

ADDENDUM NO.: 2

DATE OF ADDENDUM: 06/11/2015

**New Bio-Environmental Technology Lab
Prince Tech Vocational School
401 Flatbush Ave, Hartford, CT
BI – RT – 870**

Original Bid Due Date / Time:

06/17/2015

1:00pm

Previous Addendums: Addendum 1, dated April 29, 2015

TO: Prospective Bid Proposers:

This Addendum forms part of the "Contract Documents" and modifies or clarifies the original "Contract Documents" for this Project dated 2/27/15. Prospective Bid Proposers shall acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form. Failure to do may subject Bid Proposers to disqualification.

The following clarifications are applicable to drawings and specifications for the project referenced above.

Please Note: The Equal or substitute Product request for "CIF Lab Solutions" has been rejected.

Item 1

In Section 01 40 00, Paragraph 01 42 19 Reference Standards, Part D Governing Regulations and Authorities
Line Item 1.10 has been changed to International Fire Code 2003.

Item 2

In Section 01 40 00, Paragraph 01 45 00 Quality Control, Paragraph B Responsibilities, Part 8 Fire Alarm/ Acceptance Testing Procedures.

Line Item 8.2.1 changed to "Protective Signaling Systems: All protective signaling systems shall meet with acceptance testing requirements of the applicable standards listed in NFPA 72-2002.

Item 3

In Section 22 05 03, Paragraph 2.5A

Paragraph was deleted, removing cast iron pipe from the chemical resistant sewer piping materials.

Item 4 (Drawings)

Drawing Attachment (shown in 8 1/2 X 11 format) Drawing size should be in 24 X 36

Drawing G1.2 GENERAL NOTES, ABBREV, & has been reissued.

Drawing G2.1 EGRESS PLAN AND CODE DATA has been reissued.

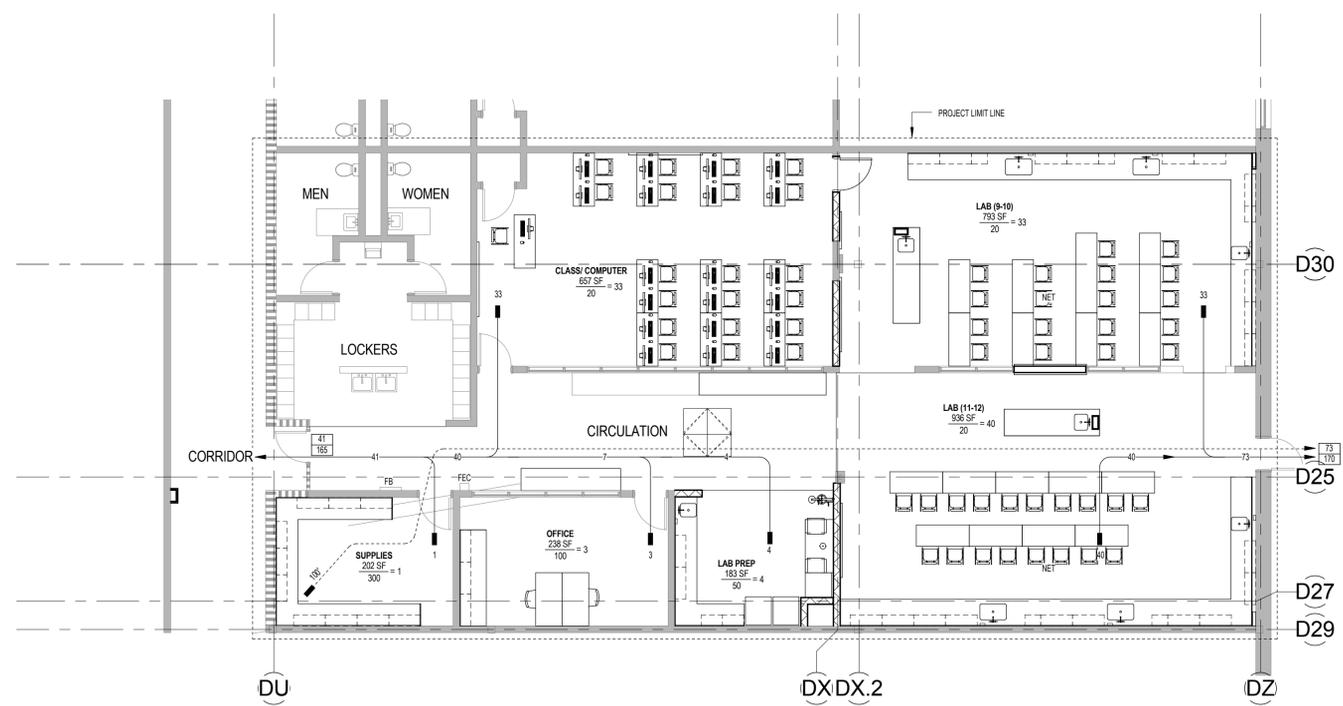
Drawing FP3.000 FIRE PROTECTION DETAILS & LEGENDS has been reissued.

