

TOWN OF BROOKLINE
333 Washington Street, Brookline, Massachusetts 02445

PURCHASE ORDER CHANGE FORM

INVOICE DATE: 13-Feb-19

TO: William Rawn Associates, Architects, Inc
10 Post Office Square, Suite 1010
Boston MA 02109

Purchase Order Number

21803108

Vendor Number

53540

PAYMENT AMOUNT

\$49,940.00

BUDGET 14,654,353.00
BALANCE 9,123,379.00

FUND	ORGANIZATION	ACTIVITY	OBJECT
	2594C204		524003

FOR: High School Expansion

Amendment	Date	
3	2/8/2019	Additional test pits and Geotechnical engineering
4	2/8/2019	Laser survey of power lines

AMOUNT
\$42,900.00
\$7,040.00

BUILDING COMMISSION

APPROVAL OF:

Janet Fierman, Chairman

George Cole

Kenneth Kaplan

Karen Breslawski

Nathan E. Peck

BOARD OF SELECTMEN

APPROVAL OF:

Neil Wishinsky, Chairman

Benjamin J. Franco

Bernard W. Greene

Nancy S. Heller

Heather Hamilton

SCHOOL COMMITTEE

APPROVAL OF:

Mary Ellen Dunn, Assistant Superintendent For Administration and Finance

HILL
Hill International

Hill International, Inc.
75 Second Avenue, Suite 300
Needham, MA 02494
Tel: 617-778-0900
Fax: 617-778-0999
www.hillintl.com

February 8, 2019

Mr. Ray Masak, P.E.
Project Manager
Town of Brookline Building Department
333 Washington Street
Brookline, MA 02445

Re: WRA Amendment #2: Additional Test Pits and Geotechnical Engineering for 111 Cypress Street
WRA Amendment #3: Laser survey of power lines

\$ 42,900
\$ 7,040

Dear Ray:

Attached please find two amendments and proposals for additional services for William Rawn Associates. We recommend approval of both of them.

The purpose of Amendment 2 is to ascertain subsurface information along Cypress Street and within the existing building to find the extent of the bridge abutment wall. This will identify the need for SOE, or at least help to define the extent of SOE necessary to support Cypress Street during construction of the new building's foundation and structure. This amendment has been negotiated from its initial proposal of more than \$80,000.

The purpose of Amendment 3 is to precisely located the utility lines on the building survey to understand exact distances to the proposed building and understand area for any required clearances.

These investigations are urgent and we request that they be approved as soon as possible.

Very truly yours,



Paul G. Kalous AIA
Program Director

cc. S. Lasky WRA
E. Tellander WRA
A. Jonic WRA

WILLIAM RAWN ASSOCIATES | Architects, Inc.

10 Post Office Sq.
Suite 1010
Boston, MA 02109
t. 617.423.3470
www.rawnarch.com

Ray Masak
Project Manager
Town of Brookline Building Department
Brookline Town Hall
333 Washington Street
Brookline, MA 02445

~~December 19, 2018~~

Revised: February 5, 2019

Project Name: Brookline High School Expansion Project

Re: Geotechnical Exploration Test Pits at Brookline High School (111 Cypress Street Property)

Dear Ray,

We do not have design documents or as-built information for the 111 Cypress building or the retaining wall that runs along the northern edge of the property adjacent to the south side of the MBTA platform. This proposal is for supplemental geotechnical services includes the following scopes of work:

Scope #1: Confirm the extent of the granite block retaining wall along Cypress Street

Proposed Schedule: January 2019

McPhail will dig 6 test pits west of the Cypress Street sidewalk to confirm the extent of the Cypress Street granite block retaining wall. See McPhail's proposal (attached) for more information.

~~Scope #2: Borings to confirm depth of bedrock~~

~~Provide two deep borings to confirm the depth of bedrock along column line D and E. See McPhail's proposal (attached) for more information.~~

BSI Engineering: \$23,300


McPhail: \$15,700

WRA Admin (10%): \$3,900

Total Fee: \$42,900

Please let us know if you have any questions or comments.

