

## Change Order

Advanced Math and Science Academy - Academic Space Expansion & Loop Roadway Reconfiguration

Note: Vendor documents are identified for reference only. Contract terms and conditions remain unchanged.

Contract	Status	CO #	Category	Owner Cost Item #	Vendor #	Cost Item	Current Contract	Pending Change Order(s)	Contact After Change Order Execution
<b>Contract # 003 Finegold Alexander Architects (FAA) - Design Services</b>									
<b>Base Contract</b>							<b>935,000.00</b>		<b>935,000.00</b>
<b>Change Orders Previously Executed</b>							<b>4,860.00</b>		<b>4,860.00</b>
<b>Change Orders Pending Execution</b>								<b>37,250.00</b>	<b>37,250.00</b>
<b>CO # 003 - Additional Work Already Completed for Original Project Scope</b>									
		CI-035				Design Additional Services: Code Related Modifications to 165 Forest St		20,050.00	
		CI-038				Design Additional Services: 1st & 2nd Floor System Modifications at 165 Forest St		2,200.00	
		CI-039				Design Additional Services: Extended Schematic Design Phase (165 Forest St & Gym)		15,000.00	
<b>CO # 003 - Additional Work Already Completed for Original Project Scope Total</b>								<b>37,250.00</b>	<b>37,250.00</b>
							<b>939,860.00</b>	<b>37,250.00</b>	<b>977,110.00</b>

# Change Order

Advanced Math and Science Academy - Academic Space Expansion & Loop Roadway Reconfiguration

Contract # 003 Finegold Alexander Architects (FAA) - Design Services

CO # 003 - Additional Work Already Completed for Original Project Scope

APPROVAL REQUESTED BY (CONTRACTOR/VENDOR):

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
NAME

\_\_\_\_\_  
TITLE

OWNER APPROVAL:

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
NAME

\_\_\_\_\_  
TITLE

\*

# Professional Service Request #003\_v2

February 2, 2022

**Revised March 11, 2022**

**Revised May 2, 2022**

**CO # 3 = \$37,250**

**See page 3 of  
FAA proposal.**

Ellen Linzey

Executive Director

Advanced Math & Science Academy Charter School, Inc.

201 Forest Street

Marlborough, MA 01752

**Project Name:** Advance Math and Science Academy

**FA Project #:** P0254.00

**Professional Service Request:** Code Related Modifications to 165 Forest Street; 1<sup>st</sup> and 2<sup>nd</sup> Floor MEP System Modifications at 165 Forest Street; Schematic Design Phase; Post SD Phase Design Explorations (Schemes 1-6)

**Authorization is:**

- Requested**
- Given**
- to proceed with Additional Services**
- to proceed with revised scope of Basic Services**
- to incur reimbursable expenses**

**Scope of Professional Services to be provided:**

The scope of work at 165 Forest Street has expanded resulting in the need for additional architectural, structural, and MEP/FP design. The expanded scope, in conjunction with arriving at key design decisions for the project, has resulted in the need for an extension of 7 weeks for the Schematic Design phase.

**1. Code Related Modifications to 165 Forest Street**

Based on the change of occupancy from Group B to Group E, the building will require structural upgrades to strengthen the diagonal braces. The building will require a 1-hour fire separation between the 3<sup>rd</sup> and 4<sup>th</sup> floor which impacts all the primary structural beams and columns below the 3<sup>rd</sup> floor structural slab, including steel located at the 1<sup>st</sup> and 2<sup>nd</sup> floor levels. The change in occupancy also requires additional fire alarm modifications at the 1<sup>st</sup> and 2<sup>nd</sup> floor levels.

Finegold Alexander Architects provided an extensive investigation, research, written narratives, graphics, and cost analysis of two different scenarios for the use of the 3<sup>rd</sup> and 4<sup>th</sup> floor for educational purposes as a decision-making tool for the Owner. As a result of these efforts, it was determined by the Owner that the design will proceed with Option B, classrooms only on the 3<sup>rd</sup> floor. FA will integrate the 1<sup>st</sup> and 2<sup>nd</sup> floor scope of work, including the strategic demolition of walls and ceilings at existing steel column and beams to receive the new structural modifications and fireproofing at these locations, and



coordinate the added fire alarm system. This work will be incorporated into the SD through CD phases of the project.

LA Fuess (Structural) will provide design services for the structural upgrade connections required throughout the building at the diagonal cross bracing. GGD (MEP/FP) will provide additional 1<sup>st</sup> and 2<sup>nd</sup> floor fire alarm modifications that are required for educational use in the building.

