



# **ADDENDUM NO. 1**

**July 10<sup>th</sup> 2012**

ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR

***BIDS DUE – TUES. JULY 31<sup>st</sup>, 2012 until 2:00PM***

This document consists of one **(1) page** plus the following documents:

- 1) Section 000100 – Table of Contents – **ADD. NO. 1**
- 2) Section 000150 – Invitation to Bid – **ADD. NO. 1**
- 3) Section 000845 - CT Department of Labor – Prevailing Wage Rates – **ADD. NO. 1**
- 4) Section 000930.2.01 – Scope of Work 2.01 – Demolition & Abatement – **ADD. NO. 1**
- 5) Section 000930.3.01 – Scope of Work 3.01 – Concrete (Set-Aside) – **ADD. NO. 1**
- 6) Section 000930.6.01 – Scope of Work 6.01 – General Trades – **ADD. NO. 1**
- 7) Section 000930.9.01 – Scope of Work 9.01 – Ceramic & Terrazzo (Set-Aside) – **ADD. NO. 1**
- 8) Section 000930.23.01 – Scope of Work 23.01 – Plumbing & HVAC – **ADD. NO. 1**
- 9) Section 000930.26.01 – Scope of Work 26.01 – Electrical – **ADD. NO. 1**
- 10) Section 000930.31.01 – Scope of Work 31.01 – Site Work – **ADD. NO. 1**
- 11) Section 000980 – Fusco Responses to Pre-Bid Requests for Information (RFIs) – **ADD. NO. 1**
- 12) **Section 000991 – Antinozzi Associates – Addendum #1 – ADD. NO. 1**

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**INTRODUCTORY INFORMATION**

Document 000000	Project Manual Cover
Document 000100	Table of Contents – <b>ADD. NO. 1</b>

**PROCUREMENT REQUIREMENTS**

Document 000150	Invitation to Bid – <b>ADD. NO. 1</b>
Document 000160	AIA Document A701 - Instructions to Bidders
Document 000200	Bidder Request for Information Form
Document 000310	Bid Security Form AIA Document A310 - “Bid Bond”
Document 000315	Form of Surety Guaranty
Document 000320	Non-Collusion Affidavit of Prime Bidder
Document 000330	Notification to Bidders
Document 000340	Contract Compliance Data Form
Document 000345	Equal Employment Opportunity Agreement
Document 000350-1	AA/EEO Requirements Summary
Document 000350-2	Contractor Minority Business Enterprises
Document 000350-3	Notification to Bidders – CHRO
Document 000360	Certification of Bidder Regarding Equal Employment Opportunity
Document 000370	Certificate as to Corporate Principal
Document 000412A	DAS Update (Bid) Statement
Document 000412B	Statement of Bidders Qualifications
Document 000845	Wage Rate Requirements CT Department of Labor Prevailing Wage Rates – <b>ADD. NO. 1</b>
Document 000847	Wage Certification Form

**CONTRACTING REQUIREMENTS**

Document 000900	Subcontract Agreement Form Exhibit A Subcontract Documents Exhibit B Scope of Work Exhibit C Final Lien Waiver and Release Exhibit D Partial Lien Waiver and Release Exhibit E Construction Schedule Exhibit F Rider A – Special Conditions Exhibit G Insurance Requirements
Document 000910	General Conditions of the Contract
Document 000911	Administrative and Statutory Requirements
Document 000912	Connecticut State Elections Enforcement Commission
Document 000913	Department of Revenue Services – Tax Exempt Certificate

Document 000920	Performance and Payment Bond Form AIA Document A312 2010 – “Performance Bond and Payment Bond”
Document 000925	Project Schedule
Document 000926	Phasing Plan
Document 000930	Exhibit B Scopes of Work:
Bid Package #1.01*	Site Preparation
Bid Package #1.02*	Temporary Construction Fence
Bid Package #1.03	Moving & Storage
Bid Package #1.04*	Final Cleaning
Bid Package #1.05*	Watchman Services
Bid Package #2.01	Demolition & Abatement – <b>ADD. NO. 1</b>
Bid Package #3.01*	Concrete – <b>ADD. NO. 1</b>
Bid Package #4.01	Masonry & Precast
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Bid Package #6.01	General Trades – <b>ADD. NO. 1</b>
Bid Package #6.02	Architectural Millwork
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Bid Package #8.01*	Windows, Glazing and Storefronts
Bid Package #8.02*	Overhead Coiling Doors & Grilles
Bid Package #8.03*	Doors, Frames & Hardware (Furnish Only)
Bid Package #9.01*	Ceramic & Terrazzo Tile – <b>ADD. NO. 1</b>
Bid Package #9.02*	Resilient, Carpet & Wood Flooring
Bid Package #9.03*	Acoustical & Wood Ceilings
Bid Package #9.04*	Painting & Fireproofing
Bid Package #10.01*	Signage
Bid Package #10.02*	Toilet Compartments
Bid Package #10.03	Operable Panel Partitions
Bid Package #11.01	Food Service Equipment
Bid Package #21.01	Fire Suppression
Bid Package #23.01	Plumbing & HVAC – <b>ADD. NO. 1</b>
Bid Package #26.01	Electrical, Communication, Safety & Security Systems – <b>ADD. NO. 1</b>
Bid Package #31.01	Site Work – <b>ADD. NO. 1</b>
Bid Package #31.02*	Fences & Gates
Bid Package #31.03*	Landscaping
Bid Package #31.04*	Athletic Fields
Document 000940	Supplemental Scope of Work
Document 000950	Bid Forms A, B, C, D, E, F
Document 000952	Bid Forms – BP#1.05 – Watchman Security Guard Services
Document 000980	Fusco Responses to Pre-Bid Requests for Information – <b>ADD. NO. 1</b>
Document 000991	Antinozzi Associates Addendum #1 Dated 7-10-12 – <b>ADD. NO. 1</b>

**INVITATION TO BID**  
**For**  
**ELI WHITNEY**  
**CONNECTICUT TECHNICAL HIGH SCHOOL**  
**Hamden, Connecticut**  
**Project No. BI-RT-837-CMR**

You are hereby invited to submit bid proposals for one or more of the Bid Packages listed below to construct the **Eli Whitney Connecticut Technical High School** located in **Hamden, Connecticut** all applicable laws, ordinances, rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout.

**The Eli Whitney State Technical High School project, located at 71 Jones Road, Hamden, Connecticut consists of new building additions and renovations throughout the high school campus totaling approximately 225,000 square feet. The project also includes site work relating to improvements to the paving, landscaping, and athletic fields and courts.**

The following are targeted Schedule of Milestones dates for all work outlined in the Contract Documents:

<b>Documents availability:</b>	<b>Tuesday, June 26<sup>th</sup>, 2012</b>
<b>Pre-Bid Conference</b>	<b>Thursday, July 12<sup>th</sup>, 2012</b>
	<b>Friday, July 13<sup>th</sup>, 2012</b>
<b>Bid Submission Deadline:</b>	<b>Tuesday, July 31<sup>st</sup>, 2012 – ADD. NO. 1</b>
<b>Scope Review Period:</b>	<b>Thursday, August 2<sup>nd</sup> – August 13<sup>th</sup>, 2012</b>
	<b>– ADD. NO. 1</b>
<b>Proposed Start Date:</b>	<b>August 21<sup>st</sup>, 2012</b>
<b>Project Completion Date:</b>	<b>February 2016</b>

Bid Solicitation for this Project will be broken into two groups: “**Non-Set-Aside Bid Packages**” and “**Set-Aside Bid Packages.**” Sealed Bid Proposals will be accepted for the following:

**Non-Set Aside Bid Packages:** The following Bid Packages are open to all bidders. In accordance with the DAS Contractor Prequalification Program (C.G.S. 4a-100) all contractors are required to be prequalified before they can bid on contracts to perform work in excess of \$500,000. DAS Contractor Prequalification Certificate and Update (Bid) Statement must accompany such bids.

In accordance with CGS 32-9e, **Non-Set Aside Bid Package** bidders are required to utilize DAS certified S/M/W/DisBE subcontractors to fulfill their commitment of **30%** SBE participation, which includes **6.25%** MBE participation.

**Bid Package #1.03      Moving & Storage**  
**Bid Package #2.01      Demolition & Abatement**

<b>Bid Package #4.01</b>	<b>Masonry &amp; Precast</b>
<b>Bid Package #5.01</b>	<b>Structural Steel</b>
<b>Bid Package #6.01</b>	<b>General Trades</b>
<b>Bid Package #6.02</b>	<b>Architectural Millwork</b>
<b>Bid Package #7.01</b>	<b>Roofing and Moisture Protection</b>
<b>Bid Package #10.03</b>	<b>Operable Panel Partitions</b>
<b>Bid Package #11.01</b>	<b>Food Service Equipment</b>
<b>Bid Package #21.01</b>	<b>Fire Suppression</b>
<b>Bid Package #23.01</b>	<b>Plumbing &amp; HVAC</b>
<b>Bid Package #26.01</b>	<b>Electrical, Communication, Safety &amp; Security Systems</b>
<b>Bid Package #31.01</b>	<b>Site Work</b>

**Set Aside Bid Packages\***: The following Bid Packages are open to only those bidders who hold current DAS certification as S/M/W/DisBEs. In accordance with the DAS Contractor Prequalification Program (C.G.S. 4a-100) all contractors are required to be prequalified before they can bid on contracts to perform work in excess of \$500,000. DAS Contractor Prequalification Certificate and Update (Bid) Statement must accompany such bids.

<b>Bid Package #1.01*</b>	<b>Site Preparation</b>
<b>Bid Package #1.02*</b>	<b>Temporary Construction Fence</b>
<b>Bid Package #1.04*</b>	<b>Final Cleaning</b>
<b>Bid Package #1.05*</b>	<b>Security Guard Services</b>
<b>Bid Package #3.01*</b>	<b>Concrete</b>
<b>Bid Package #5.02*</b>	<b>Metal Fabrications</b>
<b>Bid Package #8.01*</b>	<b>Windows, Glazing and Storefronts</b>
<b>Bid Package #8.02*</b>	<b>Overhead Coiling Doors &amp; Grilles</b>
<b>Bid Package #8.03*</b>	<b>Doors, Frames &amp; Hardware (Furnish Only)</b>
<b>Bid Package #9.01*</b>	<b>Ceramic &amp; Terrazzo Tile</b>
<b>Bid Package #9.02*</b>	<b>Resilient, Carpet &amp; Wood Flooring</b>
<b>Bid Package #9.03*</b>	<b>Acoustical &amp; Wood Ceilings</b>
<b>Bid Package #9.04*</b>	<b>Painting &amp; Fireproofing</b>
<b>Bid Package #10.01*</b>	<b>Signage</b>
<b>Bid Package #10.02*</b>	<b>Toilet Compartments</b>
<b>Bid Package #31.02*</b>	<b>Fences &amp; Gates</b>
<b>Bid Package #31.03*</b>	<b>Landscaping</b>
<b>Bid Package #31.04*</b>	<b>Athletic Fields</b>

A General Pre-Bid & CHRO Outreach Conference (All Bid Packages) shall be held at the **Project Site**, located at **71 Jones Road, Hamden, Connecticut** at **2:00PM** local time on **Thursday, July 12<sup>th</sup>, 2012**.

A Site & Demolition Specific Pre-Bid Conference (BP#1.01, BP#1.02, BP#2.01, BP#31.01, BP#31.02, BP#31.03, BP#31.04) shall be held at the **Project Site**, located at **71 Jones Road, Hamden, Connecticut** at **2:00PM** local time on **Friday, July 13<sup>th</sup>, 2012**.

All bids must be submitted in **triplicate** without exceptions, modification and/or qualifications to the bid documents and placed in a sealed envelope marked as follows:

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR  
Bid Package No. \_\_\_\_\_**

Bids will be received and accepted until **2:00 p.m.** local time **Tuesday, July 31<sup>st</sup>, 2012** at the **Project Site**, located at **71 Jones Road, Hamden, Connecticut**. Bids received after the time indicated above will not be considered and will be returned unopened. **Bids will be publicly opened** and read aloud at approximately 15 minutes after the Bid receipt time stated above at the **Project Site**, located at **71 Jones Road, Hamden, Connecticut. – ADD. NO. 1**

After the Bids have been reviewed for conformance with the bid documents, the apparent low bidder for each bid package shall be available for a Scope Review at the office of the Fusco Corporation (unless otherwise notes to be “On-Site”) on the following dates:

<b><u>Thursday 8/2/12</u></b>	Bid Package #4.01	9:00 A.M.
	Bid Package #2.01	10:30 A.M.
	Bid Package #2.01	1:30 P.M. (On-Site)
	Bid Package #1.02*	2:30 P.M. (On-Site)
	Bid Package #1.01*	3:30 P.M. (On-Site)
<b><u>Friday 8/3/12</u></b>	Bid Package #31.01	9:00 A.M.
	Bid Package #31.04*	10:30 A.M.
	Bid Package #3.01*	1:30 P.M.
	Bid Package #5.01	3:00 P.M.
<b><u>Monday 8/6/12</u></b>	Bid Package #6.01	9:00 A.M.
	Bid Package #8.03*	10:30 A.M.
	Bid Package #8.01*	1:30 P.M.
	Bid Package #7.01	3:00 P.M.
<b><u>Tuesday 8/7/12</u></b>	Bid Package #26.01	9:00 A.M.
	Bid Package #23.01	10:30 A.M.
	Bid Package #21.01	1:30 P.M.
	Bid Package #11.01	3:00 P.M.
<b><u>Wednesday 8/8/12</u></b>	Bid Package #14.01	9:00 A.M.
	Bid Package #5.02*	10:30 A.M.
	Bid Package #1.03*	1:30 P.M. (On-Site)
	Bid Package #31.03*	2:30 P.M. (On-Site)
	Bid Package #31.02*	3:30 P.M. (On-Site)

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL  
HAMDEN, CONNECTICUT  
PROJECT NO.: BI-RT-837-CMR  
ADDENDUM NO. 1

**Thursday 8/9/12**

Bid Package #6.02	9:00 A.M.
Bid Package #12.01	10:30 A.M.
Bid Package #9.03*	1:30 P.M.
Bid Package #10.01*	3:00 P.M.

**Friday 8/10/12**

Bid Package #9.01*	9:00 A.M.
Bid Package #9.02*	10:30 A.M.
Bid Package #9.04*	1:30 P.M.
Bid Package #10.02*	3:00 P.M.

**Monday 8/13/12**

Bid Package #8.02*	9:00 A.M.
Bid Package #10.03	10:30 A.M.
Bid Package #1.04*	2:30 P.M. (On-Site)
Bid Package #1.05*	3:30 P.M. (On-Site)

**-ADD. NO. 1**

If applicable any Bidder may elect to submit a Bid Proposal combining a number of Bid Packages if the amount of the Bid Proposal offers the Owner a cost reduction. This combined Bid Packaged "Offer" will be valid only if the Bidder submits an individual offer for each package involved. Bidders may offer this combined package proposal by submitting it on his or her business letterhead, as an added page to each Bid Form.

Each Bidder shall provide a Bid Bond for each Bid Package executed by an acceptable Surety company or companies authorized to do business in the State of Connecticut having a Best rating of A- or higher, in an amount equal to (10%) of the total Bid. Bids which fail to contain a Bid Bond Security as stated above may be rejected as non-responsive.

Contract Documents: have been prepared by: **Antinozzi Associates, 271 Fairfield Avenue, Bridgeport, Connecticut** and shall be on file and available at the locations listed below on or about **Tuesday, June 26<sup>th</sup>, 2012**:

Fusco Corporation  
Long Wharf Maritime Center  
555 Long Wharf Drive, Suite 14  
New Haven, CT 06511  
(203) 777-7451

McGraw Hill Construction-Dodge  
101 Corporate Place  
Rocky Hill, CT.  
(860)-529-7309

Joseph Merritt & Company  
60 Hamilton Street  
New Haven, CT 06511  
(203) 562-9885

CProjects.com – **ADD. NO. 1**  
1257 Southford Road  
Southbury, CT. 06488  
(203)-262-6248

The New Haven Contractors Alliance  
5 Science Park  
New Haven, CT 06511 - **ADD. NO. 1**

The Minority Construction Council of CT  
20 Sargent Street  
Hartford, CT 06112 - **ADD. NO. 1**

City Hall Annex  
999 Broad Street 1st Floor  
Bridgeport, CT - **ADD. NO. 1**

Contract documents may be obtained by submitting a written request directly to **Joseph Merritt & Company, 60 Hamilton Street, New Haven, Connecticut 06511, Phone (203) 562-9885 with a Copy to Mr. Joseph Castellano (Director of Purchasing and Contracts for the Fusco Corporation, 555 Long Wharf Drive, Suite 14, New Haven, Connecticut 06511)** accompanied by a Non-refundable payment of **\$300.00**. Payments shall be made via check payable to the **Joseph Merritt & Company**.

Upon receipt of your request and payment, the printer listed above shall prepare a complete set of documents. Arrangements for the pickup of documents shall be made directly through the printer. Documents shall be mailed only at the request and cost of the contractor.

Partial sets or additional sets of Contract Documents are also available for a non-refundable direct purchase from the **Joseph Merritt & Company, 60 Hamilton Street, New Haven, Connecticut 06511, Phone (203) 562-9885**. Any/all addenda/addendums will be issued only to bidders who have requested and purchased a full set of documents and are thereby registered with the Construction Manager. Partial set purchasers are referred to McGraw Hill Construction-Dodge or CProjects.com for updates and/or addenda. – **ADD NO. 1**

**Attention is called to the following:**

- 1.) **Instructions to Bidders**: Except as may be set forth in this Invitation to Bid, Fusco Corporation 'Instructions to Bidders' and AIA Document A701 Instruction to Bidders must be followed in all respects.
- 2.) **Prevailing Wages**: No less than the State of Connecticut Department of Labor prevailing minimum salaries and wages as listed in the Project Manual shall be paid on this project. Certified payrolls shall be required and submitted weekly on the form provided in the Project Manual. Additionally the Contractor shall submit Monthly Employment Utilization Reports to the Construction Manager concurrent with the Applications and Certifications for Payment.
- 3.) **Department of Administrative Services (DAS)**: This Subcontractor and all of its sub-subcontractors with contract amounts of \$500,000 or more must be DAS Certified.
- 4.) **Equal Employment Opportunity/Non-Discrimination**: Attention of bidders is called to the applicable State and Federal requirements for ensuring that employees and applicants for employment are not discriminated against because of race, color, religious creed, age, marital status, sexual preference, national origin, ancestry, sex, mental retardation or physical disability. The Contractor agrees and warrants that in the contract such contractor will not discriminate or permit discrimination against any person or group or persons on the ground of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are employed without regard to their sexual orientation. The Fusco Corporation does not discriminate on the basis of sex, race, age, physical disability, religion, or national origin. The Fusco Corporation is an Affirmative Action/Equal Opportunity Employer.

- 5.) **Performance and Payment Bonds:** The successful bidder will be required to furnish a one hundred percent (100%) Performance and Payment Bond and a one hundred percent (100%) Labor and Material Bond each in the full amount of the contract price on **AIA Document 312 as modified**, which will name the Fusco Corporation as Obligee.
- 6.) **Bid withdrawals:** All bids will be considered valid for a period of ninety (90) days. No bidder may withdraw their bid during that period. The successful bidder will be selected within ninety (90) days of Bid Opening.
- 7.) **Taxes:** Bidders shall not include Federal Excise Taxes or State of Connecticut Sales Taxes on which Public Schools are exempt.
- 8.) **Right to reject:** The Fusco Corporation and Owner reserve the right to reject any and all bids or to waive any informalities, irregularities, or technical defects in the Bids. Fusco Corporation may make any investigations as they deem necessary to determine the ability of Bidder to perform the work, and Bidders shall furnish the Fusco Corporation all such information and data for this purpose as the Fusco Corporation may require. Fusco Corporation reserves the right to reject any or all bids, without stating reasons therefore, and to waive any informality, irregularity or defect in the bids and to make awards in the best interest of the Owner consistent with applicable competitive bidding statutes, laws and legal standards.
- 9.) **Subcontract Agreement:** The successful bidder shall be required to sign the Fusco Corporation 'Subcontract Agreement' contained within the bidding documents, **without exceptions modifications and/or qualifications.**
- 10.) **“Standard Specifications”** is defined as the State of Connecticut Department of Transportation Standard Specification for Roads.
- 11.) **Bid Documents:** The following documents shall also be submitted (in triplicate) along with the Bid Proposal and completed in their entirety:
  - Bid Forms A through F
  - Bid Bond and Form of Surety
  - Non-Collusion Affidavit of Prime Bidder
  - Statement of Bidders Qualifications
  - Certification of Bidder Regarding Equal Employment Opportunity
  - Contractors Wage Certification Form
  - Department of Administrative Services (DAS) “Contractor Prequalification Certificate and Update Statement.
  - S/M/W/DisBE Certificate from the State of Connecticut for Set-Aside Bid Packages.

Project: Renovations And Additions To Eli Whitney Technical High School

**Minimum Rates and Classifications  
for Building Construction**

ID# : B 16693

**Connecticut Department of Labor  
Wage and Workplace Standards Division**

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: BI-RT-837-CMR

Project Town Hamden

State#:

FAP#:

Project: Renovations And Additions To Eli Whitney Technical High School

**CLASSIFICATION**

**Hourly Rate**

**Benefits**

1a) Asbestos Worker/Insulator (Includes application of insulating materials, protective coverings, coatings, & finishes to all types of mechanical systems; application of firestopping material for wall openings & penetrations in walls, floors, ceilings - Last updated 7/21/11

36.86

25.51

1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters. \*\*See Laborers Group 7\*\*

2) Boilermaker

34.65

24.10

**As of: Tuesday, July 03, 2012**

Project: Renovations And Additions To Eli Whitney Technical High School

3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	32.50	25.20 + a
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3b) Tile Setter	32.94	22.42
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3c) Terrazzo Mechanics and Marble Setters	31.69	22.35
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3d) Tile, Marble & Terrazzo Finishers	26.25	19.20
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3e) Plasterer	32.50	25.20
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-----LABORERS-----

***As of: Tuesday, July 03, 2012***

Project: Renovations And Additions To Eli Whitney Technical High School

4) Group 1: Laborers (common or general), acetylene burners, carpenter tenders, concrete specialists, wrecking laborers, fire watchers.	25.80	16.45
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofers/mixer/nozzleman, fence erector.	26.05	16.45
4b) Group 3: Jackhammer operators, mason tender (brick) and mason tender (cement/concrete)	26.30	16.45
4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew who primary task is to actually perform the mating of pipe sections)[If using this classification call the Labor Department for clarification]	26.05	16.45
4d) Group 5: Air track operators, Sand blasters	26.55	16.45
4e) Group 6: Nuclear toxic waste removers, blasters	28.80	16.45

***As of: Tuesday, July 03, 2012***

Project: Renovations And Additions To Eli Whitney Technical High School

4f) Group 7: Asbestos/lead removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped)	26.80	16.45
4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew	26.30	16.45
4h) Group 9: Top men on open air caisson, cylindrical work and boring crew	25.80	16.45
4i) Group 10: Traffic Control Signalman	16.00	16.45
5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	29.65	21.00
5a) Millwrights	30.15	21.39

***As of: Tuesday, July 03, 2012***

Project: Renovations And Additions To Eli Whitney Technical High School

6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	36.25	22.49
7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	45.97	23.535+a+b
-----LINE CONSTRUCTION-----		
Groundman	23.80	3% + 13.70
Linemen/Cable Splicer	43.28	3% + 13.70
8) Glazier (Trade License required: FG-1,2)	33.78	16.90 + a

***As of: Tuesday, July 03, 2012***

Project: Renovations And Additions To Eli Whitney Technical High School

9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	33.50	27.98 + a
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----OPERATORS----

Group 1: Crane handling or erecting structural steel or stone, hoisting engineer 2 drums or over, front end loader (7 cubic yards or over); work boat 26 ft. and over. (Trade License Required)	35.50	20.50 + a
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Group 2: Cranes (100 ton rate capacity and over); Backhoe/Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer). (Trade License Required)	35.18	20.50 + a
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Group 3: Excavator; Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade. (slopes, shaping, laser or GPS, etc.).	34.44	20.50 + a
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Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	34.05	20.50 + a
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**As of: Tuesday, July 03, 2012**

Project: Renovations And Additions To Eli Whitney Technical High School

Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	33.46	20.50 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller; Pile Testing Machine.	33.46	20.50 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	33.15	20.50 + a
Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrell).	32.81	20.50 + a
Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	32.41	20.50 + a
Group 9: Front end loader (under 3 cubic yards), skid steer loader regardless of attachments, (Bobcat or Similar): forklift, power chipper; landscape equipment (including Hydroseeder).	31.98	20.50 + a

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Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	29.94	20.50 + a
Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	29.94	20.50 + a
Group 12: Wellpoint operator.	29.88	20.50 + a
Group 13: Compressor battery operator.	29.30	20.50 + a
Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	28.16	20.50 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	27.75	20.50 + a

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Group 16: Maintenance Engineer/Oiler.	27.10	20.50 + a
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Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	31.41	20.50 + a
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Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	28.99	20.50 + a
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-----PAINTERS (Including Drywall Finishing)-----

10a) Brush and Roller	30.22	16.90
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10b) Taping Only/Drywall Finishing	30.97	16.90
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10c) Paperhanger and Red Label	30.72	16.90
10e) Blast and Spray	33.22	16.90
11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	38.67	25.56
12) Well Digger, Pile Testing Machine	33.01	19.40 + a
Rofer: Cole Tar Pitch	37.00	12.75 + a
Rofer: Slate, Tile, Composition, Shingles, Singly Ply and Damp/Waterproofing	35.50	12.75 + a

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15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	33.21	28.15
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16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	38.67	25.56
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-----TRUCK DRIVERS-----

17a) 2 Axle	27.88	17.22 + a
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17b) 3 Axle, 2 Axle Ready Mix	27.98	17.22 + a
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17c) 3 Axle Ready Mix	28.03	17.22 + a
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17d) 4 Axle, Heavy Duty Trailer up to 40 tons	28.08	17.22 + a
17e) 4 Axle Ready Mix	28.13	17.22 + a
17f) Heavy Duty Trailer (40 Tons and Over)	28.33	17.22 + a
17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	28.13	17.22 + a
18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	40.50	16.85 + a
19) Theatrical Stage Journeyman	22.22	6.53

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*Welders: Rate for craft to which welding is incidental.*

*\*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.*

*\*\*Note: Hazardous waste premium \$3.00 per hour over classified rate*

- Crane with 150 ft. boom (including jib) - \$1.50 extra
- Crane with 200 ft. boom (including jib) - \$2.50 extra
- Crane with 250 ft. boom (including jib) - \$5.00 extra
- Crane with 300 ft. boom (including jib) - \$7.00 extra
- Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyman instructing and supervising the work of each apprentice in a specific trade.

*The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.*

*Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.*

*It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.*

*The annual adjustments will be posted on the Department of Labor's Web page: [www.ct.gov/dol](http://www.ct.gov/dol)*

*The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.*

*All subsequent annual adjustments will be posted on our Web Site for contractor access.*

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*Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage*

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

**~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).**

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

**As of: Tuesday, July 03, 2012**

**EXHIBIT “B”  
SCOPE OF WORK**

**Bid Package #2.01  
Structure Demolition, Selective Demolition & Abatement**

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR**

**THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:**

The Scope of Work shall include but not be limited to all labor, materials, equipment, tools, services, coordination, supervision, shop drawings, permits, engineering and all incidental work associated with **Structure Demolition, Selective Demolition and Abatement** 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 **Structure Demolition, Selective Demolition and Abatement** 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 Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

**SCOPE OF WORK**

- 1) BID PACKAGE #2.01 – Structure Demolition, Selective Demolition and Abatement:**  
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 **Structure Demolition, Selective Demolition and Abatement** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. Work shall comply will all applicable codes and authorities. The

Scope of Work shall include, but not be limited to, the General Conditions, all Division 00 and 01 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:

**Project Manuals:**

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

**Specification Sections of the Project Manuals:**

Include all work for all specifications 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.

