

PROFESSIONAL CONSTRUCTION SERVICES AGREEMENT

THIS PROFESSIONAL CONSTRUCTION SERVICES AGREEMENT (Agreement) is made and entered into to be effective the 26th day of May 2021 by and between the ORANGE COUNTY SANITATION DISTRICT, hereinafter referred to as "SANITATION DISTRICT", and HDR ENGINEERING, INC., hereinafter referred to as "CONSULTANT".

WITNESSETH:

WHEREAS, the SANITATION DISTRICT desires to engage a consultant to provide construction support services for **Contract No. P1-128A, HEADQUARTERS COMPLEX AT PLANT NO. 1** (Construction Support Services); and

WHEREAS, CONSULTANT is qualified to provide the necessary services for Construction Support Services in connection with these requirements; and

WHEREAS, the SANITATION DISTRICT has adopted procedures in accordance with the SANITATION DISTRICT's Purchasing Ordinance Section 4.03(B) for the continuation of services and has proceeded in accordance with said procedures to perform this work; and

WHEREAS, at its regular meeting on May 26, 2021 the Board of Directors, by Minute Order, accepted the recommendation of the Operations Committee to approve this Agreement between the SANITATION DISTRICT and CONSULTANT.

NOW, THEREFORE, in consideration of the promises and mutual benefits, which will result to the parties in carrying out the terms of this Agreement, it is mutually agreed as follows:

1. SCOPE OF WORK

CONSULTANT agrees to furnish necessary professional and technical services to accomplish those project elements outlined in the Scope of Work attached hereto as "Attachment A", and by this reference made a part of this Agreement.

- A. The CONSULTANT shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all design, drawings, specifications, and other services furnished by the CONSULTANT under this Agreement, including the work performed by its subconsultants (Subconsultants). Where approval by the SANITATION DISTRICT is indicated, it is understood to be conceptual approval only and does not relieve the CONSULTANT of responsibility for complying with all laws, codes, industry standards, and liability for damages caused by errors, omissions, noncompliance with industry standards, and/or negligence on the part of the CONSULTANT or its Subconsultants.
- B. CONSULTANT is responsible for the quality of work prepared under this Agreement and shall ensure that all work is performed to industry standards of engineering practice for clarity, uniformity, and completeness.

C. In the event that work does not conform to the requirements of this Agreement or any applicable industry standards, the CONSULTANT shall, without additional compensation, promptly correct or revise any errors or deficiencies in its designs, drawings, specifications, or other services within the timeframe specified by the Project Engineer/Project Manager. The SANITATION DISTRICT may charge to CONSULTANT all costs, expenses, and damages associated with any such corrections or revisions.

D. All CADD drawings, figures, and other work shall be produced by CONSULTANT and its Subconsultants using the SANITATION DISTRICT standard software. Conversion of CADD work from any other non-standard CADD format to the SANITATION DISTRICT format shall not be acceptable in lieu of this requirement.

Electronic files shall be subject to an acceptance period of thirty (30) calendar days during which the SANITATION DISTRICT shall perform appropriate acceptance tests. In the event that the work does not conform to the requirements of this Agreement or the applicable industry standards, CONSULTANT shall correct any discrepancies or errors detected and reported within the acceptance period at no additional cost to the SANITATION DISTRICT.

E. All professional services performed by the CONSULTANT, including, but not limited to, all drafts, data, correspondence, proposals, reports, and estimates compiled or composed by the CONSULTANT, pursuant to this Agreement, are for the sole use of the SANITATION DISTRICT, its agents, and employees. Neither the documents nor their contents shall be released to any third party without the prior written consent of the SANITATION DISTRICT. This provision does not apply to information that (a) was publicly known, or otherwise known to the CONSULTANT, at the time that it was disclosed to the CONSULTANT by the SANITATION DISTRICT or (b) subsequently becomes publicly known to the CONSULTANT other than through disclosure by the SANITATION DISTRICT.

2. COMPENSATION

Total compensation shall be paid to CONSULTANT for services in accordance with the following provisions:

A. Total Compensation

Total compensation shall be in an amount not to exceed Four Million Nine Hundred Thousand Dollars (\$4,900,000). Total compensation to CONSULTANT including burdened labor (salaries plus benefits), overhead, profit, direct costs, and Subconsultant(s) fees and costs shall not exceed the sum set forth in Attachment "E" - Fee Proposal.

B. Labor

As a portion of the total compensation to be paid to CONSULTANT, the SANITATION DISTRICT shall pay to CONSULTANT a sum equal to the burdened salaries (salaries plus benefits) actually paid by CONSULTANT

charged on an hourly-rate basis to this project and paid to the personnel of CONSULTANT. Upon request of the SANITATION DISTRICT, CONSULTANT shall provide the SANITATION DISTRICT with certified payroll records of all employees' work that is charged to this project.

C. Overhead

As a portion of the total compensation to be paid to CONSULTANT, the SANITATION DISTRICT shall compensate CONSULTANT and Subconsultants for overhead at the rate equal to the percentage of burdened labor as specified in Attachment "E" - Fee Proposal.

D. Profit

Profit for CONSULTANT and its Subconsultants shall be a percentage of consulting services fees (Burdened Labor and Overhead). When the consulting or subconsulting services amount is \$250,000 or less, the maximum Profit shall be 10%. Between \$250,000 and \$2,500,000, the maximum Profit shall be limited by a straight declining percentage between 10% and 5%. For consulting or subconsulting services fees with a value greater than \$2,500,000, the maximum Profit shall be 5%. Addenda shall be governed by the same maximum Profit percentage after adding consulting services fees.

As a portion of the total compensation to be paid to CONSULTANT and its Subconsultants, the SANITATION DISTRICT shall pay profit for all services rendered by CONSULTANT and its Subconsultants for this project according to Attachment "E" - Fee Proposal.

E. Subconsultants

For any Subconsultant whose fees for services are greater than or equal to \$100,000 (excluding out-of-pocket costs), CONSULTANT shall pay to Subconsultant total compensation in accordance with the Subconsultant amount specified in Attachment "E" - Fee Proposal.

For any Subconsultant whose fees for services are less than \$100,000, CONSULTANT may pay to Subconsultant total compensation on an hourly-rate basis per the attached hourly rate Schedule and as specified in the Scope of Work. The SANITATION DISTRICT shall pay to CONSULTANT the actual costs of Subconsultant fees and charges in an amount not to exceed the sum set forth in Attachment "E" - Fee Proposal.

F. Direct Costs

The SANITATION DISTRICT shall pay to CONSULTANT and its Subconsultants the actual costs of permits and associated fees, travel, and licenses for an amount not to exceed the sum set forth in Attachment "E" - Fee Proposal. The SANITATION DISTRICT shall also pay to CONSULTANT actual costs for equipment rentals, leases, or purchases with prior approval of the SANITATION DISTRICT. Upon request, CONSULTANT shall provide to the SANITATION

DISTRICT receipts and other documentary records to support CONSULTANT's request for reimbursement of these amounts, see Attachment "D" – Allowable Direct Costs. All incidental expenses shall be included in overhead pursuant to Section 2 - COMPENSATION above.

G. Other Direct Costs

Other Direct Costs incurred by CONSULTANT and its contractor due to modifications in the Scope of Work resulting from field investigations and field work. These items may include special equipment, test equipment and tooling, and other materials and services not previously identified. Refer to attachment "D" Allowable Direct Costs for payment information.

H. Reimbursable Direct Costs

The SANITATION DISTRICT will reimburse the CONSULTANT for reasonable travel and business expenses as described in this section and further described in Attachment "D" - Allowable Direct Costs to this Agreement. The reimbursement of the above-mentioned expenses will be based on an "accountable plan" as considered by the U.S. Internal Revenue Service (IRS). The plan includes a combination of reimbursements based upon receipts and a "per diem" component approved by the IRS. The most recent schedule of the per diem rates utilized by the SANITATION DISTRICT can be found on the U.S. General Services Administration (GSA) website at <http://www.gsa.gov/portal/category/104711#>.

The CONSULTANT shall be responsible for the most economical and practical means of management of reimbursable costs inclusive but not limited to travel, lodging, and meals arrangements. The SANITATION DISTRICT shall apply the most economic and practical method of reimbursement which may include reimbursements based upon receipts and/or "per diem" as deemed the most practical.

CONSULTANT shall be responsible for returning to the SANITATION DISTRICT any excess reimbursements after the reimbursement has been paid by the SANITATION DISTRICT.

Travel and travel arrangements – Any travel involving airfare, overnight stays, or multiple day attendance must be approved by the SANITATION DISTRICT in advance.

