

August 11, 2025  
Proposal No. 08SJO02-03309

Mr. Martin Cervantes  
750 Bradford Street  
Redwood City, CA 94063

Subject: Proposal for Geotechnical Observation, Materials Testing and Special Inspection Services for the Redwood City School District Solar Installations Projects:

Dear Mr. Cervantes:

In accordance with your request, we are pleased to submit this cost proposal for geotechnical observation, materials testing and special inspection services for the Redwood City School District Solar Installations Project in Redwood City, California. This proposal includes cost estimates based on our review of the project documents and our previous experience with similar projects.

## PROPOSED SCOPE OF WORK

Based on our review of the project documents and our experience with similar projects, we propose to provide the following scope of services

Name of Location	Address	DSA File No.
Kennedy Middle School	2521 Goodwin Avenue, Redwood City, California 94061	DSA Application No.: 01-122410; DSA File No.: 41-22
Hoover Elementary School	701 Charter Street, Redwood City, California 94063	DSA Application No.: 01-122411; DSA File No.: 41-22
Orion Alternative School	555 Ave Del Ora, Redwood City, California 94062	DSA Application No.: 01-122412; DSA File No.: 41-22
Garfield Community School	3600 Middlefield Road, Menlo Park, California 94025	DSA Application No.: 01-122420; DSA File No.: 41-22
McKinley Institute of Technology	400 Duane Street, Redwood City, California 94062	DSA Application & File No: TBD
Taft Elementary School	903 Tenth Ave, Redwood City, California 94063	DSA Application No.: 01-122217; DSA File No.: 41-22

Name of Location	Address	DSA File No.
Henry Ford Elementary School	2498 Massachusetts Avenue, Redwood City, California 94061	DSA Application No.: 01-122414; DSA File No.: 41-22
Harper School	3150 Granger Way, Redwood City, California 94061	DSA Application No.: 01-122419; DSA File No.: 41-22
Roy Cloud Elementary School	3790 Road Oak Way, Redwood City, California 94061	DSA Application No.: 01-122415; DSA File No.: 41-22

## Geotechnical Observation

- Observe site preparation for foundation, excavation, and removal of unsuitable materials.
- Observe drilled pier installation, verify pier locations, diameters, plumbness, and lengths.

## Reinforced Concrete

- Review concrete mix designs submitted by the contractor for compliance with the project documents.
- Sampling and tagging of reinforcing steel at the shop.
- Tensile and bend tests of reinforcing steel in the laboratory.
- Concrete batch plant inspection.
- Sample and test concrete including measuring slump, temperature, and batch times. One set of five (5) cylinders will be cast for every 50 cubic yards of concrete placed or fraction thereof, per day.
- Sample pick up for concrete cylinders and transportation to our laboratory for curing and testing.
- Compressive strength testing of concrete cylinders in the laboratory.

## Post Installed Anchors

- Visual inspection during the installation of post installed anchors.
- Load testing including pull and torque testing of post-installed anchors.

## Structural Welding and Bolting

- Welding procedure and welder's qualification review prior to performing welding in the shop and field.

- Material identification, mill certificate verification and structural steel welding inspection in the shop.
- Structural steel welding inspection in the shop and field.
- High strength bolts placement, sampling and inspection and torque testing with skidmore.
- High Strength Bolt, Nut & Washer Conformance per assembly, A 325 in the laboratory.

## Project Management

- Provide project management to include client liaison, work scheduling, mix design review, WPS review, quality review, and distribution of test data and daily field inspection reports.
- Preparation of daily field reports documenting items inspected.
- Prepare interim and final verified reports (DSA 291 and 293) at the conclusion of the project.

## ESTIMATED FEE

We propose to perform the scope of services described above, subject to the listed assumptions, on a time-and-materials basis in accordance with the attached Schedule of Fees. Our fee estimate for the scope of services described for this project is \$119,980. Our detailed estimate of fees is attached (Table 1). Should the construction schedule require a lesser or greater amount of services than that estimated herein, the cost will vary accordingly.