All questions must be in writing (not phone or e-mail) and must be forwarded to the consulting Architect/Engineer (Jim Becker 860-548-0802) with copies sent to the CT DCS Project Manager (Rob Dexter 860-713-5614) and Construction Manager (Rohit Pradhan 860-635-7740)

End of Addendum 2



Mellanee Walton, Associate Fiscal Administrative Officer
Department of Administrative Services
On Behalf of the Division of Construction Services



F6 FIRST FLOOR EGRESS PLAN
1/8" = 1'-0"

CHEMICAL USAGE

PROJECT OVERVIEW
The below chart depicts the maximum quantities allowable. The faculty and building operations confirmed the School operates well below these levels. The Bio-Tech Lab program uses very small quantities of chemicals, and none that are higher than Class II. See below for a list of the materials used. All acids and flammable materials will be stored in steel cabinets.

LAB CLASSIFICATION & SEPARATION

# IBC CLASSIFICATION OF HAZARDS	IBC not as restrictive as NFPA 45 for Educational Labs
1. Chemical Quantities VS exempt amounts	Not Applicable
1. Number of Control Areas	Not Applicable

NFPA 45 (Note: Code modification in progress to change to NFPA 45-2011 which will eliminate any NFPA 45 requirements. Lab does not exceed the thresholds for flammable or combustible liquids per NFPA 45-2011.

ACTUAL MATERIALS LIST

VARIOUS ACIDS:
ACETIC ACID (VINEGAR) 10 LITERS
HYDROCHLORIC ACID 500 ML

VARIOUS BASES:
SODIUM HYDROXIDE 500 GRAM
POTASSIUM HYDROXIDE 500 GRAM

GENERAL CHEMICALS:
ETHANOL 1 LITER
SODIUM CHLORIDE 2 KG
HYDROGEN PEROXIDE 1 LITER
AMMONIA 1 LITER
SMALL QUANTITY OF TEST KIT REAGENTS
SMALL QUANTITIES OF OIL PAINTS - 2 QUARTS
SMALL QUANTITIES WATER BASED PAINTS - 2 GALLONS
WINDEX - 4 LITERS
BIOLOGICAL STAINS FOR MICROSCOPIC SLIDES 100 ML
CLEANING POWDERS - 1 POUND
SCAFS - VARIOUS
BAKING POWDER - 1 POUND
BAKING SODA - 1 POUND

CODE LEGEND

BUILDING FIRE SEPARATIONS SMOKE TIGHT PARTITION (NOT SMOKE BARRIER)	ROOM OCCUPANCY LOAD 150 = 2P ROOM S.F. 100 = 1P ROOM S.F.
A.O.R. - AREA OF REFUGE FEC - FIRE EXTINGUISHER CABINET - EXISTING FB - FIRE BLANKET - EXISTING	EXIT CAPACITY 100 = ACTUAL EGRESS LOAD CODE S.F. / PERSON 150 = MAXIMUM ALLOWABLE EGRESS CAPACITY
	CUMULATIVE OCC. LOAD ON EGRESS ROUTE 100 (FT) = MAXIMUM TRAVEL DISTANCE FROM FURTHEST POINT

