AMENDMENT NO. 10
TO
SAN RAFAEL CITY SCHOOLS
INDEPENDENT CONSULTANT AGREEMENT
FOR PROFESSIONAL SERVICES
WITH NINYO & MOORE GEOTECHNICAL & ENVIRONMENTAL SCIENCES CONSULTANTS

This Amendment No. 10 ("Amendment") amends the Independent Consultant Agreement for Professional Services ("Agreement"), which was entered into by and between San Rafael City Schools ("District") and Ninyo & Moore Geotechnical & Environmental Sciences Consultants ("Consultant") (together, "Parties') as follows:

RECITALS

WHEREAS, the Parties entered into the Agreement effective as of January 3, 2017; and

WHEREAS, the Parties wish to make certain modifications to the Agreement.

Now, THEREFORE, in consideration of the mutual promises and covenants set forth above and contained herein, the Parties agree as follows:

AGREEMENT TO AMEND

1. **Exhibit "A"** to the Agreement is deleted in its entirety and replaced with the document titled **"Exhibit "A""** and attached to this Amendment.

2. Section 4 of the Agreement ("Compensation") is amended to add the following:

   4.4 In addition to the Compensation identified above, the District shall pay to Consultant for the following:

4.4.1	**Amendment No. 1 Glenwood Elementary:**	**$13,880**
	Design Level Geotech Investigation	
	Amendment No. 2 San Pedro Elementary:	**$17,500**
	Design Level Geotech Investigation	
	Amendment No. 3 San Pedro Elementary:	**$ 6,300**
	Cone Penetration Testing	
	Amendment No. 4 Glenwood Elementary:	**$19,954**
	Construction Phase Geotech	
	Amendment No. 5 San Pedro Elementary:	**$19,173**
	Construction Phase Geotech Inc. 1	
	Amendment No. 6 San Pedro Elementary:	**$11,500**
	Supplemental Construction Phase Geotech	
	Amendment No. 7 Glenwood Elementary:	**$16,400**
	Supplemental Construction Phase Geotech	

Amendment No. 8 Glenwood Elementary/ San Pedro Elementary:	**$13,300**
Supplemental Construction Phase Geotech	
Amendment No. 9 San Pedro Elementary:	**$ 9,500**
Supplemental Construction Phase Geotech Inc. 3	
Amendment No. 10 San Pedro Elementary:	**$ 4,800**
Supplemental Construction Phase Geotech Inc. 3	

The new total Agreement compensation amount shall be One Hundred Sixty-Eight Thousand, Eight Hundred and Seven Dollars ($168,807).

3. All other provision of the Agreement shall remain in full force and effect and are reaffirmed. If there is any conflict between this Agreement and any provision of the Agreement relating to this Amendment only, the provisions of this Amendment shall control.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment on the dates indicated below.

By_____ _____

Jim Hogeboom — Date
Superintendent
San Rafael City Schools

By David C. Seymour August 30, 2019

David C. Seymour, PG, CEG — Date
Ninyo & Moore Geotechnical &
Environmental Sciences
Consultants

Exhibit "A"

For Glenwood Elementary School, San Pedro Elementary School, and Short Elementary School, Consultant shall provide the services described below in Sections 1 thru 12 in accordance with the terms below:

1. Geological and Soil Engineering General Requirements

a. The Geological and Soil Engineering Consultant ("GSE Consultant") shall be a registered Geotechnical Engineer in California with experience in soils engineering. The work to be provided by the GSE Consultant includes the following: supply all equipment and labor to perform field exploration, drill test borings, sample soils and perform laboratory tests; evaluate geologic and seismic conditions; and provide full soils evaluations with detailed soils reports which shall include construction level recommendations, surface evaluation, subsurface exploration coring, boring log, r-value test results, grain size distribution, soils classification according to the Unified Soils Classification System, laboratory testing of earth materials collected, ground water evaluation, existing geologic, seismic, and soil conditions present within the Property, and evaluation of potential impacts to the Project under conditions associated with faults, strong seismic ground shaking, seismic-related ground failure such as liquefaction, landslides, and unstable geologic units and/or soils.

b. The geological and soil engineering studies of the Property shall be conducted in compliance with Education Code sections 17212.5. The GSE Consultant will be the District's advisor for the existing sites and identified projects with regard to compliance with statutes and regulations on Geological and Soil Engineering services. The successful GSE Consultant will ensure that the District complies with all laws and regulations governing Geological and Soil Engineering which are applicable to the construction, renovation, or modernization of a public school or public school facilities, including without limitation Public Resources Code section 21000 et seq., Government Code section 65402, Education Code section 17210 et seq. and all applicable regulations. The successful GSE Consultant shall coordinate its work with the District's other consultants without limitation. The successful GSE Consultant shall respond to public comments on any reports issued by the GSE Consultant on the Project and shall attend and participate in any public hearings upon District request.

