

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**JOHN WAYNE AIRPORT  
AGREEMENT FOR  
ON-CALL ENGINEERING SERVICES**

**PROJECT: GEOTECHNICAL ENGINEERING, MATERIALS TESTING,  
CONSTRUCTION OBSERVATION AND INSPECTION**

**PROJECT NO: 281-281-4200-P107**

THIS AGREEMENT (the "Agreement"), is made and entered into on the \_\_\_\_ day of \_\_\_\_\_, 2020, between the County of Orange, a political subdivision of the State of California ("COUNTY"), and Twining ("ARCHITECT-ENGINEER" or "A-E"). COUNTY and A-E may be referred to individually as a "PARTY" or collectively as the "PARTIES." This Agreement will be administered by the Director of John Wayne Airport or his designee, herein after referred to as ("JWA").

**WITNESSETH:**

IT IS MUTUALLY AGREED between the parties hereto that:

**1. TERM OF AGREEMENT**

The "Term" of this Agreement shall commence upon the date of award as evidenced by the Orange County Board of Supervisors Minute Order awarding this Agreement (Contract Award Date). This Agreement shall expire three years from execution, at 11:59 p.m., unless the COUNTY, at its sole option, extends the Term of this Agreement up to two additional years, or any portion thereof, by giving A-E a 30-day notice of such an extension. The A-E shall not commence services under this Agreement until it has obtained all required insurance and such insurance has been approved by COUNTY. The A-E shall have 7 days from the Contract Award date to submit complete insurance documents, and COUNTY may take up to 14 days to approve said insurance. Also, A-E may not work on the site until its Safety Plan is approved by the COUNTY.

**2. A-E SCOPE OF SERVICES**

- A. The A-E shall perform in a competent and professional manner those tasks and duties set forth in the attached Scope of Services for Project No. 281-281-4200-P107, ("Project") which is incorporated into this Agreement as Appendix 1.
- B. The A-E shall comply with all applicable COUNTY procedures, guidelines, and rules pertaining to the management of architectural and engineering, construction management, and construction contracts, including, but not limited to the COUNTY's Contract Policy Manual. The A-E shall fully familiarize itself with all contracts they are tasked with managing. A-E shall enforce all contractual requirements.

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

- C. The A-E is not authorized to amend any COUNTY contracts which it is assigned to manage. COUNTY contracts may only be amended by written change order first approved by JWA.
- D. The A-E's duties shall include the review, verification and recommendation for payment of pay requests submitted by all architectural, engineering, design and construction contractors within the Scope of Services. The A-E shall review and verify that any such pay requests are accurate and in compliance with the applicable contract and COUNTY and JWA requirements. A-E's recommendation of a pay request shall represent that A-E has reviewed the work, products or services for that pay request, and that the work, products or services for that pay request have been completed in a good and workmanlike manner and in compliance with the contract. The A-E shall promptly inform JWA, in writing, of any discovered work, products or services which have not been performed in compliance with the contract. The A-E shall recommend the appropriate payment for each pay request based on the A-E's review.
- E. The A-E's verification of pay requests shall include all documents necessary to support and justify the A-E's recommendations for payment. Such documentation shall include updated cost-loaded schedules and/or other applicable schedule formats as defined in contractors' agreements with COUNTY, independent cost estimates, photos of completed work, delivery tickets, and purchase orders. A-E is responsible for assuring that project files contain all documentation necessary to justify payments prior to recommending payment. Electronic copies of documents shall be maintained in JWA's electronic Project Document Management System, Oracle Primavera Unifier ("Unifier"), with the appropriate system security applied.
- F. The A-E shall make recommendations on any requests for extension of time by contractors. Such time extension requests, if approved by JWA, shall result in the issuance of a Revised Baseline Schedule in accordance with the terms defined in contractors' agreements with COUNTY, and Revised Baseline Schedule must be approved by the A-E. A-E shall procure and maintain all documentation necessary to justify A-E's recommendations on requests for extension of time. Electronic copies of documents shall be maintained in Unifier with the appropriate system security applied.
- G. A E shall diligently perform in a competent and professional manner those tasks and duties set forth in Appendix 1 - Scope of Services, attached hereto, in the time set forth in the Article titled "Time for Performance" below. The attached Appendix 1 – Scope of Services is hereby incorporated into this Agreement by reference. COUNTY, at its discretion, may reduce, limit or amend the Scope of Services and the corresponding costs upon written notification to A E as described in the Article titled "Changes in Scope of Services" of this Agreement.

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**3. COMPENSATION FOR SERVICES**

**A. Maximum Not-To-Exceed Compensation and Reimbursable Expenses**

COUNTY shall pay to A-E for performance of this Agreement on a time and material basis a not-to-exceed amount of \$1,500,000 for A-E's approved work in accordance with the Scope of Services and approved reimbursable expenses. A-E shall only be entitled to payment for work as directed by COUNTY and completed by A-E within its Scope of Services as set forth in Appendix 1. In no event shall A-E be entitled to compensation and reimbursement that would result in the total payment by the COUNTY under this Agreement exceeding the above contract amount unless change order(s) or amendment(s) to this agreement have been approved by COUNTY, pursuant to Paragraph 4, Changes in Scope of Services.

**B. Rates for A-E's Personnel**

COUNTY agrees to compensate A-E for services performed by its personnel based on the hourly rates set forth in Appendix 2 for each Job Classification. The hourly rate for each job classification represents the maximum rate for that job classification. However, the COUNTY reserves the right to negotiate with A-E a lower rate for any given job classification based on the qualifications of the candidate being considered for that job classification.

**C. Hourly Rate Adjustment**

A-E's personnel hourly rates as listed in Appendix 2 shall remain the same each year for the term of the contract. The contract does not provide for annual cost of living adjustments.

**D. Location of Work**

A-E shall perform all services at a location to be determined by JWA. If A-E's personnel are assigned to work on County premises, JWA will make available for use by A-E office space, furniture, fixtures, equipment, land-line telephones, and supplies, as necessary, to perform A-E services required herein. All A-E's personnel who will be working on COUNTY premises and using the COUNTY's information network shall each sign the COUNTY's Information Technology Usage Policy.

**E. Reimbursable Expenses:**

A-E shall be entitled to reimbursement for the following Reimbursable Expenses. No other expenses shall be reimbursed without prior written authorization of the COUNTY:

- 1) The actual costs of special equipment to be rented, leased or purchased by A-E for use exclusively in the performance of the Scope of Services, to the extent such rental, lease, purchase and costs have been approved in writing by JWA.

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

All special equipment purchased by A-E shall become the property of JWA at the termination of this Agreement.

- 2) The actual cost of third-party project management tools and software recommended by A-E and approved in writing by JWA. Project management tools and software costs to include, but not limited to, purchase, lease, maintenance, external web hosting when appropriate, and server applications for multiple users to be specified by JWA.
- 3) Reproduction expenses paid to outside vendors, to the extent such vendors and reproduction rates have been approved by JWA.
- 4) Other actual costs and/or payments specifically approved and authorized in writing by JWA and actually incurred by A-E in performance of this Agreement.
- 5) Travel costs shall be reimbursed only if approved in advance in writing by JWA and are subject to the following restrictions:
  - a) Alcohol of any type will not be reimbursed
  - b) Dry cleaning will not be reimbursed
  - c) Hotel movies will not be reimbursed
  - d) Valet parking is reimbursable only if no other parking option is available.
  - e) Meals will be reimbursed for personnel on authorized business travel only at a flat per diem rate of \$60 per day.
  - f) Air travel is reimbursed at the fare for "Coach Class" seating. "Business Class" or "First Class" fares will not be reimbursed.
  - g) Lodging reimbursement shall be based on actual, reasonable, and necessary costs. Hotel rates associated with authorized business travel exceeding \$200.00 per day must be approved in writing by JWA. This written approval must be submitted with the billing for reimbursable expenses.
  - h) Phone charges during hotel stays associated with business support of the Scope of Services must be identified. Personal phone charges will not be reimbursed.
  - i) Car rental is reimbursable at the cost for mid-size or lower size vehicle. Larger size vehicle rentals must be approved in advance in writing by JWA. This written approval must be submitted with the billing for reimbursable expenses. Luxury or Sports car rentals of any type will not be reimbursed.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

- j) Reimbursement of mileage for the business use of a personal vehicle during the conduct of business within the Scope of Services of this Agreement shall be based on the Internal Revenue Service Standard Mileage Rate in effect at the time. Mileage between the A-E's "Home Based" office location and JWA, as well as mileage within JWA's property, will not be reimbursed.
- k) Cost of "Home Based" Xerox copies, faxes, and other supplies and materials associated with them will not be reimbursed.
- l) Cost of cellular phones, cell phone usage plans and usage minutes, and other mobile communication devices will not be reimbursed.

Reimbursable expenses shall be submitted no more frequently than once every month. All reimbursable expenses must be documented with receipts and documentation must be submitted with billing. Reimbursables without back-up documentation will not be paid. A-E is responsible for submitting reimbursable billings in a format that is acceptable to JWA Accounting.

**F. Labor Cost Projections and Cost Control**

A-E shall exercise diligent effort to maintain best management practices control of the productivity of its personnel in performance of their tasks within the Scope of Services, and report to JWA in a timely fashion any conditions, unusual circumstances, or elements that may impact or be cause for change in A-E's Scope of Services or cost.

Upon request by County, and on a quarterly basis, or more frequently as COUNTY may consider appropriate, A-E shall submit to JWA its personnel's labor hours and costs expenditures for the previous quarter and projections for the coming quarter, and shall report potential variances, if any, in expenditures and productivity which may result in the exhaustion of funds in the Agreement prior to its term expiration. A-E shall promptly submit a request for change order or amendment for JWA's review if A-E becomes aware of conditions or circumstances that may warrant a change in Scope of Services, or which may cause labor productivity and/or expenditures to vary measurably.

**G. Request for Payment**

Services under this Agreement shall be billed every month on a time and materials basis using JWA's "Request for Payment" form provided by JWA and/or other electronic format of "Request for Payment" approved and made available by JWA, via Unifier. Approved and authorized reimbursable expenses shall be included in the Request for Payment. A-E will not be entitled to any mark-up on reimbursable expenses. A-E will not be entitled to reimbursement for any expense incurred in performance of this Agreement or in connection with the Scope of Services that is not specified above in this section.

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

Each Request for Payment shall be accompanied by:

- 1) Scope of Services Status Report for the services being invoiced in part or in whole.
- 2) Up-to-date running account of hours and cost for all projects.
- 3) List of employees who worked on the Scope of Services during the month covered by the Request For Payment, including their names, job titles, hourly rates, and assignments.

Requests for payment should be submitted to JWA no later than 15 days following the period in which the services were performed. Requests for Payment must be approved by COUNTY Auditor before payment may be made.

#### **4. CHANGES IN SCOPE OF SERVICES**

The COUNTY may at any time direct any amendments or changes in work in the Scope of Services under this Agreement, including any reductions in the Project Management Scope of Services. If COUNTY desires a change in the services, a written change order shall be issued by COUNTY. The written change order shall set forth the nature of the change. Within a reasonable time as to allow COUNTY sufficient time for the review, analysis, processing, and issuance of written change order(s) or amendments(s), the A-E shall present to COUNTY a detailed request for change in compensation or other conditions from what is set forth in this Agreement, if any. Upon receipt, COUNTY may reject A-E's request for change, propose a revision to the requested change, or approve such change as requested by the A-E.

If A-E believes that a change in the Scope of Services is appropriate, it may submit a written request to the COUNTY to issue a change order or amendment. Such a request shall include the proposed change in the Scope of Services as well as any proposed change in compensation associated with the proposed changes in the work. COUNTY may utilize the same options in response to A-E's request for change as stated hereinabove.

All changes to the Scope of Services shall be approved in accordance with the current version of the COUNTY's Contract Policy Manual. If changes to the Scope of Services cause an increase in compensation, such increase in compensation shall be based on the terms of this Agreement.

#### **5. CONFLICTS AND DISCLOSURES**

The A-E and its personnel shall not accept any gifts or gratuities from any contractors which it is assigned to manage. A-E and its personnel shall not procure or accept any services, products or materials from any contractors which A-E is assigned to manage or oversee, without immediate disclosure to COUNTY.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

A-E shall immediately advise JWA in writing of any contracts between A-E and any contractors, architect-engineers, or other vendors and service providers it has been assigned to manage. This disclosure applies to prime contracts and/or Joint Venture agreements that the A-E has with all the assigned contractors. This disclosure shall be in addition to any other disclosures required by law or the California Political Reform Act (Government Code Section 87200, et. seq.). A-E shall, upon request by JWA, provide JWA with copies of contracts between A-E and contractors it has been assigned to manage.

**6. A-E'S PERSONNEL**

- A. Assigning Personnel: Throughout the term of this Agreement, the A-E shall provide those personnel qualified to perform the required Scope of Services upon the CIP Projects assigned to A-E. Upon request by COUNTY, A-E shall submit a staff authorization request for proposed personnel and for a given job classification, upon which COUNTY will render a decision on whether the proposed personnel meets the qualifications sought under the Agreement.

A-E shall also provide such fully-qualified administrative, managerial, clerical, secretarial and other support personnel as are necessary, and approved by JWA. A-E shall furnish the necessary personnel to complete the services on a timely basis in accordance with the requirements for any given Project. A-E shall have the authority to commit A-E's resources as needed and as requested by JWA.

A-E shall not bill the COUNTY for the services of any personnel not assigned to the Project without the COUNTY's prior written approval of the person by name and the person's specific hourly billing rate.

- B. Assigned Personnel: Reassignment of A-E's personnel requires prior written consent by JWA. A-E shall not be entitled to compensation for personnel who are removed from the project or the individuals who replace them without the written consent of JWA.
- C. Removal of personnel at COUNTY's Discretion: COUNTY may, at its sole discretion, require A-E to remove from the Project any of its personnel assigned to the performance of the Scope of Services. A-E shall remove such person(s) from the Project promptly after request from JWA. The A-E shall make its best efforts to replace any person so removed within seven (7) days with a person of like qualifications acceptable to COUNTY. Alterations to A-E's staff at COUNTY's or JWA's request do not constitute changes to the SCOPE OF SERVICES.
- D. Qualifications/Licensing: A-E represents that all personnel provided under this Agreement are fully qualified for the offices or positions to which they are assigned, and that they meet or exceed the qualifications for their positions.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

A-E and each of its subconsultants at any tier, if any, shall maintain in full force and effect at all times during the term of this Agreement such licenses, registrations or permits as may be required by the State of California or any other local, regional, County, State or Federal governmental entities. A-E shall promptly inform COUNTY of any lapse of license, investigation, or disciplinary action against A-E, its employees, or its subconsultants on this project.

- E. Organization/Assignments: Within thirty days of the execution of this Agreement, A-E shall prepare and submit to JWA an organizational chart detailing A-E's Project activities by employee name, job title, and organizational unit, and showing lines of command and responsibility. A-E shall update the organizational chart to show any proposed changes at least 30 days, or sooner if JWA deems necessary, prior to the change taking effect, and shall submit the updated chart to JWA.
- F. List of Employees: A-E shall also provide JWA with a list of employees on the Project on a monthly basis, including their names, job titles and assignments, rates, and listing any employees whose services on the project have ceased in the prior month and the reason therefore. A-E shall submit this list with each monthly pay request. COUNTY reserves the right to withhold payment from A-E's pay requests until such information is submitted.
- G. Compliance with Employment Laws: A-E shall be solely responsible for complying with all laws pertaining to the employment of all of A-E's personnel, including but not limited to, compliance with all applicable laws and regulations concerning workers' compensation, social security, minimum wage, unemployment insurance, hours of labor, services, working conditions, equality in employment, and like subjects affecting employers engaged in public projects.



**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**7. EMPLOYMENT ELIGIBILITY VERIFICATION**

The A-E warrants that it fully complies with all Federal and State statutes and regulations regarding the employment of aliens and others and that all its employees performing work under this Contract meet the citizenship or alien status requirement set forth in Federal statutes and regulations. The A-E shall obtain, from all employees performing work hereunder, all verification and other documentation of employment eligibility status required by Federal or State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986, 8 U.S.C. §1324 et seq., as they currently exist and as they may be hereafter amended. The A-E shall retain all such documentation for all covered employees for the period prescribed by the law. The A-E shall indemnify, defend with counsel approved in writing by COUNTY, and hold harmless, the COUNTY, its agents, officers, and employees from employer sanctions and any other liability which may be assessed against the A-E or the COUNTY or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract.

**8. OWNERSHIP OF DOCUMENTS**

All documents in all forms and media pertaining to A-E's Scope of Services shall be and remain the property of COUNTY, without any additional cost to COUNTY. However, A-E does not accept responsibility for COUNTY's use of its work under this Agreement for other projects.

