ADDENDUM NO.: 4 DATE OF ADDENDUM: August 21, 2015

CAMPUS RENOVATIONS
ASNUNTUCK COMMUNITY COLLEGE
170 ELM STREET
ENFIELD, CT
BI – CTC-437

Original Bid Due Date / Time:	September 2, 2015	1:00 PM

Previous Addendums:	Addendum #1, July 23, 2015; Addendum #2, August 4, 2015 & Addendum #3, August 13, 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 04/27/2015. 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.

Item 1

Pre-Bid Request For Information:

Question: Are unlabeled wall types A3-0? What is the wall type between Function Room #E108 and Corridor #111? I do not see a code a code safety plan so I assume it is not a fire or smoke wall?

Answer: Per General Note #10 on floor pans A2.101, A2.102, A2.103 & A2.104: "UNLESS NOTED OTHERWISE ALL WALLS ARE TYPE A3-0".

Item 2

Pre-Bid Request For Information:

Question: Reference drawing A8.202 Opening types F9 and B3, and door schedule 08 06 10-1door numbers 206, & 207. Please clarify which opening should be fire rated, hollow metal or aluminum. Both doorways are marked 206 on the elevations I believe F9 is intended to be fire rated but B3 has fire rated glass noted. And confirm if B3 is to be Hollow Metal as noted on the door schedule.

Answer: The correct elevation for door #206 is elevation F9/A8.202. Elevation F9/A8.202 has been revised to show 1 hour fire rated glazing and elevation B3/A8.202 has been deleted from the project. As indicated in section 08 06 10 'Schedule of Openings', door #206 is a 1 hour fire rated aluminum and glass door with a 1 hour fire rated aluminum frame. Door #207 is a non-rated solid core wood door (SCW) with a non-rated hollow metal frame type HM-1.

Additionally, all aluminum doors, aluminum frames and aluminum entrance systems indicated to be of 1 hour fire rated construction on the drawings or in section 08 06 10 'Schedule of Openings' shall be constructed of a fire rated curtain wall system as specified in section 08 44 33 'Fire-Rated Glazed Curtain Walls'.

Item 3

Substitution Request:

ADDENDUM NO.: 4 **DATE OF ADDENDUM: August 21, 2015**

Section 07 42 13.23, Metal Composite Material Wall Panels. See attached **APPROVED** substitution request form #7001

Item 4

Section 07 42 13.23 Metal Composite Material Wall Panels:

REVISE paragraph 2.04 Metal-Faced Composite Wall Panels, section A, item 1 as follows:

ADD Fairview Architectural; VitraBond as an approved equal to the specified products.

Item 5

Pre-Bid Request For Information:

Question: Do you know who the contact rep is for the Equitone Tective Fiber Cement Panel system is? I've had no luck in finding a supplier.

Answer: Mike LeRoy, CSI, LEED GA
Program Manager
EQUITONE
1 (857) 829-0016
3 Freemont Ter
Waltham, MA 02452
E-mail: mleroy@equitone.com

Item 6

Substitution Request:

Section 23 09 00, Instrumentation and Control For HVAC. See attached **REJECTED** substitution request form #7001

Item 7

Drawing G1.1 - Information Sheet

- **REVISED** fire extinguisher cabinet elevation.
- **REVISED** drinking fountain elevation.
- **REVISED** Handicap toilet grad bar dimensions.

Item 8

Drawing G1.2 - Code Summary

- **REVISED** list of applicable building codes.

Item 9

Drawing A1.103 - First Floor Reflected Ceiling Demolition Plan

- **ADDED** demolition of existing ceiling in Corridor #e25 added to scope for installation and reconfiguration of above ceiling MEP items in this area.

ADDENDUM NO.: 4 DATE OF ADDENDUM: August 21, 2015

Item 10

Drawing A1.105 - Roof Demolition Plan

- **ADDED** Existing roof top equipment to gym roof.

Item 11

Drawing A2.201 First Floor Finish Plan

- **REVISED** communicating stair tread and riser finishes.

Item 12

Drawing A2.203 - Material List & Finish Details

- **ADDED** flooring type LVT-1.

Item 13

Drawing A2.301 - First Floor Reflected Ceiling Plan

- **ADDED** re-installation of existing ceiling grid, ceiling pads, lighting and misc. ceiling mounted items in Corridor #225.
- **DELETE** ceiling material and finish notes in lobby display case.

Item 14

Drawing A2.401 - Overall Roof Plan & Roof Deck Plan

- **ADDED** Existing roof top equipment to gym roof on plan H12

Item 15

Drawing A2.402 - Partial Roof Plan – North East

- **ADDED** Existing roof top equipment to gym roof

Item 16

Drawing A2.403 - Partial Roof Plan – South East

- **ADDED** Existing roof top equipment to gym roof

Item 17

Drawing A6.301 - Millwork

- **REVISED** dimensions on detail J5

Item 18

Drawing A6.302 - Millwork

- **REVISED** notes on detail H12
- **DELETED** finish notes on elevation J12

ADDENDUM NO.: 4 **DATE OF ADDENDUM: August 21, 2015**

Item 19

Drawing A7.101 Stair Plans & Sections

- **REVISED** acoustical wall panel layout and dimensions on section E8

Item 20

Drawing A7.102 - Stair Details

- **REVISED** tread and riser materials on detail F12
- **DELETED** note on detail J12
- **REVISED** note on detail H9

Item 21

Drawing A8.202 - Window Schedule, Details & Interior Window Elevations

- **DELETED** elevation B3
- **REVISED** elevation F9

Item 22

Drawing MEP2.100 – MEP Roof Demolition Plan

- **REVISED** Notes 3, 6 and 8.

Item 23

Drawing FP2.101 – First Floor Fire Protection Demolition Plan

- **REVISED** selected notes describing demolition scope in corridors.

Item 24

Drawing FP2.102 – Second Floor Fire Protection Demolition Plan

- **REVISED** selected notes describing demolition scope in corridors.

Item 25

Drawing P0.301 – Plumbing Schedules

- **REVISED** drinking fountain specification to include bottle filler.
- **REVISED** urinal specification to .125 gpf.

Item 26

Drawing H0.301 – Mechanical Schedules

- **REVISED** freeze pump specification and provide minor clarifications for two other pumps specifications.

ADDENDUM NO.: 4 **DATE OF ADDENDUM: August 21, 2015**

Item 27

Drawing SE1.01 – Site Electrical Plan

- **REVISED** notes pertaining to security scope and lighting homeruns revision from LP-A to LP-1A.

Item 28

Drawing EL2.02 – Second Floor Electrical Lighting Construction Plan

- **REVISED** homeruns for all lighting circuits from panel LP-A to LP-1A.

Item 29

Drawing E0.301- Electrical Schedules.

- **ADDED** new panel LP-1A to the schedules (deleted multiple connections to existing panel LP-A located outside of the area of this project).

Item 30

Drawing E0.302- Electrical Schedules

- **REVISED** specifications of lighting fixtures B1, B1E, B1DL, D1, D1E.

Item 31

Drawing E2.101- First Floor Electrical Demolition Plan

- Clarified selected demolition notes.

Item 32

Drawing E0.301- Electrical Power Riser Diagram

- **ADDED** new panel LP-1A to the riser.

Item 33

Drawing T0.101- Technology General Notes, Symbols and Abbreviations

- **REVISED** clock symbol description.

Item 34

Drawing T2.101- First Floor Technology Demolition Plan

- **REVISED** selected demolition notes.

Item 35

Drawing T2.102- Second Floor Technology Demolition Plan

- **REVISED** selected demolition notes.

ADDENDUM NO.: 4 **DATE OF ADDENDUM: August 21, 2015**

Item 36

Drawing TC2.201- First Floor Technology Communications Construction Plan

- **REVISED** Communications General notes 2 and 3.

Item 37

Drawing TC2.202- Second Floor Technology Communications Construction Plan

- **REVISED** Communications General notes 2 and 3.

Item 38

Drawing S0.001- General Notes, Abbreviations, and Drawing List Plan

- **REVISED** structural design parameters.

Item 39

Drawing S2.200- Second Floor Framing Plan

- **REVISED** beam size as indicated.

Item 40

Drawing S2.202- Roof Framing Plan

- **REVISED** beam size as indicated.

Item 41

Drawing S4.402- Framing Details

- **REVISED** framing details at existing structure.

All questions must be in writing (not phone or e-mail) and must be forwarded to the consulting Architect/Engineer (Tecton Architects, 860-522-6251) with copies sent to the DCS Project Manager (Lisa Humble, 860-713-7270).

End of Addendum #4

Mellanee Walton

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

Connecticut
DAS
Division Of
Construction Services

7001
Equal or Substitute Product Request

Request Phase Pre-Bid [XX] Post Bid [ ] *(See Article 15 Materials: Standards, General Conditions)*

(If Pre-bid only) Current Bid Due Date: 9/01/2015 **Request No.:** 1 **Dated:** 8/18/2015

To: **State of Connecticut**
Department of Administrative Services
Division of Construction Services

DCS Project No.: BI-CTC-437
Project Name / Location: Asnuntuck Community College - Campus Renovations

References: Specification(s): Section(s): 23 09 00 Paragraph(s): 2.01H - Manufactures (See Attached)
Drawing(s): Drawing(s) No(s): Detail(s) No(s):

Contractually Specified Product: Automated Logic, Johnson Controls, Siemens, Trane
Contractor Proposed Product: American Auto-Matrix

Proposed Product is : Equal: [XX] Substitute: [ ] Model No.: Aspect, CBM, CBT

*See attached data for **both** specified and proposed products as required by Article 15 General Conditions.*

Data attached: Drawings: [ ] Product Data: [XX] Reports: [ ] Samples: [ ]
Tests: [ ] Other:

Reason(s) for not providing the Specified Product:
Tradesmen of New England is a Dealer partner of American Auto-Matrix and do not represent listed company and products.
Please see attached support "equal" product details and justification letter.

Similar Installation:
Project: CSU, 61 Woodland Street
Address: Hartford, CT
Architect:
Owner:
Date Installed:

Will proposed substitution impact other parts of the Work? No [XX] Yes [ ] *If yes attach explanation.*
Will proposed substitution increase Contract Time? No [XX] Yes [ ] *by number of Days*

Actual Dollar Savings to the State of Connecticut if substitution is accepted: $ UnknownC

The Undersigned Certifies that the proposed Request for an Equal or Substitute Product conforms to all of the requirements of Division 01 General Requirements, Section 01 25 00 Substitution Procedures.

Request Submitted By ~~General Contractor / CMR:~~ ~~Temperature Controls Subcontractor~~ Tradesmen of New England, LLC. *(Firm's Typed Name)*

By: Robert Marra *(Typed Name)* BAS Manager *(Title)* *(Signature)* 8/17/15 *(Date)*

CONTRACTOR / CMR Send copies to DCS PM: [ ] CA: [ ]

Consultant's Review – This Substitution Request is: Request Received on (Date):

[ ] **Approved:** *(Submittals in accordance with Div. 01 General Requirements, Section 01 33 00 Submittal Procedures.)*
[ ] **Approved as Noted:** *(Submittals in accordance with Div. 01 General Requirements, Section 01 33 00 Submittal Procedures.)*
[XX] **Rejected:** **Use Specified Materials.**
[ ] **Rejected:** **Request Not Received Within Specified Time Period - Use Specified Materials.**

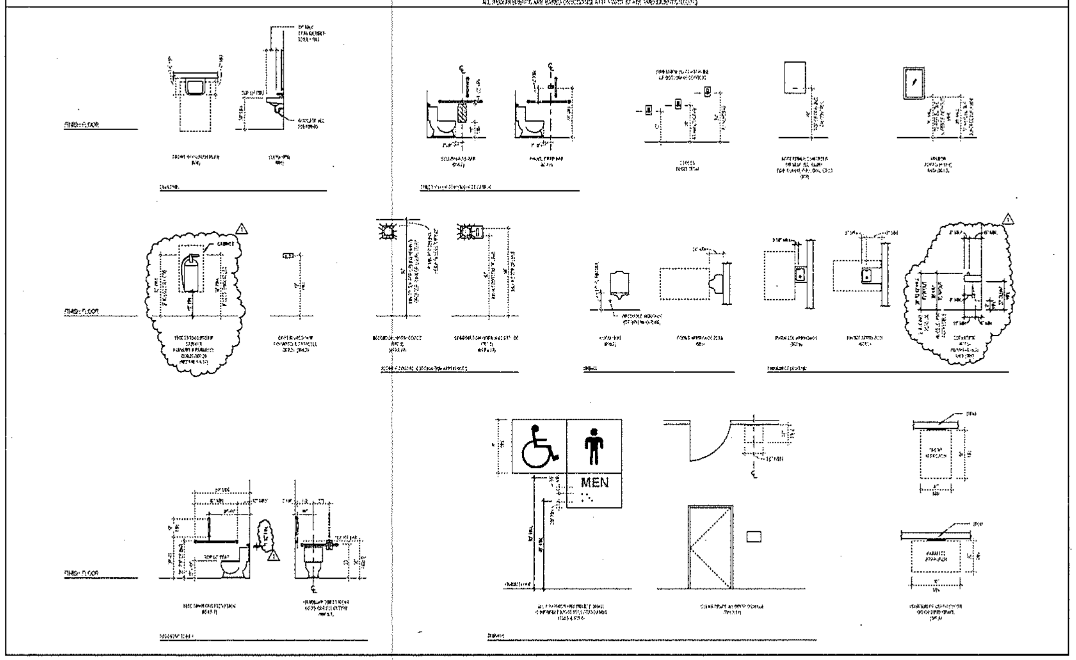
Reviewed Issued By: ILONA PROSOL *(Typed Name)* *(Signature)* 8/19/15 *(Date)*

CONSULTANT Send copies to: DCS PM: [ ] CA: [ ] Chief Architect [ ] Chief Engineer [ ]

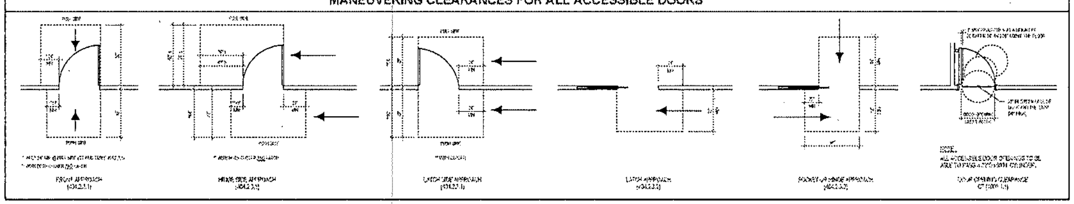
If Approved: As noted by Consultant,
DCS Chief Architect: *(Signature)* *(Date)*

Copies: Project File Red R2

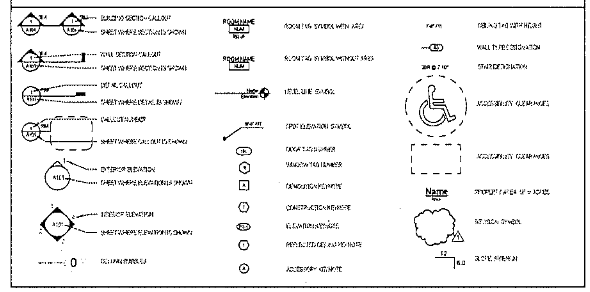
FIXTURE HEIGHTS



MANEUVERING CLEARANCES FOR ALL ACCESSIBLE DOORS



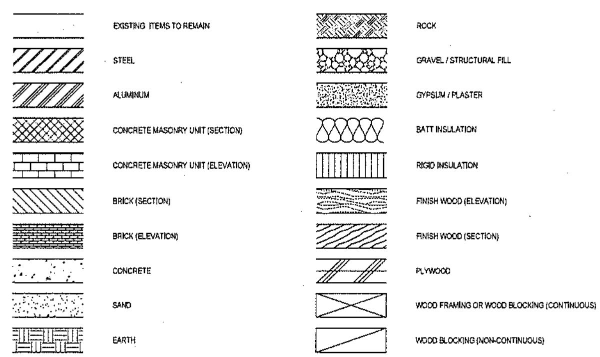
GRAPHIC SYMBOLS



MASTER ABBREVIATION LIST

[illegible]

MATERIAL LEGEND



INFORMATION SHEET

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

G1.1

3011 Building Information For Code Analyses

Connecticut DAS Division Of Construction Services

The information on this form is intended to expedite the plan review process and is for archival purposes. It assembles all code related information into one table. The information shall be placed on the drawings and become a permanent record of the code information applicable to this building.

