

November 19, 2018
Proposal No. 04-02121

Mr. Michael Otavka
Director of Facilities
William S. Hart Union High School District
21380 Centre Pointe Parkway
Santa Clarita, California 91350

Subject: Proposal for Materials Testing and Inspection Services
Saugus High School – Auto Shop Improvement (Building D)
21900 Centurion Way
Saugus, California
Division of the State Architect (DSA) Application No. 03-119109

Reference: WSHUHS, 2018, Electronic Mail from Mr. Michael Otavka to Mr. Rajindra Handapangoda, Request for Proposal – Saugus High School Auto School Improvements (DSA# 03-119109), dated November 15.

Dear Mr. Otavka:

Ninyo & Moore is pleased to submit this proposal for materials testing and specialty inspection services during construction of the Saugus High School Auto Shop Improvement (Building D) project located at 21900 Centurion Way in Saugus, California. We have prepared our proposal based on our review of the referenced e-mail correspondence, project plans, the Statement of Structural Tests and Inspection (DSA-103), and our experience on similar projects. It is our understanding that the project geotechnical design firm will provide geotechnical testing for the project. Therefore, we excluded geotechnical testing from our proposed scope of services.

The project generally consists of installing a new auto lift (Lift No. 5) and five pendant light fixtures at the auto shop work area located in Building D. Structurally, the new auto lift will consist of conventional spread footings, a 6-inch thick reinforced concrete slab-on-grade, and auto-lift posts (provided by others). Other improvements include work benches and light fixtures. The DSA-103 indicates that our scope will include testing and inspection of concrete, reinforcing steel, and post-installed anchors, and if needed, laboratory testing of non-shrink grout.

SCOPE OF SERVICES

Our services will be performed in general accordance with the California Code of Regulations Title 24. Based on our understanding of the proposed construction and our experience with similar projects, we propose to provide the following scope of services:

- Project coordination, technical support, and management, including review of the project plans and specifications, distribution of test reports, and work scheduling.
- Regular distribution of tests and DSA interim and final verified reports in accordance with new DSA guidelines, 2016 California Administrative Code and DSA Construction Oversight Process (PR 13-01) requirements.
- Attendance at pre-construction meetings and as-needed field meetings.
- Field technician services for sampling and testing of concrete, including checking slump, temperature, and casting a set of cylinders for each batch.
- Field technician services for concrete batch plant inspection at the production plant including checking mix design and batch weights and signing each delivery ticket.
- Field technician services for sampling, tagging, and testing of construction materials, such as reinforcing steel.
- Post-installed anchor installation inspection services in the field.
- Load and/or torque testing of post-installed anchors including epoxy and expansion anchors.
- Preparation of progress reports and field memoranda to document the items inspected.
- Laboratory testing, including bend and tensile testing of reinforcing steel, compressive strength testing of concrete and non-shrink grout sampled in the field, and threaded rod tensile strength.
- Preparation and submittal of the Laboratory Interim and Final Verified Reports (DSA-291).

ASSUMPTIONS

Based on our experience with similar projects, the following assumptions have been made in the preparation of our scope of services:

- Our services are subject to prevailing wage requirements.
- Our services will be scheduled and coordinated by the construction management and inspection team on an as-needed basis.
- Our estimated fee does not include stand-by time or costs associated with retesting or reinspecting materials that were found not to be in compliance with the project plans or specifications. Our services will depend on the construction schedule and the contractor's operations. Hours spent that exceed those in the attached tables will be billed on a time-and-materials basis.

ESTIMATED FEE

We propose to provide materials testing and inspection services on a time-and-materials basis in accordance with the attached Schedule of Fees and Schedule of Fees for Laboratory Testing. Our estimated fee is presented in the attached Table 1.

Ninyo & Moore appreciates the opportunity to provide services on this project and we look forward to working with you.

