

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 BAS with an address at 1360 Valley Vista Drive, Diamond Bar, California (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

Mr. Todd Curtis at phone number 805-882-3621 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Mr. Caleb Moore, at phone number 909-860-7777 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

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: Mr. Todd Curtis, County of Santa Barbara, 130 E. Victoria Street, Suite 100,
Santa Barbara, CA 93101

To CONTRACTOR: Mr. Jeff Williams, Tetra Tech BAS, 1360 Valley Vista Drive, Diamond Bar, CA 91765

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. TERM

CONTRACTOR shall commence performance on May 4, 2016 and end performance upon completion, but no later than October 31, 2018 unless otherwise directed by COUNTY or unless earlier terminated.

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 Section 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 first class and workmanlike manner and shall conform to the standards of quality 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

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government 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

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of services required to be performed under this

Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

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 (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

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.

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.

Agreement for Services of Independent Contractor between the **County of Santa Barbara** and Tetra Tech BAS.

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

By: _____
Deputy Clerk

COUNTY OF SANTA BARBARA:

By: _____
Chair, Board of Supervisors

Date: _____

RECOMMENDED FOR APPROVAL:

Public Works Department

By: _____

Name: Scott McGolpin

Title: Director of Public Works

CONTRACTOR:

Tetra Tech BAS

By:  _____
Authorized Representative

Name: Jeffrey M. Williams

Title: Vice President, Controller

APPROVED AS TO FORM:

Michael C. Ghizzoni
County Counsel

By: _____
Deputy County Counsel

APPROVED AS TO ACCOUNTING FORM:

Theodore A. Fallati, CPA
Auditor-Controller

By: _____
Deputy

APPROVED AS TO FORM:

Risk Management

By: _____
Risk Management

EXHIBIT A

STATEMENT OF WORK

Contractor shall provide construction management services as set forth in the Tetra Tech BAS "Proposal For Construction Management Services for the Tajiguas Landfill Phase 2 and 3 Partial Final Closure Construction Project (Project Number 129913)" dated March 9, 2016. The detailed scope of work is stipulated in Attachment A-1 and is incorporated by reference. Tetra Tech BAS's Fee Estimate for proposed services is provided in Attachment A-2 and is incorporated by reference.

Caleb Moore, Richard Huffmire, and Julie Hauenstein shall be the primary individual(s) personally responsible for construction management services as specified in Attachment A-1. CONTRACTOR may not substitute other persons without the prior written approval of CONTRACTOR's Designated Representative.

ATTACHMENT A-1



PROPOSAL TO PROVIDE:

CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT THE TAJIGUAS SANITARY LANDFILL

Project No. 129913



PRESENTED TO:
County of Santa Barbara
Public Works Department
Resource Recovery & Waste Management Division



TETRA TECH BAS

MARCH 10, 2016



SANTA BARBARA COUNTY

CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3
PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL



TETRA TECH

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March 9, 2016

p16-5056

Todd Curtis, PE, Civil Engineer
County of Santa Barbara, Public Works Department
Resource Recovery and Waste Management Division
130 East Victoria Street, Suite 100
Santa Barbara, California 93101

**RE: PROPOSAL FOR CONSTRUCTION MANAGEMENT SERVICES FOR THE TAJIGUAS LANDFILL
PHASE 2 AND 3 PARTIAL FINAL CLOSURE CONSTRUCTION (PROJECT NUMBER 129913)**

Dear Mr. Curtis:

Tetra Tech BAS is pleased to present this proposal to provide construction management services at the Tajiguas Sanitary Landfill.

Tetra Tech BAS has more than 30 years of experience providing construction management services for landfill liner and cover construction, earthwork, drainage, landfill gas management, and infrastructure improvement projects. We employ proven scheduling, cost control, and risk management procedures and have helped our clients ensure that construction projects are completed within the contractor's bid price. We feel we are one of a select few consultants with the local resources, expertise, and personnel to meet all the technical requirements of this contract.

Tetra Tech BAS is dedicating our most senior team of landfill construction specialists to this contract to ensure that upcoming projects are constructed in a manner that does not interfere with the short- or long-term operational performance of the Tajiguas Landfill. Mr. Rich Huffmire, Tetra Tech BAS Vice President of Construction, will be the Project Manager for this contract. Mr. Huffmire has more than 40 years of experience, and has a long history of successfully managing construction projects at landfills throughout central and southern California. He will be closely supported by Julie Hauenstein, PE, a Project Engineer in our Santa Maria office with more than nine years of experience, including construction management support for large landfill improvement projects.

We give our commitment that the County of Santa Barbara will receive the highest quality construction management services throughout the duration of this contract. Thank you for giving us the opportunity to present this proposal. We are available to meet with you to discuss our proposal.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Caleb Moore'.

Caleb Moore, P.E.
Division Engineer, Tetra Tech BAS



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

1.0 EXECUTIVE SUMMARY

Introduction of Proposer: Tetra Tech BAS is a landfill specialty consulting firm that has been supporting public and private operators of landfills for over 30 years. We specialize in all aspects of landfill planning, permitting, design, construction and operational support. We feature a staff of more than 150 engineers, geologists, environmental technicians, and technical support personnel, located primarily in California.

We were founded in 1984 as Bryan A. Stirrat & Associates (BAS), and became a wholly-owned subsidiary of Tetra Tech, Inc. in 2009. We lead the Solid Waste Initiative of Tetra Tech, Inc., a team of specialists with the resources to address the diverse needs of the solid waste management market. We are one of a select few consultants that can efficiently function as an extension of client engineering and planning staff throughout the entire life cycle of landfill projects. In 2015, Engineering News-Record ranked Tetra Tech as the Number 1 Solid Waste firm in the U.S., based upon the earnings of our Solid Waste practice.



Tetra Tech 2015 ENR Rankings

1	Solid Waste
1	Environmental Science
1	Environmental Management
1	Water
1	Treatment / Desalination
2	Wind Power
5	Hazardous Waste
7	Design Firms



Number of Years with Offices in California: more than 30 years.

Addresses of Offices near Santa Barbara that will Service this Project:

3201 Skyway Drive, Suite 108
Santa Maria, California 93455

5383 Hollister Avenue, Suite 130
Santa Barbara, California 93111

Primary Contact information:

Caleb Moore, PE, Division Engineer and Senior Project Manager, Tetra Tech BAS
1360 Valley Vista Drive, Diamond Bar, California 91765
Tel: 909.860.7777 | Email: caleb.moore@tetrattech.com

Project Understanding: Tetra Tech BAS understands that the County of Santa Barbara (County) wishes to select a qualified consultant to provide Construction Management (CM) during the Phase 2 & 3 Partial Final Closure Construction projects at the Tajiguas Sanitary Landfill (TSL). From a review of the Request for Proposals (RFP) and information on the County’s ebids.cosbpw.net website, Tetra Tech BAS understands the following:

- The County has issued a Notice to Bidders and associated Construction Bid Documents for the Phase 2 & 3 Partial Final Closure Construction Project. Contractor bids were received on March 3, 2016 and at this time, award is pending.
- Phase 2 of the project is scheduled to begin this May and shall be completed within 130 working days. Phase 3 is scheduled to begin in August of 2017 and is to be completed within 85 working days.



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

- The CM firm selected by the County will be expected to provide all necessary CM, supervisor, and clerical staff for management of the project.
- The CM firm shall conduct the Pre-Construction Meeting, maintain project files, review and monitor the construction schedule, provide daily documentation of Contractor progress and conformance, review project payment applications, and evaluate cash flow projections. The CM firm will also act as liaison between the Contractor, County, CQA personnel, and LFG plant operations; review requests for information; conduct bi-weekly construction progress meetings; monitor and review as-built drawings; follow up on Contract close-out procedures (including preparation of Construction Completion Reports); and fulfill the duties of Resident Engineer.

We have reviewed the February 25, 2016 RFP, the project design drawings and Technical Provisions, and have structured our proposal to meet the requirements outlined in Section 4 of the Project RFP. Our proposal is comprised of the following sections:

Section 2.0 presents the Tetra Tech BAS CM team for the Phase 2 & 3 Partial Final Closure project. Tetra Tech BAS has been providing landfill CM services since in 1984. Our proposed project team has years of specialized experience in landfill CM, such as final closure construction, geosynthetic material installations, landfill gas (LFG) improvements, stormwater, drainage and utility improvements, low-permeability material processing and placement, and scales/fee booth installations.

Section 3.0 highlights Tetra Tech BAS' 30+ years of CM experience on major landfill closure, liner construction, and other landfill related projects. This section also provides summaries for several of our projects that are similar in nature to the proposed Phase 2 & 3 projects.

Section 4.0 presents Tetra Tech BAS' approach to managing the Phase 2 & 3 Partial Final Closure Projects, and demonstrates the team's knowledge and understanding of the applicable procedures, guidelines, and standards governing the proposed work. Tetra Tech BAS has followed these procedures on numerous landfill construction projects that were completed in compliance with the drawings and specifications, completed within the Owner's operational time frame, and completed within the allotted budgets for the projects.

Additional Benefit of the Tetra Tech BAS CM Team: Tetra Tech BAS has provided CM services on numerous projects that were designed by County's design engineer for this project, SWT Engineering. This includes the Barstow Sanitary Landfill Phase 1 Borrow Area Liner Construction, the Scale House Facilities and Entrance Road at the Victorville Sanitary Landfill, the Middle East Channel Improvements at Olinda Alpha Landfill, and most recently, the Unit 3 Phase 6 & 7 Groundwater Protection project and the Unit 1 Partial Final Closure project at Mid-Valley Sanitary Landfill. This long relationship has provided for a cooperative approach in addressing and resolving problems and issues on past projects. Tetra Tech BAS has also worked extensively with the preparers of the CQA plans for the Phase 2 and Phase 3 projects: Geologic Associates (GLA) and Geosyntec Consultants.



