

Attachment 1

Attachment 1

CONTRACT FOR CONSTRUCTION SERVICES



COUNTY OF SANTA BARBARA
AGREEMENT FOR:
General Services Project No. 21053
 County of Santa Barbara
 BWell Tecolote House Renovation
 310 Camino Del Remedio
 BC: _____-

THIS AGREEMENT (“Agreement”) is made by and between the County of Santa Barbara, a political subdivision of the State of California (“**COUNTY**”), and **Quincon, Inc.** (“**CONTRACTOR**” and together with COUNTY, collectively, the “Parties” and each individually a “Party”), for the completion of the Work (defined below), on the following terms, conditions, and provisions. All references in the General Conditions to the “Agreement” shall have the meaning ascribed to the term “Agreement” in the immediately preceding sentence and in Section 1, below.

1. **CONTRACT:** This Agreement incorporates by reference all of the General Conditions and Special Conditions, Specifications and Drawings provided by the COUNTY for the **BWell Tecolote House Renovation**, Project No. **21053**, the Notice to Bidders as amended by Addenda Number 0, the Bid Bond, the Performance Bond, the Payment Bond, and the bid documents executed and submitted by the CONTRACTOR for the Project (“Bid”), to the extent the Bid is consistent with the provisions of this Agreement other than the Bid (all of the foregoing documents, together with this Agreement, collectively, the “Contract” or “Contract Documents”). A copy of each of the General and Special Conditions, Specifications and Drawings provided by the COUNTY for the **BWell Tecolote House Renovation, 21053**, the Notice to Contractors, the Bid Bond, the Performance Bond, and the Payment Bond are attached hereto as EXHIBIT A, and a copy of the Bid is attached hereto as EXHIBIT B. All capitalized terms used but not defined herein shall have the respective meanings ascribed to such terms in the Notice to Bidders. Copies of all Contract Documents are on file in the Department of General Services Office of the COUNTY and have been and will be made available to the CONTRACTOR during the Term of this Agreement. CONTRACTOR acknowledges receipt of all Contract Documents.

2. **WORK:** CONTRACTOR, at CONTRACTOR’s own cost and expense, shall perform all the work described in the Contract Documents (“Work”), and shall furnish all equipment and materials necessary to perform and complete the Work, in a good and workmanlike manner and to the satisfaction of the Director of the COUNTY’s General Services Department (“Director”), or the Director’s designee, all in strict accordance with the Contract Documents.

3. **EXCAVATIONS:** Before any pavement resurfacing, displacement, or excavation of the ground that may be required in connection with the Work under this Contract, the CONTRACTOR shall obtain an inquiry identification number by calling Underground Service Alert (USA) 1 (800) 422-4133 or by such other means as may be required; shall conform to all requirements of Sections 4215 through 4217 of the Government Code regarding any such pavement resurfacing, displacement or excavation, including the payment of any fees required; and shall facilitate performance by the COUNTY of any obligation required of the COUNTY under the Government Code. There shall be no performance under this Contract by either party hereto unless and until CONTRACTOR complies with all of the foregoing provisions of this Sections 3, and notifies the County Representative (defined below) in writing regarding such compliance.

4. **COUNTY REPRESENTATIVE:** The “County Representative” referred to in the Contract Documents is Lou Gibilisco.

5. **PAYMENT:** As full compensation for furnishing all labor, supervision, overhead, materials, and equipment and for completing all of the Work contemplated by this Contract, and subject to adjustments and liquidated damages, if any, as provided in the Contract Documents, the base amount to be paid to the CONTRACTOR for satisfactory completion of all requirements of the CONTRACTOR under this Contract is and shall be **ONE MILLION SIX HUNDRED TWENTY-TWO THOUSAND NINETY-TWO, \$1,622,092** (“Base Contract Amount”), to be paid as provided in the Contract Documents. The CONTRACTOR assumes and will provide against any loss or damage arising out of the nature of the Work undertaken, or the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the performance of the Work until its acceptance by the COUNTY, and assumes any and all expenses incurred by or in consequence of suspension or discontinuance of the Work, for well and faithfully completing the Work and the whole thereof, in the manner and to the requirements of the Contract and directions of the County Representative to the extent not inconsistent with any provisions of the Contract Documents.

6. RIGHT TO AUDIT: CONTRACTOR shall maintain and make available all books, papers, records, detail costs, estimates, claims, and accounts, including payment, property, payroll, personnel, subcontractors, and financial records related to or which arise in connection with the Contract (collectively, the "Records"). The form of record keeping with respect to the Records shall be subject to approval by COUNTY. The Records shall be made available during normal business hours for examination by COUNTY or the County Representative and shall be retained at CONTRACTOR'S principal place of business in California for audit during normal business hours at such place for four (4) years after the recording of the Notice of Completion for the Project. CONTRACTOR shall provide an office in which COUNTY and the County Representative may conduct such audit(s).

The COUNTY will have the right to audit CONTRACTOR'S Project records. Records must be made available in a form satisfactory to the Santa Barbara County Auditor-Controller.

7. EXTRA WORK: Extra work and materials, may be authorized via written Change Order(s) duly executed by the Director, including agreement(s) providing for compensation in addition to the Base Contract Amount at the same rates per unit provided for in the Contract Documents; *provided, however*, that the aggregate amount of such compensation in addition to the Base Contract Amount that may be authorized by the Director shall not exceed **\$93,604.60** (i.e., ten percent (10%) of the original Base Contract Amount, if the original Base Contract Amount is less than \$250,000, or (ii) \$25,000 + 5% of the amount of the original Base Contract Amount in excess of \$250,000). Compensation in such other equitable amount as is appropriate for the requirements of the COUNTY may be authorized by resolution or minute order of the Santa Barbara County Board of Supervisors.

8. COMPLIANCE WITH LAW: CONTRACTOR shall keep fully informed of, and shall at all times during the Term (defined below) ensure the performance of the Work is in compliance with, all laws, statutes, ordinances, decrees, orders, and regulations which do or may affect the Project, performance of the Work, the materials used therein, or persons engaged in connection therewith, and all such orders of bodies and tribunals having any jurisdiction over same (collectively, "Applicable Laws"). If CONTRACTOR has reason to believe that any provision of the Contract Documents conflict with any Applicable Law(s), the CONTRACTOR shall immediately report same to the County Representative in writing. CONTRACTOR shall at all times observe and comply with, and shall cause all agents, employees, and subcontractors to observe and comply with, all Applicable Laws. CONTRACTOR acknowledges and shall comply with the provisions of Sections 9364 and Sections 9550 and 9566, inclusive, of the Civil Code of California.

9. PAYMENTS NOT ACCEPTANCE: No certificate given or payments made under this Contract, except the final payment hereunder, shall be evidence of the performance of this Contract, either wholly or in part, against any claim upon CONTRACTOR. Final payment for the Work performed under this Contract shall not be made until the lapse of thirty (30) days after the Notice of Completion of the Work has been filed for record and no payment shall be construed to be acceptance of any defective Work or improper materials. CONTRACTOR agrees that the payment for final quantities due under this Contract and the payment of amounts due for any Work in accordance with this Contract shall release the COUNTY from any claims or liabilities on account of Work performed under this Contract, as the same may be amended from time to time during the Term. In addition to guarantees required elsewhere, CONTRACTOR shall and does hereby guarantee all workmanship and material to be free of defects and fit for the purposes intended for a period of one year from and after both the date of acceptance of the work and the recordation of the Notice of Completion by the COUNTY and CONTRACTOR shall repair or replace all Work and materials, together with any other portions of the Work which may be displaced in so doing, that, in the opinion of the County Representative, is or becomes defective during the period of said guarantee, without expense whatsoever to the COUNTY.

10. PREVAILING WAGE RATES: Rates of wages, including overtime, holiday, and Sunday rates provided for the Work shall comply with and are subject to the California Labor Code, Sections 1770 et. seq., Executive Orders of the President of the United States No. 9240, dated September 9, 1942, and No. 9250, dated October 3, 1942, and to any modifications thereof, and to and any orders of the President or any authorized Federal Officer or agency, insofar as the same may apply to this Contract.

No contractor or subcontractor may be listed on a bid for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]. No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

11. CONTRACT DOCUMENTS ACKNOWLEDGED: CONTRACTOR hereby declares that CONTRACTOR has read the Contract Documents, has carefully examined the plans and detailed drawings of the Work to be performed, and fully understands the intent and meaning of the same.

12. TIME FOR COMMENCEMENT, COMPLETION; TERM: The term of this Contract shall commence effective as of the first date that this Agreement is duly executed by all of the parties hereto ("Effective Date") and shall terminate on the date that is **292** calendar days after the Effective Date unless earlier terminated in accordance with the provisions of this Agreement ("Term"). As soon as practicable after the Contract has been executed by both the CONTRACTOR and the COUNTY, a Notice to Proceed will be issued by the County Representative stating the starting date of work performance under the Contract. The CONTRACTOR shall begin work within fifteen (15) calendar days after receiving the Notice to Proceed unless otherwise provided therein.

The provisions of this Agreement pertaining to Liquidated Damages shall apply in the event of the CONTRACTOR's failure to complete the Work within the Term. In the event that CONTRACTOR does not complete the Work during the Term, CONTRACTOR shall only be paid for the Work actually performed during the Term and accepted by COUNTY in accordance with the provisions of this Agreement.

13. WORKERS' COMPENSATION INSURANCE: CONTRACTOR certifies that CONTRACTOR has knowledge of, is in compliance with, and warrants that CONTRACTOR at all times during the Term shall remain in compliance with, the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance by the provisions of that Code. CONTRACTOR shall comply with such provisions before commencing the performance of the Work.

14. PROGRESS PAYMENT; NO WAIVER FOR DELAY: Any progress payment made after the scheduled completion date for the Work shall not constitute a waiver of any liquidated damages under this Contract.

15. GUARANTEE BONDS: Before any performance under this Contract, the CONTRACTOR shall provide the security required by statute for the payment of all workers and suppliers, and security for the faithful performance of all terms and conditions of this Contract, in an amount and form approved by the COUNTY. Both securities shall contain provisions that automatically increase amounts thereof and/or time of completion or both for all change orders, extensions, and additions to the Work provided under this Contract.

16. DISPUTES: Should any dispute(s) arise respecting the construction or meaning of any of the plans or specifications affecting the Work or respecting the true value of any extra work or work omitted, such dispute(s) shall be resolved by the Director of the COUNTY's General Services Department or his Assistant Director of General Services designee ("Director"), whose decision shall be final and binding upon the parties hereto. If, after the decision of the Director as provided herein, claims (as defined in Public Contracts Code Section 20104) under this Contract are filed by CONTRACTOR against COUNTY, and those claims are in the aggregate amount of \$375,000 or less, such claims shall be resolved under Public Contracts Code Sections 20104 through 20104.8, inclusive.

17. SUBSTITUTION OF MATERIALS, SUBSTITUTION OF CONTRACTORS: The County Representative is authorized to act on behalf of the COUNTY in any matters requiring consent to substitutions of materials or equipment; provided, however, that the County Representative is not authorized to extend the Term, terminate this Contract, increase or exceed the Contingency Amount, the Base Contract Amount, or the Maximum Contract Amount, or exercise any authority reserved to the Director or his Assistant Director designee hereunder.

18. SURVIVAL: All provisions of this Contract which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

19. INDEMNIFICATION AND INSURANCE: CONTRACTOR shall at all times comply with the indemnification and insurance provisions set forth in EXHIBIT C, attached hereto and incorporated herein by reference.

20. ARPA COMPLIANCE: CONTRACTOR shall comply with the requirements of the Federal 2021 American Rescue Plan Act ("ARPA"), U.S. Treasury Coronavirus State and Local Fiscal Recovery Funds Compliance and Reporting Guidance, and federal regulations, including, but not limited to, Title 2 of the Code of Federal Regulations (CFR) Part 200, entitled, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards." In addition, CONTRACTOR shall comply with the Federal Terms and Conditions attached hereto as EXHIBIT D and incorporated herein by reference. CONTRACTOR shall comply with grant agreements, assurances in applications, notices of award, and all other applicable federal, state, and local laws, regulations, ordinances, orders, rules, guidelines, directives, circulars, bulletins, notices, and policies governing the ARPA funds provided in connection with this Agreement. CONTRACTOR shall be responsible for providing services in a manner consistent with all federal and state requirements and standards required as a condition of receiving and expending ARPA funds provided in connection with this Agreement.

21. STATE FUNDING PROVISIONS: CONTRACTOR acknowledges that this Agreement will be funded by financial assistance from the State of California (the "State") through the California Department of Social Services ("CDSS") Community Care Expansion ("CCE") Program ("CCE Funds"), and CONTRACTOR shall only use funds provided to CONTRACTOR hereunder as authorized herein and in compliance with all applicable State law, regulations, executive orders, federal policies, procedures, and directives, including, but not limited to, California Welfare and Institutions Code sections 18999.97–18999.98 and the Project Funding Agreement governing the use of such CCE Funds attached hereto as EXHIBIT F and incorporated herein by reference ("CCE Agreement"). CONTRACTOR shall comply, and shall ensure that all of its Subcontractors comply, with all obligations of the "Sponsor" under the CCE Agreement, as well as all notices of award, and all other applicable federal, State, and local laws, regulations, ordinances, orders, rules, guidelines, directives, circulars, bulletins, notices, and policies governing the CCE Funds provided in connection with this Agreement. CONTRACTOR shall be responsible for performing the Work in a manner consistent with all federal and State requirements and standards required as a condition of receiving and expending funds provided in connection with this Agreement

22. TAXES: CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any Work under this Contract and shall make any and all payroll deductions required by law. CONTRACTOR is responsible for all CONTRACTOR personnel and for the payment of their compensation, including, if applicable, withholding of income taxes, and the payment and withholding of social security and other payroll taxes, unemployment insurance, workers' compensation insurance payments, and disability benefits. In no event shall COUNTY pay or be responsible for any taxes imposed on, or with respect to, CONTRACTOR's income, revenues, gross receipts, personnel, real or personal property, or other assets. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance

23. CONFLICT OF INTEREST: CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of Work required to be performed under this Contract. CONTRACTOR further covenants that in the performance of this Contract, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

24. NONDISCRIMINATION: COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Contract and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

25. NON-ASSIGNMENT: CONTRACTOR shall not assign, subcontract, delegate, or otherwise transfer, directly or indirectly, whether by operation of law or otherwise ("Transfer") this Contract, in whole or in part, or any of CONTRACTOR's rights or obligations under this Contract, without the prior written consent of COUNTY in each instance. Any attempted or purported Transfer in violation of this Section 24, or in violation of Section 2.08 of the General Conditions, attached hereto as part of Exhibit A, shall be null and void and without legal effect and shall constitute grounds for termination by COUNTY. No Transfer shall relieve CONTRACTOR of any of its obligations hereunder.

26. SEVERABILITY: If any one or more of the provisions contained in the Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect by a court of competent jurisdiction, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

27. TIME IS OF THE ESSENCE: Time is of the essence in this Contract, and each covenant and term is a condition herein.

28. ENTIRE AGREEMENT AND AMENDMENT: The Contract Documents, as may be modified from time to time during the Term by duly authorized and executed Change Orders in accordance with the provisions of this Agreement and the General Conditions contain the entire understanding and agreement of the Parties with respect to respect to the subject matter hereof and thereof, and there have been no promises, representations, agreements,

warranties or undertakings by any of the Parties, either oral or written, of any character or nature hereafter binding except as set forth herein and therein. This Contract may be altered, amended or modified only by an instrument in writing, duly executed by each of the Parties, and by no other means, except as otherwise set forth in Section 30, below, to the extent such delegated authority is expressly authorized by the COUNTY Board of Supervisors in approving this Contract. Each Party waives its future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

29. EXECUTION OF COUNTERPARTS: This Contract may be executed electronically and in any number of counterparts, and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the Parties shall preserve undestroyed, shall together constitute one and the same instrument.

30. SUBCONTRACTORS: CONTRACTOR is authorized to subcontract with only the subcontractor(s) identified in the Bid as attached hereto and as set forth in Exhibit B ("Subcontractors"). Contractor shall be fully responsible for all services and Work performed by its Subcontractors. Contractor shall secure from each of its Subcontractors legally binding written agreements to comply with the provisions of this Agreement pertaining to CONTRACTOR's obligations as if such obligations pertained to such Subcontractor, including, but not limited to, audit obligations.

31. CHANGE ORDERS: No Change Order shall be valid or enforceable against the COUNTY unless in the form of the Form of Change Order attached here as Exhibit E and duly executed in advance by both CONTRACTOR and the Director, in accordance with this Section 32 and Article 13 of the General Conditions, to the extent not inconsistent with the Numbered Sections (defined below) ("Change Order"). No Change Order may (i) extend the Term, (ii) authorize Work to be performed hereunder after the Term or after the expiration or termination of this Agreement, (iii) increase the Maximum Contract Amount, or (iv) change the plans or specifications.

32. FLEET REQUIREMENTS: Vehicles with a Gross vehicle weight rating ("GVWR") greater than 8,500 lbs. and light-duty package delivery vehicles operated in California may be subject to the California Air Resources Board ("CARB") Advanced Clean Fleets regulations. Such vehicles may therefore be subject to requirements to reduce emissions of air pollutants. For more information, please visit the CARB Advanced Clean Fleets webpage at <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>. Contractor shall at all times have a valid Certificate of Reported Compliance, as described in section 2449(n) of Title 13 of the California Code of Regulations ("CARB Certificate of Compliance") and shall confirm that each subcontractor listed in Contractor's Bid has a valid CARB Certificate of Compliance, for each fleet of vehicles subject to 13 CCR section 2449 that may be used in performance of this Contract. No such vehicle is permitted on the project site unless and until Contractor provides County with a valid Certificate of Reported Compliance applicable to such vehicle.

33. ORDER OF PRECEDENCE: In the event of conflict between the provisions contained in the numbered sections 1 through 37 of this Agreement ("Numbered Section") and the provisions contained in the Exhibits, the provisions contained in the Numbered Sections of this Agreement shall prevail over those in the Exhibits other than Exhibit C, which Exhibit C shall control and prevail over all other provisions of this Contract. CONTRACTOR agrees that in the event of any discrepancy, inconsistency, gap, ambiguity, or conflicting language between the Bid attached hereto as Exhibit B, on the one hand, and any other provision(s) of this Contract on the other, the provisions of this Contract (including the Numbered Sections of this Agreement, Exhibit A, and Exhibit C) other than Exhibit B shall take precedence and control and prevail over the provisions of the Bid attached hereto as Exhibit B.

34. TERMINATION.

- COUNTY may, by written notice to CONTRACTOR, terminate this Contract in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill its obligations hereunder.

- **For Convenience.** COUNTY may terminate this Contract in whole or in part upon thirty (30) days' written notice. During such thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease Work as quickly and efficiently as reasonably possible, without performing unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of Work.

- **For Nonappropriation of Funds.** Notwithstanding any other provision of this Contract, in the event that no funds or insufficient funds are appropriated or budgeted by federal, State or COUNTY governments, or sufficient funds are not otherwise available for payments hereunder in the fiscal year(s) covered by the Term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence, and COUNTY may terminate or suspend this Contract in whole or in part, with or without a prior notice period. Subsequent to termination of this Contract under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the Term.

- **For Cause.** Should CONTRACTOR default in the performance of this Contract or materially breach any of the provisions hereof, COUNTY may, at COUNTY's sole option, terminate or suspend this Contract in whole or in part upon written notice ("Termination Notice"). Upon receipt of such Termination Notice, CONTRACTOR shall immediately discontinue all Work (unless otherwise directed in such Termination Notice) and notify COUNTY in writing of the status of CONTRACTOR's performance of Work hereunder. The date of termination shall be the date the Termination Notice is received by CONTRACTOR, unless the Termination Notice directs otherwise.

- Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Contract, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Contract, COUNTY shall pay CONTRACTOR for satisfactory Work performed as of the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the Maximum Contract Amount, or for unperformed portions of Work. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the Work rendered by CONTRACTOR. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

35. JURISDICTION; VENUE. This Contract shall be governed by the laws of the State of California. Any litigation arising out of this Contract shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to the County of Santa Barbara, if in federal court.

36. NO WAIVER. COUNTY's delay or failure to act with respect to a breach of this Contract by CONTRACTOR shall not constitute or be construed as a waiver of COUNTY's rights with respect to subsequent or similar breaches. Any delay or failure of COUNTY to exercise or enforce any right or provision of this Contract shall not constitute a waiver of such right or provision, and every power and remedy given by this Contract to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY. No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement to be effective as of the first date fully executed by all of the parties hereto.

COUNTY

County of Santa Barbara

By: [Signature]
LAURA CAPPS, CHAIR
BOARD OF SUPERVISORS

Dated: 6-3-25

ATTEST:

MONA MIYASATO,

CONTRACTOR

Quincon, Inc., a California corporation

COUNTY EXECUTIVE OFFICER

CLERK OF THE BOARD

By: [Signature]
Deputy Clerk of the Board

Signed by: [Signature] 5/14/2025 | 2:28 PM PDT
By: [Signature]
CEDEE4EAD35D42E
AUTHORIZED REPRESENTATIVE

Name: Jose Quintana

Title: President

Address: 200 South 13th Street Suite A

City/State/Zip: Grover Beach, CA 93433

APPROVED AS TO FORM:

RACHEL VAN MULLEM,
COUNTY COUNSEL

Signed by: [Signature] 5/14/2025 | 3:02 PM PDT
By: [Signature]
0F46413977C66458
Deputy County Counsel

APPROVED AS TO ACCOUNTING FORM:

BETSY SCHAFFER, CPA, CPFO
AUDITOR-CONTROLLER

DocuSigned by: [Signature] 5/14/2025 | 3:01 PM PDT
By: [Signature]
0BAAEA15901943E1
Deputy Auditor-Controller

APPROVED AS TO FORM:

GREG MILLIGAN, ARM
RISK MANAGER

DocuSigned by: [Signature] 5/16/2025 | 11:25 AM PDT
By: [Signature]
05F545F00289468...
Risk Management

RECOMMENDED FOR APPROVAL

KIRK LAGERQUIST, DIRECTOR
GENERAL SERVICES DEPARTMENT

DocuSigned by: [Signature] 5/14/2025 | 5:05 PM PDT
By: [Signature]
19AED10000809E...
Department Head

Dept 063 Fund 030

Program 1930

Account {ACCT} Project 21053

EXHIBIT A

**COUNTY OF SANTA BARBARA
GENERAL SERVICES DEPARTMENT
CAPITAL PROJECTS DIVISION**



**BWell, Tecolote House Renovation
310 Camino Del Remedio SB, CA 93110**

**INVITATION FOR BIDS
COUNTY PROJECT NO. 21053**

MANDATORY JOB WALK:
Tuesday, February 11, 2025, 10:00am

BID DUE DATE:
Thursday March 20, 2025, 2:30 P.M.

VIRTUAL BID OPENING:
Thursday March 20, 2025, 3:00 P.M.

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BIDDING DOCUMENTS

Notice to Bidders
Bid Form – correction of walk pad
Designation of Subcontractors
Noncollusion Affidavit
Certificate of Compliance
Bidder's Statements
Anti-fraud Certification
Bidder's Bond

CONTRACT FORMS

Payment Bond
Performance Bond
Certificate of Insurance Transmittal
Unlawful Discrimination Ordinance
County of Santa Barbara Form of Agreement

TERMS & CONDITIONS

Exhibit "B" Contractor's Bid
General Conditions
Exhibit "C" Indemnification and Insurance Requirements (For Construction Contracts)
Exhibit "D" ARPA SLFRF Required Terms"
Exhibit "E" Federal Clauses and Anti-Byrd"
Exhibit "F" CCE-PROGRAM FUNDING AGREEMENT (PFA) CCE-2378566416-051

DRAWINGS AND SPECIFICATIONS

Architectural Drawings
Civil Drawings
Fire Sprinkler Drawings
Mechanical Drawings
Specifications

EXHIBIT A

BIDDING DOCUMENTS

General and Special Conditions, Specifications, Plans, and Drawings,
Bid Invitation, Bid Bond, Performance Bond, and Payment Bond

NOTICE TO BIDDERS

Notice is hereby given that the County of Santa Barbara ("COUNTY") General Services Department will receive bids for:

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053

MANDATORY JOB WALK:
Tuesday, February 11, 2025, 10:00 A.M.

BID DUE DATE:

Thursday March 20, 2025, 2:30 P.M.

VIRTUAL BID OPENING:

Thursday March 20, 2025, at 3:00 P.M.

CONSTRUCTION COST ESTIMATE: Estimated cost of construction is **One Million Four Hundred Thousand \$1,400,000.00**

PROJECT LOCATION: 310 Camino Del Remedio, Santa Barbara CA 93110

MANDATORY JOB WALK: The job walk is MANDATORY on **Tuesday, February 11, 2025, 10:00 A.M.**
Only those prime contractors attending a job walk shall be qualified to submit a bid in response to this Invitation for Bids.

PROJECT DESCRIPTION: The purpose of this project No. 21053 ("Project") is to renovate and construct a facility known as the Tecolote House for use as a Board and Care facility for people requiring residential behavioral health support. It will be a 12-bed facility and may house some residents for up to 18 months as they move through the continuum of care. The previous use of the facility was a residential care facility for disabled adults managed by a non-County agency. The facility previously known as Casa Omega was developed approximately 50 years ago for this purpose.

The Project site is located on the County's Calle Real Campus in Santa Barbara, and once the improvements are complete the facility will be operated through the Behavioral Wellness Department ("BeWell") system. The Tecolote House site also provides convenient access to various services supporting clients as they transition through Behavioral Wellness treatment.

CONTRACTOR'S LICENSE: To submit a Bid in response to this Invitation for Bids, a Bidder must possess either a Class A or B license.

QUESTIONS: All questions MUST be submitted electronically through the Public Purchase Portal (www.publicpurchase.com) on or before **Friday, February 14, 2025, at 2:30 P.M. Pacific Time.**

Any changes or additional information needed for bidding will be provided via addendum or addenda posted on the Public Purchase site. Each Bidder shall be responsible for all compliance with all addenda.

BID SUBMITTAL INSTRUCTIONS: Each bid shall be in accordance with the plans and specifications approved by the County's General Services Department. Each bid MUST be submitted electronically through the Public Purchase website (www.publicpurchase.com) on or before **Thursday, March 20, 2025, 2:30 P.M.**

SUBSTITUTION OF SECURITIES: Pursuant to Section 22300 of the Public Contract Code and the Project specifications, the CONTRACTOR may substitute securities or request that the County make payment of retentions to an escrow agent for any money held by the COUNTY to ensure Contract performance.

REGISTRATION: No contractor or subcontractor may be listed on a bid for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code § 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code § 1771.1(a)]. No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code § 1725.5. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

QUALIFYING CONTRACTOR OR SUBCONTRACTOR: Pursuant to the provisions of Section 4104 of the California Public Contracting Code a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal or engage in the performance of any contract for public work, as defined in Section 4104, unless currently registered with the Department of Industrial Relations and qualified to perform public work pursuant to Section 1725.5 California Labor Code.

WITHDRAWAL OF BIDS: The COUNTY reserves the right to reject any and or all bids, and to waive any informality in a bid. No bidder may withdraw such bidder's bid for a period of sixty (60) days after the date set for the opening thereof.

BID SELECTION: The lowest responsible bidder will be determined in accordance with Public Contract Code Division II, Part 3, Chapter 1, Section 20103.8, Subdivision (c) and as follows:

1. The Project funding amount will be disclosed before the first bid is opened.
2. The lowest responsible bidder will be determined on the basis of the Total Base Bid plus Total Additive Items or Total Base Bid plus Total Additive Groups, if any.
3. In the event that all bids including Total Base Bid plus Total Additive Items or Total Base Bid plus Total Additive Groups exceeds the Project funding amount, the lowest bid will be determined on the basis of the Total Base Bid plus those additive items or Total Base Bid plus those additive groups that, when taken in numerical order from the additive list, and added to the Total Base Bid are less than or equal to the funds available.

CONTRACT: By submitting a Bid in response to this Invitation for Bids, Bidder agrees to enter into a contract with the County in the form of the Form of Agreement attached hereto ("Contract") if awarded the Contract as the successful lowest responsible bidder ("CONTRACTOR").

BID PROTEST: The County of Santa Barbara Bid Protest Procedures are described in Section 10 of the BID FORM, which is included in the Bid Documents included herein below.

CONSTRUCTION TIME: The successful CONTRACTOR (after receiving the Notice to Proceed) shall have **275** calendar days to complete all work called for under the Contract Documents.

LIQUIDATED DAMAGES: The liquidated damages will be **\$250 (Two Hundred Fifty Dollars)** per day for project delays that are determined to be attributable to the CONTRACTOR.

VIRTUAL BID OPENING: Bids will be opened and read aloud in a public virtual meeting. Meeting can be attended by using the following Teams link: [Join the meeting now](#) or call in (audio only) 805-724-0311 and use Phone Conference ID: **187 459 81#**

BID FORM

- Pursuant to and in compliance with your Notice to Bidders and the Contract Documents relating to the construction of:

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053
Bid Due Date: Thursday, March 20, 2025, 2:30 P.M.

including Addendum No(s). ____, ____, ____, ____, ____, ____, the undersigned bidder ("Bidder"), having become thoroughly familiar with the terms and conditions of the Contract Documents and with local conditions affecting the performance and the costs of the Work at the place where the Work is to be done, hereby proposes and agrees to fully perform the Work within the time stated in and in strict accordance with the Contract Documents (including the furnishing of any and all labor, materials, tools, expendable equipment and utility and transportation services necessary to fully perform the Work and complete it in a workmanlike manner) for the total sum of:

- BASE BID:**

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ADD OPTION 1:

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Alternate 1: (N) CMU Privacy Wall at Patio

ADD OPTION 2:

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Alternate 2: Alternate: Wet Room - Refer to plan set for more information.

(Place figures in appropriate boxes.)

The Bidder shall submit a list of the Allowances and Alternates with the Bid submittal.

Allowances for Specific Task Items Identified in Specifications 012100:
Alternates for Specific Task Items Identified in Specifications 012300:

Estimated number of work days: _____

3. It is understood that County of Santa Barbara ("COUNTY" or "Owner") reserves the right to reject this Bid and that it shall remain open and not be withdrawn for a period of sixty (60) calendar days from the date prescribed for its opening.
4. Attached hereto and incorporated herein is the complete and entire list of subcontractors ("Subcontractors") to be employed by the undersigned Bidder and in the performance of the Work.
5. It is understood and agreed that if written notice of the acceptance of this Bid is mailed or delivered personally to the undersigned bidder within thirty (30) calendar days after the opening of the Bid, or at any time thereafter before it is withdrawn, the undersigned Bidder will execute and deliver the Contract Documents to Owner in accordance with the Bid as accepted, and will also furnish and deliver to Owner any Payment Bond required under the provisions of California Civil Code Section 3247 through 3252 and Performance Bond as required under the provisions of the California Government Code and/or California Public Contract Code all within fourteen (14) calendar days after personal delivery or deposit in the mails, as the case may be, by COUNTY of the Notification of Intent to Award. The Work under the Contract shall be commenced by the undersigned Bidder on the date stated in COUNTY'S written Notice to Proceed and shall be completed within **275 calendar** days thereafter.
6. Notice of acceptance or request for additional information may be addressed to the undersigned Bidder at the business address set forth below.
7. Bidder certifies and warrants that none of this Bid, the Contract or other submittal of the Bidder identified below in connection with the Project is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization, or corporation; that this Bid is genuine, and not collusive or a sham; that the undersigned Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding; that the undersigned Bidder has not directly or indirectly sought by agreement, communication or conference with anyone to fix such Bidder's bid price, or the bid price of any other bidder, or to fix any overhead, profit or cost element of such bid price or that of any other bidder, or to secure any advantage against the COUNTY of anyone interested in the Project; that all statements contained in this Bid are true; and that the undersigned Bidder has not directly or indirectly, submitted the Bid, or any breakdown thereof, or the contents hereof or thereof, or divulged information or data relative hereto or thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, entity, Bid Depository, or to any member or agent thereof, to effectuate a collusive or sham bid. The undersigned Bidder declares under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.
8. Wherever in this Bid an amount is stated in both words and figures, in case of discrepancy between such words and figures, the words shall control and prevail; if all or any portion of the Bid is required to be given in unit prices and totals and a discrepancy existing between any such unit prices and totals so given, the unit prices shall control and prevail.
9. In accordance with the provisions of Sections 1860 and 1861 of the California Labor Code, every contractor performing work in connection with the Project will be required to secure the payment of compensation of such contractor's employees. Each contractor to whom a public works contract is awarded shall sign the following certification prior to performing any Work in connection with the Contract: "I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."

10. Protest(s) of any bid(s) must be delivered to the COUNTY in writing within ten (10) working days after the opening of bids, and must specify all grounds for such protest.

BIDDER

Company

IRS No.: _____

Street Address

License Classification(s): _____

City

Phone Number: _____

BY: _____
Signature

Printed Name, Title

SECTION 01 21 00

ALLOWANCES

PART 1 -GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements governing allowances.

B. Types of allowances include the following:

1. Lump-sum allowances.
2. Unit-cost allowances.
3. Quantity allowances.
4. Contingency allowances.
5. Testing and inspecting allowances.

C. Related Requirements:

1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.
2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
3. Section 014000 "Quality Requirements" for procedures governing the use of allowances for field testing by an independent testing agency.

1.2 DEFINITIONS

A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.3 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise COUNTY of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the COUNTY OF SANTA BARBARA to avoid delaying the Work.

B. At COUNTY's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by Architect from the designated supplier.

1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.6 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by COUNTY OF SANTA BARBARA or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by COUNTY OF SANTA BARBARA or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to COUNTY OF SANTA BARBARA, after installation has been completed and accepted.
 - 1. If requested by Architect, retain, and prepare unused material for storage by COUNTY OF SANTA BARBARA. Deliver unused material to COUNTY OF SANTA BARBARA's storage space as directed.

1.7 UNIT-COST ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by COUNTY OF SANTA BARBARA or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by COUNTY OF SANTA BARBARA or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to COUNTY OF SANTA BARBARA, after installation has been completed and accepted.
 - 1. If requested by Designated Representative and/or Architect, retain and prepare unused material for storage by COUNTY OF SANTA BARBARA. Deliver unused material to COUNTY OF SANTA BARBARA's storage space as directed.

1.8 QUANTITY ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by COUNTY OF SANTA BARBARA or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by COUNTY OF SANTA BARBARA or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to COUNTY OF SANTA BARBARA, after installation has been completed and accepted.
 - 1. If requested by Designated Representative and/or Architect, retain and prepare unused material for storage by COUNTY OF SANTA BARBARA. Deliver unused material to COUNTY OF SANTA BARBARA's storage space as directed.

1.9 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for COUNTY OF SANTA BARBARA's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by COUNTY OF SANTA BARBARA under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to COUNTY OF SANTA BARBARA by Change Order.

1.10 TESTING AND INSPECTING ALLOWANCES

- A. Testing and inspecting allowances include the cost of engaging testing agencies, actual tests and inspections, and reporting results.
- B. The allowance does not include incidental labor required to assist the testing agency or costs for retesting if previous tests and inspections result in failure. The cost for incidental labor to assist the testing agency shall be included in the Contract Sum.
- C. Costs of testing and inspection services not specifically required by the Contract Documents are Contractor responsibilities and are not included in the allowance.
- D. At Project closeout, credit unused amounts remaining in the testing and inspecting allowance to COUNTY OF SANTA BARBARA by Change Order.

1.11 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, required maintenance materials, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
 - 3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. COUNTY OF SANTA BARBARA reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs due to a change in the scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 -PRODUCTS (Not Used)

PART 3 -EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Contingency Allowance: Include a contingency allowance of \$100,000.00 for use according to COUNTY OF SANTA BARBARA's written instructions.
- B. Allowance No. 2: Testing and Inspection Allowance: Include the sum of at least \$30,000.00 to cover costs for Cultural Resources Consultant, soils, compaction, concrete testing (including slump & breaks), structural observations, epoxy, rebar tests roofing , waterproofing and special inspections to be provided by a licensed third-party inspector and/or testing agency/lab, as specified on Plans, all Specifications, including Section 014523, 014527 and in Section 033000 "Cast-in-Place Concrete.

END OF SECTION

SECTION 01 23 00

ALTERNATES

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section includes administrative and procedural requirements for alternates.

1.02 **DEFINITIONS**

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.03 **PROCEDURES**

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

SCHEDULE OF ALTERNATES

- A. Alternate No. 1
 - 1. Base Bid: No Privacy Wall provided at the new Patio.
 - 2. Alternate: (N) CMU Privacy Wall at Patio

- B. Alternate No. 2
 - 1. Base Bid: Restroom slab to remain as existing with no new floor drain. No new medical hose supply box. No new tile walls throughout, gypsum to match other restrooms.
 - 2. Alternate: Wet Room - Slope floor to drain, waterproofing of entire room with non-slip ceramic tile, (N) medical hose supply box for wash down. Refer to plan set for more information.

END OF SECTION 01 23 00

DESIGNATION OF SUBCONTRACTORS

The Bidder agrees if this Bid is accepted by the COUNTY, that Bidder will contract with the County of Santa Barbara by executing the Contract in the form of the Form of Agreement to fully perform all Work and furnish all labor, materials, machinery, tools and apparatuses necessary to completely perform the Work in the manner and time prescribed by said Contract.

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053
Bid Due Date: Thursday, March 20, 2025, 2:30 P.M.

In compliance with the provisions of Section 41004107 of the Public Contract Code of the State of California, as may be amended from time to time, the undersigned Bidder has set forth below the name and principal place of business address of each Subcontractor who will perform Work or labor or render service(s) to the undersigned Bidder in connection with the Project, as well as the portion of the Work to be performed by each Subcontractor pursuant to a subcontract in an amount of more than one-half of one percent (0.5%) of the amount of the undersigned Bidder's total aggregate Bid, and Bidder represents and warrants that such information set forth below for each Subcontractor is substantiated by documentation signed by such Subcontractor affirming such Subcontractor's agreement to perform such Work in compliance with all applicable requirements set forth in this Invitation for Bids and the Contract. Prior to entering into the Contract, Bidder shall be required to provide a true and correct copy of an executed contract between Bidder and each Subcontractor reflecting the information set forth by Bidder for such Subcontractor in this Designation of Subcontractors and such Subcontractor's agreement to perform such Work in compliance with all applicable requirements set forth in the Contract Documents.

DIVISION OF WORK SUBCONTRACTOR LIC NO. LOCATION

BIDDER: _____

BY: _____

Name:

Title:

NOTE: This form may be reproduced and attached behind this page to list additional Subcontractors.

NONCOLLUSION AFFIDAVIT

In accordance with Public Contract Code [§ 7106](#). _____
(Bidder' signatory's full name)

being first duly sworn, deposes and says that he or she is _____
(Bidder signatory's title)

of _____,
(Bidder's fully legal entity name as registered with the California Secretary of State)

the Bidder submitting the foregoing Bid, that the Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the Bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham Bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or that anyone shall refrain from bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the Project; that all statements contained in the Bid are true; and further, that the Bidder has not, directly or indirectly, submitted the Bid or any breakdown thereof, or the contents thereof, or divulged information or data relative of any of the foregoing, to any corporation, partnership, company, association, organization, entity, bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid and has not paid, and will not pay, any person or entity for such purpose.

The undersigned, if executing this Noncollusion Affidavit on behalf of Bidder if Bidder is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents and warrants that he or she has full power to execute, and does execute, this Noncollusion Affidavit on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

SIGNATURE BLOCK <i>(Signature Block must be completed in ink & changes must be initialed.)</i>	
Bidder's Signature: _____	Date: _____
Bidder's Name & Title (Print): _____	
At CITY: _____	STATE: _____

CERTIFICATE OF COMPLIANCE

The undersigned hereby certifies that all requirements for insurance of subcontractors as specified in the Form of Agreement for this Project will be met.

Dated

Signature of Principal

Printed Name, Title of Principal

Company

Address

City, State & Zip

BIDDER'S STATEMENTS

REGARDING INSURANCE COVERAGE:

Bidder hereby certifies that Bidder has reviewed the insurance coverage requirements specified in the Contract Forms. Should Bidder be awarded the Contract for the Work, Bidder further certifies that Bidder can satisfy all the Contract Specification requirements for insurance, including insurance coverage of each Subcontractor.

REGARDING TITLE 13 OF THE CA CODE OF REGULATIONS, BIDDER'S FLEET:

Bidder must provide to the County, prior to executing the Contract, a true and correct copy of each valid Certificate of Reported Compliance, as described in section 2449(n) of Title 13 of the California Code of Regulations, for Bidder's fleet, and for each fleet of each subcontractor listed in Bidder's Bid, of vehicles subject to 13 CCR section 2449 that may be used in performance of the Contract.

REGARDING PUBLIC CONTRACT CODE SECTION 10232:

In accordance with Public Contract Code Section 10232, the Bidder hereby states, under penalty of perjury, that no more than one final unappealable finding of contempt of court by a Federal Court has been issued against the Bidder within the immediately preceding two-year period in connection with the Bidder's failure to comply with an order of a Federal Court which orders the Bidder to comply with an order of the National Labor Relations Board.

REGARDING PUBLIC CONTRACT CODE SECTION 10162:

In accordance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing, a federal, state, or local government project because of a violation of law or safety regulation?

Yes _____

No _____

(If the answer is yes, explain the circumstances on a separate sheet of paper and attach such explanation to the Bid)

Date

Signature of Principal

Printed Name, Title of Principal

Company

Address

City, State & Zip

ANTI-FRAUD CERTIFICATION

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053
Bid Due Date: Thursday, March 20, 2025, 2:30 P.M.

In accordance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury that the Bidder **has** __, **has not** __, been convicted within the preceding three years of any offenses referred to in Public Contract Code Section 10285.1, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or federal antitrust law in connection with the bidding upon award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or Trustees of the California State University.

The term "Bidder" is understood to include all partners, members, officers, directors, responsible managing officers, and responsible managing employees thereof, as referred to in Public Contract Code Section 10285.1.

NOTE: The Bidder must place a check mark after "has" or "has not" in one of the blank spaces provided above.

Date

Signature of Principal

Printed Name, Title of Principal

Company

Address

City, State & Zip

BIDDER'S BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ as Principal, and _____ as Surety (hereinafter referred to as Surety), are held firmly bound unto the County of Santa Barbara, State of California (hereinafter called "Owner") in the penal sum of Ten Percent (10%) of the total aggregate amount of the Bid of the Principal above named, submitted by said Principal to Owner for the Work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents. Surety shall be and hereby warrants that it is listed in the Insurance Organizations Authorized by the Insurance Commissioner to Transact Business of Insurance in the State of California, published by the Department of Insurance, State of California or successor publications. In no case shall the liability of the Surety hereunder exceed the sum of _____ DOLLARS (\$ _____). The condition of this obligation is such that a bid to Owner for certain construction specifically described as follows:

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053

for which bids are due on **Thursday, March 20, 2025, 2:30 P.M. Pacific Time** has been submitted by Principal to Owner.

NOW, THEREFORE, if the aforesaid Principal shall not withdraw said Bid within the period therein after the opening of the same, or, if no period be specified within sixty (60) days after said opening and shall within the period specified therefore, or, if no period be specified, within eight (8) days after the prescribed forms are presented to Principal for signature, enter into a written Contract with Owner, in the prescribed Form of Agreement, in accordance with the Bid as accepted, and file the two Bonds with Owner, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by law, then this obligation shall be null and void; otherwise, it shall remain in full force, virtue and affect.

Said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any manner affects its obligations on this bond, and it does hereby waive notice of any change, extension, alteration, or addition.

It is hereby agreed that any progress payment made after the scheduled completion date will not constitute a waiver of any liquidated damages heretofore agreed upon.

In the event suit is brought upon either Bond by Owner and judgment is recovered, the Surety shall pay all costs incurred by Owner in such suit, including a reasonable attorney's fee to be fixed by the Court.

Death, Bankruptcy, Receivership, Going Out of Business for any reason, or incompetence of the Principal shall not relieve the Surety of its obligations hereunder.

Name of Principal _____
Dated _____ Signature of Principal _____ (Seal)

Name of Surety

Address

City, State & Zip

Dated _____ Signature of Principal _____ (Seal)
Signature of Surety's Attorney-in-fact _____

Surety's Agent for Service of Process (located within the State of California):

Name of Agent

Address

City, State & Zip

Telephone Number

FAX Number

NOTE: Signatures of those executing for Surety MUST be properly acknowledged. This form may be reproduced for transmittal to the Surety for execution and attached to the front of the original Bid Bond Form.

CONTRACT FORMS

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That the County of Santa Barbara of the State of California (hereinafter referred to as the County) and _____ (hereinafter referred to as Principal) have by written agreement dated _____, entered into a contract identified as:

Project Title: County of Santa Barbara

BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. **21053**

(Hereinafter referred to as the Contract) and

That, pursuant to law and to said Contract, and before entering upon the performance of said Contract, the principal is required to file with the County a good and sufficient bond to secure the payment of labor and materials claims.

NOW, THEREFORE, said Principal and _____

_____ as corporate surety (hereinafter referred to as "Surety"), are held firmly bound unto the County in the amount of \$_____, for the payment of which Principal and Surety bind themselves, and their respective heirs, executors, administrators, successors and assigns both jointly and severally. Surety shall be and hereby warrants that it is listed in the Insurance Organizations Authorized by the Insurance Commissioner to Transact Business of Insurance in the State of California, published by the Department of Insurance, State of California or successor publications.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said principal, his or its subcontractors, heirs, executors, administrators, successors, or assigns, shall fail to pay any of the persons named or referred to in Section 9100 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or for any amounts required to be deducted, withheld and paid over to the Employment Development Department from the wages of employees of the Principal and Principal's subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to such work and labor as required by the California Civil Code, or this bond, then said Surety will pay for the same, in an amount not to exceed the amount hereinafter set forth.

This bond shall insure to the benefit of any and all persons, entities, companies and corporations named or referred to in Section 9100 of the California Civil Code, so as to give a right of action to them or their assign in any suit brought upon this bond.

And the said Surety, for value received, hereby agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder, or the Specifications accompanying the same, shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Specifications.

In the event suit is brought upon this Bond by County and judgment is recovered, Surety shall pay all costs incurred by the County in such suit, including a reasonable attorney's fee to be fixed by the court.

Death, illness, disability or disqualification of the Principal shall not relieve Surety of its obligations hereunder.

Principal

Surety

By: _____

Signature of Attorney-in-fact

DATED: _____

Address

City, State & Zip Code

Surety's Agent for Service of Process (located within the State of California):

Name of Agent

Address

City, State & Zip Code

Telephone Number

FAX Number

NOTE: Signature of those executing for Surety must be properly acknowledged.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That the County of Santa Barbara of the State of California (hereinafter referred to as the County) and _____
(hereinafter referred to as Principal) have by written agreement dated _____, entered into a contract identified as:

Project Title: County of Santa Barbara

BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110

Project No. **21053**

(Hereinafter referred to as the Contract) and

That, pursuant to law and to said Contract, and before entering upon the performance of said Contract, the Principal is required under the terms and conditions of said Contract to furnish a bond for the faithful performance of Contract.

NOW, THEREFORE, said Principal and _____

as corporate surety (hereinafter referred to as Surety), are held firmly bound unto the County in the amount of \$_____, for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns both jointly and severally. Surety shall be and hereby warrants that it is listed in the Insurance Organizations Authorized by the Insurance Commissioner to Transact Business of Insurance in the State of California, published by the Department of Insurance, State of California or successor publications.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Principal, his heirs, executors, administrators, successors, or assigns, shall perform all of the covenants, conditions and agreements in said Contract and any alteration thereof made as herein provided, in his or their part, to be kept and performed at the time, and in the manner therein specified, and shall indemnify and save harmless County, its officers, agents, and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force, virtue and effect.

And the said Surety, for value received, hereby agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder, or the specifications accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or additions to the terms of the Contract or to the work or to the specifications.

In the event suit is brought upon this Bond by County and judgment is recovered, Surety shall pay all costs incurred by the County in such suit, including a reasonable attorney's fee to be fixed by the court.

Death, illness, disability or disqualification of the Principal shall not relieve Surety of its obligations hereunder.

Principal

Surety

By: _____

Signature of Attorney-in-fact

DATED: _____

Address

City, State & Zip Code

Surety's Agent for Service of Process (located within the State of California):

Name of Agent

Address

City, State & Zip Code

Telephone Number

FAX Number

NOTE: Signature of those executing for Surety must be properly acknowledged.



CERTIFICATE OF INSURANCE TRANSMITTAL FORM

FOR THE FOLLOWING DESCRIBED PROJECT:

County of Santa Barbara
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053

CONTRACTOR:

Name

Address

City, State & Zip Code

The successful bidder shall furnish satisfactory proof of the maintenance of adequate Worker's Compensation Insurance, and the maintenance of Comprehensive General and Automobile Liability Insurance in the amount of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate. The County of Santa Barbara (COUNTY), its officers, employees, and agents shall be named as additional insured on all certificates. A copy of the endorsement evidencing that the County has been added to the policy must be attached to the certificate of insurance. Said policy or policies shall provide that the COUNTY shall be given thirty (30) days written notice prior to cancellation or expiration of the policy or reduction in coverage. Refer to section 5.18 of the General Conditions.

In addition to the above, the following information must appear on the certificates:

County of Santa Barbara
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053

This form must be attached to all insurance forms sent to the County of Santa Barbara, General Services Department:

Authorized Insurance Company Representative's Signature

This form may be reproduced as required.

COUNTY OF SANTA BARBARA UNLAWFUL DISCRIMINATION ORDINANCE

Section 2-95. Prohibition of unlawful discrimination in employment practices. The COUNTY reserves the right to terminate forthwith each and every written contract and agreement (except purchase orders) respecting real property for goods and/or services entered into by the COUNTY or by its joint powers, agencies, or agents with the consent of the other parties (hereinafter called "CONTRACTOR") including but not limited to concessions, franchises, construction agreements, leases, whether now in effect or hereinafter made if the COUNTY finds that the CONTRACTOR is discriminating or has discriminated against any employee or applicant for employment in violation of any applicable state or federal laws, rules, or regulations which may now or hereafter specifically prohibit such discrimination on such grounds as race, religion, sex, color, national origin, physical or mental handicap when otherwise qualified, Vietnam war veteran/disabled, age, medical condition, marital status, ancestry, sexual orientation, or other legally protected status.

Such finding may only be made after CONTRACTOR has had a full and fair hearing on notice of thirty (30) days before an impartial hearing officer at which hearing CONTRACTOR may introduce evidence, produce witness, and have the opportunity to cross-examine witnesses produced by the COUNTY. Further, any finding of discrimination must be fully supported by the facts developed at such hearing and set forth in a written opinion; and in addition, CONTRACTOR may move in the appropriate court of law for damages and/or to compel specific performance of a CONTRACTOR or agreement if any of the above procedures are not afforded to the CONTRACTOR. If CONTRACTOR is not found to have engaged in unlawful discriminatory practices, COUNTY shall pay all costs and expense of such hearing, including reasonable attorney's fees to CONTRACTOR in accordance with current Santa Barbara County Superior Court schedule of attorney's fees for civil trials. If CONTRACTOR is found to have engaged in such unlawful discriminatory employment practices, CONTRACTOR shall pay all such costs, expenses, and attorney's fees.

Whether or not a contract or agreement is still in existence at the time of final determination of such unlawful discrimination, the CONTRACTOR shall forthwith reimburse COUNTY for all damages directly stemming from such discrimination; however, those damages shall not exceed and are not reimbursable in an amount which exceeds amounts paid CONTRACTOR under the terms of the contract or agreement.

Nothing in this Section 2-95 shall directly or by interpretation give a private cause of action to any third party (not a signatory to the contract or agreement) including employees past or present, or applicants for employment to CONTRACTOR, it being the sole purpose of this clause to administratively assure compliance with the nondiscrimination clauses contained herein.

Employment practices shall include, but are not limited to employment, promotion, demotion, transfer, recruitment and advertising for recruitment, layoff or other termination, rate of pay, employee benefits, and all other forms of compensation selection for training and apprenticeship and probationary periods.

CONTRACTOR shall permit access at all reasonable time and places to all of its records of employment, advertising, application forms, tests, and all other pertinent employment data and records, to the COUNTY, its officers, employees, and agents for the purpose of investigation to ascertain if any unlawful discrimination as described herein has occurred or is being practiced, provided that such records are relevant to a complaint of an unlawful discriminatory practice which has been forwarded to CONTRACTOR reasonably prior to the time CONTRACTOR is asked to make such records available. In addition, all such records shall be deemed "Confidential" by the officers, employees, and agents of the COUNTY. No records or copies of such records may be removed from the premises of CONTRACTOR and no disclosure, oral, or written of such record, may be made to third parties except as provided within the agreement.

Provided, however, that in the event of a hearing to determine whether or not CONTRACTOR is engaging in unlawful discrimination in employment practices as defined herein, the Board of Supervisor of Santa Barbara County may issue subpoenas to require that certified copies of such records be made available to the hearing.

Failure to fully comply with any of the foregoing provisions relating to unlawful discrimination in employment practices shall be deemed to be a material breach of any contract or agreement with the COUNTY. All persons contracting with or who have contracts for goods or services with the COUNTY shall be notified that this chapter applied to their contract or agreement with the COUNTY (Ordinance No. 2946, SS1; Ordinance No. 2993, SS1; and Ordinance No. 3018, SS1).

Section 2-95.5. Exceptions. Notwithstanding any other provisions in this article, any party contracting with the COUNTY having an affirmative action program which has been approved within twelve (12) months from the date of the contract by an agency of the federal government shall be deemed to be in compliance with the provisions of this article upon furnishing documentary evidence of such approval satisfactory to the COUNTY affirmative action officer. Loss of such approval shall be immediately reported by such party to the COUNTY affirmative action officer.

Section 2-96. Purchase orders. Purchase orders shall contain the following clause as grounds for termination of such purchase orders:

"If complaint is made that seller is engaging in discriminatory employment practices made unlawful by applicable state and federal laws, rules, or regulations, and the State Fair Employment Practice Commission or the Federal Equal Employment Opportunities Commission

determines that such unlawful discrimination exists, then the COUNTY may forthwith terminate this order." (Ordinance No. 2946, SS 1)

Section 2-97. Affirmative action officer. At the discretion of the COUNTY affirmative action officer, he or she shall promptly and thoroughly investigate, or cause to be investigated reports and complaints from whatever source, that any party contracting with the COUNTY is engaging, or during the term of a contract or agreement with the COUNTY has engaged, in any unlawful discriminatory employment practices as described in Section 2-95 of this Code. If the investigation discloses reason to believe such unlawful discrimination does exist or has existed and the conditions giving rise thereto have not been changed so as to prevent further such unlawful discrimination, and the said party shall forthwith terminate such unlawful discrimination, take all appropriate steps to prevent a recurrence of such or other unlawful practices, and compensate the person or persons unlawfully discriminated against for any and all loss incurred by reason of such unlawful discrimination, all to the satisfaction of the affirmative action officer, then the affirmative action officer shall cause the matter to be presented for action to the State Fair Employment Practices Commission or the Federal Equal Employment Opportunities Commission, or both, and to any other concerned state or federal agencies or officers.

If and when it has been finally determined by the affirmative action officer, COUNTY counsel, or state or federal regulatory agencies that such unlawful discriminatory employment practice has in fact so occurred or are being carried on, then the affirmative action officer shall forthwith present the entire matter to the Board of Supervisors of the COUNTY, together with all damages, costs, and expense related thereto and incurred by COUNTY, for appropriate action by the Board of Supervisors in accord with the intent and purposes of this article and of the affirmative action program of the COUNTY (Ordinance No. 2946, SS 1),

FORM OF AGREEMENT



**COUNTY OF SANTA BARBARA
AGREEMENT FOR:**

General Services Project No. 21053

County of Santa Barbara

BWell Tecolote House Renovation

310 Camino Del Remedio Santa Barbara CA 93110

BC: _____ - _____

THIS AGREEMENT (“Agreement”) is made by and between the County of Santa Barbara, a political subdivision of the State of California (“COUNTY”), and {FULL LEGAL NAME OF CONTRACTOR} (“CONTRACTOR” and together with COUNTY, collectively, the “Parties” and each individually a “Party”), for the completion of the Work (defined below), on the following terms, conditions, and provisions. All references in the General Terms to the “Agreement” shall have the meaning ascribed to the term “Agreement” in the immediately preceding sentence.

1. CONTRACT: This Agreement incorporates by reference all of the General Conditions and Special Conditions, Specifications and Drawings provided by the COUNTY for the {PROJECT NAME, Project No. PROJECT NUMBER}, the Notice to Bidders as amended by Addenda Number {xx-xx}, the Bid Bond, the Performance Bond, the Payment Bond, and the bid documents executed and submitted by the CONTRACTOR for the Project (“Bid”), to the extent the Bid is consistent with the provisions of this Agreement other than the Bid (all of the foregoing documents, together with this Agreement, collectively, the “Contract” or “Contract Documents”). A copy of each of the General and Special Conditions, Specifications and Drawings provided by the COUNTY for the {PROJECT NAME, PROJECT NUMBER}, the Notice to Contractors, the Bid Bond, the Performance Bond, and the Payment Bond are attached hereto as EXHIBIT A, and a copy of the Bid is attached hereto as EXHIBIT B. All capitalized terms used but not defined herein shall have the respective meanings ascribed to such terms in the Notice to Bidders. Copies of all Contract Documents are on file in the Department of General Services Office of the COUNTY, and have been and will be made available to the CONTRACTOR during the term of this Agreement. CONTRACTOR acknowledges receipt of all Contract Documents.

2. WORK: CONTRACTOR, at CONTRACTOR’s own cost and expense, shall perform all the work described in the Contract Documents (“Work”), and shall furnish all equipment and materials necessary to perform and complete the Work, in a good and workmanlike manner and to the satisfaction of the Director of the COUNTY’s General Services Department (“Director”), or the Director’s designee, all in strict accordance with the Contract Documents.

3. EXCAVATIONS: Before any pavement resurfacing, displacement, or excavation of the ground that may be required in connection with the Work under this Contract, the CONTRACTOR shall obtain an inquiry identification number by calling Underground Service Alert (USA) 1 (800) 422-4133 or by such other means as may be required; shall conform to all requirements of Sections 4215 through 4217 of the Government Code regarding any such pavement resurfacing, displacement or excavation, including the payment of any fees required; and shall facilitate performance by the COUNTY of any obligation required of the COUNTY under the Government Code. There shall be no performance under this Contract by either party hereto unless and until CONTRACTOR complies with all of the foregoing provisions of this Sections 3, and notifies the County Representative (defined below) in writing regarding such compliance.

4. COUNTY REPRESENTATIVE: The “County Representative” referred to in the Contract Documents is Lou Gibilisco

5. PAYMENT: As full compensation for furnishing all labor, supervision, overhead, materials, and equipment and for completing all of the Work contemplated by this Contract, and subject to adjustments and liquidated damages, if any, as provided in the Contract Documents, the base amount to be paid to the CONTRACTOR for satisfactory completion of all requirements of the CONTRACTOR under this Contract is and shall be {WRITTEN AMOUNT IN DOLLARS AND CENTS} (\$NUMERICAL) (“Base Contract Amount”), to be paid as provided in the Contract Documents. The CONTRACTOR assumes and will provide against any loss or damage arising out of the nature of the Work undertaken, or the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the performance of the Work until its acceptance by the COUNTY, and assumes any and all expenses incurred by or in consequence of suspension or discontinuance of the Work, for well and faithfully completing the Work and the whole thereof, in the manner and to the requirements of the Contract and directions of the County Representative to the extent not inconsistent with any provisions of the Contract Documents.

6. RIGHT TO AUDIT: CONTRACTOR shall maintain and make available all books, papers, records, detail costs, estimates, claims, and accounts, including payment, property, payroll, personnel, subcontractors, and financial records related to or which arise in connection with the Contract (collectively, the “Records”). The form of record keeping with respect to

the Records shall be subject to approval by COUNTY. The Records shall be made available during normal business hours for examination by COUNTY or the County Representative and shall be retained at CONTRACTOR'S principal place of business in California for audit during normal business hours at such place for four (4) years after the recording of the Notice of Completion for the Project. CONTRACTOR shall provide an office in which COUNTY and the County Representative may conduct such audit(s).

The COUNTY will have the right to audit CONTRACTOR'S Project records. Records must be made available in a form satisfactory to the Santa Barbara County Auditor-Controller.

7. EXTRA WORK: Extra work and materials, may be authorized via written Change Order(s) duly executed by the Director, including agreement(s) providing for compensation in addition to the Base Contract Amount at the same rates per unit provided for in the Contract Documents; *provided, however*, that the aggregate amount of such compensation in addition to the Base Contract Amount that may be authorized by the Director shall not exceed [] (i.e., ten percent (10%) of the original Base Contract Amount, if the original Base Contract Amount is less than \$250,000, or (ii) \$25,000 + 5% of the amount of the original Base Contract Amount in excess of \$250,000). Compensation in such other equitable amount as is appropriate for the requirements of the COUNTY may be authorized by resolution or minute order of the Santa Barbara County Board of Supervisors.

8. COMPLIANCE WITH LAW: CONTRACTOR shall keep fully informed of, and shall at all times during the Term (defined below) ensure the performance of the Work is in compliance with, all laws, statutes, ordinances, decrees, orders, and regulations which do or may affect the Project, performance of the Work, the materials used therein, or persons engaged in connection therewith, and all such orders of bodies and tribunals having any jurisdiction over same (collectively, "Applicable Laws"). If CONTRACTOR has reason to believe that any provision of the Contract Documents conflict with any Applicable Law(s), the CONTRACTOR shall immediately report same to the County Representative in writing. CONTRACTOR shall at all times observe and comply with, and shall cause all agents, employees, and subcontractors to observe and comply with, all Applicable Laws. CONTRACTOR acknowledges and shall comply with the provisions of Sections 9364 and Sections 9550 and 9566, inclusive, of the Civil Code of California.

9. PAYMENTS NOT ACCEPTANCE: No certificate given or payments made under this Contract, except the final payment hereunder, shall be evidence of the performance of this Contract, either wholly or in part, against any claim upon CONTRACTOR. Final payment for the Work performed under this Contract shall not be made until the lapse of thirty (30) days after the Notice of Completion of the Work has been filed for record and no payment shall be construed to be acceptance of any defective Work or improper materials. CONTRACTOR agrees that the payment for final quantities due under this Contract and the payment of amounts due for any Work in accordance with this Contract shall release the COUNTY from any claims or liabilities on account of Work performed under this Contract, as the same may be amended from time to time during the Term. In addition to guarantees required elsewhere, CONTRACTOR shall and does hereby guarantee all workmanship and material to be free of defects and fit for the purposes intended for a period of one year from and after both the date of acceptance of the work and the recordation of the Notice of Completion by the COUNTY and CONTRACTOR shall repair or replace all Work and materials, together with any other portions of the Work which may be displaced in so doing, that, in the opinion of the County Representative, is or becomes defective during the period of said guarantee, without expense whatsoever to the COUNTY.

10. PREVAILING WAGE RATES: Rates of wages, including overtime, holiday, and Sunday rates provided for the Work shall comply with and are subject to the California Labor Code, Sections 1770 et. seq., Executive Orders of the President of the United States No. 9240, dated September 9, 1942, and No. 9250, dated October 3, 1942, and to any modifications thereof, and to and any orders of the President or any authorized Federal Officer or agency, insofar as the same may apply to this Contract.

No contractor or subcontractor may be listed on a bid for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]. No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

11. CONTRACT DOCUMENTS ACKNOWLEDGED: CONTRACTOR hereby declares that CONTRACTOR has read the Contract Documents, has carefully examined the plans and detailed drawings of the Work to be performed, and fully understands the intent and meaning of the same.

12. TIME FOR COMMENCEMENT, COMPLETION: The term of this Contract shall commence effective as of the first

date that this Agreement is duly executed by all of the parties hereto (“Effective Date”) and shall terminate on the date that is {275} calendar days after the Effective Date unless earlier terminated in accordance with the provisions of this Agreement (“Term”). As soon as practicable after the Contract has been executed by both the CONTRACTOR and the COUNTY, a Notice to Proceed will be issued by the County Representative stating the starting date of work performance under the Contract. The CONTRACTOR shall begin work within fifteen (15) calendar days after receiving the Notice to Proceed unless otherwise provided therein. The provisions of this Agreement pertaining to Liquidated Damages shall apply in the event of the CONTRACTOR’s failure to complete the Work within the Term. In the event that CONTRACTOR does not complete the Work during the Term, CONTRACTOR shall only be paid for the Work actually performed during the Term and accepted by COUNTY in accordance with the provisions of this Agreement.

13. WORKERS' COMPENSATION INSURANCE: CONTRACTOR certifies that CONTRACTOR has knowledge of, is in compliance with, and warrants that CONTRACTOR at all times during the Term shall remain in compliance with, the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance by the provisions of that Code. CONTRACTOR shall comply with such provisions before commencing the performance of the Work.

14. PROGRESS PAYMENT; NO WAIVER FOR DELAY: Any progress payment made after the scheduled completion date for the Work shall not constitute a waiver of any liquidated damages under this Contract.

15. GUARANTEE BONDS: Before any performance under this Contract, the CONTRACTOR shall provide the security required by statute for the payment of all workers and suppliers, and security for the faithful performance of all terms and conditions of this Contract, in an amount and form approved by the COUNTY. Both securities shall contain provisions that automatically increase amounts thereof and/or time of completion or both for all change orders, extensions, and additions to the Work provided under this Contract.

16. DISPUTES: Should any dispute(s) arise respecting the construction or meaning of any of the plans or specifications affecting the Work or respecting the true value of any extra work or work omitted, such dispute(s) shall be resolved by the Director of the COUNTY’s General Services Department or his Assistant Director of General Services designee (“Director”), whose decision shall be final and binding upon the parties hereto. If, after the decision of the Director as provided herein, claims (as defined in Public Contracts Code Section 20104) under this Contract are filed by CONTRACTOR against COUNTY, and those claims are in the aggregate amount of \$375,000 or less, such claims shall be resolved under Public Contracts Code Sections 20104 through 20104.8, inclusive.

17. SUBSTITUTION OF MATERIALS, SUBSTITUTION OF CONTRACTORS: The County Representative is authorized to act on behalf of the COUNTY in any matters requiring consent to substitutions of materials or equipment; provided, however, that the County Representative is not authorized to [_____].

18. SURVIVAL: All provisions of this Contract which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

19. INDEMNIFICATION AND INSURANCE : CONTRACTOR shall at all times comply with the indemnification and insurance provisions set forth in EXHIBIT C, attached hereto and incorporated herein by reference.

20. ARPA COMPLIANCE : CONTRACTOR shall comply with the requirements of the Federal 2021 American Rescue Plan Act (“ARPA”), U.S. Treasury Coronavirus State and Local Fiscal Recovery Funds Compliance and Reporting Guidance, and federal regulations, including, but not limited to, Title 2 of the Code of Federal Regulations (CFR) Part 200, entitled, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.” In addition, CONTRACTOR shall comply with the Federal Terms and Conditions attached hereto as EXHIBIT D and incorporated herein by reference. CONTRACTOR shall comply with grant agreements, assurances in applications, notices of award, and all other applicable federal, state, and local laws, regulations, ordinances, orders, rules, guidelines, directives, circulars, bulletins, notices, and policies governing the ARPA funds provided in connection with this Agreement. CONTRACTOR shall be responsible for providing services in a manner consistent with all federal and state requirements and standards required as a condition of receiving and expending ARPA funds provided in connection with this Agreement.

21. FEDERAL PROVISIONS : CONTRACTOR acknowledges that Federal financial assistance will be used to fund this Agreement. CONTRACTOR shall only use federal funds as authorized herein. CONTRACTOR will comply will all applicable federal law, regulations, executive orders, federal policies,

procedures, and directives, including, but not limited to, Title 2 of the Code of Federal Regulations (CFR) Part 200, entitled, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards." In addition, CONTRACTOR shall comply with the Federal Terms and Conditions attached hereto as EXHIBIT E and incorporated herein by reference. CONTRACTOR shall comply with grant agreements, assurances in applications, notices of award, and all other applicable federal, state, and local laws, regulations, ordinances, orders, rules, guidelines, directives, circulars, bulletins, notices, and policies governing the Federal funds provided in connection with this Agreement. CONTRACTOR shall be responsible for providing services in a manner consistent with all federal and state requirements and standards required as a condition of receiving and expending funds provided in connection with this Agreement.

22. STATE FUNDING PROVISIONS: CONTRACTOR acknowledges that this Agreement will be funded by financial assistance from the State of California (the "State") through the California Department of Social Services ("CDSS") Community Care Expansion ("CCE") Program ("CCE Funds"), and CONTRACTOR shall only use funds provided to CONTRACTOR hereunder as authorized herein and in compliance with all applicable State law, regulations, executive orders, federal policies, procedures, and directives, including, but not limited to, California Welfare and Institutions Code sections 18999.97-18999.98 and the Project Funding Agreement governing the use of such CCE Funds attached hereto as EXHIBIT F and incorporated herein by reference ("CCE Agreement"). CONTRACTOR shall comply, and shall ensure that all of its Subcontractors comply, with all obligations of the "Sponsor" under the CCE Agreement, as well as all notices of award, and all other applicable federal, State, and local laws, regulations, ordinances, orders, rules, guidelines, directives, circulars, bulletins, notices, and policies governing the CCE Funds provided in connection with this Agreement. CONTRACTOR shall be responsible for performing the Work in a manner consistent with all federal and State requirements and standards required as a condition of receiving and expending funds provided in connection with this Agreement

23. TAXES: CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any Work under this Contract, and shall make any and all payroll deductions required by law. CONTRACTOR is responsible for all CONTRACTOR personnel and for the payment of their compensation, including, if applicable, withholding of income taxes, and the payment and withholding of social security and other payroll taxes, unemployment insurance, workers' compensation insurance payments, and disability benefits. In no event shall COUNTY pay or be responsible for any taxes imposed on, or with respect to, CONTRACTOR's income, revenues, gross receipts, personnel, real or personal property, or other assets. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

24. CONFLICT OF INTEREST: CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of Work required to be performed under this Contract. CONTRACTOR further covenants that in the performance of this Contract, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

25. NONDISCRIMINATION: COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Contract and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

26. NON-ASSIGNMENT: CONTRACTOR shall not assign, subcontract, delegate, or otherwise transfer, directly or indirectly, whether by operation of law or otherwise ("Transfer") this Contract, in whole or in part,, or any of CONTRACTOR's rights or obligations under this Contract, without the prior written consent of COUNTY in each instance. Any attempted or purported Transfer in violation of this Section 24, or in violation of Section 2.08 of the General Conditions, attached hereto as part of Exhibit A, shall be null and void and without legal effect and shall constitute grounds for termination by COUNTY. No Transfer shall relieve CONTRACTOR of any of its obligations hereunder.

27. SEVERABILITY: If any one or more of the provisions contained in the Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect by a court of competent jurisdiction, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any

other provision hereof, and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

28. TIME IS OF THE ESSENCE: Time is of the essence in this Contract, and each covenant and term is a condition herein.

29. ENTIRE AGREEMENT AND AMENDMENT: The Contract Documents, as may be modified from time to time during the Term by duly authorized and executed Change Orders in accordance with the provisions of this Agreement and the General Terms, contain the entire understanding and agreement of the Parties with respect to the subject matter hereof and thereof, and there have been no promises, representations, agreements, warranties or undertakings by any of the Parties, either oral or written, of any character or nature hereafter binding except as set forth herein and therein. This Contract may be altered, amended or modified only by an instrument in writing, duly executed by each of the Parties, and by no other means, except as otherwise set forth in Section 30, below, to the extent such delegated authority is expressly authorized by the COUNTY Board of Supervisors in approving this Contract. Each Party waives its future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

30. EXECUTION OF COUNTERPARTS: This Contract may be executed electronically and in any number of counterparts, and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the Parties shall preserve undestroyed, shall together constitute one and the same instrument.

31. SUBCONTRACTORS: CONTRACTOR is authorized to subcontract with only the subcontractor(s) identified in the Bid as attached hereto and as set forth in Exhibit B (“Subcontractors”). Contractor shall be fully responsible for all services and Work performed by its Subcontractors. Contractor shall secure from each of its Subcontractors legally binding written agreements to comply with the provisions of this Agreement pertaining to CONTRACTOR’s obligations as if such obligations pertained to such Subcontractor, including, but not limited to, audit obligations.

32. CHANGE ORDERS: No Change Order shall be valid or enforceable against the COUNTY unless in the form of the Form of Change Order attached here as Exhibit [] and duly executed by both CONTRACTOR and the Director. in accordance with this Section 30 and Article 6 of the General Conditions (“Change Order”). No Change Order may (i) extend the Term, (ii) authorize Work to be performed hereunder after the Term or after the expiration or termination of this Agreement, (iii) increase the Maximum Contract Amount, or (iv) change the plans or specifications.

33. FLEET REQUIREMENTS: Vehicles with a Gross vehicle weight rating (“GVWR”) greater than 8,500 lbs. and light-duty package delivery vehicles operated in California may be subject to the California Air Resources Board (“CARB”) Advanced Clean Fleets regulations. Such vehicles may therefore be subject to requirements to reduce emissions of air pollutants. For more information, please visit the CARB Advanced Clean Fleets webpage at <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>. Contractor shall at all times have a valid Certificate of Reported Compliance, as described in section 2449(n) of Title 13 of the California Code of Regulations (“CARB Certificate of Compliance”), and shall confirm that each subcontractor listed in Contractor’s Bid has a valid CARB Certificate of Compliance, for each fleet of vehicles subject to 13 CCR section 2449 that may be used in performance of this Contract. No such vehicle is permitted on the project site unless and until Contractor provides County with a valid Certificate of Reported Compliance applicable to such vehicle.

34. ORDER OF PRECEDENCE: In the event of conflict between the provisions contained in the numbered sections 1 through 37 of this Agreement (“Numbered Section”) and the provisions contained in the Exhibits, the provisions contained in the Numbered Sections of this Agreement shall prevail over those in the Exhibits other than Exhibit C, which Exhibit C shall control and prevail over all other provisions of this Contract. CONTRACTOR agrees that in the event of any discrepancy, inconsistency, gap, ambiguity, or conflicting language between the Bid attached hereto as Exhibit B, on the one hand, and any other provision(s) of this Contract on the other, the provisions of this Contract (including the Numbered Sections of this Agreement, Exhibit A, and Exhibit C) other than Exhibit B shall take precedence and control and prevail over the provisions of the Bid attached hereto as Exhibit B.

35. TERMINATION.

A. COUNTY may, by written notice to CONTRACTOR, terminate this Contract in whole or in part at any time, whether for COUNTY’s convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill its obligations hereunder.

1. For Convenience. COUNTY may terminate this Contract in whole or in part upon thirty (30) days’ written notice. During such thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease Work as quickly and efficiently as reasonably possible, without performing unnecessary services or activities and by minimizing

negative effects on COUNTY from such winding down and cessation of Work.

2. For Nonappropriation of Funds. Notwithstanding any other provision of this Contract, in the event that no funds or insufficient funds are appropriated or budgeted by federal, State or COUNTY governments, or sufficient funds are not otherwise available for payments hereunder in the fiscal year(s) covered by the Term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence, and COUNTY may terminate or suspend this Contract in whole or in part, with or without a prior notice period. Subsequent to termination of this Contract under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the Term.

3. For Cause. Should CONTRACTOR default in the performance of this Contract or materially breach any of the provisions hereof, COUNTY may, at COUNTY's sole option, terminate or suspend this Contract in whole or in part upon written notice ("Termination Notice"). Upon receipt of such Termination Notice, CONTRACTOR shall immediately discontinue all Work (unless otherwise directed in such Termination Notice) and notify COUNTY in writing of the status of CONTRACTOR's performance of Work hereunder. The date of termination shall be the date the Termination Notice is received by CONTRACTOR, unless the Termination Notice directs otherwise.

B. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Contract, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Contract, COUNTY shall pay CONTRACTOR for satisfactory Work performed as of the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the Maximum Contract Amount, or for unperformed portions of Work. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the Work rendered by CONTRACTOR. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

36. JURISDICTION; VENUE. This Contract shall be governed by the laws of the State of California. Any litigation arising out of this Contract shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to the County of Santa Barbara, if in federal court.

37. NO WAIVER. COUNTY's delay or failure to act with respect to a breach of this Contract by CONTRACTOR shall not constitute or be construed as a waiver of COUNTY's rights with respect to subsequent or similar breaches. Any delay or failure of COUNTY to exercise or enforce any right or provision of this Contract shall not constitute a waiver of such right or provision, and every power and remedy given by this Contract to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY. No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement to be effective as of the first date fully executed by all of the parties hereto.

COUNTY

County of Santa Barbara

By: _____
LAURA CAPPS, CHAIR
BOARD OF SUPERVISORS

Dated: _____

ATTEST:

MONA MIYASATO,

COUNTY EXECUTIVE OFFICER

CLERK OF THE BOARD

By: _____
Deputy Clerk of the Board

CONTRACTOR

{LEGAL NAME OF CONTRACTOR}, a
California corporation

By: _____
AUTHORIZED REPRESENTATIVE

Name: {NAME}

Title: {TITLE OF AUTHORIZED
REPRESENTATIVE}

APPROVED AS TO FORM:

RACHEL VAN MULLEM,
COUNTY COUNSEL

By: _____
Deputy County Counsel

APPROVED AS TO ACCOUNTING FORM:

BETSY SCHAFFER, CPA, CPFO
AUDITOR-CONTROLLER

By: _____
Deputy Auditor-Controller

APPROVED AS TO FORM:

GREG MILLIGAN, ARM
RISK MANAGER

By: _____
Risk Management

RECOMMENDED FOR APPROVAL

KIRK LAGERQUIST, DIRECTOR
GENERAL SERVICES DEPARTMENT

By: _____
Department Head

Dept 063 Fund {FUND} Program {PROGRAM}

Account {ACCT} Project {PROJECT NUMBER}

EXHIBIT B - Contractors Bid

COUNTY OF SANTA BARBARA
GENERAL SERVICES DEPARTMENT
CAPITAL PROJECTS DIVISION



**BWell, Tecolote House Renovation
310 Camino Del Remedio SB, CA 93110**

**INVITATION FOR BIDS
COUNTY PROJECT NO. 21053**

MANDATORY JOB WALK:
Tuesday, February 11, 2025, 10:00am

BID DUE DATE:
Thursday March 20, 2025, 2:30 P.M.

VIRTUAL BID OPENING:
Thursday March 20, 2025, 3:00 P.M

BID FORM

- Pursuant to and in compliance with your Notice to Bidders and the Contract Documents relating to the construction of:

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053
Bid Due Date: Thursday, March 20, 2025, 2:30 P.M.

including Addendum No(s) 1, __, __, __, __, __, __, the undersigned bidder ("Bidder"), having become thoroughly familiar with the terms and conditions of the Contract Documents and with local conditions affecting the performance and the costs of the Work at the place where the Work is to be done, hereby proposes and agrees to fully perform the Work within the time stated in and in strict accordance with the Contract Documents (including the furnishing of any and all labor, materials, tools, expendable equipment and utility and transportation services necessary to fully perform the Work and complete it in a workmanlike manner) for the total sum of:

- BASE BID:**

\$

	1
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5	5	9
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 ,

0	9	8
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ADD OPTION 1:

\$

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5	7	0
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Alternate 1: (N) CMU Privacy Wall at Patio

ADD OPTION 2:

\$

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 ,

1	7
---	---

 ,

4	2	4
---	---	---

 .

0	0
---	---

Alternate 2: Alternate: Wet Room - Refer to plan set for more information.

(Place figures in appropriate boxes.)

The Bidder shall submit a list of the Allowances and Alternates with the Bid submittal.

Allowances for Specific Task Items Identified in Specifications 012100: \$130,000
Alternates for Specific Task Items Identified in Specifications 012300:

Estimated number of work days: 195



GENERAL SERVICES – CAPITAL PROJECTS DIVISION
ADDENDUM NOTICE

February 13, 2025

ADDENDUM NO. 1

COUNTY PROJECT NO. 21053

BWELL TECOLOTE HOUSE RENOVATION
310 CAMINO DEL REMEDIO SANTA BARBARA 93110

Prepared By: Lou Gibilisco Date: 02/13/2025

Reviewed By: Diana Estorga Date: 02/13/2025

To All Prospective Bidders:

Your attention is directed to the bid information presented below and on the attached page(s) that contain a summary of the modifications to the identified Bid Documents or Terms and Conditions.

The following changes have been made to the **BID DOCUMENTS**:

- 1) Invitation to Bidders page 6 BID FORM to include page in incorporate Addendum 1
- 2) Public Purchase Web Page - Bid Document file ADDITIONS:
 - a) Fire Sprinkler System Hydro Calculations
 - b) Fire Sprinkler Product Data Sheets

You are responsible for replacing the specified pages and added files.

You must acknowledge this addendum in Section 1 on your Bid Form and attach it to your Bid.

10. Protest(s) of any bid(s) must be delivered to the COUNTY in writing within ten (10) working days after the opening of bids, and must specify all grounds for such protest.

BIDDER

Quincon, Inc. _____ IRS No.: 205442300

Company

PO Box 1029 _____

Street Address

License Classification(s): #888545 / A, B, C27, C09, C33

Grover Beach _____

City

Phone Number: 805-574-1660

BY: _____

Signature

Jose Quintana, President _____

Printed Name, Title

DESIGNATION OF SUBCONTRACTORS

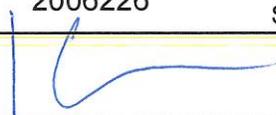
The Bidder agrees if this Bid is accepted by the COUNTY, that Bidder will contract with the County of Santa Barbara by executing the Contract in the form of the Form of Agreement to fully perform all Work and furnish all labor, materials, machinery, tools and apparatuses necessary to completely perform the Work in the manner and time prescribed by said Contract.

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053
Bid Due Date: Thursday, March 20, 2025, 2:30 P.M.

In compliance with the provisions of Section 41004107 of the Public Contract Code of the State of California, as may be amended from time to time, the undersigned Bidder has set forth below the name and principal place of business address of each Subcontractor who will perform Work or labor or render service(s) to the undersigned Bidder in connection with the Project, as well as the portion of the Work to be performed by each Subcontractor pursuant to a subcontract in an amount of more than one-half of one percent (0.5%) of the amount of the undersigned Bidder's total aggregate Bid, and Bidder represents and warrants that such information set forth below for each Subcontractor is substantiated by documentation signed by such Subcontractor affirming such Subcontractor's agreement to perform such Work in compliance with all applicable requirements set forth in this Invitation for Bids and the Contract. Prior to entering into the Contract, Bidder shall be required to provide a true and correct copy of an executed contract between Bidder and each Subcontractor reflecting the information set forth by Bidder for such Subcontractor in this Designation of Subcontractors and such Subcontractor's agreement to perform such Work in compliance with all applicable requirements set forth in the Contract Documents.

DIVISION OF WORK	SUBCONTRACTOR	LIC NO.	LOCATION
Masonry	KMA Masonry	605570	PO Box 5263, Paso Robles CA
Casework	A&E Cabinets	1066457	7330 Hollister Avenue, Goleta, CA 93117
Roofing	JR Roofing	970049	PO Box 6304, Oxnard, CA 93031
Ceramic Tile	Floor Connection	665417	141 Brisco Road, Arroyo Grande, CA 93420
Fire Sprinklers	Whittle Fire Protection	677813	PO Box 1168, Nipomo, CA 93444
HVAC	Smith MEP	420418	1340 W Betteravia Rd, Santa Maria, CA 93455
Electrical	Santa Maria Electric Inc.	2006226	408 N Broadway, Santa Maria, CA 93454

BIDDER: Quincon, Inc.

BY: 

Name: Jose Quintana
 Title: President

NOTE: This form may be reproduced and attached behind this page to list additional Subcontractors.

DESIGNATION OF SUBCONTRACTORS

The Bidder agrees if this Bid is accepted by the COUNTY, that Bidder will contract with the County of Santa Barbara by executing the Contract in the form of the Form of Agreement to fully perform all Work and furnish all labor, materials, machinery, tools and apparatuses necessary to completely perform the Work in the manner and time prescribed by said Contract.

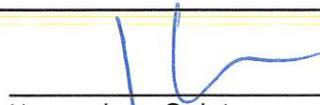
COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053
Bid Due Date: Thursday, March 20, 2025, 2:30 P.M.

In compliance with the provisions of Section 41004107 of the Public Contract Code of the State of California, as may be amended from time to time, the undersigned Bidder has set forth below the name and principal place of business address of each Subcontractor who will perform Work or labor or render service(s) to the undersigned Bidder in connection with the Project, as well as the portion of the Work to be performed by each Subcontractor pursuant to a subcontract in an amount of more than one-half of one percent (0.5%) of the amount of the undersigned Bidder's total aggregate Bid, and Bidder represents and warrants that such information set forth below for each Subcontractor is substantiated by documentation signed by such Subcontractor affirming such Subcontractor's agreement to perform such Work in compliance with all applicable requirements set forth in this Invitation for Bids and the Contract. Prior to entering into the Contract, Bidder shall be required to provide a true and correct copy of an executed contract between Bidder and each Subcontractor reflecting the information set forth by Bidder for such Subcontractor in this Designation of Subcontractors and such Subcontractor's agreement to perform such Work in compliance with all applicable requirements set forth in the Contract Documents.

<u>DIVISION OF WORK</u>	<u>SUBCONTRACTOR</u>	<u>LIC NO.</u>	<u>LOCATION</u>
Asphalt Paving	Challenge Asphalt	568465	118 Nopalitos Way, Santa Barbara, CA 93103
Flooring	Floor Connection	665417	141 Brisco Road Arroyo Grande, CA 93420

BIDDER: Quincon, Inc.

BY:


Name: Jose Quintana
Title: President

NOTE: This form may be reproduced and attached behind this page to list additional Subcontractors.

NONCOLLUSION AFFIDAVIT

In accordance with Public Contract Code § 7106, Jose Quintana

(Bidder' signatory's full name)

being first duly sworn, deposes and says that he or she is President

(Bidder signatory's title)

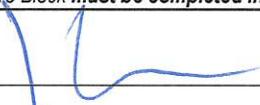
of Quincon, Inc.

(Bidder's fully legal entity name as registered with the California Secretary of State)

the Bidder submitting the foregoing Bid, that the Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the Bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham Bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or that anyone shall refrain from bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the Project; that all statements contained in the Bid are true; and further, that the Bidder has not, directly or indirectly, submitted the Bid or any breakdown thereof, or the contents thereof, or divulged information or data relative of any of the foregoing, to any corporation, partnership, company, association, organization, entity, bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid and has not paid, and will not pay, any person or entity for such purpose.

The undersigned, if executing this Noncollusion Affidavit on behalf of Bidder if Bidder is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents and warrants that he or she has full power to execute, and does execute, this Noncollusion Affidavit on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

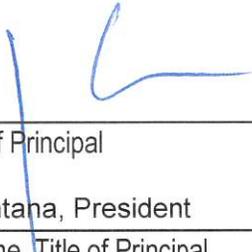
SIGNATURE BLOCK <i>(Signature Block must be completed in ink & changes must be initialed.)</i>	
Bidder's Signature: 	Date: <u>3/20/25</u>
Bidder's Name & Title (Print): <u>Jose Quintana, President</u>	
At CITY: <u>Grover Beach</u>	STATE: <u>CA</u>

CERTIFICATE OF COMPLIANCE

The undersigned hereby certifies that all requirements for insurance of subcontractors as specified in the Form of Agreement for this Project will be met.

3/20/25

Dated



Signature of Principal

Jose Quintana, President

Printed Name, Title of Principal

Quincon, Inc.

Company

PO Box 1029

Address

Grover Beach, CA, 93483

City, State & Zip

ANTI-FRAUD CERTIFICATION

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053
Bid Due Date: Thursday, March 20, 2025, 2:30 P.M.

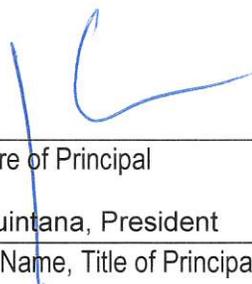
In accordance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury that the Bidder **has** __, **has not** , been convicted within the preceding three years of any offenses referred to in Public Contract Code Section 10285.1, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or federal antitrust law in connection with the bidding upon award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or Trustees of the California State University.

The term "Bidder" is understood to include all partners, members, officers, directors, responsible managing officers, and responsible managing employees thereof, as referred to in Public Contract Code Section 10285.1.

NOTE: The Bidder must place a check mark after "has" or "has not" in one of the blank spaces provided above.

3/20/25

Date



Signature of Principal

Jose Quintana, President

Printed Name, Title of Principal

Quincon, Inc.

Company

PO Box 1029

Address

Grover Beach, CA, 93483

City, State & Zip

BIDDER'S BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, Quincon Inc. as Principal, and Nationwide Mutual Insurance Company as Surety (hereinafter referred to as Surety), are held firmly bound unto the County of Santa Barbara, State of California (hereinafter called "Owner") in the penal sum of Ten Percent (10%) of the total aggregate amount of the Bid of the Principal above named, submitted by said Principal to Owner for the Work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents. Surety shall be and hereby warrants that it is listed in the Insurance Organizations Authorized by the Insurance Commissioner to Transact Business of Insurance in the State of California, published by the Department of Insurance, State of California or successor publications. In no case shall the liability of the Surety hereunder exceed the sum of Ten Percent of Bid DOLLARS (\$ 10% of Bid). The condition of this obligation is such that a bid to Owner for certain construction specifically described as follows:

COUNTY OF SANTA BARBARA
BeWell, Tecolote House Renovation
310 Camino Del Remedio, Santa Barbara CA 93110
Project No. 21053

for which bids are due on **Thursday, March 20, 2025, 2:30 P.M. Pacific Time** has been submitted by Principal to Owner.

NOW, THEREFORE, if the aforesaid Principal shall not withdraw said Bid within the period therein after the opening of the same, or, if no period be specified within sixty (60) days after said opening and shall within the period specified therefore, or, if no period be specified, within eight (8) days after the prescribed forms are presented to Principal for signature, enter into a written Contract with Owner, in the prescribed Form of Agreement, in accordance with the Bid as accepted, and file the two Bonds with Owner, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by law, then this obligation shall be null and void; otherwise, it shall remain in full force, virtue and affect.

Said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any manner affects its obligations on this bond, and it does hereby waive notice of any change, extension, alteration, or addition.

It is hereby agreed that any progress payment made after the scheduled completion date will not constitute a waiver of any liquidated damages heretofore agreed upon.

In the event suit is brought upon either Bond by Owner and judgment is recovered, the Surety shall pay all costs incurred by Owner in such suit, including a reasonable attorney's fee to be fixed by the Court.

Death, Bankruptcy, Receivership, Going Out of Business for any reason, or incompetence of the Principal shall not relieve the Surety of its obligations hereunder.

Dated 3-20-2024
Name of Principal Quincon Inc.
By: [Signature] (Seal)
Signature of Principal

Name of Surety Nationwide Mutual Insurance Company
Address 500 N.Brand Blvd.Ste 2000
Glendale, CA 91203
City, State & Zip

Dated 3/19/2025
By: [Signature] (Seal)
Jodie Lee Doner, Attorney-In-Fact
Signature of Surety's Attorney-in-fact

Surety's Agent for Service of Process (located within the State of California):

Name of Agent Nationwide Mutual Insurance Company
Address 500 N.Brand Blvd.Ste 2000
Glendale, CA 91203
City, State & Zip
213-507-4207
Telephone Number
FAX Number

NOTE: Signatures of those executing for Surety MUST be properly acknowledged. This form may be reproduced for transmittal to the Surety for execution and attached to the front of the original Bid Bond Form.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

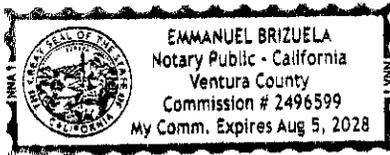
"A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document."

State of: California
County of Ventura

On 3-19-25 before me, Emmanuel Brizuela, Notary Public,
personally appeared Jodie Lee Doner

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I Certify under PENALTY OF PERJURY under the laws of The State of California that the foregoing paragraph is true and correct.



WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- INDIVIDUAL
- CORPORATE OFFICER

TITLES(S)

TITLE OR TYPE OF DOCUMENT

- PARTNERS
- LIMITED
- GENERAL

NUMBER OF PAGES

- ATTORNEY-IN-FACT
- TRUSTEE(S)
- GUARDIAN/CONSERVATOR
- OTHER

DATE OF DOCUMENT

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

SIGNER(S) OTHER THAN NAMED ABOVE

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:

AARON FOSBURG; EMMANUEL BRIZUELA; JODIE LEE DONER; KEVIN P REED;

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of

UNLIMITED

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 1st day of April, 2024.

[Handwritten Signature]

Antonio C. Albanese, Vice President of Nationwide Mutual Insurance Company

ACKNOWLEDGMENT

STATE OF NEW YORK COUNTY OF KINGS: ss

On this 1st day of April, 2024, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.



Sharon Laburda
Notary Public, State of New York
No. 01LA6427697
Qualified in Kings County
Commission Expires January 3, 2026

[Handwritten Signature]

Notary Public
My Commission Expires
January 3, 2026

CERTIFICATE

I, Lezlie F. Chimienti, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 19th day of March, 2025.

[Handwritten Signature]

Assistant Secretary

EXHIBIT B

Quincon, Inc. Proposal, March, 20, 2025

(Attached)

CONTRACT SUMMARY

Base Bid	\$1,559,098.00
ADD Alt 1	\$ 15,570.00
ADD Alt 2	\$ 17,424.00
Total Base Bid Plus ADD Alt 1-2	\$1,592,092.00
Allowance Total per Exhibit B Proposal	\$ 30,000.00
Sub Total	\$1,622,092.00
Contingency	\$ 93,604.60
Total Contract	\$1,715,696.60

EXHIBIT C

Indemnification and Insurance Requirements (For Construction Contracts)

INDEMNIFICATION

CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities arising out of this Agreement from any cause whatsoever, including the acts, errors or omissions of any person or entity and for any costs or expenses (including but not limited to attorneys' fees) incurred by COUNTY on account of any claim except where such indemnification is caused by the active negligence, sole negligence, or willful misconduct of the COUNTY.

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, its agents, representatives, employees or subcontractors.

A. **Minimum Scope and Limit of Insurance**
Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$2,000,000 per occurrence and \$4,000,000 in the aggregate.
2. **Automobile Liability:** Insurance Services Office Form CA 0001 covering Code 1 (any auto), with limits no less than \$2,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** Insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Contractor's Pollution Legal Liability and/or Asbestos Legal Liability:** (if project involves environmental hazards) with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR'S insurance at least as broad as ISO Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR'S insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR'S insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – **CONTRACTOR hereby agrees to waive rights of subrogation which any insurer of CONTRACTOR may acquire** from CONTRACTOR by virtue of the payment of any loss. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. **The Workers' Compensation policy shall be endorsed with a waiver of subrogation** in favor of the COUNTY for all work performed by the CONTRACTOR, its employees, agents and subcontractors. This provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. At the option of the COUNTY, either: the CONTRACTOR shall cause the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the COUNTY, its officers, officials, employees, agents and volunteers; or the CONTRACTOR shall provide a financial guarantee satisfactory to the COUNTY guaranteeing payment of losses and related investigations, claim administration, and defense expenses.
6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR'S obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not

replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.

9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:

- i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
- ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
- iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.

11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.

EXHIBIT D

ARPA LOCAL ASSISTANCE AND TRIBAL CONSISTENCY FUND REQUIRED TERMS

This Agreement is funded through the Local Assistance and Tribal Consistency Fund (“LATCF”), a part of the American Rescue Plan Act (“ARPA” or “Act”), Pub. L. No. 117-2 (March 11, 2021) (codified as 42 U.S.C. § 801 *et seq.*). ARPA imposes certain requirements through the Act, its implementing regulations at 2 CFR Part 200, the Award Terms and Conditions imposed by the U.S. Department of the Treasury (“Treasury”) onto the COUNTY (“Award Terms and Conditions”), and Treasury’s *Local Assistance and Tribal Consistency Fund Reporting Guidance* (“LATCF Guidance”). In recognition of these funding requirements, CONTRACTOR agrees to the following provisions:

GENERAL COMPLIANCE.

CONTRACTOR shall comply with the requirements of the Act; the LATCF; the Award Terms and Conditions; the LATCF Guidance; and all other applicable federal, state, and local laws, regulations, ordinances, orders, rules, guidelines, directives, circulars, bulletins, notices, and policies governing LATCF in effect during the term of this Agreement (“Term”) and as they may be amended from time to time.

USE OF FUNDS.

- A. CONTRACTOR represents and warrants that it has the institutional, managerial, and financial capability to ensure proper planning, management, and completion of all of CONTRACTOR’s obligations under this Agreement.
- B. CONTRACTOR understands and agrees that the funds disbursed under this Agreement (“Funds”) must only be used in compliance with Section 605 of the Act and Treasury’s regulations implementing Section 605, the Award Terms and Conditions, and the LATCF Guidance.
- C. CONTRACTOR shall not use any Funds, directly or indirectly, to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, a jurisdiction, or an official of any government, to favor, adopt, or oppose, by vote or otherwise, any legislation, law, ratification, policy, or appropriation, whether before or after the introduction of any bill, measure, or resolution proposing such legislation, law, ratification, policy, or appropriation.

REPORTING.

CONTRACTOR shall promptly comply with COUNTY’s requests for documents and data, including, but not limited to, project and expenditure information, in connection with reporting obligations associated with LATCF.

MAINTENANCE OF AND ACCESS TO RECORDS.

- A. Pursuant to Section 6 of the Award Terms and Conditions, CONTRACTOR shall maintain, and provide to COUNTY upon request, records and financial documents sufficient to show compliance with Section 605 of the Act, Treasury's implementing regulations, the Award Terms and Conditions, and the LATCF Guidance with respect to all uses of the Funds.
- B. The Treasury Office of Inspector General and the Government Accountability Office, and their respective authorized representatives, shall have the right to access CONTRACTOR's records (electronic and otherwise) in order to conduct audits and other investigations.
- C. CONTRACTOR must maintain all records relating to this Agreement and/or the Funds for a period of five (5) years after all Funds have been expended or returned to Treasury.

CONFLICT OF INTEREST.

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest, and shall not at any time during the Term acquire any employment or interest, direct or indirect, including, but not limited to, any interest in any business, property, or source of income, which may conflict in any manner or degree with this Agreement or CONTRACTOR's performance hereunder. CONTRACTOR further covenants that, during the Term, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any actual or potential conflict(s) of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial; provided, however, that such waiver shall only be effective if provided by COUNTY to CONTRACTOR in writing signed by COUNTY.

EQUAL EMPLOYMENT OPPORTUNITY.

During the Term:

- A. CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. CONTRACTOR shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin, including, but not limited to, with respect to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay, other forms of compensation; and selection for training, including apprenticeship. CONTRACTOR shall post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- B. CONTRACTOR shall, in all solicitations and advertisements for employees placed by or on behalf of CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

CONTRACTOR will send to each labor union or representative of workers with which CONTRACTOR has a collective bargaining agreement or other contract or understanding, a notice advising such labor union or workers' representatives of CONTRACTOR'S commitments under this Section 6 and shall post copies of the notice in conspicuous places available to all employees and applicants for employment.

CONTRACTOR shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, as supplemented in Department of Labor regulations (41 CFR Part 60), and all other applicable rules, regulations, and relevant orders of the Secretary of Labor. Title 41 CFR section 60.14 applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the regulation were specifically set out herein, and CONTRACTOR shall comply with said regulation.

CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and shall permit access to CONTRACTOR's books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

In the event of CONTRACTOR'S noncompliance with Sections 6 and 7 of this Agreement, or with any applicable laws, rules, regulations, or orders, COUNTY may cancel, terminate, or suspended this Agreement. in whole or in part, and CONTRACTOR may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

CONTRACTOR must include the provisions of Sections 6 through 9 hereof in every subcontract and purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor and vendor. CONTRACTOR shall take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

NONDISCRIMINATION.

- D. CONTRACTOR shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22 ("Title VI"), which is herein incorporated by reference, and which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits to, or otherwise discriminating against a person on the basis of race, color, or national origin, and includes protections for persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, and.

- E. CONTRACTOR shall report any complaints of discrimination on the grounds of race, color, national origin, or limited English proficiency covered by Title VI, and shall provide to COUNTY, upon request, a list of all reviews and proceedings based on such complaint, whether pending or completed, including the outcome.
- F. CONTRACTOR shall incorporate the language in Section 7 (A) through (B), above, in every contract and purchase order funded under this Agreement.
- G. CONTRACTOR shall comply with Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. § 794, which prohibits discrimination on the basis of disability under any program or activity receiving federal financial assistance.
- H. CONTRACTOR shall comply with the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§ 12101 et seq.), which prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by state and local governments, or instrumentalities or agencies thereof.
- I. CONTRACTOR shall comply with the Age Discrimination Act of 1975, 42 U.S.C. 6101 et seq., as codified at 45 CFR Part 91, which prohibits discrimination on the basis of age in any program or activity receiving Federal financial assistance.
- J. CONTRACTOR shall comply with Governmentwide Requirements for Drug-Free Workplace, 31 CFR Part 20.
- K. CONTRACTOR shall comply with The Fair Housing Act, Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), which prohibits discrimination in housing on the basis of race, color, religion, national origin, sex, familial status, or disability.
- L. CONTRACTOR shall comply with the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (42 U.S.C. §§ 4601-4655) and implementing regulations.
- M. CONTRACTOR shall comply with all generally applicable federal environmental laws and regulations.

CLEAN AIR ACT.

- N. CONTRACTOR shall comply with all applicable standards, orders and regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- O. CONTRACTOR shall report each violation of the Clean Air Act to the California Environmental Protection Agency and understands and agrees that the California Environmental Protection Agency will, in turn, report each violation as required to assure notification to the COUNTY, the Federal Agency which provided funds in support of this Agreement, and the appropriate Environmental Protection Agency Regional Office.
- P. CONTRACTOR shall include the provisions of this Section 8 in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance.

FEDERAL WATER POLLUTION CONTROL ACT.

- A. CONTRACTOR shall comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- B. CONTRACTOR shall report each violation of the Federal Water Pollution Control Act to the California State Water Resources Control Board, and understands and agrees that the California State Water Resources Control Board will, in turn, report each violation as required to assure notification to the COUNTY, the Federal Agency which provided funds in support of this Agreement, and the appropriate Environmental Protection Agency Regional Office.
- C. CONTRACTOR shall include the provisions of this Section 9 in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance.

DEBARMENT AND SUSPENSION.

- A. As required by 2 CFR section 200.214, CONTRACTOR warrants that it is not subject to the non-procurement debarment and suspension regulations implementing Executive Orders 12549 and 12689, 2 CFR Part 180, which restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs or activities.
- B. The certification set forth in Paragraph 10.A., above, is a material representation of fact relied upon by COUNTY in entering into this Agreement. If it is later determined that CONTRACTOR did not comply with any provision of 2 CFR Part 180, subpart C, or 2 CFR Part 3000, subpart C, then, in addition to remedies available to the California Governor's Office of Emergency Services and COUNTY, the Federal Government may pursue available remedies, including, but not limited to, suspension and/or debarment of CONTRACTOR.
- C. This Agreement is a covered transaction for purposes of 2 CFR Part 180 and 2 CFR Part 3000. As such CONTRACTOR certifies and warrants that, at all times during the Term, none of the CONTRACTOR, its principals (defined at 2 CFR section 180.995), or its affiliates (defined at 2 CFR section 180.905) are excluded (defined at 2 CFR section 180.940) or disqualified (defined at 2 CFR section 180.935).
- D. CONTRACTOR must comply with 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C, and must include a requirement to comply with such regulations in all contracts it enters into in connection with this Agreement.
- E. CONTRACTOR shall comply with the requirements of 2 CFR Part 180, subpart C, and 2 CFR Part. 3000, subpart C, at all times during the Term. CONTRACTOR shall include a provision requiring such compliance in all contracts it enters into in connection with this Agreement.

MANDATORY DISCLOSURE.

CONTRACTOR must disclose, in a timely manner, in writing to the COUNTY all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the award or this Agreement. CONTRACTOR is required to report certain civil, criminal, or

administrative proceedings to the System for Award Management (SAM) located at www.sam.gov. Failure to make required disclosures can result in any of the remedies described in 2 CFR section 200.338 (Remedies for noncompliance), including suspension or debarment. (See also 2 CFR Part 180 and 31 U.S.C. 3321.)

REMEDIES FOR NONCOMPLIANCE.

In the event COUNTY determines, in its sole discretion, that CONTRACTOR is not in compliance with one or more of the provisions set forth herein, COUNTY may:

- A. Wholly or partly suspend or terminate this Agreement.
- B. Require payments hereunder to be made as reimbursements rather than advance payments;
- C. Withhold authority to proceed to the next phase until receipt of evidence of acceptable performance within a given period of performance;
- D. Require additional, more detailed financial reports;
- E. Require additional project monitoring;
- F. Requiring CONTRACTOR to obtain technical or management assistance;
- G. Establish additional prior approvals;
- H. Require CONTRACTOR to reimburse COUNTY for payments made with Funds; or
- I. Take other actions and pursue other remedies that may be legally available.

UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS.

CONTRACTOR shall comply with Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, as set forth in 2 C.F.R. §§ 200.100-110, 203, and 303, and Subpart F.

DISCLAIMER.

COUNTY expressly disclaims any and all responsibility or liability to CONTRACTOR or third persons for the actions of CONTRACTOR or third persons resulting in death, bodily injury, property damages, or any other losses resulting in any way from the performance of this Agreement or any other losses resulting in any way from the performance of this Agreement or any contract, or subcontract under this Agreement.

EXHIBIT E

General Conditions & Specifications

General Conditions

County of Santa Barbara
Tecolote House Renovation
Project 21053
January 27, 2025

GENERAL CONDITIONS

GENERAL CONDITIONS

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ARTICLE 1: CONTRACT DOCUMENTS

1.1 DEFINITIONS

- 1.1.1 The Contract Documents: The Contract Documents consist of the Agreement between the Owner and the Contractor, the Conditions of the Contract (General Conditions, General Requirements, Special Provisions and other Conditions), the Drawings, the Specifications, all Addenda, Supplements, Invitations to Bid and Proposal Forms issued prior to execution of the Contract and all Modifications issued after the execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties (2) a Change Order, (3) a written interpretation issued by the Architect/Engineer pursuant to Subparagraph 3.2.2 or (4) a written order for a minor change in the Work issued on the Owner's behalf pursuant to Paragraph 13.4.1.
- 1.1.2 The Contract: The Contract Documents form the Contract with the Contractor. This Contract represents the entire and integrated agreement and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification as defined in Subparagraph 1.1.1. The Contract Documents shall not be construed to create any contractual relationship of any kind between the Architect/Engineer and the Contractor or between the Architect/Engineer and the Designated Representative(CM/CDR) but the Architect/Engineer and the Designated Representative(CM/CDR) shall be entitled to performance of the obligations of the Contractor intended for their benefit and to enforcement thereof. Nothing contained in the Contract Documents shall create any contractual relationship between the Owner, the Designated Representative(CM/CDR) or the Architect/Engineer and any Subcontractor or Sub-subcontractor.
- 1.1.3 The Work: The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or part of the project.

The Project: The "Project" is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.
- 1.1.5 The Owner: As defined in Article 2 of the General Conditions, the Owner for this project is:
Santa Barbara County, through its
Board of Supervisors
- 1.1.6 Architect/Engineer: As defined in Article 3 of the General Conditions.
- 1.1.7 Designated Representative(CM/CDR) and/or Construction Manager (County Designated Representative)(CM/CDR): As defined in Article 4 of the General Conditions, the Designated Representative(CM/CDR) is also the Labor Compliance Coordinator for the Work.
- 1.1.8 Contractor: As defined in Article 5 of the General Conditions.
- 1.1.9 Product: The term "product" shall include materials, equipment and systems.
- 1.1.10 The Drawings: The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
- 1.1.11 The Specifications: The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work and performance of related services.
- 1.1.12 The Bid Package: The Bid Package is the volume usually assembled for the Work which may include the bidding requirements, sample forms, conditions of the Contracts and Specifications.
- 1.1.13 As Approved: Where used in conjunction with the Designated Representative(CM/CDR) or the Architect/Engineer's response to submittal's, requests, applications, inquiries, reports and claims by the Contractor, the meaning of the term "approved" shall not exceed the limitations of the Designated Representative(CM/CDR)(CM/CDR) or the Architect/Engineer's responsibilities and duties as established in these General Conditions.
- 1.1.13.1 In no case shall "approval" by the Designated Representative(CM/CDR) or the Architect/Engineer be interpreted as a release of the Contractor from the responsibilities to fulfill the requirements of the Contract Documents.
- 1.1.13.2 Approval, where required for an item, shall be obtained from the Architect/Engineer through the Designated Representative(CM/CDR) in writing.

- 1.1.14 Indicated: The term "indicated" is a cross reference to details, notes or schedules on the drawings, other paragraphs or schedules in the Specifications and similar means of recording requirements in the Contract Documents.
- 1.1.14.1 Where terms such as "shown", "noted", "scheduled", and "specified" are used instead of "indicated", it is for the purpose of helping the reader accomplish the cross reference and no limitation of locations is intended except as specifically noted.
- 1.1.14.2 Directed, Requested, Etc.: Where not otherwise explained, terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by the Architect/Engineer, Designated Representative(CM/CDR) or Owner's Representative", "requested by the Architect/Engineer, Designated Representative(CM/CDR) or the Owner's Representative", etc. However, no such implied meaning will be interpreted to extend to the Architect/Engineer's or Designated Representative(CM/CDR)'s responsibility in the Contractor's area of construction supervision.
- 1.1.15 Installer: The person or entity engaged by the Contractor or its Subcontractor or Sub-subcontractor for the performance of a particular unit of Work at the project site, including installation, erection, application and similar required operations. It is a General Requirement that installers be recognized as experienced and competent in the Work that they are engaged to perform.
- 1.1.16 Suitable, Reasonable, Proper, Correct, and Necessary: Such terms shall mean as suitable, reasonable, proper, correct or necessary for the purpose intended as required by the Contract Documents, subject to the judgment of the Architect/Engineer or the Designated Representative(CM/CDR).
- 1.1.17 Including, Such As: The Terms "including" and "such as" shall always be taken in the most inclusive sense, namely, "including, but not limited to", and "such as, but not limited to."
- 1.1.18 Option: The term "option" shall mean a choice from the specified products which shall be made by the Contractor. The choice is not "whether" the Work is to be performed, but "which" product or "which" procedure is to be used. The product or procedure chosen by the Contractor shall be provided at no increase in the cost to the Owner or the Designated Representative(CM/CDR) and with no lessening of the Contractor's responsibility for its performance. All or any options selected or proposed are still subject to all requirements for submittals and for approval of same.
- 1.1.19 Exposed: The term "exposed" shall mean any item or surface, exterior or interior, which can be seen by a person outside the building, or seen by a person inside any usable space within the building during normal activity.
- 1.1.20 At No Additional Cost: The term "at no additional cost" shall mean at no additional cost to the Owner and at no cost to the Architect/Engineer or the Designated Representative(CM/CDR).
- 1.1.21 Testing Laboratory: An independent entity engaged to perform specific inspections or tests of the Work, either at the project site or elsewhere; and to report and interpret the results of those inspections or tests.
- 1.1.22 Record Documents: Construction Documents revised to show changes made during the construction process, usually based on marked-up prints, drawings and other data furnished by the Contractor to the Designated Representative(CM/CDR).
- 1.1.23 Compliance Group Representative: The person or entity representing a third-party observer whose sole purpose on the PROJECT is to interview contractor employees, including any subcontractor for prevailing wage compliance consistent with federal and state prevailing wage requirements as set forth in the David-Bacon Act and other related codes, laws or regulations.
- 1.2 ABBREVIATIONS**
- 1.2.1 The language of the specifications and elsewhere in the Contract Documents is of the abbreviated type in certain instances and implies words and meanings which will be appropriately interpreted.
- 1.2.2 Actual word abbreviations of a self-explanatory nature have been included in the Specifications and Drawings. These are generally defined in the Specifications Section at the first instance of use of each term so abbreviated. They are generally summarized in a list on the Drawings.
- 1.2.3 Singular words will be interpreted as plural and plural words will be interpreted as singular where applicable and the full context of the requirements so indicates.
- 1.3 EXECUTION, CORRELATION AND INTENT**
- 1.3.1 By executing this Agreement, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed and correlated its observations with the requirements of the Contract Documents. Claims, as a result of failure to do so, will not be considered.
- 1.3.2 The contract agreement shall be signed in triplicate by the Owner and Contractor. Original copies are to be provided to Owner, Contractor, and Designated Representative(CM/CDR). Digital signatures, as of 2021, are acceptable by the County of Santa Barbara

- 1.3.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary and what is required by any one shall be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations in the Contract Documents which have well-known technical or trade meanings are used in accordance with such recognized meanings.
- 1.3.4 The organization of the Specification into divisions, sections and articles and the arrangements of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any Trade.
- 1.3.5 All indications or notations which apply to one or a number of similar situations, materials or processes shall be deemed to apply to all such situations, materials or processes wherever they appear in the Work, unless otherwise indicated in the Contract Documents.
- 1.3.5.1 Where the word "similar" appears on the drawings, it shall be interpreted in its general sense and not as meaning identical and all details shall be worked out in relations to their location and connection with other parts of the Work.
- 1.3.5.2 Where, on any drawings, a portion of the Work is drawn out and the remainder is indicated in outline, the parts drawn out shall also apply to parts outlined.
- 1.3.6 All manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the manufacturer's written or printed directions and instructions unless otherwise indicated in the Contract Documents.
- 1.3.7 The Contract Documents should be read as one package and are dependent on one another for interpretation. If there is an ambiguity or conflict between documents, the Contractor or its Subcontractor has the duty of inquiring with the Designated Representative(CM/CDR) and the Architect/Engineer before he bids on the job. Conflicts and discrepancies discovered during the process of the Work shall be referred to the Architect/Engineer and Owner via the Designated Representative(CM/CDR) for resolution.
- 1.3.8 Any noted discrepancies between the Contract Documents shall be promptly called to the attention of the Designated Representative(CM/CDR) and the Architect/Engineer and no Work so affected shall be undertaken in advance of the Designated Representative(CM/CDR)'s and the Architect/Engineer's decision, except at the Contractor's own risk.

1.4 OWNERSHIP AND USE OF DOCUMENTS

- 1.4.1 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, up to eight (8) sets of approved Working Drawings and Specifications for the execution of the Work.
- 1.4.2 All Drawings, Specifications and copies thereof furnished by the Owner are and shall remain its property. They are to be used only with respect to this project and are not to be used on any other project. With the exception of one contract set for each party, such documents are to be returned or suitably accounted for to the Owner on request at the completion of the Work.

ARTICLE 2: OWNER

2.1 DEFINITION

- 2.1.1 The Owner is the person or entity identified as such in the Agreement between the Owner and the Contractor and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Owner means the Owner or its authorized representative.

2.2 INFORMATION AND SERVICES FURNISHED BY THE OWNER

- 2.2.1 The Owner will furnish all surveys describing the physical characteristics and approximate known utility locations for the site of the Project.
- 2.2.2 Except as provided in Subparagraph 5.7.1, the Owner will secure and pay for necessary approvals, easements, assessments and charges required for the construction, use, or occupancy of permanent structures or for permanent changes in existing facilities unless otherwise noted.
- 2.2.3 Information or services under the Owner's control will be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the Work.
- 2.2.4 The Owner shall forward all instructions to the Contractor through the Designated Representative(CM/CDR).
- 2.2.5 The Owner shall at all times have access to the Work for inspection, wherever it is in preparation or in progress. When directed by the Designated Representative(CM/CDR), the Contractor shall provide facilities for such access and inspection at the Contractor's cost.

2.3 DELEGATION

- 2.3.1 The Board of Supervisors delegates to the County Director of General Services the authority to act on its behalf in the administration of this contract.
- 2.3.2 The Director of General Services has the authority to change the Designated Representative(CM/CDR) when the Designated Representative(CM/CDR) is an employee of the County.
- 2.3.3 If the Designated Representative(CM/CDR) is a person or entity other than an employee of the County, the Director of General Services shall recommend to the Board of Supervisors a replacement for the Designated Representative(CM/CDR) whenever such replacement is in the best interest of the County. An affirmative majority vote by the Board of Supervisors is required to complete the replacement of the Designated Representative(CM/CDR).
- 2.3.4 The Director of General Services may execute Change Orders in accordance with Article 13 in a cumulative amount not to exceed 10% of the first \$250,000 of the base contract amount plus 5% of the base contract amount over \$250,000, and for time extensions as the director may deem equitable. Any Change Orders in excess of 10% of the first \$250,000 of the base contract amount plus 5% of the base contract amount over \$250,000 shall be approved by a majority vote of the Board of Supervisors.

2.4 AUTHORITY OF BOARD AND INSPECTION

- 2.4.1 The Board of Supervisors has the final authority in all matters affecting the work covered by the plans and specifications. Within the scope of the contract, the Designated Representative(CM/CDR) has the authority to enforce compliance with the plans and specifications. The Contractor shall promptly comply with instructions from the Designated Representative(CM/CDR).
- 2.4.2 On all questions relating to quantities, the acceptability of material, equipment, or work, the execution, progress or sequence of work, and the interpretation of specifications or drawings, the decision of the Designated Representative(CM/CDR) is final and binding, and shall be precedent to any payment under the contract, unless otherwise ordered by the Board.
- 2.4.3 Labor Compliance Monitoring: To ensure compliance with prevailing wage requirements in the WORK, the Board of Supervisors has adopted a *Joint Labor Compliance Monitoring Program*. This program monitors labor compliance by conducting interviews with CONTRACTOR employees and subcontractors at the project site. A copy of the *Joint Labor Compliance Monitoring Program* is available at the Capital Projects Division Office. A copy of the *Joint Labor Compliance Monitoring Program* will be provided upon request. The Contractor, and all subcontractors, shall cooperate by allowing approved Compliance Group Representatives access to its employees on the project site for the purpose of conducting prevailing wage compliance interviews. The Compliance Group Representative shall restrict their on-site activities to prevailing wage compliance interviews only. Promotion, advertising or other related activities of the Compliance Group Representative is strictly prohibited. Any additional effort required by the Contractor in compliance with this Article shall be incorporated into the Bid Scope of Work and no additional compensation will be considered.
- 2.4.4 The Designated Representative(CM/CDR) (or its designee) may accompany any Compliance Group Representative when conducting prevailing wage compliance interviews. The Compliance Group Representative will display in plain view a county-issued identification card when conducting prevailing wage compliance interviews at the project site.

ARTICLE 3: ARCHITECT/ENGINEER

3.1 DEFINITIONS

- 3.1.1 The Architect/Engineer is the person lawfully licensed to practice architecture or engineering or an entity lawfully practicing architecture or engineering who has entered into an Agreement with the Owner to serve as Architect/Engineer and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Architect/Engineer means the Architect/Engineer or its authorized representative.
- 3.1.2 Architect/Engineer shall be entitled to performance by the Contractor of any obligations expressly set forth which are intended for the Architect/Engineer's benefit and to enforcement thereof.
- 3.1.3 In the case of the termination of the employment of the Architect/Engineer, the Owner shall appoint a capable and reputable Architect/Engineer. The status under the Contract of the Architect/Engineer so appointed shall be that of the former Architect/Engineer. The Owner shall notify the Contractor whenever the Architect/Engineer is replaced.
- 3.1.4 The Architect/Engineer may be an employee of the County or other governmental entity.

3.2 ARCHITECT/ENGINEER'S DUTIES DURING CONSTRUCTION

- 3.2.1 The Architect/Engineer shall at all times have access to the Work wherever it is in preparation and progress. When directed by the Designated Representative(CM/CDR), the Contractor shall provide facilities for such access at the

Contractor's cost so the Architect/Engineer may perform its functions under the Contract Documents.

- 3.2.2 The Architect/Engineer will be the interpreter of the requirements of the Drawings and Specifications. Written interpretations necessary for the proper execution or progress of the Work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Architect/Engineer through the Designated Representative(CM/CDR) and in accordance with any schedule agreed upon. The Contractor or Owner shall make written dated request through the Designated Representative(CM/CDR) to the Architect/Engineer for such interpretations. Such interpretations shall be consistent with and reasonably inferable from the Contract Documents. The Contractor or Owner shall execute and complete the Work in accordance with such interpretations. The Architect/Engineer shall not be liable to the Contractor for the result of any interpretation or decisions rendered in good faith in such capacity.
- 3.2.2.1 The Architect/Engineer shall interpret the requirements of Change Orders and he shall decide all other questions of design intent in connection with the Work.
- 3.2.2.2 It shall be the responsibility of the Architect/Engineer to make interpretations and render opinions in regard to all claims to the Owner or Designated Representative(CM/CDR) involving questions of interpretation of the intent of the drawings and specifications. Such opinions and interpretations, together with the reasons therefore, shall be furnished in writing by the Architect/Engineer to the Owner, Designated Representative(CM/CDR) and Contractor within ten (10) days after a request is made thereof.
- 3.2.2.3 Neither the Contractor, the Designated Representative(CM/CDR) nor the Owner shall be bound by any determination, interpretation or opinion of the Architect/Engineer if it is determined that such is not in accord with the true intent of the Contract Documents. The party taking issue with the determination, interpretation, or decision of the Architect/Engineer shall give the other party or parties, as the case may be, written notice of such fact within ten (10) days after the determination, interpretation, or opinion is rendered by the Architect/Engineer. However, it is the intent of this Paragraph 3.2 that in the actual performance of the Work, the Contractor and the Designated Representative(CM/CDR) shall, in the first instance, proceed in accordance with the instruction given by the Architect/Engineer unless the Owner and the Designated Representative(CM/CDR) mutually agree that the Contractor and the Designated Representative(CM/CDR) shall proceed otherwise.
- 3.2.3 The Architect/Engineer's decisions in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents.
- 3.2.4 The Architect/Engineer will have the authority to reject Work which does not conform to the Contract Documents. Whenever, in its opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the Work in accordance with Subparagraph 8.7.2 whether or not such Work be then fabricated, installed or completed. However, neither the Architect/Engineer's authority to act under this Subparagraph 3.2.4, nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Architect/Engineer to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.
- 3.2.4.1 The Architect/Engineer will be the judge of the performance of the Work and will use its powers under the Contract to enforce its faithful performance. The Architect/Engineer will determine the amount, quality, acceptability and fitness of all parts of the Work.
- 3.2.4.2 The Architect/Engineer will recommend suspension of the Work whenever suspension may be necessary to ensure the proper execution of the Work.
- 3.2.5 The Architect/Engineer will review and approve or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Architect/Engineer approval of a specific item shall not indicate approval of an assembly of which item is a component.
- 3.2.6 The Architect/Engineer along with the Designated Representative(CM/CDR) will conduct inspections to determine the dates of Substantial Completion and Final Completion and will receive and review written warranties and related documents required by the Contract and assembled by the Contractor.
- 3.2.7 Architect/Engineer shall prepare and deliver to the Owner a set of reproducible mylar record construction drawings and record construction specifications showing significant changes in the Work during the construction process based upon marked up prints of drawings and other data provided by the Contractor through the Designated Representative(CM/CDR).
- 3.2.8 The Architect/Engineer will communicate with the Contractor through the Designated Representative(CM/CDR).
- 3.2.9 The Architect/Engineer will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the Architect/Engineer will not be required to make exhaustive or continuous on-site inspections to check quality or quantity of the Work. On the basis of on-site observations as an Architect/Engineer, the Architect/Engineer will

keep the Owner informed of progress of the Work and will endeavor to guard the Owner against defects and deficiencies in the Work.

- 3.2.10 The Architect/Engineer will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility as provided in Paragraph 5.3. The Architect/Engineer will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect/Engineer will not have control or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractor, or their agents or employees, or of any other persons performing portions of the Work.
- 3.2.11 The Architect/Engineer has no authority to issue change orders. All requests for proposals shall be prepared by the Architect/Engineer, shall be approved by the Owner or Director of General Services, and shall be issued to the Contractor through the Designated Representative(CM/CDR).

ARTICLE 4: DESIGNATED REPRESENTATIVE(CM/CDR)

4.1 DEFINITION

- 4.1.1 The Designated Representative and/or Construction Manager (County Designated Representative)(CM/CDR) is the person or entity who has been identified in writing by the Owner to serve as Designated Representative(CM/CDR) and is referred to throughout the Contract Documents. When the Designated Representative(CM/CDR) is an entity, the term Designated Representative(CM/CDR) includes the Designated Representative(CM/CDR) acting through its authorized representatives as indicated to the Contractor in writing at the preconstruction meeting or whenever changes in personnel assignments occur.

4.2 ADMINISTRATION OF THE CONTRACT

- 4.2.1 The Designated Representative(CM/CDR) will provide, as the Owner's authorized representative, the general administration of the Project as herein described.
- 4.2.2 The Designated Representative will be the Owner's construction representative during the construction until final payment and shall have the responsibility to monitor the Work of the Contractor.
- 4.2.3 The Designated Representative shall monitor the Work to be performed through completion. The Designated Representative(CM/CDR)'s activities shall in no way supersede or dilute the Contractor's obligation to perform the Work in conformance with all contract requirements, but s/he is empowered, by the Owner, to act on its behalf with respect to the proper execution of the Work and shall give instructions to require such corrective measures as may be necessary, in its opinion, to ensure the proper execution of the contract or to protect the Owner's interest. The Designated Representative(CM/CDR) shall have the authority to require prompt execution of Work whenever such action may be necessary, in its opinion, to ensure the proper execution of the Work or to protect the interests of the Owner. Except as otherwise provided herein, the Designated Representative(CM/CDR) shall determine the amount, quality, acceptability, fitness and progress of the Work covered by the Contract without, however, assuming any of the Architect/Engineer's statutory or customary obligations.
- 4.2.4 The Designated Representative shall be deemed to be the Owner's Representative to the extent set forth below and elsewhere in this Contract. The Designated Representative(CM/CDR) shall have no authority to obligate or otherwise bind the Owner.
- 4.2.5 The Designated Representative shall review and monitor the Contractor's Work and construction schedule and establish specific measures and actions which the Contractor shall take to maintain the current approved schedule.
- 4.2.6 The Designated Representative shall examine the Contractor's Work to determine if the construction conforms to the requirements of this Contract (provided, however, that such action by the Designated Representative(CM/CDR) shall not supersede or diminish the Contractor's obligation to furnish materials and perform the Work in conformity with all requirements of this Contract).
- 4.2.7 The Designated Representative shall determine any corrective measures which may be necessary to bring the Contractor's performance into conformity with Contract requirements.
- 4.2.8 The Designated Representative shall monitor the Contractor's performance in coordinating the Contractor's Work under this Contract with the Work being performed or to be performed by other separate contractors.
- 4.2.9 The Designated Representative shall assist the Owner and the Architect/Engineer in the resolution of questions of Contract interpretation. If the Contractor either disagrees with the Designated Representative(CM/CDR)'s interpretation or considers that such interpretation constitutes a constructive change in Contract requirements, the question shall be referred to the Owner for contract interpretation.
- 4.2.10 The Designated Representative shall establish and recommend administrative procedures for coordinating the activities of the Contractor, the Designated Representative(CM/CDR), the Architect/Engineer and the Owner.
- 4.2.11 The Designated Representative shall monitor the Contractor's submittal schedule.

- 4.2.12 The Designated Representative shall coordinate the activities of the Testing Agencies with the activities of the Contractor.
 - 4.2.13 The Designated Representative shall review all requests or recommendations for changes affecting this Contract, review proposals, assist in negotiating and submit recommendations thereon to the Owner.
 - 4.2.14 The Designated Representative shall make recommendations, together with the Architect/Engineer where appropriate, to the Owner as to the qualifications of Subcontractors or Suppliers wherever submittals of Subcontractors and Suppliers are required to be furnished under this contract.
 - 4.2.15 The Designated Representative shall transmit to the Owner all written guarantees and warranties which the Contractor is required to furnish under this contract.
 - 4.2.16 The Designated Representative may call meetings which shall be attended by the Contractor, Subcontractors and Material Suppliers, as the Designated Representative(CM/CDR) may deem necessary.
 - 4.2.17 The Designated Representative shall have the authority to reject Work which does not conform to the Contract Documents and to require any Special Inspection and Testing in accordance with Subparagraph 8.7.2.
 - 4.2.18 The Designated Representative shall review all applications by the Contractor for progress payments and final payment and make recommendations to the Architect/Engineer and Owner for approval thereof in accordance with the Owner's procedures.
 - 4.2.19 The Designated Representative along with the Architect/Engineer will conduct inspections to determine the dates of Substantial Completion and Final Completion and will receive and review written warranties and related documents required by the Contract and assembled by the Contractor.
 - 4.2.20 In the event any claim is made or any action brought in any way relating to the design or construction of the Project, the Designated Representative will render to the Owner any and all assistance required of it.
 - 4.2.21 The Owner may, at his option, designate the Designated Representative as its representative to perform additional functions, including functions for which other authorized representatives may be designated by the provisions of this contract.
 - 4.2.22 It shall be the duty of the Contractor to comply with all procedures established and implemented by the Designated Representative and approved by the Owner as stated above. In the event any such procedures are at a variance with other provisions of the Contract Documents, such procedures shall prevail.
 - 4.2.23 The Designated Representative shall, at all times, have access to the Work wherever it is in preparation and progress. When directed by the Designated Representative(CM/CDR), the Contractor shall provide facilities for such access so the Designated Representative(CM/CDR) may perform its functions under the Contract Documents.
 - 4.2.24 In no event shall any act or omission on the part of the Designated Representative relieve the Contractor from its obligation to perform its Work in full compliance with the Contract.
- 4.3 OWNER'S AND DESIGNATED REPRESENTATIVE(CM/CDR)'S RIGHT TO STOP WORK**
- 4.3.1 If the Contractor fails to correct defective Work as required by Paragraph 14.2 or persistently fails to carry out the Work in accordance with the Contract Documents, the Designated Representative or the Owner through the Designated Representative(CM/CDR) may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated.
 - 4.3.1.1 The Contractor shall bear all costs of such Work stoppage unless it is determined that no fault existed in the Contractor's Work. Any Work stoppage for the correction of defective Work or removal and replacement of unacceptable materials and equipment will not be considered as the basis for any time extension.
 - 4.3.2 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Document and fails within 48 hours after receipt of written notice from the Designated Representative(CM/CDR) to commence and continue correction of such default or neglect with diligence and promptness, the Designated Representative may, by written notice and without prejudice to any other remedy he or the Owner may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Architect/Engineer's and the Designated Representative's additional services made necessary by such default, neglect or failure.
 - 4.3.3 The relationship of the Designated Representative to the Owner may be that of an independent contractor and the Designated Representative(CM/CDR) shall have no authority to bind the Owner in any way with the Contractor, its subcontractors, materials suppliers or any third parties.

ARTICLE 5: CONTRACTOR

5.1 DEFINITION

- 5.1.1 A Contractor is the person or entity identified as such in the Agreement between the Owner and a Contractor and is referred to throughout the Contract Document as if singular in number and masculine in gender. The term Contractor means the Contractor or its authorized representative.
- 5.1.2 It is the duty of the Contractor to comply with all procedures established and implemented by the Designated Representative(CM/CDR) and approved by the Owner as stated herein.

5.2 REVIEW OF CONTRACT DOCUMENTS

- 5.2.1 The Contractor shall carefully study and compare the Contract Documents, shall investigate existing site conditions, and shall at once report to the Designated Representative(CM/CDR) any error, inconsistency or omission he may or reasonably should discover.
- 5.2.2 All soil and test borehole data, water table elevations, and soil analyses shown on the drawings or included in the specifications apply only at the locations of the test holes and to the depths indicated. Soil test reports for the test holes which have been drilled are available for inspection at the office of the Director of General Services. Any additional subsurface exploration shall be done by bidders or the Contractor at their own expense.
- 5.2.3 The indicated elevation of the water table is that existing at the date the test hole was determined. It is the Contractor's responsibility to determine and allow for the elevation of groundwater at the date of project construction. A difference in elevations between groundwater shown in soil boring logs and groundwater actually encountered during construction will not be considered as a basis for extra work.

5.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- 5.3.1 The Contractor shall supervise and direct the Work, using the best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.
 - 5.3.1.1 The Designated Representative(CM/CDR) may reject any means, methods, techniques, sequences or procedures proposed by the Contractor, which might constitute or create a hazard to the Work or to persons or property, or which will not provide Work in accordance with the Contract Documents. However, neither the Designated Representative(CM/CDR)'s acceptance of nor its failure to reject any means, methods, techniques, sequences and procedures shall relieve the Contractor of its responsibilities to safely and properly complete the Work.
- 5.3.2 The Contractor shall be responsible to the Owner and the Designated Representative(CM/CDR) for the acts and omissions of its employees and all its Subcontractors and their agents and employees and other persons performing any of the Work under a contract with the Contractor.
- 5.3.3 Neither observations, inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from its obligations to perform the Work in accordance with the Contract Documents.
- 5.3.4 The Contractor shall do and be responsible for the correct horizontal and vertical layout out and completion of the Work as per the drawings and written instruction of the Designated Representative(CM/CDR) including all necessary leveling and checking. The Contractor shall protect and preserve all permanent survey monuments or bench marks and shall bear the expense of replacing any that may be disturbed without permission of the Designated Representative(CM/CDR). Replacement of damaged permanent survey monuments or benchmarks shall be performed by a licensed land surveyor hired by the Owner.
- 5.3.5 The Contractor shall keep the Designated Representative(CM/CDR) informed of the plan and progress of its Work. No Work shall be closed or covered until it has been duly inspected and approved. Should uninspected Work be covered, the Contractor shall, at its own expense, uncover all such Work so that it can be properly inspected; and after such inspection, he shall properly repair and replace all such Work.

5.4 LABOR AND MATERIALS

- 5.4.1 The Contractor shall provide and pay for all labor, equipment, tools, construction equipment and machinery, transportation and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
 - 5.4.1.1 The Contractor shall accept delivery and store, protect and provide security for any Owner-purchased materials, systems and equipment which are a part of the Work until such items are incorporated into the Work. The Contractor shall document receipt of such materials, systems and equipment on forms acceptable to the Designated Representative(CM/CDR).
 - 5.4.1.2 The Contractor shall furnish, install, connect, make operable, and test all heating, ventilating and air conditioning equipment, plumbing fixtures, lighting fixtures, kitchen equipment, and any other mechanical or electrical equipment shown on the plans or called for in the specifications or change orders. In connection therewith, the Contractor shall also furnish and install all necessary devices, hardware, and systems required to make said equipment properly

and safely operable including, but not limited to, mounting hardware and framing, insulation, vibration control devices, duct systems, gas piping systems, hot and cold water systems, venting ducts, control systems, and electrical circuits.

- 5.4.1.3 The Contractor shall furnish and install complete utility systems ready for use and shall pay any special fees, permits or assessments required by the serving utility.
- 5.4.2 The Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him.
- 5.4.2.1 Any person employed, who is found to be incompetent, intemperate, troublesome, disorderly or otherwise objectionable, or who fails or refuses to perform its work properly and acceptably, shall be immediately removed from the work by the Contractor and not be re-employed on the work.
- 5.4.2.2 The Owner may remove and may order the Contractor to remove any person who is incompetent or otherwise objectionable from the site of the Work.
- 5.4.3 Approval of the Architect/Engineer under any substitution clause shall be obtained in writing before any substitution is made. In the event of the Contractor failing to obtain such approval, no consideration will be given to any appeal from the decision of the Architect/Engineer condemning any materials furnished.
- 5.4.4 Pursuant to the Public Contract Code, any reference in the specifications and plans to any brand name, article, device, product, materials, fixture, form or type of construction by brand name, make, or catalog number, such references shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition; and the Contractor, in such cases, may at its option use any article, device, product, materials fixture, form or type of construction which in the judgment of the Architect/Engineer expressed in writing is equal to that specified. The Contractor must within forty (40) days after award of the Contract submit data substantiating a request for substitution.
- 5.4.5 If the Contractor proposed to use a material which, while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents he shall inform the Architect/Engineer through the Designated Representative(CM/CDR) in writing of the nature of such deviations at the time that the materials are submitted for approval and shall request a written approval of the deviation from the requirements of the Contract Documents.
- 5.4.6 In requesting approval of deviations or substitutions, the Contractor shall provide evidence leading to a reasonable certainty that the proposed substitutions or deviation will provide a quality of result at least equal to that otherwise attainable. If, in the opinion of the Architect/Engineer, the evidence presented by the Contractor does not provide a sufficient basis for such reasonable certainty, the Architect/Engineer may reject such substitution or deviation without further investigation.
- 5.4.7 The Architect/Engineer will judge the design and appearance of proposed substitutes on the basis of their suitability in relation to the overall design of the project, as well as for their intrinsic merits. The Architect/Engineer will not approve proposed substitutes as equal to items specified which, in its opinion, would be unharmonious, or otherwise inconsistent with the character or quality of design of the project.
- 5.4.8 Any additional cost, or any loss or damage, arising from the substitution of any material or method for those originally specified or drawn shall be borne by the Contractor, notwithstanding approval or acceptance of such substitution by the Owner or Architect/Engineer, unless such substitution was made at the written request or direction of the Owner or Architect/Engineer.
- 5.4.9 The investigation, review and approval of substitute materials requires a minimum of 30 calendar days additional time more than for specified items. The Contractor is required to assure the time impact will not delay its or other Contractor's Work when submitting (proposing) a substitution. Submittal of a substitution will be promptly rejected if the Contractor does not accept the delay responsibility in making its submittal.
- 5.4.10 The Contractor, its agents and employees shall be bound by and comply with all applicable provisions of the California Labor Code, and with Federal, State, and local laws related to labor.
- 5.4.11 The Contractor shall strictly adhere to the provisions of the California Labor Code regarding minimum wages, the eight-hour day and the forty-hour week, overtime, Saturday, Sunday, and holiday work and non-discrimination because of race, color, national origin, religion, sex, age, or physically handicapped when otherwise qualified. The Contractor shall forfeit to the Owner the penalties prescribed in the California Labor Code for violations.
- 5.4.12 The Contractor, as required by the California Labor Code, Sections 1770 et seq., the Contractor shall pay not less than the prevailing rate of per diem wages for each classification of worker employed as determined by the Director of the California Department of Industrial Relations. A copy of the general prevailing rate of per diem wages is available at the General Services Department to be viewed upon request. The Contractor shall post a copy of such wage determination at each job site.
- 5.4.13 As provided in Section 1775 of the California Labor Code, as a penalty, the Contractor shall forfeit twenty-five dollars (\$25.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing rates for such work or craft in which such worker is employed for any public work done under the Contract by the Contractor or any

Subcontractor under him.

- 5.4.14 The Contractor shall submit completed Payroll Reporting Forms for all Tradesmen employed on the Work with the monthly Progress Payment Application.
- 5.4.15 Payroll Reporting Forms shall be the forms prescribed by the Owner or computer generated payroll reporting forms which have been approved in writing by the Owner or the Designated Representative(CM/CDR).
- 5.4.16 The Contractor's attention is directed to Sections 1777.5, 1777.6, and 1777.7 of the California Labor Code and Title 8, California Administrative Code Section 200 et seq.
- 5.4.17 To ensure compliance and complete understanding of the law regarding apprentices, and specifically the required ratio thereunder, the Contractor and Subcontractors should, where some question exists, contact the Division of Apprenticeship Standards prior to commencement of the Work. Responsibility for compliance with the law lies with the Contractor.
- 5.4.18 The Owner's policy is to encourage the employment and training of apprentices in its construction contracts as may be permitted under local apprenticeship standards.
- 5.4.19 As required by Section 1773.8 of the California Labor Code, the Contractor shall pay travel and subsistence payments to each worker needed to execute the Work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this section.
- 5.4.20 To establish such travel and subsistence payments, the representative of any craft, classification, or type of workman needed to execute the Work shall file with the Department of Industrial Relations fully executed copies of collective bargaining agreements for the particular craft classification or type of work involved. Such agreements shall be filed within ten (10) days after their execution and thereafter shall establish such travel and subsistence payments whenever filed thirty (30) days prior to the call for bids.
- 5.4.21 The Contractor shall comply with all applicable provisions of Sections 1810 to 1815, inclusive of the California Labor Code relating to working hours. As a penalty, the Contractor shall forfeit twenty-five dollars (\$25.00) for each worker employed in the execution of the Work by the Contractor or by any Subcontractor for each calendar day during which such work is required or permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, unless such worker receives compensation for all hours worked in excess of these limits at not less than one and one half (1.5) times the basic rate of pay.

5.5 WARRANTIES AND GUARANTEES

- 5.5.1 The Contractor, prior to or at the time of Substantial Completion for the Work and during administrative closeout of the project, shall submit one (1) digital copy of all warranties and guarantees to the Designated Representative(CM/CDR) for subsequent transmittal to the Architect/Engineer and Owner. All guarantees and warranties shall be in writing on guarantors'/warrantors' stationery or official forms and signed by a responsible company official, and shall be submitted in full force and effect by the Contractor.
 - 5.5.1.1 The Contractor warrants to the Owner and the Designated Representative(CM/CDR) that all installed materials and equipment will be new unless otherwise specified and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved or authorized, shall be considered defective unless specifically accepted by the Owner. If required by the Designated Representative(CM/CDR), the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. This warranty is not limited by the provisions of Paragraph 14.2.
 - 5.5.1.2 The warranty of materials, equipment and workmanship defined in 5.5.1 is separate from, independent of and in addition to any other guarantees in this contract or any other warranties required by the Contract Documents.
 - 5.5.1.3 Except as otherwise specified, all Work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment or workmanship for one year from the date of Substantial Completion of the Project and acceptance/occupancy by the Owner in writing, provided that if prior to the acceptance of the entire project, the Owner occupies or uses any separate unit of Work, the guarantee period shall, as to the unit so occupied or used, commence on the date of such occupancy or use, with the further provision that the Owner shall have first agreed in writing that the separate unit shall be occupied or used by the Owner until such certificate has been given. Equipment and facilities, which have seasonal limitations on their operations, shall be guaranteed for one full year from the date of test and acceptance in writing by the Owner.
 - 5.5.1.4 If within any guarantee period, repairs or changes are required in connection the guaranteed Work, as the result of the use of materials, equipment or workmanship which are defective or inferior or not in accordance with the terms of the Contract, the Contractor shall, promptly, within 48 hours after receipt of notice from the Designated Representative(CM/CDR) or Owner and without expense to the Owner or the Designated Representative(CM/CDR), commence and continue to effect such repairs or changes.
 - (a.) The Contractor shall place in satisfactory condition, in every particular, all of such guaranteed Work and correct all defects therein.

- (b.) The Contractor shall make good all changes to the structure or site or equipment or contents thereof, which, in the opinion of the Architect/Engineer and the Designated Representative(CM/CDR) is the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the Contract. The Contractor shall make good any Work or materials, or the equipment and contents of structures or site disturbed in fulfilling such guarantee.
- (c.) Notifications by Owner of defects shall stop the warranty time period. The guarantee or warranty period for that replaced or restored Work shall be reinstated for the remaining time period, starting on the date of acceptance of the replaced or restored Work.

5.5.1.5 In any case, where in fulfilling the requirement of the Contract or of any guarantee embraced in or required thereby, the Contractor disturbs any Work guaranteed under another contract, he shall restore such Work to a condition satisfactory to the Architect/Engineer and the Designated Representative and guarantee such restored Work to the same extent as it was guaranteed under such other contract.

5.5.1.6 If the Contractor, after notice, fails to proceed within 48 hours to commence and continue to comply with the terms of the guarantee, the Owner or Designated Representative may have the defect corrected in which case the Contractor and its surety shall be liable for all expenses incurred.

5.5.1.7 All special guarantees or warranties applicable to definite parts of the Work that may be stipulated in the Specifications or other papers forming a part of the Contract shall be subject to the terms of the Subparagraph 5.5.1.2 during the first year of the life of such special guarantee.

5.5.1.8 Nothing contained in Subparagraph 5.5.1 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including liability for defective Work under Subparagraph 5.5.1. Subparagraph 5.5.1 relates to the specific obligation of the Contractor to correct the Work and does not limit the time within which its obligation to comply with the Contract Documents may be sought to be enforced, nor of the time within which proceedings may be commenced to establish the Contractor's Liability with respect to its other obligations under this contract.

5.5.1.9 In the event the Work of the Contractor is to be modified by another Contractor, either before or after the Inspection provided for in Subparagraph 10.7.1, the first Contractor shall remain responsible in all respects under the warranty given in Paragraph 5.5 and under any other warranties provided in the General Conditions or by law. However, the first Contractor shall not be responsible for any defects in materials or workmanship introduced by the Contractor modifying its Work. Both the first Contractor and the Contractor making the modifications shall be responsible solely for the Work done by each. The Contractor modifying the earlier Work shall be responsible for any damage to or defect introduced into the Work which it is modifying.

5.5.1.10 Warranties and guarantees shall clearly define what is to be guaranteed; the extent, terms, conditions, time and effective dates.

5.5.1.11 Copies of the same warranties and guarantees shall be included in the "Owner's Maintenance Manual" as specified herein.

5.5.2 The Owner shall schedule an end of warranty review meeting with the Designated Representative(CM/CDR), Architect/Engineer, and Contractor prior to the end of one year warranty to determine any work requiring correction.

5.6 CONTROL OF OPERATIONS AND EMPLOYEES

5.6.1 The Contractor shall not use any of the existing Owner's facilities, such as, but not limited to, toilets, cafeteria, parking areas, power hookup, except with the Owner's written approval.

5.6.2 The Contractor shall confine and perform its operations in those areas where construction is required. Contractor shall protect the contiguous non-construction property. The Contractor shall protect from damage all existing trees, utilities, or other improvements at the site. Should damage result from the Contractor's failure to exercise reasonable care in the performance of its Work, the Contractor shall repair or restore any such damage at its own expense.

5.6.3 Obnoxious behavior or possession or consumption of alcoholic beverages or drugs on the premises is strictly prohibited. Violators shall be promptly discharged from the site and may be subject to prosecution.

5.6.4 All vehicular aisles and walking paths at the site where Work under the Contract is being performed are for the general use and the Contractor's operations must conform to the Owners regulations and requirements to keep areas free of obstructions. If the Work of a Contractor requires that such aisles and paths be temporarily discontinued, after obtaining Designated Representative's approval, the Work shall be done expeditiously and alternate vehicular routes and paths of travel shall be identified by such Contractor and maintained as directed.

5.6.4.1 To minimize public inconvenience and possible hazards and to restore work areas to their original condition and former state of usefulness as soon as practicable, the Contractor shall diligently prosecute the work to completion. If, in the Designated Representative(CM/CDR)'s opinion the Contractor fails to prosecute the work to the extent that the above purposes are not being accomplished, the Contractor shall, upon orders from the Designated

Representative, immediately take the steps necessary to fully accomplish said purposes. All costs of prosecuting the work as described herein shall be borne by the Contractor. Should the Contractor fail to take the necessary steps to fully accomplish said purposes, after orders of the Designated Representative(CM/CDR) to do so, the Owner may suspend the work in whole or in part, until the Contractor takes said steps.

- 5.6.4.2 If work is suspended through no fault of the Owner, all expenses and losses incurred by the Contractor during such suspensions shall be borne by him. If the Contractor fails to properly provide for public safety, traffic, and protection of the work during periods of suspension, the Owner may elect to do so, and deduct the cost thereof from monies due the Contractor. Such action will not relieve the Contractor from liability.
- 5.6.5 The Contractor shall not disturb any existing structure, piping, apparatus or other Work unless expressly required by the contract. Where cutting, drilling or removals are required in existing walls, floor or roof construction, the Work shall be done in such a manner to safeguard and not endanger the structure and shall in all cases be as approved by the Owner and Designated Representative(CM/CDR). Prior to any cutting, drilling or removals, the Contractor shall investigate both sides of the surface involved, shall determine the exact location of adjacent structural members by visual examination and shall avoid interference with such members. No structural members, such as joists, beams or columns supporting Work that are to remain shall be cut, drilled or removed unless such conditions are shown in detail on the Drawings and reinforcing of members affected or new members to compensate for such cutting, drilling and removals are shown. If unforeseen obstructions are encountered, the Contractor shall take all precautions necessary to prevent damage and shall apply for and obtain full instructions from the Designated Representative(CM/CDR), in writing, before proceeding with the Work.
- 5.6.6 Rights of way or easements for the improvement as shown on the plans will be provided by the Owner. Unless otherwise provided, the Contractor shall make its own arrangements, pay for, and assume all responsibility for acquiring, using, and disposing of additional work areas and facilities temporarily required by him. The Contractor shall indemnify and hold the Owner, Designated Representative(CM/CDR), and Architect/Engineer harmless from all claims for damages occasioned by such actions.
- 5.6.7 The Contractor shall remove and dispose at no cost to the Owner and with the Owner's approval, existing improvements for which no specific disposition is made on the plans but which could interfere with the work.

5.7 PERMITS, FEES AND NOTICES

- 5.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for all permits including encroachment permits, governmental fees, licenses and inspections necessary for the proper execution and completion of this Work, which are customarily secured after execution of the contract and which are legally required at the time bids or proposals are received.
 - 5.7.1.1 The Project pays County Building Permit Fees.
 - 5.7.1.2 The Owner will pay for building permits required by other governmental entities.
 - 5.7.1.3 The Contractor shall sign for all building permits and shall be responsible for all inspections required.
- 5.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the Work.
- 5.7.3 Unless otherwise provided in the Contract Documents, it is the responsibility of the Contractor to make certain that the Contract Documents are in accordance with the applicable laws, statutes, building codes and regulations. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Designated Representative(CM/CDR) in writing and any necessary changes shall be by appropriate Modification.
- 5.7.4 If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations and without such notices to the Designated Representative(CM/CDR) he shall assume full responsibility therefore and shall bear all costs attributable thereto.

5.8 ALLOWANCES

- 5.8.1 The Contractor shall include in the Contract Sum as defined in Subparagraph 10.1.1, all allowances stated in the Contract Documents. Items covered by these allowances shall be supplied for such amounts and by such persons as the Designated Representative may direct, but the Contractor will not be required to employ persons against whom he makes a reasonable objection.
- 5.8.2 Unless otherwise provided in the Contract Documents, all allowances shall cover the cost to the Contractor, less applicable trade discount, of the materials and equipment required by the allowances delivered at the site and all applicable taxes.
- 5.8.3 Unless otherwise provided in the Contract Documents, the Contractor's costs for unloading and handling (including hoisting) on the site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowance.

5.8.4 Unless otherwise provided in the Contract Documents, whenever the cost is more than or less than the allowance, the Contract Sum shall be adjusted accordingly by Change Order, the amount of which recognizes changes, if any, in handling costs on the site, labor, installation costs, overhead, profit and other expenses.

5.9 SUPERINTENDENT

5.9.1 The Contractor shall employ an experienced, competent superintendent and necessary assistants who shall be in attendance at the Project site full time during the progress of the Work until the date of Substantial Completion and for such additional time thereafter as the Designated Representative(CM/CDR) may deem necessary for the expeditious completion of the Work. The superintendent shall be satisfactory to the Designated Representative and shall not be changed without the consent of the Designated Representative(CM/CDR), unless the superintendent proves to be unsatisfactory to the Contractor or ceases to be in its employ. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case.

5.9.2 The Contractor shall submit a job organization chart and resumes which identify the key personnel he intends to assign to the project, to the Designated Representative(CM/CDR) within 48 hours after receipt of the Notice to Proceed. The Owner, acting through the Designated Representative, reserves the right to approve the Contractor's proposed personnel and anyone not so approved shall be immediately replaced by someone acceptable. If in the course of construction, the Owner, on advice of the Designated Representative(CM/CDR), determines that it would be in its best interest to request a change in the Contractor's personnel, he may do so; and the Contractor shall immediately assign a suitable replacement who is acceptable to the Owner and the Designated Representative(CM/CDR) at no additional cost.

5.9.2.1 A duly authorized representative of the Contractor shall be available for emergency telephone communication from the Owner or Designated Representative(CM/CDR) on a 24 hour basis, seven days a week during the performance of the Work.

5.10 CONSTRUCTION SCHEDULE

5.10.1 Submission of Schedule and Format

5.10.1.1 Within Five (5) calendar days of the Notice to Proceed, the Contractor shall submit to the Designated Representative(CM/CDR) a construction Schedule covering the entire project.

5.10.1.2 The Schedule shall be prepared utilizing the critical path method of scheduling. The Schedule will show the Contractor's plan for construction in sufficient detail to indicate the sequence of construction and planned dates for achieving major milestones.

5.10.1.3 The maximum duration for any single activity will be twenty (20) working days, with the exception of "Fabrication and Delivery" activities. Although portions of the Work may take longer than 20 working days, all work shall be presented in the schedule to allow for monitoring of progress through completion of incremental activities with a duration not exceeding 5 days.

5.10.1.4 A sufficient number of activities will be carried in the schedule so that each subcontract subdivision is represented and the planned start and completion of each Subcontractor's Work can be determined.

5.10.1.5 All submittals required by the specifications will be scheduled along with the approval period (fifteen calendar days minimum) and fabrication and delivery periods.

5.10.1.6 The Contractor shall submit to the Designated Representative for approval a computer-generated critical path schedule and bar charts. The schedule shall contain the following information and shall be presented in a legible format acceptable to the Designated Representative(CM/CDR).

(a.) The critical path schedule shall indicate for each activity:

- Description
- Original Duration
- Remaining Duration
- Percentage Complete
- Total Float (critical path highlighted)
- Responsibility Code (who will perform the work)
- Early Start/Finish Dates (current update)
- Late Start/Finish Dates (current update)
- Predecessor and Successor Activities to the activity (arrow connections)

(b.) The Contractor shall submit a bar chart schedule listing all activities in the schedule as organized by responsibility, area or date as approved by the Designated Representative(CM/CDR). The bar chart shall include all the information listed in paragraph (a.) above for each activity except the listing of predecessor and successor activities.

5.10.1.7 If construction must commence during Schedule preparation and approval period, the Contractor shall prepare a

twenty (20) calendar day schedule to cover the initial field construction and submittals. Activities on this Schedule should have maximum durations of five (5) days to allow for monitoring of progress through completion of the incremental activities.

- 5.10.1.8 A copy of the Schedule shall be submitted via email to the Designated Representative(CM/CDR) for review. At the time of submittal, The Contractor's lead on-site manager or superintendent will make a presentation to the Designated Representative(CM/CDR) on the planned construction sequence/schedule. Within **Fifteen (15) calendar days** of receipt, the Designated Representative will notify the Contractor, in writing, as to any objections to the Schedule submitted. If the Schedule is deemed objectionable, the Contractor will have **five (5) calendar days** from receipt to revise the schedule and resubmit it as above. The Contractor's presentation will include, but not be limited to:
- (a.) Describing the sequence and phasing of work.
 - (b.) Delineating any area subdivision used to plan the work sequence/schedule.
 - (c.) Identifying the critical path.
 - (d.) Identifying when the milestone events specified herein are planned to be achieved (earliest and latest times).
 - (e.) Any plans for shift work, weekend work, or extended work weeks and non-work days (i.e. holidays observed).
 - (f.) Any planned interruptions of building power, water, communications, or other utilities.
 - (g.) Any assumptions used in planning and sequencing the work.
 - (h.) Long lead fabrication items.
 - (i.) Manpower projections for the project.
 - (j.) Noise/dust control measures.
 - (k.) Safety plan.
 - (l.) Plans for moving materials into the building and removing refuse and debris.
 - (m.) Any other planning information requested by the Owner or its Designated Representative prior to the presentation.
- 5.10.2 Updating of the Schedule
- 5.10.2.1 The Schedule documents will be updated monthly at a minimum to reflect progress through the "Data Date". All contract changes as they are agreed to shall be specifically incorporated into the appropriate Schedule update. The Data Date may be the last working day of the month or it may be the "closure" date of the requisition for payment, as the Contractor may choose and as approved by the Designated Representative. However, when one of the above Data Dates is selected, it will be used throughout the project. The update will be submitted within **seven (7) calendar days** following the Data Date.
- 5.10.2.1 The Contractor shall submit marked up copies of the approved critical path schedule and the bar chart indicating progress through the data date. If the Contractor has elected to submit a computer generated schedule, monthly update reports and schedule plots shall be submitted as directed by the Designated Representative(CM/CDR).
- 5.10.3 Revision of the Schedule
- 5.10.3.1 Every effort shall be made by all parties to Work in accordance with the accepted Project Schedule. The Schedule will be revised only if the actual status of Work cannot be brought into conformance with the existing Schedule. If the Schedule is revised, the revised Schedule will be submitted as if any initial Schedule.
- 5.10.4 Minor Changes of the Schedule
- 5.10.4.1 The Schedule is not considered to be "revised" if the Contractor must make minor changes, such as:
- (a.) Adding additional details to a sub-network to facilitate coordination of subcontract Work.
 - (b.) Additions/deletions/modifications of Schedule activities to reflect Work added or deleted by change order.
- 5.10.5 Extensions of Contract Time
- 5.10.5.1 All claims for extensions to contract time shall be supported by a detailed comprehensive analysis of the accepted Schedule. This analysis shall provide sufficient supporting evidence to justify a time extension. No time claims will be considered without the supporting analysis. If a time extension is granted, it shall be included in the next update of the Schedule.
- 5.10.6 During Construction
- 5.10.6.1 Construction milestone event dates will be incorporated into the detailed Construction Schedule as "target dates". These dates will be clearly noted and fixed on the Schedule graphics and corresponding computer file. It is the intent that the Work will be undertaken so as to achieve each target date and thereby achieve overall project completion as specified in the Contract.
- 5.10.6.2 The milestone event target dates will not be revised unless delays beyond the control of the Contractor occur.
- 5.10.6.3 If, when the Schedule is updated, the planned dates for achieving any milestone(s) falls more than ten (10) working days behind the target date(s), and if this has occurred through no fault of the Owner, the Architect/Engineer or their consultants, the Contractor may be directed by the Owner or the Designated Representative, to take any and all actions required to bring the actual construction back into accordance with the target dates.

- 5.10.6.4 When the Contractor falls behind its schedule and is not entitled to any time extension other than extensions already reflected in the current approved schedule, he shall submit its plan for bringing the Work back up to schedule and shall implement the plan. If other measures will not be sufficient to make up the lag, the Contractor's plan and implementation thereof shall include, but not be limited to increasing the number of shifts and days of Work, additional Work, additional equipment, increasing manpower and expediting deliveries, all at the Contractor's sole expense.
- 5.10.6.5 If the Contractor works overtime, more than forty (40) hours per week, Saturdays, Sundays or holidays; whether by choice or by necessity, the Contractor shall be responsible for the reimbursement of the Owner for additional costs incurred for the Owner's, Designated Representative's and Architect/Engineer's overtime services.
- 5.10.6.6 In the event the Contractor fails or refuses to implement such measures as will bring its Work back up to conformity with the approved schedule, its right to proceed with any or all portions of the Contract requirements may be canceled or suspended; but permitting the Contractor to proceed shall in no way operate as a waiver of any rights of the Owner or deprive the Owner of its rights under any provisions of this contract.
- 5.10.6.7 The Contractor shall include milestone activities in the Schedule as applicable to the Work. Milestone events shall at a minimum include the following as applicable:
- (a.) Demolition and Excavation complete
 - (b.) Start foundation concrete
 - (c.) Complete footings and piers
 - (d.) Complete all subgrade concrete construction
 - (e.) Each level's structural slab complete
 - (f.) Roof level structural slab complete
 - (g.) Penthouse Level structural slab complete
 - (h.) Begin structural steel
 - (i.) Complete structural steel
 - (j.) Complete decks/structure
 - (k.) Permanent power available
 - (l.) Temporary heating/cooling available
 - (m.) Begin roofing
 - (n.) Complete roofing
 - (o.) Begin exterior facades
 - (p.) Complete exterior facades
 - (q.) Begin exterior glazing
 - (r.) Complete exterior glazing
 - (s.) Building dry-in
 - (t.) Elevators operational
 - (u.) Begin mechanical/electrical/plumbing rough-in
 - (v.) Begin building controls
 - (w.) Complete building controls
 - (x.) System start-up
 - (y.) Begin partition rough-in
 - (z.) Complete partition rough-in
 - (aa) Begin drywall
 - (bb) Begin finishes and millwork
 - (cc) Complete finishes and millwork
 - (dd) Begin site work and landscaping
 - (ee) Complete grading
 - (ff) Begin underground utilities
 - (gg) Complete underground utilities
 - (hh) Complete site paving
 - (ii) Complete landscaping
 - (jj) Substantial completion
 - (kk) Start installation of Owner furnished equipment
 - (ll) Project complete/beneficial occupancy

5.10.7 Owner Directed Schedule

- 5.10.7.1 On projects involving extensive coordination between the Contractor and the Owner's ongoing operations, the Owner may issue with the Contract Documents an Owner Directed Schedule which shall be used by the Contractor in preparing its plan of operations. The Contractor shall not deviate from the Owner Directed Schedule without the written prior approval of the Owner or Designated Representative. As indicated in Paragraph 5.10.6, the Contractor may be directed by the Owner or Designated Representative(CM/CDR) to take any and all actions required to perform the actual construction in accordance with the Owner Directed Schedule and its "target dates".

5.11 SUBMITTAL SCHEDULE

- 5.11.1 The Contractor shall prepare a schedule of required submittals not later than **fourteen (14) days** after the receipt of the Notice to Proceed. The schedule shall include a complete list of items requiring shop drawings, design mixes,

material certification, product data, brochures, catalog cuts, etc., to be approved by the Architect/Engineer. The Contractor shall coordinate all submittals requiring approvals by code enforcement agencies and shall include these special approvals in the submittal schedule. The schedule is to be submitted on a form approved by the Designated Representative. The schedule shall be updated monthly or as required by the Designated Representative(CM/CDR). All shop drawings and other submittals shall be accompanied by a transmittal letter and reference should be indicated to the item numbers of the above mentioned schedule. The Contractor is to indicate the following in its submittal schedule.

- (a.) Description of item
- (b.) Specification division, page numbers, article and paragraph
- (c.) Type of submittal (shop drawings, sample, product data)
- (d.) Date that submittal shall be delivered to the Designated Representative(CM/CDR)'s office.
- (e.) Date that Contractor must have approval.
- (f.) Date that material, equipment must be on site in order to maintain the Contractor's progress schedule.

5.11.2 The Contractor's submittal schedule shall allow reasonable time (15 calendar days minimum) for review by the Designated Representative and the Architect/Engineer, and revision or correction, resubmittal and approval, sufficiently in advance of the time that the item is scheduled for incorporation into the Work.

5.11.3 The Designated Representative and the Architect/Engineer shall review the Contractor's submittal schedule for completeness, fulfillment of Specification requirements and compatibility with the anticipated construction schedule. The sequence and duration of Contractor, Architect/Engineer, Designated Representative(CM/CDR) activities on the submittal schedule may be adjusted by the Designated Representative.

5.12 DRAWINGS AND SPECIFICATIONS AT THE SITE

5.12.1 The Contractor shall maintain at the site for the Designated Representative and the Architect/Engineer, two (2) copies of all drawings, specifications, addenda, change orders, responses to requests for information, proposals and other modifications, in good order and marked currently to record all changes made during the construction, including any changes in locations, size and arrangement of the various components of the Work or any other variations from the drawings or shop drawings. The Contractor shall mark each drawing as the Work shown thereon is completed in the field, revising any or adding lines, dimensions, elevations, depths, notes or any other information required to accurately record conditions. These drawings, marked to record all changes during the construction and approved shop drawings, product data, samples, addenda, change orders, responses to requests for information, proposals and other records of modifications shall be delivered to the Designated Representative, for the Owner, upon completion of the Work.

5.12.1.1 In addition to maintaining and delivering to the Designated Representative(CM/CDR) those record drawings required by Subparagraph 5.12.1, the Contractor shall also prepare and submit to the Designated Representative(CM/CDR), upon completion of the Work, record reproducible drawings if the technical specifications so require.

5.13 USE OF SITE

5.13.1 The Contractor shall confine operations at the site to areas approved by the Designated Representative, permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.

5.13.2 The Contractor shall not disturb existing monuments and markers at the site. Should monuments or markers or both be disturbed at any time by the Contractor, he shall bear the cost of a licensed surveyor engaged by the Owner for the purpose of relocating such monuments or markers.

5.13.3 The Contractor shall lay out its Work and shall be responsible for the accuracy of all lines, elevations and measurements, grading, utilities and other Work executed by him under its Contract. He must exercise proper precaution to verify figures shown on drawing before laying out Work and will be held responsible for any error resulting from its failure to exercise such precaution.

5.13.4 All discrepancies shall be brought to the attention of the Designated Representative(CM/CDR) in writing for review and direction before proceeding with the Work. Should the Contractor proceed without direction, he shall be responsible to make whatever changes are necessary and pay call costs incurred by that Contractor, the Designated Representative(CM/CDR), the Owner or other Contractors.

5.13.5 Any enclosure including safety barricades, perimeter rails, opening covers and devices required to protect the Work, workmen, materials or equipment shall be provided by the Contractor.

5.13.6 Weather protection shall be supplied by the Contractor and shall include all enclosure, supplemental heating and furnishing all other features (insulation, etc.), or meeting conditions required by the Designated Representative or by the specifications relative to the Contractor's Work, to protect the Work and any materials stored on site.

5.13.7 Protection of finished Work until acceptance shall be furnished by the Contractor.

5.14 CUTTING AND PATCHING WORK

- 5.14.1 The Contractor shall be responsible for all cutting or patching that may be required to complete the Work or to make its several parts fit together properly. He shall provide protection of existing Work as required.
- 5.14.2 The Contractor shall not damage or endanger any portion of the Work or the Work of any separate contractors by cutting, patching or otherwise altering any Work or by excavation. The Contractor shall not cut or otherwise alter the Work of any separate contractor except with the written consent of the Designated Representative and of such separate contractor. The Contractor shall not unreasonably withhold from any separate contractor its consent to cutting or otherwise altering the Work.
- 5.14.3 The Contractor shall not cut, weld to or otherwise alter any structural member without the written consent of the Architect/Engineer obtained through the Designated Representative(CM/CDR).

5.15 DAILY AND FINAL CLEAN UP

- 5.15.1 The Contractor shall be responsible for daily and final clean up and continuous removal of all rubbish and debris from the building and site.
 - 5.15.1.1 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by its operations. At the completion of the Work he shall remove all its waste materials and rubbish from and about the Project, as well as all its tools, construction equipment, machinery and surplus materials.
- 5.15.2 The job site shall be maintained in a neat and orderly condition and kept free from accumulations of waste materials and rubbish during the entire construction period. Remove all crates, cartons and other flammable waste materials or trash from the Work areas at the end of each working day to appropriate waste hauling receptacles.
- 5.15.3 Elevator shafts, electrical closets, pipe and duct shafts, chases, furred spaces and similar spaces which are generally unfinished, shall be cleaned and left free from rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt and dust before Substantial Completion inspection.
- 5.15.4 The Contractor shall be responsible for the cleaning of all surfaces as necessary to make them free of spatters or other deposits of paint, plaster, mortar, concrete, adhesives, roofing, dirt, soil, oil, and all other materials foreign to the surface involved.

5.16 COMMUNICATIONS

- 5.16.1 The Contractor shall forward all communications to the Owner and Architect/Engineer through the Designated Representative.
 - 5.16.1.1 The Contractor shall promptly return telephone calls or respond to any other form of communication initiated by the Designated Representative. Failure to promptly do so shall be considered lack of performance on the part of the Contractor.
 - 5.16.1.2 All written correspondence to the Designated Representative shall be dated and signed by the Contractor or its authorized representative.
- 5.16.2 Weekly project progress review meetings will be conducted with Designated Representative, Architect/Engineer, their consultants as necessary, and Contractor in attendance. The Designated Representative(CM/CDR) may call for special meetings of the Contractor, Subcontractors and material suppliers as he deems necessary for the proper coordination of the Work. Such meetings shall be held at the job site on regular working days during regular working hours. Unless otherwise directed by the Designated Representative(CM/CDR), attendance shall be mandatory for all parties notified to attend the meeting.

5.17 ROYALTIES AND PATENTS

- 5.17.1 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner and Designated Representative(CM/CDR) harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Designated Representative(CM/CDR).

5.18 INSURANCE

- 5.18.1 Indemnification
 - 5.18.1.1 CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities arising out of this Agreement from any cause whatsoever, including the acts, errors or omissions of any person or entity and for any costs or expenses (including but not limited to attorneys' fees) incurred by COUNTY on account of any claim except where such indemnification is caused by the active negligence, sole negligence, or willful misconduct of the COUNTY.

5.18.1.2 CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

5.18.2 Insurance Requirements for Contractor

5.18.2.1 CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, its agents, representatives, employees or subcontractors, set to the minimum scope and limit of insurance coverage as specified in Exhibit "C" of the Terms and Conditions for this Project.

Said policy or policies shall include a severability of interest or cross liability clause or equivalent wording. Said policy or policies shall contain a provision of the following form: "Such insurance as is afforded by this policy shall be primary and non-contributory to the full limits stated in the declarations, and if the COUNTY has other valid and collectible insurance for a loss covered by this policy, that other insurance shall be excess only."

If the policy providing liability coverage is on a 'claims-made' form, the CONTRACTOR is required to maintain such coverage for a minimum of three years following completion of the performance or attempted performance of the provisions of this agreement. Said policy or policies shall provide that the COUNTY shall be given thirty (30) days written notice prior to cancellation or expiration of the policy or reduction in coverage.

5.18.2.2 CONTRACTOR shall submit to the office of the designated COUNTY representative certificate(s) of insurance documenting the required insurance as specified above prior to this Agreement becoming effective. COUNTY shall maintain current certificate(s) of insurance at all times in the office of the designated County representative as a condition precedent to any payment under this Agreement. Approval of insurance by COUNTY or acceptance of the certificate of insurance by COUNTY shall not relieve or decrease the extent to which the CONTRACTOR may be held responsible for payment of damages resulting from CONTRACTOR'S services of operation pursuant to the contract, nor shall it be deemed a waiver of COUNTY'S rights to insurance coverage hereunder. In the event the CONTRACTOR is not able to comply with the COUNTY'S insurance requirements, COUNTY may, at their sole discretion and at the CONTRACTOR'S expense, provide compliant coverage.

5.18.2.3 The above insurance requirements are subject to periodic review by the COUNTY. The COUNTY's Risk Manager is authorized to change the above insurance requirements, with the concurrence of County Counsel, to include additional types of insurance coverage or higher coverage limits, provided that such change is reasonably based on changed risk of loss or in light of past claims against the COUNTY or inflation. This option may be exercised during any **amendment** of this Agreement **that results in an increase in the nature of COUNTY's risk** and such change of provisions will be in effect for the term of the **amended** Agreement. Such change pertaining to types of insurance coverage or higher coverage limits must be made by **written** amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of acceptance of the amendment or modification.

5.19 CONTRACTOR QUALITY CONTROL SYSTEM

5.19.1 The Contractor shall provide and maintain an effective quality control program of Contractor inspection system, which will assure that all supplies and services required under the Contract conform to the Contract Documents whether constructed or processed by the Contractor or procured from subcontractors or vendors. The Contractor shall substantiate that all supplies and services conform to the Contract Documents and shall also perform or have performed all inspections and tests otherwise required by the Contract Documents unless the required inspection and test is specifically designated to be performed by the Owner or the Owner's Designated Representative(CM/CDR). Mechanical and electrical personnel, either engineers or highly qualified technicians shall be provided during the testing, balancing, adjusting and regulating mechanical and electrical devices and systems. The Contractor's inspection system shall be documented, as specified herein, and shall be available for review by the Designated Representative prior to the start of construction and throughout the life of the Contract. The Contractor shall notify the Designated Representative(CM/CDR) in writing of any proposed change to its inspection system and change shall be subject to disapproval if they would, in the opinion of the Designated Representative(CM/CDR), result in non-conformance with the Contract requirements. The Contractor's inspection system shall include the minimum requirements stated below. The Contractor's full time job site superintendent may function as the Contractor's Contractor Quality Control representative.

5.19.1.1 Preparatory Inspection: The Contractor's Quality Control organization shall perform prior to the beginning any Work on any definable segment of Work; a review of contract requirements; a check to assure that all materials and equipment have been tested, submitted and approved; a check to assure that provisions have been made to provide required control testing; examination of the Work area to ascertain that all preliminary Work has been completed; and a physical examination of materials and equipment to assure that they conform to approved shop drawings or submittal data and that all material and equipment are on hand. As a part of this preparatory Work, the Contractor's Quality Control organization will review and certify all shop drawings, certificates and other submittal data prior to submission to the Designated Representative(CM/CDR). Each submittal offered to the Designated Representative(CM/CDR) will bear the date and the signature of a member of the Contractor's Quality Control organization indicating that he has reviewed the submittal and certified it to be in compliance with the Contract Documents (or showing the required change). The Designated Representative(CM/CDR) shall be notified a

minimum of seventy two (72) hours prior to the beginning of a Preparatory Inspection.

- 5.19.1.2 Initial Inspection: The Contractor's Quality Control organization shall perform, as soon as a representative segment of the particular item of Work has been accomplished, an examination of the quality of workmanship and a review of control testing for compliance with Contract Requirements, use of defective or damaged materials, omissions, and dimensions requirements.
- 5.19.1.3 Follow-Up Inspection: The Contractor's Quality Control organization shall perform daily, or as frequently as necessary, follow up inspections to assure continuing compliance with Contract Requirements, including control testing, until completion of the particular segment of the Work.
- 5.19.1.4 The Contractor shall maintain current records on an appropriate approved format of all inspections and tests performed. These records should provide factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, causes for rejection, etc.; proposed remedial action and corrective actions taken. The Contractor shall not build upon or conceal any feature of the Work containing uncorrected defects, and payment on deficient items will be withheld until satisfactorily corrected or other actions taken as authorized. These records must cover both conforming and defective items and shall include a statement that all supplies and materials, incorporated in the Work, are in full compliance with the terms of the contract. Legible copies shall be furnished to the Designated Representative. The report will cover all Work placement subsequent to the previous report and will be verified by the prime Contractor's Quality Control representative. The Contractor shall include in all subcontracts, purchase orders or other agreements, either written or oral, with a commercial testing laboratory for quality control testing under the subject Contract, a requirement that copies of any test reports, data or other information relating to tests conducted by said laboratory under this Contract, be mailed simultaneously to the Designated Representative when said report, data or other information are mailed or delivered to the Contractor.
- 5.19.1.5 The Contractor shall establish controls necessary to assure scheduled completion dates established by the Contract are not impacted by the delinquent submittal data and operational tests. **twenty (20)** days in advance of the Substantial Completion and prior to scheduling a pre-final inspection of the Work, or any phase of Work, under the Contract, the Contractor's Quality Control organization shall submit to the Designated Representative a complete and factual report of all remaining submittals, inspections and tests required prior to acceptance of the Work. The report shall include the following:
 - (a.) A list of outstanding shop drawing submittals or re-submittals requiring approval by the Contractor.
 - (b.) A list of manuals, test reports, spare parts, keys, etc., to be furnished to the Designated Representative(CM/CDR) and scheduled submittal dates.
 - (c.) Schedule of required operations tests and instruction periods.
 - (d.) Scheduled delivery dates for materials or equipment impacting contract completion dates.
 - (e.) Plan of action by the Contractor for correcting all known contract deficiencies including delay in scheduled progress.
- 5.19.1.6 The Contractor shall maintain marked-up documents depicting Record Document conditions. These drawings will be maintained in a current condition at all times until completion of the Work and will be available for review by the Designated Representative at all times. All variations from the Contract Documents, for whatever reason, including those occasioned by the required coordination between trades, will be indicated. These variations will be shown in the same general detail utilized in the Contract Documents. Upon Substantial Completion, the marked-up documents shall be furnished to the Designated Representative(CM/CDR) for delivery to the Owner or the Owner's Designated Representative(CM/CDR). The Contractor shall also furnish Record Documents as provided in the Technical Provisions of the specifications.
- 5.19.1.7 After the Contract is awarded and before construction operations are started, the Contractor shall meet with the Designated Representative(CM/CDR) and discuss the inspection system requirements. The meeting shall develop mutual understanding relative to details of the Contractor's Quality Control system including the form to be used for recording the inspection, administration of the system and the interrelationship of the Contractor and the Designated Representative(CM/CDR). The Contractor shall furnish to the Designated Representative(CM/CDR) within five (5) days after receipt of the Notice to Proceed, an inspection system plan which shall include the procedures, instructions and reports to be used. No progress payments will be processed under this Contract until the inspection plan is acceptable to the Owner and the Designated Representative. The Contractor's Quality Control plan documentation will include the following minimum elements:
 - (a.) The inspection organization.
 - (b.) Number and qualifications of inspection personnel to be used.
 - (c.) Authority and responsibilities of inspection personnel.
 - (d.) Schedule of use of inspection personnel by types and phase of Work.
 - (e.) Methods of inspection, including Subcontractor's work.
 - (f.) Test methods including as specified, name of qualified testing laboratory to be used, if applicable.
 - (g.) Method of documenting inspection and testing.
 - (h.) A copy of a letter of direction to the Contractor's Quality Control representative responsible for the quality control

inspection, outlining its duties and responsibilities and signed by a responsible officer of the firm.

- 5.19.1.8 The Contractor's Quality Control inspection system shall provide for procedures which will assure that the latest applicable drawings, including shop drawings, specifications and instruction required by the contract, as well as authorized changes thereto, are used for fabrication, inspection and testing.
- 5.19.1.9 The Designated Representative and the Architect/Engineer reserves the right to inspect at source supplies or services not manufactured or performed within the Contractor's facility. The Designated Representative(CM/CDR)'s and the Architect/Engineer's inspection shall not constitute acceptance, nor shall it in any way replace Contractor inspection or otherwise relieve the Contractor of its responsibility to furnish an acceptable end item. When inspection at Subcontractor's plant is performed by the Designated Representative(CM/CDR), such inspection shall not be used by Contractor as evidence of effective inspection by such Subcontractor.
- 5.19.1.10 The Designated Representative(CM/CDR) may notify the Contractor or its Quality Control representative at the site of noncompliance with the foregoing provisions. This notice may be in writing by a form titled "Deficiency Correction Report" or "Notice of Noncompliance". The Contractor shall immediately, upon receipt of said notice, indicate the corrective action which will be taken and the date by which it will be complete, and submit this data for the Designated Representative's approval. If the Contractor refuses to comply promptly with these requirements, the Designated Representative may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. No part of the time lost or cost of damages due to such stop orders shall be compensable and payment representing the noncompliance item and corrective action will be withheld until the Designated Representative(CM/CDR) has approved the corrective action.
- 5.19.1.11 Each of the Contractor's Quality Control Inspectors shall be responsible for inspecting the Work under its surveillance for compliance with OSHA Standards for the Construction Industry Section and approved safety program and shall immediately bring to the attention of the Contractor's supervisory personnel any unsafe Work conditions and instance of noncompliance noted.
- 5.19.2 Certificates of Compliance: The Designated Representative may require certificates of compliance with the specifications for materials or manufactured items produced outside of the job site. Such certificates will not relieve the Contractor from the requirements of providing material and manufactured items complying with the specifications even though they have been incorporated into the job.
- 5.19.3 Weighing Equipment: All scales used for proportioning materials shall be inspected for accuracy and certified within the past twelve (12) months by the State of California Bureau of Weights and Measures, by the County Director or Sealer of Weights and Measures, or by a Scale Mechanic registered with or licensed by the County.
- 5.19.3.1 The accuracy of the work of a scale service agency, except as stated herein, shall meet the standards of the California Business and Professions Code and the California Administrative Code pertaining to weighing devices. A certificate of compliance shall be presented prior to operation to the Designated Representative for approval and shall be renewed whenever required by the Designated Representative(CM/CDR) at no cost to the Owner.
- 5.19.3.2 All scales shall be so arranged that they may be read easily from the operator's platform or area. They shall indicate the true net weight without the application of any factor. The figures of the scales shall be clearly legible. Scales shall be accurate to within 1% when tested with the plant shut down. Weight equipment shall be so insulated against vibration or moving of other operating equipment in the plant area that the error in weighing with the entire plant running will not exceed 2% for any setting nor 1-1/2% for any batch.