- 024119 Selective Demolition**
- 024216 Building Demolition**
- 026123 Removal & Disposal of PCB Contaminated Soils**
- 028100 Removal and Handling of Regulated Materials**
- 028213 Asbestos Abatement**
- 028433 Removal and Disposal of PCBs**

- Division 21 Fire Suppression (As Applicable)
- Division 22 Plumbing (As Applicable)
- Division 23 Mechanical (As Applicable)
- Division 26 Electrical (As Applicable)
- Division 27 Communications (As Applicable)
- Division 28 Electronic Safety and Security (As Applicable)
- Division 31 Earthwork (As Applicable)
- Division 33 Utilities (As Applicable)

**Schedule of Drawings:**

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

**2) 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 sections:

Selective Demolition, Building demolition including but not limited to: Roof Removal as Required (Total Roof Removal and Roof Abatement by BP#7.01), Wall, 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 **Structure Demolition and Abatement** 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. Salvage of existing Face Brick is required.

### **3) Phasing:**

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

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. Shop Drawings will only be reviewed by phase. 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.

### **4) 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.

**5) 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 Contractor shall cut, cap and drop the system identified to be removed.
- b. The Fire Suppression Contractor shall cut, cap and drop the system identified to be removed.
- c. The Electrical Contractor shall cut, cap and drop 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 by the Electrical Contractor) shall be properly disposed by the Demolition and Abatement Contractor.
- f. The Plumbing and HVAC Contractor shall be responsible to remove and properly dispose of the existing HVAC Rooftop Units.
- g. The Plumbing and HVAC Contractor shall be responsible to remove and properly dispose of the existing Steam Boilers.

**6) 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.
- h. Existing Foundation:** This Subcontractor shall REMOVE the existing foundation and slab where Building Demolition is indicated on the Contract Documents. This Subcontractor shall REMOVE all pier footing where the Portable Classrooms are removed or where pier footings exist from former portable classrooms.
- 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, in the sole discretion of the Construction Manager.
- 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, metal pans, black iron, welded metal tube ceiling support, batt insulation, light fixtures, stud framing and drywall, transfer ducts and grilles.
- l. 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.
  - 1. 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. **3,000 exterior square feet of bricks – This includes the 1,000 exterior square feet of bricks referenced on sheet A-302. 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.**

- 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.

#### 7) **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.

#### 8) **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.

**9) 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.**

**10) CLARIFICATIONS**

- a.) 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, fat and solids that remain in the tanks.
  4. Provide OSHA safe sloping to the satisfaction of the Construction Manager, in its sole discretion, at all underground removals.
  5. Sheet INFO.2 – Include all sawcutting at slabs and all building sawcutting. Include all building sawcutting for mechanical, plumbing and electrical work.
  6. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
  7. Sheet ASB-1 - Include all work indicated on this sheet except for the “Work To Be Performed By Term Contractor”.
  8. Sheet ASB-2 - Include all work indicated on this sheet except for the “Work To Be Performed By Term Contractor”. Include all the work for the note indicating ‘REMOVE ALL ACM VINYL FLOOR TILE AND MASTIC PRESENT BENEATH LOCKERS IN CORRIDOR (TYP).’
  9. Sheet PCB-1 - Include all work indicated on this sheet.
  10. Sheet PCB-2 - Include all work indicated on this sheet.
  11. Sheet PCB-3 - Include all work indicated on this sheet.

12. Sheet PCB-4 - Include all work indicated on this sheet.
13. Sheet PCB-5 - Include all work indicated on this sheet.
14. Sheet PCB-6 - Include all work indicated on this sheet.
15. Sheet PCB-7 - Include all work indicated on this sheet.
16. Sheet PCB-8 - Include all work indicated on this sheet.
17. Sheet D-101 - Include all work indicated on this sheet.
18. Coordinate with other trades and remove all ACM flashings at exterior walls and other locations required for penetrations. Replace all removed flashings to ensure that all buildings remain water tight at all times during construction and after project completion.
19. Sheet D-102 - Include all work indicated on this sheet.
20. Sheet D-104 - Include all work indicated on this sheet.
21. Sheet D-105 - Include all work indicated on this sheet.
22. Sheet D-106 - Include all work indicated on this sheet except for Specific Demolition Note A7 indicating to remove the existing gymnasium court markings and Demolition Note 117 indicating to remove floor sleeve covers. Work described in Specific Demolition Note A7 and Demolition Note 117 to be completed by Carpet, Resilient & Wood Flooring Subcontractor.
23. Sheet D-107 - Include all work indicated on this sheet.
24. Sheet D-108 - Include all work indicated on this sheet.
25. Sheet D-109 – Include all work indicated on this sheet. Include all of the abatement and demolition for “D” Wing and “G” Wing.
26. Sheet D-110 - Include all work indicated on this sheet including for the demolition of all of "D" Wing and "G" Wing.
27. Sheet D-111 - Include all work indicated on this sheet including the demolition of all of "D" Wing and "G" Wing.
28. Sheet D-112 - Include all work indicated on this sheet except for work at equipment noted to be reused. Equipment noted to be reused will be addressed by the Food Service Subcontractor. Legally capture and dispose of any refrigerant in items to be disposed of including kitchen equipment, mechanical equipment, and any other equipment in the project.
29. Structural (“S”) Drawings – Include all work in the Structural drawings as it relates to this scope of work. Include all items relating to sawcutting and demolition or removal of materials.
30. Sheet S-100 General Note 4 – Provide all shoring necessary for this scope of work.
31. Sheet S-102.2 – Include all sawcutting at slabs and all building sawcutting.
32. Sheet S-102.3 – Include all sawcutting at slabs and all building sawcutting.
33. Sheet S-103.1 – Include the demolition of the existing piles as indicated.
34. Sheet S-103.4 – Include all shoring.
35. Sheet S-220 Detail 1 – Include the demolition of the concrete keys.
36. Sheet S-220 Detail 4, 8 and 10 – Include all sawcutting at slabs and all building sawcutting.
37. Sheet S-221 Detail 12 – Include the demolition of the foundation wall.
38. Sheet S-221 Detail 15 – Include the removal of concrete slab needed to achieve specified new concrete thickness.

39. Sheet S-221 Detail 13 - Complete all interior and building saw cutting including saw cutting needed to complete the work of other trades. Include saw cutting the slab for new footings and saw cutting for all utilities.
40. Sheet S-222 Detail 28 – Include the removal of slabs on grade as indicated.
41. Sheet S-320 Detail 1 – Include concrete removal to achieve specified thickness.
42. Sheet S-320 Detail 9 - Include cutting the beam pockets in the existing walls.
43. Sheet S-321 Detail 13 – Include all demolition including the sawcutting and demolition of the gyp deck.
44. Sheet S-321 Detail 15 - Include shoring and all provisions necessary to support the parapet wall at the roof as shown.
45. Sheet S-323 Detail 38 - Include all shoring.
46. Architectural Drawings – Include all demolition and abatement indicated in the architectural drawings.
47. Sheet A-102.1 – Include removal of wood flooring and concrete as indicated.
48. Sheet A-102.2 – Include removal of wood flooring as indicated.
49. Sheet A-110.0, A-110.1 and A-110.2 – Include Roof Demolition Notes 9, 12, 16, 17, 18, 19, 22 & 23 typical and as noted.
50. Sheet F-102.2 – Include demolition of all wood flooring to be demolished including the wood flooring in the new Theory Room B111.
51. Sheet P-003.2 - Include all interior building slab sawcutting and demolition required for new and existing utilities and included for the demolition of utilities including as shown on this sheet.
52. Sheet E-103.3 - Include all slab demolition for floor boxes throughout the project including in the Lobby C102B.
53. Include all hazardous material abatement including the removal of all asbestos, lead and PCBs and all other hazardous materials.
54. Include the construction, maintenance, and removal of all barriers required to isolate the abatement areas.
55. Include all demolition and abatement required for the construction of temporary school spaces. Include demolition in Building D for the construction of two temporary classrooms which will include the removal of flooring and items attached to the floors and walls.
56. Saw cut or chip out slabs as required and indicated to achieve the specified drainage. See Sheet S102.1 as an example.
57. Include the demolition and removal of all existing items not shown to remain and as directed by the Construction Manager. This includes the demolition and removal of all remaining equipment not shown in the drawings but observed during the Pre-Bid Conference located throughout the project including in the shop spaces and garage.
58. Include Demolition of “D” Wing (listed as “D” Wing and “G” Wing on some sheets).
59. Include demolition of the garage as a separate phase as directed by the Construction Manager.
60. Protect the existing science lab teacher and student work stations as they will be removed and relocated by the General Trades Subcontractor.
61. Include demolition of any temporary construction, rooms and spaces.
62. Include demolishing the flooring and base in the elevator cab.
63. Include all sawcutting at slabs and all building sawcutting throughout the project.

64. ALL DUMPSTERS are to be provided by the General Trades Contractor except for:
  - a. BP#1.01 Site Preparation\*;
  - b. BP#2.01 Demolition & Abatement\*
  - c. BP#31.04 Athletic Fields\*
  - d. \*These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.
65. Include the removal of walls and windows as needed for removal of existing boilers and other equipment (by others) and for installation of new boilers (by others) and installation of other equipment (by others) in the boiler room.
66. Include off-hours work as directed by the Construction Manager as required to minimize impact to the school. No extra compensation will be issued for off-hours work.
67. Provide manifests and other specified documents for abatement and removal to the Construction Manager as indicated in the specifications, all applicable codes and laws.
68. Include the demolition and lawful disposal of all in-wall/window air conditioning systems.
69. Include paying for and obtaining all permits including but not limited to asbestos disposal authorizations, asbestos abatement notifications, asbestos management plans, demolition notification forms, lead-based paint, building demolition permit, and all other permits and fees related to this scope of work.
70. Specification 024216.2.3.E.2 – After Building Demolition leave all remaining excavation (hole slopes) OSHA safe. Backfill by the Bid Package 31.01 Sitework Contractor. – **ADD. NO. 1**

## **EXCLUSIONS**

- 1) Sale and Use Taxes.

## **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 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.

**EXHIBIT “B”  
SCOPE OF WORK**

**Bid Package 3.01  
Concrete**

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR**

**THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:**

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Concrete** 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 **Concrete** 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 #3.01 – Concrete:** 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 **Concrete** 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:

**Project Manuals:**

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

**Specification Sections of the Project Manuals:**

Include all work for all specifications 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.

<b>033000</b>	<b>Cast-In-Place Concrete</b>
<b>035319</b>	<b>Concrete Densifier/Sealer/Hardener</b>
<b>035400</b>	<b>Self-Leveling Underlayment</b>
051200	Structural Steel (As Applicable)
053100	Metal Decking (As Applicable)
055000	Metal Fabrications (As Applicable)
055100	Metal Stairs (As Applicable)
072100	Building Insulation (As Applicable)
078413	Through-Penetration Firestop Systems (As Applicable)
078443	Fire Resistive Joint Systems (As Applicable)
Division 21	Fire Suppression (As Applicable)
Division 22	Plumbing (As Applicable)
Division 23	Mechanical (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)
Division 31	Earthwork (As Applicable)
Division 32	Exterior Improvements (As Applicable)
Division 33	Utilities (As Applicable)

**Schedule of Drawings:**

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.:  
BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

## **2) 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 sections:

Cast-in-Place Concrete and Accessories; Concrete Forms; Shores and Re-Shores; Admixtures; Curing Materials and Compounds; Bonding Agents; Adhesives; Interior Pads for Mechanical/Electrical Equipment per the MEP drawings; Housekeeping Pads; Concrete Reinforcement; welding of reinforcement, Wire Welded Mesh, Slabs on Grade; Slabs on Metal Deck; Concrete Fill for Metal Pan Stairs; Vapor Barriers; Opening Blockouts; Water Stops; Anchor Bolt Placement and Layout; Grouting of Columns Bases; Grouting of Bearing and/or Leveling Plates; Installation of Embedded Items; Elevator Wall Footings/Pit/Sump; Concrete Buttress Walls; Concrete Haunches, Lightweight Concrete; Drilling and Grouting of Reinforcing; Drilling and Epoxy of Reinforcing; Slab Expansion Joints; Sawcutting of Slab Control Joints; Setting of Anchor Bolts; Grouting of Base Plates; Concrete Foundations Scored Forms; Rubbing of Exposed Concrete; Winter Protection of Concrete Placements; Masonry Shear Wall Footings; etc.

## **3) Phasing:**

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

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. Shop Drawings will only be reviewed by phase. 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.

## **4) Structural and Site Excavation, Bedding and Backfill:**

The Sitework Subcontractor shall provide Excavation, Bedding, Backfill for the Concrete Subcontractor for all structures including: Structures Footings and Foundations.

## **5) Vapor Barriers:**

The Concrete Contractor shall provide all Under-slab Vapor Barriers and vapor retarders and accessories as noted on the Contract Documents.

**6) Sumps and Pits:**

This Concrete Subcontractor is responsible for all sump pits and elevator pits. Excavation and backfill will be by the Site Work Subcontractor.

**7) Metal Pan Stairs & Decks:**

- a. The Concrete Contractor shall install Concrete Fill, Wire Mesh, Reinforcing Bar, Nosing (if applicable) to all Metal Pan Stairs and Platforms and decks in accordance with the Contract Documents. The placement of concrete for the above mentioned work must be scheduled as a separate placement from any concrete/slab placements. The Concrete Contractor is responsible for providing, installing, removing and disposing of temporary wood slip resistant stair treads in all stairs/landings and cleaning (include vacuuming to a spotless condition) of pans prior to placement of concrete. The temporary treads shall be installed immediately after steel stair erection and will remain in place until concrete fill is ready to be placed.
- b. The Concrete Contractor must provide protection, barricades, etc., for the entire process of the above work. This includes protecting and cleaning stair components including any adjacent surfaces from concrete splatter. This also includes repairing any resulting damage to the satisfaction of the General Contractor.
- c. The Concrete Contractor shall provide concrete and reinforcing at all Cast in Place Concrete Stairs, Metal Pan Stairs, and Ramps, and include all including Cast in Nosings (note also indicated in Structural Steel) and embeds with the exception of any Site Concrete Stairs as shown on the Contract Documents. All Site Work Concrete shall be provided by Sitework Contractor.

**8) Structural Steel Coordination and Embeds:**

- a. The Concrete Contractor shall layout and install Leveling Plates, Bolts, Inserts and other Structural Elements (including grouting of same) that are to be incorporated into the concrete work. The above steel materials shall be provided by others for installation by the Concrete Contractor.
- b. This Subcontractor shall coordinate the location of and include the unloading and installing of all embeds, bolts, anchor bolts, inserts and/or sleeves with the appropriate trade Subcontractor to ensure that they are installed in the proper locations.
- c. This Subcontractor will coordinate and install all embedded hardware, inserts and blockouts required to connect the structural members to foundation system.
- d. The Structural Steel Contractor will provide a certified survey of installed anchor bolts and bearing plates and/or leveling nuts prior to scheduled start of structural

steel erection. This Contractor will correct any errors immediately upon notification of any work that must be corrected so that the Structural Steel Contractor will not be delayed.

- e. The Concrete Contractor is responsible to unload, receive, inventory (verify quantities on the spot), store (as approved by CM) and then install all embeds, anchor bolts, base plates (as required) nuts and washers, angles, frames, plates, channels, or any other steel component noted to be cast into the concrete as an embedded item, provided by others to be installed in the work of this bid package.
- f. The Concrete Contractor shall properly store, maintain and turn over the proper quantity of nuts and washer to the Steel Contractor/Erector.

**9) Grouting and Dry-Packing:**

The Concrete Contractor shall provide all grouting and/or dry-packing throughout, including but not limited to grouting of column bases, bearing and leveling plates, unless specifically specified to be provided by others.

**10) Pipe and Tube Railings:**

The Concrete Contractor shall install Inserts, Anchors, etc. as provided by others, into the concrete to allow for the installation of pipe railings, tube railings, and guard rails provided by others.

**11) Winter Protection, Dewatering and Runoff Control:**

- a. The Site Subcontractor shall provide all dewatering and surface water control for all open excavations, foundations, footings, access and haul roads, and staging areas as required until the site drainage system has been completed.
- b. The Site Subcontractor shall provide and maintain all winter protection up to the point where the area is taken over by the Concrete Subcontractor. The Sitework Subcontractor shall include preparation, protecting and/or pre-heating/thawing (including but not limited to blankets, ground heaters, etc.) required to complete its Work and will provide the Concrete Subcontractor with “non-frozen” conditions.
- c. The Concrete Subcontractor will be responsible for Winter Protection and Dewatering its own Work. This Contractor shall include Cold/Hot Weather Concrete placing procedures per current revision to ACI 306-88 including all required temporary heat, and blankets. This shall include time to stay late and complete the winter conditions Work. This Subcontractor includes all labor, materials, and equipment necessary to provide snow, ice and water removal that affects the performance of this Scope of Work.

**12) Housekeeping Pads:**

The Concrete Contractor shall include in the Contract Value all Housekeeping and Equipment Pads as noted on the Contract Documents. The Concrete Contractor shall coordinate the size and location of all pads with the respective trade contractor supplying that equipment.

House Keeping Pad design shall be the responsibility of the Subcontractor whose equipment is placed on the pad and in accordance with the Contract Documents. The Concrete Subcontractor shall form, place, install any embeds and finish the concrete housekeeping pads and curbs as shown on all Contract Documents. Any necessary seismically designed work that needs to be incorporated into the pads shall be the responsibility of the Subcontractor who requires the seismically designed housekeeping pad.

**13) Sleeves:**

The Concrete Contractor shall install all sleeves and/or inserts as indicated on the Contract Documents into the Work. Sleeves and Sealing of same shall be provided by the Contractor providing the Sleeve. This includes coordinating and providing all openings in formwork for other trades as required. This includes penetrations in walls and slabs for MEP items and any related gym equipment as noted on the contract documents. Sleeves and/or Inserts at Metal Decks shall be furnished and installed by the contractor requiring that sleeve or insert.

**14) Joint Sealant/Fillers:**

The Concrete Contractor shall provide Joint Sealant, Joint Fillers and Premolded Joint Fillers at Construction Joints, and Control Joints within the Concrete Contractors Scope of Work and as shown and as required for all Concrete-to-Concrete work. This includes but not limited to the construction of Joints by saw cutting, forming of cold pours, etc.

**15) Concrete Delivery:**

- a. This Subcontractor shall be responsible for cleaning and blowing off all surfaces prior to Concrete Delivery and Placement, including but not limited to, metal deck.
- b. This Subcontractor is responsible for transporting all concrete from source to final destination. This includes, but not limited to, the use of cranes, buckets, concrete chutes, concrete pumps, slick lines, conveyors, buggies, etc. which shall be provided by this Subcontractor where and as required. Staging and location of concrete trucks, etc. will be coordinated with, and approved by Fusco Corporation.
- c. This Concrete Subcontractor will work closely with the Site Work Subcontractor to coordinate the scheduling and excavation for concrete footing/foundations as shown.
- d. This Concrete Subcontractor shall provide the specified vapor barrier before placing the slab on grade.

- e. This Concrete Subcontractor shall provide all water stops as required.
- f. This Concrete Subcontractor shall provide all shoring and re-shoring, as required whether shown or not shown, to complete the Work.
- g. This Subcontractor is responsible for providing concrete to the jobsite that meets or exceeds the specified concrete mix, and the guarantee of test results meeting 28 day strength. This Subcontractor includes all costs of testing for defective concrete and rebar placement where and when directed by Fusco Corporation. Any extra cylinders, coring, Windsor Probe (etc.) or testing of any kind required for non-conforming items will be at this Subcontractor's cost.
- h. This Concrete Subcontractor will assist the testing agency taking the necessary concrete ready-mix samples to be tested. This Subcontractor will be responsible for providing the testing agency with an area large enough for cylinder slump testing, next to the designated/specified testing location, whether at point of discharge from the concrete truck, end of chute from pump truck or slick line, or at point of placement. Also provided and maintained by this Subcontractor shall be two (2) insulated concrete curing boxes with inside dimensions of 5' x 3' x 2'-6" high. Each curing box will be equipped with a Hi/Low thermometer and an interior outlet for heaters and lighting. Heaters, lighting and Hi/Low thermometers are to be provided by this Subcontractor. Each curing box will be insulated to maintain specified temperatures of 60-80 degrees prior to transfer of molds to testing lab. It will be this Subcontractor's responsibility to locate these boxes to the required location prior to the start of concrete placement. It is also this Subcontractor's responsibility to provide concrete pour cards designating locations, elevations, outside temperature and weather conditions, and expected quantities prior to placement.

#### **16) Reinforcement:**

- a. The Concrete Contractor shall provide Concrete Reinforcement as noted on the Contract Documents.
- b. The Concrete Contractor shall drill and epoxy all reinforcing bars and hooks into existing substrates abutting new concrete as noted on the Contract Documents. The Concrete Subcontractor shall drill and epoxy for all items indicated to be imbedded in new or existing concrete.
- c. The Concrete Trade Contractor is responsible to furnish and install all reinforcing steel, anchors, dowels and accessories within his or her Scope of Work as noted on the Contract Documents. All reinforcing entirely in Masonry Walls and/or Partitions shall be provided by the Masonry Contractor. All reinforcing bars from any concrete slab to unit masonry or concrete shall be furnished and installed by the Concrete Contractor and must not be drilled in by the Concrete Contractor.
- d. The Concrete Contractor is responsible for supplying and installing all reinforcing steel, wire welded mesh, any necessary or required supports and required shop drawings to complete this scope of work.
- e. All reinforcing steel from any concrete placement must be tied in place and inspected prior to placement of any concrete. Additionally, all reinforcing steel from any concrete structure to any unit masonry or to any other concrete structure

(I.E. concrete footing to concrete wall, etc.) shall be installed by the Concrete Contractor and not drilled in by the Mason or the Concrete Contractor unless specifically noted. If for any reason the Concrete Trade Contractor misses any reinforcing steel, anchors, dowels or accessories, the Concrete Trade Contractor at his or her expense shall make any necessary corrections or changes as approved by the Engineer.

- f. All reinforcing steel must be kept organized and out of any soil or mud. Additionally, all cutoffs, scraps, etc. must be disposed of on a DAILY basis.
- g. All reinforcing causing a safety issue of falling upon or walking into shall be protected by the Concrete Contractor.

**17) Concrete Finishing:**

- a. This Subcontractor includes all labor, materials, and equipment necessary to strip all forms, and break off ties. All concrete forms must be in like-new condition and free of any defects. All excess slag, concrete or slurry spills, will be removed and rubbed smooth. Walls, columns, slab on grade, slab of deck or ramps not conforming to specified and or ACI tolerances will be removed and replaced at this Subcontractor's cost.
- b. It shall be the responsibility of this Subcontractor to check and accept excavations and sub grades established by the Sitework Subcontractor, to ensure they were established within the required tolerances prior to placing concrete. All site work shall be graded within 1/2". Any deviation or issues with the sub grade needs to be reported to Fusco Corporation prior to placing concrete.
- c. All dowels and dovetail for CMU to be coordinated and placed by this Subcontractor and provided by others.
- d. This Subcontractor includes all labor, material and equipment necessary to saw cut control joints.
- e. This Subcontractor shall coordinate, supply and install all construction/control joint material as shown on Contract Drawings and/or as described in the Specifications, and as required for all concrete-to-concrete Work and concrete-to-steel Work at column diamond locations and concrete-to-masonry or any and all existing substrates, and shall coordinate and perform all saw cuts for control joints for SOG as indicated on the drawings, including all caulking and sealants.
- f. This Subcontractor includes all labor, materials, and equipment necessary to furnish and install admixtures, curing materials and compounds, bonding agents, adhesives and concrete sealers as specified.
- g. Exposed Concrete Foundation Walls shall be finished in accordance with Contract Documents.

**18) Concrete Washouts and Debris:**

The Concrete Contractor shall remove and properly dispose of all concrete debris, formed concrete demo, spoils, and concrete accumulated from truck/pump wash outs.

This Contractor is responsible for cleaning and /or washing down the tires of his or her construction/concrete vehicles and equipment including but not limited to visitors and

vendors exiting the site at the anti-tracking aprons located at each construction entrance to avoid tracking mud, dust, and etc. from the site and onto public streets.

**19) Concrete Haunches and Thickened Slabs:**

The Concrete Contractor shall provide any concrete haunches and thickened slabs as noted on the contract documents.

**20) Rigid Under Slab and Foundation Insulation:**

All Extruded-Polystyrene Insulation inside and outside and underneath the Foundation walls and footings, where indicated on the Contract Documents, shall be furnished and installed by the Sitework Subcontractor.

**21) Floor Recesses:**

The Concrete Contractor shall provide and coordinate with the General Trades Subcontractor and Flooring Subcontractor any and all recess in any concrete slab as required for floor finishes.

**22) Waterstop:**

The Concrete Contractor shall provide all Waterstop as noted on the Contract Documents.

**23) Substrates:**

- a. The Concrete Contractor shall prepare substrates so that they meet or exceed the requirements of the specification for the final finishes. The Substrate shall meet or exceed flatness, levelness and/or surface texture required per the contract documents.
- b. The Concrete Contractor shall review the Specification Divisions related to all Finished Flooring and verify that the substrate and substrate finish anticipated is achievable and there are no conflicts with the contract documents as it related to the Flooring Contractor floor finishes. It is the responsibility of the Concrete Contractor to coordinate all curing and sealing compounds with the Flooring Contractor to verify compatibility with all flooring adhesives and installation methods. This Contractor shall notify the Fusco Corporation of any conflicts or deficiencies prior to placing of any slabs.
- c. The Concrete Contractor shall coordinate the Work, including but not limited to additives and curing methods, for compatibility with the Flooring Contractors, the Architect and specified Flooring Adhesives.

**24) Duct / Equipment, Slab Edges and Openings:**

- a. Any closures or bulkheads required for the placement of concrete shall be constructed of wood and shall be furnished and installed by the Concrete Contractor. This shall include, but not limited to, mechanical/electrical box-outs, chase spaces, curbs, mechanical pads, box-outs for drainage, etc., that are shown on the contract documents. It shall be the responsibility of the Mechanical, Plumbing, Electrical and Fire Protection Contractors to furnish and install all required floor sleeves and appropriate fire seal ratings.
- b. The Structural Steel Subcontractor shall furnish and install framing and support steel for Ducts, Equipment and other openings as indicated on the Contract Drawings. The Structural Steel Subcontractor shall coordinate framing for these openings with the appropriate Contractor.

**25) Expansion Joint Assemblies:**

- a. The Concrete Contractor shall perform all box-out work as required for floor and wall expansion joint assemblies.

**26) Food Service Freezer / Cooler:**

- a. The Food Service Equipment Contractor shall coordinate with the Sitework Subcontractor and Concrete Subcontractor for the size and locations of all depressions.
- b. The Concrete Contractor shall provide the Concrete Fill for the Freezer / Cooler floors.

**27) Hollow Metal Doors, Door Frames and Access Doors:**

- a. The General Trades Subcontractor shall Furnish, Receive, Handle, Distribute, Set, Protect, Install and Adjust all Steel/Hollow Metal Doors, Borrowed Lights, Vision Panels and including all other Hollow Metal Frames and access doors, including access doors furnished by others, Hollow metal frames contained within Masonry Partitions and Concrete Partitions (if required-openings/forming by Concrete Contractor) shall be set and plumbed by the General Trades Subcontractor who will work with the Masonry Subcontractor/Concrete Subcontractor to ensure that the frames are blocked and grouted as set by the General Trades Subcontractor. The General Trades Subcontractor shall make provisions to protect Hollow Metal Frames and Hardware mounting holes, installed by the General Trades Subcontractor, from damage during grouting operations.
- b. The General Trades Subcontractor shall furnish all access doors and panels that are shown on the Contract Drawings to be installed by the Masonry Subcontractor in his or her partitions/work and the General Trades/Acoustical Contractor in his or her partitions, drywall ceilings, acoustical ceilings/work. Any access doors or panels (consistent with the surrounding assembly) that are not shown on the

Contract Drawings, but required by the Plumbing, Mechanical, Fire Protection or Electrical Contractors, shall be provided by the Contractor who requires the access doors or panels. The access doors or panels shall be furnished to the Mason Contractor for installation in his or her work and the General Trades/Acoustical Contractor into his or her partitions, drywall ceilings or acoustical ceilings.