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

2.0 PROJECT TEAM ORGANIZATION AND KEY PERSONNEL

Tetra Tech BAS will function in partnership with the County of Santa Barbara, wherein we can support County resources while directly sharing the results, systematic reporting, and information solutions to problems as we work as a team to meet the project objectives. The Tetra Tech BAS project team is structured to provide the flexibility to accommodate all of the technical requirements required by this contract. The experience and credentials of our project team are summarized in Table 2.1 below.

Table 2.1: Qualifications of Proposed Project Team

Name / Role:	Education	Licenses / Certifications	Years of Experience
Caleb Moore, PE <i>Resident Engineer</i>	M.S. Civil Engineering B.S. Civil Engineering	Registered Civil Engineer: CA, IL, Guam	15
Rich Huffmire, QSP <i>Construction Manager</i>	N/A	Qualified SWPPP Practitioner CA Contractor’s License Certified – GCI-ICP Geosynthetic Materials & Compacted Clay Liners	45
Julie, Hauenstein, PE <i>Construction Engineer</i>	B.S. Civil Engineering	CA Registered Civil Engineer	9

Commitment of Key Personnel for Duration of Project: As stated above, Rich Huffmire will be our primary Construction Manager, with periodic support by Julie Hauenstein, PE, who is based in the Tetra Tech Santa Maria office. We give our commitment that staff identified above are available to be dedicated to this project, and will not be substituted without the prior approval of the County. We are committed to providing the highest level of professional services throughout this contract.

Depth and Availability of Resources: Tetra Tech BAS features a staff of more than 150 engineers, geologists, construction managers, and technical support personnel with expertise in solid waste management, based primarily in Southern California. Since we maintain an average staff utilization ratio of 70 percent, we are able to perform additional assignments required by the project using select staff dedicated to the performance of the work, and have the capacity to accommodate additional work.

Our parent company Tetra Tech is a full-service, multidisciplinary engineering, environmental, and construction firm with a staff of more 16,000. The firm has 26 offices and more than 1,300 employees in California. If requested, we can provide the County with access to the full corporate capabilities of Tetra Tech through our internal corporate structure that allows for effective sharing of resources and identification of unique technical skill sets.

Qualifications and experience of each of the key individuals on our proposed project team are presented in alphabetical order on the following pages. Due to space limitations, full resumes are available upon request.



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

Caleb Moore, PE

Project Role:	Engineering Support
Education:	M.S., Civil Engineering (<i>University of Southern California</i>) B.S., Civil Engineering (<i>California State Polytechnic University, Pomona</i>)
Registration:	Registered Civil Engineer (California, Illinois, Guam)

Mr. Moore has 15 years of experience in solid waste and civil engineering. He is Tetra Tech BAS' Solid Waste Division Engineer and specializes in the design of landfill cover systems, liner systems, leachate collection systems, and in the design of grading, drainage, and earthwork improvements. He has extensive experience working with the Central Coast, Santa Ana, Lahontan, and Colorado River Regional Water Quality Control Boards in support of landfill development and closure projects. Mr. Moore has managed the full life-cycle of landfill design projects, from the development of initial design concepts, to negotiation with local regulars, to preparation of construction plans and specifications, to engineering support during the construction phase. He has developed landfill master planning strategies which have maximized landfill air space, and reduced long-term capital costs. In addition, he has performed hydraulic studies and designed storm drain features including natural and concrete channels, pipes, and basins. Mr. Moore has managed liner design projects at the Las Pulgas, Ox Mountain, Sunshine Canyon, and Chiquita Canyon landfills; and final cover design projects at the Vandenberg AFB, Alameda IR2, Scott Air Force Base, Lockheed Goldendale, and San Bernardino Airport landfills.

Relevant Project Experience:

<i>Landfill Cover Design</i>	<ul style="list-style-type: none"> ▪ USAF Vandenberg Landfill (Project Manager) ▪ US Navy's Alameda IR2 Landfill (Project Manager) ▪ County of Kern's Kern Valley Landfill (Project Manager) ▪ County of Mendocino's South Coast Landfill (Project Manager) ▪ USAF's Scott Air Force Base Landfill (Project Manager) ▪ San Bernardino International Airport Waste Management Unit (Project Manager)
<i>Landfill Module Design</i>	<ul style="list-style-type: none"> ▪ County of Merced's Billy Wright Landfill, Phase 2A (Project Manager) ▪ Republic Services' Newby Island Landfill (Project Manager) ▪ MCB Camp Pendleton Las Pulgas Landfill, Phase II (Project Manager) ▪ Waste Connection's Chiquita Canyon Landfill, Cell 5 (Project Manager) ▪ Republic Services' Sunshine Canyon Landfill, Phase CC-1 (Project Manager) ▪ Republic Services' Ox Mountain Landfill Phase XVII and XVIII (Supervising Engineer) ▪ County of Orange's Prima Deshecha Landfill, Zone 1 Phase D (Project Manager) ▪ County of San Bernardino's Victorville Landfill Phase 1B Stage 1 (Project Manager) ▪ County of Madera' Fairmead Landfill (Project Engineer) ▪ Waste Connection's Avenal Landfill (Project Engineer)
<i>Landfill Stormwater Management</i>	<ul style="list-style-type: none"> ▪ Republic Services' Keller Canyon Landfill (Project Manager) ▪ County of Orange's Prima Deshecha Landfill (Project Engineer) ▪ County of Imperial's Brawley Landfill (Project Manager).
<i>Landfill Civil Design</i>	<ul style="list-style-type: none"> ▪ County of Santa Barbara Tajiguas Landfill Fill Plans (Engineering) ▪ County of Merced's Billy Wright Landfill Transfer Station (Project Manager) ▪ County of Merced's Highway 59 Landfill Scalehouse (Project Manager) ▪ CR&R Waste Services' Prima Deshecha Landfill Self Haul MRF (Project Engineer) ▪ City of Los Angeles' Central Recycling and Transfer Station (Project Manager)



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

Richard Huffmire, QSP

Project Role:	Project / Construction Manager
Registration:	California State Contractor's License; Geosynthetic Institute Certified – GCI-ICP Geosynthetic Materials & Compacted Clay Liners; Qualified SWPPP Practitioner (QSP); OSHA 40-hour HAZWOPER; Certified Inspector of Sediment & Erosion Control (CISEC)

Mr. Huffmire is a Project Manager with more than 45 years of experience in construction management and inspection services for the expansion and closure of landfill facilities, and for public works improvement projects. He is a licensed general contractor and is responsible for coordination of construction management staff, geotechnical and geosynthetic QA/QC staff, and on-site project review of construction issues. Responsibilities have included coordination of construction schedules, ensuring compliance with contract documents, coordination between contractors and engineers, and maintenance of all project-related documentation such as daily progress reports, change orders, and pay applications. Mr. Huffmire’s construction management experience includes liner construction projects at the Tajiguas, Mid-Valley, Barstow, Victorville, Prima Deshecha, Mesquite, and Frank R. Bowerman landfills; Landfill closure or partial closure projects at Mid-Valley, Phelan, 29 Palms, 27th Avenue, Elsinore, Frank R. Bowerman, Berry Street, and a variety of closure projects for the Integrated Waste management Board (now CalRecycle) under the AB2136 program. Mr. Huffmire has also managed numerous infrastructure development projects at the Mesquite, Prima Deshecha, FRB, and Olinda Alpha Landfills.

Relevant Project Experience:

<i>Landfill Closure Projects</i>	<ul style="list-style-type: none"> County of San Bernardino’s Mid-Valley Landfill Unit 1 Partial Final Closure (CM) County of San Bernardino’s Phelan Landfill Closure (CM) County of San Bernardino’s 29 Palms Landfill Closure (CM) County of Orange’s Frank R. Bowerman Partial Front Face Closure and Demonstration Fill (CM) City of Phoenix’s 27th Avenue Landfill Closure (CM) Armco’s Royal Boulevard Landfill Closure (CM) CIWMB (now CalRecycle’s) Berry Street Landfill Closure (CM) County of Riverside’s Elsinore Landfill Closure (CM) Carson Holding’s Cal-Compact Landfill Closure (CM) Various closures and site remediation under CIWMB (CalRecycle) AB 2136 Program
<i>Landfill Liner Construction Projects</i>	<ul style="list-style-type: none"> County of Santa Barbara’s Tajiguas Phase 1 and 1A (CM) County of Orange’s Prima Deshecha Landfill Phases A, A1, B, B1/A2, C1, & C2 (CM) County of Orange’s Frank R. Bowerman Landfill Phase V-D (CM) County of San Bernardino’s Mid-Valley Landfill Unit 3 Phases 2, 3B, 6 & 7 (CM) County of San Bernardino’s Victorville Landfill Phases 1B Stage 1 & 2 (CM) County of San Bernardino’s Barstow Landfill Septage Pond and Phase 1 Borrow Area Liner projects (CM) Los Angeles County Sanitation Districts’ Mesquite Phase 1 liner project (CM)
<i>Landfill Gas Projects</i>	<ul style="list-style-type: none"> County of San Bernardino’s Big Bear Landfill LFG Improvements (CM) County of Orange’s San Joaquin Landfill LFG Improvements (CM) County of Orange’s Lane Road Landfill LFG Improvements (CM)



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

Julie Hauenstein, PE

Project Role:	Construction Management
Education:	B.S., Civil Engineering (<i>California State Polytechnic University, Pomona</i>)
Registrations:	Registered Profession Engineer #77358 (California)

Ms. Hauenstein has nine years of wide-ranging experience in engineering, construction management, and construction quality control for municipal solid waste landfill projects. She is based in the Tetra Tech Santa Maria office, and her recent experience includes engineering and construction support during closure activities at the Vandenberg Landfill. Her construction management duties have included oversight of grading, fill placement, and subgrade preparation; submittal review and response to RFIs; coordination with local RWQCBs and other regulators; and development of final construction reports. Her experience also includes engineering analysis, cost estimating, earthwork design, and preparation of design calculations for lined cell development projects and final cover construction projects. She has experience with stormwater design, scheduling, and permitting, and she has provided technical and field support during studies of the engineering impacts of alternative landfill development scenarios. Ms. Hauenstein has experience with stormwater design, scheduling, and permitting, and has provided technical and field support during studies of the engineering impacts of alternative landfill development scenarios.

