

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter County) and **Tetra Tech, Inc.** with an address at **290 Valley Station Dr Suite 102, Buellton, CA 93427** (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and County agrees to accept the services specified herein.

WHEREAS, CONTRACTOR represents that it is specially trained, skilled, experienced, and competent to perform the special services required by County and County desires to retain the services of CONTRACTOR pursuant to the terms, covenants, and conditions herein set forth;

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. DESIGNATED REPRESENTATIVE

Jesus Hernandez at phone number **805-803-8797** is the representative of County and will administer this Agreement for and on behalf of County. **Jason Fussel** at phone number **805-542-8630** is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party. The designated County representative may also be referred to herein as the "Contract Administrator."

2. NOTICES

Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by personal delivery or facsimile, or with postage prepaid by first class mail, registered or certified mail, or express courier service, as follows:

To County: **Jesus Hernandez, Public Works, 620 W Foster Road, Santa Maria, CA, 93455, 805-803-8797, jehernan@countyofsb.org**
To CONTRACTOR: **Jason Fussel, Tetra Tech, Inc., 290 Valley Station Dr Suite 102, Buellton, CA 93427, 805-542-8630, Jason.fussel@tetrattech.com**

or at such other address or to such other person that the parties may from time to time designate in accordance with this Notices section. If sent by first class mail, notices and consents under this section shall be deemed to be received five (5) days following their deposit in the U.S. mail. This Notices section shall not be construed as meaning that either party agrees to service of process except as required by applicable law.

3. SCOPE OF SERVICES

CONTRACTOR agrees to provide services to County in accordance with Exhibit A attached hereto and incorporated herein by reference.

4. PERFORMANCE PERIOD

- A. CONTRACTOR shall commence performance on **03/05/2024** and end performance upon completion, but no later than **06/30/2027** unless otherwise directed by County or unless earlier terminated.
- B. The Director of Public Works, or designee, may extend the period of performance of this Agreement for up to a period of one year by giving written notice of extension to CONTRACTOR.

5. COMPENSATION OF CONTRACTOR

In full consideration for CONTRACTOR's services, CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of Exhibit B attached hereto and incorporated herein by reference. Billing shall be made by invoice, which shall include the contract number assigned by County and which is delivered to the address given in Clause 2 "NOTICES" above following completion of the increments identified on Exhibit B. Unless otherwise specified on Exhibit B, payment shall be net thirty (30) days from presentation of invoice.

6. INDEPENDENT CONTRACTOR

It is mutually understood and agreed that CONTRACTOR (including any and all of its officers, agents, and employees), shall perform all of its services under this Agreement as an independent CONTRACTOR as to County and not as an officer, agent, servant, employee, joint venturer, partner, or associate of County.

Furthermore, County shall have no right to control, supervise, or direct the manner or method by which CONTRACTOR shall perform its work and function. However, County shall retain the right to administer this Agreement so as to verify that CONTRACTOR is performing its obligations in accordance with the terms and conditions hereof. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a County employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure. CONTRACTOR shall be solely liable and responsible for providing to, or on behalf of, its employees all legally-required employee benefits. In addition, CONTRACTOR shall be solely responsible and save County harmless from all matters relating to payment of CONTRACTOR's employees, including compliance with Social Security withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, CONTRACTOR may be providing services to others unrelated to the County or to this Agreement.

7. STANDARD OF PERFORMANCE

CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to County pursuant to this Agreement, shall be prepared in a manner consistent with the standards normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at County's request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. DEBARMENT AND SUSPENSION MANDATORY DISCLOSURE

- A. CONTRACTOR's signature affixed herein shall constitute a certification under penalty of perjury under the laws of the State of California, that CONTRACTOR has complied with Title 2 CFR, Part 180, "OMB Guidelines to Agencies on Government wide Debarment and Suspension (nonprocurement)", which certifies that he/she or any person associated therewith in the capacity of owner, partner, director, officer, or manager, is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal agency within the past three (3) years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years. Any exceptions to this certification must be disclosed to County.
- B. Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining CONTRACTOR responsibility. Disclosures must indicate to whom exceptions apply, initiating agency, and dates of action.
- C. Exceptions to the Federal Government Excluded Parties List System maintained by the General Services Administration are to be determined by the Federal Highway Administration.
- D. CONTRACTOR's signature affixed herein shall constitute a certification under penalty of perjury under the laws of the State of California, which certifies that CONTRACTOR or any person associated therewith in the capacity of owner, partner, director, officer, or manager, is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility for participation in any state or local government agency contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

9. TAXES

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. 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.

10. CONFLICT OF INTEREST

- A. CONTRACTOR shall disclose in writing any financial, business, or other relationship with County that may have an impact upon the outcome of this Agreement, or any ensuing County construction project.

CONTRACTOR shall also list current clients who may have a financial interest in the outcome of this Agreement, or any ensuing County construction project, which will follow.

- B. CONTRACTOR hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this Agreement.
- C. Any subcontract entered into as a result of this Agreement, shall contain all of the provisions of this Section.
- D. CONTRACTOR hereby certifies that neither CONTRACTOR, its employees, nor any firm affiliated with CONTRACTOR providing services on this project prepared the Plans, Specifications, and Estimate for any construction project included within this Agreement. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.
- E. CONTRACTOR further certifies that neither CONTRACTOR, nor any firm affiliated with CONTRACTOR, will bid on any construction subcontracts included within the construction contract. Additionally, CONTRACTOR certifies that no person working under this Agreement is also employed by the construction CONTRACTOR for any project included within this Agreement.
- F. Except for subcontractor whose services are limited to materials testing, no subcontractor who is providing service on this Agreement shall have provided services on the design of any project included within this Agreement.

11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

County shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, all photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials, and any material necessary for the practical use of such items, from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any of such items to other parties except after prior written approval of County.

Unless otherwise specified in Exhibit A, CONTRACTOR hereby assigns to County all copyright, patent, and other intellectual property and proprietary rights to all data, documents, reports, photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials prepared or provided by CONTRACTOR pursuant to this Agreement (collectively referred to as "Copyrightable Works and Inventions"). County shall have the unrestricted authority to copy, adapt, perform, display, publish, disclose, distribute, create derivative works from, and otherwise use in whole or in part, any Copyrightable Works and Inventions. CONTRACTOR agrees to take such actions and execute and deliver such documents as may be needed to validate, protect and confirm the rights and assignments provided hereunder. CONTRACTOR warrants that any Copyrightable Works and Inventions and other items provided under this Agreement will not infringe upon any intellectual property or proprietary rights of any third party. CONTRACTOR at its own expense shall defend, indemnify, and hold harmless County against any claim that any Copyrightable Works or Inventions or other items provided by CONTRACTOR hereunder infringe upon intellectual or other proprietary rights of a third party, and CONTRACTOR shall pay any damages, costs, settlement amounts, and fees (including attorneys' fees) that may be incurred by County in connection with any such claims. This Ownership of Documents and Intellectual Property provision shall survive expiration or termination of this Agreement.

12. NO PUBLICITY OR ENDORSEMENT

CONTRACTOR shall not use County's name or logo or any variation of such name or logo in any publicity, advertising or promotional materials. CONTRACTOR shall not use County's name or logo in any manner that would give the appearance that the County is endorsing CONTRACTOR. CONTRACTOR shall not in any way contract on behalf of or in the name of County. CONTRACTOR shall not release any informational pamphlets, notices, press releases, research reports, or similar public notices concerning the County or its projects, without obtaining the prior written approval of County.

13. COUNTY PROPERTY AND INFORMATION

All of County's property, documents, and information provided for CONTRACTOR's use in connection with the services shall remain County's property, and CONTRACTOR shall return any such items whenever requested by County and whenever required according to the Termination section of this Agreement. CONTRACTOR may use such items only in connection with providing the services. CONTRACTOR shall not disseminate any County property, documents, or information without County's prior written consent.

14. RECORDS, AUDIT, AND REVIEW

CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting principles. County shall have the right to audit and review all such documents and records at any time during CONTRACTOR's regular business hours or upon reasonable notice. In addition, if this Agreement exceeds ten thousand dollars (\$10,000.00), CONTRACTOR shall be subject to the examination and audit of the California State Auditor, at the request of the County or as part of any audit of the County, for a period of three (3) years after final payment under the Agreement and records for real property and equipment acquired with federal funds must be retained for three (3) years after final disposition (Cal. Govt. Code Section 8546.7). CONTRACTOR shall participate in any audits and reviews, whether by County or the State, at no charge to County.

If federal, state or County audit exceptions are made relating to this Agreement, CONTRACTOR shall reimburse all costs incurred by federal, state, and/or County governments associated with defending against the audit exceptions or performing any audits or follow-up audits, including but not limited to: audit fees, court costs, attorneys' fees based upon a reasonable hourly amount for attorneys in the community, travel costs, penalty assessments and all other costs of whatever nature. Immediately upon notification from County, CONTRACTOR shall reimburse the amount of the audit exceptions and any other related costs directly to County as specified by County in the notification.

15. INDEMNIFICATION AND INSURANCE

CONTRACTOR agrees to the indemnification and insurance provisions as set forth in Exhibit C attached hereto and incorporated herein by reference.

16. NONDISCRIMINATION

- A. CONTRACTOR shall permit access by representatives of the Department of Fair Employment and Housing and the COUNTY upon reasonable notice at any time during the normal business hours, but in no case less than twenty-four (24) hours' notice, to such of its books, records, accounts, and all other sources of information and its facilities as said Department or COUNTY shall require to ascertain compliance with this clause.
- B. CONTRACTOR 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.
- C. CONTRACTOR shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this AGREEMENT
- D. County hereby notifies CONTRACTOR that County's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement 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.
- E. **Statement of Compliance California:**
 - 1) CONTRACTOR's signature affixed herein, and dated, shall constitute a certification under penalty of perjury under the laws of the State of California that CONTRACTOR has, unless exempt, complied with, the nondiscrimination program requirements of Government Code Section 12990 and Title 2, California Administrative Code, Section 8103.
 - 2) During the performance of this Agreement, CONTRACTOR 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 unlawfully discriminate, harass, or allow harassment 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. CONTRACTOR and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment.
 - 3) CONTRACTOR and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 et seq.), the applicable regulations promulgated there under (2 CCR §11000 et seq.), the provisions of Gov. Code §§11135-11139.5, and the regulations or standards adopted by COUNTY to implement such article. The applicable regulations of the Fair Employment and Housing

Commission implementing Gov. Code §12990 (a-f), set forth 2 CCR §§8100-8504, are incorporated into this AGREEMENT by reference and made a part hereof as if set forth in full

F. Federal Assurances:

- 1) The CONTRACTOR, with regard to the work performed under this AGREEMENT, shall act in accordance with Title VI of the Civil Rights Act of 1964 (42 U.S.C. §2000d et seq.). Title VI provides that the recipients of federal assistance will implement and maintain a policy of nondiscrimination in which no person in the United States shall, on the basis of race, color, national origin, religion, sex, age, disability, be excluded from participation in, denied the benefits of or subject to discrimination under any program or activity by the recipients of federal assistance or their assignees and successors in interest.
- 2) The CONTRACTOR shall comply with regulations relative to non-discrimination in federally-assisted programs of the U.S. Department of Transportation (49 CFR Part 21 - Effectuation of Title VI of the Civil Rights Act of 1964). Specifically, the CONTRACTOR shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR §21.5, including employment practices and the selection and retention of Subcontractors.
- 3) CONTRACTOR, subrecipient or subcontractor will never exclude any person from participation in, deny any person the benefits of, or otherwise discriminate against anyone in connection with the award and performance of any contract covered by 49 CFR 26 on the basis of race, color, sex, or national origin. In administering the COUNTY components of the DBE Program Plan, CONTRACTOR, subrecipient or subcontractor will not, directly, or through contractual or other arrangements, use criteria or methods of administration that have the effect of defeating or substantially impairing accomplishment of the objectives of the DBE Program Plan with respect to individuals of a particular race, color, sex, or national origin.
- 4) Solicitations for subcontractors, including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by CONTRACTOR for work to be performed under the subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by CONTRACTOR of CONTRACTOR's obligations under this Agreement, and the Regulations relative to nondiscrimination on the grounds of race, religion, color, sex, age or national origin.
- 5) Information and Reports: CONTRACTOR shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by COUNTY to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to COUNTY, and shall set forth what efforts it has made to obtain the information.
- 6) Sanctions for Noncompliance: In the event of CONTRACTOR's noncompliance with the nondiscrimination provisions of this Agreement, COUNTY shall impose such contract sanctions as it may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to CONTRACTOR under this Agreement until CONTRACTOR complies,
 - b. and/or Cancellation, termination or suspension of the Agreement in whole or in part.

G. Pertinent Non-Discrimination Authorities: During the performance of this contract, the CONTRACTOR, for itself, its assignees, and successors in interest (hereinafter referred to as the "CONTRACTOR") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- 1) Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- 2) The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- 3) Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- 4) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- 5) The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- 6) Airport and Airway Improvement Act of 1982, (49 USC § 4 71, Section 4 7123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- 7) The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and CONTRACTORS, whether such programs or activities are Federally funded or not);
- 8) Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in

the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;

- 9) The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- 10) Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- 11) Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100); and
- 12) Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

17. NONEXCLUSIVE AGREEMENT

CONTRACTOR understands that this is not an exclusive Agreement and that County shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the County desires.

18. NON-ASSIGNMENT

CONTRACTOR shall not assign, transfer or subcontract this Agreement or any of its rights or obligations under this Agreement without the prior written consent of County and any attempt to so assign, subcontract or transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

19. TERMINATION

- A. By County. County may, by written notice to CONTRACTOR, terminate this Agreement 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 the obligations herein.
 - 1) **For Convenience**. County may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by County, wind down and cease its services 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 services.
 - 2) **For Nonappropriation of Funds**. Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or County governments, or funds are not otherwise available for payments 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 Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement 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 Agreement or materially breach any of its provisions, County may, at County's sole option, terminate or suspend this Agreement in whole or in part by written notice. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify County as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise.
- B. By CONTRACTOR. Should County fail to pay CONTRACTOR all or any part of the payment set forth in Exhibit B, CONTRACTOR may, at CONTRACTOR's option terminate this Agreement if such failure is not remedied by County within thirty (30) days of written notice to County of such late payment.
- C. 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 Agreement, 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 Agreement, County shall pay CONTRACTOR for satisfactory services performed to 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 full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to County such financial information as in the judgment of County is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of County shall be final. The foregoing is cumulative and shall not affect any right or remedy which County may have in law or equity.

20. SECTION HEADINGS

The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

21. SEVERABILITY

If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, 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 Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

22. REMEDIES NOT EXCLUSIVE

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.

23. TIME IS OF THE ESSENCE

Time is of the essence in this Agreement and each covenant and term is a condition herein.

24. NO WAIVER OF DEFAULT

No delay or omission of County to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to County shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of County.

25. ENTIRE AGREEMENT AND AMENDMENT

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties 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. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their 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.

26. SUCCESSORS AND ASSIGNS

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

27. COMPLIANCE WITH LAW

CONTRACTOR shall, at its sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether County is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and County.

28. CALIFORNIA LAW AND JURISDICTION

This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

29. EXECUTION OF COUNTERPARTS

This Agreement may be executed 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. AUTHORITY

All signatories and parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

31. SURVIVAL

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

32. PRECEDENCE

In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

33. HANDLING OF PROPRIETARY INFORMATION

CONTRACTOR understands and agrees that certain materials which may be provided by County may be classified and conspicuously labeled as proprietary confidential information. That material is to be subject to the following special provisions:

- A. All reasonable steps will be taken to prevent disclosure of the material to any person except those personnel of CONTRACTOR working on the project who have a need to use the material.
- B. Upon conclusion of CONTRACTOR's work, CONTRACTOR shall return all copies of the material direct to party providing such material. CONTRACTOR shall contact County to obtain the name of the specific party authorized to receive the material.

34. IMMATERIAL AMENDMENTS

CONTRACTOR and County agree that immaterial amendments to this Agreement such as time frame and mutually agreeable work program changes which will not result in a change to the total Agreement amount or to the scope of the Statement of Work may be authorized by the Public Works Director, or designee, in writing, and will not constitute an amendment to the Agreement.

35. NEWS RELEASES/INTERVIEWS

CONTRACTOR agrees for itself, its agents, employees, and subcontractors, it will not communicate with representatives of the communications media concerning the subject matter of this Agreement without prior written approval of the County Agency Contact Person. CONTRACTOR further agrees that all media requests for communication will be referred to County's responsible personnel.

36. FEDERAL AND STATE PREVAILING WAGE RATES

As applicable:

- A. CONTRACTOR shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the work.
- B. Any subcontract entered into as a result of this Agreement shall contain all of the provisions of this Article.
- C. When prevailing wages apply to the services described in the scope of work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See <http://www.dir.ca.gov>.
- D. No CONTRACTOR or subcontractor may be listed on a bid proposal 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; and this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

E. Payroll Records

1. As Each CONTRACTOR and Subcontractor shall keep accurate certified payroll records and supporting documents as mandated by Labor Code §1776 and as defined in 8 CCR §16000 showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by the CONTRACTOR or Subcontractor in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:
 - i. The information contained in the payroll record is true and correct.
 - ii. The employer has complied with the requirements of Labor Code §1771, §1811, and §1815 for any work performed by his or her employees on the public works project.
2. The payroll records enumerated under paragraph (1) above shall be certified as correct by the CONTRACTOR under penalty of perjury. The payroll records and all supporting documents shall be made available for inspection and copying by COUNTY representatives at all reasonable hours at the principal office of the CONTRACTOR. The CONTRACTOR shall provide copies of certified payrolls or permit inspection of its records as follows:
 - i. The payroll records enumerated under paragraph (1) above shall be certified as correct by the CONTRACTOR under penalty of perjury. The payroll records and all supporting documents shall be made available for inspection and copying by COUNTY representatives at all reasonable hours at the principal office of the CONTRACTOR. The CONTRACTOR shall provide copies of certified payrolls or permit inspection of its records as follows:
 - ii. A certified copy of all payroll records enumerated in paragraph (1) above, shall be made available for inspection or furnished upon request to a representative of COUNTY, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations. Certified payrolls submitted to COUNTY, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards shall not be altered or obliterated by the CONTRACTOR.
 - iii. The public shall not be given access to certified payroll records by the CONTRACTOR. The CONTRACTOR is required to forward any requests for certified payrolls to the COUNTY Contract Administrator by both email and regular mail on the business day following receipt of the request.
3. Each CONTRACTOR shall submit a certified copy of the records enumerated in paragraph (1) above, to the entity that requested the records within ten (10) calendar days after receipt of a written request.
4. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by COUNTY shall be marked or obliterated in such a manner as to prevent disclosure of each individual's name, address, and social security number. The name and address of the CONTRACTOR or Subcontractor performing the work shall not be marked or obliterated.
5. The CONTRACTOR shall inform COUNTY of the location of the records enumerated under paragraph (1) above, including the street address, city and county, and shall, within five (5) working days, provide a notice of a change of location and address.
6. The CONTRACTOR or Subcontractor shall have ten (10) calendar days in which to comply subsequent to receipt of written notice requesting the records enumerated in paragraph (1) above. In the event the CONTRACTOR or Subcontractor fails to comply within the ten (10) day period, he or she shall, as a penalty to COUNTY, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Such penalties shall be withheld by COUNTY from payments then due. CONTRACTOR is not subject to a penalty assessment pursuant to this section due to the failure of a Subcontractor to comply with this section.

F. When prevailing wage rates apply, the CONTRACTOR is responsible for verifying compliance with certified payroll requirements. Invoice payment will not be made until the invoice is approved by the COUNTY Contract Administrator.

G. Penalty

1. The CONTRACTOR and any of its Subcontractors shall comply with Labor Code §1774 and §1775. Pursuant to Labor Code §1775, the CONTRACTOR and any Subcontractor shall forfeit to the COUNTY a penalty of not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of DIR for the work or craft in which the worker is employed for any public work done under the AGREEMENT by the CONTRACTOR or by its Subcontractor in violation of the requirements of the Labor Code and in particular, Labor Code

§§1770 to 1780, inclusive.

2. The amount of this forfeiture shall be determined by the Labor Commissioner and shall be based on consideration of mistake, inadvertence, or neglect of the CONTRACTOR or Subcontractor in failing to pay the correct rate of prevailing wages, or the previous record of the CONTRACTOR or Subcontractor in meeting their respective prevailing wage obligations, or the willful failure by the CONTRACTOR or Subcontractor to pay the correct rates of prevailing wages. A mistake, inadvertence, or neglect in failing to pay the correct rates of prevailing wages is not excusable if the CONTRACTOR or Subcontractor had knowledge of the obligations under the Labor Code. The CONTRACTOR is responsible for paying the appropriate rate, including any escalations that take place during the term of the AGREEMENT.
3. In addition to the penalty and pursuant to Labor Code §1775, the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the CONTRACTOR or Subcontractor.
4. If a worker employed by a Subcontractor on a public works project is not paid the general prevailing per diem wages by the Subcontractor, the prime CONTRACTOR of the project is not liable for the penalties described above unless the prime CONTRACTOR had knowledge of that failure of the Subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime CONTRACTOR fails to comply with all of the following requirements:
 - a. The AGREEMENT executed between the CONTRACTOR and the Subcontractor for the performance of work on public works projects shall include a copy of the requirements in Labor Code §§ 1771, 1775, 1776, 1777.5, 1813, and 1815.
 - b. The CONTRACTOR shall monitor the payment of the specified general prevailing rate of per diem wages by the Subcontractor to the employees by periodic review of the certified payroll records of the Subcontractor.
 - c. Upon becoming aware of the Subcontractor's failure to pay the specified prevailing rate of wages to the Subcontractor's workers, the CONTRACTOR shall diligently take corrective action to halt or rectify the failure, including but not limited to, retaining sufficient funds due the Subcontractor for work performed on the public works project.
 - d. Prior to making final payment to the Subcontractor for work performed on the public works project, the CONTRACTOR shall obtain an affidavit signed under penalty of perjury from the Subcontractor that the Subcontractor had paid the specified general prevailing rate of per diem wages to the Subcontractor's employees on the public works project and any amounts due pursuant to Labor Code §1813.
5. Pursuant to Labor Code §1775, COUNTY shall notify the CONTRACTOR on a public works project within fifteen (15) calendar days of receipt of a complaint that a Subcontractor has failed to pay workers the general prevailing rate of per diem wages.
6. If COUNTY determines that employees of a Subcontractor were not paid the general prevailing rate of per diem wages and if COUNTY did not retain sufficient money under the AGREEMENT to pay those employees the balance of wages owed under the general prevailing rate of per diem wages, the CONTRACTOR shall withhold an amount of moneys due the Subcontractor sufficient to pay those employees the general prevailing rate of per diem wages if requested by COUNTY.

H. Hours of Labor

Eight (8) hours labor constitutes a legal day's work. The CONTRACTOR shall forfeit, as a penalty to the COUNTY, twenty-five dollars (\$25) for each worker employed in the execution of the AGREEMENT by the CONTRACTOR or any of its Subcontractors for each calendar day during which such worker 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 in violation of the provisions of the Labor Code, and in particular §§1810 to 1815 thereof, inclusive, except that work performed by employees in excess of eight (8) hours per day, and forty (40) hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day and forty (40) hours in any week, at not less than one and one-half (1.5) times the basic rate of pay, as provided in §1815.

I. Employment of Apprentices

1. Where either the prime AGREEMENT or the subagreement exceeds thirty thousand dollars (\$30,000), the CONTRACTOR and any subcontractors under him or her shall comply with all applicable requirements of Labor Code §§ 1777.5, 1777.6 and 1777.7 in the employment of apprentices.
2. CONTRACTORS and subcontractors are required to comply with all Labor Code requirements regarding the employment of apprentices, including mandatory ratios of journey level to apprentice workers. Prior to commencement of work, CONTRACTOR and subcontractors are advised to contact the DIR Division of Apprenticeship Standards website at <https://www.dir.ca.gov/das/>, for additional information regarding the employment of apprentices and for the specific journey-to- apprentice ratios

for the AGREEMENT work. The CONTRACTOR is responsible for all subcontractors' compliance with these requirements. Penalties are specified in Labor Code §1777.7.

37. COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS

- A. CONTRACTOR agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the allowable cost(s) of individual items.
- B. CONTRACTOR also agrees to comply with federal procedures in accordance with 2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Super or Omni Circular)
- C. Any costs for which payment has been made to CONTRACTOR that are determined by subsequent audit to be unallowable under applicable Federal Regulations, are subject to repayment by CONTRACTOR to County.
- D. When a CONTRACTOR or Subcontractor is a Non-Profit Organization or an Institution of Higher Education, the Cost Principles for Title 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards shall apply.”
- E. All subcontracts shall contain the above provisions.

38. SUBCONTRACTING

- A. Nothing contained in this Agreement or otherwise, shall create any contractual relation between County and any subcontractor(s), and no subcontract shall relieve CONTRACTOR of its responsibilities and obligations hereunder. CONTRACTOR agrees to be as fully responsible to County for the acts and omissions of its subcontractor(s) and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by CONTRACTOR. CONTRACTOR's obligation to pay its subcontractor(s) is an independent obligation from County's obligation to make payments to the CONTRACTOR.
- B. CONTRACTOR shall perform the work contemplated with resources available within its own organization and no portion of the work pertinent to this Agreement shall be subcontracted without written authorization by County's designated representative, except that, which is expressly identified in the approved Cost Proposal.
- C. CONTRACTOR shall pay its subcontractors within ten (10) calendar days from receipt of each payment made to CONTRACTOR by County.
- D. Any subcontract entered into as a result of this Agreement shall contain all the provisions stipulated in this Agreement to be applicable to subcontractors.
- E. Any substitution of subcontractor(s) must be approved in writing by County's designated representative prior to the start of work by the subcontractor(s).
- F. Prompt Progress Payment
CONTRACTOR or subcontractor shall pay to any subcontractor, not later than fifteen (15) days after receipt of each progress payment, unless otherwise agreed to in writing, the respective amounts allowed CONTRACTOR on account of the work performed by the subcontractors, to the extent of each subcontractor's interest therein. In the event that there is a good faith dispute over all or any portion of the amount due on a progress payment from CONTRACTOR or subcontractor to a subcontractor, CONTRACTOR or subcontractor may withhold no more than 150 percent of the disputed amount. Any violation of this requirement shall constitute a cause for disciplinary action and shall subject the licensee to a penalty, payable to the subcontractor, of 2 percent of the amount due per month for every month that payment is not made.

In any action for the collection of funds wrongfully withheld, the prevailing party shall be entitled to his or her attorney's fees and costs. The sanctions authorized under this requirement shall be separate from, and in addition to, all other remedies, either civil, administrative, or criminal. This clause applies to both DBE and non-DBE subcontractors.

- G. Prompt Payment of Withheld Funds to Subcontractors
No retainage will be held by the County from progress payments due to CONTRACTOR.

CONTRACTORS and subcontractors are prohibited from holding retainage from subcontractors. Any delay or postponement of payment may take place only for good cause and with the COUNTY's prior written approval. Any violation of these provisions shall subject the violating CONTRACTOR or subcontractor to the penalties, sanctions, and other remedies specified in Section 3321 of the California Civil Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies, otherwise available to CONTRACTOR or subcontractor in the event of a dispute involving late payment or nonpayment by CONTRACTOR, deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

39. SUBCONTRACTORS

CONTRACTOR is authorized to subcontract with **Filippin Engineering** as identified in Attachment D (Proposal). CONTRACTOR shall be fully responsible for all services performed by its subcontractor. CONTRACTOR shall secure from its subcontractor all rights for County in this Agreement, including audit rights. CONTRACTOR shall ensure subcontractor's compliance with California Labor Code, including but not limited to the payment of prevailing wage when required.

40. EQUIPMENT PURCHASES

- A. Prior authorization in writing, by County's designated representative shall be required before CONTRACTOR enters into any unbudgeted purchase order, or subcontract exceeding \$5,000 for supplies, equipment, or CONTRACTOR services. CONTRACTOR shall provide an evaluation of the necessity or desirability of incurring such costs.
- B. For purchase of any item, service, or consulting work not covered in CONTRACTOR's Cost Proposal and exceeding \$5,000 prior authorization by County's designated representative; three competitive quotations must be submitted with the request, or the absence of bidding must be adequately justified.

Any equipment purchased as a result of this Agreement is subject to the following: "CONTRACTOR shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs replacement and is sold or traded in, County shall receive a proper refund or credit at the conclusion of the Agreement, or if the Agreement is terminated, CONTRACTOR may either keep the equipment and credit County in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established County procedures; and credit County in an amount equal to the sales price. If CONTRACTOR elects to keep the equipment, fair market value shall be determined at CONTRACTOR's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by County and CONTRACTOR, if it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by County."

- C. All subcontracts shall contain the above provisions.

41. AUDIT REVIEW PROCEDURES

- A. Any dispute concerning a question of fact arising under an interim or post audit of this Agreement that is not disposed of by agreement, shall be reviewed by County's Deputy Director - Finance and Administration for Public Works.
- B. Not later than 30 days after issuance of the final audit report, CONTRACTOR may request a review by County's Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.
- C. Neither the pendency of a dispute nor its consideration by County will excuse CONTRACTOR from full and timely performance, in accordance with the terms of this Agreement.
- D. CONTRACTOR and subcontractor Agreements, including cost proposals and Indirect Cost Rates (ICR), may be subject to audits or reviews such as, but not limited to, an Agreement audit, an incurred cost audit, an ICR Audit, or a CPA ICR audit work paper review. If selected for audit or review, the Agreement, cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is CONTRACTOR's responsibility to ensure federal, County, or local government officials are allowed full access to the CPA's work papers including making copies as necessary. The Agreement, cost proposal, and ICR shall be adjusted by CONTRACTOR and approved by County to conform to the audit or review recommendations. CONTRACTOR agrees that individual terms of costs identified in the audit report shall be

incorporated into the Agreement by this reference if directed by County at its sole discretion. Refusal by CONTRACTOR to incorporate audit or review recommendations, or to ensure that the federal, County or local governments have access to CPA work papers, will be considered a breach of Agreement terms and cause for termination of the Agreement and disallowance of prior reimbursed costs.

E. CONTRACTOR's Cost Proposal may be subject to a CPA ICR Audit Work Paper Review and/or audit by the Independent Office of Audits and Investigations (IOAI). IOAI, at its sole discretion, may review and/or audit and approve the CPA ICR documentation. The Cost Proposal shall be adjusted by the CONTRACTOR and approved by the County to conform to the Work Paper Review recommendations included in the management letter or audit recommendations included in the audit report. Refusal by the CONTRACTOR to incorporate the Work Paper Review recommendations included in the management letter or audit recommendations included in the audit report will be considered a breach of the Agreement terms and cause for termination of the Agreement and disallowance of prior reimbursed costs.

- 1) During IOAI's review of the ICR audit work papers created by the CONTRACTOR's independent CPA, IOAI will work with the CPA and/or CONTRACTOR toward a resolution of issues that arise during the review. Each party agrees to use its best efforts to resolve any audit disputes in a timely manner. If IOAI identifies significant issues during the review and is unable to issue a cognizant approval letter, County will reimburse the CONTRACTOR at an accepted ICR until a FAR (Federal Acquisition Regulation) compliant ICR {e.g. 48 CFR Part 31; GAGAS (Generally Accepted Auditing Standards); CAS (Cost Accounting Standards), if applicable; in accordance with procedures and guidelines of the American Association of State Highways and Transportation Officials (AASHTO) Audit Guide and other applicable procedures and guidelines is received and approved by IOAI.

