

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and Geosyntec Consultants, Inc. with an address at 2100 Main Street, Suite 150, Huntington Beach, CA 92648 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

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

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

1. DESIGNATED REPRESENTATIVE

Jeanette Gonzales-Knight at phone number 805-882-3627 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Gregory T. Corcoran at phone number 858-674-6559 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. NOTICES

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

To COUNTY: Leslie Wells, Deputy Director, County of Santa Barbara, Public Works Department, Resource Recovery & Waste Management Division, 130 E. Victoria Street, Suite 100, Santa Barbara, CA Phone: (805) 882-3600 Fax (805) 882-3601

To CONTRACTOR: Gregory T. Corcoran, Senior Principal Engineer, Geosyntec Consultants, Inc., 16644 West Bernardo Drive, Suite 301, San Diego, California 92127 Phone: (858) 674-6559 Fax: (858) 674-6586

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

3. SCOPE OF SERVICES

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

4. TERM

CONTRACTOR shall commence performance on August 13, 2019 and end performance upon completion, but no later than June 30, 2020 unless otherwise directed by COUNTY or unless earlier terminated.

5. COMPENSATION OF CONTRACTOR

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

6. INDEPENDENT CONTRACTOR

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

7. STANDARD OF PERFORMANCE

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

8. DEBARMENT AND SUSPENSION

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

9. TAXES

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

10. CONFLICT OF INTEREST

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

11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

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

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

12. NO PUBLICITY OR ENDORSEMENT

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

13. COUNTY PROPERTY AND INFORMATION

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

14. RECORDS, AUDIT, AND REVIEW

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

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

15. INDEMNIFICATION AND INSURANCE

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

16. NONDISCRIMINATION

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

17. NONEXCLUSIVE AGREEMENT

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

18. NON-ASSIGNMENT

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

19. TERMINATION

A. By COUNTY. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill the obligations herein.

1. **For Convenience.** COUNTY may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease its services as quickly and efficiently as reasonably possible, without performing

unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of services.

2. **For Nonappropriation of Funds.** Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or COUNTY governments, or funds are not otherwise available for payments in the fiscal year(s) covered by the term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence and COUNTY may terminate or suspend this Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the term.
 3. **For Cause.** Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY may, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify COUNTY as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise.
- B. By CONTRACTOR. Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in EXHIBIT B, CONTRACTOR may, at CONTRACTOR's option terminate this Agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.
- C. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for satisfactory services performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

20. SECTION HEADINGS

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

21. SEVERABILITY

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

22. REMEDIES NOT EXCLUSIVE

No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

23. TIME IS OF THE ESSENCE

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

24. NO WAIVER OF DEFAULT

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

25. ENTIRE AGREEMENT AND AMENDMENT

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

26. SUCCESSORS AND ASSIGNS

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

27. COMPLIANCE WITH LAW

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

28. CALIFORNIA LAW AND JURISDICTION

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

29. EXECUTION OF COUNTERPARTS

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

30. **AUTHORITY**

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

31. **SURVIVAL**

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

32. **PRECEDENCE**

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

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Agreement for Services of Independent Contractor between the **County of Santa Barbara** and Geosyntec Consultants, Inc.

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

ATTEST:

Mona Miyasato
County Executive Officer
Clerk of the Board

COUNTY OF SANTA BARBARA:

By: _____
Deputy Clerk

By: _____
Steve Lavagnino, Chair
Board of Supervisors

Date: _____

RECOMMENDED FOR APPROVAL:

Public Works

CONTRACTOR:

GeoSyntec Consultants, Inc.

By: _____
Scott D. McGolpin
Director of Public Works

By: _____
Authorized Representative

Name: _____
Title: _____

APPROVED AS TO FORM:

Michael C. Ghizzoni
County Counsel

APPROVED AS TO ACCOUNTING FORM:

Betsy M. Schaffer, CPA
Auditor-Controller

By: _____
Deputy County Counsel

By: _____
Deputy

APPROVED AS TO FORM:

Ray Aromatorio, ARM, AIC
Risk Manager

By: _____

EXHIBIT A

STATEMENT OF WORK

Contractor shall provide construction quality assurance services as set forth in the Geosyntec Consultants, Inc. "Proposal for Construction Quality Assurance Services, Tajiguas Landfill Phase 3 Part 2 Partial Final Closure & Groundwater Protection System Phase III E" dated June 14, 2019. The detailed scope of work is stipulated in Attachment A-1 and is incorporated by reference. Geosyntec Consultants, Inc. Fee Estimate for proposed services is provided in Attachment A-2 and is incorporated by reference.

Chris Conkle, Jeff Fijalka, and Doug Hamilton shall be the primary individual(s) personally responsible for construction quality assurance services as specified in Attachment A-1. CONTRACTOR may not substitute other persons without the prior written approval of CONTRACTOR's Designated Representative.

ATTACHMENT A-1

June 14, 2019

Todd Curtis, P.E.
County of Santa Barbara - Public Works Department
130 E. Victoria Street, Suite 100
Santa Barbara, California 93101

**RE: Construction Quality Assurance Services Tajiguas Landfill
Phase 3 Part 2 Partial Final Closure & Groundwater Protection System
Phase III E Construction Project No. 129913/828380**

Dear Mr. Curtis:

Geosyntec Consultants, Inc. (Geosyntec) is pleased to provide this proposal for Construction Quality Assurance (CQA) services in response to your Request for Proposal for Project No. 129913/828380.

Geosyntec is enthusiastic about working with the Santa Barbara County Public Works Department on this combined partial final closure and groundwater protection system project, and we look forward to discussing our proposal with you further at your convenience.

We are respectfully submitting three hard copies of our proposal, one electronic copy, and a separate fee proposal. Please feel free to contact Chris Conkle or Jeff Fijalka at our main line at (714) 969-0800 if you have any questions, comments, or would like additional information.

Sincerely,

Geosyntec Consultants



Chris Conkle, P.E., G.E. - Project Director
Direct: (714) 465-1214
E-mail: CConkle@Geosyntec.com



Jeff Fijalka, P.E. - CQA Manager
Direct: (714) 465-1236
E-mail: JFijalka@Geosyntec.com



Gregory T. Corcoran, P.E.
Authorized Signatory
Direct: (858) 716-2905
E-mail: GCorcoran@Geosyntec.com

1. EXECUTIVE SUMMARY



Building upon our project team's working knowledge and Construction Quality Assurance (CQA) experience at Tajiguas Landfill, Geosyntec Consultants is pleased to submit this proposal to provide Santa Barbara County (the County) with CQA Services for the Phase 3 Part 2 Partial Final Closure and the Phase III E Groundwater Protection System Construction, Project Numbers 1129913 and 828380, respectively. In this proposal, we present the distinctive qualifications of our team, direct and relevant landfill project experience, our proposed method to accomplish the scope of work, and a schedule for the CQA activities. A cost estimate is included in a separate fee proposal.

Project Team

The Geosyntec Team assembled for this contract is uniquely qualified to perform the CQA services required for successful implementation of the project objectives. Our team provides the County with reliability, site experience, added technical value, and depth of resources. As we have done with past liner expansion projects at Tajiguas Landfill, we will continue to provide the County with the highest quality CQA service to meet potential needs for the Phase 3 Part 2 Partial Final Closure and Phase III E Groundwater Protection System. Under the leadership of our CQA Manager and Project Director, Geosyntec's experienced CQA staff will monitor the earthworks and geosynthetics construction required for successful completion of this combined project.

Primary Contacts & Project Office Locations

Huntington Beach Office

2100 Main Street, Suite 150
Huntington Beach, CA 92648
Phone: (714) 969-0800

Contacts: Jeff Fijalka, CQA Manager
Chris Conkle, Project Director

Santa Barbara Office

924 Anacapa Street, Suite 4A
Santa Barbara, CA 93101
Phone: (805) 897-3800

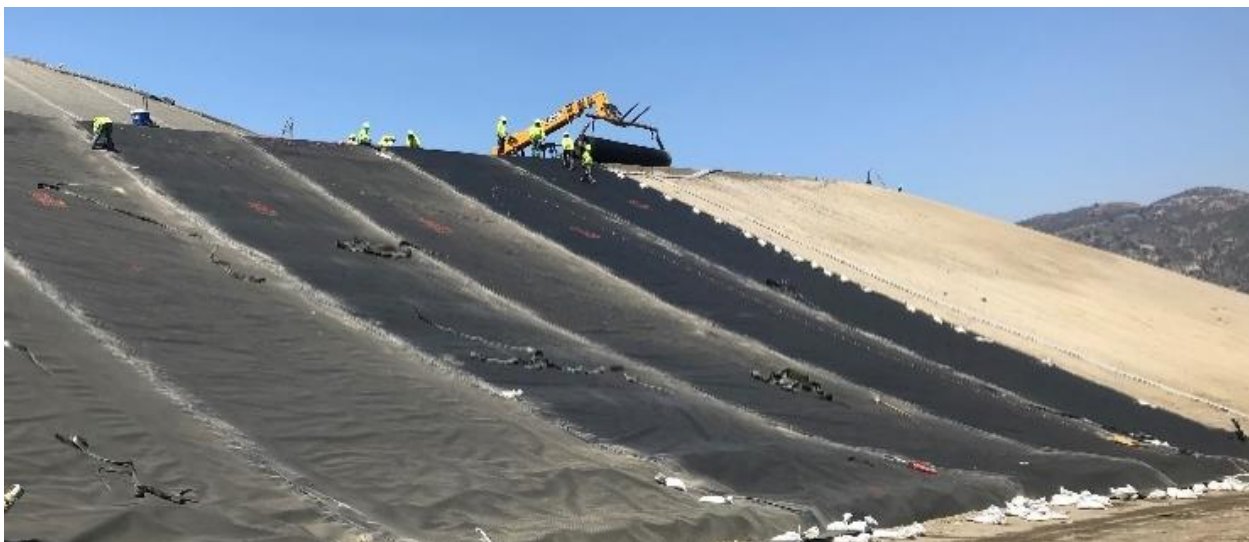
Qualification and Experience Competence

Geosyntec meets and exceeds the qualifications set forth in the RFP and has demonstrated its competence by performing CQA and other environmental services at Tajiguas Landfill, including the preceding six groundwater protection system expansions. We are proud of our achievements that have benefited the County under the previous phases and look forward to continuing to serve the County using similar technical approaches. In each case, the projects which Geosyntec has been involved with at the site have been completed on time, have been technically sound, and have allowed for the County to take beneficial occupancy of each phase quickly. We also understand based on our discussions with the County that no construction claims have been filed for the projects on which Geosyntec has provided support at Tajiguas Landfill. Geosyntec also provided design and CQA services during the large-scale closure of the County's Foxen Canyon Landfill.

Geosyntec was founded 35 years ago as a landfill-related services firm and specializes in the areas of landfill engineering and CQA, groundwater monitoring and reporting, hydrogeology, hydrology, environmental engineering, geotechnical and civil engineering, and construction-management services. Geosyntec is an employee-owned, multi-disciplinary, environmental and engineering consulting firm that provides professional services to public and private sector clients.