CT STATE BUILDING CODE

1.0	EXISTING BUILDING:	X YES	☐ NO	☐ N/A
1.1	Continuation of Existing Use	X YES	☐ NO	☐ N/A
1.2	Change of Use	☐ YES	X NO	☐ N/A
1.3	Complying with International Existing Building Code	☐ YES	☐ NO	X N/A
2.0	NEW BUILDINGS OR ADDITIONS:	X YES	☐ NO	☐ N/A
2.1	Exceeds Threshold Building Limits	☐ YES	X NO	☐ N/A
3.0	OCCUPANCY CLASSIFICATION:			
3.1	Mixed Occupancies	SEPERATED MIXED USE A-3, B & F-2		
4.0	HEIGHT AND AREA COMPUTATION + CONSTRUCTION TYPE:	CONSTRUCTION TYPE 2B		

GENERAL BUILDING LIMITATIONS (Chapters 5 & 6)

Use **Case 1** to determine the allowable height and area and permitted construction types for the building containing a single occupancy or non-separated mixed occupancies. Use **Case 2** to determine the allowable height and area and permitted types of construction for the building containing separated mixed occupancies.

AREA MODIFICATIONS TO TABLE 503

% of allowable tabular area, A_t (Table 503) 100%

% Increase for frontage, I_f (506.2) + ___ %

% Increase for automatic sprinklers, I_s (506.3) + ___ %

Total percentage factor = ___ %

Conversion factor: ___ (Total percentage factor ÷ 100%)

Frontage (506.2)	141'-0"	0'-0"	0'-0"	28'-0"
	North	East	South	West

Total Frontage (F) 169'-0" ft. Perimeter (P) 480'-0" ft.

Width of open space (W) = 30 FEET

% Frontage Increase (I_f) (506.2) =

$$I_f = 100\left[\frac{F}{P} - 0.25\right]\frac{W}{30}$$

Not Applicable: The existing building is 167,975 sqft of separated mixed use occupancy containing use groups A-3, B & F-1. The largest existing floor plate (first floor) is larger than allowed by the 2003 IBC section 302.3.2. A Code Modification Request to extend the existing non-conforming condition and allow for an addition to the existing building has been submitted & approved to the Office of the State Building Inspector. The Code Modification approval # M-756-14A

3011 Building Information For Code Analyses

Connecticut DAS Division Of Construction Services

CASE 1 – SINGLE OCCUPANCY OR NON-SEPARATED USES (302.3.1)

Using Table 503, identify the allowable height and area of the single occupancy or the most restrictive of the non-separated mixed occupancies. Construction types providing an allowable tabular area equal to or greater than the adjusted building area and allowable heights (as modified by Section 504) equal to or greater than the actual building height are permitted.

DETERMINE CONSTRUCTION TYPE | **ALLOWABLE AREA (506.4)**

Actual building area ___ ft² — Allowable area per floor (A_a)

Adjusted building area ___ ft² (actual building area ÷ conversion factor) — conversion factor × tabular area (Table 503) ___ ft²

Actual building height ___ feet ___ stories — Total floor area (all stories) ___ ft²

Allowable building height ___ feet ___ stories — Allowable floor area (all stories)

Permitted construction types ___ — Allowable area per floor (A_a) × Number of stories (maximum 3) = ___ ft²

Type of construction assumed for review (602.1.1) ___

CASE 2 – MIXED OCCUPANCY SEPARATED USES (302.3.3)

Using Table 503, identify the allowable height and area of each of the separated uses within the building. Construction types providing for each story of the building, tabular areas (as modified by Section 506), which result in a sum of the ratios of 1.00 or less and allowable heights (as modified by Section 504) equal to or greater than the actual height of the use are permitted.

Story	Group	Actual floor area	Adjusted floor area*	Actual height		Allowable height	
1 & 2	B	N/A ft²	N/A ft²	27'-4" ft	2 stories	53'-0" ft	1 stories
1 & 2	A-3	N/A ft²	N/A ft²	44'-0" ft	2 stories	55'-0" ft	2 stories
1	F-2	N/A ft²	N/A ft²	27'-4" ft	1 stories	55'-0" ft	3 stories

Σ Adjusted floor area* ÷ Allow. tab. area, A_t (Table 503): N/A + ___ + ___ + ___ + ___ ≤ 1.00

*Adjusted floor area = actual floor area ÷ conversion factor

Not Applicable: The existing building is 167,975 sqft of separated mixed use occupancy containing use groups A-3, B & F-1. The largest existing floor plate (first floor) is larger than allowed by the 2003 IBC section 302.3.2. A Code Modification Request to extend the existing non-conforming condition and allow for an addition to the existing building has been submitted & approved to the Office of the State Building Inspector. The Code Modification approval # M-756-14A

3011 Building Information For Code Analyses

Connecticut DAS Division Of Construction Services

ALLOWABLE AREA (508.4)

Allowable area per floor (A_a)

Not Applicable: The existing building is 167,975 sqft of separated mixed use occupancy containing use groups A-3, B & F-1. The largest existing floor plate (first floor) is larger than allowed by the 2003 IBC section 302.3.2. A Code Modification Request to extend the existing non-conforming condition and allow for an addition to the existing building has been submitted & approved to the Office of the State Building Inspector. The Code Modification approval # M-756-14A

MEZZANINES (505)

N/A	Area limitation (505.2)	N/A	Openness (505.4)
N/A	Egress (505.3)	N/A	Equipment platforms (505.5)

UNLIMITED AREA BUILDINGS (507)

N/A	Unsprinklered, one story (507.1)	N/A	High-hazard use groups (507.6)
N/A	Sprinklered, one story (507.2)	N/A	Aircraft paint hangar (507.7)
N/A	Two story (507.3)	N/A	Group E buildings (507.8)
N/A	Reduced open space (507.4)	N/A	Motion picture theaters (507.9)
N/A	Group A-3 buildings (507.5)		

SPECIAL PROVISIONS (508)

___ Special condition applicable (508.1)

3011 Building Information For Code Analyses

Connecticut DAS Division Of Construction Services

CONSTRUCTION INFORMATION

6.0 MEANS OF EGRESS:

- 6.1 Total Occupant Load (Entire Building): 3,588 PEOPLE (1ST FLR 2,497 & 2ND FLR 1,089)
- 6.2 Total Occupant Load (Largest Floor): 2,497 PEOPLE (1ST FLOOR)
- 6.3 Total Capacity Of Exits: 7,805 PEOPLE
- 6.4 Total Number of Exits: 1ST FLOOR – 25 & 2ND FLOOR – 4

7.0 FIRE RESISTANT RATING OF STRUCTURE ELEMENTS (TABLE 602) REFER TO CONSTRUCTION DOCUMENTS FOR THE FOLLOWING:

7.1	Exterior Walls:		
7.1.1	Load Bearing	0	HR(S)
7.1.2	Non-load Bearing	0	HR(S)
7.2	Fire Walls & Party Walls	N/A	HR(S)
7.3	Fire Separation Assemblies:		
7.3.1	Fire enclosure of exits	1	HR(S)
7.3.2	Shafts	1	HR(S)
7.3.3	Mixed Use Separation	1	HR(S)
7.3.4	Other Separation Assemblies	0	HR(S)
7.4	Fire Partitions	N/A	HR(S)
7.5	Dwelling Unit Separations	N/A	HR(S)
7.6	Smoke Barriers	N/A	HR(S)
7.7	Other Non bearing Partitions	0	HR(S)
7.8	Interior Bearing Walls, Bearing Partitions, Columns, Girders, Trusses and Framing:		
7.8.1	Supporting more than one floor	0	HR(S)
7.8.2	Supporting one floor only or a roof	0	HR(S)
7.8.3	Structural Members Supporting Wall	0	HR(S)
7.9	Floor Construction Including Beams	0	HR(S)
7.10	Roof Construction	0	HR(S)
7.10.1	* 15 ft. or less:	0	HR(S)
7.10.2	* 15 ft. or more:	0	HR(S)
7.10.3	* 20 ft. or more:	0	HR(S)

* Height to lowest member:

8.0 FIRE PROTECTION SYSTEM: FULLY SPRINKLERED

- 8.1 Fire Suppression System: FURNISHED PER CODE
- 8.2 Alarms: FURNISHED PER CODE
- 8.3 Automatic Fire Detection System: FURNISHED PER CODE
- 8.4 Smoke Control System: N/A
- 8.5 Supervision: FURNISHED PER CODE

3011 Building Information For Code Analyses

Connecticut DAS Division Of Construction Services

CONNECTICUT STATE FIRE SAFETY CODE

1.0	CLASSIFICATION OF OCCUPANCY:	A-3, B & F-2 SEPERATED MIXED USE
2.0	CONSTRUCTION CLASSIFICATION:	2B
3.0	MINIMUM CONSTRUCTION TYPE REQUIRED:	2B
4.0	ACTUAL CONSTRUCTION TYPE PROVIDED:	2B
5.0	NOTIFICATION/ALARMS:	FURNISHED PER CODE
6.0	DETECTION:	FURNISHED PER CODE
7.0	EXTINGUISHMENT REQUIREMENTS:	FURNISHED PER CODE

BUILDING CODES

ALL CONSTRUCTION SHALL CONFORM WITH THE FOLLOWING CODES

2005 CONNECTICUT STATE BUILDING CODE (CSBC)

1. INTERNATIONAL BUILDING CODE 2003 (IBC)
2. INTERNATIONAL EXISTING BUILDING CODE 2003 (IEBC)
3. INTERNATIONAL MECHANICAL CODE 2003 (IMC)
4. INTERNATIONAL PLUMBING CODE 2003 (IPC)
5. [illegible] ELECTRICAL CODE 2011 (NEC)
6. INTERNATIONAL ENERGY CONSERVATION CODE 2003 (IECC)
7. [illegible] ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES (ANSI)
8. CONNECTICUT SUPPLEMENT 2005 STATE BUILDING CODE
9. [illegible] STATE BUILDING CODE
10. 2011 CONNECTICUT AMENDMENT / STATE BUILDING CODE
11. 2013 CONNECTICUT AMENDMENT / STATE BUILDING CODE
12. NFPA 13 2002 EDITION
13. NFPA 72 2002 EDITION

2005 CONNECTICUT STATE FIRE SAFETY CODE (CSFSC)

1. 2009 CONNECTICUT AMENDMENT / STATE FIRE SAFETY CODE
2. 2013 CONNECTICUT AMENDMENT / STATE FIRE SAFETY CODE
3. 2005 CONNECTICUT STATE FIRE PREVENTION CODE

2005 CONNECTICUT STATE ELEVATOR CODE

1. ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS, 1996 WITH 1997 & 1998 AMENDMENTS
2. ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS - 2004 PART 5 [illegible] APPLICATION ELEVATORS (LULA)
3. ASME A18.1 SAFETY STANDARDS FOR PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS 2003

CODE MODIFICATIONS ON FILE

CODE MODIFICATION M-247-13

CODE MODIFICATION TO ALLOW AN ADDITION TO A BUILDING THAT EXCEEDS THE AREA LIMITATIONS OF TABLE 503 OF THE CONNECTICUT STATE BUILDING CODE

CODE MODIFICATION M-756-14A

CODE MODIFICATION TO ALLOW AN ADDITION TO A BUILDING THAT EXCEEDS THE AREA LIMITATIONS OF TABLE 503 OF THE CONNECTICUT STATE BUILDING CODE

CODE MODIFICATION M-756-14B

CODE MODIFICATION TO ALLOW THE FENESTRATIONS OF THE NEW ADDITION TO EXCEED 40% OF THE GROSS WALL AREA PER SECTION 502.1 OF THE 2009 INTERNATIONAL ENERGY CODE

CODE MODIFICATION M-473-14

CODE MODIFICATION TO TEMPORARILY REDUCE THE EXIT CAPACITY OF THE EXISTING SECOND FLOOR TO 200 PEOPLE DURING CONSTRUCTION WHILE ONE OF THE REQUIRED EGRESS STAIRS IS BEING RE-CONSTRUCTED.

PLUMBING FIXTURE CALCULATIONS

ASSEMBLY - 217 OCCUPANTS

SPACE	SQ. FT.	OCC.	WC-M	WC-W	LAV	DF
WATER CLOSETS - MEN	1:125	108.5	.87			
WATER CLOSETS - WOMEN	1:65	108.5		1.67		
LAVATORIES	1:200	217			1.08	
DRINKING FOUNTAINS	1:500	217				.43

BUSINESS - 13 OCCUPANTS

SPACE	SQ. FT.	OCC.	WC-M	WC-W	LAV	DF
WATER CLOSETS - MEN	1:25	6.5	.26			
WATER CLOSETS - WOMEN	1:25	6.5		.26		
LAVATORIES	1:40	13			.33	
DRINKING FOUNTAINS	1:100	13				.13

MERCANTILE - 35 OCCUPANTS

SPACE	SQ. FT.	OCC.	WC-M	WC-W	LAV	DF
WATER CLOSETS - MEN	1:500	17.5	.035			
WATER CLOSETS - WOMEN	1:500	17.5		.035		
LAVATORIES	1:750	35			.046	
DRINKING FOUNTAINS	1:1000	35				.035

STORAGE - 7 OCCUPANTS

SPACE	SQ. FT.	OCC.	WC-M	WC-W	LAV	DF
WATER CLOSETS - MEN	1:100	3.5	.035			
WATER CLOSETS - WOMEN	1:100	3.5		.035		
LAVATORIES	1:100	7			.07	
DRINKING FOUNTAINS	1:1000					.007

TOTAL - 272 OCCUPANTS

SPACE	WC-M	WC-W	LAV	DF	REQUIRED	PROVIDED
WATER CLOSETS - MEN	1.2				2	2
WATER CLOSETS - WOMEN		2.0			2	2
LAVATORIES			1.53		2	4
DRINKING FOUNTAINS				.602	1	2
SERVICE SINK					1	1

BUILDING AREA STATISTICS

FIRST FLOOR STATISTICS		SECOND FLOOR STATISTICS	
EXISTING FLOOR PLATE:	127, 218 sqft	EXISTING FLOOR PLATE:	40,757 sqft
AREA TO BE DEMOLISHED:	10,139 sqft	AREA TO BE DEMOLISHED:	355 sqft
EXISTING TO REMAIN:	117,079 sqft	EXISTING TO REMAIN:	40,402 sqft
PROPOSED ADDITION:	10,204 sqft	PROPOSED ADDITION:	4,815 sqft
PROPOSED FLOOR PLATE:	127,283 sqft	PROPOSED FLOOR PLATE:	45,217 sqft
NET FLOOR PLATE CHANGE:	+65 sqft	NET FLOOR PLATE CHANGE:	+4,460 sqft

OVERALL EXISTING BUILDING SQUARE FOOTAGE 167,975 SF

OVERALL PROPOSED BUILDING SQUARE FOOTAGE 172,500 SF

CODE SUMMARY

REVISIONS: 1 — ADDENDUM #1

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE
170 ELM STREET
ENFIELD, CT

G1.2

STRUCTURAL GENERAL NOTES

GENERAL

1. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND DETAILS. ALSO, SEE STRUCTURAL SPECIFICATIONS.

