

**C O N T R A C T**

**THIS CONTRACT**, hereinafter referred to as “Contract” for purposes of identification hereby numbered MA-080-21010805, and dated \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_ is

**BY AND BETWEEN**

County of Orange, a political subdivision of the State of California, hereinafter referred to as “County”

**AND**

Tetra Tech BAS, Inc., a California Corporation, hereinafter referred to as “A-E.”

which are sometimes individually referred to as “Party” or collectively referred to as “Parties.”

**RECITALS**

**WHEREAS**, County requires professional services to accomplish projects and/or services (“PROJECTS/SERVICES”) as described in MA-080-21010805 Scope of Work for On-Call Landfill Construction Support Services, hereinafter referred to as “Attachment A,” attached hereto and incorporated herein by reference; and

**WHEREAS**, A-E is a firm whose principals are, as required by law, registered by the State of California for the practice of specialized A-E services per the attached Scope of Work.

**NOW, THEREFORE, IT IS AGREED** by and between the parties hereto as follows:

**1. GENERAL**

**1.1. Retainer**

- 1.1.1.** County does hereby retain A-E to perform the Projects/Services as required by this Contract.
- 1.1.2.** A-E has offered, and County has accepted, the professional services of **Caleb Moore, P.E.** and A-E shall assign him/her to the Projects/Services.
- 1.1.3.** A-E may employ special consultants/contractors for the accomplishment of the Projects/Services specified; and only the firms or independent consultants/contractors identified in Attachment C may be employed by A-E to provide these Projects/Services.
- 1.1.4.** Consultants/contractors may be substituted and/or added by mutual Contract of A-E and the Director, County of Orange, OC Public Works or his designee, hereinafter referred to as “Director”.
- 1.1.5.** A-E's employment of independent consultants/contractors shall not relieve A-E from the performance of its own responsibilities pursuant to this Contract. However, all consultants/contractors independently contracting with County shall be independently liable to County for the performance of the work pursuant to their agreements, and A-E shall have no liability for work by contractors independently contracting with County.

**1.2. Projects/Services****1.2.1. Description of Projects/Services**

- a. Project/Services to be performed by A-E shall consist of the work as specified herein and as required in Attachment A. If in the event Attachment A shall be in conflict with any provision of this Contract, the wording as set forth in Attachment A shall prevail.
- b. A-E shall be responsible for submitting all Projects/Services to County in a form which has been thoroughly reviewed and checked for completeness, accuracy and consistency by the registered professional named in Section 1.1.2 herein; and, any Projects/Services not meeting this requirement will be returned to A-E prior to review by County.

**1.2.2. Design Criteria and Standards**

All Projects/Services shall be performed in accordance with instructions, criteria and standards set forth by the Director.

**1.2.3. Scheduling**

- a) Concurrently with the work of the Contract, A-E shall prepare a progress work schedule and within five (5) working days from the date of receipt of individual assignments from County, A-E shall submit to County two (2) copies of a progress work schedule which shall delineate dates of commencement and completion of the various phases of Projects/Services assignments. A-E schedule shall include required County review period(s) set forth herein. An approved copy of the progress schedule will be returned to A-E.
- b) A-E shall allow at least five (5) working days for County review of progress work schedule. In planning work, A-E should anticipate and allow ten (10) working days for County review of each submittal required in Attachment A.
- c) A-E shall meet on an as-needed basis as determined by County or at least once every four (4) weeks with County to review progress of work, adherence to progress schedule, coordination of work, scheduling of seminars, if needed, and to resolve any problems that may develop.
- d) Within five (5) working days of each meeting, A-E shall prepare a brief memorandum summarizing the results of the meeting and shall submit it to County for concurrence.
- e) A-E shall complete all the work of Projects/Services and obtain all approvals by the County within the time frame indicated in Attachment A except A-E shall not be responsible for any delay beyond the control of A-E.
- f) In the event A-E fails to complete the work and obtain the approval of Director in the time allowed, County shall have the option of completing the work by its own forces or by contract with another firm. The time allowed for A-E to complete the Projects/Services pursuant to this Contract shall be extended for delay caused by County in completing its work pursuant to this Contract which delay exceeds the agreed County review and/or approval time periods.

**1.3. Assistance by County Staff**

- 1.3.1.** County shall assign an appropriate staff member to work with A-E in connection with the work of this Contract. Said staff member's duties will consist of the giving of advice and consultations, assisting A-E in negotiations with other public agencies and private parties, miscellaneous items which in the judgment of A-E or County's staff warrant attention, and all other duties as may be described in Attachment A.
- 1.3.2.** All of the above activities, however, shall be the primary responsibility of A-E to schedule, initiate and carry through to completion.

**1.4. Term and Maximum Compensation**

The term of this Contract is for three (3) years, commencing upon Board approval, with a maximum allowable compensation of one million seven hundred fifty thousand (\$1,750,000), with the option to renew for two (2) additional years, with Board approval; except as permitted in Paragraph 1.5 below.

**1.5. A-E Compensation and Extra Work**

- 1.5.1.** For the Projects/Services authorized under this Contract, A-E shall be compensated in accordance with the following:
- 1.5.2.** For completion and approval of all Projects/Services where "Extra Work" (defined as changes in approved portions of the Project/Services required by and ordered in writing by Director which changes constitute a change in or departure from said approved portions of Projects/Services) is not authorized, compensation including reimbursables shall be described and payable as stipulated in Fee Schedule, herein after referred to as "Attachment B", attached hereto and incorporated herein by reference.
- 1.5.3.** Where extra work is authorized for Projects/Services:
- a) The amount for Extra Work shall be determined using Attachment B. Extra Work shall be required by and ordered in writing by Director. If this Contract is not approved by the Board of Supervisors, any change that increases the cumulative Contract price beyond \$200,000 must be approved by the Board. Increases in the Contract amount for services within the existing scope of work may be granted by the Director where the amount does not exceed 25 percent of the existing Contract price or \$200,000, whichever is less.
  - b) A-E's billing for the Extra Work shall include but not be limited to names of A-E's staff employed in the Extra Work, classification of employees and number of hours worked.
- 1.5.4.** For partial completion of work of Projects/Services followed by default on part of A-E:
- a) For failure to complete and secure approval of the first required submittal, there shall be no compensation.

**County of Orange  
Tetra Tech BAS, Inc.**

---

- b) For failure to complete and secure approval of other authorized phases, A-E shall, upon completion of Projects/Services by others, be entitled to receive compensation based on approved work of Projects/Services not to exceed the amounts specified in Attachment A for that particular submittal, plus the reasonable value as determined by County of the non-approved work; provided, however, that if the cost to County to complete the contract exceeds the amount specified herein, A-E shall be liable to County for such excess costs attributable to A-E's breach of the Contract.

**2. LABOR****2.1. Non-Employment of County Personnel**

- 2.1.1.** A-E agrees that it will neither negotiate, offer, or give employment to any full-time, regular employee of County in professional classifications of the same skills required for the performance of this Contract who is involved in this Project in a participatory status during the life of this Contract regardless of the assignments said employee may be given or the days or hours employee may work.
- 2.1.2.** Nothing in this Contract shall be deemed to make A-E, or any of A-E's employees or agents, agents or employees of the County. A-E shall be an independent contractor and shall have responsibility for and control over the details and means for performing the work, provided that A-E is in compliance with the terms of this Contract. Anything in the Contract which may appear to give County the right to direct A-E as to the details of the performance of the work or to exercise a measure of control over A-E shall mean that A-E shall follow the desires of County, only in the results of the work.

**2.2. Non-Discrimination**

- 2.2.1.** In the performance of this Contract, A-E agrees that it will comply with the requirements of the California Labor Code and not engage nor permit any subcontractors to engage in discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons.
- 2.2.2.** A-E acknowledges that a violation of this provision shall subject A-E to all the penalties imposed for a violation of the California Labor Code.

**2.3. Employee Eligibility Verification**

- 2.3.1.** A-E warrants that it fully complies with all Federal and State statutes and regulations regarding the employment of aliens, and others and that all its employees performing work under this Contract meet the citizenship or alien status requirement set forth in Federal statutes and regulations. A-E shall obtain, from all employees performing work hereunder, all verification and other documentation of employment eligibility status required by Federal or State statutes and regulations, including but not limited to, the Immigration Reform and Control Act of 1986, 8 U.S.C. § 1324 et seq., as they currently exist and as they may be hereafter amended. A-E shall retain all such documentation for all covered employees for the period prescribed by the law.

**2.4. Independent Contractor**

- 2.4.1.** As referenced in Section 2.1.2 of this Contract, A-E shall be considered an independent contractor.

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

2.4.2. Neither A-E, its employees nor anyone working under A-E shall qualify for workers' compensation or other fringe benefits of any kind through County.

**2.5. Conflict of Interest Contractor Personnel**

2.5.1. The A-E shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the best interests of the County. This obligation shall apply to the A-E; the A-E's employees, agents, and relatives; sub-tier contractors; and third parties associated with accomplishing work and Projects/Services hereunder.

2.5.2. A-E's efforts shall include, but not be limited to establishing precautions to prevent its employees or agents from: making, receiving, providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to appear to influence individuals to act contrary to the best interests of the County.

**2.6. Labor Code Notice**

All A-E and subcontractors must comply with the requirements of California Labor Code 1770 et seq. if the work performed is considered a "public works" under California Labor Code 1720 et seq. A-E is encouraged to contact the California Department of Industrial Relations for clarification if the A-E is unsure if some or any of the work performed under this Contract qualifies as "public works".

**3. INSURANCE**

**3.1. Requirements and Endorsements**

3.1.1. Prior to the provision of services under this Contract, the A-E agrees to purchase all required insurance at A-E's expense, including all endorsements required herein, necessary to satisfy the County that the insurance provisions of this Contract have been complied with. A-E agrees to keep such insurance coverage, Certificates of Insurance, and endorsements on deposit with the County during the entire term of this Contract. The County reserves the right to request the declarations page showing all endorsements and a certified copy of the policy. In addition, all subcontractors performing work on behalf of A-E pursuant to this Contract shall obtain insurance subject to the same terms and conditions as set forth herein for A-E.

3.1.2. A-E shall ensure that all subcontractors performing work on behalf of A-E pursuant to this Contract shall be covered under A-E's insurance as an Additional Insured or maintain insurance subject to the same terms and conditions as set forth herein for A-E. A-E shall not allow subcontractors to work if subcontractors have less than the level of coverage required by County from A-E under this Contract. It is the obligation of A-E to provide notice of the insurance requirements to every subcontractor and to receive proof of insurance prior to allowing any subcontractor to begin work. Such proof of insurance must be maintained by A-E through the entirety of this Contract for inspection by County representative(s) at any reasonable time.

3.1.3. All self-insured retentions (SIRs) shall be clearly stated on the Certificate of Insurance. Any self-insured retention (SIR) in an amount in excess of Fifty Thousand Dollars (\$50,000) shall specifically be approved by the County's Risk Manager, or designee, upon review of A-E's current audited financial report. If A-E's SIR is approved, A-E, in addition to, and without limitation of, any other indemnity provision(s) in this Contract, agrees to all of the following:

1. In addition to the duty to indemnify and hold the County harmless against any and all liability, claim, demand or suit resulting from A-E's, its agents, employee's or

subcontractor's performance of this Contract, A-E shall defend the County at its sole cost and expense with counsel approved by Board of Supervisors against same; and

2. A-E's duty to defend, as stated above, shall be absolute and irrespective of any duty to indemnify or hold harmless; and
3. The provisions of California Civil Code Section 2860 shall apply to any and all actions to which the duty to defend stated above applies, and the A-E's SIR provision shall be interpreted as though the A-E was an insurer and the County was the insured.

**3.1.4.** If the A-E fails to maintain insurance acceptable to the County for the full term of this Contract, the County may terminate this Contract.

A. **Qualified Insurer**

1. The policy or policies of insurance must be issued by an insurer with a minimum rating of A- (Secure A.M. Best's Rating) and VIII (Financial Size Category as determined by the most current edition of the **Best's Key Rating Guide/Property-Casualty/United States or ambest.com**). It is preferred, but not mandatory, that the insurer be licensed to do business in the state of California (California Admitted Carrier).

If the insurance carrier does not have an A.M. Best Rating of A-/VIII, the CEO/Office of Risk Management retains the right to approve or reject a carrier after a review of the company's performance and financial ratings.