Local Travel is considered travel by the CONSULTANT within the SANITATION DISTRICT general geographical area which includes Orange, Los Angeles, Ventura, San Bernardino, Riverside, San Diego, and Imperial and Kern Counties. Automobile mileage is reimbursable if CONSULTANT is required to utilize personal vehicle for local travel.

Lodging – Overnight stays will not be approved by the SANITATION DISTRICT for local travel. However, under certain circumstances, overnight stay may be allowed at the discretion of the SANITATION DISTRICT based on reasonableness of meeting schedules and the amount of time required for travel by the

CONSULTANT. Such determination will be made on a case-by-case basis and at the discretion of the SANITATION DISTRICT.

Travel Meals – Per-diem rates as approved by the IRS shall be utilized for travel meals reimbursements. Per diem rates shall be applied to meals that are appropriate for travel times. Receipts are not required for the approved meals.

Additional details related to the reimbursement of the allowable direct costs are provided in the Attachment “D” - Allowable Direct Costs of this Agreement.

I. Limitation of Costs

If, at any time, CONSULTANT estimates the cost of performing the services described in CONSULTANT’s proposal will exceed the not-to-exceed amount of the Agreement, including approved additional compensation, CONSULTANT shall notify the SANITATION DISTRICT immediately and in writing. This written notice shall indicate the additional amount necessary to complete the services. Any cost incurred in excess of the approved not-to-exceed amount without the express written consent of the SANITATION DISTRICT’s authorized representative shall be at CONSULTANT’s own risk. This written notice shall be provided separately from, and in addition to, any notification requirements contained in the CONSULTANT’s invoice and monthly progress report. Failure to notify the SANITATION DISTRICT that the services cannot be completed within the authorized not-to-exceed amount is a material breach of this Agreement.

3. REALLOCATION OF TOTAL COMPENSATION

The SANITATION DISTRICT, by its Director of Engineering, shall have the right to approve a reallocation of the incremental amounts constituting the total compensation, provided that the total compensation is not increased.

4. PAYMENT

- A. Monthly Invoice: CONSULTANT shall include in its monthly invoice a detailed breakdown of costs associated with the performance of any corrections or revisions of the work for that invoicing period. CONSULTANT shall allocate costs in the same manner as it would for payment requests as described in this Section of the Agreement. CONSULTANT shall warrant and certify the accuracy of these costs and understand that submitted costs are subject to Section 11 - AUDIT PROVISIONS.
- B. CONSULTANT may submit monthly or periodic statements requesting payment for those items included in Section 2 - COMPENSATION hereof in the format as required by the SANITATION DISTRICT. Such requests shall be based upon the amount and value of the work and services performed by CONSULTANT under this Agreement and shall be prepared by CONSULTANT and accompanied by such supporting data, including a detailed breakdown of all costs incurred and project element work performed during the period covered by the statement, as may be required by the SANITATION DISTRICT.

Upon approval of such payment request by the SANITATION DISTRICT, payment shall be made to CONSULTANT as soon as practicable of one hundred percent (100%) of the invoiced amount on a per-project-element basis.

If the SANITATION DISTRICT determines that the work under this Agreement or any specified project element hereunder is incomplete and that the amount of payment is in excess of:

- i. The amount considered by the SANITATION DISTRICT's Director of Engineering to be adequate for the protection of the SANITATION DISTRICT or
- ii. The percentage of the work accomplished for each project element

he or she may, at his or her discretion, retain an amount equal to that which ensures that the total amount paid to that date does not exceed the percentage of the completed work for each project element or the project in its entirety.

- C. CONSULTANT may submit periodic payment requests for each 30-day period of this Agreement for the profit as set forth in Section 2 - COMPENSATION above. Said profit payment request shall be proportionate to the work actually accomplished to date on a per-project-element basis. In the event the SANITATION DISTRICT's Director of Engineering determines that no satisfactory progress has been made since the prior payment or in the event of a delay in the work progress for any reason, the SANITATION DISTRICT shall have the right to withhold any scheduled proportionate profit payment.
- D. Upon satisfactory completion by CONSULTANT of the work called for under the terms of this Agreement and upon acceptance of such work by the SANITATION DISTRICT, CONSULTANT will be paid the unpaid balance of any money due for such work, including any retained percentages relating to this portion of the work.
- E. Upon satisfactory completion of the work performed hereunder and prior to final payment under this Agreement for such work, or prior settlement upon termination of this Agreement, and as a condition precedent thereto, CONSULTANT shall execute and deliver to the SANITATION DISTRICT a release of all claims against the SANITATION DISTRICT arising under or by virtue of this Agreement other than such claims, if any, as may be specifically exempted by CONSULTANT from the operation of the release in stated amounts to be set forth therein.
- F. Pursuant to the California False Claims Act (Government Code Sections 12650-12655), any CONSULTANT that knowingly submits a false claim to the SANITATION DISTRICT for compensation under the terms of this Agreement may be held liable for treble damages and up to a Ten Thousand Dollars (\$10,000) civil penalty for each false claim submitted. This Section shall also be binding on all Subconsultants.

A CONSULTANT or Subconsultant shall be deemed to have submitted a false claim when the CONSULTANT or Subconsultant: a) knowingly presents or causes to be presented to an officer or employee of the SANITATION DISTRICT a false claim or request for payment or approval; b) knowingly makes, uses, or

causes to be made or used a false record or statement to get a false claim paid or approved by the SANITATION DISTRICT; c) conspires to defraud the SANITATION DISTRICT by getting a false claim allowed or paid by the SANITATION DISTRICT; d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to the SANITATION DISTRICT; or e) is a beneficiary of an inadvertent submission of a false claim to the SANITATION DISTRICT and fails to disclose the false claim to the SANITATION DISTRICT within a reasonable time after discovery of the false claim.

5. CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION AND RECORD OF WAGES

- A. To the extent CONSULTANT's employees and/or Subconsultants who will perform Work during the design and preconstruction phases of a construction contract for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq., CONSULTANT and its Subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the Work is subject to compliance monitoring and enforcement by the DIR.
- B. The CONSULTANT and its Subconsultants shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776 and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a) (3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.
- C. Pursuant to Labor Code Section 1776, the CONSULTANT and its Subconsultants shall furnish a copy of all certified payroll records to the SANITATION DISTRICT and/or general public upon request, provided the public request is made through the SANITATION DISTRICT, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement of the Department of Industrial Relations.
- D. The CONSULTANT and its Subconsultants shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulation Section 16461(e).

6. DOCUMENT OWNERSHIP – SUBSEQUENT CHANGES TO PLANS AND SPECIFICATIONS

- A. Ownership of Documents for the Professional Services performed.
All documents, including but not limited to, original plans, studies, sketches, drawings, computer printouts and disk files, and specifications prepared in connection with or related to the Scope of Work or Professional Services, shall be the property of the SANITATION DISTRICT. The SANITATION DISTRICT's ownership of these documents includes use of, reproduction or reuse of, and all incidental rights whether or not the work for which they were prepared has been performed. The SANITATION DISTRICT ownership entitlement arises upon payment or any partial payment for work performed and includes ownership of

any and all work product completed prior to that payment. This Section shall apply whether the CONSULTANT's Professional Services are terminated: a) by the completion of the Agreement or b) in accordance with other provisions of this Agreement. Notwithstanding any other provision of this paragraph or Agreement, the CONSULTANT shall have the right to make copies of all such plans, studies, sketches, drawings, computer printouts and disk files, and specifications.

- B. CONSULTANT shall not be responsible for damage caused by subsequent changes to or uses of the plans or specifications where the subsequent changes or uses are not authorized or approved by CONSULTANT, provided that the service rendered by CONSULTANT was not a proximate cause of the damage.

7. INSURANCE

A. General

- i. Insurance shall be issued and underwritten by insurance companies acceptable to the SANITATION DISTRICT.
- ii. Insurers must have an "A-" Policyholder's Rating, or better, and Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best's Guide Rating. However, the SANITATION DISTRICT will accept State Compensation Insurance Fund, for the required policy of Worker's Compensation Insurance subject to the SANITATION DISTRICT's option to require a change in insurer in the event the State Fund financial rating is decreased below "B". Further, the SANITATION DISTRICT will require CONSULTANT to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within 20 days of written notice to CONSULTANT by the SANITATION DISTRICT or its agent.
- iii. Coverage shall be in effect prior to the commencement of any work under this Agreement.

