

---

**Corporate Headquarters**

3788 McCray Street | Riverside, CA 92506 | T: 951.686.1070 | F: 951.788.1256

**Desert Region**

36-951 Cook Street #103 | Palm Desert, CA 92211 | T: 760.568.5005 | F: 760.568.3443

W.O.: 009996

March 4, 2014

Mr. Karl Drew, General Manager  
**CRESTLINE VILLAGE WATER DISTRICT**  
P.O. Box 3347  
Crestline, California 92325-3347

RE: Proposal for Engineering Services during Construction of the Zurich II Tank Project

Dear Karl:

Pursuant to the District's request, we have prepared this letter proposal for the subject project's specified engineering services. This letter proposal is comprised of the following sections:

1. Project Understanding
2. Scope of Work
3. Project Team

## **SECTION 1: PROJECT UNDERSTANDING**

### **Overview**

Crestline Village Water District (District) recently received bids for the construction of the 0.20 MG Zurich II tank. The construction support work will include submittal reviews, geotechnical inspection and testing, coating inspection and miscellaneous support services as outlined below. It is anticipated that the District will contract directly with the geotechnical firm and the coating inspection firm based on the recommendation provided in this proposal. Webb will provide submittal review and construction support services as needed as the project progresses. The District will provide services not specifically listed in this proposal such as inspection of the tank construction, appurtenances and site work.

## **SECTION 2: SCOPE OF WORK AND BUDGET**

### **General**

Webb shall perform the following Scope of Services for the Zurich II Tank Project.

#### **1. Submittal Review and Construction Support - Engineering**

- Review tank design calculations for conformance to the specification requirements.
- Review tank construction shop drawings and details for conformance to the specification requirements.
- Review other material submittals for conformance to the specification requirements.
- Review RFI's and change orders.
- Review compaction testing and inspection reports for conformance to the specification requirements.
- Assist the District in Contract administration and initial progress payment reviews
- Attend the pre-construction conference.
- Provide inspection services during construction of the tank ring wall, ten days of inspection time are budgeted.
- Attend site meetings/visits. Three meetings/visits are budgeted.
- Attend final site walk-through / inspection and develop punch list.
- Coordinate construction activities and inspection requirements.
- Assist the District during construction, as requested by the District.
- Provide Survey Support during construction
  - Set site benchmark
  - Stakes for construction of the ring wall
  - Confirm ring wall form elevations prior to pouring foundation
  - Confirm ring wall/tank floor elevation prior to filling tank
  - Provide lines and grades for grading work around the tank

Webb Associates proposes to provide the above services during the construction phase of the project for \$77,740. The District should plan on a contingency of 10% or \$7,770 for additional engineering work should unforeseen circumstances arise during construction.

Based upon the project's Scope of Work, our engineering services budget is as follows:

<u>ENGINEERING SERVICES TASK</u>	<u>TOTAL ESTIMATED ENGINEERING SERVICES BUDGET<sup>(1)</sup></u>
1. Review Tank Calculations and Drawings.....	\$19,050
2. Review Submittals .....	\$7,620
3. Review RFI's .....	\$6,474
4. Construction Inspection and Support.....	\$25,312
5. Construction Survey and Support.....	\$12,018
6. Attend Kick off Meeting, Site meetings and Final Walk .....	\$6,016
7. Expenses .....	\$1,250
<b>Total .....</b>	<b><u>\$77,740</u></b>

**2. Geotechnical Observation and Testing**

Soils Exploration Company, Inc. proposes to provide inspection services during over-excavation and re-compaction of the site, materials testing for the on-site soils and concrete poured for the foundation. Webb estimates the inspection hours required for this project at 42 hours, plus budget for other items such as attendance at the pre-construction meeting, laboratory testing and reports. Based on the proposal attached in Appendix A, the District should execute a contract for \$5,530 to Soils Engineering Company, Inc. for geotechnical observation and testing. The District should plan on a contingency of 10% or \$550 for additional geotechnical work should unforeseen circumstances arise during construction.