**28) Concrete Pumping and Concrete Tickets:**

- a. The Site Work and Concrete Contractors shall be responsible for any and all concrete pumping including any approved necessary means to place concrete for their work. Additionally, original copies of concrete tickets after every concrete delivery shall be provided to the Construction Manager.

**29) Additional Concrete:**

The Concrete Contractor shall include any and all additional concrete required to compensate for the deflection of beams and metal deck.

**30) Concrete Slab Finish / Curing:**

All slabs shall be wet cured in addition to and prior to any other specified curing methods not in the Contract Documents. The Concrete Contractor shall also coordinate the slab finish as specified and depicted in the flooring specifications.

**31) Concrete Testing Boxes:**

The Concrete Contractor shall assist the Owner's testing agency taking samples that need to be tested. This Contractor shall provide two (2) insulated wood boxes no larger than 5' wide x 3' long x 2'-6" feet high with hinged access doors for easy access, including heat if necessary. This Contractor shall move cylinders to a location on site as prescribed by the General Contractor.

**32) Keyways:**

The Concrete Contractor shall provide wood keyways that are fixed into any form and shall be removed with or when the forms can be contractually removed. No dragging of Angle Irons or any other material can be used as keyways.

**CLARIFICATIONS**

a.) The Concrete Contractor shall include the following work:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Furnish and install all concrete reinforcing and rebar.

3. Sheet C-18 Detail 3 - Include all concrete work indicated in the detail listed. Include attachments for Artwork. Coordinate with artist by Owner.
4. Sheet D-105 – Include new concrete structure project north of existing Culinary Kitchen and coordinate with General Trades Subcontractor.
5. Sheet EV-101 - Provide concrete, reinforcing and vapor barrier and geotextile grid for the active soil depressurization radon systems.
6. Structural (“S”) Drawings – Include all work in the Structural drawings as it relates to this scope of work.
7. Sheet S-100 – Include all work indicated related to cast in place concrete, reinforcing and bonding agents. Provide all shoring necessary for this scope of work as indicated under General Note 4.
8. Sheet S-101.1 – Include all work indicated on this sheet. Include all drilling and doweling into concrete with epoxy.
9. Sheet S102.1 – Include all house keeping pads.
10. Sheet S102.2 – Include slab and footings for dust collector. Also see mechanical drawings for information.
11. Sheet S104.6 – Include all house keeping pads.
12. Sheet S-106 Include all concrete work as applicable to this scope of work as indicated on this sheet for the E House.
13. Sheet S-201 – Include all work indicated on this sheet.
14. Sheet S-202 – Include all work indicated on this sheet. Include compressible filler.
15. Sheet S-210 – Include all work indicated on this sheet. Include installing all items embedded into concrete. Furnish and install the galvanized angle shown in detail 2 and 10 /S-210.
16. Sheet S-220 – Include all work indicated on this sheet.
17. Sheet S-221 – Include all work indicated on this sheet. Include concrete bonding agents as required and specified.
18. Sheet S-222 – Include all work indicated on this sheet except for the helical piles. Include pile caps.
19. Sheet S-301 – Include all concrete, grout, and reinforcing in concrete.
20. Sheet A102.1 – Include concrete infill at existing wood flooring.
21. Sheet A-102.2 Detail A – Furnish and install concrete bases for the lockers including the wood sleepers. Furnish and install all self-leveling flooring compounds.
22. Sheet A102.3 – Include all house keeping and equipment pads.
23. Sheet A102.4 – Include all house keeping and equipment pads.
24. Sheet A-103.3 – Include concrete and reinforcing for interior Dango system. Furnish and install all self-leveling flooring compounds.
25. Sheet A104.4 – Include all house keeping and equipment pads.
26. Sheet F-102.2 – Include all self-leveling mix including in new Theory Room B111.
27. Sheet E-103.3 - Include all patching for slab demolition at floor boxes throughout the project including in the Lobby C102B.
28. Include patching or infilling of all concrete floor, wall and roof openings that are indicated on the Contract Documents and coordinate the demolition, plumbing, HVAC, and electrical drawings for existing areas to be removed and infilled.
29. Include vapor and moisture barrier under all new concrete slabs on grade to prevent flooring moisture issues.

30. Include all topping slabs, house-keeping slabs, and equipment pads on top of, inside, or within 20 feet of the buildings.
31. Include all reinforcing.
32. Include all construction joints, control joints, expansion joints, score joints, or any other joints in or abutting the building concrete.
33. Include all leveling of concrete.
34. Include the drilling, doweling, and epoxying for attachment of structural steel to concrete where required. Include drilling, doweling and epoxying for anchor rods and bolts where indicated to be epoxied.
35. Include all building curbs.
36. Furnish and install all compressible materials around columns and any brace frame systems prior to placing concrete.
37. Provide all self-leveling underlayment as indicated in specification section 035400 and the drawings.
38. Strip and remove all form materials.
39. Sheet FS-5 – This Contractor shall box-out for the floor trough drain as furnished by the Food Service Equipment Subcontractor.
40. Sheet E-703 Detail 3 – Include all concrete work indicated in this detail.
41. Furnish and install Barrier-1 concrete moisture vapor reducer admixture at all new concrete slabs.
42. Sheet S103.1 - Include all work for cast in place concrete walls, stairs and slab at the loading dock typical and as noted on S103.1. – **ADD. NO. 1**
43. Sheet S103.3 – Include all work for cast in place concrete piers supporting the entrance canopy typical and as noted on S103.3. – **ADD. NO. 1**
44. Sheet A103.3 – Include all work for the cast in place concrete interior and exterior “Dango” Art Pedestals typical and as noted on A103.3. – **ADD. NO. 1**

**EXCLUSIONS:**

- 1) Sale and Use Taxes.

**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 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.

**ALLOWANCE NO. 1: WINTER CONDITIONS - \$150,000**

The Concrete Trade Contractor shall include in its base bid the allowance of **\$150,000** to provide Winter Conditions, i.e., blankets, temporary enclosures, temporary heating devices and temporary heating fuels, etc if required. All other costs required by the Concrete Trade Contractor to perform their work around the Buildings shall be included in this Trade Contractor's Base Bid.

**EXHIBIT “B”  
SCOPE OF WORK**

**Bid Package #6.01  
General Trades**

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR**

**THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:**

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **General Trades** 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 **General Trades** 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 Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

**SCOPE OF WORK**

- 1) **BID PACKAGE #6.01 – General Trades:** 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 **General Trades** 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:

**Project Manuals:**

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

**Specification Sections of the Project Manuals:**

Include all work for all specifications 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.

024119 Selective Demolition (As Applicable)

**054000 Cold-Formed Metal Framing**

**061053 Miscellaneous Carpentry**

**061800 Structural Glue-Laminated Timber**

**062013 Exterior Finish Carpentry**

**072100 Building Insulation**

**074243 Aluminum Composite Systems**

**074423 Ceramic Tile Cladding – ADD. NO. 1**

078413 Through-Penetration Firestop Systems (As Applicable)

**078443 Fire Resistive Joint Systems**

079200 Joint Sealants (As Applicable)

**079500 Architectural Joint Systems**

**081119 Steel Doors and Frames (Install Only)**

**081416 Flush Wood Doors (Install Only)**

**083000 Special Doors (Install Only)**

083113 Access Doors and Frames (As Applicable)

**083116 Floor Door Access**

**083459 Custom Steel Vault Doors and Frames**

**083473 Acoustically Rated Doors (Install Only)**

**087100 Door Hardware (As Applicable - Install Only)**

**087112 Acoustically Gasketed Doors (Install Only)**

<b>089000</b>	<b>Louvers and Vents</b>
<b>092116</b>	<b>Gypsum Board Assemblies</b>
<b>092123</b>	<b>Gypsum Board Shaft-Wall Assemblies</b>
<b>092400</b>	<b>Portland Cement Plaster</b>
093013	Ceramic Tile (As Applicable)
095100	Acoustical Panel Ceilings (As Applicable)
095426	Suspended Wood Ceilings Systems (As Applicable)
<b>098413</b>	<b>Acoustical Panels</b>
<b>100000</b>	<b>Specialties</b>
<b>101100</b>	<b>Visual Display Surfaces</b>
<b>101200</b>	<b>Display Cases</b>
<b>102100</b>	<b>Cubicles</b>
<b>102213</b>	<b>Wire Mesh Partitions</b>
<b>104400</b>	<b>Fire-Protection Specialties</b>
<b>105113</b>	<b>Metal Lockers</b>
<b>111300</b>	<b>Loading Dock Equipment</b>
<b>115213</b>	<b>Projection Screens</b>
<b>116143</b>	<b>Stage Curtains</b>
<b>116623</b>	<b>Gymnasium Equipment</b>
<b>116643</b>	<b>Gymnasium Scoreboards</b>
<b>122400</b>	<b>Window Shades</b>
<b>125716</b>	<b>Trade Equipment</b>
<b>144200</b>	<b>Wheelchair Lifts</b>
Division 21	Fire Suppression (As Applicable)
Division 22	Plumbing (As Applicable)
Division 23	Mechanical (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)

**Schedule of Drawings:**

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

**2) 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 sections:

All Miscellaneous Carpentry; Cold Formed Metal Framing; Framing Accessories; Gypsum Sheathing; Glass-Fiber Blanket Insulation; Gypsum Board; Glass-Matt Water-Resistant Board; Gypsum Board Accessories; Gypsum Board Shaft Walls; Gypsum Board Assemblies; Drywall Partitions; Cementitious Backer Board as Tile Substrate; Drywall Ceiling and Soffits and other Gypsum and Light Gage Framing; Non-Structural Metal Framing; Wood Framing; Stage Wood Floor Infills; Wood Wall Base; Rough Carpentry; Safety (O.S.H.A. Protection); Blocking; Furring, Grounds; Backboards; Acoustical and other Sealants/Caulking; Fire-Resistive Joint System; Firestopping; Joint Sealants; Expansion Joint Cover Assemblies Louvers and Vents and installation of Steel Doors and Frames; installation of Flush Wood Doors; Access Doors and Frames; Door Hardware; Acoustical Ceilings; Signage; Cubicles;; Fire-Protection Cabinets; Fire Extinguishers; Projection Screens; Library Equipment; Gymnasium Equipment; Stage Curtains; Studio Curtains; Welding Curtain Systems; Selective Structure Demolition; DAFS Systems; Visual Display Boards; Temporary Work; Wheelchair Lifts; Coordination with project schedule and other trades; Submittals, Samples, Product Data

### **3) Phasing:**

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

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. Shop Drawings will only be reviewed by phase. 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.

### **4) Building Insulation:**

- a. The General Trades Contractor shall furnish and install Building Thermal And Acoustical Insulation as required to complete its Scope of Work as noted on the Contract Documents except for the below grade rigid building insulation at the foundation walls and footings completed by the Sitework Subcontractor. Include

- acoustical insulation at the new walls and ceilings of all toilet rooms even if it is not shown in the drawings.
- b. Provide and install all insulation at all buildings required to complete project. This includes but is not limited to thermal and acoustical insulation as specified at:
    - i. Exterior walls
    - ii. Interior walls
    - iii. Voids at doors and windows
    - iv. Ceiling and Floor Insulation
  - c. Provide all mineral wool, sound attenuation fiberglass batts and thermal insulation.

### **5) Sheet Metal and Fabric Flashings**

The Roofing Contractor shall furnish and install all Sheet Metal Flashings, Metal Copings, Trim and Roof Accessories as described in the Contract Documents and furnish all exposed Metal through Wall Flashings, including metal reglets for installation by the Masonry Subcontractor.

- a. Any concealed and exposed (partially into **NEW** masonry) flashings and any metal flashing requiring a fabricated bend shall be supplied by the Roofing Contractor and installed by the Masonry Contractor at Cavity Walls, Unit Masonry Steel Lintels, Relieving Angle and other areas in contact with Masonry as indicated on the Contract Documents.
- b. The Roofing Contractor shall furnish and install all Prefinished ZINC Cap, ZINC Fascia and/or Prefinished Aluminum Flashings, Counter Flashings, Copings, Metal Gravel Stops and other Sheet Metal contiguous with the Roofing system.
- c. The Roofing Contractor shall furnish to the Masonry Contractor, for installation into the Mason's **NEW** work, all other Metal Flashing and Metal Thru Wall Flashings as noted in the Contract Documents.
- d. Membrane Flashings contiguous to the Mason's work shall be provided and installed by the Mason Contractor.
- e. The Windows, Glazing and Storefronts Contractor shall furnish and install all Flashings and Sheet Metal that is contiguous with his or her work; such as but not limited to: Flashings required to be installed prior to window or Panel installations.
- f. The Roofing Contractor shall provide all flashings and reglets and accessories into existing masonry as noted on the Contract Documents. This shall include cutting and patching of all reglets into existing masonry necessary to provide a complete system.
- g. The Roofing Contractor shall supply to the Masonry Contractor all flashings and reglets and accessories into new masonry and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Masonry Contractor.

- h. The Roofing Contractor shall supply to the Window Contractor all flashings and reglets and accessories into Window System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Window Contractor.
- i. The Roofing Contractor shall supply to the General Trades Contractor all flashings and reglets and accessories into DAFS System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the General Contractor.
- j. All metal drip flashings shall be furnished by the Roofing Contractor and installed by the Masonry Contractor.

**6) Layout/Survey:**

The General Trades Contractor shall provide layout/surveys for his or her own Scope of Work.

The General Trades Contractor shall provide Horizontal and Vertical Control Lines. This information shall be provided by a Connecticut Licensed Surveyor who shall install permanent offset points and bench marks that will allow for the reproduction of lines and grades by other Trades. This Contractor shall include per floor and per building wing the following: 4 bench marks and 4 offsets at locations directed by the Construction Manager.

**7) Perimeter Cable Protection:**

The Structural Steel Contractor shall install and maintain OSHA-compliant perimeter protection cables and supporting steel at all decks, where required by OSHA. Removal of perimeter cable protection and supporting steel at all levels (except the roof) shall be by the General Trades Contractor. Removal of perimeter cables at the roof shall be by the Roofing Contractor.

**8) Seismic Framing at Top of Partitions:**

This Subcontractor shall provide seismic framing and kickers at top of wall typical and as noted on the Contract Documents.

**9) Light Gage Framing, Wood Framing, Gypsum Partitions and Gypsum Ceilings**

The General Trades Contractor shall furnish and install Stud Framing, Gyp Board Sheathing, and/or 3/4" Pressure Treated Plywood, Batt and/or Semi-Rigid Insulation, Clips, firestopping and any and all accessories required to complete the substrate for all Trades as noted on the Contract Documents.

Subcontractor shall furnish and install all rough carpentry as required. This includes but is not limited to furnishing and installing all framed walls, framed ceilings, framed soffits, framed roofs and framed floors, framing at doors and windows and access doors, framing at fire extinguisher cabinets and hatches and all other openings, plywood, hangers, clips, hold-downs, straps, wood posts, wood beams, shop fabricated structural wood, sawn-timber beams, glue laminated timber (glu-lams), wood I-joists, PSLs, blocking, bracing, bridging, nailers, furring, cants, anchorage, fasteners, shims, roof sheathing, soffit sheathing, wall sheathing, and floor sheathing, parapet walls, backing, furring, soffit framing, roof rafters, building paper, all sheathing, wood fascia, partition framing etcetera at all buildings.

The General Trade Contractor shall furnish and install **ALL INTERIOR AND EXTERIOR WOOD AND METAL BLOCKING AND BACKING**, including but not limited to, general wood blocking, all roofing blocking and nailers required to form Fascias, Parapets, Rakes, Expansion Joints, etc., as shown on the drawings. This includes furnishing and installing any required anchors, bolts, screws, nails, anchor bolts. Etc. This Contractor is responsible for any approved method to furnish and install anchors for attaching wood to metal or concrete masonry units. This Contractor is responsible for all wood nailers to receive Pre-Manufactured HVAC Curbs at the roof. Additionally, this Contractor shall furnish to the Masonry Contractor any Anchor Bolts that will be installed in Masonry units for the purpose of anchoring any wood products. Include all blocking and backing required to support all items attaching to walls or ceilings throughout the project.

Provide all Firestopping/Safing/Fire/Smoke Sealants including at head and base of walls and at edge of slabs and decks as required to achieve required fire ratings; work includes filling voids & caulking as required. Provide all insulation and sealants to meet code, project documents and applicable requirements.

Include all interior and exterior building caulking and sealants unless specifically noted to be included in another scope. Furnish and install all caulking at dis-similar surfaces/conditions/transitions. Furnish and install all caulking including, but not limited to, caulking at louvers and vents, rails, serving windows, lockers, operable partitions, signage, miscellaneous metal, non-masonry expansion joint covers, overflow drain openings, etcetera per plans and specifications. Include backer rod as required.

Additionally the General Trades Contractor shall furnish and install all Drywall Partitions, Insulation, Clips and/or accessories as required to complete Drywall Partitions types as noted on the Contract Documents including, Smoke, Fire, Acoustical, Architectural and other Sealant and Safing as noted. Fire Safing at Metal Deck/Steel intersection shall be completed by the General Trades Subcontractor. Neoprene Gasket between Drywall Partitions and Exterior Wall Systems shall be provided by the General Trades Subcontractor.

Subcontractor is responsible for all items, including, but not limited to all wall/partition anchors, bolts (including anchor & track bolts), clips, plates, metal stud framing, drywall,

taping and finishing. Furnish, install and finish all gypsum board assemblies including screws, metal trim, resilient channels, sealants and joint-treatment materials. Subcontractor is responsible for all connections of metal stud systems to building steel. Finish drywall to levels indicated on plans and specifications. Include fire taping of all sheetrock. Provide fire caulk to structure as needed. Furnish and install air tight drywall ceiling plenums for mechanical systems. Furnish and install all gypsum board beam and column wraps and associated sealants/fire caulking. Include sheetrock at fire-extinguisher cabinets for fire-ratings. All installed sheetrock, cement board, etcetera must be plumb, line and free of warped planes. Subcontractor is responsible to ensure smooth walls and may use felt/furring strips if necessary to maintain level surfaces. Subcontractor is required to construct walls in compliance with the rating requirements specified or implied on the bid documents. Prepare all surfaces to be finished, include cleaning and sanding. Finished wall shall be flat. Protect floors and other adjoining surfaces from taping mud droppings and spillage of materials. Remove all drips from any finish surface. Furnish and install cement backer board at all tile and FRP areas. Include any required waterproofing behind the cement backer board. Provide all labor, material and equipment to furnish and install the exterior wall framing & sheathing systems including metal studs, track, runner tracks, metal channels, tie wire, pins and fasteners, backing plates, and compression or isolation strips, densglass sheathing, complete per plans and specifications. Provide all labor, material and equipment to furnish and install all metal stud and drywall systems on the interior of building. Include all rated head of wall conditions. Furnish and install cold rolled channel, angle, king studs, header boxes, notch backing and flat strap backing. Furnish and install ceiling suspensions systems for gypsum board ceilings including metal channels, all wire, fasteners, clips, and stiffeners complete per plans and specifications. Furnish and install rated stair cores. Include the installation of top track at all floors prior to any fireproofing of the structural steel. Include all block-out framing, rocking and finishing at locations of mechanical, electrical, toilet accessories and other equipment or items which penetrate metal framed walls and soffits. These items may not be found in the A drawings – refer to entire set of drawings for quantity and locations of penetrations. Frame, drywall and tape around smoke and fire/smoke dampers as required by the product specifications. Furnish and install all high impact gypsum. Also include all abuse resistant gypsum board. Furnish and install all fire rated enclosure systems around all light fixtures recessed in fire rated ceilings. Include all caulking for a complete fire rated system. Furnish and install a gypsum board system or a pre-manufactured enclosure system.

#### **10) Winter Conditions and Temporary Heat:**

The General Trades Contractor shall provide all necessary Winter Conditions and Temporary Heat for his or her work (Interior and Exterior) in accordance with *ACI 530.1-02 / ASCE 6-02 / TMS 602-02* for the duration of the project. Also see the Contract Documents which contains additional requirements for both Cold and Hot Weather conditions.

#### **11) Snow, Ice and Water Removal**

The General Trades Contractor shall be responsible for all snow, ice and water removal from **Interior of the Building** and staging provided by the General Trades Contractor and as directed by the Construction Manager for the duration of the Project. Snow, ice and water removal shall be required on a daily basis as directed by the Construction Manager at its sole discretion. This Contractor shall be responsible to provide whatever means necessary to remove snow, ice and water from the interior of the building including but not limited to pumping, piping and vacuuming.

**12) Sound Attenuation at Mechanical Curbs:**

The General Trades Contractor shall furnish and install all materials and equipment to construct Sound Attenuation Assemblies. This includes, but is not limited to, any framing, sheetrock, insulation, etc.

**13) Hollow Metal Doors, Hollow Metal Door Frames (INSTALL ONLY):**

The General Trade Contractor shall Receive, Handle, Distribute, Set, Protect, Install and Adjust *all* Steel/Hollow Metal Doors, Borrowed Lights, Vision Panels, Hardware, including access doors and panels, including access doors and panels furnished by others. Hollow metal frames contained within Masonry Partitions and Concrete Partitions (if required-openings/forming by Concrete Contractor) shall be set and plumbed by the General Trades Contractor who will work with the Mason/Concrete Contractor to ensure that the frames are blocked with CMU's and grouted properly.

The General Trades Contractor shall make provisions to protect Hollow Metal Frames and Hardware mounting holes, installed by the General Trade Contractor, from damage during grouting operations performed by the Masonry Contractor.

- a. The General Trades Contractor shall make provisions to protect Hollow Metal Frames and Hardware mounting holes, installed by the General Trades Contractor, from damage during grouting operations.
- b. The General Trades Contractor shall prepare all frames to accept all hardware and technology.

**14) Wood Doors (INSTALL ONLY):**

The General Trade Contractor shall install all Wood Doors.

**15) Acoustically Rated Doors (INSTALL ONLY):**

The General Trade Contractor shall Receive, Handle, Distribute, Set, Install Adjust and Protect Sound Control Doors.

**16) Finish Hardware (INSTALL ONLY):**

The General Trade Contractor shall Receive, set, install, adjust and protect all Finish Hardware for this Scope of Work.

Additionally the General Trade Contractor shall also be responsible for the following:

- a.) Complete coordination between all hardware, doors, and frames
- b.) Install all doors, wood and hollow metal, pre-machined and pre-fit for glass lites, louvers, hardware, etc.
- c.) Install all electrified hardware for this Scope or Work including but not limited to electric locks, electric strikes, key cards/readers, electric operators/openers, transformers and any and all necessary accessories as noted on the Contract Documents.
- d.) Coordinate with the Hardware Contractor (BP#8.03) and meet with the Owner to set up the cabinet in an initial meeting and then turnover the key cabinet at a follow-up meeting.
- e.) Install and later remove at the direction of the Construction Manager temporary construction cores for all locksets.
- f.) This Contractor shall install all construction cores and permanent cores in each lockset. The Owner will not be doing ANY of this work.
- g.) This Contractor is responsible for coordinating the Master Key System with the owner including as many meetings as necessary to accomplish this coordination.
- h.) This Contractor will return to the Project (6) months after the date of Substantial Completion to examine, re-adjust, consult, replace hardware items, and prepare a detailed written report to the Owner.
- i.) This Contractor shall install the magnetic door hold open contact plate (furnished by the Electrical Contractor) on doors as noted on the Contract Documents.
- j.) This Contractor shall coordinate the Hollow Metal Frames and Doors to receive the Electrical Contractor's Door Contacts (contacts installed by Electrical Contractor).
- k.) Subcontractor responsible for all shims, sealants and/or backer rods required for door frame installation.
- l.) Install door opening assemblies including associated exit devices, closers, and gaskets complete.
- m.) Include unloading, inventorying, storing, protection, distribution, and installation of all doors, frames and finish hardware. General Trades Subcontractor is responsible for any theft, damage, or other loss to items once items are delivered to the project site.
- n.) Include all adjusting and balancing of doors for proper operation. Include the adjusting and balancing of doors and closers and comply with all applicable codes. Subcontractor shall perform the adjusting and balancing when directed by the Construction Manager in writing to minimize repeat visits and shall submit a report identifying any doors or closers that are not balanced as specified and the reason why.

- o.) Install thresholds, seals, smoke seals, fasteners, door stops, door hold-opens, finish hardware, kickplates, gasketing and weather stripping, sweeps, astragals and door silencers complete.

### **17) Blocking & Backing:**

- a. The General Trades Contractor shall coordinate the Blocking requirements for the Work of the Window, Glazing and Storefront Trades Contractor.
- b. Any Blocking indicated on the Contract Documents or as required by the window and storefront manufacturer and the Window, Glazing and Storefront Contractor shall be furnished and installed by the General Trades Contractor.
- c. The blocking coordination responsibility amongst this Contractor and General Trades Contractor shall be ongoing for the duration of the project.
- d. The Window, Glazing and Storefront Contractor shall provide all Clip Angles, Steel Angles, Furring Channels, Miscellaneous Metal Framing and Shims to complete installation of the Windows and Storefronts before and after the General Trades Contractor has provided coordinated Blocking.

**The General Trade Contractor shall furnish and install ALL WOOD AND METAL BLOCKING AND BACKING required by the Contract Documents.** Wood Blocking shall include, but not be limited to, plywood blocking, furring, dimensional lumber and any and all wood required by the contract documents indicated for the purpose of blocking for any and all trades. The General Trades Contractor shall prepare a blocking location plan and conduct all required meetings in the presence of the Construction Manager. The blocking location plan shall be signed off by all trades requiring blocking (including the Architect for FF&E). Metal backing or blocking can only be used in lieu of specified wood backing or blocking if approved in writing by the Architect and Construction Manager.

### **18) Plywood Sheathing:**

The General Trade Contractor shall provide all plywood sheathing throughout the project except for the following:

- a. The Roofing Subcontractor shall provide plywood sheathing where: (1) plywood sheathing is directly fastened to the Roof and or Canopy Metal Deck; and (2) plywood sheathing is directly fastened to roofing insulation.

### **19) Backboards:**

The General Trade Contractor shall provide all Electrical/Mechanical/Communication and other Backboards and as described in the Specification and as shown on the Contract Drawings. This Contractor shall provide **thirty (30) additional four foot x eight foot 3/4"**

plywood backboards in addition to what is required by the Contract Documents. All plywood for backboards shall be fire rated plywood and labels shall not be covered.

## 20) Architectural Louvers, Grilles and Vents

This Contractor shall provide and install **ALL** Architectural Louvers/Grilles/Vents.

- a. The General Trades Contractor shall provide “Architectural Louvers” only.
- b. All other louvers, grilles and the like shall be the responsibility of the Mechanical Contractor.
- c. The Mechanical Contractor shall be responsible for all final connections to the Architectural Louvers provided by others.
- d. The General Trades Subcontractor shall block out areas behind louvers not needed for the free air requirements as indicated for louvers included in this scope.

## 21) Substrates:

The General Trade Contractor shall prepare drywall substrate so that they meet or exceed the requirements of the specification for the final finishes. The Substrate shall meet or exceed flatness, Levelness and/or surface texture required.

## 22) Inspections:

The General Trade Contractor shall be responsible for properly coordinating and scheduling all inspections with the Construction Manager including but not limited to framing, insulation and other inspection that may be required in the execution of his or her Scope of work by the Authority having Jurisdiction.

## 23) Expansion Joints:

The General Trade Contractor shall furnish and install all **interior and exterior** floor, wall and ceiling expansion joint assemblies as shown on the contract documents.

## 24) Saddles, Thresholds and Sills (INSTALL ONLY):

The General Trades Contractor shall install all saddles, thresholds and sills that are a component of your assembly.

## 25) Proper Manpower Management:

The General Trades Contractor shall have figured in their bid price multiple crews to perform the work of this bid package but not limited to; work both interior and exterior framing simultaneously in addition to separate crews for other work such as, but not

limited to; installing gypsum, interior/exterior wall panels, taping and ceiling installation to meet the project schedule.

## **26) Floor Recesses:**

The Concrete Contractor, General Trade Contractor and Flooring Contractor shall coordinate all recess in any concrete slab as required for floor finishes.

