

PROFESSIONAL SERVICES SUPPLEMENT #4

AIA Document G604

In accordance with the **AGREEMENT** dated:

December 2, 2014

BETWEEN:

**The Dover School District
School Administrative Unit #11
McConnell Center
61 Locust Street, Suite 409
Dover, NH 03820-4132**

and:

**HMFH Architects, Inc.
130 Bishop Allen Drive
Cambridge, MA 02139**

for the Project:

Dover High School and Regional Career Technical Center

☒ authorization is requested

- { ☒ to proceed with Additional Services
☐ to proceed with revised scope of Basic Services
☐ to incur Reimbursable Expenses

OR

☐ notification is made

- { ☐ of the need to proceed with Contingent Additional Services
☐ of the need for other services

AS FOLLOWS:

Additional Geotechnical Engineering Services – Borings, Geotechnical Report and Design Assistance.

McPhail proposal for Borings, Geotechnical Report and Design Assistance	\$37,000.00
HMFH Coordination Fee – 10%	<u>\$3,700.00</u>
TOTAL	\$40,700.00

(insert provisions covering time of commencement and completion of authorized services as applicable).

Prompt written notice is required if the services indicated are not needed.

SUBMITTED BY: HMFH Architects, Inc.

AUTHORIZATION IS GIVEN or
NOTIFICATION IS ACKNOWLEDGED BY:



(signature)

(signature)

Laura Wernick, AIA, Treasurer
(printed name and title)

(printed name and title)

9/14/15

(date)

(date)



September 11, 2015

HMFH Architects, Inc.
130 Bishop Allen Drive
Cambridge, MA 02139

Attention: Mr. Pip Lewis, AIA

Reference: Dover High School; Dover, New Hampshire
Proposal for Final Geotechnical Engineering Services

Ladies and Gentlemen:

In accordance with your recent request, we are pleased to present our proposal for providing final geotechnical engineering services for the proposed Dover High School development located in Dover, New Hampshire.

The Dover High School campus occupies an irregularly shaped site that is bounded by Dover Middle School and the Bellamy River to the north, Durham Road to the southeast, residential properties to the south and Bellamy Road to the west. Currently, the campus is occupied by the existing high school building which is located on the southeastern quadrant of the site with parking areas immediately surrounding and to the south of the existing school. The school fronts to the south onto Alumni Drive which crosses the southern half of the site. Athletic fields are located to the north and west of the existing building. A separate small school building is located to the southwest of the main high school structure on the south side of Alumni Drive. The existing school has two above-grade levels and a partial single below-grade level which is benched into the existing slope. The first floor slab level is understood to be about Elevation +96 and the basement level is at about Elevation +85.

The proposed development involves the demolition of the existing school and the construction of a new school building to the northwest of the existing school. Based on the information provided to us, the proposed 3-story building will occupy a footprint of approximately 185,000 square feet. It is understood that the proposed building will not contain any below grade space but will be benched into the existing slope of the site which drops from southwest to northeast. In addition, it is understood that current football/soccer field will be replaced with a synthetic turf field and new track.

On May 4 and 5, 2015, eight (8) borings were performed at the site for the purpose of obtaining subsurface information in order to provide preliminary foundation design recommendations for the new construction development.

Borings indicated that the ground surface is underlain by an approximate 2 to 10-foot thick granular fill deposit. Below the fill deposit, the borings encountered either marine clay or alluvial deposits, which are underlain by glacial till or bedrock deposits. Underlying the fill deposit, one boring located adjacent to the southwest corner of the existing school encountered an approximate 43.2-foot thick marine deposit. At the remainder of the explorations the fill was underlain either by a loose to compact alluvial deposit or the glacial



till. Glacial till was encountered beneath the fill, alluvial or marine deposits at depths of 3.1 to 48.2 feet below ground surface. Groundwater was observed in the completed boreholes at depths varying from 4 to 26 feet below the existing ground surface.