[REMAINDER OF PAGE INTENTIONALLY BLANK]

2. Preliminary Geotechnical Investigation and Geologic Hazard Study

a. Review of literature, including reports and studies relating to the geology of the sites, potential geologic hazards, and other relevant subsoil conditions.
b. Review of maps, aerial photos, and any other existing surveys relating to geological or geologic hazard conditions at the sites.
c. Site reconnaissance and visual confirmation of existing surface conditions on the sites.
d. Soil testing, boring or probes to establish preliminary soils conditions on the sites.
e. Review and correlation of data to confirm any geologic hazards existing on or adjacent to the sites which might impact future school development, including identified projects.
f. Preparation of the Preliminary Geotechnical and Geologic Hazard Study for each of the sites including:
    i. Identification of the general soils characteristics of the sites.
    ii. Preliminary bearing values for building and site design including foundations, slabs-on-grade, paving, retaining walls.
    iii. General preliminary recommendations for appropriate foundation designs for new construction, and retrofit of existing buildings.
    iv. The report should identify any areas of the site that may be unsuitable for consideration as areas for possible school construction.
g. Meetings with District staff and Bond Team to review the course of work, review draft documents and to consider comments prior to final issuance.
h. Final Documents issued to District.

3. Design Level Geotechnical Recommendations

a. Supplemental Geotechnical Engineering Investigation for specific new construction, additions, or renovation projects.
b. Develop recommendations for grading, excavations, groundwater mitigation, foundations, footings, piers, slabs for building and site elements.
c. Develop recommendations where ground improvement strategies may be required including areas of liquefaction.
d. Coordination with the District's design and engineering teams.

e. Preparation of Final Geotechnical report summarizing site Engineering Geology for full compliance with California Geological Survey Note 48 requirements
f. Assist the District in the preparation of testing and inspection requirements for building and site elements subgrades and foundations.

[REMAINDER OF PAGE INTENTIONALLY BLANK]

4. Construction Phase Services

a. For specific projects provide support during bidding and construction.
b. Respond to Requests for Information related to geotechnical engineering issues during bidding and construction.
c. Develop any supplemental information, recommendations, or reports needed to facilitate construction in accordance with approved plans and reflecting sub-surface issues which may be encountered during the work.
d. Coordinate services with the District's Architectural, Engineering, and Construction Management teams.
e. Provide and coordinate all required testing for compaction, excavations, building and foundation subgrades, slab subgrades, engineered soils mitigation elements. Coordinate laboratory analysis and report timely to the project team.
f. Provide certification as required for each element and final certification as required to close the project with the Division of State Architect.

5. Glenwood MPR Services:

To commence and complete a design level geotechnical study for the proposed multipurpose building to be located at the Districts Glenwood Elementary School and to perform Services as identified, above, in Sections 1 and 2 of this Exhibit.

6. San Pedro Elementary School Services:

To prepare geotechnical design level report for the proposed new buildings at San Pedro Elementary School at 498 Point San Pedro Road in San Rafael, California. Services will include preparation of a design level geotechnical evaluation and geologic hazard report in accordance with the 2014 version of CGS Note 48 suitable for submittal to DSA and CGS. The report will include foundation design parameters for the proposed structure and will incorporate the findings presented in the preliminary geotechnical evaluation for the school dated April 20, 2017.

In addition, Consultant shall provide the following services for the new proposed administration building at San Pedro Elementary School at 498 Point San Pedro Road, San Rafael, CA.

7. San Pedro Elementary School Services:

To perform four cone penetration tests of up to 50 feet along with engineering analysis to estimate the amount of dynamic settlement due to liquefaction.

8. Geotechnical Observation and Testing and Soil Sampling and Waste Classification Services for the Glenwood Elementary School Multi-Purpose Building Project:

In accordance with the California Department of Toxic Substances Control (DTSC) Information Advisory – Clean Imported Fill Material, one (1) soil sample will be collected from the soil at the site using a hand auger. The sample will be collected in a glass jar, stored in a cooler with ice, and transported to a California certified analytical laboratory under chain of custody documentation via a courier. The scope of services will include:

- Provide project management to include client liaison, work scheduling, quality review, and semi-monthly distribution of test data and daily field inspection reports.
- Coordinate inspections and testing requests with the project inspector.
- Perform soil sampling for waste classification. The soil will be analyzed for the following parameters:
    - Volatile organic compounds (VOCs) and Total petroleum hydrocarbons (TPH) as gasoline using EPA Method 8260B.
    - Semi-volatile organic compounds (SVOCs) using EPA Method 8270C.
    - Organochlorine Pesticides (OCPs) using EPA Method 8081.
    - Polychlorinated biphenyls (PCBs) using EPA Method 8082.
    - TPH as diesel and motor oil using EPA Method 8015B/8021.
    - Asbestos using EPA Method 600/R-93-116.
    - Chromium VI using EPA Method 600/R-92-116.
    - Title 22 Metals by EPA Method 6010.
- Due to the potential for metals reported above Title 22 waste characterization guidelines, a waste extraction test (WET) and Toxicity Characteristic Leaching Procedure (TLCP) for solubility analysis will be conducted for lead and chromium on the sample.
- Following the completion of field activities and receipt of laboratory analysis, a brief correspondence describing the sample results, as well as Ninyo & Moore's recommended waste classification for the soil will be submitted along with the laboratory analytical report.
- Observe site preparation, excavation, and removal of unsuitable materials.
- Observe prepared subgrade and foundation excavations for conformance with geotechnical recommendations and design assumptions.
- Observe placement and compaction of subgrade, fill and aggregate base material.
- Perform soil sample pick up and transport them back to the Ninyo & Moore laboratory for proctor density testing.
- Perform field density tests to evaluate compaction of subgrade, fill, aggregate base for utilities, and sidewalk areas.
- Prepare daily field reports describing the work observed with a summary of the results of field tests performed.
- Compile, review, and distribute progress report including field and laboratory test data.