Method to Accomplish the Services

As described above, Geosyntec's approach to providing CQA services has yielded success in previous projects at the site. We have found that a construction team that communicates frequently and openly is a successful team. Geosyntec's approach to this project will be similar to those successfully completed projects while tailored to the unique aspects of this partial final closure and groundwater protection system. Geosyntec understands the importance of incorporating the specified materials and following the



proper installation procedures when constructing landfill liner and cover systems. Our team is adept at providing thorough review of submittals and well-documented observation during construction. Geosyntec's CQA Manager will be actively involved in all aspects of the project. He will attend each bi-weekly meeting in person, which will provide the opportunity to be on-site with the Engineer, construction manager (CM), and CQA monitors to observe conditions. Geosyntec's experienced CQA monitors will resolve construction related issues in the field quickly, notifying County personnel and CM immediately when their intervention is needed. Geosyntec's approach to these services and communication is exemplified by our close working relationships with the County's staff and the project design engineer, as well as with contractors, liner installers, and other subcontractors who are frequently involved with projects at Tajiguas.

Knowledge & Understanding of Federal/State/County Procedures

Geosyntec takes pride in our understanding of County and State procedures, guidelines and standards pertaining to the environment, and we work to build and maintain excellent working relationships with the County, and other local and State agencies.

Schedule

Geosyntec's approach to scheduling for this project is driven by the need to coordinate CQA activities with those of the contractor. Geosyntec strives to limit CQA monitor time on site to only those periods where it's truly needed for the required certification. An additional requirement is the rapid resolution of submittals and RFIs. Geosyntec targets turnaround of these items within 1 week and frequently achieves a quicker resolution. Finally, Geosyntec targets the complete delivery of CQA reports to RWQCB within 2 weeks of completion of construction and the receipt of final as-builts. Geosyntec has also been successful in past phases in securing a conditional approval from the RWQCB of liner construction so that the County may occupy the subject area even in advance of the review and approval of the CQA report. This timeliness in reporting and approval from RWQCB will be particularly important during this project to avoid disruption to the progress of the resource recovery project (TRRP) which is currently under construction at the Site. Geosyntec's ongoing involvement in the environmental aspects of TRRP and our understanding of the constraints of that project will be a benefit to the County during the performance of our services.

2. PROJECT TEAM ORGANIZATION AND KEY PERSONNEL

Geosyntec has assembled a dynamic and focused team to provide the proposed CQA services for the County. In this section and in the following organization chart, we present our project team member qualifications and their roles on the contract.

Geosyntec's **CQA Project Manager will be Mr. Jeff Fijalka, PE**, a civil engineer with over 5 years of local (Southern California) experience. When necessary, Mr. Fijalka will consult

with the **Project Director, Mr. Chris Conkle, PE, GE**, a civil and geotechnical engineer with over 15 years of professional experience in Southern California. Mr. Conkle, who served a leading role in the CQA management of six past groundwater protection projects at Tajiguas Landfill, will also provide internal quality control and will facilitate resolution of technical and other issues that might arise during the project.

Doug Hamilton will serve as Lead CQA Monitor for the project, and will be assisted as needed by senior technicians, Aaron Reeder and/or Cory Miller, both of whom have extensive experience with earthworks and geosynthetic monitoring at numerous sites. The same CQA Project Manager and Field CQA Monitor(s) will participate in the project for the duration of the construction. Unless the project is significantly delayed, the individuals identified in this proposal will be the key personnel assigned to the project. We will not substitute personnel without prior approval of the County. The Geosyntec project team is summarized below. Detailed resumes are included in Section 7 at the end of this proposal.



Key Personnel Bios



CHRIS CONKLE, PE, GE, PROJECT DIRECTOR

- Professional Engineer California No. C70923; California GE No. 2926
- CQA Project Manager/Project Direction for last 6 liner expansion project at the Site
- Landfill CQA for new liner systems, partial, and clean closures
- Landfill engineering including liner interface shear strength, slope stability, and seismic performance
- Geotechnical engineering of landfills, landslides, foundation systems, earth retention systems, and embankments
- Civil engineering and hydrologic design



JEFF FIJALKA, PE, CQA MANAGER

- Professional Engineer California No. C84990
- CQA Project Manager for Tajiguas Phase IIIC berm construction and liner installation
- CQA project management for temporary landfill cover installation
- Civil design involving geosynthetics
- Engineering support for public works construction projects
- Petroleum spill prevention compliance at landfills
- Slope stability analysis for landfill expansions



DOUG HAMILTON, LEAD CQA MONITOR

- Lead CQA Monitor for 3A and 3B liner construction at Tajiguas
- Geosynthetics CQA monitoring of over 72 million ft² of geosynthetics



AARON REEDER, CQA MONITOR

- CQA Monitor on waste containment projects including traditional soil and geosynthetic cover systems as well as exposed geomembrane cover systems
- Waste containment system construction, landfill gas system installation and maintenance, environmental remediation, and contractor oversight



CORY MILLER, CQA MONITOR

- CQA Monitor for various geosynthetic installations
- Landfill gas system construction



YONAS ZEMUY, PE, TECHNICAL SUPPORT

- Professional Engineer California No. C79713
- Geosyntec's leading technical expert in monocover design and permitting
- Landfill CQA for new liner systems, partial, and clean closures
- County waste management master planning
- Planning of landfill investigations
- Design of landfill liners and covers

3. QUALIFICATION AND EXPERIENCE COMPETENCE

Founded as a landfill engineering firm, incorporated in Florida in 1983, Geosyntec Consultants, Inc. has 88 offices in the continental United States and internationally. Geosyntec has 30 years of local experience in the closure and post-closure maintenance, preparation of final fill plans, preparation of final cover design and CQA of hundreds of landfill expansions and closure projects. Our exceptional understanding of environmental regulations and application of leading-edge technology uniquely qualifies Geosyntec to support the County's Partial Final Closure and Groundwater Protection System project.

Geosyntec has provided CQA during the construction of numerous similar projects at the Tajiguas Landfill, including six previous groundwater protection system expansions (Phases 2A, 2B, 2C, 3A, 3B, and 3C) as well as other improvement projects at the site (e.g. Out of Channel Basin and Leachate tank foundations). Mr. Conkle served as the CQA Manager/Project Manager for each of these projects all of which were completed on time and without construction related claims. **Geosyntec's CQA reports have been readily approved by the Regional Water Quality Control Board without comment.** The timely completion and approval of these reports has allowed the County to occupy the new phases of the groundwater protection system prior to the wet season in each case.

Geosyntec has successfully provided CQA services on similar projects with SWT Engineering serving as Design Engineer to the County. In addition, Geosyntec has experience working with the selected contractor for this project (Whitaker) on the most recent liner expansion project at the site, Phase IIIC. A summary of Geosyntec's previous experience at Tajiguas Landfill is provided in **Table 1** below.

TABLE 1: CQA SERVICES AT TAJIGUAS LANDFILL

| Groundwater Protection System Phase | Date | Contractor | Geosynthetics Installer | Designer | Geotechnical Engineer |
|-------------------------------------|-----------|-----------------------|-------------------------|----------|-----------------------|
| 2A | 2008 | Raminha | Great Basin | SWT | Geosyntec |
| 2B | 2009 | Whitaker | ECA | SWT | Geosyntec |
| In Channel/Out of Channel Basin | 2010-2011 | R. Burke Construction | - | SWT | Geosyntec |
| 2C | 2011 | Papich | D&E | SWT | Geosyntec |
| 3A | 2012 | Raminha | D&E | SWT | Geosyntec |
| 3B | 2014 | Papich | D&E | SWT | Geosyntec |
| 3C | 2018 | Whitaker | ECA | SWT | Geosyntec |



Project References

Provided in **Table 2** is a list of client references who are familiar with Geosyntec’s recent Southern California CQA experience. Each will attest to the qualifications of our firm and our personnel.

TABLE 2: PROJECT REFERENCES

| Project | Client | Value (\$) | Contact Information |
|---|--|------------|---|
| Tajiguas Sanitary Landfill Liner Expansion CQA Services Phase IIIC | County of Santa Barbara Resource Recovery and Waste Management | \$130,000 | Todd Curtis 805-882-3621 tcurtis@cosbpw.net |
| Tajiguas Sanitary Landfill Compliance Monitoring Services | County of Santa Barbara Resource Recovery and Waste Management | \$156,000 | Melissa Nelson 805-882-3625 mnelson@cosbpw.net |
| Savage Canyon Landfill Phase 3A Construction Quality Assurance & Engineering Support Services | City of Whittier | \$350,000 | Phuong Nguyen 562-567-9507 pnguyen@cityofwhittier.org |
| Sunshine Canyon Landfill | Republic Services, Inc. | \$93,566 | Michael Beaudoin 480-718-6350 mbeaudoin@republicservices.com |
| Waste Management Unit 2 Partial Final Closure, Prima Descheca Landfill | OC Waste and Recycling | \$839,109 | David Tieu 949-728-3047 David.Tieu@ocpw.ocgov.com |
| Taft Recycling and Sanitary Landfill | Kern County Waste Management | \$450,000 | Bryon Smith 661-862-8908 smithb@co.kern.ca.us |
| Olinda Alpha Landfill | OC Waste and Recycling | ~\$500,000 | David Wong 714-993-0608 david.wong@ocwr.ocgov.com |

Relevant Project Experience

Tajiguas Sanitary Landfill Liner Expansion CQA Services, Santa Barbara County, California. Santa Barbara County Public Works Department, Resource Recovery and Waste Management Division. (2008-2018)

Geosyntec has provided landfill liner CQA services at Tajiguas Landfill for over more than 10 years during the construction of Phases 2A, 2B, 2C, 3A, 3B, and 3C of the groundwater protection system. In total, over 25 acres of composite landfill liner was installed. Both Geosynthetic Clay Liner (GCL) and



Geomembrane placed along an engineered fill berm during construction of Phase IIIC.

Compacted Clay Liner (CCL) were utilized. During each project, Geosyntec documented the geosynthetic products used by the contractor including geotextile, GCL, geomembrane, and geocomposite products. Geosyntec coordinated conformance testing of the products to ensure that the materials installed by the contractor met the project specifications. During geomembrane seaming Geosyntec field personnel conducted nondestructive and destructive testing of the contractor's work to ensure high quality and environmentally safe products were installed. In areas where low-permeability CCL was installed, Geosyntec evaluated and tested the fill to ensure it was placed at the proper moisture content, density, and that the soil had the proper index properties. These activities also included coordination of a demonstration fill, which allowed the contractor and Geosyntec to find an acceptable means of construction before major construction activities began. This approach allowed the project to proceed smoothly. The above field testing and observation activities, which were coordinated to meet the requirements of Central Coast Regional Water Quality Control Board (RWQCB), were documented in a CQA Report for review by the County of Santa Barbara and the RWQCB. Our report for each phase was readily approved by the RWQCB and we maintain an excellent working relationship with the RWQCB both through our CQA work on site and our compliance monitoring work on behalf of the County which is described below.

