DESIGN SERVICES CONTRACT MA-080-20010602
FOR
HUNTINGTON BEACH CHANNEL AND TALBERT CHANNEL SHEET PILE REPAIR PROJECT

THIS Contract, hereinafter referred to as "Contract" for purposes of identification hereby numbered MA-080-20010602, and dated _____ day of _____, 20_____ is

BY AND BETWEEN

The County of Orange, a political subdivision of the State of California and the Orange County Flood Control District, a body corporate and politic, hereinafter referred to as "Owner"

AND

Reyes Construction, Inc., a California Corporation, hereinafter referred to as "Design-Build Entity (D-BE)",

which are sometimes individually referred to as "Party" or collectively referred to as "Party".

RECITALS

WHEREAS, Owner requires professional services to accomplish projects and/or services ("PROJECT/SERVICES") as described in MA-080-20010602 Scope of Work for Huntington Beach Channel and Talbert Channel Sheet Pile Repair Project, hereinafter referred to as "Attachment A," attached hereto and incorporated herein by reference; and

WHEREAS, D-BE is a firm whose principals are, and/or employs a sufficient number of personnel who are, as required by law, registered by the State of California for the practice of specialized design services per the attached Scope of Work.

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

1. GENERAL

1.1. Retainer

1.1.1. Owner does hereby retain D-BE to perform the Projects/Services as required by this Contract.

1.1.2. D-BE has offered and contracted with, and Owner has accepted, the professional services of **GHD Inc.** and D-BE shall assign it to the PROJECTS/ SERVICES.

1.1.3. D-BE may employ special consultants/contractors for the accomplishment of the Projects/Services specified; and only the firms or independent consultants/contractors identified in Attachment C may be employed by D-BE to provide these Projects/Services.

1.1.4. Consultants/contractors may be substituted and/or added by mutual agreement of D-BE and Owner.

1.1.5. D-BE's employment of independent consultants/contractors shall not relieve D-BE from the performance of its own responsibilities pursuant to this Contract. However, all consultants/contractors independently contracting with Owner shall be independently

liable to Owner for the performance of the work pursuant to their agreements, and D-BE shall have no liability for work by contractors independently contracting with Owner.

1.2. Projects/Services

1.2.1. Description of Projects/Services

a. PROJECT/SERVICES to be performed by D-BE shall consist of the work as specified herein and as required in Attachment A and Design Services General Conditions. If in the event Attachment A shall be in conflict with any provision of this Contract, the wording as set forth in Attachment A shall prevail.

b. D-BE shall be responsible for submitting all Projects/Services to Owner in a form which has been thoroughly reviewed and checked for completeness, accuracy and consistency by the licensed professional named entity in Section 1.1.2 herein; and, any Projects/Services not meeting this requirement will be returned to D-BE prior to review by Owner.

1.2.2. Design Criteria and Standards

All Projects/Services shall be performed in accordance with instructions, criteria and standards set forth by the Owner and as described in Attachment A.

1.2.3. Scheduling *(subject to change per scope of work specifications and/or contract task orders)*

a. Concurrently with the work of the Contract, D-BE shall prepare a progress work schedule and within five (5) working days from the date of receipt of individual assignments from Owner, D-BE shall submit to Owner two (2) copies of a progress work schedule which shall delineate dates of commencement and completion of the various phases of Projects/Services assignments. D-BE schedule shall include required Owner review period(s) set forth herein. An approved copy of the progress schedule will be returned to D-BE.

b. D-BE shall allow at least five (5) working days for Owner review of progress work schedule. In planning work D-BE should anticipate and allow twenty (20) working days for Owner review of each submittal required in Attachment A.

c. D-BE shall meet on an as-needed basis as determined by Owner or at least once every week with Owner to review progress of work, adherence to progress schedule, coordination of work, scheduling of seminars, if needed, and to resolve any problems that may develop.

d. Within five (5) working days of each meeting, D-BE shall prepare a brief memorandum summarizing the results of the meeting and shall submit it to Owner for concurrence.

e. D-BE shall complete all the work of Projects/Services and obtain all approvals by the Owner within the time frame indicated in Attachment A except D-BE shall not be responsible for any delay beyond the control of D-BE.

f. In the event D-BE fails to complete the work and obtain the approval of Owner in the time allowed, Owner shall have the option of completing the work by its own forces or by contract with another firm. The time allowed for D-BE to complete the Projects/Services pursuant to this Contract shall be extended for delay caused by Owner in completing its work pursuant to this Contract which delay exceeds the agreed Owner review and/or approval time periods.

1.3. Assistance by Owner STAFF

1.3.1. Owner shall assign an appropriate staff member to work with D-BE in connection with the work of this Contract. Said staff member's duties will consist of the giving of advice and consultations, assisting D-BE in negotiations with other public agencies and private parties, miscellaneous items which in the judgment of D-BE or Owner's staff warrant attention, and all other duties as may be described in Attachment A.

1.3.2. All of the above activities, however, shall be the primary responsibility of D-BE to schedule, initiate and carry through to completion.

1.4. Term and Maximum Compensation

1.4.1. The Contract shall go into effect upon Board Approval and D-BE shall commence work after notification to proceed by Owner, with a maximum allowable compensation of **Two Million, Eight Hundred and Forty-Six Thousand, Five Hundred and Seventy-Seven Dollars ($2,846,577).**

1.4.2. D-BE is advised that any recommendation for contract award is not binding on Owner until the Contract is fully executed and approved by the Owner.

1.5. D-BE Compensation and Extra Work

1.5.1. For the Projects/Services authorized under this Contract, D-BE shall be compensated in accordance with the following:

1.5.2. For completion and approval of all Projects/Services where “Extra Work” (defined as changes in approved portions of the PROJECT/SERVICES required by and ordered in writing by Owner which changes constitute a change in or departure from said approved portions of Projects/Services) is not authorized, compensation including reimbursables shall be described and payable as stipulated in Price Proposal, herein after referred to as “Attachment B”, attached hereto and incorporated herein by reference.

1.5.3. Where extra work is authorized for Projects/Services:

a. The amount for Extra Work shall be determined using Attachment B. Extra Work shall be required by and ordered in writing by the ENGINEER. If this Contract is not approved by the Board of Supervisors, any change that increases the cumulative Contract price beyond $200,000 must be approved by the Board. Increases in the Contract amount for services within the existing scope of work may be granted by the ENGINEER where the amount does not exceed 25 percent of the existing Contract price or $200,000, whichever is less.

b. D-BE's billing for the Extra Work shall include but not be limited to names of D-BE's staff employed in the Extra Work, classification of employees and number

of hours worked.

1.5.4. For partial completion of work of Projects/Services followed by default on part of D-BE:

a. For failure to complete and secure approval of the first required submittal, there shall be no compensation.

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

2. LABOR

2.1 Non-Employment of Owner Personnel

2.1.1 D-BE agrees that it will neither negotiate, offer, or give employment to any full-time, regular employee of Owner in professional classifications of the same skills required for the performance of this Contract who is involved in this Project in a participatory status during the life of this Contract regardless of the assignments said employee may be given or the days or hours employee may work.

2.1.2 Nothing in this Contract shall be deemed to make D-BE, or any of D-BE's employees or agents, agents or employees of the Owner. D-BE shall be an independent contractor and shall have responsibility for and control over the details and means for performing the work, provided that D-BE is in compliance with the terms of this Contract. Anything in the Contract which may appear to give Owner the right to direct D-BE as to the details of the performance of the work or to exercise a measure of control over D-BE shall mean that D-BE shall follow the desires of Owner, only in the results of the work.

2.2 Non-Discrimination

2.2.1 In the performance of this Contract, D-BE agrees that it will comply with the requirements of the California Labor Code and not engage nor permit any subcontractors to engage in discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons.

2.2.2 D-BE acknowledges that a violation of this provision shall subject D-BE to all the penalties imposed for a violation of the California Labor Code.

2.3 Employee Eligibility Verification

2.3.1 D-BE 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. D-BE 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. D-BE shall retain all such documentation for all covered employees for the period prescribed by the law.

2.4 Independent Contractor

2.4.1 As referenced in Section 2.1.2 of this Contract, D-BE shall be considered an independent contractor.

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

2.5 Conflict of Interest Contractor Personnel

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

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

2.6. Labor Code Notice

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

2.7 Subcontractor Bidding and Apprentices

2.7.1 D-BE shall comply with Public Contract Code Section 22166 for the award of subcontracts exceeding one-half of one percent of the contract price allocable to construction work.

2.7.2 D-BE shall comply with all requirements of California Public Contract Code Section 22164 (c) regarding the use of a skilled and trained workforce.

3. INSURANCE

3.1.1 Prior to the provision of services under this Contract, the D-BE agrees to purchase all required insurance at D-BE's expense, including all endorsements required herein, necessary to satisfy the Owner that the insurance provisions of this Contract have been complied with. D-BE agrees to keep such insurance coverage, Certificates of Insurance, and endorsements on deposit with the Owner during the entire term of this Contract. The

Owner reserves the right to request the declarations page showing all endorsements and a certified copy of the policy. In addition, all subcontractors performing work on behalf of D-BE pursuant to this Contract shall obtain insurance subject to the same terms and conditions as set forth herein for D-BE.

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

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

1. In addition to the duty to indemnify and hold the Owner harmless against any and all liability, claim, demand or suit resulting from D-BE's, its agents, employee's or subcontractor's performance of this Contract, D-BE shall defend the Owner at its sole cost and expense with counsel approved by Board of Supervisors against same; and

2. D-BE'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 D-BE's SIR provision shall be interpreted as though the D-BE was an insurer and the Owner was the insured.

3.1.4 If the D-BE fails to maintain insurance acceptable to the Owner for the full term of this Contract, the Owner may terminate this Contract.

A. Qualified Insurer

1. The policy or policies of insurance must be issued by an insurer with a minimum rating of A- (Secure A.M. Best's Rating) and VIII (Financial Size Category as determined by the most current edition of the **Best's Key Rating Guide/Property-Casualty/United States or ambest.com).** It is preferred, but not mandatory, that the insurer be licensed to do business in the state of California (California Admitted Carrier).
If the insurance carrier does not have an A.M. Best Rating of A-/VIII, the CEO/Office of Risk Management retains the right to approve or reject a carrier after a review of the company's performance and financial ratings.

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

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

Coverage	Minimum Limits
Commercial General Liability	$1,000,000 per occurrence $2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	$1,000,000 per occurrence
Workers' Compensation	Statutory
Employers' Liability Insurance	$1,000,000 per occurrence
Professional Liability	$1,000,000 per claims made, or per occurrence $2,000,000 aggregate
Contractor's Pollution Liability	$1,000,000 per claims-made, or per occurrence $1,000,000 aggregate

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

Commercial General Liability	$1,000,000 per occurrence $2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	$1,000,000 per occurrence
Workers' Compensation	Statutory
Employers' Liability Insurance	$1,000,000 per occurrence
Professional Liability	$1,000,000 per claims made, or per occurrence $2,000,000 aggregate
Contractor's Pollution Liability	$1,000,000 per claims-made, or per occurrence $1,000,000 aggregate

B. Required Coverage Forms

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

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

C. Required Endorsements

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

   a. An Additional Insured endorsement using ISO form CG 2010 or CG 2033 or a form at least as broad naming the ***County of Orange, Orange County Flood Control District, City of Huntington Beach, and their respective elected and appointed officials, officers, employees and agents*** as Additional Insureds, or provide blanket coverage, which will state ***AS REQUIRED BY WRITTEN AGREEMENT.***

   b. A primary non-contributing endorsement using ISO form CG 20 01 0413, or a form at least as broad evidencing that D-BE's insurance is primary, and any insurance or self-insurance maintained by the County of Orange shall be excess and non-contributing.

   c. A primary non-contributing endorsement using ISO form CG 20 01 0413, or a form at least as broad.

2. The Pollution Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance:

   a. An Additional Insured endorsement naming the ***County of Orange, Orange County Flood Control District, City of Huntington Beach, and their respective elected and appointed officials, officers, employees and agents*** as Additional Insureds.

   b. A primary non-contributing endorsement evidencing that D-BE's insurance is primary, and any insurance or self-insurance maintained by the County of Orange shall be excess and non-contributing.

3. The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against **the** ***County of Orange, Orange County Flood Control District, City of Huntington Beach, and their respective elected and appointed officials, officers, employees and agents***, or provide blanket coverage, which will state ***AS REQUIRED BY WRITTEN AGREEMENT.***

4. All insurance policies required by this Contract shall waive all rights of subrogation against the County of Orange, Orange County Flood Control District, City of Huntington Beach and their elected and appointed officials, officers, employees and agents when acting within the scope of their appointment or employment.

5. D-BE shall notify Owner 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 Owner. Failure to provide written notice of cancellation may constitute a material breach of the Contract, upon which the Owner may suspend or terminate this Contract.

6. If D-BE's Professional Liability policy is a claims-made policy, D-BE shall agree to maintain professional liability coverage for ten (10) years following

completion of Contract.

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

8. Insurance certificates should be forwarded to the agency/department address listed on the solicitation.

9. If the D-BE fails to provide the insurance certificates and endorsements within seven (7) days of notification by CEO/Purchasing or the agency/department purchasing division, award may be made to the next qualified vendor.

10. Owner expressly retains the right to require D-BE 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 Owner.

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

12. The procuring of such required policy or policies of insurance shall not be construed to limit D-BE's liability hereunder nor to fulfill the indemnification provisions and requirements of this Contract, nor act in any way to reduce the policy coverage and limits available from the insurer.

4. INDEMNITY/COMPLIANCE

4.1 D-BE shall indemnify, defend with counsel approved in writing by Owner, and hold harmless, the County of Orange, Orange County Flood Control District, City of Huntington Beach, and their respective agents, officers, and employees from employer sanctions and any other liability which may be assessed against D-BE or the Owner or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract.

4.2 All Projects/Services submitted by D-BE shall be complete and shall be carefully checked prior to submission. D-BE understands that Owner's checking is discretionary, and D-BE shall not assume that Owner will discover errors and/or omissions. If Owner discovers any errors or omissions prior to approving D-BE's Projects/Services, the Projects/Services will be returned to D-BE for correction. Should Owner or others discover errors or omissions in the work submitted by D-BE after Owner's approval thereof, Owner's approval of D-BE's Projects/Services shall not be used as a defense by D-BE.

4.3 Indemnification

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

4.4 Bills and Liens

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

4.5 Compliance with Laws

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

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

5. TERMINATION

5.1 Termination of Contract for Cause

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

5.1.2 D-BE shall have the opportunity to cure the alleged breach prior to termination.

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

5.2 Termination for Convenience

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

5.2.2 D-BE shall immediately stop work in accordance with the notice and comply with any other direction as may be specified in the notice or as provided subsequently by Owner.

5.2.3 Owner shall pay the D-BE for the Work completed prior to the effective date of the termination, and such payment shall be the D-BE's sole remedy under this Contract.

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

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

5.3 Breach of Contract

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

a. afford the D-BE written notice of the breach and ten (10) calendar days or such shorter time that may be specified in this Contract within which to cure the breach;

b. discontinue payment to the D-BE for and during the period in which the D-BE is in breach; and

c. offset those monies disallowed pursuant to the above, against any monies billed by the D-BE but yet unpaid by the Owner.

5.4 Default

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

5.4.2 In the event the D-BE shall fail to make prompt delivery as specified of any equipment or service, the same conditions as to the rights of the Owner to purchase on the open market and to reimbursement set forth above shall apply, except as otherwise provided in this Contract.

5.4.3 In the event of the cancellation of this Contract, either in whole or in part, by reason of the default or breach by the D-BE, any loss or damage sustained by the Owner in procuring any equipment or service which the D-BE agreed to supply under this Contract shall be borne and paid for by the D-BE.

5.4.4 Default shall include failure to carry out any of the requirements of this Contract, including, but not limited to not providing enough properly skilled workers or proper materials, persistently disregarding laws and or ordinances, not proceeding with the Projects/Services as agreed to herein, or otherwise substantially violating any provision of this Contract.

5.4.5 Upon termination of this Contract for any reason, each Party shall assist the other Party in transferring all assets, tangible and intangible, as may be necessary for the orderly, non-disruptive business continuation of each Party, including all data and any unfinished, preliminary or draft documents. Each Party shall promptly return to the other Party all papers, materials, and other properties of the other held by each for purposes of performance of this Contract.

5.4.6 The right of either party to terminate this Contract hereunder shall not be affected in any way by its waiver of or failure to take action with respect to any previous default.

6. MISCELLANEOUS

6.1 Laws to be Observed

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

6.2 OMITTED

6.3 Amendments

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

6.4 Successors and Assigns

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

6.5 Entirety

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

6.6 Severability

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

6.7 Binding Obligation

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

6.8 Governing Law and Venue

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

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

6.9 OMITTED

6.9.1 All Contractors are required to comply with the child support enforcement requirements of the County of Orange. Failure of the Contractor to comply with all federal, state, and local reporting requirements for child support enforcement or to comply with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignment shall constitute a material breach of the Contract. In order to comply with the child support enforcement requirements of the County of Orange, all bidders/proposers must furnish to the Contract administrator, the Purchasing Agent, or the agency/department Deputy Purchasing Agent:

A. In the case of an individual Contractor, his/her name, date of birth, Social Security number, and residence address;

B. In the case of a Contractor doing business in a form other than as an individual, the name, date of birth, Social Security number, and residence address of each individual who owns an interest of 10 percent or more in the Contracting entity;

C. A certification that the Contractor has fully complied with all applicable federal and state reporting requirements regarding its employees; and

D. A certification that the Contractor has fully complied with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignment and will continue to so comply.

Failure to cure such breach within 60 calendar days of notice from the Owner shall constitute grounds for termination of the Contract.

6.9.2 It is expressly understood that this data will be transmitted by Owner to governmental agencies charged with the establishment and enforcement of child support orders and for no other purposes.

6.10 Ownership of Documents

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

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

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

6.11 Confidentiality

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

6.11.2 Nothing furnished to D-BE which is generally known among counties in Southern California shall be deemed confidential.

6.11.3 D-BE and/or anyone acting under the supervision of D-BE shall not use Owner 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 Owner.

6.12 Publication

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

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

6.13 Records and Audit/Inspections

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

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

6.13.3 D-BE shall keep such material, including all pertinent cost accounting, financial records and proprietary data for a period of three (3) years after termination or completion of the Contract or until resolution of any claim or dispute between the Party, whichever is later.

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

6.14 Notices

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

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

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

time to time in the manner aforesaid.

For D-BE: Reyes Construction, Inc.

1383 S. Signal Drive
Pomona, CA 91766
Attn: Steve Leathers
Phone: 714-900-0208
E-mail: SLeathers@Reyesconstruction.com

For Owner:

OC Public Works / Infrastructure Programs
601 N. Flower Street
Santa Ana, CA 92701
Attn: Justin Golliher
Phone: 714-647-3979
E-mail: justin.golliher@ocpw.ocgov.com

cc: OC Public Works Procurement Services
601 N. Flower Street
Santa Ana, CA 92701
Attn: Nicholas Murray
Phone: 714-667-1659
E-mail: nicholas.murray@ocpw.ocgov.com

6.15 Attorney's Fees

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

6.16 Interpretation

6.16.1 Contract has been negotiated at arm's length and between persons sophisticated and knowledgeable in the matters dealt with in this Contract.

6.16.2 In addition, each Party has been represented by experienced and knowledgeable independent legal counsel of their own choosing or has knowingly declined to seek such counsel despite having the opportunity to do so.

6.16.3 Each Party further acknowledges that they have not been influenced to any extent whatsoever in executing this Contract by any other Party hereto or by any person representing them, or both.

6.16.4 Accordingly, any rule of law (including California Civil Code Section 1654) or legal decision that would require interpretation of any ambiguities in this Contract against the Party that has drafted it is not applicable and is waived.

6.16.5 The provisions of this Contract shall be interpreted in a reasonable manner to affect the purpose of the Party and this Contract.

6.17 Headings

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

6.18 Acceptance

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

6.19 Changes

6.19.1 D-BE shall make no changes in the work or perform any additional work without the Owner's specific written approval.

6.20 Assignment

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

6.21 Changes in Ownership

6.21.1 D-BE agrees that if there is a change or transfer in ownership, including but not limited to merger by acquisition, of D-BE's business prior to completion of this Contract, the new owners shall be required under terms of sale or other transfer to assume D-BE's duties and obligations contained in this Contract and to obtain the written approval of Owner of such merger or acquisition, and complete the obligations and duties contained in the Contract to the satisfaction of Owner. D-BE agrees to pay, or credit toward future work, Owner's costs associated with processing the merger or acquisition.

6.22 Force Majeure

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

6.23 Calendar Days

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

6.24 Title to Data

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

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

6.25 Availability of Funds

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

6.26 Contingency of Funding

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

6.27 Contract Construction

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

6.28 Conflicts of Interest

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

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

6.29 Usage

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

IN WITNESS WHEREOF, the parties hereto have hereunto set their hand and seal the day and year first hereinabove written.

TBD
a *California* Corporation

Date: 10/31/2019

By DocuSigned by: Ricardo Jimenez 8B4E6A9A069A4B2...
Signature

RICARDO JIMENEZ, Vice President
Print Name & Title

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

Date: 10/31/2019

By DocuSigned by: AB26D59D3F694C3...
Signature

EDDIE GALLARDO, Corporate Secretary/ Chief Financial Officer
Print Name & Title

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

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

Date: _____

By _____
County of Orange, California

ORANGE COUNTY FLOOD CONTROL DISTRICT,
a body corporate and politic

Date: _____

By _____
County of Orange, California

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

By: 11/1/2019 DocuSigned by: Mark Sanchez 1D2AF995336249F...

Print Name: MARK N. SANCHEZ, Deputy County Counsel

DESIGN SERVICES GENERAL CONDITIONS FOR DESIGN-BUILD

1. DEFINITIONS

As used in the Contract Documents, the following terms shall have the following definitions:

Term	Definition
"day"	Unless otherwise specified within the Contract Documents, all references to any "day" or number of "days" shall mean consecutive calendar days (including all holidays and weekends).
"working day"	Any day within the period between the date of the Notice to Proceed and Owner's acceptance of the work, except: Saturday; Sunday; or any day designated as a holiday by Owner. Notwithstanding the foregoing, any day will be treated as a working day if the Contract Documents require that it be so treated, or D-BE with Owner's approval elects to work on such day.
Addendum/Addenda	Written or graphic instrument issued prior to the submittal of the GMP (hereinafter defined) Proposal(s), which clarify, correct or change the GMP Proposal(s) requirements.
Agreement	The portion of the Contract Documents, signed by both Parties, that contains the Project name, Contract Price, Contract Time, Liquidated Damages, and other terms and conditions.
Amendment	A written instrument issued after execution of the Contract Documents signed by the Owner and D-BE, stating their Contract upon all of the following: the addition, deletion or revision in the scope of services or Deliverables; the amount of the adjustment to the Contract Amount; the extent of the adjustment to the Contract Time; or modifications of other Contract terms.
Application for Payment	D-BE's periodic or one-time claim for payment based on work completed.
Accepted Project Schedule	D-BE's initial job progress schedule after it has been accepted by Owner and designated as the Accepted Project Schedule and updated by each accepted monthly Schedule Update.
Board of Supervisors	Owner's governing body.
CCR	California Code of Regulations.
Code Sections	Except where otherwise specified, all statutory references (e.g. "Labor Code" or "Public Contract Code") shall mean those laws enacted by the State of California, as they may be amended.
Construction Contract Time	The number of working days or the dates related to the construction phase that is stated in Construction Documents applies to achievement of Substantial Completion of the Work.
Construction Documents	Final plans, specifications and estimates prepared by the D-BE's Engineer of Record after correcting for peer review comments and utilized for the D-BE's Construction Services Guaranteed Maximum Price Proposal.
Construction Fee	A fixed percentage of the future Construction Services Contract total to cover D-BE's administrative costs, home office overhead, and profit, whether at the D-BE's principal or branch offices.
Contingency (D-BE's)	A fund to cover cost growth during the Project used at the discretion of the D-BE usually for costs that result from Project circumstances. The amount of the D-BE's Contingency will be negotiated as a separate line item in each GMP package. Use and management of the D-BE's Contingency during the construction phase is described in Section 2.7.

Term	Definition
Contingency (Owner's)	A fund to cover cost growth during the Project used at the discretion of the Owner usually for costs that result from Owner directed changes or unforeseen site conditions. The amount of the Owner's Contingency will be set by the Owner and will be in addition to the project costs included in the D-BE's GMP packages. Use and management of the Owner's Contingency during the construction phase is described in Section 2.7.
Contract	This written document signed by the Owner and D-BE covering the design phase of the Project, as and including other documents itemized and referenced in or attached to and made part of this Contract, including the below referenced General Conditions.
Contract Documents	The following items and documents in descending order of precedence executed by the Owner and the D-BE: (i) all written modifications, amendments; (ii) this Contract, including all exhibits and attachments; and (iii) all PS&E Submittals in accordance with Section 2.4 and Attachment A.
Contract Amount	The cost for Design Phase Services for this Contract as identified in Section 3.
Contract Unit Price	The amount stated in the GMP Proposal for a single unit of an item of work.
Cost of the Work	Direct design phase costs necessarily incurred by the D-BE in the proper performance of the Work. The Cost of the Work shall include direct labor costs, subcontract costs, costs of materials and equipment incorporated in the completed construction, costs of other materials and equipment, temporary facilities, permit fees (if not paid for by Owner), materials testing, and related items. The Cost of the Work shall not include the D-BE's Construction Fee or taxes.
Critical Path Schedule	The sequence of activities from the start of the Work to the Completion of the Project. Any delay in the completion of these activities will extend the Completion date.
Design-Build Entity (D-BE)	The Respondent ("Party") awarded the Contract by Owner.
Design Phase Services	The work products prepared by the D-BE in performing the Scope of Work, attached hereto and as described in this Contract.
Director	Except where otherwise provided, references to "Director" shall mean the Director of OC Public Works or his or her designee.
Engineer of Record	The D-BE's California-registered engineer in responsible charge for the design of the Project and whose seal appears on the Plans, Specifications, and Special Provisions.
Escrowed Documents	Those documents sealed, submitted, and held in accordance with the "ESCROWED DOCUMENTS" Section of the Agreement.
Float	The number of Days by which an activity can be delayed without lengthening the Critical Path and extending the Completion date.
General Conditions	The portion of the Contract Documents setting forth various conditions and requirements of the Contract.
Guaranteed Maximum Price (GMP) Proposal	The offer or proposal of the D-BE submitted on the prescribed form, Attachment B, setting forth the GMP prices for the entire Work or portions of the Work to be performed during the design phase. The GMP Proposal(s) are to be developed in accordance with the Instructions to D-BE and Section 2.7 of this Contract.

Term	Definition
Guaranteed Maximum Price (GMP)"	The sum of the maximum Cost of the Work including the D-BE's Construction Fee, General Conditions Costs, sales tax, and D-BE Contingency.
Laws and Regulations; Laws or Regulations	Any and all applicable laws, rules, regulations, ordinances, codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.
Lump Sum (LS)	"Lump Sum", "L.S.", or "Job" prices are paid according to a flat total for all labor, materials, overhead, and other costs associated with the work item. (See the "PAYMENTS" Section of the General Conditions.)
Notice of Termination	Owner's notice to D-BE specifying the effective date of a termination of the Contract (in whole or in part).
Notice to Proceed (NTP)"	Written notice given by Owner to the D-BE fixing the date on which the D-BE will start to perform the D-BE's obligations under this Contract.
Owner	The County of Orange, a political subdivision of the State of California, and the Orange County Flood Control District, a body corporate and politic, and its representatives.
Party / Parties	The Owner and/or D-BE.
Plans	The drawings, profiles, cross sections, standard plans, working drawings, and shop drawings, or reproductions thereof, approved by Owner, which show the location, character, dimensions, or details of the Project.
Project	All work performed by D-BE as required by, and in strict accordance with, the Contract Documents.
Project Manager (PM)	The Owner representative identified in the Contract Documents or otherwise specified by Owner in writing.
Project Schedule	A current schedule developed from the accepted baseline project schedule or subsequent schedule through regular monthly review to incorporate as-built progress and any planned changes.
Project Team	Design phase services team consisting of the D-BE, Owner, and other stakeholders who are responsible for making decisions regarding the Project.
Reference Specifications	Those bulletins, standards, rules, methods of analysis or testing, codes, and specifications of other agencies, engineering societies, or industrial association referred to in the Contract Documents. These shall refer to the latest edition, including amendments in effect and published at the time of advertising the Contract or issuing the permit, unless specifically referred to by edition, volume, or date.
Schedule of Values	D-BE's detailed breakdown of unit prices and costs of services, labor, and materials.
Schedule Update(s)	D-BE's monthly update of work progress. (See the "PROJECT SCHEDULES" Section of the General Conditions.)
Shop Drawings	All drawings, diagrams, schedules and other data specifically prepared for the Work by the D-BE or a Sub-consultant, Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
Site	The land or premises on which the Project is located.

Term	Definition
Special Provisions	The portion of the Contract Documents describing the specific requirements of the Project, which may include additions and revisions to the Standard Specifications setting forth conditions and requirements peculiar to the Project.
Standard Plans	Details of standard structures, devices, or instructions referred to on the Plans or in the Special Provisions by title or number.
Standard Specifications	The Standard Specifications for Public Works Construction (SSPWC), known as the "Greenbook," Current Edition, Parts 2 through 5, including any supplements effective as of the time of Bid opening.
Subcontractor(s)	A person, firm or corporation having an independent Contract with the D-BE to furnish services required as its independent professional consultant or perform portions of the work with respect to the Project. May be herein referred to as sub-consultant or subcontractor.
Submittals	Items that the Contract Documents require D-BE to submit to Owner after award of the Contract and issuance of the Notice to Proceed, as provided by the "SUBMITTALS" Section of the General Conditions.
Substantial Completion	When the Work, or an agreed upon portion of the Work, is sufficiently complete so that Owner can occupy and use the Project or a portion thereof for its intended purposes. The conditions of Substantial Completion that apply or do not apply to a specific GMP will be listed in the Notice to Proceed Letter pursuant to the Construction Phase Contract.
Supplier	A manufacturer, fabricator, supplier, distributor, materialman or vendor having a direct Contract with D-BE or with any Sub-contractor to furnish materials or equipment to be incorporated in the construction phase Work by D-BE or any subcontractor.
Supplementary General Conditions	The portion of the Contract Documents identified describing additions and revisions to the General Conditions setting forth conditions and requirements peculiar to the Project.
Unilateral Change Order	A Change Order issued by the Owner where Owner and D-BE cannot reach an agreement on a proposed modification to the Contract.
Value Engineering	Alternatives for design, means and methods or other scope considerations that are evaluated using value engineering principles and have the potential to reduce construction costs while still delivering a quality and functional Project that meets Owner requirements.
Work	The entire completed design and construction or the various separately identifiable parts thereof, required to be furnished during the design and construction phases. Work includes and is the result of preparing Construction Documents, performing or furnishing labor, furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Contract Documents for the construction phase.

2. DESIGN PHASE SERVICES

2.1 GENERAL PROJECT REQUIREMENTS

2.1.1 The D-BE, to further the interests of the Owner, will perform the services required by, and in strict accordance with this Contract, to the satisfaction of the Owner, exercising the degree of

care, skill and judgment ordinarily used by members of the architectural and engineering professions, as well as members of the construction contractor professions, with expertise in the design and construction of public facilities, practicing under similar conditions in Orange County, California would exercise at the same time as the services performed hereunder. The D-BE will provide these services as applicable from the Design Phase through the end of the project design and construction.

2.1.2 Project Evaluation: If requested, as a participating member of the Project Team, the D-BE will provide to the Owner a written evaluation of the Owner's Project and Project Budget, each in terms of the other, with recommendations as to the appropriateness of each.

2.1.3 Project Meetings: The D-BE will attend Project Team meetings which may include, but are not limited to, regular Project management meetings, Project workshops, special Project meetings, construction document rolling reviews and partnering sessions. Alteration of Plans or of Character of Work:

No substantial change, as determined at the sole discretion of the Owner, in general plan or character of the work shall be made by the D-BE without written agreement by the Owner. The Owner reserves the right to request, at any time prior to or during the progress of the work, alterations or changes, whether a substantial change or not, and such alterations in the details of construction, whether a substantial change or not, as may be found necessary or desirable by the Owner in accordance with Contract Sections 5.2. Such alterations or changes shall not constitute a breach of Contract, shall not invalidate the Contract, nor release the D-BE from any liability arising out of this Contract or the surety bond. The D-BE agrees to evaluate the request within 7 days of receipt, and either provide justification for dismissing the request or proceed to perform the work, as altered or changed, the same as if it had been a part of the original Contract.
The term "substantial change" applies only when the Owner determines that the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction. This includes Project Milestone deliverables at 35%, 65%, and 95% Design. The allowance due to the D-BE will be in accordance with Contract Section 14.2 – Change Orders.
In the instance of an alleged "substantial change", the determination by the Owner shall be conclusive. If the determination is challenged by the D-BE in any proceeding, the D-BE must establish by clear and convincing proof that the determination by the Owner was without any reasonable basis.

2.2 PROJECT MANAGEMENT PLAN

2.2.1 If requested by the Owner, the D-BE will prepare and/or maintain a Project Management Plan (PMP), which may include the D-BE's professional opinions concerning: (a) Project milestone dates and the Project Schedule, including the broad sequencing of the design and construction of the Project, (b) investigations, if any, to be undertaken to ascertain subsurface conditions and physical conditions of existing surface and subsurface facilities and underground utilities, (c) alternate strategies for fast-tracking and/or phasing the construction, (d) the number of separate subcontracts to be awarded to Subcontractors and Suppliers for the Project construction, (e) permitting strategy, (f) safety and training programs, (g) construction quality control, (h) a commissioning program, (i) the cost estimate and basis of the project, and (j) a matrix summarizing each Project Team member's responsibilities and roles, (j) a utility relocation strategy, (k) construction staffing requirements, right of way, temporary construction easement (TCE), right of entry, encroachment permit strategies and requirements, and (l) reduction to environmental resources and environmental regulatory permit acquisition strategies.

2.2.2 The D-BE shall add detail to its previous version of the PMP as new information becomes available to keep it current throughout the design and construction phases. The update/revisions shall take into account (a) revisions in Drawings and Specifications; (b) the results of any additional investigatory reports of subsurface conditions, drawings of physical conditions of existing surface and subsurface facilities and documents depicting underground utilities placement and physical condition, whether obtained by the Owner or the D-BE, (c) unresolved permitting issues, and significant issues, if any, pertaining to the acquisition of land and right of way, (d) the fast-tracking if any of the construction, or other chosen construction delivery methods, (e) the requisite number of separate construction phases, (f) the status of the procurement of long-lead time equipment (if any) and/or materials, and (g) funding issues identified by the Owner.