## **2. 1<sup>st</sup> and 2<sup>nd</sup> Floor MEP System Modifications at 165 Forest Street**

GGD will provide design services for the replacement of rooftop units that serve the 1<sup>st</sup> and 2<sup>nd</sup> floors, including all associated roof curbs, duct connections, controls, gas piping, and power wiring. Replacement rooftop units shall be designed with similar capacity as existing units.

## **3. Schematic Design Phase**

The initial project schedule assumed 10 weeks for the Schematic Design phase starting October 4, 2021 through December 13, 2021. During this time, however, the design team's efforts were focused on the extensive code analysis of 165 Forest Street; gymnasium site selection options/cost matrix; gymnasium size/court configuration and supporting program options; standard classroom layout options for the 3<sup>rd</sup> floor of 165 Forest Street; and Science Suite options for the 3<sup>rd</sup> floor of 165 Forest Street. These efforts resulted in the need for weekly meetings and presentations to help the Owner make important decisions to advance the project.

With final direction given on the site design, gymnasium configuration and program, and 165 Forest Street 3<sup>rd</sup> and 4<sup>th</sup> floor program uses at our December 21, 2021 and January 4, 2022 meetings, the design team requires a 7 week schedule extension to complete the Schematic Design phase. This is a reduction of the initially planned 10 week Schematic Design phase as the team was able to advance a portion of the SD documentation leading up to January 4, 2022 decisions.

### **SD Phase Client Presentations and Decision:**

- November 9, 2021 - Preliminary Concept Design Review [Gym size options/locations]
- November 23, 2021 – Building Systems
- November 30, 2021 – Site matrix w/ cost
  - **Client Decision: Gym Site Location Selection**
- December 7, 2021 – Gym Layouts
- December 14, 2021 – Building 165 – Code and classroom/office layout
  - **Client Decision: Proceed with Option B Upgrades – Classrooms on Level 3**
- December 21, 2021 – HVAC Systems
  - **Client Decision: Site Concept Development**
  - **Client Decision: Gymnasium Court Configuration**
- January 4, 2021 – 165 Cost Estimate Review (code upgrades and fit out)
  - **Client Decision: 3<sup>rd</sup> Floor – Intent for Science Program**
  - **Client Decision: 4<sup>th</sup> Floor – Intent for Office**
  - **Client Decision: Gymnasium Programming**
- February 18, 2021 – SD Submission

The additional service request reflects a 7 weeks Schematic Design extension and we would appreciate any consideration for the extended time. We understand and appreciate that there is a tight budget for the project and are committed to working together with AMSA to reach their goals for the benefit of the students and educators.

**4. Post SD Phase Design Studies (Schemes 1-6)**

After receiving the Schematic Design cost estimate, the design team was asked to explore additional program options which included a combined Classroom/Gym building and a Classroom only building. Conceptual design plans, elevations, and sections were created. The MEP/FP and structural engineers were asked to provide narratives to support the design options to inform the cost estimates. The landscape/civil team evaluated the impact the modified options would have on the site design and vehicular circulation. Two cost estimates were provided for Schemes 1 – 4 and Schemes 5 & 6.

**Compensation for Professional Services:**

<b>1. Code Related Modifications to 165 Forest St</b>	<b>Work Completed</b>	<b>Future Work</b>	<b>Total</b>
Finegold Alexander Architects - Code	\$7,148 (A)		\$7,148
Finegold Alexander Architects – 1 <sup>st</sup> and 2 <sup>nd</sup> Floor	\$6,552 (B)	\$30,300 (C)	\$36,852
LA Fuess - Structural	\$5,850 (D)	\$30,150 (E)	\$36,000
GGD - (fire alarm)	\$500 (F)	\$2,500 (G)	\$3,000
<b>Total</b>	<b>\$20,050</b>	<b>\$62,950</b>	<b>\$83,000</b>
<b>2. 1<sup>st</sup> and 2<sup>nd</sup> Floor System Modifications at 165 Forest St</b>			
	<b>Work Completed</b>	<b>Future Work</b>	<b>Total</b>
Electrical, Plumbing, HVAC/ATC	\$2,200 (H)	\$12,800 (I)	\$15,000
<b>Total</b>	<b>\$2,200</b>	<b>\$12,800</b>	<b>\$15,000</b>
<b>3. Schematic Design Phase (extended 7 weeks)</b>			
	<b>Work Completed</b>	<b>Future Work</b>	<b>Total</b>
Finegold Alexander Architects - Architectural	\$15,000 <del>-\$30,000 (J)</del>		
<b>Total</b>	<b>\$30,000</b>		
<b>4. Post SD Phase Design Studies (Schemes 1-6)</b>			
	<b>Work Completed</b>		
Finegold Alexander Architects	\$6,000		
GGD – MEP/FP	\$1,800		
Warner Larsen - Landscape	\$1,630		
Fennessy – Cost Estimating	\$4,600		
<b>Total</b>	<b>\$14,030(K)</b>		
<b>Grand Total</b>	<b>\$66,280</b>	<b>\$75,750</b>	<b>\$128,000</b>

**CO # 3 = \$37,250**

Classroom schemes for new academic building - will be included in CO 4 - fee proposal for new academic building.

