

June 27, 2017 Proposal No. P02-01011

Mr. Frank Gonzalez Magnolia Public Schools 250 East 1st Street Los Angeles, California 90012

Subject: Proposal for Geotechnical, Special Inspection and Materials Testing Services

Magnolia Science Academy

6525 Estrella Avenue San Diego, California DSA 04-116175

Dear Mr. Gonzalez:

We are pleased to present this proposal to provide geotechnical, special inspection and materials testing services during the construction of the Magnolia Science Academy campus to be located at 6525 Estrella Avenue in the Grantville area of the City of San Diego. In preparation of this proposal, we have reviewed the Division of the State Architect (DSA) approved plans and specifications for the subject DSA application number. We understand that the project will include the demolition of the existing structure and partial removal of existing utilities, construction of asphalt pavement, placement of seven modular classrooms and administrative office, and installation of underground utilities. This proposal was prepared without the benefit of a construction schedule or DSA Form 103 and is based on our assumptions as to the needed geotechnical, special inspections and materials testing.

It is our understanding that the seven modular structures will be from existing stock. In the event that new structures are utilized, special inspection during in-plant fabrication will be required. Costs for special inspection during fabrication are not included in this proposal but may be provided upon request. Site improvements will consist of the relocation of the existing gazebo, construction of masonry retaining walls, construction of asphalt pavement for beneath the proposed structures, basketball courts and parking areas.

A geotechnical report was contained in the electronic files received and indicated that the site is underlain by 2 to 6 feet of undocumented fill material. The fill is underlain by Very Old Paralic Deposits. It was recommended in the report that proposed foundations be entirely in fill material or paralic deposits. In the event that foundations will transition between fill and paralic deposits, it was recommended that the pad be over excavated such that the foundations would be underlain by 2 feet of engineered fill.

## SCOPE OF SERVICES

We propose to provide construction testing/inspection services that will include geotechnical observations, materials testing, and special inspections services. We anticipate our construction related scope of services for this project to include the following:

- Reviewing available geotechnical reports prepared for the site.
- Preparing a change of geotechnical engineer of record report for submittal to DSA.
- Attending preconstruction and site meetings, as requested.
- Performing field observation and in-place density testing during the earthwork and flatwork subgrade operations.
- Performing geologic/engineering field services to evaluate the suitability of remedial grading and foundation excavations.
- Performing laboratory testing of the materials used for the earthwork operations. The tests
  performed are anticipated to include an evaluation of Proctor density/optimum moisture content
  analysis. Additional tests may be performed as appropriate.
- Performing review of concrete mix design.
- Performing sampling and tagging of reinforcing steel at the supplier's facility. Per the DSA
  Interpretation of Regulations Document IR 17-10, samples of the reinforcing steel will be
  obtained from bundles or coils identified by the manufacturer's mill and returned to laboratory
  for conformance testing.
- Performing sampling of high strength bolts on site, if required.
- Performing special inspection of reinforcing steel and formwork by our special inspector for proper size, spacing, and lapping.
- Performing concrete batch plant inspection during the production of structural concrete to be utilized on the project.

- Performing special inspection by our certified inspector during placement of the structural concrete. Our special inspector will perform continuous inspection during the concrete placements for proper mix designs, age of concrete, allowable water, proper ingredient proportions, and sample the fresh material. The inspector/technician will test the sampled material for temperature and slump, as well as cast one set of five concrete cylinders for every 50 cubic yards placed, or fraction thereof, during a day's placement per project specifications.
- Performing periodic special inspection during the placement and grouting of structural masonry by our certified inspector. Mortar, grout and prism samples will be fabricated and tested for the compressive strength as specified on the project plans in accordance with the California Building Code (CBC) Standards for masonry.
- Performing special inspection during shop fabrication of structural steel and embed plates. It is anticipated that the fabricator will be located within San Diego County
- Performing special inspection by our certified inspector of the field welding and high strength bolt installation. Welding inspection will include review of project plans and shop detail drawings, welding procedures, welder qualifications, proper fit-up, preheat, weld length, and weld quality. Inspection of high strength bolting will include review of mill certificates, verification of bearing surfaces, alignment, tightening and testing by specified methods for connection type.
- Performing special inspection during installation of post installed anchors.
- Performing load testing of post installed anchors.
- Performing laboratory material conformance testing in our in-house laboratory of reinforcing steel, high strength bolts, and masonry unit samples
- Performing laboratory testing to evaluate the compressive strength of concrete, mortar, grout, and prism samples.
- Reviewing for and preparation of Geotechnical Verified Report (DSA 293), Laboratory Verified Report (DSA 291), Interim and Final Verified Reports for submittal to the Division of the State Architect
- Engineering consultation and project management, including distribution of test reports and Final Verified Reports.