B. General Liability

The CONSULTANT shall maintain during the life of this Agreement, including the period of warranty, Commercial General Liability Insurance written on an occurrence basis providing the following minimum limits of liability coverage: Two Million Dollars (\$2,000,000) per occurrence with Four Million Dollars (\$4,000,000) aggregate. Said insurance shall include coverage for the following hazards: Premises-Operations, blanket contractual liability (for this Agreement), products liability/completed operations (including any product manufactured or assembled), broad form property damage, blanket contractual liability, independent contractors liability, personal and advertising injury, mobile equipment, and cross liability and severability of interest clauses. A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement(s). If requested by SANITATION DISTRICT and applicable, XCU coverage (Explosion, Collapse and Underground) and Riggers/On Hook Liability must be included in the General Liability policy and coverage must be reflected on the submitted Certificate of Insurance.

C. Umbrella Excess Liability

The minimum limits of general liability and Automotive Liability Insurance required, as set forth herein, shall be provided for through either a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Umbrella excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automotive liability.

D. Automotive/Vehicle Liability Insurance

The CONSULTANT shall maintain a policy of Automotive Liability Insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limits of liability coverage: Combined single limit of One Million Dollars (\$1,000,000). A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement.

E. Drone Liability Insurance

If a drone will be used, Drone Liability Insurance must be maintained by CONSULTANT in the amount of One Million Dollars (\$1,000,000) in a form acceptable to the SANITATION DISTRICT.

F. Worker's Compensation Insurance

The CONSULTANT shall provide such Workers' Compensation Insurance as required by the Labor Code of the State of California in the amount of the statutory limit, including Employer's Liability Insurance with a minimum limit of One Million Dollars (\$1,000,000) per occurrence. Such Worker's Compensation Insurance shall be endorsed to provide for a waiver of subrogation in favor of the SANITATION DISTRICT. A statement on an insurance certificate will not be accepted in lieu of the actual endorsements unless the insurance carrier is State of California Insurance Fund and the identifier "SCIF" and endorsement numbers 2570 and 2065 are referenced on the certificate of insurance. If an exposure to Jones Act liability may exist, the insurance required herein shall include coverage for Jones Act claims.

G. Errors and Omissions/Professional Liability

CONSULTANT shall maintain in full force and effect, throughout the term of this Agreement, standard industry form professional negligence errors and omissions insurance coverage in an amount of not less than Four Million Dollars (\$4,000,000) with limits in accordance with the provisions of this Paragraph. If the policy of insurance is written on a "claims made" basis, said policy shall be continued in full force and effect at all times during the term of this Agreement, and for a period of five (5) years from the date of the completion of the services hereunder.

I. Cancellation Notice

Each insurance policy required herein shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days' prior written notice. The Cancellation Section of ACORD Form 25 (5/2010) shall state the required thirty (30) days' written notification. The policy shall not terminate, nor shall it be cancelled or materially changed until thirty (30) days after written notice is given to the SANITATION DISTRICT except for nonpayment of premium, which shall require not less than ten (10) days written notice to the SANITATION DISTRICT. Should there be changes in coverage or an increase in deductible or SIR amounts, the CONSULTANT shall send to the SANITATION DISTRICT a certified letter which includes a description of the changes in coverage and/or any increase in deductible or SIR amounts. The certified letter must be sent to the attention of Risk Management, and shall be received by the SANITATION DISTRICT not less than thirty (30) days prior to the effective date of the change(s) if the change would reduce coverage or increase deductibles or SIR amounts or otherwise reduce or limit the scope of insurance coverage provided to the SANITATION DISTRICT.

J. Primary Insurance

All liability policies shall contain a Primary and Non-Contributory Clause. Any other insurance maintained by the SANITATION DISTRICT shall be excess and not contributing with the insurance provided by CONSULTANT.

K. Separation of Insured

All liability policies shall contain a "Separation of Insureds" clause.

L. Non-Limiting (if applicable)

Nothing in this document shall be construed as limiting in any way, nor shall it limit the indemnification provision contained in this Agreement, or the extent to which CONSULTANT may be held responsible for payment of damages to persons or property.

M. Deductibles and Self-Insured Retentions

Any deductible and/or self-insured retention must be declared to the SANITATION DISTRICT on the Certificate of Insurance. All deductibles and/or self-insured retentions require approval by the SANITATION DISTRICT. In no event shall a deductible or self-insured retention exceed \$250,000 for any one line of insurance.

N. Defense Costs

General and Automobile Liability policies shall have a provision that defense costs for all insureds and additional insureds are paid in addition to and do not deplete any policy limits.

O. Subconsultants

The CONSULTANT shall be responsible to establish insurance requirements for any Subconsultant hired by the CONSULTANT. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subconsultant's operations and work.

P. Limits Are Minimums

If the CONSULTANT maintains higher limits than any minimums shown above, then SANITATION DISTRICT requires and shall be entitled to coverage for the higher limits maintained by CONSULTANT.

8. SCOPE CHANGES

In the event of a change in the Scope of Work requested by SANITATION DISTRICT, the parties hereto shall execute an amendment to this Agreement setting forth with particularity all terms of the new Agreement, including but not limited to any additional CONSULTANT's fees.

9. PROJECT TEAM AND SUBCONSULTANTS

CONSULTANT shall provide to the SANITATION DISTRICT, prior to execution of this Agreement, the names and full description of all Subconsultants and CONSULTANT's project team members anticipated to be used on this project by CONSULTANT. CONSULTANT shall include a description of the scope of work to be done by each Subconsultant and each CONSULTANT's project team member. CONSULTANT shall include the respective compensation amounts for CONSULTANT and each Subconsultant on a per-project-element basis, broken down as indicated in Section 2 - COMPENSATION.

There shall be no substitution of the listed Subconsultants and CONSULTANT's project team members without prior written approval by the SANITATION DISTRICT.

10. ENGINEERING REGISTRATION

The CONSULTANT's personnel are comprised of registered engineers and a staff of specialists and draftsmen in each department. The firm itself is not a registered engineer but represents and agrees that wherever in the performance of this Agreement requires the services of a registered engineer, such services hereunder will be performed under the direct supervision of registered engineers.

11. AUDIT PROVISIONS

A. SANITATION DISTRICT retains the reasonable right to access, review, examine, and audit any and all books, records, documents, and any other evidence of procedures and practices that the SANITATION DISTRICT determines are

necessary to discover and verify that the CONSULTANT is in compliance with all requirements under this Agreement. The CONSULTANT shall include the SANITATION DISTRICT's right as described above in any and all of its subcontracts and shall ensure that these rights are binding upon all Subconsultants.

- B. SANITATION DISTRICT retains the right to examine CONSULTANT's books, records, documents, and any other evidence of procedures and practices that the SANITATION DISTRICT determines are necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred, or to ensure CONSULTANT's compliance with all requirements under this Agreement during the term of this Agreement and for a period of three (3) years after its termination.
- C. CONSULTANT shall maintain complete and accurate records in accordance with Generally Accepted Accounting Principles (GAAP). The CONSULTANT shall make available to the SANITATION DISTRICT, for review and audit, all project related accounting records and documents and any other financial data within fifteen (15) days after receipt of notice from the SANITATION DISTRICT. Upon SANITATION DISTRICT's request, the CONSULTANT shall submit exact duplicates of originals of all requested records to the SANITATION DISTRICT. If an audit is performed, CONSULTANT shall ensure that a qualified employee of the CONSULTANT will be available to assist the SANITATION DISTRICT's auditor in obtaining all project-related accounting records and documents and any other financial data.

12. LEGAL RELATIONSHIP BETWEEN PARTIES

The legal relationship between the parties hereto is that of an independent contractor and nothing herein shall be deemed to make CONSULTANT an employee of the SANITATION DISTRICT.

13. NOTICES

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, return receipt requested, postage prepaid.

Notices shall be mailed to the SANITATION DISTRICT at:

ORANGE COUNTY SANITATION DISTRICT
10844 Ellis Avenue, Fountain Valley, CA 92708-7018
Attention: Digna Olmos, Principal Contracts Administrator
Copy: Tom Grant, Project Manager

Notices shall be mailed to CONSULTANT at:

HDR Engineering, Inc.
3230 El Camino Real, Suite 200, Irvine, CA 92602
Attention: Kip Field

All communication regarding the Scope of Work will be addressed to the Project Manager. Direction from other SANITATION DISTRICT's staff must be approved in writing by the SANITATION DISTRICT's Project Manager prior to action by the CONSULTANT.

14. TERMINATION

The SANITATION DISTRICT may terminate this Agreement at any time, without cause, upon giving thirty (30) days written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be entitled to compensation for work performed on a prorated basis through and including the effective date of termination. The SANITATION DISTRICT may also terminate this Agreement for cause but only after providing CONSULTANT written notice of the breach and a reasonable opportunity to cure.