**9. RECORD DRAWINGS**

A-E shall provide record drawings on disc, to the satisfaction of Owner, showing the as-constructed condition of the Project in digital format (PDF and AutoCAD, Civil 3D or Microstation). The drawings shall incorporate all changes in the work made during construction, based on marked-up prints, as-built drawings provided by the Contractor, shop drawings and other data known by the A-E, and shall accurately reflect the final construction of the work. The drawings shall include, without limitation, the following systems: architectural, structural, civil, mechanical electrical, plumbing, fire protection, fire alarm, security and landscape. A-E shall provide the drawings to COUNTY promptly after the completion of construction. A-E shall upload any Record Drawings into the Oracle Primavera Unifier Project Document Management System (Unifier).

**10. CONFIDENTIALITY**

All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, and all written or other information submitted to A-E in connection with the performance of this Agreement shall be held confidential by A-E and/or anyone acting under the supervision of A-E and shall not, without the prior written consent of COUNTY, be used for any purposes other than the performance of the PROJECTS/SERVICES

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

described in Appendix 1, nor be disclosed to any person, partnership, company, corporation or agency, not connected with the performance of the PROJECTS/SERVICES.

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

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

#### **11. PUBLICATION**

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

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

#### **12. SUBCONSULTANTS**

The retention of any subconsultants by the A-E shall be approved in writing by the COUNTY. A-E shall submit the proposed subconsultant's contract to COUNTY for its review. A-E shall ensure that the contract for each of its subconsultants providing services on this Project contain requirements that bind the subcontractor to all the regulations of this Agreement including, but not limited to: Accounting Records/Audit; Nondiscrimination; and County of Orange Child Support Enforcement.

#### **13. RIGHT TO OFFSET**

COUNTY, without waiver or limitation of any of its rights or remedies, shall be entitled from time to time to deduct from any amounts due or owing by COUNTY to A-E in connection with this Agreement, any and all amounts owed by A-E to COUNTY in

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

connection with this Agreement. COUNTY will provide A-E with written notice including justifications of amounts withheld.

**14. AVAILABILITY OF FUNDS**

Each payment or obligation of COUNTY is contingent upon the availability of local, State, or Federal government funds which are appropriated or allocated for the payment of such an obligation. If the funds are not allocated and available for the continuance of the services performed, then this Agreement may be terminated or suspended by COUNTY at its convenience. COUNTY shall notify A-E promptly of any product or service that will be affected by a shortage of funds and shall make its best efforts to notify A-E prior to the A-E's commitment or expenditure of funds. No penalty shall accrue to COUNTY in the event this provision is exercised, and COUNTY shall not be obligated or liable for any future payments due or for any damages as a result of suspension or termination under this paragraph.

**15. TERMINATION FOR CONVENIENCE**

The COUNTY may, at any time, and without cause, terminate this Agreement in whole or in part, upon written notice to A-E. Such termination shall be effected by delivery to A-E of a notice of termination specifying the effective date of the termination and the extent of the services to be terminated.

In the event of such termination, COUNTY shall pay A-E amounts owing to it for the services completed and reimbursable expenses incurred prior to the effective date of the termination, and such payment shall be A-E's sole remedy against COUNTY. Under no circumstances will A-E be entitled to anticipatory or unearned profits, consequential or special damages, or any other damages as a result of a termination or partial termination of this Agreement.

**16. TERMINATION FOR DEFAULT**

Notwithstanding any other provision of this Agreement, if A-E fails to perform any of its obligations under this Agreement, COUNTY may, without prejudice to any other rights or remedies it may have, cause further payment to be held in abeyance, and/or may terminate this Agreement by giving written notice to A-E specifying the cause and the date of termination.

In the event of such termination, COUNTY shall pay A-E for the portion of services performed up to the date of termination, including reimbursable expenses incurred up to that time, less any sums as may be withheld by COUNTY in its sole discretion to cover all costs, claims, damages or losses incurred by COUNTY or likely to be incurred as a result of or in connection with A-E's failure to perform. The COUNTY may set off against and deduct from any amounts payable to A-E all damages suffered by COUNTY due to any such default and failure to perform by A-E. If COUNTY has, as of the date of the termination of this Agreement, already paid A-E an amount which

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

exceeds the amount which may be due to A-E, A-E shall refund to COUNTY the excess amount promptly after notice from COUNTY.

If the sum of the total cost to COUNTY of completing the services plus amounts previously paid to A-E exceeds the total amount the COUNTY would have paid to A-E under this Agreement for the completed services, the A-E shall promptly pay the difference to COUNTY.

Under no circumstances will A-E be entitled to anticipatory or unearned profits or special damages as a result of a termination of this Agreement.

## **17. OBLIGATIONS UPON TERMINATION**

In the event of termination for convenience or for default, the A-E shall immediately stop services in accordance with the notice and comply with any other direction as may be specified in the notice or as subsequently provided by COUNTY. A-E shall insert in any contract with a subcontractor that the subcontractor shall stop services on the date of and to the extent specified in a notice of termination, and shall require all subconsultants at any tier to insert the same in any lower tier contracts.

Upon termination, A-E shall turn over to COUNTY all finished and unfinished reports and other written services of any kind or quality prepared or generated in connection with the services under this Agreement, including providing copies on computer disks or other applicable media of all such services or materials that were prepared in electronic or digital form.

Upon termination, A-E shall immediately advise COUNTY of all outstanding agreements, subcontracts, rental agreements, and purchase orders which A-E has with others pertaining to performance of the services, and shall furnish COUNTY with complete copies thereof. Upon request by COUNTY, A-E shall assign to COUNTY, in form and content satisfactory to COUNTY, A-E's title to materials and equipment for the services and all its interest in any agreements, subcontracts, rental agreements, and purchase orders designated by COUNTY. A-E shall include provisions in all of its subcontracts, rental agreements, purchase orders, and other agreements related to its services under this Agreement providing that its rights thereunder may be assigned to COUNTY and that in the event of such assignment, the other contracting party agrees to be bound to the COUNTY, and shall require all subconsultants at any tier to insert the same in any lower tier contracts.

## **18. SUSPENSION OF SERVICES**

### **A. COUNTY's Options**

The COUNTY, at its sole discretion, may at any time by written notice to A-E suspend further performance of all or any portion of the services by A-E. Said notice of suspension shall specify the date of suspension and the estimated duration

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

of the suspension. Upon receiving any such notice of suspension, A-E shall promptly suspend further performance of the services to the extent specified, and during the period of such suspension shall properly care for and protect all services in progress and information, materials, supplies, and equipment A-E has on hand for performance of the services.

Upon the request of COUNTY, A-E shall promptly deliver to COUNTY copies of outstanding purchase orders, agreements, and subcontracts of A-E for materials, equipment, and services for the services, and shall take such action relative to such purchase orders, agreements, and subcontracts as may be directed by COUNTY. COUNTY may at any time withdraw the suspension of performance of the services as to all or part of the suspended services by written, verbal, or facsimile notice to A-E specifying the effective date and scope of withdrawal, and A-E shall resume diligent performance of the services for which the suspension is withdrawn on the specified effective date of withdrawal.

**B. No Agreement Modification**

No suspension or withdrawal of suspension shall entitle A-E to any prospective profits or other losses or damages of any kind resulting from such suspension or withdrawal of suspension. However A-E shall be entitled to actual demobilization costs arising directly out of the suspension or withdrawal of suspension.

Furthermore, no damages, compensation, or claims shall be payable or owing by COUNTY to A-E for any interruption or cessation of A-E's business, or loss of income arising from any suspension or withdrawal of suspension.

**19. REVIEW OF PROJECT DOCUMENTS AND FIELD CONDITIONS BY A-E**

A-E represents and agrees that it will review and become fully informed as to the state of any existing drawings, specifications and studies for work on the CIP Project, that A-E will visit the job site and examine the actual job conditions and limitations of the Project, and that A-E will obtain information sufficient to allow it to proceed with the Project Management Scope of Services described herein. A-E is and will be relying strictly and solely upon its own such review and examinations and the advice and counsel of its agents and officers. A-E shall advise COUNTY of any need for securing any tests, analyses, studies, reports, or services in connection with assigned work and the management thereof. Except as expressly set forth in this Agreement, COUNTY is not making and has not made any warranty or representation with respect to site conditions or limitations.

**20. ACCOUNTING RECORDS/AUDIT**

A-E shall keep accurate accounting records of time and expenditures, and records shall be available for inspection and audit by COUNTY or its authorized representatives and/or agents, or by another appropriate governmental office, at all reasonable times,

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

for a period of four (4) years after the final payment under the Agreement. A-E represents and agrees that failure by A-E to maintain such records in compliance with this paragraph precludes A-E from maintaining any request or claim for compensation from or against COUNTY for any time periods for which such records were not kept, and constitutes a waiver by A-E of any such claim(s) against COUNTY for such time period(s).

The COUNTY shall have the right to audit A-E's subconsultants and vendors providing services on this project. This right to audit A-E's subconsultants and vendors shall extend to COUNTY's authorized representatives and/or agents, and other appropriate governmental offices. A-E shall include in its agreements with its subconsultants and sub-consultants an audit provision that provides the COUNTY with the right to audit their records as set forth herein.

Pursuant to and in accordance with Section 8546.7 of the California Government Code, in the event that this Agreement involves expenditures of public funds aggregating in excess of Ten Thousand Dollars (\$10,000), the parties shall be subject to the examination and audit of the Auditor General of the State of California for a period of three (3) years after final payment under this Agreement.

**21. ASSIGNMENT**

A-E shall not assign any right, nor delegate any duty, under this Agreement, or any portion thereof, without the written consent of COUNTY. Any attempted assignment or delegation without COUNTY's prior written consent shall be void.

**22. SOLE AND ONLY AGREEMENT**

This Agreement constitutes the sole and only agreement between the parties hereto with respect to the services herein described, and correctly sets forth the obligations of each party. Any representations or agreements not specifically contained herein are null and void. Any amendments hereto shall be made in writing, effective only when signed by both parties.

**23. NO WAIVER BY COUNTY**

In the event the COUNTY does not insist upon strict performance by A-E or does not exercise any right or option herein conferred, such event shall not be deemed or construed as a waiver or a relinquishment to any extent of any right of COUNTY to insist on strict performance or to assert or rely upon any such terms or options on any future occasion.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**24. INDEMNITY**

To the fullest extent permitted by law, the A-E shall defend with counsel approved in writing by COUNTY, indemnify, and hold harmless the COUNTY, its officers and employees (collectively referred to as "indemnitees" or individually as "indemnatee") from and against any and all claims, lawsuits, orders, judgments, damages, penalties, fines, costs, liabilities, losses or actions of every kind and description arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the A-E. In the event an indemnatee is named as a defendant in any such lawsuit, the A-E shall, at the request of the COUNTY, represent the indemnatee with qualified counsel approved in writing by the COUNTY.

A-E's indemnity obligation shall not apply in the event of any loss, damage, or expense arising from the sole and /or active negligence or willful misconduct of the COUNTY or its agents, servants or independent contractors. If judgment is entered against A-E and the COUNTY by a court of competent jurisdiction because of the concurrent negligence of the COUNTY, its officers and employees, and the A-E, then the A-E and the COUNTY agree that such liability will be apportioned as determined by the trier of fact.

Nothing in this Agreement shall be construed as authorizing any award of attorney's fees in any action on, or to enforce, the terms of this Agreement. The rights and obligations set forth in this paragraph shall survive the termination or completion of this Agreement.

**25. ERRORS AND OMISSIONS AND NEGLIGENT PERFORMANCE**

In the event of errors or omissions, or negligent performance by the A-E in the performance of this Agreement which result in damages and costs to COUNTY greater than what would have resulted if there were no such errors or omissions or negligence, any additional damages and costs incurred by the COUNTY, including without limitation direct and consequential damages as a result thereof, shall be borne by the A-E. Any COUNTY payment to the A-E shall not be deemed or construed as acceptance or waiver by COUNTY of errors or omissions or negligence by the A-E.

**26. INSURANCE**

Prior to the provision of services under this contract, the A-E agrees to purchase all required insurance at A-E's expense and to deposit with the COUNTY Certificates of Insurance, including all endorsements required herein, necessary to satisfy the COUNTY that the insurance provisions of this contract have been complied with and to keep such insurance coverage and the certificates therefore on deposit with the COUNTY during the entire term of this contract. The COUNTY reserves the right to request the declarations page showing all endorsements and a certified copy of the policy. In addition, all sub-consultants performing work on behalf of A-E pursuant to

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

this contract shall obtain insurance subject to the same terms and conditions as set forth herein for A-E.

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

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

- 1) In addition to the duty to indemnify and hold the COUNTY harmless against any and all liability, claim, demand or suit resulting from A-E's, its agents, employee's or subcontractor's performance of this Agreement, A-E shall defend the COUNTY at its sole cost and expense with counsel approved by Board of Supervisors against same; and
- 2) A-E's duty to defend, as stated above, shall be absolute and irrespective of any duty to indemnify or hold harmless; and
- 3) The provisions of California Civil Code Section 2860 shall apply to any and all actions to which the duty to defend stated above applies, and the A-E's SIR provision shall be interpreted as though the A-E was an insurer and the COUNTY was the insured.

If the A-E fails to maintain insurance acceptable to the COUNTY for the full term of this contract, the COUNTY may terminate this contract.

**Qualified Insurer**

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



**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

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

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

<u>Coverage</u>	<u>Minimum Limits</u>
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 aggregate
Automobile Liability (owned, non-owned, hired vehicles)	\$1,000,000 per occurrence \$10,000,000 to use Commercial Ramp
Workers' Compensation	Statutory
Employers' Liability Insurance	\$1,000,000 per occurrence
Professional Liability Insurance	\$1,000,000 per claims made or occurrence \$2,000,000 aggregate

**Required Coverage Forms**

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

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

**Required Endorsements**

The Commercial General Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance:

- 1) An Additional Insured endorsement using ISO form CG 2010 or CG 2033 or a form at least as broad naming the *County of Orange, its elected and appointed officials, officers, employees and agents* as Additional Insureds, or provide blanket coverage which shall state ***AS REQUIRED BY WRITTEN AGREEMENT.***
- 2) A primary non-contributing endorsement using ISO form CG 20 01 0413, or a form at least as broad evidencing that A-E's insurance is primary and any insurance or self-insurance maintained by the County of Orange shall be excess

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

and non-contributing.

The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against *the County of Orange, its elected and appointed officials, officers, employees and agents*, or provide blanket coverage which shall state ***AS REQUIRED BY WRITTEN AGREEMENT***.

All insurance policies required by this Agreement shall waive all rights of subrogation against the County of Orange, its elected and appointed officials, officers, employees and agents when acting within the scope of their appointment or employment.

A-E shall notify COUNTY in writing within thirty (30) days of any policy cancellation and ten (10) days for non-payment of premium and provide a copy of the cancellation notice to COUNTY. Failure to provide written notice of cancellation may constitute a material breach of the contract, upon which the COUNTY may suspend or terminate this Contract.

If A-E's Professional Liability policy is a "claims made" policy, A-E shall agree to maintain Professional Liability coverage for Two (2) years following completion of contract.

The Commercial General Liability policy shall contain a severability of interests clause (standard in the ISO CG 001 policy).

Insurance certificates should be forwarded to the agency/department address listed on the solicitation. If the A-E fails to provide the insurance certificates and endorsements within seven (7) days of notification by Project Manager or the agency/department Facilities Division, award may be made to the next qualified vendor.

COUNTY expressly retains the right to require A-E to increase or decrease insurance of any of the above insurance types throughout the term of this Contract. Any increase or decrease in insurance will be as deemed by County of Orange Risk Manager as appropriate to adequately protect COUNTY.

COUNTY shall notify A-E in writing of changes in the insurance requirements. If A-E does not deposit copies of acceptable certificates of insurance and endorsements with COUNTY incorporating such changes within thirty (30) days of receipt of such notice, this Contract may be in breach without further notice to A-E, and COUNTY shall be entitled to all legal remedies.

The procuring of such required policy or policies of insurance shall not be construed to limit A-E's liability hereunder or to fulfill the indemnification provisions and requirements of this Contract, nor act in any way to reduce the policy coverage and

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

limits available from the insurer.

**27. ACCIDENTS**

All known job site and other project-related accidents, injuries, and illnesses sustained by A-E's or subconsultants' employees who require medical attention (other than first aid), shall be orally reported to COUNTY at the time of the incident. Written reports, satisfactory in form and content to COUNTY shall be submitted by A-E promptly after each such incident.

**28. PUBLIC RELATIONS**

A-E and its subconsultants, if any, shall not disseminate information on behalf of the COUNTY or JWA pertaining to the nature, scope, or details of the CIP Project without the prior specific written consent of JWA. All inquiries of any kind pertaining to the Project presented to A-E in any form, including but not limited to written or oral requests, and originating from any media source, such as the press and other print publications, television or radio networks, the World Wide Web or instruments thereof, community or public interest groups, or any other limited or mass media systems, shall be immediately referred by A-E to JWA.

A-E shall not release information in any manner or form on behalf of the COUNTY or JWA pertaining to the nature, scope, or details of the Project in any organized public or private event, setting, or ceremony, without the prior specific written consent of JWA.