BUILDING CODES - CONNECTICUT
ALL CONSTRUCTION SHALL CONFORM WITH THE FOLLOWING CODES:

CODE TYPE	CODE MODEL
BUILDING CODE	IBC 2003: (STATE BUILDING CODE, 2005 CT SUPPLEMENT WITH 2009, 2011 AND 2013 AMMENDMENTS)
STRUCTURAL CODE	INTERNATIONAL EXISTING BUILDING CODE 2003
PLUMBING CODE	IPC 2003 (STATE BUILDING CODE, 2005 CT SUPPLEMENT WITH 2009 AND 2011 AMMENDMENTS)
MECHANICAL CODE	IMC 2003 (STATE BUILDING CODE, 2005 CT SUPPLEMENT WITH 2009 AND 2011 AMMENDMENTS)
ELECTRICAL CODE	NEC 2011 (NFPA-70)
FIRE / LIFE SAFETY CODE	2005 STATE FIRE SAFETY CODE (2003 IFC) WITH 2012 AMMENDMENTS; NFPA 101-2003 FOR EXISTING BUILDINGS
ACCESSIBILITY CODE	ICC/ANSI A117.1 2003
ENERGY CODE	2009 INTERNATIONAL ENERGY CONSERVATION CODE
GAS CODE	CT STATE REGULATIONS
BOILER CODE	ASME BOILER AND PRESSURE VESSEL CODE; NBIC
PUBLIC HEALTH CODE	CT PUBLIC HEALTH CODE

CODE INFORMATION

PROJECT SUMMARY
THIS PROJECT IS THE RENOVATION OF AN EXISTING ELECTRONICS LAB/ CLASSROOM INTO A BIO TECHNOLOGY LAB/ CLASSROOM. SCOPE OF WORK INCLUDES NEW INTERIOR PARTITIONS, FINISHES, DOORS, FRAMES AND HARDWARE, LAB CASEWORK AS WELL AS MECHANICAL, ELECTRICAL AND PLUMBING SERVICES AND DEVICES TO ACCOMMODATE THE NEW DESIGN.

BUILDING CODE INFORMATION

BUILDING CONSTRUCTION TYPE	IB ASSUMED
BUILDING USE CLASSIFICATION:	MIXED USE: EDUCATIONAL/ ASSEMBLY BUSINESS/ FACTORY/ INDUSTRIAL
TENANT USE CLASSIFICATION:	MIXED USE: EDUCATIONAL/ ASSEMBLY BUSINESS/ FACTORY/ INDUSTRIAL
PROJECT AREA	4,089 SQ. FT.
EXITING	SEE EGRESS PLAN
EXIT ACCESS TRAVEL DISTANCE	257' MAX
FIRE ALARM	EXISTING - MODIFIED AS REQUIRED BY CODE
SPRINKLERS	EXISTING - MODIFIED AS REQUIRED BY CODE
EMERGENCY LIGHTS	EXISTING - MODIFIED AS REQUIRED BY CODE



CONSTRUCTION DOCUMENTS

Drawing Title EGRESS PLAN & CODE DATA		STATE OF CONNECTICUT DEPARTMENT OF CONSTRUCTION SERVICES	
Revisions		Plans Prepared By: TECTON ARCHITECTS, pc HARTFORD, CT 06106	
No.	Date	Description	Date
1	6/10/15	Addendum 1	06/10/2015
Project: NEW BIO- ENVIRONMENTAL TECHNOLOGY LAB		Production Manager: EK	
Project Architect: PRINCE TECH VOCATIONAL SCHOOL, HARTFORD, CT		Project Manager: TC	
Project Number: BI-RT-870		Peer Reviewer: JB	
		Drawing Number: G2.1	