Accepted rates will be as follows:

- a. If the proposed rate is less than one hundred fifty percent (150%) - the accepted rate reimbursed will be ninety percent (90%) of the proposed rate.
 - b. If the proposed rate is between one hundred fifty percent (150%) and two hundred percent (200%) -the accepted rate will be eighty-five percent (85%) of the proposed rate.
 - c. If the proposed rate is greater than two hundred percent (200%) - the accepted rate will be seventy-five percent (75%) of the proposed rate.
- 2) If IOAI is unable to issue a cognizant letter per paragraph E.1. above, IOAI may require CONTRACTOR to submit a revised independent CPA-audited ICR and audit report within three (3) months of the effective date of the management letter. IOAI will then have up to six (6) months to review the CONTRACTOR's and/or the independent CPA's revisions.
 - 3) If the CONTRACTOR fails to comply with the provisions of this paragraph E, or if IOAI is still unable to issue a cognizant approval letter after the revised independent CPA audited ICR is submitted, overhead cost reimbursement will be limited to the accepted ICR that was established upon initial rejection of the ICR and set forth in paragraph E.1. above for all rendered services. In this event, this accepted ICR will become the actual and final ICR for reimbursement purposes under this Agreement.
 - 4) CONTRACTOR may submit to County final invoice only when all of the following items have occurred: (1) IOAI accepts or adjusts the original or revised independent CPA audited ICR; (2) all work under this Agreement has been completed to the satisfaction of County; and, (3) IOAI has issued its final ICR review letter. The CONTRACTOR MUST SUBMIT ITS FINAL INVOICE TO COUNTY no later than sixty (60) calendar days after occurrence of the last of these items. The accepted ICR will apply to this Agreement and all other agreements executed between County and the CONTRACTOR, either as a prime or subcontractor, with the same fiscal period ICR.

42. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION

CONTRACTOR warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration, either promised or paid to any County employee. For breach or violation of this warranty, County shall have the right in its discretion; to terminate the Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the Agreement price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

43. PROHIBITION OF EXPENDING COUNTY, STATE, OR FEDERAL FUNDS FOR LOBBYING

A. CONTRACTOR certifies to the best of his or her knowledge and belief that:

- 1) No state, federal or County appropriated funds have been paid, or will be paid by-or-on behalf of CONTRACTOR to any person for influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or

employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the awarding of any state or federal contract; the making of any state or federal grant; the making of any state or federal loan; the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.

- 2) If any funds other than federal appropriated funds have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this federal contract, grant, loan, or cooperative agreement; CONTRACTOR shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- C. CONTRACTOR also agrees by signing this document that he or she shall require that the language of this certification be included in all lower-tier subcontracts which exceed \$100,000, and that all such sub recipients shall certify and disclose accordingly.

44. CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT.

CONTRACTOR shall comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and pursuant to the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). The CONTRACTOR shall promptly disclose, in writing, to the County office, to the Federal Awarding Agency, and to the Regional Office of the Environmental Protection Agency (EPA), whenever, in connection with the award, performance, or closeout of this Agreement or any subcontract thereunder, the CONTRACTOR has credible evidence that a principal, employee, agent, or subcontractor of the CONTRACTOR has committed a violation of the Clean Air Act (42 U.S.C. 7401-7671q.) or the Federal Water Pollution Control Act (33 U.S.C. 1251-1387).

45. PROCUREMENT OF RECOVERED MATERIALS

CONTRACTOR must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

46. SUSPENSION FOR CONVENIENCE

County may without cause, order CONTRACTOR in writing to suspend, delay, or interrupt the services under this Agreement in whole or in part for up to 90 days. County shall incur no liability for suspension under this provision and suspension shall not constitute a breach of this Agreement.

47. DISADVANTAGE BUSINESS ENTERPRISE REQUIREMENTS

CONTRACTOR must submit Local Assistance Procedures Manual Exhibit 9-F, 'Disadvantaged Business Enterprise (DBE) Running Tally of Payments,' no later than the 10th day of the following month after submitting an invoice for reimbursement. Form must also be emailed to Business.Support.Unit@dot.ca.gov.

- A. CONTRACTOR or subcontractor shall take necessary and reasonable steps to ensure that DBEs have opportunities to participate in the contract (49 CFR 26). To ensure equal participation of DBEs provided in 49 CFR 26.5, The COUNTY shows a contract goal for DBEs. CONTRACTOR shall make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

CONTRACTOR shall meet the DBE goal shown elsewhere in this Agreement or demonstrate that they made adequate good faith efforts to meet this goal. It is CONTRACTOR's responsibility to verify at date of proposal opening that the DBE firm is certified as a DBE by using the California Unified Certification Program

(CUPC) database and possess the most specific available North American Industry Classification System (NAICA) codes or work code applicable to the type of work the firm will perform on the contract. Additionally, the CONTRACTOR is responsible to document the verification record by printing out the CUCP date for each firm. A list of DBEs certified by the CUCP can be found at <https://ucp.dot.ca.gov/index2.jsp>.

All DBE participation will count toward the California Department of Transportation's federally mandated statewide overall DBE goal. Credit for materials or supplies CONTRACTOR purchases from DBEs counts towards the goal in the following manner:

- 100 percent counts if the materials or supplies are obtained from a DBE manufacturer.
- 60 percent counts if the materials or supplies are purchased from a DBE regular dealer.
- Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer nor regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

This AGREEMENT is subject to 49 CFR Part 26 entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs". CONTRACTORS who enter into a federally-funded agreement will assist the COUNTY in a good faith effort to achieve California's statewide overall DBE goal.

B. The goal for DBE participation for this AGREEMENT is 11%. Participation by DBE CONTRACTOR or subcontractors shall be in accordance with information contained in Exhibit 10-O2: CONTRACTOR Contract DBE Commitment attached hereto and incorporated as part of the AGREEMENT. If a DBE subcontractor is unable to perform, CONTRACTOR must make a good faith effort to replace him/her with another DBE subcontractor, if the goal is not otherwise met.

C. CONTRACTOR can meet the DBE participation goal by either documenting commitments to DBEs to meet the AGREEMENT goal, or by documenting adequate good faith efforts to meet the AGREEMENT goal. An adequate good faith effort means that the CONTRACTOR must show that it took all necessary and reasonable steps to achieve a DBE goal that, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to meet the DBE goal. If CONTRACTOR has not met the DBE goal, complete and submit Exhibit 15-H: DBE Information – Good Faith Efforts to document efforts to meet the goal. Refer to 49 CFR Part 26 for guidance regarding evaluation of good faith efforts to meet the DBE goal.

D. Contract Assurance

Under 49 CFR 26.13(b):

CONTRACTOR or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. CONTRACTOR shall carry out applicable requirements of 49 CFR 26 in the award and administration of federal-aid contracts.

Failure by the CONTRACTOR to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying CONTRACTOR from future proposing as non-responsible

E. Termination and Substitution of DBE Subcontractors

CONTRACTOR shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless CONTRACTOR obtains the COUNTY's written consent. CONTRACTOR shall not terminate or substitute a listed DBE for convenience and perform the work with their own forces or obtain materials from other sources without authorization from the COUNTY. Unless the COUNTY's consent is provided, the CONTRACTOR

shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE on the Exhibit 10-02 CONTRACTOR Contract DBE Commitment form, included in the Bid.

CONTRACTOR may request to use other forces or sources of materials if CONTRACTOR shows any of the following justifications:

1. Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.
2. The COUNTY stipulated that a bond is a condition of executing the subcontract and the listed DBE fails to meet the COUNTY's bond requirements.
3. Work requires a Professional license and listed DBE does not have a valid license under CONTRACTORs License Law.
4. Listed DBE fails or refuses to perform the work or furnish the listed materials (failing or refusing to perform is not an allowable reason to remove a DBE if the failure or refusal is a result of bad faith or discrimination).
5. Listed DBE's work is unsatisfactory and not in compliance with the contract.
6. Listed DBE is ineligible to work on the project because of suspension or debarment.
7. Listed DBE becomes bankrupt or insolvent.
8. Listed DBE voluntarily withdraws with written notice from the Contract
9. Listed DBE is ineligible to receive credit for the type of work required.
10. Listed DBE owner dies or becomes disabled resulting in the inability to perform the work on the Contract.
11. The COUNTY determines other documented good cause.

CONTRACTOR shall notify the original DBE of the intent to use other forces or material sources and provide the reasons and provide the DBE with 5 days to respond to the notice and advise CONTRACTOR and the COUNTY of the reasons why the use of other forces or sources of materials should not occur.

CONTRACTOR's request to use other forces or material sources must include:

1. One or more of the reasons listed in the preceding paragraph.
2. Notices from CONTRACTOR to the DBE regarding the request.
3. Notices from the DBEs to CONTRACTOR regarding the request.

If a listed DBE is terminated or substituted, CONTRACTOR must make good faith efforts to find another DBE to substitute for the original DBE. The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet or exceed the DBE goal.

F. Commitment and Utilization

The COUNTY's DBE program includes a monitoring and enforcement mechanism to ensure that DBE commitments reconcile to DBE utilization.

The CONTRACTOR shall:

1. Notify the COUNTY's contract administrator or designated representative of any changes to its anticipated DBE participation
2. Provide this notification before starting the affected work
3. Maintain records including:
 - Name and business address of each 1st-tier subcontractor

- Name and business address of each DBE subcontractor, DBE vendor, and DBE trucking company, regardless of tier
- Date of payment and total amount paid to each business (see Exhibit 9-F Monthly Disadvantaged Business Enterprise Payment)

If CONTRACTOR is a DBE CONTRACTOR, they shall include the date of work performed by their own forces and the corresponding value of the work.

If a DBE is decertified before completing its work, the DBE must notify CONTRACTOR in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify CONTRACTOR in writing of the certification date. CONTRACTOR shall submit the notifications to the COUNTY. On work completion, CONTRACTOR shall complete a Disadvantaged Business Enterprises (DBE) Certification Status Change, Exhibit 17-O, form and submit the form to the COUNTY within 30 days of contract acceptance.

Upon work completion, CONTRACTOR shall complete Exhibit 17-F Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors and submit it to the COUNTY within 90 days of contract acceptance. The COUNTY will withhold \$10,000 until the form is submitted. The COUNTY will release the withhold upon submission of the completed form.

The COUNTY's reports of DBE participation to Caltrans, include both commitments and attainments.

- G. A DBE is only eligible to be counted toward the AGREEMENT goal if it performs a commercially useful function (CUF) on the AGREEMENT, as set forth in 49 CFR § 26.55.
- J. CONTRACTOR shall maintain records of materials purchased or supplied from all subcontracts entered into with certified DBEs. The records shall show the name and business address of each DBE or vendor and the total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all firms. DBE CONTRACTOR's shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.
- K. If a DBE subcontractor is decertified during the life of the AGREEMENT, the decertified subcontractor shall notify CONTRACTOR in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the AGREEMENT, the subcontractor shall notify CONTRACTOR in writing with the date of certification. Any changes should be reported to COUNTY's Contract Administrator within thirty (30) calendar days.
- L. After submitting an invoice for reimbursement that includes a payment to a DBE, but no later than the 10th of the following month, the prime contractor shall complete and email the Exhibit 9- F: Disadvantaged Business Enterprise Running Tally of Payments to business.support.unit@dot.ca.gov with a copy to the Agency.
- M. Any subcontract entered into as a result of this AGREEMENT shall contain all of the provisions of this section.

48. FUNDING REQUIREMENTS

- A. It is mutually understood between the parties that this AGREEMENT may have been written before ascertaining the availability of funds or appropriation of funds, for the mutual benefit of both parties, in order to avoid program and fiscal delays that would occur if the AGREEMENT were executed after that determination was made.
- B. This AGREEMENT is valid and enforceable only if sufficient funds are made available to County for the purpose of this AGREEMENT. In addition, this AGREEMENT is subject to any additional restrictions, limitations, conditions, or any statute enacted by the Congress, State Legislature, or County governing board that may affect the provisions, terms, or funding of this AGREEMENT in any manner.
- C. It is mutually agreed that if sufficient funds are not appropriated, this AGREEMENT may be amended to reflect any reduction in funds.
- D. County has the option to terminate the AGREEMENT pursuant to Article VI Termination, or by mutual agreement to amend the AGREEMENT to reflect any reduction of funds.

49. SAFETY

- A. CONTRACTOR shall comply with OSHA regulations applicable to CONTRACTOR regarding necessary safety equipment or procedures. CONTRACTOR shall comply with safety instructions issued by COUNTY Safety Officer and other COUNTY representatives. CONTRACTOR personnel shall wear hard hats and safety vests at all times while working on the construction project site.
- B. Pursuant to the authority contained in Vehicle Code § 591, COUNTY has determined that such areas are within the limits of the project and are open to public traffic. CONTRACTOR shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. CONTRACTOR shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.
- C. CONTRACTOR must have a Division of Occupational Safety and Health (CAL-OSHA) permit(s), as outlined in Labor Code § 6500 and § 6705, prior to the initiation of any practices, work, method, operation, or process related to the construction or excavation of trenches which are five (5) feet or deeper.

50. NATIONAL LABOR RELATIONS BOARD CERTIFICATION

In accordance with Public Contract Code §10296, CONTRACTOR 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 CONTRACTOR within the immediately preceding two-year period, because of CONTRACTOR's failure to comply with an order of a federal court that orders CONTRACTOR to comply with an order of the National Labor Relations Board.

51. PROMPT PAYMENT FROM THE COUNTY TO CONTRACTOR

The County shall make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from CONTRACTOR on a professional service contract. If the County fails to pay promptly, the County shall pay interest to the CONTRACTOR, which accrues at the rate of 10 percent per annum on the principal amount of a money judgment remaining unsatisfied. Upon receipt of a payment request, the County shall act in accordance with both of the following:

- a. Each payment request shall be reviewed by the County as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

Any payment request determined not to be a proper payment request suitable for payment shall be returned to County as soon as practicable, but not later than seven (7) days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.

52. PROHIBITION ON CERTAIN TELECOMM PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

A. CONTRACTOR is prohibited from obligating or expending loan or grant funds to:

- i. Procure or obtain;
- ii. Extend or renew a contract to procure or obtain; or
- iii. Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

B. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

C. Telecommunications or video surveillance services provided by such entities or using such equipment.

- D. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- E. In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.
- F. See Public Law 115-232, section 889 for additional information.
- G. See also 2 CFR § 200.471.

53. DOMESTIC PREFERENCES FOR PROCUREMENTS

- A. As appropriate and to the extent consistent with law, the CONTRACTOR should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subcontractor agreements.
- B. For purposes of this section:
 - i. “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - ii. “Manufactured products” means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

54. TITLE VI ASSURANCES

APPENDICES of the TITLE VI ASSURANCES

CONTRACTOR shall comply with the following Appendices of the Title VI Assurances as shown below. CONTRACTOR must include any applicable Title VI Assurances in all subcontracts to perform work under the contract.

The clauses of Appendix B of this Assurance shall be included as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a COUNTY.

The clauses set forth in Appendix C and Appendix D of this Assurance shall be included as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the COUNTY with other parties:

- a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
- b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.

APPENDIX A

During the performance of this Agreement, the CONTRACTOR, for itself, its assignees and successors in interest (herein collectively referred to as CONTRACTOR agrees as follows:

- a. Compliance with Regulations: CONTRACTOR shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of

Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the REGULATIONS), which are herein incorporated by reference and made a part of this agreement.

- b. Nondiscrimination: CONTRACTOR, with regard to the work performed by it during the AGREEMENT, shall not discriminate on the grounds of race, color, sex, national origin, religion, age, or disability in the selection and retention of sub-applicants, including procurements of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.
- c. Solicitations for Sub-agreements, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by CONTRACTOR for work to be performed under a Sub-agreement, including procurements of materials or leases of equipment, each potential sub-applicant or supplier shall be notified by CONTRACTOR of the CONTRACTOR'S obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- d. Information and Reports: CONTRACTOR shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the recipient or FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the recipient or FHWA as appropriate, and shall set forth what efforts CONTRACTOR has made to obtain the information.
- e. Sanctions for Noncompliance: In the event of CONTRACTOR's noncompliance with the nondiscrimination provisions of this agreement, the recipient shall impose such agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - i. withholding of payments to CONTRACTOR under the Agreement within a reasonable period of time, not to exceed 90 days; and/or
 - ii. cancellation, termination or suspension of the Agreement, in whole or in part.
- f. Incorporation of Provisions: CONTRACTOR shall include the provisions of paragraphs (1) through (6) in every sub-agreement, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

CONTRACTOR shall take such action with respect to any sub-agreement or procurement as the recipient or FHWA 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 sub-applicant or supplier as a result of such direction, CONTRACTOR may request the recipient enter into such litigation to protect the interests of the State, and, in addition, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

APPENDIX B CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the recipient will accept title to the lands and maintain the project constructed thereon in accordance with Title 23 U.S.C., the regulations for the administration of the preceding statute, and the policies and procedures prescribed by the FHWA of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the recipient all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the recipient and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the recipient, its successors and assigns. The recipient, in consideration of the conveyance of said lands and interest in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the recipient will use the lands and interests in lands and interest in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said lands, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].* (*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the recipient pursuant to the provisions of Assurance 7(a):

- A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land" that:
 - 1) In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations(as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, the recipient will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*
- C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the recipient will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the recipient and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX D

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by the recipient pursuant to the provisions of Assurance 7(b):

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishings of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits or, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.) in the event of breach of any of the above of the above Non-discrimination covenants, the recipient will have the right to terminate the (license, permits, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, the recipient will there upon revert to and vest in and become the absolute property of the recipient and its assigns.

APPENDIX E

During the performance of this contract, the CONTRACTOR, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 C.F.R. Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), prohibits discrimination on the basis of sex;
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 C.F.R. Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and CONTRACTORS, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging

programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

CONTRACTOR SIGNATURE PAGE

Agreement for services and work to be performed by CONTRACTOR between the County and CONTRACTOR.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by County.

CONTRACTOR:

Jason Fussel, PE, PLS

Tetra Tech, Inc.

290 Valley Station Dr Suite 102

Buellton, CA 93427

License No.: 551555

Business Type: Corporation

Jason.fussel@tetratech.com

805-542-8630

By:



Authorized Representative

Date:

1/31/2024

COUNTY SIGNATURE PAGE

Agreement for services and work to be performed by CONTRACTOR between the County and CONTRACTOR.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by County.

ATTEST:

Mona Miyasato
County Executive Officer
Clerk of the Board

COUNTY OF SANTA BARBARA:

Steve Lavagnino

By: _____
Deputy Clerk

By: _____
Chair, Board of Supervisors

Date: _____

RECOMMENDED FOR APPROVAL:

Scott D. McGolpin
Director of Public Works

By: _____
Department Head

DocuSigned by:
Scott McGolpin
2C7CB1830C5741F...

Date: 2/21/2024 | 4:43 PM PST

APPROVED AS TO FORM:

Greg Milligan
Risk Manager

By: _____

DocuSigned by:
Greg Milligan
05F555F00269466...

APPROVED AS TO ACCOUNTING FORM:

Betsy M. Schaffer, CPA
Auditor-Controller

By: _____
Deputy

DocuSigned by:
Betsy M. Schaffer
6BAAEA15901943F...

APPROVED AS TO FORM:

Rachel Van Mullem
County Counsel

By: _____
Deputy County Counsel

DocuSigned by:
Rachel Van Mullem
5DB10F553F3444F...

Exhibit A – Statement of Work

Jason Fussel shall be the individual point of contact for providing all services hereunder. Contractor may not substitute other persons without the prior written approval of County’s designated Representative.

Work shall comply with the proposal dated October 18, 2023 and will occur pursuant to executed Task Orders.

Work shall be within the assigned maintenance Division of the County except as specified in the RFP and Exhibit B. The work includes Engineering services including but not limited to; site investigations and evaluation; conceptual planning; preliminary and final plans, specifications, and estimates; providing design support during construction; and developing as-built plans of transportation public works projects, as specified. The work does provide evaluation or discipline reports and is therefore A&E (Architecture & Engineering) service (Reference: California Government Code §4527.)

The Contractor assigned maintenance Division is: SANTA MARIA.



Suspension for Convenience: County may, without cause, order Contractor in writing to suspend, delay, or interrupt the services under this Agreement in whole or in part for up to 90 days. County shall incur no liability for suspension under this provision and suspension shall not constitute a breach of this Agreement.

SCOPE OF WORK AND PROJECT DELIVERABLES

1.1 DESCRIPTION OF WORK

Contractor will provide DESIGN Services as required for each Task Order and as so ordered by the Contract Manager, or Designee. Contractor shall maintain all required certifications to perform the work, namely a California Professional Civil Engineer in responsible charge. Contractor shall respond in a timely and cost-efficient manner to the County requests for DESIGN Services at any transportation project location throughout each assigned Maintenance Division within the County.

DESIGN Services may also include, but not be limited to: preparation of construction documents for transportation projects, provide environmental support services, assist in acquisition of various permits, perform land surveys, perform hydrology/hydraulic analysis, perform and provide geotechnical analysis/study reports, provide Plans, Specifications, and Estimate package, bid and construction support services and other services necessary to complete Task Orders in accordance with County directives on an as-needed basis. The scope of services will be defined by the Work Statement in the executed agreement and subsequent Task Orders. A general example is as follows:

WORK STATEMENT

Contractor agrees to provide County, including but not limited to, design services as needed. Work is to begin upon County and Contractor developing an estimate and schedule in a Task Order. Scope of work typically includes:

- a. Site Investigation/Evaluation/Analysis, Conceptual Planning
- b. Preliminary Design: Prepare benefit cost analysis, exhibits, and plans and estimates
- c. Prepare final design plans, specifications, and estimates
- d. Provide design support during construction phase, develop As-Built drawings

If the proposer is using subcontractors to perform certain work, no additional markup is allowed. The cost shown in the cost proposal for any test that a subcontractor may perform shall include any markups as resolved between the contractor and subcontractor.

This contract requires a DIR number issued by the California Department of Labor Relations for prevailing wage work.

1.2 TASKS AND DELIVERABLES

The scope of work will be broken down into the following tasks and associated deliverables:

1. Contract Management

- a. Manage, administer, and coordinate all work required
- b. Coordinate with and inform the Contract Manager of staffing, schedule and budget changes
- c. Submit timely and accurate invoices
- d. Project development meetings/coordination
- e. Public Outreach

2. Initiation and Review of Existing Data

- a. Meeting with Contract Manager and/or designees to identify environmental obstacles, review existing survey data/determine extents of topographic survey, discuss required studies/reports.
- b. Field review of project site with Contract Manager and/or designees.

3. Design Recommendation Report

- a. Summary Report of Recommended Design
- b. 35% Layout plans with existing utilities shown, vicinity map
- c. 35% Cost Estimate

4. 65% Plans and Cost Estimate

- a. Respond to County 35% Review Comments.

- b. A completed set of plans will be prepared, level of detail will be stated in Task Order (Level A, B or C):
 - i. Level A plans include: Title Sheet, Demolition Plan, Typical Sections, Layout, Profile, Superelevation, Construction Details, Drainage Plan and Details, Utility Plans, Construction Area Signs, Pavement Delineation sheets, Stage Construction, Right of Way, Cross Sections and Log of Test Boring sheets.
 - ii. Level B plans include: Title Sheet, Typical Sections, Layout, Profile, Construction Details
 - iii. Level C plans include: Sketch with conceptual plan and construction oversite
- c. 65% construction cost estimate with independent quantity check prior to submittal.

5. 95% Plans, Specifications and Estimate

- a. Respond to County 65% Review Comments.
- b. Prepare Project technical special provisions, based on Caltrans Standard Specifications
- c. 95% Plans with finalized proposed improvement plans after considering County comments and the project special provisions. Contractor will perform internal QA/QC review.
- d. 95% Cost Estimate using Caltrans Cost Data and local price index.

6. Final (100%) Plans, Specifications and Estimate

- a. Respond to County 95% Review Comments.
- b. Final Specification Comments
- c. Signed 100% Plans
- d. Technical Special Provisions
- e. Cost Estimate with DBE Analysis and Goal
- f. Design Calculations
- g. Quantity Calculations

1.3 STANDARDS

The Contractor must be knowledgeable of and adhere to the latest editions of pertinent standards of practice.

This includes, but is not limited to:

- All deliverables must be prepared in accordance with the current County of Santa Barbara Public Works Transportation Design Standards
- Current Caltrans Standard Specifications, Standard Plans, Local Assistance Procedure Manual (LAPM) and Land Surveying Manual
- All deliverables will comply with County, State, and Federal regulations
- All deliverables will be in English units
- All deliverables for Level A and B projects must be prepared using the latest version of Autodesk Civil 3D used by the County

1.4 PERSONNEL REQUIREMENTS

- Overview; The Contractor's personnel shall be capable, competent, and experienced in performing the types of work indicated in this RFP with minimal instruction and little to no supervision. Personnel skill level should match the job classifications as set forth below. The Contractor's personnel shall be knowledgeable about, and comply with, all applicable federal, state, and local laws and regulations. In location(s) where the Contractor personnel is expected to work for an extended period of time, the Contractor shall either relocate the personnel or make every effort to hire local persons at no additional cost to the County.
- Task Orders; Prior to preparing and issuing a Task Order, the County will discuss the availability of Contractor to fulfill the Design Services assignment based on input from the County. Once chosen, County will submit any applicable project documents to Contractor. Contractor confirms personnel by providing written communication that the Contractor is available for assignment.
- Additions or Substitutes; The Contractor is required to submit a written request and obtain the County's prior written approval for any substitutions or additions to the Contractor's originally proposed personnel

and project organization, as depicted on the proposed Contractor's Organization Chart or in the Contractor's cost proposal. Substitute personnel shall have the same job classification, meet or exceed the qualifications and experience level of the previously assigned personnel, and not exceed the billing rate so that no additional cost is incurred by the County. The substitute personnel shall have significant experience in the work involving similar transportation facilities for, at a minimum, two (2) previous projects, unless otherwise approved by the County.

The Contractor's personnel shall typically be assigned to and remain on Task Order until completion and acceptance of the project/deliverables by the County. After the County's approval of the Contractor's personnel and finalization of a Task Order, the Contractor may not add or substitute personnel without the County's prior written approval. Any substitute personnel shall meet the qualifications for performance of the work as demonstrated by a resume and copies of current certifications submitted by the Contractor.

Invoices with charges for personnel not pre-approved in writing by the County Contract Manager for work on the Contract and for each Task Order *shall not be reimbursed*. The removal or replacement of personnel without the written approval from the County shall be a material breach of the IDIQ agreement and may result in termination.

- Contractor Employee Leave; When assigned Contractor personnel are on approved leave and required by the County, the Contractor shall provide a substitute employee until the assigned employee returns to work from the approved leave. Substitute personnel shall be provided as described above.
- Training; The Contractor is responsible to provide fully trained personnel to efficiently perform the work. The Contractor's personnel may be asked to attend certain special training if recommended by the County. On such occasions, with written approval of the County, the County shall compensate the Contractor for the Contractor's actual cost for time spent in training only. All other costs, fees, and expenses associated with the training, or re-certification, including any transportation costs and training fees, shall be the Contractor's responsibility. In addition, services to train or re-certify the County personnel shall not be provided by the Contractor under this Contract.
- Job Classification: Contract Manager; Contractor shall provide a Contract Manager that will be responsible for the work under the IDIQ agreement. The Contractor Contract Manager shall perform, or ensure the performance of, the tasks described in the IDIQ agreement and subsequent Task Orders. In addition to other specified responsibilities, the Contractor Contract Manager shall be responsible for all matters related to the Contractor's personnel performing Design Services work, and Contractor's operations including, but not limited to:
 - Ensuring that deliverables are clearly defined and time-bound; and that the deliverables satisfy the County.
 - Supervising, reviewing, monitoring, training, and directing the Contractor's work.
 - Assigning qualified personnel to complete the required Task Order work as specified on an "as-needed" basis in coordination with the County Contract Manager.
 - Administering personnel actions for Contractor personnel and ensuring appropriate actions taken for personnel.
 - Maintaining and submitting organized project files for record tracking and auditing.
 - Developing, organizing, facilitating, and attending scheduled coordination meetings, and preparation and distribution of meeting minutes.
 - Implementing and maintaining quality control procedures to manage conflicts, insure product accuracy, and identify critical reviews and milestones.
 - Assuring that all applicable safety measures are in place.
 - Providing monthly invoices no later than 30 days after the end of the month the work occurred within and include total Task Order amount, amount billed to date under the Task Order to date, the Task Order balance as well as the same for the total contract value.
 - Reviewing invoices for accuracy and completion before billing to the County.
 - Managing overall budget for Contract and provide report to the County Contract Manager.
 - Monitoring and maintaining required DBE involvement documentation.
 - Ensuring compliance with the provisions in this Contract and all specific Task Order requirements.
 - Monitoring the health and safety of personnel working in a hazardous environment in accordance with all applicable federal, state, and local regulations.
 - Knowledge, experience, and familiarity with prevailing wage issues and requirements in state of

- California.
 - Managing and coordinating with sub-consultants as well as other stakeholders defined in the Task Order.
- Job Classification: Stamping Engineer in Responsible Charge. As required, shall be a Professional Engineer registered & licensed in the State of California, in good standing with the California State Board for Professional Engineers, Land Surveyors, and Geologists. The PE shall also have a documented minimum of 2 (two) years of experience in stamping plans, specifications, and estimates.
- Job Classification: Drafter, Designer, and other project personnel not identified on the Contractor's cost proposal, including, but not limited to, administrative office staff, shall also satisfy appropriate minimum qualifications identified herein or in each Task Order.

1.5 GENERAL REQUIREMENTS & TOOLS/MATERIALS

- Safety; Work shall not be performed when conditions prevent a safe and efficient operation. If such a condition exists Contractor agrees to immediately notify County.
- Overtime; The Contractor Contract Manager may direct the Contractor's employees to work overtime to meet Task Order schedules at Contractor's own expense. Otherwise, all overtime that will be submitted to County for payment shall be pre-approved and directed in writing by the County in the applicable Task Order or follow up written communication. County will only pay overtime to persons covered by the Fair Labor Standards Act.
- Costs; The County shall not incur costs beyond the funding commitments in each Task Order. If the Contractor anticipates that funding for work will be insufficient to complete work, the Contractor shall promptly notify the County in writing.

The Contractor may claim reimbursement for providing equipment or supplies. However, such claimed costs shall be in compliance with 48 Code of Federal Regulation (CFR), Chapter 1, Part 31 (Federal Acquisition Regulation - FAR cost principles) and 2 CFR, Part 200, and be consistent with the Contractor's company-wide allocation policies and charging practices with all clients including federal government, state governments, local agencies, and private clients.

- Cost Prohibitions; The County shall not reimburse the Contractor for costs to relocate its personnel to the service area. The County shall not reimburse the Contractor for per diem costs, unless preapproved by the County. The County shall not reimburse the Contractor for out-of-state travel without prior written approval from the County.
- Tools/Materials; Contractor shall provide all necessary tools, instruments, equipment, materials, supplies, and safety equipment required to perform the work identified in each Task Order and the agreement accurately, efficiently, and safely. The Contractor's personnel shall be fully trained in the use of such necessary tools, instruments, equipment, materials, supplies, and safety equipment. The Contractor shall not be reimbursed separately for tools of the trade.

Contractor shall have and provide adequate office equipment and supplies to complete the work required. Such equipment and supplies shall include, but not be limited to:

- Office Supplies.
- Calculators, computers with appropriate software, printers, plotters, fax machines, calculators, data collectors and their necessary attachments and accessories.
- Data processing systems, software packages, reference materials, construction survey equipment, or other tools, including hardware and software, used in providing transportation design deliverables.

If the Contractor fails to submit the work products, upon request by the County, the County shall have the right to withhold payment and/or terminate the Task Order or the IDIQ agreement in accordance with the termination

provisions. If the Contract is terminated, the Contractor shall, at the County's request, return all materials recovered or developed by the Contractor under the Contract including, but not limited to, photos, field notes, computer data files, maps, artifact collections, catalogs, estimates, office notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, products, data, manuals, details, deliverables, backup documents, other documents, and all other items produced under the Contract.

The County shall not pay the Contractor for the Contractor's work under the Contract and the charges incurred by the Contractor that does not conform to the requirements specified in the Contract and to the applicable Task Order, and such work shall be corrected at the Contractor's sole expense at no additional cost to the County.