Relevant Project Experience:	
<i>Construction Management</i>	<ul style="list-style-type: none"> County of San Bernardino’s Victorville Phase 1B Stage 1 Liner (CM) County of San Bernardino’s Victorville Phase 1B Stage 2 Liner (CM Support) San Bernardino Airport Disposal Unit Closure (CM) County of San Bernardino’s Mid-Valley Landfill Stormwater Pond (CM) County of El Dorado’s Union Mine Landfill (Construction Quality Assurance)
<i>Landfill Closure Engineering</i>	<ul style="list-style-type: none"> USAF Vandenberg Landfill Closure (Engineering) USAF Scott Air Force Base Landfill Closure (Engineering) Carson Holding’s Cal Compact Landfill (Engineering) County of San Bernardino’s Phelan Landfill (Engineering) County of San Bernardino’s Yermo Landfill (Engineering) County of Imperial’s Holtville Landfill (Engineering) County of Imperial’s Palo Verde Landfill (Engineering) City of Bakersfield’s Bakersfield Landfill (Engineering)
<i>Liner Design</i>	<ul style="list-style-type: none"> San Bernardino County, Victorville Sanitary Landfill, Phase 1B Revisions (Engin.) County of Orange’s Prima Deshecha Landfill, Phases C2 and C3 (Engineering) Waste Connections’ Avenal Landfill, Phase (Engineering) County of Flathead’s Flathead Landfill, Phase III (Engineering) USMC Camp Pendleton, Las Pulgas Landfill, Phase II (Engineering) Republic Services’ Sunshine Canyon Landfill, Phase CC-1 Liner (Engineering)
<i>Miscellaneous Design</i>	<ul style="list-style-type: none"> USAF’s Vandenberg AFB Landfill (Site Engineer) City of Santa Maria’s Proposed Los Flores Landfill (Engineering) County of Sonoma’s Sonoma Central Landfill Compost Facility (Engineering) County of Orange’s FRB Landfill Master Planning (Engineering) County of Orange’s Prima Deshecha Landfill Master Planning (Engineering) Republic Services’ Newby Island Landfill Master Planning (Engineering) Proposed Gregory Canyon Landfill Master Planning (Engineering)



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

3.0 QUALIFICATION AND EXPERIENCE COMPETENCE

Table 3.1 summarizes overall Tetra Tech BAS construction management experience. Descriptions of similar recent landfill CM projects are provided on the pages that follow.

Table 3.1: Tetra Tech BAS Landfill CM Experience			Earthwork	Liner	Cover	Drainage	LFG System	Liquids Mgt.	Infrastructure	Landscape
Site	Client	Location								
19th Avenue Landfill	City of Phoenix	Phoenix, AZ					■			
27th Avenue Landfill	City of Phoenix	Phoenix, AZ	■		■	■				
29 Palms Landfill	County of San Bernardino	San Bernardino County, CA	■		■	■				
Baker Sanitary Landfill	County of San Bernardino	San Bernardino County, CA	■		■	■		■	■	■
Ballard Canyon Landfill	County of Santa Barbara	Santa Barbara County, CA	■		■	■				
Barstow Sanitary Landfill	County of San Bernardino	San Bernardino County, CA		■						
Berry Street Mall Landfill	CIWMB	Roseville, CA	■		■	■				■
Big Bear Landfill	County of San Bernardino	San Bernardino County, CA	■				■		■	
Billy Wright Landfill	County of Merced	Merced County, CA	■	■						
BKK Landfill	BKK Corporation	West Covina, CA	■	■	■	■		■	■	■
Cal Compact Landfill	Carson Partners LP	Carson, CA	■		■	■				
CIWMB Sites	CIWMB (now CalRecycle)	Various						■		
Colton Landfill	County of San Bernardino	San Bernardino County, CA	■		■	■	■	■	■	■
Coyote Canyon Landfill	County of Orange	Irvine, CA	■		■	■		■	■	■
Crazy Horse Landfill	City of Salinas	Salinas, CA	■	■	■	■	■	■	■	■
Curti Dump	City of Cerritos	Cerritos, CA					■			
Elsinore Landfill	County of Riverside	Riverside County, CA	■		■	■				■
Frank R. Bowerman Landfill	County of Orange	Orange County, CA	■	■	■	■	■	■	■	■
Geer Road Landfill	County of Stanislaus	Modesto, CA					■			
Heaps Peak Disposal Site	County of Orange	Running Springs, CA						■	■	
Highway 59 Landfill	County of Merced	Merced County, CA	■						■	
Huntington Beach Landfill	City of Huntington Beach	Huntington Beach, CA	■		■	■	■			
Keller Canyon Landfill	Republic Services	Pittsburg, CA		■			■			
Kern Valley Landfill	County of Kern	Kern County, CA	■	■	■	■				
Lopez Canyon Landfill	City of Los Angeles	Lakeview Terrace, CA	■	■	■		■		■	
Mesquite Regional Landfill	LA County Sanitation Dists.	Imperial County, CA		■		■			■	
Meyers Landfill	County of El Dorado	El Dorado, CA	■		■					
Mid-Valley Sanitary Landfill	County of San Bernardino	San Bernardino County, CA	■	■		■	■	■	■	■
Milliken Landfill	County of San Bernardino	San Bernardino County, CA	■		■	■	■		■	■
Mountain View Landfill	City of Mountain View	Mountain View, CA	■	■	■	■	■	■	■	■
Needles Landfill	County of San Bernardino	Needles, CA	■		■	■		■	■	■
North Chollas Burn Site	City of San Diego	San Diego, CA	■							
Olinda Alpha Landfill	County of Orange	Brea, CA				■	■			
Operating Industries Landfill	Cure, Inc.	Monterey Park, CA	■		■	■	■	■	■	■
Ox Mountain Landfill	Republic Services	San Mateo County, CA		■						
Phelan Landfill	County of San Bernardino	San Bernardino County, CA	■	■	■	■	■	■	■	■
Prima Deshecha Landfill	County of Orange	Orange County, CA	■	■		■	■	■	■	
Roseville Landfill	City of Roseville	Roseville, CA	■		■	■				
Royal Blvd. Reclamation Site	Armco, Inc.	Torrance, CA	■		■	■		■	■	■
Santa Cruz Landfill	City of Santa Cruz	Santa Cruz, CA	■	■	■	■		■		
Santa Maria Landfill	City of Santa Maria	Santa Maria, CA	■		■	■				
Santiago Canyon Landfill	County of ORange	Orange County, CA			■		■			
Sonoma Burn Dump	County of Sonoma	Sonoma County, CA	■		■	■				
SR-85 Landfill	City of Phoenix	Phoenix, AZ							■	
Tajiguas Landfill	County of Santa Barbara	Santa Barbara County, CA	■	■	■	■		■		
Vandenberg AFB Landfill	USAF	Santa Barbara County, CA			■					
Victorville Landfill	County of San Bernardino	San Bernardino County, CA	■	■						

**CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3
PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL****Mid-Valley Sanitary Landfill Unit 1 Partial Final Closure Phase 6 & 7 Liner Construction – Rialto, California**

Client: San Bernardino County Solid Waste Management Division
Contact: Darrin Meeka | Phone: (909) 386-9017
Project Type: Construction Management
Total Value: \$7,557,987

Tetra Tech BAS provided construction management services for construction of the Phase 6 & 7 Groundwater Protection Project and the Unit 1 Partial Final Closure Project. Rich Huffmire served as the Construction Manager on this project.

The \$7.5 million project included construction of a 5 foot thick monolithic final cover system covering more than 22 acres. Closure work included abandonment of portions of the existing LFG system, installation of 18 new dual LFG extraction wells, extension of 16 existing LFG wells, installation of new above and below ground LFG headers and laterals. Additional components included waste removal and reconsolidation, unclassified fill to develop new benches and establish subgrade for the final cover system, construction of miscellaneous civil improvements (stormwater drainage and AC/CMB access roads, etc.), and erosion control improvements.

The project also included installation of a composite liner system for Phases 6 & 7 including a two-foot thick low-permeability ($<1.0E^{-07}$ cm/sec) soil layer placed on the floor and side-slopes, with a GCL encapsulated between the two 60 mil geomembrane layers; LCRS piping and gravel; non-woven geotextiles and geocomposite; and a two-foot thick soil operations layer.

Tetra Tech BAS' CM responsibilities included project documentation, contract time accounting, preparation meeting agendas and meeting minutes, daily reports, processing of progress payment applications, Request for Information (RFI) and design clarification tracking and recording, and preparation of construction close-out reports.