**3. Coating Inspection**

CSI Services, Inc. proposes to provide comprehensive coating inspection services during the coating of the tank shell. CSI proposes a budget of \$14,250 for the project based on 19 days of inspection time, which is a typical and reasonable time to complete the work based on past projects. The specification allows for 25 working days for coating inspection, thereafter, the contractor shall pay for inspection services. Therefore, Webb recommends that the District budget an additional \$4,500 contingency for coating inspection up to the specification allowable.

---

<sup>(1)</sup> The amounts indicated for each individual project task are estimated budget amounts; and accordingly, the actual amounts may be more or less than shown. However, the overall total for engineering services as described in the Scope of work will not be exceeded without written authorization from the District.

**4. Contract Administration and General Project Inspection**

As with past projects, CVWD staff will handle the contract administration, final partial pay estimates, general project inspection support, coordination of contractor and support services and overall construction management.

**SUMMARY OF RECOMMENDED BUDGET**

For final project budgeting based on our experience with implementation of previous projects of similar size and complexity, Webb recommends that the District execute the following contracts and plan for the contingencies per the following table.

Task(s)	Consultant	Contract Amount	Contingency
Engineering Support	Webb Associates	\$77,740	\$7,770
Geotechnical Support	Soils Exploration Company	\$5,530	\$550
Coating Inspection	CSI Services, Inc.	<u>\$14,250</u>	<u>\$4,500</u>
Totals		\$97,520	\$12,820

A copy of the proposals from Soils Exploration Company and CSI Services Inc. are attached.

**Additional Services**

Services which are not specifically identified herein as services to be performed by Webb Associates are considered Additional Services for the purposes of this Proposal. The District may request that Webb Associates perform services which are considered Additional Services.

**SECTION 3: PROJECT TEAM**

The Webb Associates project team is anticipated to be as follows:

NAME	TITLE	PROJECT ROLE
Wally Franz, P.E.	Vice President	Principal-In-Charge
Dave Algranti, P.E.	Chief Design Engineer	QA/QC
Bradley Sackett, P.E.	Senior Engineer	Project Manager
Seungwon Won, P.E.	Senior Engineer	Project Engineer
Flo Smith	Project Coordinator	Administrative Support

Mr. Karl Drew, General Manager  
**CRESTLINE VILLAGE WATER DISTRICT**  
March 4, 2014  
Page 5 of 5

Brad Sackett will be the day to day contact and is available at either (951) 686-1070 or [brad.sackett@webbassociates.com](mailto:brad.sackett@webbassociates.com) to address any questions or concerns over the course of the project.

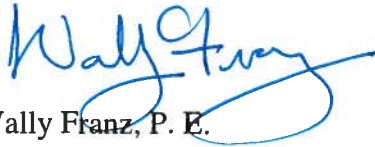
Should you have any questions or require additional information, please contact our office.

Sincerely,

**ALBERT A. WEBB ASSOCIATES**



Bradley A. Sackett, P. E.  
Senior Engineer



Wally Franz, P. E.  
Vice President

BAS/WF:fs

Enclosures: Fee Schedule 31  
Soils Exploration Inc. proposal  
CSI Services, Inc. proposal

## FEE SCHEDULE

**RATES  
\$/HOUR**

**CLASSIFICATION**

**Engineers/Project Manager/Planners/Scientist/  
Assessment/Special Tax Specialists/Landscape Architects/Designers**

Principal II.....	175.00
Principal I.....	169.00
Senior III .....	157.00
Senior II .....	155.00
Senior I .....	146.00
Associate III .....	138.00
Associate II .....	124.00
Associate I .....	118.00
Assistant V .....	101.00
Assistant IV .....	97.00
Assistant III .....	89.00
Assistant II .....	76.00
Assistant I .....	62.00

**Survey Services**

3-Person Survey Party.....	242.00
2-Person Survey Party.....	212.00
1-Person Survey Party.....	130.00
Director of Survey.....	150.00
Manager of Field Operations.....	120.00
Survey Technician II.....	104.00
Survey Technician I .....	86.00

**Inspection Services**

Construction Manager .....	150.00
Inspector II .....	97.00
Inspector I .....	92.00

**Administrative Services**

Project Coordinator.....	86.00
Administrative Assistant III .....	72.00
Administrative Assistant II.....	62.00
Administrative Assistant I .....	46.00

**Other Direct Expenses**

Incidental Charges .....	Cost
Postage and Telephone .....	Cost
In-house Prints, Copies and Delivery .....	Cost
Travel and Subsistence .....	Cost
Expert Witness Testimony and Preparation .....	375.00/Hour
Consultant Time Relative to Legal Action .....	300.00/Hour
GIS License Fee.....	37.00/Hour
Subcontracted Services .....	Cost + 15%
Survey/Inspector Vehicle .....	0.77/Mile
Mileage.....	0.66/Mile

NOTE: All rates are subject to change based on annual inflation and cost of living adjustments.

