

COACHELLA VALLEY WATER DISTRICT
PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is entered into this ____ day of _____, 20____ by and between COACHELLA VALLEY WATER DISTRICT, a public agency ("CVWD") and NORTHWEST HYDRAULIC CONSULTANTS INC., a Washington Corporation ("Consultant"). CVWD and Consultant may be collectively referred to as the "Parties" and individually as a "Party."

RECITALS

A. CVWD is a public agency of the State of California and is in need of professional services for triennial stormwater hydrology and hydraulic review services for proposed developments subject to regional flooding and to perform master planning and other technical studies.

B. CVWD issued a Request for Proposals ("RFP") seeking proposals from qualified consultants to provide the required professional services, a copy of which is incorporated herein by reference.

C. Consultant submitted a proposal in response to the RFP, and CVWD selected Consultant to provide the required professional services.

D. Consultant is duly licensed in the State of California and has the necessary qualifications to provide such services.

E. The Parties desire to enter into this Agreement for the purpose of setting forth the terms and conditions upon which Consultant shall render certain services to CVWD.

NOW, THEREFORE, THE PARTIES HERETO HEREBY AGREE AS FOLLOWS:

ARTICLE 1

Scope of Services to be Performed and Term

1.1 Scope of Services to be Performed. The scope of services to be provided by Consultant is set forth on Exhibit "A" attached hereto and by this reference incorporated herein ("Services"). Consultant warrants that all work and services set forth in the Scope of Services will be performed in accordance with the Standard of Care (as defined in Section 1.6).

1.2 Term of Agreement. The term of this Agreement shall be from December 1, 2024 to November 30, 2027, unless earlier terminated as provided herein.

1.3 Task Orders. CVWD, through its General Manager, or in his absence, his delegate (collectively "Authorized Persons"), may, from time to time, make changes or authorize certain work set forth in the Scope of Services, including but not limited to, issuance of additional instructions, require additional work, or direct omissions of work previously ordered by issuing a Task Order to Consultant ("Task Order") and the provisions of this Agreement shall apply to all such Task Orders. The Task Order shall be in such form and content as set forth on Exhibit "B" attached hereto and by this reference incorporated herein. Consultant shall not perform and

CVWD shall not be liable for any services performed by Consultant unless written authorization from CVWD is given to Consultant prior to the performance of such work. The cost of such Task Orders which may or may not add to or reduce the work called for hereunder and any extension of completion date that might be required thereby, shall be mutually agreed upon in writing by CVWD and Consultant before commencement of the work called for by such Task Order.

1.4 Contract Documents. The following documents are incorporated into and made part of this Agreement by this reference:

- Request for Proposals
- Scope of Services (Exhibit "A")
- Performance Schedule (Exhibit "C")
- Compensation (Exhibit "D")
- Insurance Requirements (Exhibit "E")
- Addenda
- Task orders issued in accordance with the Contract Documents (Exhibit "B")
- Amendments issued in accordance with the Contract Documents

1.5 Permits, Licenses, Fees and Other Charges. Consultant shall, in accordance with applicable laws and ordinances, obtain at his/her/its expense all permits and licenses necessary to accomplish the Scope of Services and shall give all notices necessary and obtain all required inspections. Failure to maintain a required license or permit may result in immediate termination of this Agreement.

1.6 Time to Perform Services. Consultant shall perform the Services in accordance with the schedule set forth on Exhibit "C" attached hereto and by this reference incorporated herein. Consultant shall commence work immediately upon receipt of a notice to proceed from CVWD. CVWD will have no obligation to pay for any services rendered by Consultant in advance of receipt of the notice to proceed, and Consultant acknowledges that any such services are at Consultant's own risk. Consultant shall confer as requested with CVWD representatives to review progress of work elements, adherence to work schedule, coordination of work, scheduling of review and resolution of problems which may develop.

1.7 Delays in Performance.

(a) Neither CVWD nor Consultant shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Agreement, such circumstances include but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war; riots and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage or judicial restraint.

(b) Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

1.8 Qualifications. Consultant represents and warrants to CVWD that it has the qualifications, experience, licenses, and facilities necessary to properly perform the Scope of Services in a competent and professional manner.

1.9 Standard of Care. Consultant's Services will be performed in accordance with generally accepted professional practices and principles and in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions.

ARTICLE 2

Payment for Services Rendered/Reimbursement

2.1 Payment for Services Rendered. CVWD shall compensate Consultant for the Services performed pursuant to this Agreement in the amount set forth on the schedule attached hereto as Exhibit "D" and by this reference incorporated herein. In no event shall the total amount paid for Services rendered by Consultant under this Agreement exceed the sum authorized by each Task Order without a written amendment.

Billing Procedure.

(a) Consultant shall submit, on or before the twentieth (20th) day of each month, to CVWD, accurate, detailed and complete statements for Services ("Invoices") actually performed during the previous month. The Invoices shall specify the percentage of completion (as of the end of the preceding month) of the work and compensation due Consultant. The Invoices shall be supported by such data substantiating the Consultant's right to payment as CVWD may require.

(b) Payment shall not constitute acceptance of any work completed by Consultant.

(c) The making of final payment shall not constitute a waiver of any claims by CVWD for any reason whatsoever.

2.3 Payment. CVWD shall make payment to Consultant within thirty (30) days of receipt of an undisputed Invoice or the resolution of any billing dispute. CVWD may withhold a portion of an application for payment because of defective work not remedied or unsatisfactory prosecution of the work by the Consultant. CVWD will release any withheld funds upon Consultant satisfactorily remedying the issue that resulted in the withholding. CVWD will not pay late fees to the Consultant on the compensation due Consultant under the terms of this Agreement.

ARTICLE 3

Accounting, Inspection and Audit

3.1 Records. Consultant shall keep and shall preserve for four (4) years after final completion of the project, accurate and detailed records of all ledgers, books of account, invoices, vouchers, cancelled checks, and other documents or records evidencing or relating to the work, services and disbursements charged to CVWD under this Agreement (collectively, "Books and Records"). Any and all Books and Records must be maintained in accordance with generally accepted accounting principles and must be sufficiently complete and detailed so as to permit an accurate evaluation of the Services provided by Consultant under this Agreement. During such four (4) year period, Consultant shall give CVWD and its agents, during normal business hours,

access to such Books and Records. CVWD and its agents shall have the right to make copies of any of the said Books and Records.

3.2 Custody. Where CVWD has reason to believe that any of the Books and Records required to be maintained by this Article may be lost or discarded due to dissolution or termination of Consultant's business, CVWD may, by written request, require that custody of such Books and Records be given to a person or entity mutually agreed upon and such Books and Records thereafter shall be maintained by such person or entity at Consultant's expense. Access to the Books and Records shall be granted to CVWD and its Representatives.

ARTICLE 4

Termination

4.1 Termination. CVWD may terminate the Agreement, in whole or in part, with or without cause, upon ten (10) days written notice to Consultant. Upon receipt of the termination notice, Consultant shall promptly discontinue services unless the notice directs to the contrary. In the event CVWD renders such written notice to Consultant, Consultant shall be entitled to compensation for all services properly rendered prior to the effective date of the notice and all further services set forth in the notice. CVWD shall be entitled to reimbursement for any compensation paid in excess of services rendered and shall be entitled to withhold compensation for defective work or other damages caused by Consultant's Services. Consultant acknowledges CVWD's right to terminate this Agreement as provided in this Article, and hereby waives any and all claims for damages that might arise from CVWD's termination of this Agreement. Consultant shall deliver to CVWD and transfer title (if necessary) to all completed work, and work in progress including drafts, documents, plans, forms, maps, products, graphics, computer programs and reports. CVWD shall not be liable for any costs other than the charges or portions thereof which are specified herein. Consultant shall not be entitled to payment for unperformed services, and shall not be entitled to damages or compensation for termination of work.

ARTICLE 5

California Labor Code Provisions

5.1 Prevailing Wage Laws. Consultant is aware of the requirements of California Labor Code sections 1720 et seq. and 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects ("Prevailing Wage Laws"). If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws, if applicable. Consultant shall defend, indemnify and hold CVWD, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It shall be mandatory upon the Consultant and all subconsultants to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code sections 1771, 1774 and 1775), employment of apprentices (Labor Code section 1777.5), certified payroll records (Labor Code section 1771.4 and 1776), hours of labor (Labor Code sections 1813 and 1815), and debarment of contractors and subcontractors (Labor Code section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code section 1771.4.

5.2 Registration. If the Services are being performed as part of an applicable “public works” or “maintenance” project, in addition to the foregoing, then pursuant to Labor Code sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations (“DIR”). Consultant shall maintain registration for the duration of the project and require the same of any subconsultants, as applicable. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code sections 1725.5 and 1771.1.

5.3 Compliance Monitoring and Stop Orders. This Agreement may also be subject to compliance monitoring and enforcement by the DIR. It shall be Consultant’s sole responsibility to comply with all applicable registration and labor compliance requirements. Any stop orders issued by the DIR against Consultant or any subconsultant that affect Consultant’s performance of Services, including any delay, shall be Consultant’s sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Consultant caused delay and shall not be compensable by CVWD. Consultant shall defend, indemnify and hold CVWD, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the DIR against Consultant or any subconsultant.

5.4 Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of section 3700 of the California Labor Code which require every employer to be insured against liability for Worker’s Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

ARTICLE 6

Project Management

6.1 Representative of Consultant. Brady McDaniel (“Consultant Representative”) is hereby designated as the principal and representative of Consultant authorized to act on its behalf with respect to the work and services specified herein and to make all decisions in connection herewith. Consultant shall not substitute any person as Consultant Representative without first notifying CVWD in writing of Consultant’s intent. CVWD shall have the right to review the qualifications of said substitute. If CVWD determines said substitute Consultant Representative is unacceptable, Consultant shall submit alternate candidates until CVWD determines that substitute Consultant Representative is acceptable.