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FIRE PROTECTION ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
DCV	DOUBLE CHECK VALVE
ELEV	ELEVATION
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FD	FIRE DEPARTMENT
FDC	FIRE DEPARTMENT CONNECTION
FHV	FIRE HOSE VALVE
FP	FIRE PROTECTION
FPM	FEET PER MINUTE
FS	FLOW SWITCH
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	TOTAL DEVELOPED HEAD
HVC	HOSE VALVE CABINET
ITC	INTERMEDIATE TEMPERATURE CLASSIFICATION
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
OS&Y	OUTSIDE SCREW AND YOLK
PD	PRESSURE DROP
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH
SS	SUPERVISORY SWITCH
TS	TAMPER SWITCH
TYP	TYPICAL
V	VOLTS
VEL	VELOCITY
WG	WIRE GUARD

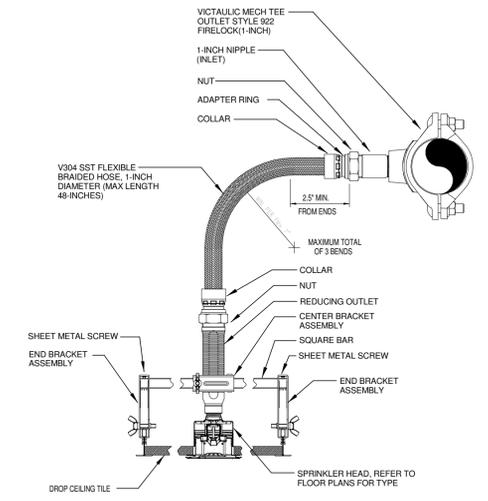
SPRINKLER SYSTEM NOTES

- THESE GENERAL NOTES ARE APPLICABLE TO ALL FIRE PROTECTION DRAWINGS.
- DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL INTENT OF WORK. SEE DETAILS, RISERS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- THE DRAWINGS INDICATE A SUGGESTED SPRINKLER HEAD LAYOUT AND THAT EACH AREA IS COVERED BY SPRINKLER PROTECTION AS REQUIRED BY ALL APPLICABLE STATE OF CT. BUILDING AND FIRE CODES. THE SPRINKLER QUANTITIES SHALL NOT BE COUNTED AS A TAKE OFF OR AS EXACT LOCATIONS. EXACT SPACING, DENSITY, AND LOCATION REQUIREMENTS SHALL BE AS DICTATED BY NFPA 13.
- THE CONTRACTOR SHALL PERFORM A FLOW TEST TO VERIFY THE EXISTING FLOW DATA. INFORMATION FROM THE CONTRACTOR'S FLOW TEST SHALL BE USED FOR HYDRAULIC CALCULATIONS.
- COMBINED INSIDE AND OUTSIDE HOSE STREAM ALLOWANCE FOR HYDRAULIC CALCULATIONS SHALL BE 250 GPM.
- HYDRAULIC CALCULATIONS SHALL INCLUDE A SAFETY FACTOR OF 10%.
- PIPE VELOCITY AT ANY POINT OF THE SYSTEM SHALL NOT EXCEED 18FPS.
- INSTALLATION OF SPRINKLERS SHALL BE BASED ON THE FOLLOWING:

AREA	OCCUPANCY CLASSIFICATION	DENSITY (GPM/SF)	AREA OF APPLICATION (SF)
MECHANICAL ROOM	ORDINARY HAZARD GROUP 1	0.15	1500
STORAGE ROOMS	ORDINARY HAZARD GROUP 1	0.15	1500
PROJECT AREA	ORDINARY HAZARD GROUP 2	0.20	1500