\*A FINANCE CHARGE of one and one half percent (1-1/2%) per month (18% per year) will be added to any unpaid amount commencing thirty (30) days from date of invoice. A mechanic's lien may be filed for any invoice remaining unpaid after thirty (30) days from date of invoice.



P. O. Box 801357  
Santa Clarita, CA 91380  
Phone: 877.274.2422  
Fax: 661.775.7628  
[www.CSIServices.biz](http://www.CSIServices.biz)

**Providing Quality Technical Services to the Coating Industry**

**Via Email**

January 6, 2014

Brad Sackett, PE  
Senior Engineer  
Albert A. Webb Associates  
3788 McCray Street  
Riverside, CA 92506

Email: [brad.sackett@webbassociates.com](mailto:brad.sackett@webbassociates.com)  
Phone: 951.686.1070  
Fax: 951.788.1256

**Subject: Proposal 1407 - Coating Inspection Services**

**Re: New Zurich II Tank Project, CVWD**

Dear Brad:

CSI Services, Inc. (CSI) is pleased to submit this proposal to support the above referenced project for the Crestline Valley Water District. Our Scope of Services and Fee Schedule are attached.

Thank you for this opportunity and should you have any questions or comments, I can also be reached through e-mail at [psweeney@CSIServices.biz](mailto:psweeney@CSIServices.biz) or cell 661-478-8900.

Sincerely,  
CSI Services, Inc.

A handwritten signature in blue ink that reads 'Patrick Sweeney'.

Patrick Sweeney  
Project Manager

***Hawaiian Office: PO Box 671, Aiea, HI 96701  
Northern California Office: PO 371 Sonoma, CA 95476  
Coating Specialists and Inspection Services, Inc.***

***Consulting***

***Evaluations***

***Tank Diving***

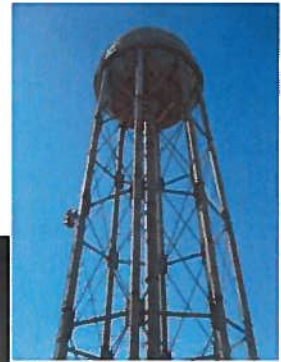
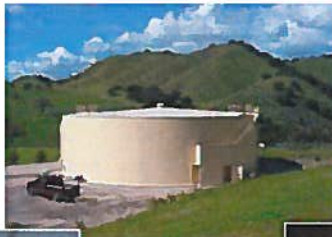
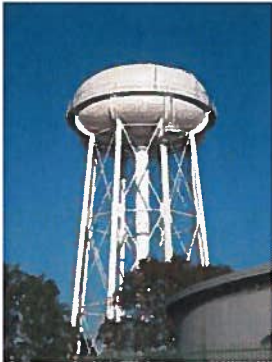
***Inspection***



CSI Services, Inc.  
P.O. Box 801357, Santa Clarita, CA 91380  
877.274.2422

## Proposal 1407 Tank Inspection Services

New Zurich II Water Storage Tank Project  
Crestline Valley Water District



**Prepared for:**

Brad Sackett, PE  
Senior Engineer  
Albert A. Webb Associates  
3788 McCray Street  
Riverside, CA 92506

**Prepared by:**

CSI Services, Inc.

A handwritten signature in blue ink that reads 'Patrick Sweeney'.

Patrick Sweeney  
Project Manager

January 6, 2014

**Hawaiian Office: PO Box 671, Aiea, HI 96701**  
**Northern California Office: PO 371 Sonoma, CA 95476**  
**Coating Specialists and Inspection Services, Inc.**

**Consulting**

**Evaluations**

**Tank Diving**

**Inspection**





---

## Scope of Services

CSI will provide quality assurance inspection services during the coating of the new Zurich II Water Storage Tank for the Crestline Valley Water District. CSI will provide technical as-needed consulting assistance and a qualified fully trained and equipped inspector throughout the progress of the work up to and including final acceptance. CSI will provide an independent, professional, and thorough inspection. CSI will not take any responsibility for the safety of others. CSI will complete all coating related verifications.