Regards,



Andy Jonic, AIA
Senior Associate
William Rawn Associates, Architects Inc.
Attachments: McPhail proposal, BSI Proposal, test pit & boring locations map

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. 2_____

WHEREAS, the Town of Brookline_____ ("Owner") and William Rawn Associates, Architects Inc._____, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the _Brookline High School Expansion_____ Project (Purchase Order # 21803108) at the Brookline High _____ School on _July 6, 2018_____.
"Contract"; and

WHEREAS, effective as of ____February 5, 2019____, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.
2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:	Original Contract*	After this Amendment:
		Amendment fee: \$42,900
Feasibility Study Phase	\$ _____	\$ _____
Schematic Design Phase	\$ _____	\$ _____
Design Development Phase	\$ _____	\$ _____
Construction Document Phase	\$ _____	\$ _____
Bidding Phase	\$ _____	\$ _____
Construction Phase	\$ _____	\$ _____
Completion Phase	\$ _____	\$ _____
*Includes previous Amendments		
Total Fee	<u>\$13,154,353.00</u>	<u>\$13,197,253.00</u>

This Amendment is a result of: Existing conditions below grade geotechnical investigations at the existing High School (111 Cypress). The geotechnical engineer will provide confirmation of the existing Cypress Street Bridge retaining wall, retaining wall footings along the northern 111 Cypress property line.

3. The Construction Budget shall be as follows:

Original Budget: \$n/a _____

Amended Budget \$n/a _____

4. The Project Schedule shall be as follows:

Original Schedule: \$n/a _____

Amended Schedule \$n/a _____

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

(print name)

(print title)

By _____
(signature)

Date _____

DESIGNER

Andrew Jonic _____
(print name)

Senior Associate _____
(print title)

By _____
(signature)

Date 2.5.19 _____

BSI ENGINEERING

CIVIL & SUBSURFACE UTILITY ENGINEERING

William Rawn Associates | Architects, Inc.

10 Post Office Square

Suite 1010

Boston, MA 02109

Tel: 617-423-3470

Mobile: 617-548-4275

February 4, 2019

Subject: Subsurface Utility Engineering – Change Order Request (COR No. 1)

BSIE Job # 18-3544

Attn: Attn: Andrew Jonic, AIA, LEED AP BD+C | Senior Associate

Reference: Architect and Consultant Subcontract Agreement

Dear Mr. Jonic,

In the above reference, WRA, Inc., hereby agrees to an additional fee other than the initial cost estimate provided by BSIE and approved by WRA, Inc. BSIE estimates an additional charge of \$23,300.00 for the following additional services:

- (4) four additional quality level A traditional excavation test pits, approximately 4'x4' each with non-destructive air vacuum excavation support services for locations TP-1A, TP-1B, TP-2B, TP-3 in search of the original granite block wall supporting along Cypress Street as shown on the attached site plan provided by WRA, Inc.
- (2) two additional non-destructive air vacuum excavation test pits, approximately 1'x1' each for location TP-4 searching for a space between the MBTA retaining wall and the Brook Channel Culvert, and B-102, to clear for potential utility presence down to 8' below grade prior to soil boring activities by others as shown on the attached site plan provided by WRA, Inc.
- Hot asphalt will be used for surface restoration at all locations including those on concrete city sidewalks in lieu of future construction activities. Test pits conducted on landscaped areas will be restored in kind.
- Permits will be obtained from the City of Brookline for test pits located on the public sidewalk. Pedestrian traffic management will be implemented as needed for Cypress Street sidewalk test pit locations. City of Brookline Police Details will be utilized for work on Cypress Street sidewalk.
- The appropriate "One Call" to Dig Safe will be placed 72 hours prior to the commencement of excavation activities.
- Quality level B utility designation services to horizontally locate any potentially conflicting utilities within the proposed test pit locations along Cypress Street and for soil boring location B-102.
- All quality level A test pit results will be surveyed and appended to the existing conditions plan set accordingly.

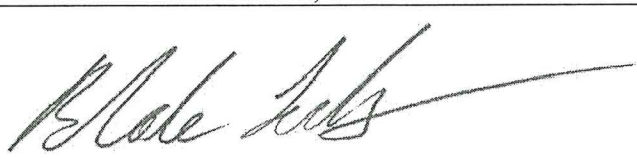
Client: WRA
Job # 18-3544

BSI Engineering, Inc.
100 Hallett St
Boston, MA 02124
Tel. (617) 265-4200 Fax (617) 209-1297
www.bsieng.com

2/4/2019
Page 1 of 2

Please review and authorize the following as an amendment to the subcontract agreement between WRA, Inc. and BSIE, Inc.:

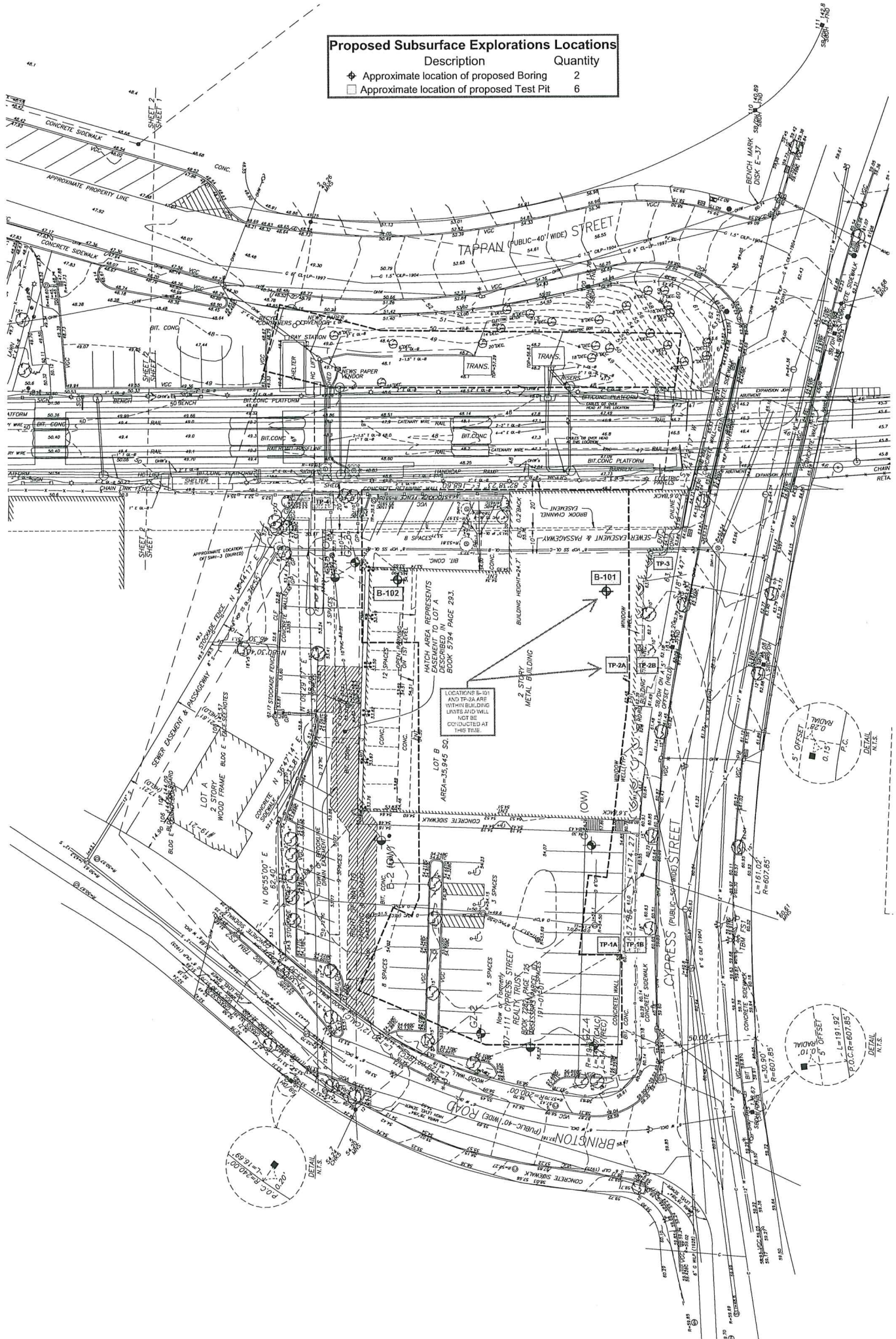
Original Amount: \$83,150.00	BSI Engineering, Inc. 100 Hallet Street Boston, MA 02124	Date: 2/4/2019
Added by this Change Order: \$23,300.00	Original Notification	Job#: 18-3544
Amended Total: \$106,450.00		Reference: BSIE & RWA Subcontract Agreement

AUTHORIZED SIGNATURES			
BSIE, INC.		WRA, Inc.	
			
SIGNATURE	DATE 2-4-19	SIGNATURE	DATE

All provisions, terms and conditions of the original cost proposal remain in full force and effect except to the extent modified herein.

Proposed Subsurface Explorations Locations

Description	Quantity
Approximate location of proposed Boring	2
Approximate location of proposed Test Pit	6





January 25, 2019

William Rawn Associates, Architects, Inc.
10 Post Office Square, Suite 1010
Boston, MA 02109

Attention: Erik Tellander, AIA, LEED AP BD+C

Reference: Brookline High School Expansion (BHS) – Project A: 111 Cypress Street Brookline, MA
Revised Proposal for Supplemental Geotechnical Engineering Services – Test
Pit Investigation

Ladies and Gentlemen:

In response to your recent request, we are pleased to present our revised proposal for providing supplemental geotechnical engineering services for proposed Project A, associated with the Brookline High School (BHS) Expansion, and located at 111 Cypress Street in Brookline, Massachusetts. This proposal supersedes our proposal dated December 14, 2018. Specifically, we've revised our proposed budget for the scope of services in this proposal which includes performing supplemental test pits on the proposed building portion to the south of the MBTA Green Line and utility easements.