5.20 COMPLETION INSPECTIONS

- 5.20.1 Contractor's Quality Control Completion Inspection: Based upon the Designated Representative's concurrence that the Work is nearing Substantial Completion, at least 15 days prior to pre-final inspection, the Contractor's Quality Control Inspection personnel shall conduct a detailed inspection. The Designated Representative(CM/CDR) shall be notified of the inspection date in order that he may participate, if s/he so elects. The Work shall be inspected for conformance to plans, specifications, quality, workmanship and completeness. The Contractor shall prepare an itemized list of Work not properly completed, inferior workmanship or not conforming to Contract Documents. The list shall also include outstanding administrative items such as Record Documents, operations and maintenance manuals, spare parts, installed property list, etc. The list shall be included in the Quality Control documentation and submitted to the Designated Representative(CM/CDR) with an estimated date for correction of each deficiency within five (5) working days after conducting this inspection.
- 5.20.2 Pre-Final Inspection: The Contractor's Quality Control Inspection personnel, its superintendent, or other primary management person and the Designated Representative will be in attendance at this inspection. Additional Owner personnel, including but not limited to those from the Owner's General Services Department user groups, Board of Supervisors and the Architect/Engineer may be in attendance. The pre-final inspection will be formally scheduled by the Owner or the Designated Representative based upon notice from the Contractor. This notice will be given to the Owner or the Designated Representative(CM/CDR) at least **ten (10)** days prior to the pre-final inspection and must include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with the remaining Contract Work will be complete and acceptable by the date scheduled for the pre-final inspection. Failure of the Contractor to have all Contract Work acceptably complete for this inspection will be the cause of the Owner or the Designated Representative(CM/CDR) to be reimbursed by the Contractor for the additional inspection costs of the Owner or the Designated Representative. At this inspection, the Owner or the

Designated Representative(CM/CDR) will develop a specific list of incomplete and unacceptable Work performed under the Contract and will subsequently furnish this list to the Contractor. Failure of the Owner or the Designated Representative(CM/CDR) to detect or list all incomplete and unacceptable Work during this inspection will not relieve the Contractor from acceptably performing all Work required by the Contract Documents. The Owner or the Designated Representative, at their option, may accept this inspection as the final acceptance inspection, if in its opinion the completion status of the inspected facilities and other Work performed under the Contract warrant this consideration.

5.20.3 Final Acceptance Inspection: The Contractor's Quality Control Inspection personnel, its superintendent or other primary management persons and the Owner or the Designated Representative will be in attendance at this inspection. Additional Owner personnel including, but not limited to, those from the Owner's General Services Department, user groups, Board of Supervisors and the Architect/Engineer may also be in attendance. The final acceptance inspection will be formally scheduled by the Owner based upon the Contractor's written assertion to the Owner that the Work is complete. This notice will be given to the Owner or the Designated Representative(CM/CDR) at least **five (5) days** prior to the final acceptance inspection and must include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining Work performed under the Contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all Work acceptably complete for this inspection will be cause for the Owner and the Designated Representative to bill the Contractor for any additional inspection costs.

5.20.4 If, in the Designated Representative's judgment, the work has been completed in accordance with the plans and specifications and is ready for acceptance he will so certify to the Owner, which may accept the completed work. The Designated Representative(CM/CDR) will, in its certification to the Owner, give the date when the work was completed. This will be the date when the Contractor is relieved from responsibility to protect the work. This will also be the date to which liquidated damages will be computed.

5.21 WARRANTY OF CONSTRUCTION

5.21.1 Performance Bond: The Performance Bond shall remain in effect for a 12 month warranty period after the date of substantial completion, as determined by the County. Extended warranty periods shall be provided under manufacturer warranties, as required by project specifications.

5.21.2 In the event that the Contractor or its Designated Representative(CM/CDR) fails to commence and diligently pursue all Work required under Paragraph 5.5 within a reasonable time after receipt of written notification pursuant to the requirements thereof, the Owner or the Designated Representative shall have the right to demand that said Work be performed under the Performance Bond by making written notice on the surety. If the surety fails or refuses to perform the obligation it assumed under the Performance Bond, the Owner or the Designated Representative(CM/CDR) shall have the Work performed by others, and after completion of the Work, shall make demand for reimbursement of any or all expenses incurred by the Owner while performing the Work, including, but not limited to, administrative personnel.

5.21.3 Warranty repair work which arises to threaten the health or safety of personnel or the safety of property or equipment will be handled by the Contractor on an immediate basis as directed verbally by the Owner or the Designated Representative(CM/CDR). Written verification will follow the Owner's or the Designated Representative's verbal instructions. Failure of the Contractor to respond as verbally directed will be cause for the Owner or the Designated Representative(CM/CDR) to have the warranty repair work performed by others and to proceed against the Contractor as outlined in Paragraph 5.21.2 above.

5.21.4 Pre-Warranty Conference: Prior to Substantial Completion and at a time designated by the Owner or the Designated Representative(CM/CDR), the Contractor shall meet with the Owner or the Designated Representative(CM/CDR) to develop a mutual understanding with respect to the requirements of Paragraph 5.5 of this specification. The Owner or the Designated Representative(CM/CDR) shall establish communication procedures for the Contractor notification of warranty defects, priorities with respect to the type of defect and reasonable time required for the Contractor response and other details deemed necessary by the Owner or the Designated Representative(CM/CDR) for the execution of the construction warranty. In connection with these requirements, the Contractor will furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and maintain warranty Work action on behalf of the Contractor. This single point of contact will be located within the local service area of the warranted construction and will be responsive to the Owner's inquiry on warranty Work action and status. This requirement does not relieve the Contractor of any of its responsibilities in connection with Paragraph 5.5.

5.22 SUBCONTRACTS

5.22.1 Each bidder shall file with its bid the name, license number, and the location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of one percent of the Contractor's total bid. Each bidder shall state the portion of the work which will be done by each subcontractor under this act. The Contractor shall list only one subcontractor for each such portion as is defined by the Contractor in its bid.

- 5.22.2 In each instance, the nature and extent of the work to be sublet shall be described. The failure of the Contractor to specify a subcontractor, or the listing of more than one subcontractor for the same portion of the work, constitutes an agreement by the Contractor that he is fully qualified to perform that portion himself, and that he shall perform that portion himself.
- 5.22.3 The Contractor must have the written consent of the Owner to substitute a subcontractor other than that designated in the original bid, to permit any subcontract to be assigned or transferred, or to allow a subcontract to be performed by other than the original subcontractor. The Contractor shall submit an acknowledgement signed by the original subcontractor that there is no objection to its replacement by another subcontractor. Any substitution of subcontractors must comply with California Public Contract Code.
- 5.22.4 Subcontracting of work for which no subcontractor was designated in the original bid, and which is more than one-half of one percent of the work, will be allowed only in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the Owner, setting forth the facts constituting the emergency or necessity.
- 5.22.5 Violation of any of the above provisions will be considered a violation of the Contract, and the Owner may cancel the Contract or assess the Contractor a penalty of not more than 10% of the subcontract involved.
- 5.22.6 All persons engaged in the work, including subcontractors and their employees, will be considered as employees of the Contractor. He will be held responsible for their work. The Owner will deal directly with, and make all payments to the Contractor.
- 5.22.7 When subcontracted work is not being prosecuted in a satisfactory manner, the Contractor will be notified to take corrective action. If the Owner so orders, and on receipt by the Contractor of written instructions from the Owner, the subcontractor shall be removed immediately from the work. He shall not again be employed on the work.

5.23 LAWS TO BE OBSERVED

- 5.23.1 The Contractor shall keep himself fully informed of State and National laws and County and municipal ordinances and regulations which in any manner affect those employed in the work or the materials used in the work or in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances and regulations.
- 5.23.2 Santa Barbara County Ordinance 2946 Unlawful Discrimination in Employment Practices: Contractor agrees with the County of Santa Barbara that it will not discriminate against any employee or applicant for employment in violation of any applicable State or Federal laws, rules or regulations which may now or hereafter specifically prohibit such discrimination on such grounds as race, religion, sex, color, national origin, physical handicap when otherwise qualified, Vietnam era veteran/disabled or age. If it is determined by the Board of Supervisors upon recommendation of the Affirmative Action Officer and the County Counsel that during the life of this contract any such unlawful discriminations have occurred, the County Board of Supervisors may forthwith terminate this contract. Contractor further agrees that whether or not the term of this contract is still in existence at the time of final determination of such unlawful discrimination, that it will forthwith reimburse the County for any and all damages, costs and expenses incurred in connection with such unlawful discrimination, including but not limited to damages from loss of Federal or State grants, subventions or loans; costs of processing, investigating and reporting complaints of unlawful discrimination; additional costs or expenses incurred in completion of this agreement by another party if this agreement is terminated before completion; all costs of suit including reasonable attorney's fees incurred in collecting any such damages, costs and expenses; and interest at 7% on all such damages, costs and expenses from the date they are incurred to date of payment.
 - 5.23.2.1 Employment practices shall include, but are not limited to employment, promotion, demotion, transfer, recruitment and advertising for recruitment, layoff or other termination, rates of pay, employee benefits and all other forms of compensation, selection for training and apprenticeship and probationary periods.
 - 5.23.2.2 Contractor further agrees to permit access at all reasonable times and places to all of its records of employment advertising, application forms, tests and all other pertinent employment data and records, to the County of Santa Barbara, its officers, employees and agents for the purpose of investigation to ascertain if any unlawful discrimination as described herein has occurred or is being practiced.
 - 5.23.2.3 Failure to fully comply with any of the foregoing provisions relating to unlawful discrimination in employment practices shall be deemed to be a material breach of this contract.

ARTICLE 6: SUBCONTRACTORS

6.1 DEFINITION

- 6.1.1 A Subcontractor is a person or entity who has a direct contract with a Contractor to perform any of the Work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or its authorized representative.
- 6.1.2 Nothing in the Contract Documents shall create any contractual relationship between the Owner, the Architect/Engineer or the Designated Representative(CM/CDR) and any Contractor, any Subcontractor, or any

Sub-subcontractor or its authorized representative.

6.2 SUB-CONTRACTUAL RELATIONS

6.2.1 By an appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor, by the terms of the Contract Documents and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these documents, assumes toward the Owner, the Designated Representative or the Architect/Engineer. Said agreement shall preserve and protect the rights of the Owner, the Designated Representative(CM/CDR) and the Architect/Engineer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents has against the Owner or Designated Representative(CM/CDR). Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with its Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph 6.3 and shall identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents to its Subcontractors.

ARTICLE 7: SEPARATE CONTRACTS

7.1 OTHER CONTRACTORS

7.1.1 The Owner reserves the right to let other separate contracts in connection with the Work of the Project. The Contractor shall cooperate with other separate contractors and he shall afford the Designated Representative(CM/CDR) and other Contractors reasonable opportunity for the introduction and storage of their materials and equipment and execution of their Work and shall properly connect and coordinate its Work with others under the general direction of the Designated Representative. Temporary structures, equipment or materials shall be located where directed by the Designated Representative(CM/CDR) and if not so located, they shall be moved by the Contractor when directed at no additional cost.

7.2 CONTRACTOR TO INSPECT OTHER WORK

7.2.1 If any part of the Contractor's Work depends, for proper execution or results, upon the Work of the Designated Representative(CM/CDR) or any separate contractor, the Contractor shall, prior to proceeding with the Work, inspect and measure Work already in place and promptly report to the Designated Representative any discrepancies from the drawings and specifications or defects in such Work that render it unsuitable for such proper execution and results. The Contractor shall submit the report of discrepancies or defects in the form of a written request for information. Failure of the Contractor to so report shall constitute an acceptance of the other contractor's Work as fit and proper to receive its Work, except as to defect which may develop after the execution of its Work.

7.2.2 Copies of Drawings and specifications relating to these separate contracts will be available to the Contractor, upon request, for its information in carrying out the above provisions. The Contractor shall be held responsible for any damage or misfit resulting from its neglect to comply with the foregoing.

7.3 COORDINATION AND COOPERATION

7.3.1 The Contractor shall coordinate Work to be done hereunder with the Work of such other contractors in such manner as the Designated Representative may direct. The Work shall be scheduled and executed at such time and in such a way as to cause the least inconvenience to the Owner and with proper consideration for the rights of other contractors and public. The Contractor shall keep fully informed with the entire operation and install its Work promptly.

7.3.2 If the Designated Representative determines that the Contractor is failing to coordinate its Work with the Work of other contractors as directed, he may, upon written notice to the Contractor recommend the following actions by the Owner:

7.3.2.1 The Owner may withhold any payment otherwise due hereunder until the Designated Representative's directions are complied with by the Contractor.

7.3.2.2 The Owner, through the Designated Representative, may direct other contractors to perform portions of the contract and charge the cost of such Work to the contract amount.

7.3.2.3 The Owner may terminate any and all portions of the contract for the Contractor's failure to perform in accordance with the contract.

7.3.3 If the Contractor notifies the Designated Representative(CM/CDR), in writing, that another contractor on this project is failing to coordinate its Work with the Work of this contract, as directed, the Designated Representative will promptly investigate the charge. If he finds it to be true, he will promptly issue such directions to the other contractor with respect thereto as the situation may require. The Designated Representative(CM/CDR) shall not, however, be liable for any damages suffered by this contractor by reason of the other contractor's failure to promptly comply

with the directions so issued by the Designated Representative(CM/CDR) or by reason of another contractor's default in performance; it being understood that the Designated Representative(CM/CDR) does not guarantee the responsibility or continued efficiency of any contractor.

7.3.4 In the event of any labor dispute, affecting the Contractor or its employees, the Contractor shall utilize all possible means to resolve the dispute in order that the project not be delayed to any extent.

7.3.5 The Contractor shall cooperate with the Owner, the Architect/Engineer and the Designated Representative(CM/CDR) and other Contractors working on this project in order to avoid interference, inconvenience or damage. To aid in avoiding conflicts, the Contractor, without additional charge, shall make all reasonable modification in the Work as may be directed by the Designated Representative. In the event of the Contractor's operations causes any damage, interference, or inconvenience to Work being carried out under any other contract, the Contractor shall restore, replace, rectify, or otherwise make good any damage to the satisfaction of the Designated Representative(CM/CDR) or to the other contractors. Should the responsible Contractor fail to comply with this provision, the Work will be done by others at the expense of the responsible Contractor.

7.3.6 The Contractor shall ensure that all labor employed by him, its agents, or those he assigns for Work on the project shall be in harmony with and be compatible with all other labor being used by the Designated Representative or other Contractors. The Contractor shall observe hours and conditions of labor as directed by Designated Representative(CM/CDR) and in any event, in compliance with all applicable laws, ordinances and regulations. The Contractor shall coordinate its work with the work of other Contractors, the Owner and the Designated Representative(CM/CDR) and shall provide adequate information and planning of its work to allow for effective coordination by others with its operations. Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of the Work of this contract, the Contractor shall immediately give notice thereof to the Designated Representative(CM/CDR). The Contractor shall then confirm the notice, in writing within 24 hours of the giving thereof, and shall include all relevant information with respect thereto. No claims will be accepted for costs incurred as a result of jurisdictional or labor practice disputes.

7.4 OWNER'S RIGHT TO CLEAN UP

7.4.1 If a dispute arises between the separate contractors as to their responsibility for cleaning up as required by Paragraph 5.15, the Owner may clean up and charge the cost thereof to the Contractor responsible therefore as the Owner shall determine to be just.

7.5 DAMAGES TO WORK

7.5.1 Should the Contractor wrongfully cause damage to the Work or property of the Owner or to other Work on the site, the Contractor shall promptly remedy such damage.

7.5.2 Should the Contractor wrongfully cause damage to the Work or property of any other Contractor, the Contractor shall, upon due notice, promptly attempt to settle with the other Contractor by agreement, or otherwise resolve the dispute. If such other Contractor sues the Owner or the Designated Representative(CM/CDR) or initiates any legal proceeding against the Owner or the Designated Representative(CM/CDR) on account of any damage alleged to have been caused by the Contractor, the Owner or Designated Representative(CM/CDR) shall notify the Contractor who shall defend such proceedings at the Contractor's expense and if any judgment or award against the Owner or Designated Representative arises from, the Contractor shall pay or satisfy it and shall reimburse the Owner or Designated Representative(CM/CDR) for all attorney's fees and court costs which the Owner or Designated Representative(CM/CDR) has incurred.

7.5.3 Should the Contractor sustain any damage through any act or omission of any other contractor having a contract for the performance of Work upon the site or of Work which may be necessary to be performed for the proper execution of the Work to be performed hereunder, the Contractor shall have no claim against the Owner, Architect/Engineer, Designated Representative(CM/CDR) or the Owner's consultants for such damage, but shall have a right to recover such damage from the other contractor as provided herein.

7.5.4 The Contractor shall indemnify and hold the Owner, Architect/Engineer and Designated Representative(CM/CDR) harmless from any and all claims or judgments for damages and from costs and expenses to which the Owner and Designated Representative may be subjected or which either may suffer or incur by reason of the Contractor's failure to comply with the Designated Representative(CM/CDR)'s directions promptly.

ARTICLE 8: MISCELLANEOUS PROVISIONS

8.1 GOVERNING LAW

8.1.1 This contract shall be governed by the laws of the State of California.

8.2 SUCCESSORS AND ASSIGNS

8.2.1 The Owner and the Contractor each binds himself, its partners, successors, assignees and legal representatives to the other part hereto and to the partners, successors, assignees and legal representatives of such other parties in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract nor sublet it as a whole without written consent of the other.

8.2.1.1 The Contractor shall not assign any monies due, or to become due, under this Contract without prior written consent of the Owner obtained through the Designated Representative.

8.3 WRITTEN NOTICE

8.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the corporation for whom it was intended, or if delivered at or sent by the registered or certified mail to the last business address known to him who gives the notice.

8.4 CLAIMS FOR DAMAGES

8.4.1 Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of its employees, agents or others for whose acts he is legally liable, claims shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

8.5 PERFORMANCE BOND AND LABOR MATERIAL PAYMENT BOND

8.5.1 The Contractor shall deliver to the Designated Representative, on forms approved by the Designated Representative and Owner, all executed and Standard Performance Bond and Standard Labor Material Payment Bond and a one (1) year Maintenance (Warranty) Bond, both with an approved surety acceptable to the Owner or Designated Representative(CM/CDR) and each payable in the amount at least equal to one hundred (100%) percent of the accepted bid as guarantee for the faithful performance of the Contractor and the payment of all persons who have, and fulfill, contracts which are directly with the successful bidder. The sureties of all bonds shall be of such security company or companies as are approved by the Designated Representative(CM/CDR) and the Owner. No Contract shall be deemed to be in effect until all bonds have been approved.

8.5.2 The insurance and bonding companies providing or underwriting such bonding shall be duly authorized and registered to do business in the State of California and shall be acceptable to the Owner and the Designated Representative.

8.5.3 The performance bond required by the Contract Documents shall remain in full force and effect during the warranty periods required by the Contract so as to give the Designated Representative and Owner recourse on the bond if the Contractor fails to remedy defects during the warranty period.

8.5.4 The Contractor's Payment and Performance Bond shall name the Owner as obligee.

8.6 RIGHTS AND REMEDIES

8.6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

8.6.2 No action or failure to act by the Designated Representative, Architect/Engineer or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract Documents nor shall any such action or failure to act constitute an approval or acquiescence in any breach there under, except as may be specifically agreed in writing.

8.7 TESTS

8.7.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the Designated Representative timely notice of its readiness so the Architect/Engineer and Designated Representative(CM/CDR) may observe such inspection, testing, or approval. The Owner shall bear all costs of such inspections, tests or approvals unless otherwise provided. The Contractor shall bear all costs of retesting any work failing to pass initial testing.

8.7.2 If the Architect/Engineer or Designated Representative determine that any Work requires special inspection, testing, or approval which Subparagraph 8.7.1 does not include, he will, through the Designated Representative(CM/CDR), instruct the Contractor to prepare for such special inspection, testing or approval and the Contractor shall give notice as in Subparagraph 8.7.1. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, Contractor shall bear all costs thereof, including compensation for the Architect/Engineer's and the Designated Representative's additional services made necessary by such failure. If the Work complies, the Owner shall bear such costs and an appropriate Change Order shall be issued.

8.7.3 Where operating tests are specified, the Contractor shall test its Work as it progresses, on its own account and shall make satisfactory preliminary tests in all cases before applying to the Designated Representative(CM/CDR) for official tests.

8.7.4 Official tests shall be made as directed by the Designated Representative, in the manner specified, for the different branches of the Work or portions thereof. The Contractor shall furnish all materials and apparatus, make connections and conduct the official test under the observation of the Owner's independent testing agency where

appropriate. The official test will be conducted in the presence of a representative of the Designated Representative(CM/CDR). Should defects appear, they shall be corrected by the Contractor and the official test repeated until the installation is acceptable to the Designated Representative.

- 8.7.5 Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by him through the Designated Representative(CM/CDR) to the Architect/Engineer.
- 8.7.6 If the Architect/Engineer or Designated Representative is to observe the inspections, tests or approval required by the Contract Documents, he will do so promptly and, where practicable, at the source of supply.
- 8.7.7 The Contractor shall deliver test samples of any of the materials specified in any of the Sections of the Specifications to the Owner's testing agency. This may apply to materials proposed for use, materials already delivered to the job, or materials already incorporated into the construction.
- 8.7.8 Neither the observations of the Architect/Engineer or the Designated Representative(CM/CDR) in their Administration of the Construction Contract, nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from its obligation to perform the Work in accordance with the Contract Documents.
- 8.7.9 Any materials which fail to meet the requirements of these specifications shall not be used whether or not previously approved by the Architect/Engineer. If they have been delivered to the job, they shall be removed. If they have already been incorporated into the construction, the Designated Representative or Architect/Engineer may order them removed, or, at the discretion of the Owner through the Designated Representative, they may be permitted to remain in place, providing the Contractor agrees to a proper deduction from the contract sum.
- 8.7.10 The services of a testing and inspection engineer, selected by the Owner, Designated Representative(CM/CDR) and Architect/Engineer, shall be provided and paid for by the Owner for the tests required in the various sections, unless specifically stated otherwise or due to deficient Work.
- 8.7.11 No Work of any kind shall be covered or enclosed before it has been tested and approved.

8.8 ORDER OF PRECEDENCE

8.8.1 In the event of any conflict or discrepancy in the provisions of the Contract Documents, the documents shall be interpreted on the basis of the following order or priority:

- (a.) Agreement between the Owner and the Contractor
- (b.) Addenda, with later date having greater priority
- (c.) Special Conditions
- (d.) General Requirements and Other Conditions
- (e.) Drawings and Specifications

8.8.2 In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum the better quality or greater quantity of Work shall be provided in accordance with the Architect/Engineer's and Designated Representative(CM/CDR)'s interpretation.

ARTICLE 9: TIME

9.1 DEFINITIONS

9.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for the Substantial Completion of the Work as defined in Subparagraph 9.1.3 including authorized adjustments thereto.

9.1.2 The date of commencement of the Work is the date established in a Notice to Proceed (NOP) from the Owner.

9.1.3 The Date of Substantial Completion of the Work or designated portion thereof is the date certified by the Architect/Engineer when construction is sufficiently complete in accordance with the Contract Documents, so that the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended.

9.1.4 The term Day, as used in the Contract Documents, shall mean calendar day unless otherwise specifically designated.

9.2 PROGRESS AND COMPLETION

9.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

9.2.2 The Contractor shall begin the Work on the date of commencement as defined in Subparagraph 9.1.2. He shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time. The actual date on which the Contractor starts work will not affect the required time for completion of the work.

9.2.3 The Contractor shall furnish sufficient forces, plant and equipment and shall Work such hours, including night shifts and lawful overtime operations as may be necessary to ensure the execution of the Work in accordance with the Construction Schedule. If, in the opinion of the Designated Representative, the Contractor falls behind the progress schedule, the Contractor shall take such steps as may be necessary to improve its progress and shall submit its plans demonstrating the manner in which the desired rate of progress may be regained. It shall be the responsibility of the Contractor to maintain its schedule so as not to delay the progress of the project. If the Contractor delays the progress of the project, he shall, in order to maintain the overall schedule, take all necessary actions, not limited to an increase in the number of shifts, days of Work and to the extent permitted by law, to institute or increase overtime operations, all without additional cost.

9.2.4 If the Designated Representative determines that the Contractor, without just cause, fails or refuses to employ an adequate working force, or to employ them for a maximum number of hours per day as permitted by law or by shifts of its working forces as would be sufficient, in the opinion of the Designated Representative(CM/CDR) to complete the Work in accordance with the approved project schedule or within the time to which such completion may be extended, then after formal notice to the Contractor, the Owner shall have the right to complete or to have the Work completed by such means and in such manner, by contract or otherwise, as permitted by law, as the Owner may deem advisable, utilizing for such purpose such of the Contractor's plant, materials, equipment, tools and supplies remaining on the site. Formal notice in this article shall be telegram, or registered letter to the last known business address of the Contractor.

9.2.5 The expense of such completion shall be charged against and deducted out of such money as would have been payable to the Contractor if he had completed the Work; the balance of such moneys, if any, subject to the other provisions of this contract, to be paid to the Contractor without interest after completion. Should the expense of such completion, so certified by the Designated Representative, exceed the total sum which would have been payable under this contract, if the same had been completed by the Contractor or its surety, the surety shall remit such balance due to the Owner upon its demand.

9.2.6 Whether or not the Contractor's right to proceed is terminated, he and its surety will be liable for any damage to the Owner, other Contractors and the Designated Representative(CM/CDR) from the Contractor's refusal to complete the Work in accordance with the approved progress schedule or within the time for which such completion may be extended. Formal notice in this article shall be by telegram, or registered letter to last known business address of the Contractor.

- 9.2.7 The permitting of the Contractor or the surety on the performance bond to proceed to complete all Work or any part of it after the date of Substantial Completion or after the date to which the time for Substantial Completion may have been extended, shall in no way operate as a waiver on the part of the Owner of any of its rights hereunder.
- 9.2.8 In order to expedite the completion of the Contractor's Work, the Designated Representative(CM/CDR) may direct the Contractor to Work on the basis of two (2) shifts instead of one (1) or to take such other measures as he deems necessary to expedite construction. If the need for such direction is not attributable to delays or other fault on the part of the Contractor, the Owner shall pay the Contractor any additional net cost. If, however, the Contractor is behind schedule due to its own delays or other fault on its part and the Designated Representative directs him to Work additional shifts, expedite deliveries or purchase additional materials or equipment in order to bring its Work up to schedule, all additional costs shall be borne by the Contractor.
- 9.2.9 With the Designated Representative's approval, the Contractor shall suspend any Work that may be subject to damage by climatic conditions. Under such conditions, the Contractor shall take measures to protect the Work and to minimize the impact on the progress of the Work.

9.3 DELAYS AND EXTENSIONS OF TIME

- 9.3.1 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Owner, Designated Representative or the Architect/Engineer or by any employee of either, or by any separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipated, unavoidable casualties or any causes beyond the Contractor's control, or by delay authorized by the Owner or Designated Representative(CM/CDR) pending litigation, or by any other cause which the Designated Representative(CM/CDR) determines may justify the delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Director of General Services may determine.
- 9.3.2 Any claim for extension of time shall be made in writing to the Designated Representative not more than ten (10) days after commencement of the delay; otherwise, it shall be waived. Any claim for extension of time shall state the cause of the delay and the number of days of extension requested. If the cause of the delay is continuing, only one claim is necessary, but the Contractor shall report the termination of the cause for the delay within ten (10) days after such termination and shall simultaneously make final claim for said delay, otherwise any claim for extension of time based upon that cause shall be waived.
- 9.3.3 In the event of a delay attributable in part to the Contractor and in part to causes for which the Contractor is not responsible, then provided the Contractor has given proper and timely notice hereunder, the delay shall be equitably apportioned among the parties causing it and the Contractor shall remain liable for the portion not so excused.
- 9.3.4 If no agreement is made stating the dates upon which interpretations as set forth in Subparagraph 3.2.2 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until fifteen days after written request is made for them and not then, unless such claim is reasonable.
- 9.3.5 If the Project is delayed as a result of the Contractor's refusal or failure to begin the Work on the date of commencement, as defined in Subparagraph 9.1.2, or its refusal or failure to carry the Work forward expeditiously with adequate forces, equipment, material or other resources, the Contractor shall be liable to the Owner for damages for every day Contractor's scheduled completion is exceeded, provided, however, that such refusal or failure is not the result of a justifiable delay as defined in Subparagraph 9.3.1.
- 9.3.6 Neither the Owner, Architect/Engineer, nor Designated Representative(CM/CDR) shall have liability to the Contractor nor to any other Contractor or subcontractor for delay, hindrance or interference in the performance of the Work, however caused, except for delay or hindrance resulting from active interference of the Owner or its representatives in such Contractor's execution of the Work.
- 9.3.7 In addition to damages, as defined in Subparagraph 9.3.5, the Contractor shall be liable to the Owner for any damages sustained as the result of the Contractor's refusal or failure to perform the Work, provided however that such refusal or failure is not the result of a justifiable delay as defined in Subparagraph 9.3.1
- 9.3.8 Contractor shall not request additional time to complete the project because of delays occurring on Sundays or holidays. Neither shall he request additional time for Saturday delays except and unless he can show proof of normally working on Saturdays in order to complete the Work on time.
- 9.3.9 Anticipated Normal Weather Days: The time estimated by the Contractor for completion of the entire Work ready for use shall include the number of calendar days, for anticipated delays due to normal weather conditions. No time extensions for delays due to weather will be allowed until and unless such delays exceed the time included for normal weather delays. In case of claims for extension of time because of abnormal inclement weather, such extension of time shall be granted only because such abnormal inclement weather prevented the execution of major items of Work on normal working days. A weather table reflecting the meteorological data from the Santa Barbara area is given following the General Conditions and will be used to determine any contract time extension due to abnormally inclement weather. For the purpose of this contract, "abnormal inclement weather" will be interpreted as the number of days in excess of the normal on which rainfall exceeds 0.01 inch or snow/ice pellets exceed 1.0 inch. Extension of time to complete the project will be based on actual working days, i.e., Saturdays, Sundays and

holidays will be considered in granting extension of time.

- 9.3.10 Liquidated Damages: The Owner will suffer financial loss if the project is not substantially complete on the date set forth in the Contract Documents. The Contractor and its surety shall be liable for and pay to the Owner, hereinafter stipulated as fixed, agreed and liquidated damages for each consecutive calendar day of delay until the Work is substantially complete, the sum noted in the Notice to Bid. The Owner reserves the right to withhold the liquidated damages, incurred because of failure to complete the project on time, from the final payment to the Contractor. The Owner reserves the right to withhold liquidated damages from any progress payments occurring after the contract completion date.
- 9.3.11 If a suspension of work is ordered by the Designated Representative, due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the contract, the days on which the suspension order is in effect shall be considered working days if such days are working days as defined.

ARTICLE 10: PAYMENTS AND COMPLETION

10.1 CONTRACT SUM

- 10.1.1 The Contract Sum is stated in the Agreement between the Owner and the Contractor including adjustments thereto and is the total amount payable to the Contractor for the performance of the Work under the Contract Documents.
- 10.1.2 Payment for work performed or materials furnished under an assessment proceedings contract will be made as provided in the particular proceedings or legislative act under which such contract was awarded.
- 10.1.3 Whenever any portion of the work is performed by the Owner at the Contractor's request, the cost thereof shall be charged against the Contractor, and may be deducted from any amount due or becoming due from the Owner.

10.2 SCHEDULE OF VALUES

- 10.2.1 Within **fifteen (15) days** after award of the contract and at least fifteen (15) days before the first Application for Payment, the Contractor shall submit to the Designated Representative(CM/CDR) a schedule of values allocated to the various portions of the Work prepared in such a form and supported by such data to substantiate its accuracy as the Designated Representative may require. This schedule, unless objected to by the Designated Representative, shall be used only as a basis for the Contractor's Application for Payment.
- 10.2.2 The schedule of values shall equal in total the Contract Sum and shall correctly represent a reasonable apportionment of the Contract Sum.
- 10.2.3 When a bid item is included in the proposal form and subject to the limitation and conditions in the contract documents, the Contractor shall itemize in the schedule of values the costs of mobilization work in advance of construction operations and not directly attributed to any specific bid item. When no such bid item is provided, payment for mobilization costs will be considered in the other items of work.
- 10.2.4 With said Schedule of Values contractor shall provide to Owner's Designated Representative(CM/CDR) copies of hourly wage rates for all workers in all trades associated with the job. If, during the course of construction, wage rates change, the contractor shall provide to Owner's Designated Representative(CM/CDR) copies of revised hourly wage rates the same day as said change is adopted or agreed-upon.

10.3 APPLICATION FOR PAYMENT

- 10.3.1 The Designated Representative will, after award of the contract, establish a closure date for the purpose of making monthly progress payments. The Contractor may request in writing that such monthly closure date be changed. The Designated Representative(CM/CDR) may approve such request when it is compatible with the Owner's payment procedures.
- 10.3.1.1 Each month, the Contractor will make an approximate measurement of the work performed to the closure date and as a basis for making monthly payments, estimate its value based on the contract unit prices or as provided for in the approved schedule of values.
- 10.3.1.2 At a fixed date each month as established by the Designated Representative(CM/CDR) during the progress of the Work, the Contractor shall render to the Designated Representative(CM/CDR) a notarized Application for Payment for a portion of the Contract Price, broken down into the categories itemized in the Contractor's Schedule of Values. The amounts invoiced shall be directly proportional to the percentage of completion of Work in each of the categories at the end of the closure date for the invoice period less any amounts previously invoiced. The Application for Payment shall be made on A.I.A. Document G702 with continuation sheets A.I.A. Document G703, or on other forms approved by the Designated Representative.
- 10.3.2 The Contractor shall certify monthly that he has made payment due to its Subcontractors and suppliers from the proceeds of prior payments and that he will make timely payments from the proceeds of the progress payment now due to its Subcontractor and suppliers in accordance with the contractual arrangements with them. The Contractor shall submit written certification that all amounts for equipment, materials, labor, union benefits and other services and all other items provided by the month covered by Contractor's invoice have been paid; and proof that Contractor

has acquired title to the equipment and materials invoiced the previous month. Partial Waivers of Lien will be required with the second and succeeding monthly invoices. The Designated Representative(CM/CDR) may request Record Documents, schedule updates, payrolls for all labor and other data supporting payment to Subcontractors and material suppliers before processing the requisition.

- 10.3.3 With respect to material purchased during the preceding month by the Contractor as Owner's special purchasing subagent, the Contractor shall provide the Designated Representative(CM/CDR) with a statement showing the costs of such materials and any state or local sales and use taxes paid by the Contractor in connection with the purchase or use thereof during the preceding month, which statement shall be supported by copies of invoices, receipts, etc., clearly and separately showing the costs of such materials and taxes. This statement shall be filed with the Designated Representative(CM/CDR) within one month after the purchase of such items.
- 10.3.4 Unless otherwise provided in the Contract Documents, payment will be made on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site. Payments made for materials or equipment stored on the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Designated Representative to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest. Materials invoiced in pay applications, if not stored on site, must be kept stored in a bonded warehouse approved by the Designated Representative(CM/CDR).
- 10.3.5 The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the Owner by incorporation in the construction and upon the receipt of final payment by the Contractor free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 10 as "liens" and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor by any other person performing its Work at the site or furnishing materials and equipment for its Work, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person. All Subcontractors and Sub-subcontractors agree that title will so pass upon their receipt of payment from the Contractor.

10.4 PROGRESS PAYMENTS

- 10.4.1 If the Contractor has made Application for Payment in accordance with the General Requirements, the Designated Representative will, with reasonable promptness, review and process such Application for Payment in accordance with the Contract. From each progress estimate, five (5%) percent will be deducted and retained by the Owner, and the remainder less the amount of all previous payments will be paid to the Contractor.
- 10.4.2 No approval of an application for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the project by the Owner, shall constitute an acceptance of any Work not in accordance with the Contract Documents. Nor shall the same relieve the Contractor or its surety from any obligation under the Contract or the Standard Performance Bond and the Standard Labor and Material Payment Bond.
- 10.4.3 Except in case of bona fide disputes, or where the Contractor has some other justifiable reason for delay, the Contractor shall pay for all transportation and utility services not later than the end of the calendar month following that in which services are rendered and for all materials, tools and other expendable equipment to the extent of ninety percent (90%) of the cost thereof not later than the end of the calendar month following that in which such materials, tools and equipment are delivered at the site of the Project. The Contractor shall pay to each of its Subcontractors, not later than the end of the calendar month in which each payment is made to the Contractor, the representative amount allowed the Contractor on account of the Work performed by its Subcontractors, to the extent of each Subcontractor's interest herein. The Contractor shall, by an appropriate agreement with each Subcontractor, also require each Subcontractor to make payments to its suppliers and sub-subcontractors in a similar manner.
- 10.4.4 Payment shall not relieve the Contractor from its obligations under the contract; nor shall such payment be construed to be acceptance of any of the work. Payment shall not be construed as the transfer of ownership of any equipment or materials to the Owner. Responsibility of ownership shall remain with the Contractor who shall be obligated to store, protect, repair, replace, rebuild or otherwise restore any fully or partially completed work or structure for which payment has been made; or replace any materials of equipment required to be provided under the contract which may be damaged, lost, stolen or otherwise degraded in any way prior to acceptance of the work under the contract, except as provided in Paragraph 10.7.2.
 - 10.4.4.1 Guarantee periods shall not be affected by any payment but shall commence on the date equipment or material is placed into service at the direction of the Owner. In the event such items are not placed into service prior to partial or final acceptance of the project, the guarantee period will commence on the date of such acceptance.
 - 10.4.4.2 If, within the time fixed by law, a properly executed notice to stop payment is filed with the Owner, due to the Contractor's failure to pay for labor or materials used in the work, all money due for such labor or materials will be withheld from payment to the Contractor in accordance with applicable laws.
- 10.4.5 Per the California Public Contract Code, upon the Contractor's request, the County will make payment of funds withheld to ensure performance of the Contract if the Contractor deposits in escrow with the Santa Barbara County Treasurer, or with a bank acceptable to the COUNTY/DISTRICT, securities eligible for investment under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following conditions:

- (a.) The Contractor shall bear the expense of the COUNTY/DISTRICT and the escrow agent, either the County Treasurer or the bank, in connection with escrow deposit made.
- (b.) Securities or certificates of deposit to be placed in escrow shall be of a value at least equivalent to the amount of retention to be paid to the Contractor pursuant to this section.
- (c.) The Contractor shall enter into an escrow agreement satisfactory to the COUNTY/DISTRICT which agreement shall include provisions governing inter alia:
 - (1) the amount of securities to be deposited.
 - (2) the providing of power of attorney or other documents necessary for the transfer of the securities to be deposited.
 - (3) conversion to cash to provide funds to meet defaults by the Contractor including, but not limited to, termination of the Contractor's control over the work, stop notices filed pursuant to law, assessment of liquidated damages or other amounts to be kept or retained under the provisions of the contract.
 - (4) decrease in value of securities on deposit.
 - (5) the termination of the escrow upon completion of the Contract.
- (d.) The Contractor shall obtain the written consent of the surety of such agreement.

10.5 PAYMENTS WITHHELD

10.5.1 The Designated Representative, Architect/Engineer or the Owner may decline approval of an Application for Payment if, in its opinion, the Application is not adequately supported. If the Contractor and the Designated Representative(CM/CDR) or Owner cannot agree on a revised amount, the Designated Representative(CM/CDR) shall process the application for the amount he deems appropriate. An amount equaling one hundred fifty (150%) percent of the value of the Work related to any Stop Notice shall be withheld from payments applied for by the Contractor until the Stop Notice is expunged. The Designated Representative(CM/CDR) may also decline to approve any Applications for Payment or, because of subsequently discovered evidence or subsequent inspections, he may nullify in whole or in part any approval previously made to such extent as may be necessary in its opinion because of:

- (a.) Defective Work not remedied.
- (b.) Third party claims filed or reasonable evidence indicating probably filing of such claims.
- (c.) Failure of the Contractor to make payments properly to Subcontractor or for labor, materials or equipment.
- (d.) Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum.
- (e.) Damage to the Designated Representative(CM/CDR), the Owner or another contractor working at the Project.
- (f.) Reasonable evidence that the Work will not be completed within the Contract Time.
- (g.) Persistent failure to carry out the Work in accordance with the Contract Documents.
- (h.) The filing of a lien against the Project when lien is caused by the act or inaction of the Contractor or its subcontractor.
- (i.) Refusal to follow the Project Safety Program issued as a Contract Document.
- (j.) Failure to maintain records as specified.
- (k.) Failure to maintain record drawings as specified.
- (l.) Failure to secure required building inspections.

10.5.2 When the above grounds in Subparagraph 10.5.1 are removed, payment shall be made for the amounts withheld because of them, but in no case shall interest be paid on amounts withheld by the Owner to the Contractor.

10.6 FAILURE OF PAYMENT

10.6.1 If the Contractor is not paid within sixty (60) days after the Application for Payment is approved for payment by the Designated Representative(CM/CDR) and has become due and payable, then the Contractor may, upon thirty (30) additional days written notice to the Owner and the Designated Representative(CM/CDR), stop the Work until payment of the amount owing has been received. The Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start up, which shall be effected by the appropriate Change Order in accordance with Paragraph 13.3., but in no case shall interest be paid by the Owner to the Contractor.

10.7 SUBSTANTIAL COMPLETION

10.7.1 When the Contractor considers that the Work, or a designated portion thereof which is acceptable to the Owner, is substantially complete as defined in Subparagraph 9.1.3, the Contractor shall prepare for submission to the Designated Representative(CM/CDR) a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Designated Representative and Architect/Engineer, on the basis of inspection, determine that the Work or designated portion thereof is substantially complete, the Architect/Engineer will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner, the Designated Representative(CM/CDR) and the Contractor for security, maintenance, heat, utilities, damage to the Work, insurance and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner, the Designated Representative(CM/CDR) and the Contractor for their written acceptance of the responsibilities assigned to them in

such Certificate. The Owner may retain a sum equal to an amount not to exceed one hundred twenty-five percent (125%) of the estimated cost of completing any unfinished items, separately listed and estimated at the time of substantial completion. Thereafter, the Owner shall pay to the Contractor monthly, the amount retained for incomplete items as each of said items are completed.

- 10.7.2 The Owner shall have the right to take possession of and use for any purpose any partially completed portion of the Work. The Designated Representative(CM/CDR) will give notice to the Contractor of the Owner's intention to take said possession and use. Such taking possession or use shall not be deemed to be the Designated Representative(CM/CDR)'s acknowledgement of completion and acceptance of said portion of Work.
- 10.7.2.1 The Owner's taking over and utilizing all or part of any completed facility or appurtenance will relieve the Contractor of responsibility for injury or damage to said completed portions of the improvement resulting from use by the public or from the action of the elements or from any other cause, except injury or damage resulting from the Contractor's operations or negligence. The Contractor will not be required to reclean such portions of the improvements before final acceptance, except for clean up made necessary by its operations. Nothing in this section shall be construed as relieving the Contractor from full responsibility for correcting defective work or materials.
- 10.7.2.2 In the event the Owner exercises its right to place into service and utilize all or part of any completed facility or appurtenance, the Owner shall assume the responsibility and liability for injury to persons or property arising out of or resulting from the utilization of the facility or appurtenance so placed into service, except for any such injury to persons or property caused by any willful or negligent act or omission of the Contractor, subcontractor, their officers, employees or agents.

10.8 FINAL COMPLETION AND FINAL PAYMENT

- 10.8.1 Following the Architect/Engineer's issuance of the Certificate of Substantial Completion of the Work or designated portion thereof and the Contractor's completion of the Work, the Contractor shall notify the Designated Representative(CM/CDR) in writing that the Work will be ready for final inspection and test on a definite date. Notice shall be given at least **five (5)** days in advance of said date. Designated Representative shall forward the notice to the Architect/Engineer who will attach its endorsement as to whether or not he concurs with the Contractor's statement that the Work will be ready for final inspection or test on the date given, but such endorsement shall not relieve the Contractor of its responsibility in the matter. If the Architect/Engineer concurs that the Work will be ready for final inspection or test on the date given, the Architect/Engineer and the Designated Representative(CM/CDR) will make such inspection. The Contractor is required to furnish access for the final inspection as provided in Subparagraph 3.2.1. If the Work is found acceptable under the Contract Documents and the Contractor fully performed the Designated Representative(CM/CDR), upon receipt of a correct final Application for Payment, shall recommend to the Owner that such payment be made.
- 10.8.2 Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Designated Representative(CM/CDR) all (1) inspection sign-offs, (2) final certificate of occupancy, (3) an affidavit that all payrolls, bills for materials and equipment and other indebtedness connected with the Work for which the Owner or its property might in any way be responsible, have been paid or otherwise, (4) consent of surety, if any, to final payment and executed "General Release and Lien Waiver and General Guarantee", on forms to be provided by the Designated Representative(CM/CDR), (5) if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the contract, to the extent and in such form as may be designated by the Owner or Designated Representative. If any Subcontractor refuses to furnish a release or waiver required by the Owner or Designated Representative(CM/CDR), the Contractor may furnish a bond satisfactory to the Owner and Designated Representative(CM/CDR) to indemnify them against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner or Designated Representative(CM/CDR) all monies that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees. Contractor is required to submit all "Record Documents" and operating manuals as required by the Contract Documents prior to the processing of the final payment.
- 10.8.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by the issuance of Change Orders affecting the final completion, and the Designated Representative so confirms, the Owner shall upon certification by the Designated Representative(CM/CDR) and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance of Work not fully completed or corrected is less than the retention stipulated in the Contract Documents and if the bonds have been furnished as provided in Paragraph 8.5, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Designated Representative(CM/CDR) prior to such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.
- 10.8.4 Upon successful completion of the final inspection and Work required by the Contract, acceptance of the same by the Owner and the filing of all affidavits, consents of surety and other data required in Subparagraph 10.8.2 and the submission of all bonds, written warranties and guarantees and of all data documents required for project closeout by the Contract Documents, the Architect/Engineer shall file a written certification of completion with the Owner and with the Designated Representative(CM/CDR) as to the entire amount of Work performed and compensation earned, including extra Work and compensation therefore. At the expiration of thirty-five (35) days after the Owner's confirmation of such Certificate of Completion or as prescribed by law, the Owner shall pay the Contractor the amount stated therein, less all prior payments and advances, whatsoever, to or for the account of the Contractor

except such amounts as are required to be withheld by properly executed and filed notices to stop payment or as may be authorized by the contract to be further retained. All prior estimates and payments including those relating to extra Work shall be subject to correction by this payment, which is throughout the Contract called "Final Payment."

10.8.5 The making of Final Payment shall constitute a waiver of all claims by the Owner or Designated Representative(CM/CDR) except those arising from:

- (a.) Unsettled liens.
- (b.) Faulty or defective Work appearing after Substantial Completion.
- (c.) Failure of the Work to comply with the requirements of the Contract Documents
- (d.) Terms of any special warranties required by the Contract Documents.

10.8.5.1 The acceptance by the Contractor of the Final Payment shall be and operate as a release to the Owner and to the Designated Representative(CM/CDR) of all claims and of all liability to the Contractor for all things done or furnished in connection with this Contract.

10.8.6 In accordance with Section 4551 of the Government Code, the Contractor and subcontractors shall conform to the following requirements. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act, Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code, arising from purchases of goods, services, or materials pursuant to the public works contract of the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

10.8.7 In accordance with Section 4552 of the Government Code, the bidder shall conform to the following requirements. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code, arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

10.9 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK

10.9.1 General: Unless otherwise specified, quantities of work shall be determined from measurements or dimensions in horizontal planes. However, linear quantities of pipe, piling, fencing, and timber shall be considered as being the true length measured along the longitudinal axis. Unless otherwise provided in the Contract Documents, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. The planimeter shall be considered an instrument of precision adapted to the measurement of all areas.

10.9.2 Methods of Measurement: Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in the particular section involved.

10.9.3 Certified Weights: When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Designated Representative(CM/CDR), on a completely automated weighing and recording system. The Contractor shall furnish the Designated Representative with duplicate licensed weighmaster's certificates showing the actual net weights. The Designated Representative(CM/CDR) will accept the certificate as evidence of the weights delivered.

10.9.4 Units of Measurement: Measurements shall be in accordance with U. S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds avoirdupois. The unit of liquid measure is the U. S. gallon.

10.9.5 Lump Sum Items: Items for which quantities are indicated as "Lump Sum", "L.S.", "Job", or words of like import shall be paid for at the price named. Such payment shall be full compensation for the work named and all work appurtenant thereto required by the contract which is not specifically provided for by other pay items.

10.9.6 Actual Quantities: The quantities listed in the bid schedule will not govern final payment. Payment to the Contractor will be made only for the actual quantities of contract items constructed in accordance with the plans and specifications. Upon completion of the construction, if the actual quantities show either an increase or decrease from the quantities given in the bid schedule, the contract unit prices will prevail subject to the provisions of Article 13.

10.9.7 Waste: Payment will not be made for materials wasted or disposed of in a manner not called for under the Contract. This includes rejected materials not unloaded from vehicles, material rejected after it has been placed and material placed outside of the plan lines. No compensation will be allowed for disposing of rejected or excess material.

ARTICLE 11: PROTECTION OF PERSONS AND PROPERTY

11.1 SAFETY PRECAUTIONS AND PROGRAMS

- 11.1.1 The Contractor expressly undertakes, both directly and through its Subcontractor, to take every precaution at all times for the protection of persons, including employees and property. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.
- 11.1.2 The Contractor shall comply with the provisions of the "Construction Safety Act" and the "Occupational Safety and Health Act of 1970" and the Designated Representative(CM/CDR)'s safety program, as well as all other applicable, Federal, State and local requirements. The Contractor shall submit its safety program to the Designated Representative prior to mobilizing the job and shall be responsible for the safety, efficiency and adequacy of its plant, appliances and methods and for any damage which might result from failure or improper construction, maintenance or operation. The Contractor shall provide a safety report to the Designated Representative(CM/CDR) on a weekly basis. During the conduct of the Work, the Contractor shall take immediate corrective action, as required upon notification of any deficiencies in safety provisions by the Designated Representative or identification of any deficiencies by Subcontractor personnel.
- 11.1.3 If the Contractor fails to maintain the safety precautions required by law or directed by the Designated Representative, the Designated Representative(CM/CDR) may take such steps as necessary and charge the Contractor therefore.
- 11.1.4 The failure of the Owner to take any such action shall not relieve the Contractor of its obligations in Subparagraph 11.1.1.
- 11.1.5 The Contractor shall immediately notify the Designated Representative(CM/CDR) of all accidents and submit a written report describing in detail the circumstances of all accidents within twenty-four (24) hours.
- 11.1.6 The Contractor alone shall be responsible for the safety, efficiency and adequacy of its plant, appliances and methods and for any damage which may result from their failure or their improper construction, maintenance or operation.

11.2 SAFETY OF PERSONS AND PROPERTY

- 11.2.1 The Contractor shall take all reasonable precautions for the safety of and shall provide all reasonable protection to prevent damage, injury or loss to:
 - (a.) All employees on the Project and all other persons who may be affected thereby;
 - (b.) All the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of its Subcontractors or Sub-subcontractors; and
 - (c.) Other property at the site or adjacent thereto, including trees, shrubs, lawns walks, pavements, roadways, structures and utilities not designed for removal, relocation or replacement in the course of construction.
- 11.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.
- 11.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards promulgating safety regulations and notifying the Owners and users of adjacent utilities. He shall protect the Owner's property from injury or loss arising in connection with this Contract. He shall adequately protect adjacent property as provided by law and the Contract Documents. He shall provide and maintain all passageways, guard fences, light and other facilities for protection required by public authority, local conditions or any of the Contract Documents. If the Contractor fails to so comply, he shall, at the direction of the Designated Representative, remove all forces from the Project without cost or loss to the Owner or Designated Representative(CM/CDR), until he is in compliance.
- 11.2.4 When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.
- 11.2.5 The Contractor shall notify the Designated Representative(CM/CDR) of any flammable, combustible and toxic materials intended for use on the project and shall furnish the Designated Representative(CM/CDR) literature pertinent to the use and control of such materials.
- 11.2.6 Every employee will be dressed for the Work he performs. Minimum dress will consist of long pants, tee shirt and work shoes. Shorts, cut-offs, "tank-top" shirts or soft-soled shoes will not be permitted.
- 11.2.7 The Contractor shall promptly remedy all damage or loss (other than damage or loss insured under Paragraph 12.2) to any property, referred to under Articles 11.2.1.2 and 11.2.1.3, caused in whole or in part by the Contractor, its Subcontractors or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under the Articles 11.2.1.2 and 11.2.1.3, except damage or loss attributable to the acts or omissions of the Owner or Architect/Engineer or anyone directly or indirectly employed by either of them or by anyone for whose acts either of them may be liable and not attributable to the fault

or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to its obligations under Paragraph 5.18. The Contractor shall be responsible to the Owner and the Designated Representative(CM/CDR) for the acts and omissions of all its employees and all Subcontractors, their agents and employees and all other persons performing any of the Work under a contract with the Contractor.

- 11.2.8 The Contractor and each Subcontractor shall designate a responsible member of its organization at the site to act as its Safety Representative whose duty shall be the prevention of accidents and who shall be responsible to maintain all Safety requirements of the Contractor and shall attend all Project Safety Meetings scheduled by the Contractor. This person shall be the Contractor's or Subcontractor's Superintendent unless otherwise designed by the Contractor in writing to the Designated Representative(CM/CDR).
- 11.2.9 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger safety.
- 11.2.10 When necessary for the proper protection of the Work, temporary heating of a type approved by the Designated Representative and Architect/Engineer shall be provided by the Contractor unless otherwise specified.

11.3 EMERGENCIES

- 11.3.1 In an emergency affecting the safety or life of individuals, of the Work, or of adjoining property, the Contractor without special instruction or authorization from the Owner or Designated Representative(CM/CDR) or Architect/Engineer shall act, at its discretion, to prevent such threatened loss or injury. Also, should he, to prevent threatened loss or injury, be instructed or authorized to act by the Owner or Designated Representative or Architect/Engineer, he shall so act, without appeal. Any additional compensation or extension of time claimed by the Contractor on account of any emergency Work shall be determined as provided by Article 13 - Changes in the Work.
- 11.3.2 Whenever immediate action is required to prevent impending injury, death, or property damage, and precautions which are the Contractor's responsibility have not been taken and are not reasonably expected to be taken, the Owner or Designated Representative may, after reasonable attempt to notify the Contractor, cause such precaution to be taken and shall charge the cost thereof against the Contractor, or may deduct such cost from any amount due or becoming due from the Owner. The Owner's or Designated Representative(CM/CDR)'s action or inaction under such circumstances shall not be construed as relieving the Contractor or its surety from liability.

ARTICLE 12: UTILITIES

12.1 LOCATION

- 12.1.1 The Owner will search known substructure records and furnish the Contractor, when requested by the Contractor, with copies of documents which describe the location of utility substructures, or will indicate on the plans for the project those substructures, except for service connections, which may affect the work. Information regarding removal, relocation, abandonment, or installation of new utilities will be furnished to prospective bidders.
- 12.1.2 Where underground main distribution conduits such as water, gas, sewer, electric power, telephone or cable television are shown on the plans, the Contractor, for the purpose of preparing its bid, shall assume that every property parcel will be served by a service connection for each type of utility.
- 12.1.3 At least two (2) working days before entering on the work, the Contractor shall request the utility owners whose utilities will be affected by the Contractor's work to mark or otherwise indicate the approximate location of their subsurface facilities including, but not limited to, structures, main conduits and service connections. This requirement will not apply to sewer and storm drain installations where their location and depth are shown on the plans for the project.
- 12.1.4 It shall be the Contractor's responsibility to determine the location and depth of all utilities, including service connections, which have been marked by the respective utility owners and which he believes may affect or be affected by its operations. If no pay item is provided in the contract for this work, full compensation for such work shall be considered as included in the prices bid for other items of work.

12.2 PROTECTION

- 12.2.1 The Contractor shall not interrupt the service function or disturb the supporting base of any utility without authority from the utility owner or order from the Designated Representative.
- 12.2.2 Where protection is required to insure support of utilities located as shown on the plans or in accordance with Paragraph 12.1, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at its expense.
- 12.2.3 Upon learning of the existence and location of any utility omitted from or shown incorrectly on the plans, or not properly marked, the Contractor shall immediately notify the Designated Representative(CM/CDR) in the form of a written request for information. When authorized by the Owner, support or protection of the utility will be paid for as provided in Article 13.
- 12.2.4 The Contractor shall immediately notify the Designated Representative(CM/CDR) and the utility owner if any utility is disturbed. The Contractor shall bear the costs of repair or replacement of any utility damaged.

12.2.5 When placing concrete around or contiguous to any non-metallic utility installation, the Contractor at its own expense, shall (1) furnish and install a two-inch cushion of expansion joint material or other similar resilient material; or (2) provide a sleeve or other opening which will result in a two-inch minimum clear annular space between the concrete and the utility; or (3) provide other acceptable means to prevent embedment in or bonding to the concrete. Where concrete is used for backfill or for structures which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other cathodic protection system is exposed or damaged by the Contractor's operations or as may be required by the work, the Contractor shall notify the Designated Representative(CM/CDR) and arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system.

12.3 EXCAVATIONS

12.3.1 For any displacement or excavation of the ground that may be required by any performance under this Contract, the Contractor shall obtain an inquiry identification number by calling Underground Service Alert (USA) 1 (800) 422-4133 or by such other means as may be required; shall conform to all requirements of Government Code Sections 4215 through 4217 regarding any such displacement or excavation, including the payment of any fees required; and shall facilitate performance by the Owner of any obligation required of the County under said sections.

12.3.2 There shall be no performance under this Contract by either party unless and until the provisions of such Sections are complied with and the Designated Representative(CM/CDR) is notified regarding the compliance.

12.4 REMOVAL

12.4.1 Unless otherwise specified, the Contractor shall remove all interfering portions of utilities shown on the plans or indicated in the bid documents as "abandoned" or "to be abandoned in place".

12.4.2 Before starting removal operations, the Contractor shall ascertain from the Designated Representative(CM/CDR) whether the utility abandonment is complete, and the costs involved in the removal and disposal shall be absorbed in the bid for the items of work necessitating such removals.

12.5 RELOCATION

12.5.1 When feasible, the utility owners responsible for utilities within the area affected by the work will complete their necessary installations, relocations, repairs or replacements before commencement of work by the Contractor. When the Contract Documents or plans indicate that a utility installation is to be relocated, altered or constructed by others, the Owner will conduct all negotiations with the utility owners and the work will be done at no cost to the Contractor.

12.5.2 Utilities which are relocated in order to avoid interference with the proposed permanent work shall be protected in their relocated position and the cost of such protection shall be absorbed in the various items of the contract.

12.5.3 After award of the contract, portions of utilities which are found to interfere with the work will be relocated, altered or reconstructed by the utility owners, or the Owner may order changes in the work to avoid interference. Such changes will be paid for in accordance with Article 13.

12.5.4 When the plans or specifications provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such work shall be included in the bid for the items of work necessitating such work. Temporary or permanent relocation or alteration of utilities requested by the Contractor for its own convenience shall be its responsibility, and he shall make all arrangements and bear all costs.

12.5.5 The utility owner will relocate service connections as necessary within the limits of the work or within temporary construction or slope easements unless otherwise specified. When directed by the Designated Representative, the Contractor shall arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. The relocation of such service connections when not detailed on the plans or in the specifications will be paid for in accordance with provisions of Article 13. Payment will include the restoration of all existing improvements which may be affected thereby. The Contractor may, for its own convenience or to expedite the work, agree with any utility owner to disconnect and reconnect interfering service connections. The Owner will not be involved in any such agreement.

12.6 DELAYS

12.6.1 The Contractor shall notify the Designated Representative(CM/CDR) of its construction schedule insofar as it affects the protection, removal or relocation of utilities. Said notification shall be in writing and shall be included as a part of the construction schedule required in Paragraph 5.10. He shall notify the Designated Representative(CM/CDR) in writing of any subsequent changes in its construction schedule which will affect the time available for protection, removal or relocation of utilities.

12.6.2 The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted and completed in accordance with Paragraph 12.1. The Contractor may be given an extension of time for unforeseen delays attributable to utility relocations or alterations not shown or incorrectly shown on the plans, or for unreasonably protracted interference by utilities in performing work correctly

shown on the plans. If the Contractor sustains loss due to delays attributable to interferences, relocations or alterations not covered by Paragraph 12.1, which could not have been avoided by the judicious handling of forces, equipment or plant, there shall be paid to the Contractor such amount as the Owner may find to be fair and reasonable compensation for such part of the Contractor's actual loss as was unavoidable.

12.7 COOPERATION

12.7.1 When necessary, the Contractor shall so conduct its operations as to permit access to the work site and provide time for utility work to be accomplished during the progress of the contract work.

ARTICLE 13: CHANGES IN THE WORK

13.1 CHANGE ORDERS

13.1.1 A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the Contract authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by a Change Order. The County Director of General Services is authorized to execute Change Orders for the Owner in accordance with Article 2.3. A Change Order signed by the Contractor indicates its agreement therewith, including the adjustment in the Contract Sum or the Contract Time, and Contractor agrees that the change in the contract sum and contract time set forth in the Change Order shall constitute the complete compensation and time extension for the change in the work including, but not limited to, Contractor's field and home office overhead, profit, and supervision costs. The Contractor shall not proceed with any change in the Work unless directed in writing by the Designated Representative.

13.1.2 The Owner or Designated Representative, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by a Change Order and shall be performed under the applicable conditions of the Contract Documents. Provisions of the Contract shall apply to all changes, modifications and additions with the same effect as if changes were embodied in the base Contract Documents.

13.1.3 A change in the Work may be initiated in one of three ways:

13.1.3.1 A "Request for Quotation" form from the Designated Representative(CM/CDR) to the Contractor describing the revision to the Work desired. Usually, it is accompanied by revised drawings, sketches or other data.

13.1.3.2 Formal notification from the Contractor documenting a "concealed condition" requesting investigation by the Designated Representative(CM/CDR) and Architect/Engineer which causes changes in the Contract Documents (and a subsequent Request for Quotation on the revised documents).

13.1.3.3 In response to a Contractor's "Request for Information", the Architect/Engineers' response may include instructions which the Contractor interprets as involving "extra work." In such cases, the Contractor must submit written notice to the Designated Representative(CM/CDR) requesting review and issuance of an appropriate Request for Quotation. Any other "instruction" given to the Contractor by the Owner, Designated Representative(CM/CDR) or Architect/Engineer shall require these procedures and as indicated in 13.4.1 below.

13.1.4 The cost or credit to the Owner resulting from changes in the Work, as outlined above, shall be made on the basis of one of the following methods:

- (a.) By such applicable unit prices as set forth in the Contract Documents or subsequently agreed upon by both parties to the Contract.
- (b.) By a lump sum mutually agreed upon by the Owner and the Contractor.
- (c.) The Owner may direct the Contractor through the Designated Representative to proceed with Work on a time and material (T & M) basis, with a not to exceed cost and the Contractor shall keep and present, in such a form as the Designated Representative(CM/CDR) may direct, a correct account of all costs of the changes together with all vouchers. The costs shall include overhead and profit as subsequently set forth below. These costs then shall be finalized by a Change Order.
- (d.) If the parties cannot agree upon a Lump Sum, Unit Pricing or T & M with a not to exceed cost, the Owner may, as recommended by the Designated Representative, issue a written directive Contract Amendment to proceed and the Contractor shall be compensated for the net cost of additional Work. The Contractor shall keep and present in such a form as the Designated Representative(CM/CDR) may direct a correct account of all costs of the changes together with all vouchers. The costs shall include overhead and profit as subsequently set forth below.

13.1.5 Lump sum prices and compensation for actual net cost plus overhead and profit shall be established as follows:

13.1.5.1 The net cost of Changes in the Work may include all items of labor or material, power tools and equipment actually used, prorated charges for foreman and payroll charges such as Public Liability and Workmen Compensation Insurance. No percentage for overhead, profit and commission shall be allowed on items of premium costs for overtime, social security, old age and unemployment insurance, fringe benefits, and payroll taxes. If deductions are ordered, the credit shall be the net cost. Items considered as overhead shall include insurance, other than that

mentioned above, bond or bonds, superintendent, timekeeper, clerks, watchmen, use of small tools, incidental job burdens, transportation, and general offices expense. The percentages for overhead and profit shall be negotiated and may vary according to the nature, extent and complexity of the changed Work (other than those covered by unit prices set forth on the Contract Documents), but in no case shall exceed the following:

(a.) Allowable Mark-ups on Change Orders

Definitions:

Prime Contractor = General Contractor
 First Tier Subcontractor = Contractor to the Prime Contractor
 Second Tier Subcontractor = Contractor to the First Tier Subcontractor

Case A: For work within the scope of the Change Order performed by forces of the Prime Contractor:

Overhead: 10% to Prime Contractor only.
 Profit: 5% to Prime Contractor only.
 Commission: No commission to any party.

Case B: For work within the scope of the Change Order performed by forces of the First Tier Subcontractor(s):

Overhead: 10% to First Tier Subcontractor(s) only.
 Profit: 5% to First Tier Subcontractor(s) only.
 Commission: 5% to Prime Contractor only.

Case C: For work within the scope of the Change Order performed by forces of the Second Tier Subcontractor(s):

Overhead: 10% to the Second Tier Subcontractor(s) only.
 Profit: 5% to the Second Tier Subcontractor(s) only.
 Commission: 5% to the Prime Contractor.
 5% to the First Tier Subcontractor(s).
 No commission to Second Tier Subcontractor(s).

(b.) Not more than four (4) mark-ups (Case C), not to exceed the maximum percentages shown above, shall be allowed.

(c.) All Cost Proposals for work shall be submitted to the Designated Representative(CM/CDR) on the attached document: "County of Santa Barbara General Services/Capital Projects Division Cost Proposal".

- 13.1.5.2 On proposals covering both increases and decreases in the amount of the contract, overhead, profit and commission shall be allowed on the net increase only as determined above. When the net difference is a deletion, no percentage for overhead profit and commission shall be allowed.
- 13.1.5.3 Contractor's cost for preparation of change order proposals shall be deemed to be included in amount of change order proposal.
- 13.1.6 The Contractor shall respond to the Designated Representative(CM/CDR)'s request for a proposal within seven calendar days. In this proposal, the Contractor shall furnish to the Designated Representative(CM/CDR) an itemized breakdown of the quantities and prices used in computing the value of changes that might be ordered. The Contractor shall submit with its proposal, its request for time extension (if any). If time for completion of the Contractor's Work is not affected by the change, the Contractor shall so state.
- 13.1.7 In figuring changes, instructions for measurements of quantities set forth in the specifications shall be followed.
- 13.1.8 After receipt of a proposal with a detailed breakdown, the Designated Representative shall act promptly thereon. However, when the necessity to proceed with a change does not allow sufficient time to properly check a proposal, the Owner through the Designated Representative(CM/CDR) may order the Contractor to proceed on the basis to be determined at the earliest practicable date. In this event, the value of the change, with the corresponding equitable adjustment to the contract, shall not be more than the increase or less than the decrease proposed.
- 13.1.9 The Designated Representative(CM/CDR) will inform the Contractor and the Contractor will inform the Designated Representative(CM/CDR) when either party recognizes that a proposed Request for Quotations (RFQ) may affect the progress of the Work schedule.
- 13.1.10 Designated Representative(CM/CDR)'s Audit: Designated Representative's duly authorized auditors shall have access at all reasonable times, to all Contractor's and Subcontractors' personnel, books, records, correspondence, instructions, plans, drawings, receipts, vouchers and memoranda of every description pertaining to Change Orders for the purpose of auditing and verifying Contractor's net cost of Change Order or for any other reasonable purpose. Designated Representative(CM/CDR)'s auditors shall have the right to reproduce any of the aforesaid documents. Contractor shall preserve and shall cause its Subcontractors to preserve all the aforesaid documents for a period of two (2) years after the completion and acceptance or termination of the Work.

13.1.11 If unit prices are stated in the Contract Documents or subsequently agreed upon and if the quantities originally contemplated are so changed in a proposed Change Order, that application of the agreed unit prices to the quantities of Work proposed will cause substantial inequity to the Owner, the Contractor or the Subcontractor, the applicable unit prices shall be equitably adjusted.

13.2 CONCEALED CONDITIONS

13.2.1 Should concealed conditions encountered in the performance of the Work below the surface of the ground or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in this Contract be encountered, the Contractor shall report the conditions to the Designated Representative(CM/CDR) before the conditions are disturbed. The Designated Representative shall thereupon notify the Architect/Engineer. Upon such notices, or upon its own observation of such conditions, the Architect/Engineer shall promptly make such changes in the Contract Documents as he finds necessary to conform to the different conditions. Any change in the cost of the Work or the time needed for completion resulting from concealed conditions shall be determined in accordance with Paragraph 13.1 provided a notice thereof is made within ten (10) days after the first observance of the conditions.

13.3 CLAIMS FOR ADDITIONAL COST

13.3.1 If the Contractor claims that any instructions given to him by the Owner or Designated Representative(CM/CDR) or by the Architect/Engineer, by drawings or otherwise, involve extra Work not covered by the Contract, he shall give the Designated Representative written notice thereof within ten (10) days after the receipt of such instructions and before proceeding to execute the Work, except in emergencies endangering life or property, in which case the Contractor shall proceed in accordance with Paragraph 11.3. Should it not be clear to the Contractor that a change will involve extra Work, written notice given within ten (10) days that the change may involve extra work will be considered sufficient notice. If it is later determined that the Work involved in such instruction shall be recognized as an extra, the amounts of additional compensation to be paid therefore, should be determined in accordance with Paragraph 13.1. Except as otherwise specifically provided, no claim for additional cost shall be allowed unless the notice specified by this Subparagraph is given by the Contractor or unless such Work is performed as provided in Subparagraph 13.1.4. Any change in the contract sum resulting from such claim shall be authorized by agreement amendment.

13.3.2 If the Contractor claims that additional cost is involved because of, but not limited to, (1) written interpretation issued pursuant to Subparagraph 3.2.2, (2) any order by the Owner or Designated Representative(CM/CDR) to stop the Work pursuant to Paragraph 4.3 where the Contractor was not at fault, or (3) any written order for a minor change in the Work issued pursuant to Paragraph 13.4, the Contractor shall make such claims as provided in Subparagraph 13.3.1.

13.3.2.1 Any claim for damages of any character, delays for which the Owner is liable under the Contract Documents, extra work or extra compensation of any other nature, shall be waived unless notice thereof is given to the Owner, in writing, within ten (10) days after the initial occurrence of the first event, which is relied upon to justify the claim or within such time as the event should have reasonably been discovered by the Contractor and in any event, before extra cost is incurred.

13.3.2.2 Any claim for a delay for which the Owner is liable will not be allowed where there is a concurrent delay that is the responsibility of the Contractor.

13.3.2.3 No claim for damages of any character due to delays caused by adverse weather, acts of God, strikes, fire or unavoidable casualties will be allowed. The Contractor shall bear the expenses related to additional time granted for "force majeure" events.

13.3.2.4 The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and, insofar as possible, the amount of the potential claim. The said notice as above required must have been given to the Designated Representative prior to the time that the Contractor shall have performed the work giving rise to the potential claim for additional compensation, if based on an act or failure to act by the Designated Representative(CM/CDR), or in all other cases within ten (10) days after the happening of the event, thing or occurrence giving rise to the potential claim. It is the intention of this paragraph that differences between the parties arising under and by virtue of the contract be brought to the attention of the Designated Representative(CM/CDR) at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The Contractor hereby agrees that he shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as herein required was filed.

13.4 MINOR CHANGES IN THE WORK

13.4.1 The Architect/Engineer will have the authority to order, through the Designated Representative, minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes will be effected by written order and such changes shall be binding on the Owner, the Designated Representative(CM/CDR) and the Contractor. The Contractor shall carry

out such written orders promptly.

ARTICLE 14: UNCOVERING AND CORRECTION OF WORK**14.1 UNCOVERING OF WORK**

14.1.1 If any portion of the Work should be covered contrary to the request of the Owner through the Designated Representative(CM/CDR) or Architect/Engineer, or to requirements specifically expressed in the Contract Documents, it shall, if required in writing by the Designated Representative, be uncovered for their observation and replaced, at the Contractor's expense.

14.1.2 If any other portion of the Work has been covered which neither the Designated Representative nor the Architect/Engineer has specifically requested to observe prior to being covered, the Architect/Engineer or Designated Representative(CM/CDR), with written approval of the Owner, may request to see such work and it shall be uncovered by the Contractor. If such work is found in accordance with the Contract, the cost of uncovering and replacement shall, by an appropriate Change Order, be charged to the Owner, as the case may be. If such Work is found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by a separate contractor employed as provided in Article 7 and in that event, the separate contractor shall be responsible for payment of such costs.

14.2 CORRECTION OF WORK

14.2.1 The Contractor shall promptly correct all Work rejected by the Architect/Engineer or the Designated Representative as defective or as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Architect/Engineer's and Designated Representative's additional services made necessary thereby.

14.2.2 Notwithstanding acceptance of the Work by the Owner, if any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Designated Representative to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. This obligation shall survive the termination of the Contract. The Designated Representative(CM/CDR) shall give such notice promptly after discovery of the condition.

14.2.2.1 If, within one (1) year after the Date of Substantial Completion of the Work or the designated portion thereof, or within one (1) year after acceptance by the Owner of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner or Designated Representative to do so unless the Owner or the Designated Representative(CM/CDR) has previously given the Contractor written acceptance of such condition. This obligation shall survive the termination of the Contract. The Owner or Designated Representative(CM/CDR) shall give such notice promptly after discovery of the condition.

14.2.3 The Contractor shall remove from the site all portions of the Work which are defective or nonconforming and which have not been corrected under Subparagraph 5.5.1, 14.2.1 and 14.2.2 unless removal has been waived by the Owner.

14.2.4 If the Contractor fails to correct the defective or nonconforming Work as provided in Subparagraph 5.5.1, 14.2.1 and 14.2.2, the Owner may correct it in accordance with Subparagraph 4.3.2.

14.2.5 If the Contractor does not proceed with the correction of such defective or nonconforming Work within a reasonable time fixed by written notice from the Designated Representative, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten (10) days thereafter, the Owner may, upon ten (10) additional days written notice, sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all costs that should have been borne by the Contractor, including compensation for the Designated Representative's additional services made necessary thereby. If such proceeds of sale do not cover all costs, which the Contractor should have borne, the difference shall be charged to the Contractor and the appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

14.2.6 The Contractor shall bear the cost of making good all Work of the Owner or other contractors destroyed or damaged by such removal or correction.

14.2.7 Nothing contained in this Paragraph 14.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Paragraph 5.5 hereof. The establishment of the time period of one (1) year after the Date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents, relates only to the specific obligation of the Contractor to correct the Work and has no relationship to the time within which its obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to its obligations other than specifically to correct the Work.

14.3 ACCEPTANCE OF DEFECTIVE OR NONCONFORMING WORK

- 14.3.1 If the Owner prefers to accept defective or nonconforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect reduction in the Contract Sum where appropriate and equitable. Such adjustment shall be affected whether or not Final Payment has been made.

ARTICLE 15: TERMINATION OF THE CONTRACT

15.1 TERMINATION BY THE CONTRACTOR

- 15.1.1 If the Work is stopped under an order of any court or other public authority having jurisdiction for a period of three (3) months, through no fault of the Contractor or a Subcontractor or their agents or employees or any other person performing any of the Work under a contract with the Contractor, or if the Designated Representative should arbitrarily fail to issue any certificate for payment within a reasonable time after it is due, or if the Owner should fail to pay within sixty (60) days, any sum certified by the Designated Representative(CM/CDR) to the Contractor, he may, upon thirty (30) additional days written notice by the Contractor, stop Work or terminate the Contract and recover from the Owner payment for all Work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery.

15.2 TERMINATION BY THE OWNER

- 15.2.1 If the Contractor is adjudged bankrupt or if he makes a general assignment for the benefit of its creditors or if a receiver is appointed on account of its insolvency, or if he persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules regulations, orders of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, then the Owner may, without prejudice to any right or remedy and after giving the Contractor and its surety, ten (10) days written notice, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished.
 - 15.2.1.1 If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including compensation for the Designated Representative's additional services made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner.
 - 15.2.1.2 The expenses incurred by the Owner or Designated Representative and the damage incurred through the Contractor's default shall be certified by the Architect/Engineer.
- 15.2.2 The Owner may terminate the contract at its own discretion or when conditions encountered during the work make it impossible or impracticable to proceed, or when the Owner is prevented from proceeding with the contract by act of God, by law, or by official action of a public authority.
- 15.2.3 After receipt of a Notice of Termination, the Contractor shall submit to the Owner through the Designated Representative its written termination claim in the form and with the certification which the Owner or Designated Representative(CM/CDR) may require. Such claims shall be submitted promptly, but in no event more than thirty (30) days after the effective date of termination.

ARTICLE 16: PROJECT REQUIREMENTS

16.1 PROJECT REPORTS

- 16.1.1 Contractor Reports: Immediately after the contract is awarded, a meeting will be scheduled at the project site to review project procedures, designation of name and title of the authorized person or persons, representing the Contractor and responsible for the project management and field operation, designation of Emergency Contact, designation of representative for progress meetings, the requirements for daily, weekly and monthly reports and other submittals required to perform and administer the project. Without limiting the reports required, several reports are indicated below with their requirements:
- 16.1.2 Daily Force and Activity Reports: The Contractor shall prepare and submit to the Designated Representative, including similar data for each of its Subcontractors, a Daily Force and Activity Report. This report shall be on a form approved by the Designated Representative(CM/CDR) and shall indicate all Supervisors, Journeymen, Laborers or Helpers and, by crew, the activities, related to the Contractor's schedule, that are being performed. The Daily Force and Activity Report shall include information on material deliveries, tests, weather conditions and other significant events. Each Daily Force and Activity Report shall be delivered to the Designated Representative(CM/CDR) at the job site by 9:00 a.m. on the next succeeding business day.
- 16.1.3 Daily Change Documentation: The Contractor shall submit to the Designated Representative for review and verification, separate daily documentation of any "Change in the Work" being performed on any basis, other than agreed upon lump sum, as described in Article 13 of the General Conditions. This report shall be on a form approved by the Designated Representative(CM/CDR). The Contractor shall certify the accuracy of this report.
- 16.1.4 Safety Reports: The Contractor shall submit to the Designated Representative copies of all accident reports and weekly minutes/reports of Safety Program "Tool Box" meeting and other safety information.

- 16.1.5 Material Status Reports: The Contractor shall prepare a Materials Status Report not later than fifteen (15) calendar days after the Notice to Proceed. The report shall include a complete list of suppliers, items to be purchased from them, the fabricator and manufacturer, the time required and the promised delivery dates for each item. This report shall be updated and submitted with the payment requisition monthly as an integral part thereof and more frequently as requested by the Designated Representative.
- 16.1.6 Purchase Orders: A copy of each purchase order as issued by the Contractor shall be furnished to the Designated Representative, except that prices may be omitted.
- 16.1.7 Job Cost Breakdown: The Contractor shall submit job cost breakdown reports for record and tax purposes to the Designated Representative. The first report shall be submitted within thirty (30) calendar days after date of each Notice to Proceed on any portion of the Work and shall be consistent in format with the schedule of values. Another report shall be submitted at the completion of the job and shall include all additions and deletions. Interim reports on various elements of the Work shall be submitted as required by the Owner for investment, tax credit, pollution control, financing and other purposes.
- 16.1.8 Monthly Progress Payment Applications: The Contractor shall submit Monthly Progress Payment Applications in the form and at the time as approved by the Designated Representative.
- 16.1.9 Monthly Reports: The Contractor shall submit to the Designated Representative copies of all monthly reports, such as MBE Participation, etc., required by governing bodies.
- 16.1.10 Monthly Certification: The Contractor shall submit to the Designated Representative periodic evidence and a monthly certification that "Record Documents", Test Reports and other Project Record Documents are being maintained for ultimate submittal to the Designated Representative(CM/CDR) and Owner at the completion of the Work.
- 16.1.11 Weekly Request for Information Status: The Contractor shall submit, each week on a day agreed to between the Contractor and the Designated Representative, a Request for Information Status Report indicating the Contractor's perception of the status of all submitted Requests for Information. The Request for Information Status Report will include a brief description of the request, date the request was submitted to the Designated Representative(CM/CDR), date a response is needed from the Architect/Engineer, date a response is actually made by the Architect/Engineer, and any pertinent remarks. The Request for Information Status Report shall be in a format approved by the Designated Representative(CM/CDR).

16.2 DRAWINGS, PRODUCT DATA AND SAMPLES

- 16.2.1 Shop Drawings: Shop drawings are drawings, diagrams, schedules and other data especially prepared for the Work by the Contractor, Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work. Shop drawings shall be signed by a registered professional engineer where required by law.
- 16.2.2 Product Data: Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product, equipment or system for some portion of the Work.
- 16.2.3 Samples: Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- 16.2.4 Submittals: Submittals forwarded by the Contractor to the Designated Representative(CM/CDR) shall be in conformance with the requirements of the Contract Documents. The Contractor shall notify the Architect/Engineer and Designated Representative in writing of any deviations in the submittals from the requirements of the Contract Documents at the time of submission. Before submission of each Shop Drawing, Product Data or Sample, the Contractor shall have determined and verified all quantities, dimensions, specified design and performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and review or coordinated each Shop Drawing, Product Data or Sample with other Shop Drawings, Product Data and Samples and with the requirements of the Work and the Contract Documents. The term "submittal" as used herein includes Shop Drawings, Product Data and/or Samples as required by the Contract Documents. All submittals shall be submitted thirty (30) days prior to commencement of work affected.
- 16.2.5 Notice of Variation: At the time of each submission, the Contractor shall give the Architect/Engineer specific written notice of each Contractor perceived variation that the submittal may have from the requirements of the Contract Documents and, in addition, the Contractor shall cause a specific notation to be made on each Shop Drawing, Product Data and/or Sample submitted to the Architect/Engineer for review and "approval" demonstrating each such perceived variation.
- 16.2.6 Architect/Engineer Submittal Review: The Architect/Engineer will review and "approve" with reasonable promptness the required submittals. The Architect/Engineer's review and approval of the Contractor's submittal does not constitute a complete check, but indicates only that design, general method of construction and detailing is satisfactory. The Architect/Engineer's review and approval does not permit any deviation from the Contract Requirements and does not relieve the Contractor of the responsibility for errors in dimensions, details, sizes of member, etc., or the coordinating of installation and construction with actual conditions of the Work. The

Architect/Engineer's review and "approval" will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, the methods, technique sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or safety programs incident thereto. The individual review and "approval" of a component item as such will not indicate "approval" of the integrated final assembly into which the item is placed and in which the item must function. The Contractor shall make any corrections required by the Architect/Engineer, without any additional cost to the Owner. The Contractor shall return the required number of corrected copies of submittals to the Architect/Engineer who will promptly, as required, review the re-submittals for conformance with the design concept.

- 16.2.7 Resubmission Notice: The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to all revisions other than those requested by the Architect/Engineer or Designated Representative(CM/CDR) on previous submittals.
- 16.2.8 Contractor Responsibility: Review and "approval" of submittals by the Architect/Engineer shall not relieve the Contractor from responsibility for any variation from the requirements of the Contract Documents unless the Contractor has in writing called the Architect/Engineer's attention to each such variation at the time of submission as required and the Architect/Engineer has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the submittal "approval"; nor will any "approval" by the Architect/Engineer relieve the Contractor from the responsibility for the Contractor's own errors or omissions in the submittal or from the Contractor's responsibility for compliance with all Contract Document provisions.
- 16.2.9 No Work Prior to Submittal Approval: The Contractor shall resubmit submittals as required until the Architect/Engineer's approval is obtained. No work requiring submittals shall be executed until the Architect/Engineer's approval is given. Where a submittal is required by the Specifications, any related work performed prior to the Architect/Engineer's review and "approval" of the pertinent submission will be at the sole risk, expense and responsibility of the Contractor.
- 16.2.10 Transmittal Requirements: After checking and verifying all field measurements and complying with applicable procedures specified in the Contract Documents, the Contractor shall transmit all submittals to the Architect/Engineer with one (1) copy to the Designated Representative(CM/CDR) and shall include:
- (a.) Date and revision dates.
 - (b.) Project title and number.
 - (c.) The names of:
 - (1.) Architect/Engineer
 - (2.) Designated Representative(CM/CDR)
 - (3.) Contractor
 - (4.) Contract Number
 - (5.) Subcontractor or Supplier
 - (6.) Manufacturer
 - (7.) Separate Detailer when pertinent
 - (d.) Number of Shop Drawings, Product Data and Sample submitted. (System to be established by Designated Representative(CM/CDR).)
 - (e.) Identification of product or material.
 - (f.) Relation to adjacent structure or materials.
 - (g.) Field dimensions, clearly identified as such.
 - (h.) Specification section number and paragraph.
 - (i.) Applicable standards such as ASTM number or Federal Specification.
 - (j.) A blank space, minimum of 2 1/2 by 3 1/2 inches for the Architect/Engineer stamp.
 - (k.) Identification of deviations from Contract Documents.
 - (l.) Other pertinent data.
- 16.2.11 Approval Delays: The Contractor shall be responsible for any delays caused by the rejection of the submittal for inadequate or incorrect shop drawings, manufacturer's data or other information.
- 16.2.12 Working Drawings: The Contractor is responsible for seeing that only "Approved" copies of shop drawings bearing the stamp of the Architect/Engineer are allowed on the job.
- 16.2.13 Approved Equals: The Contractor's attention is directed to Article 5.4 LABOR AND MATERIALS. Where two or more products are specified for an item of Work, either one thereof is acceptable and the choice is left to the Contractor. Where only one product is specified and where the term "or approved equal" or similar wording is used in connection with specified products, the Contractor may, if he so desires, offer for consideration a substitute product which he judges to be equal in every respect to the required product. When a specific process is specified as well as a guarantee of the results, the Contractor shall, if in its judgement the process may not produce the required result, submit for approval, an alternative process which he would guarantee. All such submittals shall be made, within forty (40) calendar days after award of the Contract, in writing to the Designated Representative(CM/CDR), who in turn will forward them to the Architect/Engineer. Review of any substitute product will (1) be contingent upon submission of substantiating serviceability to specified product; (2) use of the item will not entail changes in details and construction of related Work; (3) item conforms to required design and artistic effect. The Contractor shall furnish with the first submittal, a sufficient number of drawings, specifications, samples,

performance data and other information necessary to assist the Architect/Engineer in determining whether the proposed substitution is acceptable. The burden of proof shall be upon the Contractor. No consideration will be given to incomplete submittals. Substitutions shall be approved in writing before they may be used.

- 16.2.14 **Conflicting Instructions:** When product manufacturer's instructions are in conflict with the Contract Documents, the Contractor shall notify the Designated Representative(CM/CDR) for clarification before proceeding. The Contractor shall keep a copy of the various product manufacturer's instructions applicable to the Work at the project site.
- 16.2.15 **Submittal Log:** Each week on a day agreed to between the Contractor and the Designated Representative(CM/CDR), the Contractor shall submit an updated submittal log to the Designated Representative(CM/CDR) indicating the Contractor's perception of the status of all required submittals and reviews. Similar information to that outlined below shall be provided for any required re-submittals. The submittal log will include such information as:
- (a.) The schedule date to receive information from a subcontractor or supplier.
 - (b.) The actual date information was received from a subcontractor or supplier.
 - (c.) The scheduled date to submit information to the Architect/Engineer.
 - (d.) The date information was submitted to Architect/Engineer.
 - (e.) Anticipated date of return of information from Architect/Engineer.
 - (f.) Actual date information was received from Architect/Engineer.
 - (g.) Status or actions required.
- 16.2.16 **Sample Submission:** The Contractor shall submit all required samples for review and "approval" by the Architect/Engineer, with such promptness as to cause no delay in the Work. All samples shall be checked by the Contractor and accompanied by a specific written indication that the Contractor has satisfied Contractor's responsibilities under the Contract Documents with respect to the Contractor's review of the submission. The samples shall be identified clearly as to equipment, material, supplies and include pertinent data such as demonstrating compliance with a certain Specification Section, catalog number, etc., and the use for which the material is intended. An approved sample of each material shall be provided to the Designated Representative(CM/CDR) prior to delivery of any materials for which submission of samples is required.
- 16.2.17 **Sample Review:** The Contractor shall submit four (4) samples of materials to the Architect/Engineer for approval as indicated in the Specifications. All samples shall be properly labeled to indicate type of material submitted, intended use, manufacturer's name, trade name, project name, Designated Representative(CM/CDR)'s name, Contractor's, Subcontractor's and Supplier's names; and shall be transmitted as required by paragraph 16.2.10. Samples will be inspected and tested as required and if acceptable an approved notice will be sent to the Contractor along with one (1) approved sample. Rejected samples will be returned along with a statement of reasons for rejection. Accepted samples will be retained by the Architect/Engineer, one of which will be provided to the Designated Representative(CM/CDR) and shall become the property of the Owner.
- 16.2.18 **Submittals Affecting the Contract Sum:** The Architect/Engineers approval of submittals which deviate from the Contract Documents does not authorize changes to the Contract Sum. The Contractor shall notify the Architect/Engineer and the Designated Representative(CM/CDR) in writing at the time of transmittal of any changes to the Contract Sum affected by such approval of a submittal; otherwise, claim for extras will not be considered.
- 16.2.19 **Ductwork Layout Drawings:** As soon as practical and in no case starting later than thirty (30) days after the award of contract, the Mechanical Subcontractor shall prepare layout drawings of all duct work and piping at not less than 3/8" scale. The ductwork layout drawings shall show registers, grilles, diffusers and similar features as well as locations of all valves, dampers and other items requiring access for service and maintenance. The ductwork layout drawings shall also show beams, ceiling heights, walls, floor to floor dimensions, columns, doors and other major architectural and structural features as shown on the architectural and structural drawings.
- 16.2.20 **Coordination with Subcontractors:** The Contractor shall, within sixty (60) days after award, send a reproducible and two (2) prints of the ductwork layout drawings to the plumbing, materials handling, fire protection and electrical subcontractors who shall then make on the reproducible their own routings as well as other major items such as valves, access panels, switch panels, etc., as required to determine interrelationship and possible interferences with the mechanical ductwork and architectural or structural features. The marked-up reproducible shall then be returned to the Mechanical Subcontractor through the Contractor with copies to the Designated Representative(CM/CDR) no less than thirty (30) days after receipt by the other Subcontractors.
- 16.2.21 **Composite Drawings:** The Mechanical Subcontractor shall prepare preliminary composite drawings of such layout drawings, incorporating all the information and routings provided by the other Subcontractors. (At its option, a group of transparent overlays may be substituted, provided that they clearly show the relationship of all proposed installations.) The preliminary composite drawings, or the overlays, shall be reviewed during a series of meetings, called by the Contractor and attended by the Architect/Engineer and the Designated Representative(CM/CDR), at which all Subcontractors and trades shall be represented, in order to review and resolve any real or apparent interferences or conflicts.
- 16.2.22 **Agreement by Subcontractors:** After all conflicts or interferences are resolved the Mechanical Subcontractor shall develop a final set of composite drawings showing the agreed upon routing, layout and juxtaposition of all ductwork, conveyers, piping, major conduit, valves, panels, lighting fixtures and all other major mechanical and electrical installations. In areas where no mechanical ductwork occurs, but where other mechanical and electrical installations

are installed, each Subcontractor shall be responsible for its own Work and shall cooperate in preparing similar composite drawings, shall perform its own drafting Work and pay its own costs in connection therewith. In preparation of all the final composite drawings, large scale details as well as cross and longitudinal sections shall be as required to fully delineate all conditions. Particular attention shall be given to the locations, size and clearance dimensions of equipment items, shafts and similar features. These final composite drawings shall then be signed-off by each of the Subcontractors, including the Mechanical Subcontractor, and the Contractor indicating their awareness of and agreement with the indicated routings and layouts and their interrelationship with the adjoining or contiguous Work. Thereafter, no unauthorized deviations will be permitted and if made without knowledge or agreement of the Architect/Engineer and Designated Representative(CM/CDR), this unauthorized Work will be subject to removal and correction at no additional cost to Owner.

- 16.2.23 Minor Changes: In preparing the composite drawings, minor changes in duct, pipe or conduit routings that do not affect the intended function may be made as required to avoid space conflicts, when mutually agreed, but items may not be resized or exposed items relocated without the Architect/Engineers and Designated Representative(CM/CDR)'s written approval. No changes shall be made in any wall or chase locations, ceiling heights, door swings or locations, window or other openings or other features affecting the function or aesthetic effect of the building. If conflicts or interferences cannot be satisfactorily resolved, the Architect/Engineer and the Designated Representative(CM/CDR) shall be notified and their decision obtained.
- 16.2.24 Distribution of Composite Drawings: After the final composite drawings have been agreed upon and signed by all Subcontractors, the Contractor shall provide and distribute four (4) prints to each of the Subcontractors, to the Architect/Engineer and to the Designated Representative(CM/CDR) for reference and record purposes. The Contractor shall make similar distribution of all supplementary composite drawings, initiated by other Subcontractors as indicated herein before. All Subcontractors desiring additional prints of such drawings, beyond the basic distribution indicated above, shall arrange for and pay the cost of the same.
- 16.2.25 Record Composite Drawings: The record copies of the final composite drawings shall be retained by the Designated Representative(CM/CDR) and each Contractor as a working reference. All shop drawings, prior to their submittal to the Architect/Engineer, shall be compared with the composite drawings and developed accordingly by the Contractor and the responsible Subcontractor. Any revision to the composite drawings which may become necessary during the progress of the Work shall be noted by the Contractor and all Subcontractors and shall be neatly and accurately recorded on the record copies. The Contractor and each Subcontractor shall be responsible for the up-to-date maintenance of its record copies of the composite drawings and to keep two (2) copies available at the site. The composite drawings and any subsequent changes thereto, shall be utilized by the Contractor and each Subcontractor in the development of its "Record Document" drawings.
- 16.2.26 Timely Submissions: The composite drawings need not be submitted as a whole, but they shall be submitted in all cases in ample time to avoid construction delay. The coordination drawings may lack complete data in certain instances pending receipt of shop drawings, but sufficient space shall be allotted for the items affected. When final information is received, such data shall be promptly inserted on the composite drawings.
- 16.2.27 Improperly Coordinated Work: No extra compensation will be paid for relocating any duct, pipe, conduit, or other material that has been installed without proper coordination between the Contractor and all Subcontractors involved. If any improperly coordinated Work or Work installed that is not in accordance with the approved composite drawings, necessitates additional Work by the Contractor or other Subcontractors, the costs of all such additional Work shall be borne solely by the Contractor or the Subcontractor responsible for the nonconforming Work.
- 16.2.28 Incorporation of Changes: All changes in the scope of Work due to revisions formally issued and approved shall be shown on the composite drawings.
- 16.2.29 Quality Draftsmanship: All Work on shop drawings, ductwork layout drawings, coordination drawings, and composite drawings shall be performed by competent draftsmen and shall be clear and fully legible. The Architect/Engineer shall be the sole judge of the acceptability of the drawings.
- 16.2.30 Structural Cutting: The Contractor shall obtain specific positive written instructions from the Architect/Engineer through the Designated Representative(CM/CDR) before cutting beams or other structural members, arches or lintels, and the Contractor shall be guided by such instructions.

16.3 TEMPORARY SERVICES, SYSTEMS AND FACILITIES

- 16.3.1 Temporary Lighting, Power and Water: At its own expense, the Contractor shall furnish, install, maintain, and remove all temporary lighting, electric power, and potable water, including piping, wiring, lamps, and other equipment necessary for the execution and security of the Work; and shall be responsible for the cost of power and water usage. The Contractor shall not draw water from any fire hydrant, except to extinguish a fire, without first obtaining permission from the water agency concerned. The Contractor shall provide for distribution of drinking water to all work forces under this Contract.
- 16.3.2 Sanitation: The Contractor shall provide and maintain portable enclosed toilets for the use of all work forces under this Contract. These accommodations shall be maintained in a neat and sanitary condition. They shall also comply with all applicable laws, ordinances and regulations pertaining to the public health and sanitation of dwellings and camps. The Contractor shall not interrupt the flow of existing sanitary sewers. Should the Work involve the disruption of existing sewer facilities, the Contractor shall convey the sewage in closed containers and shall dispose

of it in a sanitary sewer system as approved by local health authorities and the Designated Representative(CM/CDR). Sewage shall not be permitted to flow in trenches or be covered by backfill.

- 16.3.3 Vermin Control: The Contractor shall maintain the job site free of rodents, insects, vermin and pests throughout all phases of construction, including suspensions of work, and until final acceptance of the Work. Necessary extermination work shall be arranged and paid for by the Contractor as part of the contract work and contract time and shall be performed by a licensed agency in accordance with requirements of governing authorities. The Contractor shall be liable for injury to persons or property and responsible for the elimination of offensive odors resulting from extermination operations.
- 16.3.4 Water Pollution Control: The Contractor shall exercise every reasonable precaution to protect channels, storm drains, and bodies of water from pollution and shall conduct and schedule its operations so as to minimize or avoid muddying and silting of said channels, drains, and waters. Water pollution control work shall consist of constructing those facilities which may be required to provide prevention, control, and abatement of water pollution.
- 16.3.5 Air Pollution Control: The Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.
- 16.3.6 Project Site Maintenance: Throughout all phases of construction, including suspensions of work, and until final acceptance of the Work, the Contractor shall keep the job site, including the interior of all structures, clean and free from rubbish and debris. The Contractor shall provide and maintain rubbish containers and periodic rubbish removal services as required by the pace of the Work and health regulations, and as acceptable to the Designated Representative(CM/CDR).
 - 16.3.6.1 The Contractor shall abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other methods.
 - 16.3.6.2 Materials and equipment shall be removed from the site as soon as they are no longer necessary; and upon completion of the Work and before final inspection the entire work site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be absorbed in the Contractor's bid.
 - 16.3.6.3 The Contractor shall take care to avoid spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned by the Contractor.
 - 16.3.6.4 Burning or burying of rubbish and waste materials on the project site is prohibited. Disposal of volatile fluid wastes in storm and sanitary sewer systems is prohibited.
 - 16.3.6.5 Waste materials shall not be dropped or thrown from heights. Cleaning operations shall be scheduled so that dust and other contaminants resulting from the cleaning process will not fall on wet or newly painted surfaces. Dusty debris shall be sprinkled lightly with water as required to control dust.
 - 16.3.6.6 The Contractor shall vacuum clean the interior of buildings prior to the start of finish painting. The Contractor shall continue vacuum cleaning thereafter on an as needed basis until the building is ready for acceptance.
 - 16.3.6.7 Failure of the Contractor to comply with the Designated Representative(CM/CDR)'s cleanup orders may result in an order to suspend the Work until the condition is corrected. No additional compensation will be allowed as a result of such suspension.
- 16.3.7 Final Cleaning: At the completion of the Work, the Contractor at its sole expense shall remove all waste materials and rubbish from and about the project, as well as all tools, construction equipment, temporary facilities, machinery, and surplus materials.
 - 16.3.7.1 At completion of construction and just prior to final inspection, the Contractor shall thoroughly clean the interior and exterior of the buildings, including hardware, floors, roofs, sills, ledges, glass, or other surfaces where debris, plaster, paint, spots, and dirt or dust may have collected. All glass shall be washed clean and polished. All grease, stains, labels, fingerprints, and other foreign materials shall be removed from interior and exterior surfaces. The Contractor shall repair, patch, and touch up marred surfaces to match adjacent finishes.
 - 16.3.7.2 The Contractor shall use only experienced workmen or professional cleaners for final cleaning. Use only cleaning materials recommended by the manufacturer of the surface to be cleaned, and use cleaning materials only on surfaces recommended by the cleaning material manufacturer.
 - 16.3.7.3 The Contractor shall broom clean all paved surfaces and rake clean other surfaces of grounds.
 - 16.3.7.4 The Contractor shall replace air conditioning filters, if units were operated during construction. The Contractor shall clean all ducts, blowers, and coils if air conditioning units were operated at any time without filters during construction.
 - 16.3.7.5 The Contractor shall maintain the building in a clean condition until it is accepted by the Owner.

- 16.3.8 Fire Protection: The Contractor at its sole expense shall provide temporary fire safety equipment for general use. The Contractor shall provide fire extinguishers for its trailers, for use as required when cutting and burning is performed, and as required throughout the job site as instructed by the local fire marshal.
- 16.3.9 Communication Systems: The Contractor shall provide telephone services at its own expense. The Contractor at its sole expense shall maintain in service a facsimile telecopy machine whenever telephone service is available at the job site. The use of portable radios shall be in accordance with Federal Regulations and shall not interfere with other local radio operations.
- 16.3.10 Office Facilities: The Contractor at its sole expense shall provide, maintain and remove temporary field office facilities, including all furniture, equipment, copiers, heating, cooling, lighting, power, telephones, drinking water, plumbing and toilet fixtures as necessary for its performance of the Work; and shall make these spaces, telephones, and services available for the use of the Owner, the Designated Representative(CM/CDR) and the Architect/Engineer. A designated work area shall be provided for the use of the Owner, the Designated Representative(CM/CDR) and the Architect/Engineer.
- 16.3.11 Weather Protection: The Contractor at its sole expense shall be responsible for providing protection for its own Work against inclement weather, in order to maintain all Work, materials, apparatus, and equipment. All Work subject to damage by adverse weather conditions shall be covered or otherwise protected as required. Weather protection shall be adequate to permit the Contractor to Work on a continuous basis without shutdown due to temperature or weather conditions as far as possible.
- 16.3.12 Dewatering: The Contractor at its sole expense shall provide all temporary drainage and dewatering measures including all pumping, drainage, erosion control or other work required to protect the Work while in progress.
- 16.3.12.1 Inundation of partially completed work due to lack of control during non-working periods will not be permitted, and may be cause for requiring removal of work already completed with replacement at the Contractor's expense.
- 16.3.12.2 The Contractor shall be responsible for obtaining the use of any property, in addition to that provided for in the plans and specifications, which may be required for the diversion and protective works so as not to create a hazard to persons or property or to interfere with the water rights of others.
- 16.3.12.3 It shall be understood and agreed that the Contractor shall hold the Owner and the Designated Representative(CM/CDR) harmless from legal action taken by any third party with respect to construction and operation of the diversion and protective works.
- 16.3.12.4 All works installed by the Contractor in connection with dewatering, control, and diversion of water but not specified to become a permanent part of the project, shall be removed and the site restored, insofar as practical, to its original condition prior to completion of construction or when directed by the Designated Representative(CM/CDR).
- 16.3.13 Material Handling: The Contractor at its sole expense shall be responsible for handling and transporting, including lifting, its material and equipment to the location of need in a timely manner.
- 16.3.14 Cranes, Hoists and Scaffolds: The Contractor at its sole expense shall furnish, erect, maintain and remove all cranes, temporary hoists and scaffolding as may be required by the Contractor for the performance of the Work.
- 16.3.15 Storage: The Contractor at its sole expense shall provide and remove whatever temporary storage facilities, sheds, buildings, enclosures, partitions, etc., he deems necessary for the protection of its materials, tools and equipment after receiving approval from the Designated Representative(CM/CDR) on specific details of the method proposed. Any damage caused to Work in place by these temporary measures will be repaired / replaced at the Contractor's expense.
- 16.3.16 Security Fences: The Contractor at its sole expense shall provide temporary site enclosures (fences), barriers, and pedestrian walkways as indicated by the Contract Documents or as required to control access to the job site.
- 16.3.17 Security Services: The Contractor at its sole expense shall be responsible for job site security during various phases of the Work, including non-working hours and at other times, and as may be required for the protection of the Owner and the Designated Representative(CM/CDR)'s interests. All costs for same will be paid by the Contractor.
- 16.3.18 Openings, Sleeves and Supports: The Contractor at its sole expense shall provide all necessary openings, channels, chases, flues, sleeves, inserts, hangers, etc., if any, and such cutting, patching, finishing, etc., if any, required by the Contract Documents to complete the Work.
- 16.3.19 Protection and Restoration of Existing Improvements: The Contractor at its sole expense shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property. All costs to the Contractor for protecting, removing, and restoring existing improvements shall be paid by the Contractor.
- 16.3.19.1 The Contractor at its sole expense shall repair or replace all existing improvements which are damaged or removed as a result of its operations and which are not designated for removal (e.g. curbs, sidewalks, driveways, fences, walls, ceilings, floor coverings, signs, utility installations, pavements, structures, trees, shrubbery, grass etc.).

- 16.3.19.2 Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimensions in such a manner that the repaired work will not be readily noticeable.
- 16.3.20 Excavation Protection: The Contractor at its sole expense shall provide and maintain fencing, shoring and bracing and dewatering of all excavation.
- 16.3.21 Temporary Safety Measures: The Contractor at its sole expense shall provide, maintain and remove when no longer required all temporary safety measures, including all construction supplies, barricades, pedestrian walkways and equipment as may be required by the Contract Documents for its Work.
- 16.3.22 Advertising: The names of the Contractor, Subcontractors, the Architect/Engineer, including their consultants, with their addresses and the designation of their particular specialties, may be displayed on removable signs. The size, format and location of such signs shall be subject to the Designated Representative(CM/CDR)'s approval. Commercial advertising matter shall not be attached or painted on the surfaces of buildings, fences, canopies, or barricades. All signs shall be removed when directed by the Designated Representative(CM/CDR) but not later than final acceptance of the Work.

16.4 SAFETY

- 16.4.1 OSHA and California Codes and Regulations: The Contractor at its sole expense shall provide, erect, maintain, dismantle and remove any and all barricades, railings, covers, warning lights, safety netting, and similar safety devices required to complete its Work and protect the public in accordance with OSHA, California Administrative Code, Title 8 Industrial Relations, Chapter 4 Division of Industrial Safety, Section 4 Construction and Safety Orders, Article 8 Explosives, and all other applicable code requirements.
- 16.4.2 Traffic Control: The Contractor shall conduct its Work so as to interfere as little as possible with pedestrian and vehicular traffic and he shall, at its sole expense, provide and maintain proper warnings and detour signs at all pedestrian and vehicular closures, intersections and along detours, directing traffic around closed portions of roadways. He shall, at its own expense, wherever necessary or required, provide and maintain fences, temporary roadways, temporary crossing signs, watchmen, warning lights and take such other precautions as may be necessary to protect life and property and shall be responsible for all damages occasioned in any way by its act or neglect. All barricades and obstructions shall be illuminated at night and all lights shall be kept on from one-half hour before sunset until one-half hour after sunrise.
- 16.4.3 Fall Protection: When performing any cutting, removal, creating openings or holes, etc., the Contractor at its sole expense, by use of barricades, flagmen or other means, shall provide protective measures to assure that other workmen or the public are not exposed to potential injury by the operation being conducted.
- 16.4.4 Welding Protection: The Contractor at its sole expense shall provide, maintain and remove all shielding or similar precautions required to be taken adjacent to welding operations.
- 16.4.5 Personal Equipment: The Contractor at its sole expense shall provide and supervise the use of all proper safety and protective devices by its employees during any potentially dangerous phases of its Work.
- 16.4.6 Safety Orders: The Contractor shall have at the work site, copies or suitable extracts of: Construction Safety Orders, Electrical Safety Orders, and General Industrial Safety Orders issued by the State Division of Industrial Safety. The Contractor shall comply and shall require the compliance by all Subcontractors with provisions of these Safety Orders and all other applicable laws, ordinances, and regulations.
- 16.4.7 Trench Excavations: As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall submit for acceptance by the Owner, a detailed plan showing protection of the worker from the hazard of caving ground.
- 16.4.8 Use of Explosives: Explosives may be used only when authorized in writing by the Owner, or as otherwise stated in the Contract Documents. Explosives shall be handled, used, and stored in accordance with all applicable regulations. The Owner's approval of the use of explosives shall not relieve the Contractor from its liability for claims caused by its blasting operations.
- 16.4.9 Hazardous Materials: The Contractor shall immediately stop work if unforeseen suspected hazardous material conditions are encountered. The Contractor shall immediately report the unforeseen conditions in the written form of a request for information submitted to the Designated Representative(CM/CDR). Work shall be resumed after the Owner has fully resolved the questions related to the unforeseen conditions and has remediated any hazardous materials determined to be present.

END OF GENERAL CONDITIONS

Tecolote House Renovation

310 Camino del Remedio
Santa Barbara, California 93110
2332

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SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Work performed by Owner.
4. Work under Owner's separate contracts.
5. Owner-furnished/Contractor-installed (OFI) products.
6. Owner-furnished/Owner-installed (OFI) products.
7. Contractor-furnished/Owner-installed (CFI) products.
8. Contractor's use of site and premises.
9. Coordination with occupants.
10. Work restrictions.
11. Specification and Drawing conventions.
12. Miscellaneous provisions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
2. Section 017300 "Execution" for coordination of Owner-installed products.

1.2 DEFINITIONS

- A. Work Package:** A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

1.3 PROJECT INFORMATION

A. Project Identification: BWell Tecolote House Renovation

1. Project Location: 310 Camino Del Remedio, Santa Barbara CA, 93110.

B. Owner: County of Santa Barbara, General Services, Capital Projects

1.Owner's Project Manager / County Designated Representative (PM/CDR):
Lou Gibilisco lgibilisco@countyofsb.org

C. Architect: studio 2G Architects.

1.Architect's Representative: Laura Gough laura@studio-2g.com, Ashley Mayou
ashley@studio-2g.com

CI. Construction Manager / County Designated Representative (CM/CDR): Lou
Gibilisco lgibilisco@countyofsb.org

1. Construction Manager / County Designated Representative (CM/CDR) :Lou Gibilisco lgibilisco@countyofsb.org
2. Construction Manager (CM/CDR) has been engaged for this Project to serve as an advisor to Owner and provide assistance in administering the Contract for construction between Owner and Contractor, according to a separate contract between Owner and Construction Manager.
 - a. Construction Manager (CM/CDR)also serves as Project coordinator, as defined in Section 011200 "Multiple Contract Summary."
3. Construction Manager for this Project is Project's constructor. The terms "Construction Manager (CM)" "County Designated Representative (CDR)" and "Constructor" and Project Manager (PM) are synonymous.

CII. Project Coordinator for Multiple Contracts: Owner shall serve as Project coordinator.

CIII. Web-Based Project Software: Project software will be used for purposes of managing communication and documents during the construction stage.

- 1.See Section 013100 "Project Management and Coordination." for requirements for using web-based Project software.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:

- 1.**THE PROJECT INCLUDES THE RENOVATION OF TECOLOTE HOUSE, A BOARD AND CARE FACILITY FOR PEOPLE REQUIRING RESIDENTIAL BEHAVIORAL HEALTH SUPPORT,** and other Work indicated in the Contract Documents.

B. Type of Contract:

- 1.Project will be constructed under a single prime contract.

1.5 WORK PERFORMED BY OWNER

- A. Cooperate fully with Owner, so work may be carried out smoothly, without interfering with or delaying Work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.

1.6 OWNER-FURNISHED/CONTRACTOR-INSTALLED (OFCI) PRODUCTS

- A. Owner's Responsibilities: Owner will furnish products indicated and perform the following, as applicable:

1. Provide to Contractor Owner-reviewed Product Data, Shop Drawings, and Samples.
2. Provide for delivery of Owner-furnished products to Project site.
3. Upon delivery, inspect, with Contractor present, delivered items.
 - a. If Owner-furnished products are damaged, defective, or missing, arrange for replacement.
4. Obtain manufacturer's inspections, service, and warranties.
5. Inform Contractor of earliest available delivery date for Owner-furnished products.

- B. Contractor's Responsibilities: The Work includes the following, as applicable:

1. Designate delivery dates of Owner-furnished products in Contractor's construction schedule, utilizing Owner-furnished earliest available delivery dates.
2. Review Owner-reviewed Product Data, Shop Drawings, and Samples, noting discrepancies and other issues in providing for Owner-furnished products in the Work.
3. Receive, unload, handle, store, protect, and install Owner-furnished products.
4. Make building services connections for Owner-furnished products.
5. Protect Owner-furnished products from damage during storage, handling, and installation and prior to Substantial Completion.
6. Repair or replace Owner-furnished products damaged following receipt.

- C. Owner-Furnished/Contractor-Installed (OFCI) Products:

1. Refer to Sections 01 64 00 and 01 64 00 A.

1.7 OWNER-FURNISHED/OWNER-INSTALLED (OFOI) PRODUCTS

- A. The Owner will furnish and install products indicated.
- B. Owner-Furnished/Owner-Installed (OFOI) Products:

- 1.Furniture and Equipment not listed in the Construction Documents.
- 2.Audio/ Visual Equipment.
- 3.Network Communication Equipment.

1.8 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Unrestricted Use of Site: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.9 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
 - 1.Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to between 8:00 a.m. to 5:00 PM p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.
 - 1.Weekend Hours: As approved by Owner. Sundays and Legal Holidays are prohibited.
 - 2.Early Morning Hours: As approved by Owner.
 - 3.Work in Existing Building: as approved by Owner.
 - 4.Hours for Utility Shutdowns: as approved by Owner.
 - 5.Hours for Core Drilling As approved by Owner.
- C. On-Site Workday Restrictions: Do not perform work on-site during work black-out days indicated in Document 003113 "Preliminary Schedules."
- D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:
 - 1.Notify Construction Manage not less than two days in advance of proposed utility interruptions.

2. Obtain Construction Manager's written permission before proceeding with utility interruptions.

E. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.

1. Notify Construction Manager not less than [two] days in advance of proposed disruptive operations.

2. Obtain Construction Manager's written permission before proceeding with disruptive operations.

F. Smoking and Controlled Substance Restrictions: Use of tobacco products and other controlled substances on Project site is prohibited.

G. Employee Identification: Contractor to provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.

H. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.

1. Maintain list of approved screened personnel with Owner's representative.

1.10 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.

3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.

4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the

Specifications.

- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 10 00

SECTION 01 12 20

WORK RESTRICTIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Special Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 CONTRACTOR'S USE OF PREMISES AND SITE, GENERAL

- A. CONTRACTOR's Use of Premises and Site, General: Refer to Specifications Section 00 71 00, General Conditions.
 1. CONTRACTOR shall always perform Work to impose no hardship on the COUNTY OF SANTA BARBARA nor cause unreasonable delays or hindrance thereto.
 2. Construction activities shall be scheduled to minimize disruption to the COUNTY OF SANTA BARBARA users.
 3. CONTRACTOR may not interrupt any utilities without prior written permission from the COUNTY OF SANTA BARBARA.

USE OF PREMISES

- B. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
 1. Limits: Confine constructions operations to Project Area indicated on the Drawings. Use of other areas shall be only with the approval of COUNTY OF SANTA BARBARA. Confine constructions operations to Perimeter of Work Area shown on the approved drawings.
 2. There may be isolated items that are outside the limits indicated, such as irrigation line connections, site light pole relocations, plant or grading adjustments, utility extensions, and similar items. The scope of items beyond the general limit indicated have been specifically indicated and are to be performed within the scope of the Project.

1.03 CONTRACTOR'S USE OF PROJECT AREA

- A. Location of Work: The Work shall be accomplished within areas indicated on Drawings as Project Area or, if not indicated, to areas as directed by COUNTY OF SANTA BARBARA. Use of other areas, including parking areas, shall be subject to approval by COUNTY OF SANTA BARBARA. Refer to Section 01 55 00 Access and Staging for additional requirements.

1. CONTRACTOR shall not unreasonably encumber the site with materials or equipment.
 2. CONTRACTOR shall assume full responsibility for protection and safekeeping of products stored on the premises.
- B. COUNTY OF SANTA BARBARA or CONTRACTORS performing work under separate contracts for COUNTY OF SANTA BARBARA. Temporary closures or restrictions of use of public thoroughfares, necessary to accomplish the Work, shall be made only as approved in advance by public safety and parking authorities having jurisdiction, as directed in writing by the COUNTY OF SANTA BARBARA.
- C. CONTRACTOR's Use of the Project Area: Unless otherwise specified or indicated on the Drawings, during the construction period the CONTRACTOR shall have full use of the designated Project Area for construction operations, including use of the site. CONTRACTOR'S use of Project Area shall be limited only by COUNTY OF SANTA BARBARA right to perform construction operations with its own forces or to employ separate CONTRACTORS on portions of the Project in accordance with the Contract General Conditions.
- D. Protection of Existing Improvements and Facilities: CONTRACTOR shall protect property adjacent to the Project Area and all existing improvements and facilities within the Project Area, including paving and landscaping indicated to remain.
1. All existing improvements and facilities, except those specifically indicated for removal or reconstruction, shall be protected with temporary barriers, enclosures, and passageways. Refer to additional requirements specified in Section 01 56 00 - Temporary Barriers and Enclosures.
 2. After completion of Work, existing improvements and facilities shall be restored to original condition and location. Project Area shall be cleaned and restored to acceptable condition, identical to or better than the condition prior to start of Work.
 3. Should existing improvements and facilities be damaged or soiled beyond renovation or repair, new products shall be provided by CONTRACTOR equivalent to existing products, as directed by COUNTY OF SANTA BARBARA.
 4. Project Area Access: Limit access to site to indicated routes and access points as indicated. If routes and access points are not indicated, access shall be as approved and as directed by COUNTY OF SANTA BARBARA.
 5. Access to and egress from Project Area shall be in strict conformance to prearranged routes approved by COUNTY OF SANTA BARBARA, with the understanding that curtailment of construction traffic or revision of access routes may be required on short notice if COUNTY OF SANTA BARBARA's operations mandate such changes because of excessive noise or problems of safety, service, or supply.
 6. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to service and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.

- b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- E. Emergency Access: Provide pathways, drives, gates, directional signage and other provisions as required by authorities having jurisdiction for emergency access to Project Area and adjoining campus facilities.
- F. Emergency Egress: Maintain all pathways, drives, gates, and other means of egress during construction as required by public safety authorities having jurisdiction.

1.04 WORK HOURS AND UTILITY RESTRICTIONS

- A. CONTRACTOR's Work Hours: Work hours shall be from 8:00 am to 5:00 pm Monday through Friday, any exceptions or changes must be requested in writing at least two working days in advance and approved by the COUNTY OF SANTA BARBARA. Work on other days and at other hours shall be only with written approval of COUNTY OF SANTA BARBARA.
 - 1. If it becomes necessary to perform Work on weekends and holidays, to meet milestone and final completion dates, Work shall be performed at no change in Contract Amount unless authorized by written Change Order or Field Instruction.
 - 2. No grading on weekends or holidays unless approved in writing by COUNTY OF SANTA BARBARA.
- B. Utility Outages and Shutdown: Schedule utility outages and shutdowns of adjacent COUNTY OF SANTA BARBARA occupied facilities, if necessary and applicable, to dates acceptable to and approved by COUNTY OF SANTA BARBARA. Time and duration of outages and shutdowns shall not hinder normal activities except as authorized in writing by COUNTY OF SANTA BARBARA.
 - 1. Provide fourteen (14) calendar days written notice to COUNTY OF SANTA BARBARA of all utility outages and shutdowns. Describe Work to be performed, which utilities will be interrupted and time and duration of interruption.
 - 2. CONTRACTOR shall provide temporary utilities to occupied facilities and adjacent properties when utilities to these facilities must be interrupted for more than two hours, unless otherwise directed by COUNTY OF SANTA BARBARA.
 - 3. Any damage to the existing utility systems caused by the CONTRACTOR, shall be repaired by the CONTRACTOR immediately. If CONTRACTOR is unable to repair the damage in a timely manner, and COUNTY OF SANTA BARBARA personnel are available to fix the damage, the CONTRACTOR will be charged by the COUNTY OF SANTA BARBARA based on the time and material spent to fix the damage. The CONTRACTOR shall be responsible for all consequences resulting from the damage.
 - 4. Refer also to requirements for temporary utilities specified in Section 01 50 00, Construction Facilities and Temporary Controls.

NOISE AND VIBRATION RESTRICTIONS

- A. Noise Restrictions: Construction noise shall not exceed levels defined in local and state noise ordinances. Coordinate construction activities that may exceed levels permitted in

local and state ordinances with the COUNTY OF SANTA BARBARA before proceeding with the Work.

- B. Vibration Restrictions: Do not perform activities that cause vibrations in adjacent occupied structures, including structures above and below location where Work is performed. If vibrations transmit through site, perform Work at times approved by COUNTY OF SANTA BARBARA.

1.05 COUNTY OF SANTA BARBARA'S USE OF SITE AND PREMISES

- A. COUNTY OF SANTA BARBARA's Use of Site and Premises: COUNTY OF SANTA BARBARA reserves the right to occupy and to place and install equipment in completed or partially completed areas of buildings and site. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. Partial COUNTY OF SANTA BARBARA Occupancy: COUNTY OF SANTA BARBARA reserves the right to occupy and to place and install equipment in completed areas of building/site provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.
2. COUNTY OF SANTA BARBARA will issue a written contract Change Order for each specific portion of the Work to be occupied before Final Completion to release the CONTRACTOR of insurance obligations and any special conditions of the partial occupancy.
3. Before partial COUNTY OF SANTA BARBARA occupancy, mechanical, fire life safety and electrical systems shall be fully operational and required tests and inspections shall be successfully completed. Unless otherwise agreed, COUNTY OF SANTA BARBARA will provide operation and maintenance of mechanical, fire life safety and electrical systems in portions of the building used by COUNTY OF SANTA BARBARA. Unless otherwise agreed in writing by the COUNTY OF SANTA BARBARA, warranty periods shall not begin until date established by Notice of Completion filed at Contract closeout.
4. Upon occupancy, COUNTY OF SANTA BARBARA will assume responsibility for maintenance and custodial service for occupied portions of building.
5. Allow vendors and service providers access through site with reasonable notice.

1.06 TRACKING CONTROL

- A. Refer to Contract Documents for Erosion Control.

PART 2 – **PRODUCTS** (Not Used)

PART 3 – **EXECUTION** (Not Used)

END OF SECTION

SECTION 01 15 20

APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

1.01 RELATED REQUIREMENTS

- A. Drawings and General Provisions of Contract, including General Conditions and Division 01 Specification Sections, apply to the Work of this Section.

1.02 DESCRIPTION

- A. Submit Applications for Payment to COUNTY OF SANTA BARBARA in accordance with the schedule established by Conditions of the Contract and Agreement Between Owner and Contractor.
- B. IF THERE IS ANY INCONSISTENCY IN THIS DOCUMENT WITH THE PROVISIONS IN THE GENERAL CONDITIONS AND THE SPECIAL CONDITIONS THAT THE CONTRACTOR SHALL COMPLY WITH RELATED TO CHANGES AND/OR REQUESTS FOR CHANGES (e.g., "PAYMENTS," "SCHEDULE OF VALUES"), THOSE PROVISIONS IN THE GENERAL CONDITIONS AND THE SPECIAL CONDITIONS SHALL TAKE PRECEDENCE.

1.03 RELATED WORK

- A. Lump Sum Price: Agreement Between Owner and Contractor.
- B. Progress Payments, Retainages and Final Payment.
- C. Special Conditions.
- D. Construction Schedule: Section 01 32 13.
- E. Schedule of Values: Section 01 29 73.
- F. Contract Close-out: Section 01 77 00.

1.04 FORMS

- A. Application for each progress payment shall be prepared using the COUNTY OF SANTA BARBARA Forms or other Forms approved by COUNTY OF SANTA BARBARA.

1.05 SUBMITTAL PROCEDURE

- A. The Contractor shall furnish three (3) copies of an itemized breakdown of the contract cost in detail, (Schedule of Values) immediately after the contract is awarded. Each major subcontract is to be identified, rather than just a breakdown by CSI division.
- B. Application for Payment and payments shall be delayed when project is not in compliance with permits, or any related instructions given by COUNTY OF SANTA BARBARA. Lack of Project Cleanliness may also delay payment. Weekly broom cleaning required for interior renovations.

- C. Before submitting the first Application for Payment, the Contractor shall submit for approval to the COUNTY OF SANTA BARBARA a detailed Schedule of Values of the work. This schedule, once approved by the COUNTY OF SANTA BARBARA, shall be used as a basis for reviewing the Contractor's Applications for Payment.
- D. The Contractor starts the monthly payment process by preparing an Application for Payment on the approved form. The Contractor must itemize the application using the Schedule of Values, as modified by fully executed Change Orders.
- E. The Contractor shall submit a preliminary "pencil copy" of their payment application request to the COUNTY OF SANTA BARBARA five (5) days before the payment application submittal due date. The Contractor and COUNTY OF SANTA BARBARA shall review the pencil copy and agree to any changes to the pay application.
- F. Monthly payment applications shall include documentation showing compliance with CALGreen Construction Waste Management Requirements as may be applicable.
- G. COUNTY OF SANTA BARBARA will review the application and authorize payments to the Contractor monthly. The Contractor will be paid 95% of the value of labor and material completed or delivered to the site. Retainage in the amount of 5% will be held on the work completed to date.
- H. When the work is found to be complete, including all punch list items, the Contractor shall submit a final application for payment.
- I. COUNTY OF SANTA BARBARA shall sign and/or initial all copies of each Application for Payment in the appropriate areas and recommend payment to the COUNTY OF SANTA BARBARA.
- J. COUNTY OF SANTA BARBARA shall issue payment to the Contractor in accordance with the approved application amount.
- K. All Applications for Payment shall include the following:
 - 1. Statement of Construction progress basis for the Contractor and all Subcontractors and supporting documentation as requested by the COUNTY OF SANTA BARBARA.
 - 2. COUNTY OF SANTA BARBARA shall certify that the application is correct and check the accuracy of the percentage of work complete for each line item, the arithmetic for the entire application, including the cost breakdown of the Contract Sum and the provision of items listed in the General Conditions.
 - 3. The Contractor shall submit payroll information in compliance with Contract Documents.
 - 4. The Contractor shall incorporate all agreed correction(s) and submit the pay application on the due date for approval.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 21 00

ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Unit-cost allowances.
 - 3. Quantity allowances.
 - 4. Contingency allowances.
 - 5. Testing and inspecting allowances.
- C. Related Requirements:
 - 1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.
 - 2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
 - 3. Section 014000 "Quality Requirements" for procedures governing the use of allowances for field testing by an independent testing agency.

1.2 DEFINITIONS

- A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise COUNTY of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the COUNTY OF SANTA BARBARA to avoid delaying the Work.
- B. At COUNTY's request, obtain proposals for each allowance for use in making final

selections. Include recommendations that are relevant to performing the Work.

- C. Purchase products and systems selected by Architect from the designated supplier.

1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.6 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by COUNTY OF SANTA BARBARA or selected by (CM/CDR) and/or Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by COUNTY OF SANTA BARBARA or selected by (CM/CDR) and/or Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to COUNTY OF SANTA BARBARA, after installation has been completed and accepted.
 - 1. If requested by (CM/CDR) and/or Architect, retain, and prepare unused material for storage by COUNTY OF SANTA BARBARA. Deliver unused material to COUNTY OF SANTA BARBARA's storage space as directed.

1.7 UNIT-COST ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials

ordered by COUNTY OF SANTA BARBARA or selected by (CM/CDR) and/or Architect under allowance and shall include taxes, freight, and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by COUNTY OF SANTA BARBARA or selected by (CM/CDR) and/or Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to COUNTY OF SANTA BARBARA, after installation has been completed and accepted.

1.If requested by (CM/CDR) and/or Architect, retain and prepare unused material for storage by COUNTY OF SANTA BARBARA. Deliver unused material to COUNTY OF SANTA BARBARA's storage space as directed.

1.8 QUANTITY ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by COUNTY OF SANTA BARBARA or selected by (CM/CDR) and/or Architect under allowance and shall include taxes, freight, and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by COUNTY OF SANTA BARBARA or selected by (CM/CDR) and/or Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to COUNTY OF SANTA BARBARA, after installation has been completed and accepted.

1.If requested by (CM/CDR) and/or Architect, retain and prepare unused material for storage by COUNTY OF SANTA BARBARA. Deliver unused material to COUNTY OF SANTA BARBARA's storage space as directed.

1.9 CONTINGENCY ALLOWANCES

A. Use the contingency allowance only as directed by (CM/CDR) and/or Architect for COUNTY OF SANTA BARBARA's purposes and only by Change Orders that indicate amounts to be charged to the allowance.

B. Contractor's overhead, profit, and related costs for products and equipment ordered by COUNTY OF SANTA BARBARA under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs

include delivery, installation, taxes, insurance, equipment rental, and similar costs.

- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to COUNTY OF SANTA BARBARA by Change Order.

1.10 TESTING AND INSPECTING ALLOWANCES

- A. Testing and inspecting allowances include the cost of engaging testing agencies, actual tests and inspections, and reporting results.
- B. The allowance does not include incidental labor required to assist the testing agency or costs for retesting if previous tests and inspections result in failure. The cost for incidental labor to assist the testing agency shall be included in the Contract Sum.
- C. Costs of testing and inspection services not specifically required by the Contract Documents are Contractor responsibilities and are not included in the allowance.
- D. At Project closeout, credit unused amounts remaining in the testing and inspecting allowance to COUNTY OF SANTA BARBARA by Change Order.

1.11 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, required maintenance materials, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
 - 3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. COUNTY OF SANTA BARBARA reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs due to a change in the scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.

1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Contingency Allowance: Include a contingency allowance of \$100,000.00 for use according to COUNTY OF SANTA BARBARA's written instructions.
- B. Allowance No. 2: Testing and Inspection Allowance: Include the sum of at least \$30,000.00 to cover costs for Cultural Resources Consultant, soils, compaction, concrete testing (including slump & breaks), structural observations, epoxy, rebar tests, roofing, waterproofing and special inspections to be provided by a licensed third-party inspector and/or testing agency/lab, as specified on Plans, all Specifications, including Section 014523, 014527 and in Section 033000 "Cast-in-Place Concrete.

END OF SECTION 01 21 00

SECTION 01 23 00

ALTERNATES

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section includes administrative and procedural requirements for alternates.

1.02 **DEFINITIONS**

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.03 **PROCEDURES**

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 **SCHEDULE OF ALTERNATES**

- A. Alternate No. 1
 - 1. Base Bid: No Privacy Wall provided at the new Patio.
 - 2. Alternate: (N) CMU Privacy Wall at Patio

B. Alternate No. 2

1. Base Bid: Restroom slab to remain as existing with no new floor drain. No new medical hose supply box. No new tile walls throughout, gypsum to match other restrooms.
2. Alternate: Wet Room - Slope floor to drain, waterproofing of entire room with non-slip ceramic tile, (N) medical hose supply box for wash down. Refer to plan set for more information.

END OF SECTION 01 23 00

SECTION 01 25 00
SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 012100 "Allowances" for products selected under an allowance.
 - 2. Section 012300 "Alternates" for products selected under an alternate.
 - 3. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements but may offer advantage to Contractor or Owner.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit documentation identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use form acceptable to or provided by Architect, (CM/CDR) and/or COUNTY OF SANTA BARBARA.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
 - b. Coordination of information, including a list of changes or revisions

needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.

- c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- e. Samples, where applicable or requested.
- f. Certificates and qualification data, where applicable or requested.
- g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
- h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
- i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
- j. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
- k. Cost information, including a proposal of change, if any, in the Contract Sum.
- l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
- m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven calendar days of receipt of a request for substitution. Architect will notify Contractor through Construction Manager (CM/CDR) acceptance or rejection of proposed substitution within 15 calendar days of receipt of request, or seven calendar days of receipt of additional information or documentation, whichever is later.

- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.

- b. Use product specified if Architect and/or CM/CDR does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.5 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

1.6 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 calendar days prior to time required for preparation and review of related submittals.

1. Conditions: COUNTY OF SANTA BARBARA will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

- a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- b. Requested substitution provides sustainable design characteristics that specified product provided for compliance with LEED requirements.
- c. Requested substitution provides sustainable design characteristics that specified product provided for compliance with IgCC requirements.
- d. Requested substitution provides sustainable design characteristics that specified product provided for compliance with ASHRAE 189.1 requirements.
- e. Requested substitution provides sustainable design characteristics that specified product provided for compliance with Green Globes requirements.
- f. Substitution request is fully documented and properly submitted.
- g. Requested substitution will not adversely affect Contractor's construction schedule.
- h. Requested substitution has received necessary approvals of authorities having jurisdiction.
- i. Requested substitution is compatible with other portions of the

Work.

- j. Requested substitution has been coordinated with other portions of the Work.
- k. Requested substitution provides specified warranty.
- l. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience:

- 1. Not allowed unless approved by the COUNTY OF SANTA BARBARA (CM/CDR).
- 2. Architect will consider requests for substitution if received within [30] calendar days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of OWNER.

- a. Conditions: Architect/COUNTY OF SANTA BARBARA (CM/CDR) will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

- 1) Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
- 2) Requested substitution does not require extensive revisions to the Contract Documents.
- 3) Requested substitution is consistent with the Contract Documents and will produce indicated results.
- 4) Requested substitution provides sustainable design characteristics that specified product provided for compliance with LEED requirements.
- 5) Requested substitution provides sustainable design characteristics that specified product provided for compliance with IgCC requirements.
- 6) Requested substitution provides sustainable design characteristics that specified product provided for compliance with ASHRAE 189.1 requirements.
- 7) Requested substitution provides sustainable design characteristics that specified product provided for compliance with Green Globes requirements.
- 8) Substitution request is fully documented and properly submitted.
- 9) Requested substitution will not adversely affect Contractor's

construction schedule.

- 10) Requested substitution has received necessary approvals of authorities having jurisdiction.
- 11) Requested substitution is compatible with other portions of the Work.
- 12) Requested substitution has been coordinated with other portions of the Work.
- 13) Requested substitution provides specified warranty.
- 14) If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 25 00

SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
 - 1. Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.
 - 2. Section 013100 "Project Management and Coordination" for requirements for forms for contract modifications provided as part of web-based Project management software.

1.2 MINOR CHANGES IN THE WORK

- A. Architect will issue through Construction Manager/ supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on form approved by COUNTY OF SANTA BARBARA.

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Construction Manager will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Construction Manager are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 14 calendar days, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.

- c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use forms provided or approved by Owner.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Construction Manager.
- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
 - 7. Proposal Request Form: Use form provided or approved by Owner..

1.4 ADMINISTRATIVE CHANGE ORDERS

- A. Allowance Adjustment: See Section 012100 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.
- B. Unit-Price Adjustment: See Section 012200 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Construction Manager will issue a Change Order for signatures of Owner and Contractor on form approved by Owner .

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Construction Manager may issue a Construction Change Directive form provided or approved by Owner. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.7 WORK CHANGE DIRECTIVE

- A. Work Change Directive: Construction Manager may issue a Work Change Directive on form approved or provided by Owner . Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 26 13

REQUESTS FOR CLARIFICATION (RFC) PROCEDURE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 SECTION INCLUDES

- A. Procedures for submitting requests for clarification (RFC).
- B. Limitations on use of RFC to obtain clarification and clarification.

1.03 RELATED SECTIONS

- A. Section 01 31 13 - Coordination: Requirements for organizing and coordinating the Work.
- B. Section 01 33 00 - Submittals Procedures: Restriction on use of submittals for changes in materials, products, equipment and systems.
- C. Section 01 63 00 - Product Substitution Procedures: Procedures for requesting substitutions of materials, products, equipment, and systems.
- D. Section 01 31 26 – Electronic Communications Protocol.

1.04 DEFINITIONS

- A. Request for Clarification: A document submitted by the CONTRACTOR requesting clarification of a portion of the Contract Documents, hereinafter referred to as an RFC.

1.05 CONTRACTOR'S RFCs

- A. CONTRACTOR'S RFCs: Should CONTRACTOR be unable to determine from the Contract Documents the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of Work is described differently at more than one place in the Contract Documents; the CONTRACTOR shall request through the CM/CDR that the ARCHITECT/ENGINEER make a clarification of the requirements of the Contract Documents to resolve such matters. CONTRACTOR shall comply with procedures specified herein to make Requests for Clarification (RFCs).
- B. Submission of RFCs: RFCs shall be prepared and submitted on a form provided in the Electronic Project Management system.
 - 1. Requests for clarification not submitted by means of the EPM will not be reviewed or logged. The COUNTY OF SANTA BARBARA CM/CDR or ARCHITECT/ENGINEER will only review requests for clarification or clarification received directly in the required written form submitted by

means of the EPM system.

2. Forms if prepared by hand will not be reviewed.
 3. Each RFC shall be given a discrete, consecutive number.
 4. Each page of the RFC and each attachment to the RFC shall bear the COUNTY OF SANTA BARBARA project name, project number, date, RFC number and a descriptive title.
 5. CONTRACTOR shall sign all RFCs attesting to good faith effort to determine from the Contract Documents the information requested for clarification. Frivolous RFCs shall be subject to reimbursement from CONTRACTOR to COUNTY OF SANTA BARBARA for fees charged by ARCHITECT, ARCHITECT's consultants and other design professionals engaged by the COUNTY OF SANTA BARBARA.
- C. Subcontractor-Initiated and Supplier-Initiated RFCs: RFCs from Subcontractors and material suppliers shall be submitted through, be reviewed by and be attached to an RFC prepared, signed and submitted by CONTRACTOR. RFCs submitted directly by Subcontractors or material suppliers will be returned unanswered to the CONTRACTOR.
1. CONTRACTOR shall review all Subcontractors and supplier-initiated RFCs and take actions to resolve issues of coordination, sequencing and layout of the Work.
 2. RFCs submitted to request clarification of issues related to means, methods, techniques and sequences of construction or for establishing trade jurisdictions and scopes of subcontracts will be returned without clarification. Such issues are solely the CONTRACTOR's responsibility.
 3. CONTRACTOR shall be responsible for delays resulting from the necessity to resubmit an RFC due to insufficient or incorrect information presented in the RFC.
- CI. Requested Information: Immediately on discovery of the need for additional clarification of the Contract Documents, CONTRACTOR shall prepare and submit an RFC in the form specified. CONTRACTOR shall carefully study the Contract Documents, to ensure that information sufficient for interpretation of requirements of the Contract Documents is not shown. RFCs that request interpretation of requirements clearly indicated in the Contract Documents will be returned without clarification.
1. In all cases in which RFCs are issued to request clarification of issues related to means, methods, techniques and sequences of construction, for example, pipe and duct routing, clearances, specific locations of Work shown diagrammatically, apparent interferences and similar items, the CONTRACTOR shall furnish all information required for the ARCHITECT or COUNTY OF SANTA BARBARA CM/CDR to analyze and/or understand the circumstances causing the RFC and prepare a clarification or direction as to how the CONTRACTOR shall proceed.
 2. If information included with this type RFC by the CONTRACTOR is insufficient, the RFC will be returned unanswered.
- CII. Unacceptable Uses for RFCs: RFCs shall not be used to request the following:
1. Approval of submittals (use procedure specified in Section 01 33 00 - Submittals Procedures)
 2. Approval of substitutions (refer to Section 01 63 00 - Product Substitution Procedures)
 3. Changes that entail change in Contract Time and Contract Sum (comply with provisions of

the Contract General Conditions, as discussed in detail during pre-construction meeting)

4. Different methods of performing Work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Contract General Conditions).
- F. Disputed Requirements: In the event the CONTRACTOR believes that a clarification by the COUNTY OF SANTA BARBARA Representative results in additional cost or time, CONTRACTOR shall comply with Article 5 of the Contract General Conditions.
 - G. RFC Log: A log for recording information about RFC status and responses will be provided in the EPM system. CONTRACTOR shall maintain and continuously update the RFC log in the EPM. Make corrections in the log as directed by the COUNTY OF SANTA BARBARA
 - H. Review Time: The amount of time necessary for and appropriate review and response to a RFC will vary. ARCHITECT will review each RFC, determine action required, and respond. Allow fourteen (14) Calendar days for ARCHITECT'S response for each RFC. RFCs received by ARCHITECT after 1:00 p.m. will be considered as received the following working day. CONTRACTOR will be notified in writing if responses will take more than fourteen (14) calendar days.
 - I. In the event the CONTRACTOR believes that a clarification by the ARCHITECT results in additional cost or time, CONTRACTOR shall not proceed with the Work indicated by the RFC until a Change Order (or Work Change Directive, if applicable to Project) is prepared and approved by the COUNTY OF SANTA BARBARA or the CONTRACTOR is authorized in writing to proceed. RFCs shall not justify a cost increase in the Work or a change in the Project schedule.

PART 2 – PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 29 00

PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1. Document 004373 "Proposed Schedule of Values Form" for requirements for furnishing proposed schedule of values with bid.
 - 2. Section 012100 "Allowances" for procedural requirements governing the handling and processing of allowances.
 - 3. Section 012200 "Unit Prices" for administrative requirements governing the use of unit prices.
 - 4. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 5. Section 013200 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.
 - 6. Section 018113.13 "Sustainable Design Requirements - LEED 2009 for New Construction and Major Renovations" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.
 - 7. Section 018113.16 "Sustainable Design Requirements - LEED 2009 for Commercial Interiors" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.
 - 8. Section 018113.19 "Sustainable Design Requirements - LEED 2009 for Core and Shell Development" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.
 - 9. Section 018113.23 "Sustainable Design Requirements - LEED 2009 for Schools" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.
 - 10. Section 018113.14 "Sustainable Design Requirements - LEED v4 BD+C" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.
 - 11. Section 018113.17 "Sustainable Design Requirements - LEED v4 ID+C" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.
 - 12. Section 018113.43 "Sustainable Design Requirements - ASHRAE

- 189.1" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.
13. Section 018113.53 "Sustainable Design Requirements - Green Globes" for administrative requirements governing submittal of cost breakdown information required for sustainable design documentation.

1.2 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.3 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule. Cost-loaded Critical Path Method Schedule may serve to satisfy requirements for the schedule of values.

1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
2. Submit the schedule of values to Construction Manager at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.

- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:

- a. Project name and location.
- b. Owner's name.
- c. Owner's Project number.
- d. Name of Architect.
- e. Architect's Project number.
- f. Contractor's name and address.
- g. Date of submittal.

2. Arrange schedule of values consistent with format of AIA Document G703.

3. Arrange the schedule of values in tabular form, with separate columns to indicate the following for each item listed:

- a. Related Specification Section or division.
- b. Description of the Work.
- c. Name of subcontractor.
- d. Name of manufacturer or fabricator.

- e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent. Round dollar amounts to whole dollars, with total equal to Contract Sum.
 - 1) Labor.
 - 2) Materials.
 - 3) Equipment.
4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts more than five percent of the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
- a. Differentiate between items stored on-site and items stored off-site.
6. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
7. Purchase Contracts: Provide a separate line item in the schedule of values for each Purchase contract. Show line-item value of Purchase contract. Indicate Owner payments or deposits, if any, and balance to be paid by Contractor.
8. Overhead Costs, Proportional Distribution: Include total cost and proportionate share of general overhead and profit for each line item.
9. Overhead Costs, Separate Line Items: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
10. Temporary Facilities: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
11. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
12. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

1.4 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments, as certified by Construction Manager and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Owner/Contractor Agreement. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Times: Submit final Application for Payment to Construction Manager by the end of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 - 1. Submit draft copy of Application for Payment **five** calendar days prior to due date for review by Construction Manager.
- D. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 or as approved by Owner as form for Applications for Payment.
 - 1. Other Application for Payment forms proposed by the Contractor may be acceptable to Construction Manager and Owner. Submit forms for approval with initial submittal of schedule of values.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Construction Manager will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 - 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- F. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:

- a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- G. Transmittal: Submit two signed and notarized original copies of each Application for Payment to Construction Manager. One copy shall include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- H. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment for construction period covered by the previous application.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 2. When an application shows completion of an item, submit conditional final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 5. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
 5. Products list (preliminary if not final).
 6. Sustainable design action plans, including preliminary project materials cost data.
 7. Schedule of unit prices.
 8. Submittal schedule (preliminary if not final).

9. List of Contractor's staff assignments.
 10. List of Contractor's principal consultants.
 11. Copies of building permits.
 12. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 13. Initial progress report.
 14. Report of preconstruction conference.
 15. Certificates of insurance and insurance policies.
 16. Performance and payment bonds.
 17. Data needed to acquire Owner's insurance.
- J. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - a. Complete administrative actions, submittals, and Work preceding this application, as described in Section 017700 "Closeout Procedures."
 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- K. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Certification of completion of final punch list items.
 3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 4. Updated final statement, accounting for final changes to the Contract Sum.
 5. AIA Document G706.
 6. AIA Document G706A.
 7. AIA Document G707.
 8. Evidence that claims have been settled.
 9. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 10. Final liquidated damages settlement statement.
 11. Proof that taxes, fees, and similar obligations are paid.
 12. Waivers and releases.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 29 00

SECTION 01 29 73 SCHEDULE OF VALUES

PART 1 - GENERAL

- 1.01 SECTION INCLUDES
 - A. Procedure for submission of a certified Schedule of Values for review and approval by the COUNTY OF SANTA BARBARA.
- 1.02 RELATED REQUIREMENTS
 - A. Section 01 29 76: Progress Payment Procedures.
 - B. Section 01 31 13: Project Coordination.
 - C. Section 01 32 13: Construction Schedule.
 - D. Section 01 33 00: Submittal Procedures.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

- 3.01 PREPARATION
 - A. Upon receipt of the Notice of Intent to Award, CONTRACTOR shall commence preparation of a Schedule of Values in accordance with the form as provided by COUNTY OF SANTA BARBARA.
 - B. CONTRACTOR shall coordinate the preparation of a Schedule of Values with preparation of the Construction Schedule as set forth in Section 01 32 13. The corresponding values from the specification division totals on cost loaded schedule shall match with the approved Schedule of Values.
 - C. Include the following Project identification on a certified Schedule of Values:
 - 1. Project name and location.
 - 2. Project Number.
 - 3. Contract #.
 - 4. CONTRACTOR name.
 - 5. Date of Submittal.
 - D. The Schedule of Values shall be in tabular form with separate columns and shall include the following items:
 - 1. Related Specification Section and Division.
 - 2. Description of Work.
 - 3. Name of Subcontractor, manufacturer, or supplier.
 - 4. Dollar value, quantity, and unit of measure of each line item.
 - 5. Percentage of Contract amount to nearest one-hundredth percent, adjusted to total 100 percent.

- E. Round amounts to the nearest whole dollar; the total shall equal the Contract Amount.
- F. Provide a breakdown of the Contract Amount in enough detail acceptable to COUNTY OF SANTA BARBARA to facilitate continued evaluation of Application for Payment and progress reports. Coordinate with the Project Manual table of content and COUNTY OF SANTA BARBARA approved Schedule of Values. Provide line items for subcontract amounts, where appropriate.
- G. Provide separate line items for items in the Schedule of Values for total installed value of that part of the Work.
- H. Provide separate line item for labor and material when required by the COUNTY OF SANTA BARBARA.
- I. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item except the amounts shown as separate line items.
- J. Temporary facilities and other cost items that are not direct cost of actual work-in-place shall be shown as separate line items.
- K. An approved certified Schedule of Values shall serve as the basis for the monthly certified Application for Payment.
- L. If at any time, COUNTY OF SANTA BARBARA determines, in its reasonable discretion, that the schedule of Values does not approximate the actual cost being incurred by CONTRACTOR to perform the Work, CONTRACTOR shall prepare, for COUNTY OF SANTA BARBARA approval, a revised Schedule of Values, which then shall be used as the basis for future progress payments. Without changing the Contract Amount, COUNTY OF SANTA BARBARA reserves the right to require CONTRACTOR:
 - 1. To increase or decrease amounts within the line items in the Schedule of Values; and,
 - 2. To conform the price breakdown to COUNTY OF SANTA BARBARA accounting practice.

3.02 SUBMITTAL

- A. CONTRACTOR shall submit three (3) certified copies of a Schedule of Values for review and approval by the COUNTY OF SANTA BARBARA at least 14 days before the first Application for Payment.
- B. COUNTY OF SANTA BARBARA will review and if necessary, return the submitted Schedule of Values with summary comments noting items not in compliance with the requirements of the Contract Documents. CONTRACTOR shall revise the submitted Schedule of Values and return Three copies within three days of receipt of summary comments.
- C. Signature by COUNTY OF SANTA BARBARA shall constitute acceptance of the submitted Schedule of Values.
- D. An approved copy of the Schedule of Values by COUNTY OF SANTA BARBARA will be transmitted to CONTRACTOR, and Inspector.

END OF SECTION

SECTION 01 29 76

PROGRESS PAYMENT PROCEDURES

PART 1 - GENERAL

- 1.01 SECTION INCLUDES:
- A. This Section specifies administrative and procedural requirements for a certified Application for Payment.
 1. Coordinate the certified Schedule of Values and certified Application for Payment with, but not limited to, the Construction Schedule, submittal log, and list of Subcontractors.
- 1.02 RELATED REQUIREMENTS:
- A. Section 01 29 73: Schedule of Values.
 - B. Section 01 32 13: Construction Schedule.
 - C. Section 01 77 00: Contract Closeout.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

- 3.01 APPLICATION FOR PAYMENT
- A. Each certified Application for Payment shall be consistent with previous applications and payments as reviewed by COUNTY OF SANTA BARBARA Representative, paid for by COUNTY OF SANTA BARBARA, and:
 1. The initial Application for Payment and Final Application for Payment at time of Completion involve additional requirements.
 - B. Payment Application Times: The period of Work covered by each Application for Payment is payment date for each progress payment as specified in the General Conditions. The period covered by each Application for Payment is previous month.
 - C. Payment Application Forms: Use AIA or COUNTY OF SANTA BARBARA provided forms for the Application for Payment.
 - D. Application Preparation: Complete every entry on the form. Include execution by a person authorized to sign legal documents on behalf of CONTRACTOR. COUNTY OF SANTA BARBARA will return incomplete applications without action.
 - E. Transmittal: Submit a minimum of Three signed and original copies of each certified Application for Payment to COUNTY OF SANTA BARBARA. All copies shall be complete, including releases and similar attachments.
 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information related to the application, in a manner acceptable to COUNTY OF SANTA BARBARA.
 - F. Initial Application for Payment within 60 days of issuance of Notice to Proceed: Administrative actions and submittals, that must precede or coincide with submittal for first certified Application for Payment include, but are not limited to, the following:

1. Certified Schedule of Values.
 2. Performance and payment bonds.
 3. List of principal suppliers and fabricators.
 4. Worker Compensation certificates, if applicable.
 5. Auto Insurance, if applicable.
 6. Hazardous Material Insurance Certificates, if applicable.
 7. Construction Schedule.
 8. Submittal Schedule.
 9. Emergency Contact List.
 10. Copies of authorizations and licenses from governing authorities for performance of Work.
 11. Certified Payroll (Submitted directly to Labor Compliance in electronic format as specified by COUNTY OF SANTA BARBARA including hard copy).
 12. Storm Water Pollution Prevention Plan (SWPPP).
 13. Certification of Compliance with CEQA Mitigations, if applicable.
- G. Applications for Payment: Administrative actions and submittals that must precede or coincide with submittal of Progress Applications for Payment include, but are not limited to, the following:
1. Certified Payroll (submitted directly to Labor Compliance in electronic format as specified by COUNTY OF SANTA BARBARA including hard copy).
 2. Updated and current Project Record Drawings (as-built).
 3. Monthly Construction Schedule (updated, submitted, and approved).
 4. Approved Schedule of Values.
 5. List of Subcontractors (Payments Summary).
 6. Storm Water Pollution Prevention Plan(SWPPP) – Site Monitoring Report.
 7. Certification of Compliance with CEQA Mitigations, if applicable.
- H. Final Application for Payment at Completion: Following COUNTY OF SANTA BARBARA issuance of certificate of Completion, submit an Application for Payment:
1. Administrative actions, submittals and/or Work that shall precede or coincide with this application include:
 - a. Occupancy permits and similar approvals by authorities having legal jurisdiction over Work.
 - b. Removal of temporary facilities and services.
 - c. Testing, adjusting and balance records.
 - d. Removal of surplus materials, rubbish, and similar elements.
 - e. Meter readings.
 - f. Start-up performance reports.
 - g. COUNTY OF SANTA BARBARA training and orientations.

- h. Operating and maintenance instruction manuals.
- i. Preliminary Warranties, guarantees and maintenance agreements.
- j. Delivery of extra materials, products and or stock.
- k. Change over information related to COUNTY OF SANTA BARBARA occupancy, use, operation, and maintenance.
- l. Final cleaning.
- m. Ensure that Work is completed.
- n. Advise on shifting insurance coverage.
- o. List of defective Work, recognized as exceptions to certificate of Completion.
- p. Change of door locks, including keys, to COUNTY OF SANTA BARBARA system.
- q. Certified Payroll (submitted directly to Labor Compliance in electronic format as specified by the COUNTY OF SANTA BARBARA including hard copy).
- r. Certification that all benefit contributions due and owing to appropriate union trusts has been paid by CONTRACTOR and Subcontractors, as specified by the General Conditions.
- s. Storm Water Pollution Prevention – Site Monitoring Reports, SWPP revisions, compliance certifications, and Notice of Termination (NOT) (see Section 01 74 16).
- t. Certification of Compliance with CEQA Mitigations, where applicable.
- u. Waivers and releases for CONTRACTOR.

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Administration of Contract: Provide administrative requirements for the proper coordination and completion of work including the following:
 - 1. Supervisory personnel.
 - 2. Preconstruction conference.
 - 3. Project meetings, minimum of two per month; prepare and distribute minutes.
- B. Reports: Monthly with progress schedule.
- C. Work Schedule: Submit progress schedule, updated monthly.
- D. Perform Surveys: Lay out the work and verify locations during construction.
- E. Emergency Contacts: Submit and post a list of emergency telephone numbers and address for individuals to be contacted in case of emergency.
- F. Record Documents: Submit record drawings and specifications; to be maintained and annotated by CONTRACTOR as work progresses.

1.02 REQUIREMENTS

- A. A close liaison will be maintained by the COUNTY OF SANTA BARBARA's Representative, COUNTY OF SANTA BARBARA, and the CONTRACTOR. The COUNTY OF SANTA BARBARA's Representative(s) shall notify the COUNTY OF SANTA BARBARA immediately of any problems encountered, including but not limited to impacts to the cost, schedule and/or quality.
- B. The COUNTY OF SANTA BARBARA's Representative(s) shall observe, inspect, and approve all Work and may reject unsuitable Work that does not conform to the Drawings and Specifications.
- C. The COUNTY OF SANTA BARBARA's Representative(s) shall always have free access to the jobsite while Work is in progress, and the CONTRACTOR shall furnish information and assistance as necessary to the COUNTY OF SANTA BARBARA's Representative(s).
- D. The COUNTY OF SANTA BARBARA's Representative(s) shall monitor construction for conformance with the approved Drawings and Specifications.
- E. The authority of the COUNTY OF SANTA BARBARA's Representative(s) is limited to the following functions:
 - 1. Observe and accept or reject work and materials including approval or disapproval of materials submittals.
 - 2. Clarify Specifications and Drawings.

3. Provide input on elements of the design which require field-fitting due to conditions unknown prior to construction.
- F. The COUNTY OF SANTA BARBARA's Representative(s) are not authorized to take the following actions, all of which remain the sole responsibility of the COUNTY OF SANTA BARBARA:
1. Make changes to the contract provisions, period of performance, or change any contract terms and conditions.
 2. Make decisions concerning any claims and disputes.

1.03 SUBMITTALS

- A. Types of Submittals: Provide types of submittals listed in individual sections and number of copies required below. Electronic copies may be substituted in lieu of all requirements. Refer to Specifications Section 01 33 00, Submittal Procedures.
1. Informational submittals, Site Logistics Plan, Demolition Work Plan, Health & Safety Plan, - 3 copies.
 2. Schedule Submittals - 3 copies.
 3. Shop drawings, reviewed and annotated by the CONTRACTOR - 3 copies.
 4. Inspection and test reports - 3 copies.
 5. Warranties - 3 copies.
 6. Survey data - 3 copies.
 7. Closeout submittals - 3 copies.
- B. Submittal Procedures: Comply with project format for submittals. Comply with submittal procedures established by ENGINEER's including ENGINEER's submittal and shop drawing stamp. Provide required resubmittals if original submittals are not approved. Provide distribution of approved copies including modifications after submittals have been approved.
- C. Samples and Shop Drawings: Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and related work. Note special coordination required. Note any deviations from requirements of the Contract Documents.
- D. Warranties: Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. CONTRACTOR, supplier, or installer responsible for performance of warranty shall sign warranties.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 31 00

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project, including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. RFIs.
 - 4. Digital project management procedures.
 - 5. Web-based Project management software package.
 - 6. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- C. Related Requirements:
 - 1. Section 011200 "Multiple Contract Summary" for a description of the division of work among separate contracts and responsibility for coordination activities not in this Section.
 - 2. Section 013200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
 - 3. Section 017300 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 4. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.
 - 5. Section 019113 "General Commissioning Requirements" for coordinating the Work with Owner's Commissioning Authority.

1.2 DEFINITIONS

- A. BIM: Building Information Modeling.
- B. RFC: Request for Clarification. Request from Contractor seeking information required by or clarifications of the Contract Documents.

1.3 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

- B. Key Personnel Names: Within 15 calendar days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses, cellular telephone numbers, and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.
 - 1. Post copies of list in Project meeting room, in temporary field office, in web-based Project software directory. Always keep list current.

1.4 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results, where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.

- B. Coordination of Multiple Contracts: Each contractor shall cooperate with project coordinator, who shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its own operations with operations included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best

- results, where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- C. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and scheduled activities of other contractors with Construction Manager to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Contractor's construction schedule.
 2. Preparation of the schedule of values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Preinstallation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.

1.5 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely indicated on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
 - b. Coordinate the addition of trade-specific information to coordination drawings in a sequence that best provides for coordination of the information and resolution of conflicts between installed components

before submitting for review.

- c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
- d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
- e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
- f. Indicate required installation sequences.
- g. Indicate dimensions shown on Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternative sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

B. Coordination Drawing Organization: Organize coordination drawings as follows:

1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
2. Plenum Space: Indicate subframing for support of ceiling, and wall systems, mechanical and electrical equipment, and related Work. Locate components within plenums to accommodate layout of light fixtures and other components indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
3. Mechanical Rooms: Provide coordination drawings for mechanical rooms, showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
6. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
 - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
 - c. Fire-rated enclosures around ductwork.
7. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4 inches in diameter and

larger.

- b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire-alarm locations.
- c. Panel board, switchboard, switchgear, transformer, busway, generator, and motor-control center locations.
- d. Location of pull boxes and junction boxes, dimensioned from column center lines.

8. Fire-Protection System: Show the following:

- a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.

9. Review: Architect will review coordination drawings to confirm that, in general, the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Architect determines that coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, Architect will so inform Contractor, who shall make suitable modifications and resubmit.

10. Coordination Drawing Prints: Prepare coordination drawing prints according to requirements in Section 013300 "Submittal Procedures."

C. Coordination Drawing Process: Prepare coordination drawings in the following manner:

- 1. Schedule submittal and review of Fire Sprinkler, Plumbing, HVAC, and Electrical Shop Drawings to make required changes prior to preparation of coordination drawings.
- 2. Commence routing of coordination drawing files with HVAC Installer, who will provide drawing plan files denoting approved ductwork. HVAC Installer will locate ductwork and piping on a single layer, using orange color. Forward drawings to Plumbing Installer.
- 3. Plumbing Installer will locate plumbing and equipment on a single layer, using blue color.
- 4. Fire Sprinkler Installer will locate piping and equipment, using red color. Fire Sprinkler Installer shall forward drawing files to Electrical Installer.
- 5. Electrical Installer will indicate service and feeder conduit runs and equipment in green color. Electrical Installer shall forward drawing files to Communications and Electronic Safety and Security Installer.
- 6. Communications and Electronic Safety and Security Installer will indicate cable trays and cabling runs and equipment in purple color. Communications and Electronic Safety and Security Installer shall forward completed drawing files to Contractor.
- 7. Contractor shall perform the final coordination review. As each coordination drawing is completed, Contractor will meet with COUNTY OF SANTA BARBARA (CM/CDR) and Architect to review and resolve conflicts on the coordination drawings.

CI. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:

1.File Preparation Format:

- a. Same digital data software program, version, and operating system as original Drawings.
- b. DWG Latest Version, operating in Microsoft Windows operating system.

2.File Submittal Format: Submit or post coordination drawing files using PDF format.

3.BIM File Incorporation: Develop and incorporate coordination drawing files into BIM established for Project.

- a. Perform three-dimensional component conflict analysis as part of preparation of coordination drawings. Resolve component conflicts prior to submittal. Indicate where conflict resolution requires modification of design requirements by Architect.

4.Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.

- a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
- b. Contractor shall execute a data licensing agreement in the form acceptable to Owner and Architect.

1.6 REQUEST FOR CLARIFICATION(RFC)

A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFC in the form specified.

- 1.Architect will return without response those RFCs submitted to Architect by other entities controlled by Contractor.
- 2.Coordinate and submit RFCs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFC: Include a detailed, legible description of item needing information or interpretation and the following:

- 1.Project name.
- 2.Owner name.
- 3.Owner's Project number.
- 4.Name of Architect and Construction Manager.
- 5.Architect's Project number.
- 6.Date.
- 7.Name of Contractor.
- 8.RFC number, numbered sequentially.

9.RFC subject.

10. Specification Section number and title and related paragraphs, as appropriate.
11. Drawing number and detail references, as appropriate.
12. Field dimensions and conditions, as appropriate.
13. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFC.
14. Contractor's signature.
15. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

C. RFC Forms: As provided or approved by Owner.

1.Attachments shall be electronic files in PDF format.

CI. Architect's and Construction Manager's Action: Architect and Construction Manager will review each RFC, determine action required, and respond. Allow fourteen calendar days for Architect's response for each RFC. RFCs received by Construction Manager after 1:00 p.m. will be considered as received the following working day.

1.The following Contractor-generated RFCs will be returned without action:

- a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFCs.
- 2.Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect AND Construction Manager of additional information.
- 3.Architect's action on RFCs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
- a. If Contractor believes the RFC response warrants change in the Contract Time or the Contract Sum, notify Construction Manager in writing within Three (3) Calendar days of receipt of the RFC

response.

- E. RFC Log: Prepare, maintain, and submit a tabular log of RFCs organized by the RFC number. Submit log weekly. Use software log that is part of web-based Project management software. Include the following.
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect and Construction Manager.
 - 4. RFI number, including RFCs that were returned without action or withdrawn.
 - 5. RFI description.
 - 6. Date the RFC was submitted.
 - 7. Date Architect's and Construction Manager's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
- F. On receipt of Construction Manager's action, update the RFC log and immediately distribute the RFC response to affected parties. Review response and notify Construction Manager within three Calendar days if Contractor disagrees with response.

1.7 DIGITAL PROJECT MANAGEMENT PROCEDURES

- A. Use of Architect's Digital Data Files: Digital data files of Architect's CAD drawings will be provided by Architect for Contractor's use during construction.
 - 1. Digital data files may be used by Contractor in preparing coordination drawings, Shop Drawings, and Project Record Drawings.
 - 2. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Contract Drawings.
 - 3. Contractor shall execute a data licensing agreement in the form acceptable to Owner and Architect.
 - 4. The following digital data files will be furnished for each appropriate discipline:
 - a. Floor plans.
 - b. Reflected ceiling plans.
 - c. Others as requested and approved by Owner.
- B. Web-Based Project Management Software Package: Provide and administer web-based Project management software package for purposes of hosting and managing Project communication and documentation until Final Completion.
 - 1. Web-based Project management software includes, at a minimum, the

following features:

- a. Compilation of Project data, including Contractor, subcontractors, Architect, Architect's consultants, Owner, and other entities involved in Project. Include names of individuals and contact information.
 - b. Access control for each entity for each workflow process, to determine entity's digital rights to create, modify, view, and print documents.
 - c. Document workflow planning, allowing customization of workflow between project entities.
 - d. Creation, logging, tracking, and notification for Project communications required in other Specification Sections, including, but not limited to, RFIs, submittals, Minor Changes in the Work, Construction Change Directives, and Change Orders.
 - e. Track status of each Project communication in real time, and log time and date when responses are provided.
 - f. Procedures for handling PDFs or similar file formats, allowing markups by each entity. Provide security features to lock markups against changes once submitted.
 - g. Processing and tracking of payment applications.
 - h. Processing and tracking of contract modifications.
 - i. Creating and distributing meeting minutes.
 - j. Document management for Drawings, Specifications, and coordination drawings, including revision control.
 - k. Management of construction progress photographs.
 - l. Mobile device compatibility, including smartphones and tablets.
2. Provide Project management software user licenses for use of Owner, Owner's Commissioning Authority, Construction Manager, Architect, and Architect's consultants. Provide four hours of software training at Architect's office for web-based Project software users.
3. At completion of Project, provide digital archive in format that is readable by common desktop software applications in format acceptable to Architect. Provide data in locked format to prevent further changes.
4. Manufacturers: Subject to compliance with requirements, provide products by available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- a. Autodesk, Inc.
 - b. Corecon Technologies, Inc.
 - c. Deltek Inc.
 - d. Meridian Systems, Inc.
 - e. Newforma, Inc.
 - f. Procore Technologies, Inc.
 - g. Viewpoint, Inc.; a Trimble Company.

C. PDF Document Preparation: Where PDFs are required to be submitted to

Construction Manager, prepare as follows:

1. Assemble complete submittal package into a single indexed file, incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
2. Name file with submittal number or other unique identifier, including revision identifier.
3. Certifications: Where digitally submitted certificates and certifications are required, provide a digital signature with digital certificate on where indicated.

1.8 PROJECT MEETINGS

- A. General: Construction Manager will schedule and conduct meetings and conferences at Project site unless otherwise indicated.
- B. Pre-construction Conference: Construction Manager will schedule and conduct a pre-construction conference before starting construction, at a time convenient to Owner, but no later than 15 calendar days after execution of the Agreement.
 1. Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Construction Manager, Architect, their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Responsibilities and personnel assignments.
 - b. Tentative construction schedule.
 - c. Phasing.
 - d. Critical work sequencing and long lead items.
 - e. Designation of key personnel and their duties.
 - f. Lines of communications.
 - g. Use of web-based Project software.
 - h. Procedures for processing field decisions and Change Orders.
 - i. Procedures for RFCs.
 - j. Procedures for testing and inspecting.
 - k. Procedures for processing Applications for Payment.
 - l. Distribution of the Contract Documents.
 - m. Submittal procedures.
 - n. Sustainable design requirements.
 - o. Preparation of Record Documents.
 - p. Use of the premises.
 - q. Work restrictions.
 - r. Working hours.

- s. Owner's occupancy requirements.
- t. Responsibility for temporary facilities and controls.
- u. Procedures for moisture and mold control.
- v. Procedures for disruptions and shutdowns.
- w. Construction waste management and recycling.
- x. Parking availability.
- y. Office, work, and storage areas.
- z. Equipment deliveries and priorities.
- aa. First aid.
- bb. Security.
- cc. Progress cleaning.

3.Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

C. Sustainable Design Requirements Coordination Conference: Construction Manager will schedule and conduct a sustainable design coordination conference before starting construction, at a time convenient to Owner, Construction Manager, Architect, and Contractor.

1.Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Construction Manager, Inspectors, Architect, and their consultants; Contractor and its superintendent and sustainable design coordinator; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2.Agenda: Discuss items of significance that could affect meeting sustainable design requirements, including the following:

- a. Sustainable design Project checklist.
- b. General requirements for sustainable design-related procurement and documentation.
- c. Project closeout requirements and sustainable design certification procedures.
- d. Role of sustainable design coordinator.
- e. Construction waste management.
- f. Construction operations and sustainable design requirements and restrictions.

3.Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

D. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity when required by other Sections and when required for coordination with other construction.

1.Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration

with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect, Construction Manager, Inspectors, and Owner's Commissioning Authority] of scheduled meeting dates.

2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

- a. Contract Documents.
- b. Options.
- c. Related RFCs.
- d. Related Change Orders.
- e. Purchases.
- f. Deliveries.
- g. Submittals.
- h. Sustainable design requirements.
- i. Review of mockups.
- j. Possible conflicts.
- k. Compatibility requirements.
- l. Time schedules.
- m. Weather limitations.
- n. Manufacturer's written instructions.
- o. Warranty requirements.
- p. Compatibility of materials.
- q. Acceptability of substrates.
- r. Temporary facilities and controls.
- s. Space and access limitations.
- t. Regulations of authorities having jurisdiction.
- u. Testing and inspecting requirements.
- v. Installation procedures.
- w. Coordination with other work.
- x. Required performance results.
- y. Protection of adjacent work.
- z. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.

4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.

5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

E. Project Closeout Conference: Construction Manager will schedule and conduct a project closeout conference, at a time convenient to Owner and Architect, but no later than 60 calendar days prior to the scheduled date of Substantial Completion.

1. Conduct the conference to review requirements and responsibilities related to Project closeout.
2. Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Construction Manager, Inspectors, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of Record Documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Procedures for completing and archiving web-based Project software site data files.
 - d. Submittal of written warranties.
 - e. Requirements for completing sustainable design documentation.
 - f. Requirements for preparing operations and maintenance data.
 - g. Requirements for delivery of material samples, attic stock, and spare parts.
 - h. Requirements for demonstration and training.
 - i. Preparation of Contractor's punch list.
 - j. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - k. Submittal procedures.
 - l. Coordination of separate contracts.
 - m. Owner's partial occupancy requirements.
 - n. Installation of Owner's furniture, fixtures, and equipment.
 - o. Responsibility for removing temporary facilities and controls.
4. Minutes: Entity conducting meeting will record and distribute meeting minutes.

F. Progress Meetings: Construction Manager will conduct progress meetings at regular intervals.

1. Coordinate dates of meetings with preparation of payment requests.
2. Attendees: In addition to representatives of Owner, Owner's Commissioning Authority, Construction Manager, Inspectors, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

- 1) Review schedule for next period.

- b. Review present and future needs of each entity present, including the following:

- 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Resolution of BIM component conflicts.
 - 4) Status of submittals.
 - 5) Status of sustainable design documentation.
 - 6) Deliveries.
 - 7) Off-site fabrication.
 - 8) Access.
 - 9) Site use.
 - 10) Temporary facilities and controls.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) Status of RFIs.
 - 16) Status of Proposal Requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.

4.Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.

- a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting, where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

G. Coordination Meetings: Construction Manager will conduct] regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.

1. Attendees: In addition to representatives of Owner[, Owner's Commissioning Authority, Construction Manager, Inspectors, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting, where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
 - c. Review present and future needs of each contractor present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Resolution of BIM component conflicts.
 - 4) Status of submittals.
 - 5) Deliveries.
 - 6) Off-site fabrication.
 - 7) Access.
 - 8) Site use.
 - 9) Temporary facilities and controls.
 - 10) Work hours.
 - 11) Hazards and risks.
 - 12) Progress cleaning.
 - 13) Quality and work standards.
 - 14) Status of RFCs.
 - 15) Proposal Requests.
 - 16) Change Orders.
 - 17) Pending changes.
3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 31 10 COMMUNICATION

PART 1 - GENERAL

1.01 GENERAL COMMUNICATION

- A. The COUNTY OF SANTA BARBARA shall designate a COUNTY OF SANTA BARBARA'S Representative for this project.
- B. All oral communication and correspondence shall be between CONTRACTOR Representative, COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT'S Representative. The ARCHITECT'S Representative shall not provide oral direction to the CONTRACTOR Representative. All direction to the CONTRACTOR Representative shall be through written Requests for Clarification, or other contractually permitted documentation.
- C. The ARCHITECT'S Representative will communicate and transmit information to the COUNTY OF SANTA BARBARA'S (CM/CDR) representative as requested by the COUNTY OF SANTA BARBARA.
- D. Subcontractors: Do not contact members of the design team directly. Transmit problems or questions in writing using the Request for Clarification form (RFC) through CONTRACTOR
- E. In case of an EMERGENCY contact the COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT immediately. If they are not available, contact the COUNTY OF SANTA BARBARA Representative.

1.02 CORRESPONDENCE

- A. Address all written correspondence to COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT.
- B. Format: Number correspondence sequentially beginning with Serial Letter #001. Include project title and ARCHITECT'S project number.

1.03 REQUEST FOR CLARIFICATION (RFC)

- A. When field conditions or Contract Document contents require clarification or verification by the ARCHITECT or ARCHITECT'S consultants, a written RFC is to be submitted per the following:
 - 1. Identify the nature and location of each clarification/verification using the RFC form; provide as a minimum the following information:
 - a. Project name and number.
 - b. Date.
 - c. Date response required by.
 - d. RFC number.
 - e. Subject.

- f. Initiator of the question.
 - g. Indication of costs and/or schedule impact, if known.
 - h. Location on site.
 - i. Contract drawing reference.
 - j. Contract specification section and paragraph reference.
 - k. Descriptive text.
 - l. Space for reply on same page as questions; and
 - m. Single subject matter, 1 item each - architectural, civil, structural, mechanical, electrical.
2. Number each RFC sequentially beginning with #001. Only one questions per RFC. Do not attach cover sheets.
- B. Route: RFC's in same manner as correspondence.
- C. Copy: RFC's in same manner as correspondence.
- D. Clarifications: Incorporate the essence of all oral discussions onto an RFC form or receive ASI from ARCHITECT.
- E. Procedure: If, after an oral discussion or directive, the CONTRACTOR fails to correct work that in the opinion of the COUNTY OF SANTA BARBARA fails to conform to the Contract Documents, a Nonconformance Report shall be issued. Upon receipt of NCR, CONTRACTOR shall take immediate action to correct work. Review corrections at progress meetings for nonconforming work.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION

SECTION 01 31 13 PROJECT COORDINATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements necessary for coordinating Work operations including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.

1.02 RELATED REQUIREMENTS

- A. Section 01 32 13: Construction Schedule.
- B. Section 01 33 00: Submittal Procedures.
- C. Section 01 77 00: Contract Closeout.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

3.01 COORDINATION

- A. CONTRACTOR shall coordinate operations included in various sections of Contract Documents to assure efficient and orderly installation of each part of Work. Coordinate Work operations included under related sections of Contract Documents that depend on each other for proper installation, connection, and operation of Work, including but not limited to:
 - 1. Schedule construction operations in sequence required where installation of one part of Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
 - 3. Provide provisions to accommodate items scheduled for later installation.
 - 4. Prepare and administer provisions for coordination drawings.
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required in notices, reports, attendance at meetings, and:
 - 1. Prepare similar memoranda for COUNTY OF SANTA BARBARA and Separate Work Contract where coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of Work. Such administrative activities include, but are not limited to, following:
 - 1. Preparation of schedules.

2. Installation, relocation, and removal of temporary facilities.
 3. Delivery and processing of submittals.
 4. Progress meetings.
 5. Project closeout activities.
- D. Conservation: Coordinate Work operations to assure operations are carried out with consideration given to conservation of energy, water, materials, and:
1. Salvage materials and equipment involved in performance of, but not actually incorporated into Work.

3.02 SUBMITTALS

- A. Coordination Drawings: CONTRACTOR shall prepare coordination drawings to coordinate the installation of products and materials fabricated, furnished, and installed by separate entities, under different parts of the Contract. CONTRACTOR shall notify the COUNTY OF SANTA BARBARA (CM/CDR), and ARCHITECT of all major conflicts in writing in a timely manner so that the design team can respond without construction delays. Coordination drawings shall address the following at a minimum:
1. Limitations in available space for installation or service. CONTRACTOR shall overlay plans of each trade and verify space requirements and conflicts between trades. Minor changes and adjustments that do not affect design intent shall be made by CONTRACTOR and shall be highlighted for ARCHITECT'S review.
 2. Incompatibility between items provided under different trades (such as difference in voltage between equipment specified under Divisions 22 and 23 and electrical power provided under Division 26.)
 3. Inconsistencies between drawings, specifications, and codes (between trades and within each trade).
 4. Additional items required for existing facilities construction projects shall be designed and prepared from available as-built drawings that are verified through non-invasive and non-destructive, visual observation only. CONTRACTOR shall field verify actual existing conditions during and upon completion of demolition work and incorporate findings into preparation of coordination drawings. Minor changes and adjustments that do not affect design intent shall be made by Sub-Contractor and shall be highlighted for COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT'S reviews.
- B. Prepare coordination drawings in CAD with each trade on a separate layer, in specified color and scale. CONTRACTOR and each Subcontractor shall provide and forward reproducible copies and CAD drawing files in the order described here where applicable:
1. Structural shop drawings shall indicate location and sizes of columns, beams and other structural members, as well as wall, roof and slab penetrations, and will be provided to mechanical, electrical, low voltage and plumbing Sub-contractors for coordination. Structural items shall be indicated using black lines.
 2. HVAC Subcontractor will indicate all ductwork, piping and equipment complete with installation and dimensioned service clearances, duct and pipe sizes, fitting types and sizes, top or bottom of duct and pipe elevations, distances of ducts, pipes and equipment from building reference points and hanger and support locations. Minor changes and adjustments that do not affect design intent shall be made by Subcontractor and shall be highlighted for COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT'S reviews. Forward drawings to plumbing Subcontractor for further coordination. HVAC items shall be indicated using orange lines.

3. Plumbing Subcontractor will indicate all plumbing lines, and equipment complete with installation and dimensioned service clearances, pipe sizes, fitting types and sizes, top or bottom of pipe elevations, distances of pipes and equipment from building reference points and hanger/support locations. Coordinate with HVAC Subcontractor. Minor changes and adjustments that do not affect design intent shall be made by Sub-contractor and shall be highlighted for COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT'S reviews. Upon completion drawings shall be forwarded to Fire Sprinkler Subcontractor for further coordination. All Plumbing items shall be indicated using blue lines.
4. Fire sprinkler Subcontractor will indicate fire sprinkler piping and equipment complete with installation and dimensioned service clearances, pipe sizes, fitting types and sizes, top or bottom of pipe elevations, distances of pipes and equipment from building reference points and hanger or support locations. Coordinate with Plumbing and HVAC Subcontractors. Minor changes and adjustments that do not affect design intent shall be made by sub-contractors and shall be highlighted for COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT'S reviews. Upon completion drawings shall be forwarded to Electrical CONTRACTOR for further coordination. Fire sprinkler equipment shall be indicated using red lines.
5. Electrical and Low Voltage Subcontractors will indicate service and feeder conduit runs and other electrical equipment complete, including low voltage with installation and dimensioned service clearances, sizes, top or bottom of conduit and rack elevations, distances of conduits and equipment from building reference points and hanger and support locations. Coordinate with Fire Sprinkler, Plumbing and HVAC Subcontractors. Minor changes and adjustments that do not affect design intent shall be made by sub-contractors and shall be highlighted for COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT'S reviews. Upon completion drawings shall be forwarded to CONTRACTOR for further coordination. Electrical work shall be indicated in dark green lines. Low voltage work shall be indicated in light green lines.
6. CONTRACTOR will be responsible for the overall coordination review. As each coordination drawing is completed, CONTRACTOR will meet with COUNTY OF SANTA BARBARA (CM/CDR) to review and resolve all conflicts on coordination drawings.
7. Coordination meetings will be held in Project field office of CONTRACTOR. CONTRACTOR is required to distribute Shop Drawings, cut sheets and submittals to Subcontractors where appropriate. Reviewed coordination drawings will be maintained in Project field office of CONTRACTOR. Meeting minutes shall be developed by CONTRACTOR and submitted to COUNTY OF SANTA BARBARA (CM/CDR) within 5 days.