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL



Phelan Landfill Closure Construction – Phelan, California

Client: San Bernardino County Solid Waste Management Division
Contact: Darrin Meeka | Phone: (909) 386-9017
Project Type: Design, Construction Management, CQA
Total Value: \$4,069,885

The Tetra Tech BAS/GLA Team provided construction management services during the construction of the \$4 million dollar final cover system at this high desert landfill owned by the County of San Bernardino. Rich Huffmire served as the Construction Manager on this project. Construction involved placement of a two-foot thick monolithic soil alternative cover over a minimum of 1-foot of existing foundation soils over the refuse footprint for a total cover thickness of three feet. Final closure construction required placement of approximately 266,000 cubic yards of unclassified fill, and 112,000 cubic yards of select final cover soils. The Tetra Tech BAS/GLA Team provided CM and CQA during placement of the final closure soils, and construction of final drainage improvements, landfill gas monitoring system modifications, and site security features.

Tetra Tech BAS CM activities included comprehensive project documentation, including meeting minutes, daily reports, schedules, payment applications, preparation and tracking of change-orders and submittals, photo logs and contract time accounting. BAS also provided construction observation and engineering support to ensure that the project was constructed in compliance with the project plans and specifications. Team member GLA conducted grain-size distribution, moisture-density, compaction, and permeability testing to demonstrate compliance with the performance requirements for the monolithic final-cover design, and prepared the final construction certification report for approval by the Lahontan RWQCB.



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

Frank R. Bowerman Landfill Phase VD Groundwater Protection and Front Face Closure – Orange County, California

Client: OC Waste & Recycling
Contact: Kevin Hanson | Phone: (949) 551-7110
Project Type: Construction Management, CQA
Total Value: \$600,000 Est. (part of \$7M expansion Project)



Tetra Tech BAS provided construction management for the Phase VD Groundwater Protection and Front Face Closure Project at Frank R. Bowerman Landfill. The project included construction of a partial final closure demonstration fill on the front face of the landfill. The demonstration fill provided a model for future site closures and included installation of moisture monitoring probes for testing the efficiency of the probes for testing the efficiency of the alternative soil cover.

Approximately 322,000 cubic yards were placed for the five foot thick monolithic soil layer. In addition, the project included abandonment, replacement, and modification of the front face landfill gas extraction system components, miscellaneous drainage improvements and vegetation of the closure area.



The Phase V-D project also included approximately 2.5 million cubic yards of excavation and installation of a composite liner system consisting of a low permeable layer overlain with a GCL encapsulated between a 40 mil and 60 mil HDPE geomembrane. The project also included significant perimeter drainage improvements, an asphalt concrete access road, and re-vegetation of the adjacent slopes. Rich Huffmire served as the Construction Manager on this project.



**CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3
PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL**

Table 3.2 below represents the Construction Management Bid versus Actual Completion Costs for projects managed by Construction Manager Rich Huffmire.

Table 3.2: Bid Cost Comparison

Landfill Expansion, Earthworks, Geosynthetics Projects	Construction Bid	Final Construction Cost	Miscellaneous Landfill Projects	Construction Bid	Final Construction Cost
Tajguas Sanitary Landfill/Santa Barbara County			Olinda Alpha Landfill/OC Waste & Recycling		
Phase 1	\$1,612,834	\$1,512,814	Scale Improvement Project	\$1,990,035	\$1,976,113
Phase 1A	\$3,067,519	\$2,889,245	Lower East Channel	\$1,544,575	\$1,495,935
Prima Deshecha Landfill/OC Waste & Recycling			Middle East Channel	\$1,435,937	\$1,263,862
Phase A Mass Excavation	\$5,096,956	\$5,151,172	Prima Deshecha Landfill/OC Waste & Recycling		
Phase A Groundwater Protection	\$2,041,791	\$2,041,791	Pre-Mitigation Native Habitat	\$3,233,069	\$3,158,454
Phase A1	\$1,126,200	\$1,125,071	HHWCC	\$878,880	\$885,748
Phase B	\$14,351,521	\$14,351,087	Facility Improvements	\$528,218	\$480,000
Phase B1/A2	\$6,255,575	\$6,224,157	Scale Improvement Project	\$324,490	\$311,364
Phase C1	\$4,089,961	\$3,692,495	Fire Water Booster Pump	\$377,125	\$374,125
Phase C2	\$4,250,965	\$3,973,139	New Fee Booth	\$249,900	\$239,406
Frank R. Bowerman Landfill/OC Waste & Recycling			San Joaquin LFG Improvements	\$479,125	\$449,212
North Slide Complex	\$1,900,000	\$3,380,000	Lane Road LFG Improvements	\$688,290	\$561,711
Phase V-D & Front Face Closure	\$7,069,913	\$7,149,021	Frank R. Bowerman Landfill/OC Waste & Recycling		
Mid-Valley Sanitary Landfill/San Bernardino SWMD			Office Improvement Project	\$697,000	\$824,128
Unit 3 Phase 2	\$2,612,732	\$2,433,182	Santiago Flare	\$282,587	\$334,412
Unit 3 Phase 5B	\$5,962,275	\$5,456,027	CR&R MRF/ CR&R		
Unit 3 Phase 6 & 7	\$4,211,900	\$3,844,820	Material Recovery Facility	\$1,394,247	\$1,420,262
Unit 1 Partial Final Closure	\$3,346,797	\$3,236,510	Heaps Peak Disposal Site		
Victorville Sanitary Landfill/San Bernardino SWMD			Leachate Treatment Facility	\$1,864,090	\$1,879,863
Phase 1B Stage 1	\$3,548,548	\$3,092,476	Big Bear Sanitary Landfill		
Phase 1B Stage 2	\$6,467,712	\$6,069,776	Landfill Gas System	\$1,786,416	\$1,737,192
Barstow Sanitary Landfill/San Bernardino SWMD			\$104,276,264	\$103,275,932	
Septage Pond Liner System	\$789,560	\$668,598			
Barstow Phase 1 Borrow Area Liner	\$3,025,123	\$2,900,979			
29 Palms Sanitary Landfill/San Bernardino SWMD					
Final Closure Construction	\$3,046,550	\$2,623,488			
Phelan Sanitary Landfill/San Bernardino					
Final Closure Construction	\$4,069,885	\$3,542,919			
Mesquite Regional Landfill/LACSD					
Cell 1	\$3,258,316	\$4,927,437			



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

4.0 PROPOSED METHOD TO ACCOMPLISH THE SERVICES

4.1 KEY ISSUES

While all aspects of a construction project are important and require the full attention of the construction management firm, landfill projects can present unique challenges that require specific experience and understanding to enhance the prospects of achieving success. Tetra Tech BAS has identified several key issues for the TSL project that will be significant components of managing the project, or will require special attention during construction. They are as follows:



Site Access, Traffic Control, and Site Coordination: TSL is an active landfill serving both commercial and public customers. In addition to site operations staff, vendors, equipment maintenance personnel, County inspection and monitoring staff and other Contractors may be working at the site during construction.



The Phase 2 & 3 projects will include construction activities such as waste excavation and removal, fill placement and compaction, and LFG improvements being conducted directly adjacent to the main access road. Final cover subgrade preparation and transport, placement, and compaction of the monolithic final cover will also be conducted above, below and directly adjacent to the access road on existing front face benches.

Close coordination will be required between County, site operations staff, the CM, and the Contractor to minimize any potential impacts to daily operations and to provide for a safe and controlled flow of traffic during the construction period. Special attention will be required when/if construction traffic crosses with landfill traffic. Submitted Traffic Control Plans for daily access to the Project as well as equipment/material delivery routes and procedures will be reviewed with all pertinent project team members. Monitoring of traffic control devices, signage, crossings and/or adjacent work area locations will be performed on a continuing basis. No modification to the approved access routes or traffic control features will be allowed without all parties being consulted and advised prior to a change.



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

Waste Removal/Relocation: Prior to waste removal and relocation to accommodate final cover construction adjacent to the access road, Tetra Tech BAS will confirm whether there are any Santa Barbara County Air Pollution Control District (SBCAPCD) compliance issues that need to be addressed. Tetra Tech BAS will also confirm that the Contractor has the proper equipment and trained personnel for monitoring waste relocation operations. Tetra Tech BAS will verify that all exposed waste in the excavation area is covered at the conclusion of each day's operations. Contractor monitoring logs will be submitted and reviewed on a daily basis. As required by the Technical Specifications, all excavated waste material will be transported to the active fill area. Excavated quantities will be documented on a daily basis by field measurement or survey.



Landfill Gas System: In general, LFG work associated with the final closure project includes extension of existing LFG wells, interim connection of the well laterals during construction of the final cover system, installation of new HDPE headers and laterals.



Sequencing of the pre-closure installation will be reviewed with the County, LFG Energy Recovery Operator (Fortistar), and as necessary, the LFG design engineer, GC Environmental (via the agreed upon chain of command), so as to minimize any impacts to the operating TSL LFG system. Any proposed modifications to the planned system would also be review with GC Environmental, as well as any or-equal material substitutions proposed by the Contractor. The Contractor's construction sequencing plans for the Phase 2 &3 drawings will be reviewed for conformance with the design sequencing intent.

Biological Mitigation Measures: Specification Section 14, Environmental Stewardship, reflects that all persons working on the project need to be trained on the requirements of existing biological permits. No permits were provided with the RFP documents received, however, prior to the start of construction, Tetra Tech BAS will request and review all associated permit requirements and will, in particular, note all items that could potentially impact construction sequencing and scheduling. These items will be included on the Pre-Construction Meeting agenda, and any "Action Items" will be included on following Construction Progress Meeting agendas.