CONSULTANT shall be permitted to terminate this Agreement upon thirty (30) days written notice only if CONSULTANT is not compensated for billed amounts in accordance with the provisions of this Agreement when the same are due.

Notice of termination shall be mailed to the SANITATION DISTRICT and/or CONSULTANT in accordance with Section 13 - NOTICES.

15. DOCUMENTS AND STUDY MATERIALS

The documents and study materials for this project shall become the property of the SANITATION DISTRICT upon the termination or completion of the work. CONSULTANT agrees to furnish to the SANITATION DISTRICT copies of all memoranda, correspondence, computation, and study materials in its files pertaining to the work described in this Agreement, which is requested in writing by the SANITATION DISTRICT.

16. COMPLIANCE

A. Labor

CONSULTANT certifies by the execution of this Agreement that it pays employees not less than the minimum wage as defined by law and that it does not discriminate in its employment with regard to race, color, religion, sex, or national origin; that it is in compliance with all federal, state, and local directives and executive orders regarding non-discrimination in employment; and that it agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

B. Air Pollution

CONSULTANT and its Subconsultants and subcontractors shall comply with all applicable federal, state, and local air pollution control laws and regulations.

17. AGREEMENT EXECUTION AUTHORIZATION

Both the SANITATION DISTRICT and CONSULTANT do covenant that each individual executing this Agreement by and on behalf of each party is a person duly authorized to execute agreements for that party.

18. DISPUTE RESOLUTION

In the event of a dispute arising between the parties regarding performance or interpretation of this Agreement, the dispute shall be resolved by binding arbitration under the auspices of the Judicial Arbitration and Mediation Service (“JAMS”), or similar organization or entity conducting alternate dispute resolution services.

19. ATTORNEY'S FEES, COSTS AND NECESSARY DISBURSEMENTS

If any action at law or in equity or if any proceeding in the form of an Alternative Dispute Resolution is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which it may be entitled.

20. PROGRESS REPORTS

Monthly progress reports shall be submitted for review by the tenth day of the following month and must include as a minimum: 1) current activities, 2) future activities, 3) potential items that are not included in the Scope of Work, 4) concerns and possible delays, 5) percentage of completion, and 6) budget status.

21. WARRANTY

CONSULTANT shall perform its services in accordance with generally accepted industry and professional standards. If, within the 12-month period following completion of its services, any part of the services fails to meet those standards, CONSULTANT shall, within the time prescribed by the SANITATION DISTRICT, take all such actions as are necessary to correct or complete the deficiency(ies).

22. INDEMNIFICATION

To the fullest extent permitted by law, CONSULTANT shall indemnify, defend (at CONSULTANT's sole cost and expense and with legal counsel approved by the SANITATION DISTRICT, which approval shall not be unreasonably withheld), protect and hold harmless the SANITATION DISTRICT and all of SANITATION DISTRICT's officers, directors, employees, consultants, and agents (collectively the “Indemnified Parties”), from and against any and all claims, damages, liabilities, causes of action, suits, arbitration awards, losses, judgments, fines, penalties, costs and expenses including without limitation, reasonable attorneys' fees, disbursements and court costs, and all other professional, expert or consultants fees and costs and the SANITATION DISTRICT's general and administrative expenses (individually, a “Claim”, or collectively, “Claims”) which may arise from or are in any manner related, directly or indirectly, to any work performed, or any operations, activities, or services provided by CONSULTANT in carrying out its obligations under this Agreement to the extent of the negligent, recklessness and/or willful misconduct of CONSULTANT, its principals, officers, agents, employees, CONSULTANT's suppliers, consultants, subconsultants, subcontractors, and/or anyone employed directly or indirectly by any of them, regardless of any contributing negligence or strict liability of an Indemnified Party. Notwithstanding the foregoing, nothing herein shall be construed to require CONSULTANT to indemnify the Indemnified Parties from any Claim arising from:

- (A) the sole or active negligence or willful misconduct of the Indemnified Parties; or
- (B) a natural disaster or other act of God, such as an earthquake; or
- (C) the independent action of a third party who is neither one of the Indemnified Parties nor the CONSULTANT, nor its principal, officer, agent, employee, nor CONSULTANT's supplier, consultant, subconsultant, subcontractor, nor anyone employed directly or indirectly by any of them.

Exceptions (A) through (B) above shall not apply, and CONSULTANT shall, to the fullest extent permitted by law, indemnify the Indemnified Parties, from Claims arising from more than one cause if any such cause taken alone would otherwise result in the obligation to indemnify hereunder.

CONSULTANT's liability for indemnification hereunder is in addition to any liability CONSULTANT may have to the SANITATION DISTRICT for a breach by CONSULTANT of any of the provisions of this Agreement. Under no circumstances shall the insurance requirements and limits set forth in this Agreement be construed to limit CONSULTANT's indemnification obligation or other liability hereunder.

The terms of this Agreement are contractual and the result of negotiation between the parties hereto. Accordingly, any rule of construction of contracts (including, without limitation, California Civil Code Section 1654) that ambiguities are to be construed against the drafting party, shall not be employed in the interpretation of this Agreement.

23. DUTY TO DEFEND

The duty to defend hereunder is wholly independent of and separate from the duty to indemnify and such duty to defend shall exist regardless of any ultimate liability of CONSULTANT and shall be consistent with Civil Code Section 2782.8. Such defense obligation shall arise immediately upon presentation of a Claim by any person if, without regard to the merit of the Claim, such Claim could potentially result in an obligation to indemnify one or more Indemnified Parties, and upon written notice of such Claim being provided to CONSULTANT. Payment to CONSULTANT by any Indemnified Party or the payment or advance of defense costs by any Indemnified Party shall not be a condition precedent to enforcing such Indemnified Party's rights to indemnification hereunder. In the event a final judgment, arbitration, award, order, settlement, or other final resolution expressly determines that the claim did not arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONSULTANT, to any extent, then the SANITATION DISTRICT will reimburse CONSULTANT for the reasonable costs of defending the Indemnified Parties against such claims. Additionally, in no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault.

CONSULTANT's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until such time as action against the Indemnified Parties for such matter indemnified hereunder is fully and finally barred by the applicable statute of limitations.

24. CONSULTANT PERFORMANCE

The CONSULTANT's performance shall be evaluated by the SANITATION DISTRICT. A copy of the evaluation shall be sent to the CONSULTANT for comment. The evaluation, together with the comments, shall be retained by the SANITATION DISTRICT and may be considered in future CONSULTANT selection processes.

25. COMPLIANCE WITH SANITATION DISTRICT POLICIES AND PROCEDURES

CONSULTANT shall comply with all SANITATION DISTRICT policies and procedures including the Contractor Safety Standards, as applicable, all of which may be amended from time to time.

26. CLOSEOUT

When the SANITATION DISTRICT determines that all work authorized under the Agreement is fully complete and that the SANITATION DISTRICT requires no further work from CONSULTANT or the Agreement is otherwise terminated or expires in accordance with the terms of the Agreement, the SANITATION DISTRICT shall give the Consultant written notice that the Agreement will be closed out. CONSULTANT shall submit all outstanding billings, work submittals, deliverables, reports, or similarly related documents as required under the Agreement within thirty (30) days of receipt of notice of Agreement closeout.

Upon receipt of CONSULTANT's submittals, the SANITATION DISTRICT shall commence a closeout audit of the Agreement and will either:

- i. Give the CONSULTANT a final Agreement Acceptance, or
- ii. Advise the CONSULTANT in writing of any outstanding item or items which must be furnished, completed, or corrected at the CONSULTANT's cost.

CONSULTANT shall be required to provide adequate resources to fully support any administrative closeout efforts identified in this Agreement. Such support must be provided within the timeframe requested by the SANITATION DISTRICT.

Notwithstanding the final Agreement Acceptance, the CONSULTANT will not be relieved of its obligations hereunder, nor will the CONSULTANT be relieved of its obligations to complete any portions of the work, the non-completion of which were not disclosed to the SANITATION DISTRICT (regardless of whether such nondisclosures were fraudulent, negligent, or otherwise); and the CONSULTANT shall remain obligated under all those provisions of the Agreement which expressly or by their nature extend beyond and survive final Agreement Acceptance.

Any failure by the SANITATION DISTRICT to reject the work or to reject the CONSULTANT's request for final Agreement Acceptance as set forth above shall not be deemed to be acceptance of the work by the SANITATION DISTRICT for any purpose nor imply acceptance of, or agreement with, the CONSULTANT's request for final Agreement Acceptance.

