



State of Utah

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Division of Facilities Construction and Management

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Director

ADDENDUM #7

Date: July 30, 2007

To: Short Listed Interested Firms

From: Rick James, Project Manager, DFCM

Reference: Salt Lake Community College
New Campus Services Building – Redwood Road Campus
DFCM Project No. 07261660

Subject: **Addendum No. 7**

Pages	Addendum	1	pages
	GSH Geotechnical Study	4	pages
	Total	5	pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

7.1 SCHEDULE CHANGES – There are no changes to the Project Schedule.

7.2 GENERAL ITEMS:

7.2.1 Omit item 6.7 on Addendum No. 6. Submittal requirements are shown on page 6 of the RFP “Request for Proposals for Design/Build Services, State II” dated July 6, 2007.

7.2.2 Program Clarification:

Only one drive-up window station is required. The window will be used by two departments.

7.2.3 Soils Report:

A preliminary report on the soils is attached to this addendum.

End of Addendum #7



MEMORANDUM

To: Rick James – State of Utah DFCM

Job No. 0128-010-07

From: Josh Whitney – GSH

Date: July 30, 2007

Subject: Status Report
Geotechnical Study
Proposed Campus Services Building (DFCM #07261660)
Approximately 4351 South 2200 West
Salt Lake City, Utah

1. INTRODUCTION

This memorandum presents the status of our geotechnical study performed at the site of proposed Campus Services Building located at approximately 4351 South 2200 West in Salt Lake City, Utah.

2. SITE INVESTIGATIONS

2.1 FIELD PROGRAM

In order to define and evaluate the subsurface soil and groundwater conditions at the site, 3 borings were drilled to depths ranging from 14.5 to 31.5 feet with an all-terrain drill rig equipped with hollow-stem augers. The field program was performed on July 16, 2007.

2.2 LABORATORY TESTING

In order to provide data necessary for our engineering analyses, a laboratory testing program has been initiated. The program includes moisture and density, consolidation, partial gradation, and chemical tests. The laboratory program should be completed within the next one to two days.

3. SUBSURFACE SOIL AND GROUNDWATER

The soil conditions encountered in each of the borings, to the depths penetrated, were relatively similar. In Borings B-1 and B-3, a two to seven and one-half-foot layer of non-engineered fills was encountered. The fills consist of silty clay and will exhibit variable and, in most cases, poor engineering characteristics. Underlying the fills in Boring B-3 and from the ground surface in Boring B-2, natural silty clays were encountered that extend to depths of nine to nine and one-half feet.

Underlying the fills and natural silty clays, silty sands and gravels/sands and gravels with trace silt were encountered that extend to the depths explored, 14.5 to 31.5 feet.

Immediately following drilling operations, groundwater was measured at depths ranging from 13 to 15 feet below existing grade. One week after drilling, groundwater was measured at a depth of 17.6 feet below existing grade. Seasonal and longer-term groundwater fluctuations on the order of one to two feet are projected. The highest seasonal levels generally occurring during the late spring and early summer months.

4. PRELIMINARY DISCUSSIONS AND RECOMMENDATIONS

4.1 SUMMARY OF FINDINGS

The results of our study indicate that the proposed structure may be supported upon conventional spread and continuous walls foundations established upon suitable natural soils and/or structural fill extending to suitable natural soils.

The most significant geotechnical aspect of the site is the surficial fills that cover a large portion of the site. Preparation of the site must consist of the removal of all non-engineered fill, loose surficial soils, surface vegetation, potentially deeper fills associated with previous structures, topsoil, and other deleterious materials from beneath an area extending at least five feet beyond the perimeter of the proposed building, rigid pavement, and exterior flatwork areas. Non-engineered fills may remain in flexible pavement areas provided that the remaining soils do not contain deleterious materials and the upper 9 to 12 inches are scarified, moisture prepared, and recompacted to the requirements of structural fill.

4.2 SPREAD AND CONTINUOUS WALL FOUNDATIONS

4.2.1 Design Data

The results of our analyses indicate that the proposed structure may be supported upon conventional spread and/or continuous wall foundations established upon suitable natural soils and/or structural fill extending to suitable natural soil. For design, the following parameters are recommended:

Minimum Recommended Depth of Embedment for Frost Protection	- 30 inches
Minimum Recommended Depth of Embedment for Non-frost Conditions	- 15 inches

Recommended Minimum Width for Continuous Wall Footings	- 18 inches
Minimum Recommended Width for Isolated Spread Footings	- 24 inches
Recommended Net Bearing Pressure for Real Load Conditions	- 2,000 pounds per square foot
Bearing Pressure Increase for Seismic Loading	- 50 percent

The term “net bearing pressure” refers to the pressure imposed by the portion of the structure located above lowest adjacent final grade. Therefore, the weight of the footing and backfill to lowest adjacent final grade need not be considered. Real loads are defined as the total of all dead plus frequently applied live loads. Total load includes all dead and live loads, including seismic and wind.

4.2.2 Installation

Under no circumstances should the footings be established upon non-engineered fills, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. If unsuitable soils are encountered, they must be removed and replaced with compacted structural fill. If granular structural fills become loose or disturbed, they must be recompact to the requirements for structural fill.

The width of structural replacement fill below footings should be equal to the width of the footing plus one foot for each foot of fill thickness.

4.2.3 Settlements

Preliminary anticipated settlement of foundations designed and installed in accordance with the above recommendations and supporting maximum loads should not exceed one-half of an inch. Settlements will occur rapidly with approximately 50 to 60 percent of the quoted settlements occurring during construction.

Following completion of the laboratory program, detailed discussions pertaining to foundation, earthwork, pavements, and the geoseismic setting of the site will be provided.

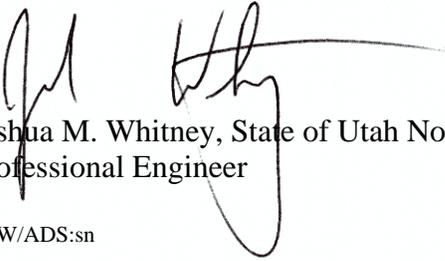
State of Utah – DFCM
Memorandum
Job No. 0128-010-07
July 30, 2007



If you have any questions or require additional information, please do not hesitate to contact us.

Respectfully submitted,

GSH Geotechnical Consultants, Inc.

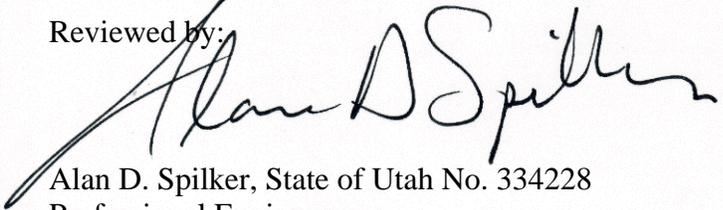


Joshua M. Whitney, State of Utah No. 146417
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