

PROFESSIONAL SERVICES CONTRACT BETWEEN
THE CITY OF HUNTINGTON BEACH AND
SA ASSOCIATES
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 SA ASSOCIATES, 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 Shahnawaz Ahmad who shall represent it and be its sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. CITY STAFF ASSISTANCE

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

3. TERM; TIME OF PERFORMANCE

Time is of the essence of this Agreement. The services of CONSULTANT are to commence on _____, 20____ (the "Commencement Date"). This Agreement shall automatically terminate three (3) years from the Commencement Date, unless extended or sooner terminated as provided herein. All tasks specified in **Exhibit "A"** shall be completed no later than three (3) years from the Commencement Date. The time for performance of the tasks identified in **Exhibit "A"** are generally to be shown in **Exhibit "A."** This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONSULTANT.

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. METHOD OF PAYMENT

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:

“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

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. CERTIFICATE OF INSURANCE

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

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

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:

TO CITY:

City of Huntington Beach
ATTN: Director of Public Works
2000 Main Street
Huntington Beach, CA 92648

TO CONSULTANT:

SA Associates
Attn: Shahnawaz Ahmad
1130 W. Huntington Drive, Suite 12
Arcadia, CA 91007

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. INTERPRETATION OF THIS AGREEMENT

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

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. DUPLICATE ORIGINAL

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. IMMIGRATION

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. LEGAL SERVICES SUBCONTRACTING PROHIBITED

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.

24. ATTORNEY'S FEES

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. SURVIVAL

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. SIGNATORIES

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

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. EFFECTIVE DATE

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,
SA ASSOCIATES

CITY OF HUNTINGTON BEACH, a
municipal corporation of the State of
California

By: Shahnawaz Ahmad
Shahnawaz Ahmad, President
print name

ITS: (circle one) Chairman/President/Vice President

Mayor

City Clerk

AND

By: Shahnawaz Ahmad
Shahnawaz Ahmad, Secretary/Treasurer
print name

ITS: (circle one) Secretary/Chief Financial Officer/Asst.
Secretary - Treasurer

INITIATED AND APPROVED:

[Signature]
Director of Public Works

REVIEWED AND APPROVED:

City Manager

APPROVED AS TO FORM:

[Signature]
for City Attorney [Signature]

EXHIBIT "A"

A. STATEMENT OF WORK: (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. CITY'S DUTIES AND RESPONSIBILITIES:

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

Disciplines of Civil Engineering Services Application Form

Circle all that apply

Civil Engineering Service Area	Bidding? Y/N (circle)
• Water/Sewer/Storm Water Engineering	<input checked="" type="radio"/> Yes / No
• General Civil Engineering	Yes / <input type="radio"/> No
• Ocean Engineering	Yes / <input type="radio"/> No
• Environmental/Water Quality	Yes / <input type="radio"/> No



TABLE OF CONTENTS

COVER LETTER

SECTION I: BACKGROUND AND PROJECT SUMMARY

SECTION II: METHODOLOGY

SECTION III: STAFFING

SECTION IV: QUALIFICATIONS

- RELATED EXPERIENCE
- REFERENCES FORM

SECTION V: APPENDIX

- RESUMES OF NON-KEY STAFF
- EXPERIENCE TABLES

(OUR COST PROPOSAL/RATE SHEET IS PROVIDED AS A SEPARATE DOCUMENT)



SECTION I: BACKGROUND AND PROJECT SUMMARY

BACKGROUND

SA Associates was established in May, 1989 as a principal-owned engineering firm with offices in Los Angeles and Orange Counties. SA Associates is a California Corporation and "SA Associates" is our full legal name. SA Associates services cover a broad spectrum of engineering from investigation and feasibility reports to design, construction administration, and construction observation. The firm provides complete civil engineering services for municipalities, public and private water agencies, sanitary districts, and flood control districts.

Our main fields of specialty are:

- Water Supply Projects
- Wastewater Facilities Projects
- Flood Control and Drainage Projects
- Civil Engineering
- Construction Management and Construction Inspection Services
- Feasibility Studies
- Survey Services

SA Associates' experience was gained through providing engineering services to several cities and agencies in the greater Los Angeles area for over 35 years. All of SA Associates completed (or currently ongoing) projects are for public agencies. Our team of engineers and professionals are aware of the requirements of most public agencies and are familiar with public procedures.

For the City of Huntington Beach, we provided design services for the replacement of water valves in approximately 50 separate locations throughout the City's water system. We also provided extra work support for the Utilities Department, through our subconsultant, Ardurra. In addition, SA Associates brings experience in water projects in nearby Anaheim and the County of Orange Public Works. As a result, we are knowledgeable of the City Standards and have previous experience to benefit the City of Huntington Beach for your on-call projects.

RELEVANT ON-CALL SERVICES

We have provided or are providing On-Call Design Services to the following agencies:

City of Anaheim	City of Huntington Beach	City of Riverside
City of Azusa	City of Irvine	City of Whittier
Crescenta Valley Water District	City of Manhattan Beach	Gateway Water Management Authority
City of Culver City	City of Mission Viejo	Long Beach Water District
City of Fullerton7104	City of Pomona	Santa Clarita Valley Water Company

PROJECT UNDERSTANDING

The City is seeking to retain as-needed services from qualified engineering firms to supplement City Staff for a variety of services. The contract will be for a 3-year term with the option to extend the contract for one additional year. The City will issue task orders for each project. The projects will be assigned on an on-call basis. Consultants may bid on one or more categories of service.

SA Associates is submitting in Category A: Water/Sewer/Storm Water Engineering which includes:



- Potable Water Pipeline Engineering (Water Distribution)
- Potable Water Wells, Reservoirs, and Booster Pump Stations (Water Production)
- Potable Water Master Plan Update and Water Financial Plan Update
- Wastewater Engineering (Sanitary Sewer)
- Wastewater Master Plan Update
- Stormwater Engineering

The City has 15 wells that are aging and are 30 – 50 years old. Some of the wells have water quality issues such as manganese, PFAS, odor, color, etc. and may require treatment to mitigate the water quality issues. The City is working with Orange County Water District on a feasibility study for treatment. It is our understanding that the City plans to drill two new wells. Some of the sites in the City may have space restrictions. We have on our team Richard C. Slade & Associates (RCS), hydrogeologists, to assist us on any well projects. RCS has over 50 years of hydrogeologic experience in California. RCS staff are available to provide as-needed office and field support services on groundwater projects.

Some wells may also require installation of a sodium hypochlorite generating system. For the City of La Palma, SA Associates provided design and construction inspection services for the On-Site Sodium Hypochlorite Generation System at the City Yard (2.5 MG reservoir) and Walker Well (2.0 MG reservoir). **This project won the APWA 2008 project of the year award.**

The City also has several miles of water pipelines that need replacement. SA Associates has completed 147 miles of pipeline in the last 35 years for numerous cities and water agencies in the Southern California area.

SA Associates also has experience in sliplining of sewer mains.

The City has 21 lift stations and has rehabilitated 15 of them in the last several years. Some lift stations have been rehabilitated and some are new. We have on our team Steven Andrews Engineering to assist in the design of lift stations. Steven Andrews Engineering has been providing consulting services for master planning and engineering projects in the water and wastewater fields for over 35 years for civil/water resources master planning, design, and construction engineering for both the public and private sectors. They have designed several sewer lift stations for Orange County cities and other agencies.

The work and objectives may involve the following:

- Preparation of PS&E packages and/or updates of various reports
- Preparation of project schedules
- Contracting with any necessary subconsultants to complete the work, i.e. survey, geotechnical investigations, potholing, traffic control
- Contracting with specialty subconsultants such as structural, architectural, electrical, mechanical, hydraulic calculations, electrical, SCADA, etc.
- Conducting site evaluations and preparing preliminary design reports, if necessary
- Providing Construction Support Services if requested
- For various reports, provide financial plans, budgets, projections, etc.
- Securing funding for projects if needed.



SECTION II: METHODOLOGY

TECHNICAL APPROACH

As your Consultant, SA Associates will provide quality resources to manage and complete the Project. We will work within the framework of the Project Documents, City staff, and the Contractor to execute our tasks in a timely manner. We consider ourselves to be available not as contract representatives but as an extension of your staff. For our projects, we believe in developing and maintaining clear lines of communication between all project parties, being proactive in identifying construction issues, and working diligently toward resolution of issues. Based on this approach, you will be assured of a complete project that complies with your project designs and is in accordance with the standards of the industry. SA Associates' overall approach for your projects is to provide hands on engineering in order to create robust contract documents and reduce the risk for change orders and to avoid delays in the construction.

With regard to streamlining the design phase of the projects, the key technical approach to be used by the design team is as follows:

- Expedite coordination among all affected parties including utility information requests
- Evaluate design alternatives immediately
- Sequence project tasks to occur simultaneously where possible (i.e., evaluate alternative for service connections during the field survey and digital topo preparation)
- Coordinate thoroughly throughout the entire project & appurtenances
- Sequence meetings to occur at favorable days/times (i.e., meetings with City staff and other meetings with impacted agencies/personnel may occur simultaneously or subsequently)

TYPICAL SCOPE OF WORK

The following is a typical scope of work:

1. Conduct a kick-off meeting with the City staff to review the scope of work and to collect existing maps, plans, and other information available at the City. The project schedule will also be discussed, and if necessary, appropriate changes will be made. SA Associates will prepare a schedule to complete the project, along with significant milestones by which the project work will be monitored through completion.
2. Conduct visits to the site to review the extent of the work necessary. A field review meeting with the City will also be held to establish all items of work necessary.
3. Conduct a utilities investigation to determine the location of all existing facilities that would affect the design and construction of this project. Letters will be sent to all utility companies to request information on their utilities.
4. Evaluate design alternatives, prepare a design report, and provide recommendations to the City.
5. Conduct geotechnical investigations, if needed.
6. Conduct a design survey of the proposed work, if required.
7. Prepare and submit a written report including the proposed work to best achieve the project objectives and minimize removal or relocation of existing improvements.



8. Prepare design plans on 24"x 36" sheets. Details will be provided where needed and we will provide the City with original mylar drawings in addition to an AutoCAD format electronic copy. Submittals will be at the 60%, 90%, and 100% completion levels
9. Prepare technical specifications. The City will provide the boilerplate specifications.
10. Submit preliminary design plans and specifications to the City for review.
11. Meet with the City to discuss review comments.
12. Prepare preliminary cost estimates.
13. Notify utility companies for any existing utility relocation. Maintain a record of all transmittal letters to and from the utility companies and submit a copy.
14. Conduct a Quality Control/Quality Assurance (QC/QA) review of the project.
15. Prepare construction bidding documents including specifications. SA Associates will provide the documents on a hard copy and in electronic MS Word format.
16. Prepare detailed estimates of quantities and construction costs on Microsoft Excel Format.
17. Submit final plans and specifications to the City incorporating comments received from the City and utility companies.
18. Project Construction Support Services, if requested.

TYPICAL CITY PROVIDED SERVICES

The City may be asked to furnish the following information:

- City Drawing Standards
- City Standard Details
- Boilerplate Specifications
- As-Built Drawings
- City Water & Sewer Atlas Maps
- Made payments for any permit or encroachment fees
- Utility Company information
- GIS or survey information
- City Sample Plans
- City's Title Sheet and General Notes in CAD format
- Easement information
- Water Master Plan

TYPICAL PROJECT SCHEDULE

A typical design project schedule identifying all tasks and deliverables to be performed, durations for each task, and overall time of completion is included at the end of this section.

IMPLEMENTATION PLAN

SA Associates' overall approach to providing professional engineering services is to enforce the contract documents and other applicable regulations, to develop and maintain clear lines of communication between all project parties including the City's team, to be proactive in identifying



issues, and to work diligently and effectively toward resolution of issues. Specifically, we will perform the following tasks to address these issues:

- Locate resources where they can be most effectively utilized.
- Develop and implement procedures for effective communication between the City, Construction Inspector, Designer, and the Contractor.
- Develop and implement cost and scheduling procedures to efficiently track the project.
- Assist the City as needed in interfacing with the public.
- All these activities will be performed to ensure that the project is completed on time and within budget.

CLIENT SATISFACTION

SA Associates is committed to client satisfaction by providing and delivering to the City the highest quality project design, implementing proven and successful design techniques resulting in a systematic approach to obtain optimum value for your dollars spent. Our aim is to provide you with an economical design without affecting performance and reliability.

SA Associates understands the importance that the design team reflects well on the values of the City. With this in mind, SA Associates is committed to providing quality staff members who are not only capable of satisfying the project tasks but who also have a track record of similar projects and working well with all impacted agencies and local residents.

QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

It is the goal of SA Associates to present clients with a superior product and responsive service. We are aware we can only continue to grow and remain a viable influence in the consulting engineering profession if we produce an excellent product. That is why we have established "excellence in engineering" as our credo. A sound company policy that emphasizes technical strength, professional conduct, efficiency and communication is applied to each project in order to achieve excellence. This policy is the basis of our Quality Assurance / Quality Control (QA/QC) program.

COST CONTROL

SA Associates' staff performs at a level of difficulty that minimizes redundant or unnecessary activity. Meeting deadlines and attention to detail are primary objectives. Cost control is also exercised with the same importance dedicated to technical problem solving.

Staff engineers apply value analysis/investigation techniques in a systematic approach to obtain optimal value for any marginal cost increase. The result of this approach is to lower total and life cycle costs without sacrificing quality, performance, or reliability.

Project costs are reviewed on a weekly basis by the Project Manager. These costs are reviewed against the budget and schedule. The effort required to complete the project is estimated. In this way, if the budget is close to exceeding, steps can be taken to remedy the situation.



ASSOCIATES

City of Huntington Beach
Civil Engineering Project
Typical Design Schedule



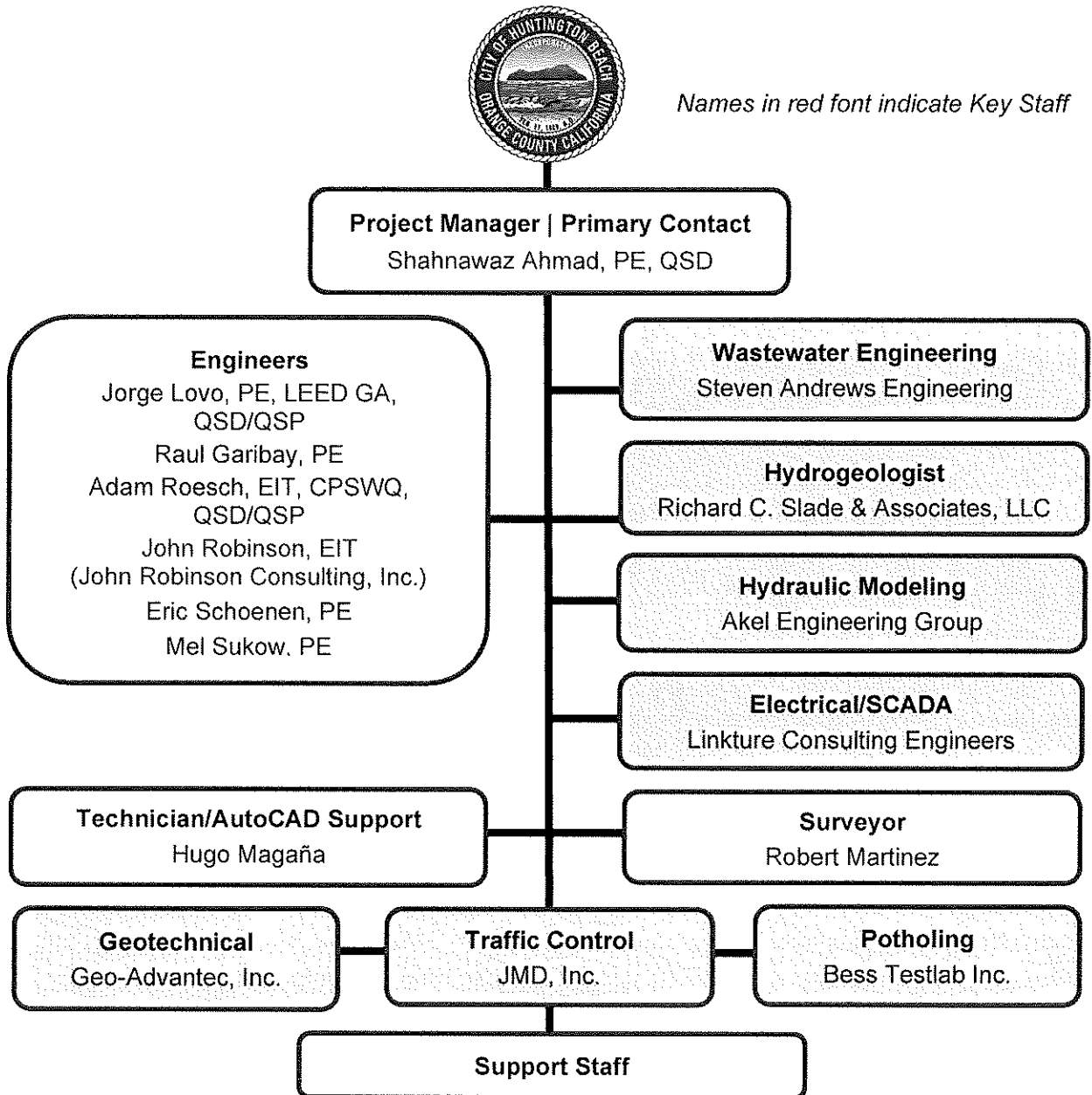
ID	Task Name	Duration	Start	Finish	
1	Task 1. Project Management and Coordination	380 days	Mon 5/5/25	Fri 10/16/26	
2	Kick-off Meeting	1 day	Mon 5/5/25	Mon 5/5/25	Task 1. Project Management and Coordination
3	Public Outreach Program - Information Dissemination	12 wks	Tue 5/6/25	Mon 7/28/25	Kick-off Meeting May 5
4	Project Progress, Budgets & Schedules, Workshops	75.8 wks	Tue 5/6/25	Fri 10/16/26	Public Outreach Program - Information Dissemination
5	Project QA/QC & Controls	75.8 wks	Tue 5/6/25	Fri 10/16/26	Project Progress, Budgets & Schedules, Workshops
6	Project Management, Reviews, Invoices, Deliverables	75.8 wks	Tue 5/6/25	Fri 10/16/26	Project QA/QC & Controls
7	Task 2. CEQA Process	147.5 days	Mon 7/28/25	Wed 2/18/26	Project Management, Reviews, Invoices, Deliverables
8	CEQA Project Compliance	2 wks	Mon 7/28/25	Fri 8/8/25	Task 2. CEQA Process
9	Preparation of CEQA documents (IS as applicable)	27.5 wks	Mon 8/11/25	Wed 2/18/26	CEQA Project Compliance Aug 8
10	CEQA Permit & Filing to County Clerk	29.5 wks	Mon 7/28/25	Wed 2/18/26	Preparation of CEQA documents (IS as applicable)
11	Task 3. Preliminary Design Report (PDR)	61 days	Tue 5/6/25	Tue 7/29/25	CEQA Permit & Filing to County Clerk Feb 18
12	As-Built Research, Site Investigation, & Data Collection	2 wks	Tue 5/6/25	Mon 5/19/25	Task 3. Preliminary Design Report (PDR) Feb 18
13	Topographic Survey	4 wks	Tue 5/6/25	Mon 6/2/25	As-Built Research, Site Investigation, & Data Collection
14	Permits, Access, & Easement Requirements	3 wks	Tue 6/3/25	Mon 6/23/25	Topographic Survey
15	Utility Research & Notifications	3 wks	Tue 5/6/25	Mon 5/26/25	Permits, Access, & Easement Requirements
16	Geotechnical Evaluation	3 wks	Tue 5/6/25	Mon 5/26/25	Utility Research & Notifications
17	30% Plans & Estimate	8 wks	Tue 5/6/25	Mon 6/30/25	Geotechnical Evaluation
18	Develop Pothole Plan	4 days	Tue 7/1/25	Fri 7/4/25	30% Plans & Estimate
19	Prepare & Submit Draft PDR	6 wks	Tue 5/27/25	Mon 7/7/25	Develop Pothole Plan
20	City Review of Draft PDR	2 wks	Tue 7/8/25	Mon 7/21/25	Prepare & Submit Draft PDR Jul 7
21	30% Design & PDR Review Meeting with City	1 day	Tue 7/22/25	Tue 7/22/25	City Review of Draft PDR
22	Prepare & Submit Final PDR	1 wk	Wed 7/23/25	Tue 7/29/25	30% Design & PDR Review Meeting with City
23	Task 4. Design and Specifications	108 days	Wed 7/30/25	Fri 12/12/25	Prepare & Submit Final PDR Jul 29
24	Pothole Utilities & Report	3 wks	Wed 7/30/25	Tue 8/19/25	Task 4. Design and Specifications
25	Final Utility & DDW & Other Agencies Coordination	4 wks	Wed 7/30/25	Tue 8/26/25	Pothole Utilities & Report
26	Prepare & Submit 60% PS&E	6 wks	Wed 7/30/25	Tue 9/9/25	Final Utility & DDW & Other Agencies Coordination
27	City Review of 60% PS&E Submittal	2 wks	Wed 9/10/25	Tue 9/23/25	Prepare & Submit 60% PS&E
28	60% Design Review Meeting with City	1 day	Wed 9/24/25	Wed 9/24/25	City Review of 60% PS&E Submittal
29	Prepare & Submit 90% PS&E	5 wks	Thu 9/25/25	Wed 10/29/25	60% Design Review Meeting with City
30	City Review Meeting of 90% PS&E	2 wks	Thu 10/30/25	Wed 11/12/25	Prepare & Submit 90% PS&E
31	90% Design Review Meeting with City	1 day	Thu 11/13/25	Thu 11/13/25	City Review Meeting of 90% PS&E
32	Prepared & Submit 100% Final PS&E	4 wks	Fri 11/14/25	Thu 12/11/25	90% Design Review Meeting with City
33	City Review Meeting of 100% PS&E	2 wks	Fri 12/12/25	Thu 12/25/25	Prepared & Submit 100% Final PS&E
34	100% Design Review Meeting with City	1 day	Fri 12/26/25	Fri 12/26/25	City Review Meeting of 100% PS&E
35	Permit Support (DDW & others)	21.6 wks	Wed 7/30/25	Fri 12/26/25	100% Design Review Meeting with City
36	Task 5. Bid and Construction Support Services	175 days	Mon 1/12/26	Fri 9/11/26	Permit Support (DDW & others)
37	Bidding Assistance	3 wks	Mon 1/12/26	Fri 1/30/26	Task 5. Bid and Construction Support Services
38	Submittals & Shop Drawing Review	26 wks	Mon 3/2/26	Fri 8/28/26	Bidding Assistance
39	RFIs/RFCs	26 wks	Mon 3/2/26	Fri 8/28/26	Submittals & Shop Drawing Review
40	Change Orders (15)	26 wks	Mon 3/2/26	Fri 8/28/26	RFIs/RFCs
41	Final Inspection & Punch List	2 wks	Mon 8/17/26	Fri 8/28/26	Change Orders (15)
42	As-Built Drawings	2 wks	Mon 8/31/26	Fri 9/11/26	Final Inspection & Punch List