All of the liner projects over this period were completed on time and without construction-related claims. Geosyntec's CQA reports have typically been received by the RWQCB

within weeks of completion of construction. This expedited reporting allowed for quick regulatory review and occupancy of the cell by the County on schedule.

In each of the last 3 phases an approval to occupy the cell was received within 1 month of the completion of liner system construction. In the case of Phase IIIB, approval to occupy the cell was issued by the RWQCB prior to the completion of the cell based on Geosyntec’s relationship with the RWQCB and the commitment which we fulfilled to deliver the CQA report within two weeks of the completion of construction.

TABLE 3: TIMELY COMPLETION OF CQA SERVICES AT TAJIGUAS LANDFILL

| Groundwater Protection System Phase | Date of Completion of Liner System Construction | Date of Geosyntec Request for Conditional Approval | Date of Submittal of Final CQA Report | Approval to occupy Cell Granted by RWQCB | Time from Completion of Liner System to Approval to Occupy by RWQCB |
|-------------------------------------|---|--|---------------------------------------|--|---|
| IIIA | 8-27-12 | - | 9-10-12 | 9-24-12 | 28 days |
| IIIB | 10-13-14 | 10-6-14 | 10-21-14 | 10-9-14 | 0 days |
| IIIC | 7-10-18 | 7-9-18 | 9-27-18* | 7-17-18 | 7 days |

*Draft CQA was issued on 7-27-18. Final submittal withheld due to as-built survey.

Tajiguas Sanitary Landfill Compliance Monitoring Services (2017)

Geosyntec constructed a single database for the five County-owned landfills to streamline data collection, transcription, storage, analysis and reporting in compliance with each landfill’s Groundwater Monitoring & Reporting Program (M&RP). Since 2017, Geosyntec continues to manage the County-owned landfill database and imports additional historical information including, but not limited to, landfill gas, flare, leachate, soil lithology, waste limits, liner extent and limits, and landfill water production well data to support a holistic approach to environmental data management and evaluation at each Landfill. Geosyntec’s support has expedited field data collection efforts, expedited transcription into the database and reduced errors, incorporated data validation, improved data evaluation and met compliance reporting timelines. Additionally, Geosyntec prepared an M&RP compliance sampling matrix and workflow for the County to support streamlined field compliance efforts. Overall, Geosyntec support has reduced County staff labor effort and cost associated with M&RP compliance and Landfill data management.



Sunshine Canyon City/County Landfill Closure Turf CQA – Sylmar, California (2018)



Installation crew spraying infill sand into the newly installed closure turf.

Republic Services, the owner and operator of Sunshine Canyon Landfill, contracted Geosyntec to provide construction quality assurance (CQA) services during the installation a temporary cover system along an approximately 4-acre waste fill slope at this active Class III landfill. The temporary cover was comprised of a 50-mil LLDPE structured geomembrane installed over prepared

subgrade soil and overlain by closure turf with infill sand placed between the synthetic tufts of the turf. Geosyntec provided an engineering technician onsite full-time for the duration of the project. Prior to geomembrane deployment, the Geosyntec CQA technician observed and documented subgrade preparation and performed nuclear density testing to evaluate compliance with specifications requirements. During geosynthetic installation, the onsite technician confirmed material deliveries, observed geomembrane and turf placement, and documented seaming and testing activities. Throughout the project, the Geosyntec project manager attended weekly construction status meetings, reviewed contractor submittals, and maintained communication with the client, the field staff, and the design engineer. Additionally, Geosyntec provided conformance testing for the subgrade soil and geosynthetic materials. Upon completion of the project, Geosyntec prepared a comprehensive CQA Report describing the services performed, presenting the results of all required testing, and certifying that the project was constructed in general conformance with the project documents.

Savage Canyon Landfill Phase 3A CQA & Engineering Support - Whittier, California (2018)



Liner system installed as part of the Phase 3A Construction.

Geosyntec Consultants, Inc. provided Construction Quality Assurance (CQA) and Engineering Support services for the approximately 4-acre Phase 3A construction project at Savage Canyon Landfill, an active Class III landfill in Whittier, California. As a part of the CQA services, Geosyntec monitored the construction and installation of mass excavation and unclassified fill, geosynthetics, leachate collection and

removal system, surface water management system, perimeter access road, and the re-abandonment of oil wells.

Geosyntec’s CQA program included review of contractor submittals and corresponding responses; monitoring installation of earthworks, leachate collection and removal system, surface water management system, access road, and geosynthetics; performing conformance tests for earthworks and geosynthetics; review of design clarifications and modifications; monitoring the re-abandonment of existing oil wells; and performing in-grade geological mapping. In addition, Geosyntec prepared the final CQA report documenting construction of the Phase 3A project.

Waste Management Unit 2 (WMU2) Partial Final Closure, Closure Construction Quality Assurance - Orange County, California (2016)

The WMU2 closure was necessitated by the construction of a highway through the Prima Deshecha Landfill. This 3.6-mile link between San Clemente and San Juan Capistrano is the largest completed project in Orange County Public Works history. The roadway crosses a portion of landfill where as much as 120’ of waste had previously been placed. Because of concerns with excessive settlements of the roadway and



long-term maintenance, waste under the alignment was excavated as part of a partial final closure of the unit. The excavation and relocation of approximately 850,000 yd³ of waste is one of the largest ever completed. The remaining in-place waste adjacent to the alignment was closed with an approximately 14-acre composite liner system. The composite liner system consists of (from top to bottom): 2’ thick layer of protective cover soil, a 300-mil geocomposite cushion layer, a 60-mil double-sided textured LLDPE geomembrane, a 300-mil geocomposite cushion layer, and a 2’ thick foundation soil layer. In addition to serving as the geotechnical engineer for the larger roadway project and the designer of the WMU2 waste excavation, Geosyntec provided construction quality assurance (CQA) services during waste excavation, subgrade preparation, foundation soil layer construction, geosynthetics installation, and protective cover soil placement. The closure construction posed many challenging and unique conditions including the construction of a foundation layer over waste on a 1.5:1 (H:V) slope up to 120’ high with deployment of three layers of geosynthetics over this same slope.

Additionally, uncertainties regarding the actual base of waste excavation dictated that adjustments to the closure design were made during construction including the height of lined slopes and location of drainage. The waste excavation and cover system installation were completed on schedule, without impact to the highway construction schedule.

Taft Recycling & Sanitary Landfill Module 2 Expansion - Kern County, California (2015)



CQA during liner installation at Taft Landfill.

Module 2 expansion at Taft Recycling and Sanitary Landfill, (Taft RSLF) encompassed approximately 10 acres with over 1,000,000 yd³ of air space capacity. Geosyntec provided design and construction quality assurance (CQA) services to Kern County Public Works Department (KCPWD). As part of the CQA services, Geosyntec performed earthworks monitoring and testing,

geosynthetics documentation and installation observation, observation of non-destructive and destructive geosynthetic testing, and observation of leachate collection and removal systems installation. Geosyntec’s CQA field testing activities included compaction testing and visual classification of fill materials. Throughout the construction process, Geosyntec worked with the contractor to verify qualification testing and obtained conformance samples for laboratory testing and characterization. Geosyntec’s CQA report was approved by the Central Valley RWQCB within a very short period and with no major comments. Geosyntec also provided construction support services to KCWMD on an as-needed basis. Geosyntec’s other major project contributions included a Subtitle D “alternative” liner demonstration which was readily approved by the Central Valley RWQCB and granted an exemption for subgrade material specification, saving KCPWD millions of dollars over the life of the project. Geosyntec’s innovative solutions to address challenging site conditions and regulatory requirements on this project have provided significant long-term cost savings to Kern County.

Foxen Canyon Sanitary Landfill Final Cover Evaluation and Construction, Santa Barbara County Public Works, Resource Recovery and Waste Management Division Santa Barbara County, California (2007)

Foxen Canyon is an 18-acre unlined Class 3 landfill. The final evapotranspirative (ET) soil cover consisted of a 4-ft soil layer overlying a foundation layer. To construct the ET cover, approximately 180,000 yd³ was excavated from an on-site borrow source and limited waste was relocated to meet the design grades. The landfill gas (LFG) system was temporarily shut down and adjustments were made to extend the extraction wells and reinstall lateral/header lines to accommodate



the new ET cover. Concrete drainage channels and erosion control mattings were installed to manage the stormwater conveyance and reduce sediment loss. Geosyntec performed the feasibility study for use of an alternative ET cover system. An established set of criteria was used to compare the different alternatives, including infiltration control, stability, constructability, maintenance, and cost. Through this evaluation, Geosyntec demonstrated this was the most cost-effective cover option that met the regulatory requirements. The alternative to the California prescriptive cover was approved by the Central Coast RWQCB, saving the County from installing a costlier conventional lined cover system. During construction Geosyntec worked with the Central Coast RWQCB to allow the use of on-site soils with a higher plasticity. This eliminated the need to import soil to complete the final cover construction. Geosyntec also provided (CQA) during the construction of the final ET cover. Geosyntec obtained conformance samples of the proposed on-site borrow source and performed in-situ testing of the in-place cover. Geosyntec also performed concrete testing, monitored the LFG system adjustments, and observed the deployment of erosion and sediment control measures.

Olinda Alpha Landfill Phase 1 & 2 Partial Final Closure - Orange County, California (2018)



Phase 1 and 2 Partial Final Closures (PFC) at the Olinda Alpha Landfill (OAL) was constructed using an ET cover. The project was designed to be constructed using owner-supplied material from an on-site soil stockpile, which eliminated the need for soil importation and resulted in large savings (estimated in the millions of dollars) for OC Waste & Recycling. Prior to construction of the ET cover, Geosyntec performed geotechnical field investigation, collected soil samples for laboratory testing and prepared a landfill cover model in support of the

ET final cover system design. Results of the field investigation, laboratory testing, and computer modeling tasks were used to prepare an Alternative Final Cover (AFC) Report. The (AFC) report was reviewed and approved by the regional Water Quality Control Board (RWQCB) and the Local enforcement Agency (LEA) of CalRecycle with no comments. In support of the Phase 1 and 2 PFCs at the OAL, Geosyntec also delineated the limits of the existing waste within Phase 1 and 2 PFC areas. Additionally, Geosyntec prepared a comprehensive Construction Quality Assurance (CQA) plan for the ET cover and miscellaneous civil improvements at the site.

4. PROPOSED METHOD TO ACCOMPLISH THE SERVICES

Based on review of the contract documents and construction quality assurance plans for the partial final closure and groundwater protection system, as well as our 30-year history of providing these services for landfill sites throughout Southern California, Geosyntec

prepared the following approach to accomplish the scope of work described in the RFP. Bid documents indicate a total project duration of 60 working day (12 weeks) for the completion of both the partial final closure and the groundwater protection system. Based on our experience with previous similar projects at the site, Geosyntec developed a tentative CQA schedule for these combined construction projects. The estimated CQA schedule is presented in Figure 1 at the end of this proposal.

