ADDENDUM No. 4

February 6, 2018

Francis Walsh Intermediate School / Board of Education Central Offices

185 Damascus Road

Branford, Connecticut 06405

State Project Nos.: 014-0034EA / 014-0035BE-EA

REFERENCE CODE	
DC	Design Coordination / Improvement
SI	Supplemental Information
CL	Graphic and / or type correction and clarification
oc	Owner directed Change
ВС	Bid or Contractual Language Clarification

The following clarifications and changes to the Project Manual, Specifications, and Drawings are a part of the Contract Documents superseding previously issued Project Manual, Specifications, and Drawings to the extent modified by this **Addendum No. 4**. Bidders shall ensure this addendum is acknowledged in the appropriate space provided on the Bid Form when submitting their bid.

NOTE: (none)

	Project Manual Clarifications	Reference Code
A.	BP#2.0 Demolition and Abatement	
	Correct Scope of Work header; remove reference to Eli Whitney and replace with Francis Walsh.	-
B.	BP#7.0 Roofing, BP#8.0 Glass and Glazing	
	Reference Detail D4 on A-581 issued with Addendum #3. The BP#8.0 shall furnish and install the counterflash coping to glazing as shown. The counterflashing is metal and shall match the adjacent curtain wall.	-
		-

Project Specification Clarifications		Reference Code
A.	Specification Section 131500	
	Subject to compliance with the requirements of the Construction Documents, [Antinozzi Associates] takes no exception to the proposed alternative S. R. Smith Starting Blocks and Anchors for Francis Walsh IS.	-
B.	ELECTRICAL	

	The requirements elaborated upon in the response to RFI#87 are based upon standards recently adopted by the DAS Office of School Construction Grants & Review and are to be followed for all CT school construction projects. The restrictions to the use of MC cable affords the School greater flexibility for future space conversions which is an attribute sought throughout the facility. The restrictions are intended to further limit disorganized distribution of electrical wiring common to projects that heavily utilize MC cable.	
	Drawing Clarifications	Reference Code
A.	Section 123200 Manufactured Wood Casework	
1.	Inquiry: Specs for 123200 include student workstations (see paragraph 2.3.A) but the basis of design product specified in no way resembles the millwork drawings for the lab stations drawn on A-850. We will assume the drawings are correct. We will not include the 5-sided units in the specs. Response: Incorporate the following revisions to Section 123200: Paragraph 2.1 Manufacturers, A. Basis of Design, replace "Case Systems" with "CiF Lab Solutions. Delete, B. "1. Case Systems Inc." without replacement. Paragraph 2.3. A Basis of Design, replace "Diversified Woodcrafts – Model #2946K (Forward Vision 1)", with "CiF Lab Solutions, K-Line Series, white maple"	CL
A.	A-302 - Clarification only. Drawing not re-issued.	1
I.	Inquiry: Detail C3/2A-302 appears to show some brick work at existing column lines 4, 7, &10. Is this part of the abatement work done at the columns? If so, what is required at exterior and at which locations. Response: The specified replacement of exterior masonry expansion joints is limited to the sealant only and does not require the removal or replacement of existing brick veneer.	- CL
B.	A-640 – Clarification only. Drawing not re-issued.	1
l.	Inquiry: Detail B2/A-640 shows scored cmu at elevator interior. Please clarify if this is actually required or just an oversight on the drawings. Response: Scored CMU is not required at the elevator hoistway interior.	CL
C.	A-850 - Clarification only. Drawing not re-issued.	
I.	 Inquiry: The drawings for the lab stations on A-850 require some clarification: a. There are two plan views – a typical station (plan D5) and an ADA station (plan D4) b. There is one elevation (D3) that is tagged on plan view D4 for the ADA station 	CL

	c. There is no elevation of the typical station, but there are two section	
	details that appear to coordinate with the typical station, even	
	though there are no section tags are included on plan view D5.	
	d. Elevation D3 for the ADA station shows WB-4 next to the sink and	
	it's drawn as a 4-door, 4-drawer, double-sided base cabinet. But	
	WB-4 is a double-sided sink base so it has no drawers & no shelf	
	inside either. There is no 4-door, 4-drawer, double-sided base	
	cabinet listed in the schedule in section 123200 (see paragraph 3.4).	
	e. Elevation D3 for the ADA station does not show the plumbing chase	
	noted in plan view D4.	
	f. There are no section details for the ADA station.	
	We will assume details DI and D2 are correct for the typical station and will	
	include a WB-4 sink base under the sink and a plumbing chase next to it &	
	centered under the counter. We will assume the chase at the ADA station is	
	similar to the one in Detail DI but positioned flush with the back of the	
	station as shown on the plan view. We will provide WB-4 sink base (no	
	drawers or shelves) as noted next to the sink at the ADA station.	
2.	Response: To clarify details D1 and D2 are based on plan detail D5. There	
	is a base cabinet WB-4 under the sink in detail D5. To clarify at the sink in	
	plan detail D4 the section is similar to D1 but accessible knee & toe	
	clearances like those shown in detail AI are required.	

Attachments		Reference Code
A.	-	
I.	Updated Scope of Work for BP#2.0	-
2.	Updated Bid Forms to include acknowledgement of Addendum #4	-
3.	Revised Specification Section 123200	-

END OF ADDENDUM No. 4

Francis Walsh Intermediate School 185 Damascus Rd Branford, CT 06405 State Project # - 014-0034EA / 014-0035BE-EA

EXHIBIT "B" SCOPE OF WORK

Bid Package #2.0 (ABATEMENT AND DEMOLITION)

Francis Walsh Intermediate School & Board of Education Central Offices State Project # - 014-0034EA / 014-0035BE-EA

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not limited to labor, materials, equipment and all incidental work associated with **ABATEMENT AND DEMOLITION** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **ABATEMENT AND DEMOLITION** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word "provide" if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and General Contractor. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

1) BID PACKAGE #2.0 – ABATEMENT AND DEMOLITION: This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the ABATEMENT AND DEMOLITION and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Specification Sections of the Project Manuals:

Include all work for all specification sections specifically listed below or as applicable if indicated "(as applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

020010	Phase I Environmental Site Investigation
020020	Phase II Environmental Site Investigation
024113	Site Demolition and Removals (as applicable)
024116	Structure Demolition
024119	Selective Structure Demolition
028200	Selective Hazardous Materials Abatement Demolition
028213	Asbestos Abatement
028313	Lead Paint Awareness
028416	Universal Waste Removal and Recycling
028432	PCB's Greater than 50 PPM Remediation
028433	PCB's Less than 50 PPM Remediation
028434	Performance Based Remediation and Disposal Plan

2) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plans.

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

3) Description of Work:

a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those specifications:

Abatement of Hazardous Materials; Selective Demolition, Building demolition including but not limited to: Roof Removal as Required, Walls, Partitions; Doors and Frames; Flooring; Ceilings; Masonry; Soffits; Bulkheads; Cabinets and Casework; Shelves; Column Enclosures demolition (and the legal disposal of same); sheeting; shoring; bracing; openings for all trades as described in the Contract Documents and listed below.

The intent of the Scope of Work is for the **ABATEMENT AND DEMOLITION** bidder to remove and dispose of all materials and equipment noted on the Contract Documents, unless specifically noted to remain or be removed and/or disposed by others.

4) Inspections:

The Abatement and Demo Contractor shall be responsible for properly coordinating and scheduling all inspections with the Appropriate Authorities that may be required in the execution of his or her Scope of work by the Authority having Jurisdiction. Contractor shall coordinate and must provide the CM 48 hours advanced notice of any inspections.

5) Work over Finished Surfaces:

The Subcontractor shall furnish, install, and later remove surface protection necessary in situations when working on or above existing-to-remain or new surfaces. The subcontractor shall supply all material necessary (i.e. plywood, plastic, etc) to insure the surface is not damaged by their operation. This includes protection of flooring for use of lifts, scaffolds, and other equipment respective to their trades work.

6) Layout/Survey:

The Subcontractor shall <u>provide</u> layout/surveys for his or her own Scope of Work.

7) Clean-up:

All trades currently working on-site include clean-up on a daily basis. Clean-up, at a minimum, includes trash removal in their work area, break area, and storage area. Trash to be placed into dumpsters at the end of each day. Clean-up further includes broom sweep and general tidying of all areas impacted by this Subcontractor. Failure to clean-up to these standards on a daily basis will result in financial penalty to have the clean-up performed by others. Costs will also include Fusco fee's.

8) Electronic Documentation:

The Subcontractor includes use and collaboration of web-based project management software. This includes uses for, but not limited to, requests for information, submittal submission, and general document management. The Construction Manager will dictate which software system is to be utilized. The Subcontractor will be responsible for any computers, tablets, accessories, user training sessions, etc. necessary for proper use of the software.

9) Construction Schedule:

It is understood that TIME IS OF THE ESSENCE and as such the Schedule, included with the Bid Documents along with the Construction Phasing must be maintained.

- **a.** Subcontractor includes all overtime required to meet the schedule and as needed as a result of this Subcontractor's failure to meet the project schedule.
- **b.** Subcontractor includes all mobilizations necessary to complete Work.
- **c.** Subcontractor will be responsible for overtime costs for Construction Manager's supervision if the Subcontractor falls behind schedule, by its own fault, and overtime is required by this Subcontractor to make up the schedule.
- **d.** All provisions for Schedule compliance both in the Bid Documents and as covered in Fusco's Standard Form of Contract will be strictly enforced. Further, this Contractor shall be held to all of the same Schedule constraints and penalties that have been agreed to and have been stipulated to in the agreement between Fusco Corporation and the Owner.
- **e.** Subcontractor acknowledges that minor adjustments to the schedule will be required as all parties progress through project construction, and agrees to accomplish such minor adjustments at no increase in price.

10) Mechanical, Electrical, Fire Suppression, Plumbing, and HVAC Demolition:

This Subcontractor shall be responsible to properly dispose of all Mechanical, Electrical, Fire Suppression, Plumbing and HVAC installations as indicated on the Contract Documents:

- a. The Plumbing and HVAC Contractors shall cut, cap, and make-safe the system identified to be removed.
- b. The Fire Suppression Contractor shall cut, cap, and make-safe the system identified to be removed.
- c. The Electrical Contractor shall cut, cap, and make-safe the system identified to be removed.
- d. Removal and proper disposal of all Mechanical, Electrical, Fire Suppression, Plumbing and HVAC systems shall be by the Demolition and Abatement Contractor.
- e. Removal and proper disposal of all fluorescent lights and ballasts (placed in a suitable container) shall be properly disposed by the Demolition and Abatement Contractor.
- f. The <u>HVAC Subcontractor</u> shall be responsible to remove and properly dispose of the existing HVAC Air Handling, Rooftop Unit(s), Floor Mounted Unit(s), or Hung Unit(s) **WITHIN BUILDINGS B1/B2.** Includes all piping, hangers, supports, etc. FROM THE

GYMNASIUM, AUXILIARY GYMNASIUM, AND POOL AREA ONLY, INCLUDING THE ROOFTOPS. The HVAC Subcontractor shall furnish their own dumpsters for this. All other HVAC demolition in Areas B1/B2 is by the BP#2.0 Subcontractor- ADDENDUM #3.

g. The <u>Demolition and Abatement Subcontractor</u> shall be responsible to remove and properly dispose of the existing Boilers, Pumps, and Chillers.

11) Structure and Selective Demolition:

In addition to the Work depicted on the Contract Documents, this Subcontractor shall be responsible to provide the following:

- a. Pre-Demolition Photographs: This Subcontractor shall document the existing conditions photographically of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by building demolition operations and submit prior to commencing the Work.
 - 1. Salvage of Owner Items: This Subcontractor shall remove, clean and submit to Owner any items requested to be salvaged by the Owner prior to performing any demolition or abatement.
- b. Post-Demolition Photographs: This Subcontractor shall document the existing conditions photographically of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by building demolition operations and submit after completing the Work.
 - 1. Snaking and Video of Underground Pipe: This Subcontractor shall provide snaking and video of existing underground piping to City Structures to the Construction Manager with six (6) copies of a written report and DVD media. This shall be done before any work begins and again after the Project is Substantially Complete.
- c. Protect Existing Door Frames and Walls: This Subcontractor shall protect the existing door frames and wall, wherever necessary, prior to beginning the Work. Protection shall be focused on areas where damage to the existing door frames and walls is likely. This Subcontractor shall maintain and repair any damage to existing door frames and walls to the satisfaction of the Architect and Construction Manager, in their sole discretion, immediately during the performance of the Work and at the final completion of the Work as a prerequisite to closeout.
- d. Protection of Existing Stairs: This Subcontractor shall provide and maintain (until taken over by the General Trades Contractor, at the direction of the Construction Manager) temporary protection throughout the entire

construction phases to ALL Stairs, Stair Treads, Stair Risers, Stair Landings, Railings and Guardrails.

