PROFESSIONAL SERVICES CONTRACT BETWEEN THE CITY OF HUNTINGTON BEACH AND CANNON CORPORATION

FOR

ON-CALL CIVIL ENGINEERING & PROFESSIONAL CONSULTING SERVICES

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and CANNON CORPORATION, a California Corporation hereinafter referred to as "CONSULTANT."

WHEREAS, CITY desires to engage the services of a consultant to provide On-Call Civil Engineering & Professional Consulting Services; and

Pursuant to documentation on file in the office of the City Clerk, the provisions of the Huntington Beach Municipal Code, Chapter 3.03, relating to procurement of professional service contracts have been complied with; and

CONSULTANT has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

1. SCOPE OF SERVICES

CONSULTANT shall provide all services as described in **Exhibit "A,"** which is attached hereto and incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the "PROJECT."

CONSULTANT hereby designates Gary Solsona who shall represent it and be its sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. <u>CITY STAFF ASSISTANCE</u>

CITY shall assign a staff coordinator to work directly with CONSULTANT in the performance of this Agreement.

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3. TERM; TIME OF PERFORMANCE

In the event the Commencement Date precedes the Effective Date, CONSULTANT shall be bound by all terms and conditions as provided herein.

4. COMPENSATION

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed Two Million Dollars (\$2,000,000.00).

5. EXTRA WORK

In the event CITY requires additional services not included in **Exhibit "A"** or changes in the scope of services described in **Exhibit "A,"** CONSULTANT will undertake such work only after receiving written authorization from CITY. Additional compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

6. <u>METHOD OF PAYMENT</u>

CONSULTANT shall be paid pursuant to the terms of Exhibit "B."

7. DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS

CONSULTANT agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONSULTANT shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

8. HOLD HARMLESS

A. CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONSULTANT's (or CONSULTANT's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONSULTANT, its officers, agents or employees except such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONSULTANT will conduct all defense at its sole cost and expense and CITY shall approve selection of CONSULTANT's counsel. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONSULTANT.

B. To the extent that CONSULTANT performs "Design Professional Services" within the meaning of Civil Code Section 2782.8, then the following Hold Harmless provision applies in place of subsection A above:

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"CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY and its officers, elected or appointed officials, employees, agents and volunteers, from and against any and all claims, damages, losses, expenses, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) to the extent that the claims against CONSULTANT arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONSULTANT. In no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault. However, notwithstanding the previous sentence, in the event one or more other defendants to the claims and/or litigation is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, CONSULTANT shall meet and confer with CITY and other defendants regarding unpaid defense costs. The duty to indemnify, including the duty and the cost to defend, is limited as provided in California Civil Code Section 2782.8.

C. Regardless of whether subparagraph A or B applies, CITY shall be reimbursed by CONSULTANT for all costs and attorney's fees incurred by CITY in enforcing this obligation. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT.

9. PROFESSIONAL LIABILITY INSURANCE

CONSULTANT shall obtain and furnish to CITY a professional liability insurance policy covering the work performed by it hereunder. This policy shall provide coverage for CONSULTANT's professional liability in an amount not less than One Million Dollars (\$1,000,000.00) per occurrence and in the aggregate. The above-mentioned insurance shall not contain a self-insured retention without the express written consent of CITY; however an insurance

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policy "deductible" of Ten Thousand Dollars (\$10,000.00) or less is permitted. A claims-made policy shall be acceptable if the policy further provides that:

- A. The policy retroactive date coincides with or precedes the initiation of the scope of work (including subsequent policies purchased as renewals or replacements).
- B. CONSULTANT shall notify CITY of circumstances or incidents that might give rise to future claims.

CONSULTANT will make every effort to maintain similar insurance during the required extended period of coverage following PROJECT completion. If insurance is terminated for any reason, CONSULTANT agrees to purchase an extended reporting provision of at least two (2) years to report claims arising from work performed in connection with this Agreement.

If CONSULTANT fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the CITY with required proof that insurance has been procured and is in force and paid for, the CITY shall have the right, at the CITY's election, to forthwith terminate this Agreement. Such termination shall not effect Consultant's right to be paid for its time and materials expended prior to notification of termination. CONSULTANT waives the right to receive compensation and agrees to indemnify the CITY for any work performed prior to approval of insurance by the CITY.

10. <u>CERTIFICATE OF INSURANCE</u>

Prior to commencing performance of the work hereunder, CONSULTANT shall furnish to CITY a certificate of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverage as required by this Agreement; the certificate shall:

- A. provide the name and policy number of each carrier and policy;
- B. state that the policy is currently in force; and

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C. shall promise that such policy shall not be suspended, voided or canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice; however, ten (10) days' prior written notice in the event of cancellation for nonpayment of premium.

CONSULTANT shall maintain the foregoing insurance coverage in force until the work under this Agreement is fully completed and accepted by CITY.

The requirement for carrying the foregoing insurance coverage shall not derogate from CONSULTANT's defense, hold harmless and indemnification obligations as set forth in this Agreement. CITY or its representative shall at all times have the right to demand the original or a copy of the policy of insurance. CONSULTANT shall pay, in a prompt and timely manner, the premiums on the insurance hereinabove required.

11. INDEPENDENT CONTRACTOR

CONSULTANT is, and shall be, acting at all times in the performance of this Agreement as an independent contractor herein and not as an employee of CITY. CONSULTANT shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for CONSULTANT and its officers, agents and employees and all business licenses, if any, in connection with the PROJECT and/or the services to be performed hereunder.

12. TERMINATION OF AGREEMENT

All work required hereunder shall be performed in a good and workmanlike manner. CITY may terminate CONSULTANT's services hereunder at any time with or without cause, and whether or not the PROJECT is fully complete. Any termination of this Agreement by CITY shall be made in writing, notice of which shall be delivered to CONSULTANT as provided herein. In the

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event of termination, all finished and unfinished documents, exhibits, report, and evidence shall, at the option of CITY, become its property and shall be promptly delivered to it by CONSULTANT.

13. ASSIGNMENT AND DELEGATION

This Agreement is a personal service contract and the work hereunder shall not be assigned, delegated or subcontracted by CONSULTANT to any other person or entity without the prior express written consent of CITY. If an assignment, delegation or subcontract is approved, all approved assignees, delegates and subconsultants must satisfy the insurance requirements as set forth in Sections 9 and 10 hereinabove.

14. COPYRIGHTS/PATENTS

CITY shall own all rights to any patent or copyright on any work, item or material produced as a result of this Agreement.

15. CITY EMPLOYEES AND OFFICIALS

CONSULTANT shall employ no CITY official nor any regular CITY employee in the work performed pursuant to this Agreement. No officer or employee of CITY shall have any financial interest in this Agreement in violation of the applicable provisions of the California Government Code.

16. NOTICES

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONSULTANT's agent (as designated in Section 1 hereinabove) or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONSULTANT may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

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TO CITY:

TO CONSULTANT:

City of Huntington Beach

ATTN: Director of Public Works

2000 Main Street

Huntington Beach, CA 92648

Cannon Corporation Attn: Gary Solsona

16842 Von Karman Avenue, Suite 150

Irvine, CA 92606

17. CONSENT

When CITY's consent/approval is required under this Agreement, its

consent/approval for one transaction or event shall not be deemed to be a consent/approval to any

subsequent occurrence of the same or any other transaction or event.

18. MODIFICATION

No waiver or modification of any language in this Agreement shall be valid unless in

writing and duly executed by both parties.

19. SECTION HEADINGS

The titles, captions, section, paragraph and subject headings, and descriptive phrases

at the beginning of the various sections in this Agreement are merely descriptive and are included

solely for convenience of reference only and are not representative of matters included or excluded

from such provisions, and do not interpret, define, limit or describe, or construe the intent of the

parties or affect the construction or interpretation of any provision of this Agreement.

20. <u>INTERPRETATION OF THIS AGREEMENT</u>

The language of all parts of this Agreement shall in all cases be construed as a

whole, according to its fair meaning, and not strictly for or against any of the parties. If any

provision of this Agreement is held by an arbitrator or court of competent jurisdiction to be

unenforceable, void, illegal or invalid, such holding shall not invalidate or affect the remaining

covenants and provisions of this Agreement. No covenant or provision shall be deemed dependent

upon any other unless so expressly provided here. As used in this Agreement, the masculine or

neuter gender and singular or plural number shall be deemed to include the other whenever the

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context so indicates or requires. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provision contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no right to contract, then the latter shall prevail, and the provision of this Agreement which is hereby affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

21. <u>DUPLICATE ORIGINAL</u>

The original of this Agreement and one or more copies hereto have been prepared and signed in counterparts as duplicate originals, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original. Each duplicate original shall be deemed an original instrument as against any party who has signed it.

22. <u>IMMIGRATION</u>

CONSULTANT shall be responsible for full compliance with the immigration and naturalization laws of the United States and shall, in particular, comply with the provisions of the United States Code regarding employment verification.

23. <u>LEGAL SERVICES SUBCONTRACTING PROHIBITED</u>

CONSULTANT and CITY agree that CITY is not liable for payment of any subcontractor work involving legal services, and that such legal services are expressly outside the scope of services contemplated hereunder. CONSULTANT understands that pursuant to *Huntington Beach City Charter* Section 309, the City Attorney is the exclusive legal counsel for CITY; and CITY shall not be liable for payment of any legal services expenses incurred by CONSULTANT.

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24. <u>ATTORNEY'S FEES</u>

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the nonprevailing party.

25. <u>SURVIVAL</u>

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

26. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

27. <u>SIGNATORIES</u>

Each undersigned represents and warrants that its signature hereinbelow has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify CITY fully for any injuries or damages to CITY in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

28. ENTIRETY

The parties acknowledge and agree that they are entering into this Agreement freely and voluntarily following extensive arm's length negotiation, and that each has had the opportunity to consult with legal counsel prior to executing this Agreement. The parties also acknowledge and agree that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by that party or anyone acting on that party's behalf, which are not embodied in this Agreement, and that that party has not executed this Agreement in reliance on any representation, inducement, promise, agreement, warranty, fact or circumstance not expressly set forth in this

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Agreement. This Agreement, and the attached exhibits, contain the entire agreement between the parties respecting the subject matter of this Agreement, and supersede all prior understandings and agreements whether oral or in writing between the parties respecting the subject matter hereof.

29. <u>EFFECTIVE DATE</u>

This Agreement shall be effective on the date of its approval by the City Council.

This Agreement shall expire when terminated as provided herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers.

CONSULTANT, CANNON CORPORATION	CITY OF HUNTINGTON BEACH, a municipal corporation of the State of California
By: Michael F. Cannon, President, CEO print name	Mayor
ITS: (circle one) Chairman President Vice President	City Clerk
By: Lawrence P. Kraemer, Vice President, Secretary print name ITS: (circle one) Secretary Chief Financial Officer/Asst.	Director of Public Works
Secretary - Treasurer	REVIEWED AND APPROVED:
	City Manager
	APPROVED AS TO FORM:
	Pegier
	City Attorney

EXHIBIT "A"

A. <u>STATEMENT OF WORK:</u> (Narrative of work to be performed)

Provide On-Call Civil Engineering and Professional Consulting Services. If Consultant chooses to assign different personnel to the project, Consultant must submit names and qualifications of these staff to City for approval before commencing work.

B. CONSULTANT'S DUTIES AND RESPONSIBILITIES:

See Attached Exhibit A

C. <u>CITY'S DUTIES AND RESPONSIBILITIES:</u>

- 1. Furnish Scope of Work and provide a request for proposal for each project.
- 2. City shall issue a task order for each project based upon scope of services, work schedule, and fee proposal submitted.

D. WORK PROGRAM/PROJECT SCHEDULE:

A project schedule will be developed for each project assigned by the City.

EXHIBIT A





Cody Hernandez
City of Huntington Beach
Public Works Department
2000 Main Street
Huntington Beach, CA 92648

March 13, 2025

Subject: On-Call Civil Engineering Professional Consulting Services

Dear Mr. Hernandez:

The City of Huntington Beach (City) has a tremendous responsibility to provide and maintain critical and essential infrastructure for its residents. The City needs a team that will listen attentively, respond quickly, and work diligently on each project, regardless of the size or scope. This qualified list will allow the City to reduce response time and to meet project needs as they arise.