2. STRUCTURAL CONDITIONS WHERE SECTIONS OR DETAILS ARE CUT SHALL ALSO APPLY TO COMPARABLE SIMILAR LOCATIONS ELSEWHERE ON THE PLANS REGARDLESS IF THE SECTION MARK IS NOT INDICATED. DETAILS SHOWN APPLY TO ALL SIMILAR CONDITIONS UNLESS OTHERWISE NOTED. DO NOT SCALE DRAWINGS.

3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, QUANTITIES, ETC., IN THE FIELD PRIOR TO BEGINNING OF ANY NEW CONSTRUCTION. NOTIFY ENGINEER/ARCHITECT OF ANY DISCREPANCIES FOUND IMMEDIATELY.

4. CONTRACTOR SHALL VERIFY AND COORDINATE THE DIMENSIONS, LAYOUT AND DETAILS OF ALL OPENINGS, PENETRATIONS, SLEEVES, SLAB DEPRESSIONS, DRAINS, EQUIPMENT PADS, BLOCKOUTS, SLOPED SLABS, ETC. CONTRACTOR SHALL REVIEW ALL OF THE CONTRACT DOCUMENTS AND CONSULT WITH THE SUBCONTRACTORS AND SUPPLIERS TO OBTAIN THE REQUIRED INFORMATION. OPENINGS, PENETRATIONS, SLEEVES, SLAB DEPRESSIONS, DRAINS, EQUIPMENT PADS, BLOCKOUTS, SLOPED SLABS, ETC. THAT VARY FROM OR HAVE NOT BEEN INDICATED ON THE STRUCTURAL DOCUMENTS, SHALL BE INSTALLED AT NO ADDITIONAL COST, ONLY AFTER APPROVAL BY THE STRUCTURAL ENGINEER HAS BEEN OBTAINED.

5. CONTRACTOR SHALL VERIFY AND COORDINATE THE FINAL LOCATION, LAYOUT, AND DETAILS OF ALL FRAMING FOR MECHANICAL EQUIPMENT, DRAINS, MECHANICAL SHAFTS, ETC. THE CONTRACTOR SHALL CONSULT WITH THE SUBCONTRACTORS AND SUPPLIERS TO OBTAIN THE REQUIREMENTS FOR EQUIPMENT AND/OR MATERIALS THAT WILL BE PROVIDED FOR THE PROJECT. VARIATIONS TO THE FRAMING INDICATED ON THE STRUCTURAL DOCUMENTS SHALL BE COORDINATED AND INSTALLED AT NO ADDITIONAL COST, AFTER REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER IS OBTAINED.

6. AT EXTERIOR WINDOW SYSTEMS AND EXTERIOR (STORE FRONT/CURTAIN) WALL SYSTEMS: CONTRACTOR TO PROVIDE POSITIVE ATTACHMENT TO THE CONCRETE SLAB/BENT PLATE POUR STOP AT FLOOR LEVELS, THE TOP FLANGE OF BEAMS AT ROOF LEVELS OR FLOOR AREAS WITHOUT SLABS, AND TO THE BOTTOM OF HUNG LINTEL ASSEMBLIES AT SLAB OPENINGS. PROVIDE VERTICAL SLIP CONNECTIONS AS INDICATED ON CONTRACT DOCUMENTS. ATTACHMENT TO STRUCTURAL STEEL AT OTHER LOCATIONS IS PROHIBITED UNLESS APPROVED BY THE ENGINEER OF RECORD. ANY ADDITIONAL BRACING OF THE STRUCTURAL STEEL (AS DETERMINED BY THE ENGINEER OF RECORD) REQUIRED BY THE CONTRACTORS REQUEST TO USE ALTERNATE ATTACHMENT LOCATIONS SHALL BE FURNISHED AND INSTALLED BY THE SAID CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

CODES

1. ALLOWABLE UNIT STRESSES AND DESIGN CRITERIA IN ACCORDANCE WITH THE FOLLOWING-

A) 'THE 2003 INTERNATIONAL BUILDING CODE' WITH THE '2005 STATE OF CONNECTICUTSUPPLEMENT', THE '2009 STATE OF CONNECTICUT AMENDMENT', THE '2011 STATE OF CONNECTICUT AMENDMENT', AND THE '2013 STATE OF CONNECTICUT AMENDMENT'.

B) 'MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES', ASCE/SEI 7-02.

C) 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS-ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN', AISC 1989, WITH SUPPLEMENT NO.1, 2001.

D) 'SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS' AISC 341-02.

E) 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE', ACI 318-02.

F) 'BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES', ACI 530-02.

G) 'NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS', NASPEC 2001.

H) 'AISC-STANDARD FOR COLD-FORMED STEEL FRAMING-GENERAL PROVISIONS', 2001.

I) 'STANDARD SPECIFICATIONS, LOAD TABLES AND WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS', SJI-94.

DESIGN CRITERIA

1.	LIVE LOADS:	
	ROOF:	
	- GROUND SNOW LOAD (Pg)	35 PSF
	- FLAT-ROOF SNOW LOAD (Pf)	40 PSF (PLUS DRIFT WHERE APPLICABLE)
	- SNOW EXPOSURE FACTOR (Ce)	1.1
	- SNOW LOAD IMPORTANCE FACTOR (Is)	1.0
	FLOOR: (NEW ADDITION)	
	- OFFICES, CONFERENCE ROOMS, LOUNGES	100 PSF
	- STAIRS/CORRIDORS	100 PSF
	- MECHANICAL ROOM	150 PSF
2.	LATERAL LOADS: (NEW ADDITION)	
	WIND DESIGN DATA:	
	- BASIC WIND SPEED (V)	95 MPH
	- WIND IMPORTANCE FACTOR (Iw)	1.15
	- BUILDING OCCUPANCY CATEGORY	III
	- WIND EXPOSURE	C
	- INTERNAL PRESSURE COEFFICIENT (GC/PI)	+/- 0.18
	- COMPONENTS AND CLADDING WIND DESIGN PRESSURE	THE MORE STRINGENT OF ASCE 7-02 CHAPTER 6 AND FM GLOBAL REQUIREMENTS
	EARTHQUAKE DESIGN DATA:	
	- SEISMIC IMPORTANCE FACTOR (Ie)	1.25
	- SEISMIC USE GROUP	II
	- MAPPED SPECTRAL ACCEL AT SHORT PERIODS (SS)	0.233
	- MAPPED SPECTRAL ACCEL AT 1-SEC PERIOD (S1)	0.065
	- SITE CLASS	E
	- DESIGN SPECTRAL ACCEL AT SHORT PERIODS (SDS)	0.388
	- DESIGN SPECTRAL ACCEL AT 1 SEC PERIOD (SD1)	0.152
	- SEISMIC DESIGN CATEGORY	C
	- BASIC SEISMIC-FORCE-RESISTING SYSTEM(S)	STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.
	- DESIGN BASE SHEAR	145 KIPS (N-S DIRECTION) 145 KIPS (E-W DIRECTION)
	- SEISMIC RESPONSE COEFFICIENT (C/S)	0.13
	- RESPONSE MODIFICATION FACTOR (R)	3
	- ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE PROCEDURE, LINEAR ELASTIC MODEL
3.	PRESUMED SOIL BEARING PRESSURE (BASED ON DR. CLARENCE WELTIS REPORT DATED JANURARY 15, 2013 AND TEST BORINGS.)	1.5 TSF
	- FROST DEPTH	3'-6"
4.	W SHAPES, STRUCTURAL STEEL SECTIONS UNLESS OTHERWISE NOTED.	ASTM A992, Fy=50 KSI
5.	ROLLED CHANNELS, ANGLES, PLATES AND SHAPES UNLESS OTHERWISE NOTED	ASTM A36, Fy=36 KSI
6.	MOMENT FRAME CONTINUITY PLATES	ASTM A572 Fy=50 KSI
7.	HOLLOW STRUCTURAL SECTIONS (HSS) (RECTANGULAR)	ASTM A-500, GRADE B GRADE C (ROUND), Fy=46 KSI
8.	STRUCTURAL STEEL PIPES	ASTM A-53, GRADE B Fy=35 KSI
9.	WELDED WIRE FABRIC	ASTM A-185 Fy=60 KSI
10.	REINFORCING STEEL	ASTM A-615 GRADE 60, Fy=60 KSI
11.	WELDABLE REINFORCING STEEL	ASTM A-706 (WELDED PER ANSI/AWS D1.4) GRADE 60, Fy=60 KSI
12.	CONCRETE FOR FOUNDATION WALLS, FOOTINGS, AND GRADE BEAMS	f'c=3,000 PSI (UNLESS OTHERWISE NOTED)
13.	CONCRETE FOR SLABS ON GRADE, SLABS ON METAL DECK AND STRUCTURAL SLABS	f'c=4,000 PSI (UNLESS OTHERWISE NOTED)
14.	STEEL FRAME - THE STEEL FRAME SHALL BE TYPE 2 CONSTRUCTION, WITH THE EXCEPTION OF RIGID MOMENT CONNECTIONS AS INDICATED ON CONSTRUCTION DOCUMENTS.	

FOUNDATION

1. FOOTINGS ARE INTENDED TO BEAR ON SUITABLE UNDISTURBED MATERIAL UNLESS OTHERWISE NOTED. THE SOIL SUBGRADE FOR ALL FOOTINGS AND SLABS ON GRADE SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR THE OWNER'S TESTING LABORATORY IMMEDIATELY PRIOR TO PLACING FOOTING FORMS AND CONCRETE. CONTRACTOR SHALL NOTIFY THE STRUCTURAL AND GEOTECHNICAL ENGINEERS WHERE PROPOSED FOOTING ELEVATIONS WOULD BEAR ON UNSUITABLE MATERIAL AND PROCEED AS DIRECTED.

2. FOUNDATION WALLS AND RETAINING WALLS WITH FINISH GRADE EQUAL ON BOTH SIDES SHALL BE BACKFILLED ON BOTH SIDES, SO THAT THE MAXIMUM VARIATION IN ELEVATION IS LIMITED TO 12 INCHES. DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL BASEMENT AND GROUND LEVEL SLABS HAVE BEEN POURED AND THE CONCRETE HAS ATTAINED THE SPECIFIED 28-DAY STRENGTH. DO NOT BACKFILL AGAINST RETAINING WALLS UNTIL THE CONCRETE HAS ATTAINED THE SPECIFIED 28-DAY STRENGTH.

3. DO NOT USE EQUIPMENT WEIGHING MORE THAN 5000 POUNDS WITHIN (10) FEET OF ALL WALLS. EQUIPMENT WEIGHING MORE THAN 5000 POUNDS SHALL NOT BE USED ADJACENT TO WALLS, EXCEPT AS EXPRESSLY APPROVED BY THE ENGINEER.

4. NO FOOTING OR SLABS SHALL BE PLACED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST OR ICE.

5. PROVIDE AN ADEQUATE DEWATERING SYSTEM TO MAINTAIN DRY EXCAVATIONS.

6. ANY CHANGES IN THE DIMENSIONS OR DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW. ALL EXISTING CONSTRUCTION AND UTILITIES SHALL BE SAFEGUARDED AND PROTECTED FROM DAMAGE OR SETTLEMENT DURING EXCAVATION AND CONSTRUCTION. ALL DIMENSIONS AND DETAILS RELATING TO THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

7. THE CONTRACTOR SHALL LOCATE AND COORDINATE REQUIRED SLEEVES AND BLOCKOUTS THROUGH FOUNDATION WALLS WITH OTHER TRADES. THESE OPENINGS SHALL BE ADDRESSED ON REBAR SHOP DRAWINGS WHEN SUBMITTED TO STRUCTURAL ENGINEER FOR APPROVAL.

8. FOOTINGS SHALL BE CENTERED ON COLUMN LINES UNLESS OTHERWISE NOTED. WALL FOOTINGS SHALL BE CENTERED ON WALLS UNLESS OTHERWISE NOTED.

FOUNDATION UNDERPINNING

1. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL ENGINEER HAVING A MINIMUM OF 10 YEARS EXPERIENCE IN UNDERPINNING AND SOIL RETENTION WORK, WHO IS REGISTERED IN THE STATE OF CONNECTICUT AND WILL PREPARE ALL SUBMITTALS REQUIRED AND BE FULLY RESPONSIBLE FOR DETAILED DESIGN AND CONSTRUCTION SPECIFICATIONS AND PROVIDE SUPERVISION DURING CONSTRUCTION OF THE UNDERPINNING WORK.

2. THE FOUNDATION CONTRACTOR'S PROFESSIONAL ENGINEER SHALL PROVIDE SEALED STRUCTURAL DESIGN CALCULATIONS AND DRAWINGS FOR ALL RETENTION AND UNDERPINNING SYSTEMS TO THE OWNER'S STRUCTURAL ENGINEER AND/OR GEOTECHNICAL ENGINEER FOR REVIEW. SOIL PRESSURES AND GUIDELINE CRITERIA ESTABLISHED BY THE OWNER'S GEOTECHNICAL ENGINEER SHALL BE UTILIZED.

3. THE FOUNDATION CONTRACTOR SHALL SUBMIT RETENTION SYSTEM BRACING AND/OR TIEBACK SYSTEM INCLUDING TESTING PROCEDURES FOR LATERAL TIEBACK, AND EXCAVATION CONSTRUCTION SEQUENCES IN WRITING TO THE STRUCTURAL ENGINEER AND/OR GEOTECHNICAL ENGINEER FOR REVIEW.

4. SUBMIT CONTRACTOR'S AND CONTRACTOR'S ENGINEERS QUALIFICATIONS FOR ENGINEER'S REVIEW PRIOR TO START OF WORK.

5. THE CONTRACTOR AND THE CONTRACTOR'S ENGINEER SHALL DESIGN, FURNISH, INSTALL AND PERFORM THE NECESSARY APPROACH EXCAVATION, PIT EXCAVATION, TIMBER LAGGING, JACKS, CONCRETING, WEDGING, SHIMMING DRY PACKING AND ALL OTHER WORK REQUIRED TO SAFELY SUPPORT, PROTECT AND MAINTAIN THE INTERIOR AND EXTERIOR OF THE BUILDINGS IN THEIR EXISTING CONDITION. ANY MOVEMENT OR DAMAGE TO THE BUILDING OR ADJACENT PROPERTY SHALL BE CORRECTED TO THE SATISFACTION OF THE OWNER AND STRUCTURAL ENGINEER AT THE SOLE EXPENSE OF THE CONTRACTOR.