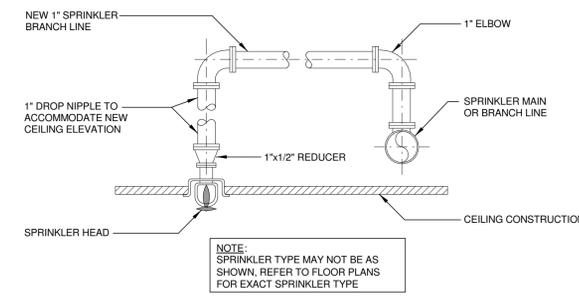
FIRE PROTECTION GENERAL NOTES

- THESE GENERAL NOTES ARE APPLICABLE TO ALL FIRE PROTECTION DRAWINGS.
- SUPPLY PIPING INSTALLATION SHALL BE COORDINATED WITH OTHER TRADES AND ARCHITECTURAL FEATURES. WHERE MOVABLE PARTITIONS ARE TO BE INSTALLED, PIPING SHALL BE INSTALLED TO PERMIT MOVING OF WALL OR PARTITION.
- WHERE CEILINGS PERMIT THE PASSAGE OF HEAT TO ANOTHER ELEVATION SPRINKLERS SHALL BE INSTALLED AT TO PROTECT BELOW THE CEILING AND ABOVE THE CEILING.
- FURNISH AND INSTALL LOW POINT DRAINS FOR TRAPPED SECTIONS OF PIPING. TERMINATE LOW POINT DRAIN WITH VALVE AND THREADED HOSE END FITTING. FURNISH AND INSTALL ACCESS DOORS WHEN LOW POINT DRAINS ARE CONCEALED ABOVE HARD CEILING AND FINISHED WALLS.
- CONTRACTOR SHALL COORDINATE SUPPRESSION SYSTEM SHUT DOWNS WITH OWNER AND PROVIDE A MINIMUM OF (1) WEEK NOTICE PRIOR TO SHUT DOWN.
- CONTRACTOR SHALL PROVIDE FIRE WATCHES WHEN SYSTEMS ARE SHUT DOWN OR INACTIVE. FIRE WATCH SHALL BE SUBJECT TO APPROVAL BY THE LOCAL AHJ. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE OFFICE OF STATE FIRE MARSHALL AND THE LOCAL FIRE DEPARTMENT PRIOR TO ANY INTERRUPTION. IMPAIRMENT AND REPAIR OF THE FIRE SPRINKLER SYSTEM FIRE WATCHES SHALL BE PROVIDED THROUGHOUT AREAS WITHIN AND BEYOND THE PROJECT AREA WHENEVER SPRINKLER SYSTEM SHUT DOWNS OCCUR.
- THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE THE OWNER WITH A MINIMUM OF (2) TWO SPRINKLERS FOR EACH TYPE INSTALLED UNDER THIS PROJECT TO BE INCLUDED IN THE OWNER STOCK PILE OF SPARE SPRINKLERS.



- NOTES:**
- REFER TO MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS FOR ADDITIONAL DETAILS.
 - THIS PRODUCT IS APPROVED TO APPLICABLE FM STANDARDS AND REQUIREMENTS BY FACTORY MUTUAL 1507

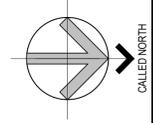
1 BRAIDED FLEXIBLE HOSE SPRINKLER ASSEMBLY
N.T.S.



2 NEW ARMOVERT DETAIL (HARD PIPED)
N.T.S.

SPRINKLER SYMBOLS

SYMBOL	DESCRIPTION
○	WET UPRIGHT SPRINKLER HEAD
●	WET FULLY CONCEALED SPRINKLER HEAD



CONSTRUCTION DOCUMENTS

Drawing Title FIRE PROTECTION DETAILS & LEGENDS		Date: 06/10/2015	
Revisions		Scale: 1/8" = 1'-0"	
No.	Date	Description	Production Leader
1	6/10/15	Addendum 1	
Plans Prepared By:		Project Manager:	
TECTON ARCHITECTS, pc		NEW BIO- ENVIRONMENTAL TECHNOLOGY LAB	
HARTFORD, CT 06106		Project Architect:	
Project:		Peer Reviewer:	
PRINCE TECH VOCATION SCHOOL		Drawing Number:	
HARTFORD, CT		FP3.000	
Project Number:		BI-RT-870	