A dependable team should have experience in public works projects, technical expertise, and a history working with Southern California cities and counties. The consultant's work product must also have the necessary attention to quality assurance/quality control to contribute to the success of the City's Capital Improvement Program.

The Cannon Team offers a comprehensive solution to fulfill City requirements, encompassing a broad range of services, such as engineering evaluations, studies, master plans, hydraulic modeling, surveying, preliminary designs, final designs, code compliance reviews, design/constructability reviews, permitting, construction cost estimates, construction management and inspection, plan check review, and more.

Our experience in managing on-call contracts and waterworks projects throughout Southern and Central California positions us as a dependable partner for the diverse needs of the City. We have recently completed similar design projects, such as the Santa Clarita Valley Water Agency Deane Zone Tank Pump Station, City of Ventura Mound Well Nos. 2 and 3, and City of Anaheim Rio Vista Street and Lincoln Avenue Pavement Rehabilitation, as well as numerous construction management and inspection projects.

We are confident that our expertise, commitment to excellence, and past successes make us the ideal choice to address your diverse project needs. We look forward to the opportunity to further discuss how our team can

seamlessly integrate with the City to achieve mutual success.

Sincerely,

Gary Solsona,* PE, QSD Director, Public Infrastructure 16842 Von Karman Avenue, Ste. 150, Irvine, CA 92606

2 949,777,1580 **3** 909,234,7857

GaryS@CannonCorp.us

*Authorized to bind firm.

Proposed Disciplines:

A. Water/Sewer/Storm Water Engineering

B. General Civil Engineering

Statements:

- This proposal price will remain valid for a period of no less than 180 days from the date of submittal.
- Main Office Where Projects will be Managed: 16842 Von Karman Avenue, Suite 150, Irvine, CA 92606

REQUEST FOR PROPOSAL

VENDOR APPLICATION FORM

TYPE OF APPLICANT:	☐ NEW	CURRENT VENDOR
Legal Contractual Name of Corpor	ration:	Cannon Corporation
Contact Person for Agreement: G	ary Solsona,	PE, QSD
Corporate Mailing Address:		on Karman Ave., Suite 150
City, State and Zip Code:	Irvine, CA	92606
E-Mail Address: GaryS@Canr	nonCorp.us	
Phone: 949.777.1580		Fax: 949.753.0775
Contact Person for Proposals: Ga	ary Roepke	e, PE
Title: Senior Principal Engineer		E-Mail Address: GaryR@CannonCorp.us
Business Telephone: 310.382.		Business Fax: 310.664.8877
Year Business was Established: 1 Is your business: (check one)		
☐ NON PROFIT CORPORAT	TION	FOR PROFIT CORPORATION
Is your business: (check one)		
■ CORPORATION☐ INDIVIDUAL☐ PARTNERSHIP	SOLE I	ED LIABILITY PARTNERSHIP PROPRIETORSHIP CORPORATED ASSOCIATION

Names & Titles of Corporate Board Members (Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names	Title	Phone
Michael Cannon, PE	President	805.544.7407
Larry Kraemer, PE	Secretary	805.503.4542
Bob Stets	General Counsel	805.459.2014
Karen Morris	Chief Operations Officer	805.503.4524
Gary Solsona, PE, QSD	Dir. Public Infrastructure	949.777.1580
Federal Tax Identification Number:	77-024624	9
City of Huntington Beach Business Licens	e Number:	310856
(If none, you must obtain a Huntington Be	ach Business License	upon award of contract.)
City of Huntington Beach Business Licens	se Expiration Date:	7/31/2025

References of Work Performed Form

(List 5 Local References)

Comany Name:	annon Corporation	

1. Name of Reference: City of Whittier
Address: 13230 Penn Street, Whittier, CA 90602
Contact Name: Philip Wang Phone Number: 561.567.9504
Email: pwang@cityofwhittier.org
Dates of Business: 2017 - Present
2. Name of Reference: City of Gardena
Address: 1717 West 162nd Street, Gardena, CA 90247
Contact Name: Kevin Kwak Phone Number: 310.217.9643
Email: kkwak@cityofgardena.org
Dates of Business: 2019 - Present
3. Name of Reference: City of Fullerton
Address: 303 W. Commonwealth Ave., Fullerton, CA 92832
Contact Name: Gar Huang Phone Number: 714.738.6300
Email: GarH@ci.fullerton.ca.us
Dates of Business: 2018 - Present
4. Name of Reference: Suburban Water Systems
Address: 1325 N. Grand Avenue, Suite 100, Covina, CA 91724
Contact Name: Jorge Lopez Phone Number: 626.543.2518
Email: lopez@swwc.com
Dates of Business: 2011 - Present
5. Name of References City of Angheim
5. Name of Reference: City of Anaheim
Address: 200 S Anaheim Blvd, Suite 276, Anaheim, CA 92805
Contact Name: Lori Ishigo Phone Number: 714.765.4113
Email: Llshigo@anaheim.net
Dates of Business: 2017 - Present

References of Work Performed Form

(List 5 Local References)

Comany Name: Cannon Corporation continued

1. Name of Reference: City of Anaheim
Address: 200 S Anaheim Blvd, Suite 276, Anaheim, CA 92805
Contact Name: Megan Hajimomen Phone Number: 714.765.5100 x5818
Email: mhajimomen@anaheim.net
Dates of Business: 2017 - Present
2. Name of Reference: City of Ventura
Address: 501 Poli Street, Room 120, Ventura, CA 93001
Contact Name: Mark Garcia Phone Number: 805.654.4749
Email: mgarcia@ci.ventura.ca.us
Dates of Business: 2013 - Present

Disciplines of Civil Engineering Services Application Form

Circle all that apply

Civil Engineering Service Area	Bidding?
	Y/N (circle)
Water/Sewer/Storm Water Engineering	Yes / No
General Civil Engineering	(Yes) / No
Ocean Engineering	Yes /No
Environmental/Water Quality	Yes / No

Background and Summary



Project Understanding

We understand that the City of Huntington Beach (City) Is seeking qualified firms to provide professional services for a variety of projects and programs on an as-needed or "on-call" basis. Selected firms will enter into a Professional Services Agreement and may be requested to submit task order proposals for specific projects or programs as the need for services arises. Task order fees will be based on the hourly rates provided by the firm submitted in response to the RFQ.

Types of Services Needed

Cannon is submitting for. A. Water/Sewer/Storm Water Engineering B. General Civil Engineering

A. Water/Sewer/Storm Water Engineering

The City requires professional engineering support for water, sewer, and stormwater infrastructure projects. Services under this category may include:

PS&E Preparation: Preparation of Plans, Specifications, and Estimates (PS&E) for water, sewer, and stormwater infrastructure.

Surveying and Geotechnical Evaluations: Surveying and geotechnical assessments to provide accurate site data for design.

Preliminary Design Reports (PDRs): Development of Preliminary Design Reports to document design assumptions, evaluate alternatives, and provide recommendations.

Construction Support Services: Support during construction to address RFIs, review submittals, and provide inspections.

Utility Coordination and Permitting: Coordination with utilities and regulatory agencies to streamline approvals, secure permits, and address potential conflicts. This includes verifying existing utility locations through potholing.

Water Pipeline Design: Engineering services to design potable water pipelines, including size determination, hydraulic calculations, material selection, and corrosion protection. Plans will include profiles, crosssections, and separation and utility requirements.

Wells, Reservoirs, and Booster Stations: Design services for potable water production infrastructure, including wells, reservoir rehabilitation, booster pump stations, pressure control stations, and metering facilities. Hydraulic calculations and site evaluations will support these designs.

Master Plan and Financial Plan Updates: Updates to the potable water and wastewater master plans are necessary to integrate system data, assess capacity, and plan for future infrastructure needs. A financial plan update will be developed to support budgeting and funding strategies.

Wastewater System Design: Engineering services are needed for the design of wastewater pipelines, lift stations, force mains, and sewer rehabilitation. Hydraulic calculations and material specifications will be included in the design process.

Stormwater System Design: Engineering support for stormwater infrastructure, including channels, pipelines, and pump stations. Assistance with grant applications to secure funding for storm drain improvements.

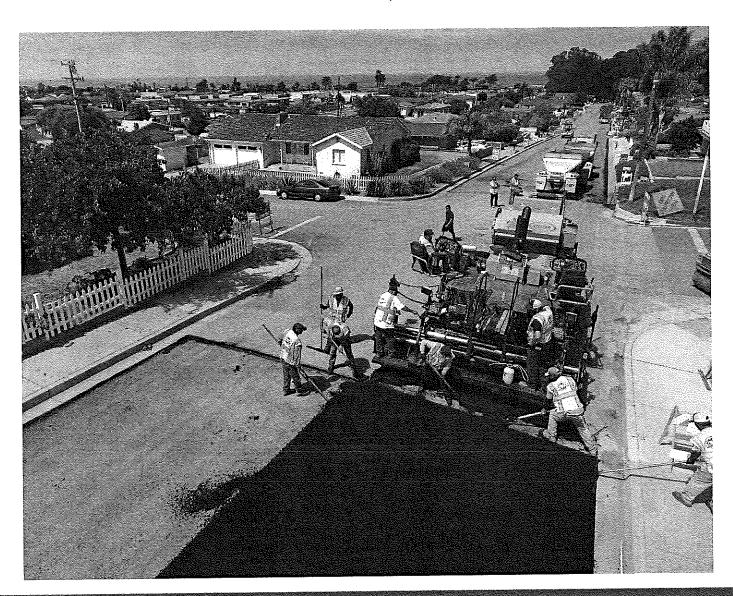
B. General Civil Engineering

The City requires civil engineering and surveying services to support a range of capital improvement projects. Public works infrastructure projects may include rehabilitation and improvements to roads, alleys, bridges, curbs, gutters, sidewalks, and parking lots within the public right-of-way and city-owned properties. The consultant will provide design, engineering, and administrative services, including project controls, planning, QA/QC, change control, and risk management.

Bridges, Street Improvements, and Parking Lots: The consultant will develop PS&E packages for street rehabilitation, widening, realignment, and City facility site work, including parking lots and ADA compliance. Responsibilities include preparing and reviewing NPDES reports, WQMPs, and SWPPPs. Construction support will be required, along with record drawings in mylar and .dwg formats. Geotechnical engineering may be required as part of specific projects.

Surveying Services: The consultant will provide surveying services, including horizontal and vertical control, design and topographic surveys, aerial surveys, boundary surveys, and centerline surveys. Additional tasks include preparing legal descriptions, subdivision map reviews, title report reviews, and construction staking for public works projects.

The consultant must have knowledge of APWA's GreenBook and City standards. Work will be performed in coordination with City staff, monitoring compliance with applicable regulations and project requirements.



Sample Scope Of Work

The following scope of work is a sample for a recent project. It describes our typical approach to defining scopes and implementing a civil engineering design or water project for the City.

Once provided with a specific project, a description of each task will be provided. Our scope of the design stage usually consists of the following phases: Project Management, Preliminary Engineering, Environmental Clearances, Construction Plans, Specifications and Estimate, and Engineering Support Services during Construction.

Phase 1. Project Management Project Administration

This service includes organizing, coordinating, and controlling the quality of the necessary personnel and subconsultants. We will provide monitoring and reporting of the status of the budget, schedule, and action item progress for the task items as well as create and maintain a project file. Additionally, we have included the following items as part of this task:

- · Record keeping and file management
- Accounting
- Budget monitoring and control

Project Kickoff Meeting

We will orchestrate and attend a project kickoff meeting with appropriate personnel from the City. The meeting agenda will focus on project understanding, team involvement, project constraints, and the anticipation of design development impediments. This meeting will also include a project introduction, review of background information and project scope, and an overview of the project schedule. This meeting represents a key opportunity for representatives from the City to steer the consultant team and further clarify critical elements of the project scope.

Progress Meetings

This service includes coordination and attendance with City staff for the progress meetings. This scope includes preparation of meeting agenda and meeting minutes.

Deliverables:

- Project File
- Monthly Project Progress Reports
- Monthly Progress Meeting Agendas and Minutes

Phase 2. Preliminary Engineering Records Research and Utility Coordination

Upon receipt of Notice to Proceed, we will research and obtain readily available record drawings and other data pertinent to the scope of work (to facilitate the preliminary design). We will mail initial and second utility notifications to utility companies requesting copies of their maps, plans and/or sketches of their existing and/or proposed facilities. Utility letters sent and responses received will be recorded in a utility correspondence log that will be made available for review, as requested, by City staff. We will send out a final utility notice with approved plans, a tentative pre-construction meeting date, a tentative schedule date for construction, and we will maintain a utility log to track responses to notices.