Based upon a schematic untitled drawing dated September 2, 2015 prepared by HMFH, it is understood that the approximate configuration of the proposed school building has changed from that which was shown on our Figure 2 and Figure 3 contained in our report entitled "Preliminary Foundation Engineering Report" dated May 14, 2015 and prepared for use on this project.

Therefore, in accordance with the final scope of the project, we propose to perform a supplemental subsurface exploration program at the site that would consist of up to thirteen (13) borings. Borings would be advanced to depths of 20 to 60 feet below the existing ground surface, or to practical refusal on the bedrock surface, whichever occurs first. Specifically, nine of the borings would be advanced to a depths of 20 to 30 feet below the existing ground surface and would be located within the building and synthetic field footprints where shallow granular soils are anticipated. The remaining four borings are budgeted to each extend to about 60 feet below the existing ground surface along the northern and eastern ends of the building and at the animal sciences building where deep marine clay deposits may be present. It is anticipated that the borings would require eight (8) rig days to complete. We estimate the cost of a drilling subcontractor to perform the thirteen (13) borings to be \$18,300.

We propose to provide the following geotechnical engineering services associated with the subsurface exploration program and final foundation design:

1. Provide a field engineer or geologist to monitor the boring explorations, to obtain representative soil samples, to monitor the groundwater levels in the completed explorations, to make modifications to the subsurface exploration program depending upon actual conditions encountered;
2. Contract with a qualified drilling contractor to perform the borings and clear utilities with Dig-Safe;
3. Review available site, subsurface and geological data for the site;
4. Prepare a detailed subsurface exploration plan and exploration logs;
5. Perform laboratory tests to determine the grain size characteristics of representative samples of the fill material and underlying natural soils;
6. Perform geotechnical engineering analyses related to final foundation design; and
7. Prepare a final foundation engineering report documenting the results of our subsurface explorations and provide recommendations for foundation design of the proposed development.



HMFH Architects, Inc.
September 11, 2015
Page 3

8. Provide design assistance to the Architect and Structural Engineer following submission of the report. Design assistance consists of consultation to address foundation design issues, checking the structural and site drawings for consistency with our design recommendations in the report, and preparing or reviewing the specialty foundation section of the technical specifications for inclusion into the Contract Documents.

The fee for geotechnical engineering services would be based upon a multiple of 2.5 times salary cost of technical personnel directly attributable to the project plus expenses (e.g. the drilling subcontractor, ~~report reproduction, etc.~~) at cost plus 15 percent. The total estimated fee for Items 1 through 7 above is \$33,500, which includes an allowance of \$18,300 for the drilling subcontractor. The estimated fee for Design Assistance Item 8 above would be \$3,500. Hence, the total fee for our services would be about \$37,000.

Conclusion

The terms and conditions of our proposal dated December 10, 2014 are incorporated herein by reference.

The Client named herein, it is understood that other entities designated by the Client from time to time (including lenders, equity providers, and property owners) and agreed to by McPhail may be named as additional insureds on McPhail's General, Automobile, and/or Umbrella liability insurance policies with respect to this project and the scope of work defined herein. The Client shall provide McPhail with a complete list of those entities to be named as additional insureds on our General, Automobile, and/or Umbrella liability insurance policies along with each entities professional relationship to the Client on this project.

We are prepared to commence work immediately upon receipt of notification to proceed. To authorize us to proceed with the services proposed above, please sign and return the enclosed copy of this letter. Should you have any questions, please contact us.



HMFH Architects, Inc.
September 11, 2015
Page 4

We appreciate being invited to submit this proposal and we look forward to being of continued service to HMFH Architects, Inc. on the proposed Dover High School development to be located in Dover, New Hampshire.

Very truly yours,

McPHAIL ASSOCIATES, LLC

HMFH ARCHITECTS, INC.


Fatima Babic-Konjic

BY _____


Jason S. Huestis

DATE _____


Ambrose J. Donovan, P.E.

F:\WP5\PROPOSALS\5883 Dover High School_091015.docx

FBK/jsh/ajd