**29. INDEPENDENT CONTRACTOR**

A-E is an independent contractor. Nothing in this Agreement shall be deemed to make A-E, its subconsultants, or any of their respective officers, employees, representatives, or agents, the agents or employees of COUNTY. A-E shall have responsibility for and control over the details and means for performing the services provided that A-E is in compliance with the terms of the Agreement.

**30. SAFETY PLAN**

The A-E must prepare and submit to COUNTY a safety plan for review and comment prior to beginning services. This safety plan shall comply with all OSHA, COUNTY, and FAA services, safety, and health rules governing the conduct of its employees, agents, and subconsultants at and about the Project job site. A-E agrees that it shall ensure that its personnel, employees, agents, and subconsultants at the job site comply strictly with such rules.

COUNTY reserves the right, from time to time, to make recommendations to revise the safety plan and revise any safety rules therein. A-E shall comply fully with such rules as revised in accordance with the foregoing provisions.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**31. COMPLIANCE WITH LAWS**

A-E shall comply with and give all notices required by all laws, ordinances, rules, regulations, and lawful orders of government authorities applicable to the A-E's performance of the Scope of Services and all other provisions of this Agreement. A-E shall promptly notify COUNTY in writing if A-E has reason to believe that any part of A-E's services is at variance with any law, ordinance, code, rule, or regulation of public authority. A-E shall not knowingly allow contractors and other parties whose services it is managing to perform services that are contrary to laws, statutes, ordinances, building codes, and rules and regulations applicable to the Project. Notwithstanding the above, A-E shall not be responsible for those designers or contractors whom they are not managing. A-E agrees to comply with all Federal laws, regulations, orders and other requirements applicable to A-E and A-E's services, including but not limited to The Americans with Disabilities Act, The Immigration Reform Act, and the Drug Free Workplace Act. A-E agrees to permit the COUNTY to verify such compliance.

**32. AIRPORT SECURITY**

The A-E's personnel must complete a background clearance Security Identification Display Area (SIDA) class in order to obtain an I.D. badge and a driving permit for access to drive on the Airport Operations Area.

**A. Badge Acquisition:**

Prior to issuance of a security badge(s), designated A-E's personnel who will be working onsite at the JWA terminal or other secure areas and engaged in the performance of work under this Agreement must pass JWA's screening requirements, which include an F.B.I. background investigation and finger printing (the estimated fee is \$29.00 per person. A-E shall verify actual fees with JWA's badging office). All actual fees shall be borne by A-E. A-E's designated personnel are required to attend a 4-hour SIDA training class at JWA, and pass the written test (the estimated fee is \$10.00 per person.) The A-E shall be responsible for all costs associated with the background checks, and abide by all of the security requirements set forth by the Federal Aviation Administration (FAA) and JWA.

**B. Badge Holder Requirements and Responsibilities:**

The FAA-approved security program for JWA requires that each person issued a JWA security badge be made aware of his/her responsibilities regarding the privilege of access to restricted areas of JWA.

All persons within the restricted air operation areas of JWA are required to display, on their person, a JWA security badge, unless they are specifically exempted for safety reasons or they are under escort by a properly badged individual. Each JWA employee, or JWA tenant employee who has been issued a JWA security badge is responsible for challenging any individual who is not properly displaying a JWA

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

issued or approved and valid identification badge. Any person who is not properly displaying or who cannot produce a valid JWA security badge must immediately be referred to the Sheriff's Department - Airport Police Services Office for proper handling.

The JWA security badge is the property of the County of Orange and must be returned upon termination of A-E's personnel employment and/or termination or expiration of this Agreement at JWA. The loss of a badge shall be reported within 24 hours to the Sheriff's Department - Airport Police Services by calling (949) 252-5000. Individuals that lose their badge shall be required to pay a fee before receiving a replacement badge. The charge for lost badge replacement will be at the current posted rate located in the JWA Administration Office. A report shall be made before a replacement badge will be issued.

The JWA security badge is nontransferable.

In the event that a A-E's badge is not returned to JWA upon termination of A-E's personnel employment and/or termination or expiration of this Agreement, a fine of \$250.00 per badge will be charged to the A-E. A-E's final payment may be held by JWA or a deduction from the A-E's payment(s) may be made to ensure that funding is available to cover the fine in the event that badges are not returned.

### **33. NONDISCRIMINATION**

#### **A. Compliance with Regulations**

The A-E shall comply with the regulations relative to nondiscrimination in Federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are incorporated herein by reference and made a part of this Agreement.

#### **B. Nondiscrimination**

The A-E, with regard to the services performed by it during the Agreement, shall not discriminate on the grounds of race, color, disability, or national origin in the selection and retention of subconsultants, including procurement of materials and leases of equipment. A-E shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the regulations.

#### **C. Solicitations for Subcontracts, Including Procurement of Materials and Equipment**

In all solicitations, either by competitive bidding or negotiation, made by A-E for services to be performed under a subcontract, including procurement of materials

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

or lease of equipment, each potential subcontractor or supplier shall be notified by A-E of A-E's obligations under this Agreement and the regulations relative to nondiscrimination on the grounds of race, color, disability, or national origin.

**D. Information and Reports**

A-E shall provide all information and reports required by the regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such regulations, orders and instructions.

Where any information required of A-E is in the exclusive possession of another who fails or refuses to furnish this information, A-E shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

**E. Sanctions for Noncompliance**

In the event of A-E's noncompliance with the nondiscrimination provisions of this contract, the COUNTY shall impose such contract sanctions as it or the FAA may determine to be appropriate, including but not limited to:

- 1) Withholding of payments to A-E under the Agreement until A-E complies, and/or
- 2) Termination or suspension of the Agreement, in whole or in part.

**F. Incorporation of Provisions**

The A-E shall include the provisions of subparagraphs A through E of this paragraph in all of its subcontracts and other agreements pertaining to the services under this Agreement, including procurement of materials and leases of equipment, unless exempt by the regulations or directives issued thereto. The A-E shall take such action with respect to any subcontract or procurement as the COUNTY or the FAA may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, in the event A-E becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, A-E may request the sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, A-E may request the United States to enter into such litigation to protect the interests of the United States.

**34. DISADVANTAGED BUSINESS ENTERPRISE (FEDERALLY-FUNDED PROJECTS)**

**A. Policy**

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

It is the policy of John Wayne Airport, under the direction of its governing body, the Orange County Board of Supervisors, to promote the objectives of the Department of Transportation with respect to the participation of Disadvantaged Business Enterprises (DBEs) in DOT – assisted contracts. This policy has been formulated to comply with 49 CFR Part 26. The objectives of the program are as follows:

- 1) To ensure nondiscrimination in the award and administration of DOT-assisted contracts in the Department's highway, transit, and airport financial assistance programs;
- 2) To create a level playing field on which DBEs can compete fairly for DOT-assisted contracts;
- 3) To ensure that the Department's DBE program is narrowly tailored in accordance with applicable law;
- 4) To ensure that only firms that fully meet this part's eligibility standards are permitted to participate as DBEs;
- 5) To help remove barriers to the participation of DBEs in DOT-assisted contracts;
- 6) To assist the development of firms that can compete successfully in the marketplace outside the DBE programs; and
- 7) To provide appropriate flexibility to recipients of Federal financial assistance in establishing and providing opportunities for DBEs.

John Wayne Airport has in the past, as a matter of both principle and law, established an Affirmative Action Program to ensure that no person is discriminated against on the grounds of race, color, national origin or sex in any program associated with the Airport. John Wayne Airport administers a DBE program in compliance with 49 CFR Part 26.

#### **B. DBE Obligation**

The A-E agrees to ensure that disadvantaged business enterprises, as defined in 49 CFR Part 23 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with federal funds provided under this Agreement. In this regard, all contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 to ensure that disadvantaged business enterprises have the maximum opportunity to compete for and perform contracts.

#### **C. Assurances**

The A-E, contractor, sub-recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

**35. GOVERNING LAW AND VENUE**

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

**36. ATTORNEY'S FEES**

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

**37. WAIVER OF JURY TRIAL**

Each PARTY acknowledges that it is aware of and has had the opportunity to seek advice of counsel of its choice with respect to its rights to trial by jury, and each PARTY, for itself and its successors, creditors, and assigns, does hereby expressly and knowingly waive and release all such rights to trial by jury in any action, proceeding or counterclaim brought by any PARTY hereto against the other (and/or against its officers, directors, employees, agents, or subsidiary or affiliated entities) on or with regard to any matters whatsoever arising out of or in any way connected with this Agreement and/or any other claim of injury or damage.

**38. CONTRACT CONSTRUCTION**

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

**39. INTERPRETATION**

- A. Agreement has been negotiated at arm's length and between persons sophisticated and knowledgeable in the matters dealt with in this Agreement.
- B. In addition, each PARTY has been represented by experienced and knowledgeable independent legal counsel of their own choosing, or has knowingly declined to seek such counsel despite having the opportunity to do so.
- C. Each PARTY further acknowledges that they have not been influenced to any extent whatsoever in executing this Agreement by any other PARTY hereto or by any



**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

person representing them, or both.

- D. Accordingly, any rule of law (including California Civil Code Section 1654) or legal decision that would require interpretation of any ambiguities in this Agreement against the PARTY that has drafted it is not applicable and is waived.
- E. The provisions of this Agreement shall be interpreted in a reasonable manner to affect the purpose of the PARTIES and this Agreement.

**40. SEVERABILITY**

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

**41. HEADINGS**

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

**42. JWA INFORMATION TECHNOLOGY NETWORK**

- A. The County will provide connection to its information technology network in support of A-E's required access to JWA's electronic project management system Unifier.
- B. The A-E shall submit to the COUNTY a completed JWA User Access Request form at least seven days prior to A-E's need for access to JWA's information technology network. A JWA User Access Request form is required for each employee to access project documentation including, but not limited to: correspondence; monthly reports; schedules; RFIs; daily reports; payment applications; deliverables/submittals; change documentation; plans and drawings; and all other communication.
- C. JWA will provide Unifier system training following receipt of the JWA User Access Request form. A-E shall arrange Unifier training for its staff with the JWA project manager. JWA will create a user ID with approved access rights and provide an initial password to the user in a secure manner.
- D. County of Orange Information Technology Policy  
A-E's personnel shall acknowledge prior accessing the JWA technology network and comply with the County of Orange Information Technology Usage Policy.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**County of Orange****Information Technology Usage Policy****1 INTRODUCTION:**

The County of Orange Information Technology (IT) Usage Policy is the foundation of the County's information security efforts. Each member of the County workforce is responsible for understanding his/her role in maintaining County IT security. This policy summarizes your information technology responsibilities. To learn more about information security, please see the Information Technology Security Policy.

Complete **Section 5: Acknowledgement** after you have finished reading this document. Your signature on the Acknowledgement indicates that you understand and will comply with County security policy. If you disregard security policies, standards, or procedures, you can be subject to County and agency-specific disciplinary action.

**2 TERMS YOU NEED TO KNOW:**

<b>Authentication</b>	The process of verifying the identity of anyone who wants to use County information before granting them access.
<b>Back Up</b>	To copy files to a second medium (for example, a disk or tape) as a precaution in case the first medium fails.
<b>Confidentiality / Non-Disclosure Agreement</b>	An agreement that outlines sensitive materials or knowledge that two or more parties wish to share with one another. By way of such agreement, the parties to the agreement agree not to share or discuss with outside parties the information covered by the agreement.
<b>System or Software Configuration Files</b>	Highly important files that control the operation of entire systems or software.
<b>Electronic Communication</b>	Messages sent and received electronically through any electronic text or voice transfer/storage system. This includes e-mail, text messages, instant messages (IM) and voicemail.
<b>Encryption</b>	The translation of data into a secret code. Encryption is the most effective way to achieve data security. To read an encrypted file, you must have access to a secret key or password that enables you to <i>decrypt</i> it. Unencrypted data is called <i>plain text</i> ; encrypted data is referred to as <i>cipher text</i> .
<b>Information Security</b>	Safeguarding an organization's data from unauthorized access or modification to ensure its availability, confidentiality, and integrity.
<b>Information Technology (IT)</b>	The broad subject concerned with all aspects of managing and processing information within an organization.
<b>Local Security Administrator (LSA)</b>	The person at each agency who is responsible for the operational maintenance of IT security resources within the agency.
<b>Network</b>	Two or more linked computer systems. There are many different types of computer networks.
<b>Password</b>	Sequence of characters (letters, numbers, symbols) used in combination with a User ID to access a computer system or network. Passwords are used to authenticate the user before s/he gains access to the system.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**County of Orange****Information Technology Usage Policy**

<b>Personally Identifiable Information (PII)</b>	Any piece of information that could be used to uniquely identify, contact, or locate a single person. Examples include: full name; national identification number; email address; IP address; driver's license number; and Social Security Number.
<b>User</b>	Any individual who uses a computer.
<b>User ID</b>	Unique name given to a user for identification to a computer or telephone network, database, application, etc. Coupled with a password, it provides a minimal level of security.
<b>Virus / Malicious Software</b>	A software program that interferes with computer operation, damages or destroys electronic data, or spreads itself to other computers. Viruses and malicious software are often transmitted via email, documents attached to email, and the Internet.
<b>Workforce Member</b>	Any member of the County workforce, including employees, temporary help, contractors, vendors and volunteers.

**3 POLICY OVERVIEW**

As a member of the County workforce, you are expected to comply with the County's Information Technology Usage Policy. Your agency may have additional policies that you must follow as part of your job.

The following are key concepts of the County's policy:

- Information created or used in support of County business activities is the property of the County.
- Your assigned information technology resources are meant to facilitate the efficient and effective performance of your duties. It is your responsibility to ensure that resources are not misused and that you comply with policy.
- If you need to access confidential information as part of your duties, you will be asked to sign a confidentiality or non-disclosure agreement before you access the County network.
- Many County facilities house sensitive or critical information systems. You are expected to comply with all physical access controls designed to restrict unauthorized access.
- You may not remove County equipment or data in any format from the workplace unless you have received prior written approval from your supervisor or manager.
- The use of the network and Internet is a privilege, not a right. If you violate policy, you may lose your network and/or Internet access. The County may refuse to reinstate your access for the remainder of your employment at the County. The County may also take other disciplinary action as appropriate under County policy, departmental policy and applicable employment MOUs.

**4 YOUR RESPONSIBILITIES**

Your security responsibilities fall under several different Information Technology categories. Each category and the key responsibilities associated with it are listed below:

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**County of Orange****Information Technology Usage Policy****USER IDs AND PASSWORDS**

- You will be issued a network user ID unique to you. Only you may use your user ID to access County resources (e.g. computer, telephone, FAX).
- You will be issued a default password at the same time as your user ID. You will be prompted to change your password the first time you log in to the system.
- Do not share user IDs and passwords with other users or individuals, including coworkers and supervisors. Treat your password as sensitive and highly confidential information.
- You are agreeing to follow the Information Technology Usage Policy when you accept a password from the County and use it to access the County data or telephone networks, the Internet, or the Intranet.
- Change your password immediately if you think someone else knows it. Report your suspicions to management.
- If you lose or forget your password, you are required to request a password reset. No one else can do it for you.

**HARDWARE AND SOFTWARE**

- The County will provide, and employees may request, peripheral equipment such as ear buds for cellular phones or Blackberry devices, as may be necessary to enable compliance with all local laws which pertain to the use of mobile communication equipment or the individual workplace needs for the employee to perform his or her employment.
- Never download or install any hardware or software without prior written approval of your agency IT representative.
- Do not make any changes to system and/or software configuration files unless specifically authorized in writing by your agency IT.
- Maintain your business data files on a network (or "shared") drive so that they can be backed up according to your agency's regular backup schedule.
- Use the "lock workstation" feature any time you leave your workstation logged on to the network and you are away from your desk.
- Do not connect a County laptop or other mobile device to the network until it has been scanned for viruses and malicious software.
- Follow the authentication procedures defined by your agency whenever you log in to the County network via Remote Access.
- Do not attempt to connect your workstation, laptop, or other computing device to the Internet via an unauthorized wireless or other connection while simultaneously connected to any County network.
- Retain original software installed on your computer if it is provided to you. The software must be available when your system is serviced in case it needs to be reinstalled.
- Do not keep liquids or magnets on or near computers, as they can cause serious damage.
- Ensure that your equipment is plugged into a surge protector at all times.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**County of Orange****Information Technology Usage Policy**

- Report all computer problems in detail on the appropriate form and/or when you contact the County Service Desk or discuss the problem with your agency's Help Desk.
- Report equipment damage immediately to the County Service Desk or your agency's Help Desk.