## **27) Temporary Entrance Doors and Exterior Openings:**

This Contractor shall be responsible for enclosing the entire building with temporary protection, as described herein, during its demolition process:

- At **ALL exterior door** (ie. Aluminum, Hollow Metal, etc.) locations this Contractor shall include in his or her bid proposal the cost to provide and eventually remove and dispose temporary [exterior grade wood doors] with heavy duty locks and keys, all other necessary hardware, partition walls at these locations only, and closers. Temporary enclosures shall be free of drafts utilizing a method acceptable to the Construction Manager.
- At **ALL exterior punched openings** (ie. Window, Curtainwall, Storefront, Louvers, Coiling Doors, Roof Openings) this Contractor shall provide and eventually remove and dispose closing in of using weather/wind-tight enclosures [2x4 wood-framed heavy-duty-reinforced-clear-plastic barriers] acceptable to the Construction Manager. Temporary enclosures shall be free of drafts utilizing a method acceptable to the Construction Manager.
- At **ALL open facades** (ie. Building B & C Shop Wings, Openings Created as a Result of Structure Demolition, etc), the Contractor shall provide and eventually remove and dispose closing in of using weather/wind-tight enclosures [2x6 wood-framed heavy-duty-reinforced-clear-plastic barriers] acceptable to the Construction Manager.

This Contractor shall be responsible for security of the building with temporary doors, chains, locks, etc. Any associated cost shall be included in their base bid (distribution of 10 Sets of keys free of charge as directed by the Construction Manager.) Provide and eventually remove and dispose temporary doors with permanent door rating and lockset to mechanical room, electrical rooms, electrical closets, elevator machine room, switch-gear room(s), as directed by the CM. All temporary doors shall have closers and locks on them.

This Contractor shall provide and eventually remove and dispose Six (6) access locations (at upper levels) for access of temporary works into the building by others and for general access to load the upper floors as work progresses.

This Contractor shall be responsible on a daily basis to secure all access points to the building at the direction of the Construction Manager.

**28) Temporary Heating and Cooling:**

The patching of holes in partitions made as required for Temporary Heating and Cooling is to be patched by the General Trades Contractor for drywall and the Masonry Contractor for masonry.

**29) Temporary Power:**

The patching of holes in partitions made for Temporary Power shall be provided by the General Trades Contractor for drywall and the Masonry Contractor for masonry.

**30) Construction Ventilation:**

The General Trades Contractor shall be responsible for providing Six (6) Five Foot (5') diameter hi-speed, heavy duty portable fans for the duration of the Project. This includes setting up, locating, moving as needed, plugging or wiring as needed and maintaining at all times during this duration.

**31) Architectural Joint Systems:**

The General Trade Contractor shall furnish and install all Architectural Joint Systems Assemblies and expansion joints that are to be incorporated into this Scope of Work.

**32) Minor Work/Provisions:**

The General Trades Contractor shall carry in their base bid **240 hours of carpentry hours with small tools to perform additional minor work directed by the Construction Manager.**

The General Trades Contractor shall carry in their base bid **240 hours of laborer hours with small tools to perform additional minor work directed by the Construction Manager.**

The General Trades Subcontractor shall provide **2 hr fire separation walls with a total one-sided area of 7,200 total square feet and 5 pairs of double doors and panic hardware at locations to be specified by the Construction Manager.** General Trades Subcontractor shall also include code compliant temporary exit signage at these door locations. Include removal of these items and patching the adjacent surfaces as directed by the Construction Manager.

**33) Man Lifts:**

The General Trades Contractor shall allow use of its man lifts by the Construction Manager and others for inspection purposes and as directed by the Construction Manager. Provide training and any necessary safety equipment.

### **34) Fire Extinguishers and Cabinets:**

The General Trades Contractor shall provide all Fire Extinguisher Cabinets and Permanent Fire Extinguishers as noted on the Contract Documents.

### **CLARIFICATIONS**

a.) The General Trades Contractor shall:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet C-19 Notes For Irrigation 2 – Include backboard for irrigation controller.
- 3) Sheet D-105 – Include new hatch and cover for concrete structure project north of existing Culinary Kitchen and coordinate with Cast In Place Concrete Subcontractor.
- 4) Structural (“S”) Drawings – Furnish and install all metal stud framing work in the structural drawings and throughout the rest of the drawings.
- 5) Sheet S-100 – Include all of the work described under the Cold Formed Metal Framing Notes. Provide all shoring necessary for this scope of work as indicated under General Note 4.
- 6) Sheet S-220 Detail 5 – Include all of the metal stud framing shown.
- 7) Sheet S-301 Detail 2 – Include all wood nailers to receive Pre-Manufactured Curbs.
- 8) Sheet S-320 – Include all of the metal stud framing shown throughout this project and on this sheet. Include all clips that connect to metal studs and include all drilling, doweling and epoxying for metal stud attachment.
- 9) Sheet S-321 - Include all of the metal stud framing shown throughout this project and on this sheet. Include all clips that connect to metal studs and include all drilling, doweling and epoxying for metal stud attachment.
- 10) Sheet S-322 - Include all of the metal stud framing shown throughout this project and on this sheet. Include all clips that connect to metal studs and include all drilling, doweling and epoxying for metal stud attachment. Include all plywood sheathing and nailers.
- 11) Sheet A-101.1 Typical – Complete all work described under Construction Note 12 relating to the elevator system.
- 12) Sheet A-101.3 – Furnish and install all goggle cabinets throughout the project including the goggle cabinets in the science classroom labs.
- 13) Sheet A-102.2 – Furnish and install floor hatch in Carpentry B-108.
- 14) Sheet A-103.2 – Include all replacement/repair work at the existing bleachers. Move the bleachers as required to facilitate the replacement/repair of the existing bleachers.

- 15) Sheet A-110.0 – Furnish and install replacement Tectum and formed gypsum roof decks as indicated. Provide a credit for work not completed as indicated.
- 16) Sheet A-110.1 & A110.2 – Patch and infill all Tectum, gypsum, concrete and steel roof decks as indicated. Include all metal studs, sheathing and insulation assemblies at existing louver vents.
- 17) Sheet A-549 Detail 2 – Include maple glulam media center entrance system. Include stamped shop drawings as indicated
- 18) Sheet EQ-101 – Install all general related equipment indicated to be owner furnished and contractor installed. Install the following items:
  - a. Shop Equipment Schedule – Automotive Production Shop
    - i. Item 14 – Welding Bench
    - ii. Item 19 – Metal Shelving
    - iii. Item 29 – Work Bench
    - iv. Item 32 – Welding Bench
    - v. Item 33 – Drill Press
    - vi. Item 34 – Pedestal Grinder
- 19) Sheet EQ-101 – Furnish and install all general related equipment and work indicated to be contractor furnished and contractor installed. Furnish and install the following items:
  - a. Shop Equipment Schedule – Automotive Production Shop
    - i. Item 23 – Welding Curtain
    - ii. Item 27 – Flammable Storage Cabinet
    - iii. Item 28 – Tool Storage Cabinet With Doors
    - iv. Item 35 – Germicidal Goggle Cabinet
- 20) Sheet EQ-102 – Install all general related equipment indicated to be owner furnished and contractor installed. Install the following items:
  - a. Shop Equipment Schedule – Electrical
    - i. Item 6 – Storage & Tool Cabinet – **ADD. NO. 1**
    - ii. Item 11 – Drill Press
    - iii. Item 12 – Grinder
  - b. Shop Equipment Schedule – Carpentry
    - i. Item 32 – Tool Storage Cabinet Or Industrial Shelving – **ADD. NO. 1**
- 21) Sheet EQ-102 – Furnish and install all general related equipment indicated to be contractor furnished and contractor installed. Furnish and install the following items:
  - a. Shop Equipment Schedule – Electrical
    - i. Item 15 – Flammable Storage Cabinet
    - ii. Item 18 – Germicidal Goggle Cabinet
  - b. Shop Equipment Schedule – Carpentry
    - i. Item 30 – Flammable Storage Cabinet
    - ii. Item 33 – Germicidal Goggle Cabinet
- 22) Sheet EQ-103 – Furnish and install all general related equipment indicated to be contractor furnished and contractor installed. Furnish and install the following items:
  - a. Shop Equipment Schedule – Plumbing
    - i. Item 6 – Welding Curtain
    - ii. Item 20 – Flammable Storage Cabinet

- iii. Item 30 – Germicidal Goggle Cabinet
  - b. Shop Equipment Schedule – Graphics
    - i. Item 15 – Flammable Storage Cabinet
- 23) Sheet EQ-103 – Install all general related equipment indicated to be contractor furnished and contractor installed. Install the following items:
- a. Shop Equipment Schedule – Plumbing
    - i. Item 9 – Welding Bench
    - ii. Item 11 – Work Bench
    - iii. Item 12 – Tool Storage Cabinet
    - iv. Item 16 – Work Bench
    - v. Item 17 – Drill Press
    - vi. Item 18 – Pedestal Grinder
    - vii. Item 19 – Plasma Cutter
- 24) Sheet EQ-106 – Furnish and install all general related equipment indicated to be contractor furnished and contractor installed. Furnish and install the following items:
- a. Shop Equipment Schedule – Manufacturing
    - i. Item 40 – Germicidal Goggle Cabinet
    - ii. Item 42 – Flammable Storage Cabinet
  - b. Shop Equipment Schedule – Cosmetology
    - i. Item 5 – Flammable Storage Cabinet
    - ii. Item 8 – Pedicure Station
- 25) Sheet F-003 – Include patching at temporary FDC location as required for this scope of work.
- 26) Sheet E-001 Note 37 - Furnish and install plywood in all electrical and data rooms and as noted.
- 27) Patch existing plaster work in all A Wing locations including as shown in detail 1/A502.
- 28) Include temporary protection at C Wing where culinary area is demolished. Also include it where roof gets removed and replaced at C Wing.
- 29) All doors, windows, walls, and other assemblies must comply with specified STC ratings including the ratings indicated on drawing INFO.1
- 30) Include blocking for smart boards and other owner furnished and installed equipment.
- 31) Remove and reinstall stairs for access in kitchen tunnel per sheet P003.1.
- 32) Include the careful removal of the existing science lab teacher and student work stations including the chemical resistant tops and casework below and relocate to the two temporary lab spaces as directed by the Construction Manager. Demolish and remove the lab stations when the temporary labs are no longer needed as directed by the Construction Manager.
- 33) Provide all labor, materials, tools, equipment and services necessary to furnish and install all stage curtain systems and studio curtain systems. Include the track, pulleys, blocks, cable, supports, curtain, clamps, brackets, fasteners and all accessories. Ensure curtain is installed level and plumb and operation of curtain is satisfactory to the Construction Manager. Submit shop drawings for approval. Include owner training for the system.
- 34) Provide all labor, materials, tools, equipment and services necessary to furnish and install all interior athletic equipment including basketball backstop and goal systems,

- wall pads with concealed clips, scoreboard with wireless controls, and shot clocks with wireless receivers. These are complete systems. Furnish volleyball floor sleeves and volleyball posts with net and net antennas. Submit shop drawings for approval. Setup all equipment and provide training to the owner to operate all equipment. This includes setup of the volleyball post and net system and verification that all installed equipment conforms to the specifications and all referenced tolerances.
- 35) Furnish and install wood soffits and tongue and groove including soffit vents and screens.
  - 36) Include any calculations and shop drawings prepared and stamped by a qualified professional engineer required for this scope of work. Include professional engineering for specification section 054000, 074213, 089000, 116623 and all other sections as it relates to this scope of work.
  - 37) Provide all access doors and panels shown in the drawings and required for this scope of work. Install all access doors and panels for this scope of work and install all access doors and panels provided by other trades. The Construction Manager shall select the manufacturer of the access doors and panels from a manufacturer listed in the specifications for all trades to use, so a single manufacturer is used throughout the project.
  - 38) The acoustical rated doors shall be installed by factory-trained or approved representatives or contractors as indicated in the specifications.
  - 39) Furnish and install all back mounted acoustical panels.
  - 40) Furnish and install all sanitizing eyewear cabinets, goggle cabinets, fire blankets and cabinets, flammable liquids storage cabinets, corrosive material storage cabinets, and "Knox Box" units.
  - 41) Furnish and install all visual display surfaces including the markerboards and tackboards.
  - 42) Furnish and install all display cases.
  - 43) Furnish and install all cubicle curtains, tracks and curtain carriers.
  - 44) Furnish and install all wire mesh partitions.
  - 45) Furnish and install all portable fire extinguisher systems including fire extinguishers, cabinets, and mounting brackets.
  - 46) Furnish and install all loading dock equipment.
  - 47) Furnish and install all projection screens including motorized projection screens. Provide key operated switches and all accessories for the motorized projection screens and coordinate with Electrical Subcontractor for wiring. Include training on how to operate and maintain the system on two separate days as directed by the Construction Manager
  - 48) Furnish and install stage curtains and valance and studio curtain systems. Include shop drawings for stage curtains and valance. Include training on how to operate and maintain the system on two separate days as directed by the Construction Manager.
  - 49) Furnish and install all gymnasium equipment including basketball equipment and wall mounted safety pads. Furnish and install motors for basketball goal systems and furnish all switches for installation by the Electrical Subcontractor.
  - 50) Furnish and install all gymnasium scoreboard systems. Include training on how to operate and maintain the system on two separate days as directed by the Construction Manager.

- 51) Coordinate the installation of all recessed door contacts and card readers with the owner's security consultant and the Construction Manager before proceeding with the work. Refer to the SEC drawings.
- 52) Include all floor door access. Furnish and install.
- 53) Furnish and install all welding curtains and support rods and welding tables.
- 54) Install all owner furnished tool storage cabinets.
- 55) ALL DUMPSTERS are to be provided by the General Trades Contractor except for:
  - a. BP#1.01 Site Preparation\*;
  - b. BP#2.01 Demolition & Abatement\*;
  - c. BP#31.04 Athletic Fields\*;
  - d. \*These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.
- 56) Furnish and install all window shades and window coverings.
- 57) Furnish and install new volleyball sleeve covers noted in the drawings.
- 58) Subcontractor shall furnish and install all lockers as required including all associated hardware, sealants, base, hooks, shelves, numerals, sloping tops, panels and trim accessories. Furnish shop drawings for approval prior to fabrication. Installation to be neat and level. Provide touch-up paint as extra material. Furnish and install benches and pedestals at lockers.
- 59) Provide layout of locker bases for the Concrete Subcontractor.
- 60) Ceramic tile cladding described in specification section 074423 to be completed by bid package 6.01 General Trades. – **ADD NO. 1**

### Wheelchair Lift Clarifications

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet A-103.2 – Re-wire existing wheelchair lift near stage to make lift operate without the use of keys and plug existing keyholes as indicated.
- 3) Sheet A-101.2 – Furnish and install a complete wheelchair lift system in Building A as indicated.
- 4) Provide all labor, materials, tools, equipment and services necessary to furnish and install complete wheel chair lift systems.
- 5) Furnish and install wheel chair lift interiors.
- 6) Furnish and install flooring for lifts.
- 7) Include all costs and coordination associated with the inspection and permits of the wheel chair lifts.
- 8) Furnish all inserts and embeds required for installation.
- 9) All lift interior and exterior dimension are to be in accordance with the plans, specifications and applicable codes.
- 10) Furnish and install life/safety and accessibility signage at wheelchair lift per plan and specifications.
- 11) Include all required programming, balancing and adjusting.
- 12) Furnish and install lift sills and grouting of sills.
- 13) Provide OSHA compliant removable temporary barriers during installation of lift.

- 14) Include operation and maintenance manual per the specifications.
- 15) Include all electrical terminations for the electrical power provided by the Electrical Subcontractor.
- 16) Include all samples, shop drawings, and other submittals required per the specifications. All submittals must be submitted to Construction Manager within 60 calendar days after issuance of the contract or notice to proceed.
- 17) Include all inspections and permits required.
- 18) Include a two year warranty period and 1 year full maintenance service beginning from the date of substantial completion as indicated in the specifications. Check the operation of the lift with the Owner's personnel present before the warranty period is over but no earlier than 1 month before the end of the warranty period and address any warranty issues.
- 19) Include owner training to maintain and use the lift on two separate occasions as directed by the Construction Manager.

**EXCLUSIONS:**

- 1) Sale and Use Taxes.

**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 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.

**ALLOWANCE NO. 1 – TEMPORARY COVERED WALKWAYS - \$20,000**

Provide safe covered temporary egress paths as directed by the Construction Manager.

**EXHIBIT “B”  
SCOPE OF WORK**

**Bid Package #9.01  
Ceramic & Terrazzo Tile**

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR**

**THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:**

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Ceramic & Terrazzo Tile** 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 **Ceramic & Terrazzo Tile** 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 Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

**SCOPE OF WORK**

- 1) **BID PACKAGE #9.01 – Ceramic & Terrazzo Tile:** 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 **Ceramic & Terrazzo Tile** 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:

**Project Manuals:**

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

**Specification Sections of the Project Manuals:**

Include all work for all specifications 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.

033000 Cast-In-Place Concrete (As Applicable)

**ADD. NO. 1**

078443 Fire Resistive Joint Systems (As Applicable)

079200 Joint Sealants (As Applicable)

093113 Access Doors and Frames (As Applicable)

**093013 Ceramic Tile**  
**096616 Terrazzo Tile**

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

**Schedule of Drawings:**

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

**2) 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 sections:

Terrazzo Tile; Ceramic Tile; Quarry Tile; Stone and Marble Thresholds, Edge strips; Reducer Strips; Setting Materials and/or Adhesives; Grout; Bonding Agents; Mesh; Crack Isolation Membranes; Epoxy Grout; Flash Patching/Leveling; Expansion Joint Materials; Mixes; Transition/Reducing Strips; Expansion; Trim Pieces; All Accessories; Extra Materials; Cleaning and Protection and Final Sealing; All Guarantees and Warranties; Coordination with project schedule and other Trades; Submittals and Samples; Product Data as described in the Contract Documents.

### **3) Phasing:**

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

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. Shop Drawings will only be reviewed by phase. 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.

### **4) Temporary Protection:**

This Contractor shall provide and maintain floor protection as directed by the Construction Manager until final cleaning.

### **5) Preparation and Acceptance of Substrate:**

This Contractor is responsible for all floor and wall preparation that is required to bring the substrate up to compliance with manufacturer's standards for the installation of materials under this Bid Package. This requirement shall also include, but not be limited to, any additional prep that may be required at floor boxes, plumbing drains, cleanouts, small cracks, small depressions/chips or other floor penetrations made by other Contractors. Also, provide floating at walls as needed to ensure smooth/flat wall surfaces.

This Contractor shall review the Specification, including but not limited Cast In Place Concrete, as it is related to all finished flooring and verify that the substrate and substrate finish anticipated is achievable and it will not affect the installation of any floor finish and base within This Contractor's Scope of Work. It is the responsibility of This Contractor to coordinate all curing and sealing compounds with the Concrete Contractor to verify compatibility with all flooring adhesives and installation methods. This Contractor shall notify the Construction Manager of any conflicts or deficiencies 30 calendar days prior to placing of any slabs. Failure to notify the Fusco Corporation of any deficiencies shall be construed as acceptance of substrate conditions.

This Contractor shall also include in the Contract Value all necessary Flash Patching and buffing to level and to fill depressions and or imperfections in the substrate to which the floor finishes are to be applied. Additionally This Contractor shall provide all necessary Flash patching at transitions from one floor finish to the other.

This Contractor shall examine and verify in writing that the concrete slab is dry according to test methods recommended by the appropriate flooring manufacturer.

This Contractor shall also examine and verify in writing that the concrete slab is in accordance with manufactures requirements for level and flatness when measured with a ten foot straight edge with a maximum deviation of 1/8".

This Contractor shall include all costs to perform testing for adhesion and moisture and pH levels at least 30 days prior to installation as detailed in the contract documents at all new and existing locations. All data and reports shall be reported to the Construction Manager. If the results are too high for the installation of flooring, then this Contractor and the Construction Manager shall implement and execute a plan of remedial measures to make the slab moisture content acceptable.

**6) Cementious Underlayment/Flash Patching:**

This Contractor shall provide all necessary Crack Isolation Membrane/Cementious Underlayment/Flash Patching and Buffing to fill depressions and or imperfections in the substrate to which the floor finishes are to be applied. Additionally, this Contractor shall provide all necessary flash patching at transitions from one floor finish to the other.

**7) Mechanical / Plumbing / Electrical / Communications Coordination:**

This Contractor shall coordinate devices and the like with appropriate Contractor and shall flash patch to these floor penetrating items.

**8) Finish Schedule:**

All finishes shall be in accordance with the Finishes Schedule, Drawings and Specifications, any conflicts between the above, the most restrictive, greatest quantity and highest quality shall prevail.

**9) Freezer / Cooler Floor Finish:**

This Contractor shall provide the floor finish in the Freezer / Cooler as noted on the Contract Documents which shall be, unless otherwise noted, quarry tile similar to that which is to be installed in the main Kitchen area.

**10) Saddles, Thresholds, Trim and Sills:**

This Contractor shall provide all marble and stone thresholds and all trim at tile wall or floor transitions.

**11) Installation and Protection:**

This Contractor shall provide adequate ventilation during the performance of this work and shall include but not be limited to portable fans if necessary

This Contractor shall provide and maintain barriers and protection to prevent other Contractors from damaging finished work during and after the installation period.

This Contractor shall include in the contract value minimum protective measures as follows:

<b>Over Ceramic &amp; Quarry Tile</b>	<b>Two Layers Of 40# Reinforced Kraft Paper (or equal) With Tape</b>
<b>Terrazzo</b>	<b>One Layer Of 40# Reinforced Kraft Paper (or equal) With Tape Under 1/8" Thick Masonite Hardboard</b>

This Contractor shall remove and dispose of the Flooring Protection measures when directed by the Construction Manager, at its sole discretion.

This Contractor shall provide transition strips at dissimilar materials.

This Contractor is responsible for all layout patterns for wall and flooring work to be installed under this bid package and shall be reviewed by the Architect and Construction Manager prior to installation.

**12) Floor Recesses:**

The Concrete Contractor, General Trades Contractor and Flooring Contractor shall coordinate all recess in any concrete slab as required for floor finishes.

### **13) Floor Sealing:**

In addition to that as noted on the Contract Documents, this Contractor shall also provide the following:

- a.) Comply with manufacturer's instructions for cleaning operations.
- b.) This Contractor shall broom, vacuum and mop clean all flooring surfaces under this Scope of Work prior to sealing.

### **CLARIFICATIONS**

This Contractor shall:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Sheet A-803.2 – Install ceramic tiles provided by artist as indicated.
3. Provide extra stock at the completion of the project per project specifications.
4. Sheet FS-5 – This Contractor shall install the floor trough drain as furnished by the Food Service Equipment Subcontractor.
5. Ceramic tile cladding described in specification section 074423 to be completed by bid package 6.01 General Trades. – **ADD NO. 1**

### **EXCLUSIONS**

- 1) Sale and Use Taxes.

### **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 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.

**EXHIBIT “B”  
SCOPE OF WORK**

**Bid Package #23.01  
Plumbing & HVAC**

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR**

**THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:**

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Plumbing & HVAC** 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 **Plumbing & HVAC** 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 Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

**SCOPE OF WORK**

- 1) **BID PACKAGE #23.01 – Plumbing & HVAC:** 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 **Plumbing & HVAC** 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:

**Project Manuals:**

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

**Specification Sections of the Project Manuals:**

Include all work for all specifications 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.

078413 Through-Penetration Firestop Systems (As Applicable)  
079200 Joint Sealants (As Applicable)

083113 Access Doors and Frames (As Applicable)

114000 Food Service Equipment (As Applicable)  
123553 Wood Laboratory Casework And Furnishings (As Applicable)  
123570 Healthcare Casework (As Applicable)

Division 21 Fire Suppression (As Applicable)

**Division 22 Plumbing**  
**Division 23 Mechanical**

**230500 Demolitions And Removals (As Applicable)**

Division 26 Electrical (As Applicable)  
Division 27 Communications (As Applicable)  
Division 28 Electronic Safety and Security (As Applicable)  
Division 31 Earthwork (As Applicable)  
Division 32 Exterior Improvements (As Applicable)

328000 Irrigation System (As Applicable)

Division 33          Utilities (As Applicable)

Commissioning (note included in 019100, DIV 1)

**Schedule of Drawings:**

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

**2) 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 sections:

**All Plumbing and Mechanical Demolition throughout existing buildings and tunnels;**

All Service from five feet outside building into the building unless otherwise noted in the Clarifications Section of this Scope of Work; Plumbing; Heating, Ventilating and Air Conditioning; Supply Connections to equipment of other trades and/or furnished by Owner; Connections to Food Service Equipment and components; Kiln Fume Hoods (including all service connections); Power and Control Wiring beyond the Main Disconnect; Grilles, Registers and Diffusers; Automatic Temperature Control Systems; Installation of equipment furnished by Owner; Access Doors, Motors, Variable Frequency Drives (VFDs), Starters and Disconnects; Hangers, Anchors, Pipe and Duct supports; Cleaning, Lubrication, Testing, Balancing and Adjusting; Coordination Drawings; Record Drawings; Operating and Maintenance Manuals; Instructions; Tests on: all system under your Scope of Work; Commissioning; Coordination with project schedule and other trades; Submittals, Samples, Product Data and etc.

Radiant Panels; Interior and Exterior and including under slab Gas Piping Systems; Condensate Piping; Heating Systems; Cooling Systems; HVAC Piping (HWS+HWR+CWS+CWR); HVAC Pumps; Chemical Water Treatment; Complete Heating Boilers and Accessories; Refrigeration Piping; Air Handling Units; Packaged Air Conditioning Units; Thermal Heat Transfer Units; Fans; Ductwork; Sound Attenuators; Air terminal Units; Air Outlets and inlets; HVAC Control System; Testing, Adjusting, Balancing; Vibration Isolation; Insulation; Pipe and Pipe fittings; Radon Piping; Chemical Water Treatment; Hydronic Piping (excluding excavation and backfill); Motors and Starters; Venting System; Gas Systems; Gas Piping; Accessories and all final connections; Connections and Support systems for Equipment furnished by others; Hanger and Supports; Valves; Pipes; Drains; Vibration Control; Pumps and Controls; Coordination

Drawings; Core Boring; Firestopping and Through-Penetration Firestop Systems and Joint Sealants for your scope of work; Mechanical Connections to Equipment provided by others. Mock-ups; Submittals; Product Data and Samples and Etc; Record Drawings; Identification Tags and Drawings; Operating and Maintenance Instructions; Testing; Adjusting; and Balancing; Commissioning; support of Commissioning Agent. The Plumbing and HVAC Contractor shall provide starters and disconnects for fans; pumps; motors; equipment and etc.; provided under your scope of work; unless specifically noted to be furnished by others. Interconnecting wiring (including controls) shall be the responsibility of the Plumbing and HVAC Contractor, as noted on the Contract Documents.

All Plumbing Work; Sanitary Piping Systems; Venting Systems; Waste Systems; Domestic Water Piping; Piping Systems; Storm Piping Systems; Trap Primers and Cleanouts; Water Hammer Arrestors; Plumbing Fixtures and Accessories; Plumbing Equipment; Domestic Water Heater Equipment and Accessories; Vibration Isolation; Insulation; Pipe and Pipe fittings; Motors and Starters; Storm and Roof Drainage Systems; Temporary Roof Drains; Domestic Hot and Cold Water Systems; Fire Service Water Service; Connections and Support systems for Equipment furnished by others; Hangers and Supports; Insulation; Valves; Pipes; Drains; Water Heating Equipment; Vibration Control; Pumps and Controls; Hose Bibbs and Wall Hydrants; Miscellaneous Plumbing Specialties; Coordination Drawings; Core Boring; Down Spout Nozzles; Firestopping and Through-Penetration Firestop Systems and Joint Sealants for your scope of work; Mechanical Connections to Equipment provided by others. Mock-ups; Submittals; Product Data and Samples and Etc; Record Drawings; Identification Tags and Drawings; Operating and Maintenance Instructions; Testing and Commissioning

The Plumbing Contractor shall provide starters and disconnects for fans; pumps; motors; equipment and etc.; provided under your scope of work; unless specifically noted to be furnished by others. Interconnecting wiring (including controls) shall be the responsibility of the Plumbing Contractor, as noted on the Contract Documents.

### **3) Phasing:**

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

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. Shop Drawings will only be reviewed by phase. 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.