2. The policy or policies of insurance maintained by the A-E shall provide the minimum limits and coverage as set forth below:

<u>Coverage</u>	<u>Minimum Limits</u>
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 aggregate
Automobile Liability including converge for owned, non-owned and hired vehicles	\$1,000,000 per occurrence
Workers' Compensation	Statutory
Employers' Liability Insurance	\$1,000,000 per occurrence
Professional Liability	\$1,000,000 per claims made or per occurrence \$2,000,000 aggregate
Environmental/Pollution Liability* <i>*(Optional coverage to be required only when hazardous materials are involved. If required, A-E will be notified by County).</i>	\$1,000,000 per claims made or occurrence

B. **Required Coverage Forms**

1. The Commercial General Liability coverage shall be written on Insurance Services Office (ISO) form CG 00 01, or a substitute form providing liability coverage as broad.

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

2. The Business Auto Liability coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing liability coverage as broad.

C. Required Endorsements

1. The Commercial General Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance:
  - a. An Additional Insured endorsement using ISO form CG 2010 or CG 2033 or a form at least as broad naming the ***County of Orange, Orange County Flood Control District, and their respective elected and appointed officials, officers, employees and agents*** as Additional Insureds, or provide blanket coverage, which will state **AS REQUIRED BY WRITTEN AGREEMENT**.
  - b. A primary non-contributing endorsement using ISO form CG 20 01 0413, or a form at least as broad evidencing that A-E's insurance is primary and any insurance or self-insurance maintained by the County of Orange and Orange County Flood Control District shall be excess and non-contributing.
2. *(Optional coverage to be required only when hazardous materials are involved. If required A-E will be notified by County).* The Pollution Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance:
  - a. An Additional Insured endorsement naming the ***County of Orange, Orange County Flood Control District and their respective elected and appointed officials, officers, employees and agents*** as Additional Insureds.
  - b. A primary non-contributing endorsement evidencing that A-E's insurance is primary and any insurance or self-insurance maintained by the County of Orange and Orange County Flood Control District shall be excess and non-contributing.
3. The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against ***the County of Orange, Orange County Flood Control District, and their respective elected and appointed officials, officers, employees and agents***, or provide blanket coverage, which will state **AS REQUIRED BY WRITTEN AGREEMENT**.
4. All insurance policies required by this Contract shall waive all rights of subrogation against the County of Orange, Orange County Flood Control District, and their elected and appointed officials, officers, employees and agents when acting within the scope of their appointment or employment.
5. A-E shall notify County in writing within thirty (30) days of any policy cancellation and ten (10) days for non-payment of premium and provide a copy of the cancellation notice to County. Failure to provide written notice of cancellation may constitute a material breach of the Contract, upon which the County may suspend or terminate this Contract.

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

6. If A-E's Professional Liability policy is a claims-made policy, A-E shall agree to maintain professional liability coverage for two (2) years following completion of Contract.
7. The Commercial General Liability policy shall contain a severability of interests clause (standard in the ISO CG 001 policy).
8. Insurance certificates should be forwarded to the agency/department address listed on the solicitation.
9. If the A-E fails to provide the insurance certificates and endorsements within seven (7) days of notification by CEO/Purchasing or the agency/department purchasing division, award may be made to the next qualified vendor.
10. County expressly retains the right to require A-E to increase or decrease insurance of any of the above insurance types throughout the term of this Contract. Any increase or decrease in insurance will be as deemed by County of Orange Risk Manager as appropriate to adequately protect County.
11. County shall notify A-E in writing of changes in the insurance requirements. If A-E does not deposit copies of acceptable Certificates of Insurance and endorsements with County incorporating such changes within thirty (30) days of receipt of such notice, this Contract may be in breach without further notice to A-E, and County shall be entitled to all legal remedies.
12. The procuring of such required policy or policies of insurance shall not be construed to limit A-E's liability hereunder nor to fulfill the indemnification provisions and requirements of this Contract, nor act in any way to reduce the policy coverage and limits available from the insurer.

**4. INDEMNITY/COMPLIANCE****4.1. Indemnification**

- 4.1.1. **A-E shall indemnify, defend with counsel approved in writing by County, and hold harmless, the County, Orange County Flood Control District and their agents, officers, and employees from employer sanctions and any other liability which may be assessed against A-E or the County or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract.**
- 4.1.2. All Projects/Services submitted by A-E shall be complete and shall be carefully checked prior to submission. A-E understands that County's checking is discretionary, and A-E shall not assume that County will discover errors and/or omissions. If County discovers any errors or omissions prior to approving A-E's Projects/Services, the Projects/Services will be returned to A-E for correction. Should COUNTY or others discover errors or omissions in the work submitted by A-E after County's approval thereof, County's approval of A-E's Projects/Services shall not be used as a defense by A-E.

**4.1.3. A-E agrees to, indemnify, defend with counsel approved in writing by County, and hold County, Orange County Flood Control District and their elected and appointed officials, officers, employees, agents and those special districts and agencies which County's Board of Supervisors acts as the governing Board ("County Indemnitees") harmless from any claims, demands or liability of any kind or nature, including but not limited to personal injury or property damage, arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the A-E. If judgment is entered against A-E and County by a court of competent jurisdiction because of the concurrent active negligence of A-E and County or County Indemnitees, A-E and County agree that liability will be apportioned as determined by the court. Neither party shall request a jury apportionment. Notwithstanding anything stated above, nothing contained herein shall relieve A-E of any insurance requirements or obligations created elsewhere in this Contract.**

**4.2. Bills and Liens**

**4.2.1. A-E shall pay promptly all indebtedness for labor, materials and equipment used in performance of the work. A-E shall not permit any lien or charge to attach to the work or the premises, but if any does so attach, A-E shall promptly procure its release and, in accordance with the requirements of the indemnification paragraph above, indemnify, defend, and hold County harmless and be responsible for payment of all costs, damages, penalties and expenses arising from or related thereto.**

**4.3. Compliance with Laws**

**4.3.1. A-E represents and agrees that services to be provided under this Contract shall fully comply, at A-E's expense, with all standards, laws, statutes, restrictions, ordinances, requirements, and regulations (collectively "laws"), including, but not limited to those issued by County in its governmental capacity and all other laws applicable to the Projects/Services at the time Projects/Services are provided to and accepted by County.**

**4.3.2. A-E acknowledges that County is relying on A-E for such compliance, and pursuant to the requirements of the indemnification paragraph above, A-E agrees that it shall defend, indemnify and hold County and County Indemnitees harmless from all liability, damages, costs and expenses arising from or related to a violation of such laws.**

**5. TERMINATION**

**5.1. Termination of Contract for Cause**

**5.1.1. If A-E breaches any of the covenants or conditions of this Contract, County shall have the right to terminate this Contract upon ten (10) days written notice prior to the effective day of termination.**

**5.1.2. A-E shall have the opportunity to cure the alleged breach prior to termination.**

**County of Orange  
Tetra Tech BAS, Inc.**

---

**5.1.3.** In the event the alleged breach is not cured by A-E prior to termination, all work performed by A-E pursuant to this Contract, which work has been reduced to plans or other documents, shall be made available to County.

**5.2. Termination for Convenience**

**5.2.1.** Notwithstanding any other provision of the Contract, County may at any time, and without cause, terminate this Contract in whole or in part, upon not less than seven (7) calendar days' written notice to the A-E. Such termination shall be effected by delivery to the A-E of a notice of termination specifying the effective date of the termination and the extent of the Work to be terminated.

**5.2.2.** A-E shall immediately stop work in accordance with the notice and comply with any other direction as may be specified in the notice or as provided subsequently by County.

**5.2.3.** County shall pay the A-E for the Work completed prior to the effective date of the termination, and such payment shall be the A-E's sole remedy under this Contract.

**5.2.4.** Under no circumstances will A-E be entitled to anticipatory or unearned profits, consequential damages, or other damages of any sort as a result of a termination or partial termination under this Paragraph.

**5.2.5.** A-E shall insert in all subcontracts that the subcontractor shall stop work on the date of and to the extent specified in a notice of termination, and shall require subcontractors to insert the same condition in any lower tier subcontracts.

**5.3. Breach of Contract**

The failure of the A-E to comply with any of the provisions, covenants or conditions of this Contract shall be a material breach of this Contract. In such event, in addition to any other remedies available at law, in equity, or otherwise specified in this Contract, the County may:

- a) afford the A-E written notice of the breach and ten (10) calendar days or such shorter time that may be specified in this Contract within which to cure the breach;
- b) discontinue payment to the A-E for and during the period in which the A-E is in breach; and
- c) offset those monies disallowed pursuant to the above, against any monies billed by the A-E but yet unpaid by the County.

**5.4. Default**

**5.4.1.** In the event any equipment or service furnished by the A-E in the performance of this Contract should fail to conform to the specifications therein within one (1) calendar year from the County's acceptance of the equipment or service, or any performance period specifically specified within the specifications or Contract, whichever is greater, the County may reject same, and it shall become the duty of the A-E to reclaim and remove the items without expense to the County and to immediately replace all such rejected equipment or service with others conforming to such specifications, provided that should the A-E fail, neglect or refuse to do so within one hundred and twenty (120) calendar days, the County shall have the right to purchase on the open market a corresponding quantity of any such equipment or service and to deduct

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

from any monies due or that may thereafter become due to the A-E the difference between the price specified in this Contract and the actual cost to the County.

- 5.4.2.** In the event the A-E shall fail to make prompt delivery as specified of any equipment or service, the same conditions as to the rights of the County to purchase on the open market and to reimbursement set forth above shall apply, except as otherwise provided in this Contract.
- 5.4.3.** In the event of the cancellation of this Contract, either in whole or in part, by reason of the default or breach by the A-E, any loss or damage sustained by the County in procuring any equipment or service which the A-E agreed to supply under this Contract shall be borne and paid for by the A-E.
- 5.4.4.** Default shall include failure to carry out any of the requirements of this Contract, including, but not limited to not providing enough properly skilled workers or proper materials, persistently disregarding laws and or ordinances, not proceeding with the Projects/Services as agreed to herein, or otherwise substantially violating any provision of this Contract.
- 5.4.5. Orderly Termination:** Upon termination of this Contract for any reason, each Party shall assist the other PARTY in transferring all assets, tangible and intangible, as may be necessary for the orderly, non-disruptive business continuation of each Party, including all data and any unfinished, preliminary or draft documents. Each Party shall promptly return to the other Party all papers, materials, and other properties of the other held by each for purposes of performance of this Contract.
- 5.4.6.** The right of either party to terminate this Contract hereunder shall not be affected in any way by its waiver of or failure to take action with respect to any previous default.

**6. MISCELLANEOUS****6.1. Laws to be Observed**

A-E is assumed to be familiar with and, at all times, shall observe and comply with all federal, state and local laws, ordinances and regulations in any manner affecting the conduct of the Projects/Services.

**6.2. Award of Construction Contract and Other Future Contracts**

A-E is hereby informed that provisions of the Public Contract Code, the Political Reform Act of 1974, other statutes, regulations, and County policy prohibit, as an impermissible conflict of interest, the award of a contract for the construction of the project(s) on which A-E performed architectural-engineering services under this A-E Contract. A-E is hereby informed that these statutes and regulations could also prohibit the award to A-E of design or other contracts on future phases related to tasks performed by A-E under this Contract. This prohibition applies also to a subcontractor of or parent company of the firm that performed architectural-engineering tasks under this Contract.

**6.3. Amendments**

No alteration or variation of the terms of this Contract shall be valid unless made in writing and signed by the parties; no oral understanding or agreement not incorporated herein shall be binding on either of the parties; and no exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing.

**6.4. Successors and Assigns**

**County of Orange  
Tetra Tech BAS, Inc.**

---

The terms and provisions of this Contract shall be binding upon and inure to the benefit of the parties hereto and their successors and assigns.

**6.5. Entirety**

This Contract contains the entire agreement between the parties with respect to the matters provided for herein.

**6.6. Severability**

If any part of this Contract is held, determined, or adjudicated to be illegal, void, or unenforceable by a court of competent jurisdiction, the remainder of this Contract shall be given effect to the fullest extent reasonably possible.