It is anticipated that construction will begin on or around the beginning of September 2019 and will continue until approximately the end of November 2019. Finalization of the project CQA reports for the partial final closure system components and the groundwater protection system components will occur prior to the end of 2019. Our staffing and cost estimate were developed accordingly. Geosyntec has organized the scope of work into the following tasks:

Task 1: Construction Observation Services

Task 2: Laboratory Testing

Task 3: Project Management

Task 4: Preparation of CQA Report

Task 5: Engineering Support

Task 1: Construction Observation Services

Geosyntec will provide CQA services, limited to CQA monitoring, sampling, field testing, and documenting closure and liner system construction. CQA activities performed by Geosyntec will be in general accordance with the CQA plans for the project and the project plans and specifications. While on site, Geosyntec will be involved in general, earthwork, and geosynthetic field activities. Geosyntec’s experienced CQA monitors will resolve construction related issues in the field quickly, notifying the County and CM immediately when their intervention is needed.

General Field Activities

Throughout construction, Geosyntec’s field CQA Monitors will participate in bi-weekly progress meetings and special meetings as needed. Geosyntec’s personnel will perform daily activities that are routinely performed as part of general field activities. These activities will include the following:

- Interfacing with County and contractor personnel;
- Documenting on-site construction personnel, equipment, and weather conditions;
- Collecting and reviewing documentation as required by the plans and specifications;
- Maintaining a photographic record of construction progress; and
- Maintaining daily field logs and weekly progress reports.

Earthwork Field Activities – Phase 3 Part 2 Partial Final Closure

Geosyntec will monitor and test the earthwork activities to document compliance with the plans and specifications. Geosyntec's CQA activities will include the following:

- Documentation of existing cover thickness in potholes excavated by the contractor;
- Collection of geotechnical test samples of earthwork materials (including on-site borrow materials to be used for foundation soil and protective cover soil), shipping the samples to the testing laboratory as needed, and documenting that final cover soils are obtained from designated locations;
- Monitoring and field testing and sampling during the placement of approximately 10,000 cubic yards of foundation soil placement;
- Observation during the placement of approximately 20,000 cubic yards of protective soil cover material;
- Monitoring protective cover soil placement thickness by observation of hike-up poles; and
- Reviewing the geotechnical laboratory test results for compliance with the specifications.

Earthwork Field Activities – Phase III E Groundwater Protection System

Geosyntec will monitor and test the earthwork activities to document compliance with the plans and specifications. Geosyntec's CQA activities will include the following:

- Collection of geotechnical test samples of earthwork materials (including on-site borrow materials to be used for veneer soil and protective cover soil), shipping the samples to the testing laboratory as needed, and documenting that final cover soils are obtained from designated locations;
- Monitoring and field testing and sampling during the placement of up to approximately 3,000 CY of veneer soil placement;
- Observation during the placement of approximately 4,000 cubic yards of protective soil cover material;
- Monitoring protective cover soil placement thickness by observation of hike-up poles;
- Reviewing the geotechnical laboratory test results for compliance with the specifications.

Geosynthetic Field Activities – Phase 3 Part 2 Partial Final Closure and Phase III E Groundwater Protection System

During the geosynthetic field activities, Geosyntec field CQA personnel will perform daily activities that will include, but are not limited to, the following:

- Documenting delivery of geosynthetics at the site and comparing the delivered inventory against the inventory list prepared at the factory;
- Reviewing the manufacturer's quality control test results for compliance with the specifications;

- Documenting the storage, handling, and placement of geosynthetics delivered to the site and inspecting for damage which may have occurred during shipping and handling;
- Reviewing the laboratory test data for compliance with the specifications;
- Documenting rejection of geosynthetic materials;
- Monitoring and documenting the deployment and installation of the geosynthetic materials and marking repair locations;
- Monitoring trial geomembrane seaming and contractor destructive testing of trial seams;
- Monitoring and documenting production seaming or joining of the adjacent geosynthetics;
- Monitoring and documenting repairs for geosynthetics;
- Monitoring and documenting the non-destructive field testing of production geomembrane seams and other repairs;
- Selecting destructive geomembrane production seam sample locations and documenting their location;
- Reviewing the destructive seam test results for compliance with the specifications;
- Monitoring and documenting the repair of geomembrane production seams that failed either non-destructive or destructive CQA testing criteria.

CQA Special Focus: Cover Thickness Verification

Verifying the thickness of the protective cover soil after placement by comparing a pre- and post-survey can pose a challenge due to the impacts of settlement that occurs between the surveys. While potholing can be performed to verify cover thickness, this introduces the risk of damaging the underlying geosynthetics during the potholing process. To address this, Geosyntec proposes to monitor soil cover thickness during construction by means of cones or PVC pipes placed along the cover to serve as hike-up poles. This will allow direct observation of cover thickness which can be certified within the final construction quality assurance report.



A dozer pushing protective cover soil up a lined slope at Tajiguas Landfill.

This will allow direct observation of cover thickness which can be certified within the final construction quality assurance report.

CQA Special Focus: Oversize Material in Cover

The percentage of oversize material incorporated within soil cover systems has historically been an area of concern for the RWQCB. Full-time observation during material placement, supported by material descriptions and photographic documentation by

Geosyntec's CQA Monitor, will help demonstrate to the RWQCB that no more than a "de minimus" amount of oversized particles as required by the specifications are present in the final cover system.

Staffing Approach

A primary goal of our proposed staffing approach is to limit CQA monitor time on site to only those periods where it's truly needed for the required certification. Although the estimated construction duration is 60 working days, we anticipate that approximately 5 of these days will be dedicated to contractor mobilization and site clearing and grubbing activities. As such, Geosyntec proposes to delay mobilization of the CQA monitor until the start of earthwork activities. Additionally, while it is understood that construction of the cover system and the liner system will occur simultaneously, Geosyntec assumes that for the majority of the project duration these concurrent activities can be effectively observed by a single CQA monitor. We anticipate there may be period of approximately one week in which two separate activities, each requiring full-time observation, may occur concurrently. In response to this, Geosyntec is prepared to mobilize a second CQA monitor to remain onsite for the duration of the overlapping activities.



Geosyntec's CQA Monitor documenting geosynthetic repairs during construction of Tajiguas Phase III C Groundwater Protection System.

Geosyntec will work with the project's Construction Management staff to assist in supplementing our staff by providing limited observation services, such as oversight during placement of protective cover soil, in an attempt to utilize available resources on site, and eliminating the added expense of an additional CQA monitor. In the event that nature of the work requires additional assistance, an additional CQA monitor will be mobilized. Given the assumed schedule, Geosyntec has reserved the services of the lead CQA monitor identified. In the event the lead monitor becomes unavailable over the course of the project he will be replaced temporarily by the other CQA monitors identified.

For Task 1, Geosyntec has budgeted a total of 480 hours (based on 60 days at 8 hours per day) for CQA Monitor time over the course of the 60-day construction period. This includes CQA monitor time onsite for foundation soil and veneer soil placement, geosynthetic deployment and seaming, landfill gas collection system and LCRS installation, and protective cover system placement.

Task 2: Laboratory Testing

Laboratory testing will be performed in general accordance with the project specifications and the CQA plan. Geosyntec has estimated the required laboratory testing quantities based on the engineer’s estimate and the construction quality assurance plan. The assumed test quantities are presented in the following table.

TABLE 3: LABORATORY TESTING QUANTITIES

| Type of Test | ASTM Standard | # of Tests |
|---|---------------|------------|
| Phase 3 Part 2 Partial Final Closure (includes testing of Foundation Soil, Protective Cover Soil, and Aggregate) | | |
| Moisture-Density Relationship | ASTM D 1557 | 6 |
| Particle Size Analysis (Soil) | ASTM D 422 | 6 |
| Particle Size Analysis (Aggregate) | ASTM C 136 | 1 |
| Hydraulic Conductivity | ASTM D 2434 | 1 |
| Soundness | ASTM C 88 | 1 |
| LA Abrasion | ASTM C 131 | 1 |
| Phase III E Groundwater Protection System (includes testing of Veneer Soil, Protective Cover Soil, Anchor Trench Backfill, and Aggregate) | | |
| Moisture-Density Relationship | ASTM D 1557 | 3 |
| Particle Size Analysis (Soil) | ASTM D 422 | 3 |
| Engineering Classification of Soils | ASTM D 2487 | 1 |
| Atterberg Limits | ASTM D 4318 | 1 |
| Particle Size Analysis (Aggregate) | ASTM C 136 | 1 |
| Hydraulic Conductivity | ASTM D 2434 | 1 |
| Soundness | ASTM C 88 | 1 |
| LA Abrasion | ASTM C 131 | 1 |

Geotechnical laboratory testing will be conducted by Excel Geotechnical Testing, Inc., with which Geosyntec has had a long-term working relationship and who has performed the geotechnical testing for the last six groundwater protection system expansions at the site. All geosynthetics laboratory testing will be the responsibility of the geosynthetics contractor. It is assumed that other potential incidental miscellaneous laboratory testing will be the responsibility of others.

Task 3: Project Management

Geosyntec’s Project Manager, Mr. Jeff Fijalka, P.E., will be responsible for directing the project and CQA personnel. Chris Conkle, P.E., G.E., will serve as the Project Director and will periodically assist Mr. Fijalka on technical matters requiring special attention. Both Mr. Fijalka and Mr. Conkle have extensive experience in the various aspects of landfill engineering and construction projects. Mr. Fijalka and Mr. Conkle work in Geosyntec’s Huntington Beach, California office. Additional support staff will be available in

Geosyntec’s Santa Barbara and Huntington Beach offices to periodically perform project administration duties (e.g., invoicing, reproduction, and overnight shipping).

| Jeff Fijalka, CQA Manager Responsibilities | Chris Conkle, Project Director Responsibilities |
|--|--|
| <ul style="list-style-type: none"> • Administer the contract; • Update the existing Site Health and Safety Plan; • Make site visits, including attendance at project kickoff meetings and bi-weekly construction meetings; • Handle CQA contract and administrative matters; • Introduce all project personnel; • Communicate regularly with on-site CQA personnel; • Be responsible for technical aspects of the project related to CQA; • Review the CQA documentation; • Direct CQA operations and communicate directly with the County’s Site Manager and/or Construction Manager; and • Prepare, sign, and seal the CQA certification report. | <ul style="list-style-type: none"> • Technical CQA items that require special attention, such as interface conformance testing and communication with regulatory agencies (if required and approved by the County Project Manager). • Provide senior review of the CQA certification report. |

Geosyntec Approach to Project Communications

Geosyntec’s CQA Manager will be actively involved in all aspects of the project. He will attend each bi-weekly meeting in person. Geosyntec has found that this frequent on-site presence which typically involves observing the site with Engineer, construction manager (CM), and CQA monitor is essential to the successful performance of our services. To assist in maintaining open lines of communication with both the engineer and construction manager, Geosyntec will complete a Bi-Weekly Update Form. This form provides a concise 1-page snapshot of the project from a quality perspective and can be used by the construction manager and contractor alike to plan their activities. The “Outstanding CQA Items” list included in each update will focus the team on items which need to be resolved quickly to avoid impacts to project schedule. The Central Coast RWQCB also concurs with Geosyntec’s particular format as a method of communication of project status.