Exhibit B – Payment Arrangements Specified Rates of Compensation

- A. CONTRACTOR will be reimbursed for hours worked at the hourly rates specified in CONTRACTOR's Cost Proposal, as described in this Exhibit. The specified hourly rates shall include direct salary costs, employee benefits, overhead, and fee. These rates are not adjustable for the performance period set forth in this Contract.
- B. In addition, CONTRACTOR will be reimbursed for incurred (actual) direct costs other than salary costs that are in the cost proposal and identified in the cost proposal and in the executed Task Order.
- C. Specific projects will be assigned to CONTRACTOR through issuance of Task Orders.
- D. After a project to be performed under this contract is identified by County, County will prepare a draft Task Order; less the cost estimate. A draft Task Order will identify the scope of services, expected results, project deliverables, period of performance, project schedule and will designate a County Project Coordinator. The draft Task Order will be delivered to CONTRACTOR for review. CONTRACTOR shall return the draft Task Order within ten (10) calendar days along with a Cost Estimate, including a written estimate of the number of hours and hourly rates per staff person, any anticipated reimbursable expenses, overhead, fee if any, and total dollar amount. After agreement has been reached on the negotiable items and total cost; the finalized Task Order shall be signed by both County and CONTRACTOR.
- E. Task Orders shall be negotiated for specific rates of compensation, which must be based on the labor and other rates set forth in CONTRACTOR's Cost Proposal.
- F. Reimbursement for transportation and subsistence costs shall not exceed the rates as specified in the approved Cost Proposal.
- G. When milestone cost estimates are included in the approved Cost Proposal, CONTRACTOR shall obtain prior written approval for a revised milestone cost estimate from the County designated representative before exceeding such estimate.
- H. Progress payments for each Task Order will be made monthly in arrears based on services provided and actual costs incurred.
- I. CONTRACTOR shall not commence performance of work or services until this contract has been approved by County, and notification to proceed has been issued by the County designated representative. No payment will be made prior to approval or for any work performed prior to approval of this contract.
- J. A Task Order is of no force or effect until returned to County and signed by an authorized representative of County. No expenditures are authorized on a project and work shall not commence until a Task Order for that project has been executed by County.
- K. CONTRACTOR will be reimbursed, as promptly as fiscal procedures will permit upon receipt by the County designated representative of itemized invoices. Separate invoices itemizing all costs are required for all work performed under each Task Order. Invoices shall be submitted no later than 45 calendar days after the performance of work for which CONTRACTOR is billing, or upon completion of the Task Order. Invoices shall detail the work performed on each milestone, on each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this contract number, project title and Task Order number. Credits due County that include any equipment purchased under the provisions of Section 11 Equipment Purchase of this contract, must be reimbursed by CONTRACTOR prior to the expiration or termination of this contract. Invoices shall be mailed to the County designated representative at the following address:

County of Santa Barbara
Jesus Hernandez
620 West Foster Road
Santa Maria, CA 93455

- A. The period of performance for Task Orders shall be in accordance with dates specified in the Task Order. No Task Order will be written which extends beyond the expiration date of this Contract.
- B. The total amount payable by County for an individual Task Order shall not exceed the amount agreed to in the Task Order, unless authorized by contract amendment.
- C. If the CONTRACTOR fails to satisfactorily complete a deliverable according to the schedule set forth in a Task Order, no payment will be made until the deliverable has been satisfactorily completed.
- D. Task Orders may not be used to amend this Agreement and may not exceed the scope of work under this Agreement.
- E. The total amount payable by County for all Task Orders resulting from this contract shall not exceed **\$1,000,000**. It is understood and agreed that there is no guarantee, either expressed or implied that this dollar amount will be authorized under this contract through Task Orders.
- F. All subcontracts shall contain the above provisions.

COUNTY OF SANTA BARBARA PUBLIC WORKS TRANSPORTATION;
DESIGN SERVICES

Cost Proposal

COST PROPOSAL

SPECIFIC RATE OF COMPENSATION (USE FOR ON-CALL OR AS-NEEDED CONTRACTS)

Note: Mark-ups are Not Allowed

Consultant Tetra Tech, Inc.

Prime Consultant

Subconsultant

Project No. Various Contract No. _____ Participation Amount % _____ Date 11/8/2023

For Combined Rate	Fringe Benefit 63.52% + General & Administrative 89.99%	=	Combined ICR 153.51%
OR			
For Home Office Rate	Fringe Benefit % + General & Administrative	=	Home Office ICR%
For Field Office Rate	Fringe Benefit % + General & Administrative %	=	Field Office ICR%
		=	Fee
		=	%

**COUNTY OF SANTA BARBARA PUBLIC WORKS TRANSPORTATION;
DESIGN SERVICES**

Cost Proposal

OFFICE STAFF

BILLING INFORMATION

CALCULATION INFORMATION

Name/Job Title/Classification ¹	Hourly Billing Rates ²			Effective Date of Hourly From	To	Actual or Avg. hourly rate ³	% or \$ increase	Hourly Range - for Classifications Only
	Straight ³	OT(1.5x)	OT(2x)					
CONTRACT MANAGER	\$302	\$302	\$302	01/01/2024	12/31/2024	\$101.23		Not Applicable
	\$318	\$318	\$318	01/01/2025	12/31/2025	\$106.56	5.0%	
	\$335	\$335	\$335	01/01/2026	12/31/2026	\$112.17	5.0%	
STAMPING ENGINEER IN RESPONSIBLE CHARGE	\$238	\$238	\$238	01/01/2024	12/31/2024	\$79.96		Not Applicable
	\$251	\$251	\$251	01/01/2025	12/31/2025	\$84.17	5.0%	
	\$264	\$264	\$264	01/01/2026	12/31/2026	\$88.60	5.0%	
DESIGNER	\$152	\$152	\$152	01/01/2024	12/31/2024	\$51.12		Not Applicable
	\$160	\$160	\$160	01/01/2025	12/31/2025	\$53.81	5.0%	
	\$169	\$169	\$169	01/01/2026	12/31/2026	\$56.64	5.0%	
DRAFTER	\$119	\$119	\$119	01/01/2024	12/31/2024	\$39.98		Not Applicable
	\$126	\$126	\$126	01/01/2025	12/31/2025	\$42.08	5.0%	
	\$132	\$132	\$132	01/01/2026	12/31/2026	\$44.30	5.0%	
SENIOR CIVIL ENGINEER	\$213	\$213	\$213	01/01/2024	12/31/2024	\$71.36		Not Applicable
	\$224	\$224	\$224	01/01/2025	12/31/2025	\$75.11	5.0%	
	\$236	\$236	\$236	01/01/2026	12/31/2026	\$79.07	5.0%	
MID CIVIL ENGINEER	\$182	\$182	\$182	01/01/2024	12/31/2024	\$61.19		Not Applicable
	\$192	\$192	\$192	01/01/2025	12/31/2025	\$64.41	5.0%	
	\$202	\$202	\$202	01/01/2026	12/31/2026	\$67.80	5.0%	
SENIOR GEOTECHNICAL ENGINEER	\$326	\$326	\$326	01/01/2024	12/31/2024	\$110.01		Not Applicable
	\$343	\$343	\$343	01/01/2025	12/31/2025	\$115.80	5.0%	
	\$361	\$361	\$361	01/01/2026	12/31/2026	\$121.89	5.0%	
MID GEOTECHNICAL ENGINEER	\$216	\$216	\$216	01/01/2024	12/31/2024	\$73.04		Not Applicable
	\$228	\$228	\$228	01/01/2025	12/31/2025	\$76.89	5.0%	
	\$240	\$240	\$240	01/01/2026	12/31/2026	\$80.93	5.0%	
SENIOR GEOLOGIST	\$245	\$245	\$0.00	01/01/2024	12/31/2024	\$82.52		Not Applicable
	\$257	\$257	\$0.00	01/01/2025	12/31/2025	\$86.86	5.0%	
	\$271	\$271	\$0.00	01/01/2026	12/31/2026	\$91.43	5.0%	
MID GEOLOGIST	\$157	\$157	\$157	01/01/2024	12/31/2024	\$53.00		Not Applicable
	\$165	\$165	\$165	01/01/2025	12/31/2025	\$55.79	5.0%	
	\$174	\$174	\$174	01/01/2026	12/31/2026	\$58.73	5.0%	
ENVIRONMENTAL SCIENTIST SR.	\$176	\$176	\$176	01/01/2024	12/31/2024	\$59.53		Not Applicable
	\$186	\$186	\$186	01/01/2025	12/31/2025	\$62.66	5.0%	
	\$195	\$195	\$195	01/01/2026	12/31/2026	\$65.96	5.0%	

**COUNTY OF SANTA BARBARA PUBLIC WORKS TRANSPORTATION;
DESIGN SERVICES**

Cost Proposal

BILLING INFORMATION

CALCULATION INFORMATION

Name/Job Title/Classification ¹	Hourly Billing Rates ²	Effective Date of Hourly	Actual or Avg.	% or \$	Hourly Range -
	Straight ³	From	hourly rate ³	increase	for Classifications Only
	OT(1.5x)	To	hourly rate ³		
ENVIRONMENTAL SCIENTIST MID	\$123	01/01/2024	\$41.62	5.0%	Not Applicable
	\$130	01/01/2025	\$43.81	5.0%	
	\$137	01/01/2026	\$46.12	5.0%	
ENVIRONMENTAL SCIENTIST FR	\$102	01/01/2024	\$34.51	5.0%	Not Applicable
	\$108	01/01/2025	\$36.33	5.0%	
	\$113	01/01/2026	\$38.24	5.0%	
ENVIRONMENTAL TECHNICIAN	\$75	01/01/2024	\$25.38	5.0%	Not Applicable
	\$79	01/01/2025	\$26.72	5.0%	
	\$83	01/01/2026	\$28.12	5.0%	
SENIOR CEQA SPECIALIST	\$164	01/01/2024	\$55.29	5.0%	Not Applicable
	\$172	01/01/2025	\$58.20	5.0%	
	\$182	01/01/2026	\$61.26	5.0%	
DRAINAGE DESIGN MANAGER	\$292	01/01/2024	\$98.69	5.0%	Not Applicable
	\$308	01/01/2025	\$103.89	5.0%	
	\$324	01/01/2026	\$109.35	5.0%	
SENIOR H&H ENGINEER	\$238	01/01/2024	\$80.38	5.0%	Not Applicable
	\$251	01/01/2025	\$84.61	5.0%	
	\$264	01/01/2026	\$89.07	5.0%	
MID H&H ENGINEER	\$194	01/01/2024	\$65.31	5.0%	Not Applicable
	\$204	01/01/2025	\$68.75	5.0%	
	\$214	01/01/2026	\$72.37	5.0%	
JR. H&H ENGINEER	\$173	01/01/2024	\$58.53	5.0%	Not Applicable
	\$183	01/01/2025	\$61.61	5.0%	
	\$192	01/01/2026	\$64.85	5.0%	
LICENSED LAND SURVEYOR (PLS)	\$200	01/01/2024	\$69.42	5.0%	Not Applicable
	\$211	01/01/2025	\$73.07	5.0%	
	\$222	01/01/2026	\$76.92	5.0%	
PROJECT SURVEYOR I	\$165	01/01/2024	\$53.37	5.0%	Not Applicable
	\$174	01/01/2025	\$56.18	5.0%	
	\$183	01/01/2026	\$59.14	5.0%	
PROJECT SURVEYOR II	\$180	01/01/2024	\$62.48	5.0%	Not Applicable
	\$190	01/01/2025	\$65.77	5.0%	
	\$200	01/01/2026	\$69.23	5.0%	

**COUNTY OF SANTA BARBARA PUBLIC WORKS TRANSPORTATION;
DESIGN SERVICES**

Cost Proposal

FIELD STAFF

BILLING INFORMATION

CALCULATION INFORMATION

Name/Job Title/Classification ¹	Hourly Billing Rates ²		Effective Date of Hourly From	To	Actual or Avg. hourly rate ³	% or \$ increase	Hourly Range - for Classifications Only
	Straight ³	OT(1.5x) OT(2x)					
GEOTECHNICAL TECHNICIAN (PREVAILING WAGE)	\$171	\$277.50	01/01/2024	12/31/2024	\$57.68		Not Applicable
	\$180	\$292.50	01/01/2025	12/31/2025	\$60.72	5.0%	
	\$190	\$307.5	01/01/2026	12/31/2026	\$63.91	5.0%	
CHIEF OF PARTY	\$143	\$214.50	01/01/2024	12/31/2024	\$45.96		Not Applicable
	\$151	\$226.50	01/01/2025	12/31/2025	\$48.38	5.0%	
	\$159	\$238.5	01/01/2026	12/31/2026	\$50.93	5.0%	
INSTRUMENTMAN	\$122	\$183.00	01/01/2024	12/31/2024	\$40.53		Not Applicable
	\$129	\$193.50	01/01/2025	12/31/2025	\$42.66	5.0%	
	\$136	\$204.0	01/01/2026	12/31/2026	\$44.91	5.0%	
CHAINMAN/RODMAN	\$110	\$165.00	01/01/2024	12/31/2024	\$36.54		Not Applicable
	\$116	\$174.00	01/01/2025	12/31/2025	\$38.46	5.0%	
	\$122	\$183.0	01/01/2026	12/31/2026	\$40.49	5.0%	
ONE-PERSON SURVEY CREW (PREVAILING WAGE)	\$176	\$264.00	01/01/2024	12/31/2024	N/A		Not Applicable
	\$186	\$279.00	01/01/2025	12/31/2025	N/A	5.0%	
	\$196	\$294.0	01/01/2026	12/31/2026	N/A	5.0%	
TWO-PERSON SURVEY CREW (PREVAILING WAGE)	\$336	\$504.00	01/01/2024	12/31/2024	N/A		Not Applicable
	\$354	\$531.00	01/01/2025	12/31/2025	N/A	5.0%	
	\$373	\$559.5	01/01/2026	12/31/2026	N/A	5.0%	
THREE-PERSON SURVEY CREW (PREVAILING WAGE)	\$496	\$744.00	01/01/2024	12/31/2024	N/A		Not Applicable
	\$523	\$784.50	01/01/2025	12/31/2025	N/A	5.0%	
	\$550	\$825.0	01/01/2026	12/31/2026	N/A	5.0%	

NOTES:

1. All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
2. The cost proposal format shall not be amended.
3. Billing rate = actual hourly rate * (1+ ICR) * (1+ Fee). Indirect cost rates should be based on the consultant's annual accounting period, established by a cognizant agency or accepted by Caltrans. All costs must comply with the Federal cost principles for reimbursement.
4. For named employees and key personnel enter the actual hourly rate. For classifications only, enter the Average Hourly Rate for that classification.
5. Prevailing Wage Rates are subject to change based on the wage determinations and increases issued by the California Department of Industrial Relations.

**COUNTY OF SANTA BARBARA PUBLIC WORKS TRANSPORTATION;
DESIGN SERVICES**

Cost Proposal

COST PROPOSAL

SPECIFIC RATE OF COMPENSATION (USE FOR ON-CALL OR AS-NEEDED CONTRACTS)

Consultant Tetra Tech, Inc. Prime Consultant Subconsultant

Project No. Various Contract No. _____ Date 11/8/2023

SCHEDULE OF OTHER DIRECT COST ITEMS (Add additional pages as necessary)				
Description of Item	Quantity	Unit	Unit Cost	Total
Mileage Costs	1	mile	\$0.58	\$0.58
Equipment Rental and Supplies	1	day	\$300	\$300
Field vehicle usage (engineers/geologists only)	1	mile	\$0.80	\$0.80
Field vehicle usage (field services)	1	hour	\$20	\$20
Sand Cone or Nuclear Density Gauge	1	hour	\$16	\$16
Hand auger and soil sampling equipment	1	day	\$70	\$70
BAT Permeameter	1	day	\$275	\$275
Double Ring Infiltrometer	1	day	\$250	\$250
Inclinometer data collection system	1	day	\$400	\$400
Floor level manometer	1	day	\$80	\$80
Infiltration test flowmeter	1	per day-test	\$130	\$130
Per diem	1	day	\$300	\$300
Reproduction	1	each	at Cost	at Cost
Permit Fees	1	each	at Cost	at Cost
Plan Sheets	1	each	at Cost	at Cost
Subconsultant 1:				\$
Subconsultant 2:				\$
Subconsultant 3:				\$
Subconsultant 4:				\$
Subconsultant 5:				\$

Note: Add additional pages if necessary.

NOTES:

1. List other direct cost items with estimated costs. These costs should be competitive in their respective industries and supported with appropriate documentation.

**COUNTY OF SANTA BARBARA PUBLIC WORKS TRANSPORTATION;
DESIGN SERVICES**

Cost Proposal

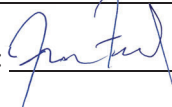
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2. Proposed ODC items should be consistently billed regardless of client and contract type.
 3. Items when incurred for the same purpose, in like circumstance, should not be included in any indirect cost pool or in the overhead rate.
 4. Items such as special tooling, will be reimbursed at actual cost with supporting documentation (invoice).
 5. Items listed above that would be considered "tools of the trade" are not reimbursable as other direct cost.
 6. Travel related costs should be pre-approved by the contracting agency and shall not exceed current State Department of Personnel Administration rules.
 7. If mileage is claimed, the rate should be properly supported by the consultant's calculation of their actual costs for company vehicles. In addition, the miles claimed should be supported by mileage logs.
 8. If a consultant proposes rental costs for a vehicle, the company must demonstrate that this is its standard procedure for all of their contracts and that they do not own any vehicles that could be used for the same purpose.
 9. The cost proposal format shall not be amended. All costs must comply with the Federal cost principles.
 10. Add additional pages if necessary.
 11. Subconsultants must provide their own cost proposals.

**COUNTY OF SANTA BARBARA PUBLIC WORKS TRANSPORTATION;
SURVEYOR SERVICES****Cost Proposal****COST PROPOSAL****Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

7. Generally Accepted Accounting Principles (GAAP)
8. Terms and conditions of the contract
9. [Title 23 United States Code Section 112](#) - Letting of Contracts
10. [48 Code of Federal Regulations Part 31](#) - Contract Cost Principles and Procedures
11. [23 Code of Federal Regulations Part 172](#) - Procurement, Management, and Administration of Engineering and Design Related Service
12. [48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board](#) (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Prime Consultant or Subconsultant Certifying:Name: Jason FusselTitle *: Vice PresidentSignature: Date of Certification 11/08/2023Email: Jason.Fussel@tetrattech.comPhone Number: (805) 305-0150Address: 290 Valley Station Drive, Ste. 102, Buellton, CA 93427

* An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

As-Needed Engineering Design Services.

EXHIBIT C

Indemnification and Insurance Requirements (For Design Professional Contracts that also Include Non-Design Services)

INDEMNIFICATION

A. Indemnification pertaining to Design Professional Services:

CONTRACTOR agrees to fully indemnify and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, suits damages, costs, expenses, judgments and/or liabilities that arise out of, or pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONTRACTOR and its employees, subcontractors, or agents in the performance of services under this Agreement. The indemnity includes the cost to defend COUNTY to the extent of the CONTRACTOR'S proportionate percentage of fault. Should one (or more) defendants be unable to pay its share of the defense costs due to bankruptcy or dissolution of the business, CONTRACTOR shall meet and confer with other parties regarding unpaid defense costs and CONTRACTOR shall pay COUNTY'S cost of defense to the fullest extent permitted by law.

B. Indemnification pertaining to other than Design Professional Services:

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 prohibited by law. CONTRACTOR'S indemnification obligation applies to COUNTY'S active as well as passive negligence but does not apply to COUNTY'S sole negligence or willful misconduct.

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 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 \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if CONTRACTOR'S has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than \$1,000,000 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. **(Not required if CONTRACTOR provides written verification it has no employees)**
4. **Professional Liability** (Errors and Omissions) Insurance appropriate to the CONTRACTOR'S profession, with limit of no less than \$2,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains broader coverage and/or higher limits than the minimums shown above,

the COUNTY requires and shall be entitled to the broader coverage for and/or 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 if a later revisions used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR'S insurance coverage shall be primary insurance 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 state that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but 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** – Self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or COUNTY.
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.
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 special 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.

ATTACHMENT B – CONTRACTOR INFORMATION SHEET

Attachment B. Contractor Information Sheet

Contractor Information Sheet

Name of Proposer Tetra Tech, Inc

Business P.O. Box 290 Valley Station Drive, Ste 102

City, State, Zip Buellton, CA 93427

Business Street Address 290 Valley Station Drive, Ste 102
(Include even if P.O. Box is used)

City, State, Zip Buellton, CA 93427

Telephone No. (805) 542-9052 Fax No. (805) 542-9254

Contractor License No. 551555 License Classification General

Public Works Contractor Registration No. _____

Business Type (Check One) Corporation: Partnership: _____ Sole Proprietorship: _____

Contact Person Name Jason Fussel, Contract/Project Manager

Contact Person Phone No. (805) 542-8630

Contact Person Email Jason.Fussel@tetrattech.com

Employer's Tax Identification Number FEIN: 954148514; California DIR: 1000647433

ATTACHMENT C – DBE REQUIREMENTS

Exhibit 10-O2 CONTRACTOR Contract DBE Commitment

July 23, 2015

LOCAL ASSISTANCE PROCEDURES MANUAL

Page 1 of 2

1. Local Agency: County of Santa Barbara 2. Contract DBE Goal: 11%
3. Project Description: Construction DESIGN SERVICES Services, IDIQ, 2023-2026
4. Project Location: Countywide, Various, IDIQ
5. CONTRACTOR's Name: _____ 6. Prime Certified DBE: 7. Total Contract Award Amount: _____
8. Total Dollar Amount for **ALL** Subcontractors: _____ 9. Total Number of **ALL** Subcontractors: _____

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Local Agency to Complete this Section			
20. Local Agency Contract Number: <u>IDIQ04</u> 21. Federal-Aid Project Number: <u>NA</u> 22. Contract Execution Date: _____			\$
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.			%
23. Local Agency Representative's signature _____ 24. Date _____ 25. Local Agency Representative's Name _____ 26. Phone _____ 27. Local Agency Representative's Title _____			14. TOTAL CLAIMED DBE PARTICIPATION IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required. 15. Preparer's Signature _____ 16. Date _____ 17. Preparer's Name _____ 18. Phone _____ 19. Preparer's Title _____

DISTRIBUTION: 1. Original – Local Agency, 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.

ADA Notice:

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

ATTACHMENT D – PROPOSAL



PROPOSAL FOR

INDEFINITE DELIVERY-INDEFINITE QUANTITY "AS NEEDED" DESIGN SERVICES

OCTOBER 2023



TETRA TECH



1. Transmittal Letter

October 18, 2023
Cesar Morales, Contract Manager
County of Santa Barbara, Department of Public Works, Transportation Division
123 East Anapamu Street, Santa Barbara, CA 93101

RE: Request for Proposals for Indefinite Delivery-Indefinite Quantity “As Needed” Design Services - 3 Year Contract Term

Dear Mr. Morales:

Tetra Tech is pleased to submit our proposal to provide as-needed design services. The Indefinite Delivery-Indefinite Quantity “As Needed” Design Services Contract is important to assist the County of Santa Barbara (County) with its transportation project delivery goals, which are vital for meeting the Transportation Division’s ongoing mission to provide a clear path, smooth ride, and a safe trip to the traveling public.

Our proposed team brings a record of distinguished, successful implementation and completion of engineering services for large- and small-scale public works projects. The efficient execution of this contract requires a talented team balanced with technical expertise and effective leadership, which is exactly what Tetra Tech offers. We will provide the most cost-effective solutions to the County based on the following reasons:

Local Resources and In-house Capabilities. Tetra Tech’s presence in Santa Barbara County goes back to 1993, when we opened our office in Santa Barbara, followed by our Santa Maria office in 1995. Combined with our Buellton and San Luis Obispo offices, there are now more than 75 professionals in our Central Coast offices providing engineering, surveying, environmental, and geotechnical consulting services for both local government and private sector clients. We can best serve the County due to our ability to provide key services in-house, leading to efficient and well-coordinated deliverables. We can self-perform most of all the activities anticipated as part of this contract, including but not limited to, transportation engineering services, land surveys, drainage analyses, utility research and coordination, geotechnical services, structural, specifications, and estimates, construction support, and as-builting. Additionally, we have teamed up with Filippin Engineering to provide additional local resources.

Experienced Leadership. Our proposed Contract/Project Manager, Mr. Jason Fussel, PE, PLS, has managed many sizable engineering design campaigns aligning multiple field crews and office personnel to produce accurate and timely deliverables for a multitude of clients. Mr. Fussel brings a proven track record of planning effectively, responding quickly, and managing efficiently a multitude of task orders concurrently for as needed engineering contracts. He will ensure the Tetra Tech team is responsive to task order requests and executes the work required to the County’s satisfaction in a cost-effective and schedule conscious manner.

Tetra Tech is eager to provide the requested professional as needed design engineering consultant services for the County and community.

Sincerely,

Jason Fussel, PE, PLS, QSD/P, LEED AP, ENV SP
Vice President, Contract Manager/PM

Required Information:

Listed below is Tetra Tech’s authorized representative, proposed Contract Manager, Jason Fussel. Mr. Fussel is an authorized signatory and will serve as the single point of contact throughout the course of the proposal selection process and this contract.

Mr. Fussel is committed to each task order’s success and the overall success of the County of Santa Barbara. He will commit all necessary resources to support the County for the duration of this contract.

Authorized Representative, Point of Contact, Address, Email and Telephone:

Jason Fussel, PE, PLS
290 Valley Station Drive
Suite 102
Buellton, CA 93427
Jason.Fussel@tetrattech.com
805.542.8630

2. Contractor Information, Qualifications, Experience, and Understanding of Work

FIRM PROFILE

Tetra Tech is a full-service, multidisciplinary engineering consulting firm, specializing in planning, design, and construction management. Tetra Tech has served more than 5,000 different clients since 1966, successfully solving design and construction challenges through our innovative approaches to "real world" design and construction activities. Our clients include a diverse base of municipalities, public, and private sector transportation and transit agencies, as well as residential, commercial, and industrial developers located in the U.S. and internationally. Tetra Tech's reputation as a leader in consulting engineering is validated by Top 10 ratings annually by Engineering News Record (ENR). **In 2023, Tetra Tech was rated #4 Design Firm among the top 500 Design Firms nationwide, and holds numerous #1 rankings in a variety of service areas by ENR.**

Tetra Tech has been headquartered in Pasadena for more than 50 years. We can draw upon the firm's pool of 1,400+ staff in California, as well as more than 27,000 engineers, scientists, technical specialists, and construction management personnel worldwide. Our team has successfully delivered high-profile and publicly-charged projects throughout the Central California region, creating a legacy of innovation, fiscal responsibility, schedule consciousness, success, and client satisfaction. With an established presence in California for many years, we have developed strong working relationships with various local municipalities and jurisdictional approval agencies throughout the local area.

Tetra Tech values the relationship we have built with the County through current and past projects, and we are committed to providing the County with the same high-quality service that you expect and deserve and have seen from Tetra Tech on our previous work together.

PROFESSIONAL EXPERIENCE

Our proposed project team is currently providing professional services under several on-call contracts that represent projects similar to those outlined in the Request for Proposals, including:

- **City of Buellton**, City Engineering Services
- **City of Anaheim**, On-Call Civil, Structural, Traffic and Transportation Engineering Consulting Services
- **City of Pasadena**, On-Call Civil Engineering Design Services
- **City of Los Angeles**, On-Call Bridge/Civil Engineering and other Design and Support Services
- **County of Orange**, On-Call Road and Bikeway Engineering Services
- **City of Santa Clarita**, As-Needed Civil Engineering and Survey Services
- **County of Santa Barbara**, Indefinite Delivery-Indefinite Quantity "As Needed" Surveyor Services

We are Local!

Tetra Tech's services will be provided from our Buellton office, with support from our Santa Barbara, San Luis Obispo, Santa Maria, and Irvine offices. Although we can draw from a large pool of nationwide resources, our Central Coast offices have the experienced staff ready to mobilize at a moment's notice to meet the County's needs.



UNDERSTANDING OF WORK

Tetra Tech understands that the County of Santa Barbara is seeking a highly skilled and multifaceted consultant team to provide on-call professional design services on an as-needed basis to assist the County with meeting quick deadlines to comply with state and federal regulations. The design support is to help the County prepare plans, specifications and estimates quickly to have packages ready for construction to not only meet project delivery goals but to also support with emergency response repairs. Tetra Tech is prepared to support the County with transportation design services, surveying, geotechnical, drainage design, as well as environmental support services, preparation of construction documents for transportation projects, hydrology and hydraulic analysis, and bid and construction support services necessary to complete the task orders and projects. To further support the team and meet federal DBE goals, Tetra Tech has enlisted Filippin Engineering to provide constructibility review support to ensure Tetra Tech is providing high level, in class design services, construction management and inspection services.

TETRA TECH can provide the County with a "one-stop-shop" to assist with professional services listed in the Request for Proposals (RFP):

- Civil/Transportation Engineering
- Surveying/Mapping/ROW Services
- Geotechnical Engineering
- Grading and Drainage Design
- Utility Surveys and Coordination
- Storm Drain/Hydraulic and Hydrology Reports/Design
- Street Improvements
- Traffic/Striping Improvements
- Pavement Analysis
- Structural Design
- Electrical Engineering
- Construction Engineering Support
- Construction Inspection Support
- Preliminary/Final Design Plans, Specifications, and Estimates

STREET IMPROVEMENTS

Tetra Tech offers roadway design and engineering services for plans, specifications, and estimates (PS&E) packages to cities, counties, and Caltrans. Tetra Tech has completed various roadway geometric design plans on projects of all sizes ranging from bike path and parking lot design to interchange and major corridor design.

Tetra Tech will develop preliminary design concepts into PS&E for the County to advertise the construction contract. Tetra Tech is experienced and knowledgeable with the codes and design criteria that will govern the concept and final design for the project. The PS&E will be prepared to satisfy the requirements of the County, RWQCB, AASHTO, Manual on Uniform Traffic Control Devices (MUTCD), California Building Code (CBC), and the Standard Specifications for Public Works Construction (SSPWC).

Our engineers are experienced in integrating environmental, regulatory, and community requirements to provide functional and efficient infrastructure improvements.

For the cost estimate, Tetra Tech will substantiate quantities for all contract pay items with quantities calculations. Unit costs will be based on Caltrans historical cost data, RSMeans, recent bid results, or other sources as appropriate. For lump sum work items, we will include a breakdown of major components along with adequate cost backup justifying the total lump sum cost. Quantities and estimates will be prepared in Microsoft Excel. Cost will include subtotals for Right-of-Way and Utility work.

Plans will be produced per City, County, and/or Caltrans Standard Plans and Specifications, and typically include the following:

- ***Preliminary Road Alignments, Profiles and Grading Concepts, Cross Sections***
- ***Roadway Plans/Profiles/Details***
- ***Contour Grading Plans***
- ***Drainage Plans/Profiles/Details***

- ***Curb, Gutter, Sidewalk and Curb Ramp Design***
- ***Utility Identification, Composite Plans, and Mitigation***
- ***Road Signage and Delineation Plans (Striping Plans)***
- ***Road Repair Assessments and Recommendations***
- ***Traffic Signal Plans***
- ***Street Lighting Design***
- ***Construction Staging and Traffic Control Plans***
- ***Landscape/Irrigation Plans***
- ***Retaining Wall/Fencing Plans***
- ***Composite Utility Plans***
- ***Encroachment Permits***

STORM DRAIN/HYDRAULIC AND HYDROLOGY REPORTS/DESIGN

Tetra Tech has prepared numerous studies and designs involving varying aspects of hydrologic and hydraulic modeling, storm drains, and application of floodplain-management techniques. With extensive experience in hydrologic, hydraulic, storm drain, and floodplain-management services, Tetra Tech provides solutions for our clients by:

- ***Performing hydrologic/hydraulic analyses***
- ***Investigate drainage problems or complaints, drainage report preparation***
- ***Master planning of comprehensive water resource and drainage plans***
- ***Flood control feasibility studies and concept reports preparation for new projects, improvements, or modifications***
- ***Prepare opinions of probable cost, conduct benefit/cost, and other economic analyses***
- ***Floodplain mapping studies [i.e. Flood Insurance Studies (FIS) and Letters of Map Revision (LOMRs)] through the Federal Emergency Management Agency***
- ***Preparation of basin and river management studies***
- ***Provide legal and expert witness support for technical water resources***
- ***Public involvement communication programs***

Our drainage engineers can prepare Hydrology Study Reports to identify the drainage boundaries and sub-boundaries necessary for sizing roadway drainage and catch basin locations. Our drainage engineers use XPSWMM, HydroWin, and other agency approved software, as necessary, for hydrology analysis and hydraulic design. The appropriate agency design procedures will be utilized in determining maximum flows and peak storm discharge rates. Culvert sizes and lengths can be calculated and used in the cost estimates of different alternatives developed.