**6.7. Binding Obligation**

The Parties to this Contract represent and warrant that this Contract has been duly authorized and executed and constitutes the legally binding obligation of their respective organization or entity enforceable in accordance with its terms.

**6.8. Governing Law and Venue**

**6.8.1.** This Contract has been negotiated and executed in the State of California and shall be governed by and construed under the laws of the State of California. In the event of any legal action to enforce or interpret this Contract, the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California, and the Parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure, Section 394.

**6.8.2.** The Parties specifically agree that by soliciting and entering into and performing Projects/Services under this Contract, the A-E shall be deemed to constitute doing business within Orange County from the time of solicitation of work, through the period when all Projects/Services under this Contract is completed, and continuing until the expiration of any applicable limitations period.

**6.9. Intentionally Omitted****6.10. Ownership of Documents**

**6.10.1.** All data, including but not limited to letters, reports, files, plans, drawings, specifications, SOQs, sketches, diagrams and calculations, prepared by A-E and/or anyone acting under the supervision of A-E pursuant to this Contract, shall become the property of County upon preparation by A-E and may be used by the County as it may require without additional cost to the County.

**6.10.2.** A-E, at County's direction and upon County's request, shall transmit and convey to County all such data described in Section 6.10.1 above, in native format and regardless of whether such data constitutes a draft, preliminary, or final document within three (3) business days. Failure by A-E to promptly comply with such direction and request by County shall constitute a material breach of A-E's responsibilities under this Contract

**6.10.3.** County shall not be limited in any way to its use thereof at any time, including the release of this data to third parties. A-E shall be held harmless for release of such data as may be prepared or created under this Contract to any third party. If A-E and/or anyone acting under the supervision of A-E should later desire to use any of the data prepared in connection with this Contract, A-E shall first obtain the written approval of County.

**6.11. Confidentiality**

**6.11.1.** All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, and all written or other information submitted to A-E in connection with the performance of this Contract shall be held confidential by A-E and/or anyone acting under the supervision of A-E and shall not, without the prior written consent of County, be used for any purposes other than the performance of the Projects/Services described in Attachment A, nor be disclosed to any person, partnership, company, corporation or agency, not connected with the performance of the Projects/Services.

**6.11.2.** Nothing furnished to A-E which is generally known among counties in Southern California shall be deemed confidential.

**6.11.3.** A-E and/or anyone acting under the supervision of A-E shall not use County name or insignia, photographs of the work, or any other publicity pertaining to the work in any magazine, trade paper, newspaper, or other medium without the express written consent of County.

**6.12. Publication**

**6.12.1.** No copies of sketches, schedules, written documents, computer based data, photographs, maps or graphs, including graphic art work, resulting from performance or prepared in connection with this Contract, are to be released by A-E and/or anyone acting under the supervision of A-E to any person, partnership, company, corporation, or agency, without prior written approval by the County, except as necessary for the performance of the services of this Contract. All press contacts, including graphic display information to be published in newspapers, magazines, etc., are to be administered only after County approval.

**6.12.2.** The A-E agrees that it will not issue any news releases or make any contact with the media in connection with either the award of this Contract or any subsequent amendment of, or effort under this Contract. A-E must first obtain review and approval of said media contact from the County through the County's Project Manager. Any requests for interviews or information received by the media should be referred directly to the County. A-E's are not authorized to serve as a media spokespersons for County projects without first obtaining permission from the County Project Manager.

**6.13. Records and Audit/Inspections**

**6.13.1.** A-E shall keep an accurate record of time expended by A-E and/or consultants employed by A-E in the performance of this Contract.

**6.13.2.** Within ten (10) days of County's written request, A-E shall allow County or authorized State or Federal agencies or any duly authorized representative to have the right to access, examine, audit, excerpt, copy or transcribe any pertinent transaction, activity, time cards or other records relating to this Contract.

**6.13.3.** A-E shall keep such material, including all pertinent cost accounting, financial records and proprietary data for a period of three (3) years after termination or completion of the Contract

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

or until resolution of any claim or dispute between the Parties, whichever is later.

**6.13.4.** Should A-E cease to exist as a legal entity, records pertaining to this Contract shall be forwarded within a reasonable period of time not to exceed sixty (60) days to its successor in interest or surviving entity in a merger or acquisition, or, in the event of liquidation, to County.

**6.14. Notices**

**6.14.1.** Any and all notices, requests, demands and other communications contemplated, called for, permitted, or required to be given hereunder shall be in writing, except through the course of the Parties' project managers' routine exchange of information and cooperation during the Projects/Services.

**6.14.2.** Any written communications shall be deemed to have been duly given upon actual in-person delivery, if delivery is by direct hand, or upon delivery on the actual day of receipt, or no greater than four (4) calendar days after being mailed by U. S. certified or registered mail, return receipt requested, postage prepaid, whichever occurs first. The date of mailing shall count as the first day.

**6.14.3.** All communications shall be addressed to the appropriate party at the address stated herein or such other address as the parties hereto may designate by written notice from time to time in the manner aforesaid.

For A-E: Tetra Tech BAS, Inc.  
21700 Copley Dr., Ste. 200  
Diamond Bar, CA 91765  
Attn: Jeff Williams  
Phone: 909-860-7777  
E-mail: [jwilliams@bas.com](mailto:jwilliams@bas.com)

For County: OC Waste & Recycling  
Address: 601 N. Ross Street, 5<sup>th</sup> Floor  
City: Santa Ana, CA 92701  
Attn: Hugo Pineda  
Phone: 714-834-4148  
E-mail: [hugo.pineda@ocwr.ocgov.com](mailto:hugo.pineda@ocwr.ocgov.com)

cc: OC Public Works Procurement Services  
601 N. Ross St.,  
Santa Ana, CA 92701  
Attn: Ranique Cortez  
Phone: 714-667-4906  
E-mail: [ranique.cortez@ocpw.ocgov.com](mailto:ranique.cortez@ocpw.ocgov.com)

**6.15. Attorney's Fees**

In any action or proceeding to enforce or interpret any provision of this Contract, or where any provision hereof is validly asserted as a defense, each party shall bear its own attorney's fees, costs and expenses.

**6.16. Interpretation**

**County of Orange  
Tetra Tech BAS, Inc.**

---

- 6.16.1.** Contract has been negotiated at arm's length and between persons sophisticated and knowledgeable in the matters dealt with in this Contract.
- 6.16.2.** In addition, each Party has been represented by experienced and knowledgeable independent legal counsel of their own choosing, or has knowingly declined to seek such counsel despite having the opportunity to do so.
- 6.16.3.** Each Party further acknowledges that they have not been influenced to any extent whatsoever in executing this Contract by any other Party hereto or by any person representing them, or both.
- 6.16.4.** Accordingly, any rule of law (including California Civil Code Section 1654) or legal decision that would require interpretation of any ambiguities in this Contract against the Party that has drafted it is not applicable and is waived.
- 6.16.5.** The provisions of this Contract shall be interpreted in a reasonable manner to affect the purpose of the Parties and this Contract.

**6.17. Headings**

The various headings and numbers herein, the grouping of provisions of this Contract into separate clauses and paragraphs, and the organization hereof are for the purpose of convenience only and shall not limit or otherwise affect the meaning hereof.

**6.18. Acceptance**

Unless otherwise agreed to in writing by County acceptance shall not be deemed complete unless in writing and until all the services have actually been received, inspected, and tested to the satisfaction of County.

**6.19. Changes**

A-E shall make no changes in the work or perform any additional work without the County's specific written approval.

**6.20. Assignment**

The terms, covenants, and conditions contained herein shall apply to and bind the heirs, successors, executors, administrators and assigns of the parties. Furthermore, neither the performance of this Contract nor any portion thereof may be assigned or sub-contracted by A-E, by any means whatsoever including but not limited to acquisition by merger, without the express written consent of County. Any attempt by A-E to assign or sub-contract the performance or any portion thereof of this Contract without the express written consent of County shall be invalid and shall constitute a breach of this Contract.

**6.21. Changes in Ownership**

A-E agrees that if there is a change or transfer in ownership, including but not limited to merger by acquisition, of A-E's business prior to completion of this Contract, the new owners shall be required under terms of sale or other transfer to assume A-E's duties and obligations contained

**County of Orange  
Tetra Tech BAS, Inc.**

---

in this Contract and to obtain the written approval of County of such merger or acquisition, and complete the obligations and duties contained in the Contract to the satisfaction of County. A-E agrees to pay, or credit toward future work, County's costs associated with processing the merger or acquisition.

**6.22. Force Majeure**

A-E shall not be assessed with damages or unsatisfactory performance penalties during any delay beyond the time named for the performance of this Contract caused by any act of God, war, civil disorder, employment strike or other cause beyond its reasonable control, provided A-E gives written notice of the cause of the delay to County within thirty-six (36) hours of the start of the delay and A-E avails himself of any available remedies.

**6.23. Calendar Days**

Any reference to the word "day" or "days" herein means calendar day or calendar days, respectively, unless otherwise expressly provided.

**6.24. Title to Data**

**6.24.1.** All materials, documents, data or information obtained from the County data files or any County medium furnished to the A-E in the performance of this Contract, will at all times remain the property of the County. Such data or information may not be used or copied for direct or indirect use by the A-E after completion or termination of this Contract without the express written consent of the County.

**6.24.2.** All materials, documents, data or information, including copies furnished by County and loaned to A-E for his temporary use, must be returned to the County at the end of this Contract unless otherwise specified by the Director.

**6.25. Availability of Funds**

The obligation of County is subject to the availability of funds appropriated for this purpose, and nothing herein shall be construed as obligating the County to expend or as involving the County in any contract or other obligation for future payment of money in excess of appropriations authorized by law.

**6.26. Contingency of Funding**

A-E acknowledges that funding or portions of funding for this Contract may also be contingent upon receipt of funds from, and/or appropriation of funds by, the State of California or other funding sources to County. If such funding and/or appropriations are not forthcoming, or otherwise limited, County may immediately terminate or modify this Contract without penalty.

**County of Orange  
Tetra Tech BAS, Inc.**

---

**6.27. Contract Construction**

The parties acknowledge that each party and its counsel have reviewed this Contract and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Contract or any amendment or exhibits hereto.

**6.28. Conflicts of Interest**

**6.28.1.** A-E or its employees may be subject to the provisions of the California Political Reform Act of 1974 (the "Act"), which (1) requires such persons to disclose any financial interest that may be materially affected by services provided under this Contract, (2) prohibits such persons from making, or participating in making, decisions that could reasonably affect such interest; and (3) may require the filing a Statement of Economic Interest (Form 700).

**6.28.2.** If subject to the Act, A-E shall conform to all requirements of the Act. Failure to do so shall constitute a material breach and is grounds for immediate termination of this Contract by County. Pursuant to Section 4.3 "Indemnification", A-E shall indemnify and hold harmless County for any and all claims for damages resulting from Contractor's violation of this Section.

**6.29. Usage**

No guarantee is given by the County to A-E regarding usage of this Contract. The A-E agrees to supply services requested, as needed by the County of Orange, at prices listed in the Contract, regardless of quantity requested.

**6.30. Cooperative Agreement**

**6.30.1.** The provisions and pricing of this Contract will be extended to other California local or state governmental entities. Governmental entities wishing to use this Contract will be responsible for issuing their own purchase documents/price agreements, providing for their own acceptance, and making any subsequent payments. Contractor shall be required to include in any Contract entered into with another agency or entity that is entered into as an extension of this Contract a Contract clause that will hold harmless the County of Orange from all claims, demands, actions or causes of actions of every kind resulting directly or indirectly, arising out of, or in any way connected with the use of this contract. Failure to do so will be considered a material breach of this Contract and grounds for immediate Contract termination. The cooperative entities are responsible for obtaining all certificates of insurance and bonds required. The Contractor is responsible for providing each cooperative entity a copy of the Contract upon request by the cooperative entity. The County of Orange makes no guarantee of usage by other users of this Contract.

**6.30.2.** The Contractor shall be required to maintain a list of the cooperative entities using this Contract. The list shall report dollar volumes spent annually and shall be provided on an annual basis to the County, at the County's request.

