

Geo-Advantec Inc.

G *Geotechnical Engineering*

Earthquake Engineering

A *Inspection and Testing*

I *Engineering Geology*

PROPOSAL FOR TESTING AND INSPECTION SERVICES

PROJECT:

**BOWMAN HIGH SCHOOL PEDESTRIAN BRIDGE/RAMP AND FIRE
ALARM SYSTEM UPGRADE**

FOR

WILLIAM HART UNIFIED SCHOOL DISTRICT



William S. Hart
Union High School District

**PREPARED BY:
GEO-ADVANTEC INC.
457 W. ALLEN AVE, STE. 113
SAN DIMAS, CALIFORNIA 91773
PROPOSAL NO. 17-1066
APRIL 4, 2017**

Geo-Advantec Inc.

Geotechnical Engineering. Earthquake Engineering. Engineering Geology

April 4, 2017
Proposal No: 17-1066

Mr. Michael Otavka
Director of Facilities, Planning & Construction
Wm. S. Hart Union High School District
21380 Centre Pointe Parkway
Santa Clarita, CA 91350

SUBJECT: Proposal for Bowman High School Pedestrian Bridge/Ramp and Fire Alarm System Upgrade
Santa Clarita, California

Dear Mr. Otavka,

Geo-Advantec, Inc., (GAI) appreciates the opportunity to submit this proposal to provide the Wm. S. Hart Union High School District (WHUSD) with all the required geotechnical and materials special inspection services for construction of the subject project.

GAI ensures that our services will meet the requirements of applicable codes, regulations, ordinances, guidelines, and project documents.

Included in this submittal is our understanding about the project, a breakdown of estimated budget for the inspection and testing services, our hourly rates and the company's master fee schedule for this project.

We look forward to the opportunity to working with the WHUSD on this and future upcoming projects. If there are any questions please do not hesitate to contact the undersigned at (909) 305-0400 or SAriannia@GeoAdvantec.com.

Regards,

A handwritten signature in blue ink that reads "SHAWN" followed by a stylized flourish.

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

1. PROJECT UNDERSTANDING

Based on the review performed on the available project manual and T&I sheet, it is our understanding that the project involves the construction of a cast-in-place pedestrian bridge with related ramps and walkways. The bridge is concrete with steel tresses. We will perform inspection and testing for the concrete poured for the bridge and associated walkways. We assume that these will be poured at one time. We will perform inspection for the fabrication of the steel tresses, and we will verify the certifications for the weld filler material markings and manufacturers certificate of compliance. There will be no soil inspections included in our scope of work per the T and I sheet.

2. ESTIMATED BUDGET AND BREAKDOWN

The following "Table 1" provides cost breakdown and our estimate for the subject project. The unit rates are included in the Table. The hourly rates for inspectors and technicians are based on prevailing wage rates. The master fee schedule for our company is provided as an attachment to this submittal.

TABLE-Estimated Hourly Budget Breakdown

| Description | Quantity | Unit | Unit Rate | Total Amount |
|---|--------------------|--------|-----------|--------------------|
| MATERIALS SPECIAL INSPECTION | | | | |
| Concrete Inspection | 8 | Hourly | \$ 88.00 | \$ 704.00 |
| Batch Plant Inspection | 4 | Hourly | \$ 88.00 | \$ 352.00 |
| Steel Fabrication Inspection | 32 | Hourly | \$ 88.00 | \$ 2,816.00 |
| TOTAL ESTIMATED FEES FOR MATERIALS SPECIAL INSPECTION | | | | \$ 3,872.00 |
| MATERIALS LABORATORY TESTING/SERVICES | | | | |
| Compressive Strength of Concrete-ASTM C39 | 6 | Test | \$ 25.00 | \$ 150.00 |
| Tensile and Bend test on Rebars-# 11 and smaller | 3 | Test | \$ 35.00 | \$ 105.00 |
| Verification of steel tests | Estimate | | | \$ 500.00 |
| Sample pick-up | 2 | Hourly | \$ 50.00 | \$ 100.00 |
| Any specific/special test to be performed in other DSA approved lab (Sub to Geo-Advantec) | The cost+5% markup | | | |
| Mix Design Reviews | 1 | Report | \$ 100.00 | \$ 100.00 |
| Registered Civil Engineer | 2 | Hours | \$ 125.00 | \$ 250.00 |
| Final Report - Issuance of DSA-291 (interims and final) | 1 | Report | \$ 100.00 | \$ 100.00 |
| TOTAL ESTIMATED FEES FOR MATERIALS INSPECTION AND TESTING | | | | \$ 1,305.00 |
| TOTAL ESTIMATE OF PROJECT INSPECTION AND TESTING | | | | \$ 5,177.00 |