The following Stair protection system shall be utilized:

- i. 6 mil poly (Overlap 12" and Duct Tape Joints); and
- ii. ¾" Plywood
- e. Temporary Shoring and Bracing: This Subcontractor shall furnish, install, maintain, and remove any shoring and/or Bracing as may be required. Shoring/Bracing plan(s) shall be designed and stamped by a Structural Engineer licensed to practice in the State of Connecticut and approved by the project engineer prior to the start of work.
- f. Temporary Closure Walls @ Building Demolitions: This Subcontractor shall provide a 6" Steel Stud (12" O.C.) Insulated Wall with two layers of ¾" Plywood and batt insulation sealed off completely and in all respects to the weather and for the purposes of safety and security (specifically at the building doorways and hallways) where the building is to be demolished is severed from the existing occupied building to remain. Wall shall be weathertight, soundproof and secure in all respects. Walls shall adequately isolate temperature, sound, dust, odors, and fumes and meet applicable building and fire codes.
- g. Temporary Roofing and Waterproofing: This Subcontractor shall provide Temporary Roof Membrane wherever required to sealed off completely and in all respects to the weather and (specifically at the building interface) where the building to be demolished is severed from the existing building to remain. Temporary roofing shall also be provided where the existing Building Envelope is compromised as a result of the demolition and abatement. The entire building envelope including but not limited to caulking and flashings and specifically Roofing shall be weathertight in all respects.
- Existing Foundation: This Subcontractor shall REMOVE the existing foundation and slab where Building Demolition is indicated on the Contract Documents.
 Provide OSHA safe sloping to the satisfaction of the Construction Manager, in its sole discretion, at all underground removals.
- i. VAT, VCT, Carpet and Mastic Removal: This Subcontractor shall remove and properly dispose of all VAT, VCT, Carpet and other flooring and Mastic as indicated on the Contract Documents. The existing slabs shall be completely clean of all mastic. The existing slabs shall be free of any abrasions, rills or damage resulting from the abatement/demolition process. In the event the slabs are damaged, in the sole discretion of the Construction Manager, this

Subcontractor shall repair those areas so as to leave the slab in a condition acceptable to receive floor finishes.

- j. Encapsulant Adhesives: This Subcontractor shall remove any and all residue left behind by encapsulant adhesives so as to leave the existing substrate in a condition to receive finishes, in the sole discretion of the Construction Manager. In the event the existing substrates are damaged, in the sole discretion of the Construction Manager, this Subcontractor shall repair those existing substrates.
- k. Ceiling Demolition: This Subcontractor shall remove and properly dispose of all ceilings and soffits as indicated on the Contract Documents including but not limited to: acoustical grid, acoustical grid wires, acoustical ceiling tile, metal pans, black iron, welded metal tube ceiling support, batt insulation, light fixtures, stud framing and drywall, transfer ducts and grilles.
- I. Movable Partitions Demolition: This Subcontractor shall remove and properly dispose of all movable partitions as indicated on the Contract Documents.
- m. Millwork and Lockers Removal and Disposal: This Subcontractor shall remove and properly dispose of all millwork and lockers as indicated on the Contract Documents.
- n. Interior Door Removal and Disposal: This Subcontractor shall remove and properly dispose of all interior doors as indicated on the Contract Documents.
- o. Window Treatments Removal and Disposal: This Subcontractor shall remove and properly dispose of all window treatments as indicated on the Contract Documents.
- p. Roof Demolition & Abatement: The Roofing Contractor (Bid Package #7) shall remove and properly dispose of the existing roofing materials.
- q. Existing Roof Drains: This Subcontractor shall protect and leave in place all roof drains and discharge piping during the Project. In the event a roof drain is damaged it shall be replaced by this Subcontractor at no cost to the Project. In the event a roof drain must be removed in the proper execution of the Work, this Subcontractor shall replace it and include such cost in its bid as required to maintain proper roof drainage at all times. Also include furnishing, installing and removing temporary gutters and rain water downspouts as required to maintain proper drainage from the roofs at all times during construction.
 - Where Abatement of existing roof drains, pipes and leaders is required, this Subcontractor shall properly remove all hazardous pipe insulation including where pipe insulation may be concealed in an existing walls, chases and or ceilings.

- r. Existing Masonry Unit Salvage: This Subcontractor shall salvage, clean, count, palletize, plastic wrap and store on-site at the direction of the Construction Manager the following quantities of existing face brick masonry units (in the event this Subcontractor is unable to salvage the following quantities of brick and cannot substantiate to the Construction Manager, in its sole discretion, why there is a shortage, this Subcontractor shall purchase and provide brick to the Project at its own cost up to the required amounts):
 - 1,000 exterior square feet of bricks. The percent of each type of brick that is salvaged should be roughly proportional to the brick that is removed and as directed by the Construction Manager.

This brick shall be "clean" from contaminants. This Subcontractor will include the later removal and proper disposal of any un-used stored brick at the request of the Construction Manager and at no additional cost.

- s. Existing Wheelchair Lift Removal and Disposal: This Subcontractor shall be responsible to remove and properly dispose of the existing wheelchair lift including but not limited to the doors and frames, push button stations and all components complete.
- t. Miscellaneous Items: This Subcontractor shall be responsible to remove (including all attachment hardware while minimizing damage to existing substrate) and properly dispose of the following: tackboards, whiteboards, markerboards, water coolers (including electrical and plumbing supply/waste), signage, hose cabinets, emergency lighting, door hold opens, thermostats, fire extinguisher cabinets, area of refuge call boxes, wiremold, embedded wall anchors, coat racks, flags and holders, clock and speakers, telephone and supporting bracket, shelving and standards, surface mounted conduit and piping, miscellaneous hardware and bolts, refrigerant piping and any other item affixed to the walls not intended to remain.
- u. Disposal of Liquids: Include the legal disposal of any refrigerant, petroleum or any other hazardous liquid. Provide disposal of shed filled with hazardous materials.
- v. Temporary Swing Space Classrooms: This Subcontractor shall demolish and properly dispose of the Temporary Swing Space Classrooms constructed during the Project. Area approximately 2000 square feet.
- 12) Sheeting, Shoring, Underpinning, Bracing and Open Hole Protection:

In addition to that required by the Contract Documents, this Subcontractor is responsible to provide all Sheeting, Shoring and Underpinning as required, whether shown or not on the Contract Documents.

- a. This Subcontractor shall furnish, install, maintain and remove any shoring and/or Bracing as may be required. Shoring/Bracing plan(s) shall be designed and stamped by a Structural Engineer licensed to practice in the State of Connecticut and approved by the project engineer prior to the start of work.
- b. Any and all work in or along edges of roadways will be coordinated and scheduled with the proper authorities two weeks prior to beginning work.
- c. Protect all open excavations, access and haul roads, and staging areas as required.

13) Dumpsters, Clean-up & Waste Removal:

- a. This Subcontractor shall provide chutes, dumpsters and whatever other disposal tools are required for its Work and the work of its subcontractors. This Subcontractor is responsible for all necessary cleanup associated with the Work and Contract Documents and shall provide all necessary manpower and equipment for proper disposal. Cleaning is necessary in order to maintain a safe working and productive environment, and will be strictly enforced by the on-site Construction Management and supervisory personnel.
- d. Given this Subcontract responsibility, the Subcontractor is required to perform all necessary clean-up associated with the Work, and shall provide the necessary personnel and equipment to bring out all debris and dispose of safely and properly. All First Floor debris which cannot be disposed of in debris chutes, or debris carts must be placed directly into the appropriate dumpster. If it is determined by the Fusco onsite personnel that the Subcontractor is failing to perform the clean-up responsibilities, they will be put on notice and given a single work day to rectify this failure. If it is not rectified within that 24 hour period Fusco will upon written notice immediately perform this delinquent clean-up work and will back charge the appropriate Subcontractor for all costs incurred by Fusco in the performance of this cleanup.
- e. Subcontractor is to maintain a clean and safe work area. Housekeeping is a daily priority. The Subcontractor is responsible for daily clean up of their Work and debris. If the Subcontractor fails to clean up, all material and debris will be cleaned up by others and all costs associated will be charged to the responsible Subcontractor. In the event this Subcontractor encounters labor jurisdictional issues over this Work, this Subcontractor agrees to make whatever arrangements or provisions required to complete same and has included all associated costs.
- f. Any trucks leaving site with loads must be covered by this Subcontractor.

14) Minor Work/Provisions:

This Contractor shall carry in their base bid the removal of 150 additional mudded insulation on pipe fittings/elbows above ceiling and behind walls/pipe chases.

This Contractor shall carry in their base bid the removal of 200 additional linear feet of asbestos containing pipe insulation.

15) Mechanical Room Structure and Existing Fire Pump:

Mechanical Room Structure and Existing Fire Pump

The existing Fire Pump and the Building Structure that houses it will have to remain in operation through Phase I Construction. It is located in the North West corner of the Instructional Area to be demolished, and is referenced as a Storage Room. Reference Drawing 1D-101.A1 for location purposes. The Structure is approximately 16' x 16' and is 26'-0" tall. The fire pump is located on the 2nd floor of the structure. Currently the 10" dedicated fire service line comes from the water meter vault located at the North side of the Project, enters the storage room below grade, rises up inside the structure to the fire pump, returns to the 1st floor and runs underground to the perimeter 8" fire hydrant loop. There are a total of 4 hydrants at the Project. At each hydrant is an adjacent vault that has the fire line that services the various Wings of the Building.

The 1st hydrant in the Phase I Construction Area is in the footprint of the New Building Construction. The hydrant will be removed, but the fire line that feeds it and continues to the balance of the fire loop will remain. Perimeter Footings of the New Building will be dropped as needed to accommodate this fire line. The existing Mechanical Tower will be approximately 13'-0 from the construction of the new Academic Wing.

Scope of Work:

Bid Package:

02 Demolition/Abatement Subcontractor

Activity will be scheduled upon the completion of Phase I Construction, but no later than the Demolition of the Phase II Academic Wing. All framing members, roofing flashings and attachments that are connected to the Mechanical Tower to remain will be removed prior to demolition of the one story Phase I Building.

03- Concrete Subcontractor

Drop footings in 2 locations as required for the existing underground Fire Loop piping to remain. Extend piers as necessary. Follow detail and location.

09 - Drywall Subcontractor

Supply and install a pair of 3'-0" x 7'-0" doors in an existing door frame. Provide and install hinges, keyed lockset, inactive door surface mount stops, and exterior weather-stripping.

21-Fire Protection Subcontractor

Review and field verify the piping configuration from the existing Fire Pump. Confirm piping runs from current fire pump outlet to existing buildings. Cut and cap piping that is within the building A1 to be demolished. Maintain fire protection for existing building. Return at the end of Phase 1 to cut and cap fire loop at tower for demolition.

22-Plumbing Subcontractor

Cut vertical roof drain riser 2' above finish floor and run though exterior wall to exit building. Include an exterior grated cover.

26- Electrical Subcontractor

Furnish and install temporary heaters (need to get sizes and quantities from CES).

Locate power, and fire alarm sources and branch feeders to allow system to stay energized throughout Phase I Construction. Return at the end of Phase 1 to cut and make safe.

31-Sitework Subcontractor

Excavate and locate the underground existing 8" Fire Loop no less than every 40lf from where the pipe exits the Mechanical Tower to where the pipe exits the footprint on the new Building Foundation. Once located backfill and clearly mark with a high visible, long term monument. Excavate to drop footings in 2 locations as required at the Phase I building to allow Fire loop to remain.

Terminate and remove vertical riser to 1st hydrant located in the footprint of Phase I building construction. Upon completion of Phase I Construction remove all underground fire line piping except for the piping that runs under the building footprint. Cut and cap Existing Fire loop line that runs under the Building Footprint and grout solid with 3000psi concrete.