Huntington Beach On-Call Typical Design Schedule.mpp Tue 3/11/25



SECTION III: STAFFING

ORGANIZATIONAL CHART



We understand that if the Consultant chooses to assign different personnel to the project, the Consultant must submit their names and qualifications, including information listed above to the City for approval before they work. Resumes for Key Staff Members follow on page 5 of this section. Resumes for the other team members are included in Section V: Appendix



SUBCONSULTANTS

The following subconsultants are included on our Project Team. We have worked with these subconsultants for many years and on several successful projects. Our Project Manager will ensure that the documentation provided by our subconsultants will be relayed to the Project Team members, to seamlessly incorporate their findings into the design process. Individual Project Team members also have a good rapport with our subconsultants and information is conveyed between them in a timely manner, as often as needed.

HYDRAULIC MODELING: AKEL ENGINEERING GROUP, INC.

7433 N. First Street, Ste. 103

Fresno, CA 93720

Tony Akel, P.E., Principal

626.574.1425, takel@akeleng.com

AKEL
ENGINEERING GROUP, INC.

Akel Engineering Group, Inc. is a specialty engineering firm with over 100 years of combined staff experience providing consulting services in water resources infrastructure modeling and master planning. Akel's infrastructure planning services include hydraulic modeling, water quality modeling, risk and condition assessment, and infrastructure master planning for: water distribution, wastewater collection, non-potable/recycled water, irrigation, and storm drainage system master plans. Planning-related specialties include urban water management plans, water supply assessments, hydraulic model development and calibration, capital improvement budgets, cost sharing analysis, model conversions and GIS development and integration. Akel maintains state-of-the-art hydraulic modeling, water quality modeling, surge analysis, and risk and condition assessment modeling applications.

ELECTRICAL ENGINEER: LINKTURE CORP.

41250 Placer Lafite

Temecula, CA 92591

Jade Brandais

949.317.4700, jade@linkture.com

LINKTURE
CONSULTING ENGINEERS

Linkture Corp., formed in 1992 offers a full range of electrical and control system engineering services to Engineers, Private Industries, Contractors, Institutional, Federal and State Government and Municipalities. The firm has acquired its qualifications through the many years of specialized experience of professional staff, including technical competence in organizational analysis, familiarity with clients' financial planning and related business systems, broad-gauged analytical ability and professional independence, objectivity, and integrity. Their services include evaluations, studies, engineering, design, and construction-related services for water and wastewater facilities such as open and closed system pump stations, stormwater pump stations, irrigation pump stations, reclaimed water pump stations, lift stations, PRV/PRS, wastewater treatment plants, potable water treatment, reservoirs and tanks, turnouts, pressure reducing stations, reservoir floating covers, well equipping, and SCADA/RTU/DCS.

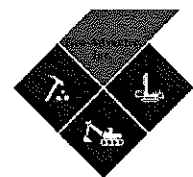
GEOTECHNICAL ENGINEERING: GEO-ADVANTEC, INC.

457 W. Allen Avenue, Suite 113

San Dimas, CA 91773

Shawn Ariannia, Ph.D., P.E., G.E., President

Tel 909.305.0400, sariannia@geoadvantec.com





Geo-Advantec, Inc. (GAI) is a geotechnical engineering consultant that offers comprehensive services in various areas of geotechnical engineering, engineering geology, geotechnical earthquake engineering, and during construction services including materials testing and special inspections. Their laboratory is accredited by Caltrans, AMRL, CCRL, DSA, and the city of Los Angeles. Their technicians and inspectors are certified by ICC, ACI, Caltrans, County of Los Angeles, and City of Los Angeles and are qualified to perform on public works as well as DSA projects. Their main areas of services and capabilities include Geotechnical and Geological Engineering; Geotechnical Earthquake Engineering, Pavement Engineering, Field Grading Monitoring and Soil Testing, Soil, Asphalt/Paving Field Inspection, Soil, Asphalt, and Materials Laboratory Testing, Special Inspections for Concrete, Welding, Masonry, Rebar, etc. SA Associates has worked with Geo-Advantec on many projects through the years.

TRAFFIC CONTROL PLANS: JMDIAZ, INC.

18645 East Gale Avenue, Suite 212
City of Industry, CA 91748
Juan M. Diaz, PE., President
Tel 626.820.1137, jmdiaz@jmdiaz.com



Originally founded and 100% owned by Juan M. Diaz in 2001, JMD is serving clients from its regional offices in the City of Industry, Anaheim, and San Diego, California. Currently, JMD has a staff of 19 professionals and administrative staff. JMD offers expertise in several areas of civil engineering including highway, land, rail and traffic engineering for public and private sectors. JMD's experience includes the development of plans, specifications and estimates for a variety of facilities including freeways, roadways, streetscapes, traffic signals, lighting systems, light rail corridors, BRT corridors, railroads, grade crossings and development sites. These projects have required JMD's expertise in roadway, grading, drainage, utility, signing & striping, traffic signals, lighting, traffic control, grade crossing, and track alignment design. JMD has thorough knowledge of Federal, State, local agency and private entity project requirements as they relate to transportation and development projects. JMD staff is often coordinating project approvals with public agencies at all levels as well as developing sensitive projects requiring close coordination with political officials, local communities and railroads.

POTHOLING: BESS TESTLAB, INC.

1508 E. St. Francis Street, Unit A
Ontario, CA 91762
Don Whitman, Project Manager
Tel 909.510.5535, donald@besstestlab.com



Bess Testlab, Inc. (BESS), is a CPUC certified MBE/DBE company that provides solutions to mitigate the underground utility related risks associated with the design and construction of civil and infrastructure projects. They have been in operation since 1967 and provide a complete range of Subsurface Utility Engineering Services (SUE) to both private and public companies throughout Northern and Southern California. Bess Testlab, Inc., uses Non-Destructive Air-vacuum Excavation (potholing) to expose the utilities being surveyed to determine their exact depth and location. Precisely locating underground utilities help the designers plan their construction project to eliminate potential damage and unnecessary relocations.



SHAHNAWAZ AHMAD, P.E., QSD
Project Manager | Primary Contact

Mr. Ahmad founded SA Associates in 1989, creating a civil engineering firm focused on city, county and municipal agencies. Mr. Ahmad has over 40 years of experience. Currently, he is involved with projects on civil design, street improvements, water and sewer system master planning; water resources; water supply and treatment; water reuse; wastewater collection, treatment, and disposal; storm drainage; design of water and wastewater treatment plants, water pipelines, sewers, pumping stations, wells, storage reservoirs, and water reclamation systems; studies of water and wastewater treatment processes; and industrial waste problems.

RELATED EXPERIENCE

CITY OF ALHAMBRA

- Westmont Drive Water Main Replacement
- Valley Boulevard, Almansor Street Sewer Replacement

CITY OF ANAHEIM

- Baja and Solomon Drives Water Main Replacement
- Country Glen Way Water Main Replacement

BOY SCOUTS OF AMERICA

- Camp Trash Water System

CENTRAL BASIN WATER DISTRICT

- Recycled Water Pipeline Extension City of South Gate

CITY OF CHINO

- Quadrant 1 Water Main Replacement

CRESCENTA VALLEY WATER DISTRICT

- New Biological Nitrate Removal Treatment Facility & Well #2 Reactivation

CITY OF HUNTINGTON BEACH

- Water Valves Replacement Design

CITY OF GARDEN GROVE

- Design of Sewer System Rehabilitation Plan, Phase 1

LONG BEACH UTILITIES DEPARTMENT

- Water Main Improvement projects at 1613 Ximeno Ave. and Queensway Drive

CITY OF LYNWOOD

- Long Beach Meter Upgrade and Line Abandonment Project ft

CITY OF MANHATTAN BEACH

- Cycle 2 & 3 Sewer Infrastructure Improvements

CITY OF MONTEREY PARK

- Water & Sewer Improvements Atlantic Boulevard

CITY OF NORWALK

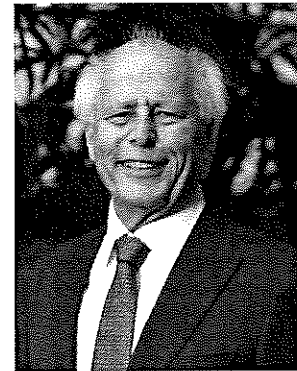
- FY 2017/18 Sewer Main Repair

CITY OF ONTARIO

- Water Main Replacement at 30 locations.

CITY OF SOUTH GATE

- Water Main Replacement Project, Phase.



EDUCATION:

University of Karachi, Pakistan,
B.E., Civil Engineering
University of California,
Berkeley, M.S., Sanitary
Engineering

REGISTRATION:

Registered Civil Engineer,
California
No. 23712

MEMBER:

American Academy of
Environmental Engineers,
Diplomate
American Public Works
Association
American Society of Civil
Engineers
American Water Works
Association
California Water Environment
Association
Southern California Water
Utilities Association
Water Environment Federation



JORGE LOVO, PE, LEED GA, QSD/QSP
Engineer

Mr. Lovo has over 25 years of experience designing and managing a variety of infrastructure projects. Project types range from streets, roadways, sewers, storm water, to water-related projects. The water related include water, wastewater, recycled water, and storm water facilities including conveyance, water quality & treatment, pump stations, and storage. He provides technical leadership on small to large sized projects; supporting teams winning new business; interacting with clients, agencies and other consulting firms; preparing detailed engineering calculations, CAD drawings, estimates, master planning, facilities condition assessment, construction support, preparation of plans, specifications and others documents for permitting and construction. His expertise lies mostly with city, municipal and agency projects. He is adept at working with municipalities and understands their process.



PROJECT EXPERIENCE

CITY OF ALHAMBRA

- Westmont Drive Water Main Replacement
- Pepper Creek Way, Fern Haven Lane, Hadrian's Crescent Water Main Replacement
- Valley Boulevard, Almansor Street Sewer Replacement

CITY OF ANAHEIM

- Baja and Solomon Drives Water Main Replacement
- Country Glen Way Water Main Replacement

BOY SCOUTS OF AMERICA

- Camp Trash Water System

CENTRAL BASIN WATER DISTRICT

- Recycled Water Pipeline Extension City of South Gate

CRESCENTA VALLEY WATER DISTRICT

- New Biological Nitrate Removal Treatment Facility & Well No. 2 Reactivation

CITY OF HUNTINGTON BEACH

- Water Valves Replacement Design

CITY OF MONTEREY PARK

- Atlantic Boulevard Water & Sewer Improvements

CITY OF ONTARIO

- Water Main Replacement

ROSE HILLS MEMORIAL PARK AND CEMETERY

- Recycled Water Retrofit Project

CITY OF SIERRA MADRE

- 2020 Water Main Replacement

CITY OF WHITTIER

- Comstock Avenue Water Main Replacement
- Beverly Boulevard Water Main Replacement

EDUCATION:

B.S. Civil Engineering
University of Hawaii

REGISTRATION:

Registered Civil Engineer,
California, No. C75632
Registered Civil Engineer,
Canada, Board of
Professional Engineers

CERTIFICATION:

LEED Green Associates –
Green Building Certification
Institute, ID No. 10779963
Construction Management,
University of Quebec,
Canada
Professional Studies in
Technique of Architecture,
College of Old Montreal
Qualified SWPPP Developer
(QSD)
Qualified SWPPP Practitioner
(QSP) Certificate No. 25596



Steven Andrews Engineering
www.sandrewsengineering.com

Education:

B.S., Environmental Engineering
Pennsylvania State University

Professional Data:

Professional Engineer,
California, R.C.E. No. 31259

Professional Affiliations:

Orange County Water Assn
Water Environmental Federation
American Water Works Association

Office Location:

Lake Forest, CA

Years of Experience: 50

Years with SAE: 35

STEVEN R. ANDREWS, P.E.

PRINCIPAL ENGINEER

Mr. Andrews has 50 years of professional experience in master planning, design and construction of groundwater wells, water treatment, water pipelines, water storage reservoirs; preparation of master water supply plans, wastewater treatment plants, wastewater reclamation plants, wastewater lift stations, force mains, gravity sewers and water reuse systems for large proposed and existing developments and cities.

EXPERIENCE:

Sewer Lift Station No. 3 Replacement, Emerald Bay Service District, City of Laguna Beach, CA:. Principal Engineer for the design and preparation of construction plans and technical specifications for the Emerald Bay Service District Sewer Lift Station No. 3 Replacement.

Wilson Sewer Lift Station, City of Banning, CA. Principal Engineer for the design and preparation of construction plans and specifications for the construction of Atwell PA-11 Sewer Lift Station Project.

Westward Sewer Lift Station, City of Banning, CA. Principal Engineer for the evaluation of the existing City of Banning Westward Sewer Lift Station located in the Atwell Development and preparation of a technical memorandum outlining the short-term improvements needed at the Westward Lift Station.

Sewer Lift Stations No. 1 & No. 7, Emerald Bay, City of Laguna Beach, CA. Principal Engineer for the evaluation of the existing City of Laguna Beach Sewer Lift Stations No. 1 & No. 7 in the Emerald Bay Service District.

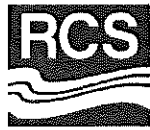
Rancho Miramonte SPA Private Sewer Lift Station, City of Chino, CA. Principal Engineer for the design and preparation of construction plans and specifications for two (2) submersible sewage grinder pumps, piping, and valving for the Rancho Miramonte SPA private Sewer Lift Station.

Woodland Mausoleum Expansion Phase 1 Project, Town of Colma, CA. Principal Engineer for the design and preparation of construction plans and specifications for the Woodland Mausoleum Expansion Phase 1 Project in the Town of Colma, CA

Preserve City of Chino Sewer Lift Station Project, City of Chino, CA. Principal Engineer for the design and preparation of construction plans and specifications for the construction of the Preserve City of Chino Sewer Lift Station Project.

Blandwood Road and True Avenue Sewer Lift Station Replacement, City of Downey, CA. Principal Engineer for the design of the City of Downey Blandwood Road and True Avenue Sewer Lift Station Replacement project. This project was selected to receive the 2017 APWA BEST Award for the category of Drainage, Water, Wastewater serving a population between 100,000 to 200,000.

Chino Hills Pine Valley Estates Sewer Lift Station, Chino Hills, CA. Principal Engineer for the design and preparation of construction plans and specifications for the City of Chino Hills Pine Valley Estates Sewer Lift Station in Chino Hills, CA. The project included a 35-foot deep precast wet well and two submersible sewage pumps, piping, valving, metering, odor control, MCC, standby engine generator, electrical, telemetry and controls for a new development within the City.



RICHARD C. SLADE & ASSOCIATES LLC
CONSULTING GROUNDWATER GEOLOGISTS

RICHARD C. SLADE, PRESIDENT & PRINCIPAL GROUNDWATER GEOLOGIST

Richard Slade's major fields of hydrogeologic emphasis includes groundwater resource development (basin-wide studies, and water well design and construction), and aquifer analysis. His principal projects have involved evaluations of entire groundwater basins; aquifer test analyses; assessment of water quality problems and groundwater degradation; design of water wells for municipal supply; well rehabilitation assessments; monitoring of all phases of water well construction; locating and designing groundwater monitoring networks; and providing expert witness testimony for groundwater litigation. He has performed feasibility studies for determining final locations for new wells, designing new wells, monitoring the construction of new wells, working with drilling contractors, evaluating down-hole problems in existing wells, and developing protocol for water well rehabilitation.