Staffing Approach

Geosyntec has budgeted 8 hours per week for the CQA Manager and 2 hours per week for the Project Director for the anticipated 12-week duration of the project.

Task 4: Preparation of CQA Report

At the completion of construction, Geosyntec will prepare two separate CQA reports, one for the Phase 3 Part 2 Partial Final Closure, and one for the Phase III E Groundwater Protection System. These reports will document the quality of construction and verify conformance with the project documents. Each report will contain a narrative description of significant aspects of the field and laboratory CQA activities undertaken by Geosyntec.

Geosyntec will include documentation of construction activities (presented on the field logs and weekly reports) as appendices to the final report. The Engineer of Record (i.e., Geosyntec's Project Manager a registered Professional Engineer (P.E.) in the State of California, will sign and seal the final report of CQA field activities. Geosyntec will provide the County with an initial draft of each report within two weeks of the completion of work, pursuing a conditional approval of portions of the work if appropriate and request by the County. Subsequently, Geosyntec will submit the final report to the County within one (1) week after receiving comments from the County. We will provide the County with professional services consistent with the standards of the profession. Our internal quality control program requires that every project deliverable be peer reviewed by a senior member of the firm with appropriate experience and qualifications prior to submittal to the client.

Task 5: Engineering Support

Where requested by the design engineer and/or the project's Construction Manager, Geosyntec will provide input on design changes during construction. In Geosyntec's experience, technical challenges are a fact of life in geotechnical construction. To take the Tajiguas site as an example, previous projects have faced challenges related to stability of interim cut slopes, availability of appropriate gravel sources, availability of geosynthetics, expansive soils, hydraulic conductivity of compacted clays, and interface strengths of liner materials. In each case, Geosyntec's team was able to develop a solution in coordination with other project team members which solved the problem. Geosyntec's close working relationships with contractors, liner installers, and other subcontractors who are frequently involved with projects at Tajiguas are very important in providing these solutions.

For this task, 2 hours of Project Manager time and 1 hour of Project Director time per week of engineering support is presumed to be required to respond to technical matters pertaining to the cover and liner construction that may arise during the project.

Schedule

This proposal is intended to cover the period from the beginning of construction in September 2019 to the completion of construction and finalization quality assurance reports for the project in December 2019. Geosyntec understands the importance of the

maintaining this schedule to avoid negative impacts to other ongoing or planned projects at Tajiguas Landfill. It is imperative that the construction of the cover and liner projects not disrupt the progress of the TRRP project that is currently underway at the Site. Geosyntec assumes that a CQA Monitor will be present on-site full-time during the activities identified in Task 1.

While our assumed schedule indicates that some of these tasks overlap, Geosyntec assumes that one onsite CQA monitor can provide the necessary CQA oversight during overlapping tasks, except as previously described within Task 1 of this proposal. Should it become apparent that additional CQA personnel are needed onsite simultaneously, Geosyntec is prepared to mobilize additional monitors as necessary with the County’s approval. This project will be completed upon Geosyntec’s submittal of final construction quality assurance reports to RWQCB for the Phase 3 Part 2 Partial Final Closure and for the Phase III E Groundwater Protection System.

TABLE 4: PROPOSED CQA SCHEDULE – 60 CQA MONITOR SHIFTS

| Activity | Month | | | | | | | | | | | | |
|--|-------|--|--|---|--|--|---|--|--|--|--|--|--|
| | 1 | | | 2 | | | 3 | | | | | | |
| Mobilization/Clear&Grubb (1 week) | | | | | | | | | | | | | |
| Foundation Soil/Veneer Soil Placement (7 weeks) | | | | | | | | | | | | | |
| Geosynthetics and LFG Collection System Installation (5 weeks) | | | | | | | | | | | | | |
| LCRS Bench Collector and Protective Cover Soil Placement (2 weeks) | | | | | | | | | | | | | |

Note: Schedule based on assumed construction sequencing and construction phase durations.

- No CQA Monitor presence required
- Single CQA Monitor budgeted
- Two CQA Monitors budgeted

5. KNOWLEDGE & UNDERSTANDING OF FEDERAL/STATE/COUNTY PROCEDURES



Since 2003, Geosyntec has maintained a series of Master Services Agreement with the County of Santa Barbara to provide solid waste, hazardous materials and environmental services. The Santa Barbara office of Geosyntec was established in 2000 under the leadership of Santa Barbara-based practitioners and works seamlessly with the firm's Huntington Beach office on significant local projects.

Geosyntec maintains excellent working relationships with the County, other local and State agencies and takes pride in our understanding of County and State procedures, guidelines and standards pertaining to the environment. We have worked closely with most County and State agencies regarding environmental matters and have provided expert testimony regarding application of environmental regulatory issues to site issues. With regard specifically to groundwater protection and landfill closure, Geosyntec's project personnel understand the Title 27/Subtitle D regulatory requirements as well as recent RWQCB interpretations and has well-established working relationships with the relevant regulatory agencies. Geosyntec's project personnel have developed excellent relationships with the relevant state regulators, which includes Ryan Lodge and Martin Fletcher of the Central Coast RWQCB.

6. ADDENDA

Geosyntec acknowledges receipt of Addenda 1 through 3 that were issued for this RFP.

7. KEY PERSONNEL RESUMES

CHRIS CONKLE, PE, GE

ROLE: PROJECT DIRECTOR

OFFICE LOCATION

- Huntington Beach, California

CREDENTIALS

- MS, Geoen지니어ing, UC Berkeley
- BS, Civil Engineering, UC Berkeley
- Professional Engineer Geotechnical, CA No. GE2926
- Professional Engineer Civil, CA No. C70923

RELEVANT TAJIGUAS EXPERIENCE

- Served as CQA Manager for the Tajiguas Phase IIA, IIB, IIC, IIIA, and IIIB landfill liner expansion projects. All five projects were completed on time without and construction-related claims.
- Served as CQA manager for the closure of the existing waste management unit 2 at the Prima Deshecha Landfill during construction of the La Pata Avenue Gap Closure.

Mr. Conkle is a Geotechnical Engineer at Geosyntec with 16 years of experience in landfill, geotechnical, and construction related engineering. He has managed and executed geotechnical investigation, analysis, design, and construction quality assurance (CQA) monitoring projects for a wide variety of geotechnical systems, including landfills, landslide remediation, and engineered slopes. He has performed design and analysis for a number of municipal solid waste landfills, waste containment systems and Superfund sites throughout the United States. This experience include design and CQA services for both liner and final closure projects throughout Southern California.

KEY PROJECTS

Tajiguas Sanitary Landfill, Santa Barbara County, California. Mr. Conkle provided geotechnical design and CQA management roles for the construction of the phase IIA, IIB, IIC, IIIA, IIIB, and IIIC liner expansion projects. During these projects, Mr. Conkle worked effectively with the designer SWT Engineering and the general contractor to produce a construction quality assurance report that satisfied the regional quality control board with minimal comment.

Prima Deshecha Landfill, La Pata Avenue Gap Closure, Orange County, California. In addition to acting as Geotechnical Engineer of Record for several components of this project, Mr. Conkle was the CQA Manager for partial final closure construction at Prima Deshecha Landfill Property. The roadway crosses the existing WMU2 portion of Prima Deshecha and a large paleolandslide, both of which present significant design challenges. Under Mr. Conkle's direction, Geosyntec provided CQA services during waste excavation, subgrade preparation, foundation soil layer construction, geosynthetics installation, and protective cover soil placement.

Los Alamitos Joint Forces Training Base, Los Alamitos, California. Mr. Conkle assisted in preparation of detailed design plans and specification for a new 10-acre solid waste landfill as part of a closure of an existing landfill at the Los Alamitos JFTB. This design included all geotechnical aspects of the project, including geosynthetics, embankment stability, and seismic design. Additionally, Mr. Conkle assisted with the design hydrology, surface water management feature design, and selection of construction best management practices.

JEFFREY FIJALKA, PE

ROLE: CQA MANAGER

OFFICE LOCATION

- Huntington Beach, California

CREDENTIALS

- MS, Civil Engineering, Arizona State University
- BS, Business Management, Arizona State University
- Professional Engineer, Civil, CA No. C84990
- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- Certified Nuclear Moisture/Density Gauge Operator

RELEVANT TIJIGUAS EXPERIENCE

- CQA oversight of Phase IIIC berm construction and liner installation
- Observation of 50,000 cubic yards of unclassified fill placement, field and lab testing, contractor submittal review, and report preparation

Mr. Fijalka is a Project Engineer with Geosyntec’s geotechnical group focusing on geotechnical investigations, construction quality assurance, and civil design. He oversaw the CQA operations during Phase IIIC, the most recent phase of liner construction at Tajiguas landfill in the Spring of 2018, and he served as the CQA Manager for a partial final closure at Sunshine Canyon Landfill during that same time. Additionally, Mr. Fijalka has experience planning and executing field investigations involving cone penetration testing, mud rotary and hollow stem boring, sample collection and logging, field classification of soils, infiltration testing, and pavement assessment. He has also had a leading role in the design of multiple infrastructure repair projects for clients in southern California.

KEY PROJECTS

Tajiguas Landfill Santa Barbara County, California. Mr. Fijalka was responsible for the CQA oversight of Phase IIIC berm construction and liner installation at this county landfill. The project required observation of 50,000 yd³ of unclassified fill placement, geosynthetics installation, field and lab testing, contractor submittal review, and report preparation.

Sunshine Canyon Landfill Sylmar, California. Mr. Fijalka was the CQA project manager for a final closure project including the use of geosynthetics. His responsibilities included oversight of the earthwork observation, geosynthetic installation, field and lab testing, contractor submittal review, and report preparation.

City of Los Angeles On-Call Earthwork Observation and Testing Los Angeles, California. Mr. Fijalka observed earthwork operations and performed field density tests to verify fill compaction during construction of three City of Los Angeles projects: Asphalt Plant No.1 Modernization, LADOT Downtown CNG Fueling and Bus Maintenance Facility, and Lincoln Park Bathhouse and Pool.

ASCON Landfill Huntington Beach, California. Mr. Fijalka designed a berm repair for a breached stormwater retention basin and monitored construction of the repair. Geogrid was used to increase the stability of the soft soil layers beneath the reconstructed berm. In addition, Mr. Fijalka performs quarterly inspections at ASCON Landfill to observe the performance of various slopes, berms, and drainage systems at the site.