CLARIFICATIONS:

The Structure Demolition, Selective Demolition and Abatement Subcontractor shall include:

- 1. The Structure Demolition, Selective Demolition and Abatement Contractor must undertake the exterior wall demolition in order to salvage the required amount of face brick. This Contractor shall be responsible for cleaning all salvaged brick, stacking them neatly on pallets, and covering them with shrink wrap. Once completed they shall be turned over to the Masonry Trade Contractor who shall be responsible for protecting them and ultimate use in closing up existing openings. In the event this Contractor is unable to satisfy the required salvage quantities, the burden shall be on this Contractor to substantiate why the required quantities were not attained, and in the sole discretion of the Construction Manager, this Contractor may be responsible to provide brick at its own cost to attain the required quantity.
- 2. Remove and properly dispose of all roof penetration/perimeter flashing as ACM typical unless otherwise noted. Replace flashing that is removed by this Contractor with a temporary flashing that is weather tight and acceptable to the Construction Manager.
- 3. Provide the removal of the grease interceptors including but not limited to the pumping and proper disposal of all grease, fats, and solids that remain in the tanks.
- 4. Provide the removal of the existing acid neutralization tank including but not limited to the pumping and proper disposal of its contents.
- 5. Provide OSHA safe sloping to the satisfaction of the Construction Manager, in its sole discretion, at all underground removals.
- 6. Provide dumpsters for the demolition and abatement debris.

- 7. Include the careful removal of existing plaques and other such school memorabilia (whether shown or not on the documents) and turn over to Fusco in clean form, free of any contaminants. In the event such items cannot be made free of contaminants, this contractor shall be responsible for the proper disposal of such items.
- 8. The Subcontractor shall NOT demo the existing clerestory windows and metal panels that are within frames that are remaining. The Glass and Glazing Subcontractor will remove these units.
- 9. The Subcontractor includes the demolition and removal of the existing roof (Building B1/B2), for the installation of Structural Steel at the Locker Room. Reference drawing 2A-1R1.B1/B2 for the footprint of the roof area to be removed.
- 10. The Subcontractor shall demo completely, any and all MEP items within existing Area A1, C1, C2, and C3. MEP Trades will de-energize, cut, cap, and make-safe for demolition.
- 11. In areas B1 and B2, the HVAC Subcontractor will full perform all demolition of all HVAC piping, equipment, supports, hangers, etc.... All other demolition, including Plumbing Demolition, in B1/B2 is still by the Demolition and Abatement Subcontractor. All Abatement in Areas B1 and B2 is by the Demolition and Abatement Subcontractor.
- 12. The Subcontractor shall fully demo and remove all concrete slabs on drawing 2D-101.B2. For reference purposes, see drawing 2S-102.B2 for new slab footprint.
- 13. The Subcontractor shall fully demo and remove all concrete slab in the Corridor between the Gymnasium and the Auxiliary Gymnasium.
- 14. The Subcontractor includes performance of Abatement activities during off-hours shifts when schedule shows abatement work during the School calendar year.
- 15. The Subcontractor shall include any scaffolding required for the completion of their work.
- 16. The Subcontractor shall remove and dispose of the existing wood base from the Gymnasium and Auxiliary Gymnasium in its entirety.
- 17. The Electrical Subcontractor shall be responsible for demolition and removal of electrical items suspended over the pool. All other electrical items in the pool area are the responsibility of this Subcontractor for demolition.
- 18. The Subcontractor shall provide clean, plumb, sawcuts for all existing masonry to be removed by this Subcontractor, when sections of immediately adjacent existing masonry are to remain (IE: gymnasium, auxiliary gymnasium, pool, corridors, etc.). **ADDENDUM #1**
- 19. The Subcontractor includes the removal and disposal of the exterior ground mounted Chiller. This includes removal and disposal of pad, removal and disposal of fluids. The Sitework Subcontractor shall remove and dispose of all underground services for the Chiller. – ADDENDUM #1
- 20. The <u>Abatement and Demolition Subcontractor</u> shall provide in their proposal the requirement to include a Professional Engineer licensed in the State of CT to determine the sequence of masonry demolition including any shoring and/or bracing required by this P.E. Engineer's calculations to facilitate the work of this subcontract. This Subcontractor shall also in developing their sequence of work coordinate with <u>Langan Engineering</u> and <u>the Masonry and Cast Stone Subcontractor</u> to determine the sequence of operation that best expedites the schedule of work from masonry abatement and air clearance testing to masonry reconstruction. This Subcontractor also understands that he must submit signed and sealed calculations and drawings developed by his P.E. Engineer for review and

acceptance by the Engineer of Record before commencing the abatement/ demolition work. Reference specification section 017300. – **ADDENDUM #1**

- 21. Complete all saw cutting including saw cutting needed to complete the work of other trades. Include saw cutting the existing slabs for new masonry. **Addendum #3**
- 22. BP#7.0 shall be responsible for the removal of the roof material, down to deck. BP#2.0 shall remove the deck, and everything below. The roof area to be removed shall be coordinated with the new Structural Steel. **Addendum #3**
- 21. Dumpsters
 - BP#2.0 shall provide all dumpsters for their own work.
 - BP#4.0 shall provide all dumpsters for their own work.
 - BP#6.0 shall provide all general construction and debris dumpsters for the entire project and all trades, except for BP#2.0, BP#4.0, and BP#31.0.
 - BP#23.0 shall NOT dispose of the B1/B2 HVAC demolition from the Gym/Aux Gym/Pool into dumpsters provided by others. BP#23.0 shall be responsible for the removal of their debris by their B1/B2 demolition activities with their own means and dumpsters.
 - BP#31.0 shall provide all dumpsters for their own work. Addendum #3
- 22. The Subcontractor shall include the removal and proper disposal of the batteries from the Electrical Room. **Addendum #3**

EXCLUSIONS

- 1) Sale and Use Taxes.
- 2) HVAC Demolition in Areas B1 and B2 Gymnasium, Auxiliary Gym, and Pool (including rooftop). All other HVAC demolition in Areas B1 and B2 is by BP#2.0 Addendum #3.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative

Francis Walsh Intermediate School 185 Damascus Rd Branford, CT 06405 State Project # - 014-0034EA / 014-0035BE-EA – Addendum #4

expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

SECTION 123200 – MANUFACTURED WOOD CASEWORK

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of contract, including General and Supplementary Conditions and Division-1 Specification apply.

1.2 SUMMARY

A. Section Includes:

- 1. Pre-manufactured wood casework, equipment and components for science rooms and other locations indicated on the drawings.
- 2. Corrosives storage equipment.
- 3. Flammables storage equipment.
- 4. Fume hoods.

B. Related Requirements:

- 1. Section 017419 "Construction and Demolition Waste Management.".
- 2. Section 018113 "VOC Limits for Adhesives, Sealants, Paints and Coatings."
- 3. Section 018119 "Construction Indoor Air Quality (IAQ) Management."
- 4. Section 061053 "Miscellaneous Rough Carpentry" for wood furring, blocking, shims, and hanging strips required for installing woodwork and concealed within other construction before wood casework installation.
- 5. Section 123653 "Laboratory Worksurfaces" for epoxy resin counters and sinks.

1.3 HIGH PERFORMANCE BUILDINGS GENERAL REQUIREMENTS

- A. Implement practices and procedures to meet the project's environmental goals, which include complying with Connecticut Standard Guidelines Compliance Manual for High Performance Buildings, September 2011, with additional mandatory building project requirements for schools. Specific project goals which may impact this and the other sections of this specification include: use of recycled-content materials; use of locally-manufactured materials; use of low-emitting materials; use of certified wood products; construction waste recycling; and the implementation of a construction indoor air quality management plan. Ensure that the requirements related to these goals, as defined in this Section and other Sections of the contract documents, are implemented to the fullest extent. Substitutions or other changes to the work shall not be allowed if such changes substantially compromise the stated High Performance Building criteria.
- B. Comply with Connecticut Standard Guidelines Compliance Manual for High Performance Buildings, September 2011, with additional mandatory building project requirements for

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

schools and the Department of Administrative Services / Office of School Construction Grants & Review High Performance School Construction Bulletin, June 2017.

1.4 ACTION SUBMITTALS

- A. Product data for each type of casework, hardware and accessories specified. Provide data indicating compliance with SEFA 8 standards.
- B. Shop drawings for casework showing location and size of each type of casework, accessories, materials, finishes, hardware types and locations, and filler panels. Include fully dimensioned plans, elevations and sectional details of all equipment included in this specification. Shop drawings shall show the construction and interface of all equipment included in this specification.
- C. Samples for verification purposes must be based on the following specifications and not a "manufacturers standard" product. Manufacturer will be allowed to submit only one (1) set of samples for approval. Samples not meeting the following specification will be grounds for rejection of bid. Upon request of the Architect/Owner, samples must be submitted within thirty (30) -days and may be held until project completion. Samples that may be required are as follows:
 - 1. One (1) combination drawer and cupboard base cabinet showing construction details.
 - 2. Specifications and product literature indicating deviations from the project specifications.
- F. High Performance Building Submittal Requirements: The contractor or subcontractor shall submit the following High Performance Building certification items:
 - 1. A Connecticut High Performance Building Compliance letter shall be provided verifying agreement with relevant High Performance requirements. Information to be supplied includes, but is not limited to:
 - a. The percentage by weight of recycled content in the product(s). Identify post-consumer and/or pre-consumer recycled content.
 - b. The manufacturing location for the product(s); and the location (source) of the raw materials used to manufacture the product(s).
 - c. Provide material costs for the materials included in the contractor's or subcontractor's work. Material cost does not include costs associated with labor and equipment.
 - 2. Letters of Certification, provided from the product manufacturer on the manufacturer's letterhead, to verify the amount of recycled content.
 - 3. Product Cut Sheets for all materials that meet the High Performance Building Requirements this Section.
 - 4. Material Safety Data Sheets (MSDS), for all applicable products. Applicable products include, but are not limited to adhesives, sealants, carpets, paints and coatings applied on the interior of the building. MSDS shall indicate the Volatile Organic Compound (VOC) limits of products submitted (If an MSDS does not include a product's VOC content, then

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

product data sheets, manufacturer literature, or a letter of certification from the manufacturer can be submitted in addition to the MSDS to indicate the VOC content).

1.5 INFORMATIONAL SUBMITTTALS

- A. Installers Qualifications:
- B. All laboratory equipment covered by this specification and the relevant project drawings shall be furnished by a single source to facilitate coordination between the various manufacturers and eliminate divided responsibility.
- C. Equipment Contractor shall submit a list demonstrating the completion of at least ten (10) projects of equal or greater size than this project and that have been in service for five (5) years or longer.
- D. Those seeking to bid, other than the supplier of the specified products must apply for approval at least seven (7) days prior to bid opening. Full-sized samples of wall, base, and tall cabinets along with relevant specifications must be submitted to the architect.

1.6 QUALITY ASSURANCE

- A. Provide certification that furniture meets the performance requirements described in SEFA 8.
- B. High Performance Building Requirements:
 - 1. Adhesives, sealants, paints or coatings used for work in this section for interior applications shall meet the requirements of Division 1, Section 018113: "Volatile Organic Compound (VOC) Limits for Adhesives, Sealants, Paints and Coatings", where applicable.
 - 2. Materials manufactured within a radius of 500 miles from the project site where all or a portion of the raw resources also originate within a radius of 500 miles shall be documented in accordance with the High Performance Building Requirements of this Section.
 - 3. Materials that contain recycled content shall be documented in accordance with the High Performance Building Requirements of this Section.
- C. Certified Wood: Section 16a-38k-6(d)(13): Not less than fifty percent (50%) (by cost) of wood-based materials shall be produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship." Only include materials permanently installed on the project.
 - 1. Wood-based materials include, but are not limited to, the following materials:
 - a. Rough carpentry.
 - b. Doors.
 - c. Miscellaneous carpentry.
 - d. Heavy timber construction.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- e. Wood decking.
- f. Metal-plate-connected wood trusses.
- g. Structural glue-laminated timber.
- h. Finish carpentry.
- i. Architectural woodwork.
- j. Wood paneling.
- k. Wood veneer wall covering.
- 1. Wood Flooring.
- m. Wood Lockers.
- n. Wood Cabinets.
- o. Furniture.
- 2. Do not include plumbing, mechanical and electrical components, and specialty items such as elevators and equipment in the calculation.
- 3. FSC Chain-of-Custody (COC) Requirements:
 - a. Must submit all invoices for all permanently installed wood products, FSC certified or not, purchased by the project contractor or subcontractors.
 - b. Each Vendor invoice must conform to the following requirements:
 - 1) Each wood product must be identified on a line-item basis.
 - 2) FSC products must be identified as such on a line-item basis.
 - 3) The dollar value of each line item must be shown.
 - 4) The COC certificate number must be shown on any invoice that includes FSC products.
 - c. Each wood product's vendor that invoices FSC certified products must be COC certified by an FSC-accredited certifier. Project contractors, subcontractors, and furniture installers are not required to be COC certified, as long as they do not modify products beyond what is required for installation, according to the LEED Reference Guide. However, vendors, suppliers, manufacturers are required to hold and provide COC tracking numbers as the product moves throughout the supply chain.