27. CONSTRUCTION PROCEDURES

CONSULTANT's observation or monitoring portions of the work performed under construction contracts shall not relieve the contractor from its responsibility for performing work in accordance with applicable contract documents. CONSULTANT shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. CONSULTANT shall not be responsible for the acts or omissions of the contractor or other parties on the project.

28. ENTIRE AGREEMENT

This Agreement constitutes the entire understanding and agreement between the parties and supersedes all previous negotiations between them pertaining to the subject matter thereof.

[INTENTIONALLY LEFT BLANK. SIGNATURES FOLLOW ON THE NEXT PAGE.]

IN WITNESS WHEREOF, this Agreement has been executed in the name of the SANITATION DISTRICT and CONSULTANT, by their respective officers thereunto duly authorized, as of the day and year first above written.

CONSULTANT: HDR ENGINEERING, INC.

By _____
Date _____

Printed Name & Title

ORANGE COUNTY SANITATION DISTRICT

By _____
David John Shawver
Board Chairman
Date _____

By _____
Kelly A. Lore
Clerk of the Board
Date _____

By _____
Ruth Zintzun
Purchasing & Contracts Manager
Date _____

- Attachments: Attachment "A" – Scope of Work
Attachment "B" – Not Used
Attachment "C" – Not Used
Attachment "D" – Allowable Direct Costs
Attachment "E" – Fee Proposal
Attachment "F" – Not Used
Attachment "G" – Not Attached
Attachment "H" – Not Used
Attachment "I" – Cost Matrix and Summary
Attachment "J" – Not Used
Attachment "K" – Minor Subconsultant Hourly Rate Schedule
Attachment "L" – Contractor Safety Standards

DO:ms

**HEADQUARTRES COMPLEX AT PLANT NO.1
CONTRACT NO. P1-128A**

**PROFESSIONAL CONSTRUCTION SERVICES AGREEMENT
REQUEST FOR PROPOSAL**

ATTACHMENT A – SCOPE OF WORK

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I. SUMMARY

Provide construction engineering support services for the construction and installation, commissioning, and closeout phases of this project.

II. PROJECT SCHEDULE

The schedule for the services specified in this Scope of Work (SOW) shall be provided per the construction contract schedule and the following schedule constraints:

Task(s)	Period of Performance
Submittals	As described under Task 4.3 titled "Submittal Reviews"
Requests for Information	As described under Task 4.4 titled "Request for Information (RFI)"
Record Drawings	Draft Record Drawings shall be submitted to OC San within 45 Calendar days of receipt from OC San of the approved Contractor's As-Built Drawings. The final Record Drawings shall be submitted within 30 Calendar days of receipt of OC SAN's comments on the Draft Record Drawings.

III. PROJECT IMPLEMENTATION

All Orange County Sanitation District (OC San) projects are divided into six phases. CONSULTANT shall provide engineering support services for Phase 4 Construction and Installation Services, Phase 5 Commissioning Services, and Phase 6 Closeout.

Phase 1 – Project Development – *Completed*

Phase 2 – Preliminary Design – *Completed*

Phase 3 – Final Design – *Completed*

Phase 4 – Construction and Installation Services

Phase 5 – Commissioning Services

Phase 6 – Closeout

PHASE 4 – CONSTRUCTION AND INSTALLATION SERVICES

OC San will retain the services of another consulting firm to provide Third Party Construction Management services. References to OC San activities in this scope of work may be delegated, at OC San's discretion, to this firm.

OC San will administer and provide field inspection for the construction contract. Construction and support services shall be provided by CONSULTANT as requested by OC San.

CONSULTANT shall provide the key management personnel as described in its proposal for this project. CONSULTANT shall not reassign the key project personnel without prior approval of OC San. OC San may request reassignment of any of CONSULTANT's or its subconsultant's personnel based on that individual's performance.

For all services, CONSULTANT shall refer to Engineering Design Guidelines, Chapter 01 for detailed requirements.

Quality Assurance/Quality Control (QA/QC): CONSULTANT shall administer a program of QA/QC procedures for producing quality work and shall effectively manage and control the work. Specific procedures shall include but not be limited to planning, coordination, tracking, checking, reviewing, and scheduling the work. CONSULTANT shall subject all work products prepared by CONSULTANT to CONSULTANT's in-house QA/QC procedures prior to submittal to OC San. QA/QC hours and costs shall be incorporated into other tasks within this SOW.

Task 4.1 – Project Management

CONSULTANT shall be responsible for detailed management of the project, including managing its subconsultants, and shall keep OC San apprised of the status of the project.

CONSULTANT shall conduct monthly virtual project management meetings with OC San's Project Manager. These meetings shall be attended by OC San's Project Manager and CONSULTANT's Project Manager at a mutually agreeable time. The purpose of the meetings shall be to review CONSULTANT Project Manager's progress report and the status of the project scope, budget, and any issues which may affect completion of the project. Meetings should be arranged so that the progress report can be submitted shortly prior to or at each meeting.

CONSULTANT shall prepare and submit monthly invoices to OC San no later than the second Wednesday of the following month. The invoices shall document the hours and billing rate for each person that works on the project for each task in the Work Breakdown Structure (WBS). Overhead, profit, and any direct costs shall also be shown for each task. As part of the summary section of the invoice, CONSULTANT shall also include the following information:

- Budget
- Current billing period invoicing
- Previous billing period "total invoiced to date"
- Budget amount remaining
- Current billing period "total percent invoice to date"
- Current billing period "total percent completed to date"

The monthly progress report and project schedule shall be submitted with the project invoice as part of the monthly request for payment.

CONSULTANT shall also provide the percent budget spent for each of OC San's WBS cost codes (i.e. by task).

CONSULTANT shall also provide a summary of progress and expenditures to date.

OC San will provide a sample invoice structure to CONSULTANT at the beginning of the project.

Task 4.2 – Initial Project Meetings

4.2.1 - Construction Hand-Off Workshop

CONSULTANT shall participate in two 2-hour virtual construction hand-off workshops followed by up to three 2-hour virtual meetings focusing on electrical, instrumentation, and control disciplines. The purpose of the workshop is for CONSULTANT and OC San design teams to transfer project-specific knowledge to the OC San construction management and inspection

staff who will be managing and monitoring construction. Topics that might be covered in this meeting include the following:

- Overview of objective of the project
- Review of project elements
- Review of sequencing constraints
- Key issues to be addressed during construction
- Identification of risks and discussions of contingency plans

The workshop will be led by OC San's Project Engineer and CONSULTANT's Project Discipline Leads. CONSULTANT shall include its Project Manager, Project Architect, and one other discipline lead.

4.2.2 - PMWeb Procedures Meeting

The project will utilize PMWeb as the web-based Project Control Management System (PCMS), and CONSULTANT will be given access to PMWeb, so CONSULTANT will not need to purchase software for the selected PCMS. The PCMS shall be utilized for Project communication, tracking, and management. PCMS utilization is to facilitate the electronic exchange of information, the automation of key processes, and the overall management of the contract. When required by OC San, paper documents shall also be provided. In the event of discrepancy between the electronic version and paper documents, the electronic documents within PCMS shall govern.

CONSULTANT shall participate in one 2-hour PMWeb procedure virtual meeting. The training will be provided by OC San's staff. The purpose of this meeting is to review the roles and logistics for review, approval, and provision of various construction related documents. CONSULTANT's Project Manager, Project Architect, Project Assistant, and two other discipline leads shall participate in the virtual meeting.

4.2.3 - Submittal Review Procedures

CONSULTANT shall participate in one 2-hour virtual Submittal Procedure Meeting. The purpose of this meeting is to review the roles and logistics for review and approval of the Contractor submittals. CONSULTANT's Project Manager and Project Architect shall participate in this meeting.

4.2.4 - Preconstruction Conference

CONSULTANT shall participate in a two-hour Preconstruction Conference attended virtually by OC San staff, CONSULTANT, the Contractor, subcontractors, and vendors. This meeting will be scheduled and presided over by OC San. In this meeting, OC San's Resident Engineer will describe CONSULTANT's role in the project as the Design Firm and the services CONSULTANT shall provide during construction. OC San will prepare meeting minutes and CONSULTANT shall review and comment on the minutes.

4.2.5 - Pre-Submittal Meetings

CONSULTANT shall participate in virtual pre-submittal meetings specified for the following specification sections:

OC San will prepare the agenda and meeting minutes and CONSULTANT shall review and comment on the minutes. CONSULTANT's appropriate design professionals shall attend.