**4) Plumbing and HVAC Demolition:** This Subcontractor shall be responsible to remove and properly dispose of all **Plumbing and HVAC** installations as indicated on the Contract Documents. This Subcontractor shall also be required to cap all existing utilities services at the interface of the building to be demolished and the existing building interface. It is the intent of the Contract Documents that this subcontractor coordinate systems, so that, they remain active during the construction and renovation of this phased project. This includes temporary measures and expansion of existing systems required for occupancy in occupied areas of the building. Include all temporary work required including but not limited to all cutting, capping, rerouting, adding new and interconnecting piping, ducting, control wiring, devices, and equipment to maintain all existing mechanical and plumbing services. Existing systems shall not be demolished until new systems are running for existing buildings to remain. All parts of existing systems not to be part of the permanent systems shall be demolished.

- a. This Subcontractor shall identify and mark Plumbing and HVAC systems to be demolished as per the Contract Documents and in accordance with the Phasing Plan (Document 000926).
- b. This Subcontract shall cut, cap and drop the system identified to be removed.
- c. Removal and proper disposal shall be by the Demolition and Abatement Contractor (Bid Package 2.01).
- d. This Subcontractor shall be responsible to remove and properly dispose of the existing HVAC Rooftop Units.
- e. This Subcontractor shall be responsible to remove and properly dispose of the existing Steam Boilers.

**5) Electrical Connections for Equipment:**

- a. The Electrical Contractor shall provide single source line voltage to all equipment provided within this project for all trades unless specifically noted otherwise.
- b. Starters, variable frequency drives (VFDs), Disconnects Low Voltage and Control Wiring including control voltage transformers shall be provided by the Plumbing and HVAC Contractor for all of your equipment, unless specifically noted to be provided by the Electrical Contractor.
- c. The Electrical Contractor shall provide line voltage to only those the Temperature Control Panels indicated or shown on the Contract Documents.
- d. Power for additional Temperature Panels provided by the Plumbing and HVAC Contractor shall be the responsibility of the Plumbing and HVAC Contractor.
- e. Failure to notify the Fusco Corporation of any discrepancies shall be construed as acceptance of the condition.

**6) Seismic Bracing:**

- a. This Subcontractor shall furnish and install all seismic bracing as required and indicated in the Contract Documents.
- b. This Subcontractor shall furnish and install all flexible joint assemblies associated with any mechanical restraint collars as indicated in the Contract Documents.

**7) Temporary and Permanent Heating and Cooling:**

- a. The Plumbing and HVAC Contractor shall utilize both Temporary and Permanent Cooling and Heating Equipment for Temporary Cooling and Heating subject to the approval of the Construction Manager, in its sole discretion. Subcontractor to provide all temporary heating and cooling as required and specified below.
- b. All Temporary Heating and Cooling requirements are per the Project Schedule and Phasing Plan (Document 000926).
- c. The Plumbing and HVAC Contractor shall provide a compatible **temporary low pressure steam boiler** to run the existing steam heating systems for all areas not under construction as indicated in the phasing plan. The temporary boiler must have sufficient capacity (200 Horsepower minimum) to service the areas not under construction. Include all rental, transport, start-up, adjustment, service, temporary piping, inspection, permitting, controls and connection costs with the existing system and temporary utilities for a complete functioning system. It is critical that the temporary boiler system be reliable and Subcontractor must have all necessary service agreements, replacement parts on hand and service technicians available to repair any issues within eight (8) hours. A replacement temporary boiler must be delivered and connected within eight (8) hours of the temporary boiler going off-line if repairs can't be made. A temporary boiler of sufficient capacity must be operating during the winter heating season (October 1 to May 1). Include gas piping of sufficient capacity for the temporary boiler.
- d. The Plumbing and HVAC Contractor shall provide all labor and materials to connect temporary ductwork and all of its components and necessary accessories, including but not limited to hangers, insulation, dampers, vents, from the **exterior located temporary construction heating units (as described in the Allowance under this Bid Package)** with risers to all floors. The temporary ductwork shall be extended down hallways and into individual rooms to maintain distribution of the required minimum temperature. The system shall be fully functional to the approval of the Construction Manager, in its sole discretion. Sufficient temperature for temporary heating shall be a minimum ambient temperature of 55 degrees Fahrenheit.

- e. The Plumbing and HVAC Contractor shall provide Cooling / Humidity Control with **New Permanent Cooling System** during the summer cooling season (May 1 thru October 1). Sufficient temperature for temporary cooling shall be a maximum ambient temperature of 78 degrees Fahrenheit and a maximum relative humidity of 50 percent.
- f. The Plumbing and HVAC Contractor shall provide **all temporary control wiring** for its temporary heating and cooling systems. At a minimum, thermostat controls shall be provided in a quantity (one per floor per unit) and location (remote from Units), as approved by the Construction Manager, to accommodate an evenly distribution of temporary heating and cooling.
- g. All necessary Equipment, Temperature Controls, Plumbing, Safety Controls that may be required shall be installed and operational prior to requesting approval to utilize the permanent heating or cooling system.
- h. The Plumbing and HVAC Contractor shall provide **temporary filters at all return ducts as required** and at the sole discretion of the Construction Manager, changed at weekly intervals, so as not to allow the migration of construction dirt and dust.
- i. When the **Permanent Cooling System** is utilized for Temporary Cooling, the Plumbing and HVAC Contractor shall be responsible for the maintenance, repair, refurbishing and extension of all required warranties of the HVAC Equipment (including temporary connections).
- j. **Power Consumption** cost (**Usage Only**) to operate the **Permanent Cooling System** shall be by others.
- k. **Fuel Consumption** cost (**Usage Only**) to operate the Temporary and **Permanent Heating System** shall be by others.
- l. The Plumbing and HVAC Contractor shall take adequate precautions to prevent any Damage from occurring to the **Permanent Heating and Cooling Equipment** while providing Temporary Heating and Cooling.
- m. All system filters for liquid or air shall be routinely replaced as required by maintenance intervals, written in the O & M Manuals.
- n. All permanent Plumbing and HVAC Systems and Components utilized for Temporary Heating and Cooling shall be **completely serviced, vacuumed, cleaned and turned over in "As New" condition** prior to acceptance by Owner.
- o. All Plumbing and HVAC Equipment and Filters used for Temporary Cooling shall have the **Warranties and Guarantees Extended** so that their full term as

specified is available to the Owner from the date of Substantial Completion of each Phase as required by the Contract Documents.

- p. The Electrical Contractor shall provide all power wiring necessary to accommodate the above Temporary and Permanent Heating and Cooling requirements.

#### **8) Fire Alarm Systems:**

The Plumbing and HVAC Contractor shall provide any and all coordination that may be required with the Electrical Contractor as it relates to the Fire Alarm System. This shall include but not be limited to Tie-ins, Equipment, Meetings, Drawings, Sketches, Schematics Tests and etc as indicated on the Contract Documents

It is the intent of the Contract Documents that the Fire Alarm System be complete in all respects. Failure to notify the Construction Manager that discrepancies exist within the Contract Documents shall be construed as acceptance of the information provided.

#### **9) Underground Ducts and Utilities**

The Site Contractor and/or Utility Company shall provide water, storm and sanitary service from point of origin to within 5' of the building line. The Site Contractor shall also provide Trenching, Bedding, Backfilling, Concrete Anchors, Thrust Blocks and Encasement as required for your work and the work of other trades.

The Plumbing and HVAC Contractor shall be responsible for connections to each service within your Scope of Work provided by the Site Contractor and/or Utility Co. to complete the installation. Inserts, sleeve and the like required to enter/penetrate Foundation Wall and/or slabs shall be provided and sealed/Waterproofed by the Plumbing and HVAC Contractor

#### **10) Radon Pit Removal Systems:**

The Site Contractor shall be responsible for Excavation, Bedding, Backfill, 3/4" Pressure Treated Plywood and/or metal deck as indicated in the drawings, Crushed Stone, Concrete Block and accessories for the Radon Removal Systems as detailed on the Contract Documents. The Plumbing and HVAC Contractor will supply and install the Radon Removal Systems in its entirety and all piping including polyurethane sealants typical at all penetrations. The Concrete Contactor will supply and install the vapor barrier.

The Plumbing and HVAC Contractor shall confirm the operation of the Radon Removal Systems after installation as noted on the Contract Documents. The Plumbing and HVAC Contractor shall be responsible for providing a licensed certified radon testing company to certify all Radon Removal Systems as noted on the Contract Documents.

### **11) Service Connections:**

The Plumbing and HVAC Contractor shall be responsible for all final connections, including, shut off valves, disconnects and etc. for all Equipment, (furnished by others) as it relates to your scope of work, including but not limited to: Millwork and Casework Services, Kitchen Equipment, Owner Supplied Equipment, and etc.

The Plumbing and HVAC Contractor shall coordinate with the appropriated Contractor to assure that all services are complete in all respects. Failure to notify the Construction Manager of any discrepancies shall be construed as acceptance of the connection locations.

The Plumbing and HVAC Contractor shall provide all HVAC, and associated Controls Work required for the Food Service Equipment as noted on the Contract Documents. The Food Service Equipment Contractor shall furnish and install the Exhaust Hoods as noted on the Contract Documents. The Plumbing and HVAC Contractor shall include mechanical final connection for Exhaust Hoods, Kitchen Hood Exhaust ductwork and install Kitchen Hood Exhaust Fans, and required Automatic Temperature Controls per the Contract Documents.

The Plumbing and HVAC and Electrical Contractors shall each be responsible for final connections and control wiring as required for the food service equipment and as noted on the Contract Documents.

### **12) Wall-Hung Lavatories and Toilets:**

The Plumbing and HVAC Contractor shall coordinate with the Masonry and General Trades Contractor for installation of any wall anchors required during masonry or drywall wall construction for support of wall-hung lavatory systems and toilets. The Plumbing and HVAC Contractor will be responsible for furnishing and installing all necessary wall anchors or carries in strict accordance with the manufacturer's specification for their wall-hung lavatory systems.

### **13) Food Service Drawing Coordination:**

The Food Service Equipment Contractor is solely responsible for providing accurate information on shop drawings accurately laid out for electrical, plumbing, and HVAC coordination and all connections required for each piece of kitchen equipment supplied under this bid package. The Food Service Equipment Contractor shall **take the lead** for the kitchen equipment and the Plumbing and HVAC and Electrical Contractors coordination efforts. Any costs incurred by other trades to modify installed electrical or mechanical rough-ins due to incorrect information supplied by The Plumbing and HVAC shall be at this Contractor's cost.

The detailed shop drawings shall include a detailed point to point shop drawing which shall be accompanied by a digital copy in AutoCAD and shall be used for all Contractor coordination. A coordination meeting shall take place between the Food Service Contractor and the MEP Contractors plus or minus 3 to 4 weeks prior to the placement of the concrete slab in the kitchen areas to confirm the exact quantity and location of all under-slab rough in that is required to be installed by the MEP Contractors as it relates to the Food Service Equipment. The Food Service Contractor shall be responsible to inspect and confirm the final locations of ALL under slab roughing as installed by the MEP Contractors within 1 or 2 days of the slab placement.

#### **14) Casework:**

The Millwork Contractor shall coordinate and be responsible for all locations of rough-ins for the Casework. The Millwork Contractor shall submit detailed shop drawings within 45 days of award that include a detailed point to point location of all MEP rough-ins. These shop drawings shall be accompanied with a digital copy in AutoCAD and shall be used for all Contractor coordination. These drawings will be used by the Plumbing and HVAC and Electrical Contractors to locate penetrations/sleeves that will be core bored by them (Plumbing and HVAC and Electrical Contractors) for this work. All cost associated with core boring shall be included in this bid proposal.

The Plumbing and Mechanical Trade Contractor shall furnish and set all faucets and sinks with tail pieces. The Plumbing and HVAC Contractors shall make all appropriate final connections to these items.

#### **15) Equipment:**

The Electrical Contractor shall provide line voltage to all equipment provided within this project for all trades unless specifically noted otherwise. Starters and disconnects shall be provided by the Contractor that is providing the motorized equipment unless specifically noted to be provided by others.

The Plumbing and HVAC Contractor will coordinate and shall furnish all starters and disconnects switches for all Plumbing, HVAC, and ATC equipment and as specified and scheduled on the Plumbing and HVAC Drawings. Installation of such will be by the Electrical Contractor.

#### **16) Balancing Systems:**

The Plumbing and HVAC Balancing Subcontractor shall provide extended service on balancing for one-hundred and eighty (180) days beyond full building occupancy during which time any resetting, readjusting or rebalancing shall be performed to any terminal, fan or zone to correct comfort conditions or to confirm information submitted in the balancing report. The Balancing Contractor shall provide technicians as needed to assist the mechanical engineers in making any test that he or she may require during this time.

The Plumbing and HVAC balancing Contractor must have at least three years experience in testing, adjusting and balancing (TAB) procedures for equivalent sized projects. The personnel conducting the air system TAB must be certified by Associated Air Balancing Council (AABC). All instruments must have documented calibration traceable to the bureau of standards.

**17) Kitchen Equipment Exhaust Ventilator:**

The Food Service Equipment Subcontractor shall provide the Kitchen Equipment Exhaust Ventilator.

The Plumbing and HVAC Contractor shall make all final connections to the Exhaust Ventilator. The Plumbing and HVAC Contractor shall provide any and all accessories required, including but not limited to access doors, as noted on the Contract Documents or as required by the applicable inspector.

**18) Kitchen Equipment Fire Suppression System:**

The Food Service Equipment Contractor shall furnish the Gas Valve to the Plumbing and HVAC Contractor for installation, and coordinate all the necessary requirements for a fully functioning system.

**19) Plumbing and HVAC for Food Service Equipment:**

The Plumbing and HVAC Contractor shall be responsible for all Plumbing and Mechanical connections to the Food Service Equipment.

The Plumbing and HVAC Contractor shall install faucets and sinks which are provided by the Food Service Equipment Contractor.

**20) Residential Appliances:**

The General Trades Contractor shall provide, deliver and set appliances to the required locations; the Plumbing and HVAC and Electrical Contractors shall connect the appliance to their respective utilities in accordance with the Contract Documents or the requirements of the Residential Appliance. The General Trades Subcontractor shall be responsible for leveling and adjusting its final resting location.

**21) Gas Connections and Pressure Regulators:**

The Plumbing and HVAC Contractor shall install *all* interior and exterior gas piping and shall be responsible for the gas pressure required for all equipment. The Plumbing and HVAC Contractor shall also be responsible for furnishing and installing all gas pressure regulators, shut off valves and meter whether or not shown on the Contract Documents

required for correct operation of all equipment and to be coordinated and compliant with the gas company.

**22) Grease Interceptor:**

The Site Contractor shall be responsible to furnish and install the Grease Interceptor as shown on the Contract Documents and shall include any necessary openings for, but not limited to, intake piping, exiting (downstream) piping, above access holes, etc. The Plumbing Trade Contractor shall be responsible for furnishing and installing all sanitary piping from the building into the grease interceptor including the heat trace wiring. The Site Contractor shall install all sanitary piping from the downstream side of the Grease Interceptor and any manhole covers, manhole frames, manhole risers, vent lines, etc.

**23) Freezer/Cooler:**

The Food Service Equipment Contractor shall coordinate with the Plumbing and HVAC and Electrical Contractors for work that they are shown as being responsible for on the Kitchen Drawings with respect to the freezer and the cooler. The plumbing Contractor shall install the floor grate drain as furnished by the Food Service Equipment Contractor. The Plumbing and HVAC Contractor shall install exhaust vent units as furnished by the Food Service Equipment Contractor.

The Food Service Equipment Contractor shall cut and seal all holes in the Coolers and Freezers, but not limited to, sprinkler piping and heads, etc. This shall be coordinated with the Fire Protection Contractor for locations.

**24) Ductwork and Terminal Air Equipment:**

The Plumbing and HVAC Contractor shall cover all open ends of ductwork and terminal air equipment with air tight seals on a daily basis and shall be maintained until such time as the system is completed and the Construction Manager and the Mechanical Engineer indicates that these seals can be removed. This includes from when the material is delivered to the site to final installation. This Contractor is required to perform air leakage testing per SMACNA requirements and/or per the contract document. If air seals are broken prior to installation, the Construction Manager may require the piece to be HAND Cleaned, resealed, retested.

As indicated in the Project Specification, the Plumbing and Mechanical Trade Contractor shall be responsible for **Cleaning ALL of the Ductwork and HVAC Units** before the Phase and the Project is turned over to the Owner.

**25) Louvers and Grilles**

Only “Architectural Louvers” shall be provided by the General Trades Contractor. All other louvers, grills and the like shall be the responsibility of the Plumbing and HVAC Contractor.

The Plumbing and HVAC Contractor shall be responsible for all final connections to the Architectural Louvers provided by the General Trades Contractor.

## **26) Condensate Piping**

The Plumbing and HVAC Contractor is responsible for **ALL** condensate drain piping (including insulation) and related pumps and accessories.

## **27) Temporary Roof Drain Systems, Pans, Metal Deck openings**

The Plumbing and HVAC Contractor shall provide temporary roof drains SYSTEM for the proposed roof drains.

The Plumbing and HVAC Contractor shall provide temporarily running and maintaining the roof drains/roof leaders to the exterior of the building to locations as directed by the Construction Manager.

The Plumbing and HVAC Contractor shall provide and be responsible for cutting holes in all roof drain pans and cutting and removal of metal decking for all of their openings.

## **28) Ductwork and Pipe Testing**

The Plumbing and HVAC Contractor shall include all cost associated with duct work and pipe leakage testing, balancing, hydrostatic testing, flushing to industry cleanliness specifications, and chemical pretreatment and all other industry standard testing related to this bid package.

The Plumbing and HVAC Contractor shall be responsible for glycol fill (if specified) of the hydronic system and maintenance of the specified glycol concentration until the system concentration has completely stabilized and is turned over to the Owner. Any needed Replacement glycol shall not be from the Owner’s Attic Stock.

**29) New Ductwork Penetrations in Existing Walls:** The Plumbing and Mechanical Trade Contractor shall be responsible for laying all new ductwork penetrations that are required to be installed into existing masonry walls. It shall be the responsibility of the Mason Trade Contractor to cut out the masonry in order for the Plumbing and Mechanical Trade Contractor to be able to install their ductwork. The Mason Trade Contractor shall furnish and install any masonry lintels that may be required to support the existing masonry openings.

## **30) Under Slab Plumbing**

This Subcontractor shall complete ALL under slab plumbing three (3) days prior to the scheduled slab on grade pour time being of the essence.

This Subcontractor shall expedite material submittals for all underslab piping and accessories to complete this Work.

This Subcontractor shall utilize sufficient manpower to complete this Work.

### **31) Building Management System**

Furnish and install the complete building management controls system for the mechanical systems.

### **32) Heat Trace:**

The Mechanical Contractor will furnish and install all electric heat trace cable systems indicated on the Contract Documents and the Electrical Contractor will provide all of the power wiring to these heating cables.

### **33) Minor Work/Provisions:**

This Subcontractor shall carry in their base bid an additional **120 hours of plumber/HVAC time with small tools and materials to perform minor work as directed by the Construction Manager in addition to all other work indicated in this scope.**

## **CLARIFICATIONS**

a.) The Plumbing and HVAC Subcontractor shall include:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Sheet C-2 – Provide all plumbing and mechanical demolition throughout existing buildings and tunnels.
3. Sheet C-19 - Include all work inside the building and within 5 feet of the outside of the building except for the electrical connection and controllers. Stub the piping to 5 feet outside of the building terminating in an accessible box. Include water supply line, gate valve, backflow preventer assembly and all items within 5 feet of the outside of the building.
4. Sheet C-19 - Include the cost of furnishing and installing a booster pump system and verify the water pressure prior to ordering equipment or proceeding with the work and review with Construction Manager. If a booster pump is not required provide a credit for the booster pump system. Coordinate with Athletic Fields & Courts Subcontractor.

5. Sheet ASB-1 – Include re-insulating all piping to remain throughout the project including in the areas enclosed by the “WORK TO BE PERFORMED BY TERM CONTRACTOR” symbol and areas not enclosed by this symbol. Also include re-insulating existing pipe that will be used during the project but not to remain as part of a permanent system.
6. Sheet ASB-2 – Include re-insulating all piping to remain throughout the project including in the areas enclosed by the “WORK TO BE PERFORMED BY TERM CONTRACTOR” symbol and areas not enclosed by this symbol. Also include re-insulating existing pipe that will be used during the project but not to remain as part of a permanent system.
7. Sheet D-101, 102, 103, 105, 106 and 107 Specific Demolition Note A2 – Include all work for this note related to the plumbing and HVAC systems. Include reinstallation and all work needed to maintain systems during construction at all areas. Include attachment and support for all items. Include all safe-off required for demolition.
8. Sheet D-112 - Safe-off all mechanical connections for the food service and kitchen equipment.
9. Sheet EV-101 - Include all work required for the active soil depressurization radon systems except for the supply of power, vapor barrier, and concrete. Include the CMU, piping, fans, and all other work.
10. Structural (“S”) Drawings – Include all work in the Structural drawings as it relates to this scope of work.
11. Sheet S-301 Detail 2 – Include fastening of Pre-Manufactured Curb to PT Blocking.
12. Sheet S-301Detail 2 – Include all mechanical curbs for mechanical and plumbing work.
13. Sheet EQ-101 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all plumbing and mechanical utilities for all equipment. Furnish and install the following items:
  - a. Shop Equipment Schedule – Automotive Production Shop
    - i. Item 9 – Air Compressors
    - ii. Item 9a – Air Line Dryers
    - iii. Item 12 – Waste Oil Containment System – Complete all work within 5’ of the building. Tank will be furnished and installed by Site Work Subcontractor.
    - iv. Item 16 – Pull Down Air Lines
    - v. Item 20 – Exhaust Removal System
    - vi. Item Between 34 and 35 – Air Station
14. Sheet EQ-102 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all plumbing and mechanical utilities for all equipment. Furnish and install the following items:
  - a. Shop Equipment Schedule – Carpentry
    - i. Item 10 – Air Compressors
    - ii. Item 27 – Dust Collector
15. Sheet EQ-103 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all

plumbing and mechanical utilities for all equipment. Furnish and install the following items:

- a. Shop Equipment Schedule – Plumbing
  - i. Item 3 – Oil Tank – Complete all work within 5’ of the building. Tank will be furnished and installed by Site Work Subcontractor.
  - ii. Item 10 – Concentric Vent Kit
  - iii. Item 13 – Hot And Cold Water Shut Off Valve
  - iv. Item 14 – Sanitary Valve W/ Backflow Preventor
  - v. Item 15 – Emergency Shut-Off Switches
  - vi. Item 22 – All Fuel Flue
  - vii. Item 24 – Natural Gas
  - viii. Item 25 – LP Gas
  - ix. Item 26 - #2 Fuel Oil
  - x. Item 27 – Cold Water Main Stub-In
  - xi. Item 29 – Sanitary
  - xii. Item 32 – Exhaust Hood
  - xiii. Item 33 – Vent
16. Sheet EQ-103 – Install all plumbing and mechanical related equipment and work indicated to be owner furnished and contractor installed. Install the following items:
  - a. Shop Equipment Schedule – Plumbing
    - i. ~~Item 5 – Hung Lavatory~~ – **ADD. NO. 1**
    - ii. ~~Item 8 – Hung Urinals~~ – **ADD NO. 1**
    - iii. Item 28 – Water Heater
17. Sheet EQ-106 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all plumbing and mechanical utilities for all equipment. Furnish and install the following items:
  - a. Shop Equipment Schedule – Manufacturing
    - i. Item 28A – Snorkle Exhausts
    - ii. Item 30 – Compressor
    - iii. Item 43 – Exhaust Hood
18. Sheet EQ-101, EQ-102, EQ-103 and EQ-106 – Furnish and install all Utilities including but not limited to air, gas, hot water, and cold water. Include all connections to equipment. – **ADD. NO. 1**
19. Sheet MR-101.1, 101.2, 102.1, 103.1, & 103.2 – Include all work on these sheets. Include the demolition of all mechanical systems shown and systems not needed to remain as indicated. Verify all demolition with the Construction Manager.
20. Sheet M-201 – Include the demolition of all mechanical systems shown and systems not needed to remain as indicated. Verify all demolition with the Construction Manager. Include all patching at exterior walls and the roof needed to keep the building water tight at demolished pipes, ducts, equipment, and other items.
21. Sheet PR-100, 101, 102, 103, 104, 105, 106 and 107 – Include all work on these sheets. Include the demolition of all plumbing systems shown and systems not needed to remain as indicated. Verify all demolition with the Construction Manager.
22. Sheet PR-102 – Include all work on this sheet. Demolish and remove the gas meter assembly and all piping and related items within 5’ of the exterior of the building.

23. Sheet P-102.1 - Install all regulators furnished by the owner at compressed air outlets throughout the project.
24. Sheet M-201 Detail 3 – Include supplemental steel as required to support piping and duct.
25. Sheet ER-100 – Include all plumbing demolition including the plumbing and gas demolition in B-wing shown.
26. Include the demolition of all mechanical and plumbing items that are not required for the permanent systems including items shown in the drawings and items not shown in the drawings but located on the site. Include the demolition of all above ceiling and roof plumbing and mechanical not indicated to remain as part of the permanent system.
27. Include commissioning and balancing at the end of each phase and a final round of commissioning and balancing at the completion of the project.
28. Sheet M-303 Detail 8 - Include all ductwork insulation, exterior jacketing, ductwork supports and galvanizing of supports as specified.
29. Sheet M102.2 Detail 1 - Include dust collector support framing system and coordinate foundation location with Sitework Contractor.
30. Sheet E-001 Note 13 and 14 - Provide all control wiring.
31. Cut and cap all items as required and complete all work needed to keep temporary systems running. Include all plumbing and HVAC cutting, capping, and making safe as required.
32. Provide all penetrations and cores required to complete Subcontractor's Work. Include patching, fire caulking, acoustical caulking, and architectural caulking as required.
33. Include grease tank/oil tank piping and plumbing connections.
34. Include the maintenance and repair of all new and existing plumbing and HVAC systems until the entire phase is complete.
35. Include providing temporary water and air to the 2 teacher stations in the temporary science labs as indicated in the phasing documents and directed by the Construction Manager.
36. Include shop drawings and calculations prepared and stamped by a qualified professional engineer as specified for this scope of work. Include shop drawings and calculations for seismic restraints.
37. Include all Plumbing and HVAC work for the food service equipment including service rough-ins, shut-off valves, piping, support brackets, vents, adapters, traps, tailpieces and final connections. Install fixtures specified to be provided by the Food Service Subcontractor but installed by the Plumbing and HVAC Subcontractor.
38. Include all sleeves for plumbing and HVAC work including the locations shown in the structural drawings.
39. Provide all access doors and panels required for this scope of work to be installed by others.
40. Include all plumbing and HVAC work at the laboratory casework including service rough ins, shut-off valves, internal piping, support brackets, final connections, hubs, vents adapters, traps, tailpieces, ducts, fans, exhaust stacks and all other mechanical items.
41. Furnish and install all welding hood systems.
42. Included all welding at mechanical items. Include welding at roof sleeves and for mechanical support systems.
43. Include all galvanizing of mechanical items and supports.
44. Include all insulation at piping and ductwork.

45. Include all mechanical curbs.
46. Furnish and install expansion joints for piping, ducting, and other equipment at all locations showing or requiring expansion joints.
47. Furnish and install all exhaust removal systems. Refer to the Automotive Production Shop Equipment schedule item 20 and the rest of the EQ sheets.
48. Furnish and install all connections for temporary boiler(s) required for heating. Include all modifications necessary to the existing steam system to provide heat to all existing spaces prior to the completion of the new heating systems.
49. Include all put back and reinstallation of mechanical and plumbing systems at abatement areas.
50. Complete all plumbing connections for laboratory casework stations and sinks and for healthcare stations and sinks.
51. Include all eye wash, shower, and eye wash/shower combination fixtures.
52. Include all air compressors.
53. Include all work indicated in specification section 230500 including Part 1, 1.01 item 3 indicating to remove all equipment, piping, supports, etc. And infrastructure not being reused including items shown in the drawings and existing items in the field not shown on the drawings.
54. Review all specified equipment for the project and provide a letter to the Construction Manager indicating if all existing and new equipment will function properly with the plumbing and mechanical utilities specified in the construction documents 30 calendar days prior to completing related work.
55. Video For Training, Maintenance & Operation - For equipment which requires training, maintenance and/or operation by operational personnel, provide a professionally developed video DVD with audio for the use of maintenance training for the facility as indicated in the specifications. Each video will be accompanied by a written index which can be utilized to find any specific item of information by time or place on the video. The recordings shall include the equipment being maintained by qualified personnel, the required maintenance tools, and a step by step technique, both verbally and visually demonstrating how to maintain each piece of equipment in a hands on application. Provide 5 copies of the video to the Construction Manager.
56. Create weather-tight conditions around all mechanical piping, ducts and equipment to prevent moisture and mold related problems.