It is imperative in designing storm drain systems to correctly analyze the existing hydrology conditions and hydraulic requirements in the project area. For years, Tetra Tech has set the standard with knowledge of the integration of surface water hydrology and multi-dimensional hydraulic analysis. Our team will bring value to projects and confidently develop the best plan to properly convey stormwater.

PAVEMENT DESIGN

The analysis of a pavement structural section must reflect many factors that affect the life cycle and maintenance costs of the pavement. The recommendation must include consideration of the subgrade, soil classification, traffic loads, pavement material, localized instabilities, and subsurface drainage. Recycled material or alternate pavement design evaluating emerging technologies need to be analyzed with respect to the following criteria:

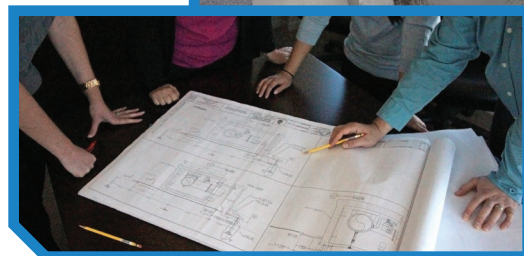
- ***Initial construction cost***
- ***Life cycle cost***
- ***Construction delay and impact***
- ***Facility maintenance and ease of repair***
- ***Pavement noise, smoothness***
- ***Industry capacity and local contractor capability***

Our team has experience in pavement design and can include this service to support other project disciplines.

GRADING AND DRAINAGE DESIGN

Our grading specialists are well versed in the use of advanced AutoCAD software including AutoCAD Civil 3D, and AutoCAD. We can provide AutoCAD services as needed in support of project deliverables. Our Civil Engineering staff is experienced in access road design including local roads, their connection to arterials, highways, and the required protection from stormwater flows. We have provided grading support for large and small scale municipal public works, transportation, solar and wind energy, water and wastewater projects in the past and utilize the Civil 3D software to create a working 3-Dimensional model of the grading surfaces that can quickly and accurately provide grading revisions to minimize disturbed area and maximize balancing of graded sub areas.

Grading experience also extends to developing community parks and recreational areas, and lot grading for residential and commercial projects. Tetra Tech engineers adapt development grading by employing contour grading into each design to preserve the existing landscape, blend finished grade areas to match the surrounding topography, and maintain drainage to preserve natural flow patterns.

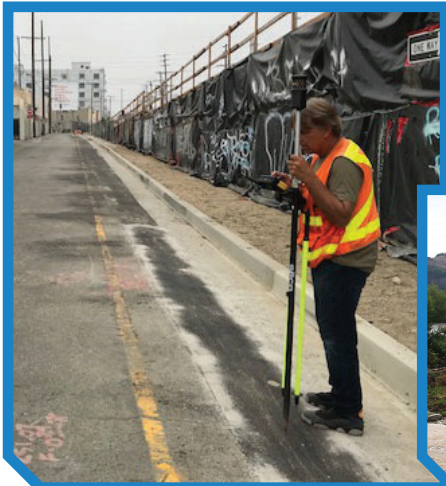


SURVEYING

Our licensed surveyors can assist the County with all surveying and mapping needs, including the following:

- ***Topographic Surveying***
- ***Boundary Surveying***
- ***GPS Surveys***
- ***GIS Base Mapping***
- ***Right-of-Way Mapping***
- ***ALTA Surveying***
- ***Construction Staking***
- ***As-built Surveying***
- ***Legal Description***
- ***Easement Preparation***
- ***Lot Line Adjustments***
- ***Tract Map and Final Map Review***
- ***Control Survey***
- ***Corner Records***
- ***Aerial Survey***

For projects in the State right-of-way, we can obtain an encroachment permit from Caltrans, and our survey crew can occupy Caltrans control monuments to create a GPS control network. Mapping would be completed in accordance with traditional Caltrans photogrammetric mapping guidelines and with the A-B-C oversight materials and procedures.



GEOTECHNICAL ENGINEERING

Tetra Tech employs a team of highly regarded geotechnical engineers, geologists, and field support personnel with a well-established reputation supporting infrastructure development programs. Overall service areas include:

- ***Industrial facilities***
- ***Reservoirs, pipelines and channels***
- ***Seismic hazard evaluation and design***
- ***Fault studies***
- ***Slope design and remediation***
- ***Excavation and shoring design***
- ***Advanced numerical modeling***
- ***Field instrumentation***
- ***Construction vibration monitoring***
- ***Pavement evaluation and design***
- ***Foundation design***
- ***Forensic investigations/expert witness services***
- ***On call review services for public agencies***
- ***Construction quality assurance***

We have managed geotechnical projects ranging from conventional foundations and street rehabilitation projects, to complex highway, bridge, dams, levees, and reservoir projects, to advanced deformation and seepage modeling of complex geotechnical problems throughout California. We have assisted municipalities, city/county agencies, school districts, private developers, and legal firms in meeting their geotechnical engineering needs for development and redevelopment projects in the multifaceted geologic environment of California.

TRAFFIC/STRIPING IMPROVEMENTS

Often with geometric or operational changes, revisions are needed to properly adjust the current signage and striping delineation. Tetra Tech has proven experience in the preparation of signing and striping plans and gives special attention to evaluating traffic and pedestrian safety. All plans and specifications would conform to agency standards, including MUTCD, APWA, and AASHTO.



STRUCTURAL DESIGN

Tetra Tech's in-house structural team can provide the County with structural design for new structures, as well as modifications to the County's existing structures. This includes the structural design of:

- **Bridges**
- **Retaining Walls**
- **Buildings**
- **Reservoirs**
- **Drainage Systems**

The analyses could potentially include:

- **Seismic and wind design**
- **Structural stability and load bearing capacity analysis**
- **Foundation and framing design, as well as other design elements**

Other structural related services include structural assessments, retrofitting of existing structures, and ASCE 41 Tier 1 and Tier 2 seismic evaluations.

A separate independent check of all structural calculations will be performed. These services can cover the entire project life-cycle from alternative analysis during preliminary design to the preparation of record drawings after construction.

ELECTRICAL ENGINEERING

Our in-house electrical group has extensive experience in utility, industrial, residential, commercial, governmental, and military projects. Our electrical expertise covers the areas of transmission, distribution, programmable logic controller, PID control, SCADA, preliminary solar alternative studies, and telecommunications.

CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES

Our construction management and inspection services include providing technical support services with our design engineers and Engineers of Record to support the County through the entire construction and commissioning phase. Tetra Tech support services include a dedicated Construction Management team who will be responsible for coordinating with the construction contractor on behalf of the County, coordinating reviews of contractor submittals, and providing a document management system for all project documentation. Tetra Tech will also have available to the County, an onsite construction inspector for the duration of the construction phase of the project.

STATE AND FEDERAL FUNDED PROJECTS

For state and federally funded projects, Tetra Tech will assist the County with the completion of the necessary reporting forms as required by Caltrans Local Assistance Procedure Manual. Tetra Tech understands the regulatory framework and relationships from similar assignments which have required coordination with Federal, State, and Local Agencies representatives, as well as a thorough knowledge of associate regulations and guidelines related to legal requirements, environmental compliance, permitting and local codes and ordinances.

COMMITMENT TO DISADVANTAGED BUSINESSES

Tetra Tech has a long-standing commitment to working with small, minority, women, disadvantaged, native, and veteran-owned business enterprises. Thanks to shared training and our partnering philosophy, we can enhance the development of small and disadvantaged businesses, execute work on schedule and on budget, and meet contract quality objectives.

Tetra Tech's corporate commitment to disadvantaged businesses can be witnessed locally on a wide variety of contracts and projects we have with municipalities throughout California. We are steadfast in achieving our goal of exceeding small and disadvantaged business utilization requirements, and are always interested in meeting more small business owners and utilizing their services so we can expand our network. We are committed to these partnerships as they stimulate economic development and diversify the supply chain that our clients rely on to deliver public works projects.



PROVEN RESULTS



SUCCESS STORY

Our team's relevant experience with Caltrans Local Assistance Procedures Projects includes our work for the City of Los Angeles LA River bike path for the recently completed Riverside Drive Bridge improvement project, and we designed bike path alternatives from 4th to 7th streets as part of the Sixth Street Viaduct PARC project. These two design projects required approval from the USACE, the State Water Resources Control Board, State Department of Fish and Game, CEQA, and the Los Angeles Cultural Heritage Commission, among many others, due to the encroachment in the river and the historical designation of the bridges, respectively.

TASK ORDER INITIATION

After receiving a task order request from the County, our project manager will review the requested scope of work and select the key team members to address project requirements.

Our proposed management process for each task order will consist of the following nine components, but will be specifically tailored to suit the type and size of each assignment.

Task Order Initiation: Receive request from the County; receive and review available information and discuss with the County staff by phone.

Data Research: Obtain and review documents that are pertinent to the task order.

County Coordination: Meet at the County office or project site, if advantageous, and obtain any additional data; meet with end-user(s) if possible.

Draft Proposal: The project manager and selected team prepare a draft proposal for internal review.

Final Proposal and Work Plan: Based upon team input on draft proposal documents and a pricing review, the team prepares the final proposal.



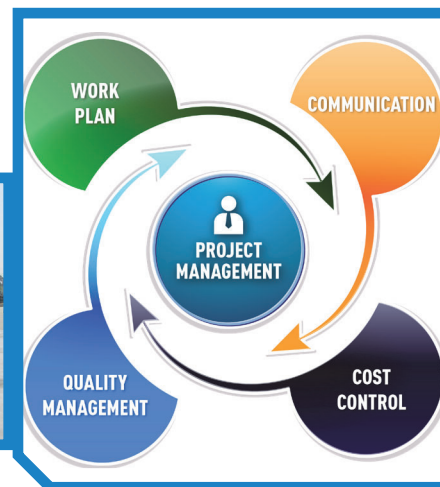
Task Order Authorization: Schedule a project kick-off; update the quality control plan as necessary.

Project Execution: Execute project in accordance with our contract scope of services and all applicable City, State and Professional standards.

Project Quality Control: Before the final deliverable is submitted, perform start-to-finish review for adherence to the work plan and quality control plan to verify completeness and accuracy of deliverables.

Project Closeout: Perform final review of the agreed upon scope of services and any modification thereto.

Tetra Tech anticipates that the County will provide access to any as-built plans, land records, deeds, maps, and any other documents relevant to the scope of work requested. Tetra Tech is available to assist the County with research and will help County staff review available documents for applicability to the project.



RELEVANT PROJECT EXPERIENCE

Tetra Tech's strength lies in the qualifications of our staff, commitment of our firm, and interest in and knowledge of the local area. As one of the largest consulting engineering firms in the United States, our success has been built on having a client-centric approach to all we do. Clients receive a local and dedicated team, combined with state-of-the-practice technical expertise, innovation, quality design, fiduciary duty, and development of practical solutions to meet industry standards for high quality engineering practices.

The represented project descriptions provided within this section validate the depth of our team's expertise in the design services associated with your future projects. In addition, full project descriptions illustrating our engineering experience and designing projects similar to the potential projects under this as-needed contract. We look forward to bringing this experience to the County of Santa Barbara.

CAMP ROBERTS PERIMETER ROAD DESIGN

San Miguel, CA



Contracting Agency: California Army National Guard, Sacramento, CA 95816

Contracting Project Manager/Contact: Bill Kendall, 916.500.1809

Contract Amount: \$482,854

Funding Sources: Federal

Project Dates: 2016 - Ongoing (Design Complete - Construction Ongoing)

Contractor Project Manager: Devin Newton, PE, 805.542.8607

PROJECT DESCRIPTION

Located in San Miguel, California, Camp Roberts is a California Army National Guard base originally constructed in 1941. It is one of the nation's largest and most historic Army installations, and the main training and pre-mobilization site for all of the California National Guard. Tetra Tech was selected to provide architectural and engineering services for upgrades to approximately 17.1 miles of roadway along the East and West Perimeter Range Roads at Camp Roberts. Significant portions of the perimeter range roads were in a state of disrepair and well beyond their service life. The existing pavement had numerous potholes, cracks and surface deterioration that have developed over the years due to extreme weather conditions and the need to operate heavy military vehicles. The goal of the project was to bring the roadways up to modern asphalt standards, provide a safe, reliable and usable environment for soldier training and improve operability and maintainability of roadways. Tetra Tech was responsible for conducting a pavement condition assessment, topographic survey (traditional ground and mobile LiDAR), and preparing conceptual and detailed design plans, specifications, and calculations to allow the Government to assemble a bid package for repair of the perimeter range roads.

Tetra Tech provided design support services during construction, and assisted with shop drawing/submittal review, Requests for Information (RFI), making changes to the plans in the event a change order is processed or a change in the design is desired, and Record Drawing Preparation.

Project Highlights:

- Road Repair Assessment and Recommendations
- Preliminary Road Study
- Drainage Analysis
- Utility Coordination
- Striping Plans
- Plans, Specifications, and Estimate (PS&Es)
- Design Support During Construction

CULVER BOULEVARD CORRIDOR REALIGNMENT PROJECT & FILTRATION & RETENTION PROJECT

Culver City, CA

CULVER BOULEVARD MEDIAN AT SEPULVEDA
RETAINING WALL AND BERMING CONCEPT



PROJECT DESCRIPTION

Tetra Tech was contracted by the City of Culver City to design two separate projects along Culver Boulevard, a median realignment project and a regional stormwater capture project. The primary goal of the median realignment project was to improve pedestrian/vehicular safety and mobility while mitigating traffic noise and nuisance impacts to nearby residents. The primary goal of the regional stormwater capture project was to meet water quality improvement priorities and objectives established in the MS4 Permit and the Ballona Creek Enhanced Water Management Plan. Tetra Tech developed the Preliminary Concept Designs, Preliminary Design Reports, gained community/stakeholder acceptance through public outreach, prepared the final plans, specifications, and cost estimates, and provided design support during construction for each of the two improvement projects.

Realignment Project: Street improvements included the reconfiguration of existing traffic lanes, new and reconstructed landscape medians, traffic signal additions and modifications, newly designed bus stops, signal interconnects, new lighting, utility adjustments, relocation of existing catch basins, and the design of a parking lane with innovative buffer treatment to separate it from the eastbound high-speed travel lanes on Culver Boulevard. Active transportation components included both bike paths and pedestrian paths, ADA compliant curb

extensions and ramps, improved crosswalks, and path lighting to improve pedestrian safety and mobility through the corridor. At the heart of the realignment project was a newly constructed 58-foot wide raised landscape median, complete with buffered bicycle and pedestrian paths. The raised landscaped median complements the proposed active transportation improvements and serves as an aesthetic and vibrant gateway to the City.

Stormwater Capture Project: This project maximized pollutant and stormwater capture by diverting dry-weather and wet-weather stormwater flows at a rate of up to 50 cubic-feet-per-second from 2 stormwater facility locations; a 66-inch reinforced concrete pipe located at Harter Avenue and an 87-inch reinforced concrete arch pipe located at Sepulveda Boulevard. Diverted stormwater flows are first sent to one of two pretreatment units to remove trash and sediments and then to a concrete underground storage facility capable of providing up to 8-acre-feet of storage. Stored water is pumped to the post-storage filtration system where it is polished for final pollutant removal before being returned to downstream storm drain channels and receiving waters. As an added benefit of this project, treated stormwater is used to offset potable water irrigation demands on the newly constructed 58-foot wide raised landscape median and at nearby Veterans Park.

Contracting Agency: City of Culver City, Culver City, CA 90232

**Contracting Project Manager/
Contact:** Hong Wang, 310.253.5604

Contract Amount: \$1,000,077

Funding Sources: State, Local, Federal

Project Dates: 2018 - 2022

Contractor Project Manager:
Jason Fussel, PE, 805.542.8630



MERCED AVENUE GREENWAY

South El Monte, CA

Contracting Agency: City of South El Monte, South El Monte, CA 91733

**Contracting Project Manager/
Contact:** Rene Salas, 626.579.6540

Contract Amount: \$422,000

Funding Sources: Local, State, Federal

Project Dates: 2018 - 2022

Contractor Project Manager:
Jason Fussel, PE, 805.542.8630

PROJECT DESCRIPTION

Tetra Tech provided concept planning and detailed design services for a multi-benefit stormwater runoff management and street retrofit project of the Merced Avenue corridor in the City of South El Monte. Improvements to the 1.1-mile section of Merced Avenue included the reconfiguration of existing traffic lanes to accommodate water quality improvements and LID/BMP infrastructure retrofits, native re-vegetation, and planned active transportation components to increase pedestrian safety and mobility throughout the corridor. The primary goal of the project was to manage stormwater runoff at its source in order to meet regulatory compliance by improving water quality and enhancing watershed health. A key component of this project was to demonstrate how stormwater BMP's can be incorporated into existing residential and industrial infrastructure. The project serves as a model for future LID/BMP retrofit techniques and development throughout Los Angeles County. Additional project benefits include creating new safe bike and pedestrian connections, reducing the urban heat island effect and its carbon footprint, enhancing public health and beautifying the neighborhood.

Water Quality LID/BMP's included curbside bioretention facilities to reduce pollutant loads, and permeable pavers and below-grade infiltration galleries to promote groundwater recharge. Active transportation components included elevated Class IV Cycle Tracks, ADA compliant curb extensions

and ramps, improved crosswalks, and improved pedestrian linkages. The project implemented strategies aimed at reducing urban heat island effect by replacing impervious surfaces with planting areas and permeable pavements, increase tree canopy, and possibly add high albedo hardscape surface coatings to discourage heat absorption and retention. To reach a consensus with the residents, Tetra Tech and other members of the project team prepared a comprehensive Outreach Community Engagement Plan and participated in community outreach meetings to encourage full and early community/stakeholder participation in the project.

Project Highlights:

- Plans, Specifications and Estimate (PS&Es)
- Bike and Pedestrian Amenities
- LID/BMP Green Infrastructure
- Landscaped Medians
- Hydrology/Hydraulic Modeling
- Stormwater Management
- Traffic/Signalization
- Active Transportation
- Streets/Roadway
- GIS/Mapping/Survey
- Community Outreach
- Prop 1 IRWM Funding

DTLA ARTS DISTRICT PEDESTRIAN & CYCLIST SAFETY, ACTIVE TRANSPORTATION PROJECT (ATP) 3

Los Angeles, CA



Contract Amount: \$1,539,371

Funding Sources: CalTrans ATP Grant

Project Dates: 2017-2022 Design Complete (Construction Ongoing)

Contractor Project Surveyor:
Dan Helt, PE, 805.542.8626

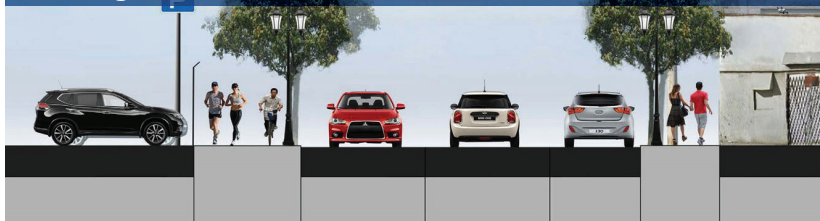
Tetra Tech provided design services and will be providing design support during construction for the DTLA Arts District Pedestrian and Cyclist Safety Active Transportation Project (ATP) 3. Scope included pre-design and preparation of plans, specifications and estimates for this active transportation project, funded by a CalTrans ATP grant. The project area is characterized by a complex street system of very long blocks with few safe crossing locations, complicated intersections, and very limited bike facilities that create mobility challenges for residents, workers and visitors to the district. The project improvements

will provide pedestrian and cyclist improvements including new cycle tracks, bike lanes, bike routes, new and widened sidewalks with curb extensions, new traffic-controlled intersections, a new shared street connecting to the new Sixth Street Viaduct Arts Plaza, as well as green street elements. The goal of this Caltrans Local Assistance Program funded project is to increase the mobility and safety for non-motorized users to achieve the regional agency's greenhouse gas reduction goals, and aid in the enhancement of the public's health.

Contract Agency/Contracting Contact: City of Los Angeles, Bureau of Engineering | Naomi Diep | 213.847.4783

BOYLE HEIGHTS PEDESTRIAN LINKAGES ACTIVE TRANSPORTATION PROJECT (ATP) 2

Los Angeles, CA



Contract Amount: \$706,634

Funding Sources: CalTrans ATP Grant

Project Dates: 2017-2021 Design Complete (Construction Ongoing)

Contractor Project Manager:
Devin Newton, PE, 805.542.8607

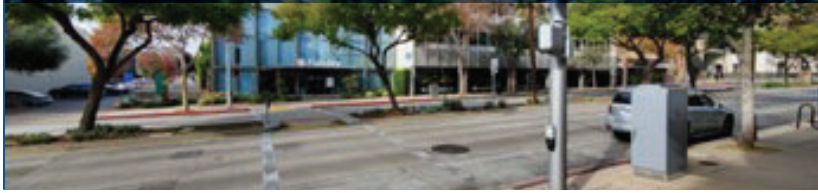
Scope included pre-design and preparation of PS&E for this CalTrans ATP grant, aims to improve pedestrian safety and access to the City of Los Angeles' Sixth Street Viaduct and Sixth Street PARC Projects. In addition to serving City residents, the project aimed to improve the pedestrian accessibility for users of the Aliso Pico Recreation Center, Pecan Recreation Center, and Boyle Heights Technology Youth Center. Before, there was little pedestrian use of the streets within the Boyle

Heights project area because of its industrial nature and poor pedestrian facilities. The project focused on pedestrian transportation improvements which includes sidewalk enhancements, ADA ramps, new and enhanced crosswalks, and safety features that include curb pedestrian signals and new pedestrian lighting along all new/improved walkways. Vehicle traffic calming improvements will consist of installing a new traffic signal at the intersection of 4th Street and Clarence Street.

Contract Agency/Contracting Contact: City of Los Angeles, Bureau of Engineering | Naomi Diep | 213.847.4783

SOUTH LAKE AVE. PEDESTRIAN ACCESS IMPROVEMENTS TO GOLD LINE STATION

Pasadena, CA



Tetra Tech was selected through the City's On-Call Civil Engineering Design Services contract to provide design services for pedestrian access improvements to a 1.06-mile portion of Lake Avenue between Corson Street and California Boulevard. Tetra Tech balanced the design approach to meet the scope of the Los Angeles County Metropolitan Transportation Authority (Metro) grant while staying within the grant budget. The work includes the addition of a signalized mid-block crossing and a new signalized intersection,

elimination of a "pork chop" island with additions of right-turn pockets and traffic signal modifications, removal of a bus turning bay and bus-stop improvements, installation of new in-fill pedestrian-scale sidewalk lighting system, the addition of curb extensions and ADA compliant curb ramps, and in-fill street trees, landscaped islands, and irrigation. Tetra Tech also performed surveying services, as well as investigation and mapping for a number of existing utilities along Lake Avenue.

Contract Amount: \$379,133

Funding Sources: CalTrans ATP Grant

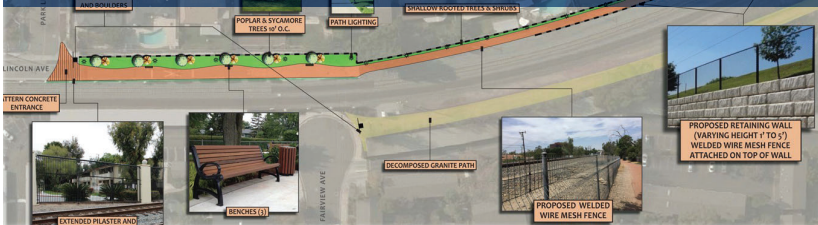
Project Dates: 2021 - Ongoing
Design Complete (Construction Ongoing)

Contractor Project Manager:
Justin Smith, PE, 949.809.5029

Contract Agency/Contracting Contact: City of Pasadena, Dept. of Public Works | Richard Yee | 626.722.7181

LINCOLN AVE. PEDESTRIAN PATHWAY CONNECTIVITY

Santa Ana, CA



Tetra Tech provided engineering, geotechnical, environmental, permitting, landscaping, surveying, and construction support services for this active transportation project. The project was funded in part by ATP state grant funds. The pedestrian pathway runs parallel with Lincoln Avenue west of the existing railroad tracks. The improvements commence at the intersection of Lincoln Avenue and Park Lane, continue north between the back of the residential properties and the railroad tracks, and end at the existing Santiago Trail, under the railroad bridge that crosses Santiago Creek.

The improvements included a 12-foot pathway and railroad-approved safety fencing, drought tolerant landscaping, pedestrian lighting, and a trailhead to identify the pathway. The construction of the project provides active transportation continuity to the Santiago Trail, connects to the existing pedestrian pathway located along the east side of the railroad tracks, and enhances the aesthetics of the area. The connection to the eastern pedestrian pathway provides the ability to traverse to the south back to Fairhaven Avenue

Contract Amount: \$149,786

Funding Sources: ATP State Grants

Project Dates: 2018-2022

Contractor Program Manager:
Jason Fussel, PE, PLS, 805.542.8630

Contract Agency/Contracting Contact: City of Santa Ana | Gilbert Castillo | 714.647.5674

COUNTY OF SANTA BARBARA AS-NEEDED SURVEY

Santa Barbara, CA



Tetra Tech is currently providing as-needed survey services to the County of Santa Barbara under an Indefinite Delivery-Indefinite Quantity (IDIQ) Survey contract. The services provided are important to assist the County with its transportation project delivery goals, which are vital for meeting the Transportation Division's ongoing mission to provide a clear path, smooth ride, and a safe trip to the traveling public.

To date, Tetra Tech has provided the following as-needed services:

- Perpetuate and preserve survey monuments prior to the construction of South and Central Pavement Rehabilitation on N Refugio Road
- Perform right-of-way research, right-of-way stakeout, and topographic survey required for storm damage repairs emergency opening on San Miguelito Road
- Perform right-of-way stakeout for storm damage repairs emergency opening on Foxen Canyon Road
- Perform right-of-way research and right-of-way stakeout for storm damage repairs emergency opening on Santa Rosa Road

Contract Amount: \$168,959

Funding Sources: Local/County

Project Dates: 2023 - Ongoing

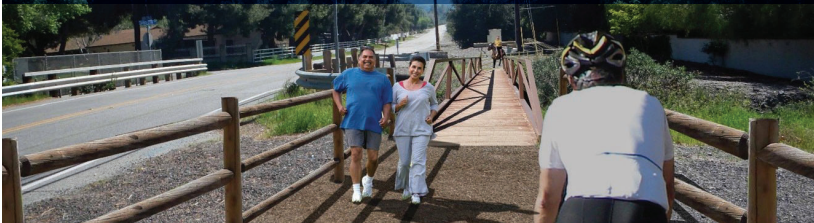
Contractor Program Manager:

Dan Helt, PE, 805.542.8626

Contract Agency/Contracting Contact: County of Santa Barbara | Jesus Hernandez | 805.803.8797

SAND CANYON TRAIL DESIGN PHASES IV & VI

Santa Clarita, CA



The Sand Canyon Trail Phases IV through VI Project consists of the installation of a multi-use trail along Sand Canyon Road in the City of Santa Clarita. The proposed trail is approximately 1.6 miles in length, and will be separated from motor vehicular traffic by fencing, providing a safe route for pedestrian and equestrian use. Tetra Tech is working with Alta Planning + Design to provide the City of Santa Clarita with preparation of design, plans, and engineer's estimates for Phases IV through VI of the project, which are a continuation of the

completed Phase III trail. The project scope includes preliminary conceptual trail design, preliminary environmental analysis, right-of-way mapping, civil engineering, conceptual bridge design and preliminary construction cost estimates. Following the preliminary investigation, Tetra Tech prepared a hydrologic study and drainage report that examined the hydrology and creek hydraulics within the trail corridor and at three proposed bridge crossings that will be constructed during Phase IV of the project.

Contract Amount: \$235,622

Funding Sources: Local

Project Dates: 2016 - Ongoing
Design Complete - Construction Ongoing

Contractor Project Manager:

Jason Fussel, PE, PLS, 805.542.8630

Contract Agency/Contracting Contact: City of Santa Clarita | Jackie Lillio | 661.286.4131

BRIDGE PREVENTATIVE MAINTENANCE PROJECTS

Santa Clarita, CA



Tetra Tech developed a new preventive maintenance guideline to help the City of Santa Clarita preserve roughly 130 bridge structures and assisted in receiving federal funding under the Highway Bridge Program. The City of Santa Clarita, in cooperation with the Federal Highway Administration (FHWA) recently programmed federal funds to help local agencies develop a Bridge Preventive Maintenance Program. The program will help this local agency extend the life of City-owned bridges by performing certain activities that have been pre-approved by the FHWA.

Contract Amount: \$100,000

Funding Sources: Federal

Project Dates: 2007 - 2023

Contractor Program Manager:
Molly Mell, PE, 805.542.8626

Work tasks included:

- Identifying preventive maintenance strategies and criteria for use
- Addressing processes and procedures related to the program
- Providing guidelines for selecting bridge preservation projects
- Providing recommendations for ongoing program evaluation, continuous improvement and performance measurement
- Determine the overall financial needs of implementing the program

Contract Agency/Contracting Contact: City of Santa Clarita | Frank Lujan | 661.255.4138

GARFIELD AVE. COMPLETE STREET IMPROVEMENTS

South Gate, CA



Tetra Tech is providing professional engineering design and construction support services for this complete streets project for the City of South Gate. The scope of this project included providing multimodal pedestrian and bicycle design treatments to this 2.5 mile stretch of heavily congested corridor. The project will provide ADA improvements to approximately 42 existing curb ramps and an additional 10 newly constructed curb ramps. Existing gaps will be closed within sidewalks to improve pedestrian mobility. Three new pedestrian activated push button signals

with enhanced crosswalks will be designed and constructed to further improve mobility. Medians will be installed at strategic locations as a safety counter measure, preventing dangerous vehicular left-turn movements at congested locations. Class II and Class III bike lanes and routes will be designed throughout the corridor and a Class I bike path will be designed within an adjacent park. Medians will be landscaped, and roadway rehabilitation assessment will be performed to identify the most economical way to utilize City funds to improve roadway conditions within the corridor.

Contract Amount: \$657,000

Funding Sources: Federal & State

Project Dates: 2020 - 2022 (Design)
2023 - Ongoing (Construction)

Contractor Project Manager:
Bridget Elliott, PE, 805.542.9052

Contract Agency/Contracting Contact: City of South Gate | Elias Saikaly | 323.563.9581

BONITA SCHOOL ROAD BRIDGE REPLACEMENT SURVEY

Santa Barbara, CA



Tetra Tech is providing survey services in support of this project which aims to remove and replace the 300-foot-long Bonita School Road Bridge over the Santa Maria River with a new 2,350-foot-long bridge, construct roadway approaches to the new bridge, and construct Active Transportation (pedestrian and bicycle) improvements on the west side of the new bridge. Tetra Tech began working directly for the County of Santa Barbara, and has continued to be part of the design team working on the project for TYLin International. Originally, Tetra Tech set established controls and tied points to the Santa Maria Valley Control Network. Aerial photography, analytical

aerotriangulation, and stereo compilation were used for density control and to create planimetric and terrain data. Terrain data was used to generate 1-foot contours. Tetra Tech performed a ground survey to supplement the aerial-acquired topography to collect additional data of features not readily visible from the air. The Digital Terrain Model of the ground and aerial surveys were combined to eliminate redundancy, and an AutoCAD Civil 3D file containing all data was produced.

Tetra Tech is currently supporting the project preparing exhibits and right of way acquisition packages.

Contract Amount: \$130,289

Funding Sources: Federal

Project Duration: 2014 - Ongoing

Contractor Survey Manager:
Dan Helt, PE, PLS, 805.542.8626

Client: County of Santa Barbara, Public Works Department | James Faber | 949.398.4957

VENTURA RIVER LEVEE (VR-1)

Ventura, CA



Tetra Tech is currently providing geotechnical and hydraulic engineering services for the rehabilitation of the Ventura River Levee (VR-1) in Ventura, California. The Ventura River is formed by the junction of the North Fork and Matilija Creek, 4 miles northwest of Ojai. It flows 16.5 miles in a generally southerly direction, emptying into the Pacific Ocean in Ventura, California. The current VR-1 Levee extends along the left bank of the Ventura River from the Pacific Ocean on the south, immediately downstream of the outlet of Canada de San Joaquin creek into the Ventura River.