## **ASSUMPTIONS**

This proposal has been prepared in accordance with the following assumptions:

- Work will be performed during normal workdays (Monday through Friday) and normal daylight work hours.
- The project is subject to prevailing wages.

- Shop fabrication special inspection of the modular structures will not be required.
- Shop fabrication of embed plates for the foundations will be required.
- Environmental sampling and testing of the subsurface soils is not included within the scope of this proposal. A cost for these services, if needed may be provided upon request.

## **FEE ESTIMATE**

The construction geotechnical, special inspection and materials testing services described herein for the proposed Magnolia Science Academy campus will be provided on a time-and-expense basis accrued in accordance with the attached Schedule of Fees. For budgetary purposes, we have prepared an estimate for the above describe services. The estimated fee for the noted construction testing/inspection services is approximately \$80,900 (Eighty Thousand Nine Hundred Dollars). A breakdown of the fees associated with the geotechnical observation, special inspection and materials testing services during construction are presented on Table 1.

A DSA Form DSA-103 was not available in the preparation of this proposal. Generally inspection of concrete placement and post installed anchors is performed by the Project Inspector (IOR) but can be performed by a special inspector upon DSA approval. We have included the costs for these inspections in the attached table. Sampling of concrete and load testing of the post installed anchors would still be required if the inspection is performed by the IOR.

After formulation of a project schedule and construction drawings, estimated hours may be reevaluated. It should be noted that the performance of the subcontractors can substantially affect the
duration of our services. Requested engineering, special inspection, and field and laboratory testing not
within the specified scope of services or in excess of those presented in the attached tables will be
provided, based on time and materials, in accordance with the attached fee schedule.

Our fee does not include time to review drawings, preparation of construction specifications, meetings and other activities requested that are not presented in our estimated fee breakdown. We appreciate the opportunity to submit this proposal and look forward to working with you on this project.

If this proposal meets with your approval, please sign the attached work authorization form and return, authorizing us to proceed. We appreciate the opportunity to submit this proposal and look forward to working with you on this project.

Respectfully submitted, NINYO & MOORE

Kai A. Vedenoja, PE Senior Project Engineer Ronald S. Halbert, PE Principal Engineer

KAV/RSH/gg

Attachment: Schedule of Fees

Table 1 – Breakdown of Estimated Fee for Construction Services

Work Authorization and Agreement

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

#### Schedule of Fees **Hourly Charges for Personnel** Principal Engineer/Geologist/Environmental Scientist \$ 168 Senior Engineer/Geologist/Environmental Scientist \$ 164 Senior Project Engineer/Geologist/Environmental Scientist Project Engineer/Geologist/Environmental Scientist \$ 156 Senior Staff Engineer/Geologist/Environmental Scientist Staff Engineer/Geologist/Environmental Scientist \$ 128 Field Operations Manager \$ 112 Supervisory Technician Nondestructive Examination Technician, UT, MT, LP \$ 105 Senior Field/Laboratory Technician \$ 95 Field/Laboratory Technician \$ 95 ACI Concrete Technician 95 Concrete/Asphalt Batch Plant Inspector \$ Special Inspector (Concrete, Masonry, Steel, Welding, and Fireproofing).....\$ 95 Technical Illustrator/CAD Operator \$ 86 Geotechnical/Environmental/Laboratory Assistant \$ 73 Information Specialist 73 Data Processing, Technical Editing, or Reproduction 64 Other Charges Concrete Coring Equipment (includes one technician) \$ 165/hr \$ 140/day PID/FID Usage Anchor load test equipment (includes technician) \$ 105/hr Hand Auger Equipment \$ 65/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 15/hr Nuclear Density Gauge Usage \$ Field Vehicle Usage 12/hr Direct Project Expenses Cost plus 15 %

#### 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.

Laboratory testing, geophysical equipment, and other special equipment provided upon request.