## **EXCLUSIONS**

- 1) Sale and Use Taxes.

## **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 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.

### **ALLOWANCE NO.1 - TEMPORARY HEATING UNITS - \$120,000**

Provide and completely coordinate the delivery, setup, gas connection (including all communications with the local gas supplier), startup, maintenance, operation and dismantling (including all necessary disconnection communications with local gas supplier) and removal of Temporary Heating Units & Exterior Supply and Return Ductwork – with the most stringent OSHA regulation is included in the base bid.

**EXHIBIT “B”  
SCOPE OF WORK**

**Bid Package #26.01  
Electrical**

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR**

**THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:**

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Electrical, Communications, Safety and Security Systems** 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 **Electrical, Communications, Safety and Security Systems** 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 Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

**SCOPE OF WORK**

- 1) BID PACKAGE #26.01 - Electrical, Communications, Safety and Security Systems:**  
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 **Electrical, Communications, Safety and Security Systems** 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:

**Project Manuals:**

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

**Specification Sections of the Project Manuals:**

Include all work for all specifications 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.

- 078413 Through-Penetration Firestop Systems (As Applicable)
- 079200 Joint Sealants (As Applicable)
  
- 083113 Access Doors and Frames (As Applicable)
- 087100 Door Hardware (As Applicable)
  
- 114000 Food Service Equipment (As Applicable)
- 123553 Wood Laboratory Casework And Furnishings (As Applicable)
  
- Division 21 Fire Suppression (As Applicable)
- Division 22 Plumbing (As Applicable)
- Division 23 Mechanical (As Applicable)
  
- 230500 Demolitions And Removals (As Applicable)**
  
- Division 26 Electrical**
- Division 27 Communications**
- Division 28 Electronic Safety and Security**
  
- Division 31 Earthwork (As Applicable)
- Division 32 Exterior Improvements (As Applicable)
  
- 328000 Irrigation System (As Applicable)

Division 33          Utilities (As Applicable)

Commissioning (note included in 019100, DIV 1)

**Schedule of Drawings:**

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

**2) 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 sections:

**All Electrical Demolition throughout existing buildings and tunnels;**

Electrical; Communications; Electronic Safety and Security Division; Temporary Light and Power; Core Boring; Firestopping and Through-Penetration Firestop Systems for your scope of work; Site Electric and Site Communication; Site Lighting including furnishing of Anchor Bolts for installation by others; Electric Disconnects for equipment, (unless specifically noted otherwise shall be provided by Electrical Contractor); Line Voltage for all equipment as noted in the Contract Documents including but not limited to Fans, Pumps, Projection Screens, Display Cases, Operable Window Treatment, Kitchen Equipment, Appliances, Gymnasium Equipment, Kiln Exhaust Fan, Elevator, Owner Supplied Equipment, Boilers, Heating/Cooling and Air Handling Units, Overhead Doors; Elevator Recall System; Commissioning; Motor Controllers/Starters shall be provided by the contractor or equipment motor supplier furnishing the equipment (unless specifically noted to be provided by the Electrical Contractor); Excavation; Concrete Encasement Bedding and Backfill for Site Electric and Site Lighting shall be by Site Contractor.

All Electrical; Wiring Devices; Pre-Fabricated Electrical and Tele/Communications Raceway Systems and all associated Accessories; Electric Power and Communication Transmission Service from Utility to Building; Site Lighting; Basic Electrical Materials and Methods; Service and Distribution, Service Entrance; Switchboards; Disconnect Switches; Secondary Grounding; Transformers; Panel Boards; Motor Control; All Interior and Exterior Lighting; Theatrical Lighting; Complete Fire Alarm Systems; Conduit and Stubs for Security Systems; Complete Clock and PA Systems; Conduit and Stubs for Voice and Data Systems; Complete Call Systems; Complete Rescue Call for Assistance Systems; Complete Video Telecommunications Systems; Conduit and Stubs for Audio/Visual Systems; All Lighting Control Systems; Interior & Exterior Temporary Light and Power; Core Boring; Firestopping and Through-Penetration Firestop Systems for your scope of work; Site Electric and Site Communications; Site Lighting including furnishing of Anchor Bolts for installation

by others; Electric Disconnects for equipment; HVAC controls; Motor Controllers/Starters shall be provided by the Contractor or equipment motor supplier furnishing the equipment (unless specifically noted to be provided by the Electrical Contractor); Elevator Recall System; Fire Alarm Systems; Mock-ups; Submittals, Product Data and Samples; Record Drawings; Identification Tags and Drawings; Operating and Maintenance Instructions; Testing and Commissioning;

**3) Phasing:**

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

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. Shop Drawings will only be reviewed by phase. 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.

**4) Electrical Demolition:** This Subcontractor shall be responsible to remove and properly dispose of all **Electrical** installations as indicated on the Contract Documents. This Subcontractor shall also be required to cap all existing utilities services at the interface of the building to be demolished and the existing building interface. It is the intent of the Contract Documents that this subcontract coordinate systems, so that, they remain active during the construction and renovation of this phased project. This includes temporary measures, expansion of existing systems and maintenance of all systems required for occupancy in occupied areas of the building. This includes all systems including but not limited to fire alarm, data, phone, communications, security, power, lighting, and all other electrical systems.

- a. This Subcontractor shall identify and mark Electrical systems to be demolished as per the Contract Documents and in accordance with the Phasing Plan (Document 000926).
- b. This Subcontract shall cut, cap, make safe and drop the system identified to be removed.
- c. Removal and proper disposal shall be by the Demolition and Abatement Contractor (Bid Package 2.01).
- d. This Subcontractor shall be responsible to remove all fluorescent lights and ballasts and place them in a suitable container to be properly disposed by the Demolition and Abatement Contractor (Bid Package No. 2.01).

**5) Temporary Construction Manager Site Office:**

- a. The Electrical Contractor shall remove all Power and Telecom/Data) for the Construction Managers and Owner's Site Offices as shown on the Site Logistics Plan.

**6) Temporary and Permanent Heating and Cooling:**

- a. The Plumbing and HVAC Contractor shall utilize both Temporary and Permanent Cooling and Heating Equipment for Temporary Cooling and Heating subject to the approval of the Construction Manager, in its sole discretion. Subcontractor to provide all temporary heating and cooling as required and specified below.
- b. All Temporary Heating and Cooling requirements are per the Project Schedule and Phasing Plan (Document 000926).
- c. The Plumbing and HVAC Contractor shall provide a compatible **temporary low pressure steam boiler** to run the existing steam heating systems for all areas not under construction as indicated in the phasing plan. The temporary boiler must have sufficient capacity (200 Horsepower minimum) to service the areas not under construction. Include all rental, transport, start-up, adjustment, service, temporary piping, inspection, permitting, controls and connection costs with the existing system and temporary utilities for a complete functioning system. It is critical that the temporary boiler system be reliable and Subcontractor must have all necessary service agreements, replacement parts on hand and service technicians available to repair any issues within eight (8) hours. A replacement temporary boiler must be delivered and connected within eight (8) hours of the temporary boiler going off-line if repairs can't be made. A temporary boiler of sufficient capacity must be operating during the winter heating season (October 1 to May 1). Include gas piping of sufficient capacity for the temporary boiler.
- d. The Plumbing and HVAC Contractor shall provide all labor and materials to connect temporary ductwork and all of its components and necessary accessories, including but not limited to hangers, insulation, dampers, vents, from the **exterior located temporary construction heating units (as described in the Allowance under this Bid Package)** with risers to all floors. The temporary ductwork shall be extended down hallways and into individual rooms to maintain distribution of the required minimum temperature. The system shall be fully functional to the approval of the Construction Manager, in its sole discretion. Sufficient temperature for temporary heating shall be a minimum ambient temperature of 55 degrees Fahrenheit.
- e. The Plumbing and HVAC Contractor shall provide Cooling / Humidity Control with **New Permanent Cooling System** during the summer cooling season (May 1

thru October 1). Sufficient temperature for temporary cooling shall be a maximum ambient temperature of 78 degrees Fahrenheit and a maximum relative humidity of 50 percent.

- f. The Plumbing and HVAC Contractor shall provide **all temporary control wiring** for its temporary heating and cooling systems. At a minimum, thermostat controls shall be provided in a quantity (one per floor per unit) and location (remote from Units), as approved by the Construction Manager, to accommodate an evenly distribution of temporary heating and cooling.
- g. All necessary Equipment, Temperature Controls, Plumbing, Safety Controls that may be required shall be installed and operational prior to requesting approval to utilize the permanent heating or cooling system.
- h. The Plumbing and HVAC Contractor shall provide **temporary filters at all return ducts as required** and at the sole discretion of the Construction Manager, changed at weekly intervals, so as not to allow the migration of construction dirt and dust.
- i. When the **Permanent Cooling System** is utilized for Temporary Cooling, the Plumbing and HVAC Contractor shall be responsible for the maintenance, repair, refurbishing and extension of all required warranties of the HVAC Equipment (including temporary connections).
- j. **Power Consumption** cost (**Usage Only**) to operate the **Permanent Cooling System** shall be by others.
- k. **Fuel Consumption** cost (**Usage Only**) to operate the Temporary and **Permanent Heating System** shall be by others.
- l. The Plumbing and HVAC Contractor shall take adequate precautions to prevent any Damage from occurring to the **Permanent Heating and Cooling Equipment** while providing Temporary Heating and Cooling.
- m. All system filters for liquid or air shall be routinely replaced as required by maintenance intervals, written in the O & M Manuals.
- n. All permanent Plumbing and HVAC Systems and Components utilized for Temporary Heating and Cooling shall be **completely serviced, vacuumed, cleaned and turned over in "As New" condition** prior to acceptance by Owner.
- o. All Plumbing and HVAC Equipment and Filters used for Temporary Cooling shall have the **Warranties and Guarantees Extended** so that their full term as specified is available to the Owner from the date of Substantial Completion of each Phase as required by the Contract Documents.

- p. The Electrical Contractor shall provide all power wiring necessary to accommodate the above Temporary and Permanent Heating and Cooling requirements. Provide **two temporary boiler connections rated at 50 A @ 460V/3 ph/60 cy service** near the exterior of the existing boiler room as directed by the Construction Manager.

**7) Light Poles/Bollards/Grounding:**

The Electrical Contractor shall furnish all Anchor Bolts and Anchor Bolt templates to the Site Contractor for installation by the Site Work Contractor. The Electrical Contractor shall furnish and install **ALL** site light fixtures, conduit wire and cable. The Electrical Contractor shall also furnish and Install all required grounding cable and grounding rods

**8) Appliances:**

The Residential Appliances shall be provided by the Owner as shown on the Contract Documents. The Owner shall bring and set the appliance to the required locations; the Plumbing, Mechanical, Electrical Contractors shall connect the appliance to their respective utilities.

**9) Kitchen Equipment:**

The Electrical Contractor shall be responsible for any and all final connections to food service equipment as noted on the Contract Documents.

The Plumbing and HVAC Contractor shall install faucets and sinks which are provided by the Food Service Equipment Contractor. The Electrical Contractor shall provide power to the hand sinks in the kitchen, including all final connections to the hard wired transformer.

Electrical Subcontractor to provide and install all fused disconnect switches where required for the refrigerators, freezers, and all other food service equipment.

**10) Freezer/Cooler:**

The Food Service Equipment Contractor shall coordinate with the Plumbing, Mechanical and Electrical Contractors for work that they are shown as being responsible for on the Kitchen Drawings with respect to the freezer / cooler.

**11) Service Connections:**

The Electrical Contractor shall be responsible for all final connections, including, disconnects and etc. for all Equipment, (furnished by others) as it relates to your scope of work, including but not limited to: Millwork and Casework Services, Fans, Pumps,

Doors/hardware, Projection Screens Laboratory Equipment, Kitchen Equipment, Elevator and Wheelchair Lift, Owner Supplied Equipment, Boilers, Heating, Ventilating and Cooling Units, Overhead Door(s), Operable HVAC Controls, Operable Misc. Gym Equipment, Washers, Dryers and Dishwashers, etc.

This Contractor shall coordinate the location of connections for equipment; Failure to notify the Construction Manager of any discrepancies shall be construed as acceptance of the condition.

The Plumbing, Mechanical and Electrical Contractors shall each be responsible for final connections and control wiring to and for the food service equipment as noted on the Contract Documents.

The Food Service Equipment Contractor shall submit in writing, as a separate submission, that all electrical requirements for all food service equipment, i.e., quantity, location phase, voltage, etc., is correctly shown on the contract drawings. This separate submission shall be submitted to the Construction Manager and to the Electrical Trade Contractor.

The Plumbing Contractor shall install faucets and sinks which are provided by the Food Service Equipment Contractor. The Electrical Contractor shall provide power to the hand sinks in the kitchen, including all final connections to the hard wired transformer(s).

## **12) Equipment:**

The Electrical Contractor shall provide line voltage to electrical equipment provided within this project for all trades unless specifically noted otherwise. Starters and disconnects shall be provided by the Contractor that is providing the motorized equipment unless specifically noted to be provided by the Electrical Contractor. In any case, the installation of starters and disconnects shall be by the Electrical Contractor.

The Plumbing and Mechanical Contractors will coordinate and shall furnish all starters disconnects switches for all Plumbing, HVAC, ATC equipment and as specified and noted on the Contract Documents. Installation of these devices shall be by the Electrical Contractor.

## **13) Fire Alarm Systems:**

The Electrical Contractor shall provide any and all coordination that may be required with the Mechanical Contractor as it relative to the Fire Alarm System. This shall include but not limited to Tie-ins, Equipment, Meetings, Drawings, Sketches, Schematics Tests and etc as indicated on the Contract Documents.

It is the intent of the Contract Documents that the Fire Alarm System be complete in all respects. Failure to notify the Construction Manager that discrepancies exist within the Contract Documents shall be construed as acceptance of the information provided.

It is critical that a fire alarm system be functioning properly in all completed and occupied areas of the project at all times and the existing system shall not be removed or disabled until the new system has been completed, tested, passed inspection and is fully functional. The new fire alarm system must be fully functional and operational in all spaces prior to the end of each phase.

In addition, add all required temporary devices, wiring, panels and other items required as a result of temporary doors, walls and conditions created by the phasing. Additional devices (smoke detectors, horns, strobes and pull stations as applicable) shall be temporarily added on each side of temporary doors, walls, and other separations as if these were permanent separations to meet code at **15 temporary separation locations**. Include all permanent and temporary programming to the existing and new fire alarm systems required for the phasing. Electrical Subcontractor to complete all work related to the new and existing Fire Alarm systems.

Provide and remove temporary electric lit **exit signs that are code compliant at 15 locations** as directed by the Construction Manager.

#### **14) Pre-Engineered Kitchen Hood Extinguishing System:**

The Pre-Engineered Kitchen Hood Extinguishing System for the Food Service Equipment shall be interlocked with the building fire alarm system. The Electrical Trade Contractor shall be responsible for all tie-ins to the building fire alarm system.

#### **15) Equipment, Control Devices and Starters for Food Service Equipment:**

Switches, fuses, terminal boxes, cords, flexible connectors, control devices, starters, disconnect, and plugs for food service equipment shall be furnished by the Food Service Equipment Contractor unless specifically noted otherwise.

The Electrical Contractor shall be responsible for line voltage connections and the Mechanical Contractor shall be responsible for Plumbing and Mechanical connections. **All interconnecting wiring shall be the responsibility of the Electrical Contractor**.

The Food Service Equipment Contractor shall coordinate the location of connections for equipment and shall notify the Construction Manager of any discrepancies. Failure to notify the Construction Manager shall be construed as acceptance of the condition.

The Food Service Equipment Contractor shall submit in writing, as a separate submission, that all electrical requirements for all food service equipment, i.e., quantity, location phase, voltage, etc., is correctly shown on the contract drawings. This separate submission shall be submitted to the Construction Manager and forwarded to the Electrical Trade Contractor.

The Electrical Contractor shall provide power to the hand sinks in the kitchen, including all final connections to the hard wired transformer(s).

**16) Kitchen Equipment Exhaust Ventilator:**

The Food Service Equipment shall provide (furnish and install) the Kitchen Equipment Exhaust Ventilator.

The Electrical Contractor shall make all final connections to the Exhaust Ventilator. The Electrical Contractor shall provide any and all accessories required, including but not limited to access doors, as noted on the Contract Documents or as required by the applicable inspector.

**17) Elevator Recall System:**

An Elevator recall System for all Elevators shall be installed in accordance with the Contract Documents. Coordination and final connections to the Elevator Control Panel shall be provided by the General Trades (for Elevator) Contractor

**18) Elevator Telephone:**

The Electrical Contractor shall be responsible for furnishing and installing any conduit necessary to bring the elevator phone line wire to the elevator controller. The Electrical Contractor shall leave the phone line wire coiled in the elevator machine room adjacent to the controller for final connection to the elevator controller by the General Trades (for Elevator) Contractor.

The General Trades (for Elevator) Contractor shall provide a functioning telephone within the elevator cab. Dial Tone for the telephone will be brought into the elevator machine room by The Electrical Contractor as described above. The General Trades (for Elevator) Contractor is responsible to land all wires on, to and from his or her equipment.

**19) Conduit in Concrete Slabs:**

The Electrical Contractor shall not place conduit in any concrete slab. All routing of conduit must be concealed and take place from ceiling space, cavity space and in walls.

**20) Communication Service:**

The Electrical Contractor shall provide ALL Communication service in accordance with that as indicated on drawing. All required Excavation, Bedding, Encasement and Backfill shall be provided by the Site Contractor.

**21) Temporary Light and Power:**

Installation:

Provide labor, material and equipment for the installation of interior temporary light as required by these specifications, unless specifically noted otherwise in the Contract Documents.

Furnish, install, and maintain and eventually remove all distribution of interior temporary light as required.

Temporary lighting shall be installed in such a manner as not to interfere with the permanent construction. If such interference does occur, it will be the responsibility of the Electric Contractor to make such changes as may be required to overcome the interference. The cost of these changes are included as part of the Contract price.

Temporary wiring is to be laid out, balanced and wire-sized so as to produce a voltage drop of not greater than five percent (5%) at the extreme end of the line when operating a full load.

Lighting Requirements:

The exterior of the building, and the Construction Manager Office Trailer and the Construction Parking / Material Storage Trailers Location area as shown on the Site Logistics Plan, shall have extreme Security Lighting at various locations as determined by the Construction Manager. This lighting shall be controlled by sensors w/ on/off switch overrides. Staging area and Trailer area and perimeter of the existing building (30 feet out) will require a minimum of 1/2 watt/SF.

All other temporary lighting shall be controlled by appropriate on/off equipment at a mutually agreed location.

The replacement of all bulbs and temporary wiring shall be included as part of these requirements and maintained by this Subcontractor. At least on a weekly basis, the entire job shall be checked and re-lamped as required. At no time shall more than 10 percent of the temporary lighting not be operational.

System is to be of a movable nature suspended from structure and is not to damage or dislodge any spray-on-fireproofing during the life of its installation. It shall also be installed, removed and/or reinstalled as work progresses. Temporary lighting shall utilize 100-watt bulbs with pigtailed and protective shields. General Area lighting will require a minimum of 1/4 watt/SF.

All mechanical rooms/areas will require a minimum of 1/2 watt/SF.

All stairwells will require a light at each landing and intermediate landing.

All entrances and exits of the building will require a single string of lights with bulbs a minimum of 10 feet on center.

### Power Requirements

This Contractor shall carry all cost and all materials and equipment as needed to step down to a 600 amp 480 volt 3 phase complete temporary power service inside the building, including but not limited to, conduit, wiring, CT and DT Cabinets, meter, panel-board, grounding, etc for complete system per the NEC and the local building code. This Subcontractor shall also provide all provisions required for weather tightness of the above system.

Provide **six (6) 200 amp 120/208 volt interior temporary panels** as directed by the Construction Manager. This Subcontractor shall also provide all provisions required for weather tightness of the above system.

Provide **two (2) 200 amp 120/208 volt exterior temporary panels** as directed by the Construction Manager. This Subcontractor shall also provide all provisions required for weather tightness of the above system.

For small tools, provide 20 amp @ 120 volt power outlets located throughout the project so that the floor area and exterior of the building can be covered with standard 50 foot extension cords.

Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for connection of power tools and equipment.

Provide 220 volt 40 amp receptacle for larger power equipment at each temporary panel.

When the permanent power service is activated, all temporary installation shall be transferred to that source, including required OSHA Ground Fault Protection. A competent qualified Electrician is required to test all GFI certificates at the outlet panel at a minimum on a monthly basis and each panel must include a dated sign off in plain view. Any costs related to these inspections shall be included in this Contractor's bid proposal. Each Trade Contractor is to include in his or her proposal electrical cords for their work.

### Maintenance

This Contractor shall maintain the temporary lighting (interior and exterior) and power systems.

All work covered under this Contract is to be maintained in good and safe operating condition and in a timely manner so not to delay the project in whole or in part. This Contractor shall be responsible for installing and maintaining a reasonably balanced system and shall take current reading on the feeders at regular intervals.

All temporary facilities are to be maintained and kept in good operating conditions. Maintenance men necessary to perform this work shall be provided so that other trades are not delayed. Local power centers shall be constantly maintained to prevent the accumulation of “rat’s-nest circuitry”. All temporary wiring shall be suspended and maintained at least 8 feet above finished floors and pass through permanent walls above the permanent ceiling level. The patching of holes in partitions is to be done by the General Trades Contractor for drywall and the Masonry Contractor for masonry.

Removal

This Contractor shall eventually remove (at the direction of the Construction Manager) all temporary power and lighting equipment (interior and exterior).

**22) Supplement Temporary Lighting:**

General temporary lighting will be provided by the Electrical Trade Contractor after the steel is erected. It will be the responsibility of each Trade Contractor to provide supplement lighting and cords as needed or when finish work is being completed especially prior to the new permanent lighting is installed and lit.

**23) Electric Door Hardware:**

The Electrical Contractor shall provide final connections for all electrified door hardware (locks, hold-opens, strikes, hinges, etc.) shown on the Contract Documents. Electrified door hardware shall be furnished and installed by others with the exception of electromagnetic hold opens which shall be furnished and installed by the Electrical Contractor. The Electrical Contractor shall coordinate the location of the door magnets and conduits supplying power to the magnets. All wiring to the magnets shall be concealed within the walls. Include power for all electrified hardware. Verify through submittals and in the field that all electrified hardware is rated for the supplied voltage and power and then make all connections.

**24) Heat Trace:**

The Mechanical Contractor will furnish and install all electric heat trace cable indicated on the Contract Documents and the Electrical Contractor will provide all of the power wiring to these heating cables.

**25) Mechanical Service Lighting:**

The Electrical Contractor shall furnish and install any necessary wiring for internal lighting in or on mechanical units. This Contractor is expected to check mechanical specifications and drawings to be sure any lights associated with the mechanical units are wired and operational.

**26) Fire Protection Devices:**

The Fire Suppression Contractor shall provide all fire alarm devices related to the sprinkler system (flow and tamper switches). The Electrical Contractor is responsible to wire these devices to the Fire Alarm System. This Contractor will coordinate with the Electrical Contractor exact number and location of these devices.

**27) Casework Lighting and Receptacles:**

Wood Casework electrical receptacles/wiremold and task lighting shall be provided by the Electrical Contractor except if built into a finished product.

**28) Pre-Manufactured Finished Raceway for Devices at Existing Walls**

The Electrical Contractor shall provide pre-manufactured finished raceway as indicated on the Contract Documents.

**29) Stage Lighting Support System:**

The Electrical Contractor shall be responsible to provide any and all support system for stage lighting to be hung from the structure above or adjacent and as noted on the Contract Documents.

**30) Minor Work/Provisions:**

The Electrical Contractor shall carry in their base bid **240 hours of Electrician hours with small tools to perform additional minor work directed by the Construction Manager.**

**31) Pricing of Additional Work**

All additional work for change orders that are submitted by the Electrical Trade Contractor must be calculated on the basis of the latest version of NECA Category 1 costs further reduced by 25%.

**32) Wiring of ALL Plumbing/HVAC Fixtures and Equipment**

The Electrical Contractor shall furnish and install all wiring and transformers for Plumbing Fixtures and HVAC Equipment that may not be shown on the Electrical Drawings but is required by the Contract Documents. This Contractor is expected to check plumbing and mechanical specifications and drawings to be sure any power associated with Plumbing Fixtures and HVAC Equipment are wired and operational.

## 6) Underground Ducts and Utility Structures:

The Electrical Contractor shall provide all Conduits and other materials as required to complete the Underground Conduits, Cables, Ducts, Grounding systems and Utilities installation per the Electrical Divisions.