Deliverables:

- Compiled Existing Records
- Utility Coordination Log, Notices & Correspondence

Soils Investigation

We will retain the services of our subconsultant geotechnical engineer to prepare a soils evaluation report for the project. The report will include, but not be limited to, recommendations for pavement structural section, pipe bedding and backfill requirements, suitability of existing soils for use in after trench backfill, and design data needed for shoring and bracing. Other important information gathered will be depth to groundwater (if applicable) and thickness of the existing pavement section. This evaluation will provide valuable information for prospective contractors bidding the construction phase of the project.

Before initiating the subsurface exploration, we will coordinate with Underground Service Alert (USA) for underground utility coordination and determination of other subsurface feature locations with potential to be impacted by coring/boring operations.

We will provide hand auguring in each core and use a ring-lined barrel sampler (ASTM D 3550) to obtain soil samples below the existing paving section. In each core, the thicknesses of asphalt concrete and aggregate base will be measured and recorded. Bulk soil samples of subgrade soils will be obtained from the hand auger cuttings.

Soil samples will be tested in the laboratory to evaluate a variety of soil properties, including in-situ moisture, grain size, maximum density versus optimum moisture, and resistance to deformation under repeated loading (R-value). Trained technicians will complete the laboratory testing in accordance with American Society for Testing and Materials or other applicable standards at their laboratory.

The team will assess geologic conditions based upon a review of geologic literature, maps, aerial photographs, and the field/laboratory data. We will identify and discuss impacts upon pavement resulting from geotechnical/geologic conditions in the pavement recommendations report, which will address the following:

- Encountered subsurface conditions
- Preparation of the site before construction
- Grading criteria, including soil stabilization, as needed
- PCC and HMA pavement design criteria based upon City-provided traffic index (TI)
- · Observation and testing

For street rehabilitation or reconstruction projects, we will evaluate data developed and formulate recommendations for new pavement structural design. This will include options for pavement replacement, as well as pavement rehabilitation, where feasible, to include but not necessarily be limited to: overlay, inlay, full depth reclamation and cold-in-place recycling. We assume that 10- and 20-year traffic indexes will be provided by the City for use in our pavement design analysis.

The geotechnical recommendations will comply with the considerations of local standards and 1803.1 through 1803.6, J104.3, and J104.4 of the 2019 CBC, as they apply to this project, as well as common geotechnical engineering practice in this area under similar conditions at this time. It is our intent that the

report will be used exclusively by the City to form the geotechnical basis of the design of the project and the preparation of plans and specifications.

During construction and as-needed, we will be available to provide quality control services, including soil compaction testing, observation of excavations, placement of fill soils, and laboratory materials testing of proposed construction materials.

Deliverables:

Draft and Final Geotechnical Investigation Report

Survey Services

Horizontal, Vertical and Right-of-Way Control

We will establish project horizontal control based upon record information and Orange County GPS monuments found at or near the project. The vertical control will be based upon Orange County benchmarks relative to the North American Vertical Datum of 1988. Right-of-way (ROW) on submittal drawings will be compiled from available record information found during the research process (such as City records and APN maps). The search for and the measurements of found monumentation will extend from the re-established street centerlines to the individual property corners within the areas of potential construction derived from the project RFP. The field survey data will be analyzed and compared to those bearings and distance as provided by the record data per the recorded maps on file with the County Surveyor's Office. Said comparison of record data versus measured data will characterize the final adjusted and accepted right-of-ways for project limits.

Site Topography

Field Locations & Elevations

- We will obtain ground specific field locations and elevations in accordance with the project RFP within the defined mapping limits. Said areas will include the existing roadways, concrete walkways, ADA ramps, driveways, curbs, gutters, cross gutter, visible surface utilities, and finish pavement. Limits of field topography are from Back of Walk to Back of Walk.
- Noticeable asphalt patch work
- Measuring the depths of manholes to flow lines and manhole material

- Measuring the depths of water valves to top of nut
- Measuring the depths of catch basins to flow lines and opening width

Compile Topographic Survey Map

We will prepare a detailed Topographic Survey Map in AutoCAD Civil 3D based upon the ground locations and elevations within the defined mapping limits in accordance with the ALTA/NSPS Land Title Surveys 2016 mapping requirements for the project specified area. Said mapping will include:

- 1. A scale of 1' = 20';
- 2. One (1.0') foot Contours;
- 3. Fifty (50') foot spot elevations;
- 4. Hardscape areas & sidewalk paths;
- 5. Identification of visible field located utilities and existing utilities as discovered by means of project research.
- 6. Plotted Cross Sections of existing roadways on 25' intervals.

The topographic survey work will include submitting certified payrolls to the California Department of Industrial Relations (DIR) and a copy submitted to the City, submitted with invoice for this item of work.

Deliverables:

- Field topographic survey in AutoCAD and PDF format
- DTM of existing surface features

Field Investigation and Data Collection

Utilizing the topographic survey, we will prepare base maps in Microstation, which will include dimensions, street names, north arrow, scale, match lines, street centerline, existing R/W, stationing, location of surface topographic features from R/W to R/W, location of surface and subsurface utilities.

Upon completion of base map preparation, we will perform a field review within the project limits to confirm completeness/accuracy of the topographic

survey from the base maps, note existing conditions that may affect the design, note access concerns/ traffic control concerns, note potential utility issues and other construction challenges and collect a photo-document log of the project site. From the data collected during our field review, the project's existing CAD base mapping will be updated. Final base map will be provided to the City before starting design.

Deliverables:

- Field Notes & Photos
- Base Map (before starting design)

Phase 3. Preliminary Design

Preliminary Design Report

With the topographic survey, record data boundary information, and geotechnical evaluation from the previous tasks, we will prepare a preliminary design report evaluating the proposed alternative alignments and include the following:

- A summary of each design element defining current roadway and/or utility deficiencies and recommended alternatives for resolving the deficiencies
- Analysis of potential alternatives including feasibility and construction impacts
- Preliminary Design Drawings that will include sufficient information to verify that the overall design concept will meet the needs of the City

We will submit a draft of the Preliminary Design Report and will attend one meeting with the City to review and discuss the results. We will then incorporate the City's comments and finalize the report before proceeding with the tasks.

Phase 4. Construction Plans, Specifications and Estimate (PS&E)

30%, 60% and 100% PS&E

Plans: We will prepare a title sheet, typical sections and detail sheets, plan and profile (at 1"=40' scale), design cross sections, signing and striping, median planting and irrigation (at 1"=20' scale, double stacked).

Specifications: We will prepare technical specifications based upon the boiler plate supplied by the City. Described bid items required by the plans or otherwise needed to accomplish the project construction in the General Provisions and include them in the Contractor's bid list. Reference Special Provisions to the SSPWC Greenbook (latest edition), Caltrans or other appropriate specifications. A bid schedule will also be prepared which will be broken out into sufficient tasks to assist in evaluating the bids and preparing progress payments. City will furnish the front-end contract and insurance documents, as well as a reduced set of drawings will be included to complete the specification package.

Estimate: An Engineer's Opinion of Probable Construction Costs will be developed in accordance with City's requirements and based on the itemized quantity take-off from the contract documents. The estimates will incorporate recent relevant bid prices, price quotes from equipment vendors as necessary and will reflect the most recent trends in construction pricing.

QA/QC Reviews: Before milestone submittals for City plan check review, an experienced/independent in-house team, led by our QA/QC Manager, we will perform a thorough review of said documents to confirm their quality, clarity, constructability and that all the project goals are being met. Deliverables will be prepared with engineering practices that address required standards and guidelines. Documents submitted to the City are independently checked and back-checked. The review process will include a 2nd thorough "back check" review of all recommended corrections.

Final PS&E - Ready for Bid

Based on the finalized project design issues resolved during the preceding tasks, we will prepare and submit a Final Construction Documents Bid package. This submittal package will contain complete Construction Plans via PDF or on permanent drawing medium (Mylar film) and an Opinion of Probable Construction Costs. The plans will incorporate City's review comments, and provide construction level designs and technical specifications sufficient for final project approvals. Bid documents will be prepared in the City's standard format, including contract

documents and technical specifications. Electronic copies of all drawing files of the Final Construction Documents will be submitted to the City, ready for bidding.

Phase 5. Engineering Support Services during Construction

Bid Assistance

We will provide services during the bid stage by responding in writing to Contractor's questions. It is understood that the City will receive all questions and issue the responses to the Contractor to properly control the flow of information. Assist the City in the issuance of addenda to the bid package. This consists of making design changes necessary to address clarifications. Other design changes, such as those for the Contractor's preference, are not anticipated. Changes in the overall design concept are not anticipated. Attend pre-bid meeting (if requested). If requested, we will review all bids for irregularities and conformance with the bid documents. If requested, we will also check Contractor references to make recommendations for contract award.

Construction Support

Pre-Construction Meeting: We will attend the preconstruction meeting, as requested by City Staff, and will respond to questions received during or after the meeting.

Review of Submittals: The Contractor's submittals/ shop drawings will be received by the City and transmitted to Cannon for review. Shop drawing reviews will be completed within three working days of receipt.

Response to RFIs: We will provide responses to requests for information submitted by the Contractor. Clarification drawings will be prepared and distributed, as required.

As-Built Drawings

Contractor and City's construction representative redline drawings will be used for preparation of electronic as-built drawings. We will draft revision clouds around construction revisions, and will submit a bond and a PDF copy of the final as-builts for the City's records.

Methodology



Although our approach to a specific task order varies depending on the scope, Cannon understands that a successful project begins with team selection and an effective scoping meeting.

Our project manager will evaluate the project scope to select the most qualified team members. Upon receiving the notice-to-proceed, we will schedule a kick-off meeting to establish project expectations, lines of communication, assumptions, scope, schedule, and budget.

By meeting with City Staff early in the process, we will determine project elements such as design criteria, engineering standards, project constraints, schedule requirements, and potential coordination with other projects within the area. This information will be used by the Cannon Team to develop a concise and detailed scope of work, schedule, and budget for each project.

Project Management Plan (PMP)

Successful completion of projects will require a well-conceived management and control plan, based on past successful strategies. Cannon's PMP will include special emphasis on project communications procedures, preparation of the scope of work, and the submittal process. Upon notice-to-proceed (NTP), and before initiating work, our team will prepare and submit a PMP for the City's review.

The specific elements of the PMP can be categorized into three key areas: Progress Reporting Systems, Cost/Design Schedule Control, and QA/QC. These elements are detailed as follows:

Progress Reporting Systems
Our Project manager will have a proactive
communication style, and will be available to the
City's Project Manager. This accessibility, combined
with our understanding of the City's needs, generates
a team that is ready to mobilize quickly and assign the

right staff to a given task. Cannon's communication procedures include the following:

Document Control: The document control plan specifies procedures for documenting, transmitting, and storing communication items for the project, including meeting minutes, correspondence, submittals, and filing of hard copies and electronic files. Adherence to document control plan requirements will confirm quality and speed up project delivery. Before initiating a task order, Cannon will complete a checklist that includes a list of project deliverables and submittal formats.

Progress Reporting: The Cannon team will provide the City's Project Manager with a monthly status report. This report will include project management status, work accomplished during the reporting period, work to be completed during the following reporting period, budget and schedule status, potential out-of-scope items, and issues and concerns raised during the reporting period.

Communication Plan: Recognizing that effective project communication is the key component for a successful project, our team will focus on clearly defining project team communications. Mr. Solsona will be the point-of-contact for the City's Project Manager and team communication.

A project communication plan will be developed as part of the overall PMP. This communication plan will include a list of contact information for each team member, their role, and their responsibilities for the project. The project communication plan will be monitored closely. At each project development team (PDT) meeting, the team will discuss successes and areas of improvement for the team's communication with the City, and we will proactively look for opportunities to improve the project team's communication.



Cost Control / Design Schedule Control
Upon receipt of the NTP, our team will develop
a work breakdown structure (WBS) program to
monitor the project budget and schedule. Cannon's
accounting system is designed to assist the Project
Manager and financial managers in efficiently
monitoring project costs. Project cost sheets will
be available weekly for the Project Manager and
will show labor and indirect costs by task. This
information, and a detailed estimate of physical
progress made during each reporting period, will be
used to prepare status reports and update an earned
value report. The project will be reviewed at each
project milestone or bi-monthly.