From this point the existing levee bends away from the Ventura River and forms the left bank of the Canada de San Joaquin creek. In the general area where the levee alignment bends to the east, the levee prism has been buried by embankment fill placed to construct State Route 33 and is no longer visible. The study was performed to evaluate the existing levee system within the criteria currently established by the Federal Emergency Management Agency (FEMA). Tetra Tech determined that the levee could not be certified for the 100-year flood event due to several deficiencies.

Contract Amount: \$200,187

Funding Sources: Ventura County

Project Duration: 2018 - Present

Contractor Project Manager:
Doug Bell, PE, GE, 909.860.7777

Client: Ventura County Water Protection District | Kirk Norman | 805.564.2017

VULCAN AVENUE DRAINAGE IMPROVEMENTS

City of Encinitas, CA



To alleviate nuisance surface flooding, Tetra Tech engaged with the City of Encinitas to identify and design green infrastructure solutions as part of the Vulcan Avenue Drainage Improvements project. The Vulcan Avenue neighborhood, located between Leucadia Boulevard and Encinitas Boulevard in the City of Encinitas, is drained by several lateral connections that convey stormwater runoff to an undersized storm drain system under Coast Highway 101. The storm drain main is regulated by an orifice plate limiting the

entry flows to 1 cfs. The undersized network and restrictor orifice plate resulted in the neighborhood being subject to nuisance flooding even during small and frequent storm events that are less than the 85th percentile, 24-hour rain event.

Community outreach was central to the Vulcan Avenue Drainage Improvements Project. Public workshops were held at Encinitas City Hall for community feedback. Tetra Tech worked with City staff to identify key post-construction management and resident use issues.

Contract Amount: \$330,334

Funding Sources: Grants

Project Duration: 2016 - 2022

Contractor Project Manager:
Jason Wright, PE, 919.485.2064

Client: City of Encinitas | Matt Widelski | 760.633.2862

GILMAN SPRINGS ROAD BRIDGE REPLACEMENT

San Jacinto, CA



Riverside County is replacing a culvert near San Jacinto with a larger bridge/culvert and animal crossing at Gilman Springs Road and Bridge Road. Tetra Tech was contracted to do the H&H and Scour analysis on the existing and new crossing design. The effort is a task order with existing contract with NCM engineering, who has a master contract with Riverside Transportation. Tetra Tech utilized HEC-RAS to conduct the hydraulic analysis with a 1D model, with discharges from a hydrology analysis of the watershed with the Riverside County design manual. The hydrology calculated matched that of the existing

culvert design discharge. The analysis was updated with a wider bridge with a ledge for animal crossings during flow events. The under-crossing was originally proposed as soft bottom, but the analysis highlighted scour potential that could undermine the structure. Instead, the bottom was made concrete (effectively a culvert) with a downstream lip to promote sedimentation under the bridge at the tail end of flow events to provide a soft bottom between storms. The proposed design was modeled and upstream toe-down protection recommended.

Contract Amount: \$131,151

Funding Sources: Riverside County DOT

Project Duration: 2020 - 2023

Contractor Project Manager:
Steve Parker, 949.809.5114

Client: County of Riverside | Mark Reader | 949.981.5260

LOWER MISSION CREEK CHANNEL IMPROVEMENT & ECOSYSTEM RESTORATION

Santa Barbara County, CA



Tetra Tech prepared the hydraulic design, sediment transport (HEC-6T), PS&E and Design Document Report for the Lower Mission Creek Flood Control and restoration project in Santa Barbara. Tetra Tech was responsible for the civil, structural, geotechnical engineering for the project. The project includes approximately 4,000 LF of improvements along the highly urbanized Lower Mission Creek from Mason to Castillo. Improvements consists of widening and streamlining the channel bed 60-feet to 70-feet, stabilizing creek banks using riprap side slope and vertical walls, planting of native vegetation along

the riprap (5.6 acres of restoration along the creek) and Fish passage improvements to improve the migration of the Steelhead Trout and Tidewater Goby (Lower Mission Creek is considered critical habitat). It includes grading of the existing channel and expansion parcels directly adjacent to the channel. As part of the design, Tetra Tech performed a design refinement and value engineering review of the conceptual plans. The design changes proposed by Tetra Tech assisted in reducing the proposed property acquisitions and reduced the project cost.

Contract Amount: \$874,000

Funding Sources: Federal & County

Project Duration: 2009 - 2018

Contractor Project Manager:
Aric Torreyson, PE, ENV SP, 951.662.0788

Client: Santa Barbara County Flood Control & Water Conservation District | Jonathan Frye | 805.884.8074

3. Contractor Staffing

Our proposed personnel, experience, certifications, and registrations are presented in the following Organization Chart and team member professional resumes.

TEAM PERSONNEL

Our project team includes engineering experts with the experience necessary to successfully complete the County's projects in a timely and professional manner. The individuals depicted in our Team Organizational Chart are available, and we commit their time and effort necessary to successfully complete each project. Brief resumes of personnel are included in the following pages. Additional resumes can be provided upon request.



Our Contract and Project Manager, Jason Fussel, has more than 20 years of engineering experience that includes has a broad knowledge of civil engineering stemming from his involvement in a variety of residential, educational and federal projects. His relevant project experience includes hydrology and hydraulic studies in support of transportation projects and bridge designs, street and storm drain improvements and grading activities varying from mass grading to final precise grading plans. Mr. Fussel's professional strengths and key areas of expertise include project management, design, cost estimating, preparation of specifications, and construction support services.

SUBCONSULTANT: FILLIPIN ENGINEERING



Filippin Engineering, Inc. (FE) is a regional firm providing local service solely to California including

Santa Barbara, Ventura, and San Luis Obispo Counties. FE's emphasis, and all our attention, remains focused on our local Public Agency projects and relationships. FE and its associates have a highly successful record in managing a variety of public works projects and a reputation for building strong, long-term relationships with our clients. FE's civil engineering staff have gained their experience over decades in a variety of roles—as public Agency employees, as engineering consultants, and on the

private development side—so the experience and capability that we bring is exceptionally well-suited to this assignment. Additionally, FE has civil engineering staff resources at a range of levels, meaning we can adapt the context of projects as needed to assign the most appropriate level of engineering and construction staff. FE staff specializes in construction management and has one of the largest regional teams to serve our clients. This pool of professional staff creates a responsiveness and adaptability that will translate directly to the best available quality of service at the highest available value to the County of Santa Barbara.

OUR COMMITMENT.



Tetra Tech commits our best leadership and resources to perform professional design services for each task order under the as-needed contract. It is our mission that the Public Works Department and the Transportation Division will be elevated by our successful delivery of each project on time, within budget, and to the satisfaction of the County, residents, and businesses alike.

TEAM ORGANIZATIONAL CHART



*Subconsultant - Filippin Engineering, Inc.
 Additional Resumes and Staff Can Be Provided As-Needed

Jason Fussel, PE, PLS, QSD/P, LEED AP, ENV SP

CLIENT/PROJECT MANAGER

Mr. Fussel will serve as Contract and Project Manager, tasked with ensuring the complete satisfaction of the County with the work efforts of the team and the intent of the proposed projects, and seeing that the schedule and budget goals are met. Mr. Fussel's civil engineering experience totals two decades with the majority of it being focused on transportation and stormwater infrastructure projects. He has ample experience designing and supporting the construction of transportation improvement projects and has provided QA/QC oversight for the design and construction of ADA intersection ramp improvements for more than 1,800 ramps on 300 intersections in San Francisco. Mr. Fussel's professional strengths and key areas of expertise include project management, QA/QC, peer review, design, preparation of specifications, bid documents and cost estimates, and construction support services.

RELEVANT EXPERIENCE

Culver Boulevard Realignment Project, City of Culver City, CA.

Principal-In-Charge. Mr. Fussel is overseeing design services for pedestrian access improvements to a 1.06-mile portion of Lake Avenue between Corson Street and California Boulevard. Tetra Tech balanced the design approach to meet the scope of the Los Angeles County Metropolitan Transportation Authority grant while staying within the budget. The work includes the addition of a signalized mid-block crossing and a new signalized intersection, elimination of a "pork chop" island with additions of right-turn pockets and traffic signal modifications, removal of a bus turning bay and bus-stop improvements, installation of new in-fill pedestrian-scale sidewalk lighting system, the addition of curb extensions and ADA compliant curb ramps, and in-fill street trees, landscaped islands, and irrigation.

Merced Avenue Greenway Project, Council for Watershed Health for City of South El Monte, CA.

Principal-In-Charge. Mr. Fussel is responsible for overseeing

planning, design, and construction support services for a stormwater retrofit project. The scope of services included assessing existing conditions on Merced Avenue, consulting with agencies on regulations for planning and design, evaluating pre-design monitoring data and analyzing urban heat island mitigation strategies, providing a preliminary design report, presenting at community design workshops and meetings in collaboration with various stakeholders to create designs for the retrofit. Tetra Tech also provided final permitting, construction drawings, cost estimates, and a bid package.

Lincoln Avenue Pedestrian Pathway, City of Santa Ana, Santa Ana, CA.

Principal-In-Charge. Responsible for direction of the design efforts, staffing to meet the City's needs, and dedicating the resources necessary to see that the design objectives, schedule, and budget goals are met. The project scope includes preparation of the plans, specifications, and estimates for this active transportation project. Services included permitting through the Southern California Regional Rail Authority.

Bonita School Road Bridge Replacement Survey, TYLin International for County of Santa Barbara, CA.

Principal-In-Charge. Provided direction of the survey and design effort, staffing to meet client needs, and dedicating resources necessary to see design objectives, schedule, and budget goals were met. Scope of services included performing control, aerial, and topographic survey work for the replacement of the Bonita School Road Bridge.

EDUCATION:

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, 2003

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer: California, #70879
Hawaii, #15600

Professional Land Surveyor, California, #9006

Qualified SWPPP Developer and Qualified SWPPP Practitioner, #20231

Envision™ Sustainability Professional

LEED® Accredited Professional

YEARS OF EXPERIENCE:

20

Molly Mell, PE, ENV SP

PRINCIPAL-IN-CHARGE

Ms. Mell will serve as Principal-In-Charge, tasked with overseeing the work efforts of the team and the intent of the proposed projects. Ms. Mell has provided program management services to high profile California clients. She is adept at coordinating complex workloads that can include multiple projects under a single program or numerous disciplines within a single project. Ms. Mell has over 30 years of experience in civil engineering construction management. She has provided construction management and administration services for a variety of infrastructure improvement projects that involved coordination and community between the agencies, contractor and utility companies.

RELEVANT EXPERIENCE

Bridge Maintenance Program, City of Santa Clarita, CA.

Project Manager. As project manager for the City's bridge maintenance program, Ms. Mell led Tetra Tech's project team to prepare plans, specifications and estimates to rehabilitate aging vehicular bridges. Work activities included methacrylate resin bridge deck treatment, replacement of expansion joint seals, repair of spalled concrete, and epoxy injection in cracked concrete. The program will extend the useful service life of existing bridge assets. Since 2007, Tetra Tech managed design and construction phase services to improve more than 30 bridges.

Soto Street Bridge Over Mission Road and Huntington Drive Bridge Removal and Street Improvement Project, City of Los Angeles Bureau of Engineering, Los Angeles, CA.

Project Manager. Provided engineering design support services during construction including RFIs, review of shop drawings, geotechnical engineering support, responding to requested design changes, and preparing as-builts for the

Soto Street Bridge over Mission Road and Huntington Drive Bridge Removal and Street Improvement Project.

Bike/Pedestrian Path for Los Angeles River Greenway, Bureau of Engineering, City of Los Angeles, CA.

Project Director. Prepared Plans, Specifications, and Estimate for a new bike path along the Los Angeles River channel from Winnetka Avenue to Mason Avenue. The proposed bike path is inside the channel, requiring modifications to the channel cross section and retaining wall design. Tetra Tech prepared a 2-D hydraulic model to study the effects the new section will have on waving and ramping patterns, in accordance with the Army Corps of Engineers requirements. The project also included bikeway plans and profiles, signing and striping, lighting plans, and decorative path construction. An artistic rendering was also prepared to illustrate how the completed project will appear.

Golden Valley Road/Soledad Canyon Road Interchange Improvements and Grade Separation, City of Santa Clarita, Santa Clarita, CA.

Project Engineer. Preparation

of Feasibility Study, Project Study Report, Environmental Document, and PS&E for grade separation of two major arterial streets and Metrolink/UPRR paralleling one of the arterial streets. The project included Class I Bikeway design, track and roadway design, bridge advance planning studies, crash wall development, grade separation, and coordination with Metrolink, and the California Public Utilities Commission (CPUC). Work tasks included mapping; structure overcrossing geometrics; traffic signals; utility coordination; right-of-way identification; and cost estimates for various options related to the interchange.

EDUCATION:

BS, Civil Engineering, University of Redlands, 1992

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer: California, #59104

Envision™ Sustainability Professional

YEARS OF EXPERIENCE:

30

James Schwedtfeger, PE

QA/QC MANAGER

Mr. Schwedtfeger has 21 years of experience as a Project Manager and Lead Designer on transportation projects throughout the state, including TxDOT; the Cities of Austin, San Antonio, New Braunfels, Round Rock, Georgetown, Cedar Park, Leander; and Williamson and Hays County. He has also completed projects for both the Austin and Lake Travis Independent School Districts. His responsibilities include development of plans and specifications, supervision of project staff, and being responsive to clients' needs. James has performed many roadway design projects, feasibility studies, ramp reversals studies, traffic control plans, traffic signals, traffic beacon, illumination plans, school zone studies, traffic impact analysis, drainage improvements, and water and wastewater design.

RELEVANT EXPERIENCE

TxDOT Fort Worth District IH 20, IH 820 to Chisolm Trail Intelligent Transportation System Design, Tarrant County, TX. Design Lead.

Mr. Schwedtfeger served as task lead for the design of the Intelligent Transportation System (ITS) section of the project. The ITS design included identify existing ITS equipment, provide removal and replacement plans of fiber optic cables for existing ITS equipment, develop plans for detective Wrong Way Driver System, Radar Vehicle Sensing Device (RVSD) system, wireless CCTV system on high mast ITS poles, and back to back Dynamic Message Signs (DMS) on cantilever sign structures, provide schematic layouts and fiber optic connection plans for ITS equipment.

City of Buda Cabelas Connector, Buda, TX.

Mr. Schwedtfeger performed a traffic study for determining applicable signage, pavement markings and pedestrian access at the intersection of Cabelas Drive and Old San Antonio Road in conjunction with the Cabelas Connector project. He analyzed

site and stopping distance approach the intersection and recommended improvements including flashing stop signs to warn approaching drivers.

Traffic On-Call Engineering Services, Williamson County, TX.

As Project Manager, Mr. Schwedtfeger managed and performed a variety of traffic engineering services for Williamson County through the 2020 Traffic On-Call. Recent traffic engineering assignments have covered crash studies, intersection safety analysis, sight distance studies, and all-way stop warrants. He performed field condition assessments and monitors vehicular and pedestrian movements either through traffic count collection or visual turning movement analysis. Prepared written reports for each assignment summarizing existing field conditions, data collection, analysis, and recommendations for improvements including cost estimates.

City of San Antonio Evans Road and Bulverde Road Pedestrian Safety Improvements, San Antonio, TX.

As part of an On-Call IMP Contract, Mr. Schwedtfeger

completed the analysis of the pedestrian crossing at the eastbound to southbound yield condition right turn lane. The crosswalk had sight distance issues. Following the analysis, design, bidding and construction phase services were performed to relocate the pedestrian crossing and modify the island to improve the sight distance. The design included new sidewalk, curb, retaining wall, and ramps.

City of San Antonio Traffic On-Call Engineering Services, San Antonio, TX.

The project manager for this on-call contract which will include transportation systems planning, schematic development, traffic engineering studies, traffic operations design and more. Mr. Schwedtfeger will manage each of the task orders for these projects as they are assigned.

EDUCATION:

BS, Civil Engineering, Texas A&M University, 2001

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer: Texas, #97266

YEARS OF EXPERIENCE:

21

Devin Newton, PE, QSD/P

CIVIL/ROADWAY

Mr. Newton is a California Licensed Civil Engineer with 21 years of civil engineering design and consulting experience. He is highly skilled in infrastructure design and is able to provide timely, cost-effective design solutions for his clients. Mr. Newton possesses current experience with modern stormwater management and Low Impact Development (LID) practices including hydraulic and hydrologic design of bio-treatment and flood control systems. He is knowledgeable in all phases of the land development entitlement process from conceptual planning to construction. Mr. Newton has extensive experience in the design of ADA compliant facilities, property title research, grading design, erosion control, and land surveying.

RELEVANT EXPERIENCE

Boyle Heights Pedestrian Linkages Active Transportation Project (ATP 2), City of Los Angeles, Bureau of Engineering, Los Angeles, CA.

Senior Civil Engineer & Engineer of Record. Mr. Newton is responsible for overseeing the project design and preparation of final plans, specifications and estimates for this active transportation project aims to improve pedestrian safety and access to the City of Los Angeles' Sixth Street Viaduct and Sixth Street PARC Projects. In addition to serving City residents, the project specifically aims to improve the pedestrian accessibility. The project focuses on pedestrian transportation improvements which includes sidewalk enhancements, ADA ramps, new and enhanced crosswalks, and safety features that include curb pedestrian signals and new pedestrian lighting along all new/improved walkways. The project will provide nearly 4,000 linear feet of new, replaced, and reconstructed sidewalk.

Camp Roberts Perimeter Road, California Army National Guard, San Miguel, CA. Project Manager.

Mr. Newton is responsible for overseeing engineering services for upgrades to approximately 17.1 miles of roadway along the East and West Perimeter Range Roads at Camp Roberts. The existing pavement had numerous potholes, cracks and surface deterioration that have developed over the years due to extreme weather conditions and the need to operate heavy military vehicles. The goal of the project was to bring the roadways up to modern asphalt standards, provide a safe, reliable, and usable environment for soldier training and improve operability and maintainability of roadways. Tetra Tech was responsible for conducting a pavement condition assessment, topographic survey services, and preparing conceptual and detailed design plans, specifications, and calculations to allow the Government to assemble a bid package for repair of the perimeter range roads. Tetra Tech also provided construction support services.

Sand Canyon Trail Phase IV, Alta Planning + Design for the City of Santa Clarita, Santa Clarita, CA. Project Engineer & Engineer of Record. Mr. Newton was responsible for providing final

construction documents for a new multi-use trail along Sand Canyon Road. The proposed trail is approximately 1.6 miles in length, and will be separated from motor vehicular traffic by fencing, providing a safe route for pedestrian and equestrian use. Tetra Tech is working with Alta Planning + Design to provide the City of Santa Clarita with preparation of design, plans, and engineer's estimates for Phases IV through VI of the project, which are a continuation of the completed Phase III trail. The project scope includes preliminary conceptual trail design, preliminary environmental analysis, right-of-way mapping, civil engineering, conceptual bridge design and preliminary construction cost estimates.

EDUCATION:

California Polytechnic State University, San Luis Obispo, 2000

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #72952

Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP), #01054

YEARS OF EXPERIENCE:

21

Bridget Elliott, PE

CIVIL/ROADWAY

Ms. Elliott has 19 years of engineering experience in stormwater, transportation, land development, capital improvement programing, construction management/administration, municipal service, and regulatory compliance, providing internal engineering support for various projects and business development pursuits. In addition, she manages the engineering services and construction management for capital improvement projects on behalf of the City of Buellton. A seasoned professional with experience on both the private and regulatory side, Ms. Elliott has played an active role in all phases of the project life-cycle. She is experienced in management of annual road maintenance projects with various surface treatments, full depth pavement reclamation, and federally-funded bridge seismic retrofit. Her experience also includes project administration and construction management of various municipal project such as reservoir repair and recoating, meter replacement, sewer line replacements, booster station upgrades, wellhead facility development, right-of-way improvements, and major utility relocation.

RELEVANT EXPERIENCE

Garfield Avenue Complete Streets Project, City of South Gate, CA. Project Manager. The scope of this project includes providing multimodal pedestrian and bicycle design treatments to this 2.5 mile stretch of heavily congested corridor. The project will provide ADA improvements to approximately 42 existing curb ramps and an additional 10 newly constructed curb ramps. Existing gaps will be closed within sidewalks to improve pedestrian mobility. Three new pedestrian activated push button signals with enhanced crosswalks will be designed and constructed to further improve mobility. Medians will be installed at strategic locations as a safety counter measure, preventing dangerous vehicular left-turn movements at congested locations. Class II and Class III bike lanes and routes will be designed throughout the corridor and a Class I bike path will be designed within an adjacent park, providing access from the corridor to the Los Angeles Bicycle Path located adjacent to the LA River.

Templeton to Atascadero Connector, County of San Luis Obispo, Templeton, CA. Project Engineer. Responsible for project budgeting and site design and construction document preparation. Tetra Tech was contracted to providing design services for a multi-use pathway including completing the California Environmental Quality Act and National Environmental Policy Act processes, right-of-way acquisition, permits, construction documents and grant administration. The ultimate goal of the pathway network is to provide connectivity between Templeton and Atascadero, facilitating safe and attractive transportation between these two towns and encouraging alternative transportation modes.

Long Beach Armory Org Parking Area, California State Military Department, Long Beach, CA. QA/QC. Responsible for providing quality assurance quality control (QA/QC) review of civil engineering design services. Tetra Tech is providing detailed design and construction

support services to update and repair the existing parking with new AC pavement and improve storm water drainage from the project site at the Long Beach Armory. Project scope includes the removal and replacement of asphalt pavement, along with support site improvements such as grading and drainage, walkways, curb/gutters, sidewalks, manhole repair/replacement, sewer lateral replacement, bollards, ADA parking spaces and ramps, signage, striping, and lighting.

EDUCATION:

BS, Civil Engineering, emphasis in Structural Engineering; University of Utah, 2004

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer: California, #C84723
Utah, #5339740

LEED® Accredited Professional

Certified Professional in Erosion and Sediment Control (CPESC)

YEARS OF EXPERIENCE:

19

Craig Ziel, PE, QSD/P

CIVIL/ROADWAY

Mr. Ziel's experience involves the planning, analysis, and design for residential, commercial, and municipal development projects. His proficiency includes the design and preparation of construction documents for sewer, water, and storm drains, as well as improvement plans for the geometric design of roads, highways, bike paths and parking areas. He also has sufficient experience preparing grading and drainage plans for roads, mass grading, finish grading, and grading for Low Impact Development (LID) projects. Mr. Ziel understands the unique characteristics of every site and employs a variety of design techniques including AutoDesk's Civil 3D, as well as various hydraulic/hydrologic analysis software programs. This approach allows him to analyze the interaction of utilities, grading, and drainage during the design process and develop innovative and dynamic solutions for every project.

RELEVANT EXPERIENCE

Sand Canyon Trail Phases IV - VI, Alta Planning + Design for the City of Santa Clarita, Santa Clarita, CA. Project Engineer. Mr. Ziel was responsible for preparing planning and construction documents for project which consisted of the installation of a multi-use trail along Sand Canyon Road in the City of Santa Clarita. The proposed trail is approximately 1.6 miles in length, and is separated from motor vehicular traffic by fencing, providing a safe route for pedestrian and equestrian use. Tetra Tech worked with Alta Planning + Design to provide the City of Santa Clarita design, plans and engineer's estimates for Phases IV through VI of the project, which was a continuation of the completed Phase III trail. The project scope included preliminary conceptual trail design, preliminary environmental analysis, right-of-way mapping, civil engineering, bridge design, specifications, and construction cost estimates.

DTLA Arts District Pedestrian and Cyclist Safety Active Transportation Project (ATP

3), City of Los Angeles, Bureau of Engineering, Los Angeles, CA. Project Engineer. Mr. Ziel is providing pre-design and preparation of plans, specifications and estimates for this active transportation project, funded by a CalTrans ATP grant. The project area is characterized by a complex street system of very long blocks with few safe crossing locations, complicated intersections, and very limited bike facilities that create mobility challenges for residents, workers and visitors to the district. The project improvements will provide pedestrian and cyclist improvements including new cycle tracks, bike lanes, bike routes, new and widened sidewalks with curb extensions, new traffic-controlled intersections, a new shared street connecting to the new Sixth Street Viaduct Arts Plaza, as well as green street elements.

Shell Beach Road Streetscape Phase I Project, City of Pismo Beach, Pismo Beach, CA. Project Engineer. Responsible for preparing utility and site layout exhibits for the design of a "total street" reconstruction of 18 blocks of Shell Beach Road

in the City of Pismo Beach. The project entails incorporating a new Class 1 bikeway along an existing Caltrans right-of-way (Highway 101). In addition, the project aims to replace aging utilities, including: a new 12-inch water line, new 12-inch reclaimed water line, undergrounding power and communication lines, and new storm drain improvements. The project will incorporate new way-finding and streetscape enhancements including pavement enhancements at crosswalks and intersections, full ADA compliance, street furniture and landscape improvements (incorporating Low Impact Development techniques).

EDUCATION:

BS, BioResource and Agricultural Engineering, California Polytechnic State University, San Luis Obispo, 2006

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #73743

Qualified SWPPP Developer/Practitioner, QSD/QSP, #23344

YEARS OF EXPERIENCE:

16

Justin Smith, PE

CIVIL/ROADWAY

Mr. Smith has been a part of the Tetra Tech team for 11 years and contributes his extensive knowledge in civil engineering from his involvement in a variety of municipal projects of varying size and funding. His design experience includes hydrologic and hydraulic design for storm drain improvements, construction and post-construction stormwater Best Management Practices (BMPs) including associated Water Quality Management Plans (WQMP) and Stormwater Pollution Prevention Plans (SWPPP), WQMP Operations and Maintenance Reports, overall utility plans, structural design, grading activities varying from mass grading to final precise grading plans, parking lot and roadway geometrics, pedestrian accessibility improvements, bike trails, and park developments. His other experience includes cost estimating, preparing specifications, providing construction/post-construction support, performing utility research, and coordinating with the project team and outside agencies.

RELEVANT EXPERIENCE

Lincoln Avenue Pedestrian Pathway Connectivity, City of Santa Ana, Santa Ana, CA.

Project Manager. Responsible for overseeing engineering, geotechnical, environmental, permitting, landscaping, surveying and construction support services for this active transportation project. The project is funded in part by ATP state grant funds. The pedestrian pathway will run parallel with Lincoln Avenue west of the existing railroad tracks. The improvements will commence at the intersection of Lincoln Avenue and Park Lane, continue north between the back of the residential properties and the railroad tracks, and end at the existing Santiago Trail, under the railroad bridge that crosses Santiago Creek. The improvements include a 12-foot pathway and railroad-approved safety fencing, drought tolerant landscaping, pedestrian lighting, benches, and a trailhead to identify the pathway.

Boyle Heights Pedestrian Linkages (ATP 2) and DTLA Arts District (ATP 3), City of Los Angeles, Bureau of Engineering, Los Angeles, CA. Design Engineer. Providing

design services and support during construction for two active transportation projects: the Boyle Heights Linkage Project Description (ATP 2) and the Arts District Pedestrian/Cyclist Improvement Project (ATP 3). The goal of ATP 2 is to improve pedestrian safety and access to the City of Los Angeles' Sixth Street Viaduct and Sixth Street PARC Projects, specifically aiming to improve the pedestrian circumstances for users of the Aliso Pico Recreation Center, Pecan Recreation Center, and Boyle Heights Technology Youth Center. The goal of these two Caltrans Local Assistance Program funded projects is to increase the mobility and safety for non-motorized users to achieve the regional agency's greenhouse gas reduction goals, and aid in the enhancement of the public's health.

Camp Roberts Perimeter Road, California Army National Guard, San Miguel, CA.

Design Engineer. Responsible for assisting in the preparation of plan and profile roadway plans for the repair of a 17-mile perimeter loop road at Camp Roberts. Significant portions of the perimeter range roads were in a state of disrepair and are

well beyond their service life. The existing pavement had numerous potholes, cracks and surface deterioration that have developed over the years due to extreme weather conditions and the need to operate heavy military vehicles. The goal of the project was to bring the roadways up to modern asphalt standards, provide a safe, reliable and usable environment for soldier training and improve operability and maintainability of roadways. Tetra Tech was responsible for conducting a pavement condition assessment, topographic survey services (traditional ground and mobile LiDAR), and preparing conceptual and detailed design plans, specifications, and calculations to allow the Government to assemble a bid package for repair of the perimeter range roads.

EDUCATION:

BS, Civil Engineering,
University of Irvine, 2013

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer:
California, #85736

YEARS OF EXPERIENCE:

11

Dan Helt, PE, PLS

LAND SURVEYING

Mr. Helt is experienced in both civil engineering and land surveying aspects of construction and land development projects. He has designed and prepared small and large federal, municipal, commercial, and residential grading and drainage plans, as well as utility plans and project associated public improvement plans. Mr. Helt has prepared a variety of hydrology and hydraulic documents for review of analysis and compliance with codes and standards. He has prepared and reviewed specifications, calculations and other basis of design documents. He has performed field boundary and topographic surveys, as well as construction staking, certification and monitoring, and ALTA/ACSM surveys. Mr. Helt has considerable experience researching boundary and chain of title information, and preparing legal descriptions.

RELEVANT EXPERIENCE

Culver Boulevard Realignment, City of Culver City, CA. Survey Manager. Mr. Helt was responsible for overseeing field and office survey services in support of this roadway realignment project. The new road will include a 58-foot wide raised landscape median, complete with buffered bicycle and pedestrian paths. Street improvements include the reconfiguration of existing traffic lanes, new and reconstructed landscape medians, traffic signal additions and modifications, bus stops, signal interconnects, new lighting, utility adjustments, relocation of existing catch basins, and the design of a parking lane with innovative buffer treatment to separate it from the eastbound high-speed travel lanes on Culver Boulevard. Tetra Tech also led a series of outreach meetings with the Community Advisory Committee and the residents to obtain input and consensus in the design process.

First Street Pedestrian Improvements, City of Santa Ana, Santa Ana, CA. Survey Manager. Responsible for overseeing topographic survey services in support of preparation of the

plans, specifications, and estimates for this active transportation project. The project involves the widening of the existing sidewalks by 3-feet by reducing the width of the vehicle travel lanes along a 1.2-mile portion of First Street between Flower Street and Standard Avenue. Improvements include reconstructing ADA curb ramps, reconstructing hardscapes, creating bulb-outs at intersections, restriping travel lanes, installing high visibility marked crosswalks, relocating and/or adjusting existing utility features to grade, relocating street furniture, modifying existing pedestrian push buttons, installing new traffic signal detector loops, installing a new traffic signal at the intersection with Lacy Street, retrofitting and/or reconstructing drainage structures, and installing stormwater Best Management Practices.

Boyle Heights Pedestrian Linkages Active Transportation Project (ATP 2), City of Los Angeles, Bureau of Engineering, Los Angeles, CA. Survey Manager. Responsible for overseeing field and office survey services in support of this active transportation project. ATP 2 aims to improve pedestrian safety and access to the City of Los Angeles'

Sixth Street Viaduct and Sixth Street PARC Projects. In addition to serving City residents, the project specifically aims to improve the pedestrian accessibility. The project focuses on pedestrian transportation improvements which includes sidewalk enhancements, ADA ramps, new and enhanced crosswalks, and safety features that include curb pedestrian signals and new pedestrian lighting along all new/improved walkways. The project will provide nearly 4,000 linear feet of new, replaced, and reconstructed sidewalk. The sidewalk improvements will include new and reconstructed ADA ramps and crosswalks, providing connectivity to various key community features and adjacent neighboring locations.

EDUCATION:

BS, Civil Engineering, Cal Poly, San Luis Obispo, 2003

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #C69347

Professional Land Surveyor, California, #8925

YEARS OF EXPERIENCE:

20

Jesus Guzman, PLS

LAND SURVEYING

Mr. Guzman is a licensed surveyor with 25 years of experience providing office and field survey support for projects involving engineering, construction, and mapping for highways, utility infrastructure, airport runways, schools, water pipeline tunnels, dams, rivers, and lake improvements. He is experienced with preparation, agency submittal, and recordation of tract maps, parcel maps, final maps, Records of Surveys, tentative maps, corner records, lot mergers, lot line adjustments, ALTA documents, and public roadway abandonments. Mr. Guzman has managed and participated in various land survey activities including field surveying for municipalities, county, state, and federal agencies, and the armed services. His municipal experience includes providing map checking, public improvement plan check, and setting Engineering Conditions of Approval for proposed developments.