We sincerely appreciate the opportunity to submit this proposal and look forward to working with you on this project.

Respectfully submitted,  
**NINYO & MOORE**



Ryan Sharek  
 Project Manager



Lothus Hennefer, PE, PMP  
 Construction Services Manager

RCS/LMH/rk

Attachments: Table 1 - Breakdown of Estimated Fees  
 Schedule of Fees

**Table 1 - Breakdown of Estimated Fee**

**Geotechnical Observation**

Senior Staff Engineer	Foundation Observation and Drilled Piers Inspection	72 hours @ \$ 180.00 /hour	\$ 12,960.00
<b>Subtotal</b>			<b>\$ 12,960.00</b>

**Reinforced Concrete**

Special Inspector	Reinforcing Steel Sampling and Tagging	72 hours @ \$ 115.00 /hour	\$ 8,280.00
Laboratory Testing	Reinforcing Steel Tensile and Bend Testing	36 tests @ \$ 75.00 /test	\$ 2,700.00
Special Inspector	Concrete Batch Plant Inspection and Onsite Concrete Sampling & Testing	92 hours @ \$ 115.00 /hour	\$ 10,580.00
Laboratory Testing	Concrete Compressive Strength Testin 5 Concrete Cylinders / 50 CY (4"x 8" Cylinders)	50 tests @ \$ 35.00 /test	\$ 1,750.00
<b>Subtotal</b>			<b>\$ 23,310.00</b>

**Post Installed Anchors**

Special Inspector	Post-Installed Anchors Installation Inspection	36 hours @ \$ 115.00 /hour	\$ 4,140.00
Senior Technician	Load Testing of Post-Installed Anchors (Torque & Pull Testing)	36 hours @ \$ 115.00 /hour	\$ 4,140.00
<b>Subtotal</b>			<b>\$ 8,280.00</b>

**Structural Steel**

Special Inspector	Structural Steel Welding Inspection (Shop and Field)	240 hours @ \$ 115.00 /hour	\$ 27,600.00
Laboratory Testing	High Strength Bolt, Nut & Washer Conformance per assembly, A 325	27 tests @ \$ 250.00 /test	\$ 6,750.00
Special Inspector	High Strength Bolt Placement Inspections and Torque Testing using Skidmore	72 hours @ \$ 115.00 /hour	\$ 8,280.00
<b>Subtotal</b>			<b>\$ 42,630.00</b>

**Reimbursables**

Equipment		620 hours @ \$ 15.00 /hour	\$ 9,300.00
Vehicle		620 hours @ \$ 15.00 /hour	\$ 9,300.00
<b>Subtotal</b>			<b>\$ 18,600.00</b>

**Project Management**

Geo Assistant	Dispatch	20 hours @ \$ 100.00 /hour	\$ 2,000.00
Project Engineer	Meetings, Mix Design & WPS Review, Project Coordination and Progress Reports	40 hours @ \$ 195.00 /hour	\$ 7,800.00
Principal Engineer	Project Oversight, Consultation and Final Affidavit Letter	20 hours @ \$ 220.00 /hour	\$ 4,400.00
<b>Subtotal</b>			<b>\$ 14,200.00</b>

**TOTAL ESTIMATED FEE**

**\$ 119,980.00**

## Schedule of Fees

### Hourly Charges for Personnel

#### Professional Staff

Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist .....	\$ 220
Senior Engineer/Geologist/Environmental Scientist .....	\$ 210
Senior Project Engineer/Geologist/Environmental Scientist .....	\$ 200
Project Engineer/Geologist/Environmental Scientist .....	\$ 195
Senior Staff Engineer/Geologist/Environmental Scientist .....	\$ 180
Staff Engineer/Geologist/Environmental Scientist .....	\$ 165
GIS Analyst .....	\$ 145
Technical Illustrator/CAD Operator .....	\$ 120