2.3 PROJECT SCHEDULE

2.3.1 The fundamental purpose of the "Project Schedule" is to identify, coordinate and record the tasks and activities to be performed by all of the Project Team members and then for the Project Team to utilize that Deliverable as a basis for managing and monitoring all member's compliance with the schedule requirements of the Project. The D-BE is responsible for developing, managing, maintaining, and monitoring compliance with the "Project Schedule" on behalf of, and to be used by, the Project Team based on input from the other Project Team members. The Project Schedule will be consistent with the most recent revised/updated PMP. The Project Schedule will use the Critical Path Method (CPM) technique, unless required otherwise, in writing by the Owner. The D-BE will use scheduling software to develop the Project Schedule that is acceptable to the Owner. The Project Schedule shall be presented in graphical and tabular reports as agreed upon by the Owner. If construction phasing, as described below, is required, the Project Schedule will indicate milestone dates for the phases once determined.

2.3.2 The Project Schedule shall include a CPM diagram schedule that shall show the sequence of activities, the interdependence of each activity, and indicate the Critical Path.

2.3.2.1 The CPM diagram schedule shall be in Days and indicate duration, earliest and latest start and finish dates for all activities, and total Float times for all activities except critical activities. The CMP diagram shall be presented in a time scaled graphical format for the Project as a whole.

2.3.2.2 The CPM diagram schedule shall indicate all relationships between activities.

2.3.2.3 The activities making up the schedule shall be sufficient detail to assure that adequate planning has been done for proper execution of the Work and such that it provides an appropriate basis for monitoring and evaluating the progress of the Work.

2.3.2.4 The CPM diagram schedule shall be based upon activities, which would coincide with the milestone submittals and schedule of values.

2.3.2.5 The CPM diagram schedule shall show all submittals associated with each work activity and the review time for each submittal.

2.3.3 Float time shall be as prescribed below:

2.3.3.1 The total Float within the overall schedule, is for the exclusive use of the Owner, and is a resource available to the Owner as needed to meet Contract milestones and the Project completion date.

2.3.3.3 Since Float time within the schedule is solely Owner owned, it is acknowledged that Owner-caused delays on the Project may be offset by Owner-caused time savings (i.e., critical path submittals returned in less time than allowed by the Contract, approval of substitution requests and credit changes which result in savings of time to the D-BE, etc.). In such an event, the D-BE shall not be entitled to receive a time extension or delay damages until all Owner-caused time savings are exceeded.

2.3.4 The Project Schedule will be updated and maintained by the D-BE throughout the design phase such that it will not require major changes at the start of the construction phase to incorporate the D-BE's plan for the performance of the construction phase Work. The D-BE will provide updates and/or revisions to the Project Schedule for use by the Project Team, whenever required, but no less often than at the Project Team meetings. The D-BE will include with such submittals a narrative describing its analysis of the progress achieved to-date vs. that planned, any concerns regarding delays or potential delays, and any recommendations regarding mitigating actions.

2.3.5 Construction Phasing: If phased construction is deemed appropriate and the Owner approves, the D-BE will review the design and make recommendations regarding the phased issuance of Construction Documents to facilitate phased construction of the Work, with the objective of reducing the Project Schedule and/or Cost of the Work. The D-BE will take into consideration such factors as natural and practical lines of work severability, sequencing effectiveness, access and availability constraints, total time for completion, construction market conditions, labor and materials availability, and any other factors pertinent to saving time and cost.

2.4 DESIGN DOCUMENT DEVELOPMENT

2.4.1. All Project Work shall be performed in accordance with instructions, criteria, and standards set forth by the Owner.

2.4.2. For each phase of construction, the D-BE shall develop 35% (as part of finalizing the Project Report), 65%, 95%, and 100% PS&E submittals, unless otherwise approved by the Owner.

2.4.3. At all milestone submittals for the PS&E, the D-BE shall prepare hard copies for the reviewing agencies and/or parties identified by the County if required otherwise electronic submissions will be the standard method of delivery. The reviewing agency's and/or party's requests or directions regarding modifications and/or revisions to the PS&E at any milestone review will be relayed to the D-BE through the County for incorporation. Upon receipt of the comments and recommended revisions to the PS&E from the County, the D-BE shall evaluate and upon concurrence by the County, proceed with revising the plans, specifications (special provisions), design, quantity calculations, and engineer's estimate. The review comments and responses shall be documented in a Peer Review Response Matrix. The Peer Review Response Matrix from a previous milestone review shall be provided with the subsequent milestone PS&E package.

Upon receipt of the Final PS&Es stamped and signed by the Project Engineer, the Owner shall coordinate signature of the plans by the appropriate Owner and Project Stakeholder officials prior to issuance of any Notice to Proceed for construction.

2.5 DESIGN DOCUMENT REVIEWS

2.5.1 The D-BE will evaluate periodically the availability of labor, materials/equipment, building systems, cost-sensitive aspects of the design; and other factors that may impact the cost estimate, GMP Proposals and/or the Construction Schedule.

2.5.2 The D-BE will recommend, obtain Owner approval, and conduct any additional surface and subsurface investigations that, in its professional opinion, are required to provide the necessary information for the D-BE to construct the Project. Before initiating construction operations, the D-BE may request additional investigations in their GMP Proposal to improve the adequacy and completeness of the site condition information and data made available with the Construction Documents.

2.5.3 The D-BE will meet with the Project Team as required to review designs during their development. The D-BE will proactively advise, justify, and implement recommendations on factors related to construction costs and concerns pertaining to the feasibility and practicality of any proposed means and methods, selected materials, equipment and building systems, and, labor and material availability. The D-BE will furthermore advise, justify, and implement proposed site improvements, excavation and foundation considerations, as well as, concerns that exist with respect to coordination of the Drawings and Specifications. The D-BE will recommend and implement cost effective alternatives, as approved by the Owner.

2.5.4 Constructability Reviews: The D-BE shall conduct constructability reviews of the Construction Documents in accordance with the D-BE's Quality Assurance / Quality Control (QA/QC) Plan. The reviews will ensure (a) the Drawings and Specifications are configured to enable efficient construction, (b) design elements are standardized, (c) construction efficiency is properly considered in the Drawings and Specifications, (d) module/preassembly design are prepared to facilitate fabrication, transport and installation, (e) the design promotes accessibility of personnel, material and equipment and facilitates construction under adverse weather conditions, (f) sequences of Work required by or inferable from the Drawings and Specifications are practicable, and (g) the design has taken into consideration, efficiency issues concerning; access and entrance to the site, laydown and storage of materials, staging of site facilities, construction parking, and other similar pertinent issues. The D-BE shall identify and rectify all discrepancies and inconsistencies in the Construction Documents.

2.5.4.1 Bidability Reviews: The D-BE shall conduct bidability reviews of the Construction Documents in accordance with the D-BE's QA/QC Plan. The D-BE will check cross-references and complementary Drawings and sections within the Specifications, and in general ensure (a) the Drawings and Specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies, (b) named materials and equipment are commercially available and are performing well or otherwise, in similar installations, and (c) Specifications include alternatives in the event a requirement cannot be met in the field. The D-BE shall identify and rectify all discrepancies and inconsistencies in the Construction Documents.

2.5.4.2 The results of the constructability and bidability reviews will be provided whenever required, but no less often than at the Project Milestones.

2.5.5 Notification of Variance or Deficiency: If the D-BE recognizes that portions of the Construction Documents are at variance with applicable laws, statutes, ordinances, building codes, rules and regulations, it will promptly notify the Owner in writing, describing the apparent variance or deficiency. The D-BE is ultimately responsible for the cost associated with the revisions necessary for compliance with those laws, statutes, ordinances, building codes, rules and regulations.

2.5.6 Value Engineering Evaluations: The D-BE will routinely identify, evaluate, justify, and implement, using value engineering principles, any alternate systems, approaches, design changes that have the potential to reduce Project costs while still delivering a quality and functional product. If the Owner approves, the D-BE will perform a cost/benefit analysis of the alternatives and submit such in writing to the Owner. The Project Team will decide which alternatives will be incorporated into the Project. The D-BE will have full responsibility for the incorporation of the alternatives into the Drawings and Specifications. The D-BE will include the cost of the alternatives into the cost estimate and any GMP Proposals.

2.6 COST ESTIMATES

2.6.1 Unless otherwise agreed by both parties, within 14 days after receipt of the documents for the various phases of design, the D-BE shall provide a detailed cost estimate to arrive at a GMP.

2.6.2 If any estimate submitted to the Owner exceeds previously accepted estimates or the Owner's Project budget, the D-BE shall make appropriate recommendations on methods and materials to the Owner that would bring the project back into the Project budget.

2.6.3 In between these milestone estimates, the D-BE shall periodically provide a tracking report which identifies the upward or downward movements of costs due to value engineering or scope changes. It shall be the responsibility of the D-BE to keep the Owner informed as to the major trend changes in costs relative to the Owner's budget.

2.6.4 If requested by the Owner, the D-BE shall prepare a preliminary "cash flow" projection based upon historical records of similar type projects to assist the Owner in the financing process.

2.6.5 If this Contract is funded in whole or in part by the Federal Government, D-BE agrees to comply with the Federal labor standards provisions set forth in the Special Provisions. If the Federal prevailing wage determinations differ from the State's, D-BE shall not pay less than the higher of the two rates.

2.7 GUARANTEED MAXIMUM PRICE (GMP) PROPOSALS

2.7.1 The proposed GMP for the entire Work (or portions thereof) will be presented in a format acceptable to the Owner. Due to the potential for the Owner to update procedures without notice, the D-BE must verify with the Owner the current submittal requirements and procedures when entering into these services.

The Owner may request a GMP Proposal for all or any portion of the Project and at any time during the design and construction phases. Any GMP Proposals submitted by the D-BE will be based on and consistent with the current update/revised cost estimate at the time of the request, the associated estimates for construction costs and include any clarifications or assumptions upon which the GMP Proposal(s) are based.

2.7.2 Guaranteed Maximum Price is comprised of the following not-to-exceed cost reimbursable or lump sum amounts defined below.

2.7.2.1 The Cost of the Work is actual costs and is a not-to-exceed, reimbursable amount.

2.7.2.2 The Construction Fee is a firm, fixed percentage of the future Construction Services Contract total.

2.7.2.3 D-BE's Contingency is an amount the D-BE shall use under the following conditions:

(1) At its discretion for increases in the Cost of the Work which are not the Owner's responsibility, or

(2) With written approval of the Owner for increases in General Condition Costs. D-BE's Contingency is assumed to be a direct project cost so will receive all markups at the time of GMP submission.

2.7.2.4 Taxes are deemed to include all sales, use, consumer and other taxes which are legally enacted when negotiations of the GMP were concluded, whether or not yet effective or merely scheduled to go into effect. Taxes are actual costs and are a not-to-exceed reimbursable amount.

2.7.3 Owner's Contingency are funds to be used at the discretion of the Owner to cover any increases in Project costs that result from Owner directed changes or unforeseen site conditions. Owner's Contingency will be added to the GMP amount provided by the D-BE, the sum of which will be the full Contract price for construction. Markups for Construction Fee and taxes will be applied by the D-BE at the time that Owner's Contingency is used. Any Owner Contingency not utilized shall revert to the Owner after Project completion.

2.7.4 GMPs are cumulative except for D-BE Contingency. The amount of D-BE Contingency for each GMP amendment will be negotiated separately and shall reflect the D-BE's risk from that point in the project forward.

2.7.5 The D-BE, in preparing any GMP Proposal will prepare its GMP in accordance with the Owner's request. The D-BE will mark the face of each document of each set of Construction Documents (including all addenda) upon which its proposed GMP is based. The D-BE will send one set of those documents to the Owner's Project Manager and keep one set.

2.7.6 An updated/revised Project Schedule will be included with any GMP Proposal(s) that reflects the Construction Documents. Any such Project Schedule updates/revisions will continue to comply with the requirements of Section 2.3.

2.7.7 GMP savings resulting from a lower actual project cost than anticipated by the D-BE remaining at the end of the project will revert to Owner.

2.7.8 GMP Proposal(s) Review and Approval shall be prescribed below:

2.7.8.1 The D-BE will meet with the Owner to review the GMP Proposal(s) and the written statement of its basis. In the event the Owner discovers inconsistencies or inaccuracies in the information presented, the D-BE will make adjustments as necessary to the GMP Proposal, its basis or both.

2.7.8.2 The Owner upon receipt of any GMP proposal from the D-BE, may submit the GMP Plans, Specifications, and Estimate to an independent third party for review and verification. The third party will develop an independent estimate of the Cost of the Work and review the Construction Schedule for the associated scope of the GMP Proposals.

2.7.8.3 If the D-BE GMP Proposal is greater than the independent third party's estimate, the Owner may require the D-BE to reconfirm its GMP Proposal. The D-BE will accept the independent third party's estimate for the Cost of Work as part of the D-BE's GMP or present a report within

seven days of a written request to the Owner identifying, explaining and substantiating the differences. The D-BE may be requested to, or at its own discretion, submit a revised GMP Proposal for consideration by the Owner. At that time the Owner may do one of the following:

(1) Accept the D-BE original or revised GMP Proposal, if within the Owner's budget, without comment.

(2) Accept the D-BE original or revised GMP Proposal that exceeds the Owner's budget, and indicate in writing to the D-BE that the Project Budget has been increased to fund the differences.

(3) Reject the D-BE's original or revised GMP Proposal because it exceeds the Owner's budget or the independent third party's estimate, in which event, the Owner may terminate this Contract and/or elect to not enter into a separate Contract with the D-BE for the construction phase associated with the Scope of Work reflected in the GMP Proposal.

(4) With the D-BE's Contract, wait to accept the GMP Proposal if the Owner believes adequate funding will be available in the future

2.7.8.4 If during the review and negotiation of GMP Proposals design changes are required, the Owner will authorize and the D-BE to revise the Construction Documents to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the final approved GMP Proposal.

2.8 RESERVED

3. CONTRACT AMOUNT AND PAYMENTS

3.1 CONTRACT AMOUNT FOR DESIGN/PRE-CONSTRUCTION PHASE SERVICES

3.1.1 Based on the design/pre-construction phase services fee proposal submitted by the D-BE and accepted by the Owner (which by reference is made a part of this Contract); the Owner will pay the D-BE a ***Guaranteed Maximum Price $_____*** which includes basic service, special services, and reimbursable items, per Attachment B.

3.2 PAYMENTS

3.2.1 Requests for monthly payments by the D-BE for design phase services will be submitted on the Owner's "Contract Payment Request" form and will be accompanied by a progress report, detailed invoices and receipts, if applicable. Any requests for payment will include, at a minimum, a narrative description of the tasks accomplished during the billing period, a listing of any Deliverables submitted, and copies of any Subconsultants' requests for payment, based on their respective fee schedules in Attachment B, plus similar narrative and listings of Deliverables associated with their Work. Payment for services negotiated as a lump sum shall be made in accordance with the percentage of work completed during the preceding month. Services negotiated as a not-to-exceed fee will be paid in accordance with the work effort expended on that service during the preceding month.

3.2.2 The fees for the D-BE and any Subconsultants will be based upon the hourly rate schedule included as Attachment B.

3.2.3 The D-BE will pay all sums due Subconsultants for services and reimbursable expenses within 14 calendar days after the D-BE has received payment for those services from the Owner. In no event will the Owner pay more than 90 percent of the Contract Amount until final acceptance of

all design phase services, and award of the final approved GMP for the entire Project by Owner, or Owner's election to not use D-BE for construction of the Project.

3.2.4 The D-BE agrees that no charges or claims for costs or damages of any type will be made by it for any delays or hindrances beyond the reasonable control of the Owner during the progress of any portion of the services specified in this Contract. Such delays or hindrances, if any, will be solely compensated for by an extension of time for such reasonable period as may be mutually agreed between the parties.

It is understood and agreed, however, that permitting the D-BE to proceed to complete any services, in whole or in part after the date to which the time of completion may have been extended, will in no way act as a waiver on the part of the Owner of any of its legal rights herein.

3.3 ADDITIONAL DESIGN PHASE SERVICES

3.3.1 D-BE's Expense: D-BE will be responsible for all costs related to photo copying, telephone communications and fax communications while on Owner sites during the performance of work and services under this Contract.

3.3.2 Reimbursable Items: Reimbursable items are non-salary items that are not included in the Scope of Work but necessary for completion of the work and must be authorized in advance by the Owner' Project Manager. D-BE may be entitled to reimbursement for the following, upon prior approval by Owner:

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

(2) Printing expenses paid to outside Contractors; to the extent such Contractors and reproduction rates have been approved by the Owner Project Manager.

(3) Other actual costs and/or payments specifically approved and authorized in writing by the Owner Project Manager and actually incurred by D-BE in performance of this Contract

(4) Travel costs shall only be reimbursed if approved in advance in writing by Owner Project Manager and are subject to the following restrictions:

a. Reimbursement of mileage for the business use of a personal vehicle during the conduct of business within the Scope of Services of this Contract shall be based on the Internal Revenue Service Standard Mileage Rate in effect at the time. Mileage and parking fees between the D-BE's "Home Based" office location and OC Public Works location, as well as mileage within OC Public Works property will not be reimbursed.

(5) Cost of "Home Based" Xerox copies, faxes, and other supplies and materials associated with them will not be reimbursed.

(6) Cost of cellular phones, cell phone usage plans and usage minutes, and other mobile communication devices will not be reimbursed.

(7) All reimbursable expenses must be itemized on D-BE invoice(s) and documented with receipts. Receipts for reimbursable expenses must be submitted with all D-BE invoices. Invoices for reimbursable expenses without back-up receipts will not be paid. D-BE is responsible for submitting reimbursable invoices in a format that is acceptable to the Owner. Reimbursable items shall be charged at cost. Any third-party or subcontractor services shall also be charged at cost; no mark-ups will be allowed.

4. Owner's Responsibilities

4.1 DISSEMINATION OF EXISTING PROJECT INFORMATION

The Owner, at no cost to the Design-Build, will furnish the following information:

4.1.1 One copy of data the Owner determines pertinent to the Work. However, the D-BE will be responsible for searching the records and requesting information it deems reasonably required for the Project.

4.1.2 All available data and information and requirements pertaining to relevant policies, standards, criteria, studies, etc.

4.1.3 The name of the Owner employee or Owner's representative who will serve as the Project Manager during the term of this Contract. The Project Manager has the authority to administer this Contract and will monitor the D-BE's compliance with all terms and conditions stated herein. All requests for information from or decisions by the Owner on any aspect of the Work or Deliverables will be directed to the Project Manager. Owner shall give D-BE written notification if the person designated as the Project Manager changes.

4.2 NOTIFICATION OF COMPLIANCE WITH CONTRACT REQUIREMENTS

The Owner additionally will:

4.2.1 Give prompt written notice to the D-BE when the Owner becomes aware of any default or defect in the Project or non-conformance with the Plans, Specifications and Estimates, or any of the services required hereunder. Upon notice of failure to perform, the Owner may provide written notice to D-BE that it intends to terminate the Contract unless the problem cited is cured, or commenced to be cured, within three days of D-BE's receipt of such notice.

4.2.2 Notify the D-BE of changes affecting the budget allocations or schedule.

4.3.3 The Owner's Project Manager, will have authority to approve the Project Budget and Project Schedule and render decisions and furnish information the Project Manager deems appropriate to the D-BE. This authority is only for the purpose of facilitating the design phase. This approval authority is not binding or a commitment upon the Owner for the purposes of Project construction.

5. CONTRACT CONDITIONS

5.1 PROJECT DOCUMENTS AND COPYRIGHTS

5.1.1 County Ownership of Project Documents: All work products (electronically or manually generated) including but not limited to: cost estimates, studies, design analyses, original mylar drawings, Computer Aided Drafting and Design (CADD) file, and other related documents which are prepared specifically in the performance of this Contract (collectively referred to as Project Documents) are to be and remain the property of the Owner and are to be delivered to the Project Manager before the final payment is made to the D-BE. Nonetheless, in the event these Projects Documents are altered, modified or adapted without the written consent of the D-BE, which consent the D-BE will not unreasonably withhold, the Owner agrees to hold the D-

BE harmless to the extent permitted by law, from the legal liability arising out of and or resulting from the Owner's alteration, modification or adaptation of the Project Documents.

5.1.2 License to Owner for Reasonable Use: The D-BE hereby grants, and will require its Subconsultants to allow the Owner, its agents, employees, and representatives for an indefinite period of time to reasonably use, make copies, and distribute as appropriate the Project Documents, works or Deliverables developed or created for the Project and this Contract. This license will also include the making of derivative works. In the event that the derivative works require the Owner to alter or modify the Project Documents, then paragraph 5.1.1 applies.

5.1.3 Documents to Bear Seal: When applicable and required by state law, the D-BE and its Subconsultants will sign and stamp by an applicable California professional all plans, works, and Deliverables prepared by them for this Contract.

5.2 AMENDMENT TO DESIGN WORK

5.2.1 D-BE shall make no changes in the work or perform any additional work without the Owner's specific written approval.

If such changes cause an increase in the cost of doing work or in the time required and are issued as a result of some action or inaction on the part of Owner, compensation shall be at hourly rates as indicated in the payment schedule.

Reimbursable Items Article 4 and Changes in Services Article 2 and Scope of Work, must be specifically approved by Owner in writing before work begins. All changes in scope of work that amend this Contract may be subject to approval by County of Orange Board of Supervisors.

A. Owner Initiated: Owner may, at any time, upon written notice, direct any changes in the work within the general scope of the Contract. If Owner shall determine that a change in the scope of services of the D-BE is desirable, a written order called an "Amendment" shall be issued by Owner which shall set forth the nature of the change. When an Amendment has been issued, D-BE shall expeditiously proceed to implement the change set forth therein.

B. If D-BE believes that a change in the scope of services is necessary and desirable to further the interests of the Project under this Contract, D-BE shall make a request, in writing, to Owner to issue an Amendment. Such requests for a Contract change shall include the proposed change in scope of work, as well as any proposed change in compensation, schedule, construction cost and time, associated with granting such an Amendment. Upon receipt of such request for a Contract scope change, Owner may reject the request; approve the request; negotiate with D-BE regarding the change in the scope of services, cost and/or change in schedule. A written Amendment will be processed by Owner and D-BE shall expeditiously proceed to implement such change.

5.3 DATA CONFIDENTIALITY AND DATA SECURITY

5.3.1 Data Confidentiality: As used in the Contract, "data" means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to the D-BE or its subcontractors in the performance of this Contract.

5.3.1.1 The parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to the D-BE or its subcontractors in connection with the D-BE's or its subcontractor's performance of this Contract is confidential and proprietary information belonging to the Owner.

5.3.1.2 Except as specifically provided in this Contract, the D-BE or its subcontractors shall not divulge data to any third party without prior written consent of the Owner. The D-BE or its subcontractors shall not use the data for any purposes except to perform the services required under this Contract. These prohibitions shall not apply to the following data provided the D-BE or its subcontractors have first given the required notice to the Owner:

5.3.1.2.1 Data which was known to the D-BE or its subcontractors prior to its performance under this Contract unless such data was acquired in connection with work performed for the Owner;

5.3.1.2.2 Data which was acquired by the D-BE or its subcontractors in its performance under this Contract and which was disclosed to the D-BE or its subcontractors by a third party, who to the best of the D-BE's or its subcontractor's knowledge and belief, had the legal right to make such disclosure and the D-BE or its subcontractors are not otherwise required to hold such data in confidence; or

5.3.1.2.3 Data which is required to be disclosed by virtue of law, regulation, or court order, to which the D-BE or its subcontractors are subject.

5.3.1.3 In the event the D-BE or its subcontractors are required or requested to disclose data to a third party, or any other information to which the D-BE or its subcontractors became privy as a result of any other Contract with the Owner, the D-BE shall first notify the Owner as set forth in this Section of the request or demand for the data. The D-BE or its subcontractors shall give the Owner sufficient facts so that the Owner can be given an opportunity to first give its consent or take such action that the Owner may deem appropriate to protect such data or other information from disclosure.

5.3.4 The D-BE, unless prohibited by law, within ten calendar days after completion of services for a third party on real or personal property owned or leased by the Owner, the D-BE or its subcontractors shall promptly deliver, as set forth in this Section, a copy of all data to the Owner. All data shall continue to be subject to the confidentiality Contracts of this Contract.

5.3.4.1 The D-BE or its subcontractors assume all liability for maintaining the confidentiality of the data in its possession and agrees to compensate the Owner if any of the provisions of this Section are violated by the D-BE, its employees, agents or subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section shall be deemed to cause irreparable harm that justifies injunctive relief in court. D-BE agrees that the requirements of this Section shall be incorporated into all subcontracts entered into by D-BE. A violation of this Section may result in immediate termination of this Contract without notice.

5.3.5 Personal Identifying Information-Data Security: Personal identifying information, financial account information, or restricted Owner information, whether electronic forma to hard copy, must be secured and protected at all times. At a minimum, D-BE must encrypt and/or password protect electronic files. This includes data saved to laptop computers, computerized devices or removable storage devices.

5.3.5.1 When personal identifying information, financial account information, or restricted Owner information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed.

5.3.5.2 In the event that data collected or obtained by D-BE or its subcontractors in connection with this Contract is believed to have been compromised, D-BE or its subcontractors shall immediately notify the Project Administrator. D-BE agrees to reimburse the Owner for any costs incurred by the Owner to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach.

5.3.5.3 D-BE agrees that the requirements of this Section shall be incorporated into all subcontracts entered into by D-BE. It is further agreed that a violation of this Section shall be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Contract without notice.

5.3.5.4 The obligations of D-BE or its subcontractors under this Section shall survive the termination of this Contract.

5.5 PROJECT STAFFING

5.4.1 Prior to the start of any Work or Deliverable under this Contract, the D-BE will submit to the Owner, an organization chart for the D-BE staff and Subconsultants and detailed resumes with pictures of key personnel listed in its response to the Owner's Request for Qualifications or subsequent fee proposals (or revisions thereto), that will be involved in performing the services prescribed in the Contract. Unless, otherwise informed, the Owner hereby acknowledges its acceptance of such personnel to perform such services under this Contract. In the event the D-BE desires to change such key personnel from performing such services under this Contract, the D-BE will submit the qualifications of the proposed substituted personnel to the Owner for prior approval. Key personnel will include, but are not limited to, principal-in-charge, project manager, superintendent, project director or those persons specifically identified to perform services of cost estimating, scheduling, value engineering, and procurement planning.

5.4.2 The D-BE will maintain an adequate number of competent and qualified persons, as determined by the Owner, to ensure acceptable and timely completion of the scope of services described in this Contract throughout the period of those services. If the Owner objects, with reasonable cause, to any of the D-BE's staff, the D-BE will take prompt corrective action acceptable to the Owner and, if required, remove such personnel from the Project and replace with new personnel acceptable to the Owner. If D-BE breaches this section, it will be considered an event of default under this Contract.

An Owner appointed project manager to act as liaison between the Owner and the contractor, and to carry out the administration of this contract. The Owner's Project Manager shall coordinate the activities of the Owner's staff assigned to work with the D-BE. The Owner's Project Manager shall have the right to require the removal and replacement of the D-BE's Project Manager and key personnel. The Project Manager shall notify the D-BE in writing of such action. The D-BE shall accomplish the removal within 14 calendar days after written notice by the Project Manager. The Project Manager shall review and approve the appointment of the replacement for the D-BE's Project Manager and key personnel. Said approval shall not be unreasonably withheld. The Project Manager shall have the authority to administer the rights and responsibilities of Owner so long as the Project Manger's actions do not affect the legal rights and obligations of Owner.

5.5 EMPLOYEE ELIGIBILITY VERIFICATION

5.5.1 D-BE shall indemnify, defend with counsel approved in writing by Owner, and hold harmless, the Owner, its agents, officers, and employees from employer sanctions and any other liability which may be assessed against D-BE or the Owner 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.

5.6 ERRORS AND OMISSIONS

5.6.1 All Projects/Services submitted by D-BE shall be complete and shall be carefully checked prior to submission. D-BE understands that Owner's checking is discretionary, and D-BE shall not assume that Owner will discover errors and/or omissions. If Owner discovers any errors or omissions prior to approving D-BE's Projects/Services, the Projects/Services will be returned to D-BE for correction. Should Owner or others discover errors or omissions in the work submitted by D-BE after Owner's approval thereof, Owner's approval of D-BE's Projects/Services shall not be used as a defense by D-BE.

5.6.2 If D-BE subcontracts portions of the architectural or engineering design Projects/Services to be performed under the terms of this Contract, D-BE shall obtain evidence that such subcontractors have purchased Professional Liability Insurance to the same limits as described in Paragraph 6.15.4 and containing the same clauses as the insurance required of D-BE under the terms of this Contract. Evidence of subcontractor's insurance shall be submitted to Owner upon request.

5.7 CONSENT TO BREACH NOT WAIVER

5.7.1 No term or provision of this Contract shall be deemed waived and no breach excused, unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented.

5.7.2 Any consent by any party to, or waiver of, a breach by the other, whether express or implied, shall not constitute consent to, waiver of, or excuse for any other different or subsequent breach.

5.8 REMEDIES NOT EXCLUSIVE

5.8.1 The remedies for breach set forth in this Contract are cumulative as to one another and as to any other provided by law, rather than exclusive; and the expression of certain remedies in this Contract does not preclude resort by either party to any other remedies provided by law.

5.9 PAYROLL RECORDS

5.9.1 The requirements of Labor Code Section 1776 provide in part:
D-BE and any subcontractor(s) performing any portion of the work under this Contract shall keep an accurate record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by D-BE or any subcontractor(s) in connection with the work.

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

(1) The information contained in the payroll record is true and correct.

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

5.9.3 The payroll records shall be certified and shall be available for inspection at the principal office of D-BE on the basis set forth in Labor Code Section 1776.

5.9.4 D-BE shall inform Owner of the location of the payroll records, including the street address, city and Owner, and shall, within five working days, provide a notice of any change of location and address of the records.

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

5.10 WAGE RATES

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

5.11 PUBLIC RECORDS ACT

5.11.1 Pursuant to the California Public Records Act ("CPRA"), Government Code Sections 6250 et seq., all records provided by Contractor to Owner are subject to public disclosure upon request except as otherwise provided by law. Prior to their submission to Owner, Contractor shall identify any records it believes are exempt from disclosure, and identify the applicable CPRA exemption. If the disclosure of such records is subsequently requested, Owner will notify Contractor of such request. Unless Contractor obtains a protective order issued by a court restricting disclosure of the requested records, Owner may disclose the records if Owner determines that the Public Records Act requires disclosure. Contractor shall indemnify and defend Owner in any action to compel disclosure of such records.

ATTACHMENT A

SCOPE OF WORK

ATTACHMENT A
SCOPE OF WORK

A. **Project Location**

The Project site is located in the City of Huntington Beach in Orange County, California. The Project area includes repair and/or replacement to the Huntington Beach Channel and Talbert Channel, Orange County Flood Control District (OCFCD) Facilities No. D01 and D02, respectively. The limits of repairs to D01 extend from the confluence with D02 to downstream Adams Avenue (approximately 3.1 miles) and repairs to D02 from upstream Brookhurst Street to downstream Yorktown Avenue (approximately 3.0 miles) (see Exhibit 1).

B. **Background**

The Talbert Valley Channel system consists of OCFCD facilities Huntington Beach Channel (D01), Talbert Channel (D02), and Fountain Valley Channel (D05). These facilities collect and convey flood control flows to the ocean from a drainage area of approximately 13.3 square miles. The channel system lies within a flat, coastal plain known as the Talbert Gap, which historically consisted of excavated drainage ditches for farming practices. This area was subject to frequent flooding of the Santa Ana River that refilled these ditches with sand and silt. Following the flood of 1938, this floodplain was extensively investigated by the OCFCD for flood control improvements.

In 1959, the first reaches of D01 and D02 were constructed as earthen trapezoidal channels with design capacities to convey 65% of the estimated 25-year storm event. By 1966, both D01 and D02 were constructed reach by reach to the current day extents, such that D01 extends from its confluence with D02 to Adams Avenue and D02 extends from the ocean outlet to upstream Slater Avenue. Talbert Valley experienced a large storm event in March of 1983, which flooded surrounding areas and required evacuation of homeowners. This event and additional development in the area prompted major channel improvements to meet current design standards to convey a 100-year storm event, as well as meet federal requirements for national flood insurance.

Channel improvements that began in 1990 and were completed in 2006, consisted of channel widening by installing steel sheet piles with corrosion resistant coatings, removing the resultant soil wedges, and installing Cathodic Protection (CP) systems. Two different types of CP systems were installed including the Sacrificial Anode CP system (Galvanic system) and Impressed Current CP system. The Galvanic system consists of galvanic couples that are set up with two dissimilar metals where one of the metals is allowed to corrode (sacrificial aluminum anode) while protecting the other metal (the steel sheet pile structure) from corrosion. The Impressed Current CP system uses an external power source to transfer current into the structure being protected. Current flows back and forth in a conductor with no net flow in any direction. The Impressed Current CP system was maintenance intensive and less resistant to vandalism impacting its level of performance compared to the Galvanic system. In 2011, both D01 and D02 were improved to their current day structures by abandoning the Impressed Current CIP system and expanding the Galvanic system to all reaches of the channels. The record drawings and CP commissioning report of the complete system is provided as Exhibit 2 and Exhibit 3, respectively.

C. **Purpose and Need**

Currently, the general condition of the D01 and D02 steel sheet piles is poor due to failure of the corrosion resistant coating and thus resulting in corrosion and physical deterioration of the steel sheet piles concentrated within the splash and tidal zones. The levees are due for recertification by engineer and accreditation from FEMA in accordance with the National Flood Insurance Program (NFIP) design criteria requirements, per 44 CFR 65.10. Re-accreditation of the levee systems, expected to

provide a 1-percent-annual-chance of exceedance or greater level of flood protection, is required to avoid re-introduction of the former floodplain in the area.

Orange County Public Works (OCPW), on behalf of OCFCD (Owner), retained Corrpro Companies, Inc. and Moffatt & Nichol to evaluate the coatings, CP system, and structural integrity of the sheet piles. These reports are provided herein as Exhibit 4 and Exhibit 5. Corrpro concluded that the D01 and D02 CP systems are providing *"effective corrosion protection"*, but the protective coating system has *"failed beyond 50% of the overall structures surface. At the current rate of coating failure, the existing protective coating and sheet piles will not meet their intended service life* [of 10 years]*."* In the context of this statement, the 10 year service life reference was identifying the areas that may not have a service life longer than required for a 10 year levee certification.

Moffatt & Nichol further evaluated the steel sheet piles for D01 to determine the *"necessary critical remaining thickness of the steel sheet piles for the system to maintain its structural integrity."* Moffatt & Nichol is currently conducting an equivalent structural assessment of D02 and the report will be provided to the selected D-BE once available. Areas below the critical thickness thresholds warrant repairs, approximately 977 LF along D01 and approximately 12,000 LF along D02

Repair and replacement of portions of the existing steel sheet pile channel walls is necessary to maintain accreditation for the levees and to avoid reintroduction of previously removed FEMA Special Flood Hazard Areas (SFHA's). There is currently an effort by FEMA to update the Flood Insurance Rate Maps (FIRMs) that includes remapping of specific areas. Without FEMA accreditation, areas behind and along D01 and D02 systems would be remapped to reintroduce the FEMA SFHA areas and therefore requiring affected property owners to obtain mandatory flood insurance policies.