1.7 WORK BY EQUIPMENT CONTRACTOR

- A. Furnishing, delivering to the jobsite, uncrating, setting in place, leveling and securing all casework and equipment listed in the specification or equipment schedule and/or shown on the drawings.
- B. Furnishing plumbing fixtures and fittings only as defined by specifications or noted on project drawings and/or as included in manufacturer's standard model number. Assembling and securing fixtures to casework and equipment shall be by the Plumbing Contractor as part of their final connections.
- C. Furnishing electrical service fixtures as defined by specification or noted on project drawings and/or included in manufacturer's standard model number. Assembling or securing fixtures to casework and equipment shall be by the Electrical Contractor as part of their final connections.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- D. Furnishing and installing sink bowls and cup sinks, complete with required overflows, plugs and strainers as called for in the specifications, equipment list and/or shown on the drawings.
- E. Furnishing and installing filler panels and scribes as required for finished installation.
- F. Furnishing and installing locks at doors and drawers when specifically noted in the specifications or project drawings. (If locks are not noted or called for, they will be excluded from Equipment Contractor's scope of work.)
- G. Removal of all debris, dirt, and rubbish accumulated as a result of installation of this equipment, leaving premises broom clean and orderly. Debris and rubbish to be deposited in dumpsters provided by Contractor.

1.8 WORK BY OTHER TRADES

- A. Plumbing Work: Service rough-ins, shut-off valves, internal piping, support brackets, or final connection to plumbing fixtures (Service fixtures, when provided, are installed by the Plumbing Contractor.)
- B. Electrical Work: Service rough-ins, junction boxes, internal conduit and wiring, support brackets, or final connection to electrical fixtures. (Electrical receptacles, when provided, are installed by Electrical Contractor.)
- C. Sink Drains: Waste rough-ins, hubs, vents, adapters, internal piping, support brackets, traps, tailpieces, or final connection to sink outlet.
- D. Fume Hood Duct Work, Fans, and Blowers: Exhaust and supply duct, fans, exhaust stacks, mounting brackets, adapters, safety disconnects, magnetic starters, conduit and wiring to fans or final connection to equipment.
- E. Appliances, Data Outlets, Wall-Mounted Chalkboard and Tack Boards: Chalkboards and tack boards are provided when they are an integral part of the Labscape product.
- F. Locks: Except where specifically called for.
- G. Demolition Work.
- H. Caulking Between Tops, Walls, Battens, and Equipment: All caulking to be by Contractor.
- I. Framing or Reinforcements: Any framing or reinforcement of walls, floors, and ceilings required to support the equipment provided under this section, including but not limited to threaded rods, uni-strut, and plaster grounds shall be provided and installed by the respective trade. Equipment supplier shall provide detailed drawings showing types and locations of required blocking and securement apparatus.
- J. Furnishing, installing, and connecting of all vents, revents, steam fittings and special plumbing fixtures or piping to meet local codes, even though not specifically called for in the specifications and/or shown on the drawings.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- K. Furnishing and installation of all rigid or flexible conduit, wire, pulling of wire, fittings, special electrical equipment and accessories including boxes, receptacles; flush plates sent loose. Included are those in box curbs or tops which are not installed at Equipment Contractor's plant due to inconvenience of shipping. Wiring and connection of switch to fume hood lights and blower motors.
- L. Furnishing any miscellaneous materials generally classified as maintenance or supply items.
- M. Providing protection and security by Contractor during and after laboratory equipment installation.
- N. Hoisting or elevator service Contractor to provide these services at equipment locations above ground floor.

1.9 MAINTENANCE AND OPERATING INSTRUCTIONS

A. This Contractor shall include in its bid, the cost of providing a technically qualified representative for a period of one (1) day to thoroughly instruct the Owner's personnel in correct procedures of operating and maintaining this contract.

1.10 GUARANTEE

A. This Contractor shall guarantee all materials and workmanship of equipment provided on this contract for a period of one (1) year from the date of final acceptance. Any defective materials or faulty workmanship occurring within that time shall be replaced or corrected without charge.

PART 2 – PRODUCTS

2.1 MANUFACTURES

- A. Basis of Design: Case Systems CiF Lab Solutions [Addendum No. 4]
- B. Subject to compliance with the requirements of this section, provide manufactured wood casework from one of the following:
 - 1. Case Systems, Inc.
 - 2. CiF Lab Solutions.
 - 3. Diversified Woodcrafts, Inc.
 - 4. Kewaunee Scientific Corp.
 - 5. Wood-Metal Industries.

2.2 MATERIALS

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

A. Hardwood Plywood (White Maple)

- 1. Plywood used for exterior surfaces and exposed to view after installation or for interior surfaces of open face cabinets or cabinets having glazed doors shall have A-1 plain sliced face grade veneers and shall be of thickness described under Part 3 Construction of this specification.
- 2. Plywood used for exterior surfaces unexposed to view after installation or interiors of cabinets with doors or drawers shall be hardwood Grade D veneer face, Grade 3 back.

B. Lumber

- 1. All lumber used for exposed cabinet members shall be selected northern grown hardwood, matching that of the hardwood plywood selected, free from cracks, checks and knots.
- 2. All lumber used for interior construction shall be hardwood as selected by the manufacturer and free from structural defects.
- 3. All solid lumber shall be thoroughly air-dried, then kiln dried to a moisture content of 6 7 percent and finally environmentally tempered before fabrication.

C. Hardboard

- 1. Hardboard: 1/4-inch (6 mm) thick, composed of wood fibers and resinous binder compressed under heat and pressure to form a hard, smooth surface.
- D. High Density Fiberboard
- E. High Density Fiberboard: 3/4-inch (19 mm) thick, composed of wood fibers and resinous binder formed with heat and pressure to form a hard, smooth surface.

F. Edging:

- 1. All exposed cabinet doors, drawer and drawer fronts and shelf edges shall be edged with 3 mm solid oak maple banding applied with hot melt adhesive under extreme heat and pressure. [Addendum No. 3]
- 2. Unexposed shelf edging shall be edged with 3mm solid maple banding applied with hot melt adhesive under extreme heat and pressure.

G. Glass:

- 1. Framed sliding and swinging doors: 3/16-inch (5 mm) thick tempered glass.
- 2. Unframed sliding glass doors: 1/4-inch (6 mm) thick tempered glass.
- 3. Fume hood glass: 7/32-inch (5.6 mm) thick laminated safety float glass.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

H. Dowels:

1. Dowels used to assemble rails and panels shall be 8MM diameter fluted hardwood.

I. Hardware:

- 1. Hinges: 5-knuckle hospital tip institutional grade quality, .083-inch (2 mm) thick, offset type for swinging doors. Hinges shall be 2-1/2-inch (63.5 mm) long with a non-removable pin and be satin finish stainless steel.
 - a. Doors under 48-inches in height shall receive two (2) hinges.
 - b. Doors exceeding 48-inches in height shall receive three (3) hinges.
 - c. Hinges are mounted using four (4) flat head screws to the cabinet end and five (5) flat head screws to the door resulting in a minimum weight load capacity of 200 pounds.
- 2. Door and Drawer Pulls: Zinc coated steel bow or wire type, nominally 4-inches on center.
- 3. Pulls shall be surface mounted and attached using two (2) machine screws.
 - a. All doors shall receive one (1) pull per door.
 - b. Drawer fronts up to 24-inches (610 mm) wide shall receive one (1) pull.
 - c. Drawer fronts exceeding 24-inches (610 mm) wide shall receive two (2) pulls.
- 4. Flush pulls for sliding doors shall be recessed providing a finger grip and be satin finish chrome plated steel.
- J. Locks: When specified and called for on the drawings, shall be 5-disc tumbler with an interchangeable cylinder. Finish shall be satin nickel.
 - 1. Locks shall have the capacity for 200 primary key changes.
 - 2. Cam shall fit securely into mortised slot located in cabinet bottom, side or intermediate rail.

K. Catches:

- 1. Base and wall cabinets: Roller catches consisting of two (2) spring-loaded polyethylene rollers and metal catch.
 - a. Double door cabinets without locks: provide a catch on each door.
- 2. Tall cabinets: Employ a 3-point latch mechanism.
- L. Drawer Slides:

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- 1. Equip standard drawers with a 3/4-inch (19 mm) extension slide assembly consisting of a 2-part slide mechanism of epoxy coated steel and captive nylon rollers. Minimum dynamic load rating: 100 lbs. (45.4 kg).
 - a. Drawer slide member shall have two (2) legs formed at 90° wrapping side and bottom of drawer.
 - b. Cabinet slide member shall be U-shaped formed to capture nylon roller and be mounted with screws to the side of the cabinet.
 - 2. Full extension slide, when specified, shall be a 3-part slide mechanism consisting of zincplated cold rolled steel and captive steel ball bearings.; and having a minimum dynamic load rating of 100 lbs. (45.4 kg).
 - a. Drawer slide members are side mounted with screws.

M. Shelf Supports:

- 1. Shelf supports shall be heavy-duty nylon or injection molded plastic with a double stem engagement system inserted into pre-drilled holes in the cabinet ends or partition. Pre-drilled holes shall be located 32mm (1-1/4-inches) on center.
- 2. Shelf supports shall have molded locking tabs, that will accept 3/4-inch and 1-inch shelving, to prevent accidental tipping.
- N. Wardrobe Hanger Rod: 1-1/4-inch (32 mm) diameter chrome plate steel rod supported by end mounted captive sockets.
- O. Tote Trays: Impact resistant polystyrene of tan color.
- P. Leg Boot / Floor Glides:
 - 1. All table legs shall receive 2-1/2-inch (63.5 mm) black rubber leg boots to conceal leveling device.
 - 2. Leg leveling device shall be of non-skid, non-marring material 1-inch in diameter with a minimum of 5/8-inch (16 mm) height adjustment.
- Q. Base Molding: Provided and installed by other trade.
- R. Upright Rod Assemblies
 - 1. Upright rods and cross rods, when specified, shall be 3/4-inch (19 mm) diameter aluminum
 - 2. Rod sockets shall be aluminum and secured through the work surface with a lock nut and washer.

S. Sliding Glass Doors

1. Framed Doors: Double extruded aluminum track with hanging nylon rollers secured to the cabinet top and door top. An aluminum U-channel is secured to the bottom of the cabinet for guidance.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

2. Unframed Glass Doors: Double extruded aluminum track with roller bearings secured to the bottom of the cabinet. An aluminum U-channel is secured to the top of the cabinet for guidance.

2.3 STUDENTS SCIENCE LABORATORY WORKSTATIONS

A. Basis of Design: Diversified Woodcrafts Model # 2946K (Forward Vision I) CiF Lab Solutions, K-Line Series, white maple veneer plywood panels, solid maple rails and edge banding. [Addendum No. 4]

2.4 BASE CABINETS

- A. Cabinet End Panels: 3/4-inch (19 mm) thick 7-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front edge.
 - 1. Provide two (2) rows of 5mm holes vertically row bored, 32mm on center, on each end panel to accept drawer slides and shelf supports.
 - 2. Shall be notched 4-inches (102 mm) high by 2-1/4-inches (57 mm) deep on the front bottom edge to receive a 4-inch by 3/4-inch (102 by 19 mm) by piece of hardwood plywood forming a totally enclosed toe space.
 - 3. Shall receive a 1/4-inch by 1/4-inch (6 by 6 mm) vertical dado 3/4-inch (19 mm) of an inch in from the rear edge to accept a 1/4-inch (6 mm) thick back.