6. THE CONTRACTOR'S ENGINEER SHALL PREPARE A REPORT OF THE STRUCTURAL PRECONDITION SURVEY OF THE EXISTING BUILDING. THIS ON-SITE SURVEY SHALL BE DONE IN THE PRESENCE OF THE CONTRACTOR'S ENGINEER AND A REPRESENTATIVE FOR THE OWNER OF THE EXISTING BUILDING. THIS PRECONDITION SURVEY REPORT SHALL INCLUDE A DETAILED ON-SITE INSPECTION OF THE INTERIOR AND EXTERIOR OF THE BUILDING WITH PHOTOGRAPHS OF THE INTERIOR AND THE EXTERIOR OF THE BUILDING SHOWING EXISTING CONDITIONS.

7. THE CONTRACTOR'S ENGINEER SHALL SUBMIT A COMPLETE SEALED, DETAILED DESIGN IN THE FORM OF COMPUTATIONS, WORKING SHOP DRAWINGS AND CALCULATIONS FOR REVIEW AND COMMENT BY THE STRUCTURAL AND GEOTECHNICAL ENGINEERS. THE SUBMITTAL SHALL INCLUDE ALL CONSTRUCTION SEQUENCES, METHODS, DETAILS, SPECIFICATIONS, DESIGN LOADS AND OPERATIONS NECESSARY FOR PROPER EXECUTION OF THE FOUNDATION UNDERPINNING ANDSOIL RETENTION WORK. THE CONTRACTOR SHALL SCHEDULE A MINIMUM OF 15 DAYS FOR REVIEW.

8. THE CONTRACTOR'S ENGINEER SHALL HAVE A LICENSED LAND SURVEYOR, SET AT LEAST THREE PERMANENT CONTROL MARKS TO MONITOR HORIZONTAL AND VERTICAL MOVEMENT ABOVE FINISHED GRADE ALONG THE BUILDING (SEE "7/S3.301"). HORIZONTAL AND VERTICAL MEASUREMENTS SHALL BE TAKEN ON THESE CONTROL MARKS USING TWO (2) SEPARATE SET-UPS BEFORE THE UNDERPINNING/SOIL RETENTION OPERATION STARTS, EVERY 24 HOURS DURING THE UNDERPINNING/SOIL RETENTION WORK AND WEEKLY DURING ADJACENT EXCAVATION OPERATIONS. THESE READINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AT THE END OF THE WORKING DAY ON WHICH THEY WERE TAKEN. THE STRUCTURAL ENGINEER MAY ORDER MORE FREQUENT READINGS TO BE TAKEN ON SPECIFIC CONTROL MARKS WHEN, IN HIS OPINION, IT IS WARRANTED. ACCURACY OF ALL SURVEY WORK SHALL BE WITHIN 1/16 OF AN INCH, BOTH HORIZONTALLY AND VERTICALLY.

9. SEQUENCE THE UNDERPINNING/SOIL RETENTION WORK PER ALL APPROVED SUBMITTALS.

10. SEE SPECIFICATION SECTIONS 312001 AND 315000 FOR ADDITIONAL REQUIREMENTS.

CONCRETE

1. KEY FOUNDATION WALLS TO FOOTINGS AND SLABS TO SUPPORT WALLS. KEY SHALL BE FORMED WITH WOOD AND BE 1 1/2" DEEP. KEY WIDTH SHALL BE 1/3 THE WALL THICKNESS

2. UNLESS OTHERWISE NOTED, REINFORCE ALL FOUNDATION WALLS WITH (2)-#5 BARS TOP AND BOTTOM CONTINUOUS. PROVIDE DOWELS AT CORNERS AND INTERSECTIONS - LAP ALL SPLICES 30 BAR DIAMETERS UNLESS OTHERWISE NOTED. ALL SPLICES IN CONCRETE BEAMS, GRADE BEAMS, AND ALL FOUNDATION WALLS SPANNING HORIZONTAL TO CONFORM TO ACI 318 TENSION LAP SPLICES - SEE DEVELOPMENT LENGTH SCHEDULE ON DRAWING "S3.300".

3. PROVIDE (2)-#5 BARS ON EACH SIDE OF ALL OPENINGS THROUGH CONCRETE WALLS. BARS SHALL EXTEND 2'-0" BEYOND EDGE OF OPENINGS. PROVIDE (2)-#5 x 5'-0" LONG DIAGONAL (ONE EACH FACE) AT ALL CORNERS.

4. DOWEL ALL VERTICAL REINFORCING STEEL IN WALLS, COLUMNS, PIERS, PIERS INTEGRAL WITH WALLS, ETC. INTO FOOTINGS.

5. AIR ENTRAIN ALL CONCRETE EXPOSED TO FREEZE THAW ACTION.

6. POCKET WALLS WHERE NECESSARY FOR COLUMNS, BEAMS AND SLABS. POCKET TO BE COMPLETELY FILLED WITH CONCRETE AFTER BEAM/COLUMN IS IN PLACE.

7. THE CONTRACTOR SHALL COORDINATE REQUIRED SIZES OF ALL ISOLATION JOINTS AROUND COLUMN BASES AT SLABS ON GRADE, AND SIZE OF COLUMN POCKETS IN FOUNDATION WALLS TO ACCOMMODATE DIAGONAL LATERAL BRACING CONNECTION DETAILS WITHOUT CONCRETE INTERFERENCE. ENCASED BASE OF COLUMN TO PROVIDE A MINIMUM TWO (2") INCH CONCRETE COVER AROUND COLUMN AND BASE PLATES.

8. ALL CONCRETE REINFORCING SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH ACI PROCEDURES AND THE REQUIREMENTS OF THE CODES IN THE PREVIOUSLY OUTLINED "CODES" SECTION AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI-315.

9. CHECKED SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING CONSTRUCTION JOINTS, OPENINGS, REINFORCING SIZES, SPACING AND PLACEMENT SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. UNCHECKED SHOP DRAWINGS WILL BE REJECTED WITHOUT REVIEW

10. ALL WELDED WIRE FABRIC SHALL BE LAPPED TWO (2) FULL MESH PANELS AND TIED SECURELY.

11. CONSTRUCTION JOINTS IN ALL WALLS AND BEAMS SHALL NOTE BE SPACED FURTHER THAN 60 FEET IN ANY DIRECTION. HORIZONTAL WALL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED EXCEPT WHERE SHOWN. CONSTRUCTION JOINTS IN BASEMENT WALLS SHALL CONTAIN CONTINUOUS WATERSTOPS (SEE SPECS).

12. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

13. SEE ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF ALL PARTITIONS, FLOOR FINISHES, FLOOR DEPRESSIONS AND CURBS. COORDINATE SIZE AND LOCATION OF EQUIPMENT PADS WITH MECHANICAL AND ELECTRICAL CONTRACTORS.

14. ALL CONSTRUCTION JOINTS IN STRUCTURAL SLABS SHALL BE MADE AT CENTER OF SPAN WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS OTHERWISE SHOWN OR APPROVED.

15. PROVIDE DOWELS INTO MASONRY UNITS AT ALL CONCRETE WALLS OR SLABS SUPPORTING CMU WALLS.

16. STRUCTURAL SLABS AND SLABS ON DECK SHALL NOT CONTAIN ANY ELECTRICAL CONDUITS OR PIPING.

17. ALL EXTERIOR SLABS ON GRADE, AND ALL STRUCTURAL SLABS SHALL CONTAIN 6x6-W2.9xW2.9 WELDED WIRE FABRIC MINIMUM, UNLESS OTHERWISE NOTED IN DETAILS OR ON PLAN.

MASONRY

1. DESIGN CRITERIA ACI 530.1:

A) HOLLOW UNITS- ASTM C 90, GRADE N, TYPE 1 - MOISTURE CONTROLLED.

B) SOLID UNITS- ASTM C 90, GRADE N, TYPE 1 - MOISTURE CONTROLLED.

C) CONCRETE BUILDING BRICK- ASTM C55

D) MORTAR- ASTM C 270, TYPE S, FOR REINFORCED AND LOAD BEARING MASONRY AND MASONRY BELOW GRADE IN CONTACT WITH EARTH.

E) GROUT- ASTM C 476 - 2000 PSI (MINIMUM)

F) COMPRESSIVE STRENGTH OF MASONRY - f'm = 1500 PSI (MINIMUM)

G) VERTICAL AND HORIZONTAL REINFORCEMENT ASTM A 615, GRADE 60.

H) ALL MASONRY CONSTRUCTION MUST BE FULLY INSPECTED.

2. MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 530.1 "SPECIFICATION FOR MASONRY STRUCTURES". ALL MASONRY REINFORCING SHALL BE POSITIONED AND SECURED PRIOR TO PLACING GROUT. "WET STICKING" OF REINFORCING INTO GROUT IS NOT PERMITTED. REMOVAL AND REPLACEMENT OF IMPROPERLY CONSTRUCTED MASONRY SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

3. COURSING AND REINFORCING IS SHOWN DIAGRAMMATICALLY TYPICALLY IN THE DOCUMENTS. IT IS NOT THE INTENT OF THE DOCUMENTS TO DELINEATE EVERY COURSING CONDITION. GROUTED COURSE/CORE, ANCHORAGE, OR REINFORCING INSTANCE REQUIRED. THE CONTRACTOR SHALL PROVIDE COURSING, GROUTING, ANCHORAGE, REINFORCING, AND THE LIKE AS REQUIRED BY THE DOCUMENTS.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS'.

2. ALL WELDING ELECTRODES SHALL BE E70XX UNLESS OTHERWISE NOTED.

3. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-325 OR ASTM A-490.

4. ALL WELDING SHALL BE BY CERTIFIED WELDERS AND SHALL CONFORM TO AWS 'CODE OF ARC AND GAS WELDING IN BUILDING CONSTRUCTION', LATEST EDITION.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION PROCEDURES AND SEQUENCES INCLUDING TEMPORARY BRACING AND SHORING.

6. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

7. ANY ADDITIONAL STEEL REQUIRED BY THE CONTRACTOR FOR ERECTION PURPOSES AND SITE ACCESS OR MATERIALS FOR STOCKPILING STEEL SHALL BE PROVIDED AT NO COST TO THE OWNER. ALL SUCH ADDITIONAL STEEL SHALL BE REMOVED BY THE CONTRACTOR UNLESS APPROVED BY THE OWNER IN WRITING.

8. PROVIDE FULL DEPTH WEB STIFFENER PLATES, BOTH SIDES, FOR ALL BEAMS CONTINUOUS OVER COLUMNS, AND FOR BEAMS SUPPORTING POSTS FROM ABOVE. PROVIDE PLATE AT EACH FLANGE OR WEB OF COLUMN OR POST.

9. FABRICATE AND ERECT ALL BEAMS WITH CAMBER UP.

10. SHOP AND FIELD TESTING OF WELDS AND BOLTS BY TESTING LAB SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 051200, SHOP QUALITY CONTROL, AND FIELD QUALITY CONTROL.

12. STRUCTURAL STEEL FABRICATOR SHALL BE RESPONSIBLE FOR PROVIDING BRACING MEMBER END CONNECTIONS WITH A MINIMUM CAPACITY FOR FORCES GIVEN ON BRACED FRAME ELEVATIONS OR PLANS. WHEN PROVIDING CONNECTIONS, ALL AISC CODE REQUIREMENTS SHALL BE MET AS APPLICABLE (I.E., NET SECTION, BLOCK SHEAR, ETC.) FOR THE MEMBERS AND GUSSET PLATES.

13. BEAM END CONNECTIONS SHALL BE SELECTED AND DETAILED FOR 1.25 TIMES THE REACTIONS INDICATED. A MINIMUM CONNECTION CAPACITY OF 6 KIPS SHALL BE PROVIDED. REACTIONS GOVERNED BY THE 6K MINIMUM ARE DESIGNATED AS "<WXX:XX>" ON PLAN, AND NEED NOT BE INCREASED BY THE FACTOR OF 1.25.

14. CONNECTIONS WHERE NO END REACTIONS ARE INDICATED MAY BE ESTIMATED FOR A REACTION EQUAL TO ONE HALF THE ALLOWABLE UNIFORM LOAD FOR THE BEAM SPAN. CONNECTIONS FOR COMPOSITE BEAMS WITH NO END REACTION INDICATED MAY BE ESTIMATED FOR 1.5 TIMES ONE HALF THE ALLOWABLE UNIFORM LOAD FOR THE BEAM SPAN. FOR FINAL DESIGN PURPOSES, THE FABRICATOR SHALL SUBMIT AN RFI TO THE ENGINEER TO REQUEST VALUES FOR ANY REACTIONS THAT ARE NOT INDICATED.

15. STRUCTURAL STEEL FABRICATOR SHALL SUBMIT TO ENGINEER FOR REVIEW CALCULATIONS FOR EACH TYPE OF CONNECTION UTILIZED ON THE PROJECT TWO (2) WEEKS PRIOR TO SUBMITTING DETAILED SHOP DRAWING. FABRICATOR SHALL ALSO SUBMIT TO THE ENGINEER ANY SHOP STANDARD DETAILS APPLICABLE TO CONNECTIONS FOR USE ON THE PROJECT. SHOP DRAWINGS WILL NOT BE REVIEWED UNTIL THIS SUBMISSION IS MADE.

16. PRIOR TO INSTALLATION OF SPRAY-ON FIREPROOFING, THE CONTRACTOR SHALL REMOVE ALL LOOSE MILL SCALE.

17. PROVIDE DECK OPENING FRAMES FOR ALL OPENINGS IN FLOOR DECK AND ROOF DECK 12" AND LARGER, INCLUDING SUMP PANS. SEE "5/S4.400". COORDINATE FINAL QUANTITY AND LOCATION WITH ARCHITECTURAL AND MEP DRAWINGS.

18. ALL FIELD WELDS SHALL BE SCRAPED AND CLEANED FREE OF SLAG BY WELDER/ERECTOR TO ENABLE VISUAL WELD INSPECTION.

19. FIELD WELDING TO GALVANIZED STEEL: PRIOR TO FIELD WELDING CONNECTIONS, ZINC COATING AT ALL WELD CONNECTION AREAS SHALL BE REMOVED BY BURNING WITH OXYGEN FUEL GAS TORCH OR GRINDING TO BARE STEEL. APPLY A MINIMUM OF TWO COATS OF ZINC-RICH PAINT AFTER CLEANING COMPLETED WELD.

20. UNLESS OTHERWISE NOTED, PROVIDE WELDED METAL TIES FOR MASONRY ON ALL BEAM WEBS, WHERE MASONRY WALLS RUN BY STEEL BEAMS. REFER TO DIVISION 4 OF SPECIFICATIONS.