**6.31. Wage Rates**

Contractor shall post a copy of the wage rates at the job site and shall pay the adopted prevailing wage rates as a minimum. Pursuant to the provisions of Section 1773 of the Labor Code of the State of California, the Board of Supervisors has obtained the general prevailing rate of per diem

wages and the general prevailing rate for holiday and overtime work in this locality for each craft, classification, or type of workman needed to execute this Contract from the Director of the Department of Industrial Relations. These rates are on file with the Clerk of the Board of Supervisors. Copies may be obtained at cost at the office of County's OC Public Works/OC Facilities & Asset Management/A&E Project Management or visit the website of the Department of Industrial Relations, Prevailing Wage Unit at [www.dir.ca.gov/DLSR/PWD](http://www.dir.ca.gov/DLSR/PWD). The Contractor shall comply with the provisions of Sections 1774, 1775, 1776 and 1813 of the Labor Code.

### **6.32. Apprenticeship Requirements**

The Contractor shall comply with Section 230.1(A), California Code of Regulations as required by the Department of Industrial Relations, Division of Apprenticeship Standards by submitting DAS Form to the Joint Apprenticeship Committee of the craft or trade in the area of the site.

### **6.33. Registration of Contractor**

All contractors and subcontractors must comply with the requirements of Labor Code Section 1771.1(a), pertaining to registration of contractors pursuant to Section 1725.5. Bids cannot be accepted from unregistered contractors except as provided in Section 1771.1. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. After award of the contract, Contractor and each Subcontractor shall furnish electronic payroll records directly to the Labor Commissioner in the manner specified in Labor Code Section 1771.4.

### **6.34. Payroll Records**

**6.34.1.** Contractor and any Subcontractor(s) shall comply with the requirements of Labor Code Section 1776. Such compliance includes the obligation to furnish the records specified in Section 1776 directly to the Labor Commissioner in an electronic format, or other format as specified by the Commissioner, in the manner provided by Labor Code Section 1771.4.

**6.34.2.** The requirements of Labor Code Section 1776 provide, in summary:

Contractor and any Subcontractor(s) performing any portion of the work under this Contract shall keep an accurate record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by Contractor or any Subcontractor(s) in connection with the work.

**6.34.3.** Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

a. The information contained in the payroll record is true and correct.

**County of Orange  
Tetra Tech BAS, Inc.**

---

b. The employer has complied with the requirements of Labor Code Sections 1771, 1811, and 1815 for any work performed by his or her employees in connection with the Contract.

**6.34.4.** The payroll records shall be certified and shall be available for inspection at the principal office of Contractor on the basis set forth in Labor Code Section 1776.

**6.34.5.** Contractor shall inform County of the location of the payroll records, including the street address, city and county, and shall, within five working days, provide a notice of any change of location and address of the records.

**6.34.6.** Pursuant to Labor Code Section 1776, Contractor and any Subcontractor(s) shall have 10 days in which to provide a certified copy of the payroll records subsequent to receipt of a written notice requesting the records described herein. In the event that Contractor or any Subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to County, forfeit \$100, or a higher amount as provided by Section 1776, for each calendar day, or portion thereof, for each worker to whom the noncompliance pertains, until strict compliance is effectuated. Contractor acknowledges that, without limitation as to other remedies of enforcement available to County, upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement of the California Department of Industrial Relations, such penalties shall be withheld from progress payments then due Contractor. Contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

**6.34.7.** Contractor and any Subcontractor(s) shall comply with the provisions of Labor Code Sections 1771 et seq., and shall pay workers employed on the Contract not less than the general prevailing rates of per diem wages and holiday and overtime wages as determined by the Director of Industrial Relations. Contractor shall post a copy of these wage rates at the job site for each craft, classification, or type of worker needed in the performance of this Contract, as well as any additional job site notices required by Labor Code Section 1771.4(b). Copies of these rates are on file at the principal office of County's representative, or may be obtained from the State Office, Department of Industrial Relations ("DIR") or from the DIR's website at [www.dir.ca.gov](http://www.dir.ca.gov). If the Contract is federally funded, Contractor and any Subcontractor(s) shall not pay less than the higher of these rates or the rates determined by the United States Department of Labor.

**6.35. Work Hour Penalty**

Eight hours of labor constitute a legal day's work, and forty hours constitute a legal week's work. Pursuant to Section 1813 of the Labor Code of the State of California, the Contractor shall forfeit to the County Twenty Five Dollars (\$25) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than the legal day's or week's work, except that work performed by employees of said Contractor and subcontractors in excess of the legal limit shall be permitted without the foregoing penalty upon the payment of compensation to the workers for all hours worked in excess of eight hours per day of not less than 1-1/2 times the basic rate of pay.

**6.36. Apprentices**

**6.36.1.** The Contractor acknowledges and agrees that, if this Contract involves a dollar amount greater than or a number of working days greater than that specified in Labor Code Section 1777.5, this

**County of Orange  
Tetra Tech BAS, Inc.**

---

Contract is governed by the provisions of Labor Code Section 1777.5. It shall be the responsibility of the Contractor to ensure compliance with this Article and with Labor Code Section 1777.5 for all apprenticeable occupations.

- 6.36.2.** Pursuant to Labor Code Section 1777.5 if that Section applies to this Contract as indicated above, the Contractor and any subcontractors under him employing workers in any apprenticeable craft or trade in performing any work under this Contract shall apply to the applicable joint apprenticeship committee for a certificate approving the Contractor or subcontractor under the applicable apprenticeship standards and fixing the ratio of apprentices to journeymen employed in performing the work.
- 6.36.3.** Pursuant to Labor Code Section 1777.5 if that Section applies to this Contract as indicated above, he Contractor and any subcontractor under him may be required to make contributions to the apprenticeship program.
- 6.36.4.** The Contractor and all subcontractors under him shall comply with Labor Code Section 1777.6 which Section forbids certain discriminatory practices in the employment of apprentices.

**County of Orange**  
**Tetra Tech BAS, Inc.**

IN WITNESS WHEREOF, the Parties hereto have executed this Contract on the dates opposite their respective signatures:

**TETRA TECH BAS, INC.,**  
a California Corporation,

Date: 12/4/2020

By: Christine M. Arbogast, President  
Signature

Christine Arbogast, President  
Print Name & Title

*(If a corporation, the document must be signed by two corporate officers. The 1<sup>st</sup> must be either Chairman of the Board, President or any Vice President.)*

Date: 12/4/2020

By: Jeffrey M. Williams  
Signature

Jeffrey M. Williams, Chief Financial Officer  
Print Name & Title

*(If a corporation, the 2nd signature must be either the Secretary, an Assistant Secretary, the Chief Financial Officer, or any Assistant Treasurer)*

COUNTY OF ORANGE,  
a political subdivision of the State of California

Date: \_\_\_\_\_

By: \_\_\_\_\_

Print  
Name: \_\_\_\_\_

Title: \_\_\_\_\_

APPROVED AS TO FORM  
Office of the County Counsel  
Orange County, California

By: Lauren Kramer

Deputy

Print Name: Lauren Kramer 12/4/2020

**ATTACHMENT A**  
**SCOPE OF SERVICES**  
**LANDFILL CONSTRUCTION SUPPORT SERVICES**

**I. INTRODUCTION**

OC Public Works on behalf of the County of Orange (County) requires supplemental professional services to meet workload demands and project scheduling commitments in relation to Architect/Engineer (A-E) Design, Project Administration and Management Services for various projects. A-E is defined as an Architect or Engineer for design and/or engineering of a project. To supplement existing resources, County intends to issue "On-Call Landfill Construction Support Services" contracts for use by Orange County on an "as needed" basis. No specified amount of work is guaranteed to A-E. However, the amount of negotiated contracted work that will be required on an "as-needed" basis shall not exceed \$1,750,000.

**II. GENERAL DESCRIPTION OF SERVICES**

- A. Under this Contract the Architect-Engineer (A-E) firm will provide the following Landfill Construction Support Services: Construction Management (CM), Quality Assurance/Quality Control (QA/QC) Services, Inspection Services, Surveying Services, Archaeological/Paleontological Support Services (A/P), Biological Services, and Other Support Services as required for various landfill projects. The A-E will be a member of County team consisting of the Site Deputy Director, Project Manager(s), Engineers, other County staff and A-E firms working on associated programs at various landfill sites throughout the County of Orange. Landfill sites include but are not limited to: Olinda Alpha Landfill (North Region) located in Brea, CA; Frank R. Bowerman Landfill (Central Region) located in Irvine, CA; Prima Deshecha Landfill (South Region) located in San Juan Capistrano, CA; and various other closed landfill sites located throughout all three (3) Regions. Additional information on our active and closed landfills can be found by visiting <http://www.oclandfills.com/landfills>.
- B. The A-E will provide professional services, advice and consultation in a timely manner including, but not limited to: contract administration, project planning, project implementation, project monitoring and controlling of construction projects, including scheduling and programming, integration of proposed project(s) with existing waste management operations, materials and systems, methods for achieving maximum value, and control of schedule and cost. The A-E will also provide all-inclusive QA/QC services including geotechnical engineering, geosynthetic liner monitoring and testing, and other related Construction Support Services as directed by County.
- C. The A-E will work under the general direction of the County Project Manager. The A-E will coordinate with and serve the needs of the County to undertake the Construction Support Services of the project in accordance with respective landfill development plans, as authorized by the County's Board of Supervisors.
- D. The A-E will utilize furnished on-site field offices provided by County at the landfill to provide their services, however, the A-E shall provide its own office equipment, telephones, fax machines, copiers, internet service, etc.
- E. In general, the A-E is required to provide the following services:
1. Constructability review of plans, specifications and cost estimates;
  2. Provide full CM services before, during and after the course of construction activities (i.e. preconstruction, construction, and close-out project phases);
  3. Provide full QA/QC services;
  4. Provide A/P services;
  5. Provide Surveying services prior to, during and after construction activities (i.e. baseline

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

- preconstruction, construction and as-built conditions);
- 6. Provide biological monitoring services; and
- 7. Other miscellaneous construction support services as requested.

**III. BACKGROUND**

- A. OC Waste & Recycling (OCWR) is responsible for managing the County of Orange (County) solid waste disposal system which includes North Region, Central Region and South Region Landfills. The County operates one of the nation's premier solid waste disposal systems, providing this essential public service to residents and businesses in 34 cities and unincorporated areas. The three active landfills are among the largest statewide, receiving more than four million tons of solid waste annually. The active landfills include Olinda Alpha (Olinda) Landfill, Frank R. Bowerman (FRB) Landfill and Prima Deshecha (Prima) Landfill. The Olinda Landfill was opened in 1960, the FRB Landfill was opened in 1990 and the Prima Landfill was opened in 1976 to meet the solid waste disposal needs of Orange County.
- B. North Region Landfills consist of the active Olinda Alpha Landfill and ten closed solid waste disposal sites. The Olinda Alpha Landfill was opened in 1960 to meet the solid waste disposal needs of the northern portion of Orange County. Olinda is currently permitted as a Class III waste disposal site. It was originally permitted as two separate Class III disposal facilities. The facilities were located in two canyons separated by a center ridge. Operations initially began in 1960 in Olinda Canyon. Disposal operations in Olinda Alpha Canyon began in 1981. The center ridge was excavated in the late 1990s and the two canyons were merged into a single disposal site. The site comprises approximately 565 acres, of which 453 acres is used for disposal area. The remaining acreage serves as a buffer zone. Closed landfill sites include La Habra in the City of La Habra, La Veta in the City of Orange, Longsdon Pit in the City of Garden Grove, Reeve Pit in the City of Orange, Sparkes Pit in the City of Anaheim, Villa Park in the City of Orange and Yorba in the City of Orange.
- C. Central Region Landfills consist of the active Frank R. Bowerman Landfill and five closed solid waste disposal sites. The Frank R. Bowerman Landfill is a state-of-the-art, Class III, municipal solid waste landfill. Opened in 1990 near Irvine, California, it is one of the largest landfills in the state and the ninth largest in the U.S. The property spans approximately 725 acres of Irvine hillside with 534 acres allocated for waste disposal. It is permitted for 11,500 tons per day (TPD) maximum with an 8,500 TPD annual average. The landfill has enough projected capacity to serve residents and businesses until approximately 2053.
- D. South Region Landfills consist of the active Prima Deshecha Landfill and five closed solid waste disposal sites. Opened in 1976, the Prima Deshecha Landfill features 1,530 total acres, with 697 acres for waste disposal. The Prima Deshecha site has a projected capacity to serve residents and businesses until approximately 2102. The Prima site is also home to a landfill gas-to-energy plant, which powers 7,500 homes and is managed by the Fortistar Methane Group.
- E. For a listing and additional information on our closed landfill sites operated by County, visit <http://oclandfills.com/landfills/closed-landfill-sites>. Additional information on our landfills can be found by visiting <http://www.oclandfills.com/landfills>.