Respectfully submitted,
NINYO & MOORE



Rajindra S. Handapangoda, PE, GE
Senior Engineer



Alfredo "Tino" Rodriguez
Principal, Construction Services

RAH/AR/sc

Attachments: Table 1 – Breakdown of Estimated Fee
Schedule of Fees

Distribution: (1) Addressee (via e-mail)

Table 1 – Breakdown of Estimated Fee**Field Services**

Field Technician/Inspector					
Concrete Sampling and Testing	12 hours	@	\$ 98.00 /hour	\$	1,176.00
Concrete Batch Plant Inspection	12 hours	@	\$ 98.00 /hour	\$	1,176.00
Post-Installed Anchor Installation Inspector	6 hours	@	\$ 98.00 /hour	\$	588.00
Anchor Bolt Load Testing	6 hours	@	\$ 98.00 /hour	\$	588.00
Observation, Tag and Sample (Rebar)	4 hours	@	\$ 98.00 /hour	\$	392.00
Sample Pick-up	4 hours	@	\$ 92.00 /hour	\$	368.00
Vehicle and Equipment Usage	44 hours	@	\$ 12.00 /hour	\$	528.00
Subtotal				\$	4,816.00

Laboratory Analyses

Compressive Strength (Concrete)	12 tests	@	\$ 30.00 /test	\$	360.00
Compressive Strength (Non-shrink Grout)	4 tests	@	\$ 45.00 /test	\$	180.00
Anchor Bolt Tensile Strength Testing	2 tests	@	\$ 80.00 /test	\$	160.00
Reinforcing Tensile or Bend, up to No. 11, A 615 & A 706	4 tests	@	\$ 60.00 /test	\$	240.00
Subtotal				\$	940.00

Project Coordination and Management

Senior Project Engineer/Geologist/Environmental Scientist	4 hours	@	\$ 163.00 /hour	\$	652.00
Subtotal				\$	652.00

Report Preparation For The DSA-291

Principal Engineer/Geologist/Environmental Scientist	2 hours	@	\$ 178.00 /hour	\$	356.00
Senior Project Engineer/Geologist/Environmental Scientist	4 hours	@	\$ 163.00 /hour	\$	652.00
Subtotal				\$	1,008.00

TOTAL ESTIMATED FEE				\$	7,416.00
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Schedule of Fees

Hourly Charges for Personnel

Certified Industrial Hygienist	\$ 188
Principal Engineer/Geologist/Environmental Scientist	\$ 178
Senior Engineer/Geologist/Environmental Scientist	\$ 168
Senior Project Engineer/Geologist/Environmental Scientist	\$ 163
Certified Asbestos Consultant, Lead Inspector/Assessor, Lead Project Monitor	\$ 163
Project Engineer/Geologist/Environmental Scientist	\$ 156
Senior Staff Engineer/Geologist/Environmental Scientist	\$ 142
Staff Engineer/Geologist/Environmental Scientist	\$ 126
Certified Site Surveillance Technician, Lead Sampling Technician	\$ 126
GIS Analyst	\$ 116
Field Operations Manager	\$ 112
Supervisory Technician	\$ 98
Nondestructive Examination Technician, UT, MT, LP	\$ 98
ACI Concrete Technician	\$ 98
Concrete/Asphalt Batch Plant Inspector	\$ 98
Special Inspector (Concrete, Masonry, Steel, Welding, and Fireproofing)	\$ 98
Senior Field/Laboratory Technician	\$ 92
Field/Laboratory Technician	\$ 92
Technical Illustrator/CAD Operator	\$ 92
Information Specialist	\$ 78
Geotechnical/Environmental/Laboratory Assistant	\$ 76
Data Processing, Technical Editing, or Reproduction	\$ 68

Other Charges

Concrete Coring Equipment (includes one technician)	\$ 180/hr
X-Ray Fluorescence	\$ 450/day
Air Sampling Pump	\$ 45/day
PID/FID Usage	\$ 140/day
Anchor load test equipment (includes technician)	\$ 97/hr
Hand Auger Equipment	\$ 150/day
Inclinometer Usage	\$ 40/hr
Vapor Emission Kits	\$ 40/kit
Level D Personal Protective Equipment (per person per day)	\$ 30/p/d
Rebar Locator (Pachometer)	\$ 30/hr
Nuclear Density Gauge Usage	\$ 15/hr
Field Vehicle Usage	\$ 12/hr
Direct Project Expenses	Cost plus 15 %
Laboratory testing, geophysical equipment, and other special equipment provided upon request.	