**EMAIL and TELEPHONE**

- The e-mail and telephone systems and networks are primarily for official County business.
- Management can freely inspect or review electronic mail and data files including voicemail. Employees should have no expectation of privacy regarding their internet usage, electronic mail or any other use of County computing or telephone equipment.
- Do not use a County email account or voicemail box assigned to another individual to send or receive messages unless you have been authorized, in writing, to act as that individual's delegate.
- Use of personal Internet (external) email systems from County networks and/or desktop devices is prohibited unless there is a compelling business reason for such use and prior written approval has been given by agency management and agency IT.
- Do not configure or use automated forwarding to send County email to Internet-based (external) email systems unless specifically authorized to do so, in writing, by County management.
- Send confidential information via email only with the written permission of management and only via an approved method. Mark the email according to agency policy.
- Treat confidential or restricted files sent as attachments to email messages as confidential or restricted documents. This also applies to confidential or restricted information embedded within an email message as message text or a voicemail message.
- Do not delete email or voicemail messages or other data if management has identified the subject matter as relevant to pending or anticipated litigation, personnel investigation, or other legal processes.

**THE INTERNET / INTRANET**

- Internet/Intranet access is primarily for County business.
- You may access the Internet for limited personal use only during nonworking time and in strict compliance with policy. If there is any doubt about whether an activity is appropriate, consult with your Department Head or his/her designee.

**INFORMATION SECURITY**

- Treat hardcopy or electronic Personally Identifiable Information (PII) as confidential and take all precautions necessary to ensure that it is not compromised. Intentional – or even accidental – disclosure of PII to unauthorized users is a violation of policy.
- Don't leave PII unattended or unsecured for any period of time.
- Be sure to follow your agency's policy for disposing of confidential data. This may include the physical destruction of data through shredding or other methods.
- Information created, sent, stored or received via the email system, network, Internet, telephones (including voicemail), fax or the Intranet is the property of the County.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**County of Orange****Information Technology Usage Policy**

- o Do not expect information you create and store on County systems, including email messages or electronic files, to be private. Encrypting or using other measures to protect or "lock" an email message or an electronic file does not mean that the data are private.
- o The County reserves the right to, at any time and without notice, access, read and review, monitor, and copy all messages and files on its computer system as it deems necessary.
- o The County may disclose text or images to law enforcement without your consent as necessary.

**PROHIBITED ACTIVITY**

Unless you are specifically authorized by your manager or agency in writing, the following uses are prohibited by the Information Technology Security Policy:

- Using, transmitting, or seeking inappropriate or offensive materials, including but not limited to vulgar, profane, obscene, abusive, harassing, belligerent, threatening, or defamatory (harming another's reputation by lies) language or materials.
- Accessing, attempting to access, or encouraging others to access controversial or offensive materials.
- Revealing PII without permission, such as another's home address, telephone number, credit card number or Social Security Number.
- Making offensive or harassing statements or jokes about language, race, color, religion, national origin, veteran status, ancestry, disability, age, sex, or sexual orientation.
- Sending or soliciting sexually oriented messages, images, video or sound files.
- Visiting sites featuring pornography, terrorism, espionage, theft, drugs or other subjects that violate or encourage violation of the law.
- Gambling or engaging in any other activity in violation of local, state, or federal law.
- Uses or activities that violate the law or County policy or encourage others to violate the law or County policy. These include:
  - o Accessing, transmitting, or seeking confidential information about clients or coworkers without proper authorization.
  - o Intruding, or trying to intrude, into the folders, files, work, networks, or computers of others, or intercepting communications intended for others.
  - o Knowingly downloading or transmitting confidential information without proper authorization.
- Uses that cause harm to others or damage to their property, including but not limited to:
  - o Downloading or transmitting copyrighted materials without the permission of the copyright owner. Even if materials on the network or the Internet are not marked with the copyright symbol, ©, assume that they are protected under copyright law.
  - o Using someone else's password to access the network or the Internet.
  - o Impersonating another user or misleading message recipients into believing that someone other than the authenticated user is communicating a message.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**County of Orange****Information Technology Usage Policy**

- Uploading a virus, other harmful component, or corrupted data or vandalizing any part of the network.
  - Creating, executing, forwarding, or introducing computer code designed to self-replicate, damage, or impede the performance of any computer's memory, storage, operating system, application software, or any other functionality.
  - Engaging in activities that jeopardize the security of and access to the County network or other networks on the Internet.
- Downloading or using any software on the network other than that licensed or approved by the County.
- Conducting unauthorized business or commercial activities including, but not limited to:
  - Buying or selling anything over the Internet.
  - Soliciting or advertising the sale of any goods or services.
  - Unauthorized outside fund-raising activities, participation in any lobbying activity, or engaging in any prohibited partisan political activity.
  - Posting County, department and/or other public agency information to external news agencies, service bureaus, social networking sites, message boards, blogs or other forums.
- Uses that waste resources, including, but not limited to:
  - Printing of personal files.
  - Sending chain letters for any reason.
  - Including unnecessary recipients on an email. Only copy others on an email or voicemail message who should be "in the loop" on the topic addressed.
  - Indiscriminate use of distribution lists. Before using a distribution list, determine whether or not it is appropriate for everyone on that list to receive the email.
  - "All hands" emails. Emails of this type are to be sent only after management permission has been obtained.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**County of Orange**

**Information Technology Usage Policy**

**5 ACKNOWLEDGEMENT**

- If you violate security policies, standards, or procedures, you can be subject to County and agency-specific disciplinary action up to and including discharge.

By signing this document, I acknowledge that I have read, understand and will comply with this County of Orange Information Technology Usage Policy. I understand that the complete Information Technology Usage Policy is available for me to review on the County's intranet. I also may request a copy from the County Service Desk, my agency's Help Desk, or my agency's Local Security Administrator.

**Workforce Member Name (please print):** \_\_\_\_\_

**Workforce Member Signature:** \_\_\_\_\_

**Agency/Department:** \_\_\_\_\_

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



**JOHN WAYNE AIRPORT**  
**GEOTECHNICAL ENGINEERING, MATERIALS TESTING**  
**CONSTRUCTION OBSERVATION, AND INSPECTION**  
**PROJECT NO. 281-281-4200-P107**  
**TWINING**



**User Access  
Request Form:**  
**IT Services  
Request**

**1. USER INFORMATION**

User Name (First): \_\_\_\_\_ (Last): \_\_\_\_\_  
 Title: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Start Date: \_\_\_\_\_ email: \_\_\_\_\_  
 Supervisor's Name: \_\_\_\_\_ Firm: \_\_\_\_\_

**2. HARDWARE REQUIRED**

- |                                            |                                                |
|--------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> Desktop Computer  | <input type="checkbox"/> Telephone             |
| <input type="checkbox"/> Portable Computer | <input type="checkbox"/> County Cellular Phone |
|                                            | <input type="checkbox"/> Other: _____          |

\*Standard PC setup: MS Windows 10 and Office 2016 (Outlook, Word, Excel, Power Point, anti-virus and Adobe Reader)

**3. ACCESS REQUIRED**

- |                                                   |                                                        |                                                                   |
|---------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> OCAIR User ID and E-mail | <input type="checkbox"/> On-Base                       | <input type="checkbox"/> ERMJ                                     |
| <input type="checkbox"/> PropWorks                | <input type="checkbox"/> Unifier (Primavera)           | <input type="checkbox"/> Off-site remote Access (JWA laptop only) |
| <input type="checkbox"/> CAMS/ASR                 | <input type="checkbox"/> CMMS                          | <input type="checkbox"/> Other: _____                             |
| <input type="checkbox"/> CAPS/CAPS+               | <input type="checkbox"/> AVI, Gatekeeper, Great Plains |                                                                   |

**4. ADDITIONAL SOFTWARE REQUIRED**

- |                                                     |                                               |
|-----------------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Adobe Acrobat Professional | <input type="checkbox"/> Costworks (RS Means) |
| <input type="checkbox"/> Adobe Illustrator          | <input type="checkbox"/> Microsoft Project    |
| <input type="checkbox"/> Primavera P6               | <input type="checkbox"/> Microsoft Visio      |
|                                                     | <input type="checkbox"/> Other: _____         |

**5. ADDITIONAL REQUIREMENTS, NOTES**

**6. EMPLOYEE SIGNATURE**

\_\_\_\_\_  
 Signature Date

**7. AGENCY APPROVAL**

**Manager**

**Deputy Airport Director**

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

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

\_\_\_\_\_  
 Signature Date

\_\_\_\_\_  
 Signature Date

**Please Return Completed  
Form To:**

**JWA IT**

John Wayne Airport  
 3160 Airway Ave.  
 Costa Mesa, CA 92626

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**43. NOTICES**

All notices required or provided for under this Agreement shall be sent to the following addresses:

COUNTY OF ORANGE  
JOHN WAYNE AIRPORT  
Attn: Mr. Larry Serafini, Deputy Airport Director, Facilities  
3160 Airway Avenue  
Costa Mesa, California 92626

Twining, Inc.  
Attn: Robert Ryan, Chief Executive Officer & President  
2883 E. Spring Street, Suite 300  
Long Beach, CA 90806

**SIGNATURE PAGE FOLLOWS**

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION, AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the date first written above.

DATED: \_\_\_\_\_

COUNTY OF ORANGE

By \_\_\_\_\_  
Chairwoman of the Board of Supervisors  
County of Orange, California

SIGNED AND CERTIFIED THAT A COPY OF THIS  
AGREEMENT HAS BEEN DELIVERED TO THE CHAIR  
OF THE BOARD PER G.C. Sec 25103, Reso 79-1535

Attest:

\_\_\_\_\_  
Robin Stieler  
Clerk of the Board  
County of Orange, California

A-E

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

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

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

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

*\*If A-E is a corporation, signatures of two specific corporate officers are required as further set forth:*

- *The first signature must be one of the following: a) the Chairman of the Board; b) President; or c) any Vice President.*
- *The second signature must be one of the following: a) Secretary; b) the Chief Financial Officer; c) any Assistant Secretary; or d) any Assistant Treasurer.*
- *In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signature to bind the company.*

APPROVED AS TO FORM:  
COUNTY COUNSEL

By  \_\_\_\_\_  
Deputy

Date 12.5.19

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING,  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**APPENDIX 1  
SCOPE OF SERVICES  
ON-CALL ENGINEERING SERVICES  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING, CONSTRUCTION  
OBSERVATION AND INSPECTION**

## **INTRODUCTION**

The Contract is to provide Architect-Engineer (A-E) services for Geotechnical Engineering, Materials Testing, Construction Observation, and Inspection (hereafter known as A-E Testing & Inspection) support services for new and existing facilities, Airport Improvement Plan (AIP), and Capital Improvement Plan (CIP) projects at John Wayne Airport (JWA).

## **TECHNICAL SERVICES**

The following sections describe the types of on-call services the A-E Testing & Inspection Firms are to provide: Geotechnical Engineering, estimated to be 20% of the work, and Materials Testing, Construction Observation, and Inspection comprising the remaining 80% of the work. Tasks will include, but are not limited to, the examples that are provided. A cost estimate for each task order pursuant to the JWA Architectural/Engineering (A/E) Services Agreement, to which this Scope of Work is an attachment, will be ordered at the time JWA requests services.

## **CODES AND CONTRACT STANDARDS**

AIP and CIP at the Airport require special knowledge of Federal Aviation Administration (FAA) Advisory Circulars (AC), i.e. FAA AC 150/5370-10B, etc., California Code of Regulations Title 24, prescribed plans, and specifications and standards for design, construction, and safety. It is required that the A-E Testing & Inspection Firm have expert knowledge of the American Standard Testing Method (ASTM) and other regulatory agency requirements. Further, the contract will require that the A-E Testing and Inspection Firm have the ability to function proficiently in and around airport facilities, as the prescribed services will take place within a busy and restricted operating environment.

In the event of a conflict between the provisions of Federal, State or local regulations and/or standards or contract documents, the more stringent of these shall apply.

Firms must be properly licensed and in good standing with the State of California. The selected firm's personnel working on this project will be required to pass a FBI background check that includes finger printing and attend a mandatory Security Identification Display Area (SIDA) class.

## **LIST OF SCOPE OF SERVICES**

### **A. Preconstruction Task Activities**

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING,  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

**i. Review of Plans and Specifications**

The A-E Testing & Inspection Firm will review all approved construction documents including design plans, specifications, and Contractors Construction Schedule for testing and inspection compliance, after which the A-E Testing & Inspection Firm will prepare a proposal to conduct all Quality Assurance testing and inspection (also called Material Acceptance Sampling and Testing). The cost proposal shall include a Call Notice (list of required tests). If clarifications or adjustments are required for any of the proposed task order activities, the A-E Testing & Inspection Firm will notify the JWA Project Manager (PM) and/or Construction Manager (CM) in writing. The PM and/or CM will prepare a task-order-specific notice to order all laboratory testing and inspection services as pre-approved through the use of a task specific Job Order. This shall be done in a timely manner and in accordance with the Contract Fee Schedules, which shall include the pre-negotiated contractual agreement between the A-E Testing & Inspection Firm and JWA for all personnel and laboratory Fee Schedules.

All improperly ordered testing and inspections related to no-shows, delayed starts, variance in manpower allocation and location, and/or unplanned overtime shifts caused by the Contractor that result in a cost variance from the approved task order, will be noted on the A-E Testing & Inspection Firm's Daily Report.

**ii. Construction Testing Equipment Mobilizations**

After JWA reviews and approves each individual task order, the A-E Testing & Inspection Firm will coordinate mobilization and demobilization of any testing equipment to the site for the specified task. Equipment may include, but is not limited to, the following: asphalt/concrete coring equipment, water hoses, sand equivalent kits, asphalt thermometers, slump cones, unit weight buckets, pressure meters, volumetric air meters, and other task-specific equipment as required.

**B. General Construction Quality Assurance/Quality Control Activities**

**i. Scheduling Services**

If ordered, the A-E Testing & Inspection Firm will prepare a Line Item Inspection and Test List (LIITL) take-off from plans and specifications to be used for construction at JWA. The LIITL is a comprehensive list of the activities required to construct the project to the approved plans and specifications.

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING,  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

Often unforeseen or undefined conditions may exist in JWA projects, which may require additional services from the A-E Testing & Inspection Firm. In the event that requested services result in additional fees beyond those described in an existing task order, the A-E Testing & Inspection Firm and/or JWA PM/CM are to contact the JWA Contract Administrator for a written budget increase, if necessary.

ii. **Building and Special Inspection Services**

The A-E Testing & Inspection Firm shall, at the direction of JWA PM/CM, perform building and/or special inspections as required by and to ensure conformance to the governing codes and contract documents during construction projects and/or facilities improvements at the Airport. Inspection services shall include, but not be limited to the following:

- Coring of asphalt and concrete pavements
- Batch plant inspections for asphalt and concrete
- Shop fabrication welding inspections and identification of high strength steel for structural steel
- Sampling and tagging of reinforcing steel
- Bolts installed in concrete along with installation; testing of post installation; expansion or chemical anchors, including dowels
- Placement of reinforcing steel and pre-stressing steel tendons
- Placement of high-strength structural concrete
- Shotcrete and spray applied fireproofing
- Concrete mix design review
- Structural masonry
- Field welding
- High-strength bolting
- Non-destructive inspection/testing of welds
- Asphalt and concrete pavement process
- Piling, drilled piers and caissons
- Commercial and residential construction designed/engineered per the governing codes
- Other inspection services as requested by JWA

The A-E Testing and Inspection Firm site representative; i.e., technician and/or inspector, shall be properly trained, licensed and/or certified in the State of California for the testing and/or inspection services that they are providing, including at least five years of verifiable experience in the area of work within the State of California. These individuals will at a minimum prepare daily inspection reports that are detailed and clearly written with all

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING,  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
TWINING**

information categories completed, have appropriate signatures with dates, and include all documentation for all inspections. The daily inspection reports shall include, but not be limited to, documentation with identifiable and properly labeled photographs that clearly describes the progression and/or completion of work; time stamps at each significant milestone of work; field issues and/or corrections; deviations from the contract documents; abnormal or atypical field or site conditions; non-conformance and/or non-compliant items or work; etc. Completed daily inspection documentation is to remain at the job site for JWA PM/CM review.

iii. **Geotechnical Design and Construction (Including Observation and Testing)**

A-E Testing & Inspection Firm is to provide the resources necessary to provide geotechnical design and/or construction information for specified JWA projects. Services shall include, but not be limited to:

- Project coordination, technical support and management, including review of project reports, plans and specifications, distribution of test reports, and work scheduling
- Geophysical testing to delineate the presence of underground utilities
- On-site soils and materials testing during construction under the direction of the client representative, construction manager, or resident engineer for soils and materials testing services
- Field observation, documentation, and testing during the earthwork operations, including field density testing of general fill, wall and trench backfill, aggregate sub-base, aggregate base, and asphalt concrete
- Field sampling and testing of cast-in-place concrete, including casting of cylinders for compressive strength, beams for flexural strength, and testing for slump, air content (if needed), unit weight, and temperature
- Observation, sampling, and testing during batch plant operations
- Field sampling and testing of mortar and grout, if applicable
- Field observation, sampling, and testing during asphalt concrete pavement operations
- Observation and documentation during the placement of reinforcement for concrete structures
- Observation and documentation during the placement of Portland Cement Concrete (PCC) pavements, including the evaluation of thickness and smoothness
- Observation and testing services relative to the welding of structural steel