**IV. TYPICAL PROJECT DESCRIPTION**

- A. In general, construction projects include, but are not limited to:
  - 1. Clearing and grubbing;
  - 2. Demolition of existing improvements including site drainage, paving, landfill gas (LFG), migration monitoring probes, water quality monitoring, wells, and miscellaneous facilities;

**County of Orange**  
**Tetra Tech BAS, Inc.**

3. Excavation of unsuitable materials and replacement with unclassified fill;
4. Transportation, placement, and compaction of material to and within the landfill or unclassified fill, as required for the use of the landfill(s);
5. Installation of misting systems or other odor mitigation system(s);
6. Compliance with erosion control requirements outlined in the Industrial Activities Stormwater Pollution Prevention Plan (SWPPP), Industrial General Permit (IGP), and the Construction General Permit (CGP) SWPPP;
7. Installation of a Leachate Collection and Recovery System ("LCRS");
8. Installation of Geosynthetic Clay Liner ("GCL");
9. Installation of a clay layer;
10. Furnishing and installation of geotextiles to protect the geomembrane;
11. Furnishing and installation of the geomembrane for proper installation and function of the composite liner system for solid waste and leachate containment;
12. Furnishing and installation of bi-planer, heated bonded geotextile/geonet drainage composite;
13. Screening, processing, stockpiling, transporting, and placement of protective soil cover material or final cover soil material;
14. Construction of new roads and maintenance of existing roadway systems. Construction of bridging systems to provide access routes for on-site traffic;
15. Construction of miscellaneous civil and drainage improvements;
16. Installation of LFG header, LFG extraction wells, and perimeter LFG migration monitoring probes;
17. Installation of perimeter water quality monitoring wells;
18. Construction/installation of erosion controls including preparation and application of a hydroseed mix over the disturbed construction area, and installation of miscellaneous erosion control improvements and landscaping;
19. Installation of electrical services;
20. Installation of pumps and potable and reclaimed water lines;
21. Installation of new diesel and fuel tanks plus tire wash stations.
22. Construction of buildings and facilities on both active and closed landfill sites which can include footings, framing, roofing, weather proofing, plumbing, electrical, structural steel and a multitude of potential structural systems;
23. Installation of water treatment and water quality systems;
24. Earth importation, screening, blasting and crushing;
25. Blasting work may include use of explosive materials and detonating devises to break rock material that cannot be removed solely by excavating or ripping with heavy duty mechanical construction equipment; and
26. Other miscellaneous improvements required for the successful operation of both active and closed landfills.

**V. CONSTRUCTION SUPPORT SERVICES****A. Constructability Review**

1. The scope of work includes review of the proposed project improvements as shown in the design plans, specifications and estimate (PS&E).
2. Review shall be focused on potential issues or concerns that may impact constructability or phasing of the project.
3. Assist the County Project Manager with coordinating and collaborating with other A-E firms involved with the project, during the review of the PS&E. Review the PS&E for completeness, compatibility, coordination and constructability.
4. Identify cost savings or value engineering opportunities if applicable.
5. Deliverable shall be a final constructability review report.

**B. Construction Management**

1. Assist County Project Manager in conducting construction pre-bid meetings and site walk-

- through, and in answering questions posed by bidders on the site conditions and intent of the design.
2. Assist County Project Manager in conducting pre-construction conferences, chair meetings, prepare, and circulate copies of minutes thereof.
  3. Serve as County's and other A-Es liaison with the Contractors, working principally through the Contractors' project superintendents and assist said superintendents in understanding the intent of the Contract Documents.
  4. Perform contract administration and construction management during the development of the construction contract documents, bidding and pre-construction activities, the construction phase, and post-construction period, and establish and implement coordination procedures between the County and Contractors.
  5. Review the Contractors' critical path methodology (CPM) schedules and update schedules each month to show current project status. Reconcile Contractors' cost loading of schedules with CM cost schedules. Reconcile construction Contractor's schedule of values and construction schedule with the Design A-E construction cost estimate and schedule.
  6. Provide regular monitoring of the schedule as construction progresses. Identify potential variances between scheduled and probable completion dates. Review schedule for work not started or incomplete and advise County regarding necessary adjustments in the work to meet scheduled completion dates. Provide summary reports of each monitoring activity and document all changes in schedule. Assist County in prompt management and resolution of all claims, change orders, legal notification and enforcement of contract requirements.
  7. Preparation, review, and processing of construction change orders. Recommend necessary or desirable changes to the County, review requests for changes, and assist in negotiating change orders. Advise and assist in the analysis of errors and omissions occurring in design and discovered in construction. Monitor labor and materials associated with change orders based on time and materials. Maintain complete documentation on changes to back up contract change orders prepared and issued by County.
  8. Prepare submittal register, receive and record date of receipt of submittals, shop drawings and material samples, arrange for tests of samples, review, transmit to County Project Manager and other A-Es for review and appraisal, approve submittals and maintain records.
  9. Conduct on-site observations of work in progress to ascertain that the works are proceeding in accordance with the Contract Documents.
  10. Record with color-photographs and video films the progress of each project. Photographs shall be taken as often as needed (e.g., daily, hourly) with a digital camera using the latest in time and geographical location data embedment. Critical views shall be established before construction begins and progress photos shall be taken from those locations throughout construction. In addition, obtain photographs of opportunities including potential or known deficiencies. Photos shall be kept on CDs or other appropriate media to store electronic data, such as a flash drive or an electronic storage device per owner's request. A set of the photos will be used in progress reports submitted to County Project Manager and a set shall be kept by the CM in a continuous photographic log of the Project. Upon completion of the Project, the photographic log, along with the storage media and any videos taken shall be submitted to County Project Manager.
  11. Assist County in determining substantial completion of the work or designated portions thereof and, in conjunction with County and construction Contractor. Report to County when any work is unsatisfactory, faulty, or defective or does not conform to the Contract Documents, and advise when work should be corrected, rejected, or requires special testing, inspection, or approval.
  12. Monitor the Contractors' development and implementation of safety programs, which comply with all federal, state, municipal and local laws, rules, and regulations.
  13. Verify that tests, equipment, and systems start-ups and operating and maintenance instruction are conducted as required by the Contract Documents and in presence of the required personnel, and that the Contractors maintain adequate records.
  14. Accompany visiting inspectors representing public or other agencies having jurisdiction over the work, record the outcome of these inspections, and report to County.
  15. Transmit to the Contractor, the Design A-Es and County's clarifications and interpretations of

- the contract design or Contract Documents.
16. Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general, and specific observations related to Quality Control Assurance plan as reported by County sub-consultants.
  17. Record names, addresses, and telephone numbers of Contractors, subcontractors, and major suppliers of materials and equipment.
  18. Notify the County Project Manager and Deputy Director in writing when expenditures against this contract reach 75% of the total dollar limit of the contract. County will not be responsible for any expenditure overruns and will not pay for work exceeding the total dollar limit of the contract unless an amendment to cover those costs has been issued by the County. This notification must come within three (3) working days of receipt of invoice that is within the notification limit.
  19. Prepare and submit Monthly Project Progress Reports to County, which will include the following information in a form acceptable to the County Project Manager:
    - a. Summary of contract status, including:
      1. Significant events during the reporting period and major decisions made.
      2. Description of progress made during the period.
      3. Comparison of Actual vs. Planned progress.
      4. Work scheduled during the coming period.
      5. Discussion of any current problems or pending changes and action being taken to resolve.
      6. Identification of possible future problems or change orders and proposed remedial action.
      7. Effect any pending changes will have on contract cost or schedule.
      8. Discussion of any new goals.
    - b. The Monthly Project Progress Report will also include:
      1. A Contract Execution Schedule with the principle activities listed in bar graph form, with scheduled versus actual progress shown for each task. The bar graph will be overlaid with an "S" curve showing scheduled overall progress versus actual progress.
      2. An analysis of the project progress as related to each major task.
      3. Status of contract funds broken-down into major project components and showing scheduled versus actual disbursements.
      4. A financial analysis of the contract showing the original budget and any modifications to the budget caused by contract modifications and change orders.
      5. A change order index listing all change orders to the contract which affect the cost or project schedule. Change orders in process or potential change orders, which will affect the cost or schedule, will also be listed.
      6. A list of invoices submitted for payment, with the status of each request.
      7. A breakdown of all project staff including subcontractors' staff actively employed during the preceding month, with the times each worked and the applicable rate.
      8. A QA/QC section, which addresses testing and regulatory compliance issues, and re-design and field mitigation concerns.
    - c. Submit Monthly Project Progress Reports to the County Project Manager by the 10<sup>th</sup> of the month following the period being reported.
  20. Prepare and submit Daily Work Logs for review and signature by the County Project Manager (provide daily log content detail) including labor, hours and equipment utilized by the

contractor.

21. Furnish County periodic reports as required of progress of the work and the Contractor's compliance with the accepted progress schedule of Contractor submittals. Record the progress of the project. In addition to daily record keeping, submit weekly written progress summaries to County including the information on the construction Contractors' work.
22. Consult with County and other A-Es in advance of scheduled major tests, inspections, or start of important phases of the work.
23. Review and agree with the Contractor on progress payment invoices for compliance with the established procedure for their submittal and forward those with recommendations to County Project Manager, noting particularly their relation to the schedule of values, work completed, and materials and equipment delivered at the site but not incorporated in the work per payment provisions of the Contractor's contract.
24. Monitor Contractors' Certified Prevailing Wage Payroll submissions.
25. During the course of the project, maintain on a current basis: records of all necessary contracts, drawings, materials, equipment, certificates, maintenance and operating manuals and instructions, reports, submittals, addenda, change orders, field reports, and other documents required to be assembled and furnished by the Contractor, are applicable to the items actually installed, including all revisions. Obtain data from construction Contractor and maintain a current set of record drawings, specifications, and operating manuals. Prior to the final acceptance of each project, deliver these documents to County and design A-Es for their review.
26. As requested by County, arrange for as-built Surveys at various stages of the project and ensure that a complete set of As-Built data is collected and recorded. Maintain as-built files of project plans and documents for reference by Consultants, County and other agencies.
27. Before preparing Certificates of Substantial Completion, submit to the Contractor a punch list of observed items requiring completion or correlation.
28. Conduct final inspections in the company of County, the Design A-E and the Contractor and prepare final punch lists of items to be completed or corrected. Assist County in determining final completion and when the work is ready for final inspection. Coordinate all close-out procedures.
29. Verify that all items on the final punch lists have been completed or corrected and make recommendations to County concerning acceptance.
30. Ensure that as-built documents are correct, complete and certified, prior to their submittal to County at the conclusion of project. Periodically review Contractor's marked-up as-built plans ensuring that the actual as-built conditions are representative and up to date as per the construction contract.
31. Assist County in resolving any legal disputes arising from the Contractor's claims.
32. Assist County Project Manager in providing final reports on the project for fiscal accountability and construction cost expenditures.
33. Furnish County with all liner material certifications and material warranties.
34. Assist County in the preparation of project completion reports.
35. Assist County in following up on defective work performed by Contractor covered by warranties.
36. Other Tasks:
  - a. Advise County in analyzing and evaluating the Project site with respect to construction-related considerations and ongoing site landfill operations.
  - b. Provide regular updates of the milestone summary schedule and monthly progress reports on the Project. Define timely actions required by others.
  - c. Develop, implement, and monitor an effective system of project cost control. Review, revise, and refine the initially approved project budget, incorporate approved changes as they occur, and develop cash flow reports and revise financial forecasts as needed to keep County informed.
  - d. Review all work for completeness, compatibility, and coordination of plans and

- specifications, constructability, and construction means and methods. Advise County as to alternative methods, materials, and techniques that may be utilized to achieve project requirements, cost and schedule control.
- e. Review all drawings and specifications, at frequent intervals, as they are prepared and advise County whether the design process is on schedule and within the project scope and budget.
  - f. Review the construction contract bid documents that include (but not limited to) the Invitation for Bid, the Proposal format, the General Conditions, the Supplementary General; Conditions, and the Special Conditions.
  - g. Clarify any questions that may arise during the bid process.
  - h. Coordinate and evaluate bid document addenda for time and cost impacts.
  - i. Evaluate bids and bidders and make formal recommendation to County.
  - j. Assist County in obtaining and expediting any required permits and reviews, necessary for the implementation of the Project.
  - k. Coordinate the activities and responsibilities of the materials testing and inspection teams with the construction work to complete the Project in accordance with the County's objectives of cost, time, and quality.
  - l. Schedule and assist County in conducting ongoing and periodic construction progress meetings so that the construction Contractor, County, Design A-E and others as needed, can jointly discuss such matters as procedures, coordination, progress, problem solving and scheduling.
  - m. Task orders may be prepared for each task under this agreement. The task orders shall contain a specific scope, fee, and schedule for task, and shall be an integral part of this agreement. The fees provided will include support work
37. Final Construction Report:
- a. The Project close-out procedures will begin well before the conclusion of the project. CM will maintain a cumulative listing of project deficiencies and corrective action items. Pre-final inspections will be implemented to develop project punch lists.
  - b. 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.
  - c. 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. A-E will perform early discussion regarding the requirements and expectations for the final as-built product. The CM will meet with the Contractor, the Contractor's surveyor and A-E's 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.
  - d. 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. A-E 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.
  - e. At the completion of the project close-out by Contractor, 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 drawing.