Notes

For field and laboratory technicians and special inspectors, regular hourly rates are charged during normal weekday construction hours. Overtime rates at 1.5 times the regular rates will be charged for work performed outside normal construction hours and all day on Saturdays. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day or on Sundays and holidays. Lead time for any requested service is 24 hours. Field Technician rates are based on a 4-hour minimum. Special inspection rates are based on a 4-hour minimum for the first 4 hours and an 8-hour minimum for hours exceeding 4 hours. Field personnel are charged portal to portal.

Invoices will be submitted monthly and are due upon receipt. A service charge of 1.0 percent per month may be charged on accounts not paid within 30 days.

The terms and conditions of providing our consulting services include our limitation of liability and indemnities as presented in Ninyo & Moore's Work Authorization and Agreement.

Schedule of Fees for Laboratory Testing

Laboratory Test, Test Designation, and Price Per Test

SOILS

Atterberg Limits, D 4318, CT 204	\$ 170
California Bearing Ratio (CBR), D 1883	\$ 550
Chloride and Sulfate Content, CT 417 & CT 422	\$ 175
Consolidation, D 2435, CT 219	\$ 300
Consolidation, Hydro-Collapse only, D 2435	\$ 150
Consolidation – Time Rate, D 2435, CT 219	\$ 75
Direct Shear – Remolded, D 3080	\$ 350
Direct Shear – Undisturbed, D 3080	\$ 300
Durability Index, CT 229	\$ 175
Expansion Index, D 4829, IBC 18-3	\$ 190
Expansion Potential (Method A), D 4546	\$ 170
Geofabric Tensile and Elongation Test, D 4632	\$ 200
Hydraulic Conductivity, D 5084	\$ 350
Hydrometer Analysis, D 422, CT 203	\$ 220
Moisture, Ash, & Organic Matter of Peat/Organic Soils	\$ 120
Moisture Only, D 2216, CT 226	\$ 35
Moisture and Density, D 2937	\$ 45
Permeability, CH, D 2434, CT 220	\$ 300
pH and Resistivity, CT 643	\$ 175
Proctor Density D1557, D 698, CT 216, AASHTO T-180	\$ 220
Proctor Density with Rock Correction D 1557	\$ 340
R-value, D 2844, CT 301	\$ 325
Sand Equivalent, D 2419, CT 217	\$ 125
Sieve Analysis, D 422, CT 202	\$ 145
Sieve Analysis, 200 Wash, D 1140, CT 202	\$ 100
Specific Gravity, D 854	\$ 125
Thermal Resistivity (ASTM 5334, IEEE 442)	\$ 925
Triaxial Shear, C.D., D 4767, T 297	\$ 450
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt	\$ 400
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt	\$ 250
Triaxial Shear, U.U., D 2850	\$ 180
Unconfined Compression, D 2166, T 208	\$ 130

MASONRY

Brick Absorption, 24-hour submersion, 5-hr boiling, 7-day, C 67	\$ 70
Brick Compression Test, C 67	\$ 55
Brick Efflorescence, C 67	\$ 55
Brick Modulus of Rupture, C 67	\$ 50
Brick Moisture as received, C 67	\$ 45
Brick Saturation Coefficient, C 67	\$ 60
Concrete Block Compression Test, 8x8x16, C 140	\$ 70
Concrete Block Conformance Package, C 90	\$ 500
Concrete Block Linear Shrinkage, C 426	\$ 200
Concrete Block Unit Weight and Absorption, C 140	\$ 70
Cores, Compression or Shear Bond, CA Code	\$ 70
Masonry Grout, 3x3x6 prism compression, C 39	\$ 45
Masonry Mortar, 2x4 cylinder compression, C 109	\$ 35
Masonry Prism, half size, compression, C 1019	\$ 120
Masonry Prism, Full size, compression, C 1019	\$ 200