Attachment B

**JOHN WAYNE AIRPORT**  
**GEOTECHNICAL ENGINEERING, MATERIALS TESTING,**  
**CONSTRUCTION OBSERVATION AND INSPECTION**  
**PROJECT NO. 281-281-4200-P107**  
**TWINING**

- Review of PCC and asphalt concrete mix designs submitted by the contractor
- Laboratory testing of soil and base materials to be placed as fill or backfill to evaluate maximum dry density and optimum moisture content, Atterberg limits, California Bearing Ratio (CBR) or R value; conformance testing (if needed) will be performed on the proposed aggregate sub-base and aggregate base
- Laboratory testing of cementitious materials to evaluate compressive strength of structural concrete, flexural strength of PCC pavements, and thickness of concrete pavement cores
- Laboratory testing of asphalt concrete materials to evaluate percent asphalt content, Marshall Stability, air voids, and unit weight of cores
- Preparation of daily reports and other memoranda to summarize field operations and laboratory test results
- Subsurface explorations consisting of soil borings, cone penetrometer tests, and backhoe test pits, etc.
- Review of existing site conditions
- Clearance of subsurface utilities by reviewing existing plans
- Hazardous materials
- Geophysical surveys to assist in the location of underground utilities
- Review of aerial photographs
- Geotechnical laboratory testing
- Formation of conclusions based on results from field and laboratory tests
- Preparation of geotechnical engineering recommendations for design and construction of proposed improvements
- Preparation of geotechnical reports containing a summary of work performed, conclusions, recommendations, results of laboratory tests, boring logs, and maps of boring locations and the addition of boring information
- Providing geotechnical engineering, construction observation and testing consultation as needed during design
- Other design, construction, testing, observation, and inspection services as requested by JWA

iv. Geotechnical Observation and Testing

After reviewing project plans and specifications, the A-E Testing & Inspection Firm is to provide the resources necessary for geotechnical observation and testing services during construction of specified JWA projects. Services shall include, but not be limited to:



Attachment B

**JOHN WAYNE AIRPORT**  
**GEOTECHNICAL ENGINEERING, MATERIALS TESTING,**  
**CONSTRUCTION OBSERVATION AND INSPECTION**  
**PROJECT NO. 281-281-4200-P107**  
**TWINING**

- Observing removal of building foundations, retaining walls, over-excavation, etc.
- Testing of over-excavation bottoms
- Testing during placement of engineered fill
- Observing installation of geosynthetics
- Laboratory testing as required during construction
- Preparation of daily documentation of field activities
- Preparation of final reports at the completion of field activities
- Providing geotechnical engineering consultation as needed during all phases of construction
- Other testing, observation, and inspection services as requested by JWA

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107  
Twining, Inc.**

**APPENDIX 2  
HOURLY RATE SCHEDULE  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING, CONSTRUCTION  
OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107**

CONSULTING SERVICES	
Position and hourly rates for Twining and our team's subconsultants can be found on pages 2 through 14 of this PDF.	\$Various

**COUNTY agrees to compensate A-E for services performed by its personnel based on the hourly rates set forth in Appendix 2 for each Job Classification. The hourly rate for each job classification represents the maximum rate for that job classification. However, the COUNTY reserves the right to negotiate with A-E a lower rate for any given job classification based on the qualifications of the candidate being considered for that job classification.**

**A-E's personnel hourly rates as listed in Appendix 2 shall remain the same each year for the term of the contract. The contract does not provide for annual cost of living adjustments.**

## Schedule of Fees 2020-2023

Personnel Rates: Per Hour Unless Otherwise Noted

Task Code	Engineering and Consulting Personnel	Rate
10026	Senior Principal Advisor/Consultant	\$ 280.00
10001	Principal Engineer/Geologist	\$ 200.00
10017	Metallurgical Engineer	\$ 190.00
70000	Registered Geotechnical Engineer	\$ 195.00
10010	Technical Advisor	\$ 195.00
10011	Material Scientist, Welding/NDT Consultant	\$ 205.00
70003	Registered Geologist/Certified Engineering Geologist	\$ 185.00
10003	Senior Engineer/Geologist	\$ 175.00
10009	Registered Civil Engineer	\$ 170.00
60003	Roofing/Waterproofing Consultant	\$ 195.00
10013	Project Engineer/Manager	\$ 165.00
30000	Quality Control Manager	\$ 155.00
10005	Senior Staff Engineer/Geologist	\$ 150.00
10007	Staff Engineer/Geologist	\$ 145.00
10015	Quality Control Administrator	\$ 135.00
10019	Metallurgical Technician	\$ 110.00
90001	CADD Operator/Draftsperson	\$ 97.00
70107	Field Supervisor	\$ 130.00
91030	Safety Supervisor	\$ 130.00
20000	Laboratory Manager	\$ 115.00
98000	Laboratory Technician	\$ 95.00
90005	Expert Witness Testimony	\$ 525.00
91010	Qualified SWPPP Developer	\$ 150.00
91000	Qualified SWPPP Practitioner	\$ 135.00
30001	Vibration Engineer	\$ 175.00

Task Code	Field Inspection Personnel	Rate
10101	Concrete/Reinforced Steel Inspector	\$ 115.00
10103	Prestressed/Post Tensioned Inspector	\$ 115.00
10105	Concrete ICC Inspector	\$ 115.00
10109	Drilled-In-Anchor Inspector	\$ 115.00
10111	Guniting/Shotcrete Inspector	\$ 115.00
10113	Masonry Inspector	\$ 115.00
10201	Structural Steel/Welding Inspector	\$ 115.00
10203	AWS Certified Welding Inspector	\$ 115.00
10207	Fireproofing Inspector	\$ 115.00
10501	Lead Inspector	\$ 119.00
10115	Firestop Special Inspector - IFC Premier	\$ 130.00
10117	Firestop Special Inspector - IQP	\$ 160.00
70109	L.A. Deputy Grading Inspector	\$ 120.00
75001	Asphalt Field and Plant Inspector/Technician	\$ 115.00
70103	Pile Driving Inspector	\$ 115.00
70101	Soils Technician	\$ 115.00
10107	Concrete Quality Control (ACI/Catrans Technician)	\$ 115.00
10122	Wood Framing Inspector	\$ 115.00
60001	Roofing/Waterproofing Inspector	\$ 122.00
10515	Mechanical Inspector	\$ 140.00
10519	Electrical Inspector	\$ 140.00
10521	Plumbing Inspector	\$ 140.00
10523	Building Inspector	\$ 135.00
30002	Vibration Monitoring Technician	\$ 108.00
50003	Field Engineering Technician	\$ 120.00

Task Code	Shop Inspection Personnel	Rate
10301	Structural Steel Fabrication Inspector	\$ 116.00
10309	Batch Plant Quality Control Technician/Inspector	\$ 115.00
10325	Glue-Laminated Fabrication Inspector	Quotation
10328	Pre-Cast Concrete/Pipe Fabrication Inspector	\$ 116.00

Task Code	Non-Destructive Testing Personnel	Rate
10401	NDE Ultrasonic Testing Technician	\$ 120.00
10403	NDE Magnetic Particle Testing Technician	\$ 120.00
10405	NDE Dye Penetrant Testing Technician	\$ 120.00
10305	Combination NDE Technician/Welding Inspector	\$ 120.00
10409	Radiographic Testing (crew of 2)	\$ 315.00
10020	NDE Engineer	\$ 180.00

Task Code	Equipment Usage (Daily Unless Otherwise Noted)	Rate
95318	Skidmore	\$ 40.00
95309	Torque Wrench, Small	\$ 15.00
95312	Torque Wrench, Large	\$ 25.00
95315	Torque Multiplier	\$ 40.00
95321	Air Meter	\$ 20.00
95324	Brass Mold	\$ 20.00
95343	Nuclear Gauge (Per Hour)	\$ 9.00
95333	Pull Test Equipment	\$ 60.00
95348	Concrete/Asphalt Coring Equipment	\$ 600.00
95327	Pachometer	\$ 55.00
95336	Floor Flatness (Dipstick)	\$ 45.00
95330	Schmidt Hammer	\$ 20.00
95341	Vapor Emission Test Kits	\$ 30.00
95342	Relative Humidity Probe	\$ 60.00
95339	UPV (Ultrasonic Pulse Velocity) Meter	\$ 350.00
95351	Fireproofing Adhesion/Cohesion (Per Test)	\$ 35.00
95300	A Scan Ultrasonic Equipment and Consumables	\$ 75.00
95303	Magnetic Particle Equipment and Consumables	\$ 40.00
95306	Liquid Penetrant Consumables	\$ 35.00
95307	Phased Array Ultrasonic Equipment (Per Hour)	\$ 60.00
95347	Ground Penetrating Radar	\$ 300.00
95345	Impact Echo	\$ 350.00
95362	Ultrasonic Tomography	\$ 450.00
95349	Inertial Profiler (Per Hour)	\$ 260.00
95357	Project Dedicated Vehicle	\$ 110.00
95364	Roller Compacted Concrete Vibrating Hammer/Tamping Plate	\$ 70.00
95367	Half-cell Potential Equipment Set	\$ 350.00
95368	Concrete Electrical Resistivity Meter	\$ 160.00
95369	Field Hardness (Steel)	\$ 100.00
95370	Coating Thickness Gauge	\$ 100.00
95371	Temperature Control Curing Box (Per Month)	\$ 450.00
95372	Temperature Matching Curing Box (Per Month)	\$ 520.00

Task Code	Specimen Pick-Up	Rate
20102	Standard Sample: Concrete Cylinders (Each)	\$ 23.00
20101	Standard Sample: Mortar/Grout Cubes and Cores, Fireproofing, Rebar, and Epoxy Prisms (Each)	\$ 23.00
20103/	Over-size Sample: Masonry Prisms, Shotcrete Panels, Flexural Beams (Each)	\$ 50.00
20107	Technician for Specimen Pick-Up Not Listed Above (Per Hour, 2-Hour Minimum)	\$ 95.00
20109	Technician for Specimen Pick-Up Before 5:00 a.m. or After 5:00 p.m. Monday thru Friday, or All Day Saturday (Per Hour, 2-Hour Minimum Plus Mileage)	\$ 120.00

Task Code	Jobsite Trailer, Mobile or On-site Laboratory	Rate
95360	Mobile laboratory for rapid strength concrete (per shift not exceeding 12 hours) All others by quotation	\$ 450.00

Task Code	Concrete Tests (Field Made Specimens)	Rate
20201	6" x 12" Cylinder: Compression Strength (ASTM C39)	\$ 36.00
20202	4" x 8" Cylinder: Compression Strength (ASTM C39)	\$ 31.00
20203	Density of Structural Lightweight Concrete Equilibrium or Oven Dry Method (ASTM C567)	\$ 77.00
20205	Core Compression including Trimming (ASTM C42)	\$ 62.00
20207	6" x 6" x 18" Flexural Beams Not Exceeding Referenced Size (ASTM C78, C293 or CTM 523)	\$ 85.00
20209	Splitting Tensile Strength (ASTM C496)	\$ 90.00
20211	Modulus of Elasticity Test (ASTM C469)	\$ 240.00
80003	Rapid Chloride Permeability Test: Cylinders or Cores (ASTM C1202)	\$ 490.00
80006	Density, Absorption, and Voids in Hardened Concrete (ASTM C642)	\$ 450.00

Task Code	Concrete Tests (Field Made Specimens)	Rate
40005	Flexural Toughness (ASTM C1609, Formerly ASTM C1018)	\$ 800.00
40006	Double Punch Strength of Fiber Reinforced Concrete	\$ 450.00
40009	Coefficient of Thermal Expansion of Concrete (CRD 39, AASHTO T336)	\$ 500.00

Task Code	Concrete Specimen Preparation	Rate
20151	Sawing of Specimens (Each)	\$ 32.00
20157	Coring of Specimens in Lab (Each)	\$ 32.00

Task Code	Laboratory Trial Batch: Concrete, Cement and Mortar	Rate
30217	Compression Test Cylinders Made and Tested in Laboratory (ASTM C192, C35)	\$ 50.00
30219	6" x 6" x 18" Flexural Beams Made and Tested in Laboratory (ASTM C192, C78)	\$ 90.00
30223	Splitting Tensile Strength Cylinders Made and Tested in Laboratory (ASTM C192, C496)	\$ 110.00
30225	Modulus of Elasticity Test Cylinders Made and Tested in Laboratory (ASTM C192, C469)	\$ 260.00
30227	Density of Structural Lightweight Concrete Made in the Laboratory, Equilibrium or Oven Dry Method (ASTM C567)	\$ 95.00
30201	Laboratory Trial Batch (ASTM C192)	\$ 475.00
30203	Laboratory Trial Batch: Packaged Dry Concrete Including Verification of Slump, Air Content, Plastic Unit Weight, Six Cylinders for Compressive Strength (ASTM C387 and C192)	\$ 950.00
30205	Drying Shrinkage Up to 28 Days: Three 3" x 3" or 4" x 4" Bars, Five Readings up to 28 Dry Days (ASTM C157)	\$ 490.00
30230	Additional Reading, Per Set of Three Bars	\$ 45.00
30231	Storage over Ninety (90) Days, Per Set of Three Bars, Per Month	\$ 30.00
30207	Setting Time Up to 7 Hours (ASTM C403)	\$ 130.00
30209	Bleeding (ASTM C232)	\$ 130.00
30229	Concrete Restrained Expansion (ASTM C878)	\$ 520.00
30211	Mix, Make and Test Mortar or Grout Specimens for Compressive Strength: Set of 6 (ASTM C878)	\$ 450.00
20263	Non-Shrink Grout: Height Change after Final Set (ASTM C1090)	\$ 450.00
20265	Non-Shrink Grout: Height Change at Early Age (ASTM C827)	\$ 800.00
30232	Cracking Resistance, Set of Three Rings, Laboratory Trial Batching, Test Until Cracking or up to 28 Days (ASTM 1581)	\$ 5,000.00
30233	Evaluation of Pre-Packaged Masonry Mortars (ASTM C270)	\$ 1,100.00
30234	Creep, ASTM C512 (One Age of Loading, 12 Months Duration of Testing)	\$ 7,000.00

Task Code	Chemical Analysis and Petrographic Examination of Concrete	Rate
80123	Chemical Analysis for Acid Soluble Chlorides (ASTM C1152) (includes sample prep)	\$ 250.00
80193	Chloride Diffusion Coefficient of Cementitious Mixtures by Bulk Diffusion (ASTM C1556)	\$ 2,200.00
80129	Petrographic Examination of Hardened Concrete (ASTM 856) (Comprehensive)	\$ 1,700.00

Task Code	Physical and Chemical Analysis of Cement	Rate
80195	Physical Testing and Chemical Analysis of Portland Cement per Standard Requirements (ASTM C150)	\$ 1,200.00
80100	Chemical Analysis of Portland Cement per Standard Requirements (ASTM C150)	\$ 650.00
80103	Physical Testing of Portland Cement per Standard Requirements (ASTM C150)	\$ 650.00
80194	Physical Testing of Type K Cement, Mortar Expansion (ASTM C806)	\$ 650.00
80106	Partial Analysis or Specific Physical Tests	Quotation
80110	Sulfates Resistance of Hydraulic Cement (ASTM C1012) - 6 months	\$ 2,400.00
80111	Sulfates Resistance of Hydraulic Cement (ASTM C1012) - 12 months	\$ 2,600.00

Task Code	Physical and Chemical Analysis of Fly Ash	Rate
80140	Chemical Analysis of Fly Ash per Standard Requirements (ASTM C618)	\$ 650.00
80143	Physical Testing of Fly Ash per Standard Requirements (ASTM C618)	\$ 650.00
80146	Partial Analysis or Specific Physical Tests	Quotation
80147	Chemical Analysis and Physical Testing of Fly Ash per Standard Requirements (ASTM C1618)	\$ 1,100.00

Task Code	Physical Testing of Chemical Admixtures for Concrete	Rate
80196	Qualification of Admixture per ASTM C494	Quotation