### **Coating Inspection**

CSI has found that it can provide its clients the most versatile and technically competent quality assurance program through a team approach. This team of PCS's, inspectors, and administrative support personnel allow us to provide an up-to-date, competent, and efficient service product. The duty of this team approach is segmented into two tasks, which frequently overlap. Either the field inspector or the support personnel will complete the various tasks that will be required on this project. These two general segments of the team have been detailed below under two categories: Project Support Activities and Direct Field Inspection Activities. Unless called -out differently in the specification, CSI will complete the following applicable tasks:

#### **Project Support Activities**

1. CSI will participate in project start-up meetings, weekly job meetings, and any special interest meetings as required to discuss procedures, progress, problems, or outstanding issues. CSI will complete notes and minutes for all meetings and distribute accordingly, as requested.
2. CSI will maintain copies of all applicable coating correspondence, reports, job conferences, drawings, submissions, reproductions, and original contract documents including all addenda, change orders, supplemental drawings, records of materials and equipment deliveries and use, manpower, and all other project-related documents. Log books will be maintained and turned over to the owner, if requested.
3. CSI will utilize a project specific daily inspection report for use by the CSI inspector. This daily report will include work in progress, areas accepted, and items requiring repair/rework. CSI will assist in the determination of the quantities and/or percent of work completed for each item for contractor progress payments.
4. CSI staff will provide any support to the project required to assure that all technical issues and concerns are properly corrected and/or addressed.

#### **Direct Field Inspection Activities**

1. The CSI inspector will ensure that the requirements of the Contract Specifications and manufacturer's technical data sheets for the various materials are strictly followed. PDCA P2-04, SSPC, NACE, and ASTM D3276 standard practices will be used a guideline for proper procedures, where not called out in the specification



or manufacturer's PDS's.

2. Verifications of the contractor's compliance with the specifications will be accomplished by performing the following tasks as necessary, with the appropriate calibrated instruments for each:
3. The CSI inspector will ensure that the requirements of the Contract Specifications and manufacturer's technical data sheets for the various materials are strictly followed. ASTM D3276 will be used as a guideline for proper procedures. It is not the intent of our cost proposal to provide a safety inspector to this project.
4. Verifications of the contractor's compliance with the specifications will be accomplished by performing the following tasks as necessary, with the appropriate calibrated instruments for each:
  - a. Condition Of Surfaces Prior To Preparation – The CSI inspector will inspect the surfaces to be prepared to assure that grease and oil have been removed, and sharp edges are removed as specified. NACE Standard RP0178 will be used as acceptance criteria where areas are of concern.
  - b. Compressed Air Cleanliness – The CSI inspector will check the air quality when production includes abrasive blast cleaning or substrate blow-down procedures. This will be accomplished in accordance with ASTM D4285.
  - c. Ambient Conditions – The CSI inspector will monitor ambient conditions in accordance with ASTM E337 to assure that final blast cleaning and coating application operations are not completed outside the specified requirements.
  - d. Surface Preparation – The CSI inspector will examine the abrasive and equipment used for surface preparation for adequacy to do the work, as specified. Equipment pressures will be monitored. Salt testing will be verified. The inspector will verify proper storage and size of abrasives, and that the proper degree of cleaning and surface profile or scarification is achieved. The testing for soluble salts or amine blush by the contractor will be verified.
  - e. Coating Preparation and Mixing – The CSI inspector will observe the mixing of coatings to assure that all components are added and proportioned correctly and that any induction times are maintained. The inspector will verify that any materials used are approved and that they are not used when the pot or shelf lives have been exceeded.
  - f. Coating Application – The CSI inspector will examine the application equipment for cleanliness and adequacy to do the work. The inspector will observe application techniques to assure proper coverage without detrimental runs, pinholes, or other visually evident deficiencies. The inspector will make spot



checks of the wet film thickness in accordance with ASTM D4414 so that adjustments to the amount of material being applied can be made at the time of application to minimize the amount of rework after the coating has dried.