RELEVANT EXPERIENCE

TOS 702 Ramp Design, City of Los Angeles, Bureau of Engineering, Los Angeles, CA. Senior Land Surveyor. Responsible for preparing centerline alignments and Right-of-Ways in support of ADA compliant ramp designs. Tetra Tech was contracted by the City of Los Angeles to provide survey and engineering design services in support of Streets LA's Pavement Preservation Program which maintains a street network of 23,000 lane miles and keeps all improved streets and related throughways in good to excellent condition. Tetra Tech's scope of services includes topographic survey, engineering design, design support during construction, and construction management services for various access ramps throughout the City, in compliance with the Americans with Disabilities Act (ADA).

I-5 Mapping of Lake Hughes Road to Hasley Canyon Road, County of Los Angeles, Los Angeles, CA. Survey Party Chief. Responsible for providing surveying services and managing field crews, setting ground aerial targets, for

Photogrammetry. Survey methods used were fast static.

Tesla Nola ATLA Survey, Levy Alameda LLC, Alameda and San Joaquin Counties, CA. Senior Land Surveyor. Oversaw all research, initial mapping, and search calcs and coordinated field acquisition, and production and oversight of mapping and project deliverables. Tetra Tech conducted survey services for Levy Alameda. Field and office survey work was conducted to complete a certified survey map for two parcels straddling the San Joaquin and Alameda Counties meeting the Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, effective February 23, 2021. The survey was prepared to reflect the ALTA Commitment for Title Insurance provided by the client. This survey required use of aerial LiDAR, traditional topographic survey and boundary acquisition and resolution.

Street Topography for Design and Construction of Waterline Infrastructure, Cities of Fullerton, Buena Park, and Orange, CA. Project Surveyor. Mr. Guzman

managed various field crews in the collection of field topo and boundary data for the development of topographies for the design and construction of new water infrastructure in each City respectively. ROW and parcel mapping were completed by Mr. Guzman, or under his direct supervision, along with reviewing and approving all deliverables.

Los Angeles River, Rio Hondo, and San Luis Rey River Levee Mapping, U.S. State Department, CA. Survey Party Chief. Performed and managed various field crews in the mapping of the river levees for each river respectively, from their head waters to their outfall to the sea. Responsibilities included scheduling field crews, collecting and processing field data using RTK survey methods in data recovery.

EDUCATION:

Math studies, California State at Fullerton, 1989

REGISTRATIONS/ CERTIFICATIONS:

Professional Land Surveyor, California No. 8648

YEARS OF EXPERIENCE:

25

Mark Lawler

LAND SURVEYING

Mr. Lawler is experienced in a variety of field survey and GIS applications, and has participated in all aspects of control, construction, boundary, topographic and aerial control surveys including terrestrial LiDAR acquisition. Mr. Lawler has ample experience with field survey preparation, logistics and execution and is responsible for geospatial data acquisition processing and quality control, project research, crew deployment and support as well as task oversight and tracking. He has experience working on projects for municipal, state and federal agencies in diverse areas such as real estate and cadastral, flood plain management, public health and safety, and resource management.

RELEVANT EXPERIENCE

Active Transportation Project (ATP 3) - Arts District Pedestrian and Cyclist Safety, City of Los Angeles Bureau of Engineering, CA. Survey Technician. Acquisition of topographic data in support of construction for this active transportation project. The project area was characterized by a complex street system of very long blocks with few safe crossing locations, complicated intersections, and very limited bike facilities that created mobility challenges for residents, workers and visitors to the district. The project improvements provided pedestrian and cyclist improvements including new cycle tracks, bike lanes, bike routes, new and widened sidewalks with curb extensions, new traffic-controlled intersections, a new shared street connecting to the new Sixth Street Viaduct Arts Plaza, as well as green street elements. The goal of this project was to increase the mobility and safety for non-motorized users, to achieve the regional agency's greenhouse gas reduction goals, and aid in the enhancement of the public's health.

Active Transportation Project (ATP 2) - Boyle Heights Pedestrian Linkages, City of Los Angeles

Bureau of Engineering, CA.

Survey Technician. Acquisition of topographic data in support of construction for this active transportation project aimed at improving pedestrian safety and access to the City of Los Angeles' Sixth Street Viaduct and Sixth Street PARC Projects. In addition to serving City residents, the project specifically aimed to improve the pedestrian accessibility. The project focused on pedestrian transportation improvements which included sidewalk enhancements, ADA ramps, new and enhanced crosswalks, and safety features that included curb pedestrian signals and new pedestrian lighting along all new/improved walkways. The project provided nearly 4,000 linear feet of new, replaced, and reconstructed sidewalk. The sidewalk improvements included new and reconstructed ADA ramps and crosswalks, providing connectivity to various key community features and adjacent neighboring locations

Camp Roberts Perimeter Road, California Army National Guard, San Miguel, CA. Survey Technician. Mr. Lawler was responsible for providing field survey services. Site survey included setting control around the 17-mile perimeter loop, as well as the mobile mapping of

the roadway. Significant portions of the perimeter range roads are in a state of disrepair and are well beyond their service life. The existing pavement has numerous potholes, cracks and surface deterioration that have developed over the years due to extreme weather conditions and the need to operate heavy military vehicles. The goal of the project is to bring the roadways up to modern asphalt standards, provide a safe, reliable and usable environment for soldier training and improve operability and maintainability of roadways. Tetra Tech will be responsible for conducting a pavement condition assessment, topographic survey services (traditional ground and mobile LiDAR), and preparing conceptual and detailed design plans, specifications, and calculations to allow the Government to assemble a bid package for repair of the perimeter range roads.

EDUCATION:

MS, Geography, University of New Mexico, Albuquerque, 2013

BA, Geography, Humboldt State University, California, 2011

YEARS OF EXPERIENCE:

10

Kyle Streeter, LSIT

LAND SURVEYING

Mr. Streeter is a survey technician with experience working on both small and large residential, commercial, municipal and federal projects. Mr. Streeter's surveying experience includes performing boundary, topographic, as-built, construction staking, and aerial photogrammetric surveys throughout California. He is experienced in operating multiple types of data gathering equipment such as total stations, digital levels, scanning devices and Unmanned Aerial Vehicles (UAVs). Mr. Streeter is also experienced in processing traditional survey data, as well as photogrammetric and scanning data. He has worked on boundary and legal projects which include research of chain of title information, historical boundary information and interoperating legal descriptions.

RELEVANT EXPERIENCE

Survey Services for South County Overlay, County of San Luis Obispo, CA. Survey Technician. Provided topographic and right-of-way surveys for ADA curb ramp and other survey locations, and monument preservation for asphalt overlay of various south county roads. Provided topographic surveys at 14 intersections and 6 areas of drainage concern. Field work included a control survey for the topographic survey and the monument preservation. Boundary monuments, sufficient to establish right-of-way were located and observed. Base map files including topographic survey information and right-of-way were prepared. Two separate Records of Survey were prepared: a pre-construction condition and location of survey monuments and the right-of-way establishment.

DTLA Arts District Pedestrian and Cyclist Safety Active Transportation Project (ATP 3), City of Los Angeles, Bureau of Engineering, Los Angeles, CA. Survey Technician. Mr. Streeter was responsible for performing

field survey services as well as providing planimetric mapping and civil design services for this active transportation project. The ATP 3 Project will provide pedestrian and cyclist improvements including new cycle tracks, bike lanes, bike routes, new and widened sidewalks with curb extensions, new traffic-controlled intersections, a new shared street connecting to the new Sixth Street Viaduct Arts Plaza, as well as green street elements. The goal of these two projects is to increase the mobility and safety for non-motorized users to achieve the regional agency's greenhouse gas reduction goals, and aid in the enhancement of the public's health.

Templeton to Atascadero Connector, County of San Luis Obispo, Templeton, CA.

Survey Technician. Mr. Streeter performed an aerial survey of the project site using an unmanned aerial vehicle (UAV). In addition to the UAV survey, he used traditional total station and GPS instruments to fill in supplemental data on spots that could not be acquired or seen from the aerial survey. Mr.

Streeter was also responsible for processing the survey data, creating surfaces, planimetric mapping and setting up civil plan sheets. The project entails the design of a multi-use pathway including completing the California Environmental Quality Act and National Environmental Policy Act processes, right-of-way acquisition, permits, construction documents and grant administration. The ultimate goal of the pathway network is to provide connectivity between Templeton and Atascadero, facilitating safe and attractive transportation between these two towns and encouraging alternative transportation modes.

EDUCATION:

BS, Geomatics Engineering, California State University Fresno, 2017

REGISTRATIONS/ CERTIFICATIONS:

Licensed Surveyor In Training, March 27, 2019

Part 107A Remote Pilot Certificate, #4274106

YEARS OF EXPERIENCE:

6

Aric Torreyson, PE, ENV SP

DRAINAGE DESIGN

Mr. Torreyson has more than 20 years of diverse engineering experience in public works construction, environmental engineering, and infrastructure assessment. He has completed numerous multi-discipline public works and recreational improvement projects, smoothly integrating many different disciplines to achieve project goals. Mr. Torreyson has extensive and relevant experience in stormwater design and development of Best Management Practices and has successfully implemented sustainable design elements, including complete streets, water harvesting, landscaping, and streetscaping. He has specific experience in projects throughout Southern California requiring public engagement for complete street reconstruction, emergency roadway/trail repairs, and shoreline protection tieback walls with pedestrian access. His significant involvement in LID and stormwater pollution prevention and reduction projects in Southern California has provided a deep understanding of permitting and regulatory issues in this region. He has obtained permits from Caltrans, UPRR, and BNSF, and has experience with right-of-way acquisition and managing environmental permitting.

RELEVANT EXPERIENCE

Lower Mission Creek Flood Control and Restoration, USACE Los Angeles District, Santa Barbara, CA.

Project Manager. Managed the preparation of plans, specifications, cost estimates, and Design Document Reports. The project includes approximately 4,000 LF of the lower Mission Creek Channel from Mason Street to Castillo Street and consists of widening and streamlining the channel bed, stabilizing creek banks using riprap side slope and short vertical walls, and planting native vegetation along the riprap to mitigate and minimize impacts to the biological resources within the creek. Additional fish passage improvements were included to support the migration of the Steelhead Trout and Tidewater Goby. The channel widening will range from 60 to 70 feet at the top. The restored area covers the improvement reaches 1B, and 3-7 for a total of approximately 5.6 acres. It includes grading of the existing channel and expansion parcels directly adjacent to the channel. The plans are being

processed through Santa Barbara County Flood Control and Water Conservation District, Caltrans, and the City of Santa Barbara.

Gilman Springs Road Bridge Replacement, County of Riverside, CA.

Design Lead. Tetra Tech was contracted to do the H&H and Scour analysis on the existing and new crossing design. Utilized HEC-RAS to conduct the hydraulic analysis with a 1D model, with discharges from a hydrology analysis of the watershed with the Riverside County design manual. The hydrology calculated matched that of the existing culvert design discharge. The analysis was updated with a wider bridge with a ledge for animal crossings during flow events. The undercrossing was originally proposed as soft bottom, but the analysis highlighted scour potential that could undermine the structure. Instead, the bottom was made concrete (effectively a culvert) with a downstream lip to promote sedimentation under the bridge at the tail end of flow events to provide a soft bottom between storms. The proposed design was

modeled and upstream toe-down protection recommended. A long-term sediment balance analysis was conducted for long term downstream erosion potential where Mystic Lake habitat areas are located. The recommended design took into consideration using no additional concrete downstream of the crossing. The upstream and downstream face cutoff walls at wingwall inlet/outlet were included to protect the bridge itself beyond the normal scour protection. Extra care was conducted to size rock protection with maintenance for the final design.

EDUCATION:

BS, Civil Engineering, California State Polytechnic University, Pomona (2000)

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, No. 66068

Envision Sustainability Professional

YEARS OF EXPERIENCE:

20

Elva Pangilinan, PE, ENV SP, CDT

DRAINAGE DESIGN

Ms. Pangilinan has been a member of the Tetra Tech team for 16 years and has experience in designing and preparing improvement plans, specifications, and estimates for both municipal and federal projects. She has extensive knowledge in Best Management Practices (BMP) and Low Impact Development (LID) implementation through her involvement in several important Measure W and Proposition O projects and various stormwater capture projects throughout Southern California. Additionally, Ms. Pangilinan's experience includes design and construction support of various street improvement projects, including design of bikeway and pedestrian improvements, right-of-way improvements, ADA compliant facilities, underground utilities, grading design, erosion control, and green street infrastructure projects.

RELEVANT EXPERIENCE

Garfield Avenue Complete Streets Project, City of South Gate, CA.

Project Engineer. Prepared specifications for the design of this complete streets improvements project. Tetra Tech is providing professional engineering design and construction support services, including developing multimodal pedestrian and bicycle design treatments to this 2.5 mile stretch of heavily congested corridor. The project will provide ADA improvements to approximately 42 existing curb ramps and an additional 10 newly constructed curb ramps. Existing gaps will be closed within sidewalks to improve pedestrian mobility. Three new pedestrian activated push button signals with enhanced crosswalks will be designed and constructed to further improve mobility. Medians will be installed at strategic locations as a safety counter measure, preventing dangerous vehicular left-turn movements at congested locations. Class II and Class III bike lanes and routes will be designed throughout the corridor and a Class I bike path will be designed within an adjacent park, providing access from the corridor to the Los Angeles Bicycle Path located adjacent to the LA River.

Culver Boulevard Realignment, City of Culver City, Culver City, CA.

Design Engineer. Prepared specifications and bid documents for the realignment of Culver Boulevard between Sepulveda Boulevard and Elenda Street. The new road will include a 58-foot wide raised landscape median, complete with buffered bicycle and pedestrian paths. Street improvements include the reconfiguration of existing traffic lanes, new and reconstructed landscape medians, traffic signal additions and modifications, bus stops, signal interconnects, new lighting, utility adjustments, relocation of existing catch basins, and the design of a parking lane with innovative buffer treatment to separate it from the eastbound high-speed travel lanes on Culver Boulevard.

Merced Avenue Greenway Project, Council for Watershed Health for South El Monte, South El Monte, CA.

Project Manager. Responsible for overseeing design support during the construction phase. Tetra Tech provided pre-design and design services, and is currently providing construction support services for a stormwater retrofit project along the Merced Avenue corridor in South El Monte. The scope

of services includes assessing existing conditions on Merced Avenue, consulting with agencies on regulations for planning and design, evaluating pre-design monitoring data and analyzing urban heat island mitigation strategies, providing a preliminary design report, presenting at community design workshops and meetings in collaboration with various stakeholders to create designs for the retrofit. Tetra Tech will also be providing final permitting, construction drawings, cost estimates, and a bid package. The goal of the project is to manage stormwater runoff at its source to meet regulatory compliance by improving water quality and enhancing watershed health.

EDUCATION:

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, 2007

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #81113

Construction Documents Technology (CDT) Certified

Envision™ Sustainability Professional

YEARS OF EXPERIENCE:

16

Eric Martin, PE, PLS

DRAINAGE DESIGN

Mr. Martin has over 11 years of experience in civil engineering design for municipal, federal, and private sector projects including preparation of site plans, street and storm drain improvements, grading plans, and utility plans. His experience includes providing hydrology analysis and hydraulic design for Low Impact Development (LID) projects. He is also experienced in performing and developing maps and plans for boundary and topographic surveys, as-built surveys, and construction staking for a wide variety of projects. Mr. Martin has comprehensive knowledge in the use of AutoCAD Civil 3D, WaterCAD, Bentley FlowMaster, Hydroflow, and SewerCAD.

RELEVANT EXPERIENCE

Camp Roberts Perimeter Road, California Army National Guard, San Miguel, CA.

Project Engineer. Mr. Martin provided engineering design services for upgrades to approximately 17.1 miles of roadway along the East and West Perimeter Range Roads at Camp Roberts. The existing pavement had numerous potholes, cracks and surface deterioration that developed over the years due to extreme weather conditions and the need to operate heavy military vehicles. The goal of the project was to bring the roadways up to modern asphalt standards, provide a safe, reliable and usable environment for soldier training and improve operability and maintainability of roadways. Tetra Tech was responsible for conducting a pavement condition assessment, topographic survey services, and prepared a conceptual and detailed design plans, specifications, and calculations to allow the Government to assemble a bid package for repair of the perimeter range roads.

Templeton to Atascadero Connector, County of San Luis Obispo, Templeton, CA.

Project Engineer. Mr. Martin was responsible for providing design

services for a multi-use pathway including completing the California Environmental Quality Act and National Environmental Policy Act processes, right-of-way acquisition, permits, construction documents and grant administration. The goal of the pathway network was to provide connectivity between Templeton and Atascadero, facilitating safe and attractive transportation between these two towns and encouraging alternative transportation modes.

Shell Beach Road Streetscape Phase I Project, City of Pismo Beach, CA.

Project Engineer. Mr. Martin provided design services for a "total street" reconstruction of 18 blocks of Shell Beach Road in the City of Pismo Beach. The project entailed incorporating a new Class 1 Bikeway along an existing Caltrans right-of-way (Highway 101). In addition, the project replaced aging utilities, including: a new 12" water line, new 12" reclaimed water line, undergrounding power and communication lines, and new storm drain improvements. The project incorporated new wayfinding and streetscape enhancements including pavement enhancements at crosswalks and intersections, full ADA compliance, street furniture and landscape

improvements (incorporating LID techniques).

Bonita School Road Bridge Replacement Survey, Santa Barbara County Public Works, Santa Maria, CA.

Survey Technician. Mr. Martin was responsible for providing topographic surveys of the Santa Maria River channel and surrounding surface street known as Bonita School Road. Tetra Tech set 22 ground control targets and tied those points to the Santa Maria Valley Control Network. Tetra Tech performed a ground survey to supplement the aerial acquired topography to collect additional data of features not readily visible from the air.

EDUCATION:

MS, Civil/Environmental Engineering, California Polytechnic State University, San Luis Obispo, 2012

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, 2011

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #84829

Professional Land Surveyor, California, #9718

YEARS OF EXPERIENCE:

11

Tyler Parra, PE

DRAINAGE DESIGN

Mr. Parra's experience includes work on a variety of municipal, residential, and commercial development projects. He has extensive experience in the preparation of construction documents for commercial development sewer, water, and storm drains, as well as improvement plans for geometric design of roads, highways, bike paths, and parking areas, including signing and striping plans. Mr. Parra has comprehensive knowledge of AutoCAD Civil 3D, AutoCAD 2016, GIS, as well as various hydraulic/hydrologic analysis software programs to solve complex engineering issues and to analyze the interaction of utilities, grading, and drainage during the design process. He is experienced in WaterCAD, StormCAD, FlowMaster, HEC-RAS, HEC HMS, EPA SWMM, HCS 2010 and MATLAB programming.

RELEVANT EXPERIENCE

First Street Pedestrian Improvements, City of Santa Ana, Santa Ana, CA. Project Engineer. Responsible for the preparation of the plans and estimates for this active transportation project. The project involves the widening of the existing sidewalks by three feet by reducing the width of the vehicle travel lanes along a 1.2-mile portion of First Street between Flower Street and Standard Avenue. Improvements include reconstructing ADA curb ramps, reconstructing hardscapes, creating bulb-outs at intersections, restriping travel lanes, installing high visibility marked crosswalks, relocating and/or adjusting existing utility features to grade, relocating street furniture, modifying existing pedestrian push buttons, installing new traffic signal detector loops, installing a new traffic signal at the intersection with Lacy Street, retrofitting and/or reconstructing drainage structures, and installing stormwater Best Management Practices.

Boyle Heights Pedestrian Linkages Active Transportation Project (ATP 2), City of Los Angeles,

Bureau of Engineering, Los Angeles, CA. Design Engineer. Mr. Parra is responsible for designing demolition plans, sidewalk improvement plans and curb ramp plans. The goal of ATP 2 is to improve pedestrian safety and access to the City of Los Angeles' Sixth Street Viaduct and Sixth Street PARC Projects, specifically aiming to improve the pedestrian circumstances for users of the Aliso Pico Recreation Center, Pecan Recreation Center, and Boyle Heights Technology Youth Center. The project will directly benefit the adjacent low-income and senior housing community near 4th Street and Clarence Street.

Lincoln Avenue Pedestrian Pathway, City of Santa Ana, Santa Ana, CA. Design Engineer. Responsible for utility research and preparation of site plans for this active transportation project. The pedestrian pathway will run parallel with Lincoln Avenue west of the existing railroad tracks. The improvements will commence at the intersection of Lincoln Avenue and Park Lane, continue north between the back of the residential properties and the railroad tracks, and end at the existing Santiago Trail, under

the railroad bridge that crosses Santiago Creek. The improvements include a 12-foot pathway and railroad-approved safety fencing, drought tolerant landscaping, pedestrian lighting, benches, and a trailhead to identify the pathway.

Orangethorpe Avenue Widening, Phase II, Indiana Avenue to Kass Drive, City of Buena Park, Buena Park, CA. Design Engineer. Mr. Parra was responsible for the development of plan and profile, geometric design, conceptual striping plans, drainage, utilities research and relocation. Tetra Tech is providing topographic surveys, plans and profile design sheets, traffic control sheets, striping sheets and cross-sections for street widening along the south side of Orangethorpe Avenue.

EDUCATION:

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, 2014

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #89535

Professional Land Surveyor, California, #9718

YEARS OF EXPERIENCE:

9

Peter Skopek, PhD, PE, GE

GEOTECHNICAL

Dr. Skopek brings over 35 years of technical expertise to Tetra Tech. As a principal engineer, Dr. Skopek is responsible for oversight, management, and execution of geotechnical engineering projects and for management of Tetra Tech Geotechnical staff. Dr. Skopek has been involved with transportation projects including road widening and pavement design, designs of new, widening, and replacement bridges and bridge seismic retrofits, embankment and cut slope designs and natural slope stabilization projects, subgrade preparation, and culvert design.

RELEVANT EXPERIENCE

Puente Hills Intermodal Facility, CA. Design Engineer. Lead design engineer and CQA supervisor of Puente Hills Intermodal Facility that will be used to transport municipal solid waste 230 miles to Mesquite Regional Landfill near Glamis in Imperial County. The project included:

- Five railroad and road bridges
- 1,500 feet of below-grade roadway trench corridor supported by soldier pile walls up to 25 feet high and designed for high groundwater and the associated uplift and liquefaction
- A 40-foot deep pump station
- SR-60 Undercrossing widening with tieback wall 600 feet long and up to 25 feet high
- Right-of-way improvements on 3.6 miles of Union Pacific railroad including additional track, and 2,200 caissons 36" to 48" diameter up to 100' long with post-grouted tips
- The intermodal facility consists of railroad spurs, crane pads and rails, and various operations buildings, roads, towers, and utility installations

Bridge Seismic Retrofits, Orange and Los Angeles Counties, CA.

The projects included retrofit of 4 bridges across Kern River, an overpass bridge and a pedestrian bridge in Bakersfield, 8 bridges in Orange and Los Angeles Counties and consisted of evaluation of foundation capacities under lateral and axial loading, liquefaction potential assessment, and site seismic response spectra analyses.

Caruthers Park – City of Bellflower, CA.

Lead Engineer. Lead Engineer in charge of the infiltration testing using large diameter boreholes and geotechnical exploration for the design of large stormwater infiltration and storage underground vaults, including foundation design for diversion structures, pump stations, and pretreatment units.

Bolivar Park – City of Lakewood, CA.

Lead Engineer. Lead Engineer in charge of the geotechnical design of an underground stormwater infiltration and storage facility using precast reinforced concrete units with their associated hydraulic structures and conveyance systems. Provided recommendations for the design

of the shoring system for the deep excavations, monitored construction and performance of the shoring system using soldier piles and steel plate and performed infiltration testing required for the design of the infiltration facilities.

Mayfair Park – City of Lakewood, CA.

Lead Engineer. Lead Engineer in charge of the evaluation of the infiltration characteristics of the subsurface materials and the geotechnical design of stormwater storage system. In addition, a field feasibility study was conducted to study the possibility of using injection wells at the site.

EDUCATION:

PhD, Geotechnical Engineering, University of Alberta, Edmonton, Canada, 1994

MSc, Geotechnical Engineering, Czech Technical University, Prague, Czech Republic, 1987

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #59242

Geotechnical Engineer, California, #2635

YEARS OF EXPERIENCE:

35

Fernando Cuenca, PhD, PE, GE

GEOTECHNICAL

Dr. Cuenca's experience in the field of geotechnical engineering includes research on the stability of reinforced embankments incorporating coupled analysis including pore water pressures in unsaturated soils and water flow movement with slope deformations, using finite element formulations. Dr. Cuenca has also worked on several projects including design of rigid and flexible pavements, as well as design of permeable pavements for green street projects requiring stormwater infiltration, as well as projects requiring pavement rehabilitation including the use of glass-grid interlayer to mitigate against reflective cracking and increase durability.

RELEVANT EXPERIENCE

Fontana Channel – County of San Bernardino, CA. Project Engineer. Project Engineer in charge of the design of a new concrete lined channel that included slope stability evaluations and special design for permanent support for excavations at the bridge undercrossings and foundation retrofits for the bridges.

Manix, Dola, and Lanzit Bridge Replacements- San Bernardino, CA. Project Engineer. Project Engineer assigned with the task of designing the pile foundations for these three timber bridges in the County of San Bernardino, historical landmarks. Analyses included evaluation of scour conditions, lateral and axial load capacity evaluations, design of deadman and tieback rods, and submittal to Caltrans for review.

Los Angeles River Bike Path, City of Los Angeles, CA. Project Engineer. Project Engineer in charge of the design of retaining structures including soil nail walls and tieback walls along the bridge undercrossings and the CQA program for the construction of the bike path and the new bridge foundations.

Ventura River and Santa Clara River Levees – County of Ventura, CA. Project Engineer. Project Engineer in charge of certification and rehabilitation of existing levees along the Ventura River and Santa Clara River. Evaluation of seepage using finite element models considering transient and unsaturated flow and verification of slope stability conditions under static and seismic loadings. Levee design includes sections with different types of revetments including soil cement, rip rap, and grouted rip rap.

Wintersbug Channel in Huntington Beach - County of Orange, CA. Project Engineer. Project Engineer in charge of the design of a replacement levee at the Wintersburg Channel consisting of sheet pile walls and a Soil Cement Mix to mitigate against effects of liquefaction. Numerical analyses using dynamic Finite Element program PLAXIS.

US Corps of Engineers (USACE) – USA. Project Engineer. Project Engineer in charge of performing certification inspections for different levee projects, dams, retarding basins,

spreading basins, throughout Orange County and LA County. Evaluating the stability and performance of levees and dams under different hydraulic loadings and seismic conditions.

Caruthers Park – City of Bellflower, CA. Project Engineer. Project Engineer in charge of the infiltration testing using large diameter boreholes and geotechnical exploration for the design of large stormwater infiltration and storage underground vaults, including foundation design for diversion structures, pump stations, and pretreatment units.

EDUCATION:

PhD, Geotechnical Engineering, University of Texas, Austin

MS, Geotechnical Engineering, University of Texas, Austin

BS, Civil Engineering, University of los Andes, Bogota

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #50097

Geotechnical Engineer, California, #3128

YEARS OF EXPERIENCE:

30

Patrick Keefe, PG, CEG

GEOTECHNICAL

Mr. Keefe has worked in the California geotechnical industry for over 35 years. Previous work experiences include geotechnical feasibility investigations for site selection, design-level geotechnical investigations, seismic hazards evaluations, fault studies, landslide evaluations/slope stability analyses, settlement analyses, liquefaction/lateral spread evaluation, ground water studies, and analyses of specialized geotechnical instrumentation. Specific projects have included engineering geologic expertise for large-scale mass grading of hillside and flatland developments, infrastructure improvements, earthen dams, critical care hospital facilities, mine and tunnel abandonment, landslide mitigation, forensic investigations, and technical review for various municipalities.

RELEVANT EXPERIENCE

FEMA Levee Certification, Santa Ana River E01, Orange County, CA. Lead Engineer.

Mr. Keefe provided lead engineering geologic evaluation and assessment in support of Federal Emergency Management Agency (FEMA) certification of the Santa Ana River (SAR) E01 levee system between Yorba Linda Boulevard and Pacific Coast Highway (PCH) in Orange County, California. Engineering geologic assessments included evaluation of subsurface conditions and description of types, distribution, and engineering characteristics of subsurface materials in support of engineering analyses for liquefaction potential, embankment stability, and seepage conditions during the design 100-year flood event. Engineering geologic assessments also included evaluation of seismic hazards along the levee alignment, including surface fault rupture.

Carbon Canyon Dam Investigation, Brea, CA. On behalf of the United States Army Corps of Engineers (USACE) Tetra Tech performed a geologic field

investigation for the Carbon Canyon Dam in Brea, California. The Carbon Canyon Dam is an earthen embankment located on Carbon Canyon Creek within the northeastern portion of Brea, California. The exploration performed by Tetra Tech included drilling and down-hole logging of a bucket auger within the upstream slope of the dam near the left abutment. In order to perform this exploration Tetra Tech designed and constructed an access ramp from the dam crest down to the drilling pad approximately 30 feet below the crest elevation. The boring was drilled to a depth of 70 feet and encountered dam fill, colluvial soils, and underlying bedrock. The boring was down-hole logged by Mr. Keefe who identified the approximately 5 feet thick colluvial layer of clay located above the bedrock contact.

Bedrock Rippability/Blasting Assessments, Riverside and San Bernardino Counties, CA. Mr. Keefe has conducted numerous rippability/blasting studies for private developments and local municipalities to assess excavation characteristics of bedrock materials where

construction cuts were planned on the order of 50 feet to 100 feet in granitic and metamorphic hillside terrain. The primary goals of the studies were to determine if conventional heavy earth moving equipment could be utilized to excavate the full depth of the planned excavations or if blasting would be required in order to achieve final grades. Once bedrock conditions are modeled in the near surface, seismic refraction surveys are typically conducted in various arrays to produce velocity gradient models that are used to evaluate bedrock rippability potential and help illustrate stratigraphic and structural characteristics through tomographic modeling.

EDUCATION:

BS, Geological Sciences, San Diego State Univ., San Diego, California

REGISTRATIONS/ CERTIFICATIONS:

Professional Geologist, California, #6373

Certified Engineering Geologist, California, #2022

YEARS OF EXPERIENCE:

37

Doug Bell, PE, GE

GEOTECHNICAL

Mr. Bell has been involved with the geotechnical engineering of numerous projects involving heavy civil construction, commercial and industrial development, roadways, bridges, water reservoirs, pipelines, and hydraulic structures. Mr. Bell has performed geotechnical studies for numerous transportation project including roadways, bridges, retaining walls, pavement rehabilitation, and seismic retrofit. He has performed geotechnical engineering with regard to shallow and deep bridge foundations, settlement of highway fills and bridge approaches, and design of new pavements and pavement restoration projects.

RELEVANT EXPERIENCE

Queensway Bay Parking Structure - Long Beach, CA.

Geotechnical Engineer. Geotechnical study for a four story post-tensioned concrete parking structure with a footprint area of approximately 100,000 square feet. The project included evaluation of liquefaction potential and settlement due to seismic shaking. Recommendations were provided for densification of potentially liquefiable sands using both compaction grouting and stone column construction. Recommendations were also provided for spread footing foundations, slabs-on-grade and temporary shoring.

Pismo Beach Sea Bluff Stabilization, Pismo Beach, CA.

Project Manager. Mr. Bell served as Geotechnical Project Manager for the stabilization of the sea bluff adjacent to the St. Andrews sewer lift station in Pismo Beach, California. Wave action had caused significant erosion undermining of the sea bluff which had resulted in slope failures and loss of ground at the top of the slope. The investigation for this project included surface geologic mapping of the slope face and subsurface borings drilled from the top of slope. The design of the slope stabilization included a shotcrete wall supported laterally

by post-tensioned tieback anchors. Recommendations were provided for the static and seismic earth pressures based on allowable wall movement of less than 0.25 inch. In order to mitigate the potential of undermining of the new wall the design also included toe down embedment into competent bedrock at the base of the wall, and lateral cutoffs at the end of the wall. Recommendations were also provided for anchor installation and testing, storm drain and subdrain installation, and corrosion protection for the shotcrete reinforcement and post-tensioned anchors.