DOUG HAMILTON

ROLE: CQA MONITOR LEAD

OFFICE LOCATION

- Boca Raton, Florida

CREDENTIALS

- Certified Geosynthetic Certification Institute – Inspector Certification Program (GCI – ICP). Geosynthetic Materials and Clay Liner, December 2006, No. 138-06 Recertification December 2011
- Troxler Electronics Nuclear Moisture/Density Gauge Operation
- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- Certified DOT IATA Hazmat Transportation

RELEVANT TAJIGUAS EXPERIENCE

- Lead CQA Monitor for Tajiguas Phase IIIA and IIIB liner expansions
- 26 years of CQA monitoring experience related to earthworks and geosynthetics construction.
- Inspection of over 69 million square feet of several types of geomembranes
- Field soils testing experience including in-place moisture/density, and visual classification

Mr. Hamilton is Site Manager II at Geosyntec with over 28 years of experience in comprehensive landfill engineering field services and CQA. His responsibilities include QA/QC oversight and inspection; CQA Plan implementation; review of contractor submittals; construction documentation including the preparation of daily and weekly progress reports, meeting agendas, and minutes; and developing test result databases. Mr. Hamilton’s municipal solid waste (MSW) landfill construction experience includes oversight of landfill gas extraction systems, multi-layer liner systems, and low permeability soil and geosynthetic capping systems. Mr. Hamilton has provided construction quality assurance (CQA) oversight for over 69,398,800 ft² of both smooth and textured High-Density Polyethylene (HDPE), Very Low-Density Polyethylene (VLDPE), and Linear Low-Density Polyethylene (LLDPE) and Polypropylene (PP), polyvinyl chloride (PVC), and spray asphaltic geomembranes (SAG). In addition, Mr. Hamilton has provided CQA monitoring services for the installation of geotextiles, geogrids, geonets, geocomposite, and geosynthetic clay liners.

KEY PROJECTS

Tajiguas Sanitary Landfill, Cell IIIA and IIIB, Santa Barbara, California. Mr. Hamilton provided CQA of geomembrane, low permeability layer, drainage gravel, LCRS system, and protective cover soil. Responsible for performing field moisture/density tests, visual classification, and conformance sampling of engineered soil layers. Maintained a test database that assisted with client-CQA Manager-contractor communication.

Municipal Solid Waste Landfill Closure Keene Road Parcel 1 and 2 Class III Closure, Apopka, Orange County, Florida. Mr. Hamilton provided CQA of 2,700,000 ft² of 50mil super gripnet and 40mil smooth LLDPE geomembranes. His responsibilities included performing field nuclear moisture/density testing on the compacted fill material of the subgrade. CQA of geomembrane, geotextile and protective cover material and gas collection system installation, also responsible for the installation of down chutes and drainage aggregate. A PDA was used for the efficiency and quality of data collected.

AARON REEDER

ROLE: CQA MONITOR

OFFICE LOCATION

- Kennesaw, Georgia

CREDENTIALS

- Certified Nuclear Moisture/Density Gauge Operator
 - OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
 - Certified ISCO HDPE Pipe Fusion Technician
 - Certified First Aid/CPR, American Red Cross
-

Mr. Reeder is a Senior Technician I at Geosyntec with over nine years of construction experience with seven years of experience focused on waste containment system construction, CQA and landfill gas system installation and maintenance, environmental remediation, and contractor oversight. He has performed CQA services on numerous waste containment projects including traditional soil and geosynthetic cover systems as well as exposed geomembrane cover systems. He has served in a number of roles for LFG construction work, including a pipe fusion operator, heavy equipment operator and CQA oversight.

KEY PROJECTS

Sunshine Canyon Landfill, Sylmar, California. Mr. Reeder provided CQA oversight during construction of a 5-acre single composite ClosureTurf® cap system. This included the observation and testing of placed soils for liner subgrade and protective cover soils, as well as observation and CQA of approximately 218,000 ft² of geosynthetics installation including the low linear density polyethylene (LLPE) geomembrane and ClosureTurf® system.

Duke Energy, Cells 3 and 4, CCR Disposal Facility, L.V. Sutton Energy Complex, Wilmington, North Carolina. Mr. Reeder provided CQA oversight during construction of two 10-acre double composite lining systems including the observation and testing of placed soils for subgrade, low-permeability soil liner, and protective cover soils systems totaling approximately 96,800 yd³. Mr. Reeder also performed observation and CQA of approximately 3,485,000 ft² of geosynthetics installation including geosynthetic clay liner (GCL), HDPE geomembrane, geonet composite drainage layer, as well as leachate collection systems.

Mesquite Creek Unit 2 Phase IV North Liner System Solid Waste Disposal Facility, Waste Management of Texas, New Braunfels, Texas. Mr. Reeder provided CQA oversight during construction of an 8-acre single composite lining systems including the observation and testing of placed soils for low-permeability clay liner, and protective cover soils systems totaling approximately 30,000 yd³. Mr. Reeder also performed observation and CQA of approximately 348,480 ft² of geosynthetics installation including HDPE geomembrane, geonet composite drainage layer, leachate collection systems and protective cover soil.

CORY MILLER

ROLE: CQA MONITOR

OFFICE LOCATION

- Boca Raton, Florida

CREDENTIALS

- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- Troxler Nuclear Moisture/Density Gauge
- Duke 2017 Power Safe Training
- Class B CDL Georgia License

Mr. Miller is a Senior Technician I at Geosyntec with over seven years of experience in multiple phases of containment system construction, operations, and closure. His experience includes landfill gas collection and control system (GCCS) construction and operation as well as CQA on numerous landfill projects for new construction and closure. In addition to his GCCS and CQA experience, Mr. Miller holds a Class B Commercial Driver's License with over seven years of commercial truck operation. He also operates small to medium heavy equipment operation such as farm tractors, skid steers, front end loader, and hydrostatic mowers.

KEY PROJECTS

Central Landfill-Phase V, Cell A, Santa Rosa County, Florida. Mr. Miller provided CQA oversight during excavation of Cell A, Leachate Storage Facility Ponds A and B, and Stormwater Pond #2. He oversaw conformance testing of borrow source soil, placement of general fill, and density testing of placed material for approximately 96,950yd³ within Cell A and Leachate Storage Facility Ponds A and B.

Perdido Landfill, Escambia County, Pensacola, Florida. Mr. Miller provided CQA oversight during installation of three HDPE horizontal gas collectors installed at the active face of the landfill as well as bollard installation at the haul route to protect the previously installed gas wells.

Duke Energy Progress, Cells 3, 4, 5, 6, 7, and 8 / CCR Disposal Facility, L.V. Sutton Energy Complex, Wilmington, North Carolina. Mr. Miller provided CQA oversight during construction of six, 10-acre double composite lining systems including: 410,045 yd³ subgrade; 59,094 yd³ low-permeability soil liner, GCL, 5,003,710 ft² of 60-mil HDPE textured geomembrane liner, geonet composite drainage layer, leachate collection systems and protective cover soil.

Onondaga Lake Industrial Landfill & Lake Bottom Subsite Closure, Syracuse, New York. Provided third party CQA oversight during the placement of the composite liner cap including approximately 362,000 yd³ of leveling layer soils, installation of 2,180,000 ft² composite cap system

YONAS ZEMUY, PE

ROLE: SENIOR TECHNICAL SUPPORT

OFFICE LOCATION

- Huntington Beach, California

CREDENTIALS

- MS, Geotechnical Engineering, UCLA
- BS, Civil and Environmental Engineering, UCLA
- Professional Engineer, Civil, CA No. C79713
- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- USACE Construction Quality Management (CQM)

RELEVANT TAJIGUAS EXPERIENCE

- Managed several CQA projects during landfill cover constructions in California,
- Taft Landfill Module 2 CQA and engineering support during final closure of Phase I Olinda Alpha landfill.
- Prepared detailed technical specifications and CQA plans that gained regulatory approval with little to no changes

Mr. Zemuy is a Senior Engineer with Geosyntec with over 15 years of experience in landfill CQA services and geotechnical engineering. His expertise includes relevant experience with landfill fieldwork, laboratory testing programs, interpretation of compaction, density and moisture content testing in-situ subsurface conditions drilling operations, soil classification and borrow-source evaluations. Mr. Zemuy's experience includes providing civil and geotechnical engineering support, landfill closure construction and post-closure maintenance and construction CQA services during landfill cover construction; Waste excavation and placement of waste, construction of new landfill cells. Mr. Zemuy has managed these services for several local government projects including clients such as OC Waste & Recycling, City of Whittier, City of Los Angeles (Bureau of Sanitation) and Kern County.

KEY PROJECTS

Taft Recycling and Sanitary Landfill (TRSL), Taft, California. Geosyntec provided full-design services for a lateral extension, grading and drainage work, landfill gas and leachate collection system. Mr. Zemuy managed the preparation of design/construction drawings, design report and technical specifications. The project involved extensive grading work, landfill phase development, relocation of an existing waste trench, and preparation of a comprehensive design report. Geosyntec also provided full CQA services during the construction of Module 2, TRSL. Mr. Zemuy managed the CQA program, served as the technical lead for the project and prepared detailed CQA report in accordance with Title 27 of the California Code of Regulations. The design and construction of Module 2, TRSL was approved by the RWQCB in an expedited manner.

Olinda/Alpha Landfill, Orange County, California. Mr. Zemuy provided construction support and earthworks construction quality assurance (CQA) services during the repair of a distressed section of the main access road. Mr. Zemuy monitored and documented construction activities, collected soil samples, and performed field testing of compacted structural fill to evaluate compliance with the project specifications. Additional responsibilities included: reviewing the drawings and the layout of the secondary containment systems and evaluating the areas and volumes of the secondary systems, as well as the area and volume of ASTs, preparation of the calculation package and draft SPCC plan.

ATTACHMENT A-2

June 14, 2019

Mr. Todd Curtis, P.E.
County of Santa Barbara
Public Works Department
130 E. Victoria St. Suite 100
Santa Barbara, California 93101

**Subject: Construction Quality Assurance Services Tajiguas Landfill
Phase 3 Part 2 Partial Final Closure & Groundwater Protection
System Phase III E Construction Project No. 129913/828380**

Dear Mr. Curtis:

1. INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) is pleased to submit this fee proposal to provide Construction Quality Assurance (CQA) services for the subject project. This proposal is provided in response to the Request for Proposal issued by Santa Barbara County (the County).

We understand that the County is seeking services of a qualified consultant to provide CQA services in support of construction of the Phase 3 Part 2 Partial Final Closure and Phase III E Groundwater Protection System project. This letter contains Geosyntec's proposed fee schedule and brief project approach in the form of scope of work, schedule, and cost estimate.

2. SCOPE OF WORK AND SCHEDULE

Geosyntec has organized the scope of work into the following five tasks:

- **Task 1:** Construction Observation Services
- **Task 2:** Laboratory Testing
- **Task 3:** Project Management
- **Task 4:** Preparation of CQA Report
- **Task 5:** Engineering Support

Task 1: Construction Observation Services

Geosyntec will provide CQA services limited to: CQA monitoring, sampling, field testing, and documenting cover and liner system construction. CQA services performed by Geosyntec will be in general accordance with the CQA plan for the project and the project plans and specifications. While on site, Geosyntec will be involved in general, earthwork, and geosynthetic field activities.