Please note that a proposal is being provided under a separate cover for the performance of two (2) borings within this portion of the Project A site.

It is understood that the proposed development at 111 Cypress Street consists of the demolition of the existing medical office building followed by construction of a new academic building. The proposed building is understood to consist of a 5-story structure supporting the 9th grade enrolment, including all necessary administrative and common spaces. The footprint of the proposed academic building is understood to be approximately 28,000 square feet, covering the majority of the site and its surrounding parking areas, and spanning the MBTA Green Line and utility easements, which will include an entrance each on Brington Road and Tappan Street.

Proposed Supplemental Geotechnical Engineering Services – Test Pits

Based on the scope of the proposed development, and in consideration that the existing retaining wall, the existing building foundation wall and the existing granite block wall along Cypress Street are being evaluated for use as temporary earth support for the proposed construction, and in the absence of original foundation drawings for the existing structure, we recommend to perform five (5) exploratory test pits along Cypress Street.

Of the five (5) test pits, two (2) test pits, identified as TP-1A and TP-1B, would be performed on the inside (parking lot) and outside (Cypress Street sidewalk) of the existing retaining wall, to a depth of approximately 4 feet and 8 feet below existing ground surface, respectively. Two (2) other test pits, identified as TP-2A and TP-2B, would be completed inside the medical office building to a depth of approximately 4 feet below the lowest level



slab, and outside the foundation wall in the landscape margin between the existing building and Cypress Street sidewalk to a depth of approximately 12.5 feet below existing ground surface. The remaining test pit along Cypress Street, identified as TP-3, would also be completed within the landscape margin between the existing building and Cypress Street sidewalk to a depth of approximately 4 feet below existing ground surface.

Also, we recommend to complete one (1) test pit, identified as TP-4, that extends to the north of the previously completed test pit by BSI, to further investigate if the existing granite block wall exists on the other side of the concrete box culvert. Refer to the attached plan for the approximate locations of the test pits.

The six (6) test pits would be performed using hand and/or machine excavation and are anticipated to require two (2) weeks to complete at a cost of approximately \$43,000 for the excavation contractor. The contractor's fee would include the cost of clearing utilities with Dig-Safe, setting up safety fencing on site and shoring installation as required, and backfilling the excavated areas.

It should also be noted that if excavation below the above-specified depths be required, an additional cost of \$1,180 per foot depth of test pit would be added to the fee of the excavation contractor.

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

1. Subcontract with an excavation contractor to perform the test pits and clear utilities with Dig-Safe;
2. Provide a field engineer or geologist to lay out the test pits in the field, monitor the explorations, obtain representative soil samples, monitor the groundwater levels within the completed test pits, prepare detailed field logs, make modifications to the subsurface exploration program depending upon actual conditions encountered, and determine the existing ground surface elevation at each test pit utilizing vertical control indicated on the site survey;
3. Perform laboratory gradation analyses on representative soil samples from the test pits to determine the physical characteristics of the fill and natural deposit;
4. Prepare a detailed subsurface exploration plan, and test pit logs;
5. Include the information in a final foundation engineering report (FFER) with specific recommendations and design criteria for safe and economical foundation design of the proposed 111 Cypress Street building (Project A).



William Rawn Associates, Architects, Inc.
January 25, 2019
Page 3

The fee for engineering services would be based on a multiple of 2.5 times salary cost of technical personnel directly attributable to the project plus any direct expenses (e.g. mileage, the excavation contractor, etc.) at cost plus 15 percent. The estimated fee for the scope of geotechnical engineering services listed above is ~~\$58,700~~, which includes ~~\$43,000~~ for the cost of the excavation contractor.

**\$15,700 FOR SITE
MONITORING**

Insurance and Payment

The services proposed herein will be provided in accordance with the terms and conditions presented in the Standard Form of Agreement Between Architect and Consultant (AIA Document C401) dated July 31, 2018 which is incorporated herein by reference.

Based on previous conversations with MBTA personnel at the site in December 2018, notice will need to be provided for work within 50 feet of the Green Line Right of Way. However, since the work is being performed off of the MBTA property in a lot separated by a fence and retaining wall, we do not anticipate MBTA training and 5 M. umbrella and rail road endorsement will be required for the test pit work. Notwithstanding, should such additional insurance and training be required by the MBTA, such would be provided at an additional cost of approximately \$10,000.