Our Project Management team will conduct monthly project schedule reviews to identify potential deviations and formulate a plan of action to reduce impacts to the schedule. Schedule updates will be made available to City Staff for review. Our Project Manager will use an action item checklist as a management tool to track the responsibilities of Cannon Team project personnel. Each item will identify the responsible individual and the due date.

Completion will be tracked and compared to the baseline schedule; slippage will be identified, and corrective actions taken to restore the schedule to original forecasted completion dates. Cannon is committed to preparing projects for the City that are not only technically successful, but fiscally responsible as well. Accordingly, project expenditures will be tabulated and monitored on a weekly basis, with discussion for taking corrective action on the baseline budget, as required.

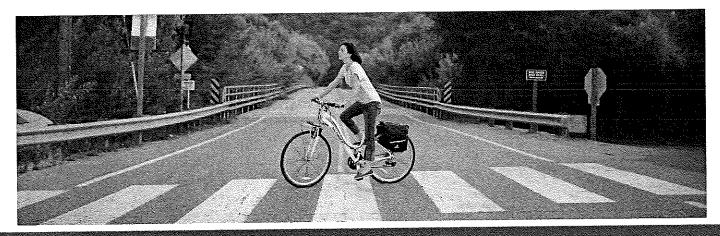
To conduct the project control effort, Cannon will use Microsoft Office software for project management scheduling and cost control. Microsoft Project will be used to establish the master project schedule in accordance with the agreed-upon work breakdown structure, so that the schedule can be integrated into discrete work elements for budgeting and monitoring purposes. The master project schedule will provide essential information necessary to determine the project's critical path and to report the project's status.

Community Outreach

We will establish a community outreach program with informative, collaborative, and research-driven engagement to define the community's goals. This supports decision-making and strategizing during preliminary design to minimize construction impacts and business disruptions. We will consider alternative phasing, such as nightwork. We will proactively notify the impacted community of the construction schedule, including flyer distribution and posting on the City's website and social media.

Typical community concerns involve construction duration and impacts of frontage improvements, such as noise, dust control, and vehicle and pedestrian access. We will reference our database of typical questions and responses to anticipate what may be asked. Our public outreach services including meetings, charrettes, technical training, and surveys. We can provide the following for this project:

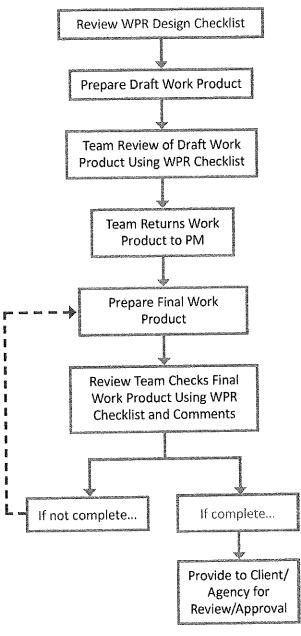
- Community outreach to achieve multi-party engagement across diverse demographics and needs.
- Graphic visualization materials for workshops.
- Post-workshop design development and reporting.



Quality Assurance / Quality Control Program Cannon is committed to providing the City with the best possible product, on schedule and within budget. To accomplish this, we use a Quality Assurance/Quality Control (QA/QC) Program that is organized to accommodate the specific needs and requirements of each task order. Our QA/QC Engineer for this contract is Larry Kraemer, PE. Cannon's QA/QC program is generally divided into three phases:

- 1. Design Team Review. This review is provided by members of the project team as the work progresses. Prior to the start of design work, an analysis is made to determine the technical requirements, needs, and requirements of the Client; jurisdictional requirements; and fiscal constraints or schedule requirements of the project. At this time, specific quality control requirements and internal review procedures are established.
- 2. Independent Peer Review. This review is conducted at various project phases (preliminary, 60%, and 100%) by design personnel who are outside of the regular project design team. Peer review consists of a detailed review of project work products. This process involves the assignment of senior personnel, including principals, to provide detailed, independent reviews of the work being completed. The selection of senior personnel for this task is based on professional expertise, specific knowledge of similar projects, and years of experience. The detail reviewer's responsibility will include the evaluation of overall project concept at the preliminary phase; verification of the adequacy of the design to achieve the project goals; evaluation of possible design alternatives; review of QA/QC by the design team; review of the project for constructability; and contractor review. Recommendations made by the independent reviewer are made directly to the project manager, who is responsible for evaluating the recommendations and implementing changes, as required. The reviewer's comments will be documented and recorded along with the designer and project manager's response to comments.

Overview of Cannon's Quality Assurance/ Quality Control Program



3. Review of Sub-consultant Deliverables (when applicable). This review is conducted by Cannon's project manager because of their knowledge of the entire project's scope and how each discipline relates to each other. This review is also conducted at various project phases, including the preliminary, 60%, and 100% and will be done prior to submitting the complete deliverable to the City. This review includes: evaluation of the overall project concept at preliminary phase; verification of the adequacy of the design to achieve the project goals; evaluation of possible design alternatives; and review of the project for constructability. After receipt of review comments, the sub-consultant incorporates the comments or provides justification for a different design direction. The sub-consultant then provides revised plans to the project manager along with the original comments and proper responses that follows our QA/QC plan format.

Cannon



Organizational Chart

Key Personnel

Our key personnel will be available for the duration of the required services.

We acknowledge that no person designated as "key" will be removed or replaced without prior written concurrence of the City.

Resumes are provided in the Appendix.



Principal-in-Charge George Jurica, PE

Project Manager Gary Solsona, PE, QSD & QA/QC Manager Larry Kraemer, PE &

General Civil Engineering

Task Manager
Gary Solsona, PE, QSD /

Anthony Severy, PE
Feldro Esperanza, PE
Andy Rowe, PE
Karena Diep, EIT
Kaitlin Grabiec, EIT
Ally Grijalva, EIT
Nick Settevendemie, EIT
Patrick Lopez

Water/Sewer/Storm Engineering

Task Manager

Gary Roepke, PE /

J. Eric Porkert, PE
Michael Kielborn, PE, LEED AP
Amando Garza, PE
Tina Kuah, PE
Gary Solsona, PE, QSD
Kaitlin Grabiec, EIT
Foster Campbell, EIT
Maria Murillo

Engineering Support Services

Geotechnical *LOR*John Leuer, GE
Andrew Tardie, GE
Robert Markoff, CEG

Hydrogeology Thomas Harder and Associates

Thomas Harder, PG, CHG A Georgie Aronson Mathew Hutchinson

Environmental/CEQA HDR Lucy Jaramillio, EIT Survey KDM Meridian Richard Maher, PLS Patrick Earl, PLS

In-House Support Survey
Bob Chanley, PLS
Burl Steude, PLS

Structures Marshall Pihl, SE Hooman Tavallali, SE

Electrical Engineering Derek Romer, PE Alex Maestre, PE Instrumentation / Controls Mehdi Ahmadi, PEO David Noellsch, CSE

Construction Managers and Resident Engineers Josh Knoefler, PE Michael Petrovich, PE

Construction Inspectors
Robert Estrada, CPII
Mossad Rizkalla
Bud Nance

Mechanical Engineering Robert Campbell-Taylor, PE Table 1 below details our key personnel's years of experience, professional licensing, and role on projects..

Table 1 - Key Personnel Experience, Licensing, and Roles

Name	Years Exp.	Licensing	Job Role
Gary Solsona, PE, QSD 🄊	23	Professional Civil Engineer, CA No. 68420 Qualified SWPPP Developer/Practitioner No. 23466	Project Manager / General Civil Engineering Task Manager
George Jurica, PE 🎤	50+	Professional Civil Engineer, CA No. 26564	Principal-in- Charge
Larry Kraemer, PE	37	Professional Civil Engineer, CA No. 44813	QA/QC Manager
Gary Roepke, PE	50+	Professional Civil Engineer, CA No. 48693	Water / Sewer / Storm Engineering Task Manager
Lucy Jaramillo, EIT 🔑	11	Engineer-In-Training (EIT) California, No. 166938	Environmental
John Leuer, GE 🔑	35	Professional Civil Engineer, CA No. 34996 Professional Geotechnical Engineer, CA No. 2030	Geotechnical
Thomas Harder, PG, CHG 🎤	36	Professional Geologist, CA No. 6512 Certified Hydrogeologist, CA No. 588	Hydrogeology
Richard Maher, PLS 🔑	35	Professional Land Surveyor, CA No. 7564	Survey





Cannon Corporation- Providing Reliable Responsive Solutions since 1976

Firm Profile

As a full-service engineering design, construction management and inspection, and surveying firm, Cannon takes pride in the ability to offer clients a complete range of services. Our commitment to providing clients Reliable Responsive Solutions, whether the project scope is expansive or more specialized, spans 49 years.

During that time, we have worked with many cities, counties, and agencies to maintain secure and dependable water systems; make streets safer and more pedestrian and bicycle-friendly; and construct buildings and facilities that are structurally sound. These characteristics have been an integral part of the infrastructure improvement projects we have completed throughout California.

Our multidisciplinary team of over 150 professionals includes the following:

- · Registered Civil, Structural, Mechanical, and **Electrical Engineers**
- Licensed Land Surveyors and Survey Technicians
- Caltrans Certified Construction Managers and Inspectors
- Instrumentation and Controls (SCADA) Specialists

Team Statistics

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cumulative years of years of design on-call contracts

experience

design engineers

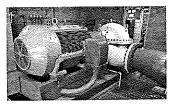
Our proposed key staff are not just experts with water, stormwater, and sewer systems, but also have a long history teaming on general civil engineering projects that have enabled them to fine-tune their collaboration and coordination to deliver successful projects on time and within budget.

Experience Counts

Cannon offers relevant expertise in the following areas:



Water Pipelines and Conveyance Systems



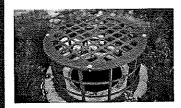
Water Wells and Pump Stations



Pavement Rehabilitation



ADA Ramps, Curb, Gutter, and Sidewalks



Stormwater Engineering



Street Improvements, Parking Lots, and Bridges

Office Locations

Services for the City will be provided primarily from our Irvine office with support from our other offices, if needed. Cannon office locations include the following:

Irvine

16842 Von Karman Ave. Suite 150 Irvine, CA 92606 **2** 949,753,8111

Ventura

60 S California Street Suite 401 Ventura, CA 93001 **2** 805.503.4590

Los Angeles

11900 W Olympic Blvd. Suite 530 Los Angeles, CA 90064 **310.664.1166**

San Luis Obispo

1050 Southwood Dr. San Luis Obispo, CA 93401 **2** 805.544.7407

Firm Capabilities: In-House Services and Specialties

Water Resources

- · Reservoirs, Tanks, Wells
- Pipelines
- Pump/Booster Stations
- Valving and Enclosures
- Potable/Recycled Systems
- · Wastewater Treatment
- Stormwater, Groundwater Quality, and Flood Control
- Storm Water Pollution Prevention Plans
- · Grading and Drainage
- Erosion/Sediment Control
- · Capital Improvement Program Development
- System Master Planning and Modeling
- Regulatory Compliance
- O&M Studies
- · Watershed Studies
- Feasibility Studies
- Hydrology and Hydraulics
- Fire Flow/Pressure Tests
- Permitting
- Condition/Capacity Assessments

- · Streets & Highways
- · Pavement Rehabilitation
- Road Widening and Diet
- Roundabouts
- Intersections
- Bridges, Culverts, and Retaining Walls
- Bicycle/Pedestrian **Facilities**
- Multi-Use Pathways/Trails
- Green/Complete Streets
- · Bioswales
- Low Impact Development
- Sidewalk Gap Closures
- · Safe Routes to School
- Traffic Control
- ADA Compliance
- **Cost Estimating**
- · Funding Administration
- Drainage Studies/Reports
- · Hydrologic, Hydraulic, and Floodplain Analysis
- Street Lighting
- · Permit Processing
- O&M Manuals

Construction Management

- Complete Project and Contract Management
- Inspection and Testing
- Constructability Reviews
- · Value Engineering
- Submittal and RFI Review
- · Bid Review, Preparation, Evaluation, and Administration
- · Contract Review
- Resident Engineering
- Claim Resolution
- Quality Assurance
- Coordination and Community Outreach
- Labor Compliance
- Federal Funding Compliance
- Document Control
- Photo and Video Documentation
- Project Reports.
- · Change Order Management
- CPM Scheduling