For Task 1, Geosyntec has budgeted a total of 480 hours (based on 60 days at 8 hours per day) for CQA Monitor time over the course of the 60-day construction period. This includes CQA monitor time onsite for additional foundation soil and veneer soil placement, geosynthetic deployment and seaming, landfill gas collection system and LCRS system installation, and protective cover soil placement.

Task 2: Laboratory Testing

Laboratory testing will be performed in general accordance with the project specifications and the CQA plan. Geosyntec assumes that the following laboratory measurements will be performed:

- Moisture-Density Relationship by ASTM D 1557
- Particle Size Analysis by ASTM D 422
- Atterberg Limits by ASTM D 4318
- Engineering Classification of Soils by ASTM D 2487

Geotechnical laboratory testing will be conducted by Excel Geotechnical Testing, Inc., with which Geosyntec has had a long-term working relationship and who has performed the geotechnical testing for several of the past groundwater protection system expansions at the site. All geosynthetics laboratory testing during Phase II will be the responsibility of the geosynthetics contractor. It is assumed that other potential incidental miscellaneous laboratory testing expenses will be the responsibility of others.

Task 3: Project Management

Geosyntec's CQA Manager, Mr. Jeff Fijalka, P.E., will be responsible for directing the project and CQA personnel. Mr. Chris Conkle, G.E., P.E. will serve as the Project Director and periodically assist Mr. Fijalka on technical matters requiring special attention.

Geosyntec has budgeted 8 hours per week for the CQA Manager, 1 hour per week of assistance provided by the Project Administrator, and 2 hours per week for the Project Director for the course of the project. It is assumed that construction will begin in early September 2019 and continue through November 2019 (a duration of approximately 60 working days or 12 weeks).

Task 4: Preparation of CQA Reports

At the completion of construction, Geosyntec will prepare the final CQA reports that will document the quality of construction in general accordance with the project documents. The reports will contain a narrative description of significant aspects of the field and laboratory CQA activities undertaken by Geosyntec. Geosyntec will include documentation of construction activities (presented on the field logs and weekly reports) as appendices to the final report. One report each will be prepared for Phase 3 Part 2 Partial Final Closure and the Phase IIIE Groundwater Protection System.

The Engineer of Record (i.e., Geosyntec's Project Director), a registered Professional Engineer (P.E.) and Geotechnical Engineer (G.E.) in the State of California, and Geosyntec's CQA Manager, also a Professional Engineer (P.E.) in the State of California, will sign and seal the final report of CQA field activities. Geosyntec will provide the County with an initial draft of the report within two weeks of the completion of the cover and liner installations. Subsequently, Geosyntec will submit revised reports to the County within one (1) week after receiving comments from the County.

Task 5: Engineering Support

Additionally, 2 hours of Project Manager time and 1 hour of Project Director time per week of technical support is presumed to be required to respond to technical matters pertaining to the cover and liner construction that may arise during the project.

Schedule

Geosyntec assumes that a CQA Monitor will be present on site full time during foundation soil and veneer soil placement, geosynthetic deployment and seaming, landfill gas collection system and LCRS system installation, and protective cover soil placement.

3. COST ESTIMATE

This fee proposal is intended to cover the period from the beginning of construction in September 2019 to the completion of construction and finalization of the CQA reports in December 2019. If the actual construction schedule differs, Geosyntec reserves the right to renegotiate the rates provided in our attached rate sheet or submit a change order request for the anticipated additional scope of work.

Assumptions

Geosyntec has made the following assumptions in preparing the cost estimate:

- **Project Documents:** The County will make available a sufficient number of copies of the project documents (including a set of full-size drawings) for the site personnel at the pre-construction meeting.
- **Health and Safety Plan:** The owner or contractor will provide: (i) their own necessary Health and Safety Plan for the scope of work described herein; and (ii) any necessary monitoring equipment. Geosyntec will develop its own Health and Safety Plan for the CQA activities carried out by Geosyntec personnel.
- **Expenses:** Geosyntec will invoice costs for expenses (including vehicle, per diem, mileage, and other project-specific purchases and expenses). Geosyntec details these expenses in the attached cost breakdown tables.
- **Travel:** Geosyntec will bill travel expenses at cost plus 12% markup; however, Geosyntec will not bill the County for costs associated with personnel rotation travel, should it occur.
- **Charged Time:** Hours worked on the project will be billed at the rates indicated in the attached Schedule of Fees (these rates are also utilized in the project cost build-up). The cost estimate assumes that CQA monitors are required to perform work no more than 8 hours per day and will be paid based on prevailing wage laws. Overtime rates are provided in the fee Schedule. If CQA staff work federal statutory holidays (i.e., Thanksgiving Day, Christmas, etc.), the rates provided will be doubled for hours worked on these days, in accordance with prevailing wage laws.
- **Accommodations and Meals:** Geosyntec will bill a per diem of \$76 per person per calendar day for meals. In addition, Geosyntec will bill for required lodging at \$168 per calendar day per person. In the event of inclement weather or construction delays, Geosyntec will bill for accommodations for on-site personnel regardless of days not worked.
- **Vehicle:** Geosyntec proposes to provide a rental/company vehicle for use by Geosyntec CQA personnel on site. The estimated costs for this vehicle (\$625 per week), included in the budget estimate, include the costs of fuel and maintenance.
- **Consumables:** Geosyntec estimates that \$1,000 for the project will cover the cost of field supplies (small tools, markers, paint, soil sample bags, photographs, computer supplies, etc.), and will be billed at cost plus 12% markup.
- **On-Site Facilities:** Geosyntec CQA personnel will require space for office work, power, and small equipment storage while on site. Geosyntec assumes that the County will provide these facilities.

- **Field Equipment:** Geosyntec will provide a nuclear moisture/density gauge for use by CQA personnel. The estimated cost indicated in Table 3 for these items includes shipping costs to and from the site and includes the total rental charges for the equipment. Geosyntec assumes that the County will provide a proper overnight storage area for the nuclear gauge, which requires special handling and lockdown.
- **Change Orders:** Changes to the scope of work for CQA services (including number of working days, field monitors, and laboratory testing requirements) must be approved in writing between the County and Geosyntec. Changes can be approved on a Geosyntec Field Change Order Form or an appropriate County form.
- **Field and Laboratory Testing:** Geosyntec developed the cost estimate assuming that the field and laboratory testing requirements and material quantities presented in this proposal are appropriate. Additional testing, if required due to failing materials or other reasons, will be conducted per the rates in this proposal with County approval prior to conducting the tests.
- **Meetings:** The fee estimate assumes the following meetings. The CQA Manager and onsite CQA Monitor will attend one project kickoff meeting. The CQA manager and onsite CQA Monitor will attend six bi-weekly progress meetings throughout the duration of the project.

Proposed Fee

Geosyntec proposes to bill for its services on a time and material basis. An estimate of the fee breakdown is included in Tables 1 through 4. Tables 4 is subdivided into two parts (Table 4.a reflecting estimated laboratory costs pertaining to Phase 3 Part 2 Partial Final Closure and Table 4.b reflecting laboratory costs pertaining to Phase IIIE Groundwater Protection System). The estimated cost for providing Geotechnical Engineering services over the 60 working day duration of the project is **\$176,688**. Geosyntec will invoice costs for expenses incurred related directly to providing this CQA and engineering support.

Closing

Geosyntec is enthusiastic about working with the Santa Barbara County Public Works Department on this important project. Please contact either Chris Conkle or Jeff Fijalka at the numbers provided below if you have any questions or comments or if you need additional information.

Sincerely,

Geosyntec Consultants



Chris Conkle, P.E., G.E. - Project Director

Direct: (714) 465-1214

E-mail: CConkle@Geosyntec.com



Jeff Fijalka, P.E. - CQA Manager

Direct: (714) 465-1236

E-mail: JFijalka@Geosyntec.com



Gregory T. Corcoran, P.E.

Authorized Signatory

Direct: (858) 716-2905

E-mail: GCorcoran@Geosyntec.com

Attachments:

- **Figure 1 Proposed Schedule**
- **Cost Estimate Breakdown Tables 1 - 4**
- **Geosyntec 2019 Rate Schedules**

FIGURE 1: PROPOSED SCHEDULE

| PROPOSED CQA SCHEDULE – 60 CQA MONITOR SHIFTS | | | | | | | | | | | | |
|--|-------|--|--|--|---|--|--|--|---|--|--|--|
| Activity | Month | | | | | | | | | | | |
| | 1 | | | | 2 | | | | 3 | | | |
| Mobilization/Clear&Grubb (1 week) | | | | | | | | | | | | |
| Foundation Soil/Veneer Soil Placement (7 weeks) | | | | | | | | | | | | |
| Geosynthetics and LFG Collection System Installation (5 weeks) | | | | | | | | | | | | |
| LCRS Bench Collector and Protective Cover Soil Placement (2 weeks) | | | | | | | | | | | | |

Note: Schedule based on assumed construction sequencing and construction phase durations.

- No CQA Monitor presence required
- Single CQA Monitor budgeted
- Two CQA Monitors budgeted

TABLE 1: COST ESTIMATE BREAKDOWN

COST ESTIMATE SUMMARY

PHASE 3 PART 2 PARTIAL FINAL CLOSURE AND PHASE IIIE GROUNDWATER PROTECTION SYSTEM

| TASK NO. | TASK TITLE ⁽¹⁾ | TOTAL |
|-------------------------------|--|------------------|
| 1 | Construction Observation Services | \$91,224 |
| 2 | Laboratory Testing | \$9,234 |
| 3 | Project Management | \$26,178 |
| 4 | CQA Report | \$26,078 |
| 5 | Engineering Support | \$7,910 |
| TOTAL | | \$160,625 |
| | Contingency | \$16,063 |
| TOTAL WITH CONTINGENCY | | \$176,688 |

Note: (1) For detailed cost breakdown, see Tables 2 through 4.