6.2 Representative of CVWD. David Wilson is hereby designated as the representative of CVWD and except as otherwise provided herein authorized to act on its behalf with respect to the work and services specified herein and make all decisions in connection therewith.

ARTICLE 7

Work Product

7.1 Work Product. All original papers, maps, models, designs, studies, surveys, reports, data, notes, computer files, documents, drawings and other work product (collectively “Work Product”) of Consultant produced by Consultant pursuant to this Agreement, except documents which are required to be filed with public agencies, shall be deemed solely the property

of CVWD. Consultant will take such steps as are necessary to perfect or protect the ownership interest of CVWD in such Work Product. Upon completion, expiration or termination of this Agreement, Consultant shall turn over to CVWD all such original Work Product in Consultant's possession or control.

ARTICLE 8

Insurance

8.1 **Insurance.** Consultant agrees to procure and maintain, at Consultant's expense all insurance specified in Exhibit E attached hereto and by this reference incorporated herein. Consultant shall require all subconsultants to carry the same policies and limits of insurance that the Consultant is required to maintain pursuant to this Article, unless otherwise approved in writing by CVWD, and shall furnish separate certificates and endorsements for each subconsultant.

8.2 **Failure to Provide Insurance.** If Consultant fails or refuses to procure or to maintain the insurance as required by this Agreement or fails or refuses to furnish CVWD with required proof that the insurance has been procured and is in force and paid for, CVWD shall have the right, at CVWD's election and upon ten (10) days' notice to Consultant to terminate this Agreement or procure and maintain such insurance. The premiums paid by CVWD shall be treated as an amount due from Consultant with interest at the rate of ten percent (10%), to be paid on the first (1st) day of the month following the date on which the premiums were paid. CVWD shall have the right to offset any amounts CVWD pays hereunder with amounts due Consultant for services rendered pursuant to this Agreement. CVWD shall give prompt notice of the payment of such premiums, stating the amounts paid and the names of the insurer or insurers, and interest shall run from the date of the notice.

ARTICLE 9

Indemnification

9.1 **Consultant's Duty to Indemnify.** To the fullest extent permitted by law, Consultant shall defend (with counsel of CVWD's choosing), indemnify and hold CVWD, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Consultant's Services, the Project or this Agreement, including without limitation the payment of all damages, expert witness fees and attorney's fees and other related costs and expenses. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Consultant, CVWD, its officials, officers, employees, agents, or volunteers.

If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance as a "design professional" (as that term is defined under Civil Code Section 2782.8), then, and only to the extent required by Civil Code Section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

Consultant's obligation to fully defend and indemnify CVWD, its Board, members of the Board, employees, and authorized volunteers shall extend to any and all liability incurred by CVWD based on an allegation that Consultant has been misclassified as an independent contractor or failed to pay any or all necessary state or federal taxes.

ARTICLE 10

General Provisions

10.1 **Notices.** All notices permitted or required under this Contract shall be given at the following address, or at such other address as the parties may provide in writing for this purpose:

CVWD:

Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92236
Attention: J.M. Barrett
General Manager

CONSULTANT:

Northwest Hydraulic Consultants, Inc.
12787 Gateway Drive S.
Seattle, WA 98168
Attention: Brady McDaniel
Principal-in-Charge

The parties may designate, in writing, other individuals to whom notice is to be given. Notices shall be deemed to be received upon personal delivery to the addresses above; if sent by overnight delivery, upon delivery as shown by delivery service records; if sent by facsimile, upon receipt as confirmed by the sending facsimile equipment; if by United States Postal Service, five days after deposit in the mail.

10.2 **Separate Contracts.** Consultant understands that this is not an exclusive Agreement and that CVWD shall have the right to negotiate with and enter into separate contracts with others providing the same or similar services as those provided by Consultant as CVWD desires.

10.3 **Notification.** In the event of a problem or potential problem that could impact the quality or quantity of work, services or the level of performance under this Agreement, the Consultant shall, within one (1) business day of actual knowledge of the problem or potential problem, notify CVWD in writing and by telephone.

10.4 **Compliance.** All work, labor and materials shall be done and provided in strict conformity with each of the following: (i) all laws, ordinances, codes, rules, regulations and standard specifications of governmental authorities having jurisdiction over Consultant's work; and (ii) this Agreement. Consultant shall also comply, at Consultant's expense, with all requirements of inspectors of any governmental authority having jurisdiction over Consultant's work. The Consultant will be responsible for securing any and all required governmental inspections and approvals for the work completed under this Agreement.

10.5 **Disputes.** If any disputes should arise between the Parties concerning the work to be done under this Agreement, the payments to be made, or the manner of accomplishment of the work, Consultant shall nevertheless proceed to perform the work as directed by CVWD pending settlement of the dispute.

10.6 Setoffs and Counterclaims. All claims for moneys due or to become due to Consultant shall be subject to deduction by CVWD for any setoff or counterclaim arising out of this or any other of CVWD's agreements with Consultant.

10.7 No Waiver. The fact that CVWD has made payment under this Agreement shall not be interpreted so as to imply CVWD has inspected, approved or accepted the work which has been performed by Consultant. No delay or omission in the exercise of any right or remedy by the non-defaulting Party on any default shall impair such right or remedy or be construed as a waiver. A Party's consent to or approval of any act by the other Party requiring the Party's consent or approval shall not be deemed to waive or render unnecessary the other Party's consent to or approval of any subsequent act. Any waiver by either Party of any default must be in writing and shall not be a waiver of any other default concerning the same or any other provision of the Agreement.

10.8 Assignment and Subcontractors. Consultant shall not assign or subcontract any portion of the work to be performed under this Agreement or any of the rights or obligations under this Agreement, without the prior written consent of CVWD, which consent may be withheld in CVWD's sole and absolute discretion. Any attempted assignment in violation of the provisions of this paragraph shall be void. Subject to the foregoing, this Agreement shall be binding upon the heirs, administrators, successors and assigns of CVWD and Consultant.

10.9 Independent Contractor. The Consultant shall act as an independent contractor in the performance of the services provided for in this Agreement and shall furnish such services in Consultant's own manner and method and in no respect shall Consultant be considered an agent or employee of CVWD, maintaining complete control over all men and operations. No provisions of this Agreement shall be intended to create a partnership or joint venture between Consultant and CVWD and neither Party shall have the power to bind or obligate the other Party, except as expressly set forth in this Agreement. This provision shall apply even if Consultant co-locates at CVWD offices for purposes of this Agreement.

10.10 Non-Liability of CVWD Officials and Employees. No official or employee of CVWD shall be personally liable to the Consultant in the event of any default or breach by CVWD or for any amount which may become due to the Consultant or for any breach of the terms of this Agreement.

10.11 Conflict of Interest. No director, officer or employee of CVWD shall have any financial interest, direct or indirect, in this Agreement nor shall any such director, officer or employee participate in any decision relating to this Agreement which affects his/her financial interest or the financial interest of any corporation, partnership, entity or association in which he/she is directly or indirectly interested, in violation of any state or federal statute or regulation. The Consultant warrants that it has not paid or given and will not pay or give any third party any money or other consideration for obtaining this Agreement.

10.12 Best Efforts. The Consultant recognizes the relations of trust and confidence that are established by this Agreement, and covenants with CVWD to furnish his/her professional skill and judgment, and to actively cooperate and assist in furthering the best interests of CVWD in all matters pertaining to the work. The Consultant agrees to furnish efficient business administration and capable supervision, and to use every effort to keep upon the work an adequate supply of workmen and materials in order to secure its execution in the most expeditious and economical manner consistent with CVWD's best interests. The Consultant's employees assigned to the work shall at all times be reasonably satisfactory to CVWD.

10.13 Confidential Information. All information gained or Work Product produced by Consultant in the performance of this Agreement will be considered confidential, unless such information is in the public domain. Consultant shall not release or disclose any such information or Work Product to persons or entities other than CVWD without the prior written consent of the General Manager of CVWD, except as otherwise required by law. Consultant shall promptly notify CVWD should Consultant, or its Representatives be served summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, requests for admissions or other discovery request or court order from any third party regarding this Agreement and the Services performed under this Agreement.

10.14 Amendment. This Agreement may not be amended except by a subsequent writing which is signed by the Parties.

10.15 Cooperation. Consultant shall cooperate in the performance of work with CVWD and all other agents.

10.16 Incorporation of Recitals. The Recitals and section titles set forth herein are incorporated herein and are an operative part of this Agreement.

10.17 Governing Law, Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of California. The Parties agree that any action or proceeding to enforce or relating to this Agreement shall be brought exclusively in the federal or state courts located in Riverside County, California, and the Parties hereto consent to the exercise of personal jurisdiction over them by any such courts for purposes of any such action or proceeding

10.18 Attorneys' Fees and Costs. If any action in law or equity, including an action for declaratory relief, is brought to enforce or interpret the provisions of this Agreement, each Party shall pay its own attorneys' fees.

10.19 Severability. If any provision of this Agreement is found by a court of competent jurisdiction to be void, invalid or unenforceable, then the Parties agree that such invalidity or unenforceability shall have no effect whatsoever on the balance of this Agreement.

10.20 Counterparts. This Agreement may be signed and delivered in any number of counterparts, each of which, when signed and delivered, shall be an original, but all of which shall together constitute one and the same Agreement.

10.21 Entire Agreement. This Agreement contains the entire agreement between the Parties with respect to the subject matter of this Agreement and any agreement or representation with respect to the same or the obligations of either Party with respect to the same which is not expressly provided in this Agreement or in a written document which is signed by the Party to be charged, shall be null and void.

10.22 Time is of the Essence. Time shall be of the essence as to all dates and times of performance contained in this Agreement.

10.23 Authority to Execute. Each Party represents and warrants to the other Party that all necessary action has been taken by such Party to authorize the undersigned to execute this Agreement and to bind it to the performance of its obligations hereunder.