B. Cabinet Bottom

1. Shall be 3/4-inch (19 mm) thick 7-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding, multiple doweled. Dowels are to be glued securely to end panels and clamped under pressure to ensure joint integrity and unit squareness.

C. Horizontal Top Frame

- 1. At the front of the cabinet, rail shall be 2-1/2 by 1 inches (63.5 by 24.5 mm) solid maple.
- 2. At the rear of the cabinet, rail shall be 2-1/2 by 1 inches (63.5 by 24.5 mm) solid hardwood.
- 3. At the sides of the cabinet, rails shall be 1-1/2 by 3/4 inches (38 by 19 mm) hardwood.
- 4. All rails shall be multiple doweled. Dowels are to be glued securely to end panels and clamped under pressure to ensure joint integrity and unit squareness, resulting in a fully framed cabinet.

D. Horizontal Intermediate Rails

- 1. Shall be 2-1/2 by 3/4 inches (63.5 by 19 mm) solid maple, multiple doweled and glued securely to end panels.
- 2. Shall be located at the front of the cabinet between stacked drawers and between doors and drawers.

E. Backs:

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- 1. 1/4-inch (6 mm) high density fiber board at unexposed interiors.
- 2. 1/4-inch (6mm), 5-ply hardwood plywood at exposed interiors.
- 3. In all base cabinets, the back will fit snugly into a 1/4-inch (6mm) deep dado in the end panels and bottom, and be secured by hot melt adhesive.

F. Hang Rails:

1. Shall be 3-inches by 3/4-inch (76.2 by 10 mm) 7-ply hardwood plywood, multiple doweled and glued securely to the cabinet ends at the top and bottom of the cabinet.

G. Drawers:

- 1. Drawer sides, back and sub-front shall be 7/16-inch (11 mm) thick 9-ply Birch plywood.
- 2. Drawer bottom shall be 1/4-inch (6 mm) thick hardboard with a thermally fused laminated interior surface.
- 3. Sides, back and sub-front shall be assembled using multiple dovetail joints and glue at all four corners.
- 4. Drawer bottoms shall be set and glued into 1/4-inch (6 mm) dadoes on all four sides.

H. Shelves:

- 1. Shelves 30-inch wide or less shall be 3/4-inch thick 7-ply veneer core plywood with 1/4-inch solid maple edge banding on the front edge.
- 2. Shelves over 30-inches (762 mm) shall be 1-inch (25.4 mm) thick 9-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front edge.
- I. Doors and Drawer Fronts: 3/4-inch (19 mm) thick solid core material with maple veneer both sides.
 - 1. Edge band all four (4) edges with 3 mm solid maple.
 - 2. Overlap drawer fronts and swinging doors beyond the cabinet opening on all four (4) sides by 1/4-inch (6 mm).
 - 3. Apply an astragal to the inside face of the left door and extend beyond the rear of the right door, thus securing the left door when locks are required as the right door shall receive the lock.
 - 4. Glass-framed doors: 7/8-inch thick by 2-3/4-inches (22 by 70 mm) by wide solid maple framing.
 - a. The rear inside edge of the opening shall be rabbeted to accept 3/16-inch (5 mm) thick tempered glass. Glass shall be held in place with plastic retainer.

2.5 WALL CABINETS

A. Cabinet End Panels

- 1. Shall be 3/4-inch (19 mm) thick 7-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front and bottom edge.
- 2. Shall have two (2) rows of 5MM holes vertically row bored, 32 mm on center, on each end panel to accept shelf supports.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

3. Shall receive a 1/4 by 1/4-inch (6 by 6 mm) vertical dado 3/4-inch (19 mm) from the rear edge to accept a 1/4-inch (6 mm) thick back.

B. Cabinet Top and Bottom Panels

- 1. Shall be 1-inch (25.4 mm) thick 9-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding, multiple doweled. Dowels are to be glued securely to end panels and clamped under pressure to ensure joint integrity and unit squareness.
- 2. Shall receive a 1/4 by 1/4-inch dado (6 mm by 6 mm) the length of the member 3/4- inch (19 mm) in from the rear edge to accept a 1/4-inch (6 mm) thick back resulting in a fully captured back panel.

C. Backs:

- 1. 1/4-inch (6 mm) thick high density fiberboard at unexposed interiors.
- 2. 1/4-inch (6 mm) thick 5-ply hardwood plywood at exposed interiors.
- 3. In all wall cabinets, the back will fit snugly into a 1/4-inch (6 mm) deep dado located in the cabinet end panels and top and bottom panels, resulting in a fully captured back. Back shall be secured by hot melt adhesive.

D. Hang Rails

1. Shall be 3-inches by 3/4-inch (76.2 by 19 mm), 7-ply hardwood plywood, multiple doweled and glued securely to the end panels at the top and bottom of the cabinet.

E. Shelves:

- 1. Shelves 30 inches (762 mm) wide or less shall be 3/4-inch (19 mm) thick 7-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front edge.
- 2. Shelves over 30 inches (762 mm) shall be 1-inch (25.4 mm) thick 9-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front edge.

F. Doors:

- 1. Shall be 3/4-inch (19 mm) thick solid core material with maple veneer both sides.
 - a. All four (4) edges to be banded with 1/4-inch (6 mm) solid maple.
 - b. Swinging doors shall overlap the cabinet opening on all four (4) sides by 1/4-inch (6 mm).
- 2. An astragal shall be applied to the inside face of the left door and shall extend beyond the rear of the right door, thus securing the left door when locks are required as the right door shall receive the lock.
- 3. Glass-framed doors shall be 7/8- thick by 2-3/4-inches (22 by 70 mm) wide solid maple framing.
 - a. The rear inside edge of the opening shall be rabbeted to accept 3/16-inch (5 mm) thick tempered glass. Glass shall be held in place with plastic retainer.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

2.6 FULL HEIGHT CABINETS

A. Cabinet End Panels

- 1. Shall be 3/4-inch (19 mm) thick 7-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front edge.
- 2. Shall have two (2) rows of 5mm holes vertically row bored, 32mm on center, on each end panel to accept drawer slides and shelf supports.
- 3. Shall be notched 4-inches high by 2-1/4-inches deep (102 mm by 57 mm) on the front bottom edge to receive a 4 by 3/4-inches (102 by 10 mm) piece of hardwood plywood forming a totally enclosed toe space.
- 4. Shall receive a 1/4 by 1/4-inch (6 by 6 mm) vertical dado 3/4-inch in from the rear edge to accept a 1/4-inch (6 mm) thick back.

B. Cabinet Bottom

1. Shall be 3/4-inch (19 mm) thick 7-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding, multiple doweled. Dowels are to be glued securely to end panels and clamped under pressure to ensure joint integrity and unit squareness.

C. Cabinet Top and Bottom Panels

- 1. Shall be 1-inch thick 9-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding, multiple doweled. Dowels are to be glued securely to end panels and clamped under pressure to ensure joint integrity and unit squareness.
- 2. Shall receive a 1/4 by 1/4-inch dado (6 by 6 mm) the length of the member 3/4-inch (19 mm) in from the rear edge to accept a 1/4-inch (6 mm) thick back resulting in a fully captured back panel.

D. Hang Rails:

- 1. Shall be 3 by 3/4-inches (76.2 by 19 mm), 7-ply hardwood plywood, multiple doweled and glued securely to the cabinet ends at the top, center and bottom of the cabinet.
- 2. Shelves 30 inches (762 mm) wide or less shall be 3/4-inch (19 mm) thick 7-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front edge.
- 3. Shelves over 30-inches (762 mm) shall be 1-inch (25.4 mm) thick 9-ply veneer core plywood with 1/4-inch (6 mm) solid maple edge banding on the front edge.

E. Backs:

- 1. Shall be 1/4-inch (6 mm) thick high density fiberboard at unexposed interiors.
- 2. Shall be 1/4-inch (6 mm) thick 5-ply hardwood plywood at exposed interiors.
- 3. In all tall cabinets, the back will fit snugly into a 1/4-inch (6 mm) deep dado located in the cabinet end panels and top and bottom panels, resulting in a fully captured back. Back shall be secured by hot melt adhesive.

F. Doors and Drawer Fronts

1. Shall be 3/4-inch thick solid core material with oak veneer both sides.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- a. All four (4) edges to be banded with 1/4-inch (6 mm) solid maple.
- b. Drawer fronts and swinging doors shall overlap the cabinet opening on all four (4) sides by 1/4-inch (6 mm).
- 2. An astragal shall be applied to the inside face of the left door and shall extend beyond the rear of the right door, thus securing the left door when locks are required as the right door shall receive the lock.
- 3. Glass-framed doors shall be 7/8-inch thick by 2-3/4-inches wide (22 by 70 mm) solid maple framing.
 - a. The rear inside edge of the opening shall be rabbeted to accept 3/16-inch (5 mm) -thick tempered glass. Glass shall be held in place with plastic retainer.

2.7 CABINET FINISH REQUIREMENTS

- A. Wood Surface Preparation: Smoothly sand all wood surfaces to remove any and all scratches and abrasions. Remove dust by compressed air.
- B. Exposed Exterior and Interior Finish:
 - 1. All exposed exterior surfaces and semi-exposed interior surfaces shall receive one (1) coat of non-fiber lifting stain to achieve the selected color.
 - 2. One (1) coat of penetrating sealer shall be applied, thoroughly dried, sanded and all dust removed. A second coat of sealer shall then be applied and thoroughly dried.
 - 3. Two (2) successive coats of a water base synthetic polymer finish shall then be applied and thoroughly dried, resulting in a highly acid, alkali, solvent, water and abrasion resistant semi-gloss finish.
 - 4. Curing of finishes shall be made under controlled environmental conditions and aided by infrared radiant heat.

C. Unexposed Interior Finish

1. Two (2) successive coats of water base synthetic polymer finish shall be applied and thoroughly dried.

D. Performance Test Rating and Results:

1. Terms referred to in PERFORMANCE TEST RESULTS are as follows:

"A" (Excellent) – Indicates excellent to superior integrity of finish film. Includes no effect to slight allowable change in gloss (dulling or increase in gloss) and slight discoloration.

"B" (Good) – Indicates good to very good integrity of finish film. Allows change of gloss or discoloration. Any effect can be removed from the tested area by abrading with 325-mesh silica powder and water, indicating that the discoloration is only superficial and that the finish film is good below the surface.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- 2. Chemical Spot Tests: Chemical spot tests shall be made by applying 5 drops of each reagent to the surface to be tested. Each reagent (except those marked **) shall be covered with a 24MM watch glass, convex side down to confine the reagent. Spot tests of volatile solvents marked ** shall be tested as follows: A ball of cotton shall be saturated with solvent and placed on the surface to be tested. The cotton ball shall then be covered by an inverted 1-ounce wide mouth bottle to retard evaporation. All spot tests shall be conducted in such a manner that the test surface is kept wet throughout the entire test period, and at a temperature of 77° F ± 3° F. At the end of the test period, the reagents shall be flushed from the surface with water, and the surface scrubbed with a soft bristle brush under running water, rinsed and dried. Volatile solvent test areas shall be cleaned with a cotton swab soaked in the solvent used on the test area. Immediately prior to evaluation, 16 to 24 hours after the reagents are removed, the test surface shall be scrubbed with a damp paper towel and dried with paper towels. Per the SEFA standards, no more than four (4) of the 49 chemicals/concentrations tested shall fail.
- 3. Heat Resistance: Hot water $(190^{\circ} \text{ F} 205^{\circ} \text{ F})$ shall be allowed to trickle on the finished surface, which shall be set at an angle of 45° from horizontal, for a period of five (5) minutes. After cooling and wiping dry, the finish shall show no visible effect from the hot water treatment.
- 4. Moisture Resistance: A cellulose sponge (2 by 3 by 1 inches) shall be soaked with water and placed on the finished surface for a period of 100 hours. The sponge shall be maintained in a wet condition throughout the entire test period. At the end of the test period, the surface shall be dried and no visible effect shall be shown on the finish.
- 5. Impact Resistance: A one (1) pound ball (approximately 2-inches in diameter) shall be dropped from a distance of one (1) foot onto the finished surface of a 1/4-inch thick plywood panel supported underneath by a solid surface. There shall be no evidence of cracks or checks in the finish due to impact upon close examination.