D. **Project Description**

In basic terms, the ultimate requirement of the project is to fortify the portions of the levees that presently cannot be certified for a 10-year service life by the Owner's consultant. Upon fortification of all areas with less than a 10-year service life, the project may be expanded to fortify areas with less than a 25-year service life, budget allowing.

The Project shall include design elements necessary for the channels to convey the design discharge from a 100-year storm as defined by the Orange County Hydrology Manual (or as specified by FEMA, whichever is greater); to provide levee corrosion resilience and post-construction levee recertification; to satisfy regulatory agencies requirements; and to provide mitigation measures to protect from potential levee failure due to a storm event, extreme tidal events, tsunami, or earthquake. The initial Project objectives and responsibilities of the Design-Build Entity include, but are not limited to:

A. Develop a solution to repair or replace damaged steel sheet piles having areas with thicknesses below the required thresholds and therefore threatening their structural integrity,
B. Design improvements for a minimum design life of 50-75 years that will be integral to future channel improvements, such as 100% repair or replacement of all existing steel sheet piles for the D01 and D02 systems,
C. Provide a solution that maintains required channel design capacity and freeboard for 100-year storm discharge conveyance,
D. During design development and throughout construction, collaborate with project stakeholders and the Owner's independent peer review & recertification consultant(s),

E. Develop value engineering solutions that optimize Project budget, schedule, constructability, and/or avoid and/or minimize potential Project impacts to nearby residents and sensitive habitat,
F. Complete the Project in its entirety by June 2021.

The Project must be designed, constructed, and documented for post-construction levee recertification by the Owner's 3rd party consultant. Due to the urgency to repair and/or replace these steel sheet pile critical areas for levee recertification, the Project should prioritize the most critical areas while enabling integration for future improvements to the remaining channel reaches based on corrosion rates and identified deficiencies within the existing channels. The steel sheet piles are an integral component of the levees and their integrity is crucial for maintaining a sound flood control system. The selected project alternative(s) shall achieve the Project requirement to recertify the levees while complying with environmental, operations & maintenance, and economic constraints.

A summary and preliminary scoping of the project thus far can be found as Exhibit 6, *"Huntington Beach (D01) and Talbert (D02) Channels – Preliminary Scoping Memo",* dated August 2019.

The anticipated construction budget is $20M ($15M in FY 19/20; $5M in FY 20/21), however could be expanded to $60M pending final Owner recommendations from the Talbert Channel (D02) Structural Assessment Report.

E. Construction Means and Methods

Early in the design phase, the Design-Build Entity (D-BE) will be required to submit in writing, as specific as possible, the expected construction means and methods to complete the project, taking into consideration the environmental regulatory, federal, city, and project site constraints. Adverse impacts include, but are not limited to, impacts to the public, environment, water quality, and potential future improvement projects. The construction means and methods shall make attempts to limit these potential impacts.

Due to the proximity of sensitive receptors, past sheet piling projects were accomplished utilizing the static penetration, "press-in" method. Should sheet piling be included in the selected Project alternative, this method is recommended, however all construction means and methods for items of work shall be determined by the D-BE and submitted for approval by the Owner.

F. Project Stakeholders and Regulatory Permits

The D-BE shall be responsible for all work related to the Project and shall comply with the latest requirements of all federal, state, and local laws, as well as rules and regulations of the governing agencies and/or districts. Depending on the selected Project alternative, the following table provides a summary of potential project stakeholders that will be coordinated with, and regulatory permits obtained, by the Owner. The D-BE shall support the Owner's Corresponding conditions, constraints, and minimization and mitigation measures will need to be abided by for design and construction of the Project. Should an alternative be selected that will require acquisition of any of the following permits, agreements, or certifications, the following estimated processing lead times shall be incorporated into the D-BE Project Schedule:

Agency	Project Nexus	Estimated Processing Lead Time
US Army Corps of Engineers	Section 404 Individual Permit	6 months
CA Department of Fish and	Lake or Streambed Alteration	6 months

Wildlife	Agreement	
CA Coastal Commission	Coastal Development Permit	12 months
Santa Ana Regional Water Quality Control Board	Section 401 Certification	12-14 months
City of Huntington Beach	General Plan Conformation	3 months

Varies Project by Project, may include others and lead time varies

G. **Compliance with the California Environmental Quality Act**

Previous channel improvements were evaluated as a component of the *Talbert Valley Flood Control System: EIR No. 445* (Orange County 1987) and Addendums IP 90-49 and IP 01-094. Most recent improvements to the channels (2011 D01/D02 CP Systems) were either substantially the same as prior environmental documentation or consistent with a Class 2 exemption, Section 15302, Replacement or Reconstruction of the CEQA Guidelines. Prior environmental documentation is provided herein as Exhibit 9.

Substantial changes to the existing structures may require further environmental review and documentation. The D-BE shall coordinate with the Owner and shall be responsible for preparation of an amendment to the aforementioned CEQA document(s) and associated special environmental studies, if required.

H. **Status of Utility Investigation**

There are possible utility conflicts including, but not limited to, under/within bridge crossings and pump stations. Known utilities are shown on record drawings in Exhibit 3. Furthermore, the Owner has requested for information (RFI) from utility companies within the Project vicinity for the purpose of incorporating these facilities into the Project design. Facility maps cannot be provided at this time due to confidentiality agreements; however they will be provided to the D-BE once the Design Contract has been executed. Responsive companies from the RFI that may have facilities within the Project area include, but are not limited to, the following:

Utility Company
Chevron Pipeline & Power
Crimson Pipeline
Orange County Sanitation District
Long Beach Gas Department
City of Newport Beach
Plains All American Pipeline
SCE Transmission
SoCal Gas Distribution
SoCal Gas Transmission
Orange County Water District
Frontier
ExteNet

The D-BE is responsible for conducting utility research, identifying, and addressing all utility conflicts. During design development, the Owner will be the primary point-of-contact with the utility companies and will coordinate the utility requests and notifications. The D-BE will be responsible for coordinating with the utility companies during construction of the Project. Responsibility of the Owner and D-BE for utility coordination is further detailed in Design Task 6 herein.

I. **Status of Right-of-Way**

The Owner has a combination of fee title and permanent easements for channel and maintenance road right-of-way (see Exhibit 8). The D-BE will be responsible for determining and procuring any required permanent or temporary right-of-way needed to construct the Project. Any work within City right-of-way will require encroachment permits prior to construction. It is the D-BE's responsibility to make sure that activities related to the Project do not cause violations of local laws. The D-BE shall develop and obtain Owner approval of staging, hauling, and detour routes, as needed and will be responsible for procurement of all necessary local permits.

J. **Design Tasks**

All work related to the Project shall comply with the latest requirements of all of the following types of rules, laws, and regulations, without limitation, and these requirements shall apply to this entire Contract and any subsequent contracts as though incorporated herein by reference:

1. Federal Laws;
2. State Laws;
3. Local Laws;
4. Rules and Regulations of the governing utility agencies and/or districts; and
5. Rules and Regulations of other authorities with jurisdiction over the procurement of equipment and/or materials.

In general, D-BE design services are needed to perform the tasks detailed herein. All reports and/or studies, renderings and exhibits, plans and specifications, calculations, etc. developed by the D-BE shall at a minimum comply with the County of Orange, Orange County Flood Control District, FEMA, and USACE standards. Electronic file deliverables shall be in PDF (Portable Document Format), Microsoft (MS) Word, Microsoft (MS) Excel, and/or CAD (Computer Aided Design) [Autodesk AutoCAD 2018 format] unless otherwise approved by the Owner.

This scope of work should build upon and utilize, but not duplicate still-valid work and/or information previously prepared for or by the Owner and is further detailed herein as Design Task 2. In addition to the list of design services in Section I, Part B Scope of Work Summary of RFP 080-C025204-NM and the basic design phase services described in the Design-Build Design Services Model Contract General Conditions - Article 2, the D-BE shall be responsible for the following detailed tasks:

Task 1 – Project Meetings and Public Outreach

During design, the D-BE shall arrange, attend, and conduct bi-weekly Project meetings or weekly coordination calls with the Owner's Project Manager and Project stakeholders to discuss project status, technical issues, schedules, and/or other details of the Project. The D-BE shall provide a one month look ahead of the activities to be completed during the upcoming month for each meeting or coordination call. The agenda and minutes of all the project meetings shall be prepared and documented by the D-BE. The agenda shall be submitted to the attendees of the meeting at least one (1) working day prior to each meeting, while the minutes of the meeting shall be provided within five

(5) working days following each meeting. The minutes of each meeting shall include a list of the action items and a project status matrix of the deliverables, which shall be updated prior to the subsequent follow-up meetings. Also, at the request of the Owner, the D-BE shall attend other meetings (off- or on-site) and/or presentations as needed to complete the terms of this scope of work. This task assumes that at a minimum, the D-BE Project Manager will be made available to attend these occurrences at these requests with the appropriate staff.

During the development of the design of the Project, the D-BE shall, at a minimum, prepare and conduct one (1) Design Seminar and one (1) project presentation for internal County of Orange staff; with the first Design Seminar discussing the Project at 35% design completion (minimum) and then followed by the second project presentation at 95% design completion. Both these presentations shall not only focus on the technical engineering design of the Project, but also discuss the current and foreseeable issues, complexities, and/or challenges with the implementation of the Project. At the Owner's option, the D-BE shall conduct a project presentation at the 65% design milestone.

Furthermore, the D-BE shall coordinate, facilitate, and provide engineering design support for at least two (2) community public outreach meetings or assemblies along with developing and furnishing all the necessary materials and/or information packages, exhibits, etc. for these community meetings. The first community public outreach meeting shall be conducted following the Design Seminar at 35% design and the second community public outreach meeting following 100% design and prior to construction. Note that the Owner has a Strategic Communications team that leads the outreach effort and distributes project notifications. The D-BE is expected to support and supplement this effort. Due to the various aspects of the Project and its impact to the surrounding community and the public, the objective of these community and/or public outreach activities is to not only acquire support for the Project, but to also involve the community and the public in the development of the Project and to provide them with current and accurate information regarding the Project.

Task 2 – Review Documentation and Background Information, completion of Basis of Design Report

The D-BE shall review all still-valid work and/or information prepared for or by the County, including design memorandums and design reports and/or studies, CAD design files, environmental reports, as-built plans, etc. developed for the Project. This scope of work should build upon and utilize, but not duplicate still-valid work and/or information previously prepared for or by the Owner. This information would include design memorandums and design reports and/or studies, CAD design files, environmental reports, as-built plans, etc. developed for the Project. Below is a list of the reports and/or studies that are/will be available:

1. Preliminary Project Scoping Memorandum (OC Public Works 2019) Provided as Exhibit 6

2. Huntington Beach Channel Structural Assessment Report (Moffatt & Nichol 2019) Provided as Exhibit 5

3. Talbert Channel Structural Assessment Report (Moffatt & Nichol 2019, in progress) Provided as Exhibit 5

4. D02 Cathodic Protection and Coating Condition Assessment Report (Corrpro 2019) Provided as Exhibit 4

5. D01 Huntington Beach Channel Sheet Piling Cathodic Protection and Coating Condition Assessment Report (Corrpro 2017) Provided as Exhibit 4

6. D01 & D02 Post-Construction CP Testing Report (Corrpro 2012)
Provided as Exhibit 3

7. Geotechnical Investigation: Huntington Beach Channel (GeoSoils, Inc. 1991)
Provided as Exhibit 7

8. Geotechnical Investigation: Talbert Channel (GeoSoils, Inc. 1991)
Provided as Exhibit 7

Final reports will be made available to the D-BE once they become available. It is expected that the D-BE will review, verify, obtain Owner approval, and implement the recommendations and measures provided in these documents in the design of the Project.
The D-BE shall build upon and utilize the reviewed background information in the development of the final design for the Project. *The D-BE shall obtain written approval from the Owner's Project Manager prior to advancing from one design phase to the next.*

Aside from reviewing the existing documentation and/or information for the Project, the D-BE shall prepare a Basis of Design Report (BDR) that will be submitted for County review as well as an independent engineering peer review (IEPR) facilitated by the Owner. The BDR provides a preliminary design study of the Project that discusses and/or identifies, but is not limited to, the following: the history and/or background relevant to the Project; the existing conditions of the facilities and/or features within the project limits; design alternative solutions considered; the appropriate design standards, regulations, and codes utilized; agreements, permits, and approvals required; community and/or public outreach requirements; environmental constraints and considerations; survey requirements; technical discussions and assessments (e.g. alignments (both vertical and horizontal), construction impacts, right-of-way and/or easements, utilities; geotechnical investigations, hydrology, hydraulics, etc.); 35% Plans, Specifications, & Estimate (PS&E); construction methods, schedules, and phasing for the Project; and current design assumptions, criteria, and recommendations based on the limitations and constraints of the Project. The BDR shall confirm the project meets OCFCD, City of Huntington Beach, and FEMA's flood protection criteria.

Finalization of the BDR includes, but is not limited to, completion, validation, and concurrence of the content within the BDR and modification and/or revision to the content within the BDR to correct any errors and/or oversights that were not originally considered. Prior to finalization of the BDR, the D-BE shall provide a draft copy of the final report to the County for review and comment. In addition, the County shall obtain an IEPR from a 3rd party engineering firm. The D-BE shall incorporate all submitted and validated review modifications from the County or the IEPR into the final comprehensive Basis of Design Report. Furthermore, after 95% PS&E development, the D-BE shall prepare a BDR addendum that documents and summarizes design changes and/or additional design developments to the finalized BDR.

Task 3 – Encroachment, Regulatory Permits, and/or Agreements

The D-BE shall coordinate, facilitate, and provide engineering design support when assisting the County with the completion, submission, and processing of encroachment and regulatory permit applications and/or submittal packages, as well as with the development of encroachment and/or regulatory related agreements that are required for the Project with the appropriate agencies and/or parties. Note that the County has a Regulatory Permits and Project Management team that will lead the submittal and coordination effort with the Regulatory Agencies, but the D-BE is expected to

supplement this effort. The Project will likely require, but is not limited to, the following work related to encroachment and regulatory permits and/or agreements:

1. Regulatory Permits from the appropriate regulatory agency and/or party (e.g. California Department of Fish and Wildlife (CDFW), California State Water Resources Control Board, California Coastal Commission, etc.);

2. Encroachment permits from and possibly a cooperative agreement with the City of Huntington Beach;

3. Utility related permits and/or agreements;

4. Temporary access and/or partial property acquisitions required for temporary construction easements, temporary rights of entry, and right-of-way easements; and,

5. Support of any other permit or agreements required to complete the Project.

The D-BE Project Manager shall be prepared and well-versed in answering questions and/or clarifying the scope of work of the Project to the appropriate governing authority or party and/or regulatory agency associated with the permit approval and/or agreement process.

Task 3a – California Environmental Quality Act (CEQA) Environmental Documentation

The D-BE shall be responsible for preparation of an amendment to any of the prior environmental documentation, if needed. Changes to the existing structures may require further environmental review and documentation. The D-BE shall be responsible for any special environmental studies needed for amendments to the CEQA documents.

Task 4 – Hydraulic & Alternatives Analyses Report

The D-BE shall perform an independent hydraulic analysis to verify and validate the proposed design meets OCFCD and NFIP design criteria. The D-BE shall utilize the existing information provided for the project area, including but not limited to the OCFCD Design Manual, OCFCD Design Reports, and the City of Huntington Beach General Plan Update (adopted October 2017). The D-BE shall document the findings and results of the hydraulic analysis in a comprehensive report that also includes design recommendations that satisfy and conform to current design standards, procedures, regulations, and codes.

The D-BE shall establish the existing site conditions and the proposed site conditions. Should the proposed design modify the existing channel capacities, the D-BE will then develop a hydraulic model of the project area (the study area shall extend sufficiently beyond the project area) using HEC-RAS (Hydrologic Engineering Center – River Analysis System). The peak discharges to be considered shall be based on the hydraulic data tables provided on the record drawings (Exhibit 3). The D-BE shall utilize the final model output and results from the HEC-RAS model to provide design recommendations for the improvements to the existing channel based on the hydraulic and/or structural impacts within the project limits as a result of the Project.

The D-BE shall present the initial, intermediate, and final findings of the hydraulic analysis to the Owner and shall prepare and conduct a presentation on the development of the analysis models as well as the results that established the design recommendations for the Project at the Design Seminar and project presentations noted in ***Task 1***. Prior to finalization of the report, the D-BE shall provide a

draft copy of the report to the Owner for review and comment. The D-BE shall incorporate all submitted and validated review comments from the Owner into the final comprehensive report.

Task 5 – Preparation of the Plans, Specifications, & Estimates (PS&E)

The D-BE shall not progress between phases of the PS&E preparation until after written direction is provided by the Owner. In compliance with the appropriate design criteria, standards, regulations, and codes, the D-BE shall be responsible for the design and development, implementation, practicality, and quality of all direct and indirect work (i.e. sub-consultant design services) within the PS&E package, which includes, but is not limited to, the following:

1. The rehabilitation and/or modification of the existing channel based on the geotechnical, hydrogeological, hydraulic and/or structural impacts;

2. The rehabilitation and/or modification of the existing drainage and utility bank crossings and other subsurface dry and wet utilities;

3. The implementation of traffic control (indicating detours, temporary signing and striping, locations of removable temporary barriers and crash cushions, and lane closures if required, etc.) within the project limits based on the various stages of construction that will occur due to the limited amount of access to the project area;

4. The preparation of the Water Quality Management Plan (WQMP), if required, consistent with the Model WQMP and Technical Guidance Document (TGD) and incorporation of the post-construction runoff management requirements into the engineering design of the Project. These documents may be found at the following web address: http://www.ocwatersheds.com/documents/wqmp; and,

5. The preparation of the preliminary Storm Water Pollution Prevention Plan (SWPPP), if required by the Construction General Permit (CGP), and incorporation of erosion control measures to support.

All designs, renderings and exhibits, plans and specifications, calculations, etc. developed by the D-BE for the Project shall at a minimum comply with and/or be in accordance to the latest versions and/or editions at the time of the award of this contract for the following:

1. Requirements within the encroachment and regulatory permits for the Project;

2. CEQA requirements;

3. Orange County Hydrology Manual (OCHM);

4. Orange County Flood Control District Design Manual (OCFCDDM);
5. Orange County Public Works Standard Specifications;

6. Orange County Public Works Standard Plans;

7. U.S. Army Corps of Engineers Standards;

8. FEMA NFIP Flood Protection Standards (44 CFR 65.10);

9. Standard Plans for Public Works Construction;

10. Standard Specifications for Public Works Construction (Greenbook);

11. City of Huntington Beach Standard Plans and Specifications;

12. City of Huntington Beach General Plan Update (2017);

13. Caltrans Standard Plans; and,

14. Caltrans Standard Specifications.

Special Considerations:

The D-BE shall provide substantially compete PS&E packages for the Project prior to negotiating the GMP for construction. If the work is phased, the D-BE shall incorporate, within their design, transition details at the locations where the scopes of work will join as the design and construction scheduling for phased scopes of work may not be concurrent. The traffic control plans and specifications for the Project that will be developed by the D-BE shall take this phasing into consideration as well.

However, irrespective of the phase, all plans developed as part of this scope of work shall be prepared in accordance with the Orange County Flood Control District recommended practice for detailing. Orange County Public Works Standard Plans shall be utilized where applicable and shall also be referenced on the plans. All plans shall be computer drafted on standard 22" x 34" size sheets using Autodesk AutoCAD 2018 with OC Public Works borders and title blocks. The PS&E shall be prepared in accordance with the County of Orange CAD Standards Manual. In addition, the D-BE shall prepare specifications (special provisions) per the County's specifications format for all relevant design aspects within this scope of work. Final specifications shall be provided in pdf and Microsoft Word format.

The implementation of the Project may require the need to coordinate existing utilities and/or features. The D-BE shall try to avoid utility impacts and shall make modifications to the design, plans, and specifications (special provisions) if additional utility conflicts are discovered at any point in the design or construction process. With proper notice by the D-BE, the Owner will provide the first and second utility notices with all affected utility agencies and/or parties within the project limits, if Owner staffing assignments permit. If the Owner is unable to provide utility coordination, the D-BE shall make staffing available to coordinate existing utilities if needed. For the utilities identified, the specifications for the Project shall incorporate utility relocation and/or abandonment windows as necessary. The project work plan shall accommodate said utility relocation windows. Upon advisement by the D-BE, the Owner will issue notices to relocate and/or abandon to affected utility agencies and/or parties requiring such need. The Owner will be the lead agent in negotiation of utility relocations but shall be fully supported by the D-BE.

PS&E Development Process:

For each phase of construction, the D-BE shall develop 35% (as part of finalizing the BDR), 65%, 95%, and 100% PS&E submittals.

At all milestone submittals for the PS&E, the D-BE shall prepare hard copies for the reviewing agencies and/or parties identified by the County if required otherwise electronic submissions will be the standard method of delivery. The D-BE shall budget for 15 working days for each peer review at each Project milestone submittal. The reviewing agency's and/or party's requests or directions

regarding modifications and/or revisions to the PS&E at any milestone review will be relayed to the D-BE through the Owner for incorporation. Upon receipt of the comments and recommended revisions to the PS&E from the Owner, the D-BE shall evaluate and upon concurrence by the Owner, proceed with revising the plans, specifications, design, quantity calculations, and engineer's estimate. The review comments and responses shall be documented in a Peer Review Response Matrix. The Peer Review Response Matrix from a previous milestone review shall be provided with the subsequent milestone PS&E package.

The D-BE shall routinely conduct constructability and bidability reviews of the Construction Documents as necessary to satisfy the needs of the Project Team. The reviews will attempt to identify all discrepancies and inconsistencies in the Construction Documents especially those related to clarity, consistency, and coordination of Work for Subcontractors and Suppliers. The D-BE shall perform constructability reviews for all aspects within this scope of work, which includes, but is not limited to, the following: accessibility for construction equipment; evaluation of traffic and roadway detouring issues and/or concerns; evaluation of inconvenience to local residents and businesses; construction phasing and sequential demolition due to the phasing of the Project; identification of conflicts related to easements and/or right-of-way, including utility relocations and/or abandonment; evaluation of the amount of construction activity within the channel; compliance with all environmental documentation and encroachment and/or regulatory permit requirements; conformance to all County standards, procedures, regulations, and codes. If major constructability conflicts and/or issues are discovered, modifications and/or revisions to the design, plans, specifications (special provisions), quantity calculations, and engineer's estimate, in addition to all affected reports and/or documents, shall be made by the D-BE as mutually agreed to by the D-BE and the Owner.

Upon written authorization from the County, the D-BE shall develop the GMP for the items of work included in the plans and specifications. At the request of the D-BE and written approval by the Owner, the GMP may be developed earlier in the design process as long as the D-BE is able to confidently assign contingency to mitigate project risks.

The following components shall be included within the 35% PS&E Submittal at a minimum unless otherwise approved by the Owner:

Plans:

1. Horizontal and vertical alignment are shown
2. Known utility conflicts are shown
3. All existing topographic features are shown
4. The following plan sheets are included:
    a. Plan & Profile
    b. Typical Sections
    c. Construction Notes for Major Construction Items
    d. Draft Water Quality Features/BMPs
    e. Hydraulic Data Table (Local Drainage and Flood only)

    Optional:
    a. Draft Structural Details and Steel Schedules
    b. Site Exploration Map and Soil Borings
    c. Station Cross Sections
    d. Construction Details

    Specifications:
5. Draft Schedule of Work Items (w/ draft quantities)
6. Draft Special Provisions - Construction

The following components shall be included within the 65% PS&E Submittal at a minimum unless otherwise approved by the Owner:

Plans:

1. Horizontal and vertical alignment are shown including survey ties
2. All Utility conflicts are identified
3. All existing topographic features are shown
4. The following plan sheets are included:
    a. Plan & Profile
    b. Draft Structural Details and Steel Schedules
    c. Draft Paylines
    d. Site Exploration Map and Soil Borings
    e. Typical Sections
    f. Construction Notes for Major Construction Items
    g. Draft Water Quality Features/BMPs
    h. Hydraulic Data Table (Local Drainage and Flood only)

    Optional:
    a. Station Cross Sections
    b. Construction Details
    c. Preliminary Traffic Detour/Control Plans

    Specifications:
5. Draft Schedule of Work Items (w/ draft quantities)
6. Draft Special Provisions - Construction

When the development of the PS&E is at 95% project completion, the D-BE shall prepare and submit final design memorandums that amend the 35% BDR for the Project. The 95% PS&E submittal should be a fully completed final draft set of Plans, Specifications, and Special Provisions where the review is for minor refinements and consistency throughout. All calculations performed by the D-BE shall be signed and stamped by a Registered Civil Engineer and/or Registered Structural Engineer, who is licensed by the State of California approved by the Owner. All submitted calculations shall be neat, orderly, legible, coherent, and complete, and all standards, codes and/or manuals, important formulas, assumptions, and procedures used shall be referenced. In addition, the D-BE shall be responsible for preparing an updated set of quantity calculations for the Project. All work items used in the engineer's estimate shall be incorporated and clearly described in all quantity calculations. These calculations shall be neat, orderly, legible, coherent, and complete, and show the required sketches, diagrams, and dimensions used. The cover sheet of the quantity calculations shall also be signed and stamped by a Registered Civil Engineer and/or Registered Structural Engineer, who is licensed by the State of California and is in responsible charge of the Project and approved by the County. Furthermore, at 95% project completion, the D-BE shall perform a final constructability review of the PS&E (95% project completion) for all aspects within this scope of work. If constructability conflicts and/or issues are discovered, modifications and/or revisions to the design, plans, specifications, quantity calculations, and engineer's estimate, in addition to all affected reports and/or documents, shall be made by the D-BE as mutually agreed to by the D-BE and the Owner.

Additional items required within the PS&E development process include the following:

1. For each final PS&E package, a letter to the Owner's Resident Engineer (RE), including any issues requiring the RE's attention ("Pending File") and items included in the Construction Package. The package and transmittal memo shall describe the Project, procedures, and the documents attached will be used by field personnel during construction.

2. Hydraulic Calculations: Prepare and furnish to the Owner an electronic copy of the final report and all associated engineering models.

3. Quality Assurance/Quality Control (QA/QC) Statement & Plan: Prepare and furnish to the Owner and the appropriate agencies and/or parties, one (1) copy each of a QA/QC Statement and Plan as noted in the QA/QC Section.

4. Provide constructability review/work plan on each PS&E submittal by the D-BE construction team.

The last item that should be provided by the D-BE at 95% PS&E completion is the D-BE's estimate of probable cost. The D-BE shall prepare an estimate for all work items described within the specifications and the scope of work. The D-BE's estimate of probable cost shall use the same nomenclature and units of pay as indicated in the specifications. The estimate shall reflect current cost data prices as determined by the D-BE based on recent bid prices and industry knowledge. The estimate that is submitted by the D-BE will be developed solely on the basis of the D-BE's qualifications and experience as a professional. In addition, the D-BE's estimate shall be signed and stamped by an active Registered Civil Engineer and/or Registered Structural Engineer, who is licensed by the State of California and is in responsible charge of the Project. The D-BE's estimate of probable cost shall be used as the basis of the determination of the GMP for the items of work associated with the contract document package.

Finally, following the 95% PS&E submittal, the D-BE shall complete and provide the final PS&E (100% project completion) to the reviewing agencies and/or parties identified by the County. This submittal shall consist of final plans, final specifications, final Basis of Design Report, final quantity calculations, and the final estimate of probable cost.

Upon receipt of the PS&E stamped and signed by the Engineer, the County shall coordinate signature of the plans by the appropriate Owner officials, the Chief Engineer of the Orange County Flood Control District and the appropriate City official. The plans shall be approved by the City of Huntington Beach as required by the California Public Contract Code Section 21020.9 prior to issuance of any Notice to Proceed for construction.

Task 6 – Utilities

The D-BE shall coordinate, facilitate, locate (GPR/pothole/etc.) and provide engineering design support in the request, research, and the relocations/abandonment of the existing utilities within the project limits, as needed. The D-BE shall prepare and/or furnish all the necessary materials and/or information, exhibits, etc. required for the utilities aspect of the Project. In addition, the D-BE shall be made available and be prepared to facilitate and/or attend coordination meetings and/or presentations related to the utilities within the Project with the appropriate staff.

Furthermore, at 65% design completion, the D-BE shall have identified and confirmed all impacted utilities within the project limits and shall ensure that a viable solution has been established to address these conflicts (i.e. relocation and/or abandonment) as well as ensuring that all required utility relocation and/or abandonment permits and/or agreements with the appropriate utility agencies and/or parties will be completed prior to 95% design completion. In the event that there are any conflicts and/or issues with the utilities that were previously identified during the development of the final design, the D-BE shall immediately notify County staff for a resolution.

The County shall be the lead utility coordinator with the full support of the D-BE. In the event that County staff are not available to serve as the lead coordinator for utilities, upon direction from the County, the D-BE shall provide the staff necessary to complete the required tasks.

Task 7 – Right-of-Way

The D-BE shall coordinate, facilitate, provide engineering design in the procurement of temporary access and/or partial property acquisitions for temporary construction easements, temporary rights of entry, and right-of-way easements that are required for the Project, as well as in the development of easement, right of entry, and/or right-of-way related agreements with the appropriate agencies and/or parties. The D-BE shall prepare and/or furnish all the necessary materials and/or information, exhibits, etc. required for the right-of-way aspect of the Project. In addition, the D-BE shall be made available and be prepared to facilitate and/or attend coordination meetings and/or presentations related to right-of-way within the Project with the appropriate staff.

The acquisition of the temporary right-of-way shall be the responsibility of the D-BE unless otherwise approved by the County. The acquisition of permanent right-of-way shall be the responsibility of the County with the full support of the D-BE.

Furthermore, at 35% design completion, the D-BE shall provide to the Owner identification of all required easements, rights of entry, and/or right-of-way required for the Project and shall ensure that all required temporary right-of-way acquisitions, permits, and/or agreements with the appropriate agencies and/or parties will be completed prior to 95% design completion. In the event that there are any discrepancies and/or issues with the easements, rights of entry, and/or right-of-way that were previously identified during the development of the final design, the D-BE shall immediately notify County staff and coordinate a resolution.

Task 8 – Water Quality Management Plan (WQMP)

Depending on the selected design alternative, the Project may trigger priority development project post-construction runoff management requirements. The D-BE shall develop a Water Quality Plan (WQP) for the Project consistent with the County Model WQMP and the Technical Guidance Document (TGD) as required by the Orange County NPDES (National Pollutant Discharge Elimination System) Municipal Separate Storm Sewer System (MS4) Permit from the Santa Ana Regional Water Quality Control Board (SARWQCB) – North of El Toro Road. As this is a public agency linear maintenance project, the design should follow the "Green Streets" approach detailed in Section 2.7 of the Technical Guidance Document (TGD) to the Maximum Extent Practicable (MEP) standard. The OC Public Works streets and linear project WQMP template should also be used to prepare the WQMP. The WQP shall adhere to and satisfy all the requirements stated within the MS4 permit including the incorporation of Low Impact Development (LID) Best Management Practices (BMPs) (e.g. retention and/or bio-treatment of storm water runoff, etc.) among others. The development of the final design shall incorporate these water quality facilities and/or features (i.e. BMPs) and ensure that they function and complement the intent of the Project while also meeting the requirements and guidelines of the County Model WQMP and the Technical Guidance Document (TGD). A Draft WQP shall be developed and submitted to the Owner at the 35% (as part of finalizing the BDR) and a Final WQP submitted with the 65% PS&E submittal.

K. **Additional Scope of Work**

The D-BE shall also provide the following:

1. Public outreach to notify & educate the public on upcoming construction activities via coordination with the Owner's Strategic Communications team.

2. Procure a qualified biological monitor, approved by the Owner, to perform biological monitoring and documentation during pile driving activities, if needed.

3. Coordination with the City of Huntington Beach, utility agencies and residents.

L. **Proposed Project Schedule of Major Milestones (subject to change)**

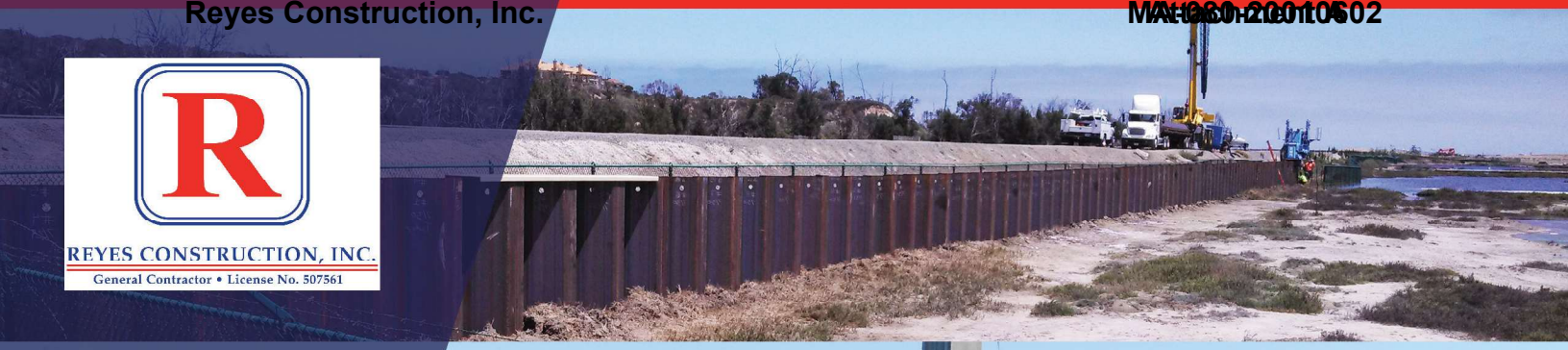
- Negotiate Construction Services GMP, issue Notice to Proceed, process insurance & bonding – April 2020
- Finalize construction drawings and specifications – July 2020
- Mobilization – August 2020
- Begin construction – September 2020
- Complete construction – June 2021

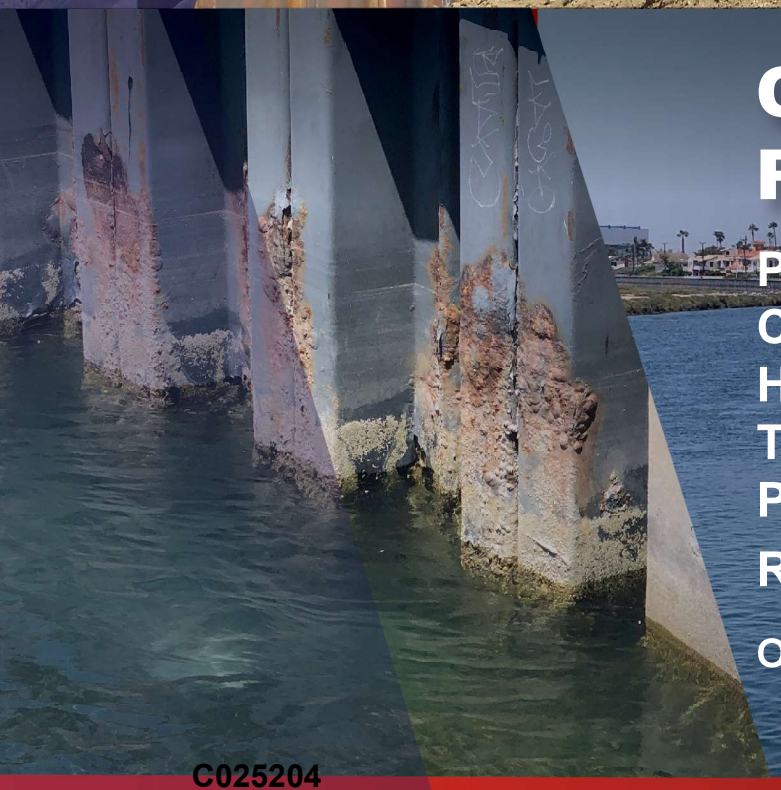
It should be noted that the construction period and/or work areas may be constrained by environmental working windows contained within the regulatory permits and rainy season conditions

M. The following documents can be downloaded utilizing the hyperlinks below:

Exhibit 1: Location Map
Exhibit 2: Record Drawings
Exhibit 3: Post-Construction CP Testing Report (2012)
Exhibit 4: Corrpro Inspection Findings Presentations (2019)
Exhibit 5: Moffatt & Nichol Structural Assessment Report (2019)
Exhibit 6: Preliminary Project Scoping Memo (2019)
Exhibit 7: Prior Geotechnical Reports
Exhibit 8: Right-of-Way Maps
Exhibit 9: Prior Environmental Documentation

REYES CONSTRUCTION, INC.
General Contractor • License No. 507561





Orange County Public Works

Proposal for Design and Construction Services for the Huntington Beach Channel and Talbert Channel Sheet Pile Repair Project

RFP #080-C025204-NM

October 2, 2019

REYES CONSTRUCTION, INC.