Exclusions and Qualifications

The following exclusions and qualifications apply:

1. The Client agrees to provide right of entry to the site in order that the subsurface explorations can be performed. While we will take reasonable precautions to avoid damage to property, subterranean structures or utilities, the Owner agrees to hold us harmless for any damages to subterranean structures or utilities not as shown on the plans furnished or evident in the field.
2. The costs provided herein are approximate only. We have not reviewed the site conditions or locations with any contractors as we have not had access to the interior of the building since it has been not occupied. We have used the cost information from the recent work at the STEM wing, hence we anticipate the cost to be similar.
3. Anticipated depths of explorations are based on assumed existing below-grade conditions. Pavements and slabs are assumed to be no greater than 6 inches in thickness. Of course, unanticipated conditions below ground surface such as concrete and granite obstructions may exist requiring additional time or materials to complete the explorations which would be performed at an additional cost.
4. Assumed available work days and times: Monday through Friday, 7:00 AM – 4:00 PM. Other times/days if required may incur overtime costs.



William Rawn Associates, Architects, Inc.
January 25, 2019
Page 4

5. We assume the building and site will be completely vacant at the time that the investigation is performed. It is assumed that non-load-bearing partitions, drywall, floor slabs, carpets, pavements etc. can be demolished as required to complete the work. The client agrees to accept the unrestored condition of the site after the work is performed.
6. Test pits located outside of the building will be backfilled and levelled, however, surface treatments such as pavement and landscaping would not be restored.
7. Any excess soil will be left on-site, in a location designated by the Owner.
8. All permits to complete the work to be paid for and provided by Client.
9. Police details, if required, to be paid for and provided by the Client.
10. All subcontractors cost estimates are based on non-prevailing wage rates. If prevailing wage rates are required, such would be provided at an additional cost.

Conclusion

In summary, we appreciate the opportunity to submit our proposal for supplemental geotechnical engineering services on Project A of the Brookline High School Expansion and look forward to continue being of service to you on this project.


To authorize us to proceed with the services proposed above, please sign and return a copy of this letter. Should you have any questions, please contact us.

Very truly yours,
McPHAIL ASSOCIATES, LLC


Hassan Ghiye

WILLIAM RAWN ASSOCIATES, ARCHITECTS, INC.

BY _____


Thomas J. Fennick, P.E., L.S.P.