2.8 TOPS, SINKS AND ACCESSORIES

- A. Epoxy Resin Tops, Sinks, Troughs, And Service Turrets
 - 1. Epoxy resin one-piece construction. Inside corners and bottoms coved for easy cleaning. All sinks to be drop-in type, flush mounted. Sizes as indicated on drawings. Refer to Section 123653 "Laboratory Worksurfaces" for additional requirements.
 - 2. Provide appropriate sink outlet with stopper at all sinks. Tailpiece and trap by others.

B. Plumbing Fittings:

- 1. All service fittings to meet SAMA standards with all working parts removable and interchangeable with fittings of same type and number. Buttons clearly marked in accordance with SAMA standard color code.
- 2. Plumbing fittings and turret type mountings cast from red brass (85-5-5-5) an alloy of 85% copper, 5% tin, 5% lead, and 5% zinc.
- 3. Water fittings all working parts removable and interchangeable with fittings of same type and number. Fixtures furnished with hose connection and/or vacuum breakers when indicated.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- a. Valve stems held in place by large packing nut with brass and fiber washer and preformed long life packing. Valve stem assembly removable without disturbing installation of fixture. Double acme thread on valve stem and fixture body.
- b. Seat interchangeable bronze. Surface highly polished.
- c. Goosenecks 11/16-inch outside diameter brass, threaded to accommodate 3/8-inch I.P.S. accessories. Provided with vacuum breakers.
- d. Water & Gas handles wrist-blade type, forged from high grade brass with recessed snap-in index buttons.
- 4. Ground key cocks for gas ground key cocks shall have a forged brass valve body, with a straight ten (10) serration hose end integral with the valve body. Valve plug shall be forged brass with an oversize operating handle held in place with a non-removable solid stainless steel pin, and shall have a color coded screw-on type index disc which permits full visibility of the color from the side. Ground key cocks shall be individually ground, lapped and sealed and shall be individually tested at 100 PSI under water. The maximum working pressure for ground key cocks shall be 40 PSI.
- 5. Fitting Finish Chrome polished heavy-duty triple stage high bright nickel and chrome over copper plate. Plating to meet Federal Specifications WWP-541-B-Type A.

2.9 TECHNICAL PRODUCT

- A. General: The following specifications are provided to accurately describe the technical products shown on the drawings. Because of the specific educational function of these items, any deviations from this section will not be considered.
 - 1. Basis of Design: Basis of Design: Sheldon Model # 91273ADA-E811-48-Flat Front Hood
 - 2. Subject to compliance with requirements, other acceptable manufacturers include, but are not limited to:
 - a. Fisher Scientific.
 - b. Kewaunee Scientific.
 - c. Labconco.
 - d. LOC Scientific.
 - e. Sheldon.

B. ADA Accessible Fume Hood:

- 1. Basis-of-Design hood operates at an average of 833 CFM at 100 feet per minute.
- 2. Basis-of-Design hood generates 0.33 static pressure at duct collar.
- 3. The exterior of the superstructure is fabricated of cold rolled furniture steel finished in color selected from manufacturer's standard range of colors. Exterior finish is a chemical resistant powder coat. The entire interior of the hood is lined with ½" thick phenolic resin.
- 4. The inner lining and exterior finished panels are attached to a framework constructed of 16 and 18 gauge steel. This framework is welded and bolted together to form a rigid assembly and is painted with a black rust inhibitive finish. All steel parts are treated with an iron phosphate bath to resist corrosion and insure adhesion to finish materials. The

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- inner lining material is securely fastened to this frame assembly.
- 5. Vertical sliding sash is constructed of 18-gauge steel, welded into a rigid frame, and has removable glass retainers for glazing. A flush, full-length finger lift is located at the bottom of the sash. Nylon glides are located on each side. Sash guides are stainless steel. The sash is glazed with 7/32-inch (5.6 mm) clear laminated safety glass set in a "U" shaped neoprene channel. The sash is counter balanced using a single weight at the rear of the hood, and is attached to the sash with 1/16-inch (1.6 mm), 7 by 7 plastic coated aircraft-type cable; total diameter .105-inch (2.67 mm). Cables ride on six 2-inch (50.8 mm) diameter nylon ball bearing pulleys.
- 6. Understructure support is wood as specified in this Section. Countertop is 1-inch (25.4 mm) thick, dished, black epoxy resin. Top of counter is 30-1/4-inches (768 mm) above the finished floor.
- 7. Electrical services included incandescent light fixture (bulbs not included), light switch, blower switch and (2) duplex electrical outlets.
- 8. Plumbing services include (1) cup sink [6-1/2-inches (165 mm) deep max.], (1) remote controlled cold water gooseneck faucet and (1) remote controlled gas fixture. All interior fixtures shall have a powder coat finish for maximum chemical resistance.
- 9. ADA Fume hood must meet current ADA guidelines for wheelchair accessibility as shown on "INFO" drawing. All Fume Hood controls shall be located between 48-inches (1219 mm) maximum and 30-inches (762 mm) minimum above finished floor.

2.12 CORROSIVES AND FLAMMABLES STORAGE

- A. Flammables Storage Cabinet Type **E-11**: Steel, double-wall construction corrosives storage cabinet with dual vents, grounding wire connections and spill proof sill. Manually operated self-latching single leaf door.
 - 1. Basis of Design: Justrite 54 Gallon Sure-Grip EX Deep Slimline Flammable Safety Cabinet, Model 895402, or equal.
- B. Corrosives Storage Cabinet Type **E12**: Double-wall 18-gauge steel cabinet with insulating air space for fire resistance. Fail-safe closing mechanism with three-point bullet latching system. Galvanized steel interior sleeves sloped to direct spills toward leakproof sump at rear and bottom of cabinet.
 - 1. Basis of Design: Justrite 45 Gallon Sure-Grip EX Corrosives/Acid Steel Safety Cabinet, or equal.
 - a. Dimensions: 18 by 43 inches (370 by 1003 mm) by 65 inches (1537 mm) high.
 - b. Finish: Chemical resistant, lead free epoxy/polyester powder-coat finish.

PART 3 - EXECUTION

3.1 COORDINATION

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- A. The casework contractor shall coordinate all deliveries and installation of this equipment with the Contractor and associated trades.
- B. Lab casework shall not be delivered to the jobsite until the following conditions have occurred.
 - 1. Overhead ceiling work ductwork, lighting, acoustical ceiling, etc. is complete.
 - 2. Windows and exterior doors are installed. Building is secure and weather-tight.
 - 3. Air circulation control system is functioning and maintaining relatively constant temperature and humidity conditions closely approximating those to be maintained by the Owner.
- C. It is recommended that all painting and overhead work be completed in the areas in which casework is to be installed prior to such installation.

3.2 CABINET INSTALLATION

- A. The casework shall be delivered to the building in pre-finished modular units. It shall be set in place, leveled, secured to walls or floors as necessary, trimmed or scribed to make a neat installation. Installation shall be under the direction of a factory approved superintendent.
- B. Provide filler panels where required to close spaces between casework and walls.
- C. The casework contractor shall deliver to the appropriate contractor all sinks, troughs, service fixtures, etc., as supplied in this section, for installation and connection by the appropriate trades.

3.3 CLEANING AND PROTECTION

- A. Remove all debris, dirt, rubbish and excess material accumulated as a result of the installation of this equipment and leave casework clean and orderly. All debris to be deposited in dumpsters provided by Contractor
- B. Advise contractor of procedures for protection of installed material from damage from work of other trades.

3.4 SCHEDULE

- C. <u>WW-1 (Wood Wall-1)</u>, similar to *Case Systems W0300 Display with Framed Glazed Doors*, Adjustable shelves, two hinged framed glazed doors.
- D. <u>WW-2 (Wood Wall-2)</u>, similar to *Case Systems W0310 & W0320 Display with Framed Glazed Doors*, Adjustable shelves, one hinged framed glazed door.
- E. <u>WB-1 (Wood Base-1)</u>, similar to *Case Systems B3100 Door/Drawer Storage*, One adjustable shelf, two drawers, two hinged doors w/ locks.

FRANCIS WALSH INTERMEDIATE SCHOOL / BOARD OF EDUCATION CENTRAL OFFICES BRANFORD, CONNECTICUT

State Project No.s: 014-0034 EA / 014-0035 BE-EA

- F. WB-2 (Wood Base-2), similar to Case Systems B3110 & B3120 Door/Drawer Storage; One adjustable shelf, one drawer, one hinged door with lock.
- G. WB-3 (Wood Base-3), similar to Case Systems B2100 Sink Cabinet with Doors; Two hinged doors.
- H. WB-4 (Wood Base-4), similar to Case Systems B2900 Double-Sided Sink Cabinet with Doors; Four hinged doors.
- I. WB-5 (Wood Base-5), similar to Case Systems B4080 Eight Drawer Storage; 8 drawers.
 - a. Modified for 20 drawers
- J. <u>BEAKER DRYING RACKS</u>, similar to *Case Systems SP500 Stainless Steel Drying Rack*, Integral drip trough with hose drain, white polypropylene pegs, includes wall bracket.

END OF SECTION



Bid Form "A" Proposal Form

Francis Walsh Intermediate School 185 Damascus Road Branford, CT 06405 State Project No. 014-0034 EA & 014-0035 BE/EA

Bid Package No	
Bid Submitted by:	
Company Name	
Street Address	
City, State & Zip Code	
Contact	
(_)

The undersigned, having familiarized themselves with the existing conditions of the, but is not limited to, the project area affecting the cost of the work, and with the Contract Documents (which includes Invitation to Bid, Bid Form, Bid Bond, Instructions to Bidders, Non-Collusion Affidavit, Addenda, General Conditions, Project Conditions, Technical Specifications, Drawings as listed in the Schedule of Drawings, and form of Surety Bond) hereby proposes to furnish all machinery, tools, appurtenances, equipment, and services, including utility and transportation services required to construct and complete the work, all in accordance with the above listed Documents, and submits herewith in conformity with the project manual and subsequent addenda, the following bid:



The total amount of the Bid as computed by the undersigned Bidder is (in words):
Dollars and Cen
(and figures) \$
The Fusco Corporation reserves the right to make the award on the basis of the above Base Bid.
In submitting this Bid, the Bidder understands that the Fusco Corporation reserves the right to accept or reject all or any part of this bid, to reject any and all bids, or to waive any informalities, irregularities, or technical defect in submitted bids. The Bidder also understands that the Fusco Corporation reserves the right to accept any, all, or none of the Alternates, which may be listed above, and may accept Alternates in any order at Fusco Corporation's sole discretion. The Bidder agrees to perform the work of each accepted Alternate for the sun quoted above for each, and to include such accepted Alternates in the Contract for Construction.
If written notice of the acceptance of this Bid and any or all of the Alternates is mailed telegraphed, or otherwise delivered to the undersigned within ninety (90) days after the opening of the Bid, or at any time thereafter before the Bid is withdrawn, the undersigned agrees to sign the Subcontract, and to furnish the required bonds within ten (10) days after the Subcontract is presented to them for signature.
Bid Bond:
The undersigned herewith submits security equal to ten percent (10%) of the Base Bid, the sum of:dollars and no cents
\$
This security shall be the sole and exclusive property of the Fusco Corporation as liquidated

This security shall be the sole and exclusive property of the Fusco Corporation as liquidated damages to the City, if the undersigned fails to execute a Contract in conformity with the accompanying forms, after due date notification therefore in the Contract Documents.