ATTACHMENT
MASTER SCHEDULE OF RATES

| <u>ENGINEERING SERVICES</u> | | | | |
|---|------------|---|-------------|-------------------|
| ENGINEERING AND PROFESSIONAL SERVICES | | | | |
| Principal Geotechnical Engineer/Principal Engineering Geologist | | | \$ 175.00 | Per Hour |
| Senior Geotechnical Engineer/ Senior Engineering Geologist | | | \$ 135.00 | Per Hour |
| Registered Civil Engineer | | | \$ 135.00 | Per Hour |
| Project Manager | | | \$ 90.00 | Per Hour |
| Staff Engineer/Staff Geologist/Field Engineer | | | \$ 75.00 | Per Hour |
| <u>INSPECTION SERVICES</u> | | | | |
| GEOTECHNICAL MONITORING | | | | |
| DURING CONSTRUCTION TESTING AND INSPECTION SERVICES | | | | |
| Soil Technician / Field Engineer (Prevailing Wage) | | | \$ 88.00 | Per Hour |
| Technician / Field Engineer – Pile Monitoring & Inspection (Prevailing Wage & Regular Wage) | | | \$ 88.00 | Per Hour |
| Deputy Grading Inspector (City of LA) | | | \$ 88.00 | Per Hour |
| Nuclear Gauge Equipment | | | \$ 40.00 | Per Day |
| MATERIALS SPECIAL INSPECTION | | | | |
| Inspector/Concrete, Batch Plant Inspection | | | \$ 88.00 | Per Hour |
| Inspector/Masonry | | | \$ 88.00 | Per Hour |
| Inspector/Welding/Steel/Tagging & Sampling | | | \$ 88.00 | Per Hour |
| Inspector/Post-Tension | | | \$ 88.00 | Per Hour |
| Inspector/Fireproofing | | | \$ 88.00 | Per Hour |
| Inspector/UT | | | \$ 95.00 | Per Hour |
| <u>REPORTS</u> | | | | |
| Soils (Geotechnical/Geohazard Evaluation) Report | | | | Varies - Lump Sum |
| DSA-291 or 293 Report | | | \$ 250.00 | Each Certificate |
| Pad Certificate Report | | | \$ 1,000.00 | Each |
| Laboratory Report Review Letter (Stamped) | | | \$ 300.00 | Each |
| <u>LABORATORY AND MATERIAL TESTING</u> | | | | |
| SOIL AND AGGREGATE | | | | |
| CLASSIFICATION & PHYSICAL CHARACTERISTICS | | | | |
| ASTM | CTM | | | |
| C29 | CT212 | Unit Weight | \$ 25.00 | Each |
| D4829 | | Expansion Index | \$ 125.00 | Each |
| C117, D1140 | | Finer than #200 Wash | \$ 50.00 | Each |
| C136 | CT202 | Sieve Analysis- Coarse & Fine Including Wash Aggregate | \$ 140.00 | Each |
| C136 | CT202 | Sieve Analysis- Coarse Aggregate | \$ 110.00 | Each |
| C136 | CT202 | Sieve Analysis- Fine Including Wash Aggregate | \$ 110.00 | Each |
| D1140, D422 | | Particle-Size Distribution - Sieve Analysis + Hydrometer Combined | \$ 185.00 | Each |
| D422 | | Hydrometer Analysis only | \$ 125.00 | Each |
| D4318 | | Atterberg Limits LL, PL, & PI of Soils | \$ 125.00 | Each |
| D2435 | | Consolidation | \$ 125.00 | Each |
| D2419 | CT217 | Sand Equivalent Value of Soil and Fine Aggregate (Set of Three) | \$ 100.00 | Each Set |
| C127 | CT206 | Specific Gravity and Absorption (Coarse Aggregate) | \$ 65.00 | Each |
| C127 | CT206 | Absorption Only, Coarse Aggregate | \$ 90.00 | Each |
| C128 | CT207 | Specific Gravity and Absorption (Fine Aggregate) | \$ 160.00 | Each |
| C128 | CT207 | Absorption Only, Fine Aggregate | \$ 90.00 | Each |
| D854 | CT203 | Specific Gravity (Soil) by Hydrometer (Water Pycnometer) | \$ 140.00 | Each |
| D2216 | | Water Moisture Content | \$ 20.00 | Each |
| D3080 | | Direct Shear (3 Points) | \$ 250.00 | Each |