**C. Construction Quality Assurance/Quality Control (QA/QC)**

1. During Bidding and Contract Award Period:
  - A. Review Contract Documents and prepare a QA/QC Plan, including a list of all QA/QC criteria to be met to comply with the documents, County and regulatory agencies' requirements.
  - B. Establish Certifications and Reports required by County and regulatory agencies.
  - C. Attend pre-construction meetings with construction Contractor.
  - D. Review Contractor's Stormwater Pollution Prevention Plan (SWPPP) or Erosion Sediment and Chemical Control Plan (ESCCP).
  
2. During Construction:
  - A. Provide QA/QC of earthwork activities, perform geologic mapping of cuts exposed during excavation and evaluate for effect on the project.
  - B. Take samples of soils and construction materials, make compaction tests, and perform laboratory testing as necessary to ensure QA/QC requirements of the specifications are met.
  - C. Perform QA/QC during construction of concrete and asphalt elements of the projects.
  - D. Provide deputy and/or specialty inspection as required.
  - E. Monitor day-to-day operation of Contractor's equipment and daily production of the earthwork Contractor.
  - F. Attend weekly construction progress meetings.
  - G. Attend meetings with County team and/or Contractor to resolve technical issues.
  - H. Review Contractor's submittal of materials, catalog data, shop drawings, field and factory testing, and other technical submissions for compliance with contract specifications, and recommend acceptance or rejection.
  - I. Review and verify construction contract change order submittal for technical compliance with the contract.
  - J. Monitor of Contractor's monthly Requests for Payment for concurrence with quantities of work performed.
  - K. Prepare and submit to County Project Manager daily reports of QA/QC monitoring activities.
  - L. Report QA/QC observations to County in a monthly progress report and as otherwise required for decision making.
  - M. Monitor Contractor's Qualified SWPPP Practitioner (QSP) to ensure all SWPPP Best Management Practices (BMP) are implemented, visual non-storm water and storm water observations are made, sampling and analysis is completed, and all data collection and recording is performed.
  
3. QA/QC Services Related to Liner Systems:
  - A. Ensure that subgrade preparation, placing of toe and sub-drain system and fine grading of area to receive liner is performed in accordance with contract specifications.
  - B. Ensure that placement of clay layer and testing for compaction and permeability is performed in accordance with contract specifications.

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

- C. Ensure that placement of new liner, monitoring of flexible membrane liner (FML) seaming and testing for impermeability is performed in accordance with contract specifications.
  - D. Ensure that placement of leachate collection system, filter layer and geotextile is performed in accordance with contract specifications.
  - E. Ensure that processing of protective cover material and placement of the cover is performed in accordance with contract specifications.
4. Review As-Built Drawings and Prepare As-Built Reports:
- A. Review as-built drawings submitted by the Contractor.
  - B. A CQA Construction Completion Report will be prepared and submitted. The CQA report 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 in order to receive permission for waste disposal to commence in the expansion area.
5. Other Tasks:
- A. Apply and obtain Permits.
  - B. Assist County with documentation processing for regulatory agency requirements.
  - C. Prepare CQA Plans.
  - D. Perform CQA earthwork monitoring during excavation and fill placement.
  - E. Perform CQA materials monitoring and testing related to roads, reinforced concrete channel, concrete lined basins and drainage channel.

**D. Surveying**

1. Provide verification of preconstruction topography survey.
2. Provide mapping of topography for project preconstruction existing conditions.
3. Build Electronic Design Model (Digital Terrain Model - DTM) as required to meet requirements construction contract requirements.
4. Set primary survey control.
5. Provide QA/QC field surveying as required.
6. Provide processing and mapping as needed.
7. Verify contractor as-built quantities.
8. QA/QC Contractor submittals including as-builts and perform quantity verification.
9. Survey as requested by County Project Manager.

**E. Archaeological/Paleontological**

1. A-E shall provide Archaeological and Paleontological services. All work at the site shall be performed by trained staff that has performed archaeological, paleontological and/or biological services at various developments throughout Southern California. All work shall be supervised by the site Biologist.
2. All excavated findings shall be the property of the County of Orange.
  - a. Cultural Resources and Paleontology Monitoring  
Consultants shall establish procedures for Archaeological and Paleontological resource surveillance and shall establish, in cooperation with County or a County retained contractor, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of any artifacts or fossils discovered in the excavation areas, including:

1. Archaeological monitoring during brushing, initial cutting and Paleontological monitoring during grading in sensitive formations. The frequency and duration of these inspections shall depend on the rate of excavations, and the materials being excavated.
  2. Stratigraphic mapping of fossil locations for placement into proper geologic context.
- b. **Salvage of Cultural Resources and Paleontology Resources**
- If additional or unexpected archaeological features are discovered, the archaeologist shall report such findings to County. In the event micro-fossils are located, County shall be notified. Procedures to divert or temporarily halt work from the vicinity of the discovery shall be implemented, with approval from County, to permit sampling, identifying, and evaluating the paleontological resources. Follow-up salvage reports shall be written for all finds. This report shall include the period of inspections, an analysis of artifacts and fossils found, and the present repository of the artifacts.
- c. **Archeological Resources**
1. Salvage of isolated artifacts, which include filling out isolate forms, and which are not part of a site that would need to be mitigated. If individual artifacts are exposed during monitoring, they shall be mapped *in-situ*, collected, analyzed in a designated laboratory, catalogued, and curated.
  2. If individual artifacts are exposed during monitoring, they will be mapped in situ, collected, analyzed A/P's laboratory, catalogued, and curated.
  3. If a feature (cluster of in situ artifacts, intact hearth, foundation, etc.) is exposed during monitoring, construction activities will need to be diverted briefly until the project archaeologist has had the opportunity to assess the find and make appropriate recommendations. If excavation is required, it will be accomplished expediently. As in the above condition, the feature will be mapped in situ, and artifacts will be collected, analyzed in A/P's laboratory, catalogued, and curated to the point of identification.
  4. If a site (a large defined space with more or less continuous archaeological evidence) is discovered during monitoring, construction activities will be diverted until the project archaeologist assesses the find and makes appropriate recommendations, within 2-3 calendar days. If excavation is required, a test plan will need to be developed prior to excavation. The report format will be altered.
  5. If the Principal Investigator (PI) of Archaeology determines that the site has the potential to yield data relevant to the research questions determined in the assessment phase, a representative sample of 3–5 percent of the site area will be hand-excavated using standard archaeological procedures, which will constitute mitigation of construction impacts through data recovery (salvage). The PI of Archaeology will inform County and the Contractor of the estimated time required for mitigation. During archaeological mitigation, earthmoving within 100 feet of the site will be halted.
  6. If any human remains are exposed during monitoring, project-related activities in the immediate vicinity of the find will be temporarily diverted. The Orange County coroner must be contacted within 24 hours by A/P to determine whether the remains are recent. If the remains are determined not to be recent, A/P will immediately confer with the County as to the appropriate agency or organization to contact for a determination of the most likely descendant. The recognized Native American representative will have the opportunity to become involved with the disposition of the remains after the remains have been scientifically analyzed.
  7. After mitigation of site impacts has been completed, and if additional cultural material is exposed by grading in the same site, additional hand excavation will not be required unless the additional material represents a new kind of data not recovered during previous data recovery at that site. Such new data would consist of artifact classes and features not recovered during previous mitigation. Features may include hearths and burials. Even if

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

no additional hand excavation is required, the newly exposed material will be mapped and collected.

d. Paleontological Resources

1. Salvage of large or extensive Paleo resources that cannot be collected during daily grading monitoring procedures, including screening of micro-fossils.
2. Grading shall be temporarily diverted within 100-feet of the discovery so that the monitor can determine whether the fossil represents vertebrate animal, an invertebrate animal, or a plant.
3. If fossils are plant or invertebrates, the monitor will collect a sample of the material and record its location. Grading may then continue.
4. If the fossils are vertebrates, the monitor shall contact the PI of Paleontology or his designated representative. The PI of Paleontology will evaluate the fossils within four (4) hours. The PI will then determine the significance of the discovery and decide what recovery method should be employed. Large individual specimens such as whales, or concentrations of specimens, will require additional crew to expose the specimen, prepare a plaster jacket, and remote it. Individual specimens normally require no more than one (1) day to remove.
5. If a large collection of specimens is recovered, these may require laboratory work (to be carried out by crew members). This work shall include: cleaning, preparation to the point of identification, identification, and analysis. The amount of time necessary for laboratory work will vary with the type and condition of the recovered material. Unless unexpected, unusual deposits of fossils are recovered (e.g. more than 100 specimens or extremely large fossils like whales or mammoths), the estimates in this report shall cover all Paleontological mitigation.
6. Paleontological monitoring will be performed by A/P crew members who have paleontological monitoring experience. The A/P's Director of Paleontology will visit as needed to confer with field personnel. More frequent visits may be warranted by the character of bedrock exposure and frequency of paleontological finds.
7. A paleontological monitor will be required only when cutting operations are being conducted in formations that have the potential to produce fossils. Monitoring of a particular cut will cease when each cutting operation reaches final grade.
8. Preparation and submittal of daily logs and reports as needed.

e. Project Management

1. A monthly written report shall be prepared identifying the progress and any significant findings.
2. Meetings, as required by County staff.