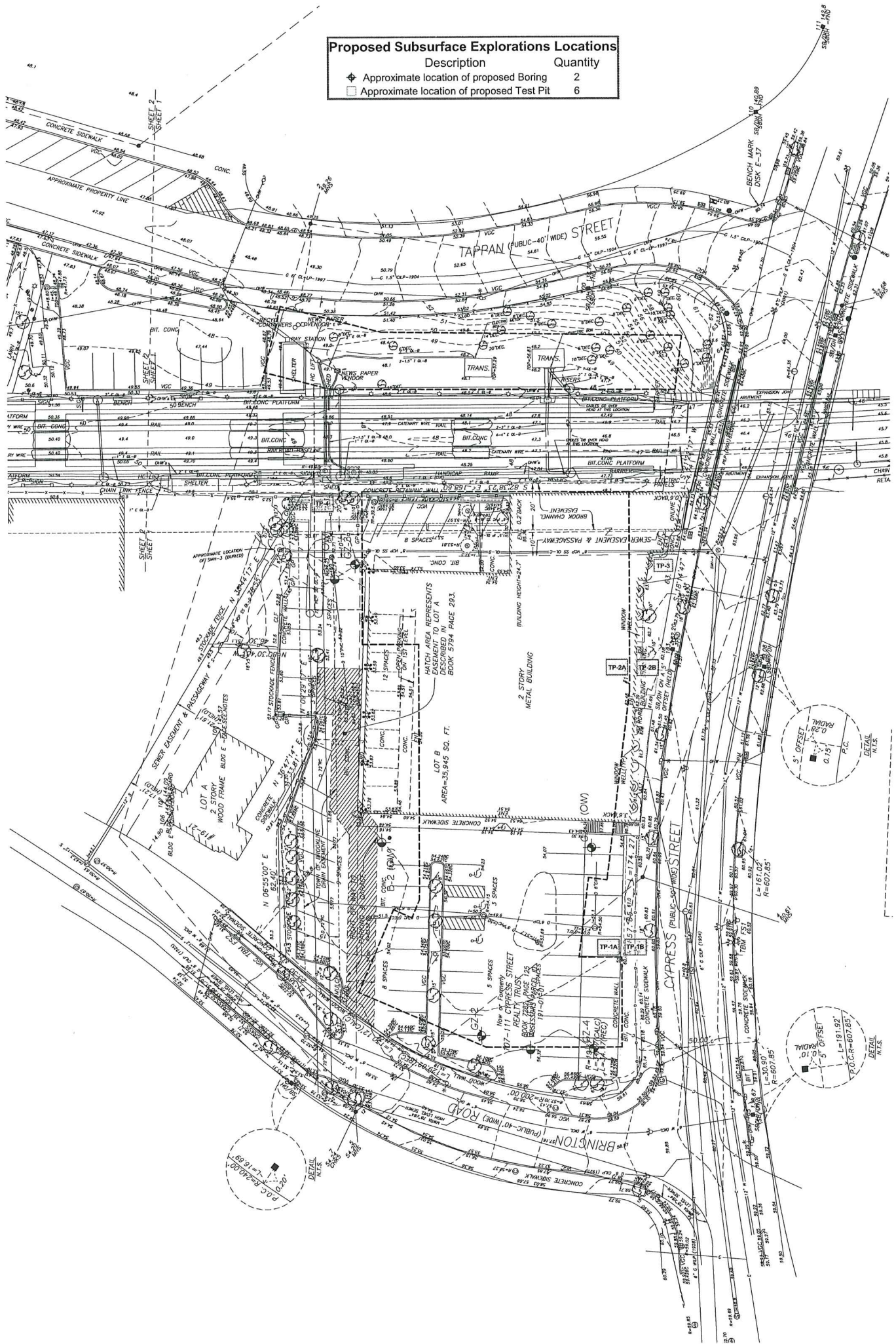
DATE _____

N:\Working Documents\Proposals\6324 BHS - Project A - Revised Proposal for Supp. Subsurface Investigation_Test_Pits_Rawn Architects_012519.docx

HG/tjf

Proposed Subsurface Explorations Locations

Description	Quantity
Approximate location of proposed Boring	2
Approximate location of proposed Test Pit	6



WILLIAM RAWN ASSOCIATES | Architects, Inc.

10 Post Office Sq.
Suite 1010
Boston, MA 02109
t. 617.423.3470
www.rawnarch.com

Ray Masak
Project Manager
Town of Brookline Building Department
Brookline Town Hall
333 Washington Street
Brookline, MA 02445

February 7, 2019

Project Name: Brookline High School Expansion Project

Re: Contract Amendment #3 – R1 – Cypress Building Site 3d Scan of Power Lines

Dear Ray,

High voltage powerlines surround the Cypress site along Tappan St., Cypress St., and Brington Road. OSHA standards for construction activity, cranes, and steel erection require a 10'-20' setback from the power lines to the building. In order to determine if the current building design is meeting these standards a precise understanding of power line configurations and the 3d geometry of leaning poles in space are required. This proposal is for Feldman Surveyors to provide a 3d laser scan of all utility poles, power lines, and any guy wires surrounding the site. Feldman will provide a point cloud that we can bring into our 3d model of the building to confirm the final location of the building.

Scope: 3d scan of power lines along Tappan Street, Cypress Street, and Brington Road

Proposed Schedule: February 11 - 25.

Feldman Surveyors: \$6,400

WRA Admin (10%): \$640

Total Fee: \$7,040

Please let us know if you have any questions or comments.

Regards,



Andy Jonic, AIA
Senior Associate
William Rawn Associates, Architects Inc.
Attachments: Feldman Proposal

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. 3_____

WHEREAS, the Town of Brookline_____ ("Owner") and William Rawn Associates, Architects Inc._____, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the _Brookline High School Expansion_____ Project (Purchase Order # 21803108) at the Brookline High_____ School on _July 6, 2018_____.
"Contract"; and

WHEREAS, effective as of ____February 6, 2019____, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.
2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:	Original Contract*	After this Amendment: Amendment fee: \$7,040
Feasibility Study Phase	\$ _____	\$ _____
Schematic Design Phase	\$ _____	\$ _____
Design Development Phase	\$ _____	\$ _____
Construction Document Phase	\$ _____	\$ _____
Bidding Phase	\$ _____	\$ _____
Construction Phase	\$ _____	\$ _____
Completion Phase	\$ _____	\$ _____
*Includes previous Amendments		
Total Fee	<u>\$13,197,253.00</u>	<u>\$13,204,293</u>

This Amendment is a result of: The need for the precise locations of leaning utility poles, power line configurations, and utility pole guy wires to confirm the final Cypress building configuration meets OSHA power line setback standards for construction.