Task Code	Soils and Aggregate Tests	Rate
30503	Abrasion: LA Rattler (ASTM C131)	\$ 195.00
30505	Abrasion: LA Rattler (ASTM C535)	\$ 195.00
70301	Atterberg Limits/Plasticity Index (ASTM D4318, CTM204)	\$ 150.00
70303	California Bearing Ratio Excluding Maximum Density (ASTM D1883): Soil	\$ 550.00
70304	California Bearing Ratio Excluding Maximum Density (ASTM D1883): Cement-Treated Soil	\$ 650.00
70344	Cement-Treated Soil/Base Mix Design: includes three trial cement contents with three unconfined compressive strength specimens per cement content	\$ 3,200.00
70305	Chloride and Sulfate Content (CTM 417, CTM 422)	\$ 150.00
30403	Clay Lumps and Friable Particles (ASTM C142)	\$ 175.00
30321	Cleanliness Value: 1" x #4 (CTM 227)	\$ 175.00
30322	Cleanliness Value: 1.5" x .75" (CTM 227)	\$ 275.00
70393	Collapse Potential/Index (ASTM D5333)	\$ 175.00
70396	Compressive Strength of Molded Soil-Cement Cylinders (ASTM D1633)	\$ 105.00
70309	Consolidation Test: Full Cycle (ASTM 2435, CTM 219)	\$ 195.00
70311	Consolidation Test: Time Rate per Load Increment (ASTM D2435, CTM 219)	\$ 45.00
70313	Corrosivity Series: Sulfate, Cl, pH, Resistivity (CTM 643, 417, and 422)	\$ 245.00
70315	Crushed/Fractured Particles (ASTM D5821, CTM 205)	\$ 175.00
70317	Direct Shear Test: Remolded and/or Residual (ASTM D3080)	\$ 245.00
70319	Direct Shear Test: Undisturbed - Slow [CD] (ASTM D3080)	\$ 225.00
70321	Direct Shear Test: Undisturbed - Fast [CU] (ASTM D3080)	\$ 195.00
70378	Durability Index: Per Method - A, B, C, or D (CTM 229, ASTM D3744)	\$ 210.00
70325	Expansion Index (ASTM D4829, UBC 18-2)	\$ 170.00
75004	Fine Aggregate Angularity (AASHTO T304, ASTM C1252, CTM 234)	\$ 190.00
30507	Flat and Elongated Particle (ASTM D4791)	\$ 225.00
30508	Flat or Elongated Particle (ASTM D4791)	\$ 195.00
70331	Maximum Density: Methods A/B/C (ASTM D1557, D698, CTM 216)	\$ 190.00
70333	Maximum Density: Check Point (ASTM D1557, D698)	\$ 65.00
70335	Maximum Density: AASHTO C [Modified] (AASHTO T-180)	\$ 195.00
70337	Moisture Content (ASTM D2216, CTM 226)	\$ 25.00
70339	Moisture and Density: Ring Sample (ASTM D2937)	\$ 30.00
70341	Moisture and Density: Shelby Tube Sample (ASTM D2937)	\$ 40.00
70340	Moisture-Density Relations of Soil-Cement Mixtures Premixed in the Field (ASTM D558)	\$ 275.00
70342	Moisture-Density Relations of Soil-Cement Mixtures Mixed in the Lab (ASTM D558)	\$ 350.00
30401	Organic Impurities (ASTM C40, CTM 213)	\$ 90.00
70343	Permeability (ASTM D5084)	Quotation
80001	Potential Reactivity: Chemical Method (ASTM C289 - Discontinued Method)	\$ 525.00
70394	Potential Reactivity: Mortar Bar Expansion Method, 14-Day Exposure (ASTM C1260)	\$ 825.00
70391	Potential Reactivity: Mortar Bar Expansion Method, 28-Day Exposure (ASTM C1260)	\$ 875.00
70398	Potential Reactivity: Concrete Bar Expansion, Method (ASTM C1293), 12 month	\$ 2,600.00
70399	Potential Reactivity: Concrete Bar Expansion, Method (ASTM C1293), 24 month	\$ 2,800.00

Task Code	Soils and Aggregate Tests, Continued	Rate
70397	Potential Reactivity of Aggregate Combination, 14-Day Exposure, Mortar (ASTM C1567)	\$ 950.00
70392	Potential Reactivity of Aggregate Combination, 28-Day Exposure, Mortar (ASTM C1567)	\$ 1,000.00
70345	R-Value: Soil (ASTM 2844, CTM 301)	\$ 410.00
70347	R-Value: Aggregate Base (ASTM D2844, CTM 301)	\$ 410.00
70349	Sand Equivalent (ASTM D2419, CTM 217)	\$ 125.00
70351	Sieve #200 Wash Only (ASTM D1140, CTM 202)	\$ 90.00
70353	Sieve with Hydrometer: 3/4" Gravel to Clay (ASTM D422, CTM 203)	\$ 250.00
70355	Sieve with Hydrometer: Sand to Clay (ASTM D422, CTM 203)	\$ 240.00
70357	Sieve Analysis Including Wash (ASTM C136, CTM 202)	\$ 150.00
70359	Sieve Analysis Without Wash (ASTM C136, CTM 202)	\$ 120.00
70360	Sieve Analysis: Split Sieve (ASTM C136, CTM 202)	\$ 240.00
70361	Sieve Analysis Without Wash: With Cobbles (ASTM C136, CTM 202)	\$ 235.00
70363	Soundness: Sodium or Magnesium Sulfate, 5 Cycles (ASTM C88)	\$ 450.00
70365	Specific Gravity and Absorption: Coarse (ASTM C127, CTM 206)	\$ 100.00
70367	Specific Gravity and Absorption: Fine (ASTM C128, CTM 207)	\$ 165.00
70369	Swell/Settlement Potential: One Dimensional (ASTM D4546)	\$ 105.00
70371	Triaxial	Quotation
70373	Unconfined Compression (ASTM D2166, CTM 221)	\$ 135.00
30317	Unit Weight Per Cubic Foot (ASTM C29, CTM 212)	\$ 125.00
30319	Voids in Aggregate with Known Specific Gravity (ASTM C29, CTM 212)	\$ 125.00
30411	Lightweight Particle: Coarse (ASTM C123)	\$ 400.00
30412	Lightweight Particle: Fine (ASTM C123)	\$ 400.00

Task Code	Asphalt Concrete Tests	Rate
75031	HMA Mixing and Preparation	\$ 125.00
75032	HMA Mixing and Preparation with Aggregate Treatment	\$ 175.00
75033	Bulk Specific Gravity of Compacted Sample or Core: SSD (CTM 308C and ASTM D2726)	\$ 55.00
75036	Bulk Specific Gravity of Compacted Sample or Core: Paraffin Coated (CTM 308A and ASTM D1188)	\$ 80.00
75040	Emulsion Residue, Evaporation (ASTM D244)	\$ 150.00
75024	Extraction: % Bitumen (CTM 382, ASTM D6307)	\$ 160.00
75027	Extraction: % Bitumen and Gradation (CTM 382, CTM 202, ASTM D6307, ASTM D5444)	\$ 215.00
75028	Extraction: % Bitumen, Correction Factor (CTM 382, ASTM D6307)	\$ 350.00
75030	Chemical Extraction: % Bitumen and Sieve Analysis (ASTM D2172 Method A or B, ASTM D5444)	\$ 245.00
75042	Lab Tested Maximum Density: Hveem, 3 briquettes (CTM 304, CTM 308, ASTM D1561, ASTM D1188)	\$ 210.00
75057	Hveem Stabilometer Test, Premixed, 3 briquettes (CTM 304, CTM 366, ASTM D1560, ASTM D1561)	\$ 210.00
75048	Lab Tested Maximum Density: Marshall, 3 briquettes (ASTM D6926, ASTM D2726)	\$ 210.00
75049	Lab Tested Maximum Density: Marshall 6" Specimen, 3 briquettes (ASTM D5581, ASTM D2726)	\$ 215.00
75050	Lab Tested Maximum Density: Superpave Gyrotory Compacted Briquette, SSD, 1 briquette (ASTM D6925, ASTM D2726)	\$ 80.00
75052	Lab Tested Maximum Density: Superpave Gyrotory Compacted Briquette, Paraffin, 1 briquette (ASTM D6925, ASTM D1188)	\$ 90.00
75051	Maximum Theoretical Specific Gravity [RICE] (CTM 309, ASTM D2041)	\$ 160.00
75066	Marshall Stability and Flow, Cored Sample, each (ASTM D6927)	\$ 80.00
75069	Marshall Stability and Flow, Premixed, 3 briquettes (ASTM D6926, ASTM D6927)	\$ 230.00
75106	Marshall Stability and Flow, Gyrotory Compacted Specimen Pre-Mixed, 3 briquettes (ASTM D6925, ASTM D5581)	\$ 230.00
75107	Marshall Stability and Flow 6" Specimen, Premixed, 3 briquettes (ASTM D5581)	\$ 230.00
75063	Moisture Content (CTM 370)	\$ 85.00

Task Code	Asphalt Concrete Tests, Continued	Rate
75005	Wet Track Abrasion Test (ASTM D3910)	\$ 160.00
75093	Hveem Mix Design (Excluding Aggregate Quality Tests)	\$ 3,400.00
75096	Hveem Mix Design, with RAP (Excluding Aggregate Quality Tests, RAP Qualification)	\$ 3,800.00
75099	Hveem Mix Design, with Lime (Excluding Aggregate Quality Tests)	\$ 3,800.00
75094	Hveem Mix Design Caltrans Untreated Mix (Including Aggregate Quality Tests)	\$ 4,650.00
75095	Hveem Mix Design Caltrans Lime Treated Mix (Including Aggregate Quality Tests)	\$ 4,650.00
75084	Marshall Mix Design (Excluding Aggregate Quality Tests)	\$ 3,400.00
75087	Marshall Mix Design with RAP (Excluding Aggregate Quality Tests)	\$ 3,800.00
75090	Marshall Mix Design with Lime (Excluding Aggregate Quality Tests)	\$ 3,800.00
75083	Open Grade Asphalt Concrete Mix Design (CTM 368, ASTM D7064)	\$ 1,700.00
75109	Superpave Mix Design (Excluding Aggregate Quality Tests)	\$ 4,900.00
75113	Superpave Mix Design, with RAP (Excluding Aggregate Quality Tests)	\$ 6,500.00
75075	Effect of Moisture on Asphalt Paving Mixtures, Pre-Mixed (AASHTO T283, ASTM D4867)	\$ 1,000.00
75111	Hamburg Wheel Track Test, 20,000 passes, 4 briquettes (AASHTO T324)	\$ 1,100.00
75039	Raveling Test of Cold Mixed Emulsified Asphalt (ASTM D7196)	\$ 200.00
75067	Marshall Stability, wet set, 3 replicates (AASHTO T245)	\$ 350.00
75068	Marshall Stability, dry set, 3 replicates (AASHTO T245)	\$ 300.00
75070	Cold Recycled Asphalt Mix Design: 2 gradings each, 3 emulsion content (Caltrans LP-8)	\$ 10,500.00
75114	Superpave Mix Design, with Rubber (Excluding Aggregate Quality Tests)	\$ 6,600.00
75115	Superpave Mix Design, with Additives (Excluding Aggregate Quality Tests)	\$ 5,790.00

Task Code	Brick Masonry Tests, ASTM C67	Rate
20301	Modulus of Rupture: Flexural	\$ 75.00
20303	Compression Strength	\$ 55.00
20305	Absorption: 5 Hour or 24 Hour	\$ 60.00
20307	Absorption (Boil): 1, 2 or 5 Hours	\$ 70.00
20309	Initial Rate of Absorption	\$ 50.00
20311	Efflorescence	\$ 70.00
20313	Cores: Compression	\$ 65.00
20315	Shear Test on Brick Cores: 2 Faces	\$ 90.00

Task Code	Concrete Block, ASTM C140	Rate
20321	Compression	\$ 85.00
20323	Absorption/Moisture Content/Oven Dry Density	\$ 85.00
20327	Linear Shrinkage (ASTM C426)	\$ 225.00
20335	Web and Face Shell Measurements	\$ 45.00
20329	Tension Test	\$ 155.00
20331	Core Compression	\$ 65.00
20333	Shear Test of Masonry Cores: 2 Faces	\$ 85.00
20339	Efflorescence Tests	\$ 45.00

Task Code	Masonry Prisms, ASTM C1314	Rate
20341	Compression Test: Composite Masonry Prisms Up To 8" x 16"	\$ 185.00
20343	Compression Test: Composite Masonry Prisms Larger Than 8" x 16"	\$ 245.00
20346	Prism Cord Modulus of Elasticity	\$ 525.00
20347	Prism Cord Modulus of Elasticity with Transverse Strain (for double-wythe specimen)	\$ 650.00

Task Code	Mortar and Grout	Rate
20351	Compression: 2" x 4" Mortar Cylinders (ASTM C780)	\$ 55.00
20353	Compression: 3" x 3" x 6" Grout Prisms, Includes Trimming (ASTM C119)	\$ 37.00
20355	Compression: 2" Cubes (ASTM C109)	\$ 55.00
20357	Compression: Cores (ASTM C42)	\$ 65.00



Task Code	Masonry Specimen Preparation	Rate
20155	Cutting of Cubes or Prisms	\$ 65.00

Task Code	Fireproofing Tests	Rate
20401	Oven Dry Density (ASTM E605)	\$ 65.00

Task Code	Gunitite and Shotcrete Tests	Rate
20361	Core Compression Including Trimming (ASTM C42)	\$ 65.00
20365	Compression: Cubes (Includes Saw Cutting)	\$ 85.00

Task Code	Concrete Roof Fill: Gypsum, Vermiculite, Perlite, Lightweight Insulating Concrete, Etc.	Rate
20371	Compression Test (ASTM C495 and C472)	\$ 47.00
20373	Air Dry Density (ASTM C472)	\$ 37.00
20379	Oven Dry Density (ASTM C495)	\$ 62.00

Task Code	Reinforcing Steel, ASTM A615, A706	Rate
20501	Tensile Test: # 11 or Smaller	\$ 60.00
20503	Bend Test: # 11 or Smaller	\$ 55.00
20504	Bend Test #14 or #18	\$ 325.00
20505	Tensile Test: # 14	\$ 225.00
20507	Tensile Test: # 18	\$ 325.00

Task Code	Reinforcing Steel - Welded or Coupled Specimens	Rate
20521	Tensile Test: Welded/Coupled #11 and Smaller	\$ 70.00
20523	Tensile Test: Welded/Coupled #14	\$ 250.00
20525	Tensile Test: Welded/Coupled #18	\$ 375.00
20529	Weld: Macroetch	\$ 75.00
20531	Slippage Test - Caltrans (CTM 670)	\$ 190.00
20532	Tensile Test: Welded Hoops #11 and Smaller	\$ 145.00

Task Code	Metal and Steel Testing	Rate
20601	Tensile Strength: Up to 100K Pounds (Each)	\$ 60.00
20603	Tensile Strength: Up to 200K Pounds (Each)	\$ 70.00
20605	Tensile Strength: Up to 300K Pounds (Each)	\$ 85.00
20607	Tensile Strength: Up to 400K Pounds (Each)	\$ 135.00
20609	Tensile Strength: 400K to 600K Pounds (Each)	\$ 325.00
20611	Tensile Strength: Stress-Strain Percent Offset	\$ 170.00
20545	Weld: Macroetch	\$ 75.00
20547	Weld: Fracture	\$ 40.00
20615	Bend Test	\$ 55.00
20617	Flattening Test	\$ 70.00
20619	Hardness Test (ASTM E18)	\$ 80.00
20630	Bolt: Axial Tensile Test (Up to 7/8" diameter)	\$ 45.00
20631	Bolt: Wedge Tensile Test (Up to 7/8" diameter)	\$ 60.00
20632	Bolt: Axial Tensile Test (Greater than 7/8" up to 1" diameter)	\$ 65.00
20633	Bolt: Wedge Tensile Test (Greater than 7/8" up to 1" diameter)	\$ 80.00
20634	Bolt: Axial Tensile Test (Greater than 1" diameter)	Quotation
20635	Bolt: Wedge Tensile Test (Greater than 1" diameter)	Quotation
20636	Bolt: Proof Load Test (Up to 7/8")	\$ 70.00
20637	Bolt: Proof Load Test (Greater than 7/8" up to 1" diameter)	\$ 90.00
20638	Bolt: Proof Load Test (Greater than 1")	Quotation
20639	Nut: Proof Load Test (Up to 7/8")	\$ 50.00
20640	Nut: Proof Load Test (Greater than 7/8" up to 1" diameter)	\$ 70.00
20641	Nut: Proof Load Test (Greater than 1")	Quotation

Task Code	Chemical Testing of Metal and Steel	Rate
80170	Steel Chemical Analysis	\$ 155.00
80173	Weight of Galvanized Coating (ASTM A90)	\$ 75.00
80176	Epoxy Coating Thickness	\$ 80.00

Task Code	Machining and Preparation of Tensile and Bend Sample: Carbon Steel	Rate
20751	Machinist: Initial Preparation from Mock-up, Etc. (Per Hour)	\$ 95.00
20753	Sawcut to Overall Width (Per 0.5" Thickness or Fraction Thereof)	\$ 50.00
20755	Machine to Test Configuration: Milled Specimens	\$ 55.00
20757	Machine to Test Configuration: Turned Specimens (Per 0.5" Thickness or Fraction Thereof)	\$ 70.00
20759	Prepare Subsize Specimens (Per 0.5" Thickness or Fraction Thereof)	\$ 135.00
		\$ 85.00

Task Code	Charpy Impact	Rate
20621	Charpy Impact Ambient Temperature	\$ 90.00
20623	Charpy Impact Reduced Temperature	\$ 110.00

Task Code	Machining of Charpy Samples: Carbon Steel	Rate
20780	Cutting and Milling (Per 0.5" or Fraction Thereof)	\$ 80.00
20783	Final Machining to Sample Configuration	\$ 90.00

Task Code	Prestressing Wires and Tendons, (ASTM A416)	Rate
20701	Stress-Strain Analysis: Wire or Strands (Including Chart and Percent Offset)	\$ 180.00
20703	Tensile Test Only	\$ 135.00
20705	Tendons	

Task Code	Polymer Matrix Composite Materials (Fiberwrap)	Rate
20706	Tensile Strength - Set of 5 Specimens/batch/ direction (ASTM D3039)	\$ 1,350.00
20707	Tensile Strength - Additional Specimens (ASTM D3039)	\$ 250.00
20708	Heating Chamber Time - Per 24 hr period	\$ 95.00

Task Code	Calibration Services and Universal Machine Usage	Rate
20801	Calibration/Verification Services	Quotation
20803	Universal Test Machine Usage (Per Hour)	\$ 350.00

Task Code	Ceramic Tile Testing Division	Rate
	The Ceramic Tile Institute of America (CTIOA) and Twining worked together to advance and develop technology designed to enhance the quality of materials and workmanship in the ceramic tile industry. A separate schedule of fees for these services is available upon request.	