Demolition/Salvage of Facilities and Site Utilities: Demolition and/or salvage and relocation of existing site facilities and utilities (awning, tanks, compressor, septic tank, storm drains, water lines, underground power lines, fencing, LCRS and condensate lines, etc.), will require close coordination with site representatives and the Contractor to minimize the potential for service interruptions. The Contractor's schedule will be reviewed to confirm that all impacted facilities and utilities are identified.



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

Prior to salvaging, demolition or removing any utility or conveyance line from service, site operations, (and the LFG Energy Recovery Operator, if applicable) will be provided with adequate, and agreed upon, prior notice. Any operation that has a potential for spills (e.g. condensate or leachate lines) will be reviewed with the Contractor to ensure that appropriate plans have been implemented to prevent such an occurrence. All items to be salvaged will be inspected and photographed prior to removal to minimize the potential for disputes regarding the condition of the existing facilities.

Partial Final Closure/Grade Control: Subgrade preparation and grade control are critical to the success of a closure project. The Contractor will be required to prepare an Earthworks Operations Plan that will demonstrate how the Contractor will prepare the existing interim cover material to establish a foundation for the final cover system (36-inch thick on slope areas, 24-inch thick vegetative layer over 60 mil LLDPE on Phase 3 deck area), and verify that the minimum thicknesses have been achieved.



Prior to placing final cover layer material, hike-up stakes will be set at the locations reflected on the drawings and the stakes surveyed. The subgrade will need to be inspected for any interim grade breaks, surface irregularities, or deficiencies that would impact verification of the final cover thickness. The Contractor will be required to continue subgrade preparation operations until the deficiencies have been remediated, or if applicable, additional hike up stakes may be set, or interim top, toe, or grade break survey points set. Throughout the course of construction, it will be emphasized that, as reflected in the “Design Intent” statement in the Specifications, settlement of the landfill mass is anticipated, and that compensation for final cover layer is on a square footage basis placed to the design thickness indicated on the drawings. The CM will work with the Contractor to confirm that there are no misunderstandings related to the Contractor’s responsibilities for developing and maintaining an acceptable subgrade for the final cover placement.

Soil Processing and Placement: Soil material for the Phase 2 and 3 partial final closures will come from designated onsite stockpiles. As reflected in project the Specifications and the CQA plan, the final cover materials will be compacted to a minimum 90 percent relative compaction, at 0 to 3 percent above optimum, and must exhibit a minimum average fines content (percent passing the No. 200 sieve) of 25 percent with a minimum of 15 percent finer than 5-microns, and a maximum particle size of 3-inch (except within 6-inch of LLDPE membrane or geocomposite where the maximum particle size shall be 1-inch).



CONSTRUCTION MANAGEMENT SUPPORT FOR PHASE 2 & 3 PARTIAL FINAL CLOSURE CONSTRUCTION AT TAJIGUAS SANITARY LANDFILL

Close coordination and monitoring will be required between the Contractor and the CQA monitor, with assistance from the CM team, to minimize the potential for deficient fill placement and lost time due to improperly processed, moisture conditioned, and screened (as necessary) fill material. Fill placement will be monitored not only for lift thickness and material properties as indicated in the Specifications, but also for any issues that may compromise thickness verification of the final cover system.

Construction Stormwater Activities: TSL and onsite construction activities fall under an NPDES Industrial Permit (IAO). However, the project Specifications also indicate that the Contractor shall prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) and a Storm Water Management Plan (SWMP) to demonstrate compliance with the Site Industrial SWPPP and to provide BMP's for interim erosion control as required per Order No. 2012-0006-DWQ, NPDES No. CAS000002, (Construction General Permit-(CGP) hereinafter referred to as the "Order").



Tetra Tech BAS' Qualified SWPPP Practitioner (QSP) will monitor the Contractor's compliance with the site SWPPP and implementation and maintenance of BMPs, typically required by the CGP.

4.2 CONSTRUCTION MANAGEMENT SERVICES AND APPROACH

Section 3 of the RFP, Scope of Services, outlines the responsibilities of the Construction Management Team. The following summarizes Tetra Tech BAS' approach to meeting or exceeding the expectations for each of the listed items.

4.2.1 Provide Necessary Personnel/Resident Engineer Duties

The inspection and monitoring staff will be under the direction of the Resident Engineer. The Resident Engineer will evaluate the needs of the project based on the level of activities represented on the Contractor's schedule and as dictated by field conditions.

Implementation of the Tetra Tech BAS CM approach to the project, as well as the establishment of staffing requirements, will be dependent upon the projected construction schedule and current activities at the site. As demonstrated during past CM contracts at County landfills, Tetra Tech BAS provides staffing appropriate for the number of specific tasks underway at a given time and commensurate with the level of activity by the Contractor(s). The Resident Engineer will review staffing requirements with County's Project Manager on a regular basis and will provide County with a detailed breakdown of services provided.



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Tetra Tech BAS staff have been cross-trained in a variety of disciplines, which provides for efficient monitoring when multiple activities are being undertaken by the Contractor. As the Contractor's activities increase, decrease, or the critical nature of the work intensifies, the CM staff can be adjusted accordingly to provide for an appropriate level of monitoring.

Understanding the importance and serious economic impacts of failures within landfill systems, and the importance of providing a product that will be in compliance with regulatory requirements, Tetra Tech BAS will utilize their most qualified individuals for each specialized task. While all aspects of the Phase 2 & 3 Partial Final Closure are important, particular attention will be paid to such items as:



- Verification of the pre-construction topographic survey information.
- Protection of existing facilities and improvements.
- Monitor clearing and grubbing, site demolition, salvage and relocation of existing site facilities, and salvage/demolition of LFG system components.
- Review and verification of waste removal limits.
- Compliance with any SBCAPCD or Health and Safety requirements during waste removal operations.
- Monitor unclassified fill for proper gradient and limits to establish sub grade for the final closure construction.
- Monitor soils processing in preparation for placements as final cover material.
- Review of line and gradient of closure area for compliance with "Design Intent" statements as reflected on the drawings and in the Specifications.
- Establishment and monitoring of construction settlement monuments for verification of cover thickness.
- Review LFG system phasing and sequencing for compliance with SBCAPCD requirements, site operations, and applicable project Specification requirements.
- Review excavation of anchor trenches.
- Monitor installation and testing of geosynthetic material layers including geotextiles, drainage geocomposite and 60 mil LLDPE geomembrane.
- Monitor installation of geocomposite edge drain.
- Placement of soil barrier and vegetative cover layers.
- Monitor construction of stormwater, drainage, access road construction, and other civil improvements.
- Monitor installation of BMPs and final erosion control and stormwater improvements.
- Review each Bid Schedule line item for proper measurement verification and documentation.

All Contractor activity will be monitored for compliance with the plans, specifications and regulatory requirements. Sampling and testing procedures and reporting will be coordinated by the CM to ensure that all material and products are provided in accordance with the



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applicable specification or standard. Estimated payment quantities will be reviewed for accuracy and any supporting or backup documentation that is required for payment will be requested and reviewed prior to approval of progress payment application request.

The CM will provide detailed reports of all Contractor activities. Of particular note will be the recording of any deviations from the project specifications or QA plan. All variances will be documented and will be maintained on a cumulative punch list until repair and/or remediation has been completed.

NPDES Compliance: The project is subject to compliance with the existing Industrial Stormwater General Permit for the site. The project Specifications also require that the Contractor prepare and submit a Construction Activities Stormwater Management Plan (SWMP) that provides BMP's for interim erosion control, pre and post storm inspections, etc. as required by the General Construction Permit (CGP) and BMP requirements included in the project Specifications.



The CM, a Qualified SWPPP Practitioner (QSP), will monitor the Contractor's implementation of their SWMP, installation and maintenance of BMPs, and project documentation including Inspection Reports required

Landfill Gas System Modifications: In conjunction with the County's selected CQA consultant, Tetra Tech BAS will monitor and document the pre-closure interim adjustment of various landfill gas extraction wells to verify that the wells have been properly extended above the proposed final cover finished grade.

The CM/CQA Team will monitor operations to verify that the adjusted wells are adequately protected during construction of the final cover. During post closure activities, the CM/CQA Team will observe installation, monitor testing, and document installation of the final LFG improvements.

Throughout LFG pre closure, interim, and post closure construction activities, Tetra Tech BAS will coordinate with the County, the LFG Energy Recovery Operator (Fortistar), and the County's LFG O&M consultant to facilitate implementation of the work, and minimize any potential impacts to the operating system.

Onsite Technical and Administrative Management: Tetra Tech BAS' CM will have responsibility for administration of the work during construction. The CM will maintain communications with the designated County Project Manager and inform County as to the status of all aspects of the work.



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Communication Protocol: Prior to beginning the project, Tetra Tech BAS' CM and the County's Project Manager will discuss and agree upon the distribution procedure of contract documentation, lines of authority/communications, and other administrative issues. Tetra Tech BAS' CM will not deviate from those procedures unless directed otherwise.

The Phase 2 & 3 Partial Final Closure Construction Project was designed by SWT Engineering, with geotechnical support provided by GLA and Geosyntec. To provide continuity and minimize the potential for miscommunication, Tetra Tech BAS' CM will be the nexus for all construction-related communication and correspondence between the engineering/CQA firms and the Contractor. County will be copied on all correspondence. All construction-related communication and correspondence from Contractors performing work on the project will be directed to the CM, who will log the information and then distribute it to the appropriate parties.



Field Office: As reflected in the project specifications, the Contractor selected for the Project will be required to furnish a field office at the Tajiguas Sanitary Landfill. Complete copies of all project related plans, specifications, correspondence, documentation, and record drawings will be maintained at the field office as well as digital backup copies on Tetra Tech BAS' Diamond Bar office server.