21. ALL STRUCTURAL STEEL IN PROJECT TO MEET AESS REQUIREMENTS. SEE SPECIFICATION SECTION "051200" FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

OPEN-WEB STEEL JOISTS

A) DESIGN FABRICATION AND ERECTION, SJI SPECS, 'K' SERIES.

B) DESIGN NET WIND UPLIFT PRESSURE = 15 PSF.

C) DETAILS: JOISTS TO BE WELDED OR BOLTED TO SUPPORTS. EXTEND BOTTOM CHORD OF JOIST TO COLUMN IN COLUMN LINES WITH A SLIDE CONNECTION IN ACCORDANCE WITH OSHA REQUIREMENTS.

D) CONCENTRATED LOADS: ATTACHMENT IN SUCH MANNER OR AT SUCH LOCATION THAT LOCAL BENDING IS NOT INTRODUCED INTO THE CHORDS EXCEPT AS NOTED. SEE SPECIFICATION DIVISION 5 FOR ADDITIONAL REINFORCING REQUIRED WHERE CONCENTRATED LOADS FALL BETWEEN PANEL POINTS (SUBJECT TO ENGINEER'S APPROVAL).

E) PROVIDE BRIDGING AS NOTED ON PLAN AND/OR IN ACCORDANCE WITH SJI SPECIFICATION AND ALL LOCAL, STATE AND FEDERAL CODES AND REGULATIONS.

F) ALL JOISTS TO BE EVENLY SPACED WITHIN BAYS UNLESS OTHERWISE NOTED ON PLANS.

G) ALL JOISTS HAVING A SUPPORT SPACING OF 40 FEET OR GREATER MUST BE BOLTED TO SUPPORTS.

TEMPORARY SHORING

1. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE PROJECT IS CONSTRUCTED TO PREPARE ALL SUBMITTALS REQUIRED AND TO BE FULLY RESPONSIBLE FOR DETAILED DESIGN AND CONSTRUCTION SPECIFICATIONS AND PROVIDE SUPERVISION DURING CONSTRUCTION OF THE TEMPORARY SHORING WORK.

2. THE CONTRACTOR AND THE CONTRACTOR'S ENGINEER SHALL DESIGN, FURNISH, INSTALL AND PERFORM THE NECESSARY WORK REQUIRED TO SAFELY SUPPORT, PROTECT AND MAINTAIN EXISTING CONSTRUCTION. ANY MOVEMENT OR DAMAGE OF THE BUILDING OR STRUCTURE SHALL BE CORRECTED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SOLE EXPENSE OF THE CONTRACTOR.

3. THE CONTRACTOR'S ENGINEER SHALL PREPARE A REPORT OF THE STRUCTURAL PRECONDITION SURVEY OF THE EXISTING BUILDING. THIS ON-SITE SURVEY SHALL BE DONE IN THE PRESENCE OF A REPRESENTATIVE FOR THE OWNER OF THE EXISTING BUILDING. THIS PRECONDITION SURVEY REPORT SHALL INCLUDE A DETAILED ON-SITE INSPECTION OF THE INTERIOR AND THE EXTERIOR OF THE BUILDING WITH PHOTOGRAPHS OF THE INTERIOR OF THE BUILDING SHOWING EXISTING CONDITIONS.

4. THE CONTRACTOR'S ENGINEER SHALL SUBMIT A COMPLETE SEALED, DETAILED DESIGN IN THE FORM OF COMPUTATIONS AND WORKING SHOP DRAWINGS AND CALCULATIONS FOR REVIEW AND COMMENT BY THE ENGINEER. THE SUBMITTAL SHALL INCLUDE ALL CONSTRUCTION SEQUENCES, METHODS, DETAILS, SPECIFICATIONS, DESIGN LOADS AND OPERATIONS NECESSARY FOR PROPER EXECUTION OF THE TEMPORARY SHORING WORK. THE CONTRACTOR SHALL SCHEDULE A MINIMUM 15 DAYS FOR REVIEW.

COLD-FORMED METAL FRAMING

1. AISI SPECIFICATIONS AND STANDARDS: COMPLY WITH AISI'S "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" AND IT'S "STANDARD FOR COLD-FORMED STEEL FRAMING-GENERAL PROVISIONS".

2. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL ENGINEER HAVING A MINIMUM OF 5 YEARS EXPERIENCE IN DESIGN AND DETAILING OF COLD-FORMED METAL FRAMING, WHO IS REGISTERED IN THE PROJECT JURISDICTION TO PREPARE ALL SUBMITTALS REQUIRED.

3. THE CONTRACTOR'S ENGINEER SHALL SUBMIT A COMPLETE SEALED, DETAILED DESIGN IN THE FORM OF COMPUTATIONS, WORKING SHOP DRAWINGS AND CALCULATIONS FOR REVIEW AND COMMENT BY THE STRUCTURAL ENGINEER OF RECORD. THE SUBMITTAL SHALL INCLUDE ALL FRAMING, CONNECTIONS, DETAILS, SPECIFICATIONS, AND DESIGN LOADS NECESSARY FOR THE COMPLETE DESIGN AND INSTALLATION OF ALL COLD-FORMED METAL FRAMING.

4. ENGINEERING CALCULATIONS AND DATA SHALL BE SUBMITTED VERIFYING THE FRAMING ASSEMBLY'S ABILITY TO MEET OR EXCEED DESIGN REQUIREMENTS AS REQUIRED BY LOCAL CODES AND AUTHORITIES OR BY THE ARCHITECT. ALL CONNECTIONS (MEMBER TO MEMBER AND MEMBER TO STRUCTURE) SHALL BE THOROUGHLY EXAMINED AND DESIGNED.

5. SHOP DRAWINGS SHALL BE DOCUMENTS ILLUSTRATING MATERIALS, SHOP COATINGS, STEEL THICKNESS, DETAILS OF FABRICATION, DETAILS OF ATTACHMENT TO ADJOINING WORK, SIZE, LOCATION AND SPACING OF FASTENERS FOR ATTACHING FRAMING TO ITSELF, DETAILS OF ATTACHMENT TO STRUCTURE, ACCESSORIES AND THEIR INSTALLATION, AND CRITICAL INSTALLATION PROCEDURES. DRAWINGS MAY INCLUDE PLANS, ELEVATIONS, SECTIONS, AND DETAILS.

6. ALL COLD-FORMED METAL FRAMING SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENT STATE APPLICABLE BUILDING CODES. DESIGN SHALL CONSIDER ALL APPLICABLE LOAD COMBINATIONS, AND SHALL INCLUDE, BUT NOT LIMITED TO THE AFFECTS OF DEAD LOAD, LIVE LOAD, SNOW LOAD, AND WIND AND SEISMIC LOADS AS REQUIRED.

POST INSTALLED ANCHORS (PIA)

1. POST INSTALLED ADHESIVE ANCHORS SHALL BE INSTALLED USING A TWO-COMPONT MATERIAL MEETING ASTM C 881 REQUIREMENTS. SEE PROJECT SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS AND PRODUCTS.

2. POST INSTALLED MECHANICAL ANCHORS: SEE PROJECT SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS AND PRODUCTS.

3. ALL POST INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

4. TESTING AGENCY SHALL RANDOMLY REVIEW ANCHORING INSTALLATION TO VERIFY CONFORMANCE WITH CONTRACT DOCUMENTS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. INITIAL INSPECTIONS SHALL OCCUR AT FIRST APPLICATION FOR EACH TYPE OF ANCHOR TO VERIFY CONFORMANCE. THE NUMBER OF POST INSTALLED ANCHOR INSTALLATIONS TO BE WITNESSED BY THE OWNER'S TESTING AGENCY SHALL MEET THE FOLLOWING CRITERIA:

4a. A MINIMUM OF 25% OF ADHESIVE ANCHOR INSTALLATIONS PER SUB CONTRACTOR SHALL BE WITNESSED. THE PERCENTAGE WITNESSED MAY BE MODIFIED BY THE STRUCTURAL ENGINEER OF RECORD, DEPENDING UPON INITIAL RESULTS.

4b. A MINIMUM OF 10% OF MECHANICAL ANCHOR INSTALLATIONS PER SUB CONTRACTOR SHALL BE WITNESSED. THE PERCENTAGE WITNESSED MAY BE MODIFIED BY THE STURCTURAL ENGINEER OR RECORD, DEPENDING UPON INITIAL RESULTS.

5. LOAD TESTING OF POST INSTALLED ANCHORS MAY BE REQUESTED BY THE STRUCTURAL ENGINEER OF RECORD FOLLOWING THE RESULT OF THE TESTING AGENCY'S INSTALLATION REPORTS. LOAD TESTING SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.

6. SEE PROJECT SPCIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

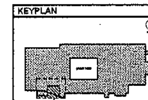
STRUCTURAL ABBREVIATIONS

#	NUMBER OR POUND	k	KIP(S)
&	AND	L	ANGLE
@	AT	LG	LIGHT GAGE FRAMING
AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL	LLH	LONG LEG HORIZONTAL
AFF	ABOVE FINISHED FLOOR	LLV	LONG LEG VERTICAL
ARCH	ARCHITECTURAL/ARCHITECT	LSH	LONG SIDE HORIZONTAL
AVG	AVERAGE	LSV	LONG SIDE VERTICAL
B/S	BOTH SIDES	MAX	MAXIMUM
BF	BRACE FRAME	MECH	MECHANICAL
BFE	BOTTOM OF FOOTING ELEVATION	MFR	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BM	BEAM	MISC	MISCELLANEOUS
BOT	BOTTOM	MO	MASONRY OPENING
C	CHANNEL	NTS	NOT TO SCALE
CANT	CANTILEVER	O/C	ON CENTER
CFMF	COLD-FORMED METAL FRAMING	OD	OUTSIDE DIAMETER
CJ	CONTROL JOINT	OF	OUTSIDE FACE
CL	CENTER LINE	OH	OPPOSITE HAND
CLR	CLEAR	OPP	OPPOSITE
CMU	CONCRETE MASONRY UNIT	P	CONCRETE PIER
CO	UNDERDRAIN CLEANOUT	PAF	POWDER ACTUATED FASTENER
COL	COLUMN	PEN	PENETRATION
CONC	CONCRETE	PIA	POST-INSTALLED ANCHOR
CONST	CONSTRUCTION	QTY	QUANTITY
CONT	CONTINUOUS	R	REACTION
COORD	COORDINATE	RAD	RADIUS
DEMO	DEMOLITION	RD	ROOF DRAIN
DIA	DIAMETER	REINF	REINFORCEMENT
DIAG	DIAGONAL	REQ'D	REQUIRED
DIM	DIMENSION	RL	ROOF DRAIN LEADER
DOF	DECK OPENING FRAME	ROF	ROOF OPENING FRAME
DWGS	DRAWINGS	RTU	ROOF TOP UNIT
EA	EACH	SECT	SECTION
EF	EACH FACE	SF	SQUARE FOOT
EJ	EXPANSION JOINT	SIM	SIMILAR
EL	ELEVATION	SJ	SEISMIC JOINT
ELEC	ELECTRICAL	SL	SLOPE
EOS	EDGE OF SLAB	SOG	SLAB ON GRADE
EQ	EQUAL	SPEC	SPECIFICATION
EW	EACH WAY	STR	STRUCTURAL
EX	EXISTING	T&B	TOP AND BOTTOM
EXT	EXTERIOR	T/SLAB	TOP OF SLAB ELEVATION
FD	FLOOR DRAIN	TCE	TOP OF CONCRETE ELEVATION
FDN	FOUNDATION	TGE	TOP OF GRADE BEAM ELEVATION
FF	FINISHED FLOOR	TPC	TOP OF PILE CAP ELEVATION
FS	FOOTING STEP	TPE	TOP OF PIER ELEVATION
FT	FOOT/FEET	TPL	TOP OF PLANK ELEVATION
FTG	FOOTING	TSE	TOP OF SHELF ELEVATION
GALV	GALVANIZED	TWE	TOP OF WALL ELEVATION
GR	GRADE	TYP	TYPICAL
HORIZ	HORIZONTAL	UON	UNLESS OTHERWISE NOTED
HSS	HOLLOW STRUCTURAL SECTIONS	VERT	VERTICAL
ID	INSIDE DIAMETER	VIF	VERIFY IN FIELD
IN	INCH(ES)	W	WIDE FLANGE
INT	INTERIOR	W/	WITH
INV	INVERT	W/O	WITHOUT
		WP	WORKING POINT
		WWF	WELDED WIRE FABRIC

STRUCTURAL DRAWING LIST

S0.001	GENERAL NOTES, ABBREVIATIONS, AND DRAWING LIST
SD1.101	FOUNDATION DEMOLITION PLAN
SD2.200	FRAMING DEMOLITION PLANS
S1.100	GRID LAYOUT
S1.101	FOUNDATION PLAN
S1.102	SLAB ON GRADE PLAN
S2.200	SECOND FLOOR FRAMING PLAN
S2.201	SECOND FLOOR SLAB EDGE PLAN
S2.202	ROOF FRAMING PLAN
S2.203	ROOF EDGE OF DECK PLAN
S2.204	STAIR TOWER FRAMING PLANS
S3.300	FOUNDATION DETAILS
S3.301	FOUNDATION DETAILS
S3.302	FOUNDATION DETAILS
S3.303	FOUNDATION DETAILS
S3.304	FOUNDATION DETAILS
S4.400	FRAMING DETAILS
S4.401	FRAMING DETAILS
S4.402	FRAMING DETAILS
S4.403	FRAMING DETAILS
S4.404	FRAMING DETAILS
S5.500	COLUMN SCHEDULE
S6.600	BRACED FRAME ELEVATIONS
S7.700	MASONRY DETAILS
Grand total: 24	

KEYPLAN



BVH integrated services

STRUCTURAL, MECHANICAL, ELECTRICAL AND TECHNOLOGY

GENERAL NOTES, ABBREVIATIONS, AND DRAWING LIST

REVISIONS

mark	date	description
1	9/23/15	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