LABORATORY AND MATERIAL TESTING

SOIL AND AGGREGATE

CLASSIFICATION & PHYSICAL CHARACTERISTICS

ASTM **CTM**

| | | | | |
|-----------|--------|--|-----------|------|
| D3080 | | Direct Shear Remolded sample (3 points) | \$ 300.00 | Each |
| D1557-A,B | | Maximum Density 4 in. Mold Passing No.4 or 3/8 in. Sieve | \$ 140.00 | Each |
| D1557-C | | Maximum Density 6 in. Mold Passing or 3/4 in. Sieve | \$ 150.00 | Each |
| D2844 | CT301 | R-Value (3 Points) | \$ 300.00 | Each |
| D2844 | CT301 | R-Value, Untreated Material | \$ 280.00 | Each |
| D2844 | CT301 | R-Value, Treated Material | \$ 300.00 | Each |
| D4791 | | Flat and Elongated Particles | \$ 180.00 | Each |
| | CT 229 | Durability Index (fine and coarse) in Aggregate | \$ 250.00 | Each |
| | CT 229 | Durability Index (fine or coarse) in Aggregate | \$ 160.00 | Each |
| C142 | | Clay Lumps and Friable Particles in Aggregate | \$ 150.00 | Each |
| C40 | | Organic Impurities in Fine Aggregates for Concrete | \$ 140.00 | Each |
| | CT205 | Percentage of Crushed Particles | \$ 180.00 | Each |
| C131 | CT211 | Los Angeles Rattler Test, (Abrasion Testing Machine), Small-Size | \$ 275.00 | Each |
| C535 | CT211 | Los Angeles Rattler Test, (Abrasion Testing Machine), Large-Size | \$ 350.00 | Each |

SOIL AND AGGREGATE (CONTINUED)

ASTM **CTM**

| | | | | |
|------|-------|---|-----------|------|
| C88 | CT214 | Sodium/Magnesium Sulfate Soundness of Aggregate, Per Sieve | \$ 90.00 | Each |
| | CT216 | Soil Impact (Tests for Relative Compaction of Soils & Aggregates) | \$ 180.00 | Each |
| | CT216 | Soil Impact- Check Point | \$ 140.00 | Each |
| C227 | CT227 | Cleanness Value of Coarse Aggregate | \$ 190.00 | Each |

CHEMICAL PROPERTIES

CTM

| | | | |
|---------------|--------------------|-----------|------|
| 643 | Resistivity | \$ 75.00 | Each |
| 643 | pH | \$ 50.00 | Each |
| 417 | Sulphate | \$ 60.00 | Each |
| 422 | Chloride | \$ 60.00 | Each |
| 643, 417, 422 | Corrosivity Series | \$ 185.00 | Each |

CONCRETE

ASTM **CTM**

| | | | | |
|----------|-------|--|-----------|------|
| C39 | CT521 | Compression Tests, 6x12 and/or 4x8 Cylinders | \$ 25.00 | Each |
| C495 | | Compression, Lightweight Insulating Concrete | \$ 45.00 | Each |
| C42 | | Concrete Cores, Compression (excludes sampling) | \$ 35.00 | Each |
| C42 | | Drilling Cores from Shotcrete Panel (Lab) | \$ 75.00 | Each |
| C109 | | Compression, Hydraulic Cement, Mortar 2" Cube Specimen | \$ 45.00 | Each |
| C496 | | Splitting Tensile Strength 6"x12" Cylinder | \$ 90.00 | Each |
| C293/C78 | CT523 | Flexural Strength Test (6"x6"x21" Beam) | \$ 130.00 | Each |
| C157 | | Drying Shrinkage (Set of 3) | \$ 360.00 | Each |
| C138 | | Unit Weight of Concrete Cylinders | \$ 45.00 | Each |
| C192 | | Review of Existing Mix Design | \$ 100.00 | Each |

MATERIALS TESTING

ASTM **CTM** **UBC**

| | | | | |
|--|-----|--|----------|------|
| | 7-6 | Fireproofing Density Test | \$ 45.00 | Each |
| | | High Strength Bolt, Nut, & Washer Conformance, set | \$ 55.00 | Each |