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		CONCRETE	
Atterberg Limits, D 4318, CT 204	\$ 160	Compression Tests, 6x12 Cylinder, C 39	\$ 25
California Bearing Ratio (CBR), D 1883	\$ 485	Concrete Mix Design Review, Job Spec	\$ 155
Chloride and Sulfate Content, CT 417 & CT 422	\$ 175	Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	\$ 825
Consolidation, D 2435, CT 219	\$ 300	Concrete Cores, Compression (excludes sampling), C 42	\$ 60
Consolidation – Time Rate, D 2435, CT 219	\$ 75	Drying Shrinkage, C 157	\$ 350
Direct Shear – Remolded, D 3080	\$ 325	Flexural Test, C 78	\$ 65
Direct Shear – Undisturbed, D 3080	\$ 275	Flexural Test, C 293	\$ 60
Durability Index, CT 229	\$ 165	Flexural Test, CT 523	
Expansion Index, D 4829, IBC 18-3	\$ 180	Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI	\$ 275
Expansion Potential (Method A), D 4546	\$ 160	Jobsite Testing Laboratory	Quote
Geofabric Tensile and Elongation Test, D 4632	\$ 180	Lightweight Concrete Fill, Compression, C 495	\$ 45
Hydraulic Conductivity, D 5084	\$ 330	Petrographic Analysis, C 856	\$ 1,900
Hydrometer Analysis, D 422, CT 203		Restrained Expansion of Shrinkage Compensation	\$ 270
Moisture, Ash, & Organic Matter of Peat/Organic Soils	\$ 120	Splitting Tensile Strength, C 496	\$ 90
Moisture Only, D 2216, CT 226	\$ 35	3x6 Grout, (CLSM), C 39	\$ 45
Moisture and Density, D 2937	\$ 45	2x2x2 Non-Shrink Grout, C 109	\$ 45
Permeability, CH, D 2434, CT 220	\$ 255		
pH and Resistivity, CT 643	\$ 175	ASPHALT CONCRETE	
Proctor Density D 1557, D 698, CT 216, &		Air Voids, T 269	\$ 50
AASHTO T-180 (Rock corrections add \$100)	\$ 200	Asphalt Mix Design, Caltrans (excl. Aggregate Quality)	\$ 2,800
R-value, D 2844, CT 301	\$ 295	Asphalt Mix Design Review, Job Spec	165
Sand Equivalent, D 2419, CT 217	\$ 110	Dust Proportioning, CT LP-4	\$ 50
Sieve Analysis, D 422, CT 202	\$ 130	Extraction, % Asphalt, including Gradation, D 2172, CT 382	\$ 240
Sieve Analysis, 200 Wash, D 1140, CT 202	\$ 100	Film Stripping, CT 302	110
Specific Gravity, D 854	\$ 100	Hveem Stability and Unit Weight D 1560, T 246, CT 366	\$ 215
Thermal Resistivity (ASTM 5334, IEEE 442)	\$ 880	Marshall Stability, Flow and Unit Weight, T 245	\$ 240
Triaxial Shear, C.D., D 4767, T 297		Maximum Theoretical Unit Weight, D 2041, CT 309	150
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt	\$ 365	Moisture Content, CT 370	\$ 85
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt	\$ 210	Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371	
Triaxial Shear, U.U., D 2850	\$ 155	Slurry Wet Track Abrasion, D 3910	