### CLARIFICATIONS

a.) The Electrical Subcontractor shall include:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet C-19 - Include power supply and connection to irrigation controller and 3" conduit to 5 feet outside of the building terminating with a pull box. Also include power to booster pump.
- 3) Sheet D-101, 102, 103, 105, 106, and 107 Specific Demolition Notes – Include all work for Demolition Note A2 related to the electrical systems. Include reinstallation and all work needed to maintain systems during construction in all areas. Include attachment and support for all items. Safe-off all electrical connections required for demolition. Also, rewire outlets and provide new covers per Specific Demolition Note A13.
- 4) Sheet D-112 - Safe-off all electrical connections for the food service and kitchen equipment.
- 5) Sheet A-101.1 – Complete all electrical work described under Construction Note 12 relating to the elevator system.
- 6) Sheet EQ-101 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
  - a. Shop Equipment Schedule – Automotive Production Shop
    - i. Item 17 – Suspended Drop Lights
    - ii. Item 18 – Power Drops
    - iii. Item 30 – Emergency Shut-Off Switch
- 7) Sheet EQ-102 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
  - a. Shop Equipment Schedule – Electrical
    - i. Item 7 – Power Cord Reels
    - ii. Item 13 – Emergency Disconnect Switch
    - iii. Item 16 – Master Electrical Panel
    - iv. Item 17 – Residential Electrical Panel
  - b. Shop Equipment Schedule – Carpentry
    - i. Item 28 – Emergency Shut-Off Switch
    - ii. Item 34 – Power Cord Reels

- 8) Sheet EQ-102 – Install all electrical related equipment and work indicated to be owner furnished and contractor installed. Install the following items:
  - a. Shop Equipment Schedule – Electrical
    - i. Item 4 – Power Console
- 9) Sheet EQ-103 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
  - a. Shop Equipment Schedule – Plumbing
    - i. Item 15 – Emergency Shut-Off Switches
    - ii. Item 21 – Electrical Panel W/ Breakers
    - iii. Item 31 – Power Cord Reels
  - b. Shop Equipment Schedule – Graphics
    - i. Item 17 – Emergency Power Shut-Off
- 10) Sheet EQ-106 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
  - a. Shop Equipment Schedule – Manufacturing
    - i. Item 18 – Emergency Shut-Off Switch
- 11) Sheet EQ-101, EQ-102, EQ-103 and EQ-106 - Furnish and install all Electrical and Power. Include all connections to equipment. – **ADD. NO. 1**
- 12) Sheet EV-101 - Provide power for the active soil depressurization radon systems.
- 13) Sheet E-001 – Include all work indicated on this sheet.
  - a. General Note 4 – Provide a suitable junction box at each recessed fixture, whether specifically indicated or not.
  - b. General Note 13 and 14 - Provide all power wiring.
  - c. General Note 25 – Provide GFI type receptacles when receptacles shown on plans are within 6 feet of any water source whether depicted to be GFI on the plan sheet or not.
  - d. General Note 43 – Furnish and install wiring for automatic flush valves as indicated.
  - e. General Note 47 – Include hand dryer wiring as indicated.
  - f. General Note 58 – Provide and install supplemental steel for light fixture installation.
  - g. General Note 63 – Provide additional duplex receptacle systems as indicated.
  - h. General Note 64 – Provide additional home run circuits and breakers as indicated.
  - i. General Note 65 – Provide additional home run circuits and breakers as indicated.
  - j. General Note 77 – Provide additional GFI duplex receptacles as indicated.
  - k. General Note 63 – Provide additional home run circuits and breakers as indicated.
  - l. General Note 81 – Provide all power, wiring and other electrical work required for items indicated in the plumbing drawings for complete and functional fixtures.
- 14) Sheet ER-100, 101, 102, 103, 104, 105, 106 and 107 – Include all electrical removal and demolition work. Include completely removing unused electrical conductors,

- conduits, and other electrical items as indicated. Include furnishing and installing temporary lighting and temporary emergency lighting battery units as indicated. Include removals of work in trenches between buildings.
- 15) Sheet ER-100
    - a. Removal General Note 2 - Include the removal of TV brackets and television sets as indicated.
  - 16) Sheet E-106.1 – Furnish and install galvanized unistrut and fittings as required to independently support disconnects and receptacles.
  - 17) Sheet E-703 Detail 3 – Include all electrical work indicated in this detail. Include all work at floor box fire detail including box as indicated.
  - 18) Provide temporary power.
  - 19) Provide all penetrations and cores required to complete Subcontractor's Work. Include patching, fire caulking, acoustical caulking, and architectural caulking as required.
  - 20) Include all temporary egress lighting required including what is shown in the demolition drawings.
  - 21) Include all cord reels.
  - 22) Include all disconnects for the project.
  - 23) Maintain or provide lighting for all drop off, parking lot and pedestrian areas throughout the course of the project.
  - 24) Include demolishing any existing electrical system items that are no longer to be used that were not specified to be demolished in the demolition drawings. Verify any and all demolition with the Construction Manager prior to completion.
  - 25) Include the maintenance and repair of all new and existing electrical systems until the entire project is complete.
  - 26) Include all electrical cutting, capping, and making safe as required.
  - 27) Include all sleeves for electrical work including the locations shown in the structural drawings.
  - 28) Include providing temporary electric power to the 2 teacher stations in the temporary science labs as indicated in the phasing documents and directed by the Construction Manager.
  - 29) Include shop drawings and calculations prepared and stamped by a qualified professional engineer as specified for this scope of work. Include shop drawings and calculations for seismic restraints.
  - 30) Include all electrical work for the food service equipment including all service rough-ins, junction boxes, conduit and wiring, support brackets, disconnects, and final connections. Include the installation of all Food Service Subcontractor provided items specified to be installed by the Electrical Subcontractor.
  - 31) Provide all access doors and panels required for this scope of work to be installed by others.
  - 32) Include power connections and switching for the overhead motorized service doors and motorized operable panel partitions. Provide all line voltage wiring and switching.
  - 33) Include power for the display cases.

- 34) Include the installation for the switches and furnishing and installing wiring at the motorized projection screens. Switches to be furnished by the General Trades Subcontractor. Include all wiring, conduit, junction boxes and components.
- 35) Include the installation for the switches and furnishing and installing wiring at the motorized basketball goal systems. Switches to be furnished by the General Trades Subcontractor. Include all wiring, conduit, junction boxes and components.
- 36) Furnish and install all electrical for the gymnasium scoreboard systems including power conduit, cable, outlet boxes and all other related items. Include signal raceways, boxes, jacks, cover plates and all terminations.
- 37) Furnish and install all electrical work at the laboratory casework including service rough-ins, junction boxes, internal conduit and wiring, support brackets, final connections, disconnects, starters and all other electrical work.
- 38) Include power for dust collectors.
- 39) Furnish and install all GPS related equipment.
- 40) Include emergency generator system.
- 41) Include all conduit, cable trays, raceways, sleeves, fire sealing at sleeves, back boxes, boxes, pull cords, infrastructure, and power wiring for the security system shown on the SEC drawings. All work for the security system is to be reviewed and approved by the owner's security consultant and the Construction Manager prior to starting the work.
- 42) Video for Training, Maintenance & Operation - For equipment which requires training, maintenance and/or operation by operational personnel, provide a professionally developed video DVD with audio for the use of maintenance training for the facility as indicated in the specifications. Each video will be accompanied by a written index which can be utilized to find any specific item of information by time or place on the video. The recordings shall include the equipment being maintained by qualified personnel, the required maintenance tools, and a step by step technique, both verbally and visually demonstrating how to maintain each piece of equipment in a hands on application. Provide 5 copies of the video to the Construction Manager.
- 43) Include the demolition of all electrical items not indicated to remain as part of the permanent systems including items shown in the drawings and including items not shown in the drawings but existing on site. Include the demolition of all above ceiling and roof electrical not indicated to remain as part of the permanent system.
- 44) Furnish and install stage and theatrical light systems and all supports.
- 45) Review all specified equipment for the project and provide a letter to the Construction Manager indicating if all existing and new equipment will function properly with the electrical utilities specified in the construction documents 30 calendar days prior to completing related work.
- 46) Furnish all door hardware specified to be furnished by the electrical contractor in specification section 087100. Furnish and install all magnetic holders throughout the project.
- 47) Include cutting openings in metal deck for all work.
- 48) Include all shunt trips for the elevator shaft and other locations as indicated.
- 49) Equipment to be moved (By Bid Package 1.03) shall be disconnected by this Contractor and reconnected when delivered back to the building.

- 50) Obtain and pay for all permits including but not limited to certificate of compliance requirements for fire alarm inspection testing certification for all protective signaling systems.

**EXCLUSIONS**

- 1) Sale and Use Taxes.

**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 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.

**ALLOWANCE NO. 1: NEW ELECTRICAL SERVICE                      \$10,000**

-The Electrical Trade Contractor shall include in his/her base bid the allowance of **\$10,000** to cover fees and charges from Utility Company to install the new **permanent** electrical power service to the Building.

**EXHIBIT “B”  
SCOPE OF WORK**

**Bid Package #31.01  
Site Work**

**ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR**

**THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:**

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Site Work** 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 **Site Work** 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 Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

## **SCOPE OF WORK**

- 1) **Bid Package 31.01 Site Work:** 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 **Site Work** 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:

### **Project Manual:**

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

### **Specification Sections of the Project Manual:**

Include all work for all specifications 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.

<b>020100</b>	<b>Site Preparation</b>
<b>024113</b>	<b>Site Clearing, Site Demolition and Removals</b>
024216	Building Demolition (As Applicable) – <b>ADD. NO. 1</b>
<b>033001</b>	<b>Portland Cement Concrete – Site</b>
<b>040501</b>	<b>Mortar and Grout – Site</b>
<b>042113</b>	<b>Brick Masonry - Site</b>
072100	Building Insulation (As Applicable)
079200	Joint Sealants (As Applicable)
<b>101453</b>	<b>Site Signage</b>
<b>107500</b>	<b>Flagpole</b>

<b>111233</b>	<b>Vehicle Access Gate</b>
<b>129300</b>	<b>Site Furnishings</b>
Division 22	Plumbing (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)
<b>311400</b>	<b>Strip and Stockpile Existing Topsoil</b>
<b>312000</b>	<b>Building Earthwork</b>
<b>312213</b>	<b>Formation of Subgrade</b>
<b>312316</b>	<b>Earthwork</b>
<b>312317</b>	<b>Unclassified Excavation</b>
<b>212323</b>	<b>Borrow Soil Fill</b>
<b>312333</b>	<b>Trenching</b>
<b>312500</b>	<b>Erosion and Sediment Controls</b>
<b>316613</b>	<b>Helical Pile</b>
<b>321123</b>	<b>Processed Aggregate Base</b>
<b>321200</b>	<b>Bituminous Concrete Pavement and Markings</b>
<b>321213</b>	<b>Portland Cement Concrete Pavement and Curb</b>
<b>321244</b>	<b>Reinforced Turf</b>
<b>321413</b>	<b>Unit Pavers</b>
<b>321541</b>	<b>Stone Screenings</b>
<b>321726</b>	<b>Detactable / Tactile Warning Surfaces</b>
<b>323223</b>	<b>Modular Retaining Wall System</b>
328000	Irrigation System (As Applicable)
<b>329113</b>	<b>Topsoil</b>
<b>329200</b>	<b>Seed and Sod Lawn</b>
<b>Division 33</b>	<b>Utilities</b>
<b>481614</b>	<b>Geothermal Well Drilling</b>

**Schedule of Drawings:**

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

**2) 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 sections:

Layout; Temporary Sidewalks and associated work; Sedimentation and Erosion Control; Cast in Place Concrete; Footings and Foundations for Site Walls; Utility Pads; Removal and Replacement of Unsuitable Material; Excavation and Backfilling; Demolition and Tree Removal; Rock Removal; Foundation Underpinning and Soil Retentions Systems; Trenching and installation both outside and inside the Buildings (including but not limited to Gas, Water, Electrical, Grounding, Telephone/Data/Cable TV, Storm, Sewer, Fire Protection; Ductwork, Heating and Cooling); Concrete Thrust Blocks for All Utilities/Systems; Sheeting and Shoring; Dewatering for all trades; Earthwork; Anti-Tracking Pads; Site Water Distribution & Drainage; Foundation Drainage; Processed Aggregate Base; Soil & Materials Management; Site Storm Sewer Systems, (including Storm Water Discharge Permit); Site Sanitary Sewer System; Gas Utility System; Water Systems (including Water Meter Pit & Vault); all other Site Utilities as noted; Bituminous Concrete Pavement; Portland Cement Concrete Pavement & Curbs; Stone Pavers; Granite Curbs; Temporary Protection and weatherproofing; Concrete Encasements; Concrete Formwork (For Site Concrete Work only); Concrete Reinforcement (For Site Concrete Work only); Structural Concrete (For Site Concrete Work only); Site/Traffic Control Signage; Flagpoles; Joint Sealers and Caulking (as it applies to your scope of work) and as described in the Specifications Divisions and Sections listed below.

### **3) Phasing:**

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

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. Shop Drawings will only be reviewed by phase. 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.

### **Site Preparation:**

- a. This Subcontractor shall relocate as necessary and remove a minimum of **six (6) construction signs and bases** at surrounding City streets stating “Construction Equipment and Trucks Entering Road”. Additional signs may be required by the **Town of Hamden** and is included in the Subcontract price.
- b. This Subcontractor shall relocate as necessary and eventually remove a minimum of **ten (10) temporary wayfinding signs and bases** as directed by the Construction Manager.
- c. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to work areas. This Subcontractor shall be required to provide tree protection for existing trees to remain. All protection to be removed by this Subcontractor at the completion of the Work.
- d. This Subcontractor shall provide and maintain and eventually remove all erosion control measures as required including, but not limited to, inlet protection at manholes, silt fence, hay bales, anti-tracking pads at the construction entrance and exit including all associated filter fabric and large stone, as detailed and approved in the aforementioned Logistics Plan. All truck tires are to be free of dirt, dry and clean before leaving the construction site.
- e. This Subcontractor shall provide dust control (watering trucks) as required by the Construction Manager and/or by any state or local agency.
- f. This Subcontractor shall protect all asphalt, concrete and existing site improvements. In the event asphalt, concrete or other site improvements intended to remain, this Subcontractor shall repair and restore the asphalt, concrete and site improvements to its original condition.
- g. This Subcontractor is responsible for maintenance and eventual removal of crushed stone temporary roads to adequately support loading and withstand exposure to heavy construction traffic. Obtain approval from the Construction Manager to locate temporary roads, storage and parking areas. Extend temporary roads in and around the construction area as necessary to accommodate delivery and storage of materials, equipment usage, administration and supervisory personnel during later phases.
- h. This Contractor shall be responsible for all costs to eventually remove the water line taps and any other work related to the new water services to the Office Trailers. The water authority will provide a list of qualified Contractors who can be used for the Taps, disconnects, and any other work that needs qualifications.
- i. This Subcontractor shall remove and restore the following areas depicted on the Site Logistics Plan:

- i. Construction Parking and Material Storage Location : Remove 6” of compacted processed stone at 30,000 square feet and install perimeter erosion control, all acceptable to the Construction Manager. Remove and restore per finish sitework plan.
- ii. Construction Manager’s Office Trailer: Remove and dispose of a pressured treated wood deck and shed roof (watertight) to connect the entrances between the Owner’s jobsite trailer and the Construction Manager’s jobsite trailer – approx. 40x12 in size deck with 2-48” wide stairs/rails built to all applicable codes and as directed by the CM.
- iii. Construction Manager’s Office Trailer & Owner Office Trailer: For each the Owner and Construction Manager’s Trailer – Remove and dispose of two base cabinets and two wall cabinets and countertop to fill twelve foot long space in two locations in both Construction Manager’s and Owner’s Office Trailers.

This Subcontractor shall remove within their Base Bid the following; two (2) large white mailbox installed on 4 x4 post for CM and Owner.

This Subcontractor shall provide a case (24) each of white, blue and yellow Marking spray paint, 10 rolls each of “Caution Tape” and “Danger”.

This Subcontractor shall include **five (5) round trips** from the Project Site to the Construction Managers warehouse/office in New Haven at the end of the project with a rack body truck (provided by this Contractor) to bring, furniture and incidentals from the site. Include **two (2) laborers** to move carry and distribute these incidentals.

- j. This Subcontractor shall remove conduit and wire for all Power and Telecom and Data for Construction Manager Trailer and Owner Trailer. Include removal of two (2) overhead poles and power backboard systems. Make final disconnections to trailers for power, telecom and data.
- k. This Subcontractor shall provide all Site Preparation, Sediment Erosion Control Protection, and Clearing and Grubbing to remove all Trees, Tree Roots, Stumps, Shrubs and other existing Plant materials with the exception of those specifically noted in the Contract Documents to remain.
- m. This Subcontractor shall provide, maintain and eventually remove all erosion control measures including, but not limited to, inlet protection at manholes, silt fence, hay bales, anti-tracking pads [as depicted on the Site Phasing/Logistics Plan] all construction entrances and exits including all associated filter fabric and

large stone, as detailed and approved in the aforementioned Logistics Plans. All truck tires are to be free of dirt, dry and clean before leaving the construction site. (See Bid Package No. 1.01 (“Site Preparation”) for (3) Anti-Tracking Pad being provided by that Contractor).

**5) Site Demolition:**

This Subcontractor shall include Existing Site Improvement removals.

**6) Temporary Roads, Paving, Access**

**This Contractor shall provide for installation of asphalt binder course immediately following underground utilities work in that area.** This Contractor shall also provide asphalt patching, asphalt cleaning or sweeping and tack coat prior to installation of final paving, including final pavement marking and striping. Final paving shall be prepared to eliminate bird baths and minimize cold joints. It is understood that all final paving (top course/finish course) can take place up to several months after the binder course is installed and all associated cost shall be included in this Contractor’s bid proposal.

The Site Contractor shall construct and maintain temporary roads and paving that will adequately support loading and withstand exposure to traffic and equipment during the construction period. Locate temporary roads, storage, staging and parking areas where the same permanent facilities will be located whenever possible. Extend temporary roads in and around the construction area as necessary to accommodate concrete trucks, concrete pumps, structural steel deliveries, and all other deliveries, storage of materials, and access for equipment and for administration and supervisory personnel. This Contractor must maintain a compacted surface that slightly slopes away from building around the entire perimeter of the building at a minimum of 10 feet wide suitable for staging of the exterior of the building. Provide and maintain suitable pumps and drains to keep the excavated areas of the building free from water and sufficiently dry at all times. This Contractor shall provide **five (5) separate compacted (90% compaction) dry pads suitable for the crane that will be used in erecting the building structural steel from outside of building foot print as located and as prescribed by the CM. These five (5) separate compacted pads shall be a minimum of thirty-five feet by thirty five feet.**

This Contractor shall be responsible to professionally sweep clean public roads around the project site on a daily basis as result of construction traffic. Additionally, this Contractor shall professionally sweep all pavement, sidewalks, and entry steps as directed by the Construction Manager from the time this Contractor mobilizes until the issuance of the Certificate of occupancy.

**7) Soil Erosion and Sediment Control**

This Contractor is responsible for the furnishing, maintenance and removal of Erosion and Sedimentation Controls including anti-tracking pads as shown on the Contract Documents. This Contractor will also be responsible to maintain the anti tracking pads as shown on the Contract Documents. Please Note, anti tracking pads are shown for count only and it is possible that these pads could be located in others areas as directed by the Construction Manager.

This Contractor is responsible for cleaning and /or washing down the tires of his or her construction vehicles and equipment including but not limited to visitors and vendors exiting the site at the anti-tracking aprons located at each construction entrance to avoid tracking mud, dust, and etc. from the site and onto public streets.

Sedimentation and erosion control shall be properly installed and maintained. The silt fence specified utilizes an 8' post spacing. The posts are to be hardwood posts with the fabric prefabricated on the posts from the factory. The fabric specified does exceed the specifications of some other manufacturers in regards to strength. The control includes two rows of fabric as a means of a second defense mechanism.

A breach in the erosion control systems shall be deemed a lack of oversight from this Contractor to properly ensure the systems are installed correctly and are being inspected and maintained regularly. In the event of a breach, this Contractor shall immediately repair and replace the breach and repair and restore the neighboring property.

It is essential that the site work be performed in a staged progression to minimize the potential for soil loss through erosion as stated in the Contract Documents. The Contract Documents are not intended to show every erosion control measure necessary to coordinate with the Project Schedule (this is identified in the Erosion Control Narrative Specification). Erosion control logs shall be required by this Contractor that clearly and accurately identifies the status of the erosion control measures in place, this item shall be on the agenda of every construction meeting.

Furthermore, this Contractor will be required to submit on a weekly basis, formally sign and follow requirements of the Water Pollution Control Plan for the project.

#### **8) Survey / Layout:**

The Site Work Trade Contractor shall provide **40 control lines and 10 benchmark grades**. This information shall be provided by a Connecticut Licensed Land Surveyor who shall install permanent offset points and bench marks that will allow for the reproduction of lines and grades by other trades.

This Contractor shall provide all other layout required to perform and complete his or her Work. The cost to replace or repair lost or damage control points shall be the charged to the offending Contractor.

**9) Temporary Works:**

The Site Work Contractor shall provide:

- l. The Site Work Contractor shall provide the Temporary Bituminous Sidewalks and associated work.
- m. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to work areas. The Site Contractor shall be required to provide tree protection for existing trees to remain.
- n. This Subcontractor shall include protection of utilities to remain within the work areas as indicated in the Contract Documents.
- o. This Contractor shall also provide and maintain suitable pumps, drains, and etc. to keep the site and building excavations free from water and sufficiently dry at all times.
- p. This Subcontractor shall not stockpile materials on site without prior written approval from the Construction Manager.
- q. This Subcontractor shall remove all Temporary Works below grade, including but not limited to, temporary power conduits, temporary water piping, temporary gas piping and other temporary systems not indicated to remain.
- r. This Subcontractor shall provide any and all temporary ramps over foundations for access by any trade.

**10) Under-slab Utilities within the Structure:**

The Site Contractor shall include all trenching, bedding and backfilling within the building footprint for installation of any and all under-slab work depicted on the Contract Documents and Reference Documents. Soil compaction shall be restored and tested as noted on the Contract Documents.

**11) Removal of Mock-Ups:**

The Site Contractor shall remove and dispose in the General Trades dumpster all Mock-ups (any trade) constructed in and around the Site when directed by the Construction Manager.

**12) Site Utilities:**

Site Contractor shall provide all Site Utilities as shown on the Contract Documents, including but not limited to:

- a. Trenching, Bedding, Pipe, Fittings, Valves, Concrete Anchors, Thrust Blocks, Concrete Encasements, Backfilling, and etc. as required to complete all systems as noted such as, Gas, Storm, Sanitary, Water, Fire Protection, Under Drains, CATV, Fiber, Electrical, Telecom, Data and Pole Mounted Security Cameras. All Conduits for the electrical, CATV, Fiber, Telecom, Data and Site Lighting will be provided by the Site Contractor.
- b. Site Water Distribution & Drainage, Site Storm Sewer Systems (including Storm Water Discharge Permit), Site Sanitary Sewer System; Gas Utility System; Fire Protection Service; Water Systems (including Water Meter Pit); all other Site Utilities as noted;
- c. This Contractor shall provide the above services from the point of origin into the building and coordinate same with the appropriate utility.
- d. This Subcontractor shall provide and install all thrust concrete blocking associated with all systems including fire protection lines.
- e. This Contractor will be responsible for coordination with the appropriate utility and provide and pay for all Permit, Fees, etc. and the coordination of inspections within the Contractor's Scope of Work as required by the service provider and/or the authority having jurisdiction.
- f. It is the intent of this document that the Site Contractor shall provide all utilities noted as complete in all respects, including but not limited to, providing Utility Pads as shown or required.
- g. The Site Contractor shall include in the Scope of Work any costs associated with shut downs that may be required to complete the Work.
- h. The Site Contractor shall be responsible for cleaning, flushing and disinfecting all water service piping prior to any Plumber or Fire Protection Trade Contractor's attaching to the new services. The Site Contractor shall employ a licensed Plumbing Contractor for any water service piping that is required to have a licensed contractor to install this above mentioned work by code. Site Subcontractor shall ensure everyone on site has appropriate licenses in regards to this subcontract.

- i. The Site Work Contractor shall furnish, install and coordinate with the Construction Manager and authority having jurisdiction when performing Domestic and Fire Protection water systems. It shall be the responsibility of the Site Work Contractor to make certain that the Water Distribution Services (Fire and Domestic) is complete in all respects at no additional cost to the Project. This includes but not limited to all tapping fees.
- j. The Site Contractor shall be responsible for all costs and coordination of water line taps and any other work related to the new water services. The water authority will provide a list of qualified Contractors who can be used for the Taps, disconnects, and any other work that needs qualifications.
- k. The Site Contractor shall provide excavation, Bedding and backfill for the new gas service from the Street Line to the new gas meter.
- l. The Site Contractor shall be responsible for connections to each utility service including the Gas Service, and coordinate work with other trades. Excavation, Bedding and backfill for all other trades shall be the responsibility of this Site Contractor. Inserts, sleeve and the like required to pass through the foundation and/or slabs shall be provided by the Contractor requiring the opening.
- m. The Site Contractor shall include in the Scope of Work any costs associated with shut downs to complete his or her work for the entire length of the project.
- n. The Site Work Contractor is responsible for all excavation, Bedding and backfill required within the new building and on the entire site for, all Trade Contractors. Each Trade Contractors shall provide line and grade for Site Contractor. It will be the responsibility of the Site Contractor to obtain the proper depth and location required for each excavation.
- o. This Contractor is to furnish all labor, materials, equipment and incidentals necessary for the demolition and disconnection and lawful disposal of existing underground and above ground utilities and appurtenances servicing structures to be demolished as indicated on drawings and as necessary to perform work in the Scope of Work, as specified, and as directed by Engineer. This Contractor is to contact and coordinate with all utilities prior to the start of Work. Subcontractor to verify all existing utilities that are to remain that are in Subcontractor's area of work. Subcontractor is required to employ, at their expense, professional underground utility locating services for their onsite work. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs passed on to Subcontractor. Stake, flag, and protect all existing utilities to remain.

**13) Grease Interceptor:**

The Site Contractor shall be responsible to furnish and install the Grease Interceptor as shown on the Contract Documents and shall include any necessary openings for, but not limited to, intake piping, exiting (downstream) piping, above access holes, etc. The Site Contractor shall be responsible for furnishing and installing all sanitary piping from the building into the grease interceptor. The Site Contractor shall install all sanitary piping from the downstream side of the Grease Interceptor and any manhole covers, manhole frames, manhole risers, vent lines, etc.

The Site Contractor shall verify operation of the grease interceptor and correct any malfunctions.

**14) Bituminous Damp Proofing at Foundation and Site Walls:**

- a. This Contractor shall be responsible for any and all damp-proofing, waterproofing, and insulation as it relates to Foundation Walls.
- b. This Contractor shall be responsible for all damp proofing, waterproofing and insulation at Site Walls.

**15) Site Security:**

The Site Contractor shall be responsible for security of the site with temporary gates, chains, locks, etc. Any associated cost shall be included in their base bid (distribution of keys free of charge as directed by the Construction Manager. Provide locks and chains on gates in fence as indicated on the Site Logistics Plan and as directed by the Construction Manager.

The Site Contractor shall be responsible on a *daily basis* to secure all access points to the site at the direction of the Construction Manager.

**16) Office Trailer Locations:**

This Subcontractor shall remove conduit and wire for all required Power and Telecom/Data for **All** Site Offices.

This Subcontractor shall remove wastewater sewer connection for **All** Site Offices.

This Subcontractor shall remove water service connection for **All** Site Offices.

**17) Bid Package No. 1.01 (“Site Preparation”) Site Excavation and Stockpile:**

Any excess soil that is stockpiled by the Bid Package No. 1.01 (“Site Preparation”) Contractor shall be removed by this Subcontractor. Stockpiles that have erosion control measures installed around it shall be maintained by this Subcontractor.

**18) Construction Parking and Material Storage Location:**

At the completion of the Project, or as directed by the Construction Manager, all services shall be removal and the area completed or restored in accordance with the Contract Documents. The Site Contractor shall cut, cap and remove all services to the Construction Parking and Material Storage Location. The Site Contractor shall remove or reuse all processed stone parking lot materials, erosion control and any other components of the Construction Parking and Material Storage Location area not indicated to remain as per the Contract Documents. The Construction Parking and Material Storage Location will be constructed in accordance with the Site Logistics Plan.

**19) Building and Site Excavation, Bedding, Backfill:**

The Site Contractor shall provide Excavation, Bedding, Backfill and etc. where indicated for all structures including: Retaining Walls, Structures, Site and Building Footings and Foundations, Utilities, Mud Slabs, Flag Poles, Miscellaneous Site Improvements, etc.

The Site Contractor shall provide Bases for all Site Lighting.

This Subcontractor shall be responsible for the Removal and Replacement of Unsuitable Material.

The Site Contractor shall provide the excavation and installation of Light Fixture bases.

Strip site and off haul soil spoils and/or stock pile for future use. Subcontractor is responsible for determining amount of soil needed for obtaining a balanced site (complete rough & finish grade and backfilling operations). Any excess soil is to be off-hauled by Subcontractor; if site is short, Subcontractor is responsible for importing. Stockpiles shall have erosion control measures installed around it and maintained. All spoils or any other soil being removed from the site must be tested and characterized prior to leaving the site and legally disposed of off site.

**20) Underground Ducts and Utility Structures:**

The Site Work Contractor shall provide Excavation, Dewatering, Bedding and Backfill, and installation of all Underground Conduits, Ducts, Grounding System and all other Utilities. Additionally the Site Contractor shall furnish and install Manholes, Handholds,

Power Boxes Underground Structures and Pads, Transformer Vault/Pad, Concrete Anchors & Concrete Encasements, including Reinforcing Steel and Identification for same for all Underground Conduits, Ducts and all other Utilities.

The Electrical Contractor shall provide all Conduits, Ducts, Electrical Wire Accessories, connections and other materials as required to complete the Underground Conduits, Cables, Ducts, Grounding systems and Utilities installation per the Electrical Divisions.

The Site Contractor shall include in the Scope of Work any costs associated with any type of shut down to complete the work.

Additionally, the Site Contractor shall include all Trenching, Bedding and Backfilling within the building for installation of all under slab underground work performed by others (under new and existing slabs).

This Contractor shall be responsible for the removal of ALL existing underground utilities and structures as indicated on the Contract Documents.

This Contractor shall include all dewatering including all excavations, trenches, pits, open foundations, footings, etc., for the duration of the project.

**21) Rigid Under Slab and Foundation Insulation:**

All Extruded-Polystyrene Insulation inside and outside and underneath the Foundation walls and footings, where indicated on the Contract Documents, shall be furnished and installed by the Site Contractor.

**22) Sheeting, Shoring, Underpinning and Open Hole Protection:**

In addition to that required by the Contract Documents, the Site Contractor is responsible to provide all Sheeting, Shoring, Bracing, and Underpinning as required to complete his or her Scope of Work and the work of other Trades, whether shown or not on the Contract Documents.