- CenGen and Utility Tunnel (1 meeting @ 2 -hour each)
- 06 17 19 Cross-Laminated Timber (1 meeting @ 1 -hour each)
- 06 18 00 Glue Laminated Timber (1 meeting @ 1 -hour each)
- 21 10 00 Fire Protection (1 meeting @ 2 -hour each)
- 26 09 19 Networked Lighting Control System (1 meeting @ 2 -hour each)
- 27 10 00 Communications Cabling Systems for Offices (1 meeting @ 2 -hour each)

Task 4.3 – Submittal Reviews

OC San will receive and log-in all submittals from the Contractor. OC San will forward copies of selected shop drawing and submittals requiring CONSULTANT's review. CONSULTANT shall review the shop drawings and submittals for conformance with the requirements of the Contract Documents and return the submittal review comments to OC San within ten calendar days after receipt of submittal, except for submittals requiring multi-discipline review. CONSULTANT shall return comments to OC San allowing enough time for OC San to incorporate all comments into a combined review comment set that OC San will return to the Contractor. CONSULTANT shall accommodate occasional expedited reviews for time sensitive submittals. Submittals shall include, but not be limited to, shop drawings, vendor tests, certifications, and test reports. All submittals will be made available electronically (PDF) through PMWeb.

See Section V - "Quantitative Assumptions" in this SOW for the estimated number of submittals.

Task 4.4 – Request for Information (RFI)

OC San will log in and forward to CONSULTANT certain RFIs generated by the Contractor or OC San. CONSULTANT shall return written responses to OC San as soon as possible or within three business days of receipt of RFI, except for complex RFIs that may have cost impacts and previously discussed with OC San's Resident Engineer, clarifying the requirements of the Contract Documents. CONSULTANT shall generate necessary sketches, figures, and modifications to the drawings for clarifications. When required to avoid schedule delay or additional construction-related costs, CONSULTANT shall expedite the review of time-sensitive RFIs.

If any changes to the Contract Drawings are required, CONSULTANT shall prepare these drawings and submit them as AutoCAD files to OC San. CONSULTANT shall update all AutoCAD drawings and specifications upon OC San acceptance of any changes resulting from RFIs and change orders.

See Section V - "Quantitative Assumptions" in this SOW for the estimated number of RFIs.

Task 4.5 – Contract Document Modifications and Design Changes

If the Contract Documents require modifications due to changed conditions, OC San requested changes, omissions, or design errors, CONSULTANT shall prepare preliminary Request for Proposal (RFP) documents and forward them to OC San, as needed. OC San shall review the RFP and request CONSULTANT to incorporate any changes. OC San will issue the change order documents in a formal RFP or Field Change Order (FCO) to the Contractor.

CONSULTANT shall forward design calculations and other design backup documents as necessary to OC San.

Any Contract Document that requires changes shall be identified with date of change and reference (RFI number, RFP number, FCO number, etc.) shown on the document. Changes shown on drawings shall be clearly marked and “clouded” for accurate identification of the scope of change by the Contractor and inspection staff. CONSULTANT shall maintain up-to-date Contract Documents. When a change is required on a Contract Drawing that has previously undergone a change, the updated drawing showing the previous change shall be used as the base document to identify new changes.

CONSULTANT shall submit complete change documentation to OC San for use in RFIs, RFPs, and FCOs. This change documentation shall include plan drawings, schematics, details, schedules, and specifications, as required.

See Section V - “Quantitative Assumptions” in this SOW for the estimated number of hours.

Task 4.6 – Construction Progress Meetings and Site Visits

CONSULTANT shall attend construction progress meetings as requested by OC San. The scope item covers time for meeting preparation, travel time, follow-up, and review of meeting minutes. Progress meeting minutes will be prepared by OC San.

CONSULTANT shall make field visits to assist in field problem resolution and design clarification/verification to help resolve construction issues as they arise and as requested by OC San. When possible, field visits shall be scheduled on the same day as construction progress meetings. CONSULTANT shall report the nature of the field site visits, the problem resolved, and identify staff requesting the site visit in CONSULTANT’s monthly project report. OC San will provide project inspection, except as required in other sections of this SOW.

See Section V - “Quantitative Assumptions” in this SOW for the estimated number of hours.

Task 4.7 – Factory Observations

CONSULTANT shall attend factory observations for the following design elements:

System	Assumed Visits
Unitized Curtain Wall	One 1-day trip
Cross-Laminated Timber	One 1-day trip
Glue-Laminated Timber	One 1-day trip
Power Transformers Factory Testing	One 1-day trip
Switchboards factory testing	One 1-day trip
Audio-Visual Shop Inspection	One 1-day trip

Task 4.8 – Specialty Services

4.8.1 – Geotechnical Engineering Services

The CONSULTANT shall provide field personnel to be in charge of the QA/QC program and coordinate with Contractor/OC San to monitor the drilling and installation of the Cast-in-Drilled-Hole (CIDH) piles for the project. Perform all QC during drilling, steel reinforcement installation and concrete placement. CONSULTANT shall also be available for support to respond to differing site conditions, and Requests for Clarification and Information. OC San will have primary responsibility for monitoring the construction work. The CONSULTANT shall assist in monitoring the work and compile a report of the data collected during the monitoring. The consultant shall be present on-site while CIDH pile installation is taking place.

The CONSULTANT shall also provide geotechnical engineering services as they may be needed during the course of the project.

See Section V - “Quantitative Assumptions” in this SOW for the estimated number of hours.

4.8.2 – Structural Engineering Services

CONSULTANT shall have the structural engineer of record conduct field visits and provide expert opinion in review of observation of the structural work associated with the project. California Building Code requires the structural engineer of record to perform some structural inspections during construction.

See Section V - “Quantitative Assumptions” in this SOW for the estimated number of hours.

4.8.3 – AV Bidding and Procurement

CONSULTANT shall review AV systems designs and equipment with OC San to confirm products and equipment are appropriate and current. CONSULTANT shall update AV systems design documents to produce final AV systems design package for Contractor bidding and AV integrator selection.

CONSULTANT shall provide oversight and review of bids from qualified AV integrators in coordination with OC San bidding requirements.

CONSULTANT shall facilitate a pre-bid meeting to review bid requirements with shortlisted AV Integrators.

CONSULTANT shall review bidders questions and provide responses and clarification with addenda as required.

CONSULTANT shall provide review of all bids for accuracy and adherence to bid requirements.

CONSULTANT shall lead a kickoff meeting to review and clarify the project delivery process, AV system design and performance expectations, the project schedule and criteria for shop drawings and other required submittals

Prior to delivery of the AV systems to the project site for installation, CONSULTANT shall perform a detailed inspection and assessment of the assembled systems at the AV integrator’s shop to review the workmanship and to confirm the specified AV system functionality.

4.8.4 – Fire Protection Services

CONSULTANT shall secure the services of a fire protection specialist for assistance in construction support services during installation and commissioning of fire protection systems. CONSULTANT shall manage fire protection subconsultant, and CONSULTANT shall be on site with the subconsultant for up to 4 hours per day for up to 10 days.

4.8.5 – Landscape Architectural Services

CONSULTANT shall provide on-site landscape architectural services for construction support. This item is separate from the hours for Task 4.3, 4.4, and 4.5.

See Section V - "Quantitative Assumptions" in this SOW for the estimated number of hours.

4.8.6 – Furniture, Fixtures and Equipment Support

CONSULTANT shall provide services related to Furnishings, Fixtures, and Equipment (FFE). Services shall be defined as 'sourcing options of FFE, presentation of FFE options (with finishes) in digital format, coordination of mock-ups and samples, coordination and participation in local showroom visits and coordination with FFE budget (rough estimate studies). No compiled FFE binder shall be required.

OC San will manage the solicitation and procurement of FFE, with assistance from CONSULTANT as specified below.

4.8.6.1 Define FFE Requirements

CONSULTANT shall meet with OC San stakeholders to define specific requirements for FFE.

4.8.6.2 Prepare FFE Scopes of Work

CONSULTANT shall prepare detailed scopes of work for FFE including bills of materials, details, figures, and specifications for OC San to request competitive quotes for all FFE.

4.8.6.3 Vendor Quotation Reviews

CONSULTANT shall review vendor quotes to provide feedback for OC San's evaluation of vendor quotations. CONSULTANT shall not be required to attend any vendor interviews.

4.8.6.4 Vendor Submittal Reviews

CONSULTANT shall review and comment on vendor submittals. Review of vendor submittals is separate from the review of the General Contractor's Submittals specified in Task 4.3.