Signature



Bidders shall furnish with their bids (in triplicate) the following:

- 1. Bid Forms A through F (document 000950)
- 2. Bid Bond (document A310)
- 3. Certification as to Corporate Principal (document 000312)
- 4. Form of Surety (document 000315)
- 5. Non-Collusion Affidavit of Prime Bidder (document 00320)
- 6. CHRO Notification to Bidders (document 00350-4)
- 7. Certification of Bidder Regarding EEO (document 00360)
- 8. Department of Administrative Services (DAS) "Contractor Prequalification Certificate" and "Update Statement" (document 000412A)
- 9. Statement of Bidder's Qualifications (document 000412C)
- 10. Contractors Wage Certification Form (document 000847)
- 11. Project Labor Agreement Letter of Assent

Addendum Number

Addenda:

Addendum #1

The Bidder hereby acknowledges receipt of the following Addenda:

Date received

	Dated ce To			
		icial Name and A	Address:	
		Street Address		
Contact Nai	<u> </u>	, State & Zip Code		
	Signature		Title	
Da	ate			



Bid Form "B"

Francis Walsh Intermediate School 185 Damascus Road Branford, CT 06405 State Project No. 014-0034 EA & 014-0035 BE/E

The following Labor Rates shall apply when Changes in your Scope of Work (adds and deducts) are requested by the Owner/Construction Manager per the General Conditions of the Contract for Construction, where Unit Prices are not applicable and a Lump Sum Cost proposal cannot be agreed upon. The labor rate shall only include those categories as listed below plus the allowable percentage for Overhead and Profit. Overhead and Profit is calculated on add and deduct changes in scope. Trade-related equipment, hand tools and power tools, normally supplied with the labor, shall not be included in the Labor Rate. The Overhead and Profit is defined as all other incidental costs, Main Office Expenses, Main/Field Office Staffing, Project Management, Supervision, Insurances, Travel Expenses, etc. Under no circumstances will Subcontractor be entitled to any OH&P in excess of that set forth in Article 6(f) "Changes, Claims", of the Subcontract. All subcontractors are required to use the attached form for labor rates.

Please fill out the attached "Change Order Labor Rate" form and return with bid; along with Fringe benefits backup, and your Workmans Comp backup and EMR backup.

All labor rates of this Subcontractor and any sub tier subcontractors are subject to full audit at any time. The Owner/Construction Manager reserve the right to review and audit all rates prior to award.



	Cr	nange Orde	er Labor R	ates		
Contracto	r & Address/Phone:					
Name				Date		
Address						
hone						
	Trade:			Classification		
		*				
		%	Straight Time	Over Time	Double Time	Premium
		,,,	ou anglie i i iii	0.00	200010 111110	
Base Rate				\$ -	\$ -	\$ -
Taxes						
	FICA - %	7.65%	\$ -	\$ -	\$ -	\$ -
	Federal Unemployment - %		\$ -	\$ -	\$ -	\$ -
	State Unemployment - %		\$ -	\$ -	\$ -	\$ -
nsurance:	Control of the contro		•	1	,	Ÿ
iisurance.	Worker's Compensation - % *					
	·		\$ -	\$ -	\$ -	
	General Liability - % **		\$ -	\$ -	\$ -	
Benefits:	Union ****					
	Health & Welfare Fund -	Per Hrs. Worked		\$ -	\$ -	
	Pension Fund -	Per Hrs. Worked		\$ -	\$ -	
	Annuity Fund -	Per Hrs. Worked		\$ -	\$ -	
	Apprentice Fund -	Per Hrs. Worked		\$ -	\$ -	
	Health & Molfore Fried	Dorlles Dele		c	¢	6
	Health & Welfare Fund -	Per Hrs. Paid		\$ -	\$ -	\$ -
	Pension Fund -	Per Hrs. Paid		\$ -	\$ -	\$ -
	Annuity Fund -	Per Hrs. Paid		\$ -	\$ -	\$ -
	Apprentice Fund -	Per Hrs. Paid		\$ -	\$ -	\$ -
	Other					
		Per Hr.		\$ -	\$ -	
		Per Hr.		\$ -	\$ -	
				,		
		Per Hr.		\$ -	\$ -	
		Per Hr.		\$ -	\$ -	
		Per Hr.		\$ -	\$ -	
		Per Hr.		\$ -	\$ -	
	TOTAL		\$ -	\$ -	\$ -	\$ -
				·	· ·	
	Contractor shall enter data into all fields hig	hlighted in orange; fo	or fields highlighted	in blue, data will aut	omatically populate.)	
*	This is the % shown on your Ins Policy less	any credits for EMR	. Provide documen	tation		
**	This is the % shown on your Ins Policy for w	ages only. Provide d	ocumentation			
***	Please provide union benefit package as do	cumentation				
	All rates are subject to audit.					
	An rates are subject to audit.					
		A11- :		Biii i		
		Allowed		Disallowed		
		Base rate		Small Tools		
		FUTA		Vacation		
		SUTA		Phone		
		FICA		Miscellaneous		
		Workman's Comp		Testing		
	C	Gen Liability on wage	s	Training		
		Union Benefits		Supplies		
				Equipment		
				Mobilization		
				Incidentals		
				Holiday		



Bid Form "C"Alternates

Francis Walsh Intermediate School 185 Damascus Road Branford, CT 06405 State Project No. 014-0034 EA & 014-0035 BE/E

ALTERNATE BIDS

All Bidders shall include within his or her Bid any additional costs associated with the Alternates as listed below and in the Specifications. Should an Alternate not apply to your Scope of Work, indicate so on the Bid Form provided.

The Alternate Bid prices shall be listed on Bid Form "C" and shall include all necessary labor, materials; equipment, installation; cost for delivery; machinery; insurance; applicable taxes; supervision, overhead; and profit. Should an Alternate be accepted, the cost or credit as noted on the above form shall be added or deducted from the Contract Value via Change Order.

The Undersigned further proposes and agrees that should the following alternate or alternates be accepted and included in this Contract, the amount of base bid, as heretofore stated, shall be increased by stated alternate amount. All materials and workmanship shall be in strict accordance with original specifications and drawings.

The Contract requirements shall be an integral part of the alternates. The base bid shall include all work shown on the drawings and specifications irrespective of any items included in the alternative. The alternate is subject to acceptance or rejection by the Owner without affecting the price of the base bid. A Contract may be awarded on any base bid-alternate combination that is in the best interest of the Owner. Contractors shall perform all work required to complete execution of the accepted alternate. The amount of the alternate price shall include the cost of any and all modifications made necessary by the Owner's acceptance and all Contractor's expenses including overhead and profit. The bidding contractor shall state the amount of the alternate listed below. No response to the alternates will be interpreted as no change in cost.



SECTION 012300 - ALTERNATES PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
- 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
- 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
- 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
 - B. Execute accepted alternates under the same conditions as other work of the Contract.
 - C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.



3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1: Phenolic Panel Custom Pattern:		
1. Delete specified cementitious core phenolic plan and replace with Arc printed pattern to exterior phenolic rainscreen panels, throughout. Refer Section 074233 "Exterior Phenolic Rainsceen Panels."	to	
~		
2. Replace specified 3-inch thick polyisocyannuarte core barrier wall inspanel with 4-inch thick mineral wool core barrier wall insulated metal pascetion 074213 "Insulated Metal Barrier Wall & Soffit Panels."	anel. Refer to	
D. Altania de Na. 2. Window Taratan antes		
B. Alternate No. 2: Window Treatments:		
1. Provide horizontal louver blinds at classroom exterior windows as incomprawings 1A-201-A1, 1A-201-A2, 1A-202-A1, 1A-202-A2, 1A-203-A2A-201-B1, and 2A-201-B2; and as specified in Section 122113 "Horizontal Blinds."	1, 1A-203-A2,	
\$	·	
C. Alternate No. 3: Granite Block Pavers		
1. Delete specified exterior granite block pavers, complete. Refer to Drawings C-101 Site Layout Plan; C-107 Site Detail 02; specification Section 321440 "Granite Block		
Pavers".	S	
2. Replace granite pavers in locations identified above with portland cenwalks with custom scoring equivalent to a rectilinear grid having 12 by dimension. Refer to Section 321313 "Portland Cement Concrete Pavements" \$	12 inches ent."	
D. Alternate No. 4: Ground Mounted Sign		
1. For specified Ground Mounted Signs, replace granite sign assembly a system with reinforced brick masonry veneer sign assembly and foundates \$\\$	tion system.	
E. Alternate No. 5: Cafeteria Floor Finish		
1. Replace specified solid vinyl tile (SVT-1) with standard vinyl compositive (VCT-1 – VCT-11) for Cafeteria 1069. Refer to 1FI-101.A1 Phase 1 Par Finish Plan; FI-901 Finish Schedule and Legend; and Section 096519 "I Flooring."	rtial First Floor	
\$ \$) 	



F. Alternate No. 6: Climbing Wall

Walls".	131200 "Climbing
wans.	\$
2. Remove, salvage and store existing climbing wall system to allow finish. Reinstall existing climbing wall system.	for wall repair and
G. Alternate No. 7: Acid Waste System.	
1. Delete acid waste piping system and treatment tank, complete.	\$
2. Replace acid waste piping system with standard sanitary waste dra assemblies. Refer to Drawings 1P-103.A2 Phase 1 – Part. Third Floo Section 220503 "Pipes and Tubes for Plumbing Piping and Equipme	or Plumbing Plan;
H. Alternate No .8: Direct Digital Control Systems for HVAC – Addendum	n #2
Section 230923 Paragraph 2.1 Direct digital Controls: delete: "A. Ma and replace with the below 3 Vendors. Provide Add pricing for all 3	
1. Add: Trane	S
2. Add: Alerton as represented by Automated Building Systems (A \$	BS)
3. Add: Distech as represented by Connecticut Temperature Contro	ols (CTC)
\$	5



Bid Form "D"Allowances

Francis Walsh Intermediate School 185 Damascus Road Branford, CT 06405 State Project No. 014-0034 EA & 014-0035 BE/E

All Bidders shall include within the bid price the applicable Bid Allowances listed below. Should an Allowance not apply to your Scope of Work, indicate so on the Bid Form provided.

This Subcontractor shall include within the Subcontract Price, the allowances as listed below. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes, overhead, and profit.

The amounts quoted by the bidder for the allowances listed are inclusive of all costs, direct and indirect, required for the proper completion of the work for the Bid Package quoted. This includes, but is not limited to; labor, material, equipment, insurance, taxes, bond, overhead, profit, and all else required to complete the work as described in the allowance.

All adjustments to an Allowance or scope of work shall be made via Change Order. No adjustments for Overhead, Profit, Supervision and the like will be allowed. Any unused portion of an allowance shall be returned to the Owner via a deduct Change Order to this Subcontractors Contract Value. Allowances shall appear as a line item on the Subcontractor's Schedule of Values.

It is understood that the Subcontractor has included in the contract price all allowances contained in the Contract Documents and shall cause the Work so covered to be performed by such subcontractors or suppliers and for such sums within the limit of the allowances as may be acceptable to the Construction Manager.

The Subcontractor agrees as follows:

The allowances include the cost to the Subcontractor, less any applicable trade discounts, of materials and equipment required by the allowances to be delivered at the site;

The Subcontractor's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the contract price and not in the allowances; and

No demand for additional payment on account of any thereof shall be valid. Prior to final payment, an appropriate change order shall be issued as recommended by the Construction Manager to reflect actual amounts due the Subcontractor due to work covered by allowances and the contract price shall be correspondingly adjusted. Any unused portion of any Allowance shall be deducted from the Contract Value via Change Order



Allowance 1

Utility Company Charges \$60,000

Water	\$20,000
Gas	\$10,000
Electric	\$20,000
Telephone	\$5,000
CCTV	\$5,000

BP#31.0 to include this entire allowance – **Addendum #3**

Allowance 2

Temporary Electric & Data Relocations \$50,000

Electric \$20,000 BP#26.0 to include – **Addendum #3** Data \$20,000 BP#26.0 to include – **Addendum #3** General Trades \$10,000 BP#6.0 to include – **Addendum #3**

Allowance 3

Pool Deck Repairs \$10,000

General trades \$10,000 BP#6.0 to include— Addendum #3



Bid Form "E" Unit Prices

Francis Walsh Intermediate School 185 Damascus Road Branford, CT 06405 State Project No. 014-0034 EA & 014-0035 BE/E

The Contractor shall include within his or her Bid the Unit Prices as listed in the Specifications section 012200-Unit Prices. Should a Unit Price not apply to your Scope of Work, indicate so on the Bid Form provided.

The undersigned further proposes and agrees that should the amount of work required be increased or decreased, as directed by the Architect/CM, the following supplemental Unit Prices will be the basic price in place for computing extra cost. The stated costs are to be for "Additions" or "Deletions" of work to the Trade Contractor's Contract. All Unit Prices shall include all cost of work to the representative contractor, including all charges for materials, labor, plant, equipment, overhead, profit, additional insurance, taxes and all charges of whatever kind.