Unconfined Compression, D 2166, T 208	\$ 120	SuperPave, Asphalt Mix Verification (incl. Aggregate Quality)	
Wax Density, D 1188	\$ 100	SuperPave, Gyratory Unit Wt., T 312	\$ 75
		SuperPave, Hamburg Wheel, 20,000 passes, T 324	\$ 1,000
MASONRY		Unit Weight sample or core, D 2726, CT 308	
Brick Absorption, 24-hour submersion, C 67	\$ 50	Voids in Mineral Aggregate, (VMA) CT LP-2	\$ 50
Brick Absorption, 5-hour boiling, C 67		Voids filled with Asphalt, (VFA) CT LP-3	\$ 50
Brick Absorption, 7-day, C 67			
Brick Compression Test, C 67		AGGREGATES	
Brick Efflorescence, C 67	\$ 50	Clay Lumps and Friable Particles, C 142	
Brick Modulus of Rupture, C 67	\$ 45	Cleanness Value, CT 227	160
Brick Moisture as received, C 67		Crushed Particles, CT 205	
Brick Saturation Coefficient, C 67		Durability, Coarse or Fine, CT 229	
Concrete Block Compression Test, 8x8x16, C 140		Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234	180
Concrete Block Conformance Package, C 90	\$ 485	Flat and Elongated Particle, D 4791	\$ 220
Concrete Block Linear Shrinkage, C 426	\$ 135	Lightweight Particles, C 123	180
Concrete Block Unit Weight and Absorption, C 140	\$	Los Angeles Abrasion, C 131 or C 535	\$ 200
Cores, Compression or Shear Bond, CA Code		Material Finer than No. 200 Sieve by Washing, C 117	
Masonry Grout, 3x3x6 prism compression, C 39		Organic Impurities, C 40	
Masonry Mortar, 2x4 cylinder compression, C 109		Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260	\$ 950
Masonry Prism, half size, compression, C 1019	\$ 120	Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260	\$ 1,250
Masonry Prism, Full size, compression, C 1019	\$ 185	Potential Reactivity of Aggregate (Chemical Method), C 289	
		Sand Equivalent, T 176, CT 217	
REINFORCING AND STRUCTURAL STEEL		Sieve Analysis, Coarse Aggregate, T 27, C 136	\$ 115
Chemical Analysis, A 36, A 615	\$ 135	Sieve Analysis, Fine Aggregate (including wash), T 27, C 136	
Fireproofing Density Test, UBC 7-6		Sodium Sulfate Soundness, C 88	
Hardness Test, Rockwell, A 370	\$ 70	Specific Gravity and Absorption, Coarse, C 127, CT 206	
High Strength Bolt, Nut & Washer Conformance,		Specific Gravity and Absorption, Fine, C 128, CT 207	\$ 160
per assembly, A 325	\$ 130		
Mechanically Spliced Reinforcing Tensile Test, ACI		ROOFING	
Pre-Stress Strand (7 wire), A 416	\$ 170	Roofing Tile Absorption, (set of 5), C 67	
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	\$ 55	Roofing Tile Strength Test, (set of 5), C 67	\$ 210
Structural Steel Tensile Test: Up to 200,000 lbs.			
(machining extra), A 370	\$ 80		
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	\$ 60		