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

10.25 Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification obligations, shall survive any such expiration or termination.

10.26 Third Party Rights. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than CVWD and the Consultant.

IN WITNESS WHEREOF, the Parties have hereunto set their hands on the first day date above written.

“CONSULTANT”

NORTHWEST HYDRAULIC
CONSULTANTS INC., a Washington
Corporation

By:

Name:

Its:

“CVWD”

COACHELLA VALLEY WATER DISTRICT, a
public agency

By:

Name:

Its:

EXHIBIT LIST

EXHIBIT "A" SCOPE OF SERVICES

EXHIBIT "B" PROFORMA TASK ORDER

EXHIBIT "C" PERFORMANCE SCHEDULE

EXHIBIT "D" COMPENSATION

EXHIBIT "E" INSURANCE REQUIREMENTS

EXHIBIT “A”

SCOPE OF SERVICES

The scope of services includes the tasks as described in CVWD’s Request for Proposals dated September 11, 2024 and Consultant’s proposal dated October 10, 2024 attached hereto and incorporated herein by this reference.

ATTACHMENT 1
REQUESTED SCOPE OF SERVICES

- 1) **The Respondent shall submit a response to the sample project in this section. Please note that the sample project is only for purposes of demonstrating understanding of the project. The response to this sample project will impact the score for the evaluation criteria of project approach and suitability to CVWD's needs.**

Sample Project

There is a 20-acre proposed residential subdivision located within an AO-1 flood zone. The subdivision has 60 lots. Using the checklist from Appendix K-5 of the CVWD Development Design Manual, provide an approach and cost estimate to review the first submittal for Stages 1 and 2 (combined) of the checklist for regional flooding. Provide a description of the review approach and items to review along with a task list and associated hours and cost.

2) **Required experience, expertise, and knowledge required of the consultant:**

- Flood hydrology including rainfall and runoff analysis, watershed runoff modeling and routing, sediment transport, scour analysis, and debris flow calculations
- Open channel and closed conduit hydraulic design analyses including high velocity flood channels, energy dissipaters, culverts, bridges, stormwater network analysis and erosion and scour analyses for riverbank protection
- Standard hydrology and hydraulic models including HEC-HMS, HEC-RAS, MIKE 21C, FLO-2D, XPSWMM/ PCSWMM/ SWMM and FEMA's Alluvial Fan Model
- FEMA guidelines and regulations, California Drainage Law, Riverside County Ordinance 458 (latest version), CVWD Ordinance 1234.2 (latest version), and CVWD's Development Design Manual
- Hydrologic and hydraulic design guidelines and analytical approaches utilized by the U.S. Army Corps of Engineers, FEMA, U.S. Bureau of Reclamation, Federal Highway Administration, California Department of Water Resources-Division of Dam Safety and Riverside County Flood Control & Water Conservation District (RCFC&WCD)
- U.S. National Oceanic Atmospheric Administration (NOAA) National Weather Service rainfall frequency data for the Coachella Valley Area

3) **Outline of the scope of services to be provided to CVWD:**

- Assist CVWD during the review of hydrology and hydraulic reports submitted by developers/consultants for different phases of proposed projects based on:
 - Analyses of rainfall data, frequency, etc. used for the study
 - Rainfall/runoff (hydrology) and hydraulics analyses
 - Analyses of pre and post development conditions
 - Project integration into regional master planning

- Hydraulic design of stormwater facilities for collection, conveyance and redistribution
- Analyses of debris and/or sediment transport
- Implementation of FEMA guidelines and regulations, California Drainage Law, Riverside County Ordinance 458, and CVWD Ordinance 1234.2
- Provide feedback on initial guidance or approach by the developer's engineer in the preparation of the hydrology and hydraulic studies in areas where the flood hazard has not been determined
- Provide written comments to CVWD within three weeks after receipt of hydrology and hydraulic reports
- Perform special studies for CVWD including Stormwater Master Plans and capacity assessments for various facilities
- Assist CVWD in the preparation and review of proposed projects to ensure conformance with approved Stormwater Master Plans (e.g. Eastern Coachella Valley, North Cathedral City, North Indio and East Side Dike)
- Review existing regulations, ordinance guidelines and design criteria
- Review examples of existing hydrology and hydraulic reports
- Develop standards and design criteria for stormwater facilities in coordination with CVWD staff
- Attend field visits to proposed project/development sites
- Attend technical meetings with CVWD staff, developers and their engineers
- Perform special technical studies for CVWD
- Work closely with CVWD staff during project review to ensure succinct responses using the most recent modeling programs
- Provide expert stormwater hydrology and hydraulics opinion/testimony on behalf of CVWD for potential stormwater-related claims/lawsuits

4) The following provides additional information:

CVWD REGIONAL STORMWATER FACILITIES

Facility	Type	Material	Length(mi)
Whitewater River/Coachella Valley Stormwater Channel (WWR/CVSC)	Channel/Levee	Earth/Concrete Slope Lining	50.0
Bear Creek System & La Quinta Evacuation Channel	Levee/Basin/Channel	Earth/Concrete/ Soil Cement	5.8
Dead Indian System & Deep Canyon System	Levees/Channel	Earthen/Concrete	7.8
Palm Valley Channel & Cat Creek	Basins/Channels	Earthen/Concrete	7.0
East Magnesia Canyon Channel	Channel	Earthen/Concrete	1.8

Facility	Type	Material	Length(mi)
West Magnesia Canyon Channel	Basin/Channel	Earthen/Concrete	1.3
Thunderbird Channel	Channel	Concrete/Earthen	1.0
Thunderbird Villas Stormwater Channel	Channel/Storm Drain	Concrete/Earthen	0.8
Peterson Stormwater Channel	Channel/Storm Drain	Concrete/Earthen	0.5
Sky Mountain Channel	Channel/Storm Drain	Concrete/Earthen	1.8
Eastside Dike	Levee	Earthen	25.5
Detention Channel 1	Channel	Concrete	3.3
Detention Channel 2	Channel	Concrete	2.3
Detention Channel 3	Channel	Concrete	1.3
Dike No. 2	Levee	Earthen	1.0
Dike No. 4	Levee	Earthen Dike	3.5
Avenue 64 Evacuation Channel	Channel/Pipe	Concrete Channel & Pipes	6.8

CVWD GUIDING REGULATIONS

CVWD relies on three primary regulations to ensure flood protection for the Coachella Valley:

(1) California Drainage Law

California Drainage Law states that property owners have the right to protect themselves from flooding as long as they do not unreasonably increase flood risk for adjacent property owners. Flows must be reasonably received and released in the historical flow paths at the historical flow depths and velocities.

(2) Riverside County Ordinance 458

Ordinance 458 was adopted by Riverside County for the unincorporated areas and is required by FEMA's National Flood Insurance Program (NFIP). Ordinance 458 specifically regulates development in Special Flood Hazard Areas identified on maps prepared by FEMA, the State of California or the County that are based on the 1 percent chance of flood, also referred to as the "100-Year Flood."

(3) CVWD Ordinance 1234.2

Ordinance 1234.2 provides conditions of approval for development in flood hazard areas within CVWD Stormwater Unit Boundary. The key provisions of Ordinance 1234.2 are as follows (please refer to Guideline K-7 for details):

- Whitewater River/Coachella Valley Stormwater Channel: Designed and constructed utilizing the SPS/SPF design standard. The CVWD 100-Year Plus design standard will now be utilized for this facility, and for analyses addressing impacts associated with lands

adjacent to this facility. The WWRSC/CVSC is owned, operated and maintained by CVWD.

- Existing Tributary Regional Facilities (Owned, Operated or Maintained by CVWD including USBR Protective Works, or Private Entity): Designed and constructed utilizing the SPS/SPF design standard. The CVWD 100-Year Plus design standard will now be utilized for these facilities and for analyses addressing impacts associated with lands adjacent to these facilities. These existing tributary regional facilities can be owned, operated and maintained by CVWD or by a private entity that has an existing regional stormwater facilities agreement with CVWD.
- Existing Tributary Regional Facilities (Owned, Operated, or Maintained by Private Entity): Designed and constructed utilizing the 100-Year Storm/100-Year Flood design standard. The CVWD 100-Year Plus design standard shall be utilized for changes to these facilities and for analyses addressing impacts associated with lands adjacent to these facilities. These facilities will continue to be owned, operated and maintained by a private entity.
- Proposed Tributary Regional Stormwater Facilities: Design shall be based on the CVWD 100-Year Plus design standard. CVWD shall assume operation and maintenance of proposed 100-Year tributary regional stormwater facilities. In the event a developer specifically requests to assume the operation and maintenance responsibility, CVWD shall determine, in its discretion, whether to approve such a request. In the event the request is approved, the requirements for private ownership, operation and maintenance of the proposed regional stormwater facilities shall apply as set forth in Section 6.

EXISTING REGIONAL STORMWATER FACILITIES

Whitewater River/Coachella Valley Stormwater Channel — **ALTHOUGH** the WWR/CVSC is the major component of the existing regional flood control for the Coachella Valley, there are areas along the WWR/CVSC where erosion of the channel banks and inundation are a threat to development adjacent to the channel. Therefore, proposed developments, adjacent to or impacted by the channel, are required to submit detailed hydraulic reports and plans for concrete slope protection. The slope protection must be installed prior to occupancy of any development adjacent to the channel.

CVWD has completed a detailed hydraulic analysis of the WWR/CVSC from Palm Springs to the Salton Sea and identified areas that are deficient in conveying the standard project flood and/or subject to inundation. FEMA in coordination with CVWD and impacted stake holders has issued preliminary Flood Insurance rate maps for the CVSC from Monroe Street to the Salton Sea.

Tributary Regional Stormwater Facilities — The tributary regional stormwater facilities are located within the developed areas of the Coachella Valley, e.g. City of Rancho Mirage, City of Palm Desert, City of La Quinta. The consultant may be tasked to ensure that the regional stormwater facilities comply with both FEMA and CVWD design standards and that the proposed improvements do not negatively impact the existing facilities.