Cyclic and Fatigue Testing Programs on Special Products/Parts	Quotation
Engineering and Technical supports/Design of Prototypes and Special Test Set-Up	Quotation
Fastener/Coupling Full Testing Program Per New Regulations: Tension, Tension/Bend, Shear, Double Shear, 8 Compressions	Quotation
Fiberglass/Composite Materials Field Testing Program (ASTM D4065, D1143, D4923, D2584, D4476, D1242, D7901, D7921, and D732)	Quotation
Field Testing of Structures and Structural Elements	Quotation
In-Place Shear Testing	Quotation
Materials and/or Product Evaluation Per Specifications	Quotation
Structural Dynamic Testing and Durability Analysis	Quotation

## General Conditions

NOTE: Field inspection work conditions are established by contract with Operating Engineers, Local 12.

NOTE: A minimum of 24 hours notice is required for testing and inspection services.

NOTE: For projects subject to a Project Labor Agreement (PLA), if terms/conditions of the PLA are more restrictive those terms/conditions will apply.

NOTE: Rates will be adjusted annually each July 1st to reflect increased costs.

### Administrative Fees

All administrative costs including report distribution and Twining ConstructionHive system are billed at the following percentage of the monthly invoice total: 0%

Note that hard copies of reports will be sent only to governing jurisdictions that mandate them. All other parties will receive reports electronically. The administrative fee above will receive reports electronically. The administrative fee above will be increased by 0% if additional hard copies of reports are requested.

### Minimum Charges (Inspection and Technician Personnel Only - Other Personnel Charged on Portal to Portal Basis)

2-Hour Minimum: Inspector arrives at jobsite, no work to perform.

4-Hour Minimum: 1 to 4 hours of inspection

8-Hour Minimum: Over 4 to 8 hours of inspection

### Regular Time

The first 8 hours worked Monday through Friday between 5:00 a.m. and 5:00 p.m.

### Time and One-Half (All Types of Inspection)

All shifts will be billed based on the time and date of their start. Any increment past 8 hours through 12 hours worked Monday through Friday and the first 12 hours on Saturday.

Time and one-half will also be charged for the first four hours before 5:00 a.m. and after 5:00 p.m.

### Double Time (All Types of Inspection)

All shifts will be billed based on the time and date of their start. After the first 12 hours worked Monday through Saturday, all day Sunday, holidays, and the first Saturday following the first Friday in June and December. After the first four hours worked before 5:00 a.m. and after 5:00 p.m. Holidays are New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving and Christmas Day.

### Meal Period

When personnel are required by their duties to work more than five consecutive hours without a one-half hour uninterrupted meal period, one half hour at double time rate will be charged in addition to any applicable overtime for actual hours worked.

### Shift Differential (Applies to Regularly Scheduled Shifts Only)

A \$1.00 per hour shift differential premium will be charged for all inspection hours that fall outside of the 5:00 a.m. to 5:00 p.m. time period. Twining will require 48-hour notice along with the General Contractors approved shift letter prior to beginning a shift that will include hours falling outside this time period. Should this notice not be provided, all work performed on that shift will be billed at the overtime rate.

If three shifts per day are required, the first shift will be billed at the standard rate. The second shift shall be billed in accordance with the previous paragraph.

The third shift shall be billed at 8 hours for the first 6 1/2 hours worked and appropriate overtime for all hours thereafter.

### Travel Time and Mileage

For projects outside a 50-mile radius from the nearest Twining facility, \$0.58 per excess mile to and from the project will be charged for inspectors and technicians.

Other than small tools, whenever project related equipment is required to be transported to and from the project site, time and mileage for inspectors and field technicians will be billed on a portal to portal basis. For all projects, \$0.58 per mile rate and applicable travel time will be charged portal to portal for engineers, consultants, supervisors, and laboratory technicians from the laboratory to the project site and return.

For work locations located 100 miles or more from Twining, travel time will be charged at the relevant rate for inspectors and technicians in addition to a subsistence allowance.

### Weekend Sample Pick-Ups

In order to be in strict conformance with testing standards, it may be required that weekend pick-ups be performed (e.g. concrete specimens cast on Friday must be picked up on weekend in order to be in conformance with ASTM C31 requiring specimens to be moved to their final curing location within 48 hours of casting.) Applicable charges for weekend work will apply when this is required. Should these charges not be authorized then Twining will not be responsible for any negative consequences.

### Reimbursable Expenses

Parking, air fare, car rental, food and lodging, etc. will be charged at cost plus 0% per processed invoice, unless provided by client.

### Project Specific Documents

Costs presented assume that client will provide project specific documents (plans, specifications, submittals, RFIs, etc.) for all inspection personnel. Should project specific documents be provided electronically through a "for fee" service, the client will be responsible for providing access and paying any fees for the service.

### Project Site Facilities

Prices quoted assume that initial curing facilities for test samples that comply with relevant test standards and project requirements are provided by others. In addition, prices quoted assume that work/desk space for inspection staff are provided by others. Additional costs will apply should Twining be required to provide such facilities.

### Subsistence

Subsistence on remote jobs will be charged per quotation.

### Laboratory Testing Hours

Please note that laboratory testing will be billed on an hourly basis for non-standard tests. If testing is required to be performed on Saturdays, Sundays, holidays, or before 5:30 a.m. or after 4:00 p.m. on weekdays, an additional hourly charge with a minimum of one hour will be applied for the laboratory technician. 1.5 x regular test rate will be charged for rush testing.

### Charges for Subcontracted Services

Material sent to outside laboratory for testing:	Cost plus 10%
Material sent to outside fabricator or machine shop:	Cost plus 10%
Glu-Lam beam inspection:	Cost plus 10%
Other subcontractors:	Cost plus 10%
Project exclusive equipment purchase:	Cost plus 10%

## General Conditions, continued

### Limit of Liability

~~Client agrees to limit Twining's aggregate liability to all entities for alleged or actual errors and omissions in the performance of its professional services under this agreement to \$50,000.00 or the fees actually paid to Twining, whichever amount is greater. Higher limits may be available by quotation.~~

### Certified Payroll

Certified payroll will be provided, upon request, at an additional charge of \$0/month. Fee applies to every month that certified payroll must be submitted regardless of whether or not services were provided for any given month.

### Final Reports Required by Jurisdiction

If a final report or affidavit is required, we must first review all inspection and testing reports and clear up any unresolved issues on these reports. These issues will typically require approval by the engineer or architect of record. This process can take several weeks or just a day, depending on the number and complexity of the issues. Cost for final reports will be billed hourly.

### Terms of Payment

Fees charged are for professional and technical services and are due upon presentation. If not paid within 30 days from date of invoice, they are considered past due and a finance charge of 1 1/2% per month will be added to the unpaid balance.

A 3% fee will be applied for payments processed by credit card.

All invoice errors or necessary corrections shall be brought to the attention of Twining within 15 days of receipt of invoice. Thereafter, customer acknowledges invoices are correct and valid. Twining reserves the right to terminate its services to a customer without notice if all invoices are not current. Upon such termination of services, the entire amount accrued for all services performed shall immediately become due and payable. Customer waives any and all claims against Twining, its subsidiaries, affiliates, servants and agents for termination of work on account of these terms.

In the event of any litigation arising from or related to any agreement to provide services whether verbal or written, the prevailing party shall be entitled to recover from the non-prevailing party all reasonable costs incurred, including staff time, court costs, attorney's fees and all other related expenses in such litigation. Additionally, in the event of a non-adjudicative settlement of litigation between the parties or a resolution of dispute by arbitration, that same process shall determine the prevailing party.

### Specimen Disposal

Specimens will be discarded after testing unless Twining has been notified prior to testing that the customer wishes to retrieve the specimens or storage arrangements are made.

### Oversize Specimens

An extra charge will be made when test specimens require more than one person to handle because of size or weight.

### Elevated Work Platforms

In the event an elevated work platform is required to safely complete our inspections, the client must provide safe access, including a trained and certified operator, to Twining inspection and testing personnel.





## GREGG DRILLING, LLC.

SPECIALIZING IN ENVIRONMENTAL, GEOTECHNICAL AND IN-SITU TESTING

**Fully Loaded Labor & Equipment Rates \$/Hour**

<b>Mud Rotary Drill Rig (Mobile B80/B53) - 2 person crew</b>	
Drilling time - Mud Rotary	\$475.00
Drilling Time - Rock Coring/101 GeoBarrel	\$535.00
Standby Time & Development Time	\$575.00
Mob/Demob	\$475.00
Daily Travel (when rig can be left on-site)	\$315.00

<b>Truck-Mounted Hollow Stem AUGERS - 2 person crew</b>	
Drilling Time	\$395.00
Drilling Time - 5-foot dry core sampling	\$430.00
Standby Time & Development Time	\$395.00
Mob/Demob	\$395.00
Daily Travel (when rig can be left on-site)	\$315.00

<b>Truck-Mounted Direct Push Rig - 1 person crew</b>	
Drilling Time - Direct Push	\$315.00
Standby Time & Development Time	\$315.00
Mob/Demob	\$315.00
Daily Travel	\$315.00

<b>SONIC Drill Rig - 3 person crew</b>	
Drilling Time	\$945.00
Standby Time & Development Time	\$945.00
Mob/Demob	\$945.00
Daily Travel	\$475.00

<b>Track-Mounted Auger/Direct Push Rig - 2 person crew</b>	
Drilling Time - Auger/Direct Push	\$420.00
Standby Time & Development Time	\$420.00
Mob/Demob	\$420.00
Daily Travel (when rig can be left on-site)	\$315.00

<b>Truck-Mounted Development Rig - 1 person crew</b>	
Development Time	\$290.00
Standby Time & Development Time	\$290.00
Mob/Demob	\$290.00
Daily Travel (when rig can be left on-site)	\$290.00

<b>Air Vacuum Rig - 2 person crew</b>	
Rig Time	\$325.00
Standby Time	\$325.00
Mob/Demob	\$325.00

<b>Truck-mounted 30 Ton CPT Rig - 2 person crew</b>	
Cone Penetrometer Testing	\$475.00
Standby Time	\$475.00
Mob/Demob	\$475.00
Daily Travel (when rig can be left on-site)	\$315.00

**Other Labor Costs**

Additional Technician (extra helper) - ADD:	\$135/hr.
Premium time for after 8 hours per day, week-end work, night work & holidays - ADD:	\$100/man hr.
Level C Protection (per day or portion) - ADD:	\$100/man day
Per Diem	\$225/man nigh

**Administration**

Project Management	\$110.00/hr.
Project Assistant	\$70.00/hr.
Admin Assistant	\$55.00/hr.

**Equipment****\$/Day**

Steamcleaner	\$150.00
Mud system (mud rotary as needed)	\$250.00
Support truck (pick-up)	\$150.00
Support truck (stake-bed)	\$200.00
Support truck (water-truck)	\$400.00
Air Compressor	\$450.00
Portable water trailer	\$200.00
Bobcat	\$300.00
Grout Pump on Trailer	\$200.00
Submersible Pump	\$175.00

**Materials**

1/4" or 1/2" Poly Tubing	\$2/ft.
Asphalt Patch	\$30/bag
Bentonite Pellets	\$80/bucket
Bentonite Chips	\$15/bag
Bentonite Powder	\$30/bag
Bollards	\$95/each
Cement - Portland Type II	\$15/bag
Concrete - Ready Mix	\$12/bag
Concrete - Quickset	\$20/bag
Core Box - Plastic	\$30/each
Core Box - Wooden	\$60/each
Disposable Bailers	\$25/each
Disposable Tips	\$25/each
Drums - 55 Gallon	\$65/each
Drill mud	\$30/bag
Easy Mud 5-gal	\$243/bucket
Easy Mud Gold 10lb	\$236/bucket
Filter Sand	\$15/bag
Sample Liners & Caps - Brass	\$8/each
Sample Liners & Caps - Stainless	\$10/each
Sample Liners & Caps Macro Core	\$10/each
Shelby/Pitcher Tube & Caps	\$75/each
Soda Ash 50lb	\$25/bag
Standpipe	\$250/each
Traffic Cones	\$30/each
Vapor Probe Implant - PVC	\$15/each
Vapor Probe Implant - Stainless	\$50/each
Visqueen (large roll)	\$150/roll
Well Box - 8-inch	\$125/each
Well Box - 12-inch	\$150/each
Wood Plug	\$25/each
2" PVC Screen 0.010" or 0.020"	\$10.00/ft.
2" PVC Blank casing	\$5.00/ft.
2" PVC threaded end cap	\$10.00/each
2" PVC slip cap or coupling	\$5/each
2" Locking Cap	\$35.00/each
4" PVC Screen 0.010" or 0.020"	\$15.00/ft.
4" PVC Blank casing	\$12.00/ft.
4" PVC threaded end cap	\$15.00/each
4" PVC slip cap or coupling	\$10/each
4" Locking Cap	\$45.00/each
3/4" PVC Screen 0.010" or 0.020"	\$6/ft.
3/4" PVC Blank casing	\$4/ft.
3/4" PVC fittings	\$5/each
Slope Indicator Pipe (2.75")	\$15.00/ft.
Slope Indicator Pipe Bottom Cap	\$25.00/each
Slope Indicator Pipe Top Cap	\$10.00/each

Reflects prevailing wages

Costs are effective Jan 1, 2019

SOUTHERN CALIFORNIA: 2726 WALNUT AVE, SIGNAL HILL, CA 90755 (562) 427-6899 FAX (562) 427-3314

NORTHERN CALIFORNIA: 950 HOWE ROAD, MARTINEZ, CA 94553 (925) 313-5800 FAX (925) 313-0302

www.greggdrilling.com



**Fee Schedule**  
**Time and Materials/Fixed Price Contract**

Labor

<u>Category</u>	<u>Hourly Rate</u>
Principal or Sr. Engineer/Geophysicist Expert Witness	\$ 300
Principal	240
Senior Geophysicist	185
Project Manager	135
Draft person	130
Senior Project Geophysicist	125
Project Geophysicist	120
Senior Staff Geophysicist	110
Staff Geophysicist	95
Senior Geophysical Technician	110
Geophysical Technician II	90
Geophysical Technician I	80
Clerical	60