f. Laboratory Analysis of Fossils and Artifacts

1. Laboratory analysis of fossils shall be conducted, which includes cleaning, sorting, and preparation of fossils to the point of identification, and to size for storage.
2. Laboratory analysis shall be performed for isolated artifacts, which are not collected as part of a site.
3. Fossils and artifacts shall be distributed to an Orange County approved repository.
4. All excavated finds shall be the property of the County of Orange. Final mitigation and disposition of the resources shall be subject to the approval of County, and the Manager, OC Parks/ Historical Facilities, and as guidelines set forth in applicable site-specific environmental documents (EIR, Supplementals, Addendums, etc.).
5. All work at the site shall be performed by trained archaeological and paleontological observers, who have performed archaeological and paleontological monitoring at various developments in Southern California and supervised by County Certified Archaeologist and Paleontologist

g. Final Reports

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

1. Draft and/or prepare final archaeology and paleontology reports at the end of each construction project.
  2. Distribution of fossils and artifacts to an Orange County approved repository
- h. Additional A/P Services
1. A/P shall be acceptable to County. A/P can be selected from County's list available at <http://www.ocpublicworks.com/gov/pw/cd/building/plan/forms.asp> under the "Archaeologist and Paleontologist" section. Regardless of whether A/P is selected from County's list, A/P shall meet all minimum qualifications listed in the "Qualifications for Certification of Archaeological and Paleontological Professionals" document provided at that website.
  2. Conduct a literature and records search for recorded sites and previous surveys;
  3. Conduct a field survey unless the entire work site has been previously surveyed and the survey documentation is acceptable to County;
  4. Attend the pre-construction meeting to conduct or schedule separate pre-construction cultural and paleontological resources sensitivity training, and attend additional meetings or provide training as determined necessary by County. In the event of the discovery of specimens or artifacts, attend construction meetings until otherwise directed by County;
  5. Conduct pre-construction cultural and paleontological resources sensitivity training for all staff involved in moving soil or working near soil disturbance. Training shall review the types of archaeological and paleontological resources that might be found, along with laws for the protection of the resources;
  6. If determined necessary by the A/P and approved by County, the A/P shall prepare a report on a subsurface test level investigation of archaeological resources collection or pre-grade paleontological salvage operation. The report shall evaluate the site including the significance of any finds (location, depth, nature, condition, and extent of the artifacts or specimens), recommended methodology of salvage or mitigation and related cost estimates, and an analysis and catalogue of artifacts or specimens;
  7. Establish procedures for A/P sampling and resource surveillance and monitoring;
  8. In cooperation with County, establish procedures for suspension or redirection of work to permit sampling, identification, and evaluation of possible resources.
  9. During grading, excavation, or other ground-disturbing activities, if any evidence of paleontological, pre-historic, or historic cultural resources is uncovered, the following measures, unless otherwise specified in project-specific regulatory permit language, shall be taken:
    - i. All below grade work shall stop within a 100-foot radius of the discovery. Work shall not continue until the discovery has been evaluated by the A/P.
    - ii. The A/P shall assess the find(s) and determine if they are of value. If the find(s) are of value then:
      1. The A/P shall draft a monitoring program and monitor all ground-disturbing activities related to the Project.
      2. A/P shall prepare all potential finds in excavated material to the point of identification.
      3. Significant finds shall be preserved as determined necessary by the A/P.
      4. Excavated finds shall be offered to County or its designee for curation on a first-refusal basis, then offered to a local museum or repository willing to accept the resource.
      5. Within 30 working days of completion of the end of earth moving activities, the A/P shall draft a report summarizing the finds, and shall include the inspection period, an analysis of any resources found, and the present repository of the items.
      6. All resulting reports shall be delivered to County and filed with the South Central

Coastal Information Center at the California State University, Fullerton, or another institution if directed by County.

10. If any burial grounds or remains are uncovered, ceremonial objects, petroglyphs, or archaeological, paleontological, or other artifacts or specimens of like nature within the construction area, A/P shall immediately notify the County's onsite representative of finds and shall modify the construction operations so as not to disturb the finds pending further instructions from County.
  
11. Discovery of Human Remains
  - i. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County of Orange Sheriff-Coroner and/or other applicable coroner and law enforcement agency ("Coroner's Office") has determined the appropriate treatment and disposition of the human remains. The Coroner's Office shall be notified within 24 hours of the discovery.
  - ii. If the Coroner's Office determines that the remains are or are believed to be of Native American origin, the Coroner's Office will notify the California Native American Heritage Commission (NAHC).
  - iii. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall be granted access to the site to complete their inspection as quickly as possible. The designated Native American representative would then determine, in consultation with County, the treatment and disposition of the human remains.
  
12. Unless otherwise required by law, any and all finds shall remain the property of County and not become the property of any other person or entity.
13. Fossil Preparation, fossil identification, fossil cataloguing, paleontological report on monitoring, analysis of resources found, and repository of record.
14. Any A/P services including presentations, reports or surveys requested by the PM.

#### **F. Biological**

1. A-E shall provide Biological Services to perform construction related monitoring in compliance with conditions and requirements set forth in project permits and authorizations, as well as in existing project plans, monitoring plans and related documents. All work at the site shall be performed by trained staff that has performed Biological Services at various developments throughout Southern California. All work shall be supervised by the site Biologist.
  
2. Biological Services may include monitoring for vegetations clearing, nesting birds, special-status plants/animals, or conserved vegetation types. The A-E will be responsible for monitoring all habitat types within the construction project limits which may include riparian, coastal sage scrub (CSS), wetland and native grassland habitats. The A-E will be responsible for preparation of reports and memos based on all monitoring and field work performed per project permits, plans, authorizations and related documents or as requested by County.

#### **VI. CONSTRUCTION DOCUMENT MANAGEMENT**

- A. The A-E shall use e-Builder (Trimble), a project/construction management software for all project related documents and correspondence, including, but not limited to Submittals, Requests for

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

Information, Change Order Request, Contract Change Orders, Daily Reports, Payment Applications, Communication Forms and other Processes. The Contractor is not required to purchase a user license for e-Builder. Within five (5) working days of Contract award or Task Order Notice to Proceed (NTP), County shall provide the Contractor and pertinent support personnel user access login information to e-Builder for use on the Project. County will provide an e-Builder training session to appropriate A-E personnel and the A-E shall coordinate with County to schedule the training. County will provide e-Builder user training and support to the Contractor as determined is needed. It shall be the responsibility of the A-E to notify their designated County e-Builder Administrator when, the Contractor must change Project assignment or disable e-Builder login access to personnel.

- B. Should the use of e-Builder not be feasible/required for use on specific Task Orders, the County Project Manager will inform A-E within five (5) working days of issuing NTP.

**VII. CONTRACT TASK ORDER**

- A. A-E shall be assigned work via a task order by County which shall subsequently be referred to as the "Contract Task Order" (hereinafter "CTO"). A CTO for each project shall be developed by A-E in conjunction with County Project Management staff. The County Project Manager shall manage all A-E's work including monitoring the CTO work schedule, quality of deliverables, review of invoiced amounts, adherence to set budget, and internal review of submittal packages. A-E shall follow all requirements as outlined in the CTO; this general Scope of Work **and** the project specific Scope Statement.
- B. The CTO shall include a detailed Scope Statement, describing tasks to be performed with a specific list of deliverables for each task, schedule of work and cost to complete the work. The schedule of work shall allow enough time for meetings with County Management staff to review the work progress, provide technical and policy direction, resolve problems and ensure adherence to the work completion schedule. The CTO shall include a cover sheet provided by County Project Management staff with the appropriate signature blocks and contract information. Once both Parties agree, and all Parties have signed the CTO, County Management staff shall provide A-E with a Notice to Proceed (NTP) to begin work. A-E shall submit all plans, reports and other documents produced under the CTO to the assigned County Project Manager within the timeframe indicated in the CTO or as directed by County Project Management staff.

**VIII. PERSONNEL REQUIREMENTS**

- A. The A-E shall assign key personnel as required for the performance of this Contract and as described in the previous Sections. These key personnel must have an in-depth understanding of the requirements and their responsibilities as well as the ability, knowledge, experience and skills to perform the requirements. A-E shall provide its personnel all equipment, tools, materials, and transportation that may be required in the performance of this work.
- B. The following personnel is requested, at minimum, for this Contract:
1. Principal Project Manager;
  2. Construction Manager;
  3. Field Office Engineer;
  4. Quality Control Inspector(s);
  5. Geotechnical Inspector(s);
  6. Geologist;
  7. Structural Materials Representative/Testing;
  8. Licensed Surveyor;
  9. Surveying Crew;

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

10. Scheduler;
11. Archeo/Paleo Monitor;
12. Biological Monitor;
13. Deputy/Special Inspector(s); and
14. All other personnel/classifications required to provide full Landfill Construction Support Services as described herein.

**IX. ASSUMPTIONS**

- A. The Scope of Work for these project services are based on County's and A-Es experience with similar construction projects and includes the following assumptions:
  1. In general, the Approximate Total Project/Task Duration consist of the following project phases:
    - a. Design;
    - b. Preconstruction/Advertisement;
    - c. Construction; and
    - d. Close-Out.
  2. 4-hour minimum for field CQA Monitor if called out on a part-time basis;
  3. Prevailing wage is anticipated for all staff performing actual work on a public works project;
  4. Full-time staff may be required to work alternate working days including Saturdays, minor holidays or as directed by the County Project Manager in those instances where construction procedures require a revised work schedule and where overtime compensation is approved by the County Project Manager. The A-E shall provide sufficient staffing to cover alternate working days without the need for overtime.
  5. Copies of the current plans, specifications and estimates (if existing/available) may be available to A-E upon request.

**X. TIME OF PERFORMANCE**

- A. The County makes no representation as to when the construction will be performed and completed and the time of performance of the actual construction of the contract, regardless of the changes in schedule thereof, and whether such changes are within control of the County.
- B. As between the A-E and the County, the A-E assumes the risk of suspensions of or delays in performance of the Contract, with the following exceptions:
  1. The Construction Contractor fails to finish on the scheduled completion date as a result of failure by the County to act within a reasonable time to provide necessary information, prompt reviews, decisions and other matters essential to the Project, and the County grants an extension of time to the construction contract for these reasons.
  2. The Construction Contractor fails to finish on the scheduled completion date as a result of Force Majeure, strikes or inability to obtain materials on time through no fault of the Construction Contractor, and the County grants an extension of time for these reasons.
  3. The Construction Contractor fails to finish on the scheduled completion date for reasons under control of the Construction Contractor and the County requires the A-E to provide inspection and coordination of construction services beyond the scheduled completion date.
- C. A Notice to Proceed (NTP) shall be issued to the A-E soon after contract or task order execution. Scheduling of the required services shall be coordinated with the County Project Manager. It is anticipated that services for Constructability Review will commence soon after the issuance of the NTP. Construction Management, Construction QA/QC, Surveying and Archeological/Paleontological

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

services shall be performed as directed by the County Project Manager and in accordance to the applicable project phase.

**ATTACHMENT B**  
**COST/COMPENSATION**

- I. COMPENSATION:** This is a **time and materials** usage Contract between County and A-E for On-Call Landfill Construction Support Services as set forth in Attachment A, "Scope of Work".

A-E agrees to accept the specified compensation as set forth in this Contract as full remuneration for performing all services and furnishing all staffing, labor, vehicles, equipment, tools, materials, overhead, travel, etc. required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by A-E of all its duties and obligations hereunder. A-E shall only be compensated as set forth herein below for work performed in accordance with the Scope of Work. **County shall have no obligation to pay any sum in excess of the Total Contract Amount specified herein below unless authorized by amendment in accordance with Paragraphs 6.3 and 6.19 of the County Contract Terms and Conditions.**

- II. PRICING:** Payment shall be made in accordance with the provisions of this Contract. Partial progress payments may be allowed at the discretion of the County Project Manager. Payment shall be as follows:

**A. Classification Rates:**

<b>TETRA TECH BAS, INC.</b>	
<b>Classification Titles</b>	<b>Hourly Rate</b>
<b>Construction Management</b>	
Principal-in-Charge	\$255.00
Senior Project Director	\$247.00
Senior Construction Manager	\$220.00
Construction Manager	\$182.00
Senior Estimator	\$170.00
Estimator	\$135.00
Senior Scheduler	\$170.00
Scheduler	\$133.00
Construction Engineering Technician	\$165.00
Administrative Support	\$79.00
Lead Inspector/Chief Technician	\$150.00
Inspector/Construction Supervisor	\$160.00
Office Support/Clerical	\$88.00
<b>Surveying</b>	
Professional Land Surveyor	\$208.00
Project Surveyor	\$153.00
1-person Survey Party w/ Equipment	\$232.00
2-person Survey Party w/ Equipment	\$261.00
3-person Survey Party w/ Equipment	\$320.00
<b>Engineering/Environmental</b>	
Principal Solid Waste Planner	\$241.00
Division Engineer	\$236.00
Electrical Engineer	\$188.00
Senior Project Designer	\$175.00
Project Designer	\$164.00
Senior Designer	\$150.00
CADD Designer/Drafter	\$145.00
Designer	\$137.00
Senior Drafter	\$128.00
Drafter	\$118.00
Senior CADD Operator	\$104.00

Regulatory Compliance Manager	\$168.00
Regulatory Compliance Specialist	\$133.00
Senior Environmental Scientist	\$162.00
Senior Environmental Specialist	\$141.00
Environmental Specialist	\$99.00
Estimator/Specification Writer	\$140.00
Sr. Landscape Architect	\$177.00
Landscape Architect	\$136.00
Project Accountant/Analyst	\$96.00
Senior Project Coordinator	\$165.00
Project Coordinator	\$100.00
Senior Technical Editor	\$101.00
Administrative Assistant	\$78.00
Office Services Clerk	\$88.00
Project Manager I (PM-I)	\$184.00
Project Manager II (PM-II)	\$194.00
Project Manager III (PM-III)	\$209.00
Engineer (E)	\$103.00
Engineer I (E-I)	\$118.00
Engineer II (E-II)	\$131.00
Engineer III (E-III)	\$142.00
Engineer IV (E-IV)	\$149.00
Engineer V (E-V)	\$165.00
Engineer VI (E-VI)	\$174.00
Engineer VII (E-VII)	\$185.00
Principal (P)	\$267.00
Senior Principal (SP)	\$303.00
Chief of Survey Parties (CSP)	\$154.00