Survey

- 3D Laser Scanning and Modeling
- Boundary Surveys
- Right-of-Way Surveys
- Construction Surveys
- · Construction Staking
- Easements and Legal Descriptions
- Topographic Surveys
- · As-Built Certification
- ALTA Surveys
- Subsidence / Settlement Monitoring
- Parcel and Tract Maps
- Aerial Mapping
- Subdivision Mapping
- Centerline Ties
- Flood Zone Certificates
- · Dedications and Abandonment
- GPS Surveys
- Monumentation
- · Legal Description Preparation
- Land Area Calculations



Parks and Facilities

- Parks
- · Public Buildings
- Multi-modal Transportation Facilities
- Stadiums
- Landfills and Waste Recycling
- Plan Check
- Seismic Retrofits
- Cost Estimating
- ADA Compliance
- Site Inspections
- · Staff Augmentation
- · Utility Master Planning
- · Feasibility and Entitlement
- · Regulatory Permitting Assistance
- Agency Communication and Consultation
- Stormwater and Floodplain Management · Backbone Infrastructure,
- Utilities, and Roads Dry Utility Coordination

Engineering

- Master Planning
- Voltage Distribution Systems
- Power Systems Analysis
- · Arc Flash Analysis
- EV Charging Solutions
- Recloser Studies
- Emergency Backup Solar / **Generator Power Systems**
- **Power Systems**
- · Electrical Specifications
- · Electrical Coordination
- Cost Estimates
- Title 24 Calculations
- Construction Management
- Bid Assistance
- On-Site Observation
- Record Drawings O&M Manual Review

and Controls

- PLC Programming
- UL 508A Panel Shop
- Uninterpretable Power
- Analyzer Panels
- Factory Acceptance
- VFD Integration and Programming
- Emergency Shutdown Systems
- · Instrument Calibration, Troubleshooting, and
- **Commissioning Support**
- Site Acceptance Testing Process Control Troubleshooting/Analysis
- Control System Training

- Evaluation/Assessment
- Tenant Improvement
- New Structures
- Repair of Damaged or
- Pile and Pier Cap
- Capacity Based Design

- Testing Results Review
- · Concrete Mix Design Review
- Welding Report Review Working Drawing Review
- · Seismic Force
- Determination
- 3D Design and Analysis
- Acquisition
- As-Constructed Drawings

Electrical

- Low, Medium, and High
- and Modeling
- Motor Control Systems
- · Emergency/Standby
- Energy Efficiency Studies

- SCADA and HMI Development
- Control Panel Fabrication
- Heat Load Calculations
- Supplies
- Testing

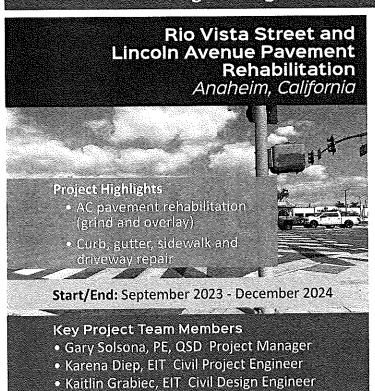
System Documentation

- Deficient Structures

- ASCE 41 Seismic Retrofits · Material Certification
- Submittal Review

Similar Projects/Contracts

General Civil Engineering Services



Manhattan Beach Boulevard Roadway and Bike Improvements Redondo Beach, California



- Karena Diep, EIT Civil Project Engineer
- Kaitlin Grabiec, EIT Civil Design Engineer

This project's proposed street improvements generally consist of AC pavement rehabilitation (uniform 2" grind and overlay) with localized digouts, adjustment of manholes and utility covers to final pavement grade, PCC repair of damaged curb and gutter, sidewalk, driveways, cross gutters, restriping, and replacement of pavement markings within the project limits.

The project included drainage improvements to address flooding of the existing cross gutter at the intersection of Wagner Avenue and Marjan Street, and localized ponding along the southerly curb of Wagner Avenue from Marjan Street to the knuckle east of Marjan Street. Also involved obtaining an approved Caltrans encroachment permit for the proposed sewer improvements at the intersection of Rio Vista Street and Lincoln Avenue.

Contact: Megan Hajimomen, Associate Civil Engineer City of Anaheim

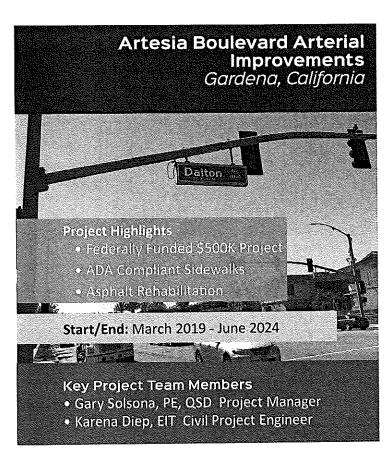
200 S. Anaheim Blvd., Mailstop #276, Anaheim, CA 92805 🕿 714.765.5100 x5818 🖂 mhajimomen@anaheim.net

This project aimed to significantly improve roadway conditions, safety, and aesthetics, while also enhancing the functionality of transportation infrastructure for all users, including pedestrians, cyclists, and motorists. The objective of the project was to enhance roadway infrastructure and safety through a comprehensive suite of improvements.

Project Highlights

- · Roadway grinding and asphalt resurfacing
- Restriping and median modifications
- Addition of Class II bike lanes
- Traffic signal modifications at Manhattan Beach **Boulevard and Dow Avenue**
- New dedicated westbound U-turn pocket on Manhattan Beach Boulevard between Gibson Place and McBain Avenue
- ADA curb ramp upgrades
- Curb, gutter, crossgutter, and sidewalk repairs

Contact: Daniel Gruezo, PE Civil Engineer City of Redondo Beach 415 Diamond Street, Redondo Beach, CA 90277



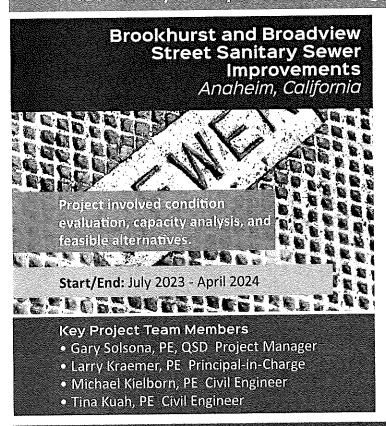
The City of Gardena (City) wanted to replace existing medians along Artesia Boulevard, from Western Avenue to Vermont Avenue, with a new decorative hardscape paving solution. Based on prior discussions with City staff, the Cannon Team evaluated and presented four paving solutions to the City: grouted river cobble, exposed concrete, concrete unit pavers, and staining/sealing the existing stamped concrete. The City subsequently decided to move forward with the "cobblestone" paving solution, which Cannon incorporated into the final design plans, specifications, and cost estimate. Our team prepared a design study to convey the proposed limits of add or deducted hardscape for City direction. Following approval of the conceptual design direction, Cannon completed revisions to the previously submitted 95% design plans, specifications, and estimate. This consisted of the street improvement plans and landscape demolition plan, irrigation plan, planting plan, technical specifications, and cost estimate.

Contact: Kevin Kwak, PE Assistant Public Works Director *City of Gardena*

1717 West 162nd Street, Gardena, CA 90247

🕿 310.217.9643 🖂 kkwak@cityofgardena.org

Wastewater/Sewer/Stormwater Engineering



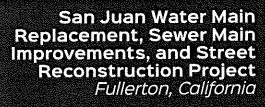
City of Anaheim has on-going Citywide Sanitary Sewer Improvement Programs/Projects to address capacity and operational deficiencies under existing conditions which include replacement and/or rehabilitation of undersized and/or deteriorated sewer mains. Cannon provided engineering services for the condition evaluation, the capacity analysis, and to develop feasible alternatives to remove and replace/upsize existing sewer mains at three locations in the City.

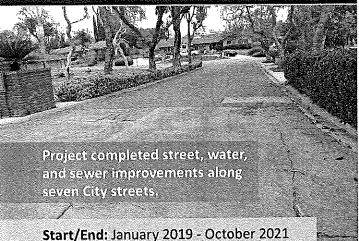
 Brookhurst/Broadview: The existing 8-inch sewer main was abandoned and the 10 sewer laterals were diverted to the existing parallel 8-inch sewer along the easterly side of Brookhurst Street, which was lowered along Brookhurst. The Broadview street project addressed similar sanitary sewer capacity deficiencies in the 10" VCP sewer main in Broadview Street.

Contact: Lori Ishigo Associate Engineer *City of Anaheim*

200 S. Anaheim Blvd., Ste. 276, Anaheim, CA 92805

200 3. Atlaneim Blod., Ste. 270, Hidrichis, ex 32003 **≅** 714.765.4113 ext: 5826 ⊠ Lishigo@anaheim.net





Key Project Team Members

- Gary Solsona, PE, QSD Project Manager
- George Jurica, PE Principal-in-Charge
- Anthony Severy, PE Civil Engineer
- · Michael Kielborn, PE Principal Engineer

Deane Zone Tank, Pump Station and Disinfection Facility Santa Clarita, California



Key Project Team Members

- Eric Porkert, PE Project Manager
- Gary Roepke, PE QA/QC Engineer
- Tyler Fallon, EIT Civil Engineer
- · Alex Maestre, EE Electrical Engineer

The City of Fullerton needed to complete street, water, and sewer improvements along seven streets within the San Juan Community. Improvements consisted of pavement reconstruction via full depth reclamation with cement; reconstruction of raised median (due to upheaving of tree roots); repair of broken/damaged portland cement concrete curb and gutter (rolled and standard); cross-gutters and driveway aprons; replacement and upsizing of existing water mains to 8" PVC; reconnecting existing water services; and removal and replacement of the existing 8" VCP sewer main.

Cannon provided civil engineering design services for plans, specifications, and estimate (PS&E) construction documents. The Cannon Team also provided topographic survey, geotechnical investigation, utility coordination, utility potholing services, and pre- and post-construction monumentation preservation services for the project. Survey services included topographic survey, cross sections, right-of-way establishment, construction staking, and monument perpetuation for one mile of residential streets.

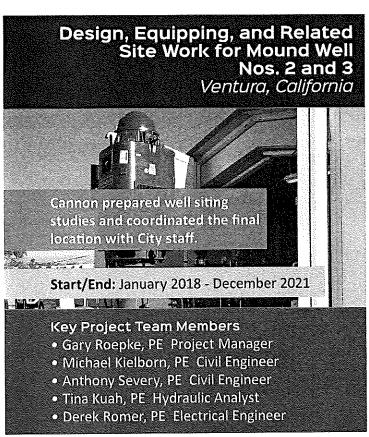
Contact: Gar Huang Project Manager City of Fullerton

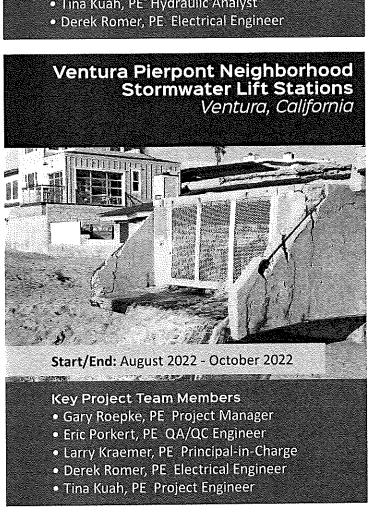
303 W. Commonwealth Ave, Fullerton, CA 92832

714.738.6300 M GarH@ci.fullerton.ca.us

As part of the Skyline Ranch Project, SCV Water needed to install new facilities for the Deane Pressure Zone, including a 2.08 MG tank, pump station, and disinfection facility. The graded pad for the pump station was located along Skyline Road, just north of Sierra Highway. The access road to the site included intake and discharge water piping, a storm drain, grading, and paving. Cannon provided engineering, design, and construction document preparation for the project. Our design accommodated the construction of the future 2.08 MG tank, as well as the Nimbus/Skyline Pump Station, and the disinfection building on-site. The pump station, which was housed in a concrete masonry unit block building included three 850 gallon-per-minute pumps and a 20-inch suction pipe and 16-inch discharge pipe to the Deane Tank. Our design for the new building accommodated the disinfection system components for both current and future needs. We connected the new on-site facilities to the off-site infrastructure provided by the developer, Pardee Homes.