Valid through 01/19/2020 to 01/19/2023



**Equipment Fee Schedule (US\$)**  
**Time and Materials/Fixed Fee Contract**

<b>Equipment Item (qty if more than 1)</b>	<b>Day</b>	<b>Week</b>	<b>Month</b>
Geonics EM-31DL Terrain Conductivity Meter w/data logger (2)	90	450	1,350
Geonics EM-61 High Sensitivity Digital Metal Detector w/data logger (2)	90	450	1,350
Geonics EM-61MK2A High Sensitivity Digital Metal Detector w/data logger	125	625	1,875
Geometrics G-858 Cesium Magnetometer	135	675	2,025
Gem GSM-19 Walking Magnetometer	50	250	750
Bartington GRAD-13S 1000 Borehole Magnetometer	900	4,500	13,500
GSSI SIR 10B, 20, 3000, 4000, Mini XT Ground Penetrating Radar Unit (8)	125	600	1,875
GSSI GPR Antenna (2.6GHz, 1.5 GHz, 900, 400, 350, 275, 200 MHz – ground coupled)	75	350	1,125
Oyo DAS-1 48 Channel Seismograph w/ 48 Channel Expansion Module	250	1250	3,750
Geometrics Geode 24-channel Seismograph (4)	130	650	1,950
Twenty-five 8 to 40 Hz Geophones with Muller or Kootter takeouts (350)	50	250	750
Twenty-Five 4.5 Hz Geophones (80)	100	500	1,500
Instantel Micromate seismograph for vibration monitoring – add \$50 "Cal Fee" first use	65	325	975
Instantel MicroMate seismograph – with stainless steel enclosure, battery and charger	95	475	1,425
IVI T15000 MiniVib Seismic Reflection System including MiniVib	1,500	7,500	22,500
Horizontally Polarized Shear-Wave Vibrator seismic Source (MicroVib)	900	4,500	13,500
Seismic Refraction/Reflection Cable, 24-ch, including adapters (25)	25	125	375
Input/Output RLS240M Roll Box with cable adapters	25	125	375
Betsy Downhole Percussion Firing Rod without shells	20	100	300
Accelerated Weight Drop (AWD) PEG40Kg (3) and Geometrics AWD 80Kg (1)	120	600	1,800
Kinometrics Ranger or Oyo Geospace 1Hz Seismometer (8)	20	100	300
Kinometrics Episensor Accelerometer (2)	20	100	300
Geostuff Triax BHG-3 Borehole Geophone	60	300	900
Metrotech/RadioDetection/Dynatel/Ditchwitch Utility Locator (8)	35	175	525
Fisher TW-6 Metal Detector (6)	15	75	225
Schonstedt GA72Cd Magnetic Locator (5)	10	50	150
IEI Impulse Echo System	200	1000	3,000
HP Spectrum Analyzer	150	750	2,250
GeoVISION Nano NTSC borehole camera	450	2,250	6,750
Sokkia Axis3 or Trimble Pro XR GPS Unit (2)	80	400	1,200
Nikon AP-7 or Sokkia C300 Automatic Level (2)	10	50	150
Nikon NPL-362 Total Station	75	300	900
General 210 Motorized Auger	10	50	150
Honda EX650 or EU2000i generator (3)	10	50	150
Polaris Ranger/Quad with Trailer, or Truck/Van (10)	115	575	1,725

<b>Complete Systems</b>	<b>Day</b>	<b>Week</b>	<b>Month</b>
Full Utility Search Vehicle with GPR, Fisher, 2 EM utility locators, field supplies (5)	500	2,500	7,500
Full UST and Utility Search Vehicle with EM, Magnetic, GPR, Fisher, Metrotech, and RD400 equipment	650	3,250	9,750
SUE (Subsurface Utility Engineering) Equipment to augment Utility Search, including Compressor, Air powered spade and other digging tools, Vacuum Extraction System, and Nikon NPL-362 Total Station	1,000	5,000	15,000
Oyo P-S Wave Suspension Logging System with Logging Truck (w/o truck -\$100) (4)	1,000	5,000	15,000
Robertson Borehole Televiewer (both HRAT and OPTV) including winch, Micrologger II, SmartWinch, and Logging Truck (w/o truck subtract \$100) (2)	550	2,750	8,250
Robertson E-Logging system including winch, Micrologger II, E-log probe (16' / 64' Normal Resistivity / Natural Gamma / SPR / SP), or...	300	1,500	4,500
Robertson Dual Induction/N Gamma, including winch and Logging Truck (w/o truck subtract \$100) (2)			
Robertson Caliper/Nat'l Gamma, or Fluid Temp/Conductivity/N Gamma, add-on to E-Log or BHTV	150	750	2,250
Geostuff Downhole Seismic Probe incl. cables, Geode, shear wave plank and vehicle	400	2,000	6,000
GEOVision "Triple Whammy" high energy P- and S-wave surface source for downhole seismic, includes 3 PEG 40KG accelerated weight drop generators	500	2,500	7,500
GEOVision High-Speed Highway Air-Launched GPR Survey System with SIR20, laptop, RADAN, and one Air-Launched 1GHz or 2GHz antenna	500	2,500	7,500
- additional antenna add	150	750	2,250
- with vehicle add	100	500	1,500
Full StructureScan GPR Vehicle with SIR10B or SIR4000, laptop, RADAN, 2x1.5GB antenna, and on-site color plotting (2)	600	3,000	9,000
SASW System (HP Analyzer, 1 Hz seismometers, AWD or shaker source)	350	1,750	5,250
Full Surface-Wave System, including MASW, SASW, ReMi (includes SASW system plus refraction system with Geodes)	650	3,250	9,750
Seismic Refraction System (24 channel, cables, geophones, sledge hammer, AWD or Betsy firing rod, level, GPS system) (2)	500	2,500	7,500
Seismic Refraction System (48 channel, cables, geophones, sledge hammer, AWD or Betsy firing rod, level, GPS system)	750	3,750	11,250
MRI vibration survey system (HP Analyzer, PCB non-ferrous sensors, signal conditioner)	300	1,500	4,500
AGI SuperSting R8 IP earth resistivity system with R8/112 Switch Box and 56 electrodes	375	1,875	5,625
AGI SuperSting R8 IP earth resistivity system with R8/112 Switch Box and 112 electrodes	650	3,250	9,750
Trimble R8 RTK GPS System (Rover, Base, Radio, Data Collector, etc.)	300	1,500	4,500
MicroVib Seismic Reflection System including MicroVib, Doghouse with 144Ch OYO DAS-1/ SeisNet Acquisition system, Input/Output Roll Box, 5KVA generator, 240 channels 40Hz S-wave geophones, and cables	1,800	9,000	27,000
IVI T15000 MiniVib Seismic Reflection System including MiniVib, Doghouse with 144Ch OYO DAS-1/ SeisNet Acquisition system, Input/Output Roll Box, 5KVA generator, 240 channels 28Hz P-wave OR 40-Hz S-wave geophones, and cables	2,200	11,000	33,000

Valid through 01/19/2020 to 01/19/2023

1124 Olympic Drive, Corona, California 92881. Telephone: (951) 549-1234  
 19205 Parthenia Street, Unit D, Northridge, California 91324. Telephone: (818) 734-6609  
[www.geovision.com](http://www.geovision.com)

## Utility Locating and Mapping<sup>1</sup> Fee Schedule Time and Materials/Fixed Price Contract

### Labor

Two man team,  
equipment fees, and expenses. \$ 2,150<sup>2</sup> per day  
Minimum ½ day \$ 1,100<sup>2</sup>

Full-site survey, assuming less than 1 acre, firm fixed fee \$ 2,600<sup>2</sup>  
includes:  

- Utility mark out
- Mapped with GPS and Total Station, convert to CAD drawing and checked
- Allow 1 field day

<u>Consultation, per hour</u>	<u>Hourly Rate</u>
Principal	\$ 240
Senior Geophysicist	\$ 185
CAD operator, create drawing or transfer field data to customer AutoCAD drawing	\$ 130

### Report (one day project)

All reports include description of methods used, and summary of results found.

Electronic Letter report, includes electronic AutoCAD map \$ 750

Valid through 01/19/2019 to 01/19/2023

<sup>1</sup>"Utility Locating" – means locating and marking of detectable utilities using standard GEOVision protocol, locating tools and equipment

<sup>2</sup> Valid for Southern California. Additional mobilization and Per Diem may be charged for sites outside So Cal.

## FEE SCHEDULE

## KEHOE TESTING & ENGINEERING

### CONE PENETRATION TESTING (CPT) SERVICES/PRICING:

• CPT Soundings w/ CPT Rig (up to 8 hrs)	2,950.00/day
• CPT Soundings w/ CPT Rig (up to 6 hrs)	2,250.00/day
• CPT Soundings w/ CPT Rig (up to 4 hrs)	1,475.00/day
• CPT Soundings w/ Direct Push, Limited or Track Rig (up to 8 hrs)	2,950.00/day
• CPT Soundings w/ Direct Push, Limited or Track Rig (up to 6 hrs)	2,250.00/day
• CPT Soundings w/ Direct Push, Limited or Track Rig (up to 4 hrs)	1,475.00/day

### CPT SERVICES/PRICING INCL. PREVAILING WAGE:

• CPT Soundings w/ CPT Rig (up to 8 hrs)	3,950.00/day
• CPT Soundings w/ CPT Rig (up to 6 hrs)	3,050.00/day
• CPT Soundings w/ CPT Rig (up to 4 hrs)	1,975.00/day
• CPT Soundings w/ Direct Push, Limited or Track Rig (up to 8 hrs)	3,950.00/day
• CPT Soundings w/ Direct Push, Limited or Track Rig (up to 6 hrs)	3,050.00/day
• CPT Soundings w/ Direct Push, Limited or Track Rig (up to 4 hrs)	1,975.00/day

### OTHER SERVICES/PRICING:

• Additional Man for Hand Augering to Pre-Clear Each Location	300.00/day
• Additional Man for Hand Augering to Pre-Clear Each Location (incl. Prevailing Wage)	350.00/day
• Seismic Shear Wave Measurements	30.00/ea
• Pore Pressure Dissipation Testing w/ CPT Rig (no charge w/ daily rate)	no charge
• Pore Pressure Dissipation Testing w/ CPT Rig (no charge w/ daily rate, incl. Prevailing Wage)	no charge
• Concrete Coring (up to 8" thick)	150.00/core
• Mob/Demob	(location)
• Mob/Demob (incl. Prevailing Wage)	(location)
• Per Diem/Two Man	400.00/nt

### MATERIALS:

• Bentonite Granules / Portland Cement / Concrete / Sand / Asphalt Patch	15.00/ea
• Bentonite Grout	30.00/ea
• Waste Drum (55 gallon)	50.00/ea
• Other Materials	(cost + 15%)

### STANDBY TIME/ADDITIONAL HOURS:

• CPT Rig, Direct Push, Limited or Track Rig	370.00/hour
• CPT Rig, Direct Push, Limited or Track Rig (incl. Prevailing Wage)	525.00/hour

### SURCHARGES:

• Night / Saturday (up to 8 hrs/day)	400.00/day
• Night / Saturday (up to 4 hrs/day)	200.00/day
• Sunday (up to 8 hrs/day)	600.00/day
• Sunday (up to 4 hrs/day)	300.00/day
• Night / Saturday (up to 8 hrs/day, incl. Prevailing Wage)	800.00/day
• Night / Saturday (up to 4 hrs/day, incl. Prevailing Wage)	600.00/day
• Sunday (up to 8 hrs/day, incl. Prevailing Wage)	1,150.00/day
• Sunday (up to 4 hrs/day, incl. Prevailing Wage)	850.00/day

\* All unit prices will remain valid for up to 3 years. Must call for an estimate based on a specific scope of work.

(Rev. 10/30/19-18CPT)



## 2019 STRATEGIC SERVICES FEE SCHEDULE

PROFESSIONALS		PER HOUR
Level 1	Scientist/Engineer	\$105
Level 2	Scientist/Engineer	\$125
	Project Supervisor	\$140
Level 3	Project Scientist/Engineer	\$150
	Project Manager	\$160
Level 4	Project Manager, Senior Scientist/Engineer	\$170
Level 5	Senior Project Manager	\$185
Level 6	Senior Project Director	\$205
Level 7	Principal	\$245
Level 8	Senior Principal	\$300
TECHNICIANS		PER HOUR
	Technician	\$95
	Senior Technician	\$105
ADMINISTRATIVE SUPPORT		PER HOUR
	Report Specialist	\$85

**Note:**

These rates are valid for the next three years (i.e. 2020 through 2022). All internal copying, computer usage, and report materials are included in the above rates unless otherwise negotiated.

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107**

Twining, Inc.

**APPENDIX 3  
STAFFING PLAN  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING, CONSTRUCTION  
OBSERVATION AND TESTING  
PROJECT NO. 281-281-4200-P107**

**1. A/E KEY PERSONNEL**

<b>Name</b>	<b>Classification/ Designation</b>	<b>Years of Experience</b>	<b>Licenses/Certifications (include license number)</b>
Linas Vitkus, PE, GE	Project Executive	20	Civil Engineer, CA, PE 63163 Geotechnical Engineer, CA, GE 2816
Robert M. Ryan, ASNT Level III	Technical Expert, Structural Steel	42	ASNT ID # 90878
Paul Soltis, PE, GE	Geotechnical Engineer of Record	27	Civil Engineer, CA, PE 56140 Geotechnical Engineer, CA, GE 2606
Hesam "Sam" Sajed	Project Manager	6	NCEES ID 14-077-78
Boris Stein	Technical Expert, Concrete	47	--
Liangcai He, PhD, PE, GE	Chief Geotechnical Engineer	27	Civil Engineer, CA, PE 73280 Geotechnical Engineer, CA, GE 3033
Adrian Moreno, PE	Senior Staff Engineer	6	Civil Engineer, CA, PE 87057
Amir Ghavibazoo, PhD	Technical Expert, Asphalt	5	--
Ernie Roumelis	Geologist	24	Professional Geologist, CA 5284 Engineering Geologist, CA 1856
Eddie (Heriberto) Ornelas	Soil Technician	18	ICC Soils 8105131 Nuclear Gauge



**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107**

Twining, Inc.

Bertha Campos	Soil Technician / Special Inspector	10	ICC Soils, Reinforced Concrete, Prestressed Concrete, Structural Masonry, Structural Steel and Bolting 8145238 Nuclear Gauge
Howard Franklin	Soil Technician	18	Nuclear Gauge
Xavier Richie	Soil Technician	9	ICC Soils 8073394 Nuclear Gauge
John Lara, Jr.	Soil Technician	16	Nuclear Gauge
Jack Hodges	Special Inspector	25	ICC Structural Steel and Bolting, Reinforced Concrete, Structural Steel & Welding, Structural Masonry, Structural Welding, Prestressed Concrete 875351
John Andrade	Special Inspector	14	ICC Prestressed Concrete, Reinforced Concrete, Structural Masonry 5249959
Jose Castillo	Special Inspector	10	ICC Structural Masonry, Structural Welding, Structural Steel and Bolting, Reinforced Concrete, Spray Applied Fireproofing 8027998
Marc Lottie	Special Inspector	2	AWS CWI 18078101
Pete Rodriguez	Special Inspector	11	ICC Structural Steel and Bolting, Structural Welding 8002263, AWS CWI 08101181

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107**

Twining, Inc.

Joe Bradford	Special Inspector	25	ICC Spray Applied Fireproofing, Structural Steel and Welding, Structural Welding, Structural Masonry, Reinforced Concrete, Structural Steel and Bolting 880382 AWS CWI 95080621
--------------	-------------------	----	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Assigning Personnel:** Throughout the term of this Agreement, the A-E shall provide those personnel qualified to perform the required Scope of Services upon the CIP Projects assigned to A-E. Upon request by COUNTY, A-E shall submit a staff authorization request for proposed personnel and for a given job classification, upon which COUNTY will render a decision on whether the proposed personnel meets the qualifications sought under the Agreement.

A-E shall also provide such fully-qualified administrative, managerial, clerical, secretarial and other support personnel as are necessary, and approved by JWA. A-E shall furnish the necessary personnel to complete the services on a timely basis in accordance with the requirements for any given Project. A-E shall have the authority to commit A-E's resources as needed and as requested by JWA.

A-E shall not bill the COUNTY for the services of any personnel not assigned to the Project without the COUNTY's prior written approval of the person by name and the person's specific hourly billing rate.

**Assigned Personnel:** Reassignment of A-E's personnel requires prior written consent by JWA. A-E shall not be entitled to compensation for personnel who are removed from the project or the individuals who replace them without the written consent of JWA.

**Removal of personnel at COUNTY's Discretion:** COUNTY may, at its sole discretion, require A-E to remove from the Project any of its personnel assigned to the performance of the Scope of Services. A-E shall remove such person(s) from the Project promptly after request from JWA. The A-E shall make its best efforts to replace any person so removed within seven (7) days with a person of like qualifications acceptable to COUNTY. Alterations to A-E's staff at COUNTY's or JWA's request do not constitute changes to the SCOPE OF SERVICES.

**Qualifications/Licensing:** A-E represents that all personnel provided under this Agreement are fully qualified for the offices or positions to which they are assigned, and that they meet or exceed the qualifications for their positions.

Attachment B

**JOHN WAYNE AIRPORT  
GEOTECHNICAL ENGINEERING, MATERIALS TESTING  
CONSTRUCTION OBSERVATION AND INSPECTION  
PROJECT NO. 281-281-4200-P107**  
Twining, Inc.

**2. SUBCONTRACTOR(S) (IF APPLICABLE)**

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

<b>Company Name &amp; Address</b>	<b>Contact Name and Telephone Number</b>	<b>Project Function</b>
<b>Gregg Drilling 2726 Walnut Avenue Signal Hill, CA 90755</b>	<b>Pat Keating 562.427.6899</b>	<b>Drilling</b>
<b>GeoVision 1124 Olympic Drive Corona, CA 92881</b>	<b>Mark Riches 951.549.1234</b>	<b>Geophysical testing for underground utilities</b>
<b>Kehoe Testing and Engineering 5415 Industrial Drive Huntington Beach, CA 92649</b>	<b>Steve Kehoe 714.901.7270</b>	<b>Cone penetrometer testing</b>
<b>EnSafe 5001 Airport Drive, Suite 260 Long Beach, CA 90815</b>	<b>Greg Alexander 562.740.1060</b>	<b>Evaluation of hazardous materials</b>