Huntington Beach Municipal Pier - Huntington Beach, CA.

The project involved complete demolition of the existing pier and construction of a new structure approximately 1850 feet in length. The pier foundation consisted of over 300 precast concrete piles equipped with steel lead sections. It was necessary to develop an extensive program involving both jetting and driving in order to install piles to the target depths.

Lower Mission Creek Rehabilitation, Santa Barbara, CA.

Mr. Bell served as Geotechnical Engineer for the assessment of erosion potential along the Lower Aliso Creek in southern

Orange County. The project was conducted for the South Orange County Wastewater Authority as part of the planning process for the proposed Coastal Treatment Plant Export Sludge Force Main Replacement Project. Long term erosion of the banks of Aliso Creek is a key consideration in the siting of the proposed force main replacement. The project involved erosion assessment conducted to categorize the vulnerability of the proposed infrastructure in/along both the east bank and west bank of the creek over a 50-year planning period. The work included field reconnaissance, hydraulic modeling, and geotechnical analysis. Mr. Bell performed slope stability modeling to evaluate the influences of various types of soils and stratification, slope geometry, and groundwater conditions on stable slope geometry using limit equilibrium for desired factors of safety.

EDUCATION:

BS Civil Engineering, McGill University, 1980

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #C40516

Geotechnical Engineer, California, #2140

YEARS OF EXPERIENCE:

43

Eric Yuen, PE, SE

STRUCTURAL (RETAINING WALL/BRIDGE)

Mr. Yuen has more than 15 years of experience in the design, analysis, and detailing of structural engineering with special emphasis on the design of water storage/water containment and water conveyance-related structures, including reservoirs, water/wastewater treatment plants, booster pump stations, flow control facilities, pressure reducing stations and pipelines. He is knowledgeable in all types of construction including reinforced concrete, masonry, structural steel, and wood frame design. He also has extensive experience with seismic evaluation, assessment, strengthening, retrofit, and replacement of existing structures.

RELEVANT EXPERIENCE

Mayfair Park Stormwater and Runoff Capture Project, City of Lakewood, Lakewood, CA.

Structural Design Engineer. Provided independent structural review and oversight of final plans, specifications, and estimates. Tetra Tech evaluated the potential site location and developed this stormwater runoff and capture project. The project consists of an air-inflated rubber dam diversion system to re-direct all urban runoff and stormwater runoff from the Clark Channel through a pre-treatment system to remove trash, debris, and sediment. A drainage pipeline will convey the water into a large, buried multi-chambered storage and filtration facility. The stormwater collected in the underground reservoir will be treated and used to irrigate the park's landscaped areas. The system will monitor the weather conditions and the facility through a secured cloud-based system. This project will help the City comply with their metals Total Maximum Daily Loads, while providing additional benefits such as revitalized park infrastructure and augmentation of local water supplies.

San Diego County Water Authority, Hubbard Hill North (Q0204) Project, San Diego, CA. Structural

Project Engineer. Assisted with the structural design for the First Aqueduct Structures, FCFs, and Lining Rehabilitation. The project will remove the internal lining from the steel portions of Pipelines 1 and 2 in the San Luis Rey river valley, and Pipeline 1 in Couser Canyon and the Lake Hodges river valley. The operation required 12 access portals. New reinforced concrete vaults and pipe encasement will be added to or replaced at the existing structure at most of the portals. The project also included nine new reinforced concrete turnout connections structures at six flow control facilities. Tetra Tech is responsible for the structural designs of all access portal vaults, the turnout connection structures, pipe encasements, and other structural improvements for the six flow control facilities such as retaining walls and pipe bridging/cap across access road.

El Dorado Stormwater Capture Project Phase 2, City of Long Beach, CA. Structural Engineer.

Tetra Tech is providing pre-design, design, and bid support services for this multi-benefit regional best management practice (BMP) to enhance an undeveloped parcel within the City to achieve pollutant load reductions for the Lower San Gabriel River Watershed. The

site has the potential to provide significant water quality benefits for multiple jurisdictions as the 2,924-acre drainage area for the project covers portions of the cities of Norwalk, Cerritos, Artesia, Hawaiian Gardens, Lakewood, and Long Beach. This project has the potential to offer runoff storage and water quality benefits for all these cities. For Phase 2 of this project, the Tetra Tech team evaluated the 30-percent concept plans and geotechnical report to provide alternatives for the siting of a new pumping station. We analyzed four sites for shoring and excavation, structural concrete, utility relocations, site improvements and repair, pipeline alternatives based on depth, potential impacts to residential structures, ease of operations and maintenance, and cost.

EDUCATION:

MS, Structural Engineering, California State Polytechnic University Pomona, 2016

BS, Civil Engineering, California State Polytechnic University, 2007

REGISTRATIONS/CERTIFICATIONS:

Professional Engineer, California, #75983

Professional Structural Engineer, California, #6177

YEARS OF EXPERIENCE:

15

Mike Olsen, PE

STRUCTURAL (RETAINING WALL/BRIDGE)

Mr. Olsen has over 14 years experience and contributes his extensive structural engineering knowledge from his involvement in municipal, industrial and federal projects. He has completed a variety of projects varying in size and funding for both public and private entities. Mr. Olsen's experience includes design, analysis, detailing and construction in structural engineering. He is knowledgeable in reinforced concrete, pre- and post-tensioned concrete, reinforced masonry, steel and timber construction for a variety of building and infrastructure projects including reservoirs, water/wastewater treatment facilities, pump stations, bridge, buried concrete vaults, pipeline structures, bridges, as well as seismic retrofit of existing structures. Mr. Olsen has extensive working knowledge of the California Building Code (CBC), International Building Code (IBC) and their application to civil and structural engineering projects.

RELEVANT EXPERIENCE

Sand Canyon Trail Phase IV, Alta Planning + Design for the City of Santa Clarita, Santa Clarita, CA.

Lead Structural Design Engineer. Responsible for providing bridge design services including crossing plans, foundation recommendations, cost estimates, and bridge type selection reports. The Sand Canyon Trail Corridor provides access for cyclists, hikers, and equestrians and connects the Santa Clarita Valley to the northeast San Fernando Valley. In order to preserve the natural environment, the 0.8-mile extension of the multi-use trail will require three bridges.

Construction of Lost Canyon Road Bridge Widening over Sand Canyon Wash, Santa Clarita, CA.

Project Engineer. Engineer construction phase and services portion of the bridge widening at Lost Canyon Road. Mr. Olsen was responsible for attending weekly construction meetings, performing structural observations, reviewing and responding to RFI's and Submittal's, Design Bulletins for Contractor regarding design clarifications, preparing and

performing Final Inspection and preparing Record Drawings. The goal of the project was to create a multi-use pedestrian and bicycle path along the north edge of the existing bridge approximately 10-feet wide. The proposed bridge expansion is 50-feet long by 16-feet wide and was constructed similar to the existing structure with the addition of four PS/PC concrete box girders, extending the existing abutments and repositioning the wing walls on the downstream side. Construction of the bridge structure and road surface was conducted primarily from the top, however, equipment and materials were needed to access the wash for the purpose of grading and constructing the abutments, scour protection slab, and repositioning the wing walls.

Vista Canyon Regional Transit Center, City of Santa Clarita, Santa Clarita, CA. Structural Project Manager and Engineer of Record. Provided structural engineering design support for the Vista Canyon Regional Transit Center Project located in Santa Clarita, California, which consisted of the development and

construction of a seven-bay bus transfer station complete with a restroom and security/ticketing facilities to provide an efficient and safer way of transportation to the public. Supported in the structural designs, calculations, modeling, and structural plan production of the steel canopy structures of the bus transfer station, the CMU restroom facility structure, and the CMU security building structure. Construction Administration support services have also been provided throughout the construction phase of the project where structural observations for various stages of the project have been conducted.

EDUCATION:

MS, Civil Engineering (Structural Emphasis), California State Polytechnic University, Pomona, 2016

BS, Civil Engineering, California State Polytechnic University, Pomona, 2009

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #81944

YEARS OF EXPERIENCE:

14

Gino Filippin, PE, QSD (Filippin Engineering)

CONSTRUCTIBILITY

Mr. Filippin has over 40 years of experience in all aspects of construction management, including roles as project manager, resident engineer, engineer of record, and project engineer for public works projects throughout the Central Coast. He has extensive experience, knowledge of Caltrans procedural matters and claims avoidance/resolution and innovative solutions as he closely monitors project documents for clarity, conformity, and consistency. Mr. Filippin excels at communicating to both clients and contractors, consistently providing intelligent and well thought out solutions to complex project issues, and he has extensive experience coordinating with clients, contractors, consultants, private utilities, regulatory agencies, and the public on large construction projects. Mr. Filippin will be a constant resource for the constructibility team on this project.

RELEVANT EXPERIENCE

Matilija Dam Ecosystem Restoration and Santa Ana Blvd Bridge Replacement, Ventura County, CA. Resident Engineer for this \$11.2M the Matilija Dam Ecosystem Restoration and Santa Ana Blvd Bridge Replacement project. Project work included the removal of the existing bridge and construction of the Santa Ana Boulevard Bridge over the Ventura River in Oak View, CA. Part of the project will be to remove the Matilija Dam to restore suitable habitat and improve water and sediment flows. This project included demo of an old bridge and construction of the new bridge with two large diameter CIDH piles, abutments, and roadways. Project also included improvement of sidewalks, channel embankment work, rock riprap, removal and relocation of numerous utilities, chain link fencing and gates, rock walls, ornamental gates, retaining walls, storm drains and landscape and mitigation plantings.

FY19 A and B Waterline Replacement, City of Santa

Barbara, CA. Provided Resident Engineer services for this \$7.6 million project which consisted of installing 1,022 LF of 6 to 12-inch ductile iron, installing 29,657 LF of 6 to 12-inch PVC water main lines, reconnecting 600 water services and installing 36 fire hydrants, tying in existing water mains to new water mains and coordinating with the City water department for Bac-T and low chlorine testing, and GPS services for the main, T's and new valves.

Meadowpark Bridge Replacement, City of San Luis Obispo, CA. Filippin Engineering provided engineering design services to the City of San Luis Obispo by preparing plans and specification for the replacement of two pedestrian bridges at Meadow Park.

Sycamore Creek Widening & Punta Gorda Street Bridge Replacement, City of Santa Barbara, CA. Resident Engineer on this critical first segment of the Sycamore Creek Widening Program. Project included over 300ft of channel widening, bridge demolition, and

construction of a new precast bridge deck structure supported on CIDH pile system foundation. The environmental coordination included relocation of sensitive species, temporary creek diversion, daily coordination with project MMRP's, and complete creek/habitat restoration.

Sheffield Reservoir Quality Project, City of Santa Barbara, CA. Resident engineer and structures representative for the tank portion of this project which consisted of the construction of two 6.5-million-gallon reservoirs and related structures and site improvements on the 23-acre project.

EDUCATION:

Bachelor of Construction Management, Polytechnic State University, San Luis Obispo, 1994

REGISTRATIONS/CERTIFICATIONS:

Professional Engineer, California, #57254

YEARS OF EXPERIENCE:

40

Kevin Connors, PE (Filippin Engineering)

CONSTRUCTIBILITY

Mr. Connors joined Filippin Engineering in August 2012 and has over 37 years of public and private work experience in all aspects of project construction. Mr. Connors' extensive public works experience includes the design and construction of bridges, roadways, airports, utilities, parks, airports, and environmental mitigation. Mr. Connors' project management experience includes a wide variety of engineering projects including water, sewer, and reclaimed water infrastructure, storm drainage systems, roadways, airport runways and taxiways, buildings, drainage systems, parks, bridges, and freeway interchange work. Responsibilities included project management, budgeting, advertising and bidding, scheduling, constructibility reviews, coordination with local, State, and Federal permitting agencies, (including Caltrans, City Planning Departments, California Department of Fish and Game, Army Corps of Engineers, and the State Historic Preservation Office), as well as managing consultant contracts. His project management experience includes several environmentally sensitive projects where he has acted as Project Environmental Coordinator (PEC).

RELEVANT EXPERIENCE

Westside Community Paseos, City of Santa Barbara, CA. Construction Manager for this project which is located in the City of Santa Barbara along Mission, Gillespie, San Pascual, Micheltorena, Castillo, Sola, Salsipuedes, Panchita, Victoria, Alta Vista, Anapamu, & Nopal Streets. The project established safe and efficient connections from the Westside to the Downtown area, the Eastside, and to schools and parks. Work generally included the construction of curb extensions, traffic diverters, stop islands, ADA compliant sidewalk and curb ramps, improved signage, speed humps, raised crosswalk, Class I, Class II green lane, and Class III bike routes, and tree removal and planting.

Los Positas Multiuse Path Project, City of Santa Barbara, CA. Project Manager and Resident Engineer for \$13M ATP Funded multi-use pathway project that included Construction a 2.6-mile class 1, separated multi-use pathway along Modoc Road and Las

Positas Road. The project work area is within an environmentally sensitive area adjacent to Arroyo Burro Creek and includes 3,500 feet of trail retaining walls, 2,150 feet of Caltrans Barrier Railing, parkway bioretention systems, and permeable trail paving.

Old Town Sidewalk Improvements, City of Goleta, CA.

Construction Manager for \$2.5 Million sidewalk improvements project to improve pedestrian access and safety by installing sidewalk throughout the residential areas of Old Town Goleta. Old Town has aging infrastructure that includes narrow streets, limited and disconnected sidewalks, and access ramps that do not comply with the current American with Disabilities Act (ADA) standards. The project work included constructing curb, gutter and sidewalk, upgrading access ramps to comply with current ADA standards, adding additional street lighting (by Southern California Edison), coordinating private utility relocations, adding drainage improvements, bioretention areas,

and constructing angled parking with permeable concrete in some areas.

Romero Creek Debris Basin, Santa Barbara County Flood Control & Water Conservation District, CA.

Provided Construction Manager responsibilities for the existing flood control debris basin along Romero Road. Work consisted of providing water pollution control, clearwater diversion, removal of a portion of grouted rock slope protection, excavation, placement of rock slope protection, construction of a cast-in-place outlet structure including retaining walls, grading of a new channel with ESM, and construction of new concrete access road.

EDUCATION:

BS, Civil Engineering,
Northern Arizona University,
1984

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer,
California, #43862

YEARS OF EXPERIENCE:

37

Chung-Chen Yen, PhD, PE

HYDROLOGY & HYDRAULICS

Dr. Yen has over 34 years of experience in the field of water resources engineering, specializing in hydrology, hydraulics, and groundwater modeling. His work experience includes rainfall analysis, rainfall-runoff modeling, detention basin flood routing analysis, floodplain evaluations and mapping, and drainage facility deficiency and mitigation studies. Dr. Yen has extensive knowledge of local hydrology procedures for Southern CA counties including the County of Orange, County of Los Angeles, County of San Bernardino, County of Riverside, County of San Diego, and County of Ventura. He has extensive hands-on experience in applying HEC-1, HEC-HMS, HEC-2, HEC-RAS, HEC-GeoRAS, WSPG, HEC-SSP, HEC-FDA, and other hydrology/hydraulic computer programs on various studies and projects.

RELEVANT EXPERIENCE

Gilman Springs Road Bridge Replacement, County of Riverside, CA. Lead Hydrologist/Quality Control. Tetra Tech was contracted to do the H&H and Scour analysis on the existing and new crossing design. Utilized HEC-RAS to conduct the hydraulic analysis with a 1D model, with discharges from a hydrology analysis of the watershed with the Riverside County design manual. The hydrology calculated matched that of the existing culvert design discharge. The analysis was updated with a wider bridge with a ledge for animal crossings during flow events. The undercrossing was originally proposed as soft bottom, but the analysis highlighted scour potential that could undermine the structure. Instead, the bottom was made concrete (effectively a culvert) with a downstream lip to promote sedimentation under the bridge at the tail end of flow events to provide a soft bottom between storms. The proposed design was modeled and upstream toe-down protection recommended. A long-term sediment balance analysis was conducted for long term downstream erosion potential

where Mystic Lake habitat areas are located. The recommended design took into consideration using no additional concrete downstream of the crossing. The upstream and downstream face cutoff walls at wingwall inlet/outlet were included to protect the bridge itself beyond the normal scour protection.

Taylor Yard Bridge, City of Los Angeles, CA. Quality Control H&H. Conducted quick turnaround review of complex HEC-RAS bridge modeling for false-works in the Los Angeles River Channel. Previous model prepared by Tetra Tech for bridge hydraulics with pier scour analysis was utilized for this effort for pre-rainy season permitting application turn around for false-works that were not going to be removed in time for the rainy season. The model was completed quickly and on time to the satisfaction of the end client for the permitting effort. Subsequent contract amendments and effort included a post bridge construction river bed restoration to return the channel to it's previous geometry, providing hydraulics, CAD grading design, regulatory comment responses, and construction support for the restoration effort

Ventura River Levee Certification, Ventura County Watershed Protection District, Ventura County, CA. Hydraulic Engineer. Performed interior drainage and risk and uncertainty analyses for the Ventura levee reach 1 (VR-1) and reach 2 (VR-2) based on the guidelines of USACE and FEMA regulations.

Santa Clara River Certification, Ventura County Watershed Protection District, Ventura County, CA. Hydraulic Engineer. Performed interior drainage and risk and uncertainty analyses for the Santa Clara River levee reach 1 (SCR-1) based on the guidelines of USACE and FEMA regulations.

EDUCATION:

PhD, Civil Engineering, University of California, Irvine, 1985

MS, Civil Engineering, University of California, Irvine, 1982

BS, Hydraulic Engineering, Chung Yuan College, Chung-Li Taiwan, Republic of China, 1975

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #49913

YEARS OF EXPERIENCE:

34

Steve Parker

HYDROLOGY & HYDRAULICS

Mr. Parker has experience in environmental planning and hydrologic and hydraulic engineering as a GIS specialist and H&H Analyst. He is an experienced geographer and GIS professional, acting as a project manager and analyst in environmental planning and hydrologic and hydraulic engineering. Mr. Parker has a strong background in remote sensing/image analysis, GIS, fluvial geomorphology, hydraulics, and hydrology. His experience includes field survey data collection and application and model expertise including the latest versions of HEC-RAS, as well as GeoRAS, FLO-2D, HEC-HMS, and GeoHMS. He acts as a mentor in GIS and ArcGIS for other staff and works well with design teams working in AutoCAD or Microstation, or with graphics teams working in Illustrator or Photoshop. His diverse experience and geography background bring a holistic view to projects he manages or participates in.

RELEVANT EXPERIENCE

Gilman Springs Road Bridge Replacement, County of Riverside, CA. Project Manager & Lead Hydraulic Analysis. Tetra Tech was contracted to do the H&H and Scour analysis on the existing and new crossing design. Utilized HEC-RAS to conduct the hydraulic analysis with a 1D model, with discharges from a hydrology analysis of the watershed with the Riverside County design manual. The hydrology calculated matched that of the existing culvert design discharge. The analysis was updated with a wider bridge with a ledge for animal crossings during flow events. The undercrossing was originally proposed as soft bottom, but the analysis highlighted scour potential that could undermine the structure. Instead, the bottom was made concrete (effectively a culvert) with a downstream lip to promote sedimentation under the bridge at the tail end of flow events to provide a soft bottom between storms. The proposed design was modeled and upstream toe-down protection recommended. A long-term sediment balance analysis was conducted for long term

downstream erosion potential where Mystic Lake habitat areas are located. The recommended design took into consideration using no additional concrete downstream of the crossing. The upstream and downstream face cutoff walls at wingwall inlet/outlet were included to protect the bridge itself beyond the normal scour protection.

Taylor Yard Bridge, City of Los Angeles, CA. Project Manager & Lead Hydraulic Analysis. Conducted quick turnaround complex HEC-RAS bridge modeling for falseworks in the Los Angeles River Channel. Previous model prepared by Tetra Tech for bridge hydraulics with pier scour analysis was utilized for this effort for pre-rainy season permitting application turn around for falseworks that were not going to be removed in time for the rainy season. The model was completed quickly and on time to the satisfaction of the end client for the permitting effort. Subsequent contract amendments and effort included a post bridge construction river bed restoration to return the channel to its previous geometry, providing hydraulics, CAD grading design, regulatory comment

responses, and construction support for the restoration effort.

Lake Gregory Dam Inundation Mapping Study and Emergency Action Plan, San Bernardino County Parks and Recreation, San Bernardino County, CA. Project Manager. Managed this project and conducted floodplain mapping and analyses with HEC-RAS 2D for this dam breach inundation mapping study and associated Emergency Action Plan. After the emergency at Oroville Dam in California, all Division of Safety of Dam jurisdictional dams above low levels of hazard require updated mapping and EAPs. Lake Gregory Dam is classified as a high-hazard dam. He shepherded this effort through approval of the inundation maps with no comments from DSOD. The EAP approval effort is in its final review at CalOES.

EDUCATION:

MA Geography, San Diego State University, 2008

BA Geography, Humboldt State University, 1997

YEARS OF EXPERIENCE:

19

Jason Wright, PE

HYDROLOGY & HYDRAULICS

Mr. Wright is a Water Resource Engineer with 16 years of experience in stormwater management. He takes a comprehensive approach to designing LID and green stormwater infrastructure by developing standards and technical manuals for BMP design, identifying, prioritizing, and selecting potential BMP implementation sites, developing conceptual designs, and providing construction oversight and post-construction monitoring. In addition to his design experience, he has organized and assisted with numerous educational and training workshops to inform and certify the public and design community on the impact of stormwater and implementation of stormwater practices, including BMP Construction, Inspection and Maintenance Certification, and Residential Rain Garden Certification.

RELEVANT EXPERIENCE

Vulcan Avenue Drainage Improvements, City of Encinitas, CA. Project Manager. To alleviate nuisance surface flooding, Tetra Tech engaged with the City of Encinitas to identify and design green infrastructure solutions as part of the Vulcan Avenue Drainage Improvements project. The Vulcan Avenue neighborhood in the City of Encinitas, is drained by an undersized storm drain system under Coast Highway 101. An evaluation of the existing conveyance demonstrated two practical solutions; additional grey infrastructure including pipes and inlets that connect to the Moonlight Beach outfall to the south or green infrastructure solutions along the edge of the right-of-way to impound and infiltrate nuisance flows thus reducing the flooding frequency while improving water quality. The project's initial design analysis included an innovative use of the SUSTAIN model to optimize combinations of green infrastructure within the right-of-way, both for volume and peak flow reductions. Additionally, the proposed solutions maintain on-street parking and natural traffic calming.

Orpheus Avenue Drainage Improvements, City of Encinitas

Development Services Department, Engineering Division, Encinitas, CA. Project Manager. Completed a 100% design of a green street enhancement project to reduce nuisance flooding and runoff volumes for a 153-acre residential watershed. The design involved multiple green infrastructure practices, including permeable pavement and bioretention. Design plans included details for multiple BMP configurations, designed as retrofits, to serve as a green solution to reduce flooding and mitigate peak flows thus limiting the need for traditional grey infrastructure solutions within the right-of-way. A full geotechnical investigation, architectural renderings, and construction cost estimates were included in the project. Coordinated multiple utility reviews and public outreach meetings.

City of Los Angeles Stormwater Capture Parks Program, City of Los Angeles, Bureau of Engineering, Los Angeles, CA. Technical Lead. Modeled and optimized the stormwater capture at three parks. Managed an effort to determine the optimal diversion rate, BMP size, and configuration to maximize runoff capture, infiltration, and pollutant reduction at each park. Led a watershed wide optimization

to determine the optimal diversion rate and BMP configuration at nine parks in Los Angeles to maximize runoff capture and infiltration watershed wide and to meet a suite of compliance targets. Assisted in development of conceptual plans including long term operation and maintenance and monitoring.

Lakewood Stormwater and Runoff Capture Project, City of Lakewood, Lakewood, CA. Technical Advisor. Provided technical oversight for water quality, hydrology, and hydraulic modeling to develop two conceptual designs for the City of Lakewood to assist in regulatory compliance. Evaluated multiple BMP diversions, footprints, and real time inlet and outlet controls to optimize compliance with the water quality targets

EDUCATION:

MS, Biological and Agricultural Engineering, North Carolina State University, 2005

BS, Environmental Engineering, North Carolina State University, 2002

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #C77922

YEARS OF EXPERIENCE:

16

Kelly Wheeler, PE, QSD (Filippin Engineering)

CONSTRUCTION MANAGEMENT/INSPECTION

Ms. Wheeler has 22 years of experience in the construction management and civil engineering design industry. Kelly has served as a resident engineer on a variety of projects ranging from roadways and bridge construction to complex utility conveyance systems. She excels at coordinating multiple agencies involved in large projects, such as Santa Barbara Cottage Hospital, City of San Luis Obispo Tank Farm Gravity Sewer, Force Main, and Lift Station Project, and the Lower Mission Creek projects, of which she has performed construction management on six separate reaches and two bridges over the course of an 8-year period. These projects also include numerous regulatory permits, multiple agency stakeholders, and relocation of both dry and wet utilities.

RELEVANT EXPERIENCE

Anapamu Bridge Replacement Project, City of Santa Barbara, CA. Fulfilled Resident Engineer duties on this Anapamu Street Bridge over Old Mission Creek between San Andres Street and San Pascual Street. The replacement of the bridge consisted of removing and replacing a concrete bridge and roadway approaches; relocating domestic water facilities; constructing concrete channel walls; planting landscape materials and irrigation systems; installing storm drainage facilities; installing streetlights; and protecting existing utilities.

Maria Ygnacio Creek, Main & East Branch Debris Basins Modifications Project, Santa Barbara County Flood Control District & Water Conservation District, CA. Resident Engineer for the East and Main Branch debris basins which consisted of providing water pollution control; clear water diversion; clearing and grubbing, deconstruction of existing grouted rock dams; removal of RCP and cube inlet structures; deconstruction of

grouted rock grade control structures; construction of a RSP low-flow crossing; grading of streambed channel and overbank, placement of the deconstructed RSP and fabric, and ¼ ton RSP placement, protection of existing facilities and utilities and installation of irrigation and planting in each location.

Mason Street Bridge Replacement Project, City of Santa Barbara, CA. Resident Engineer for the \$7 million Mason Street Bridge Replacement and Lower Mission Creek Reach 1A-2 Project which includes removing and replacing a concrete bridge and roadway approaches, removing building facilities including hazardous materials abatement, relocating water, sanitary sewer, and storm drain facilities in a realigned and reconstructed roadway, constructing secant pile channel walls and bridge foundations, architectural shotcrete facing, fish ledges, rip-rap placement, realigning the roadway, precast girders, street improvements, landscaping, street lights, and irrigation systems. The project

was a joint project administered by the City of Santa Barbara with the County of Santa Barbara Flood Control and Water Conservation District.

Local Road Rehabilitation, City of Santa Barbara, CA. Design and Construction Management of the pavement rehabilitation for various concrete streets within the City of Santa Barbara. Overlay using rubberized asphalt concrete was used on Chapala Street and Hollister Avenue, along with redesign of striping and construction of multiple concrete access ramps.

EDUCATION:

BS, Agricultural Engineering, Water Resources Emphasis, Texas A&M University, College Station, 2000

Executive MBA, Leadership Track, UCLA, 2023

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #64522

YEARS OF EXPERIENCE:

22

Brad Starr, PE, QSD, CFM (Filippin Engineering)

CONSTRUCTION MANAGEMENT/INSPECTION

Mr. Starr has over 30 years of construction and design experience related to roadway and pavement maintenance, water and sewer infrastructure, dry utility, road construction, dredging, storm drain structures, development, facility construction, and emergency operations. Construction Management experience includes managing projects from capital planning through the design and construction phases until final acceptance. These duties include managing engineer and inspection staff as well as performing the functions of daily report preparation, submittal management and review, RFI management, change-order negotiation, providing field direction to contractors, partnering, budget approvals, legal reviews, code determinations, claims, labor compliance, property management, and resolution of disputes.

Mr. Starr has extensive experience in public works infrastructure, pavement design and construction, underground utilities, vertical construction, and concrete construction

RELEVANT EXPERIENCE

Santa Monica Debris Basin Operation Improvements, Santa Barbara County Flood Control & Water Conservation District, CA.

Construction Manager for the Santa Monica Debris Basin Improvements. Work consisted of providing water pollution control; removal of existing bridge; modifications to existing drainage facilities; new bridges; new drainage facilities; reinforced earth and sheet pile retaining walls; and roadway improvements including PCC and HMA surfacing.

Victoria Avenue Green Streets Project, City of Ventura, CA.

Provided construction management for the City to mill, repair, and overlay nearly 1.7 lane miles of roadway from Poli to Telegraph road. Improvements included curb and gutter replacement, dig outs, sidewalk replacements, tree root removal, tree root barriers, ADA ramps, asphalt paving, new signs, utility manhole raising, water can placement, survey benchmark replacement, pedestrian crossing, and striping for this project. Other duties included public noticing, neighborhood flyers, traffic control,

dust control, and stormwater BMP's.

Fairview Neighborhood Resurfacing Project, City of Ventura, CA.

Provided construction management for the City to mill, repair, and overlay an influential hillside neighborhood. Improvements included curb and gutter replacement, dig outs, sidewalk replacements, tree root removal, tree root barriers, ADA ramps, asphalt paving, new signs, utility manhole raising, water can placement, survey benchmark replacement, pedestrian crossing, and striping for this project. Other duties included public noticing, neighborhood flyers, neighborhood meetings, daily phone hotline information, traffic control, dust control, and stormwater BMP's.

Matilija Dam Ecosystem Restoration & Santa Ana Blvd Bridge Replacement, Ventura County, CA.

Resident Engineer for this \$11.2M the Matilija Dam Ecosystem Restoration and Santa Ana Blvd Bridge Replacement project. Project responsibilities included inspection of the removal of the existing bridge and construction of the Santa Ana

Boulevard Bridge over the Ventura River in Oak View, CA. Part of the project will be to remove the Matilija Dam to restore suitable habitat and improve water and sediment flows. This project included demo of an old bridge and construction of the new bridge with two large diameter CIDH piles, abutments, and roadways. Project also included improvement of sidewalks, channel embankment work, rock riprap, removal and relocation of numerous utilities, chain link fencing and gates, rock walls, ornamental gates, retaining walls, storm drains and landscape and mitigation plantings.

EDUCATION:

BS, Civil Engineering, California State University, Northridge, CA, 1994

MS, Public Administration, California State University, Northridge, CA, 2008

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #C59254

Certified Floodplain Manager (CFM)

YEARS OF EXPERIENCE:

30

Raul Estrada (Filippin Engineering)

CONSTRUCTION MANAGEMENT/INSPECTION

Mr. Estrada has over 15 years of civil and construction management experience in both private and public sectors including contract work for Caltrans Districts 5 and 7. He has worked on a variety of projects ranging from roadway, utilities, flood control and bridge projects. He is familiar with managing and administering projects per the Caltrans methods and procedures, in accordance with the Local Assistance Procedures Manual. Mr. Estrada is universally skilled and can function in multiple roles including Project Manager, Structure Representative, and Inspector.

RELEVANT EXPERIENCE

Randall Road Debris Basin, Santa Barbara County Flood Control & Water Conservation District, CA. Construction Manager on a \$10.5M debris basin project. The 8-acre project included removing extensive debris and damaged existing structures caused by the 2018 debris flow, excavation, placement of various types of RSP, grading, construction of debris rack structures and a new roadway section and access road.

Lower Mission Creek Reaches 2B-2 and Reach 3, Santa Barbara County Flood Control & Water Conservation District, CA. Assistant Construction Manager on multiple sections of the Lower Mission Creek Improvements projects that in total were about \$10M. The project included removal of existing drainage and parking lot improvements, channel excavation, disposal of contaminated soil and groundwater, construction of a reinforced concrete weir structure and by-pass channel, construction of approximately 200 L.F. of CIDH Secant Pile wall system with architectural treatment, installation of Rock Slope Protection, fabrication and

installation of by-pass channel metal debris rack, installation of fencing and railing, construction of new drainage facilities and parting lot improvement and Native Plant Restoration.