BI-CTC-437

S0.001

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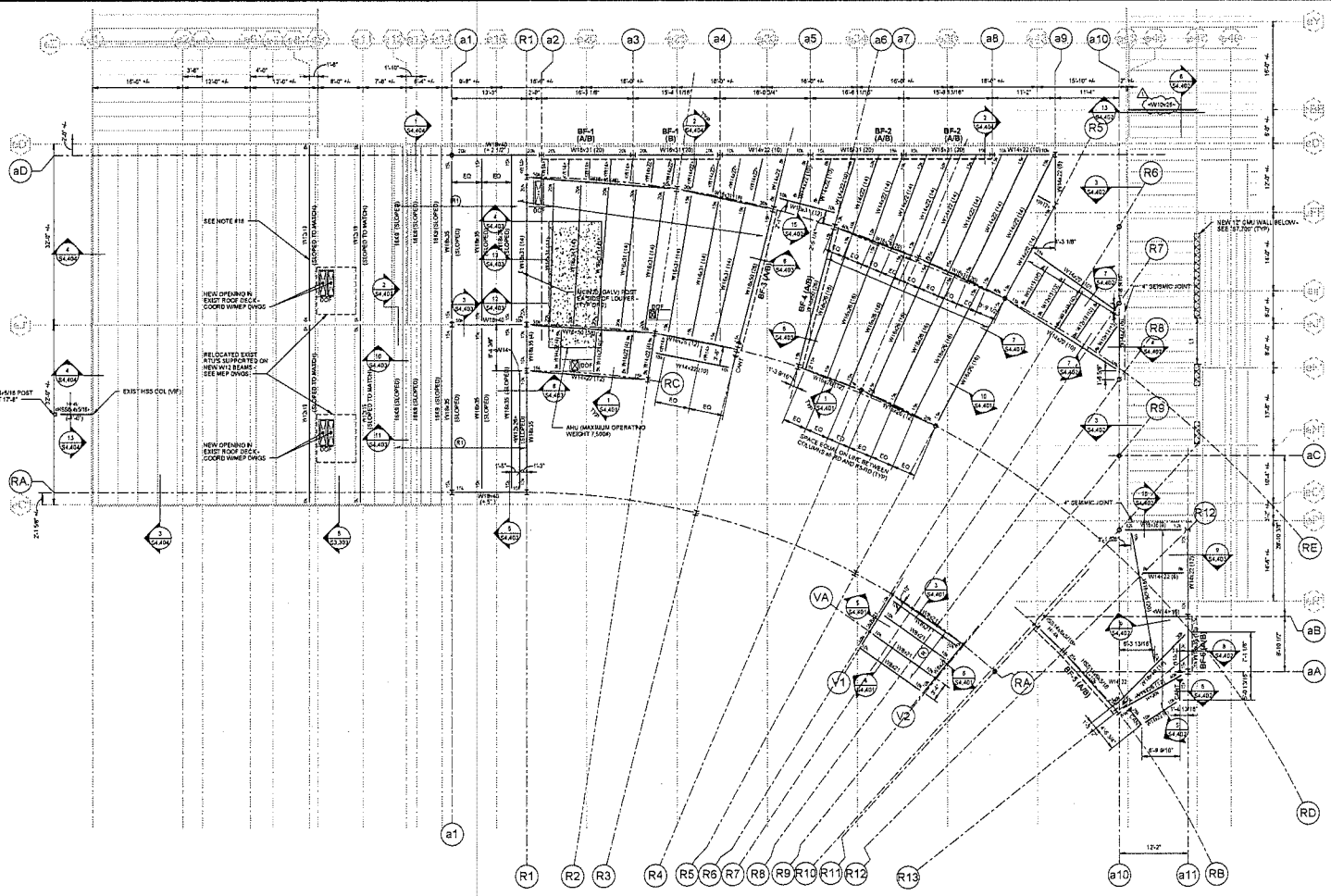


SECOND FLOOR FRAMING PLAN

1/8" = 1'-0"

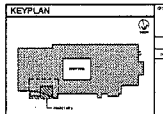
1. TOP OF CONCRETE FLOOR SLAB TO BE AT REFERENCE ELEVATION 11'-0 3/8"±/-VERIFY IN FIELD. TOP OF NEW SLAB ELEVATION TO MATCH EXISTING. ADJUST STEEL ELEVATION AS REQUIRED.
2. [+...] OR [-...] INDICATES TOP OF GIRDERS/BEAMS ELEVATION AT COLUMN OR BEAM CENTERLINE, REFERENCED FROM TOP OF STEEL ELEVATION.
3. BF-... INDICATES BRACED FRAME. SEE BRACE FRAME ELEVATIONS AND DETAILS.
4. CANT INDICATES CANTILEVERED BEAM TO BE THE SAME BEAM SIZE AS ADJACENT BACKSPAN.
5. DOF INDICATES DECK OPENING FRAME. SEE TYPICAL DETAIL ON "S4.400"
6. A NUMBER SHOWN AFTER A BEAM SIZE (I.E. W18X35 (24)) INDICATES THE NUMBER OF 3/4" DIAMETER x 4" HIGH, HEADED STUD TYPE SHEAR CONNECTORS WELDED TO TOP FLANGE OF BEAM. SHEAR CONNECTORS TO BE EVENLY SPACED, UNLESS OTHERWISE NOTED.
7. BEAM END CONNECTIONS SHALL BE SELECTED AND DETAILED FOR 1.25 TIMES THE REACTIONS INDICATED ON PLAN OR IN A SCHEDULE. END CONNECTIONS ON BEAMS DESIGNATED <WXXXX/YY> SHALL BE SELECTED AND DETAILED FOR A MINIMUM OF 5K.
8. A+, K INDICATES TENSION/COMPRESSION FORCE IN MEMBER.H+, K INDICATES HORIZONTAL FORCE AT MEMBER CONNECTION. T+, T-, K OR T+, -K INDICATES TORSIONAL FORCE AT MEMBER CONNECTION. K AND R+, K INDICATES GRAVITY LOAD AT MEMBER CONNECTION. DESIGN CONNECTION FOR ALL FORCES INDICATED ON THE DRAWINGS.
9. W8 INDICATES W8x10, W10 INDICATES W10x12, W12 INDICATES W12x14, W14 INDICATES W14x22.
10. CONTRACTOR TO COORDINATE LOCATION AND DIMENSIONS OF MECHANICAL UNITS AND MECHANICAL UNIT SUPPORT FRAMING WITH MECHANICAL CONTRACTOR AND/OR EQUIPMENT SUPPLIER. STRUCTURE HAS BEEN DESIGNED TO SUPPORT THE EQUIPMENT INDICATED ON THE STRUCTURAL DRAWINGS. IF CHANGES ARE MADE, NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY FOR SUPPORT VERIFICATION.
11. CONTRACTOR TO COORDINATE SIZE AND LOCATION OF ALL OPENINGS AND SLEEVES WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS AND MEP CONTRACTORS.
12. CONTRACTOR PERFORMING STRUCTURAL WORK SHALL BE RESPONSIBLE FOR ALL SHORING OF EXISTING CONSTRUCTION REQUIRED TO SAFELY COMPLETE WORK.
13. SEE "S54.400" FOR TYPICAL SLAB ON DECK CONSTRUCTION JOINT DETAIL. CONTRACTOR TO SUBMIT PROPOSED SLAB CONSTRUCTION JOINT LOCATIONS FOR APPROVAL.
14. ALL STRUCTURAL STEEL TO MEET AISS REQUIREMENTS. SEE SPECIFICATION SECTION "051200" FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
15. ALL RADIAL BEAM CENTERLINES SHALL ALIGN WITH GRID WORKING POINT. BEAMS SHALL BE EQUALLY SPACED IN BAYS UNLESS OTHERWISE NOTED ON PLANS. SEE DRAWING S1.100 FOR LOCATION OF GRID WORKING POINT.
16. NEW W13 @ EXIST JOISTS SUPPORTING RELOCATED RTUS. INSTALL TIGHT TO UNDERSIDE OF DECK, DRY PACK WITH NONSHRINK GROUT AS REQD TO PROVIDE FULL BEARING. REMOVE EXISTING JOIST BRIDGING AS REQUIRED TO INSTALL NEW BEAM. REINSTALL EXISTING JOIST BRIDGING AFTER INSTALLATION OF W13
17. SEE DRAWING "S1.100" FOR ALL GRID DIMENSIONS.

FLOOR FRAMING PLAN SYMBOL LEGEND

- INDICATES DIRECTION OF SPAN OF COMPOSITE CONCRETE FLOOR SLAB. STRUCTURAL SLAB TO BE 5" NORMAL WEIGHT CONCRETE OVER 2" 18 GAGE GALVANIZED METAL DECK (NOMINAL THICKNESS = 5"). REINFORCED WITH 6x6-W2.9xW2.9 WWF. SEE "VS4.400" FOR ADDITIONAL REINFORCING REQUIREMENTS.
- (R1) INDICATES DIRECTION OF SPAN OF WIDE RIB, GALVANIZED 1 1/2" DEEP, 18 GAGE, METAL ROOF DECK. SEE "6/S4.400" FOR FRAMING INFORMATION. SEE PROJECT SPECIFICATIONS.
- * INDICATES COORDINATE FINAL DIMENSIONS WITH ARCHITECTURAL DRAWINGS, EQUIPMENT SUPPLIER, AND EQUIPMENT CONTRACTOR.
- INDICATES MOMENT CONNECTION TO DEVELOP FULL BENDING AND SHEAR CAPACITY OF BEAM OR GIRDER, UNLESS OTHERWISE NOTED.
- INDICATES CONCRETE HOUSEKEEPING SLAB. COORDINATE QUANTITY, SIZE, AND LOCATION WITH MEP DRAWINGS. SEE "S/S3.301".

ON LEGEND NORTH

KEYPLAN



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drawing title: SECOND FLOOR FRAMING PLAN

mark	date	description
1	10/23/15	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing prepared by
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELD STREET
ENFIELD, CT

project number: DCT-C-037

date: 04/27/2015
as shown
project manager: J.F.
project engineer: J.F.
drawn by: BBP
checked by: J.F.

S2.200

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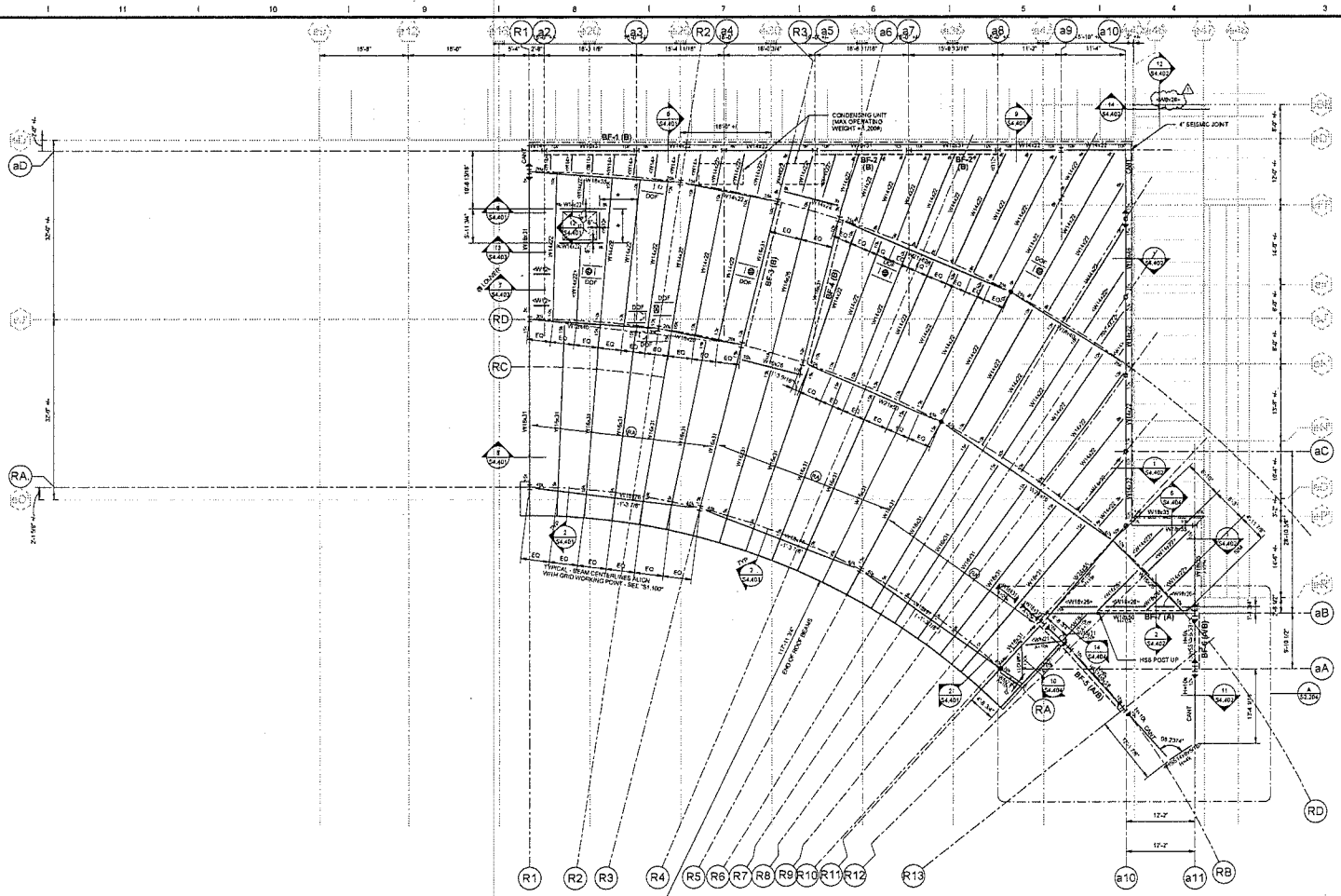


ROOF FRAMING PLAN

1/8" = 1'-0"

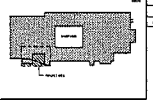
1. TOP OF STEEL TO BE AT REFERENCE ELEVATION 23'-1 1/4" +/- (VERIFY IN FIELD) UNLESS OTHERWISE NOTED BY (+...) OR (-...) INDICATING THE DISTANCE ABOVE OR BELOW THIS REFERENCE ELEVATION.
2. [+...] OR [-...] INDICATES TOP OF GIRDERS/BEAMS ELEVATION AT COLUMN OR BEAM CENTERLINE REFERENCED FROM TOP OF STEEL ELEVATION.
3. BF-... INDICATES BRACED FRAME. SEE BRACE FRAME ELEVATIONS AND DETAILS.
4. ODF INDICATES ROOF OPENING FRAME. SEE TYPICAL DETAIL "S/S4.400".
5. CONTRACTOR TO COORDINATE LOCATION AND DIMENSIONS OF MECHANICAL EQUIPMENT AND MECHANICAL EQUIPMENT SUPPORT FRAMING WITH MECHANICAL CONTRACTOR AND/OR EQUIPMENT SUPPLIER. STRUCTURE HAS BEEN DESIGNED TO SUPPORT THE EQUIPMENT INDICATED ON THE MECHANICAL DRAWINGS. IF CHANGES ARE MADE, NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY FOR SUPPORT VERIFICATION.
6. CONTRACTOR TO COORDINATE SIZE AND LOCATION OF ALL OPENINGS AND SLEEVES WITH ARCHITECTURAL DRAWINGS AND MEP CONTRACTORS.
7. OPEN WEB JOISTS SHOWN ON PLAN SHALL HAVE BRIDGING INSTALLED AND SPACED PER STEEL JOIST INSTITUTE REQUIREMENTS, UNLESS OTHERWISE NOTED.
8. BEAM END CONNECTIONS SHALL BE SELECTED AND DETAILED FOR 1.25 TIMES THE REACTIONS INDICATED ON PLAN OR IN A SCHEDULE. END CONNECTIONS ON BEAMS DESIGNATED "WXXXVYY" SHALL BE SELECTED AND DETAILED FOR A MINIMUM OF 8k.
9. ALL STRUCTURAL STEEL TO MEET AISS REQUIREMENTS. SEE SPECIFICATION SECTION "051200" FOR ADDITIONAL INFORMATION AND REQUIREMETNS.
10. ALL RADIAL BEAM CENTERLINES SHALL ALIGN WITH GRID WORKING POINT. BEAMS SHALL BE EQUALLY SPACED IN BAYS UNLESS OTHERWISE NOTED ON PLANS. SEE DRAWING S1.100 FOR LOCATION OF WORKING POINT.
11. SEE DRAWING "S1.100" FOR ALL GRID DIMENSIONS.