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.

Table 1 - Breakdown of Estimated Fee for Construction	n Services			
Field Services				
Field Technician - Building Pad Preparation	120 hours @	\$95.00 /hour	\$	11,400.00
Field Technician - Retaining Wall Backfill	24 hours @			2,280.00
Field Technician - Trench Backfill	120 hours @	\$95.00 /hour	\$	11,400.00
Field Technician - Subgrade and Aggregate Base	40 hours @			3,800.00
Field Technician - Asphalt Concrete	24 hours @	\$95.00 /hour	\$	2,280.00
Field/Laboratory Technician, Tag & Sample	40 hours @	\$95.00 /hour	\$	3,800.00
ACI Concrete Technician	24 hours @	\$95.00 /hour	\$	2,280.00
Reinforced Concrete, Special Inspector	80 hours @	\$95.00 /hour	\$	7,600.00
Concrete/Asphalt Batch Plant Inspector	40 hours @	\$95.00 /hour	\$	3,800.00
Reinforced Masonry, Special Inspector	40 hours @	\$95.00 /hour	\$	3,800.00
Structural Steel/Welding, Special Inspector, Shop	24 hours @	\$95.00 /hour	\$	2,280.00
Structural Steel/Welding, Special Inspector, Field	40 hours @	\$95.00 /hour	\$	3,800.00
Post Installed Anchor, Special Inspector	20 hours @	\$95.00 /hour	\$	1,900.00
Pull Test Technician and Equipment	12 hours @	\$105.00 /hour	\$	1,260.00
Field/Laboratory Technician, Sample Pickup	30 hours @	\$95.00 /hour	\$	2,850.00
		Subtotal	\$	64,530.00
Laboratory Analyses				
Proctor Density - D 1557	4 tests @	\$200.00 /test	\$	800.00
Expansion Index - D 4829, UBC 18-2	4 tests @	\$180.00 /test	\$	720.00
Chloride and Sulfate Content, CT 417 & CT 422	2 tests @	\$150.00 /test	\$	300.00
pH and Resistivity, CT 643	2 tests @	\$155.00 /test	\$	310.00
Extraction, % Asphalt, including Gradation, D 2172, CT 310	2 tests @	\$240.00 /test	\$	480.00
Hveem Stability and Unit Weight CTM or ASTM, CT 366	2 tests @	\$215.00 /test	\$	430.00
Concrete Block Conformance Package, C 90	2 tests @	\$485.00 /test	\$	970.00
Masonry Mortar, 2x4 cylinder compression, UBC 21-16	2 tests @	\$35.00 /test	\$	70.00
Masonry Grout, 3x3x6 prism compression, UBC 21-18	2 tests @	\$35.00 /test	\$	70.00
Masonry Prism, half size, compression, UBC 21-17	2 tests @	\$120.00 /test	\$	240.00
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	16 tests @	***************************************	\$	880.00
High Strength Bolt, Nut & Washer Conformance, set, A-325	3 tests @	•	\$	390.00
Compression Tests, 6x12 Cylinder, C 39	58 tests @		\$	1,450.00
		Subtotal	\$	7,110.00
Project Management, Technical Support, and Report Prepa				
Principal Engineer/Geologist/Environmental Scientist	8 hours @		\$	1,344.00
Senior Project Engineer/Geologist/Environmental Scientist	28 hours @	\$160.00 /hour	\$	4,480.00
Project Engineer/Geologist/Environmental Scientist	10 hours @	\$156.00 /hour	\$	1,560.00
Technical Illustrator/CAD Operator	4 hours @	\$86.00 /hour	\$	344.00
Data Processing, Technical Editing, or Reproduction 24 hours @ \$64.00 /hou				1,536.00
		Subtotal	\$	9,264.00
TOTAL ESTIMATED FEE			\$	80,904.00

## **WORK AUTHORIZATION AND AGREEMENT**

Please Sign and Return One Copy to:

NINYO & MOORE
5710 Ruffin Road
San Diego, California 92123

PROPOSAL NO. P02-01011

1. PROJECT ADDRESS: 6525 Estrella Avenue, San Diego, California

2. PROJECT DESCRIPTION: Geotechnical, Special Inspection and Materials Testing Services

3. SCOPE OF STUDY: Please refer to proposal dated- Proposal dated June 27, 2017.

4. FEE: \$80,900 (Eighty Thousand Nine Hundred Dollars – Estimate Only)

PORTION OF FEE IN ADVANCE OF WORK: None

6. CLIENT: MAGNOLIA PUBLIC SCHOOLS PHONE: 213/628-3634

250 East 1st Street

Los Angeles, California 90012

CONTACT: Frank Gonzalez PHONE: 213/628-3634

STATEMENT TO BE SENT TO: Client

#### CONDITIONS OF AGREEMENT BETWEEN CLIENT AND NINYO & MOORE

This AGREEMENT is made by and between: NINYO & MOORE GEOTECHNICAL AND ENVIRONMENTAL SCIENCES CONSULTANTS, hereinafter referred to as CONSULTANT, and **MAGNOLIA PUBLIC SCHOOLS**, hereinafter referred to as CLIENT. This AGREEMENT between the parties consists of these TERMS, the attached Proposal identified as No. **P02-01011** dated **June 27, 2017**, and any exhibits or attachments noted in the Proposal. Together, these elements will constitute the entire AGREEMENT superseding any and all prior negotiations, correspondence, or agreements either written or oral. Any changes to this AGREEMENT must be mutually agreed to in writing.