STORMWATER MASTER PLANNING PROJECTS

CVWD has prepared several stormwater master planning studies to address flood control needs in the Coachella Valley. The objective of the stormwater master plans is to provide guidance to CVWD and Riverside County for conditioning future development. These plans will require extensive capital to construct the improvements and will be built and funded over time as development occurs. The proposed regional stormwater facilities studies include:

Thousand Palms Flood Control Project (TPFCP) — The TPFCP will intercept stormwater flows from nearby canyons and convey them to existing flood channels. The project will protect more than 2,800 acres of land while providing long-term sand supply for an endangered fringe-toed lizard. The design and environmental documentation is more than 90% complete and the hydraulic studies have been submitted to the FEMA for review and approval.

North Indio Regional Flood Control Channel and the East Side Dike — The project will collect flood flows from the outlets of the Sun City Palm Desert stormwater channels and convey them to the Sun City Shadow Hills channels and ultimately to the Coachella Valley Stormwater Channel (CVSC). The project is currently under construction. The second phase of flood protection for North Indio area consists of acquiring FEMA certification of the existing Eastside Dike. These projects propose to remove a large portion of the flood hazards mapped by FEMA in this area thereby eliminating the mandatory requirement for homeowners to purchase flood insurance.

Oasis Area Stormwater Master Plan — CVWD has completed the master plan for the Oasis area which will provide protection from alluvial fan and valley floor drainage flooding sources. The document will help to strategically guide future CVWD and developer improvements in the area. Based on the completed study, FEMA has revised the FIRMs to reflect the revised flood zones.

Mecca/North Shore Area Stormwater Master Plan — CVWD has completed the master plan for Mecca/North Shore area which will provide flood protection from various flooding sources. The document recommends new facilities and upgrades to existing stormwater facilities to convey regional flows and drainage downstream of the East Side Dike to the CVSC or the Salton Sea.

North Cathedral City Stormwater Master Plan — The master plan proposes to collect regional stormwater flows from Morongo Wash and other upland flooding sources and divert them to the Whitewater River Stormwater Channel through a proposed bridge under Interstate 10. Phase I of the project is under design.

Until the construction of master stormwater facilities is complete, CVWD requires developers to comply with California Drainage Law, Riverside County Ordinance 458, CVWD Ordinance 1234.2 (its revised version) and all FEMA Regulatory requirements.

Prior to CVWD approval of a subdivision map in an area subject to regional flooding, the developer is required to pay fees and submit a hydrologic (watershed) and hydraulic (stormwater facility) report. Typically, a subdivision map is approved after conceptual approval of the hydrology and hydraulic report by CVWD and the stormwater consultant. However, prior to issuance of grading permits, CVWD requires both a Conditional Letter of Map Revision (CLOMR) from FEMA and a final report reviewed and approved by CVWD and its stormwater consultant. Prior to occupancy, a FEMA Letter of Map Revision (LOMR) is required based on the approved hydrology and hydraulic report.

TECHNICAL DATA

The following reports, studies, exhibits, data and other technical information are provided as electronic attachments in Planet Bids for your use in preparing your proposal:

1. CVWD Boundary Map
2. CVWD "Stormwater Unit" Boundary Map
3. CVWD Stormwater Facilities Map
4. CVWD Drainage and Stormwater Outlet System Map
5. North Cathedral City Stormwater Master Planning Area
6. Eastern Coachella Valley Stormwater Master Planning Area (Executive Summary Report and Exhibits)
7. Thousand Palms Flood Control Project
8. North Indio and East side Dike Stormwater Master Planning Area
9. Riverside County Ordinance 458 (latest version)
10. CVWD Ordinance 1234 (latest version)
11. CVWD Department Development Design Manual – Stormwater Section

ADDITIONAL TECHNICAL DATA

The following reports, studies, data and other technical information are available at CVWD for your use in preparing your proposal:

1. Oasis/ Valley Floor Area Stormwater Master Plan prepared by Albert A. Webb Associates for CVWD. April 2015.
2. Mecca/North Shore Stormwater Master Plan prepared by Albert A. Webb Associates for CVWD. April 2015.
3. Eastern Coachella Valley Stormwater Master Plan - Coachella Valley Stormwater Channel Alternatives Study. Final report. Prepared by Tetra Tech and dated August 2014.
4. Eastern Coachella Valley Stormwater Master Plan - Alternatives Study for the Oasis Area, Riverside County, California. Final report. Prepared by Tetra Tech and dated August 2014.
5. Eastern Coachella Valley Stormwater Master Plan - Coachella Valley Stormwater Channel – Oasis Area Drainage Study. Final report. Prepared by Tetra Tech and dated July 2014.
6. Coachella Valley Water District, Whitewater River Stormwater Channel, Bank Protection Project Hydraulic Design Report, prepared by Bechtel Corporation, dated March 1995
7. Draft Whitewater River Basin Feasibility Report for Flood Control and Allied Purposes, San Bernardino & Riverside Counties, California. Prepared by U.S. Army Engineer District, Los Angeles Corps of Engineers, May 1980
8. Draft "Without Project" Hydrology Report Thousand Palms Area, Whitewater River Basin Riverside and San Bernardino Counties, California. March 20, 1997
9. Northwest Hydraulic Consultants (NHC). 2006. Hydraulic Modeling of Whitewater River Stormwater Channel at Cimarron Golf Course. Report prepared for Coachella Valley Water District and Riverside County Flood Control and Water Conservation District. August 7, 2006.

10. Northwest Hydraulic Consultants (NHC). 2012. Morongo Wash Flood Control Project Hydraulic Design Studies. Report Prepared for Coachella Valley Water District. September 25, 2012.
11. Northwest Hydraulic Consultants (NHC). 2012. Coachella Valley Stormwater Channel Hydraulic Analysis: Existing Conditions. Report prepared for Coachella Valley Water District. October 9, 2012.
12. Northwest Hydraulic Consultants (NHC). 2012. Jefferson Street Grade Control Structure and Sewer Line Replacement Final Basis of Design Report. Report prepared for Coachella Valley Water District. October 2012.
13. Northwest Hydraulic Consultants (NHC). 2013. North Cathedral City and Thousand Palms Stormwater Management Plan Morongo Wash and Thousand Palms Watersheds (Draft) Alternatives Analysis Report. Report prepared for Coachella Valley Water District. September 20, 2013.
14. Northwest Hydraulic Consultants (NHC). 2013. North Cathedral City and Thousand Palms Stormwater Management Plan Thousand Palms Flood Control Project Hydrology and Hydraulics. Report prepared for Coachella Valley Water District. December 2, 2013.
15. Northwest Hydraulic Consultants (NHC). 2013. Whitewater River Stormwater Channel Levees (Ramon Road to Vista Chino) Hydraulic Model Studies for Certification. Report prepared for Coachella Valley Water District and Federal Emergency Management Agency. December 2, 2013.
16. Northwest Hydraulic Consultants (NHC). 2014. Coachella Valley Stormwater Channel Hydraulic Studies Channel Improvements Analysis: Monroe Street to Avenue 52. Report prepared for Coachella Valley Water District. November 24, 2014.
17. Northwest Hydraulic Consultants (NHC). 2014. Coachella Valley Stormwater Channel Hydraulic Analysis: Existing Conditions (Jefferson Street to Monroe Drop Structure). Report prepared for Coachella Valley Water District. September 24, 2014.
18. Northwest Hydraulic Consultants (NHC). 2014. North Cathedral City and Thousand Palms Stormwater Management Plan Morongo Wash Watershed Hydrology and Hydraulics. Report prepared for Coachella Valley Water District. April 25, 2014.
19. Northwest Hydraulic Consultants (NHC). 2014. Whitewater River/Coachella Valley Stormwater Channel Hydraulic Analysis (Ramon Road to Jefferson Street) (Levee ID 23, 26, 28, 30, 31, 36 & 38). Report prepared for Coachella Valley Water District. September 24, 2014.
20. Northwest Hydraulic Consultants (NHC). 2015. North Indio Study Area Stormwater Management Plan East Side Dike and North Indio Hydrology and Hydraulics. Report prepared for Coachella Valley Water District. February 27, 2015

E. UNDERSTANDING OF PROJECT

Sample Project

The RFP includes a description of a sample project, directing the respondent to provide an approach and cost estimate to review the first submittal for Stages 1 and 2 (combined) of the checklists for regional flooding, using the checklist from Appendix K-5 of the CVWD Development Design Manual. The sample project is defined as a 20-acre proposed residential subdivision located within an AO-1 flood zone. The subdivision has 60 lots. The proposed review approach and items to review, task list, associated hours, and cost are summarized below.

Since the project is located within an AO flood zone, it is assumed that items of major focus in the submittal will be the identification of the existing flood hazard, how flood protection is to be provided to the proposed development, and how potential flooding impacts on neighboring properties will be mitigated in the with-project condition. For scope and budget estimating purposes, it is assumed that the submittal has included a project report in addition to hydrologic and hydraulic models for both existing and with-project conditions. It is also assumed that sediment yield, sediment transport, and scour calculations used in sizing project features and for assessment of off-site impacts are based on the hydrologic and hydraulic modeling results.

The applicant has chosen to submit a combined Stage 1 and 2 analyses, which has some risks if the existing condition analysis is not accurate. We will use our knowledge of the area to cross-reference the location of the project to existing CVWD Stormwater Master Plans and development reports in the area to see if there are any existing delineations or H&H analysis and to confirm that the best available data is being used. The applicant will be directed to these studies and provided baseline topography, geomorphic, and/or H&H data as appropriate and available. If the applicant has not used the best available information, they will be made aware and may wish for a more cursory review to take place at the onset, a meeting to be scheduled, or to rescind their submission. During the review, if a fatal flaw is identified in a fundamental assumption, we will make CVWD aware to determine if the review should be stopped at that time.