Las Vegas Sand Pedro Creeks Capacity Improvement Project, Santa Barbara County Flood Control & Water Conservation District, CA. Inspection of creek channel widening for both Las Vegas and San Pedro Creeks to improve flow capacity. Inspection of the construction of an 840' channel floodwall and channel protection in San Pedro Creek to increasing the hydraulic capacity of the two creeks from a 10-year to a 25-year storm water event.

Marsh Street Bridge Replacement, City of San Luis Obispo, CA. Construction Manager \$4.3M bridge replacement project that included removing and replacing a concrete bridge and roadway approaches, relocating domestic water facilities, constructing concrete channel walls utilizing rock slope protection and soldier pile wall, micropile foundation on the abutments, planting landscape materials and irrigation systems, installing

storm drainage facilities, installing street lights, and protecting existing utilities.

Quinientos Street Bridge Replacement, City of Santa Barbara, CA. Provided Structures Representative Inspection for this 38' foot long and 36' wide bridge that crosses over the Sycamore Creek. The new bridge will be 50' long and consist of two 12' lanes with 6' shoulders and 7' sidewalks on both sides of the bridge. The work will consist of removing and replacing existing concrete bridge and roadway approaches, CIDH bridge abutment piles, Soldier-Pile Channel Walls, Cast-In-Place concrete bridge deck, relocating domestic water facilities, constructing concrete channel walls and sidewalk; landscape and irrigation systems; tree trimming and removal; installing storm drainage facilities; installing streetlights and associated civil street improvements.

EDUCATION:

BS, Civil Engineering, Cal Poly San Luis Obispo, California, 2007

YEARS OF EXPERIENCE:

15

Zach Bryant (*Filippin Engineering*)

CONSTRUCTION MANAGEMENT/INSPECTION

Mr. Bryant is a longtime resident of the California Central Coast, with over 20 years of public works and construction industry experience in Santa Barbara, Ventura, and Los Angeles Counties. His experience comes vastly as a project manager and field services supervisor at Fugro Consultants, Inc. His focus at Fugro and now FE is major infrastructure projects such as bridge reconstruction, freeway and roadway widenings, water and wastewater pipelines, wastewater and water treatment facilities and reservoirs. Recently, he has been providing construction management and inspection services to the County of Ventura on the Santa Ana Blvd. Bridge Replacement Project in Oak View, CA. Roles and responsibilities include all manner of project management, coordination with stake holders, inspection, document review, and document control. Mr. Bryant excels at managing multiple projects at once and his depth of experience, strong communication skills and problem-solving abilities, make him an effective and essential member of the FE team.

RELEVANT EXPERIENCE

Matilija Dam Ecosystem

Restoration - Santa Ana Blvd Bridge Replacement, Ventura County, CA. Assistant Resident Engineer for this \$11.5M project, the Matilija Dam Ecosystem Restoration/Santa Ana Blvd Bridge Replacement project. Project responsibilities included construction management and inspection during construction of the Santa Ana Boulevard Bridge over the Ventura River, channel improvements and the removal of the existing bridge in Oak View, CA. Part of the project will be to remove the Matilija Dam to restore suitable habitat and improve water and sediment flows. This project included demo of an old bridge and construction of the new bridge with two large diameter CIDH piles, abutments, and roadways. Project also included improvement of sidewalks, channel embankment work, rock riprap, removal and relocation of numerous utilities, chain link fencing and gates, rock walls, ornamental gates, retaining

walls, storm drains and landscape and mitigation plantings.

Jonata Park Road Bridge Replacement, County of Santa Barbara, CA.

Mr. Bryant's involvement in this \$1.7 million bridge construction project included Materials Testing, Inspection and Plant Inspection. The project was federally funded and replaced the original bridge built in 1916 that had deteriorated over time and was identified as one of the County's structurally deficient bridges before it was demolished and replaced. The reinforced concrete bridge is about 96 feet long and almost 37 feet wide. The approach roadway was constructed of new concrete pavement to replicate the original historic "feel" of the roadway in recognition of the old bridge's historic designation.

Mason Street Bridge, City of Santa Barbara, CA. Field Services Supervisor provided technical expertise for materials testing for the Mason Street Bridge Replacement Project

which included removal of a nearly 60-year-old structure and significant flood capacity improvements upstream and downstream of Mason Street. The completed project includes street lighting, sidewalks, landscaping, and bridge railings and will increase flood capacity as well as provide additional habitat for steelhead trout and tidewater gobies.

Jalama Road Bridge, County of Santa Barbara, CA. Mr. Bryant's involvement in the construction on the Jalama Road Bridge that connects Highway 1 to Jalama Road included Materials Testing and Inspection. The bridge width was increased by 7 feet on the north side to create two 12-foot wide travel lanes and 2-foot wide shoulders. The cost of the project was approximately \$1.8 million with about 90% of the funding coming from the Federal Highway Bridge Program.

YEARS OF EXPERIENCE:

20

Steve Bucknum (*Filippin Engineering*)

CONSTRUCTION MANAGEMENT/INSPECTION

Mr. Bucknum is a construction professional with 30 years of industry experience. His experience as both a hands-on contractor and a construction foreman representing public agencies and other clients is exceptionally useful in his roles in management and inspection of public works projects. As a Senior Construction Inspector for FE, he provides inspection of new road construction, underground utilities, grading, asphalt concrete paving, concrete placement, calculation of pay quantities for process billing, processing of contract change orders and coordination with public agencies and utility companies. Duties include construction management, inspection, plan check, value engineering, constructibility review, contract and specification review and supervision of crew and subcontractor activities. He has an extensive background working on Public Works projects administered per the California Department of Transportation (Caltrans) methods and procedures, in accordance with the Local Assistance Procedures Manual. Mr. Bucknum's diverse background working construction management and inspection provides him with the skillset necessary to tackle complicated and diverse project issues. His depth of experience, strong communication skills and problem-solving abilities, make him an effective and essential addition to any construction management team.

RELEVANT EXPERIENCE

Marsh Street Bridge Replacement, City of San Luis Obispo, CA. Superintendent for a \$4.3M bridge replacement project that included removing and replacing a concrete bridge and roadway approaches, relocating domestic water facilities, constructing concrete channel walls utilizing rock slope protection and soldier pile wall, micropile foundation on the abutments, planting landscape materials and irrigation systems, installing storm drainage facilities, installing street lights, and protecting existing utilities.

Community Garden, San Jose Creek Multi-Purpose Path & Armitos Park Improvements, City of Goleta, CA. Senior Construction Inspector partnering with NV5 and BSafe team that is currently providing Construction Management and Inspection for the improvements of the

Community Garden, San Jose Creek Multi-Purpose Path and Armitos Park Improvements. The improvements include clearing and grubbing and rough grading of the full 2 acre site along with earthwork, and the construction of a new community garden with raised garden beds, outdoor classroom, outdoor picnic area with pizza oven, installation of new playground equipment and surfacing material, constructing ADA accessible walkways, ramps and curbs, DG, as well as the construction of a bike path in a riparian area along San Jose Creek, and all associated clearing, grubbing, grading, porous asphalt concrete, bioretention and bioswales, concrete, drainage, fencing, signage and landscape work. Close coordination with multiple landscape architects, engineers, permitting agencies, environmental consultants, and archeological monitors is required.

2022 F-14 Paving, City of Atascadero, CA. Superintendent for this \$2.8M project inspecting the pavement rehabilitation of approximately 3.3 miles of roadway. Work included full reconstruction and overlay and minor drainage improvements.

2022 Pavement Rehabilitation, City of Guadalupe, CA. Provided Superintendent responsibilities for the City of Guadalupe. This project involves removing and replacing existing asphalt, lime/cement treatment of base, raising and lowering utility lids, striping and markings, and survey monuments. The work also included traffic control, stormwater pollution control programs.

YEARS OF EXPERIENCE:

30

Jeff Atijera, PE

UTILITIES & COST ESTIMATING

Mr. Atijera has 23 years of experience in civil and structural engineering. His direct experience includes preparation of design documents for foundation design, retaining structures, grading and drainage, hydrology, and seismic design for residential, commercial, and educational facilities, as well as seismic retrofit for existing facilities. He is thoroughly experienced in construction support which includes interpretation of contract documents, construction observation, submittal and schedule reviews, review of field change orders, and testing and inspection procedures.

RELEVANT EXPERIENCE

Lake Avenue Pedestrian Access Improvements Project, City of Pasadena, Pasadena, CA.

Project Engineer. Developed design drawings and project specifications. Tetra Tech is providing design services for pedestrian access improvements to a 1.06-mile portion of Lake Avenue between Corson Street and California Boulevard. Tetra Tech balanced the design approach to meet the scope of the Los Angeles County Metropolitan Transportation Authority grant while staying within the grant budget. The work includes the addition of a signalized mid-block crossing and a new signalized intersection, elimination of a "pork chop" island with additions of right-turn pockets and traffic signal modifications, removal of a bus turning bay and bus-stop improvements, installation of new in-fill pedestrian-scale sidewalk lighting system, the addition of curb extensions and ADA compliant curb ramps, and in-fill street trees, landscaped islands, and irrigation.

Lincoln Avenue Pedestrian Pathway, City of Santa Ana, Santa Ana, CA. Project Engineer.

Prepared design documents. The project is funded in part by ATP state grant funds. The pedestrian pathway will run parallel with Lincoln Avenue west of the existing railroad tracks. The improvements will commence at the intersection of Lincoln Avenue and Park Lane, continue north between the back of the residential properties and the railroad tracks, and end at the existing Santiago Trail, under the railroad bridge that crosses Santiago Creek. The improvements include a 12-foot pathway and railroad-approved safety fencing, drought tolerant landscaping, pedestrian lighting, benches, and a trailhead to identify the pathway.

Garfield Avenue Complete Streets Project, City of South Gate, CA.

Project Engineer. Prepared design documents and provided construction support. The scope of this project includes providing multimodal pedestrian and bicycle design treatments to this 2.5 mile stretch of heavily congested corridor. The project will provide ADA improvements to approximately 42 existing curb ramps and an additional 10 newly constructed curb ramps. Existing gaps will be closed within

sidewalks to improve pedestrian mobility. Three new pedestrian activated push button signals with enhanced crosswalks will be designed and constructed to further improve mobility. Medians will be installed at strategic locations as a safety counter measure, preventing dangerous vehicular left-turn movements at congested locations. Class II and Class III bike lanes and routes will be designed throughout the corridor and a Class I bike path will be designed within an adjacent park, providing access from the corridor to the Los Angeles Bicycle Path located adjacent to the LA River. Medians will be landscaped, and roadway rehabilitation assessment will be performed to identify the most economical way to utilize City funds to improve roadway conditions within the corridor.

EDUCATION:

BS, Civil Engineering, University of California, Irvine, 2000

REGISTRATIONS/ CERTIFICATIONS:

Professional Engineer, California, #72039

YEARS OF EXPERIENCE:

23

Terry Weaver (*Filippin Engineering*)

PUBLIC OUTREACH

Ms. Weaver has an extensive background in public works construction and over 10 years of direct experience in public outreach in support of Capital Improvement Projects. Her experience as a community outreach coordinator includes all types of projects including water and sewer pipelines, underground dry utilities, storm drainage, structures, transportation, roads, and pavement maintenance projects. Ms. Weaver excels in taking the public outreach task out of the realm of the design and construction team as she acts as the single point of contact for all disbursed information and able to take all the incoming calls.

RELEVANT EXPERIENCE

California Street Bridge Upgrade, City of Ventura, CA. Provided public outreach services for the city during the enhancement of the gateway to the city bridge upgrade in the downtown Ventura area. As the community outreach coordinator, Terry was responsible for planning, organization, developing and implementing a community outreach plan to the public and businesses within the affected area, with social media, town hall meetings and flyer distribution.

Access Ramp Construction, City of Ventura, CA. Provided public outreach services for the city for the construction of 80 ramps in street corners throughout the City of Ventura. The project was a 24-month project, and as a community outreach coordinator, Terry handled communication, planning and organizing an outreach plan with the residents and businesses in the construction area.

Waterline Replacement Ondulando Phases 1 - 4, City of Ventura, CA. Provided public outreach services for the City during the 24 month

(approximately 2 years) replacement of aging cement waterline. As the community outreach coordinator, Terry was responsible for planning, organization, developing and implementing a community outreach plan to the public and businesses within the affected area with social media, town hall meetings and flyer distribution.

Saticoy Country Club Well No 2 Rehabilitation, City of Ventura, CA. Provided public outreach services for the city during the demo of Well No.1 which was no longer in use and the rehabilitation of Well No. 2 which would be used as a backup to the Well No.3 during this 10 month project. As the community outreach coordinator Terry handled planning, organization, developing and implementing a community outreach plan to the residents in the Saticoy Country club area via social media, town hall meetings and flyer distribution.

Montalvo Safe Routes School Improvements, City of Ventura, CA. Provided public outreach during a high profile school improvements that included installation of three flashing

beacon crossings, bike lanes and restriping of the area. As the community outreach coordinator, Terry handled developing and implementing a community outreach plan for the school's parents, students, and faculty.

Prebble Street Property Surplus Project, City of Ventura, CA. Provided public outreach services for the City to demolish a structure that was a church, prepare the site for sale, provide information to advertise the property for sale, and work through the sale proceedings with the public. As the community outreach coordinator, Terry was responsible for planning, organization, developing and implementing a community outreach plan to the public and businesses within the affected area with social media, town hall meetings and flyer distribution.

EDUCATION:

AS, Business, Ventura College

YEARS OF EXPERIENCE:

10

Jim Steele, PG, CEG, CHg

ENVIRONMENTAL SUPPORT

Mr. Steele is a Principal Engineering-Hydrogeologist at Tetra Tech with over 34 years of professional experience executing and managing projects. Mr. Steele's experience includes engineering geology, geohazard assessment/soil engineering studies, Phase I Environmental Assessments (ESAs), Phase II ESAs, Preliminary Environmental Assessments (PEAs), remedial action projects, and CEQA studies including IS/MNDs and EIRs. He has worked on and managed environmental assessments, engineering geology/geotechnical projects for municipal infrastructure development and private sector clients. He has managed and worked on CEQA study projects for infrastructure development projects, and environmental assessment and remediation projects for the Air National Guard and U.S. Air Force. He has developed and implemented groundwater treatment programs for groundwater remediation programs and construction projects in areas with impacted groundwater for development projects.

RELEVANT EXPERIENCE

Klaus Braun Automotive Assessment and Remediation Project, Santa Barbara, CA. This project involved treating fuel-related soil and groundwater contamination from released from an underground storage tank dispenser system at a former gas station. The project was performed under regulatory oversight from the California Regional Water Quality Control Board (Central Coast Region), Santa Barbara County Fire Department, the Santa Barbara County Air Pollution Control District, and the Goleta Sanitary District. Design, construction, operation, and maintenance of an in-situ combined soil vapor/groundwater extraction system to treat soil and groundwater contamination in areas where contaminated soil could not be removed by excavation for ex-situ treatment. Both the soil vapor and extracted groundwater were treated using granular activated carbon (GAC) under permit from local agencies.

City of Los Angeles Department of Recreation and Parks, Decker

Canyon Youth Camp, Malibu, CA. Mr. Steele served as Project Geologist for a special study to evaluate the condition of the existing potable water supply and wastewater systems needed for overnight camping. The water system evaluation included removing the existing pump, video logging the well casing, evaluating the integrity and condition of the water supply and distribution piping network including two 10,000 storage tanks, conducting a pump test, groundwater sample collection and testing, and field mapping. The wastewater system evaluation included exposing the septic tank and leach lines, inspecting the condition of the system, and field mapping

Site Assessment and Remediation, Taylor Yard G-2 Site, City of Los Angeles, Los Angeles, CA. Mr. Steele was the Deputy Project Manager for site assessment and remediation activities for a former 40-acre railroad facility. The Taylor Yard Parcel G-2 is located in northeast Los Angeles, California. The site is currently inactive. The Taylor Yard G-2 site was historically used for maintenance and fueling.

Since 1985, a number of soil and groundwater investigations have been conducted at the Site and have identified chemicals in the soil that include: total petroleum hydrocarbons (TPH), antimony, arsenic, lead, benzo(a)pyrene, and tetrachloroethene. Remediation of soil is necessary before the Site can be developed for future use. Tetra Tech reviewed remediation cost estimates prepared by another consultant in the Final Remedial Action Plan (RAP) and discussed the Final RAP with the Department of Toxic Substances Control (DTSC).

EDUCATION:

BA, Geological Sciences/ Geography, University of California, Santa Barbara, 1987

Certificate in Hazardous Materials Management, University of California, Santa Barbara, 1989

REGISTRATIONS/ CERTIFICATIONS:

Professional Geologist, California, #5963

Certified Engineering Geologist, California, #1906

YEARS OF EXPERIENCE:

34

Randy Westhaus, PE

ENVIRONMENTAL SUPPORT

Mr. Westhaus has over 40 years of experience in mechanical, nuclear, and environmental engineering. He has managed several multidisciplinary environmental projects involving compliance audits, spill, prevention, control and countermeasures plans, indoor air quality studies, pollution prevention (P2), waste minimization, water quality, environmental audits and permitting, remedial investigations (RIs), feasibility studies (FSs), remedial designs, RCRA closures, and risk management programs. Mr. Westhaus has extensive experience in the assessment and remediation of sites contaminated with petroleum hydrocarbons, chlorinated solvents and polycyclic aromatic hydrocarbons (PAHs) under CERCLA, RCRA, and state of California programs. He is very familiar with the following remedial technologies: air sparging, bioremediation, bioventing, chemical reduction/oxidation processes, natural attenuation, soil vapor extraction, and steam stripping. He has managed RI/FS and remediation projects for commercial and government clients such as the City of Los Angeles, several California School Districts, General Electric, Shell, The Gas Company, U.S. Air Force, U.S. Navy, U.S. Army Corps of Engineers, Air National Guard, and U.S. Coast Guard.

RELEVANT EXPERIENCE

Site Assessment and Remediation, Taylor Yard G-2 Site, City of Los Angeles, Los Angeles, CA. Project Manager for site assessment and remediation activities for a former 40-acre railroad facility. The Taylor Yard Parcel G-2 is located in northeast Los Angeles, California. The site is currently inactive. The Taylor Yard G-2 site was historically used for maintenance and fueling. Since 1985, a number of soil and groundwater investigations have been conducted at the Site and have identified chemicals in the soil that include: total petroleum hydrocarbons (TPH), antimony, arsenic, lead, benzo(a)pyrene, and tetrachloroethene. Remediation of soil is necessary before the Site can be developed for future use. Tetra Tech reviewed remediation cost estimates prepared by another consultant in the Final Remedial Action Plan (RAP) and discussed the Final RAP with the Department of Toxic Substances Control (DTSC).

Site Investigation of a Park for the City of Paramount, CA. Project

Manager for a project to conduct a Site Investigation (SI) at Village Park, located at 15150 Illinois Avenue, Paramount, California. The City entered into a Voluntary Cleanup Agreement (VCA) with DTSC to investigate the potential release of metals onto park grounds through air emissions from Carlton Forge Works and/or other potential neighborhood sources. A Work Plan was prepared to collect soil and dust samples throughout the park. The Work Plan was reviewed and approved by DTSC. Tetra Tech collected soil and dust samples at the Site, with DTSC oversight, to determine if metals were present at concentrations that could pose a health risk to humans visiting and using the park. This project has a very high interest in the local community and other regulatory agencies are participating and conducting investigations to determine the source and extent of metals in the air and soil.

Oil Field Site Assessments and Remediation, Confidential Client, CA. Served as Project Manager for site assessments and remedial

actions at the California (CAL) and United California (UCAL) lease diluent seep sites. Building on site knowledge acquired while conducting assessments, Tetra Tech performed an evaluation of site conditions to develop final remedial action alternatives. The two projects were performed under the regulatory oversight of the Central Coast Regional Water Quality Control Board (CCRWQCB) and Santa Barbara County. The projects included assessment data review and construction of a database of site conditions, semi-annual groundwater monitoring and sample collection, and development of remedial action alternatives based on current site conditions and regulatory requirements.

EDUCATION:

B.S., Civil Engineering,
University of Notre Dame,
1979

REGISTRATIONS/ CERTIFICATIONS:

Professional Mechanical
Engineer, California,
#M025171

YEARS OF EXPERIENCE:

44

Anne Simpson, QSD/P, QISP

SWPPP SUPPORT

Ms. Simpson is a Project Manager/ Environmental Scientist, Qualified Industrial Storm Water Practitioner (QISP), and Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer/ Practitioner (QSD/P) with over 19 years of experience in a variety of water quality-related projects, with a specialty in erosion control and vegetation management. Ms. Simpson has performed all requirements of various NPDES permits, including but not limited to, developing Storm Water Management Plans and Guidance Documents, Storm Water Pollution Prevention Plans (SWPPPs), Water Pollution Control Plans, Reports of Waste Discharge, Effectiveness Assessment plans and reports, monitoring plans, manuals, education and outreach materials, etc.; performing inspections and best management practice (BMP) assessments; carrying out illicit discharge investigations; conducting training and participating in client and public meetings and events; monitoring storm water and managing sampling teams; analyzing data; managing Storm Water Multiple Application and Report Tracking System (SMARTS); developing Numeric Action Limit (NAL) Exceedance Response Actions (ERAs) and reports.

RELEVANT EXPERIENCE

IGP Permit Compliance; El Estero Water Resources Center; City of Santa Barbara; Santa Barbara, CA.

Ms. Simpson currently supports the city with compliance with all IGP permit requirements by performing facility compliance inspections, storm water sampling, conducting annual training, and completing SWPPP updates including facility mapping, pollutant source assessments, and recommendations for BMP implementation. Since Tetra Tech began assisting the city, the facility has returned to "Baseline" ERA status and was able to remove numerous sampling constituents from the monitoring program.

Level 2 Exceedance Response Actions Support; Resource Recovery & Waste Management; County of Santa Barbara; Los Olivos, CA.

Ms. Simpson is currently supporting the County with Level 2 Exceedance Response Actions (ERAs), which have included the Level 2 ERA Action Plan and Technical Report, for the Santa Ynez Valley Recycling and

Transfer Station. Tasks include a full review of all past monitoring data and BMPs implemented at the site; conducting a site investigation and survey request (County to conduct surveying); soil testing; infiltration BMP siting; and report development. Ms. Simpson also assists the County with on-call industrial storm water monitoring.

SWPPP Development; Wallace & Smith Contractors; Santa Maria, CA.

Ms. Simpson supported SWPPP implementation at the Easton Plaza Apartments construction project in Santa Maria, CA. Ms. Simpson oversaw storm water monitoring pursuant to the Construction General Permit, including tracking weather and developing REAPs, weekly site inspections and rain event sampling, recommendations for BMP installation and maintenance, reporting, and developed the Notice of Termination. She also coordinated with the Regional Board on providing post-construction BMP information to facilitate Notice of Termination approval.

Construction and Industrial General Permit Support; City of Santa Maria, Utilities Department; Santa Maria, CA.

Ms. Simpson assists the city with on-call Construction and Industrial General Permit tasks at the Santa Maria Landfill, including inspections, BMP analysis, Notice of Non-Applicability assessments, Rain Event Action Plans, et al. Additionally, she recently oversaw one-time groundwater monitoring and reporting for PFAS.

EDUCATION:

MS, Agriculture, California Polytechnic State University, San Luis Obispo, 2006

BS, Environmental Horticultural Science, California Polytechnic State University, San Luis Obispo, 2003

REGISTRATIONS/ CERTIFICATIONS:

California QSD/ QSP No. 517

California QISP No. 339

YEARS OF EXPERIENCE:

19

Emily Jensen Wolf, CPESC, QSD/P

SWPPP SUPPORT

Ms. Jensen Wolf is an Environmental Scientist with eight years of experience supporting environmental and water quality projects. She has performed storm water, wastewater, and drinking water sampling according to accepted State and Federal protocols; data analysis; and technical writing. She specializes in performing inspections, sampling, and data management per the requirements of the General Permit for Storm Water Discharges Associated with Industrial Activities Order 2014-0057-DWQ (Industrial General Permit) and the General Permit for Waste Discharge Requirements for Storm Water Discharges from all Municipal Separate Storm Sewer Systems (MS4s) Order 2013-0001-DWQ (Small MS4 Permit). She has an understanding of State and Federal environmental laws and regulations. Ms. Jensen Wolf has supported industrial facilities, cities, military bases, school districts, and private construction firms with SWPPP implementation and provides specialized ongoing compliance support for each project.

RELEVANT EXPERIENCE

303(d) and TMDL Monitoring for the County of Santa Barbara, Santa Barbara County, CA. Ms. Jensen Wolf coordinated wet-weather sampling at the County of Santa Barbara's six 303(d) monitoring sites throughout the County in Buellton, Solvang, Goleta, and Carpinteria as well as four TMDL monitoring sites in the County Municipal Separate Storm Sewer System (MS4) permit areas of the Orcutt Creek subwatershed. Coordination efforts include monitoring weather forecasts, communicating with personnel at partner cities to schedule sampling events during qualifying storms, and arranging sample pickup and with sampling personnel throughout the County and three different analytical laboratories. Ms. Jensen Wolf documented the field data and results for each event in the form of individual event memos and Annual Report for all events sampled during the reporting year.

County of Santa Barbara, Santa Ynez Valley Recycling and Transfer Station, Los Olivos, CA. Ms. Jensen Wolf supports the

County of Santa Barbara with compliance with the Industrial General Permit at the Santa Ynez Valley Recycling and Transfer Station (SYVRTS). Support at this facility has involved the development and implementation of multiple site-specific plans including updates and adherence to the Industrial SWPPP, the development of a Spill Prevention, Control, and Countermeasure Plan, and the development of a Basin Unit Sampling Plan specific to a newly constructed on-site filtration basin. Ms. Jensen Wolf conducts storm event monitoring at this site consisting of samples collected from the facility discharge location as well as upstream and downstream samples from the basin unit to assess the effectiveness of the BMP. She tracks the local NOAA weather forecasts, coordinates with the facility and multiple laboratories to determine the timing for sample collection, reviews laboratory sample results, assists with the documentation of field and lab samples, and enters sample results into the SMARTS online database.

Wallace & Smith Contractors, Santa Maria, CA. Ms. Jensen Wolf supported Storm Water Pollution Prevention Plan (SWPPP) implementation at the Easton Plaza Apartments construction project in Santa Maria, CA. Ms. Jensen Wolf performed storm water monitoring pursuant to the Construction General Permit, including tracking weather and developing REAPs, performing weekly site inspections and rain event sampling. Based on the findings from weekly inspections and the results of storm water sampling, Ms. Jensen Wolf provided recommendations for BMP utilization and installation.

EDUCATION:

B.S., Environmental Studies, University of California, Santa Barbara, 2013

REGISTRATIONS/ CERTIFICATIONS:

CA Qualified Storm Water Pollution Prevention Plan Developer/Practitioner (QSD/P)

Certified Professional in Erosion and Sediment Control (CPESC)

YEARS OF EXPERIENCE:

8

4. Conflict of Interest

Tetra Tech is a full service consulting firm supporting more than 16,500 clients and completing a yearly average of 100,000 projects worldwide. As such, we have a robust internal conflict of interest process to ensure we serve our clients without adverse conflict. Tetra Tech does not foresee any potential conflicts of interest in working for the County of Santa Barbara and we will work with you for each task assignment to ensure this remains the same.

Below is a listing of our infrastructure team's clients served within the local area:

- Department of the Air Force
- US Army Corp of Engineers
- County of Santa Barbara (direct and as subcontractor to TY Lin)
- City of Solvang
- City of Buellton
- City of Santa Maria
- Montecito Water District

5. Litigation

In the normal course of business, Tetra Tech, Inc. is subject to certain claims and lawsuits typically filed against the engineering and consulting professions, including contractual disagreements, workers' compensation, personal injury and other similar lawsuits. Tetra Tech maintains insurance coverage for its business and operations, subject to certain deductibles and policy limits against such claims. As described in Tetra Tech's most recent quarterly and annual reports filed with the U.S. Securities and Exchange Commission, Tetra Tech believes that the resolution of any such claims will not have a material effect on its financial position or results of operations. Tetra Tech's proposed project team has not been involved in any litigation in connection with prior projects.

6. Agreement for Services of Independent Contractor

The terms included in our proposal will remain in effect for ninety (90) days following the date of this submittal. As required by the RFP, Tetra Tech confirms we have reviewed the sample agreement provided in the RFP, and we accept the terms of that agreement. Included in the Appendix is our signed Attachment A Contractor Acceptance form.

7. Contractor Information Sheet

Tetra Tech's completed Attachment B Contractor Information Sheet is included in the Appendix.

8. Disadvantaged Business Enterprise (DBE) Information

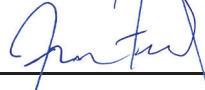
Tetra Tech will be teaming with Filippin Engineering, Inc. as a DBE for this pursuit, and per the RFP, we have provided the Attachment C.

Attachment A. County Standard Agreement

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

Attachment A contains the Standard Agreement used by the County for technical services and added clauses by the State Auditors; no changes will be made to the Standard Agreement language. CONTRACTORS are required to review the Standard Agreement and acknowledge their acceptance of the terms of the Standard Agreement language in the space provided below. Failure to acknowledgement acceptance of the Standard agreement language will cause the rejection of the proposal without further consideration.

Tetra Tech, Inc. acknowledges acceptance of the terms of the Standard Agreement, "Agreement for Services of Independent CONTRACTORS."

Signature:  _____
Jason Fussel, PE, PLS, QSD/P, LEED AP, ENV SP
Contract Manager

Attachment B. Contractor Information Sheet

Contractor Information Sheet

Name of Proposer Tetra Tech, Inc
Business P.O. Box 290 Valley Station Drive, Ste 102
City, State, Zip Buellton, CA 93427
Business Street Address 290 Valley Station Drive, Ste 102
(Include even if P.O. Box is used)
City, State, Zip Buellton, CA 93427
Telephone No. (805) 542-9052 **Fax No.** (805) 542-9254
Contractor License No. 551555 **License Classification** General
Public Works Contractor Registration No. _____
Business Type (Check One) **Corporation:** **Partnership:** _____ **Sole Proprietorship:** _____
Contact Person Name Jason Fussel, Contract/Project Manager
Contact Person Phone No. (805) 542-8630
Contact Person Email Jason.Fussel@tetrattech.com
Employer's Tax Identification Number FEIN: 954148514; California DIR: 1000647433

Attachment C. DBE Requirements

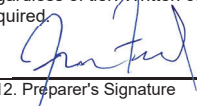
Exhibit 10-01 Contractor Proposal DBE Commitment

January 2019

LOCAL ASSISTANCE PROCEDURES MANUAL

Page 1 of 2

1. Local Agency: County of Santa Barbara 2. Contract DBE Goal: 11%
 3. Project Description: Construction DESIGN SERVICEServices, IDIQ, 2023-2026
 4. Project Location: Countywide, Various, IDIQ
 5. Contractor's Name: Tetra Tech, Inc. 6. Prime Certified DBE:

7. Description of Work, Service, or Materials Supplied	8. DBE Certification Number	9. DBE Contact Information	10. DBE %
Constructibility, Construction Management & Inspection	No. 42855	Filippin Engineering, Inc. 354 S. Fairview Ave, Goleta, CA 93117 (805) 845-4602	11%
Local Agency to Complete this Section		11. TOTAL CLAIMED DBE PARTICIPATION	11 %
17. Local Agency Contract Number: <u>IDIQ04</u> 18. Federal-Aid Project Number: <u>NA</u> 19. Proposed Contract Execution Date: _____ 20. Contractor's Ranking after Evaluation: _____ Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.			
21. Local Agency Representative's _____ 22. Date _____ 23. Local Agency Representative's Name _____ 24. Phone _____ 25. Local Agency Representative's Title _____		IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.  12. Preparer's Signature _____ 13. Date <u>10-12-2023</u> Jason Fussel, PE, PLS _____ 15. Phone <u>805.305.0150</u> 14. Preparer's Name _____ Vice President, Contract Manager _____ 16. Preparer's Title _____	

DISTRIBUTION: Original – Included with Contractor's proposal to local agency.

ADA Notice:

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PROPOSAL FOR

INDEFINITE DELIVERY-INDEFINITE QUANTITY "AS NEEDED" DESIGN SERVICES



TETRA TECH