END OF SECTION

SECTION 01 31 19 PROJECT MEETINGS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for Project meetings, including but not limited to, the following:
 - 1. Job start meeting.
 - 2. Pre-installation conferences.
 - 3. Progress meetings.
 - 4. Meetings as required by COUNTY OF SANTA BARBARA.

1.02 RELATED REQUIREMENTS

- A. Section 01 31 13: Project Coordination.
- B. Section 01 32 13: Construction Schedule.
- C. Section 01 33 00: Submittal Procedures.

PART 2 – PRODUCTS (Not used)

PART 3 - EXECUTION

3.01 JOB START MEETING

- A. In accordance with General Conditions, COUNTY OF SANTA BARBARA (CM/CDR) will schedule a job start meeting before starting the Work, at a time and date determined by COUNTY OF SANTA BARBARA. Meeting shall be held at the Project site, or another location as determined by COUNTY OF SANTA BARBARA (CM/CDR). Meeting will be held to review responsibilities, procedures, and other administrative requirements contained within the Contract Documents.
- B. Authorized representatives of COUNTY OF SANTA BARBARA (CM/CDR), INSPECTOR, ARCHITECT, CONTRACTOR, and other parties shall attend the meeting. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda items shall include significant items which could affect progress of the Work, including, but not limited to the following:
 - 1. Preliminary Construction Schedule.
 - 2. Critical work sequencing.
 - 3. Designation of responsible personnel.
 - 4. Identification of COUNTY OF SANTA BARBARA
 - 5. Lines of Communication

6. Procedures for processing field decisions.
7. Procedures for testing and inspection
8. Request for Proposal.
9. Request for Clarification.
10. Construction Directive and Change Order.
11. Procedures for processing Applications for Payment.
12. Prevailing wages.
13. Submittal and review of Shop Drawings, Product Data, material lists, and Samples.
14. Preparation of project record documents.
15. Use of the Project site and/or premises.
16. Procedures for disruption and shutdown
17. Parking availability.
18. Office, work, and storage areas.
19. Equipment deliveries and priorities.
20. Safety procedures.
21. First Aid.
22. Security.
23. Housekeeping. Progress cleaning
24. Working hours and work restrictions
25. Contract Compliance Officer.
26. Insurance Services.
27. Environmental Health and Safety.
28. Owner's occupancy requirements
29. Substantial Completion, Administrative Closeout and Contract Completion requirements and procedures.
30. Procedures for Mandatory Dispute and Claim Resolution.
31. Storm Water Pollution Prevention Plan (SWPPP).

32. CEQA Compliance.

D. CONTRACTOR and/or COUNTY OF SANTA BARBARA (CM/CDR), shall prepare and issue meeting minutes to attendees and interested parties no later than five calendar days after the meeting date.

3.02 PRE-INSTALLATION CONFERENCES

A. CONTRACTOR shall coordinate and conduct pre-installation conferences at the Project site as required by related Sections of the Contract Documents.

B. CONTRACTOR, manufacturers, and fabricators involved in or affected by the installation and its coordination or integration with other preceding and/or subsequent installations of Work shall attend the meeting. CONTRACTOR shall advise COUNTY OF SANTA BARBARA , INSPECTOR, and ARCHITECT of scheduled meeting dates in order to secure their attendance.

1. CONTRACTOR shall review the progress of construction activities and preparations for the activity under consideration at each pre-installation conference, including requirements for the following:

- a. Contract Documents.
- b. Options.
- c. Related Construction Directives and Change Orders.
- d. Purchases.
- e. Deliveries.
- f. Shop Drawings, Product Data, and quality-control samples.
- g. Review of mockups.
- h. Possible conflicts.
- i. Compatibility problems.
- j. Time schedules.
- k. Weather limitations.
- l. Manufacturer's recommendations.
- m. Warranty requirements.
- n. Compatibility of materials.
- o. Acceptability of substrates.
- p. Temporary facilities.
- q. Space and access limitations.
- r. Governing regulations.
- s. Safety.
- t. Inspecting and testing requirements.
- u. Required performance results.
- v. Recording requirements.
- w. Protection.

2. CONTRACTOR shall record significant discussions and directives received from each conference. CONTRACTOR shall, within three (3) calendar days after the meeting date, distribute the minutes of the meeting to all concerned parties, including but not limited to, COUNTY OF SANTA BARBARA(CM/CDR), INSPECTOR, and ARCHITECT.

3.03

PROGRESS MEETINGS

- A. Progress meetings will be held at the Project site at regular intervals, typically weekly, as determined by the COUNTY OF SANTA BARBARA (CM/CDR).
- B. In addition to representatives of CONTRACTOR, COUNTY OF SANTA BARBARA (CM/CDR), and ARCHITECT, each Subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of the Work shall, if requested by COUNTY OF SANTA BARBARA, be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude all matters relating to the Work.
- C. Failure of CONTRACTOR to be so represented at any progress meeting which is held at a mutually agreed time or for which a written notice is given, shall not relieve CONTRACTOR from abiding by all COUNTY OF SANTA BARBARA (CM/CDR), determinations or directives issued at such meeting.
- D. COUNTY OF SANTA BARBARA (CM/CDR), will review and correct or approve minutes of the previous progress meeting and will review other significant items affecting progress. Topics for discussion as appropriate to the status of the Project include but are not limited to:
 1. Interface requirements.
 2. Construction Schedule (review of Contractor's three-week Look-Ahead and Monthly Schedules).
 3. Sequence and coordination.
 4. Status of submittals / RFCs.
 5. Deliveries.
 6. Off-site fabrication.
 7. Access.
 8. Site utilization.
 9. Temporary Construction Facilities and Controls.
 10. Hours of work.
 11. Hazards and risks.
 12. Housekeeping.
 13. Quality of materials, fabrication, and execution.
 14. Unforeseen conditions.
 15. Testing and Inspection.
 16. Defective Work.
 17. Construction Directive.
 18. Request for Proposal.
 19. Change Order Proposals and Change Orders.

- 20. Documentation of information for payment requests.
 - 21. Application for Payment.
 - 22. Other items as required or as brought forth.
 - 23. Initial Notice of Start of Issue, Event, Condition, Circumstance, or Cause of Perceived Delay, Disruption, Interference, Hindrance, Acceleration as described in the General Conditions).
 - 24. Final Notice of End of Issue, Event, Condition, Circumstance, or Cause of Perceived Delay, Disruption, Interference, Hindrance, Acceleration as described in the General Conditions).
 - 25. Storm Water Pollution Prevention.
 - 26. CEQA Compliance.
- E. No later than three (3) calendar days after each progress meeting, CONTRACTOR and/ or COUNTY OF SANTA BARBARA (CM/CDR) will prepare and distribute minutes of the meeting to each present and absent party. Include a brief summary, in narrative form, of progress, decisions, directives, actions taken, and all other issues since the previous meeting and report.
- 1. Schedule Updating: CONTRACTOR shall revise the Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized and issue the revised schedule at the next scheduled progress meeting.
- 3.04 ADDITIONAL MEETINGS
- A. COUNTY OF SANTA BARBARA, upon giving notice to the intended parties and without further obligation, may require additional meetings to discuss Work and/or Project related activities.
- 3.05 COUNTY OF SANTA BARBARA'S RIGHT TO RECORD
- A. CONTRACTOR agrees on behalf of itself and all its subcontractors that the COUNTY OF SANTA BARBARA may audiotape or videotape any meetings, training, and any work at any time during the Project.

END OF SECTION

SECTION 01 31 26

ELECTRONIC PROJECT MANAGEMENT SYSTEM

PART 1- GENERAL

1.01 DESCRIPTION

- A. This Section is in addition to the Contract General Conditions.
- B. The CONTRACTOR shall be required to use an Electronic Project Management (EPM) system for electronic construction management document control and communications between the COUNTY OF SANTA BARBARA (CM/CDR), other project-related consultants, and the CONTRACTOR (aka the Project Team).
- C. Unless otherwise designated by the COUNTY OF SANTA BARBARA (CM/CDR), the system will be maintained and owned by the CONTRACTOR but operated collaboratively by the Project Team. CONTRACTOR is required to get COUNTY OF SANTA BARBARA approval on the type of EPM system program that will be used on this project. COUNTY OF SANTA BARBARA preferred EPM is Procore construction management software or equal. The EPM that the CONTRACTOR chooses shall be approved by the COUNTY OF SANTA BARBARA. The CONTRACTOR shall be responsible for training the members of the Project team on how to use the EPM at no additional cost to the COUNTY OF SANTA BARBARA.
- D. The CONTRACTOR shall be primarily responsible for the scanning, uploading, and logging of all electronic documents for the project as indicated below.
- E. The CONTRACTOR shall provide personnel and equipment as required by their employees to electronically submit all necessary documents.
- F. The EPM system shall contain the following information which shall be made available by the CONTRACTOR for the project team:
 - 1. Submittal Information (shop drawings, product data, etc.) and Logs
 - 2. Requests for Clarification and Logs
 - 3. Inspection Requests / Reports
 - 4. Non-Compliance Inspection Reports
 - 5. Project Photographs
 - 6. Project Meeting Minutes
 - 7. Project FTP Site
 - 8. Contract Documents (including specifications, drawings, reference materials, sketches, ASIs, etc.)

- 9. Other Documentation as determined by the COUNTY OF SANTA BARBARA and the Project team.

- G. All Request for Clarification (RFCs) and Inspection Requests shall be submitted by the CONTRACTOR to the COUNTY OF SANTA BARBARA (CM/CDR) electronically through the EPM.

- H. The COUNTY OF SANTA BARBARA will NOT accept faxed and/or handwritten documentation of RFCs, RFC Sketches, and/or Inspection Requests.
 - 1. The CONTRACTOR shall be solely responsible for data entry via the chosen EPM Website for the generation of RFIs.
 - 2. The CONTRACTOR shall be solely responsible for the scanning of sketches / drawings as necessary for the electronic submittal and attachment of necessary information related to RFIs.
 - 3. CONTRACTOR shall supply field personnel all necessary computer equipment necessary to enter RFIs and other documentation electronically.

- I. Submittals shall be submitted via Section 01 33 00 Submittal Procedures.

1.02 CONTRACTOR'S RESPONSIBILITIES

- A. The CONTRACTOR shall have computer(s) with capabilities to access the EPM system at their on-site and off-site project offices. At the pre-construction meeting, the CONTRACTOR shall provide to the COUNTY OF SANTA BARBARA (CM/CDR) the contact information (including email addresses) of all CONTRACTOR personnel that the CONTRACTOR chooses to provide coordination for the EPM system and information. At a minimum, this will include the CONTRACTOR'S Project Engineer and/or other technical staff as required. These personnel shall have the computer skills required to access the Internet and do basic trouble shooting of the EPM system. The CONTRACTOR shall provide training and technical support to the Project team personnel for use of the EPM system. The CONTRACTOR shall complete 4-hours training, minimum, for each Project team personnel member who will access and use the EPM. The EPM shall be onsite and operational to process the CONTRACTOR'S first payment request.

1.03 OFFICIAL RECORDS

- A. The documentation and records maintained on the EPM system will be the "Official Record" for the project (not including as-builts created by the ARCHITECT). At the conclusion of the project all records shall be made available via Adobe "pdf" and/or other electronic filing methods approved by the COUNTY OF SANTA BARBARA for import/export.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 31 29 PARTNERING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. The furnishing of labor, materials, equipment, services, and incidentals necessary for a Partnering Agreement process.
- B. This specification requires the use of a formal Partnering process between COUNTY OF SANTA BARBARA and CONTRACTOR. Partnering is a collaborative effort and a long-term commitment between two or more organizations for the purpose of achieving specific project objective by maximizing the efficiency and effectiveness of each organization's participation in meeting specific project requirements. This effectiveness requires changing traditional "individualized" relationships to "shared culture" relationships without regard to organizational boundaries. The partnering relationship is based upon trust, dedication to common goals, understanding of each other's individual expectations and values, and a full commitment to success. Benefits include improved communications, efficiency and cost effectiveness, increased opportunity for innovation, and the continuous improvement of product quality and services.
- C. The COUNTY OF SANTA BARBARA'S Partnering process applies these concepts to the delivery of new facilities. By using partnering in this contract, the COUNTY OF SANTA BARBARA seeks to maximize the opportunity to achieve project success measured by how well the project meets the operational requirements for the school, financial constraints for the parties, the school schedule constraints, safety, quality, functional requirements of the project, and the need to employ appropriate levels of risk management throughout the project.

1.02 SUBMITTALS

- A. CONTRACTOR shall, upon Notice of Intent to Award, begin arranging for the Partnering workshop. CONTRACTOR shall provide a list of CONTRACTOR employees, subcontractors, and other personnel the CONTRACTOR anticipates will attend the meeting. The attendee list shall include the job title of each person, an email address, telephone and fax number.
- B. CONTRACTOR shall propose at least three facilitators and submit their names to the COUNTY OF SANTA BARBARA for review and mutual agreement with COUNTY OF SANTA BARBARA as to a facilitator for the project Partnering process. CONTRACTOR shall provide resumes of the proposed facilitators as well as information about each facilitator's business including, but not limited to years in business, references and proposed agenda.
- C. CONTRACTOR shall recommend a location and a date, subject to COUNTY OF SANTA BARBARA approval, for the initial workshop between CONTRACTOR and COUNTY OF SANTA BARBARA.
- D. At the completion of the initial Partnering workshop, and any follow up meetings, within 15 days thereafter the Facilitator shall provide to CONTRACTOR and COUNTY OF SANTA BARBARA the following:
 - 1. Copies of meeting minutes for attendees in accordance with the agenda detailing the issues addressed, actions required, and comments made by all parties. The summary shall be provided in electronic format in MS Word for email distribution.

2. Partnering Charter in sufficient quantities for attendees and file copies for primary parties involved.
3. Proposal for follow up meetings, if required.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION

3.01 PARTNERING PROCEDURES

- A. Initial Partnering Meeting: The initial Partnering Workshop shall be an all-day meeting or as mutually agreed between COUNTY OF SANTA BARBARA (CM/CDR) and CONTRACTOR. The initial meeting may be prior to or combined with the pre-construction conference but shall occur no later than the Notice to Proceed. The number of follow up meetings will be as required in Article 3.01.C below. COUNTY OF SANTA BARBARA and CONTRACTOR shall:
 1. Mutually agree upon the scope, agenda, attendees, and a location for the meeting.
 2. Use a facilitator to organize and conduct the meetings:
 - a. The facilitator is to act as a neutral party. There must be no conflict of interest on the part of the facilitator in favor of COUNTY OF SANTA BARBARA, CONTRACTOR or ARCHITECT.
 - b. COUNTY OF SANTA BARBARA and CONTRACTOR will provide the Facilitator with a list of attendees. COUNTY OF SANTA BARBARA will be approximately **five (5)** people in attendance.
 - c. The meeting arrangements (meeting space, audio visual equipment etcetera) will be the responsibility of the Facilitator.
 - d. CONTRACTOR and COUNTY OF SANTA BARBARA will be responsible for expenses incurred by their respective employees, including but not limited to meals, travel and lodging.
 - e. The Facilitator should contact COUNTY OF SANTA BARBARA and CONTRACTOR at least three weeks prior to the workshop, and have a conference call with the parties at least 10 calendar days prior to the workshop to discuss ideas and to finalize the agenda. The agenda will be based on the needs of the project delivery team, and may be as specific as deemed necessary. The Facilitator is responsible for developing the full agenda in conjunction with both parties.
- B. Participation in Partnering: It is the responsibility of COUNTY OF SANTA BARBARA and CONTRACTOR to compile a list of and invite the key project personnel to participate in the partnering workshops, as well as key representatives of interested parties in attendance. Examples include, but are not limited to ARCHITECT, CONSTRUCTION MANAGER, Project Inspector, subcontractors, material suppliers, city and county officials, local jurisdictions, and utility companies. CONTRACTOR and COUNTY OF SANTA BARBARA shall encourage staff to attend and actively participate in the partnering process. CONTRACTOR and COUNTY OF SANTA BARBARA agree that the personnel identified and attending the workshop will be assigned to the project.
- C. Payment: The cost of the initial partnering workshop will be paid by CONTRACTOR. CONTRACTOR will be responsible for arranging the partnering workshop (meeting room, audio visual equipment, supplies, cost of facilitator, etcetera). Expenses for miscellaneous incidentals shall be paid for out of this cost.

- D. Follow up partnering meeting would be scheduled on a quarterly basis. These meetings will generally be “executive” level involving CONTRACTOR, ARCHITECT, Project Inspector and COUNTY OF SANTA BARBARA (CM/CDR) only. The cost of these meetings shall be borne by CONTRACTOR. For planning purposes, these meetings will generally be one (1) day in duration and may be held at the jobsite or other facility available to CONTRACTOR.

END OF SECTION

SECTION 01 32 00

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

- 1.Startup construction schedule.
- 2.Contractor's Construction Schedule.
- 3.Construction schedule updating reports.
- 4.Daily construction reports.
- 5.Material location reports.
- 6.Site condition reports.
- 7.Unusual event reports.

B. Related Requirements:

- 1.Section 012900 "Payment Procedures" for schedule of values and requirements for use of cost-loaded schedule for Applications for Payment.
- 2.Section 013213 "Construction Schedule".
- 3.Section 013214 "Construction Milestones"
- 4.Section 01324A "Construction Milestones Appendix A"

1.2 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction Project. Activities included in a construction schedule consume time and resources.

- 1.Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
- 2.Predecessor Activity: An activity that precedes another activity in the network.
- 3.Successor Activity: An activity that follows another activity in the network.

B. Cost Loading: The allocation of the schedule of values for completing an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum.

C. CPM: Critical path method, which is a method of planning and scheduling a

construction project where activities are arranged based on activity relationships. Network calculations determine the critical path of Project and when activities can be performed.

- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
 - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
 - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- G. Resource Loading: The allocation of labor and equipment necessary for completing an activity as scheduled.

1.3 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file.
 - 2. PDF file.
 - 3. Two paper copies, of sufficient size to display entire period or schedule, as required.
- B. Startup construction schedule.
 - 1. Submittal of cost-loaded startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.
- C. Startup Network Diagram: Of size required to display entire network for entire construction period. Show logic ties for activities.
- D. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 1. Submit a working digital copy of schedule, using software indicated, and labeled to comply with requirements for submittals.
- E. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports to contain activity number, activity

description, cost and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.

1. Activity Report: List of activities sorted by activity number and then early start date, or actual start date if known.
 2. Logic Report: List of preceding and succeeding activities for each activity, sorted in ascending order by activity number and then by early start date, or actual start date if known.
 3. Total Float Report: List of activities sorted in ascending order of total float.
 4. Earnings Report: Compilation of Contractor's total earnings from the Notice to Proceed until most recent Application for Payment.
- F. Construction Schedule Updating Reports: Submit with Applications for Payment.
- G. Daily Construction Reports: Submit at weekly intervals.
- H. Material Location Reports: Submit at monthly intervals.
- I. Site Condition Reports: Submit at time of discovery of differing conditions.
- J. Unusual Event Reports: Submit at time of unusual event.
- K. Qualification Data: For scheduling consultant.

1.4 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within 24 hours of Architect's request.
- B. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Section 013100 "Project Management and Coordination." Review methods and procedures related to the preliminary construction schedule and Contractor's Construction Schedule, including, but not limited to, the following:
1. Review software limitations and content and format for reports.
 2. Verify availability of qualified personnel needed to develop and update schedule.
 3. Discuss constraints, including work stages, interim milestones, and Owner occupancy.
 4. Review delivery dates for Owner-furnished products.
 5. Review schedule for work of Owner's separate contracts.
 6. Review submittal requirements and procedures.
 7. Review time required for review of submittals and resubmittals.
 8. Review requirements for tests and inspections by independent testing and

- inspecting agencies.
- 9. Review time required for Project closeout and Owner startup procedures, including commissioning activities.
- 10. Review and finalize list of construction activities to be included in schedule.
- 11. Review procedures for updating schedule.

1.5 COORDINATION

- A. Coordinate Contractor's Construction Schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.
 - 2. Coordinate each construction activity in the network with other activities, and schedule them in proper sequence.

1.6 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
- B. Scheduling Consultant: Engage a consultant to provide planning, evaluation, and reporting, using CPM scheduling.
 - 1. In-House Option: Owner may waive requirement to retain a consultant if Contractor employs skilled personnel with experience in CPM scheduling and reporting techniques. Submit qualifications.
 - 2. Meetings: Scheduling consultant to attend all meetings related to Project progress, alleged delays, and time impact.
- C. Time Frame: Extend schedule from date established for the Notice of Award to date of Final Completion.
 - 1. Contract completion date to not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- D. Activities: Treat each floor or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
 - 1. Activity Duration: Define activities so no activity is longer than 15 calendar days, unless specifically allowed by OWNER.
 - 2. Temporary Facilities: Indicate start and completion dates for the following as applicable:

- a. Securing of approvals and permits required for performance of the Work.
 - b. Temporary facilities.
 - c. Construction of mock-ups, prototypes, and samples.
 - d. Owner interfaces and furnishing of items.
 - e. Interfaces with Separate Contracts.
 - f. Regulatory agency approvals.
 - g. Punch list.
3. Procurement Activities: Include procurement process activities for long lead-time items and major items, requiring a cycle of **more than 60 days**, as separate activities in schedule.
4. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.
5. Startup and Testing Time: Include no fewer than fifteen (15) calendar days for startup and testing.
6. Commissioning Time: Include no fewer than fifteen (15) calendar days for commissioning.
7. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Architect's and Construction Manager's administrative procedures necessary for certification of Substantial Completion.
8. Punch List and Final Completion: Include not more than thirty (3) calendar days for completion of punch list items and Final Completion.
- E. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
1. Phasing: Arrange list of activities on schedule by phase.
 2. Work under More Than One Contract: Include a separate activity for each contract.
 3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
 4. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 5. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 6. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.

- e. Use-of-premises restrictions.
- f. Provisions for future construction.
- g. Seasonal variations.
- h. Environmental control.

7. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:

- a. Subcontract awards.
- b. Submittals.
- c. Purchases.
- d. Mockups.
- e. Fabrication.
- f. Sample testing.
- g. Deliveries.
- h. Installation.
- i. Tests and inspections.
- j. Adjusting.
- k. Curing.
- l. Building flush-out.
- m. Startup and placement into final use and operation.
- n. Commissioning.

8. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:

- a. Structural completion.
- b. Temporary enclosure and space conditioning.
- c. Permanent space enclosure.
- d. Completion of mechanical installation.
- e. Completion of electrical installation.
- f. Substantial Completion.

F. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion. Refer to Section 01 32 14 and Section 01 32 14 A.

G. Cost Correlation: Superimpose a cost correlation timeline, indicating planned and actual costs. On the line, show planned and actual dollar volume of the Work performed as of planned and actual dates used for preparation of payment requests.

1. See Section 012900 "Payment Procedures" for cost reporting and payment procedures.

H. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:

1. Unresolved issues.
2. Unanswered Requests for Information.
3. Rejected or unreturned submittals.
4. Notations on returned submittals.
5. Pending modifications affecting the Work and the Contract Time.

I. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule with each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
3. As the Work progresses, indicate Final Completion percentage for each activity.

J. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.

K. Distribution: Distribute copies of approved schedule to Architect, Construction Manager (CM/CDR), Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

1. Post copies in Project meeting rooms and temporary field offices.
2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

1.7 STARTUP CONSTRUCTION SCHEDULE - NOT USED

1.8 CPM SCHEDULE REQUIREMENTS – REFER TO SECTION 01 32 14 CONSTRUCTION SCHEDULE

1.9 REPORTS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. List of separate contractors at Project site.
3. Approximate count of personnel at Project site.
4. Equipment at Project site.
5. Material deliveries.
6. High and low temperatures and general weather conditions, including presence of rain or snow.
7. Testing and inspection.
8. Accidents.
9. Meetings and significant decisions.
10. Unusual events.
11. Stoppages, delays, shortages, and losses.
12. Meter readings and similar recordings.
13. Emergency procedures.
14. Orders and requests of authorities having jurisdiction.
15. Change Orders received and implemented.
16. Change Directives received and implemented.
17. Services connected and disconnected.
18. Equipment or system tests and startups.
19. Partial completions and occupancies.
20. Substantial Completions authorized.

- B. Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List to be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:

1. Material stored prior to previous report and remaining in storage.
2. Material stored prior to previous report and since removed from storage and installed.
3. Material stored following previous report and remaining in storage.

- C. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

- D. Unusual Event Reports: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, responses by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

1. Submit unusual event reports directly to Owner within three (3) calendar

day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 32 00

SECTION 01 32 13 CONSTRUCTION SCHEDULE

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Required procedures, preparation, submittals, reviews, updates, and revisions to the cost/schedule integrated construction schedule. The purpose of this section is to:
 - 1. Ensure adequate planning and execution of the Work by CONTRACTOR.
 - 2. Establish a standard against which satisfactory completion of the Project can be measured by COUNTY OF SANTA BARBARA.
 - 3. Assist CONTRACTOR and COUNTY OF SANTA BARBARA Construction Manager in monitoring progress.
 - 4. Aid in assessing the impact of any changes to the Contract.
 - 5. Provide justification for progress payments.

1.02 RELATED REQUIREMENTS

- A. Section 01 11 00 Summary of Work.
- B. Section 01 29 73 Schedule of Values.
- C. Section 01 29 76 Progress Payment Procedures.
- D. Section 01 31 13 Project Coordination.
- E. Section 01 33 00 Submittal Procedures.
- F. Section 01 50 00 Construction Facilities Temporary Controls.
- G. Section 01 77 00 Contract Closeout.
- H. Section 01 78 36 Warranties.

PART 2 – PRODUCTS

2.01 SCHEDULING SOFTWARE

- A. CONTRACTOR shall utilize Primavera Scheduling Software (P6) to employ the Critical Path Method (CPM) in the development and maintenance of the construction schedule. If the version of Primavera Scheduling Software (P6) used is greater than Version 15.1, the CONTRACTOR shall save & export schedules in Version 15.1 before submitting to COUNTY OF SANTA BARBARA for review. The scheduling software shall be capable of being resource loaded with manpower, costs, and materials. It shall also be capable of generating time-scaled logic diagrams, resource histograms and profiles, bar charts, layouts, and reports with any and/or all activity detail.
- B. All schedule calculation rules, auto cost rules and resource calculation rules shall be in a format acceptable to COUNTY OF SANTA BARBARA. When schedule calculations are performed, the “Retained Logic” setting shall be used. CONTRACTOR shall use the zero “Decimal Places” setting.

PART 3 – EXECUTION

3.01 SUBMITTALS

- A. CONTRACTOR shall retain a construction scheduler to work in enough capacity to perform all the requirements outlined in this Section. CONTRACTOR shall submit to the COUNTY OF SANTA BARBARA (CM/CDR) a resume of the proposed Scheduler for review and acceptance prior to the preparation of any Schedule. The resume shall demonstrate the proposed scheduler's capability to plan, coordinate, execute, and monitor a cost/resource loaded CPM schedule as required for this Project and have a minimum of five years direct experience using Primavera Project Planner or Equal/Like Schedule program. Scheduler will cooperate with COUNTY OF SANTA BARBARA and shall be available on site for monitoring, maintaining, and updating schedules in a timely manner. COUNTY OF SANTA BARBARA has the right to reject the Scheduler based upon a lack of experience as required by this Section or based on lack of on-site performance and timeliness of schedule submittals. If COUNTY OF SANTA BARBARA (CM/CDR) does not accept the proposed Scheduler, CONTRACTOR shall within one week of disapproval, propose another scheduler who meets the experience requirements stated above.
- B. CONTRACTOR shall submit two color originals and three copies of all bar charts, reports and/or other required schedule data as outlined in this Section. CONTRACTOR shall electronically deliver the schedule file in its original format at the time of submittal.
- C. CONTRACTOR shall attend a pre-construction scheduling conference with COUNTY OF SANTA BARBARA (CM/CDR) within 7 days after Notice of Award. Contractor shall then develop and submit the Preliminary Construction Schedule within 14 days after Notice of Award.
- D. CONTRACTOR shall submit the Proposed Baseline Schedule no later than thirty days from the Notice to Proceed.
- E. CONTRACTOR shall submit the Monthly Schedule Updates, Four-Week Rolling Schedules, and Recovery Schedules as required.

3.02 PRELIMINARY CONSTRUCTION SCHEDULE

- A. The purpose of the cost-loaded Preliminary Construction Schedule is to provide an interim mechanism in which to measure performance on individual activities and to validate the CONTRACTOR'S monthly Application for Payment on work performed (starting with month one) during the first three months of the job until the complete Baseline Schedule is approved by the COUNTY OF SANTA BARBARA (CM/CDR).
- B. CONTRACTOR shall develop and submit a cost loaded Preliminary Construction Schedule as required by this Section. It shall be submitted in computer generated network format and shall be organized by Activity Codes representing the CONTRACTOR'S intended sequencing of the Work. The Preliminary Construction Schedule shall include activities for the first 90 calendar days following the NTP such as mobilization, preparation of submittals, specified review periods, procurement items, fabrication items, milestones, and detailed construction activities.
- C. Upon COUNTY OF SANTA BARBARA'S (CM/CDR) acceptance of the Preliminary Construction Schedule, CONTRACTOR shall update the accepted Preliminary Construction Schedule each month (beginning with month 1) and submit these updates until CONTRACTOR'S Baseline Schedule is fully developed and accepted. Since updates to Preliminary Construction Schedule are the basis for payment to CONTRACTOR during the first three-month period, submittal and acceptance of such updates shall be a condition precedent to approving monthly payment(s), as referenced in General Conditions.

- D. Provide a written narrative describing CONTRACTOR'S approach to mobilization, procurement, and construction during the first 90 calendar days including crew sizes, equipment and material delivery, site access, submittals, and permits.
- E. Submit Bar Charts, Tabular Reports, a Cost Flow Histogram, Electronic Data, and Plots in accordance with the General Conditions.

3.03 SCHEDULE OF VALUES

- A. CONTRACTOR shall cost load activities in the Construction Baseline Schedule and allocate costs to the cost accounts of all activities. The cost accounts shall match the CSI sections listed in the Table Of Contents of the Specifications. The format shall be coordinated with Specification Section 01 29 73 (Schedule of Values), and Specification Section 01 29 76 (Progress Payment Procedures).
- B. Submit a computer-generated report from the Construction Baseline Schedule using the P6 scheduling software. The report shall contain the following data for each activity: Cost Account Number (by CSI section), Cost Account Description, Cost Account Budget, Cost to Date, Cost this Period, and Cost to complete. Total costs shall be organized and totaled by CSI section. This report shall be the source of the data CONTRACTOR reports on the Schedule of Values.
- C. The cost loading associated with the activities shall be based on CONTRACTOR estimates of costs that CONTRACTOR will incur performing the specific activities. If COUNTY OF SANTA BARBARA determines that the costs are front loaded and/or the distribution of costs is unreasonable, CONTRACTOR shall revise accordingly and resubmit the Schedule of Values within five (5) days for COUNTY OF SANTA BARBARA review.

3.04 BASELINE SCHEDULE CPM NETWORK

- A. No later than thirty days from the Notice to Proceed, CONTRACTOR shall submit a detailed Proposed Baseline Schedule that covers the entire duration of the Project. This schedule shall convey CONTRACTOR'S plan for organizing, managing, and executing the Work.
- B. The Proposed Baseline Schedule shall include activity descriptions, sequencing, logic relationships, duration estimates, cost loading by CSI section in accordance with General Conditions, resource loading of manpower, and other information as set forth in this Section.
 - 1. The Proposed Baseline Schedule shall include all Milestones as well as all activities required to achieve timely completion of the Milestones.
 - 2. The Proposed Baseline Schedule shall include activities for: all construction activities, the NTP, Milestones, submittals, coordination drawings, re-submittals, procurement of materials and equipment, manufacturing, fabrication & delivery, COUNTY OF SANTA BARBARA (CM/CDR) furnished contractor installed items (OFCl), access restrictions, work restrictions, phased occupancy, testing, start-up, and contract closeout activities. The Proposed Baseline Schedule shall allow a period for COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT to review each submittal, as required by Section 01 33 00 and other sections which require additional time for COUNTY OF SANTA BARBARA reviews and deferred submittal reviews.
 - 3. The Proposed Baseline Schedule shall include start and completion dates for: temporary facilities, construction of mock-ups, prototypes, samples, punch list, COUNTY OF SANTA BARBARA interfaces and furnishing of items, separate

work contracts, regulatory agency approvals, and permits required for performance of the Work.

4. The Proposed Baseline Schedule shall allow for all foreseeable factors and risks which affect performance of the Work. Include allowances for weather conditions in accordance with General Conditions, applicable laws, transportation, traffic, air quality, noise, or any other applicable regulatory requirements, regulations or collective bargaining agreements pertaining to labor.
 5. The Proposed Baseline Schedule shall include an activity with a minimum review period of one hundred days for all Deferred Approvals. In addition, as a predecessor to this activity, a separate 18-day COUNTY OF SANTA BARBARA (CM/CDR) review period shall be included in the Proposed Baseline Schedule.
 6. CONTRACTOR shall not use any float suppression techniques such as preferential sequencing or logic, special hidden lag time between activities or milestones, float absorption activities, or unjustifiable over-estimating of activity durations in preparing the Proposed Baseline Schedule. Finish Milestones should be constrained to a "Finish on or before" constraint. No "Zero Free Float" constraints, No "Early" Constraints, and No "Mandatory Finish" constraints shall be utilized.
 7. The Proposed Baseline Schedule shall include activity durations based on the crew sizes and equipment utilization that CONTRACTOR will maintain during the Project. No activity durations shall exceed fifteen (15) working days unless approved by the COUNTY OF SANTA BARBARA (CM/CDR). Non-construction activities such as procurement, delivery, or submittal activities are exempted. CONTRACTOR will need to perform their due-diligence to make sure that the activity man-power loading and activity durations are directly integrated.
 8. CONTRACTOR shall include with the Proposed Baseline Schedule a written narrative report sufficiently comprehensive to explain the rationale behind CONTRACTOR'S approach to the Work including but not limited to: activity durations, manpower flow, average crew sizes (by trade), equipment requirements, anticipated production rates, constraints, holidays and other non-work days, potential problem areas, permits, coordination with regulatory authorities, utilities, separate work contracts and other parties, and long lead delivery items requiring more than thirty days from the date of order to delivery to the Project site.
- C. At the COUNTY OF SANTA BARBARA'S request, furnish a detailed written explanation of CONTRACTOR'S basis for specific durations, logic, phasing, or other information. Such an explanation shall include CONTRACTOR'S rationale for selecting the number of crews, crew composition, number of shifts per day, number of hours in a shift, number of work days per week, construction equipment, and similar factors.
- D. The Proposed Baseline Schedule activities shall contain the following data:
1. Activity ID numbers shall consist of a built-in intelligence scheme. Following COUNTY OF SANTA BARBARA acceptance of the Baseline Schedule, Activity ID numbers shall not be changed.
 2. Activity Descriptions shall provide adequate information that readily identifies each activity, work scope, and location.
 3. At a minimum, activity codes specified in the General Conditions shall be applied to each activity. This is at the activity level and is different than WBS coding structure.

- 4. Cost accounts (in CSI Master Format) and Resource accounts shall be applied to each activity. They shall include lump sum costs, and man-hours/man-days (where applicable).
- E. At COUNTY OF SANTA BARBARA'S request, furnish a written explanation for each lead or lag relationship and each constrained date. Unjustifiable leads, lags, and constraints will result in COUNTY OF SANTA BARBARA'S rejection of the Proposed Baseline Schedule.
- F. Calendar Identification: In the scheduling software, identify all activities that will require overtime shifts, double shifts, and work on weekends or holidays. Identify non-work days and holidays in the schedule calendar. No holiday or non-work-day restrictions are permitted on this calendar. Within the schedule software, the CONTRACTOR shall not use Primavera Global Calendars from past projects, but rather shall use project specific calendars created for this specific contract. The Calendar coding shall be transferable and compatible with the COUNTY OF SANTA BARBARA calendars as to not distort any start/finish dates and "total float" values upon schedule re-calculation.
- G. Activity Codes: As a minimum, the Activity Codes shown in the Table 1 below shall be assigned to each activity.

Table 1

Name	Length	Description
TYPE	2	Type of activity (for example: mobilization, submittals, procurement/fabrication, construction, milestones, etcetera.)
AREA	2	Area or Building
STAG	2	Stage (for example: Foundations, Superstructure, Exterior, Interior, Roof, Floor Number etcetera.)
SBST	2	Substage (a specific area within a stage such as: main electrical room, kitchen, room number, etcetera.)
RESP	7	Responsible Party (subcontractor and/or trade)
DIV	2	CSI Division
SPEC	5	CSI Specification Section number

- 1. COUNTY OF SANTA BARBARA may require additional coding of activities. The mandatory activity code requirements listed in Table 1 are not to be construed as setting limits on CONTRACTOR'S management and coordination responsibilities but are intended to guide CONTRACTOR in the administration of its contractual responsibilities.
- H. Milestones: are designated dates in which Work or portions thereof are required to start and complete in accordance with the Contract Documents.
 - 1. Where the term completion or similar terms are used regarding a Milestone, it shall be construed to mean all portions of the Work in the indicated phase, area, and zone are complete and acceptable to COUNTY OF SANTA BARBARA. Where the term starts or similar terms are used in the designation of a Milestone, it shall be construed to mean a portion of the Work in the indicated phase, area, or zone is required to be commenced.
 - 2. A Proposed Baseline Schedule extending beyond the Milestones or Contract Time will not be acceptable.

3. Finish Milestones shall be constrained with "Finish on or before" type constraints in.
 4. In the P6 scheduling software, prior to opening the project, click the "dates" tab and place a "must finish by" date to match the Contract Completion Milestone date.
 5. A Proposed Baseline Schedule indicating Work completed in less time than the Milestones and/or Contract Time will not be acceptable. Rather, CONTRACTOR shall show any unused contract time as float available to the project.
 6. Milestones shall be placed on a calendar with seven days per week. No Holiday or non-work-day restrictions are permitted on this calendar.
- I. The Critical Path shall be clearly indicated on all schedules submitted. An activity is defined as critical when it is shown to be on the longest path from beginning to end.
 - J. CONTRACTOR shall allow for inclement weather in the Proposed Baseline Schedule by incorporating an activity titled "Rain Day Impact Allowance" as the last activity prior to the Completion Milestone. No other activities may be concurrent with it. The duration of the Rain Day Impact Allowance activity will be based on Table #2 below, and will be calculated from the Notice to Proceed until the original date of Completion.

Table 2: Cumulative Calendar Days "Rain Day Impact Allowance":

January	6	July	0
February	5	August	0
March	5	September	1
April	4	October	1
May	1	November	3
June	0	December	5

1. When inclement weather at the Project site impacts Critical Path activities, CONTRACTOR may provide the COUNTY OF SANTA BARBARA with a written request for a weather impact day describing the inclement weather delay on the Critical Path activities. The inclement weather delay must be clearly indicated by a 70 percent decrease in the field labor workforce hours on Critical Path activities on the day in question as indicated by CONTRACTOR'S Daily reports from the day in question and the scheduled work days prior to the day in question. Upon COUNTY OF SANTA BARBARA'S independent confirmation of the amount of rainfall and impact, COUNTY OF SANTA BARBARA will authorize CONTRACTOR to reduce the duration of the Rain Day Impact Allowance by one day.
2. Inclement weather on non-scheduled workdays shall not be granted as weather impact days. If CONTRACTOR asks to work a specific weekend or holiday and gives COUNTY OF SANTA BARBARA advanced, written notification of critical path work to be performed and a substantial amount of precipitation occurs that prevents the work from being performed, then that day can be claimed as a weather impact day. If the effects of inclement weather from a non-scheduled work day carry forward to a scheduled work day and impacts the Critical Path as noted above, then the scheduled work day will be considered impacted by weather. Any unused rain day allowance at the end of the project will be shown as available float to the Completion Milestone. Excusable, non-compensable time extensions will be granted for inclement weather to Completion milestone only after the weather impact area affecting the critical path work has exhausted the allotted cumulative Rain Day Impact Allowance. On projects that have multiple phases with defined start & finish dates, the cumulative rain impact allowance may be split up (pro-rated) into their designated phases upon COUNTY OF SANTA BARBARA Approval.

K. Cost loaded Activities:

1. Each activity included in the Proposed Baseline Schedule shall be assigned the cost CONTRACTOR estimates it will incur performing that activity. Each activity's assigned cost will be inclusive of overhead and profit so CONTRACTOR'S total overhead and profit is distributed over all activities on a pro rata basis. The sum of the costs assigned to activities shall equal the total contract value. No activity costs shall be assigned to manufacturing or delivery activities unless approved by COUNTY OF SANTA BARBARA. If COUNTY OF SANTA BARBARA finds that the costs are front loaded and the distribution of costs is unreasonable, CONTRACTOR shall redistribute the costs and resubmit the revised Schedule of Values within five days for COUNTY OF SANTA BARBARA backcheck.
2. CONTRACTOR shall cost load activities in the Proposed Baseline Schedule and allocate costs to related resource/cost accounts associated with each activity. The cost accounts shall match the CSI sections listed in the Table of Contents of the Specifications. All cost-loaded activities shall roll-up to their designated CSI sections and shall be the basis for the data reported in the Schedule of Values (Section 01 29 73), and Progress Payment Procedures (Section 01 29 76).
3. Submit computer generated reports using the scheduling software which will be the basis for the approved Schedule of Values. The reports shall contain the following data for each activity: Cost/Resource Account Number (by CSI section), Cost/Resource Account Description, Cost/Resource Account Budget, Cost to Date, Cost this Period, and Cost at Completion. Total Costs shall be organized and totaled by CSI section.
4. Submit a Cost Flow Histogram in accordance with General Conditions.

L. CONTRACTOR shall submit computer generated reports and plots with the Proposed Baseline Schedule submittal package. Format shall display the following columns: Activity ID, Activity Description, Original Duration, Remaining Duration, Percent Complete, Early Start, Early Finish, Late Start, Late Finish, and Total Float. Unless otherwise noted, bar charts and reports shall be on 8 ½ by 11 paper and bound.

1. Color Bar charts shall be generated separately for:
 - a. Milestones only.
 - b. All Activities sorted by Early Start date and organized by Project, Area, Stage, and Substage. (The network shall be organized to show continuous flow of all activities from left to right). CONTRACTOR is reminded that during the monthly schedule update process, even the activities that have already been completed need to be shown in this "all activities" bar chart report.
 - c. Activities sorted by Responsibility.
 - d. Summary level of all activities sorted by craft/trade and area.
 - e. Critical Path (Longest Path). The network shall be organized to show continuous flow of all critical activities on the longest path from left to right (sorted by early start).
2. Reports:
 - a. Total Float sorted low to high.
 - b. Predecessors and Successors sorted by Activity ID.
3. Cost Flow Histogram
 - a. Using the costs assigned to each activity, develop a Histogram that projects the estimated invoice amounts by month for the Project duration. The histogram

shall be produced from the scheduling software on 11" by 17" paper (landscape mode). It shall contain both a monthly bar histogram and a cumulative cost curve on the same graph. The Total Costs shall be based on the Early Dates option.

4. Man Power Histogram
 - a. Submit a planned man-power graphic bar histogram produced from the scheduling software on 11" by 17" paper (landscape mode) that displays total man-hours based on Early Dates. Show both a weekly bar histogram and a cumulative curve on same graph. In addition, provide a summary excel table of average crew sizes and peak crew sizes broken down by trade/subcontractor. CONTRACTOR will need to perform their due-diligence to make sure that the activity man-power loading is realistic and adequate based on material /labor cost estimates.
5. Provide a written narrative as required by General Conditions.
6. Electronic data: Provide an electronic file in its original format of the Schedule. The electronic P6 files shall be saved in "XER" type format. (Version 15.1)
7. Plots: Produce a color bar chart on E-size paper (30 by 42-inch) organized (at a minimum) by project, area, stage, and substage.

M. COUNTY OF SANTA BARBARA will notify CONTRACTOR of any adjustments that are required for the Proposed Baseline Schedule to be accepted. CONTRACTOR shall perform any required adjustments to the Proposed Baseline Schedule and resubmit it for acceptance certifying in writing that all information contained therein complies with the Contract Documents. COUNTY OF SANTA BARBARA will review the Proposed Baseline Schedule for accuracy, reasonableness, and conformance with the Contract Documents and shall provide comments within ten days of receipt. Within five days after receiving COUNTY OF SANTA BARBARA comments, CONTRACTOR shall both incorporate changes to address COUNTY OF SANTA BARBARA concerns and resubmit the Proposed Baseline Schedule for COUNTY OF SANTA BARBARA backcheck. This process will continue until the Proposed Baseline Schedule is accepted as the Baseline Schedule. Once accepted by COUNTY OF SANTA BARBARA, the Baseline Schedule will be the basis upon which CONTRACTOR shall prepare updates that record and report actual performance and progress. The accepted Baseline Schedule and subsequent Monthly Updates (reference General Conditions) shall be the basis for consideration and analysis of requests for time extensions and CONTRACTOR progress payments.

N. COUNTY OF SANTA BARBARA acceptance of the Baseline Schedule or CONTRACTOR'S failure to identify or include an element of the Contract, shall not release CONTRACTOR'S obligation to complete all required Work in accordance with the Contract Documents.

3.05 REQUIREMENTS FOR MONTHLY/WEEKLY SCHEDULE UPDATING

A. Once the Baseline Schedule is accepted by COUNTY OF SANTA BARBARA, CONTRACTOR shall copy the Approved Baseline file to a new name, status the activities with actual as-built data through the end of the month & submit Monthly Schedule Updates beginning with month No. 1. The current month's schedule update cannot be accepted until the previous Monthly Schedule Update has been accepted by COUNTY OF SANTA BARBARA. Each Monthly Schedule Update shall be submitted concurrently with the Monthly Pay Application no later than the fifth day of the succeeding month in accordance with the General Conditions.

B. Monthly Schedule Update Format.

1. Initially, the contractor shall status a current Monthly Schedule Update with actual Work progress only. No logic ties shall be modified. Status all Actual Start and Finish

dates, adjust Remaining Durations where needed, and update Percent Completion of cost and resource loaded activities. No activity Original Durations or Logic shall be changed unless authorized by COUNTY OF SANTA BARBARA. No new activities shall be added (except for the addition of new activities for every re-submittal and re-review required) or unless authorized by the COUNTY OF SANTA BARBARA.

2. Once the schedule is stasured in accordance with the General Conditions, CONTRACTOR shall print (and submit with Monthly Schedule Update) a report of "out-of-sequence" logic that results from the updating process. CONTRACTOR shall then correct all "out-of-sequence" logic to reflect CONTRACTOR'S actual Work sequence. Prior to submission of the Monthly Schedule Update, CONTRACTOR shall review and validate that all remaining activities along with their schedule relationships are still accurate based on the actual work flow in the field. If CONTRACTOR chooses to modify logic or add activities (other than out-of-sequence corrections), it shall be done in accordance with the General Conditions for COUNTY OF SANTA BARBARA Review & Approval. CONTRACTOR shall also submit a comparison report between the previous monthly schedule update and the current monthly update that will document the overall changes (i.e., comparison software such as "Digger", or "Schedule Analyzer", etc.).
3. During construction, CONTRACTOR may desire to break down specific activities into greater detail. If greater detail is necessary, then CONTRACTOR shall identify expanded activities such that the Baseline Schedule activities that the expanded activities originated from are readily apparent. CONTRACTOR shall not allow the aggregate duration of the expanded activities to exceed the duration assigned to the Baseline Schedule activity unless permitted by COUNTY OF SANTA BARBARA in writing.
4. Auto cost rules and calculation rules shall link Remaining Duration and Percent Complete.
5. The Data Date for the Monthly Schedule Updates shall be the first day of the succeeding month. At a minimum, three days prior to the submission of the Monthly Schedule Update, CONTRACTOR shall meet in person with COUNTY OF SANTA BARBARA to present the proposed Percentages of Completion and Actual Start and Actual Finish dates. Once percentages of completion and actual dates have been agreed to, they shall be the basis of the Monthly Schedule Update.
6. CONTRACTOR shall submit a Cost Histogram that overlays the planned cost curve from the Baseline Schedule, against the monthly cumulative "cost to date" curve, and against the remaining activities planned curve from the current Monthly Schedule Update.
7. Written Narrative Report: CONTRACTOR shall include a written report to explain the Monthly Schedule Update. The narrative shall, at a minimum include the following headings with appropriate discussions of each topic:
 - a. Introduction.
 - b. A Summary of Work which was on-going (This Pay Period).
 - c. Problem Areas and Proposed Solutions.
 - d. Critical Path.
 - e. Current and Anticipated Delays.
 - f. Coordination of Work with Others.
 - g. Milestone Status.

- h. Revisions: the standard schedule comparison report that compares the current update to the previous update shall be submitted to help document any variances/changes. However, this comparison report will not be accepted by COUNTY OF SANTA BARBARA in lieu of the above written narrative requirements outline above.
 - 8. In updating the Schedule, CONTRACTOR shall not modify Activity ID numbers, schedule calculation rules/criteria, or the Activity Coding Structure required.
 - 9. Submit bar charts, reports, a cost flow histogram, man-power histogram, written narrative, electronic data, and plots in accordance with the General Conditions.
 - 10. Submit a cost-loaded report (progressed monthly) produced from the scheduling software that displays all the activities organized by the CSI section cost/resource accounts. This report shall follow the General Conditions, Section 01 29 73 (Schedule of Values), and Section 01 29 76 (Progress Payment Procedures).
- C. Four-Week Rolling Schedule: At each Weekly Progress Meeting, CONTRACTOR shall present a Four-Week Schedule in Bar Chart format. It shall show one (1) week of actual and three (3) weeks of forecasted progress. The Four-Week Rolling Schedule shall be used as a basis for discussing progress and work planned during the three (3) weeks.
- 1. The Four-Week Rolling Schedule shall be based on the most recent COUNTY OF SANTA BARBARA Accepted Monthly Schedule Update. It shall include weekly updates to all construction, submittal, fabrication and procurement, and separate work contract activities. CONTRACTOR shall ensure that it accurately reflects the current progress of the Work.
 - 2. CONTRACTOR shall discuss at the weekly Progress meeting the actual dates and any variances to critical or near critical activities.
 - 3. Upon request by COUNTY OF SANTA BARBARA, CONTRACTOR shall provide the Four-Week Rolling Schedule in electronic format.
 - 4. If the Four-Week Rolling Schedule indicates activities are behind schedule, CONTRACTOR shall provide a Recovery Schedule in accordance with the General Conditions.
 - 5. If the CONTRACTOR chooses to provide a Four-Week Rolling Schedule in a greater level of detail (by trade/subcontractor) outside of the monthly contractual P6 schedule database, then upon CONTRACTOR REQUEST and COUNTY OF SANTA BARBARA written approval, the CONTRACTOR may proceed as long as the detailed activities roll-up to the contractual P6 monthly schedule updates. These detailed activities will need to be linked to the overall Completion date as to properly forecast whether the project is ahead or behind schedule during the weekly Progress Meetings. The Four-Week Rolling Schedule must accurately reflect the work that is going on during the current week and must accurately reflect what will happen in the next three weeks.

3.06 RECOVERY SCHEDULES

- A. If a Monthly Schedule Update indicates negative float greater than ten (10) days on a critical path as result of events not predicated by the General Conditions CONTRACTOR shall prepare a Proposed Recovery Schedule demonstrating CONTRACTOR'S plan to regain the time lost. The Recovery Schedule shall be submitted either in advance of or concurrent with the Monthly Schedule Update and CONTRACTOR progress request. Both the Monthly Schedule Update and the Proposed Recovery Schedule shall be based on the same percentages of completion and actual dates accepted by COUNTY OF SANTA BARBARA under the General Conditions.

- B. The Proposed Recovery Schedule shall be based on a copy of the Monthly Schedule Update for the calendar month during which the negative float first appears.
- C. The Proposed Recovery Schedule shall include a written narrative that identifies the causes of the negative float on the critical path and provides CONTRACTOR'S proposed corrective action to ensure timely completion of all Milestones and the Completion Date. CONTRACTOR'S corrective actions shall include but are not limited to increasing concurrent operations, increasing labor, adding multiple shifts in a 24-hour period, and adding overtime.
- D. During any period when CONTRACTOR is found to be behind schedule by COUNTY OF SANTA BARBARA, the Monthly Schedule Update described above shall become a weekly requirement (at no additional cost to COUNTY OF SANTA BARBARA) to provide a greater degree of focus on the timely completion of the Work. These Updates shall be submitted to COUNTY OF SANTA BARBARA every Monday morning. When CONTRACTOR is deemed by COUNTY OF SANTA BARBARA to be back on schedule, CONTRACTOR may revert to submitting the schedule monthly.
- E. CONTRACTOR'S progress payment may not be processed until COUNTY OF SANTA BARBARA accepts the Proposed Recovery Schedule. Following such an acceptance, the Proposed Recovery Schedule will be known as the Recovery Schedule and future Work will be performed by CONTRACTOR in accordance with it.

3.07 FRAGNETS AND TIME EXTENSION REQUESTS

- A. Float is not for exclusive use or benefit of either COUNTY OF SANTA BARBARA or CONTRACTOR but is an expiring resource available to both parties on a non-discriminatory basis. If required to meet specified Milestones, either party may utilize float. Adjustments to Milestones or Contract Time will only be authorized by Change Order and only to the extent the claimed adjustments exceed total float along the most critical path of the current Monthly Schedule Update in effect at the time of the claimed adjustments. The claimed adjustments to the Milestones and/or Contract Time must also cause the Completion Date to exceed that currently indicated in the Monthly Schedule Update. No time extensions will be granted nor delay damages paid under contract until all available float is used and the CONTRACTOR obtains a Time Extension Request approval from the COUNTY OF SANTA BARBARA in accordance with the General Conditions in its entirety. CONTRACTOR claimed adjustments to an existing negative float path will not receive consideration until the activity with the highest negative float is driven even further negative.
 - 1. Claimed adjustments to the Milestones or Contract Time will be administered in conjunction with those set forth in the General Conditions.
- B. Pursuant to the float sharing requirements of this Section, the use of float suppression techniques such as preferential sequencing or logic, special lead or lag logic restraints, and extended activity times or durations are prohibited. The use of float time disclosed or implied using alternate float suppression techniques shall be proportionally shared to benefit COUNTY OF SANTA BARBARA and CONTRACTOR. The use of any technique solely for the purpose of suppressing float will result in COUNTY OF SANTA BARBARA rejection of the submitted Monthly Schedule Update.
- C. In the event CONTRACTOR believes the Project has suffered an adverse impact arising from events predicated by the General Conditions, CONTRACTOR may prepare a Time Extension Request by submitting a Schedule Fragnet and a written narrative outlining the detail of the impact. A Schedule Fragnet must demonstrate a critical path delay. Such a delay must adversely impact the Completion Date for CONTRACTOR to receive a time extension. To demonstrate such an impact successfully, CONTRACTOR shall prepare a Schedule Fragnet based on a copy of COUNTY OF SANTA BARBARA accepted Monthly

Schedule Update for the calendar month during which the adverse impact occurred. This "copy" of the COUNTY OF SANTA BARBARA accepted Monthly Schedule Update shall however first be updated (by COUNTY OF SANTA BARBARA and CONTRACTOR jointly) with both Percentages of Completion and Actual Dates up to the day the delay commenced. This process will provide the "pre-delay" project status. Once COUNTY OF SANTA BARBARA and CONTRACTOR have agreed to the "pre-delay" project status, CONTRACTOR should make a copy of this "pre-delay" schedule and this copy is to be the starting point for CONTRACTOR'S Schedule Fragnet development. COUNTY OF SANTA BARBARA will evaluate the activities, logic, durations, etcetera, in the Schedule Fragnet and will evaluate if the adverse impact arose from events described by the General Conditions. The Fragnet shall also include CONTRACTOR-caused delays that affect the critical or near critical path in the network and should be accounted for in the Time Impact Analysis if overlapped at any point in time with COUNTY OF SANTA BARBARA-caused delay. If rain impact days were granted between the Start and Finish of COUNTY OF SANTA BARBARA-caused delay period, they should be accounted for in the Time Impact Analysis as well. Provided COUNTY OF SANTA BARBARA determines such an impact occurred, CONTRACTOR may be due a time extension equal to the number of proportioned days of variance/delay that resulted to the Completion Date.

- D. Activities added into a Schedule Fragnet to demonstrate the impact of adverse event shall be assigned a unique activity code. The Schedule shall be organized by this unique activity code.
- E. The Schedule Fragnet shall incorporate logic that accurately ties reflective of the adverse event to pre-event predecessor activities and post event successor activities.
- F. The format and components of a Schedule Fragnet submittal shall be in accordance with this Section and the General Conditions. It is crucial for the Fragnet to be submitted within the same month of discovery so it can be resolved during the monthly schedule update review. The notice shall be transmitted to COUNTY OF SANTA BARBARA within the stipulations outlined in the General Conditions.
- G. If COUNTY OF SANTA BARBARA accepts CONTRACTOR'S Schedule Fragnet and an extension is granted, a Change Order will be prepared. COUNTY OF SANTA BARBARA will advise what change order number the time extension will become. When CONTRACTOR receives this Change Order number, all the activities added to the Schedule Fragnet shall be given Activity Identification Numbers that corresponds with the Change Order number. CONTRACTOR shall cost load and resource-load the activities if required by COUNTY OF SANTA BARBARA. If resource loading is required, the resource loading shall include a breakdown of labor, material, and equipment quantities.
- H. If COUNTY OF SANTA BARBARA rejects CONTRACTOR'S Schedule Fragnet in part based on improper forecast logic or activity tasks then it shall be revised accordingly to conform to COUNTY OF SANTA BARBARA'S review comments and resubmitted. If the forecast logic and activity tasks cannot be agreed to then the pre-delay schedule outlined in the General Conditions shall be compared to the actual as-built data in the succeeding month of the encountering issue, event, condition, circumstance, and/or cause. The variance to the project between the pre-delay and post delay schedules shall be discussed in CONTRACTOR'S written narrative and proportioned between the different parties involved in the delay.
- I. If COUNTY OF SANTA BARBARA rejects CONTRACTOR'S Schedule Fragnet in whole then CONTRACTOR may follow the procedures set forth in the General Conditions.

3.08 PAYMENT FOR SCHEDULING

- A. The Work of this Section will be included as part of the bid price.

- B. Preparation, revising, maintenance, and compliance with this Section and Section 01 29 73 is an integral part of the Contract Documents and is specified to have a minimum value equal to 2 percent of the original Contract Amount or \$150,000, whichever is less. This amount shall be proportionally cost loaded into two activities in both the Proposed Baseline Schedule and the Schedule of Values described in Section 01 29 73. One activity for the "Baseline Schedule" and the other activity for the "Monthly Schedule Update Process" as follows:
1. CONTRACTOR may allocate twenty percent (20 percent) of the total cost and place in the "Baseline Schedule" activity. It can then be billed against when the COUNTY OF SANTA BARBARA accepts the Proposed Baseline Schedule as the Baseline Schedule.
 2. The remaining eighty percent (80 percent) may be cost loaded into the "Monthly Schedule Update Process" activity. This amount may be billed in equal monthly increments. The amount of those increments is determined by dividing the remaining cost by the total number of months in the Contract Time. Payment of these incremental amounts is contingent upon COUNTY OF SANTA BARBARA acceptance of CONTRACTOR Monthly Schedule Updates, Recovery Schedules, Four-Week Rolling Schedules, Fragnets, Time Impact Analysis, and the updated Log of Required Submittals.
 3. The CONTRACTOR shall anticipate in their base contract scope that numerous Fragnets and written time impact analyses will be required during the duration of the project with the Monthly Schedule Updates. Requests for extra scheduling services will not be considered until the CONTRACTOR demonstrates that all the costs stipulated in the General Conditions has been expended.

3.09 FAILURE TO COMPLY WITH REQUIREMENTS

- A. At any time during the project if CONTRACTOR fails to comply with the specified requirements, COUNTY OF SANTA BARBARA reserves the right to engage independent estimating and scheduling consultants to fulfill these requirements. Upon notice to CONTRACTOR, COUNTY OF SANTA BARBARA shall assess against CONTRACTOR, incurred costs for these additional services.
- B. In such an event, COUNTY OF SANTA BARBARA will require, and CONTRACTOR shall participate and provide requested information to ensure the resulting Milestones Schedule accurately reflects CONTRACTOR's plan to execute the Work in compliance with the Contract Documents. If it becomes necessary for COUNTY OF SANTA BARBARA to recommend logic or duration revisions because of CONTRACTOR failure to furnish acceptable data, and if CONTRACTOR has objections to the recommendations, CONTRACTOR shall provide notice to COUNTY OF SANTA BARBARA within three days and CONTRACTOR shall provide an acceptable alternate plan. If CONTRACTOR fails to so note any objections and provide an acceptable alternate plan, or if CONTRACTOR implements the recommendations of COUNTY OF SANTA BARBARA without so noting any objections, CONTRACTOR will be deemed to have waived all objections and concurred with the recommended logic/duration revisions provided by ARCHITECT and/or COUNTY OF SANTA BARBARA.
- C. Submittal of any Monthly Schedule Updates are subject to review and acceptance by COUNTY OF SANTA BARBARA. COUNTY OF SANTA BARBARA retains the right, including, but not limited to the General Conditions, to withhold progress payments in whole or part until CONTRACTOR submits a Monthly Schedule Update acceptable to COUNTY OF SANTA BARBARA. If a Monthly Schedule Update is "Rejected" due to the COUNTY OF SANTA BARBARA not receiving a satisfactory schedule that accurately reflects the on-going work activities, the COUNTY OF SANTA BARBARA will mandate a separate meeting with the CONTRACTOR and approved Scheduler to remedy the

non-conformance. If after the 2nd consecutive months, the COUNTY OF SANTA BARBARA still has to "Reject" the monthly Schedule update due to non-conformance, then the CONTRACTOR'S Scheduler will need to be replaced at no additional cost to the COUNTY OF SANTA BARBARA. CONTRACTOR shall within one week of disapproval, propose another Scheduler who meets the experience requirements stated in this Section.

3.10 CONTRACTOR RESPONSIBILITY

- A. Nothing in this Section shall be construed to be a usurpation of CONTRACTOR authority, responsibility, and obligation to plan and schedule Work as CONTRACTOR deems necessary, subject to all other requirements of the Contract Documents.
- B. CONTRACTOR shall involve the subcontractors, manufacturers, and suppliers in the development and periodic updating of the schedule.

3.11 RECORD DOCUMENTS / FINAL AS-BUILT SCHEDULE

- A. Prior to Contract Completion of the Work, CONTRACTOR shall submit a final as-built schedule, and a time-scaled network diagram reflecting the actual dates of all activities. This shall be submitted prior to the final application of payment and prior to the request to release retention.

END OF SECTION

SECTION 01 32 14

CONSTRUCTION MILESTONES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Requirements for Construction Milestones include logistics, phasing, and completion of designated phases prior to commencement of subsequent phases.

1.02 RELATED REQUIREMENTS

- A. Section 01 11 00: Summary of Work.
- B. Section 01 31 13: Project Coordination.
- C. Section 01 32 13: Construction Schedule.
- D. Section 01 32 14A: Construction Milestones – Appendix A.
- E. Section 01 33 00: Submittal Procedures.
- F. Section 01 50 00: Construction Facilities and Temporary Controls.
- G. Section 01 77 00: Contract Closeout.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

3.01 SUBMITTALS

- A. CONTRACTOR shall submit a Project site logistics plans in accordance with and as required by this Section.

3.02 LOGISTICS

- A. Prior to commencement of Work, CONTRACTOR shall prepare and submit to COUNTY'S Construction Manager, a detailed Project site logistic plan, in same size and scale of Drawings, setting forth CONTRACTOR plan of Work relative to following, but not limited to, items:
 1. Hauling route(s) shall be in accordance with local ordinances, inclusive of a truck access route to and from Project site.
 2. The identification of any overhead wire restrictions for power, street lighting, signal, or cable.
 3. Local sidewalk access and street closure requirements.
 4. Protection of sidewalk pedestrians and vehicular traffic.
 5. Project site fencing and access gate locations.
 6. Construction parking.
 7. Material staging or delivery areas.

8. Material storage areas.
 9. Temporary trailer locations.
 10. Temporary service location and proposed routing of all temporary utilities.
 11. Location of temporary or accessible fire protection.
 12. Trash removal and location of dumpsters.
 13. Concrete pumping locations.
 14. Crane locations.
 15. Location of portable sanitary facilities.
 16. Mixer trucks wash out locations.
 17. Traffic control signage.
 18. Perimeter and site lighting.
 19. Storm Water Pollution Prevention Plan – SWPPP.
 20. Stockpile or lay down areas.
 21. Security lighting
- B. Revised Project site logistic plan may be required by CONSTRUCTION MANAGER for separately identified phases of Work as set forth in this Section.
- C. CONTRACTOR is responsible for securing and/or obtaining all approvals and permits from authorities having jurisdiction relative to any activities set forth in Article 3.02.A.
- D. If required CONTRACTOR shall consider 6-day workweek to complete the work to meet the COUNTY approved Construction contract time into their Construction Schedule.

3.03 CONSTRUCTION MILESTONES

- A. Project will be constructed in separate Milestone increments, as identified, or as described in this Section or Contract Documents. Phasing will also delineate Work to be completed in each designated phase. Unless otherwise approved or directed by COUNTY, each phase shall be completed according to approved Baseline Schedule prior to commencement of next subsequent phase. CONTRACTOR shall incorporate and coordinate Work of Separate Work Contracts relative to this Project into the Phasing and Construction Schedule.
- B. CONTRACTOR shall install all necessary Work for, but not limited to, power, lighting, signal, HVAC, drainage, and plumbing systems in phased Work before completion of designated phase. All valves, pull boxes, stub outs, temporary capping, and other Work necessary for phased completion and operation of all necessary systems shall be provided whether or not such Work is specifically identified in Contract Documents.

3.04 ORGANIZATION – GENERAL

- A. CONTRACTOR shall prepare Construction Schedule in order to complete Work and related activities in accordance with the construction milestones as established in Appendix “A”. CONTRACTOR shall obtain CONSTRUCTION approval on the milestones schedule prior to Baseline Schedule submittal. CONTRACTOR shall include all costs to complete all Work within Milestones or Contract Time. CONTRACTOR is required to mobilize and start construction of the entire site simultaneously.
- B. COUNTY will be seriously damaged by not having all Work completed within Milestones or Contract Time. It is mandatory Work be complete within Milestones or Contract Time.

To avoid any impacts to the COUNTY approved Milestones or Contract Time, CONTRACTOR to consider 2 shift recovery schedules, as necessary.

3.05 ORGANIZATION – SPECIFIC

- A. CONTRACTOR shall prepare Construction Baseline Schedule, and shall complete following, but not limited to Milestones, as shown in Section 01 32 1A A – Appendix
- B. The Contract Time shall be a total of 766 calendar days from date of commencement of Contract Time.

END OF SECTION

01 32 14A – CONSTRUCTION MILESTONES

APPENDIX A – CONSTRUCTION MILESTONES

CONTRACTOR shall commence performance of the Contract upon the date specified in the Notice to Proceed and shall furnish sufficient forces, facilities and materials, work such hours, including extra shifts and overtime operations, so as to fully perform the Work in accordance with the following Milestones.

Milestone	Description	Milestone Completion Date*	Completion Date
No. 1	Notice to Proceed: Is established in accordance with Document 00 21 13, Instructions to Bidders, Document 00 65 10, Notice to Proceed and Document 00 70 00 Article 15.1 of the General Conditions.	As specified by NTP.	As specified by NTP.
No. 2	Preliminary Construction Schedule: In accordance with Article 10.1.1.1 of the General Conditions, Contractor shall provide a preliminary schedule of construction indicating the starting and completion dates of the various stages of the Work, including any information, and following any form as may be specified in the Specifications. Once approved by County, this shall become the Construction Baseline Schedule. This schedule shall include and identify all tasks that are on the Project’s critical path with a specific determination of the start and completion of each critical path task, all contract milestones and each milestone’s completion date(s) as may be required by the County, and the date of Project Completion.	10 calendar days after the effective date of the NTP.	
No. 3	Schedule of Submittals: In accordance with Articles 10.1.1.2, 10.5, 10.6, 10.7, 10.8 & 10.9 of the General Conditions, Contractor shall provide a preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals. Once approved by County, this shall become the Submittal Schedule. All submittals shall be forwarded to the County by the date indicated on the approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those submittals shall be forwarded to the County so as not to delay the Construction Schedule. Milestones may include, but not be limited to, Shop Drawings and Submittals that are either critical or near critical to the overall Completion of the Project, Deferred Approvals steel Shop Drawings, excavation support system drawings, seismic calculations, shoring system drawings, or any long lead fabrication/procurement item requiring Shop Drawings.	10 calendar days after the effective date of the NTP.	

* Milestone date to be determined by CONTRACTOR during development of the Construction Baseline Schedule and submitted to the COUNTY’S CONSTRUCTION MANAGER for approval.

Milestone	Description	Milestone Completion Date*	Completion Date
No. 4	<p>Schedule of Values: In accordance with Article 10.1.1.3 of the General Conditions, the Contractor shall provide a preliminary schedule of values for all component parts of the Work for which progress payments may be requested. The schedule of values must include quantities and prices of items totaling the Contract Price and must subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. The preliminary schedule of values should include, at a minimum, the following information Overhead and Profit; Supervision; General Conditions; Layout; Mobilization; Submittals; Bonds and Insurance; Closeout Documentation; Demolition; Installation; Rough-In; Finishes; Testing; Punch List and Acceptance. Divided by each of the following areas: Site Work; By each building; By each floor. The preliminary schedule of values shall not provide for values any greater than the following percentages of the Contract value: Mobilization and layout combined to equal not more than 1%; Submittals, samples and shop drawings combined to equal not more than 3%; Bonds and insurance combined to equal not more than 2%; Closeout Documentation shall have a value in the preliminary schedule of not less than 5%.</p>	10 calendar days after the effective date of the NTP.	
No. 5	<p>Safety Plan: In accordance with Article 10.1.1.4 of the General Conditions, the Contractor shall provide a preliminary Contractor's Safety Plan specifically adapted for the Project. Contractor's Safety Plan shall comply with the following requirements: (1) All applicable requirements of California Division of Industrial Safety ("CalOSHA") and/or of the United States Occupational Safety and Health Administration ("OSHA"). (2) All provisions regarding Project safety, including all applicable provisions in these General Conditions. (3) Contractor's Safety Plan shall be prepared in both English and in the predominant language(s) of the Contractor's and its Subcontractors' employees.</p>	10 calendar days after the effective date of the NTP.	
No. 6	<p>Complete Subcontractor List: In accordance with Article 10.1.1.5 of the General Conditions, the Contractor shall provide a preliminary Subcontractor List stating the name, address, telephone number, e-mail address, California State Contractors License number, classification, and monetary value of all Subcontracts for parties furnishing labor, material, or equipment for the Project.</p>	10 calendar days after the effective date of the NTP.	
No. 7	<p>Completion of Site Logistics Plan: In accordance with Article 10.4 of the General Conditions and Specifications Section 01 12 20, Site Logistics Plan, the Contractor shall provide a Site Logistics Plan for review and approval by the County's Construction Manager, prior to site mobilization.</p>	Prior to completion of site mobilization.	

* Milestone date to be determined by CONTRACTOR during development of the Construction Baseline Schedule and submitted to the COUNTY'S CONSTRUCTION MANAGER for approval.

Milestone	Description	Milestone Completion Date*	Completion Date
No. 8	Completion of Mobilization Activities: Is defined as CONTRACTOR mobilization completed, logistics plan submittal and approval (access, gates, parking, trailer locations, signage), site fencing complete, temporary offices complete (trailers- fully functional with furniture, office equipment, network connection and office supplies., storage bins, dumpsters), temporary Utilities complete (water, electric, phone, sanitation, fire protection), Project signage complete, obtain all required permits, implementation of Storm Water Pollution Prevention measures, submission of CONTRACTOR Safety Plan, submission of CONTRACTOR Hazard Communication Plan.	30 calendar days after the effective date of the NTP.	
No. 9	Baseline Schedule Complete: Is defined as County's Construction Manager approved baseline schedule, meeting the schedule requirements of the General Conditions, Special Conditions and Division 01 Sections 01 32 13, Construction Schedule and 01 32 14, Construction Milestones.	90 calendar days after the effective date of the NTP.	
No. 11	Building Pad Certification: Shall be separately listed for each building and is defined as building areas excavated, graded, and surveyed in accordance with Division 01 Section 01 71 23, Field Engineering.	Contractor to submit for Review & Approval by OWNER.	
No. 12	Site Underground Utilities Complete: Defined as all underground utilities (mechanical, electrical, and plumbing) installed from the point of supply to five feet outside the building line, inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 13	Foundations Complete: Defined as all rebar, formwork, and concrete in place, inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 14	Structural System Complete: Defined as the structural system completely erected, tested, and inspected by the PROJECT INSPECTOR>.	Contractor to submit for Review & Approval by OWNER.	

* Milestone date to be determined by CONTRACTOR during development of the Construction Baseline Schedule and submitted to the COUNTY'S CONSTRUCTION MANAGER for approval.

Milestone	Description	Milestone Completion Date*	Completion Date
No. 15	Roofing Systems Complete: Defined as roofing system completely installed and inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 16	Exterior Painting Complete: Defined as exterior finish coat completed and inspected by PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 17	Utility Provider Access: Shall be separately listed for each utility and is defined as complete access to all areas and rooms for electrical, water, gas, sewer, cable and telephone incoming and distribution services.	Contractor to submit for Review & Approval by OWNER.	
No. 18	Permanent Lighting Functional: Defined as all lighting fixtures installed and wires leading to light sources, dimmers, control panels, and transformers to be completely pulled, terminated, tested, and operational with permanent and/or temporary power and inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 19	Electrical Equipment Energized (Permanent Power): Defined as all major electrical equipment (transformers, MCC's, CIC's, control panels, switches, etc.) installed with points of contact terminated, tested, inspected by the PROJECT INSPECTOR and energized with permanent power.	Contractor to submit for Review & Approval by OWNER.	
No. 20	HVAC Equipment Complete: Defined as all HVAC ducting installed, system fans and units operational, controls installed and operational, inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 21	HVAC Test and Balance: Defined as HVAC equipment fully tested and balanced with verified test and balance reports submitted to ARCHITECT.	Contractor to submit for Review & Approval by OWNER.	

* Milestone date to be determined by CONTRACTOR during development of the Construction Baseline Schedule and submitted to the COUNTY'S CONSTRUCTION MANAGER for approval.

Milestone	Description	Milestone Completion Date*	Completion Date
No. 22	Electrical UPS Complete: Defined as Uninterrupted Power Supply system installed, operational, tested, and inspected by PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 23	Mechanical Room Complete: Defined as all mechanical equipment inside the mechanical room to be installed, operational, tested, and inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 24	Plumbing Complete: Defined as all plumbing systems installed, operational, tested, and inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 25	Interior Painting Complete: Defined as interior finish painting complete and inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 26	Computer Networking Systems: Defined as all racks and cabinets (MDF/IDF/LDF), hardware components (switches, panels, UPS, routers, etc.) pathways, cables, and termination hardware. System shall be installed in accordance with contract documents and shall be 100% tested for defects in installation and to verify system operation and required performances. All system "close-out" documentation and material shall be submitted and approved.	Contractor to submit for Review & Approval by OWNER.	
No. 27	Intrusion Alarm System: defined as all pathways, cabling, motion detectors, main security key switch or keypad and alarm controller installed in accordance with contract documents and shall be 100% tested for proper operation and lack of defects in installation. All system "close-out" documentation and material shall be submitted and approved.	Contractor to submit for Review & Approval by OWNER.	

* Milestone date to be determined by CONTRACTOR during development of the Construction Baseline Schedule and submitted to the COUNTY'S CONSTRUCTION MANAGER for approval.

Milestone	Description	Milestone Completion Date*	Completion Date
No. 29	Fire Sprinklers Complete: Defined as all fire sprinkler piping complete, including sprinkler heads, joints, valves, escutcheons, solenoids, and actuators. Inclusive of sprinkler lines primed, completely tested, and inspected by the PROJECT INSPECTOR, State Fire Marshall and the City or County Fire Authority having jurisdiction.	Contractor to submit for Review & Approval by OWNER.	
No. 30	Fire Alarm Complete: Defined as fire annunciator control panel installed and completely tested, fire suppression equipment installed, egress plans submitted, and alarm system inspected by the PROJECT INSPECTOR, State Fire Marshall and the City or County Fire Authority having jurisdiction.	Contractor to submit for Review & Approval by OWNER.	
No. 31	Owner Furnished Contractor Installed (OFCI) Materials: Coordination and access shall be provided to a Separate Work Contractor and/or OWNER for delivery of OFCI materials in accordance with Document 01 64 00, Owner-Furnished Equipment.	Contractor to submit for Review & Approval by OWNER.	
No. 32	Hardscape Complete: Is defined as all asphalt/concrete, or outdoor hard surface complete in accordance with Drawings and Specifications and inspected by the PROJECT INSPECTOR.	Contractor to submit for Review & Approval by OWNER.	
No. 33	Final Inspection: Completion of above Milestones 11 to 34, as applicable, and completing the Final Inspection in accordance with Document 00 70 00 Article 20.3 of the General Conditions and Document 00 71 00 Articles 65 and 66 of the Special Conditions.	730 calendar days after the effective date of the NTP.	
No. 34	Administrative Closeout / Contract Completion: Is established in accordance with Document 01 77 01, Contract Closeout and Document 00 70 00 Article 21 of the General Conditions. Note: Contract Completion shall occur a maximum 30 days after Completion.	766 calendar days after the effective date of the NTP.	

END OF SECTION

* Milestone date to be determined by CONTRACTOR during development of the Construction Baseline Schedule and submitted to the COUNTY'S CONSTRUCTION MANAGER for approval.

SECTION 01 32 33

PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Preconstruction photography.
 - 2. Construction photography and time-lapse photography of work-in-progress.

1.02 GENERAL

- A. Provide photographs at locations designated by ARCHITECT, including aerial views.
- B. Photographer: Specialist, experienced in taking construction photography and time-lapse photography.
- C. Equipment:
 - 1. As necessary to photograph both interior and exterior exposures.
 - 2. Utilize full range of lenses, including wide angle, telephoto and 360 degree.
 - 3. If drones are used for aerial views, provide proof of FAA Certificated Drone Pilot and Drone Insurance.

1.03 SUBMITTAL REQUIREMENTS

- A. Make photo submittals, to COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT, along with each monthly Application for Payment.
- B. Electronic Format:
 - 1. Submit electronic files in jpeg format produced by digital camera with minimum resolution of not less than 3200 by 2400 pixels with minimum sensor size of 8 megapixels.
 - 2. Submit without alteration, manipulation, editing, or modifications using image-editing software.
 - 3. Date and Time: Include date and time in file name for each image.
- C. Cloud based web application for 360-degree images shared with COUNTY OF SANTA BARBARA(CM/CDR) , ARCHITECT and CONTRACTOR.

1.04 PRECONSTRUCTION PHOTOGRAPHS

- A. Take photographs prior to beginning Work of this Contract.
- B. Provide 10 Project Site photographs, including one aerial view.

1.05 CONSTRUCTION PHOTOGRAPHS

- A. Construction progress photography shall use both still and 360-degree photography to photo document work progress and site conditions. 360-degree photography shall use a cloud-based web application or program that allows photos to be organized and displayed on plan view drawings and accessed real time by the COUNTY OF SANTA BARBARA (CM/CDR), ARCHITECT and project team. At project closeout, deliver to the COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT a stand-alone PDF export of the entire project photo documentation.
1. Take construction photographs, beginning two weeks after last preconstruction photograph, and continuing every other week for duration of the Work.
 2. Take a minimum of one photo per area within the structure. For areas greater than 500 square feet, take one photo for every 250 square feet of area. Take additional photographs as needed to fully document Project.
 3. Take one exterior photo every 300 feet of building perimeter. Take additional photographs as needed to fully document Project.
- B. Provide three (3) independent single point stationary time-lapse photography cameras. The stationary time-lapse cameras shall be mounted to allow a wide range of view of the entire project. The location of stationary time-lapse cameras shall be approved by the COUNTY OF SANTA BARBARA (CM/CDR) and ARCHITECT. Time-lapse photos shall be taken every 10 minutes 24 hours per day seven days per week through the course of construction. Time-lapse photos shall be accessible real-time on the web. At project closeout, time-lapse photos shall be permanently archived and remain viewable by the COUNTY OF SANTA BARBARA and ARCHITECT.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SECTION 01 33 00
SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Submittal schedule requirements.
2. Administrative and procedural requirements for submittals.

B. Related Requirements:

1. Section 012900 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
2. Section 013100 "Project Management and Coordination" for submitting coordination drawings and subcontract list and for requirements for web-based Project software.
3. Section 013200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
4. Section 013233 "Photographic Documentation" for submitting preconstruction photographs, periodic construction photographs, and Final Completion construction photographs.
5. Section 017700 "Closeout Procedures" for submitting closeout submittals and maintenance material submittals.
6. Section 017823 "Operation and Maintenance Data" for submitting operation and maintenance manuals.
7. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
8. Section 017900 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's and Construction Manager's (CM/CDR) responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's and Construction Manager's responsive action.

Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and Construction Manager and additional time for handling and reviewing submittals required by those corrections.
1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 2. Initial Submittal Schedule: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 3. Final Submittal Schedule: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule as required to reflect changes in current status and timing for submittals.
 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal Category: Action; informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for Architect's and Construction Manager's final release or approval.
 - g. Scheduled dates for purchasing.
 - h. Scheduled date of fabrication.
 - i. Scheduled dates for installation.
 - j. Activity or event number.

1.4 SUBMITTAL FORMATS

- A. Submittal Information: Include the following information in each submittal:
1. Project name.

2. Date.
3. Name of Architect.
4. Name of Construction Manager.
5. Name of Contractor.
6. Name of firm or entity that prepared submittal.
7. Names of subcontractor, manufacturer, and supplier.
8. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier and alphanumeric suffix for resubmittals.
9. Category and type of submittal.
10. Submittal purpose and description.
11. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
12. Drawing number and detail references, as appropriate.
13. Indication of full or partial submittal.
14. Location(s) where product is to be installed, as appropriate.
15. Other necessary identification.
16. Remarks.
17. Signature of transmitter.

B. Options: Identify options requiring selection by Architect.

C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect and Construction Manager (CM/CDR) on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.

D. Paper Submittals:

1. Place a permanent label or title block on each submittal item for identification; include name of firm or entity that prepared submittal.
2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect and Construction Manager (CM/CDR).
3. Action Submittals: Submit three paper copies of each submittal unless otherwise indicated.
4. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated.
5. Additional Copies: Unless additional copies are required for final submittal, and unless Architect or Construction Manager (CM/CDR) observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
6. Transmittal for Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using Owner approved transmittal form.

- E. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.
- F. Submittals Utilizing Web-Based Project Software: Prepare submittals as PDF files or other format indicated by Project management software.

1.5 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Email: Prepare submittals as PDF package and transmit to Architect by sending via email. Include PDF transmittal form. Include information in email subject line as requested by Architect.
 - a. Architect, through Construction Manager (CM/CDR), will return annotated file. Annotate and retain one copy of file as a digital Project Record Document file.
 - 2. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project management software website. Enter required data in web-based software site to fully identify submittal.
 - 3. Paper: Prepare submittals in paper form and deliver to Architect.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 - 4. Coordinate transmittal of submittals for related parts of the Work specified in different Sections, so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect and Construction Manager (CM/CDR) reserve the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Construction Manager's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow fourteen 14 calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Construction Manager (CM/CDR) will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 3. Resubmittal Review: Allow fourteen (14) calendar days for review of each resubmittal.
 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow twenty-one (21) calendar days for initial review of each submittal.
 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow fourteen (14) calendar days for review of each submittal. Submittal will be returned to Construction Manager (CM/CDR), through Architect, before being returned to Contractor.
 - a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect and Construction Manager.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked with approval notation from Architect's and Construction Manager's action stamp.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's and Construction Manager's action stamp.

1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.

2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data unless submittal based on Architect's digital data drawing files is otherwise permitted.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Paper Sheet Size: Except for templates, patterns, and similar full-size Drawings, submit Shop Drawings on sheets at least [8-1/2 by 11 inches, but no larger than 30 by 42 inches].
 3. BIM Incorporation: Incorporate Shop Drawing files into BIM established for Project. Refer to Section 01 31 25 Building Information Modeling.

C. Samples: Submit Samples for review of type, color, pattern, and texture for a check of these characteristics with other materials.

1. Transmit Samples that contain multiple, related components, such as accessories together in one submittal package.
2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
 - a. Project name and submittal number.
 - b. Generic description of Sample.
 - c. Product name and name of manufacturer.
 - d. Sample source.
 - e. Number and title of applicable Specification Section.
 - f. Specification paragraph number and generic name of each item.
3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics and identification information for record.
4. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
5. Paper Transmittal: Include paper transmittal, including complete submittal information indicated.
6. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
7. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units, showing the full range of colors, textures, and patterns available.
8. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

- 1) Submit a single Sample where assembly details,

workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.

- 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three (3) sets of paired units that show approximate limits of variations.

D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

- 1.Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
- 2.Manufacturer and product name, and model number if applicable.
- 3.Number and name of room or space.
- 4.Location within room or space.

DI. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects, owners (, and other information specified.

DII. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.

DIII. Certificates:

- 1.Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
- 2.Installer Certificates: Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- 3.Manufacturer Certificates: Submit written statements on manufacturer's letterhead, certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- 4.Material Certificates: Submit written statements on manufacturer's letterhead, certifying that material complies with requirements in the Contract Documents.
- 5.Product Certificates: Submit written statements on manufacturer's

letterhead, certifying that product complies with requirements in the Contract Documents.

6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of AWS B2.1/B2.1M on AWS forms. Include names of firms and personnel certified.

H. Test and Research Reports:

1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.
2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.
 - f. Test procedures and results.
 - g. Limitations of use.

1.7 DELEGATED DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by

the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
- C. BIM Incorporation: Incorporate delegated design drawing and data files into BIM established for Project.

1.8 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect and Construction Manager (CM/CDR).
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
1. Architect and Construction Manager (CM/CDR) will not review submittals received from Contractor that do not have Contractor's review and approval.

1.9 ARCHITECT'S AND CONSTRUCTION MANAGER'S REVIEW

- A. Action Submittals: Architect and Construction Manager (CM/CDR) will review each submittal, indicate corrections or revisions required, and return.
1. PDF Submittals: Architect and Construction Manager will indicate, via markup on each submittal, the appropriate action.
 2. Paper Submittals: Architect and Construction Manager will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action
 3. Submittals by Web-Based Project Management Software: Architect and Construction Manager (CM/CDR) will indicate, on Project management software

website, the appropriate action.

1)

- B. Informational Submittals: Architect and Construction Manager (CM/CDR) will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect and Construction Manager (CM/CDR) will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect and Construction Manager.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Architect and Construction Manager (CM/CDR) will [return without review submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by Architect without action.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 33 00

SECTION 01 33 60

ELECTRONIC DOCUMENT REQUEST

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Procedure for obtaining electronic computer-aided design drafting (CADD) version of Contract Document Drawings.

1.02 STIPULATIONS AND CONDITIONS

- A. Electronic documents are not Contract Documents.
- B. Electronic documents are provided by the COUNTY OF SANTA BARBARA to CONTRACTOR for CONTRACTOR's convenience.
- C. Electronic Documents will be transmitted to CONTRACTOR by the COUNTY OF SANTA BARBARA (CM/CDR) only after the CONTRACTOR agrees to and signs the Electronic Files Waiver.
- D. Electronic documents may be used for no other purposes than for Project for which Contract Documents were prepared.
- E. Waiver form to be provided by the ARCHITECT after NTP.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 35 00 SPECIAL PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 SECTION INCLUDES

1. Environmental protection procedures
2. Smoke/odor control procedures
3. Noise control procedures
4. Dust and air pollution control procedures
5. Hazardous materials procedures
6. Welding and burning mitigation procedures
7. Erosion and sediment control procedures (Storm Water Pollution Protection Plan)
8. Disposal operations procedures
9. Cultural resources procedures
10. Alteration project procedures.

1.03 RELATED SECTIONS

- A. Section 01 73 29 - Cutting and Patching: General requirements for procedures and limitations for cutting and patching the work.
- B. Section 01 57 19 - CEQA Mitigations. General requirements for procedures and limitations for handling hazardous materials.

1.04 ENVIRONMENTAL PROTECTION PROCEDURES

- A. Environmental Protection Procedures, General: Requirements specified in this Section are in addition to those of the Contract General Conditions.
 1. During the progress of the work, keep the premises occupied in a neat and clean condition and protect the environment both on site and off site, throughout and upon completion of the construction project.
 2. In coordination with the COUNTY OF SANTA BARBARA, develop an Environmental Protection Plan in detail and submit to COUNTY OF SANTA BARBARA for approval within 30 calendar days from the date of commencement specified in the Notice to Proceed. Distribute approved plan to all employees and to all subcontractors and their employees. Environmental Protection Plan shall include, but not be limited to, the following items:
 - a. Copies of required permits
 - b. Proposed sanitary landfill site
 - c. Other proposed disposal sites

- d. Noise Control
 - e. Dust Control
 - f. Erosion and Sediment Control
 - g. Copies of any agreements with public or private landowners regarding equipment, materials storage, borrow sites, fill sites, or disposal sites. Such agreements made by CONTRACTOR shall be invalid if their execution causes violation of local or regional grading or land use regulations.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result.
- 1. Avoid use of tools and equipment that produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site.
 - 2. Comply with noise control requirements specified below.
- C. Construction Operations: All construction operations shall comply with all applicable Federal, State, and local Codes, ordinances, statutes and regulations pertaining to water, air, solid waste and noise pollution. It shall be CONTRACTOR's responsibility to identify and determine necessary measures to be taken to comply with such Codes, ordinances, statutes, and regulations.
- D. Definitions of Contaminants:
- 1. Sediment: Soil and other debris that have been eroded and transported by runoff water
 - 2. Solid waste: Rubbish, debris, garbage and other discarded solid materials resulting from construction activities, including a variety of combustible and non-combustible wastes, such as ashes, waste materials that result from construction or maintenance and repair work, leaves and tree trimmings
 - 3. Chemical waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, disinfectants, organic chemicals and inorganic wastes. Some of the above may be classified as "hazardous"
 - 4. Sanitary wastes:
 - a. Sewage: Domestic sanitary sewage
 - b. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing and consumption of food.
- E. Hazardous Materials: See also Section below titled "HAZARDOUS MATERIALS PROCEDURES."
- 1. Except as otherwise specified, in the event the CONTRACTOR encounters on the site material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or other hazardous materials which have not been rendered harmless, the CONTRACTOR shall immediately stop Work in the area affected and report the condition to the COUNTY OF SANTA BARBARA (CM/CDR) in writing.
 - 2. Work in affected areas shall not thereafter be resumed except by written agreement of the COUNTY OF SANTA BARBARA and CONTRACTOR if in fact the material is asbestos, PCB, or other hazardous materials and has not been rendered harmless.
 - 3. Work in affected areas shall be resumed in the absence of asbestos, PCB, or other

hazardous materials, or when such materials have been rendered harmless.

- F. Protection of Natural Resources: It is intended that the natural resources within the Project boundaries and outside the limits of permanent work performed under this Contract be preserved in their existing condition or be restored to an equivalent or improved condition upon completion of the work. Confine construction activities to areas defined by the public roads, easements, and work area limits shown on the drawings. Return construction areas to their pre-construction elevations except where surface elevations are otherwise noted to be changed. Maintain natural drainage patterns. Conduct construction activities such that ponding of stagnant water conducive to mosquito breeding habitat will not occur at any time.
1. Land resources protection: Do not remove, cut, deface, injure or destroy trees or shrubs outside the work area limits. Do not remove, deface, injure or destroy trees within the Project area without permission from COUNTY OF SANTA BARBARA. Such improvements shall be removed and replaced, if required, by the CONTRACTOR at no change in Contract Time and Contract Sum.
 2. Landscaping protection: Protect trees that are located near the limits of Project area which may possibly be defaced, bruised, or injured or otherwise damaged by the CONTRACTOR's operations. No ropes, cables or guys shall be fastened to or be attached to any existing nearby trees or shrubs for anchorages. Refer to additional requirements specified in Section 015600 - Temporary Barriers and Controls.
 - a. Repair and restoration: Repair or replace trees or other landscape feature scarred or damaged by equipment or construction operations as specified below. Repair and restoration plan shall be reviewed and approved by COUNTY OF SANTA BARBARA prior to its initiation.
 3. Temporary construction:
 - a. Remove all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, or any other vestiges of construction as directed by the COUNTY OF SANTA BARBARA (CM/CDR).
 - b. Level all temporary roads, parking areas and any other areas that have become compacted or shaped.
 - c. Unpaved areas where vehicles have been operated shall receive suitable surface treatment or shall be periodically wetted down to prevent construction operations from producing dust damage and nuisance to persons and property, at no additional cost to the COUNTY OF SANTA BARBARA.
 - d. Keep haul roads clear at all times of any object that creates an unsafe condition. Promptly remove any contaminants or construction materials dropped from construction vehicles. Do not drop mud and debris from construction equipment on public streets. Sweep clean turning areas and pavement entrances as necessary.
 4. Water resources: Comply with all applicable Federal, State, and local Codes, ordinances, statutes and regulations pertaining to discharge (directly or indirectly) of pollutants to underground and natural waters.
 - a. Perform all Work under the Contract in a manner that any adverse environmental impacts are reduced to a level that is acceptable to COUNTY OF SANTA BARBARA and authorities having jurisdiction.
 - b. Refer to Division 2 - Site Construction, earthwork Sections, and Civil Drawings for specific requirements on control of storm water and disposal of water from

dewatering activities.

5. Oily Substances: At all times, special measures shall be taken to prevent oily or other hazardous substances from entering the ground, drainage areas or local bodies of water in such quantities as to affect normal use, aesthetics or produce a measurable impact upon the areas. All soil or water that is contaminated with oily substances due to CONTRACTOR's operations shall be disposed of in accordance with applicable regulations, at no change in Contract Time and Contract Sum.
6. Report to the COUNTY OF SANTA BARBARA all fuel, chemical, hydraulic fluid or other material spills, leaks, and other incidents due to human or natural causes for evaluation. All work in the affected area shall stop until the COUNTY OF SANTA BARBARA can complete its review. Should the COUNTY OF SANTA BARBARA determine environments consultants, the CONTRACTOR will comply with any required assistance in the environmental review. All contamination shall be dealt with in accordance with all applicable laws and regulations.

1.05 SMOKE/ODOR CONTROL PROCEDURES

- A. Smoke/Odor Control: Protect primary fresh air intakes to existing buildings from exhaust from internal combustion engines, paint and solvent fumes and other noxious fumes and vapors.
 1. Implement control methods such as snorkels from engines exhausts to 50 feet away from air intakes. Provide carbon filters on air intakes as necessary, including periodic replacement of filters to ensure effectiveness.
 2. All other activities generating fumes shall be limited to minimum distance of 50 feet from air intake grilles.
 3. If fume-generating procedures must occur within 50 feet of an air intake, CONTRACTOR shall do the following:
 - a. Notify COUNTY OF SANTA BARBARA at least 14 calendar days in advance of such activities.
 - b. Perform Work when it least impacts the COUNTY OF SANTA BARBARA (evenings, weekends or particularly windy days).
 - c. Provide carbon filter media, plastic barriers, or other control methods to ensure fresh air only enters into the building ventilation system.

1.06 NOISE CONTROL PROCEDURES

- A. Noise Control Procedures, General: Requirements of this Section are in addition to those of the Contract General Conditions. Maximum noise levels within 1,000 feet of residences, businesses, adjacent buildings, and other populated areas:
 1. Noise levels for trenchers, pavers, graders and trucks: Not exceeding 90 dBA at 50 feet as measured under noisiest operating conditions.
 2. Noise levels for all other equipment: Not exceeding 85 dBA at 50 feet.
- B. Noise Control of Equipment:
 1. Equip jackhammers with exhaust mufflers and steel muffling sleeves.
 2. Use air compressors of a quiet type such as a "whisperized" compressor. Compressor hoods shall be closed while equipment is in operation.
 3. Use electrically-powered rather than gasoline or diesel powered fork-lifts.
- C. Noise Control of Construction Operations:

1. Keep noisy equipment as far as possible from noise-sensitive site boundaries.
 2. Machines shall not be left idling.
 3. Use electric power in lieu of internal combustion engine power whenever possible.
 4. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources. All engines shall have properly functioning mufflers.
- D. Scheduling of Noisy Operations: Schedule construction activities to minimize time of noisy operations and disruption to occupants of adjoining facilities. Notify COUNTY OF SANTA BARBARA in advance of performing Work creating unusual noise and schedule such Work at times mutually agreeable.
- E. Accessory Noise: Do not play radios, tape recorders, televisions, and other similar items at construction site.

1.07 DUST AND AIR POLLUTION CONTROL PROCEDURES

- A. Dust and Air Pollution Control Procedures, General: Requirements of this Section are in addition to those of the Contract General Conditions. Employ measures to prevent or minimize creation of dust and air pollution. CONTRACTOR shall appoint a dust control monitor to oversee and implement all measures specified in this Section.
- B. Provide proper barricades and take all other necessary measures required to prevent dust and fumes from migrating to other buildings. Fumes from welding and epoxy operations shall be properly ventilated away from building at all times. CONTRACTOR shall control dust properly throughout the construction period at the construction site, corporation yard (if applicable), dirt borrow site (if Applicable), and dirt access route. Should dust or fumes migrate to other building areas, it shall be the CONTRACTOR's responsibility to clean immediately the affected occupied areas and mechanical equipment, including air handlers and ductwork. CONTRACTOR shall be responsible and liable for all associated damages and costs due to dust and fume damage.
1. Unpaved areas shall be wetted down, to eliminate dust formation, a minimum of twice a day to reduce particulate matter. When wind velocity exceeds 15 mph, site shall be watered down more frequently.
 2. Store all volatile liquids, including fuels or solvents in closed containers.
 3. No on-site burning of debris, lumber and other scrap shall be permitted.
 4. Properly maintain equipment to reduce gaseous pollutant emissions.
 5. Exposed areas, new driveways and sidewalks shall be seeded, treated with soil binders or paved, as appropriate, as soon as possible.
 6. Cover stockpiles of soil, sand and other loose materials.
 7. Cover trucks hauling soil, debris, sand or other loose materials.
 8. Sweep project area streets at least once daily. Refer to Section 01 74 00 - Cleaning Requirements.

1.08 WELDING AND BURNING MITIGATION PROCEDURES

- A. Welding and Burning Mitigation Procedures: Eliminate welding and burning of steel as much as possible. Where unavoidable, perform welding and burning with all possible precaution to avoid fire hazard. Provide a fire watch for minimum of 30 minutes after burning stops. Provide protection for all adjacent surfaces.
- B. Precautions shall be taken during the construction phase to minimize the likelihood of ignition,

1. Smoking is prohibited within 50 feet of the construction area or material storage area.
2. Open flames or heat sources required for construction will be closely monitored to minimize the risk of accidental ignition.
3. Fire extinguishers and water hoses shall be made readily available by the CONTRACTOR and maintained in case of emergency.

1.09 EROSION AND SEDIMENT CONTROL PROCEDURES

- A. Erosion and Sediment Control Procedures: Refer to runoff control requirements specified in the Contract General Conditions. Obtain and comply with Storm Water Pollution Protection Plan (SWPPP) and project-specific requirements indicated on Civil Drawings.

1.010 DISPOSAL OPERATIONS PROCEDURES

- A. Solid Waste Management:
1. Supply solid waste transfer containers. Daily remove all debris such as spent air filters, oil cartridges, cans, bottles, combustibles, and litter. Take care to prevent trash and papers from blowing onto adjacent property. Encourage personnel to use refuse containers. Convey contents to a sanitary landfill.
 2. Washing of concrete containers where wastewater may reach adjacent property, storm drains or natural water courses will not be permitted. Remove any excess concrete to the sanitary landfill.
- B. Chemical Waste and Hazardous Materials Management: furnish containers for storage of spent chemicals used during construction operations. Dispose of chemicals and hazardous materials in accordance with applicable regulations.
- C. Garbage: Store garbage in covered containers, pick up daily and dispose of in a sanitary landfill.
- D. Grading Spoil and Landscape Debris: Dispose of vegetation, weeds, rubble, and other materials removed by the clearing, stripping and grubbing operations off site at a suitable disposal site in accordance with applicable Federal, State and local Codes, ordinances, statutes and regulations.
- E. Excavated Materials:
1. Native soil complying with the requirements of applicable Division 2 - Site Construction earthwork Section, may be used for backfilling, fill and embankments as allowed in applicable by that section.
 2. Remove all material which is excavated more than that required for backfill. Dispose of unsuitable excavated material from the site and dispose of it legally.
 - a. Excess suitable backfill material shall be hauled off site. No additional compensation will be paid to the CONTRACTOR for such off haul. Include all such costs in the Contract Sum.
 - b. Unsuitable backfill material shall be disposed of off-site in accordance with applicable regulations, in a disposal site indicated in the Environmental Protection Plan.
 - c. Remove rubbish and materials unsuitable for backfill immediately following excavation.
 - d. Remove material more than that required for backfill immediately following backfill operations.

1.011 CULTURAL RESOURCES PROCEDURES

- A. Cultural Resources Procedures: Requirements specified in this Section are in addition to those required by the Contract General Conditions.
 - 1. Project does not pass through any known archaeological sites. However, it is conceivable that unrecorded archaeological sites could be discovered during construction.
 - 2. In the event that artifacts, human remains, or other cultural resources are discovered during subsurface excavations at locations of the Work, the CONTRACTOR shall protect the discovered items, cease work for a distance of 35 feet radius in the area, notify the ARCHITECT and COUNTY OF SANTA BARBARA (CM/CDR) and comply with applicable law.
 - 3. COUNTY OF SANTA BARBARA may retain an Archaeologist to monitor and recover data and artifacts during period that work has ceased.
 - 4. All items found which are considered to have archaeological significance are the property of the COUNTY OF SANTA BARBARA.

1.012 ALTERATION PROJECT PROCEDURES

- A. Coordinate the work of trades and schedule elements of alterations and renovation work by procedures and methods to expedite completion of the work.
- B. In addition to demolition specifically shown, cut, move or remove items as necessary to provide access or to allow alterations and new work to proceed. Include such items as:
 - 1. Repair or removal of hazardous or unsanitary conditions.
 - 2. Removal of abandoned items and items serving no useful purpose, such as abandoned piping, conduit and wiring.
 - 3. Removal of unsuitable or extraneous materials not marked for salvage, such as abandoned furnishings and equipment, and debris such as rotted wood, rusted metals and deteriorated concrete.
 - 4. Cleaning of surfaces, and removal of surface finishes as needed to install new work and finishes.
- C. Patch, repair and refinish existing items to remain, to the specified condition for each material, with a smooth and clean transition to adjacent new items of construction.
- D. Assign the work of moving, removal, cutting and patching, to trades qualified to perform the work in a manner to minimize the possibility of damage to each type of work, and provide means of returning surfaces to appearance of new work.
- E. Perform cutting and removal work with minimal disruption and in a manner to avoid damage to adjacent work.
- F. Cut finish surfaces such as masonry, tile, plaster or metals, using methods that terminate surfaces in a straight line at a natural point of division.
- G. Perform cutting and patching as specified in Section 01 73 29 - Cutting and Patching.
- H. Protect existing finishes, equipment, and adjacent construction that is scheduled to remain, from damage.
 - 1. Protect existing and new work from weather and extremes of temperature.
 - 2. Maintain existing interior work above 60 degrees F.
 - 3. Provide weather protection, waterproofing, heat and humidity control as needed to prevent damage to remaining work and to new work.

1.013 BLASTING CONTROL AND SAFETY PLAN

- A. If the CONTRACTOR decides to blast to remove rock, prior to construction, the CONTRACTOR shall prepare a Blasting Control and Safety Plan. This Plan shall indicate the location of all blasting activity, anticipated dates/times and pedestrian, construction worker and equipment/vehicle safety mechanisms that must be in place to ensure public safety. All blasting must occur within the parameters of the Blasting Control and Safety Plan. .

PART 2 - PRODUCTS

2.01 PRODUCTS FOR PATCHING, EXTENDING AND MATCHING

- A. Provide same products or types of construction as that in existing structure, as needed to patch, extend or match existing.
- B. Generally, the Contract Documents will not define products or standards of workmanship present in existing construction; determine products by inspection and necessary testing and determine quality of workmanship by using existing as a sample for comparison.
- C. The presence of a product, finish, or type of construction requires that patching, extending or matching shall be performed as necessary to make work complete and consistent with identical standards of quality.

PART 3 - EXECUTION

3.01 CUTTING AND PATCHING

- A. Perform cutting and patching as specified in Section 01 73 29 - Cutting and Patching.

END OF SECTION

SECTION 01 35 10

TRAFFIC CONTROL PROCEDURES

PART 1 - GENERAL

1.01 RELATED REQUIREMENTS

- A. Division 00 70 00: General Requirements
- B. Division 00 71 00: Special Requirements

1.02 REFERENCES (Not Used)

1.03 PROTECTION OF PUBLIC TRAFFIC

- A. Comply with requirements of Acts, Regulations and By-Laws in force for regulation of traffic or use of roadways upon or over which it is necessary to carry out Work or haul materials or equipment.
- B. When working on travelled way:
 - 1. Place equipment in position to minimize interference and hazard to travelling public.
 - 2. Keep equipment units as close together as working conditions permit and preferably on same side of travelled way.
 - 3. Do not leave equipment on travelled way overnight.
- C. Close lanes of road only after receipt of written approval from Departmental Representative.
 - 1. Before re-routing traffic erect suitable signs and devices to comply with requirements of Acts, Regulations and By-Laws.
- D. Keep travelled way graded, free from potholes and of sufficient width for required number of lanes of traffic.
 - 1. Provide 21-foot-wide minimum temporary roadway for traffic in two-way sections through Work and on detours.
 - 2. Provide 15-foot-wide minimum temporary roadway for traffic in one-way sections through Work and on detours.
- E. Provide graveled detours or temporary roads as directed by Departmental Representative to facilitate passage of traffic around restricted construction area:
- F. Provide and maintain road access and egress to property fronting along Work under Contract and in other areas as indicated, except where other means of road access exist that meet approval of Departmental Representative.

1.04 INFORMATIONAL AND WARNING DEVICES

- A. Provide and maintain signs and other devices required to indicate construction activities or other temporary and unusual conditions resulting from Project Work which requires road user response.
- B. Supply and erect signs, delineators, barricades, and miscellaneous warning devices to comply with requirements of Acts, Regulations and By-Laws.
- C. Place signs and other devices in locations recommended in Acts, Regulations and By-

Laws.

- D. Meet with Departmental Representative prior to commencement of Work to prepare list of signs and other devices required for project. If situation on site changes, revise list to approval of Departmental Representative.
- E. Continually maintain traffic control devices in use:
 - 1. Check signs daily for legibility, damage, suitability and location. Clean, repair or replace to ensure clarity and reflectance.
 - 2. Remove or cover signs which do not apply to conditions existing from day to day.

1.05 CONTROL OF PUBLIC TRAFFIC

- A. Provide competent flag personnel, trained in accordance with, and properly equipped to comply with requirements of Acts, Regulations and By-Laws for situations as follows:
 - 1. When public traffic is required to pass working vehicles or equipment that block all or part of travelled roadway.
 - 2. When it is necessary to institute one-way traffic system through construction area or other blockage where traffic volumes are heavy, approach speeds are high and traffic signal system is not in use.
 - 3. When workmen or equipment are employed on travelled way over brow of hills, around sharp curves or at other locations where oncoming traffic would not otherwise have adequate warning.
 - 4. Where temporary protection is required while other traffic control devices are being erected or taken down.
 - 5. For emergency protection when other traffic control devices are not readily available.
 - 6. In situations where complete protection for workers, working equipment and public traffic is not provided by other traffic control devices.
 - 7. At each end of restricted sections where pilot cars are required.
 - 8. Delays to public traffic due to contractor's operators: 15 minutes maximum.
- B. Where roadway, carrying two-way traffic, is restricted to one lane, for 24 hours each day, provide portable traffic signal system.
 - 1. Adjust, as necessary, and regularly maintain system during period of restriction.
 - 2. Ensure signal system meets requirements of Acts, Regulations and By-Laws.

F. OPERATIONAL REQUIREMENTS

- A. Maintain existing conditions for traffic throughout period of contract except that, when required for construction under contract and when measures have been taken as specified and approved by Departmental Representative to protect and control public traffic, existing conditions for traffic to be restricted.
- B. Maintain existing conditions for traffic crossing right-of-way.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 35 29

HEALTH AND SAFETY REQUIREMENTS

PART 1 - GENERAL

A. GENERAL REQUIREMENTS

1. This Section addresses special procedures and requirements that shall be followed for protection of health and safety of persons at the Project Site.
2. Contractor is responsible for site health & safety of its personnel and those of its subcontractors. COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA's Construction Manager are not responsible for health and safety at the site.
3. Health and safety requirements established in this Section are based on Site conditions anticipated from available Site data.
 - a. Procedures are intended for Work activities including, but not limited to:
 1. Hazardous Materials Abatement
 2. Scaffolding (if necessary)
 3. Ladders
 4. Crane Operations
 5. Work on roofs
 6. Demolition
 7. Shoring
 8. Backfilling
 9. Confined Space Entry
 - b. Contractor shall be responsible for reviewing and revising their safety program based on actual conditions encountered at the Site and to conform with all applicable laws and regulations.
5. Before Work at the Site proceeds, all personnel involved in performing Work activities shall read, understand, and sign the Site Health and Safety Plan (SHSP) prepared by Contractor.

B. SUBMITTALS

1. Submit as specified in SECTION 01 33 00.
2. Submittals shall include, but are not limited to:
 - a. Site health and safety plan (SHSP).
 - b. Personnel certificates of training.
 - c. Daily logs of air monitoring.
 - d. Site entry register.

C. SITE HEALTH AND SAFETY PLAN

1. Contractor shall protect workers and the public from inadvertent entry into the site. The existing perimeter site fence shall remain during demolition. Contractor shall maintain and repair site perimeter fences during demolition services and fencing shall continuously remain in a secure and safe condition until the successful completion of contract work. Contractor is responsible to protect and secure the demolition site using at minimum chain link construction fencing sufficiently installed, secured and maintained to prevent unauthorized access to the site.
2. The Contractor shall be required to prepare and implement a Site-specific Health and Safety Plan ("HASP") in accordance with the company requirements specified in Section 01 35 29, Health and Safety Requirements and all applicable federal and state and local regulations.
3. The Contractor shall develop a Site-Specific HASP for their operations that meets the requirements of applicable federal, state, and local requirements as well as the company requirements. The Contractor shall implement this plan taking precautions as necessary to protect the public and work force personnel from potential hazards. The Contractor shall utilize personnel with approved training as specified in Section 01 35 29, Health and Safety Requirements. The Contractor shall handle all wastes in accordance with applicable federal, state and local requirements.
4. Protection of Personnel & Public - Contractor shall conduct Work in a safe, workmanlike manner. Every excavation or area of construction on a site located five feet or less from the street or right of way line shall be enclosed with a suitable barrier to prevent the entry of unauthorized persons. Where located more than five feet from the street lot line, a barrier shall be erected, where required by the code official. All barriers shall be of adequate strength to resist wind pressure as specified by the Code Official. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area. Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, may remain standing without additional bracing, shoring, or lateral support until demolished, unless directed otherwise by COUNTY OF SANTA BARBARA. Ensure that no elements determined to be unstable are left unsupported and place and secure bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.
5. CONTRACTOR shall provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement, or structural replacement require approval by COUNTY OF SANTA BARBARA to performing such work.
6. General: Contractor shall prepare and submit a Site Health and Safety Plan (SHSP) to COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA's Construction Manager. Contractor shall be responsible for the safety and health of its staff and that of its Subcontractors. COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA's Construction Manager will not be responsible for approving Contractor's SHSP. COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA's Construction Manager shall be notified in writing and consulted before any changes to SHSP are implemented. Contractor shall include at a minimum the items described in the following paragraphs.
7. Key Personnel:
 - a. Contractor shall designate an onsite health and safety representative (HSR) who will be

responsible for the compliance to the SHSP including, but not limited to the following activities:

1. Monitor workers' breathing zone and periodically at the Site for combustible gasses, dusts, asbestos.
 2. Oversee all operations at the Site.
 3. Maintain proper medical surveillance.
 4. Provide hazard communications to personnel at the Site.
 5. Train personnel in safe operating procedures.
8. Health Risk Analysis: Contractor shall develop a health risk analysis to include all hazards which may be encountered during the project.
- a. Training Requirements:
 1. General: Contractor shall provide training for personnel, including supervisors, observers, and workers active on the Site. Training in safety precautions, procedures, and personal protective equipment shall comply with at a minimum, but not be limited to:
 - a. 29 CFR 1910.120 (e) – Hazardous Waste Operations and Emergency Response-Training.
 - b. 29 CFR 1910.146 – Permit-required confined spaces.
 - c. 29 CFR 1910.1200 – Hazard communication.
 - d. 29 CFR 1910.1001 – Asbestos
 - e. 29 CFR 1926 - OSHA Standards for the Construction Industry
 - f. 29 CFR 1926.59 - OSHA Hazard Communication Standard for Construction Industry
 - g. Any other requirements not listed to conduct the work in accordance with all Applicable Laws and Regulations.
 2. Health and Safety Training: Prior to commencement of Work activities, health and safety training shall be conducted by the HSR to review pertinent sections of the SHSP.
 - a. All workers shall attend.
 - b. Personnel not attending shall be given a similar pre-Work orientation individually or in groups by the HSR.
 - c. If a significant change in on-Site operations occurs during Work activities, another Site-specific training session shall be given.
 - d. A record of training and attendance shall be provided in the Project safety log.
 3. Training Certification: Contractor shall submit copies of current training certifications for all Project personnel to COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA's Construction Manager prior to entry onto the Work Site.
 4. Site Visitors: A visitor seeking entry into an exclusion zone or contamination reduction zone on Site shall present documents of current health and safety training and medical surveillance examination/certification equivalent to that required for on-Site Work. HSR shall provide orientation on relevant sections of the SHSP.

b. Personal Protective Equipment:

1. Contractor shall include in SHSP all personal protective equipment (PPE) anticipated for use on Site according to level of protection indicated by health risk analysis.
2. Level D with high visibility safety vest shall be the minimum level of protection set for Site operations.

c. Site Security and Control:

1. Include procedures for Site security and control in SHSP.
2. Indicate Site exclusion and contamination reduction zone boundaries in SHSP.
3. Provide register log form for entering and leaving the Site.

d. Contingency Plan:

1. SHSP shall include a contingency plan for health and safety emergencies.
2. This plan shall incorporate any Site-specific or COUNTY OF SANTA BARBARA-specific requirements.
3. A copy of the contingency plan shall remain on-Site, signed by and available for review by all personnel.

e. Standard Operating Procedures:

1. Contractor shall be familiar with and include in SHSP the COUNTY OF SANTA BARBARA's standard operating procedures (SOP) relevant to Work activities performed on Site.

PART 2 -- PRODUCTS

A. PERSONAL PROTECTIVE EQUIPMENT

1. Level of Protection. Contractor shall include in SHSP all personal protective equipment (PPE) anticipated for use on Site.
 - a. Level D Protection: Work activities shall be conducted with a minimum of Level D protection indicated below. Contractor is responsible for identification and providing additional protective equipment as deemed necessary based on the identified hazards at the site. Level D protection shall at a minimum consist of:
 1. Work boots with steel toe and steel shank.
 2. Hard hat.
 3. Safety glasses
 4. Safety vest

B. FIRST AID PROVISIONS AND EMERGENCY EQUIPMENT

1. Fire Extinguishers: Type and number of fire extinguishers shall be determined by Contractor in accordance with Applicable Laws and regulations and submitted as part of the SHSP. Inspection and maintenance shall be the responsibility of Contractor. Other fire stations equipped with the appropriate type and size of fire extinguishers shall be established by Contractor as needed. These stations shall be clearly marked and identified in the SHSP. All combustible or flammable materials used onsite shall be stored in

Underwriter's Laboratory (UL) listed and/or Factory Mutual (FM) approved containers.

2. Contractor shall arrange for local emergency rescue support (i.e. local fire department) or provide any and all emergency rescue equipment, such as safety harness and lifeline, and/or basket stretcher that is required to rescue an individual from an excavation cave-in and/or confined space.

PART 3 -- EXECUTION

A. SITE SECURITY AND CONTROL

1. Work Zones:
 - a. An exclusion zone for Work activities shall be established by the HSR.
 - b. Both zones shall be clearly delineated with the use of barrier tape or snow fencing.
 - c. Contractor's Site office, parking area, and other support operations shall be located outside the exclusion zone.
 - d. Any changes in the exclusion zone shall be presented in a written SHSP amendment by the HSR to COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA's Construction Manager for approval.
 - e. Boundaries of the exclusion and contaminated reduction zones shall be clearly posted by Contractor.
2. Site Register: Contractor shall maintain a register of all personnel visiting, entering, or working (on the Site) (in the exclusion zone).
3. Contractor is responsible for securing Work Zone and Site office from trespassers.
4. Contractor shall coordinate with COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA's Construction Manager to provide access as necessary for parties involved in other projects on the site, if any.
5. Signs: Before Site operations begin, Contractor shall post signs at the perimeter of the exclusion zone stating:
DEMOLITION AREA – KEEP OUT DANGER – NO SMOKING AUTHORIZED
PERSONNEL ONLY
 - a. Signs shall be printed in bold large letters on contrasting backgrounds.
 - b. Signs shall be visible from all points, where entry might occur and at such distances from the restricted area that personnel may read the signs and take necessary protective steps before entering.

B. CONTINGENCY PLAN

1. The following part of the SHSP shall be posted in Site construction office trailers, kept in all Site vehicles, and provided to supervisory personnel on Site.
 - a. Emergency Action – Standard Operating Procedures:
 1. Name, address, and telephone number of the nearest medical treatment facility shall be conspicuously posted. A map and direction for locating the facility, plus the travel time, shall be readily available.
 2. If the facility lacks toxicological capability, arrangements shall be made for consultant services.
 3. Arrangements to quickly obtain ambulance, emergency, fire, and police services.

Telephone numbers and procedures for obtaining these services shall be conspicuously posted.

4. Prior to mobilization at the Site, personal contact shall be made with emergency room personnel, the poison control center, and the local fire department and police. If outside of an established town, contact shall be made with county officials and local emergency services.
5. An eye wash kit and first aid equipment shall be readily available on Site. Personnel shall have first aid and medical emergency training.
6. Sufficient water and/or dry chemical fire extinguisher and neutralizing agents shall be maintained on Site to cope with any situation until emergency services can arrive.

a. Medical Emergencies

1. For any person who becomes ill or injured on Site and the injury or illness is minor, follow the requirements of the Site Health & Safety Plan.
2. The SHSP shall outline how decontamination will occur should a medical emergency arise in the containment area.

b. Site-Specific Information. The following shall be provided on a Site-specific basis:

1. Nearest Hospital:
Name.
Address.
Phone number.
Directions from the Site (map attached).
2. Nearest Fire Department:
Phone number.
3. Facility Contact:
Phone number.
4. Other emergency contacts.

C. CONFINED SPACE

1. Confined Space: As part of the SHSP, Contractor shall identify all tasks that shall be considered confined space entry (e.g., entrance into manholes, buildings and trenches), any procedure for entry into these spaces (i.e., air testing), and permit requirements.

- END OF SECTION -

SECTION 01 35 60

SITE SECURITY PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

- A. This section describes the minimum-security measures to be taken and equipment to be used by the Contractor for the Site.
- B. The Contractor shall be responsible for maintaining security of the Site as identified in the Project Plans twenty-four (24) hours a day, seven (7) days a week including holidays throughout the duration of the Contract.
- C. Contractor shall have sole responsibility for job site security. CONTRACTOR shall protect the Work from theft, vandalism, and unauthorized entry.
- D. CONTRACTOR shall employ and maintain sufficient safety measures to effectively prevent vandalism, vagrancy, theft, arson, and all other such negative impacts to the Work. Any impacts to the progress of the Work of CONTRACTOR, COUNTY OF SANTA BARBARA, or COUNTY OF SANTA BARBARA'S forces, due to loss from inadequate security, will be the responsibility of CONTRACTOR.
- E. The Contractor shall make no claim against COUNTY OF SANTA BARBARA and COUNTY OF SANTA BARBARA consultants for damage resulting from theft, vandalism, unlawful and unauthorized entry onto the site.
- F. The Contractor and its Security Services firm shall replace, repair, restore and make good all damage to property of COUNTY OF SANTA BARBARA and others resulting from failure of securing the site.
- G. Until Completion of the Work, CONTRACTOR shall employ appropriate means to remove all graffiti from buildings, equipment, fences and all other temporary and/or permanent improvements on the Project site within twenty-four (24) hours from the date of report or forty-eight (48) hours of each occurrence.
- H. If existing fencing or barriers are breached or removed for purposes of construction, the Contractor shall provide and maintain temporary security fencing in a manner satisfactory to COUNTY OF SANTA BARBARA.
- I. Contractor shall maintain security throughout construction until the COUNTY OF SANTA BARBARA occupancy or acceptance.
- J. The Contractor shall restrict entrance of persons and vehicles into the Site and existing facilities. The Contractor shall allow entrance only to authorized persons with proper identification.
- K. Protect Work, existing premises and COUNTY OF SANTA BARBARA operations from theft, vandalism, and unauthorized entry.
- L. Penal Code Sections 290 and 290.4 commonly known as "Megan's Law", require, among

other things, individuals convicted of sexually oriented crimes, to register with the chief of police where the convicted individual resides or with a county sheriff or other law enforcement officials. CONTRACTOR shall check its own employees and require each Subcontractor to check its employees and report to CONTRACTOR if any such employees are registered sex offenders. CONTRACTOR shall check monthly during the life of the Contract to ascertain this information and report same to COUNTY OF SANTA BARBARA. Before starting the Work, and monthly thereafter during the life of Contract, CONTRACTOR shall notify COUNTY OF SANTA BARBARA in writing if any of its employees and/or if any Subcontractor's employee is a registered sex offender.

1.02 RELATED SECTIONS

- A. Section 01 50 00 Construction Facilities Temporary Controls.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.01 SECURITY PLAN

- A. The Contractor shall submit a site security plan. This plan shall address at a minimum, the following:
1. Description of proposed daily security operations.
 2. Method and frequency for conducting security checks.
 3. Sign in/sign out procedures.
 4. Location of security station (if implemented);
 5. Description of how a breach of security shall be handled. A breach of security shall include, but not be limited to, unauthorized personnel located in the active Site work areas, unauthorized personnel attempting to gain access to the active Site work areas, broken fences and unlocked gates, and unauthorized access to COUNTY OF SANTA BARBARA work areas.
 6. Location of security check points.
 7. Security cameras. At a minimum, locate motion triggered security cameras at the following locations: entry and exit gates, site perimeter, office trailer(s), equipment trailer(s) and material storage area(s),
 8. Location of security lighting. Lights triggered by motion detection or passive infrared sensor are required. At a minimum, provide lights surrounding the following locations at Office trailer, equipment storage trailer, material storage yard, equipment storage areas, entry and exit gates, site temporary roads, and around the perimeter of the site.
 9. Lighting should be illuminated to a minimum consistent with applicable local regulations and should be visible from the traveled roads bordering the construction

site.

10. Communications: On-site security personnel shall contact COUNTY OF SANTA BARBARA local police/sheriff if they witness crime in progress.

11. List of personnel to be contacted in case of emergency.

3.02 SITE SECURITY

- A. Trailers shall be alarmed to provide security during periods of inactivity (nights, weekends, Holidays, etc.).
- B. The Contractor shall provide keyed locks on all fence gates. The Contractor shall provide motion lights at each gate, at all trailers (where access is possible, i.e. doors and windows), and at all equipment storage areas.
- C. The Contractor shall ensure that all gaps in fences are closed to provide security of the active work areas.
- D. The Contractor shall be responsible for maintaining a log of all security incidents. This log shall be furnished to the COUNTY OF SANTA BARBARA's Construction Manager upon request.

3.03 ENTRANCE CONTROL

- A. Control of all persons, equipment, and vehicles entering and leaving the Site shall be provided by the Contractor. **CONTRACTOR SHALL BE REQUIRED TO MAINTAIN WORK AREA SITE SECURITY.**
- B. The Contractor shall require each person to display proper identification and credentials. If person does not have the proper credentials, he/she must be escorted by a person carrying the proper credentials.
- C. The Contractor shall maintain a list of persons authorized for Site entry and submit a copy of the list to the COUNTY OF SANTA BARBARA's Construction Manager.
- D. Implements procedures to deny unauthorized site access. The Contractor shall require all personnel and visitors having access to the Site to sign in and sign out and shall keep a record of all Site access. A log of all visitors shall be maintained.
- E. Site visitors shall not be permitted to enter active work areas unless authorized by the COUNTY OF SANTA BARBARA's Construction Manager or Site Health and Safety Officer.
- F. Vehicular access shall be restricted to authorized vehicles only.
- G. Personal vehicles shall not be authorized to enter the on-site active work areas.
- H. All Site activities, visitations, etc. shall be coordinated with COUNTY OF SANTA BARBARA daily. At a minimum, records of visitors and trucks entering/leaving the Site shall be provided upon request.
- I. Restrict the access of all persons entering the construction area to the agreed upon access route and to the actual site of the Work.

- J. Restrict activities of workers to authorized areas. Workers shall not mingle in student or public areas.
- K. Provide COUNTY OF SANTA BARBARA with keys to all construction gates and building entrances.
- L. Post project contact list, to include 24-hour telephone numbers, for all key project staff members. Post list at major access points to the project site(s) and outside at the project office. Update as necessary.
- M. Post warning signs to help keep unauthorized persons off the site.
- N. Provide nighttime lighting of the site
- O. Consider limiting vehicle access to the site to one designated entrance through which all vehicle traffic
- P. Inspect the site at the end of each day before securing it to assure nothing has been compromised.

3.04 SECURITY STATION

- A. The Contractor is required to provide an area designated for security operations. This area may be part of Contractor's offices.

END OF SECTION

SECTION 01 35 92
MITIGATION AND MONITORING PROCEDURES FOR
ARCHAEOLOGICAL AND HISTORICAL FINDINGS

PART 1 - GENERAL

- 1.01 SECTION INCLUDES
- A. Mitigation procedures for the unanticipated discovery of archaeological or paleontological remains not identified by research or other investigations during pre-construction.
 - B. Mitigation procedures for the unanticipated discovery of human remains and associated cultural materials.
- 1.02 REGULATORY REQUIREMENTS
- A. State of California Health and Safety Code Section 7050.5.
 - B. Public Resources Code, Sections 5097.94, 5097.98, 5097.99.
 - C. Secretary of the Interior's Standards and Guidelines.
 - D. Professional Qualifications Standards (48 Federal Register 44738-39).
 - E. South Central Coastal Information Center.
 - F. Native American Heritage Commission (NAHC).
 - G. Archaeological Resource Management Reports (ARMR).
 - H. ARMR Guidelines.
- 1.03 ARCHAEOLOGICAL FINDINGS
- A. Upon archaeological discoveries the CONTRACTOR shall stop construction activities in the immediate area and notify the COUNTY OF SANTA BARBARA. COUNTY OF SANTA BARBARA will retain a qualified archeologist meeting the Secretary of the Interior's Professional Qualifications Standards (48 Federal Register 44738-39), to make an immediate evaluation of significance and appropriate treatment of the resource.
 - B. To complete this assessment, CONTRACTOR shall allow the Archeologist shall the necessary time and access to the Site to recover, analyze, and curate the find. The Archeologist will recommend the extent of archeological monitoring necessary to ensure the protection of resources that may be in the area. Construction activities may continue on other parts of the site while evaluation and treatment of historical or unique archaeological resources takes place.
 - C. COUNTY OF SANTA BARBARA will implement an archaeological monitoring program for the construction activities at the site prepared by the Archaeologist under the following conditions:
 - 1. When a Phase I Site Investigation shows a strong possibility that unique archaeological resources are buried on the site.

2. When unique architectural resources have been identified on a site, but COUNTY OF SANTA BARBARA does not implement a Phase III Data Recovery/Mitigation Program because the resources can be recovered through the archaeological monitoring program.
- D. Work shall stop within a 30-foot radius of the discovery. Work shall not continue until the discovery has been evaluated by the Archaeologist. The Archaeologist will assess the find and, if determined to be of value, will draft a monitoring program and oversee the remainder of the grading work. Archaeologist will monitor the project ground-disturbing activities if there is evidence that prehistoric or historic cultural resources may be found. Significant archaeological resources found will be preserved as determined necessary by the Archaeologist and offered to a local museum or repository. Resulting reports will be forwarded to the South-Central Coastal Information Center.
 - E. Cultural resources sensitivity training will be conducted by the Archaeologist for the construction workers involved in moving soil or working near soil disturbance. This training will review the types of archaeological resources that might be found, along with laws for the protection of resources.
 - F. COUNTY OF SANTA BARBARA will determine whether it is feasible to prepare and implement a Phase III Data Recovery/Mitigation Program. A Phase III Data Recovery/Mitigation Program would be designed by the Archaeologist to recover a statistically valid sample of the archaeological remains and to document the site to a level where the impacts can be determined to be less than significant. Documentation will be prepared in the standard format of the ARMR Guidelines, as prepared by the OHP. Once a Phase III Data Recovery/Mitigation Program is completed, an archaeological monitor will be present on site to oversee the grading, demolition activities, and/or initial construction activities to ensure that construction proceeds in accordance with the adopted Phase III Data Recovery/Mitigation Program. The extent of the Phase III Data Recovery/Mitigation Program and the extent and duration of the archaeological monitoring program depend on site-specific factors.
 - G. Work shall stop within a 30-foot radius of the discovery. Work shall not continue until the discovery has been evaluated by a qualified Archaeologist and the local Native American representative has been contacted and consulted to assist in the accurate recordation and recovery of the resources.

1.04 PALEONTOLOGICAL FINDINGS

- A. Upon paleontological discoveries the CONTRACTOR shall stop construction activities in the immediate area and notify the COUNTY OF SANTA BARBARA. COUNTY OF SANTA BARBARA will have a paleontological monitor on-call during construction activities. This monitor will provide the construction crew with a brief summary of the sensitivity, the rationale behind the need for protection of these resources, and information on the initial identification of paleontological resources. If paleontological resources are uncovered during construction, the on-call paleontologist shall be notified and afforded the necessary time to recover, analyze, and curate the find. Subsequently, the monitor will remain on site for the duration of the ground disturbances to ensure the protection of any other resources that may be in the area.
- B. The paleontological monitor will be on site for ground altering activities and will advise COUNTY OF SANTA BARBARA as to necessary means of protecting potentially significant paleontological resources, including, but not limited to, possible cessation of construction activities in the immediate area of a find. If resources are identified during the monitoring program, the CONTRACTOR shall provide the paleontologist the necessary time to recover, analyze, and curate the find. Subsequently, the monitor will

remain on site for the duration of the ground disturbances to ensure the protection of any other resources that may be in the area.

1.05 HUMAN REMAINS FINDINGS

- A. The State of California Health and Safety Code Section 7050.5 states that in the event that human remains are discovered during construction activities, the following procedure shall be observed:
1. All construction activity shall stop immediately, and the Archaeologist will contact the Los Angeles County Coroner. The Coroner has two working days to examine human remains after being notified by the COUNTY OF SANTA BARBARA.
 2. If the coroner determines the remains to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will immediately notify the person it believes to be the Most Likely Descendent (MLD) of the deceased Native American.
 3. The MLD has 48 hours to make recommendations to the COUNTY OF SANTA BARBARA for the treatment or disposition, with proper dignity, of the human remains and grave goods. If the MLD does not make recommendations within 48 hours the COUNTY OF SANTA BARBARA will reinter the remains in an area of the property secure from further disturbance following procedures required by the Public Resources Code, Sections 5097.94, 5097.98, 5097.99, and Health and Safety Code, Section 7050.5.
 4. If the County does not accept the descendant's recommendations, the COUNTY OF SANTA BARBARA or the descendent may request mediation by the NAHC.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 35 93

OFF-SITE IMPROVEMENT and PERMIT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Surface improvements including street, sidewalks, curbs, driveway approaches and new parkway vegetation. ADA improvements includes new accessible curb ramp and detachable warning surface.
2. Utilities: Underground Storm drain utility connection.

B. Related Requirements:

1. Division 01 - General Requirements.
2. Division 31 – Earthwork.
3. Division 32 - Exterior Improvements.
4. Division 33 – Utilities.

1.02 SYSTEM DESCRIPTION

A. Regulatory Requirements:

1. Comply with requirements of the authorities having jurisdiction including COUNTY OF SANTA BARBARA.
2. Secure and pay for all deposits, all permits, and licenses for the street improvements, utility connections, including testing, inspection, and related costs as required by the authorities having jurisdiction. Secure copies of approved and permitted drawings issued by the COUNTY OF SANTA BARBARA, before starting the Work.
3. Performance Bond and Insurance shall be extended to cover the COUNTY OF SANTA BARBARA, a Municipal Corporation, as co-oblige, as well as the COUNTY OF SANTA BARBARA. This bond is further conditioned upon and guarantees due compliance with the applicable City Municipal Code of the COUNTY OF SANTA BARBARA. Copies of the Performance Bond will be furnished to COUNTY OF SANTA BARBARA by the CONTRACTOR and such copies may be executed and filed with the City Engineer by CONTRACTOR at time of securing permit.

1.03 SUBMITTALS

A. Shop Drawings: Submit plans, sections, and details of Work to the COUNTY OF SANTA BARBARA. Submit design drawings and calculations signed and stamped by a civil and/or structural engineer licensed in the State of California.

B. Worksite Traffic Control Plan (WTCP): Submit a temporary WTCP to the COUNTY OF SANTA BARBARA Department of Public Works for review and approval. The plan shall use the Los Angeles Department of Transportation standards f. Temporary WTCP shall be prepared by a State of California registered traffic and/or civil engineer, drawn to scale, and shall delineate the existing curbs and traffic striping

- C. CONTRACTOR shall comply with the COUNTY OF SANTA BARBARA procedures for submittal and permitting of off-site improvements.

1.04 QUALITY ASSURANCE

- A. Comply with the COUNTY OF SANTA BARBARA Standard Specifications for Public Works Construction (SSPWC)

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials shall be as specified in the COUNTY OF SANTA BARBARA permitted plans and specifications.

PART 3 - EXECUTION

3.01 GENERAL

- A. Perform the Work in accordance with the COUNTY OF SANTA BARBARA permitted plans and specifications
- B. Work that is immediately adjacent to existing occupied structures and vehicular and pedestrian right of ways, CONTRACTOR shall, in his sole judgment and in accordance with applicable safety standards, provide temporary facilities, additional barricades, protection and care to protect existing structures, occupants, property, pedestrians and vehicular traffic.
- C. CONTRACTOR is responsible for damage, which may occur to the COUNTY OF SANTA BARBARA'S property or adjacent private or public properties which results from the acts or negligence of CONTRACTOR.
- D. Match adjoining improvements, such as construction and expansion joints, sidewalk marking patterns, and landscape.
- E. Foundry or other identifying stamps or markers are not permitted to be installed on exposed portions of the Work.

3.02 PROTECTION

- A. Protect the Work of this section until Substantial Completion.

3.03 CLEANUP

- A. Remove rubbish, debris, and waste materials and legally dispose of away from the Project site.

END OF SECTION

SECTION 01 41 10

REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 AUTHORITY AND PRECEDENCE OF CODES, ORDINANCES AND STANDARDS

- A. Authority: All codes, ordinances and standards referenced in the Drawings and Specifications shall have the full force and effect as though printed in their entirety in the Specifications.
- B. Precedence:
 - 1. Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.
 - 2. Where the Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, the Drawings and Specifications shall take precedence so long as such increase is legal.
 - 3. Where no requirements are identified in the Drawings or Specifications, comply with all requirements of applicable codes, ordinances and standards of authorities having jurisdiction.

C. COUNTY OF SANTA BARBARA OBLIGATIONS

- 1. Neither COUNTY OF SANTA BARBARA nor ARCHITECT are responsible for monitoring CONTRACTOR'S compliance with codes, laws or other Regulatory Requirements.
- 2. Reviews performed or failed to be performed by COUNTY OF SANTA BARBARA, ARCHITECT, and other consultants under employment by COUNTY OF SANTA BARBARA do not waive or change CONTRACTOR'S obligations, and do not constitute approval of the Work or portions of the Work.

D. CONTRACTOR REQUIREMENTS

- 1. Perform Work in accordance with requirements of governing agencies and other Regulatory Requirements; including Regulatory Requirements referenced by this Section and other Contract Documents.
- 2. Schedule and coordinate inspections and gain approvals required by governing

agencies in timely manner, as necessary for COUNTY OF SANTA BARBARA occupancy of site within Contract Time.

3. Inform Building Department, Fire Department, and other governing agencies in timely manner of changes in the Work affecting Regulatory Requirements.
4. Promptly forward to COUNTY OF SANTA BARBARA, inspections, reports, orders, permits, and other directives and correspondence received from inspector or governing agency having jurisdiction over the Work.
5. Promptly notify COUNTY OF SANTA BARBARA where Contract Documents appear to conflict with Regulatory Requirements.

E. REGULATORY REQUIREMENTS

1. Regulatory Authorities establish minimum requirement levels. Where provisions of Contract Documents and Regulatory Requirements differ or conflict, more stringent requirements govern.
2. Regulatory Requirements added by other Sections or by Addendum apply to requirements of this Section.
3. Regulatory Requirements, current at date of Building Permit Submittal and as required by governing agencies, supersede and govern over those listed by this Section and other Contract Documents.

1.03 APPLICABLE CODES, LAWS, AND ORDINANCES

A. Applicable Codes, Laws, and Ordinances: Refer also to Section 01 11 00 - Summary of the Work regarding permits and licenses.

1. Performance of the Work shall meet or exceed the minimum requirements of the latest revisions of the California Code of Regulations (CCR), Title 24, including, but not limited to, the following:
 - a. CCR Title 24, Part 1: California Building Standards Administrative Code.
 - b. CCR Title 24, Part 2: California Building Code (CBC), consisting of Uniform Building Code (UBC) Volumes 1 through 3, with State of California Amendments.
 - c. CCR Title 24, Part 3: California Electrical Code (CEC); consisting of National Fire Protection Association (NFPA) 70 - National Electrical Code (NEC), with State of California Amendments.
 - d. CCR Title 24, Part 4: California Mechanical Code (CMC); consisting of Uniform Mechanical Code (UMC) with State of California Amendments.
 - e. CCR Title 24, Part 5: California Plumbing Code (CPC); consisting of Uniform Plumbing Code (UPC) with State of California Amendments.
 - f. CCR Title 24, Part 6 California Energy Code
 - g. CCR Title 24, Part 9: California Fire Code (CFC); consisting of Uniform Fire Code (UFC) with current State of California Amendments.
 - h. CCR Title 24, Part 10 California Existing Building Code

- i. CCR Title 24 Part 11 California Green Building Standards (CALGreen Code)
 - j. CCR Title 24, Part 12: California Reference Standards Code; consisting of Uniform Building Code Standards (UBC Standards) with State of California Amendments.
 2. Performance of the Work shall also comply with applicable requirements of California Code of Regulations (CCR) as follows:
 - a. Title 19 - Public Safety
 - b. Title 22 - Social Security
 3. References on the Drawings or in the Specifications to "code", "Code" or "building code" similar terms, not otherwise identified, shall mean the codes specified above, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction having authority over the Project.
 4. The applicable edition of all codes shall be that adopted at the time of issuance of permits by the authority having jurisdiction and shall include all modifications and additions adopted by that authority. The applicable date of laws and ordinances shall be that of the date of performance of the Work.
- B. Other Applicable Laws, Ordinances and Regulations:
1. Work shall be accomplished in conformance with all applicable laws, ordinances, rules and regulations of Federal, State, County, City and special agencies and jurisdictions having authority over the Project.
 2. Performance of the Work shall be accomplished in conformance with all rules and regulations of public utilities, utility districts and other agencies serving the facility.
 3. Where such laws, ordinances, rules and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules and regulations occur subsequent to the execution date of the Agreement.

PART 2 – PRODUCTS (Not Applicable to this Section).

PART 3 – EXECUTION (Not Applicable to this Section).

END OF SECTION

SECTION 01 41 50 LEAKAGE TEST FOR BUILDING ENVELOPES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Building Envelope infiltration performance criteria.
- B. Air Leakage Testing for building envelope mock-up.
- C. Air Leakage Testing of the building envelope.

1.02 RELATED REQUIREMENTS

- A. Section 01 43 39 Mockup
- B. Section 07 25 00 Water and Air Barrier Systems: Air and Vapor Barriers for building envelope
- C. Section 07 52 00 Modified Bituminous Membrane Roofing
- D. Section 07 92 00 Joint Sealers: Sealants used for building envelope
- E. Section 08 43 13 Aluminum-Framed Storefronts: Allowable Infiltration rates for Storefront
- F. Section 08 44 13 Glazed Aluminum Curtain Walls: Allowable infiltration rates for Curtain Walls.
- G. Section 08 54 13 Fiberglass Windows: Allowable infiltration rates for Fiberglass Windows

1.03 REFERENCE STANDARDS

- A. ASTM E 779, Standard Test Method for Determining Air Leakage by Fan Pressurization, latest edition.
- B. ASTM E 1186, Air Leakage Detection in Building Envelopes and Air Barrier Systems, latest edition.
- C. ASTM E 1258, Test Method for Airflow Calibration of Fan Pressurization Devices, latest edition.
- D. ASTM E 1827, Single-Point Method indicated in the Standard Test Methods for Determining Airtightness of Buildings Using an Orifice Blower Door, latest edition.

1.04 SUBMITTALS

- A. Submit the following:
 - 1. Test Reports: Submit preliminary, follow-up and final test reports including, but not limited to the following information for each tested location.
 - a. Date of test.
 - b. Weather conditions at time of test.

- c. Name, firm and signature of technician, general contractor, COUNTY CONSTRUCTION MANAGER 's representative, and other key personnel that have witnessed the test.
 - d. Room name and number.
 - e. Room exterior wall(s) geographical orientation.
 - f. Room exterior wall area (square feet).
 - g. Room total wall area, exterior and interior (square feet).
 - h. Room volume (cubic feet).
 - i. Blower door testing pressures (Pa), positive and negative, and the resulting exfiltration and infiltration rates in air changes (ACH) and volume flow through the exterior wall area (CFM/sf).
 - j. Representative pictures of blower door and sealed interior duct openings.
 - k. Results and evaluation of smoke tests, including photographs, and recommendation for envelope improvements.
2. Submit electronic copy of preliminary report(s) with-in 5 days of testing.
 3. Submit electronic copy final report(s) with-in 3 days of re-testing.

1.05 QUALITY ASSURANCE

- A. The COUNTY CONSTRUCTION MANAGER (CM/CDR) shall retain the services of an approved Testing and Inspection Agency to perform required infiltration testing.
- B. Contractor's Responsibilities:
 1. Coordinate scheduling of mock-up and in-situ testing with Agency.
 2. Provide Agency access to site as needed
 3. Make minor modifications to mock-up if requested.
 4. Contractor and all subcontractors' tradespersons responsible for the construction of the envelope shall attend a pre-conference with the testing agency describing the performance testing requirements and workmanship quality expectations.
- C. The Testing Agency shall not have authority to require design changes. Notify the Architect and COUNTY CONSTRUCTION MANAGER (CM/CDR) of any requested design changes by the Testing Agency.
- D. Instrument Certification: All instruments used shall be accurately calibrated and certified within six months of testing and maintained in good working order.
- E. COUNTY CONSTRUCTION MANAGER (CM/CDR) Witness: Perform all tests in the presence of the COUNTY CONSTRUCTION MANAGER 's (CM/CDR) representative.
- F. Architect's Witness: The Architect or Architect's representative reserves the right to observe all tests or selected tests to assure compliance with the specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 GENERAL

- A. Notification: Advise the COUNTY CONSTRUCTION MANAGER (CM/CDR) and design team 3 days in advance of each test. Failure to so notify will require the test to be rescheduled.
- B. Testing Equipment: Provide all necessary equipment required to perform the tests.

3.02

TESTING PROCEDURE, ENVELOPE LEAKAGE

- A. Sample rate:
 - 1. Perform testing of typical example rooms with and without curtain wall, that are constructed specifically for the purpose of mockups, including exterior air barrier system, cladding, floor, ceiling and interior walls.
 - 2. Perform preliminary testing on each of the following spaces (1 test each):
 - a. Corner room (with 2 exterior walls).
 - b. Inner room (with 1 exterior wall).
 - c. Classroom/office at curtain wall.
 - d. Classroom/office at framed wall.
 - e. Other rooms or spaces as may be directed by the COUNTY CONSTRUCTION MANAGER and DCM.
 - 3. Perform follow-up testing on each preliminary space that did not initially pass the performance test.
 - 4. Perform final testing on 10% of the enclosed rooms, with equal sampling of each room type.

Performance criteria:

- 5. Infiltration and exfiltration rates shall not exceed 0.10 CFM/sf for each space at 50 Pascals, where area (sf) is the exterior wall area.

Schedule:

- 6. Coordinate schedule with the general contractor so that preliminary and follow-up testing are performed on a mockup before the air-barrier system is installed on the actual building.
- 7. Final testing shall occur after the entire air-barrier and cladding system is installed on the actual building and before substantial completion.

Procedure:

- 8. Record all information indicated to be submitted with the test report.
- 9. Seal all interior wall openings including but not limited to diffusers, grilles and transfer air openings that communicate with ducted system or directly with adjacent rooms.

10. Test each room individually with a blower door installed at the entry door.
11. Perform test at positive and negative pressure at +/- 25, 50 and 75 Pascals and record results.
12. Perform smoke testing while the space is under 50 Pascal positive pressure to identify leaks in all spaces.
13. Identify areas of air-barrier discontinuities. Bring to the attention of the installing contractor and provide training to all related installation staff indicating recommendations to remedy the deficiency.
14. After deficiencies are remedied, perform follow-up testing and reporting.
15. Perform final testing of air-barrier at sampling rate identified.

END OF SECTION

SECTION 01 42 00

REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect and/or (CM/CDR). Other terms, including "requested," "authorized," "selected," "required," and "permitted," have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms, including "shown," "noted," "scheduled," and "specified," have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents

to the extent referenced. Such standards are made a part of the Contract Documents by reference.

- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

1. For standards referenced by applicable building codes, comply with dates of standards as listed in building codes.

- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they are to mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."

- B. Industry Organizations, List: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they are to mean the recognized name of the entities in the following list. Abbreviations and acronyms not included in this list are to mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States." The information in this list is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. AABC - Associated Air Balance Council; www.aabc.com.
2. AAMA - American Architectural Manufacturers Association; (see FGIA).
3. AAPFCO - Association of American Plant Food Control Officials; www.aapfco.org.
4. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
5. AATCC - American Association of Textile Chemists and Colorists; www.aatcc.org.
6. ABMA - American Bearing Manufacturers Association; www.americanbearings.org.
7. ABMA - American Boiler Manufacturers Association; www.abma.com.
8. ACI - American Concrete Institute; www.concrete.org.
9. ACP - American Clean Power; (Formerly: American Wind Energy Association); www.cleanpower.org.
10. ACPA - American Concrete Pipe Association; www.concretepipe.org.

11. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
12. AF&PA - American Forest & Paper Association; www.afandpa.org.
13. AGA - American Gas Association; www.aga.org.
14. AHAM - Association of Home Appliance Manufacturers; www.aham.org.
15. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
16. AI - Asphalt Institute; www.asphaltinstitute.org.
17. AIA - American Institute of Architects (The); www.aia.org.
18. AISC - American Institute of Steel Construction; www.aisc.org.
19. AISI - American Iron and Steel Institute; www.steel.org.
20. AITC - American Institute of Timber Construction; (see PLIB).
21. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
22. AMPP - Association for Materials Protection and Performance; www.ampp.org.
23. ANSI - American National Standards Institute; www.ansi.org.
24. AOSA/SCST - Association of Official Seed Analysts (The)/Society of Commercial Seed Technologists (The); www.analyzeseeds.com.
25. APA - APA - The Engineered Wood Association; www.apawood.org.
26. APA - Architectural Precast Association; www.archprecast.org.
27. API - American Petroleum Institute; www.api.org.
28. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
29. ASA - Acoustical Society of America; www.acousticalsociety.org.
30. ASCE - American Society of Civil Engineers; www.asce.org.
31. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (see ASCE).
32. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; www.ashrae.org.
33. ASME - ASME International; [American Society of Mechanical.
34. ASSE - ASSE International; (American Society of Sanitary Engineering); www.asse-plumbing.org.
35. ASSP - American Society of Safety Professionals; www.assp.org.
36. ASTM - ASTM International; www.astm.org.
37. ATIS - Alliance for Telecommunications Industry Solutions; www.atis.org.
38. AVIXA - Audiovisual and Integrated Experience Association; www.avixa.org.
39. AWI - Architectural Woodwork Institute; www.awinet.org.
40. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
41. AWPA - American Wood Protection Association; www.awpa.com.
42. AWS - American Welding Society; www.aws.org.
43. AWWA - American Water Works Association; www.awwa.org.
44. BHMA - Builders Hardware Manufacturers Association;

- www.buildershardware.com.
45. BIA - Brick Industry Association (The); www.gobrick.com.
 46. BICSI - BICSI, Inc.; www.bicsi.org.
 47. BIFMA - Business and Institutional Furniture Manufacturer's Association; www.bifma.org.
 48. BISSC - Baking Industry Sanitation Standards Committee; www.bissc.org.
 49. BWF - Badminton World Federation; www.bwfbadminton.com.
 50. CARB - California Air Resources Board; www.arb.ca.gov.
 51. CDA - Copper Development Association Inc.; www.copper.org.
 52. CE - Conformite Europeenne (European Commission); www.ec.europa.eu/growth/single-market/ce-marking.
 53. CEA - Canadian Electricity Association; www.electricity.ca.
 54. CFFA - Chemical Fabrics and Film Association, Inc.; www.chemicalfabricsandfilm.com.
 55. CFSEI - Cold-Formed Steel Engineers Institute; www.cfsei.org.
 56. CGA - Compressed Gas Association; www.cganet.com.
 57. CIMA - Cellulose Insulation Manufacturers Association; www.cellulose.org.
 58. CISCA - Ceilings & Interior Systems Construction Association; www.cisca.org.
 59. CISPI - Cast Iron Soil Pipe Institute; www.cispi.org.
 60. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
 61. CPA - Composite Panel Association; www.compositepanel.org.
 62. CRI - Carpet and Rug Institute (The); www.carpet-rug.org.
 63. CRRC - Cool Roof Rating Council; www.coolroofs.org.
 64. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
 65. CSA - CSA Group; www.csagroup.org.
 66. CSI - Cast Stone Institute; www.caststone.org.
 67. CSI - Construction Specifications Institute (The); www.csiresources.org.
 68. CSSB - Cedar Shake & Shingle Bureau; www.cedarbureau.org.
 69. CTA - Consumer Technology Association; www.cta.tech.
 70. CTI - Cooling Technology Institute; www.coolingtechnology.org.
 71. DASMA - Door and Access Systems Manufacturers Association; www.dasma.com.
 72. DHA - Decorative Hardwoods Association; www.decorativehardwoods.org.
 73. DHI - Door and Hardware Institute; www.dhi.org.
 74. ECIA - Electronic Components Industry Association; www.ecianow.org.
 75. EIMA - EIFS Industry Members Association; www.eima.com.
 76. EJMA - Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
 77. EOS/ESD - EOS/ESD Association, Inc.; Electrostatic Discharge Association; www.esda.org.

78. ESTA - Entertainment Services and Technology Association; www.esta.org.
79. EVO - Efficiency Valuation Organization; www.evo-world.org.
80. FCI - Fluid Controls Institute; www.fluidcontrolsinstitute.org.
81. FGIA - Fenestration and Glazing Industry Alliance; <https://fgiaonline.org>.
82. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); www.fiba.com.
83. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); www.fivb.org.
84. FM Approvals - FM Approvals LLC; www.fmapprovals.com.
85. FM Global - FM Global; www.fmglobal.com.
86. FRSA - Florida Roofing and Sheet Metal Contractors Association, Inc.; www.floridarroof.com.
87. FSA - Fluid Sealing Association; www.fluidsealing.com.
88. FSC - Forest Stewardship Council U.S.; www.fscus.org.
89. GA - Gypsum Association; www.gypsum.org.
90. GS - Green Seal; www.greenseal.org.
91. HI - Hydraulic Institute; www.pumps.org.
92. HMMA - Hollow Metal Manufacturers Association; (see NAAMM).
93. IAPSC - International Association of Professional Security Consultants; www.iapsc.org.
94. IAS - International Accreditation Service; www.iasonline.org.
95. ICC - International Code Council; www.iccsafe.org.
96. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
97. ICPA - International Cast Polymer Association (The); www.theicpa.com.
98. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
99. IEC - International Electrotechnical Commission; www.iec.ch.
100. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
101. IES - Illuminating Engineering Society; www.ies.org.
102. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
103. IGMA - Insulating Glass Manufacturers Alliance; (see FGIA).
104. IGSHPA - International Ground Source Heat Pump Association; www.igshpa.org.
105. ILI - Indiana Limestone Institute of America, Inc.; www.iliai.com.
106. Intertek - Intertek Group; www.intertek.com.
107. ISA - International Society of Automation (The); www.isa.org.
108. ISFA - International Surface Fabricators Association; www.isfanow.org.
109. ISO - International Organization for Standardization; www.iso.org.
110. ITU - International Telecommunication Union; www.itu.int.
111. KCMA - Kitchen Cabinet Manufacturers Association; www.kcma.org.
112. LPI - Lightning Protection Institute; www.lightning.org.
113. MBMA - Metal Building Manufacturers Association; www.mbma.com.

114. MCA - Metal Construction Association; www.metalconstruction.org.
115. MFMA - Maple Flooring Manufacturers Association, Inc.; www.maplefloor.org.
116. MFMA - Metal Framing Manufacturers Association, Inc.; www.metalframingmfg.org.
117. MHI - Material Handling Industry; www.mhi.org.
118. MMPA - Moulding & Millwork Producers Association; www.wmmpa.com.
119. MPI - Master Painters Institute; www.paintinfo.com.
120. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry, Inc.; www.msshq.org.
121. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
122. NACE - NACE International; (National Association of Corrosion Engineers International); (see AMPP).
123. NADCA - National Air Duct Cleaners Association; www.nadca.com.
124. NAIMA - North American Insulation Manufacturers Association; www.insulationinstitute.org.
125. NALP - National Association of Landscape Professionals; www.landscapeprofessionals.org.
126. NBGQA - National Building Granite Quarries Association, Inc.; www.nbgqa.com.
127. NBI - New Buildings Institute; www.newbuildings.org.
128. NCAA - National Collegiate Athletic Association (The); www.ncaa.org.
129. NCMA - National Concrete Masonry Association; www.ncma.org.
130. NEBB - National Environmental Balancing Bureau; www.nebb.org.
131. NECA - National Electrical Contractors Association; www.necanet.org.
132. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.
133. NEMA - National Electrical Manufacturers Association; www.nema.org.
134. NETA - InterNational Electrical Testing Association; www.netaworld.org.
135. NFHS - National Federation of State High School Associations; www.nfhs.org.
136. NFPA - National Fire Protection Association; www.nfpa.org.
137. NFPA - NFPA International; (see NFPA).
138. NFRC - National Fenestration Rating Council; www.nfrc.org.
139. NGA - National Glass Association; www.glass.org.
140. NHLA - National Hardwood Lumber Association; www.nhla.com.
141. NLGA - National Lumber Grades Authority; www.nlga.org.
142. NOFMA - National Oak Flooring Manufacturers Association; (see NWFA).
143. NOMMA - National Ornamental & Miscellaneous Metals Association; www.nomma.org.

144. NRCA - National Roofing Contractors Association; www.nrca.net.
145. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
146. NSF - NSF International; www.nsf.org.
147. NSI - Natural Stone Institute; www.naturalstoneinstitute.org.
148. NSPE - National Society of Professional Engineers; www.nspe.org.
149. NSSGA - National Stone, Sand & Gravel Association; www.nssga.org.
150. NTMA - National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
151. NWFA - National Wood Flooring Association; www.nwfa.org.
152. NWRA - National Waste & Recycling Association; www.wasterecycling.org.
153. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
154. PDI - Plumbing & Drainage Institute; www.pdionline.org.
155. PLASA - PLASA; www.plasa.org.
156. PLIB - Pacific Lumber Inspection Bureau; www.plib.org.
157. PVCPA - Uni-Bell PVC Pipe Association; www.uni-bell.org.
158. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
159. RFCI - Resilient Floor Covering Institute; www.rfci.com.
160. RIS - Redwood Inspection Service; (see WWPA).
161. SAE - SAE International; www.sae.org.
162. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
163. SDI - Steel Deck Institute; www.sdi.org.
164. SDI - Steel Door Institute; www.steeldoor.org.
165. SEFA - Scientific Equipment and Furniture Association (The); www.sefalabs.com.
166. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (see ASCE).
167. SIA - Security Industry Association; www.securityindustry.org.
168. SJI - Steel Joist Institute; www.steeljoist.org.
169. SMA - Screen Manufacturers Association; www.smainfo.org.
170. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
171. SMPTE - Society of Motion Picture and Television Engineers; www.smpte.org.
172. SPFA - Spray Polyurethane Foam Alliance; www.sprayfoam.org.
173. SPIB - Southern Pine Inspection Bureau; www.spib.org.
174. SPRI - Single Ply Roofing Industry; www.spri.org.
175. SRCC - Solar Rating & Certification Corporation; www.solar-rating.org.
176. SSINA - Specialty Steel Industry of North America; www.ssina.com.
177. SSPC - SSPC: The Society for Protective Coatings; (see AMPP).
178. STI/SPFA - Steel Tank Institute/Steel Plate Fabricators Association; www.steeltank.com.

179. SWI - Steel Window Institute; www.steelwindows.com.
180. SWPA - Submersible Wastewater Pump Association; www.swpa.org.
181. TCA - Tilt-Up Concrete Association; www.tilt-up.org.
182. TCNA - Tile Council of North America, Inc.; www.tcnatile.com.
183. TEMA - Tubular Exchanger Manufacturers Association, Inc.; www.kbcdco.tema.org.
184. TIA - Telecommunications Industry Association (The); www.tiaonline.org.
185. TMS - The Masonry Society; www.masonrysociety.org.
186. TPI - Truss Plate Institute; www.tpinst.org.
187. TPI - Turfgrass Producers International; www.turfgrasssod.org.
188. TRI - Tile Roofing Industry Alliance; www.tilerroofing.org.
189. UL - Underwriters Laboratories Inc.; www.ul.org.
190. UL LLC - UL LLC; www.ul.com.
191. USAV - USA Volleyball; www.usavolleyball.org.
192. USGBC - U.S. Green Building Council; www.usgbc.org.
193. USITT - United States Institute for Theatre Technology, Inc.; www.usitt.org.
194. WA - Wallcoverings Association; www.wallcoverings.org.
195. WCLIB - West Coast Lumber Inspection Bureau; (see PLIB).
196. WCMA - Window Covering Manufacturers Association; www.wcmanet.org.
197. WDMA - Window & Door Manufacturers Association; www.wdma.com.
198. WI - Woodwork Institute; www.woodworkinstitute.com.
199. WSRCA - Western States Roofing Contractors Association; www.wsrca.com.
200. WWPA - Western Wood Products Association; www.wwpa.org.

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they are to mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.

- 1.DIN - Deutsches Institut fur Normung e.V.; www.din.de.
- 2.IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
- 3.ICC - International Code Council; www.iccsafe.org.
- 4.ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they are to mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.

- 1.CPSC - U.S. Consumer Product Safety Commission; www.cpsc.gov.
- 2.DOC - U.S. Department of Commerce; www.commerce.gov.

- 3.DOD - U.S. Department of Defense; www.defense.gov.
- 4.DOE - U.S. Department of Energy; www.energy.gov.
- 5.DOJ - U.S. Department of Justice; www.ojp.usdoj.gov
- 6.DOS - U.S. Department of State; www.state.gov.
- 7.EPA - United States Environmental Protection Agency; www.epa.gov.
- 8.FAA - Federal Aviation Administration; www.faa.gov.
- 9.GPO - U.S. Government Publishing Office; www.gpo.gov.
10. GSA - U.S. General Services Administration; www.gsa.gov.
11. HUD - U.S. Department of Housing and Urban Development; www.hud.gov.
12. LBNL - Lawrence Berkeley National Laboratory; Energy Technologies Area; www.lbl.gov/.
13. NIST - National Institute of Standards and Technology; www.nist.gov.
14. OSHA - Occupational Safety & Health Administration; www.osha.gov.
15. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; www.trb.org.
16. USACE - U.S. Army Corps of Engineers; www.usace.army.mil.
17. USDA - U.S. Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
18. USDA - U.S. Department of Agriculture; Rural Utilities Service; www.usda.gov.
19. USP - U.S. Pharmacopeial Convention; www.usp.org.
20. USPS - United States Postal Service; www.usps.com.

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they are to mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

- 1.CFR - Code of Federal Regulations; Available from U.S. Government Publishing Office; www.govinfo.gov.
- 2.DOD - U.S. Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.dsp.dla.mil/Specs-Standards/.
- 3.DSCC - Defense Supply Center Columbus; (see FS).
- 4.FED-STD - Federal Standard; (see FS).
- 5.FS - Federal Specification; Available from DLA Document Services; www.dsp.dla.mil/Specs-Standards/.
 - a. Available from Defense Standardization Program; www.dsp.dla.mil.
 - b. Available from U.S. General Services Administration; www.gsa.gov.
 - c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org.
- 6.MILSPEC - Military Specification and Standards; (see DOD).
- 7.USAB - United States Access Board; www.access-board.gov.

8.USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (see USAB).

F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they are to mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

- 1.BEARHFTI; California Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; (see BHGS).
- 2.BHGS; State of California Bureau of Household Goods and Services; (Formerly: California Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation); www.bhgs.dca.ca.gov.
- 3.CCR; California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; www.oal.ca.gov/publications/ccr/.
- 4.CDPH; California Department of Public Health; Indoor Air Quality Program; www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/Main-Page.aspx.
- 5.CPUC; California Public Utilities Commission; www.cpuc.ca.gov.
- 6.SCAQMD; South Coast Air Quality Management District; www.aqmd.gov.
- 7.TFS; Texas A&M Forest Service; Sustainable Forestry and Economic Development; <https://tfsweb.tamu.edu/>.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 01 42 00

SECTION 01 42 13

ABBREVIATIONS SYMBOLS and ACRONYMS

PART 1 - GENERAL

- 1.01 SECTION INCLUDES
 - A. List of abbreviations, symbols, and acronyms of societies, institutes, and associations generally appearing in the Contract Documents.
- 1.02 RELATED REQUIREMENTS
 - A. Division 01 - General Requirements

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

- 3.01 ABBREVIATIONS
 - ac Alternating current
 - amp ampere
 - C Degrees Centigrade, Celsius
 - Cat 6 Category 6, unshielded twisted pair cabling
 - CFC Chlorofluorocarbon
 - cfh Cubic feet per hour
 - cfm Cubic feet per minute
 - cm Centimeter
 - Co. Company
 - Corp. Corporation
 - d Penny
 - db. Decibel
 - DB Dry bulb
 - dc Direct current
 - ePTZ Digital Pan Tilt Zoom
 - F Degrees Fahrenheit
 - fpm Feet per minute
 - FPS Frames per Second
 - ft Foot or feet
 - GA Gage
 - gph Gallons per hour

 - gpm Gallons per minute
 - HP Horsepower
 - Hz Hertz
 - ID Inside Diameter
 - Inc. Incorporated
 - IP Internet Protocols
 - IR light Infrared light
 - Kbps Kilobits per Second
 - KHz Kilohertz
 - Kip thousand pounds
 - Ksf Thousand pounds per square foot
 - Ksi Thousand pounds per square inch

Kv	Kilovolt
KVA	Kilovolt amperes
KW	Kilowatt
KWH	Kilowatt hour
LED	Light Emitting Diode
LF	Linear foot
Lb(s)	Pound(s)
LCD	Liquid Crystal Display
Lux	A standard unit of illumination measurement
Max	Maximum
MBH	1000 BTUs per hour
MHz	Mega hertz
mil	Thousandth of an inch
Min	Minimum
mm	Millimeter
mph	Miles per hour
NA	Not Applicable
NIC	Not in Contract
OC	On Center
OD	Outside Dimension
oz.	Ounce
PCF	Pounds per cubic foot
pH	Acidity-alkalinity balance
PoE	Power Over Ethernet – A standard for providing power over network cable
psf	Pounds per square foot
psi	Pounds per square inch
psig	Pounds per square inch, gage
PTS	Pan–Tilt–Zoom
PVC	Polyvinylchloride
QoS	Quality of Service
RF	Radio frequency
rpm	Revolutions per minute
SDK	Software Development Kit
SF	Square foot
SIP	Session Initiation Protocol
SMA	Software Maintenance Agreement
SS	Stainless Steel
SSL	Secure Sockets Layer
SSM	Server Software Module
SY	Square yard
TCP	Transmission Control Protocol
TLS	Transport Layer Security
UI	User Interface
Unicast	Communication between a single sender and single receiver on network
UPnP	Universal Plug and Play
V	Volts
VBR	Variable Bit Rate
VMS	Video Management System
W	Watts
WB	Wet bulb
WDR	Wide dynamic range

3.02

SYMBOLS

#	Number or pound
'	Foot or feet

- " Inch(es)
- % Percent
- ° Degree (Angle or Temperature)

3.03

ACRONYMS

- AA The Aluminum Association, Inc
- AABC Associated Air Balance Council
- AAMA American Architectural Manufacturers Association
- AASHTO American Association of State Highway and Transportation Officials
- AATCC American Association of Textile Chemists and Colorists
- ABMA American Boiler Manufacturers Association
- ACI American Concrete Institute
- ACS Access Control System
- AEC Automatic Echo Cancellation
- ADA Americans with Disabilities Act
- ADAAG Americans with Disabilities Act Accessibility Guidelines
- AFF Above Finish Floor
- AGC Automatic Gain Control
- ALPR License Plate Recognition
- AGA American Gas Association
- AGC Automatic Gain Control
- AGCIH American Conference of Governmental Industrial Hygienists
- AI Asphalt Institute
- AIA American Institute of Architects
- AISC American Institute of Steel Construction
- AISI American Iron and Steel Institute
- AITC American Institute of Timber Construction
- AMCA Air Movement and Control Association, Inc.
- ANI Automatic Number Identification
- ANSI American National Standards Institute
- APA APA – The Engineered Wood Association
- API Application Programming Interface
- ARI Air-Conditioning and Refrigeration Institute
- ARS Automated Route Selection
- ARP Address Resolution Protocol
- ATSC Advanced Television Systems Committee
- ASHRAE American Society of Heating, Refrigeration and Air Conditioning Engineers
- ASME American Society of Mechanical Engineers
- ASTM American Society for Testing and Materials
- ATBCB Architectural & Transportation Barriers Compliance Board
- AWI Architectural Woodwork Institute
- AWPA American Wood Preservers Association

AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BBS	Backbone Switch
BGP	Border Gateway Protocol
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Institute of America
BICSI	Building Industry Consulting Services, International
BRI	Basic Rate Interface
BOOTP	Bootstrap Protocol
BTU	British thermal unit
CAL/OSHA	California Occupational Safety and Health Administration
CAC	Call Admission Control
CAS	Channel Associated Signaling
CAT 5e	Category 5e
CBC	California Building Code
CCR	California Code of Regulations
CCK	Complementary Code Keying
CDR	Call Detail Record
CEC	California Electrical Code
CESM	Compact Edge Switch-Managed
CFR	Code of Federal Regulations
CIF	Common Intermediate Format
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CLI	Command Line Interface
CLID	Calling Line Identification
CMAS	California Multiple Award Schedule
CMC	California Mechanical Code
CNG	Comfort Noise Generation
CNID	Calling Party Name Identification
CQC	California Quality Control (CMA Standards)
Codec	Coder/Decoder
COP	Coefficient of performance
COS	Class of Service
CPC	California Plumbing Code
CRA	California Redwood Association
CSA	Client Software Application
CRI	Carpet and Rug Institute
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standards, U.S. Department of Commerce
CS	Communications Server

CSFM	California State Fire Marshal
CSI	Construction Specifications Institute
CTIOA	Ceramic Tile Institute of America
CTI	Cooling Tower Institute
DHCP	Dynamic Host Configuration Protocol
DHI	Door and Hardware Institute
DHCP	Dynamic Host Configuration Protocol
DGM	Dynamic Graphical Map
DNS	Domain Name System
DSS	Direct Station Selection
DTMF	Dual Tone Multiple Frequency
DVD	Digital Video Disc
EER	Energy efficiency ratio
EIA	Electronic Industries Alliance
EIS	Electronic Image Stabilization
ESM	Edge Switch-Managed
E&M	Ear and Mouth
FAT	Field Acceptance Testing
FEP	Front End Processor
FEP	Fluorinated Ethylene Propylene
FPS	Frames per Second
FTP	File Transfer Protocol
FXS	Foreign Exchange Station
EPA	Environmental Protection Agency
ETL	ETL Testing Laboratories
FCC	Federal Communication Commission
FDA	Food and Drug Administration
FECC	Far End Camera Control
FPS	Frames per Second
FM	Factory Mutual
FPS	Frames per Second
FS	Federal Specifications
FTP	File Transfer Protocol
FXO	Foreign Exchange Office
FXS	Foreign Exchange Station
GA	Gypsum Association
GANA	Glass Association of North America
GBIC	Gigabit Interface Converter
GUI	Graphical User Interface
GigE	Gigabit Ethernet
HMMA	Hollow Metal Manufacturer's Association
HPVA	Hardwood Plywood & Veneer Association
HTTP	Hypertext Transfer Protocol

HTTPS	Hypertext Transfer Protocol over SSL
HVAC	Heating, Ventilation, and Air Conditioning
IACS	International Annealed Copper Standards
IAMPO	International Association of Plumbing and Mechanical Officials
IC	Intercom
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
ICMP	Internet Control and Message Protocol
ID	Identifier
IDF	Intermediate Distribution Frame
IEEE	Institute of Electrical & Electronic Engineers, Inc.
IDS	Intrusion Detection System
IEC	International Electro technical Commission
IES	Illuminating Engineering Society
IMI	International Masonry Institute
IOR	Inspector of Record
IP	Internet Protocol
IP Router	Internet Protocol Router
IPVC	Internet Protocol Video Conferencing
IPX	Internetwork Packet Exchange
IRI	Industrial Risk Insurers
ISDN	Integrated Services Digital Network
ISO	International Organization for Standardization
ISA	Industry Standard Architecture
ISDN	Integrated Services Digital Network
ISM	Intermediate Switch-Managed (Fiber Switch)
ISMS	Integrated Security Monitoring and Management System
ISP	Internet Service Provider
ITU	International Telecommunication Union
IVR	Interactive Voice Response
JPEG	Joint Photographic Experts Group (image format)
Kbps	Kilobits per Second
LAN	Local Area Network
LCD	Liquid Crystal Display
LDC	Local Distribution - Cabinet
LDF	Local Distribution Frame
LED	Light Emitting Diode
LIU	Light Interconnection Unit
MAC	Media Access Control
MAN	Metropolitan Area Network
MBR	Maximum Bit Rate
MCU	Multipoint Conference Unit
MDF	Main Distribution Frame

MDF-BBS	Main Distribution Frame Backbone Switch
MIB	Management Information Base
MIC	Message Integrity Check
MLD	Multicast Listener Discovery
MLSFA	Metal Lath/Steel Framing Association
MPOE	Main Point of Entry
MPEG	Moving Picture Experts Group
MP-BGP	Multi-Protocol Border Gateway Protocol
MOS	Mean Opinion Scale
MSS	Manufacturers Standardization Society of the Valve & Fittings Industry.
NAAMM	National Association of Architectural Metal Manufacturers
NAT	Network Address Translation
NAT-PT	NAT Protocol Translation
NAS	Network Attached Storage
NBFU	National Board of Fire Underwriters
NBS	National Bureau of Standards
NCMA	National Concrete Masonry Association
NEBB	National Environmental Balancing Bureau
NEBS	Network Equipment Building System
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NEC	National Electrical Code
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NIC	Network Interface Card
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
NMP	Simple Network Management Protocol
NOFMA	National Oak Flooring Manufacturers Association
NPCA	National Paint and Coatings Association
NPDES	National Pollutant Discharge Elimination System
NRCA	National Roofing Contractors Association
NSF	National Sanitation Foundation
NTP	Network Time Protocol
NTSC	National Television System Committee
NTMA	National Terrazzo & Mosaic Association
NTSC	National Television System Committee
NUSIG	National Uniform Seismic Installation Guidelines
NWMA	National Woodwork Manufacturers Association
OC-3	Optical Carrier Level-3 (~155 Mbps)
OEHS	Office of Environmental Health and Safety (LAUSD's)
OFNR	Optical Fiber Non-Conductive Riser
OFNP	Optical Fiber Non-Conductive Plenum

OID	Object Identifier
OPX	Off Premise Extension
OSHA	Occupational Safety & Health Administrations
OSI	Open Systems Interconnection
OSPF	Open Shortest Path First
OTDR	Optical Time Domain Reflectometer.
ONVIF	Open Video Interface Forum
OWAN	OWNER's Wide Area Network
	WEST BASIN MUNICIPAL WATER DISTRICT
PA	Public Address
PABX	Private Auxiliary Branch Exchange
PA/IC	Public Address/Intercommunications
PAL	Phase Alternating Line
PAT	Port Address Translation
PBX	Private Branch Exchange
PCA	Portland Cement Association
PCI	Precast/Prestressed Concrete Institute
PCM	Pulse Code Modulation
PDI	Plumbing and Drainage Institute
PEI	Porcelain Enamel Institute
PHB	Per Hop Behavior (DiffServ)
PIC	PBX Integration Card
PIM	Protocol-Independent Multicast
PING	Packet Internet Groper
PINX	Private Integrated Services Network Exchange
PIP	Picture in Picture
PMO	Project Management Office
PoE	Power-over-Ethernet
POP	Point of Presence
POTS	Plain Old Telephone System
PRI	Primary Rate Interface
PS	Product Standard, U.S. Department of Commerce
PSIP	Program and System Information Protocol
PSTN	Public Switched Telephone Network
PZM	Pressure Zone Microphone
QCIF	Quarter CIF – See CIF
QoS	Quality of Service
QSIG	Q-Signaling
RADIUS	Remote Access Dial-In User Service
RIP	Routing Information Protocol
RIPng	Routing Information Protocol Next Generation
RIS	Redwood Inspection Service
RMON	Remote Network Monitoring

RMON2	Remote Network Monitoring Version 2
SAN	Storage Area Network
SCAQMD	South Coast Air Quality Management District
SCSI	Small Computer System Interface
SDEI	Steel Deck Institute
SDI	Steel Door Institute
SFM	State Fire Marshal
SFP	Small Form-factor Pluggable transceiver
SFP+	Enhanced Small Form-factor Pluggable transceiver
SFPA	Southern Forest Products Association
SIF	Source input format (NTSC)
SIP	Session Initiation Protocol
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joist Institute
SLC	Small Learning Community
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SMDI	Simple Message Desk Interface
SMI	Structure of Management Information
SMTP	Simple Mail Transfer Protocol
SMPTE	Society of Motion Picture and Television Engineers
SNA	Systems Network Architecture
SNMP	Simple Network Management Protocol
SSH	Secure Shell
SSID	Service Set Identifier
SSL	Secure Socket Layer
SSPC	Steel Structures Painting Council
S/P DIF	Sony/Philips Digital InterFace
SWI	Steel Window Institute
TEHO	Tail End Hop Off
TCA	Tile Council of America
TCP	Transmission Control Protocol
TFTP	Trivial File Transfer Protocol
TIA	Telecommunications Industry Association
TKIP	Temporal Key Integrity Protocol
TLS	Transport Layer Security
TOS	Type of Service
UBPPA	Uni-Bell PVC Pipe Association
UCI	Uniform Construction Index
UFAS	Uniform Federal Accessibility Standards
UL	Underwriters' Laboratories, Inc.
UM	Unified Messaging
UPS	Uninterruptible Power Supply
UPnP	Universal Plug and Play

URL	Uniform Resource Locator
USDA	United State Department of Agriculture
UTC	Coordinated Universal Time
UTP	Unshielded Twisted Pair
UPS	Uninterruptible Power Supply
USP	Unified Security Platform
USW	Unified Web Client
VAD	Voice Activity Detection
VBR	Variable Bit Rate
VLAN	Virtual Local Area Network
VM	Voice Mail
VSS	Video Surveillance System
VoD	Video on Demand
VFD	Vacuum Fluorescent Display
VTC	Video Teleconference
WAN	Wide Area Network
WDR	Wide dynamic range
WLAN	Wireless Local Area Network
WCLIB	West Coast Lumber Inspection Bureau
WDMA	Window and Door Manufacturers Association
WWPA	Western Wood Products Association

END OF SECTION

SECTION 01 42 16 DEFINITIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Definitions of words used by Project Manual.
- B. Format and language used by Project Manual.

1.02 ADDITIONAL DEFINITIONS

- A. As defined by Conditions of the Contract.
- B. Definitions specified by individual Sections of Project Manual.

1.03 DEFINITIONS OF WORDS USED BY PROJECT MANUAL

- A. "Approved" and "accepted": Means "consented to by ARCHITECT or OWNER(CM/CDR) in so far as item or action meets or exceeds requirements of Contract Documents". In no case will "approved" or "accepted" be interpreted as assurance to CONTRACTOR that requirements of the Contract Documents have been fulfilled.
- B. "For approval" and "as accepted": Means, "for formal consent by OWNER, ARCHITECT, or Consultant".
- C. "Or approved", "as approved", "or accepted", "as accepted": Means, "consented to in so far as accepted item or action meets or exceeds requirements of Contract Documents". Where used, ARCHITECT and OWNER (CM/CDR) are sole judge of quality and suitability.
- D. "Selected": Means, "as selected by ARCHITECT and/or (CM/CDR)". It is not necessarily limited to manufacturer's standard line of colors, finishes or details, unless otherwise called for.
- E. "As instructed": Means, "as instructed by ARCHITECT and/or (CM/CDR)".
- F. "As required", "as needed", "as necessary": Means "As required to suitably complete the Work" and "at the direction of the ARCHITECT and/or (CM/CDR)".
- G. "Furnish" and "supply": Means, "arrange, purchase, and deliver to site ready for intended inclusion into the Work". "Furnish" and "Supply" may be used interchangeably.
- H. "Install": Means, "to place in position for service or use", to hook up to utilities or to secure into place.
- I. "Provide": Means, "furnish, and install complete, in place, ready for intended operation and use."
- J. "Verify": Means "to determine the condition of existing elements at the project prior to beginning work".
- K. "Shown": Means, "where reasonably implied by Drawings of the Contract Documents."
- L. "Specified": Means "where reasonably implied by Project Manual".
- M. "Indicated": Means, "where reasonably implied and necessary in conformance with work specified, drawn, or required for completion, including written information and drawings of Contract Documents".
- N. "Coordinate": Means "coordinate scheduling, submittals, work of Project Manual,

Drawings, work of subcontractors, suppliers, and other means and methods as necessary for efficient, sequential, and orderly construction progress.”