4.8.6.5 Review Installed FFE

In conjunction with Vendor performed punchlist, CONSULTANT shall conduct inspections of delivered and installed FFE to confirm that the specified requirements have been satisfied. See Section V - "Quantitative Assumptions" in this SOW for the estimated number of hours.

4.8.7 – Exhibit Design, Fabrication and Installation

CONSULTANT shall provide coordination, fabrication, and installation for educational exhibits to be installed in the lobby based on the preliminary exhibit designs developed during the

Phase 3 – Final Design. CONSULTANT shall provide remaining design services to develop approved concept for the educational exhibit to include the following tasks:

- Contract with Fabricator to review concepts and document considerations moving forward to coordinate the exhibit build within the timeline and budget.
- Coordinate with architecture and interiors to document design of physical elements and graphic content intent for proper execution.
- Create a full project schedule for the exhibit, coordinated with the project schedule and milestones, with updates periodically as needed.
- Review materials and guide development of approved concept with Fabricator from costing and sourcing through final design drawings and/or mock-up review.
- Create all graphic artwork to be incorporated with physical exhibit, which may include printed graphics, embedded custom emblems, text, or patterns, or other artwork appearing within the exhibit.
- Coordinate with OC San for review and sign-off of final artwork files within the master design, and sourcing/file share of existing photography or material that may be incorporated. Professional photography for new imagery is not anticipated to be required for the exhibits and is therefore not included in the scope.
- Meetings and milestones: One presentation to review development and document feedback to be incorporated in the next round of work. One follow up presentation for client review point and two additional coordination meetings to be completed via phone and screenshare.

CONSULTANT shall conduct workshop visits for coordination, oversight, and sign-off during the fabrication of the exhibit physical objects.

CONSULTANT shall conduct up to three on-site reviews during installation of the exhibit, expected to align with installation and final punch list.

4.8.8 – Equipment and Instrument Database (EID)

CONSULTANT shall review electronic copies of the EID updated by the Contractor and shall update and verify the fields in the EID required to be filled out in accordance with Specifications Section 01788. The EID shall be completed and submitted to OC San as equipment is taken over for beneficial occupancy.

See Section V- “Quantitative Assumptions” in this SOW for the estimated number of hours.

4.8.9 – LEED Certification Support

CONSULTANT shall provide the services of a LEED Accredited Professional to coordinate with the Contractor/OC San for the implement the LEED design developed during Phase 3 – Final Design.

See Section V - “Quantitative Assumptions” in this SOW for the estimated number of hours.

PHASE 5 – COMMISSIONING SERVICES

Task 5.1 – Building Commissioning Services

CONSULTANT shall coordinate Building Commissioning activities with the Contractor (through the Third Party Construction Manager).

5.1.1 – Construction & Acceptance Phase Commissioning Tasks

CONSULTANT shall provide a Commissioning Agent with the responsibility and required expertise to develop the Commissioning Plan and represent OC San with the Building Commissioning activities. Additionally, CONSULTANT shall contract with a third-party commissioning authority to manage and supervise the commissioning process to comply with LEED requirements.

CONSULTANT shall revise the Commissioning Plan for the building, originally developed during the design phase, outlining the process, relationships and scope of work for commissioning the process. The plan will include:

- a. Definition of the systems included in the project commissioning process.
- b. Definition of the roles and responsibilities for commissioning team members.
- c. Definition of the requirements for operator training.
- d. Procedures for reporting, deficiency resolution, and testing methods.
- e. Requirements and procedures for documentation.

The Commissioning Plan will address project construction, warranty, and post construction phases.

CONSULTANT shall revise equipment and system pre-functional checklists to be used by the commissioning team for verification purposes during the construction phase of the project. The PFC (Pre-Functional Check) checklists will include procedures for installation verification and operational testing of the systems prior to functional testing. These documents will be finalized and issued to the contractors for comment early in the construction phase, and will include the following systems:

- Fire protection
- Electrical acceptance testing
- Data communication and wireless access
- Television system
- Public address
- Sound masking
- Assistive listening
- Electronic access control and intrusion detection
- Video surveillance
- Fire alarm
- Air-blown fiber

CONSULTANT shall prepare final functional performance testing documents to be used by the commissioning team for testing and verification purposes during the acceptance phase of the project. The FPT (Functional Performance Test) procedures will be used for the performance acceptance testing. These documents will be finalized and issued to the contractors following receipt of approved controls submittals, and will include the following systems:

- Fire protection

- UPS
- Fire alarm
- Air-blown fiber

CONSULTANT shall review equipment and system pre-functional checklists prepared by the contractor. These will include the following systems:

- Fire protection
- Electrical acceptance testing
- Data communication and wireless access
- Television system
- Public address
- Sound masking
- Assistive listening
- Electronic access control and intrusion detection
- Video surveillance
- Fire alarm
- Air-blown fiber

CONSULTANT shall review final functional performance testing documents prepared by the contractor. These will include the following systems:

- Fire protection
- UPS
- Fire alarm
- Air-blown fiber

CONSULTANT shall organize the commissioning process components and conduct a commissioning kick-off meeting where the commissioning process requirements are reviewed with the commissioning team (A/E, CM, appropriate subcontractors, and Facility Staff). The purpose of the meeting will be to review the construction phase commissioning process and activities for this project. During this meeting, the following will be reviewed:

- f. Commissioning Plan.
- g. Individual roles and responsibilities.
- h. Documentation requirements.
- i. Communication and reporting procedures.
- j. PFC and FPT forms utilized on the project.
- k. Project commissioning schedule.

CONSULTANT shall coordinate and direct commissioning activities in a logical, sequential and efficient manner using consistent protocols, clear and regular communications and consultations with all necessary parties, frequently updated timelines, schedules, and technical expertise.

CONSULTANT shall attend selected planning and job-site meetings to obtain information on construction progress. Review construction-meeting minutes for revisions/substitutions relating to the project design intent. Assist in resolving any discrepancies.

CONSULTANT shall organize and conduct periodic commissioning team meetings (monthly beginning immediately following contractor's Commissioning Coordinator acceptance by OCSD until equipment start-up; weekly following start-up thorough testing and acceptance) to plan, develop the scope, coordinate, schedule activities and resolve problems. It is anticipated that commissioning progress review meetings will be concurrent with site visits.

CONSULTANT shall review contractor standard submittals for commissioned equipment concurrent with the design professional's review to ensure that the equipment being provided will meet the specifications and owner's requirements particularly as it relates to the environmentally responsive characteristics. Provide comments to the A/E for inclusion in the submittal comments returned to the contractor.

CONSULTANT shall perform site inspections during rough-in of systems and equipment for installation verification and adequacy of testing and maintenance arrangements. The site inspections will be scheduled for critical milestones in each construction phase.

CONSULTANT shall coordinate with contractors in completing pre-functional checklists and tracking of checklist completion.

CONSULTANT shall sample completed pre-functional checklists to verify accuracy.

CONSULTANT shall review equipment and system start-up reports.

CONSULTANT shall direct and witness functional performance testing of each system and major piece of equipment to demonstrate that the equipment and systems are operating according to the design intent and contract documents. Functional performance testing will include operating the system and components through each of the written sequences of operation.

CONSULTANT shall review the preliminary Test, Adjust and Balance (TAB) reports for the hydronic and air systems. Field verify a percentage of flow and pressure readings at circuit setters, terminal devices, AHUs, fans, pumps, and main equipment. Participate with the CM/GC, TAB contractor, and design team in resolution of any discrepancies found during the sample readings and review the final TAB report.

CONSULTANT shall maintain a master issues log and a separate testing record. Provide to the CM and CONTRACTOR and the OWNER written progress reports and test results with recommended actions.

CONSULTANT shall document the correction and retesting of non-compliance items by the contractor.

CONSULTANT shall review the training plans by contractors and vendors to confirm compliance with bid specifications.

CONSULTANT shall prepare a Systems Manual.

CONSULTANT shall provide the Owner with the commissioning final report, in electronic copy formats. The report will include an executive summary, list of participants and roles, brief system descriptions, and the following information:

- a. Design intent narrative and basis of design documentation.
- b. CxA's design and submittal review reports.
- c. Pre-functional checklists completed.
- d. Functional checklists completed.
- e. TAB reports.
- f. Control point-by-point records, control program strategies and set points.
- g. Commissioning observation deficiency log highlighting any outstanding issues.
- h. Warranty details and start/end dates.

5.1.2 – Occupancy & Operation Commissioning Tasks

CONSULTANT shall schedule and verify deferred and seasonal testing by the contractor. CONSULTANT shall verify continuing training.

CONSULTANT shall schedule, organize, and attend a lessons-learned meeting.