REINFORCING AND STRUCTURAL STEEL

Chemical Analysis, A 36, A 615	\$ 135
Fireproofing Density Test, UBC 7-6	\$ 60
Hardness Test, Rockwell, A 370	\$ 70
High Strength Bolt, Nut & Washer Conformance, per assembly, A 325	\$ 150
Mechanically Spliced Reinforcing Tensile Test, ACI	\$ 175
Pre-Stress Strand (7 wire), A 416	\$ 170
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	\$ 60
Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370	\$ 80
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	\$ 65

CONCRETE

Compression Tests, 6x12 Cylinder, C 39	\$ 30
Concrete Mix Design Review, Job Spec	\$ 180
Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	\$ 850
Concrete Cores, Compression (excludes sampling), C 42	\$ 60
Drying Shrinkage, C 157	\$ 400
Flexural Test, C 78	\$ 75
Flexural Test, C 293	\$ 75
Flexural Test, CT 523	\$ 85
Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI	\$ 275
Jobsite Testing Laboratory	Quote
Lightweight Concrete Fill, Compression, C 495	\$ 50
Petrographic Analysis, C 856	\$ 2,000
Restrained Expansion of Shrinkage Compensation	\$ 450
Splitting Tensile Strength, C 496	\$ 100
3x6 Grout, (CLSM), C 39	\$ 45
2x2x2 Non-Shrink Grout, C 109	\$ 45

ASPHALT CONCRETE

Air Voids, T 269	\$ 75
Asphalt Mix Design, Caltrans (incl. Aggregate Quality)	\$ 4,500
Asphalt Mix Design Review, Job Spec	\$ 180
Dust Proportioning, CT LP-4	\$ 75
Extraction, % Asphalt, including Gradation, D 2172, CT 382	\$ 250
Extraction, % Asphalt without Gradation, D 2172, CT 382	\$ 150
Film Stripping, CT 302	\$ 120
Hveem Stability and Unit Weight D 1560, T 246, CT 366	\$ 225
Marshall Stability, Flow and Unit Weight, T 245	\$ 240
Maximum Theoretical Unit Weight, D 2041, CT 309	\$ 150
Moisture Content, CT 370	\$ 85
Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371	\$ 1,000
Slurry Wet Track Abrasion, D 3910	\$ 150
Superpave, Asphalt Mix Verification (incl. Aggregate Quality)	\$ 4,900
Superpave, Gyration Unit Wt., T 312	\$ 100
Superpave, Hamburg Wheel, 20,000 passes, T 324	\$ 1,000
Unit Weight sample or core, D 2726, CT 308	\$ 100
Voids in Mineral Aggregate, (VMA) CT LP-2	\$ 75
Voids filled with Asphalt, (VFA) CT LP-3	\$ 75
Wax Density, D 1188	\$ 100

AGGREGATES

Clay Lumps and Friable Particles, C 142	\$ 180
Cleanliness Value, CT 227	\$ 180
Crushed Particles, CT 205	\$ 175
Durability, Coarse or Fine, CT 229	\$ 205
Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234	\$ 180
Flat and Elongated Particle, D 4791	\$ 220
Lightweight Particles, C 123	\$ 180
Los Angeles Abrasion, C 131 or C 535	\$ 200
Material Finer than No. 200 Sieve by Washing, C 117	\$ 90
Organic Impurities, C 40	\$ 90
Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260	\$ 1,250
Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260	\$ 950
Potential Reactivity of Aggregate (Chemical Method), C 289	\$ 475
Sand Equivalent, T 176, CT 217	\$ 125
Sieve Analysis, Coarse Aggregate, T 27, C 136	\$ 120
Sieve Analysis, Fine Aggregate (including wash), T 27, C 136	\$ 145
Sodium Sulfate Soundness, C 88	\$ 450
Specific Gravity and Absorption, Coarse, C 127, CT 206	\$ 115
Specific Gravity and Absorption, Fine, C 128, CT 207	\$ 175

ROOFING

Roofing Tile Absorption, (set of 5), C 67	\$ 250
Roofing Tile Strength Test, (set of 5), C 67	\$ 250

Special preparation of standard test specimens will be charged at the technician's hourly rate.
Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.