- O. “Product”: Means, “materials, equipment, and other items provided by CONTRACTOR, covered under Part 2 of each Section”.
- P. “Project Manual”: Written portions of Contract Documents, as listed in the Table of Contents, including but not limited to Bidding Requirements, Contracting Requirements, Division 1- General Requirements, and specification Sections under Division 2 through Division 33.
- Q. “Drawings”: As listed in Index to Drawings and other drafted, sketched, or pictorial illustrations included in the Contract Documents.
- R. “Work”: Means, "construction, installations, applications, demolitions, and other operations as indicated or implied by the Contract Documents". Refers to work of individual Sections for complete and finished systems, and Work to fully complete requirements of the Contract Documents for Project completion as a whole.
- S. “Installer”, “Erector”, and “Applicator”: Means, “person or entity engaged by CONTRACTOR, subcontractor, or sub-subcontractor for performance of work indicated by Contract Documents, such as installation, erection, or application of specified products and systems”.
- T. “Specialist”: Means, “person, firm, or entity of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field), regularly engaged in and maintaining an experienced force of skilled workers qualified to perform items of work required by Construction Documents, such as in manufacturing, fabricating, installing, and applying specified products and systems.
- U. “Manufacturer's Instructions”: Means, “manufacturer’s written or verbal directions or recommendations, specifications, product literature, and product data as required to complete work in accordance to manufacturer's system”.
 1. Unless otherwise noted or instructed, install work in accordance with manufacturer's instructions for best results. Do not omit preparatory steps or installation procedure unless specifically modified or exempted by Contract Documents or approved by ARCHITECT and/or (CM/CDR).
 2. Where more than one manufacturer is involved in the work or its component parts, follow requirements that are more stringent by each manufacturer as required to properly complete work. Submit discrepancies or conflicts to ARCHITECT and/or (CM/CDR) for resolution.
 3. Install work in accordance with manufacturer's instructions even where not specifically stated by Contract Documents. Where Contract Documents conflict with manufacturer's instructions, notify ARCHITECT and/or (CM/CDR) for resolution. Do not proceed until written authorization is received.
- V. “Project Site”: Means, “the space made available to CONTRACTOR for performing construction activities in performing Work of this Project”. The extent of the Project Site is shown on the Drawings.
- W. “Regulatory Requirements”: Means, “codes, laws, statutes, and lawful orders established by governing agencies and other regulatory authorities having jurisdiction over the work as well as rules, conventions, and agreements within the construction industry that controls work performance”.
- X. “Days” Means “calendar days” unless otherwise indicated.

1.04 FORMAT USED BY PROJECT MANUAL

- A. "Project Manual Organization": Organization is according to Construction Specification Institute (CSI), Project Resource Manual and Master Format 2014.
 - 1. This includes Divisions of related construction information and Sections defining portions of each Division.
 - 2. Divisions and Sections do not define limits of work for each trade.
 - 3. Sections are not intended to define contractual relationships, such as between CONTRACTOR, subcontractors, suppliers, and manufacturers.
 - 4. Therefore, one or more trades may perform work of a single Section and a particular trade may perform work of more than one Section.
- B. "Document and Section Format": Based upon CSI MasterFormat, SectionFormat, and PageFormat, organization, titles, and numbering system.

1.05 LANGUAGE USED BY PROJECT MANUAL

- A. Singular and Plural: Product referenced, whether as singular or as plural in number, are to be taken to mean as many such Products and systems as required to complete the Work. Singular means plural and plural means singular.
- B. Tense: Present tense words include future tense.
- C. Gender: Words in masculine gender include feminine and neuter genders.
- D. All, each, any, every, (etc): These and similar words are generally omitted, and their meaning is implied. Read implications of these words into requirements of phrases such as, "Balance and adjust [all] dampers".
- E. Specifying by Reference: Comply with provisions of Section 014219 for products specified by Reference Standards. Conform to most current revised requirements at time of Bid.
- F. Streamlined Language: Language is abbreviated or streamlined and includes short imperative phrases in place of complete sentences.
- G. Words and phrases such as "shall", "the CONTRACTOR shall", and "shall be", are generally omitted and are to be inferred.
- H. Information is directed to CONTRACTOR, except where specifically stated otherwise.
- I. Where "CONTRACTOR" is used it means CONTRACTOR as defined by the Agreement between OWNER and CONTRACTOR.
- J. Where "OWNER" is used it may mean CONSTRUCTION MANAGER as defined by the Agreement between OWNER and CONTRACTOR.
- K. Semicolons following Articles mean "shall be", and "shall comply with", and "CONTRACTOR shall".
 - 1. Examples:
 - a. Flamespread: ASTM E 84, less than 20 means "Flame spread shall comply with ASTM E 84 and shall be less than 20".
 - b. "Base: Pack solid with non-shrink grout." means "CONTRACTOR shall pack base solid with non-shrink grout".

1.06 DIMENSIONS AND MEASUREMENTS ON DRAWINGS:

- A. Dimensions govern. Do not scale.
- B. Check dimensions and field verify with respect to adjacent or incorporated work. Bring conflicts to ARCHITECT's and/or (CM/CDR) attention for interpretation and resolution.

PART 2 - PRODUCTS - NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

SECTION 01 43 00

QUALITY ASSURANCE

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Quality Assurance - Control of Installation
 2. CONTRACTOR's Project Manager
 3. Tolerances
 4. Field Samples and Mock-ups
 5. Manufacturer's Instructions
 6. Field Quality Control Inspections and Testing
 7. Manufacturer's Field Service and Reports
 8. Certifications

1.02 QUALITY ASSURANCE - CONTROL OF INSTALLATION

- B. CONTRACTOR to confirm all specification criteria is met by individual sub-contractor prior to bid approval. This includes but not limited to the following:
1. Manufacturer, Fabricator, and Installer Qualifications.
- C. Schedule, sequence, coordinate, and oversee, as necessary to maintain quality control for the Work and as necessary to make parts of the Work fit together within critical path as defined by Project Schedule.
- D. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- E. Conform to manufacturer's instructions, Reference Standards, Regulatory Authorities, and provisions of Contract Documents to establish minimum level of quality for work of each Section.
1. Where in conflict, assume that provisions of Contract Documents prevail.
 2. Verify with ARCHITECT and/or (CM/CDR) before beginning work where other requirements are more stringent than Contract Documents.
- F. Perform work by company specializing in and qualified to produce workmanship of specified quality for size and complexity of Project.
- G. Maintain project superintendent continually on Project site for duration of Work of this Contract. Do not engage project superintendent in work other than Work of this Contract.
- H. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
- I. Give persons representing or engaged by COUNTY OF SANTA BARBARA free, safe, and unencumbered access to the Work, and portions of the Work.
- J. Give persons representing or engaged by COUNTY OF SANTA BARBARA access to off-site facilities where components of the Work are stored, work takes place that that will be included into or otherwise affect the Work.

- J. COUNTY OF SANTA BARBARA reserves right to photograph, videotape, or otherwise to record through visual, audio, electronic, and written means, work- and work-related events in order to track progress and quality of the Work.
- 1.03 CONTRACTOR'S PROJECT MANAGER
- A. Refer to Conditions of the Contract for related requirements.
 - B. Remain continuously on Project site during working hours until Final completion Work of this Contract. Do not engage in work other than Work of this Contract.
 - C. Prepare measure and payment documents including Application for Payment, modifications to the Contract, Unit Prices, and Allowances. Prepare and verify coordination with Schedule of Values specified by the Conditions of the Contract.
 - D. Prepare Submittal Schedule as specified Section 013300 – Submittal Procedures and include Submittals with lead times within Critical Path of Progress Schedule.
 - E. Review Submittals for clarity, accuracy, completeness, coordination with other work, and conformance to specified requirements.
 - F. Verify that format, number, and other provisions conform to Section 013300 – Submittal Procedures and other requirements of the Contract Documents.
 - G. Do not accept or forward for ARCHITECT's review Submittals that contain product substitutions not accepted by Substitution Request procedures specified in Section 012513 – Substitution Procedures.
 - H. Stamp and certify CONTRACTOR's review of Submittals before submitting to ARCHITECT.
 - I. Prepare or direct preparation of Coordination Overlay Drawings and Masonry Coordination Drawings as specified in Section 01 31 13 – Project Coordination.
 - J. Coordinate and facilitate testing and inspections including State, County, City, Health, Labor and Industries and as follow:
 - 1. As specified by other Sections to meet Quality Assurance and Code provisions.
 - K. Conduct Project Closeout administrative procedures including preparation and Submittals of Operating and Maintenance Manuals, Project Record Documents, Warranties, and other closeout documents.
- 1.04 TOLERANCES
- A. Monitor fabrication and installation tolerance to produce acceptable Work. Do not permit tolerances to accumulate.
 - B. Conform to specified tolerances. When manufacturers' tolerances conflict with provisions of Contract Documents, request clarification from ARCHITECT and/or (CM/CDR) before proceeding.
 - C. Make adjustments to conform to specified tolerances before securing products in place.
- 1.05 FIELD SAMPLES AND MOCK-UPS
- A. Construct specified field samples and mock-ups at designated Project location, or where instructed by ARCHITECT.
 - B. Provide physical field samples illustrating finishes, coatings, patterns, and systems.
 - C. Construct full-size mock-ups, as may be requested, for review of construction systems to establish standards by which workmanship will be judged.
 - D. Provide full scale field samples and mock-ups, as may be requested, with specified

attachments, anchorage devices, flashings, sealants, finishes, and colors for a complete and finished system.

- E. Provide in dimension as specified, or when not specified, provide in sufficient size and completeness, in consultation with ARCHITECT and/or (CM/CDR) to illustrate each sample.
- F. Do not install as part of permanent Work, except as specified or instructed by ARCHITECT.
- G. Maintain ease of access to accepted in-place mock-up. Where accepted mock-up is covered, lost, or damaged, arrange with ARCHITECT to provide new accepted mock-up as means to illustrate acceptable quality standards.
- H. Demolish and remove field samples and mock-ups when instructed to do so, or if not instructed, at Project completion.
- I. Integrated Exterior Mockups: Construct integrated exterior mockup according to approved Shop Drawings or as indicated on Drawings. Coordinate installation of exterior envelope materials and products for which mockups are required in individual Specification Sections, along with supporting materials.

1.06

MANUFACTURERS INSTRUCTIONS

- A. Conform to manufacturer's instructions in full detail, including each step-in sequence.
- B. Where manufacturer's instructions conflict with provisions of Contract Documents, including Regulatory Requirements and Reference Standards, request written clarification from ARCHITECT before proceeding with work.

1.07

FIELD QUALITY CONTROL INSPECTIONS AND TESTING

- A. Submit Quality Control Plan within 15 days of Notice of Award. Identify personnel, procedures, controls, instructions, tests, records and forms to be used to carry out the Contractor's quality-assurance and quality-control responsibilities.
- B. Conduct specified field quality control testing of in-place work as required to verify conformance to specified air, water, thermal, structural, tolerances, and other performance and design requirements.
- C. Conduct inspections and testing that conform to testing procedures and criteria published by specified reference standards, testing and laboratory agencies, and building codes.
- D. Where initial tests fail to pass specified testing requirements, provide work needed to meet or exceed inspection and testing criteria and conduct additional testing to verify conformance.
- E. Independent inspection, testing, and laboratory services may be retained by COUNTY OF SANTA BARBARA to conduct field quality control inspection testing services.
 - 1. Make provisions as needed to aid testing agency in scheduling, accessing, and performing services requested by COUNTY OF SANTA BARBARA.
 - 2. Cost of initial inspections and tests at COUNTY OF SANTA BARBARA request will be born by COUNTY OF SANTA BARBARA.
 - 3. Costs of subsequent inspections and tests, needed to rectify failed initial inspection and test results, will be paid by the COUNTY OF SANTA BARBARA and deducted from Contract Sum.
- F. Independent inspection and testing services are to be certified, accredited, approved, or recognized by qualifying agencies, organizations, or institutions as specialists in conducting these services, or accepted by ARCHITECT and/or (CM/CDR).

1.08

MANUFACTURERS FIELD SERVICES

- A. Require manufacturers to supply field services as specified and as necessary to verify conformance to manufacturer's instructions, to achieve manufacturer's warranty, and to conform to other provisions of Contract Documents and Regulatory Authorities.
- B. Require manufacturer's trained and qualified personnel to inspect site conditions, surfaces, installation, quality of workmanship, start-up of equipment, testing adjusting and balancing of equipment, and other field services as necessary to maintain quality assurance of Work.
- C. Require manufacturers and suppliers to provide and assist in initiating instructions when necessary.
- D. For non-conforming work, submit manufacturer's written report to ARCHITECT within 10 days of observation. List observations and recommendations.
- E. When site decisions and instructions are received, that are contrary to manufacturers' published instructions, promptly report to ARCHITECT and/or (CM/CDR) and verify acceptance before continuing with work.
- F. Manufacturer's Reports: Submit under provisions of 01 33 00 – Submittal Procedures.

1.09

CERTIFICATIONS

- A. Submit 2 copies of written certifications. Sign and date by authorized representative, officer, or other person legally entitled to represent business, firm, or organization submitting certification.
- B. Provide backup data, testing procedures by independent testing agency, and other information as necessary to confirm that content of written certification meets or exceeds that required by Contract Documents.
- C. Indicate conformance to, meeting or exceeding, that specified by individual Sections.

1.010

TEST DATA

- A. Submit two copies of test data including calculations from independent inspection agencies, testing laboratories, professional engineers, and as specified for each Section.
- B. Conform to requirements of Regulatory Requirements for code related certifications.
- C. Indicate acceptance or results of testing.
- D. Certify test data in letter signed by authorized representative.

PART 2 – PRODUCTS (Not Applicable to this Section).

PART 3 – EXECUTION (Not Applicable to this Section).

END OF SECTION

SECTION 01 45 19

CONTRACTOR CONSTRUCTION QUALITY CONTROL

PART 1 - GENERAL

1.01 SUMMARY

- A. The intent of this specification is to delineate a plan and procedure to be used by CONTRACTOR, working in partnership with COUNTY OF SANTA BARBARA and its agents, to assure the quality control necessary to provide for a complete, fully functional, high-quality facility in accordance with the intent and meaning of the Contract Documents.
- B. CONTRACTOR shall be totally responsible for Contractor Construction Quality Control (CQC) – which is verification by CONTRACTOR that work performed by CONTRACTOR forces is in compliance with the Contract Documents.
- C. COUNTY OF SANTA BARBARA shall be responsible for Construction Quality Assurance (CQA) – which is the verification by Construction Manager (CM), ARCHITECT of Record (ARCHITECT), Project Inspector (PROJECT INSPECTOR), and Deputy Inspectors that CONTRACTOR has taken the actions and steps defined in the Construction Documents and Contractor Construction Quality Control Plan accepted by COUNTY OF SANTA BARBARA. Verification shall consist of the Inspection of the Work in place by the ARCHITECT, PROJECT INSPECTOR, and deputy inspectors using established inspection, sampling, testing, and observational techniques.
- D. Specification includes definition of:
 - 1. CONTRACTOR requirements for establishing, administering and maintaining Quality Control (QC) over the Work and ancillary functions through Contract Closeout.
 - 2. Required elements of a Construction Quality Control program.
- E. Related Requirements:
 - 1. Section 01 1100 - Summary of the Work.
 - 2. Section 01 31 13 - Project Coordination.
 - 3. Section 01 31 19 - Project Meetings.
 - 4. Section 01 32 13 - Construction Schedule.
 - 5. Section 01 33 00 - Submittal Procedures.
 - 6. Section 01 45 24 - Environmental Import/Export Materials Testing.
 - 7. Section 01 74 16 - Storm Water Pollution Prevention Plan.
 - 8. Section 01 74 19 - Construction and Demolition Waste Management.
 - 9. Section 01 77 00 - Contract Closeout.
 - 10. Section 01 78 36 - Warranties.

1.02 OBJECTIVES

- A. Require CONTRACTOR to establish and maintain a CQC program as described in this section.
- B. Require CONTRACTOR to provide a qualified, full-time Construction Quality Control Manager to direct, manage, control, and document a CQC Plan for the Project that includes a:
 - 1. CQC Manager reporting directly to the person authorized to sign the Contract or an Officer of CONTRACTOR's firm and not be subordinate to CONTRACTOR's Project Superintendent or Project Manager.
 - 2. Adequately staffed CQC organization.
 - 3. CQC plan for the project, keyed to the work sequence, addressing site logistics, planning, submittals, design issue and interpretation coordination, and on-site and off-site Work.
 - 4. Procedure:
 - a. To ensure no construction work or testing is performed unless CQC Manager is on the work site unless otherwise approved by COUNTY OF SANTA BARBARA.
 - b. By which the CQC Manager certifies that submittals, namely: RFCs, shop drawings, etcetera for project materials, equipment, fabrication, construction and construction operations provided by CONTRACTOR comply with the requirements of the CONTRACT.
 - c. By which the CQC Manager certifies that project materials, equipment, fabrication, construction and construction operations provided by CONTRACTOR comply with the requirements of this CONTRACT.
 - d. To ensure coordination drawings have been prepared and reviewed by impacted subcontractors and trades.
 - e. To ensure an activity hazard analysis is conducted for operations specifically identified as having special safety considerations.
 - f. For quality control during project commissioning (if applicable).
 - g. For expediting project closeout.
 - 5. Schedule and format/agenda for CQC review meetings.
 - 6. Site specific Safety Plan/Injury and Illness Prevention Plan (IIPP) reviewed and accepted by COUNTY OF SANTA BARBARA.
 - 7. System to report on the CONTRACTOR's Quality Control activities.
- C. Ensure that Work is performed in accordance with the approved Construction Documents at the specified construction quality level.

1.03 SUBMITTALS

- A. For the purposes of the CQC Plan, the term "Submittals" shall include, but not be limited to, required engineering, administrative and material submittals, inspection requests, Requests for Clarification (RFCs), Change Order Proposals (COPs), Requests for Proposals (RFPs) and other project documents. The CQC Manager is responsible for the timelines of each submittal, and shall certify in writing the quality, accuracy, and completeness of submittals.
- B. CQC Manager. CONTRACTOR shall submit the resume of the proposed CQC Manager to COUNTY OF SANTA BARBARA upon receiving Notice of Award. The proposed CQC Manager shall be approved in writing by COUNTY OF SANTA BARBARA. The CQC

Manager shall be assigned to work on the project full-time through the completion of the Contract Administrative Closeout period and be available at the project site location whenever construction work occurs.

- C CONTRACTOR shall submit a draft Construction Quality Control (CQC) Plan to COUNTY OF SANTA BARBARA within fifteen days after issuance of Notice to Proceed. The CQC plan shall include, but not be limited to:
1. A letter from the person authorized to sign the Contract or an Officer of CONTRACTOR's firm clearly identifying:
 - a. CONTRACTOR's CQC Manager.
 - b. CQC Manager as having responsibility and authority to implement and manage CONTRACTOR's CQC Program.
 - c. Lines of authority and reporting for the CQC Manager. (Note: The CQC Manager shall report directly to the person authorized to sign the Contract or an Officer of the CONTRACTOR's firm. The person signing the letter shall not be the Project Manager or the Superintendent for the project nor report to the Project Manager, Superintendent or persons other than those defined heretofore.)
 - d. CQC Manager's authority to direct stoppage, removal and/or replacement of non-conforming Work.
 - e. CQC Manager (or staff reporting directly to CQC Manager) as the direct and only line of contact with COUNTY OF SANTA BARBARA's PROJECT INSPECTOR with sole responsibility for submitting and documenting inspection requests (IRs) to the PROJECT INSPECTOR.
 2. Organization Chart identifying CQC positions, names of assigned staff, duties and responsibilities, dedicated hours per week assigned to the project, and qualifications. As a minimum, there shall be, in addition to the CQC Manager:
 - a. One full-time administrative assistant and one full-time Assistant CQC Manager.
 - b. One Assistant CQC manager for every \$75 million increment (or increment thereof) of Construction Contract value over \$50 million of base Construction Contract value OR for every "stand-alone" building greater than 50,000 square feet.
 3. Staff shall be assigned to work at (and be located on) the project site when performing project-related duties. COUNTY OF SANTA BARBARA shall assess scheduled payment amounts for required CQC positions not staffed against invoiced Contract amount for the corresponding month.
 4. Proposed formats for meeting agendas, minutes and required reports
 5. Procedures for managing the submittal process, as described in Section 01 33 00, Submittals, including:
 - a. Reviews and approvals.
 - b. List of required submittals and certifications cross-referenced to the construction drawings and specifications.
 - c. Scheduled date of submittals.
 - d. Names of CONTRACTOR's staff authorized to review and certify submittals prior to submission to ARCHITECT/ENGINEER.
 6. Procedure for ensuring Construction Coordination Drawings is coordinated with (and reflect) the Contract's Construction Drawings and Specifications.

7. Procedure for preparing an Activity Hazard Analysis (AHA) Plan identifying operations requiring special safety considerations and defining the policy, procedure, and administrative steps to be taken to ensure the preparation and submittal of an AHA during each of the three phases of Construction Quality Control.
 8. Testing Plan and Log that identifies tests required (referencing the specification section and/or drawing requiring the test), subcontractor responsible for each test, scheduled date of test and actual date performed and approved.
 9. A plan for coordinating with COUNTY OF SANTA BARBARA's designated commissioning agent to ensure that documentation, measurements and calibration of systems necessary to complete the Commissioning Plan defined in Section 01 91 13 are performed prior to requesting COUNTY OF SANTA BARBARA's designated commissioning agent verify and/or observe Contractor and/or Subcontractor demonstration of operations and/or testing. COUNTY OF SANTA BARBARA or ARCHITECT of Record may act as Commissioning Agent for this project as allowed in Section 01 91 13.
 10. Procedure and documentation required to ensure CONTRACTOR compliance with sustainable building practices during construction and when considering materials for substitutions.
 11. Contract Closeout Plan compliant with requirements of Section 01 77 00, Contract Closeout.
 12. Procedures and requirements for above-ceiling coordination and installation.
 13. Procedures to identify, record and track completion and clearing of rework items (including deviations and corrections to deviations).
 14. List of outside firms CONTRACTOR may employ pursuant to executing CONTRACTOR responsibilities identified in the CQC Plan and description of their respective services.
- D. CONTRACTOR shall submit the final Construction Quality Control (CQC) Plan to COUNTY OF SANTA BARBARA within forty-five (45) days after issuance of Notice to Proceed 1 for review and acceptance.
1. COUNTY OF SANTA BARBARA reserves the right to require changes in the final CQC Plan and operations as necessary to ensure quality of Work.
 2. CONTRACTOR must receive COUNTY OF SANTA BARBARA's approval prior to implementing changes to the final CQC Plan or operations.
- E. CQC Manager Responsibilities and Qualifications
1. CQC Manager shall be designated as person responsible for directing, managing, coordinating, documenting, and reporting CONTRACTOR quality control activities in accordance with CONTRACTOR's CQC Plan including, if applicable, required CONTRACTOR materials testing and certifications.
 2. CONTRACTOR's CQC Manager shall have significant, relevant documentable training and field experience on building construction projects of a similar scale and be one of the following:
 - a. ENGINEER or ARCHITECT currently licensed in the State of California.
 - b. PROJECT INSPECTOR Class 1 or Class 2 with a current California State Certification.
 - c. Construction Contractor or superintendent (or similar position/function) with a minimum of 10 years of documentable training and field experience on building construction.

1.04 APPROVALS

- A. COUNTY OF SANTA BARBARA shall approve in writing the proposed CONTRACTOR CQC Manager prior to start of any Work requiring quality control.
- B. COUNTY OF SANTA BARBARA shall review and respond to CONTRACTOR's CQC Plan within fifteen days of receipt.
 - 1. Response shall be in writing.
 - 2. CONTRACTOR shall be assessed COUNTY OF SANTA BARBARA's actual incurred costs to provide quality control services by COUNTY OF SANTA BARBARA should CONTRACTOR fail to have an accepted CQC Plan within ninety days of Notice to Proceed 1.
- C. COUNTY OF SANTA BARBARA reserves the right to require changes in the approved CQC Plan and operations as necessary to ensure quality of the Work.
- D. CONTRACTOR shall submit a written request to CONSTRUCTION MANAGER for approval of any proposed change in the CQC Manager, CQC staff or CQC Plan or Procedures a minimum of seven days prior to the proposed change.
- E. COUNTY OF SANTA BARBARA shall have the right to require the removal and replacement of the CQC Manager or any member of the CQC staff following a minimum of seven (7) days written notice.
- F. CONTRACTOR shall receive CONSTRUCTION MANAGER's acceptance of any proposed changes to the CQC Plan prior to any implementing changes.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.01 QUALITY CONTROL RESPONSIBILITY

- A. The CONTRACTOR's CQC Manager, Project Superintendent, and Project Manager shall work together effectively. While the CQC Manager shall be the primary individual responsible for quality control, CONTRACTOR personnel, Subcontractor personnel and material suppliers shall be responsible for the quality of their work on the project.
- B. Work of the CONTRACT shall not commence prior to COUNTY OF SANTA BARBARA approval of CQC Manager and acceptance of CQC Plan unless otherwise specifically authorized in writing by CONSTRUCTION MANAGER.

3.02 MEETINGS

- A. Weekly CQC Meetings: Upon the start of construction, the CQC Manager shall conduct weekly CQC meetings at the Project Site with the project superintendent, Safety Officer and pertinent subcontractors starting with the Preconstruction Phase and continuing through completion of the construction. The COUNTY OF SANTA BARBARA, PROJECT INSPECTOR, and ARCHITECT may attend these meetings.
 - 1. The CQC Manager shall prepare the minutes of the meeting and provide a copy to the COUNTY OF SANTA BARBARA and the PROJECT INSPECTOR within two working days after the meeting.
 - 2. As a minimum, the meetings will address the following:
 - a. Minutes of the previous meeting.

- b. Status of submittals.
- c. Schedule and the status of the Work scheduled during the next two weeks relative to submittals needed for that Work.
- d. Status of inspection requests and identify pre-inspection requirements.
- e. Work to be accomplished in the next fourteen days and the related required documentation.
- f. Current and upcoming activities requiring special safety training, resources and/or activity hazard analyses including:
 - 1) The activity hazard analyses prepared and submitted.
 - 2) Fourteen (14) day safety look-ahead schedule.
 - 3) Safety audit findings.
 - 4) Safety deficiency/corrective action log.
- g. Resolve CQC and production problems, including open deviations and rework items.
- h. Address items that may require revising the CQC Plan.

B. Preconstruction Submittal Phase

1. CONSTRUCTION MANAGER shall schedule a Presubmittal Meeting within twenty-one (21) days following Notice of Award. The Presubmittal Meeting will include key representatives of COUNTY OF SANTA BARBARA (CONSTRUCTION MANAGER, PROJECT INSPECTOR, key specialty inspectors, key testing agency representatives), CONTRACTOR (and key subcontractors), and ARCHITECT/ENGINEER (and key sub consultants).
2. Purpose of this meeting is to:
 - a. Develop a mutual understanding of CONTRACT and the COUNTY OF SANTA BARBARA's CQC Plan requirements prior to Plan development and submittal.
 - b. Establish the Project Quality approach.
 - c. Define the scope, content and documentation required for submittals.
 - d. Establish the quality requirements for submittals, with a goal of no "Revise and Resubmit" responses to submittals.
 - e. Define review criteria for each of the submittals.
 - f. Set timeframes for the preparation, transmittal and review of the submittals.
 - g. Establish the framework for a Project Quality Assurance/Quality Control Team and the associated quality culture for the life of the project.
 - h. Foster teamwork between CONSTRUCTION MANAGER, CONTRACTOR (including CQC Manager and subcontractors), PROJECT INSPECTOR (and subordinate specialty inspectors and testing entities), and the ARCHITECT/ENGINEER (and sub consultants) and will function as an initial teambuilding intervention.
 - i. Schedule follow-on meetings between each of the subcontractors and their respective counterpart sub consultants for the purpose of defining in detail the scope, content and documentation required for submittals.
3. The results of this meeting shall be incorporated into the CONTRACTOR's Construction Quality Control Plan submittal.

- C. Partnering Meetings: CQC Manager shall schedule and coordinate the attendance of required CONTRACTOR and Subcontractor personnel and participate in "Partnering" sessions required by the appropriate Division 01 Specification in the Contract or CONSTRUCTION MANAGER.

3.03 THREE-PHASE CONSTRUCTION QUALITY CONTROL PROCESS

- A. For each project activity and each trade associated with that activity, CONTRACTOR shall perform a three-phase construction quality control process with that activity to ensure each trade's Work complies with CONTRACT requirements and is coordinated with other trades. The three-phase quality control process shall address both on-site and off-site Work and include:
 - B. Preparatory Phase: CONTRACTOR shall conduct a Preparatory Phase meeting with the superintendent, CONTRACTOR's Safety Officer, subcontractor, and the foreman responsible for that portion of Work.
 1. A Preparatory Phase meeting shall be conducted a minimum of five working days and maximum of ten working days prior to the scheduled start of the Work.
 2. CONSTRUCTION MANAGER and PROJECT INSPECTOR shall be notified at least two working days prior to each Preparatory Phase meeting.
 3. The CQC Manager shall prepare and distribute an agenda to attendees at least two working days prior to each Preparatory Phase meeting.
 4. At each Preparatory Phase meeting, the following tasks shall be performed:
 - a. Review the applicable Contract Document specification sections.
 - b. Review the applicable Contract Document and trade coordination drawings.
 - c. Review codes, jurisdictional requirements and COUNTY OF SANTA BARBARA standards relative to execution of the applicable portion of the Work.
 - d. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and reviewed.
 - e. Verify, when required, the receipt of approved factory test results.
 - f. Review the testing plan and testing schedule to ensure that provisions have been made to provide the required QC testing.
 - g. Review the safety plan and appropriate activity hazard analysis to ensure applicable safety requirements are met.
 - h. Examine the work areas to ensure the required preliminary Work has been completed.
 - i. Discuss construction methods, as necessary.
 - j. Confirm coordination with other trades.
 - k. Confirm above-ceiling coordination is completed.
 - l. Confirm service accessibility for installed systems.
 - m. Confirm PROJECT INSPECTOR inspection requirements of the WORK and Inspection Request timing and submittal requirements.
 5. The CQC Manager shall prepare minutes of Preparatory Phase meetings and provide a copy to attendees of the meeting within two (2) working days after each meeting.
 6. Results of preparatory phase meeting and actions shall be documented in the weekly CONTRACTOR Quality Control Report.

- C Initial Phase: When construction crews are ready to start work, the CQC Manager shall coordinate with the superintendent, CONTRACTOR's Safety Officer and foreman responsible for the Work and:
 - 1. Notify CONSTRUCTION MANAGER and PROJECT INSPECTOR at least two working days in advance of starting the Work.
 - 2. Observe the initial Work activities to ensure compliance with Contract requirements including Safety.
 - 3. Perform the following:
 - a. Confirm that the quality of materials, fabrication, and execution provided meets requirements.
 - b. Resolve potential conflicts.
 - c. Review the Safety Plan and appropriate activity hazard analysis and verify that the applicable safety requirements are met.
 - d. Ensure that testing is performed by the approved laboratory.
 - 4. Repeat the Initial Phase for each new crew assigned to work on-site or when compliance falls below acceptable levels when so notified by COUNTY OF SANTA BARBARA.
 - 5. Document observations and results of Initial Phase coordination and activities in the weekly CONTRACTOR Quality Control Report and Contractor Safety Report.
- D Follow-Up Phase: After the work has begun, perform the following:
 - 1. Document results and observations in the weekly CONTRACTOR Quality Control Report.
 - 2. Daily, or more frequently as necessary, until completion of Work:
 - a. Ensure the Work is in compliance with Contract requirements.
 - b. Identify and document subcontractor Work requiring rework or correction.
 - c. Ensure that rework items are documented and are corrected.
 - d. Ensure that the quality of materials, fabrication, and execution provided complies with the requirements of the Contract Documents.
 - e. Review and sign off on Inspection Requests prior to issuance to PROJECT INSPECTOR.
 - f. Ensure that testing is performed by the approved laboratory.
 - g. Ensure safety requirements and practices are observed.
- E. Notify CONSTRUCTION MANAGER, PROJECT INSPECTOR and involved local regulatory agencies or utilities at least fourteen days prior to the start of Preparatory and Start-Up Phases for Off-Site Work.

3.04 ACTIVITY HAZARD ANALYSIS – CONTRACTOR SAFETY PROGRAM

- A. Before beginning each Work activity, CONTRACTOR shall prepare and utilize for each task an AHA or Job Safety Analysis (JSA). The AHA/JSA shall be reviewed by each work crew prior to the activity and re-addressed any time there are changes in that activity. A sample of an AHA can be found on the COUNTY OF SANTA BARBARA Website or in the COUNTY OF SANTA BARBARA Safety Standards.
 - 1. Activity Hazard Analyses will define the activities being performed and identify the sequences of work, specific hazards anticipated, site conditions, materials and control measures to be implemented to eliminate or reduce each hazard.

2. Work shall not begin until the AHA/JSA for the work activity has been accepted by COUNTY OF SANTA BARBARA and discussed with parties engaged in the work activity (CONTRACTOR, subcontractors, COUNTY OF SANTA BARBARA representatives) at the preparatory and initial phase meetings required by the Construction Quality Control process.
 3. The names of the competent/qualified person(s) required to be present during a particular activity (e.g., excavations, fall protection, other activities required by OSHA or similar jurisdictions) shall be identified and included in the AHA/JSA. Proof of their competency shall be submitted to the COUNTY OF SANTA BARBARA for acceptance prior to the start of that work activity.
 - a. If more than one competent/qualified person will be used on the AHA/JSA activity, a list of names shall be submitted as an attachment to the AHA form. Those listed shall be competent/qualified for the type of work involved in the AHA and familiar with current site safety policies, procedures and issues.
 - b. If a new competent/qualified person is added to the staff, the original list attached to the AHA form shall be updated. The new person shall acknowledge in writing that he/she has reviewed the AHA/JSA and is familiar with the current site safety issues.
 4. The AHA/JSA shall be reviewed and modified as necessary to address changing site conditions, operations, or change of competent/qualified person(s).
- B. An AHA/JSA shall be prepared and documented for each project work activity as warranted by the hazards associated with the activity. Generally, an AHA shall be prepared for field work activities.

3.05 REQUIRED CONTRACTOR QUALITY CONTROL CERTIFICATIONS

- A. Submittal Certification: The CQC Manager shall certify in writing as to the adequacy and completeness of submittals.
- B. Contractor Quality Control Report Certification: Furnish weekly CONTRACTOR Quality Control Reports signed by CQC Manager containing the following statement: "On behalf of CONTRACTOR, I certify that this report is complete, correct and equipment and material used and work performed during this reporting period is in compliance with the Contract Documents to the best of my knowledge, except as noted in this report."
- C. Invoice Certification: Include a certificate with each payment request, signed by CQC Manager, attesting that record drawings are current and the Work for which payment is requested, including stored material, is in compliance with Contract requirements.
- D. Completion Certification: Upon completion of designated portion of the Work, furnish a certificate to COUNTY OF SANTA BARBARA, signed by the CQC Manager, attesting that "...the Work has been completed, inspected, tested and is in compliance with the Contract requirements."
- E. Commissioning Certification. In coordination with COUNTY OF SANTA BARBARA's designated Commissioning Agent, furnish a certification to COUNTY OF SANTA BARBARA, signed by the CQC Manager, attesting that the Work of CONTRACTOR, in support of the project commissioning activities, "...has been completed in compliance with the approved Project Commissioning Plan and Contract requirements."
- F. Submittals: CQC Manager shall attest in writing as to the adequacy and completeness of submittals.
- G. Drawing Certification: The CQC Manager shall certify in writing as to the accuracy and completeness of submitted CONTRACTOR "As-Built" and trade coordination drawings.

- H. Punch List Certification: The CQC Manager shall attest in writing as to the accuracy and completeness of rework and punch list corrective activities.

3.06 PROJECT CLOSEOUT

- A. The CQC Manager shall be responsible for ensuring the quality and completeness of CONTRACTOR closeout activities as they relate to the Work of the contract including, but not limited to, remedial work, final submittals, as-built and coordination drawings, maintenance and operations manuals and training, stacks of spare parts and materials, and the like.
- B. Prior to CONTRACTOR submission of the Request for Certificate of Completion, CQC Manager shall:
 - 1. Ensure completion of Work except those minor items on CONTRACTOR's Punch List.
 - 2. Conduct a CONTRACTOR Pre- Completion Inspection of the entire Work to:
 - a. Identify any additional items of construction requiring correction to comply with the project documents.
 - b. Cause trades to promptly correct identified defects in their respective Work.
 - c. Re-inspect the Work to ensure compliance with project documents.
 - 3. Certify that items, except those minor Work items on CONTRACTOR's Punch List, have been completed in accordance with the contract plans and specifications.
 - 4. Ensure required closeout documents, as outlined in Section 01 77 00, have been submitted to COUNTY OF SANTA BARBARA.
- C. CONTRACTOR's Request for notice of Completion shall have attached the Punch List prepared by CONTRACTOR with known corrective items indicated and be certified by the CQC Manager that items listed and on the Inspector List or with a Deviation/Corrective Notice as needing rework or correction have been corrected in accordance with the plans and specifications.
- D. Upon determination by COUNTY OF SANTA BARBARA that the Work is Complete and ready for inspection, the PROJECT INSPECTOR shall conduct a Completion Inspection and prepare an Inspector List (Working Copy) incorporating input from the ARCHITECT, its subconsultants and other COUNTY OF SANTA BARBARA representatives. The CQC Manager and other CONTRACTOR representatives may participate in this Completion Inspection.
- E. COUNTY OF SANTA BARBARA will provide a notice of Completion with Inspector List (Working Copy) attached. The Inspector Punch List (Master Copy) shall be provided within five days of COUNTY OF SANTA BARBARA's provision of the notice of Completion.
- F. Within the time allowed for Administrative Closeout of the contract, CONTRACTOR shall correct the deficient Work indicated on the Inspector Punch List (Master Copy). The CQC Manager shall certify that the Work of the Inspector Punch List (Master Copy) has been completed and ask for a Final Inspection of the Work. COUNTY OF SANTA BARBARA will re-inspect the Work and identify any items still requiring correction.
- G. Upon correction of items on the Inspector Punch List (Master Copy) or at the end of the Administrative Closeout period, COUNTY OF SANTA BARBARA shall issue a Notice of Contract Completion to CONTRACTOR directing the cessation of CONTRACTOR and Subcontractor activities and advising of any assessment of monies for uncorrected Punch List items or undelivered Record Documents.

3.07 DOCUMENTATION

CQC Manager shall maintain current and complete records of on-site and off-site construction and CQC program operations and activities including, but not limited to:

A. CONTRACTOR Daily Construction Report

1. The CONTRACTOR Daily Construction Report shall be generated as required in Section 01 50 00, Construction Facilities and Temporary Controls, and shall include the following information:
 - a) Date of report, name of Contractor, and superintendent present.
 - b) Weather conditions in the morning and in the afternoon including maximum and minimum temperatures.
 - c) List of Contractor and subcontractor personnel on the Project site, their trades, employer, Work location, description of work performed (corresponding to schedule activity numbers) and hours worked.
 - d) List of job safety actions taken and safety inspections conducted. Indicate that identified safety deficiencies have been corrected and provide related documentation of the following:
 - 1) Job safety meetings held (including sign-in sheets).
 - 2) Lost time accidents/incidents (including witness statements and photographs).
 - 3) Daily written safety inspections conducted including, as a minimum when applicable:
 - a) Fire extinguishers.
 - b) Crane certification/equipment operator licenses.
 - c) Trenching/shoring/scaffold/high voltage electrical/ elevated work.
 - d) Personal Fall Arrest System (PFAS) equipment/harnesses, spider boxes.
 - 4) Hazardous material/waste released into the environment.
 - 5) Meetings held, including CQC preparatory and initial phase meetings.
 - a) List of equipment/material received that day and which is incorporated into the project.
 - b) List of construction and plant equipment on the Project site including number of hours used, idle and down for repair. Identify whether equipment is CONTRACTOR-owned or rental.
 - c) Include a "remarks" section in this report for directions, problems and delays, drawing coordination and conflicts, field changes, records of visitors, and any other relevant issues.
 - d) List of items, generated by CQC staff, observed as requiring correction or having been corrected.
2. Terminology used for reporting of Work in the CONTRACTOR Daily Construction Report shall be consistent with terminology in the construction schedule.
3. Reports shall be prepared, signed and dated by Contractor's project superintendent. CQC Manager shall review and initial CONTRACTOR Daily Construction Reports, add comments as necessary and attach to the Contractor Quality Control Report prepared for the same day.

B. CONTRACTOR Quality Control Report:

1. Weekly reports shall be prepared, certified and submitted on the first Monday following the reporting period to CONSTRUCTION MANAGER and PROJECT INSPECTOR for each day Work was performed during the week and/or weekly for every period of no-work.
2. Terminology used for reporting of Work shall be consistent with terminology in the construction schedule or contract documents.
3. Reports shall be prepared, signed, and dated by the CQC Manager and include the following information:
 - a. identification of the Work and its associated construction quality control phase (Preparatory, Initial, Follow-up) including:
 - 1) Results of Preparatory Phase meetings held during the reporting week, including location of the Work and list of personnel present at the meeting and that tasks listed in 3.03.A.4 were addressed and performed.
 - 2) Results from Initial Phase meetings held during the week, including location of the Work, list of trades involved, and personnel present at the meeting. Indicate in the report that:
 - a) Preliminary Work was done correctly.
 - b) Work is in compliance with CONTRACT and jurisdictional requirements.
 - c) Materials, fabrication, and execution are satisfactory.
 - d) Safety requirements were met.
 - e) Samples have been prepared and approved.
 - f) Required testing to be performed, by whom and verify that the results are in compliance with requirements.
 - g) Required tests were performed by the approved testing laboratory.
 - 3) Results of Follow-Up Phase observations and inspections conducted during the week including verifying:
 - a) Location of the Work.
 - b) Work was done correctly.
 - c) Work complies with CONTRACT requirements.
 - d) Materials, fabrication, and execution are satisfactory.
 - e) Required testing has been performed, by whom and verify that the results are in compliance with requirements.
 - f) Required tests were performed by the approved testing laboratory and individual responsible for performing the tests.
 - b. Safety-related activities including operations, incidents, analyses, and lessons learned.
 - c. List of corrected rework items along with the corrective action taken.
 - d. List of rework items identified by CQC staff and/or PROJECT INSPECTOR but not corrected by close of business for the reporting period.
 - e. Results of the three phases of quality control for off-site Work, if applicable, including actions taken.
 - f. Status of submittals, namely: RFCs, materials, project schedules, activity hazard analyses, etc.

2. Within fifteen (15) days after Notice to Proceed 1, and prior to any waste removal, submit the plan to the CONSTRUCTION MANAGER for review and approval.
 3. Review and ensure timely submission of required monitoring and final reports.
- G. California Environmental Quality Act (CEQA) Report: The CQC Manager is required to:
1. Verify compliance with CEQA requirements at the project site.
 2. Review and ensure timely submission of required monitoring and final reports.
- H. Environmental Import/Export Materials: The CQC Manager is required to:
1. Review the import/export Sampling Strategy Plan (SSP) prepared by the CONTRACTOR'S licensed environmental professional as outlined in Section 01 45 24.
 2. Review the Draft Certification Report prepared by the CONTRACTOR's licensed environmental professional as outlined in Section 01 45 24.
 3. Provide required certifications and manifests.
- I. Test and Balance: The CQC Manager is required to:
1. Review the qualifications of the Test and Balance agency directly subcontracted to the CONTRACTOR.
 2. Review the Work of the Test and Balance agency as part of the CQC program.
- J. Trade Coordination Drawings: The CQC Manager shall:
1. Facilitate the preparation and utilization of trade coordination drawings as required under Section 01 31 13.
 2. Ensure and certify that the trade coordination drawings are complete and are continuously updated to reflect changes in the Work.
 3. Ensure that the trade coordination drawings are used during the Preparatory Phase for each scheduled construction operation such that the Work of trades is properly coordinated and free from interference and conflict.
 4. Field changes arising from the coordination of the respective trades will be reflected in revised trade coordination drawings.
 5. Trade coordination drawings will be updated and certified monthly by the CQC Manager as to their accuracy and completeness precedent to review by COUNTY OF SANTA BARBARA.
- K. As-Built Drawings: CQC Manager shall review the as-built drawings required by Section 01 77 00, CONTRACTOR's AS-BUILT DOCUMENTS, to ensure as-built drawings are:
1. Kept current on a weekly basis.
 2. Marked to show precise, referenced locations of any deviations made from the Contract Document drawings or specifications.
- L. As part of the Request for Completion, the CQC Manager shall attest to the accuracy of the as-built drawings and submit the as-built drawings to the CONSTRUCTION MANAGER with a certificate attesting to the accuracy of the As-Built drawings prior to Administrative Closeout.

END OF SECTION

SECTION 01 45 23

TESTING AND INSPECTION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Testing and inspection services to meet requirements of the California Building Code (CBC) and COUNTY OF SANTA BARBARA.
- B. Related Requirements:
 - 1. DIVISION 3 - Concrete.
 - 2. DIVISION 4 - Masonry.
 - 3. DIVISION 6 - Metals.

1.02 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. ACI 318 – Building Code Requirements for Structural Concrete and Commentary.
- B. American Institute of Steel Construction (AISC):
 - 1. AISC 360 – Specification for Structural Steel Buildings.
 - 2. AISC 341 – Seismic Provisions for Structural Steel Buildings.
- C. ASTM International (ASTM):
 - 1. ASTM A108 – Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished.
 - 2. ASTM A370 – Standard Test Methods and Definitions for Mechanical Testing of Steel Products.
 - 3. ASTM A706 – Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement.
 - 4. ASTM C31 - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
 - 5. ASTM C172 - Standard Practice for Sampling Freshly Mixed Concrete.
 - 6. ASTM C780 - Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry.
 - 7. ASTM C1140 - Standard Practice for Preparing and Testing Specimens from Shotcrete Test Panels.
 - 8. ASTM C1314 - Standard Test Method for Compressive Strength of Masonry Prisms.
 - 9. ASTM C1604 - Standard Test Method for Obtaining and Testing Drilled Cores of Shotcrete.
 - 10. ASTM E164 - Standard Practice for Contact Ultrasonic Testing of Weldments.
 - 11. ASTM E488 - Standard Test Methods for Strength of Anchors in Concrete Elements.
 - 12. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing.

13. ASTM E605 - Standard Test Methods for Thickness and Density of Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members.
14. ASTM E1444 - Standard Practice for Magnetic Particle Testing.
15. ASTM F606 - Standard Test Methods for Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Washers, Direct Tension Indicators, and Rivets.

- D. Association of the Wall and Ceiling Industry (AWCI):
 1. AWCI Technical Manual 12-B - Standard Practice for the Testing and Inspection of Field Applied Thin Film Intumescent Fire-Resistive Materials; an Annotated Guide.
- E. American Welding Society (AWS):
 1. AWS D1.1 – Structural Welding Code.
 2. AWS D1.4 – Structural Welding Code – Reinforcing Steel.
 3. AWS D1.8 – Structural Welding Code – Seismic Supplement.
- F. Any COUNTY OF SANTA BARBARA Interpretation Regulations (IR).

1.03 REGULATORY REQUIREMENTS

- A. Laboratories performing testing shall have COUNTY OF SANTA BARBARA's Laboratory Evaluation and Acceptance Program approval prior to providing material testing or special inspection services.
- B. Tests of materials and inspections shall be in accordance of Section 4-213 through 4-219 of the California Building Standards Commission's, California Administrative Code.
- C. Required material testing, inspections and special inspections are indicated on COUNTY OF SANTA BARBARA listing of Structural Tests & Special Inspections (T&I List).

1.04 TESTS

- A. COUNTY OF SANTA BARBARA will contract with an approved testing laboratory to perform the testing indicated on the Contract Documents, including the Tests and Special Inspections (T&I) list.
- B. Selection of material to be tested shall be by the Testing Laboratory and not by CONTRACTOR.
- C. Any material shipped from the source of supply prior to having satisfactorily passed such testing and inspection, or prior to the receipt of notice from Project Inspector such testing and inspection is not required, shall not be incorporated into the Work.
- D. COUNTY OF SANTA BARBARA will select, and directly reimburse, the Testing Laboratory for costs of all required tests and inspections; however, the Testing Laboratory may be reimbursed by CONTRACTOR for such costs as specified or noted in related sections of the Contract Documents.
- E. The Testing Laboratory is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
- F. The Testing Laboratory shall not perform any duties of CONTRACTOR.
- G. CONTRACTOR shall provide an insulated curing box with the capacity for twenty concrete cylinders and will relocate said box and cylinders as rapidly as required in order to provide for progress of the Work.

1.05 TEST REPORTS

- A. Test reports shall include all tests performed, regardless of whether such tests indicate the material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations, when and as required, shall also be reported. Reports shall indicate the material (or materials) was sampled and tested in accordance with requirements of CBC, Title 24, Parts 1 and 2, as indicated on the Contract Documents. Test reports shall indicate specified design strength and specifically state whether or not the material (or materials) tested comply with the specified requirements.

1.06 VERIFICATION OF TEST REPORTS

- A. Each Testing Laboratory shall submit in duplicate, a verified report covering all tests required to be performed by that agency during the progress of the Work. Such report, covering all required tests, shall be furnished prior to Substantial Completion and/or, when construction on the Work is suspended, covering all tests up to the time of Work suspension.

1.07 INSPECTION BY COUNTY OF SANTA BARBARA

- A. COUNTY OF SANTA BARBARA, and its representatives, shall have access, for purposes of inspection, at all times to all parts of the Work and to all shops wherein the Work is in preparation. CONTRACTOR shall, at all times, maintain proper facilities and provide safe access for such inspection.
- B. CONSTRUCTION MANAGER (CM/CDR) shall have the right to reject materials and/or workmanship deemed defective Work and to require correction. Defective workmanship shall be corrected in a satisfactory manner and defective materials shall be removed from the premises and legally disposed of without charge to COUNTY OF SANTA BARBARA. If CONTRACTOR does not correct such defective Work within a reasonable time, fixed by written notice and in accordance with the terms and conditions of the Contract Documents, COUNTY OF SANTA BARBARA may correct such defective Work and proceed in accordance with related Articles of the Contract Documents.
- C. CONTRACTOR is responsible for compliance to all applicable local, state, and federal regulations regarding codes, regulations, ordinances, restrictions, and requirements.

1.08 PROJECT INSPECTOR

- A. A PROJECT INSPECTOR will be employed by COUNTY OF SANTA BARBARA in accordance with requirements of Title 24 of the California Code of Regulations with their duties specifically defined therein. Additional Special Inspectors may be employed and assigned to the Work by COUNTY OF SANTA BARBARA in accordance with the requirements of the CBC and COUNTY OF SANTA BARBARA.
- B. Inspection of Work shall not relieve CONTRACTOR from any obligation to fulfill all terms and conditions of the Contract Documents.
- C. CONTRACTOR shall be responsible for scheduling times of inspection, tests, sample taking, and similar activities of the Work.

1.09 STRUCTURAL TESTS AND SPECIAL INSPECTIONS

- A. Soils:
 - 1. General: Periodic inspection by Geotechnical Engineer for verification of the following construction activities in conformance to CBC Table 1705A.6:
 - a. Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations.

- b. Foundation excavations are extended to proper depth and have reached proper material.
 - c. Materials below footings are adequate to achieve the design bearing capacity.
2. Compacted Fills: Testing and inspections shall be in conformance to Table 1705A.6:
- a. Geotechnical Engineer will continuously verify the use of proper materials and inspect lift thicknesses, placement, and compaction during placement of fill.
 - b. Testing Laboratory under the supervision of the Geotechnical Engineer will:
 - 1) Perform qualification testing of fill materials.
 - 2) Test the compaction of fill.
3. Driven Deep Foundations (Piles): Testing and inspections shall be in conformance to Table 1705A.7:
- a. Continuous inspections by Geotechnical Engineer:
 - 1) Verify pile materials, sizes and lengths comply with the requirements.
 - 2) Inspect driving operations and maintain complete and accurate records for each pile.
 - 3) Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.
 - b. Testing Laboratory under the supervision of the Geotechnical Engineer will determine capacities of test piles and conduct additional load tests as required.
 - c. Steel piles: Tests and inspections will be as indicated on paragraphs below for structural steel.
 - d. Concrete piles and concrete filled piles: Tests and inspections will be as indicated on paragraphs below for concrete.
4. Cast-in-place Deep Foundations (Piers): Continuous inspections by Geotechnical Engineer in conformance to Table 1705A.8:
- a. Inspect drilling operations and maintain complete and accurate records for each pier.
 - b. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, and embedment into bedrock (if applicable). Record concrete or grout volumes.
 - c. Confirm adequate end strata bearing capacity.
 - d. Concrete Piers: Tests and inspections will be as indicated on paragraphs below for concrete.
5. Retaining Walls:
- a. Continuous inspections by Geotechnical Engineer:
 - 1) Placement, compaction, and inspection of soil per CBC Section 1705A.6.1 for fills supporting foundations.
 - 2) Segmental retaining walls; inspect placement of units, dowels, connectors, etc.
 - b. Concrete Retaining Walls: Provide tests and inspections as indicated on paragraphs below for concrete.

- c. Masonry Retaining Walls: Provide tests and inspections as indicated on paragraphs below for masonry.
- B. Concrete:
- 1. Cast in Place Concrete: Inspection and testing in conformance to CBC Table 1705A.3:
 - a. Inspection of reinforcement, including prestressing tendons and verification of placement, per ACI 318, sections 25.2, 25.2, 25.5.1 through 26.5.3.
 - b. Reinforcing bar welding: Inspect per AWS D1.4, ACI 318 26.5.4.
 - 1) Verification of weldability of reinforcing bars other than ASTM A706.
 - 2) Inspect single-pass fillet welds, maximum 5/16".
 - 3) Inspect all other welds.
 - c. Inspect anchors cast in concrete per ACI 318, section 17.8.2.
 - d. Inspect anchors post-installed in hardened concrete members:
 - 1) Continuous inspection of adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads, per ACI 318, section 17.8.2.4.
 - 2) Mechanical anchors and adhesive anchors, not defined in previous paragraph, per ACI 318, section 17.8.2.
 - e. Design Mix:
 - 1) Verify use of required mix, per ACI 318, chapter 19 and sections 26.4.3 and 26.4.4.
 - 2) Batch Plant Inspection: The quality and quantity of materials used in transit-mixed concrete and in batched aggregates shall be continuously inspected as required by CBC section 1705A.3.2. If approved by COUNTY OF SANTA BARBARA, batch plant inspection may be reduced to periodic if plant complies with CBC section 1705A3.3.1, item 1, and requires first batch inspection, weighmaster, and batch tickets.
 - f. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete, per ASTM C172, ASTM C31, ACI 318, sections 26.4.5 and 26.12.
 - g. Inspect concrete and shotcrete placement for proper application techniques, per ACI 318, section 26.4.5.
 - h. Verify maintenance of specified curing temperature and techniques per ACI 318 sections 26.4.7 through 26.4.9 and CBC section 1908.9.
 - i. Inspect prestressed concrete for:
 - 1) Application of prestressing forces, per ACI 318 section 26.9.2.1
 - 2) Grouting of bonded prestressing tendons per ACI 318 section 26.9.2.3.
 - j. Inspection of erection of precast concrete members per ACI 318 chapter 26.8.
 - k. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs per ACI 318 section 26.10.1.b.
 - l. Sampling and testing of reinforcing steel per ASTM A370 and CBC section 1910A.2. CONTRACTOR shall submit mill certificate indicating compliance with requirements for reinforcement, anchors, ties, and metal accessories.

2. Prestressed Concrete: In addition to the tests and inspections required for concrete listed above, the following tests and inspections will performed:
 - a. Testing Laboratory will test prestressing tendons and anchorages per CBC section 1910A.3 and ASTM A370.
 - b. Special Inspector will check the materials, equipment, tensioning procedure and inspect placement of prestressing tendons and construction, per CBC section 1705A.3.4.
 - c. Special Inspector will verify in-situ adequate concrete strength prior to stressing tendons.
 - d. Continuous inspection by Special Inspector of application of prestressing forces and grouting of bonded prestressing tendons, per CBC section 1705A.3.4.
 3. Precast Concrete: In addition to the tests and inspections required for concrete listed above, the following tests and inspections will performed:
 - a. Continuous inspection by Special Inspector of fabrication of precast concrete members.
 - b. Inspection of erection of precast concrete members per ACI 318, chapter 26.8.
 4. Shotcrete: In addition to the tests and inspections required for concrete listed above, the following tests and inspections will performed:
 - a. Continuous inspection by Special Inspector of placement of shotcrete per ACI 318 section 26.4.5.
 - b. Testing Laboratory will test strength of shotcrete in accordance to ASTM C1140 and ASTM C1604.
 5. Post-installed Anchors:
 - a. Special Inspector will inspect installation of post-installed anchors in hardened concrete members as required by CBC table 1705A.3, item 4.
 - 1) Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads, per ACI 318, section 17.8.2.4.
 - 2) Mechanical anchors and adhesive anchors not defined above, per ACI 318, section 17.8.2.
 - b. Testing Laboratory will test post-installed anchors in conformance to CBC section 1905A and ASTM E488.
- C. Structural Masonry:
1. Material Verification and Testing:
 - a. Sampling and testing of reinforcing steel per ASTM A370 and CBC section 1910A.2. CONTRACTOR shall submit mill certificate indicating compliance with requirements for reinforcement, anchors, ties, and metal accessories.
 - b. Submit manufacturer's certificate of compliance for masonry units, mortar and grout materials. Test masonry units, mortar and grout (unit strength method).
 - c. Testing Laboratory will test masonry prisms in conformance with ASTM C1314.
 - d. Special Inspector will verify proportions of site-prepared, premixed or preblended mortar and grout, per ASTM C780.
 - e. Testing Laboratory will test core-drilled samples in conformance with CBC 2114.6.2.
 2. Inspection:

- a. Special Inspector will continuously inspect preparation of prisms per ASTM C1314.
 - b. Special inspector will verify size, location and condition of dowels and construction supporting masonry.
 - c. Special inspector will verify size specified size, grade and type of reinforcement.
 - d. Special inspector will verify weldability of reinforcing bars other than ASTM A706. Special inspector to inspect reinforcing bar welding: Inspection to be in conformance with AWS D1.4, ACI 318 26.5.4.
 - e. Special inspector will inspect placement of reinforcement, connectors, masonry units and construction of mortar joints.
 - f. Special inspector will verify protection of masonry during cold weather temperature (temperature below 40° F) or hot weather (temperature above 90° F).
 - g. Special inspector will inspect type, size and location of anchors and all other items to be embedded in masonry, including other details of anchorage of masonry to structural members, frames and other construction.
 - h. Special inspector will inspect grout space prior to grouting and placement of grout.
3. Post-installed Anchors in Masonry:
- a. Special inspector will inspect anchors cast in concrete per ACI 318, section 17.8.2.
 - b. Special inspector will inspect anchors post-installed in hardened concrete members:
 - 1) Continuous inspection of adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads, per ACI 318, section 17.8.2.4.
 - 2) Mechanical anchors and adhesive anchors, not defined in previous paragraph, per ACI 318, section 17.8.2.
 - c. Testing Laboratory will test post-installed anchors in conformance to CBC section 1905A and ASTM E488.
- D. Structural Steel:
1. Special inspector will verify that all materials are properly marked in conformance with AISC 360, Section 3.3 and applicable ASTM standards.
 - a. Mill certificates indicating material properties that comply with requirements.
 - b. Materials, sizes, types and grades complying with requirements.
 2. Testing Laboratory will test unidentified materials in conformance with ASTM A370.
 3. Special inspector will examine seam welds of HSS shapes.
 4. Special inspections and non-destructive testing of structural steel elements shall be in conformance to CBC section 1705A.2.1.
- E. High Strength Bolts:
1. Special inspector will verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the Contract Documents.

2. Testing Laboratory will test high-strength bolts, nuts and washers in conformance with ASTM F606, ASTM A370 and all applicable Codes.
3. Special inspector will inspect bearing-type (“snug tight”) bolt connections in conformance with AISC 360, section M2.5 and all applicable Codes.
4. Special inspector will inspect slip-critical bolt connections in conformance with AISC 360, section M2.5.

F. Welding:

1. Verification of Materials, Equipment and Welders:
 - a. Special inspector will verify weld filler material identification markings per AWS designation listed on the Contract Documents and the WPS.
 - b. Special inspector will verify material manufacturer’s certificate of compliance.
 - c. Special inspector will verify WPS, welder qualifications and equipment in conformance to and all applicable Codes and Regulations.
2. Shop Welding: Special inspector will inspect the following, per CBC 1705A.2.1 and AISC 360 (and AISC 341, as applicable):
 - a. Groove, multi-pass fillet welds larger than 5/16”, plug and slot welds.
 - b. Single-pass fillet welds equal or less than 5/16”.
 - c. Inspect welding of stairs and railing systems.
 - d. Verification of reinforcing steel weldability.
 - e. Welding of reinforcing steel, per AWS D1.4.
3. Field Welding: Special inspector will inspect the following, per CBC 1705A.2.1, AISC 360 (and AISC 341, as applicable) and all applicable Codes:
 - a. Groove, multi-pass fillet welds larger than 5/16”, plug and slot welds.
 - b. Single-pass fillet welds equal or less than 5/16”.
 - c. End welded studs (ASTM A108) installation, including bend test.
 - d. Floor and roof deck welds.
 - e. Welding of structural cold-formed steel.
 - f. Welding of stairs and railing systems.
 - g. Verification of reinforcing steel weldability.
 - h. Inspect welding of reinforcing steel.
4. Non-Destructive Testing: Testing Laboratory will test perform ultrasonic and magnetic particle testing in conformance to AISC 360 section N5.5, AISC 341 appendix Q5.2, AWS D1.1, AWS D1.8, ASTM E543, ASTM E1444, ASTM E164 and all applicable Codes and Regulations.

G. Steel Joists and Trusses: Continuous inspection, special inspector will verify size, type and grade for all chord and web members as well as connectors and weld filler material, verify joist profile, dimensions and chamber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist, in conformance with CBC section 2207.1 and all applicable Codes and Regulations.

H. Fire-Proofing:

1. Spray Applied:

- a. Project inspector will examine structural steel surface conditions, inspect application, take samples, measure thickness, and verify compliance of all aspects of application with Construction Documents, in conformance with CBC sections and ASTM E.605.
 - b. Testing Laboratory will test bond strength in conformance with ASTM E605, per CBC section 1705A.14.6.
 - c. Testing Laboratory will test density in accordance with ASTM E605, per CBC section 1705A.14.5.
2. Intumescent Fire-Resistant Coatings: Special inspector will inspect and test in accordance with AWCI 12-B, per CBC section 1705A.15.
- I. Anchor Bolts, Anchor Rods and Other Steel:
1. Testing Laboratory will sample and test not readily identifiable anchor bolts and anchor rods in accordance with and all applicable Codes and Regulations.
 2. Testing Laboratory will sample and test not readily identifiable threaded rod not used for foundation anchorage per procedures and all applicable Codes and Regulations.
- J. Prefabricated Wood Structural Elements:
1. Special inspector will continuously inspect fabrication of glued-laminated timber in accordance with CBC section 1704A2.5.
 2. Special inspector will continuously inspect fabrication of manufactured open-web trusses in accordance with CBC 1704A2.5 and all applicable Codes and Regulations.
 3. Special inspector will continuously inspect fabrication of manufactured metal plate connected trusses in accordance with CBC 1704A2.5 and all applicable Codes and Regulations.

PART 2 – PRODUCTS (Not used).

PART 3 – EXECUTION (Not used).

END OF SECTION

SECTION 01 45 24

ENVIRONMENTAL IMPORT/EXPORT MATERIALS TESTING

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section specifies the requirements for the sampling, testing, transportation, and certification of imported fill materials or exported fill materials from COUNTY OF SANTA BARBARA site.
- B. This Section defines:
 - 1. CONTRACTOR requirements for use of existing, imported, or generated materials on site.
 - 2. CONTRACTOR requirements for stockpiling materials for use on site.
 - 3. CONTRACTOR requirements for exporting materials from a site including transportation.
 - 4. Testing requirements for all materials imported, exported, stockpiled, or generated for use on a site.
 - 5. CONTRACTOR testing and reporting requirements.
 - 6. CONTRACTOR submittal requirements.
- C. Related Requirements:
 - 1. Division 1: General Requirements.
 - 2. Section 01 11 00: Summary of Work.
 - 3. Section 01 31 13: Project Coordination.
 - 4. Section 01 32 13: Construction Schedule.
 - 5. Section 01 33 00: Submittal Procedures.
 - 6. Section 01 77 00: Contract Closeout.

1.02 OBJECTIVES

- A. Ensure that fill materials imported to site are safe for the maintenance crew.
- B. Ensure that materials exported from site for use or offsite disposal/recycling are adequately characterized for lawful disposition.
- C. Ensure that representative data be collected so that analytical determinations can be made regarding the first two objectives.
- D. If required by authorities having jurisdiction, the CONTRACTOR shall contract with and pay for the services of a licensed environmental professional (licensed State of California Professional Engineer [PE Civil] or Professional Geologist [PG]) familiar with environmental site assessment and waste classification and disposal requirements to perform such services.
- E. If required by authorities having jurisdiction, the CONTRACTOR shall contract with and pay for an independent, approved California Department of Health Services certified

testing laboratory to perform analytical testing of imported, exported and site generated fill materials.

- F. Require CONTRACTOR to pay all fees required by authorities having jurisdiction over area.
- G. Require CONTRACTOR to post bonds required by authorities having jurisdiction over area.

1.03 DEFINITIONS

- A. Definitions not furnished in text of this section:
 - 1. CEQA: California Environmental Quality Act.
 - 2. EIR: Environmental Impact Report.
 - 3. OWNER REPRESENTATIVE/OWNER REPRESENTATIVE Licensed Environmental Professional: Person licensed in the State of California and with sufficient knowledge and experience to competently perform environmentally-related work, including (but not necessarily limited to) environmental site investigations, remedial projects, and other tasks involving the collection of soil, soil vapor, and groundwater samples; the selection of analytical methods for said samples; the interpretation of analytical data; the preparation of work plans, reports, and other relevant documents; and the supervision and/or oversight of remedial contractors. For the purposes of this Section, a licensed environmental professional shall include a Professional Geologist or "P.G." or a Civil Professional Engineer or "P.E."
 - 4. ug/kg: micrograms/kilogram.
 - 5. mg/kg: milligrams/kilogram.
 - 6. NA: Not Applicable.
 - 7. RCRA: Federal Resource Conservation and Recovery Act.
 - 8. Soil Certification/Sample Data Report: Report documenting location, volume, sampling procedures, analytical methods, chemical test results, and recommendations for either disposing or re-using stockpiled soil excavated from COUNTY OF SANTA BARBARA sites or proposed for import to same. Preparation of report is to follow the procedures given in Article 1.04 of this Section.
 - 9. Soil Sampling Plan (SSP): As described in Article 1.04 of this Section, a document providing sufficient guidance with which to adequately characterize soil proposed for import to, or export from . Guidance in this document is to be in accordance with the procedures described in Article 1.04 of this Section.
 - 10. STLC: Soluble Threshold Limit Concentrations as defined in Tables II and III, Chapter 11, Article 3, § 66261.24-1 of Title 22 of the California Code of Regulations (CCR).
 - 11. TCLP: Toxicity Characteristic Leaching Procedure, test Method 1311, documented in Title 40, Part 261, Subpart C, § 261.24 of the Code of Federal Regulations (CFR).
 - 12. TPH: Total Petroleum Hydrocarbons.
 - 13. TTLC: Total Threshold Limit Concentrations, as defined in Tables II and III, Chapter 11, Article 3, § 66261.24-1 of Title 22 of the CCR.
 - 14. USEPA or EPA: United States Environmental Protection Agency.
 - 15. VOCs: Volatile Organic Compounds.

16. WET: Waste Extraction Test, as defined in Appendix II-1, Chapter 11 of Title 22 of the CCR.

1.04 SUBMITTALS

A. CONTRACTOR shall submit to OWNER REPRESENTATIVE for transmittal if pothole sampling is utilized. In addition, the draft SSP shall contain all necessary contact information for the import/export site and a proposed schedule for the sampling activities. OWNER REPRESENTATIVE will either approve the document or request that revisions be made. This process shall continue until OWNER REPRESENTATIVE approves the draft SSP.

1. Draft Soil Certification/Sample Data Report:

- a. A draft Soil Certification/Sample Data Report prepared by CONTRACTOR's licensed environmental professional for review and concurrence. At a minimum, the draft Soil Certification/Sample Data Report shall contain:
 - 1) A site map showing the location of the in-situ sampling locations or the stockpile(s) and stockpile sample locations.
 - 2) A detailed discussion and evaluation of the laboratory results.
 - 3) A summary of findings and recommendations that provide a determination on the waste classification of the subject materials, based on the representative sample results.
 - 4) Recommendations for additional step-out samples, if any.
 - 5) Chain-of-custody forms and all laboratory data with respective QA/QC sheets.
- b. CONTRACTOR must allow OWNER REPRESENTATIVE a minimum of 72 hours to review the draft Soil Certification/Sample Data Report. OWNER REPRESENTATIVE will either approve the document or request that revisions be made. This shall continue until OWNER REPRESENTATIVE approves the draft Soil Certification/Sampling Data Report.
- c. Upon revision of the draft Soil Certification/Sample Data Report by the CONTRACTOR'S licensed environmental professional and acceptance by OWNER REPRESENTATIVE, the final report, signed and stamped by the licensed professional, shall be submitted to the OWNER REPRESENTATIVE. If the soil is to be exported to or imported from, a COUNTY OF SANTA BARBARA site, if it satisfied the requirements of paragraphs 3.02.F and 3.02.G of this Section, then a PG or civil PE must sign and stamp the final report.
 - 1) The OWNER REPRESENTATIVE, COUNTY OF SANTA BARBARA ENVIRONMENTAL CONSULTANT will confirm that the proposed waste classification for the proposed import/export material is appropriate. For materials designated unacceptable for export except to a licensed facility, or for those materials sent electively by CONTRACTOR to a licensed facility, the OWNER REPRESENTATIVE, COUNTY OF SANTA BARBARA ENVIRONMENTAL CONSULTANT will provide information on the necessary waste manifest documentation.
 - 2) If an OWNER REPRESENTATIVE would like to conduct the soil sampling and/or soil removal, the CONTRACTOR will facilitate the OWNER REPRESENTATIVE request.

2. Written documentation, e-mail is acceptable, verifying that all export soil data for any soils exported for use at a site, including the final Certification Report prepared by CONTRACTOR's licensed environmental professional, were provided to the proposed recipient prior to export and delivery.
3. Prior to import/export, written documentation in the form of a letter sent by the transporter to the CONTRACTOR, who must in turn submit it to OWNER REPRESENTATIVE, to verify the following:
 - a. The hauling contract for each load imported to, or exported from, the site specifies the use of "clean" trucks and/or trailer beds, in which the material will be carried.
 - b. The actual trucks and/or trailer beds utilized for import/export activities will be clear of visible contamination or deleterious materials.
 - c. The trucks will go directly from the source location to the recipient location with no detours or stops at other locations; and
 - d. Short loads will not be augmented by other materials that were not tested as part of the final SSP.
 - e. All import/export transportation activities shall be conducted in accordance with all applicable local, state, and federal rules and regulations.
4. Certification, in the form of haul tickets or completed waste manifests, documenting the volume and recipient of all import/export materials and activities. This documentation shall be coordinated through the OWNER REPRESENTATIVE.
 - a. For approved import/export to unregulated facilities (landfill) sites, haul tickets may be utilized, but shall contain the following minimum information:
 - 1) Date(s) of haul activity.
 - 2) Address of source site.
 - 3) Address of recipient.
 - 4) Load volume.
 - 5) Time of departure from source.
 - 6) Time of arrival at recipient site.
 - 7) Signature of recipient or recipient's agent.
 - 8) It is the CONTRACTOR's responsibility to confirm that no other trips or short-load augmentation occurred and submit documentation to the OWNER REPRESENTATIVE.
 - b. For export to regulated facilities (landfills, recyclers, etc.), the appropriate waste manifest as determined by the OWNER REPRESENTATIVE or COUNTY OF SANTA BARBARA'S ENVIRONMENTAL CONSULTANT in paragraph 1.04.A.3 must be completed and a copy of the executed manifest, signed by the receiving site, must be provided to the OWNER REPRESENTATIVE. The waste manifest copy, signed by the receiving facility and based on the manifest address, will be sent directly to OWNER REPRESENTATIVE.

1.05 APPROVALS

- A. No import or export of earth or geotechnical grading or filling materials can occur at COUNTY OF SANTA BARBARA sites without prior approval by OWNER REPRESENTATIVE.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Imported:

1. Soils: Soils proposed for import shall be tested pursuant to the requirements of this Section (01 45 24) unless a variance has been requested by CONTRACTOR and approved by OWNER REPRESENTATIVE prior to the import of the subject materials.
2. Gravels: Clean gravel, consisting of native rock from a commercial source, may be granted a variance from the testing requirements of this Section provided a request for variance is submitted by CONTRACTOR for review and approval at least 72 hours prior to import. CONTRACTOR shall provide written documentation, which identifies the source, volume, and proposed transport date(s) of the material for review.
 - a. Furthermore, a letter signed and stamped by either a Civil PE or PG and originating from the commercial source must state the following:
 - 1) The quarry does not mine ultramafic (i.e., natural asbestos containing) materials.
 - 2) The gravel is produced from virgin aggregate materials and does not contain any contaminated or reclaimed or recycled materials.
 - b. Additionally, a letter from the material transporter and signed by the same must state the following:
 - 1) Haul truck and/or trailer beds transferring the material are clear of visible contamination and deleterious materials.
 - 2) Haul trucks will go directly from the quarry source to the site with no trips or augmentation of short loads with other materials.
 - c. The request for variance requires approval by OWNER REPRESENTATIVE prior to CONTRACTOR importing the materials.
3. Sands: Clean sand from a commercial source may be granted a variance from the testing requirements of this Section provided a request for variance is submitted by CONTRACTOR for review and approval at least 72 hours prior to import. CONTRACTOR shall provide written documentation, which identifies the source, volume, and proposed transport date of the material for review.
 - a. Furthermore, a letter signed and stamped by either a Civil PE or PG and originating from the commercial source must state the following:
 - 1) The source does not mine ultramafic (i.e., natural asbestos containing) materials.
 - 2) The sand is produced from virgin materials and does not contain any contaminated or reclaimed or recycled materials.
 - b. Additionally, a letter from the material transporter and signed by the same must state the following:
 - 1) Haul truck and/or trailer beds transferring the material are clear of visible contamination or deleterious materials.
 - 2) Haul trucks will go directly from the commercial source to the site with no trips or augmentation of short loads with other materials.

- c. The request for variance requires approval by OWNER REPRESENTATIVE prior to CONTRACTOR importing the materials.
 - 4. Miscellaneous Material: No miscellaneous material containing crushed concrete, asphalt, construction debris, recycled, or other potential deleterious materials may be utilized or imported to a COUNTY OF SANTA BARBARA project site for use as fill or grading material.
- B. Exported/Site Generated:
- 1. Soils: Soils proposed for export shall be tested pursuant to the requirements of the subject section unless a variance has been requested by CONTRACTOR and approved by OWNER REPRESENTATIVE prior to the import of the subject materials. Once soils or other materials for export have been tested, they cannot be disturbed or reused for any purpose without prior approval by OWNER REPRESENTATIVE.
 - 2. Gravels/Sands: Gravels, sands, or other natural rock materials shall not be exported from a COUNTY OF SANTA BARBARA project site without prior testing by CONTRACTOR pursuant to this Section (01 45 24) and/or approval by OWNER REPRESENTATIVE. An exception to this provision is gravel adhering to concrete or asphalt pavement. In this instance and in consultation with OWNER REPRESENTATIVE, which shall make the final decision, CONTRACTOR may dispose of said materials and construction debris without sampling and analytical testing required under this Section.
 - 3. Miscellaneous Material. No miscellaneous material or other similar materials shall be exported from a COUNTY OF SANTA BARBARA project site without prior testing by CONTRACTOR pursuant to this Section (01 45 24) and/or approval by OWNER REPRESENTATIVE. No crushed miscellaneous material containing concrete, asphalt, construction debris, or other potential deleterious materials that is generated onsite may be used as fill or grading material of any sort at a COUNTY OF SANTA BARBARA project site. Crushed asphalt shall be segregated and stockpiled separately. The onsite use of crushing equipment is not permitted.

PART 3 - EXECUTION

3.01 GRADING/EXCAVATION

- A. If the CONTRACTOR encounters an area with discolored, stained, and/or odorous soils or any other evidence of contamination during excavation/grading work, CONTRACTOR must immediately notify the OWNER REPRESENTATIVE, cease work in the aforementioned area, and secure the area with fencing, tape, stakes, or other suitable means to prevent entry by personnel or equipment. In turn, the OWNER REPRESENTATIVE will immediately notify OWNER REPRESENTATIVE, which will initiate a construction response to address the contamination, in accordance with pertinent regulatory requirements.

3.02 SAMPLING AND TESTING

- A. CONTRACTOR shall contract with, and pay for, the services of a licensed environmental professional, licensed State of California Professional Civil Engineer (PE) or Professional Geologist (PG), to oversee or perform sampling of Materials that are subject to this Section.
- B. CONTRACTOR shall contract with, and pay for, an independent, approved California Department of Health Services certified testing laboratory to perform testing of imported, exported and site generated fill materials.

- C. All fill/grading material, unless otherwise specified in writing by OWNER REPRESENTATIVE, whether imported or exported, must be tested at the site of origin. Import/export testing and certification process shall include the steps listed below. COUNTY OF SANTA BARBARA retains the right to refuse any fill material proposed for use at a site.
1. Stockpile all materials for sampling (standard stockpile or backhoe pothole stockpile). Crushed fill materials generated by CONTRACTOR at a site must be segregated by material.
 2. Submit draft SSP for review and concurrence by OWNER REPRESENTATIVE. SSP must include figures identifying the site location, the in-situ sampling boundary or stockpile location, the sampling locations, and a brief site history including the type of remedial activity that occurred at the source site, if any.
 3. Collect and analyze samples (see Table 1 for number of samples per volume) per the SSP. Samples must include both discrete samples and composite samples.
 - a. Discrete samples correspond to a single sample depth at a single sampling/boring location. Discrete samples are to be used for producing composite samples, as described in subparagraph b. below, and for analysis, in accordance with paragraph 3.02.E.1, which applies only to VOCs and TPH-g. For analysis of these compounds, the licensed professional shall collect one discrete sample from each sampling location and samples should be collected at different depths between these locations, so that all stockpile depths are equally represented.
 - b. Composite samples correspond to three sample depths from a single sampling location (this includes in situ samples). Each composite sample shall consist of three discrete samples collected near the top, middle, and bottom of the stockpile or in situ boring location at each sampling location. The licensed environmental professional shall then have the analytical laboratory combine the discrete samples into a single composite sample. The laboratory should be directed to retain a sufficient quantity of each discrete sample for further analysis, as necessary. The composite sample shall be analyzed, in accordance with paragraph 3.02.E.2, which describes required testing other than for VOCs and TPH-g. Once materials for export have been stockpiled and tested, they may not be used onsite for any purpose without prior approval by OWNER REPRESENTATIVE.
 - 1) Composite samples with analyte concentrations approximating or exceeding acceptable screening criteria, as specified below in paragraphs F through H, may be attributed to constituents within one or more discrete samples. Analyzing the discrete comprising the composite may reveal the discrete samples with elevated analyte concentrations and, thus, better isolate (and minimize) the volume of soils within the stockpile requiring removal and licensed disposal.
 4. Submit draft Soil Certification/Sample Data Report for review and concurrence by OWNER REPRESENTATIVE.
 5. Submit final Soil Certification/Sample Data Report to the OWNER REPRESENTATIVE. All certified material not utilized or exported within a period of 90 days will be subject to retesting unless a variance is requested by CONTRACTOR and is approved by OWNER REPRESENTATIVE prior to use or import/export of the subject materials.
 6. Submit required pre import/export documentation/record to the OWNER REPRESENTATIVE, e-mail is acceptable.

7. Submit post import/export certifications to the OWNER REPRESENTATIVE, e-mail is acceptable.
 8. In addition to the preceding, requirements, and as necessary or as specified by OWNER REPRESENTATIVE, certifications and submittals as indicated in previous articles of PART 3 or in the remainder of this Section may be required.
- D. Import/export fill materials shall be samples in situ or stockpiled by CONTRACTOR (or at export site) and are deemed acceptable for import/export or reuse only when it is demonstrated to the satisfaction of OWNER REPRESENTATIVE that the subject materials meet the requirements of this Section.
- E. As described in paragraph 1.04.A.2.b, lacking site-specific data or sample rationale to support a more focused analytical approach; the CONTRACTOR shall analyze all samples for the following substances according to the methods indicated below. Table 3 is a waste classification flowchart for use by CONTRACTORS licensed environmental professional. In all cases, detection levels and quality assurance/quality control methods shall be in accordance with standard method reporting limits, best laboratory practices and the following USEPA (EPA) methods for discrete and composite samples:
1. Discrete samples shall be analyzed for Volatile Organic Compounds (VOCs), utilizing EPA Method 8260B/5035 and for Total Petroleum Hydrocarbons (TPH) gasoline (TPH-g), utilizing EPA Method 8015M [with EPA Method 5035 extraction using either volatile organic analysis (VOA) kits, EnCores®, or an equivalent soil collection device].
 2. Composite samples shall be analyzed for the following:
 - a. TPH, utilizing EPA Method 8015M, for full carbon-chain speciation (including diesel, oil, and other long-chain hydrocarbons).
 - b. Polychlorinated biphenyls, utilizing EPA Method 8082.
 - c. Semi-Volatile Compounds (SVOCs), utilizing EPA Method 8270C.
 - d. Organochlorine Pesticides (OCPs), utilizing EPA Method 8081A.
 - e. Organophosphorus Pesticides (OPPs), utilizing EPA Method 8141A.
 - f. Chlorinated Herbicides, utilizing EPA Method 8151A.
 - g. California Code of Regulations Title 22 (CAM 17) Metals, utilizing EPA Method 6010B/7470A.
 - h. Hexavalent Chromium, utilizing EPA Method 7199.
 - i. Arsenic/Thallium, utilizing EPA Method 6020.
 3. For EPA Method 8270C, a Method Detection Limit (MDL) of 250 ug/kg in addition to the Practical Quantitation Limit (PQL) or equivalent. This requirement is due to a recent DTSC directive requiring MDLs or PQLs to be sufficiently low to detect Carcinogenic Polycyclic Aromatic Hydrocarbons (CPAHs) in the composite sample, even if these compounds exceed actionable concentrations (900 ug/kg) in only one of the three discrete samples comprising the composite.
 4. The certified laboratory may also need to analyze the composite samples for polycyclic aromatic hydrocarbons (PAHs), a component of semi-volatile compounds, if the data evaluation performed in accordance with paragraph 3.02.G of this Section (01 45 24) does not meet DTSC requirements. The analytical methods to be used for this purpose are EPA Method 8270 SIM, if the samples contain relatively high concentrations of hydrocarbons, or EPA Method 8310, if the samples contain low concentrations of hydrocarbons.

- F. Import/export fill material may be deemed defective for use by OWNER REPRESENTATIVE at a site if any of the following results are obtained:
1. TPH are present at concentrations exceeding 100 milligrams per kilogram (mg/kg) for gasoline and/or 1,000 mg/kg for oil/diesel and long-chain hydrocarbons.
 2. Solvents and other VOCs are present at concentrations exceeding the laboratory reporting limit. Detections between the laboratory reporting limit and the practical quantitation limit (J-flags) should not be reported.
 3. PCBs are present at concentrations exceeding the laboratory reporting limit. Detections between the laboratory reporting limit and the practical quantitation limit (J-flags) should not be reported.
 4. SVOCs are present at concentrations exceeding the laboratory reporting limit. Detections between the laboratory reporting limit and the practical quantitation limit (J-flags) should not be reported.
 5. OCPs are present at concentrations exceeding the laboratory reporting limit. Detections between the laboratory reporting limit and the practical quantitation limit (J-flags) should not be reported.
 6. OPPs are present at concentrations exceeding the laboratory reporting limit. Detections between the laboratory reporting limit and the practical quantitation limit (J-flags) should not be reported.
 7. Chlorinated herbicides are present at concentrations exceeding the laboratory reporting limit. Detections between the laboratory reporting limit and the practical quantitation limit (J-flags) should not be reported.
 8. California Code of Regulations Title 22 (CAM 17) Metals at concentrations exceeding site-specific background. Detections between the laboratory reporting limit and the practical quantitation limit (J-flags) should not be reported.
 9. Hexavalent chromium is present at concentrations exceeding 300 ug/kg.
- G. As mentioned in paragraph 3.02.E, evaluate concentrations of CPAHs, a subset of SVOCs, in the import/export material by conducting the analyses set forth below.
1. Comparing CPAH concentrations with the benzo(a)pyrene [b(a)p] equivalent concentration of 900 ug/kg, the background concentration for CPAHs defined in "A Methodology for Using Background PAHs To Support Remediation Decisions," prepared by the Environ Corporation for the Southern California Gas Company and Southern California Edison, January 24, 2002 (referred to as "document"). In this document, CPAHs are defined in Table 2, and Potency Equivalency Factors (PEFs) for each CPAH are listed in Table 3. Using the correct PEF for each CPAH, the licensed environmental professional shall convert the concentration of each CPAH into its b(a)p equivalent concentration. The summation of these b(a)p equivalents for each CPAH must not exceed 900 ug/kg. If CPAHs do not exceed the laboratory reporting limit, then the licensed environmental professional must perform the procedure described above, using the PEF and the laboratory reporting limit (LRL) for each CPAH. The result will be the LRL for each CPAH converted to b(a)p equivalent concentrations. The summation of these b(a)p equivalent concentrations (representing the LRL for each CPAH) must not exceed 900 ug/kg.
- H. Evaluate concentrations of metals in import fill by conducting the analysis set forth below.
1. Compare the maximum detected metal concentrations in import/export material samples to either DTSC or US EPA regulatory action levels for either residential or site, whichever is more conservative. If any metal concentration exceeds its listed

regulatory action level, the fill material fails and shall be deemed defective and unacceptable for use.

2. In addition to paragraph 3.02.G.1, import/export fill shall be deemed defective and unacceptable for use if any of the following results are obtained:
 - a. Arsenic concentrations greater than or equal to 12.0 mg/kg.
 - b. Lead concentration greater than or equal to 80 mg/kg.
 - c. Import/Export materials at site with total lead concentrations greater than or equal to 50 mg/kg shall be analyzed for leachability (STLC) prior to export. Materials exceeding STLC limits identified in Table 2 are deemed defective and unacceptable for use at site.
 - d. Import/Export materials at site with total chromium concentrations greater than or equal to 100 mg/kg shall be tested for hexavalent chromium.

- I. All export/import material shall be characterized, handled, and documented in accordance with applicable US EPA and State of California hazardous waste and hazardous materials regulations (See Table 2). For the purpose of this specification, "contaminated" shall mean any soil or geotechnical material with constituent concentrations, which would require disposal at a regulated facility (i.e., California hazardous waste or RCRA hazardous waste). Refer to Article 3.03 and 3.04 which outline the disposal fee requirements for excavated contaminated soil. OWNER REPRESENTATIVE must be notified at least 72 hours prior to the disposal of hazardous waste or hazardous material and its disposal fee cost for excavated contaminated soil. No material disposal or reuse can take place without prior written approval of OWNER REPRESENTATIVE.

- J. Specification test results and OWNER REPRESENTATIVE approvals are valid for a period of 90 days from the date of the subject testing unless a variance is requested by CONTRACTOR and approved by OWNER REPRESENTATIVE. Previously approved materials shall not be utilized or disposed offsite after the 90-day limit without prior review and approval by OWNER REPRESENTATIVE.

- K. Requests for variances to this Specification Section shall be submitted in writing to OWNER REPRESENTATIVE a minimum of two weeks in advance of need for review and approval. The request for a variance from soil sampling for export must state the following: "The soil for export is less than 10 cubic yards, has no visible staining, is not odorous, and appears native". A photograph of the stockpiled soil must be included in the variance request. The photograph must have a representative scale within it in order for OWNER REPRESENTATIVE to determine the volume of soil to be exported. The request for variance must provide all available testing data, and a rationale to support the request. OWNER REPRESENTATIVE will review the request for variance and will provide its preliminary determination within 72 hours. Once OWNER REPRESENTATIVE approves the variance from sampling, the soil stockpile may be removed as "construction related debris". Certain requests may require final approval by the DTSC.

3.03 TRANSPORTATION

- A. Details of the samples and testing must be submitted to and approved by OWNER REPRESENTATIVE or COUNTY OF SANTA BARBARA ENVIRONMENTAL CONSULTANT before the materials from which the samples were collected undergo transportation.

- B. Haul Routes and Regulations/Restrictions: CONTRACTOR must comply with requirements of project environmental disclosure documents (i.e., CEQA EIR) and

authorities having jurisdiction over the project area and the proposed activities (e.g., Regional Water Quality Control Board, DTSC, etc.).

3.04

COSTS

- A. CONTRACTOR shall pay all fees required by authorities having jurisdiction over area.
- B. Contractor shall pay all fees for disposal and/or processing of impacted and/or hazardous fill materials at a regulated facility.
- C. CONTRACTOR shall post and pay for all bonds required by authorities having jurisdiction over area.

TABLE 1: MINIMUM SAMPLING FREQUENCY

Volume (Cubic Yards)*	Sampling Frequency*
0 - 500	1 per 100 CY
501 - 1,000	1 per 250 CY
1,001 - 5,000	1 per 250 CY for first 1000 CY 1 per 500 CY thereafter
> 5,000	12 samples for first 5000 CY 1 per 1000 CY thereafter

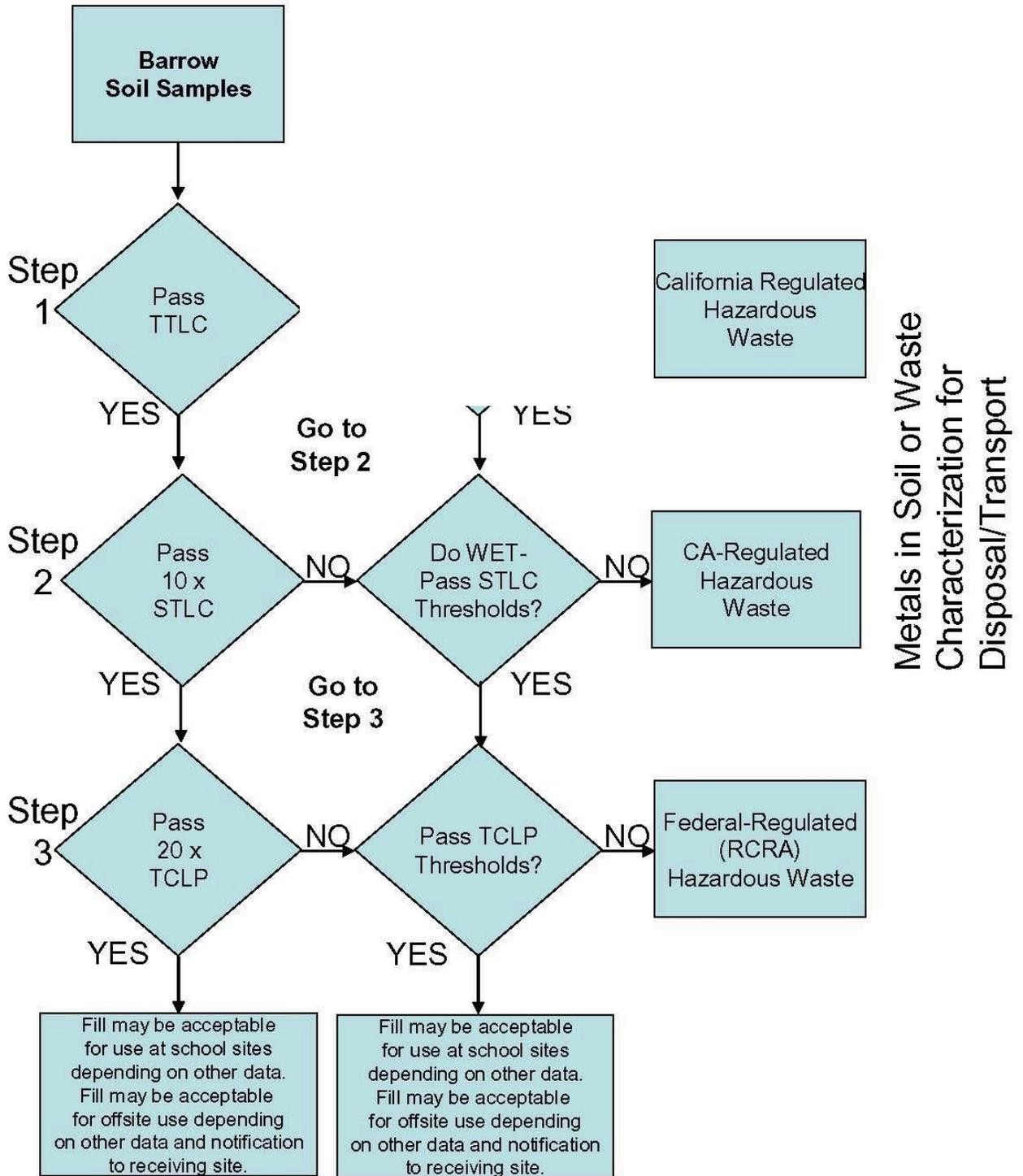
All samples are to be collected, analyzed, and accepted before import/export: materials going to licensed facilities must meet sampling criteria from that facility. The rationale for sample approach should be discussed in the draft SSP.

Pothole stockpile sampling may require discrete depth supplemental sampling in order to achieve representative results. The rationale for sample approach should be discussed in the draft SSP. In-situ (in place) sampling by mechanical boring or a hand auger method is acceptable if no space exists to store the soil stockpile at the site with prior OWNER REPRESENTATIVE approval.

*Discuss alternative screening & sampling approaches with OWNER REPRESENTATIVE for project.

Chemicals of Potential Concern	TABLE 2 WASTE CHARACTERIZATION				
	Hazardous Waste if Exceed Criteria - TTLC Level* (mg/kg)	Additional WET Leaching Tests if Exceed Hazardous Waste Criteria - 10 times STLC Level** (mg/kg)	California-Regulated Hazardous Waste - Soluble Threshold Limit Concentration -STLC Level (mg/l)	Additional TCLP Leaching Tests if Exceed Hazardous Waste Criteria - 20 times TCLP Level** (mg/kg)	Federally Regulated (RCRA) Hazardous Waste - Toxicity Characteristic Leaching Procedure - TCLP Level (mg/l)
CAM 17 Metals					
Antimony	500	150	15	NA	NA
Arsenic	500	50	5	100	5
Barium	10,000	1,000	100	2,000	100
Beryllium	75	7.5	0.75	NA	NA
Cadmium	100	10	1	20	1
Chromium	2,500	50	5	100	5
Cobalt	8,000	800	80	NA	NA
Copper	2,500	250	25	NA	NA
Lead	1,000	50	5	100	5
Mercury	20	2	0.2	4	0.2
Molybdenum	3,500	3,500	350	NA	NA
Nickel	2,000	200	20	NA	NA
Selenium	100	10	1	20	1
Silver	500	50	5	100	5
Thallium	700	70	7	NA	NA
Vanadium	2,400	240	24	NA	NA
Zinc	5,000	2,500	250	NA	NA
<i>Chromium (VI)</i>	500	50	5	NA	NA

TABLE 3 – WASTE CLASSIFICATION FLOWCHART



SECTION 01 45 27

ROOFING AND WATERPROOFING INSPECTION SERVICES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Independent roofing and waterproofing inspection under contract with the CONTRACTOR and approved by the COUNTY OF SANTA BARBARA.
- B. Related Sections:
 - 1. DIVISION 7 – Thermal and Moisture Protection.

1.02 SELECTION AND PAYMENT

- A. Independent Roofing and Waterproofing Inspection Firm: Employed and paid for by CONTRACTOR to perform monitoring, inspections, and tests of roofing and associated work.
- B. Employment of inspection firm does not relieve CONTRACTOR of obligation to perform Work in accordance with requirements of Contract Documents.

1.03 ROOFING AND WATERPROOFING INSPECTOR RESPONSIBILITIES

- A. Inspector will examine demolition procedures, substrates before roofing and waterproofing, make interim inspections as work progresses, monitor environmental/weather conditions, and inspect methods and materials for conformance to Contract Documents, manufacturer's instructions, and good roofing and waterproofing practices.
- B. Tests and laboratory services may be performed to verify roofing and waterproofing conformance to Contract Documents and for weather tightness, including cut tests and analysis of roofing and waterproofing materials.
- C. Perform additional inspections and tests as necessary to confirm results and as instructed by Architect. Perform additional testing when initial testing shows non-compliance with Contract Documents.

1.04 INSPECTION REPORT

- A. Inspector will submit written Inspection Report indicating results of each inspection and test conducted. Address reports to CONTRACTOR, Architect, OWNER REPRESENTATIVE and COUNTY OF SANTA BARBARA.
- B. Inspection Reports will Include:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Name of Roofing and Waterproofing Inspector.
 - 4. Date and time of inspection.
 - 5. Identification of products and appropriate specification Section.
 - 6. Location in the Project.
 - 7. Type of inspection.

8. Conformance with Contract Documents, manufacturer's instructions, and good roofing and waterproofing practices.

1.05 REINSPECTION FEES

- A. Where re-inspection is necessary, due to CONTRACTOR's non-compliance with provisions of Contract Documents, COUNTY OF SANTA BARBARA will reimburse Roofing and Waterproofing Inspector at CONTRACTOR's expense, deducted from Contract Sum.

1.06 LIMITS ON AUTHORITY OF ROOFING WATERPROOFING INSPECTOR

- A. May not release, revoke, alter, or enlarge on requirements of Contract Documents.
- B. May not approve or accept roofing and waterproofing work.
- C. May not assume duties of COUNTY OF SANTA BARBARA, Architect, or CONTRACTOR.
- D. May not stop the Work.

1.07 CONTRACTOR RESPONSIBILITIES

- A. Coordinate work with and cooperate with Roofing and Waterproofing Inspector.
- B. Provide access to Work, including utilization of products and personnel as requested by Roofing and Waterproofing Inspector to gain access and to facilitate inspections and tests.
- C. Provide test sample storage as requested by Roofing and Waterproofing Inspector, COUNTY OF SANTA BARBARA, or Architect.
- D. Notify Roofing and Waterproofing Inspector, minimum 72 hours, before beginning roofing and waterproofing work.
- E. Provide and Patch roof cuts for inspection and testing when taken at no increase to Contract Sum.
- F. Distribute Roofing and Waterproofing Inspection Reports and other information to subcontractors and other parties as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.
 - 2. Section 011200 "Multiple Contract Summary" for responsibilities for temporary facilities and controls for projects utilizing multiple contracts.
 - 3. Section 012100 "Allowances" for allowance for metered use of temporary utilities.

1.2 USE CHARGES

- A. Installation, removal, and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Construction Manager, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Sewer Service: Pay sewer-service use charges for sewer usage by all entities for construction operations.
- C. Water Service: Pay water-service use charges for water used by all entities for construction operations.
- D. Electric Power Service: Pay electric-power-service use charges for electricity used by all entities for construction operations.
- E. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use with metering. Provide connections and extensions of services and metering as required for construction operations.
- F. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use with metering. Provide connections and extensions of services and metering as required for construction operations.
- G. Sewer, Water, and Electric Power Service: Use charges are specified in Section 011200 "Multiple Contract Summary."

1.3 INFORMATIONAL SUBMITTALS

- A. Site Utilization Plan: Show temporary facilities, temporary utility lines and connections, staging areas, construction site entrances, vehicle circulation, and parking areas for construction personnel.
- B. Implementation and Termination Schedule: Within 15 calendar days of date established for commencement of the Work, submit schedule indicating implementation and termination dates of each temporary utility.
- C. Project Identification and Temporary Signs: Show fabrication and installation details, including plans, elevations, details, layouts, typestyles, graphic elements, and message content.
- D. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- E. Moisture- and Mold-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage and mold. Describe delivery, handling, storage, installation, and protection provisions for materials subject to water absorption or water damage.
 - 1. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and requirements for replacing water-damaged Work.
 - 2. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
 - 3. Indicate methods to be used to avoid trapping water in finished work.
- F. Dust- and HVAC-Control Plan: Submit coordination drawing and narrative that indicates the dust- and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Include the following:
 - 1. Locations of dust-control partitions at each phase of work.
 - 2. HVAC system isolation schematic drawing.
 - 3. Location of proposed air-filtration system discharge.
 - 4. Waste-handling procedures.
 - 5. Other dust-control measures.
- G. Noise and Vibration Control Plan: Identify construction activities that may impact the occupancy and use of existing spaces within the building or adjacent existing buildings, whether occupied by others, or occupied by the Owner. Include the following:
 - 1. Methods used to meet the goals and requirements of the Owner.

2. Concrete cutting method(s) to be used.
3. Location of construction devices on the site.
4. Show compliance with the use and maintenance of quieted construction devices for the duration of the Project.
5. Indicate activities that may disturb building occupants and that are planned to be performed during non-standard working hours as coordinated with the Owner.
6. Indicate locations of sensitive areas or other areas requiring special attention as identified by Owner. Indicate means for complying with Owner's requirements.

1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in the United States Access Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.5 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS
PART 3 - EXECUTION

3.1 TEMPORARY FACILITIES, GENERAL

- A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

3.2 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Section 011000 "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.3 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
 - 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
- D. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- E. Sanitary Facilities: Provide temporary toilets, wash facilities, safety shower and eyewash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
 - 1. Use of Permanent Toilets: Use of Owner's existing or new toilet facilities is not permitted.
- F. Temporary Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
 - 1. Provide temporary dehumidification systems when required to reduce

ambient and substrate moisture levels to level required to allow installation or application of finishes and their proper curing or drying.

- G. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.
- H. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 - 1. Install electric power service overhead unless otherwise indicated.
 - 2. Connect temporary service to Owner's existing power source, as directed by Owner.
- I. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- J. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install WiFi cell phone access equipment for each field office.
 - 1. Post a list of important telephone numbers.
 - a. Police and fire departments.
 - b. Ambulance service.
 - c. Contractor's home office.
 - d. Contractor's emergency after-hours telephone number.
 - e. Architect's office.
 - f. Construction Manager's.
 - g. Engineers' offices.
 - h. Owner's office.
 - i. Principal subcontractors' field and home offices.
- K. Electronic Communication Service: Provide secure WiFi wireless connection to internet with provisions for access by Architect and Owner.
- L. Project Computer: Provide a desktop computer in the primary field office adequate for use by Architect, Construction Manager, and Owner to access Project electronic documents and maintain electronic communications. Equip computer with not less than the following:
 - 1. Processor: Intel Core i5 or i7.
 - 2. Memory: 32 gigabyte.
 - 3. Disk Storage: 1 -terabyte hard-disk drive.

4. Display: 24-inch LCD monitor with 256-Mb dedicated video RAM.
5. Full-size keyboard and mouse.
6. Network Connectivity: 10/100BaseT Ethernet Gigabit.
7. Operating System: Microsoft Windows 10 Professional.
8. Productivity Software:
 - a. Microsoft Office Professional, 2013 or higher, including Word, Excel, and Outlook.
 - b. Adobe Reader DC.
 - c. WinZip 10.0 or higher.
9. Printer: "All-in-one" unit equipped with printer server, combining color printing, photocopying, scanning, and faxing, or separate units for each of these three functions.
10. Internet Service: Broadband modem, router, and ISP, equipped with hardware firewall, providing minimum 10 -Mbps upload and 15-Mbps download speeds at each computer.
11. Internet Security: Integrated software, providing software firewall, virus, spyware, phishing, and spam protection in a combined application.
12. Backup: External hard drive, minimum 2 terabytes, with automated backup software providing daily backups.

3.4 SUPPORT FACILITIES INSTALLATION

A. Comply with the following:

1. Provide construction for temporary field offices, shops, and sheds located within construction area or within 30 feet of building lines that is noncombustible in accordance with ASTM E136. Comply with NFPA 241.
2. Maintain support facilities until Construction Manager schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations..

1. Provide dust-control treatment that is nonpolluting and non-tracking. Reapply treatment as required to minimize dust.

C. Temporary Use of Planned Permanent Roads and Paved Areas: Locate temporary roads and paved areas in same location as permanent roads and paved areas. Construct and maintain temporary roads and paved areas adequate for construction operations. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.

1. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.

2. Prepare subgrade and install subbase and base for temporary roads and paved areas in accordance with Section 312000 "Earth Moving."
 3. Recondition base after temporary use, including removing contaminated material, regrading, proofrolling, compacting, and testing.
 4. Delay installation of final course of permanent hot-mix asphalt pavement until immediately before Substantial Completion. Repair hot-mix asphalt base-course pavement before installation of final course in accordance with Section 321216 "Asphalt Paving."
- D. Traffic Controls: Comply with requirements of authorities having jurisdiction.
1. Protect existing site improvements to remain, including curbs, pavement, and utilities.
 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- E. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
- F. Storage and Staging: Use designated areas of Project site for storage and staging needs.
- G. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
 2. Remove snow and ice as required to minimize accumulations.
- H. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
1. Identification Signs: Provide Project identification signs as indicated on Drawings.
 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.
 3. Maintain and touch up signs, so they are legible at all times.
- I. Waste Disposal Facilities: Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."
- J. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."

K. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

- 1.Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

L. Temporary Elevator Use: Use of elevators is not permitted

M. Existing Elevator Use: Use of Owner's existing elevators will be permitted, provided elevators are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore elevators to condition existing before initial use, including replacing worn cables, guide shoes, and similar items of limited life.

- 1.Do not load elevators beyond their rated weight capacity.
- 2.Provide protective coverings, barriers, devices, signs, or other procedures to protect elevator car and entrance doors and frame. If, despite such protection, elevators become damaged, engage elevator Installer to restore damaged work, so no evidence remains of correction work. Return items that cannot be refinished in field to the shop, make required repairs and refinish entire unit, or provide new units as required.

N. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.

O. Existing Stair Usage: Use of Owner's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore stairs to condition existing before initial use.

- 1.Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If stairs become damaged, restore damaged areas, so no evidence remains of correction work.

P. Temporary Use of Permanent Stairs: Use of new stairs for construction traffic will be permitted, provided stairs are protected and finishes restored to new condition at time of Substantial Completion.

3.5 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

- 1.Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.

B. Environmental Protection: Provide protection, operate temporary facilities, and

conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

1. Comply with work restrictions specified in Section 011000 "Summary."
- C. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
 - D. Tree and Plant Protection: Comply with requirements specified in Section 015639 "Temporary Tree and Plant Protection."
 - E. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
 - F. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals, so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using materials approved by authorities having jurisdiction.
 - G. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.
 1. Extent of Fence: As required to enclose entire Project site.
 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel
 - H. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
 - I. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
 - J. Temporary Egress: Provide temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction. Provide signage directing occupants to temporary egress.
 - K. Covered Walkway: Erect protective, covered walkway for passage of individuals through or adjacent to Project site. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction

1. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
 2. Paint and maintain appearance of walkway for duration of the Work.
- L. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
- M. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by from fumes and noise.
1. Construct dustproof partitions with gypsum wallboard, with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
 2. Construct dustproof partitions with two layers of 6-mil polyethylene sheet on each side. Cover floor with two layers of 6-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
 - a. Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Maintain water-dampened foot mats in vestibule.
 3. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 4. Insulate partitions to control noise transmission to occupied areas.
 5. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
 6. Protect air-handling equipment.
 7. Provide walk-off mats at each entrance through temporary partition.
- N. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition in accordance with requirements of authorities having jurisdiction.
 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and

- procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign, stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.6 MOISTURE AND MOLD CONTROL

- A. Moisture and Mold Protection: Protect stored materials and installed Work in accordance with Moisture and Mold Protection Plan.
- B. Exposed Construction Period: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
 1. Protect porous materials from water damage.
 2. Protect stored and installed material from flowing or standing water.
 3. Keep porous and organic materials from coming into prolonged contact with concrete.
 4. Remove standing water from decks.
 5. Keep deck openings covered or dammed.
- C. Partially Enclosed Construction Period: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
 1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
 2. Keep interior spaces reasonably clean and protected from water damage.
 3. Periodically collect and remove waste containing cellulose or other organic matter.
 4. Discard or replace water-damaged material.
 5. Do not install material that is wet.
 6. Discard and replace stored or installed material that begins to grow mold.
 7. Perform work in a sequence that allows wet materials adequate time to dry before enclosing the material in gypsum board or other interior finishes.
- D. Controlled Construction Period: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
 1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
 2. Use temporary or permanent HVAC system to control humidity within ranges specified for installed and stored materials.
 3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.

- a. Hygroscopic materials that may support mold growth, including wood and gypsum-based products, that become wet during the course of construction and remain wet for 48 hours are considered defective and require replacing.
- b. Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record readings beginning at time of exposure and continuing daily for 48 hours. Identify materials containing moisture levels higher than allowed. Report findings in writing to Architect.
- c. Remove and replace materials that cannot be completely restored to their manufactured moisture level within 48 hours.

3.7 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 - 2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
 - 3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 01 50 00

SECTION 01 54 10

SECURITY and SAFETY MEASURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions Division 0 and Special Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 SECTION INCLUDES

- A. CONTRACTOR Security requirements.

1.03 RELATED SECTIONS

- A. Section 01 11 00 - Summary of the Work: CONTRACTOR'S use of site and premises
- B. Section 01 55 00 - Site Logistics Plan

1.04 SECURITY and SAFETY MEASURES

- A. In addition to security requirements contained in the Contract General Conditions, CONTRACTOR shall adhere to the following requirements for security:
 1. CONTRACTOR shall protect the Work from theft, vandalism an unauthorized entry. CONTRACTOR shall have sole responsibility for job site security.
 2. CONTRACTOR shall employ and maintain sufficient security and safety measures to effectively prevent vandalism, vagrancy, theft, arson, and all other such negative impacts to the Work. Any impacts to the progress of the Work of CONTRACTOR, COUNTY OF SANTA BARBARA, or COUNTY OF SANTA BARBARA'S forces, due to loss from inadequate security, will be the responsibility of CONTRACTOR.
 3. Until Substantial Completion of the Work, CONTRACTOR shall employ appropriate means to remove all graffiti from buildings, equipment, fences and all other temporary and/or permanent improvements on the Project site within twenty-four (24) hours from the date of report or forty-eight (48) hours of each occurrence.
 4. Keying. CONTRACTOR shall provide construction keying different from permanent keying of locks and include organized, locked, and supervised storage for receiving and dispensing items of finish hardware throughout the construction.
 5. Provide INSPECTOR Access. Contractor shall provide the Project INSPECTOR with keys necessary to gain access to locked areas of the Work. The Project INSPECTOR will be responsible for such keys and will return them to the Contractor upon

acceptance of the project or area as complete.

- B. Penal Code Sections 290 and 290.4 commonly known as “Megan’s Law”, require, among other things, individuals convicted of sexually oriented crimes, to register with the chief of police where the convicted individual resides or with a county sheriff or other law enforcement officials. CONTRACTOR shall check its own employees and require each Subcontractor to check its employees and report to CONTRACTOR if any such employees are registered sex offenders. CONTRACTOR shall check monthly during the life of the Contract to ascertain this information and report same to OWNER REPRESENTATIVE. Before starting the Work, and monthly thereafter during the life of Contract, CONTRACTOR shall notify COUNTY OF SANTA BARBARA in writing if any of its employees and/or if any Subcontractor’s employee is a registered sex offender. If so, CONTRACTOR shall proceed in accordance with paragraph B above.

1.05 PERMANENT KEYS

- A. If permanent keys are required for longer than a daily basis, CONTRACTOR must request keys in writing for approval by the COUNTY OF SANTA BARBARA.
- B. Immediately upon receipt of permanent keys for whatever purpose (finish hardware, mechanical equipment, casework, dispensers, lockers, switches, equipment items, etc.), CONTRACTOR shall tag or otherwise clearly identify keys according to one approved system and turn them over to the OWNER REPRESENTATIVE prior to any opportunity of access to keys by parties other than the COUNTY OF SANTA BARBARA.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 55 00

SITE LOGISTICS PLAN

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide all material, labor, and equipment necessary to perform the work as shown on Drawings and as specified herein.
- B. This SECTION includes:
 - 1. Approved access roads to and from the project site and work areas.
 - 2. Approved equipment staging and parking areas.

1.02 REFERENCES

- A. General
 - 1. The publication listed below forms a part of this specification to the extent referenced.
 - 2. Refer to the latest edition available on the date of the Notice Inviting Bids shall be used.
 - 3. CONTRACTOR shall abide by Authority Having Jurisdiction (AHJ) for all Traffic Controls and regulations requirements.

1.03 SUBMITTALS

- A. Site Logistics Plan. See Specifications Section 01 33 00, Submittal Procedures. CONTRACTOR shall prepare and submit for review by CONSTRUCTION MANAGER a site logistics plan indicating detailed layout of CONTRACTOR Staging Area, including:
 - 1. Temporary utilities
 - 2. Temporary fencing and gates
 - 3. Temporary offices and sheds
 - 4. Construction aids
 - 5. Vehicular accessways and on-site parking
 - 6. Temporary barriers and enclosures
 - 7. Storm water pollution prevention measures
- B. Provide a traffic control plan prior to commencement of construction. This plan shall outline flagging procedures and delivery/movement timing so as to avoid peak traffic periods. The plan shall also outline procedures for notifying the COUNTY OF SANTA BARBARA Security of forthcoming lane or roadway closures. Allow COUNTY OF SANTA BARBARA Security to modify emergency response plans and notify other public service providers (such as The City's Fire Department) of closures as required.

1.04 ACCESS TO THE WORK SITE

- A. CONTRACTOR shall coordinate with CONSTRUCTION MANAGER regarding site access. CONTRACTOR shall provide contact information for a representative during construction and for the COUNTY OF SANTA BARBARA during long-term maintenance. CONTRACTOR shall provide a construction and site access schedule to CONSTRUCTION MANAGER.
- B. The CONTRACTOR'S use of existing access roads will be prohibited or limited where shown on Drawings.
- C. CONTRACTOR shall coordinate with CONSTRUCTION MANAGER to become familiar with the terms of the use permit and shall comply with the use permit for the duration of the work.
- D. Working hours are generally 7 AM to 5 PM, Monday through Friday. Weekend hours may be allowed when approved by COUNTY OF SANTA BARBARA and in compliance with local requirements.
- E. The CONTRACTOR'S employees shall park within the worksite as shown on Site Logistic Plan or as directed by the COUNTY OF SANTA BARBARA. All deliveries shall be coordinated through the CONSTRUCTION MANAGER.
- F. CONTRACTOR shall provide legal access to and maintain CONTRACTOR designated areas for the legal parking, loading, off-loading and delivery of all vehicles associated with the Work.
- G. CONTRACTOR shall be solely responsible for providing and maintaining these requirements whether on or off the Project site. CONTRACTOR shall provide and maintain ample on-site parking spaces designated for the exclusive use of COUNTY OF SANTA BARBARA and CONSTRUCTION MANAGER team. CONTRACTOR shall erect signs as required by CONSTRUCTION MANAGER each of these spaces and prevent all unauthorized vehicles from parking in the COUNTY OF SANTA BARBARA and CONSTRUCTION MANAGER team -reserved spaces.
- H. CONTRACTOR shall provide unimpeded access for emergency vehicles. CONTRACTOR shall maintain 20-foot (6 m) width driveways with turning space between and around combustible materials.
- I. CONTRACTOR shall provide and maintain access to fire hydrants free of obstructions.

1.05 TRAFFIC CONTROL

- A. The CONTRACTOR shall be responsible for the safe movement of vehicular traffic to and from the worksite and during operations, including traffic control measures required to ensure safe passage of vehicles and equipment.
- B. The control shall be in accordance with CCR Title 8.
 - 1. At least 1 flagman shall be provided at the entrance and Exit during periods when the CONTRACTOR'S vehicular activity may conflict with other traffic along roads.
 - 2. The flagman shall ensure that the right-of-way is granted to loaded vehicles and shall provide for safety of all users of the road.
- C. The Traffic control and signage shall be in accordance with Manual of Traffic Controls for Construction and Maintenance Work Zones.
- D. CONTRACTOR shall provide temporary signs and signals as required by authorities having jurisdiction and in compliance with COUNTY OF SANTA BARBARA'S requirements transmitted through CONSTRUCTION MANAGER. CONTRACTOR shall relocate signs and signals as necessary during construction.

1.06 HAUL ROUTES

- A. If a permit is required by local authorities for off-site hauling of materials, the CONTRACTOR shall prepare the truck-routing plan, obtain the permit, and submit a copy of the permit to the CONSTRUCTION MANAGER before off-site hauling begins.
- B. The plan shall include provisions for cleaning soil and rock from adjacent and nearby streets, and other paved roads that may become dirty due to hauling operations, and disposal of those items.
- C. Comply with weight restrictions on all roads.
- D. The CONTRACTOR shall inform the CONSTRUCTION MANAGER and local authorities when hauling operations are to begin and end.

1.07 TIRE DECONTAMINATION

- A. See Erosion Control Plan.
- B. Vehicles, excavation, and hand-held equipment will be decontaminated prior to leaving the site.
- C. A decontamination area will be prepared on site prior to impacted-soil excavation. This area will be designed to contain liquids and residue generated during the decontamination process. The decontamination area will be in an area easily accessible to incoming and outgoing vehicles and equipment and within proximity to the excavation areas.
- D. Decontamination procedures will include methods for removing soil from vehicle tires, such as shaker plates located at the site exit and hand-brushing of tires. In addition, personnel overseeing decontamination procedures will be responsible for ensuring soil is not tracked off site.

1.08 ACCESS ROADS

- A. Throughout the entire Contract period, the CONTRACTOR shall share access roads, both those constructed by the CONTRACTOR or otherwise provided for CONTRACTOR'S use whose work is adjacent to the CONTRACTOR'S work.
 - 1. Coordination with others shall be the responsibility of the CONTRACTOR. In case of conflicts or disputes, the CONSTRUCTION MANAGER'S decision will be final.
 - 2. The CONTRACTOR shall not construct new access roads.
 - 3. The CONTRACTOR shall provide dust control on access roads used in CONTRACTOR operations and on those roads subject to dust because of conditions created by the work.
 - a. Roads shall be sprayed by water truck at least twice daily or more frequently during haul operations.
 - b. CONTRACTOR shall limit driving speed on access roads to keep dust down.
 - 4. If on-site access roads become damaged during the work, the CONTRACTOR shall promptly repair them with equivalent surfacing.

1.09 PARKING

- A. On-site parking areas for CONTRACTOR personnel shall be limited to the staging areas

shown on Drawings.

1. The CONTRACTOR'S personnel, suppliers, and delivery vehicles shall not block access roads.

1.10 CONTRACTOR STAGING AREA REQUIREMENTS

- A. CONTRACTOR Staging Areas: Refer to reference drawings included in the set of Contract Drawings for location of CONTRACTOR Staging Areas.
1. CONTRACTOR shall use only site areas designated specifically by CONSTRUCTION MANAGER as CONTRACTOR Staging Area for the Project.
 2. CONTRACTOR Staging Area for the Project shall be clearly delineated by means of signage. CONTRACTOR shall remove equipment placed or located outside of areas designated for CONTRACTOR Staging Area to within CONTRACTOR Staging Area at no change in Contract Time and Contract Sum.
 3. CONTRACTOR shall keep access to CONTRACTOR Staging Areas and other construction access ways and thoroughfares clear at all times. CONTRACTOR shall provide traffic and parking control signage acceptable to CONSTRUCTION MANAGER.
- B. Cleanliness: CONTRACTOR shall keep CONTRACTOR Staging Area clear of trash and debris and in neat order. CONTRACTOR shall be responsible for cleanliness and order of assigned CONTRACTOR Staging Areas, as acceptable to CONSTRUCTION MANAGER.

1.11 REMOVAL OF CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

- A. Removal of Construction Facilities and Temporary Controls: Unless otherwise mutually agreed by CONSTRUCTION MANAGER and CONTRACTOR, CONTRACTOR shall remove temporary materials, equipment, services, and construction prior to Contract Completion review.
- B. Cleaning and Repairs: CONTRACTOR shall clean, and repair damage caused by installation or use of temporary facilities on public and private rights-of-way.
- C. Removal of Temporary Utilities and Restoration: CONTRACTOR shall remove temporary underground utility installations to a depth of two feet. Backfill, compact, and regrade site as necessary to restore areas or to prepare for indicated paving and landscaping.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 56 39

TEMPORARY TREE AND PLANT PROTECTION

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section Includes: General protection and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.
- B. Related Requirements:
 - 1. Section 015000 "Temporary Facilities and Controls" for temporary site fencing.
 - 2. Section 311000 "Site Clearing" for removing existing trees and shrubs.

1.2 DEFINITIONS

- A. Caliper: Diameter of a trunk measured by a diameter tape at a height 6 inches above the ground for trees up to and including 4-inch size at this height and as measured at a height of 12 inches above the ground for trees larger than 4-inch size.
- B. Caliper (DBH): Diameter breast height; diameter of a trunk as measured by a diameter tape at a height 54 inches above the ground line[for trees with caliper of 8 inches or greater as measured at a height of 12 inches above the ground.
- C. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- D. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings.
- E. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project sit.
 - 1. Review methods and procedures related to temporary tree and plant protection including, but not limited to, the following:

- a. Tree-service firm's personnel, and equipment needed to make progress and avoid delays.
- b. Arborist's responsibilities.
- c. Quality-control program.
- d. Coordination of Work and equipment movement with the locations of protection zones.
- e. Trenching by hand or with air spade within protection zones.
- f. Field quality control.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
 1. Include plans, elevations, sections, and locations of protection-zone fencing and signage, showing relation of equipment-movement routes and material storage locations with protection zones.
 2. Detail fabrication and assembly of protection-zone fencing and signage.
 3. Indicate extent of trenching by hand or with air spade within protection zones.
- C. Tree Pruning Schedule: Written schedule detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.
 1. Species and size of tree.
 2. Location on site plan. Include unique identifier for each.
 3. Reason for pruning.
 4. Description of pruning to be performed.
 5. Description of maintenance following pruning.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For arborist and tree service firm.
- B. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- C. Maintenance Recommendations: From arborist, for care and protection of trees affected by construction during and after completing the Work.
- D. Existing Conditions: Documentation of existing trees and plantings indicated to remain, which establishes preconstruction conditions that might be misconstrued as damage caused by construction activities.

1. Use sufficiently detailed photographs or video recordings.
2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.

E. Quality-control program.

1.6 QUALITY ASSURANCE

- A. Arborist Qualifications: Certified Arborist as certified by ISA.
- B. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed temporary tree and plant protection work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of the Work.
- C. Quality-Control Program: Prepare a written program to systematically demonstrate the ability of personnel to properly follow procedures and handle materials and equipment during the Work without damaging trees and plantings. Include dimensioned diagrams for placement of protection zone fencing and signage, the arborist's and tree-service firm's responsibilities, instructions given to workers on the use and care of protection zones, and enforcement of requirements for protection zones.

1.7 FIELD CONDITIONS

- A. The following practices are prohibited within protection zones:
 1. Storage of construction materials, debris, or excavated material.
 2. Moving or parking vehicles or equipment.
 3. Foot traffic.
 4. Erection of sheds or structures.
 5. Impoundment of water.
 6. Excavation or other digging unless otherwise indicated.
 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- B. Do not direct vehicle or equipment exhaust toward protection zones.
- C. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

- PART 2 - PRODUCTS
- PART 3 - EXECUTION

3.1 EXAMINATION

- A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion- and sedimentation-control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- B. Prepare written report, endorsed by arborist, listing conditions detrimental to tree and plant protection.

3.2 PREPARATION

- A. Locate and clearly identify trees, shrubs, and other vegetation to remain. Flag each tree trunk at 54 inches above the ground.
- B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.
- C. Trunk Protection: Protect the trunk of each tree to remain as follows:
 - 1. Install 2-by-6-inch wood planks around trunk at maximum 3 inches apart. Minimum three planks per tree. Band together with no less than three steel bands stapled to the planks to hold them securely in place.
 - a. Height: 48 inches from lowest branch
 - 2. Wrap trunk with orange plastic construction fencing to 2 inches in thickness minimum 1/4-inch closed-cell foam pad]. Install 2-by-6-inch wood planks around trunk over wrap at maximum 3 inches apart. Minimum three planks per tree. Band together with no less than three steel bands stapled to the planks to hold them securely in place.
 - a. Height: 48 inches.
 - b. Trunk protection to remain in place for construction duration.

3.3 PROTECTION ZONES

- A. Protection-Zone Fencing: Install protection-zone fencing along edges of protection zones in a manner that will prevent people and animals from easily entering protected areas except by entrance gates. Construct fencing so as not to obstruct safe passage or visibility at vehicle intersections where fencing is

located adjacent to pedestrian walkways or in close proximity to street intersections, drives, or other vehicular circulation.

- 1.Chain-Link Fencing: Install to comply with ASTM F567 and with manufacturer's written instructions.
 - 2.Posts: Set or drive posts into ground one-third the total height of the fence without concrete footings. Where a post is located on existing paving or concrete to remain, provide appropriate means of post support acceptable to Architect.
 - 3.Access Gates: Install[where indicated; adjust to operate smoothly, easily, and quietly; free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
- B. Protection-Zone Signage: Install protection-zone signage in visibly prominent locations in a manner approved by Construction Manager.
- C. Maintain protection zones free of weeds and trash.
- D. Maintain protection-zone fencing and signage in good condition as acceptable to Architect and remove when construction operations are complete and equipment has been removed from the site.
- 1.Do not remove protection-zone fencing, even temporarily, to allow deliveries or equipment access through the protection zone.
 - 2.Temporary access is permitted subject to preapproval in writing by arborist if a root buffer effective against soil compaction is constructed as directed by arborist. Maintain root buffer so long as access is permitted.

3.4 EXCAVATION

- A. General: Excavate at edge of protection zones and for trenches indicated within protection zones according to requirements in Section 312000 "Earth Moving" unless otherwise indicated.
- B. Trenching within Protection Zones: Where utility trenches are required within protection zones, excavate under or around tree roots by hand or with air spade, or tunnel under the roots by drilling, auger boring, or pipe jacking. Do not cut main lateral tree roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots as required for root pruning. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots.
- C. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches back from new construction and as required for root pruning.

- D. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.

3.5 ROOT PRUNING

- A. Prune tree roots that are affected by temporary and permanent construction.
- B. Root Pruning at Edge of Protection Zone: Prune tree roots by cleanly cutting all roots to the depth of the required excavation.
- C. Root Pruning within Protection Zone: Clear and excavate by hand or with air spade to the depth of the required excavation to minimize damage to tree root systems. If excavating by hand, use narrow-tine spading forks to comb soil to expose roots. Cleanly cut roots as close to excavation as possible.

3.6 CROWN PRUNING

- A. Prune branches that are affected by temporary and permanent construction.
 - 1. Prune to remove only broken, dying, or dead branches unless otherwise indicated. Do not prune for shape unless otherwise indicated.
 - 2. Do not remove or reduce living branches to compensate for root loss caused by damaging or cutting root system.
 - 3. Pruning Standards: Prune trees according to ANSI A300 (Part 1).
- B. Unless otherwise directed by arborist and acceptable to Architect, do not cut tree leaders.
- C. Cut branches with sharp pruning instruments; do not break or chop.
- D. Do not paint or apply sealants to wounds.
- E. Provide subsequent maintenance pruning during Contract period as recommended by arborist.
- F. Chip removed branches.

3.7 REGRADING

- A. Lowering Grade: Where new finish grade is indicated below existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.
- B. Lowering Grade within Protection Zone: Where new finish grade is indicated

below existing grade around trees, slope grade away from trees as recommended by arborist unless otherwise indicated.

1. Root Pruning: Prune tree roots exposed by lowering the grade. Do not cut main lateral roots or taproots; cut only smaller roots. Cut roots as required for root pruning.
- C. Raising Grade: Where new finish grade is indicated above existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.
- D. Minor Fill within Protection Zone: Where existing grade is 2 inches or less below elevation of finish grade, fill with backfill soil. Place backfill soil in a single uncompacted layer and hand grade to required finish elevations.

3.8 FIELD QUALITY CONTROL

- A. Inspections: Engage a qualified arborist to direct plant-protection measures in the vicinity of trees, shrubs, and other vegetation indicated to remain and to prepare inspection reports.

3.9 REPAIR AND REPLACEMENT

- A. General: Repair or replace trees, shrubs, and other vegetation indicated to remain or to be relocated that are damaged by construction operations, in a manner approved by Architect.
1. Submit details of proposed pruning and repairs.
 2. Perform repairs of damaged trunks, branches, and roots within 24 hours according to arborist's written instructions.
 3. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Architect.
- B. Trees: Remove and replace trees indicated to remain that are more than 25 percent dead or in an unhealthy condition or are damaged during construction operations that Architect determines are incapable of restoring to normal growth pattern.
1. Small Trees: Provide new trees of same size and species as those being replaced.
 2. Large Trees: Provide two new tree(s) for each tree being replaced that measures more than 6 inches in caliper size.
 - a. Species: As selected by Architect
 3. Plant and maintain new trees as specified in Section 329300 "Plants."

- C. Soil Aeration: Where directed by Architect, aerate surface soil compacted during construction.

3.10 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Disposal: Remove excess excavated material, displaced trees, trash, and debris and legally dispose of them off Owner's property.

END OF SECTION 01 56 39

SECTION 01 57 19 CEQA MITIGATIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Mitigation procedures to minimize environmental impact.

1.02 RELATED SECTIONS

- A. Section 01 35 00 – Special Procedures
- B. Section 01 74 16 – Storm Water Pollution Prevention Plan.
- C. Section 01 45 24 – Environmental Import / Export Materials Testing.
- D. Section 01 50 00 - Temporary Facilities and Controls.
- E. Section 01 74 19 - Construction Waste Management and Disposal.

1.03 SUBMITTALS

- A. CONTRACTOR shall submit monthly the form “Certification of Compliance with CEQA Mitigations”, found in Section 01 57 19, certifying compliance to CEQA mitigations.

1.04 CEQA MITIGATIONS - MITIGATION MONITORING AND REPORTING PROGRAM -

- A. CONTRACTOR shall comply with the EIR Mitigation Monitoring and Reporting Program and all other CEQA requirements included in **Exhibit G – Environmental Impact Report**. Tribal Monitoring (Cultural Resource Consulting) may be required.
- B. Following installation of exterior lighting CONTRACTOR shall adjust light fixtures to reduce the lighting intensity from the new sources on adjacent residences to no more than two foot-candles, measured at the property line.
- C. CONTRACTOR shall ensure that construction equipment is properly tuned and maintained in accordance with manufacturer’s specifications, to ensure that excessive emissions are not generated by unmaintained equipment.
- D. CONTRACTOR shall comply with the following requirements:
 - 1. Maintain slow speeds with all vehicles.
 - 2. Load impacted soil directly into transportation trucks to minimize soil handling.
 - 3. Water/mist soil as it is being excavated and loaded onto the transportation trucks.
 - 4. Water/mist and/or apply surfactants to soil placed in transportation trucks prior to exiting the site.
 - 5. Minimize soil drop height into transportation trucks or stockpiles during dumping.
 - 6. During transport, cover or enclose trucks transporting soils, increase freeboard requirements, and repair trucks exhibiting spillage due to leaks.
 - 7. Cover the bottom of the excavated area with polyethylene sheeting when work is not being performed.
 - 8. Place stockpiled soil on polyethylene sheeting and cover with similar material.

9. Place stockpiled soil in areas shielded from prevailing winds.
- E. When using large, heavy or noisy construction equipment CONTRACTOR shall implement all feasible measures to reduce air emissions below the South Coast Air Quality Management (SCAQMD) regional and localized significance thresholds.
1. Exhaust Emissions:
 - a. Schedule construction activities that affect traffic flow to off-peak hours .
 - b. Consolidate truck deliveries and/or limit the number of haul trips per day.
 - c. Route construction trucks of congested streets.
 - d. Employ high pressure fuel injection systems or engine timing retardation.
 - e. Utilize ultra-low sulfur diesel fuel, containing 15 ppm sulfur or less (ULSD) in all diesel construction equipment.
 - f. Use construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits for engines between 50 and 750 horsepower.
 - g. Restrict non-essential diesel engine idle time, to not more than five consecutive minutes.
 - h. Utilize electrical power rather than internal combustion engine power generators as soon as feasible during construction.
 - i. Utilize electric or alternatively fueled equipment, if feasible.
 - j. Utilize construction equipment with the minimum practical engine size.
 - k. Utilize low-emission on-road construction fleet vehicles.
 - l. Ensure construction equipment is properly serviced and maintained to the manufacturer's standards.
 2. Fugitive Dust:
 - a. Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas (previously graded areas inactive for ten days or more).
 - b. Replace ground cover in disturbed areas as quickly as possible.
 - c. Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).
 - d. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.
 - e. Water the disturbed areas of the active construction site at least three times per day, except during periods of rainfall.
 - f. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specifications to exposed piles (i.e., gravel, dirt, and sand) with a five percent or greater silt content.
 - g. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph).
 - h. Apply water at least three times daily, except during periods of rainfall, to all unpaved road surfaces.
 - i. Limit traffic speeds on unpaved road to 10 mph or less.

- j. Prohibit high emission causing fugitive dust activities on days where violations of the ambient air quality standard have been forecast by SCAQMD.
 - k. Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
 - l. Limit the amount of daily soil and/or demolition debris loaded and hauled per day.
3. General Construction:
- a. Utilize ultra-low VOC or zero-VOC surface coatings.
 - b. Phase construction activities to minimize maximum daily emissions.
 - c. Configure construction parking to minimize traffic interference.
 - d. Provide temporary traffic control during construction activities to improve traffic flow (e.g., flag person).
 - e. Develop a trip reduction plan for construction employees.
 - f. Increase distance between emission sources to reduce near-field emission impacts.
 - g. Require construction contractors to document compliance with the identified mitigation measures.
- F. CONTRACTOR shall consult and coordinate with the COUNTY OF SANTA BARBARA REPRESENTATIVE and COUNTY OF SANTA BARBARA, prior to construction to schedule high noise or vibration producing activities to minimize disruption. Coordination shall continue on an as-needed basis throughout the construction phase of the project.
- G. CONTRACTOR shall minimize blasting for all construction and demolition activities, where feasible. If demolition is necessary adjacent to residential uses or fragile structures, the COUNTY OF SANTA BARBARA REPRESENTATIVE will require the CONTRACTOR to avoid using impact tools. Alternatives that shall be considered include mechanical methods using hydraulic crushers or deconstruction techniques.
- H. Where pile driving activities are required within 150 feet of a structure, a detailed vibration assessment shall be provided by an acoustical engineer to analyze potential impacts related to vibration to nearby structures and to determine feasible mitigation measures to eliminate potential risk of architectural damage.
- I. Specific noise reduction measures include, but are not limited to, those listed below.
1. Source Controls:
- a. Time Constraints: It is prohibited work during nighttime hours.
Scheduling: Perform noisy work during less sensitive time periods as directed by the COUNTY.
 - b. Equipment Restrictions: Restrict the type of equipment used.
 - c. Noise Restrictions: Comply with local and state noise levels ordinances.
Substitute Methods: Use quieter methods and/or equipment.
 - d. Exhaust Mufflers: Ensure equipment have quality mufflers installed.
 - e. Lubrication & Maintenance: Well-maintained equipment is quieter.
 - f. Reduced Power Operation: Use only necessary size and power.
 - g. Limit Equipment On-Site: Only have necessary equipment on-site.
 - h. Noise Compliance Monitoring: Technician on site shall ensure compliance.

- i. Quieter Backup Alarms: Manually-adjustable or ambient sensitive types.
2. Path Controls:
- a. Noise Barriers: Semi-permanent or portable wooden or concrete barriers.
 - b. Noise Curtains: Flexible intervening curtain systems hung from supports.
 - c. Enclosures: Encase localized and stationary noise sources.
 - d. Increased Distance: Perform noisy activities farther away from receptors, including operation of portable equipment, storage, and maintenance of equipment.
3. Receptor Controls:
- a. Community Participation – open dialogue to involve affected residents.
 - b. Noise Complaint Process: CONTRACTOR shall log and respond to noise complaints. Advance notice of the start of construction shall be delivered to all noise sensitive receptors adjacent to the project area. The notice shall state specifically where and when construction activities will occur and provide contact information for filing noise complaints with the CONTRACTOR and the COUNTY OF SANTA BARBARA. In the event of noise complaints, the COUNTY OF SANTA BARBARA will monitor noise from the construction activity to ensure that construction noise does not exceed limits specified in the noise ordinance.
 - c. Construction Equipment for Use on Public Roadways: CONTRACTOR shall submit a construction worksite traffic control plan to the COUNTY OF SANTA BARBARA REPRESENTATIVE for review prior to construction. The plan shall show the location of haul routes, hours of operation, protective devices, warning signs, and access to abutting properties COUNTY OF SANTA BARBARA encourages CONTRACTOR to limit construction-related trucks to off-peak commute periods.

END OF SECTION

SECTION 01 57 23

TEMPORARY STORM WATER POLLUTION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Temporary stormwater pollution controls.

1.2 STORMWATER POLLUTION PREVENTION PLAN

- A. The Stormwater Pollution Prevention Plan (SWPPP) is part of the Contract Documents and is bound into this Project Manual.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site

1. Meet with Owner, Architect, Construction Manager, and earthwork subcontractor.
2. Review requirements of the SWPPP, including permitting process, worker training, and inspection and maintenance requirements.

1.4 INFORMATIONAL SUBMITTALS

- A. Stormwater Pollution Prevention Plan (SWPP): Within 15 calendar days of date established for commencement of the Work, submit completed SWPPP.
- B. EPA authorization under the EPA's "2017 Construction General Permit (CGP)."
- C. Stormwater Pollution Prevention (SWPP) Training Log: For each individual performing Work under the SWPPP.
- D. Inspection reports.

1.5 QUALITY ASSURANCE

- A. Stormwater Pollution Prevention Plan (SWPPP) Coordinator: Experienced individual or firm with a record of successful water pollution control

management coordination of projects with similar requirements.

1. SWPPP Coordinator shall complete and finalize the SWPPP form.
2. SWPPP Coordinator shall be responsible for inspections and maintaining of all requirements of the SWPPP.

B. Installers: Trained as indicated in the SWPPP.

PART 2 - PRODUCTS
PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with all best management practices, general requirements, performance requirements, reporting requirements, and all other requirements included in the SWPPP.
- B. Locate stormwater pollution controls in accordance with the SWPPP.
- C. Conduct construction as required to comply with the SWPPP and that minimize possible contamination or pollution or other undesirable effects.
 1. Inspect, repair, and maintain SWPPP controls during construction.
 - a. Inspect all SWPPP controls not less than every seven days, and after each occurrence of a storm event, as outlined in the SWPPP.
- D. Remove SWPPP controls at completion of construction and restore and stabilize areas disturbed during construction.

END OF SECTION 01 57 23

Tecolote House Renovation
SECTION 02 41 19 - SELECTIVE DEMOLITION

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
 - 1. Demolition and removal of selected portions of building or structure.

1.02 **MATERIALS OWNERSHIP**

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.

1.03 **FIELD CONDITIONS**

- A. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- B. Notify Architect and/or (CM/CDR) of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Storage or sale of removed items or materials on-site is not permitted.
- D. No owner operations currently on site.

PART 2 - PRODUCTS

2.01 **PERFORMANCE REQUIREMENTS**

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

PART 3 - EXECUTION

3.01 **EXAMINATION**

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.

3.02 **UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS**

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.

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1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
2. Arrange to shut off utilities with utility companies.
3. Disconnect, demolish, and remove plumbing, HVAC systems, equipment, and components indicated on Drawings to be removed.
 - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
 - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
 - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
 - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.

3.03 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
- C. Remove temporary barricades and protections where hazards no longer exist.

3.04 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 5. Dispose of demolished items and materials promptly. Comply with requirements in Section 01 74 19 "Construction Waste Management and Disposal."
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

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SECTION 02 41 19 - SELECTIVE DEMOLITION

3.05 **CLEANING**

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Comply with requirements specified in Section 01 74 19 "Construction Waste Management and Disposal."

- B. Burning: Do not burn demolished materials.

- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to conditions existing before selective demolition operations began.

END OF SECTION 02 41 19

SECTION 03 10
00

POST INSTALLED ANCHORAGE

PART 1 - GENERAL

1.1 SUMMARY

- A. Requirements pertaining to post-installed and cast-in-place anchors for materials and equipment. This section pertains to all other sections of these specifications that require post-installed or cast-in-place anchors, unless specified otherwise.
- B. Post installed anchors that are not specifically specified on the structural drawings should be reviewed by the engineer of record prior to installation.

1.2 REFERENCES

- A. ACI 318 – Building Code Requirements for Structural Concrete
- B. ACI 355.2 – Qualification of Post-Installed Mechanical Anchors in Concrete
- C. ACI 355.4 – Qualification of Post-Installed Adhesive Anchors in Concrete
- D. ASTM A36 – Standard Specification for Carbon Structural Steel
- E. ASTM A153 – Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
- F. ASTM A193 – Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service
- G. ASTM A615 – Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
- H. ASTM B633 – Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel
- I. ASTM B695 – Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
- J. ASTM C881 – Standard Specification Epoxy-Resin-Based Bonding Systems for Concrete
- K. ASTM E488 – Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements
- L. ASTM E1190 – Standard Test Methods for Strength of Power-Actuated Fasteners Installed in Structural Members
- M. ASTM E1512 – Standard Test Methods for Testing Bond Performance of Bonded Anchors
- N. ASTM E3121 – Standard Test Methods for Field Testing of Anchors in Concrete or Masonry
- O. ASTM F1554 – Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength
- P. ASTM F1624 – Standard Test Method for Measurement of Hydrogen Embrittlement Threshold in Steel by the Incremental Step Loading Technique
- Q. Federal Specifications A-A-1922A and A-A-55614 for Expansion and Shield-Type Anchors
- R. ICC-ES AC70 – Acceptance Criteria for Fasteners Power-Driven into Concrete, Steel and Masonry Elements
- S. ICC-ES AC193 – Acceptance Criteria for Mechanical Anchors in Concrete Elements
- T. ICC-ES AC308 – Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements
- U. ICC-ES AC510 – Acceptance Criteria for Seismic Qualification of Post-Installed Anchors in Concrete

1.3 SUBMITTALS AND SUBSTITUTIONS

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Post Installed Anchorage

- A. Submittals are to be in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
 - 1. Submit product data for proprietary products and materials that include:
 - a. Product Information
 - b. Technical Information
 - c. Material Safety Data Sheets (MSDS)
 - d. Manufacturer's Published Installation Instructions (MPII)
 - 2. Submit code reports and agency listings as applicable that include:
 - a. ICC-ES Evaluation Report
 - b. IAPMO-UES Evaluation Report
 - c. Underwriters Laboratories
 - d. Factory Mutual
- B. Substitutions: Substitute in accordance with Conditions of the Contract and Division 1 Substitution Procedures Section.
 - 1. Only manufacturers with an ICC-ES or IAPMO-UES listing will be considered for substitution requests.
 - 2. The contractor shall submit, for Engineer-of-Record's review, calculations that are prepared & sealed by a registered Professional Engineer demonstrating that the substituted product is capable of achieving the pertinent equivalent performance values of the specified product using the appropriate design procedure and/or standard(s) as required by the Building Code.
 - 3. In addition, the calculations shall specify the diameter and embedment depth of the substituted product.
 - 4. Any increase in material costs or labor for such submittal shall be the responsibility of the contractor.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: The installer shall be experienced in installing anchors equal to type, and into the substrate material required for this project. See PART 3 EXECUTION.
- B. Evaluations Reports and Listings: Anchors and related materials shall be listed by one or more of the following agencies, as applicable:
 - 1. ICC Evaluation Service
 - a. Anchors shall be manufactured under an approved quality assurance program with follow-up inspections by an inspection agency under ISO/IEC 17020 by a recognized accreditation body conforming to the requirements of ISO/IEC 17011.
 - 2. IAPMO Uniform Evaluation Service
 - a. Anchors shall be manufactured under an approved quality assurance program with follow-up inspections by an inspection agency under ISO/IEC 17020 by a recognized accreditation body conforming to the requirements of ISO/IEC 17011.
 - 3. City of Los Angeles
 - 4. City or San Luis Obispo
 - 5. Underwriters Laboratories (UL)
 - 6. Factory Mutual (FM)
 - 7. Special Inspections Per CBC Section 1705.3

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to job site in manufacturer's or distributor's packaging undamaged, complete with installation instructions.
- B. Protect and handle materials in accordance with manufacturer's recommendations to prevent damage or deterioration.

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1.6 PROJECT CONDITIONS

- A. Adhesive anchors shall be installed in concrete having a minimum age of 21 days at time of anchor installation.
- B. Anchoring adhesives must be stored at temperatures prescribed by the manufacturer and must not be used beyond the expiration date.
- C. The anchor or fastener coating, plating or steel type must provide suitable corrosion resistance for the environment in which the anchor or fastener is installed.

PART 2 - PRODUCTS

1.1 CONCRETE

A. Screw Anchors for Cracked and Uncracked Concrete

- 1. Screw anchors are post-installed concrete anchors used to transmit structural loads by means of tension, shear, or a combination of both between: (a) connected structural elements; or (b) safety-related attachments and structural elements. Anchors shall be designed in accordance with ACI 318 Chapter 17 – Anchoring to Concrete as amended by the specific design provisions of ACI 355.2. Anchors shall be manufactured from carbon steel which is subsequently heat-treated. Anchors shall be zinc-plated in accordance with ASTM B633, Class SC1, Type III. Anchors shall have an evaluation report issued by ICC-ES or IAPMO-UES and have been tested and qualified for performance in cracked and uncracked concrete in accordance with ACI 355.2 and ICC-ES AC193 for all mandatory tests and including the following:
 - a. Seismic tension in cracked concrete
 - b. Seismic shear in cracked concrete
- 2. Screw anchors for cracked and uncracked concrete shall be:
 - a. Simpson Strong-Tie Titen HD Screw Anchor, ICC-ES ESR-2713 or
 - b. Simpson Strong-Tie Titen HD Rod Hanger, ICC-ES ESR-2713

B. Adhesive Anchors for Cracked and Uncracked Concrete

- 1. An adhesive anchor shall consist of: 1) threaded rod or reinforcing bar insert; and 2) adhesive formula. Threaded rod inserts shall meet the minimum requirements of ASTM F1554 Grade 36, ASTM A193 Grade B7, ASTM A193 Grade B6 (Type 410 Stainless Steel) or ASTM A193 Grade B8 and B8M (Types 304 and 316 Stainless Steel). Reinforcing bar inserts shall meet the minimum requirements of ASTM A615 Grade 60 or ASTM A706 Grade 60. For exterior exposure the threaded rod and/or reinforcing shall be stainless steel. Inserts in contact with preservative-treated and fire-retardant-treated wood shall be zinc coated in accordance with ASTM A153 Class C or D or stainless steel or demonstrated through tests to be equivalent to the coatings described. Adhesives shall be injectable, two-component, cartridge-type systems dispensed and mixed through a static mixing nozzle supplied by the manufacturer. Acceptable installation and performance temperature ranges shall be verified with manufacturer's literature prior to installation.
- 2. Adhesive anchors are post-installed anchors used to transmit structural loads by means of tension, shear, or a combination of both between: (a) connected structural elements; or (b) safety-related attachments and structural elements. Adhesive anchors shall be designed in accordance with ACI 318 Chapter 17 as amended by the specific design provisions of ICC-ES AC308. Adhesive anchors shall have an evaluation report issued by

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ICC-ES or IAPMO-UES and have been tested and qualified for performance in cracked and uncracked concrete in accordance with ACI 355.4 and ICC-ES AC308 for all mandatory tests and including the following:

- a. Seismic tension in cracked concrete
 - b. Seismic shear in cracked concrete
 - c. Horizontal and overhead applications
 - d. Installation in saturated concrete
 - e. Sensitivity to freeze/thaw conditions
 - f. Long term creep at elevated temperatures
 - g. Submerged hole applications (SET-3G only)
3. Adhesive anchors for cracked and uncracked concrete shall be:
- a. Simpson Strong-Tie SET-3G Epoxy Adhesive, ICC-ES ESR-4057

C. Powder-Actuated Fasteners, Threaded Studs and Assemblies

1. Powder-actuated fasteners and threaded studs are used to fasten building components, such as wood and steel, to normal-weight and sand-lightweight concrete, steel deck with sand-lightweight concrete fill, structural steel, and hollow and grout-filled concrete masonry units.
2. Simpson Strong-Tie fasteners and threaded studs are manufactured from steel complying with ASTM A510, Grades 1060 to 1065 or 10B60 to 10B65 and austempered to a Rockwell "C" core hardness of 51 to 56, except for PDPA headed fasteners, which are manufactured from steel complying with ASTM A510, Grade 1060, and austempered to a Rockwell "C" core hardness of 53 to 56. Unless otherwise noted in the evaluation report, the fasteners have a mechanically plated zinc finish complying with ASTM B695, Class 5, Type I. When installed with the powder-actuated fastening tool recommended by Simpson Strong-Tie, the fasteners pierce the material being fastened and embed into the supporting concrete, structural steel, hollow or grout-filled concrete masonry units substrate. Fasteners shall have an evaluation report issued by ICC-ES or IAPMO-UES and have been tested in accordance with ICC-ES AC70.
3. Powder-actuated fasteners, threaded studs and assemblies attached to normal-weight and sand-lightweight concrete, steel deck with sand-lightweight concrete fill, structural steel, and hollow and grout-filled concrete masonry units shall be:
 - a. Simpson Strong-Tie Powder-Actuated Fasteners, Threaded Studs and Assemblies, ICC-ES ESR-2138

PART 3 EXECUTION

1.1 EXAMINATION

- A. Examine supporting base materials and environmental conditions. Do not begin installation until base materials have been properly prepared.
- B. Unless otherwise specified, do not drill holes in concrete or masonry until concrete, mortar, or grout has achieved full design strength.
- C. Install only if environmental conditions are in compliance with manufacturer's recommendations for installation conditions.

1.2 INSTALLATION

- A. Adhesive anchors shall be installed in concrete having a minimum age of 21 days at time of anchor installation.

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- B. Installation shall conform to the manufacturer's published installation instructions.
- C. Where holes are drilled in concrete or masonry, holes shall be accurately and squarely drilled, and the holes shall be cleaned in accordance with the manufacturer's recommendations.
- D. Unless otherwise noted, anchors shall be installed in holes drilled into base materials using carbide-tipped drill bits conforming to ANSI B212.15-1994.
- E. Where manufacturer recommends use of special tools for installation of anchors, such tools shall be used, unless otherwise permitted specifically by the Engineer or Architect of Record.
- F. Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Exercise care in drilling to avoid damaging existing reinforcing or embedded items. Notify the Engineer if reinforcing steel or other embedded items are encountered during drilling.

1.3 FIELD QUALITY CONTROL

A. Special Inspection

- 1. For mechanical anchors qualified for use in cracked and uncracked concrete in accordance with ACI 355.2, periodic special inspection is required.
- 2. For adhesive anchors qualified for use in cracked and uncracked concrete in accordance with ACI 355.4, installations may be made under continuous special inspection with an onsite proof loading program or periodic special inspection, as determined by the registered design professional. Strength reduction factors, Φ , and additional factors published in the evaluation report, and used in design, must correspond to the type of inspection provided.
- 3. For adhesive anchors qualified for use in cracked and uncracked concrete in accordance with ACI 355.4, where required, a program for on-site proof loading, that is, proof loading program, to be conducted as part of the special inspection shall be established by the engineer or design professional of record and shall conform to the following minimum requirements:
 - a) Frequency of proof loading based on anchor type, diameter, and embedment
 - b) Proof loads by anchor type, diameter, embedment, and location
 - c) Acceptable displacements at proof load
 - d) Remedial action in the event of failure to achieve proof load or excessive displacement
- 4. Unless otherwise directed by the engineer or design professional of record, proof loads shall be applied as confined tension tests. Proof load levels shall not exceed the lesser of 60 percent of the expected peak load based on adhesive bond strength or 80 percent of the anchor yield strength. Maintain the proof load at the required load level for a minimum of 10 seconds.

B. Installer Certification

- 1. The following installer certification requirements apply to adhesive anchors assessed by the acceptance testing under ACI 355.4:
 - a) Adhesive anchors shall be installed by qualified personnel in accordance with the contract documents. The contract documents shall require installation of post-installed anchors in accordance with the Manufacturer's Printed Installation Instructions (MPII). Installation of

adhesive anchors shall be performed by personnel trained to install adhesive anchors.

- b) Adhesive anchors installed in horizontal or upwardly inclined orientations to resist sustained tension loads shall be continuously inspected during installation by an inspector specially approved for that purpose by the building official. The special inspector shall furnish a report to the licensed design professional and building official that the work covered by the report has been performed and that the materials used, and the installation procedures used conform with the approved contract documents and the manufacturer's printed installation instructions.
- c) Installation of adhesive anchors horizontally or upwardly inclined to support sustained tension loads shall be performed by personnel certified by an applicable certification program. Certification shall include written and performance tests in accordance with the ACI/CRSI Adhesive Anchor Installer Certification program, or equivalent.
- d) The acceptability of certification other than the ACI/CRSI Adhesive Anchor Installer Certification shall be the responsibility of the licensed design professional.

END OF SECTION

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Cast-in-place concrete and related installation accessories, including, but not limited to:
1. Formwork
 2. Reinforcement
 3. Concrete materials
 4. Mix design
 5. Placement procedures
 6. Standard concrete finishing

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's literature for each type of manufactured material and product, including accessory products.
- B. Design Mixes: For each concrete mixture submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments. Review of mix designs by Architect and/or Engineer shall in no way relieve the Contractor of responsibility for the performance of the concrete.
- C. Shop Drawings:
1. Steel Reinforcement: Show details of fabrication, bending, and placement. Drawings shall be prepared according to ACI 315, "Details and Detailing of Concrete Reinforcement." Include material, grade, bar schedules, stirrup spacing, bent bar diagrams, arrangement, and supports of concrete reinforcement.
 2. Joints: Show proposed location of construction joints, expansion/contraction joints and control joints for slabs on deck and obtain approval from Architect prior to construction.
- D. Material Certificates: Signed by manufacturers certifying that the following items comply with requirements:
1. Cementitious materials and aggregates.
 2. Form materials and form-release agents.
 3. Steel reinforcement and reinforcement accessories.
 4. Admixtures.
 5. Waterstops.
 6. Curing materials.
 7. Floor and slab treatments.
 8. Bonding agents.
 9. Adhesives.
 10. Vapor retarders.
 11. Epoxy joint filler.
 12. Joint-filler strips.
 13. Repair materials.
- E. Floor surface flatness and levelness measurements to determine compliance with specified tolerances.

1.3 QUALITY ASSURANCE

Tecolote House

March 27, 2024

- A. Qualifications:
1. Installer Qualifications: Installer shall have a minimum of 5 years experience with concrete Work similar in material, design, and extent to that indicated for this Project.
 - a. Installer of concrete flatwork shall be able to demonstrate a history of successful experience placing, finishing and curing concrete flatwork with fly ash replacement contents similar to the percentages indicated for this project.
 2. Design Mix Engineer: Engineer having minimum 10 years documented experience in determining concrete design mix, licensed in the State of California. Design Mix Engineer shall stamp and seal mix designs and make determinations regarding maximum slump, additives, and water added to mix at the site.
 3. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
- B. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, each aggregate from one source, and each admixture from the same manufacturer.
- C. Standards: Comply with the following, unless more stringent provisions are indicated:
1. ACI 301, "Specification for Structural Concrete."
 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
 3. ACI 347 R - Guide to Formwork for Concrete.
- D. Pre-installation Conference: Conduct conference at Project site.
1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 - a. Contractor's superintendent.
 - b. Independent testing agency responsible for concrete design mixtures.
 - c. Ready-mix concrete manufacturer.
 - d. Concrete subcontractor.
 2. Review special inspection and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, cold- and hot-weather concreting procedures, curing procedures, construction contraction and isolation joints, and joint-filler strips, semi-rigid joint fillers, forms and form removal limitations, shoring and re-shoring procedures, vapor-retarder installation, steel reinforcement installation, floor and slab flatness and levelness measurement, concrete repair procedures, and concrete protection.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Reinforcement: Deliver reinforcement to the Project site in a manner that will prevent bending and damage. Reinforcement shall be bundled, tagged and marked to facilitate sorting and placing. Tags shall indicate bar sizes, lengths, grade and other information corresponding to markings shown on placement diagrams.
- B. Storage and Protection: Store materials at the site off the ground and in a manner to prevent damage to the materials.

1.5 PROJECT CONDITIONS

- A. Rain protection: Do not place concrete during rain unless adequate protection has been provided.
- B. Cold weather protection: Comply with ACI-306R.

- C. Hot weather protection: Comply with ACI-305R.

PART 2 - PRODUCTS

2.1 FORMWORK

- A. Forms shall be designed to produce hardened concrete having the shape, lines, and dimensions indicated on the Drawings. Forms shall conform to ACI347R. Stay in place metal formwork will not be permitted unless approved by the Structural Engineer of Record.
- B. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
1. Plywood, metal, or other approved panel materials.
- C. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- D. Forms for Cylindrical Columns, Pedestals, and Supports: Metal, glass-fiber-reinforced plastic, paper, or fiber tubes that will produce surfaces with gradual or abrupt irregularities not exceeding specified formwork surface class. Provide units with sufficient wall thickness to resist plastic concrete loads without detrimental deformation.
1. Acceptable product: Seamless Sonotube as manufactured by Sonoco Products Co.
- F. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Debond Form Coating as manufactured by L&M Construction Chemicals, Inc.
 - b. Crete Lease 880 as manufactured by Cresset Chemical.
 - c. Nox-Crete as manufactured by Nox-Chem.
 - d. Clean strip Ultra J-3 VOC by Dayton Superior.
- G. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
1. Furnish ties that, when removed, will leave holes not larger than 1-inch in diameter in concrete surface.
 2. Form ties in exposed surfaces shall be uniformly spaced and aligned in horizontal and vertical rows.
 3. The type of form ties used shall be acceptable to Structural Engineer of Record.

2.2 REINFORCEMENT

- F. Steel Reinforcement Bars: ASTM A 615, deformed.
1. Grade 60 Minimum (UNO on Structural Plans)
- G. Plain-Steel Welded Wire Fabric: ASTM A 185
1. Wire: Plain steel, ASTM A82.
 2. Gages and Configuration: As indicated on General Structural Notes.
- H. Reinforcement Accessories:
1. Bar Supports: Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete or fiber-reinforced concrete of greater compressive strength than concrete:

- a. Concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected or CRSI Class 2 stainless-steel bar supports.
2. Joint Dowel Bars: Plain-steel bars, ASTM A 615, Grade 60. Cut bars true to length with ends square and free of burrs.

2.3 CONCRETE MATERIALS

- F. Portland Cement: ASTM C 150, Type I or II.
- G. Aggregate: Normal weight, ASTM C 33, free from deleterious material and meeting the limits in Table 3 of ASTM C 33 for the weathering region applicable to the project site. Coarse aggregate should be size number 57 or 67 unless otherwise specified in the Contract Documents.
1. Nominal Maximum Aggregate Size:
 - a. Footings: 1.5 inches
 - b. Other locations: 3/4 inch.
- H. Water: Potable and complying with ASTM C 94. Water from concrete production operations shall not be used.
- I. Concrete Admixtures: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material and to be compatible with other admixtures and cementitious materials.
1. Admixtures containing calcium chloride are not permitted.
 2. Air-Entraining Admixture: ASTM C 260.
 3. Water Reducing Admixtures: ASTM C 494 Type A water reducing admixtures and Type G and F high-range water reducing admixtures.
 4. Corrosion-Inhibiting Admixture: Commercially formulated, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete.
 - a. Acceptable Products: Subject to compliance with requirements, products that may be incorporated into the Work include the following:
 - 1) DCI or DCI-S; W. R. Grace & Co., Construction Products Div.
 - 2) Rheocrete 222+; Master Builders, Inc.
 - 3) FerroGard-901; Sika Corporation.
- J. Accelerators and Retarders: Comply with ASTM C494 and shall be compatible with any other admixture(s) and shall not increase shrinkage of the concrete.
1. Accelerators and retarders shall not be used unless approved in writing by the Structural Engineer.

2.4 ACCESSORIES

- F. Water: Potable.
- G. Plastic Vapor Retarder:
1. Classification: ASTM E 1745, Class A. I
 2. Minimum thickness according to ACI 302.2R-06: 15 mils.
 3. Seam Tape: Provide manufacturer's recommended seam tape.
 - a. Water Vapor Transmission Rate ASTM E 96 0.3 perms or lower
 4. Vapor Proofing Mastic: Provide manufacturer's recommended mastic.
 - a. Water Vapor Transmission Rate ASTM E 96 0.3 perms or lower
 5. Pipe Boots : Construct pipe boots from vapor barrier material, pressure sensitive tape and/or mastic per manufacturer's instructions.

6. Acceptable Products: Subject to compliance with requirements, provide products as manufactured by one of the following:
 - a. Raven Industries Inc.; Vapor Block 15.
 - b. Reef Industries, Inc.; Griffolyn 15 mil green.
 - c. Stego Wrap 15-mil Vapor Barrier by Stego Industries LLC

- H. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
 1. Acceptable Products: Subject to compliance with requirements, provide one of the following:
 - a. Sure Film; Dayton Superior Corporation.
 - b. Eucobar; Euclid Chemical Co.
 - c. E-Con; L&M Construction Chemicals, Inc.
 - d. Confilm; Master Builders, Inc.
 - e. SikaFilm; Sika Corporation.

- I. Leveling Agent: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.
 1. Acceptable Products: Subject to compliance with requirements, provide one of the following:
 - a. Sonoflow; Sonneborn
 - b. Flo-Top; Euclid
 - c. Ardex K-15; Maxxon Corporation
 - d. Levelex; L&M Construction Chemicals
 - e. Levelayer 1; Dayton-Superior

- J. Repair Topping – Exposed Locations: Traffic-bearing, cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch.

- K. Curing Materials: Provide one of the following methods as appropriate to indicated finish and as recommended by floor treatment and finish manufacturers. Verify that specified curing compound is compatible with the floor finish material(s) and adhesive(s) that will be applied to floor surface prior to delivery of curing compound to jobsite. If it is determined that the curing compound is not compatible, notify Architect immediately.
 1. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.
 2. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
 3. Curing Compound: Water based, dissipating resin, ASTM C 309, Type 1, Class B.
 - a. Products: Subject to compliance with requirements, provide one of the following:
 - 1) Cure R; L & M Construction Chemicals, Inc.
 - 2) Rez Cure J-11W; Dayton Superior Corporation.
 - 3) Kurez VOX; Euclid Chemical Co.
 - 4) 1100; W. R. Meadows, Inc.

- L. Curing and Sealing Compound: ASTM C 1315, Type 1, membrane forming.
 1. Interior: ASTM C1315, Class B.
 - a. Acceptable Products: Subject to compliance with requirements, provide one of the following:
 - 1) VOCOMP-30; W. R. Meadows
 - 2) Super Aqua Cure VOX; Euclid
 - 3) Dress & Seal WB #30; L&M Construction Chemicals
 - 4) Safe Cure and Seal J-19; Dayton Superior
 - b. Comply with requirements of LEED IEQ 4.2.
 2. Exterior: ASTM C1315, Class A.

- a. Acceptable Products: Subject to compliance with requirements, provide one of the following:
 - 1) Super Diamond Clear VOX.; Euclid Chemical Company (The)
 - 2) Lumiseal WB Plus; L&M Construction Chemicals, Inc.
 - 3) Vocomp-30.; Meadows, W. R., Inc.

- M. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.

- N. Joint Filler Elastomer: 100% solids polyurea filler. Shore A shall be 75 or higher. Tensile 620 psi, elongation minimum of 450% per ASTM C412.
 - 1. JOINT TITE 750; L&M Construction Chemicals, Inc.
 - 2. Spall Pro 2000; Metzger McGuire

- O. Bonding Agent: ASTM C 1059, capable of humid curing and bonding to damp surfaces, of type, class and grade to suit requirements:
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Interior: PVA Type, ASTM C1059, Type 1
 - 1) EVERWELD; L&M Construction Chemicals, Inc.
 - 2) Weldcrete; Larsens.
 - 3) Superior Concrete Bonder J-41; Dayton Superior.
 - b. Exterior and Interior (acrylic):
 - 1) Acryl 60; Chem-Rex
 - 2) Intralok; W.R. Meadows
 - 3) Ad Bond J40; Dayton Superior
 - 4) Everbond; L&M Construction Chemicals, Inc.

- P. Nails, Spikes, Lag Bolts, Through Bolts, and Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

2.5 CONCRETE MIXES

- F. Prepare design mixes for each type and strength of concrete determined by either laboratory trial mix or field test data bases, as follows:
 - 1. Proportion normal-weight concrete according to ACI 211.1 and ACI 301.

- G. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the laboratory trial mix basis.

- H. Proportion normal-weight concrete mix as follows:
 - 1. Compressive Strength (28 Days): As indicated on General Structural Notes and Drawings.
 - a. Mat Slab $f'c = 4000\text{psi}$
 - b. Footings $f'c = 4000\text{psi}$
 - c. Exterior Flatwork $f'c = 2500\text{psi}$
 - 2. Design Slump = 5 inches

- I. Slump Tolerances: Slump tolerances per ASTM C 94, Section 6 as follows:
 - 1. When project specifications for slump are not written as a "maximum" or "not to exceed" requirement:

<u>Slump Specified</u>
<u>Tolerance</u>
2 inches and less
+/- 1/2 inch
More than 2 inches through 4 inches

+/- 1 inch
More than 4 inches
+/- 1-1/2 inch

- J. Maximum Water-Cementitious Materials Ratios = 0.55
- K. Air Content:
 - 1. Include air entrainment in concrete exposed to weather or installed in unheated spaces that may be subject to freezing during and after completion of the project.
 - 2. Add air-entraining admixture at manufacturer's prescribed rate.
 - 3. Air content for air entrained concrete shall be sampled from the transportation unit at the point of discharge and shall be within a tolerance of 6 % +/- 1.0%.
 - 4. Do not air entrain concrete to trowel-finished interior floors and suspended slabs. Do not allow entrapped air content to exceed 3 percent.
- L. Admixtures: Use admixtures according to manufacturer's written instructions.
- M. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94, and furnish batch ticket information.
 - 1. Not more than 90 minutes shall elapse from time water is introduced into the concrete mixture until completion of placement.
 - 2. Water shall not be added at any later time. Do not add water to mix that has stiffened to increase its workability.
 - 3. Discharge of the concrete shall be completed within 90 minutes from the time of batching.

2.6 FABRICATING REINFORCEMENT

- F. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

PART 3 - EXECUTION

3.1 FORMWORK

- F. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until concrete structure can support such loads.
- G. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- H. Limit concrete surface irregularities, designated by ACI 347R as abrupt or gradual, as follows:
 - 1. Permanently Exposed Locations: Class A, 1/8 inch.
 - 2. Surfaces to receive other finishes: Class B, 1/4 inch.
 - 3. Concealed Locations: Class C, 1/8 inch.
- I. Construct forms tight enough to prevent loss of concrete mortar.
- J. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical. Kerf wood inserts for forming keyways, reglets, recesses, and the like, for easy removal.
 - 1. Do not use rust-stained steel form-facing material.

- K. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- L. Chamfer exterior corners and edges of permanently exposed concrete.
- M. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Locate temporary openings in forms at inconspicuous locations.
 - 1. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.
- N. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- O. Retighten forms and bracing before placing concrete, as required, to prevent paste leaks and maintain proper alignment.
- P. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.
- Q. Provide formed openings where required for items to be embedded in or passing through concrete work.
- R. Locate and set in place items which will be cast directly into concrete.
- S. Coordinate Work of other Sections in forming and placing openings, slots, reglets, recesses, chases, sleeves, bolts, anchors, and other inserts.
- T. Place and secure anchorage devices and other embedded items in accordance with Manufacturer's instructions, straight, level and plumb. Ensure items are not disturbed during concrete placement. Use Setting Drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.2 REMOVING AND REUSING FORMS

- F. General: Formwork for parts of the Work that do not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 48 hours after placing concrete provided concrete is hard enough to not be damaged by form-removal operations and provided curing and protection operations are maintained.
- G. Formwork for structural elements, that support the weight of concrete shall remain in place until concrete has achieved the following:
 - 1. 28-day design compressive strength or as required by General Structural Notes and Drawings.
 - 2. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- H. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- I. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.

- J. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete.

3.3 VAPOR RETARDERS

- F. Vapor Retarder: As recommended in the soils report .

3.4 STEEL REINFORCEMENT

- F. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
 2. Reinforcement shall be accurately positioned on supports, spacers, hangers, or other reinforcement, and shall be secured in place with wire ties or suitable clips. Tolerances shall be as stipulated in ACI117 and ACI318 unless otherwise indicated..
 3. Reinforcement at the bottom of concrete slabs and mats shall not be supported from contact with subgrade by the use of metal supports or bent reinforcement.
- G. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials.
- H. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- I. Before concrete is place, reinforcement shall be rigidly secured in proper position. All surfaces encrusted with dried concrete from previous placements shall be cleaned and the entire installation shall be acceptable to the Structural Engineer of Record.

3.5 JOINTS

- F. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- G. Construction Joints: Construction joints shall be made at locations indicated on the Drawings or where specified. Construction joints shall not be made at other location without the concurrence of the Structural Engineer of Record. Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
 2. Form from preformed galvanized steel, plastic keyway-section forms, or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
 3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
 4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
 5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
 6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- H. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness, as follows:
 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.

2. **Sawed Joints:** Saw cut joints within 24 hours after placing. Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear abrade, or otherwise damage surface and before concrete develops random contraction cracks.
- I. **Isolation Joints in Slabs-on-Grade:** After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
 1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.
 2. Terminate full-width joint-filler strips not less than 1/2 inch or more than 1 inch below finished concrete surface where joint sealants, specified in Section 07 92 00.20 – Joint Sealants are indicated.
 3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

3.6 CONCRETE PLACEMENT

- F. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed. All dirt, mud, water, and debris shall be removed from the space to be occupied by concrete. All surfaces encrusted with dried concrete from previous placements shall be cleaned.
- G. Do not add water to concrete during delivery, at Project site, or during placement, unless approved by Architect and Engineer of Record.
- H. Deposit concrete continuously or in layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation.
- I. Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Place each layer while preceding layer is still plastic, to avoid cold joints.
 1. Consolidate placed concrete with mechanical vibrating equipment. Use equipment and procedures for consolidating concrete recommended by ACI 309R.
 2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the vibrator. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix constituents to segregate.
- J. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
 1. Consolidate concrete during placement operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
 2. Maintain reinforcement in position on chairs during concrete placement.
 3. Screed slab surfaces with a straightedge and strike off to correct elevations.
 4. Slope surfaces uniformly to drains where required.
 5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, free of humps or hollows, before excess moisture or bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

- K. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 2. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.
- L. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows, when hot-weather conditions exist:
1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.7 FINISHING FORMED SURFACES

- F. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding ACI 347R limits for class of surface specified.
- G. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams.
1. Repair and patch tie holes and defective areas remove fins and other projections exceeding 1/8 inch in height to produce uniform, smooth, dense concrete having the following formed finish Class and permitted abrupt or gradual irregularities as designated by ACI 347-01:
 - a. Vertical and horizontal exterior exposed surfaces: Class A, 1/8 inch, except abrupt irregularities shall be removed.
 - b. Other surfaces prominently exposed to public view: Class A, 1/8 inch, except abrupt irregularities shall be removed.
 - c. Concealed Locations where covered by another finish: Class C, 1/2 inch, except limit irregularities to 1/4 inch.
 2. Apply to concrete surfaces exposed to public view.
 3. Do not apply rubbed finish to smooth-formed finish.
- H. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.8 FINISHING FLOORS AND SLABS

- F. General: Comply with recommendations in ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- G. Mix and apply evaporation retarder in accordance with manufacturer's printed instructions immediately after floating. In extreme drying conditions, apply additional material as needed. Apply lightly on hard to trowel floor areas.

- H. Trowel Finish: After applying float finish, apply first trowel finish and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighthen until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
 - 1. Locations: Apply a trowel finish to surfaces indicated and as follows:
 - a. Floor and slab surfaces exposed to view
 - b. Floor and slab surfaces to be covered with the following:
 - 1) Resilient flooring
 - 2) Carpet
- I. Trowel and Fine-Broom Finish: Apply a partial trowel finish, stopping after second troweling. Immediately after second troweling, and when concrete is still plastic, slightly scarify surface with a fine broom.
 - 1. Locations: Apply to surfaces indicated and as floor and slab surfaces as follows:
 - a. Indicated to receive thinset or thickset installed tile.

3.9 MISCELLANEOUS CONCRETE ITEMS

- F. Filling In: Fill in holes and openings left in concrete structures, unless otherwise indicated, after work of other trades is in place. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete Work.
- G. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.
- H. Equipment Bases and Foundations: Provide machine and equipment bases and foundations as shown on Drawings. Set anchor bolts for machines and equipment at correct elevations, complying with diagrams or templates of manufacturer furnishing machines and equipment.

3.10 CONCRETE PROTECTION AND CURING

- F. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with recommendations in ACI 305R for hot-weather protection during curing.
- G. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after initial placing, screeding, and bull floating or darbying concrete, but before float finishing.
- H. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If forms are removed prior to end of curing period, continue curing using curing methods specified herein.
- I. Unformed Surfaces: Begin curing immediately after finishing concrete using curing methods specified herein.
- J. Curing Methods: Cure concrete according to ACI 308.1, by one or a combination of the following methods. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies will not interfere with bonding of floor covering used on Project.

1. **Moisture Curing:** Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
2. **Moisture-Retaining-Cover Curing:** Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
3. **Curing Compound:** Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - a. After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.
4. **Curing and Sealing Compound:** Apply uniformly to floors and slabs indicated to receive sealer in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.11 JOINT FILLING

- F. Prepare, clean, and install joint filler according to manufacturers written instructions.
 1. Defer joint filling until concrete has aged a minimum of 30 days.
- G. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.
- H. Install joint filler per manufacturer's recommendations. Overfill joint and trim joint filler flush with top of joint after hardening.

3.12 CONCRETE SURFACE REPAIRS

- F. **Defective Concrete:** Repair and patch defective areas concealed from view. Do not patch, repair or replace exposed architectural concrete except upon written direction of Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- G. **Patching Mortar:** Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
- H. **Repairing Formed Surfaces:** Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
 1. **Concealed Locations:** Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension. Remove defective concrete to a depth of 3/4-inch to 1-inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
 2. **Surfaces exposed to view:** Repair defects by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color.

Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.

3. Surfaces that affect concrete's durability and structural performance: Repair defects upon direction of Architect and Structural Engineer.
- I. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
 1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
 2. After concrete has cured at least 14 days, correct high areas by grinding.
 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
 4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
 5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
 6. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least 3/4 inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mix as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
 7. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.
 - J. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
 - K. Repair materials and installation not specified above may be used, subject to Architect's approval.

3.13 FIELD QUALITY CONTROL

- F. Testing Agency: Owner will acquire a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during concrete placement according to requirements specified in this Article.
- G. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 1. Testing Frequency: Obtain at least one composite sample for each 50 cu. yd. or fraction thereof of each concrete mix placed each day.

- a. When frequency of testing will provide fewer than 5 compressive-strength tests for each concrete mix, testing shall be conducted from at least 5 randomly selected batches or from each batch if fewer than five are used.
 2. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mix. Perform additional tests when concrete consistency appears to change.
 3. Air Content: ASTM C 231, pressure method, for normal-weight concrete; ASTM C 173, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.
 4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
 5. Compression Test Specimens: ASTM C 31; cast and laboratory cure one set of 4 standard cylinder specimens for each composite sample.
 6. Compressive-Strength Tests: ASTM C 39; test 2 laboratory-cured specimens at 7 days and one at 28 days and hold one cylinder for additional information, as required.
 - a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at age indicated.
 7. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
 8. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.
- H. Strength of each concrete mix will be satisfactory if every average of any 3 consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- I. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-and 28-day tests.
- J. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- K. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42 or by other methods as directed by Architect.

3.14 PROTECTION

- F. Protect finished surfaces from stains or abrasions. Protect surfaces or edges by leaving forms in place or by providing temporary covers. Protect concrete from rain, flowing water or mechanical injury.
- G. Protect floor slabs from the droppings of plaster, paint, dirt, and other marring by covering with polyethylene plastic sheet, well lapped and sealed or similar protection.

3.15 CLEANING

- F. During the course of the Work and on completion of the Work, remove and dispose of excess materials, equipment and debris away from premises.

END OF SECTION

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SECTION 04 22 00 - CONCRETE UNIT MASONRY

SECTION 04 22 00 - CONCRETE UNIT MASONRY

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
 - 1. Concrete masonry units.
 - 2. Pre-faced concrete masonry units.
 - 3. Steel reinforcing bars.

1.02 **DEFINITIONS**

- A. CMU(s): Concrete masonry unit(s).
- B. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.

1.03 **ACTION SUBMITTALS**

- A. Product Data: For each type of product.

1.04 **INFORMATIONAL SUBMITTALS**

- A. Material Certificates: For each type and size of product. For masonry units, include data on material properties.

PART 2 - PRODUCTS

2.01 **UNIT MASONRY, GENERAL**

- A. Masonry Standard: Comply with TMS 602/ACI 530.1/ASCE 6, except as modified by requirements in the Contract Documents.
- B. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do not use units where such defects are exposed in the completed Work.
- C. Fire-Resistance Ratings: Comply with requirements for fire-resistance-rated assembly designs indicated.
 - 1. Where fire-resistance-rated construction is indicated, units are listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction.

2.02 **CONCRETE MASONRY UNITS**

- A. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.
 - 1. Provide special shapes for lintels, corners, jambs, sashes, movement joints, headers, bonding, and other special conditions.

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- B. Integral Water Repellent: Provide units made with integral water repellent for exposed units .
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Euclid Chemical Company (The); a subsidiary of RPM International, Inc.
 - b. GCP Applied Technologies Inc.
 - c. Master Builders Solutions, brand of MBCC Group, a Sika company.
- C. CMUs: ASTM C90.
 - 1. Density Classification: Lightweight.
- D. Concrete Building Brick: ASTM C55.
 - 1. Density Classification: Lightweight .
- E. Pre-faced CMUs: Lightweight hollow concrete units complying with ASTM C90, with manufacturer's standard smooth resinous facing complying with ASTM C744.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Echelon; an Oldcastle APG brand.
 - b. The Spectra Group.
 - c. York Building Products.
 - 2. Size: Manufactured with pre-faced surfaces having 1/16-inch- wide returns of facing to create 1/4-inch- wide mortar joints.
 - 3. Colors and Patterns: Split face on one side.

2.03 MORTAR AND GROUT MATERIALS

- A. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.
- B. Aggregate for Mortar: ASTM C144.
 - 1. White-Mortar Aggregates: Natural white sand or crushed white stone.
 - 2. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.
- C. Water-Repellent Admixture: Liquid water-repellent mortar admixture intended for use with CMUs containing integral water repellent from same manufacturer.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Euclid Chemical Company (The); a subsidiary of RPM International, Inc.
 - b. GCP Applied Technologies Inc.
 - c. Master Builders Solutions, brand of MBCC Group, a Sika company.
- D. Water: Potable.