#### Field Staff

Certified Asbestos/Lead Technician .....	\$ 200
Field Operations Manager .....	\$ 130
Nondestructive Examination Technician (UT, MT, LP) .....	\$ 125
Supervisory Technician .....	\$ 120
Special Inspector (Concrete, Masonry, Structural Steel, Welding, and Fireproofing) .....	\$ 115
Senior Technician .....	\$ 115
Technician .....	\$ 110

#### Administrative Staff

Information Specialist .....	\$ 100
Geotechnical/Environmental/Laboratory Assistant .....	\$ 100
Data Processor .....	\$ 80

### Other Charges

Concrete Coring Equipment (includes technician) .....	\$ 190/hr
Anchor Load Test Equipment (includes technician) .....	\$ 190/hr
GPR Equipment .....	\$ 180/hr
State of California Prevailing Wage Surcharge .....	\$ 30/hr
Inclinometer .....	\$ 100/hr
Hand Auger Equipment .....	\$ 80/hr
Rebar Locator (Pachometer) .....	\$ 25/hr
Vapor Emission Kit .....	\$ 65/kit
Equipment .....	\$ 15/hr
X-Ray Fluorescence .....	\$ 70/hr
PID/FID .....	\$ 25/hr
Air Sampling Pump .....	\$ 10/hr
Field Vehicle .....	\$ 15/hr
Expert Witness Testimony .....	\$ 450/hr
Direct Expenses .....	Cost plus 15 %
Special equipment charges will be provided upon request.	

### Notes

Our field services, are charged at a 4-hour minimum, and 8-hour minimum for hours exceeding 4 hours. Overtime rates at 1.5 times the regular rates will be charged for work performed in excess of 8 hours in one day Monday through Friday and all day on Saturday. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day, all day Sunday and on holidays.

Field services that may be subject to prevailing wage in accordance with AB 1768 and Prevailing Wage Determinations, will be subject to a prevailing wage surcharge as shown in our Schedule of Fees. Our rates will be adjusted in conjunction with the increase in the Prevailing Wage Determination during the life of the project, as applicable.

The terms and conditions are included in Ninyo & Moore's Work Authorization and Agreement form.

## Schedule of Fees for Laboratory Testing

### SOILS

Atterberg Limits, D 4318, CT 204 .....	\$ 190
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 .....	\$ 200
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 6913, CT 203 .....	\$ 220
Moisture, Ash, & Organic Matter of Peat/Organic Soils .....	\$ 120
Moisture Only, D 2216, CT 226 .....	\$ 45
Moisture and Density, D 2937 .....	\$ 55
Permeability, CH, D 2434, CT 220 .....	\$ 350
pH and Resistivity, CT 643 .....	\$ 185
Proctor Density D1557, D 698, CT 216, AASHTO T-180 .....	\$ 350
Proctor Density with Rock Correction D 1557 .....	\$ 400
R-value, D 2844, CT 301 .....	\$ 450
Sand Equivalent, D 2419, CT 217 .....	\$ 155
Sieve Analysis, D 6913, CT 202 .....	\$ 175
Sieve Analysis, 200 Wash, D 1140, CT 202 .....	\$ 130
Specific Gravity, D 854 .....	\$ 135
Thermal Resistivity (ASTM 5334, IEEE 442) .....	\$ 925
Triaxial Shear, C.D., D 4767, T 297 .....	\$ 550
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt .....	\$ 450
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt .....	\$ 350
Triaxial Shear, U.U., D 2850 .....	\$ 250
Unconfined Compression, D 2166, T 208 .....	\$ 150

### 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 .....	\$ 80
Cores, Compression or Shear Bond, CA Code .....	\$ 80
Masonry Grout, 3x3x6 prism compression, C 39 .....	\$ 45
Masonry Mortar, 2x2 cylinder compression, C 109 .....	\$ 55
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 .....	\$ 90
Hardness Test, Rockwell, A 370 .....	\$ 80
High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 .....	\$ 250
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 .....	\$ 75
Structural Steel Tensile Test: Up to 200,000 lbs., A 370 .....	\$ 90
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI .....	\$ 80