- a. Also included shall be the restoration of all previously existing conditions disturbed as a result of the Site Contractor's work.
- b. Any street and parking area openings must be plated, barricaded with jersey barriers, barrels, signage, caution tape, and/or flashing caution lights at the end of each workday by this Subcontractor.
- c. 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.
- d. Underpinning of existing foundation shall be the full responsibility of this Contractor to maintain the integrity of the foundation to the complete satisfaction of the Structural Engineer and Architect.

- e. Any compromise of the integrity of the existing foundation shall be the full responsibility of this Contractor to rebuild the existing foundation to the satisfaction of the Structural Engineer and Architect.

### **23) Site Concrete:**

The Site Contractor shall provide all Concrete Formwork (for Site Concrete Work only), Concrete Reinforcement (for Site Concrete Work only) and Structural Concrete (for Site Concrete Work only) to complete all Site Concrete as indicated on the Contract Documents, including the Clarifications as listed below:

- a. The Site Contractor shall provide excavation and installation of Concrete Bases and footings for the Site Lighting Fixtures, including the setting of anchor bolts. The Site Contractor shall provide Concrete Grouting if required. Refer to the electrical drawings.
- b. The Site Contractor shall provide Excavation, Bedding, Backfill, Formwork, Drypack, Grout, Concrete, removals, etc., for all Site Concrete Work as indicated on the Contract Documents, including but not limited to Sidewalks, Bituminous Concrete Pavement, Portland Cement Concrete Pavement & Curbs, Stone Pavers, Detectable Warning Surfaces, Granite Curbs, Bollards, Light Pole Bases; Flag Pole and Base; Concrete Encasements; Concrete Formwork (For Site Concrete Work only); Concrete Reinforcement (For Site Concrete Work only); Structural Concrete (For Site Concrete Work only) and Retaining Walls.
- c. This Subcontractor shall provide all Utility Equipment Pads, Generator Pads, Slabs, All Exterior Mechanical Pads, and Transformer Vaults as indicated on the Contract Documents or required by Utility Companies or authorities;
- d. The Site Contractor shall provide all Site Signage, Traffic Signage, Parking Signage, and associated Posts and/or Concrete Bases (VLOCs) as noted in the Contract Documents. Include all site utility signage specified and required by all applicable codes and agencies.
- e. The Site Contractor shall install all inserts, anchors, as provided by others, to allow for the installation of pipe and tube railings provided by others.
- f. The Site Contractor shall provide all Site Concrete typical and as noted on the Civil, Architectural and Structural Drawings.
- g. The Site Contractor shall provide ALL Concrete and Reinforcing in its entirety from the outside face of the existing or new exterior concrete foundations walls.

### **24) Site Signage:**

The Site Contractor shall provide all Site Signage, Traffic Signage, Parking Signage, and associated Posts and/or Concrete Bases (VLOCs) as noted in the Contract Documents.

- a. The Site Contractor shall provide the excavation, foundation and backfill at the school sign typical and as noted on Detail 5/C10.
- b. The Signage Contractor shall provide the Cast Metal Letters at school sign typical and as noted on Detail 5/C10.
- c. The Masonry Contractor shall provide the masonry and precast at the school sign typical and as noted on Detail 5/C10.

**25) Transformer & Lightning Protection Grounding Loop:**

The Site Contractor shall provide Trenching, Bedding and Backfilling for the installation of the Ground Loop for the Transformer and the Lighting Protection System as indicated in the drawings.

**26) Winter Protection, Dewatering and Runoff Control:**

- a. The Site Contractor shall provide removal of snow, ice and mud from Construction Roads (including the Athletic Field Project Site Roads), Permanent Driveways & Roads, City Sidewalks, Construction Trailer Office Locations, Office Trailer stairs and access and Construction Parking and Material Storage Areas as may be required for accessibility, safety, protection and prosecution of all trade work. These operations shall be performed for the duration of the Project. In addition to removing the snow, this Contractor shall spread ice melt as needed or at the Construction Manager's discretion. This Contractor will be responsible to sweep up all sand used in the above process. Site Subcontractor also to provide all removal of snow, ice and mud to complete its own work.
- b. This Subcontractor shall include and maintain all rainwater runoff control and shall sign and agree to the Storm Water Pollution Control Plan.
- c. This Subcontractor shall include ALL dewatering and surface water control for all open excavations, foundations, footings, access and haul roads, and staging areas as required for the duration of the Project. All erosion controls shall be inspected weekly and before every anticipated rain event and after every rain event.
- d. This Subcontractor shall provide and maintain all winter protection up to the point where the area is taken over by the Concrete Foundation Subcontractor. This Subcontractor shall include preparation, protecting and/or pre-heating/thawing (including but not limited to blankets, ground heaters, etc.) required to complete its Work and will provide the Concrete Subcontractor's with "non-frozen" conditions. The Concrete Foundation Subcontractor will be responsible for

dewatering its Work. Once forms are stripped, this Subcontractor shall resume responsibility and backfill promptly.

**27) Dust Control:**

The Site Contractor shall provide all Dust Control for the duration of the Project. This Contractor will provide dust control (watering trucks) as required or as requested by the Construction Manager and/or by any state or local agency.

**28) Permanent Roads and Pavement:**

This Contractor shall provide for installation of asphalt binder course for each designated paved area. This Contractor shall also provide asphalt patching, asphalt cleaning or sweeping and tack coat prior to installation of final paving, plus final pavement marking and striping. Final Paving shall be prepared to eliminate birdbaths and minimize cold joints.

Additionally, this Contractor shall professionally sweep all pavement, sidewalk, and entry steps just prior to occupancy as directed by the Construction Manager.

This Contractor is responsible for all pavement and field markings/painting, curb and wheel stops, speed bumps, undulations, and sealers. Include the complete removal of existing striping in lieu of just painting over existing with black paint.

**29) Neighboring Property Owners:**

This Contractor shall provide any and all coordination (through the Construction Manager) with neighboring property owners while conducting Work in the vicinity of the property line, including but not limited to rock removal, excavation, site demolition and brush and tree removals.

**30) Storm Water Retention Systems**

**This Contractor shall be required to construct the Storm Water Systems upon mobilization to the Project.**

This Contractor shall be required maintain the Storm Water Retention Systems for the duration of the Project.

This Contractor shall be required to permit reasonable access to all Contractors over the Storm Water Retention Systems and provide temporary protection over the units to allow for such reasonable access (manlifts, lulls, highlifts and other construction equipment) to the building.

This Contractor shall be required to restore and completely clean to the satisfaction of the **Town of Hamden**, Architect, Construction Manager and any other entity having authority over the Storm Water Retention Systems.

This Contractor shall prepare and submit for approval a Work Plan specifically identifying the work activities in sequence for the construction of Storm Water Retention Systems. This Contractor shall meet with the Construction Manager, Site Engineer and appropriate representatives of the **Town of Hamden** and likely the State of Connecticut to review the Work Plan which shall include at a minimum: (1) schedule of operations, (2) installation sequence, (3) sedimentation and erosion control measures, (4) shop drawings, (5) removal of construction sedimentation prior to closeout and any other information required by the **Town of Hamden**, Architect and Engineer.

**31) Dumpsters, Clean-up, Wash-Out & Waste Removal:**

- a. The Site Work Contractor shall be responsible to compact down ALL TRADES dumpsters w/ a machine equivalent to or greater than a John Deere 410 on an as needed basis per the Construction Manager.
- b. The Site Work Contractor shall be responsible for washing out concrete trucks, pumping trucks, pipe lines, etc., off-site (take back to plant) or at a designated place on site which can be cleaned and disposed of at his or her expense. Additionally, the cost of cleaning of all concrete, mortar, and grout splatter from all surfaces immediately after placement of these materials, and repairing any resulting damage to the satisfaction of the Construction Manager shall be included in this Contractor's bid proposal. Also include a location for the Concrete Subcontractor to wash out its trucks on the project site. NO WASHING OF TOOLS, EQUIPMENT, ETC. OR ANY MATERIALS INTO STORM OR SANITARY SYSTEMS WILL BE PERMITTED.
- c. This Contractor will provide, maintain, and remove at project completion a washout area for his or hers and the Concrete/Mason Contractor's concrete trucks, pump trucks, pipe lines, etc., delivering to the site. Including periodically relocating the washout area as dictated by the Construction Manager and/or Engineer.

**32) Sub-grade Preparation:**

This Contractor is responsible for providing Sub-grade to tolerances indicated in the Contract Documents for all elevations noted on the Contract Documents.

### **33) Radon Pit Removal System:**

The Site Contractor shall be responsible for Excavation, Bedding, Backfill, Concrete Block, Plywood or Metal Decking as indicated in the details, of Radon Collection Systems and all accessories for the Radon Removal Systems as detailed on the Contract Documents.

The Mechanical Contractor shall confirm the operation of the Radon Removal Systems after installation as noted on the Contract Documents. The Mechanical Contractor shall be responsible for providing a licensed certified radon testing company to certify all Radon Removal Systems as noted on the Contract Documents.

Include all under slab radon trenching, installation, and connections and stub up from the slab on grade.

### **34) Flagpole**

This Contractor shall provide the Flagpole and flags and related components as noted on the Contract Documents, including demolition and removal and proper disposal of the existing pole/base.

### **35) Traffic Control Signage**

This Contractor shall provide the Traffic Control Signage and related components as noted on the Contract Documents, including demolition and removal and proper disposal of the existing pole/base.

### **35) Final Cleaning of Asphalt and Site Concrete:**

The Sitework Contractor shall professionally sweep clean the roads and pressure wash all sidewalks.

### **36) Topsoil and Lawn Seeding**

This Subcontractor shall provide all approved topsoil and seeding as indicated on the Contract Documents. This Contractor shall be responsible for watering, cutting and maintaining all grasses until Project is complete and as specified. **Only complete Work to the Project North of the Athletic Fields & Courts Demarcation Line (See Contract Documents). All work to the project south of the Athletic Fields & Courts Demarcation Line will be completed by the BP#31.04 Athletic Fields Subcontractor.**

## **CLARIFICATIONS**

- a.) Subcontractor shall **only complete Work to the Project North of the Athletic Fields & Courts Demarcation Line (See Contract Documents). All work to the project south of the Athletic Fields & Courts Demarcation Line will be completed by the BP#31.04 Athletic Fields Subcontractor.** Include all sleeves for plumbing, electrical, storm water drainage and irrigation work located to the project north of the Athletic Fields & Courts Demarcation Line that are required for work to the project south of the Athletic Fields & Courts Demarcation Line. Utilities crossing the Athletic Fields & Courts Demarcation Line shall be terminated at the line by this Subcontractor with a pull box or manhole unless otherwise noted.
1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
  2. The Fire Suppression Contractor shall coordinate closely with the work of the Site Contractor to complete the water service(s) connection in a timely manner, as directed by the Construction Manager in its sole discretion, as not to delay the backfilling of the new water service(s). In the event the Fire Suppression Contractor is not acting timely, in the Construction Manager's sole discretion, the Construction Manager shall direct the Sitework Contractor to complete the installation into the building with cost backcharged to the Fire Suppression Contractor.
  3. The Sitework Trade Contractor shall provide fire protection service and domestic water line to within 5'0" of exterior face of exterior foundation wall with a flanged end or a bell end of the ductile iron pipe or similar condition for the other Trade Contractors to connect to. The Plumbing and Mechanical Trade Contractor and the Fire Protection Contractors shall be responsible for making the connections and running the piping into the building from that point.
  4. Complete work using the phasing described in Fusco Corporation's Phasing Documents. Include providing and maintaining site lighting.
  5. Sheet C-1 - Include all work indicated on this sheet.
  6. Sheet C-2 - Include all work indicated on this sheet except for the demolition of "D" Wing and the garage. The demolition of "D" Wing (listed as "D" Wing and "G" Wing on some sheets) and demolition of the garage will be completed by the Demolition and Abatement Subcontractor. Site Work Subcontractor to include demolition of oil separator tank and all exterior steps, stairs, ramps, walks, hand rails, and guard rails.
  7. Sheet C-3 - Include all site footings except for footings at fencing. Include reinforcing at footings where specified. Include footings for gates, hand rails, guard rails, other railings, bollards, removable bollards and vehicle access gates and coordinate with other trade contractors. Infill bollards with concrete and form top. Include all exterior and site concrete, concrete paving, sidewalks, ramps, steps and stairs, aprons, curbs, asphaltic concrete paving, traffic signage and striping, all exterior signage not attached to buildings, stop bars, crosswalks, stone screenings, parking stalls, loading zones, flagpoles, retaining walls, utility pads, bike racks, trash

- receptacles, and benches. Include all grass, lawn and reinforced turf located north of the Athletic Fields & Courts Demarcation Line.
8. Sheet - C-4 - Include all work indicated on this sheet. Include all utility connections, permits and fees. For site materials and methods use CTDOT Form 816 and/or the specifications, whichever is more stringent.
  9. Sheet C-5 – Include all grass, sod and lawn on the Project North side of the Athletic Fields & Courts Demarcation Line.
  10. Sheet C-6 - Include all work indicated on this sheet. Include the installation, maintenance, and removal of three (3) Anti-Tracking pads to be located as directed by the Construction Manager based on revised phasing. Maintenance of the anti-tracking pads includes the periodic removal of materials and addition of new rock as directed by the Construction Manager. In addition, include sedimentation and erosion control systems along the Athletic Fields & Courts Demarcation Line which is not shown in the drawings and all required erosion control whether shown on the drawings or not. Also include the maintenance and removal of three (3) separate Anti-Tracking pads provided through Bid Package No. 1.01 (“Site Preparation”).
  11. Sheet C-7 - Include all work indicated on this sheet.
  12. Sheet C-8 Include all work indicated on this sheet.
  13. Sheet C-9 - Include all work indicated on this sheet.
  14. Sheet C-10 Detail 5 - Include all work indicated in this detail below the top of the footing and include the reinforcing coming out of the top of the footing. Provide a shop drawing for this footing and coordinate with Masonry Subcontractor.
  15. Sheet C-10 Detail 6 - Include all work indicated in the detail listed.
  16. Sheet C-10 Detail 7 – Include all work indicated in this detail.
  17. Sheet C-11 Detail 1, 2, 3, 4, 5, 6, 7, 8, and 9 - Include all work indicated in the details listed.
  18. Sheet C-13 Detail 7 - Include all work indicated in the details listed.(See Drawing C-3 for location adjacent to Building E typical).
  19. Sheet C-15 Detail 4 – Include all concrete and concrete expansion joints, tooled joints, pre-molded joints, sealants and any other concrete joints.
  20. Sheet C-16 Detail 2, 3, 4 & 5 - Include all footing and concrete and other work indicated in the details listed except for furnishing the railings and gates. Miscellaneous Metals Subcontractor to furnish and install railings and gates in these details. Infill bollards with concrete and form top.
  21. Sheet C-17 - Include all work indicated in this sheet. Include furnishing and installing the entire sand pit system.
  22. Sheet C-18 Detail 1 - Include all work indicated in the details listed. Include benches, concrete pavers, trash receptacles, bike racks and flag pole.
  23. Sheet C-18 Detail 2 – Include all work indicated in this detail except for the tree, mulch, precast cap and brick veneer. Include the plaques and skate stops in this scope. Provide shop drawings for the seat wall system and plaques and coordinate with Masonry Subcontractor and Landscaping Subcontractor. Include sand-blasting at concrete.

24. Sheet EV-101 - Sitework Subcontractor shall be responsible for Excavation, Bedding, Backfill,  $\frac{3}{4}$ " Pressure Treated Plywood and/or metal deck as indicated in the drawings, Crushed Stone, Concrete Block and accessories for the Radon Removal Systems as detailed on the Contract Documents. Include piping under the slab and stub up above the slab. Coordinate with Mechanical Subcontractor and Concrete Subcontractor.
25. Structural ("S") Drawings – Include all work in the Structural drawings as it relates to this scope of work. Include the excavation for all building footings and slabs and include all subgrade, base, crushed stone, fill and backfill. This includes excavation work and bedding and backfill work at slab removal and infill locations.
26. Sheet S-100 Foundation Note 1 – Include all work described in Foundation Note #1 including 12" of compacted granular fill under all footings and foundations and all work relating to helical piles and the surveying for those piles.
27. Sheet S-106 – Include site work as applicable to this scope of work as indicated on this sheet for the E House.
28. Sheet S-202 Detail 7 - Include all crushed stone at building slabs and at infill areas. Include infill areas that are shown throughout the contract documents and infill areas required but not shown in the drawings.
29. Sheet S-222 Detail 21, 22 and 23- Include ALL helical piles typical and as noted throughout the Contract Documents.
30. Sheet EQ-101 – Furnish and install all site and plumbing related equipment and work indicated to be contractor furnished and installed outside of the buildings. Furnish and install the following items:
  - a. Shop Equipment Schedule – Automotive Production Shop
    - i. Item 12 – Waste Oil Containment System – Include entire tank and system and bring piping within 5' of the building.
31. Sheet EQ-103 – Furnish and install all site and plumbing related equipment and work indicated to be contractor furnished and installed outside of the buildings. Furnish and install the following items:
  - a. Shop Equipment Schedule – Plumbing
    - i. Item 3 – Oil Tank – Include entire tank and system and bring piping within 5' of the building.
32. Sheet PR-102 – Demolish and remove existing gas piping system from 5' outside of the exterior of building to main line in Jones Road. Cap in the street at the main. Coordinate and comply with local utility. Coordinate and comply with Town of Hamden requirements for street work.
33. Sheet P-104.2 - Furnish and install the oil separator systems outside of the buildings.
34. Sheet M102.2 Detail 1 – Provide 12" Sonotube Foundations for Dust Collector angle frame. Coordinate location with Plumbing and HVAC Contractor.
35. Sheet ES-101 Detail 6 & 6a – Include all transformer utility pads. Include a pad for the generator.
36. Sheet ES-101 Detail 0, 1, 2, 3, and 4 – Include all site electrical infrastructure including ductbanks.

37. Sheet F-002 Detail 1 and 2 – Include the demolition of the existing site fire protection piping and construction of the new site fire protection line system to within 5’ of where the line is shown to enter the building.
38. Sheet F-003 Detail 1 – Include installation of the fire sprinkler site piping system from point of connection shown to within 5’ of where the line is shown to enter the building. Include control valve and box.
39. Include hydro flushing and cleaning of all existing and new storm drainage piping, catch basins, and manholes that are to be reused in the final plan at the end of the construction project. Also, hydro flush and clean all existing storm drainage piping, catch basins, and manholes at the beginning of the project and periodically during the project to endure a clean and properly functioning system as directed by the Construction Manager. All hydro flushing and cleaning to be done to the point of connection in the street.
40. Include all temporary pavement markings as indicated or required and their removal.
41. Saw cut and remove asphalt, sidewalk, curb, and site concrete as required for new sidewalk, curb, site concrete and drive and/or ramp entrance requirements. Saw cuts to be laid out prior to cutting and lay-out MUST be approved by Construction Manager’s Superintendent (correct layout is the responsibility of Subcontractor; Construction Manager's Superintendent to verify neatness and constructability only). All cuts to be neat and all overcuts to be kept to an absolute minimum.
42. Include all sawcutting for utility demolition and for new utilities throughout the project outside of the buildings.
43. Subcontractor shall provide all suitable soil and topsoil for the entire site including all lawn, landscaping and planting areas. Subcontractor shall furnish and install all soil amendments, conditioners, compost, manure, and fertilizers and shall complete all soil preparation. Include rototilling. Include topsoil testing and report costs as specified and include all amendments and work indicated in the report.
44. Include back fill at perimeters of building structures after completion of concrete.
45. Include the off-haul of spoils from all work including any work by other trades.
46. Hand dig around tree drip lines and near existing utilities.
47. Include shop drawings prepared and stamped by a Professional Engineer licensed in the State Of Connecticut for the vehicle access gates as indicated in specification section 111233 and for precast structural concrete units as indicated in specification section 033000 and for soil shoring as indicated in specification section 312317 and helical piles as indicated in specification section 316613 and the modular retaining walls as indicated in specification section 323223 provide shop drawings stamped by a Professional Engineer for all other applicable items in this scope. Helical pile work shall be completed after school hours or on weekends or holidays.
48. Site Subcontractor responsible to install, maintain, and relocate fencing and surfaces for egress paths out of school as they change with the construction phasing. All pedestrian walkways shall be asphaltic (not crushed stone or processed).
49. Include a new driveway apron and asphaltic concrete paved driveway over baserock matching the permanent construction details as a temporary driveway and road for school access from Jones Road just west of Pease Street to the existing parking lot.

- See Fusco Site Phasing Plan and CP-1.2 for reference and demolish this temporary driveway and road as directed by the Construction Manager when it is no longer needed.
50. The Sitework Subcontractor shall provide Excavation, Bedding, Backfill for the Concrete Subcontractor for all structures including: Structures Footings and Foundations. Excavation and backfill of sumps and pits will be by the Sitework Subcontractor.
  51. Provide all concrete joints and include shop drawings indicating the layout of joints.
  52. The demolition of all concrete shall extend to the nearest control joint, expansion joint or tooled edge.
  53. Include relocating 2 existing and 3 new Conex type storage containers on site which are approximately 20' long 4 times each as directed by the Construction Manager.
  54. Include concrete patching at all city sidewalks and concrete repair at city sidewalks near construction entrances.
  55. Include all underground location services as required and coordinate with all agencies to avoid underground utility damage. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs back-charged to the Subcontractor.
  56. Provide all temporary egress protective pathways required to obtain Certificate of Occupancies and Temporary Certificate of Occupancies and as indicated in the Contract Documents.
  57. Include pumping out and disposing of all materials in existing site fuel and waste oil containers as directed by the Construction Manager
  58. Include all exterior sand-blasting.
  59. Furnish and install all skate stops.
  60. Create as-built drawings for all underground utilities prior to covering them.
  61. Include all vaults, manholes and box covers and lids. Provide and install traffic rated Christy boxes or manhole covers at roadways, sidewalks, and all other areas where vehicular traffic is likely.
  62. Subcontractor is responsible for potholing and locating all existing underground utilities for the entire project.
    - i. Include potholing to determine existing conditions and utility locations. Verify the locations & invert elevations of all shown utilities. Include locating, cutting, capping, relocation, and connection to all existing utilities.
    - ii. Verification of underground utilities prior to sawcutting is the responsibility of the Subcontractor. All information contained in the contract drawings must be verified prior to sawcutting. Include all sawcutting for this scope of work.
    - iii. If the field conditions are inconsistent with the drawings, notify the General Contractor's Superintendent immediately. Provide detailed & complete information that can be sent to the Engineer for direction.
    - iv. Subcontractor is required to employ, at their expense, professional underground utility locating services for their onsite excavations and trenching. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs passed on to Subcontractor.
    - v. Subcontractor to safe-off utilities as required.

63. Subcontractor will be responsible for any line and it's functionality that Subcontractor connects to (including but not limited to, drainlines). Subcontractor to clean lines and ensure that lines are clear and are functioning/flowing as intended.
64. Provide patching for all finished surfaces.
65. Adjust the elevations of all new and existing utility boxes to finish grade. Include new covers, boxes, and risers as needed.
66. Complete all onsite and offsite utility connections.
67. Include the sanitation and flushing of all systems as indicated.
68. Furnish and install all lateral lines, inlets, catch basins, area drains clean-outs & manholes. Include required grates and fasteners. All grates shall meet ADA accessibility requirements.
69. Include all required adjustments of new and existing manholes, valve boxes, vaults, grates, catch basins, inlets, etcetera, to finish grade.
70. Include all off-site work for utility connections. Include layout, sawcutting, demolition and off-haul, trenching, pipe systems, back-fill, connections, compaction and patching.
71. Demolish and remove all existing site items not indicated to remain as directed by the Construction Manager.
72. Subcontractor shall furnish and install all indicated header boards adjacent to their work.
73. Include all utility connections. Include all coordination, permits, and fees for utility connections. Include all fees associated with cable TV, electric, gas, sewer, telephone and water. Include all permits and fees for the construction storm water and erosion control management including the fees and submission for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities for the entire project site (both sides of the demarcation line).
74. Include all site and utility related work at the E House including conduit for electrical service and installation of water line. Include the drilling of the geothermal well system.
75. Specification 024216.2.3.E.2 – After Building Demolition Bid Package 2.01 Demolition and Abatement Contractor shall leave all remaining excavation (hole slopes) OSHA safe. Backfill shall be by the Bid Package 31.01 Sitework Contractor. – **ADD. NO. 1**
76. Sheet C2 – Include demolition of underground utility tunnel between Wing B & Wing C typical and as noted on Sheet C2. – **ADD. NO. 1**

### **EXCLUSIONS:**

- 1) Sale and Use Taxes.

### **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 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.

### **ALLOWANCE NO. 1: REGIONAL WATER AUTHORITY FEE - \$30,000**

The Site Work Contractor shall include in the base bid the allowance of **\$30,000** for the Regional Water Authority Fee. All other related Work remains the same and shall be included in the Base Bid.



**July 10<sup>th</sup>, 2012**

ELI WHITNEY  
CONNECTICUT TECHNICAL HIGH SCHOOL  
Hamden, Connecticut  
Project No. BI-RT-837-CMR

**Responses to Pre-Bid RFI's #1 - #10**

Pre-Bid RFI#1: Who is the obligee on the Bid Bond?

*1. Fusco Corporation is the obligee on the Bid Bond.*

Pre-Bid RFI#2: Who is the obligee on the Payment and Performance Bond?

*2. Fusco Corporation is the obligee on the Payment and Performance Bond.*

Pre-Bid RFI#3: Reference S103.1, 10/S210, 11/S210 – Who is responsible for the cast in place walls, stairs and slab @ the loading dock Area C1?

*3. See updated Bid Package 3.01 Scope of Work, Clarifications, Item 42.*

Pre-Bid RFI#4: Reference Specification Section 024216 – Who is responsible for the backfilling as written in Article 2.3(E)(2) “All areas to be backfilled as required per other Division 2 specification requirements?”

*4. See updated Bid Package 2.01 Scope of Work, Clarification, Item 70. See also updated Bid Package 31.01 Scope of Work, Clarification, Item 75.*

Pre-Bid RFI#5: Reference S103.3, A103.3, 24/S222 and Specification Section 033001 – Who is responsible for the cast in place piers (10 each) and the “Dungo” piers (4 each) shown on these two drawings @ Column Lines C-9 - C-15 / C-A – C-E?

*5. See updated Bid Package 3.01 Scope of Work, Clarifications, Item 43 & 44.*

Pre-Bid RFI#6: In drawing A203.1, linear wood ceiling, Type "E", is this included in the contract as defined in Section 062023? Please advise.

*6. The "Linear Wood Ceiling (Type 'E')" hatching is shown in the plans. Specification section 095426 is for the Suspended Wood Ceilings Systems.*

Pre-Bid RFI#7: Detail 38A/43/A612.0, showing bench seats in shower room, are they included in the contract as defined in Section 062023? Please advise.

*7. Specification section 102800 describes the folding shower seats (See Bid Package 10.02). Specification section 105113 describes the locker benches and pedestals (See Bid Package 6.01). See Fusco Project Manual for Scopes of Work.*

Pre-Bid RFI#8: In spec section 096400 Wood Flooring Pg 4 line 2.4c Steel angle iron base. Who is responsible for this item?

*8. See existing Bid Package 9.02 Scope of Work, Clarifications, Item 14.*

Pre-Bid RFI#9: Spec section 074423 Ceramic Tile Cladding. What is the finish abbreviation used for this item on the finish schedule? Do not see it shown on the plans or finish schedule. Please Clarify? Is this item to be part of Bid Package 9.01 Ceramic/Terrazzo?

*9. See updated Bid Package 6.01 Clarification Item 60 and 9.01 Scope of Work, Clarifications, Item 5.*

Pre-Bid RFI#10: Who is responsible for all the major floor prep and infill's as described in Notes 1-4 on the finish drawings? BP3.01 Concrete spec section 035400? For BP 9.02 Resilient/Carpet can we get a specific description of what should be carried for the floor prep?

*10. See existing Bid Package 3.01 Clarification Item 37 and existing Bid Package 9.02 Scope of Work Item 6.*