Specifications, Bid Document Review, Pre-Construction Meeting: Tetra Tech BAS will review all project drawings, specifications, engineers cost estimates, and project bid documents in preparation for commencement of construction activities. Tetra Tech BAS has had extensive experience in the preparation and/or implementation of such documents for numerous similar projects as well as applicable County, regulatory, and industry design and construction standards.

Prior to work beginning on the project, the CM will have developed the format for all project files and acquired all pertinent project documents. Format of reports and distribution procedures will be reviewed with County's Project Manager. At a minimum, project files will include:

- All contract documents, i.e., Instructions to Bidders, Contract/Agreement, Proposal, Bid Schedule, Sub-Contractors Listing, Bonds, Non-Collusion Affidavit, General Conditions, Special Conditions, Technical Specifications, and QA/QC Requirements.
- Relative permits and requirements from local governments or regulatory agencies.
- Appropriate reference specifications, standards, and standard plans.
- Notice to Proceed and contract time accounting procedure and documentation.
- Equipment and material submittal log. (The contract will be reviewed for submittal requirements and due dates will be established.)
- Progress payment format in compliance with County requirements.



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- Project personnel and emergency phone numbers.
- Contract change order documentation and approval procedures.
- Daily construction report format.
- Required safety documentation and equipment.
- Project photographic log.
- Record drawing format.
- Progress meeting format.
- Pre-construction meeting format.

4.2.2 Conduct Preconstruction Meeting

After contract award, but prior to beginning work on the project, a pre-construction conference will be scheduled. The CM will prepare an agenda and review it with the County Project Manager. At a minimum, the agenda will include the following:

- Introduction of project participants (County, A-E's, and Contractor)
- Lines of communication
- Project health and safety issues
- Emergency notification procedures
- Submittal format
- Requests for Information
- Change order/extra work (procedures and approvals)
- Progress payments (schedule and procedures)
- Completion date, time extension procedures, and time accounting
- QA/QC (review of project requirements)
- Project schedule, milestones
- Special permit requirements
- Review of site specific concerns (plans and specifications)
- Survey requirements
- Discussion of submittals for long-lead time purchases

The CM will conduct and document the pre-construction conference. Following the conference, the CM will prepare minutes of the meeting and will distribute draft copies to each attendee. Upon receipt and reconciliation of any comments, the CM will finalize the meeting minutes for distribution to the attendees.

Examples of past Pre-construction Agenda and Pre-Construction Meeting Minutes have been included in Appendix A of this proposal for County's review.

4.2.3 Maintain Project Files

The CM staff typically use Microsoft Word for report writing and construction documentation such as daily reports and meeting minutes, Microsoft Project (as referenced in the project



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Specifications) for scheduling, and Microsoft Excel for a variety of spreadsheet and graphing functions.

Schedule and Cost Control: The Contractor will be required to submit their proposed schedule and schedule of values prior to the pre-construction conference. The proposed schedule will be reviewed against the Contract Documents for compliance with project milestones. Tetra Tech BAS will confer with and advise the County's Project Manager regarding any potentially significant schedule issues. If the proposed schedule meets the overall intent of the project, the Contractor's phasing will be accepted and the schedule will become the Baseline Schedule.

The Schedule of Values will be reviewed for conformance with the intent of the Bid Schedule and Measurement and Payment sections of the specifications. Any proposed sub items will be evaluated to ensure that they do not result in accelerated or front-loaded compensation. Any approved modifications will be included in the Progress Payment Application format.

Project Documentation: Construction documentation provides not only the project history, but is quite often the basis for resolving many outstanding issues. Clarification or adjustment of payment limits, extra work and changed or unforeseen conditions, and ultimately an evaluation of the completeness of the project, will all be dependent upon accurate construction documentation.



Tetra Tech BAS understands the importance of detailed documentation on all aspects of a construction project. On past projects, records that were developed and prepared by Tetra Tech BAS have been used to successfully resolve conflicts and mitigate potential Contractor claims. Tetra Tech BAS takes pride in observing high standards in the preparation of all construction documentation. Examples of documentation prepared by Tetra Tech BAS for previous projects are provided in Appendix A of this proposal.



Outlined below is a brief description of typical documentation that would be maintained during the project:

- **Daily Construction Reports:** All daily reports are to be finalized by the following day. The report will include the date, weather, a summary of the equipment working (and non-operating equipment), manpower, material deliveries, visitors to the site, and a narrative. The narrative portion of the report will include sufficient information to convey to County the scope of work that occurred on that day, and the locations in which the work occurred. Particular attention will be paid to changed or unforeseen



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conditions, deficiencies noted, and when corrective action is required. If earthwork operations or geosynthetic installations are underway, an additional daily report will be prepared by the geotechnical CQA monitor. All reports will be reviewed by the CM prior to distribution to appropriate parties.

- **Cumulative Corrective Action File:** A list will be maintained of all deficiencies and items requiring repair, removal, or remediation. As items are corrected they will be removed from the list. The Contractor will be kept advised of the items requiring additional work. At the conclusion of the project, those items that have not been completed will be added to the punch list.
- **Work Force and Material Daily Reports:** When time and materials work has been authorized, or disputed work is taking place, the CM will keep a detailed summary of the manpower, equipment, and material being used in the operation. The report will be agreed upon by the CM and the Contractor on a daily basis, and signed by each party. The signatures are verification of the labor, equipment, and material used in the operation; however, they do not constitute the approval, or authorization for extra work.
- **Contract Time Accounting:** On a daily basis, the CM will determine whether or not the day is to be charged as a "contract day". At each bi-weekly Construction Progress Meeting, a Contract Time Summary will be included on the agenda for review by the Contractor and the County. Recommended time extensions for inclement weather, change orders, or unforeseen conditions will be reflected in the summary. The summary will also reflect any adjustment to the contract completion date, and the remaining contract time.
- **Contract Change Orders:** All change orders or contract modifications must be approved prior to beginning the work. Contract change orders will be based on either an extension of contract unit prices, an approved Contractor estimate, or on a time and materials basis. Anticipated changes may be submitted on a Proposed Change Order form, or in letter format. All change orders will be finalized on a separate Change Order document, approved by County.
- **Progress Payments:** Monthly progress payment applications will be prepared based on a schedule agreed upon by County and the Contractor. Applications may be prepared on the standard Tetra Tech BAS form (Excel) or a form of County's preference. The CM will schedule a meeting with the Contractor to review the Contractor's estimated quantities, prior to preparing the payment application. Standard progress payment packages will include:





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Contractors Invoice, Application for Payment (contract summary and signature page), and Contractor's Detailed Monthly Application for Payment (summary of individual bid items status).

- **Submittals:** Prior to work beginning on the project, the CM will determine the minimum submittal requirements for material and equipment as outlined in the Project Specifications and anticipated due dates will be established. All submittals will be directed to the CM and recorded on the Submittal Log. Each submittal will be reviewed for completeness and compliance with the project Specifications. Based on prior discussions and concurrence with the Engineer of Record, the CM will either respond to the submittal, or distribute the submittal to the design engineer for comments. The CM will track the response time from the engineer to ensure that an item is not inadvertently overlooked. Once a response is received, it will be noted on the Submittal Log and then distributed to the Contractor.
- **Request for Information (RFI) and Design Clarification Log:** The same format as outlined for tracking submittals will be implemented to track RFIs and Design Clarifications. All responses to RFIs and finalization of Design Clarifications will be reviewed and approved by the design engineers/architects and, if applicable, the CQA Officer.
- **Weekly Progress Meeting Minutes:** In addition to the above noted documentation, bi-weekly Construction Progress Meeting will be conducted in which many of the above issues will be reviewed and documented.

At a minimum the following issues will be covered:

- Amendments or corrections to previous week's minutes
- Health and Safety issues
- Contract time summary to date
- Stormwater and erosion control issues
- Progress and schedule review (three week look ahead)
- Submittal review
- Request for Information review
- Review any out-of-scope or extra work occurring during the previous week. Any changed or unforeseen conditions that have come to the Contractor's attention since the previous week. (If required, separate resolution meetings will be scheduled to discuss and resolve specific issues.)
- QA/QC review and discussion of issues
- Task specific issues
- Progress payment (if applicable)



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The CM will document all discussions at the progress meetings and will prepare meeting minutes for distribution to all attendees prior to the next scheduled meeting.

Examples of past CM Construction Progress Meeting Agendas and Meeting Minutes are included in Appendix A of this proposal for your review.

Schedule Control: On a bi-monthly basis, the Contractor will be required to submit a three week look-ahead schedule. The look-ahead schedule will be reviewed for compliance with the baseline schedule during the weekly Construction Progress Meetings. The primary purpose of the less formal look-ahead schedule will be to facilitate coordination of inspection, CQA, or special inspection needs; to identify areas of concern or to note items where submittals, test results, or engineering data is required or will be necessary to proceed.



On a monthly basis, the Contractor will submit a Project Schedule update. These schedule updates will be reviewed for compliance with the Baseline Schedule. The Contractor will note any deviations from the original schedule and will provide a narrative explaining the deviations, how problem areas will be remediated, and any corrective action necessary to resolve the schedule issues.

The CM will confer with and advise County's Project Manager regarding the status of any significant schedule issues. If necessary and appropriate, changes will be made to the original baseline schedule.

Project Cash Flow: Prior to beginning work on any project, the baseline schedule and Schedule of Values are reviewed, modified as necessary, and accepted. On a monthly basis, Tetra Tech BAS' CM will review the Baseline time projections and expenditures versus the actual progress that occurred during the previous pay period. When deficiencies are noted, the CM will schedule a meeting with the Contractor's PM to review the Contractor's proposed remedies to mitigate any schedule/expenditure variations. Throughout the course of construction, the Baseline schedule is updated and approved Changes Orders are included on the Schedule of Values so that the project cash flow is accurately forecast.