The approach to be followed in the submittal review is outlined below:

1. Review the submitted report to determine if the application is complete.

Specifically, review (1) if the appropriate K-5 checklist items for the Stage 1 and Stage 2 items

have been addressed, and (2) if the level of analyses and discussion provided in the report is sufficient to describe the existing and with-project conditions related to regional flooding. If the application is incomplete, then we will let CVWD know and discuss if the report should be sent back at that time for further development.

2. Review the hydrologic models and/or supporting input/calculations. Ensure that appropriate storm centering, rainfall intensities, and loss rates have been applied for development of runoff hydrographs that impact the project site. Check assumptions regarding changes to routing, infiltration, etc., that are associated with the proposed development. Contrast model inputs and outputs with values noted in the report and used in the project design – check for consistency.

3. Review the hydraulic models and the related assumptions (i.e., resistance factors, boundary conditions, etc.). Check that the level of refinement applied in the models is appropriate for the size of the development and proposed flood management features. Review assumptions related to flow path uncertainty to determine if a reasonable level of analysis has been performed to define the potential flood hazard. Contrast model inputs and outputs with values noted in the report and used in the project design – check for consistency.

4. Review the scour assessment and sediment yield/transport calculations and/or evaluation. Ensure that the assumptions applied (i.e., sediment gradations, Blench Z-factors, fire factors, etc.) are appropriate and reasonable for determination of design parameters and evaluation of potential off-site impacts, and that the calculation procedures follow CVWD guidelines.

5. Prepare a review memo that briefly summarizes the submittal objectives and contents and identifies the adequacy of the submittal. Specifically, disclose if the submittal addresses Riverside County Ordinance 458, California Drainage Law, along with the CVWD requirements as outlined in the DDM guidelines. We have found that resolving California Drainage Law is a limiting factor in developing the footprint and geometry for a regional flood control facility, so extra time will be spent clarifying this item and next steps within the reporting.

6. Develop a Task Order summary. Maintain and disclose an accounting of time spent for distribution to CVWD and the project applicant.

7. Coordinate with CVWD and the project applicant. Coordinate and participate in review meetings to discuss the findings of the review and plan for next steps.

Tasks, hours, and estimated costs, using proposed rates as presented in Section I, are summarized in the following table. It is assumed that the primary review will be conducted by a

Principal, with some additional time from the other Principals and Senior Engineers for specific discipline input and QA/QC of the review comments. We have found that it is important to have experienced personnel working on these jobs in order to provide effective comments. Our reviewers also have extensive experience reviewing these types of submittals and understanding of the systems, which increases efficiency and effectiveness. We typically have two to three individuals engaged in a review with one Principal (Hank or Brady) as the primary point of contact. We included time for a meeting under Coordination either with CVWD prior to submission or with the applicant.

NHC COST PROPOSAL								
PROJECT:		CVWD Sample Project 2024						
PROJECT NO:		P05009421						
CLIENT:		CVWD						
DATE:		3-Oct-24						
BY:		HMF, BJM						

We have found that the cost for initial reviews can vary greatly depending on the quality and complexity of the projects. Types and numbers of models applied. We have examples of initial reviews that are under \$2K which can be done primarily by one individual, while others with numerous models for review and more complex designs can be over \$6K; this estimate given the assumptions listed comes in at \$5,115. If the project uses established regional models for areas such as hydrology and hydraulics, it will likely reduce the above estimate by around 15 to 25 percent.

Required Experience, Expertise, and Knowledge

The Scope of Services in Section 2 and Attachment 1 of the RFP describe both the technical skills required from the engineering consultant and the specific services expected over the term of the agreement. The general requirements for the consultant will be to contribute specialized technical expertise in hydrology, hydraulics, sediment transport, scour analysis, debris flow, and other river engineering disciplines to supplement the skills of CVWD. Section D (Personnel), Section G (List of Representative Projects), and the paragraphs below detail the nature of NHC's expertise in these disciplines.

Application of the technical expertise also requires an understanding of the regulatory environment in the Coachella Valley for stormwater and flood hazards, an understanding of arid lands hydrology and alluvial fan hazards, and familiarity with existing practices to manage stormwater and flood hazards in the Coachella Valley. NHC has held the Stormwater Hydrology and Hydraulic Review Services contract for the past 16 years and has worked on more than 200 task orders for CVWD. Our proposed team understands the regulatory environment in the Coachella Valley and can continue to provide the required services with staff who have long experience working in the Coachella Valley and with CVWD. CVWD has outlined several areas of expertise that are required, which are addressed directly below.

Flood hydrology including rainfall and runoff analysis, watershed runoff modeling and routing, sediment transport, scour analysis, and debris flow calculations.

NHC has utilized all of these skills on Stormwater Master Plans, Capital Improvement Projects, and Developer Reviews for CVWD. We have developed flood hydrology including rainfall and runoff analysis, watershed runoff modeling, and routing (North Cathedral City, East Side Dike, West Shore Salton Sea, etc.). We have completed sediment transport modeling using 1D models (WWR/CVSC) and 2D model results (Thousand Palms Flood Control Project), as well as reviewing different methodologies applied by developers. We have completed a scour analysis on Capital Improvement Projects (Avenue 54 to Thermal Project, East Side Dike, etc.) for straight reaches and hydraulic structures. We have completed debris flow calculations and analysis for the West Shore Salton Sea.

Open channel and closed conduit hydraulic design analyses including high velocity flood channels, energy dissipaters, culverts, bridges, stormwater network analysis and erosion and scour analyses for riverbank protection.

NHC's hydraulic engineering experts have knowledge and experience working in open and closed conduit systems for varying conditions such as those listed above. Our relevant experience in the Coachella Valley includes work on the Whitewater River (open channel, bridges, erosion and scour analysis, and riverbank protection), North Indio Channels (closed conduit, energy dissipaters, stormwater network, high-velocity flood channels, erosion and scour analysis), and Avenue 54 to Thermal (energy dissipaters, high-velocity flood channels, bridges). We have also reviewed and provided input on all the listed conditions as part of developer reviews.

Standard hydrology and hydraulic models including HEC-HMS, HEC-RAS, MIKE 21C, FLO-2D, XPSWMM/ PCSWMM/ SWMM and FEMA's Alluvial Fan Model.

NHC has expertise in many of the commercially available software packages including all listed above for projects in Coachella Valley. NHC has utilized HEC-RAS, HEC-HMS, FLO-2D, and MIKE

to develop stormwater master plans for CVWD, the Alluvial Fan Model for floodplain mapping, and PCSWMM to develop a stormwater master plan for the City of Coachella. A listing of our model experience for these programs by staff is given in Section D.2.

FEMA guidelines and regulations, California Drainage Law, Riverside County Ordinance 458 (latest version), CVWD Ordinance 1234.2 (latest version), and CVWD's Development Design Manual.

NHC has experience following FEMA guidelines and regulations on CVWD projects (Oasis LOMR, CVSC PMR, East Side Dike), including the implementation of the first Levee Analysis and Mapping Procedure (LAMP) project in the country with CVWD. NHC is very familiar with CVWD Ordinance 1234.2 and the Development Design Manual, assisting in the development and review of the documents. NHC applies our knowledge of Riverside County Ordinance 458 and California Drainage Law on a regular basis through review of developer submittals.

Hydrologic and hydraulic design guidelines and analytical approaches utilized by the U.S. Army Corps of Engineers, FEMA, U.S. Bureau of Reclamation, Federal Highway Administration, California Department of Water Resources-Division of Dam Safety and Riverside County Flood Control & Water Conservation District (RCFC&WCD).

NHC is familiar with the hydrologic and hydraulic guidelines of regulating agencies and has previously held contracts for work directly with many of them, including FEMA, USACE, USBR, FHWA, and DWR. We are familiar with the RCFC&WCD guidelines through our collaborative work with them and CVWD, such as the Cimarron Levee project/Vista Chino Certification. NHC has successfully submitted regulatory documents for DSOD and worked with them on projects such as the Oroville Spillway Rehabilitation.

U.S. National Oceanic Atmospheric Administration (NOAA) National Weather Service rainfall frequency data for the Coachella Valley Area.

NHC has applied NOAA rainfall data for all the stormwater master plan projects we have worked on for CVWD (West Shore Salton Sea, East Side Dike, etc.) and we are very familiar with utilizing the data. We have also utilized the data on special projects such as the Rainfall Gauge Pilot Program and WRP-7.

Outline of Scope of Services to be Provided to CVWD

NHC has extensive experience applying the tools, knowledge, and guidelines outlined in the scope during our extensive tenure as CVWD's on-call consultant. The specific services to be provided to CVWD are discussed below.

Assist CVWD in the review of regional hydrology and hydraulic reports

The submissions from developers for review are expected to include hydrology and hydraulic studies for proposed housing and other developments on fans, proposed housing and other developments on floodplains, and flood channels connecting to CVWD facilities, as well as bridges, crossings, or other structures built within the stormwater conveyance channels managed by CVWD. NHC has assisted CVWD in the review of over 69 different developer projects during our time as an on-call consultant. NHC reviews the submissions for technical accuracy, compliance with CVWD, local, and federal standards, and compatibility with existing or proposed infrastructure including SMPs. During these reviews, NHC uses our expertise in H&H to provide technical comments to the project proponents, which often requires an understanding of rainfall frequency, hydrology, hydraulics, alluvial fans, debris flow, sediment transport, and scour.

The general responsibilities of NHC will be to meet with the developer and provide guidance for preparing studies to meet CVWD and other relevant standards. NHC is well-versed in local regulations including: CVWD Ordinance 1234.2, Riverside County Ordinance 458, and California Drainage Law. NHC will then review developer submissions and provide an initial evaluation of whether or not the submissions meet CVWD and other requirements. Subsequent reviews include detailed reviews of hydrologic and hydraulic models, characterizing both existing alluvial fan hazards or flood hazards at the development and the success of proposed mitigation measures in protecting the development and meeting floodplain criteria and California Drainage Law.