- Provide interim and final verified reports at the project's closeout.

9. Geotechnical observation and testing services, and soil sampling and waste classification services for San Pedro Elementary School

a) Task 1 – Geotechnical Observation and Testing Services

- Observe site preparation, excavation, and removal of unsuitable materials.
- Observe prepared subgrade and foundation excavations for conformance with geotechnical recommendations and design assumptions.
- Observe placement and compaction of subgrade, fill and aggregate base material.
- Perform soil sample pick up and transport them back to our laboratory for Proctor density testing.
- Perform field density tests to evaluate compaction of subgrade, fill, aggregate base for utilities, and sidewalk areas.
- Prepare daily field reports describing the work observed with a summary of the results of field tests performed.
- Compile, review, and distribute progress report including field and laboratory test data.
- Provide interim and final verified reports at the project's closeout.

b) Task 2 – Soil Sampling and Waste Classification

In accordance with the California Department of Toxic Substances Control (DTSC) Information Advisory – Clean Imported Fill Material, one (1) soil sample will be collected from the soil at the site using hand held equipment. The sample will be collected in a glass jar, stored in a cooler with ice, and transported to a California certified analytical laboratory under chain of custody documentation via courier. Based on our understanding of the proposed construction and our experience with similar projects, we propose to provide the following scope of services.

- Provide project management to include client liaison, work scheduling, quality review, and semi-monthly distribution of test data and daily field inspection reports.
- Coordinate inspections and testing requests with the project inspector.
- Perform soil sampling for waste classification. The soil to be analyzed for the following parameters:
    i. Volatile organic compounds (VOCs) and Total petroleum hydrocarbons (TPH) as gasoline using EPA Method 8260B.
    ii. Semi-volatile organic compounds (SVOCs) using EPA Method 8270C.
    iii. Organochlorine pesticides (OCPs) using EPA Method 8081.
    iv. Polychlorinated Biphenyls (PCBs) using EPA Method 8082.
    v. TPH as diesel and motor oil using EPA Method 8015B/8021.
    vi. Asbestos using EPA Method 600/R-93-116.

vii. Chromium VI using EPA Method 7199.
viii. Title 22 Metals by EPA Method 6010.

- Due to the potential for metals reported above Title 22 waste characteristic Leaching Procedure (TLCP) for solubility analysis will be conducted for lead and chromium on the sample.
- Following the completion of field activities and receipt of laboratory analysis, a brief correspondence describing the sample results, as well as Ninyo & Moore's recommended waste classification for the soil will be submitted along with the laboratory analytical report.
- Observe site preparation, excavation, and removal of unsuitable materials.
- Observe prepared subgrade and foundation excavations for conformance with geotechnical recommendations and design assumptions.
- Observe placement and compaction of subgrade, fill and aggregate base material.
- Perform soil sample pick up and transport them back to our laboratory for proctor density testing.
- Perform filed density tests to evaluate compaction of subgrade, fill, aggregate base for utilities, and sidewalk areas.
- Prepare daily field reports describing the work observed with a summary of the results of field tests performed.
- Compile, review, and distribute progress report including field and laboratory test data.
- Provide interim and final verified reports at the project's closeout.

10. Supplemental Geotechnical Observation and Environmental Testing Services for San Pedro Elementary School improvements project.

a) Conduct supplemental geotechnical services to those identified in item 9 of this scope,

b) Observation and testing services to be performed for the utility trench installation in the main parking area and grading of the building pads for Buildings D, E and F,

c) Continued geotechnical grading observation and testing services, laboratory testing, and office support.

11. Supplemental Geotechnical Observation and Environmental Testing Services for Glenwood Elementary School Multi-purpose Building project.

a) Conduct supplemental geotechnical services to those identified in item 8 of this scope,

c) Continued observation and testing services by a soil technician, laboratory testing, and office support.

12. Continued Geotechnical Grading Observation and Testing Services for Glenwood Elementary School and San Pedro Elementary School Improvement Projects.

a) Conduct continued geotechnical grading observation and testing services. These services are to include observation and testing by soil technician, laboratory testing, and office support.

[END OF EXHIBIT]