COVER LETTER

October 2, 2019

County of Orange OC Public Works
Attn: Nicholas Murray, DPA
c/o: Procurement/Badge Access Counter
300 N. Flower Street, 6th Floor
Santa Ana, CA 92703

Subject: **RFP No. 080-C25204-NM – Design-Build Services Huntington Beach Channel and Talbert Channel Pile Repair Project**

Dear Mr. Murray,

Reyes Construction Inc. ("RCI") is pleased to submit the enclosed proposal in response to the County's Request for Proposal (RFP) related to the subject project.

With over 25-years of design-build experience constructing heavy civil projects throughout the southwestern United States, including numerous sheet pile walls similar to the Huntington Beach and Talbert Channels, RCI is uniquely qualified to perform this project.

We have teamed with GHD Inc. (GHD). As a team, RCI and GHD have successfully completed several design-build task orders under a current multi-year Heavy Horizontal Multiple Award Construction Contract (MACC) for the U.S. Navy. GHD is a top 500 firm as listed in Engineering News Record (ENR), ranking #25 overall. They bring expertise in flood control planning and design, including civil and structural engineering, hydrology, hydrodynamics, hydrogeology, and corrosion protection.

Our team agrees to enter into a Design-Build contract if selected for this project. We are available to discuss our qualifications at your convenience. Please feel free to call me if you have questions regarding the enclosed SOQ at (909) 622-2259.

Reyes Construction Inc.,

Ricardo Jimenez
Vice President

Eduardo Gallardo
Corporate Secretary/CFO

Enclosures:
Compliance Statements
Company Profile
Respondent's Proposal
Appendices
GMP Proposal –Separate Sealed Envelope

EXECUTIVE SUMMARY

The project objective is clear; repair the existing steel sheet piles that no longer provide a minimum 10-year life span due to physical deterioration of the steel sheet piles. Developing an appropriate design that does not detrimentally affect the floodplain within budget is the challenge.

1. Financial Condition and Safety Record
   The RCI DB-E team consists of financially stable companies who have all been in business for at least 10-years. RCI has consistently held one of the best safety records in the industry. With a ten-year average of 0.59, RCI's Modification Rate (EMR) is consistently lower than the Industry Average of 1.0. In our 30-year history, RCI has never had an EMR above 1.0. We incorporate safety accountability at every level, including contractually requiring subcontractors to adhere to RCI's safety standards. ***The County can have confidence that Project will benefit from our comprehensive "zero-incident" approach to jobsite safety.***

2. Qualifications, Related Experience, and References
   Our D-B team has worked together, as companies and individuals, since 2015. RCI and GHD are currently partnered on an Indefinite Delivery Indefinite Quantity (IDIQ) Unrestricted Multiple Award Construction Contract (MACC) for the Department of the Navy. Under this MACC, our team has successfully delivered four (4) design-build projects and are currently completing a fifth project. Under this MACC, we completed sheet pile repairs with marine coatings and cathodic protection at Wharf E in Port Hueneme. ***This is a tried, tested, and proven design-build team.*** Independently, RCI and GHD have completed numerous flood control channel improvements including installation and repair of steel sheet piles, cathodic protection, marine grade coatings, and levee stabilization. This experience results in our team understanding the unique challenges and opportunities related to flood control channel design and construction. In 2014, RCI completed the Wintersburg Channel (D05) sheet pile improvements (Sta 6+34 to 102+02 Bolsa Chica Tide Gates to Warner Avenue) for the County of Orange. This project received an "Exceptional" evaluation from the County and received an award from the American Society of Civil Engineers (ASCE).

3. Work Plan/Project Approach
   Our objective is to develop a design that not only addresses the physically deteriorated sheet piling with less than the minimum 10-year remaining lifespan required for accreditation, but also determine solutions to mitigate long-term corrosion/deterioration. We understand that funding limitations have focused attention on the immediate need to maintain FEMA accreditation and avoid reintroduction of FEMA Special Flood Hazard Areas (SFHA's). As a result, we anticipate that the construction may be phased/prioritized based on available

funding. However, to avoid the need to develop future designs, achieve the desired design life of 50-75 years as indicated in the RFP, and maintain an "integral" project, we propose to develop a standard design for each channel segment that can be implemented as funding becomes available. The project hydraulic analyses can then be performed for interim and final retrofit conditions to assure adequate flood protection is provided, ***allowing the County to issue construction contracts to implement the repairs expeditiously as funding becomes available***. Our approach results in cost and time savings by providing a comprehensive design and channel hydraulics, as well as completion of the environmental assessment required to implement future repairs. Future repairs can be managed similar to pavement management plans, scheduled around funding availability and prioritized according to level of physical degradation of the existing steel sheet piles.

4. Proposed Staffing and Project Organization

We have assembled a team of highly qualified individuals who are prepared to address this challenge by evaluating design alternatives, conducting feasibility analyses, performing value engineering, and developing a constructible design for the County of Orange.

Mr. Steve Leathers, PE will be responsible for the comprehensive management of the team and serve as the County's primary point of contact. Steve has extensive design-build experience. ***Mr. Leathers has been developing and delivering D-B projects since 1996.*** As a consulting engineer for a top ENR 500 design firm for over 20 years, he provided design services to RCI for multiple award construction contracts (MACCs). In 2013, he joined RCI to manage the construction of several multi-disciplined heavy civil construction projects. Steve's first assignment, construct the 159A Operation Access Points Green Beach project that he designed. Since joining RCI, he has been responsible for the successful completion of over $43M of design-build improvements.

GHD is our lead design firm. GHD is a top 500 firm as listed in Engineering News Record (ENR), ranking #25 overall. They bring expertise in flood control planning and design, including civil and structural engineering, hydrology, hydrodynamics, hydrogeology, and corrosion protection. ***As a team, RCI and GHD have successfully completed several design-build task orders under a current multi-year Heavy Horizontal Multiple Award Construction Contract (MACC) for the U.S. Navy, including waterfront improvements involving steel sheet piles and corrosion protection at Port Hueneme***.

With an understanding that the County's ultimate goal is recertification and accreditation of the Huntington Beach and Talbert Channels from FEMA in accordance with the National Flood Insurance Program (NFIP). The RCI Team has secured the services of Q3 Consulting (Q3) to ensure the design and construction meets the design criteria required to maintain accreditation of the levees. ***Q3 has extensive experience and knowledge of the specific design criteria requirements per 44 CFR 65.10 necessary to maintain accreditation for the levees and avoid reintroduction of previously removed FEMA***

Special Flood Hazard Areas (SFHA's), including recent re-certification of the Santa Clara River and Sespe Creek levees in Ventura County.

Corrpro has also joined the RCI Team to provide corrosion engineering and cathodic protection design services. Corrpro has extensive knowledge of the Huntington (D01) and Talbert (D02) channels, having completed condition assessments under separate contract to the County of Orange. They are the nation's largest corrosion engineering, cathodic protection, and corrosion control firm.

Earth Mechanics Inc. (EMI), having completed over a dozen local flood control projects in Southern California, will support the design effort by providing geotechnical investigations and analyses that may be needed to ensure the design complies with the current seismic criteria necessary for levee certification. EMI also provided geotechnical services in support of the structural assessment of the existing steel sheet pile walls on the Huntington and Talbert channels.

Our team brings the corporate resources as well as individual talent necessary to deliver a successful project to the County.

5. Proposed Concept Design/Value Engineering or Alternative Analysis/Lifecycle Analysis

As requested in the RFP, our team will build upon the studies and recommendations developed by the County in preparation of the RFP. Although Option 4 was recommended, we understand that other alternatives may be considered. Based on our review of the available studies, record drawings, and physical site conditions, we anticipate a combination of Option 2, 3, and 4 to achieve the project objective.

Our team will evaluate the feasibility and lifecycle cost effectiveness of selectively using cladding near the existing bridge structures (Option 3) where utility pipelines currently run through the existing steel sheet piling. This avoids the need for costly utility relocation. Alternative cladding materials will be considered, including Fiber Reinforced Polymer (FRP), concrete, or steel plate with industrial marine coating and cathodic protection. ***These claddings can be formed around the existing utilities, thereby eliminating the need for costly relocation and potential schedule impacts associated with the relocation planning and implementation.***

In areas where there are no utilities penetrating the existing steel sheet piles, it will likely be more cost effective to install new steel sheet piling in front of the existing sheet piles (waterside) as described in Option 4.

Some areas may only require localized welding repairs (Option 2). In addition to reviewing the previous studies provided by the County, our team will verify the actual conditions to validate the findings of the previous studies. Should it be determined that localized repairs along with enhanced cathodic protection or coatings is sufficient to

provide the desired lifespan and is deemed more cost-effective than the other options, localized welding repairs will be considered.

The selected design concept will be determined based on the physical condition assessment, channel hydraulics, specific design criteria to maintain FEMA accreditation, and value engineering analyses. Based on the available information contained in the RFP, the combination of new steel sheet piles with selective areas of cladding and welding repairs appears to be the best-value method of repair. Since the introduction of new sheet piling and cladding on the waterside of the existing steel sheet piling decreases the hydraulic capacity of the channel, other alternatives such as installation of new structural sheet piles on the landside of the existing steel sheet piles will also be considered.

6. Compliance with the Owner Model Contract
   RCI is prepared to enter into a Design-Build contract, based on the County's model contract for Design-Build services if selected for this project.

7. Additional relevant information having a bearing on measuring firm's capabilities and services.
   We understand that additional project funding may be required to fully upgrade the existing channels. While not requested in the RFP or included in the GMP, our team has the experience to assist the County in identifying available funding sources, preparing applications, and qualifying the project for federal reimbursement if necessary.

CONCLUSIONS:

This team is an experienced D-BE, having recently completed similar improvements at Port Hueneme together, and has worked as a team since 2015. RCI successfully partnered with the County to complete the Wintersburg Channel (D05) project involving similar sheet pile walls, earning an "Exceptional" rating from the County and an ASCE award. GHD is very familiar with the County and City of Huntington Beach individual staff members, established standards and procedures, and utility stakeholders in the area. The RCI team offers logical solutions to address the physical corrosion by combining the Repair Options evaluated by the County to provide a cost-effective design suitable for construction phasing as funding becomes available.

The enclosed proposal is formatted as indicated in the RFP with tabs provided for Part 1, Part 2, and Part 3. We are committed to developing a design that achieves the project objectives and bringing value to the County of Orange. Our team is prepared to start the design activities immediately upon award to ensure the project is completed by the June 2021 deadline.

2. Company Profile

Part 2

Part 2:
Company Profile

(Complete this section and submit as ***Part 2*** in the second tabbed section of Proposal.)

Company Legal Name: Reyes Construction Inc.

Company Legal Status (corporation, partnership, sole proprietor, etc.): Corporation

Business Address: 1383 South Signal Dr. Pomona, CA 91766

Website Address: www.reyesconstruction.com

Telephone Number: (909) 622-2259 Facsimile Number: (909) 622-3053

Email Address: rjimenez@reyesconstruction.com CA Contractor License # 507561

Length of time the company has been in business: 32 yrs Length of time at current location: 17 yrs

Is your company a sole proprietorship doing business under a different name? __Yes X No
If yes, please indicate sole proprietor's name and the name you are doing business under:

Is your company incorporated? X Yes _____No If yes, State of Incorporation: California

Federal Taxpayer ID Number 95-4090956

Regular business hours: 7AM- 5PM

Regular holidays and hours when business is closed: New Years's Day, Memorial Day, July 4th, Labor Day, Veteran's Day, Thanksgiving and the Friday after, Christmas Day.

Contact person in reference to this solicitation: Ricardo Jimenez
Telephone Number: (909) 622-2259 Facsimile Number: (909) 622-3053
Email Address: rjimenez@reyesconstruction.com

Contact person for accounts payable: Michelle Guzman
Telephone Number: (909) 622-2259 Facsimile Number: (909) 622-9441
Email Address: mguzman@reyesconstruction.com

Name of Project Manager: Steve R. Leathers
Telephone Number: (909) 622-2259 Facsimile Number: (909) 622-3053
Email Address: sleathers@reyesconstruction.com

In the event of an emergency or declared disaster, the following information is required:
Name of contact during non-business hours: Eddie Gallardo
Telephone Number: (909) 622-2259 Facsimile Number: (909) 622-3053
Email Address: egallardo@reyesconstruction.com Cell or Pager Number: (909)242-7703

3. Respondent's Proposal

Part 3

1. Financial Condition and Safety Record

The Design-Build Team, Reyes Construction and GHD, will provide the County of Orange with an experienced and fully integrated Design-Build Entity (DB-E) Team for the delivery of the Huntington Beach Channel and Talbert Channel pile repair project. Based on our successful work and extensive Design-Build experience, RCI intends to partner with the County of Orange (County) to promote open and honest communication, mutual understanding and teamwork, and trust, as well as increase control and mitigation of risks. Our team comprises individual companies that are financially sound, with excellent safety records, and possess the technical expertise to deliver this high priority project for the County.

General Contractor

Reyes Construction Inc. (RCI), founded and incorporated in 1987, has been providing quality service for a variety of clients in the flood control, water/wastewater, and public works infrastructure industry. Projects such as channels, detention basins, water and waste water treatment plant facilities, pipelines, storm water infiltration and storage, bridge replacement and rehabilitation, interchanges, rail, landfills, and other infrastructure projects throughout southern California. RCI self-performs an average of 70% of all contract work, including demolition, earthwork, structural concrete, wet utilities, concrete paving, mechanical, pile driving, and minor concrete. Since the early 1990's we have demonstrated our commitment to implementing the best design and construction practices through a proven track record of delivering high-quality design-build projects. RCI has completed over 40 design-build projects with total revenue in excess of $200 million. Furthermore, RCI has completed multiple projects including flood control and waterfront improvements involving technical challenges and construction techniques similar to this project. This breadth of experience allows us to address unique aspects of the project and apply our expertise and lessons learned.

RCI has completed projects on the following flood control channels and tributaries in southern California:

Wintersburg Channel	San Gabriel River	Santa Paula Creek	Santa Ana River
San Luis Rey River	Trabuco Creek	Santa Clarita Creek	San Gabriel River
Rio Hondo Channel	San Juan Creek	Los Angeles River	Price Creek

Having completed similar projects, including the East Garden Grove Wintersburg Channel improvements (EGGWC) for the County, combined with our design-build, levee certification, and CEQA/NEPA permitting experience, our Team is uniquely qualified to lead the DB-E effort required to successfully complete this project. OCPW provided RCI with an overall "Exceptional" performance rating on the EGGWC WO EF07398, Agreement No. D12-054. A copy of this evaluation is included in Appendix B.

RCI has an abundance of local resources, including an equipment fleet of over 100 late-model units and a staff of approximately 150 employees. RCI's staff include registered professional engineers, project managers, project engineers, schedulers, estimators, safety professionals, operators, laborers, carpenters, cement masons, and teamsters. We store and maintain our equipment fleet in a 4 acre site located in Pomona, CA. A tractor/lowboy trailer fleet is also dispatched from this location and moves our equipment from project to project. Our 12,000 SF headquarters is located in Pomona, CA and is composed of offices, conference rooms and training space. RCI also has 5,000 SF of office space at our two Area offices in San Diego and Laguna Niguel.

RCI provides a full range of construction services, including, but not limited to:

Design/Build	Municipal Utilities (Wet Utilities)	Demolition	Landfills
Waterfront Improvements (Wharfs, Piers, Terminals, etc.)	Flood Control Channels	Paving	Railroads
	Drainage Infrastructure	Structures	Airfields

RCI has consistently taken a conservative financial approach in connection with its business operations. The Company's adherence to sound and responsible financial practices has resulted in our ability to maintain working capital and net worth ratios necessary to support a high seven figure line of credit and bonding capacity that are more than sufficient to meet the financial requirements of this project. Further, RCI has never been a party to any litigation and does not have any other business conditions that would impede our ability to successfully complete the services contemplated by this project. RCI is registered with the California Department of Industrial Relations (DIR), [Registration No.1000011831, License Type/Number(s) CSLB-507561].

For this Project, we have selected a highly qualified construction subcontractor whom we have worked with on similar flood control projects to perform the press-in sheet piling.

Blue Iron Inc., an LLC established in 1984, specializes in piling, drilling, and excavation. They have 77 staff members and 5 offices located in Irvine, West Sacramento, Seattle, Saint Rose, and Casselberry. Blue Iron owns and ***operates eight (8) of the ten (10) Giken Silent Piler machines in the US*** able to install paired Z-pile sheets. No other company/competitor owns more than one (1). Having numerous silent piler machines allows the operation of multiple crews and equipment to ensure the installation of the new sheet piling on the Project is completed on-schedule. ***Blue Iron Inc., successfully installed 31,220 linear feet of steel sheet piles for RCI on the EGGWC*** and have recently completed two other projects together. Blue Iron's financial condition is stable and there are no conditions that may impede their ability to complete the services requested.

Lead Design Firm

GHD, Inc. is one of the world's leading engineering, architecture, and environmental consulting companies. A California Corporation established in 1928, GHD employs more than 10,000+ people across five continents and serves clients in the global markets of water, energy and resources, environment, property and buildings, and transportation. We have more than 4000+ North American staff and have provided services to special districts and municipalities throughout California. Our local offices include Irvine, Long Beach, Los Angeles, Moreno Valley, and San Diego, and we are able to reach out to our 200 offices worldwide for support. Committed to sustainable development, GHD improves the physical, natural and social environments of the many communities in which we operate. GHD is guided by our workplace health, safety, quality and environmental management systems, which are certified by Lloyds Register Quality Assurance to the relevant international standards (ISO). GHD is a chartered member of the Institute of Sustainable Infrastructure and supports the United Nations Sustainable Development Goals for 2030. Today, GHD is one of the world's top engineering firms and is recognized by ENR as the 10th largest revenue generating pure design firm globally, and ***rated #25 on the 2019 Top 500 Design Firms list***. GHD's financial stability and strength is proven in our growth and ability to diversify our services and markets and there are no conditions that may impede our ability to complete the services requested.

GHD offers outstanding resources to support the needs of our clients. We have completed multiple projects for Orange County Public Works and are currently a preferred consultant for City of Huntington Beach serving them through both an on-call and general capital improvement contracts. GHD also provides engineering consulting services for dozens of other local public agencies throughout southern California. GHD was selected in December 2017 as one of the top 3 consultants for a $1.5M on call to provide design support services for OCPW. The On-Call contract is for 3 years and ***GHD was successful executing over 10 task orders to support the County on numerous CIP projects.*** GHD and RCI are partners in delivering high quality constructable projects.

The design sub-consultants selected will best serve the needs of this Project.

Q3 Consulting (Q3), a California Corporation founded in 2006 and headquartered in Foothill Ranch with a second office in Corona, has 54 employees, and brings expertise in the planning, analysis, and design of comprehensive flood control engineering and stormwater management projects throughout southern California. ***Q3 has extensive experience and knowledge of the design and certification of levee systems in accordance with FEMA criteria.*** Recent projects have included the re-certification of the Santa Clara River (SCR-3) Phase 1 and Sespe Creek levee systems in Ventura County. Q3's financial condition is stable and there are no conditions that may impede their ability to complete the services requested.

Earth Mechanics Inc. (EMI)) is a geotechnical and earthquake engineering consulting company founded as a California Corporation in February 1989. With a staff of 32, EMI's headquarters is in Fountain Valley, CA and other offices are located in San Marcos, Hayward, San Bernardino, and San Pedro. EMI has provided geotechnical services to Orange County Public Works on ***over a dozen flood control projects including past service to support the geotechnical assessment and structural evaluation of the existing sheetpile walls for both the Huntington Beach and Talbert channels.*** GHD and EMI's staff have worked together on projects for the Ports of Long Beach and Los Angeles. EMI's financial condition is stable and there are no conditions that may impede theirability to complete the services requested.

MBI Media Inc. (MBI), a CA C corporation founded in 1989, is headquartered in Covina with additional offices in Downtown Los Angeles, Orange County and the Bay Area and has 22 employees. ***MBI brings strategic communications to our Design Team, having provided on-call Public Relations services to OCPW*** for Santa Ana Riverbed Homeless Encampment, Southwest Anaheim Sidewalk Improvements and Peters Canyon Bikeway. MBI is certified as a 100-percent WBE, DBE, and SBE, and has worked with GHD on multiple southern California projects. MBI's financial condition is stable and there are no conditions that may impede their ability to complete the services requested.

Corrpro, a California Corporation founded in 1984, is the nation's largest corrosion engineering, cathodic protection and corrosion control firm with 20 offices in North America, Europe and the Middle East. ***The firm has been providing professional corrosion engineering and turnkey cathodic protection design-build services similar to this project, such as condition assessments of both the County of Orange D01 and D02 channels and the County's Laguna Canyon channel in Laguna Beach.*** The company has unparalleled experience and understanding of the design, construction and corrosion affecting the channels and related structures. Corrpro provides corrosion and condition assessments, coating examination and failure analysis, cathodic protection systems evaluation, ultrasonic thickness measurements of steel piles and retaining plates, potholing examinations and report preparation services. Corrpro's financial condition is stable and there are no conditions that may impede their ability to complete the services requested.

RCI's Bonding Capacity

Please refer to Appendix B for our notarized surety company letter from Zurich Surety, Fidelity and Deposit Company of Maryland..

RCI's Experience Modification Rate (EMR)

Please refer to Appendix B for our EMR letter from our Insurance Broker, Cavignac & Associates. RCI has dedicated significant time and resources to creating, strengthening and supporting its safety program. Ultimately, RCI's efforts have created a safety culture within the company resulting in a best-in-class safety record. This safety record is most evidenced by an achieved Experienced Modification Rate (EMR) that is consistently lower than the industry average of 1.0.

2. Qualifications, Related Experience, and References of Respondent

General Construction and Design-Build

Founded 32 years ago, Reyes Construction, Inc. (RCI) is a local, general construction and design build firm headquartered in Pomona, California. The firm specializes in heavy civil engineering, flood control, and waterfront infrastructure improvements projects in southern California.

Since its inception, RCI has executed over 40 design-build projects with an aggregate value in excess of $200 million throughout southern California. For the past five (5) years, Reyes has direct experience and qualifications with completing 48 general construction and design build projects for various clients.

Similar Project Experience (RCI)

East Garden Grove – Wintersburg Channel Improvement Project (Station 6+34 to Station 102+02) EGGWC (County of Orange, Southern California)

The East Garden Grove – Wintersburg channel levees from Bolsa Chica Tide Gates to Warner Avenue, approximately 2 miles in Length to provide for 100-year flow conveyance capacity within this channel reach. The project location was in the most "at risk" portion of the channel for catastrophic levee failure and was the site of a declared emergency on October 16, 2007. The project was ***delivered on time and with a .01% budget variance*** due to quantity estimates and unforeseen subsurface conditions. The overall ***project evaluation was rated "Exceptional"*** by the County and awarded the 2014 Orange County American Society of Civil Engineers (ASCE). Scope included:

- Excavated 117,000 cubic yards of the channel embankment and bottom, and placement of 14,000 cubic yards of structural backfill and buttress fill;
- Reinforced structural concrete channel and transition structures, wing wall structures, and bridge railing with 2,000 cubic yards structural concrete retaining walls at various lengths;
- Poured 77,450 cubic yards of soil-mixed with cement columns sandwiched between two rows of steel sheet piles along both sides of the channel;
- Installed 31,220 LF of steel sheet piles
- Built 11,900 LF of structural concrete pile cap;
- Installed 14,420 tons of rip rap over filter fabric;
- Constructed park trail with disintegrated granite surface and access ramp;
- Collected salvaged and relocated salt marsh plants;
- Landscaped, irrigated and installed bio-retention planter units;
- Constructed temporary cofferdams and water diversions to manage tidal and non-storm flows;
- Constructed storm water bio-retention filtration system and storm water catch basin filtration devices; and
- Coordined with County, utility companies, district personnel, city staff, regulatory agencies, and adjacent property owners.

RCI was the Prime Contractor on this project and self-performed 52% of the work. This project was procured as a Design-Bid-Build contract therefore no design services were provided by RCI.

Relevance

- ✓ Steel pile channel experience
- ✓ Local community knowledge
- ✓ Continuity of construction personnel and equipment
- ✓ Same equipment Silent Pile Drivers for press-on sheet piling

Owner: Orange County Public Works			
Cost/Schedule	References	Subcontractors	Key Personnel
Award Amount: $41,392,704 Final Amount: $41,927,883 Award Date: 11/8/2012 Completion Date: 6/3/2014	**Richard Patricelli** (714) 245-4500 Richard.Patricelli@ocpw.ocgov.com **Ali Fayad, P.E.** (714) 647-3975 Ali.Fayad@ocpw.ocgov.com	Hayward Baker, Inc. – Soil cement mix columns Blue Iron, Inc. – Install sheet pile via the press-in-method Marina Landscape, Inc. – Landscape and Irrigation Geosyntec Consultants – Soil cement mixing inspection and testing Martinez Steel Corp – Reinforcing steel Alcorn Fence Company – Fence and railing Merkel and Associates – Collect, salvage and transport salt marsh plants	Ricardo Jimenez – Principal-in-Charge Joe Reyes Jr. – Project Superintendent Oscar Ojeda, P.E.– Project Engineer/QC Manager Elsa Alegria – Project Engineer

P-159A Operation Access Points Green Beach (MCB Camp Pendleton, Southern California)

This design-build project was an AGC Constructor Awards finalist for meeting the challenge of the difficult job: Heavy Engineering. The project required the re-alignment of Beach Club Road and El Camino Real Road to provide access for military tactical vehicles to San Onofre Beach for training exercises. The project consisted of replacing the existing timber trestle railroad bridge over Beach Club Road to maintain at least 15' vertical clearance below the new bridge structure. New levee/channel improvements along the San Onofre River included constructing temporary sheet pile walls for bridge abutment construction and permanent beam and plate retaining walls with concrete pile cap. Soil cement mixing below the roadway was required due to the high ground water table and finished grades located below the flood level. The design included hydraulic analyses and modeling, environmental permitting, public outreach, and coordination with numerous entities. Environmental monitoring of the riparian zone, including tidewater goby, wetlands, and archeological mitigation was performed. The project was ***completed ahead of schedule, within budget***, and provided an exceptional facility for the owner. The project was given an ***"Outstanding" evaluation*** by NAVFAC SW.

During design, RCI 1) developed and updated monthly the design and construction schedule; 2) conducted over the shoulder constructability and biddability reviews; 3) performed site investigations; 4) potholed existing utilities and prepared reports; and 5) maintained a QC Program. Design and Construction Manager, Steve Leathers, acted as the Facilitator during the Concept Design Workshop and provided the Workshop Report.

RCI was the D-BE/Prime Contractor on this project and self-performed 57% of the work.

Relevance

- ✓ Design-Build project delivery
- ✓ San Onofre Creek levee steel beam and plate w/ concrete pile cap construction
- ✓ Regulatory agency coordination
- ✓ Soft bottom channel construction
- ✓ Temporary water diversion/dewatering and temporary Right of way
- ✓ Noise and vibration monitoring
- ✓ Relocation and construction of utilities

Owner: Department of the Navy, Naval Facilities Engineering Command Southwest			
Cost/Schedule	References	Subcontractors	Key Personnel
Award Amount: $9,427,757 Final Amount: $10,545,272 Award Date: 9/14/2011 Completion Date: 9/18/2014	**John Woods, PE, LEED AP** (760) 763-8356 John.m.woods@navy.mil **Miguel Ramirez,** (619) 532-4650; miguel.ramirez1@navy.mil	HDR – Lead Design Firm Adams and Smith – Structural Steel Bridge CMC Rebar – Reinforcing Steel Delta Railroad Construction, Inc. – Railroad track REB Construction Company – CIDH Piles Harrell Electric – Electrical Phoenix Landscape – Irrigation and Landscaping Twining, Inc. – Inspection and testing	Ricardo Jimenez – Principal-in-Charge Steve Leathers, P.E. – Design and Construction Project Manager Oscar Ojeda, P.E.– Project Engineer/ QC Manager

Repair Wharf E 5274 Small Craft (Bulkhead), Work Order #BL44RZ, Port Hueneme (NAVFAC Southwest, Southern California)

The Surface Craft Berth (Wharf E) is a small craft floating dock with water and electrical power supply. The floating docks are adjacent to a tie-back steel sheet pile bulkhead with a concrete pile cap and an asphalt wharf deck. The project included:

- Recoating sheet piles at splash zones,
- Guide piles,
- Anchor tie-back heads,
- And installing cathodic protection for the steel sheet pile.

The intent of the project was to repair the existing corrosion on wharf components, and to prevent further corrosion in the future by installing a cathodic protection system.

RCI was the Prime Contractor on this Design-Bid-Build project and self-performed 59% of the work.

Relevance

- ✓ Sheet pile by press-in-method
- ✓ Cathodic protection
- ✓ Coordination with regulatory agencies

Owner: NAVFAC Southwest			
Cost/Schedule	References	Subcontractors	Key Personnel
Award Amount: $1,734,374 Final Amount: $1,734,374 Award Date: 4/28/2016 Completion Date: 9/28/2017	**Veronica Rindge-Silvas** (805) 982-3927 Veronica.rindge@navy.mil **Danielle Hawthorne**, (805) 982-2932, Danielle.hawthorne@navy.mil	**GHD - Design** Corrpro – Cathodic Protection Harrell Electric – Electrical SUBSEA Global Solutions – Diving Services Technocoatings –Coatings	Ricardo Jimenez – Principal-in-Charge

LA Waterfront Downtown Harbor Water Cut Contract No. 2275 (Port of Los Angeles, Southern California)

The LA Waterfront-Downtown Harbor-Water Cut project, located north of the Los Angeles Maritime Museum, created the necessary and and harbor infrastructure to accommodate the development of a new town square, which is a centerpiece of the ongoing revitalization of the LA Waterfront. Scope:

- Demolished existing downtown harbor parking lot;
- Extended Berth 85 tugboat wharf by 25 feet;
- Installed 800 linear feet of king/sheet pile wall up to 80 foot depths with concrete pile cap;
- Excavated/Dredged 80,000 cubic yards material;
- Placed 30,000 cubic yards of soil cement jet grouting;
- Removed 4000 tons of rock slope protection;
- Installed 2,200 tons of rock slope protection;
- Coordinated with regulatory agencies

Reyes Construction Inc. was the Prime Contractor on this project and self-performed 60% of the work. This project was procured as a Design-Bid-Build contract therefore no design services were provided by RCI.

Relevance

- ✓ Sheet pile and pile cap construction
- ✓ Regulatory agencies
- ✓ Noise and vibration monitoring

Owner: Port of Los Angeles			
Cost/Schedule	References	Subcontractors	Key Personnel
Award Amount: $12,284,861 Final Amount: $12,200,404 Award Date: 11/9/2012 Completion Date: 4/30/2013	**Brian Chuc** (310) 732-3331 bchuc@portla.org **Mahsa Hematabadi, P.E., CCM** (310) 732-7674 mhematabadi@portla.org	Manson Construction – Dredging Hayward Baker – Jet Grouting Alcorn Fence – Fencing and railing Environmental Construction, Inc. – Timber Wharf Demolition Twining, Inc. – Inspection and Testing	Ricardo Jimenez – Principal-in-Charge Joe Reyes Jr. – Project Superintendent

Contractor Project History

We have provided a list of 10 comparable OCPW and public agency projects where RCI has performed as D-BE, Agency Construction Management, or General Contractor in the last ten years.

Project Name	Prject Role	Owner	Award	Completion	Contract Amount	Location
Construction of East Garden Grove Wintersburg Channel, Facility C05	Prime Contractor	OCFCD- County of Orange	11/8/2012	6/3/2014	$41,927,883	Orange County, CA
DB - Repair Wharf E	Prime Contractor	NAVFAC SW	4/26/2017	11/28/2017	$1,734,374	Ventura County, CA
Firestone Blvd Bridge Widening over the LA River	Prime Contractor	City of Southgate	1/12/2016	3/26/2018	$5,497,672	Southgate, CA
DB - Operations Access Points, Green Beach	Prime Contractor	NAVFAC SW	9/14/2011	9/18/2014	$11,003,702	MCB, Camp Pendleton CA
Naples Island Premanent Seawall Expansion	Prime Contractor	City of Long Beach	6/17/2019	Estimated 09/20	$13,881,331	Long Beach, CA
DB - Shoreline Erosion Control	Prime Contractor	NAVFAC SW	8/30/2018	Estimated 02/20	$2,873,000	MCB, Camp Pendleton CA
Structural Repairs to Navy Pier	Prime Contractor	Port of San Diego	9/12/2018	7/3/2019	$3,585,140	San Diego, CA
Santa Monica Clean Beaches Project for Pier Watershed, SP2356	Prime Contractor	City of Santa Monica	7/27/2017	8/28/2018	$13,963,895	Santa Monica, CA
NCMT Berth 24-10 Structural And Mooring Repairs	Prime Contractor	Port of San Diego	2/9/2016	6/9/2017	$7,168,632	National City, CA
LA Waterfront-Downtown Harbor-Water Cut	Prime Contractor	Port of Los Angeles	11/9/2012	4/30/2013	$12,200,404	LA Waterfront-Downtown Harbor, Los Angeles CA

Local Team of Niche Experts in Design, Environmental, Hydrology, Geotechnical, and Construction with Direct Experience on the OC Flood Channels

Additional Project Experience

Further to the four projects described above, the following tables list and describe the experience of the primary team members on projects with similar elements to this Project.