Contact: Orlando Moreno Project Manager Santa Clarita Valley Water Agency 26521 Summit Cir., Santa Clarita, CA 91350
661.714.5942 ⋈ omoreno@scvwa.org





The City of Ventura needed to replace wells No. 2 and No. 3 to increase discharge from the mound groundwater basin. Cannon worked alongside the hydrologist to prepare well siting studies. We prepared separate plans and specifications for equipping the wells with pumps and motors, discharge header piping, transmission mains, pump-to-waste discharge lines, electrical equipment, controls, SCADA, and site work for construction.

Cannon completed access studies for well drilling and maintenance and provided perspectives of the final well enclosure. We coordinated with City staff regarding the location of the well enclosures, electrical equipment, and on-site equipment. To reduce disruption to County of Ventura operations, the selected well site was located in the corner of a parking lot screened by existing trees.

Mound Well No. 3 included the valves and piping to be an Aguifer Recharge and Supply well that allowed the City to inject recycled water into the mound basin for future use. Cannon incorporated these additional components.

Contact: Mark Garcia, Project Engineer City of Ventura 501 Poli St., Room 120, Ventura, CA 93001 🕿 805.654.4749 🖂 mgarcia@ci.ventura.ca.us

The City of Ventura's (City) Dover and Weymouth stormwater pipelines and pump stations were built in 1970 to mitigate flooding along the Pierpont Bay neighborhood. In addition to stormwater runoff mitigation, the reinforced concrete pump stations also serve as public access points for the beach. The pump stations had reached the end of their service life and showed signs of deterioration.

Cannon was selected to provide design services for the pump station upgrades. The four pumps sizes and types included three 4,100-gpm mix flow pumps and one 1,600gpm submersible pump with a lift of 17 feet. Cannon analyzed the pumping requirements and designed two identical stormwater pump stations that included structural upgrades; new electrical Southern California Edison service; and Americans with Disabilities Act access to the beach. The design includes survey, civil, electrical, mechanical, structural, and SCADA. The goal of the project is to increase the efficiency of the pump stations and provide structures and pumping plants that will weather the Pacific Ocean storm long into the future.

Contact: Robert Hearne, PE Civil Engineer City of Ventura 501 Poli St., Room 120, Ventura, CA, 93001 🕿 805.654.7721 🖂 rhearne@cityofventura.ca.gov

Additional Well Projects Spotlight

Cannon has extensive experience supporting municipalities with well rehabilitation, upgrades, and new construction. The table below highlights some of Cannon's relevant well projects. Our support services include civil, mechanical, electrical, and automation systems as well as construction management.

Project Name	Allero Allero	/ ci ^{sis}	, sec	orica Proces			
Ventura Mound Wells 2 and 3	-	V	V		√	✓	V
City of Lakewood Well 28		V			>	✓	\
Santa Maria Well 15	V	√	4		>	✓	/
City of Tulare Wells 4-3 and 4-5	V	✓ /	V	1	✓	✓	1
City of Nipomo Eureka Well	V	✓	1		>	✓	V
Ventura Golf Course Well 7	1	1	1		√	✓	✓
Crescenta Valley Water District Well 16	V	· 🗸	V		>	✓	1
Crescenta Valley Water District Well 2			800 18 2			✓	✓
City of Vernon Well 45	✓	1	1	1	✓	✓	1
City of Delano Well 28 and 29	V	1	V	1	✓	✓	V
City of Delano Wells 30-33	/	✓	V	V	✓	✓	V
Los Angeles County Well 4-45	>	1	V	✓	✓	✓	✓
Los Angeles County Well 4-46	V	V	>	\	✓	✓	✓
Los Angeles County Well 4-47	✓	1	>	✓	✓	✓	✓
Los Angeles County Well 4-77	V	1	>	1	✓	✓	√
Los Angeles County Well 4-66	V	\	>	1	✓	√	√
Los Angeles County Well 4-73	V	V	\ \ JB	\	✓	✓	1
Los Angeles County Well 4-74	✓	V	>	✓	√	√	1
Los Angeles County Well 4-80	✓	V	>	✓	✓	✓	1
Los Angeles County Well 4-81	V	\	/	1	✓	✓	1
Los Angeles County Well 4-88	/	>	>	V	✓	✓	1
City of Simi Valley Wells 31 C and D	V	>	>	V	✓	✓ _	/
City of Simi Valley Well 32A	V	J	4	✓	✓	✓	1
City of South Pasadena Wilson Well	V	V	✓	V	√		
Robinson Ranch Golf Course Well #1	V	1	1	✓	√	V	V
MBMI Cobblestone Well		V	1		✓	√	1
LA County Fire Camp 14 Well 4 and 5	V	1	V	✓	✓	✓	1
LA County Fire Camp 19 Well 3	V	J	V	✓	✓	√	✓



Appendix Resumes

Resumes

Gary Solsona, PE, QSD Project Manager/General Civil Engineering Task Manager



Professional Registration

- Civil Engineer, California, No. 68420
- Qualified SWPPP Developer – Practitioner #234666

Education

 Bachelor of Science, Civil Engineering, California State Polytechnic University, Pomona, California

Professional Affiliations

- Member ASCE, ACEC and APWA
- Past Board Member
 Filipino American
 Society of Architects and Engineers

Mr. Solsona has 23 years of civil engineering experience in public works design, consisting of award-winning roadway widening, street rehabilitation and intersection improvements; sound wall and retaining wall design, preparation of traffic control plans and project study reports, and is recognized in the industry as an ADA design specialist. His proactive approach is carried out seamlessly through project management, engineering design development, and construction support services to public agencies throughout Southern California and he has a proven track record in providing innovative, cost-saving, and sustainable solutions (such as alternative pavement rehabilitation methods, including full depth reclamation and cold-in-place-recycling) on numerous street improvement projects for major arterials and residential streets.

Jamboree / Main Intersection Improvement Project, I-405 NB On-Ramps to Kelvin, Irvine, California: This contract with the City of Irvine was to improve the intersection of Jamboree Road and Main Street to mitigate the future deficient level of service by adding a fifth northbound and a fifth southbound lane on Jamboree Road between the I-405 northbound on / off-ramps and Kelvin Avenue. The Land Surveying services on this project included GPS and Boundary control, boundary and right-of-way analysis, detailed topographic mapping of all infrastructure and improvements, aerial topographic mapping, right of way acquisition legal descriptions, plats, and exhibits, and existing cross section creation. Mr. Solsona served as Project Manager.

Artesia Boulevard Arterial Improvements, Gardena, California: The City of Gardena wanted to replace existing medians along Artesia Boulevard, from Western Avenue to Vermont Avenue, with a new decorative hardscape paving solution. Based on prior discussions with City staff, the Cannon Team (including subconsultant BGB Design Group) evaluated and presented four paving solutions to the City. Our team prepared a design study (exhibit) to convey the proposed limits of added or deducted hardscape for City direction. Following approval of the conceptual design direction, Cannon completed revisions to the previously submitted 95% design PS&E. Mr. Solsona served as Project Manager.

Select Relevant Experience

- Brookhurst Street Sanitary Sewer Improvement Project, Anaheim, California
- Concrete Street Pavement Reconstruction, Newport Beach, California
- Redondo Beach Boulevard Arterial Improvements, Gardena, California
- Manhattan Beach Boulevard Resurfacing, Redondo Beach, California
- Cerritos Avenue Sidewalk Gap Closure, Anaheim, California
- Jamboree and Main Improvements, Irvine, California
- City of Long Beach Pedestrian Access Curb Ramps, Long Beach, California
- 4th Street Improvements-Phase II, Santa Monica, California

George Jurica, PE Principal-in-Charge



Professional Registration

 Civil Engineer, California, No. 26564, Arizona No. 27191, Colorado No. 18563, Texas No. 55430

Education

- Master of Business Administration, Construction Management, University of Denver, Denver, Colorado
- Bachelor of Science, Engineering, University of California, Los Angeles, California

Professional Affiliations

- Board Member ACEC, Orange County
- Board Member APWA, Southern California Chapter

Awards

- APWA, Southern California, 2013 California Private Sector Leader of the Year
- ASCE, Los Angeles, 2003
 Outstanding Civil Engineer
 in the Private Sector

Mr. Jurica has more than 50 years of experience as a Project Engineer, Project Manager, and Principal-In-Charge, with relevant experience encompassing planning, design, and construction of major public works infrastructure and facility projects. He has extensive experience working on public agency projects throughout Southern California.

Cerritos Avenue Sidewalk Gap Closure, Anaheim, California: This project is located on Cerritos Avenue from Euclid Street to approximately 600 feet east of Euclid Street. The project consists of constructing a five-foot-wide, ADA compliant sidewalk adjoining the back of curb, with no parkway along the north and south sides. The work will also include the construction of block walls and fences that will be relocated or reconstructed as part of the project. The new sidewalk will eliminate the need for pedestrians to walk along the side of the road or on a dirt path. Cerritos is designated as a four lane secondary arterial by the County's Master Plan of Arterial Highways with average daily traffic of 9,400 vehicles per day. The sidewalk along Cerritos east of Euclid Street ends abruptly. The existing pathway consists of an unpaved dirt path. This sidewalk project will provide safer and better access for the school children and pedestrians in general. Mr. Jurica served as Principal-in-Charge.

Select Relevant Experience

Mr. Jurica served as Principal-in-Charge on the following projects:

- San Juan Water Main Replacement, Sewer Main Improvements, and Street Reconstruction Project, Fullerton, California
- City of Long Beach Pedestrian Access Curb Ramps, Long Beach, California
- Newport Beach Concrete Street Pavement Reconstruction, Newport Beach, California
- City of Lake Forest ADA Access Ramp and Sidewalk Improvements, Lake Forest, California
- Jamboree and Main Intersection Improvement Project, I-405 NB On-Ramps to Kelvin, Irvine, California
- Cerritos Avenue Sidewalk Gap Closure, Anaheim, California
- Shoemaker Bridge Replacement, Long Beach, California
- Engineering Design Services for Pavement Rehabilitation Projects, San Juan Capistrano, California
- Crystal Canyon Road Drainage and Pavement Rehabilitation Project, Eastern Orange County, California
- Jeffrey Road/Portola Parkway Infrastructure Improvements, Irvine, California
- Portola Parkway Infrastructure Improvements, Irvine, California
- Portola Parkway, Portola Springs, and Modjeska Project, Irvine, California
- On-Call Civil Engineering Services and Land Surveying Services, Rancho Palos Verdes, California
- LINK US / LA Metro Union Station, Los Angeles, California

Larry Kraemer, PE QA/QC Manager



Professional Registration

 Civil Engineer, California, No. 44813

Education

- Master of Science, Civil Engineering – Water Resources, California State University, Long Beach, California
- Bachelor of Science, Agricultural Engineering, California Polytechnic State University, San Luis Obispo, California

Professional Affiliations

- American Society of Civil Engineers
- American Water Works Association
- American Public Works Association
- California Water
 Environment Association
- Water Environment Federation
- WaterReuse Association
- Institute for Sustainable Infrastructure

Mr. Kraemer has more than 37 years of design experience with civil, water resource, and environmental engineering projects within both the public and private sectors. He has served as a senior engineer for complex engineering projects dealing with water resources, wastewater, transportation, schools, and land development. As Director of Cannon's Public Infrastructure division, his duties and responsibilities include technical oversight of master planning, preliminary design, detailed design and construction documents, construction contract administration and management for a wide variety of essential systems, including water distribution, sewage collection and treatment, local streets, and engineered and natural drainage systems. Mr. Kraemer is adept at managing challenging or complex projects due to his astute troubleshooting skills, keen attention to detail, and innovative approach for efficient design.