Acceptance of a unit price amount, if any, is subject to review by the Architect and Construction Manager and final approval of the Owner.

Any and all adjustments to the Contract shall be made via Change Order. No adjustments for Overhead; Profit; Supervision and the like will be allowed.

SECTION 012200 - UNIT PRICES PART 1 GENERAL -1.1 SUMMARY

A. A unit price is an amount proposed by Bidders and stated on the Bid Form as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the project Scope of Work is altered.

B. Unit prices include material, any direct or indirect expenses of the Contractor or Sub-Contractor, profit, insurance, bonding and any applicable taxes. The same unit price shall apply whether the work is added or deducted.



3.1 UNIT PRICE SCHEDULE

Unit Prices in accordance with the following schedule will apply to this Contract.

Item No. 1: Small Containment Preparation Containment (Less than 160 square\260 linear feet of asbestos containing material) Pricing for containments with larger amounts of materials are to be INCLUDED in the unit prices themselves listed below. There is no separate unit price for containments with larger amounts. \$
Item No. 2: Floor Tile/Flooring Materials and Mastics (Includes All layers of carpeting, adhesives, multiple layers of floor tiles/ flooring materials/ vinyl stairwell flooring/wood/ceramic/ grout/mud bed/terazza/ concrete /mastics, levelastics, contaminated flooring materials etc.) Removal and Disposal as ACM. \$ per square foot
Item No. 3: Flooring and/or Carpeting Mastic (includes carpet over carpet mastic, floor tile, multiple layers of floor tiles/ flooring materials/ wood/ ceramic/ terazza/ concrete/ etc.) Removal and Disposal as ACM per square foot
Item No. 4: Mudded Pipe Fitting Insulation Removal and Disposal as ACM \$ per fitting/joint
Item No. 5: Glove Bag Removal and Disposal as ACM \$ per bag
Item No. 6: Pipe and Pipe Fitting Insulation Removal and Disposal as ACM \$ per linear foot
Item No. 7: Window Sill/Adhesive Removal and Disposal as ACM. \$ per linear foot
Item No. 8: Duct Insulation and/or Duct Adhesives (including contaminated substrates) Removal and Disposal as ACM. \$ per square foot
Item No. 9: Ceiling Tile and Support System (suspended metal grid or adhesive/contaminated substrate) Removal and Disposal as ACM. \$ per square foot
Item No. 10: Light Backing Paper Insulation Removal and Disposal as ACM. \$ per light fixture.
Item No. 11: Air Duct Vibration Isolation Cloth Removal and Disposal as ACM \$ per cloth.
Item No. 12: Sink Undercoating Removal and Disposal as ACM.



Item No. 13: Cou \$	ntertop/Adhesive Removal and Disposal as ACM per square foot
Item No. 14: Tran	asite Cement Board Removal and Disposal as ACM. per square foot
Item No. 15: Fire	Door/Insulation Removal and Disposal as ACM. per door
Item No. 16: Cov	e Base Adhesive and Contaminated Substrate Removal and Disposal as ACM. per linear foot
	l Adhesives Including Contaminated Substrates (mirrors/blackboards/bulletin oval and Disposal as ACM. per square foot
Item No. 18: Scie Disposal as ACM \$	
	niculite and Associated Wall/Ceiling Materials Removal and Disposal as
Item No. 20: Ceil (Removal and Dis	
Item No. 21: Shee	etrock/Taping Compound Removal and Disposal as ACM. per square foot
Item No. 22: Elec	trical Insulation Removal and Disposal as ACM. per linear foot
Item No. 23: Wat \$	er Fountain/Damp-proofing Removal and Disposal as ACM. per fountain
Item No. 24: Cust	todial Slop Sink/Damp-proofing Removal and Disposal as ACM. per slop sink
	zers/Damp-proofing/Contaminated Cork/Contaminated Substrates/Other l and Disposal as ACM. per square foot
Disposal as ACM	nerator/Boiler/Brick/Mortar/Insulation/Mastic/Fireproofing Removal and per boiler/incinerator



	7: Caulking, Glazing and Sealant Compounds (includes substrates and contaminated Removal and Disposal as ACM.
sinaichais). S	ner linear foot
\$	ner window onening (multiple windows/sizes exist in onenings)
\$	per linear foot per window opening (multiple windows/sizes exist in openings) per door opening (multiple doors/sizes exist in openings)
Item No. 2	8: Caulking, Glazing and Sealant Compounds Removal and Disposal as ACM and
	om (CT DEEP regulated PCB waste).
\$	per linear foot
\$	per window opening (multiple windows/sizes exist in openings)
\$	per linear foot per window opening (multiple windows/sizes exist in openings) per door opening (multiple doors/sizes exist in openings)
	9: Caulking, Glazing and Sealant Compounds (includes substrates and contaminated one foot) Removal and Disposal as ACM and PCB>50 ppm (EPA regulated Bulk
Product W	,
t roduct w	ner linear foot
\$	per window opening (multiple windows/sizes exist in openings)
\$ \$	per linear foot per window opening (multiple windows/sizes exist in openings) per door opening (multiple doors/sizes exist in openings)
ppm (CT I	DEEP regulated PCB waste).
\$	per linear foot
\$	per linear foot per window opening (multiple windows/sizes exist in openings) per door opening (multiple doors/sizes exist in openings)
\$	per door opening (multiple doors/sizes exist in openings)
	1: Caulking, Glazing and Sealant Compounds (includes substrates and contaminated one foot) Removal and Disposal as PCB>50 ppm (EPA regulated Bulk Product
\$	ner linear foot
\$	per window opening (multiple windows/sizes exist in openings)
\$	per linear foot per window opening (multiple windows/sizes exist in openings) per door opening (multiple doors/sizes exist in openings)
Item No. 3	2: Interior/Exterior Wall Removal and Disposal as PCB Remediation Waste. per square foot
Wall Mate	3: Interior/Exterior Metal Support Column/Beam and Caulking Compound, Adjacent rial and Paint Removal and Disposal as PCB Bulk Product/Remediation Waste. per square foot
Item No. 3	4: Exterior Asphalt/Concrete Removal and Disposal as PCB Remediation Waste.
\$	Disposal of PCB Remediation Solid waste (Concrete or Asphalt per ton)
\$	Cubic Yard Disposal of PCB Remediation Solid waste (Concrete or Asphalt per ton) Disposal of Asphalt or Concrete Not Contaminated (per ton)
	5: Exterior Soil Removal and Disposal as PCB Remediation Waste per cubic yard
	6: Roofing Core/Field Base Material (includes multiple layers and substrates) nd Disposal as ACM.
	ner square foot



site approved disposal facility.

ACM.
\$ per square foot
Item No. 38: Roofing Debris (includes contaminated ceiling tiles, etc) Removal and Disposal at ACM.
\$ per square foot
Item No. 39: Damp-proofing/Tars/Mastics – Interior/Exterior Walls/Floors, Pool, Gym and Associated Substrate/Adjacent Materials (includes multiple layers, contaminated materials and substrates) Removal and Disposal as ACM. \$ per square foot
Item No. 40: Paint (includes multiple layers and substrates) Removal and Disposal as PCB Remediation Waste. \$ per square foot
Item No. 41: Damp-proofing/Tars/Mastics – Foundation, Flooring Slab Materials and Associated Footing Removal and Disposal as ACM. \$ per square foot
Item No. 42: Off-Site Transportation and Disposal of Natural Soil. \$ per ton.
"Natural" Soil: Soils have no detectable concentrations of non-naturally occurring compounds.
Item No. 43: Off-Site Transportation and Disposal of Polluted Soil. \$ per ton.
"Polluted" Soils contain concentrations of non-naturally occurring compounds detected above laboratory reporting limits, but below the CTDEEP RSR criteria in accordance with RCSA 22a 133k-1(a)(45). Polluted soils can be reused on-site with the preparation of a Materials Management Plan and approval from the Engineer.
Item No. 44: Off-Site Transportation and Disposal of Contaminated Soil. \$ per ton.
"Contaminated Materials" contain concentrations of compounds that exceed CTDEEP RSR criteria in accordance with RCSA 22a-133k. Contaminated materials (concrete, soil, sediment, groundwater or surface water) can NOT be reused on-site and must be disposed of at an off-site disposal facility.
Item No. 45: Off-Site Transportation and Disposal of Hazardous Waste/Soils. \$ per ton.
"Hazardous Waste/Soils" Includes all soil/fill material that exceeds regulatory limits for hazardous substances as defined in 40 CFR, Part 261.20 Subpart C – Characteristics of Hazardous Waste. This material can NOT be reused on-site and must be disposed of at an off-



Item No. 46: Earth Excavation: Additional bulk excavation according to Division 31 Section "Earthwork"
\$ per cubic yard.
Item No. 47: Trench Earth Excavation: Additional trench excavation according to Division 31 Section "Trenching" per cubic yard.
Item No. 48: Crushed Stone: Import and place additional crushed stone according to Division 31 Section "Earthwork" and as recommended by Section 020000 Geotechnical Report. per cubic yard.
Item No. 49: On-Site Material: Place additional on-site material as backfill and compact according to Davison 32 Section "Earthwork" and as recommended by Section 020000 Geotechnical Report. \$
Item No. 50: Processed Aggregate Base Material: Import and place processed aggregate base course material in accordance with Division 31 specifications and as recommended by Section 020000 Geotechnical Report. \$
Item No. 51: Pipe Bedding Material: Import and place pipe bedding material according to Division 31 specifications and as recommended by Section 020000 Geotechnical Report. \$ per cubic yard.
Item No. 52: Pavement at Parking Spaces: Furnish and install pavement in accordance with Contract Documents and as recommended by Section 020000 Geotechnical Report. Scope includes prepared subgrade, sand and gravel subbase, processed aggregate course, binder course and finish course.
\$ per square yard.
Item No. 53: Pavement at Driveways: Furnish and install pavement in accordance with Contract Documents and as recommended by Section 020000 Geotechnical Report. Scope includes prepared subgrade, sand and gravel subbase, processed aggregate course, binder course and finish course.
\$ per square yard.
Item No. 54: Concrete Sidewalk: Furnish and install concrete sidewalk in accordance with Contract Documents and as recommended by Section 020000 Geotechnical Report. Scope includes prepared subgrade, sand and gravel subbase, and 5-inch concrete sidewalk. \$
Item No. 55: Topsoil: Import and place mulch and place topsoil in accordance with Contract Documents. \$ per cubic yard.
Item No. 56: Mulch: Furnish and place mulch in accordance with Contract Document. \$



Item No. 57: Drywall: Provide unit price for type 2A wall sections (1' to 14' high). \$ per square foot.	
Item No. 58: Drywall: Provide unit price for type 2A wall sections (14'+ higher). \$ per square foot.	
Item No. 59: Painting: Provide unit price for primer & 2 coats of paint on wall sections (1' to high).	14'
\$ per square foot.	
Item No. 60: Painting: Provide unit price for primer & 2 coats of paint on wall sections (14'+ high).	
\$ per square foot.	
Item No. 61: Fire Caulk: Linear foot price for fire caulking. \$ per linear foot.	
Item No. 62: Steel: Structural Steel, factory primed. \$ per pound	
Item No. 63: Steel: Structural Metal Deck. \$ per pound	
Item No.64: Concrete: Reinforcing Steel Bars, deformed and uncoated. \$	
Item No. 65: Masonry: Masonry Repointing. \$ per square foot.	
Item No. 66: Masonry: Masonry Cleaning.	
\$ per square foot.	
Item No. 67: Masonry: Masonry Brick Staining.	
\$ per square foot.	



Bid Form "F" Proposed Subcontractor Listing

Francis Walsh Intermediate School 185 Damascus Road Branford, CT 06405 State Project No. 014-0034 EA & 014-0035 BE/E

This form shall be filled out by each bidder. Attach additional sheets if necessary.

Subcontractor Name And Address	Trade	Contract Amount	Certificate Type (SBE,MBE, WBE,)	SBE 25% MBE 6.25%

Construction Manager and Owner reserve the right to disapprove any proposed Subcontractor without prejudice.