2.04 REINFORCEMENT

- A. Uncoated-Steel Reinforcing Bars: ASTM A615/A615M or ASTM A996/A996M, Grade 60.

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- B. Reinforcing Bar Positioners: Wire units designed to fit into mortar bed joints spanning masonry unit cells and to hold reinforcing bars in center of cells. Units are formed from 0.148-inch steel wire, hot-dip galvanized after fabrication. Provide units designed for number of bars indicated.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Heckmann Building Products, Inc.
 - b. Hohmann & Barnard, Inc.
 - c. Wire-Bond.

2.05 **TIES AND ANCHORS**

- A. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated:
1. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A82/A82M, with ASTM A153/A153M, Class B-2 coating.
 2. Steel Sheet, Galvanized after Fabrication: ASTM A1008/A1008M, Commercial Steel, with ASTM A153/A153M, Class B coating.
 3. Steel Plates, Shapes, and Bars: ASTM A36/A36M.
- B. Rigid Anchors: Fabricate from steel bars 1-1/2 inches wide by 1/4 inch thick by 24 inches long, with ends turned up 2 inches or with cross pins unless otherwise indicated.
1. Corrosion Protection: Hot-dip galvanized to comply with ASTM A153/A153M .

2.06 **EMBEDDED FLASHING MATERIALS**

- A. Metal Flashing: Provide metal flashing complying with SMACNA's "Architectural Sheet Metal Manual" and as follows:
1. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304, 0.016 inch thick.
 2. Copper: ASTM B370, Temper H00, cold-rolled copper sheet, 16-oz./sq. ft. weight or 0.0216 inch thick or ASTM B370, Temper H01, high-yield copper sheet, 12-oz./sq. ft. weight or 0.0162 inch thick.
 3. Fabricate continuous flashings in sections 96 inches long minimum, but not exceeding 12 feet. Provide splice plates at joints of formed, smooth metal flashing.
 4. Fabricate metal expansion-joint strips from to shapes indicated.
- B. Single-Wythe CMU Flashing System: System of CMU cell flashing pans and interlocking CMU web covers made from UV-resistant, high-density polyethylene. Cell flashing pans have integral weep spouts designed to be built into mortar bed joints and that extend into the cell to prevent clogging with mortar.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Mortar Net Solutions.
- C. Solder and Sealants for Sheet Metal Flashings: As specified in Section 07 62 00 "Sheet Metal Flashing and Trim."

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- D. Adhesives, Primers, and Seam Tapes for Flashings: Flashing manufacturer's standard products or products recommended by flashing manufacturer for bonding flashing sheets to each other and to substrates.

2.07 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
 - 1. Do not use calcium chloride in mortar or grout.
 - 2. Use portland cement-lime or masonry cement mortar unless otherwise indicated.
 - 3. For exterior masonry, use portland cement-lime or masonry cement mortar.
 - 4. For reinforced masonry, use portland cement-lime or masonry cement mortar.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Unit Masonry: Comply with ASTM C270, Property Specification. Provide the following types of mortar for applications stated unless another type is indicated.
 - 1. For masonry below grade or in contact with earth, use Type MorType S.
- D. Colored-Aggregate Mortar: Produce required mortar color by using colored aggregates and natural color or white cement as necessary to produce required mortar color.
 - 1. Application: Use colored-aggregate mortar for exposed mortar joints with the following units:
 - a. Pre-faced CMUs.
- E. Grout for Unit Masonry: Comply with ASTM C476.
 - 1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with TMS 602/ACI 530.1/ASCE 6 for dimensions of grout spaces and pour height.
 - 2. Proportion grout in accordance with ASTM C476, Table 1 .
 - 3. Provide grout with a slump of 8 to 11 inches as measured in accordance with ASTM C143/C143M.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.

3.02 TOLERANCES

- A. Dimensions and Locations of Elements:

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1. For dimensions in cross section or elevation, do not vary by more than plus 1/2 inch or minus 1/4 inch.
2. For location of elements in plan, do not vary from that indicated by more than plus or minus 1/2 inch.
3. For location of elements in elevation, do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

B. Lines and Levels:

1. For bed joints and top surfaces of bearing walls, do not vary from level by more than 1/4 inch in 10 feet, or 1/2-inch maximum.
2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2-inch maximum.
3. For vertical lines and surfaces, do not vary from plumb by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2-inch maximum.
4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2-inch maximum.
5. For lines and surfaces, do not vary from straight by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2-inch maximum.

C. Joints:

1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
2. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch.
3. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch.

3.03 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less-than-nominal 4-inch horizontal face dimensions at corners or jambs.
- C. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- D. Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.
- E. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below, and rod mortar or grout into core.

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- F. Fill cores in hollow CMUs with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.

3.04 MORTAR BEDDING AND JOINTING

- A. Lay hollow CMUs as follows:
 1. Bed face shells in mortar and make head joints of depth equal to bed joints.
 2. Bed webs in mortar in all courses of piers, columns, and pilasters.
 3. Bed webs in mortar in grouted masonry, including starting course on footings.
 4. Fully bed entire units, including areas under cells, at starting course on footings where cells are not grouted.
- B. Lay solid CMUs with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- C. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
- D. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint) unless otherwise indicated.

3.05 FLASHING

- A. General: Install embedded flashing at ledges and other obstructions to downward flow of water in wall where indicated.
- B. Install flashing as follows unless otherwise indicated:
 1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
 2. At lintels, extend flashing a minimum of 6 inches into masonry at each end. At heads and sills, extend flashing 6 inches at ends and turn up not less than 2 inches to form end dams.
 3. Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall, and adhere flexible flashing to top of metal drip edge.
 4. Install metal flashing termination beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall, and adhere flexible flashing to top of metal flashing termination.
- C. Install single-wythe CMU flashing system in bed joints of CMU walls where indicated to comply with manufacturer's written instructions. Install CMU cell pans with upturned edges located below face shells and webs of CMUs above and with weep spouts aligned with face of wall. Install CMU web covers so that they cover upturned edges of CMU cell pans at CMU webs and extend from face shell to face shell.

3.06 REINFORCED UNIT MASONRY

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- A. Temporary Formwork and Shores: Construct formwork and shores as needed to support reinforced masonry elements during construction.
 - 1. Construct formwork to provide shape, line, and dimensions of completed masonry as indicated. Make forms sufficiently tight to prevent leakage of mortar and grout. Brace, tie, and support forms to maintain position and shape during construction and curing of reinforced masonry.
 - 2. Do not remove forms and shores until reinforced masonry members have hardened sufficiently to carry their own weight and that of other loads that may be placed on them during construction.
- B. Placing Reinforcement: Comply with requirements in TMS 602/ACI 530.1/ASCE 6.
- C. Grouting: Do not place grout until entire height of masonry to be grouted has attained enough strength to resist grout pressure.
 - 1. Comply with requirements in TMS 602/ACI 530.1/ASCE 6 for cleanouts and for grout placement, including minimum grout space and maximum pour height.
 - 2. Limit height of vertical grout pours to not more than 60 inches .

3.07 REPAIRING, POINTING, AND CLEANING

- A. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- B. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
 - 1. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes.
 - 2. Clean concrete masonry by applicable cleaning methods indicated in NCMA TEK 8-4A.

3.08 MASONRY WASTE DISPOSAL

- A. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed.
 - 1. Do not dispose of masonry waste as fill within 18 inches of finished grade.
- B. Masonry Waste Recycling: Return broken CMUs not used as fill to manufacturer for recycling.
- C. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above or recycled, and other masonry waste, and legally dispose of off Owner's property.

END OF SECTION 04 22 00

Tecolote House Renovation
SECTION 05 52 13 - PIPE AND TUBE RAILINGS

SECTION 05 52 13 - PIPE AND TUBE RAILINGS

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
1. Stainless steel railings.

1.02 **ACTION SUBMITTALS**

- A. Product Data:
1. Manufacturer's product lines of mechanically connected railings.
 2. Handrail brackets.
 3. Shop primer.
 4. Intermediate coats and topcoats.
 5. Bituminous paint.
 6. Nonshrink, nonmetallic grout.
 7. Anchoring cement.
 8. Metal finishes.
 9. Paint products.

PART 2 - PRODUCTS

2.01 **METALS, GENERAL**

- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.
- B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.
1. Provide type of bracket with flange tapped for concealed anchorage to threaded hanger bolt and that provides 1-1/2-inch clearance from inside face of handrail to finished wall surface.

2.02 **STAINLESS STEEL RAILINGS**

- A. Tubing: ASTM A554, Grade MT 304 .
- B. Pipe: ASTM A312/A312M, Grade TP 304 .
- C. Castings: ASTM A743/A743M, Grade CF 8 or CF 20 .
- D. Plate and Sheet: ASTM A240/A240M or ASTM A666, Type 304 .

2.03 **FASTENERS**

- A. Fastener Materials:

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1. Ungalvanized-Steel Railing Components: Plated steel fasteners complying with ASTM F1941/ASTM F1941M, Class Fe/Zn 5 for zinc coating.
 2. Stainless Steel Railing Components: Type 304 stainless steel fasteners.
- B. Post-Installed Anchors: Fastener systems with working capacity greater than or equal to the design load, according to an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC193.
1. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy Group 1 stainless steel bolts, ASTM F593, and nuts, ASTM F594.

2.04 MISCELLANEOUS MATERIALS

- A. Handrail Brackets: Cast stainless steel, center of handrail from wall.
- B. Welding Rods and Bare Electrodes: Select in accordance with AWS specifications for metal alloy welded.
1. For stainless steel railings, provide type and alloy as recommended by producer of metal to be welded and as required for color match, strength, and compatibility in fabricated items.
- C. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout, complying with ASTM C1107/C1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.

2.05 FABRICATION

- A. Cut, drill, and punch metals cleanly and accurately.
1. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated.
 2. Remove sharp or rough areas on exposed surfaces.
- B. Form work true to line and level with accurate angles and surfaces.
- C. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 2. Obtain fusion without undercut or overlap.
 3. Remove flux immediately.
 4. At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Finish #1 welds; ornamental quality with no evidence of a welded joint .
- D. Welded Connections for Aluminum Pipe: Fabricate railings to interconnect members with concealed internal welds that eliminate surface grinding, using manufacturer's standard system of sleeve and socket fittings.
- E. Nonwelded Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.

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- F. Form changes in direction as follows:
 - 1. As detailed.
 - 2. .
- G. Bend members in jigs to produce uniform curvature for each configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- H. Close exposed ends of hollow railing members with prefabricated cap and end fittings of same metal and finish as railings.
- I. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Close ends of returns unless clearance between end of rail and wall is 1/4 inch or less.
- J. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.
 - 1. At brackets and fittings fastened to plaster or gypsum board partitions, provide crush-resistant fillers or other means to transfer loads through wall finishes to structural supports and prevent bracket or fitting rotation and crushing of substrate.
- K. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work.
 - 1. Fabricate anchorage devices capable of withstanding loads imposed by railings.
 - 2. Coordinate anchorage devices with supporting structure.
- L. For railing posts set in concrete, provide stainless steel sleeves not less than 6 inches long with inside dimensions not less than 1/2 inch greater than outside dimensions of post, with metal plate forming bottom closure.
- M. Toe Boards: Where indicated, provide toe boards at railings around openings and at edge of open-sided floors and platforms. Fabricate to dimensions and details indicated.

2.06 STAINLESS STEEL FINISHES

- A. Stainless Steel Pipe and Tubing Finishes:
 - 1. 320-Grit Polished Finish: Oil-ground, uniform, fine, directionally textured finish.
- B. Stainless Steel Sheet and Plate Finishes:
 - 1. Directional Satin Finish: ASTM A480/A480, No. 4.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Perform cutting, drilling, and fitting required for installing railings.
 - 1. Fit exposed connections together to form tight, hairline joints.
 - 2. Install railings level, plumb, square, true to line; without distortion, warp, or rack.

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3. Set railings accurately in location, alignment, and elevation; measured from established lines and levels.
4. Do not weld, cut, or abrade surfaces of railing components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
5. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
6. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.

B. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1. Coat concealed surfaces of aluminum that will be in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

3.02 ANCHORING POSTS

A. Use stainless steel pipe sleeves preset and anchored into concrete for installing posts. After posts are inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions.

B. Form or core-drill holes not less than 5 inches deep and 3/4 inch larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions.

3.03 ATTACHING RAILINGS

A. Attach handrails to walls with wall brackets, except where end flanges are used. Provide brackets with 1-1/2-inch clearance from inside face of handrail and finished wall surface.

B. Secure wall brackets and railing end flanges to building construction as follows:

1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
2. For wood stud partitions, use hanger or lag bolts set into studs or wood backing between studs. Coordinate with carpentry work to locate backing members.

3.04 CLEANING

A. Clean stainless steel by washing thoroughly with clean water and soap and rinsing with clean water.

B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas, and repair galvanizing to comply with ASTM A780/A780M.

END OF SECTION 05 52 13

SECTION 06 10 00
ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
1. Dimensional lumber, boards and timber.
 2. Blocking and furring.
 3. Sheathing.
 4. Plywood backing panels.
 5. Fasteners, anchors and connectors.

1.2 SUBMITTALS

- A. Product Data:
1. Manufacturer's data for wood-preservative treatment and certification by treating plant that treated materials comply with requirements.

Delete first subparagraph below if fire-retardant-treated wood is not required.

2. Manufacturer's data for fire-retardant treatment and certification by treating plant that treated materials comply with requirements. Include physical properties of treated materials, both before and after exposure to elevated temperatures when tested according to ASTM D 5516 and ASTM D 5664.
3. Submit copies of warranties from chemical treatment manufacturers for each type of treatment.
4. Submit certification that moisture content meets specified requirements at time of installation.

1.3 QUALITY ASSURANCE

Delete below if no fire-retardant-treated wood.

- A. Source Limitations for Fire-Retardant-Treated Wood: Obtain each type of fire-retardant-treated wood product through one source from a single producer.
- B. Standards:
1. Grading: Conform with applicable requirements of DOC PS 20, *American Softwood Lumber Standard*, by the American Lumber Standards Committee (ALSC), the National Grading Rule for Dimensional Lumber and to grading rules of manufacturer's association under whose rules the lumber is produced.
 2. Preservative Treatment: Applicable standards of the American Wood Preservers Association.
- C. Engineered Wood Products: Provide engineered wood products acceptable to authorities having jurisdiction and for which current model code research or evaluation reports exist that show compliance with building code in effect for Project.
1. Allowable Design Stresses: Provide engineered wood products with allowable design stresses, as published by manufacturer, that meet or exceed those indicated.

Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.

- D. Delegated Design: Engage a qualified professional engineer to design structural glued-laminated timber and connectors.
 - 1. Structural Performance: Structural glued-laminated timber and connectors shall withstand the effects of structural loads shown on Drawings without exceeding allowable design working stresses listed in AITC 117 or determined according to ASTM D 3737 and acceptable to authorities having jurisdiction.

Retain "Seismic Performance" Paragraph below for projects requiring seismic design. Model building codes and ASCE/SEI 7 establish criteria for buildings subject to earthquake motions. If retaining paragraph, show seismic design criteria on Drawings.

- 2. Seismic Performance: Structural glued-laminated timber and connectors shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Packing and Shipping: Deliver materials to site in manufacturer's original unopened packaging with labels intact.
- B. Storing: Stack lumber, plywood, and other panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.
- C. Environmental Requirements: Store materials for which a maximum moisture is specified in areas where humidity can be controlled.

PART 2 - PRODUCTS

2.1 DIMENSION LUMBER

- A. General:
 - 1. Provide dimension lumber of grades indicated according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.
 - 2. Factory mark each piece of lumber with grade stamp of grading agency.

Delete if no exposed lumber.

Revise first subparagraph below if rough lumber is acceptable for all work.

- 3. Provide dressed lumber, S4S, unless otherwise indicated.
- 4. Moisture Content: Expressed as a percentage of the weight of oven-dry wood at time of installation:
 - a. 2-inch nominal thickness or less: 19 percent maximum moisture content.
 - b. Architecturally exposed framing shall be free of heart center members with a maximum moisture content not to exceed 15 percent.
- B. All structural lumber shall be Douglas Fir-Larch, S4S and shall conform to the Governing Building Code, Section 2303.1.1.
- C. Following Wood Grades are Minimums UNO:

1. 2x Studs, blocking, and plate: Stud
 2. 2x joists: #2 or Better
 3. 4x4, 4x6, or 6x6 beams or posts: #2 or Better
 4. 4x8, 6x8, or larger beams or posts #1 or Better
 5. It is recommended (but not required) that all exposed members be Select Structural or Better and free of heart center due to visual characteristics.
- D. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.
- E. All lumber in contact with concrete or masonry shall be pressure treated Douglas Fir. Whenever it is necessary to cut, notch, bore or splice pressure treated material, all newly cut surfaces shall be thoroughly painted with the same preservative.

2.2 SHEET PRODUCTS

- F. General:
1. Comply with "Code Plus" provisions in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial."
 2. Factory mark panels according to indicated standard.
- G. Plywood: Each panel of softwood plywood shall be identified with the APA grade-trademark and shall meet the requirements of PS-1-83 for softwood plywood.
1. Plywood Wall Sheathing: Exposure 1 sheathing. Structural I
 - a. Thickness: As indicated on General Structural Notes and Drawings.
 2. Plywood Roof Sheathing: Exposure 1 sheathing.
 - a. Thickness: As indicated on General Structural Notes and Drawings.
- H. Oriented Strand Board:
1. Raw materials used in panel shall be manufactured from wood products conforming to ANSI A201.1.
 2. Each piece shall be stamped in accordance with American Plywood Associations (APA) grade rules and shall meet requirements of latest edition of U.S. Product standard for Softwood Plywood.
 3. Provide Grade 2-M-W or 2-M-F as required for thickness and application.
 4. Rating: Exposure 1, Structural I sheathing, U.N.O. on plans.
 5. Thickness: As needed to comply with requirements specified but not less than thickness indicated on Drawings.

2.2 TREATED MATERIALS

- A. Preservative Treatment: AWPA C2 (lumber) and AWPA C9 (plywood)
1. Materials:
 - a. Provide ammoniacal copper quaternary (ACQ) or copper boron azole (CBA).
 - b. Chromated copper arsenate (CCA) is not allowed.
 2. Locations:
 - a. Wood members in connection with roofing or flashing.
 - b. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete, located at or below grade.
 - c. Wood framing members at or less than 8 inches above grade.

- d. Wood floor plates that are installed over concrete slabs directly in contact with earth.
 - e. Blocking occurring on top of or above the roof deck, including the nailer beneath the flashing at parapet caps.
 - f. Other locations as required by Code.
- B. Fire Retardant Treatment (FRT): Comply with performance requirements in AWPA C20 (lumber) and AWPA C27 (plywood). Identify fire-retardant-treated wood with appropriate classification marking of UL, U.S. Testing, Timber Products Inspection, or another testing and inspecting agency acceptable to authorities having jurisdiction.
1. Use treatment for which chemical manufacturer publishes physical properties of treated wood after exposure to elevated temperatures, when tested by a qualified independent testing agency according to AWPA C20 (lumber) and AWPA C27 (plywood).
 2. Use treatment that does not promote corrosion of metal fasteners. Fasteners must be galvanized steel, stainless steel, silicon bronze, or copper, in accordance with Section 2304.9.5 or the 2018 IBC.
 3. Chemicals shall comply with FR-1 or AWPA Standard P17 and shall be free of halogens, sulfates and ammonium phosphate.
 4. Lumber shall be kiln dried to maximum moisture content of 19 percent after treatment, 15 percent for plywood.
 5. Handle and install all FRT wood per manufacturer's specification.

2.3 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
1. Where rough carpentry is exposed to weather, in contact with ground, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153.
 2. Fasteners in contact with wood that has been pressure-preservative treated shall be hot dip zinc coated complying with ASTM A 153, or stainless steel complying with ASTM F 593 and ASTM F 594.
- B. Nails:
1. Shall be with "common" nails unless noted otherwise
 2. Shall not be driven closer than $\frac{1}{2}$ their length nor closer than $\frac{1}{4}$ of their length to the edge or end of a member, except for sheathing.
 3. Shall be installed in pre-drilled lead holes if necessary to avoid splitting
 4. Shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicone bronze, or copper when in contact with preservative-treated wood.
 - a. When use in exterior applications, nails shall have coating types and weights in accordance with the treated wood or bolt manufacturer's recommendations. A minimum of A653, type G185 zinc-coated galvanized steel or equivalent shall be used.
 - b. When used in an interior, dry environment in SBX/DOT or zinc borate preservative-treated wood, plain carbon nails shall be permitted.
 5. All nailing shall conform to the CBC, Table 2304.10.1
- C. Power-Driven Fasteners: ICC ESR-2138.
1. Shall be installed at all interior non-bearing, non-shearwalls.
 2. Shall be 0.145x3" with 1.5" diameter steel washers.
 3. Shall not be spaced greater than 32" o.c.

D. Screws:

1. Shall be installed into pre-drilled lead holes. Lubricant (or soap) shall be used to facilitate installation and prevent damage to the screws.
2. Shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
 - a. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's recommendations. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
 - b. When used in dry interior environments in SBX/DOT or zinc borate preservative treated wood, plain carbon screws, nuts and washers shall be permitted.

E. Bolts: Steel bolts complying with ASTM F1554, Grade 36:

1. Shall be installed at all exterior walls and all interior shear and/or bearing walls
2. Shall be 5/8" diameter with 3x3x0.229" steel plate washers at shearwalls.
3. Shall be 5/8" diameter with 2x2x3/16" steel plate washers at non-shearwalls.
4. Shall have 7" minimum embedment. (Contractor to coordinate length of bolts with sill plate thickness).
5. Shall not be spaced greater than 72" o.c.. Refer to shearwall schedule for specific anchor bolt spacing requirements.
6. Shall be placed a maximum of 12" from wall corners, wall ends, and sill plate splices (but not less than 7 diameters) , and a minimum of two bolts per piece of sill plate is required.
7. Shall be secured in place prior to foundation inspection.
8. Shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
 - a. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's recommendations. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
 - b. When used in dry interior environments in SBX/DOT or zinc borate preservative treated wood, plain carbon screws, nuts and washers shall be permitted.

Subparagraph above and below are examples only. Above protects against corrosion in an indoor atmosphere; revise to suit other service conditions after verifying availability of thicker coatings.

F. Metal Framing Anchors: Made from hot-dip, zinc-coated steel sheet complying with ASTM A 653, G60 coating designation.

1. Research/Evaluation Reports: Provide products acceptable to authorities having jurisdiction and for which model code research/evaluation reports exist that show compliance of metal framing anchors, for application indicated, with building code in effect for Project.
2. Allowable Design Loads: Meet or exceed those indicated per manufacturer's published values determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Fabricate, size, install, connect, fasten, bore, notch, and cut wood and plywood with joints true, tight, and well-nailed, screwewd or bolted as required, all members to have solid bearing without being shimmed, unless noted otherwise. Set horizontal members subject to bending with the crown up. Install framing plumb, square, true and cut for full bearing. Splices are not permitted between bearings. Use full lengths unless otherwise specified.
- B. Metal framing angles, anchor, clips, straps, ties, holdowns, ect. Shall be manufactured by Simpson Strong-Tie Co. No substitutions shall be permitted without prior approval of the Engineer.
- C. All walls are to have continuous double 2x top plates spliced as following unless specifically noted otherwise on the plans and details.
- D. Blocking:
 - 1. Provide minimum one row of nominal 2" thick blocking of same width as stud, fitted snugly and spiked into studs at mid-height of partitions or walls over 8'-0" high.
 - 2. All foundation cripple walls (or "pony walls") less than 14" in height shall be solid blocking.
 - 3. Rim blocking/rim board to be 1-1/4" minimum width x full depth at bearing walls, UNO. At second floor framing provide 1-3/4" minimum width x full depth at bearing walls. Refer to shearwall section for additional blocking requirements.
- E. Notching:
 - 1. Is not permitted of any structural member without prior approval
 - 2. In exterior and bearing walls, notches shall not exceed 25% of stud depth.
 - 3. Non-bearing partition walls, notches shall not exceed 40% of the stud depth
 - 4. Successive notches in the same member shall be spaced a minimum of 18" apart.
- F. Boring:
 - 1. Is not permitted of any structural member without prior approval.
 - 2. In exterior and bearing walls, holes shall not exceed 40% of the stud depth.
 - 3. Non-bearing partition walls may be drilled no greater than 60% of stud depth.
 - 4. Successive holes in the same member shall be spaced a minimum of 18" apart.
- G. Bearing:
 - 1. Provided a minimum of 1½" of bearing for all 2x joists and headers 4x10/6x8 & smaller
 - 2. Provide a minimum of 3" of bearing for all beams headers 4x12/6x10 & larger, UNO on plans.
 - 3. Members bearing on prefabricated hangers are to have full bearing and nailing per manufacturer's specifications.

Delete below if not required.

3.2 POST INSTALLATION:

- A. Posts inside walls shall bear on sill plates and shall be continuous between top and bottom plates, unless specifically noted otherwise.

Delete subparagraph below if not applicable. This condition requires subflooring or stringers, as specified, to provide cross-tie.

First paragraph below is recommended for wind resistance. Delete if not required.

- B. Provide posts under all beams, girders or double joists equal to the width of the supported member.
- C. Posts on upper levels are to be stacked on posts of equal size at levels below, unless a larger post is specified on the plans.
- D. Vertically oriented blocking (“squash blocking”) shall be used to fully transfer the post area through floors to foundation. Vertical blocking shall be equal to floor thickness plus 1/16”.
- E. Headers framing into continuous posts without trimmer studs shall be supported in Simpson HUC hangers unless noted otherwise on plans.
- F. Posts when isolated , shall be seated in Simpson post or column bases, unless noted otherwise on the plans.

3.3 ROOF FRAMING:

- A. Provide wood joists, as specified, laid with the crown up and spaced as indicated.
- B. Provide a minimum of 1½” end bearing unless otherwise shown.
- C. Provide full depth solid 2x blocking or cross-bridging between the joists at 8'-0” o.c. maximum.
- D. Provide all cricket framing required to achieve positive drainage per architect.
- E. Install plywood panels with the face grain across the framing and close joints and nail at each support. Fully nail with common nails per the plans.
- F. Plywood panels shall not be less than 4'x 8' except at boundaries and change in framing direction, where the minimum panel dimensions shall be no less than 24”, unless all edges of undersized panels are supported by and fastened to framing members or blocking.
- G. Provide Simpson “PSCL” clips at all plywood joints perpendicular to framing. Provide clips midway between framing members at the unsupported edges of plywood when members are spaced at 24” o.c. or greater. IF clips are not used, provide solid blocking for joints perpendicular to framing.

3.4 FLOOR FRAMING:

- A. Provide wood joists, as specified, laid with the crown up and spaced as indicated.
- B. Provide a minimum of 1½” end bearing unless otherwise shown.
- C. Provide full depth solid 2x blocking or cross-bridging between the joists at 8'-0” o.c. maximum. For floors framed with I joists, refer to the manufacturer’s specifications for blocking requirements.

- D. Provide full depth solid 2x blocking between the joists under all walls and partitions where the wall or partition is perpendicular to the floor framing (including floors framed with I joists).
- E. Install plywood sheathing with the face grain across supports, end supports staggered, and the edges of sheets centered over supports. If T&G plywood is used, blocking need not be provided at all plywood edges (UNO per plan) If T&*G plywood is not used, blocking shall be provided at all plywood edges. Glue plywood to joists and fully nail with common nails per the plans.
- F. Plywood panels shall not be less than 4'x8' except at boundaries and changes in framing direction, where the minimum panel dimension shall be no less than 24", unless all edges of undersized panels are supported by and fastened to framing members or blocking.

Delete subparagraph below if not applicable. This condition requires subflooring or stringers, as specified, to provide cross-tie.

First paragraph below is recommended for wind resistance. Delete if not required.

3.5 SHEAR WALLS:

- A. Refer to plans for all shear wall locations, length type and nailing.
- B. Refer to shear wall Schedule on title sheet for additional information.
- C. Shear wall lengths specified on plans are minimum required.
- D. Shear walls to be nailed with common nails. All nails to have minimum 3/8" edge distance to panel or framing member.
- E. Where 3x framing is required per the shear wall schedule, stagger edge nailing.
- F. Typical rim board/blocking at shearwalls shall be 1-3/4" minimum LSL (refer to Engineered Lumber Section for material specifications). Refer to shearwall schedule per plan for minimum rim & blocking requirements per transfer fasteners.

3.6 WALL STUDS:

- A. Unless specifically noted on the plan and details, use the following guidelines for wall framing:
 1. Use 2x4 studs at 16" o.c. for walls less than 8'-0" tall. Unless noted otherwise in the structural plan set.
 2. Walls 9'-0" to 16'-0" tall shall be constructed of 2x6 studs at 16" o.c. Unless noted otherwise in the structural plan set.
 3. Request specifically engineered wall details for walls greater than 16'-0" tall.

END OF SECTION

SECTION 06 17 35

MICROLLAM (LVL) FRAMING

PART 1 - GENERAL

1.1 SCOPE

- A. This work includes the complete furnishings and installation of all Microllam® laminated veneer lumber (LVL) as shown on the drawings herein specified and necessary to complete the work.

1.2 CODE APPROVALS

- A. These products shall be designed and manufactured to the standards set forth in the ICC Evaluation Service, Inc. report ESR-1387.

1.3 DESIGN

- B. Products:
 - a. Microllam® LVL shall be designed to fit the dimensions and loads indicated on the plans.

1.4 SUBMITTALS

- A. Drawings:
 - a. Drawings showing layout and detail necessary for determining fit and placement in the building shall be provided by Weyerhaeuser. (Fees may apply)
 - i. Production:
 - 1. Fabrication and/or cutting shall not proceed until the architect and/or engineer have approved the submittal package.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Code Reports:
 - a. Materials shall comply with ICC ES ESR-1387
- B. Adhesives:
 - a. Adhesives shall be of the waterproof type conforming to the requirements of ASTM D-2559.

2.2 FABRICATION

- A. Microllam® LVL shall be manufactured by Weyerhaeuser in a plant listed in the reports referred to above and under the supervision of an approved third-party inspection agency. It shall be manufactured in a continuous process with all grain parallel with the length of the members. All members are to be free of finger or scarf joints or mechanical connections in full-length members.

2.3 TOLERANCES (DRY MATERIAL)

- A. Finished Length (as specified): $\pm 1/4"$
- B. Width/Depth
 - $\leq 3.5"$ wide / $\leq 14"$ deep: $\pm 1/8"$
 - $> 3.5"$ wide / $> 14"$ deep: $\pm 3/16"$

2.4 IDENTIFICATION

- A. Microllam® LVL shall be identified by a stamp indicating the product type and grade and ICC ES evaluation report number, manufacturer's name, plant number and the independent inspection agency's logo.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Microllam® LVL, if stored prior to installation, shall be protected from the weather. It shall be installed in accordance with the plans and any Weyerhaeuser drawings and installation suggestions. Temporary construction loads that cause stresses beyond design limits are not permitted. Safety bracing is to be provided by the installer to keep the Microllam® LVL straight and plumb as required and to assure adequate lateral support for the individual Microllam® LVL members and the entire system until the sheathing material has been applied.
- B. The contractor may give notification to the manufacturer prior to installation of the Microllam® LVL products to review and discuss product installation guidelines.
- C. LVL members shall bear a minimum of 3½" on specified supports. Provide full depth solid blocking at all bearing points.
- D. LVL members shall be nailed in accordance with manufacturer's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
 - 1. 16d @ 6" o.c. 10d @ 4" o.c., and 8d @ 3" o.c.
 - 2. When nailing must be reduced, stagger rows a minimum of ½" apart while maintaining proper edge distances.
- E. When LVL beams are comprised of multiple ply's, members shall be connected with 16d nail, ½" bolts or ¼" lag screws in accordance with manufacture's specifications.
- F. LVL members are not be cut, notched or drilled without specific written approval of the EOR.

3.2 PERFORMANCE STANDARDS

- A. Products shall be proven by testing and evaluation in accordance with the provisions of ASTM D-5456.
- B. Member Specifications: As indicated on General Structural Notes and Drawings.
 - 1. Members shall be 1¾" minimum thickness with the following minimum properties:
 - i. E = 2000ksi
 - ii. Fb = 2600psi
 - iii. Fv = 285psi
 - iv. Fc (Parallel) = 2500psi
 - v. Fc (Perpendicular) = 750psi
 - vi. Ft (parallel) = 1500psi
 - vii. Specific Gravity = 0.50

3.3 FIRE RATING

- A. Microllam® LVL is permitted as a substitute for conventional wood framing in fire-resistive assemblies. Microllam® LVL shall be sized for the same load-carrying capacity as the sawn lumber specified in the assembly, and its dimensions shall be equal to or greater

than those specified for the sawn lumber. The fire resistance of exposed Microllam® LVL members may be calculated in accordance with Chapter 16 of the ANSI/AWC NDS.

3.4 WARRANTY

- A. The products delivered shall be free from manufacturing errors or defects in workmanship and material. The products, when correctly installed and maintained, shall be warranted to perform as designed for the normal and expected life of the building.

PART 4 - ALTERNATES AND/OR EQUALS

4.1 MODIFICATIONS/ALTERNATES:

- A. Due to the customized detailing and engineering characteristics of the roof and/or floor framing assembly, it is a requirement that Microllam® LVL be used in the base bid.
 - 1. The specification is based on Microllam® LVL engineered wood products. No alternatives, modifications or substitutions are allowed unless the General Contractor and Sub-Contractors submits in writing for such requests to the Project Engineer of Record for approval, no later than two weeks prior to bid. Alternate products must have a current ICC-ES code evaluation report with listed design properties equivalent or greater than specified products. Substantiating calculations shall be submitted. All floor performance, fire endurance, holes, tapered cuts and notching shall be justified for alternate. Contract shall reflect any price changes. The Engineer of Record shall be reimbursed for any review time.

END OF SECTION

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SECTION 06 40 23 - INTERIOR ARCHITECTURAL WOODWORK

SECTION 06 40 23 - INTERIOR ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
 - 1. Interior standing and running trim.
 - 2. Interior frames and jambs.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For the following:
 - 1. Anchors.
 - 2. Adhesives.
 - 3. Shop finishing materials.

1.03 **INFORMATIONAL SUBMITTALS**

- A. Qualification Data: For architectural woodwork manufacturer and Installer.

1.04 **FIELD CONDITIONS**

- A. Environmental Limitations without Humidity Control: Do not deliver or install interior architectural woodwork until building is enclosed, wet-work is complete, and HVAC system is operating and maintaining temperature and relative humidity at levels designed for building occupants for the remainder of the construction period.

PART 2 - PRODUCTS

2.01 **ARCHITECTURAL WOODWORK, GENERAL**

- A. Quality Standard: Unless otherwise indicated, comply with the Architectural Woodwork Standards for grades of interior architectural woodwork indicated for construction, finishes, installation, and other requirements.

2.02 **INTERIOR FRAMES AND JAMBS FOR OPAQUE FINISH**

- A. Architectural Woodwork Standards Grade: Premium .
- B. Wood Species: Any closed-grain hardwood .
 - 1. Do not use plain-sawn softwood lumber with exposed, flat surfaces more than 3 inches wide.
 - 2. Wood Moisture Content: 5 to 10 percent.

2.03 **FABRICATION**

- A. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.

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- B. Fabricate interior architectural woodwork to dimensions, profiles, and details indicated.
 - 1. Ease edges to radius indicated for the following:
 - a. Edges of Solid-Wood (Lumber) Members: 1/16 inch unless otherwise indicated.
 - b. Edges of Rails and Similar Members More Than 3/4 Inch Thick: 1/8 inch.
- C. Complete fabrication, including assembly, to maximum extent possible before shipment to Project site.
 - 1. Disassemble components only as necessary for shipment and installation.
 - 2. Where necessary for fitting at site, provide allowance for scribing, trimming, and fitting.
 - 3. Trial fit assemblies at fabrication shop that cannot be shipped completely assembled.
 - a. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting.
 - b. Verify that parts fit as intended, and check measurements of assemblies against field measurements indicated on approved Shop Drawings before disassembling for shipment.

PART 3 - EXECUTION

3.01 **PREPARATION**

- A. Before installation, condition interior architectural woodwork to humidity conditions in installation areas for not less than 72 hours prior to beginning of installation.
- B. Before installing interior architectural woodwork, examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming of concealed surfaces.

3.02 **INSTALLATION**

- A. Grade: Install interior architectural woodwork to comply with same grade as item to be installed.
- B. Assemble interior architectural woodwork and complete fabrication at Project site to the extent that it was not completed during shop fabrication.
- C. Install interior architectural woodwork level, plumb, true in line, and without distortion.
 - 1. Shim as required with concealed shims.
 - 2. Install level and plumb to a tolerance of 1/8 inch in 96 inches.
- D. Scribe and cut interior architectural woodwork to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- E. Preservative-Treated Wood: Where cut or drilled in field, treat cut ends and drilled holes in accordance with AWWA M4.

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SECTION 06 40 23 - INTERIOR ARCHITECTURAL WOODWORK

- F. Fire-Retardant-Treated Wood: Install fire-retardant-treated wood to comply with chemical treatment manufacturer's written instructions, including those for adhesives used to install woodwork.

- G. Anchor interior architectural woodwork to anchors or blocking built in or directly attached to substrates.
 - 1. Secure with countersunk, concealed fasteners and blind nailing.
 - 2. Use fine finishing nails for exposed fastening, countersunk and filled flush with interior architectural woodwork.
 - 3. For shop-finished items, use filler matching finish of items being installed.

- H. Standing and Running Trim:
 - 1. Install with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to greatest extent possible.
 - 2. Do not use pieces less than 96 inches long, except where shorter single-length pieces are necessary.
 - 3. Scarf running joints and stagger in adjacent and related members.
 - 4. Fill gaps, if any, between top of base and wall with plastic wood filler; sand smooth; and finish same as wood base if finished .
 - 5. Install standing and running trim with no more variation from a straight line than 1/8 inch in 96 inches.

END OF SECTION 06 40 23

Tecolote House Renovation
SECTION 06 41 13 - WOOD-VENEER-FACED ARCHITECTURAL CABINETS

SECTION 06 41 13 - WOOD-VENEER-FACED ARCHITECTURAL CABINETS

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
1. Wood cabinets for opaque finish.
 2. Wood materials.
 3. Cabinet hardware and accessories.
 4. Wood furring, blocking, shims, and hanging strips for installing architectural cabinets that are not concealed within other construction.
 5. Shop finishing.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For each type of product.
1. Include data for fire-retardant treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements.
- B. Shop Drawings: For architectural cabinets.
1. Include plans, elevations, sections, and attachment details.
 2. Apply AWI Quality Certification Program label to Shop Drawings.

1.03 **QUALITY ASSURANCE**

- A. Manufacturer's Qualifications: Employs skilled workers who custom fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.

PART 2 - PRODUCTS

2.01 **ARCHITECTURAL CABINET**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following :
1. Mantra Cabinets by MasterBrand, or equal.

2.02 **CABINETS, GENERAL**

- A. Quality Standard: Unless otherwise indicated, comply with the Architectural Woodwork Standards for grades of architectural cabinets indicated for construction, finishes, installation, and other requirements.
1. Provide labels and certificates from AWI certification program indicating that woodwork and installation complies with requirements of grades specified.

2.03 **WOOD CABINETS FOR OPAQUE FINISH**

- A. Architectural Woodwork Standards Grade: Premium.

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SECTION 06 41 13 - WOOD-VENEER-FACED ARCHITECTURAL CABINETS

- B. Type of Construction: Face frame.
- C. Door and Drawer-Front Style: Partial Overlay.
 - 1. Reveal Dimension: As specified by manufacturer.
- D. Panel Product for Exposed Surfaces: Plywood.
- E. Drawer Construction: Fabricate with exposed fronts fastened to subfront with mounting screws from interior of body.
 - 1. Join subfronts, backs, and sides with glued dovetail joints.
- F. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed surfaces complying with the following requirements. Refer to unit plans for final locations.
 - 1. As selected by Architect from manufacturer's full range in the following categories:
 - a. Style: Classic. Color: Snow.

2.04 WOOD MATERIALS

- A. Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of architectural cabinet and quality grade specified unless otherwise indicated.
 - 1. Wood Moisture Content: 5 to 10 percent.
- B. Composite Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of architectural cabinet and quality grade specified unless otherwise indicated.
 - 1. Softwood Plywood: DOC PS 1 , medium-density overlay.

2.05 CABINET HARDWARE AND ACCESSORIES

- A. General: Provide cabinet hardware and accessory materials associated with architectural cabinets.
- B. Frameless Concealed Hinges (European Type): ANSI/BHMA A156.9, B01602, 110 degrees of opening.
- C. Adjustable Shelf Standards and Supports: ANSI/BHMA A156.9, B04071; with shelf rests, B04081 .
- D. Shelf Rests: ANSI/BHMA A156.9, B04013; .
- E. Drawer Slides: ANSI/BHMA A156.9.
 - 1. Type: Full extension.
- F. Door and Drawer Silencers: ANSI/ BHMA A156.16, L03011.
- G. Basis-of-Design Product: Subject to compliance with requirements, provide Tandem plus Blumotion full extension concealed drawer runners or comparable product.

Tecolote House Renovation
SECTION 06 41 13 - WOOD-VENEER-FACED ARCHITECTURAL CABINETS

H. Cabinet Pulls: Ligature Resistant Classic Grip Cabinet Pull Handle

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Kingsway Group, or equal.

I. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with ANSI/BHMA A156.18 for BHMA finish number indicated.

1. Satin Stainless Steel: ANSI/BHMA 630.

J. For concealed hardware, provide manufacturer's standard finish that complies with product class requirements in ANSI/BHMA A156.9.

2.06 **MISCELLANEOUS MATERIALS**

A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber , kiln-dried to less than 15 percent moisture content.

B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide metal expansion sleeves or expansion bolts for post-installed anchors. Use nonferrous-metal or hot-dip galvanized anchors and inserts at inside face of exterior walls and at floors.

2.07 **FABRICATION**

A. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.

B. Complete fabrication, including assembly and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.

C. Shop-cut openings to maximum extent possible to receive hardware, appliances, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.

D. Install glass to comply with applicable requirements in Section 08 80 00 "Glazing" and in GANA's "Glazing Manual."

1. For glass in wood frames, secure glass with removable stops.
2. For exposed glass edges, polish and grind smooth.

2.08 **SHOP FINISHING**

A. General: Finish architectural cabinets at manufacturer's shop as specified in this Section. Defer only final touchup, cleaning, and polishing until after installation.

Tecolote House Renovation
SECTION 06 41 13 - WOOD-VENEER-FACED ARCHITECTURAL CABINETS

- B. Preparation for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural cabinets, as applicable to each unit of work.
 - 1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of cabinets.

- C. Opaque Finish:
 - 1. Architectural Woodwork Standards Grade: Premium .
 - 2. Color: As selected by Architect from manufacturer's full range.
 - a. Snow.

PART 3 - EXECUTION

3.01 **INSTALLATION**

- A. Before installation, condition cabinets to humidity conditions in installation areas for not less than 72 hours.

- B. Architectural Woodwork Standards Grade: Install cabinets to comply with quality standard grade of item to be installed.

- C. Anchor cabinets to anchors or blocking built in or directly attached to substrates. Secure with wafer-head cabinet installation screws.

- D. Install cabinets level, plumb, and true in line to a tolerance of 1/8 inch in 96 inches using concealed shims.
 - 1. Scribe and cut cabinets to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
 - 2. Install cabinets without distortion so doors and drawers fit openings and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.
 - 3. Fasten wall cabinets through back, near top and bottom, and at ends not more than 16 inches o.c. with No. 10 wafer-head screws sized for not less than 1-1/2-inch penetration into wood framing, blocking, or hanging strips .

- E. Shop Finishes: Touch up finishing after installation of architectural cabinets. Fill nail holes with matching filler.

3.02 **FIELD QUALITY CONTROL**

- A. Inspections: Provide inspection of installed Work through AWI's Quality Certification Program certifying that woodwork, including installation, complies with requirements of the Architectural Woodwork Standards for the specified grade.
 - 1. Inspection entity is to prepare and submit report of inspection.

END OF SECTION 06 41 13

Tecolote House Renovation
SECTION 07 31 13 - ASPHALT SHINGLES

SECTION 07 31 13 - ASPHALT SHINGLES

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
1. Glass-fiber-reinforced asphalt shingles.
 2. Underlayment materials.
 3. Eyebrow roof vents.
 4. Metal flashing and trim.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For the following:
1. Asphalt shingles.
 2. Underlayment materials.
 3. Ridge vents.
 4. Asphalt roofing cement.
 5. Elastomeric flashing sealant.

1.03 **CLOSEOUT SUBMITTALS**

- A. Maintenance data.

1.04 **QUALITY ASSURANCE**

- A. Installer Minimum Qualifications: Installer shall be licensed or otherwise authorized by all federal, state and local authorities to install all products specified in this section. Installer shall perform work in accordance with NRCA Roofing and Waterproofing Manual. Work shall be acceptable to the asphalt shingle manufacturer.

1.05 **WARRANTY**

- A. Materials Warranty: Manufacturer agrees to repair or replace asphalt shingles that fail within specified warranty period.
1. Manufacturer's Warranty: Furnish shingle manufacturer's warranty for the product listed below:
 - a. CertainTeed Landmark: Lifetime limited warranty.
 2. Warranty Supplement: Provide manufacturer's supplemental warranty (CertainTeed's SureStart or SureStart PLUS) to cover labor and materials in the event of a material defect for the following period after completion of application of shingles:
 - a. First Ten Years (Landmark Shingles)

PART 2 - PRODUCTS

2.01 **PERFORMANCE REQUIREMENTS**

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SECTION 07 31 13 - ASPHALT SHINGLES

- A. Exterior Fire-Test Exposure: Provide asphalt shingles and related roofing materials identical to those of assemblies tested for Class A fire resistance in accordance with ASTM E108 or UL 790 by Underwriters Laboratories or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing agency.
- B. Wind Resistance: Provide asphalt shingles that comply with requirements of ASTM D3161/D3161M, Class F, and with ASTM D7158/D7158M, Class H.
- C. Energy Performance, ENERGY STAR: Provide asphalt shingles that are listed on the DOE's "ENERGY STAR Roof Product List" for steep-slope roof products.

2.02 GLASS-FIBER-REINFORCED ASPHALT SHINGLES

- A. Laminated-Strip Asphalt Shingles: ASTM D3462/D3462M, laminated, multi-ply overlay construction; glass-fiber reinforced, mineral-granule surfaced, and self-sealing.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. CertainTeed; SAINT-GOBAIN.
 - b. or approved equal.
 - 2. Butt Edge: Straight cut.
 - 3. Strip Size: Manufacturer's standard .
 - 4. Algae Resistance: Granules resist algae discoloration.
 - 5. Style: Landmark
 - 6. Color and Blends: Burnt Sienna.
- B. Hip and Ridge Shingles: Manufacturer's standard units to match asphalt shingles .

2.03 UNDERLAYMENT MATERIALS

- A. Synthetic Underlayment: UV-resistant polypropylene, polyolefin, or polyethylene polymer fabric with surface coatings or treatments to improve traction underfoot and abrasion resistance; evaluated and documented to be suitable for use as a roof underlayment under applicable codes by a testing and inspecting agency acceptable to authorities having jurisdiction.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. CertainTeed; SAINT-GOBAIN.

2.04 EYEBROW ROOF VENTS

- A. Eyebrow Roof Vent: Manufacturer's standard, rigid-section, high-density, UV-stabilized eyebrow vent for use under ridge shingles.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. O'Hagin
 - b. GAF.
 - 2. Minimum Net Free Area: 72 sq. in .

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SECTION 07 31 13 - ASPHALT SHINGLES

3. Refer to A-131 Roof Plan

2.05 ACCESSORIES

- A. Asphalt Roofing Cement: ASTM D4586/D4586M Type II, asbestos free.
- B. Elastomeric Flashing Sealant: ASTM C920, Type S, Grade NS, one-part, non-sag, elastomeric polymer sealant; of class and use classifications required to seal joints and remain watertight; recommended in writing by manufacturer for installation of flashing systems.
- C. Roofing Nails: ASTM F1667, aluminum, stainless steel, copper, or hot-dip galvanized-steel wire shingle nails, minimum 0.120-inch- diameter, sharp-pointed, with a 3/8- to 7/16-inch- diameter flat head and of sufficient length to penetrate 3/4 inch into solid wood decking or extend at least 1/8 inch through sheathing less than 3/4 inch thick.
 - 1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.
- D. Underlayment Nails: Aluminum, stainless steel, or hot-dip galvanized-steel wire nails with low-profile metal or plastic caps, 1-inch- minimum diameter.
 - 1. Provide with minimum 0.0134-inch- thick metal cap, 0.010-inch- thick power-driven metal cap, or 0.035-inch- thick plastic cap; and with minimum 0.083-inch- thick ring shank or 0.091-inch- thick smooth shank of length to penetrate at least 3/4 inch into roof sheathing or to penetrate through roof sheathing less than 3/4 inch thick.

2.06 METAL FLASHING AND TRIM

- A. Comply with requirements in Section 07 62 00 "Sheet Metal Flashing and Trim."
 - 1. Sheet Metal: Stainless steel .
- B. Fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of the item unless otherwise indicated on Drawings.
 - 1. Vent-Pipe Flashings: ASTM B749, Type L51121, at least 1/16 inch thick. Provide lead sleeve sized to slip over and turn down into pipe, soldered to skirt at slope of roof, and extending at least 4 inches from pipe onto roof.

PART 3 - EXECUTION

3.01 INSTALLATION OF UNDERLAYMENT MATERIALS

- A. Comply with asphalt shingle and underlayment manufacturers' written installation instructions and with recommendations in NRCA's "The NRCA Roofing Manual: Steep-Slope Roof Systems" applicable to products and applications indicated unless more stringent requirements are specified in this Section or indicated on Drawings.
- B. Asphalt-Saturated Felt: Install on roof deck parallel with and starting at eaves and fasten with underlayment nails.

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SECTION 07 31 13 - ASPHALT SHINGLES

1. Single-Layer Installation:
 - a. Lap sides a minimum of 4 inches over underlying course.
 - b. Lap ends a minimum of 4 inches.
 - c. Stagger end laps between succeeding courses at least 72 inches.
 2. Double-Layer Installation:
 - a. Install a 19-inch- wide starter course at eaves and completely cover with a 36-inch- wide second course.
 - b. Install succeeding 36-inch- wide courses lapping previous courses 19 inches in shingle fashion.
 - c. Lap ends a minimum of 4 inches. Stagger end laps between succeeding courses at least 72 inches.
 - d. Apply a continuous layer of asphalt roofing cement over starter course and on felt surface to be concealed by succeeding courses as each felt course is installed. Apply over entire roof .
 3. Install fasteners in a grid pattern of 12 inches between side laps with 6-inch spacing at side and end laps.
 4. Terminate felt flush against sidewalls, curbs, chimneys, and other roof projections.
- C. Synthetic Underlayment:
1. Install on roof deck parallel with and starting at the eaves.
 - a. Lap sides and ends as recommended in writing by manufacturer, but not less than 4 inches for side laps and 6 inches for end laps.
 - b. Stagger end laps between succeeding courses at interval recommended in writing by manufacturer, but not less than 72 inches.
 - c. Fasten with underlayment nails in accordance with manufacturer's written instructions.
 - d. Cover underlayment within period recommended in writing by manufacturer.
 2. Install in single layer on roofs sloped at 4:12 and greater.
 3. Install in double layer on roofs sloped at less than 4:12.
 4. Install synthetic underlayment on roof deck not covered by self-adhering, polymer-modified bitumen sheet unless otherwise specified in this Section or indicated on Drawings.
 - a. Lap sides of underlayment over self-adhering sheet not less than 4 inches in direction to shed water.
 - b. Lap ends of underlayment not less than 6 inches over self-adhering sheet.
 5. Install fasteners in a grid pattern of 12 inches between side laps with 6-inch spacing at side and end laps.
 6. Terminate synthetic underlayment flush against sidewalls, curbs, chimneys, and other roof projections.
- D. Metal-Flashed, Open-Valley Underlayment: Install two layers of minimum 36-inch- wide underlayment centered in valley.
1. Use same underlayment as installed on field of roof.
 2. Stagger end laps between layers at least 72 inches.
 3. Lap ends of each layer at least 12 inches in direction that sheds water, and seal with asphalt roofing cement.

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SECTION 07 31 13 - ASPHALT SHINGLES

4. Fasten each layer to roof deck with underlayment nails located as far from valley center as possible and only to extent necessary to hold underlayment in place until installation of valley flashing.
5. Lap roof-deck underlayment over first layer of valley underlayment at least 6 inches.

3.02 INSTALLATION OF METAL FLASHING AND TRIM

- A. Install metal flashings and trim to comply with requirements in Section 07 62 00 "Sheet Metal Flashing and Trim."
 1. Install metal flashings in accordance with recommendations in ARMA's "Asphalt Roofing Residential Manual - Design and Application Methods" and NRCA's "NRCA Guidelines for Asphalt Shingle Roof Systems."
 2. Bed flanges of metal flashings using asphalt roofing cement or elastomeric flashing sealant.
- B. Pipe Flashings: Form flashing around pipe penetrations and asphalt shingles. Fasten and seal to asphalt shingles as recommended by manufacturer.

3.03 INSTALLATION OF ASPHALT SHINGLES

- A. Install asphalt shingles in accordance with manufacturer's written instructions and recommendations in ARMA's "Asphalt Roofing Residential Manual - Design and Application Methods" and NRCA's "NRCA Guidelines for Asphalt Shingle Roof Systems."
- B. Install first and remaining courses of laminated asphalt shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure.
- C. Install first and remaining courses of three-tab-strip asphalt shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure.
- D. Fasten asphalt shingle strips with a minimum of four roofing nails, but not less than the number indicated in manufacturer's written instructions for roof slope and design wind speed indicated on Drawings and for warranty requirements specified in this Section.
 1. Locate fasteners in accordance with manufacturer's written instructions.
 2. Where roof slope is less than 4:12, hand seal self-sealing asphalt shingles to improve the shingles' positive bond by applying asphalt roofing cement spots between course overlaps after nailing the upper course.
- E. Closed-Cut Valleys: Extend asphalt shingle strips from one side of valley 12 inches beyond center of valley.
 1. Use one-piece shingle strips without joints in valley.
 2. Fasten with extra nail in upper end of shingle. Install asphalt shingle courses from other side of valley and cut back to a straight line 2 inches short of valley centerline.
 3. Trim upper concealed corners of cut-back shingle strips.
 4. Do not nail asphalt shingles within 6 inches of valley center.

Tecolote House Renovation
SECTION 07 31 13 - ASPHALT SHINGLES

5. Set trimmed, concealed-corner asphalt shingles in a 3-inch- wide bed of asphalt roofing cement.

- F. Hip and Ridge Shingles: Maintain same exposure of cap shingles as roofing-shingle exposure. Lap cap shingles at ridges to shed water away from direction of prevailing winds.
 1. Fasten with roofing nails of sufficient length to penetrate sheathing.
 2. Fasten ridge cap asphalt shingles to cover ridge vent without obstructing airflow.

END OF SECTION 07 31 13

Tecolote House Renovation
SECTION 07 92 00 - JOINT SEALANTS

SECTION 07 92 00 - JOINT SEALANTS

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
1. Silicone joint sealants.
 2. Mildew-resistant joint sealants.
 3. Latex joint sealants.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For each joint-sealant product.

PART 2 - PRODUCTS

2.01 **JOINT SEALANTS, GENERAL**

- A. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.02 **SILICONE JOINT SEALANTS**

- A. Silicone, S, NS, 100/50, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Use NT.
- B. Silicone, S, NS, 50, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Use NT.
- C. Silicone, S, NS, 35, NT: Single-component, nonsag, plus 35 percent and minus 35 percent movement capability. nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 35, Use NT.
- D. Silicone, S, NS, 25, NT: Single-component, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Use NT.
- E. Silicone, S, NS, 100/50, T, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
- F. Silicone, S, NS, 50, T, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Uses T and NT.

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- G. Silicone, S, NS, 25, T, NT: Single-component, nonsag, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Uses T and NT.
- H. Silicone, S, P, 100/50, T, NT: Single-component, pourable, plus 100 percent and minus 50 percent movement capability traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade P, Class 100/50, Uses T and NT.
- I. Silicone, S, P, 25, T, NT: Single-component, pourable, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade P, Class 25, Uses T and NT.
- J. Silicone, M, P, 100/50, T, NT: Multicomponent, pourable, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type M, Grade P, Class 100/50, Uses T and NT.

2.03 **MILDEW-RESISTANT JOINT SEALANTS**

- A. Mildew-Resistant Joint Sealants: Formulated for prolonged exposure to humidity with fungicide to prevent mold and mildew growth.
- B. Silicone, Mildew Resistant, Acid Curing, S, NS, 25, NT: Mildew-resistant, single-component, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, acid-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Use NT.
- C. Acrylic Latex: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

2.04 **MISCELLANEOUS MATERIALS**

- A. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials.
- B. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.01 **PREPARATION**

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove laitance and form-release agents from concrete.
 - 2. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion.

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SECTION 07 92 00 - JOINT SEALANTS

- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces.

3.02 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with ASTM C 1193 and joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
- C. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 1. Place sealants so they directly contact and fully wet joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 1. Provide concave joint profile per Figure 8A in ASTM C 1193 unless otherwise indicated.

3.03 JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal nontraffic surfaces not subject to significant movement.
 - 1. Joint Locations:
 - a. Other joints as indicated on Drawings.
 - 2. Joint Sealant: Acrylic latex .
 - 3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors .
- B. Joint-Sealant Application: Mildew-resistant interior joints in vertical surfaces and horizontal nontraffic surfaces.
 - 1. Joint Locations:
 - a. Joints between plumbing fixtures and adjoining walls, floors, and counters.
 - b. Tile control and expansion joints where indicated.

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SECTION 07 92 00 - JOINT SEALANTS

2. Joint Sealant: Silicone, mildew resistant, acid curing, S, NS, 25, NT .
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors .

END OF SECTION 07 92 00

Tecolote House Renovation
SECTION 08 14 16 - FLUSH WOOD DOORS

SECTION 08 14 16 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Five-ply flush wood veneer-faced doors for transparent finish.
 2. Five-ply flush wood doors for opaque finish.
 3. Solid-core flush wood doors with plastic-laminate-faces.
 4. Factory priming finishing flush wood doors.
 5. Factory fitting flush wood doors to frames and factory machining for hardware.

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of product, including the following:
1. Door core materials and construction.
 2. Door edge construction
 3. Door face type and characteristics.
 4. Door louvers.
 5. Door trim for openings.
 6. Door frame construction.

PART 2 - PRODUCTS

2.01 FLUSH WOOD DOORS, GENERAL

- A. Quality Standard: In addition to requirements specified, comply with "Architectural Woodwork Standards." ANSI/WDMA I.S. 1A.
1. Provide labels and certificates from AWI certification program indicating that doors comply with requirements of grades specified.
- B. Adhesives: Do not use adhesives that contain urea formaldehyde.
- C. Adhesives: Use adhesives that meet the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- D. Composite Wood Products: Verify products are made without added urea formaldehyde.
- E. Composite Wood Products: Verify products comply with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

2.02 SOLID-CORE, FIVE-PLY FLUSH WOOD VENEER-FACED DOORS FOR TRANSPARENT FINISH

Tecolote House Renovation
SECTION 08 14 16 - FLUSH WOOD DOORS

- A. Interior Doors:
1. Basis-of-Design Product: Subject to compliance with requirements, provide Aspiro Select Wood Veneer Interior Doors, Plain Sliced White Maple, Satin Sheen by Masonite Architectural or comparable product by one of the following:
 - a. OregonDoor
 - b. Pacific Architectural Wood Products
 2. Performance Grade:
 - a. ANSI/WDMA I.S. 1A Heavy Duty unless otherwise indicated on Drawings.
 - b. ANSI/WDMA I.S. 1A Extra Heavy Duty: Classrooms public toilets janitor's closets assembly spaces exits and where indicated on Drawings.
 - c. ANSI/WDMA I.S. 1A Standard Duty: Closets (not including janitor's closets) and private toilets .
 3. Architectural Woodwork Standards Grade: Premium.
 4. Faces: Single-ply wood veneer not less than 1/50 inch thick.
 - a. Species: Select white maple.
 - b. Cut: Plain sliced (flat sliced).
 - c. Match between Veneer Leaves: Book match.
 - d. Assembly of Veneer Leaves on Door Faces: Center-balance match.
 - e. Pair and Set Match: Provide for doors hung in same opening.
 - f. Room Match: Match door faces within each separate room or area of building. Corridor-door faces do not need to match where they are separated by 20 feet or more.
 - g. Room Match: Provide door faces of compatible color and grain within each separate room or area of building.
 - h. Blueprint Match: Where indicated, provide doors with faces produced from same flitches as adjacent wood paneling and arranged to provide blueprint match with wood paneling. Comply with requirements in Section 06 42 16 "Flush Wood Paneling."
 5. Exposed Vertical Edges: Same species as faces or a compatible species - Architectural Woodwork Standards edge Type A.
 6. Core for Non-Fire-Rated Doors:
 - a. ANSI A208.1, Grade LD-2 particleboard.
- B. Blocking: Provide wood blocking in particleboard-core doors as follows:
1. 5-inch top-rail blocking, in doors indicated to have closers.
 2. 5-inch bottom-rail blocking, in exterior doors and doors indicated to have kick, mop, or armor plates.
 3. 5-inch midrail blocking, in doors indicated to have exit devices.
- C. Provide doors with glued-wood-stave or WDMA I.S. 10 structural-composite-lumber cores instead of particleboard cores for doors scheduled to receive exit devices in Section 08 71 00 "Door Hardware."
1. Glued wood stave.
 - a. WDMA I.S. 10 structural composite lumber.
- D. Screw Withdrawal, Face: 475 lb.
- E. Screw Withdrawal, Edge: 475 lb.
1. Either glued wood stave or WDMA I.S. 10 structural composite lumber.

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SECTION 08 14 16 - FLUSH WOOD DOORS

2. Construction: Five plies, hot-pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.

2.03 SOLID-CORE FIVE-PLY FLUSH WOOD DOORS FOR OPAQUE FINISH

- A. Interior Solid-Core Doors :
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Oshkosh Door Company.
 - b. Pacific Architectural Wood Products.
 - c. VT Industries Inc.
 2. Performance Grade: ANSI/WDMA I.S. 1A Extra Heavy Duty Heavy Duty Standard Duty as indicated on Drawings.
 3. Performance Grade:
 - a. ANSI/WDMA I.S. 1A Heavy Duty unless otherwise indicated on Drawings.
 - b. ANSI/WDMA I.S. 1A Extra Heavy Duty: Classrooms,public toilets,janitor's closets assembly spaces exits and where indicated on Drawings.
 - c. ANSI/WDMA I.S. 1A Standard Duty: Closets (not including janitor's closets) and private toilets and where indicated on Drawings.
 4. ANSI/WDMA I.S. 1A Grade: Premium.
 5. Faces: Any closed-grain hardwood of mill option .
 6. Exposed Vertical Edges: Any closed-grain hardwood.
 - a. Mineral-Core Doors: At hinge stiles, provide laminated-edge construction with improved screw-holding capability and split resistance. Comply with specified requirements for exposed edges.
- B. Screw-Holding Capability: 475 lbf in accordance with WDMA T.M. 10.
 1. Core for Non-Fire-Rated Doors:
 - a. ANSI A208.1, Grade LD-2 particleboard.
- C. Blocking: Provide wood blocking in particleboard-core doors as follows:
 1. 5-inch top-rail blocking, in doors indicated to have closers.
 2. 5-inch bottom-rail blocking, in exterior doors and doors indicated to have kick, mop, or armor plates.
 3. 5-inch midrail blocking, in doors indicated to have exit devices.
- D. Provide doors with glued-wood-stave or WDMA I.S. 10 structural-composite-lumber cores instead of particleboard cores for doors scheduled to receive exit devices in Section 08 71 00 "Door Hardware."
 1. Glued wood stave.
 - a. WDMA I.S. 10 structural composite lumber.
- E. Screw Withdrawal, Face: 475 lb.
- F. Screw Withdrawal, Edge: 475 lb.
 1. Either glued wood stave or WDMA I.S. 10 structural composite lumber.
 2. Construction: Five plies, hot-pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.

2.04 FABRICATION

Tecolote House Renovation
SECTION 08 14 16 - FLUSH WOOD DOORS

- A. Factory fit doors to suit frame-opening sizes indicated.
 - 1. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.
 - 2. Comply with NFPA 80 requirements for fire-rated doors.

- B. Factory machine doors for hardware that is not surface applied.
 - 1. Locate hardware to comply with DHI-WDHS-3.
 - 2. Comply with final hardware schedules, door frame Shop Drawings, ANSI/BHMA-156.115-W, and hardware templates.
 - 3. Coordinate with hardware mortises in metal frames, to verify dimensions and alignment before factory machining.
 - 4. For doors scheduled to receive electrified locksets, provide factory-installed raceway and wiring to accommodate specified hardware.

- C. Openings: Factory cut and trim openings through doors.
 - 1. Light Openings: Trim openings with moldings of material and profile indicated.
 - 2. Glazing: Factory install glazing in doors indicated to be factory finished. Comply with applicable requirements in Section 08 80 00 "Glazing."
 - 3. Louvers: Factory install louvers in prepared openings.

2.05 FACTORY PRIMING

- A. Doors for Opaque Finish: Factory prime faces, all four edges, edges of cutouts, and mortises with one coat of wood primer specified in Section 09 91 23" Interior Painting."

2.06 FACTORY FINISHING

- A. Comply with referenced quality standard for factory finishing.
 - 1. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.
 - 2. Finish faces, all four edges, edges of cutouts, and mortises.
 - 3. Stains and fillers may be omitted on top and bottom edges, edges of cutouts, and mortises.

- B. Factory finish doors where indicated in schedules or on Drawings as factory finished.

- C. Transparent Finish:
 - 1. ANSI/WDMA I.S. 1A Grade: Premium.
 - 2. Finish: ANSI/WDMA I.S. 1A TR-6 Catalyzed Polyurethane.
 - 3. Staining: As selected by Architect from manufacturer's full range .
 - 4. Effect: Semifilled finish, produced by applying an additional finish coat to partially fill the wood pores.
 - 5. Sheen: Satin.

- D. Opaque Finish:
 - 1. ANSI/WDMA I.S. 1A Grade: Premium.
 - 2. Finish: ANSI/WDMA I.S. 1A OP-6 Catalyzed Polyurethane.
 - 3. Color: As selected by Architect from manufacturer's full range.
 - 4. Sheen: Satin.

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SECTION 08 14 16 - FLUSH WOOD DOORS

PART 3 - EXECUTION

3.01 **INSTALLATION**

- A. Hardware: For installation, see Section 08 71 00 "Door Hardware."
- B. Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- C. Install frames level, plumb, true, and straight.
 - 1. Shim as required with concealed shims. Install level and plumb to a tolerance of 1/8 inch in 96 inches.
 - 2. Anchor frames to anchors or blocking built in or directly attached to substrates.
 - a. Secure with countersunk, concealed fasteners and blind nailing.
 - b. Use fine finishing nails or finishing screws for exposed fastening, countersunk and filled flush with woodwork.
- D. For factory-finished items, use filler matching finish of items being installed.
- E. Job-Fitted Doors:
 - 1. Align and fit doors in frames with uniform clearances and bevels as indicated below.
 - a. Do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors.
 - 2. Machine doors for hardware.
 - 3. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
 - 4. Clearances:
 - a. Provide 1/8 inch at heads, jambs, and between pairs of doors.
 - b. Provide 1/2 inch from bottom of door to top of decorative floor finish or covering unless otherwise indicated on Drawings.
 - c. Where threshold is shown or scheduled, provide 1/4 inch from bottom of door to top of threshold unless otherwise indicated.
 - d. Comply with NFPA 80 for fire-rated doors.
 - 5. Bevel non-fire-rated doors 1/8 inch in 2 inches at lock and hinge edges.
 - 6. Bevel fire-rated doors 1/8 inch in 2 inches at lock edge; trim stiles and rails only to extent permitted by labeling agency.
- F. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.
- G. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

3.02 **FIELD QUALITY CONTROL**

- A. Inspections:
 - 1. Provide inspection of installed Work through AWI's Quality Certification Program , certifying that wood doors and frames, including installation, comply with requirements of AWI/AWMCA/WI's "Architectural Woodwork Standards" for the specified grade.

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2. Egress Door Inspections: Inspect each door equipped with panic hardware, each door equipped with fire exit hardware, each door located in an exit enclosure, each electrically controlled egress door, and each door equipped with special locking arrangements in accordance with NFPA 101, Section 7.2.1.15.

B. Repair or remove and replace installations where inspections indicate that they do not comply with specified requirements.

C. Reinspect repaired or replaced installations to determine if replaced or repaired door assembly installations comply with specified requirements.

3.03 **ADJUSTING**

A. Operation: Rehang or replace doors that do not swing or operate freely.

B. Finished Doors: Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 08 14 16

SECTION 08 14 23

ENTRY DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Out-swing and In-swing entry doors.

1.2 RELATED SECTIONS

- A. Section 07 92 00 – Joint Sealants: Sealants and caulking.
- B. Section 08 71 00 – Door Hardware.

1.3 REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
 - 1. AAMA 502 – Voluntary Specification for Field Testing of Windows and Doors.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM C 1036 – Flat Glass.
 - 2. ASTM C 1048 – Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass.
 - 3. ASTM D 1149 – Rubber Deterioration – Surface Ozone Cracking in a Chamber.
 - 4. ASTM E 283 – Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Difference Across the Specimen.
 - 5. ASTM E 330 – Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
 - 6. ASTM E 331 – Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
 - 7. ASTM E 1300 – Standard Practice for Determining Load Resistance of Glass in Buildings.
- C. National Accreditation & Management Institute, Inc. (NAMI):

1.4 PERFORMANCE REQUIREMENTS

- A. Doors shall have a certified rating of DP 15 PSF minimum, in accordance with NAMI Certification for Side-hinged Exterior Door Systems.

1.5 SUBMITTALS

- A. Comply with Division 1 requirements.
- B. Product Data: Submit manufacturer's product data, including installation instructions.

- C. Shop Drawings: Submit manufacturer's shop drawings, indicating dimensions, construction, component connections and locations, anchorage methods and locations, hardware locations, and installation details.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site undamaged in manufacturer's or sales branch's original, unopened containers and packaging, with labels clearly identifying manufacturer and product name. Include installation instructions.
- B. Storage: Store materials in an upright position, off ground, under cover, and protected from weather, direct sunlight, and construction activities.
- C. Handling: Protect materials and finish during handling and installation to prevent damage.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design: Pella Corporation, 102 Main Street, Pella, Iowa 50219. Toll Free (800) 54-PELLA. Phone (641) 621-1000. Website www.pella.com.

2.2 ENTRY DOORS

- A. Factory-assembled doors with outward-swing and inward-swing door panels installed in frames.
- B. Frames:
 - 1. Exterior surfaces are a multi-part composite material at the head and jambs.
 - 2. Interior surfaces are composite factory-primed to match interior finish.
 - 3. Sills: Extruded thermally broken aluminum with uPVC threshold.
 - a. Mill Finish
 - b. ADA Approved sills.
 - 4. Frame Dimensions:
 - a. Refer to A-601, Door Schedule
- C. Door Panels:
 - 1. Fiberglass Door Panels:
 - a. 0.075-inch minimum fiberglass skin on exterior and interior surfaces with CFC-free injected foam insulating core.
 - b. Rails and Stiles: Wood top rails and stiles and wood plastic composite bottom rails secured with structural adhesive between skins at perimeter.
 - c. Fiberglass Grain: Oak.
 - d. Lock Block: 12-inches or greater, solid wood.

Entry Doors

- e. Panel Thickness: 1-3/4 inches (44 mm).
 - f. 20-minute fire panels are Warnock-Hersey labeled.
2. Hardware Preparation
- a. No bore
 - b. Factory prepared for latch bore
 - 2-1/8-inch bore diameter 2-3/8-inch backsets
 - c. Factory prepared for latch bore and deadbolt bore
 - 2-1/8-inch bore diameter 2-3/8-inch backsets
 - 5-1/2 inches on center
 - b. Factory prepared Multi-point with lock installed
 - 2-3/8-inch backset
 - 6 inches on center
3. Door Closer and Panic Hardware Reinforcement: Solid reinforcement positioned to support surface-mounted closer and panic hardware.
- D. Weather Strip:
- 1. Dual-durometer extruded polymer
 - a. In-Swing: along perimeter of door frames and along the bottom of door panels
 - b. Out-Swing: along perimeter of door frames.
 - 2. Compression type foam filled weatherstrip at head and jambs.
 - 3. Sill: Dual durometer extruded polymer with bulb at bottom rail of door panel will contact threshold and include drip.

2.3 GLAZING

- A. Glazing:
- 1. Float Glass: ASTM C 1036, Quality 1.
 - a. Tempered Glass: ASTM C 1036.
 - b. ASTM E1300 compliant.
 - 2. Type:
 - a. 1 inch Impact-Resistant Tempered Insulating Glass: dual-seal with Low-E glass installed into high-performance glazing frames.
 - b. Dual seal insulating glass shall be traditional rim glazed into panel.

2.5 HARDWARE

Specifier Notes: Out-swing entry doors are available with; factory installed multi-point lock, prepped for standard locking hardware or no bore. Locking hardware is available from your local Pella representative. Not all finishes available in all hinges types. Contact your local Pella representative for more information.

Closers, exit devices, push plates, and kick plates are not available from Pella. These hardware items are specified in the door hardware section. Hardware parameters and recommendations are located in the Pella Architectural Design Manual at www.pellaadm.com on the Design Data pages of the Pella Out-Swing Entry Door section. Contact your local Pella representative for more information.

- A. Hinges: Three (3) per door panel on 6' 8" and 7' 0" panel heights; four (4) per door panel on 8' 0" heights for operable units].
1. Type:
 - a. [In-Swing: [Standard Steel Ball Bearing] [Steel Spring (fire rated doors only, Stainless Steel finish only)]
 - b. [Out-Swing: [Standard Steel Ball Bearing] [Steel Spring (fire rated doors only, Stainless Steel finish only)].

Specifier Notes: Specify finish of hinges.

2. Finish: [Brasstone zinc dichromate] [US3, Brass-plated] [US32D, stainless steel] [Matte Black] [US15, satin nickel].
- B. Frames are prepared for hardware to match door panel boring
- C. Locking Hardware:
1. Multi-point lock mechanism includes stainless steel face plate.
 2. Multi-point lock handle set hardware, with Schlage 5-pin configured keyway, is [Brass] [Satin Nickel] [Oil-Rubbed Bronze].

2.6 TOLERANCES

- A. Doors shall accommodate the following opening tolerances:
1. Vertical Dimensions Between High and Low Points: Plus 1/4 inch, minus 0 inch.
 2. Width Dimensions: Plus 1/4 inch, minus 0 inch.
 3. Building Columns or Masonry Openings: Plus or minus 1/4 inch from plumb.

2.7 FINISH

- A. Door Frame Exterior Finish System:
 - 1. Exterior surfaces are finished with composite multi-step baked-on finish.
 - 2. Color: Matches panel color
- B. Door Panel Exterior Finish:
 - 1. Fiberglass Door Panels: Unfinished, ready for site finishing.
- C. Door Frame Interior Finish: Unfinished, ready for site finishing.
- D. Door Panel Interior Finish:
 - 2. Fiberglass Door Panels: Unfinished, ready for site finishing.

2.8 INSTALLATION ACCESSORIES

- A. Flashing/Sealant Tape: Pella SmartFlash.
 - 1. Aluminum-foil-backed butyl window and door flashing tape.
 - 2. Maximum Total Thickness: 0.013 inch.
 - 3. UV resistant.
 - 4. Verify sealant compatibility with sealant manufacturer.
- B. Interior Insulating-Foam Sealant: Low-expansion, low-pressure polyurethane insulating window and door foam sealant.
- C. Exterior Perimeter Sealant: "Pella Window and Door Installation Sealant" or equivalent high quality, multi-purpose sealant as specified in the joints sealant section.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive doors. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions and approved shop drawings.
- B. Install doors to be weather-tight and freely operating.
- C. Maintain alignment with adjacent work.
- D. Secure assembly to framed openings, plumb and square, without distortion.

- E. Integrate door system installation with exterior weather-resistant barrier using flashing/sealant tape. Apply and integrate flashing/sealant tape with weather-resistant barrier using watershed principles in accordance with door manufacturer's instructions.
- F. Place interior seal around door perimeter to maintain continuity of building thermal and air barrier using backer rod and sealant.
- G. Seal door to exterior wall cladding with sealant and related backing materials at perimeter of assembly.
- H. Leave doors closed.

3.4 CLEANING

- A. Clean door frames and glass in accordance with Division 1 requirements.
- B. Do not use harsh cleaning materials or methods that would damage finish.
- C. Remove manufacturer's proprietary labels and visible markings.

3.5 PROTECTION

- A. Protect installed doors to ensure that, except for normal weathering, doors will be without damage or deterioration at time of substantial completion.

END OF SECTION

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SECTION 08 54 13 - FIBERGLASS WINDOWS
PRODUCT MASTERSPEC LICENSED BY DELTEK, INC. TO ANDERSEN WINDOWS;
ANDERSEN CORPORATION

SECTION 08 54 13 - FIBERGLASS WINDOWS

PART 1 - GENERAL

1.01 **RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 **SUMMARY**

- A. Section includes fiberglass-framed windows.

1.03 **ACTION SUBMITTALS**

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, glazing and fabrication methods, dimensions of individual components and profiles, hardware, and finishes for fiberglass windows.
- B. Shop Drawings: For fiberglass windows.
 - 1. Include plans, elevations, sections, hardware, accessories, insect screens, operational clearances, and details of installation, including anchor, flashing, and sealant installation.

1.04 **INFORMATIONAL SUBMITTALS**

- A. Qualification Data: For manufacturer and Installer.
- B. Sample Warranties: For manufacturer's warranties.

1.05 **QUALITY ASSURANCE**

- A. Manufacturer Qualifications: A manufacturer capable of fabricating fiberglass windows that meet or exceed performance requirements indicated and of documenting this performance by test reports and calculations.
- B. Installer Qualifications: An installer acceptable to fiberglass window manufacturer for installation of units required for this Project.

1.06 **WARRANTY**

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace fiberglass windows that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure to meet performance requirements.

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- b. Structural failures including excessive deflection, water leakage, and air infiltration.
 - c. Faulty operation of movable sash and hardware.
 - d. Deterioration of materials and finishes beyond normal weathering.
 - e. Failure of insulating glass.
2. Warranty Period:
- a. Window: 10 years from date of Substantial Completion.
 - b. Glazing Units: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Source Limitations: Obtain fiberglass windows from single source from single manufacturer.

2.02 WINDOW PERFORMANCE REQUIREMENTS

- A. Product Standard: Comply with AAMA/WDMA/CSA 101/I.S.2/A440 for definitions and minimum standards of performance, materials, components, accessories, and fabrication unless more stringent requirements are indicated.
 - 1. Window Certification: WDMA certified with label attached to each window.
- B. Performance Class and Grade: AAMA/WDMA/CSA 101/I.S.2/A440 as follows:
 - 1. Minimum Performance Class: R .
 - 2. Minimum Performance Grade: 15 .

2.03 FIBERGLASS WINDOWS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Milgard Manufacturing, Inc.; C650 Ultra Series or comparable product by one of the following:
 - 1. Andersen, Inc.
 - 2. Alpen High Performance Products.
 - 3. Pella Corporation.
- B. Operating Types: Provide the following operating types in locations indicated on Drawings:
 - 1. Casement: Project out.
 - 2. Fixed.
 - 3. Horizontal sliding.
- C. Frames and Sashes: Pultruded fiberglass complying with AAMA/WDMA/CSA 101/I.S.2/A440 and with exposed exterior fiberglass surfaces finished with manufacturer's standard enamel coating complying with AAMA 623.
 - 1. Exterior Color: Bark.
 - 2. Interior Finish: Matching exterior color and finish .
- D. Glass: Clear annealed glass, ASTM C1036, Type 1, Class 1, q3.
 - 1. Kind: Double pane, one pane fully tempered.

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- E. Windborne-Debris-Impact-Resistant Laminated Glass: ASTM C1172 with two plies of float glass.
 - 1. Float Glass: Fully tempered.
 - 2. Inner Ply: Clear.
 - 3. Interlayer: As required by performance requirements indicated .
 - 4. Outer Ply: Clear .
 - 5. Low-E Coating: Pyrolytic on second surface .

- F. Insulating-Glass Units: ASTM E2190.
 - 1. Glass: ASTM C1036, Type 1, Class 1, q3.
 - a. Tint: Clear .
 - b. Kind: Fully tempered .
 - 2. Lites: Two,Three.
 - 3. Filling: Fill space between glass lites with argon.
 - 4. Low-E Coating: Pyrolytic on second surface .

- G. Glazing System: Manufacturer's standard factory-glazing system that produces weathertight seal .

- H. Hardware, General: Provide manufacturer's standard hardware fabricated from aluminum, stainless steel, carbon steel complying with AAMA 907, or other corrosion-resistant material compatible with adjacent materials; designed to smoothly operate, tightly close, and securely lock fiberglass windows, and sized to accommodate sash weight and dimensions.
 - 1. Exposed Hardware Color and Finish: As selected by Architect from manufacturer's full range .

- I. Projected Window Hardware:
 - 1. Gear-Type Rotary Operators: Complying with AAMA 901 when tested in accordance with ASTM E405, Method A. Provide operators that function without requiring the removal of interior screens or using screen wickets.
 - a. Type and Style: As selected by Architect from manufacturer's full range of types and styles .
 - 2. Hinges: Manufacturer's standard type for sash weight and size indicated .
 - 3. Single-Handle Locking System: Operates positive-acting arms that pull sash into locked position. Provide one arm on sashes up to 27-1/2 inches tall and two arms on taller sashes.
 - 4. Limit Devices: Concealed support arms with adjustable, limited, hold-open limit devices designed to restrict sash opening.
 - 5. Pole Operators: Tubular-shaped anodized aluminum; with rubber-capped lower end and standard push-pull hook at top to match hardware design; of sufficient length to operate window without reaching more than 60 inches above floor; one pole operator and pole hanger per room that has operable windows more than 72 inches above floor.

- J. Horizontal-Sliding Window Hardware:

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1. Sill Cap/Track: Manufacturer's standard of dimensions and profile indicated; designed to comply with performance requirements indicated and to drain to the exterior.
 2. Locks and Latches: Allow unobstructed movement of the sash across adjacent sash in direction indicated and operated from the inside only.
 3. Roller Assemblies: Low-friction design.
- K. Weather Stripping: Provide full-perimeter weather stripping for each operable sash unless otherwise indicated.
- L. Fasteners: Noncorrosive and compatible with window members, trim, hardware, anchors, and other components.
1. Exposed Fasteners: Do not use exposed fasteners to greatest extent possible. For application of hardware, use fasteners that match finish hardware being fastened.

2.04 INSECT SCREENS

- A. General: Fabricate insect screens to integrate with window frame. Provide screen for each operable exterior sash. Screen wickets are not permitted.
1. Type and Location: Full, outside for sliding sashes.
- B. Aluminum Frames: Manufacturer's standard aluminum alloy complying with SMA 1004 or SMA 1201. Fabricate frames with mitered or coped joints or corner extrusions, concealed fasteners, and removable PVC spline/anchor concealing edge of frame.
1. Tubular Framing Sections and Cross Braces: Roll formed from aluminum sheet.
 2. Finish for Interior Screens: Baked-on organic coating in color selected by Architect from manufacturer's full range .
 3. Finish for Exterior Screens: Baked-on organic coating in color selected by Architect from manufacturer's full range .
- C. Glass-Fiber Mesh Fabric: 18-by-14 or 18-by-16 mesh of PVC-coated, glass-fiber threads; woven and fused to form a fabric mesh resistant to corrosion, shrinkage, stretch, impact damage, and weather deterioration. Comply with ASTM D3656/D3656M.
1. Mesh Color: Manufacturer's standard .

2.05 FABRICATION

- A. Fabricate fiberglass windows in sizes indicated. Include a complete system for installing and anchoring windows.
- B. Glaze fiberglass windows in the factory.
- C. Weather strip each operable sash to provide weathertight installation.
- D. Mullions: Provide mullions and cover plates, matching window units, complete with anchors for support to structure and installation of window units. Allow for erection tolerances and provide for movement of window units due to thermal expansion and

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building deflections. Provide mullions and cover plates capable of withstanding design wind loads of window units.

- E. Complete fabrication, assembly, finishing, hardware application, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation. Allow for scribing, trimming, and fitting at Project site.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify rough opening dimensions, levelness of sill plate, and operational clearances.
- C. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure weathertight window installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Comply with manufacturer's written instructions for installing windows, hardware, accessories, and other components. For installation procedures and requirements not addressed in manufacturer's written instructions, comply with installation requirements in ASTM E2112.
- B. Install windows level, plumb, square, true to line, without distortion, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction to produce weathertight construction.

3.03 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
 - 1. Testing and inspecting agency will interpret tests and state in each report whether tested work complies with or deviates from requirements.
- B. Testing Services: Testing and inspecting of installed windows shall take place as follows:
 - 1. Testing Methodology: Testing of windows for air infiltration and water resistance will be performed in accordance with AAMA 502.
 - 2. Air-Infiltration Testing:
 - a. Test Pressure: That required to determine compliance with AAMA/WDMA/CSA 101/I.S.2/A440 performance class indicated.
 - b. Allowable Air-Leakage Rate: 1.5 times the applicable AAMA/WDMA/CSA 101/I.S.2/A440 rate for product type and performance class rounded down to one decimal place.

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SECTION 08 54 13 - FIBERGLASS WINDOWS
PRODUCT MASTERSPEC LICENSED BY DELTEK, INC. TO ANDERSEN WINDOWS;
ANDERSEN CORPORATION

3. Water-Resistance Testing:
 - a. Test Pressure: Two-thirds times test pressure required to determine compliance with AAMA/WDMA/CSA 101/I.S.2/A440 performance grade indicated.
 - b. Allowable Water Infiltration: No water penetration.
4. Testing Extent: windows of each type as selected by Architect and a qualified independent testing and inspecting agency. Windows shall be tested after perimeter sealants have cured.
5. Test Reports: Prepared in accordance with AAMA 502.

C. Windows will be considered defective if they do not pass tests and inspections.

D. Prepare test and inspection reports.

3.04 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust operating sashes and hardware for a tight fit at contact points and weather stripping for smooth operation and weathertight closure.
- B. Clean exposed surfaces immediately after installing windows. Remove excess sealants, glazing materials, dirt, and other substances.
 1. Keep protective films and coverings in place until final cleaning.
- C. Remove and replace sashes if glass has been broken, chipped, cracked, abraded, or damaged during construction period.
- D. Protect window surfaces from contact with contaminating substances resulting from construction operations. If contaminating substances do contact window surfaces, remove contaminants immediately in accordance with manufacturer's written instructions.

END OF SECTION 08 54 13

Tecolote House Renovation
SECTION 08 71 00 - DOOR HARDWARE

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
 - 1. Mechanical door hardware for the following:
 - a. Swinging doors.
 - 2. Cylinders for door hardware specified in other Sections.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Door hardware schedule.

1.03 **INFORMATIONAL SUBMITTALS**

- A. Sample warranty.

1.04 **CLOSEOUT SUBMITTALS**

- A. Maintenance data.

1.05 **WARRANTY**

- A. Special Warranty: Manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: Three years from date of Substantial Completion unless otherwise indicated below:
 - a. Exit Devices: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 **PERFORMANCE REQUIREMENTS**

- A. Ligature Resistant hardware is required, comply with ANSI/BHMA A156.34.
- B. Means of Egress Doors: Latches do not require more than 15 lbf to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.
- C. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the USDOJ's "2010 ADA Standards for Accessible Design" and California Building Code .

2.02 **HINGES**

- A. Hinges: BHMA A156.1.

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SECTION 08 71 00 - DOOR HARDWARE

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. IVES
 - b. Refer to hardware consultant sheets.

2.03 EXIT DEVICES AND AUXILIARY ITEMS

- A. Exit Devices and Auxiliary Items: BHMAA156.3.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. IVES
 - b. Schlage
 - c. Trimco
 - d. Refer to hardware schedule A-601.

2.04 SURFACE CLOSERS

- A. Surface Closers: BHMAA156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written instructions for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. LCN by Allegion
 - b. Refer to hardware schedule A-601.

2.05 MECHANICAL STOPS AND HOLDERS

- A. Wall- and Floor-Mounted Stops: BHMAA156.16.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Trimco
 - b. IVES
 - c. Glynn-Johnson
 - d. Refer to hardware schedule A-601.

2.06 THRESHOLDS

- A. Thresholds: BHMAA156.21; fabricated to full width of opening indicated.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. IVES
 - b. Zero International
 - c. Refer to hardware schedule A-601.

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SECTION 08 71 00 - DOOR HARDWARE

2.07 **FINISHES**

- A. Provide finishes complying with BHMAA156.18 as indicated in door hardware schedule.

PART 3 - EXECUTION

3.01 **INSTALLATION**

- A. Mounting Heights: Mount door hardware units at heights indicated on Drawings unless otherwise indicated or required to comply with governing regulations.
- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.
- C. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings . Verify location with Architect.
 - 1. Configuration: Provide one power supply for each door opening with electrified door hardware.
- D. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- E. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- F. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.02 **ADJUSTING**

- A. Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

END OF SECTION 08 71 00

Tecolote House Renovation
SECTION 08 80 00 - GLAZING

SECTION 08 80 00 - GLAZING

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
 - 1. Glass products.
 - 2. Glazing sealants.
 - 3. Glazing tapes.
 - 4. Miscellaneous glazing materials.

1.02 **COORDINATION**

- A. Coordinate glazing channel dimensions to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances to achieve proper safety margins for glazing retention under each design load case, load case combination, and service condition.

1.03 **ACTION SUBMITTALS**

- A. Product Data: For each type of product.

1.04 **INFORMATIONAL SUBMITTALS**

- A. Product Certificates: For glass.
- B. Preconstruction adhesion and compatibility test report.
- C. Sample warranties.

1.05 **WARRANTY**

- A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
 - 1. Warranty Period: 1 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 **PERFORMANCE REQUIREMENTS**

- A. Safety Glazing: Where safety glazing is indicated, provide glazing that complies with 16 CFR 1201, Category II.
- B. Acoustic Performance:

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SECTION 08 80 00 - GLAZING

1. Interior Glazing: 34 STC.

2.02 GLASS PRODUCTS, GENERAL

- A. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below unless more stringent requirements are indicated. See these publications for glazing terms not otherwise defined in this Section or in referenced standards.
 1. NGA Publications: "Glazing Manual."
- B. Safety Glazing Labeling: Where safety glazing is indicated, permanently mark glazing with certification label of the SGCC or manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.
- C. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass that complies with performance requirements and is not less than thickness indicated.
- D. Strength: Where annealed float glass is indicated, provide annealed float glass, heat-strengthened float glass, or fully tempered float glass as needed to comply with "Performance Requirements" Article. Where heat-strengthened float glass is indicated, provide heat-strengthened float glass or fully tempered float glass as needed to comply with "Performance Requirements" Article. Where fully tempered float glass is indicated, provide fully tempered float glass.

2.03 GLASS PRODUCTS

- A. Clear Annealed Float Glass: ASTM C1036, Type I, Class 1 (clear), Quality-Q3.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. AGC Glass Company North America, Inc.
 - b. Guardian Glass LLC.
 - c. Saint-Gobain Glass Corp.
- B. Fully Tempered Float Glass: ASTM C1048, Kind FT (fully tempered), Condition A (uncoated) unless otherwise indicated, Type I, Class 1 (clear) or Class 2 (tinted) as indicated, Quality-Q3.
- C. Heat-Strengthened Float Glass: ASTM C1048, Kind HS (heat strengthened), Type I, Condition A (uncoated) unless otherwise indicated, Type I, Class 1 (clear) or Class 2 (tinted) as indicated, Quality-Q3.
- D. Ceramic-Coated Vision Glass: ASTM C1048, Condition C, Type I, Class 1 (clear) or Class 2 (tinted) as indicated, Quality-Q3; and complying with Specification No. 95-1-31 in NGA's "Engineering Standards Manual."

2.04 MISCELLANEOUS GLAZING MATERIALS

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SECTION 08 80 00 - GLAZING

- A. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.

PART 3 - EXECUTION

3.01 **GLAZING, GENERAL**

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass includes glass with edge damage or other imperfections that, when installed, could weaken glass, impair performance, or impair appearance.
- C. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.
- D. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- E. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- F. Provide spacers for glass lites where length plus width is larger than 50 inches.
- G. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and in accordance with requirements in referenced glazing publications.

3.02 **GASKET GLAZING (DRY)**

- A. Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
- B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
- C. Installation with Drive-in Wedge Gaskets: Center glass lites in openings on setting blocks, and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended in writing by gasket manufacturer.
- D. Installation with Pressure-Glazing Stops: Center glass lites in openings on setting blocks, and press firmly against soft compression gasket. Install dense compression

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gaskets and pressure-glazing stops, applying pressure uniformly to compression gaskets. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended in writing by gasket manufacturer.

- E. Install gaskets so they protrude past face of glazing stops.

3.03 CLEANING AND PROTECTION

- A. Immediately after installation, remove nonpermanent labels and clean surfaces.
- B. Protect glass from contact with contaminating substances resulting from construction operations. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains.
 - 1. If, despite such protection, contaminating substances do contact with glass, remove substances immediately as recommended in writing by glass manufacturer. Remove and replace glass that cannot be cleaned without damage to coatings.
- C. Remove and replace glass that is damaged during construction period.

3.04 MONOLITHIC GLASS SCHEDULE

- A. Clear Glass Type : Fully tempered float glass.
 - 1. Minimum Thickness: 6 mm .
 - 2. Safety glazing required.

END OF SECTION 08 80 00

Tecolote House Renovation
SECTION 09 24 00 - CEMENT PLASTERING

SECTION 09 24 00 - CEMENT PLASTERING

PART 1 - PART 1- GENERAL

1.01 **SUMMARY**

- A. Section Includes: Work includes all labor, materials, and equipment necessary to install all aspects of a portland cement plaster assembly.
- B. 06 16 00 – Sheathing
- C. 07 90 00 – Joint Sealers

1.02 **REFERENCES**

- A. ASTM C150 – Portland Cement
- B. ASTM C847 – Standard Specification for Metal Lath
- C. ASTM C1032 - Woven Wire Plaster Base
- D. ASTM C933 - Welded Wire Lath
- E. ASTM C144/C897 – Aggregate for Job-Mixed Portland Cement-Based Plaster
- F. ASTM C926 – Application of Portland Cement-Based Plaster
- G. ASTM C1063 – Installation of Lathing and Furring for Portland Cement Based Plaster
- H. PCA (Portland Cement Association) – Plaster (Stucco) Manual
- I. ICC-ES Acceptance Criteria for Weather-resistive Barriers (AC308)
- J. SMA Details and Bulletins

1.03 **ASSEMBLY DESCRIPTION**

- A. General: Portland cement plaster is comprised of a water-resistive barrier, optional sheathing, lath, scratch, brown coats, and a finish coat. Minimum nominal $\frac{3}{4}$ inch cement thickness.
- B. Application Methods: The plaster may be applied by hand tools or machine pumps but must have sufficient force to adhere to the substrate.
- C. Framing shall have a deflection of L/360 or stiffer
- D. Fire Rated assemblies shall be per the test report or special instructions.

1.04 **SUBMITTALS**

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- A. Product Data: All product data sheets, evaluation reports, details, and warranty information that pertain to the project in accordance with Section 01 30 00 Submittal Procedures.
- B. Samples: Submitted upon request.
- C. Samples of the finish coat shall be of an adequate size as required to represent each color and texture to be utilized on the project and produced using the same techniques and tools required to complete the project. No sample shall be less than 12" by 12".
- D. Retain approved samples at the construction site throughout the application process.
- E. Submit a unit square foot price for a " Stucco Crack Reduction System"

1.05 **QUALITY ASSURANCE**

- A. Manufacturer: All component materials shall be SMA approved and shall be distributed by authorized dealers.
- B. Plastering Contractor: Shall specialize in lath and plaster contracting, document experience of at least 5 years, and follow SMA published recommendations or provide certificates to demonstrate stucco knowledge.
 - 1. Provide proof of current contractor's license and bond where required.
- C. On-Site Mock-Ups: Produced upon request.
 - 1. Prior to commencement of work, provide an on- site mock-up.
 - 2. Mock-up shall represent construction using the same quality/techniques to be utilized on the project.
 - 3. Retain approved mock-up at job site throughout the application process.
 - 4. Where acceptable to the Architect, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
 - 5. Contractor shall acknowledge the SMA technical Bulletins and agree to follow same
 - 6. Submit letter at completion that the lath and plaster is installed per SMA recommendations.

1.06 **DELIVERY, STORAGE, AND HANDLING**

- A. Delivery: Deliver all materials to the construction site in their original, unopened packaging with labels intact.
- B. Inspection: Inspect the materials upon delivery to assure that specified products have been received. Report defects or discrepancies to the responsible party according to the construction documents; do not use reported material for application.
- C. Storage: Store all products per manufacturer's recommendations. Generally, store materials in a cool, dry location; away from direct contact with the ground and/or concrete; out of direct sunlight; and protect from weather and other damage.

1.07 **PROJECT CONDITIONS**

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SECTION 09 24 00 - CEMENT PLASTERING

- A. Environmental Requirements: Follow product manufacturer's recommendations for environmental conditions and surface preparation.
- B. Temperatures: Before, during and following the application of the portland cement plaster, the ambient and surface temperatures must remain above 40 degrees F (4 C) for a minimum period of 24 hours. Protect stucco from uneven and excessive evaporation, especially during hot, dry and/or windy weather. Protect the portland cement plaster from freezing for a period of not less than 24-hours after set has occurred.
- C. Substrates: Prior to installation, inspect the wall for surface contamination or other defects that may adversely affect the performance of the materials, and shall be free of residual moisture. Do not apply the portland cement plaster to substrates whose temperature are less than 40 degrees F (4 C) or contain frost or ice.
- D. All wood based products covered shall be dry and have a moisture content below 19% . DO NOT COVER WET FRAMING.
- E. Inclement Weather: Protect applied material from deleterious effects until cured or dry.
- F. Existing Conditions:
- G. Contractor shall walk the project prior to starting work and notify the architect or owner's representative of any deficiencies that will negatively impact the plaster assembly. Do NOT proceed until remedied.
- H. Contractor shall advise architect of any horizontal surfaces with inadequate slope.
- I. Jobsite Resources: Notify architect if General Contractor fails to provide access to electrical outlets, clean, potable water, and a suitable and safe work area at the construction site throughout the application of the lath and portland cement plaster.
- J. Good Practice: During the rainy season, colored plaster can be damaged if the gutters and downspouts are not in place. It is recommended to have gutters and downspouts installed as soon as possible after plastering is complete.

1.08 **SEQUENCING AND SCHEDULING**

- A. Sequencing: Coordinate the installation of the lath and portland cement plaster with all other construction trades. To reduce stucco cracking, apply plaster only after the building is 90 percent dead loaded and the interior gypsum has been installed.
- B. Plastering contractor shall request and attend a pre-installation meeting with general contractor and architect prior to the framing being completed. Plastering contractor shall advise architect of control/expansion joint layout concerns. There shall be no cost to the owner for moving one-piece control joints prior and up to this meeting date, additional lineal footage of control joints from plans shall warrant a change order.
- C. Staffing: Provide sufficient manpower and proper supervision to ensure continuous operation, free of cold joints, scaffolding lines, curing, variations in texture, etc.

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1.09 **WARRANTY**

- A. Warranty: Submit documentation on all products. At completion of work, contractor shall provide a written warranty documentation for the assembly and products used.
- B. Warranty Length: Shall start at the time of substantial completion. See Product's System Warranties for more information. The warranty length often depends upon the combination of products used in the assembly or system. Longer warranties are possible when the basecoat is an engineered mix.

1.10 **MAINTENANCE**

- A. The following materials shall be presented to the owner following the application of the work:
- B. One container of finish for each color and texture utilized on the project.
- C. Supply a maintenance program for Owners O&M manual as required.

PART 2 - PART 2 - PRODUCTS

2.01 **MANUFACTURERS**

- A. SMA Manufacturers: Must be from the current list on SMA website under appropriate category.

2.02 **SCRATCH AND BROWN COAT (BASECOAT)**

- A. Cement: A portland cement complying with ASTM C150.
- B. Sand:
 - 1. Field mixes shall comply with ASTM C-926 and must have sand that is clean and free from deleterious amounts of loam, clay, silt, soluble salts and organic matter. Sampling and testing shall comply with ASTM C144 or C897.
 - 2. An "engineered performance mix" by an SMA manufacturer is acceptable with appropriate approvals (ICC ES, IAPMO or Interek report).
- C. Water: Clean and potable without foreign matter.
- D. An optional SMA approved admixture may be added to impart increased tensile, bond, flexural strength, and/or accelerate hydration. Delete section if no admixture is used or choose one of the following and delete the others.
 - 1. Bonding agents
 - 2. PUMP Aids
 - 3. Fibers
 - 4. Acrylic admixture

2.03 **WATER-RESISTIVE BARRIER**

- A. Over Open Framing and non-Wood-based Sheathing:

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1. One layer of D kraft building paper, minimum 30 minute ,complying with UBC Standard 14-1.
2. One layer of asphalt-saturated felt complying with ASTM D226 Type I
3. Equivalent material recognized in a current evaluation report as complying with the ICC-ES Acceptance Criteria for Water-Resistive Barriers (AC38).

B. Over Wood-based Sheathing:

1. Two layers of D kraft building paper , minimum 30 minute, complying with UBC Standard 14-1.
2. Two layers of asphalt-saturated felt complying with ASTM D226 Type I
3. Double layer of equivalent material recognized in a current evaluation report as complying with the ICC-ES Acceptance Criteria for Water-resistive Barriers (AC38).
4. SMA approved fluid applied WRB and one layer D paper, felt or equivalent

2.04 **LATH**

- A. Woven-Wire Lath: Nominal No. 17 gauge (0.058 inch), 1.5-inch opening, galvanized steel complying with ASTM C1032.
- B. Welded Wire: Nominal No. 16 gauge (0.065 inch), 2-inch-by-2-inch opening, or No. 17 gauge 1 ½ by 1 ½ inch opening, galvanized steel complying with ASTM C933.
- C. Expanded Lath: Nominal 3.4 lb/yd² weight, galvanized steel complying with ASTM C847.
- D. Rib Lath: Nominal 3.4 lb/yd² weight, galvanized steel complying with ASTM C847. For open soffit use only.

2.05 **SHEATHING**

- A.
- B. Gypsum Sheathing: Water-resistant treated core gypsum sheathing must comply with ASTM C79 or C1396.
- C. Glass Matt Sheathing: Glass mat faced, water-resistant treated core gypsum sheathing must comply with ASTM C1177 and be recognized in a current evaluation report.
- D. Gypsum Board: Water-resistant exterior fiber-reinforced gypsum sheathing must comply with ASTM C1278 and be recognized in a current Evaluation Report.
- E. Fiberboard: Minimum 1/2-inch-thick (13mm), asphalt-impregnated fiberboard must comply with ASTM C208 as a regular density sheathing.
- F. Wood-based Structural Panels: Plywood must be exterior or Exposure 1 and comply with DOC PS-1 or UBC Standard 23-2, or APA recommendations. OSB must be Exposure 1 and comply with DOC PS-2, or UBC Standard 23-3, as applicable.

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2.06 **ACCESSORIES**

- A. Sealants: Acrylic latex complying with ASTM C834 Polyurethane, polyurethane modified, polysulfide, or silyl-terminated polyether elastomeric sealant complying with ASTM C920 or 100% silicone.
- B. Flashing (by others) : Flashing complying with IBC Section 1405.4 (2013) or IRC Section R703.8, as applicable, WRB must integrate in a "Shingle Fashion " with flashings.
- C. Fasteners: Nails, staples, or screws used to rigidly secure lath and associated accessories shall be corrosion-resistant and meet the minimum requirements of ASTM C1063.
- D. Zinc and Zinc-Coated (Galvanized) Accessories: The following accessories shall be fabricated from zinc or zinc-coated (galvanized) steel pure zinc trims are most corrosion resistant, but much more susceptible to damage and more expensive. Typically limited to ocean front projects .
- E. Corner Aid: Minimum 26-gauge thick; expanded flanges shaped to permit complete embedding in plaster; minimum 2 in. wide; Bull-nose style; use unless otherwise indicated. for extra corrosion protection , trims can be double zinc dipped, extra charges will occur, specify PVC nose for acrylic finish coats
- F. Strip Mesh: Metal Lath, 3.4 lb/yd² expanded metal; 6 in. wide x 18 in. long. used as "butterflies" to minimize re-entrant cracking
- G. Vent Screed: Minimum 26-gauge thick; thickness governed by plaster thickness; minimum 4-inch (102 mm) width, double "V" profile, with perforated expanse between "V's" of longest possible lengths.
- H. Casing Bead: Minimum 26-gauge thick; thickness governed by plaster thickness; maximum possible lengths; expanded metal flanges, with square edges.
- I. Drip Screed: Minimum 26-gauge thick, depth governed by plaster thickness, minimum 3-1/2 in. high flange, maximum possible lengths.
- J. Control and Expansion Joints: Depth to conform to plaster thickness; use maximum practical lengths.
- K. Control Joints: One-piece-type, folded pair of unperforated screeds in **<insert shape: M-shaped, double V, etc.>** configuration; removable protective tape on plaster face of control joint.
- L. Expansion Joints: **[Two-piece-type formed to produce a slip-joint.] [Pair of casing beads with sealant between.]**
- M. Plastic Trim: Fabricated from high-impact PVC.
- N. Cornerbeads: With perforated flanges. Bull-nose style; use unless otherwise indicated.

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O. Casing Beads: With perforated flanges in depth required to suit plaster bases indicated and flange length required to suit applications indicated. <insert style> style; use unless otherwise indicated.

P. Expansion Joints: Two-piece-type formed to produce a slip-joint.

2.07 STUCCO CRACK REDUCTION SYSTEM (OPTIONAL)

A. Mesh: Alkali resistant, minimum 4.0 oz., woven glass fiber fabrics.

B. Base coat: must be compatible with mesh and finish coats. Select SMA manufacturer and follow manufacturer's recommendations.

2.08 PRIMER

A. For acrylic finish coats, primer by finish coat manufacturer selected. Primer is optional, but is recommended. Delete this section if primer will not be used on the project. The use of primer will generally increase the warranty.

2.09 FINISHES

A. Portland cement-based blended stucco finish: see SMA list

B. Acrylic-based finish manufactured by an SMA member

C. Elastomeric acrylic-based finishes manufactured by an SMA member

D. Color and Texture: To match existing stucco.

2.10 MIXES

A. Portland Cement Plaster Basecoats:

1. Prescriptive Method: Ratios and Mix Design shall be per ASTM C926. Contractor shall select one of the following mixes (sand is per combined volume of cements):

a. Mix 1

- 1) Portland Cement 1 part
- 2) Masonry Cement 1 part
- 3) Sand 3 ½ to 4 ½ parts per Cement
- 4) Fibers Maximum 3 oz per batch

b. Mix 2

- 1) Portland Cement 1 part
- 2) Lime (type S) ¼ to ½ part
- 3) Sand 3 to 4 parts per cement & Lime
- 4) Fibers Maximum 3 oz per batch

c. Mix 3

- 1) Plastic Cement 1 part
- 2) Sand 3 ½ to 4 ½ parts per cement
- 3) Fibers Maximum 3 oz per bag plastic cement

2. Engineered Method: Pre-mix blends or silos per SMA manufacturer.

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- B. Finish Coats: Mixing and tinting instructions are contained in the appropriate product data sheets by the SMA Manufacturer.

PART 3 - PART 3 - EXECUTION

3.01 **EXAMINATION**

- A. Prior to the application of the portland cement plaster basecoat the plastering contractor shall ensure that:
 - 1. Surface and site conditions are ready to receive work.
 - 2. Grounds and Blocking: Verify that the items within the walls for other sections of work have been installed.
 - 3. Notify architect/owner of any defects that may impact the finished assembly. Proceed as directed.
- B. Substrates:
 - 1. Acceptable substrates must be sound, secure and suitable for lath and plaster.
 - 2. Substrates and adjacent materials must be dry and clean. Substrate surface must be flat, free of protrusions or planar irregularities greater than ¼-inch in 10-feet (6mm in 3m).
- C. Flashings: All flashing around windows, at deck attachments, utility penetrations, roof lines, etc. and all kick-out flashing must be properly installed prior to application of portland cement plaster. Notify owner if flashings are missing, proceed as directed.
- D. Unsatisfactory conditions or concerns shall be reported to the general contractor and/or builder and/or architect and/or owner. Do not proceed until directed in writing by architect or general contractor.

3.02 **PREPARATION**

- A. Substrate/Framing: inspect all work prior to starting lath and plastering. Notify architect of any issues impacting performance, proceed as directed.
- B. Surrounding Areas: Protect surfaces near the work of this section from damage, disfiguration, and overspray. Mask off all dissimilar materials.

3.03 **INSTALLATION, GENERAL**

- A. General Installation: Refer to , ASTM C926, ASTM C1063, and/or the appropriate manufacturer's product data sheet for additional installation requirements and recommendations of the SMA.

3.04 **INSTALLING WEATHER PROTECTION**

- A. Water-Resistive Barrier: Apply water-resistive barrier complying with Section 1404.2 of the IBC or Section R703.2 of the IRC. Start at base of wall and overlap flashing flanges and in a "shingle-fashion" by a minimum of two (2) inches horizontal and six (6) inches vertical. Integrate with flashings to insure incidental moisture drains down and weeps out. Reverse laps shall not be allowed.

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SECTION 09 24 00 - CEMENT PLASTERING

- B. Window Flashing (by others): Contractor shall inspect and verify the flashing between the window/door and the cement plaster is appropriate for the condition. Notify architect of any concerns. Refer to SMA flashing guidelines for nail flange style windows.
- C. Flashing: Install flashing and trim per current Building Code CBC 2022 . Install flashing and trims properly to insure moisture does not accumulate and can easily drain to the exterior. All openings shall be properly flashed and designed to allow water to escape to the outside of the wall. All penetrations shall be properly flashed and/or sealed using approved methods. Walls should be designed to prevent bulk water from getting behind the stucco or running down the face of the stucco. The bottom of the wall is required to have weep screed or another effective means to drain any water that may get behind the stucco.

3.05 INSTALLING LATH/TRIMS

- A. General: Installed per ASTM C1063 or per Architect's direction. Trims shall be full length and installed plumb/level to within 1/8 inch in eight (8) feet.
- B. Weep screed shall be installed at the base of all framed walls.
- C. Trims shall be attached per the trim manufacturers instructions; however do not exceed 24 inches on center spacing.
- D. Apply lath per manufacturers recommendations. Laps shall occur at horizontal and vertical joints. Attach lath six (6) to seven (7) inches on center along framing supports (studs). Fastener shall penetrate wood by a minimum $\frac{3}{4}$ inch, penetration of wood based sheathing shall count as 50% of dimensional lumber. Metal framing by a minimum of three (3) full threads and engage the lath.
- E. Lath shall lap the flange of accessories by more than 50%.
- F. Control Joints: Installed per Architects direction. Single-piece control joint may be installed over continuous lath if approved by Building Official and/or Architect. If lath is discontinuous, framing shall support lath terminations. Notify architect of issues or changes.
- G. Expansion Joints: Install per Architect's direction. Two piece joints (expansion) must have lath terminate each side.
- H. Contractor shall honor control or expansion joints in substrates.
- I. Do not mix lath products on same wall.
- J. Avoid excessive laps with expanded metal lath
- K. Do not use rib lath on walls
- L. Use wire nose corner for cement finish, PVC nose for acrylic finish

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SECTION 09 24 00 - CEMENT PLASTERING

- M. Lath shall cover more than 75% of solid flanges.

3.06 INSTALLING PORTLAND CEMENT PLASTER

- A. Per ASTM C926, apply portland cement plaster by hand-troweling or machine-spraying to a nominal thickness of 3/8-inch (9.5mm) for scratch coat. Then apply a second coat to a nominal thickness of 3/8-inch (9.5 mm) brown coat. Total basecoat shall be a nominal 3/4 inch thickness.
- B. Scratch coat shall substantially cover the lath and be applied with sufficient pressure to encase the lath in cement. Slickers to apply cement plaster are prohibited. Score in a horizontal pattern.
- C. Allow to cure 48 hours, or until sufficiently rigid to accept a brown coat.
- D. Apply brown coat to fill and complete basecoat. Nominal 3/4 inch thickness. Rod to a flat plane. Do not apply to frozen or soft scratch coat. When excess moisture leaves brown coat, hard float to provide densification per ATSM. Hard floating procedure may be omitted if the "Base coat and Mesh or Stucco crack reduction system" is selected.
- E. Moist Curing: Provide sufficient moisture by fog or moist curing to permit proper hydration of the cementitious materials. The length of time and most effective procedure for curing will depend on climatic and job conditions. Refer to SMA curing guidelines.

3.07 INSTALLING BASE AND MESH (CRACK REDUCTION SYSTEM)

- A. [After brown (basecoat) coat has cured, apply approved polymer enriched cement skim coat to basecoat, then trowel in to fully embed the mesh into skim coat. Insure skim coat and finish coat are compatible products. A minimum two-inch (51 mm) overlap is required at all mesh joints. This method is highly recommended for smooth trowel finish plaster.

3.08 INSTALLING FINISH COAT

- A. General: Mix and apply per manufacturer's product data sheet.
- B. Do not apply to soft, contaminated or frozen basecoat.
- C. Avoid applying to excessively hot walls.
- D. (OPTION) a primer for acrylic finish coats will provide better coverage and most uniform color. This is optional and has a slight cost upcharge.
- E. Verification: Verify the desired color, material and texture to match the approved sample and/or mock-up prior to installation.
- F. Avoid scaffold lines and cold joints
- G. Fog coat (cement finish only) as needed to blend color variations

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SECTION 09 24 00 - CEMENT PLASTERING

- H. Finish coat shall be free of eye catching imperfections.

3.09 CLEANING/PATCHING/TOLERANCE

- A. Cleaning: Remove any and all materials used, overspray from adjacent surfaces, and all protective masking.
- B. Patch and repair as needed, including but not limited to fog coating, imperfections and blisters.
- C. Cracks shall be repaired per the most current SMA Crack Policy (Technical Bulletin 4)
- D. The basecoat of plaster shall be in tolerance:
 - 1. Residential: Not to exceed ¼ inch in eight (8) feet
 - 2. Commercial: Not to exceed ¼ inch in ten (10) feet
- E. Eye catching variations in color or texture pattern will not be accepted.

3.10 PROTECTION

- A. Protection: Protect applied material from inclement weather until dry and prevent it from freezing for a minimum of 24-hours after set and/or until dry. Refer to manufacturer's product data sheet for additional requirements. END OF SECTION 09 24 00

END OF SECTION 09 24 00

Tecolote House Renovation
SECTION 09 29 00 - GYPSUM BOARD

SECTION 09 29 00 - GYPSUM BOARD

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
1. Interior gypsum board.
 2. Tile backing panels.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For the following:
1. Gypsum wallboard.
 2. Gypsum board, Type X.
 3. Gypsum ceiling board.
 4. Abuse-resistant gypsum board.
 5. Impact-resistant gypsum board.
 6. Mold-resistant gypsum board.
 7. Glass-mat, water-resistant backing board.
 8. Cementitious backer units.
 9. Interior trim.
 10. Joint treatment materials.
 11. Sound-attenuation blankets.
 12. Acoustical sealant.

PART 2 - PRODUCTS

2.01 **PERFORMANCE REQUIREMENTS**

- A. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E90 and classified according to ASTM E413 by an independent testing agency.
- B. Verify ceiling and wall materials are GreenGuard Gold certified.

2.02 **GYPSUM BOARD, GENERAL**

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.03 **INTERIOR GYPSUM BOARD**

- A. Gypsum Wallboard: ASTM C1396/C1396M.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Georgia-Pacific Gypsum LLC.
 - b. National Gypsum Company.

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SECTION 09 29 00 - GYPSUM BOARD

- c. USG Corporation.
 2. Thickness: 5/8 inch.
 3. Long Edges: Tapered.
- B. Gypsum Board, Type X: ASTM C1396/C1396M.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Georgia-Pacific Gypsum LLC.
 - b. National Gypsum Company.
 - c. USG Corporation.
 2. Thickness: 5/8 inch.
 3. Long Edges: Tapered.
- C. Gypsum Ceiling Board: ASTM C1396/C1396M.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Georgia-Pacific Gypsum LLC.
 - b. National Gypsum Company.
 - c. USG Corporation.
 2. Thickness: 5/8 inch.
 3. Long Edges: Tapered.
- D. Abuse-Resistant Gypsum Board: ASTM C1396/C1396M gypsum board, tested according to ASTM C1629/C1629M.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Georgia-Pacific Gypsum LLC.
 - b. National Gypsum Company.
 - c. USG Corporation.
 2. Core: 5/8 inch , Type X.
 3. Surface Abrasion: ASTM C1629/C1629M, meets or exceeds Level 2 requirements.
 4. Indentation: ASTM C1629/C1629M, meets or exceeds Level 2 requirements.
 5. Soft-Body Impact: ASTM C1629/C1629M, meets or exceeds Level 2 requirements.
 6. Long Edges: Tapered.
 7. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.
- E. Impact-Resistant Gypsum Board: ASTM C1396/C1396M gypsum board, tested according to ASTM C1629/C1629M.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Georgia-Pacific Gypsum LLC.
 - b. National Gypsum Company.
 - c. USG Corporation.
 2. Core: 5/8 inch , Type X.

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SECTION 09 29 00 - GYPSUM BOARD

3. Surface Abrasion: ASTM C1629/C1629M, meets or exceeds Level 2 requirements.
4. Indentation: ASTM C1629/C1629M, meets or exceeds Level 2 requirements.
5. Soft-Body Impact: ASTM C1629/C1629M, meets or exceeds Level 2 requirements.
6. Hard-Body Impact: ASTM C1629/C1629M, meets or exceeds Level 2 requirements according to test in Annex A1.
7. Long Edges: Tapered.
8. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

F. Mold-Resistant Gypsum Board: ASTM C1396/C1396M. With moisture- and mold-resistant core and paper surfaces.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Georgia-Pacific Gypsum LLC.
 - b. National Gypsum Company.
 - c. USG Corporation.
2. Core: 5/8 inch , Type X.
3. Long Edges: Tapered.
4. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.04 TILE BACKING PANELS

A. Glass-Mat, Water-Resistant Backing Board: ASTM C1178/C1178M, with manufacturer's standard edges.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. Georgia-Pacific Gypsum LLC.
 - b. National Gypsum Company.
 - c. USG Corporation.
2. Core: 5/8 inch , Type X.
3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

B. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following
 - a. CertainTeed Corporation.
 - b. National Gypsum Company.
 - c. USG Corporation.
2. Thickness: 5/8 inch.
3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

2.05 TRIM ACCESSORIES

A. Interior Trim: ASTM C1047.

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SECTION 09 29 00 - GYPSUM BOARD

1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet.
2. Shapes:
 - a. Cornerbead.
 - b. Bullnose bead.
 - c. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - d. L-Bead: L-shaped; exposed long flange receives joint compound.
 - e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
 - f. Expansion (control) joint.
 - g. Curved-Edge Cornerbead: With notched or flexible flanges.

B. Exterior Trim: ASTM C1047.

1. Material: Hot-dip galvanized-steel sheet, plastic, or rolled zinc .
2. Shapes:
 - a. Cornerbead.
 - b. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - c. Expansion (Control) Joint: One-piece, rolled zinc with V-shaped slot and removable strip covering slot opening.

2.06 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C475/C475M.

B. Joint Tape:

1. Interior Gypsum Board: Paper.
2. Tile Backing Panels: As recommended by panel manufacturer.

C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
 - a. Use setting-type compound for installing paper-faced metal trim accessories.
3. Fill Coat: For second coat, use setting-type, sandable topping compound.
4. Finish Coat: For third coat, use setting-type, sandable topping compound.
5. Skim Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound .

D. Joint Compound for Tile Backing Panels:

1. Glass-Mat, Water-Resistant Backing Panel: As recommended by backing panel manufacturer.
2. Cementitious Backer Units: As recommended by backer unit manufacturer.

2.07 AUXILIARY MATERIALS

- A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.

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SECTION 09 29 00 - GYPSUM BOARD

- B. Steel Drill Screws: ASTM C1002 unless otherwise indicated.
 - 1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
 - 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- C. Sound-Attenuation Blankets: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.

PART 3 - EXECUTION

3.01 **INSTALLATION AND FINISHING OF PANELS**

- A. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- B. Comply with ASTM C840.
- C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch- wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- D. For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- E. Prefill open joints and damaged surface areas.
- F. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- G. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C840:
 - 1. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated
 - a. Primer and its application to surfaces are specified in Section 09 91 23 "Interior Painting."
- H. Glass-Mat Faced Panels: Finish according to manufacturer's written instructions.

3.02 **PROTECTION**

- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- B. Remove and replace panels that are wet, moisture damaged, and mold damaged.

END OF SECTION 09 29 00

Tecolote House Renovation
SECTION 09 30 13 - CERAMIC TILING

SECTION 09 30 13 - CERAMIC TILING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Pressed floor tile.
 2. Porcelain tile.
 3. Tile backing panels.
 4. Waterproof membranes.
 5. Grout materials.

1.02 ACTION SUBMITTALS

- A. Product Data:
1. Pressed floor tile.
 2. Porcelain tile.
 3. Tile backing panels.
 4. Waterproof membranes.
 5. Grout materials.

1.03 MAINTENANCE MATERIAL SUBMITTALS

- A. Extra Stock Material: Furnish extra materials, from the same production run, to Owner that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.

PART 2 - PRODUCTS

2.01 PRODUCTS, GENERAL

- A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.

2.02 PRESSED FLOOR TILE <REFER TO A-113>

- A. Pressed Floor Tile Type : Glazed .
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Emser Tile.

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2. Style: Time Square
3. Face Size: 12in by 24in .
4. Face Size Variation: Rectified.
5. Thickness: 3/8 inch .
6. Product Use Classification: Interior, Wet (IW) .
7. Physical Properties: Chemical resistant when tested with indicated chemicals in accordance with ASTM C650.
8. Style: Time Square, Color: Pure White Polished , Pattern: Grid.
9. Grout Color: White .
10. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile. Provide shapes as follows, selected from manufacturer's standard shapes:
 - a. Base Cap: Surface bullnose, module size same as adjoining flat tile .
 - b. Wainscot Cap: Surface bullnose, module size same as adjoining flat tile .
 - c. Wainscot Cap for Flush Conditions: Regular flat tile for conditions where tile wainscot is shown flush with wall surface above it; same size as adjoining flat tile.
 - d. External Corners: Surface bullnose, module size same as adjoining flat tile .
 - e. Internal Corners: Field-buttet square corners. For coved base and cap, use angle pieces designed to fit with stretcher shapes.
 - f. Tapered Transition Tile: Shape designed to effect transition between thickness of tile floor and adjoining floor finishes of different thickness, tapered to provide reduction in thickness from 1/2 to 1/4 inch across nominal 4-inch dimension.

2.03 PORCELAIN TILE

- A. Porcelain Tile Type : Glazed.
 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Fireclay Tile
 - b. or equal
 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
 3. Face Size: 3" x 9" .
 4. Face Size Variation: Rectified.
 5. Thickness: 1/4 inch .
 6. Product Use Classification: Interior, Wet (IW) .
 7. Color: Manzanita Gloss
 8. Grout Color: White .
 9. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile. Provide shapes as follows, selected from manufacturer's standard shapes:
 - a. Base Cap: Surface bullnose, module size same as adjoining flat tile .
 - b. External Corners: Surface bullnose, module size same as adjoining flat tile .

2.04 TILE BACKING PANELS

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SECTION 09 30 13 - CERAMIC TILING

- A. Water-Resistant Gypsum Backing Board: ASTM C1396/C1396M, with manufacturer's standard edges.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. American Gypsum.
 - b. Georgia-Pacific Gypsum LLC.
 - c. USG Corporation.
 - 2. Core: 1/2 inch , regular type .

2.05 **WATERPROOF MEMBRANES**

- A. General: Manufacturer's standard product , selected from the following, that complies with ANSI A118.10 and ANSI A118.12 and is recommended by manufacturer for application indicated. Include reinforcement and accessories recommended by manufacturer.
- B. Waterproof Membrane, Fluid Applied: Liquid-latex rubber or elastomeric polymer with continuous fabric reinforcement.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. C-Cure.
 - b. Laticrete International, Inc.

2.06 **GROUT MATERIALS**

- A. Sand-Portland Cement Grout: ANSI A108.10, consisting of white or gray cement and white or colored aggregate as required to produce color indicated.
- B. Standard Cement Grout: ANSI A118.6.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Laticrete International, Inc.
 - b. Sika Corporation.
- C. High-Performance Tile Grout: ANSI A118.7.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Laticrete International, Inc.
 - b. Parex USA, Inc.
- D. Water-Cleanable Epoxy Grout: ANSI A118.3 , with a VOC content of 65 g/L or less.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Laticrete International, Inc.
 - b. Sika Corporation.

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SECTION 09 30 13 - CERAMIC TILING

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
 - 2. Verify that concrete substrates for tile floors installed with adhesives or thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Remove coatings, including curing compounds or other coatings, that are incompatible with tile-setting materials.
- B. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with adhesives or thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- C. Where indicated, prepare substrates to receive waterproof membrane by applying a reinforced mortar bed that complies with ANSI A108.1 and is sloped 1/4 inch per foot toward drains.
- D. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.
- E. Substrate Flatness:
 - 1. For tile shorter than 15 inches, confirm that structure or substrate is limited to variation of 1/4 inch in 10 ft. from the required plane, and no more than 1/16 inch in 12 inches when measured from tile surface high points.
 - 2. For large format tile, tile with at least one edge 15 inches or longer, confirm that structure or substrate is limited to 1/8 inch in 10 ft. from the required plane, and no more than 1/16 inch in 24 inches when measured from tile surface high points.
- F. Field-Applied Temporary Protective Coating: If indicated under tile type or needed to prevent grout from staining or adhering to exposed tile surfaces, precoat them with continuous film of temporary protective coating, taking care not to coat unexposed tile surfaces.

3.03 INSTALLATION OF CERAMIC TILE SYSTEM

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SECTION 09 30 13 - CERAMIC TILING

- A. Install tile backing panels and treat joints in accordance with ANSI A108.11 and manufacturer's written instructions for type of application indicated.
- B. Install waterproof membrane to comply with ANSI A108.13 and manufacturer's written instructions to produce waterproof membrane of uniform thickness that is bonded securely to substrate.
 - 1. Allow waterproof membrane to cure and verify by testing that it is watertight before installing tile or setting materials over it.
- C. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness that is bonded securely to substrate.
 - 1. Allow crack isolation membrane to cure before installing tile or setting materials over it.
- D. Install tile in accordance with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of ANSI A108 series that are referenced in TCNA installation methods and specified in tile installation schedules, and apply to types of setting and grouting materials used.
- E. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- F. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- G. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- H. Where accent tile differs in thickness from field tile, vary setting-bed thickness so that tiles are flush.
- I. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
- J. Lay out tile wainscots to dimensions indicated or to next full tile beyond dimensions indicated.
- K. Movement Joints: Provide movement joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated on Drawings. Form joints during installation of setting materials, mortar beds, and tile. Keep joints free of dirt, debris, and setting materials prior to filling with sealants. Do not saw-cut joints after installing tiles.

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SECTION 09 30 13 - CERAMIC TILING

1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.
- L. Thresholds: Install stone and solid surface thresholds in same type of setting bed as adjacent floor unless otherwise indicated.
 1. At locations where mortar bed (thickset) would otherwise be exposed above adjacent floor finishes, set thresholds in modified dry-set mortar (thinset).
 2. Do not extend cleavage membrane waterproof membrane or crack isolation membrane under thresholds set in standard dry-set modified dry-set or improved modified dry-set mortar. Fill joints between such thresholds and adjoining tile set on waterproof membrane or crack isolation membrane with elastomeric sealant.

3.04 **INTERIOR CERAMIC TILE INSTALLATION SCHEDULE**

- A. Interior Floor Installations, Wood Subfloor:
 1. TCNA F141 **<Insert designation>**: Method ANSI A108.1C. Cement mortar bed (thickset) installed over cleavage membrane over waterproof membrane.
 - a. Ceramic Tile Type: **<Insert tile-type designation>**.
 - b. Bond Coat for Cured-Bed Method: Dry-set mortar.
 - c. Grout: Standard sanded cement grout.
 - d. Waterproof Membrane: As recommended by setting material manufacturer.
 - e. Joint Width: 1/8 inch .
 - f. Movement Joints: Types located on Drawings.
- B. Interior Wall Installations, Wood or Metal Studs or Furring:
 1. TCNA W242 : Organic adhesive on gypsum board.
 - a. Ceramic Tile Type: **<Insert tile-type designation>**.
 - b. Grout: Standard sanded cement grout.
 - c. Joint Width: 1/8 inch .
 - d. Movement Joints: Types located on Drawings.

END OF SECTION 09 30 13

Tecolote House Renovation
SECTION 09 65 13.36 - RESILIENT CARPET TRANSITIONS

SECTION 09 65 13.36 - RESILIENT CARPET TRANSITIONS

PART 1 - GENERAL

1.01 **SECTION INCLUDES**

- A. Specialty moldings and trim for flooring including the following:
 - 1. Carpet metal trim.
 - 2. Coving, square, and bevel caps.
 - 3. Accessories including drive nails, straightedge, trowels.

1.02 **RELATED SECTIONS**

- A. Section 06 40 23 - Interior Architectural Woodwork
- B. Section 09 68 16 - Sheet Carpeting.
- C. Section 09 65 16 - Resilient Sheet Flooring.

1.03 **SUBMITTALS**

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data:
 - 1. Manufacturer's data sheets on each product to be used.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Typical installation methods.

1.04 **QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
- C. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

1.05 **DELIVERY, STORAGE, AND HANDLING**

- A. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
- B. Protect from damage due to weather, excessive temperature, and construction operations.

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1.06 **PROJECT CONDITIONS**

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.07 **SEQUENCING**

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 - PRODUCTS

2.01 **MANUFACTURERS**

- A. Acceptable Manufacturer:
 - 1. Futura Transitions.
 - 2. Approved equal.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.02 **CARPET METAL TRIM**

2.03 **COVING, SQUARE, AND BEVEL CAPS**

- A. Coving Cap, 1/8 inch: For coving carpet or resilient floors.
 - 1. Basis of Design: Futura Transitions CM 901.

2.04 **ACCESSORIES**

- A. Drive Nails:
 - 1. Finish: Black.
- B. Straight Edge: Acts as a guide to cut carpet in a straight line.
 - 1. Length: 36 inches (914 mm).
 - 2. Length: 75 inches (1905 mm).

2.05 **ALUMINUM FINISHES**

- A. Finish:
 - 1. Silver.

PART 3 - EXECUTION

3.01 **EXAMINATION**

- A. Do not begin installation until substrates have been properly constructed and prepared.

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- B. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.

3.02 **PREPARATION**

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 **INSTALLATION**

- A. Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction.

3.04 **CLEANING AND PROTECTION**

- A. Clean products in accordance with the manufacturer's recommendations.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 09 65 13.36

Tecolote House Renovation
SECTION 09 65 16 - RESILIENT SHEET FLOORING

SECTION 09 65 16 - RESILIENT SHEET FLOORING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Vinyl sheet flooring with backing.

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: For resilient sheet flooring, as determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

2.02 VINYL SHEET FLOORING WITH BACKING

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Interface, Inc.
- B. Product Standard: ASTM F 1303.
1. Type (Binder Content): Type I, minimum binder content of 90 percent .
 2. Wear-Layer Thickness: Grade 1, 22 mil.
 3. Overall Thickness: 4.5mm .
 4. Interlayer Material: Foamed plastic or as standard with manufacturer.
 5. Backing Class: Class C (foamed plastic).
- C. Wearing Surface: Embossed.
- D. Plank Width: 9.845in (25cm) nominal width.
- E. Plank Length: 38.38in (1m) nominal length.
- F. Colors and Patterns:
1. Style: Northern Grain 4.5mm, Color: Oak Satin

PART 3 - EXECUTION

3.01 PREPARATION

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- A. Prepare substrates according to resilient sheet flooring manufacturer's written instructions to ensure adhesion of resilient sheet flooring.
- B. Concrete Substrates: Prepare according to ASTM F 710.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by resilient sheet flooring manufacturer. Do not use solvents.
 - 3. Alkalinity and Adhesion Testing: Perform tests recommended by resilient sheet flooring manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 9 pH.
 - 4. Moisture Testing: Perform tests so that each test area does not exceed 1000 sq. ft. , and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
 - a. Anhydrous Calcium Chloride Test: ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
 - b. Relative Humidity Test: Using in-situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.
- C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- D. Do not install resilient sheet flooring until materials are the same temperature as space where they are to be installed.
 - 1. At least 48 hours in advance of installation, move flooring and installation materials into spaces where they will be installed.
- E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient sheet flooring.

3.02 RESILIENT SHEET FLOORING INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient sheet flooring.
- B. Unroll resilient sheet flooring and allow it to stabilize before cutting and fitting.
- C. Lay out resilient sheet flooring as follows:
 - 1. Maintain uniformity of flooring direction.
 - 2. Minimize number of seams; place seams in inconspicuous and low-traffic areas, at least 6 inches away from parallel joints in flooring substrates.
 - 3. Match edges of flooring for color shading at seams.
 - 4. Avoid cross seams.
- D. Scribe and cut resilient sheet flooring to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.

Tecolote House Renovation
SECTION 09 65 16 - RESILIENT SHEET FLOORING

- E. Extend resilient sheet flooring into toe spaces, door reveals, closets, and similar openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on resilient sheet flooring as marked on substrates. Use chalk or other nonpermanent marking device.
- G. Install resilient sheet flooring on covers for telephone and electrical ducts and similar items in installation areas. Maintain overall continuity of color and pattern between pieces of flooring installed on covers and adjoining flooring. Tightly adhere flooring edges to substrates that abut covers and to cover perimeters.
- H. Adhere resilient sheet flooring to substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.
- I. Integral-Flash-Cove Base: Cove resilient sheet flooring to dimension indicated up vertical surfaces. Support flooring at horizontal and vertical junction with cove strip. Butt at top against cap strip.
- J. Floor Polish: Remove soil, adhesive, and blemishes from flooring surfaces before applying liquid floor polish.
 - 1. Apply three coat(s).

END OF SECTION 09 65 16

Tecolote House Renovation
SECTION 09 68 13 - TILE CARPETING

SECTION 09 68 13 - TILE CARPETING

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
 - 1. Modular carpet tile.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For each type of product.

1.03 **WARRANTY**

- A. Special Warranty for Carpet Tiles: Manufacturer agrees to repair or replace components of carpet tile installation that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 **CARPET TILE, REFER TO SHEET A-113**

- A. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - 1. Interface, Inc.
- B. Color: 101807 Cream.
- C. Pattern: Monolithic.
- D. Fiber Content: 100 percent Recycled Content Nylon.
- E. Pile Characteristic: Tufted Textured Loop pile.
- F. Density: 7,261 oz./cu. yd.
- G. Pile Thickness: 0.12 in for finished carpet tile according to ASTM D6859.
- H. Stitches: 10.30 / in.
- I. Gage: 1/12 in.
- J. Surface Pile Weight: 24 oz./sq. yd.
- K. Backing System: CushionBac Renew.
- L. Size: 19.69 in x 19.69 in.

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- M. Applied Treatments: Protekt², Intersept.
1. Soil-Resistance Treatment: Manufacturer's standard treatment, Protekt².
 2. Antimicrobial Treatment: Manufacturer's standard treatment, Intersept, that protects carpet tiles as follows:
 - a. Antimicrobial Activity: Not less than 2-mm halo of inhibition for gram-positive bacteria, not less than 1-mm halo of inhibition for gram-negative bacteria, and no fungal growth, according to AATCC 174.
- N. Performance Characteristics:
1. Appearance Retention Rating: Heavy traffic, 3.0 minimum according to ASTM D7330.
 2. Critical Radiant Flux Classification: Not less than 0.22 W/sq. cm according to NFPA 253.
 3. Dry Breaking Strength: Not less than 100 lbf according to ASTM D2646.
 4. Tuft Bind: Not less than 6.2 lbf according to ASTM D1335.
 5. Delamination: Not less than 3.5 lbf/in. according to ASTM D3936.
 6. Dimensional Tolerance: Within 1/32 inch of specified size dimensions, as determined by physical measurement.
 7. Dimensional Stability: 0.2 percent or less according to ISO 2551 (Aachen Test).
 8. Colorfastness to Crocking: Not less than 4, wet and dry, according to AATCC 165.
 9. Colorfastness to Light: Not less than 4 after 40 AFU (AATCC fading units) according to AATCC 16, Option E.
 10. Electrostatic Propensity: Less than 3.5 kV according to AATCC 134.

2.02 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet tile manufacturer.
- B. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that comply with flammability requirements for installed carpet tile, and are recommended by carpet tile manufacturer for releasable installation.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Concrete Slabs:
1. Moisture Testing: Perform tests so that each test area does not exceed 1000 sq. ft. , and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
 - a. Anhydrous Calcium Chloride Test: ASTM F1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
 - b. Relative Humidity Test: Using in situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.

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SECTION 09 68 13 - TILE CARPETING

- c. Perform additional moisture tests recommended in writing by adhesive and carpet tile manufacturers. Proceed with installation only after substrates pass testing.
- B. Wood Subfloors: Verify that underlayment surface is free of irregularities and substances that may interfere with adhesive bond or show through surface.

3.02 PREPARATION

- A. General: Comply with the Carpet and Rug Institute's CRI 104 and with carpet tile manufacturer's written installation instructions for preparing substrates indicated to receive carpet tile.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch wide or wider, and protrusions more than 1/32 inch unless more stringent requirements are required by manufacturer's written instructions.
- C. Concrete Substrates: Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by adhesive and carpet tile manufacturers.
- D. Metal Substrates: Clean grease, oil, soil and rust, and prime if recommended in writing by adhesive manufacturer. Rough sand painted metal surfaces and remove loose paint. Sand aluminum surfaces, to remove metal oxides, immediately before applying adhesive.
- E. Broom and vacuum clean substrates to be covered immediately before installing carpet tile.

3.03 INSTALLATION

- A. General: Comply with the Carpet and Rug Institute's CRI 104, Section 10, "Carpet Tile," and with carpet tile manufacturer's written installation instructions.
- B. Installation Method: As recommended in writing by carpet tile manufacturer .
- C. Maintain dye-lot integrity. Do not mix dye lots in same area.
- D. Maintain pile-direction patterns recommended in writing by carpet tile manufacturer.
- E. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet tile manufacturer.
- F. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

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- G. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on carpet tile as marked on subfloor. Use nonpermanent, nonstaining marking device.
- H. Install pattern parallel to walls and borders.
- I. Access Flooring: Stagger joints of carpet tiles so carpet tile grid is offset from access flooring panel grid. Do not fill seams of access flooring panels with carpet adhesive; keep seams free of adhesive.
- J. Protect carpet tile against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet tile manufacturer.

END OF SECTION 09 68 13

Tecolote House Renovation
SECTION 09 91 13 - EXTERIOR PAINTING
PRODUCT MASTERSPEC LICENSED BY DELTEK, INC. TO SHERWIN-WILLIAMS
COMPANY (THE)

SECTION 09 91 13 - EXTERIOR PAINTING

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
 - 1. Primers.
 - 2. Finish coatings.
 - 3. Floor sealers and paints.

- B. Related Requirements:
 - 1. Section 09 91 23 "Interior Painting" for surface preparation and the application of paint systems on interior substrates.

1.02 **ACTION SUBMITTALS**

- A. Product Data: For each type of product.
 - 1. Include preparation requirements and application instructions.
 - 2. Indicate VOC content.

- B. Sustainable Design Submittals:
 - 1. Product Data: For paints and coatings, indicating VOC content.
 - 2. Environmental Product Declaration (EPD): For each product.

- C. Product List: For each product indicated, include the following:
 - 1. Cross-reference to paint system and locations of application areas.
 - 2. Use same designations indicated on Drawings and in the Exterior Painting Schedule.
 - 3. Include color designations.

1.03 **CLOSEOUT SUBMITTALS**

- A. Coating Maintenance Manual: Provide coating maintenance manual including area summary with finish schedule; area detail designating location where each product/color/finish was used; product data pages; material safety data sheets; care and cleaning instructions; touch-up procedures; and color samples of each color and finish used.

1.04 **MAINTENANCE MATERIAL SUBMITTALS**

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint Products: 5 percent, but not less than 1 gal. of each material and color applied.

1.05 **DELIVERY, STORAGE, AND HANDLING**

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- A. Delivery and Handling: Deliver products to Project site in undamaged condition in manufacturer's original sealed containers, complete with labels and instructions for handling, storing, unpacking, protecting, and installing. Packaging shall bear the manufacturer's label with the following information:
 - 1. Product name and type (description).
 - 2. Batch date.
 - 3. Color number.
 - 4. VOC content.
 - 5. Environmental handling requirements.
 - 6. Surface preparation requirements.
 - 7. Application instructions.

- B. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.06 **FIELD CONDITIONS**

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

- C. Lead Paint: It is not expected that lead paint will be encountered in the Work.
 - 1. If suspected lead paint is encountered, do not disturb; immediately notify Architect and Owner.

PART 2 - PRODUCTS

2.01 **MANUFACTURERS**

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The)

- B. Source Limitations: Obtain each paint product from single source from single manufacturer.
 - 1. Manufacturer's designations listed on a separate color schedule are for color reference only and do not indicate prior approval.

2.02 **PAINT, GENERAL**

- A. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.

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2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturer for use in paint system and on substrate indicated.
- B. VOC Content: For field applications, paints and coatings comply with VOC content limits of authorities having jurisdiction and the following VOC content limits exclusive of colorants added to a tint base, when calculated in accordance with 40 CFR 59, Subpart D (EPA Method 24):
1. Flat Paints and Coatings: 50 g/L.
 2. Nonflat Paints and Coatings: 50 g/L.
 3. Dry-Fall Coatings: 150 g/L.
 4. Primers, Sealers, and Undercoaters: 100 g/L.
 5. Rust-Preventive Coatings: 100 g/L.
 6. Zinc-Rich Industrial Maintenance Primers: 100 g/L.
 7. Pretreatment Wash Primers: 420 g/L.
 8. Shellacs, Clear: 730 g/L.
 9. Shellacs, Pigmented: 550 g/L.
- C. Front Door Color: Nurture Green SW 6451.
- D. Window Trim, Door Trim, Rain Gutter, Fascia Color: Polished Mahogany SW 2823.
- E. Exterior Wall Color: Alabaster, SW 7008

2.03 PRIMERS

- A. Exterior, Alkali-Resistant, Water-Based Primer: Pigmented, water-based primer formulated for use on alkaline surfaces, such as exterior plaster, vertical concrete, and masonry.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Loxon Concrete & Masonry Primer Sealer, LX02W50 or comparable product.
- B. Exterior, Latex Wood Primer: White, waterborne-emulsion primer formulated for resistance to extractive bleeding, mold, and microbials; for hiding stains; and for use on exterior wood subject to extractive bleeding.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Exterior Latex Primer, B42 or comparable product.
- C. Water-Based, Rust-Inhibitive Primer: Corrosion-resistant, water-based-emulsion primer formulated for resistance to flash rusting when applied to cleaned, exterior ferrous metals subject to mildly corrosive environments.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Pro-Cryl Universal Primer, B66-310 Series or comparable product.

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- D. Surface-Tolerant Metal Primer: Corrosion-resistant, solvent-based metal primer formulated for use on structural steel and metal fabrications that have been minimally prepared.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Macropoxy 646 FC Epoxy B58 Series or comparable product.

- E. Alkyd Metal Primer: Corrosion-resistant, solvent-based, alkyd primer formulated for use on prepared ferrous metals subject to industrial and light marine environments.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Kem Bond HS Primer B50 Series or comparable product.

- F. Water-Based, Galvanized-Metal Primer: Corrosion-resistant, pigmented, acrylic primer; formulated for use on cleaned/etched, exterior, galvanized metal to prepare it for subsequent water-based coatings.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Pro-Cryl Universal Primer, B66-310 Series or comparable product.

- G. Epoxy Metal Primer: Corrosion-resistant, solvent-based, two-component epoxy primer formulated for use on prepared, exterior ferrous- and galvanized-metal surfaces.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Macropoxy 646 FC Epoxy B58 Series or comparable product.

- H. Vinyl Wash Primer: Two-component, vinyl butyral/phosphoric acid, wash primer formulated for use over cleaned metal surfaces and zinc-rich primers as a tie coat for subsequent corrosion-resistant primers or finish coatings.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); DTM Wash Primer B71Y1 or comparable product.

- I. Quick-Drying Aluminum Primer: Corrosion-resistant, solvent-based, alkyd or modified-alkyd primer formulated for quick-drying capabilities and for use on prepared exterior aluminum.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial ProCryl Universal Metal Primer or comparable product.

2.04 FINISH COATINGS

- A. Exterior Latex Paint, Flat: Water-based, pigmented coating; formulated for alkali, mold, microbial, and water resistance and for use on exterior surfaces, such as portland cement plaster, concrete, and primed wood.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); A-100 Exterior Latex Flat, A6 Series or comparable product.

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2. Gloss and Sheen: Manufacturer's standard flat finish .
- B. Exterior Latex Paint, Semigloss: Water-based, pigmented emulsion coating formulated for alkali, mold, microbial, and water resistance and for use on exterior surfaces, such as masonry, portland cement plaster, and primed wood and metal.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Solo Acrylic Semi-Gloss, A76 Series or comparable product.
 2. Gloss Level: Manufacturer's standard semigloss finish .
- C. Exterior Latex Paint, Gloss: Water-based, pigmented, acrylic-copolymer-emulsion coating formulated for alkali, mold, microbial, scrub, blocking (sticking of two painted surfaces), and water resistance and for use on exterior, primed, wood and metal trim, sashes, frames, and doors.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); A-100 Exterior Latex Gloss, A8 Series or comparable product.
 2. Gloss Level: Manufacturer's standard gloss finish .
- D. Exterior, High-Build Latex Paint: Water-based, high-build, pigmented, emulsion coating; high-solids content improves filling, uniformity, and film build on concrete masonry surfaces. Formulated for abrasion, mold, microbial, and wind-driven rain resistance and for use on exterior masonry, concrete masonry unit, and concrete surfaces.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Loxon XP Waterproofing Masonry Coating Flat LX11 Series or comparable product.
 2. Gloss and Sheen Level: Manufacturer's standard low-gloss finish .
 3. Minimum Solids Content: Manufacturer's standard percentage solids by volume.
- E. Textured Latex Coating, Flat: Water-based, pigmented coating that contains sand or other hard aggregate and is formulated for use on exterior masonry, concrete masonry unit, and concrete surfaces.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Conflex Ultracrete Acrylic Texture Coating CF17 Series or comparable product.
 2. Gloss and Sheen Level: Manufacturer's standard flat finish .
 3. Aggregate Size: Manufacturer's standard .
- F. Exterior Alkyd Enamel, Gloss: Solvent-based, pigmented, alkyd enamel formulated for mold, microbial, and water resistance and for use on exterior, primed, wood and metal surfaces.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Enamel HS Alkyd Gloss B54 Series or comparable product.
 2. Gloss Level: Manufacturer's standard gloss finish .
 3. Fineness of Grind: Manufacturer's standard .

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- G. Aluminum Paint: Aliphatic, solvent-based coating consisting of varnish or alkyd binder combined with aluminum pigment that is formulated for use as a stain-blocking coating and sealer on exterior wood, metal, bituminous-coated, and prepared masonry surfaces and to be able to be recoated with conventional alkyd and latex paints.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Silver-Brite Aluminum B59S11 or comparable product.

- H. High-Build Epoxy Paint, Low Gloss: High-solids, two-component epoxy; formulated for use on exterior concrete, masonry, and primed-metal surfaces.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Macropoxy 646 FC Epoxy B58 Series or comparable product.
 - 2. Gloss and Sheen Level: Manufacturer's standard low-gloss finish .

- I. Exterior, Water-Based, Light Industrial Coating, Low Sheen: Corrosion-resistant, water-based, pigmented, emulsion coating formulated for resistance to blocking (sticking of two painted surfaces), water, alkalis, moderate abrasion, and mild chemical exposure and for use on exterior, primed, wood and metal surfaces.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Acrylic Eg-Shel B66-660 Series or comparable product.
 - 2. Gloss and Sheen Level: Manufacturer's standard low-sheen finish .

- J. Exterior, Water-Based, Light Industrial Coating, Semigloss: Corrosion-resistant, water-based, pigmented, emulsion coating formulated for resistance to blocking (sticking of two painted surfaces), water, alkalis, moderate abrasion, and mild chemical exposure and for use on exterior, primed, wood and metal surfaces.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series or comparable product.
 - 2. Gloss Level: Manufacturer's standard semigloss finish .

- K. Exterior, Water-Based, Light Industrial Coating, Gloss: Corrosion-resistant, water-based, pigmented, emulsion coating formulated for resistance to blocking (sticking of two painted surfaces), water, alkalis, moderate abrasion, and mild chemical exposure and for use on exterior, primed, wood and metal surfaces.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); Pro Industrial Acrylic Gloss Coating, B66-600 Series or comparable product.
 - 2. Gloss Level: Manufacturer's standard gloss finish .

2.05 **FLOOR SEALERS AND PAINTS**

- A. Latex Floor Paint, Low Gloss: Water-based, pigmented coating formulated to hide stains, for alkali and incidental water resistance, and for use on exterior, concrete and primed-wood surfaces subject to low to medium foot traffic.

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PRODUCT MASTERSPEC LICENSED BY DELTEK, INC. TO SHERWIN-WILLIAMS
COMPANY (THE)

1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); ArmorSeal Tread-Plex, B90 Series or comparable product.
 2. Gloss and Sheen Level: Manufacturer's standard low-gloss finish .
 3. Slip-Resistant Aggregate: Manufacturer's standard additive .
- B. Latex Deck Coating: Water-based, high-solids, acrylic-emulsion coating; formulated for use on exterior, and wood-board traffic surfaces.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); SuperDeck Exterior Waterborne Solid Color Stain SD7-150 or comparable product.
 2. Gloss Level: Manufacturer's standard .
 3. Minimum Solids Content: Manufacturer's standard percentage solids by volume.
 4. Surface Texture: Smooth .
- C. Water-Based, Concrete-Floor Sealer: Clear, water-based, acrylic-copolymer-emulsion sealer formulated for oil, gasoline, alkali, and water resistance and for use on exterior, concrete traffic surfaces.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); H&C Clarishield Water Based Natural Look Clear Concrete Sealer or comparable product.
- D. Solvent-Based, Concrete-Floor Sealer: Clear, acrylic, solvent-based sealer formulated for oil, gasoline, alkali, and water resistance and for use on exterior, concrete traffic surfaces.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Sherwin-Williams Company (The); H&C Clarishield Solvent Based Natural Look Clear Concrete Sealer or comparable product.

PART 3 - EXECUTION

3.01 **EXAMINATION**

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
1. Concrete: 12 percent.
 2. Fiber-Cement Board: 12 percent.
 3. Masonry (Clay and Concrete Masonry Units): 12 percent.
 4. Wood: 15 percent.
 5. Portland Cement Plaster: 12 percent.
 6. Gypsum Board: 12 percent.
- C. Portland Cement Plaster Substrates: Verify that plaster is fully cured.

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- D. Exterior Gypsum Board Substrates: Verify that finishing compound is dry and sanded smooth.
- E. Verify suitability of substrates, including surface conditions and compatibility, with finishes and primers.
- F. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.02 PREPARATION

- A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems specified in this Section.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer .
 - 1. SSPC-SP 2.
 - 2. SSPC-SP 3.
 - 3. SSPC-SP 7/NACE No. 4.
 - 4. SSPC-SP 11.
- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- H. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

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- I. Aluminum Substrates: Remove loose surface oxidation.
- J. Wood Substrates:
 - 1. Scrape and clean knots. Before applying primer, apply coat of knot sealer recommended in writing by topcoat manufacturer for exterior use in paint system indicated.
 - 2. Sand surfaces that will be exposed to view, and remove sanding dust.
 - 3. Prime edges, ends, faces, undersides, and backsides of wood.
 - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- K. Plastic Trim Fabrication Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.

3.03 INSTALLATION

- A. Apply paints in accordance with manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
 - 3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.
 - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 5. Primers specified in the Exterior Painting Schedule may be omitted on items that are factory primed or factory finished if compatible with intermediate and topcoat coatings and acceptable to intermediate and topcoat paint manufacturers.
- B. Tint undercoats same color as topcoat, but tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
 - 1. Paint the following work where exposed to view:
 - a. Equipment, including panelboards and switch gear.
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.

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- f. Plastic conduit.
- g. Tanks that do not have factory-applied final finishes.

3.04 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor will touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written instructions, Contractor pays for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written instructions.

3.05 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
 - 1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
 - 2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
 - 3. Allow empty paint cans to dry before disposal.
 - 4. Collect waste paint by type and deliver to recycling or collection facility.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.06 EXTERIOR PAINTING SCHEDULE

- A. Concrete Masonry Unit Substrates:
 - 1. Latex System :
 - a. Prime Coat: Exterior, latex block filler.
 - 1) S-W PrepRite Block Filler, B25W25.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, low sheen .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.

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2. Latex Aggregate System :
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
 - c. Topcoat: Textured latex coating, flat.
 - 1) S-W Conflex Ultracrete Acrylic Texture Coating CF17 Series.
 3. High-Build Latex System : Dry film thickness of not less than 10 mils.
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
 - c. Topcoat: Exterior, high-build latex paint.
 - 1) S-W Loxon XP Waterproofing Masonry Coating Flat LX11 Series.
 4. Water-Based, Light Industrial Coating System :
 - a. Prime Coat: Exterior, latex block filler.
 - 1) S-W PrepRite Block Filler, B25W25.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, low sheen .
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
- B. Steel and Iron Substrates:
1. Water-Based, Light Industrial Coating System :
 - a. Prime Coat: Alkyd metal primer .
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, gloss.
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
 2. Water-Based, Light Industrial Coating over Epoxy System :
 - a. Prime Coat: Epoxy metal primer.
 - 1) S-W Macropoxy 646 FC Epoxy B58 Series.
 - b. Intermediate Coat: High-build epoxy paint, low gloss.
 - c. Topcoat: Exterior, water-based, light industrial coating, gloss.
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
 3. Aluminum Paint System :
 - a. Prime Coat: Alkyd metal primer .
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Aluminum paint.
 - 1) S-W Silver-Brite Aluminum B59S11.
- C. Galvanized-Metal Substrates:
1. Latex System :
 - a. Prime Coat: Water-based, galvanized-metal primer.
 - 1) S-W ProCryl Universal Metal Primer
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, semigloss .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.

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- 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
2. Water-Based, Light Industrial Coating System :
- a. Prime Coat: Epoxy metal primer.
 - 1) S-W ProCryl Universal Metal Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, semigloss .
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
- D. Aluminum Substrates:
1. Latex System :
 - a. Prime Coat: Quick-drying aluminum primer.
 - 1) S-W ProCryl Universal Metal Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, gloss.
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
 2. Water-Based, Light Industrial Coating System :
 - a. Prime Coat: Quick-drying aluminum primer.
 - 1) S-W ProCryl Universal Metal Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, gloss.
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
 3. Alkyd System :
 - a. Pretreatment Coat: Vinyl wash primer.
 - 1) S-W DTM Wash Primer.
 - b. Prime Coat: Quick-drying aluminum primer.
 - c. Intermediate Coat: Matching topcoat.
 - d. Topcoat: Exterior alkyd enamel, gloss.
 - 1) S-W Industrial Enamel HS B54 Series
- E. Stainless Steel Substrates:
1. Latex System :
 - a. Prime Coat:
 - 1) S-W DTM Wash Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, gloss.
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.

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2. Water-Based, Light Industrial Coating System :
 - a. Prime Coat:
 - 1) S-W DTM Wash Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, gloss.
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.

- F. Exposed Wood-Framing Substrates:
 1. Latex over Latex Primer System :
 - a. Prime Coat: Exterior, latex wood primer.
 - 1) S-W Exterior Latex Wood Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, low sheen .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
 2. Latex over Alkyd Primer System :
 - a. Prime Coat: Exterior, alkyd/oil wood primer.
 - 1) S-W Exterior Oil Based Wood Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, low sheen .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.

- G. Wood-Based Panel Substrates:
 1. Latex over Latex Primer System :
 - a. Prime Coat: Exterior, latex wood primer.
 - 1) S-W Exterior Latex Wood Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, low sheen .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
 2. Latex over Alkyd Primer System :
 - a. Prime Coat: Exterior, alkyd/oil wood primer.
 - 1) S-W Exterior Oil Based Wood Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, low sheen .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.

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- H. Wood-Board, Traffic-Surface Substrates:
1. Latex Floor Paint over Latex Primer System :
 - a. Prime Coat: Matching topcoat.
 - b. Topcoat: Latex floor paint, low gloss.
 - 1) S-W Armorseal Tread-Plex Waterbased Floor Coating.
 2. Latex Floor Paint over Alkyd Primer System :
 - a. Prime Coat: Exterior, alkyd/oil wood primer.
 - 1) S-W Exterior Oil Based Wood Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Latex floor paint, low gloss.
 - 1) S-W Armorseal Tread-Plex Waterbased Floor Coating.
 3. Latex Deck Coating System : For plywood decks.
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommending in writing by topcoat manufacturer.
 - c. Topcoat: Latex deck coating.
 - 1) S-W SuperDeck Exterior Waterborne Solid Color Stain SD7-150.
- I. Cementitious Composition Board Substrates: Trim .
1. Latex System :
 - a. Prime Coat:
 - 1) S-W Loxon Concrete & Masonry Primer LX02W50.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, semigloss .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
 2. High-Build Latex System : Dry film thickness of not less than 10 mils.
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
 - c. Topcoat: Exterior, high-build latex paint.
 - 1) S-W Loxon XP Waterproofing Masonry Coating Flat LX11-50 Series.
 3. Water-Based, Light Industrial Coating System :
 - a. Prime Coat: Exterior, alkali-resistant, water-based primer.
 - 1) S-W Loxon Concrete & Masonry Primer LX02W50.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, semigloss .
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
- J. Fiberglass Substrates:
1. Latex System :
 - a. Prime Coat: Water-based bonding primer.
 - 1) S-W Extreme Bond Primer B51W1150.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, semigloss .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.

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- 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
2. Water-Based, Light Industrial Coating System :
- a. Prime Coat: Water-based bonding primer.
 - 1) S-W Extreme Bond Primer B51W1150.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, semigloss .
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
- K. Plastic-Trim-Fabrication Substrates:
1. Latex System :
 - a. Prime Coat: Water-based bonding primer.
 - 1) S-W Extreme Bond Primer B51W1150.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, semigloss .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
 2. Water-Based, Light Industrial Coating System :
 - a. Prime Coat: Water-based bonding primer.
 - 1) S-W Extreme Bond Primer B51W1150.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior, water-based, light industrial coating, semigloss .
 - 1) S-W Pro Industrial Acrylic Eg-Shel B66-660 Series.
 - 2) S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series.
 - 3) S-W Pro Industrial Acrylic Gloss Coating, B66-600 Series.
- L. Exterior Gypsum Board Substrates:
1. Latex System :
 - a. Prime Coat: Exterior, latex wood primer, reduced in accordance with manufacturer's written instructions for substrate and topcoat.
 - 1) S-W Exterior Latex Wood Primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior latex paint, low sheen .
 - 1) S-W A-100 Exterior Latex Flat, A6 Series.
 - 2) S-W A-100 Exterior Latex Low Sheen, A12 Series.
 - 3) S-W Solo Acrylic Semi-Gloss, A76 Series.
 - 4) S-W A-100 Exterior Latex Gloss, A8 Series.
 2. Latex Aggregate System :
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
 - c. Topcoat: Textured latex coating, flat.
 - 1) S-W Conflex Ultracrete Acrylic Texture Coating CF17 Series.
 3. High-Build Latex System : Dry film thickness of not less than 10 mils.

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- a. Prime Coat: As recommended in writing by topcoat manufacturer.
- b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
- c. Topcoat: Exterior, high-build latex paint.
 - 1) S-W Loxon XP Waterproofing Masonry Coating Flat LX11 Series.

END OF SECTION 09 91 13

Tecolote House Renovation
SECTION 09 91 23 - INTERIOR PAINTING

SECTION 09 91 23 - INTERIOR PAINTING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Solvent-based finish coatings.

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by the following:
1. Sherwin-Williams Company (The).

2.02 PAINT PRODUCTS, GENERAL

- A. Material Compatibility:
1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

2.03 PRIMERS

- A. Interior Latex Primer Sealer: Water-based latex sealer used on new interior plaster, concrete, and gypsum wallboard surfaces.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Sherwin-Williams Company (The).
- B. Interior Latex Primer for Wood: Waterborne-emulsion primer formulated for resistance to extractive bleeding, mold, and microbials; for hiding stains; and for use on interior wood subject to extractive bleeding.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Sherwin-Williams Company (The).

2.04 WATER-BASED FINISH COATS

- A. Ceiling: Interior, Latex, Flat: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.

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1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Sherwin-Williams Company (The).
 - b. Color: Ceiling Bright White, SW 7007
 2. Gloss and Sheen Level: Manufacturer's standard flat finish .
- B. Walls: Interior, Latex, High-Performance Architectural Coating, Satin: High-performance architectural latex coating providing a significantly higher level of performance than conventional latex paints in the areas of scrub resistance, burnish resistance, and ease of stain removal.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Sherwin-Williams Company (The).
 2. Kitchen and Living Areas, Color: Sagey, SW 6175
 3. Bathrooms, Color: Topsail, SW 6217
 4. Bedrooms, Color: Drift of Mist, SW 9166
 5. Gloss and Sheen Level: Manufacturer's standard low-sheen finish .
- C. Door and Window Trim: Interior, Latex, High-Performance Architectural Coating, Semigloss: High-performance architectural latex coating providing a significantly higher level of performance than conventional latex paints in the areas of scrub resistance, burnish resistance, and ease of stain removal.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Sherwin-Williams Company (The).
 2. Color: Alabaster, SW 7008
 3. Gloss Level: Manufacturer's standard semigloss finish .

PART 3 - EXECUTION

3.01 **EXAMINATION**

- A. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- B. Proceed with coating application only after unsatisfactory conditions have been corrected.
 1. Application of coating indicates acceptance of surfaces and conditions.

3.02 **PREPARATION**

- A. Comply with manufacturer's written instructions and recommendations applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

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- C. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

3.03 INSTALLATION

- A. Apply paints according to manufacturer's written instructions.
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.04 CLEANING AND PROTECTION

- A. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- B. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.05 INTERIOR PAINTING SCHEDULE

- A. Gypsum Board and Plaster Substrates:
 - 1. Latex over Latex Sealer System :
 - a. Prime Coat: Interior latex primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, flat .
 - 2. High-Performance Architectural Latex System :
 - a. Prime Coat: Interior latex primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, high-performance architectural coating, satin semigloss.

END OF SECTION 09 91 23

Tecolote House Renovation
SECTION 10 56 16 - FABRICATED WOOD STORAGE SHELVING

SECTION 10 56 16 - FABRICATED WOOD STORAGE SHELVING

PART 1 - GENERAL

1.01 **SECTION INCLUDES**

- A. Shelf standards, brackets, and accessories.
- B. Miscellaneous wall brackets and accessories.

1.02 **RELATED SECTIONS**

- A. Section 06 20 00 - Finish Carpentry.
- B. Section 06 40 00 - Architectural Woodwork.

1.03 **REFERENCES**

- A. ANSI/BHMA A156.9, American National Standard for Cabinet Hardware.

1.04 **DESIGN / PERFORMANCE REQUIREMENTS**

- A. Shelf standards and brackets meet or exceed the ANSI performance standards as established by ANSI/BHMA A156.9.
- B. Shelves to be 18" deep minimum & 3/4" thick solid pine.
- C. Shelves to support 150 lbs. per linear foot.

1.05 **SUBMITTALS**

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.

1.06 **DELIVERY, STORAGE, AND HANDLING**

- A. Store products in manufacturer's unopened packaging until ready for installation.

1.07 **WARRANTY**

- A. Provide manufacturer's standard limited lifetime warranty.

1.08 **EXTRA MATERIALS**

- A. See Section 01 60 00 - Product Requirements.

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- B. Deliver extra sets of hardware items for Owner's use in maintenance.
 - 1. Furnish 3 extra standard straight brackets of each size required; deliver to location designated by Owner in original packaging.

PART 2 - PRODUCTS

2.01 **MANUFACTURERS**

- A. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.02 **SHELVING SYSTEMS**

- A. Heavy Duty Shelf Standards and Brackets:
 - 1. Shelf Standard Components: Heavy duty single-slotted channel wall standards. Standards mounted to suitable wall surface with mounting hardware 16 inches (406 mm) o.c. is capable of supporting 540 to 1,060 pounds per pair of brackets when properly installed.
 - a. Face Width: 7/8 inch (22 mm), single slotted.
 - b. Material:
 - 1) As scheduled and indicated on Drawings.
 - c. Lengths: As indicated on Drawings.
 - d. Lengths: As required to support shelving indicated.
 - 2. Straight Shelf Bracket Components: Steel, reinforced, locking into slots with molded nylon cam lock lever; size to suit shelves. Brackets adjustable in 2 inch (50.8 mm) increments along entire length of standard, drilled and countersunk for screws.
 - a. Shelf Brackets:
 - 1) 12 gage steel, reinforced, locking into slots with molded nylon cam lock lever; size to suit shelves; same finish as standards.
 - 3. Shelving:
 - a. Shelving: As indicated on Drawings.
 - 4. Cornice Brackets: Provide where cornices are indicated as part of shelving.
 - 5. Steel Shelf Rests and Rubber Shelf Cushions: Provide as required to fasten shelves to shelf brackets.
 - a. Type: Shelf rests, end: Model 210: Connects one shelf to end of shelving run.
 - b. Type: Shelf rests, center: Model 211: Connects two shelves together at center of shelves.
 - c. Type: Shelf rests, front: Model 212: Connects two shelves together at front of shelves
 - d. Type: Shelf rests, front: Model 213: Connects two shelves together at center of shelves
 - e. Type: Shelf cushions, rubber: Model 129.
- B. Extra Duty Shelf Standards and Brackets:
 - 1. Shelf Standard Components: Extra-Duty 85 Standard single-slotted channel wall standards. Standards mounted to a suitable wall surface with mounting hardware 16 inches (406 mm) o.c. is capable of supporting 320 to 680 pounds per pair of brackets when properly installed.

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- a. Face: 1-1/4 inch (32 mm) wide by 1/2 inch (13 mm) deep, single slotted.
 - b. Material:
 - 1) As scheduled and indicated on Drawings.
 - c. Lengths: As indicated on drawings.
 - d. Lengths: As required to support shelving indicated.
2. Shelf Bracket Components: Steel, reinforced, locking into slots; size to suit shelves. Brackets adjustable in 1 inch (25.4 mm) increments along entire length of standard, drilled and countersunk for screws.
 - a. Shelf Brackets: As scheduled and indicated on Drawings.
 3. Shelving:
 - a. Shelving: As indicated on Drawings.
 - b. Cornice Brackets: Provide where cornices are indicated as part of shelving.
 - c. Shelf Rests: Model 106: Provide where shelves are indicated to join at shelf bracket.
- C. Heavy Duty Shelf Standards and Brackets:
1. Shelf Standard Components: Heavy-Duty 83 Standard single-slotted channel wall standards. Standards mounted to a suitable wall surface with mounting hardware 16 inches (406 mm) o.c. is capable of supporting 285 to 480 pounds per pair of brackets when properly installed.
 - a. Face: 3/4 inch (19 mm) wide by 1/2 inch (12 mm) deep, single slotted.
 - b. Material:
 - 1) As scheduled and indicated on Drawings.
 - c. Lengths: As indicated on Drawings.
 - d. Lengths: As required to support shelving indicated.
 2. Shelf Bracket Components: Steel, reinforced, locking into slots; size to suit shelves. Brackets adjustable in 1 inch (25.4 mm) increments along entire length of standard, drilled and countersunk for screws.
 - a. Right Flanged Shelf Brackets: Model 183R: Double Lug with single tab and single slot design, type with flange for quickly attaching wood shelves to brackets, locking into slots; size to suit shelves; same finish as standards; use for installing RIGHT side of shelf; keyhole mounting holes for easy installation of shelves.
 - b. Left Flanged Shelf Brackets: Model 183L: Double Lug with single tab and single slot design, type with flange for quickly attaching wood shelves to brackets, locking into slots; size to suit shelves; same finish as standards; use for installing LEFT side of shelf; keyhole mounting holes for easy installation of shelves.
 - c. Center Flanged Shelf Brackets: Model 183C: Double Lug with single tab and single slot design, type with flange for quickly attaching wood shelves to brackets, locking into slots; size to suit shelves; same finish as standards; use for joining two shelves together; keyhole mounting holes for easy installation of shelves.
 - d. Heavy-Duty Lock Lever Shelf Brackets: Model 161: Steel, triple lug pattern and single slot design; ideal for commercial displays; size to suit shelves; same finish as standards.
 - e. Shelf Brackets: As scheduled and indicated on Drawings.
 3. Shelving:
 - a. Shelving: As indicated on Drawings.

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- b. Cornice Brackets: Provide where cornices are indicated as part of shelving.
 - c. Shelf Rests: Model 106: Provide where shelves are indicated to join at shelf bracket.
- D. Heavy Duty Shelf Decorative Standards and Brackets:
- 1. Shelf Standard Components: Heavy-Duty Decorative 82 Standard double-slotted channel wall standards. Standards mounted to a suitable wall surface with mounting hardware 16 inches (406 mm) o.c. is capable of supporting 300 to 450 pounds per pair of brackets when properly installed.
 - a. Face: 1-31/64 inch (37.7 mm) wide by 11/16 inch (17.5 mm) deep, double slotted.
 - b. Material and Finish:
 - 1) As scheduled and indicated on Drawings.
 - c. Lengths: As indicated on Drawings.
 - d. Lengths: As required to support shelving indicated.
 - 2. Shelf Bracket Components: Steel, reinforced, locking into slots; size to suit shelves. Brackets adjustable in 1-1/4 inch (31.8 mm) increments along entire length of standard, drilled and countersunk for screws.
 - a. Model 182: Steel, Quadruple Lug and double slot design, locking into slots; size to suit shelves; same finish as standards.
 - b. Shelf Brackets: As scheduled and indicated on Drawings.
 - 3. Shelving:
 - a. Shelving: As indicated on Drawings.
 - 4. Bracket Lock: Model 182DP LOCK: Provide where brackets indicated to be anchored into standards.
 - 5. Bookends: Model 182BE: Provide as scheduled and indicated on Drawings.
- E. Standard Duty Shelf Standards and Brackets:
- 1. Shelf Standard Components: Standard-Duty 80 Standard, single-slotted channel wall standards. Standards mounted to a suitable wall surface with mounting hardware 16 inches (406 mm) o.c. is capable of supporting 120 to 320 pounds per pair of brackets when properly installed.
 - a. Face: 5/8 inch (16 mm) wide by 13/32 inch (10.3 mm) deep, single slotted.
 - b. Material and Finish:
 - 1) As scheduled and indicated on Drawings.
 - c. Lengths: As indicated on Drawings.
 - d. Lengths: As required to support shelving indicated.
 - 2. Shelf Bracket Components: Steel, reinforced, locking into slots; size to suit shelves. Brackets adjustable in 1 inch (25.4 mm) increments along entire length of standard, drilled and countersunk for screws.
 - a. Straight Lipped Shelf Brackets: Steel, reinforced, lip holds shelving in place; size to suit shelves; same finish as standards.
 - b. Straight Lipless Shelf Brackets: Steel, reinforced; size to suit shelves; same finish as standards.
 - c. Shelf Brackets: As scheduled and indicated on Drawings.
 - 3. Shelving:
 - a. Shelving: As indicated on Drawings.
- F. Standard Duty Shelf Standards and Brackets:

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1. Shelf Standard Components: Standard Duty single-slotted channel wall standards. Standards mounted to a suitable wall surface with mounting hardware 16 inches (406 mm) o.c. is capable of supporting up to 220 pounds per pair of brackets when properly installed.
 - a. Face: 5/8 inch (16 mm) wide by 13/32 inch (10.3 mm) deep, single slotted.
 - b. Material:
 - 1) As scheduled and indicated on Drawings.
 - c. Lengths: As indicated on Drawings.
 - d. Lengths: As required to support shelving indicated.
2. Shelf Bracket Components: Steel, reinforced, locking into slots; size to suit shelves. Brackets adjustable in 1 inch (25.4 mm) increments along entire length of standard, drilled and countersunk for screws.
 - a. Straight Shelf Brackets: 16-gauge steel, reinforced.
 - b. Shelf Brackets: As scheduled and indicated on Drawings.
3. Shelving:
 - a. Shelving: As indicated on Drawings.

2.03 SHELF BOARDS

- A. Solid Pine shelf boards: Shelf boards to consist of 3/4 inch thick solid pine wood.
 1. Performance: Supports up to 150 pounds per linear foot when properly installed
 2. Finish and Sizes:
 - a. Solid Pine shelf boards
 - 1) Sealer: Clear finish
 - a) Seal all sides of shelf boards prior to install.
 - 2) Size as indicated on the Drawings.

2.04 ACCESSORIES

- A. Stationary L-Brackets: Heavy-duty stationary L-bracket; steel: wall-mounted; for 12 inch to 24 inch deep shelving. Meets and/or exceeds ANSI/BHMA weight load requirements
 1. Performance: Mount to wall surface with mounting hardware every 16 inches (406 mm); supports up to 1,200 pounds per pair of brackets when properly installed.
 - a. Brackets:
 - 1) Finish: White, powder coat paint
 - b. Size as indicated on the Drawings.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

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SECTION 10 56 16 - FABRICATED WOOD STORAGE SHELVING

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces and components to receive hardware using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 **INSTALLATION**

- A. Install in accordance with manufacturer's instructions.
- B. Mount standards to solid backing capable of supporting intended loads. Install standards using fasteners suitable for supporting intended loads.
- C. Install brackets and accessories as indicated on the Drawings.
- D. Install shelving, and accessories as indicated on the Drawings.

3.04 **PROTECTION**

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 10 56 16

Tecolote House Renovation
SECTION 11 30 13 - RESIDENTIAL APPLIANCES

SECTION 11 30 13 - RESIDENTIAL APPLIANCES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Cooking appliances.
 - 2. Kitchen exhaust ventilation.
 - 3. Refrigeration appliances.
 - 4. Cleaning appliances.

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.03 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Electrical Appliances: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Gas-Fueled Appliances: Certified by a qualified testing agency for each type of gas-fueled appliance according to ANSI Z21 Series standards.

2.02 COOKING APPLIANCES <REFER TO SHEET A-111>

- A. Gas Cooktop:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Frigidaire.
 - 2. Gas Burners: Four.
- B. Gas Range: Slide-in range with one oven(s).
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Frigidaire.
 - 2. Gas Burners: Four.
 - 3. Anti-Tip Device: Manufacturer's standard.
 - 4. Material: Stainless steel with manufacturer's standard cooktop.

2.03 KITCHEN EXHAUST VENTILATION

- A. Overhead Exhaust Hood:

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SECTION 11 30 13 - RESIDENTIAL APPLIANCES

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Proline.
2. Product: Proline 30-inch Wall Mounted Range Hood
3. Type: Wall-mounted, exhaust-hood system.
4. Exhaust Fan: Four-speed fan built into hood and with manufacturer's standard 900 cfm capacity.
 - a. Venting: Vented to outside through roof.
5. Finish: Stainless steel.

2.04 **REFRIGERATION APPLIANCES**

- A. Refrigerator/Freezer: Two-door refrigerator/freezer with freezer on bottom and complying with AHAM HRF-1.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Frigidaire.
 2. Product: Frigidaire Professional Counter Depth French Door Refrigerator/Freezer
 3. Type: Freestanding.
 4. General Features:
 - a. Dispenser in door for ice and cold water.
 - b. Interior light in refrigeration compartment.
 5. Front Panel(s): Manufacturer's standard.

2.05 **CLEANING APPLIANCES**

- A. Dishwasher : Complying with AHAM DW-1.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Frigidaire.
 2. Product: Frigidaire Professional 24" Dishwasher.
 3. Model Number: PDSH4816AF
 4. Type: Built-in undercounter.
 5. Front Panel: Manufacturer's standard.
- B. Clothes Washer : Complying with AHAM HLW-1.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Speed Queen.
 2. Type: Freestanding, front-loading unit.
 3. Product: Speed Queen Front Load Washer
 4. Model Number: FF7010WN
 5. Capacity: 3.5 cu. ft.
 6. Energy Star: Provide appliances that qualify for the EPA/DOE Energy Star product-labeling program.
 7. Water-Efficient Clothes Washer: Provide clothes washer with modified energy factor greater than or equal to 2.0 and water factor less than 5.5.
 8. Appliance Finish: Enamel.
 9. Front-Panel Finish: Manufacturer's standard.

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SECTION 11 30 13 - RESIDENTIAL APPLIANCES

- C. Clothes Dryer : Complying with AHAM HLD-1.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Speed Queen.
 2. Product: Speed Queen Front Load Gas Dryer
 3. Model Number: DF7004WG
 4. Type: Freestanding, frontloading, gas unit.
 5. Capacity: 7.0 cu. ft.
 6. Features:
 - a. Interior drum light.
 - b. Stacking kit to stack dryer over washer.
 7. Appliance Finish: Enamel.
 8. Front-Panel Finish: Manufacturer's standard .

PART 3 - EXECUTION

3.01 **INSTALLATION**

- A. Built-in Equipment: Securely anchor units to supporting cabinets or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and that rough openings are completely concealed.
- B. Freestanding Equipment: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate equipment.
- C. Range Anti-Tip Device: Install at each range according to manufacturer's written instructions.

END OF SECTION 11 30 13

Tecolote House Renovation
SECTION 12 36 61.16 - SOLID SURFACING COUNTERTOPS

SECTION 12 36 61.16 - SOLID SURFACING COUNTERTOPS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Solid surface material countertops.
 - 2. Solid surface material backsplashes.

1.02 ACTION SUBMITTALS

- A. Product Data: For countertop materials.

PART 2 - PRODUCTS

2.01 SOLID SURFACE COUNTERTOP MATERIALS

- A. Solid Surface Material: Homogeneous-filled plastic resin complying with ISFA 2-01.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Corian Solid Surface.
 - 2. Colors and Patterns:
 - a. Color: Neutral Concrete, Edge: Eased
- B. Plywood: Exterior softwood plywood complying with DOC PS 1, Grade C-C Plugged, touch sanded.

2.02 FABRICATION

- A. Fabricate countertops according to solid surface material manufacturer's written instructions and to the AWI/AWMAC/WI's "Architectural Woodwork Standards."
 - 1. Grade: Premium .
- B. Countertops:
 - 1. 1/2-inch- thick, solid surface material with front edge built up with same material.
- C. Backsplashes: 1/2-inch- thick, solid surface material. Height: 4 inches
- D. Joints:
 - 1. Fabricate countertops to minimize joints
- E. Cutouts and Holes:
 - 1. Undercounter Plumbing Fixtures: Make cutouts for fixtures in shop using template or pattern furnished by fixture manufacturer. Form cutouts to smooth, even curves.