Highlights

Education

- University of California, Los Angeles, B.A., Geology, January 1966
- University of Southern California, M.S., Engineering Geology, 1974

Registrations/Certifications

Experience

Well No. 29 Rehabilitation, City of Santa Ana, CA:

Richard Slade's Principal Groundwater Geologist providing in-progress hydrogeologic support. The project involved evaluation of downwell conditions, preparation of project technical specifications, and field oversight activities during rehabilitation of the well.

Well 22, City of Vernon, City of Vernon Public Utilities Department, Vernon, CA:

Principal Groundwater Geologist for hydrogeologic office and field services for preliminary and final designs and construction of Vernon Well 22 well. Well 22 was a city and grant funded municipal well construction project to secure and augment groundwater sources in the City of Vernon. The well was constructed to a depth of 1,120 feet bgs with a 500 ft deep conductor to hydraulically isolate impacted shallow aquifer systems. The well achieved a pumping rate of 2,500 GPM, with a specific capacity of 26.8 GPM/foot.

Well No. 28D Design, Liberty Utilities, Bellflower, CA:

Principal Groundwater Geologist for hydrogeologic office and field services for well rehabilitation evaluation and development of a well rehabilitation program. The project included designing, installing, and testing a new well liner, achieving a pumping capacity of 3,000 GPM.

Rehabilitation of Wells 41 and 43, Anaheim Public Utilities Department, Anaheim, CA:

Principal Groundwater Geologist for hydrogeologic office and field services for well rehabilitation evaluation and development of a well rehabilitation program. The project included designing, installing, and testing a new well liner, achieving a pumping capacity of 3,000 GPM.

**SECTION IV: QUALIFICATIONS****RELATED EXPERIENCE WATER PROJECTS FOR THE LAST 5 YEARS****CITY OF ANAHEIM**

YEAR COMPLETED:	2018
CONSTRUCTION COST:	\$405,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch CADD – Phong Tran
Water Main Replacement Projects: Pepper Creek Way, Fern Haven Lane, and Hadrians Crescent Prepared plans, specifications, and cost estimates replace approximately 1,500 linear feet of existing cast iron pipe (CIP) to polyvinyl chloride (PVC) pipe along various streets within Anaheim Hills. The pipes were installed between 1960s and 1970s, and were in need of replacement due to external corrosion of the pipeline. As a result, the corrosion causes numerous main breaks rendering water loss.	

BOY SCOUTS OF AMERICA

YEAR COMPLETED:	Estimated 2025
CONSTRUCTION COST:	\$1, 255,455
SAA TEAM:	PMs – Shahnawaz Ahmad, John Robinson Engrs – Jorge Lovo, Adam Roesch CADD – Phong Tran Surveyor – Robert Martinez
ELECTRICAL ENGINEER:	Linkture
GEOTECHNICAL ENGINEER	Geo-Advantec
Trask Scout Reservation Water System Rehabilitation and Enhancement Project Design Services for the design-build project of the Trask Scout Reservation Water System Rehabilitation Project at the Boy Scout Camp located in the foothills of the City of Monrovia. The water at the campsites is currently non-potable. The project will provide corrective measures to bring the water system up to the State Water Resources Control Board, Division of Drinking Water Standards to provide the campers with clean drinking water. Due to fires and mudslides, this project has been delayed	

CITY OF CHINO

YEAR COMPLETED:	2018
CONSTRUCTION COST:	\$3,400,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch CADD – Hugo Magana, Phong Tran
SURVEYOR:	On-Point Land Surveying, Inc.
Quadrant I Water Main Replacement Project Prepared plans and specifications for approximately 10,940 ft. to replace segments of existing pipe throughout the City with new 8-inch C900 Polyvinyl Chloride (PVC) in order to improve the existing water system. In addition, the project consists of the replacement or reconnection of existing service laterals within the project area as a result of the replacement of the existing water main. The work also involves reconnections to existing water mains. There were a few locations where the new water mains & existing sewer mains did not meet the minimum separation requirements. DDW was consulted and after some revisions to the plans, the alignments were approved.	

CITY OF CHINO HILLS

YEAR TO BE COMPLETED:	2024
CONSTRUCTION COST:	\$3,700,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
ENGINEERS:	CADD – Hugo Magana, Surveyor – Robert Martinez

**English Road Recycled Water Pipeline**

Providing engineering design approximately 6,870 LF of recycled water line on English Road, 830 LF of recycled water line on Village Center Drive between English Springs Park and Country Springs Elementary School, and 1,130 LF of recycled water line on English Place. The total construction length is approximately 8,870 LF of new 12" PVC. The goal for this project is to extend its existing recycled water line system with the purpose of providing an environmentally preferred water source for irrigation such as to reduce domestic water use from parks, schools, and residential/equestrian properties.

CRESCENTA VALLEY WATER DISTRICT

YEAR COMPLETED:	2018
CONSTRUCTION COST:	\$1,245,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
	CADD – Phong Tran
ELECTRICAL ENGINEER:	Linkture Consulting Engineers

Design of Well No. 2

Prepared plans for CVWD's Well No. 2 at Ordunio Reservoir. The project consisted of a new 150 gpm submersible pump and motor for Well No.2, onsite piping, a chlorine feed system using sodium hypochlorite, a nitrate removal treatment facility, upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system, pavement and other on-site improvements. The nitrate reduction technology named ARoNite, featured high-efficiency reduction with minimal biomass waste generation. SA Associates also provided Construction Support Services is assisting the District for permitting of the well through the State Department of Drinking Water (DDW). ***This project received multiple awards which include: the American Council of Engineering Companies Project of the Year Award in February, 2019; second place for the 2019 Clair A. Hill Agency Award for Excellence by the Association of California Water Agencies; ASCE MLAB LA Section Award; and APWA Southern California BEST Award in 2019.***

CITY OF HUNTINGTON BEACH:

YEAR COMPLETED:	2019
ENGINEER'S ESTIMATE:	\$444,500
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
ENGINEERS:	CADD – Phong Tran

Water Valves Replacement

Design services for the replacement of water valves in approximately 50 separate locations throughout the City's water system. Over 50% of those locations are expected to be closer to the coast, in area of low elevations where groundwater may be encountered and the other 50% will be located inland. In addition to restoring valve operation, the City will require the construction contractor to carefully remove and bag asbestos cement pipe from each of these valve locations, to collect field data, to collect soil samples, and to store at a location identified by the City for future analysis to determine remaining useful life of ACP as part of the City's Asset Management Program. The valve sizes will be 6" to 12" and will be in-line valves with no vaults.

LONG BEACH UTILITIES DEPARTMENT:

YEAR TO BE COMPLETED:	2024
CONSTRUCTION COST EST:	\$1,270,642
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Brandon Mesker
GEOTECHNICAL:	Geo-Advantec, Inc.
POTHOLING:	BESS Testlab



SURVEYOR:	Robert Martinez
Ximeno Avenue Water Main Improvement	
Prepared plans and specifications for approximately 1,790 LF of 8" ductile iron water mains to improve the flow, pressure, and fire protection in the private property of the apartment complex at 1613 Ximeno Ave. The location calls for improvements that serves the apartment complex on 1613 Ximeno Avenue as well as three other commercial developments on Pacific Coast Highway. The new 8-inch DIP main will tie-in to an existing 20" water main (owned by LBWD) near the intersection of Ximeno Avenue and the entrance to the Circle Business Center. The work also included Caltrans encroachment permitting.	

YEAR TO BE COMPLETED:	2024
CONSTRUCTION COST EST:	\$299,141
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Brandon Mesker, Surveyor – Robert Martinez
GEOTECHNICAL:	Geo-Advantec, Inc.
POTHOLING:	BESS Testlab
Queensway Drive Water Main Improvement	
Prepared plans and specifications for approximately 510 LF of 12" water mains to improve the flow, pressure, and fire protection by replacing the existing water mains in the 600 and 700 Queensway Drive area. The location calls for improvements that serves two hotel developments. Most of the existing water main is an 8-inch in diameter asbestos cement (AC) pipe, which was constructed in 1993. The remaining water main to be replaced, adjacent to Queensway Drive, is an 8-inch ductile iron pipe (DIP), which was constructed in 2002. The 8-inch DIP main tie-ins to an existing 20-inch water main (owned by Port of Long Beach) near the northern parking entrance.	

CITY OF LYNWOOD

YEAR TO BE COMPLETED	2024
ENGINEER'S ESTIMATE:	\$1,108,000 (30% submittal)
PROJECT MGR.:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
ENGINEERS:	CADD – Hugo Magana, Surveyor – Robert Martinez
Long Beach Meter Upgrade and Line Abandonment Project	
Providing engineering services to design improvements to the existing water main located along the easterly side of Long Beach Boulevard, between Euclid Avenue on the south end and Josephine Street on the north end. Improvements consist of relocating water services laterals from back of the properties to the front, and reconnecting them to the existing water main running along the easterly side of Long Beach Boulevard. An existing cast iron water main located in the back of properties (patios/backyards) along the easterly side of Long Beach Boulevard that presently supplies water to service laterals will be abandoned, once all services have been relocated from the back of properties to the front, and reconnected to the existing main on Long Beach Boulevard. Approximately 1,985 LF of water main will be added to the system in order to accomplish this task. Work also includes meter upgrades and tie-ins to adjacent water, any potential fire hydrants, water valves, others, such as to complete in place the improved water system. PS&E will be prepared per City, local, and federal standards, and as per any agency recommendations having jurisdiction.	

CITY OF ONTARIO:

YEAR COMPLETED:	2022
CONSTRUCTION COST:	\$10,405
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Surveyor – Robert Martinez
	Surveyor – Robert Martinez
GEOTECHNICAL:	Geo-Advantec, Inc.
POTHOLING:	BESS Testlab

**Water Main Replacement**

Prepared plans and specifications for approximately 25,430 LF of water mains at 30 various locations. The improvements will replace existing water mains of diameters ranging from 2" to 12" to proposed 8" and 12" sizes. In addition, at one of the locations, OMUC desires to install 450 LF of new 8" water main. The improvements will include replacement of service laterals, fire hydrants and other related appurtenances.

CITY OF POMONA

YEAR TO BE COMPLETED:	2024
ENGINEER'S ESTIMATE:	\$3,762,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
ENGINEERS:	Engr - Raul Garibay, CADD – Hugo Magana, Brandon Mesker

Utility Pipeline Survey & Drawing Services

Providing engineering design and surveying services to rehabilitate and/or replace existing water mains in various streets throughout the City. The project also consists of providing topographic survey that will later be used by the City to create construction drawings for sewer main spot repair, cured-in-place pipe (CIPP) rehabilitation, and/or replacement in various streets throughout the City.

YEAR COMPLETED:	2023
CONSULTANT FEE:	\$72,000
SAA TEAM:	PM – Shahnawaz Ahmad
	Engrs - Raul Garibay, Jorge Logo, Adam Roesch

Update of City's Standard Plans for Water and Sewer

Preparation of Written and Drawn Utility Construction Standards Manual related to the City's Water, Sewer, and Storm Water facilities (Project). This is a full update to the existing land development utility construction document, which will replace the current document that only includes standards for water construction. This manual will not only include written standards but AutoCAD drawn standards for water, wastewater, and storm water. The final version of this manual is to be posted on the City's website for public reference.

SANTA CLARITA VALLEY WATER AGENCY

YEAR TO BE COMPLETED:	2024
ENGR'S ROUGH ESTIMATE:	Bouquet (\$1.2 M to \$2 M,) Tank #3 \$800,000 to \$1.2 M)
SAA TEAM:	PM – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Surveyor – Robert Martinez

Bouquet Tank and Tank No. 3 Pipeline Replacement Project

Currently providing engineering design services for replacement of approximately 1,260 liner feet (LF) of 14" asbestos cement pipe (ACP), 16-inch steel pipe, and 16-inch polyvinyl chloride (PVC) pipe connecting Bouquet Tank to the existing water main in a trail on the west side of Central Park. In addition, the Project consists of the replacement of approximately 1,160 LF of 8" steel pipe in Haskell Vista Lane connecting Tank #3 to the existing water main in Cross Street. The work also includes possible replacement of fire hydrants where applicable, trench width pavement restoration, and other incidentals, all in compliance with SCVWA Standards, the latest AWWA Standards, and the Project Specifications

YEAR TO BE COMPLETED:	2024
ENGINEER'S ESTIMATE:	\$2,675,000
SAA TEAM:	PM – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Surveyor – Robert Martinez

Old Road Pipeline Replacement Project



Currently providing engineering design services for replacement of approximately 4,670 liner feet (LF) of 14-inch polyvinyl chloride (PVC) pipe on The Old Road between McBean Parkway and Pico Canyon Road. The work also includes tie-ins to the adjacent water mains in Steinbeck Avenue, Oliver Way, Constitution Avenue and several shopping center parking lots, possible replacement of fire hydrants where applicable, reconnection to existing fire services, trench width pavement restoration, and other incidentals, all in compliance with SCVWA Standards, the latest AWWA Standards, and the Project Specifications.

CITY OF SIERRA MADRE

YEAR COMPLETED:	2021
CONSTRUCTION COST:	\$7,706,600
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch Engr – Phong Tran, CADD – Hugo Magana, Brandon Mesker QA/QC – Eric Schoenen
2020 Water Main Program Preparing plans, specifications, and cost estimates to replace 21 segments of existing pipe at various locations that date from the 1930's. The project has been divided into four (4) bid segments with an approximate length of 20,300 ft. Conditions of the existing steel water mains and service laterals are poor and worsening rapidly from the inside and outside of the pipes. The project will also involve abandoning the existing main and laterals upon completion of the replacement facilities. The water mains will be replaced with the same diameter size, except for the existing 2-inch mains where it will be upsized to a 4-inch. The proposed material will be polyvinyl chloride (PVC) C-909. As necessary, the existing fire hydrants, valves, meters, and appurtenances will be replaced as well, or added to the new proposed system. All water service and fire hydrant laterals will be replaced. Existing water mains will be put out of service/abandoned only when the new water mains are installed, inspected and tested so as to keep fire and services available during construction.	

CITY OF SOUTH GATE

ANTICIPATED COMPLETION:	2023
CONSTRUCTION COST:	\$4,486,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch Engr – Raul Garibay, CADD – Hugo Magana, Brandon Mesker Surveyor – Robert Martinez
GEOTECHNICAL:	Geo-Advantec, Inc.
POTHOLING:	BESS Testlab
Water Main Replacement Project, Phase 1, City Project No. 689-WTR Currently preparing plans, specifications, and cost estimates to replace approximately 17,130 LF of cast iron water mains with 8" and 12" ductile iron pipe. The street segment to be replaced have been identified as having deficiencies in pressure, reliability, velocity, and fire flow capacity. The location extends beyond the City boundaries within the City of Lynwood right-of-way and along State Street and connects back to the City along Tweedy Boulevard, Minnesota Avenue, Wisconsin Avenue, Michigan Avenue, Sequoia Drive, and Cherokee Avenue.	

RELATED EXPERIENCED SEWER PROJECTS FOR THE LAST 5 YEARS**CITY OF ALHAMBRA**

YEAR COMPLETED:	2019
CONSTRUCTION COST:	\$1,113,552
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch CADD – Hugo Magaña, Phong Tran
Main Street Sewer Replacement Project	



Replacement of approximately 1,858 LF of an existing 8-inch sewer main with a 12-inch sewer main on Main Street, between Bushnell Avenue and Atlantic Boulevard. The existing 8" sewer main is located on the westbound lanes of Main Street. The City's Sewer System Rehabilitation Plan identified this location as the highest priority for improvements due to its aging conditions and to improve sewage flow capacity in the area.

CITY OF GARDEN GROVE SANITARY DISTRICT

COMPLETION DATE:	2024
ENGINEER'S ESTIMATE	\$2,896,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch CADD – Hugo Magana, Surveyor – Robert Martinez
GEOTECHNICAL:	Geo-Advantec, Inc.
POTHOLING:	BESS Testlab, Inc.
Sewer System Rehabilitation Plan, Phase 1, Project 4 Prepared plans, specifications, and cost estimates for Garden Grove Sanitary Sewer District Sewer System Rehabilitation Plan, Phase 1, Project 4 which includes 5,100 s/ pf VCP and CIPP sport repairs on various City Streets.	

CITY OF INGLEWOOD

YEAR COMPLETED:	2017
ENGINEER'S ESTIMATE	\$1,528,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch CADD – Hugo Magana, Phong Tran
SURVEYOR:	On-Point Land Surveying, Inc.
Sewer Main Replacement Project, Phase 1 Prepared plans for the upgrade/repair of segments of the exiting 8" to 15" vitrified clay pipe throughout the City to improve the existing sewer system. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area. as a result of the replacement of the existing VCP.	

CITY OF MANHATTAN BEACH

YEAR COMPLETED:	2024
ENGINEER'S ESTIMATE:	\$1,069,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch CADD – Hugo Magana, Surveyor – Robert Martinez
GEOTECHNICAL:	Geo-Advantec, Inc.
Cycle 3 Sewer Infrastructure Improvements Prepared plans and specifications for approximately 1,160 LF of sewer reaches throughout the City. The work includes review of CCTV video.	

YEAR COMPLETED:	2021
ENGINEER'S ESTIMATE:	\$1,165,800
SAA TEAM:	PM – Jorge Lovo, QA/QC – Shahnawaz Ahmad Engrs – Adam Roesch, Phong Tran CADD – Hugo Magana, Brandon Mesker, Surveyor – Robert Martinez
GEOTECHNICAL	Geotechnical - Geo-Advantec, Inc., CCTV- Performance Pipeline
Cycle 2 Sewer Infrastructure Improvements Prepared plans and specifications for various sewer reaches throughout the City, including 2,150 ft. of 6" and 8" CIPP sewer rehabilitation, and 25 VCP point repairs with lengths between 12 ft and 42 ft.	

**CITY OF MONTEREY PARK**

YEAR COMPLETED:	2020
ENGINEER'S ESTIMATE:	\$1.78 M Sewer, \$720,000 Water, Combined cost \$2.5M
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Phong Tran, Surveyor – Robert Martinez
Water & Sewer Improvements along Atlantic Boulevard	
Prepared plans & specifications for water & sewer main improvements on Atlantic Blvd. from W. Hellman Avenue to W. Newmark Avenue with a 12-inch ductile iron water main of approx. 2,030 ft. length, and about 2,450 ft of 12-inch HDPE sewer via pipe bursting. Sewer will also be improved along Garvey Ave., from its intersection with Atlantic Blvd. to Ynez Ave., with approx. 650 ft of 16-inch HDPE via pipe bursting and 900 ft of 18-inch VCP via open trench. Water and Sewer improvements will also include replacement of laterals, installation of new fire hydrants/services, valves, sewer manholes, abandonment of existing mains, tie-in to existing systems, pre/post CCTV videos, paving and striping restoration.	

CITY OF NORWALK

YEAR COMPLETED	2019
ENGINEER'S ESTIMATE:	\$1,468,000
SAA TEAM:	PM – Eric Schoenen, Engrs – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Phong Tran
SURVEYOR:	On-Point Land Surveying, Inc.
FY 2017/18 Sewer Main Repair Project	
Provided engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects. As a result, the City has identified 60 sewer reaches deemed as high priority for repair/replacement. Trenchless technology was used in sections to be employed to prepare the existing pipe to be acceptable to serve as a host pipe for CIPP lining.	