Select Relevant Experience

Mr. Kraemer has served as QA/QC Manager on the following projects:

- Manhattan Beach Boulevard Resurfacing Improvements, Redondo Beach,
- California
- Pier B West Expansion Sewer Lift Station, Port of Long Beach, California
- Airport Avenue Complete and Green Street Improvements Santa Monica,
- California
- City of Santa Monica Olympic Water Transmission Main, Santa Monica, California
- Santa Monica Water Main Replacement, Santa Monica, California
- San Juan Area Water Main Replacement, Sewer Main Improvements, and Street Reconstruction Project, Fullerton, California
- Murphy Reservoir Replacement Project, Whittier, California
- Cornell Pump Station Evaluation, Las Virgenes Municipal Water District, California
- GSWC-Bradshaw Water Treatment Plant Nitrate Removal System, Barstow, California
- Mound Well Nos. 2 and 3 Design, Equipping, and Related Site Work, Ventura, California
- Ventura Street Water Main Replacement, Ojai, California

Gary Roepke, PE Water / Sewer / Stormwater Engineering Task Manager



Professional Registration

 Registered Civil Engineer, California, No. 48693

Education

 Bachelor of Science, Civil Engineering, Iowa State University, Ames, Iowa

Professional Affiliations

- American Water Works Association
- American Public Works Association
- Association of Water Agencies of Ventura County
- Southern California Water Utilities Association
- American Society of Civil Engineers
- City and County Engineers Association

Mr. Roepke has more than 50 years of professional experience in a wide variety of civil engineering projects. He has been the project manager for municipal, industrial, commercial, and military facility projects involving lift stations for water systems, including treatment, supply, transmission, and distribution systems; pumping stations for drainage and flood control systems; wastewater collection and pumping systems; and construction administration, inspection, and start-up. Many of these projects included analysis of the existing lift station and pumping requirements, including studies, reports, and design of lift stations and pump stations to meet those requirements. These projects have consisted of both new construction and upgrades to existing facilities.

Engineering Design and Construction Management Services for the Murphy Reservoir Replacement Project, Whittier, California: Cannon was selected to provide engineering design services to evaluate the needs at Zone 577 and design a Prestressed, partially buried reservoir. The project includes hydraulic modeling of Zone 577 and temporary improvement design so that Zone 577 will stay in service while the Murphy Reservoirs are being replaced. The project included structural design, electrical and instrumentation design, and civil design along with geotechnical investigation, and CEQA documentation. Mr. Roepke served as Project Manager.

Ventura Pierpont Neighborhood Stormwater Lift Stations, Ventura, California: Mr. Roepke served as Project Manager. Cannon was selected to provide design services for the pump station upgrades. The four pumps sizes and types included three 4,100-gpm mix flow pumps and one 1,600-gpm submersible pump with a lift of 17 feet. Cannon analyzed the pumping requirements and designed two identical stormwater pump stations that included structural upgrades; new electrical Southern California Edison service; and Americans with Disabilities Act access to the beach. The design includes survey, civil, electrical, mechanical, structural, and SCADA. The goal of the project is to increase the efficiency of the pump stations and provide structures and pumping plants that will weather the Pacific Ocean storm long into the future.

Select Relevant Summary

Mr. Roepke served as Project Manager, QA/QC Engineer, or Civil Senior Engineer on the following projects:

- Pier A Pump Station No. 28 Rehabilitation Project, Port of Long Beach, California
- Design, Equipping, and Site Work: Mound Well Nos. 2 and 3, Ventura, California
- Cornell Pump Station, Las Virgenes Municipal Water District, Calabasas, California
- Nutmeg Water Distribution Tank Rehabilitation, Morro Bay, California
- 15 MG Zone 1 Reservoir Coating and Improvements Project, Irvine, California



Founded in 1917 in Omaha, Nebraska, HDR is a 100 percent employee-owned corporation. We have been a part of the Southern California business landscape since 1973. Locally, HDR has more than 500 professionals who specialize in planning and engineering disciplines, including transit/rail, roadway/highway, transportation planning and traffic, structures, environmental, architecture and construction management services, and we are supported by over 11,500+ employee owners in over 200 locations worldwide.



Professional Registration

 Engineer-In-Training (EIT) California, No. 166938

Licenses and Certifications

Construction Project
 Management Certificate
 – California State
 University, Dominguez
 Hills (Expected June
 2025)

Education

 Bachelor of Science – Chemical Engineering, California Polytechnic University, Pomona

Lucy Jaramillo, EIT Corrosion Project Manager

Ms. Jaramillo has over 10 years of experience performing and managing field surveys, design services, and construction support services focusing on cathodic protection, corrosion control, industrial coatings, and condition assessment of water and wastewater facilities including pipelines, reservoirs, and reinforced concrete structures. She has developed rehabilitation designs and performed contractor submittal reviews during construction. She has conducted field surveys consisting of soil corrosivity studies, industrial coating inspections, condition assessments of reinforced concrete structures, internal and external corrosion condition assessments of pipelines, and cathodic protection surveys on pipelines and reservoirs.

Select Relevant Experience

Ms. Jaramillo has served as Project Manager on the following projects:

- City of Huntington Beach Cathodic Protection System Improvements, Huntington Beach, California
- City of Huntington Beach Annual Survey Pipeline Condition Assessment, Huntington Beach, California.

LOR

LOR Geotechnical Group, Inc., has a multi-disciplinary staff of qualified and experienced licensed professionals who hold registrations in the State of California. Our laboratory is currently approved by the California Department of Transportation (Caltrans). Our firm has provided geotechnical engineering services for over three thousand projects within southern California. Among the types of geotechnical engineering services provided are; pavement rehabilitation design including complete removal and replacement, inlay/overlay, pulverization, asphalt recycling, subgrade stabilization, specialized design to minimize section thickness without minimizing the integrity of the section, slope stability analysis, liquefaction analysis, pipeline excavation and construction design, and best management practice storm water infiltration testing and design.



Professional Registration

- Civil Engineer, California, No. 34996
- Geotechnical Engineer, California No. 2030

Education

 Bachelor of Science, Civil Engineering, Cal State University, Northridge, California

John Leuer, GE Geotechnical

Mr. Leuer has over 35 years of professional experience in the geotechnical and civil engineering field. In this time, Mr. Leuer has developed an extensive knowledge of the many geotechnical considerations involved in construction in the southern California area. Mr. Leuer is highly experienced in all aspects of soil and foundation engineering for a wide variety of projects ranging from multi-story commercial and industrial structures to several thousand acre planned community developments. Mr. Leuer has substantial experience coordinating projects for many City, County, and State agencies as well as in the public sector, gaining a reputation for being responsive to client's needs while providing strong technical expertise.

Select Relevant Experience

Mr. Leuer has served as Principal-in-Charge on the following projects:

- Preliminary Soil and Infiltration Feasibility Investigation and Pavement Structural Section Design, Proposed Oak View Elementary School Neighborhood Street Improvements, Huntington Beach, California
- Subsurface Soils Investigation, Ball Road Sewer Improvements, Beach Boulevard to Knott Avenue, Anaheim, California
- Subsurface Soils Investigation, Citywide Sanitary Sewer Improvement Program, Anaheim, California
- Subsurface Soils Investigation and Pavement Structural Section Design, Webster Avenue and Ball Road Sanitary Sewer Improvements, Anaheim, California.
- Subsurface Soils Investigation, Anaheim Sewer Improvements, Basin Area La Reina Circle and Lincoln Avenue, Anaheim, California

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Thomas Harder & Co. (TH&C) is a full-service hydrogeological consulting company with extensive expertise in the siting, design, construction management, and testing of municipal water wells. Thomas Harder has more than 34 years of hydrogeological consulting experience and is a recognized expert in municipal well design and construction. He has developed and implemented effective designs and managed the construction for more than 100 successful large-diameter, high-capacity municipal water wells in California. TH&C's mission is to provide clients with sound hydrogeologic analysis and technical expertise for developing effective and sustainable water resource solutions.



Professional Registration

- Professional Geologist, California No. 6512
- Certified Hydrogeologist, California No. 588

Education

- Master of Science, Geology – Hydrogeology, California State University, Los Angeles, California
- Bachelor of Science, Geology, Polytechnic University - Pomona, California

Thomas Harder, PG, CHG Hydrogeologist

For more than three decades, Mr. Harder has been providing technical direction for municipalities and private interests to develop sustainable groundwater resources for the economy and well-being of the residents of California. From groundwater recharge projects in the Mojave Desert to basin management and adjudication in southern California to the modeling and management of banking operations in the Kern Water Bank, Mr. Harder has played a key role in providing the technical support needed to guide decisions for basin managers. His expertise spans a wide range of hydrogeological disciplines, including regional groundwater basin analysis, sustainable yield, artificial recharge, groundwater management, groundwater models, contaminant hydrogeology, and water wells.

Select Relevant Experience

Mr. Harder has served as Hydrogeologist on the following projects:

- Hydrogeological Services for the Destruction of Well 7 and Construction of Well 7A – City of Fullerton, Fullerton, California
- Hydrogeological Services for the Drilling, Construction, and Testing of La Jolla Well No. 3 – Golden State Water Company, Placentia, California.
- Armstrong Well 2 Golden State Water Company, Lakewood, California
- Gage 29-2R, City of Riverside, San Bernardino, California
- Gobernadora Multi-Use Basins Well Field Design and Construction (Two Wells) – Santa Margarita Water District, Rancho Mission Viejo, California
- Grand Avenue Well Three Valleys Municipal Water District, Claremont, California



KDM Meridian has a proven track record of providing comprehensive surveying and map checking services for public agencies across Southern California. Our licensed surveyors and technical experts bring extensive experience in subdivision map reviews, boundary analysis, right-of-way verification, and compliance with municipal and state regulations. KDM is located approximately 12 miles from the City's Public Works Department.



Licenses and CertificationsProfessional Land Surveyor,

California No. 7564

Education

- California State
 University, Fullerton:
 Various Coursework, Civil
 Engineering
- University of California, Riverside Extension: Certificate, GPS Technology

Richard Maher, PLS Survey Map Check

Richard C. Maher, a Professional Land Surveyor (PLS) registered in California, is the President and founding member of KDM Meridian, a leading Land Survey & Mapping firm established in 2000. With 35 years of experience in land surveying and civil engineering, he has worked with over a hundred local, county, and state agencies, as well as utility districts. His expertise includes GPS, LiDAR scanning, conventional land surveying, map checking, right-of-way engineering, annexations, construction staking, design topographic surveys, aerial control networks, legal descriptions, boundary surveys, and records of surveys. Committed to innovation, Richard stays at the forefront of industry advancements in technology, hardware, and software, ensuring KDM Meridian continues to lead in land surveying and mapping services.

Select Relevant Experience

Mr. Maher has served as Surveyor on the following projects:

- City of Huntington Beach Oak View Streetscape Improvement Project, Huntington Beach, California
- City of Fullerton On-Call Surveying Services, Fullerton, California
- City of Laguna Beach Ongoing On-Call Surveying Services, Laguna Beach, California
- City of Oceanside Comprehensive Surveying Services, Oceanside, California
- City of Ontario On-Call Surveying Services, Ontario, California.

EXHIBIT "B"

Payment Schedule (Hourly Payment)

A. Hourly Rate

CONSULTANT'S fees for such services shall be based upon the following hourly rate and cost schedule:

SEE ATTACHED EXHIBIT B

B. <u>Travel</u> Charges for time during travel are not reimbursable.

C. Billing

- 1. All billing shall be done <u>monthly</u> in fifteen (15) minute increments and matched to an appropriate breakdown of the time that was taken to perform that work and who performed it.
- 2. Each month's bill should include a total to date. That total should provide, at a glance, the total fees and costs incurred to date for the project.
- 3. A copy of memoranda, letters, reports, calculations and other documentation prepared by CONSULTANT may be required to be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.
- 4. CONSULTANT shall submit to CITY an invoice for each monthly payment due. Such invoice shall:
 - A) Reference this Agreement;
 - B) Describe the services performed;
 - C) Show the total amount of the payment due;
 - D) Include a certification by a principal member of CONSULTANT's firm that the work has been performed in accordance with the provisions of this Agreement; and
 - E) For all payments include an estimate of the percentage of work completed.

Upon submission of any such invoice, if CITY is satisfied that CONSULTANT is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONSULTANT in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONSULTANT is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

5. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.

