



- GEOTECHNICAL ENGINEERING
- ENVIRONMENTAL CONSULTING
- CONSTRUCTION MATERIALS ENGINEERING AND TESTING

Mr. Donnie Mayfield
City of Frisco
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Frisco, Texas 75034

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Re: Proposal for Geotechnical Investigation
Fire Station #8
Frisco, Texas
AGG Proposal: P12-0409E

Mr. Mayfield,

We are pleased to submit this proposal for geotechnical engineering services for the project referenced above. This proposal includes project description, scope of work, fee, and proposed project schedule.

PROJECT DESCRIPTION

We understand that the project will consist of the construction of the new Fire Station #8 in Frisco, Texas. The new fire station building will be approximately 15,000 square feet, and will be surrounded by associated parking areas and driveways. It is anticipated that the building will be supported on a drilled shaft foundation system. Based on a preliminary site plan we have received, the new fire station will be constructed at the northwest corner of Independence Parkway and Rolater Road in Frisco, Texas.

The Geologic Atlas of Texas locates the project site within the Austin Chalk geologic formation. This formation typically consists of clays overlying chalky limestone. The depth to limestone varies but is generally considered to be shallow.

SCOPE OF WORK

The geotechnical investigation performed for the referenced project will consist of field and laboratory investigations, engineering analysis, and a report prepared by a Registered Professional Engineer. This scope is discussed in detail below.

Field Exploration

- Coordinate field activities with City of Frisco personnel
- Locate the proposed borings using a site plan and measurements from existing landmarks
- Contact the Texas One Call system (DIGTESS), and City of Frisco personnel to locate buried utilities within existing easements and right-of-ways
- Mobilize a truck mounted drilling rig to drill 3 borings to a depth of approximately 35 feet below existing grade, or 10 feet into un-weathered gray limestone (whichever is



- shallower) within the proposed building footprint area; and 5 borings to a depth of approximately 10 feet below existing grade within the parking and driveway areas
- Sample the subsurface soils using either a tube sampler, or a split spoon sampler in conjunction with the standard penetration test
 - Evaluate rock and rock-like materials in-place using the TxDOT cone penetration test
 - Observe for groundwater seepage during drilling and at completion
 - Backfill borings with soil cuttings upon completion of drilling

Laboratory Investigation

Selected laboratory tests will be performed on samples obtained during our field investigation. These tests include:

- Atterberg Limits (liquid and plastic limits)
- Moisture content tests
- Pocket penetrometer tests
- Unconfined compression tests (soil)
- Swell tests

Engineering Analysis

Results of field and laboratory investigations will be presented in an engineering report that is signed and sealed by a Texas Registered Professional Engineer. The report will include our geotechnical recommendations for use during design and construction of the new fire station. The report will include the following:

- Plan of borings showing the approximate location of each boring
- A log of each boring indicating the boring number, depth of each stratum, soil description, and groundwater information
- Discussion of site geology
- Recommendations for foundation type, depth, and allowable loading
- Discussion of potential soil movements, including calculated potential vertical rise (PVR)
- Recommendations for pad preparation and PVR reduction to 1" for the fire station including compaction and moisture specifications;
- Earthwork recommendations
- Recommendations for pavement subgrade preparation, and pavement thickness for the parking and drive areas.



Fire Station #8
AGG Proposal: P12-0408E

PROJECT TERMS AND SCHEDULE

Based upon the proposed scope of work, Alliance Geotechnical Group will perform the geotechnical investigation for a lump sum fee of **\$5,500**.

We assume that we will have the right-of-entry to the subject properties and that all boring locations will be accessible to conventional truck mounted drilling equipment during normal working hours.

AGG will contact DIGTESS and the City of Frisco to locate underground utilities. The Client must notify AGG if any utilities are known to be present on this site. AGG cannot be held responsible for damage to underground utilities that are not identified prior to drilling.

CLOSURE

Please call if you have any questions or comments regarding this proposal. If this proposal meets with your approval, please sign below and return the executed proposal as our Notice to Proceed. We look forward to working with you on this project.

Respectfully submitted,

ALLIANCE GEOTECHNICAL GROUP

Douglas S. Land, P.E.
Senior Project Manager

Michael D. Roland, P.E.
Principal

ACCEPTED BY:

Name

Date

Title