2.03 INSTALLATION MATERIALS

Tecolote House Renovation
SECTION 12 36 61.16 - SOLID SURFACING COUNTERTOPS

- A. Adhesive: Product recommended by solid surface material manufacturer.
- B. Sealant for Countertops: Comply with applicable requirements in Section 07 92 00 "Joint Sealants."

PART 3 - EXECUTION

3.01 **INSTALLATION**

- A. Fasten countertops by screwing through corner blocks of base units into underside of countertop. Predrill holes for screws as recommended by manufacturer.
- B. Fasten subtops to cabinets by screwing through subtops into cornerblocks of base cabinets. Shim as needed to align subtops in a level plane.
- C. Secure countertops to subtops with adhesive according to solid surface material manufacturer's written instructions.
- D. Bond joints with adhesive and draw tight as countertops are set. Mask areas of countertops adjacent to joints to prevent adhesive smears.
- E. Install backsplashes and end splashes by adhering to wall and countertops with adhesive.
- F. Complete cutouts not finished in shop. Mask areas of countertops adjacent to cutouts to prevent damage while cutting. Make cutouts to accurately fit items to be installed, and at right angles to finished surfaces unless beveling is required for clearance. Ease edges slightly to prevent snipping.
- G. Apply sealant to gaps at walls; comply with Section 07 92 00 "Joint Sealants."

END OF SECTION 12 36 61.16

SECTION #21 00 00 – Fire Protection

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 DESCRIPTION:

A. Scope of Work:

1. Work included: Furnish all labor, equipment, appurtenances, and material necessary to perform all operations in connection with the installation of a wet pipe type fire sprinkler system(s) as indicated on the drawings and as required by the 2022 California Building Code including 2022 NFPA #13 as amended by Chapter 35 of the 2022 California Building Code. The work shall include but not be limited to the following:
 - a. Locating Domestic piping within 5 feet of the building.
 - b. Supply mains, risers, valves and drains.
 - c. Water flow, Bell, and tamper switches at building as required.
 - d. Wet pipe hydraulically designed fire sprinkler system per plans.
 - e. Coordination with all trades prior to fabrication and installation.
 - f. Provide As-Built fire sprinkler shop drawings, for approval, for any changes to the approved documents.
2. Related work in other sections:
 - a. Electrical connections and wiring for alarm tamper and water flow switches.
 - b. Central station monitoring.
 - c. Painting, see painting section.
 - d. Backflow prevention valve, Primary Control Valve, Check Valve and Fire Department Connections: see site utility plan and specifications.
 - e. Valve tamper switches for valves in item d, above.

B. Quality Assurance:

1. All equipment shall be new and in good condition.
2. Similar equipment shall be by one manufacturer.
3. All equipment shall be listed by Underwriter's Laboratories or Factory Mutual approved as required by NFPA.

C. Submittals:

1. All substitutions shall be approved prior to installation.

2. Calculations: The system is hydraulically designed in accordance with NFPA #13R standards as follows:
 - a. Restrooms, Dwellings, Offices, Unused Attics, Corridors, Canopies – **13R**
 - b. Kitchen, Work room, Electrical, Storage, Mech rooms – **13R**

D. Product Delivery, Storage and Handling:

1. Delivery of products (materials): All products and/or materials necessary for the construction of the fire protection system shall be delivered to the job site in a timely manner so that the installation of the work will conform to the project schedule.
2. Storage of materials: Materials stored on the jobsite shall be done so with the approval of the Project Superintendent.
3. Handling of materials: All materials shall be handled in accordance with the instructions of the manufacturer.

E. Guarantee:

1. Contractor shall submit with guarantee stating that the work shall be guaranteed against any defects in material and/or workmanship for a period of one (1) year from date of Notice of Completion and defective work which develops during guarantee period shall be repaired and/or replaced at no additional cost to the owner.

2.1 PRODUCTS:

A. Fire Protection Piping-Interior:

1. Threaded piping – ASTM A-53 Sch. 40 Galvanized or UL/FM listed fire sprinkler pipe.
2. Plastic Pipe – UL/FM Listed CPVC fire sprinkler pipe.
3. Threaded Fittings: AnvilStar ductile iron Galvanized screwed, 125 lb class or equal.
4. Plastic Fittings: UL/FM Listed CPVC fittings.

B. Water Flow Indicator Switches:

1. Provide at locations where required and shown on plans.
2. Indicators shall be U/L and CSFM listed.
3. Manufacturer: Potter, Notifier or equal.

C. Electric Bell:

1. Provide at locations where required and shown on plans.
2. Notification device shall be U/L and CSFM listed.
3. Manufacturer: Potter, Notifier or equal.

D. Valve Tamper Switches:

1. Provide at locations where required and shown on drawings.

2. Indicators shall be U/L and CSFM listed.
3. Manufacturer: Potter, Notifier or equal.

E. Sprinkler Heads:

1. Manufacturer: Sprinkler heads shall be as shown on plans.
 - i. Finish: as indicated on plan.

3.1 EXECUTION:

A. Inspections:

1. System Acceptance shall be in conformance with 2022 NFPA #13, Chapter 24.
2. Witness: All tests shall be witnessed by the Inspector of Record. A minimum of 48 hours notice is required.

B. Installation:

1. Prior to fabrication, all building and piping measurements must be verified in the field.
2. Piping is to be installed in accordance with the approved fire sprinkler plans, any adjustments made for field conditions must be approved prior to proceeding with installation.
3. Signs: Furnish and install automatic sprinkler industry signs indicating location of control valves, drain valves and test valves.
4. Seismic bracing: Furnish and install earthquake protection for sprinkler system in accordance with 2022 NFPA #13.
5. Restraints: Furnish and install in accordance with 2022 NFPA #13.
6. Provide Operations and Maintenance Manuals in accordance with 2022 NFPA #13.

C. Adjusting and Cleaning:

1. Appurtenances and equipment shall be left in a clean, neat condition.
2. Adjust all timing devices in conjunction with the alarm contractor to assure proper operation. Actual field testing of timing switches shall be required.
3. Exposed piping shall be left in a clean and neat condition.

END OF SECTION #

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SECTION 22 00 00

PLUMBING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Related Documents:

1. The other Contract Documents complement the requirements of this Section and apply to this Section
2. Division 1 - General Requirements, General Mechanical Section 23 00 13 apply to the Work of this Section.
3. Where requirements of this Section exceed those in other Contract Documents, Contractor shall comply with the requirements of this Section.

B. Codes and Regulations:

1. California Plumbing Code (CPC).
2. California Mechanical Code (CMC).
3. California Building Code (CBC).
4. California Green Building Standards Code (CGBSC).
5. California Electrical Code (CEC).
6. California Fire Code (CFC).
7. National Fire Code (NFC).
8. National Fire Protection Association (NFPA).
9. Local Building Department.
10. Local Fire Marshal.
11. California Energy Commission.
12. In the event of conflict between or among specified requirements and pertinent regulations, the more stringent requirements will govern when so directed by the Architect.

C. Scope of Work: (Plumbing Section Division 22)

1. Material and labor including rough-in for and connection to fixtures, appliances and equipment are:
 - a. WASTE AND VENT
 1. Drain waste and vent piping (DWV)
 2. Indirect waste piping
 3. Floor drains.
 4. Traps.
 5. Vent flashings.

6. Insulation of piping for condensation, heat, sound, and vibration.
- b. WATER
1. Isolation, Zone and Control Valves.
 2. Hot water systems including heaters and storage tanks.
 3. Tempered water systems.
 4. Hot water circulating pumps.
 5. Piping for water service.
 6. Backflow preventers.
 7. Disinfecting of water systems.
 8. Insulation of piping and equipment for heat, sound, and vibration.
- c. KITCHEN AND LAUNDRY
1. Sinks and dishwashers.
 2. Washing machines, clothes dryers.
 3. Clothes dryer vents.
 4. All other equipment with piping connections including kitchen unit combinations.
- d. ALL PLUMBING FIXTURES AND SUPPORTS
1. Including, but not limited to:
 - (a) Sinks, lavatories, water closets, service sinks, etc., - all materials
 - (b) Shower pans, shower receptors, and shower stalls
 - (c) Supports (backing) for all plumbing fixtures and accessories.
 - (d) Installation of sinks in or part of drainboards - all materials
- e. FUEL GAS PIPING
1. Natural and manufactured gas distribution, meters, regulators and connections to all gas fired equipment.
- f. PIPE IDENTIFICATION – ASME 13.1-Refer to Section 23 00 13
- g. CONNECTIONS
1. Utilities-Sanitary sewer, water, gas
 2. Hot water tanks
 3. Temporary water, waste, and air lines
 4. The joining of pipe by any mode or method including, but not limited to, acetylene and arc welding, brazing, lead

burning, plastics welding, soldering, wiped joints, caulked joints expanded or rolled joints, etc., used in connection with any of the work listed herein.

h. LAYOUT AND CUTTING

1. Holes, chases, channels, the setting and erection of bolts, inserts, stands, brackets, stanchions, supports, sleeves, escutcheon plates, thimbles, hangers, conduits, and boxes.

i. EXCAVATION, TRENCHING AND BACKFILL

1. In connection with plumbing and piping work shown herein

j. TEMPORARY PIPING in connection with:

1. Building and construction work
2. Excavating and underground construction
3. Demolition work

k. PIPE HANGERS, SUPPORTS, ANCHORS, GUIDES, EXPANSION JOINTS

1. Including:

(a) Supports for equipment to which pipe is connected, such as tank supports

(b) Acoustical pipe isolation

(c) Isolators-dielectric and vibration

(d) Anchors and thrust blocks of concrete, metal, etc.

(e) Seismic bracing

(1) Anvil/Badger, Mason Industries, B-Line/TOLCO or approved equal.

(2) Seismic hanger system design shall comply with current CBC requirements and ASE 7-05 and 7-10.

l. SIGNS AND NOTICES

m. SHEET LEAD, FIBERGLASS AND/OR PLASTIC LINING FOR:

1. Shower stalls
2. Tanks, vats, sinks and troughs
3. Roof flashing for pipe

n. MECHANICAL EQUIPMENT-GAS FIRED

o. ROOF FLASHINGS FOR PIPING PENETRATIONS

p. TESTS

1. Piping, for tightness
2. Equipment for performance
3. Operating instructions

4. Final operation

1.2 ACCESSIBLE PLUMBING FIXTURES

- A. Accessible plumbing fixtures shall comply with all of the requirements of CBC Sections 11B-213, 11B-305, & 11B-308, & 11B-Division 6.

1.3 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this Section.
- B. Without additional cost to the Owner, provide such other labor and materials as are required to complete the Work of this Section in accordance with the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.
- C. Welder's Qualifications: Comply with ASME B31.8. The pipe welder shall have a copy of a certified ASME B31.8 qualification test report. Contractor shall also conduct a qualification test. Submit each welder's identification symbols, assigned number, or letter, used to identify work of the welder. Affix symbols immediately upon completion of welds. Welders making defective welds after passing a qualification test shall be given a requalification test and, upon failing to pass this test, shall not be permitted to work this contract.
- D. Comply with NSF 14, "Plastics Piping System Components and Related Materials," for plastic, potable domestic water piping and components. Include marking "NSF-pw" on piping.
- E. Comply with NSF 61, "Drinking Water System Components - Health Effects; Sections 1 through 9," for potable domestic water piping and components.
- F. Comply with NSF 372, "Drinking Water System Components – Lead Content" for potable domestic water piping and components.
- G. Surface-Burning Characteristics: For insulation and related materials, as determined by testing identical products listed and labeled in accordance with UL 723 or in accordance with ASTM E 84, by a testing and inspecting agency acceptable to authorities having jurisdiction. Factory label insulation and jacket materials and adhesive, mastic, tapes, and cement material containers, with appropriate markings of applicable testing agency.
 - 1. Insulation Installed Indoors: Flame-spread index of 25 or less, and smoke-developed index of 50 or less.
 - 2. Insulation Installed Outdoors: Flame-spread index of 75 or less, and smoke-developed index of 150 or less.

1.4 SUBMITTALS

- A. Comply with pertinent provisions of Architectural Division 1 Sections.
- B. If the water heating equipment is substituted with a different brand and energy factor than that specified on the Drawings, the Title 24 Energy Compliance Calculation may have to be re-run. This re-calculation is NOT to be considered

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a general CA Task and will be billed hourly (6 hr minimum) as an Additional Service at the current rate defined in Exhibit B for Senior Energy Analyst.

- C. Product Data: Within 35 calendar days after the Contractor has received the Notice to Proceed, submit 1 electronic PDF copy of the following to the Architect for approval prior to acquisition:
 - 1. Materials list of items proposed to be provided under this Section.
 - 2. Manufacturer's specifications, catalog cuts, and other data needed to prove compliance with the specified requirements. All pieces of equipment shall be clearly identified on corresponding manufacturer's literature being submitted.
 - 3. Shop Drawings or other data as required to indicate method of installing and attaching equipment, except where such details are fully shown on the Drawings.
 - 4. Submittals for the entire project shall be submitted at the same time or may be rejected until all are included in one submittal package.
 - 5. Submittals shall be provided electronically in PDF format, bookmarked by design tags for equipment and specification sections for materials. Incomplete or noncompliant submittals may be rejected.

1.5 DESIGN CHANGES CAUSED BY PRODUCT SUBSTITUTIONS

- A. The contractor shall pay the costs of design and installation for changes resulting from the substitution of alternate products.
- B. Acceptance of alternate products by Architect does not change this requirement.

1.6 PRODUCT HANDLING

- A. Comply with pertinent provisions of Architectural Sections.
- B. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

PART 2 - PRODUCTS

2.1 WASTE, VENT, SEWER

- A. Above and Below Grade:
 - 1. Schedule 40 Solid wall PVC plastic DWV pipe with solvent-cemented drainage pattern fittings complying with ASTM D 1785 - Latest Issue.
 - a. SCH. 40 Cellular Core PVC plastic DWV pipe with solvent-cemented drainage pattern fittings complying with ASTM D 4396 may be used at Contractor's option for vent piping. -Latest Issue.
 - 2. Schedule 40 Solid wall ABS plastic DWV pipe with solvent-cemented fittings complying with ASTM D-2661 - Latest Issue.
 - a. SCH. 40 Cellular Core ABS plastic DWV pipe with solvent-cemented drainage pattern fittings complying with ASTM D

3965 may be used at Contractor's option for vent piping. -Latest Issue.

B. Condensate (sized per CMC) and indirect waste drains

1. Type M Copper Water Tube ASTM B88 with wrought Copper solder fittings, ANSI-B16.22
2. PVC Schedule 40 Plastic Pipe and fittings, Solvent Cement Joints ASTM D 1785 or D2241. ASTM D2464, D2466 or D2467. For condensing furnaces and heating equipment only.

2.2 DOMESTIC WATER PIPING

A. Below Grade (Water Service)

1. 3" NPS and smaller, Schedule 40 PVC Plastic Pipe and fittings. ASTM D1785, D2466, with Solvent Cement Joints ASTM D2564.
2. 2" NPS and smaller, Type K Soft Annealed Temper Copper Tube ASTM B88 with Wrought Copper pressure fittings, ANSI B16.22. SIL-FOS - High temperature Brazing Metal Filler.

B. Above Grade (Distribution System)

1. Piping

- a. For soldered, brazed and mechanical joints, 4" and smaller Copper Water Tube Type L Annealed Temper (Hard Drawn) ASTM B75 or ASTM B88.

2. Fittings

- a. Wrought Copper Pressure Solder Fittings, ASME B16.22 or ASME B16-25, 95-5 Tin-Antimony Filler Metal.
- b. Bronze Flanges: ASME B16.24, Class 150, with solder-joint ends.
- c. Copper Unions: MSS SP-123, cast-copper alloy, hexagonal-stock body, with ball-and-socket, met-to-metal seating surfaces, and solder-joint or threaded ends.
- d. Press Fitting: Copper press fittings shall conform to the material and sizing requirements of ASME B16.18 or ASME B16.22. O-rings for copper press fittings shall be EPDM. Press fittings shall have an inboard bead design.
 1. Copper Press Fittings: Viega/Rigid Tool Company, NIBCO, Elkhart/Apollo Xpress or approved equal.
 2. 2"NPS and smaller: Wrought copper fitting with EPDM-rubber O-ring seal in each end.
 3. 2-1/2" to 4"NPS: Cast-bronze or wrought copper fitting with EPDM-rubber O-ring seal in each end.
- e. All underground water piping within the building boundaries shall be ASTM B88-93a Type "L" annealed (soft) copper tube made up without fittings below the floor level.

2.3 GAS PIPING

A. Below Ground

1. Schedule 40, Seamless, Black Steel Pipe, 2 1/2" and under ASTM A-120 with Malleable-Iron Threaded fittings ANSI-B16.3, Class 150. Pipe and fittings shall be coated and wrapped per IAPMO IS 13-91 or provide factory applied plastic coated pipe.
2. Schedule 40, Seamless Steel Pipe 3" and larger ASTM A-53 with Buttweld Steel fittings ASTM-A-234
3. Polyethylene (PE) Natural and Liquefied Petroleum Gas Yard Piping ASTM D2513 with Fusion Joints. Provide Steel Transition Risers and Detectable Warning Tape.

B. Above Ground

1. Schedule 40, Seamless Black Steel Pipe ASTM A 120 2 1/2" and smaller with Malleable Iron Threaded fittings ANSI B16.3 Class 150
 - a. Press fittings option (1/2-inch thru 2-inch)
 1. Viega, MegaPress G Fittings: 1/2-inch through 2-inch shall conform to ANSI LC4-2012 /CSA 6.32-2012 2nd Edition. MegaPress G fittings with zinc/nickel coating for use with IPS schedule 10 thru schedule 40 carbon steel, or galvanized pipe conforming to ASTM A53. MegaPress G fittings shall have an HNBR sealing element, 420 stainless steel grip ring, 304 stainless steel separator ring, and Smart Connect (SC) Feature.
 2. Schedule 40, Seamless Steel Pipe 3" and larger. ASTM A53 with Buttweld Steel fittings ASTM A 234

2.4 VALVES

- A. Acceptable Manufacturers: Victaulic Milwaukee, Hammond, Jomar, NIBCO, others as noted.

Type	Size Range	Part Number
Ball	2" and smaller (2 or 3 piece)	Milwaukee UPBA400 Hammond UP8301A NIBCO 585-80-LF Victaulic Series P569

Note: Stem extensions of non-thermal-conductive material and protective sleeve that meets UL 2043 approved for inside air plenum and allows operation of value without breaking the vapor sleeve shall be used on insulated pipe. NIBCO NIB-Seal handle or acceptable equal.

Check-Swing	2" and smaller	Milwaukee UP509 Hammond IB940 NIBCO 413Y
Check-Spring	2" and smaller	Milwaukee UP548T NIBCO 480Y-LF
Gas Cock	2" and smaller	Milwaukee BA475B Hammond 8901 NIBCO FP600

- c. Schedule 40 PVC or ABS DWV: Every 4 feet for all sizes. Provide for expansions every 30 feet.
- 2. Vertical:
 - a. Copper: Every floor not to exceed 10 feet.
 - b. Steel, Gas: Same as horizontal spacing except 1-1/4" and larger at every floor.
 - c. Schedule 40 PVC or ABS DWV: Base and every floor with mid-floor guides. Provide for expansion every 30 feet.
- F. Refer to the plumbing code for materials not listed above.
- G. At all points where insulated pipe contacts a hanger or support, the point of contact shall be protected by a metal insulation pipe shield #B3153 as manufactured by B-Line. Equivalent pipe protectors will be considered provided the substitute item meets the same standard of quality and performance as the specified item.
- H. Abrasion-Protection Isolators: Use for prevention of damage to tubes and piping caused by abrasion when passing through or in contact with studs, joists, and similar framing.
 - 1. Products:
 - a. HOLDRITE #200 Series Isolators and Clamps.
- I. Dissimilar Metal Isolators: Use for prevention of damage to tubes and pipes caused by contact between dissimilar metals.
 - 1. Products:
 - a. HOLDRITE #200 Series Isolators and Clamps.
- J. Acoustical Noise & Vibration Isolation System: Consisting of through-stud isolators, pipe clamps, riser clamp pads, neoprene and felt lining material and associated support brackets. For applications requiring acoustical isolation of tubing, piping, and equipment from structure.
 - 1. Products:
 - a. HOLDRITE Silencer System with HOLDRITE STOUT Bracket System.
- K. Seismic Restraint Devices
 - 1. Available Manufacturers:
 - a. Anvil/Badger
 - b. Mason Industries
 - c. B-Line Tolco Division of Eaton
 - 2. Seismic hanger system design shall meet the requirements of IBC, CBC and ASCE 7-05 and 7-10.

2.6 WALL AND FLOOR PENETRATIONS

- A. Fire walls and floors:

1. Wall and floor penetrations shall be protected with a U.L. approved fire rated system. The system shall be per the Drawing Details, or other manufacturer's installation instructions.
2. Fire stopping materials by Hilti, Metacaulk, or 3M are considered equal. The material shall be the same as called out for in the U.L. approved system.

B. Poured concrete walls and floors.

1. Pipes penetrating poured concrete walls and floors shall be protected by providing the following:
 - a. A Schedule 40 PVC sleeve one (1) size larger than the pipe or one quarter (1/4) inch of foam material wrapped around and secured to the pipe or packed and caulked with mineral wool.
 - b. Protection shall end flush with the wall or floor surface.

C. All walls and floors:

1. Piping passing through walls and floors exposed to view shall be provided with chrome plated split-ring escutcheon plates in finished areas. Brass or galvanized escutcheon plates may be used elsewhere.

2.7 FLASHING

- A. All flashing shall be 4 lb. sheet lead and all vents penetrating the roof shall be flashed and counter flashed. Stoneman Co. roof flashing assembly with 10" skirt or equal may be used.
- B. The flashing for vents penetrating a metal roof shall have a corrosion resistant aluminum base compatible with the roofing system. A rubber type flashing by "Tech Specialties" shall be installed between the flashing and pipe.
- C. Individual roof storm drain overflows shall be flashed with Stoneman lead overflow Series #700 assemblies or flashed per vent above.
- D. For single ply roofing, provide flashing per roofing manufacturer recommendations or installation instructions.

2.8 VALVE BOXES

- A. Brooks Products Inc., Christy Co., or equal with the word "Water" or "Gas" cast in cover as applicable.

2.9 CLEANOUTS

- A. Provide cleanouts per Drawings and details on Drawings. Cleanouts manufactured by J.R. Smith, Mifab, Sioux Chief, or Zurn are acceptable substitutes provided they are equal if approved by the Engineer.
- B. Cleanout tops to be installed with tamper-proof screws.

2.10 FLOOR DRAINS

- A. Provide floor drains as specified on the Plumbing Fixture Schedule. Cast iron body floor drains manufactured by J.R. Smith, Mifab, Sioux Chief, or Zurn are acceptable substitutes provided they are equal if approved by an Engineer.

2.11 WATER HAMMER ARRESTORS

- A. Provide Wilkins Piston Model #1250XL, Sioux Chief #65X-X, Precision Plumbing Products, or equal, as sized on the Drawings or required by PDI. Install per manufacturer's instructions.

2.12 AUTOMATIC TRAP PRIMERS

- A. Provide Precision Plumbing Products, J.R. Smith, Mifab, Sioux Chief, or Zurn as specified on the Drawings. Install per manufacturer's instructions.

2.13 PLUMBING FIXTURES

- A. Fixture locations, quantities, types, sizes and connections shall be as shown on both the Plumbing and Architectural Drawings. If a conflict in fixture location is noted between the Plumbing and Architectural Drawings, the Architectural Drawings shall take precedence.
- B. Fixtures shall be thoroughly protected against damage to the chrome plate or enamel, by chipping, scratching or other damage during the entire period of construction. Roof drains, floor sinks and drains, toilet and sink drains, plumbing vents, and all other similar fixtures shall be covered to prevent trash from entering the pipes until final installation of grates, domes, fixtures or other protective devices.
- C. Provide fixtures as specified in the Plumbing Fixture Schedule.
- D. Provide fixtures as specified in the County Facilities Standards.
- E. Stainless Steel lavatories or sinks: Just, Elkay, Advance Tabco, Haws, or Acorn are acceptable substitutes provided they are equal if approved by Engineer.
- F. Vitreous China fixtures: American Standard, Kohler, Mansfield, Sloan, Toto, or Zurn are acceptable substitutes provided they are equal if approved by Engineer.
- G. Fixture carrier numbers listed are specified on the Plumbing Schedule; however, carriers as manufactured by J.R. Smith, Mifab, or Zurn are acceptable provided they are equal.

2.14 CONNECTORS

- A. Provide Brass Craft "Speedway" or equal heavy pattern iron pipe size brass stops, rigid or flexible supplies and chrome plated brass "P" traps. Stops in "Public" areas to have screwdriver slots and those in "Private" areas to have all cross handles.
- B. Provide Brass Craft or equal flexible stainless steel braided water supplies to appliances. They may also be used to fixtures as an option to rigid supplies. Aquaflo is an acceptable substitute.
- C. Provide Brass Craft flexible or equal, stainless steel gas appliance connectors. Dormont is an acceptable substitute.

2.15 ACCESS BOXES

- A. See section 23 00 13 for access panels.

2.16 PRESSURE GAGES AND THERMOMETERS

- A. Provide Marsh Quality gages or equal with 3-1/2" dial, gage cock, in type required. For pump suction, provide compound type.
- B. Provide Trerice 7" BX or 3" Bimetal Dial series thermometers or equal, straight, angle, or oblique as required, equipped with separable sockets and well. Provide extension necks as required on insulated line.
- C. Arrange gauges and thermometers for easy reading.

2.17 PRESSURE REGULATORS AND BACKFLOW PREVENTORS

- A. Provide the pressure regulator(s) and backflow preventer(s) as specified on the drawings and/or as required by the governmental authority having jurisdiction.
- B. Pressure regulators and/or backflow preventers by Febco, Hersey, or Wilkins are considered equal when their pressure fall-off/loss is equal to or less than the specified regulators/preventer's loss for the given flow rate.
- C. Provide all potable water outlets with hose attachments with non-removable hose bibb backflow preventers per the C.P.C.

2.18 WATER HEATERS

- A. Provide water heaters as specified in Plumbing Schedule or approved equal of size, capacity, recovery, and KW/BTUH input. American, A.O. Smith, Lochinvar, and State are considered equal. Heater shall be A.G.A. or U.L. listed.
 - 1. Heater storage tank shall be provided with magnesium anodes, approved standard pressure/temperature relief valve and all standard factory trim.
 - 2. Gas heaters shall be provided with an A.G.A. approved 100% safety shut-off.
 - 3. Provide approved flexible copper supplies for the water heater water connections.
 - 4. Instantaneous tankless water heaters shall be with water flow activated switch to energize the electrical/gas power source, a safety high water temperature limit, and all standard factory trim.
- B. Provide an aluminum Smitty Pan Mfg. Co. overflow pan with 1" drain outlet or equal under water heater as specified on the drawings. Oatey, HOLDRITE, & Benjamin Mfg. Co are considered equal.

2.19 PRESSURE-TEMPERATURE RELIEF VALVE

- A. Pressure-temperature relief valve shall be Wilkins TP220, TP3000 series, or equal.
- B. Piping from valve to termination shall be Type L Copper, hard drawn with wrought copper pressure fittings and 95-5 tin antimony filler metal.

2.20 EXPANSION TANK

- A. Expansion tank shall be Wilkins XT series as specified on the Drawings or approved equal in size and capacity. Amtrol expansion tanks are considered equal.

2.21 WATER HEATER SEISMIC RESTRAINTS

- A. Seismic restraints shall be Watts Spacemaker restraint system Model E-50 or E-100 as applicable for the water heater specified. Spacemaker Model #TSE-25 or Seismik Model #SR-2 may be substituted when first approved by the Engineer.

2.22 PROTECTIVE INSULATION (ADA FIXTURES)

- A. Provide approved manufactured, molded antimicrobial vinyl protective pipe and fitting covering for exposed waste and drain assembly and for hot and cold water supplies and stops. Protective system shall consist of pre-formed pipe or tubing sleeve and pre-formed fitting patterns for trap and stops. Assembly shall have integral snap fasteners.
- B. Provide protective covering for off-set drain assembly and disposer at kitchen sinks.
- C. Foam pipe wrap, duct tape, baggy-type covers, tie-strap fasteners are not acceptable.
- D. Acceptable manufacturers:
 - 1. Oatey/Dearborn Brass "ADA"
 - 2. Truebro "Lav-Guard"
 - 3. Plumberex "Pro-Xtreme"
 - 4. Zurn #Z89XX-XX

2.23 INSULATION

- A. All pipe insulation shall conform to Section 123 of the California Energy Efficiency Standards except to the extent that this Specification supersedes the minimum standards as established by the Code, in which case this Specification shall take precedent. Outside insulation shall be protected with a hard plastic or metal shell covering.
- B. Insulation and lining material shall meet requirements of flame spread not to exceed 25 and smoke developed not to exceed 50 as tested by Procedure ASTM-E-84, NFPA 255 or U.L. 723 and shall conform to NFPA 90A and 90B.
- C. Interior primary condensate piping shall be insulated with Armacell AP/Armaflex tube insulation with reinforced lap seal or approved equal.
- D. Domestic cold water piping shall be insulated with a minimum 1" insulation in unheated areas of the building and where exposed outside of the building.
- E. Domestic hot water piping shall be insulated with Owens-Corning Fiberglass or Armacell heavy density pipe insulation 25 ASJ/SSL-II (All Service Jacket/Double/ Self-Sealing Lap). Insulation shall be UL rated non-combustible pipe insulation with a k factor of 0.24-0.28 @ 100 degrees F. mean temperature, an embossed vapor barrier laminated and pressure sealing lap adhesive. All lap and butt strips shall have integral pressure-sensitive strips and shall be applied in strict accordance with manufacturer's instructions.
 - 1. Closed cell polyethylene foam by IMCOA or equal may be used at Contractor's option provided it meets the above requirements.

F. Insulation thickness' shown below are based on insulation having a conductivity range of 0.22 to 0.28 per BTU/inch per hour per square foot per °F temperature of 100 degrees F.

1. Temperature Range: Above 105°F-140°F

Pipe Size	Minimum Insulation Wall Thickness
1" and less	1.0"
1.25"	1.5"
1.5"	1.5"
2" or more	2.0"

G. Insulation materials not meeting the specified conductivity range shall be submitted for approval and determination of the insulation thickness required.

2.24 CIRCULATION PUMP: (DOMESTIC)

A. Provide pump(s) per schedule. Bell and Gossett, Grundfos, Laing, Xylem, or Taco are considered equal.

PART 3 - EXECUTION

3.1 GENERAL CONDITIONS

- A. Examine the areas and conditions under which Work of this Section will be performed. Conditions detrimental to timely and proper completion of the Work shall be brought to the attention of the Architect before the installation of materials. Do not proceed until unsatisfactory conditions are corrected. Incorrectly installed materials requiring changes will be at Contractor's expense.
- B. All plumbing fixtures, appliances, and appurtenances furnished with manufacturer's installation instructions shall be installed per those instructions.

3.2 PLUMBING SYSTEM LAYOUT

- A. Lay out the plumbing system in careful coordination with the Drawings. Determine proper elevations for all components of the system and use only the minimum number of bends to produce a satisfactorily functioning system.
- B. Follow the general layout shown on the Drawings in all cases except where other Work may interfere.
- C. Lay out pipes to fall within partitions, walls, or roof cavities, and to not require furring other than as shown on the Drawings.

3.3 PIPING INSTALLATION

- A. Pipe sizes as shown on drawings are Nominal Pipe Size (NPS) or Iron Pipe Size (IPS). Drawings and fixture schedule indicate pipe sizing per the CPC and Standard Engineering Practice. Pipe sizes shall be maintained to fixtures, appliances and equipment. Approved reducing fittings shall be installed at all points of connections.
- B. Install piping generally square with building, free of traps or air pockets, and true to line and grade. Keep all piping tight to the building structure, unless pipe

slope is required. Do not install piping in any locations where, in the Architect's opinion, it will interfere with the use of the building or create a safety hazard. Where space is inadequate, notify the Architect in time to avoid unnecessary Work. Install all exposed piping as high as possible without interfering with other trades.

- C. Make changes in direction with manufactured fittings; use long radius elbows. Street elbows, bushings, close nipples and bending of pipe or tubing will not be allowed.
- D. Provide "P" traps at sanitary sewer drainage devices without integral traps.
- E. All natural gas piping under structures or concrete slabs will be installed in a protective vent sleeve. Sleeves under a building will be vented to outside the building per detail on Plans. Sleeves under concrete slabs will extend a minimum of 1 foot beyond the slab. All sleeves will be sloped 1/8" per foot up toward the vented end. The vent end of sleeves under slabs will terminate under a landscaped or asphalted area.
- F. Gas piping shall be tapped off the top or side of pipe and ends of mains shall be provided with dirt legs.
- G. Gas press fittings
 - 1. Viega, Mega Press G Systems: Sealing elements shall be verified for the intended use. Pipe ends shall be cut on a right angle (square) to the pipe. Pipe ends shall be reamed chamfered and all paint, lacquer, grease, oil or dirt shall be removed from the pipe end with an abrasive cloth, or with the Ridgid MegaPress pipe end prep tool. Visually examine the fitting sealing element to ensure there is no damage. Utilizing a Viega MegaPress Insertion Depth Inspection Gauge mark the tube wall, with a felt tip pen, at the appropriate location, or insert the pipe fully into the fitting and mark the pipe wall at the face of the fitting. Always examine the pipe to ensure it is fully inserted into the fitting prior to pressing the joint. MegaPress G fittings shall be installed using Ridgid, MegaPress Tools. MegaPress G fittings shall be installed according to the most current edition of the Viega installation guidelines. Installers shall attend a Viega MegaPress installation training class.
- H. Underground plastic pipe will horizontally transition to metal pipe 5 feet before the above ground riser. Install plastic pipe with a minimum of 36" of cover when located under areas of possible vehicle traffic. Approved metallic pipe must be used if the minimum depth is not met. A tracer wire, terminating at each end at an exposed location, will be installed with all underground plastic pipe. Gas piping will also have a continuous tape marked "Gas" laid 6" above it.
 - 1. Piping may terminate a maximum of one foot above ground when encased in a listed metallic transition riser.
- I. Use friction wrenches when installing brass, polished, or soft metal piping, and when installing piping exposed in finished areas. Replace piping showing wrench marks.
- J. Attach escutcheon plates to pipes with set screws or spring clamps with concealed hinges. Continue insulation through escutcheon plates.

K. General:

1. Proceed as rapidly as the building construction will permit.
2. Thoroughly clean items before installation. Cap pipe openings to exclude dirt until fixtures are installed and final connections have been made.
3. Cut pipe accurately, and work into place without springing or forcing, properly clearing windows, doors, and other openings. Excessive cutting or other weakening of the building will not be permitted.
4. Show no tool marks or threads on exposed plated, polished, or enameled connections from fixtures. Tape all finished surfaces to prevent damage during construction.
5. Provide sufficient swing joints, ball joints, expansion loops, and devices necessary for a flexible piping system, whether or not shown on the Drawings.
6. Support piping independently at pumps, coils, tanks, and similar locations, so that weight of pipe will not be supported by the equipment. Support the equipment independently from the pipe.
7. Pipe the drains from mechanical equipment, drip pans, relief valves, air vents and similar locations, to an open sight drain, floor drain, or other acceptable discharge point, and terminate with an air break or air gap per C.P.C.
8. Securely bolt all equipment, isolators, hangers, and similar items in place.

3.4 IDENTIFICATION OF PIPING SYSTEMS

- A. Use pipe material compatible pipe labels and markers.

3.5 HANGER AND PIPE SUPPORT INSTALLATION

- A. Support pipes from structure with assemblies specified. Provide auxiliary members, anchors, guides, and sway braces necessary to maintain pipe alignment and prevent excessive movement or strain on piping system or components; allow for expansion and contraction of piping. Provide at least one hanger for each branch. Do not use powder driven fasteners, wire, perforated tape, nails, wood blocking, or other makeshift devices to support pipe.
- B. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- C. Isolate piping systems from building structure to minimize noise transfer by using acoustical suspension isolator silencer and bracket system.
- D. Protect tubing and piping from damage caused by abrasion when passing through studs, joists, and similar framing using abrasion protection isolators.
- E. Penetration Protection: Provide allowance for thermal expansion and contraction of copper tubing passing through a wall, floor, ceiling or partition by wrapping with an approved tape or pipe insulation, or by installing through an

appropriately sized sleeve. Penetrations of fire resistance rated assemblies shall maintain the rating of the assembly.

- F. In plenum-rated applications, use tested clamp and isolator support systems designed specifically for this application.
- G. Prevent damage to piping and tubing caused by contact between dissimilar metals using insert system designed specifically for this application.
- H. Attach supports to structure with bolts, screws or concrete anchors, per support manufacturer's requirements.
- I. Use pipe positioning systems in pipe spaces behind plumbing fixtures to support supply and waste piping for plumbing fixtures.

3.6 JOINTS AND CONNECTIONS

- A. Cut pipe shall be reamed to full inside diameter of pipe. Cut threads straight and true. Ensure all filings have been removed from inside of the pipe. Apply liquid Teflon to male pipe threads and not inside fittings. Use graphite on cleanout plug threads.
- B. Joints in copper tube shall be made with 95-5 tin-antimony or lead-free solder, applied in strict accordance with the manufacturer's directions.
- C. Dissimilar metals shall be isolated with dielectric couplings, "EPCO" or approved equal. Dielectric Waterway Fittings shall be UL classified in accordance with ANSI / NSF-61 for potable water service, Victaulic Style 647. Provide access panels at all hidden couplings.
- D. All plastic pipe shall be joined in accordance with the manufacturer's recommendations for their pipe and IAPMO Installation Standard per the latest edition of the C.P.C.
- E. Press Connections: Copper press fittings shall be made in accordance with the manufacturer's installation instructions. The tubing shall be fully inserted into the fitting and the tubing marked at the shoulder of the fitting. The fitting alignment shall be checked against the mark on the tubing to assure the tubing is fully engaged (inserted) in the fitting. The joints shall be pressed using the tool approved by the manufacturer.
- F. Pipe Protection: Provide protection against abrasion where copper tubing is in contact with other building members by wrapping with an approved tape, pipe insulation or otherwise suitable method of isolation.
- G. Penetration Protection: Provide allowance for thermal expansion and contraction of copper tubing passing through a wall, floor, ceiling or partition by wrapping with an approved tape or pipe insulation, or by installing through an appropriately sized sleeve. Penetrations of fire resistance rated assemblies shall maintain the rating of the assembly.

3.7 SANITARY SEWER, VENT AND INDIRECT WASTE SYSTEM INSTALLATION

- A. Install horizontal drainage piping at a minimum 2%, condensate 1%, slope unless otherwise noted. Where this is impractical notify the Architect before installing the pipes.
- B. Install vent piping to drain back into the sewer system.

- C. Provide cleanouts where shown on Drawings and where required by governmental agencies having jurisdiction.
 - 1. All cleanouts to grade shall be firmly secured by means of a concrete block 20" square by 5" thick, and shall be flush with finished grade, unless otherwise noted on the plans.
- D. Provide automatic trap primers as specified at floor sinks and drains as indicated on Drawings or where required by governmental agencies having jurisdiction. Provide access panels for all hidden mechanical trap primers.

3.8 VALVE INSTALLATION

- A. Provide valves in the water systems. Locate and arrange to provide complete regulation of apparatus, equipment, and fixtures.
- B. Provide valves in at least the following locations:
 - 1. In branches and/or headers of water piping serving a group of fixtures.
 - 2. On both sides of apparatus and equipment.
 - 3. For shutoff of risers and branch mains.
 - 4. For flushing and sterilizing the system.
 - 5. Where shown on the Drawings.
- C. Locate valves for easy accessibility and maintenance. Provide access panels for all hidden valves.
- D. Unions shall be installed downstream of all screwed valves.
- E. All gas pressure regulating valves shall be vented to the atmosphere.

3.9 WATER HAMMER ARRESTOR INSTALLATION

- A. Provide water hammer arrestor on hot and cold water lines.
 - 1. Install at all quick closing valves, solenoids, and supply headers at plumbing fixture groups.
 - 2. Locate and size as shown on Drawings, and where not shown, locate in accordance with Plumbing and Drainage Institute Standard WH-201.
 - 3. Install water hammer arrestor behind access panels.

3.10 BACKFLOW PREVENTION INSTALLATION

- A. Protect plumbing fixtures, faucets, hose connections, and other equipment having plumbing connection, against possible back-siphonage.
- B. Arrange for testing of backflow devices as required by the governmental agencies having jurisdiction.

3.11 PLUMBING FIXTURE INSTALLATION

- A. Connect plumbing services to fixtures as shown on Drawings and as specified.
- B. Install compression stops and flexible supplies per fixture manufacturer's recommendation or as high as possible on wall directly below fixtures.

- C. Install fixtures at right angles to, and tightly against, building surfaces, and in proper alignment. Fill gaps between fixtures and building surfaces with white grout. Mounting heights and locations shall be as shown on the Drawings, or, if not shown, as directed by the Architect.

3.12 INSULATION INSTALLATION

- A. Clean and dry surfaces prior to application of insulation or adhesives.
- B. Insulate piping, fittings, valves, and strainers. Leave unions exposed. Where insulation terminates, bevel ends of insulation and continue jacket over insulation and secure to pipe. Do not interrupt insulation at hangers, supports, clamps, or penetrations through structure. Fittings shall be finished with "Zeston" or approved equal fitting closures. If fitting closures not available, use 8 oz. canvas dipped in "Seal-Fas".
- C. Attach longitudinal jacket laps and butt strips with factory applied pressure sensitive adhesive. On concealed piping only, outward clinching coated staples at two inch spacing may be used. Cover elbows with one piece polyvinyl chloride covers. Secure with tack fasteners. Tape ends of covers with matching tape on exposed piping. Seal off all cut ends with canvas and Benjamin Foster 30-36.
- D. Install closed cell polyethylene foam per manufacturer's instructions.
- E. Insulate traps and trap arms on floor sinks located above slab receiving discharge from ice machines and soda dispensers with 1/2" insulation.
- F. Insulate primary condensate piping located within return air plenums with 1/2" wall thickness.

3.13 TESTING AND ADJUSTING

- A. Provide personnel and equipment, and arrange for and pay the costs of, all required tests and inspections required by governmental agencies having jurisdiction. See Section 23 00 13 for test requirements.
- B. Where tests show materials or workmanship to be deficient, replace or repair as necessary, and repeat the tests until the specified standards are achieved.
- C. Gas press fittings: Test per manufacturer's installation instructions.
 - 1. After MegaPress G fittings have been installed a "two step test" shall be followed. Utilizing air, or dry nitrogen, pressurize the system between .5 psi and 45 psi. Check the pressure gauge for pressure loss. If the system does not hold pressure, walk the system and check for un-pressed fittings. Should you identify an un-pressed fitting/s ensure the pipe is fully inserted into the fitting and properly marked prior to pressing the joint. After appropriate repairs have been made, test the system per local code, or specification requirements, not to exceed 200 psig.
- D. Adjust the system to optimum standards of operation.

3.14 CLEANING (For potable water systems.)

- A. Disinfection: The copper hot and cold water distribution system shall be disinfected prior to being placed in service. The system shall be disinfected in accordance with AWWA C651 or the following requirements:

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1. The piping system shall be flushed with potable water until discolored water does not appear at any of the outlets.
2. The system shall be filled with a water chlorine solution containing at least 50 parts per million of chlorine. The system shall be valved off and allowed to stand for 24 hours. Or, the system shall be filled with a water chlorine solution containing at least 200 parts per million of chlorine. The system shall be valved off and allowed to stand for 3 hours.
3. Following the standing time, the system shall be flushed with water until the chlorine is purged from the system.
4. Provide bacteriological sampling and analysis results to the Engineer for review.

3.15 WARRANTY

- A. The contractor shall warranty all systems for proper operation installed by the contractor for not less than one calendar year from date of project completion. This completion date shall be set by the Architect or owner.

END OF SECTION 22 00 00

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SECTION 22 41 00 - RESIDENTIAL PLUMBING FIXTURES

SECTION 22 41 00 - RESIDENTIAL PLUMBING FIXTURES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Lavatories.
 2. Lavatory faucets.
 3. Showers.
 4. Shower faucets.
 5. Kitchen sinks.
 6. Sink faucets.
 7. Water closets.
 8. Toilet seats.
 9. Supply fittings.
 10. Waste fittings.
 11. Grout.

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.01 GENERAL REQUIREMENTS

2.02 LAVATORIES - COUNTER MOUNTED

- A. Vitreous-China Lavatories <Refer to Sheet A-111> :
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Kohler Co.
 - b. Ruvati.
 2. Fixture:
 - a. ASME A112.19.2/CSA B45.1 for vitreous-china lavatories.
 - b. Product: Kohler Farmington Centerhole Drop in Sink
 - c. Type: Drop in .
 - d. Oval Nominal Size: 16 by 11in.
 - e. Faucet-Hole Punching: One hole .
 - f. Color: White
 3. Fixture:
 - a. Standard:
 - 1) ASME A112.19.2/CSA B45.1 for vitreous-china lavatories.
 - 2) Product: Ruvati Epigranite 16" Undermount Single Basin Sink
 - 3) Type: Undermount, with Flat Rim
 - 4) Rectangle Nominal Size: 19 by 16in.
 - 5) Faucet-Hole Punching: One hole
 - 6) Color: White.

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2.03 LAVATORY FAUCETS

- A. NSF Standard: Comply with NSF 61 and NSF 372 for faucet materials that will be in contact with potable water.
- B. General-Duty, Copper- or Brass-Underbody Faucets :
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Whitehall Manufacturing.
- C. Description: Include hot- and cold-water indicators; coordinate faucet inlets with supplies and fixture holes; coordinate outlet with spout and fixture receptor.
- D. Product: BestCare Ligature-Resistant Single Temperature Sensor Activated Faucet
- E. Model Number: WH3375-SO
- F. Accessibility Requirements: For all lavatory fixtures, comply with the USDOJ's "2010 ADA Standards for Accessible Design" and California Building Code.
- G. Ligature Resistant Requirements: All lavatory fixtures must be ligature resistant.
- H. Standard: ASME A112.18.1/CSA B125.1.
- I. Body Material: General duty, solid brass.
- J. Finish: Polished chrome plate.
- K. Maximum Flow Rate: 0.5 gpm.
- L. Centers: Refer to plumbing drawings.
- M. Mounting: Back/wall, concealed.
- N. Valve Handle(s): Lever.
- O. Inlet(s): NPS 3/8 tubing, with NPS 1/2 male adaptor.
- P. Spout: Rigid.
- Q. Operation: Compression, manual.
- R. Drain: Pop up.

2.04 SHOWER FAUCETS

- A. NSF Standard: Comply with NSF 61 and NSF 372 for faucet materials that will be in contact with potable water.
- B. Single-Handle, Thermostatic Faucets :

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1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Acorn Engineering.
 - b. Whitehall Manufacturing.

C. Fixture:

1. Description: Include hot- and cold-water indicators, check stops, and handheld head complying with ASSE 1014 with arm, flange, hose, and bracket. Coordinate faucet inlets with supplies.
2. Accessibility Requirements: For all shower fixtures, comply with the USDOJ's "2010 ADA Standards for Accessible Design" and California Building Code.
3. Ligature Resistant Requirements: All shower fixtures must be ligature resistant.
4. Standard: ASME A112.18.1/CSA B125.1 and ASSE 1016.
5. Body Material: Solid brass.
6. Finish: Polished chrome plate.
7. Maximum Flow Rate: 2.5 gpm unless otherwise indicated.
8. Mounting: Refer to plumbing drawings.
9. Backflow-Prevention Device for Handheld Shower: Required .
10. Operation: Compression, manual .
11. Antiscald Device: Integral with mixing valve .
12. Check Stops: Check-valve type, integral with or attached to body; on hot- and cold-water supply connections.

D. Supply Connections: NPS 1/2 .

E. Shower Head:

1. Type: Without ball joint .
2. Shower Head Material: Metallic with chrome-plated finish.
3. Spray Pattern: Fixed .
4. Integral Volume Control: Not required.
5. Shower-Arm, Flow-Control Fitting: 1.5 gpm.
6. Refer to plumbing.

2.05 **KITCHEN SINKS**

A. Stainless Steel Kitchen Sink, Counter Mounted <Refer to Sheet A-11 and Plumbing Sheets> :

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Ruvati USA.

B. Fixture:

1. ASME A112.19.3/CSA B45.4 for stainless steel kitchen sinks.
2. Product: Ruvati Urbana 36" Double Bowl Undermount Sink
3. Model Number: RVH7417
4. Overall Dimensions: 36 by 19in .
5. Metal Thickness: 16 Gauge .
6. Left Bowl:
 - a. Dimensions: 20 by 17in .
 - b. Drain: 3-1/2-inch basket strainer.

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- 1) Location: Near back of bowl .
7. Right Bowl:
 - a. Dimensions: 13 by 17in .
 - b. Drain: 3-1/2-inch basket strainer.
 - 1) Location: Near back of bowl .
- C. Faucet: Kraus Bolden Commercial Style Pulldown Kitchen Faucet . See 2.06.
- D. Supply Fittings: Comply with requirements in "Supply Fittings" Article.
- E. Waste Fittings: Comply with requirements in "Waste Fittings" Article, except include continuous waste for multibowl sinks.
 1. Disposer: Refer to plumbing drawings.
 2. Hot-Water Dispenser: Refer to plumbing drawings .

2.06 SINK FAUCETS

- A. NSF Standard: Comply with NSF 61 and NSF 372 for faucet materials that will be in contact with potable water.
- B. General-Duty, Solid-Brass Faucets :
 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Kraus.
 2. Refer to plumbing.

2.07 WATER CLOSETS

- A. Water Closets A-111 : Floor mounted, floor outlet, close coupled (gravity tank), vitreous china, 1.28 gal./flush .
 1. Refer to plumbing.
 2. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Whitehall Manufacturing.
 3. Bowl:
 - a. Standards: ASME A112.19.2/CSA B45.1, ASME A112.19.5/CSA B45.15, and ASSE 1037/ASME A112.1060/CSA B125.16.
 - b. Bowl Type: Siphon jet .
 - c. Height: Standard Handicapped/elderly.
 - d. Rim Contour: Elongated .
 - e. Water Consumption: Water saving .
 - f. Color: White .
 4. Toilet Seat: See 2.08 .
 5. Supply Fittings:
 - a. Standard: ASME A112.18.1/CSA B125.1.
 - b. Supply Piping: Refer to plumbing.
 - c. Stop: Refer to plumbing.
 - d. Riser: Refer to plumbing.

2.08 TOILET SEATS

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- A. Refer to plumbing.
- B. Toilet Seats :
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. Whitehall Manufacturing.
 - 2. Standard: IAPMO Z124.5/ANSI Z124.5.
 - 3. Material: Plastic.
 - 4. Product: BestCare Ligature-Resistant Toilet Seat Cover
 - 5. Model Number: WH-LRSC
 - 6. Type: Residential.
 - 7. Shape: Elongated rim (Closed front).
 - 8. Configuration: Closed front with cover.
 - 9. Size: Elongated .
 - 10. Hinge Type: Self-sustaining, check .
 - 11. Hinge Material: Non Corroding metal .
 - 12. Seat Cover: Required.
 - 13. Color: White.

2.09 **SUPPLY FITTINGS**

- A. NSF Standard: Comply with NSF 61 and NSF 372 for faucet materials that will be in contact with potable water.
- B. Standard: ASME A112.18.1/CSA B125.1.
- C. Bidet Lavatory Bar Sink Kitchen Sink and Laundry Tray Supply Fittings:
 - 1. Refer to plumbing for Supply Piping, Stops, and Risers.

2.10 **WASTE FITTINGS**

- A. Standard: ASME A112.18.2/CSA B125.2.
- B. Drain: Refer to plumbing.
- C. Trap: Refer to plumbing.

2.11 **GROUT**

- A. Standard: ASTM C1107/C1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- B. Characteristics: Nonshrink; recommended for interior and exterior applications.
- C. Design Mix: 5000 psi, 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

PART 3 - EXECUTION

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3.01 INSTALLATION OF RESIDENTIAL PLUMBING FIXTURES

- A. Install plumbing fixtures level and plumb in accordance with roughing-in drawings.
- B. Install floor-mounted water closets on closet flange attachments to drainage piping.
- C. Install counter-mounting fixtures in and attached to casework.
- D. Install pedestal lavatories on pedestals and secured to wood blocking in wall.
- E. Install water-supply piping with stop on each supply to each fixture to be connected to water distribution piping. Attach supplies to supports or substrate within pipe spaces behind fixtures. Install stops in locations where they can be easily reached for operation.
 - 1. Use ball or gate valves if supply stops are not specified with fixture. Comply with valve requirements specified in Section 22 05 23.12 "Ball Valves for Plumbing Piping" and Section 22 05 23.15 "Gate Valves for Plumbing Piping."
- F. Install tanks for accessible, tank-type water closets with lever handle mounted on wide side of compartment.
- G. Install toilet seats on water closets.
- H. Install faucet flow-control fittings with specified flow rates and patterns in faucet spouts if faucets are not available with required rates and patterns. Include adapters if required.
- I. Install shower flow-control fittings with specified maximum flow rates in shower arms.
- J. Install traps on fixture outlets.
 - 1. Omit trap on fixtures with integral traps.
 - 2. Omit trap on indirect wastes unless otherwise indicated.
- K. Install disposer in outlet of each sink indicated to have a disposer. Install switch where indicated or in wall adjacent to sink if location is not indicated.
- L. Install hot-water dispensers in back top surface of sink or in countertop with spout over sink.
- M. Set shower receptors in leveling bed of cement grout.
- N. Install protective shielding pipe covers and enclosures on exposed supplies and waste piping of accessible lavatories sinks. Comply with requirements in Section 22 07 19 "Plumbing Piping Insulation."
- O. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings. Comply with escutcheon requirements specified in Section 22 05 00 "Common Work Results for Plumbing."

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- P. Seal joints between plumbing fixtures, counters, floors, and walls using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Comply with sealant requirements specified in Section 07 92 00 "Joint Sealants."

3.02 PIPING CONNECTIONS

- A. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
- B. Comply with water piping requirements specified in Section 22 11 16 "Domestic Water Piping."
- C. Comply with soil and waste piping requirements specified in Section 22 13 16 "Sanitary Waste and Vent Piping."
- D. Install protective shielding pipe covers and enclosures on exposed supplies and waste piping of accessible lavatories sinks. Comply with requirements in Section 22 07 19 "Plumbing Piping Insulation."

3.03 ADJUSTING

- A. Operate and adjust plumbing fixtures and controls. Replace damaged and malfunctioning fixtures, fittings, and controls.
- B. Adjust water pressure at faucets to produce proper flow.

3.04 CLEANING AND PROTECTION

- A. After completing installation of plumbing fixtures, inspect and repair damaged finishes.
- B. Clean plumbing fixtures, faucets, and other fittings with manufacturers' recommended cleaning methods and materials.
- C. Provide protective covering for installed plumbing fixtures and fittings.
- D. Do not allow use of plumbing fixtures for temporary facilities unless approved in writing by Owner.

END OF SECTION 22 41 00

SECTION 23 00 00
HEATING, VENTILATION, AND AIR CONDITIONING

PART 1 - GENERAL

1.1 DESCRIPTION:

A. Related Documents:

1. The other Contract Documents complement the requirements of this Section and apply to this Section.
2. Division 1 - General Requirements and Section 23 00 13 and apply to the Work of this Section.
3. Where the requirements of the Section exceed those in other Contract Documents, Contractor shall comply with the requirements of this Section.

B. Codes and Regulations:

1. In addition to complying with the specified requirements, comply with pertinent regulations of governmental agencies having jurisdiction.
2. In the event of conflict between or among specified requirements and pertinent regulations, the more stringent requirements will govern when so directed by the Architect.

C. Included: Work includes, but is not necessarily limited to, the following.

1. The Work covered by this Specification shall include furnishing labor, material, equipment and services to construct, install and place in operation, the complete Heating, Ventilating and Air Conditioning Systems to the extent as indicated, and as shown on the Drawings and specified herein. The Work covered under this Section shall hereinafter be referred to as the Mechanical System.

2. A system of temperature controls shall be furnished and installed complete as hereinafter described. Low voltage wiring and conduit, complete with electrical accessories and materials as required for the installation of the temperature control system shall be furnished and installed under this Section of the Contract but shall conform to the Specification requirements as set forth under Division 26.

3. Fan Coil Units, VRF / Common Split Systems
4. Heat Pump Condensing Units
5. Cooling Coils
6. Centrifugal Exhaust Fans and Roof Exhausters
7. Supply, return, and exhaust duct systems complete with grilles, registers and diffusers.
8. Filter and Filter Boxes
9. Duct, Pipe and Equipment Insulation
10. Space Temperature Controls
11. Refrigerant Piping

12. Vibration Isolators

D. Work Not Included In This Section:

1. Blocking, framing, and wood supports required for the purpose of accommodating the Mechanical System unless specifically called for under this Division. The contractor is responsible for the correct location of such items and shall bear the expenses covering their omission or improper location.
2. Electrical connections to motors, electric starters, disconnect and over-current protective devices, unless specifically called for by this Section, or unless the equipment is furnished as an integral part of the Mechanical System Equipment, as hereinafter specified or noted on the Drawings.
3. Line voltage electrical wiring and conduit, except where specifically called for on the Drawings or hereinafter in this Section.
4. Painting, except when supplied as factory finish, or specifically called for in this Section or on Drawings.

1.2 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this Section.
- B. Without additional cost to the Owner, provide such other labor and materials as are required to complete the Work of this Section in accordance with the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.

1.3 SUBMITTALS

- A. If the heating and/or air conditioning units are substituted with a different brand than that specified on the Drawings, the Title 24 Energy Compliance Calculation may have to be re-run. This re-calculation is NOT to be considered a general CA Task and will be billed hourly (6 hr minimum) as an Additional Service at the current rate defined in Exhibit B for Senior Energy Analyst.
- B. Comply with pertinent provisions of Architectural Section.
- C. Product data: Within 35 calendar days after the Contractor has received the Owner's Notice to Proceed, submit 6 copies of the following to the Architect for approval prior to acquisition:
 1. Materials list of items proposed to be provided under this Section including, but not limited to heating, ventilating and air conditioning equipment and mountings, air distribution equipment, ductwork and fittings, flexible ductwork, flue vent pipe, duct specialties, flexible connections, insulation, lining and adhesive, duct joint sealer, temperature controls, piping and accessories.
 2. Manufacturer's specifications, catalog cuts, and other data needed to prove compliance with the specified requirements. All pieces of equipment shall be clearly identified on corresponding manufacturer's literature being submitted.
 3. Shop Drawings or other data as required to indicate method of installing and attaching equipment, except where such details are fully shown on the Drawings.
 4. Submittals for entire Project shall be submitted at the same time or may be rejected until all are included in one submittal package.

5. Submittals shall be provided electronically in PDF format, bookmarked by design tags for equipment and specification sections for materials. Alternatively, hard copies will be accepted if 6 copies are provided, bookmarked as previously noted and bound together separately in three-hole folders or three ring binders.

1.4 DESIGN CHANGES CAUSED BY PRODUCT SUBSTITUTIONS

A. Contractor shall pay costs of design and installation for changes resulting from substitution of alternate products.

B. Acceptance of alternate products by Architect does not change this requirement.

1.5 PRODUCT HANDLING

A. Comply with pertinent provisions of Architectural Sections.

PART 2 - PRODUCTS

2.1 HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT

A. Heating, Ventilating, and Air Conditioning Equipment: Equipment shall be as specified on the Drawings. All other equipment shall be pre-approved by the Mechanical Engineer.

B. It shall be the responsibility of the Contractor to see that any substituted equipment performs similarly to that which is specified and fits in the same area as specified. Cost of any additional Work caused by the substitution of equipment shall be borne by the Contractor.

2.2 AIR DISTRIBUTION EQUIPMENT

A. Grilles, registers and ceiling diffusers and other accessory equipment shown on the Drawings and "Grille, Register and Diffuser Schedule" shall be manufactured by Titus unless shown otherwise.

B. Any substitutions of the above equipment which may be proposed by the Contractor shall be re-sized to suit his equipment by the proposed manufacturer and submitted in tabular form listing components proposed for each location in the System, identifying each as to location, design, air quantity passing through the devices, pressure drop, noise criteria data, velocities of air leaving the device and "K" flow factors for each item. Manufacturer's data sheets showing dimensions and recommended method of installation for each component must also be included.

2.3 CONTROL DAMPERS

A. General Use: Provide Greenheck model VCD-23, class 1 @ 4"wg as scheduled on plans. Damper frame shall be galvanized steel, formed into a 5" X 1" structural hat channel. Blades shall be 16 gauge galvanized steel strengthened by three longitudinal 1" deep Vee grooves running the entire length of each blade. Blade seals shall be TPE. Jamb to be flexible stainless steel compression type. The Linkage shall be concealed in the frame out of the air stream, plated steel material. The Axle shall be plated steel material. Axle Bearings to be synthetic. Finish shall be Hi-Pro polyester power coat.

2.4 LOUVERS

A. 4" deep louvers, Greenheck, Model ESJ-401, or approved equal. Deflection blades shall be spaced on 4" centers having 1/2" high vertical baffle and an additional lateral center rain hood. The edges of louver blades shall be folded or beaded to exclude driving rain. Louvers blades shall be oriented to minimize the entrainment of rainwater. Louver blades, heads, sills, jambs, braces and mullions shall be made of aluminum. Louvers shall be provided with flanges.

B. Provide 1/2" aluminum bird screen on outside air intake louvers and 1/4" aluminum insect screen on combustion air louvers.

2.5 RECTANGULAR SHEET METAL DUCTWORK

A. Rectangular supply, return, outside air and exhaust ducts, single leaf dampers and plenums shall be fabricated from prime grade galvanized steel sheets of lock form quality and shall be constructed in accordance with appropriate tables of the latest ASHRAE "Guide and Data Book" and SMACNA "HVAC Duct Construction Standards" handbook and Chapter 6 of the 2019 CMC.

B. Transverse Duct Joints shall be made with The Ductmate System. When using The Ductmate System, construction of the duct such as gage, reinforcing, etc. shall be as indicated in the latest addition of the applicable SMACNA standards. With proper data, an equal may be submitted, providing the corners have a downset and corner clips to insure airtight integrity. Testing must be done by a nationally recognized testing laboratory. The standard Ductmate 35 System joint is the equivalent of a SMACNA "J" connection. The Ductmate 25 System joint is the equivalent of a SMACNA "F" connection. The installation of the Ductmate System shall be in accordance with the latest manufacturer's printed Assembly and Installation Instructions.

C. Each duct or plenum shall be diagonally cross-broken for rigidity.

D. Duct bends, fittings, transitions, etc. shall be fabricated in accordance with Fabrication Standards as shown on the Drawings or in accordance with latest SMACNA "HVAC Duct Construction Standards" where not shown on Drawings.

E. Support ducts to joists or similar structural members. Except where indicated otherwise, ducts with a side of 24" or more shall be supported on Ductmate trapeze duct hangers consisting of 2" high x 1-1/2" wide x 18" gauge channel and 3/8" diameter hanger rods hung from support brackets bolted to structural members. See also Special Fabrications as shown on the Drawings. Duct supports shall be eight (8) feet maximum on center.

F. At branch ducts, provide manually operated dampers of the type and arrangement shown on the Drawings, two gages heavier than the duct (if single leaf type) in which installed, and equipped with locking quadrants and closed end bearings.

G. Sizes shown on Drawings are net inside dimensions. Enlarge duct to accommodate lining.

2.6 ROUND DUCTWORK AND FITTINGS

A. 2-10" w.g. round duct through 61" in diameter shall be United Sheet Metal spiral lockseam unseal duct, or approved equal, manufactured from galvanized steel meeting the ASTM A-527-71 in the following gages:

Diameter	Metal Thickness
3-13"	26 ga.
14-23"	24 ga.
24-37"	22 ga.
38-51"	20 ga.
52-61"	18 ga.

B. Round duct shall be new and exclusively obtained for this project. Each piece shall be in 20' lengths. Ducts shall be cut to length required with joints only at fitting locations, except on duct runs longer than 20 feet.

C. Spiral duct and fitting connections, 15" diameter and larger shall be Ductmate Spiralmate round duct connectors. The connector system shall consist of two mating round duct connector flanges roll-formed from hot dipped galvanized steel with an integral sealant and closure ring roll-formed from hot dipped galvanized steel.

D. Fittings shall be United Sheet Metal galvanized fittings in the following gauges:

Diameter	Metal Thickness
----------	-----------------

3-13"	24 ga.
14-23"	22 ga.
24-37"	20 ga.
38-51"	18 ga.
52-61"	16 ga.

E. Spiral duct fittings must be manufactured as separated fittings and shall not be saddle taps, stubs or tap-in fittings tapped into spiral duct, nor may they be dove-tailed tap-ins into pipe or fittings.

F. Reducers shall occur after a branch tap occurs on the main portion of the fitting. Divided-flow fittings shall be used unless shown otherwise on the Drawings.

G. Joints on ducts and fittings shall be covered and sealed with 4" wide, 6 oz. canvas saturated with Arabol lagging adhesive, or Hardcast DT tape in conjunction with Hardcast FTA-20, non flammable, non-toxic adhesive, or GlenKote duct sealer or other approved mastic type sealer. Duct tape will not be allowed. Where exposed to weather, paint lagging strips with two coats of silver enamel paint.

H. All ductwork shall be constructed in accordance with appropriate tables of the latest ASHRAE "Guide and Data Book" and SMACNA "HVAC Duct Construction Standards" handbook and Chapter 6 of the 2019 CMC. Duct gauges to be in accordance with parts A and D of this section.

I. At branch ducts, provide manually operated dampers of the type and arrangement shown on the Drawings, two gages heavier than the duct (if single leaf type) in which installed and equipped with locking quadrants and closed end bearings.

2.7 FLEXIBLE DUCT

A. (RESIDENTIAL ONLY) Flexible air duct shall be Hart & Cooley Model F218. Duct shall consist of an inner core having two layers of polyester film encapsulating a steel wire helix surrounded by a blanket of fiberglass insulation and sheathed in a metalized polyester vapor barrier reinforced with fiberglass scrim. All air ducts shall be UL listed under the UL-181 standard as a Class 1 Air Duct also conforming to NFPA standards 90A and 90B. This air duct shall have a certified thermal resistance rating of R-8 in accordance with ASTM C518 at 75°F and carry the ADC "Thermal Performance" seal.

B. Flexible air duct shall be JP Lamborn Co., AMR-25. Flexible duct shall be factory made with a sound absorbing, spun-bonded, non-woven inner core. R-4.2 insulation to encompass core and a metalized polyester reinforced vapor barrier surrounding entire duct. Ends shall be secured to rigid duct per current SMACNA DCS with UL-181 FX tape. Length not to exceed 7 feet. Duct shall be Class 1, UL approved, and meet NFPA 90A, 90B and CMC minimum requirements.

C. Use only the minimum length required to make the connection. In no case shall any section of flexible duct exceed 7 feet in length.

D. Use two layers of UL listed 181 duct tape to connect flexible duct to the metal duct if flexible duct does not have S.M. collars.

E. The number of bends shall not exceed a combined total of 90 degrees. 90 degree bends will not be allowed at diffuser connections.

2.8 DUCT SPECIALTIES

A. Damper Regulators and Bearings: Duro-Dyne "Specline" SR-Series or approved equal, lever type with matching end bearing. Regulator set shall include rubber gasket between regulator and duct, spring washer between core and housing, wedge pin, dial indicator and handle. Matching end bearing shall be closed end with rubber gasket:

Model	Size
-------	------

148	10" and Under
388	20" and Under
128	21" and Above

B. Access Panels: Access panels shall be located at all points where adjustable mechanisms are installed internal to or on the surfaces of the ductwork. Where adjustable mechanisms are concealed by walls or ceilings, "Elmdor" or approved equal access doors shall be installed. Size shall be suitable for convenient servicing. Tile Walls: Doors and Frame: Stainless Steel. Other areas: recess type to receive ceiling or wall finish in order to provide "Blind Finish".

C. Volume Dampers:

1. In rectangular ducts greater than 1.5 sq. ft., provide Pottorff Model CD42, or equal, factory fabricated opposed blade damper, 16 gauge blades, and brass bearings. Blade width shall not exceed six inches.
2. In rectangular ducts 1.5 sq. ft. and less, provide single leaf dampers as described in Section 15600, 2.3 (a. and g.).
3. In round ducts 15" in diameter and less, provide shop fabricated galvanized sheet metal plate dampers. Plate shall be 18 gauge or shall be two even gauges heavier than duct; minimum thickness 22 gauge. Provide stiffening beads at 1/3 points in dampers lighter than 18 gauge.
4. In round ducts 16" and greater, provide Pottorff opposed blade damper Model CD22R or approved equal.
5. In round ducts 4" – 24" in diameter, above "hard" ceilings, provide DuroZone Cable Operated Damper. Cable length to be between 3 and 15 FT long. Contractor to determine proper length to be use.

D. Provide 20 gauge galvanized sheet metal escutcheon plates at duct penetrations of finished building surfaces. Install tight against surface and securely attached to duct. Continue insulation through openings.

E. Duct Mounted Access Doors:

1. In rectangular duct provide, DuroDyne Model IAD, Ductmate "Sandwich", or equal, insulated, duct mounted access doors with Cam-Lock operated latches where shown on drawings or required for access to duct mounted equipment. Doorframe shall be 24-gauge with double wall door and 1/2" glass fiber insulation. Size doors to provide easy access to equipment.
2. In round ducts, provide Ductmate - METU round duct access doors, fully insulated, with attached gasket and springs between inner and outer door. Access doors shall be as large as practical as duct size will allow.

2.9 FLEXIBLE CONNECTIONS

A. Provide fireproof, insulated, non-porous, flexible connections between fans and ducts or casings and where ducts are of dissimilar metals. For round ducts, securely fasten flexible connections by zinc coated steel clinch-type drawbands. Flexible connections shall be DuroDyne "Insulfab" or "Insulflex" or approved equal.

B. Provide a duct support next to each flex connector to prevent any strain on connection.

2.10 CONDENSATE DRAINS AND DRAIN PANS

A. Air conditioning cooling coils shall have a condensate drain pipe, type "M" copper, to drain the condensate as shown on drawings.

B. Condensing furnaces drains shall be PVC, slope a min of 1/4" per ft from furnace connection to drain and installed per manufacture recommendations.

C. Fan coils or DX cooling coils located in an attic or furred space shall have a water level detecting device that will shut off the equipment or appliance in the event the primary drain is blocked.

D. Alternately, Fan coils or DX cooling coils located in an attic or furred space shall have a secondary drain pan constructed of 20 gauge galvanized steel sheet metal. This pan shall have a drain line discharging to a conspicuous location. This pan and drain is in addition to the normal condensate drain line from the coil.

2.11 GAS PIPING

A. Gas piping shall be standard weight Schedule 40 steel pipe conforming to the following specifications.

1. Underground Pipe: Black pipe made up with extra heavy malleable iron screwed fittings. Underground pipe, except plastic, shall be wrapped in accordance with Specification Section entitled "Pipe Wrapping".

a. At Contractor's option, X-trucoat plastic coated pipe may be installed in lieu of above. Pipe to be installed per manufacturer's recommendations and electro-spark tested after complete installation but before back filling. Any bare areas of pipe shall be repaired with same material as pipe coating.

b. ASTM D2513-88b polyethylene (PE) pipe and fittings may be used to the extent that such materials and methods of installation meet the requirements of governmental agencies having jurisdiction. Pipe and fittings shall meet IAMPO UPC Installation Standards.

c. Underground pipes, when approved under structures or concrete slabs, will be sleeved in Schedule 40 PVC piping a minimum of 2 pipe sizes larger but in no case smaller than needed to enclose any fittings used on the gas line.

2. Above Ground Pipe Exposed to Weather: Black pipe made up with extra heavy malleable iron screwed fittings. Pipe to be painted per Section 15100.

3. Concealed or Exposed within Buildings: Black pipe made up with black malleable iron fittings.

4. Gas steel pipe and fittings shall meet ASTM A53, and ANSI B16 Standards.

5. Steel Pipe, 4" and larger shall be of the same material as stated in 1,2, and 3 except made up with welded fittings.

B. Screwed unions in gas pipe shall be 150 pound rated ground joint type.

C. Provide Brass Craft flexible or equal, stainless steel gas appliance connectors. Dormont is an acceptable substitute. Diameter of connector to be as recommended by manufacturer based on connector length and rated capacity of equipment.

D. Values:

1. Valve numbers listed are Nibco unless noted otherwise. Valves by Milwaukee, Hammond, Watts and Grinnell are considered equal.

Type	Size Range	Part No.
Gas	2" and Smaller	585-70
Cock		

Gas 2-1/2" and Walworth 1976-1797 (w/ wrench)
 Cock Larger

2.12 PIPE HANGERS AND SUPPORTS

A. In general, pipe hangers and supports shall conform to the following except where special pipe hangers and supports are detailed on the Drawings. In cases hanger and support details on the Drawings shall take precedent over the following:

Pipe 6" Size and Smaller	
Items	Superstrut Number
Pipe Hanger	710
Side Beam Clamp for Wood Joist	540
Beam Coupling for Steel Beams	U563-U562
Rod Coupling for Connection to "Hilti"	H-119
Inserts in Concrete Decks	
Trapeze Hangers	A1200-A1202
Pipe Clamp	A716 or 701W/S-716

B. Similar items by Unistrut, Securstrut, Michigan, or B-Line will be acceptable.

C. Hanger Rods shall conform to the following table:

Tube/Pipe Size	Rod Diameter
1/2" to 4"	3/8"

D. Hanger Support Spacing shall be as follows unless shown otherwise on the Drawings:

1. Horizontal:
 - a. Copper: Every 6 feet for 1-1/2 inch and smaller, and 10 feet for 2 inch and larger.
 - b. Steel, Gas: Every 6 feet for 1/2 inch, 8 feet for 3/4 inch and 1 inch, and 10 feet for 1-1/4 inch and larger.
2. Vertical:
 - a. Copper: Every floor not to exceed 10 feet.
 - b. Steel, Gas: Same as horizontal spacing except 1-1/4" and larger at every floor.

2.13 DUCT SMOKE DETECTORS:

A. HVAC systems rated at 2000 CFM or greater shall be equipped with a duct smoke detector to automatically shut off the HVAC system if smoke is detected.

B. The detectors shall be installed in the main supply duct downstream of any filters, before any branch ducts or terminal connections.

C. The detector shall be System Sensor Innovairflex D4120 4-wire Photoelectric Smoke Detector. Provide with Factory NEMA 4 enclosure if mounted outside.

2.14 DAMPER ACTUATORS

Provide actuators as specified in the mechanical control drawings. If actuators are not specified in the mechanical control drawings or in the mechanical legend or detail drawings, then the following shall be used:

A. Actuators shall be Belimo. Actuator shall be direct coupled over the shaft, spring return type.

2.15 ELECTRICAL EQUIPMENT

A. Motor starters shall be provided complete with properly sized thermal overload protection and other appurtenances necessary for motor control specified. Mount starter

adjacent to equipment. See electrical drawing. Maintain minimum of 3' clearance to front of device.

B. Motor Starters: Shall be NEMA I or III as appropriate, general purpose, weather-resistant, with watertight enclosure where required.

2.16 INSULATION

A. General: Insulation and lining material shall meet requirements of flame spread not to exceed 25 and smoke developed not to exceed 50 as tested by Procedure ASTM-E-84, NFPA 255 or U.L. 723 and shall conform to NFPA 90A and 90B.

B. Heating and cooling duct and related heating and cooling equipment insulation shall conform to 2019 Building Energy Efficiency Standards, Administrative Regulations, Title 24, Part I, Section 120.4, except to the extent that this Specification supersedes the minimum standards as established by the Code, in which case this Specification shall take precedent.

C. Unless noted otherwise, insulation shall be Fiberglass, or approved equal material. Application Work shall be performed in accordance with the best accepted practice of the trade and the manufacturer's recommendations. The performance of insulation Work shall be by experienced insulation applicators. Insulation shall be installed after the specified tests have been applied to the piping and duct systems, and the systems have been inspected and approved. Fiberglass trade names and/or numbers have been used to establish a standard of quality.

D. External Duct Insulation – Outdoors, in a space between the roof and an insulated ceiling, in a space directly under a roof with fixed vents or openings to the outside or unconditioned spaces, in an unconditioned crawlspace; or other unconditional spaces: Shall be applied to concealed heating and cooling, supply and return duct except duct that is internally lined. Insulation on duct shall be Manville Microlite FSK duct insulation, 3" thick, minimum installed R value of 8.0 or greater, FSK aluminum foil reinforced with fiberglass, scrim laminated to U.L. rated Kraft, or approved equal. Adhere to duct surfaces with Foster's 85-62 or approved equal, adhesive applied in strips of 6" wide on approximately 12" centers. Circumferential seams shall be butted together and sealed over joints with 3" wide pressure sensitive foil vapor barrier tape. Longitudinal edges shall be lapped 2" and secured with outward clinching staple 6" on center then sealed with pressure sensitive foil vapor barrier tape. Duct wrap shall be installed to allow maximum fullness at corners (avoid excessive compression) minimum thickness at corners shall be 1". Where ducts are over 24" in width, the duct wrap shall be additionally secured to the bottom of the rectangular ducts with mechanical fasteners spaced on 18" centers (Max.) to prevent sagging insulation.

E. External Duct Insulation – All other locations not listed above: Shall be applied to concealed heating and cooling, supply and return duct except duct that is internally lined. Insulation on duct shall be Manville Microlite FSK duct insulation, 2" thick, type 100, minimum installed R value of 4.2 or greater, FSK aluminum foil reinforced with fiberglass, scrim laminated to U.L. rated Kraft, or approved equal. Adhere to duct surfaces with Foster's 85-62 or approved equal, adhesive applied in strips of 6" wide on approximately 12" centers. Circumferential seams shall be butted together and sealed over joints with 3" wide pressure sensitive foil vapor barrier tape. Longitudinal edges shall be lapped 2" and secured with outward clinching staple 6" on center then sealed with pressure sensitive foil vapor barrier tape. Duct wrap shall be installed to allow maximum fullness at corners (avoid excessive compression) minimum thickness at corners shall be 1". Where ducts are over 24" in width, the duct wrap shall be additionally secured to the bottom of the rectangular ducts with mechanical fasteners spaced on 18" centers (Max.) to prevent sagging insulation

F. Internal Duct Insulation - Outdoors, in a space between the roof and an insulated ceiling, in a space directly under a roof with fixed vents or openings to the outside or unconditioned spaces, in an unconditioned crawlspace; or other unconditional spaces: Shall be applied to all heating and cooling supply and return duct and plenums on roof or where shown on Drawings. Manufacturer shall be Manville Microlite, or approved equal. Duct Liner shall be Linacoustic R, 2" thick, 1.5 pcf, with a "K" value of 2.2 in. for a total "R" installed value of 8.0 or greater. Insulation shall withstand velocities of up to 5000 FPM and temperatures up to 250 degrees F.

G. Internal Duct Insulation – All other spaces not listed above: Shall be applied to all heating and cooling supply and return duct and plenums where shown on Drawings. Manufacturer shall be Manville Microlite, or approved equal. Duct Liner shall be Linacoustic R, 1 ½" thick, 1.5 pcf, with a "K" value of 2.2 in. for a total "R" installed value of 4.2 or greater. Insulation shall withstand velocities of up to 5000 FPM and temperatures up to 250 degrees F

H. Portions of duct receiving Duct Liner shall be completed with transverse joints neatly butted with no gaps or interruptions. The duct liner shall be adhered to the sheet metal with 100% coverage of adhesive and exposed leading edges and transverse joints coated with adhesive. Adhesive shall be a water based product. In addition this shall be secured with mechanical fasteners which shall compress the liner sufficiently in place. The liner shall be cut to assure overlapped and compressed longitudinal corner joints. Application procedures shall comply with the recommendations of the Sheet Metal and Air Conditioning Contractor's National Association's Duct Liner Application Standard, Second Edition.

I. External Duct Insulation Exposed to Weather: Shall be applied to heating and cooling supply and return ducts and plenums exposed to weather if not noted to be internally insulated. Insulation shall be Knauf Type ASJ, or approved equal, rigid board fiberglass, 3.0 # per cubic foot minimum density, 2" min. thickness, 8.0 min. R value. The board shall be neatly cut and fitted to the surface with joints tightly butted together and against standing seams. The insulation shall be secured to the duct with adhesive and mechanical fasteners starting 3" from butt joints and 18" on center each direction. Vapor-barrier tape shall be then applied over joints, seams, breaks and any penetrations of the insulation vapor barrier jacket. A weather-barrier mastic compound reinforced with fabric or mesh shall be applied as a finish coat. Finish by painting with two (2) coats of aluminum paint.

J. Ducts: Ducts shall be constructed, installed, sealed and insulated in accordance with the 2019 CMC. Insulation requirements are shown in 2019 California Energy Code T-24 Part 6 Section 120.4. The above paragraph(s) shall supersede if more stringent.

2.17 TEMPERATURE CONTROLS

A. Temperature controls shall be furnished as indicated in schematic Drawing on Plans including room thermostats, relays and other necessary combustion, operating and safety controls.

B. Wiring and Conduit

1. Control wiring and conduit shall be the responsibility of this section and be installed as follows:

- a. In equipment rooms/attics – Conductors shall be run in conduit. Final connection to equipment shall be flexible conduit.
- b. Concealed in building construction (wall/inaccessible ceilings) - Conductors shall be run in conduit.

c. Roof mounted/exterior equipment yards – Conductors shall be in conduit. All flexible conduit shall be seal-tite with weatherproof connections. Equipment on grade and detached from the building a distance greater than 36” shall have underground control conduit routed to equipment.

d. Above accessible ceiling spaces – Control cable will be allowed to be installed without conduit in accessible areas above ceilings as follows:

1. Cable is an approved type for the application.

2. Cable is bundled/organized in management devices routed square with building lines (no diagonals) and kept clear of electrical devices (i.e., ballasts, transformers, etc.) that could cause interference.

3. Conduit sleeves are provided between accessible ceiling spaces (i.e., across soffits, gypboard ceilings, etc.) as required to maintain future access to cable.

e. Cable routed in accessible ceiling spaces shall comply with EIA/TIA standards for communications cabling. Communication bus wire shall be W183C-2058Y Connect Air, yellow shielded cable.

C. Electric wiring, conduit and other electric devices required to complete the installation of the temperature control systems shall comply with requirements as set forth in the Electrical Section of this Specification.

D. After completion of the installation, the Contractor shall adjust thermostats, motors and other equipment provided under this Contract. He shall place them in complete operating condition subject to approval of the Architect.

E. The Control System herein specified shall be free from defects in workmanship and material under normal use and service. If, within twelve (12) months from date of acceptance by the Architect, any of the equipment herein described is proved to be defective in workmanship or material, it will be adjusted, repaired or replaced free of charge by the Contractor.

F. The final connections and supervision of control wiring and interlock wiring shall be the responsibility of this Contractor.

G. The Contractor shall submit to the Architect for approval, the required number of shop drawings of the entire control system before starting Work.

H. Upon completion of the Work, the Contractor will provide diagrammatic layouts of the Automatic Control Systems specified herein. Layouts shall show control equipment and the function of each item shall be indicated.

I. The temperature control system shall be installed by persons in the direct employment of the temperature controls manufacturer(s) exclusive contracting representative. The Mechanical Contractor shall not install the temperature controls unless pre-approved by the Mechanical Engineer.

2.18 REFRIGERANT PIPING

A. Refrigerant piping shall be flushed clean with nitrogen and the ends capped prior to installation. Refrigerant piping shall be ASTM B280 ACR copper tube with wrought copper fittings. Use 5% minimum silver brazing alloy with melting point higher than 1100°F for making the joints.

2.19 REFRIGERANT PIPING INSULATION

A. Cooling Only Systems:

1. Insulate refrigerant suction line with 1" thick Owens-Corning Fiberglass or Armstrong AP Armaflex closed-cell elastomeric thermal insulation applied with 520 BLV or Low VOC Spray Contact Adhesive. Use multiple layers and miter insulation to cover joints and all other items as required to prevent condensation.

B. VRF and Heat Pump Systems:

1. Material:

- a. Low-density EPDM closed cell elastomeric foam, CFC and HCFC gas free with over-lap seal
- b. Thermal Conductivity: 0.235 (BTU * in/h *ft² * °F) at 75°F.
- c. Water Vapor Permeability: <0.03 perm (4.38 x 10⁻¹¹g/Pa*s*m) per ASTM E96.
- d. Water Absorption: <0.2% by volume per ASTM C 209.
- e. Working Temperature: -70 °F to 257 °F (-57 °C to 125 °C) continuous per ASTM C 411.
- f. Surface Burning Characteristics: Meets 25/50 Flame-Spread/Smoke-Generated per UL 723 and ASTM E84. Additionally, meets UL-94 5 V-A, V-0 and is self-extinguishing per ASTM D 635.
- g. UV Resistant: EPDM provides UV Resistance in accordance with ASTM G7/G90.
- h. Ozone Resistant: Meets ASTM D 1171

2. Title 24 Wall Thickness:

- a. Hot gas pipes:
 - 1. Above 200 °F (3 pipe heat recovery systems) use 2 ½" wall thickness (requires double layers to meet 25/50 fire/smoke codes)
 - 2. Below 200 °F (2 pipe heat recovery systems) use 1 ½" wall thickness
- b. Liquid pipes:
 - 1. 1" wall thickness
- c. Suction gas pipes:
 - 1. 1" wall thickness for less than 1" pipe
 - 2. 1 1/2" wall thickness for greater than 1" pipe

C. For insulation exposed to weather:

1. Provide protective PVC cover type "E-FLEX GUARD" (72 or 750 series) by Airex Manufacturing, Inc.

2.20 REFRIGERANT PIPING ACCESSORIES

- A. Stop valves shall be Henry Type – rated for R410A, brass body, soldered, packless diaphragm.
- B. Solenoid valves shall be Sporlan Type – rated for R410A, soldered with brass body.
- C. Filter dryer shall be Sporlan "Catch-All" with soldered connections.
- D. Flexible connectors rated for R410A shall be used at seismic joints. For linesets up to 5/8", flexible connectors shall be 36" Flex-Line Connectors manufactured by DiversiTech Corporation. Contractor to provide nitrogen purge and cleaning of complete assembly prior to installation.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which Work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 COORDINATION

- A. Coordinate as required with other trades to assure proper and adequate provision in the Work of those trades for interface with the Work of this Section.

3.3 PREPARATION

- A. Holes in concrete:
 1. Provide sleeves, accurately dimensioned and shaped to permit passage of items of this Section.
 2. Deliver such sleeves, with accurate setting drawings and setting information, to the trades providing the surfaces through which such items must penetrate, and in a timely manner to assure inclusion in the Work.
- B. Flashing:
 1. Where items of this Section penetrate the roof, outer walls, or waterproofing of any kind, provide under this Section base flashing and counterflashing required at such penetration.
 2. Provide on each pipe passing through the roof a 4 pound seamless lead flashing and counterflashing assembly.

3.4 GENERAL INSTALLATION REQUIREMENTS

- A. Conceal piping, ductwork, and equipment in spaces provided unless specifically shown otherwise. If spaces are inadequate, notify Architect in time to avoid unnecessary Work. Do not cut or notch structural members without specific approval of the Architect.
- B. Follow manufacturer's instructions on items not specifically covered in drawings and specifications. Report discrepancies to Architect for clarification before starting Work.

3.5 EQUIPMENT INTERFACE

- A. Provide required shut off valves, unions, and final connections of piping to the Work of this Section.

B. For electrically operated equipment, verify the electrical characteristics actually available for the Work of this Section and provide equipment meeting those characteristics.

3.6 PAINTING

A. Paint inside of air outlets and connecting plenums with one coat of black paint, or provide all such items factory prepainted.

B. For roof-mounted equipment, provide factory pre-finish on exposed surfaces.

C. Touch-up scratches and abrasions to be invisible to the unaided eye from a distance of 5 feet.

3.7 INSTALLATION OF DUCTWORK

A. Ductwork shall be delivered to the Project site with surfaces clean and free of loose dirt and rust. Special care shall be exercised by the Contractor to store the duct in a clean area to prevent the accumulation of dirt prior to installation. Fabricated or partially fabricated duct sections shall not be stored in open fields or on dirt areas surrounding the construction site. Paved areas may be used, if available, provided adequate protection is provided to prevent the accumulation of dirt on duct surfaces. If possible, the Contractor should arrange to deliver duct to the project site and store on the floor of the area in which it is to be installed.

B. Before installation of ductwork, the Contractor shall inspect each section of duct and wipe internal surfaces clean. At the end of each Work period, or when ends of duct are left installed for future extension, the open ends shall be tightly closed off with a plastic sheet and taped securely to the open end of the duct.

C. Construct and install sheet metal in accordance with latest SMACNA recommendations. Provide variations in duct size and additional duct fittings as required and approved by the Architect at no extra cost to the owner.

D. The throat radius of bends shall be 1-1/2 times the width of the duct. Provide turning vanes in any mitered turn greater than 45 degrees.

E. Transition slopes shall be no less than one to five where space permits.

F. Abrupt offsets in the duct system greater than 30 degrees will not be allowed.

3.8 TEMPERATURE CONTROL INSTALLATION

A. Install wiring and tubing parallel to walls and floors and securely clipped to structure or mechanical system components. Group parallel runs for neat appearance.

B. Install room thermostats and other control devices at 48 inches above finished floor unless a lower mounting height is required for access by handicapped.

C. Install outside air sensor in a location where it is not directly effected by radiation from the sun or any heat generating device or by a conditioned air stream or any other location that would produce a false reading.

D. Upon completion of the installation calibrate all equipment and adjust controls for proper operation.

3.9 REFRIGERANT SYSTEM CHARGING PROCEDURE

A. Pressurize the system with refrigerant and hold for 24 hours with no drop in pressure; test joints and equipment for evidence of leaks after satisfactory pressure test.

B. Provide 1/2" angle type charging and purging valves adjacent to high and low side of the condensing unit to accomplish the procedure described hereinafter. Connect the vacuum pump to both the high and low side of the system. Do Work when ambient air temperature is above 60 degrees F during the evacuation process.

C. Operate the vacuum pump until the system is evacuated to 2.5 mm Hg absolute. Break the system vacuum with nitrogen or refrigerant.

D. After the system has been evacuated to 2.5 mm Hg absolute, close the vacuum pump suction valve and stop the pump.

E. Charge system to required capacity with specified refrigerant.

3.10 CONTROL DEVICE IDENTIFICATION LABELS

A. Thermostats and Exhaust fan switches shall have labels mounted on or just above the control device labled with the equipment being controlled. As an example, for a exhaust fan controlled by a switch the lable would read "EXHAUST FAN # 1" or if a thermostat the label would read "AC-1".

1. Labels shall be 2" x 1" x 1/8" thick Formica/plastic engraving stock beveled on both sides and with two 3/16" diameter holes near the top uppermost tag corners.
2. Labels shall be white with 3/8" high red engraved letters.
3. Labels shall be attached to the equipment with adhesive.

3.11 WARRANTY

A. The contractor shall warranty all of the systems for proper operation installed by the contractor for not less than one calendar year from date of project completion. This completion date shall be set by the Architect or owner.

3.12 SHOP DRAWINGS

A. The Contractor shall prepare shop drawings covering mechanical duct systems, equipment, and piping systems. The drawings shall be prepared electronically at 1/4" / ft scale minimum (or greater as needed for clarity or as requested by the Architect or Mechanical Engineer) and shall include sections, elevations, and dimensions in relation to the building structure and other trades as required to demonstrate coordination with all other disciplines and trades on the project.

B. Shop drawings are to be submitted to the Architect for approval per the Submittals requirements of this section prior to any fabrication.

3.13 MECHANICAL SYSTEM START-UP RESPONSIBILITY

A. Start up Mechanical Systems, and perform any such Work as may be required to adjust the systems to meet the requirements of the Contract Documents.

B. Install new clean specified filters in equipment containing filters immediately prior to owner occupancy. Contractor to bear all costs for this work.

3.14 MECHANICAL SYSTEMS BALANCING

A. Testing and air balancing shall be performed by an independent balancing company certified by Associated Air Balance Council (AABC) or National Environmental Balancing Bureau (NEBB) or other ASHRAE recognized TAB specific certification. Testing and balancing shall be performed by a company other than the mechanical system installers/contractor. Service provider credentials to be included with project submittals for approval by the Mechanical Engineer.

B. After Systems have been tested as outlined, air and water flow rates shall be balanced, and control devices adjusted. Balance and testing shall not begin until systems have been completed and are in full working order. Upon completion of the balancing operation and prior to final acceptance of the systems, the balancing firm shall submit a report, per the Submittals requirements of this section, certifying to the proper performance of the system for approval by the Mechanical Engineer.

1. The following information shall be included in the Air Side Report:
 - a. Fan speeds.
 - b. Motor current readings and voltage readings.

- c. Air quantities in CFM at supply, return, exhaust terminals, and outside air intakes, both at design value and actual measured value. Test and adjust each terminal to within +10% of design requirements.
- d. Air velocities in FPM at supply, return, and exhaust terminals at design value and actual measured value.
- e. Positive static pressure, negative and total pressures and total air quantities for each fan system.
- f. Equipment nameplate data.

END OF SECTION 23 00 00

SECTION 23 00 13
GENERAL MECHANICAL REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Related Documents:

1. The other Contract Documents complement the requirements of this Section.
2. Division 1 - General Requirements applies to the Work of this Section.
3. Where the requirements of this Section exceed those in other Contract Documents, Contractor shall comply with the requirements of this Section.

B. Codes and Regulations:

1. In addition to complying with the specified requirements, comply with pertinent regulations of governmental agencies having jurisdiction.

C. Included: Work includes, but is not limited to the following:

1. Heating, Ventilating, Air Conditioning and System Balancing
2. Plumbing
3. Fire Protection
4. Carpentry and metal Work required for Work of this Section and not specifically shown under another Section. Openings in concrete or masonry construction shall be either core drilled or saw cut unless indicated otherwise on Drawings.
5. Excavation and Backfill
6. Coordination Drawings
7. Demolition:
 - a. The Demolition Plans were prepared for the convenience of the Contractor. The Engineer does not represent that all items which may require demolition, have been shown. It shall be the responsibility of the Contractor to carefully examine the site and the Contract Documents and to perform all demolition and reconstruction, which may be required for the proper execution, and completion of work.

D. Related Work:

1. Painting (Division 09)
2. Cutting and Patching (Division 30)
3. Low voltage electrical control (Division 26)

1.2 DEFINITIONS

- A. Furnish: Purchase and deliver to job site in new condition.
- B. Install: Receive and store at job site until required; place secure and connect; furnish required appurtenances.

C. Provide: Furnish and install as defined above.

D. Section: Refers to a Section of these Specifications.

E. Standards: The issue in effect as of the date of the contract documents.

1.3 PROJECT RECORD DRAWINGS

A. Comply with pertinent provisions of Architectural Sections (Division 01).

1.4 SERVICE INTERRUPTIONS

A. When Work of this Section requires temporary shutdown of existing systems for connections, the shutdown shall be made only during pre-arranged time agreeable to the Owner.

1.5 CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS

A. The Mechanical Drawings are, in general, made to scale and the Contractor may obtain approximate distances and dimensions by scaling the Plans. It is distinctly understood, however, that it is done entirely at the Contractor's responsibility. Refer to Architect's Plans and Specifications for construction details, which will affect the Work and equipment. Examine the Architectural, Civil, Structural, Mechanical, Electrical, Landscape, Irrigation, Data, Fire Protection and Plumbing Plans and Specifications to ensure that this work does not conflict with the above trades. Plumbing, Mechanical and Electrical Plans are diagrammatic and, therefore, do not necessarily represent the exact installation. However, pipe sizing for utility services and ductwork are calculated per their respective codes and Standard Engineering Practice and shall be installed as sized from point of origin to terminal point. It shall remain the Contractor's responsibility to submit Shop Drawings if he/she has any questions about the final arrangement. Nothing on these Plans or Specifications shall be construed to permit work not conforming to all applicable codes and regulations.

PART 2 - PRODUCTS

2.1 ACCESS PANELS

A. If not called for under other Sections, furnish Milcor, Elmdor, or Jay R. Smith access panels where shown on the Drawings or required for maintenance access to completed Work of this Section. Submit size, type, and location of proposed access panels not specifically shown, for review by Architect.

B. Access panels shall be constructed of 16 gauge prime coated steel or stainless steel with screwdriver operated cam latch, concealed hinges, and fire rating equal to adjacent construction.

C. Provide flush type doors with:

1. Stainless steel finish for tiled surfaces.
2. Prime coated finish for other surfaces.

2.2 FLASHING

A. Provide watertight flashing at all openings through exterior walls and roof. Refer to Architectural Drawings.

2.3 VIBRATION ISOLATION AND NOISE CONTROL

A. All fans, heating and ventilating units, air conditioning units, blowers and similar equipment shall be securely mounted to and/or supported from the structure.

B. Isolate all bare water piping from structural members or hangers with "Trisolators" or submitted and approved equal insulating sleeves. Install hangers on outside of insulated jacket on all insulated lines.

2.4 WEATHERPROOFING

A. All equipment exposed to weather shall be protected by means of a suitable finish (i.e. paint). All fan cabinets, roof-mounted equipment, and ductwork shall be fabricated in such a manner to prevent leakage through seams and joints. Water rated, exterior hoods shall be provided over motors, belts, and other devices to insure against damage by water. At all locations where pipes and/or ducts penetrate exterior walls, or roofs, suitable rain tight flashing shall be provided.

1.1 PIPE WRAPPING

A. All pipe, metal components, and joints buried in ground shall be primed and protected with 10-mil tape double wrapped or approved equal per IAPMO IS 13-2006. Before tape application, all bare pipe and fittings to be wrapped must be coated with pipe wrap primer. Stretch first layer of tape to conform to the surface while spirally half-lapping, apply a second layer, half-lapped and spiraled as the first layer with spirals perpendicular to first wrapping. In lieu of tape wrap, heat shrinkable 10-mil minimum thick polyethylene sleeve may be used.

B. When applying tape, use only enough pull to cause the tape to properly conform to the irregular surfaces of the item. The proper amount of pull is reached when the tape surface is smooth without any wrinkles. Continue tape 4" above grade. End overlaps should point down. Tape shall be applied per manufacturer's installation instructions.

2.5 ELECTRIC MOTORS AND ELECTRICAL DEVICES

A. All Electric motor current characteristics are as shown in equipment schedules on drawings and as specified hereinafter in this Specification. The Contractor shall refer to the Electrical Plans and shall confirm all motor voltage, amperage and phase characteristics before processing submittals or ordering equipment. If any equipment is installed different from the supplied electrical power, it is the contractor's responsibility to correct equipment to the required electrical characteristics.

B. All electrical devices of a type normally listed by Underwriters Laboratories, Inc. shall bear U.L. label of approval.

2.6 PAINTING AND FINISHING

A. Provide the coating specified below unless otherwise specifically called for under Painting, Division 09900. Exclude non-ferrous items, stainless steel, items to be insulated, and factory-finished items. Conform to requirements of the Painting Section where requirements are not specified in this Section.

B. All materials used, except as otherwise specified in carrying out the provisions of the contract, are to be Fuller-O'Brien manufacturer or approved equal. Numbers given below are Fuller-O'Brien Company designation unless noted otherwise.

1. Primer coat for all exterior and interior materials: 1 Coat - Primer #66850

2. Finish coats as listed below:

Exterior concrete and concrete block	2 Coats – Semi-Gloss #664XX
Interior concrete and concrete block	2 Coats – Semi-Gloss #214XX
Exterior metal	2 Coats – Semi-Gloss #664XX
Interior metal	2 Coats – Semi-Gloss #214XX
Exterior galvanized metal	2 Coats – Semi-Gloss #664XX
Exterior stucco	2 Coats – Flat #668XX
Interior of Grilles, Diffusers, and Registers	1 Coat – Flat (black) #31202

3. Furnish equipment with factory or field-applied prime coat and finish coat of enamel. Restore damaged finishes to match original.

PART 3 - EXECUTION

3.1 DEMOLITION

A. Remove all heating, ventilation, and air conditioning equipment, fans, ductwork, supply, return and exhaust grilles, supports, controls including thermostats, control wire, conduits, control panels and any related equipment as indicated or noted on plans. Dispose of as directed by Owner.

B. Remove all plumbing fixtures and fittings, water piping, gas piping, equipment, and supports as indicated on plans. Dispose of as directed by Owner.

C. Any piping or ductwork to be reused to complete the project shall be capped immediately after removal of the demolished piping or ductwork.

D. All existing piping and ductwork "to remain" shall be firmly secured with temporary supports approved by the Architect until final supports or installation is complete.

E. Any waste piping including vents and drains, to be reused to complete the project shall be capped immediately after removal of the demolished piping. Cap or cover any open drains "to remain" prior to demolition work.

F. All existing water and waste pipe "to remain" shall be flushed out prior to connection to any new work. All ductwork shall be blown out prior to the installation of new diffusers and grilles.

G. All mechanical or plumbing equipment or fixtures to be reused shall be stored and protected in a clean area. The items shall be thoroughly cleaned before reinstallation.

H. Any existing piping in a demolished area, and not shown on the plans, shall be rerouted and reconnected to piping outside of the demolished area.

3.2 GENERAL EQUIPMENT INSTALLATION REQUIREMENTS

A. Install equipment to provide neat appearance, required manufacturer's access, and required space to allow replacement or maintenance. Provide bases, supports, anchor bolts, and other items required to install equipment. Installation shall be level and braced per CBC.

B. Equipment shall operate quietly and without objectionable vibration. Excessive vibration, other than from specified equipment operating at optimum conditions, shall be the Contractor's responsibility and shall be eliminated as directed by Architect.

3.3 COORDINATION OF WORK

A. Coordinate Work of this Section with Work of other Sections to avoid conflicts. If required, provide shop drawings and submit to Architect for approval.

B. Insure that Work of other Sections is suitable to accommodate Work of this Section.

3.4 ADEQUACY OF FURRING

A. Conceal piping and ductwork in spaces provided unless specifically shown otherwise. If spaces are inadequate, notify Architect prior to ordering materials and fabrication of components.

3.5 PROTECTION AND CLEANING

A. Protect equipment from dirt, moisture, and mechanical damage during construction. Restore or replace damaged equipment to original condition.

B. Keep interior of piping and ductwork free of foreign material during construction. Flush piping systems with test medium specified under Piping Tests before installing equipment and appurtenances or making final connections.

3.6 CLOSING-IN OF UNINSPECTED WORK

A. Do not conceal or cover Work before tests and observations are completed. Uncover Work prematurely closed in and repair resulting damage to all Work, if requested by Architect, Engineer, or Project Inspector.

3.7 DAMAGE

A. Repair or replace items damaged by leaks or overflow from Work provided under this Section and for any damage to any part of the project site, for a period of 1 year after notice of completion date. This is in addition to and not a limitation of other rights the Owner may have against the contractor under the Contract Documents.

3.8 PAINTING AND FINISHING

A. The contractor shall examine carefully all surfaces to be finished under the contract; and before beginning any of his work shall see that the work of other trades has been left or installed in a workmanlike condition to receive paint, or a particular finish.

B. The contractor shall take the necessary steps to protect his work and the work of other contractors during the time his work is in process and the contractor shall be responsible for any and all damage to the work or property of other contractors caused by his employees or by himself.

C. Provide protective covers or drop cloths to protect floors, fixtures, and equipment. Exercise care to prevent paint being spattered on to surfaces which is not to be painted. Surfaces, from which such paint cannot be satisfactorily removed, shall be painted or repainted, as required to produce a finish satisfactory to the Architect.

D. Cracks, holes, or imperfections in concrete or plaster are to be filled with patching plaster and smoothed off to match adjoining surfaces.

E. All surfaces shall be in a proper condition to receive finish. Clean surfaces as necessary to receive paint. Remove all grease from metal surfaces before painting.

F. Each coat of paint shall be applied at proper consistency and brushed evenly, free of brush marks, sags, runs, and with no evidence of poor workmanship. Color between coats of paint shall differ; (Color variations between coats should be enough to impair hiding.) Care shall be exercised to avoid lapping of paint on glass or hardware. Paint to be sharply cut to lines. Finished paint surfaces to be free from defects or blemishes.

G. Exposed piping, ducts, and mechanical equipment (except for factory finished items) shall be painted. Exposed piping, except for identification banding, shall be painted to match surfaces adjacent. Each coat to be inspected when dry and subsequent coat not to be applied until approval received.

H. Paint all surfaces visible through grille, diffuser and register faces, flat black.

I. The contractor shall store all painting materials and equipment outside of the building. The receiving and moving of all paint materials and mixing shall be done outside of the building. Any other arrangements shall be made only with Architects approval.

J. All necessary precautions shall be taken to prevent fire. Rags, waste, etc., soiled with paint or cleaning material, shall be removed from the premises at the end of each day's work.

3.9 MECHANICAL SYSTEM TESTING

A. Furnish all test pumps, gauges, and equipment. Test all safety controls and devices.

B. For air tests, install a calibrated test pressure gauge in the piping system to observe any loss in pressure. Calibrate the test pressure gauge with a dead weight tester within 15 days before use and certify by initial and date on a sticker applied to the dial face. Maintain the required test pressure for the time indicated. Brush joints with a soapy water solution to check for leaks if the required pressure cannot be maintained.

C. After any test, repair all leaks found as directed and re-test as necessary until the system is proven tight.

D. Before applying test pressure to any piping systems the Contractor shall be responsible for isolating all equipment e.g. control valves, regulators, relief devices, tanks and any other line accessories, which would otherwise be damaged by the test pressure.

1. Soil, Waste, Vent, Roof, and Condensate Drainage:

a. Entire System: Tightly close all openings except the highest one. Fill to overflowing with water.

b. Sections of System: Tightly close all openings except the highest opening of the section under test. Fill section with water to test each section with a minimum 10-foot head of water except for the uppermost 10 feet of the system.

c. Allow to stand for (4) hours or longer, as required to complete the inspection.

2. Domestic Water: Fill with water and test at 150 psig. Retain for (4) hours.

3. Gas Piping: Air test to pressure equal to one and one-half times the design pressure, but in no case less than 50 psig. Retain for four hours.

4. Refrigerant: Pressurize the system with nitrogen to 150 psig and hold for 24 hours with no drop in pressure; test joints and equipment for evidence of leaks after satisfactory pressure test.

5. Hydronic Piping: Piping shall be pressure tested with water with a hydrostatic pressure of not less than 100 psi or 1.5 times the design pressure, whichever is greater. Pressure test shall be conducted at design temperature for 4 hours. Piping components shall be suitable for use under design pressures specified. Pressures in this specification are pressures in pounds per square inch (psi) above atmospheric pressure, and temperatures are in degrees Fahrenheit (F). Pressure test shall be conducted by the contractor in the presence of an authorized inspector. The piping being tested shall remain exposed to the inspector and shall not leak during the test.

E. After all Systems have been tested as outlined, all flow rates shall be balanced, and all control devices adjusted. See Section 23 00 00.

F. The equipment and installations shall be operated by the Contractor and he shall demonstrate that all Systems are performing according to the requirements of the Plans and Specifications and to the satisfaction of the Architect, Engineer and Owner.

G. Acceptance Testing Requirements: For applicable mechanical acceptance tests see the T-24 plan sheets. All forms, regulation and requirements are available online at www.energy.ca.gov/title24.

3.10 CUTTING AND PATCHING

A. The Contractor shall do all cutting and patching which may be required for the installation of the Work under this Division of the Specifications. Patching shall be of the same quality, materials and finish as, and shall match accurately, all surrounding

construction. No cutting of the Structure shall be permitted without the approval of the Architect.

B. Wherever concrete or paved surfaces are cut to provide for the installation under this Section, the Contractor shall restore the surfaces to their original condition. Subgrade materials, concrete, and paving materials, along with the placement of same, shall be in accordance with the respective Sections of this Specification as they apply to the installation of such material.

3.11 EXCAVATION AND BACKFILL: (Buried pipes within the building walls and to 5 feet from the building.)

A. Dig trenches straight and true to line and grade; bottom shall be left smoothed of rock points. Pipe shall be supported for the entire length on undisturbed, original earth. The minimum trench width shall be 16" and all pipe shall be 2 feet below the finished grade, minimum, wherever conditions permit. Sewer pipes to be below grade as necessary to meet the slope and invert on the Drawing. Whenever substantial variations of pipe bury is indicated by field conditions, the proposed changes in depth of bury shall be submitted, in writing, to the Architect for approval.

B. Installation of Thermoplastic Pipe and Fittings: Trench width for thermoplastic sewer pipe shall be 1.25 times the outside diameter of the piping plus 12 inches or the outside diameter of the piping plus 16 inches. Thermoplastic piping shall be bedded in not less than 4 inches of granular fill supporting the piping. The backfill for thermoplastic piping shall be compacted along the sides of the piping in 6 inch layers and continue to not less than 12 inches above the piping. Compaction shall be not less than a 85 percent standard proctor density.

C. All piping shall be laid on a bed of clean dry sand not less than 6" thick. The space between the pipe and the sides of the trench shall be backfilled with clean dry sand to a point 6" above the crown of the pipe. Both sides of the pipe shall be filled at the same time.

D. The remainder of the trench shall be backfilled with native soil in lifts no greater than 12" and shall be mechanically compacted by tamping so to maintain a minimum relative dry density of 95%, determined by California Impact Test Method No. 216.

E. All backfilling shall be brought flush with finished subgrade.

F. Excess material shall be removed from the site. Trenches shall be backfilled immediately after approval.

3.12 INSTALLATION OF PIPING, DUCTWORK AND EQUIPMENT

A. The installation of piping, ductwork, and equipment shall be made in such a manner to clear beams and obstructions. Do not cut into or reduce the size of plates or any load carrying members without approval of the Architect. Check Drawings and Work of others to prevent interference. Deviations of the Work determined by the Architect shall be installed by the Contractor without additional cost.

B. Install piping and ductwork promptly, cap or plug open ends of pipe. No piping shall be permanently covered by construction before inspection and approval. Piping and ductwork shall be installed in accordance with best practice and recommendations of the manufacturer.

C. Conceal piping and ductwork unless indicated otherwise. Inspect each piece of pipe, tubing, fittings, and equipment for defects and obstructions. Remove defective

material from site. Install piping at a generally level, free of traps and unnecessary bends to conform with building requirements and provide space for other work. Piping to be free of unusual noises. Avoid any possible galvanic action by isolating dissimilar metals with suitable Dielectric Insulating Fittings.

D. Unless called for otherwise, hereinafter in this Specification or by specific detail on the Drawings, all water pipes in contact with structure and/or hangers shall be suitably isolated. In the case of uninsulated pipe, "Trisolators" or equal shall be used.

E. Protect enameled or polished equipment from damage, tool marks, etc.

3.13 STERILIZATION OF PIPES

A. After preliminary purging of the Systems, the entire domestic potable water system pertaining to Work under this Contract shall be chlorinated in accordance with American Water Works Association, State of California Health and Safety Code procedure for disinfecting water mains. A thorough flushing operation shall be run upon completion of sterilization. Contractor shall then arrange with local health authority for test on mains and water systems and provide three (3) copies of test results to the Architect.

3.14 EQUIPMENT IDENTIFICATION TAGS

A. Major pieces of equipment shall include, but are not limited to: water heaters, air conditioners, unit heaters, supply and exhaust fans, and shall be tagged.

1. Tags shall be 2" x 2" x 1/8" thick Formica/plastic engraving stock beveled on both sides and with two 3/16" diameter holes near the top uppermost tag corners.
2. Tags shall be white with 3/8" high red engraved letters.
3. Tags shall be attached to the equipment with bolts, screws or chains as per valves.
4. Tags shall have the following information:
 - a. Equipment number and nomenclature corresponding to the information on the mechanical contract drawings, and where multiple systems are installed in a building, equipment tagging shall include the space or area served.
 - b. Examples:

W	E	AIR	C C N E I T I C N E F
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W	E	AC-3
F	KI	2ND

F L C C F C F F I C E - E A S T

3.15 IDENTIFICATION OF PIPING SYSTEMS

A. Building Systems:

1. Piping systems installed anywhere within the scope of the Work shall be identified as to contents using a color banding and marking system as outlined and in compliance with Federal OSHA requirements.
2. This Work includes furnishing and application of all snap-around and/or self-sticking pipe markers. Formica valve tags, chains, wires, and related materials proper for the completion of the Work.
3. Pipe markers shall be permanently shaped vinylite plastic snap-around pipe markers as manufactured by Seton Nameplate Corporation, Wilmington Plastic Company, or approved equal.
4. Background colors shall be used and shall conform to the ANSI/ASME A13.1 color scheme, lettering size, length of color field, and viewing angles of identification devices. The names of materials (pipe contents) shall be superimposed on these ANSI background colors. Work legends shall conform to ANSI A13.1 to avoid confusion and mistakes. Basic background colors and content classification are:

R	Fire Quenching Fluids
O	Toxic or Corrosive Fluids

Y	Flammable Liquids
Br	Combustible Fluids
G	Potable, Cooling, Boiler Feed, Other Water
W	Abandoned Pipes
P	Defined by User, Non-Potable Water

5. Pipe marking and installation shall be as follows:
 - a. Apply "Plastic Pipe Marker" at each valve to show proper identification of pipe contents.
 - b. Use an "Arrow Marker" with each "Pipe Content Marker". The Arrow shall always point away from the "Pipe Marker" and in the direction of the flow.
 - c. If flow can be in both directions, use a double-header "Arrow Marker".
 - d. Apply "Pipe Marker" and "Arrow Marker" at every point of pipe entry and exit where the line goes through the wall, floor or roof.
 - e. Apply "Pipe Marker" and "Arrow Marker" on each riser and "T" joint.
 - f. Apply "Pipe Marker" and "Arrow Marker" every 50 feet on long continuous lines.

g. Identifying long continuous lines with "Pipe Marker and "Arrow Marker at every bay or aisle within the building. All branch runs from mains on the roof shall be identified with "Pipe Marker" and "Arrow Marker" at the point of takeoff.

h. Apply "Markers" on the two lower quarters of the pipe where view is unobstructed. In this position "Markers" are read at a glance from ground floor level and dust will not obscure the "Marker". Roof-mounted piping "Markers" shall be so located that they can be read from a standing position on the roof.

i. All identification markers located out of doors and exposed to the sun and the elements shall receive one coat of clear lacquer after application to the pipe, to seal edges and to act as a protective coating.

j. Each "Arrow Marker" must have the same ANSI background color as its companion "Pipe Marker". Arrow must point away from "Pipe Marker" and indicate direction of flow.

k. "Pipe Markers" shall be guaranteed to stay on pipe systems for a period of not less than five years.

6. Following is a list of, but not necessarily limited to, the more commonly used piping systems that require identification "Pipe Markers" and "Arrow Markers".

A	Wording to Put on Pipe Marker	ANSI Color Backg round
H	Hot Water Supply	Green

H	Hot Water Return	Green
C	Domestic Cold Water	Green
D	Domestic Hot Water Supply	Green
D	Domestic Hot Water Return	Green
S	Gravity Sewer or Drain	Green
V	Vent	Green
G	Natural Gas	Yellow
F	Fire Protection Water	Red
C	Condensate Drain Return	Green
R	Refrigerant Liquid	Orange
R	Refrigerant Suction	Orange
<p>All text lettering shall be black on the white, yellow, and orange backgrounds. White text lettering shall be on all other background colors.</p>		

3.16 SEISMIC BRACING

A. It shall be required that pipes, ducts and conduits be supported and braced per the most current edition of SMACNA "Seismic Restraints Manual Guidelines for Mechanical Systems".

B. When the SMACNA "Seismic Restraint Manual Guidelines for Mechanical Systems" does not specifically address the size of duct or pipe to be braced, the following shall apply:

1. All ducts shall be braced and guyed to prevent lateral or horizontal swing to the satisfaction of the Architect, Engineer, and State Inspector.

2. All pipes shall be braced and guyed to prevent lateral or horizontal swing to the satisfaction of the Architect, Engineer, and State Inspector. Absolutely, no "Plumber's Tape" shall be used anywhere on this project.

C. The SMACNA Manual can be obtained through SMACNA online. Contractor shall obtain manual prior to the start of any work.

3.17 OPERATION AND INSTRUCTION

A. The Contractor shall furnish competent Technicians to supervise start-up operations of equipment specified by the Architect or Engineer and to instruct Owner's operators. The Contractor shall furnish six complete sets of operating instructions and service manuals to the Architect.

B. Instruction period shall be started after instruction books and service manuals have been submitted to and approved by the Architect and shall be at hours (regular and non-regular) arranged by the Architect.

C. Service manuals shall include oiling, cleaning, and servicing data, compiled in clearly and easily understood form and in a durable binder. Data shall show all serial numbers of every piece of equipment and complete list of replacement parts.

3.18 WARRANTY

A. The contractor shall warranty all the systems for proper operation installed by the contractor for not less than one calendar year from date of project completion. This completion date shall be set by the Architect or Owner.

END OF SECTION 23 00 13

SECTION 26 00 00

SECTION 26 00 00

ELECTRICAL

PART 1 GENERAL

1.01 SUMMARY

Work in general includes, but is not limited to, the following:

- A. Grounding of equipment, service, etc.
- B. Complete lighting and power system as shown on Drawings and specified herein, including conduit, wiring, panelboards, circuit breakers, lighting controls, switches, receptacles, and other items necessary for complete and operable systems.
- C. Electrical connection of equipment furnished by others as shown on the Drawings.
- D. Control wiring and installation and connections of control devices as specified herein.
- E. Telephone and Cable TV service.
- F. Trenching and backfill as required for electrical Work.

1.02 SITE VISITS, COORDINATION OF CONTRACT DOCUMENTS,
VERIFICATION OF DIMENSIONS

- A. Examine existing conditions as applicable. Become acquainted with Specifications and Drawings for all portions of the Project. Notify Project Manager of apparent discrepancies and of inconsistency between the Specifications and the existing conditions. Secure and follow Project Manager's instructions. The Drawings serve as working drawings only, indicating diagrammatically the general layout of the systems and their various components and equipment.
- B. Scaled and figured dimensions are approximate and are given for estimate purposes only. Carefully check and verify dimensions and sizes in order to determine if equipment and materials will fit together and if the dimensions of the assembly are compatible with the space provided. Where equipment is furnished by others, verify that dimensions and requirements for assembly are compatible with the space provided before proceeding with the roughing in connections. Field verifications of locations shown on Drawings are necessary since actual locations, distances, mounting heights, etc., may be affected by field conditions. The right is reserved to make reasonable changes in locations of equipment or other features shown on Drawings prior to roughing in without additional cost to the Owner.
- C. Where apparatus and equipment have been indicated on the Drawings, dimensions have been taken from typical equipment of the class indicated. Carefully check the Drawings to see that the contemplated equipment will fit into the spaces provided, regardless of whether or not it may have been approved for quality and utility as an equal.

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- D. Rough in all equipment, fixtures, etc., as designated on the Drawings and as specified herein. The Drawings indicate only the approximate location of rough-ins. The exact rough-in locations must be determined from large-scale certified Drawings. The Contractor shall obtain all certified rough-in information before progressing with any Work for rough-in connections.
- E. Be responsible for providing outlets and services of proper size at the required locations.
- F. Coordinate requirements of equipment furnished by others, prior to ordering and installation.
- G. No allowance will be made for extra expense due to failure or neglect to follow foregoing directives.

1.03 RULES AND REGULATIONS

- A. Materials and installation shall be in accordance with current rules and requirements of California Code of Regulations, local codes and the latest versions of ordinances including, but not necessarily limited to, the following:
 - 1. The California Electrical Code.
 - 2. Title 8, Chapter 4, California Code of Regulations (Low Voltage Electrical Safety Orders).
 - 3. Local Building Codes.
 - 4. California State Fire Marshal.
 - 5. Certified Ballast Manufacturers' Association (CBM).
 - 6. Uniform Building Code.
 - 7. NEMA (National Electrical Manufacturers Assoc.).
 - 8. IEEE (Institute of Electrical and Electronic Engineers).
 - 9. IPCEA (Insulated Power Cable Engineers Association).
 - 10. ANSI (American National Standards Institute).
 - 11. ASTM (American Society for Testing and Materials).
 - 12. UL (Underwriters Laboratories).
 - 13. OSHA (Occupational Safety & Health Act) Federal.
 - 14. Title 24, CCR.
 - 15. NFPA (National Fire Protection Association).
 - 16. NESC (National Electrical Safety Code).
 - 17. NECA Standards of Installation.
- B. Where these Specifications call for a higher standard than the above-mentioned rules, the Specifications shall govern.
- C. Should there be any direct conflict between the above mentioned rules and these Specifications, the rules shall govern.
- D. Nothing in the Drawings or Specifications is to be construed to permit Work not conforming to the rules, codes, and regulations.

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- E. All materials utilized shall be new and the best of their respective grades or kinds.

1.04 DEFINITIONS

- A. Article 100 of the California Electrical Code shall serve as a guide for definitions.
- B. Industry standard definitions.
- C. Specific Definitions:
 - 1. Concealed: Hidden from sight, as in trenches, chases, hollow construction, above furred spaces, suspended ceilings (acoustical or plastic type), or exposed to view only in tunnels, attics, shafts, crawl spaces, unfinished spaces, or other areas solely for maintenance and repair.
 - 2. Exposed: Not concealed.
 - 3. Unfinished Space: A room or space that is ordinarily accessible only to building maintenance personnel, a room noted on the "Finish Schedule" with exposed and unpainted construction for walls, floor or ceilings, or specifically mentioned as "unfinished".
 - 4. Finished Spaces: Any space ordinarily visible to the visiting public, including exterior areas.

1.05 RECOGNIZED TEST LAB

- A. All equipment and light fixtures specified or installed under this project shall be listed by a nationally recognized test lab and bear that label of approval.

1.06 PERMITS AND FEES

- A. Procure licenses and permits necessary for the completion of the Work, and inspection and other applicable fees. Before final payment, deliver to the Owner certificates and permits, approved and signed by the authorities having jurisdiction.

1.07 RECORD DRAWINGS

- A. Include under this Work complete and accurate record information both during construction and before final acceptance by the Owner, and costs associated therewith shall be included under this Work.
- B. Obtain from the Project Manager, at cost, a complete set of applicable blueline prints. On these prints, systematically and accurately keep an uptodate and legible dimensional record of Work installed differently from the location or manner indicated by the Drawings, as well as exact locations of stubouts and hidden or underground features. Have these

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Drawings readily available for reference and review. When job status permits, submit them to the Project Manager and amend or correct and resubmit if requested.

- C. When the above information is complete and acceptable, deliver Record Drawings to the Project Manager.

1.08 SUBMITTALS SUBSTITUTIONS

- A. Bids shall be based on Drawings and Specifications and references exactly as shown except as substitutions are permitted under terms of the Instructions to Bidders. Acceptance by the Project Manager of a variation or alternate shall not of itself waive other requirements of the Drawings and Specifications.
- B. Before a substitute is used, it shall be equal in quality and utility to the material or make of equipment specified, and furthermore, shall be suitable for the particular application. The decision of the Project Manager as to the quality and utility of the substitute offered shall be final.
- C. When submitting a substitute to a specified item, provide complete data for both the specified item and the substitute. Complete data includes:
 - 1. Catalog cuts with complete dimensions, characteristics, electrical properties, Under-writer's Laboratory listing, harmonics, light output, mounting and support requirements.
 - 2. Calculations, photometrics, system load data, energy effect on system, etc.

If the substitute is not deemed equal in both utility and quality to the specified item, the specified item will be approved and it shall be provided by the Contractor.

- D. Submit in one package complete systematized lists of equipment and Drawings, catalog cuts, brochures, capacity tables and curves, descriptive information, performance data and guarantees and warranties referenced either to applicable Specification paragraphs or to item numbers as shown on the Drawings, or both. Submit six (6) copies.
- E. Do not order or install equipment until submittals have been reviewed and approved.
- F. Where accepted materials or equipment other than is specified or shown on the Drawings require redesign of structural, architectural, electrical or mechanical features or layouts, such changes shall be made by, or at the expense of the Contractor all subject to complete review by the Project Manager.
- G. Because of the contingencies involved, review and general acceptance of proposed substitutes shall not relieve the Contractor's responsibility under this Work for ensuring in all respects the suitability of such materials and equipment for the particular Project requirements.

1.09 SHOP DRAWINGS

SECTION 26 00 00

- A. Prepare shop Drawings of items as required by the Project Manager or by Drawings and Specifications; submit six (6) copies of each to the Project Manager as part of the submittal package, sufficiently in advance of construction, if necessary.
- B. The shop drawings shall be submitted sufficiently in advance of construction to allow time for review and for resubmission, if necessary.
- C. Submit all shop drawings and data at one time for equipment provided under this Section. The complete electrical shop drawings shall be bound in one pamphlet or binder indexed to this Section.
- D. Shop drawing submittals processed are not change orders. The purpose of shop drawing submittals by the Contractor is to demonstrate that the Contractor understands the design concept; he demonstrates his understanding by indicating which equipment and material he intends to furnish and install and by detailing the fabrication and installation methods he intends to use. If deviations, discrepancies or conflicts between shop Drawings and Specifications are discovered, either prior to or after shop drawing submittals are processed, the design Drawings and Specifications shall control and shall be followed.
- E. Manufacturers' data and dimension sheets shall be submitted giving all pertinent physical and engineering data including weights, cross-sections and maintenance instructions. Standard items of equipment such as receptacles, switches, plates, etc., which are cataloged items, shall be listed by manufacturer.
- F. Index all submittals and reference to these Specifications.

1.10 COMPLETION DATA

- A. Submit completion data to the Project Manager in acceptable quantity and form before requesting a final inspection. Such submittal shall be corrected, amended, or completed before final acceptance of the Work.
- B. Include Record Drawings, maintenance manuals, and data; test results; control and wiring diagrams.

1.11 CUTTING, PATCHING, AND REPAIRING

- A. Cutting, patching, and framing of wood members to accommodate this Work shall be done by the Contractor and shall be in conformance with Sections 613 and 617 (F) and (K), Title 24, California Code of Regulations. All such cutting, patching and framing shall be approved by the Project Manager.
- B. Do minor miscellaneous cutting, drilling, and patching necessary and normally required at the time of actually installing this Work. Patching shall be of the same materials, workmanship, and finish as the original or surrounding Work to the complete satisfaction of the Project Manager. Comply with Division 1 CUTTING AND PATCHING Section.

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- C. Adequately inform other trades of openings and framing requirements for this Work and provide suitable instructions for establishing locations and sizes of openings or sleeves so that these may be provided in the proper location at the proper time. Concrete shall not be cut, except where approved by the Project Manager.

1.12 SIMILARITY OF MATERIALS

- A. Unless specified otherwise, fixtures, fittings, hangers, and respective type features and equipment, of a similar type or having similar operative or functional features, shall be of the same manufacturer throughout the Project.

1.13 MANUFACTURERS' DIRECTIONS

- A. Follow manufacturers' directions and recommendations in all cases where the manufacturers' equipment or articles are used for this Work. Compliance with the manufacturer's direction is a requirement for that product's listing with a recognized test lab.

1.14 VERIFICATION OF DIMENSIONS

- A. Scaled and figured dimensions are approximate only. Before proceeding with Work, carefully check and verify dimensions, etc., on architectural Drawings, and be responsible for properly fitting equipment and materials together and to the structure in spaces provided.
- B. Drawings are essentially diagrammatic, and many offsets, bends, pull boxes, special fittings, and exact locations are not indicated. Carefully study Drawings and premises in order to determine best methods, exact locations, routes, building obstructions, etc., and install apparatus and equipment in available locations. Install apparatus and equipment in manner and locations to avoid obstructions, preserve headroom, and keep openings and passageways clear.

1.15 IDENTIFICATION OF EQUIPMENT

- A. All electrical equipment shall be labeled, tagged, stamped, or otherwise identified in accordance with the following schedule:
 - 1. Panelboards:
 - a. Panel identification shall be P-Touch 3/4" label.
 - b. Circuit directory shall be a two-column, 8-1/2 x 11" sheet attached to the inside of the door. Each odd numbered circuit shall be in sequence in the left column and the even numbered circuit in the right column (e.g., 1, 3, 5..., 2, 4, 6...). Each circuit shall be identified as to the use and room name(s) or area(s). Confirm room names and/or room numbers with the Project Manager prior to project completion. Circuit breaker identification shall be by permanently installed metal numbers or plastic numbers under acrylic plastic. "Paste-on"

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numbers will not be accepted. Refer to "Panelboards" section for additional requirements.

2. Miscellaneous equipment (electrical), such as individually mounted safety switches, starters, step-down transformers, pull boxes, junction boxes, etc., shall be identified as required by the use of such equipment with P-Touch labels as required.
3. In general, the installed nameplates, as herein called for shall also clearly indicate its use, area served, circuit identification, voltage and any other useful data.
4. All auxiliary systems, including communications, shall be labeled to indicate function.
5. Motor control and disconnect switches shall be labeled with the identification given on drawing schedules.

1.16 ARC FLASH LABELING

- A. All panels, circuit breaker enclosures, switchboards and motor control centers shall be labeled with Arc Flash Warning Stickers.

1.17 CLOSING IN OF UNREVIEWED WORK

- A. Do not allow or cause any of this Work to be covered up or enclosed until it has been reviewed by the Project Manager. Should any of this Work be enclosed or covered up before such review, uncover the Work and make repairs with such materials as may be necessary to restore the Work and that of the other trades to its original and proper condition at no additional cost to the Owner.

1.18 SAFETY PRECAUTIONS

- A. It is intended that within the scope of this Work during construction and until final acceptance, strict attention be given to matters pertaining to public safety and to safety of the construction workers and complementing personnel; and to other health and building safety requirements as specified and indicated including, but not limited to: Protection of openings in fire-rated construction; clearances from and/or protection of combustibles; proper securement for fixtures, equipment materials; method of performing the Work, operational and safety check of electrical devices, etc.; erection and maintenance of suitable barriers, protective devices, lights and warning signs and adequate provisions for storage and protection of Work, materials and equipment.
- B. It is understood that the responsibility for the proper attention to the above stipulations is included under this Work.

1.19 WIRING OF EQUIPMENT FURNISHED UNDER OTHER SECTIONS

- A. All electrical wiring including power wiring and control wiring (except as specified under Automatic Temperature Control), including raceways, wiring, outlet and junction boxes,

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and labor for installation of the wiring and equipment shall be included in this section of the Specifications.

- B. All control devices, and starters not in motor control centers, for equipment furnished under the Air Conditioning section (except as specified under Automatic Temperature Control paragraph), Plumbing section, Fire Sprinkler or Lawn Sprinkler section are to be furnished under that particular section and installed under this section.
- C. Wiring diagrams complete with all connection details shall be furnished under each respective section.
- D. Coordinate requirements with Division 15 sections prior to ordering and installation.
- E. Comply with requirements of Article 430 of the California Electrical Code.

1.20 PROTECTION OF EXISTING LINES

- A. Exercise special care to avoid damaging and to maintain in operation, all existing utility runs during the construction period. Also avoid damaging existing piping, conduits, or equipment that is to remain, whether or not specifically indicated on the Drawings. Existing utilities, piping, conduits, and equipment may or may not be shown on the Drawings. The Drawings only reflect information intended to suggest the probable extent and possible location of indicated runs and equipment. There may be other runs. There may be other locations. Neither the Owner nor the Project Manager represents that either has any precise knowledge as to either the full extent or exact location of equipment and runs that may fall within the building or Project Site.
- B. Execute excavation and demolition on the Site and in the building with extreme care (by hand or small tools wherever appropriate) and at the sole risk of the Contractor and the workers involved.
- C. Locate all known existing installations before proceeding with construction operations which may cause damage to such installations. The existing installations shall be kept in service where possible and damage to them shall be repaired at no increases in Contract Sum.
- D. If other structures or utilities are encountered, request Project Manager to provide direction on how to proceed with the Work.

1.21 MOUNTING

- A. Provide materials and accessories necessary to properly mount and secure equipment furnished and/or installed under the electrical Work. This includes but is not limited to such items as conduit, outlets, junction boxes, switches, relays, disconnect switches, lighting fixtures, cabinets, and transformers.
- B. Inserts and Anchors shall be:

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1. Furnished and installed for support of Work under this Division.
 2. Adjustable concrete hanger inserts installed in new concrete work as manufactured by Hilti or as approved.
 3. Installed in locations as approved by Project Manager.
 4. Expandable lead type anchors installed in existing concrete with minimum surface damage, as manufactured by Hilti.
 5. Toggle bolts, or "molly anchors", where installed in concrete block walls.
 6. Complete with 3/16" or heavier steel backup plate where used to support heavy items. Through-bolts or backup plate shall be concealed from view, except as otherwise indicated.
- C. Mounting of equipment that is of such size as to be freestanding and that equipment which cannot conveniently be located on walls, such as motor starters, etc., shall be rigidly supported on a framework of galvanized steel angle, Unistrut or as approved.
- D. Furnish and install sleeves for the installation of Work under all sections of this Division. Sleeves through floors, roof and walls shall be as described in conduit section.

1.22 ACCESSIBILITY

- A. Install all control devices or other specialties requiring reading, adjustment, inspection, repairs, removal or replacement conveniently and accessibly throughout the project.
- B. All required access doors or panels in walls and ceilings are to be furnished and installed as part of the Work under this Division.
- C. Provide doors which pierce a fire separation with the same fire rating as the separation.
- D. Refer to "Finish Schedule" for types of walls and ceiling in each area and architectural Drawings for rated wall construction.
- E. Coordinate Work of the various sections to locate specialties requiring accessibility with others to avoid unnecessary duplication of access doors.

1.23 FLASHING

- A. Flash and counterflash all conduits penetrating roofing membrane.

1.24 TESTS

- A. Perform electrical tests as required or directed. Provide materials, labor, and equipment necessary for performances of these tests, and at completion of the Work perform a complete "inservice" operation of the entire electrical and power system to show

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compliance with the Drawings and Specifications. Replace Work showing faults under tests without additional cost to the Owner. Test system voltage at switchboards at completion of Work and provide a written report to the Project Manager.

1.25 EQUIPMENT LISTS AND MAINTENANCE MANUALS

- A. Prior to completion of job, Contractor shall compile a complete equipment list and maintenance manual. The equipment list shall include the following items for every piece of material and equipment supplied under this section of the Specifications.
1. Name, model and manufacturer.
 2. Complete parts Drawings and list.
 3. Local supply for parts and replacement and telephone number.
 4. All tags, inspection slips, instruction packages, etc. removed from equipment as shipped from the factory, properly identified as to the piece of equipment it was taken from.
- B. Maintenance manuals shall be furnished for each applicable section of the Specifications, shall be suitably bound with hard covers, and shall include all available manufacturers' operation and maintenance instructions, together with as-built Drawings and lists hereinbefore specified and other diagrams and instructions necessary to properly operate and maintain the equipment. The equipment lists and maintenance manuals shall be submitted in duplicate to Architect for approval not less than 10 days prior to the completion of the job. The maintenance manuals shall also include the name, address and phone number of the General Contractor and all subcontractors involved in any of the Work specified herein. The maintenance manuals shall be finally provided in four copies.

1.26 CLEANING

- A. During construction on a daily basis, and upon completion of the Work, remove from the site all debris and excess materials, tools, and removed items, resulting from this Work. Clean equipment, including lighting fixtures, free of dust, dirt, grease, paint, etc.

1.27 GUARANTEE

- A. Leave the entire installation in complete working order, free from defects in materials, workmanship or finish. Guarantee to repair or replace parts that may develop defects due to faulty materials, equipment, or workmanship within a period of one year after the Work is accepted by the Owner. Also guarantee to repair or replace with like materials, other existing Work in the building damaged from or during the repair of any such defective equipment, materials, or workmanship.

PART 2 PRODUCTS AND EXECUTION

2.01 GROUNDING

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- A. Grounding shall be executed in accordance with applicable codes and regulations of the State of California, California Electrical Code and local authorities having jurisdiction as well as any additional provisions specified or shown on Drawings.
- B. Grounding conductors should be located to permit, the shortest and most direct path to ground. Connections shall be readily accessible for inspection and connections shall not be permanently concealed in floors or walls.
- C. Noncurrent carrying metallic parts of electrical equipment and raceways shall be securely grounded to the common system ground. In all locations, ground conductors shall be run through conduits and shall be securely bonded to the conduit at the entrance and exit. The conduit for the grounding conductors shall be continuous from the point of attachment to cabinets or equipment to the grounding electrode, and shall be securely fastened to the ground clamp fittings.
- D. Ground connections to equipment shall be made with an approved type of exothermic weld or shall be bolted or clamped to equipment or conduit. Sheet metal strap types of ground clamps shall not be used. Contact surfaces shall be thoroughly cleaned and bright before connection is made so as to ensure a good metal to metal contact.
- E. Where nonmetallic conduit is used, ground shall be achieved through use of a separate, green-insulated, copper, code-size, ground conductor included in the conduit.
- F. Bonding of cold water piping system shall be achieved at the service entrance. A copper saddle shall be installed over the copper pipe at the location of the clamp to avoid damage to the pipe.

2.02 OUTLET, JUNCTION AND PULL BOXES

- A. Outlet boxes and junction boxes shall be galvanized one-piece pressed steel, knockout type. The size of each box shall be determined by the number of wires or conduits or size of conduits entering the box, but shall not be less than 4" square and 1 1/2" deep unless otherwise noted. All boxes shall be UL listed.
- B. Plastic boxes shall not be used.
- C. Minimum box size for data and telephone outlets shall be 4" square and 2 1/8" deep.
- D. Install wood blocking for outlet boxes in a rigid, workmanlike manner using new material where wood studs are used. Provide rigid support to avoid twisting of outlet boxes where steel studs are used.
- E. Locknuts shall be used on both sides of conduit connections to box or panel, in addition to bushing. Where a larger size opening occurs than size of conduit, reducing washers shall be used.

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- E. Exposed boxes shall be weatherproof, threaded or hub conduit with gasketed conduit cover suitable for device installed or with blank cover plate when conduit is used as a junction box. Conduit wire fill capacity shall not be exceeded.
- F. Recessed weatherproof outlets or junction boxes shall be equipped with neoprene gasketed covers.
- G. Large size junction or pull boxes shall be fabricated from code gauge sheet steel. Where located indoors, finish shall be gray enamel and covers shall be secured with screws. Where exposed to weather, they shall be weatherproof, NEMA 3R, and raintight and hotdip galvanized after fabrication; also, they shall have weatherproof gaskets, flat covers and galvanized iron screws. Provide knockouts and/or threaded hubs as required for the conduit used. Boxes in finished areas shall be prime painted.
- H. Any unused, removed knockouts shall be filled with a knockout cover.
- I. Provide bonding or grounding from metal conduit terminating in junction boxes with concentric knockouts.

2.03 PLATES AND DEVICE COVERS

- A. Plates for switches, receptacles, telephone and blank outlets shall be as shown on the architectural plans. Plates in utility areas shall be of a white, nylon finish.

2.04 RECEPTACLES

- A. Duplex convenience outlets shall be Decora-Plus style, specification grade, three wire, NEMA #5-20R, self-grounding type, 20 ampere, 125 volt with parallel slots and polarized. Additional receptacles shall be as indicated on the Drawings.
- B. Duplex receptacles in utility areas shall be specification grade, three wire, NEMA #5-20R, self-grounding type, 20 ampere, 125 volt with parallel slots and polarized.
- C. Receptacle color shall be as indicated on the architectural plans. Receptacles in utility areas shall be white.
- D. Receptacles indicated weatherproof shall have lift cover plates that are weatherproof "while in use" Taymac Corp. or equal.
- E. Ground fault current interrupter outlets shall be installed in bathrooms, kitchen and wet areas.
- F. All receptacles shall be tamper resistant.

2.05 LIGHTING SWITCHES

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- A. Line voltage lighting switches in utility areas shall be specification grade, quiet type, 20 amp. 120/277 volt A.C. white handled, unless otherwise noted. Switches shall be Hubbell #CS1221W.
- B. Dimmers shall be as indicated on the Drawings.

2.03 WIRE AND CABLE

- A. 600 Volt Conductors:
 - 1. Conductors shall be copper and delivered to the site in their original, unbroken packages plainly marked or tagged with U.L. label, size, kind, insulation, name of manufacturer and trade name of the wire.
 - 2. Type "THWN", 600 volt insulation for damp or wet locations or on boilers and furnaces and their controls.
 - 3. Type "THHN/THWN" 600 volt insulation shall be used in other locations unless noted.
 - 4. Minimum size conductor shall be #12.
 - 5. Conductors shall be stranded.
 - 6. Ground conductors shall be bare copper or have green insulation.
 - 7. Non-metallic sheathed cable shall not be used.
- B. Installation:
 - 1. Conductors shall be continuous between outlets or junction boxes and no splices shall be made except in outlet boxes, pull boxes, panelboard gutters or handholes.
 - 2. Joints, splices and taps No. 10 or smaller (including fixture pigtails) shall be connected with "floating spring" type connectors. No. 8 and larger shall be connected with solderless connectors of 100% electrolytic copper. Splitbolt connectors are not acceptable.
 - 3. Tighten pressure type lugs on panels and equipment, and then retighten 24 hours after energizing. Provide written report of torque values on lugs.
 - 4. Oil or grease shall not be used when pulling conductors. Use U.L. approved cable lubrication only.
 - 5. Lace or train conductors neatly in panels, cabinets and equipment. Use plastic wire ties to route conductors at edge of enclosure away from overcurrent devices.

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- 6. Branch circuits shall be color coded in compliance with Section 2105 of the California Electrical Code. Colored tape is not acceptable.
- 7. All line voltage wiring, shall be installed in MC cable unless otherwise noted.

C. Tag:

- 1. Branch circuits shall be left tagged with circuit numbers in gutters and junction boxes where unused circuits terminate.
- 2. Feeder conductors shall be tagged as phase "A" or "B".
- 3. The method of tagging shall be with adhesive preprinted tape numbered or lettered wrap around tags. Colored tape is not acceptable.
- 4. Tagging shall be applied after wire is installed in conduit.
- 5. Feeders in panel or equipment shall be tagged by phase letter in each panel or equipment.
- 6. Where it is impractical to use printed markers on certain wires or cables, use blank tape with identification marked thereon with indelible pencil.

D. Color Coding for Phase Identification: Color code secondary service, feeder, and branch circuit conductors with factory applied color as follows:

<u>240/120Volts</u>	<u>Phase</u>
Black	A
Red	B
White	Neutral
Green	Ground

2.07 DISCONNECT SWITCHES

- A. Non-fusible or fusible as shown on the Drawings, heavy duty, 250 volts, NEMA Type 1 enclosure, except where WP is indicated or required by code, use NEMA Type 3R enclosure.

2.08 LIGHTING FIXTURES

- A. Lighting fixtures shall be of manufacture and type as specified in the Fixture Schedule, and shall have all parts and fittings necessary to completely and properly install the fixture. Fixtures of the same type shall be of one manufacturer and of identical finish and material.
- B. Lighting fixtures shall bear Underwriter's Laboratories labels.
- C. Fixtures shall be furnished and installed as indicated on the Drawings, including hangers, glassware, auxiliary equipment, sockets, lamps, connectors for continuous installation, etc.

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- D. Each fixture shall be wired with conductors suitable for the voltage, current and temperature to which the conductors will be subjected.
- E. If excessive ballast hum develops within 12 months after installation, the condition shall be corrected at no charge to the Owner. Flickering of the lamps or blacking of the lamp ends within 12 months shall also be corrected at no charge to the Owner.
- F. Proper lamps of type, size, color temperature and wattage indicated shall be furnished and installed in each fixture and shall be manufactured by General Electric, Phillips, Sylvania, or Venture. The Contractor shall replace lamps which have been burned out prior to final completion. Clean dust, dirt, fingerprints and grease from fixtures before final completion.
- G. Install trims, reflectors and lenses with care. Wear surgical gloves when installing these to avoid leaving fingerprints.

2.09 PANELBOARDS

- A. Section Includes: Lighting and Appliance Panelboard: Furnish and install lighting and appliance panelboard(s) as specified herein and where shown on the associated schedules on Drawings.
- B. References: The panelboard(s) and circuit breaker(s) referenced herein are designed and manufactured according to the latest revision of the following Specifications.
 - 1. NEMA PB-1 - Panelboards.
 - 2. NEMA PB-1.1 - Instructions for Safe Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less.
 - 3. NEMA AB 1 - Molded Case Circuit Breakers.
 - 4. NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
 - 5. UL 50 - Enclosures for Electrical Equipment.
 - 6. UL 67 - Panelboards.
 - 7. UL 489 - Molded-Case Circuit Breakers and Circuit Breaker Enclosures.
- C. Lighting and Appliance Panelboard:
 - 1. Interior:
 - a. Shall be rated for 240 VAC/48 VDC maximum. Continuous main current ratings, as indicated on associated schedules, not to exceed 600 amperes maximum.

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- b. Minimum short circuit current rating: As indicated on schedules in rms symmetrical amperes at 240 VAC.
 - c. Provide one (1) continuous bus bar per phase. Each bus bar shall have sequentially phased branch circuit connectors suitable for plug-on or bolt-on branch circuit breakers. The bussing shall be fully rated. Panelboard bus current ratings shall be determined by heat-rise tests conducted in accordance with UL 67. Bussing rated 100-400 amperes shall be copper. Bussing rated for 600 amperes shall be copper as standard construction. Panelboards shall be suitable for use as Service Equipment when application requirements comply with UL 67 and NEC Articles 230-F and G.
 - d. All current-carrying parts shall be insulated from ground and phase-to-phase by Noryl high dielectric strength thermoplastic or equivalent.
 - e. Split solid neutral shall be plated and located in the mains compartment up to 225 amperes so all incoming neutral cable may be of the same length.
 - f. Interior trim shall be of dead-front construction to shield user from energized parts. Dead-front trim shall have pre-formed twistouts covering unused mounting space.
 - g. Nameplates shall contain system information and catalog number or factory order number. Interior wiring diagram, neutral wiring diagram, UL Listed label and short circuit current rating shall be displayed on the interior or in a booklet format.
 - h. Interiors shall be field converted for top or bottom incoming feed. Main and sub-feed circuit breakers shall be vertically mounted. Main lug interiors up to 400 amperes shall be field convertible to main breaker. Interior leveling provisions shall be provided for flush mounted applications.
2. Branch Circuit Breakers:
- a. Circuit breakers shall be UL Listed with amperage ratings, interrupting ratings, and number of poles as indicated on the panelboard schedules.
 - b. Molded case branch circuit breakers shall have bolt-on type bus connectors.
 - c. Circuit breakers shall have an overcenter toggle mechanism which will provide quick-make, quick-break contact action. Circuit breakers shall have thermal and magnetic trip elements in each pole. Two- and three-pole circuit breakers shall have common tripping of all poles.
 - d. There shall be two forms of visible trip indication. The breaker handle shall reside in a position between ON and OFF.

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- e. The exposed faceplates of all branch circuit breakers shall be flush with one another.
 - f. Lugs shall be UL Listed to accept solid or stranded copper conductors only. Lugs shall be suitable for 90° C rated wire, sized according to the 75° C temperature rating per NEC Table 310-16.
3. Enclosures:
- a. Type 1 Boxes:
 - 1) Boxes shall be galvanized steel constructed in accordance with UL 50 requirements. Galvanized steel will not be acceptable.
 - 2) Boxes shall have removable endwalls with knockouts located on one end. Boxes shall have welded interior mounting studs. Interior mounting brackets are not required.
 - 3) Box width shall be [20 in wide] [14 in wide] [8.625 in wide - NQOB column width only].
 - b. Type 1 Fronts:
 - 1) Front shall meet strength and rigidity requirements per UL 50 standards. Fronts shall have ANSI 49 gray enamel electrodeposited over cleaned phosphatized steel.
 - 2) Fronts shall be hinged 1-piece with door. Mounting shall be as indicated on associated schedules.
4. Location:
- a. Panels shall not be located in clothes' closets.
 - b. Panels shall not be located in bed headwalls.
 - c. Panels shall be located with 30 inches clear side to side and 36 inches clear in front of them.
 - d. Panels shall not be located under stairways.
 - e. Panels shall have a floor to ceiling head height clearance in front of them.

END OF SECTION

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SECTION 311000

SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Standard Specifications for Public Works Construction (SSPWC), current edition.

1.2 SUMMARY

- A. Furnish all labor, materials and equipment as necessary to complete all work as indicated on the drawings and specified herein.
- B. This Section includes:
 - 1. Protecting existing vegetation to remain.
 - 2. Removing existing vegetation.
 - 3. Clearing and grubbing.
 - 4. Stripping and stockpiling topsoil.
 - 5. Stripping and stockpiling rock.
 - 6. Removing site improvements.
 - 7. Disconnecting, capping or sealing, and removing site utilities and/or abandoning site utilities in place.
 - 8. Temporary erosion and sedimentation control measures.
- C. Related Sections:
 - 1. Section 024100 Demolition.
 - 2. Section 312000 Earth Moving.

1.3 DEFINITIONS

- A. Subsoil: All soil beneath the level of subgrade, soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.

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- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil, the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects larger than 2 inches in diameter; and free of weeds, roots, toxic materials, or other nonsoil materials.
- D. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- E. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- F. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project.

1.6 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.
- B. Topsoil Stripping and stockpiling program.
- C. Rock stockpiling program.
- D. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.7 QUALITY ASSURANCE

- A. Topsoil Stripping and Stockpiling Program: Prepare a written program to systematically demonstrate the ability of personnel to properly follow procedures and handle materials

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and equipment during the Work. Include dimensioned diagrams for placement and protection of stockpiles.

- B. Rock Stockpiling Program: Prepare a written program to systematically demonstrate the ability of personnel to properly follow procedures and handle materials and equipment during the Work. Include dimensioned diagrams for placement and protection of stockpiles.

1.8 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing site clearing indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
1. Do not proceed with work on adjoining property until directed by Engineer.
- C. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- D. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
- E. Do not commence site clearing operations until temporary erosion and sedimentation control and plant-protection measures are in place.
- F. Tree-and Plant-Protection Zones: Protect according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- G. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Satisfactory Soil Materials: Requirements for satisfactory soil materials are specified in Section 312000 "Earth Moving."
1. Obtain approved borrow soil materials off-site when satisfactory soil materials are not available on-site.

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PART 3 - EXECUTION

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3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Locate and clearly identify trees, shrubs, and vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

- A. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Engineer or Landscape Engineer.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations according to requirements in Section 015639 "Temporary Tree and Plant Protection."

3.4 EXISTING UTILITIES

- A. Owner will arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing, when requested by Contractor.
 - 1. Verify that utilities have been disconnected and capped before proceeding with site clearing.

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- B. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.
 - 1. Arrange with utility companies to shut off indicated utilities.
 - 2. Owner will arrange to shut off indicated utilities when requested by Contractor.

- C. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Engineer's written permission.

3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Grind down stumps and remove roots larger than 2 inches diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.
 - 3. Use only hand methods or air spade for grubbing within protection zones.
 - 4. Chip removed tree branches and dispose of off-site.

- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.

- B. Strip topsoil to depth indicated on Drawings in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.

- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
 - 1. Limit height of topsoil stockpiles to 72 inches.
 - 2. Do not stockpile topsoil within protection zones.
 - 3. Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity indicated to be stockpiled or reused.

3.7 STOCKPILING ROCK

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- A. Remove from construction area naturally formed rocks that measure more than 1 foot across in least dimension. Do not include excavated or crushed rock.
 - 1. Separate or wash off non-rock materials from rocks, including soil, clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
- B. Stockpile rock away from edge of excavations without intermixing with other materials. Cover to prevent windblown debris from accumulating among rocks.
 - 1. Limit height of rock stockpiles to 36 inches.
 - 2. Do not stockpile rock within protection zones.
 - 3. Dispose of surplus rock. Surplus rock is that which exceeds quantity indicated to be stockpiled or reused.
 - 4. Stockpile surplus rock to allow later use by the Owner.

3.8 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.
 - 2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

3.9 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION

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SECTION 312000

EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Standard Specifications for Public Works Construction (SSPWC), current edition.

1.2 SUMMARY

- A. Furnish all labor, materials and equipment for providing all of the following complete and in place:
 - 1. Excavating and filling for rough grading the Site.
 - 2. Preparing subgrades for walks, pavements, and landscaped areas.
 - 3. Subbase course for walks and pavement.
 - 4. Excavating and backfilling trenches for utilities and pits for buried utility structures.
- B. Related Requirements:
 - 1. Section 033000 Cast-in-Place Concrete.
 - 2. Section 311000 Site Clearing.
 - 3. Section 321126 Asphaltic Base Course.
 - 4. Section 321313 Concrete Paving.
 - 5. Section 321413 Precast Concrete Unit Paving.
 - 6. Section 321613 Concrete Curb and Gutters.

1.3 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Aggregate layer placed between the subbase course and Asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

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- E. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
 - 1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices and changes in the Work.
 - 2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
 - 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.
- F. Fill: Soil materials used to raise existing grades.
- G. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material 3/4 cu. yd. or more in volume that exceed a standard penetration resistance of 100 blows/2 inches when tested by a geotechnical testing agency, according to ASTM D 1586.
- H. Subgrade: Uppermost surface of an excavation, or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- I. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.4 PREINSTALLATION MEETINGS

Retain "Preinstallation Conference" Paragraph below if Work of this Section is extensive or complex enough to justify a preexcavation conference.

- A. Preinstallation Conference: Conduct preexcavation conference at Project site.

Retain subparagraph below if additional requirements are necessary; include information about conference.

- 1. Review methods and procedures related to earthmoving, including, but not limited to, the following:
 - a. Personnel and equipment needed to make progress and avoid delays.
 - b. Coordination of Work with utility locator service.
 - c. Coordination of Work and equipment movement with the locations of tree- and plant-protection zones.
 - d. Extent of trenching by hand or with air spade.
 - e. Field quality control.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:
 - 1. Geotextiles.

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2. Controlled low-strength material, including design mixture.
3. Warning tapes.

- B. Samples for Verification: For the following products, in sizes indicated below:
1. Geotextile: 12 by 12 inches.
 2. Warning Tape: 12 inches long; of each color.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:
1. Classification according to ASTM D 2487.
 2. Laboratory compaction curve according to ASTM D 698/ASTM D 1557.

1.7 QUALITY ASSURANCE

- A. The owner will retain and pay a qualified Soils Engineer to take all field samples and do all laboratory testing necessary to ensure compliance of the work to these Specifications. Results of any testing done during the course of the work shall be submitted to the Owner's Representative and Engineer. If testing is performed the Subcontractor shall provide 48 hours notice prior to commencing the following operations to permit the Owner's Soils Engineer to observe the work.
1. Over excavation for subgrade preparation.
 2. Recomposition of scarified soils.
 3. Placement and compaction of fill.
 4. Footing excavation.
 5. Oversight of special inspections during grading.
- B. Should testing indicate work that does not satisfy these specifications, the subcontractor shall pay, through the Owner, for all additional tests required to determine the extent of work that is not satisfactory and for all additional tests necessary to demonstrate compliance with these Specifications.
- C. The Subcontractor shall be responsible for contacting Underground Service Alert (USA), at 1-(800)-422-4133, prior to excavation to confirm the location of existing underground utility installations.
- D. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.
- E. Contractor shall review the geotechnical report(s), the project work area and vicinity, and shall familiarize themselves with the work area conditions. Contractor shall make his own deductions and conclusions as to how existing surface and sub-surface conditions will affect or be affected by their construction operations, including the nature of materials to be excavated. The degree of difficulty associated with making and maintaining the required excavations, and the degree of difficulty which may arise

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from subsurface conditions including groundwater, and shall accept full responsibility thereof.

- F. It is the contractor's responsibility to protect the integrity of existing pavement along and behind the trench sawcut lines during construction. If this pavement is broken-off or otherwise damaged before new pavement is placed, contractor shall sawcut a new conform line parallel with, full length of, and sufficient distance (1-foot minimum) behind original sawcut so as to remove damaged pavement and/or irregularity along the conform line.

1.8 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.
1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
1. Do not proceed with work on adjoining property until directed by Engineer.
- C. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth moving operations.
- D. Do not commence earth moving operations until temporary site fencing and erosion- and sedimentation-control measures, specified in Section 311000 "Site Clearing" are in place.
- E. The following practices are prohibited within protection zones:
1. Storage of construction materials, debris, or excavated material.
 2. Parking vehicles or equipment.
 3. Foot traffic.
 4. Erection of sheds or structures.
 5. Impoundment of water.
 6. Excavation or other digging unless otherwise indicated.
 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- F. Do not direct vehicle or equipment exhaust towards protection zones.
- G. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

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2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
 - 1. Satisfactory Soils: As determined by the Soils Engineer; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
 - 2. Unsatisfactory Soils: As determined by the Soils Engineer. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- B. Base Course: Crushed Aggregate Base in conformance with 200-2.2 of the Standard Specifications (SSPWC).
- C. Bedding Course: Imported Clean Sand; ASTM D 2321; except with not less than 90 percent passing a No. 4 sieve and not more than 5 percent passing a No. 200 sieve.

2.2 GEOTEXTILES

- A. Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2; AASHTO M 288.
 - 2. Apparent Opening Size: No. 40 sieve, maximum; ASTM D 4751.
 - 3. Permittivity: 0.5 per second, minimum; ASTM D 4491.
 - 4. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

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- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- C. Water encountered in trench or structure excavation shall be removed by the contractor to the satisfaction of the geotechnical engineer to provide dry conditions during construction of pipe or structure.

3.3 EXCAVATION, GENERAL

- A. Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by Engineer. The Contract Sum will be adjusted for rock excavation according to unit prices included in the Contract Documents. Changes in the Contract Time may be authorized for rock excavation.
 - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; and soil, boulders, and other materials not classified as rock or unauthorized excavations specified in See Section 311000 "Site Clearing."
 - a. Intermittent drilling; ram hammering; or ripping of material not classified as rock excavation is earth excavation.
 - 2. Rock excavation includes removal and disposal of rock. Remove rock to lines and subgrade elevations indicated to permit installation of permanent construction without exceeding the following dimensions:
 - a. 24 inches outside of concrete forms other than at footings.
 - b. 12 inches outside of concrete forms at footings.
 - c. 6 inches outside of minimum required dimensions of concrete cast against grade.
 - d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
 - e. 6 inches beneath bottom of concrete slabs-on-grade.
 - f. 6 inches beneath pipe in trenches, and the greater of 24 inches wider than pipe or 42 inches wide.
- B. All work involving Excavation, including that for Water, Sewer, Storm Drain, and Utility Conduits and all service connections and meter boxes (not permitted in driveways) shall be completed and observed and approved by the agency having jurisdiction and the structure backfill observed and tested for compaction and approved by the geotechnical engineer before aggregate base, paving, and other permanent surface construction may commence.
- C. Before commencing excavation, contractor shall contact public works and utility companies or other owners of subsurface facilities within the work site and shall verify whether or not a representative will be present before and/or during excavation and shall determine site specific requirements for excavation.

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- D. Contractor shall furnish, install, and maintain such sheeting, shoring, bracing, and/or other protection as is necessary to prevent failure of temporary excavations and embankment and to prevent damage to existing improvements, temporary improvements, and partially completed portions of the work. Contractor shall be solely responsible for the sufficiency of such supports and/or other protection per all requirements of CAL-OSHA and OSHA.

3.4 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.5 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit, unless otherwise indicated.
1. Clearance: 12 inches each side of pipe or conduit or as indicated on the plans.
- C. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course.
- D. Trenches in Tree- and Plant-Protection Zones:
1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.

3.6 SUBGRADE INSPECTION

- A. Notify Engineer and Soils Engineer when excavations have reached required subgrade.
- B. If Soils Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.

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2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the Soils Engineer, and replace with compacted backfill or fill as directed.

D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices changes in the Work.

E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

F. Trench or structure excavation subgrade shall be observed by the geotechnical engineer prior to placement of bedding material or forms. Wet or unstable soil encountered in the bottom of the excavation and deemed by the geotechnical engineer to be incapable of properly supporting the pipe or structure being constructed, shall be removed to the depth recommended by the geotechnical engineer and the excavation backfilled to the bottom of the pipe or structure grade with suitable material recommended by the geotechnical engineer.

3.7 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Engineer.

1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Engineer.

3.8 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.9 BACKFILL

A. Place and compact backfill in excavations promptly, but not before completing the following:

1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.

2. Surveying locations of underground utilities for Record Documents.

3. Testing and inspecting underground utilities.

4. Removing concrete formwork.

5. Removing trash and debris.

6. Removing temporary shoring and bracing, and sheeting.

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7. Installing permanent or temporary horizontal bracing on horizontally supported walls.

B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.10 WATER, SEWER, AND STORM DRAIN TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Backfill voids with satisfactory soil while removing shoring and bracing.

D. Initial Backfill:

1. Imported clean sand or native material if inorganic with less than 10 percent fines to a height of 6-inches over the pipe or conduit. Compact to minimum 90 percent of maximum density in 6-inch lifts.

E. Final Backfill:

1. Imported or native free of organics and deleterious material. Compact to minimum 90 percent of maximum density in 6-inch lifts.

F. Bedding and backfill material and compacted density, shall be tested for compliance with applicable requirements by the geotechnical engineer.

G. Bedding and pipe zone backfill material, shall be compacted to not less than 90 percent of maximum density. The upper 12-inches below the base or sub-base course in pave and other traffic areas and below the concrete or sand course in walkway areas shall be compacted to not less than 90 percent of maximum density. Backfill compaction shall be tested for compliance with these requirements in accordance with ASTM D-1557, latest revision, and reported by the geotechnical engineer.

H. Class I or Class II (Trench) backfill shall not be placed until bedding and initial (pipe zone) backfill have been observed, tested, and approved.

I. Compaction by flooding or jetting is not permitted.

3.11 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil material.
2. Under walks and pavements, use satisfactory soil material.

C. Place soil fill on subgrades free of mud, frost, snow, or ice.

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3.12 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 - 2. Remove and replace, or scarify and air dry otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.13 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 6 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:
 - 1. Under pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
 - 2. Under walkways, scarify and recompact top 12 inches below subgrade and compact each layer of backfill or fill soil material at least 95 percent.
 - 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at least 90 percent.
 - 4. For utility trenches, compact each layer of initial and final backfill soil material at 90 percent.
- D. Compaction by flooding or jetting is not permitted.

3.14 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following tolerances:
 - 1. Turf or Unpaved Areas: Plus or minus 1/2 inch
 - 2. Walks: Plus or minus 1/4 inch
 - 3. Pavements: Plus or minus 1/4 inch

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- C. Grading shall be in conformance with recommendations made by the geotechnical engineer during observation and testing of site demolition, preparation, grading, and development work. For any conflict between these plans and the recommendations and/or specifications of the geotechnical engineer, the more stringent provision shall govern.
- D. Areas to be graded shall be cleared of all vegetation (except trees indicated to remain), including roots and root structures, other organic material, debris, non-complying fill, and other material unsuitable for support of fill and/or proposed improvements, as recommended by and under the observation and testing of the geotechnical engineer. Call the inspector for initial inspection.
- E. Areas to receive fill material and areas to receive buildings, exterior slabs, walkways, walls, pavement, and other structural improvements shall be prepared as recommended by and under the observation and testing of the geotechnical engineer. Recommendations for over excavation, additional scarification, backfill and recompaction are contained in the project geotechnical report referenced in the general notes on these plans.
- F. Prior to placement of fill and backfill material, the prepared area shall be inspected and approved by the inspector. The geotechnical engineer shall also observe the areas to be filled. Allow a minimum 48-hour notice. Fill and backfill placed on the prepared area without the required observation shall be removed.
- G. All fill material, whether excavated on-site or imported from off-site, shall be tested and approved by the geotechnical engineer prior to placement. Imported fill material shall be equal to or better in quality than the on-site soils and shall conform to the recommendation of the geotechnical engineer. The geotechnical engineer shall test and approve the soil proposed for import for structural fill prior to importation to the site. The landscape architect and the geotechnical engineer shall test and approve the soil proposed for import for landscape area surface material prior to importation to the site.
- H. Contractor shall refer to the following as applicable:
1. Architect's plans for additional grading requirements in building areas.
 2. Landscape architect's plans for tree preservation requirements and for subgrade allowances in landscape areas.
 3. Public improvement plans for interfacing with public grading, paving, storm drainage and utility improvements.
- I. Where planter areas are shown on the plans adjacent to buildings and are contained by walks / flatwork less than 8" below bottom of sill plate or where adjacent finish grade outside a building is shown to be less than 8" below bottom of sill plate, it is the contractor's responsibility to verify that building plans call for appropriate dampproof or waterproof construction and is constructed in accordance with all building applicable code requirements.
- J. Plan elevations shown on soil and landscaped areas are finish grade (finish surface) elevations intended to establish surface drainage control for these areas. During grading operations, thicknesses (subgrade allowances) specified by landscape

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architect for turf, wood chips, mulch, etc. Shall be subtracted from these elevations to establish finish subgrade.

- K. Before placement of aggregate base or subbase material in pavement areas, the subgrade soil shall be reviewed and tested by the geotechnical engineer. During paving operations, structural section compaction shall be observed and tested by the geotechnical engineer.
- L. Grading and improvements found not in conformance with approved plans and design intent shall be corrected by contractor at contractor's expense. Additional surveying to confirm elevations after corrective measures shall also be at contractor's expense.
- M. Requirements for various surfacing conditions are as follows:
 - 1. Dirt: not less than 2% (1/4" per foot) slope in direction of surface drainage and 0.10-foot maximum deviation from design elevation at any location
 - 2. A.C. pavement: not less than 1% (1/8 inch per foot) slope in direction of surface drainage and 0.04-foot maximum deviation from design elevation at any location
 - 3. Concrete: not less than 0.5% (1/16 inch per foot) slope in direction of surface drainage and 0.02-foot maximum deviation from design elevation at any location unless noted otherwise on plans.

3.15 BASE COURSES

- A. Place base course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place base course under pavements and walks as follows:
 - 1. Place base course material over subbase under pavement.
 - 2. Shape base course to required crown elevations and cross-slope grades.
 - 3. Place base course 6 inches or less in compacted thickness in a single layer.
 - 4. Place base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 - 5. Compact subbase and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

3.16 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 - 1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 - 2. Determine that fill material classification and maximum lift thickness comply with requirements.
 - 3. Determine, during placement and compaction that in-place density of compacted fill complies with requirements.
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

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- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2937, and ASTM D 6938, as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Paved Areas: At subgrade and at each compacted fill and backfill layer, at least 1 test for every 2000 sq. ft. or less of paved area or building slab, but in no case fewer than 3 tests.
 - 2. Trench Backfill: At each compacted initial and final backfill layer, at least 1 test for each 150 feet or less of trench length, but no fewer than 2 tests.
- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.

3.17 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. All surplus and unsuitable soil materials and rubbish and debris resulting from demolition and grading operations shall be removed from the job site; transported to a suitable location and disposed of in a proper and legal manner.

END OF SECTION

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SECTION 321313

CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Standard Specifications for Public Works Construction (SSPWC), current edition.

1.2 SUMMARY

- A. Section Includes Concrete Paving.
- B. Related Requirements:
 - 1. Section 033000 Cast-in-Place Concrete
 - 2. Section 311000 Site Clearing
 - 3. Section 312000 Earth Moving
 - 4. Section 321726 Detectable/Tactile Warning Surfaces

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast-furnace slag.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated
- B. Samples for Initial Selection: For each type of product, ingredient, or admixture requiring color selection.
- C. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified ready-mix concrete manufacturer and testing agency.

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- B. Material Certificates: For the following, from manufacturer:
1. Cementitious materials.
 2. Steel reinforcement and reinforcement accessories.
 3. Admixtures.
 4. Curing compounds.
 5. Applied finish materials.
 6. Bonding agent or epoxy adhesive.
 7. Joint fillers.

1.6 QUALITY ASSURANCE

- A. Stamped Detectable Warning Installer Qualifications: An employer of workers trained and approved by manufacturer of stamped concrete paving systems.
- B. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturer ready-mixed concrete products that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").
- C. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

1.7 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Placing Concrete Under Adverse Weather Conditions:
1. Concrete for structures shall not be placed on frozen ground nor shall it be mixed or placed while the atmospheric temperature is below 35°F (2°C), unless adequate means are employed to heat the aggregates and water, and satisfactory provisions have been made for protecting the work.
 2. Concrete shall not be placed on frozen ground, nor shall concrete be mixed or placed when the atmospheric temperature is below 35°F (2°C), or when conditions indicate that the temperature may fall to 35°F (2°C) within 24 hours, except with the written permission of the Engineer and only after such precautionary measures for the protection of the concrete have been taken as approved by the Engineer.
 3. Concrete shall be effectively protected from freezing or frost for a period of 5 Days after placing.
 4. Concrete for structures shall not be mixed or placed while the atmospheric temperature is above 115°F (46°C) unless adequate means are employed to cool the aggregate and water and satisfactory provisions have been made for

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- protecting the work. In any case, the temperature of the concrete as placed shall not exceed 90°F (32°C).
5. Concrete placement shall be stopped when rainfall is sufficient to cause damage to the work.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 1. Use flexible or curved forms for curves with a radius 100 feet or less. Do not use notched and bent forms.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, fabricated from as-drawn steel wire into flat sheets.
- B. Deformed-Steel Welded Wire Reinforcement: ASTM A 497/A 497M, flat sheet.
- C. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.
- D. Steel Bar Mats: ASTM A 184/A 184M; with ASTM A 615/A 615M, Grade 60, deformed bars; assembled with clips.
- E. Plain Steel Wire: ASTM A 82/A 82M, as drawn.
- F. Joint Dowel Bars: Plain steel bars, ASTM A 615/A 615M, Grade 60. Cut bars true to length with ends square and free of burrs.
- G. Tie Bars: ASTM A 615/A 615M, Grade 60, deformed.
- H. Hook Bolts: ASTM A 307, Grade A, internally and externally threaded. Design hook-bolt joint assembly to hold coupling against paving form and in position during concreting operations, and to permit removal without damage to concrete or hook bolt.
- I. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete, and as follows:
 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.

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- J. Zinc Repair Material: ASTM A 780.

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of same type, brand, and source throughout Project:
 - 1. Portland Cement:
 - a. Type II Portland cement conforming to ASTM C150 and the optional requirements of ASTM C150, Table 2 for maximum equivalent alkalis ($Na_2O + 0.658K_2O$) of 0.60 percent.
 - b. Type III Portland cement conforming to ASTM C150 and the optional requirements of ASTM C150, Table 2 for maximum equivalent alkalis ($Na_2O + 0.658K_2O$) of 0.60 percent may be used when approved by the Engineer.
- B. Normal-Weight Aggregates: SSPWC 201-1.3.2 Combined Aggregate Grading A. Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar paving applications and service conditions using similar aggregates and cementitious materials.
 - 1. The aggregates shall conform to the gradings shown below. If the combined aggregate grading conforms to the grading of its specified class, the mix proportions shall be considered satisfied and the individual gradations required by 200-1.4 and 200-1.5 of the SSPWC may be waived by the Engineer.

Combined Aggregate Grading A

Sieve Sizes	Percentage Passing
2-inch	100
1-1/2-inch	95-100
1-inch	64-80
3/4-inch	55-71
3/8-inch	37-53
No. 4	32-42
No. 8	25-35
No. 16	18-28
No. 30	10-18
No. 50	3-9
No. 100	0-4
No. 200	0-2

- C. Air-Entraining Admixture: ASTM C260.
- D. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
 - 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.

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2. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.

E. Color Pigment: SSPWC 303-7, Color Conditioning Admixture or Pure Mineral Pigments; color stable, nonfading, and resistant to lime and other alkalis.

1. Color: As selected by Architect from manufacturer's full range.

F. Water: Potable and complying with SSPWC 201-1.2.3.

2.4 CURING MATERIALS

A. Sheet Curing Materials:

1. Sheet curing materials are designated by type as follows:

- a. Waterproof Paper: Shall conform to the requirements of ASTM C171, Standard Specification for Sheet Materials for Curing Concrete.
- b. Polyethylene Film: Shall conform to the requirements of ASTM C171, Standard Specification for Sheet Materials for Curing Concrete.
- c. White-Burlap-Polyethylene Sheet: Shall conform to the requirements of ASTM C171, Standard Specification for Sheet Materials for Curing Concrete.
- d. Burlap: Shall weigh not less than 10 ounces per linear yard, 40 inches wide (305g/m²).

2. Test Report and Certification: The Contractor shall provide, when requested by the Engineer, certified copies of the vendor's test report showing compliance with ASTM C309 and the SSPWC.

B. Water: Potable.

C. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.

2.5 RELATED MATERIALS

A. Joint-Fillers: ASTM D1751, Nonextruding and Resilient Filler (Bituminous) or ASTM D1752, Nonextruding and Resilient Filler (Non-bituminous).

B. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

C. Epoxy Bonding Adhesive: ASTM C 881/C 881M, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature, of grade complying with requirements, and of the following types:

1. Types I and II, non-load bearing, Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

2.6 CONCRETE MIXTURES

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- A. Prepare design mixtures, proportioned according to SSPWC, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixes or field experience.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete mixture designs for the trial batch method.
 - 2. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that meet or exceed requirements.
- B. Proportion mixtures to provide normal-weight concrete with the following properties:
 - 1. Minimum Compressive Strength (28 days): 3250 psi.
 - 2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.32
 - 3. Slump Limit: 3-inches max.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content that shall be within a tolerance of 1.5 percent of the value specified in ASTM C94.
- D. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- E. Cementitious Materials: Portland Cement; 560 pounds per cubic yard.
- F. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.7 CONCRETE MIXING

- A. General:
 - 1. Machine mixing will be required in all cases other than those in which it would obviously prove to be impractical, in which case hand mixing is permitted. Mixing shall be commenced as soon as possible after the cement is placed in contact with the aggregates, but in no event shall the intervening period exceed 30 minutes.
 - 2. All concrete mixers shall be of such design and construction and so operated to provide a properly mixed concrete with uniform distribution of ingredients. Mixers shall be maintained properly and be in working order and not have any aluminum parts which will have direct contact with concrete.
- B. Paving and Stationary Mixers:
 - 1. Paving and stationary mixers shall be equipped with an accurate automatic timing device so designed and constructed as to lock the discharge lever. The regulation setting of this device shall be under the supervision of the Engineer. Water control equipment shall also be provided with each concrete mixer.
 - 2. The proper proportions of aggregate, cement, and water for each batch of concrete shall be placed in the mixer and mixed for a period of not less than 1 minute (1-1/2 minutes for reinforced concrete).

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3. The rotating speed at which the mixer shall be operated shall conform to that recommended by the manufacturer. The total volume of materials in any one batch shall not exceed the water level capacity of the mixer or the manufacturer's specified capacity of the mixer.

C. Transit Mixers:

1. The type, capacity, and manner of operation of the mixing and transporting equipment for ready-mix concrete shall conform to the current "Standards for Operation of Truck Mixers and Agitators of the National Ready-Mixed Concrete Association" and the "Truck Mixer and Agitator Standards of the Truck Mixer Manufacturers Bureau." Transit mix concrete trucks shall be equipped with an automatic device for recording the number of revolutions of the drum during the mixing period. Each mixer and agitator shall have attached thereto in a prominent place, a metal plate or plates, installed by the manufacturer. The plate(s) shall be plainly marked with the manufacturer's designated capacity of the drum in terms of the volume of mixed concrete and the speed of rotation for the agitating and mixing speeds of the mixing drum or blades.
2. Each mixer shall have an identification number painted on it that can be easily read from the batching platform.
3. The total volume of materials introduced into the mixer shall not exceed the manufacturer's specified mixing capacity. If the concrete so mixed does not meet the uniformity requirements of 210-1.4.1 of the SSPWC, the amount of materials introduced into the mixer shall be reduced.
4. The drum of the mixer shall be completely emptied of any previously mixed load. The proper proportions of the required ingredients for each load of concrete shall be placed in the mixer and shall be mixed between 70 and 100 revolutions at the manufacturer's designated mixing speed unless otherwise approved by the Engineer. Additional revolutions of the drum shall be at the manufacturer's designated agitating speed.
5. When concrete is produced for pavement or concrete structures, all wash water shall be emptied from the mixer before any portion of the succeeding load is introduced, unless it has been measured. For all other work, the mixer shall be empty or may carry up to 10 gallons (40 L) of water in the drum. This amount may be exceeded if the water is measured to an accuracy of 1 percent of the required total mixing water. Adequate control of ready-mixed concrete may require additional added water mixed into the batch at the discharge point. This water shall be mixed for a minimum of 30 revolutions at the manufacturer's designated mixing speed. Water shall not be added to the load during transit.
6. The total elapsed time between introduction of water at the batch plant and completely discharging the load shall not exceed 90 minutes. The Engineer may waive this limitation if the concrete is of such slump after the 90 minute time limit has been reached that it can be placed without the addition of water to the batch. Under conditions contributing to quick stiffening of the concrete a time limit less than 90 minutes may be specified by the Engineer.
 - a. When air temperature is between 85 and 90 degrees Fahrenheit, reduce mixing and delivery time from 90 minutes to 75 minutes; when air temperature is above 90 degrees Fahrenheit, reduce mixing and delivery time to 60 minutes.

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7. The Engineer shall be provided with a legible certified weighmaster certificate which shall contain the following information:
 - a. Name of vendor.
 - b. Name of Contractor.
 - c. Work location.
 - d. Number of cubic yards in the load.
 - e. Concrete Class, Alternate Class, or Special Exposure mix designation.
 - f. Amount of water added at the plant (including water in fine aggregates).
 - g. Maximum allowable water.
 - h. Time and date of batching.
 - i. Actual weights of cementitious materials and of each size of aggregate.
 - j. Brand and type of cement.
 - k. Brand, type and amount of admixture.
 - l. Space shall be provided on certificate so that amount of water added at Work site may be indicated.

D. Hand Mixing:

1. Hand mixing is permitted when the amount of concrete required is less than 1 cubic yard (cubic meter). Hand-mixed concrete shall be mixed on a watertight platform or in a mortar box in batches not to exceed 1/3 cubic yard (cubic meter) each. The aggregates shall be spread in a uniform layer over which the required quantity of cement shall be evenly distributed. The entire batch shall be turned with shovels until the ingredients are thoroughly blended before adding water. After adding the proper amount of water, the batch shall again be turned with shovels until a uniform consistency is obtained. Methods of hand mixing which allow the loss of mixing water will not be permitted.

E. Transporting Batched Materials and Mixed Concrete:

1. The compartments of trucks or other equipment used for the purpose of transporting proportioned dry aggregate and cement, or mixed concrete, shall be suitably constructed to protect and prevent loss or leakage of contents during charging, transit, or discharging.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.
 1. Completely proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

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- A. Notify engineer minimum 24 hours prior to commencement of concreting operations
- B. Remove loose material from compacted subbase surface immediately before placing concrete.
- C. Moisten base as required to minimize absorption of water from fresh concrete. Do not permit puddles of water to accumulate

3.3 FORMS AND HEADERS

A. General:

- 1. Forms and headers shall be either wood or metal. They shall be set plumb and true to line and grade, with the upper edge thereof set to the grade of the pavement to be constructed; and shall be rigidly installed on a true alignment and so maintained for a distance in advance of placing the pavement to provide for at least a 1 Day run of concrete. Headers shall rest firmly on the subgrade or base. They shall be oiled immediately prior to the placing of the concrete and shall remain in place for at least 12 hours after concrete has been placed. Forms and headers must be removed before the work will be accepted.