CITY OF POMONA

YEAR COMPLETED	2024
CONSULTANT FEE:	\$58,500
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana
Topographic Survey for Future Sewer Main Projects	
Provided topographic survey that will later be used by the City to create construction drawings for sewer main spot repair, cured-in-place pipe (CIP) pipe rehabilitation, ad/or replacement in 6 locations throughout the City. The total length of the existing sewer main to be surveyed was approximately 2,710 ft.	

CITY OF WHITTIER

YEAR COMPLETED	2019
ENGINEER'S ESTIMATE:	\$4,100,000
SAA TEAM:	PM – Shahnawaz Ahmad, Engrs – Jorge Lovo, Adam Roesch
	CADD – Hugo Magana, Phong Tran
POTHOLING	BESS Testlab, Inc.
TRAFFIC CONTROL	JMDiaz, Inc.
Sewer Main Phase I Project	
Design services to replace a total of approximately 11,000 linear feet (LF) of existing 6-inch to 10-inch sewer main to new 8-inch to 16-inch diameter polyvinyl chloride sewer pipeline at various locations. Improvements address deficiencies in flow capacity and reduce the risk of overflows.	



REFERENCES OF WORK PERFORMED FORM FOR SA ASSOCIATES

1. Name of Reference City of Anaheim Public Utilities Department
Address 201 S. Anaheim Boulevard, Anaheim, CA 92805
Contact Name Dan Setty, Associate Engineer Phone Number: 232-232-2225
Email: dsetty@anaheim.net
Dates of Business 10/2014 – 4/2016
Project Country Glen Way Water Main Replacement
2. Name of Reference Central Basin Municipal Water District
Address 6252 Telegraph Road, City of Commerce, C 90040
Contact Name Jacqueline Koontz (now with Norwalk) Phone Number: 562.929.5926
Email: jkoontz@norwalkca.gov
Dates of Business 4/2017 – 7/2019
Project Recycled Water Extension in the City of South Gate
3. Name of Reference City of Chino Hills
Address 1400 City Center Drive, Chino Hills, CA 91709
Contact Name Danny Hernandez, Associate Engineer Phone Number: 909.364.2760
Email: dhernandez@chinohills.org
Dates of Business 7/2017 – 3/2018
Project English Road Recycled Water Line
4. Name of Reference Crescenta Valley Water District
Address 2700 Foothill Boulevard, La Crescenta, CA 91214
Contact Name David Gould, now with DMc Engineering Phone Number: 949.753.9393
Email: dgould@dmceng.com
Dates of Business 10/2015 – 9/2018
Project Design of Well No. 2 and related facilities
5. Name of Reference City of Inglewood
Address One Manchester Boulevard, Inglewood, CA 90312
Contact Name Boytrese Osias, Sr. Engineer Phone Number: 310.412.5333
Email: bosias@cityofinglewood.org
Dates of Business Water: 1/2016 – 4/2016
Project Water Main Replacement Phase V, Sewer Main Replacement Phase 1
6. Name of Reference City of Monterey Park
Address 320 Newmark Avenue Park, CA 01854
Contact Name Ziad Mazboudi, Interim City Engineer Phone Number: 626.532.2018
Email: zmazboudi@montereypark.ca.gov
Dates of Business Atlantic 8/2018 – 6/2020 CGTS 1/2017 – 1/2019



Projects Sewer & Water Improvements along Atlantic Boulevard
Centralized Groundwater Treatment System Design

7. Name of Reference City of Ontario Municipal Utilities Company
Address 1425 S. Bon View Avenue, Ontario, CA 91761
Contact Name Omar Gonzalez, Sr. Assoc. Civil Engineer Phone Number: 909.395.2578
Email: Oegonzale@ontarioca.gov
Dates of Business 7/2019 – 12/2021
Project Water Main Designs at various locations

REFERENCES FOR STEVEN ANDREWS ENGINEERING

<u>Client</u>	<u>Representative</u>
City of Banning	Art Vela, Director of Public Works (951) 922-3134
Emerald Bay Service District	Michael Dunbar, General Manager (949) 494-8572
East Orange County Water District	David A. Youngblood, General Manager (714) 538-5815
Marygold Mutual Water Company	Justin Brokaw, General Manager (909) 877-0516

REFERENCES RICHARD C. SLADE AND ASSOCIATES

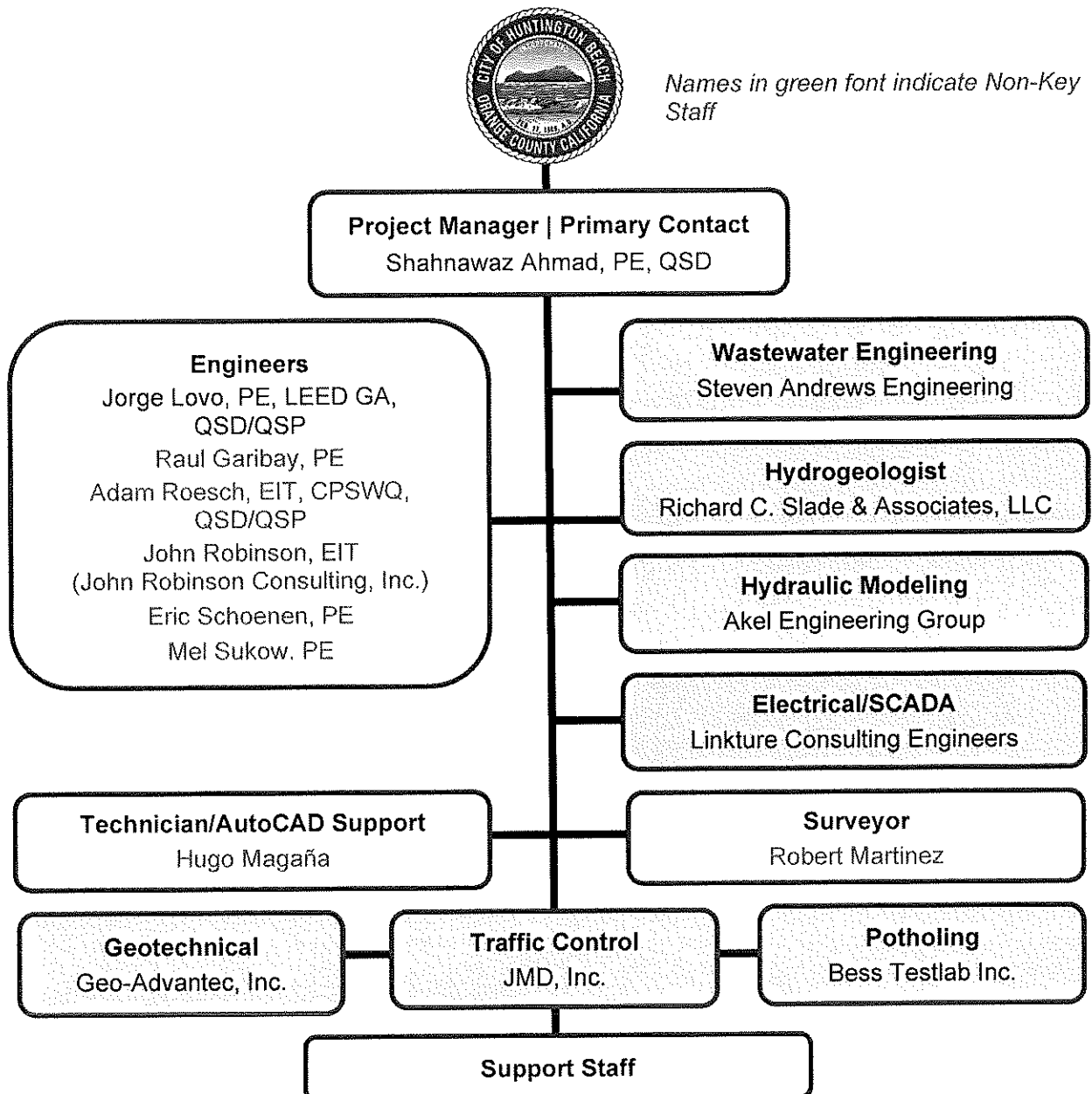
Client & Project Information	Client Project Manager	Client Contact Info
City of Newport Beach Rehabilitation work on Tamura Shallow, Tamura Deep, and Dolphin Shallow, Dolphin Deep Wells	Benjamin Davis Sr. Civil Engineer	949.644.3317 bdavis@newportbeachca.gov City of Newport Beach 100 Civic Center Drive Newport Beach, CA 92660
City of Buena Park Design and construction monitoring for new municipal-supply well in Peak Park	Mina Mikhael Director of Public Works/City Engineer	714.562-3672 MMikhael@buenapark.com 6650 Beach Blvd Buena Park, CA 90621
Irvine Ranch Water District 5 New Wells & Rehabilitation of Numerous Wells	Carl Spangenberg Senior Engineer	949.453.5567 spangen@IRWD.com Irvine Ranch Water District 3512 Michelson Drive Irvine, CA 92612



SECTION V: APPENDIX

This section includes resumes of Non-Key Staff and Project Experience Tables

For reference, the Organization Chart is pictured below:





RAUL GARIBAY, P.E.

Engineer

Mr. Garibay has over 39 years of experience in water-related projects. He retired from the City of Pomona after serving as Supervising Water Resources Engineering.

RELATED EXPERIENCE

CITY OF MONTEREY PARK

- Currently providing Construction Management and Inspection services for the Centralized Groundwater Treatment System (CGTS) for the Delta Plan, located in the city of Rosemead. The CGTS consists of advanced oxidation (AO) involving ultraviolet (UV) and hydrogen peroxide to destroy volatile organics (VOCs) and 1,4-dioxene, downstream liquid-phase granular activated carbon (LGAC) to absorb any residual contaminants.

CITY OF POMONA

As Supervising Water Resources Engineer:

- Supervised engineering group in the Water Resources Department
- Participated in interview boards for other municipalities
- Developed and implemented Sanitary Sewer Management Plan
- Conducted sewer and water plan reviews for private and public projects; reviews included compliance checks with current health regulations and inspection of field installations
- City's liaison on various water committees such as Chino Basin Watermaster, Three Valleys MWD, and Six Basins Board
- Developed and Implemented 2005 Urban Water Management Plan
- Project Manager for Water and Sewer Master Plan
- Reviewed developers' water and sewer utility plans
- Project Manager for various water and sewer related projects: ranged from pipeline to treatment plants
- Liaison with the California Department of Health Services

CITY OF BURBANK

As Planning and Engineering Manager:

- Supervised team that coordinated with outside developers on construction and planning projects
- Planned, coordinated, and negotiated with other city departments to ensure integration with their projects Liaison on other city departments on the widening of Interstate 5 project

CITY OF PASADENA

As a Civil Engineer for the City of Pasadena:

- Project Manager for Water Master Plan
- Developed and Utilized Department's Water Hydraulic Modeling
- Participated in multi-departmental group that developed the City's GIS Base map
- Reviewed building plans for impacts on the water system
- Created plans and specifications of water pipeline projects
- Participated on engineering review hiring boards for various cities
- Presented analysis of water system hydraulic model to public Planning Committee to support for upcoming water projects
- Co-City representative for the Raymond Basin Management Board
- Developed and negotiated water system interconnection with neighboring water agencies
- Developed and procured annual storage groundwater rights with basin agencies to ensure the City's annual groundwater rights
- Project Manager for the water quality laboratory rehabilitation
- Investigated and implemented improvements to water quality laboratory processes



EDUCATION:

Loyola Marymount University,
Los Angeles, BS Civil
Engineering, 1982
Cal State University Los
Angeles, MS Business
Administration

REGISTRATION:

Registered Civil Engineer,
California, No. C43304

CERTIFICATION:

Water Treatment Operator,
Grade IV, No. 19408

Water Distribution Operator,
Grade II, No. 29625



HUGO MAGAÑA
Technician/AutoCAD Designer

Mr. Magaña is a Designer/Draftsman. He is involved in a variety of street, sewer, and water projects, providing technical and CAD assistance to our team. His expertise is in GIS software and AutoCAD.

RELATED EXPERIENCE

CITY OF ALHAMBRA

- Main Street Sewer Replacement – AutoCAD Designer, Replacement of approximately 1,858 LF of an existing 8-inch sewer main with a 12-inch sewer main on Main Street, between Bushnell Avenue and Atlantic Boulevard.

BOY SCOUTS OF AMERICA

- Trask Scout Camp Water System Rehabilitation and Enhancement Project - Design services for design-build project at the Boy Scouts camp in the city of Monrovia foothills.

CITY OF ANAHEIM

Pepper Creek Way, Fern Haven Lane and Hadrians Crossing Water Main Replacement – Prepared plans for 1,500 linear feet of PVC Water Main Replacement from cast iron pipe

CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Recycled Water Pipeline System Extension in the City of South Gate – Plans for 24,600 linear feet of 8" – 20" recycled pipeline.

CITY OF CHINO

- Quadrant I Water Main Replacement Project – Plans for design of 11,000 ft. of 12" DIP with a new 8" C900 Polyvinyl Chloride. Scope included replacement/reconnection of existing service laterals.

CITY OF CHINO HILLS

- Providing utilities research and preparing plans 6,870 LF of recycled water line on English Road between Peyton Drive and Village Center Drive, 830 LF of recycled water line on Village Center Drive between English Springs Park and Country Springs Elementary School, and 1,130 LF of recycled water line on English Place between English Road and the end of the existing water easement to the south. The total construction length is approximately 8,830 LF

CITY OF HUNTINGTON BEACH

- Water Valves Replacement - Design services for water valve replacement in 50 locations throughout the City's water system. The in-line valves with no vaults range from 6" to 12".

CITY OF INGLEWOOD

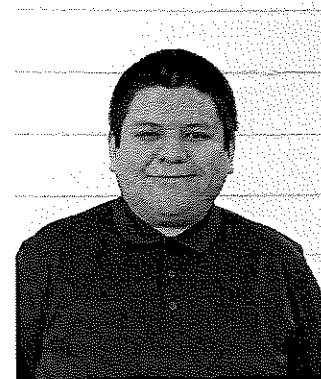
- AutoCAD Designer for preparation of plans for the upgrade/repair of segments of the exiting 8" to 15" vitrified clay pipe throughout the City to improve the existing sewer system under the Sewer Main Replacement Program Phase I. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP.

KINNELOA IRRIGATION DISTRICT

- Sierra Madre Villa & Villa Heights Water Main Improvement Project – Plans, for the installation of approximately 1,360 linear feet (LF) of new 8" DIP to connect the existing 8" DIP in Sierra Madre Villa Avenue, just north of Windover Road, with the existing 8-inch DIP at the intersection of Villa Heights and Villa Heights Road.

LONG BEACH UTILITIES WATER DEPARTMENT

- Conducted utility research and preparation of plans for the Ximeno Ave. Water Main Improvement project which includes approximately 2,230 LF of 8" ductile iron water mains to improve the flow, pressure, and fire protection in the private property of the apartment complex at 1613 Ximeno Ave.



EDUCATION:

California State University
B.S. Mechanical Engineering

Rio Honda College College of
Engineering and Technology

California State University,
Fullerton, College of

Engineering and Technology

AFFILIATIONS:

- Engineers for a Sustainable World, Cal State Long Beach
- Center for Academic Support in Engineering and Computer Science, Cal State Fullerton
- Society of Mexican American Engineers and Scientists, Cal State Fullerton and Cal State Long Beach



- Conducted utility research and preparation of plans for the Queensway Drive Water Main Improvement project which includes approximately 510 LF of 12" ductile iron water mains to improve the flow, pressure, and fire protection by replacing the existing water mains in the 600 and 700 Queensway Drive area.

CITY OF LYNNWOOD

- Conducted utilities research for Long Beach Meter Upgrade and Line Abandonment Project to design improvements to the existing water main located along the easterly side of Long Beach Boulevard, between Euclid Avenue on the south end and Josephine Street on the north end, for approximately 1,985 ft. The work also includes meter upgrades and tie-ins to adjacent water, any potential fire hydrants, water valves, others, such as to complete in place the improved water system. Provided Spanish translation of Right-of-Entry forms to be signed by non-English speaking residents.

CITY OF MONTEREY PARK

- Water Improvements Atlantic Boulevard - Plans for a 12" 2,030 feet ductile iron main, replacement of laterals, new fire hydrants/services, valves, abandonment of existing mains, tie-in to existing system, pre/post CCTV videos, paving and striping restoration.

CITY OF NORWALK

- FY 2017/18 Sewer Main Repair Project – AutoCAD Designer, Engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects.

CITY OF ONTARIO

- Water Main Replacement – Plans for 25,430 linear ft. of 2" -12" water mains at 30 locations. The new mains will be 8" -12" in diameter. The scope also includes a new 450 linear ft. water main, along with replacement of service laterals, fire hydrants and related appurtenances.

CITY OF POMONA

- Currently providing design and surveying services for various water mains and topographic survey for sewers that will later be used by the City to create drawings for sewer main projects.
- Preparation of Written and Drawn Utility Construction Standards Manual related to the City's Water, Sewer, and Storm Water facilities (Project). This is a full update to the existing land development utility construction document, which will replace the current document that only includes standards for water construction.

SANTA CLARITA VALLEY WATER AGENCY

- Conducted utilities research and preparing plans for Bouquet Tank Pipeline & Tank #3 - Replacement of 2,420 ft. of steel & PVS pipe
- Conducted utilities research and plans for Old Road Pipeline - Replacement of 4,670 ft. of PVC pipe.

CITY OF SIERRA MADRE

- Water Main Replacement – Design to replace 21 segments of existing pipe at various locations that date from the 1930's. The project was divided into four (4) bid segments with an approximate length of 20,300 ft. The project also involved abandoning the existing main and laterals upon completion of the replacement facilities. The water mains were replaced with the same diameter size, except for the existing 2-inch mains that were upsized to 4-inch.

CITY OF SOUTH GATE

- Conducted utility research and prepared plans for Water Main Replacements Project, Phase 1 for various street segments. The work includes 11,380 LF of 8" ductile iron pipe (DIP) and 5,750 LF of 12" DIP to replace existing cast iron pipe (CIP) water mains in street segments that have been identified as having deficiencies in pressure, reliability, velocity, and fire flow capacity.

CITY OF WHITTIER

- Sewer Main Phase I Project – AutoCAD Designer, Design services to replace a total of approximately 11,000 linear feet of existing 6-inch to 10-inch sewer main to new 8-inch to 16-inch diameter polyvinyl chloride sewer pipeline at various locations. Improvements address deficiencies in flow capacity and reduce the risk of overflows.



ROBERT MARTINEZ
Surveyor

Mr. Martinez has over 30 years of experience in providing professional land surveying services to both public and private infrastructure projects in all areas relating to land development including:

- Infrastructure and improvement design for grading, streets, storm drains, utilities and associated matters.
- Preliminary land planning, tentative and final map processing, land use and feasibility studies.
- A.L.T.A., architectural, boundary and topographic survey, entitlement analysis, right-of-way engineering and preparation of legal descriptions.
- GPS Surveying.

EDUCATION:

California State Polytechnic
University, Pomona – June
1989
Civil Engineering (Survey Minor)

RELATED EXPERIENCE

BOY SCOUTS OF AMERICA

- Surveyor for Camp Trash Water System. Project scope is improvement and enhancement of an existing drinking water system in Monrovia Canyon. New construction will include a new 75,000-gallon steel bolted water tank, concrete pad and related piping.