## STANDARD OF CARE

CLIENT recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by CONSULTANT will be based solely on information available to CONSULTANT. CONSULTANT is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.

Services performed by CONSULTANT under this AGREEMENT are expected by CLIENT to be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the geotechnical engineering profession practicing contemporaneously under similar conditions in the locality of the project. Under no circumstance is any warranty, expressed or implied, made in connection with the providing of geotechnical consulting services.

## SITE ACCESS AND SITE CONDITIONS

CLIENT will grant or obtain free access to the site for all equipment and personnel necessary for CONSULTANT to perform the work set forth in this agreement. CLIENT will notify any and all possessors of the project site that CLIENT has granted CONSULTANT free access to the site. Client will protect all property, inside and out, including all plants and landscaping. CONSULTANT will take reasonable precautions to reduce the potential for damage to the site, but it is understood by CLIENT that, in the normal course of work, some damage may occur and the correction of such damage or alteration is not part of this AGREEMENT unless so specified in the Proposal.

CLIENT is responsible for accurately delineating the locations of all subterranean structures and utilities. CONSULTANT will take reasonable precautions to avoid known subterranean structures, and CLIENT waives any claim against CONSULTANT, and agrees to defend, indemnify and hold CONSULTANT harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, CLIENT agrees to compensate CONSULTANT for any time spent or expenses incurred by CONSULTANT in defense of any such claim, with compensation to be based upon CONSULTANT's prevailing fee schedule and expense reimbursement policy.

#### SAMPLE DISPOSAL

CONSULTANT will dispose of remaining soil, rock, and water samples approximately thirty (30) days after submission of the report covering those samples. Further storage or transfer of samples can be made at CLIENT's expense upon CLIENT's prior written request.

## **MONITORING**

If CONSULTANT is retained by CLIENT to provide a site representative for the purpose of monitoring specific portions of construction work or other field activities as set forth in the Proposal, then this phrase applies. For the specified assignment, CONSULTANT will report observations and professional opinions to CLIENT or CLIENT's agent. No action of CONSULTANT or CONSULTANT's site representative can be construed as altering any AGREEMENT between the CLIENT and others. CONSULTANT will report to CLIENT or CLIENT's agent any observed geotechnically related work which, in CONSULTANT's professional opinion, does not conform with plans and specifications. The CONSULTANT has no right to reject or stop work of any agent or subcontractor of CLIENT; such rights are reserved solely for CLIENT. Furthermore, CONSULTANT's presence on the site does not in any way guarantee the completion or quality of the performance of the work of any party retained by CLIENT to provide field or construction-related services.

If CONSULTANT is not retained by Client for the purpose of monitoring construction work or field activities, CONSULTANT will expressly not be held liable or responsible for such activities or for the geotechnical performance of the completed project. Monitoring of construction work or field activities and the geotechnical performance of the completed project is and will remain the sole and express responsibility of the CLIENT or other party designated by the CLIENT. CLIENT hereby agrees to indemnify and hold harmless CONSULTANT from and against any loss or judgment, suffered by the CONSULTANT as a result of a claim or lawsuit resulting from CLIENT's failure to monitor construction work or field activities for which CONSULTANT has not been retained.

CONSULTANT will not be responsible for and will not have control or charge of specific means, methods, techniques, sequences or procedures of construction or other field activities selected by any agent or agreement of CLIENT. It is mutually understood and agreed by CLIENT and CONSULTANT that CONSULTANT has no control or enforcement ability over any persons or parties who are not employees of CONSULTANT. CONSULTANT does not purport to be, nor is CONSULTANT responsible for, any safety precautions nor programs incident thereto for such non-employees of CONSULTANT.