- g. Dry Film Thickness – The CSI inspector will measure the dry film thickness of each coat to assure that it complies with the specification requirements and manufacturers' instructions. Film thickness will be monitored using a Type II film gage in accordance with ASTM D1186, SSPC-PA2, or as required (i.e. every 100SqFt).
- h. Holiday Detection – CSI will provide holiday detection equipment and perform 100 percent holiday detection in accordance with NACE International's "Recommended Practice for Discontinuity (Holiday) Testing of Protective Coatings," (SP 0188-99), AWWA D102, and the specified requirements.
- i. Cure Evaluation – The CSI inspector will evaluate the final cure of the applied lining in accordance with the Manufacturer's recommended procedures.
- j. Final Inspection – The CSI inspector will perform a final inspection to evaluate the Contractor's final product. This will verify that the final visual appearance (SSPC PA1), dry film thickness readings, holiday detection, cure testing, and so forth meet the project requirements.

### **Documentation**

The inspector will use a daily journal, daily reports to clearly document the coating or structural modification inspections to verify compliance with contract documents. At a minimum, the verifications noted above will be recorded. Reports can be delivered electronically throughout the project.



---

### Fee Schedule

CSI proposes to provide the above Scope of Services on a time and materials basis in accordance with our standard terms and conditions. Our fees follow:

#### Hourly Labor Rates

Inspection  
Straight Time..... \$ 750.00/day

#### Expenses

No expenses will be charged.

### Estimated Cost of Services

Although we are not aware of a coating contractor's schedule, our experience with projects of this size and nature indicates that it should not require more than 19 days to complete the inspections. Based on this schedule and the above fees, we project that the cost of inspection should not exceed **\$14,250.00**. We will only invoice for the actual time worked, and we will not exceed this cost projection without authorization.



# SOIL EXPLORATION COMPANY, INC.

Soil Engineering, Environmental Engineering, Materials Testing, Geology

February 24, 2014

Project No. 8045-04  
**(REVISED)**

TO: Crestline Village Water District  
c/o Albert A. Webb Associates  
3788 McCray St.  
Riverside, CA 92506

ATTENTION: Messrs Dave Algranti and Brad A. Sackett

SUBJECT: Cost Estimate for Compaction Testing Services, Proposed CVWD 0.2 MG Zurich II Tank Site, Crestline, San Bernardino County, California

REFERENCE: Soil Exploration Co., Inc., "Subsurface Soil Investigation and CBC (2010) Seismic Update Report, CVWD 0.18 MG Zurich Tank Site, 333 Old Mill Road, Crestline, San Bernardino County, California", Dated April 29, 2013 (Project No. 8045-02).

As discussed with you, we have prepared the following scope and cost estimate for the subject services. We understand scope of our work will include attendance at pre-construction meeting, observations/testing during overexcavation/compaction/foundation excavation, sampling of concrete during placement, foundation Class II base compaction and testing of pipeline trench backfill. Since the time to complete the work is not known, the estimate is based on 7 site visits (maximum 6 hours each) by our field engineer.

**Scope**

• Attend pre-construction meeting, 4 hours at \$95.00/hr.....	\$380.00
• Field Engineer (California Registered PE), 7 site visits (maximum 6 hours each).....	3,150.00*
• Laboratory Testing (optimum moisture/maximum densities/soluble sulfate) (LS).....	500.00
• Concrete Compression Tests (6 @ \$50.00 each).....	300.00
• Compaction Report of Grading, pipe trench backfill and concrete compression test results (LS).....	1,200.00
<b>TOTAL COST ESTIMATE (Not to Exceed).....</b>	<b>\$ 5,530.00</b>

\* Includes vehicle/nuclear gage use, travel, office review and coordination.

**Closure**

If the above meets with your approval, please sign attached Work Authorization and Agreement and/or issue a Purchase Order. Should you have any questions or concerns, please do not hesitate to call this office. We appreciate this opportunity to be of continued service.

Very truly yours,  
Soil Exploration Co. Inc.

Gene K. Luu, PE 53417  
Project Engineer

Sid A. Siddiqui, GE 775  
Principal Geotechnical Engineer

Distribution: [1] Addressee  
Attachment: Work Authorization and Agreement