REGISTRATION:

Registered Civil Engineer,
California
No. 54360

Registered Land Surveyor,
California
No. 6966

KINNELOA IRRIGATION DISTRICT

- Surveyor for East West Tank Connector Pipeline Project. Scope included design of 2,800 ft of 12" DIP including connections to existing 4" steel tunnel line and two LA County Flood Control District channel crossing in a hilly area.

LONG BEACH UTILITIES DEPARTMENT

- Surveyor for the Ximeno Avenue Water Main Improvement project which includes approximately 1,790 LF of 8" ductile iron water mains
- Surveyor for the Queensway Drive Water Main Improvement project which includes approximately 1,050' of water mains.

CITY OF LYNWOOD

- Surveyor for Long Beach Water Meter Upgrade Topographic Project

CITY OF MANHATTAN BEACH

- Surveyor for Sewer Infrastructure Improvement Project for various sewer reaches throughout the City.

CITY OF MONTEREY PARK

- Surveyor for Water & Sewer Improvement along Atlantic Boulevard. Scope includes water and sewer main improvements of approximately 3,700 linear feet.

CITY OF ONTARIO

- Surveyor for Water main replacement of approximately 25,430 LF of water mains at 30 locations.

CITY OF POMONA

- Surveyor for Waterline Improvement Project

SANTA CLARITA VALLEY WATER AGENCY

- Surveyor for Bouquet Tank Pipeline & Tank #3 or replacement of 2,420 ft. of steel & PVS pipe and Old Road Pipeline for replacement of 4,670 ft. of PVC pipe.

CITY OF SIERRA MADRE

- Surveyor for the 2020 Water Main Design Program with an approximate length of 20,300 ft.

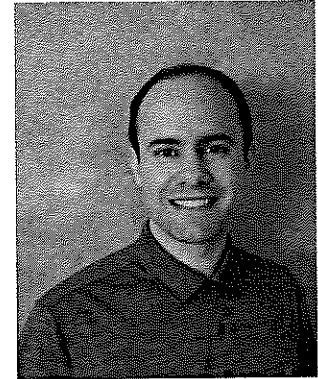
CITY OF SOUTH GATE

- Surveyor for Water Main Replacement, Phase 1, with an approximate length of 17,100 ft.



**ADAM ROESCH, PE, CPSWQ, QSD/QSP
Engineer**

Mr. Roesch serves as an engineer for various projects, including water main, wells, sewer, storm, & street projects. Due to his knowledge of engineering principles, Mr. Roesch provides valuable engineering assistance to SA Associates. Also, due to his past and part-time experience in environmental engineering/water quality, Mr. Roesch provides valuable technical assistance, especially in areas related to NPDES permitting.



PROJECT EXPERIENCE

CITY OF ALHAMBRA

- Westmont Drive Water Main Replacement – Engineering design and construction support services for the replacement of approximately 3,500 ft. of 4" and 14" water mains.

CITY OF ANAHEIM

- Pepper Creek Way, Fern Haven Lane and Hadrians Crossing Water Main Replacement – Plans, specifications and cost estimates for 1,500 linear feet of PVC Water Main Replacement from cast iron pipe.
- Country Glen Way Water Main Replacement - Plans, specifications and cost estimates for 5,300 linear feet of 6" and 8" PVC C-900 pipe in multiple side streets. The project was located in a condominium complex.

BOY SCOUTS OF AMERICA

- Trask Scout Camp Water System Rehabilitation and Enhancement Project - Design services for design-build project at the Boy Scouts camp in the city of Monrovia foothills.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Recycled Water Pipeline System Extension in the City of South Gate – Plans and specifications, and estimate of probable construction costs for 24,600 linear feet of 8" – 20" recycled pipeline.

CITY OF CHINO

- Prepared plans & specifications for the Quadrant I Water Main Replacement Project which consists of 10,940 ft. of 8" PVC pipe to improve the existing water system.

CITY OF CHINO HILLS

- Providing engineering design approximately 6,870 LF of recycled water line on English Road between Peyton Drive and Village Center Drive, 830 LF of recycled water line on Village Center Drive between English Springs Park and Country Springs Elementary School, and 1,130 LF of recycled water line on English Place between English Road and the end of the existing water easement to the south. The total construction length is approximately 8,830 LF

CITY OF HUNTINGTON BEACH

- Water Valves Replacement - Design services for water valve replacement in 50 locations throughout the City's water system. The in-line valves with no vaults range from 6" to 12".

CITY OF INGLEWOOD

- Water Main Projects - various projects which included plans and specifications for water main replacement on various street segments; 3,000 ft. of 8" ductile iron pipe water mains; and Phase V Water Main Replacement of 10,000 ft. of ductile iron pipe.
- Prepared plans and specifications for the upgrade/repair of segments of the existing 8" to 15" vitrified clay pipe throughout the City to improve the existing sewer system under the Sewer Main Replacement Program Phase I.

EDUCATION:

California State University, Long Beach, B.S. Civil Engineering

REGISTRATION:

Registered Civil Engineer
California No. 92220

CERTIFICATIONS:

Certified Professional in Storm Water Quality (CPSWQ)
Certificate No. 1022

Qualified SWPPP Developer
(QSD)

Qualified SWPPP Practitioner
(QSP)

Certificate No. 25508

SOFTWARE:

Microsoft Office
Adobe
Autodesk (AutoCAD)



KINNELOA IRRIGATION DISTRICT

- East-West Irrigation District Pipeline Project – Plans, Specifications, cost estimates, design, and construction support services for 2,800 ft of 12" DIP, including connections to the existing main. Scope also included design of 960 ft. of 4" DIP, connections to an existing 4" steel tunnel line and two channel crossings.

LONG BEACH UTILITIES DEPARTMENT

- Design of Avenue Water Main Improvement project which includes approximately 2,230 LF of 8" ductile iron water mains to improve the flow, pressure, and fire protection in the private property of the apartment complex at 1613 Ximeno Ave. The work included Caltrans encroachment permitting.
- Design of Queensway Drive Water Main Improvement project which includes approximately 510 LF of 12" ductile iron water mains to improve the flow, pressure, and fire protection by replacing the existing water mains in the 600 and 700 Queensway Drive area.
- Prepared plans and specification for the East 27th Street and Via Passilo Cast Iron Water Main Replacement Project which consisted of the replacement of approximately 4,000 feet of 6" & 8" cast iron & ductile pipe.

CITY OF LYNWOOD

- Providing services for Long Beach Meter Upgrade and Line Abandonment Project to design improvements to the existing water main located along the easterly side of Long Beach Boulevard, between Euclid Avenue on the south end and Josephine Street on the north end, for approximately 1,985 ft. The work also includes meter upgrades and tie-ins to adjacent water, any potential fire hydrants, water valves, others, such as to complete in place the improved water system. It shall also be designed as per City, local, and federal standards, and as per any agency recommendations having jurisdiction.

CITY OF MONTEREY PARK

- Water and Sewer Improvements Atlantic Boulevard - Plans and specifications for a 12" 2,030 feet ductile iron main, replacement of laterals, new fire hydrants/services, valves, abandonment of existing mains, tie-in to existing system, pre/post CCTV videos, paving and striping restoration.

CITY OF MANHATTAN BEACH

- Cycle 3 Sewer Infrastructure Improvements to prepare plans and specifications for approximately 1,160 ft. of various sewer reaches throughout the City. Scope included replacing curb ramps to ADA compliance, replacing manholes, and sidewalks, and reviewing CCTV.
- Cycle 2 Sewer Infrastructure Improvements to Prepare plans and specifications for various sewer reaches throughout the City, including 2,150 ft. of 6" and 8" CIPP sewer rehabilitation, and 25 VCP point repairs with lengths between 12 ft & 42 ft.

CITY OF ONTARIO

- Water Main Replacement – Plans and specifications for 25,430 ft. of 2" -12" water mains at 30 locations. The new mains will be 8" -12" in diameter. The scope also includes a new 450 linear ft. water main, along with replacement of service laterals, fire hydrants and related appurtenances.

CITY OF POMONA

- Utility Pipeline Survey & Drawings Services - Providing engineering design and surveying services to rehabilitate and/or replace existing water mains in various streets throughout the City. The project also consists of providing topographic survey that will later be used by the City to create construction drawings for sewer main spot repair, cured-in-place pipe (CIPP) rehabilitation, and/or replacement in various streets throughout the City.

SANTA CLARITA VALLEY WATER AGENCY

- Currently preparing plans, specifications, and cost estimate for Bouquet Tank Pipeline & Tank #3 - Replacement of 2,420 ft. of steel & PVS pipe
- Currently preparing plans, specifications, and cost estimates for Old Road Pipeline - Replacement of 4,670 ft. of PVC pipe.

CITY OF SOUTH GATE

- Currently preparing plans and specifications for Water Main Replacements Project, Phase 1 for various street segments. The work includes 11,380 LF of 8" ductile iron pipe (DIP) and 5,750 LF of 12" DIP to replace existing cast iron pipe (CIP) water mains in street segments that have been identified as having deficiencies in pressure, reliability, velocity, and fire flow capacity.



ERIC SCHOENEN, P.E.
Engineer

Mr. Schoenen has over 30 years of experience with a mix of land surveying, design, plan check, conditions of approval, strategic planning, and capital improvement projects. He has over 16 years of experience working for a Water Utility Franchise. Experience includes budget estimating, scheduling, technical report writing, and City Council Agenda Reports. Responsible for coordination with professional consultants and staff to implement CIP projects as a project manager.

PROJECT EXPERIENCE

CITY OF ALHAMBRA

- Provided construction management and inspection services for the Valley Blvd/Almansor St. Sewer Replacement Project. The work included installation of approximately 1,380 ft. of 36" extra-strength VCP sewer along Almansor St. from San Marino Ave. to Valley Blvd. and approximately 1,830 ft of 30" extra-strength VCP sewer along Valley Blvd. from Almansor St. to Garfield Ave.
- Westmont Water Main – Construction management and inspection services for replacement of 3,500 ft. of 4" and 14" mains.

EDUCATION:

California Polytechnic
University, Pomona
B.S. Civil Engineering,
, 1988
University of California,
Riverside
Supervisory Excellence I
and II, 1998

CITY OF GLENDORA

- Lorraine Avenue Water Main Project - Provided construction inspection services. Project included the installation of approximately 6,715 lineal feet of 12" and approximately 4,090 ft. of 16" ductile iron pipe and appurtenances, new water services, new fire hydrants, and 27 tie-ins to existing water lines.
- Laurel Avenue Water Main Replacement. - Provided construction inspection services. Project included the installation of approximately 1,400 lineal feet of 8" ductile iron pipe and appurtenances, new water services, new fire hydrants, and 2 tie-ins to existing water lines.

REGISTRATION:

Registered Civil Engineer,
California, No. 52775

LONG BEACH UTILITIES DEPARTMENT

- Sewer Replacement - Provided construction management and inspection services for the rehabilitation of 10,600 ft. of sewer, including lining 4,971 ft. of sewer with 8" CIPP and multiple location-specific rehabilitation efforts for the District's Cement Sewer Rehabilitation/ Replacement Group 2 Project.

CITY OF MANHATTAN BEACH

- Sewer Infrastructure Improvements – Engineer, Plans and specifications for various sewer reaches throughout the City.
- Provided design services for spot and/or section repairs to the existing pipe as identified in the City's 2013 Storm Drain Condition Assessment Report. The segments to be repaired or replaced have been identified as having high risk structural defects. Designed the removal of an existing catch basin and construction of a new catch basin at 2912 Laurel Avenue to prevent flooding. The existing catch basin was found to be under capacity due to its narrow opening and shallow depth.

CITY OF MONTEREY PARK

- Sewer Replacement - Provided construction management services for repair or replacement of defective sewer sections utilizing the Cured-In-Place-Pipe (CIPP) method at 25 locations throughout the City.

CITY OF NORWALK

- FY 2017/18 Sewer Main Repair Project – Engineer, Engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects. As a result, the City has identified 60 sewer reaches deemed as high priority for repair/replacement. Where there are short sections of pipe that have broken and/or missing pipe walls, trenchless technology may be employed to prepare the existing pipe to be acceptable to serve as a host pipe for CIPP lining.



MEL SUKOW, PE
Engineer

Mr. Sukow has over forty years of professional engineering experience in project planning, project analysis, project expediting and project design including surveying, mapping, planning, civil and structural aspects. He has provided consulting services for the preparation of plans and maps for subdivision, institutional, commercial and infrastructure projects to land developers, agencies, architects and engineering firms. The plans have included street, sewer, storm drain, grading and structural. Other functions have been surveying and mapping functions such as design surveys, construction surveys, legal descriptions, right-of-way maps etc.



PROJECT EXPERIENCE

CITY OF MANHATTAN BEACH

- Sewer Infrastructure Improvements –Plans and specifications for various sewer reaches throughout the City.
- Cycle 3 Sewer Main Improvements – 1,160 linear feet of 6" and 8" VCP design over six sites in the City.
- Cycle 2 Sewer Main Improvements – Design of 2,150 linear feet of 6 and 8 " CIPP and VCP. Project scope included spot repairs, sewer segment replacement, pavement restoration, proper traffic control for arterial streets and accurate construction ready bidding.

EDUCATION:
California State University,
Fresno
B.S. Civil Engineering

REGISTRATION:
Registered Civil Engineer,
California, No. PE 22673

MEMBER:
American Council of
Engineering
Companies of California
(ACEC-CA), State Director
City of Los Angeles-City
Engineer/
ACEC-CA Liaison Committee
American Society of Civil
Engineers

CITY OF ANAHEIM

- Designed the widening of the portion of Dale Street adjacent to the properties at 517, 519, and 523 N. Dale Avenue. The work involved widening the roadway just in front of the properties from 30 feet to 45 foot right-of way in order to implement and maintain the City's Master Plan of Arterial Highways.

CITY OF GARDENA

- Construction Management Services for the Vermont Avenue Street Improvement Project.

CITY OF IRVINE

- Prepared a traffic study/intersection analysis and infrastructure plans, including traffic signal modification plans, intersection improvement plans, construction details, street light modification plans, traffic striping and signing plans, landscaping irrigation plans, utility coordination/mapping, specifications, and construction cost estimates for the following improvements necessary for improving the traffic circulation at the Culver- Alton and Culver-Main intersections
- Prepared infrastructure plans, including street improvement plans, right-of-way engineering, grading plans, landscape planting/irrigation plans, permitting, specifications, and construction cost estimate for Barranca Parkway from the I-5 Freeway to Alton Parkway.

CITY OF LAWDALE

- Construction management services for the Redondo Beach Boulevard Street Improvement Project

CITY OF LOS ANGELES, BUREAU OF ENGINEERING, LOS ANGELES, CA – DESIGN ENGINEER

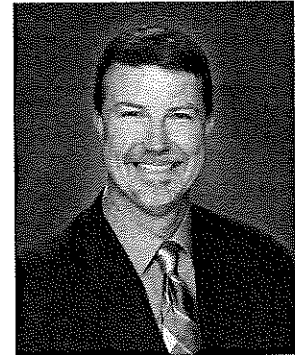
Worked in the following design areas:

- Street Design-Prepared designs for new and widening type projects. Projects included associated storm drain, sewer and utility design.
- Subdivision Development-The tasks included survey, mapping, planning and civil engineering aspects of projects.
- Structural Engineering-The work included bridge designs, building designs and wall designs.
- Construction Engineering-During the construction phase of projects provided engineering support by reviewing shop drawing submittals, responding to request for information and modifying plans to deal with field conditions.
- Transportation Engineering - Served as the liaison between Caltrans and the City's Bureau of Engineering on all Caltrans' projects.



**JOHN ROBINSON, E.I.T., John Robinson Consulting, Inc.
Engineer**

Mr. Robinson's 25 years of environmental engineering experience has focused exclusively on water reclamation planning and infrastructure design projects for municipalities in southern California. He has been involved in over 35 recycled water feasibility/master studies and plans, 12 booster pump stations and over 300 miles of recycled water pipeline design. He has converted over 400 customers to utilize recycled water including cemeteries, medians, parkways, schools, parks and industries. He has deep roots with the State Water Resource Control Board Division of Drinking Water as well as the County of Los Angeles Department of Public Health in order to coordinate the recycled water design and recycled water conversion of customers to utilize recycled water for irrigation and industrial purposes.



PROJECT EXPERIENCE

- **Project Coordinator, Crescenta Valley Water District, La Crescenta, CA –** Mr. Robinson served as the Project Coordinator for the District for Well No. 2 at Ordunio Reservoir which consisted of a new submersible pump and motor, onsite piping, a chorine feed system, a nitrate removal treatment, upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system, pavement and other on-site improvements. SA Associates is also provided Construction Support Services and is assisting the District for permitting of the well through the State Department of Drinking Water (DDW). **This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019.**
- **Project Manager, City of Monterey Park, CA -** Provided Construction Oversight Services for the design and construction of the Centralized Groundwater Treatment System (CGTS) at the Delta Plant in Rosemead. The work included site development, site utilities, equipment procurement and installation, permitting, and commissioning and startup of a new treatment system to replace the existing individual wellhead treatment systems. The City was awarded 2015 Prop 84 Integrated Regional Water Management grant funds to implement the Project. SA Associates is also assisting the City for permitting of the CGTS through DDW.
- **Project Engineer, West Basin's Recycled Water Program, WBMWD, Carson, CA**
Mr. Robinson was part of the Program Management team who oversaw the design of approximately 50 miles of 4- to 60-inch recycled water pipelines from 1993 through 1997. In addition, John was the lead project engineer for the conversion of **over 190 recycled water customers** for West Basin during that same period.
- **Program Management Team Member Central Basin Municipal Water District Water Reclamation Program, CA –** Provided various engineering services during the design of pump stations, distribution systems, and customer connections specifically to the City of Cerritos. In addition, assisted with the identifications of potential reclaimed water customers, developed on-site retrofit drawings, and prepared engineering reports for industrial user for approvals by the state and county health departments. Project included computer hydraulic model of the District's recycled water distribution system.
- **Project Engineer, Century Reclamation Program and Recycled Water Retrofits, Central Basin Municipal Water District –** Mr. Robinson identified and converted 133 recycled water use customers include those located in the City of Cerritos, which included the design of on-site retrofits for reclaimed water irrigation systems and disconnection from potable water system. Worked closely with users and Los Angeles County DPH to maximize reclaimed water use.