3. The Construction Budget shall be as follows:

Original Budget: \$n/a_____

Amended Budget \$n/a_____

4. The Project Schedule shall be as follows:

Original Schedule: \$n/a_____

Amended Schedule \$n/a_____

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

(print name)

(print title)

By _____
(signature)

Date _____

DESIGNER

Andrew Jonic
(print name)

Senior Associate
(print title)

By _____
(signature)

Date _____

February 7, 2019

Andrew Jonic, AIA, LEED AP BD+C
Senior Associate
William Rawn Associates
10 Post Office Square
Boston, MA 02109

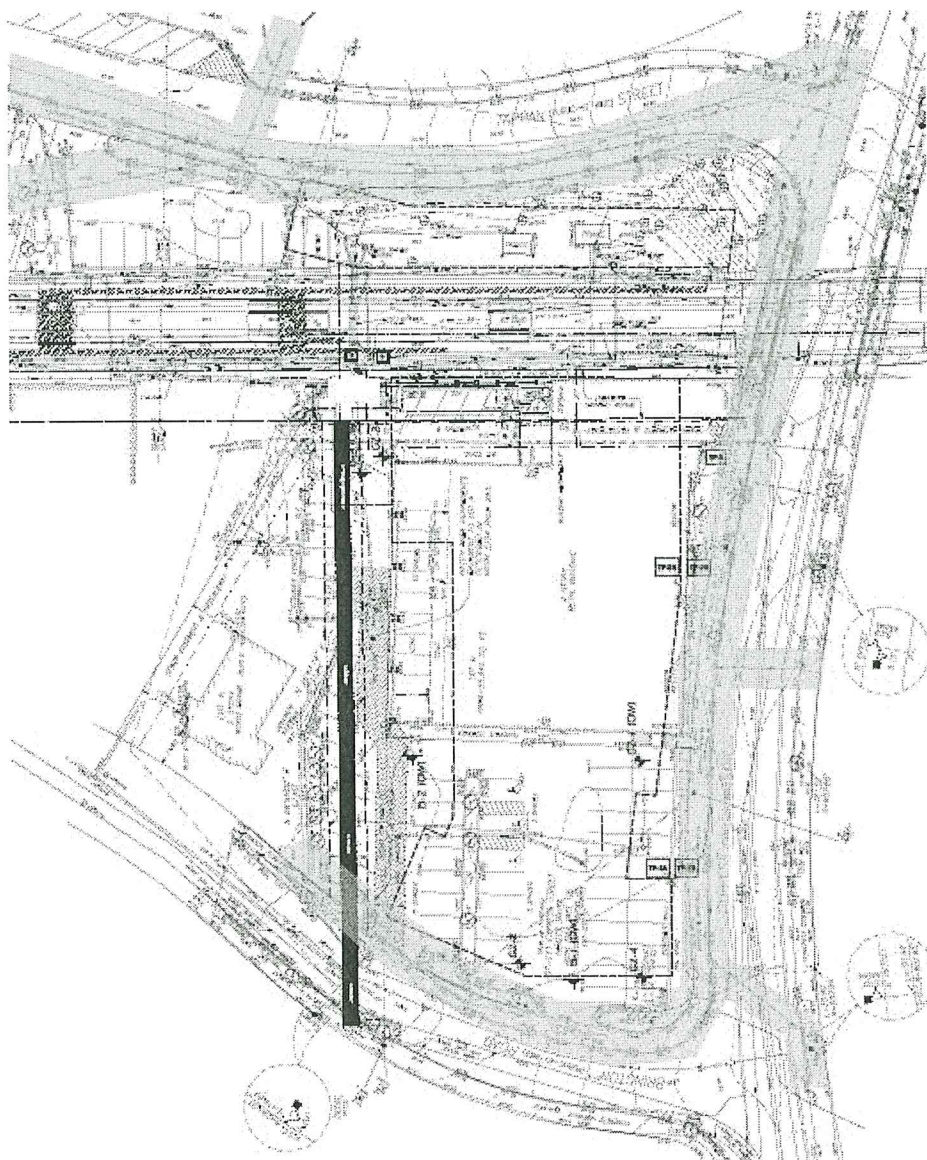
Re: **Laser scanning, point cloud preparation, and overhead wire drafting
BHS expansion – Cypress Street, Tappan Street, Brington Road
Brookline, MA**