Identify Actual and Potential Issues: Minimizing the potential for problems and issues is greatly enhanced by having as complete an understanding of all aspects of a project as possible. However, due to field conditions, material/product issues, and occasionally overlooked details by even well-intentioned Contractors, vendors, and suppliers, issues do and will occur. By utilizing the look-ahead schedules, the submittal logs, and re-reviewing the plans and specifications for the upcoming specific work items, a significant number of potential issues can be resolved before they occur. The weekly Construction Progress



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Meetings are also an opportune time for open and frank discussion regarding upcoming work. Specific questions regarding the status of submittals, material orders, and any concerns anticipated by the contractor/subcontractors or engineer/architect should be reviewed at that time. It is noted, however, that issues should not and will not be held for discussion only at Construction Progress Meetings. Daily cooperation and interaction between the CM and Contractor will likely net the most favorable results in the resolution and/or prevention of issues.

Health & Safety: As reflected on Tetra Tech BAS' agenda and Construction Progress Meeting minutes (examples included in Appendix A), Health & Safety concerns are near the top of the list. While health and safety of the workers is specifically the responsibility of the contractor/subcontractors, the CM will bring to the attention of the superintendent any potential concerns or issues that are noted during daily review of the site activities. As noted, health and safety issues will be discussed at each weekly Construction Progress Meeting, and the Contractor will be required to submit their weekly tailgate safety sign-in sheet, and will provide a report of any site health and safety incidents.



Construction Close Out: Project close-out procedures will begin well before the conclusion of a project. Tetra Tech BAS will maintain a cumulative listing of project deficiencies and corrective action items. Pre-final inspections will be implemented to develop project punch lists.

As part of the close-out procedure, the CM will review and verify final pay quantities for compliance with the bid schedule and any approved contract additions or deletions. Contract time summaries will be evaluated and the CM will endeavor to resolve any remaining contract time extension issues. Contract Change Orders and extra work items will be reviewed for completeness. If unresolved issues remain, the CM will schedule negotiation meetings with the Contractor and make every attempt to mitigate the item(s). All submittals will have been received by this time and the CM will verify receipt of any Manufacturers warranties, record drawings, or other required literature or documentation.

As noted in the Contract Documents, it is the Contractor's responsibility to provide survey data, Record Drawings and As-Built Drawings for the completed work. Tetra Tech BAS has found that early discussion regarding the requirements and expectations for the final as-built product are extremely valuable. The CM will meet with the Contractor and the project surveyor to review the as-built drawing requirements. Examples will be provided, if necessary, to demonstrate what the final product is expected to reflect and how it should be formatted.



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Additionally, the Contractor will be required to submit the raw as-built survey data immediately after each survey event to ensure that the information is available should there be a circumstance where the project surveyor is no longer available to complete or furnish the as-built drawings. Tetra Tech BAS will review the Contractor's submitted survey data and as-built survey drawings for conformance with the project specifications and will verify all applicable quantity measurements. The final drawings will be incorporated into the Construction Completion Report.

At the completion of the project close-out procedure, the CM will prepare a "Construction Completion Report" The purpose of this report is to document that activities performed during the course of construction were done in accordance with the applicable Contract Documents and regulatory requirements. The Construction Completion Report will provide a general description of the CM/CQA activities, a summary of the work associated with each component of the project, a description of any changes or modifications to the design, and a review of the project schedule. Various appendices will be attached to the Construction Completion Report to present CM/CQA documentation of the construction activities, photographic documentation, and the as-built drawings. As referenced in the RFP, the CM will submit a Construction Completion Report at the completion of each phase (Phase 2 and Phase 3). The reports will be reviewed and signed by the Resident Engineer, indicating that the work was performed in accordance with the requirements of the construction contract and regulatory requirements.



A separated CQA Construction Completion Report will be prepared and submitted by the County's selected CQA consultant. The CQA reports will serve as a stand-alone document that will be submitted to the California Regional Water Quality Control Board (CRWQCB) for the purpose of certifying that the composite liner system had been constructed in general accordance with all applicable regulations.



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5.0 KNOWLEDGE AND UNDERSTANDING OF FEDERAL/STATE/COUNTY PROCEDURES

Tetra Tech BAS has extensive experience in developing construction drawings and specifications for clients throughout California and the western United States. As a result, Tetra Tech BAS is intimately familiar with the codes and requirements applicable to construction projects in general, and specifically to projects associated with landfills. It is a Tetra Tech BAS' CM responsibility to be aware of and implement the requirements of such codes and standards as reflected in the following:

- Public Contract Code
- Standard Specifications for Public Works Construction
- CalTrans Standard Specifications
- CCR Title 8 (Cal-OSHA)
- Business and Professions Code
- California Labor Code
- National Pollutant Discharge Elimination System (NPDES)
- California Building Code (CBC)
- Utility Agency Requirements
- ASTM Standards
- Geosynthetic Research Institute (GRI) Standards



“Tetra Tech BAS has exhibited an outstanding level of professionalism, technical expertise, and versatility in addressing complex environmental issues that pose hazards to public health and safety.”

**Patricia Henshaw,
County of Orange
Health Care Agency**

Additionally, Tech BAS has an in-house Regulatory Compliance Group that is dedicated specifically to the preparation, administration, and management of regulatory compliance documents. Regulatory Compliance staff are responsible for monitoring legislative trends and changes in statutes and regulations governing solid waste. They routinely advise Tetra Tech BAS Team designers and engineers on the permitting impacts of varying approaches while projects are still in the conceptual stage. In past projects, Regulatory Compliance staff have ensured timely review of permit applications and avoided “blind alleys” by maintaining proactive communication with the agencies. Highlights of Tetra Tech BAS experience with landfill and solid waste management-related laws and regulations include the following:

- Tetra Tech BAS developed and implemented the first EPA-approved RCRA closure for a Class I landfill in the western United States (BKK Landfill).
- Tetra Tech BAS prepared the first Closure Plans approved under Title 14 Regulations (Coyote Canyon Landfill).
- Tetra Tech BAS developed and circulated one of the first acceptable formats for a Joint Technical Document (JTD).
- Tetra Tech BAS also prepared one of the first closure and post-closure cost estimates approved by CalRecycle for the Frank R. Bowerman Landfill under Title 27 regulations requiring third-party back-up. The cost estimate served as a model for the State in reviewing subsequent submittals.



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- Tetra Tech BAS is currently providing contract technical and outreach support services to the USEPA's Landfill Methane Outreach Program (LMOP). LMOP is a voluntary assistance program facilitating the reduction of methane emissions from landfills by encouraging the recovery and beneficial use of landfill gas as an energy resource.
- Tetra Tech BAS staff recently participated on an advisory committee that prepared guidance documents on Title 17, Article 4, Sub article 6, a law that regulates emissions of methane from landfill facilities.
- Tetra Tech BAS staff provided technical input during the initial development and review of one of the first statutes regulating landfill gas surface emissions in California (SCAQMD Rule 1150.1).
- Tetra Tech BAS senior technical staff served on the California Integrated Waste Management Board's (now CalRecycle) Advisory Committee on Landfill Closure, and the Governor's Task Force on Solid Waste.

The Tetra Tech BAS Team has more than 30 years of experience preparing permitting documents for solid waste facilities throughout California.

Experience with Central Coast RWQCB: The Tetra Tech Team has been representing public waste management agencies before the Central Coast RWQCB since 1992. The Team has worked with the Central Coast RWQCB on behalf of the County of Santa Barbara, City of Santa Maria, City of Paso Robles, City of Santa Cruz, and the Salinas Valley Solid Waste Authority. Achievements have included negotiation of Central Coast RWQCB approval of alternative liner and cover systems, successful negotiation of update Waste Disposal Requirements for multiple sites, and negotiation of reductions in site corrective action demands.

6.0 ADDENDA TO THE RFP

No addenda were received in conjunction with this RFP.