Table 1 Project Team Experience Matrix

Projects	Team Member Involvement	Steel sheet pile installation, repair or replacement	Other Retaining structure repair or replacement	Hydrologic or Hydraulic analysis	Structural inspection, analysis, and rehabilitation	Geotechnical engineering	Utility relocation & coordination services	ROW identification and acquisition	FEMA Levee Accreditation	CEQA/Regulatory permit agency	Cost benefit/life-cycle analysis	Project and Construction risk assessment,	Public relations	Stakeholder engagement	Plans and specifications	Estimates of Probable Costs	Water Quality Management Plans
East Garden Grove –Wintersburg Channel Improvement Project EEGWC	RCI: Ricardo Jimenez, Joe Reyes, Oscar Ojeda	●	●	●		●	●			●			●	●			●
P-159A Operation Access Points Green Beach	RCI: Steve Leathers, Ricardo Jimenez, Oscar Ojeda, Joe Reyes Jr.	●	●	●	●	●	●	●		●	●		●	●	●	●	●
LA Waterfront Downtown Harbor Water Cut Contract No. 2275	RCI: Ricardo Jimenez, Joe Reyes Jr.	●	●			●	●			●			●	●		●	●
Port Hueneme Repair Wharf E 5274 Small Craft (Bulkhead)	RCI: Ricardo Jimenez	●			●	●	●			●			●	●	●	●	
Los Cerritos Channel Regional Stormwater BMP and Channel Modification Design and Build, Signal Hill, CA	GHD: Sarmad Farjo, Greg Watanabe, Larry Tortuya		●	●	●	●	●					●		●	●		●
Point Mugu Shoreline Erosion Design-Build	RCI: Ricardo Jimenez GHD: Victor Tirado	●				●	●			●				●	●	●	
Bulk Materials Offloading Terminal	GHD: Craig Lewis	●		●	●	●	●	●		●	●	●	●	●	●	●	●
Repair Bulkheads 1, 2, and 3, Naval Amphibious Base Coronado	GHD: Craig Lewis	●	●		●	●					●				●	●	●
Uniform Tango Wharf bulkhead replacement	GHD: Craig Lewis	●	●		●	●	●					●		●	●	●	●
OCPW On-Calls – Road, Bridge, Traffic Engineering, Coastal Engineering	GHD: Sarmad Farjo, Larry Tortuya, Raymond Wong			●		●	●					●	●	●	●	●	●
Waggon Wheel Creek Emergency Repairs	GHD: Sarmad Farjo, Larry Tortuya, Raymond Wong		●	●	●	●				●	●	●			●	●	
Oakland Middle Harbor Containment Wall	GHD: Craig Lewis	●	●			●				●	●	●		●	●	●	●
Santa Ana River Enhanced Recharged Project	GHD: Sarmad Farjo, Greg Watanabe, Larry Tortuya, Raymond Wong		●	●	●	●	●				●	●			●	●	●
Petaluma Flood Control Walls	GHD: Craig Lewis	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Lower Berryessa Creek Flood Control Project	GHD: Raymond Wong		●	●	●	●	●	●	●	●	●			●		●	●
La Palma Avenue and Richfield Storm Drain Improvement Project	GHD: Sarmad Farjo, Greg Watanabe, Larry Tortuya			●		●	●			●		●		●	●	●	●
Santa Clara River (SCR-3) Levee Improvements	Q3: John McCarthy, Howard Barndt, Larry Tortuya (GHD)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Sespe Creek Hydrology, Hydraulics, Sedimentation Studies and Levee Modification	Q3: John McCarthy, Howard Barndt, Larry Tortuya (GHD)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	
OCPW Flood Control Channel Improvement Projects	EMI: Andy Korkos	●				●			●								

Table 1 Project Team Experience Details

Project Name and Completion Date	Location /Cost / Client	Project Description	Client Reference
East Garden Grove – Wintersburg Channel Improvement Project EEGWC **2014**	Huntington Beach, CA Construction Cost: $41.9M Client: Country of Orange	RCI: his project was awarded the 2014 Orange County American Society of Civil Engineers (ASCE) Flood Management Project of the Year. The channel improvements included the following major components of work: excavation of 117,000 cy of channel embankment, placement of 14,000 cy of structural backfill, over 2,000 cy of reinforced structural concrete retaining walls, 77,450 cy of soil-mixed with cement columns sandwiched between two rows of steel sheet piles, 31,220 LF of steel sheet piles, and 11,900 LF of structural concrete pile cap, 14,420 tons of rip rap over filter fabric; and construction of storm water bio-retention filtration system and storm water catch basin filtration devices.	Richard Patricelli OC Public Works/OC Inspection 714-245-4500 Richard.Patricelli@ocpw.ocgov.com
P-159A Operation Access Points Green Beach **2014**	Marine Corp Base Camp Pendleton Construction Cost: $10M Client: NAVFAC	RCI: This design-build project was an AGC Constructor Awards finalist for meeting the challenge of the difficult job: Heavy Engineering. The project required the re-alignment Beach Club Road and El Camino Real Road to provide access for military tactical vehicles to San Onofre Beach for training exercises. The project consisted of replacing the existing timber trestle railroad bridge over Beach Club Road, lowering Beach Club Road to maintain at least 15' vertical clearance below the new bridge structure. New levee/channel improvements along the San Onofre River included constructing temporary sheet pile walls for bridge abutment construction and permanent beam and plate retaining walls with concrete pile cap. Soil cement mixing below the roadway was required due to the high ground water table and finished grades located below the flood level. The project was completed ahead of schedule, within budget, and provided an exceptional facility for the owner.	John Woods, PE, LEED AP Construction Manager FEAD MCAS Camp Pendleton 760-468-6717 john.m.woods@navy.mil
LA Waterfront Downtown Harbor Water Cut Contract No. 2275 **2013**	Los Angeles Construction Cost: $12M Client: POLA	RCI: The LA Waterfront-Downtown Harbor-Water Cut project created the necessary land and harbor infrastructure to accommodate the development of a new town square, which is a centerpiece of the ongoing revitalization of the LA Waterfront. The scope included the demolition of an existing downtown harbor parking lot; construction of a king/sheet pile wall system; soil excavation and dredging; jet grouting; extension of the Berth 85 tugboat wharf by 25 feet; and the construction of a concrete pile cap.	Brian Chuc Construction Division 310-732-3331 Bchuc@portla.org
Repair Wharf E 5274 Small Craft (Bulkhead), Work Order #BL44RZ **2017**	Port Hueneme, CA Construction Cost: $1,734,374 Client: NAVFAC SW	RCI: The Surface Craft Berth (Wharf E) is a small craft floating dock with water and electrical power supply. The floating docs are adjacent to a tie-back steel sheet pile bulkhead with a concrete pile cap and an asphalt wharf deck. The project included recoating sheet piles at splash zones, guide piles, anchor tie-back heads, and installing cathodic protection for the steel sheet pile. The intent of the project was to repair the existing corrosion on wharf components, and to prevent further corrosion in the future by installing a cathodic protection system.	Veronica Rindge-Silvas Construction Manager 805-982-3927 Veronica.rindge@navy.mil
Santa Monica Clean Beaches for Pier Watershed **2018**	Santa Monica, CA Construction Cost: $13.9M Client: City of Santa Monica	RCI: The project, to construct a permanent storm water diversion structure, required an extensive public outreach program. The work involved temporary sheet pile shoring, dewatering, clearing & grubbing, demolition, excavation, hauling away, disposal, backfill, diversion structure, pretreatment device (20 CFS), three new package lift stations, mechanical and storm drainage piping, valves, abandoning or removing existing utilities, pressure testing, pavement removal/ replacement, parking lot, two underground storage reservoirs, dewatering underdrains below the reservoir, electrical equipment modifications, instrumentation and controls, traffic control, planting, and irrigation support.	Rick Valte, PE, LEED AP City Engineer Rick.Valte@SMGOV.NET 310-458-8730
Los Cerritos Channel Regional Stormwater BMP and Channel Modification Design and Build, Signal Hill, CA **2016-2017**	Signal Hill, CA Construction Cost: $23M Client: City of Signal Hill	GHD and The Contractor together led this design-build project for the City of Signal Hill's "Los Cerritos Channel Sub-Basin 4 Storm Water Capture Facility." This project included the permitting and construction of a low flow diversion system within the Los Cerritos Channel, and a diversion size based on criteria outlined in the Los Cerritos Channel Enhanced Watershed management Plan (EWMP) and designed as a Regional BMP System. GHD was responsible for the hydrology and hydraulics design, structural design, production of construction documents, technical specifications, and permitting for this project.	Kelli Tunnicliff, Public Works Director 562-989-7356 ktunnicliff@cityofsignalhill.org
Point Mugu Shoreline Erosion Design-Build **2018-Ongoing**	NBVC, Ventura, CA Construction Cost: $5M Client: NAVFAC	GHD & RCI: GHD are working for RCI on this Design & Build shoreline erosion protection project at Point Mugu, Navy Base Ventura County. Two existing revetments have become degraded and damaged as a result of increased storminess and high water levels. Severe overtopping and the closure of an access road on the base are hindering the Navy's operations. GHD came up with an innovate revetment repair design that does not require USACE or coastal commission permits, reduces risk to the Contractor placing rock in active wave breaking environment, all within a tight footprint between the ocean and a mission critical building.	Jake Waggoner, ENS NAVFAC SW	PWD Ventura County 805-982-4063 (DSN 551) jacob.waggoner@navy.mil
OCPW On-Calls – Road, Bridge, Traffic Engineering, Coastal Engineering **2017-Ongoing**	Orange County On-call Value: $15M Client: OCPW	GHD: Task Orders Include: Lambert Road Bikeway Path WQMP, Edinger Avenue SWPPP, Live Oak/Trabuco Canyon WQMP, Oso/Antonio Parkway Intersection Improvements, Crawford Canyon Road Improvements, Debris Boom Installation Design, Santiago Canyon HSIP, O'Neill and Roanoke Intersection, Orange County SSAR, Santa Ana Storm Drain and Pocket Park, Segment H Bikeway, Orange County Flood Control Standard Plans Update, Orange County Local Drainage Manual, Bay View Bridge Evaluation.	Edward Frondoso, PE OCPW Manager - Project Management 714-245-4596 Edward.Frondoso@ocpw.ocgov.com
Wagon Wheel Creek Emergency Repairs **Ongoing**	Coto de Caza, CA Estimated Construction Cost: $1.5M Client: OC Parks	GHD: Wagon Wheel Creek is located along Wagon Wheel Canyon and runs through General Thomas Riley Wilderness Park in Orange County. The existing slope protection wall is subject to significant scour and erosion of the channel bed, and OC Parks requested consulting design services for both an immediate emergency repair and for long-term stabilization of the creek bed and existing timber wall. GHD is providing hydrological and hydraulic analysis for the short and long-term repairs, along with design for recommended improvements. Specifically GHD is considering the integration of eco-friendly materials into the repairs to help avoid long-term issues for the stream ecosystem, and stabilization of the embankment toe to help reduce further erosion that could lead to the failure of other areas of the wall. The second phase is an assessment of the existing geomorphological condition of the creek. GHD will perform sediment transport and scour analysis for the portion of the creek along the existing wall. The assessment of the creek will also provide data used to establish design alternatives for a long term solution.	Natalia Gaerlan Sr. Project Manager 949-923-3759 Natalia.Gaerlan@ocparks.com
Oakland Middle Harbor Containment Wall **2010**	Oakland Harbor, CA Construction Cost: $50M Client: USACE	GHD designed the combined steel sheet pile wall and rock jetty containment structure for approx. 6 millon cubic yards of dredge material, part of the City's project to deepen the shipping channel to 50 feet. The project involved structural design elements (cellular cantilever high section modulus units uniquely designed as a deep U box to resist strong wave forces, and conventional Z sections, designed to withstand static and dynamic forces including seismic forces from an earthquake of approximately 8.0 magnitude Richter scale), and the restoration of eelgrass and tidal marsh habitat. Complex hydrodynamic modeling was performed to determine the current and wave characteristics.	Dave Doak, Project Manager 415-977-8562 David.V.Doak@usace.army.mil

Project Name and Completion Date	Location /Cost / Client	Project Description	Client Reference
Santa Ana River Enhanced Recharged Project **2019**	San Bernardino, CA Construction Cost: $16M Client: SBVMWD	GHD prepared the final design documents for the surface water facilities to divert 500 cfs from the Santa Ana River through existing and new facilities for groundwater recharge in the local Santa Ana Recharge Basins. Specific services completed under this contract included a constructability and value engineering (VE) review on proposed conceptual designs provided in the RFP, 2-D surface water hydraulic modeling analysis, design of approximately 2,000 LF of 96-inch CML&C welded steel water transmission main pipelines and valving station, structural design of large reinforced concrete drainage and underground vault structures, and the electrical and I&C design of automated/remote control facilities.	Mike Esquer, Project Manager 909-387-9253 mikee@sbvmwd.com
Uniform Tango Wharf bulkhead replacement **2014**	Apra Harbor, Guam Design Fee: $715,000 Client: NAVFAC	GHD: This Design-Build project provided infrastructure, wharf improvements, and new utilities at Tango Wharf, Apra Harbor, Guam to allow naval vessel berthing for "extended" transient ships, primarily, the Amphibious Readiness Group (ARG), its combatant escort ships and the Joint High Speed Vessels (JHSVs) required after relocation of the III Marines Expeditionary Force from Okinawa, Japan to Guam. GHD was the Designer of Record and designed the new steel king pile/sheet pile bulkhead wall seaward of the existing wharf bulkhead along with associated tie-back rods, anchor piles, pile caps, cathodic protection system, new mooring bollards and associated bollard foundations, and fenders.	Anthony Frontiero, PE, Project Manager 671-339-3091 Anthony.frontiero.fe.navy.mil
Bulk Materials Offloading Terminal **2012**	Petaluma, CA Design Fee: $3.95M Client: Shamrock Materials	GHD performed site civil, structural design and construction administration services for a new bulk materials terminal. Specific components of the project included planning, alignment and design of a tie-back sheet pile bulkhead including hydrostatic, surcharge, active and passive soil pressures and well as seismic forces, coating and cathodic protection, design of the conveyor system foundation, stormwater management, permitting liaison, plans, specifications, Engineer's Estimate and construction administration services.	David Ripple, VP 415-781-9051 ripple@shamrockmaterials.com
Repair Bulkheads 1, 2, and 3, Naval Amphibious Base Coronado **2016**	San Diego, CA Design Fee: $85,787 Client: NAVFAC Southwest	GHD performed site civil, structural design and construction administration services for a new bulk materials terminal. Specific components of the project include the following: Planning, Alignment, Analysis and Design of a Tie-Back Sheet Pile Bulkhead; Coating and Cathodic Protection for Marine Environment; Equilibrium Crane and Conveyor System Foundation; Cargo Vessel and Barge Mooring and Berthing Attachments; amd Bidding and Construction Administration Services.	Alberto Sanchez, Project Manager 619-556-7187 alberto.sanchez@navy.mil
Lower Berryessa Creek Flood Control Project **2015**	Santa Clara, CA Design Fee: $2.7M Estimated Construction Fee: $45M Client: Santa Clara Valley Water District	GHD: The Berryessa Creek Levees were constructed in 1976 and raised in 1997 to provide 100-year flood protection based on hydrology and hydraulics at that time. Subsequent engineering evaluations identified slope erosion and cracks in the levees that could potentially lead to failure of some sections. The levees do not currently meet FEMA requirements, GHD was contracted by the Santa Clara Valley Water District (SCVWD) to evaluate the levees for their ability to carry the projected 100-year flood flows, to develop alternatives, and to recommend a preferred alternative for addressing the levee stability problems and flow capacity increase. The study phase involved hydraulic and hydrologic analyses, slope stability and protection analyses, and geotechnical and structural field investigations. Following the study phase, GHD developed alternatives for necessary improvements and recommended a preferred approach to improve the levees.	Ted Ibarra, Associate Civil Engineer 408-630-2067 tibarra@valleywater.org
La Palma Avenue and Richfield Storm Drain Improvement Project **Ongoing**	Anaheim, CA Design Fee:$250,000 Client: City of Anaheim	GHD: Design of an extension to the La Palma Avenue storm drain system. The objectives were to collect, convey, and divert 67 acre-feet of storm water runoff volume on an annual basis to an existing ground water recharge basin and to alleviate excess flooding. GHD is finalizing the PDR for this project, which includes hydrology and hydraulic models of the preferred alternative, preliminary cost estimates, and preliminary layout exhibits.	Khanh Chu, Principal Engineer, 714-765-5259, kchu@anaheim.net
Petaluma Flood Control Walls **2002**	Petaluma, CA Design Fee: $500,000 Client: City of Petaluma	GHD: To prevent flooding, GHD designed and the channel improvements for the Petaluma River. The project included replacement of four road and railway bridges, utility crossings and modifications, new stormwater pump stations and the creation of a scenic promenade along the river. GHD provided structural, civil, mechanical, and electrical, engineering; construction management and inspection. The sheet pile walls were designed to USACE standards and design freeboard allowed for FEMA accreditation.	Tom Hargis, PE (Retired) 916-434-6931
Pier 8 Replacement DB Package **2020**	San Diego, CA Value: $150M Client: NAVFAC SW	GHD: GHD developed a Design-Build (DB) package for the Navy to pursue securing a contract with a DB contractor for the replacement of Pier 8 and adjacent facilities. Developed all Request for Proposal documents and cost estimate. Assisted the Navy in securing the appropriate preliminary environmental permits required for this contract.	Alberto Sanchez Design Manager 619-532-4857 Alberto.Sanchez@navy.mil
Santa Clara River (SCR-3) Levee Improvements **Ongoing**	Ventura County, CA Design Fee: $1.7M Client: Ventura County Watershed Protection District	Q3 led the final engineering services for the analysis and design of improvements to the SCR-3 levee for a two-mile reach downstream of Highway 101. The SCR-3 levee system did not meet the Title 44 CFR 65.10 criteria and was not certified levee system. The existing levee system included numerous deficiencies, such as inadequate freeboard and embankment protection, interior drainage issues, and a "gap." The project goal was to correct these deficiencies and close the gap in the levee system. Q3 team members were responsible for the final PS&E for the recommended project, which included earthen levee improvements, concrete floodwall, and automated flood gate at the roadway crossing.	Masood Jilani Project Manager 805-654-2029 Masood.jilani@ventura.org
Sespe Creek Hydrology, Hydraulics, Sedimentation Studies and Levee Modification **2017**	Ventura County, CA Design Fee: $513k Client: Ventura County Watershed Protection District	Q3 prepared a comprehensive hydrology, hydraulics and sedimentation analysis for Sespe Creek. The project completed an evaluation of the 270 square mile watershed to focus on identifying necessary improvements and maintenance needs to sustain the desired channel capacities of lower Sespe Creek. The results of the watershed study identified the need to improve the existing Sespe Creek channel levee between Highway 126 and Old Telegraph Road. An alternatives analysis was prepared to identify potential improvements and develop a recommended project. The feasibility study identified raising the existing levee as the most feasible project alternative. The Phase 2 work included final design to raise the levee. Q3 team members provided support for the final design and certification of the levee system.	Sergio Vargas Deputy Director 805-650-4077 Sergio.vargas@ventura.org
Flood Control Channel Improvement Projects **2018**	Orange County, CA Value: $600k Client: OCPW	EMI through on-call contracts with Orange County Public Works (OCPW), provided geotechnical engineering services for various flood control channel improvement projects including the: East Garden Grove-Wintersburg Channel, Groundwater Monitoring Wells Installation; East Garden Grove-Wintersburg Channel Levee Reconstruction Projects, Graham Street to Upstream of Edwards Street; Edinger Storm Channel Improvements; Newland Storm Channel Improvements; Westminster Channel Improvements; Garden Grove Storm Channel Realignment Project; Oso Creek Channel and Galivan Retarding Basin Project; and Slater Channel Improvements.	Krishnamenon Nadaraja, Senior Civil Engineer 714-567-7879 krishnamenon.nadaraja@ocpw.ocgov.com

DB-E Team Qualifications

For the past 25-years, our team members have successfully completed DB projects for public agencies, including Regional Flood Control Channels

RCI and GHD are specially qualified to complete this Design-Build Project for the County. RCI has maintained design-build Multiple Award Construction Contracts (MACCs) with the Federal Government since 2000. Specifically the following design-build contracts: Heavy Horizontal MACC, - teamed with GHD, Wet Utilities MACC, Airfield Paving MACC, Department of Homeland Security Multiple Award Task Order Contract (MATOC), and Waterfront MACC – teamed with GHD. In order to maintain a MACC contract, RCI has maintained an exemplary safety record and has received outstanding evaluations from the Owner.

Flood Control Experience

RCI delivers efficiencies with experienced staff, past construction performance on similar channels, and an achievable schedule

The RCI Team is uniquely qualified for the Huntington Beach Channel and Talbert Channel pile repair project. Our primary team members have worked on similar projects with steel sheet piles, corrosion protection, and water diversion. Our team is led by. Mr. Ricardo Jimenez, who was the Principal-in-Charge for the East Garden Grove Wintersburg Channel Improvements, Repair Wharf E, and Naples Island Premanent Seawall Expansion. Mr. Steve Leathers, our Design and Construction Project Manager, is a Registered Professional Engineer with over 25 years of experience responsible for numerous multidisciplinary capital improvement projects for State, Federal, and local agencies, including flood control channels. Our design team, GHD and Q3 Consulting have team members who have worked together for years on local, flood control design projects, such as Peters Canyon Channel Widening, Sand Diego Creek Embankment Protection, Barranca Channel, and Santa Clara River (SCR) Reach 3 Levee Improvements. ***This is a tried, tested, and proven design-build team*** for flood control channel improvements.

Expertise in Planning and Design of Flood Control Channels

The previous Table 1 and Table 2 project matrices highlight our team's Flood Control Project Experience, namely our primary team members' experience on similar projects with steel sheet pile repair and installation. Table 1 provides a matrix of the team members that worked on the project by the specific elements such as hydraulic and structural analysis, regulatory agency coordination and compliance, bio-retention and water quality management. Table 2 provides project descriptions, location, size, cost and year of completion, along with Client Reference.

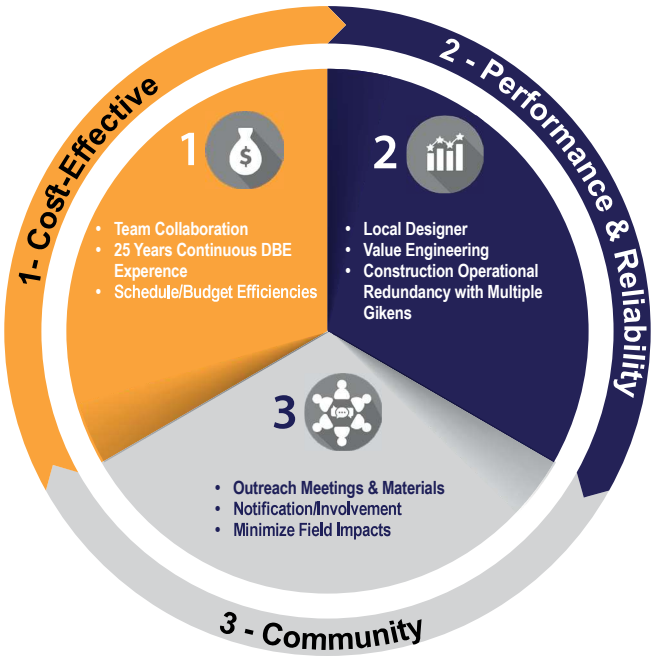
GHD and Q3 Consulting lead technical staff have worked on numerous flood control projects together over the past 15 years, including Peters Canyon Channel Widening and SCR-3 Levee Improvements. Larry Tortuya was the Engineer of Record on Peters Canyon Channel Widening, while John McCarthy from Q3 was the QA/QC Manager. Peters includes channel hydraulic modeling, and final design plans for over 1.5 miles of OCPW Facility F06, Larry and John also worked together on SCR-3 Levee Improvements during the preliminary stage which included a sheet pile levee concept for a portion of the levee system along Ventura Boulevard. Larry and John are both (FEMA) Certified Flood Plain Managers (CFM). ***Our design team is qualified, experienced, and certified in Flood Control Design and Levee Certification.***

Experience with Construction Sequencing and Project Schedules. RCI utilizes Primavera P6 Professional© software to prepare and maintain detailed Network Analysis Schedules (NAS) for Design-Build projects. Our schedulers, project managers, and project engineers are trained and experienced in the use of P6. This software is used on all RCI construction projects to produce initial baseline schedules and monthly updates. The software is also a project management tool, allowing the tracking of resource allocation, risk and opportunity management, and cost control. RCI has completed hundreds of projects using P6, including over 40 design-build projects in California. These schedules combine resource loading and cost loading. As a company, we maintain records (historical information) of previously completed projects and use realistic durations for design, submittal reviews, procurement, and construction durations based on our extensive Design-Build experience. In the event of anticipated or unforeseen project delays, RCI's team evaluates opportunities to re-sequence items of work, increase crew size, or add work shifts to accelerate the schedule or comply with permit requirements. A mitigation schedule is then prepared accordingly.

CEQA/Regulatory Permit/National Pollutant Discharge Elimination System (NPDES) compliance. Our team understands the complex interactions of the multiple stakeholders and regulatory agencies involved with the design and construction of Flood Control channels in southern California. Our team has worked on planning, FEMA mapping, LOMC/CLOMA, USACE liaison and permits, interfacing with the CA Coastal Commission, Sea Level Rise inclusion and consideration, and CEQA requirements. RCI processes an in-depth knowledge of the construction permitting requirements specifically related to temporary channel diversion, NPES permits and BMPs. Mr. Brian Leslie of GHD will provide liaison and advice to the team regarding regulatory permit agency processing and compliance.

3. Proposed Work Plan/Project Approach

Why Us? Proven Cost-Effective Delivery Performance and Community Focus



Why Choose the RCI Team

Sound Approach & Solutions

Engineers experienced with waterfront repair projects to sheet pile bulkheads will implement combination of sheet pile repair methods that minimize impacts to utilities, habitat, and stakeholders and extends service life of channel sheet piles

Familiarity, Lessons Learned, & Past Performance

Including that of our specialized design subconsultants of Corrpro, EMI, Q3 reduce projects impacts and risks while expediting design schedule

Highly Qualified Technical Experts

Site knowledge, past investigations, and engineering design will support channel recertification objective

RCI Team's Measure for Success - QUALIFICATIONS

Deliver efficiencies with experienced staff, past construction performance, and an achievable schedule

Proposed Project Work Plan and Approach

This project work plan and approach addresses the required services described in the Scope of Work and the RCI Team's approach to delivery. The Project consists of a series of design elements necessary for the channels to convey the design discharge from a 100-year storm as defined by the Orange County Hydrology Manual (or as specified by FEMA, whichever is greater); to provide levee corrosion resilience and post-construction levee recertification; to satisfy regulatory agencies requirements; and to provide mitigation measures to protect from potential levee failure due to a storm event, extreme tidal events, tsunami, or earthquake.

The RCI Team's objectives to meeting the requirements of the project are to:

- ✓ *Develop a solution to repair or replace damaged sections of sheet pile wall, restoring the structural integrity and allowing for recertification of the levees,*
- ✓ *Design new channel structures for a service life of 50 to 75 years that will be integral to future channel improvements, such as 100% repair or replacement of all sheet piles comprising the D01 and D02 systems,*
- ✓ *Deliver a solution that maintains required channel design capacity and freeboard for 100-year storm discharge conveyance,*
- ✓ *During design development and throughout construction, collaborate with project stakeholders and the Owner's independent peer review and recertification consultant,*
- ✓ *Develop value engineering solutions that optimize project budget, schedule, constructability, and/or avoid and/or minimize potential Project impacts to nearby residents and sensitive habitat,*
- ✓ *Complete the Project in its entirety by June 2021.*

The RCI Team has studied in detail the site-specific conditions, project constraints, and enhancement opportunities for the proposed project. The RCI Team's plan and approach are tailored to meet the Local Sponsor's objectives of building upon and enhancing the County's repair options for the flood channel walls. The RCI Team has reviewed the available reports and exhibits, and conducted several site visits. Our intent is to minimize impacts to scope and schedule and maximize quality.

The requirements of the project include design criteria intended to maintain accreditation for the levees and avoid remapping of specific areas for flood insurance.

The first deliverable requested in the County RFP for Design Services is a Project Work Plan (PWP). This team understands the critical path elements of the project and the importance of making ***progress on day one***. We have outlined a ***draft Project Work Plan*** so scoping discussions can begin at the project kickoff meeting. Providing our best people, corporate resources, and tools will help minimize project delivery risk. The plan includes the team's approach, deliverables, staffing plan, and schedule requirements as listed in the County's Scope of Work (RFP Attachment A).

PROJECT-LEVEL MANAGEMENT

As the ***RCI Design-Build Team Project Manager, Mr. Steve Leathers, PE*** will be responsible for comprehensive management of the team, scope, schedule, and budget. He will serve as the County's primary point of contact, managing the project on a day-to-day basis with the County's final goals and objectives in mind. Mr. Leathers understands that the quality of the design supports cost and schedule effectiveness, and he is committed to delivering that to the County.

RCI Team's Measure for Success – EXPERIENCE

Experience on plans, details, and execution of project tasks minimize costs, design and construction risk, and schedule delays

Mr. Leathers was selected to head up the RCI Team because of his extensive design-build experience managing heavy civil construction projects, including flood control improvements. He has built strong working relationships and a foundation of trust with the other team members. Mr. Leathers will work with the County to ensure that the design progresses in compliance with all the project criteria, confirming existing conditions and developing the repair options provided by the County in the RFP attachments. His project management approach is based on clear and consistent communication, including regular meetings with action item punch lists to monitor progress and accountability within the team and County staff. He will facilitate project team meetings, project management meetings, project workshops, design and construction reviews, and partnering sessions. He is dedicated to this project and available to support and coordinate with county staff, team members, and the community, as needed.

Subcontractor Selection

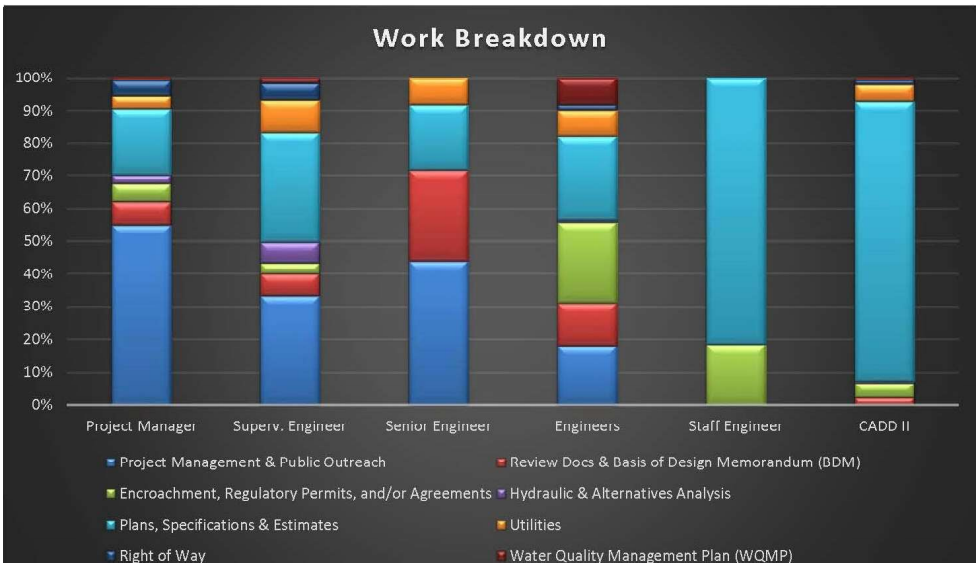
RCI has assembled a team of design subcontractors tailored to the Huntington Beach Channel and Talbert Channel (HBCTC) Sheet Pile Repair project. GHD will lead the design team with support from highly qualified subcontractors such as Earth Mechanics Inc. (EMI) for geotechnical/ground water, Q3 Consulting for hydraulic analysis, and levee certification compliancy, Corrpro for cathodic protection, and MBI Media Inc. (MBI) for public outreach. These subcontractors have been selected based on their knowledge of the similar flood control channel, experience working with the affected project stakeholders, the public, and industry-leading reputation providing professional services related to Flood Control Channel improvements in southern California.

For construction subcontractors, RCI performs extensive evaluations, including reviewing records of subcontractor performance on previous projects, and requires annual re-qualification of subcontractors previously used on RCI projects. When selecting subcontractors for the Huntington Beach Channel/ Talbert Channel project, we will consider comprehensively whether subcontractors are appropriate for the type and size of the work and their fit with the overall project team. We will evaluate recent past performance and experience, current workload, assess the subcontractors' financial strength to ensure they can complete the job, and carefully review their safety records. All subcontractors must prequalify by meeting specific safety requirements consistent with RCI's safety management plan. One key construction subcontractor has been selected early based on their unique qualifications to augment our team during design, participating in constructability reviews and technical decision making. Blue Iron Inc. will perform sheet pile installation. Additional construction subcontractors will be prequalified and selected based on competitive bids to provide the best value to the Project.

Staffing Plan

The RCI Team's proposed project staffing for the design phase is provided to the right and below The basic staffing levels are organized and allocated by Task-level management and illustrates that we have thoroughly developed the scope and effort required to deliver this Project within the schedule constraints.

FULL-TIME EQUIVALENT (FTE) WORK BREAKDOWN



FULL-TIME EQUIVALENT (FTE) PROFESSIONALS – DESIGN PHASE

Design Phase (30 week duration)	D-BE Project Manager	QCM/Project Engineers	Estimators	Scheduler	Design Project Manager	Supervisor Engineers	Senior Engineers	Engineers	Staff Engineers	CAD Designers
Design Team Professionals	1.0	0.7	0.7	0.1	0.4	0.3	0.4	1.4	0.2	2.0

Schedule

The following schedule summarizes the planned completion of milestone activities to accomplish the specified June 2021 deadline. A detailed Primavera P6 schedule is included in Appendix C. Our schedule has been developed based on construction means and methods to meet the following objectives:

- Complete the entire project in the shortest duration possible, without sacrificing safety or quality
- Comply with regulatory agency requirements including seasonal work restrictions within the channel
- Schedule the project to accommodate key activities such as utility relocation, biological surveys, and procurement durations
- Minimize disruptions to the public and project stakeholders

RCI collaborated with key design and construction team members to develop the preliminary schedule, with the construction activities based on Option 4 in the MES Recommendations for Repair (Exhibit 6 of the RFP).