CONSULTANT shall Develop an indexed Re-commissioning Management Manual containing the following:

- a. Final version of the Owner's Project Requirements and design basis narratives, including brief descriptions of each system.
- b. As-built sequence of operation for all equipment.
- c. Control drawings.
- d. A list of time of day schedules and a schedule frequency to review them for relevance and efficiency.
- e. A description and rationale for all energy and water saving features and strategies with operating instructions and caveats about their function and maintenance relative to energy use.
- f. Guidelines for establishing and tracking benchmarks for whole building energy use and equipment efficiencies of cooling, heating and service hot water equipment.
- g. Seasonal start-up and shut down, manual and restart operations procedures.
- h. Recommendations regarding seasonal operational issues that affect energy use.
- i. Recommendations for recalibration frequency of sensors and actuators by type and use.
- j. A list of all user adjustable set points and reset schedules with a brief discussion of the purpose of each and the range of reasonable adjustments with energy implications.
- k. Plans for continuous commissioning or recommended frequency for re-commissioning, by equipment type with reference to tests conducted during initial commissioning.
- l. A schedule of frequency to review the various set points and reset schedules to ensure they are at current relevant and efficient values.

- m. Guidelines for energy accounting including assurance that future renovations and equipment upgrades will not result in decreased energy efficiency and maintaining the owner's requirements.
- n. A list of diagnostic tools that use descriptions to assist facility staff.
- o. A copy of the commissioning report.

CONSULTANT shall assist in the development of a preventative maintenance plan.

CONSULTANT shall return to the site at 10 months into the 12-month warranty period. Review with facility staff the current building operation and the condition of outstanding issues related to the original and seasonal commissioning. Also interview facility staff and identify problems or concerns they have with operating the building as originally intended. Make suggestions for improvements and for recording these changes in the O&M manuals. Identify areas that may come under warranty or under the original construction contract.

5.1.3 – Systems to be Commissioned

The following components/systems are included in the commissioning of this project.

Mechanical

- Air Handling Systems
- Heating Hot Water Systems
- Condensate Return Systems
- Chilled Water Systems
- Condenser Water Systems for Chillers
- Exhaust Fans
- Direct Digital Control System
- Computer Room Air Conditioning Systems

Electrical

- Utility Service Entrance Switchgear
- Standby Generator Systems
- Generator Paralleling Switchboards
- Generator Power Distribution Systems
- Utility Power Unit Substations
- Generator Power Unit Substations
- Automatic Transfer Switches
- Normal Power Distribution Systems
- Life Safety Power Distribution Systems
- Critical Power Distribution Systems
- Lighting Controls
- UPS Systems

Plumbing

- Domestic Water Heaters
- Hot Water Circulating Pumps
- Fixtures

Communication

- Wireless Access Points
- Data Communication
- Television
- Public Address
- Sound Masking
- Assistive Listening Systems
- Access Control and Intrusion Detection
- Video Surveillance

Life Safety

- Fire Protection Systems
- Fire Alarm

Irrigation

5.1.4 – Deliverables

CONSULTANT shall provide the following deliverables.

Construction Phase

- Revised Commissioning Plan
- Updated pre-functional checklists
- Functional Performance Test procedures
- Commissioning meeting minutes
- Field site visit reports
- Comments on equipment and contractor commissioning submittals
- Comments of TAB process
- Issues log
- Comments on O&M manual data
- Comments on training plan

Acceptance Phase

- Commissioning meeting minutes

- Functional Test site visit reports
- Comments on TAB report w/back check
- Issues log
- Comments on training
- Functional Test results
- Final Commissioning Report

Occupancy And Operation Phase

- Off-season functional testing report
- Updated Commissioning Report
- Lessons Learned agenda and meeting minutes
- Re-commissioning Management Manual

PHASE 6 – CLOSEOUT

Closeout tasks include completion of punch list work by the Contractor, final inspection, completion of Record Drawings, and electronic data. CONSULTANT shall submit a final invoice at the completion of the project.

Task 6.1 – Final Inspection and Punch Lists

At the end of the construction period for the overall project, CONSULTANT's Project Engineer and technical leads shall attend the final inspection job walk with the Contractor and OC San staff. CONSULTANT shall make recommendations on the completion of the work including, but not limited to, completion of punch list items, site cleanup, leakage, and overall system operations.

CONSULTANT shall assist OC San in developing punch lists of items required to be completed prior to Final Acceptance of the project by OC San.

Task 6.2 – Record Drawings

When requested by OC San, CONSULTANT shall inspect the Contractor's as-built drawings to verify that the Contractor has included all relevant information from approved change orders and RFIs. As part of the review process, CONSULTANT shall verify that the Contractor's as-built drawings correctly reflects the information included in the approved shop drawings, RFIs, approved FCOs, plan clarifications, plan changes, and other deviations from the Contract Drawings and that the information in the set is complete. CONSULTANT shall allow for four visits per year to review the Contractor's as-built drawings. CONSULTANT shall transpose the as-built drawings to a CAD ready set after each meeting.

After Final Completion of the project, OC San will transmit to CONSULTANT the final as-built drawings. At that time, CONSULTANT shall meet with OC San's inspectors and Resident Engineer to review the Contractor's final as-built drawings.

CONSULTANT shall prepare Draft Record Drawings based on the final as-built drawings for all drawings in accordance with the requirements established for P1-128A. CONSULTANT shall submit the Draft Record Drawings to the OC San Resident Engineer. The Draft Record Drawings will be reviewed for content and CAD compliance as agreed to per the PDSA P1-128A contract by OC San staff. A comment log will be returned to CONSULTANT and, if any

comments are generated, CONSULTANT shall revise the Record Drawings and resubmit to the Resident Engineer for review of the changes and acceptance of the Record Drawings.

When no additional comments are identified, CONSULTANT shall prepare the Final Record Drawings and submit them along with the Contractor’s as-built drawings to the Project Manager. All Record Drawings shall contain a stamp indicating:

“Record Drawings

These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be herein as a result.”

The stamp shall optimally be placed in the border and may be included via x-ref. If importing the stamp via x-ref interferes with content in the bottom right hand corner, the stamp may also be placed in other open space along the bottom of the border. In addition, a note shall be placed over the engineer’s seal stating that “This drawing was originally approved for construction by [name of engineer] on [date] and sealed by [name of engineer] a licensed professional engineer in the State of California. License No. [License number].“ CONSULTANT shall submit an electronic copy of the Record Drawings to OC San for review and acceptance. The acceptance of the Record Drawings shall be deemed a condition for completion of work.

The Contractor-generated drawings described in the Design Guidelines and the shop drawings will not be updated by CONSULTANT.

The format and quantities for delivery of the submittals shall be listed below:

Contents	Draft Record Drawings	Final Record Drawings
Hard Copy Sets	2 sets of bound 11x17 prints	None
All related electronic files, including CAD and compiled PDFs	Transmit electronically via OneDrive	Transmit electronically via OneDrive

IV. STAFF ASSISTANCE

OC San staff member or designee assigned to work with CONSULTANT on the construction phase of this project is Tom Grant at (714) 593-7287, e-mail to: tgrant@ocsd.com

V. QUANTITATIVE ASSUMPTIONS

The assumptions listed in the following table below shall be the basis for the assumed level of effort. CONSULTANT shall provide services up to the assumed level of effort, as specified for each task in the Scope of Work, within CONSULTANT’s proposed fee. CONSULTANT shall track effort expended for each of these task and shall not exceed the assumed level of effort without an approved contract amendment for additional services. CONSULTANT’s effort, hourly rates, and other costs shall be based on a construction duration of up to 36 months from notice to proceed to construction completion.

Task	Description	Assumption
4.1	Project Management	36 months duration from construction NTP to construction completion
4.3	Submittals	280 original submittals 140 resubmittals 40 2 nd and later resubmittals
4.4	Requests for Information	1800 RFIs
4.5	Design Changes	1200 man-hours
4.6	Construction Progress Meetings & Site Visits (not including meetings specified in Task 4.2 - Initial Project Meetings)	100 Progress meetings @ 1 man-hours each, 75% virtual 35 site visits @ 2 hours on-site each
4.8.6.5	Review Installed FFE	15 visits @ 2 hours on-site
4.8.1	Geotechnical Engineering Support	400 total hours on-site over 50 days
4.8.2	Structural Engineering Services	20 site visits @ 2 hours on-site each
4.8.5	Landscape Architectural Services	30 site visits @ 2 hours on-site
5.1.1	Process Commissioning Team Meetings	32 meetings @ 1 hour (virtual)