NHC has worked closely with CVWD staff over the past 16 years, and we have collaboratively developed procedures to monitor and memorialize the progress of developer review projects. Throughout this period of collaboration, NHC and CVWD have conducted monthly progress meetings to review progress on all ongoing task orders. NHC has also incorporated feedback from CVWD to revise the developer review comment format to provide succinct action items along with comments.

NHC will work closely with CVWD staff and submit draft memoranda documenting the results of reviews, discuss the review comments with CVWD, and resolve comments in meetings with the developer and the developer's engineers. NHC works with CVWD and strives to provide review comments within a three-week time window. Task order summaries of work accomplished, and budget expended are produced with each review memo to track project review progress.

NHC also performs review services for CVWD on projects being completed by other consultants for CVWD as needed. For these projects, the feedback is typically more informal with more frequent meetings and discussions of the topics with the other consultants and CVWD prior to comment submission.

Perform special studies including Stormwater Master Plans and capacity assessments.

Special studies completed by NHC for CVWD include developing regional hydrologic and hydraulic models, conducting stormwater master planning studies (North Cathedral City, Thousand Palms, North Indio, Southern East Side Dike, West Shore Salton Sea), preparing construction drawings and support for critical flood control infrastructure (Fillmore Street, East Side Dike, Avenue 64), providing support for emergency repair projects (Jefferson Street grade control structure, Adams Street), and reviewing flood damage and recommendations for improvements (Valentine's Day Storm 2019, Tropical Storm Hillary 2023).

NHC has completed capacity assessments for existing facilities as part of FEMA compliance for levees (WWR/CVSC and Deep Canyon) and for drainage (Wasteway #1, #2 and #3 as part of the East Side Dike projects).

NHC anticipates that similar studies may be required if awarded the Triennial Contract.

Assist CVWD in preparation and review of proposed projects to ensure conformance with approved Stormwater Master Plans.

NHC has an extensive understanding of the Coachella Valley watersheds and CVWD regional facilities through various special studies and review projects completed over the last 16 years. Through the completion of Stormwater Master Plans, Capital improvement projects are often identified that would help to bolster the level of flood protection for the system.

NHC previously completed a Stormwater Master Plan (SMP) for the North Cathedral City and Thousand Palms region, which included studies of the Morongo Wash Watershed and supporting H&H for the Thousand Palms Flood Control Project (TPFCP). NHC completed an SMP for the North Indio watershed, which includes the East Side Dike north of I-10. This study identified deficiencies in the levee system and additional studies that would be necessary prior to completing certification. NHC then worked with CVWD to develop and construct plans to mitigate these deficiencies for the East Side Dike north of I-10, it is being processed through FEMA waiting on an updated Emergency Response Plan (ERP) from CVWD before completion. In addition, NHC has performed multiple detailed studies on the WWR/CVSC from Vista Chino to the Salton Sea, as well as other tributary systems. More recently, NHC finished studies of the East Side Dike Southern Reach (I-10 to Dos Palmas Road) and the West Shore of the Salton Sea SMPs. NHC is currently working to develop mitigation plans for certification for the Southern Reach of the East Side Dike. NHC also completed the existing condition analysis for the City of Coachella SMP in collaboration with CVWD. NHC regularly utilizes the findings from these studies to assess developer projects along the I-10 corridor (Ivey Palms, Portola) that are part of the TPFCP system (Northstar 343) or are adjacent or upstream of facilities (Virada, La Entrada,

KPC Coachella). NHC worked with WSP to address deficiencies in flood conveyance through the design and construction of the Avenue 54 to Thermal Drop project.

NHC has previously reviewed the SMPs for Eastern Coachella SMP, which included the Oasis Area/Valley Floor and Mecca/North Shore areas prepared by Albert A Webb Associates and Tetra Tech and is very familiar with the typical standards and requirements for these plans. NHC has implemented the findings from these studies on design projects (Fillmore Outfall Structure) and developer reviews (Kohl Ranch, Thermal Beach Club, and Coachella Golf Club) to confirm conformance.

Ensure reviews comply with existing regulations, ordinances, guidelines, and design criteria.

NHC previously assisted CVWD in preparing Section 8 and Appendix K of the Development Design Manual (DDM) and assisted CVWD with review of technical aspects of guidelines and policies in CVWD Ordinance 1234.1. NHC provided guidance and information to CVWD during Ordinance 1234.2, including performing as-directed technical studies to investigate impacts of changes to design standards on existing facilities. NHC has worked with CVWD to update Section 8 and Appendix K of the DDM to reflect the recently approved CVWD Ordinance 1234.2. NHC recently worked with CVWD to develop checklists for developer submissions (K-1 and K-5) to streamline the process of review. If awarded the Triennial Contract, NHC expects to continue to work closely with CVWD on reviewing policies and guidance and updating of the DDM.

Review existing hydrology and hydraulic reports to get an understanding of the watersheds and regional facilities within CVWD's stormwater boundary.

NHC has gained considerable institutional knowledge of the area and CVWD regional stormwater infrastructure through project work and reviews. NHC is familiar with and has reviewed many of the foundational studies by the USBR, USACE, Bechtel, and CVWD as part of our studies on existing and proposed facilities. NHC has authored or been a reviewer for all SMPs and H&H studies completed in the past 16 years and referenced within this RFP. The provided reports and studies (under Technical Data) have been reviewed and referenced by NHC in our work with CVWD.

Develop standards and criteria for design of regional stormwater facilities.

NHC has assisted CVWD with revising the design criteria in CVWD Ordinance 1234.1 and 1234.2. NHC completed analysis of different recurrence interval events to support the development of this criteria. NHC has also assisted in updating the DDM and its accompanying guidelines to reflect the change in ordinance. NHC has worked closely with CVWD to develop guidance on issues as they arise. An example of ongoing criteria development involves the calculation of an equilibrium slope for channels where developers are proposing to remove existing grade control

facilities. NHC also assisted CVWD in review and revision of the setback standard that is just used for determination of encroachment limits adjacent to watercourses within the District's jurisdiction. NHC has developed a sediment transport model for the WWR/CVSC that will assist developers by providing guidance for project specific conditions. NHC has background on the existing flood protection design criteria and expects to help CVWD revise and update these policies and guidelines as required.

Attend field visits to proposed project sites as necessary.

NHC routinely visits development and project sites with CVWD as part of reviews and flood damage assessments and believes that these site visits are an important part of providing appropriate reviews and performance evaluations. We recently performed a multiple day site visit to assess damage from Hurricane Hilary. We anticipate site visits for future development reviews, post-storm reconnaissance and other projects. NHC is willing and able to attend field visits on short notice as directed.

Attend technical meetings with CVWD staff, developers, and consultants.

NHC has both attended technical meetings and participated in conference calls with CVWD and developers. Responsibilities include presenting the NHC/CVWD review comments to the developer, responding to their comments, contributing to the resolution of issues, and defining the next steps for the developer. We anticipate attending technical meetings for future task orders for development proposal reviews.

NHC has also led technical meetings for CVWD staff, regulatory agencies, and other local stakeholders as part of the specialty studies and SMPs. NHC has led and supported presentations to FEMA and local stakeholders through Local Levee Partnership Teams (LLPT) and community outreach efforts. NHC has also worked with the stormwater department to brief other CVWD departments on designs to solicit feedback and buy-in for ongoing projects. These meetings have been imperative to efficiently moving design projects forward.

Perform special technical studies for CVWD.

NHC has performed a variety of technical studies for CVWD over the preceding contracts as needed for capital improvement projects and to support ongoing department work. Our existing knowledge of the system and previous studies allows us to efficiently provide these services with minimal ramp-up and time for background research. Our work as extension of staff and frequent communication with CVWD is helpful to scope the work required to meet the District's objectives. Some recent technical studies have included: performing a Rainfall Gauge Pilot Program to help inform additional locations for gauges; scour and hydraulic assessment for Reservoir 4602; a levee certification study for the CVSC reach between Ramon Road and Country Club Drive; development of flood control solutions for the Dog Park Levee at The Reserve

County Club, and development of a sediment transport model for the WWR/CVSC for assessment of changes to bed elevations and impacts of potential removal of hard structures.

Work closely with CVWD staff during project review to ensure succinct responses using most recent modeling programs.

In the past, NHC has worked closely with CVWD staff and shared technical knowledge and problem-solving approaches and techniques with CVWD for applications on internal and developer led projects. NHC is in nearly daily contact with CVWD on developer projects to address technical and administrative questions and to keep track of the progress of various projects. We anticipate continuing this relationship if awarded the Triennial Contract.

Provide expert stormwater hydrology and hydraulics opinion/testimony on behalf of CVWD for potential stormwater-related claims/lawsuits.

NHC has provided expert opinions for claims/lawsuits against some of our clients in the past and is willing to serve that role when appropriate for CVWD.

NHC's approach for providing timely services under the Triennial Contract is described below.

Approach to Staff Management

NHC will maintain close contact with CVWD throughout the contract period. We recognize the need to provide prompt technical reviews of developer submissions, while working as an extension of CVWD staff, and the need to be available to address specific issues or questions as they arise. NHC will ensure that Brady, Brent and Hank are available to respond to reviews, specific issues, and questions in a timely manner.

Brady and Brent will prepare scopes and costs and assign proposed staff to specific task orders based on the technical character of the work, delivery schedule, and size of the assignment. Brady and Hank Fehlman will be primary managers for the developer review task orders and will interact directly with CVWD on a frequent basis. Our team includes very experienced senior staff, and they will be involved in task orders and work directly with CVWD on project reviews and reviews of regulations and design criteria. Engineering staff will work on larger assignments and perform specific tasks such as setting up hydrologic or hydraulic models.