RCI Team's Measure for Success – SCHEDULE

Proposed realistic schedule to Minimize Risks and Maximize Quality

Project Schedule Summary

HUNTINGTON BEACH CHANNEL AND TALBERT CHANNEL SHEET PILE REPAIR PROJECT					2019					2020													2021					
ACTIVITY ID	ACTIVITY NAME	ORIGINAL DURATION (WD)	START	FINISH	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
CONTRACT MILESTONES																											
MILE-000	SUCCESSFUL D-BE FIRM ANNOUNCED		15-Oct-19	-																							
MILE-100	DESIGN SERVICES AWARD		17-Dec-19	-																							
MILE-130	ISSUANCE OF CONSTRUCTION NTP		9-Jun-20	-																							
MILE-170	PROJECT COMPLETION		-	11-Jun-21																							
DESIGN																											
DESIGN DELIVERABLES		127	10-Dec-19	8-Jun-20																							
	35% PS&E SUBMITTAL	42	10-Dec-19	10-Feb-20																							
	65% PS&E SUBMITTAL	27	10-Feb-20	18-Mar-20																							
	95% PS&E SUBMITTAL	41	18-Mar-20	14-May-20																							
	100% (FINAL) PS&E SUBMITTAL	37	16-Apr-20	8-Jun-20																							
	NEGOTIATE FINAL GMP AND COUNTY APPROVAL	23	16-Apr-20	5-Jun-20																							
PREPARE CONSTRUCTION SUBMITTALS		15	16-Apr-20	7-May-20																							
REVIEW AND APPROVE CONSTRUCTION SUBMITTALS		15	7-May-20	28-May-20																							
PROCUREMENT		67	28-May-20	31-Aug-20																							
CONSTRUCTION																											
	MOBILIZATION	5	29-Jul-20	5-Aug-20																							
	CONSTRUCTION	210	5-Aug-20	28-May-21																							
PROJECT CLOSEOUT																											
PROJECT CLOSEOUT		10	28-May-21	11-Jun-21																							

Development of Design Guaranteed Maximum Price (GMP)

The RCI Team has developed the Design GMP following the instructions in the RFP and clarified in the RFIs. We have broken down each Task defined in the Scope of Work. The design GMP is based on a 30 week delivery schedule and includes effort from all members of the RCI team including GHD as Lead Designer, EMI, Q3, and MBI as key support. RCI's Construction Estimators will work with the Designers to provide the most accurate Estimates during all stages of PS&E. Our team is all locally based, there are no hidden fees or travel costs for out-of-region resources. We have include costs for the requested stakeholder engagement support and public outreach. The RCI Team is confident that we have provided a competitive design fee that meets the Project requirements without overloading the costs with uncertainty. RCI's Design Contingency, included in the separately sealed envelope includes the potential for additional utility investigation, surveys, analysis and design, should it be required. We look forward to sharing our detailed design GMP with the County and collaborating to deliver a high quality, low risk Design that meets the Project requirements and exceeds expectations.

Quality

RCI understands that minimizing cost for our clients is not only about providing a cost-effective service: the quality of our engineering and construction must stand on its own. Our comprehensive Quality Management Plan (QMP) establishes standards monitored through periodic audits/reviews of design deliverables and in-place construction to ensure the company's requirements are being met. ***RCI's Construction Quality Control Manager (CQCM) Oscar Ojeda, PE, QSP*** will lead implementation of the plan and will ***serve as County's main point of contact on quality issues***. He is certified in Quality Control Management by USACE and will ensure that quality control procedures and documentation are maintained. Mr. Ojeda will be supported by Design Quality Manager Greg Watanabe, PE, third-party inspectors, and independent design reviewers. Mr. Watanabe has over 20 years of experience as a Civil Engineer, has led the Quality Assurance program on large civil infrastructure projects, and is certified Construction Quality Manager for the USACE. He will employ a team of design specialists as independent Quality Reviewers. Our proven QMP results in significant reduction of re-work, accomplishing shared expectations by both the County and D-BE.

Construction Estimates of Probable Costs

In support of each milestone design deliverable, RCI will prepare an estimate of probable costs developed using quantity takeoffs from the design drawings. Our QC process will be used to double-check quantity take-offs, identify risks, and determine cost- effective means and methods used to develop a realistic, competitive, and accurate cost estimate. Detailed estimates will be prepared using HardDollar In-Eight® estimating software. Production rates will be based on our extensive database of actual rates of production on similar projects. These will be compared to industry averages available in publications such as RSMeans. Actual equipment and labor rates are used to develop the estimate with supporting bids from suppliers and subcontractors; Equipment rates are validated with published averages from USACE and Caltrans. These estimates will lay the foundation to negotiate a GMP for construction services. For cost control, a schedule of values will be developed for Definable Features of Work (DFOW).

Procurement of Long-Lead Materials

The RCI Team has identified the procurement of sheet pile as a long-lead item. Procurement items are shown on the enclosed project schedule under the WBS title PROCUREMENT. As appropriate, our team will work with the County to specify product data (manufacturer and models) in the PS&E, eliminating the need for material submittals/reviews for these items, and accelerate the procurement process directly into fabrication. For custom items, we will issue purchase orders/ subcontracts to material vendors early in the process. ***The RCI Team will coordinate with both suppliers and subcontractors to monitor the mill production dates, ensuring that the procurement cycle commences on time.***

Cost Control

The RCI team understands that cost-effective, cost-efficient, and quality delivery is a high priority for the County. To achieve that objective, we are providing the County a competitive cost structure for value driven delivery. Leading the design build team is RCI, a highly qualified, 30+ year local, general construction firm, successfully delivering design-build improvements throughout the southwestern U.S. since 2003. Our equipment and labor force are headquartered in Pomona, California. ***This directly translates to familiarity with the County's design-build procurement model, local resource availability, and a team accustomed to working together to design and construct multi-disciplined projects in southern California.***

The competitive cost structure is driven by the business principle that all RCI's senior and 30 year ***Principal, Ricardo Jimenez,*** serves the clients by staying directly involved on projects. This business principle has not only produced a cost-effective base to our clients, it has built a culture that takes pride in a job well done. RCI is a privately-owned firm and the owners' philosophy is the quality of our services to our clients before self-interest. Our success in the Design-Build marketplace is primarily a result of the Agency/Owner's procurement method utilizing a Best Value approach. This model relies heavily on past performance in order to retain existing contracts and qualify to bid future work. The idea of placing a client's interest over our own is fully engrained in the company culture and key to our ongoing success.

RCI has a history of producing industry-leading engineering products that have frequently been the subject of praise and have received accolades from our clients. We pride ourselves on producing engineering plans and specifications that seldom require costly amendments or change orders. We do that by working in collaboration with our Clients and taking responsibility for quality at every stage of design and construction. ***"Quality design saves in construction costs."***

Safety

RCI has consistently held one of the best safety records in the industry. With a ten-year average of 0.59, RCI's Experience Modification Rate (EMR) is consistently lower than the Industry Average of 1.0. In our 30-year history, RCI has never had an EMR above 1.0. Our Safety Management System (SMS) is lead by our Corporate Safety Director, who oversees three full-time Site Safety and Health Officers (SSHOs) assigned to continually monitor and evaluate the safety performance of the company's construction activities. Our employees are OSHA and USACE EM-385 1-1 safety trained and qualified as Competent Persons on the jobsite. Activity Hazard Analyses (AHAs) are prepared for each Definable Feature Of Work (DFOW) with site specific work plans outlining the means and methods to be employed for the activity. In addition to assigning ***Mike Ruzek as Site Safety and Health Officer (SSHO)*** to the Project, we will incorporate safety accountability at every level, including contractually requiring subcontractors to adhere to RCI's safety standards. Mr. Ruzek will be responsible for safety orientation of all jobsite personnel, perform daily safety tailgate/tool box meetings, verify current training and certification requirements, and maintain all project-related safety documentation. The County can have confidence the Project will benefit from our ***comprehensive "zero-incident" approach to*** jobsite safety.

Risk Management

The following describes the RCI Team's approach to the County-identified specific project challenges:

1. **Site access** – Site access is limited to the existing bridges and linear maintenance roads along each levee. We will employ a linear production method, dividing the project into distinct segments/reaches defined between each

access point/bridge. The construction within each segment will progress as a "train" starting with the sheet pile installation, followed by the welders, backfill, cathodic protection, fencing, and surface improvement crews. These production "trains" will be able to ingress at one bridge, and egress at the next bridge. No access from adjacent private property is required.

2. **Proximity to residents/sensitive receptors –** RCI understands the importance of public outreach, minimizing impacts through effective traffic control measures, dust control, controlling construction noise pollution, and overall housekeeping efforts to ensure public satisfaction with the construction effort. We also understand the risks associated with working adjacent to private properties. We will utilize specialty subcontractors to monitor noise and vibration during critical construction activities. Detailed documentation of existing property conditions prior to start of construction will be maintained, along with inspections/ photographs of conditions during and after construction activities. Our team will communicate through the County's Strategic Communications Team, or directly if required to address property owner and project stakeholder concerns as they arise during construction.
3. **Pump stations/Utilities –** Maintaining operations and mitigating associated utility conflicts is key to successfully completing the improvements. ***Our team will proactively investigate, coordinate, and design to minimize impacts to operation and avoid utility impacts.*** This may involve performing work during off-peak hours, phasing the improvements, or temporarily relocating services.
4. **Regulatory permit conditions** –
   - ***Protection of Water Quality/Monitoring –*** RCI has assigned a Qualified SWPPP Practitioner (QSP) to support the project and ensure compliance with permit requirements. Water quality sampling and analysis will be performed upstream and downstream of the project limits as needed to ensure compliance. We will provide reporting information to the County as needed.
   - ***Biological Surveys –*** The RCI Team will employ a qualified biological consultant approved by the County to perform marine and terrestrial biological clearance surveys and monitoring necessary for construction activities. If necessary, pre-construction surveys will be performed to identify and delineate sensitive habitat areas and develop avoidance and minimization measures.
   - ***No Disturbance to Nesting Birds*** – Work is planned to occur during the bird nesting season and construction noise (specifically from the driving of sheet piles) has the potential to impact nesting birds. RCI will work with the County- approved biologist to delineate active nests, educate field personnel, and adjust construction activities to avoid disturbance.
   - ***Overall construction Best Management Practices (BMPs) –*** Our Qualified SWPPP Practitioner (QSP) and project environmental compliance officer, Oscar Ojeda, will ensure that all required BMPs are properly installed, maintained, and as conditions change, adjusted accordingly. Inspection records will be maintained as required by the SWPPP.
5. **Utility Conflicts –** The RCI Team will manage the risk of unexpected utility conflicts through our knowledge of the City of Huntington Beach utility on-call, our familiarity with the site, and the extensive data provided by the County in the Addendums. We are expecting to encounter utilities around the bridges that will require temporary relocation to install new sheet piles.

Risk of design changes or unexpected conditions will be mitigated by the RCI Team through ***effective communication and honest collaboration*** with the County. By implementing over-the-shoulder reviews from the start of the design phase, to highlighting issues early without assigning blame, we have managed the risk of unforeseen situations and conditions throughout our design projects.

Dispute Resolution

Our philosophy on dispute resolution is simple: the best dispute resolution is dispute prevention. RCI has successfully completed over 40 design-build projects with formal and informal partnering programs. Over RCI's 32-year history we have never been a party to any arbitration or litigation. In 2016, we received the ***AGC "Excellence in Partnering Award"*** for projects over $50 million. We have a proven successful history with partnering, going back to the 1990's when it was first introduced by federal and state agencies.

One of the key reasons for our success in resolving disputes at the lowest level possible and preventing litigation has been the formation of cohesive partnerships with key members of the Project Team. In particular, the implementation of the "Issues Resolution Ladder" tool. Following the objective of the "Issues Resolution Ladder" has prevented issues from evolving into disputes, promoted efficiency in decision-making, promoted issues from stagnating, eliminated surprises, and showed a visible commitment to collaborative problem solving.

Projects with the County

RCI has been awarded one similar project for the County during the last 5 years - Construction of East Garden Grove Wintersburg Channel Improvement Project.

TASK-LEVEL PROJECT WORK PLAN (PWP)

Task 1. Project Meetings and Public Outreach

The RCI Team will arrange, attend, and conduct project meetings in order to maximize communication and collaboration between the D-BE and the County. There are ***lessons learned from previous flood channel projects completed by RCI***. Regular project progress meetings to discuss project status, technical issues, schedules, and other details of the Project will ***decrease risk and increase confidence***. RCI will also engage directly with the stakeholders with County authorization. Our approach to public outreach is to utilize the professional services of ***Jonathan Linkus, AICP, LEED AP with GHD.*** Mr. Linkus has provided similar services to the County. Jonathan will work with our small business subcontractor, MBI Media Inc. (MBI) in the facilitation of two community public outreach meetings or assemblies along with developing and furnishing all the necessary materials and/or information packages, exhibits.

Task 1 Activities:

Project Management Tasks

a. Develop and distribute PWP to County and RCI Team
b. Follow RFP requirements for meetings and managing deliverables
c. Prepare agenda and look ahead schedules for all project meetings, and send to attendees one (1) working day prior to each meeting
d. Attend on and off-site meetings
e. Prepare presentations for Design Seminar and County Staff meeting
f. Prepare meeting minutes within five (5) working days following each meeting, with a list of the action items and a project status matrix of the deliverables

Staff Lead: Steve Leathers, PE | Design and Construction Project Manager | RCI; Victor Tirado, PE | Engineering Design Manager | GHD

Public Outreach Task Activities

a. Follow requirements listed in Section 1.2.3. Scheduling of the Model Contract in the RFP for meetings and managing deliverables
b. Coordinate, facilitate, and provide engineering design support for at least two community public outreach meetings or similar
c. Develop information materials, packages, exhibits, etc. for community meetings
d. Prepare Strategic Communications Plan
e. Support the County's Strategic Communications team on outreach effort project notifications
f. Support greater community area and the public outreach requests, as needed

Staff Lead: Jonathan Linkus, AICP, LEED AP | Lead Outreach | GHD

Deliverables

- ✓ PWP: draft and final
- ✓ Project management: Agendas, meeting minutes, PWP, budget, schedule, and progress reports
- ✓ Project Design Progress: In-house Design Seminar materials, Project Presentation at 95% Submittal
- ✓ Public outreach: As-needed design drawings, renderings; community outreach packages for two community public outreach meetings, project fact sheets, public notices, as-needed outreach and communication materials

Tools: Project Information Management System, Microsoft Suite, Adobe, GIS, File Transfer & Tracking System such as SharePoint or ProjectWise, Primavera P6, Harddollar, and ViewPoint.

Task 2. Review Documentation & Basis of Design Memorandum

The RCI Team will review still-valid work and/or information prepared for or by the County, including design memorandums and inspection reports and/or studies, CAD design files, environmental reports, as-built plans, etc. developed for the Project. The RCI Team will incorporate, confirm, and build upon relevant, valid information previously developed for or by the County. The Basis of Design Memorandum (BDM) will be prepared by the RCI Team and submitted to the County for review and independent engineering peer review (IEPR). The BDM will contain the information used to inform the design, including design alternatives solutions considered, design codes and standards, agreements, permits and approvals. Upon finalization, the BDM will also serve as a narrative describing why the project meets OCFCD, City of Huntington Beach, and FEMA's flood protection criteria.

Basis of Design Memorandum (BDM): Repairs and replacement of the channel walls will address: deteriorated steel sheet piles, corrosion protection of the sheet piles, recertification of the levees, and any safety conditions observed during inspection. The RCI Team will submit a comprehensive BDM including the following:

a. Description of the channel wall structures
b. Channel wall confirmation inspection summary
c. Description and estimated quantity of channel wall structure conditions to be repaired or replaced
d. Environmental conditions and structure loadings
e. Design Criteria governing the repairs and replacement
f. Description of channel wall repair and replacement alternatives, and repair type combinations
g. Applicable Codes and Standards
h. Corrosion Protection alternatives
i. Anticipated service life
j. List of major project milestones

Inspection Phase

A key project element as described in the RFP is to "Develop a Solution to Replace Damaged Sheet Piles to Provide a 50–75 Year Service Life and Repair Sheet Piles with less than 10-Year Service Life Remaining". The RCI Team's first step toward this objective will be to confirm the present-day fitness of the steel sheet piles according to location by Stationing or defined project zone; and location by elevation and/or exposure scenario. The RCI Team will confirm the findings of the County consultant's prior inspection and studies. This will facilitate quantification of wall thickness loss due to corrosion related degradation and will enable estimation of continued steel degradation in the absence of repair or remediation. GHD's structural and corrosion engineers will perform a site inspection to confirm the County consultant's findings. The GHD Team will use ASCE Manual of Practice 130 "Waterfront Facilities Inspection and Assessment" rating system to systematically document all inspection findings for the sheet pile channel walls.

In addition to the visual inspection, we anticipate performing non-destructive testing including representative Ultrasonic Thickness (UT) testing to confirm the residual steel thickness of the steel sheet piles and other metallic elements. The testing will focus on regions of the sheet piles noted in the D01 and D02 assessment reports, that are structurally significant areas or noted to have accelerated corrosion rates. A statistical average of the readings at each region will provide critical inputs into the structural assessment and help to determine recommended repairs or replacement. As part of this phase, the RCI Team will also prepare the BDM report for this project. The BDM will summarize inspection findings, analysis of the cause of deterioration, recommended repairs and replacement, priority ratings, and cost estimates. The memorandum will document findings and decisions made by the RCI Team, the County, and other stakeholders. This will provide a ***clear road map that the County can use for determining the best course of action*** for the D01 and D02 channels. The BDM will document all design parameters, OCFCD, FEMA and USACE requirements, environmental, code requirements; permitting, special inspection; and performance criteria.

Geotechnical Investigation and Analysis

EMI will review existing geotechnical data available from local agencies including Orange County and City of Huntington Beach, and the latest State published geologic and seismic hazard maps and reports. To confirm initial assumptions provided during the structural assessment of Channel D01 and Channel D02, EMI will investigate the subsurface soil conditions along the two channels within the project limits. The geotechnical investigation will include conducting exploratory boreholes and Cone Penetration Test (CPT) soundings. A total of 32 locations will be explored using boreholes and CPTs – 4 boreholes will be excavated and 12 CPT soundings will be advanced at various locations along each of the two existing channels. Boreholes and CPTs will be advanced to depths ranging between 70 and 80 feet, or until refusal is encountered, from the maintenance roads adjacent to the existing channels. Boreholes will be excavated using a truck-mounted mud-rotary drill rig and the spoils generated from the borehole excavations will be drummed and disposed off-site. Bulk, small disturbed, and small relatively undisturbed samples of subsurface soils will be collected for laboratory testing. The small disturbed and relatively undisturbed soil samples will be collected at vertical intervals of five feet using the Standard Penetration Test (SPT) split-spoon sampler and Modified California Drive (MCD) sampler. After logging and sampling is completed, the boreholes will be backfilled with cement-bentonite slurry.

Various laboratory tests will be performed on select soil samples to determine or derive their physical and engineering characteristics. Laboratory tests are anticipated to include: in-situ moisture content/density, grain size distribution, Atterberg limits, direct shear, unconsolidated-undrained triaxial tests, maximum density and optimum moisture content, and soil corrosivity tests.

EMI will use the collected geotechnical information to create idealized soil profiles, select soil shear strength parameters, and perform geotechnical analyses. For the proposed sheet pile repair and replacement work, the geotechnical analyses and recommendations are needed to determine static lateral earth pressures and lateral surcharge pressures for structural design of the wall sections.

Task 2 Activities:

- Follow requirements listed in RFP Attachment A, Task 2.
- Conduct document reviews of available data, studies and reports, consider the site conditions such as geotechnical, environmental factors and approved permits, existing conditions such as the levee and bridge abutment, updates to codes and standards, and access or proximity of the works to residences and businesses
- Coordinate with the Country and Country appointed IEPR firm
- Prepare Basis of Design Memorandum, draft and final

Staff Lead: Discipline Leads - Structural, Geotechnical, Civil, Hydraulics, Corrosion and Permitting

Deliverables

✓ Draft Basis of Design Memorandum, Final comprehensive Basis of Design Memorandum, Draft and Final Geotechnical Report

Tools: Microsoft Suite, Adobe Acrobat, GIS, CADD

Task 3. Encroachment, Regulatory Permits, and/or Agreements

The Project will result in numerous encroachments, regulatory permits and agreements. The RCI Team will coordinate, facilitate, and provide engineering design support to assist the County with the completion, submission, and processing of encroachment and regulatory permit applications and agreements.

The Project will result in impacts to Waters of the United States, which will require permits from the USACE and the Regional Water Quality Control Board. USACE permits may be processed under Nationwide Permit 31 (Maintenance of Existing Flood Control Facilities) contingent on the extent of the repair or replacement and the impacts associated with construction. The Corps will coordinate with National Marine Fisheries and the U.S. Fish and Wildlife Services during the permit process to consult on potential impacts to marine resources and threatened and endangered species; respectively.

A portion of the Project is also within the coastal zone, which will require a Coastal Development Permit under the City of Huntington Beach's Local Coastal Plan. This permit could be captured under a larger permit from the City for the entire scope of the Project. Since the Project proposed medication to the channel banks, the Project would also require a Lake and Streambed Alteration agreement from the California Department of Fish and Wildlife.

The RCI Team will review the prior permit entitlements and the proposed actions to support the County in ***developing an efficient approach to acquiring these permits*** for the Project.

Task 3 Activities:

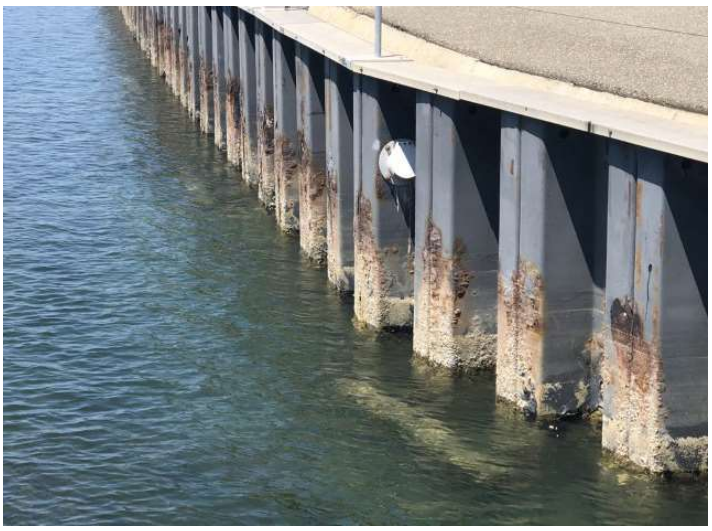
- Coordinate with various stakeholders such as: City of Huntington Beach, USACE, California Department of Fish and Wildlife (CDFW), and California State Water Resources Control Board
- Review & assist County with encroachment permits from City of Huntington Beach (as required)
- Coordinate and liaise with utility providers
- Support of any other permit or agreements required to complete the Project

Staff Lead: Brian Leslie | Lead Permitting | GHD; Victor Tirado, PE | Engineering Design Manager | GHD

Deliverables

✓ Project and engineering information as needed in support of encroachment, regulatory permits and/or agreements, and reporting requirements

Tools: Microsoft Suite, Adobe Acrobat, GIS, CADD



3.1 CEQA Documentation

RCI will prepare an subsequent, supplemental or addendum to Final EIR No. 445 (dated November 1987) as recertified, if determined to be necessary, to conduct the proposed work. An amendment to this EIR would be required if the proposed Project results in:

1) significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2) substantial changes occur with respect to the circumstances under which the project is undertaken due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3) new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete.

RCI will support the County in preparation of an amendment to the EIR and any special environmental studies, as necessary, to support gaining CEQA compliance.

Staff Lead: Brian Leslie | Lead Permitting | GHD

Deliverables

✓ Amended CEQA documents

Tools: Microsoft Suite, Adobe Acrobat, GIS, CADD

RCI Team's Measure for Success – SOLUTIONS

Independent hydraulic analysis will inform the design process and guide the channel improvements

Task 4. Hydraulic Analysis and Alternatives Study

GHD, supported by Q3, will perform an independent hydraulic analysis to verify and validate the proposed design meets OCFCD and NFIP design criteria. We will develop a channel hydraulic model capturing the existing channel configuration, bridge structures and abutments, The boundaries will extend from the ocean outlet near the Santa Ana River to Adams Avenue along the Huntington Beach Channel and upstream of Yorktown Avenue along the Talbert Channel. The outputs from the model will be used to inform the design process and guide recommendation for improvements to the existing channel.

The RCI Team will conduct the following tasks:

4.1. Baseline Data Collection and Field Review

The RCI Team will coordinate with the County to research, collect, and review existing background data. Data review includes as-built construction drawings for the channels and the local storm drain facilities and pump stations and previous and on-going hydrology studies. The data accumulated will include drainage facility dimensions, elevations, and facility types. Q3 will also perform a field investigation of the channel system and appurtenant facilities. This data will be used to set up the baseline hydraulic models.

4.2. Unit Hydrograph Hydrology Analysis

Q3 will provide engineering services to develop unit hydrographs for the channel system for use in the unsteady flow hydraulic modeling. Previous hydrology prepared by the County or others (FEMA) will be used to develop the unit hydrographs. The hydrographs will be developed in accordance with the guidelines in the Orange County Hydrology Manual and take into consideration the time-series flow rates from any pump stations which discharge to the channel systems.

4.3. Hydraulic Model Setup and Analysis

Q3 will perform a hydraulic analysis to establish the baseline (existing) condition and verify and validate the proposed design meets OCFCD and NFI design criteria. Q3 shall utilize the information provided for the project area, including but not limited to the as-built plans, OCFCD Design Manual, OCFCD Design Reports, and the City of Huntington Beach General Plan Update (adopted October 2017). Q3 shall document the findings and results of the hydraulic analysis in a comprehensive report that also includes design recommendations that satisfy and conform to current design standards, procedures, regulations, and codes.

Q3 will establish the existing and project site conditions using HEC-RAS (Hydrologic Engineering Center – River Analysis System) computer model. Should the proposed design modify the existing channel capacities, Q3 will then develop a hydraulic model of the impacted area which shall extend sufficiently beyond the project area. The peak discharges considered shall be based on the unit hydrograph analysis and compared with the hydraulic data tables provided on the record drawings. Q3 shall utilize the final model output and results from the HEC-RAS model to provide design recommendations for the improvements to the existing channel based on the hydraulic and/or structural impacts within the project limits as a result of the Project.

Q3 will prepare a scour analysis evaluating general and local scour along the project improvements. General

scour calculated using the final hydraulic model and design flow rates for the channels. Local scour associated with the bridge and culvert crossing will be evaluating using the scour analysis procedures prescribed in HEC-18 (FHWA, 2012). The composite (total) of general and local scour will be used to establish the appropriate scour protection design constraints for the recommended improvements.

Q3 will present the initial, intermediate and final findings of the hydraulic analysis to the County and will prepare and conduct a presentation on the development of the analysis models as well as the results that established the design recommendations for the Project at the Design Seminar and project presentations. Prior to finalization of the report, Q3 shall provide a draft copy of the report to the County for review and comment. Q3 shall incorporate all submitted and validated review comments from the County into the final comprehensive report. The RCI Team will present the initial, intermediate, and final findings of the hydraulic analysis to the Owner and shall prepare and conduct a presentation on the development of the analysis models as well as the results that established the design recommendations for the Project at the Design Seminar and project presentations noted in Task 1.

An alternatives analysis will be prepared by modifying the baseline model to reflect each proposed alternative. The impacts of reducing the channel width, as suggested in Options 3 and 4 from the OCPW memorandum dated August 15, 2019, and other potential alternatives will be evaluated against the baseline condition. Changes in water surface elevations will be identified and the models extended sufficient length to fully assess any proposed changes. A final model will be prepared to provide the design recommendations for the selected alternative.

Using the final hydraulic model, general scour will be determined based on design flow rates for the channels. The composite (total) of general and local scour at bridge and culvert crossing will be used to establish the appropriate scour protection design constraints at the recommended improvements.

Task 4 Activities:

- Follow requirements listed in RFP Attachment A, Task 4
- Develop Channel Hydraulic Model
- Consider and evaluate alternatives
- Present findings in an intermediate and final Hydraulics & Alternatives Report

Staff Lead: John McCarthy | Hydraulics & Levee Certification | Q3; Larry Tortuya, PE, ENV SP, CFM | Lead Flood Control | GHD

Deliverables

- ✓ Intermediate and Final Hydraulics Analysis, draft and final alternatives analysis report
- ✓ Inputs into In-house Design Seminar and Project Presentations

Tools: Hydraulic modeling software , AES, Civil3D, HEC-RAS, WSPG, Microsoft Suite, Adobe Acrobat, CADD

Task 5. Plans, Specifications, & Estimate (PS&E)

The RCI Team will incorporate and build upon the work that the County has developed for the Project, specifically the inspection and structural assessment reports, and the cathodic protection & coating condition assessment report by Corrpro. We will develop the PS&E package in accordance with the latest instructions, criteria, codes and standards set forth by the County. All work related to the project will comply with federal, state, and local laws, as well as regulations of governing agencies and districts, including rules regarding the procurement of products.

Using the Basis of Design Memorandum (BDM) described under Task 2, GHD will lead the design team for the rehabilitation and/or replacement of the existing D01 and D02 channel walls. This will include any water quality measures identified and recommended in the WQMP.

Channel Wall Structural Assessment

GHD will perform a structural assessment of the existing channel structures based on current condition (residual steel thickness) and anticipated loading. EMI will provide recommendations for lateral earth pressures based on the results of the geotechnical investigation and analysis. GHD structural engineers will work closely with the EMI geotechnical team to determine design parameters to be used in the structural analysis of the walls. Loads to be considered include seismic, hydrostatic (ground water) and lateral surcharge pressure due to adjacent vertical loading. The walls elevation will be reviewed to confirm freeboard compliance with the Title 44 CFR 65.10 criteria required for certification. If strengthening is required, designs will be developed working together with RCI.

The basic methodology of the structural engineering assessment is to determine the approximate existing structural capacity and confirm the critical steel thickness of the channel wall structures by conducting analyses using anticipated and code basis loads and information derived from the County's prior studies, record drawings, and taking into account steel deterioration noted during the inspection surveys. The evaluation will confirm and identify deficiencies with respect to the lateral pressure resisting capacity of the wall structures using updated geotechnical parameters and design basis loading per USACE and ASCE 7 design standards. Demand and capacity values will be determined for each of the channel structure components.

GHD's structural condition assessment of the D01 and D02 channel structures will also:

1) provide an understanding of the various mechanisms of corrosion and related potential repair methods;
2) quantify the structure's current condition with respect to corrosion related degradation; and
3) aid the structural assessment in estimating serviceability requirements and options to extend the service life of the channel structures to a minimum of 10 years required for FEMA recertification.

Corrosion Protection

We understand that the County encountered challenges in effectively operating and maintaining the original impressed current cathodic protection (ICCP) systems and have subsequently transitioned to use of entirely galvanic anode cathodic protection (GACP) systems. The operation of the existing GACP systems will be assessed during this preliminary project phase to determine:

1) is cathodic protection currently achieved in conformance with NACE definitions:
2) are there zones or specific locations where cathodic protection is not achieved; and
3) what is the probable remaining useful service life of the existing GACP.

Cathodic protection is only applicable for portions of the sheet pile that are continuously in contact with an electrolyte; soil or water. Corrosion control methods to extend the service life of non-continuously submerged portions of the sheet pile may include application of protective dielectric coating systems. Through quantification of existing, present-day condition of the sheet pile from the inspection; a baseline estimate of further degradation over a 10 year return period will be developed to serve as a baseline if no repair or remediation action is taken. The GHD/RCI team will then prepare a life-cycle-cost-analysis of various dielectric coating systems and total coating system build thicknesses to provide recommendations for selection of a coating system that best achieves the project corrosion control objectives.

The project approach and objectives will be to provide a long service life for the new sheet piles installed on both sides of approximately 2,200 linear feet (1,100 feet length of channel) of the Talbert Channel and Huntington Beach Channel by the Design-Build team. This work will also include the design and installation of new cathodic protection systems on the soil side and water side of the channel sheet piling.

Available pertinent information such as the 2019 survey report prepared by Corrpro, available drawings, sheet pile specifications, coating specifications, and soil and water resistivity and other pertinent information will be reviewed to prepare a cathodic protection (CP) design for effective corrosion protection for both sides of the steel sheet piling which will extend the service life of these structures and minimize maintenance costs. Corrpro has a good understanding of the existing Talbert Channel as it has performed evaluations of the existing CP systems and the coating systems under a separate contract with the Orange County Department of Public Works (OCPW). The key objectives and focus of our project approach will be as follows:

- Obtain soil and water resistivity data that is used in designing the two cathodic protection systems.
- Evaluate the coating systems that are to be utilized for the sheet piling and estimate the degree of coating damage anticipated during the installation of the piles.
- Design two separate sacrificial anode CP systems that can protect the new steel pilings on both the soil side and the water side.

Engineering Design and Preparation of PS&E

GHD will utilize our ***long history of designing repairs for maritime and waterfront structures*** to provide durable and constructible repairs tailored to the specific sheet pile wall structure and site conditions. State-of-the-practice repair construction methods for the sheet pile walls will be reviewed with RCI and the County, including use of materials such as fiber reinforced plastic (FRP). If required, an appropriate replacement flood wall design will be developed, focusing on a sheet pile cantilever wall configuration to minimize impacts to the channel and adjacent properties. All repair and replacement designs will be prepared in accordance with the latest design standards from USACE and in compliance with FEMA levee certification requirements.

The RCI Team will prepare 35%, 65%, 95% and 100% Plans, Specifications and Estimate submittals. The RCI Team believes that the collaborative nature of this Project should enable ***swift design progression with minimal changes*** following County review. By highlighting design issues, changes, and requests during progress meetings, there will be no surprises at PS&E submittals. All revisions or responses will be recorded in an RFI/Response matrix maintained by the RCI Team.

The RCI Team will work with the County's appointed Independent Engineering Peer Review (IEPR) firm, to ensure comments and changes are incorporated into the design progression in a timely manner. All plans will be prepared in accordance with the Orange County Flood Control District recommended practice for detailing. Orange County Public Works Standard Plans will be utilized where applicable and will be referenced on the plans.