EDUCATION:

B.S., Civil Engineering, California State University, Long Beach, 1993

REGISTRATION

Engineer-in-Training, California, Registration No. 109865, 1997

MEMBER:

American Society of Civil Engineers
California Water Environment Association
Central Basin Water Association
San Gabriel Valley Water Association
Southern California Water Utilities Association
Water Environmental Federation
WateReuse Association

PRESENTATIONS:

30 Presentations on water, wastewater, recycled water infrastructure and treatment projects



- **Project Manager, Rose Hills Recycled Water Project Phase I –Pipeline and Conversion** – Mr. Robinson was responsible for the expansion of the Upper San Gabriel Valley Municipal Water District's recycled water system to Rose Hills. The facilities for the project include 12,000 linear feet of pipeline and the recycled water conversion of approximately 600 acres of Rose Hills property to utilize recycled water while maintaining potable water in hose bibbs. Worked closely with Rose Hills, San Gabriel Valley Water Company and Los Angeles County DPH to maximize reclaimed water use for commercial/industrial applications.
- **Principal-In-Charge, Phase I - Northwest Area Recycled Water Facilities, Inland Empire Utilities Agency, Chino, CA** Mr. Robinson served as principal-in-charge for the design of approximately 22,000 linear feet of the 6-inch, 8-inch and 12-inch pipeline in the cities of Ontario, Rancho Cucamonga, and Upland. **The project involved crossing two railroad right-of-ways**, crossing a 152-in diameter Metropolitan Water District feeder line, coordination with multiple municipalities, and integration of multiple design criteria into a single project. The Phase 1 facilities were preliminary designed, design, and constructed over a 6 year period with the final pipelines currently being installed in May 2012.
- **Principal-In-Charge, RP-4 1158 and 1270 Pump Stations and Pipeline, IEUA, Chino, CA** Mr. Robinson's responsibilities included the writing, and preparation of the preliminary and final design efforts for two pump stations and approximately 1,000-foot 36-inch diameter pipeline. In his role as project manager, Mr. Robinson was responsible for the revision and finalization of the design criteria for the two pump stations and pipeline through the preliminary and final design of the project. Additional duties included management for preliminary and final design development and client coordination.
- **Principal-in-Charge, Rosemead Extension, Upper San Gabriel Valley MWD, City of Rosemead, CA** Mr. Robinson managed the preliminary and final design and construction services for 6000-LF of 18-inch CML&C Steel and Ductile Iron Pipe alternate recycled water pipeline. The project will serve approximately 510 AFY to three adjacent irrigation customers.
- **Senior Manager, Hollydale Pump Station and Pipeline, Central Basin Municipal Water District and City of Vernon, CA** Management of the Hollydale Pump Station located in the City of South Gate and approximately 8,000 linear feet of 12-and 18-inch recycled water pipeline to supply Malburg Generation Station. The facilities were in partnership between Central Basin Municipal Water District and City of Vernon.
- **Phase I – Reclamation Expansion - Long Beach Water Department, Long Beach, CA.** Mr. Robinson served as project engineer and project manager to provide various engineering services, including developed on-site retrofit drawings; preliminary and final design of 4 miles of 8-inch recycled water pipeline and 4 miles of 6-inch recycled water pipeline; prepared industrial engineering reports; and, performed retrofit construction management. Project included computer hydraulic model of Long Beach's recycled water distribution system.
- **Project Manager, Recycled Water System Expansion, Contract 1D, City of Long Beach, Long Beach, CA** Mr. Robinson was responsible for the design and construction management for the submittal review and resident inspection of approximately four miles of 24-inch and 30-inch diameter welded steel recycled water main. In addition, an aged and deteriorated 12-inch cast iron water main was replaced by a one mile long section of new 12-inch ductile iron pipe.
- **Project Manager, Irvine Ranch Water District Planning Area 9A, Irvine Boulevard and Jeffrey Road Pipeline Improvements, Irvine, CA** This project included design of domestic water, recycled water, and sewer pipelines to serve a new development. The recycled water pipelines included 7,500 feet of 12-inch and 2,600 feet of 30-inch diameter pipe. New water mains up to 54-inch diameter were required. All pipelines were constructed in existing streets and required careful consideration for existing facilities and traffic control. The design schedule was expedited to accommodate street improvements by the developer and was completed in four months.

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jrobinson@johnrobinsonconsulting.com



WATER PIPELINE EXPERIENCE

No.	Agency	Project	Length (Feet)	Size (Inches)	Material	Construction Cost (\$)	Complete (Year)	Services Provided				
								Site Study	Design	Cost Est.	Constr. Mngmt	Constr. Eng.
1	Santa Clarita Valley Water Assn.	Bouquet Tank Pipeline and Tank 3 Pipeline Replacement	2,420	8, 14 & 16	Steel & PVC	2,680,000	2024		X	X		
2	Santa Clarita Valley Water Assn.	Old Road Pipeline Replacement from McBean Pkwy to Pico Canyon Rd.	4,670	14	PVC	2,700,000	2024		X	X		
3	City of Chino Hills	English Road Recycled Water Main	9,000	12	PVC	3,700,000	2024		X	X		
4	City of Lynwood	Long Beach Meter Upgrade and Line Abandonment Project	1,980	6, 8 & 12	DIP	1,108,000	2024		X	X		
5	City of Pomona	Utility Pipeline Survey and Drawing Services	7,500	8	DIP	3,890,000	2024		X	X		
6	City of South Gate	Water Main Replacement Project, Phase I	17,130	8 & 12	DIP	4,486,000	2024		X	X		
7	Long Beach Utilities Dept.	Queensway Drive Water Main Improvement	510	8	DIP	299,000	2024		X	X		
8	Long Beach Utilities Dept.	Ximeno Avenue Water Main Improvement	2,230	8	DIP	1,271,000	2024		X	X		
9	Boys Scouts of America	Trask Scout Reservation Water System Rehabilitation and Enhancement Project	230	4 & 6	Steel	1,900,000	2024	X	X	X		
10	City of Ontario	Water Main Replacement, UT 1027 & UT 1043	26,480	8 & 12	DIP	10,405,000	2023		X	X		
11	Kinneloa Irrigation District	Sierra Madre Villa and Villa Heights Water Main Improvement	1,360	8	DIP	400,000	2021		X	X		
12	City of Sierra Madre	2020 Water Main Replacement Project	20,300	4, 6, 8, & 10	PVCO	7,706,600	2021		X	X		
13	City of Monterey Park	Water Improvements along Atlantic Boulevard	2,030	12	Ductile Iron	720,000	2020	X	X	X		
14	Huntington Beach	Water Valve Replacements	-	6 to 12	New Valves	444,000	2019		X	X		
15	City of Anaheim	Pepper Creek, Fern Haven, and Hadrians Crescent Water Main Replacement	1,450	4 & 8	PVC	405,000	2018		X	X		
16	Central Basin MWD	Recycled Water Pipeline System Extension in the City of South Gate	24,600	8 to 20	PVC	8,000,000	2017	X	X	X		
17	City of Chino	Quadrant I Water Main Replacement	11,000	8	PVC	3,400,000	2018	X	X	X		
18	City of Whittier	Beverly Boulevard Water Main Replacement	4,450	8	Ductile Iron	1,200,000	2017	X	X	X		
19	City of Whittier	Comstock Avenue Water Main Replacement	2,000	12	Ductile Iron	600,000	2017		X	X		
20	City of Anaheim	8" Water Main Replacement in Solomon and Baja Drives	1,560	8	PVC	370,000	2017		X	X		
21	City of Alhambra	Replacement of 4" and 14" Water Main in Westmont Dr. between Sherwood & Norwich	3,500	6, 8	PVC	1,483,000	2017		X	X		
22	City of Anaheim	8" Water Main Replacement in Country Glen Way	5,300	4, 14	Ductile Iron	1,395,000	2016	X	X	X		
23	City of Santa Monica	Water Main Replacement/Upgrade Project	10,000	6 to 21	PVC	4,000,000	2015			X		X
24	Rose Hills Memorial Park	Recycled Water Line	12,500	4, 8	PVC	800,000	2015	X	X	X		
25	Long Beach Utilities Dept.	E. 27th Street & Via Pasillo Cast Iron Water Main Replacement	4,000	6, 8	Cast Iron & Ductile Iron	600,000	2015		X	X		
26	Long Beach Utilities Dept.	Water Main Replacement Upgrade Project	10,000	6 to 21	PVC	3,500,000	2014			X		
27	Kinneloa Irrigation District	East-West Tank Connector Project	4,100	4, 12	Ductile Iron	644,000	2014	X	X	X		
28	Santa Monica	3rd Court Water Main Replacement Project	2,000	8, 12	CIP, DIP	900,000	2012			X		X
29	City of Pomona	Westmont Service Lateral Replacement Project	N/A	N/A	PE to Copper	390,000	2012			X		X
30	City of Azusa	W-265 Water Main Replacement Project	6,200	8, 12, 18	Ductile Iron	1,430,000	2012					X
31	City of Commerce	Camp Commerce Water Main	400	6	Ductile Iron	200,000	2012		X	X		X
32	City of Pomona	District 6 Phase IV Water Main Replacement	7,300	10, 12	Ductile Iron	1,900,000	2012		X	X		
33	City of Pomona	District 1, 2, & 5 Water Main Replacement	4,220	8, 10, 12	Ductile Iron	2,160,000	2012		X	X		
34	City of Pomona	As-Need Constr. Mgmt Services FY08/09 Water & Sewer CIP: Phillips Ranch Water Laterals, Pot. & Rec. Water Fire Hydrants, and Flush/Lampholes Tanks Replacement	N/A	N/A	N/A	3,500,000	2011			X		

WATER PIPELINE EXPERIENCE

No.	Agency	Project	Length (Feet)	Size (Inches)	Material	Construction Cost(\$)	Complete (Year)	Services Provided					
								Site Study	Design	Cost Est.	Constr. Mngmt	Constr. Eng.	Constr. Inspec.
35	Kinneloa Irrigation District	Windover & Sierra Madre Villa Water Main Replacement Project in the City of Pasadena	2,210	8, 10, 12, 16	Ductile Iron	517,000	2011	X	X	X			
36	City of Pomona	District 4, Phase I Water Main Replacement	6,530	6, 8	Ductile Iron	2,368,000	2010	X	X	X		X	
37	City of Pico Rivera	Water Main Inter-Ties Project (design of 3 interconnections between exist mains)				250,000	2009		X				
38	City of Azusa	WWF-243 Water Treatment Plant Water Main & Sewer Force	6,450	18, 24	Ductile Iron	1,600,000	2009						X
39	City of Lynwood	State Street & Tweedy Boulevard Water Main Replacement	2,900	8, 12	Ductile Iron	1,400,000	2009	X	X	X			
40	City of Pomona	District 2 & 3, Phase II Water Main Replacement	2,640	8	Ductile Iron	967,000	2009	X	X	X		X	
41	City of Anaheim	Katella Avenue 8" Water Main	1,700	6, 8	Ductile Iron	320,000	2008		X	X			
42	Kinneloa Irrigation District	Kinneloa Mesa Pipeline Projects	2,900	8"	Ductile Iron	152,000	2008		X	X		X	
43	City of Pomona	Reservoir St. Water Service Laterals	--	--	--	100,000	2008		X	X			
44	City of Pomona	Water System Security Updates	--	--	--	500,000	2008		X	X		X	
45	Long Beach Water Dept.	Two Alley Service Connection Conversion Projects	--	--	New Water Meters	630,000	2007						X
46	Kinneloa Irrigation District	Water Main on New York Drive	1,000	6,10	Ductile Iron	154,000	2007		X	X	X	X	
47	City of Pomona	Water Main Replacement Bonita & Towne	7,200	10, 12	Ductile Iron	1,200,000	2007	X	X	X			
48	West Basin MWD	Anza Avenue Recycled Water Lateral at Sepulveda Boulevard	200	8	PVC	50,000	2007				X		X
49	City of Azusa	W-178 Main Replacement Project in Sixth, Barbara, and Virginia Streets	3,700	4,6,8	Ductile Iron	816,000	2007						X
50	City of Thousand Oaks	Construction of Waterlines at Various Locations	11,250	8, 10, 12	PVC	950,000	2007	X	X	X		X	
51	City of Anaheim	Harding Water Users Project	1,350	8	Ductile Iron	250,000	2006	X	X	X			
52	City of Anaheim	Amberwood Water Main Replacement Project	4,600	8	PVC	735,000	2006	X	X	X			
53	City of Pomona	Districts 4, 5, & 6 Water Main Replacement Project	22,400	6, 8,10,12	Ductile Iron	2,700,000	2006	X	X	X	X		X
54	City of Anaheim	Northfield Ave. and Williamette Dr. Water Main Replacement	1,210	8	PVC	312,500	2005	X	X	X			
55	City of Anaheim	Katella Water Main Replacement Project	6,400	12	Ductile Iron	350,000	2005	X	X	X			X
56	City of Sierra Madre	Water Main Replacement Projects	1,940	6	Ductile Iron	200,000	2005		X	X			
57	City of Anaheim	Twin Peak Water Main Replacement Project	2,100	8	Ductile Iron/PVC	500,000	2004		X	X			
58	City of Torrance	I-25 Water Main Replacement Project, Phase II	22,540	6, 8	Ductile Iron	2,000,000	2004	X	X	X			
59	City of Riverside	Runsey Drive & University Drive Water Main Replacement	6,000	8	Ductile Iron	600,000	2004		X	X		X	
60	City of La Habra	Two Mobile Home Park Rehabilitations	6,000	8	PVC	1,500,000	2004	X	X	X		X	
61	Long Beach Water Dept.	Cast Iron Main Replacement: Long Beach Blvd. Project	5,000	6, 8, 12	Ductile Iron	600,000	2003					X	X
62	City of Torrance	I-20 Water Main Replacement	1,500	6,8	Ductile Iron	130,000	2003	X	X	X			
63	City of Azusa	Dalton Avenue Water Main Replacement	6,300	30	Ductile Iron	1,000,000	2003	X	X	X			
64	City of Pomona	Miscellaneous Pipeline Projects: Group 3 (Dist. 1 Ph. 2 & Dist. 3 Ph. 2)	24,600	6, 8, 12, 16	Ductile Iron	2,000,000	2003				X	X	X
65	City of Pomona	Miscellaneous Pipeline Projects: Five (5) Priority 1 Projects	24,000	6, 8, 10	Ductile Iron	2,000,000	2002				X	X	X
66	City of La Palma	City Yard Pipeline	100	14, 16	Steel	50,000	2002	X	X	X			
67	City of Riverside	Highgrove Water Main Replacement	9,600	8	Ductile Iron	900,000	2002		X	X	X	X	X
68	City of Riverside	Arroyo Drive Water Main Replacement	5,800	4, 8	Ductile Iron	600,000	2002		X	X	X	X	X
69	City of Pomona	30" Transmission Water Main	11,800	30	Steel	2,400,000	2002	X	X	X	X	X	X
70	City of Pomona	12" Water Main on San Antonio Avenue	5,800	8, 12	Ductile Iron	210,000	2002		X	X	X	X	X

WATER PIPELINE EXPERIENCE

No.	Agency	Project	Length (Feet)	Size (Inches)	Material	Construction Cost (\$)	Complete (Year)	Services Provided					
								Site Study	Design	Cost Est.	Constr. Mngmt	Constr. Eng.	Constr. Inspec.
71	City of Pomona	Potable Water Pipelines for Commercial, Rebecca, & Myrtle Avenue	5,600	8, 10	Ductile Iron	395,000	2001		X	X			
72	City of Torrance	Water Main Replacement 2000-2001: Artesia Boulevard	16,700	6, 8, 10, 12	Ductile Iron	1,500,000	2001	X	X	X		X	
73	City of Torrance	Recycled Water Distribution Pipeline 2000-2001: Artesia Blvd	17,600	8	PVC/Ductile Iron	1,100,000	2001	X	X	X		X	
74	City of Pomona	CM & Inspection Services for Five Pipeline Replacement	28,000	6, 8, 10, 12	Ductile Iron	2,000,000	2001				X	X	X
75	City of Chino Hills	Chino Avenue 20" Waterline Extension	1,900	20	Steel	200,000	2000	X	X	X			
76	Elsinore Valley MWD	Lakeshore 12" Waterline Replacement	6,000	12	Ductile Iron/PVC	500,000	2000	X	X	X		X	
77	City of Pomona	20" Reclaimed Water Main Under the 71 Freeway	400	20	Ductile Iron	50,000	2000		X	X			
78	City of La Palma	Replacement of 10" Asbestos Cement Pipe	1,000	10	PVC	33,000	1999	X	X	X		X	X
79	West Basin MWD	Carson Regional Recycling Water Plant: 14" Brine Line	27,000	14	HDPE	4,114,000	1999	X	X				
80	City of Pomona	Hawthorne Place Water Main Replacement	600	8	Ductile Iron	20,000	1999		X				
81	West Basin MWD	El Segundo Recycled Water Lateral	5,900	0	PVC	309,300	1998	X	X	X		X	
82	City of Torrance	Water Main Replacement: Prairie Avenue	2,100	4, 6, 8, 12	Ductile Iron	182,400	1998	X	X	X		X	
83	City of Arcadia	Campus Drive Water Main Project	4,700	8, 12	Ductile Iron/Steel	390,000	1997						X
84	East Pasadena Water Co.	Water Main on Oakdale Avenue & Woodward Boulevard	1,100	8	PVC	50,000	1997	X	X	X			
85	City of Tustin	Water Main Replacement	4,600	6, 8	PVC	294,000	1997		X	X		X	
86	City of Torrance	Water Main Replacement: 1997-98	19,000	6, 8, 12	Ductile Iron	1,276,000	1997		X	X		X	
87	City of Cerritos	Potable Water Main in Carmanita Road	1,600	16	Ductile Iron	326,000	1997	X	X	X			
88	City of Pomona	Hillcrest Drive Water Main	4,800	6, 8, 10	Ductile Iron	365,000	1997	X	X	X			
89	City of Pomona	Well No. 28 Water Line Improvements	1,500	8	Ductile Iron	75,000	1997	X	X	X			
90	City of Arcadia	12" Waterline on Colorado Boulevard	1,200	12	Ductile Iron	75,000	1996		X				
91	City of Torrance	Water Main Replacement - Torrance Boulevard	9,500	6, 8, 12, 16	Ductile Iron	650,000	1996		X	X		X	
92	City of Arcadia	Water Pipelines: 1st Avenue & Foothill Boulevard	3,000	12	Ductile Iron	300,000	1995		X	X			
93	City of Torrance	Water Main Replacement - Phase II	28,400	6, 8, 12	Ductile Iron	1,800,000	1995	X	X	X	X	X	
94	City of Torrance	Water Main Replacement - Phase I	21,000	6, 8, 10, 12	Ductile Iron	1,630,000	1994	X	X	X	X	X	X
95	City of Glendale	Brand Park Reclaimed Water Project	20,000	8, 10, 12, 16	Steel/PVC	1,200,000	1994		X	X			
96	CSU, San Luis Obispo	Potable Water Mains	11,000	8, 10, 12, 16	PVC	500,000	1994		X	X			
97	City of San Fernando	Water Main Installation	14,700	8, 12	Ductile Iron	800,000	1994						X
98	City of Simi Valley	Lilac Lane Tank Water Pipeline	1,000	12	Ductile Iron	20,000	1994		X	X			
99	City of Cerritos	Reclaimed Water Pipelines	7,700	6	PVC	400,000	1992		X	X		X	
100	City of Pomona	Water Pipelines	16,200	6, 8, 10	Ductile Iron	800,000	1992		X	X			X
101	City of Pomona	Water Pipelines	54,400	6, 8, 10, 12	Ductile Iron	3,100,000	1992						X
102	City of Azusa	Water Main Improvements	8,500	8, 12	Ductile Iron	500,000	1992		X	X	X	X	X
103	City of La Palma	City Yard Pipeline	100	14	Steel	20,000	1991	X	X	X			
104	City of Arcadia	Live Oak Water Facilities	1,000	24	Steel	100,000	1991						X
105	City of Whittier	Well Nos. 15, 17, & 18	1,500	20, 24	Steel	150,000	1991	X	X	X		X	
TOTALS =						777,440	Feet	147	Miles	\$134,622,800			