Dear Andrew,

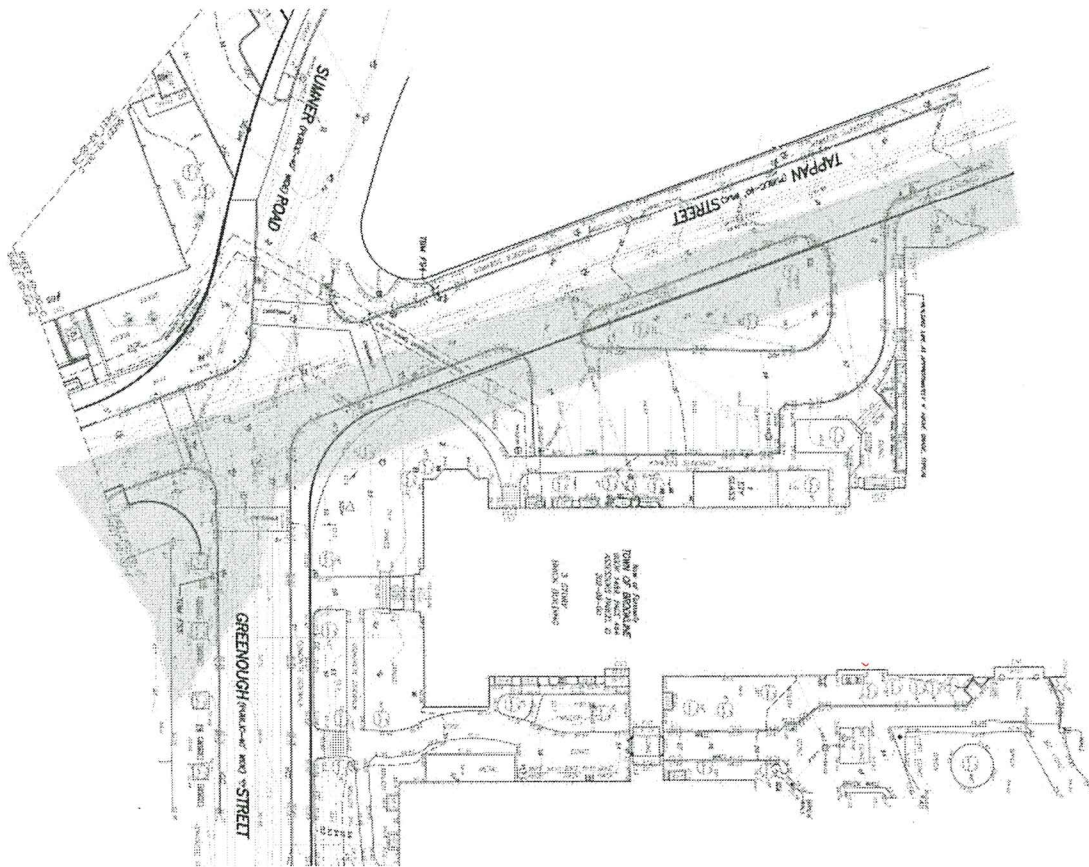
Pursuant to your request, we are pleased to submit our proposal to provide a plan of land for your project listed above located in Brookline, Massachusetts.

In order to achieve your project's goals, we propose the following tasks:

- Perform a laser scan field survey to expand upon the existing survey to include overhead wires, power lines, and any guy wires within the scope area as shown below.
- Laser scanning is line of sight technology. Obstructions to line of sight due to access limitations or intervening equipment or activity may cause shadow areas in the data.
- Register individual scan locations form single point cloud model. Data will be registered to 1/4" accuracy.
- Archive point cloud data for future potential use.
- Update the existing site topographic plan as produced by Feldman Land Surveyors.
- Perform our survey work in compliance with the Code of Massachusetts Regulations 250 CMR 6.0 Land Surveying Procedures and Standards.



Survey Expansion Scope Area 1



Survey Expansion Scope Area 2

Deliverables:

Updated topographic survey (DWG File)

The fee for the above Scope Area 1 will be \$3,900

The fee for the above Scope Area 1 will be \$2,500

Please sign, date and return this proposal to us as your authorization to proceed and we will schedule the fieldwork to begin accordingly. We will aim to complete our draft within 3 weeks of authorization.



For your protection we maintain General Liability, Automobile Liability, Workers Compensation and Professional Liability (errors and omissions) Insurance. Invoices are issued monthly and will be due upon receipt.

We look forward to working with you towards the successful completion of your project.

Very truly yours,

FELDMAN

A handwritten signature in black ink, appearing to read "Stephen Wilkes", written over a horizontal line.

Stephen Wilkes
VP - Director of 3D Services
swilkes@feldmansurveyors.com

Accepted By: _____

Firm _____

Title: _____

Date: _____