B. Wooden Forms:

- 1. Wooden forms shall be constructed of 3-inch (75 mm) nominal lumber in pieces not less than 16 feet (4.9 m) long, except where changes in alignment or grade necessitate the use of material of smaller dimensions. The lumber used shall be free from warp and other imperfections which would impair the strength for the use intended; shall have square edges (which may be slightly beveled) and square ends; shall be surfaced on the upper edge; and shall be not more than 1/2 inch (12.5 mm) less in depth than the specified thickness of the edge of the pavement.
- 2. Such forms shall be secured by nailing to side stakes spaced not more than 4 feet (1.2 m) apart and driven into the subgrade vertically to a depth not less than 12 inches (300 mm), and so that the tops will be below the upper edge of the header. The stakes shall be of sufficient length and cross-sectional area to adequately resist lateral displacement of the headers during the paving operations.
- 3. Wooden headers shall be spliced by nailing a board to the outside of the headers. The board shall be at least 4 feet (1.2 m) long, 1 inch (25 mm) thick, and at least 6 inches (150 mm) wide (or the depth of the header, whichever is least), and shall be centered on the joint.

C. Metal Forms:

- 1. Metal forms shall be free from warp, have sufficient rigidity to resist springing during the paving operations, and shall be not less in depth than the specified thickness of the edge of the pavement being constructed. They shall be secured by means of metal stakes spaced not more than 5 feet (1.5 m) apart and driven below the top of the forms. They shall be designed so as to be driven through openings in the forms to lock them in position.

3.4 STEEL REINFORCEMENT

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A. General:

1. Before placing reinforcing steel, the Contractor shall submit a reinforcing steel placing Working Drawing.
2. Reinforcing bars shall be placed in accordance with the size and spacing shown on the Plans. Reinforcing bars shall be firmly and securely held in position in accordance with the "Manual of Standard Practice" of the Concrete Reinforcing Steel Institute, using concrete or metal chairs, spacers, metal hangers, supporting wires, and other approved devices of sufficient strength to resist crushing under full load. Metal chairs which extend to the surface of the concrete (except where shown on the Plans) and wooden supports, shall not be used. Tack welding on reinforcing bars will not be permitted.
3. Concrete chairs or blocks shall attain a 28-Day compressive strength of 3250 psi or to the requirements prescribed for Class "A" mortar per 201-5.1 of the SSPWC. In either case, the concrete chairs or blocks shall be water-cured per 303-1.10 of the SSPWC.
4. The Contractor shall insure that the dowels for bridge sidewalks, curbs, and barrier railings remain tight and on the intended alignment. Any damage to or loss of bond of the dowels caused by the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer. When dowels are placed in drilled holes, the Contractor shall first fill the hole with epoxy adhesive and then insert the dowel to insure positive bonding.
5. Reinforcing steel that extends from previously placed concrete into new construction shall be cleaned and free of any coating which would be likely to destroy, reduce or impair its proper bonding with the new concrete.
6. Old reinforcement that is to project into new work shall be straightened or bent to conform to the requirements shown on the Plans. Any damaged reinforcing steel that is to be left in place, and is to be repaired by welding, shall be welded in accordance with the provisions of the American Welding Society Publication, AWS D12.1, "Recommended Practices for Welding Reinforcing Steel, Metal Inserts, and Connections in Reinforced Concrete Construction". The weld shall be sufficient to develop the full strength of the bar.
7. Placing bars on layers of fresh concrete as the work progresses and adjusting bars during the placing of concrete will not be permitted. Before placing in the form, all reinforcing steel shall be cleaned thoroughly of mortar, oil, dirt, loose mill scale, loose or thick rust, and coatings of any character that would destroy or reduce the bond. No concrete shall be deposited until the placing of the reinforcing steel has been inspected and approved.
8. Bar spacing shall be center to center of bars. Bar cover shall be the clear distance between surface of bar and face of concrete and shall be 2 inches (50mm) unless otherwise shown on the Plans. Reinforcement shall terminate 2 inches (50mm) from concrete surfaces and expansion joints, unless otherwise shown on the Plans.
9. Reinforcement used in post-tensioned concrete shall be adjusted or relocated during the installation of prestressing ducts or tendons, as required to provide planned clearances to the prestressing tendons, anchorages, jacks, and equipment, as approved by the Engineer.

B. Splicing:

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1. Splices of bars shall be made only where shown on the Plans or approved by the Engineer. Where bars are spliced, the splices shall be staggered. The length of lapped splices shall be as follows:
 - a. Reinforcing bars size No. 6, or smaller, shall be lapped 32 diameters of the smaller bar joined.
 - b. Reinforcing bars sizes Nos. 7, 8 and 9 shall be lapped at least 49 diameters of the smaller bar joined.
 - c. Reinforcing bars sizes Nos. 10 and 11 shall be lapped at least 60 diameters of the smaller bar joined.
 - d. Reinforcing bars sizes Nos. 14 and 18 shall not be spliced by lapping.
 2. Splicing shall be accomplished by placing the bars in contact with each other and wiring them together.
 3. Welding of reinforcing steel smaller than Nos. 14 and 18 will not be permitted unless otherwise shown on the Plans or directed by the Engineer. Welding, when permitted, shall conform to AWS D1.4 and utilize reinforcing bars conforming to ASTM designation A706.
 4. Radiographic examinations shall be performed by the Contractor on at least 25 percent of all full penetration butt-welded splices. For each weld found to be defective, a retest shall be made plus one additional splice as selected by the Engineer shall be examined radiographically by the Contractor.
 5. All radiographs shall be submitted to the Engineer with a radiographic report and a certificate of compliance.
 6. Each radiographed splice shall be identified on each radiograph. The radiograph identification and marking system shall be established by the Contractor and approved by the Engineer before radiographic inspection begins.
 7. Welders, welding operators, and tackers shall be prequalified in accordance with the specifications of AWS D1.4 and shall produce written evidence of qualification satisfactory to the Engineer. Written approval of the documentation by the Engineer is required.
- C. Bending Reinforcement:
1. Bends and hooks in bars shall be made in the manner prescribed in the "Manual of Standard Practice" of the Concrete Reinforcing Steel Institute.
 2. Bars shall not be bent or straightened in a manner which will injure the material. Bars with kinks or unspecified bends shall not be used.
- D. Welded Wire Fabric:
1. Welded wire fabric shall be spliced not less than two meshes. It shall be lifted carefully into its specified position after the concrete is placed but still plastic.
- 3.5 JOINTS
- A. General:
1. Joints in concrete pavement will be designated as longitudinal and transverse construction joints, transverse expansion joints, and longitudinal and transverse weakened-plane joints.
 2. Unless otherwise specified, transverse joints shall be constructed perpendicularly to the centerline of the pavement, longitudinal joints shall be constructed parallel

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to the centerline of the pavement, and the faces of all joints shall be perpendicular to the finished surface of the pavement.

3. Joint filler, when required, shall be as shown on the Plans or specified in the Special Provisions.

B. Weakened Plane Joints:

1. Weakened plane crack control (contraction) joints shall be constructed at regular intervals not exceeding 10-feet each way (longitudinal and transverse) and at additional locations as may be called for in the field. Joints shall be constructed per subsection 303-5.4.2 of the SSPWC as modified by the plan details and these notes. Reinforcement shall be continuous through joints. Depth of joints shall be 1/4 slab thickness + 1/2-inch (i.e., 2-inches for 6-inch slab). Joints shall be constructed by sawcutting grooves as soon as concrete has hardened sufficiently to permit sawing without raveling (usually 4 to 24 hours after placement). Joints shall be filled with joint sealant (sikaflex-2cns or equivalent, color limestone gray) as soon after completion of the curing period as is feasible and before pavement is opened to traffic. Joints shall be cleaned of all foreign material, including membrane curing compounds, and shall be surface-dry when sealant is installed. Joint locations shall be adjusted as necessary to align with those already constructed in existing adjacent (contiguous) features such as curbs and gutters. Along curves, transverse joints shall be radial.

C. Expansion Joints:

1. Expansion joints shall be constructed at locations called for on the plans. Joints shall be constructed per subsection 303-5.4.2 of the SSPWC as modified by the plan details and these notes. Joints shall be constructed 1/2-inch wide using one piece of preformed joint filler installed from bottom of slab to within 1" of concrete surface. The resulting reservoir shall be filled with joint sealant to within 1/4" of concrete surface as soon after completion of the curing period as is feasible and before pavement is opened to traffic. Joints shall be cleaned of all foreign material, including membrane curing compound, and shall be surface-dry when sealant is installed. Reinforcing bars shall be interrupted 3 inches clear of expansion joints and minimum 14-inch long smooth dowels installed across, and centered on, the joint. Dowel diameter shall be 1/8 slab thickness (i.e., 1" for 8" slab, 3/4" for 6" slab). One-half (one end) of the dowel shall be installed within a "speed dowel" tube with a 1-inch gap between the end of the dowel and the sealed end of the tube. Dowels shall be installed at 12 inches on center horizontally, centered in the slab vertically, and a minimum of 3 inches clear of any rebar. Joint locations shall be adjusted as necessary to align with those already constructed in existing adjacent (contiguous) features such as curbs and gutters. Along curves, transverse joints shall be radial.

3.6 CONCRETE PLACEMENT

A. General:

1. Concrete shall be placed on a subgrade sufficiently dampened to ensure that no moisture will be absorbed from the fresh concrete.
2. Immediately after being mixed, the concrete shall be deposited on the subgrade to the required depth over the entire width of the section.

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3. At the end of each day's run, or at any time when operations are stopped for a period of more than 40 minutes, a rigid transverse header shall be placed vertically and at a right angle across the improvement at the location designated by the Engineer and the pavement shall be finished to form a square vertical joint against which the work may be resumed. Hand mixing may be used only if necessary to provide sufficient concrete to complete paving to the expedient header.
 4. Concrete shall be conveyed, deposited, and consolidated by any method which will preclude the segregation or loss of component materials. Equipment having components made of aluminum or magnesium alloys which will be in contact with plastic concrete during mixing, transporting or pumping of Portland cement concrete shall not be used.
 5. All surfaces against which concrete is to be placed shall be thoroughly moistened with water immediately before placing concrete. All ponded and excess water shall be removed to leave surfaces moist but not flooded.
 6. Prior to placing any structure concrete, all forms, surfaces of previously placed concrete and reinforcing steel shall be wetted and the free water removed.
 7. Chutes used in conveying concrete shall be sloped to permit concrete of the consistency required to flow without segregation. Where a sequence for placing concrete is shown on the Plans, no deviation will be permitted unless approved in writing by the Engineer.
 8. Concrete not placed within 10 minutes from the time of leaving the mixer shall be remixed before pouring. Any concrete not poured within a 15-minute interval after mixing shall be wasted.
- B. Grouting:
1. Where concrete is to be deposited against hardened concrete at horizontal construction joints, placing operations shall begin by conveying a grout mixture through the placing system and equipment and depositing the mixture on the joint. Unless otherwise approved by the Engineer, the grout mixture shall have a combined aggregate E grading in accordance with 201-1.3.2 of the SSPWC, and meet all other requirements consistent with the approved mix design. Consolidation techniques shall be utilized to ensure proper bond at the joint.
- C. Depositing:
1. To avoid segregation, concrete shall be deposited as near to its final position as is practicable. The use of vibrators for extensive shifting of the mass of concrete will not be permitted. Concrete that has partially hardened, has been re-tempered, or is contaminated by foreign materials shall not be deposited in the structure.
 2. Concrete shall be placed in horizontal layers insofar as practical. Placing shall start at the low point and proceed up grade unless otherwise permitted by the Engineer. Concrete shall be placed in a continuous operation between construction joints and shall be terminated with square ends and level tops unless otherwise shown on the Plans.
 3. Concrete shall not be permitted to free fall more than 6 feet (1.8 m) without the use of tremies or other suitable conveyance. Tremies shall be at least 6 inches (150 mm) in diameter, or the equivalent cross-sectional area for rectangular sections. Concrete shall not be placed in horizontal members or sections until the

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concrete in the supporting vertical members or sections has been consolidated and a 2-hour period has elapsed to permit shrinkage to occur.

4. When poured monolithically, top slabs of CIPRCB sections shall not be poured until the concrete in the walls has been consolidated and settlement has occurred. Vibration of the concrete in the top slab shall be conducted in such a manner that vibrators penetrate into the concrete previously placed in the walls.

D. Consolidating:

1. Concrete shall be thoroughly consolidated in a manner that will encase the reinforcement and inserts, fill the forms, and produce a surface of uniform texture free of rock pockets and excessive voids.
2. Structural concrete, except slope paving such as spillway aprons and channel lining, and concrete placed under water, shall be consolidated by means of high frequency internal vibrators of a type, size, and number approved by the Engineer. The location, manner, and duration of the application of the vibrators shall be such as to secure maximum consolidation of the concrete without separation of the mortar and coarse aggregate, and without causing water or cement paste to flush to the surface. Internal vibrators shall not be held against the forms or reinforcing steel.
3. The number of vibrators employed shall be sufficient to consolidate the concrete within 15 minutes after it has been deposited in the forms. At least 2 vibrators in good operating condition shall be available at the site of the structure in which more than 25 cubic yards (19 m³) of concrete is to be placed.
4. Approved external vibrators for consolidating concrete will be permitted when the concrete is not accessible to internal vibration. Forms and falsework shall be designed and constructed to resist displacement or damage from external vibration.

E. Walkways:

1. Walkways and platforms shall be provided for personnel and equipment at a level convenient for the concrete placement and to permit the performance of all operations necessary for the completion of such work including finishing.
2. Where bridge decks are to be constructed to final roadway grade, walkways shall be provided outside the deck area along each side and for the full length of the structure. These walkways shall be of sufficient width and so constructed as to provide for the support of the bridges from which the longitudinal floats specified are to be operated.

3.7 FINISHING

A. General:

1. The concrete shall be consolidated, and the surface finished true to grade and cross section. Upon completion, the surface shall be free of any unevenness greater than 1/8 inch (3 mm) when checked with a 10-foot (3 m) straightedge placed on the surface of the pavement. The 10-foot (3 m) straightedge shall be furnished by the Contractor and shall be at the Work site prior to the commencing of the placing of the concrete.

B. Tamping:

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1. The concrete shall be distributed uniformly between the side forms as soon as it is placed, after which the concrete shall be struck off and tamped by means of a mechanical tamper. The tamper shall be operated at right angles to the centerline of the pavement, and tamping continued until the concrete is thoroughly consolidated to the specified cross section and sufficient mortar for finishing purposes has been brought to the surface.
2. Steel-shod hand tampers or vibrating bars may be substituted in those cases where the use of a mechanical spreader and tamper would be obviously impracticable.
3. Approved concrete vibrating equipment shall be used in conjunction with the mechanical tamper to consolidate the concrete adjacent to the forms or existing pavement.

C. Floating:

1. General:
 - a. After tamping, the surface of the concrete shall be floated by either the finishing-machine method or the transverse-float method described below. Bridge decks may be floated by the longitudinal-float method.
2. Finishing-Machine Method:
 - a. The concrete shall be floated smooth and true to grade with an approved finishing machine.
3. Transverse-Float Method:
 - a. The concrete shall be floated at least twice with a long-handled float at least 5 feet (1.5 m) wide, following which the surface of the concrete shall be finished smooth and true to grade, with a wooden float 16 feet (4.9 m) long, 2 inches (50 mm) thick, and 6 inches (150 mm) wide. It shall be rigidly ribbed and with adjustable screws between the rib and float board to ensure a true and flat surface on the under side at all times. The float shall be operated from the side of the pavement, and parallel with the centerline.
 - b. The edge of the float shall be used to cut down all high areas, and the material so removed shall be floated into the depression until a true surface is obtained. Each successive pass of the float shall half-lap the previous pass.
 - c. The float shall be operated as far behind the tamping machine as the workability of the concrete will permit before its initial set.
4. Longitudinal-Float Method:
 - a. The concrete shall first be floated with a double-handled longitudinal float not less than 16 feet (4.9 m) nor more than 20 feet (6.1 m) in length, having a troweling surface not less than 8 inches (200 mm) nor more than 10 inches (255 mm) wide.
 - b. The float shall be operated from bridges over the pavement with its length parallel to the centerline of the improvement, and shall be worked back and forth transversely across the slab, planing off high spots and filling depressions.
 - c. This operation shall be continued until the surface is reasonably smooth, after which the bridges may be advanced not to exceed 2/3 the length of the surface so floated, and the operation continued.
5. Final Finishing:

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- a. After being finished by one of the above methods, the outside edges of pavement shall be rounded to a 1/2 inch (12.5 mm) radius; and transverse contact joints, expansion joints, and joints adjacent to an existing pavement shall be rounded to a 1/4 inch (6 mm) radius.
- b. A strip of wetted burlap shall be provided, of a length not less than the width of the pavement slab. It shall be attached by one edge to a rigid frame supported over the pavement so that the free edge of the burlap will rest or drag on the surface of the concrete. The burlap shall be dragged back and forth longitudinally along the pavement until the surface of the slab is of uniform texture and appearance throughout its entire length.
- c. Apply sand finish using water-based, top-surface retarder Grace Top-cast #3 Acid etch. Wash off retarder the same day it is applied to avoid uneven surface treatment.

3.8 CURING

- A. Curing shall commence as soon as the free water leaves the surface of the concrete, but not later than 3 hours following the deposit of the concrete upon the subgrade.
- B. Concrete may be cured by the use of earth, sand, or burlap kept continuously wet when such method is approved by the engineer.
- C. Concrete that is water cured shall be kept continuously wet for at least 10 Days after being placed; preferably being covered with at least two layers of not lighter than 10 ounces per linear yard, 40 inches wide (305 g/m²) burlap. Handrail, base rail, railing posts, tops of walls, and similar parts of the structure, if water cured, shall be covered with burlap as prescribed above, immediately following the finishing treatment specified therefor, and such covering shall not be removed in less than 10 Days.
- D. Roadway areas, floors, slabs, curbs, walks, and the like, that are water cured may be ponded or covered with sand to a depth of at least 2 inches (50 mm) in lieu of the burlap as prescribed above, as soon as the condition of the concrete will permit, and such covering shall remain wet and in place for at least 10 Days, unless otherwise specified or directed by the Engineer.
- E. When the surface is covered with plastic sheeting, it shall remain covered for at least 10 Days. The plastic sheeting shall be laid either with edges butted together and sealed with a 2- inch (50 mm)-wide sealing tape or with edges lapped not less than 3 inches (75 mm) and fastened with waterproof adhesive.
- F. Should any forms be removed sooner than 10 Days after the placing of the concrete, the exposed surface shall be kept continuously wet by the use of burlap or other suitable means until such concrete has cured for at least 10 Days.
- G. If there is any likelihood of the fresh concrete checking or cracking prior to the commencement of the curing operations (due to weather conditions, materials used, or for any other reason), it shall be kept damp, but not wet, by means of an indirect fine spray of water until it is not likely that checking or cracking will occur, or until the curing operations are started in the area affected.

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3.9 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform field tests and inspections.
- B. General:
1. The proposed mix design shall be evaluated from tests of a field trial batch conforming to the size of load, materials, proportions, slump, mixing and placing equipment, and procedures to be used in the actual work or, with the approval of the Engineer, tests of a laboratory trial batch conforming to the materials, proportions, and slump to be used in the actual work. The trial batch procedure may be waived when test data of prior performance of the proposed mix design is presented by the Contractor and approved by the Engineer. The Contractor may utilize any strength data on file with the Agency for this purpose.
 2. When approved by the Engineer, field trial batches may be placed in the Work at designated locations where concrete of a lower quality is specified. Concrete so placed will be considered for purpose of payment to be the type of concrete specified at that location.
 3. Ten test cylinders shall be molded from the trial batch containing the maximum water content indicated by the mix design. Five of the cylinders shall be tested at 7 Days in order to establish 7-Day average compressive strength information, and the remaining 5 cylinders shall be tested at no more than 28 Days after molding. The average compressive strength of the 5, 28-Day cylinders for field trial tests shall be at least 600 psi (4 MPa) greater than the specified strength. The average compressive strength of the 5, 28-Day cylinders for laboratory trial batch tests shall be at least 1000 psi (7 MPa) greater than the specified strength for specified strengths less than 3000 psi (21 MPa), 1200 psi (8 MPa) greater than the specified strength for specified strengths between 3000 psi and 5000 psi (21 MPa and 36 MPa), and 1400 psi (10 MPa) greater than the specified strength for specified strengths greater than 5000 psi (36 MPa). The minimum strength of any one cylinder shall not be less than the specified strength.
 4. The placing of concrete specified by compressive strength shall not begin until the mix design has qualified in accordance with the aforesaid test criteria. Should the source of materials or established procedures change, new trial batches may be required.
- C. Tests:
1. Portland cement concrete shall be sampled and tested in accordance with the following ASTM Tests:
 - a. Sampling Fresh Concrete: C172
 - b. Obtaining Drilled Cores: C42
 - c. Molding and Curing Specimens: C31
 - d. Compressive Strength: C39
 - e. Flexural Strength: C78
 - f. Slump: C143
 - g. Air Content: C173 or C231
 - h. Unit Weight Yield: C138
 - i. Setting of Mortar: C191 or C266
 - j. Mortar Cube Test: C109

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- k. Drying Shrinkage (with admixture): C157
 - l. Expansion (with expansive hydraulic cement or component): C878
2. A compressive strength test shall consist of the average strength of 2 cylinders fabricated from a single load of concrete, except that if any cylinder shows evidence of improper handling, molding, or testing, it shall be discarded and the strength test shall consist of the strength of the remaining cylinder.
 3. The Engineer will determine the frequency of sampling. The Contractor shall afford the Engineer all reasonable access, without charge, for the procurement of samples of fresh concrete at time of placement.
 4. Concrete compressive strength tests representing concrete that has been placed shall attain the following 28-Day strength: The average of any 3 consecutive strength tests shall be equal to or greater than the specified 28-Day strength. Not more than 10 percent of the tests shall be less than the specified 28-Day strength. No test shall be less than 85 percent of the specified 28-Day strength.
 5. Concrete represented by compressive strength tests that fail to meet the requirements of this subsection shall be removed from the Work. However, with the approval of the Engineer, the concrete represented by the failing compressive strength tests may be cored for strength testing. Coring shall commence within 5 Days of notification by the Engineer. Drilled cores shall be obtained by the Contractor in the presence of the Engineer and tested at the Contractor's expense in accordance with ASTM C42 by a laboratory acceptable to the Engineer. A minimum of 3 cores shall be taken in each area represented by the failing 28-Day compressive strength tests. If the average of 3 cores is at least 85 percent of the specified 28-Day strength and no single core is less than 75 percent of the specified 28-Day strength, the concrete represented may be accepted with no further action required. Additional testing of cores extracted from locations represented by erratic core strength results shall be permitted by the Engineer.
 6. After construction of concrete pavement and appurtenant concrete features, a flood test shall be conducted to review surface drainage, as follows:
 - a. Water shall be supplied and discharged in sufficient quantity to completely wet and cover all pavement and concrete gutter areas; the outline limits of residual standing/ponded water shall then be marked.
 - b. Concrete improvements shall be removed and replaced, at no additional cost to the owner, as necessary to provide positive surface drainage and to prevent ponding of water on pavement surfaces and in gutters.
 - c. Additional flood testing shall be conducted to confirm success of corrective measures.
 - d. Where sawcut line is constructed along conform line with existing a.c. pavement, it is contractor's responsibility to protect the integrity of the pavement along and behind the sawcut line during construction; if this pavement is broken-off or otherwise damaged before new pavement is placed, contractor shall sawcut a new conform line parallel with, full length of, and sufficient distance behind original sawcut so as to remove damaged pavement and/or irregularity along the conform line.

3.10 REPAIRS AND PROTECTION

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- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.
- B. Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.
- E. Grading and improvements found not in conformance with approved plans and design intent shall be corrected by contractor at contractor's expense. Additional surveying to confirm elevations after corrective measures shall also be at contractor's expense.
 - 1. Concrete: Not less than 0.50 percent (1/16 inch per foot) slope in direction of surface drainage and 0.02 foot maximum deviation from design elevation at any location unless noted otherwise on plans.
- F. Concrete surfaces shall be sealed with a commercial grade sealer.

END OF SECTION

Tecolote House Renovation
SECTION 32 17 13 - PARKING BUMPERS

SECTION 32 17 13 - PARKING BUMPERS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Precast concrete wheel stops.

PART 2 - PRODUCTS

2.01 PARKING BUMPERS

- A. Precast Concrete Wheel Stops: Precast, steel-reinforced, air-entrained concrete; 4000-psi minimum compressive strength; manufacturer's standard height and width by 72 inches long. Provide chamfered corners, transverse drainage slots on underside, and a minimum of two factory-formed or -drilled vertical holes through wheel stop for anchoring to substrate.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. American Eagle Precast, LLC.
 - b. American Precast Concrete Inc.
 - c. Dura-Crete, Inc.
 2. Surface Appearance: Smooth, free of pockets, sand streaks, honeycombs, and other obvious defects. Corners shall be uniform, straight, and sharp.
 3. Surface Sealer: Manufacturer's standard salt-resistant, clear sealer, applied at precasting location.
 4. Mounting Hardware: Galvanized-steel hardware as standard with wheel-stop manufacturer.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Verify that pavement is in suitable condition to begin installation in accordance with manufacturer's written instructions.
- B. Install wheel stops in accordance with manufacturer's written instructions unless otherwise indicated.
- C. Securely anchor wheel stops to substrate with hardware in each pre formed vertical hole in wheel stop as recommended in writing by manufacturer. Recess head of hardware beneath top of wheel stop.

END OF SECTION 32 17 13

Tecolote House Renovation
SECTION 32 17 23 - PAVEMENT MARKINGS

SECTION 32 17 23 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.01 **SUMMARY**

- A. Section Includes:
1. Painted markings applied to asphalt paving.

1.02 **ACTION SUBMITTALS**

- A. Product Data:
1. Pavement-marking paint, solvent-borne.

PART 2 - PRODUCTS

2.01 **MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Aexcel Corporation.
 2. Dunn-Edwards Corporation (a Nippon Paint Holdings Co. Ltd. company).
 3. Rust-Oleum Corporation; a subsidiary of RPM International, Inc.

2.02 **PERFORMANCE REQUIREMENTS**

- A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1 .

2.03 **PAVEMENT-MARKING PAINT**

- A. Pavement-Marking Paint, Solvent-Borne: MPI #32, solvent-borne traffic-marking paint.
1. Color: White.

PART 3 - EXECUTION

3.01 **PAVEMENT MARKING**

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.
- B. Allow asphalt paving or concrete surfaces to age for a minimum of 30 days before starting pavement marking.
- C. Sweep and clean surface to eliminate loose material and dust.
- D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils .

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SECTION 32 17 23 - PAVEMENT MARKINGS

1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils, firmly secured to asphalt paving or concrete surface.

END OF SECTION 32 17 23

EXHIBIT F

Attachment –

**Horne-Tecolote CCE Program
Funding Agreement (CCE-
2378566416-051)**

PROGRAM FUNDING AGREEMENT

SUMMARY COVER SHEET

Program Funding Agreement ID **CCE-2378566416-051**

Program Agreement Effective Date:

Program Funding Agreement Manager: **HORNE LLP (Horne)**
661 Sunnybrook Rd., Suite 100, Ridgeland, MS 39157

Horne Engagement Partner: Alethia Thomas

Sponsor: **County of Santa Barbara ATTN:** Antonette Navarro
Address: Department of Behavioral Wellness, 315 Camino del Remedio, Santa Barbara, CA 93110 Phone: (805) 681-5220
Email address: anavarro@sbcbswell.org

Prime Contract Identification: **California Department of Social Services**
Agreement No.: 22-3100
Contract Title: *Community Care Expansion (CCE)*

Contract Type: Deliverable Based Type Contract Base Performance Period:
07/10/2026

Consideration/Budget: Capital Construction
Not to Exceed \$1,043,433

Billing Terms: See Attachment F-Payment Schedule

Payment Terms: Payment remitted thirty (30) days after receipt of undisputed invoice

Program Funding Agreement Cover Sheet

(this page is not part of the Program Funding Agreement)

This Program Funding Agreement (the “**Agreement**”) is entered into _____, 2024 (the “**Effective Date**”), by and between **HORNE LLP**, a Delaware limited liability partnership, with offices located at 661 Sunnybrook Rd., Suite 100, Ridgeland, MS 39157 (“**Horne**”), and **County of Santa Barbara**, on behalf of its **Department of Behavioral Wellness**, a California County with offices at 315 Camino del Remedio, Santa Barbara, CA 93110 (“**Sponsor**”). Horne and Sponsor may be referred to separately as a “**Party**” or collectively as “**Parties**.”

RECITALS

A. Horne entered into an agreement with the State of California (the “**State**”) through the California Department of Social Services (“**CDSS**”) to facilitate program funding awards and provide services to CDSS as the third-party administrator of the CDSS Community Care Expansion Program (“**Program**”). The agreement between CDSS and Horne shall hereinafter be referred to as the “**Prime Contract**” or “**CDSS Contract**”;

B. The purpose of the Program is to preserve and expand access to long-term care services for seniors and adults with disabilities in the least restrictive settings, prioritizing applicants and recipients of Supplemental Security Income/State Supplementary Payment (“**SSI/SSP**”) and Cash Assistance Program for Immigrants (“**CAPI**”) who are experiencing or at risk of homelessness;

C. Pursuant to the requirements of the Program and CDSS guidelines, qualified grantees or entities shall use program fund awards to expand or preserve the capacity of eligible residential adult and senior care settings by the acquisition, construction, renovation or other physical improvement of real property, infrastructure, or facilities;

D. Pursuant to the requirements of the Program and CDSS guidelines, certain grantees may use a portion of Program fund awards to establish a capitalized operating subsidy reserve (“**COSR**”) to cover potential or projected operating deficits on a facility that is deed restricted to provide licensed residential care for at least the term of the COSR;

E. In response to that certain Request for Applications issued by a previous agent on behalf of CDSS on or about January 30, 2022 (the “**RFA**”) for the Program, Sponsor submitted an application (“**Application**”) to construct the project described in the current Statement of Work, Attachment E hereto (“**SOW**”), located at 310 Camino del Remedio, Santa Barbara, CA 93110 (the “**Project**”); and Sponsor has been awarded program funds for the Project, in an amount not to exceed One Million Forty-Three Thousand Four Hundred Thirty-Three (\$1,043,433) (“**Program Funds**”); ; and

F. This Agreement sets forth the terms and conditions of Horne’s administration and management of the Program Funds and Sponsor’s duties and obligations related to its receipt of Program Funds. Capitalized terms not defined herein, shall have the meanings ascribed thereto in the California Welfare and Institutions Code sections 18999.97–18999.98.

NOW, THEREFORE, based upon the foregoing, and in consideration of the mutual covenants and agreements herein set forth, the Parties agree as follows:

ARTICLE 1.
AUTHORITY

California Assembly Bill 172 (Chapter 696, Statutes of 2021) (“AB 172”) added sections 18999.97-18999.98 to the Welfare and Institutions Code providing the statutory basis for the Program. CDSS issued the RFA for the Program Funds and Horne provides pre-application consultation, technical assistance, general training and support on individual CCE projects, as well as administration and fund management. Program Funds are derived from the State of California General Fund.

This Agreement is entered under the authority of and in furtherance of the Program. This Agreement is the result of the Application by Sponsor for funding under the Program.

This Agreement hereby incorporates by reference Sponsor’s approved Application, as well as any report prepared by Horne in reliance on the representations and descriptions included in that Application. This Agreement is governed by the following (collectively, the “Program Requirements”), and each of the following, as amended and in effect from time to time, is hereby incorporated by this reference as if set forth herein in full:

- 1.1 AB 172 (Chapter 696, Statutes of 2021), including any subsequent amendments to the statutes contained therein;
- 1.2 The RFA, in the form attached to this Agreement as Attachment M;
- 1.3 California Welfare and Institutions Code sections 18999.97–18999.98;
- 1.4 Guidance issued by CDSS regarding the Program;
- 1.5 Program Guidelines, or Program Manuals, as adopted by CDSS, and as may be amended from time to time;
- 1.6 The award letter issued by CDSS to Sponsor (“Award Letter”) attached to this Agreement as Attachment N; and
- 1.7 All other applicable law, including, but not limited to, California Labor Code statutes applicable to public works projects.

Sponsor is solely responsible and liable for Sponsor and Sponsor’s subcontractors’ performance and compliance with this Agreement, the above-referenced Program Requirements, and all other local, state, and federal laws applicable to the Project.

ARTICLE 2.
TERM

- 2.1 This Agreement shall commence on the Effective Date and shall expire automatically on June 30, 2029 (the “Expiration Date”), which Expiration Date may be extended by Horne or CDSS; (the period from the Effective Date through the Expiration Date shall be referred to herein as the “Term”), unless earlier terminated by Horne or CDSS or assigned to CDSS pursuant to Section 2.3 below.
- 2.2 There shall be no early termination, extension, amendment, or renewal of the Term of this Agreement, unless the Parties and CDSS agree in writing.
- 2.3 In the event that the Term of this Agreement is not extended, renewed, or terminated early, and either Party hereto shall have a material obligation to the other Party by the terms of this Agreement, which shall not be satisfied on or before the Expiration Date, all of Horne’s rights and obligations under this Agreement shall be assigned to CDSS, if directed by CDSS, effective June 30, 2029, at 11:59 p.m. Each of the Parties hereto acknowledge and agree that upon the occurrence of an assignment pursuant to this Section 2.3, such an assignment shall be effective without any further action by either Party hereto, or CDSS, and from and after the date of such an assignment: (i) CDSS shall be a Party to this Agreement and shall have all rights and obligations of Horne hereunder and (ii) Horne shall cease to be a Party to this Agreement and shall be released from its obligations hereunder. Upon the occurrence of such assignment, the Term of this Agreement shall be extended automatically for a period of one (1) year and shall expire without any further action by either Sponsor or CDSS, unless Sponsor and CDSS otherwise agree in writing.
- 2.4 In the event that the Prime Contract is terminated or amended in a manner removing Horne from responsibility as a Party to this Agreement, and either Party hereto shall have a remaining obligation to the other Party by the terms of this Agreement, which shall not be satisfied on or before the Expiration Date, all of Horne’s right and obligations under this Agreement shall be assigned automatically to CDSS effective upon the date of the termination or amendment.
- 2.5 Notwithstanding the foregoing or anything to the contrary contained herein, Horne and/or CDSS shall have the termination rights as set forth in Article 9 and Article 10, of this Agreement.

ARTICLE 3.
PROGRAM FUNDS

Sponsor has been awarded the Program Funds in the amount set forth in this Agreement to be used solely for the purposes set forth in this Agreement and as detailed in the SOW and for no other purposes. Sponsor shall be responsible for any costs to complete the Project in excess of the Program Funds award amount. Sponsor shall return any excess or remaining Program Funds

to the State of California upon completion of the Project. Notwithstanding the foregoing, Sponsor may be awarded a COSR to cover deficits in operating expenses attributable to the Project; and the COSR will be subject to the terms of a Capitalized Operating Subsidy Reserve Agreement between Sponsor and Horne, the form of which is attached hereto as Attachment L.

ARTICLE 4.
CONDITIONS OF CLOSING AND DISBURSEMENT

This Agreement shall be subject to the conditions precedent to closing set forth in Section 4.1 below. Horne shall disburse the Program Funds to Sponsor upon satisfaction of the requirements described in Section 4.2 below. Program Funds disbursed for real property acquisition shall be disbursed only upon satisfaction of the requirements in Section 4.2 and the additional requirements of Section 4.3 below. Program Funds to be disbursed for construction costs shall be disbursed only upon satisfaction of the requirements of Section 4.2 and the additional requirements described in Section 4.4 below. Thereafter, Program Funds shall be disbursed to Sponsor for costs incurred for the Project within thirty (30) days of receipt of a complete request for Program Funds, provided such request for funds is approved by Horne or its designee.

- 4.1.1 Conditions Precedent to Effectiveness of this Agreement. This Agreement shall not become effective until the following have been submitted by Sponsor and approved by Horne:
- 4.1.2 A fully executed copy of this Agreement, including all Attachments;
- 4.1.3 An executed copy of Certification: Related Party & Related Party Transaction Disclosure;
- 4.1.4 A completed Government Agency Taxpayer ID Form;
- 4.1.5 An authorizing resolution or set of authorizing resolutions that, in Horne's reasonable determination, materially comports with the Program Requirements.
- 4.1.6 Unless Sponsor is acquiring real property for the construction or operation of the Project, in which event Sponsor shall be subject to the requirements as described in Section 4.3.5.1, a certified copy of a recorded Declaration of Restrictions in the form attached to this Agreement as Attachment I, or deposit with Escrow Agent for recordation upon the mutual execution and release of this Agreement of a Declaration of Restrictions in such form, which shall be recorded against the real property upon which the Project is to be constructed or operated; provided that, in the event that the Project is being constructed or operated on a leasehold interest, which lease must be for a term of not less than thirty (30) years, the Sponsor shall record the Declaration of Restrictions against the leasehold and the fee interest to the real property upon which the Project is to be constructed or operated;
- 4.1.7 Unless Sponsor is acquiring real property for the construction or operation of the Project, in which event Sponsor shall be subject to the requirements

as described in Section 4.3.5.2, a certified copy of a recorded Performance Deed of Trust in the form attached to this Agreement as Attachment J, or other real estate instrument required by CDSS or deposit with Escrow Agent for recordation upon the mutual execution and release of this Agreement of a Performance Deed of Trust in such form; provided that, in the event that the Project is being constructed or operated on a leasehold interest, which lease must be for a term of not less than either twenty (20) years for existing building capacity expansion projects or thirty (30) years for new facility construction projects, the Sponsor shall record the Performance Deed of Trust against the leasehold and the fee interest to the real property upon which the Project is to be constructed or operated; and deliver to Horne within five (5) days after recordation an ALTA Lender's Policy of Title Insurance showing the Performance Deed of Trust in the lien priority, such policy in a form approved by Horne and only subject to such title exceptions as are approved by Horne, its designee, or CDSS;

4.1.8 Certificates of insurance evidencing coverages required by this Agreement and naming Horne and CDSS as additional insureds;

4.1.9 A title report reflecting all existing liens, encumbrances, taxes owed, easements, covenants or any other restrictions on the real property upon which the Project is to be constructed or operated. If Sponsor's interest in the real property upon which the Project is to be constructed or operated is a leasehold, then Sponsor shall provide a current title report for the leasehold interest and the fee interest. For tribal trust land, Sponsor shall provide a certified Title Status Report ("TSR") from the U.S. Department of the Interior Bureau of Indian Affairs ("BIA") or an attorney's opinion regarding chain of title and current title status;

4.1.10 A signed opinion letter from Sponsor's legal counsel opining that this Agreement, the Declaration of Restrictions, the Performance Deed of Trust, and the Program Requirements do not conflict with any existing contract, agreement, or other requirement applicable to Sponsor, the property upon which the Project is to be constructed or operated, or the Project, and are otherwise enforceable against Sponsor; and such opinion letter shall be in the form and substance acceptable to Horne and CDSS, in their sole discretion.

4.2 Requirements for Disbursement of Program Funds. No Program Funds shall be released to Sponsor for any Project costs until Sponsor submits, and Horne approves, the documents described below for each Program Funds request, and any additional supporting information as may be required:

4.2.1 The Sponsor's request for funds, with all required supporting documents appended thereto;

4.2.2 Delivery of all items listed in Attachment H required for the disbursements of Program Funds.

4.3 Requirements for Disbursement of Program Funds for Acquisition Costs. No Program Funds shall be released to Sponsor for any Project costs related to the acquisition of real property until Sponsor satisfies the requirements described in Section 4.2 above, and Sponsor submits, and Horne approves, all documents described in this Section 4.3, and any additional information as may be required by Horne. Program Funds disbursed for acquisition of real property will be deposited directly into an escrow account opened by Sponsor for the transfer of title of the real property with Old Republic Title Company, unless another title company is approved by Horne.

4.3.1 A fully executed purchase and sale agreement or other agreement evidencing Sponsor's right to acquire the property upon which the Project is to be constructed or operated;

4.3.2 A written appraisal report setting forth an opinion of fair market value of the real property upon which the Project is to be constructed or operated prepared by a certified general appraiser licensed in the State of California ("Certified Appraisal Report"), which shall be in a form and substance acceptable to Horne and dated no more than six (6) months prior to the applicable request for funds;

4.3.3 A commitment from a title insurance company for an ALTA Lenders Title Insurance policy in a form acceptable to Horne in the amount of the Program Funds. The condition of title, the insurer, the liability amount, the form of policy, and the endorsements shall be subject to Horne approval. The policy shall insure that Sponsor holds good and marketable title (fee simple or leasehold) and shall show the Performance Deed of Trust and Declaration of Restrictions in the lien priority approved by Horne and only subject to such title exceptions as are approved by Horne, its designee, or CDSS;

4.3.4 Evidence of any additional funds necessary for Sponsor to acquire the property upon which the Project is to be constructed if the Program Funds are not providing the full amount of the acquisition costs;

4.3.5 Signed escrow instructions, approved by Horne, providing for the following:

4.3.5.1 a Declaration of Restrictions in the form attached to this Agreement as Attachment I shall be recorded at the close of escrow against the real property upon which the Project is to be constructed or operated; and

4.3.5.2 a Performance Deed of Trust, or other real estate instrument required by CDSS, in the form attached to this Agreement as

Attachment J shall be recorded at the close of escrow against the real property upon which the Project is to be constructed or operated.

4.3.6 Applicable documents and deliverables described in Attachment H required for the disbursements of Program Funds.

4.4 Requirements for Disbursement of Program Funds for Construction Costs. No Program Funds shall be released to Sponsor for Project costs related to construction on the Project until Sponsor satisfies the requirements described in Section 4.2 above, and Sponsor submits, and Horne approves, all documents described below, and any additional information as may be required, with each request for disbursement of funds for construction:

4.4.1 Plans and specifications for the construction work approved by Horne;

4.4.2 An executed construction contract, based on a permitted set of construction plans with a licensed general contractor for an amount consistent with the construction costs in the approved Project budget, based on the sources and uses attached hereto as Exhibit A and Exhibit B (as the same may be modified from time to time, with prior notice to Horne, the "Project Budget") that incorporates the requirements of this Agreement including, but not limited to, the prevailing wage requirements, and contains the Construction Contract Rider in the form attached as Attachment K;

4.4.3 Copies of labor and material bonds and performance bonds for the construction work in an amount equal to one hundred percent (100%) of the cost of construction, naming Horne and CDSS as co-obligees on the bonds;

4.4.4 A written request for Program Funds on a form approved by Horne providing sufficient detail and with sufficient supporting documentation to permit Horne or its designee to confirm that the request is consistent with the terms of this Agreement and the Project Budget accompanied by (a) certification by Sponsor's architect or project manager that the work for which disbursement is requested has been completed (although Horne reserves the right to inspect or have its designee inspect the Project and make an independent evaluation); (b) invoices and related back-up information and documentation required by Horne evidencing the amounts being requested; and (c) lien releases and/or mechanics lien title insurance endorsements reasonably acceptable to Horne; and

4.4.5 Applicable documents and deliverables described in Attachment H required for the disbursements of Program Funds.

4.5 Disbursements for Predevelopment Expenses. Notwithstanding anything to the contrary stated in this Article 4, or otherwise in this Agreement, Program Funds

may be released to Sponsor for certain predevelopment Project costs, subject to approval by Horne, its designee, or CDSS, in their sole discretion; provided, that Sponsor has satisfied the requirements set forth in subsections 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.7, 4.1.9, 4.2.1, 4.2.2, and the Project budget includes predevelopment expenses.

ARTICLE 5.
CONSTRUCTION PROJECTS/NOTICE TO PROCEED

In the event that Program Funds are used for the performance of construction on the Project, Sponsor shall submit any update to the Project Budget and a copy of the project schedule to Horne for its approval prior to issuance of a notice to proceed to Sponsor's general contractor. The updated Project Budget and project schedule shall be consistent with the final plans and specifications for the Project. Sponsor shall not issue a notice to proceed to its general contractor until Horne has approved the updated Project Budget and project schedule.

ARTICLE 6.
PERFORMANCE

Sponsor shall comply with the schedule set forth in the Performance Milestones in Attachment H and shall provide all applicable documents or deliverables described in Attachment G when requested. Sponsor shall provide regular progress reports to Horne, but in all events at least once every thirty (30) days, including its progress toward meeting the Performance Milestones. The Project shall not be considered complete until the submission of the required Notice of Completion signed by General Contractor and Architect, the certificate of occupancy, and copies of all unconditional lien waivers. Sponsor may apply to Horne for an extension of any Performance Milestones or an extension to submit any required deliverable, which Horne may approve based on a showing of good cause and acceptable assurances from Sponsor for timely completion of the remaining Performance Milestones as determined by Horne. Any extension granted by Horne shall not be effective unless granted in writing, and such writing shall be considered an amendment to this Agreement and incorporated herein. Funding sources are summarized and located on <https://www.ccegrant.com/> (the "Website"). Any updates to obligation and liquidation dates will be reflected on the Website, with communication updates being sent out to all grantees. Currently, there are three (3) funding sources for the Program, and the deadlines are as follows: General Funds must be obligated by June 2027, and expended by June 2029. The portion of the Program Funds originating from the State of California, General Fund (formerly State Fiscal Recovery Fund or SFRF), must be obligated by June 2024, and expended by December 2026. The portion of Program Funds originating from the State of California, Health and Human Services Agency, Home-and Community Based Services Fund ("HCBS"), must be obligated by December 2023 and expended by March 2024. Any updates related to obligation or expenditure dates and deadlines reflected on the Website and formal communication to the grantee, will be automatically applicable to this Agreement and the funding sources being applied toward the Project. The specific source of funding for a specific activity as well as the affiliated liquidation timeline for that funding source will be shared at the time of disbursement.

FAILURE TO SATISFY ANY ONE OF THE DELIVERY OBLIGATIONS REQUIRED HEREUNDER AND/OR PERFORMANCE MILESTONES (UNLESS SUCH PERFORMANCE MILESTONE IS EXTENDED) SHALL CONSTITUTE A BREACH OF THIS AGREEMENT AND ENTITLE HORNE TO MANDATE SPONSOR TO RETURN TO THE STATE OF CALIFORNIA ANY PROGRAM FUNDS DISBURSED; IN ANY SUCH INSTANCE, HORNE MAY, WITH CDSS APPROVAL, ALSO CANCEL THIS AGREEMENT WITHOUT OWING ANY DAMAGES OR OTHER PAYMENT TO SPONSOR.

ARTICLE 7.
FISCAL ADMINISTRATION

- 7.1 Disbursements of Program Funds to Sponsor by Horne shall be made directly to applicable contractors or vendors or to Sponsor, unless such funds are to be used for acquisition of the property upon which the Project is to be constructed or operated or otherwise required to flow through escrow, in which event the Program Funds shall be deposited directly into an escrow account established with a title company approved by Horne. All interest earned from the deposit of Program Funds shall be used by Sponsor for eligible Program activities. Program Funds shall be segregated from Sponsor's other funds and shall only be disbursed for eligible Program Funds costs.
- 7.2 Horne has approved the sources and uses attached as Exhibit A and Exhibit B, as such sources and uses may be updated into the Project Budget in accordance with Article 5. Sponsor may adjust line items in the budget without the prior approval of Horne, provided that such adjustments do not increase the overall budget amount, and provided further that Sponsor provides notice to Horne of the budget changes. Any use of any contingency amounts listed in the sources and uses attached hereto or the Project Budget, however, shall require the prior approval of Horne, which may require submittal of Sponsor's plans for mitigation of any events or circumstances necessitating the use of contingency funds. If upon completion of a particular phase or segment of the Project the Program Funds allocated to that segment or phase have not been fully expended, the Program Funds allocated to Sponsor for such segment of the Project shall remain available to Sponsor for disbursement for subsequent segments of the Project; provided, however, in no event shall the total amount of the Program Funds available to Sponsor exceed the amount set forth in this Agreement without a written amendment to this Agreement approved by Horne and CDSS.
- 7.3 Sponsor shall notify Horne in a timely manner of any changes in the work required to be performed under this Agreement, including any additions, changes, or deletions to the plans and specifications approved by Horne. Sponsor shall provide prior notice to Horne of any written change order before any of the following changes, additions, or deletions in work for the Project may be performed: (1) any change in the work the cost of which exceeds Twenty-Five Thousand Dollars (\$25,000); (2) any set of changes in the work the cost of which cumulatively exceeds One Hundred Thousand Dollars (\$100,000); (3) any

material change in building materials or equipment, specifications, or the structural or architectural design or appearance of the Project, as provided for in the plans and specifications approved by Horne; or (4) any changes in the project schedule that will extend the completion date. Notice of any additions, changes, or deletions to the work shall not relieve or release Sponsor from any other obligations under this Agreement or relieve or release Sponsor or its surety from any surety bond.

- 7.4 Sponsor shall provide Horne with an updated Project Budget and project schedule for the Project when 50% completion of construction work is achieved that shows all changes in costs and schedule from the Project Budget and project schedule provided to Horne prior to issuance of the notice of proceed.
- 7.5 Any Program Funds that have not been expended by the expiration of the Base Performance Period set forth in the Summary Cover Sheet and the Attached Performance Milestones must be returned to CDSS with accrued interest. Returned Program Funds shall be paid as directed by Horne or CDSS, no later than thirty (30) calendar days after the expiration of the applicable Base Performance Period.
- 7.6 In the event that Sponsor receives a COSR, the terms of disbursement to Sponsor shall be governed by that certain Capitalized Operating Subsidy Reserve Agreement between Sponsor and Horne, and not the terms of this Agreement. A COSR shall be available for use by Sponsor only for a period of up to five (5) years from the date of commencement of operations in the new or expanded facility, or March 31, 2029, whichever is earlier, unless otherwise authorized by CDSS; and in the event that the facility carries an operating deficit after the expiration of such five- (5) year period, Sponsor shall be solely liable and responsible for all operating costs previously funded by a COSR. For the avoidance of doubt, in no event shall the total amount of the Program Funds or the COSR available to Sponsor exceed the amounts set forth in this Agreement without a written amendment to this Agreement approved by Horne and CDSS.

ARTICLE 8.
CHANGES TO STATEMENT OF WORK

- 8.1 Sponsor shall not change the SOW without the prior approval of Horne or CDSS, which may be approved or disapproved by Horne or CDSS, each in its sole discretion. Horne and CDSS' decision to disapprove a request to change Sponsor's SOW is fact-specific, and the decision shall be final and not subject to further review. Sponsor shall submit to Horne a written request to change the SOW, which shall include a detailed description of the following criteria:
 - 8.1.1 The changes to the services or the Project that Sponsor is requesting to make.

- 8.1.2 A detailed explanation of why the change is necessary and justification for how the change in Sponsor's Project will preserve or expand capacity of residential adult and senior care facilities and/or serve Qualified Residents as that term is defined in Welfare and Institutions Code section 18999.97.
- 8.1.3 Anticipated additional costs of changes to the Project, including a financial plan for meeting additional costs.
- 8.1.4 Any other information requested by Horne or CDSS to evaluate Sponsor's request.

Any changes to the SOW approved by Horne and/or CDSS shall be provided to Horne and considered an amendment to this Agreement and incorporated herein.

- 8.2 Sponsor is solely liable and responsible for any increases in costs that exceed the Program Fund award. In no event shall Horne or CDSS be responsible for any costs that exceed the Program Funds. In the event that Project costs exceed the funds that Sponsor has available to pay such costs, Sponsor shall within thirty (30) days of such occurrence provide for Horne's approval a financial plan for meeting such additional costs which additionally may be approved or disapproved by CDSS, in its sole discretion. A financial plan for meeting additional costs may include Sponsor providing additional funds for the Project or Sponsor incurring additional debt. Sponsor shall not incur any additional debt without the prior written approval of Horne.

ARTICLE 9.
DEFAULT AND REMEDIES

- 9.1 Event of Default. Any of the following shall, after notice by Horne or CDSS and expiration of any applicable cure period, constitute an Event of Default under this Agreement:
 - 9.1.1 Sponsor's failure to satisfy the conditions precedent to disbursement of Program Funds as set forth in Article 4 above, or to expend Program Funds pursuant to the terms of this Agreement.
 - 9.1.2 Sponsor's failure to timely satisfy each or any of the conditions set forth in this Agreement, or the Award Letter.
 - 9.1.3 Sponsor's violation of any of the Program Requirements.
 - 9.1.4 Horne's or CDSS' determination of the following:
 - 9.1.4.1 Sponsor has concealed any material fact from Horne or CDSS related to Sponsor, the Application, the property upon which the Project is to be constructed or operated or the Project; or

- 9.1.4.2 Any material fact or representation made or furnished to Horne or CDSS by Sponsor in connection with the Application, the Award Letter, or this Agreement shall have been untrue or misleading at the time that such fact or representation was made known to Horne, or subsequently becomes untrue or misleading; or
 - 9.1.4.3 Any certification or deliverable provided by Sponsor is determined to be untrue or misleading.
 - 9.1.4.4 Any objectives or requirements of the Program cannot be met in accordance with this Agreement or within applicable timeframes, as memorialized by this Agreement.
- 9.2 Right to Cure. If the breach, violation, or default pursuant to Section 9.1 is not cured to Horne's and CDSS' satisfaction, as determined by Horne and CDSS, in their sole and absolute discretion, within fourteen (14) days of notice to Sponsor, provided in accordance with the notice requirements of this Agreement, then Horne, with CDSS approval, may declare a default under this Agreement.
- 9.2.1 Notwithstanding the foregoing, Sponsor may request additional time to cure any default. Horne may, but shall not be required to, grant any such request, subject to CDSS approval. Horne's approval of Sponsor's request for additional time to cure shall be subject to Sponsor's continuing and diligent efforts to cure, and any additional cure period provided to Sponsor shall be reasonable, as determined by Horne, subject to CDSS approval. For the avoidance of doubt, any extension of the cure period shall be granted by Horne or CDSS in writing in their sole discretion.
- 9.3 Horne/CDSS Remedies. Upon the occurrence of an Event of Default, Horne (on CDSS' behalf) and/or the State (represented by CDSS in this Agreement) may take any and all actions or remedies that are available under this Agreement, at law, or in equity, including, but not limited to, the following:
- 9.3.1 temporarily withhold disbursement of Program Funds pending correction of the breach, violation, or default;
 - 9.3.2 disallow use of Program Funds for all or part of the costs resulting from the breach, violation, or default;
 - 9.3.3 wholly or partly suspend or terminate this Agreement and Sponsor's award of Program Funds, or disbursements thereof (any such suspension or termination of this Agreement or Sponsor's award of Program Funds shall be effective upon Sponsor's receipt of Horne or CDSS notice of termination or suspension);
 - 9.3.4 withhold or deny further Program Funds or awards to Sponsor,

- 9.3.5 require Sponsor to return all or part of any Program Funds, including any interest;
- 9.3.6 any and all remedies under the Performance Deed of Trust;
- 9.3.7 any and all remedies under the Declaration of Restrictions;
- 9.3.8 specific performance;
- 9.3.9 injunctive relief;
- 9.3.10 recovery and completion of the Project pursuant to the payment and performance bonds; and
- 9.3.11 any and all remedies allowed by law or equity.

ARTICLE 10.
TERMINATION

- 10.1 Horne and/or CDSS shall have the right, each in its sole discretion and without prejudice to any other rights and remedies it may have under applicable law, to terminate this Agreement immediately upon notice of such termination to Sponsor, if (i) an Event of Default occurs; (ii) three (3) breaches, violations or defaults by Sponsor of the terms and conditions of this Agreement (whether the same or different) occur within any twelve (12)-month period, regardless of whether any or all such breaches, violations or defaults are timely corrected; (iii) Sponsor files a petition in bankruptcy or is adjudicated by a court of competent jurisdiction to be bankrupt or insolvent, or makes an assignment for the benefit of creditors or an arrangement pursuant to any bankruptcy law, or if Sponsor discontinues or dissolves its business, or if a receiver is appointed for Sponsor or Sponsor's business; (iv) any lender to Sponsor declares a default under its loan agreement, or funds available to Sponsor from any lender become unavailable such that Sponsor is unable to timely satisfy obligations under this Agreement; or (v) Sponsor fails to provide Horne or CDSS with adequate assurances within a reasonable time that Sponsor is financially solvent or, Horne or CDSS determines, that Sponsor is financially insecure.
- 10.2 Upon termination of this Agreement for any reason, neither Horne nor CDSS shall be liable for any work that is not performed in accordance with the Agreement. Upon any termination, neither Horne nor CDSS shall be responsible for any additional disbursements of Program Funds after the termination date or for any damages to Sponsor as a result of such termination.

ARTICLE 11.
INSURANCE

11.1 **Insurance Requirements.** Sponsor shall continuously maintain for the duration of this Agreement, and so long as the Declaration of Restrictions is in place, the following insurance at, or in excess of, the limits detailed below:

11.1.1 A Builders Risk policy including a permission to occupy endorsement during the course of construction, and upon completion of construction, if the Project is new construction, property insurance covering all risks of loss, excluding earthquake, flood or other risks customarily excluded from “All-Risks” coverage, in an amount equal to full replacement cost of the Project, including all improvements, fixtures, furnishings and equipment thereon at the time of loss.

11.1.2 If the Project is rehabilitation of an existing building, property insurance covering all risks of loss, excluding earthquake, flood or other risks customarily excluded from “All-Risks” coverage, in an amount equal to the full replacement costs of all improvements located on the property upon which the Project is to be constructed, including all improvements, fixtures, furnishings and equipment thereon at the time of loss. Upon completion of the rehabilitation, any property insurance policy shall be updated to reflect the increased replacement costs resulting from the rehabilitation.

11.1.3 Worker’s compensation insurance as required by the State.

11.1.4 Comprehensive automobile and vehicle liability insurance covering claims for injuries to members of the public and/or damages to property of others arising from use of motor vehicles, including on-site and off-site operations, and owned, non-owned, or hired vehicles with \$1,000,000 combined single limits.

Commercial general liability insurance of not less than \$1,000,000 per occurrence with an annual aggregate limit of \$2,000,000¹ for bodily injury and property damage liability combined. The Sponsor’s required limits may be satisfied through a combination of general liability and umbrella policies of coverage. The commercial general liability insurance policy shall cover liabilities arising out of premises, operations, independent contractors, products, completed operations, personal and advertising injury, and liability assumed under an insured agreement. The commercial general liability insurance shall apply to each insured against whom claim is made or suit is brought subject to Sponsor’s limit of liability.

¹ HORNE/CDSS TO DETERMINE FOR EACH CONTRACT, DEPENDING ON SIZE OF PROJECT AND SPONSOR.

- 11.2 Policy Requirements. All policies, except Workers' Compensation, shall be endorsed to name Horne and CDSS as an Additional Insured with respect to the work to be performed by Sponsor. The endorsements and policies will provide that the insurer waives its rights of subrogation, and the insurer will provide notice to Horne in writing at least thirty (30) days prior to any cancellation, material change in coverage or intent not to renew such insurance coverage. All such insurance must be primary and non-contributory and required to respond and pay prior to any other insurance or self-insurance available. Horne, in its sole discretion, may accept evidence of self-insurance if Horne determines that such self-insurance provides adequate coverage.
- 11.3 Contractor Insurance Requirements. Sponsor shall require its general contractor and its subcontractors to provide insurance in the amounts and form set forth above during the course of construction (except the general contractor shall not be required to maintain Builder's Risk insurance or property insurance) and to name Horne and CDSS as additional insureds on all such insurance during the course of construction.
- 11.4 Certificates of Insurance. Upon Horne's request, Sponsor shall immediately deposit with Horne and CDSS a certificate of insurance evidencing the above insurance coverage and naming Horne and CDSS as additional insured parties under such policies. Sponsor agrees that the insurance required herein shall remain in effect at all times during the term of the Agreement and the term of the Declaration of Restrictions. During the term of this Agreement, at least thirty (30) calendar days prior to the expiration of any policy of insurance required herein, Sponsor shall provide to Horne and CDSS a new certificate of insurance evidencing insurance coverage as provided herein for a period not less than one year. Notwithstanding the expiration of this Agreement, the Sponsor shall provide to CDSS a new certificate of insurance evidencing insurance coverage as provided herein for a period not less than either twenty (20) years for existing building capacity expansion projects, or thirty (30) years for new facility construction projects, from the date of either of the following: (i) the date of issuance of a Certificate of Occupancy, or (ii) the date of recordation of a Notice of Completion, in the official records of the county where the Project is located.
- 11.5 Insurance Indemnification. Sponsor shall indemnify, defend and hold harmless Horne and CDSS against any and all liabilities to third persons and other losses (not compensated by insurance or otherwise) and for any other costs and expenses incurred, including reasonable attorneys' fees, judgments, settlements or penalties, as a result of any claim or liability resulting from the failure of Sponsor (or its lower tier subcontractors or consultants) to maintain the insurance policies required by this Section.
- 11.6 Insurance Premiums. Neither Horne nor CDSS shall be responsible for any premiums, deductibles, or assessments on any insurance policy referred to in this Agreement.

- 11.7 Survival. The requirements to provide insurance in this Article 11 shall survive termination of this Agreement.

ARTICLE 12.
OPERATIONS

Sponsor agrees that in consideration of the receipt of Program Funds pursuant to the terms of this Agreement, Sponsor shall enter into, as required by this Agreement, the Declaration of Restrictions, to be recorded against the property upon which the Project is to be constructed or operated, in a form substantially similar as attached hereto and incorporated herein by this reference as Attachment I. The Declaration of Restrictions shall by its terms restrict the development, use, and occupancy of the Project for the term of either twenty (20) years for existing building capacity expansion projects or thirty (30) years for new facility construction projects, each from either the date of the issuance of a Certificate of Occupancy or the date of recordation of a Notice of Completion in the official records of the county in which the Project is located. In addition to any requirements in the Declaration of Restrictions, Sponsor shall comply with all health and safety requirements associated with the operation and maintenance of the Project for the benefit of the occupants of the Project. These rights and obligations shall survive the expiration or early termination of this Agreement and are covenants running with the Project pursuant to the Declaration of Restrictions in the form of Attachment I to be recorded against the Project. During the Term of this Agreement and the term of the Declaration of Restrictions Sponsor shall execute such other documents as required by CDSS to comply with the Program Requirements, including operating agreements, deed restrictions, covenants and conditions recorded against the Project.

ARTICLE 13.
POLICIES AND LEGAL AUTHORITIES

- 13.1 Sponsor covenants comply with all California and federal law, regulations, and published guidelines, to the extent that these authorities contain requirements applicable to Sponsor's performance under this Agreement, construction of, possession or ownership of the Project, including any licensing and health and safety requirements.
- 13.2 Sponsor shall comply with California Welfare and Institutions Code sections 18999.97 -18999.98 *et seq.*, including any related CDSS guidance, regulations, and/or subsequent additions or amendments thereto.
- 13.3 In the event Sponsor does not comply with the terms of this Article 13, Horne shall have all rights set forth in Article 9 and Article 10 and available at law or in equity.

ARTICLE 14.
INDEMNIFICATION

- 14.1 Sponsor shall indemnify, defend, and hold harmless Horne, its officers, employees, and agents, and CDSS and its officers, employees and agents against liabilities to third persons and other losses (not compensated by insurance or

otherwise) and for any costs and expenses incurred by Horne and CDSS, including reasonable attorneys' fees, judgments, settlements or penalties, against all liabilities, claims, suits, demands or liens for damages to persons or property ("Claims") (except to the extent such Claims arise from the gross negligence or willful misconduct of Horne or CDSS), arising out of, resulting from, or relating to, Sponsor's performance under this Agreement or related in any way to the Project, and including, but not limited to the following:

- 14.1.1 Any act, omission, or statement of Sponsor, or any person employed by or engaged under contract with Sponsor that results in injury (including death), loss, or damage to any person or property;
 - 14.1.2 Any failure on the part of Sponsor to comply with applicable Program Requirements and requirements of law;
 - 14.1.3 Any failure to maintain the insurance policies required by this Agreement or the work performed, inclusive of intellectual property infringement, if applicable, under this Agreement. Insurance coverage that may be required shall in no way lessen or limit the liability of Sponsor under the terms of this obligation.
 - 14.1.4 Any failure on the part of Sponsor to satisfy all claims for labor, equipment, materials and other obligations relating to the performance of the work hereunder;
 - 14.1.5 Any injury to property or person occurring on or about the infrastructure or the property of Sponsor; or
 - 14.1.6 Any claims related to the use, generation, storage, release, threatened release, discharge, disposal or presence of hazardous materials on, under or about the property upon which the Project is to be constructed.
- 14.2 Sponsor shall indemnify Horne and CDSS under this clause for any of the above acts attributable to its employees, consultants, agents, and/or lower-tiered subcontractors engaged in performance of the work under this Agreement. Horne or CDSS shall provide timely notice of any Claim describing in reasonable detail such facts and circumstances with respect to such Claim. Sponsor shall defend Horne and CDSS with counsel reasonably acceptable to Horne and CDSS. Horne and CDSS may, at their option and own expense, engage separate counsel to advise them regarding the Claim and its defense. Such counsel may attend all proceedings and meetings. Sponsor shall not settle any Claim without the consent of Horne and CDSS, as applicable.
- 14.3 Sponsor agrees to indemnify, defend and save harmless Horne, its officers, agents and employees and CDSS, its officers, agents and employees from any and all claims, costs (including, but not limited to, all legal expenses, court costs, and attorney's fees incurred in investigating, preparing, serving as a witness in, or defending against, any such claim, action, or proceeding, commenced or

threatened), and losses accruing or resulting to any and all contractors, subcontractors, suppliers, laborers, and any other person, firm or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by Sponsor in the performance of this Agreement.

14.4 This indemnification shall survive the expiration or termination of the Agreement.

ARTICLE 15.
PREVAILING WAGE

Any construction work that is part of Sponsor's Project is subject to state prevailing wage law, including California Labor Code section 1720 *et seq.* Sponsor is urged to seek professional legal advice about prevailing wage law requirements and Sponsor's obligations thereunder. Prior to disbursing the Program Funds, Sponsor must provide evidence of Sponsor's and its general contractor's compliance with California's prevailing wage law and all applicable wage and hours laws. Sponsor shall also comply with any other labor requirements applicable to the Project as a result of other funding sources or regulatory requirements.

ARTICLE 16.
ENVIRONMENTAL CONDITIONS

If the SOW includes the acquisition of real property, Sponsor shall provide a Phase I Environmental Site Assessment ("ESA") for the Project, in conformance with ASTM Standard Practice E 1527, evaluating whether the Project is affected by any recognized environmental conditions. If the Phase I ESA discloses evidence of recognized environmental conditions and Sponsor desires to proceed with the Project, Sponsor shall provide Horne with a Phase II report and any additional reports as required by Horne and in a form acceptable to Horne. Sponsor shall also provide an asbestos assessment and a lead-based paint report for Horne's approval if the Project involves rehabilitation or demolition of existing improvements. Prior to disbursement of Program Funds for real property acquisition, Horne shall require Sponsor to provide evidence to Horne that all recommendations of the Phase I or Phase II ESA have been complied with or shall be complied with prior to commencement of construction. Prior to disbursement of Program Funds for any rehabilitation work, Horne shall require the sponsor to provide evidence that all asbestos and/or lead-based paint has been abated.

ARTICLE 17.
RELOCATION

Sponsor must comply with the California Relocation Assistance Law (California Government Code section 7260 *et seq.*) and its implementing regulations ("Relocation Laws") if the Project will result in the displacement, as that term is defined in the Relocation Laws, of any persons, businesses, or farm operations. Pursuant to the Relocation Laws, a Sponsor must have a relocation plan prior to proceeding with any phase of a Project or other activity that will result in the displacement of persons, businesses, or farm operations. Sponsor shall provide any required notices and relocation benefits in accordance with the Relocation Laws. Sponsor shall provide

Horne with evidence that it has complied with all applicable Relocation Laws and California Health & Safety Code and corresponding regulations for the safe transfer and relocation of residents in residential care facilities licensed by CDSS, and Sponsor shall certify to CDSS that it shall obtain a CDSS-approved relocation plan for each resident in care.

ARTICLE 18.
INSPECTIONS, AUDITS, AND RECORD RETENTION

- 18.1 Horne and CDSS or any of their authorized representatives shall have the right to access any documents, papers, or other records of Sponsor which are pertinent to the Program Funds, for the purpose of performing audits, examinations, and/or review regarding compliance with the provisions of this Agreement and the Program Requirements. Such monitoring activities shall include, but are not limited to, inspection of Sponsor's books and records, in addition to site inspections, as Horne deems appropriate.
- 18.2 Horne and CDSS may perform compliance reviews, review procedures and documents pertaining to the SOW and other elements of this Agreement, perform on-site visits and desk reviews in order to ensure Sponsor's compliance with this Section, as well as protect against fraud, waste and abuse.
- 18.3 The right to access records also includes timely and reasonable access to Sponsor's personnel for the purpose of interview and discussion related to the requested documents and/or information.
- 18.4 The right to access records is not limited to the required retention period but lasts as long as the records are retained by Sponsor.
- 18.5 Sponsor shall retain all financial records, supporting documents, statistical records, and all other records pertinent to the Program Funds, COSR, or Project for a minimum of five (5) years.
- 18.6 Sponsor shall, and shall ensure that each of its subcontractors, if applicable, shall, comply with the requirements set forth in Attachment C - The California Department of Social Services Confidentiality and Information Security Requirements.
- 18.7 Sponsor recognizes and acknowledges that CDSS is a public entity subject to the Public Records Act, and information submitted by Sponsor to Horne or directly to CDSS may be subject to public disclosure and Sponsor has no right to assume that such information shall be kept confidential.
- 18.8 Any review or inspection undertaken by Horne, its designee, or CDSS, or its designee, with reference to the Project is solely for the purpose of determining whether Sponsor is properly discharging its obligations to CDSS and should not be relied upon by Sponsor or by any third parties as a warranty or representation by Horne or CDSS as to the quality of the design or construction of the Project.

18.9 Sponsor agrees that claims based upon an audit finding and/or an audit finding that is appealed and upheld, shall be recovered by Horne or CDSS by one of the following options:

18.9.1 Sponsor's remittance to Horne or CDSS of the full amount of the audit exception within thirty (30) days following Horne request for payment; or

18.9.2 A repayment schedule which is agreeable to both Horne and Sponsor.

Horne reserves the right to select which option described above shall be employed; and Horne shall notify Sponsor in writing of the claim procedure to be utilized. Interest on the unpaid balance of the audit finding or debt shall accrue at a rate equal to the maximum allowed by applicable law.

ARTICLE 19.
THIRD PARTY BENEFICIARIES

The State, represented by CDSS in this Agreement, is a third-party beneficiary of this Agreement. The Agreement shall not be construed so as to give any other person or entity, other than the Parties and CDSS, any legal or equitable claim or right. CDSS or another authorized department or agency representing the State of California may enforce any provision of this Agreement to the full extent permitted in law or equity as a third-party beneficiary of this Agreement. The State may take any and all remedies available in law and equity. In the event of litigation, the State may choose to seek any type of damages available in law or equity, up to the full amount of Program Funds awarded to Sponsor.

ARTICLE 20.
MISCELLANEOUS

20.1 Dispute Resolution.

20.1.1 The Parties shall use reasonable efforts to resolve any dispute arising under this Agreement within thirty (30) days pursuant to informal mediation before a retired judge with Judicial Arbitration and Mediation Services ("JAMS") in Los Angeles, California.

20.1.2 If the Parties cannot resolve a dispute arising under this Agreement pursuant to Section 20.1.1, the Parties shall submit such dispute to arbitration in accordance with the provisions of the American Arbitration Association. The Parties shall conduct any arbitration in Los Angeles, California. The arbitrator's decision in any such arbitration shall be final, conclusive, and binding on the Parties.

20.1.3 TO THE FULLEST EXTENT PERMITTED BY LAW, THE PARTIES HEREBY UNCONDITIONALLY WAIVE ANY RIGHT TO A JURY TRIAL IN CONNECTION WITH ANY CLAIM ARISING OUT OF THIS AGREEMENT.

20.1.4 The Sponsor shall be obligated to continue to perform pursuant to this Agreement while any dispute is pending.

20.1.5 This Section 20.1 shall not apply to CDSS or the State.

20.2 Attorneys' Fees. If a dispute arising out of this Agreement is finally adjudicated, the non-prevailing party shall pay the prevailing party's reasonable expenses incurred in connection therewith, including reasonable arbitration costs and reasonable attorneys' fees. If multiple items are disputed and the final decision is split, then the Parties shall allocate such expenses pro rata as to each item. Section 20.2, Attorneys' Fees provisions do not apply to the State.

20.3 Waiver. Horne's failure to notify Sponsor of a breach or to insist on strict performance of any provision of this Agreement shall not constitute waiver of such breach or provision.

20.4 Remedies. No remedy in this Agreement is exclusive of any other remedy available under this Agreement, at law or in equity. Horne or CDSS may seek equitable relief, including an injunction, against Sponsor in connection with any breach or threatened breach of this Agreement.

20.5 Limitation of Liability. Except as otherwise provided in this Agreement, or by applicable law, Sponsor waives any right to seek, and Horne and CDSS shall not be liable for any special, consequential, or punitive damages; indirect, or incidental damages; or for any loss of goodwill, profits, data, or loss of use arising out of, resulting from, or in any way connected with the performance or breach of this Agreement, even if Sponsor advises Horne or CDSS of the possibility of any such damages.

20.6 Relationship. Sponsor is an independent contractor with respect to Horne. This Agreement is not intended to create a partnership, joint venture, employment, or fiduciary relationship between the Parties or between any Party hereto and CDSS.

20.7 Notices. Notices under this Agreement must be (i) in writing; (ii) addressed to the receiving Party at the address described on the Summary Cover Sheet (unless notice of a different address is given); and (iii) (A) if personally delivered to the recipient, notice is effective upon delivery; (B) if sent by a nationally recognized overnight courier service, notice is effective on the first business day following its timely deposit with such courier service, delivery fees for next business day delivery prepaid; no signature affirming receipt by the receiving party is required, the internal records of the courier service shall be accepted as sufficient evidence of the date of the deposit of the notice with the courier service; or (C) if sent by certified U.S. mail, notice is effective three (3) days after deposit thereof in the U.S. mail, postage prepaid, certified, return receipt requested. Counsel for a Party may send notice on behalf of its client.

20.7.1 Notwithstanding the foregoing, the Parties may deliver any approval, disapproval, or request therefor via email. Such email notices and

deliveries shall be valid and binding on the Parties, subject to the following:

20.7.1.1 Such email must be properly addressed to the other Party’s Designated Representatives. For purposes of this Agreement, “Designated Representative” means initially (i) for Horne, Geoffrey Ross, Geoffrey.Ross@horne.com, and Dania Khan, Dania.Khan@horne.com; (ii) for Sponsor, Antonette Navarro, anavarro@sbcbswell.org and Melanie Johnson, mejohanson@sbcbswell.org. A Party may change a Designated Representative only upon notice to the other Party pursuant to the requirements of Section 20.7(iii) (A), (B) or (C).

20.7.1.2 If the sender receives a bounceback, out-of-office or other automated response indicating non-receipt, the sender shall (i) re-attempt delivery until the other Party confirms receipt, or (ii) deliver the item in accordance with Section 20.7(iii) (A), (B) or (C).

20.8 Governing Law. The place of performance of this Agreement is California, and the laws of the State of California shall govern the validity, performance, enforcement, and interpretation of this Agreement. Any litigation or enforcement of an award must be brought in the appropriate state or federal court in the State of California, County of Sacramento. Each Party consents to personal and subject matter jurisdiction and venue in such courts and waives the right to change venue with respect to any such proceeding. The Parties acknowledge that all directions issued by the forum court, including injunction and other decrees, shall be binding and enforceable in all jurisdictions and countries.

20.9 Assignment. Sponsor shall not assign, delegate, or otherwise transfer this Agreement, or its duties, or obligations in connection therewith, in whole or in part, without the prior approval of Horne and CDSS. Horne’s obligations under this Agreement shall be assignable to CDSS or CDSS’s designee upon CDSS’s request without Sponsor’s consent. In the event that Horne assigns its obligations under this Agreement to CDSS, Horne shall make commercially reasonable efforts to transition any reasonably necessary documentation related to this Agreement to CDSS or its designee, at no cost to CDSS; provided, however, that Horne shall have no obligation to incur any liability, pay fees, charges, or reimbursement in connection with any wind-down or transition services.

20.10 Entire Agreement; Amendments. This Agreement constitutes the entire agreement of the Parties with respect to its subject matter. It supersedes all oral or written agreements or communications between the Parties. No understanding, agreement, modification, change order, or other matter affecting this Agreement shall be binding, unless in writing, signed by both Parties. No handwritten changes shall be effective unless initialed by each Party.

- 20.11 Independent Legal and Tax Advice. Horne and Sponsor, each, have reviewed and negotiated this Agreement using such independent legal and tax counsel as each has deemed appropriate. Sponsor further acknowledges that it has been afforded the opportunity to obtain legal and tax advice concerning its legal and financial duties and obligations, including its state and federal tax liabilities related to its receipt of Program Funds, and hereby confirms by the execution and delivery of this Agreement that it has either done so or waived its right to do so in connection with the entering into this Agreement. For the avoidance of doubt, Sponsor shall be solely responsible for its tax liabilities related to its receipt of Program Funds.
- 20.12 Exhibits. The Attachments, Schedules, and Addenda attached to this Agreement are a part of this Agreement and incorporated into this Agreement by reference.
- 20.13 Partial Invalidity. If any part of this Agreement is unenforceable, the remainder of this Agreement and, if applicable, the application of the affected provision to any other circumstance, shall be fully enforceable.
- 20.14 Captions. The headings contained herein are for convenience only and are not intended to define, limit, or describe the scope or intent of any provision of this Agreement.
- 20.15 Force Majeure. Neither Party shall be liable to the other for loss or damages due to failure or delay in rendering performance caused by circumstances beyond its reasonable control, if such failure could not have been overcome by the exercise of due diligence, due care, or foresight. Causes may include, but are not limited to, acts of God or a public enemy; wars; acts of terrorism; riots; fires; floods; epidemics; quarantine restrictions; labor disputes; strikes; defaults of subcontractors/vendors; failure/delays in transportation; unforeseen freight embargoes; unusually severe weather; or any law/order/regulation/request of a state or local government entity, the U.S. Government, or of any agency, court, commission, or other instrumentality of any such governments. Times of performance under this Agreement may be appropriately extended for excused delays if the Party whose performance is affected promptly notifies the other of the existence and nature of such delay.
- 20.16 Publicity. Without prior written approval of the other, neither Party shall use the other's name or make reference to the other Party or any of its employees in publications, news releases, advertising, speeches, technical papers, photographs, sales promotions, or for publicity purposes of any form related to this work or data developed hereunder, unless disclosure of such materials is required by legal, accounting, or regulatory requirements beyond the disclosing Party's reasonable control. Use of either Party's name may be made in internal documents, annual reports, and proposals. This Section shall survive expiration/termination of this Agreement. Notwithstanding the foregoing, the Sponsor agrees that the State may use and refer to the Sponsor and the Project in any publication, news release, advertising, speech, technical paper, or for any other purposes.

- 20.17 Notice of Litigation. Promptly, and in any event within one (1) business day after an officer or other authorized representative of Sponsor obtains knowledge thereof, Sponsor shall provide written notice to Horne of (i) any litigation or governmental proceeding pending against Sponsor which could materially adversely affect the business, operations, property, assets, condition (financial or otherwise) or prospects of Sponsor, and (ii) any other event which is likely to materially adversely affect the business, operations, property, assets, condition (financial or otherwise) or prospects of Sponsor.
- 20.18 Survival. Except as otherwise stated, sections that by their terms impose continuing obligations or establish continuing rights shall be deemed to survive the expiration or termination of this Agreement.
- 20.19 Successors. This Agreement shall be binding upon the Parties, their successors, and assigns.
- 20.20 Approvals. Whenever this Agreement calls for a Party's approval, approval shall mean prior written approval (including via email), not to be unreasonably conditioned, delayed, or withheld, unless sole discretion is expressly noted.
- 20.21 Counterparts; Electronic Signatures. The Parties may sign this Agreement in several counterparts, each of which constitutes an original, but all of which together constitute one instrument. Electronic signatures are valid and shall bind the Party delivering such signature.

SIGNATURES ON THE FOLLOWING PAGE

IN WITNESS THEREOF, the Parties hereto have executed this Agreement by their duly authorized respective officers as of the Effective Date.

HORNE LLP

SPONSOR:

County of Santa Barbara, a California
County

By: _____
**Alethia Thomas HORNE Engagement
Partner**

By: _____
*Antonette Navarro, Director of the
Department of Behavioral Wellness,
Authorized Entity Representative*

EXHIBIT A

**HORNE Summary
Sheet CCE Review**

Geographic Region	Central Coast
Amount Requested	\$1,043,433
Facility Type and Bed/Unit Count	ARF – 12
HORNE Recommendation	Recommended for Award
Date Submitted	July 11, 2022

PROJECT ABSTRACT SUMMARY

The proposed Adult Residential Facility comprises of the rehabilitation of an existing building that expands service capacity resulting in a 12 bed Adult Residential Facility in the Central Coast region. The project would target applicants 18 years old or older and at risk of homelessness and/or long-term psychiatric disabilities such as schizophrenia, other psychotic disorders, and bipolar disorders. Additionally, the outpatient case management, public health services, and social services are all located on the property campus and are accessible to the residents.

Application Overview

Application ID	CCE-2378566416
Project Title	Casa Omega- Tecolote House
Type of Entity	County
Target population	The proposed project will serve 100% SSI/SSP and CAPI adults who are 18 years of age or older that are underserved, unserved, marginalized, have long term psychiatric disabilities- such as schizophrenia, other psychotic disorders, and bipolar disorders who are experiencing or at risk of experiencing homelessness.
Address of Proposed Project	310 Camino del Remedio Santa Barbara, CA 93110
County	Santa Barbara
Organization Information: Name of Entity	County of Santa Barbara
Co-Applicant? Y/N	N
Estimated date of completion (from Milestone Template)	July 10, 2025
<i>Reviewer notes regarding project completion, if noted</i>	

Match Amount	\$87,373		
Match Source and details	Land Value: \$87,373		
COSR requested/amount	\$0		
Facility Type: Adult Residential Facility (ARF)	Total Beds/Units: 12	CCE Beds/Units: 12	Cost per CCE Bed/Unit: \$86,953
Total Project Amount and amount of funding received from other awards (BHCIP, other sources)	\$1,130,806 No additional funding sources		
Sponsor Awarded Projects	The Sponsor has not been awarded for any other projects within the CCE program.		
Site Plan (schematic)	Located and reviewed within the application.		
CCLD Licensing and compliance check	In Good Standing		

APPLICATION REGIONAL COLLABORATION	
Community Outreach and Letters of Support summary	Community outreach and Letter of Support were provided by the Sponsor from the National Alliance on Mental Illness - Santa Barbara County.
If applicable, does applicant have an MOU or other agreement, or related experience (Q6)	The Sponsor did not provide an MOU. The Sponsor is a County entity and currently maintains and operates 390 facilities ranging in sizes, uses, and types. The Department of Behavioral Wellness also maintains other County relationships for resources, networking, and partnerships.

<p>Analysis of Cost Reasonableness</p> <p><i>Assessed based on facility type, scope, budget, and schedule of rehabilitation or renovations proposed in accordance with 2 CFR 200.404</i></p>	<p>The cost per CCE bed/unit is \$86,953 which is less than the mean awarded projects for the Central Coast region of \$132,457. Given the property is already controlled by the Sponsor, the proposed project does not require acquisition costs and is only in need of expansion and rehabilitation funding. Additionally, the costs in the budget attributable to project management that will be conducted with internal resources are not unreasonable for the size of project.</p>
<p>Analysis of Sustainability</p> <p>(Alternate Funding Streams, ALW, Subsidies, Vouchers, Medi-Cal, partnerships with social service / behavioral health agencies to provide service funding)</p> <p><i>Assessed based on demonstrated capacity to produce and implement a business plan, develop projections of costs and revenues (which should account for service delivery), and diversity of revenue sources</i></p>	<p>Future sustainability will be achieved with the ongoing operational management by the Santa Barbara County Behavioral Wellness Department as part of its regular activities.</p> <p>The County owns the building, and the only cost would be basic maintenance. This allows the Sponsor to accommodate 50% of the target population. The outpatient case management, public health services, and social services are all located on the property campus. Part of the funding strategy includes billing contracts to bill Medi-Cal for rehabilitation services. This project has a very high probability of being sustainable in the long-term timeframe as the Sponsor is a County with the resources and knowledge to maintain and operate a facility of this scope and size.</p>
<p>Risks and mitigating factors and/or plan for addressing risks</p>	<p>The proposed project involves construction and infrastructure, which carries inherent risks, including the unpredictability of rising construction costs. As construction costs are subject to various external factors such as market demand, supply chain disruptions, and material costs, it is difficult to predict the exact expenses with absolute certainty. To address this potential risk, the project budget has included a contingency to mitigate any unforeseen construction expenditures.</p> <p>In addition, there are other potential risks that can arise during the construction process. These risks can include issues like delays in the construction schedule due to unforeseen circumstances, such as inclement weather, unexpected site conditions, or construction site accidents.</p> <p>Furthermore, construction projects may also face risks associated with changes in regulatory requirements, design flaws, labor disputes, or equipment failure. These risks could potentially impact</p>

the project timeline, increase construction costs, and affect the quality of the final product. To mitigate this, the project has provided resumes, development team contracts, site readiness documents, a schematic design checklist, zoning clearance, architectural approved drawings, and a feasibility pro forma.

Does this fulfill unmet need(s) of region?

The response is pulled from application Q. 11. Per RFA, this may include a local county/tribal/provider needs assessment, a facility wait list, the number of comparable facilities in the area, or other quantifiable documentation.

According to the Behavioral Health Assessment, Santa Barbara County has a gap of seven beds at the Crisis Stabilization Unit level of care. The rehabilitation of our Casa Omega location will allow the Sponsor to provide 12 additional beds, thereby reducing the wait time. Admission priority will be given to clients with long term psychiatric disabilities such as schizophrenia, other psychotic disorders and bipolar disorders and may be justice involved, eligible for SSI/SSP, CAPI, and/or are at risk of homelessness.

Casa Omega will be structured to offer services to individuals who are justice involved and/or transitioning from homelessness that include, but are not limited to, mental health and/or substance use treatment, independent living skills, and other resources necessary to ensure compliance with and successful completion of court requirements. Casa Omega is situated on the County's Calle Real campus which, in addition to Behavioral Wellness treatment services, is also home to Public Health and Social Services. Therefore, residents will have ready access to mental health and/or substance use disorder services while also connecting with services provided through Public Health and Social Services.

Project feasibility notes or additional considerations:

The file contains comprehensive documentation that meets all requirements. The match is valued at \$87,373 in land, which constitutes 10% of the project. The acquisition budget has been thoroughly evaluated and deemed reasonable.

Key Project Updates		
HORNE Requested:	Applicant Provided:	Result:
HORNE requested Construction Documentation	Applicant provided construction documents	HORNE reviewed and verified.
HORNE requested SOW	Applicant Provided SOW	HORNE was able to verify the

Draft and Budget review	Draft and Budget review	scope of work and compare to the estimated costs
--------------------------------	-------------------------	--

Sources		Amount	Per Bed/Unit	% of Total
Construction Sources	Grant	\$1,043,433	\$173,906	92%
Permanent Sources	Land & Cash	\$87,373	\$14,562	8%
Total Sources		\$1,130,806		100%
Uses				
Acquisition Costs		\$87,373		
Hard Construction Costs		\$751,968		
Soft Costs		\$249,370		
Reserves and Escrows		\$0		
COSR		\$0		
Developer Fee		\$42,095		
Total Uses		\$1,130,806		

EXHIBIT B

CASH FLOW PROFORMA

[attached]

UNIT TYPE	Area Median Income %(AMI) Number	Square Feet	Total Sq Feet	Gross Rent \$	Utility Allowance \$	Net Rent per Sq Foot \$	Total Monthly Net Rent \$	Current Annual Rent \$
1BR/1BA PBV				\$	\$	\$	\$	\$
1BR/1BA				\$	\$	\$	\$	\$
1BR/1BA				\$	\$	\$	\$	\$
2BR/1BA				\$	\$	\$	\$	\$
2BR/1BA (Exempt Manager)				\$	\$	\$	\$	\$
Totals				\$	\$	\$	\$	\$

Project Name: #REF! Units: 0

CASH FLOW

	Inflation % Standards:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Potential Gross Income																
Total Annual Rental Income	2.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rental Subsidy	2.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parking	2.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial	2.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community Facility	2.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laundry	2.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Potential Gross Income:																
Vacancy Allowance																
Total Annual Rental Income	5.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parking	5.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial	10.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community Facility	10.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laundry	10.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Vacancy Allowance:																
Effective Gross Income																
Total Annual Rental Income		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parking		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community Facility		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laundry		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Effective Gross Income:																
Maintenance & Operating Expenses																
Operating Expenses:	3.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Management Fee	2.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resident Services																
Taxes and Insurance																
Total Operating Expenses:																
Replacement Reserves	3.0%	\$0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenses & Reserves:																
Net Operating Income:																
Deferred Developer Fee																
Principal Balance		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest for Period		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Payment		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Balance		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Net Case after Deferred Developer Fee		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Type Of Loan:																
Principal Balance		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest for Period		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accumulated Interest		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Payment		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Balance		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
First Mortgage Debt Service	Interest Rate															
First Mortgage	4.50%	#DIV/0!														
Subsidy Debt Service	Interest Rate															
Subsidy Loan 1	0.25%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subsidy Loan 2	0.25%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subsidy Loan 3	0.50%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subsidy Loan 4	0.50%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow		#DIV/0!														
Net Cash Flow in 15 years	#DIV/0!															
Income to Expense Ratio (Min. 1.05)		#DIV/0!														
Debt Coverage Ratio		#DIV/0!														

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ATTACHMENT A STATE REQUIREMENTS

1. California Civil Rights Requirements

- a. During the performance of this Agreement, Sponsor and its subcontractors shall not deny the Agreement's benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status. Sponsor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination. Sponsor and its subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, §11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code §§11135 et seq.), the regulations or standards adopted by CDSS to implement such article, the Unruh Civil Rights Act (California Civil Code §51), and Title VI of the Civil Rights Act of 1964.

Sponsor shall permit access by representatives of the Department of Fair Employment and Housing, Home and/or CDSS upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to such of its books, records, accounts, and all other sources of information and its facilities to ascertain compliance with this clause. Sponsor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. (See Cal. Code Regs., tit. 2, §11105.)

Sponsor shall include the nondiscrimination and compliance provisions of this section in all subcontracts to perform work under the Agreement.

- b. Pursuant to Public Contract Code § 2010, a person that submits a bid or proposal to, or otherwise proposes to enter into or renew a contract with, a state agency with respect to any contract in the amount of \$100,000 or above shall certify, under penalty of perjury, at the time the bid or proposal is submitted or the contract is renewed, all of the following:
- (1) CALIFORNIA CIVIL RIGHTS LAWS: Sponsor certifies compliance with the Fair Employment and Housing Act (Gov. Code §12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, §11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code §§11135 et seq.), the regulations or

standards adopted by CDSS to implement such article, the Unruh Civil Rights Act (California Civil Code §51), and Title VI of the Civil Rights Act of 1964.

- (2) EMPLOYER DISCRIMINATORY POLICIES: For contracts executed or renewed after January 1, 2017, if Sponsor has an internal policy against a sovereign nation or peoples recognized by the United States government, Sponsor certifies that such policies are not used in violation of the Fair Employment and Housing Act (Gov. Code §12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, §11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code §§11135 et seq.), the regulations or standards adopted by CDSS to implement such article, the Unruh Civil Rights Act (California Civil Code §51), and Title VI of the Civil Rights Act of 1964.

- c. In the event of Sponsor’s noncompliance with the requirements of the provisions herein or with any state or federal statutes, rules, regulations, or orders regarding civil rights or non-discrimination requirements, this Agreement may be cancelled, terminated, or suspended in whole or in part and Sponsor may be declared ineligible for further state contracts or grants.
- d. Sponsor will include the contractor certification provisions required by this section in every subcontract or purchase order unless exempted by federal or state statutes, rules, regulations, or orders, so that such provisions will be binding upon each Sponsor or vendor. Sponsor will take such action with respect to any subcontract or purchase order Horne may direct as a means of enforcing such provisions.

2. Subcontract Requirements

- a. Sponsor may enter into subcontracts for services to be performed pursuant to the SOW provided such subcontracts are consistent with this Agreement and the SOW and provided further that Sponsor follows its procurement policy, a copy of which has been previously provided to and approved by Horne. Horne or CDSS reserve the right to approve or disapprove the selection of subcontractors and with advance written notice, require the substitution of subcontractors and require Sponsor to terminate subcontracts entered into in support of this Agreement.
 - (1) Upon receipt of a written notice from Horne requiring the substitution and/or termination of a subcontract, Sponsor shall take steps to ensure the completion of any work in progress and select a replacement, if applicable, within thirty (30) calendar days, unless a longer period is agreed to by CDSS.

- b. Sponsor shall maintain a copy of each subcontract entered into in support of this Agreement and shall, upon request by Horne, make copies available for approval, inspection, or audit.
- c. Horne and/or CDSS assume no responsibility for the payment of subcontractors used in the performance of this Agreement. Sponsor accepts sole responsibility for the payment of subcontractors used in the performance of this Agreement.
- d. Sponsor is responsible for all performance requirements under this Agreement even though performance may be carried out through a subcontract.
- e. Sponsor shall ensure that all subcontracts for services include provision(s) requiring compliance with applicable terms and conditions specified in this Agreement.
- f. Sponsor agrees to include the following clause, relevant to record retention, in all subcontracts for services:

subcontractor agrees to maintain and preserve, until three years after termination of this Agreement and final payment from Horne, to permit Horne or CDSS or any duly authorized representative, to have access to, examine or audit any pertinent books, documents, papers and records related to this subcontract and to allow interviews of any employees who might reasonably have information related to such records.

- g. Unless otherwise stipulated in writing by Horne, Horne shall be Sponsor's sole point of contact for all matters related to performance and payment under this Agreement.
- h. Sponsor shall, as applicable, advise all subcontractors of their obligations to comply with this Attachment.

3. Income Restrictions

Unless otherwise stipulated in this Agreement, Sponsor agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by Sponsor under this Agreement shall be paid by Sponsor to Horne so that Horne can pay CDSS, to the extent that they are properly allocable to costs for which Sponsor has been reimbursed by Horne under this Agreement.

4. Site Inspection

The State has the right at all reasonable times to inspect or otherwise evaluate the work performed or being performed hereunder including subcontract supported activities and the premises in which it is being performed. If any inspection or evaluation is made of the premises of Sponsor, Sponsor shall provide and shall require is contractors and subcontractors to provide all reasonable facilities and assistance for the safety and

convenience of the authorized representatives in the performance of their duties. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work.

5. Warranties

Sponsor represents and warrants that:

- a. It is free to enter into and fully perform this Agreement.
- b. It has secured and will secure all rights and licenses necessary for its performance of this Agreement.
- c. It has not granted and shall not grant to any person or entity any right that would or might derogate, encumber, or interfere with any of the rights granted to Horne or CDSS in this Agreement.
- d. It has appropriate systems and controls in place to ensure that State funds will not be used in the performance of this Agreement for the acquisition, operation or maintenance of computer software in violation of copyright laws.
- e. It has no knowledge of any outstanding claims, licenses or other charges, liens, or encumbrances of any kind or nature whatsoever that could affect in any way Sponsor's performance of this Agreement.
- f. All materials and equipment furnished with respect to the Project and all work performed by Sponsor will be of good and workmanlike quality, free from faults and defects, and in conformance with the Agreement.
- g. It shall comply with all applicable laws in connection with its performance of its obligations under this Agreement.
- h. It has disclosed to Horne and CDSS the composition of Sponsor including any entity, member, manager, partner or person that directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or common control with Sponsor ("Related Party" or "Related Parties") and shall promptly disclose to Horne and/or CDSS, during the Term of this Agreement, any change in ownership or control of Sponsor or any merger or acquisition that changes the control of Sponsor. For purposes of this Agreement "control" shall mean any entity that has an ownership interest of greater than twenty percent (20%) in Sponsor, or, has the authority to direct or cause the direction of the affairs or management of Sponsor.
- i. It shall disclose to Horne and/or CDSS, during the Term of this Agreement, promptly upon the existence or discovery of the existence of an actual or potential transaction, agreement, or settlement with a Related Party in connection with the Project ("Related Party Transaction").

- j. It shall disclose to Horne and/or CDSS, during the Term of this Agreement, promptly upon the existence or discovery of the existence of a Related Party or a Related Party Transaction: (1) the nature of the relationship, (2) the nature of the potential or actual transaction, agreement, or settlement, (3) the dollar amounts of any such transaction, agreement, or settlement, (4) the dollar amounts due to or from a Related Party, and (5) documents and any additional information, as may be requested by Horne and/or CDSS in their sole discretion.
- k. The provisions set forth herein shall survive any termination or expiration of this Agreement or any Project schedule.

6. Suspension or Stop Work Notification

- a. Horne may, at any time, issue a notice to suspend performance or stop work under this Agreement. The initial notification may be a verbal or written directive issued by Horne’s Designated Representative. Upon receipt of said notice, Sponsor is to suspend and/or stop all, or any part, of the work called for by this Agreement.
- b. Written confirmation of the suspension or stop work notification with directions as to what work (if not all) is to be suspended and how to proceed will be provided within thirty (30) working days of the verbal notification. The suspension or stop work notification shall remain in effect until further written notice is received from Horne. The resumption of work (in whole or part) will be at Horne’s discretion and upon receipt of written confirmation.
 - (1) Upon receipt of a suspension or stop work notification, Sponsor shall immediately comply with its terms and take all reasonable steps to minimize or halt the incurrence of costs allocable to the performance covered by the notification during the period of work suspension or stoppage.
 - (2) Within 90 days of the issuance of a suspension or stop work notification, Horne shall either:
 - (a) Cancel, extend, or modify the suspension or stop work notification; or
 - (b) Terminate the Agreement as provided for in the Cancellation / Termination clause of the Agreement.
- c. If a suspension or stop work notification issued under this clause is canceled or the period of suspension or any extension thereof is modified or expires, Sponsor may resume work only upon written concurrence of Horne.
- d. If the suspension or stop work notification is cancelled and the Agreement resumes, changes to the services, deliverables, performance dates, and/or

agreement terms resulting from the suspension or stop work notification shall require an amendment to the Agreement.

- e. If a suspension or stop work notification is not canceled and the Agreement is cancelled or terminated pursuant to the provision entitled Cancellation / Termination, Horne shall allow reasonable costs resulting from the suspension or stop work notification in arriving at the settlement costs.
- f. In accordance with Article 14 and Section 20.5 of the Agreement, Horne shall not be liable to Sponsor or its subcontractors for loss of profits because of any suspension or stop work notification issued under this clause.

7. Compliance with Statutes and Regulations

- a. Sponsor shall comply with all applicable California and federal law, regulations, and published guidelines, to the extent that these authorities contain requirements applicable to Sponsor's performance under the Agreement.

ATTACHMENT B

State of California Department of Social Services

CERTIFICATION REGARDING LOBBYING AND CONFLICTS OF INTEREST

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. By entering into the Agreement and accepting Program Funds, Sponsor is in compliance with the Political Reform Act of 1978 and regulations promulgated by the Fair Political Practices Commission (FPPC) regarding requirements relating to lobbying and conflicts of interest.
2. Sponsor is aware of California state laws and regulations regarding employing current or former state employees. If Sponsor has any questions on the status of any person rendering services or involved with the Agreement, Horne must be contacted immediately for clarification.

(a) Current State Employees (Pub. Contract Code §10410): 1). No officer or employee of the State shall engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular state employment. No officer or employee of the State shall contract on his or her own behalf as an independent contractor with any state agency to provide goods or services.

(b) Former State Employees (Pub. Contract Code §10411): 1). For the two-year period from the date he or she left state employment, no former state officer or employee may enter into a contract in which they engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any state agency. For the twelve-month period from the date they left state employment, no former state officer or employee may enter into a contract with any state agency if they were employed by that state agency in a policy-making position in the same general subject area as the proposed contract within the 12-month period prior to their leaving state service.

If Sponsor violates any provisions of above paragraphs, such action by Sponsor shall render this Agreement void. (Pub. Contract Code §10420). Members of boards and commissions are exempt from this section if they do not receive payment other than payment of each meeting of the board or commission, payment for preparatory time and payment for per diem. (Pub. Contract Code §10430 (e)).

Attachment B - Certification Regarding Lobbying

ATTACHMENT B

CERTIFICATION REGARDING LOBBYING
AND CONFLICTS OF INTEREST

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County of Santa Barbara, a California
County **Name of Sponsor**

Printed Name of Person Signing for Sponsor

Contract Number

Signature of Person Signing for Sponsor

Date

Title

After execution by or on behalf of Sponsor, please return to:
California Department of Social Services

Attachment B - Certification Regarding Lobbying

ATTACHMENT B

CERTIFICATION REGARDING LOBBYING
AND CONFLICTS OF INTEREST

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ATTACHMENT C

The California Department of Social Services Confidentiality and Information Security Requirements Sponsor - v 2019 01

This Confidentiality and Information Security Requirements - Attachment C (hereinafter referred to as “this Exhibit” or “Attachment C”) sets forth the information security and privacy requirements Sponsor is obligated to follow with respect to all confidential and sensitive information (as defined herein) disclosed to or collected by Sponsor, pursuant to the Agreement in which this Attachment is incorporated. The CDSS, Horne and Sponsor desire to protect the privacy and provide for the security of CDSS Confidential, Sensitive, and/or Personal (CSP) Information (hereinafter referred to as “CDSS CSP”) in compliance with state and federal statutes, rules and regulations.

- I. Order of Precedence.** With respect to information security and privacy requirements for all CDSS CSP, unless specifically exempted, the terms and conditions of this Attachment shall take precedence over any conflicting terms or conditions set forth in any other part of the Agreement between Sponsor and Horne.

- II. Effect on lower tier transactions.** The terms of this Attachment shall apply to all lower tier transactions (e.g., agreements, sub-agreements, contracts, subcontracts, and sub-awards, etc.). Sponsor shall incorporate the contents of this Attachment into each lower tier transaction.

- III. Confidentiality of Information.**
 - a. DEFINITIONS.** The following definitions apply to this Attachment and relate to CDSS Confidential, Sensitive, and/or Personal Information.
 - i. “Confidential Information” is information maintained by CDSS that is exempt from disclosure under the provisions of the California Public Records Act (Government Codes Sections 6250 et seq.) or has restrictions on disclosure in accordance with other applicable state or federal laws.
 - ii. “Sensitive Information” is information maintained by CDSS, which is not confidential by definition, but

Attachment C - CDSS Confidentiality and Information Security

ATTACHMENT C

CDSS CONFIDENTIALLY AND
INFORMATION SECURITY REQUIREMENTS

C-1

requires special precautions to protect it from unauthorized access and/or modification (i.e., financial or operational information). Sensitive information is information in which the disclosure would jeopardize the integrity of CDSS (i.e., CDSS' fiscal resources and operations).

iii. "Personal Information" is information, in any medium (paper, electronic, or oral) that identifies or describes an individual (i.e., name, social security number, driver's license, home/ mailing address, telephone number, financial matters with security codes, medical insurance policy number, Protected Health Information (PHI), etc.) and must be protected from inappropriate access, use or disclosure and must be made accessible to information subjects upon request. It can also be information in the possession of the Department in which the disclosure is limited by law or contractual Agreement (i.e., proprietary information, etc.).

iv. "Breach" is

1. the unauthorized acquisition, access, use, or disclosure of CDSS CSP in a manner which compromises the security, confidentiality or integrity of the information; or the same as the definition of "breach of the security of the system" set forth in California Civil Code Section 1798.29(f).

v. "Information Security Incident" is

1. unauthorized access or disclosure, modification or destruction of, or interference with, CDSS CSP that actually or potentially jeopardizes the confidentiality, integrity, or availability of an information system or the information the system processes, stores, or transmits or that constitutes a violation or imminent threat of violation of any state or federal law or in a manner not permitted under the Agreement, including this Exhibit.

Attachment C - CDSS Confidentiality and Information Security

- b.** CDSS CSP which may become available to Sponsor as a result of the implementation of the Agreement shall be protected by Sponsor from unauthorized access, use, and disclosure as described in this Attachment.
- c.** Sponsor is notified that unauthorized disclosure of CDSS CSP may be subject to civil and/or criminal penalties under state and federal law, including but not limited to:

 - California Welfare and Institutions Code Section 10850
 - Information Practices Act - California Civil Code Section 1798 et seq.
 - Public Records Act - California Government Code Section 6250 et seq.
 - California Penal Code Section 502, 11140-11144, 13301-13303
 - Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) - 45 CFR Parts 160 and 164
 - Safeguarding Information for the Financial Assistance Programs - 45 CFR Part 205.50
 - Unemployment Insurance Code Section 14013
- d. EXCLUSIONS.** “Confidential Information”, “Sensitive Information”, and “Personal Information” (CDSS CSP) does not include information that

 - i. is or becomes generally known or available to the public other than because of a breach by Sponsor of these confidentiality provisions;
 - ii. already known to Sponsor before receipt from CDSS without an obligation of confidentiality owed to CDSS;
 - iii. provided to Sponsor from a third party except where Sponsor knows, or reasonably should know, that the disclosure constitutes a breach of confidentiality or a wrongful or tortious act; or

Attachment C - CDSS Confidentiality and Information Security

- iv. independently developed by Sponsor without reference to CDSS CSP.

IV. Sponsor Responsibilities.

- a. Training.** Sponsor shall instruct all employees, agents, and subcontractors with access to CDSS CSP regarding:
 - i. The confidential nature of the information;
 - ii. The civil and criminal sanctions against unauthorized access, use, or disclosure found in the California Civil Code Section 1798.55, Penal Code Section 502 and other state and federal laws;
 - iii. CDSS procedures for reporting actual or suspected information security incidents in Paragraph V - Information Security Incidents and/or Breaches; and
 - iv. That unauthorized access, use, or disclosure of CDSS CSP is grounds for immediate termination of this Agreement and may be subject to penalties, both civil and criminal.
- b. Use Restrictions.** Sponsor shall take the appropriate steps to ensure that their employees, agents, and subcontractors will not intentionally seek out, read, use, or disclose CDSS CSP other than for the purposes described in the Agreement and to meet its obligations under the Agreement.
- c. Disclosure of CDSS CSP.** Sponsor shall not disclose any individually identifiable CDSS CSP to any person other than for the purposes described in the Agreement and to meet its obligations under the Agreement.
- d. Subpoena.** If Sponsor receives a subpoena or other validly issued administrative or judicial notice requesting the disclosure of CDSS CSP, Sponsor will immediately notify the Home Project Director and CDSS Information Security and Privacy Officer. In no event should notification to CDSS occur more than three (3) business days after receipt by Sponsor's responsible unit for handling subpoenas and court orders.

Attachment C - CDSS Confidentiality and Information Security

- e. **Information Security Officer.** Sponsor shall designate an Information Security Officer to oversee its compliance with this Attachment and to communicate with CDSS on matters concerning this Attachment.
- f. **Requests for CDSS CSP by Third Parties.** Sponsor shall promptly transmit to the Horne Project Director and CDSS Information Security and Privacy Officer all requests for disclosure of any CDSS CSP requested by third parties to the Agreement (except from an Individual for an accounting of disclosures of the individual's personal information pursuant to applicable state or federal law), unless prohibited from doing so by applicable state or federal law.
- g. **Documentation of Disclosures for Requests for Accounting.** Sponsor shall maintain an accurate accounting of all requests for disclosure of CDSS CSP Information and the information necessary to respond to a request for an accounting of disclosures of personal information as required by Civil Code Section 1798.25, or any applicable state or federal law.
- h. **Return or Destruction of CDSS CSP on Expiration or Termination.** Upon expiration or termination of the Agreement between Sponsor and Horne, or upon a date mutually agreed upon by the Parties following expiration or termination, Sponsor shall return or destroy CDSS CSP. If return or destruction is not feasible, Sponsor shall provide a written explanation to the Horne Project Director and CDSS Information Security and Privacy Officer, using the contact information in this Agreement. CDSS, in its sole discretion, will make a determination of the acceptability of the explanation and, if retention is permitted, shall inform Sponsor in writing of any additional terms and conditions applicable to the retention of CDSS CSP.
- i. **Retention Required by Law.** If required by state or federal law, Sponsor may retain, after expiration or termination, CDSS CSP for the time specified as necessary to comply with the law.
- j. **Obligations Continue Until Return or Destruction.** Sponsor's obligations regarding the confidentiality of CDSS CSP set forth in this Agreement, including but not limited to obligations related to responding to Public Records Act requests

Attachment C - CDSS Confidentiality and Information Security

and subpoenas shall continue until Sponsor returns or destroys CDSS CSP or returns CDSS CSP to CDSS; provided however, that on expiration or termination of the Agreement between Sponsor and Horne, Sponsor shall not further use or disclose CDSS CSP except as required by state or federal law.

- k. Notification of Election to Destroy CDSS CSP.** If Sponsor elects to destroy t CDSS CSP, Sponsor shall certify in writing, to the Horne Project Director and CDSS Information Security and Privacy Officer, using the contact information, that CDSS CSP has been destroyed.
- l. Background Check.** Before a member of Sponsor’s workforce may access CDSS CSP, Sponsor must conduct a thorough background check of that worker and evaluate the results to assure that there is no indication that the worker may present a risk to CDSS information technology systems and/or CDSS data. Sponsor shall retain each workforce member’s background check documentation for a period of three (3) years following Agreement termination.
- m. Confidentiality Safeguards.** Sponsor shall implement administrative, physical, and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of CDSS CSP that it creates, receives, maintains, uses, or transmits pursuant to the Agreement. Sponsor shall develop and maintain a written information privacy and security program that includes administrative, technical and physical safeguards appropriate to the size and complexity of Sponsor’s operations and the nature and scope of its activities, including at a minimum the following safeguards:

- i. General Security Controls**

- 1. Confidentiality Acknowledgement.** By executing the Agreement and signing Paragraph XI, CDSS Confidentiality and Security Compliance Statement, Sponsor acknowledges that the information resources maintained by CDSS and provided to Sponsor may be confidential, sensitive, and/or personal and requires special precautions to protect it from

Attachment C - CDSS Confidentiality and Information Security

wrongful access, use, disclosure, modification, and destruction.

2. **Workstation/Laptop Encryption.** All Sponsor-owned or managed workstations, laptops, tablets, smart phones, and similar devices that process and/or store CDSS CSP must be encrypted using a FIPS 140-2 certified algorithm which is 128 bit or higher, such as Advanced Encryption Standard (AES). The encryption solution must be full disk unless approved by CDSS Information Security Office.
3. **Data Encryption.** Any CDSS CSP shall be encrypted at rest when stored on network file shares or document repositories.
4. **Server Security.** Servers containing unencrypted CDSS CSP must have sufficient administrative, physical, and technical controls in place to protect that data, based upon a risk assessment/system security review.
5. **Minimum Necessary.** Only the minimum necessary amount of CDSS CSP required to perform necessary business functions may be copied, downloaded, or exported.
6. **Removable Media Devices.** All electronic files that contain CDSS CSP must be encrypted when stored on any removable media or portable device (i.e., USB thumb drives, floppies, CD/DVD, smart phone, backup tapes etc.). Encryption must be a FIPS 140-2 certified algorithm which is 128 bit or higher, such as AES.
7. **Antivirus Software.** All Sponsor-owned or managed workstations, laptops, tablets, smart phones, and similar devices that process and/or store CDSS CSP must install and actively use comprehensive anti-virus software solution with automatic updates scheduled at least daily.

Attachment C - CDSS Confidentiality and Information Security

8. **Patch Management.** To correct known security vulnerabilities, Sponsor shall install security patches and updates in a timely manner on all Sponsor-owned or managed workstations, laptops, tablets, smart phones, and similar devices that process and/or store CDSS CSP as appropriate based on Sponsor's risk assessment of such patches and updates, the technical requirements of Sponsor's systems, and the vendor's written recommendations. If patches and updates cannot be applied in a timely manner due to hardware or software constraints, mitigating controls will be implemented based upon the results of a risk assessment.
9. **User IDs and Password Controls.** All users must be issued a unique user name for accessing CDSS CSP. Sponsor's password policy must be based on information security best practices for password length, complexity, and reuse.
10. **Data Destruction.** Upon termination of the Agreement, all CDSS CSP must be sanitized in accordance with NIST Special Publication 80088, Guidelines for Media Sanitization.

ii. **System Security Controls**

1. **System Timeout.** The system providing access to CDSS CSP must provide an automatic timeout, requiring re-authentication of the user session after no more than thirty (30) minutes of inactivity for applications, and fifteen (15) minutes of inactivity for desktops and laptops.
2. **Warning Banners.** All systems (servers, desktops, laptops, etc.) containing CDSS CSP must display a warning banner at login stating that data is confidential, systems are logged, and system use is for business purposes only. User must be directed to log off the system if they do not agree with these requirements.

Attachment C - CDSS Confidentiality and Information Security

3. **System Logging.** The system must maintain an automated audit trail which can identify the user or system process which initiates a request for CDSS CSP, or which alters CDSS CSP. The audit trail must be date and time stamped, must log both successful and failed accesses, must be read only, and must be restricted to authorized users. If CDSS CSP is stored in a database, database logging functionality must be enabled. Audit trail data must be archived for at least one (1) year after occurrence.
4. **Access Controls.** The system must use role based access controls for all user authentications, enforcing the principle of least privilege.
5. **Transmission Encryption.** All data transmissions of CDSS CSP by Sponsor outside the secure internal network must be encrypted using a FIPS 140-2 certified algorithm, such as Advanced Encryption Standard (AES), with a 128bit key or higher. Encryption can be end to end at the network level, or the data files containing CDSS CSP can be encrypted. This requirement pertains to any type of CDSS CSP in motion such as website access, file transfer, and email.
6. **Intrusion Detection.** All systems involved in accessing, holding, transporting, and protecting CDSS CSP that are accessible via the Internet must be protected by a comprehensive intrusion detection and prevention solution.

iii. Audit Controls

1. **System Security Review.** All systems processing and/or storing CDSS CSP must have at least an annual system risk assessment/security review which provides assurance that administrative, physical, and technical controls are functioning effectively and providing

Attachment C - CDSS Confidentiality and Information Security

adequate levels of protection. Reviews shall include vulnerability scanning tools.

2. **Log Reviews.** All systems processing and/or storing CDSS CSP must have a routine procedure in place to review system logs for unauthorized access.
3. **Change Control.** All systems processing and/or storing CDSS CSP must have a documented change control procedure that ensures separation of duties and protects the confidentiality, integrity and availability of data.

iv. **Business Continuity / Disaster Recovery Controls**

1. **Disaster Recovery.** Sponsor must establish a documented plan to enable continuation of critical business processes and protection of the security of electronic CDSS CSP in the event of an emergency. Emergency means any circumstance or situation that causes normal computer operations to become unavailable for use in performing the work required under this Agreement for more than twenty-four (24) hours.
2. **Data Backup Plan.** Sponsor must have established documented procedures to backup CDSS CSP to maintain retrievable exact copies of CDSS CSP. The plan must include a regular schedule for making backups, storing backups offsite, an inventory of backup media, and the amount of time to restore CDSS CSP should it be lost. At a minimum, the schedule must be a weekly full backup and monthly offsite storage of CDSS data.

v. **Paper Document Controls**

1. **Supervision of Information.** CDSS CSP in paper form shall not be left unattended at any time, unless it is locked in a file cabinet, file room, desk or office. Unattended means that information may be observed by an individual

Attachment C - CDSS Confidentiality and Information Security

not authorized to access the information. CDSS CSP in paper form shall not be left unattended at any time in vehicles or planes and shall not be checked in baggage on commercial airplanes.

2. **Escorting Visitors.** Visitors to areas where CDSS CSP are contained shall be escorted and CDSS CSP shall be kept out of sight while visitors are in the area.
3. **Confidential Destruction.** CDSS CSP must be disposed of through confidential means, such as cross cut shredding and/or pulverizing.
4. **Removal of Information.** CDSS CSP must not be removed from the premises of Sponsor except for identified routine business purposes or with express written permission of CDSS.
5. **Faxing.** CDSS CSP that must be transmitted by fax shall require that Sponsor confirms the recipient fax number before sending, takes precautions to ensure that the fax was appropriately received, maintains procedures to notify recipients if Sponsor's fax number changes, and maintains fax machines in a secure area.
6. **Mailing.** Paper copies of CDSS CSP shall be mailed using a secure, bonded mail service, such as Federal Express, UPS, or by registered U.S. Postal Service (i.e., accountable mail using restricted delivery). All packages must be double packed with a sealed envelope and a sealed outer envelope or locked box.

V. Information Security Incidents and/or Breaches of CDSS CSP

- a. **CDSS CSP Information Security Incidents and/or Breaches Response Responsibility.** Sponsor shall be responsible for facilitating the Information Security Incident and/or Breach response process as described in California Civil Code 1798.82(f), and State Administrative Manual (SAM)

Attachment C - CDSS Confidentiality and Information Security

Section 5340, Information Security Incident Management, including, but not limited to, taking:

- i. Prompt corrective action to mitigate the risks or damages involved with the Information Security Incident and/or Breach and to protect the operating environment; and
 - ii. Any action pertaining to such unauthorized disclosure required by applicable Federal and State laws and regulations.
- b. Discovery and Notification of Information Security Incidents and/or Breaches of CDSS CSP.** Sponsor shall notify the Horne Project Director and CDSS Information Security and Privacy Officer of an Information Security Incident and/or Breach as expeditiously as practicable and without unreasonable delay, taking into account the time necessary to allow Sponsor to determine the scope of the Information Security Incident and/or Breach, but no later than three (3) calendar days after the discovery of an Information Security Incident and/or Breach. Notification is to be made by telephone call and email.
- c. Isolation of System or Device.** A system or device containing CDSS CSP compromised by an exploitation of a technical vulnerability shall be promptly disconnected or quarantined and investigated until the vulnerability is resolved. Sponsor will notify CDSS and Horne within two (2) business days of a confirmed exploitation of a technical vulnerability and keep CDSS and Horne informed as to the investigation until resolution of the vulnerability is completed.
- d. Investigation of Information Security Incidents and/or Breaches.** Sponsor shall promptly investigate Information Security Incidents and/or Breaches of CDSS CSP. CDSS shall have the right to participate in the investigation of such Information Security Incidents and/or Breaches. CDSS shall also have the right to conduct its own independent investigation, and Sponsor shall cooperate fully in such investigations. Sponsor is not required to disclose their un-redacted confidential, proprietary, or privileged information. Sponsor will keep CDSS fully informed of the results of any such investigation.

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ATTACHMENT C

CDSS CONFIDENTIALLY AND
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- e. Updates on Investigation.** Sponsor shall provide regular (at least once a week) email updates on the progress of the Information Security Incident and/or Breach investigation of CDSS CSP to the Horne Project Director and CDSS Information Security and Privacy Officer until the updates are no longer needed, as mutually agreed upon between Sponsor and the Horne Program Director/CDSS Information Security and Privacy Officer. Sponsor is not required to disclose their un-redacted confidential, proprietary, or privileged information.
- f. Written Report.** Sponsor shall provide a written report of the investigation to the Horne Project Director and CDSS Information Security and Privacy Officer within thirty (30) business days of the discovery of the Information Security Incident and/or Breach of CDSS CSP. Sponsor is not required to disclose their un-redacted confidential, proprietary, or privileged information. The report shall include, but not be limited to, if known, the following:

 - i. Sponsor point of contact information;
 - ii. A description of what happened, including the date of the Information Security Incident and/or Breach of CDSS CSP and the date of the discovery of the Information Security Incident and/or Breach, if known;
 - iii. A description of the types of CDSS CSP that were involved and the extent of the information involved in the Information Security Incident and/or Breach;
 - iv. A description of the unauthorized persons known or reasonably believed to have improperly used or disclosed CDSS CSP;
 - v. A description of where CDSS CSP is believed to have been improperly transmitted, sent, or utilized;
 - vi. A description of the probable causes of the improper use or disclosure;
 - vii. Whether Civil Code Sections 1798.29 or 1798.82 or any other federal or state laws requiring individual notifications of breaches are triggered; and

Attachment C - CDSS Confidentiality and Information Security

viii. A full, detailed corrective action plan, including information on measures that were taken to halt and/or contain the Information Security Incident and/or Breach of CDSS CSP.

g. Cost of Investigation and Remediation. Per SAM Section 5305.8, Sponsor shall be responsible for all direct and reasonable costs incurred by Horne or CDSS due to Information Security Incidents and/or Breaches of CDSS CSP resulting from Sponsor’s failure to perform or from negligent acts of its personnel, and resulting in the unauthorized disclosure, release, access, review, or destruction; or loss, theft or misuse of an information asset. These costs include, but are not limited to, notice and credit monitoring for twelve (12) months for impacted individuals, Horne staff time, CDSS staff time, material costs, postage, media announcements, and other identifiable costs associated with the Information Security Incident, Breach and/or loss of data.

VI. Contact Information. To direct communications to the above referenced Horne and CDSS staff, Sponsor shall initiate contact as indicated herein. Horne and CDSS reserve the right to make changes to the contact information below by giving written notice to Sponsor. Said changes shall not require an amendment to this Attachment or the Agreement to which it is incorporated.

Horne Project Director	CDSS Information Security & Privacy Officer
See Summary Cover Sheet of the Program Funding Agreement for Horne Project Director information	California Department of Social Services Information Security & Privacy Officer 744 P Street, MS 9-9-70 Sacramento, CA 95814 Email: iso@dss.ca.gov Telephone: (916) 651-5558

Attachment C - CDSS Confidentiality and Information Security

- VII. Audits and Inspections.** CDSS may inspect and/or monitor compliance with the safeguards required in this Attachment. Sponsor shall promptly remedy any violation of any provision of this Attachment and shall certify the same to the Horne Project Director and CDSS Information Security and Privacy Officer in writing. The fact that CDSS or Horne inspects, or fails to inspect, or has the right to inspect, does not relieve Sponsor of its responsibility to comply with this Attachment.
- VIII. Amendment.** The Parties acknowledge that federal and state laws regarding information security and privacy rapidly evolves and that amendment of this Attachment may be required to provide for procedures to ensure compliance with such laws. The Parties specifically agree to take such action as is necessary to implement new standards and requirements imposed by regulations and other applicable laws relating to the security or privacy of CDSS CSP.
- IX. Interpretation.** The terms and conditions in this Attachment shall be interpreted as broadly as necessary to implement and comply with regulations and applicable State laws. The Parties agree that any ambiguity in the terms and conditions of this Exhibit shall be resolved in favor of a meaning that complies and is consistent with federal and state laws and regulations.
- X. Termination.** An Information Security Incident and/or Breach of CDSS CSP by Sponsor, its employees, agents, or subcontractors, as determined by CDSS, may constitute a material breach of the Agreement between Sponsor and Horne and grounds for immediate termination of the Agreement.
- XI. CDSS Confidentiality and Security Compliance Statement**

**CALIFORNIA DEPARTMENT OF SOCIAL
SERVICES CONFIDENTIALITY AND SECURITY
COMPLIANCE STATEMENT V 2019 01**

Information resources maintained by the California Department of Social Services (CDSS) and provided to Sponsor may be confidential, sensitive, and/or personal and requires special precautions to protect it from wrongful access, use, disclosure, modification, and destruction.

We hereby acknowledge that the confidential and/or sensitive records of CDSS are subject to strict confidentiality requirements imposed by state and federal law, which may include, but are not limited to, the following; the California Welfare and

Attachment C - CDSS Confidentiality and Information Security

ATTACHMENT C

CDSS CONFIDENTIALLY AND
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Institutions Code §10850, Information Practices Act - California Civil Code §1798 et seq., Public Records Act - California Government Code §6250 et seq., California Penal Code §502, 11140-11144, 13301-13303, Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) - 45 CFR Parts 160 and 164, and Safeguarding Information for the Financial Assistance Programs - 45 CFR Part 205.50. Contractor agrees to comply with the laws applicable to CDSS CSP received.

This Confidentiality and Security Compliance Statement must be signed and returned with the Agreement.

Project Representative

Name (Printed): _____
Title: _____
Business Name: _____
Email Address: _____
Phone: _____
Signature: _____
Date Signed: _____

READ and ACKNOWLEDGED: Information Security Officer (or authorized official responsible for business’ information security program)

Name (Printed): _____
Title: _____
Business Name: _____
Email Address: _____
Phone: _____
Signature: _____
Date Signed: _____

Attachment C - CDSS Confidentiality and Information Security

ATTACHMENT D

SPONSOR CDSS CERTIFICATION

**Sponsor Certification Clause
CCC 04/2017**

CERTIFICATION

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY that I am duly authorized to legally bind the prospective Sponsor to the clause(s) listed below. This certification is made under the laws of the State of California.

Sponsor/Bidder Firm Name (Printed) County of Santa Barbara ess	Federal ID Number 956002833
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By (Authorized Signature)

Printed Name and Title of Person Signing

Date Executed	Executed in the County of Santa Barbara
---------------	--

SPONSOR CERTIFICATION CLAUSES:

ARTICLE 1.
STATEMENT OF COMPLIANCE

Sponsor has, unless exempted, complied with the nondiscrimination program requirements. (GC 12990 (a-f) and CCR, Title 2, Section 11102) (Not applicable to public entities.)

Attachment D – Sponsor/CDSS Certification

ARTICLE 2.
DRUG-FREE WORK PLACE REQUIREMENTS

Sponsor will comply with the requirements of the Drug-Free Workplace Act of 1990 and will provide a drug-free workplace by taking the following actions:

- a) Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.
- b) Establish a Drug-Free Awareness Program to inform employees about:
 - 1. the dangers of drug abuse in the workplace;
 - 2. the person's or organization's policy of maintaining a drug-free workplace;
 - 3. any available counseling, rehabilitation and employee assistance programs; and,
 - 4. penalties that maybe imposed upon employees for drug abuse violations.
- c) Every employee who works on the proposed Agreement will:
 - 1. Receive a copy of the company's drug-free policy statement; and
 - 2. agree to abide by the terms of the company's statement as a condition of employment on the Agreement.

Failure to comply with these requirements may result in suspension of payments under the Agreement or termination of the Agreement or both and Sponsor may be ineligible for award of any future State agreements if the department determines that any of the following has occurred: (1) the Sponsor has made false certification, or violated the certification by failing to carry out the requirements as noted above. (GC 8350 et seq.)

ARTICLE 3.
NATIONAL LABOR RELATIONS BOARD CERTIFICATION

Sponsor certifies that no more than one (1) final unappealable finding of contempt of court by a federal court has been issued against Sponsor within the immediately preceding two-year period because of Sponsors failure to comply with an order of a federal court which orders Sponsor to comply with an order of the National Labor Relations Board. (PCC 10296) (Not applicable to public entities.)

Attachment D – Sponsor/CDSS Certification

ARTICLE 4.
SUBCONTRACTS FOR LEGAL SERVICES \$50,000 OR MORE–
PRO BONO REQUIREMENT

If applicable to Sponsor, Sponsor hereby certifies that Sponsor will comply with the requirements of Section 6072 of the Business and Professions Code, effective January 1, 2003.

Sponsor agrees to make a good faith effort to provide a minimum number of hours of pro bono legal services during each year of the Agreement equal to the lesser of 30 multiplied by the number of full-time attorneys in the firm's offices in the State, with the number of hours prorated on an actual day basis for any Agreement period of less than a full year or 10% of its Agreement with the State.

Failure to make a good faith effort may be cause for non-renewal of a state contract for legal services and may be taken into account when determining the award of future contracts with the State for legal services.

ARTICLE 5.
SWEATFREE CODE OF CONDUCT

- a) If applicable to Sponsor, all Sponsors contracting for the procurement or laundering of apparel, garments or corresponding accessories, or the procurement of equipment, materials, or supplies, other than procurement related to a public works Agreement, declare under penalty of perjury that no apparel, garments or corresponding accessories, equipment, materials, or supplies furnished to the state pursuant to the Agreement have been laundered or produced in whole or in part by sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor, or with the benefit of sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor. Sponsor further declares under penalty of perjury that they adhere to the Sweatfree Code of Conduct as set forth on the California Department of Industrial Relations website located at www.dir.ca.gov and Public Contract Code Section 6108.

- b) Sponsor agrees to cooperate fully in providing reasonable access to Sponsor's records, documents, agents or employees, or premises if reasonably required by authorized officials of the contracting agency, the Department of Industrial Relations, or the Department of Justice to determine Sponsor's compliance with the requirements under paragraph (a).

ARTICLE 6.
DOING BUSINESS WITH THE STATE OF CALIFORNIA

The following laws apply to persons or entities doing business with the State of California.

Attachment D – Sponsor/CDSS Certification

6.1 LABOR CODE/WORKERS COMPENSATION:

Sponsor needs to be aware of the provisions which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions, and Sponsor affirms to comply with such provisions before commencing the performance of the work of this Agreement. Labor Code Section 3700)

It is hereby mutually agreed that Sponsor shall forfeit to the State (enter amount from Labor Code Section 1775) dollars for each calendar day, or portion thereof, for each worker paid by him or her, or subcontractor under him or her, less than the prevailing wage so stipulated and in addition Sponsor further agrees to pay to each worker the difference between the actual amount paid for each calendar day, or portion thereof, and the stipulated prevailing wage rate for the same. This provision shall not apply to properly, registered apprentices.

It is further agreed that the maximum hours a worker is to be employed is limited to eight hours a day and 40 hours a week and Sponsor shall forfeit, as a penalty to the State, twenty-five dollars (\$25) for each worker employed in the execution of the contract for each calendar day during which a worker is required or permitted to labor more than eight hours in any calendar day or more than 40 hours in any calendar week, in violation of Labor Code Sections 18101815, inclusive.

Properly registered apprentices may be employed in the prosecution of the work. Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and shall be employed only at the work of the craft or trade to which he or she is registered. Sponsor and each of its subcontractor must comply with the requirements of Labor Code Section 1777.5 and any related regulations regarding the employment of registered apprentices.

Each Sponsor and any of Sponsor's subcontractors shall comply with the Labor Code Section 1776 regarding record keeping.

6.2 AMERICAN WITH DISABILITIES ACT:

Sponsor assures the State that it complies with the Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA. (42 U.S.C. 12101 et seq.)

6.3 SPONSORS NAME CHANGE:

An amendment is required to change Sponsor's name as listed on this Agreement. Upon receipt of legal documentation of the name change the State will process the amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.

6.4 CORPORATE QUALIFICATION TO DO BUSINESS IN CALIFORNIA:

Attachment D – Sponsor/CDSS Certification

- a) When agreements are to be performed in the state by corporations, the contracting agencies will be verifying that Sponsor is currently qualified to do business in California in order to ensure that all obligations due to the state are fulfilled.
- b) “Doing business” is defined in R&TC Section 23101 as actively engaging in any transaction for the purpose of financial or pecuniary gain or profit. Although there are some statutory exceptions to taxation, rarely will a corporate Sponsor performing within the state not be subject to the franchise tax.
- c) Both domestic and foreign corporations (those incorporated outside of California) must be in good standing in order to be qualified to do business in California.

Agencies will determine whether a corporation is in good standing by calling the Office of the Secretary of State.

6.5 RESOLUTION:

A county, city, district, or other local public body must provide the State with a copy of a resolution, order, motion, or ordinance of the local governing body which by law has authority to enter into an agreement, authorizing execution of the agreement.

6.6 AIR OR WATER POLLUTION VIOLATION:

Sponsor and/or its subcontractors shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.

6.7 PAYEE DATA RECORD FORM STD. 204:

This form must be completed by all Sponsors that are not another state agency or other government entity.

6.8 CALIFORNIA CIVIL RIGHTS LAWS:

For Agreements executed or renewed after January 1, 2017, Sponsor certifies compliance with the Unruh Civil Rights Act (Section 51 of the Civil Code) and the Fair Employment and Housing Act (Section 12960 of the Government Code); and

6.9 EMPLOYER DISCRIMINATION POLICIES:

For Agreements executed or renewed after January 1, 2017, if Sponsor has an internal policy against a sovereign nation or peoples recognized by the United States government, Sponsor

Attachment D – Sponsor/CDSS Certification

certifies that such policies are not used in violation of the Unruh Civil Rights Act (Section 51 of the Civil Code) and the Fair Employment and Housing Act (Section 12960 of the Government Code).

ARTICLE 7.
ANTITRUST CLAIMS

Sponsor offers and agrees and will require all of its contractors and subcontractors and suppliers to agree to assign to the awarding body all rights, title, and interest in and to all causes of action they may have under Section 4 of the Clayton Act (Title 15, U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code) arising from purchases of goods, services, or materials pursuant to the public works contract or subcontract. The assignment made by Sponsor and all additional assignments made by the subcontractors and suppliers shall be deemed to have been made and will become effective at the time the awarding body tenders final payment to Sponsor without further acknowledgment or the necessity of tendering to the awarding body any written assignments.

If an awarding body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Government Code Sections 4550 to 4554, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, on demand, recover from the public body any portion of the recovery, including treble damages, and attributable overcharges that were paid by the assignor but were not paid by the public body as a part of the bid price, less the expenses incurred in obtaining that portion of the recovery. On demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under Government Code Sections 4550 to 4554 if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

Attachment D – Sponsor/CDSS Certification

ATTACHMENT D

SPONSOR/CDSS CERTIFICATION

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ATTACHMENT E

STATEMENT OF WORK (“SOW”)

A: PROJECT AND SPONSOR INFORMATION	
<p>Application ID: CCE-2378566416</p> <p>Project Title: Casa Omega- Tecolote House</p> <p>Grant Project Address: 310 Camino del Remedio, Santa Barbara, CA 93110</p> <p>APN(s) #: 059-140-029</p>	<p>Sponsor Name: County of Santa Barbara, on behalf of its Department of Behavioral Wellness</p> <p>Legal Name: County of Santa Barbara Entity Type: County, EIN: 956002833</p> <p>Co-Applicant Name (if applicable): No</p> <p>Acquisition with Grant Funds (Y/N): N</p>
B: LEAD AUTHORIZED REPRESENTATIVE	C: PROGRAM FUNDS & MATCH AMOUNT
<p>First and Last Name: Antonette Navarro</p> <p>Title/Role: Director</p> <p>Office Phone #: (805) 681-5220</p> <p>Mobile Phone #: (805) 681-5220</p> <p>Email: anavarro@sbcwell.org</p>	<p>Program Funds: \$1,043,433</p> <p style="text-align: center;">COSR Funds: \$0</p> <p>Match: \$87,373</p> <p style="text-align: center;">Acquisition \$87,373</p> <p>Total Funds: \$1,130,806</p>
D: PROJECT CONSTRUCTION	
<p>Building/Facility Type: <i>e.g., adult residential facilities (ARFs), residential care facilities for the elderly (RCFEs), Permanent Supportive Housing (PSH) that serves the needs of seniors and adults with disabilities (including models that provide site-based care, other residential care settings that serve the target population, including recuperative or respite care settings, or mixed-use:</i></p> <p>Adult Residential Facilities (ARF)</p>	
<p>Type of Project: <i>e.g., predevelopment, new construction, acquisition, renovation to expand capacity, adaptive reuse:</i></p> <p>Renovation to Expand Capacity</p>	
<p>Current License Status: <i>e.g., in good standing, pending, N/A:</i></p> <p>In good standing</p>	

Target Population(s): Describe the population that you are intending to serve, which should include Qualified Residents experiencing or at risk of homelessness, in accordance with your application for Program Funds.

The proposed project comprises of the rehabilitation of an existing building that expands service capacity at the current site by constructing 12 new beds of which 12 beds will be dedicated to the target population of 100% SSI/SSP and CAPI applicants who are at risk of homelessness and/or have long term psychiatric disabilities such as schizophrenia, other psychotic disorders, and bipolar disorders. Behavioral Wellness is committed to serving unserved, underserved, and marginalized communities and it remains to be our central focus in ensuring access to services and providing culturally and linguistically responsive care. Our services range from psychiatric hospitalization for ages 18 and up to prevention services in the schools with translation services available as needed. Clients can flow between different levels of care depending on their need at any given moment and know they can obtain language assistance at every step.

E: PROJECT SCOPE REQUIREMENT

This section may include the project narrative, from Sponsor’s application (Question No. 24), updated to include revisions made to finalize Sponsor’s final award of Program Funds. This section should include the following 1) goals of the Project, 2) overall timeline, activities, and milestones, and 3) how you plan to conduct outreach to the intended target population of Qualified Residents experiencing or at risk of homelessness in order to serve them through the Project.

Goals:

Program goals include successfully engaging and stabilizing clients transitioning into the program; connecting clients to social services and community resources; assisting clients with developing independent living skills, increasing skills necessary for recovery; and ensure clients are being served at the lowest level of care. To obtain these goals, services include case management, collateral (engagement with the resident’s significant support person(s), and plan development and progress monitoring. Residents will also engage in activities to assist with improving, maintaining or restoring a client's or a group of clients' functional skills, daily living skills, social and leisure skills, grooming and personal hygiene skills, meal preparation skills, support resources, and/or medication education. Activities for daily living will assist clients to learn how to self-administer medication and stay in compliance with medication treatment; access and use laundry facilities; maintain clean and well- kept living environments, including completing assigned weekly household chores; practice good personal hygiene, including physical health, such as hygiene, prevention and management of medical condition(s); schedule and keep appointments; and practice psychosocial skills, such as effective interpersonal communication and conflict resolution.

Overall Timeline, Activities, and Milestones:

N/A Acquisition

06/27/2024 Construction Break Ground/ Start Construction.

05/13/2025 Construction Complete.

07/10/2025 Start operations.

Outreach:

As the opening of Tecolote House (TH) nears, to perform outreach to qualified residents, TH will develop an eligibility flyer that will include a link to the referral form, and information will be distributed during the monthly and bi-monthly standing meetings with TH partners. The program will review the referral process, priority placement criteria, and demonstrate the referral form with those partners. Referral sources for Casa Omega will include an in-house Crisis Stabilization Unit, Sobering Center, and the Mental Health Rehabilitation Center (MHRC). These programs will be able to refer clients from mid and high levels of care with a focus on older adults who struggle with independent living. Referrals will be reviewed by the Long-Term Care Team (LTCT) who will prioritize clients based on need and availability. Placement and resident status will be discussed during LTCT coordination meetings to discuss client placement and resident status to ensure individuals are receiving the appropriate level of care within the program’s behavioral health Continuum of Care.

F: PROJECT EXPANSION SCOPE REQUIREMENTS					
Facility Type # 1:	# New Beds / PSH Units:	# of New Beds / PSH Units for prioritized Qualified Residents experiencing or at risk of homelessness:	Total # of all Beds / PSH Units:	Total # of all Beds / PSH Units for Qualified Residents experiencing or at risk of homelessness:	New SQFT for Facility:
Adult Residential Facilities (ARF)	12	12	12	12	4,000

G: PROJECT TASKS & DELIVERABLES

PRE-CONTRACTING
 The below outlines tasks and deliverables expected of CCE grant recipient to be completed prior to executing the Program Funding Agreement (PFA).

TASK 1: APPLICANT INFORMATION

Description/Deliverables	\$ FUNDS ALLOCATED
<p>Deliverables – All Applicants:</p> <ul style="list-style-type: none"> Completed application via CCE portal. Government Tax ID (PFA4.1.3) Articles of Incorporation <p>Deliverables – For-Profit Entities:</p> <ul style="list-style-type: none"> Proof of Prior Experience; or Memorandum of Understanding (MOU) or contract with collaborating entity (nonprofit organization, tribal entity, city, or county) <p>Deliverables – LLCs:</p> <ul style="list-style-type: none"> Articles of Organization Certificate of Good Standing 	<p style="text-align: center;">CASH MATCH AMOUNT AS REQUIRED TO START PROJECT</p> <p style="text-align: center;">[CASH MATCH MUST BE EXPENDED PRIOR TO DISBURSEMENT OF PROGRAM FUNDS TO SPONSOR]</p>

TASK 2: BUDGET INFORMATION

Description/Deliverables

Deliverables – All Applicants:

- Copy of finalized budget (Schedule 1 of SOW)

TASK 3: MATCH VERIFICATION (updated by project)

Description/Deliverables

Deliverables – All Applicants:

- Requirements of Cash Match
- Requirements of Property Equity
- Requirements of In-Kind Match

TASK 4: SITE READINESS/CONTROL**Description/Deliverables****Deliverables – All Applicants:**

- Requirements of Cash Match
- Schematic Design Checklist
- Completed Site Plans, Design Development, and/or Construction Drawings, *if applicable*.
 - Pre-Development Projects must provide proposed plans, development, and drawings.
- Design, Acquisition, and Construction Milestone Schedule
- Certificates of insurance evidencing coverages required by the PFA and naming Horne and CDSS as additional insurers (*PFA 4.1.7*)
 - As stated in Article 11 of the PFA:
 - 11.1.1 A **Builders Risk policy** including a permission to occupy endorsement during the course of construction, and upon completion of construction, if the Project is new construction, property insurance covering all risks of loss, excluding earthquake, flood or other risks customarily excluded from “All-Risks” coverage, in an amount equal to full replacement cost of the Project, including all improvements, fixtures, furnishings and equipment thereon at the time of loss.
 - 11.1.2 If the Project is rehabilitation of an existing building, property insurance covering all risks of loss, excluding earthquake, flood or other risks customarily excluded from “**All-Risks” coverage**, in an amount equal to the full replacement costs of all improvements located on the property upon which the Project is to be constructed, including all improvements, fixtures, furnishings and equipment thereon at the time of loss. Upon completion of the rehabilitation, any property insurance policy shall be updated to reflect the increased replacement costs resulting from the rehabilitation.
 - 11.1.3 **Worker’s compensation insurance** as required by the State.
 - 11.1.4 **Comprehensive automobile and vehicle liability insurance** covering claims for injuries to members of the public and/or damages to property of others arising from use of motor vehicles, including on-site and off-site operations, and owned, non-owned, or hired vehicles with \$1,000,000 combined single limits. Commercial general liability insurance of not less than \$1,000,000 per occurrence with an annual aggregate limit of \$5,000,000 for bodily injury and property damage liability combined. The Sponsor’s required limits may be satisfied through a combination of general liability and umbrella policies of coverage. The commercial general liability insurance policy shall cover liabilities arising out of premises, operations, independent contractors, products, completed operations, personal and advertising injury, and liability assumed under an insured agreement. The commercial general liability insurance shall apply to each insured against whom claim is made or suit is brought subject to Sponsor’s limit of liability.
- **A title report** reflecting all existing liens, encumbrances, taxes owed, easements, covenants or any other restrictions on the real property upon which the Project is to be constructed or operated. If Sponsor’s interest in the real property upon which the Project is to be constructed or operated is a leasehold, then Sponsor shall provide a current title report for the leasehold interest and the fee interest. For tribal trust land, Sponsor shall provide a certified Title Status Report (“TSR”) from the U.S. Department of the Interior Bureau of Indian Affairs (“BIA”) or an attorney’s opinion regarding chain of title and current title status. (*PFA 4.1.8*) (*Not required for Pre-Development Projects*)
- Copy of building permit receipt (*for new building construction or rehab that requires permits*)
- Copy of notice of exemption filed (*if applicable*)
- Certification of project construction is 50% complete. (*if applicable; for SOWs involving projects where construction work has been or will nearly be completed*)
- Receipt of certificate of occupancy (*including for existing structures*)
- Copy of notice of completion and receipt of unconditional lien releases (*if applicable; for completed building and construction*)
- Receipt of business license and certificate of occupancy (*if applicable; for existing operations and structures*)
- Anticipated expiration date of the agreement & transfer to state oversight (*if applicable*)

Future Project funding is dependent on successful completion of Deliverables and Certifications of this Task 4. If any of these Deliverables or Certifications are submitted at Task 2, these Deliverables and Certifications are not required to be submitted pursuant to this Task 4, unless otherwise required by Administrator in its sole discretion. Additional details may be provided in compliance memo.

TASK 5: SPONSOR LEGAL REVIEW
Description/Deliverables
<p>Deliverables – All Applicants:</p> <ul style="list-style-type: none"> • An authorizing resolution or set of authorizing resolutions that, in Horne’s reasonable determination, materially comports with the Program Requirements. (PFA 4.1.4) • A signed opinion letter from Sponsor’s legal counsel opining that this Agreement, the Declaration of Restrictions, the Performance Deed of Trust, and the Program Requirements do not conflict with any existing contract, agreement, or other requirement applicable to Sponsor, the property upon which the Project is to be constructed or operated, or the Project, and are otherwise enforceable against Sponsor; and such opinion letter shall be in the form and substance acceptable to Horne and CDSS, in their sole discretion. (PFA 4.1.9)
TASK 6: PFA ATTACHMENTS
Description/Deliverables
<p>Deliverables – All Applicants:</p> <p>The certifications below will be provided by Administrator:</p> <ul style="list-style-type: none"> • Attachment B - Signed Certification Regarding Lobbying and Conflicts of Interest • Attachment C - Signed CDSS Confidentiality and Information Security • Attachment D - Signed Sponsor CDSS Certification • Attachment F – Payment Schedule • Attachment G (Certification #1) - Related Party & Related Party Transaction Disclosure • Attachment G (Certification #2) - Legal Review of CA Welfare and Institutions Code §18999.97(l) • Attachment I1 - Declaration of Restrictions <i>(Not required for Pre-Development Projects)</i> • Attachment I2 - Declaration of Restrictions for Projects with COSR <i>(Not required for Pre-Development Projects)</i> • Attachment J1 - Performance Deed of Trust, Security Agreement and Fixture Filing <i>(Not required for Pre-Development Projects)</i> • Attachment J2 - Performance Deed of Trust, Security Agreement and Fixture Filing for Projects with COSR <i>(Not required for Pre-Development Projects)</i> • Attachment K – Construction Contract Addendum <i>(if applicable)</i> • Attachment L - California Department of Social Services Community Care Expansion Program COSR Agreement • Recorded Dates in Attachment H – Performance Milestones <i>(as applicable based on construction components)</i> <ul style="list-style-type: none"> ○ Match funds, property equity, or in-kind match <i>(See Task 3)</i> ○ Declaration of restrictions and performance deed of trust <i>(Attachment I)</i> ○ Certification of legal review of CAS welfare and institutions Code §18999.97(i) <i>(Attachment J)</i> ○ Evidence of planning agency review and approval <i>(Preconstruction Performance Milestone)</i> ○ Due diligence completed for acquisition. <i>(Preconstruction Performance Milestone)</i> ○ Acquisition - close of escrow/declaration of restrictions & performance <i>(See Task 8)</i> ○ Delivery of design development drawings 100% complete <i>(See Task 4)</i> ○ Delivery of construction drawings for first submittal to building dept <i>(See Task 4)</i> ○ Construction contract with construction contract rider <i>(See Task 9)</i> ○ Evidence of prevailing wage compliance <i>(See Attachment G, Certification #2)</i> ○ Copy of building permit receipt and notice of exemption filed. <i>(See Task #4)</i> ○ Evidence of required insurance and notice to proceed. <i>(See Task #4)</i> ○ Certification of project construction is 50% complete. <i>(See Task #4)</i> ○ Receipt of certificate of occupancy <i>(See Task #4)</i> ○ Notice of completion and receipt of unconditional lien releases <i>(See Task #4)</i> ○ Receipt of business license and certificate of occupancy <i>(See Task #4)</i> ○ Anticipated expiration date of the agreement & transfer to state oversight <i>(See Task #4) (Preconstruction Performance Milestone)</i>
Post-Contracting The below outlines tasks and deliverables required of CCE grant recipient prior to disbursement of funds.
TASK 7: REQUIREMENT FOR DISBURSEMENT OF PROGRAM FUNDS – ALL APPLICANTS
Description/Deliverables

Deliverables – All Applicants:

- Executed Program Funding Agreement (PFA)
- All documentation necessary to complete draw request.
- Delivery of all items listed in Attachment H required for the disbursements of Program Funds, as applicable. *(PFA 4.2.2) Either documentation is provided or a clear path with dates indicating when these milestones will be met, and respective documents will be submitted.*

TASK 8: REQUIREMENT FOR DISBURSEMENT OF PROGRAM FUNDS – ACQUISITION

Description/Deliverables

Deliverables – Acquisition

- Purchase and Sale Agreement (mutually executed by buyer and seller) *(PFA 4.3.1)*
- Certified Appraisal Report *(PFA 4.3.2)*
- A commitment from a title insurance company for an ALTA Lenders Title Insurance policy in a form acceptable to Horne in the amount of the Program Funds. The condition of title, the insurer, the liability amount, the form of policy, and the endorsements shall be subject to Horne approval. The policy shall insure that Sponsor holds good and marketable title (fee simple or leasehold) and shall show the Performance Deed of Trust and Declaration of Restrictions in the lien priority approved by Horne and only subject to such title exceptions as are approved by Horne, its designee, or CDSS; *(PFA 4.3.3)*
- Evidence of any additional funds necessary for Sponsor to acquire the property upon which the Project is to be constructed if the Program Funds are not providing the full amount of the acquisition costs; *(PFA 4.3.4)*
- Signed Escrow Instructions *(PFA 4.3.5)*
- If the SOW includes the acquisition of real property, Sponsor shall provide a Phase I Environmental Site Assessment (“ESA”) for the Project, in conformance with ASTM Standard Practice E 1527, evaluating whether the Project is affected by any recognized environmental conditions. If the Phase I ESA discloses evidence of recognized environmental conditions and Sponsor desires to proceed with the Project, Sponsor shall provide Horne with a Phase II report and any additional reports as required by Horne and in a form acceptable to Horne. Sponsor shall also provide an asbestos assessment and a lead-based paint report for Horne’s approval if the Project involves rehabilitation or demolition of existing improvements. Prior to disbursement of Program Funds for real property acquisition, Horne shall require Sponsor to provide evidence to Horne that all recommendations of the Phase I or Phase II ESA have been complied with or shall be complied with prior to commencement of construction. Prior to disbursement of Program Funds for any rehabilitation work, Horne shall require the Sponsor to provide evidence that all asbestos and/or lead-based paint has been abated. *(PFA Article 16)*

TASK 9: REQUIREMENT FOR DISBURSEMENT OF PROGRAM FUNDS – CONSTRUCTION		
Description/Deliverables		
Deliverables – Construction <ul style="list-style-type: none"> • Plans and specifications for the construction work • Plans and specifications for the construction work approved by Horne (PFA 4.4.1) • An executed construction contract, based on a permitted set of construction plans with a licensed general contractor for an amount consistent with the construction costs in the approved Project budget, based on the sources and uses attached hereto as Exhibit A and Exhibit B (as the same may be modified from time to time, with prior notice to Horne, the “Project Budget”) that incorporates the requirements of this Agreement including, but not limited to, the prevailing wage requirements, and contains the Construction Contract Rider in the form attached as Attachment K; (PFA 4.4.2) • Copies of labor and material bonds and performance bonds for the construction work in an amount equal to one hundred percent (100%) of the cost of construction, naming Horne and CDSS as co-obliges on the bonds; (PFA4.4.3) • A written request for Program Funds on a form approved by Horne providing sufficient detail and with sufficient supporting documentation to permit Horne or its designee to confirm that the request is consistent with the terms of this Agreement and the Project Budget accompanied by (a) certification by Sponsor’s architect or project manager that the work for which disbursement is requested has been completed (although Horne reserves the right to inspect or have its designee inspect the Project and make an independent evaluation); (b) invoices and related back-up information and documentation required by Horne evidencing the amounts being requested; and (c) lien releases and/or mechanics lien title insurance endorsements reasonably acceptable to Horne; and (PFA 4.4.4) • Applicable documents and deliverables described in Attachment H required for the disbursements of Program Funds. (PFA 4.4.5) 		
TASK 10: REQUIREMENT FOR DISBURSEMENT OF PROGRAM FUNDS – PRE-DEVELOPMENT		
Description/Deliverables		
Deliverables – Pre-Development <ul style="list-style-type: none"> • Completed items applicable to Pre-Development outlined in Pre-Contracting Tasks 1-6 • Completed items outlined in Post-Contracting Task 7 		
TOTAL:	TOTAL FUNDING AMOUNT = PROGRAM FUNDS + MATCH	\$1,130,806

SCHEDULE 1
[PROJECT BUDGET ATTACHED]

Applicant Instructions:			
Please review the Budget Narrative and Glossary of Terms for any clarifications.			
Please fill in yellow highlighted cells with as much accurate detail as possible. This budget is the basis of your funding.			
Please seek & include professional development team estimates & actual bids with as much accurate detail as possible.			
Please include Prevailing Wage labor costs for all relevant trades.			
CCE APPLICANT INFORMATION			
Applicant Name and Contact Information	Antonette Navarro; anavarro@sbcbswell.org; 805.681.5220		
County or Tribal Nation	Santa Barbara		
Organization Name:	County of Santa Barbara, on behalf of its Department of Behavioral Wellness		
Name of Proposed Project:	Casa Omega		
Projected Start Date:	12/1/2022		
Contact Name, Email & Phone:	Laura Zeitz; lazeitz@sbcbswell.org		
Assessor Parcel Number (APN)	059-140-029		
Assessor Parcel Number (APN)			
CCE GRANT FULL BUDGET INFORMATION			
<i>Project Development Costs by Phase</i>			
	Funded by Grant	Funded by Match	Total Costs
FEASIBILITY/DUE DILIGENCE			
Owner Administration (10% autofill)	\$5,300		\$5,300
Legal			\$0
Architect	\$20,000		\$20,000
Consultants (Specify)			\$0
Engineers			\$0
Construction Manager/Owner's Rep	\$10,000		\$10,000
SIR (Site Investigation Report)			\$0
Site Surveys (soils & enviro)	\$8,000		\$8,000
Other Feasibility / Due Diligence Costs	\$15,000		\$15,000
Other Feasibility / Due Diligence Costs			\$0
Contingency (10% autofill)	\$5,830		\$5,830
Total Feasibility Costs	\$64,130	\$0	\$64,130
PRE-DEVELOPMENT - (CCE ONLY)			
Owner Administration (10% autofill)	\$0		\$0
Legal			\$0
Architect (Schematic Design)			\$0

Construction Manager/Owner's Rep			\$0
Civil Engineering			\$0
MEP Engineers			\$0
Consultants (Specify)			\$0
Consultants (Specify)			\$0
Other Pre-Dev Costs (Specify)			\$0
Other Pre-Dev Costs (Specify)			\$0
Other Pre-Dev Costs (Specify)			\$0
Contingency (20% autofill)	\$0		\$0
Total Pre-Development Costs	\$0	\$0	\$0
DEVELOPMENT PLANNING			
Owner Administration (10% autofill)	\$11,450		\$11,450
Legal			\$0
Architect (DD and CD's)	\$75,000		\$75,000
Construction Manager/Owner's Rep	\$12,000		\$12,000
Civil Engineer			\$0
MEP Engineer			\$0
Structural Engineer			\$0
Consultants (Specify)	\$15,000		\$15,000
Consultants (Specify)			\$0
Consultants (Specify)			\$0
Other Dev Planning Costs (Specify)	\$10,000		\$10,000
Other Dev Planning Costs (Specify)	\$2,500		\$2,500
Other Dev Planning Costs (Specify)			\$0
Contingency (20% autofill)	\$25,190		\$25,190
Total Development Planning Costs	\$151,140	\$0	\$151,140
LAND COSTS/ACQUISITION			
Owner Administration (2% autofill)	\$0		\$0
Land Cost or Value		\$87,373	\$87,373
Demolition			\$0
Legal			\$0
Broker Fee			\$0
Appraisal Fee			\$0
Construction Manager			\$0
Closing Costs			\$0
Land Lease Rent Prepayment			\$0
Other Acquisition Costs (Specify)			\$0
Contingency (5% autofill)	\$0		\$0
Total Land Costs	\$0	\$87,373	\$87,373

Existing Improvements Value (for Match)			\$0
Off-Site Improvements			\$0
Total Acquisition Costs	\$0	\$87,373	\$87,373
REHABILITATION			
Owner Administration (5% autofill)	\$29,840		\$29,840
Legal			\$0
Construction Manager/Owner's Rep	\$20,000		\$20,000
Physical Needs Assessment (PNA)			\$0
Site Work (Materials and Labor)	\$65,000		\$65,000
Structures (Materials and Labor)	\$17,500		\$17,500
General Requirements/Requirements	\$390,000		\$390,000
Contractor Overhead			\$0
Contractor Profit			\$0
Prevailing Wages Administration			\$0
General Liability Insurance			\$0
Relocation Costs			\$0
Project Inspection			\$0
Signage and Marketing	\$5,000		\$5,000
Furniture/Fixtures/Equipment (FFE)	\$46,800		\$46,800
Urban Greening	\$2,500		\$2,500
Other Rehabilitation: (Specify)	\$50,000		\$50,000
Other Rehabilitation: (Specify)			\$0
Other Rehabilitation: (Specify)			\$0
Owner's Contingency (20% autofill)	\$125,328		\$125,328
Total Rehabilitation Costs	\$751,968	\$0	\$751,968
NEW CONSTRUCTION			
Owner Administration (5% autofill)	\$0		\$0
Legal			\$0
Construction Manager/Owner's Rep			\$0
Site Work (Materials and Labor)			\$0
Hard Costs (Materials and Labor)			\$0
General Conditions/Requirements			\$0
Contractor Profit			\$0
Prevailing Wages Administration			\$0
General Liability Insurance			\$0
Project Inspection			\$0

FFE (Furniture/Fixtures/Equipment)			\$0
Signage & Marketing			\$0
Urban Greening			\$0
Other New Construction: (Specify)			\$0
Other New Construction: (Specify)			\$0
Other New Construction: (Specify)			\$0
Other New Construction: (Specify)			\$0
Other New Construction: (Specify)			\$0
Owner's Contingency (20% autofill)	\$0		\$0
Total New Construction Costs	\$0	\$0	\$0
CONSTRUCTION PERMITS & FEES			
Owner Administration (10% autofill)	\$1,000		\$1,000
Bond Premium or Subcontractor Default Insurance (SDI)			\$0
Builders Risk Insurance			\$0
Title and Recording			\$0
Permit Fees	\$10,000		\$10,000
Local Development Impact Fees			\$0
Employment Reporting			\$0
Other Const. Permits & Fees (Specify)			\$0
Other Const. Permits & Fees (Specify)			\$0
Other Const. Permits & Fees (Specify)			\$0
Owner's Contingency (10% autofill)	\$1,100		\$1,100
Total Construction Permits & Fees	\$12,100	\$0	\$12,100
RESERVES			
Operating Reserves (Rehabilitation)			\$0
Transition Reserves (Move-in)			\$0
COSR Funds			\$0
Total Reserves Amount	\$0	\$0	\$0
OTHER PROJECT COSTS			
Post Construction Commissioning	\$10,000		\$10,000
Marketing/PR/Communications			\$0
Move-In fees	\$10,000		\$10,000
Accounting/Reimbursable			\$0

Other Costs: (Specify)			\$0
Other Costs: (Specify)			\$0
Other Costs: (Specify)			\$0
Other Costs: (Specify)			\$0
Owner's Contingency (10% autofill)	\$2,000		\$2,000
Total Other Project Costs	\$22,000	\$0	\$22,000
DEVELOPER COSTS			
Developer Overhead			\$0
Consultants/Processing Agents			\$0
Project Administration			\$0
Other Developer Costs: (Specify)			\$0
Total Developer Costs	\$0	\$0	\$0
Developer Fee (5%)	\$42,095		\$42,095
TOTAL PROJECT COSTS	\$1,043,433	\$87,373	\$1,130,806
	\$	% of Total	
Total Development Costs (Match Basis)	\$841,890		<i>Excludes Contingency & Developer Fee</i>
Match \$ Amount & % of Total Development Costs	\$87,373	10.38%	<i>Excludes Contingency & Developer Fee</i>
Total Contingency	\$159,448	14.65%	<i>% of Total Project Cost, excludes Developer Fee</i>
Total Reserves	\$0	0.00%	<i>% of Total Project Cost, excludes Developer Fee</i>
Total Administration	\$47,590	4.37%	<i>% of Total Project Cost, excludes Developer Fee</i>

Attachment F: Payment Schedule

Payment schedule: No more than once per month, Sponsor shall submit a complete draw request to Horne, or its designee, in a form determined by Horne for a specific amount of funds confirmed by specific invoices and supporting documents for actual work completed. Horne shall disburse Program Funds to Sponsor or directly to its vendors within thirty (30) days of Horne, or its designee's, written approval of Sponsor's complete draw request.

ATTACHMENT G

SPONSOR COMPLIANCE DELIVERY OBLIGATIONS

CERTIFICATION:	RELATED PARTY & RELATED PARTY TRANSACTION DISCLOSURE
CERTIFICATION:	LEGAL REVIEW OF CA WELFARE AND INSTITUTIONS CODE §18999.97(l)

SPONSOR S CERTIFICATION:

RELATED PARTY & RELATED PARTY TRANSACTION DISCLOSURE

I, Antonette Navarro, as an authorized representative of County of Santa Barbara (“Sponsor”), on behalf of its Department of Behavioral Wellness, hereby certify that:

1. I possess the legal authority to submit this certification on behalf of Sponsor and the information and statements set forth below are, to the best of my knowledge and belief, true and correct.
2. I am providing this information in connection with an application for funding from California Department of Social Services (“CDSS”) pursuant to the Community Care Expansion Program for the Casa Omega- Tecolote House, Adult Residential Facilities (ARF) (“Project”) and acknowledge that CDSS and its contract manager, Horne LLP (“Horne”) are relying on this information in awarding and disbursing Program Funds.
3. Sponsor certifies that it has disclosed to Horne and/or CDSS the composition of Sponsor including any entity, member, manager, partner, or person that directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or common control with Sponsor (“Related Party” or “Related Parties”).
4. Sponsor certifies that it shall disclose to Horne and/or CDSS, promptly, any change in ownership or control of Sponsor or any merger or acquisition that changes the control of Sponsor. For purposes herein, “control” shall mean any entity that has an ownership interest of greater than twenty percent (20%) in Sponsor, or, has the authority to direct or cause the direction of the affairs or management of Sponsor.
5. Sponsor certifies that it shall disclose to Horne and/or CDSS, promptly, upon the existence or discovery of an actual or potential transaction, agreement, or settlement with a Related Party in connection with the Project (“Related Party Transaction”).
6. Sponsor certifies that it shall disclose to Horne and/or CDSS: (1) the nature of the relationship, (2) the nature of the potential or actual transaction, agreement, or settlement, (3) the dollar amounts of any such transaction, agreement, or settlement, (4) the dollar amounts due to or from any Related Party, and (5) documents and any additional information, as may be required by Horne and/or CDSS in their sole discretion.

SIGNATURES ON THE FOLLOWING PAGE

I certify that the above information is true and correct and that Sponsor shall comply with all

County of Santa Barbara, a California County
Authorized Signature

Typed Name of Signatory

Title of Signatory

Date

SPONSOR'S CERTIFICATION:

LEGAL REVIEW OF CA WELFARE AND INSTITUTIONS CODE §18999.97(1)

1. I possess the legal authority to submit this certification on behalf of Sponsor and the information and statements set forth below are, to the best of my knowledge and belief, true and correct.
2. I am providing this information in connection with an application for funding from California Department of Social Services ("CDSS") pursuant to the Community Care Expansion Program for the Casa Omega- Tecolote House, Adult Residential Facilities (ARF) ("Project") and acknowledge that CDSS and its contract manager, Horne LLP ("Horne") are relying on this information in awarding and disbursing Program Funds.
3. Sponsor certifies that it has had the opportunity to seek advice from legal counsel as to its rights and responsibilities regarding California Welfare and Institutions Code §18999.97(1) set forth below:

Any project that receives funds pursuant to this section shall be deemed consistent and in conformity with any applicable local plan, standard, or requirement, and any applicable coastal plan, local or otherwise, shall be allowed as a permitted use, within the zone in which the structure is located, shall not be subject to a conditional use permit, discretionary permit, or any other discretionary reviews or approvals, and shall be deemed as a ministerial action under Section 15268 of Title 14 of the California Code of Regulations.

SIGNATURES ON THE FOLLOWING PAGE

I certify under penalty of perjury that the above information is true and correct and that Sponsor has read and understands the terms of this certification and shall comply with all requirements set forth above in Sponsor's Certification: Legal Review of CA Welfare and Institutions Code §18999.97(l) as a condition of receiving the Program Funds.

County of Santa Barbara, a California County
Authorized Signature

Typed Name of Signatory

Title of Signatory

Date

CCE

ATTACHMENT H - PERFORMANCE MILESTONES

Name of Organization

Person completing form:

These Performance Milestones are the basis for your Project's Payment Schedule so that Program Funds are timely obligated and expended.

ESTIMATED MILESTONES

Preconstruction/Acquisition, Construction, Move-in

PHASE	MILESTONE	COMPLETION DATE: Not To Exceed	
Preconstruction	MATCH FUNDS, PROPERTY EQUITY, OR IN-KIND MATCH	Project specific or N/A	
Preconstruction	DECLARATION OF RESTRICTIONS AND PERFORMANCE DEED OF TRUST		
Preconstruction	CERTIFICATION OF LEGAL REVIEW OF CA WELFARE AND INSTITUTIONS CODE §18999.97(I)		
Preconstruction	EVIDENCE OF PLANNING AGENCY REVIEW AND APPROVAL		
Preconstruction	DUE DILIGENCE COMPLETED FOR ACQUISITION		
Acquisition	ACQUISITION - CLOSE OF ESCROW/DECLARATION OF RESTRICTIONS & PERFORMANCE		
Preconstruction	DELIVERY OF DESIGN DEVELOPMENT DRAWINGS 100% COMPLETE		
Preconstruction	DELIVERY OF CONSTRUCTION DRAWINGS FOR FIRST SUBMITTAL TO BUILDING DEPT		
Preconstruction	CONSTRUCTION CONTRACT WITH CONSTRUCTION CONTRACT RIDER		
Preconstruction	EVIDENCE OF PREVAILING WAGE COMPLIANCE		
Preconstruction	COPY OF BUILDING PERMIT RECEIPT AND NOTICE OF EXEMPTION FILED		
Construction	EVIDENCE OF REQUIRED INSURANCE AND NOTICE TO PROCEED		Completion before [To Be Determined]
Construction	CERTIFICATION OF PROJECT CONSTRUCTION IS 50% COMPLETE		
Construction	RECEIPT OF CERTIFICATE OF OCCUPANCY		
Move-In	NOTICE OF COMPLETION AND RECEIPT OF UNCONDITIONAL LIEN RELEASES	Completion before [To Be Determined] Project specific, N/A [_____]	
Move-In	RECEIPT OF BUSINESS LICENSE AND CERTIFICATE OF OCCUPANCY		
CLOSE OUT	ANTICIPATED EXPIRATION DATE OF THE AGREEMENT & TRANSFER TO STATE OVERSIGHT		

RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:
[County/State]
ADDRESS
ADDRESS
ADDRESS
Attention: Name
NO FEE FOR RECORDING PURSUANT TO
GOVERNMENT CODE SECTION 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Attachment I-1

DECLARATION OF RESTRICTIONS

This Declaration of Restrictions (the “**Declaration**”), dated ____ for reference purposes, by County of Santa Barbara, on behalf of its Department of Behavioral Wellness, a California County

(the “**Owner**”), is hereby given to and on behalf of the Department of Social Services, a public agency of the State of California (“**CDSS**”).

RECITALS

A. This Declaration affects Owner’s interest in that certain real property commonly known as 310 Camino del Remedio, located in the City of Santa Barbara, County of Santa Barbara, State of California, and the improvements thereon (the “**Property**”); as more particularly described and shown on Exhibit A attached hereto and incorporated herein by this reference;

B. Owner and Horne LLP (“**Horne**”), as a contractor to CDSS, entered into that certain Program Funding Agreement, of even date herewith (the “**Program Funding Agreement**”), whereby Owner agreed to renovate or construct certain improvements on the Property and Horne agreed to disburse funds to Owner in accordance with the terms thereof (in an amount not to exceed One Million Forty-Three Thousand Four Hundred Thirty-Three Dollars (\$1,043,433) (the “**Program Funds**”));

C. The Program Funds are provided pursuant to the Community Care Expansion Program, authorized under Welfare and Institutions Code Section 18999.97-18999.98, established by California Assembly Bill No. 172 (Chapter 696, Statutes of 2021), to fund the acquisition, construction, or rehabilitation of adult and senior care facilities that service applicants and recipients of Supplemental Security Income/State Supplementary Payment (“**SSI/SSP**”) and Cash Assistance Program for Immigrants (“**CAPI**”) applicants and recipients who are experiencing or are at risk of homelessness; and

D. This Declaration shall be secured by a Performance Deed of Trust, the form of which is set forth in Attachment J to the Program Funding Agreement, encumbering Owner’s fee

interest in the Property; and the Property shall be owned, held, used, maintained, and transferred pursuant to the covenants, conditions, restrictions, and limitations as further described herein.

NOW, THEREFORE, in consideration of the foregoing and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner hereby covenants, agrees, and declares the following:

AGREEMENT

1. **Use of Property.** Owner, for itself, and for its successors and assigns, hereby declares and covenants that for the term of this Declaration, all use of the Property, and any improvements thereon, shall be restricted to continuous, and lawful use in accordance with the uses described in Exhibit B, attached hereto and incorporated by this reference. Any such other use shall require the express prior written approval of Horne or CDSS in its sole and absolute discretion and the recording of a new Declaration of Restrictions reflecting the use(s) agreed upon which shall thereafter supersede this Declaration.

2. **Maintenance, Repair, and Improvement of the Property.** Owner agrees:

2.1. To keep the Property, and all improvements thereon, in decent, safe, and sanitary condition and repair, and to permit no waste thereof;

2.2. Not to commit or suffer to be done or exist on or about the Property any condition causing the Property to become less valuable, except in accordance with this Declaration;

2.3. Not to construct any buildings or improvements on the Property, other than the buildings and improvements contemplated as part of this Declaration, that would detrimentally affect the Property; or add to, remove, demolish or structurally alter any buildings or improvements included as part of the Property, now or hereinafter located on the Property;

2.4. To promptly repair, restore or rebuild any buildings or improvements on the Property that may be damaged or destroyed while subject to this Declaration;

2.5. To comply with all applicable laws affecting the Property, and not to suffer or permit any violations of any such applicable law, nor of any covenant, condition or restriction affecting the Property;

2.6. Not to initiate or acquiesce in any change in any zoning or other land use or legal classification which affects any of the Property without Horne or CDSS's prior written consent; and

2.7. Not to alter the use of all or any part of the Property without Horne or CDSS's prior written consent.

3. **Restrictions on Sale, Encumbrance, and Other Acts.**

3.1. Owner shall not, except with Horne or CDSS's prior written consent, make any sale, encumbrance, hypothecation, assignment, refinancing, pledge, conveyance, or transfer of the Property or of any of its interest in the Property.

3.2. If Horne or CDSS determine, in their sole and absolute discretion, to grant prior written consent for a sale, transfer or conveyance of the Property, such consent may impose terms and conditions, as necessary, to preserve or establish the fiscal integrity of the Property or to ensure compliance with this Declaration and/or Program Requirements.

3.3. **Charges; Liens.** Owner shall pay all taxes, assessments, and other charges, fines and impositions attributable to the Property, if any, by Owner making payment, when due, directly to the payee thereof. Owner shall promptly furnish to Horne or CDSS all notices of amounts due under this subsection, and where Owner makes direct payments, Owner shall promptly furnish to Horne or CDSS its receipts evidencing such payments. Owner shall pay when due all encumbrances, charges, and liens on the Property, and shall make payments on notes or other obligations secured by an interest in the Property, with interest in accordance with the terms thereof. Owner shall have the right to contest in good faith any claim or lien, or payment due thereunder, so long as Owner does so diligently and without prejudice to Horne or CDSS.

4. **Building Permits.** Owner agrees not to apply for or accept any permits for the construction of improvements on the Property that are inconsistent with the lawful operation of the Property, as such Property is described in this Declaration.

5. **Hazard and Liability Insurance and Condemnation.**

5.1. Owner shall keep the Property insured against loss by fire and such other hazards, casualties, liabilities, and contingencies, and in such amounts and for such periods as required by Horne and CDSS. All insurance policies and renewals thereof shall be issued by a carrier and in a form acceptable to Horne and CDSS.

5.2. In the event of any fire or other casualty to the Property or eminent domain proceedings resulting in condemnation of the Property or any part thereof, the Owner shall have the right to rebuild the Property and to use all available insurance or condemnation proceeds therefor; provided that, as determined by Horne or CDSS in its sole and absolute discretion: (a) such proceeds are sufficient to rebuild the Property in a manner that ensures continued operation in accordance with this Declaration; and (b) no material breach or default then exists under the Program Funding Agreement. If the casualty or condemnation affects only part of the Property and if total rebuilding is infeasible, then the insurance or condemnation proceeds may be used for partial rebuilding and/or partial repayment of the Program Funds. CDSS or Horne has the right but not the obligation to approve the plans and specifications for any major rebuilding, as well as the right but not the obligation to approve disbursements of insurance or condemnation proceeds for rebuilding under a construction escrow or similar arrangement.

6. **Covenants Run with the Land.** The Property is held and hereafter shall be held, conveyed, hypothecated, encumbered, leased, rented, used, and occupied subject to this Declaration. The foregoing Declaration is intended to constitute both equitable servitudes and covenants running with the land. Owner expressly acknowledges and agrees that the Declaration is a reasonable restraint on the Owner's right to own, use, maintain, and transfer the Property and any estate or interest therein and is not and shall not be construed to be an unreasonable restraint on alienation. Each and every contract, deed or other instrument hereafter executed covering or conveying the Property, or any portion thereof, shall be held conclusively to have been executed, delivered, and accepted subject to this Declaration, regardless of whether this Declaration is set forth in such contract, deed, or other instrument.

7. **Binding on Successors and Assigns.** The Declaration contained herein shall be binding upon all of Owner's successors, assigns and transferees to or of the Property, and upon all leases, tenants, contractors, agents, and persons claiming an interest in the Property, or claiming an interest by and through any of the foregoing. Any transferee or purchaser of the Property, or of any portion of, or interest in the Property, by the acceptance of a deed therefore, whether from the Owner or from any subsequent owner of the Property, or by the signing of a contract or agreement to purchase the Property, shall by the acceptance of such deed or by the signing of such contract or agreement be deemed to have consented to and accepted the covenants and restrictions set forth in this Declaration.

8. **Term of Declaration.** The covenants in this Declaration shall be binding, effective, and enforceable commencing upon the recordation of this Declaration in the official records of the county in the jurisdiction where the Property is located, and they shall continue in full force and effect for a period of not less than 20 years after the date of _____ (the "**Restriction Period**"), regardless of any sale, assignment, transfer, or conveyance (including, without limitation, by foreclosure sale) of the Property or any portion thereof. County may terminate and this DOR shall be deemed null and void in the event that the PFA never becomes effective.

9. **Default, Remedies.** A default under this Declaration shall constitute a default under the Program Funding Agreement; and a default under this Declaration shall entitle CDSS or Horne to any rights, remedies, or damages available at law or in equity, including, but not limited to, those that are specified below. CDSS's or Horne's failure to exercise any specific right or remedy shall not be construed as a waiver of that or any right or remedy.

9.1. **Specific Performance.** The use, repair, and maintenance of the Property is of a special and unique kind and character, so that a breach of any material provision of this Declaration by the Owner would not have an adequate remedy at law. Therefore, Horne or CDSS's rights may be enforced by an action for specific performance and such other equitable relief as is provided by the laws of the State of California.

9.2. **Injunctive Relief.** In pursuing specific performance of the Declaration, Horne or CDSS shall be entitled to petition the court for injunctive relief to preserve Horne or CDSS's interests in the Property and its rights under this Declaration. Such injunctive relief may include a court order restraining any development of the Property that is inconsistent with the foregoing Declaration.

ATTACHMENT I-1

4139-1731-0280.5

DECLARATION OF RESTRICTIONS

I-31

9.3. Appointment of Receiver. In conjunction with any other remedy available at law or in equity, Horne or CDSS may apply to a court of competent jurisdiction for the appointment of a receiver to take over and operate the Property in accordance with the requirements of this Declaration.

9.4. Notwithstanding the foregoing or anything to the contrary contained herein, CDSS shall be entitled to any rights, remedies, or damages available pursuant to that certain Performance Deed of Trust executed by Owner, as Trustor, therein, on or about of even date herewith, and recorded in the official records of the county in the jurisdiction where the Property is located.

10. **Horne and CDSS Review and Inspection.**

10.1. At any time during the term of this Declaration and upon reasonable notice, Horne, CDSS, or their designees may, but are not obligated to, enter and inspect the Property, and inspect all records pertaining to the operation, repair, and maintenance of the Property. Upon request by Horne or CDSS, the Owner shall notify occupants of upcoming inspections in accordance with state law.

10.2. CDSS or Horne may, but is not obligated to, request any other information that it deems necessary to confirm compliance with this Declaration. The Owner shall provide such requested information within fourteen (14) calendar days of Horne's or CDSS's written request for the information.

10.3. During the Term of this Declaration, Owner shall submit to CDSS, or Horne, as required by Horne, or CDSS, in their sole discretion, written documentation, in a form and at a frequency acceptable to Horne, or CDSS, in their sole discretion, providing sufficient detail and with sufficient supporting information to permit Horne, or its designee, or CDSS, or its designee, to monitor and confirm that Owner's uses of the Property are in accordance with the uses described in this Declaration, including, Exhibit B, attached hereto.

10.4. CDSS or Horne shall not, by the fact of making or not making any entries or inspections, or by taking or failing to take any action in response thereto: (i) incur or undertake, or be deemed to incur or undertake, any obligation, duty, or liability whatsoever, whether to the Owner, or to any other person or entity; (ii) be deemed as approving or disapproving any matter, action, incident, or condition related to the Property; or (iii) be deemed as approving or disapproving any matter related to the compliance of the Property with this Declaration or other applicable laws. In no event or circumstance shall Horne's or CDSS's exercise or non-exercise of its discretion under this subsection constitute, or be deemed or interpreted as constituting, any termination, limitation, alteration, or waiver by Horne or CDSS of any right, benefit, or remedy under or with respect to this Declaration.

11. **Owner Representations.** Owner represents and warrants to Horne and CDSS that: (1) Owner has sufficient interest in the Property to support the operation of the Property in accordance with this Declaration; (2) to Owner's actual knowledge and belief, there are no agreements, contracts, covenants, conditions, or exclusions to which Owner (or its predecessor in interest) is a party which would, if enforced, prohibit or restrict the use of the Property in

accordance with the terms of this Declaration; (3) Owner has the full right and authority to enter into this Declaration; (4) this Declaration constitutes a valid and legally binding obligation on Owner, enforceable in accordance with its terms; and (5) Owner is duly organized and authorized to do business in the State of California.

12. **Amendment, Modification.** Owner shall not amend, modify, waive, or release this Declaration, or any part of this Declaration, without the prior and express written consent of an authorized representative of Horne or CDSS, which consent may be withheld, conditioned, or delayed in Horne's or CDSS's sole and absolute discretion. Any amendment, modification, waiver, or release without the prior and express written consent of Horne or CDSS shall be void.

13. **Severability.** Every provision of this Declaration is intended to be severable. If any provision of this Declaration is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the validity, legality, and enforceability of the remaining provisions shall not be affected or impaired.

14. **Governing Law.** This Declaration shall be governed by and interpreted under the laws of the State of California.

15. **Recordation of Agreement.** This Declaration shall be recorded in the official records of the County of Santa Barbara no later than ____ [DATE]. The Declaration shall be recorded, and shall remain, as a lien against the Property in first position over all other agreements, covenants, liens, or other matters of record on the Property.