ROOF FRAMING PLAN SYMBOL LEGEND

(RA)	INDICATES DIRECTION OF SPAN OF WIDE RIB, GALVANIZED, 1 1/2" 18 GAGE ACCOUSTICAL METAL ROOF DECK. SEE "S/S4.400" FOR FASTENING REQUIREMENTS. SEE SPECIFICATIONS.
	INDICATES MOMENT CONNECTION TO DEVELOP FULL BENDING AND SHEAR CAPACITY OF BEAM OR GIRDER, UNLESS OTHERWISE NOTED.

GRID NORTH

KEYPLAN



drawing title: ROOF FRAMING PLAN

REVISIONS

mark	date	description
1	3/28/10	ADDENDUM #

BVH integrated services
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STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

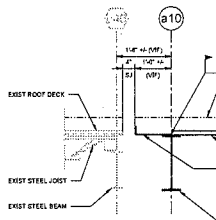
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project: CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE
170 ELD STREET
ENFIELD, CT

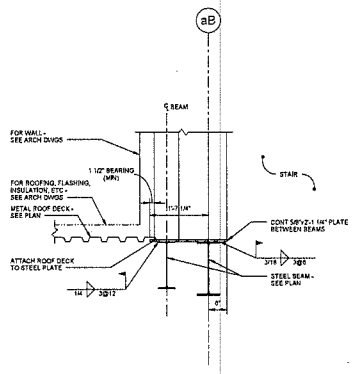
project number: BA-2TC-A31

date: 04/07/2010
drawn by: A.F.
checked by: A.F.
approved by: TMP
date of issue: 04/07/2010

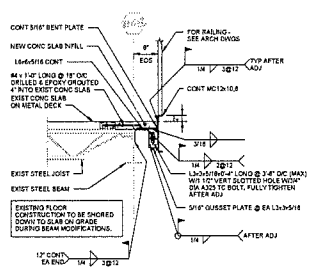
S2.202



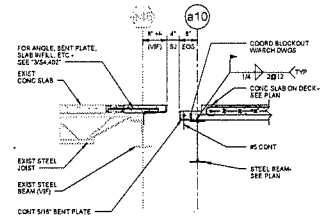
1 FRAMING SECTION
S4.402 3/4" = 1'-0"



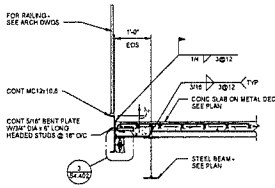
2 FRAMING SECTION
S4.402 3/4" = 1'-0"



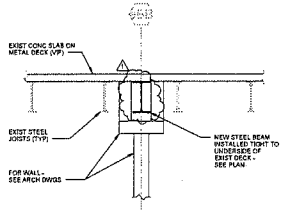
3 FRAMING SECTION
S4.402 3/4" = 1'-0"



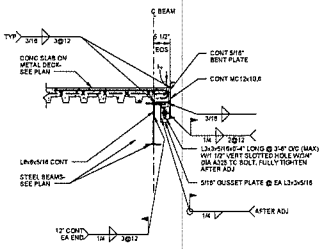
4 FRAMING SECTION
S4.402 3/4" = 1'-0"



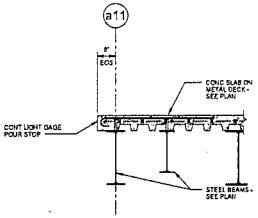
5 FRAMING SECTION
S4.402 3/4" = 1'-0"



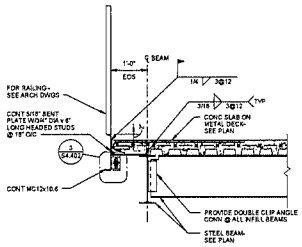
6 FRAMING SECTION
S4.402 3/4" = 1'-0"



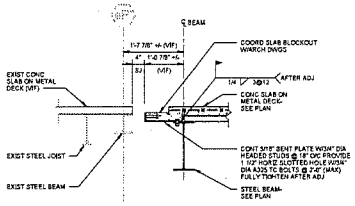
7 FRAMING SECTION
S4.402 3/4" = 1'-0"



8 FRAMING SECTION
S4.402 3/4" = 1'-0"



9 FRAMING SECTION
S4.402 3/4" = 1'-0"



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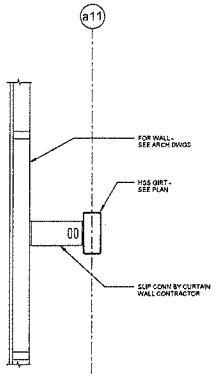

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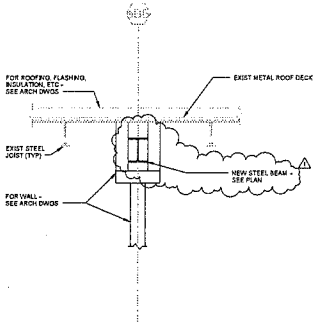

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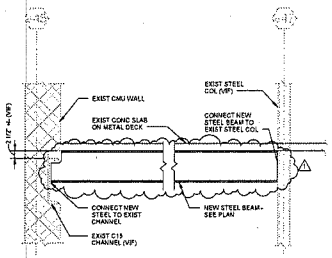

13 FRAMING SECTION
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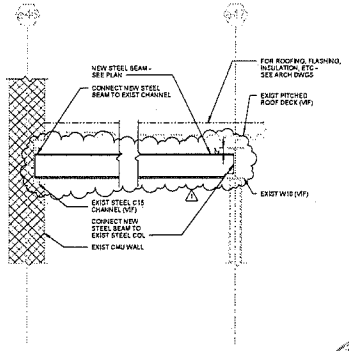

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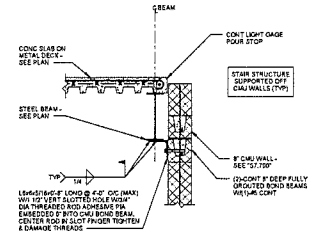
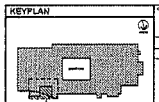


15 FRAMING SECTION
S4.402 3/4" = 1'-0"

KEYPLAN



drawing title: FRAMING DETAILS

REVISIONS

mark	date	description
1	9/28/15	ADDENDUM 4

BVH integrated services
CONSULTING MECHANICAL, ELECTRICAL, AND PLUMBING
10 Griffin Road North, Bloomfield, CT 06002
Tel (860) 243-0121
www.bvhi.com

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

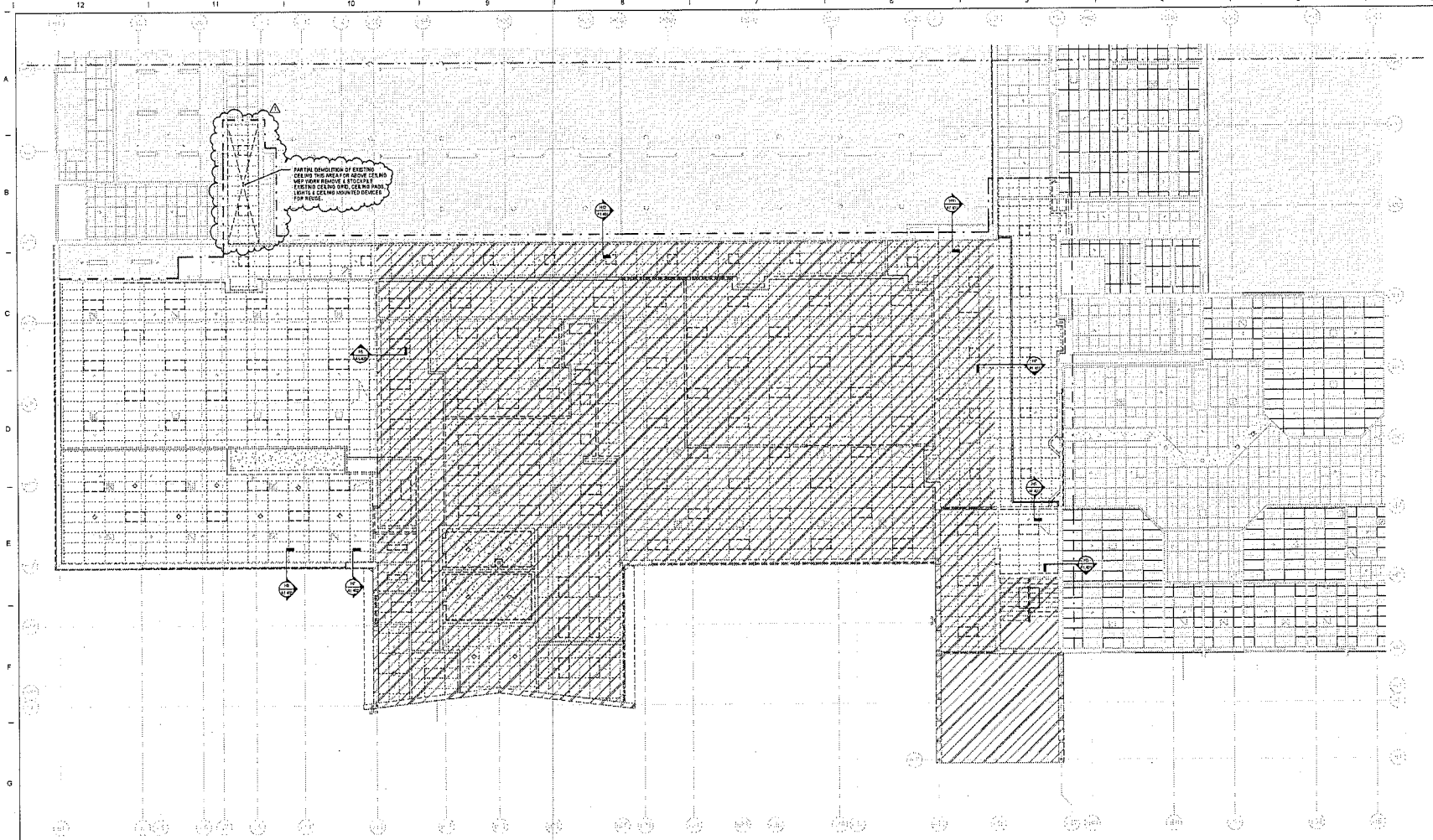
drawing prepared by:
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project:
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELD STREET
ENFIELD, CT

project number: 09-CTC-437

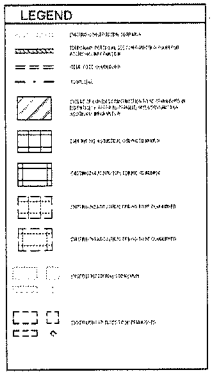
date: 04/27/2015
scale: 3/4" = 1'-0"
publication status: 50
project manager: A.F.
project designer: TGB
drawn by: TGB
drawing no.: S4.402



FIRST FLOOR REFLECTED CEILING DEMOLITION PLAN

1/8" = 1'-0"

LEGEND



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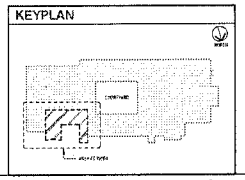

drawing title
FIRST FLOOR REFLECTED CEILING DEMOLITION PLANS

REVISIONS

mark	date	description
1	05/22/2015	ADDENDUM #1

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing designed by
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: TA-CTC-431

date: 04.21.2015
scale: 1/8" = 1'-0"
architecture license: 11591
project manager: KW
project architect: 11591
date calculator: 1111
drawing type: A1.103

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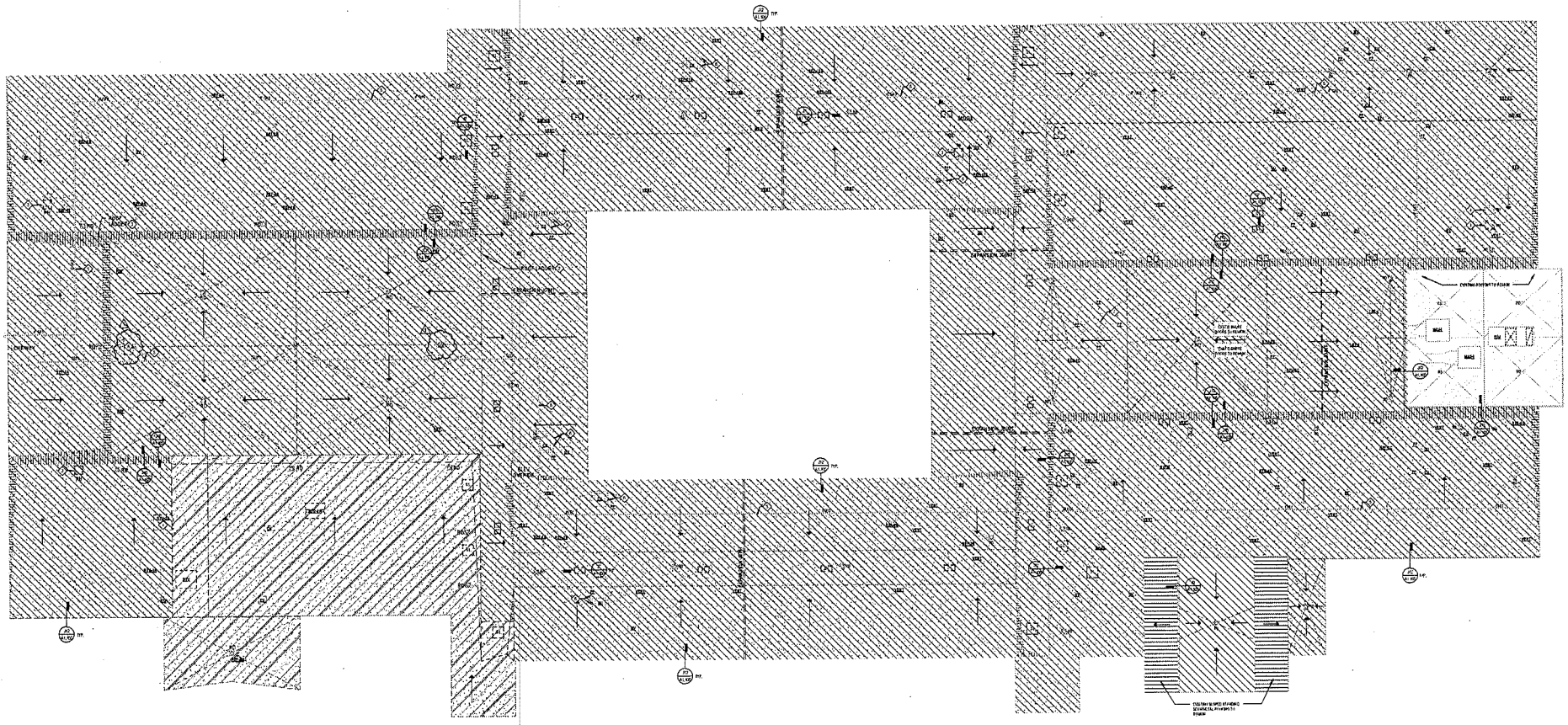
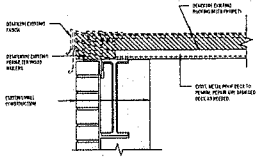
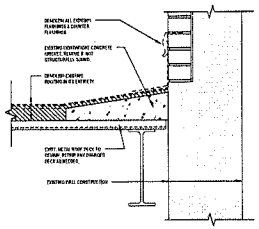