Constructability reviews are standard practice in Design-Build contracts. The RCI Team will dedicate members of the contractor's estimating and management team to review and provide input on the design plans and specifications. This collaboration will ***result in accelerated material and shop drawing reviews, minimize design issues arising during construction, and ensure a quality project*** is delivered to the County. RCI and GHD have worked together on multiple successful Design-Build projects fostering a level of trust and partnership. RCI provides real-time constructability interfacing directly to the design.

All calculations performed by the RCI Team will be signed and stamped by a Registered Civil Engineer and/or Registered Structural Engineer, licensed by the State of California. Our design leads are all registered professional engineers in CA, including our Structural lead Craig Lewis and Structural QC Brett King who are both Registered Structural Engineers.

One of the most important deliverables under this Task PS&E, are the Estimates. The RCI Team will prepare preliminary Engineer's Estimates for the 35% and 65% submittals using RCI's Estimators. At the 95% submittal the Estimate of Probable Cost will use the 95% plans and quantities to provide an accurate assessment, using recent bid prices and industry knowledge, including recent projects which included sheet piles and corrosion protection. This estimate will be signed and stamped by the DB-E Project Manager, a registered CA Civil Engineer.

The RCI Team will complete and provide the final PS&E (100% project completion) to the reviewing agencies and/or parties identified by the County. This submittal will consist of final plans, final specifications (special provisions), final structural and/or design calculations, final quantity calculations, and the final estimate of probable cost. Upon written authorization from the County, the team will then develop the GMP for the items of work included in the plans and specifications. At the request of the RCI Team and written approval by the County, the GMP may be developed earlier in the design process as long as the team is able to confidently assign contingency to mitigate project risks. The estimate of probable cost and design-phase GMP approach is presented under Project-level management herein.

Task 5 Activities:

- Follow requirements listed in RFP Attachment A, Task 5
- Structural calculations and Design memorandums
- Plan set development (35%, 65%, 95%, 100%) including confirmation of survey, datum and benchmarks, structural, civil, drainage, details etc.
- Incorporation of hydraulic analysis and water quality management measures into the design
- Prepare and implement a Traffic Control Plan identifying detours, temporary signing and striping, locations of removable temporary barriers and crash cushions, and lane closures, if required, within the project limits.
- Document Constructability Reviews for all aspects within this scope of work
- Technical Specification development (from OCPW Standards)
- Preparation of Engineer's Estimate (35%, 65%) /Estimate of Probable Cost (95%)
- Coordination with County's certification consultant

Upon receipt of signed and stamped PS&Es, the County will coordinate signature of the plans by the appropriate County officials, the Chief Engineer of the Orange County Flood Control District and the appropriate City official. The plans will be approved by the City of Huntington Beach as required by the California Public Contract Code Section 21020.9 prior to issuance of any Notice to Proceed for construction.

Staff Lead: Victor Tirado, PE | Engineering Design Manager | GHD; Design Leads for all Disciplines

Deliverables

✓ 35%, 65%, 95%, and 100% PS&E submittals

✓ PS&E will be prepared in accordance with the County of Orange CAD Standards Manual. In addition, the RCI team will prepare specifications (special provisions) per the County's specifications format for all relevant design aspects within this scope of work.

Tools: CADD, CIVIL3D, Microsoft Suite, Adobe, AGTEK, HardDollar, BlueBeam, PlanSwift, ShoringSuite, LPILE

Task 6. Utilities

The RCI Team will coordinate, facilitate, locate (GPR/pothole/etc.) and provide engineering design support in the request, research, and the relocations/abandonment of the existing utilities within the project limits. We expect to encounter utilities in areas such as around the bridges, and may have access conflicts with the overhead telecommunication lines and the

RCI Team Measure for Success – EXPERTISE

GHD is City of Huntington Beach's preferred consultant for utilities and holds an on-call contract for utilities related works with the City

piling rigs. The RCI Team has included contingency for this risk in the separately sealed envelope for the coordination and design of utility relocations if needed. Potholing may also be needed in the areas of suggested repairs, and estimated pothole locations are based on areas identified as repair segments in previous studies.

Our approach is at 35% design completion, the RCI Team will have identified and confirmed all impacted utilities within the project limits and will ensure that a viable solution has been established to address these conflicts (i.e. relocation and/or abandonment) as well as ensuring that all required utility relocation and/or abandonment permits and/or agreements with the appropriate utility agencies and/or parties will be completed prior to 95% design completion. In the event that there are any conflicts and/or issues with the utilities that were previously identified during the development of the final design, the RCI Team will immediately notify County staff for a resolution.

The design and planned construction means and methods will be evaluated and developed to minimize impacts to these existing utilities.

Task 6 Activities:

- Review utility locations for conflicts
- Perform investigations (potholing, GPR, etc.)
- Review construction methods

Staff Lead: Victor Tirado, PE | Engineering Design Manager | GHD

Deliverables

✓ Technical Memorandum

Task 7. Right-of-Way

RCI has reviewed Exhibit 8 in the RFP, noting that the County has a combination of fee title and permanent easements for the channel and maintenance road right-of-way. We do not anticipate any additional right of way needs. If additional laydown areas or access points are required, RCI will coordinate with adjacent property owners and obtain the required permissions and/or temporary construction easements (TCE).

Our approach is at 35% design completion, the RCI Team will have identified and confirmed all easements, rights of entry, and/or right-of-way required for the Project and will ensure that all required right-of-way acquisitions, permits, and/or agreements with the appropriate agencies and/or parties will be completed prior to 95% design completion. In the event that there are any discrepancies and/or issues with the easements, rights of entry, and/or right-of-way that were previously identified during the development of the final design, the RCI team will immediately notify County staff and coordinate a resolution. The design GMP includes contingency for TCE support.

Task 7 Activities:

- Review and confirm any ROW and easement needs

Staff Lead: Victor Tirado, PE | Engineering Design Manager | GHD

Deliverables

✓ Technical Memorandum

Task 8. Water Quality Management Plan (WQMP)

Tasks 8 Activities:

GHD will develop a Water Quality Plan (WQP) for the Project consistent with the County Model WQMP and the Technical Guidance Document (TGD) as required by the Orange County NPDES (National Pollutant Discharge Elimination System) Municipal Separate Storm Sewer System (MS4) Permit from the Santa Ana Regional Water Quality Control Board (SARWQCB) – North of El Toro Road. The RCI team will follow the "Green Streets" approach to the greatest extent possible. We will use the OCPW street and linear project WQMP template, and adhere to the requirements of the MS4 permit. The water quality features identified in the WQMP will be incorporated into the design of the channel improvements. The Draft WQP will be developed and submitted to the County at the 35% (as part of the BDM) and a Final WQP submitted with the 65% PS&E submittal.

Staff Lead: Larry Tortuya, PE, ENV SP, CFM | Lead Flood Control | GHD

Deliverables

✓ WQP
✓ SWPPP

Tools: Microsoft Suite, Adobe, CIVIL3D, GIS

4. Proposed Staffing and Project Organization

We have listed the key staff General Contractor team members, as well as the Design Lead and other subconsultant/subcontractor staff for this Project. RCI, GHD and our sub-contractors/consultants have selected specialists who are experienced in delivering Design-Build projects, and particularly the unique aspects of flood control projects. RCI regularly uses sub-contractors to deliver elements of the construction, and has chosen reliable subs with a history of working for RCI. Our key team member biographies can be found below, and additional detailed resumes of the key staff members can be found in Appendix A.

The RCI team is bringing over 35 credentialed staff who are specialists in their field for this Project

General Contractor (RCI) - Key Staff

Ricardo Jimenez - Design-Build Principal-in-Charge

Mr. Jimenez has over 25 years of design-build and heavy construction experience including flood control. He has worked on projects for private, local, state and Federal Government agencies. Mr. Jimenez has extensive experience working with USACE, U.S. Navy, Caltrans, Cities, Counties, and Ports in southern California. Managed over 20 Flood Control Projects in So. Cal including sheet piling and soil mixing. Mr. Jimenez was the Principal-In-Charge (PIC) on the East Garden Grove Wintersburg Channel Improvement project (EGGWC) for the County of Orange.

Education:
BS, Civil Engineering, San Diego State University
Years Experience: 27
Years with RCI: 19

Comparable Projects:

- *Principal-in-Charge, East Garden Grove Wintersburg Channel Improvement Project (WO EF07398), Huntington Beach, CA*
- *Principal-in-Charge, Design/Build P-159A Operations Access Points, Green Beach, MCB Camp Pendleton, CA*

Steven R. Leathers, PE - Design & Construction Manager, Scheduler

Mr. Leathers has over 25 years of design, design-build and heavy construction experience. He has over 20-years experience designing multi-disciplined capital improvement projects for State, Federal, and local agency clients. Projects include flood control channels, floodplain studies, and municipal drainage improvements. He has been with RCI for over 6-years as a Project Manager and Project Director, constructing a wide variety of design-build projects for the U.S. Navy and design-bid-build improvements for local governments. He has managed the design and construction of design-build projects continuously since 1996. Managed over 20 Flood Control Projects in So. Cal including sheet piling and soil mixing.

Education:
BS, Civil Engineering, California State Polytechnic University, Pomona
Licenses/Registration/Certification:
Professional Engineer, CA #C58063; Exp. 6/30/20
Years Experience: 27
Years with RCI: 6

Comparable Projects:

- *Project Manager, Design/Build P-159A Operations Access Points, Green Beach, MCB Camp Pendleton, CA*
- *Project Manager, Design/Build P-1046A North Area Waste Water Conveyance , Camp Pendleton, CA*

Reyn Shimokawa - Chief Estimator

Mr. Shimokawa has 23 years of construction experience, more than half of which have been in estimating heavy civil projects. He specializes in preparing estimates for Design-Build and Design-Bid-Build complex flood control, bridge, wet utilities, and water front projects. Reyn is experienced in a wide variety of design disciplines and is well versed in producing estimates during all phases of design, addressing constructability challenges; and identifying, analyzing, mitigating and pricing risk items. His relevant experience in the East Garden Grove Wintersburg Channel Improvement Project (EGGWC) will ensure that all environmental, local, state, federal, and stakeholder requirements are incorporated into the design and that an estimate is developed supported by historic costs and competitive proposals. He is proficient in Primavera P6 scheduling and Hard Dollar-In Eight estimating software.

Education:
BS, Civil Engineering, California State Polytechnic University, Pomona, CA
Licenses/Registration/Certification:
Primavera P6 Certified, Hard Dollar In-Eight Estimating Certified
Years Experience: 23
Years with RCI: 15

Comparable Projects:

- *Chief Estimator, East Garden Grove Wintersburg Channel Improvement Project (WO EF07398), Huntington Beach, CA*
- *Chief Estimator, Design/Build P-159A Operations Access Points, Green Beach, MCB Camp Pendleton, CA*

Oscar Ojeda, P.E., QSP - Project Engineer, QC Compliance

Mr. Ojeda has over 22 years of experience in project management, quality control, design-build, and flood control construction, having successfully delivered 8 design-build projects in the past 10 years. Mr. Ojeda understands the various construction trades having been responsible for planning, scheduling, and monitoring on-site construction quality control and inspection work. As Project Engineer for the previous phase of the East Garden Grove Wintersburg Channel Improvement Project, Oscar brings intimate knowledge of the working environment. This project has allowed him to acquire experience of the channel conditions, noise and vibration by construction equipment, storm drainage, public outreach, and other issues that impact work along the channel, and how best to work through those issues.

Education:
BS Civil Engineering, University of California, Los Angeles

Licenses/Registration/Certification:
Civil Engineer, CA #C55960, Exp. 12/31/20, OSHA 10-Hour Certified, EM-385 40-Hour Safety Training, USACE Construction Quality Management, Trench Shoring, Confined Space Entry

Years of Experience: 22
Years with RCI: 13

Comparable Projects:

- *Project Engineer, East Garden Grove Wintersburg Channel Improvement Project (EGGWC), Huntington Beach, CA*
- *Project Engineer, QC Manager, Design/Build P-159A Operations Access Points, Green Beach, MCB Camp Pendleton, CA*

Joe Reyes Jr. - Superintendent

Mr. Reyes will be the Project Superintendent. He has over 19 years experience in the construction industry including flood control and design-build projects. Mr. Reyes was the Superintendent on the EGGWC for the County and brings the lessons learned from that project to the field for this Project. Responsible for the construction of flood control improvements on LA River, Rio Hondo, San Luis Rey, and Santa Paula Creek, including sheet piling and soil mixing. Mr. Reyes has worked directly with the subs, Blue Iron and Hayward Baker, and will supervise many of the same construction team members as previous. He is RCI's best Superintendent for this Project. Responsibilities include conducting preparatory and field safety meetings, activity hazard analysis (AHA), site specific confined space, fall protection, excavation plans, layout and communication with subcontractors, supervisors and owner representatives.

Licenses/Registration/Certification:
Construction Quality Management Training, 30-Hour OSHA Training, EM-385 40-Hour Safety Training, Confined Space and Excavation Safety

Years Experience: 19
Years with RCI: 19

Comparable Projects:

- *Superintendent, East Garden Grove Wintersburg Channel Improvement Project (EGGWC), Huntington Beach, CA*
- *Superintendent and Safety Manager, Santa Monica Clean Beaches Project for Pier and Pico-Kenter Watersheds (SP2356)*

Michael Ruzek, CHST - Site Safety and Health Officer (SSHO)

Mr. Ruzek has over 17 years of safety management experience on multi-disciplined heavy civil projects. He has a proven ability to plan, direct, and implement effective safety programs, resulting in reduced lost time incidents. Mr. Ruzek embraces a "safety first" attitude, culture, and working environment. He will be responsible for the Project safety program, including construction briefings/orientations, and safety monitoring. Mike has also served as regional safety manager, district safety manager, and corporate safety director during his career.

Licenses/Registration/Certification:
2001 P.O.S.T. Certification

Years Experience: 17
Years with RCI: 1

Comparable Projects:

- *Site Safety and Health Officer (SSHO), Port of Los Angeles Berth 142-143 Backlands Improvements, San Pedro, CA*
- *Site Safety and Health Officer (SSHO), Port of Long Beach Pier E Middle Harbor, Long Beach, CA*

Lead Design Firm (GHD)

Sarmad Farjo, PE, ENV SP – Design Project Director

Mr. Farjo has over 28 years of design and management experience in Civil Infrastructure projects and directs multidisciplinary engineering teams on major projects for public agencies and has extensive experience in sustainable design. Mr. Farjo is the Road, Bridge and Traffic On-Call Principal-in-charge and Task Manager for OCPW and has managed projects/task orders such as: Santa Ana Storm Drain Improvements, Channel Debris Boom Installation Design, OC Flood Standard Plans Update, County Wide Systemic Safety Analysis Report, Santiago Canyon Highway Safety Project, O'Neill & Roanoke Intersection Improvement, Edinger Bridge SWPPP, Lambert Road WQMP, Live Oak and Trabuco Canyon Intersection, Oso Antonio Parkway Intersection.

Education:
BE in Civil Engineering, University of Baghdad; Leadership Certificate, Harvard Business School

Licenses/Registration/Certification:
CA PE # C80769, Exp. 3/31/21

Years of Experience: +28
Years with GHD: 7

Comparable Projects:

- *Project Director, OCPW On-Calls – Road, Bridge, Traffic Engineering, Coastal Engineering, Orange County, CA*
- *Project Manager, Wagon Wheel Creek Emergency Repairs, OC Parks, Coto de Caza, CA*

Victor Tirado, PE, ENV SP – Engineering Design Manager

Mr. Tirado has 18 years of Construction and Consulting engineering experience focused on staff management, planning, engineering, and construction. His emphasis is in large infrastructure projects, where he has successfully delivered complex multimodal projects involving port facilities, subsea infrastructure, municipal infrastructure, and recreational marina design among other elements. Victor's General Contracting and international experience is an instrumental resource of knowledge in the development of projects. He has executed numerous design-build projects and is highly familiar with the requirements.

Education:
BS in Applied Arts and Civil Engineering, San Diego State University
Licenses/Registration/Certification:
CA PE # C78086, Exp. 9/30/19
Years of Experience: +18
Years with GHD: +2

Comparable Projects:

- *Engineer of Record, Point Mugu Shoreline Erosion Design-Build, Ventura, CA*
- *Project Manager, Pier 8 Replacement DB Package, Naval Station San Diego, CA*

Greg Watanabe, PE – Quality Assurance Manager

Mr. Watanabe has over 20 years of experience in capital improvement program and project management and construction oversight with an emphasis in the management, planning, development, design, and construction of flood control and waterworks facilities including flood control channel diversions and improvements, regional water quality BMP basins, energy dissipaters, and collection systems for public and government agencies. He is also a certified Design and Construction Quality Manager as recognized by the US Army Corps of Engineers for design-build projects and has participated in the delivery of over a dozen design-build projects.

Education:
BS Civil Engineering - Emphasis in Environmental California State Polytechnic University, Pomona, Leadership Certificate, Harvard Business School
Licenses/Registration/Certification:
CA PE # 67618, Exp. 6/30/21
Years of Experience: +20
Years with GHD: 7

Comparable Projects:

- *Engineering Design Manager, Santa Ana River Enhanced Recharged Project, SBVMWD, San Bernardino, CA*
- *Engineering Design Manager, DB Los Cerritos Channel Sub-Basin 4 Regional Stormwater BMP and Diversion, City of Signal Hill, Long Beach, CA*

Craig Lewis, PE, SE – Structural Design Lead

Mr. Lewis has over 27 years of experience with the design and analysis of structural and multidisciplinary engineering elements for infrastructure, coastal, and utility systems. He has also performed static and dynamic analyses using various finite element structural programs and has extensive experience with hydrodynamic loading and seismic design. His experience includes design of repairs and new steel, concrete, and timber marine and waterfront structures and he has designed bulkheads and flood walls for a wide variety of loading conditions. Craig has led several sheet pile design and construction projects including Middle Harbor Containment Structure at Port of Oakland and City of Petaluma Flood Control project.

Education:
BS Civil Engineering, UC Davis
Licenses/Registration/Certification:
CA PE # 58706, CA SE # 4765, Exp. 12/31/20
Years of Experience: +27
Years with GHD: 27

Comparable Projects:

- *Lead Structural Engineer, Repair Bulkheads 1, 2, and 3, Naval Amphibious Base Coronado, San Diego, CA*
- *Lead Structural Engineer, Uniform Tango Wharf Bulkhead Replacement, Apra Harbor, Guam*

Jeff Knauer, PE, ME, NACE CP – Corrosion Engineering Lead

Mr. Knauer is a NACE certified Cathodic Protection Specialist with extensive experience in corrosion risk assessment and mitigation design for conveyance and distribution pipelines, pump stations, storage facilities and various water related infrastructure; marine and offshore structures; and oil and natural gas storage and conveyance systems. Mr. Knauer has designed numerous cathodic protection systems and has experience with design of corrosion control solutions in challenging environments and is an accomplished task leader for large scale corrosion assessment and rehabilitation projects and provides expert witness services.

Education:
MS Mechanical Engineering, University of California, San Diego; BS Mechanical Engineering, University of California, Los Angeles
Licenses/Registration/Certification:
CA PE #68329, Exp. 9/30/21; CA ME #31977, Exp. 6/30/20;
Years of Experience: 20
Years with GHD: 9

Comparable Projects:

- *Corrosion Engineer/Assessor, Port-Wide Corrosion Engineering Services, Port of San Francisco, San Francisco, CA*
- *Corrosion Engineer, China Basin Float Rehabilitation, Port of San Francisco, San Francisco, CA*

Larry Tortuya, PE, ENV SP, CFM – Flood Control Design Lead

Mr. Tortuya has over 17 years of experience in the design of flood control systems, including the implementation of soil cement and other material types. Mr. Tortuya has also led and been a part of key leadership roles for various Design-Build Projects, working with various contractors and agencies all over southern California. Mr. Tortuya currently works for OCPW as a Program Manager, is very familiar with their management systems and has worked closely with the Project Management staff at OCPW. Some of his design work for OCPW includes Peters Canyon Channel Widening, Barranca Channel Improvements, and San Diego Creek Embankment Protection. He is also the assistant project manager for the Los Cerritos Design & Build project.

Education:
BS Civil Engineering, California State Polytechnic University, Pomona; AS Engineering, Long Beach City College
Licenses/Registration/Certification:
CA PE #71502, Exp. 12/31/19
Years of Experience: 17
Years with GHD: +3

Comparable Projects:

- *Assistant Project Manager, Los Cerritos Channel Sub-Basin 4 Regional BMP and Diversion Design/Build, Signal Hill, CA*
- *Flood Control Lead, Wagon Wheel Creek Emergency Repairs, OC Parks, Coto de Caza, CA*

Brian Leslie – Permitting Liaison Design Lead

Mr. Leslie has over 15 years of experience as a coastal scientist and project manager for a variety of projects that involve shoreline protection, dredging, beach nourishment, wetland restoration and resilience to coastal hazards. He assists clients in the acquisition of permits in the coastal zone and in the preparation of environmental compliance (CEQA/NEPA) documents. Mr. Leslie has worked with the County on projects such as Lower Santa Ana River Maintenance Dredging Project and the Huntington Beach Sea Level Rise Vulnerability Assessment. Brian provides the interface between the Designers and the permitting agencies such as USACE and the CA Coastal Commission. Brian has helped clients such as U.S. Navy and OCPW with minimizing disturbance to eel grass and planning mitigation areas.

Education:
BS in Oceanography – Florida Institute of Technology; Coastal Engineering Certificate, Old Dominion University
Licenses/Registration/Certification:
Coastal Engineering Certificate
Years of Experience: 15
Years with GHD: +1

Comparable Projects:

- *Permitting Lead, Long Beach Cruise Terminal Improvements, Port of Long Beach, Long Beach, CA*
- *Project Manager, Cardiff State Beach Living Shoreline Project, Encinitas, CA*

Subconsultants/Subcontractors

John McCarthy, PE, CFM – Levee Certification Lead (Q3)

Mr. McCarthy is experienced in the development, design, and construction of flood control and drainage projects concentrating in the field of stormwater management, including hydrology studies, floodplain analysis, detailed hydraulic analyses, improvement plan preparation, and FEMA processing for floodplain revisions and levee certificadton. He has extensive experience in flood control facility design in Orange County, including the design of flood channels, dams, and levees, storm drain pipes, debris and detention basins, and ecosystem restoration projects. He has been involved in the design of over 20 miles of regional flood control facilities in Orange County.

Education:
BS Civil Engineering, California State Polytechnic University, San Luis Obispo
Licenses/Registration/Certification:
CA PE #47583, Exp. 12/31/19
Years of Experience: 30
Years with Q3: +1

Andrew Korkos, PE, GE – Geotechnical Design Lead (EMI)

Mr. Korkos has over 33 years of experience conducting and directing geotechnical studies for highway and railroad bridges, roadways and pavement, flood control facilities (including open channels, culverts, basins, levees, and pump stations), earth retaining structures, and buildings. Having worked at USACE and OCPW Materials Laboratory, Andrew is experienced with flood control facilitie and has worked on several large channel projects. Andrew is familiar with the OCPW flood control design manual and the County's Standard Plans, design guidelines and manuals used by Caltrans, the USACE, and the Division of Safety of Dams (DSOD). Mr. Korkos has worked with the County of Orange on multiple projects such as the East Garden Grove-Wintersburg Channel Levee Reconstruction Project, and Edinger Storm Channel, Newland Storm Channel, and Westminster Channel Improvement Projects.

Education:
MS, Civil Engineering, California State University, Long Beach, BS, Civil Engineering, California State University, Long Beach
Licenses/Registration/Certification:
Professional Licenses: CA PE # 44544 GE#2357, Exp. 3/31/20
Years of Experience: +33
Years with EMI: 23

Brad Jensen – Public Relations (MBI)

Mr. Jensen is a seasoned community outreach project manager with 15 years of experience coordinating and collaborating with a wide range of stakeholders. He develops communications strategy plans, coordinates collateral development, plans and facilitates events, oversees and maintains stakeholder databases, oversees the coordination of all media production projects, and oversees all day-to-day project tasks. Brad has provided public outreach services to the County of Orange on projects like the Southwest Anaheim Sidewalk Improvements, Santa Ana River Homeless Encampment Removal, and Peters Canyon Bikeway Project.

Education:
Business Management Courses, CA State Fullerton
Years of Experience: +15
Years with MBI: 15

Sarvjit Singh, NACE CP – Corrosion Engineering (Corrpro)

Mr. Singh has over 20 years of experience in Cathodic Protection (CP) Systems and other electrical systems. He has managed an extensive number of large-scale projects and has prepared the installation method statement of cathodic protection systems for various types of installations schemes. His expertise includes: Managing coating inspection projects, Soil Resistivity Survey, DCVG Survey, CIP Survey, Pipeline Current Mapping (PCM), Stray Current Mapping (SCM) Design, Installation, Testing and monitoring, Commissioning, Commissioning and Survey Data Analysis Reports of ICCP and Sacrificial CP System for Pipelines, Storage Tanks, Vessels, Steel Piles and Rebars in concrete.

Education:
BS Electrical Engineering, GN Engineering College, Ludhiana, India
Years of Experience: +20
Years with Corrpro: 20

Wes Smith, Forman Sheet Piling - (Blue Iron)

Mr. Smith possesses over 18-years of construction experience, 12-years with Blue Iron Inc. developing and implementing shoring, sheeting, and drilling work plans. He has been responsible for numerous press-in method sheet pile installations using Gieken silent pilers, including the previous Wintersburg Channel project (EEGWC).

Years of Experience: +18
Years with Blue Iron: 4

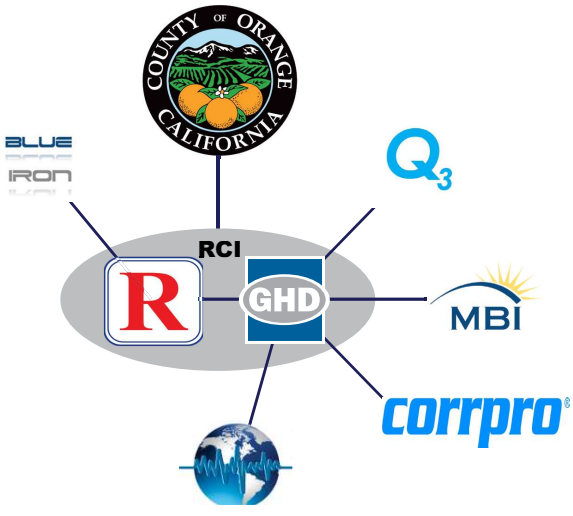
Experience of the Design-Build Team Working Together

RCI and GHD are currently teamed on two 5-year design-build Multiple Award Construction Contracts (MACC) for the U.S. Naval Facilities Command Southwest (NAVFAC SW) to provide Heavy Horizontal and Waterfront Facilities throughout the area of responsibility of NAVFAC SW, primarily in southern California. The MACC's were issued in 2018 and 2015 respectively. RCI and GHD have completed two (2) design-build projects under this MACC, and are in various stages of completion on two (2) more. Projects information and proposed design-build team members working together include:

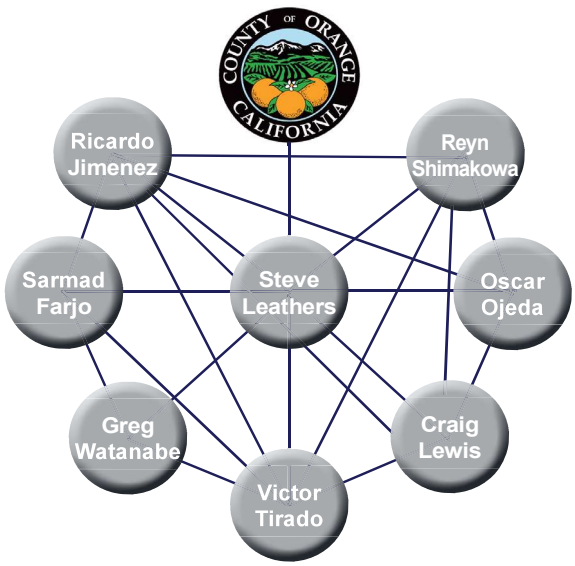
			Proposed Team Members	
Project Name	Location	Completed/Status	RCI	GHD
PE1225R Replace Concrete Boat Ramp	MCB Camp Pendleton, CA	2015	Ricardo Jimenez – Project Director Tom Beutler – Project Scheduler	Craig Lewis – Structural Design Project Manager Brett King - Structural Design Lead
C9Y6SY Shoreline Erosion Control	Point Mugu, CA	Estimated February 2020	Ricardo Jimenez – Project Director Joe Reyes Jr. – Project Superintendent Oscar Ojeda – QC Manager	Gillian Millar - Project Manager
Repair Wharf E	Naval Base Ventura County (NBVC), CA	2017	Ricardo Jimenez – Project Director	Craig Lewis – Structural Design Project Manager Brett King - Structural Design Lead
Repair of San Nicholas Island Pier	San Nicholas Island, CA	Estimated September 2019	Ricardo Jimenez – Project Director	Craig Lewis – Structural Design Project Manager

Established Partners- Same Team Delivery on Four Other DB Contracts, including similar Channel Improvement

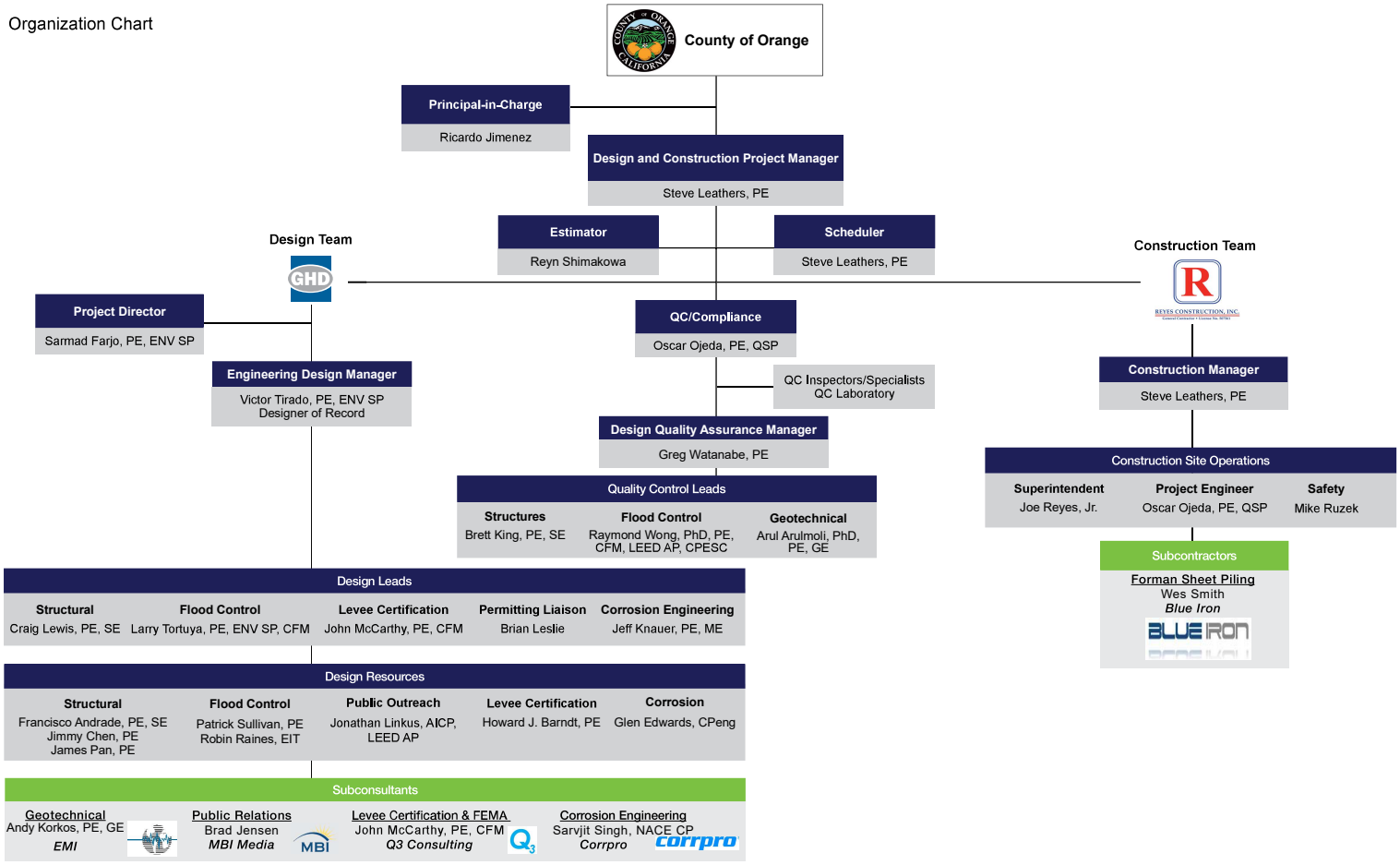
Companies Collaboration



Key Staff Collaboration



Organization Chart



ATTACHMENT C
STAFFING PLAN

1. KEY PERSONNEL

Name	Classification/Designation	Years of Experience	Licenses/Certifications (include license number)
Steven R. Leathers, PE	Project Manager, Scheduler	27	CA RCE 58063, AZ RCE 48053
Ricardo Jimenez	Principal-in-Charge	25	
Reyn Shimokawa	Estimator	24	
Joe Reyes Jr.	Superintendent	19	
Oscar Ojeda, PE	Quality Control, Project Engineer	22	CA RCE 55960
Mike Ruzek, CHST	Site Safety and Health Officer	17	

Design-Builder understands that the personnel represented as assigned to the Contract must remain working on the Contract throughout the duration of the Contract unless otherwise requested or approved by the County. Substitution or addition of Design-Builder's key personnel in any given category or classification shall be allowed only with prior written approval of the County's Project Manager. ***Note: The written approval of substituted Design-Builder Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works.***

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

2. SUBCONTRACTOR(S)

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

Company Name & Address	Contact Name and Telephone Number	Project Function
GHD Inc. 320 Goddard Way, Ste 200, Irvine, CA 92618	Sarmad Farjo, PE, ENV SP (949)585-5238	Design Project Director
Blue Iron Foundation & Shoring, LLC 3545 Carlin Dr, West Sacramento, CA	Chris Delarringa (916) 340-5600	Sheet Piling
Q3 Consulting 27042 Towne Centre Drive, Suite 110, Foothill Ranch, CA 92610	John McCarthy (949) 259-6730	Levee Certification & FEMA
Earth Mechanics, Inc. 17800 Newhope Street, Suite B, Fountain Valley, CA 92708	Andrew Korkos, PE, GE(714) 751-3826	Geotechnical Engineering
MBI Media 957 S. Village Oaks Dr., Covina, CA 91724	Dean Owens (626) 967-1510	Public Relations
Corrpro 10260 Matern Pl, Santa Fe Springs, CA 90670	Mike Prosperi (949) 637-0433	Corrosion Engineering

ATTACH ADDITIONAL SHEET(S) IF NECESSARY

5. Conceptual Design/Value Engineering Opportunities/Lifecycle Analysis

The RCI Team has conducted a thorough review of the exhibits to this RFP including the inspection reports, record drawings and project scoping memorandum. Specifically, the documents reviewed include the following:

Based on our team's specific experience with repair of waterfront facilities, we will develop and deliver an implementable program that minimizes conflicts and changes, and reduces geotechnical, environmental and stakeholder risk.