<b>GEO-LOGIC ASSOCIATES, INC.</b>	
<b>Classification Titles</b>	<b>Hourly Rate</b>
<b>QA/QC/Geotech</b>	
Senior Principal	\$240.00
Principal Engineer/Geologist	\$229.00
Project Manager	\$229.00
QA/QC Manager/Senior Project Geologist	\$229.00
Associate (E-IV)	\$202.00
Sr. Engineer/Geologist	\$180.00
Project Engineer/Geologist	\$168.00
Sr. Staff Engineer/Geologist/Staff Geologist II	\$112.00
Staff Engineer/Geologist/Staff Geologist I	\$98.00
Construction Engineer Tech - Regular (non-PW)	\$110.00
Construction Engineer Tech - Overtime (non-PW)	\$140.00
Soils/Asphalt/Field Tech – Prevailing Wage	\$115.00
Soils/Asphalt/Field Tech – Prevailing Wage Overtime	\$145.00
Soils/Asphalt/Field Tech – Prevailing Wage Doubletime	\$175.00
Drafter	\$130.00
Project Administrator/Project Analyst	\$81.00
Technical Assistant	\$81.00
Word Processor	\$81.00
Technician I Office/Env Specialist	\$67.00
Technician I Field/Env Specialist (w/vehicle)	\$82.00
Technician II Office/Env Specialist II	\$86.00
Technician II Field/Env Specialist (w/ vehicle)	\$100.00
Senior Technician Office	\$110.00
Senior Technician Field	\$124.00

Supervising Technician Office	\$134.00
Supervising Technician Field	\$150.00
Managing Technician office	\$162.00
Managing Technician Field	\$178.00
CADD Designer	\$130.00
CADD Operator/Geotechnical Draftsperson	\$111.00
Geotechnical Clerk/Word Processor	\$74.00
Principal II Professional	\$258.00
Principal I Professional	\$237.00
Supervising Professional	\$199.00
Senior Professional	\$193.00
Project III Professional	\$155.00
Project II Professional	\$161.00
Project I Professional	\$161.00
Staff III Professional	\$93.00
Staff II Professional	\$88.00
Staff I Professional	\$78.00
Technician I	\$77.50
Technician II	\$87.50
Technician III (or Minimum Prevailing Wage)	\$103.00
Technician IV	\$115.00
Laboratory Manager	\$134.00
Principal Technician	\$166.00
CADD/GIS/Database Manager I	\$103.00
CADD/GIS/Database Manager II	\$118.00
CADD Designer	\$118.00
GIS Specialist	\$97.00
Administrative Assistant I	\$78.00
Administrative Assistant II	\$90.00
Technical Editor	\$97.00
Senior Technical Editor	\$101.00

<b>ECORP CONSULTING, INC.</b>	
<b>Classification Titles</b>	<b>Hourly Rate</b>
<b>Archae/Paleo/Bio</b>	
Principal/QA/QC/Manager	\$190.00
Associate Archaeologist	\$90.00
Associate Paleontologist	\$90.00
Field Crew	\$85.00
Principal Biologist	\$170.00
Associated Biologist	\$95.00
Senior Biologist/Regulatory Permitting/Restoration Ecologist	\$150.00
Senior Paleontological Resource Manager/Principal Investigator	\$161.00
Director of Cultural Resources/Principal Investigator	\$180.00
Senior Archaeologist/Paleontologist	\$135.00
Staff Archaeologist/Paleontologist	\$115.00
Staff Biologist/Regulatory permitting/Restoration Ecologist	\$125.00
Assistant Biologist	\$85.00
Senior GIS Specialist	\$115.00
GIS Specialist/CAD Specialist	\$90.00
Word Processing/Production Coordinator/Graphic Designer	\$85.00
Project Accountant/Contracts	\$115.00
Technical Editor	\$97.00
Clerical/Production Tech	\$75.00

**County of Orange**  
**Tetra Tech BAS, Inc.**

---

\*County will not pay A-E more than the listed amount for Sub-Contractor work, regardless of any agreement between the A-E and their Sub-Contractor. Sub-Contractor rates are listed for convenience only.

\*Construction-related work performed under A-E service contracts may meet the definition of “public work” under Labor Code § 1720 et seq. “Construction” includes work performed during the design and preconstruction phases of construction, including, but not limited to, inspection and land surveying work, and work performed during the postconstruction phases of construction, including, but not limited to, all cleanup work at the jobsite. See, Labor Code § 1720. Contracts for A-E services shall mandate that prevailing wages be paid where mandated by law.

**B. Total Contract Amount Shall Not Exceed: \$1,750,000**

**III. PRICE INCREASES/DECREASES:** No price increases will be permitted during the term of this Contract. All price decreases will automatically be extended to County.

**IV. FIRM DISCOUNT AND PRICING STRUCTURE:** A-E guarantees that prices quoted are equal to or less than prices quoted to any other local, State or Federal government entity for services of equal or lesser scope. A-E agrees that no price increases shall be passed along to County during the term of this Contract not otherwise specified and provided for within this Contract.

**V. A-E’S EXPENSE:** A-E will be responsible for all costs related to photo copying, telephone communications and fax communications while on County sites during the performance of work and services under this Contract.

**VI. REIMBURSABLE ITEMS:** Reimbursable items are non-salary items that are not included in the Scope of Work but necessary for completion of the work and must be authorized in advance by the County Project Manager. A-E may be entitled to reimbursement for the following, upon prior approval by County:

- 1) The actual costs of special equipment to be rented, leased or purchased by A-E for use exclusively in the performance of the Scope of Services, to the extent such rental, lease, purchase and costs have been approved in writing by the County Project Manager.
- 2) Printing expenses paid to outside contractors; to the extent such contractors and reproduction rates have been approved by the County Project Manager.
- 3) Other actual costs and/or payments specifically approved and authorized in writing by the County Project Manager and actually incurred by A-E in performance of this Contract.
- 4) Travel costs shall only be reimbursed if approved in advance in writing by County Project Manager and are subject to the following restrictions:
  - a) Reimbursement of mileage for the business use of a personal vehicle during the conduct of business within the Scope of Services of this Contract shall be based on the Internal Revenue Service Standard Mileage Rate in effect at the time. Mileage between the A-E’s “Home Based” office location and County location, as well as mileage within County property will not be reimbursed.
- 5) Cost of “Home Based” Xerox copies, faxes, and other supplies and materials associated with them will not be reimbursed.

**County of Orange  
Tetra Tech BAS, Inc.**

---

- 6) Cost of cellular phones, cell phone usage plans and usage minutes, and other mobile communication devices will not be reimbursed.
- 7) All reimbursable expenses must be itemized on A-E invoice(s) and documented with receipts. Receipts for reimbursable expenses must be submitted with all A-E invoices. Invoices for reimbursable expenses without back-up receipts will not be paid. A-E is responsible for submitting reimbursable invoices in a format that is acceptable to the County. Reimbursable items shall be charged at cost. Any third-party or subcontractor services shall also be charged at cost; no mark-ups will be allowed.

**VII. PAYMENT TERMS:** Invoices are to be submitted in monthly arrears, after services have been completed, to the address specified below. Payment will be net thirty (30) days after receipt of an invoice in a format acceptable to the County, as applicable. Invoices shall be verified and approved by County and subject to routine processing requirements. The responsibility for providing an acceptable invoice to County for payment rests with A-E. Incomplete or incorrect invoices are not acceptable and will be returned to the A-E for correction.

Billing shall cover services and/or goods not previously invoiced. The A-E shall reimburse the County for any monies paid to the A-E for goods or services not provided or when goods or services do not meet the Contract requirements.

Payments made by County shall not preclude the right of County from thereafter disputing any items or services involved or billed under this Contract and shall not be construed as acceptance of any part of the goods or services.

**VIII. INVOICING INSTRUCTIONS:** The A-E will provide an invoice on the A-E's letterhead. Each invoice will have a unique number and will include the following information:

- A. A-E's name and address
- B. A-E's remittance address, if different from (A), above
- C. Name of County agency/department
- D. Delivery/service address
- E. Contract & Delivery Order (DO) number
- F. Contract Task Order (CTO) Project Title
- G. County Project Job Number
- H. Service Date
- I. Description of Services
- J. Approved CTO Amount
- K. Percent Complete
- L. Previously Invoiced Amount
- M. Current Amount Due
- N. Taxpayer ID number

Invoices and support documentation are to be forwarded to:

**TBA – Per Contract Task Order**

A-E has the option of receiving payment directly to their bank account via an Electronic Fund Transfer (EFT) process in lieu of a check payment. Payment made via EFT will also receive Electronic Remittance Advice with the payment details via email. An email address will need to be provided to the County via an EFT Authorization Form. To request a form, please contact the DPA.

**ATTACHMENT C**  
**STAFFING PLAN**

**1. A-E KEY PERSONNEL**

<b>Name</b>	<b>Classification/ Designation</b>	<b>Years of Experience</b>	<b>Years with Current Firm</b>	<b>Licenses/Certifications (include license number)</b>
Christine Arbogast	President Tt SWW, Principal	36	31	CA PE #C42578
Hal Arbogast	Sr. Construction Manager	37	3	CA PE #C40484 QSD/P #15800
Mike Bacsik	Construction Manager	32	9	-
Virginia Becerra	Sr. Compliance Specialist, Regulatory Compliance	33	30	-
Juan Carbajal	Project Manager, LFG CM	9	9	Engineer-in-Training
Michael Cox	Construction Manager	30	2	-
Kevin Cramer	Sr. Vice President, Scheduling	25	23	-
Julie Hauenstein	Project Manager, CM	15	15	CA PE #C77358
Dan Helt	Survey Manger, Survey Services	16	8	CA PE #C69347; CA Land Surveyor #8925
Derrick Kung	Engineer, LFG, CM	4	4	Engineer-in-Training
Caleb Moore	VP Solid Waste, Principal	22	18	CA PE #C66580
Mike Petrovich	Construction Manager	6	1	Engineer-in-Training
Greg Saul	Sr. Project Manager, Stormwater Management	24	9	CA PE #60600 QSD/P #1019
Paul Scott	Construction Manager	32	12	-
Ryan Wilson	Construction Supervisor	1	1	Engineer-in-Training
Vy Yannizzi	Project Manager	12	12	CA PE #83234

A-E understands that the personnel represented as assigned to the Contract must remain working on the Contract throughout the duration of the Contract unless otherwise requested or approved by the County. Substitution or addition of A-E's key personnel in any given category or classification shall be allowed only with prior written approval of the County's Project Manager. *Note: The written approval of substituted A-*

*E Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works or other County department.*

A-E may reserve the right to involve other A-E personnel, as their services are required. The specific individuals will be assigned based on the need and timing of the service/classification required. Assignment of additional key personnel shall be subject to County Project Manager written approval. **Note: The written approval of additional A-E Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works or other County Department.** County reserves the right to have any A-E personnel removed from providing services to County under this Contract. County is not required to provide any reason for the request for removal of any A-E personnel.

**2. SUBCONTRACTOR(S)**

Listed below are subcontractor(s) anticipated by A-E to perform services specified in Attachment A. Substitution or addition of A-E's subcontractors in any given project function shall be allowed only with prior written approval of the County Project Manager.

<b>Company Name &amp; Address</b>	<b>Contact Name and Telephone Number</b>	<b>Project Function</b>
<b>Geo-Logic Associates</b> 2777 E. Guasti Rd., Suite. 1 Ontario, CA 91761	John M. Hower, PG, CEG; Office 909-626-2282 ext. 5113, Mobile 858-864-2584	Construction Quality Assurance
<b>ECORP Consulting, Inc.</b> 2861 Pullman St. Santa Ana, CA 92705	Shannon Shaffer; Office 714-648- 0630, Mobile 714-651-2314	Biology/Archaeology/Paleontology