TABLE 2: COST ESTIMATE BREAKDOWN
COST ESTIMATE BREAKDOWN
PHASE 3 PART 2 PARTIAL FINAL CLOSURE AND PHASE IIIE GROUNDWATER PROTECTION SYSTEM

| TASK NUMBER | TASK/SUBTASK TITLES | LABOR CATEGORY AND RATE | | | | | | | | | | | | | SUBTOTAL DIRECT EXPENSES | TOTAL |
|-------------|-----------------------------------|-------------------------|---------------------|--|---|---------------------------|----------|----------------|----------------|----------------|---|---|-------------------------------|--|--------------------------|-----------|
| | | CQA PROJECT DIRECTOR | CQA PROJECT MANAGER | CQA MONITOR EARTHWORKS (PREVAILING WAGE) | CQA MONITOR GEOSYNTHETICS (PREVAILING WAGE RATES) | SENIOR STAFF PROFESSIONAL | DESIGNER | ADMINISTRATION | WORD PROCESSOR | SUBTOTAL LABOR | COMMUNICATION FEE (3% of Professional Fees) | SPECIALIZED COMPUTER APPLICATIONS (\$15 per hour) | FIELD EXPENSES ⁽¹⁾ | LABORATORY TESTING EXPENSES (incl. markup) (includes 12% markup) | | |
| 1 | Construction Observation Services | \$256 | \$192 | \$118 | \$118 | \$148 | \$138 | \$70 | \$56 | \$56,856 | \$1,706 | | \$32,663 | | \$34,368 | \$91,224 |
| 2 | Laboratory Testing | | 12 | | | | | | | \$2,304 | \$69 | | \$6,861 | | \$6,930 | \$9,234 |
| 3 | Project CQA Management | 24 | 96 | | | | 12 | | | \$25,416 | \$762 | | | | \$762 | \$26,178 |
| 4 | Preparation of (2) CQA Reports | 18 | 36 | | | 60 | 20 | | 16 | \$24,056 | \$722 | | | \$1,000 | \$2,022 | \$26,078 |
| 5 | Engineering Support | 12 | 24 | | | | | | | \$7,680 | \$230 | | | | \$230 | \$7,910 |
| | SUBTOTAL | 54 | 168 | 320 | 160 | 60 | 20 | 12 | 16 | \$116,312 | \$3,489 | | \$32,663 | \$6,861 | \$44,313 | \$160,625 |
| | Contingency (10%) | | | | | | | | | | | | | | | \$16,063 |
| | TOTAL WITH CONTINGENCY | | | | | | | | | | | | | | | \$176,688 |

(1) A detailed breakdowns for field expenses and laboratory testing expenses is presented in Tables 3 and 4.
 (2) Miscellaneous expenses include reproduction costs and/or shipping costs.
 (3) Markup applies only to subcontract services

TABLE 3: FIELD EXPENSE BREAKDOWN

**FIELD EXPENSE BREAKDOWN (CONSTRUCTION OBSERVATION)
PHASE 3 PART 2 PARTIAL FINAL CLOSURE AND PHASE III E GROUNDWATER PROTECTION SYSTEM**

| FIELD EXPENSES | UNIT | RATE (incl. 12% markup where applicable) | QUANTITY | COST |
|----------------------------------|---------|--|----------|-----------------|
| Nuclear Gauge | monthly | \$800 | 3 | \$2,400 |
| Miscellaneous Field Expenses | NTE | \$1,000 | 1 | \$1,000 |
| Lodging ⁽¹⁾ | day | \$168 | 84 | \$14,112 |
| Per Diem (Meals) ⁽¹⁾ | day | \$76 | 84 | \$6,384 |
| Rental Truck | month | \$2,500 | 3 | \$7,500 |
| Mileage for Biweekly site visits | miles | \$0.58 | 2184 | \$1,267 |
| TOTAL | | | | \$32,663 |

(1) 2019 US GSA Rates (www.gsa.gov)

TABLE 4A: EARTHWORKS TESTING EXPENSES

EARTHWORKS TESTING EXPENSES PHASE 3 PART 2 PARTIAL FINAL CLOSURE

| TYPE OF TEST | ASTM STANDARD | # OF TESTS | RESPONSIBLE PARTY | UNIT PRICE | TOTAL COST |
|------------------------------|---------------|------------|-------------------|------------|----------------|
| 12" Foundation Soil | | | | | |
| Modified Proctor | ASTM D 1557 | 2 | Laboratory | \$190 | \$380 |
| Particle Size Analysis | ASTM D 422 | 2 | Laboratory | \$80 | \$160 |
| Protective Cover Soil | | | | | |
| Modified Proctor | ASTM D 1557 | 4 | Laboratory | \$190 | \$760 |
| Particle Size Analysis | ASTM D 422 | 4 | Laboratory | \$80 | \$320 |
| Aggregate Testing | | | | | |
| Particle Size Analysis | ASTM C 136 | 1 | Laboratory | \$110 | \$110 |
| Hydraulic Conductivity | ASTM D2434 | 1 | Laboratory | \$270 | \$270 |
| Soundness | ASTM C88 | 1 | Laboratory | \$164 | \$164 |
| LA Abrasion | ASTM C131 | 1 | Laboratory | \$252 | \$252 |
| Shipping | | | | | |
| Sample Shipping | N/A | N/A | N/A | N/A | \$1,000 |
| TOTAL | | | | | \$3,416 |

TABLE 4B: EARTHWORKS TESTING EXPENSES

EARTHWORKS TESTING EXPENSES PHASE III E GROUNDWATER PROTECTION SYSTEM

| TYPE OF TEST | ASTM STANDARD | # OF TESTS | RESPONSIBLE PARTY | UNIT PRICE | TOTAL COST |
|-------------------------------------|---------------|------------|-------------------|------------|----------------|
| Veneer Soil | | | | | |
| Modified Proctor | ASTM D 1557 | 1 | Laboratory | \$190 | \$190 |
| Particle Size Analysis | ASTM D 422 | 1 | Laboratory | \$80 | \$80 |
| Protective Cover Soil | | | | | |
| Modified Proctor | ASTM D 1557 | 1 | Laboratory | \$190 | \$190 |
| Particle Size Analysis | ASTM D 422 | 1 | Laboratory | \$80 | \$80 |
| Anchor Trench Backfill | | | | | |
| Modified Proctor | ASTM D 1557 | 1 | Laboratory | \$190 | \$190 |
| Particle Size Analysis | ASTM D422 | 1 | Laboratory | \$80 | \$80 |
| Engineering Classification of Soils | ASTM D2487 | 1 | Laboratory | \$9 | \$9 |
| Atterberg Limits | ASTM D4318 | 1 | Laboratory | \$95 | \$95 |
| Aggregate Testing | | | | | |
| Particle Size Analysis | ASTM C 136 | 1 | Laboratory | \$110 | \$110 |
| Hydraulic Conductivity | ASTM D2434 | 1 | Laboratory | \$270 | \$270 |
| Soundness | ASTM C88 | 1 | Laboratory | \$164 | \$164 |
| LA Abrasion | ASTM C131 | 1 | Laboratory | \$252 | \$252 |
| Shipping | | | | | |
| Sample Shipping | N/A | N/A | N/A | N/A | \$1,000 |
| TOTAL | | | | | \$2,710 |

EXHIBIT B

PAYMENT ARRANGEMENTS

Periodic Compensation (with attached Schedule of Fees)

- A. For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, not to exceed \$ 160,625.
- B. Extra Work required to complete the project may be authorized only if CONTRACTOR receives written approval by the COUNTY's designated representative as identified in Paragraph 1 of the Agreement at the same rate per unit as defined in Attachment B1 (Schedule of Fees). The total amount of this contingency fund is 10% of the agreement amount or **\$16,000**.
- C. Payment for services and /or reimbursement of costs shall be made upon CONTRACTOR's satisfactory performance, based upon the scope and methodology contained in **EXHIBIT A** as determined by COUNTY. Payment for services and/or reimbursement of costs shall be based upon the costs, expenses, overhead charges and hourly rates for personnel, as defined in **Attachment B-1** (Schedule of Fees). Invoices submitted for payment that are based upon **Attachment B-1** must contain sufficient detail to enable an audit of the charges and provide supporting documentation if so specified in **EXHIBIT A**.
- D. Monthly, CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury for the service performed over the period specified. These invoices or certified claims must cite the assigned Board Contract Number. COUNTY DESIGNATED REPRESENTATIVE shall evaluate the quality of the service performed and if found to be satisfactory and within the cost basis of **Attachment B-1** shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of receipt of correct and complete invoices or claims from CONTRACTOR.
- E. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.

ATTACHMENT B-1

GEOSYNTEC RATE SCHEDULES

| GEOSYNTEC CONSULTANTS 2019 RATE SCHEDULE | | CONFIDENTIAL |
|--|-------------------------|--------------|
| Staff Professional | \$128 | |
| Senior Staff Professional | \$148 | |
| Professional | \$169 | |
| Project Professional | \$192 | |
| Senior Professional | \$215 | |
| Principal | \$236 | |
| Senior Principal | \$256 | |
| | | |
| Technician I | \$ 65 | |
| Technician II | \$ 71 | |
| Senior Technician I | \$ 78 | |
| Senior Technician II | \$ 85 | |
| Site Manager I | \$ 90 | |
| Site Manager II | \$100 | |
| Construction Manager I | \$114 | |
| Construction Manager II | \$124 | |
| | | |
| Designer | \$138 | |
| Senior Drafter/Senior CADD Operator | \$ 125 | |
| Drafter/CADD Operator/Artist | \$ 114 | |
| Project Administrator | \$ 70 | |
| Clerical | \$ 56 | |
| | | |
| Direct Expenses | Cost plus 12% | |
| Subcontract Services | Cost plus 12% | |
| Technology/Communications Fee | 3% of Professional Fees | |
| Specialized Computer Applications (per hour) | \$ 15 | |
| Personal Automobile (per mile) | Current Gov't Rate | |
| Photocopies (per page) | \$.09 | |
| | | |
| <p>Rates are provided on a confidential basis and are client and project specific. Unless otherwise agreed, rates will be adjusted annually based on a minimum of the Produce Price Index for Engineering Services. Rates for field equipment, health and safety equipment, and graphical supplies presented upon request. Construction management fee presented upon request.</p> | | |

GEOSYNTEC 2019 PREVAILING WAGE RATES (CONFIDENTIAL)

| Classification | Hourly Prevailing Wage (PWR) | | |
|----------------------------------|------------------------------|-------|-------|
| | Basic | OT | DT |
| Engineering Technician I | \$118 | \$143 | \$167 |
| Engineering Technician II | \$118 | \$143 | \$167 |
| Senior Engineering Technician I | \$118 | \$143 | \$167 |
| Senior Engineering Technician II | \$118 | \$143 | \$167 |
| Site Manager I | \$118 | \$143 | \$167 |
| Site Manager II | \$118 | \$143 | \$167 |
| Staff Professional | \$142 | \$166 | \$191 |
| Senior Staff Professional | \$158 | \$183 | \$207 |
| Professional | \$174 | \$198 | \$223 |
| Project Professional | \$193 | \$216 | \$240 |

- BASIC PWR Applies M-F for the first 8 hours worked per day.
- Overtime (OT PWR) Applies M-F for hours worked over 8, but less than 12 and on Saturday for the first 8 hours worked.
- Double time (DT PWR) Applies on designated Holidays, Sundays, and on Saturdays if more than 8 hours are worked, and on M-F if more than 12 hours are worked.

GEOSYNTEC PER DIEM RATES

| Item Type | Daily |
|---|-------|
| Per Diem (Meals Only) Per Day | \$76 |
| Lodging Per Day | \$168 |
| Field Vehicle (includes mileage and gasoline) | \$125 |

EXHIBIT C

Indemnification and Insurance Requirements (For Professional Contracts)

INDEMNIFICATION

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

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

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

INSURANCE

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

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the CONTRACTOR'S profession, with limit of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by

the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

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

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR's insurance coverage shall be primary insurance as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.
6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.
9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.
10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:
 - i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
 - ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
 - iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.
11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

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

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