## **OWNERSHIP AND MAINTENANCE OF DOCUMENTS**

Unless otherwise specified in this Agreement or in an Addendum, and provided that CONSULTANT has been fully paid for the Services, CLIENT shall have the right to use the documents, maps, photographs, drawings and specifications resulting from CONSULTANT's efforts on the project, for purposes reasonably contemplated by the parties. CONSULTANT shall have the right, but shall not be obligated, to retain copies of all such materials and shall have the right to use the same for any purpose, unless such use would be expected to cause harm to CLIENT. CLIENT shall specify in advance, in writing, and be charged for all arrangements for special or extended-period maintenance of such materials by CONSULTANT. CONSULTANT retains the right of ownership with respect to any patentable concepts or copyrightable materials arising from its Services.

Reuse of any material described by CLIENT, including publication to third parties, on extension of this project or on any other project without CONSULTANT's written authorization, shall be at CLIENT's risk, and CLIENT agrees to indemnify, defend, and hold harmless CONSULTANT from all claims, damages, and expenses, including attorney's fees, arising out of such unauthorized reuse.

## **BILLING AND PAYMENT**

CLIENT will pay CONSULTANT in accordance with the procedures indicated in the Proposal and its attachments. Invoices will be submitted to CLIENT by CONSULTANT, and will be due and payable upon presentation. If CLIENT objects to all or any portion of any invoice, CLIENT will so notify CONSULTANT in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, the balance as stated on the invoice will be paid.

Invoices are delinquent if payment has not been received within thirty (30) days from date of invoice. CLIENT will pay an additional charge of three quarters of a percent (.75) per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent amount, excepting any portion of the invoiced amount in dispute and resolved in favor of CLIENT. Payment thereafter will first be applied to accrued interest and then to the principal unpaid amount. All time spent and expenses incurred (including any attorney's fees) in connection with collection of any delinquent amount will be paid by CLIENT to CONSULTANT per CONSULTANT's current fee schedules. In the event CLIENT fails to pay CONSULTANT within sixty (60) days after invoices are rendered, CLIENT agrees that CONSULTANT will have the right to consider the failure to pay the CONSULTANT's invoice as a breach of this AGREEMENT and CONSULTANT may cease work on the project. At CONSULTANT's option, CONSULTANT may waive said major breach upon payment by CLIENT of all arrearages and outstanding invoices.

## **TERMINATION**

This AGREEMENT may be terminated by either party seven (7) days after written notice in the event of any breach of any provision of this AGREEMENT or in the event of substantial failure of performance by either party, or if CLIENT suspends the work for more than

three (3) months. In the event of termination, CONSULTANT will be paid for services performed prior to the date of termination plus reasonable termination expenses, including, but not limited to, the cost of completing analyses, records, and reports necessary to document job status at the time of termination.

#### **RISK ALLOCATION**

Many risks potentially affect CONSULTANT by virtue of entering into this AGREEMENT to perform professional consulting services on behalf of CLIENT. The principal risk is the potential for human error by CONSULTANT. For CLIENT to obtain the benefit of a fee which includes a nominal allowance for dealing with CONSULTANT's liability, CLIENT agrees to limit CONSULTANT's liability to CLIENT and to all other parties for claims arising out of CONSULTANT's performance of the services described in this AGREEMENT. The aggregate liability of CONSULTANT will not exceed \$50,000 for negligent professional acts, errors, or omissions, including attorney's fees and costs which may be awarded to the prevailing party, and CLIENT agrees to indemnify and hold harmless CONSULTANT from and against all liabilities in excess of the monetary limit established above.

Limitations on liability and indemnities in this AGREEMENT are business understandings between the parties voluntarily and knowingly entered into, and shall apply to all theories of recovery including, but not limited to, breach of contract, warranty, tort (including negligence), strict or statutory liability, or any other cause of action, except for willful misconduct or gross negligence. The parties also agree that CLIENT will not seek damages in excess of the limitations indirectly through suits with other parties who may join CONSULTANT as a third-party nor by an award of attorney's fees and costs to the prevailing party in excess of the aggregate liability agreed upon herein by the parties. Parties means CLIENT and CONSULTANT and their officers, employees, agents, affiliates, and subcontractors.