Review of Exhibits

Exhibit 1: Location Map

Planned Approach: The RCI Team is locally based and familiar with the flood channel system in Huntington Beach. The record information provided informs our approach to design and construction, including potential staging and laydown areas, access, existing utilities, and proximity to residential properties and potential community impacts.

Exhibit 2: Record Drawings

Planned Approach: The RCI Team has reviewed the record drawings provided with the County's RFP exhibits, noting the channel wall construction, structural details and utilities. This valuable information will guide the RCI Team toward a constructible, durable and efficient solution for the channel sheet pile walls.

Potential Value Engineering Opportunities: Working as a design-build team, the RCI Team can take advantage of the lessons learned working on similar waterfront projects and use of effective GHD structural repair details from past projects including sheet pile bulkhead repair and replacement at Naval Amphibious Base Coronado.

Exhibit 3: Post-Construction CP Testing Report

Planned Approach: The RCI Team will work closely with Corrpro to address cathodic protection deficiencies noted in report. Attachment of anodes or encapsulation of sheet piles will be needed in several areas to prevent further corrosion.

Potential Value Engineering Opportunities: Extend service life of existing sheet piles by delaying extent of corrosion to avoid repair and replacement in the near term.

Exhibit 4: Corrpro D01-D02 Assessment Report

Planned Approach: Corrpro and RCI inspection /design team to review report and confirm defects and deficiencies.

Potential Value Engineering Opportunities: The RCI Team will review of a FRP panel system to eliminate need for coating repair and cathodic protection. The team will evaluate methods to effectively encapsulate steel sheets and eliminate further deterioration, reduce required maintenance and meet the required minimum service life of 10 years.

Exhibit 5: County Consultant's Structural Assessment Report

Planned Approach: The RCI Team has reviewed the structural assessment report for Facility D01 and will review the report for Facility D02 when available. Use of information contained in the assessment reports will reduce the effort of the RCI inspection team. Field survey conducted by RCI will be a confirmation of existing defects / damage and determination of repair and replacement quantities. The critical steel thickness stated in the report will be confirmed in the structural assessment.

Potential Value Engineering Opportunities: Future maintenance and repairs can be reduced by revising the original design to incorporate new, longer-lasting and corrosive resistant materials that were not available at the time of original construction. The RCI team is reviewing the use of composite materials for wall elements such as the pile cap, which will reduce the need for future maintenance. A new wall facing composed of Fiber Reinforced Polymer (FRP) may be installed. A technique to prevent further deterioration of a steel sheet pile wall is to place a new structure between the wall and the water. A new facing resistant to the marine environment can be placed in front of the original channel wall with inert fill inserted between the two. The fill material halts further water contact with the wall - essentially by bonding tightly to the steel surface and remaining structural integrity of the wall will be maintained and further corrosion is stopped.

As long as the original sheet pile wall system retains structural stability, the new FRP face encasements require only enough strength to retain the fill material between the bulkhead and the new facing. Therefore, a material like FRP, which is stronger, more corrosion resistant, lighter in weight and less expensive than steel sheet pile, is a good choice for this repair technique. Structural repairs to D01 and D02 channel walls may consist of a combination of new steel sheet piling (marine grade steel, marine epoxy coating and cathodic protection) on the channel side where no utility conflicts exist, and use of either FRP or concrete cladding on the steel sheets where conflicting with existing utilities.

Exhibit 6: D01-D02 Preliminary Scoping Memo

All flood wall repair design will be integrated with existing utilities and infrastructure and meet OCFCD and FEMA's flood protection criteria

Planned Approach: The RCI Team has reviewed the County's scoping memo and considered the options for rehabilitation of the steel channel walls.

Potential Value Engineering Opportunities: The RCI Team will review use of

marine grade steel sheet piles for greater resistance to corrosion, allowing for reduction of CP systems and coating. Use of FRP panels to eliminate need for steel coating, encapsulation of sheet piling, and cathodic protection, all to meet the structural demands, service life requirements and reduce future maintenance requirements. The team is also reviewing use of a combination of repair and replacement, providing an efficient and durable structural wall solution.

Exhibit 7: Prior Geotechnical Reports

Planned Approach: EMI will be responsible for the geotechnical investigation, analysis and related tasks of the Project. Andy Korkos, PE has over 33 years contracting and directing geotechnical studies in southern California including multiple flood channel projects. The RCI Team will review building code, service life and performance requirements for the channel walls and perform a geotechnical investigation to develop earth pressures and surcharge lateral pressures based on in-situ conditions along the D01 and D02 alignments. These geotechnical design parameters are needed for structural assessment of the walls and design of repairs.

Potential Value Engineering Opportunities: EMI can perform additional geotechnical investigation and analysis to review and evaluate soil liquefaction potential, seismically-induced settlement, foundation, and levee stability if required for FEMA levee recertification.

Lifecycle Analysis

The RCI Team conducted a thorough review of the exhibits to this RFP including the assessment and inspection reports, record drawings, and project scoping memorandum. We have conducted a systematic analysis of project requirements and channel wall repair options. Based on the following 4 key indicators for project success, RCI believes that building upon and enhancing the channel wall repair options presented in the RFP Exhibits will provide the most effective lifecycle value for the County.

If awarded the Contract, the RCI Team will implement the following enhancements and solutions:

1. Installation of of replacement steel sheet piles using the press-in method on each side of the channel

The result of utilizing this installation method will be to minimize impacts to adjacent properties and sensitive habitat, while reducing the construction schedule. The RCI Team is experienced with this type of sheet pile installation

2. Increased Service Life for Flood Channel Walls

Replacement steel sheet piles for the Huntington Beach Channel/Talbert Channel will have a design life of approximately 50-75 years. Coatings, cathodic protection and maintenance will maintain this life span. The RCI Team has considered lifecycle alternatives, including sacrificial steel thickness, enhanced grade steel, and galvanizing or using other inert chemical treatments to extend the service life of the piles below ground.

3. Compatibility with Existing Utilities and Infrastructure

The RCI Team will evaluate the feasibility and lifecycle cost effectiveness of selectively using cladding near the existing bridge structures (Assessment Study - Option 3) where utility pipelines currently run through the existing steel sheet piling. This avoids the need for costly utility relocation. Alternative cladding materials will be considered, including Fiber Reinforced Polymer (FRP), concrete, or steel plate with industrial marine epoxy coating and cathodic protection. ***These claddings can be formed around the existing utilities, thereby eliminating the need for costly relocation and potential schedule impacts associated with the relocation planning and implementation.***

In channel locations without utilities penetrating the existing steel sheet piles, it will likely be more cost effective to install new steel sheet piling in front of the existing sheet piles (waterside) as described in Option 4. Some channel areas may only require localized welded patch and plate repairs (Option 2). In addition to reviewing the previous studies provided by the County, our team will verify and confirm existing conditions to validate the findings of the previous studies. Should it be determined that localized repairs along with enhanced cathodic protection or coatings is sufficient to provide the desired lifespan and is deemed more cost-effective than the other options, localized welding repairs will be considered. We anticipate that a combination of Option 2, 3, and 4 may be implemented to achieve the project objective.

4. Selected Design will allow Recertification of Levees

The RCI Team has the County's ultimate goal of recertification foremost in our evaluation of alternatives. The team's geotechnical engineers are prepared to perform detailed analysis as needed to evaluate liquefaction and levee stability. The selected design concept will be determined based on the structural condition assessment, channel hydraulics, specific design criteria to maintain FEMA accreditation, and value engineering analyses. The RCI Team will work seamlessly with the County's certification consultant.

Based on the record information contained in the RFP Exhibits, a combination of new steel sheet piles with selective areas of cladding and welding repairs appears to offer the best-value method of repair, while meeting the criteria required for levee recertification. As introduction of new sheet piling and cladding installed waterside of the existing steel sheet piling decreases the channel width and resulting hydraulic capacity, other alternatives such as installation of new structural sheet piles installed landside of the existing steel sheet piles will also be considered.

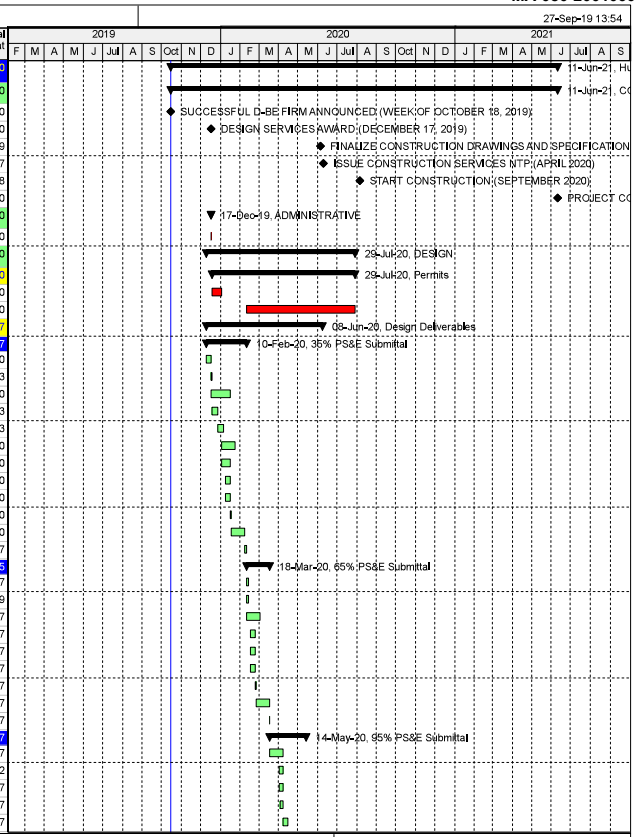
C. Detailed Project Schedule

Appendix C

Reyes Construction, Inc. **MA-080-20010602**

RFP No. 080-C25204-NM Huntington Beach Channel and Talbert Channel Sheet Pile Repair Project | Bar Chart Layout | 27-Sep-19 13:54

Activity ID	Activity Name	Original Duration	Activity % Complete	Start	Finish	Total Float
Huntington/Talbert Sheet Pile Repair		429		15-Oct-19	11-Jun-21	0
CONTRACT MILESTONES		419		15-Oct-19	11-Jun-21	0
MILE-000	SUCCESSFUL D-BE FIRM ANNOUNCED (WEEK OF OCTOBER 18, 2019)	0	0%	15-Oct-19*		0
MILE-100	DESIGN SERVICES AWARD (DECEMBER 17, 2019)	0	0%	17-Dec-19*		0
MILE-120	FINALIZE CONSTRUCTION DRAWINGS AND SPECIFICATIONS (JULY 2020)	0	0%		05-Jun-20*	39
MILE-110	ISSUE CONSTRUCTION SERVICES NTP (APRIL 2020)	0	0%	09-Jun-20*		37
MILE-130	START CONSTRUCTION (SEPTEMBER 2020)	0	0%	06-Aug-20*		38
MILE-140	PROJECT COMPLETION (JUNE 2021)	0	0%		11-Jun-21*	0
ADMINISTRATIVE		1		17-Dec-19	17-Dec-19	0
AD-100	PROJECT KICKOFF MEETING	1	0%	17-Dec-19	17-Dec-19	0
DESIGN		164		10-Dec-19	29-Jul-20	20
Permits		156		18-Dec-19	29-Jul-20	0
PER-100	OBTAIN ENCROACHMENT PERMITS	10	0%	18-Dec-19	02-Jan-20	0
PER-110	OBTAIN ENVIRONMENTAL PERMITS	120	0%	10-Feb-20	29-Jul-20	0
Design Deliverables		127		10-Dec-19	08-Jun-20	57
35% PS&E Submittal		42		10-Dec-19	10-Feb-20	17
D-135	ALTERNATIVE ANALYSIS STUDY	5	0%	10-Dec-19	17-Dec-19	0
D-100	DEVELOP PROJECT WORK PLAN	2	0%	17-Dec-19	19-Dec-19	3
D-140	PREPARE 35% PRELIMINARY DESIGN	20	0%	17-Dec-19	16-Jan-20	0
D-110	DATA COLLECTION AND REVIEW	5	0%	19-Dec-19	27-Dec-19	3
D-120	BASIS OF DESIGN MEMORANDUM	5	0%	27-Dec-19	06-Jan-20	3
D-130	INVESTIGATIONS AND SURVEY	15	0%	02-Jan-20	23-Jan-20	0
D-150	PREPARE PROJECT REPORT	10	0%	02-Jan-20	16-Jan-20	0
D-160	CONDUCT INDEPENDENT REVIEW OF 35% DESIGN	5	0%	09-Jan-20	16-Jan-20	0
D-170	CONDUCT 35% CONSTRUCTABILITY REVIEW	5	0%	09-Jan-20	16-Jan-20	0
D-180	SUBMIT 35% DESIGN SUBMITTAL	1	0%	16-Jan-20	17-Jan-20	0
D-190	COUNTY AND STAKEHOLDER REVIEW OF 35% DESIGN SUBMITTAL	15	0%	17-Jan-20	07-Feb-20	0
D-200	CONDUCT 35% DESIGN SEMINAR	1	0%	07-Feb-20	10-Feb-20	17
65% PS&E Submittal		27		10-Feb-20	18-Mar-20	115
D-300	HYDRAULIC ANALYSES	3	0%	10-Feb-20	13-Feb-20	17
D-310	RELOCATE/ABANDON UTILITY NOTIFICATIONS/DESIGN	3	0%	10-Feb-20	13-Feb-20	139
D-320	PREPARE 65% PS&E DESIGN SUBMITTAL	15	0%	10-Feb-20	02-Mar-20	17
D-330	UPDATE PROJECT REPORT	5	0%	17-Feb-20	24-Feb-20	17
D-340	CONDUCT INDEPENDENT REVIEW OF 65% PS&E DESIGN	5	0%	17-Feb-20	24-Feb-20	17
D-350	CONDUCT CONSTRUCTABILITY REVIEW OF 65% PS&E DESIGN	5	0%	17-Feb-20	24-Feb-20	17
D-360	SUBMIT 65% PS&E DESIGN	1	0%	24-Feb-20	25-Feb-20	17
D-370	COUNTY AND STAKEHOLDER REVIEW OF 65% PS&E	15	0%	25-Feb-20	17-Mar-20	17
D-380	CONDUCT 65% PS&E DESIGN SEMINAR	1	0%	17-Mar-20	18-Mar-20	17
95% PS&E Submittal		41		18-Mar-20	14-May-20	17
D-500	PREPARE 95% PS&E DESIGN SUBMITTAL	15	0%	18-Mar-20	08-Apr-20	17
D-520	CONDUCT INDEPENDENT REVIEW OF 95% PS&E DESIGN	5	0%	01-Apr-20	08-Apr-20	22
D-530	CONDUCT CONSTRUCTABILITY REVIEW OF 95% PS&E DESIGN	5	0%	01-Apr-20	08-Apr-20	17
D-510	UPDATE PROJECT REPORT	3	0%	03-Apr-20	08-Apr-20	17
D-540	PREPARE CONSTRUCTION SERVICES GMP	5	0%	08-Apr-20	15-Apr-20	17



Actual Work
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REYES CONSTRUCTION INC.

Huntington/Talbert Sheet Pile Repair

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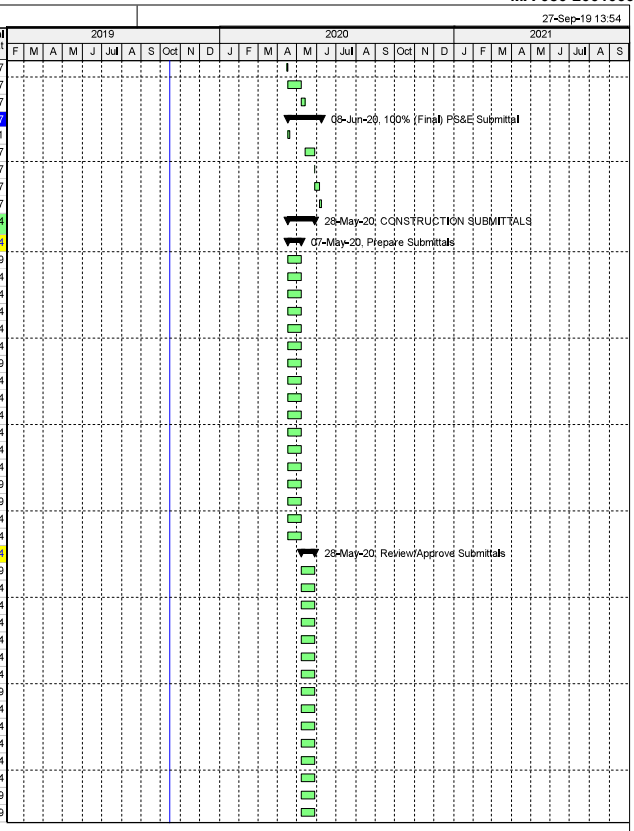
Reyes Construction, Inc. **MA-080-20010602**

RFP No. 080-C25204-NM Huntington Beach Channel and Talbert Channel Sheet Pile Repair Project | Bar Chart Layout | 27-Sep-19 13:54

Activity ID	Activity Name	Original Duration	Activity % Complete	Start	Finish	Total Float
D-550	SUBMIT 95% PS&E DESIGN (INC FINAL GMP)	1	0%	15-Apr-20	16-Apr-20	17
D-560	COUNTY AND STAKEHOLDER REVIEW OF 95% PS&E DESIGN	15	0%	16-Apr-20	07-May-20	17
D-570	CONDUCT 95% PS&E DESIGN SEMINAR	5	0%	07-May-20	14-May-20	17
100% (Final) PS&E Submittal		37		16-Apr-20	08-Jun-20	17
D-700	NEGOTIATE FINAL GMP	2	0%	16-Apr-20	20-Apr-20	51
D-710	PREPARE FINAL PS&E DESIGN	10	0%	14-May-20	28-May-20	17
D-720	SUBMIT FINAL (100%) PS&E DESIGN	1	0%	28-May-20	29-May-20	17
D-740	OBTAIN APPROVAL SIGNATURES	5	0%	29-May-20	05-Jun-20	17
D-750	ISSUE CONSTRUCTION SERVICES NTP	1	0%	05-Jun-20	08-Jun-20	17
CONSTRUCTION SUBMITTALS		30		16-Apr-20	28-May-20	254
Prepare Submittals		15		16-Apr-20	07-May-20	254
SUB-100	P/S SWPPP	15	0%	16-Apr-20	07-May-20	49
SUB-110	P/S CLEAR WATER DIVERSION PLAN	15	0%	16-Apr-20	07-May-20	64
SUB-120	P/S HAUL ROUTE PLAN	15	0%	16-Apr-20	07-May-20	44
SUB-130	P/S TRAFFIC CONTROL PLAN	15	0%	16-Apr-20	07-May-20	44
SUB-140	P/S PILE DRIVING WORK PLAN	15	0%	16-Apr-20	07-May-20	84
SUB-150	P/S SHEET PILE MATERIALS	15	0%	16-Apr-20	07-May-20	24
SUB-160	P/S AGGREGATE PRODUCT DATA	15	0%	16-Apr-20	07-May-20	209
SUB-170	P/S WELDING QUALIFICATIONS/WORK PLAN	15	0%	16-Apr-20	07-May-20	204
SUB-180	P/S INDUSTRIAL COATING MATERIALS	15	0%	16-Apr-20	07-May-20	24
SUB-190	P/S CATHODIC PROTECTION MATERIALS	15	0%	16-Apr-20	07-May-20	184
SUB-200	P/S TEMPORARY SHORING PLAN	15	0%	16-Apr-20	07-May-20	64
SUB-105	P/S MONITORING PLAN	15	0%	16-Apr-20	07-May-20	44
SUB-210	P/S PILE CAP MATERIALS	15	0%	16-Apr-20	07-May-20	204
SUB-220	P/S FENCING MATERIALS	15	0%	16-Apr-20	07-May-20	219
SUB-230	P/S CONCRETE MIX DESIGN	15	0%	16-Apr-20	07-May-20	249
SUB-240	P/S ASPHALT MIX DESIGN	15	0%	16-Apr-20	07-May-20	254
SUB-250	P/S UTILITY PIPING MATERIALS	15	0%	16-Apr-20	07-May-20	224
Review/Approve Submittals		15		07-May-20	28-May-20	254
REV-100	R/A SWPPP	15	0%	07-May-20	28-May-20	49
REV-105	R/A MONITORING PLAN	15	0%	07-May-20	28-May-20	44
REV-110	R/A CLEAR WATER DIVERSION PLAN	15	0%	07-May-20	28-May-20	64
REV-120	R/A HAUL ROUTE PLAN	15	0%	07-May-20	28-May-20	44
REV-130	R/A TRAFFIC CONTROL PLAN	15	0%	07-May-20	28-May-20	44
REV-140	R/A PILE DRIVING WORK PLAN	15	0%	07-May-20	28-May-20	84
REV-150	R/A SHEET PILE MATERIALS	15	0%	07-May-20	28-May-20	24
REV-160	R/A AGGREGATE PRODUCT DATA	15	0%	07-May-20	28-May-20	209
REV-170	R/A WELDING QUALIFICATIONS/WORK PLAN	15	0%	07-May-20	28-May-20	204
REV-180	R/A INDUSTRIAL COATING MATERIALS	15	0%	07-May-20	28-May-20	24
REV-190	R/A CATHODIC PROTECTION MATERIALS	15	0%	07-May-20	28-May-20	184
REV-200	R/A TEMPORARY SHORING PLAN	15	0%	07-May-20	28-May-20	64
REV-210	R/A PILE CAP MATERIALS	15	0%	07-May-20	28-May-20	204
REV-220	R/A FENCING MATERIALS	15	0%	07-May-20	28-May-20	219
REV-230	R/A CONCRETE MIX DESIGN	15	0%	07-May-20	28-May-20	249



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REYES CONSTRUCTION INC.

Huntington/Talbert Sheet Pile Repair

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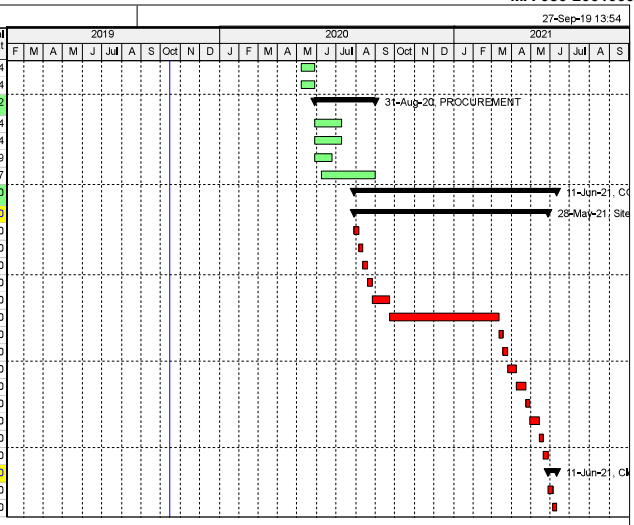
Reyes Construction, Inc. **MA-080-20010602**

RFP No. 080-C25204-NM Huntington Beach Channel and Talbert Channel Sheet Pile Repair Project | Bar Chart Layout | 27-Sep-19 13:54

Activity ID	Activity Name	Original Duration	Activity % Complete	Start	Finish	Total Float
REV-240	R/A ASPHALT MIX DESIGN	15	0%	07-May-20	28-May-20	254
REV-250	R/A UTILITY PIPING MATERIALS	15	0%	07-May-20	28-May-20	224
PROCUREMENT		67		28-May-20	31-Aug-20	172
PRO-110	PROCURE CATHODIC PROTECTION MATERIALS	30	0%	28-May-20	09-Jul-20	184
PRO-120	PROCURE FRP PILE CAP	30	0%	28-May-20	09-Jul-20	204
PRO-130	FABRICATE FENCING	20	0%	28-May-20	25-Jun-20	219
PRO-100	PROCURE & DELIVER SHEET PILES	60	0%	08-Jun-20	31-Aug-20	17
CONSTRUCTION		225		29-Jul-20	11-Jun-21	0
Sitework		215		29-Jul-20	28-May-21	0
C-100	MOBILIZE	5	0%	29-Jul-20	05-Aug-20	0
C-110	IMPLEMENT SWPPP	5	0%	05-Aug-20	12-Aug-20	0
C-115	REMOVE INTERFERING PILE CAP AND FENCING	5	0%	12-Aug-20	19-Aug-20	0
C-120	REMOVE RIP RAP IN CONFLICT WITH NEW SHEET PILING	5	0%	19-Aug-20	26-Aug-20	0
C-130	TEMPORARY UTILITY RELOCATIONS	20	0%	26-Aug-20	23-Sep-20	0
C-140	INSTALL NEW SHEET PILING	120	0%	23-Sep-20	12-Mar-21	0
C-150	WELD STEEL CHANNEL BTWN EXIST AND NEW SHEET PILES	5	0%	12-Mar-21	19-Mar-21	0
C-160	BACKFILL SAND BTWN EXIST AND NEW SHEET PILING	5	0%	19-Mar-21	26-Mar-21	0
C-170	INSTALL CATHODIC PROTECTION SYSTEM	10	0%	26-Mar-21	09-Apr-21	0
C-180	RE-INSTALL UTILITIES	10	0%	09-Apr-21	23-Apr-21	0
C-190	INSTALL NEW PILE CAP	5	0%	23-Apr-21	30-Apr-21	0
C-200	INSTALL NEW FENCING	10	0%	30-Apr-21	14-May-21	0
C-210	RECONSTRUCT CONCRETE DRAINAGE DITCH	5	0%	14-May-21	21-May-21	0
C-220	RE-PAVE MAINTENANCE ROAD	5	0%	21-May-21	28-May-21	0
Closeout		10		28-May-21	11-Jun-21	0
PC-100	FINAL CLEANUP AND PUNCHLIST	5	0%	28-May-21	04-Jun-21	0
PC-110	DEMOBILIZE CONSTRUCTION EQUIPMENT	5	0%	04-Jun-21	11-Jun-21	0



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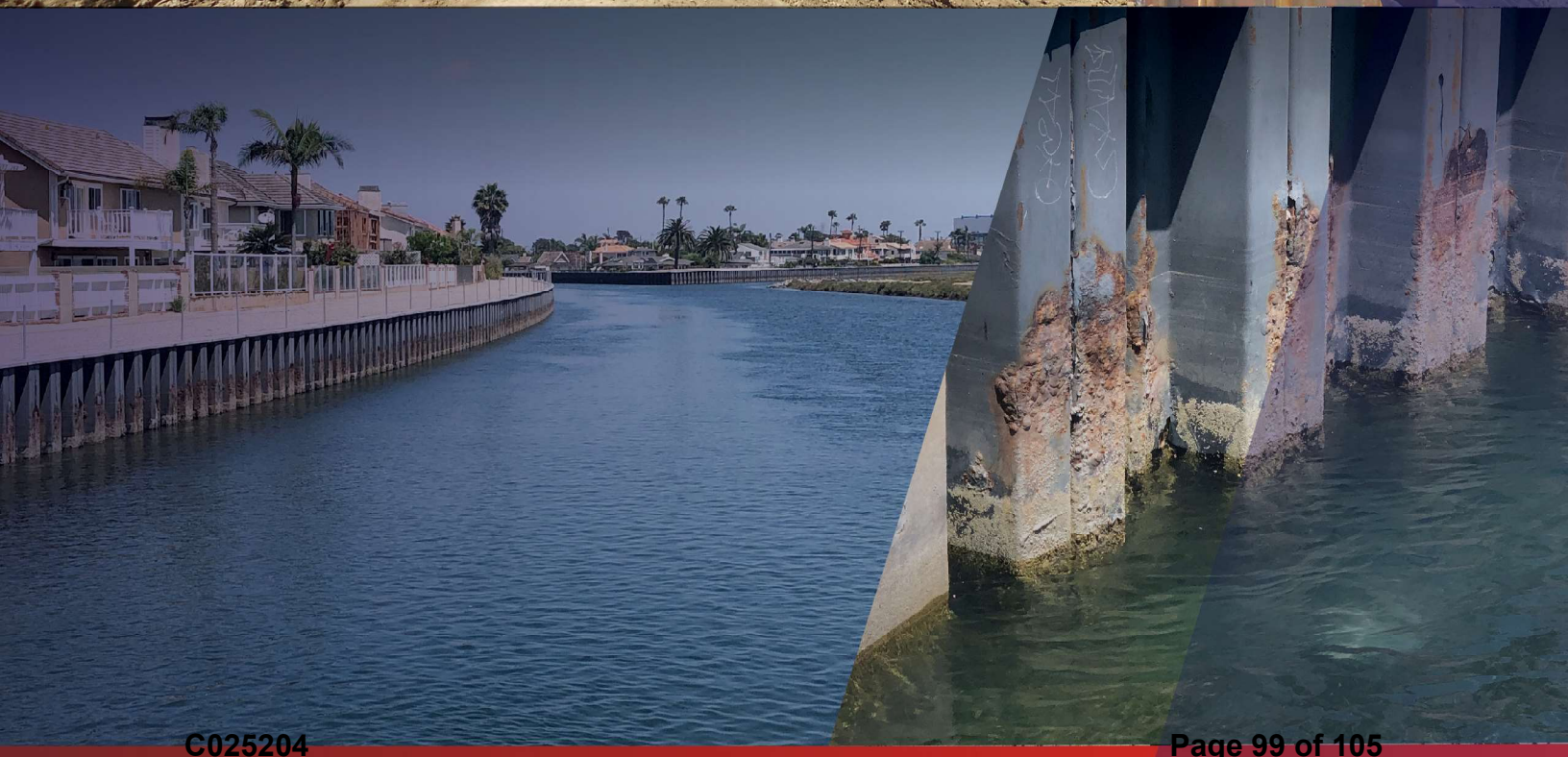

ATTACHMENT B
COST/COMPENSATION

I. **COMPENSATION**: This is a Not-to-Exceed Guaranteed Maximum Price (GMP) Contract between the County and Design-Build Entity (D-BE) for design services for Huntington Beach Channel and Talbert Channel Sheet Pile Repair Project, as set forth in Attachment A, Scope of Work.

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

II. **PRICE**:

A. Total Contract Amount:

Proposed Fee:

Design Services Fee:	$ 2,329,077
D-BE Contingency:	$517,500
Total Design Services GMP for the Project:	**$2,846,577**
Construction Services Profit Margin:	7.00%
Construction Services Labor & Overhead:	5.00%
Total Construction Fee for the Project:	**12.00%**

B. Classification Rates:

Design-Build Entity – Reyes Construction, Inc.	
Classification Titles	**Hourly Rate**
Project Manager	$148.00
Project Engineer	$101.00
Superintendent	$143.00
Chief Estimator	$145.00
Junior Estimator	$101.00
Site Safety Manager	$104.00
Scheduler	$105.00
Operator Foreman	$106.00
Operator	$103.00
Laborer Foreman	$83.00
Laborer	$81.00

*Subcontractor – GHD Inc.	
Classification Titles	**Hourly Rate**
Principal Engineer/Scientist/Project Manager	$266.00
Supervisory Engineer/Scientist	$242.00
Senior Engineer/Scientist	$222.00
Engineer/Scientist III	$205.00
Engineer/Scientist II	$180.00
Engineer/Scientist I	$160.00
Staff Engineer/Scientist	$127.00
Senior Technician	$175.00
Designer	$165.00
CADD II	$139.00
CADD I	$103.00
Project Control	$110.00
Word Processing	$103.00
General Clerical	$92.00

*Subcontractor – Q3 Consulting	
Classification Titles	**Hourly Rate**
Project Director	$225.00
Senior Technical Manager	$195.00
Senior Engineer	$175.00
Project Engineer	$165.00
Design Engineer	$135.00
GIS Analyst	$125.00

*Subcontractor – Earth Mechanics, Inc.	
Classification Titles	**Hourly Rate**
Principal/Consultant	$250.00
Principal Engineer/PM	$210.00
Project Engineer	$140.00
Senior Staff Engineer	$120.00
Senior Technician	$120.00

*Subcontractor – MBI Media	
Classification Titles	**Hourly Rate**
Senior Project Manager	$145.31
Project Manager	$104.50
Account Coordinator II	$75.11
Account Coordinator I	$58.78
Graphic Web Design	$95.52

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

***Subcontractor – Corrpro**	
Classification Titles	**Hourly Rate**
Registered Professional Engineer	$215.00
Project Manager	$180.00
Certified NACE International CP Specialist	$165.00
Field Engineer	$135.00
AutoCad	$95.00
Administration	$65.00

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

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

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

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

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

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

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

A. Name and address
B. Remittance address, if different from (A), above
C. Name of County agency/department
D. Delivery/service address
E. Contract number
F. Service Date
G. Description of Services
H. Total
I. Taxpayer ID number

Invoices and support documentation are to be forwarded to:

TBD

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

ATTACHMENT C
STAFFING PLAN

1. KEY PERSONNEL

Name	Classification/Designation	Years of Experience	Licenses/Certifications (include license number)
Steven R. Leathers, PE	Project Manager, Scheduler	27	CA RCE 58063, AZ RCE 48053
Ricardo Jimenez	Principal-in-Charge	25	
Reyn Shimokawa	Estimator	24	
Joe Reyes Jr.	Superintendent	19	
Oscar Ojeda, PE	Quality Control, Project Engineer	22	CA RCE 55960
Mike Ruzek, CHST	Site Safety and Health Officer	17	

Design-Builder understands that the personnel represented as assigned to the Contract must remain working on the Contract throughout the duration of the Contract unless otherwise requested or approved by the County. Substitution or addition of Design-Builder's key personnel in any given category or classification shall be allowed only with prior written approval of the County's Project Manager. ***Note: The written approval of substituted Design-Builder Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works.***

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

2. SUBCONTRACTOR(S)

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

Company Name & Address	Contact Name and Telephone Number	Project Function
GHD Inc. 320 Goddard Way, Suite 200 Irvine, CA 92618	Sarmad Farjo, PE, ENV SP (949)585-5238	Design Project Director
Q3 Consulting 27042 Towne Centre Drive, Suite 110 Foothill Ranch, CA 92610	John McCarthy (949) 259-6730	Levee Certification & FEMA
Earth Mechanics, Inc. 17800 Newhope Street, Suite B Fountain Valley, CA 92708	Andrew Korkos, PE, GE(714) 751-3826	Geotechnical Engineering
MBI Media 957 S Village Oaks Drive Covina, CA 91724	Dean Owens (626) 967-1510	Public Relations
Corrpro 10260 Matern Place Santa Fe Springs, CA 90670	Mike Prosperi (949) 637-0433	Corrosion Engineering
Blue Iron Foundation & Shoring, LLC 3545 Carlin Drive West Sacramento, CA 95691	Chris Delarringa (916) 340-5600	Sheet Piling

ATTACH ADDITIONAL SHEET(S) IF NECESSARY