### CONCRETE

Compression Tests, 6x12 Cylinder, C 39 .....	\$ 35
Concrete Mix Design Review, Job Spec .....	\$ 350
Concrete Mix Design, per Trial Batch, 6 cylinder, ACI .....	\$ 950
Concrete Cores, Compression (excludes sampling), C 42 .....	\$ 130
Drying Shrinkage, C 157 .....	\$ 500
Flexural Test, C 78 .....	\$ 95
Flexural Test, C 293 .....	\$ 95
Flexural Test, CT 523 .....	\$ 95
Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI .....	\$ 360
Lightweight Concrete Fill, Compression, C 495 .....	\$ 90
Petrographic Analysis, C 856 .....	\$ 2,800
Restrained Expansion of Shrinkage Compensation .....	\$ 550
Splitting Tensile Strength, C 496 .....	\$ 120
3x6 Grout, (CLSM), C 39 .....	\$ 65
2x2x2 Non-Shrink Grout, C 109 .....	\$ 65

### ASPHALT

Air Voids, T 269 .....	\$ 90
Asphalt Mix Design, Caltrans (incl. Aggregate Quality) .....	\$ 4,500
Asphalt Mix Design Review, Job Spec .....	\$ 190
Dust Proportioning, CT LP-4 .....	\$ 95
Extraction, % Asphalt, including Gradation, D 2172, CT 382 .....	\$ 260
Extraction, % Asphalt without Gradation, D 2172, CT 382 .....	\$ 160
Film Stripping, CT 302 .....	\$ 130
Hveem Stability and Unit Weight D 1560, T 246, CT 366 .....	\$ 240
Marshall Stability, Flow and Unit Weight, T 245 .....	\$ 250
Maximum Theoretical Unit Weight, D 2041, CT 309 .....	\$ 160
Moisture Content, CT 370 .....	\$ 105
Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371 .....	\$ 1,000
Slurry Wet Track Abrasion, D 3910 .....	\$ 160
Superpave, Asphalt Mix Verification (incl. Aggregate Quality) .....	\$ 4,900
Superpave, Gyro Unit Wt., T 312 .....	\$ 110
Superpave, Hamburg Wheel, 20,000 passes, T 324 .....	\$ 1,200
Unit Weight sample or core, D 2726, CT 308 .....	\$ 110
Voids in Mineral Aggregate, (VMA) CT LP-2 .....	\$ 100
Voids filled with Asphalt, (VFA) CT LP-3 .....	\$ 100
Wax Density, D 1188 .....	\$ 150

### AGGREGATES

Clay Lumps and Friable Particles, C 142 .....	\$ 190
Cleanness Value, CT 227 .....	\$ 190
Crushed Particles, CT 205 .....	\$ 180
Durability, Coarse or Fine, CT 229 .....	\$ 205
Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234 .....	\$ 180
Flat and Elongated Particle, D 4791 .....	\$ 230
Lightweight Particles, C 123 .....	\$ 180
Los Angeles Abrasion, C 131 or C 535 .....	\$ 220
Material Finer than No. 200 Sieve by Washing, C 117 .....	\$ 100
Organic Impurities, C 40 .....	\$ 100
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 .....	\$ 495
Sand Equivalent, T 176, CT 217 .....	\$ 130
Sieve Analysis, Coarse Aggregate, T 27, C 136 .....	\$ 130
Sieve Analysis, Fine Aggregate (including wash), T 27, C 136 .....	\$ 150
Sodium Sulfate Soundness, C 88 .....	\$ 450
Specific Gravity and Absorption, Coarse, C 127, CT 206 .....	\$ 120
Specific Gravity and Absorption, Fine, C 128, CT 207 .....	\$ 180

### 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.