Both CLIENT and CONSULTANT agree that they will not be liable to each other, under any circumstances, for special, indirect, consequential, or punitive damages arising out of or related to this AGREEMENT.

#### **INDEMNIFICATION**

If any claim is brought against CONSULTANT, its employees, agents and subcontractors and/or CLIENT by a third party, relating in any way to the Services, the contribution and indemnification rights and obligations of CONSULTANT and Client, subject to the paragraph titled "Risk Allocation" above, such claim shall be determined as follows:

- 1. If any negligence, breach of contract, or willful misconduct of CONSULTANT caused any damage, injury, or loss claimed by the third party, then CONSULTANT and CLIENT shall each indemnify the other against any loss or judgement on a comparative negligence basis (CLIENT responsibility to include that of its agents, employees, and other contractors); and
- 2. Unless CONSULTANT was liable for negligence, breach of contract, or willful misconduct which in whole or in part, caused the damage, injury, or loss asserted in the third party claim, CLIENT shall indemnify CONSULTANT against the claim, liability, loss, legal fees, consulting fees, and other costs of defense reasonably incurred.

## **DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS**

CLIENT represents that CLIENT has made a reasonable effort to evaluate if hazardous materials are on or near the project site, and that CLIENT has informed CONSULTANT of CLIENT's findings relative to the possible presence of such materials.

Hazardous materials may exist at a site where there is no reason to believe they could or should be present. CONSULTANT and CLIENT agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. CONSULTANT and CLIENT also agree that the discovery of unanticipated hazardous materials may make it necessary for CONSULTANT to take immediate measures to protect health and safety. CLIENT agrees to compensate CONSULTANT for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials.

CONSULTANT agrees to notify CLIENT when unanticipated hazardous materials or suspected hazardous materials are encountered. CLIENT agrees to make any disclosures required by law to the appropriate governing agencies. CLIENT also agrees to hold CONSULTANT harmless for any and all consequences of disclosures made by CONSULTANT which are required by governing law. In the event the project site is not owned by CLIENT, CLIENT recognizes that it is CLIENT's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.

Notwithstanding any other provision of the AGREEMENT, CLIENT waives any claim against CONSULTANT and, to the maximum extent permitted by law, agrees to defend, indemnify, and save CONSULTANT harmless from any claim, liability, and/or defense costs for injury or loss arising from CONSULTANT's discovery of unanticipated hazardous materials or suspected hazardous materials, including, but not limited to, any costs created by delay of the project and any cost associated with possible reduction of the property's value.

CLIENT will be responsible for ultimate disposal of any samples secured by CONSULTANT which are found to be contaminated.

#### **DISPUTE RESOLUTION**

If a dispute at law arises from matters related to the services provided under this AGREEMENT and that dispute requires litigation, then:

- 1. The claim will be brought and tried in judicial jurisdiction of the court of the county where CONSULTANT's principal place of business is located and CLIENT waives the right to remove the action to any other county or judicial jurisdiction, and;
- 2. The prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' and expert witness fees, and other claim-related expenses.

## **GOVERNING LAW AND SURVIVAL**

If any of the provisions contained in this AGREEMENT are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Risk allocation and indemnities will survive termination or failure of this AGREEMENT for any cause.

The parties have read, or had the opportunity to read, the foregoing, including all attachments, addendums, and exhibits hereto, have had an opportunity to discuss the same, understand completely the terms, and willingly enter into this AGREEMENT which will become effective on the date signed below by CLIENT.

Printed Name of Client or Authorized Agent		
Timed Name of Grant of Name 1250 Agent		
Signature of Client or Authorized Agent	Date	
Kon 1 He	<u>06/27/17</u>	
Ronald S. Halbert, PE 42204, Principal Engineer	Date	
	PM: <b>KAV</b>	