SEWER EXPERIENCE

No.	Agency	Project	Length (Feet)	Size (Inches)	Material	Constr. Cost (\$)	Complete (Year)	Site Study	Design	Cost Est.	Constr. Plan	Constr. Eng.	Constr. Inspc.
1	City of Pomona	Topographic Survey for Future Sewer Main Design Projects	2,710	8 & 10	VCP	---	2024		X	X			
2	City of Garden Grove	Sewer System Rehabilitation, Phase 1, Project 4	5,200	8 & 10	VCP	2,896,000	2024		X	X			
3	City of Manhattan Beach	Cycle 3 Sewer Main Improvements	1,160	6 & 8	CIPP & VCP	1,069,000	2024		X	X			
4	City of Manhattan Beach	Cycle 2 Sewer Main Improvements, including 25 point repairs	2,150	6 & 8	CIPP & VCP	1,165,800	2021		X	X			
5	City of Whittier	Sewer Main Phase 1	11,000	10	PVC	4,100,000	2020		X	X			
6	City of Monterey Park	Sewer Improvements along Atlantic Boulevard (Design & Construction Support)	4,020	12, 16, 18	HDPE & VCP	1,780,000	2020		X	X			
7	City of Manhattan Beach	Cyle 1 Sewer Main Replacement	430	24	CIPP	450,000	2019		X	X			X
8	City of Alhambra	Main Street Sewer Replacement	1,860	12	VCP	1,113,500	2019		X	X			
9	City of Norwalk	FY 2017/18 Sewer Main Repair Project	13,630	8-15	CIPP	1,468,000	2019		X	X			
10	City of Norwalk	FY 2016/17 Sewer Rehabilitation Project	7,400	8-12	CIPP	700,000	2018						X
11	City of Norwalk	FY 2015/16 Sewer Rehabilitation Project	8,900	8	CIPP	870,000	2017						X
12	City of Inglewood	Sewer Main Replacement, Phase I	5,300	8-15	VCP	1,500,000	2017		X	X			
13	City of Monterey Park	Sewer Spot Repairs & CIPP Installation	9,370	8	CIPP	707,000	2017						X
14	City of Alhambra	Valley Blvd./Almansor St. Sewer Replacement Project	3,210	30, 36	VCP	3,700,000	2016				X		X
15	City of Santa Monica	2014 Annual Wastewater Improvement Citywide	5,500	8	VCP	400,000	2015				X		X
16	City of Sierra Madre	Sewer Plan for West Grand View Avenue	400	8-10	VCP	241,000	2014		X	X			
17	City of Pomona	Sewer Pipeline Replacement Citywide (Phase II)	840	8	VCP	370,000	2014				X		X
18	Long Beach Water District	Cement Sewer Pipe Rehabilitation Replacement, Group 2	15,000	8	CIPP	315,000	2014				X		X
19	City of South Pasadena	Sewer Improvements on Arroyo Dr., Huntington Dr., Marengo Ave., and Meridian Ave.	4,200	4, 6, 8, 10	VCP	620,000	2012				X		X
20	City of Pomona	Sewer Replacement D Project No. 586-96-18	800	8	VCP	204,000	2012				X		X
21	City of Arcadia	Baldwin Avenue Sewer Capacity Improvement Project	900	15	VCP	500,000	2012						X
22	City of Irwindale	Martin Road Sewer Lift Station	---	---	---	450,000	2010				X		X
23	City of Lynwood	Sewer Main Replacement Project in the intersection of Imperial Hwy. & Long Beach Blvd.	400	8	VCP	230,800	2009		X	X			
24	City of Norwalk	Replacement of the Pumps at the Curtis & King Sewer Lift-Station	---	---	---	150,000	2008						
25	West Basin Municipal Water District	Anza Avenue Recycled Water Lateral at Sepulveda Boulevard	200	6	PVC	66,000	2007						
26	City of La Palma	Sewer Master Plan for the City of La Palma	---	NA	NA	---	2005	X					
27	City of Cypress	Modification of Sewer System at the Intersection of Lincoln Avenue and Moody Street	300	8	VCP	300,000	2005		X	X			
28	City of La Habra	Rehabilitation of Two Mobile Home Parks	300	6	VCP	1,500,000	2004		X	X			
29	City of Hermosa Beach	Reconstruction/Rehabilitation of Sewer on Pacific Coast Highway between 24th Street and Gould Avenue	1,000	8	VCP	1,200,000	2003		X	X			
30	City of Hermosa Beach	Sewer Reconstruction for the City's Loma Area Improvements Project	2,700	6, 8, 12	VCP	570,000	2003		X	X			
31	City of Pomona	Sewage Pump Station No. 3 Replacement	2,400	10, 21	VCP	2,300,000	2002				X		X
32	City of South Pasadena	Sewer Repairs on Huntington Drive, Diamond Avenue, and Glendon Way	1,000	6, 8	VCP	200,000	2000		X		X		X
33	City of South Pasadena	Construction Engineering Services for Sewer System Improvement Phase I	1,500	6, 8	VCP	300,000	1999					X	
34	West Basin Municipal Water District	Design of Birnie Line for the Carson Regional Recycling Water Plant	27,000	14	DIP	4,114,000	1999		X	X			
35	West Basin Municipal Water District	Design of PVC/Reclaimed Water Pipelines Water Mains for the El Segundo Lateral in the City of El Segundo	5,900	12	PVC	309,300	1998		X	X			
36	City of Arcadia	Deficiency Study of the Sewer and Drainage System and Preparation of Hydraulic Model Data Base for Trunk Sewer Lines	---	Various	Various	---	1998	X	X	X			
37	City of Compton	8-inch through 15-inch Diameter Sewer Mains	7,700	8, 15	VCP	1,200,000	1992		X	X			
38	City of Baldwin Park	8-inch Diameter Sewer from Merced Avenue along Ohio Street, Kenmore Avenue, and Private Property to Walnut Street	800	8	VCP	200,000	1992		X	X			
39	City of Compton	Prioritized Sewer Improvement Program for the entire 150 miles of the City's sewer system.	792,000	Various	Various	24,000,000	1991	X	X	X			
40	City of Cerritos	Construction of 7,700 feet of 6-inch Diameter Reclaimed Water Pipelines in Three Different Streets	7,700	6	PVC	350,000	1991		X	X			
TOTAL=			954,880	Feet 181 Miles		\$61,609,400							

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. Travel Charges for time during travel are not reimbursable.

C. Billing

1. All billing shall be done monthly 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.



EXHIBIT "B"

Proposal for On-Call Civil Engineering for Professional Consulting Services



CITY OF HUNTINGTON BEACH
ON-CALL ENGINEERING PROFESSIONAL CONSULTING SERVICES
COST PROPOSAL

HOURLY CHARGE RATE AND EXPENSE REIMBURSEMENT SCHEDULE

Position	Hourly Rates		
	2025	2026	2027
Principal-in-Charge	\$285	\$295	\$305
Project Manager	\$232	\$240	\$250
Engineer	\$180	\$185	\$190
Quality Assurance/Quality Control	\$232	\$240	\$250
AutoCAD Designer	\$125	\$130	\$135
Secretary	\$102	\$105	\$108
Surveyor (Two-Person Crew)	\$300	\$310	\$320

Reimbursable In-House Costs

Photo Copies	\$ 0.15/each
Blueprints	\$ 0.50/S.F
Vehicle mileage, between engineer's office and project site and/or client offices, will be billed at	\$ 0.70/mile

Other Reimbursables

Reproduction, special photograph, printing, and any other services performed by subcontractor will be billed at	cost + 15%
Postage, Delivery Service, Express Mail	cost + 15%



Steven Andrews Engineering
www.sandrewsengineering.com

RATE SCHEDULE

(Valid January 1, 2025 through December 31, 2025)*

PROFESSIONAL SERVICES

HOURLY RATE (\$)

Principal Engineer	250.00
Senior Engineer	240.00
Project Engineer	195.00
Senior Designer	140.00
Administrative Assistant	70.00

REIMBURSABLE EXPENSES

RATE

Reproduction	Cost + 15%
Consultant Services	Cost + 15%
Commercial Travel & Subsistence	Cost + 15%
Mileage	per IRS guidelines
Agency Fees	Cost

*Rates for subsequent years are subject to a 3% escalation rate



ASSOCIATES LLC
CONSULTING GROUNDWATER GEOLOGISTS

SCHEDULE OF CHARGES
Huntington Beach
March 2025 – December 2027

Professional Services	Hourly Rates
Principal Groundwater Geologist	\$308.00
Senior Groundwater Geologist	\$260.00
Staff Groundwater Geologist	\$225.00
Field Groundwater Geologist	\$153.00
Administrative/Clerical	\$115.00
Field Equipment Charges	
Pressure Transducers (water level & barometric pressure monitoring during pumping tests)	\$ 50.00/wk.
Electric Tape Water Level Probe	\$ 25.00/day
Field Water Quality Probe (T, pH, EC)	\$ 50.00/day

Litigation, Depositions and Testimony

Depositions and trial testimony are charged at twice the hourly rate (4-hour minimum/day).

Travel Time and Mileage

Travel time for meetings and/or to job sites will be charged at our standard hourly rates. Mileage is charged at the current IRS rate.

Administrative Fee

In-house costs for phone, e-mail, fax, regular postage, printing, copying, binding, and records retention, unless otherwise provided for in our project proposal Scope of Services, will be charged an Administrative Fee of total project labor charges multiplied by 2.5%.

Outside Services

Any services and materials not ordinarily furnished by RCS, including subcontracted services (i.e., water quality laboratory testing), delivery services, reproduction and printing, etc., are billed at cost + 15%. Reproduction costs for large format printing, and/or high volume reproduction and binding of hard copy reports performed in-house by RCS staff, will be billed at rates similar to comparable outside services.

Conditions

Invoices are issued at our option on a monthly basis or when the work is completed. A service charge of 1½% will be payable on any amount not paid within 30 days. Any attorney fees or other costs incurred in collecting delinquent charges shall be paid by the client.

Client will furnish rights-of-way to land as required for field visits and field operations, such as sampling or testing of water wells.

LABOR RATES

PERSONNEL

Professional Services	Current Rates July 1, 2024 to June 30, 2025	Effective July 1, 2025 to June 30, 2026	Effective July 1, 2026 to June 30, 2027
Engineering Assistant	\$131	\$135	\$139
Assistant Engineer	\$165	\$170	\$175
Associate Engineer	\$193	\$199	\$205
Senior Engineer	\$215	\$221	\$228
Principal Engineer	\$261	\$269	\$277
Senior Principal Engineer	\$289	\$298	\$307

Technical Staff			
GIS Technician	\$142	\$146	\$150
Senior GIS Technician	\$171	\$176	\$181

Support Staff			
Administrative	\$113	\$116	\$119

EXPENSES

Category	
Subconsultant / Other Direct Costs	Cost plus 5%

Notes:

1. Software usage costs are included in hourly rates shown.
2. AKEL Billing Rates are subject to an annual increase at the end of the fiscal year, to reflect labor rates and related cost adjustments.

HOURLY CHARGE RATE & EXPENSE REIMBURSEMENT SCHEDULE

PROFESSIONAL SERVICES

<u>CLASSIFICATION / TITLE</u>	<u>HOURLY RATE:</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Principal	\$ 258.00	\$ 258.00	\$265.00	\$272.00
Project Manager.....	\$ 243.00	\$ 243.00	\$250.00	\$257.00
Construction Manager	\$ 243.00	\$ 243.00	\$250.00	\$257.00
Quality Assurance/Quality Control	\$ 243.00	\$ 243.00	\$250.00	\$257.00
Inspector	\$ 229.00	\$ 229.00	\$235.00	\$242.00
Sr. Engineer	\$ 213.00	\$ 213.00	\$219.00	\$225.00
Engineer	\$ 194.00	\$ 194.00	\$200.00	\$206.00
Sr. Designer/Drafter	\$ 157.00	\$ 157.00	\$162.00	\$167.00
Designer/Drafter	\$ 157.00	\$ 157.00	\$162.00	\$167.00
Field Technician.....	\$ 130.00	\$ 130.00	\$134.00	\$138.00
Drafter	\$ 130.00	\$ 130.00	\$134.00	\$138.00

ADMINISTRATIVE

Administrative Clerk	\$ 92.00	\$ 92.00	\$95.00	\$98.00
Word Processor/Administration Support.	\$ 106.00	\$ 106.00	\$109.00	\$112.00
Graphic Designer/Survey Research.....	\$ 190.00	\$ 190.00	\$196.00	\$201.00

Reproduction, special photography, postage, delivery services, express mail, out-of-area telephone calls, printing, and any other services performed by subcontractors, will be billed at cost plus 15%.

REIMBURSABLE IN-HOUSE COSTS

Photo Copies (B&W 8.5"x11").....	\$ 0.28/Each
Photo Copies (B&W 11"x17")	\$ 0.51/Each
Color Copies (up to 8.5"x11").....	\$ 2.03 /Each
Color Copies (to 11"x17").....	\$ 3.38 /Each
Large Format Copies	\$ 1.35/S.F.
Mileage.....	\$ 0.72/Mile
Compact Disks.....	\$16.50/Each

The above hourly rate shall apply for invoicing for progress payments and for any authorized extra work for work associated with the enclosed proposal.

ENGINEERING SERVICES**ENGINEERING AND PROFESSIONAL SERVICES**

Principal Geotechnical Engineer/Principal Engineering Geologist	\$	250.00	Per Hour
Senior Hydrogeologist	\$	250.00	Per Hour
Senior Geotechnical Engineer/ Senior Engineering Geologist/Senior Registered Engineer	\$	195.00	Per Hour
Registered Civil Engineer	\$	150.00	Per Hour
Project Manager	\$	145.00	Per Hour
Senior Field Engineer	\$	165.00	Per Hour
Staff Engineer/Staff Geologist/Field Engineer	\$	150.00	Per Hour
Laboratory Manager	\$	120.00	Per Hour
Administration	\$	65.00	Per Hour
GIS Technician	\$	140.00	Per Hour
Drafter/CAD Technician	\$	85.00	Per Hour
Principal Geologist Forensic/Field and Office	\$	330.00	Per Hour
Principal Geotechnical Engineer Forensic (Field and Office)	\$	385.00	Per Hour
Senior Engineer Forensic (Field and Office)	\$	275.00	Per Hour
Field Engineer Forensic	\$	220.00	Per Hour
Principal Geotechnical Engineer and Geologist Expert Witness and Litigation Tasks	\$	385.00	Per Hour
Senior Geotechnical Engineer/Senior Registered Engineer Expert Witness and Litigation Tasks	\$	330.00	Per Hour

GEOTECHNICAL INVESTIGATIVE/PRE-CONSTRUCTION PHASE**FIELD DRILLING AND TESTING**

*Field Testing/Sampling Helper (Technician - Prevailing Wage)	\$	130.00	Per Hour
*Surcharge of \$10 per/hr. for projects under PLA/CWA agreements			
Drilling – Hollow Stem Auger (6-8" diameter) (subject to adjustment)	\$	6600.00	Per Day
Drilling – Mud Rotary Wash Drilling (subject to adjustment)	\$	7150.00	Per Day
Drilling – Cone Penetration Test (subject to adjustment)	\$	7700.00	Per Day
Coring- Pavement (Crew + Equipment, including rapid set concrete or cold AC patching)	\$	280.00	Each Core
Saw-Cut – R-value Sampling (Crew + Equipment, including rapid set concrete or cold AC patching)	\$	390.00	Each Location
Sample Pickup (truck + driver, within a 50-mile radius from GAI's office)	\$	170.00	Per Round
GPR Survey	\$	3850.00	Per Day
Percolation Test (Falling Head Method - Max. depth 15') (Min. 2 tests, \$9,900)	\$	4950.00	Per Test

INSPECTION SERVICES**GEOTECHNICAL MONITORING****DURING CONSTRUCTION TESTING AND INSPECTION SERVICES**

*Soil Technician / Field Engineer (Prevailing Wage)	\$	140.00	Per Hour
*Surcharge of \$10 per/hr. for projects under PLA/CWA agreements			
Soils/Materials Inspector (Regular Wage)	\$	100.00	Per Hour
Technician / Field Engineer – Pile and Tieback Monitoring & Inspection	\$	140.00	Per Hour
Deputy Grading Inspector (City of LA)	\$	170.00	Per Hour
Nuclear Gauge Equipment	\$	80.00	Per Day

MATERIALS SPECIAL INSPECTION

*Inspector/Concrete, Batch Plant Inspection	\$	140.00	Per Hour
*Inspector/Masonry	\$	140.00	Per Hour
*Inspector/Welding/Steel/Tagging & Sampling	\$	140.00	Per Hour
*Inspector/Post-Tension	\$	140.00	Per Hour
*Inspector/Fireproofing	\$	140.00	Per Hour
*Inspector/UT	\$	150.00	Per Hour
*Inspector/Pull Test	\$	150.00	Per Hour
*Surcharge of \$10 per/hr. for projects under PLA/CWA agreements			
Per Diem Shop Inspection (if the shop is more than 50 miles from the project site)	\$	TBD	

REPORTS

Soils (Geotechnical/Geohazard Evaluation) Report	Varies - Lump Sum
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REPORTS

DSA-293 Report	\$ 830.00	Ea. Cert.
DSA-291 Report	\$ 830.00	Ea. Cert.
Final Grading / Compaction Report (Comprehensive-Minimum)	\$ 3300.00	Each
Pad Certificate Report/Letter	\$ 1650.00	Each
Utility Trench Compaction Report – (Length <4000 L.F.)	\$ 2750.00	Each
Wall Backfill Report	\$ 2750.00	Each
Monthly Interim In-Grading Report	\$ 1650.00	Each
Pile/Shoring Monitoring Report (Final)	\$ Quote	Each
Plan Review (Grading/ Foundation)	\$ 2750.00	Each
Materials Testing Final Verification Letter	\$ 1100.00	Each Project
Laboratory Report Review Letter (Stamped)	\$ 830.00	Each

LABORATORY TESTING**SOIL AND AGGREGATE****CLASSIFICATION & PHYSICAL CHARACTERISTICS**

ID	ASTM	CTM			
T101	D2937	CT212	Unit Weight	\$ 32.50	Each
T102	D4829		Expansion Index	\$ 155.00	Each
T103	C117, D1140		Finer than #200 Wash	\$ 65.00	Each
T104	D422, C136	CT202	Sieve Analysis- Coarse & Fine Including wash	\$ 192.50	Each
T105	D422, C136	CT202	Sieve Analysis- Coarse Aggregate	\$ 147.50	Each
T106	D422, C136	CT202	Sieve Analysis- Fine Including Wash	\$ 165.00	Each
T107	D422	CT203	Particle-Size Distribution - Sieve Analysis + Hydrometer Combined	\$ 247.50	Each
T108	D422	CT203	Hydrometer Analysis only	\$ 165.00	Each
T109	D4318	CT204	Atterberg Limits LL, PL, & PI of Soils	\$ 155.00	Each
T110	D2435		Consolidation (without Time Rate)	\$ 237.50	Each
T111	D2419	CT217	Sand Equivalent Value of Soil and Fine Aggregate (Set of Three)	\$ 137.50	Each Set
T112	C127	CT206	Specific Gravity and Absorption (Coarse Aggregate)	\$ 110.00	Each
T113	C127	CT206	Absorption Only, Coarse Aggregate	\$ 82.50	Each
T114	C128	CT207	Specific Gravity and Absorption (Fine Aggregate)	\$ 197.50	Each
T115	C128	CT207	Absorption Only, Fine Aggregate	\$ 110.00	Each
T116	AASHTO T100	CT209	Specific Gravity (Soil) by Hydrometer (Water Pycnometer)	\$ 175.00	Each
T117	D2216	CT226	Water Moisture Content	\$ 32.50	Each
T118	D3080		Direct Shear (3 Points)	\$ 330.00	Each
T119	D3080		Direct Shear Remolded sample (3 points)	\$ 375.00	Each
T120	D1557-A, B		Maximum Density 4 in. Mold Passing No.4 or 3/8 in. Sieve	\$ 192.50	Each
T121	D1557-C		Maximum Density 6 in. Mold Passing 3/4 in. Sieve	\$ 202.50	Each
T122	D2166	CT221	Unconfined Compressive Strength of Cohesive Soil	\$ 175.00	Each
T123	D2844	CT301	R-Value, Untreated Material (3 Points)	\$ 357.50	Each
T124	D2844	CT301	R-Value, Treated Material	\$ 385.00	Each
T125	D4791	CT235	Flat and Elongated Particles	\$ 275.00	Each
T126	D3744	CT229	Durability Index (fine and coarse) in Aggregate	\$ 275.00	Each