SIGNATURE ON FOLLOWING PAGE

IN WITNESS WHEREOF, the Owner has caused this Declaration to be signed by its duly authorized representative, as of the day and year first written above.

OWNER:
County of Santa Barbara, a California County

By: _____ Authorized Entity Representative

All signatures must be acknowledged.

ADD NOTARY ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
)
COUNTY OF _____)

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Name: _____
Name: Notary Public

EXHIBIT "A"

LEGAL DESCRIPTION OF THE PROPERTY

[TO BE INSERTED BY TITLE COMPANY]

EXHIBIT "B"

PROPERTY AND OPERATIONS

A residential adult and senior care facility where 12 beds/units are prioritized for Qualified Residents experiencing or at risk of homelessness. For purposes of this Declaration, "Qualified Resident" shall have the meaning set forth in California Welfare and Institutions Code Section 18999.97(e) and "prioritized" shall mean a preferential interest in occupancy of each designated bed or unit.

If after applying best efforts to identify and enroll a Qualified Resident experiencing homelessness or at risk of homelessness for each designated bed or unit, no such person(s) is identified, the Owner may identify and enroll a Qualified Resident for each designated bed or unit; if after applying best efforts to identify and enroll a Qualified Resident for each designated bed or unit, the Owner also cannot identify and enroll a Qualified Resident, the Owner may enroll a non-Qualified Resident for the designated bed or unit.

RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:
[County/State]
ADDRESS
ADDRESS
ADDRESS
Attention: Name
NO FEE FOR RECORDING PURSUANT TO
GOVERNMENT CODE SECTION 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Attachment I-2

DECLARATION OF RESTRICTIONS

This Declaration of Restrictions (the "**Declaration**"), dated _____ for reference purposes, by _____ [INSERT NAME OF REAL PROPERTY OWNER AND TYPE OF ENTITY] (the "**Owner**"), is hereby given to and on behalf of the Department of Social Services, a public agency of the State of California ("**CDSS**").

RECITALS

A. This Declaration affects Owner's interest in that certain real property commonly known as _____ [INSERT ADDRESS OF REAL PROPERTY], located in the City of _____ [INSERT NAME OF CITY], County of _____ [INSERT NAME OF COUNTY], State of California, and the improvements thereon (the "**Property**"); as more particularly described and shown on Exhibit A attached hereto and incorporated herein by this reference;

B. Owner and Horne LLP ("**Horne**"), as a contractor to CDSS, entered into that certain Program Funding Agreement, of even date herewith (the "**Program Funding Agreement**"), whereby Owner agreed to renovate or construct certain improvements on the Property and Horne agreed to disburse funds to Owner in accordance with the terms thereof (in an amount not to exceed _____ Dollars (\$_____) (the "**Program Funds**");

C. Owner and Horne entered into that certain Capitalized Operating Subsidy Reserve Agreement, of even date herewith (the "**COSR Agreement**"), whereby Horne agreed to disburse operating reserve funds to Owner in accordance with the terms thereof, in the amount of up to _____ Dollars (\$_____) ("**COSR Funds**");

D. The Program Funds and COSR Funds are provided pursuant to the Community Care Expansion Program, authorized under Welfare and Institutions Code Section 18999.97-18999.98, established by California Assembly Bill No. 172 (Chapter 696, Statutes of 2021), to fund the acquisition, construction, or rehabilitation of adult senior care facilities that service applicants and recipients of Supplemental Security Income/State Supplementary Payment ("**SSI/SSP**") and Cash Assistance Program for Immigrants ("**CAPI**") applicants and recipients who are experiencing or are at risk of homelessness; and

E. This Declaration shall be secured by a Performance Deed of Trust, the form of which is set forth in Attachment J to the Program Funding Agreement, encumbering Owner's fee interest in the Property; and the Property shall be owned, held, used, maintained, and transferred pursuant to the covenants, conditions, restrictions, and limitations as further described herein.

NOW, THEREFORE, in consideration of the foregoing and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner hereby covenants, agrees, and declares the following:

AGREEMENT

1. **Use of Property.** Owner, for itself, and for its successors and assigns, hereby declares and covenants that for the term of this Declaration, all use of the Property, and any improvements thereon, shall be restricted to continuous, and lawful use in accordance with the uses described in Exhibit B, attached hereto and incorporated by this reference. Any such other use shall require the express prior written approval of Horne or CDSS in its sole and absolute discretion and the recordation of a new Declaration of Restrictions reflecting the use(s) agreed upon which shall thereafter supersede this Declaration.

2. **Maintenance, Repair, and Improvement of the Property.** Owner agrees:

2.1. To keep the Property, and all improvements thereon, in decent, safe, and sanitary condition and repair, and to permit no waste thereof;

2.2. Not to commit or suffer to be done or exist on or about the Property any condition causing the Property to become less valuable, except in accordance with this Declaration;

2.3. Not to construct any buildings or improvements on the Property, other than the buildings and improvements contemplated as part of this Declaration, that would detrimentally affect the Property; or add to, remove, demolish or structurally alter any buildings or improvements included as part of the Property, now or hereinafter located on the Property;

2.4. To promptly repair, restore or rebuild any buildings or improvements on the Property that may be damaged or destroyed while subject to this Declaration;

2.5. To comply with all applicable laws affecting the Property, and not to suffer or permit any violations of any such applicable law, nor of any covenant, condition or restriction affecting the Property;

2.6. Not to initiate or acquiesce in any change in any zoning or other land use or legal classification which affects any of the Property without Horne or CDSS's prior written consent; and

2.7. Not to alter the use of all or any part of the Property without Horne or CDSS's prior written consent.

3. **Restrictions on Sale, Encumbrance, and Other Acts.**

3.1. Owner shall not, except with Horne's or CDSS's prior written consent, make any sale, encumbrance, hypothecation, assignment, refinancing, pledge, conveyance, or transfer of the Property or of any of its interest in the Property.

3.2. If Horne or CDSS determines, in its sole and absolute discretion, to grant its prior written consent for a sale, transfer or conveyance of the Property, such consent may impose terms and conditions, as necessary, to preserve or establish the fiscal integrity of the Property or to ensure compliance with this Declaration and/or Program Requirements.

3.3. **Charges; Liens.** Owner shall pay all taxes, assessments, and other charges, fines and impositions attributable to the Property, if any, by Owner making payment, when due, directly to the payee thereof. Owner shall promptly furnish to Horne or CDSS all notices of amounts due under this subsection, and where Owner makes direct payments, Owner shall promptly furnish to Horne or CDSS its receipts evidencing such payments. Owner shall pay when due all encumbrances, charges, and liens on the Property, and shall make payments on notes or other obligations secured by an interest in the Property, with interest in accordance with the terms thereof. Owner shall have the right to contest in good faith any claim or lien, or payment due thereunder, so long as Owner does so diligently and without prejudice to Horne or CDSS.

4. **Building Permits.** Owner agrees not to apply for or accept any permits for the construction of improvements on the Property that are inconsistent with the lawful operation of the Property, as such Property is described in this Declaration.

5. **Hazard and Liability Insurance and Condemnation.**

5.1. Owner shall keep the Property insured against loss by fire and such other hazards, casualties, liabilities, and contingencies, and in such amounts and for such periods as required by Horne and CDSS. All insurance policies and renewals thereof shall be issued by a carrier and in a form acceptable to Horne and CDSS.

5.2. In the event of any fire or other casualty to the Property or eminent domain proceedings resulting in condemnation of the Property or any part thereof, the Owner shall have the right to rebuild the Property and to use all available insurance or condemnation proceeds therefor, provided that, as determined by Horne or CDSS in its sole and absolute discretion: (a) such proceeds are sufficient to rebuild the Property in a manner that ensures continued operation in accordance with this Declaration; and (b) no material breach or default then exists under the Program Funding Agreement. If the casualty or condemnation affects only part of the Property and if total rebuilding is infeasible, then the insurance or condemnation proceeds may be used for partial rebuilding and/or partial repayment of the Program Funds. CDSS or Horne has the right but not the obligation to approve the plans and specifications for any major rebuilding, as well as the right but not the obligation to approve disbursements of insurance or condemnation proceeds for rebuilding under a construction escrow or similar arrangement.

6. **Covenants Run with the Land.** The Property is held and hereafter shall be held, conveyed, hypothecated, encumbered, leased, rented, used, and occupied subject to this Declaration. The foregoing Declaration is intended to constitute both equitable servitudes and covenants running with the land. Owner expressly acknowledges and agrees that the Declaration is a reasonable restraint on the Owner's right to own, use, maintain, and transfer the Property and any estate or interest therein and is not and shall not be construed to be an unreasonable restraint on alienation. Each and every contract, deed or other instrument hereafter executed covering or conveying the Property, or any portion thereof, shall be held conclusively to have been executed, delivered, and accepted subject to this Declaration, regardless of whether this Declaration is set forth in such contract, deed, or other instrument.

7. **Binding on Successors and Assigns.** The Declaration contained herein shall be binding upon all of Owner's successors, assigns and transferees to or of the Property, and upon all leases, tenants, contractors, agents, and persons claiming an interest in the Property, or claiming an interest by and through any of the foregoing. Any transferee or purchaser of the Property, or of any portion of, or interest in the Property, by the acceptance of a deed therefore, whether from the Owner or from any subsequent owner of the Property, or by the signing of a contract or agreement to purchase the Property, shall by the acceptance of such deed or by the signing of such contract or agreement be deemed to have consented to and accepted the covenants and restrictions set forth in this Declaration.

8. **Term of Declaration.** The covenants in this Declaration shall be binding, effective, and enforceable commencing upon the recordation of this Declaration in the official records of the county in the jurisdiction where the Property is located, and they shall continue in full force and effect for a period of not less than [NUMBER OF YEARS (___) (NOT LESS THAN THE TERM OF CAPITALIZED OPERATING SUBSIDY RESERVE)] years after the date of _____ (the "**Restriction Period**"), regardless of any sale, assignment, transfer, or conveyance (including, without limitation, by foreclosure sale) of the Property or any portion thereof.

9. **Default, Remedies.** A default under this Declaration shall constitute a default under the Program Funding Agreement and the COSR Agreement; and a default under this Declaration shall entitle CDSS or Horne to any rights, remedies, or damages available at law or in equity, including, but not limited to, those that are specified below. CDSS's or Horne's failure to exercise any specific right or remedy shall not be construed as a waiver of that or any right or remedy.

9.1. **Specific Performance.** The use, repair, and maintenance of the Property is of a special and unique kind and character, so that a breach of any material provision of this Declaration by the Owner would not have an adequate remedy at law. Therefore, Horne's or CDSS's rights may be enforced by an action for specific performance and such other equitable relief as is provided by the laws of the State of California.

9.2. **Injunctive Relief.** In pursuing specific performance of the Declaration, Horne or CDSS shall be entitled to petition the court for injunctive relief to preserve Horne's or CDSS's interests in the Property and its rights under this Declaration. Such injunctive relief may

include a court order restraining any development of the Property that is inconsistent with the foregoing Declaration.

9.3. Appointment of Receiver. In conjunction with any other remedy available at law or in equity, Horne or CDSS may apply to a court of competent jurisdiction for the appointment of a receiver to take over and operate the Property in accordance with the requirements of this Declaration.

9.4. Notwithstanding the foregoing or anything to the contrary contained herein, CDSS shall be entitled to any rights, remedies, or damages available pursuant to that certain Performance Deed of Trust executed by Owner, as Trustor, therein, on or about of even date herewith, and recorded in the official records of the county in the jurisdiction where the Property is located.

10. **Horne and CDSS Review and Inspection.**

10.1. At any time during the term of this Declaration and upon reasonable notice, Horne, CDSS, or its designee may, but is not obligated to, enter and inspect the Property, and inspect all records pertaining to the operation, repair, and maintenance of the Property. Upon request by Horne or CDSS, the Owner shall notify occupants of upcoming inspections in accordance with state law.

10.2. CDSS or Horne may, but is not obligated to, request any other information that it deems necessary to confirm compliance with this Declaration. The Owner shall provide such requested information within fourteen (14) calendar days of Horne or CDSS's written request for the information.

10.3. During the Term of this Declaration, Owner shall submit to CDSS, or Horne, as required by Horne, or CDSS, in their sole discretion, written documentation, in a form and at a frequency acceptable to Horne, or CDSS, in their sole discretion, providing sufficient detail and with sufficient supporting information to permit Horne, or its designee, or CDSS, or its designee, to monitor and confirm that Owner's uses of the Property are in accordance with the uses described in this Declaration, including, Exhibit B, attached hereto.

10.4. CDSS or Horne shall not, by the fact of making or not making any entries or inspections, or by taking or failing to take any action in response thereto: (i) incur or undertake, or be deemed to incur or undertake, any obligation, duty, or liability whatsoever, whether to the Owner, or to any other person or entity; (ii) be deemed as approving or disapproving any matter, action, incident, or condition related to the Property; or (iii) be deemed as approving or disapproving any matter related to the compliance of the Property with this Declaration or other applicable laws. In no event or circumstance shall Horne or CDSS's exercise or non-exercise of its discretion under this subsection constitute, or be deemed or interpreted as constituting, any termination, limitation, alteration, or waiver by Horne or CDSS of any right, benefit, or remedy under or with respect to this Declaration.

11. **Owner Representations.** Owner represents and warrants to Horne and CDSS that: (1) Owner has sufficient interest in the Property to support the operation of the Property in

accordance with this Declaration; (2) to Owner's actual knowledge and belief, there are no agreements, contracts, covenants, conditions, or exclusions to which Owner (or its predecessor in interest) is a party which would, if enforced, prohibit or restrict the use of the Property in accordance with the terms of this Declaration; (3) Owner has the full right and authority to enter into this Declaration; (4) this Declaration constitutes a valid and legally binding obligation on Owner, enforceable in accordance with its terms; and (5) Owner is duly organized and authorized to do business in the State of California.

12. **Amendment, Modification.** Owner shall not amend, modify, waive, or release this Declaration, or any part of this Declaration, without the prior and express written consent of an authorized representative of Horne or CDSS, which consent may be withheld, conditioned, or delayed in Horne or CDSS's sole and absolute discretion. Any amendment, modification, waiver, or release without the prior and express written consent of Horne or CDSS shall be void.

13. **Severability.** Every provision of this Declaration is intended to be severable. If any provision of this Declaration is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the validity, legality, and enforceability of the remaining provisions shall not be affected or impaired.

14. **Governing Law.** This Declaration shall be governed by and interpreted under the laws of the State of California.

15. **Recordation of Agreement.** This Declaration shall be recorded in the official records of the County of ____ [NAME OF COUNTY] no later than ____ [DATE]. The Declaration shall be recorded, and shall remain, as a lien against the Property in first position over all other agreements, covenants, liens, or other matters of record on the Property.

SIGNATURE ON FOLLOWING PAGE

IN WITNESS WHEREOF, the Owner has caused this Declaration to be signed by its duly authorized representative, as of the day and year first written above.

OWNER:
[NAME OF OWNER, TYPE OF LEGAL ENTITY]

By: _____
[INSERT NAME OF AUTHORIZED SIGNATORY]
Its: [INSERT TITLE OF SIGNATORY]

All signatures must be acknowledged.

ADD NOTARY ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
)
COUNTY OF _____)

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Name: _____
Name: Notary Public

EXHIBIT "A"

LEGAL DESCRIPTION OF THE PROPERTY

[TO BE INSERTED BY TITLE COMPANY]

EXHIBIT "B"

PROPERTY AND OPERATIONS

A residential adult and senior care facility where [___ beds/units] are prioritized for Qualified Residents experiencing or at risk of homelessness. For purposes of this Declaration, "Qualified Resident" shall have the meaning set forth in California Welfare and Institutions Code Section 18999.97(e) and "prioritized" shall mean a preferential interest in occupancy of each designated bed or unit.

If after applying best efforts to identify and enroll a Qualified Resident experiencing homelessness or at risk of homelessness for each designated bed or unit, no such person(s) is identified, the Owner may identify and enroll a Qualified Resident for each designated bed or unit; if after applying best efforts to identify and enroll a Qualified Resident for each designated bed or unit, the Owner also cannot identify and enroll a Qualified Resident, the Owner may enroll a non-Qualified Resident for the designated bed or unit.

RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:
[County/State]
ADDRESS
ADDRESS
ADDRESS
Attention: Name
NO FEE FOR RECORDING PURSUANT TO
GOVERNMENT CODE SECTION 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Attachment J-1

PERFORMANCE DEED OF TRUST, SECURITY AGREEMENT AND FIXTURE FILING

THIS PERFORMANCE DEED OF TRUST, SECURITY AGREEMENT AND FIXTURE FILING (“Performance Deed of Trust”) is made as of _____, 20__, by and among County of Santa Barbara, on behalf of its Department of Behavioral Wellness, a California County (“Trustor”), ___ Title Company, a California corporation (“Trustee”), and the Department of Social Services, a public agency of the State of California (“Beneficiary”).

RECITALS

A. Trustor owns a fee title interest in that certain real property commonly known as 310 Camino del Remedio, located in the City of Santa Barbara, County of Santa Barbara, State of California, and the improvements thereon (the “Property”); as more particularly described and shown on Exhibit A attached hereto and incorporated herein by this reference;

B. Trustor and Horne LLP (“Horne”), as a contractor to CDSS, entered into that certain Program Funding Agreement, of even date herewith (the “Program Funding Agreement”), whereby Trustor agreed to renovate or construct certain improvements on the Property and Horne agreed to disburse funds to Trustor in accordance with the terms thereof (in an amount not to exceed One Million Forty-Three Thousand Four Hundred Thirty-Three Dollars (\$1,043,433) (the “Program Funds”);

C. The Program Funds are provided pursuant to the Community Care Expansion Program, authorized under Welfare and Institutions Code Section 18999.97-18999.98, established by California Assembly Bill No. 172 (Chapter 696, Statutes of 2021), to fund the acquisition, construction, or rehabilitation of adult and senior care facilities that service applicants and recipients of Supplemental Security Income/State Supplementary Payment (“SSI/SSP”) and Cash Assistance Program for Immigrants (“CAPI”) applicants and recipients, including those adults who are experiencing or are at risk of homelessness;

D. As a condition of receiving the Program Funds, the Beneficiary is requiring Trustor to execute and record against the Trustor’s fee interest in the Property, a Declaration of Restrictions of even date herewith (the “Declaration of Restrictions”) limiting the use of the

Property to certain restricted uses, as specified in the Declaration of Restrictions. The Declaration of Restrictions is required to be secured by this Performance Deed of Trust encumbering Trustor's fee interest in the Property; and

E. Trustor has agreed to execute and deliver to Beneficiary this Performance Deed of Trust as security for the performance of all obligations of Trustor under the Program Funding Agreement, and the Declaration of Restrictions (collectively, this Performance Deed of Trust, the Program Funding Agreement, and the Declaration of Restrictions shall be referred to herein as the "Program Documents") and any and all modifications, extensions, amendments, replacements thereto, and under any other instrument or agreement entered into by and between Beneficiary and Trustor related to the Property.

NOW, THEREFORE, in consideration of the foregoing and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Trustor hereby covenants, agrees, and declares the following:

ARTICLE 1
GRANT OF SECURITY INTEREST

Section 1.1 Grant of Security Interest.

By executing and delivering this Performance Deed of Trust, the Trustor irrevocably grants to the Trustee, in trust for the benefit of the Beneficiary as security for the performance of the obligations described in Section 1.2, with a power of sale, and subject to the terms of this Performance Deed of Trust, all of Trustor's interests, estates, rights, and claims in or to the Security whether the interest, estate, right, or claim is held by the Trustor as of the date of this Deed of Trust or arises in the future.

Security means:

- (a) Trustor's fee interest in the Property;
- (b) all interest, estates or other claims, both in law and in equity which Trustor now has or may hereafter acquire in the Property;
- (c) all easements, rights-of-way and rights used in connection therewith or as a means of access thereto, including (without limiting the generality of the foregoing) all tenements, hereditaments and appurtenances thereof and thereto;
- (d) any and all buildings and improvements of every kind and description now or hereafter erected thereon, and all property of the Trustor now or hereafter affixed to or placed upon the Property;
- (e) all building materials and equipment now or hereafter delivered to said property and intended to be installed therein;
- (f) all right, title and interest of Trustor, now owned or hereafter acquired, in and to any land lying within the right-of-way of any street, open or proposed, adjoining the

Property, and any and all sidewalks, alleys and strips and areas of land adjacent to or used in connection with the Property;

(g) all estate, interest, right, title, other claim or demand, of every nature, in and to such property, including the Property, both in law and in equity, including, but not limited to, all deposits made with or other security given by Trustor to utility companies, the proceeds from any or all of such property, including the Property, claims or demands with respect to the proceeds of insurance in effect with respect thereto, which Trustor now has or may hereafter acquire, any and all awards made for the taking by eminent domain or by any proceeding or purchase in lieu thereof of the whole or any part of such property;

(h) all of Trustor's interest in all articles of personal property or fixtures now or hereafter attached to or used in and about the building or buildings now erected or hereafter to be erected on the Property which are necessary to the complete and comfortable use and occupancy of such building or buildings for the purposes for which they were or are to be erected, including all other goods and chattels and personal property as are ever used or furnished in operating a building, or the activities conducted therein, similar to the one herein described and referred to, and all renewals or replacements thereof or articles in substitution therefor, whether or not the same are, or shall be attached to said building or buildings in any manner; and

(i) all of Trustor's interest in all building materials, fixtures, equipment, work in process and other personal property to be incorporated into the Property; all goods, materials, supplies, fixtures, equipment, machinery, furniture and furnishings, signs and other personal property now or hereafter appropriated for use on the Property, whether stored on the Property or elsewhere, and used or to be used in connection with the Property; all rents, issues and profits, and all inventory, accounts, accounts receivable, contract rights, general intangibles, chattel paper, instruments, documents, notes, drafts, letters of credit, insurance policies, insurance and condemnation awards and proceeds, trade names, trademarks and service marks arising from or related to the Property and any business conducted thereon by Trustor; all replacements, additions, accessions and proceeds; and all books, records and files relating to any of the foregoing.

Section 1.2 Secured Obligations.

The grant made in Section 1.1 is made as security for the following obligations of Trustor:

(a) Due, prompt and complete observance, performance and discharge of each and every obligation, covenant or agreement of Trustor contained herein and in the other Program Documents and any and all modifications, extensions, amendments, replacements thereto, and contained in any other instrument or agreement entered into between Beneficiary and Trustor relating to the Property, which documents are incorporated herein by reference; and

(b) Payment of any sums advanced by Beneficiary to protect the Security pursuant to the terms and provisions of this Performance Deed of Trust following a breach of

Trustor's obligation to advance said sums and the expiration of any applicable cure period, with interest thereon as provided herein.

ARTICLE 2
MAINTENANCE AND MODIFICATION OF THE PROPERTY
AND SECURITY

Section 2.1 Maintenance and Modification of the Property by Trustor.

The Trustor agrees that at all times prior to the expiration or early termination of the Program Documents, the Trustor will, at the Trustor's own expense, maintain, preserve and keep the Security or cause the Security to be maintained and preserved in good condition. The Trustor will from time to time make or cause to be made all repairs, replacements and renewals deemed proper and necessary by it. The Beneficiary shall have no responsibility in any of these matters or for the making of improvements or additions to the Security.

Trustor agrees to pay fully and discharge (or cause to be paid fully and discharged) all claims for labor done and for material and services furnished in connection with the Security, diligently to file or procure the filing of a valid notice of cessation upon the event of a cessation of labor on the work or construction on the Security for a continuous period of thirty (30) days or more, and to take all other reasonable steps to forestall the assertion of claims of lien against the Security of any part thereof. Trustor irrevocably appoints, designates and authorizes Beneficiary as its agent (said agency being coupled with an interest) with the authority, but without any obligation, to file or record any notices of completion or cessation of labor or any other notice that Beneficiary reasonably deems necessary or desirable to protect its interest in and to the Security or the Program Documents; provided, however, that Beneficiary shall exercise its rights as agent of Trustor only in the event that Trustor shall fail to take, or shall fail to diligently continue to take, those actions as hereinbefore provided, and all such rights of the Beneficiary shall be subject to the rights of senior lenders approved by the Beneficiary.

Upon demand by Beneficiary, Trustor shall make or cause to be made such demands or claims as Beneficiary shall specify upon laborers, materialmen, subcontractors or other persons who have furnished or claim to have furnished labor, services or materials in connection with the Security. Nothing herein contained shall require Trustor to pay any claims for labor, materials or services which Trustor in good faith disputes and is diligently contesting provided that Trustor, upon written request of the Beneficiary, shall, within thirty (30) days after the filing of any claim of lien, record in the Office of the Recorder of Santa Barbara County, a surety bond in an amount 1 and 1/2 times the amount of such claim item to protect against a claim of lien.

Section 2.2 Granting of Easements.

Trustor may not grant easements, licenses, rights-of-way or other rights or privileges in the nature of easements with respect to any property or rights included in the Security except those required or desirable for installation and maintenance of public utilities including, without limitation, water, gas, electricity, sewer, telephone and telegraph, or those required by law and as approved, in writing, by Beneficiary, which approval shall not be unreasonably delayed, conditioned, or withheld.

ARTICLE 3
TAXES AND INSURANCE; ADVANCES

Section 3.1 Taxes, Other Governmental Charges and Utility Charges.

Trustor shall pay, or cause to be paid, at such times and in such manner as to prevent any penalty from accruing, or any lien or charge from attaching, all taxes, assessments, charges and levies imposed by any public authority or utility company which are or may become a lien affecting the Security or any part thereof; provided, however, that Trustor shall not be required to pay and discharge any such tax, assessment, charge or levy so long as: (a) the legality thereof shall be promptly and actively contested in good faith and by appropriate proceedings; and (b) Trustor maintains reserves adequate to pay any liabilities contested pursuant to this Section. With respect to taxes, special assessments or other similar governmental charges, Trustor shall pay such amount in full prior to the attachment of any lien therefor on any part of the Security; provided, however, if such taxes, assessments or charges may be paid in installments, Trustor may pay in such installments. Except as provided in clause (b) of the first sentence of this paragraph, the provisions of this Section shall not be construed to require that Trustor maintain a reserve account, escrow account, impound account or other similar account for the payment of future taxes, assessments, charges and levies.

In the event that Trustor shall fail to pay any of the foregoing items required by this Section to be paid by Trustor, Beneficiary may (but shall be under no obligation to) pay the same, after the Beneficiary has notified the Trustor of such failure to pay and the Trustor fails to fully pay such items within seven (7) business days after receipt of such notice. Any amount so advanced therefor by Beneficiary, together with interest thereon from the date of such advance at the maximum rate permitted by law, shall become an additional obligation of Trustor to the Beneficiary and shall be secured hereby, and Trustor agrees to pay all such amounts.

Section 3.2 Provisions Respecting Insurance.

Trustor agrees to provide insurance conforming in all respects to that required under the Program Documents during the course of any construction and operation of the improvements located on the Property, and at all times until all obligations secured hereunder fulfilled and all amounts secured have been paid, and this Performance Deed of Trust reconveyed.

All such insurance policies and coverages shall be maintained at Trustor's sole cost and expense. Certificates of insurance for all of the above insurance policies, showing the same to be in full force and effect, shall be delivered to the Beneficiary upon demand therefore at any time prior to the expiration of the Program Documents.

Section 3.3 Advances.

In the event the Trustor shall fail to maintain the full insurance coverage required by this Performance Deed of Trust or shall fail to keep the Security in accordance with the Program Documents, the Beneficiary, after at least seven (7) days prior notice to Trustor, may (but shall be under no obligation to) take out the required policies of insurance and pay the premiums on the same or may make such repairs or replacements as are necessary and provide for payment

thereof; and all amounts so advanced therefor by the Beneficiary shall become an additional obligation of the Trustor to the Beneficiary (together with interest as set forth below) and shall be secured hereby, which amounts the Trustor agrees to pay on the demand of the Beneficiary, and if not so paid, shall bear interest from the date of the advance at the lesser of ten percent (10%) per annum or the maximum rate permitted by law.

ARTICLE 4
DAMAGE, DESTRUCTION OR CONDEMNATION

Section 4.1 Awards and Damages.

Subject to the rights of senior mortgage lenders approved by the Beneficiary, all judgments, awards of damages, settlements and compensation made in connection with or in lieu of: (a) taking of all or any part of or any interest in the Property by or under assertion of the power of eminent domain; (b) any damage to or destruction of the Property or in any part thereof by insured casualty; and (c) any other injury or damage to all or any part of the Property (“Funds”) are hereby assigned to and shall be paid to the Beneficiary by a wire transfer or check made payable to the Beneficiary. The Beneficiary is authorized and empowered (but not required) to collect and receive any Funds and is authorized to apply them in whole or in part upon any indebtedness or obligation secured hereby, in such order and manner as the Beneficiary shall determine at its sole option. The Beneficiary shall be entitled to settle and adjust all claims under insurance policies provided under this Performance Deed of Trust and may deduct and retain from the proceeds of such insurance the amount of all expenses incurred by it in connection with any such settlement or adjustment. All or any part of the amounts so collected and recovered by the Beneficiary may be released to Trustor upon such conditions as the Beneficiary may impose for its disposition, and Beneficiary agrees to release Funds to Trustor to rebuild the improvements located on the Property provided Trustor demonstrates to Beneficiary that such rebuilding is economically feasible. Application of all or any part of the Funds collected and received by the Beneficiary or the release thereof shall not cure or waive any default under this Performance Deed of Trust. All rights of the Beneficiary under this Section are subject to the rights of any senior mortgage lender approved by the Beneficiary.

ARTICLE 5
AGREEMENTS AFFECTING THE PROPERTY; FURTHER
ASSURANCES

Section 5.1 Other Agreements Affecting Property.

The Trustor shall duly and punctually perform all terms, covenants, conditions and agreements binding upon it under the Program Documents and any other agreement of any nature whatsoever now or hereafter involving or affecting the Security or any part thereof.

Section 5.2 Agreement to Pay Attorneys’ Fees and Expenses.

In the event of any Event of Default (as defined below) hereunder, and if the Beneficiary should employ attorneys or incur other expenses for the collection of amounts due or the enforcement of performance or observance of an obligation or agreement on the part of the

Trustor in this Performance Deed of Trust, the Trustor agrees that it will, on demand therefor, pay to the Beneficiary the reasonable fees of such attorneys and such other reasonable expenses so incurred by the Beneficiary; and any such amounts paid by the Beneficiary shall be added to the indebtedness secured by the lien of this Performance Deed of Trust, and shall bear interest from the date such expenses are incurred at the lesser of ten percent (10%) per annum or the maximum rate permitted by law.

Section 5.3 Personal Property.

To the maximum extent permitted by law, the personal property subject to this Performance Deed of Trust shall be deemed to be fixtures and part of the real property and this Performance Deed of Trust shall constitute a fixtures filing under the California Uniform Commercial Code. As to any personal property not deemed or permitted to be fixtures, this Performance Deed of Trust shall constitute a security agreement under the California Uniform Commercial Code.

Section 5.4 Financing Statement.

The Trustor shall execute and deliver to the Beneficiary such financing statements pursuant to the appropriate statutes, and any other documents or instruments as are required to convey to the Beneficiary a valid perfected security interest in the Security. The Trustor agrees to perform all acts which the Beneficiary may reasonably request so as to enable the Beneficiary to maintain such valid perfected security interest in the Security in order to secure Trustor's obligations under the Program Documents. The Beneficiary is authorized to file a copy of any such financing statement in any jurisdiction(s) as it shall deem appropriate from time to time in order to protect the security interest established pursuant to this instrument.

Section 5.5 Operation of the Security.

The Trustor shall operate the Security (and, in case of a transfer of a portion of the Security subject to this Performance Deed of Trust, the transferee shall operate such portion of the Security) in full compliance with the Program Documents.

Section 5.6 Inspection of the Security.

At any and all reasonable times upon forty-eight (48) hours' notice, the Beneficiary and its duly authorized agents, attorneys, experts, engineers, accountants and representatives, shall have the right, without payment of charges or fees, to inspect the Security, provided, however, that any such inspection shall not unreasonably disturb any tenants or other occupants of the Property.

Section 5.7 Nondiscrimination.

The Trustor herein covenants by and for itself, its heirs, executors, administrators, and assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, age, sex, sexual orientation, marital status, national origin or ancestry in the sale, lease,

sublease, transfer, use, occupancy, tenure or enjoyment of the Security, nor shall the Trustor itself or any person claiming under or through it establish or permit any such practice or practices of discrimination or segregation with reference to the selection, location, number, use or occupancy of tenants, lessees, subtenants, sublessees or vendees in the Security. The foregoing covenants shall run with the land.

ARTICLE 6 HAZARDOUS WASTE

Trustor shall keep and maintain the Property in compliance with, and shall not cause or permit the Property to be in violation of any federal, state or local laws, ordinances or regulations relating to industrial hygiene or to the environmental conditions on, under or about the Property including, but not limited to, soil and ground water conditions. Trustor shall not use, generate, manufacture, store or dispose of on, under, or about the Property or transport to or from the Property any flammable explosives, radioactive materials, hazardous wastes, toxic substances or related materials, including without limitation, any substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” or “toxic substances” under any applicable federal or state laws or regulations (collectively referred to hereinafter as “Hazardous Materials”) except such of the foregoing as may be customarily and lawfully kept and used in the rehabilitation and/or operation of the Property or as may be customarily kept and used in and about facilities such as the Property.

Trustor shall immediately advise Beneficiary in writing if at any time it receives written notice of (i) any and all enforcement, cleanup, removal or other governmental or regulatory actions instituted, completed or threatened against Trustor or the Property pursuant to any applicable federal, state or local laws, ordinances, or regulations relating to any Hazardous Materials (“Hazardous Materials Law”); (ii) all claims made or threatened by any third party against Trustor or the Property relating to damage, contribution, cost recovery compensation, loss or injury resulting from any Hazardous Materials (the matters set forth in clauses (i) and (ii) above hereinafter referred to a “Hazardous Materials Claims”); and (iii) Trustor’s discovery of any occurrence or condition on any real property adjoining or in the vicinity of the Property that could cause the Property or any part thereof to be classified as “border-zone property” under the provision of California Health and Safety Code, Sections 25220 *et seq.*, or any regulation adopted in accordance therewith, or to be otherwise subject to any restrictions on the ownership, occupancy, transferability or use of the Property under any Hazardous Materials Law.

Beneficiary shall have the right to join and participate in, as a party if it so elects, any legal proceedings or actions initiated in connection with any Hazardous Materials Claims and to have its reasonable attorneys’ fees in connection therewith paid by Trustor. Trustor shall indemnify, defend, and hold harmless Beneficiary and its board members, supervisors, directors, officers, employees, agents, successors and assigns from and against any loss, damage, cost, expense or liability directly or indirectly arising out of or attributable to the use, generation, storage, release, threatened release, discharge, disposal, or presence of Hazardous Materials on, under, or about the Property including without limitation: (a) all foreseeable consequential damages; (b) the costs of any required or necessary repair, cleanup or detoxification of the Property and the preparation and implementation of any closure, remedial or other required

plans; and (c) all reasonable costs and expenses incurred by Beneficiary in connection with clauses (a) and (b), including but not limited to reasonable attorneys' fees.

Without Beneficiary's prior written consent, which shall not be unreasonably withheld, Trustor shall not take any remedial action in response to the presence of any Hazardous Materials on, under or about the Property, nor enter into any settlement agreement, consent decree, or other compromise in respect to any Hazardous Material Claims, which remedial action, settlement, consent decree or compromise might, in Beneficiary's reasonable judgement, impair the value of the Beneficiary's security hereunder; provided, however, that Beneficiary's prior consent shall not be necessary in the event that the presence of Hazardous Materials on, under, or about the Property either poses an immediate threat to the health, safety or welfare of any individual or is of such a nature that an immediate remedial response is necessary and it is not reasonably possible to obtain Beneficiary's consent before taking such action, provided that in such event Trustor shall notify Beneficiary as soon as practicable of any action so taken. Beneficiary agrees not to withhold its consent, where such consent is required hereunder, if either (i) a particular remedial action is ordered by a court of competent jurisdiction; (ii) Trustor will or may be subjected to civil or criminal sanctions or penalties if it fails to take a required action; (iii) Trustor establishes to the reasonable satisfaction of Beneficiary that there is no reasonable alternative to such remedial action which would result in less impairment of Beneficiary's security hereunder; or (iv) the action has been agreed to by Beneficiary.

The Trustor hereby acknowledges and agrees that: (i) this Article is intended as the Beneficiary's written request for information (and the Trustor's response) concerning the environmental condition of the Property as required by California Code of Civil Procedure Section 726.5; and (ii) each representation and warranty in this Performance Deed of Trust or any of the other Program Documents (together with any indemnity applicable to a breach of any such representation and warranty) with respect to the environmental condition of the property is intended by the Beneficiary and the Trustor to be an "environmental provision" for purposes of California Code of Civil Procedure Section 736.

In the event that any portion of the Property is determined to be "environmentally impaired" (as that term is defined in California Code of Civil Procedure Section 726.5(e)(3)) or to be an "affected parcel" (as that term is defined in California Code of Civil Procedure Section 726.5(e)(1)), then, without otherwise limiting or in any way affecting the Beneficiary's or the Trustee's rights and remedies under this Performance Deed of Trust, the Beneficiary may elect to exercise its rights under California Code of Civil Procedure Section 726.5(a) to (1) waive its lien on such environmentally impaired or affected portion of the Property and (2) exercise (a) the rights and remedies of an unsecured creditor, including reduction of its claim against the Trustor to judgment, and (b) any other rights and remedies permitted by law. For purposes of determining the Beneficiary's right to proceed as an unsecured creditor under California Code of Civil Procedure Section 726.5(a), the Trustor shall be deemed to have willfully permitted or acquiesced in a release or threatened release of hazardous materials, within the meaning of California Code of Civil Procedure Section 726.5(d)(1), if the release or threatened release of hazardous materials was knowingly or negligently caused or contributed to by any lessee, occupant, or user of any portion of the Property and the Trustor knew or should have known of the activity by such lessee, occupant, or user which caused or contributed to the release or

threatened release. All costs and expenses, including (but not limited to) attorneys' fees, incurred by the Beneficiary in connection with any action commenced under this paragraph, including any action required by California Code of Civil Procedure Section 726.5(b) to determine the degree to which the Property is environmentally impaired, plus interest thereon at the lesser of ten percent (10%) or the maximum rate permitted by law, until paid, shall be added to the indebtedness secured by this Performance Deed of Trust and shall be due and payable to the Beneficiary upon its demand made at any time following the conclusion of such action.

The Trustor is aware that California Civil Code Section 2955.5(a) provides as follows: "No lender shall require a borrower, as a condition of receiving or maintaining a loan secured by real property, to provide hazard insurance coverage against risks to the improvements on that real property in an amount exceeding the replacement value of the improvements on the property.

ARTICLE 7 EVENTS OF DEFAULT AND REMEDIES

Section 7.1 Events of Default.

The following shall constitute Events of Default following the expiration of any applicable notice and cure periods: (a) failure to observe or perform any of Trustor's covenants, agreements or obligations under this Performance Deed of Trust; (b) violation of any of the covenants, agreements or obligations under any of the other Program Documents; or (c) failure to make any payment or perform any of Trustor's other covenants, agreements, or obligations under any other debt instruments or regulatory agreement secured by the Property, which default shall not be cured within the times and in the manner provided therein.

Section 7.2 The Beneficiary's Right to Enter and Take Possession.

All rights of the Beneficiary under this Section are subject to the rights of any senior mortgage lender approved by the Beneficiary. If an Event of Default shall have occurred the Beneficiary may:

(a) Either in person or by agent, with or without bringing any action or proceeding, or by a receiver appointed by a court, and without regard to the adequacy of its security, enter upon the Security and take possession thereof (or any part thereof) and of any of the Security, in its own name or in the name of Trustee, and do any acts which it deems necessary or desirable to preserve the value or marketability of the Property, or part thereof or interest therein, increase the income therefrom or protect the security thereof. The entering upon and taking possession of the Security shall not cure or waive any Event of Default or Notice of Default (as defined below) hereunder or invalidate any act done in response to such Event of Default or pursuant to such Notice of Default and, notwithstanding the continuance in possession of the Security, Beneficiary shall be entitled to exercise every right provided for in this Performance Deed of Trust, or by law upon occurrence of any Event of Default, including the right to exercise the power of sale;

(b) Commence an action to foreclose this Performance Deed of Trust as a mortgage, appoint a receiver, or specifically enforce any of the covenants hereof;

(c) Deliver to Trustee a written declaration of default and demand for sale, and a written notice of default and election to cause Trustor's interest in the Security to be sold ("Notice of Default and Election to Sell"), which notice Trustee or Beneficiary shall cause to be duly filed for record in the Official Records of the county in the jurisdiction where the Property is located; or

(d) Exercise all other rights and remedies provided herein, in the instruments by which the Trustor acquires title to any Security, or in any other document or agreement now or hereafter evidencing, creating or securing all or any portion of the obligations secured hereby, or provided by law.

(e) Notwithstanding the above, at its election, Beneficiary may exercise the remedies of specific performance or injunctive relief at any time in the event of a default under or breach of the terms of the Program Documents.

Section 7.3 Foreclosure By Power of Sale.

(a) Should the Beneficiary elect to foreclose by exercise of the power of sale herein contained, the Beneficiary shall give notice to the Trustee (the "Notice of Sale") and shall deposit with Trustee this Performance Deed of Trust which is secured hereby (and the deposit of which shall be deemed to constitute evidence that the performance obligations or sums due under the Program Documents are immediately required, or due and payable), and such receipts and evidence of any expenditures made that are additionally secured hereby as Trustee may require.

(b) Upon receipt of such notice from the Beneficiary, Trustee shall cause to be recorded, published and delivered to Trustor such Notice of Default and Election to Sell as then required by law and by this Performance Deed of Trust. Trustee shall, without demand on Trustor, after lapse of such time as may then be required by law and after recordation of such Notice of Default and Election to Sell and after Notice of Sale having been given as required by law, sell the Security, at the time and place of sale fixed by it in said Notice of Sale, whether as a whole or in separate lots or parcels or items as Trustee shall deem expedient and in such order as it may determine unless specified otherwise by the Trustor according to California Civil Code Section 2924g(b), at public auction to the highest bidder, for cash in lawful money of the United States payable at the time of sale. Trustee shall deliver to such purchaser or purchasers thereof its good and sufficient deed or deeds conveying the property so sold, but without any covenant or warranty, express or implied. The recitals in such deed or any matters of facts shall be conclusive proof of the truthfulness thereof. Any person, including, without limitation, Trustor, Trustee or Beneficiary, may purchase at such sale, and Trustor hereby covenants to warrant and defend the title of such purchaser or purchasers.

(c) After deducting all reasonable costs, fees and expenses of Trustee, including costs of evidence of title in connection with such sale, Trustee shall apply the proceeds of sale to payment of: (1) amounts due to Beneficiary with respect to the Program Documents,

including the amounts set forth in Section 6.2 above; (2) all other sums then secured hereby; and (3) the remainder, if any, to Trustor.

(d) Trustee may postpone sale of all or any portion of the Property by public announcement at such time and place of sale, and from time to time thereafter, and without further notice make such sale at the time fixed by the last postponement, or may, in its discretion, give a new Notice of Sale.

Section 7.4 Receiver.

If an Event of Default shall have occurred and be continuing, Beneficiary, as a matter of right and without further notice to Trustor or anyone claiming under the Security, and without regard to the then value of the Security or the interest of Trustor therein, shall have the right to apply to any court having jurisdiction to appoint a receiver or receivers of the Security (or a part thereof), and Trustor hereby irrevocably consents to such appointment and waives further notice of any application therefor. Any such receiver or receivers shall have all the usual powers and duties of receivers in like or similar cases, and all the powers and duties of Beneficiary in case of entry as provided herein, and shall continue as such and exercise all such powers until the date of confirmation of sale of the Security, unless such receivership is sooner terminated.

Section 7.5 Remedies Cumulative.

No right, power or remedy conferred upon or reserved to the Beneficiary by this Performance Deed of Trust is intended to be exclusive of any other right, power or remedy, but each and every such right, power and remedy shall be cumulative and concurrent and shall be in addition to any other right, power and remedy given hereunder or now or hereafter existing at law or in equity.

Section 7.6 No Waiver.

(a) No delay or omission of the Beneficiary to exercise any right, power or remedy accruing upon any Event of Default shall exhaust or impair any such right, power or remedy, or shall be construed to be a waiver of any such Event of Default or acquiescence therein; and every right, power and remedy given by this Performance Deed of Trust to the Beneficiary may be exercised from time to time and as often as may be deemed expeditious by the Beneficiary. Beneficiary's express or implied consent to a breach by Trustor, or a waiver of any obligation of Trustor hereunder shall not be deemed or construed to be a consent to any subsequent breach, or further waiver, of such obligation or of any other obligations of the Trustor hereunder. Failure on the part of the Beneficiary to complain of any act or failure to act or to declare an Event of Default, irrespective of how long such failure continues, shall not constitute a waiver by the Beneficiary of its right hereunder or impair any rights, power or remedies consequent on any Event of Default by the Trustor.

(b) If the Beneficiary (1) grants forbearance or an extension of time for the payment or performance of any of Trustor's obligations secured hereby; (2) takes other or additional security or the payment of any sums secured hereby; (3) waives or does not exercise any right granted in the Program Documents; (4) releases any part of the Security from the lien

of this Performance Deed of Trust, or otherwise changes any of the terms, covenants, conditions or agreements in the Program Documents; (5) consents to the granting of any easement or other right affecting the Security; (6) makes or consents to any agreement subordinating the lien hereof, any such act or omission shall not release, discharge, modify, change or affect the original liability under this Performance Deed of Trust, or any other obligation of the Trustor or any subsequent purchaser of the Security or any part thereof, or any maker, co-signer, endorser, surety or guarantor (unless expressly released); nor shall any such act or omission preclude the Beneficiary from exercising any right, power or privilege herein granted or intended to be granted in any Event of Default then made or of any subsequent Event of Default, nor, except as otherwise expressly provided in an instrument or instruments executed by the Beneficiary shall the lien of this Performance Deed of Trust be altered thereby.

Section 7.7 Suits to Protect the Security.

The Beneficiary shall have power to: (a) institute and maintain such suits and proceedings as it may deem expedient to prevent any impairment of the Security and the rights of the Beneficiary as may be unlawful or any violation of this Performance Deed of Trust; (b) preserve or protect its interest (as described in this Performance Deed of Trust) in the Security; and (c) restrain the enforcement of or compliance with any legislation or other governmental enactment, rule or order that may be unconstitutional or otherwise invalid, if the enforcement for compliance with such enactment, rule or order would impair the Security thereunder or be prejudicial to the interest of the Beneficiary.

Section 7.8 Trustee May File Proofs of Claim.

In the case of any receivership, insolvency, bankruptcy, reorganization, arrangement, adjustment, composition or other proceedings affecting the Trustor, its creditors or its property, the Trustee, to the extent permitted by law, shall be entitled to file such proofs of claim and other documents as may be necessary or advisable in order to have the claims of the Beneficiary allowed in such proceedings and for any additional amount which may become due and payable by the Trustor hereunder after such date.

Section 7.9 Waiver.

The Trustor waives presentment, demand for payment, notice of dishonor, notice of protest and nonpayment, protest, notice of interest on interest and late charges, and diligence in taking any action to collect any sums owing under the Program Documents or in proceedings against the Security, in connection with the delivery, acceptance, performance, default, endorsement or guaranty of this Performance Deed of Trust.

ARTICLE 8
MISCELLANEOUS

Section 8.1 Amendments.

This instrument cannot be waived, changed, discharged or terminated orally, but only by an instrument in writing signed by Beneficiary and Trustor.

Section 8.2 Reconveyance by Trustee.

Upon written request of Beneficiary stating that all obligations secured hereby have been performed in full, and upon surrender of this Performance Deed of Trust to Trustee for cancellation and retention, and upon payment by Trustor of Trustee's reasonable fees, Trustee shall reconvey the Security to Trustor, or to the person or persons legally entitled thereto.

Section 8.3 Notices.

If at any time after the execution of this Performance Deed of Trust it shall become necessary or convenient for one of the parties hereto to serve any notice, demand or communication upon the other party, such notice, demand or communication shall be in writing and shall be served personally or by depositing the same in the registered United States mail, return receipt requested, postage prepaid and (1) if intended for Beneficiary shall be addressed to:

State of California
California Department of Social Services
744 P Street MS 8-4-70
Sacramento, CA 95814
Attention: Housing and Homelessness Division

with a copy to:

Horne LLP (Horne)
400 Capitol Mall, Suite 1535
Sacramento, CA 95814
Attention: Geoffrey Ross and Dania Khan

and (2) if intended for Trustor shall be addressed to:

[SPONSOR]
[ADDRESS]
[ADDRESS]
Attn: _____

with a copy to:

[NAME]
[ADDRESS]
[ADDRESS]

Any notice, demand or communication shall be deemed given, received, made or communicated on the date personal delivery is effected or, if mailed in the manner herein specified, on the delivery date or date delivery is refused by the addressee, as shown on the return receipt. Either party may change its address at any time by giving written notice of such change to Beneficiary

or Trustor as the case may be, in the manner provided herein, at least ten (10) days prior to the date such change is desired to be effective.

Copies of notices to Trustor from the Beneficiary shall also be provided by the Beneficiary to any senior lender and any limited partner of Trustor who requests such notice in writing and provides the Beneficiary with written notice of its address in accordance with this Section.

Section 8.4 Successors and Joint Trustors.

Where an obligation created herein is binding upon Trustor, the obligation shall also apply to and bind any transferee or successors in interest. Where the terms of the Performance Deed of Trust have the effect of creating an obligation of the Trustor and a transferee, such obligation shall be deemed to be joint and several obligations of the Trustor and such transferee. Where Trustor is more than one entity or person, all obligations of Trustor shall be deemed to be a joint and several obligations of each and every entity and person comprising Trustor.

Section 8.5 Captions.

The captions or headings at the beginning of each Section hereof are for the convenience of the parties and are not a part of this Performance Deed of Trust.

Section 8.6 Invalidity of Certain Provisions.

Every provision of this Performance Deed of Trust is intended to be severable. In the event any term or provision hereof is declared to be illegal or invalid for any reason whatsoever by a court or other body of competent jurisdiction, such illegality or invalidity shall not affect the balance of the terms and provisions hereof, which terms and provisions shall remain binding and enforceable. If the lien of this Performance Deed of Trust is invalid or unenforceable as to any part of the debt, or if the lien is invalid or unenforceable as to any part of the Security, the unsecured or partially secured portion of the debt, and all payments made on the debt, whether voluntary or under foreclosure or other enforcement action or procedure, shall be considered to have been first paid or applied to the full payment of that portion of the debt which is not secured or partially secured by the lien of this Performance Deed of Trust.

Section 8.7 Governing Law.

This Performance Deed of Trust shall be governed by and construed in accordance with the laws of the State of California. Any action brought claiming a breach of this agreement or interpreting this agreement shall be brought and venued in Sacramento County, California.

Section 8.8 Gender and Number.

In this Performance Deed of Trust the singular shall include the plural and the masculine shall include the feminine and neuter and vice versa, if the context so requires.

Section 8.9 Performance Deed of Trust, Mortgage.

Any reference in this Performance Deed of Trust to a mortgage shall also refer to a Performance Deed of Trust and any reference to a Performance Deed of Trust shall also refer to a mortgage.

Section 8.10 Actions.

Trustor agrees to appear in and defend any action or proceeding purporting to affect the Security.

Section 8.11 Substitution of Trustee.

Beneficiary may from time to time substitute a successor or successors to any Trustee named herein or acting hereunder to execute this Performance Deed of Trust. Upon such appointment, and without conveyance to the successor trustee, the latter shall be vested with all title, powers, and duties conferred upon any Trustee herein named or acting hereunder. Each such appointment and substitution shall be made by written instrument executed by Beneficiary, containing reference to this Performance Deed of Trust and its place of record, which, when duly recorded in the proper office of the county or counties in which the Property is situated, shall be conclusive proof of proper appointment of the successor trustee.

Section 8.12 Statute of Limitations.

The pleading of any statute of limitations as a defense to any and all obligations secured by this Performance Deed of Trust is hereby waived to the full extent permissible by law.

Section 8.13 Acceptance by Trustee.

Trustee accepts this appointment when this Performance Deed of Trust, duly executed and acknowledged, is made public record as provided by law. Except as otherwise provided by law the Trustee is not obligated to notify any party hereto of pending sale under this Performance Deed of Trust or of any action of proceeding in which Trustor, Beneficiary, or Trustee shall be a party unless brought by Trustee.

Section 8.14 Subordination.

Upon request by Trustor, Beneficiary (acting on Beneficiary's own behalf or through Home, or any successor administrator) agrees to subordinate this Performance Deed of Trust to only the following liens, deeds of trust, and monetary encumbrances: (i) liens for property taxes and assessments; (ii) deeds of trust to secure payment obligations due on a current basis with respect to the Property or other security executed by Trustor for the benefit of a lender concurrently with or prior to the date of recording this Performance Deed of Trust; and such subordination may be evidenced by a separate subordination agreement recorded in the Official Records of the county in the jurisdiction where the Property is located.

SIGNATURE ON FOLLOWING PAGE

IN WITNESS WHEREOF, Trustor has executed this Performance Deed of Trust as of the day and year first above written.

TRUSTOR:

County of Santa Barbara, a California
County

By: _____

Name: _____

Its: _____

Date: _____

[Signature must be notarized]

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

[TO BE INSERTED BY TITLE COMPANY]

RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:
[County/State]
ADDRESS
ADDRESS
ADDRESS
Attention: Name
NO FEE FOR RECORDING PURSUANT TO
GOVERNMENT CODE SECTION 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Attachment J-2

**PERFORMANCE DEED OF TRUST, SECURITY AGREEMENT AND FIXTURE
FILING
(WITH CAPITALIZED OPERATING SUBSIDY RESERVE)**

THIS PERFORMANCE DEED OF TRUST, SECURITY AGREEMENT AND
FIXTURE FILING (WITH CAPITALIZED OPERATING SUBSIDY RESERVE)
("Performance Deed of Trust") is made as of _____, 20__, by and among
_____ ("Trustor"), _____ Title Company, a California corporation
("Trustee"), and the Department of Social Services, a public agency of the State of California
("Beneficiary").

RECITALS

A. Trustor owns a fee title interest in that certain real property commonly known as
_____ [INSERT ADDRESS OF REAL PROPERTY], located in the City of _____
[INSERT NAME OF CITY], County of _____ [INSERT NAME OF COUNTY], State of
California, and the improvements thereon (the "Property"); as more particularly described and
shown on Exhibit A attached hereto and incorporated herein by this reference;

B. Trustor and Horne LLP ("Horne"), as a contractor to CDSS, entered into that
certain Program Funding Agreement, of even date herewith (the "Program Funding
Agreement"), whereby Trustor agreed to renovate or construct certain improvements on the
Property and Horne agreed to disburse funds to Trustor in accordance with the terms thereof, in
an amount not to exceed _____ Dollars (\$_____) (the "Program Funds");

C. Trustor and Horne entered into that certain Capitalized Operating Subsidy
Reserve Agreement, of even date herewith (the "COSR Agreement"), whereby Horne agreed to
disburse operating reserve funds to Owner in accordance with the terms thereof, in the amount of
up to ____ Dollars (\$____) ("COSR Funds");

D. The Program Funds and Capitalized Operating Subsidy Reserve are provided
pursuant to the Community Care Expansion Program, authorized under Welfare and Institutions
Code Section 18999.97-18999.98, established by California Assembly Bill No. 172
(Chapter 696, Statutes of 2021), to fund the acquisition, construction, or rehabilitation of adult

and senior care facilities that service applicants and recipients of Supplemental Security Income/State Supplementary Payment (“SSI/SSP”) and Cash Assistance Program for Immigrants (“CAPI”) applicants and recipients, including those adults who are experiencing or are at risk of homelessness;

E. As a condition of receiving the Program Funds, the Beneficiary is requiring Trustor to execute and record against the Trustor’s fee interest in the Property, a Declaration of Restrictions of even date herewith (the “Declaration of Restrictions”) limiting the use of the Property to certain restricted uses, as specified in the Declaration of Restrictions. The Declaration of Restrictions is required to be secured by this Performance Deed of Trust encumbering Trustor’s fee interest in the Property; and

F. Trustor has agreed to execute and deliver to Beneficiary this Performance Deed of Trust as security for the performance of all obligations of Trustor under the Program Funding Agreement, the COSR Agreement and the Declaration of Restrictions (collectively, this Performance Deed of Trust, the Program Funding Agreement, the COSR Agreement and the Declaration of Restrictions shall be referred to herein as the “Program Documents”) and any and all modifications, extensions, amendments, replacements thereto, and under any other instrument or agreement entered into by and between Beneficiary and Trustor related to the Property.

NOW, THEREFORE, in consideration of the foregoing and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Trustor hereby covenants, agrees, and declares the following:

ARTICLE 1
GRANT OF SECURITY INTEREST

Section 1.1 Grant of Security Interest.

By executing and delivering this Performance Deed of Trust, the Trustor irrevocably grants to the Trustee, in trust for the benefit of the Beneficiary as security for the performance of the obligations described in Section 1.2, with a power of sale, and subject to the terms of this Performance Deed of Trust, all of Trustor’s interests, estates, rights, and claims in or to the Security whether the interest, estate, right, or claim is held by the Trustor as of the date of this Deed of Trust or arises in the future.

Security means:

- (a) Trustor’s fee interest in the Property;
- (b) all interest, estates or other claims, both in law and in equity which Trustor now has or may hereafter acquire in the Property;
- (c) all easements, rights-of-way and rights used in connection therewith or as a means of access thereto, including (without limiting the generality of the foregoing) all tenements, hereditaments and appurtenances thereof and thereto;

(d) any and all buildings and improvements of every kind and description now or hereafter erected thereon, and all property of the Trustor now or hereafter affixed to or placed upon the Property;

(e) all building materials and equipment now or hereafter delivered to said property and intended to be installed therein;

(f) all right, title and interest of Trustor, now owned or hereafter acquired, in and to any land lying within the right-of-way of any street, open or proposed, adjoining the Property, and any and all sidewalks, alleys and strips and areas of land adjacent to or used in connection with the Property;

(g) all estate, interest, right, title, other claim or demand, of every nature, in and to such property, including the Property, both in law and in equity, including, but not limited to, all deposits made with or other security given by Trustor to utility companies, the proceeds from any or all of such property, including the Property, claims or demands with respect to the proceeds of insurance in effect with respect thereto, which Trustor now has or may hereafter acquire, any and all awards made for the taking by eminent domain or by any proceeding or purchase in lieu thereof of the whole or any part of such property;

(h) all of Trustor's interest in all articles of personal property or fixtures now or hereafter attached to or used in and about the building or buildings now erected or hereafter to be erected on the Property which are necessary to the complete and comfortable use and occupancy of such building or buildings for the purposes for which they were or are to be erected, including all other goods and chattels and personal property as are ever used or furnished in operating a building, or the activities conducted therein, similar to the one herein described and referred to, and all renewals or replacements thereof or articles in substitution therefor, whether or not the same are, or shall be attached to said building or buildings in any manner; and

(i) all of Trustor's interest in all building materials, fixtures, equipment, work in process and other personal property to be incorporated into the Property; all goods, materials, supplies, fixtures, equipment, machinery, furniture and furnishings, signs and other personal property now or hereafter appropriated for use on the Property, whether stored on the Property or elsewhere, and used or to be used in connection with the Property; all rents, issues and profits, and all inventory, accounts, accounts receivable, contract rights, general intangibles, chattel paper, instruments, documents, notes, drafts, letters of credit, insurance policies, insurance and condemnation awards and proceeds, trade names, trademarks and service marks arising from or related to the Property and any business conducted thereon by Trustor; all replacements, additions, accessions and proceeds; and all books, records and files relating to any of the foregoing.

Section 1.2 Secured Obligations.

The grant made in Section 1.1 is made as security for the following obligations of Trustor:

(a) Due, prompt and complete observance, performance and discharge of each and every obligation, covenant or agreement of Trustor contained herein and in the other Program Documents and any and all modifications, extensions, amendments, replacements thereto, and contained in any other instrument or agreement entered into between Beneficiary and Trustor relating to the Property, which documents are incorporated herein by reference; and

(b) Payment of any sums advanced by Beneficiary to protect the Security pursuant to the terms and provisions of this Performance Deed of Trust following a breach of Trustor's obligation to advance said sums and the expiration of any applicable cure period, with interest thereon as provided herein.

ARTICLE 2
MAINTENANCE AND MODIFICATION OF THE PROPERTY
AND SECURITY

Section 2.1 Maintenance and Modification of the Property by Trustor.

The Trustor agrees that at all times prior to the expiration or early termination of the Program Documents, the Trustor will, at the Trustor's own expense, maintain, preserve and keep the Security or cause the Security to be maintained and preserved in good condition. The Trustor will from time to time make or cause to be made all repairs, replacements and renewals deemed proper and necessary by it. The Beneficiary shall have no responsibility in any of these matters or for the making of improvements or additions to the Security.

Trustor agrees to pay fully and discharge (or cause to be paid fully and discharged) all claims for labor done and for material and services furnished in connection with the Security, diligently to file or procure the filing of a valid notice of cessation upon the event of a cessation of labor on the work or construction on the Security for a continuous period of thirty (30) days or more, and to take all other reasonable steps to forestall the assertion of claims of lien against the Security of any part thereof. Trustor irrevocably appoints, designates and authorizes Beneficiary as its agent (said agency being coupled with an interest) with the authority, but without any obligation, to file or record any notices of completion or cessation of labor or any other notice that Beneficiary reasonably deems necessary or desirable to protect its interest in and to the Security or the Program Documents; provided, however, that Beneficiary shall exercise its rights as agent of Trustor only in the event that Trustor shall fail to take, or shall fail to diligently continue to take, those actions as hereinbefore provided, and all such rights of the Beneficiary shall be subject to the rights of senior lenders approved by the Beneficiary.

Upon demand by Beneficiary, Trustor shall make or cause to be made such demands or claims as Beneficiary shall specify upon laborers, materialmen, subcontractors or other persons who have furnished or claim to have furnished labor, services or materials in connection with the Security. Nothing herein contained shall require Trustor to pay any claims for labor, materials or

services which Trustor in good faith disputes and is diligently contesting provided that Trustor, upon written request of the Beneficiary, shall, within thirty (30) days after the filing of any claim of lien, record in the Office of the Recorder of _____ County, a surety bond in an amount 1 and 1/2 times the amount of such claim item to protect against a claim of lien.

Section 2.2 Granting of Easements.

Trustor may not grant easements, licenses, rights-of-way or other rights or privileges in the nature of easements with respect to any property or rights included in the Security except those required or desirable for installation and maintenance of public utilities including, without limitation, water, gas, electricity, sewer, telephone and telegraph, or those required by law and as approved, in writing, by Beneficiary, which approval shall not be unreasonably delayed, conditioned, or withheld.

ARTICLE 3
TAXES AND INSURANCE; ADVANCES

Section 3.1 Taxes, Other Governmental Charges and Utility Charges.

Trustor shall pay, or cause to be paid, at such times and in such manner as to prevent any penalty from accruing, or any lien or charge from attaching, all taxes, assessments, charges and levies imposed by any public authority or utility company which are or may become a lien affecting the Security or any part thereof; provided, however, that Trustor shall not be required to pay and discharge any such tax, assessment, charge or levy so long as: (a) the legality thereof shall be promptly and actively contested in good faith and by appropriate proceedings; and (b) Trustor maintains reserves adequate to pay any liabilities contested pursuant to this Section. With respect to taxes, special assessments or other similar governmental charges, Trustor shall pay such amount in full prior to the attachment of any lien therefor on any part of the Security; provided, however, if such taxes, assessments or charges may be paid in installments, Trustor may pay in such installments. Except as provided in clause (b) of the first sentence of this paragraph, the provisions of this Section shall not be construed to require that Trustor maintain a reserve account, escrow account, impound account or other similar account for the payment of future taxes, assessments, charges and levies.

In the event that Trustor shall fail to pay any of the foregoing items required by this Section to be paid by Trustor, Beneficiary may (but shall be under no obligation to) pay the same, after the Beneficiary has notified the Trustor of such failure to pay and the Trustor fails to fully pay such items within seven (7) business days after receipt of such notice. Any amount so advanced therefor by Beneficiary, together with interest thereon from the date of such advance at the maximum rate permitted by law, shall become an additional obligation of Trustor to the Beneficiary and shall be secured hereby, and Trustor agrees to pay all such amounts.

Section 3.2 Provisions Respecting Insurance.

Trustor agrees to provide insurance conforming in all respects to that required under the Program Documents during the course of any construction and operation of the improvements

located on the Property, and at all times until all obligations secured hereunder fulfilled and all amounts secured have been paid, and this Performance Deed of Trust reconveyed.

All such insurance policies and coverages shall be maintained at Trustor's sole cost and expense. Certificates of insurance for all of the above insurance policies, showing the same to be in full force and effect, shall be delivered to the Beneficiary upon demand therefor at any time prior to the expiration of the Program Documents.

Section 3.3 Advances.

In the event the Trustor shall fail to maintain the full insurance coverage required by this Performance Deed of Trust or shall fail to keep the Security in accordance with the Program Documents, the Beneficiary, after at least seven (7) days prior notice to Trustor, may (but shall be under no obligation to) take out the required policies of insurance and pay the premiums on the same or may make such repairs or replacements as are necessary and provide for payment thereof; and all amounts so advanced therefor by the Beneficiary shall become an additional obligation of the Trustor to the Beneficiary (together with interest as set forth below) and shall be secured hereby, which amounts the Trustor agrees to pay on the demand of the Beneficiary, and if not so paid, shall bear interest from the date of the advance at the lesser of ten percent (10%) per annum or the maximum rate permitted by law.

ARTICLE 4
DAMAGE, DESTRUCTION OR CONDEMNATION

Section 4.1 Awards and Damages.

Subject to the rights of senior mortgage lenders approved by the Beneficiary, all judgments, awards of damages, settlements and compensation made in connection with or in lieu of: (a) taking of all or any part of or any interest in the Property by or under assertion of the power of eminent domain; (b) any damage to or destruction of the Property or in any part thereof by insured casualty; and (c) any other injury or damage to all or any part of the Property ("Funds") are hereby assigned to and shall be paid to the Beneficiary by a wire transfer or check made payable to the Beneficiary. The Beneficiary is authorized and empowered (but not required) to collect and receive any Funds and is authorized to apply them in whole or in part upon any indebtedness or obligation secured hereby, in such order and manner as the Beneficiary shall determine at its sole option. The Beneficiary shall be entitled to settle and adjust all claims under insurance policies provided under this Performance Deed of Trust and may deduct and retain from the proceeds of such insurance the amount of all expenses incurred by it in connection with any such settlement or adjustment. All or any part of the amounts so collected and recovered by the Beneficiary may be released to Trustor upon such conditions as the Beneficiary may impose for its disposition, and Beneficiary agrees to release Funds to Trustor to rebuild the improvements located on the Property provided Trustor demonstrates to Beneficiary that such rebuilding is economically feasible. Application of all or any part of the Funds collected and received by the Beneficiary or the release thereof shall not cure or waive any default under this Performance Deed of Trust. All rights of the Beneficiary under this Section are subject to the rights of any senior mortgage lender approved by the Beneficiary.

ARTICLE 5
AGREEMENTS AFFECTING THE PROPERTY;
FURTHER ASSURANCES

Section 5.1 Other Agreements Affecting Property.

The Trustor shall duly and punctually perform all terms, covenants, conditions and agreements binding upon it under the Program Documents and any other agreement of any nature whatsoever now or hereafter involving or affecting the Security or any part thereof.

Section 5.2 Agreement to Pay Attorneys' Fees and Expenses.

In the event of any Event of Default (as defined below) hereunder, and if the Beneficiary should employ attorneys or incur other expenses for the collection of amounts due or the enforcement of performance or observance of an obligation or agreement on the part of the Trustor in this Performance Deed of Trust, the Trustor agrees that it will, on demand therefor, pay to the Beneficiary the reasonable fees of such attorneys and such other reasonable expenses so incurred by the Beneficiary; and any such amounts paid by the Beneficiary shall be added to the indebtedness secured by the lien of this Performance Deed of Trust, and shall bear interest from the date such expenses are incurred at the lesser of ten percent (10%) per annum or the maximum rate permitted by law.

Section 5.3 Personal Property.

To the maximum extent permitted by law, the personal property subject to this Performance Deed of Trust shall be deemed to be fixtures and part of the real property and this Performance Deed of Trust shall constitute a fixtures filing under the California Uniform Commercial Code. As to any personal property not deemed or permitted to be fixtures, this Performance Deed of Trust shall constitute a security agreement under the California Uniform Commercial Code.

Section 5.4 Financing Statement.

The Trustor shall execute and deliver to the Beneficiary such financing statements pursuant to the appropriate statutes, and any other documents or instruments as are required to convey to the Beneficiary a valid perfected security interest in the Security. The Trustor agrees to perform all acts which the Beneficiary may reasonably request so as to enable the Beneficiary to maintain such valid perfected security interest in the Security in order to secure Trustor's obligations under the Program Documents. The Beneficiary is authorized to file a copy of any such financing statement in any jurisdiction(s) as it shall deem appropriate from time to time in order to protect the security interest established pursuant to this instrument.

Section 5.5 Operation of the Security.

The Trustor shall operate the Security (and, in case of a transfer of a portion of the Security subject to this Performance Deed of Trust, the transferee shall operate such portion of the Security) in full compliance with the Program Documents.

Section 5.6 Inspection of the Security.

At any and all reasonable times upon forty-eight (48) hours' notice, the Beneficiary and its duly authorized agents, attorneys, experts, engineers, accountants and representatives, shall have the right, without payment of charges or fees, to inspect the Security, provided, however, that any such inspection shall not unreasonably disturb any tenants or other occupants of the Property.

Section 5.7 Nondiscrimination.

The Trustor herein covenants by and for itself, its heirs, executors, administrators, and assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, age, sex, sexual orientation, marital status, national origin or ancestry in the sale, lease, sublease, transfer, use, occupancy, tenure or enjoyment of the Security, nor shall the Trustor itself or any person claiming under or through it establish or permit any such practice or practices of discrimination or segregation with reference to the selection, location, number, use or occupancy of tenants, lessees, subtenants, sublessees or vendees in the Security. The foregoing covenants shall run with the land.

ARTICLE 6
HAZARDOUS WASTE

Trustor shall keep and maintain the Property in compliance with, and shall not cause or permit the Property to be in violation of any federal, state or local laws, ordinances or regulations relating to industrial hygiene or to the environmental conditions on, under or about the Property including, but not limited to, soil and ground water conditions. Trustor shall not use, generate, manufacture, store or dispose of on, under, or about the Property or transport to or from the Property any flammable explosives, radioactive materials, hazardous wastes, toxic substances or related materials, including without limitation, any substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," or "toxic substances" under any applicable federal or state laws or regulations (collectively referred to hereinafter as "Hazardous Materials") except such of the foregoing as may be customarily and lawfully kept and used in the rehabilitation and/or operation of the Property or as may be customarily kept and used in and about facilities such as the Property.

Trustor shall immediately advise Beneficiary in writing if at any time it receives written notice of (i) any and all enforcement, cleanup, removal or other governmental or regulatory actions instituted, completed or threatened against Trustor or the Property pursuant to any applicable federal, state or local laws, ordinances, or regulations relating to any Hazardous Materials ("Hazardous Materials Law"); (ii) all claims made or threatened by any third party against Trustor or the Property relating to damage, contribution, cost recovery compensation, loss or injury resulting from any Hazardous Materials (the matters set forth in clauses (i) and (ii) above hereinafter referred to a "Hazardous Materials Claims"); and (iii) Trustor's discovery of any occurrence or condition on any real property adjoining or in the vicinity of the Property that could cause the Property or any part thereof to be classified as "border-zone property" under the provision of California Health and Safety Code, Sections 25220 *et seq.*, or any regulation

adopted in accordance therewith, or to be otherwise subject to any restrictions on the ownership, occupancy, transferability or use of the Property under any Hazardous Materials Law.

Beneficiary shall have the right to join and participate in, as a party if it so elects, any legal proceedings or actions initiated in connection with any Hazardous Materials Claims and to have its reasonable attorneys' fees in connection therewith paid by Trustor. Trustor shall indemnify, defend, and hold harmless Beneficiary and its board members, supervisors, directors, officers, employees, agents, successors and assigns from and against any loss, damage, cost, expense or liability directly or indirectly arising out of or attributable to the use, generation, storage, release, threatened release, discharge, disposal, or presence of Hazardous Materials on, under, or about the Property including without limitation: (a) all foreseeable consequential damages; (b) the costs of any required or necessary repair, cleanup or detoxification of the Property and the preparation and implementation of any closure, remedial or other required plans; and (c) all reasonable costs and expenses incurred by Beneficiary in connection with clauses (a) and (b), including but not limited to reasonable attorneys' fees.

Without Beneficiary's prior written consent, which shall not be unreasonably withheld, Trustor shall not take any remedial action in response to the presence of any Hazardous Materials on, under or about the Property, nor enter into any settlement agreement, consent decree, or other compromise in respect to any Hazardous Material Claims, which remedial action, settlement, consent decree or compromise might, in Beneficiary's reasonable judgement, impair the value of the Beneficiary's security hereunder; provided, however, that Beneficiary's prior consent shall not be necessary in the event that the presence of Hazardous Materials on, under, or about the Property either poses an immediate threat to the health, safety or welfare of any individual or is of such a nature that an immediate remedial response is necessary and it is not reasonably possible to obtain Beneficiary's consent before taking such action, provided that in such event Trustor shall notify Beneficiary as soon as practicable of any action so taken. Beneficiary agrees not to withhold its consent, where such consent is required hereunder, if either (i) a particular remedial action is ordered by a court of competent jurisdiction; (ii) Trustor will or may be subjected to civil or criminal sanctions or penalties if it fails to take a required action; (iii) Trustor establishes to the reasonable satisfaction of Beneficiary that there is no reasonable alternative to such remedial action which would result in less impairment of Beneficiary's security hereunder; or (iv) the action has been agreed to by Beneficiary.

The Trustor hereby acknowledges and agrees that: (i) this Article is intended as the Beneficiary's written request for information (and the Trustor's response) concerning the environmental condition of the Property as required by California Code of Civil Procedure Section 726.5; and (ii) each representation and warranty in this Performance Deed of Trust or any of the other Program Documents (together with any indemnity applicable to a breach of any such representation and warranty) with respect to the environmental condition of the property is intended by the Beneficiary and the Trustor to be an "environmental provision" for purposes of California Code of Civil Procedure Section 736.

In the event that any portion of the Property is determined to be "environmentally impaired" (as that term is defined in California Code of Civil Procedure Section 726.5(e)(3)) or to be an "affected parcel" (as that term is defined in California Code of Civil Procedure

Section 726.5(e)(1)), then, without otherwise limiting or in any way affecting the Beneficiary's or the Trustee's rights and remedies under this Performance Deed of Trust, the Beneficiary may elect to exercise its rights under California Code of Civil Procedure Section 726.5(a) to (1) waive its lien on such environmentally impaired or affected portion of the Property and (2) exercise (a) the rights and remedies of an unsecured creditor, including reduction of its claim against the Trustor to judgment, and (b) any other rights and remedies permitted by law. For purposes of determining the Beneficiary's right to proceed as an unsecured creditor under California Code of Civil Procedure Section 726.5(a), the Trustor shall be deemed to have willfully permitted or acquiesced in a release or threatened release of hazardous materials, within the meaning of California Code of Civil Procedure Section 726.5(d)(1), if the release or threatened release of hazardous materials was knowingly or negligently caused or contributed to by any lessee, occupant, or user of any portion of the Property and the Trustor knew or should have known of the activity by such lessee, occupant, or user which caused or contributed to the release or threatened release. All costs and expenses, including (but not limited to) attorneys' fees, incurred by the Beneficiary in connection with any action commenced under this paragraph, including any action required by California Code of Civil Procedure Section 726.5(b) to determine the degree to which the Property is environmentally impaired, plus interest thereon at the lesser of ten percent (10%) or the maximum rate permitted by law, until paid, shall be added to the indebtedness secured by this Performance Deed of Trust and shall be due and payable to the Beneficiary upon its demand made at any time following the conclusion of such action.

The Trustor is aware that California Civil Code Section 2955.5(a) provides as follows: "No lender shall require a borrower, as a condition of receiving or maintaining a loan secured by real property, to provide hazard insurance coverage against risks to the improvements on that real property in an amount exceeding the replacement value of the improvements on the property.

ARTICLE 7 EVENTS OF DEFAULT AND REMEDIES

Section 7.1 Events of Default.

The following shall constitute Events of Default following the expiration of any applicable notice and cure periods: (a) failure to observe or perform any of Trustor's covenants, agreements or obligations under this Performance Deed of Trust; (b) violation of any of the covenants, agreements or obligations under any of the other Program Documents; or (c) failure to make any payment or perform any of Trustor's other covenants, agreements, or obligations under any other debt instruments or regulatory agreement secured by the Property, which default shall not be cured within the times and in the manner provided therein.

Section 7.2 The Beneficiary's Right to Enter and Take Possession.

All rights of the Beneficiary under this Section are subject to the rights of any senior mortgage lender approved by the Beneficiary. If an Event of Default shall have occurred the Beneficiary may:

(a) Either in person or by agent, with or without bringing any action or proceeding, or by a receiver appointed by a court, and without regard to the adequacy of its security, enter upon the Security and take possession thereof (or any part thereof) and of any of the Security, in its own name or in the name of Trustee, and do any acts which it deems necessary or desirable to preserve the value or marketability of the Property, or part thereof or interest therein, increase the income therefrom or protect the security thereof. The entering upon and taking possession of the Security shall not cure or waive any Event of Default or Notice of Default (as defined below) hereunder or invalidate any act done in response to such Event of Default or pursuant to such Notice of Default and, notwithstanding the continuance in possession of the Security, Beneficiary shall be entitled to exercise every right provided for in this Performance Deed of Trust, or by law upon occurrence of any Event of Default, including the right to exercise the power of sale;

(b) Commence an action to foreclose this Performance Deed of Trust as a mortgage, appoint a receiver, or specifically enforce any of the covenants hereof;

(c) Deliver to Trustee a written declaration of default and demand for sale, and a written notice of default and election to cause Trustor's interest in the Security to be sold ("Notice of Default and Election to Sell"), which notice Trustee or Beneficiary shall cause to be duly filed for record in the Official Records of the county in the jurisdiction where the Property is located; or

(d) Exercise all other rights and remedies provided herein, in the instruments by which the Trustor acquires title to any Security, or in any other document or agreement now or hereafter evidencing, creating or securing all or any portion of the obligations secured hereby, or provided by law.

(e) Notwithstanding the above, at its election, Beneficiary may exercise the remedies of specific performance or injunctive relief at any time in the event of a default under or breach of the terms of the Program Documents.

Section 7.3 Foreclosure By Power of Sale.

(a) Should the Beneficiary elect to foreclose by exercise of the power of sale herein contained, the Beneficiary shall give notice to the Trustee (the "Notice of Sale") and shall deposit with Trustee this Performance Deed of Trust which is secured hereby (and the deposit of which shall be deemed to constitute evidence that the performance obligations or sums due under the Program Documents are immediately required, or due and payable), and such receipts and evidence of any expenditures made that are additionally secured hereby as Trustee may require.

(b) Upon receipt of such notice from the Beneficiary, Trustee shall cause to be recorded, published and delivered to Trustor such Notice of Default and Election to Sell as then required by law and by this Performance Deed of Trust. Trustee shall, without demand on Trustor, after lapse of such time as may then be required by law and after recordation of such Notice of Default and Election to Sell and after Notice of Sale having been given as required by law, sell the Security, at the time and place of sale fixed by it in said Notice of Sale, whether as a whole or in separate lots or parcels or items as Trustee shall deem expedient and in such order as

it may determine unless specified otherwise by the Trustor according to California Civil Code Section 2924g(b), at public auction to the highest bidder, for cash in lawful money of the United States payable at the time of sale. Trustee shall deliver to such purchaser or purchasers thereof its good and sufficient deed or deeds conveying the property so sold, but without any covenant or warranty, express or implied. The recitals in such deed or any matters of facts shall be conclusive proof of the truthfulness thereof. Any person, including, without limitation, Trustor, Trustee or Beneficiary, may purchase at such sale, and Trustor hereby covenants to warrant and defend the title of such purchaser or purchasers.

(c) After deducting all reasonable costs, fees and expenses of Trustee, including costs of evidence of title in connection with such sale, Trustee shall apply the proceeds of sale to payment of: (1) amounts due to Beneficiary with respect to the Program Documents, including the amounts set forth in Section 6.2 above; (2) all other sums then secured hereby; and (3) the remainder, if any, to Trustor.

(d) Trustee may postpone sale of all or any portion of the Property by public announcement at such time and place of sale, and from time to time thereafter, and without further notice make such sale at the time fixed by the last postponement, or may, in its discretion, give a new Notice of Sale.

Section 7.4 Receiver.

If an Event of Default shall have occurred and be continuing, Beneficiary, as a matter of right and without further notice to Trustor or anyone claiming under the Security, and without regard to the then value of the Security or the interest of Trustor therein, shall have the right to apply to any court having jurisdiction to appoint a receiver or receivers of the Security (or a part thereof), and Trustor hereby irrevocably consents to such appointment and waives further notice of any application therefor. Any such receiver or receivers shall have all the usual powers and duties of receivers in like or similar cases, and all the powers and duties of Beneficiary in case of entry as provided herein, and shall continue as such and exercise all such powers until the date of confirmation of sale of the Security, unless such receivership is sooner terminated.

Section 7.5 Remedies Cumulative.

No right, power or remedy conferred upon or reserved to the Beneficiary by this Performance Deed of Trust is intended to be exclusive of any other right, power or remedy, but each and every such right, power and remedy shall be cumulative and concurrent and shall be in addition to any other right, power and remedy given hereunder or now or hereafter existing at law or in equity.

Section 7.6 No Waiver.

(a) No delay or omission of the Beneficiary to exercise any right, power or remedy accruing upon any Event of Default shall exhaust or impair any such right, power or remedy, or shall be construed to be a waiver of any such Event of Default or acquiescence therein; and every right, power and remedy given by this Performance Deed of Trust to the Beneficiary may be exercised from time to time and as often as may be deemed expeditious by

the Beneficiary. Beneficiary's express or implied consent to a breach by Trustor, or a waiver of any obligation of Trustor hereunder shall not be deemed or construed to be a consent to any subsequent breach, or further waiver, of such obligation or of any other obligations of the Trustor hereunder. Failure on the part of the Beneficiary to complain of any act or failure to act or to declare an Event of Default, irrespective of how long such failure continues, shall not constitute a waiver by the Beneficiary of its right hereunder or impair any rights, power or remedies consequent on any Event of Default by the Trustor.

(b) If the Beneficiary (1) grants forbearance or an extension of time for the payment or performance of any of Trustor's obligations secured hereby; (2) takes other or additional security or the payment of any sums secured hereby; (3) waives or does not exercise any right granted in the Program Documents; (4) releases any part of the Security from the lien of this Performance Deed of Trust, or otherwise changes any of the terms, covenants, conditions or agreements in the Program Documents; (5) consents to the granting of any easement or other right affecting the Security; (6) makes or consents to any agreement subordinating the lien hereof, any such act or omission shall not release, discharge, modify, change or affect the original liability under this Performance Deed of Trust, or any other obligation of the Trustor or any subsequent purchaser of the Security or any part thereof, or any maker, co-signer, endorser, surety or guarantor (unless expressly released); nor shall any such act or omission preclude the Beneficiary from exercising any right, power or privilege herein granted or intended to be granted in any Event of Default then made or of any subsequent Event of Default, nor, except as otherwise expressly provided in an instrument or instruments executed by the Beneficiary shall the lien of this Performance Deed of Trust be altered thereby.

Section 7.7 Suits to Protect the Security.

The Beneficiary shall have power to: (a) institute and maintain such suits and proceedings as it may deem expedient to prevent any impairment of the Security and the rights of the Beneficiary as may be unlawful or any violation of this Performance Deed of Trust; (b) preserve or protect its interest (as described in this Performance Deed of Trust) in the Security; and (c) restrain the enforcement of or compliance with any legislation or other governmental enactment, rule or order that may be unconstitutional or otherwise invalid, if the enforcement for compliance with such enactment, rule or order would impair the Security thereunder or be prejudicial to the interest of the Beneficiary.

Section 7.8 Trustee May File Proofs of Claim.

In the case of any receivership, insolvency, bankruptcy, reorganization, arrangement, adjustment, composition or other proceedings affecting the Trustor, its creditors or its property, the Trustee, to the extent permitted by law, shall be entitled to file such proofs of claim and other documents as may be necessary or advisable in order to have the claims of the Beneficiary allowed in such proceedings and for any additional amount which may become due and payable by the Trustor hereunder after such date.

Section 7.9 Waiver.

The Trustor waives presentment, demand for payment, notice of dishonor, notice of protest and nonpayment, protest, notice of interest on interest and late charges, and diligence in taking any action to collect any sums owing under the Program Documents or in proceedings against the Security, in connection with the delivery, acceptance, performance, default, endorsement or guaranty of this Performance Deed of Trust.

ARTICLE 8
MISCELLANEOUS

Section 8.1 Amendments.

This instrument cannot be waived, changed, discharged or terminated orally, but only by an instrument in writing signed by Beneficiary and Trustor.

Section 8.2 Reconveyance by Trustee.

Upon written request of Beneficiary stating that all obligations secured hereby have been performed in full, and upon surrender of this Performance Deed of Trust to Trustee for cancellation and retention, and upon payment by Trustor of Trustee’s reasonable fees, Trustee shall reconvey the Security to Trustor, or to the person or persons legally entitled thereto.

Section 8.3 Notices.

If at any time after the execution of this Performance Deed of Trust it shall become necessary or convenient for one of the parties hereto to serve any notice, demand or communication upon the other party, such notice, demand or communication shall be in writing and shall be served personally or by depositing the same in the registered United States mail, return receipt requested, postage prepaid and (1) if intended for Beneficiary shall be addressed to:

State of California
California Department of Social Services
744 P Street MS 8-4-70
Sacramento, CA 95814
Attention: Housing and Homelessness Division

with a copy to:

Horne LLP(Horne)
400 Capitol Mall, Suite 1535
Sacramento, CA 95814
Attention: Geoffrey Ross and Dania Khan

and (2) if intended for Trustor shall be addressed to:

[SPONSOR]
[ADDRESS]
[ADDRESS]

Attn: _____

with a copy to:

[NAME]
[ADDRESS]
[ADDRESS]

Any notice, demand or communication shall be deemed given, received, made or communicated on the date personal delivery is effected or, if mailed in the manner herein specified, on the delivery date or date delivery is refused by the addressee, as shown on the return receipt. Either party may change its address at any time by giving written notice of such change to Beneficiary or Trustor as the case may be, in the manner provided herein, at least ten (10) days prior to the date such change is desired to be effective.

Copies of notices to Trustor from the Beneficiary shall also be provided by the Beneficiary to any senior lender and any limited partner of Trustor who requests such notice in writing and provides the Beneficiary with written notice of its address in accordance with this Section.

Section 8.4 Successors and Joint Trustors.

Where an obligation created herein is binding upon Trustor, the obligation shall also apply to and bind any transferee or successors in interest. Where the terms of the Performance Deed of Trust have the effect of creating an obligation of the Trustor and a transferee, such obligation shall be deemed to be joint and several obligations of the Trustor and such transferee. Where Trustor is more than one entity or person, all obligations of Trustor shall be deemed to be a joint and several obligations of each and every entity and person comprising Trustor.

Section 8.5 Captions.

The captions or headings at the beginning of each Section hereof are for the convenience of the parties and are not a part of this Performance Deed of Trust.

Section 8.6 Invalidity of Certain Provisions.

Every provision of this Performance Deed of Trust is intended to be severable. In the event any term or provision hereof is declared to be illegal or invalid for any reason whatsoever by a court or other body of competent jurisdiction, such illegality or invalidity shall not affect the balance of the terms and provisions hereof, which terms and provisions shall remain binding and enforceable. If the lien of this Performance Deed of Trust is invalid or unenforceable as to any part of the debt, or if the lien is invalid or unenforceable as to any part of the Security, the unsecured or partially secured portion of the debt, and all payments made on the debt, whether voluntary or under foreclosure or other enforcement action or procedure, shall be considered to have been first paid or applied to the full payment of that portion of the debt which is not secured or partially secured by the lien of this Performance Deed of Trust.

Section 8.7 Governing Law.

This Performance Deed of Trust shall be governed by and construed in accordance with the laws of the State of California. Any action brought claiming a breach of this agreement or interpreting this agreement shall be brought and venued in Sacramento County, California.

Section 8.8 Gender and Number.

In this Performance Deed of Trust the singular shall include the plural and the masculine shall include the feminine and neuter and vice versa, if the context so requires.

Section 8.9 Performance Deed of Trust, Mortgage.

Any reference in this Performance Deed of Trust to a mortgage shall also refer to a Performance Deed of Trust and any reference to a Performance Deed of Trust shall also refer to a mortgage.

Section 8.10 Actions.

Trustor agrees to appear in and defend any action or proceeding purporting to affect the Security.

Section 8.11 Substitution of Trustee.

Beneficiary may from time to time substitute a successor or successors to any Trustee named herein or acting hereunder to execute this Performance Deed of Trust. Upon such appointment, and without conveyance to the successor trustee, the latter shall be vested with all title, powers, and duties conferred upon any Trustee herein named or acting hereunder. Each such appointment and substitution shall be made by written instrument executed by Beneficiary, containing reference to this Performance Deed of Trust and its place of record, which, when duly recorded in the proper office of the county or counties in which the Property is situated, shall be conclusive proof of proper appointment of the successor trustee.

Section 8.12 Statute of Limitations.

The pleading of any statute of limitations as a defense to any and all obligations secured by this Performance Deed of Trust is hereby waived to the full extent permissible by law.

Section 8.13 Acceptance by Trustee.

Trustee accepts this appointment when this Performance Deed of Trust, duly executed and acknowledged, is made public record as provided by law. Except as otherwise provided by law the Trustee is not obligated to notify any party hereto of pending sale under this Performance Deed of Trust or of any action of proceeding in which Trustor, Beneficiary, or Trustee shall be a party unless brought by Trustee.

Section 8.14 Subordination.

Upon request by Trustor, Beneficiary (acting on Beneficiary's own behalf or through Home, or any successor administrator) agrees to subordinate this Performance Deed of Trust to

only the following liens, deeds of trust, and monetary encumbrances: (i) liens for property taxes and assessments; (ii) deeds of trust to secure payment obligations due on a current basis with respect to the Property or other security executed by Trustor for the benefit of a lender concurrently with or prior to the date of recording this Performance Deed of Trust; and such subordination may be evidenced by a separate subordination agreement recorded in the Official Records of the county in the jurisdiction where the Property is located.

SIGNATURE ON FOLLOWING PAGE

IN WITNESS WHEREOF, Trustor has executed this Performance Deed of Trust as of the day and year first above written.

TRUSTOR:

By: _____

Name: _____

Its: _____

Date: _____

[Signature must be notarized]

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
)
COUNTY OF _____)

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Name: _____
Name: Notary Public

PERFORMANCE DEED OF TRUST, SECURITY AGREEMENT AND FIXTURE FILING ADDENDUM

This Performance Deed of Trust, Security Agreement and Fixture Filing Addendum (the “**Addendum**”) is made as of _____, 20__ (the “**Effective Date**”), by and between County of Santa Barbara, on behalf of its Department of Behavioral Wellness, a California County (“**Trustor**”), ___ Title Company, a California corporation (“**Trustee**”) and the Department of Social Services, a public agency of the State of California (“**Beneficiary**”).

RECITALS

A. Trustor and Horne LLP (“**Horne**”), as contractor to Beneficiary, entered into that certain Program Funding Agreement dated _____ (“**Agreement**”), pursuant to which Trustor was allocated funds pursuant to the Community Care Expansion Program (“**Program Funds**”) for the purposes of developing the project (“**Project**”).

B. Trustor and Beneficiary entered into a Declaration of Restrictions dated _____, and recorded on _____ as No. _____ (the “**Declaration of Restrictions**”), in the Official Records of _____ County, limiting the use of the Property to certain restricted uses, as specified in the Declaration of Restrictions.

C. Trustor entered into the Performance Deed of Trust, Security Agreement and Fixture Filing dated _____ and recorded on _____ as No. _____ (the “**Performance Deed of Trust**”) in the Official Records of _____ County, as security for the performance of all obligations of Trustor under the Agreement and Declaration of Restrictions.

D. The Agreement, Declaration of Restrictions, and the Performance Deed of Trust are sometimes referred to in this Addendum as the “**Program Documents**”.

E. By this Addendum, Beneficiary intends to provide rights to _____ (the “**Senior Mortgage Lender**”), which has recorded a deed of trust dated _____, and recorded on _____ as No. _____, higher in lien priority to the Performance Deed of Trust and to subject Beneficiary to additional notice, timing, and approval rights of the Senior Lender.

F. Trustor and Beneficiary wish to modify and add to the terms of the Performance Deed of Trust as set forth in this Addendum, and this Addendum is incorporated in the Performance Deed of Trust by this reference.

G. Capitalized words used without definition in this Addendum shall have the same meaning as defined in the Performance Deed of Trust.

NOW, THEREFORE, Trustor hereby covenants, agrees, and declares as follows:

1. STAND STILL PERIOD. The Stand Still Period (the “**Stand Still Period**”) is the thirty (30) day period of time after Beneficiary provides notice to the Senior Mortgage Lender

following delivery of a notice of default from Beneficiary to Trustor under the Program Documents, as defined in the Performance Deed of Trust. Beneficiary is subject to the Stand Still Period prior to commencing foreclosure by power of sale in Section 7.3 of the Performance Deed of Trust or applying to any court having jurisdiction to appoint a receiver under Section 7.4 of the Performance Deed of Trust.

2. CONSENT OF SENIOR MORTGAGE LENDER. Beneficiary will obtain the consent of the Senior Mortgage Lender prior to commencing an action to foreclose the Performance Deed of Trust as a mortgage, appoint a receiver, or specifically enforce any of the covenants in the Performance Deed of Trust, under Section 7.2(b) of the Performance Deed of Trust. Beneficiary additionally will obtain the consent of the Senior Mortgage Lender prior to delivering to Trustee a written declaration of default and demand for sale, and a written notice of default and election to cause Trustor's interest in the Security to be sold, under Section 7.2(c) of the Performance Deed of Trust.

3. AMENDMENTS AND MODIFICATIONS. Any amendments or modifications to this Addendum must be in writing and shall be made only if executed by Trustor.

4. SEVERABILITY. Every provision of this Addendum is intended to be severable. If any provision of this Addendum is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the validity, legality, and enforceability of the remaining provisions shall not be affected or impaired.

5. ADDENDUM CONTROLS. In the event that any provisions of this Addendum and the Program Documents conflict, the terms of this Addendum shall control.

[SIGNATURE BLOCK ON NEXT PAGE]

IN WITNESS WHEREOF, Trustor has executed this Addendum as of the Effective Date.

TRUSTOR:

County of Santa Barbara, a California
County

By: _____

Name: _____

Its: _____

Date: _____

[Signature must be notarized]

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
)
COUNTY OF _____)

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Name: _____
Name: Notary Public

Attachment K

CONSTRUCTION CONTRACT ADDENDUM

This Construction Contract Addendum is made this _____ day of _____, _____, by and between County of Santa Barbara, on behalf of its Department of Behavioral Wellness, a California County (“**Owner**”), and __ (“**Contractor**”).

RECITALS

A. The Owner and Horne LLP (“**Horne**”), acting as program administrator for the California Department of Social Services (“**CDSS**”) have entered into that certain Program Funding Agreement dated _____ (“**Agreement**”), pursuant to which Owner was allocated funds pursuant to the Community Care Expansion Program (“**Program Funds**”) for the purposes of developing the Project.

B. Owner and Contractor have entered into a construction agreement dated _____ under which Contractor has agreed to undertake construction work on the Project (the “**Contract**”).

C. Owner and Contractor wish to modify and add to the terms of the Contract as set forth in this Addendum, and Contractor agrees to be bound by the following provisions in the construction of said Project, in order to provide for certain terms required by Horne as a condition of providing the Program Funds for the Project. It is a condition to Horne providing the Program Funds that the Contractor agrees to be bound by the terms hereof.

NOW, THEREFORE, Owner and Contractor hereby agree as follows:

1. **OWNER’S OBLIGATIONS.** Owner agrees that any obligation imposed on Contractor by this Addendum does not waive, diminish, or alter any of Owner’s obligations to Horne under the Agreement, and that the obligations of Contractor to Horne contained herein are in addition to those obligations of Owner to Horne or CDSS contained in the Agreement. Owner shall be solely responsible for satisfying its obligations to Contractor under the Contract.

2. **CONSENT TO ASSIGNMENT OF DEVELOPMENT RIGHTS.** Contractor consents to the assignment of its Contract with Owner to Horne, upon demand by Horne, and to any subsequent assignment of the Contract by Horne at the election of Horne. Contractor agrees that if there is a breach of the Agreement or any other Event of Default (as the term may be defined in the Agreement), Horne may elect to enforce the assignment and take over the Contract. Contractor agrees to continue to perform its obligations under the Contract and this Addendum for the benefit and account of Horne in the same manner as if performed for the benefit and account of Owner in the absence of the assignment at no additional cost to Horne, as long as Contractor continues to receive the compensation called for under the Contract. Contractor agrees that Horne shall not have any obligation under the Contract until Horne notifies it in writing of Horne’s election to accept the assignment.

3. **ASSIGNMENT OF SUBCONTRACTS.** Contractor hereby consents to the assignment to Horne of all its interest in all subcontracts and agreements now or hereafter entered into by Contractor for performance of any part of the construction work required to be performed under the Contract, upon demand by Horne, and to any subsequent assignment, by Horne, at the election of Horne. The assignment will be effective upon acceptance by Horne in writing and only as to those subcontracts and agreements, which Horne designates in writing. Horne may accept said assignment at any time during the course of the construction work required to be performed under the Contract and prior to final completion of construction work required to be performed under the Contract in the event of an assignment to Horne, suspension, or termination of Contractor's rights under the Contract. Such assignment is part of the consideration to Owner for entering into the Contract with Contractor and may not be withdrawn prior to final completion of construction work required to be performed under the Contract. Contractor agrees that any subcontract entered by and between Contractor and a subcontractor in connection with the Contract or performance of the construction work required to be performed under the Contract shall expressly provide that such subcontract shall be assignable to Horne and that Horne subsequently may assign such subcontract.

4. **COMMENCEMENT AND COMPLETION OF CONSTRUCTION.** Contractor must begin construction of the Project by the date set for the commencement of construction in the Agreement. Contractor must diligently prosecute construction of the Project to completion and must complete construction of the Project by the completion date set forth in the Agreement. Incorporated herein are the Statement of Work, Performance Milestones and Payment Schedule from the Agreement.

5. **CONSTRUCTION BONDS.** Upon execution of the Contract and prior to commencement of construction, unless otherwise approved by Horne, or CDSS in its sole discretion, Contractor must obtain a labor and material (payment) bond and a performance bond, or a dual bond which covers both payment and performance obligations, with respect to the construction of the Project in a penal sum each of not less than one hundred percent (100%) of the scheduled cost of construction. Such bonds must be issued by a company which is authorized to transact surety insurance in California and which has assets exceeding its liabilities in an amount equal to or in excess of the bond amount. The bonds must name Horne and CDSS as obligees. Owner shall provide to Horne a copy of any and all such payment and performance bonds prior to commencement of construction of the construction work required to be performed under the Contract.

6. **CONTRACT WORK.** Contractor warrants and represents that it is licensed or otherwise authorized to perform the construction work specified in the Contract in the State of California. All construction work must be performed by persons or entities licensed or otherwise authorized to perform the applicable construction work in the State of California. Contractor shall insert similar provisions in all subcontracts for work for the Project.

7. **QUALITY OF WORK.** Contractor must construct the Project in conformance with the plans and specifications and any modifications thereto approved by Horne. Contractor must construct the Project according to general industry standards and shall employ building materials of a quality suitable for the requirements of the Project and conforming to general

industry standards. Contractor must construct the Project in full conformance with applicable local, state, and federal statutes, regulations, and building and housing codes.

The parties acknowledge that Horne and CDSS are under no duty to review the Plans and Specifications or to inspect construction of the Project. Any review or inspection undertaken by Horne or CDSS of the Project is solely for the purpose of determining whether Owner and Contractor are properly discharging their obligations, and should not be relied upon by Owner, Contractor, or any third parties as a warranty or representation by Horne or CDSS as to the quality of the design or construction of the Project.

8. **ADDITIONS OR CHANGES IN WORK.** Horne must be notified no later than thirty (30) days of the execution of a change order by and between Owner and Contractor, of any changes in the work required to be performed under the Contract or this Addendum, including any substantial additions, changes, or deletions to the approved Plans and Specifications, which exceeds Twenty-Five Thousand Dollars (\$25,000). Contractor shall not allow subcontractors to mark-up any change order by more than fifteen percent (15%). Contractor shall provide Horne and Owner with an updated budget and schedule prior to the commencement of construction at the Project and at fifty percent (50%) completion of the Project showing all changes from the budget and schedule prepared prior to the issuance of the notice to proceed to Contractor.

9. **SITE INSPECTIONS.** Contractor shall permit and facilitate in person and remote observation and inspection of work at the job site by Horne and CDSS and their agents and by public authorities during reasonable business hours.

10. **AUDITS.** Contractor must make available for examination at reasonable intervals and during normal business hours to Horne and CDSS's representatives all books, accounts, reports, files, and other papers or property with respect to all matters covered by the Contract and this Addendum, and must permit these representatives to audit, examine, and make copies, excerpts, or transcripts from such records.

11. **NO DISCRIMINATION.** Contractor may not discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, sexual preference, national origin, AIDS or AIDS-related conditions, involvement in the justice system, or disability in any phase of employment during construction. Contractor agrees to post in conspicuous places available to all employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

12. **PREVAILING WAGES.** All workers performing construction work for the Project employed by Contractor and by any of its subcontractors must be compensated in an amount no less than the general prevailing rate of per diem wages as determined by the California Department of Industrial Relations under California Labor Code Sections 1770, et seq., and implementing rules and regulations. Contractor must comply with, and must ensure that its subcontractors comply with, all reporting and recordkeeping requirements of the applicable prevailing wage statutes and regulations.

In the event of underpayment of wages by Contractor or by any subcontractor employed on the Project, Horne, in addition to other rights and remedies afforded by this Agreement, may:

(1) demand that any underpaying employer comply with these requirements; (2) demand that the underpaying employer pay the difference between the prevailing wage rate and the amount actually paid to workers; (3) withhold and/or pay any Program Funds as necessary to compensate workers the full wages required under this Agreement; and/or (4) pursue any lawful administrative or court remedy to enforce these requirements against the underpaying employer. Any underpaying employer shall comply with a demand to pay any amounts due under this section within ten calendar days of the demand.

Contractor must include the prevailing wage requirement in all subcontracts for work on this Project and must specify that Horne and CDSS are intended third party beneficiary of such provisions. Contractor must take reasonable measures to monitor and enforce the prevailing wage requirements imposed on its subcontractors, including withholding payments to those subcontractors who violate these requirements. In the event that Contractor fails to take the above measures, Contractor shall be liable for the full amount of any underpayment of wages, plus costs and attorneys' fees, as if Contractor was the actual employer.

13. INSURANCE COVERAGE. Contractor must have in full force and effect during the complete course of construction of the Project, insurance, providing coverage in the types and amounts set forth below:

13.1 Worker's compensation insurance as required by the State of California.

13.2 Comprehensive automobile and vehicle liability insurance covering claims for injuries to members of the public and/or damages to property of others arising from use of motor vehicles, including on-site and off-site operations, and owned, non-owned, or hired vehicles, with \$1,000,000 combined single limits.

13.3 Commercial general liability insurance of not less than \$1,000,000 per occurrence with an annual aggregate limit of \$5,000,000 for bodily injury and property damage liability combined. Such insurance can be provided pursuant to an umbrella policy. The commercial general liability insurance policy shall cover liabilities arising out of premises, operations, independent contractors, products, completed operations, personal and advertising injury, and liability assumed under an insured agreement. The commercial general liability insurance shall apply to each insured against whom claim is made or suit is brought subject to the Sponsor's limit of liability.

14. NON-LIABILITY OF OFFICIALS, EMPLOYEES AND AGENTS. No member, official, employee, or agent of Horne or CDSS shall be personally liable to Contractor for any obligation created under the terms of the Contract or this Addendum except in the case of actual fraud or willful misconduct by such person.

15. INDEMNITY. Notwithstanding the insurance requirements herein, Contractor hereby indemnifies, defends and holds, Horne and CDSS and their respective members, officers, officials, employees, and agents (collectively, the "Indemnified Parties"), harmless against any losses, damages, liabilities, claims, demands, judgments, actions, court costs, and legal or other expenses (including attorneys' fees) which an Indemnified Party may incur as a consequence of Contractor's failure to perform any obligations as and when required by the Contract or this

Addendum, any act or omission by Contractor or its subcontractors with respect to the Project, or any failure of any of Contractor's representations or warranties to be true and complete, except to the extent such losses are caused by the negligence or willful misconduct of the Indemnified Party. Contractor shall pay immediately upon the Indemnified Party's demand any amounts owing under this indemnity. The duty of Contractor to indemnify includes the duty to defend the Indemnified Party in any court action, administrative action, or other proceeding brought by any third party arising from the Project. Contractor's duty to indemnify the Indemnified Party shall survive the term of the Contract.

16. **HAZARDOUS MATERIALS.** Neither Contractor nor any of its subcontractors may use the real property upon which the Project is to be constructed (the "Project Property") or allow the Project Property to be used for the generation, manufacture, storage, disposal, or release of Hazardous Materials. Contractor shall immediately notify Horne and Owner in writing of: (a) the discovery of any concentration or amount of Hazardous Materials on or under the Project Property requiring notice to be given to any governmental agency under Hazardous Materials Laws; (b) any knowledge by Contractor that the Project Property does not comply with any Hazardous Materials Laws; (c) the receipt by Contractor of written notice of any Hazardous Materials claims; and (d) the discovery by Contractor of any occurrence or condition on the Project Property or on any real property located within 2,000 feet of the Project Property that could cause the Project Property to be designated as a "hazardous waste property".

17. **NOTICES; NOTICE OF DEFAULT TO HORNE.** If at any time after the execution of the Contract it shall become necessary or convenient for Contractor to serve any notice, demand, or communication upon Horne, such notice, demand or communication shall be in writing provided in accordance with the notice requirements of the Agreement. Contractor shall give Horne prior or concurrent written notice of any default or breach claimed by Contractor against Owner or any other party under the Contract. The notice shall describe the default and give Horne the option to cure said default within 30 calendar days. No termination of the Contract by Contractor shall be binding unless Horne has been given the required notice and has not cured the default within thirty (30) calendar days.

18. **REMEDIES.** The parties hereto agree that Horne, while not a party to the Contract, is an intended third-party beneficiary of the obligations imposed on Contractor in this Addendum. In the event of any breach or violation of any agreement or obligation of Contractor under the Contract or this Addendum, Horne may proceed with any of the following remedies:

18.1 Bring an action in equitable relief seeking the specific performance by Contractor of the terms and conditions of the Contract or this Addendum, and/or enjoining, abating, or preventing any violation of said terms and conditions;

18.2 Order immediate stoppage of construction and demand that any condition leading to the default be corrected before construction may continue;

18.3 Enter the Project Property and take any actions necessary in its judgment to complete construction of the Project as permitted under the assignment of development rights;

18.4 Suspend disbursement of Program Funds for the Project until the breach or violation is corrected, or, if Owner had any concurrent obligation to perform on or ensure performance on the breached obligation, cancel the Program Funds commitment made to Owner and terminate Horne's obligation to disburse Program Funds to Owner;

18.5 Terminate the Contract; or

18.6 Pursue any other remedy allowed at law or in equity.

19. **GOVERNING LAW.** This Addendum shall be interpreted under and be governed by the laws of the State of California, except for those provisions relating to choice of law and those provisions preempted by federal law.

20. **DEFINITIONS.** Capitalized terms not defined in this Addendum shall have the same meaning as defined in the Agreement.

21. **ATTORNEYS' FEES AND COSTS.** In the event any legal action is commenced to interpret or to enforce the terms of this Addendum, the prevailing party in any such action shall be entitled to recover all reasonable attorneys' fees and costs incurred in such action.

22. **TIME.** Time is of the essence in the performance of this Addendum by Contractor.

23. **CONSENTS AND APPROVALS.** Any consent or approval required under this Addendum shall not be unreasonably withheld, delayed, or conditioned.

24. **BINDING UPON SUCCESSORS.** All provisions of this Addendum shall be binding upon and inure to the benefit of the heirs, administrators, executors, successors-in-interest, transferees, and assigns of each of the parties; provided, however, that this section does not waive the prohibition on assignment of this Addendum by Contractor without Horne's consent.

25. **RELATIONSHIP OF CONTRACTOR AND Horne.** Contractor understands that neither Horne nor CDSS undertakes or assumes any responsibility or duty to Contractor or to any third party. The relationship of Contractor and Horne/CDSS for this Project shall not be construed as a joint venture, equity venture, or partnership. Horne shall have no obligation to any party under the Contract but is an intended third party beneficiary of the obligations under this Addendum. Contractor shall have no authority to act as an agent of Horne or CDSS or to bind Horne or CDSS to any obligation.

26. **ASSIGNMENT.** Contractor may not assign any of its interests under the Contract or the Addendum to any other party, except with the prior written consent of Horne. Any unauthorized assignment shall be void.

27. **AMENDMENTS AND MODIFICATIONS.** Any amendments or modifications to this Addendum must be in writing and shall be made only if executed by Owner and Contractor and consented to in writing by Horne.

28. **SEVERABILITY.** Every provision of this Addendum is intended to be severable. If any provision of this Addendum is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the validity, legality, and enforceability of the remaining provisions shall not be affected or impaired.

29. **ADDENDUM CONTROLS.** In the event that any provisions of this Addendum and the Contract conflict, the terms of this Addendum shall control.

IN WITNESS WHEREOF, the undersigned parties have executed this Construction Contract Addendum as of the date first written above.

“CONTRACTOR”

By: _____

Title: _____

County of Santa Barbara, a California County **“OWNER”**

By: _____

Title: _____

Attachment L

**CALIFORNIA DEPARTMENT OF SOCIAL SERVICES
COMMUNITY CARE EXPANSION PROGRAM
CAPITALIZED OPERATING
SUBSIDY RESERVE AGREEMENT**

This Capitalized Operating Subsidy Reserve Agreement (the “COSR Agreement”) is made and entered into _____, 2023, (the “Effective Date”), by and between _____, a _____ (enter the state of formation, and entity type) (“Sponsor”) and Horne LLP (“Horne”) acting as program administrator on behalf of the California Department of Social Services (“CDSS”). Horne and Sponsor may be referred to separately as a “Party” or collectively as “Parties.”

RECITALS

A. Horne is the third-party administrator of the CDSS Community Care Expansion Program (“CCE Program”) pursuant to that certain Standard Agreement with the California Department of Social Services, dated effective May 31, 2023, to facilitate program funding awards and to provide certain other services to CDSS. The agreement between CDSS and Horne shall hereinafter be referred to as the “Prime Contract” or “CDSS Contract”;

B. Horne and Sponsor entered into that certain Program Funding Agreement, on or about _____, (the “Program Funding Agreement”), in connection with Horne’s administration and disbursement of CCE Program Funds to Sponsor for the purpose of the acquisition, construction, renovation or other physical improvement of real property, infrastructure, or facilities to expand or preserve the capacity of residential adult and senior care facilities, for the benefit of Qualified Residents, as that term is defined in Welfare and Institutions Code Section 18999.97(e); and otherwise in accordance with the requirements of the CCE Program;

C. Pursuant to its Application, Sponsor was awarded Program funds in an amount not to exceed _____ and No/100s Dollars (\$ _____ .00) (the “Program Funds”) to preserve or expand residential adult and senior care facilities, by the acquisition, construction, renovation or other physical improvement of real property, infrastructure, or facilities, as described in the SOW, as attached to the Program Funding Agreement (the “Project”), in accordance with the terms of the Program Funding Agreement and the requirements of the CCE Program;

D. Sponsor was awarded a Capitalized Operating Subsidy Reserve (“COSR”) in an amount not to exceed _____ and No/100s Dollars (\$ _____ .00) (the “COSR Funds”) for the purpose of subsidizing operating costs related to the Project so that the Project can serve Qualified Residents. The COSR is available to subsidize operating costs for up to five (5) years from the date of commencement of operation of the Project, subject to the terms of this COSR Agreement and the requirements of the CCE Program or March 31, 2029, whichever date is earlier;

E. As a condition of the Program Funding Agreement, Sponsor has recorded against the real property, upon which the Project is to be constructed (the “Project Property”), a Declaration of Restrictions (“Declaration of Restrictions”) restricting the use of the Project Property and the operation of the Project in compliance with the terms of the CCE Program for a period of [redacted] years, including the requirement that Sponsor give priority to Qualified Residents including those who are currently or formerly homeless or who are at risk of homelessness; and

F. Capitalized terms included herein, and not otherwise defined, shall be defined as provided in the Program Funding Agreement.

AGREEMENT

NOW THEREFORE, based upon the foregoing, and in consideration of the terms, conditions and covenants hereinafter set forth, the Parties agree as follows:

1. COSR Administration. The COSR Funds shall be held and administered by Horne for the benefit of the Project.

2. Term of COSR Agreement.

2.1 This COSR Agreement shall commence on the Effective Date and shall automatically expire on June 30, 2029 (the “Expiration Date”); (the period from the Effective Date through the Expiration Date shall be referred to herein as the “Term”), unless earlier terminated upon the occurrence of any of the following, prior to the Expiration Date: (a) depletion of the COSR Funds; (b) the date of the fifth anniversary of the Completion Date; (c) termination of this COSR Agreement by Horne pursuant to Section 14.9 of this COSR Agreement; (d) the date of termination of the Program Funding Agreement by Horne if such termination is prior to the Expiration Date of the Program Funding Agreement; or (e) the date of expiration or early termination of the Declaration of Restrictions.

2.2 In the event that Horne terminates the Program Funding Agreement, any remaining COSR Funds held by Sponsor shall be returned to Horne or CDSS, at the direction of CDSS, and no further disbursement of COSR Funds shall be made to Sponsor.

2.3 Within thirty (30) days of the date of expiration or early termination of this COSR Agreement, Sponsor shall deliver to Horne or CDSS, at the direction of CDSS, any and all reports and documents required pursuant to Section 11.2 of this COSR Agreement.

2.4 Upon the expiration of the Prime Contract between Horne and CDSS, including any amendments or time extensions thereto, if this COSR Agreement has not otherwise been terminated in accordance with the termination provisions stated in this COSR Agreement, the COSR Agreement shall be automatically assigned to CDSS or its designee.

3. Initial Disbursement. An Initial Disbursement, as defined below, shall be permitted by Horne once all conditions specified in Section 9 of this COSR Agreement have been satisfied.

4. Definitions.

4.1 “Business Day” means Monday through Friday excluding state and federal holidays.

4.2 “Capitalized Operating Subsidy Reserve Funds (“COSR Funds”)” means the capitalized operating subsidy reserve held and administered in accordance with this COSR Agreement by Horne or CDSS to cover deficits in Operating Expenses attributable to the Project as a result of Sponsor prioritizing Qualified Residents in accordance with the CCE Program and the Declaration of Restrictions.

4.3 “Certificate of Occupancy” means a certificate, or equivalent, issued by a local building department to Sponsor that indicates that the Project has met all local code requirements and is ready for occupancy.

4.4 “Completion Date” means: (i) the date the Project receives its Certificate of Occupancy for new construction; (ii) the date the Notice of Completion, or equivalent, is recorded, for rehabilitation projects; (iii) the date of the close of escrow for Sponsor’s acquisition of Project Property, where no construction or rehabilitation is contemplated.

4.5 “Fiscal Year” means Sponsor’s twelve (12) month fiscal year.

4.6 “Gross Income” shall mean with respect to a particular calendar year all revenue, income, receipts, and other consideration actually received from operation and leasing of the Project. Gross Revenue shall include, but not be limited to: all rents, fees and charges paid by residents, Section 8 payments or other rental subsidy payments received, deposits forfeited by residents, all cancellation fees, the proceeds of business interruption or similar insurance; the proceeds of casualty insurance not used to rebuild the Project; and condemnation awards for a taking of part or all of the Project for a temporary period. Gross Revenue shall not include residents’ security deposits, loan proceeds, capital contributions or similar advances and insurance proceeds used to rebuild or repair the Project.

4.7 “Initial Disbursement” means the first (1st) advance of funds from the COSR Funds that may be released by Horne or CDSS upon the request of Sponsor following the Completion Date.

4.8 “Notice of Completion” shall have the same definition as set forth in California Civil Code §8182.

4.9 “Operating Expenses” with respect to a particular fiscal year shall mean the following costs reasonably and actually incurred for operation and maintenance of the Project to the extent that they are consistent with an annual independent audit performed by a certified public accountant using generally accepted accounting principles or an acceptable equivalent approved by Horne or CDSS: property taxes and assessments imposed on the Project; staff costs, debt service currently due on a non-optional basis (excluding debt service due from residual receipts or surplus cash of the Project) on loans associated with development of the Project and approved by Horne or CDSS; premiums for property damage and liability insurance; utility services, including

water, sewer, and trash collection; maintenance and repair; any annual license or certificate of occupancy fees required for operation of the Project; security services; advertising and marketing; extraordinary operating costs specifically approved in writing by Horne or CDSS; payments of deductibles in connection with casualty insurance claims not normally paid from reserves, the amount of uninsured losses actually replaced, repaired or restored, and not normally paid from reserves, and other ordinary and reasonable operating expenses approved in writing by the Horne or CDSS and not listed above. Operating Expenses shall not include the following: depreciation, amortization, depletion, or other non-cash expenses; any amount expended from a reserve account; and any capital cost with respect to the Project.

4.10 “Qualified Resident” shall have the meaning set forth in Welfare and Institutions Code Section 18999.97(e).

5. Purpose and Uses of COSR Funds.

5.1 The COSR Funds are intended to cover approved Operating Expenses that exceed Gross Income as a result of the Project serving Qualified Residents as required by the CCE Program and the Declaration of Restrictions.

5.2 The amount of each disbursement from the COSR (each a “COSR Disbursement”) shall be determined in advance by Horne or CDSS for each Fiscal Year, as set forth in Section 9, below. At any time during the term of this COSR Agreement, Horne or CDSS may review, re-underwrite and adjust the COSR amount, or the disbursements thereunder, if it determines in its sole discretion, that COSR payments are not necessary or that the Gross Income is sufficient to cover all Project-related approved Operating Expenses or that such adjustment shall improve the long term viability of the COSR for the benefit of the Project.

5.3 The COSR Funds are estimated to last no more than five (5) years from the Completion Date, but in all events shall be fully expended or returned to the State by March 31, 2029, subject to the terms of this COSR Agreement and the requirements of the CCE Program, and as reflected in the Operating Budget and Cash Flow Projections attached hereto as Exhibit A.

6. Exhaustion of the COSR Funds:

6.1 If, based on prior disbursements of COSR Funds and Sponsor’s annual operating budget, Horne, CDSS or Sponsor determine that COSR Funds may be exhausted prior to the date of expiration of this COSR Agreement, Sponsor shall submit a plan to Horne and CDSS for addressing Operating Expense shortfalls after exhaustion of the COSR Funds at least twelve (12) months prior to the expected depletion of the COSR Funds. The plan shall include, but not be limited to, the following:

6.1.1 An explanation of the efforts Sponsor has made to secure additional sources of funds necessary to continue to serve Qualified Residents.

6.1.2 A process for increasing the Gross Income to cover Operating Expenses.

7. Calculation of COSR Funds Disbursements.

7.1 The amount of the COSR Funds disbursement shall be based on the difference between: (i) the anticipated Gross Income for the Project in any Fiscal Year; and (ii) estimated annual Operating Expenses for the Project for the Fiscal Year.

7.2 COSR Funds disbursement amounts shall be determined annually by Horne or CDSS in advance of each Fiscal Year based on Sponsor's annual operating budget as well as cash flow projections submitted to Horne or CDSS in a form approved by Horne or CDSS in accordance with Section 11.2.2 below at least ninety (90) days prior to the beginning of the Fiscal Year. Annual COSR Funds disbursements in the amount determined by Horne or CDSS are subject to Section 10 below.

7.3 The calculation of the Initial Disbursement shall be in accordance with Section 9, below.

7.4 The COSR Funds disbursements shall be reconciled with actual Gross Income and actual Operating Expenses at or prior to each Fiscal Year's end. Horne or CDSS may require more frequent reconciliation of the COSR Funds disbursements in its sole and absolute discretion.

7.5 If funds from any COSR Disbursement remain unused in any given year, those funds shall be applied toward the next Fiscal Year's COSR Disbursement, if any or returned to Horne if there is no COSR Disbursement for the subsequent Fiscal Year.

8. Ownership, Reduction or Termination of COSR Funds.

8.1 Sponsor acknowledges and agrees that it has no ownership interest in the COSR Funds.

8.2 Sponsor acknowledges and agrees that the COSR Funds may be reduced or reallocated by CDSS prior to depletion if the Project receives new or increased revenue beyond those identified in the original underwriting, and in the judgment of Horne or CDSS the Project no longer requires COSR Funds or if the COSR Funds will not be used prior to the date of expiration of this COSR Agreement, in the sole discretion of either Horne, CDSS, or its designee.

8.3 Sponsor acknowledges and agrees that the COSR Funds shall be reduced, suspended, or terminated and this Agreement may be terminated by Horne and CDSS under the following circumstances:

8.3.1 Sponsor ceases to prioritize applications from Qualified Residents for the Project.

8.3.2 Sponsor is in default under the Program Funding Agreement or the Declaration of Restrictions.

8.3.3 Sponsor misrepresents any information provided in requested reports or documentation.

8.3.4 Sponsor is in default under any loan agreement or promissory note secured by a deed of trust recorded against title to the Project Property or the Project.

9. Conditions for the Initial Disbursement.

9.1 After the Completion Date, as defined herein, Sponsor may request the Initial Disbursement of COSR Funds upon Horne's receipt and approval of the following:

9.1.1 Evidence that the Completion Date has occurred.

9.1.2 Evidence of insurance coverage meeting the requirements of the Program Funding Agreement.

9.1.3 An operating budget for the initial operation period which shall be defined as the period from the Completion Date to the end of Sponsor's Fiscal Year, provided, however, if six (6) or fewer months remain in the Fiscal Year of the year in which the Completion Date occurs, the initial operation period shall include the full Fiscal Year after the year in which the Completion Date occurs.

9.1.4 Updates to Exhibit A, reflecting any changes to the first year annual operating budget and long-term cash flow projections.

9.1.5 Other items deemed necessary by Horne or CDSS to determine the required amount of COSR Funds to be disbursed, or to meet the requirements of the CCE Program.

9.2 Sponsor shall provide a signed request for the Initial Disbursement of COSR Funds in a form provided by Horne at least twenty (20) Business Days prior to the requested date for disbursement of COSR Funds.

9.3 The Initial Disbursement of COSR Funds may include a per diem of the COSR Funds from the beginning of the month the Completion Date occurred through the remainder of the current Fiscal Year; provided, however, that if six (6) or fewer months remain in the current Fiscal Year, the Initial Disbursement may cover the remainder of the current Fiscal Year plus the next full Fiscal Year, not to exceed eighteen (18) months.

10. Subsequent Disbursement of COSR Funds.

10.1 Subsequent COSR Funds disbursements shall require: (i) Request for Disbursement (on a form provided by Horne or CDSS) at least twenty (20) Business Days prior to the requested date for disbursement of funds; (ii) approval by Horne or CDSS of Sponsor's annual operating budget showing projected Operating Expenses and Gross Income; (iii) reports as required in Section 11.2; and (iv) additional information as requested by Horne or CDSS.

10.2 All subsequent COSR Fund disbursements shall be subject to Sponsor's full compliance with all other terms and conditions of this COSR Agreement, the Program Funding Agreement, and the Declaration of Restrictions.

10.3 Notwithstanding the foregoing, all subsequent COSR Funds disbursements shall be conditioned upon COSR Funds remaining available for disbursement.

11. Sponsor's Ongoing Obligations.

11.1 Sponsor is required to give priority to applications from Qualified Residents for occupancy of the Project and to comply with the terms of the Declaration of Restrictions. The COSR Funds are intended to address shortfalls in Gross Income resulting from the acceptance of Qualified Residents for occupancy of the Project. Disbursement of the COSR Funds may be suspended or terminated if Sponsor ceases to serve Qualified Residents as required by the CCE Program, the Declaration of Restrictions, and the Program Funding Agreement.

11.2 Reporting:

11.2.1 Sponsor shall submit an annual operating budget of the Project's projected Operating Expenses and anticipated Gross Income ninety (90) days prior to the beginning of the Project's Fiscal Year, including a cash flow projection. The annual operating budget should reflect COSR Fund distributions requested by Sponsor for that year and any unexpended COSR Funds from prior disbursements. The annual operating budget shall also show whether the COSR Funds are expected to be exhausted during the coming fiscal year and if so, the annual operating budget shall include an explanation pursuant to Section 6.1 including a description of Sponsor's efforts to obtain alternative operating subsidies to replace the COSR Funds.

11.2.2 Sponsor shall submit an annual audit of the Project's actual Gross Income and Operating Expenses ninety (90) days after the end of the Project's Fiscal Year or, if approved by Home or CDSS for organizations with annual gross income of less than One Million Dollars (\$1,000,000), a credentialed accountant's certified financial statement that includes a balance sheet/statement of financial position or income statement/statement of activities. The annual audit or financial statement shall reflect the receipt of COSR Funds for that Fiscal Year, any unspent COSR Funds (that were previously distributed to Sponsor) at the end of the Fiscal Year, if applicable, and shall include a schedule of COSR Funds expenditures during the immediately preceding Fiscal Year.

11.2.3 Sponsor, contemporaneously with the submission of its annual operating budget, shall submit a report showing the number of Qualified Residents that applied for occupancy of the Project, the number of Qualified Residents that are currently occupying the Project and an explanation if any Qualified Residents were rejected for occupancy of the Project.

12. Cross-Default. A default under the Program Funding Agreement or the Declaration of Restrictions shall constitute a default under this COSR Agreement and a default under this COSR Agreement shall constitute a default under the Program Funding Agreement and the Declaration of Restrictions.

13. Third Party Beneficiaries. The State of California, represented by CDSS in this COSR Agreement, is a third party beneficiary of this COSR Agreement. This COSR Agreement shall not be construed so as to give any other person or entity, other than the Parties and CDSS, any legal or equitable claim or right. CDSS or another authorized department or agency representing

the State of California may enforce any provision of this COSR Agreement to the extent permitted by law as a third party beneficiary of this COSR Agreement.

14. Miscellaneous.

14.1 Dispute Resolution.

14.1.1 The Parties shall use reasonable efforts to resolve any dispute arising under this COSR Agreement within thirty (30) days pursuant to informal mediation before a retired judge with Judicial Arbitration and Mediation Services (“JAMS”) in Los Angeles, California.

14.1.2 If the Parties cannot resolve a dispute arising under this COSR Agreement pursuant to Section 14.1.1, the Parties shall submit such dispute to arbitration in accordance with the provisions of the American Arbitration Association. The Parties shall conduct any arbitration in Los Angeles, California. The arbitrator’s decision in any such arbitration shall be final, conclusive, and binding on the Parties.

14.1.3 TO THE FULLEST EXTENT PERMITTED BY LAW, THE PARTIES HEREBY UNCONDITIONALLY WAIVE ANY RIGHT TO A JURY TRIAL IN CONNECTION WITH ANY CLAIM ARISING OUT OF THIS COSR AGREEMENT.

14.1.4 For the avoidance of doubt, this Section 14.1 shall not apply to the State.

14.2 Attorneys’ Fees. If a dispute arising out of this COSR Agreement is finally adjudicated, the non-prevailing party shall pay the prevailing party’s reasonable expenses incurred in connection therewith, including reasonable arbitration costs and reasonable attorneys’ fees. If multiple items are disputed and the final decision is split, then the Parties shall allocate such expenses pro rata as to each item. This Section 14.2 shall not apply to the State.

14.3 Waiver. Horne’s failure to notify Sponsor of a breach or to insist on strict performance of any provision of this COSR Agreement shall not constitute waiver of such breach or provision.

14.4 Remedies. No remedy in this COSR Agreement is exclusive of any other remedy available under this COSR Agreement, at law or in equity. Horne may seek equitable relief, including an injunction, against Sponsor in connection with any breach or threatened breach of this COSR Agreement.

14.5 Limitation of Liability. Except as otherwise provided in this COSR Agreement, or by applicable law, Sponsor waives any right to seek, and Horne and CDSS shall not be liable for any special, consequential, or punitive damages; indirect, or incidental damages; or for any loss of goodwill, profits, data, or loss of use arising out of, resulting from, or in any way connected with the performance or breach of this COSR Agreement, even if Sponsor advises Horne or CDSS of the possibility of any such damages.

14.6 Relationship. Sponsor is an independent contractor with respect to Horne. This COSR Agreement is not intended to create a partnership, joint venture, employment, or fiduciary relationship between the Parties or between any Party hereto and CDSS.

14.7 Notices. Notices under this COSR Agreement must be (i) in writing, (ii) addressed to the receiving Party at the address described below (unless notice of a different address is given), and (iii) (A) if personally delivered to the recipient, notice is effective upon delivery, (B) if sent by a nationally recognized overnight courier service, notice is effective on the first business day following its timely deposit with such courier service, delivery fees for next business day delivery prepaid; no signature affirming receipt by the receiving party is required, the internal records of the courier service shall be accepted as sufficient evidence of the date of the deposit of the notice with the courier service, or (C) if sent by certified U.S. mail, notice is effective three (3) days after deposit thereof in the U.S. mail, postage prepaid, certified, return receipt requested. Counsel for a Party may send notice on behalf of its client.

Notices to Horne: Horne LLP (Horne)
400 Capitol Mall, Suite 1535
Sacramento, CA 95814
Attention: Geoffrey Ross and Dania Khan

With a copy to:

State of California
California Department of Social Services
744 P Street MS 8-4-70
Sacramento, CA 95814
Attention: Housing and Homelessness Division

Notices to Sponsor: [SPONSOR]
[ADDRESS]
[ADDRESS]
Attn: _____

With a copy to:

[NAME]
[ADDRESS]
[ADDRESS]

14.7.1 Notwithstanding the foregoing, the Parties may deliver any approval, disapproval, or request therefor via email. Such email notices and deliveries shall be valid and binding on the Parties, subject to the following:

14.7.1.1 Such email must be properly addressed to the other Party's Designated Representatives. For purposes of this COSR Agreement, "Designated Representative"

means initially (i) for Horne, Geoffrey Ross, Geoffrey.Ross@horne.com and Dania.Khan@horne.com (ii) for Sponsor, [REDACTED] and [REDACTED]. A Party may change a Designated Representative only upon notice to the other Party pursuant to the requirements of Section 14.7(iii)(A), (B) or (C).

14.7.1.2 If the sender receives a bounce-back, out-of-office or other automated response indicating non-receipt, the sender shall (i) re-attempt delivery until the other Party confirms receipt or (ii) deliver the item in accordance with Section 14.7(iii)(A), (B) or (C).

14.9 Termination. In addition to the grounds for termination of this COSR Agreement set forth in Sections 2 and 8 of this COSR Agreement, Horne may terminate this COSR Agreement upon thirty (30) days' notice if the Prime Contract is terminated by CDSS or if Horne is directed by CDSS to terminate this COSR Agreement. If the COSR Agreement is terminated pursuant to this Section 14.9, neither Horne nor CDSS shall be responsible for any disbursements pursuant to this COSR Agreement after the termination date or for any damages to Sponsor as a result of such termination.

14.10 Governing Law. The place of performance of this COSR Agreement is California and the laws of the State of California, shall govern the validity, performance, enforcement, and interpretation of this COSR Agreement. Any litigation or enforcement of an award must be brought in the appropriate state or federal court in the State of California, County of Sacramento. Each Party consents to personal and subject matter jurisdiction and venue in such courts and waives the right to change venue with respect to any such proceeding. The Parties acknowledge that all directions issued by the forum court, including injunction and other decrees, shall be binding and enforceable in all jurisdictions and countries.

14.11 Assignment. Sponsor shall not assign, delegate, or otherwise transfer this COSR Agreement, or its duties, or obligations in connection therewith, in whole or in part, without the prior written approval of Horne or CDSS. Horne's obligations under this COSR Agreement shall be assignable to CDSS or CDSS's designee upon CDSS's request without Sponsor's consent.

14.12 Transition of COSR. In the event that the Prime Contract expires or terminates prior to the disbursement of all COSR Funds awarded to Sponsor, CDSS, or its designee, at the sole discretion of CDSS, shall be responsible for any disbursement of COSR Funds due Sponsor under this COSR Agreement. Horne shall make commercially reasonable efforts to transition the COSR Funds and any reasonably necessary documentation related to the COSR Funds to CDSS or its designee at no cost to CDSS, provided, however, that Horne shall have no obligation to incur any liability, pay fees, charges, or reimbursement in connection with any wind-down or transition services.

14.13 Entire Agreement; Amendments. This COSR Agreement constitutes the entire agreement of the Parties with respect to its subject matter. It supersedes all oral or written agreements or communications between the Parties. No understanding, agreement, modification, change order, or other matter affecting this COSR Agreement shall be binding, unless in writing, signed by both Parties. No handwritten changes shall be effective unless initialed by each Party.

14.14 Counsel. The Parties, each, have reviewed and negotiated this COSR Agreement using such legal counsel as each has deemed appropriate.

14.15 Exhibits. The Attachments, Schedules, and Addenda, attached to this COSR Agreement are a part of this COSR Agreement and incorporated into this COSR Agreement by reference.

14.16 Partial Invalidity. If any part of this COSR Agreement is unenforceable, the remainder of this COSR Agreement and, if applicable, the application of the affected provision to any other circumstance, shall be fully enforceable.

14.17 Captions. The headings contained herein are for convenience only and are not intended to define, limit, or describe the scope or intent of any provision of this COSR Agreement.

14.18 Force Majeure. Neither Party shall be liable to the other for loss or damages due to failure or delay in rendering performance caused by circumstances beyond its reasonable control, if such failure could not have been overcome by the exercise of due diligence, due care, or foresight. Causes may include, but are not limited to, acts of God or a public enemy; wars; acts of terrorism; riots; fires; floods; epidemics; quarantine restrictions; labor disputes; strikes; defaults of subcontractors/vendors; failure/delays in transportation; unforeseen freight embargoes; unusually severe weather; or any law/order/regulation/request of a state or local government entity, the U.S. Government, or of any agency, court, commission, or other instrumentality of any such governments. Times of performance under this COSR Agreement may be appropriately extended for excused delays if the Party whose performance is affected promptly notifies the other of the existence and nature of such delay.

14.19 Publicity. Without prior written approval of the other, neither Party shall use the other's name or make reference to the other Party or any of its employees in publications, news releases, advertising, speeches, technical papers, photographs, sales promotions, or publicity purposes of any form related to this work or data developed hereunder, unless disclosure of such materials is required by legal, accounting, or regulatory requirements beyond the disclosing Party's reasonable control. Use of either Party's name may be made in internal documents, annual reports, and proposals. This Section shall survive expiration/termination of this COSR Agreement. Notwithstanding the foregoing, the Sponsor agrees that the State may use and refer to the Sponsor and the Project in any publication, news release, advertising, speech, technical paper, or for any other purposes.

14.20 Notice of Litigation. Promptly, and in any event within one (1) Business Day after an officer or other authorized representative of Sponsor obtains knowledge thereof, Sponsor shall provide written notice to Horne of (i) any litigation or governmental proceeding pending against Sponsor which could materially adversely affect the business, operations, property, assets, condition (financial or otherwise) or prospects of Sponsor and (ii) any other event which is likely to materially adversely affect the business, operations, property, assets, condition (financial or otherwise) or prospects of Sponsor.

14.21 Survival. Except as otherwise stated, sections that by their terms impose continuing obligations or establish continuing rights shall be deemed to survive the expiration or termination of this COSR Agreement.

14.22 Successors. This COSR Agreement shall be binding upon the Parties, their successors, and assigns.

14.23 Approvals. Whenever this COSR Agreement calls for a Party's approval, approval shall mean prior written approval (including via email), not to be unreasonably conditioned, delayed, or withheld, unless sole discretion is expressly noted.

14.24 Counterparts; Electronic Signatures. The Parties may sign this COSR Agreement in several counterparts, each of which constitutes an original, but all of which together constitute one instrument. Electronic signatures are valid and shall bind the Party delivering such signature.

SIGNATURES ON THE FOLLOWING PAGE

IN WITNESS WHEREOF, the Parties hereto have executed this COSR Agreement as of the day and year first above written.

SPONSOR:

HORNE, LLP:

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

EXHIBIT A

Operating Budget and Cash Flow Projections
(Per Cash Flow Proforma)

ATTACHMENT M

RFA



**DHCS Behavioral Health Continuum
Infrastructure Program Launch Ready Grant
and
CDSS Community Care Expansion Program
Joint Request for Applications (RFA)**

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Part One: Overview

1.1. INTRODUCTION TO THE GRANT OPPORTUNITY AND FUNDING

California Health and Human Services Agency (CalHHS) infrastructure funding, alongside significant new state and federal investments in homelessness, healthcare delivery reform, and the social safety net, is addressing historic gaps in the behavioral health and long-term care continuum to meet growing demand for services and supports across the life span.

The California Department of Health Care Services (DHCS) and California Department of Social Services (CDSS) are working in tandem to design and implement two new programs to support infrastructure projects: the Behavioral Health Continuum Infrastructure Program (BHCIP) and the Community Care Expansion (CCE) program. These investments will ensure care can be provided in the least restrictive settings by creating a wide range of options including outpatient alternatives, urgent care, peer respite, wellness centers, and social rehabilitation models. A variety of care placements can provide a vital off-ramp from intensive behavioral health service settings and transition individuals—including the most vulnerable and those experiencing or at risk of homelessness—to safe community living. Investing in adult and senior care facilities will divert Supplemental Security Income/State Supplementary Payment (SSI/SSP) and Cash Assistance Program for Immigrants (CAPI) applicants and recipients from homelessness as a key part of California’s strategic multi-agency approach to increase housing options for seniors and persons with disabilities.

DHCS was authorized through 2021 [legislation](#) to establish BHCIP and award approximately \$2.1 billion to construct, acquire, and expand properties and invest in mobile crisis infrastructure related to behavioral health. CDSS oversees CCE, which was established through [Assembly Bill \(AB\) 172](#) (Chapter 696, of Statutes 2021) as a companion effort focused on the acquisition, construction, and rehabilitation of adult and senior care facilities that serve SSI/SSP and CAPI applicants and recipients and other adults who are experiencing or at risk of homelessness.

These combined programs represent the largest such provision of resources for such infrastructure in the state’s history and an unprecedented opportunity to effect meaningful, sustainable change in the behavioral health and long-term care continuums in California.

1.2. PURPOSE AND PROGRAM OBJECTIVES—STATE PRIORITIES

Both BHCIP and CCE are designed to address the following State Priorities:

- Invest in behavioral health and community care options that advance racial equity
- Seek geographic equity of behavioral health and community care options
- Address urgent gaps in the care continuum for people with behavioral health conditions, including seniors, adults with disabilities, and children and youth
- Increase options across the life span that serve as an alternative to incarceration, hospitalization, homelessness, and institutionalization
- Meet the needs of vulnerable populations with the greatest barriers to access, including people experiencing homelessness and justice involvement

- Ensure care can be provided in the least restrictive settings to support community integration, choice, and autonomy
- Leverage county and Medi-Cal investments to support ongoing sustainability
- Leverage the historic state investments in housing and homelessness

DHCS is releasing BHCIP funds through six grant rounds targeting various gaps in the state's behavioral health facility infrastructure.

BHCIP Rounds 1 and 2 were released in 2021:

- Round 1: Mobile Crisis, \$205M (\$55M Substance Abuse and Mental Health Services Administration grant funding)
- Round 2: County and Tribal Planning Grants, \$16M

The remaining BHCIP rounds will be released in 2022:

- Round 3: Launch Ready, \$518.5M
- Round 4: Children & Youth, \$480.5M
- Round 5: Behavioral Health Needs Assessment Phase One, \$480M
- Round 6: Behavioral Health Needs Assessment Phase Two, \$480.7M

Round 3: Launch Ready (\$518.5M), will provide funding to construct, acquire, and rehabilitate real estate assets to expand the behavioral health continuum of treatment and service resources in settings that serve Medicaid (Medi-Cal) beneficiaries. Proposed behavioral health infrastructure projects must demonstrate they have been through a planning process and are ready for implementation. For Round 3: Launch Ready, applications will only be accepted from projects that are determined to be launch ready and are submitted according to the timeline in this RFA (Section 1.4). Awarded grant funds for Round 3: Launch Ready must be obligated by June 2024 and liquidated by December 2026.

The CCE program will provide \$805 million in funding for acquisition, construction, and rehabilitation to preserve and expand adult and senior care facilities that serve SSI/SSP and CAPI applicants and recipients, including those who are experiencing or at risk of homelessness.

CCE Capital Expansion

- Approximately 75 percent of funds (\$570,000,000) will be made available for capital expansion projects, including acquisition, construction, and rehabilitation of residential care settings. Grantees may be approved to use a portion of these funds to establish a capitalized operating subsidy reserve (COSR) for these projects, available for use for up to 5 years.
- Applications for CCE Capital Expansion project funding will be accepted on a project-by-project basis through this joint RFA and funded on a rolling basis until funds are exhausted. However, projects that cannot be funded prior to applicable obligation and liquidation deadlines may not be funded. A portion of the CCE budget includes Home and Community-Based Services (HCBS) funding that must be obligated by December 2023 and liquidated by June 2026, as well as State Fiscal Recovery Funds (SFRF) that

must be obligated by June 2024 and liquidated by December 2026. The exact timeline for obligation and liquidation of funds for each funded project will be provided in the grant award announcement.

CCE Preservation, Including Capital Preservation

- Approximately 25 percent of the funds will be made available for rehabilitation to preserve settings that currently serve the target populations, including \$55 million for a COSR for existing licensed facilities, including but not limited to those facilities that receive preservation capital funding. These funds will be provided to counties and tribes through a direct-to-county and -tribe allocation process that will be announced separately from this joint RFA.

1.3. AUTHORIZING AND APPLICABLE LAW

BHCIP: [Welfare and Institutions Code, Division 5, Part 7](#)

CCE: [Welfare and Institutions Code, Division 9, Part 6](#), commencing with section 18999.97

1.4. TIMELINE

Table 1a: Timeline for BHCIP Applications

RFA release	January 31, 2022
Pre-application consultations	Beginning February 1, 2022; ongoing
Application portal open	February 15, 2022
Joint RFA informational webinar Please preregister.	February 10, 2022; 10:30 a.m.-12:00 p.m. PT
Frequently asked questions	Updated regularly and posted on website
Deadline for questions	7 days prior to each application due date
Part One application due date*	March 31, 2022
Part Two application due date*	May 31, 2022
Part One Award announcements*	May/June 2022
Part Two Award announcements*	July/August 2022

*See Section 2.2 Application Process (page 6)

Table 1b: Timeline for CCE Applications

RFA release	January 31, 2022
Pre-application consultations	Beginning February 1, 2022; ongoing
Application portal open	February 15, 2022
Joint RFA informational webinar Please preregister.	February 10, 2022; 10:30 a.m.-12:00 p.m. PT
Frequently asked questions	Updated regularly and posted on website
Deadline for questions	Ongoing
Application due date	Accepted on a rolling basis until grant funds are exhausted
Award announcements	Beginning in March 2022 and ongoing
Evaluation of statewide funding redistribution	October 2022

Part Two: Application, Submission, Award

2.1. TOTAL GRANT AMOUNTS

BHCIP Launch Ready: \$518,500,000 is available to construct, acquire, and rehabilitate real estate assets to expand the behavioral health continuum of treatment and service resources in settings that serve Medicaid (Medi-Cal) beneficiaries.

CCE: \$570,000,000 is available for acquisition, construction, and rehabilitation capital expansion projects (“expansion” projects) of residential care settings to expand the community care options that serve seniors and adults with disabilities experiencing or at risk of homelessness.

2.2. APPLICATION PROCESS

BHCIP

Round 3: Launch Ready will be composed of two application parts to balance the needs of projects capable of immediate expansion with applicants who require more time to develop their application. This will offer applicants two potential deadlines for submissions. Applicants in Part One will be evaluated competitively against each other. Round 3: Launch Ready Part One is intended for entities that can submit the application and necessary materials by March 31, 2022. Part One applicants will receive priority. Any remaining funds not awarded in Part One will be available for Part Two applicants. Part Two applicants will be evaluated competitively against each other.

Applications will be accepted electronically beginning February 15, 2022. Applications may not be hand-delivered or mailed. The application and attachments, along with instructions for submittal of the online application, can be found on the [Improving California’s Infrastructure website](#). No modified formats will be accepted. The cutoff date for all Part One applications is March 31, 2022, at 5:00 p.m. PT. The cutoff date for all Part Two applications is May 31, 2022, at 5:00 p.m. PT. Applications cannot be edited once submitted. It is the applicant’s responsibility to ensure that the submitted application is accurate. Reviewers may request additional clarifying information from the applicant.

CCE

CCE applications will be accepted and reviewed on a rolling basis until all grant funds are exhausted. However, projects that cannot be funded prior to applicable obligation and liquidation deadlines may not be funded.

Applications will be accepted electronically beginning February 15, 2022. Applications may not be hand-delivered or mailed. The application and attachments, along with instructions for submittal of the online application, can be found in the [Improving California’s Infrastructure website](#). No modified formats will be accepted. Applications cannot be edited once submitted. It is the applicant’s responsibility to ensure that the submitted application is accurate. Reviewers may request additional clarifying information from the applicant.

BHCIP and CCE application process

The application is a public record that is available for public review pursuant to the California Public Records Act (CPRA) (Chapter 3.5 [commencing with Section 6250] of Division 7 of Title 1 of the Government Code). After final awards have been issued, DHCS or CDSS may disclose any materials provided by the applicant to any person making a request under the CPRA. Applicants are cautioned to use discretion in providing information not specifically requested, such as personal phone numbers and home addresses. If the applicant does provide such information, they will be waiving any claim of confidentiality and will have consented to the disclosure of submitted material upon request.

Reasonable Accommodations for BHCIP and CCE: For individuals with disabilities, DHCS or CDSS will provide assistive services such as reading or writing assistance and conversion of the RFA, questions/answers, RFA addenda, or other Administrative Notices in Braille, large print, audiocassette, or computer disk. To request copies of written materials in an alternate format, please send an email to support@CCEprogram.com.

DHCS and CDSS will prioritize completed applications by geographic distribution to ensure the equitable and fair distribution of funds (Table 2). Both programs will adopt a regional funding approach, similar to models used in other state-funded capital programs (e.g., Homekey). Counties are assigned to one of seven geographic regions, each with a specific funding amount reserved. The funding amount reserved was determined based on the program-specific methodology described below. Applicants within each region will compete against other applicants in that same region, thereby supporting geographic equity and funding disbursement across the state.

DHCS and CDSS will reserve up to 20 percent of the BHCIP Round 3 funds and CCE Capital Expansion funds to ensure funding is effectively used to address and support the needs of vulnerable populations and gaps within the care continuum, consistent with the State Priorities. For example, the discretionary set-aside may be used to fund high-scoring projects in regions that have met their funding reserve.

Regional Funding Reserve Methodology

For BHCIP funding reserves, a ratio of available Launch Ready funding to the Behavioral Health Subaccount county allocations has been used, with 5 percent set aside for tribal entities.

For BHCIP, following an initial round of funding allocations (timeframes to be determined by DHCS), funds **may** be used for viable applications falling outside of the initial allocation priority schedules, geographical divisions, or other initial fund allocation restrictions.

The CCE regional funding reserve methodology was calculated using the distribution of adult and senior care facilities in counties across the state, the 2019 Homeless Point-in-Time count, and the proportion of SSI/SSP applicants and recipients across the state. Of the total amount of CCE funding provided under this RFA, 8 percent will be competitively awarded to small counties (populations of 200,000 or fewer) and 5 percent of funds will be reserved for tribal communities.

The RFA will be open to CCE applicants on a rolling basis. CDSS has established an initial priority application period from the release date of the CCE application through September 30, 2022. During this prioritization period, CDSS will group applications into one of the seven geographic regions, unless the application is prioritized for the rural or tribal entity set-asides. This timeframe will allow applicants time to prepare projects and seek relative technical assistance (TA). It also provides CDSS with additional data on the statewide need and interest. After September 30, 2022, CDSS reserves the right to stop grouping applications by geographic region, and instead deploy unused funds from any undersubscribed geographic region(s) to fund subsequent applications statewide.

Table 2: Regions and Counties

Counties by Geographic Distribution	BHCIP Launch Ready Estimated Targeted Funding Levels (less 20% discretionary and 5% tribal set-asides) (Total available: \$394,060,000)	Community Care Expansion Estimated Targeted Funding Levels (less 20% discretionary and 5% tribal set-asides) (Total available: \$430,171,874)
Los Angeles County	\$138,033,407	\$135,281,766
Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma	\$80,110,607	\$85,690,868
Southern California: Imperial, Orange, Riverside, San Bernardino, San Diego, Ventura	\$75,954,578	\$100,473,714
San Joaquin Valley: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare	\$44,552,480	\$45,982,932
Sacramento Area: El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba	\$23,553,889	\$31,914,624
Central Coast: Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz	\$14,912,943	\$15,052,939

<p>Balance of State: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne</p>	<p>\$16,942,096</p>	<p>\$15,775,031</p>
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2.3. PRE-APPLICATION CONSULTATIONS AND TA

Horne LLP (Horne), a consulting and research firm focused on improving health and human services systems, is serving as the administrative entity for CCE. Horne assists state and local organizations to implement and evaluate a wide range of services focusing on mental health treatment and recovery, substance use disorder treatment and prevention, workforce development, homelessness, housing, long-term services and supports, and criminal justice.

Beginning on February 1, 2022, and as part of the RFA process, either the previous third-party administrator or Horne will provide a pre-application consultation and individual agency/county TA. In addition, Horne will offer ongoing general training and TA throughout the life of the project. Applicants are required to submit a request for a pre-application consultation and complete a survey to determine their understanding of the RFA requirements. These include facility siting, permit and licensing requirements, construction plans and launch readiness, oversight and management, match requirements, and budgeting practices. In addition, applicants will be required to discuss how their proposed project meets local and/or regional gaps identified through an assessment, as well as how it addresses the state’s priorities. A Horne implementation specialist will work with applicants to support them in these areas by connecting them with subject matter experts in real estate, financing, and programmatic best practices serving the prioritized or target population to bring targeted TA to applicant and grantees. Additional information related to pre-application consultation and TA throughout the grant period can be found on the [training and technical assistance webpage](#).

The Round 2 funding via BHCIP consisted of a planning RFA for counties and tribes for BHCIP and CCE projects. For applicants who have received a BHCIP Round 2 Planning Grant, that grant will be considered during the TA planning process in order to leverage local planning already underway. **2.4. APPLICATION SCORING CRITERIA**

Applications for BHCIP and CCE must meet the following minimum criteria to be considered for award:

- Full and complete application
- Commitment to serve population and to address the gaps identified in the community
- Demonstrated match
- Completed pre-application consultation

- Attested to meet federal, state, and local laws
- Reasonable cost compared to projects within the same region
- Able to expend funds within the required timeline

CCE applicants will be awarded on a rolling basis. Projects that meet the minimum criteria will be eligible to be funded, until all grant funds are committed. BHCIP is a competitive application process. Funding decisions will be based on a variety of factors, including

- Alignment with the State Priorities described in 1.2, above;
- Alignment with local and/or regional needs, gaps, and priorities as described in 3.2, below;
- Alignment with needs and gaps described in the statewide assessment, [*Assessing the Continuum of Care for Behavioral Health Services in California: Data, Stakeholder Perspectives, and Implications*](#);
- Assurance that funds are invested throughout the state;
- Extent to which the project addresses gaps in underserved areas;
- Extent to which the project addresses gaps in underserved populations;
- Review of each project's proposed costs and a determination of reasonableness for the facility type, scope, budget, and schedule of rehabilitation or renovations proposed;
- Degree to which the applicant leverages local funding;
- Ability to use funds within the funding timeline;
- Degree to which the applicant demonstrates long-term sustainability of the proposed project;
- Proposed increase in the number of persons to be served by the expansion;
- Ability to meet match expectations; and
- Degree to which the proposed plan for serving the target population(s) demonstrates the use of established best practices.

Funds awarded pursuant to the program must be used to supplement, and not supplant, other funding available from existing local, state, or federal programs or from grants with similar purposes.

Real Estate Acquisition and Development experts under contract with Horne will conduct financial viability assessments of each applicant's project. Through review of the RFA pre-application consultation, interviews, and financial document review, they will assess long-term operational sustainability (i.e., once the capital project is complete and in use for its intended purpose). TA provided will not factor into the evaluation of the application submitted. Staff providing TA will not be scoring applications.

2.5. AWARD PROCESS

Successful applicants will receive an award letter and a Standard Agreement from Horne, the DHCS and CDSS administrative entity. The agreement must be signed, returned, and fully executed with Horne before initial funding will be awarded.

BHCIP only: Applications that are not funded during Round 3 may be considered for future funding rounds, subject to the requirements and priorities of those rounds. TA will be available to help applicants explore future BHCIP funding rounds, as well as other potential sources of funds to support the proposed projects.

CCE only: Applications that meet the minimum criteria outlined in Section 2.4, eligibility criteria described in Section 3.1, and the eligible uses requirements in Section 3.2 will be considered for funding until all available funds are fully obligated. However, projects that cannot be funded prior to applicable obligation and liquidation deadlines may not be funded. A portion of the CCE budget includes federal funding that must be obligated by June 2024 and liquidated by December 2026. The exact timeline for obligation and liquidation of funds for each funded project will be provided in the grant award announcement. Applicants that are not awarded initially will be provided TA for resubmission, subject to the availability of funds.

2.6. APPEALS

California law does not provide a protest or appeal process against award decisions made through an informal selection method. Applicants submitting a response to this RFA may not protest or appeal the award. All award decisions made by DHCS and CDSS shall be final. Applicants for CCE funds that fail to be awarded initially will be provided TA for resubmission, subject to the availability of funds.

Part Three: Program Requirements

3.1. ELIGIBILITY CRITERIA

Eligible applicants for BHCIP Launch Ready and CCE funds include counties, cities, tribal entities (including 638s and urban clinics), nonprofit organizations, for-profit organizations, and other private organizations, including private real estate developers, whose projects reflect the State Priorities. Each of these entities may apply independently or may apply jointly with another eligible entity as a co-applicant. Co-applicants can include multi-county projects. As allowed or required by context, “applicant” shall be interpreted to include any of the foregoing entities, as well as that entity’s nonprofit or for-profit corporation co-applicant. Upon receiving an award of funds, the eligible applicant and any co-applicant(s) will, both individually and collectively, be referred to as the “grantee” for purposes of this RFA.

Applicants are encouraged to apply for funding from both programs (BHCIP and CCE), as applicable. See Section 3.2 for examples.

Applicants may submit applications with a variety of partners to encourage innovative, comprehensive local and regional approaches. For applicants with partners, including co-applicants, all proposed partners must submit letters of commitment with the application. The required match will be determined by the types of applicants. If a private organization has a collaboration with a county, for example, the project qualifies for the county match amount, as long as supporting documentation is submitted.

Proposed BHCIP Launch Ready projects need to expand community capacity for serving the behavioral health (mental health and substance use disorder [SUD]) population and must make a

commitment to serve Medi-Cal beneficiaries. Under CCE, projects need to expand capacity in residential care settings that serve seniors and adults with disabilities who require long-term care supports, with priority for people experiencing or at risk of homelessness who are applicants or recipients of SSI/SSP or CAPI benefits.

Private organizations that do not have prior experience must apply with a partner. These private organizations (including real estate developers) without related prior experience that are collaborating with nonprofit organizations, tribal entities, cities, or counties may apply, with the requirement that the private organization must have

- A Memorandum of Understanding (MOU) or other agreement with the nonprofit organization, tribal entity, city, or county to confirm the private organization's role in the project, including that they are working on behalf of the service provider, and
- Related prior experience, reflected in the successful development, ownership, or operation of a relevant project for individuals who qualify as members of the target population.

3.2. ELIGIBLE USES

Eligible facility types for BHCIP Launch Ready projects must expand the community continuum of behavioral health treatment resources to build new capacity or expand existing capacity for short-term crisis stabilization, acute and sub-acute care, crisis residential, community-based mental health residential, SUD residential, peer respite, mobile crisis, community and outpatient behavioral health services, and other clinically enriched longer-term treatment and rehabilitation options for persons with behavioral health disorders in an appropriate and least restrictive and least costly setting.

Eligible settings for CCE include residential settings that expand the long-term care continuum and serve the target population, including but not limited to licensed adult and senior care facilities, recuperative or respite care settings, and independent residential settings. Facilities funded by regional centers are not eligible for CCE funds.

Applicants will be expected to define the types of facilities or settings they will operate and populations they will serve. Evaluation criteria will be used by the state to ensure that a given project is serving its target population in line with the State Priorities. In addition, all applicants must share data to demonstrate project need. This may include, for example, a local county/tribal/provider needs assessment, a facility wait list, the number of comparable facilities in the area, or other quantifiable documentation. Applicants will be required to demonstrate how the proposed project will advance racial equity and will be required to certify that they will not exclude populations, including those who are justice involved, unless required by state law. In addition, BHCIP-funded behavioral health facilities, as applicable, must provide Medi-Cal behavioral health services and will be expected to have in place a contract with their county to ensure the provision of Medi-Cal services once the funded facility's expansion or construction is complete.

Applicants are encouraged to think broadly about how BHCIP and CCE funds together can be maximized to design person-centered projects based on the needs and gaps within their local

systems of care, coupled with the state’s priorities. The following are examples of projects that could apply for both programs:

- An adult residential facility (ARF) applies for CCE funding to make the facility Americans with Disabilities Act (ADA) accessible and expand capacity to serve additional SSI/SSP or CAPI applicants and recipients. The provider also applies for BHCIP funds to add a day treatment, clubhouse, or peer-run/peer-operated center on their property.
- A residential care facility for the elderly (RCFE) applies for CCE funds to add additional beds to serve individuals who are experiencing homelessness and applies for BHCIP funds to add a behavioral health outpatient office within their network for their Medi-Cal population.
- A behavioral health crisis residential facility applies for BHCIP funding to expand facility capacity and CCE funding to create a residential setting that provides step-down residential support services for SSI/SSP or CAPI applicants and recipients at risk of homelessness.

The following facility types and subcategories may be considered for project funding through BHCIP or CCE, separately or together.

Outpatient Services (includes a variety of settings delivering clinical support services, but not overnight residential services)		
	BHCIP	CCE
Community wellness centers (including those that are youth focused)	x	
Hospital-based outpatient treatment (outpatient detoxification/withdrawal management)	x	
Intensive outpatient treatment	x	
Narcotic Treatment Programs (NTPs)	x	
NTP medication units	x	
Office-based outpatient treatment	x	
Sobering centers (funded under DMC-ODS and/or Community Supports)	x	

Residential Clinical Programs (includes a variety of settings primarily focused on delivering clinical services; also provide shelter and support, from overnight to many days, weeks, and months)		
	BHCIP	CCE
Acute inpatient hospitals—medical detoxification/withdrawal management (medically managed inpatient detoxification/withdrawal management facility)	x	
Acute psychiatric inpatient facilities	x	
Adolescent residential treatment facilities for SUD	x	
Adult residential treatment facilities for SUD	x	
Chemical dependency recovery hospitals	x	
Children’s crisis residential programs (CCRPs)	x	

Community treatment facilities (CTFs)	x	
Crisis stabilization units (CSUs)	x	
General acute care hospitals (GACHs) and acute care hospitals (ACHs)	x	
Mental health rehabilitation centers (MHRCs)	x	
Psychiatric health facilities (PHFs)	x	
Short-term residential therapeutic programs (STRTPs)	x	
Skilled nursing facilities with special treatment programs (SNFs/STPs)	x	
Social rehabilitation facilities (SRFs)	x	

Residential Support Programs (BHCIP-funded facilities listed here are primarily focused on shelter and support services, from overnight to many months; funded facilities are required to serve Medi-Cal recipients. CCE will fund adult and senior care settings to provide care and support to seniors and adults with disabilities.)

	BHCIP	CCE
Peer respite	x	x
Recovery residence/sober living homes	x	x
Adult residential facilities (ARFs)		x
Residential care facilities for the elderly (RCFEs)		x
Permanent Supportive Housing that serves the needs of seniors and adults with disabilities (including models that provide site-based care, such as Program for All Inclusive Care for the Elderly [PACE] and the Assisted Living Waiver programs)		x
Other residential care settings that serve the target population, including recuperative care sites		x

Facility types that are not eligible for funding:

- Correctional settings
- Schools
- Facilities funded by regional centers (CCE only)

3.3. MATCH

Applicants will be required to provide matching funds as part of the project. Match requirements are set according to applicant type.

- Tribal entities = 5% match
- Counties, cities, and nonprofit providers = 10% match
- For-profit providers and/or private organizations = 25% match

In order to incentivize local partnerships while also helping to expedite projects, for-profit providers who partner with tribes, counties, cities, or nonprofit providers will be eligible for the lower match. For example, a sole proprietor operating a small ARF that has partnered with a county will have a match requirement of 10%.

Match in the form of cash and in-kind contributions—such as land or existing structures—to the real costs of the project will be allowed for both BHCIP and CCE. The state must approve the match source. Cash may come from

- [American Rescue Plan Act \(ARPA\)](#) funds granted to counties and cities,
- Local funding,
- [Mental Health Services Act \(MHSA\)](#) funds in the 3-year plan (considered “other local”),
- [Opioid Settlement Funds](#) for SUD facilities (BHCIP only),
- Foundation/philanthropic support,
- Loans or investments, or
- Other.

Real property in the form of publicly or privately owned or donated land and/or buildings owned may count as match. Examples include

- Unused city or county buildings,
- Buildings originally intended for another purpose,
- Surplus land,
- State property, and
- Land trust.

Services will not be allowed as match.

3.4. GENERAL PROGRAM REQUIREMENTS

To be eligible to receive funding, projects must meet the following requirements as they relate to the applicant and project types. Refer to Section 3.5 for additional information on eligible pre-development funding.

Site control: Applicant has clear control of the property to be acquired or rehabilitated, as evidenced by one of the following:

- Clear title with no encumbrances or limitations that would preclude the proposed use (fee title);
- Existing long-term lease for the required use restriction period, with provisions to make improvements on the property;
- A leasehold estate held by a tribal entity in federal tribal trust lands property, or a valid sublease thereof that has been or will be approved by the Bureau of Indian Affairs;
- Fully executed option to purchase, sales contract, or other enforceable agreement to acquire the property;
- A letter of intent (LOI) that outlines the terms of a sale or lease contract, providing that a fully executed option will be completed within 60 days; or
- Fully executed option to lease, or similar binding commitment from property owner to agree to a long-term lease for the required use restriction period.

Permits

- Applicant documents understanding of approvals and permitting needed, and the capacity to obtain these approvals and permits, as evidenced by both of the following:
 - Providing detailed information regarding the site of the proposed capital project, including zoning, land use limitations, permissible “as of right” uses, and any approvals or variances that may be required and
 - Including a list of the approvals and permits required to complete the project as described in the construction plan (below), along with the sequences of these approvals and permits.
- Applicant commits to making initial required applications within 60 days of award, as applicable.

Licensure/certification

- Applicant provides documentation of all required certifications/licenses, including but not limited to those required by the appropriate department under CalHHS.
- For applicable projects that cannot be licensed/certified by the state and/or local level until they are completed, applicant will demonstrate that they understand the applicable licensing/certification timelines and requirements. Tribal entities that are exempt from state licensing and/or requirements must describe the basis for their exemption and their plan for meeting programmatic requirements. As part of the TA that will be made available, applicants may receive information and guidance about the licensure and certification process.

Preliminary construction plans for proposed project, such as

- Site plan (if applicable);
- Architectural drawings, blueprints, and/or other renderings;
- If no construction plan is yet in place, a valid cost estimate from an architect, licensed general contractor, or engineer.

Acquisition and/or construction timeline

- Acquisition should begin within approximately 6 months of award. Development must begin immediately after acquisition and be completed within the approved timeline. Applicant should provide a timeline from a licensed general contractor or construction manager to illustrate how this will be achieved.
- Applications for projects that can start sooner may be rated higher.

Capacity to meet match requirements (see Section 3.3)

Approval and engagement

- Organizational support is indicated by a letter from the CEO and/or board, county board of supervisors, or tribal council resolution, as applicable.

- Applicant provides documentation of active community engagement and support, particularly with people with lived experience. Insights from the community should be included in project planning, design, implementation, and evaluation. Examples may include survey results, notes taken during stakeholder engagement sessions, etc.
- **BHCIP Launch Ready only:** City, nonprofit, or private applicants must include a letter of support from their county behavioral health agency or, if a tribal facility, the tribal board at the time of application or within the grant decision period.
 - The letter must indicate that BHCIP grantees that operate Medi-Cal behavioral health services will have in place a contract with their county to ensure the provision of Medi-Cal services once the financed facility's expansion or construction is complete.

Service use restriction

Applicants will be required to commit to a service use restriction as follows:

- BHCIP: Commitments to provision of services and building use restriction for entire 30-year period.
- CCE: Commitments to provision of services and building use restriction for 30 years for new facilities and a 20-year use restriction for capacity expansion for an existing building.

3.5. Pre-DEVELOPMENT (CCE ONLY)

Prospective applicants that demonstrate viable projects via the pre-application consultation with real estate TA from the grant administrator or its Community Development Financial Institution (CDFI) partners may have the opportunity to apply for pre-development costs within the RFA using CCE funds only.

Examples may include but are not limited to:

- Hiring a development team (lawyer, architect, owner's representative or construction manager)
- Physical needs assessment
- Feasibility study
- Site plan
- Environmental survey (Phase 1 & 2 reports)
- Schematic and construction drawing and architectural plans
- Construction cost estimates
- Preliminary engineering/dry utilities
- Stakeholder coordination
- Preliminary development budgets
- Basic underwriting

3.6. BUDGET DEVELOPMENT

Applicants are required to submit a budget with their BHCIP Launch Ready and CCE applications to assist DHCS/CDSS in establishing reasonableness of the final amount awarded. Applicants are encouraged to use the BHCIP Launch Ready and CCE budget templates in Attachment A (Form 1) to create a budget and will be asked to insert the budget figures as part of the online application process. All items budgeted must be inclusive of all costs, including taxes and fees, in U.S. dollars. If an applicant has a current Negotiated Indirect Costs Rate Agreement (NICRA) established with a federal cognizant agency responsible for reviewing, negotiating, and approving cost allocation plans or indirect cost proposals, then the applicant may use its current NICRA. Alternatively, if the applicant does not have a NICRA, the applicant may elect to use a rate of 10 percent of the modified total direct costs pursuant to 2 CFR 200.414(f).

3.7. CAPITALIZED OPERATING SUBSIDY RESERVE (COSR) (CCE)

CCE applicants may request a portion of their funds be used for a COSR. A COSR can be an essential component of development projects serving households with very low incomes. The COSR helps to ensure continued operations and long-term sustainability of capital projects like CCE. CCE projects wishing to use funds from the project development budget for a COSR will be required to create a Funding and Disbursement Agreement (FDA). The COSR can be used to cover operational costs associated with utilities, maintenance and repairs, taxes and insurance, and staff, among others. CCE COSR funds will be capitalized in the applicant's development budget, helping to mitigate risk among long-term project investors. A COSR is available for use for up to 5 years from the time operations in the new or expanded facility begin; future funding streams should be included in the project development budget, in the event that the facility carries an operating deficit after the 5-year CCE COSR timeframe ends.

3.8. ACCESSIBILITY AND NON-DISCRIMINATION

All developments shall adhere to the accessibility requirements set forth in California Building Code chapters 11A and 11B and the Americans with Disabilities Act, Title II. In addition, developments shall adhere to either the Uniform Federal Accessibility Standards (UFAS), 24 CFR Part 8, or the U.S. Department of Housing and Urban Development's (HUD) modified version of the 2010 ADA Standards for Accessible Design (Alternative 2010 ADAS), HUD-2014-0042-0001, 79 FR 29671 (5/27/14) (commonly referred to as "the Alternative Standards" or "HUD Deeming Memo"). Accessible units shall, to the maximum extent feasible and subject to reasonable health and safety requirements, be distributed throughout the project and be available in a sufficient range of sizes and amenities consistent with 24 CFR Part 8.26.

Grantees shall adopt a written non-discrimination policy requiring that no person shall, on the grounds of race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, familial status, source of income, disability, age, medical condition, genetic information, citizenship, primary language, immigration status (except where explicitly prohibited by federal law), justice system involvement (except where explicitly required by law), or arbitrary characteristics, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity funded in whole or in part with program funds made available pursuant to this RFA. Nor shall all other

classes of individuals protected from discrimination under federal or state fair housing laws, individuals perceived to be a member of any of the preceding classes, or any individual or person associated with any of the preceding classes be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity funded in whole or in part with program funds made available pursuant to this RFA.

Grantees shall comply with the requirements of the Americans with Disabilities Act of 1990, the Fair Housing Amendments Act, the California Fair Employment and Housing Act, the Unruh Civil Rights Act, Government Code Section 11135, Section 504 of the Rehabilitation Act of 1973, and all regulations promulgated pursuant to those statutes, including 24 CFR Part 100, 24 CFR Part 8, and 28 CFR Part 35.

3.9. STATE & FEDERAL PREVAILING WAGE

A project funded by a BHCIP or CCE grant is a “public work” if the applicant intends to use the BHCIP and/or CCE funds for the “[c]onstruction, alteration, demolition, installation, or repair” of a building or structure (Cal. Lab. Code section 1720(a); Cal. Lab. Code section 1750(b)(1)). Applicants using BHCIP and/or CCE grants to fund public works are subject to California’s prevailing wage and working hours laws (Division 2, Part 7, Chapter 1 of the California Labor Code) and the applicant’s project is subject to compliance monitoring and enforcement by the Department of Industrial Relations (Cal. Lab. Code section 1771.4(a)(1)).

If DHCS or CDSS selects an applicant to receive a BHCIP and/or CCE grant and the applicant is using the grant to fund a public work, then the applicant shall submit a Certification of Compliance to the awarding department (i.e., DHCS or CDSS) certifying that the applicant shall comply with California’s prevailing wage and working hours laws (including posting job notices, as required by Labor Code section 1771(a)(2)) and all applicable federal prevailing wage laws. The Certification of Compliance shall also state that the applicant shall maintain its labor records in compliance with all applicable state and federal laws (Cal. Lab. Code section 1776), and shall make all labor records available to the Department of Industrial Relations, and any other applicable enforcement agencies upon request (Cal. Lab. Code section 1771.4(a)(3)). The Certification of Compliance shall be signed by the general contractor(s) and the applicant.

If DHCS or CDSS selects an applicant to receive a BHCIP and/or CCE grant and the applicant is not using the grant to fund a public work, then the applicant shall submit a Certification of Inapplicability to the awarding department (i.e., DHCS or CDSS) explaining why the project is not a public work as defined by California Labor Code section 1720. The Certification of Inapplicability shall be signed by the general contractor(s) and the applicant.

An applicant shall not receive the BHCIP and/or CCE funds from the awarding department (i.e., DHCS or CDSS) until the awarding department has received and approved the applicant’s Certification of Inapplicability or Certification of Compliance.

3.10. EXEMPTIONS

In accordance with California Welfare and Institutions Code sections 5960.3 and 18997.97(1), projects funded by a BHCIP or a CCE grant are

1. Deemed to be consistent with and in conformity with any applicable local plan, standard, or requirement;
2. Deemed to be allowed as a permitted use within the zone in which the structure is located; and
3. Not subject to a conditional use permit, discretionary permit, or to any other discretionary reviews or approvals.

3.11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EXEMPTION (BHCIP ONLY)

CEQA shall not apply to a project funded by BHCIP if that project meets the requirements outlined in California Welfare and Institutions Code section 5960.3(b). Applicants shall determine if they meet the requirements outlined in section 5960.3(b) to qualify for the exemption from CEQA. And, in accordance with section 5960.3(c), if an applicant determines that it qualifies for the exemption from CEQA, then the applicant shall file a Notice of Exemption with the Office of Planning and Research and the clerk of the county in which the project is located in the manner specified in subdivisions (b) and (c) of section 21152 of the Public Resources Code, and the applicant shall provide DHCS with a copy of the filed Notice of Exemption. If the applicant determines that CEQA applies to its project, the applicant shall provide DHCS with copies of all appropriate documentation demonstrating the project's compliance with CEQA once the applicant has received project approval.

DHCS is not responsible for determining if applicants meet the CEQA exemption requirements set forth in section 5960.3(b). Furthermore, DHCS is not responsible for filing a section 5960.3(c) notice of exemption on behalf of an applicant.

3.12. LOW-RENT HOUSING PROJECT EXEMPTION

In accordance with California Welfare and Institutions Code sections 5960.35(b)(1) and 18999.98, a project funded with a BHCIP or a CCE grant shall not be considered a "low-rent housing project," as defined in Section 1 of Article XXXIV of the California Constitution, if the project meets any one of the following criteria:

1. The project is privately owned housing, receiving no ad valorem property tax exemption, other than exemptions granted pursuant to subdivision (f) or (g) of Section 214 of the Revenue and Taxation Code, not fully reimbursed to all taxing entities, and not more than 49 percent of the dwellings, apartments, or other living accommodations of the project may be occupied by persons of low income;
2. The project is privately owned housing, is not exempt from ad valorem taxation by reason of any public ownership, and is not financed with direct long-term financing from a public body;
3. The project is intended for owner-occupancy, which may include a limited-equity housing cooperative as defined in Section 50076.5 of the Health and Safety Code, or cooperative or condominium ownership, rather than for rental-occupancy;

4. The project consists of newly constructed, privately owned, one-to-four-family dwellings not located on adjoining sites;
5. The project consists of existing dwelling units leased by the state public body from the private owner of these dwelling units;
6. The project consists of the rehabilitation, reconstruction, improvement or addition to, or replacement of, dwelling units of a previously existing low-rent housing project, or a project previously or currently occupied by lower-income households, as defined in Section 50079.5 of the Health and Safety Code; or
7. The project consists of the acquisition, rehabilitation, reconstruction, improvement, or any combination thereof, of a project which, prior to the date of the transaction to acquire, rehabilitate, reconstruct, improve, or any combination thereof, was subject to a contract for federal or state public body assistance for the purpose of providing affordable housing for low-income households and maintains, or enters into, a contract for federal or state public body assistance for the purpose of providing affordable housing for low-income households.

If a project funded with a BHCIP or CCE grant is a “low-income housing project” as defined by Section 1 of Article XXXIV of the California Constitution but does not meet any of the criteria listed above, then the applicant shall comply with the requirements set forth in that section of the California Constitution.

Part Four: Program Operations

4.1. PROGRAM OVERSIGHT AND REPORTING

As specified by DHCS or CDSS and upon request, grantees shall provide progress reports in connection with the approved timeline, statement of work (SOW), and budget and any updates to the timeline for completion of the project. The progress reports should include the project’s completion milestones and any updates or substantial changes. Grantees shall promptly notify DHCS or CDSS of any changes in grantee organization, authorization, or capacity. This information will be outlined in the Standard Agreement.

Grantees are required to meet BHCIP Launch Ready, CCE program, and other state and federal reporting, financial, and administrative requirements, as well as submit required reporting data through an online grantee data portal. Reporting requirements will include quarterly reports and a final report, along with an annual BHCIP Launch Ready or CCE Program and Expenditure Report for 5 years following Standard Agreement execution. The annual report will be due no later than January 31 for the prior calendar year of January 1 to December 31. The reports and data entered in the grantee data portal shall be in such form and contain such information as required by DHCS or CDSS, as appropriate, in its sole and absolute discretion. Funding will be contingent upon provision of submission of data and reporting. These requirements will be fully detailed upon award.

In addition to the foregoing, each grantee shall submit to DHCS or CDSS such periodic reports, updates, and information as deemed necessary by DHCS or CDSS to monitor compliance and/or

perform program evaluation. Any requested data or information shall be submitted in electronic format in a format provided by DHCS or CDSS.

Additional reporting requirements may be required by DHCS and CDSS for up to 30 years after completion of project construction.

4.2. DISBURSEMENT OF GRANT FUNDS

The Standard Agreement will set forth the general conditions for disbursement. Once the Standard Agreement between the applicant and Horne is fully executed, an initial payment will be issued directly to the applicant to begin development activities. Subsequent funding will be released following the verified completion of project milestones and deliverables and the submission of required documentation and reports. More details regarding the funding and disbursement process will be provided upon award.

Grantees will be responsible for submitting invoices and ensuring expenses are allowable and have sufficient backup documentation. Grantees shall ensure that the expenditure of BHCIP Launch Ready or CCE program funds is consistent with the requirements of the relevant program.

The BHCIP Launch Ready and CCE program teams will monitor the expenditures to ensure they comply with this RFA and may conduct desk or site audits. The teams may also request the repayment of funds or pursue any other remedies available, at law or in equity, for failure to comply with program requirements.

Part Five: Attachments

Attachment A: Application

Form 1: Budget template

Form 2: Budget narrative and definition of terms

Form 3: Schematic design checklist

Form 4: Design/acquisition/construction milestone schedule

Form 5: Development team description/contact form

Form 6: Community engagement form

Form 7: Applicant's certification

Attachment B: Pre-Application Consultation Process



05-21-2024

County of Santa Barbara, Department of Behavioral Wellness
315 Camino Del Remedio
Santa Barbara, CA 93110
Project: Casa Omega – Tecolote House

Dear County of Santa Barbara, Department of Behavioral Wellness:

Community Care Expansion (CCE) Program Grant - Award Augmentation Notification

The purpose of this letter is to inform you that the California Department of Social Services (CDSS) has approved an additional \$42,095 to County of Santa Barbara, Department of Behavioral Wellness for the Community Care Expansion (CCE) Capital Expansion grant award for CCE-2378566416.

On October 13, 2022, CDSS notified you that up to \$1,001,338 was reserved for County of Santa Barbara, Department of Behavioral Wellness for the CCE Capital Expansion grant award based on the application package you submitted for the project named above. This additional \$42,095 has been reserved for your project due to adjustment of developer fee costs relevant to executing the Program Funding Agreement. A total of up to \$1,043,433 has been reserved for your project for your CCE Capital Expansion grant award.

HORNE, the CCE administrative entity, will share important details related to your project award augmentation. Please continue to work with your grant coordinator to submit any required documentation relevant to this award augmentation.

Thank you for the time and effort you put into the application process, as well as your commitment to helping improve residential care settings to serve seniors and adults with disabilities in your community. CDSS values our partnership and looks forward to working with you. If you have any questions, please contact your assigned HORNE Grant Coordinator.

Sincerely,

A handwritten signature in blue ink that reads "Julie McQuitty".

Julie McQuitty
Chief, Program Policy and Quality Assurance Branch
Housing and Homelessness Division
California Department of Social Services