**(A)** While the base scope of work assumed review of previous existing conditions and reports, it was not anticipated we would discover preexisting, non-code compliant issues from the previous conversion from Use Group B to E prior to our involvement with the project. Factoring this information in, Finegold Alexander Architects provided extensive investigation, research, written narratives, graphics, and cost analysis of two different code compliance 3D diagrams for the use of the 3<sup>rd</sup> and 4<sup>th</sup> floor for educational purposes as a decision-making tool for the Owner. The diagrams FA produced were used by potential CMs to understand the complexities of 165 Forest Street and, ultimately, factored into their fee proposals. The code study resulted in 165 hours dedicated just to this effort.

**(B)** SD design and documentation for 1<sup>st</sup> and 2<sup>nd</sup> floor scope of work, including the strategic demolition of walls and ceilings at existing steel column and beams to receive the new structural modifications and fireproofing at these locations, and coordinate the added fire alarm system.

**(C)** DD and CD documentation for 1<sup>st</sup> and 2<sup>nd</sup> floor strategic demolition of walls and ceilings at existing steel columns and beams to receive new structural modifications and fireproofing scope of work. Should the Owner decided to implement this scope on T&M with the CM, Finegold Alexander will not have any responsibility/scope for this future work and the fees will not be required.

**(D)** SD design and documentation for structural upgrades.

**(E)** DD through CD design and documentation and construction administration for structural upgrades.

**(F)** SD design and documentation for 1<sup>st</sup> and 2<sup>nd</sup> floor fire alarm modifications required for educational use in the building. This work was not completed when building was originally converted from Use Group B to Use Group E and is required by code.

**(G)** DD through CD design and documentation for 1<sup>st</sup> and 2<sup>nd</sup> floor fire alarm modifications. This work is required by code and should have been implemented with the building was originally converted from Use Group B to Use Group E and is required by code.

**(H)** SD design and documentation for electrical, plumbing, HVAC/ATC for replacement of rooftop units that serve 1<sup>st</sup> and 2<sup>nd</sup> floor.

**(I)** DD through CD design and documentation for electrical, plumbing, HVAC/ATC for replacement of rooftop units that serve 1<sup>st</sup> and 2<sup>nd</sup> floor. Should the Owner decided not to implement this scope of work the fees will not be required.

**(J)** Finegold Alexander assumed a higher fee in the original fee proposal given unknown complexities surrounding the 165 Forrest Street Building and overall program requirements. The fee was reduced in response to comments that it seemed “very large given scope” [per markups received via email from Anser on 9/22/21]. With a 10 week SD phase beginning in October with an assumed completion in December, the team met weekly, at a minimum, with the client to study gym site location options, gym size/court configuration options, building system options, 165 Forest Street code upgrade options, and site design concepts. The number of options explored did exceed our base scope of 3 initial Schematic

Design options for review with the client, but we recognized the need to explore these multiple options to arrive at a final decision by the client. The design team also incorporated the late SD phase programming decision to change the program use at the 3<sup>rd</sup> floor of 165 Forest Street from general classrooms to a science suite consisting of five science labs and two classrooms. The design team also provided two preliminary cost estimates to inform the gymnasium site matrix and 165 Forest Street code upgrades Option A and B to facilitate decision making for the client, which exceeded our single 100% SD cost estimate. Once all design decisions were made, the design team required seven (7) additional weeks to complete the documentation of SD. The client presentations and decision-making dates are documented below.

**(K)** Based on direction received from Anser in an email dated 3/24/22, the design team proceeded to explore a combined gym/classroom building, developing Options 1-4. Based on the review of these options at our project meeting on April 12, 2022 we were directed to study a standalone classroom building and developed Options 5-6. In parallel to the building design options, the team reviewed the site and vehicular circulation impacts the options would have to the campus.

**Terms:**

Payment is due within 30 days of date of invoice.

**Submitted by:**



Regan Shields Ives, AIA, LEED AP  
Finegold Alexander Architects

**Authorized by:**



Ellen Linzey, Executive Director  
Advanced Math & Science Academy Charter School, Inc.