SOIL AND AGGREGATE

CLASSIFICATION & PHYSICAL CHARACTERISTICS

ID	ASTM	CTM			
T127	D3744	CT229	Durability Index (fine or coarse) in Aggregate	\$ 175.00	Each
T128	C142		Clay Lumps and Friable Particles in Aggregate	\$ 165.00	Each
T129	C40	CT213	Organic Impurities in Fine Aggregates for Concrete	\$ 92.50	Each
T130	D5821	CT205	Percentage of Crushed Particles	\$ 197.50	Each
T131	C131	CT211	Los Angeles Rattler Test, (Abrasion up to 1-1/2")	\$ 330.00	Each
T132	C535	CT211	Los Angeles Rattler Test, (Abrasion Large-up to 2-1/2")	\$ 385.00	Each
T133	C88	CT214	Sodium/Magnesium Sulfate Soundness of Aggregate, 5-cycles	\$ 435.00	Each
T134		CT216	Relative Compaction of Soils & Aggregates using California Impact Apparatus	\$ 265.00	Each
T135		CT227	Cleanliness Value of Coarse Aggregate	\$ 247.50	Each
T136	D558		Moisture-Density Relations of Soil-Cement Mixtures	\$ 192.50	Each
T137	D1633-A		Compressive Strength of Molded Soil-Cement Cylinders using 4 in. Mold	\$ 72.50	Each
T138	D4546		One-Dimensional Swell or Collapse of Soils	\$ 165.00	Each
T139			Shelby Tube Cutting, Remolding or Trimming Specimens for testing	\$ 32.50	Each
T140	D1883		California Bearing Ratio, Maximum Density test separate charge	\$ Quote	Each
T141	D2435		Consolidation (with time rate for 2 loads)	\$ 307.50	Each
T142	AASHTO	CT234	Fine Aggregate Angularity	\$ 242.50	Each
T143	D2850		Unconsolidated-Undrained Triaxial Compression	\$ 182.50	Each

CHEMICAL PROPERTIES OF SOILS

ID	CTM				
T190	CT643		Resistivity	\$ 82.50	Each
T191	CT643		pH	\$ 72.50	Each
T192	EPA 300.0		Sulfate Content	\$ 100.00	Each
T193	EPA 300.0		Chloride Content	\$ 100.00	Each
T194	CT643 EPA 300.0 EPA 300.0		Corrosivity Series	\$ 305.00	Each

CONCRETE

ID	ASTM	CTM			
T201	C39	CT521	Compression Tests, 6x12 and/or 4x8 Cylinders, including Holds	\$ 42.50	Each
T202	C495		Compression, Lightweight Insulating Concrete	\$ 132.50	Each
T203	C42, C39		Concrete Cores Compression Test (excludes sampling)	\$ 87.50	Each
T204	C42		Drilling Cores from Shotcrete Panel (Lab)	\$ 137.50	Each
T205	C109	C515	Compression, 2"x2"x2" Cube Specimen	\$ 60.00	Each
T206	C496		Splitting Tensile Strength 6"x12" Cylinder	\$ 165.00	Each
T207	C78	CT523	Flexural Strength Test (6"x6"x21" Beam)	\$ 166.00	Each
T208	C157		Drying Shrinkage (Set of 3 bars, 4 readings, up to 90-days)	\$ 527.50	Each set
T209	C39		Unit Weight of Concrete Cylinders	\$ 55.00	Each

CONCRETE						
ID	ASTM	CTM				
T210			Review Existing Mix Design	\$	110.00	Each
T211			Drilling Cores from Shotcrete Panel (Field)	\$	220.00	Each
MATERIALS TESTING						
ID	ASTM	CTM	UBC			
T301	D2216	7-6	Fireproofing Density Test	\$	85.00	Each
T302			Mechanically Spliced Reinforcing Tensile Test up to size No.11	\$	360.00	Each
T303	A416		Pre-Stress Still Strand (7 wire)	\$	385.00	Each
T304	A615, A706		Reinforcing Tensile or Bend Up to No.8	\$	75.00	Each
T305	A615, A706		Reinforcing Tensile or Bend No.9 to 11	\$	100.00	Each
T306	A615, A706		Reinforcing Tensile or Bend No.11 to 14	\$	200.00	Each
T307	N/A		Welding Procedure Review	\$	110.00	Each
T308	F606		Anchor Bolts, Studs, or Threaded Rods Tensile Test under 100,000 lbf	\$	265.00	Each
T309	F606, F3125		Bolt A325 or A490 Wedge Tensile and Hardness up to 3/4"	\$	165.00	Each
T310	F606, F3125		Bolt A325 or A490 Wedge Tensile up to 1-1/8" in diameter, and Hardness	\$	250.00	Each
T311	F606, F3125		Bolt A325 or A490 Wedge Tensile up to 1-1/4" in diameter, and Hardness	\$	250.00	Each
T312	F606, F3125		Bolt A325 or A490 Wedge Tensile up to 1-3/8" in diameter, and Hardness	\$	255.00	Each
T313	F606, F3125		Bolt A325 or A490 Wedge Tensile up to 1-1/2" in diameter, and Hardness	\$	285.00	Each
T314	F606, A194		Nut - Hardness and Proof Load under 100,000 lbf	\$	70.00	Each
T315	F606, A194		Nut- Hardness and Proof Load Test 100,000-120,000 lbf	\$	85.00	Each
T316	F436		Washer- Hardness	\$	55.00	Each
HOT MIX ASPHALT TESTING						
ID	ASTM	CTM				
T401	D1561	CT304	Laboratory Test Maximum Density (LTMD), Hveem	\$	310.00	Each
T402	D1560	CT304, CT366	Stabilometer Value	\$	360.00	Each
T403		CT305	Stability - Swell	\$	Quote	Each
T404		CT308	Specific Gravity & Density of Core	\$	110.00	Each
T405	D2041	CT309	Theoretical Maximum Specific Gravity & Density (Rice)	\$	260.00	Each
T406		CT370	Moisture Content by Microwave Oven	\$	80.00	Each
T407	D5444	CT202	Sieve Analysis of Extracted Aggregate Sample	\$	190.00	Each
T408	C136	CT202	Sieve Analysis of Bin Aggregate Sample, each	\$	80.00	Each
T409	C136	CT202	Sieve Analysis of Combined Aggregate Sample	\$	250.00	Each
T410	D6307	CT382	Asphalt Content by Ignition Oven (Bitumen Content)	\$	260.00	Each
T411	D6307	CT382	Asphalt Content by Ignition Oven (Correction Factor)	\$	390.00	Each
T412	D1188	CT308	Unit Weight - Coated, Molded Specimen or Cores	\$	110.00	Each
T413	D2726, D6926		Compacted Maximum Density - MARSHALL	\$	260.00	Each
T414	D2172		Extraction, % Asphalt (Reflux) including wash and solvent charge	\$	430.00	Each
T415	D2216	CT226	Emulsion Moisture Content by Oven	\$	70.00	Each
T416	AASHTO T59	CT331	Residue by Evaporation	\$	220.00	Each

HOT MIX ASPHALT TESTING					
ID	ASTM	CTM			
T417	D3910		Wet Track Abrasion Test (WTAT)	\$ Quote	Each
MASONRY TESTING					
ID	ASTM	UBC			
T501	C140		Compression Test of CMU Block (gross)	\$ 105.00	Each
T502	C140		Absorption & Moisture Content	\$ 90.00	Each
T503	C426		Linear Shrinkage	\$ 270.00	Each
T504	C140		Unit Weight	\$ 90.00	Each
T505	C140		Dimensional Measurements	\$ 60.00	Each
T506	C140		Compression Test of Masonry Core	\$ 105.00	Each
T507	C39, C780	21-16	Compression Test of 2" x 4" Mortar Cylinder	\$ 60.00	Each
T508	C1314	21-17	Compression Test of Composite Prism	\$ 270.00	Each
T509	C1019	21-18	Compression Test of 3" x 3" x 6" Grout	\$ 105.00	Each
T510	CBC 2105A.4		Shear on Masonry Cores, 2 Faces, 4" or 6" Cores	\$ 195.00	Each
T511			Saw Cutting Coupons, or trimming from Masonry Unit	\$ 45.00	Each
T512			GPR Scanning for Reinforcement	\$ Quote	Each
T513			Masonry Wall Coring	\$ 330.00	Each
T514			Masonry Wall Coring above 5 feet from floor	\$ Quote	Each
T515	C482		Veneer Bond Strength Shear Test-Onsite	\$ Quote	Each

MINIMUM CHARGES FOR CONSTRUCTION PHASE INSPECTIONS

- All technicians and inspectors are based on a minimum of four (4) hours. Over four hours shall be a minimum of eight (8) hours for inspectors or technicians. If an inspector or technician is scheduled to perform a service, shows up at the project site, and no work is performed, a four-hour (4) charge will apply and be referred to as a show-up charge.

TRAVEL & MILEAGE

- No travel time and mileage costs for engineering staff and materials/special inspection personnel. Per the regulations of Department of Industrial Relations (DIR-Public Works Manual 2016), for soils technicians performing construction inspection and testing carrying a nuclear gauge device travel time will be charged at contractual rate, from GAI's closest office and for round trip drive time (Portal to Portal).
- For regular/non-prevailing jobs, a round-trip mileage cost equal to \$0.75 per mile, calculated from GAI's office to the project site, will be charged.
- The travel time and mileage fee may be subject to change per the negotiation with the client and written approval.

SCHEDULING & CANCELLATIONS

- A 24-hour notice is required when scheduling an inspection or technician. For same day scheduling and for after 3:00 pm the preceding day, the inspector/technician will be deployed to the site if a technician is available.

PREVAILING WAGE

- Our rates will increase proportionally every July 1 in accordance with the wage listed by the Department of Industrial Relations which is tied to Operating Engineers Local 12 documented annual increases plus corresponding changes in our general administration and overhead expenses. These adjustments shall become agreed upon basis for charges by GAI to Client.

LABORATORY TESTING

- Material samples will be discarded after testing, unless notification by Client has been made to GAI's laboratory prior to testing. If Client requires samples be retrieved after testing or stored at GAI's laboratory for an extended duration of time, arrangements can be made at no additional cost to the client.

TERMS OF PAYMENT

- Invoices shall be deemed delinquent if not paid within thirty (30) days from date of invoice and will be subject to an additional charge of 1.5% of the unpaid balance for each month of delay. GAI reserves the right to terminate its services to Client without notice if all invoices are not paid currently. In case of service termination, the entire amount accrued for all services performed shall immediately become due and payable. Client waives any, and all claims against GAI, its subsidiaries, affiliates, servants, and agents, for termination of work pursuant to this paragraph.



JMD

HOURLY RATE SCHEDULE

<u>JMD Personnel</u>	<u>Position/Title in Company</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>
<u>Off-Site</u>				
Juan M. Diaz	Principal/Rail/Transit	\$279.00	\$287.00	\$296.00
Peter Kim	QA/QC Manager	\$260.00	\$268.00	\$276.00
Jack Shah	QA/QC Manager	\$256.00	\$264.00	\$272.00
Lan Saadatnejadi	Project Engineer - Highways	\$179.00	\$184.00	\$190.00
Algis Marciuska	Sr. Project Manager/Technical Adv.	\$184.00	\$190.00	\$196.00
Steven Itagaki	Sr. Project Manager - Traffic	\$205.00	\$211.00	\$217.00
Ivan Salvatierra	Sr. Project Manager - Civil	\$205.00	\$211.00	\$217.00
Sherri Terrell	Marketing Manager	\$118.00	\$122.00	\$126.00
Gilbert Figueroa	Project Engineer	\$133.00	\$137.00	\$141.00
Luis Castañeda	Assistant Project Manager	\$139.00	\$143.00	\$147.00
Deepak Solanki	Project Manager	\$127.00	\$131.00	\$135.00
Greg Andrade	Sr. Designer	\$102.00	\$105.00	\$108.00
Dana Dardoon	Engineer III	\$97.00	\$100.00	\$103.00
Chapman Lee	Engineer II	\$93.00	\$96.00	\$99.00
Rafael Rincon	Engineer II	\$79.00	\$81.00	\$83.00
Albert Cisneros	Engineer I	\$83.00	\$85.00	\$88.00
Gabriel Macias	Engineer I	\$83.00	\$85.00	\$88.00
Jasmine Felix	Administrative/Clerical	\$77.00	\$79.00	\$81.00
<u>On-Site</u>				
Mike Paieri	Sr. Construction Inspector	\$121.00	\$125.00	\$129.00
Deepak Solanki	PM/Plan Checker	\$136.00	\$140.00	\$144.00
Henry Completo	Development Reviewer	\$131.00	\$135.00	\$139.00
Frank Sanchez	Project/Construction Manager	\$135.00	\$139.00	\$143.00
Tom Geary	Building Inspector	\$121.00	\$125.00	\$129.00
Rick Barajas	Sr. Construction Inspector	\$126.00	\$130.00	\$134.00
Thomas Geary	Sr. Construction Inspector	\$100.00	\$103.00	\$106.00
John Moon	Construction Inspector I	\$88.00	\$91.00	\$94.00
<u>Reimbursable Costs</u>				
Photo Copies (B&W)		\$0.12/Each		
Photo Copies (Color)		\$0.39/Each		
Bond Prints (24"x36")		\$3.00/Each		
Mileage*		\$0.70/Mile		

***Assumptions:**

Rates are effective January 1, 2025 through December 31, 2027 as noted
Mileage rate per IRS.



Hayward (Corporate) | Fresno | Los Angeles | Sacramento | F. (408) 988-0101 Utility Locating - Ground Penetrating Radar (GPR) - Electromagnetic Pipe Locators Structural Concrete Scanning - Potholing Vacuum Excavation - CCTV Pipe Inspection Mobile LiDAR Scanning - 3D Scanning - 3D Utility Mapping - Gas Standby by - www.besstestlab.com
DBE 34267 - CSLB 817532 - DIR 100007058 - MBE 1208095 - SBE 38052 - SLEB 18-00111 - ISN 400231830

BESS Utility Solutions Rate Schedule 2025-2027

Services	Houlyr Rate	Night/OT Rate	Emergency Rate
Project Management	\$225		
Project Coordination	\$169		
Utility Foreman	\$219		
Licensed Professional (Civil / Surveyor)	\$231		
LiDAR / UAV / Data Processing and Extraction	\$146		
CAD Technician	\$135		
Reports / Sketches / Clerical	\$124		
Administrative Support	\$124		
Data Processing and Extraction	\$152		
Utility Location & Gas Transmission Standby			
1-Person Utility Designation w/ GPR & EM Pipe Locator	\$219	\$351	\$439
2-Person Utility Designation w/ Multi Antenna GPR	\$439	\$702	\$878
1-Person Gas Transmission Stand by w/truck and equipment	\$231	\$369	\$461
Potholing and Vacuum Excavation			
2-Person Utility Potholing w/ air vacuum truck	\$383	\$497	\$612
1-Person Utility Potholing w/ hydro vacuum truck	\$368	\$478	\$589
2-Person Utility Potholing w/ hydro vacuum truck	\$460	\$598	\$737
2-Person Utility Potholing w/ Air OX vacuum truck	\$514	\$669	\$823
2-Person Key Hole & Surface Restoration w/ equipment	\$371	\$483	\$594
1-Person Dump Truck Crew w/equipment	\$276	\$358	\$441
Traffic Control			
1-Person Traffic Control w/ arrow truck	\$189	\$246	\$303
2-Person Traffic Control w/ arrow truck	\$301	\$391	\$481
1-Person Flagger / TC Helper	\$163	\$212	\$261
GPR Concrete Scanning and Coring			
1-Person GPR Concrete Scanning w/ equipment	\$225	\$293	\$360
1-Person GPR Concrete Scanning w/ equipment Prevailing Wage	\$302	\$392	\$483
1-Person Saw Cutting & Coring w/ equipment	\$180	\$234	\$288
1-Person Saw Cutting & Coring w/ equipment Prevailing Wage	\$197	\$256	\$315
CCTV Camera – Video Inspection			
2-Person CCTV Pipe Inspection w/ Main Line Crawler Unit	\$387	\$503	\$619
2-Person CCTV Pipe Inspection w/ Lateral Line Push Unit	\$375	\$487	\$600
2-Person Hydro Flushing w/ hydro vacuum truck	\$460	\$598	\$737
Surveying and Mapping			
1-Person Survey Crew - GPS / Robotic / 3D Scanner	\$228	\$297	\$366
2-Person Survey Crew - GPS / Robotic / 3D Scanner	\$325	\$423	\$520
2-Person Survey Crew - Mobile LiDAR Scanner	\$422	\$549	\$675
2-Person Survey Crew - UAV Data Collection	\$325	\$423	\$520

NOTE: Rates are portal to portal from our nearest office. Mobilization may apply for distances further than 50 miles from nearest office.

Additional Cost

1-Person Utility Support Truck	\$186	\$241	\$297
1-Person General Labor Hourly Rate	\$163	\$212	\$173
1-Person Operator Hourly Rate	\$208	\$271	\$333
1-Person Utility Truck Mobilization Rate	\$128		
Air/hydrovac Utility Truck Mobilization Rate	\$337		
Hydrovac Utility Truck Mobilization Rate	\$383		
Large Specialty Utility Truck Mobilization Rate	\$429		
Traffic Control Plans – non-stamped (per sheet)	\$450		
Traffic Control Plans – Stamped (per sheet)	\$675		
Mileage, if applicable	Current IRS Rate		
Lodging and meals, applies when over 50 miles	Current GSA Rate		
Remote Hose Per 25' Section (3" 4" or 6" 10")	\$45/Each		
Off site disposal of Non-Hazardous Material	\$1,500/Load		
Off-Road Vehicle Rental	Cost +10%		
Outside reproductions, shipping, services and consultants	Cost +10%		
Cost of specialty field supplies, rental equipment, bridge tolls etc.	Cost +10%		

Conditions

Work site must be safe and prepared in advanced prior to scheduling our crews (if managed by client)
Show up cost is a 4 hour minimum per our hourly rates (Per National Pipe Line agreement)
Minimum charge is 4 hours
Over time applies after eight hours of work on site and weekends Emergencies and Sundays are double time
Rates above apply to day shift (typical BESS day shift hours are 7:00 AM to 3:30 PM).
Night rate applies outside of normal shift hours.
Overtime after 8hrs on site up to 12hrs and Saturdays
Overtime after 12hrs, Emergency, Sundays and Holidays
3% escalation may apply for multi year contracts