| MATERIALS TESTING | | | | |
|-------------------------|-----------------|-------|---|----------------|
| ASTM | CTM | UBC | | |
| A416 | | | Mechanically Spliced Reinforcing Tensile Test | \$ 75.00 Each |
| A615, A706 | | | Pre-Stress Still Strand (7 wire) | \$ 145.00 Each |
| | | | Reinforcing Tensile or Bend Up to No.11 | \$ 35.00 Each |
| | | | Welded Reinforcing Tensile Test: Up to No. 11 bars | \$ 45.00 Each |
| N/A | | | Welding Procedure Review | \$ 75.00 Each |
| HOT MIX ASPHALT TESTING | | | | |
| ASTM | CTM | | | |
| D1561 | CT304, 375 | | Laboratory Test Maximum Density (LTMD) | \$ 350.00 Each |
| D1650 | CT304, CT366 | | Stabilometer Value | \$ 240.00 Each |
| D4546 | | | Swell | \$ 110.00 Each |
| D2726 | CT308 | | Specific Gravity & Density of Core | \$ 80.00 Each |
| D2041 | CT309 | | Theoretical Maximum Specific Gravity & Density (Rice) | \$ 180.00 Each |
| | CT370 | | Moisture Content by Microwave Oven | \$ 60.00 Each |
| D5444 | CT202 | | Sieve Analysis of Extracted Sample | \$ 150.00 Each |
| C136 | CT202 | | Sieve Analysis of Bin Aggregate Sample, each | \$ 60.00 Each |
| C136 | CT202 | | Sieve Analysis of Combined Aggregate Sample | \$ 200.00 Each |
| D6307 | CT382 | | Asphalt Content by Ignition Oven (Bitumen Content) | \$ 170.00 Each |
| D6307 | CT382 | | Asphalt Content by Ignition Oven (Correction Factor) | \$ 240.00 Each |
| D1188 | | | Unit Weight – Molded Specimen or Cores | \$ 45.00 Each |
| D2726, D6926 | | | Compacted Maximum Density – MARSHALL | \$ 200.00 Each |
| D2172 | CT310 | | Extraction, % Asphalt, including Gradation | \$ 135.00 Each |
| D1560 | CT366 | | Hveem Stability and Unit Weight CTM or ASTM | \$ 100.00 Each |
| MASONRY TESTING | | | | |
| ASTM | | UBC | | |
| C140 | | | Compression Test of CMU Block (gross) | \$ 50.00 Each |
| C140 | | | Absorption & Moisture Content | \$ 50.00 Each |
| C426 | | | Linear Shrinkage | \$ 150.00 Each |
| C140 | | | Unit Weight | \$ 60.00 Each |
| C140 | | | Dimensional Measurements | \$ 40.00 Each |
| C1006 | | | Splitting Tensile Strength | \$ 80.00 Each |
| C140 | | | Compression Test of Masonry Core | \$ 60.00 Each |
| | | 21-16 | Compression Test of 2" x 4" Mortar Cylinder | \$ 25.00 Each |
| | | 21-17 | Compression Test of Composite Prism | \$ 90.00 Each |
| | | 21-18 | Compression Test of 3" x 3" x 6" Grout | \$ 50.00 Each |

WORKING HOURS

- GAI regular workweek is Monday through Friday.
- Monday through Friday overtime hours (1.5 times regular rate) apply after eight (8) hours per day. Premium time hours (2 times regular rate) apply after twelve (12) hours per day. Saturday overtime hours are 1.5 times the contracted hourly rate. Sundays and Holidays hours are 2.0 times the contracted hourly rate. Holidays observed by GAI are New Year's, Memorial, Independence, Labor, Veterans, Thanksgiving and Christmas.
- Regular and overtime hour charges shall be in one-hour increments.

MINIMUM CHARGES FOR CONSTRUCTION PHASE INSPECTIONS

- All soils monitoring and technicians are based on a minimum of two (2) hours. Over two hours shall be a minimum of four (4) hours. All materials inspectors are based on a minimum of four (4) hours. Over four (4) hours will be a minimum of eight (8) hours. If an inspector or technician is scheduled to perform a service and no work is performed, a two (2) hour minimum charge for soil technicians and a four (4) hour minimum charge for material inspectors will apply and referred to as a show-up charge.

TRAVEL & MILEAGE (Excluded for this Contract)

- No travel time and mileage costs for engineering staff and materials/special inspection personnel. For soils technicians performing construction inspection and testing, travel time will be charged at a rate of \$50.00/hr. from GAI's closest office.
- 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

- The prices quoted within and for during construction monitoring and inspection services for Prevailing Wage are provided in Page 1. The Prevailing Wage our hourly rates will increase the proportional percentage increase every July 1 in accordance with the wage listed by the Director 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 the agreed upon basis for charges by GAI to Client.

LABORATORY TESTING

- A soils sample pick-up charge of 2-hour minimum with an hourly rate of \$50 will be billed in addition to the prices quoted for testing for soils.
- Concrete Cylinder and mortar sample pick-up within a 40 miles distance from GAI's office will be billed \$5 per cylinder/sample. Over 40 miles and less than 100 miles, will be \$10 per cylinder/sample.
- For rebars, masonry units and prisms and other samples, a sample pick-up charge of 2-hour minimum with an hourly rate of \$50 will be billed in addition to the prices quoted for testing for soils
- 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.