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2025/2028 Fee Schedule

CIVIL	
Senior Consultant	\$312
Prinicpal In Charge	\$302
Senior Principal Engineer (I	\$283
Senior Principal Engineer	\$272
Principal Engineer	\$250
Senior Associate Engineer	\$234
Associate Engineer	\$216
Senior Project Engineer	\$204
Project Engineer	\$180
Senior Principal Designer	\$192
Principal Designer	\$177
Lead Designer	\$159
Senior Project Designer	\$166
Project Designer	\$154
Design Engineer	\$166
Senior CAD Tech	\$135
CAD Tech	\$125
Senior Plan Check Engineer	\$189
Plan Check Engineer II	\$185
Plan Check Engineer II	\$149
Dry Utility Coordinator I	\$185
Grant Funding Manager II	\$187
Grant Funding Manager I	\$172
MECHANICAL	

IVICCHAINICAL	
Department Manager, Energy	\$248
Sr. Principal Engineer	\$234
Principal Engineer	\$218
Sr. Associate Engineer	\$208
Associate Engineer	\$192
Sr. Project Engineer	\$182
Project Engineer	\$168
Sr. Principal Designer	\$192
Principal Designer	\$175
Lead Designer	\$158
Sr. Project Designer	\$148
Project Designer	\$140
Design Engineer	\$158
Sr. CAD Tech	\$135

STRUCTURAL	
Sr. Principal Engineer	\$239
Principal Engineer	\$229
Sr. Associate Engineer	\$208
Associate Engineer	\$198
Sr. Project Engineer	\$182
Project Engineer	\$172
Sr. Principal Designer	\$159
Principal Designer	\$144

STRUCTURAL continued	
Sr. Project Designer	\$140
Design Engineer	\$156
Sr. CAD Tech	\$135
INSTRUMENTATION & ELECTRICAL EN	T

Director, Automation & Electrical	\$286
Sr. Principal Engineer	\$270
Principal Engineer	\$239
Sr. Associate Engineer	\$218
Associate Engineer	\$198
Sr. Project Engineer	\$182
Project Engineer	\$177
Sr. Principal Designer	\$176
Principal Designer	\$160
Sr. Project Designer	\$148
Electrical Design Engineer	\$160
Principal Automation Specialist	\$208
Sr. Automation Specialit	\$198
Automation Associate Engineer	\$198
Automation Project Engineer	\$177
Automation Design Engineer	\$159
Lead Automation Specialist	\$192
Automation Specialist	\$177
Sr. Automation Technician	\$166
Lead Automation Technician	\$172
Automation Technician	\$137
Engineer Technician	\$133
I&E Services Coordination	\$125
Inside Wireman (PW)	\$245
Comm & System Tech (PW)	\$245
Comm & System Installer (PW)	\$245
Telecommunications Technician (PW)	\$245

SURVEYING	
Three-Man Field Crew (PW)	\$565
Two-Man Field Crew (PW)	\$411
One-Man Field Crew (PW)	\$229
Crew Member	\$0
Two-Man HDS Crew	\$369
Director, Survey	\$253
Senior Land Surveyor	\$242
Associate Land Surveyor	\$226
Land Surveyor	\$214
Survey Technician V	\$192
Survey Technician IV	\$182
Survey Technician III	\$172
Survey Technician II	\$160
Survey Technician I	\$149
Survey Assistant	\$130

PLANNING/LANDSCAPE ARCH	ITECTURE
Associate Landscape Architect	\$192
Senior Landscape Architect	\$208
Landscape Architect	\$144
Planner III	\$154
Planner II	\$144
Planner I	\$132
Landscape Designer II	\$132
Landscape Designer I	\$125
Project Designer IV	\$133
Project Designer III	\$125
Project Designer II	\$120
Project Designer I	\$114
Architect Senior Associate	\$234
Planning Assistant I	\$125

CONSTRUCTION MANAGEMENT	
Director, Construction Management	\$242
Principal Construction Manager	\$242
Principal Construction Engineer	\$231
Sr. Construction Manager	\$229
Construction Manager	\$203
Sr. Resident Engineer	\$234
Resident Engineer	\$218
Assistant Resident Engineer	\$182
Assistant Resident Engineer II	\$182
Assistant Resident Engineer II	\$172
Office Engineer/Doc Control III	\$154
Office Engineer/Doc Control II	\$144
Office Engineer/Doc Control I	\$133
Construction Inspector III	\$158
Construction Inspector II	\$153
Construction Inspector I	\$131
Construction Coordinator II	\$136
BCI Construction Inspector/Prevailing Wage (PW)	\$175

FORENSICS	
Expert Testimony (Deposition/Trial)	\$546
Expert Testimony (Deposition/Trial)	\$432
Expert Testimony (Deposition/Trial)	\$312
Research & Investigation	\$369
Forensics Engineer III	\$343
Forensics Engineer II	\$312
Forensics Engineer I	\$284
Forensics 2-Man Survey Crew	\$432
Forensics Survey Tech III	\$346
Forensics Survey Tech II	\$310
Forensics Survey Tech I	\$286
Office Administrator	\$185
TECHNICAL SUPPORT	
Senior Consultant	\$312
Engineering Assistant IV	\$135
Engineering Assistant III	\$130
Engineering Assistant II	\$125
Engineering Assistant I	\$120
Proposal Coordinator/Technical Writer IV	\$135
Proposal Coordinator/Technical Writer III	\$130
Proposal Coordinator/Technical Writer II	\$124
Proposal Coordinator/Technical Writer I	\$120
CADD Manager	\$142
Information Systems Manager	\$142
Information Systems Admin II	\$139
Information Systems Admin I	\$135



Fee Schedule

HDR Rate Schedule	Fror	n \$/HR	To	\$/HR
Sr. Engineer Mgr/Sr. Project Manager	\$	280	\$	355
Sr. Corrosion Engineer	\$	275	\$	335
Project Manager	\$	185	\$	270
Construction Inspector	\$	185	\$	250
Corrosion Engineer	\$	180	\$	250
Corrosion EIT	\$	120	\$	150
Corrosion Technician	\$	115	\$	135

FEE SCHEDULE

OCTOBER 2024

SERVICES

Geotechnical Engineering

LOR Geotechnical Group, Inc. provides geotechnical engineering services, including: preliminary geotechnical investigations, foundation investigations, percolation feasibility investigations, liquefaction evaluation investigations, as well as grading observation materials testing services.

Geological

LOR Geotechnical Group, Inc. provides geological services, engineering geology investigations, seismic setting studies, slope stability investigations, liquefaction susceptibility investigations, hydrology/water resource studies, and bedrock rippability evaluations.

Environmental

LOR Geotechnical Group, Inc. provides, environmental site assessments, underground storage tank investigations and remediation investigations, groundwater monitoring systems, soil and groundwater sampling and analysis, and environmental studies for property transfers.

All costs for Geotechnical Engineering, Geological, and Environmental Services are based on the site and investigative parameters requested.

FEES

The hourly personnel charges and laboratory test unit rates are as follows:

Davis and Chayesa Haydu
Personnel Charges-Hourly
Principal Engineer\$360.00
Project Engineer/Geologist. \$200.00
Staff Engineer/Geologist. \$170.00
Soil Technician/Deputy Inspector (Field or Laboratory) 1
Soil Technician/Deputy Inspector (Prevailing Wage) 1.2
Soil Technician/Deputy Inspector (CBA) 1.2\$170.00
Drafting\$115.00
Clerical\$100.00
Laboratory Testing Charges - Unit Costs
CT 202: Sieve Analysis (Soil)
CT 202: Sieve Analysis (Aggregate)\$170.00
CT 202: #200 Sieve Wash
CT 205: Crushed Particle Analysis
CT 206 Specific Gravity + Absorption of Coarse Aggregate
CT 207: Specific Gravity + Absorption of Fine Aggregate\$180.00
CT 211: LA Rattler
CT 213: Organic Impurities
CT 217: Sand Equivalent
CT 217: Sand Equivalent -QC\$160.00
CT 226: Moisture Content\$40.00
CT 227: Cleanness Value\$160.00
CT 229: Durability Index Fine/Coarse\$315.00
CT 235: Percentage of Flat and Elongate d Particles in Coarse Aggregate
OT 203. Percentage of Flat and Elongate of Fatticles in Coarse Aggregate
CT 301; R-Value\$425.00
CT 305: Swell

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CT 307: Moisture Vapor Susceptibility	\$215.00
CT 308 & CT 366: Asphalt Concrete Density & Stability/Rubberized	\$265.00/\$325.00
CT 308: Asphalt Concrete Density/Rubberized	
CT 309: Asphalt Concrete Theoretical Maximum Density	\$215.00
CT 329: Asphalt Moisture	\$45.00
CT 366: Asphalt Concrete Stability/Rubberized	\$240.00/\$305.00
CT 382: Asphalt Extraction & Gradation	\$315.00
CT 382: Slurry Extraction	\$195.00
CT 521: Concrete Cylinder Compressive Strength	\$45.00
CT 523: Beam Cylinder	\$95.00
Concrete & Beam Cylinder Hold	\$15.00
ASTM D6913/7928: Mechanical Analysis	
ASTM D1557: (Modified)/ ASTM D698: (Standard) Proctor (4")	\$230.00
ASTM D1557: (Modified)/ ASTM D698: Proctor (6" or Cal-216)	\$265.00
ASTM D2434: Permeability	
ASTM D2435: Consolidation	\$290.00
ASTM D5333: Collapse Potential	\$240.00
ASTM D2216: Moisture Content	
ASTM D221/D2937: Moisture/Unit Weight (Ring)	\$50.00
ASTM D2974: Organic Matter Test	\$110.00
ASTM D4318: Atterberg Limits	\$265.00
ASTM D4829: Expansion Index	\$230.00
ASTM D3080: Direct Shear	
CT 3910 Wet Track Abrasion	
Soluble Sulfate: (Test Kit SF-1)	\$100.00

^{110%} field supervision and equipment/vehicle charge will be added to all field services.

TERMS

Reimbursable Expenses

Outside services performed by others and direct costs expended on the client's behalf are charged at cost plus twenty percent. These expenses include rental of drill rigs, bulldozers, backhoes, travel and subsistence, permits, reproduction costs, etc.

Travel Time

Travel time required to provide professional or technical services will be charged at the appropriate hourly rates.

Overtime

An overtime rate of 1.5 times the standard rate will be used for time in excess of 8 hours per day and Saturdays. An overtime rate of 2.0 times the standard rate will be added for work on Sundays, official company holidays, and on all work in excess of 12 hours per day.

<u>Prepayments</u>

A retainer of fifty percent of the total fee is required for all field studies. The balance of the fee must be paid at the time the report is released to the client.

Billing

Billings will be provided periodically and will be classified by fee categories set forth above or as given by proposal.

Terms of Payment

Invoices rendered for professional services are due upon presentation. A service charge of 1.5 percent, per month, may be charged on accounts not paid within thirty days to cover additional processing and carrying costs. Any attorney's fees or other costs incurred in collecting any delinquent account will be paid by the client.

²Rate based on current State determined prevailing wage rates as of the date of this document. Adjustments to our rates may be necessary based on the actual State determined prevailing wage rates at the time of our work.

Staff	Hourly Rate
Principal Hydrogeologist	\$240
Associate Hydrogeologist	\$210
Senior Hydrogeologist/Geologist/Geoscientist	\$180
Project Geoscientist	\$155
Staff Geoscientist	\$135
Field Technician	\$100
Graphics	\$110
Clerical	\$90

For public hearings, depositions and court appearances requiring qualifications and services as expert witness, the Principal Hydrogeologist will be billed at the hourly rate of \$480/hr, plus travel expenses and subsistence as described below. Billing for depositions, court appearances, and administrative hearings will include an 8-hr minimum.

Travel mileage for personal vehicles will be charged at the rate allowed by current IRS guidelines. Current guideline is 70 cents/mile.

Subsistence expenses, including food and lodging, will be reimbursed at the actual cost.

Thomas Harder & Co.

Groundwater Consulting





KDM Meridian Fee Schedule

Version Code: v.250307_PWR

Professional Services

Schedule Category	Hourly Rate
Principal Principal	\$240
Project Manager	\$225
Project Surveyor	\$210
Senior Survey Technician	\$175
Survey Technician	\$145
Clerical / Administration / Technical Aide	\$ 95
Expert Witness	\$500
Survey Crew (1-person)	\$280
Survey Crew (2 persons)	\$380
Survey Crew (3 persons)	\$480

Reimbursables

Rental of Special Equip			Cost + 5%
Subconsultants	 	A STAMPE	 Cost + 5%
Agency Fees	 		Actual Cos
Airfare			Cost +5%

Miscellaneous Fee Schedule Terms

Fee Schedule Terms and Conditions

A minimum of 4 hours per day will be charged for survey crews and expert witness services.

Over-time will be charged at 1.35 times the regular rate.

Double-time will be charged at 1.75 times the regular rate.

The above rates shall be charged portal to portal (time spent on project site plus travel time) excluding meal breaks.

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