Each task order will have a specific technical team (which may vary from one to several individuals) and will have a set of tasks and milestones for delivery of products based on the scope. NHC will track internal progress, share progress with CVWD in monthly meetings, and make corrections if necessary to maintain schedules, control costs, or address technical issues. NHC will provide summaries of task orders for developer reviews for succinct record keeping and communication. NHC has the capacity to complete multiple, simultaneous assignments and

we can provide specialists other than those named in Section D, if required by the volume or nature of task orders.

Approach to Task Orders

NHC understands that the number and nature of task order assignments over the term of the Triennial Contract are not known. As discussed earlier, the assignments are expected to include reviews of developer submissions; reviews of regulations, guidelines, and design criteria; and special studies. A general description of the approach to these different types of studies is provided under the following subheadings.

Review of Developer Submissions

Budgets for these assignments are generally negotiated between the developer and CVWD. NHC tracks the use of funds through task order summaries that are provided if additional budget is required for projects.

NHC's role often begins with an initial discussion with CVWD and the receipt of a hydrologic, hydraulic, or other study report from the developer's engineer. Where practical, CVWD and NHC encourage pre-project or pre-submission meetings with the developer's engineer to go over the CVWD technical requirements for the project and organize the required submissions into logical steps.

The nature of the submissions depends on the type of project, but they generally include hydrology, existing conditions hydraulics and flood hazards, project condition hydraulics and flood hazards (including impacts on adjacent properties), and the proposed stormwater conveyance design and mitigation for impacts on adjacent properties or features. The project design review focuses on meeting CVWD and other standards for flood hazard mitigation, California Drainage Law, and public safety.

Sediment transport and stream bed adjustments, such as scour or incision, may be critical aspects of project design and performance. NHC and CVWD will carefully review these parts of the submission when they are likely to be important.

The general review process is outlined above for the sample project in Section E. It is typical for this process to take multiple submittals. The number of submittals is a function of their quality. NHC provides a list of comments and action items for each review, which is discussed with CVWD prior to submittal back to the developer. A meeting is typically held to review the developer's response to comments prior to submittals. Once the project meets all the standards, NHC will work with CVWD to write conceptual approval letters that summarize the project key features and allow for the project to receive final approval upon submittal of approved final plans. It is NHC's role to review for compliance with all of the standards to protect CVWD's interests. On occasion a project may request a variance when near completion, NHC will discuss

these instances with CVWD to provide technical information that allows CVWD to make an informed decision in these circumstances.

Review of Regulations, Guidelines, and Design Criteria

NHC's work under this scope item generally begins with a periodic review or internal revision of CVWD guidelines or issuance of revised guidelines or regulations that affect floodplain regulations or stormwater management by other agencies, such as FEMA, State of California, or Riverside County. CVWD recently revised its regulations, guidelines, and design criteria for stormwater conveyance, as published in Ordinance 1234.2 and in the DDM. NHC has experience incorporating Riverside County Ordinance 458 for regulating development in FEMA SFHAs.

Revised guidance or regulations published by agencies such as FEMA may also affect stormwater conveyance or floodplain management by CVWD. For instance, guidance from FEMA (Analysis and Mapping Procedures for Non-Accredited Levees) affects the calculation procedures for hazards on floodplains and, consequently, the depths and velocities faced by developers and the general nature of the mitigation required for development on floodplains. These guidelines often provide general advice and NHC's role has been to develop specific procedures for calculating hazards that correspond with the more general guidance in conjunction with CVWD and to advise developers on these procedures.

Special Studies

The special studies may be part of the plan by CVWD to maintain or upgrade their stormwater facilities or result from specific issues that arise. Typical examples might be:

- **Regional Stormwater Conveyance Upgrades:** The Whitewater River and the Coachella Valley Stormwater Channel (WWR/CVSC) hydraulic model have been revised and updated in the past 16 years and levee freeboard deficiencies have been identified. Ongoing steps include developing plans for levee improvements and working with CVWD and FEMA to certify levees and upgrade flood hazard maps. This includes certification of structures that were previously removed. Similar projects may be carried out on regional facilities that are tributary to the WWR/CVSC.
- **Stormwater Master Plans:** CVWD has undertaken stormwater master plans to identify regional flooding risks, infrastructure, and potential future projects. Plans have been completed for many of the tributary watersheds. Implementation of potential future projects for TPFCEP, Morongo Wash, East Side Dike, and other areas is ongoing or likely to commence. **Evaluation of Scour Susceptibility of Buried Crossings:** In combination with the hydraulic modeling, evaluate the maximum depths of scour in the WWR/CVSC and identify any pipeline crossing that might be exposed by scour.

- **Hydraulic Design:** Typical design and construction projects might include additional grade control structures, design of protective works for crossings, hydraulic design of bridges or stormwater channels, or design of bank protection works (scour component).
- **Post-Storm Assessment of Facilities after Major Storm Events:** NHC would work quickly with CVWD to document any damage in person, review previous technical studies and available measurements to quantify the event.

NHC's work on the special studies generally begins with an initial discussion of the project with CVWD, followed by preparation of a draft scope and cost estimate. CVWD reviews the scope and cost and then presents the final version to the Board for approval.

Once the scope is accepted, NHC often works independently under the general supervision of CVWD staff. Brady or Brent will manage the participation of NHC staff on the specific tasks under the task order, prepare interim or final deliverables, and provide progress reports to CVWD. Deliverables under the special studies generally consist of a final report or construction plans, specifications, and engineer's estimate of costs.

Quality Assurance Program

Introduction

NHC bases its quality assurance and project control procedures on our internal document "*Quality Assurance Guidelines for Proposals and Projects*". Quality control is the evaluation of technical products and processes to ensure that they comply with applicable laws, regulations, policies, accepted technical practices of the disciplines, and with client requirements and expectations. Evaluations consist of verifying the technical quality of each discipline involved in the project delivery team and verifying the suitability and appropriateness of major decisions made by the team.

Quality Management Team

For the Triennial Review Contract, the quality management team should include the project team and internal quality review. An independent technical review would be provided by CVWD or by another organization if required by the nature of the project.

Project Team

The project team includes the task order manager, and the staff assigned to the particular project. The project manager is responsible for supervising day-to-day progress, the execution of specific tasks, development of deliverables, and organization of the quality management

program. Specific responsibilities for quality management are attending and documenting internal review meetings, and management of project team resources.

Internal Quality Review Team

The internal quality review team provides advice on project direction, participates in task development, and reviews products throughout the course of the project. Generally, this role has been filled by either Brent Wolfe or Ken Rood, depending on the nature of the project. For a few projects, other individuals in NHC will complete the internal review.

Quality Procedures and Work Plan

Quality control procedures are discussed for each task order, with the level of detail depending on the nature of the task order. If it helps evaluate our qualifications, we would be pleased to submit an example Quality Control and Work Program.

EXHIBIT "B"

PROFORMA TASK ORDER

**COACHELLA VALLEY WATER DISTRICT
PROFESSIONAL SERVICES AGREEMENT
TASK ORDER NO. ____**

This Task Order No. ____ ("Task Order") is entered into this ____ day of _____ 20__ by and between Coachella Valley Water District ("CVWD") and INSERT CONSULTANT NAME] ("Consultant").

RECITALS

A. On or about ____, 20__ CVWD and Consultant executed that certain Professional Services Agreement ("Agreement").

B. The Agreement provides that the parties would enter into a Task Order to make changes to or authorize certain work set forth in the Scope of Services (as defined in the Agreement). The purpose of this Task Order is to make changes to or authorize work on the terms and conditions set forth herein.

NOW, THEREFORE, the parties hereto hereby agree:

1. Section 1.1 of the Agreement is hereby amended to [include] or [delete] those services listed on Exhibit "1" attached hereto and by this reference incorporated herein.

2. Section 2.1 of the Agreement is hereby amended to [increase] or [decrease] or [confirm] the amount to be paid by CVWD to Consultant as more particularly set forth on Exhibit "1."

3. In the event this Task Order authorizes additional work or confirms work set forth in the Task Order but not authorized, Consultant shall perform the services listed in Paragraph 1 above pursuant to the schedule set forth on Exhibit "1."

4. Consultant acknowledges that the compensation (time and cost) set forth herein comprises the total compensation due for the work defined in this Task Order. The signing of this Task Order acknowledges full mutual accord and satisfaction for the work and that the stated time and/or cost constitute the total equitable adjustment owed the Consultant as a result of the authorized work.

5. Except as amended or supplemented herein or in previous task orders, the terms and conditions of the Agreement shall remain in full force and effect. Notwithstanding the immediately preceding sentence, the Agreement shall be interpreted in a manner consistent with the intent of this Task Order.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE FOR
TASK ORDER NO. _____

IN WITNESS WHEREOF, CVWD and Consultant have caused this Task Order No. _____
to be executed as of the day and year first above written.

“CONSULTANT”

[INSERT CONTRACTOR NAME]

By: _____

Name: _____

Its: _____

“CVWD”

COACHELLA VALLEY WATER DISTRICT, a
public agency

By: _____

Name: _____

Its: _____

TASK ORDER NO. _____

- C. Time to Perform Services Listed Herein.

EXHIBIT “C”

PERFORMANCE SCHEDULE

The term of this Agreement shall expire on November 30, 2027 or upon completion of work authorized by approved Task Orders, whichever is later.

Individual performance requirements and schedules will be established in the Task Order for each project.

EXHIBIT “D”

COMPENSATION

The fee to complete the scope of services under this Agreement shall be in accordance with the hourly rate sheets provided in Consultant’s proposal dated October 10, 2024 attached hereto and incorporated herein by this reference. The attached hourly rate sheets shall remain in effect through November 30, 2027, or upon completion of work authorized by executed Task Orders, whichever is later.

Each Task Order will establish a not-to-exceed amount for each project. In no event shall the total amount paid for services rendered by Consultant under this Agreement exceed the sum authorized under each Task Order, unless otherwise expressly authorized by an Amendment.