ATTACHMENT A-2



Table 1

Phase 2 & 3 Partial Final Closure Construction at Tajiaguas Sanitary Landfill

Task	SCM	DE	E-V	E	SDD	OS	TOTAL LABOR HOURS	TOTAL LABOR COST	ESTIMATED EXPENSES % LABOR 2%	TOTAL FEE	Per Diem	Vehicle Use	TOTAL OUTSIDE COSTS	TOTAL FEE	
	hr. \$199	hr. \$214	hr. \$151	hr. \$99	hr. \$138	hr. \$76					day \$250	hr. \$11			
Task 1 - Pre Construction Phase 2															
1.1 Project Set up/Format Project Docs	8						8	\$1,592	\$32	\$1,624				\$1,624	
1.2 Pre-Construction Meeting	16		8				24	\$4,392	\$88	\$4,480				\$4,480	
1.3 Initial Submittal Reviews	24						24	\$4,776	\$96	\$4,872				\$4,872	
1.4 Project Administration	8	4					12	\$2,448	\$49	\$2,497				\$2,497	
<i>Task 1 Total</i>	56	4	8				68	\$13,208	\$265	\$13,473				\$13,473	
Task 2 - Construction Services Phase 2															
2.1 Monitor Construction Activities	502		96	40			638	\$118,354	\$2,367	\$120,721	104	1040	\$37,440	\$158,161	
2.2 Documentation Review/Production	390						390	\$77,610	\$1,552	\$79,162				\$79,162	
2.3 Cover Thickness Verification				32	8		40	\$4,272	\$85	\$4,357				\$4,357	
2.4 Project Administration	52	36					88	\$18,052	\$361	\$18,413				\$18,413	
<i>Task 2 Total</i>	944	36	96	72	8		1156	\$218,288	\$4,365	\$222,653	104	1040	\$37,440	\$260,093	
Task 3 - Phase 2 CM Report															
3.1 Review As-Built Drawings	8			8			16	\$2,384	\$48	\$2,432				\$2,432	
3.2 Prepare Draft CM Report	40					8	48	\$8,568	\$171	\$8,739				\$8,739	
3.3 Finalize CM Report	8					4	12	\$1,896	\$38	\$1,934				\$1,934	
3.4 Project Administration	8	8					16	\$3,304	\$66	\$3,370				\$3,370	
<i>Task 3 Total</i>	64	8		8		12	92	\$16,152	\$323	\$16,475				\$16,475	
Task 4 - Pre-Construction Phase 3															
4.1 Start up meeting(s) Coordination	8						8	\$1,592	\$32	\$1,624				\$1,624	
<i>Task 4 Total</i>	8						8	\$1,592	\$32	\$1,624				\$1,624	
Task 5 - Phase 3 CM Services															
5.1 Monitor Construction Activities	327		64	24			415	\$77,113	\$1,542	\$78,655	68	680	\$24,480	\$103,135	
5.2 Documentation Review/Production	255						255	\$50,745	\$1,015	\$51,760				\$51,760	
5.3 Cover Thickness Verification				16	4		20	\$2,136	\$43	\$2,179				\$2,179	
5.4 Project Administration	34	24					58	\$11,902	\$238	\$12,140				\$12,140	
<i>Task 5 Total</i>	616	24	64	40	4		748	\$141,896	\$2,838	\$144,734	68	680	\$24,480	\$169,214	
Task 6 - Phase 3 CM Report															
6.1 Review As-Built Drawings	8			8			16	\$2,384	\$48	\$2,432				\$2,432	
6.2 Prepare Draft CM Report	40					8	48	\$8,568	\$171	\$8,739				\$8,739	
6.3 Finalize CM Report	8					4	12	\$1,896	\$38	\$1,934				\$1,934	
6.4 Project Administration	8	8					16	\$3,304	\$66	\$3,370				\$3,370	
<i>Task 6 Total</i>	64	8		8		12	92	\$16,152	\$323	\$16,475				\$16,475	
Total Hours	1752	80	168	128	12	24	2,164				172	1720			
Total Fee	348,648	17,120	25,368	12,672	1,656	1,824		\$407,288	\$8,146	\$415,434	43,000	18,920	\$61,920	\$477,354	
														10% Contingency	\$47,735
														Total	\$525,089

The Phase 2 & 3 CM Services estimate assumes that the Contractor will work 8 hours per day, five days per week.

EXHIBIT B

PAYMENT ARRANGEMENTS

Periodic Compensation (with attached Schedule of Fees)

- A. For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, not to exceed \$ **477,354**.
- B. Extra Work required to complete the project may be authorized only if CONTRACTOR receives written approval by the COUNTY's designated representative as identified in Paragraph 1 of the Agreement at the same rate per unit as defined in Attachment B1 (Schedule of Fees). The total amount of this contingency fund is 10% of the agreement amount or **\$47,735**.
- C. Payment for services and /or reimbursement of costs shall be made upon CONTRACTOR's satisfactory performance, based upon the scope and methodology contained in **EXHIBIT A** as determined by COUNTY. Payment for services and/or reimbursement of costs shall be based upon the costs, expenses, overhead charges and hourly rates for personnel, as defined in **Attachment B1** (Schedule of Fees). Invoices submitted for payment that are based upon **Attachment B1** must contain sufficient detail to enable an audit of the charges and provide supporting documentation if so specified in **EXHIBIT A**.
- D. Monthly, CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury for the service performed over the period specified. These invoices or certified claims must cite the assigned Board Contract Number. COUNTY DESIGNATED REPRESENTATIVE shall evaluate the quality of the service performed and if found to be satisfactory and within the cost basis of **Attachment B1** shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of receipt of correct and complete invoices or claims from CONTRACTOR.
- E. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.



SCHEDULE OF CHARGES

<u>PERSONNEL</u>	<u>HOURLY RATE</u>	<u>PERSONNEL</u>	<u>HOURLY RATE</u>
Administrative Assistant (ADA)	\$92	Administrative Assistant	\$92
CADD Operator (CO)	\$82	CADD Operator	\$82
Chief Engineering Technician (CT)	\$133	Chief Engineering Technician	\$133
Chief of Survey Parties (CSP)	\$143	Chief of Survey Parties	\$143
Construction Engineering Technician (CET)	\$144	Construction Engineering Technician	\$144
Construction Manager (CM)	\$177	Construction Manager	\$177
Construction Supervisor (CS)	\$152	Construction Supervisor	\$152
Data (DP)/Word Processing Secretary (WP)	\$82	Data/ Word Processing Secretary	\$82
Data Analyst (DA)	\$62	Data Analyst	\$62
Designer (DD)	\$127	Designer	\$127
Division Engineer (DE)	\$214	Division Engineer	\$214
Drafter (D)	\$103	Drafter	\$103
Engineer (E)	\$99	Engineer	\$99
Engineer I (E-I)	\$111	Engineer I	\$111
Engineer II (E-II)	\$121	Engineer II	\$121
Engineer III (E-III)	\$131	Engineer III	\$131
Engineer IV (E-IV)	\$141	Engineer IV	\$141
Engineer V (E-V)	\$151	Engineer V	\$151
Engineering Technician (ET)	\$45	Engineering Technician	\$45
Engineering Technician I (ET-I)	\$67	Engineering Technician I	\$67
Engineering Technician II (ET-II)	\$80	Engineering Technician II	\$80
Engineering Technician III (ET-III)	\$90	Engineering Technician III	\$90
Engineering Technician IV (ET-IV)	\$105	Engineering Technician IV	\$105
Engineering Technician V (ET-V)	\$117	Engineering Technician V	\$117
Environmental Engineer (EE)	\$90	Environmental Engineer	\$90
Environmental Engineer I (EE-I)	\$95	Environmental Engineer I	\$95
Environmental Specialist (ES)	\$103	Environmental Specialist	\$103
Environmental Specialist I (ES-I)	\$115	Environmental Specialist I	\$115
Environmental Specialist II (ES-II)	\$131	Environmental Specialist II	\$131
Environmental Specialist III (ES-III)	\$136	Environmental Specialist III	\$136
General Clerk (C)/Typist (Y)	\$69	General Clerk/ Typist	\$69
Landscape Architect (LA)	\$137	Landscape Architect	\$137
Office Services Clerk (OS)	\$76	Office Services Clerk	\$76
Principal (P)	\$252	Principal	\$252
Principal Expert (PX)	\$275	Principal Expert	\$275
Principal Administrator (PA)	\$204	Principal Administrator	\$204
Principal Engineer (PRE)	\$224	Principal Engineer	\$224
Principal Engineering Geologist (PEG)	\$224	Principal Engineering Geologist	\$224
Principal Solid Waste Planner (PSW)	\$224	Principal Solid Waste Planner	\$224
Project Accountant/Analyst (AA)	\$93	Project Accountant/ Analyst	\$93
Project Coordinator (PC)	\$117	Project Coordinator	\$117
Project Designer (PD)	\$151	Project Designer	\$151
Project Manager I (PM-I) / Engineer VI (E-VI)	\$166	Project Manager I/ Engineer VI	\$166
Project Manager II (PM-II)/ Engineer V-II (E-VII)	\$176	Project Manager II/ Engineer V-II	\$176
Project Manager III (PM-III)	\$186	Project Manager III	\$186
Regulatory Compliance Manager (RCM)	\$159	Regulatory Compliance Manager	\$159
Regulatory Compliance Specialist (RS)	\$123	Regulatory Compliance Specialist	\$123
Regulatory Compliance Specialist II (RS-II)	\$139	Regulatory Compliance Specialist II	\$139
Senior CADD Operator (SCO)	\$92	Senior CADD Operator	\$92
Senior Construction Manager (SCM)	\$199	Senior Construction Manager	\$199
Senior Designer (SDD)	\$138	Senior Designer	\$138
Senior Drafter (SD)	\$113	Senior Drafter	\$113
Senior Engineer (SRE)	\$196	Senior Engineer	\$196
Senior Environmental Scientist (SNS)	\$163	Senior Environmental Scientist	\$163
Senior Environmental Specialist (SES)	\$143	Senior Environmental Specialist	\$143
Senior Project Coordinator (SPC)	\$136	Senior Project Coordinator	\$136
Senior Project Designer (SPD)	\$167	Senior Project Designer	\$167
Senior Project Manager (SM)	\$201	Senior Project Manager	\$201
Senior Regulatory Compliance Specialist (SRS)	\$151	Senior Regulatory Compliance Specialist	\$151
Senior Technical Editor (STE)	\$113	Senior Technical Editor	\$113
2-Man Survey Party (SP-2M)	\$249	2-Man Survey Party	\$249
1-Man Survey Party with GPS (1M-GPS)	\$190	1-Man Survey Party with GPS	\$190

EXHIBIT C

Indemnification and Insurance Requirements (For Design Professional Contracts)

INDEMNIFICATION

CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, costs, expenses (including but not limited to attorneys' fees), 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, but this indemnity does not apply to liability for damages arising from the sole negligence, active negligence, or willful acts of the COUNTY.

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

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

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, his 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:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the CONTRACTOR'S profession, with limit of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

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

B. Other Insurance Provisions

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

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is 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 provide 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** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.
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.