I. COST PROPOSAL

Standard Rate Sheet

Hourly Rates of Proposed Staff

NHC's proposed rate sheet is given at the end of this section. We propose to hold these rates static over the contract period.

The provided standard rates are for labor only, consistent with our current contract. Travel is infrequent for developer reviews, and we do not anticipate the need to incorporate costs for travel or special equipment as part of these projects. For special projects, it is not feasible to anticipate the nature of the work, and we propose to estimate expenses at the time of the proposal, consistent with our current practice. Reimbursable expenses and any rates for use of special equipment will be identified within proposals as necessary. Airline travel will be by the lowest available rate to the nearest airport.

Disbursement and Subconsultants

The Schedule of Standard Charges provides costs for reproduction (photocopies and plots). We are proposing a handling charge or mark up of 10% on subconsultants, reimbursable expenses, and travel and subsistence.

Invoicing

NHC proposes to invoice monthly, in arrears, on both time and materials and lump sum task order projects. Invoices are typically issued before the 15th day of each month.

SCHEDULE OF STANDARD CHARGES (Triennial Stormwater H&H Review RFP)

Labor Category	Fee Rate (\$US/hour)
Principal	289.61
Sr. Project Engineer/Scientist	242.21
Sr. Engineer/Scientist 1	217.79
Sr. Engineer/Scientist 2	192.82
Engineer/Scientist 1	162.23
Engineer/Scientist 2	153.48
Jr. Engineer/Scientist	136.26
GIS Analyst 1	160.15
GIS Analyst 2	121.32
Sr. Engineering Technician	162.29
Jr. Engineering Technician	92.52
Sr. Engineering Lab Technician	153.39
Sr. Contract Administrator	171.23
Sr. Technical Editor	166.03
Technical Editor	134.59
Office Administrator	119.30

Handling Charges / Fees

Markup on Subconsultants.....	10%
Markup on Reimbursables	10%
Markup on Travel/Subsistence	10%

Photocopies \$/sheet

B&W 8½ x 11	\$0.10
B&W 11 x 17	\$0.15
Color 8½ x 11	\$1.00
Color 11 x 17	\$2.00

Plotting \$/sheet

Plots, bond, 11 x 17	\$2.00
Plots, bond, D size	\$4.00
Plots, oversize (running foot)	\$2.00

EXHIBIT "E"

INSURANCE REQUIREMENTS

1. Time for Compliance. Consultant shall maintain insurance for the duration of the Agreement and shall not commence Work under this Agreement until it has provided evidence satisfactory to the Coachella Valley Water District ("CVWD") that it has secured all insurance required under this Section. Consultant shall require and verify that all subconsultants maintain insurance meeting all the requirements stated herein. Consultant shall not allow any subconsultant to commence work on any subcontract until each subconsultant has provided evidence satisfactory to Consultant that it has secured all insurance required under this Section.
2. Minimum Requirements. Consultant shall, at its expense, procure and maintain, insurance against claims arising from Consultant's rendering of professional services, including claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subconsultants. Consultant shall require all of its subconsultants to procure and maintain insurance for the duration of the Agreement and shall verify subconsultants' compliance as set forth in the Section entitled "Subconsultant Insurance Requirements" below. Such insurance shall meet at least the following minimum levels of coverage:
 - (A) **Commercial General Liability Insurance** which shall be written on an occurrence basis and be at least as broad as the latest version of ISO form CG 00 01 with limits of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate for claims against bodily injury, personal and advertising injury, and property damage. Such policy shall include Broad Form Contractual Liability coverage.
 - (B) **Business Automobile Liability insurance** which shall be as broad as ISO form CA 00 01 covering bodily injury and property damage with a combined single limit of not less than \$1,000,000 per accident for all owned, non-owned, and hired automobiles used in connection with the services or operations to be performed under this Agreement.
 - (C) **Workers' Compensation Insurance** with statutory limits, and **Employer's Liability insurance** with limits of not less than \$1,000,000 per accident or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of CVWD, its directors, officials, officers, employees, agents, and volunteers.
 - (D) **Professional Liability Insurance (Errors & Omissions Liability)** covering the services to be performed under this Agreement with limits of not less than \$2,000,000 per occurrence or claim and \$2,000,000 in the aggregate. This coverage may be written on a claims-made form. If coverage is written on a claims-made form, the provisions set forth in the Section entitled "Provisions Applicable to All Insurance Requirements: Claims-Made Coverage" below shall apply. CVWD reserves the right to require a project-specific endorsement. All subconsultants, providing professional services shall have professional liability insurance with an amount not less than \$1 Million per occurrence or claim and in the aggregate.

3. **Provisions Applicable to All Insurance Requirements. Each Insurance policy required by this Agreement shall be endorsed the following provisions:**

(a). **Additional Insured Coverage.** Except for the Workers' Compensation and Professional Liability insurance policies, all liability policies shall be endorsed to include CVWD, its directors, officials, officers, employees, agents, and volunteers as additional insureds on all primary, umbrella or excess policies for ongoing and completed operations performed by, or on behalf, of Consultant, including materials, parts or equipment furnished in connection with such work. Coverage for the additional insured under the Commercial General Liability policy shall be as broad as that provided by ISO CG 20 10 (ongoing operations) and 20 37 (completed operations).

(b). **Acceptability of Insurers.** Unless otherwise reviewed and accepted by CVWD, all required insurance must be placed with insurers with a current A.M. Best rating of not less than A- VII and be admitted to do business in California, or approved by the Surplus Lines Association.

(c). **Verification of Coverage.** Consultant shall furnish CVWD with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to CVWD. The certificates of insurance shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by CVWD before work commences. CVWD reserves the right to require complete, certified copies of all required insurance policies, at any time. Acceptance of Consultant's Certificates of insurance does not relieve Consultant of the insurance requirements, nor decrease the liability of Consultant under this Agreement. It is Consultant's responsibility to ensure its compliance with these insurance requirements. Any actual or alleged failure on the part of CVWD to obtain proof of insurance required under this Agreement shall not in any way be construed to be a waiver of any right or remedy of CVWD, in this or any regard.

(d). **Primary and Noncontributory.** The insurance required to be maintained by Consultant shall be primary and any insurance or self-insurance maintained by CVWD shall be excess only, and not be required to contribute with it.

(e). **Umbrella or Excess Insurance.** Any Umbrella or Excess insurance shall also apply on a primary and noncontributory basis for the benefit of CVWD, before CVWD's own primary insurance or self-insurance shall be called upon to protect it as a Named Insured.

(f). **Waiver of Subrogation.** Consultant shall waive any right of subrogation, except for Professional Liability, of the insurer against CVWD, its officials, officers, employees, agents, and volunteers, or any other additional insureds, or shall specifically allow Consultant or others providing insurance in compliance with these specifications to waive their right of recovery prior to a loss. By signing this Agreement, Consultant hereby waives its own right of recovery against CVWD and any other additional insureds, and shall require similar written express waivers and insurance clauses from each of its

subconsultants. Consultant shall pay all damages and costs arising out of Consultant's failure to provide a waiver of subrogation from its insurers.

(g). **Broader Coverage and Limits.** The insurance requirements under this Agreement shall be the greater of (1) the minimum coverage and limits specified in this Agreement, or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the Named Insured. It is agreed that these insurance requirements shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums required herein. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Consultant hereunder.

(h). **Severability of Interest (Cross Liability).** A severability of interest provision must apply for the additional insureds, ensuring that Consultant's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the policies' limits.

(i). **Notices; Cancellation or Reduction of Coverage.** At least fifteen (15) days prior to the expiration of any such policy, evidence showing that such insurance coverage has been renewed or extended shall be filed with CVWD. If such coverage is cancelled or materially reduced, Consultant shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with CVWD evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies. In the event any policy of insurance required under this Contract does not comply with these specifications or is canceled and not replaced, CVWD has the right but not the duty to obtain the insurance it deems necessary and any premium paid by CVWD will be promptly reimbursed by Consultant or CVWD may withhold amounts sufficient to pay premium from Consultant's payments. In the alternative, CVWD may suspend or terminate this Agreement. No policy required to be maintained by Consultant shall be canceled and not replaced with equivalent coverage without thirty (30) days prior written notice to CVWD, unless cancellation is due to the non-payment of premium, in which case, ten (10) days prior written notice shall be provided.

(j). **Claims-Made Coverage.** For any coverage provided on a claims-made form (which type of form is only permitted at CVWD's sole discretion) the following shall apply:

- i. The retroactive date must be shown, and must be before the date of this Agreement and before the commencement of services or operations related to this Agreement;
- ii. Insurance must be maintained and Certificates of Insurance must be provided to CVWD for at least five (5) years after the expiration or earlier termination of this Agreement;
- iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of this

Agreement or commencement of any services or operations related to this Agreement, Consultant must purchase an extended reporting period for a minimum of five (5) years after the expiration or earlier termination of this Agreement.

(k). **Deductibles, Self-Insurance, Self-Insured Retentions.** Any deductibles, self-insurance, or self-insured retentions (SIRs) applicable to the required insurance coverage shall be declared to, and accepted by, CVWD. At the option and request of CVWD, Consultant shall provide documentation of its financial ability to pay the deductible(s), self-insurance, or SIR.

4. **Subconsultant Insurance Requirements.** Consultant shall not allow any of its subconsultants to commence work on any subcontract relating to the work under the Agreement until Consultant has verified that all subconsultants have procured insurance meeting all requirements under this Agreement and provided evidence to Consultant of such insurance. If requested by Consultant, CVWD may approve different scopes or minimum limits of insurance for particular subconsultants, but in no case shall be less than \$1 Million per claim. The Contractor and CVWD shall be named as additional insureds on subconsultants' Commercial General Liability insurance.

5. **Reservation of Rights.** CVWD reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

END OF EXHIBIT E - INSURANCE REQUIREMENTS