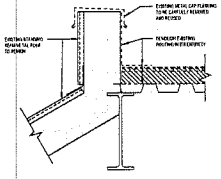
H12 ROOF DEMOLITION PLAN
1/16" = 1'-0"



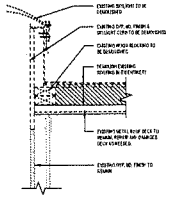
J12 ROOF DEMOLITION DETAIL
1 1/2" = 1'-0"



J10 ROOF DEMOLITION DETAIL
1 1/2" = 1'-0"



J9 ROOF DEMOLITION DETAIL
1 1/2" = 1'-0"



J7 SKYLIGHT DEMOLITION DETAIL
1 1/2" = 1'-0"

GENERAL NOTES

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2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. [illegible]
12. [illegible]
13. [illegible]

ROOF DEMOLITION KEYNOTES

1. EXISTING RTU TO BE RELOCATED, COORDINATE WITH MEP TRADE
2. EXISTING ROOF ACCESS LADDER TO BE REMOVED AND REINSTALLED AFTER RE-ROOFING
3. EXISTING ROOF HATCH TO BE REINSTALLED
4. EXISTING ROOF HATCH TO REMAIN
5. EXISTING GAS/VENT PIPE / CONDUIT TO REMAIN, RE-USE & EXISTING PIPE SUPPORTS
6. EXISTING STEEL CURBS OR TO REPAIR & EXISTING PITCH POCKETS TO BE DEMOLISHED & REPLACED
7. EXISTING ANTENNA TO REMAIN
8. EXISTING ROOF CURB TO BE DEMOLISHED AND ROOF OPENING INFILLED WITH METAL DECKING

LEGEND

EXISTING ROOF DECK TO BE REMAIN	ROOF DRAIN (IN PLAN)
DEMOLITION BOUNDARY	EXISTING ROOF DRAIN (IN PLAN)
EXISTING CONCRETE PAVERS TO BE DEMOLISHED	EXISTING GAS/VENT PIPE (IN PLAN) NOT TYPICAL DETAIL SPACING
EXISTING ROOF DECK TO BE DEMOLISHED	EXISTING HATCH
[illegible]	EXISTING ROOF DRAIN TO BE REMOVED AND INFILLED
KEY NOTE	
EXISTING CONCRETE PAVERS TO REMAIN	

CALDERHEATH

DRAWING TITLE	STATE OF CONNECTICUT
ROOF DEMOLITION PLAN	DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF CONSTRUCTION SERVICES

REVISIONS

Mark	Date	Description
1	10/22/2015	ADDENDUM

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

A1.105

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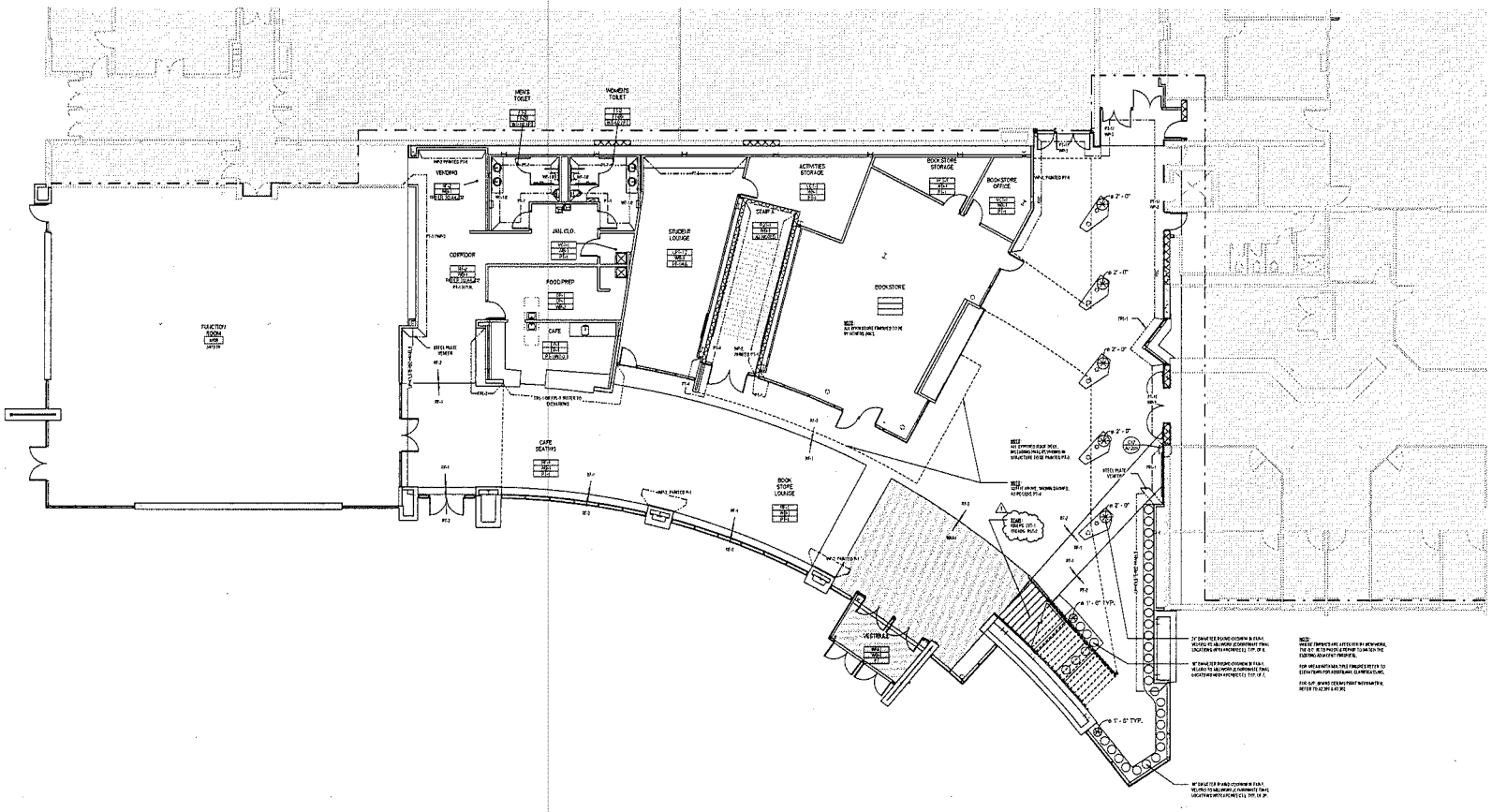


FIRST FLOOR FINISH PLAN

1/8" = 1'-0"

FINISH PLAN LEGEND

ROOM NAME
FLOORING MATERIAL
WALL BASE MATERIAL
WALL FINISH (MATERIAL)
FINISH SCHEDULE INFORMATION LOCATED ON FINISH PLAN IN TABULAR SHEET FORMAT
FLOORING DIRECTION

drawing title	FIRST FLOOR FINISH PLAN
REVISIONS	
mark	date / description
1	06/22/2017 ADDENDUM

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

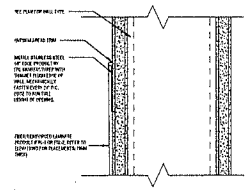
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

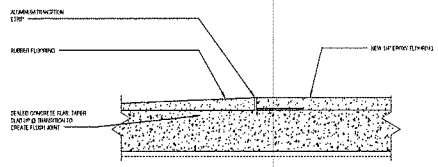
170 ELM STREET
ENFIELD, CT

project number BACTC-0437

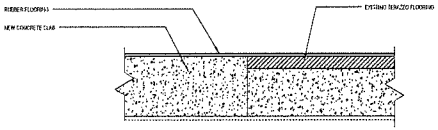
date 06-23-2017
scale As indicated
production team TSW
project manager KP
project architect TSW
drawing no. A2.201



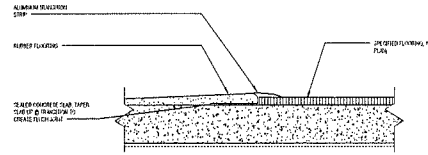
C12 WALL EDGE DETAIL
6" = 1'-0"



C10 RUBBER TO EPOXY TRANSITION DETAIL
6" = 1'-0"



C7 RUBBER TO EXISTING TERAZZO TRANSITION DETAIL
6" = 1'-0"



C4 RUBBER TRANSITION DETAIL
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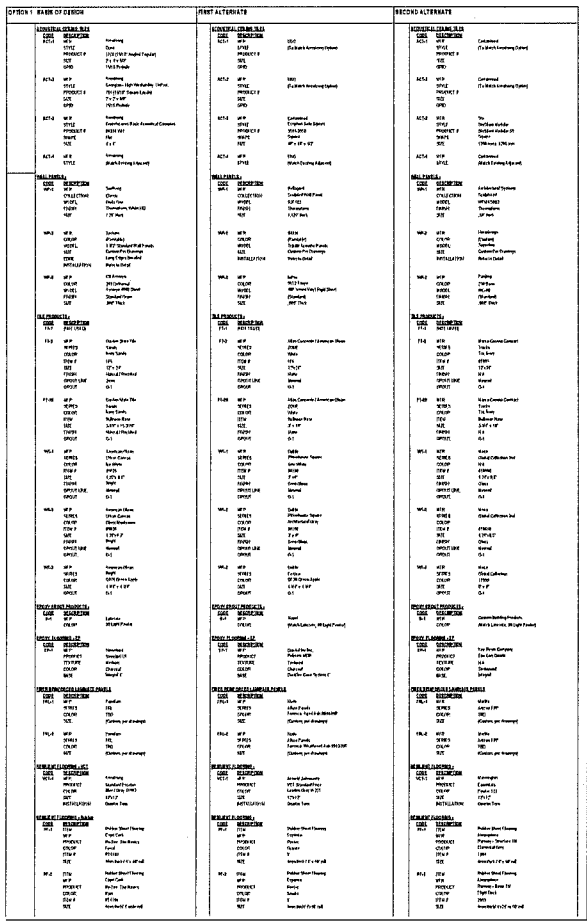

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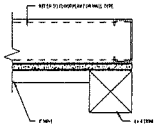

H2 TRIM AT ACCENT WALL
3" = 1'-0"

Drawing title	
MATERIAL LIST & FINISH DETAILS	

REVISIONS			
mark	date	description	
0	06.25.2015	INCEDEMENARK	

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing prepared by
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number 06CTC-057

date	06.25.2015
issued for	As indicated
construction status	ISSUED
project manager	MT
project architect	MT
drawn by	MT
checked by	MT
drawing no.	A2.203

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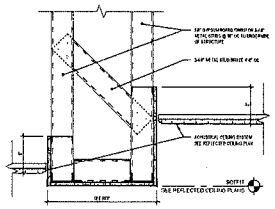
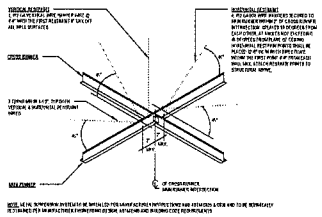
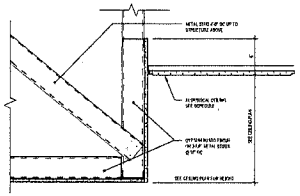


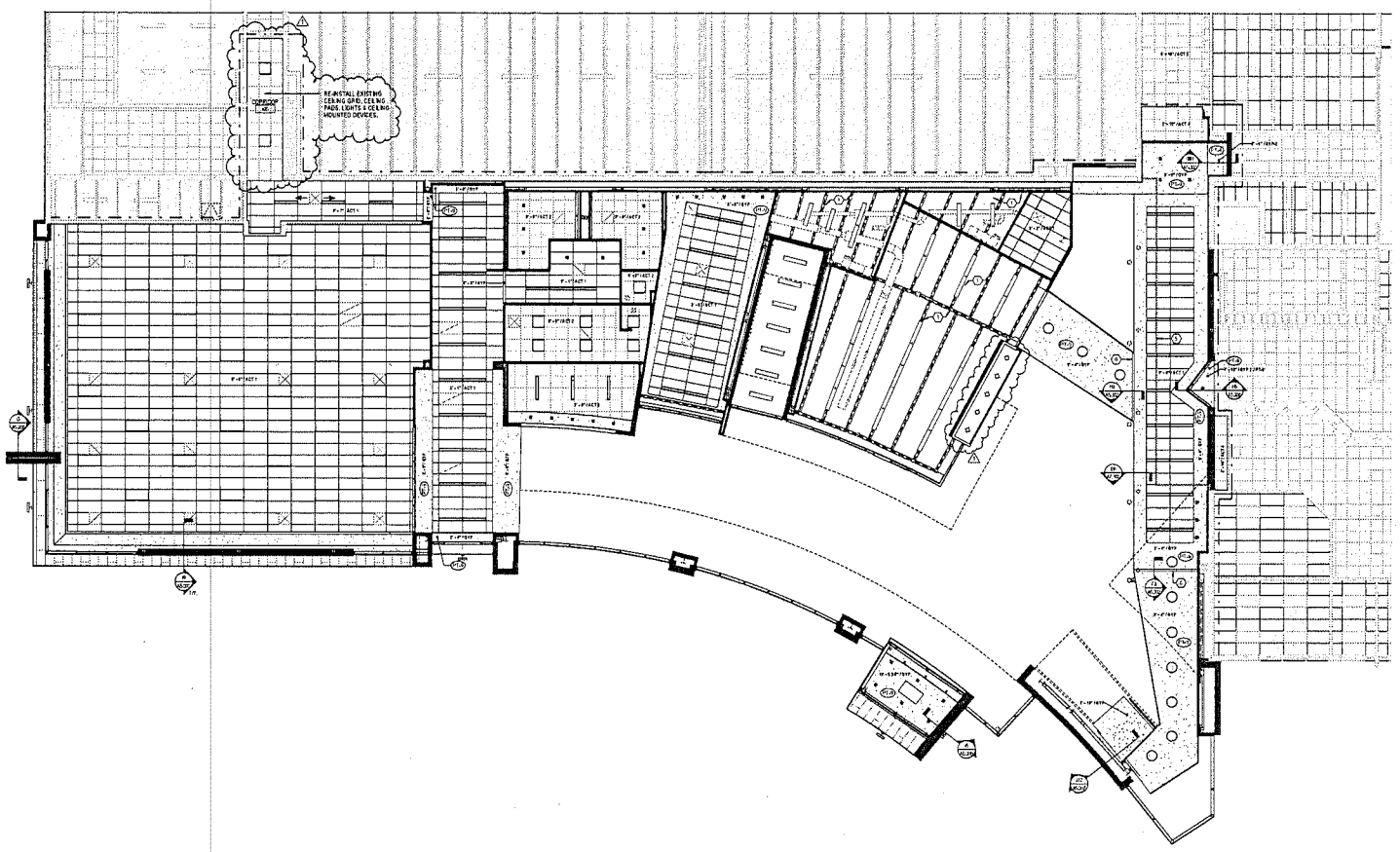
C12 GYP BD SOFFIT
1 1/2" = 1'-0"



E12 CEILING SEISMIC RESTRAINT DETAIL
1 1/2" = 1'-0"



G12 SOFFIT DETAIL (TYP)
1 1/2" = 1'-0"

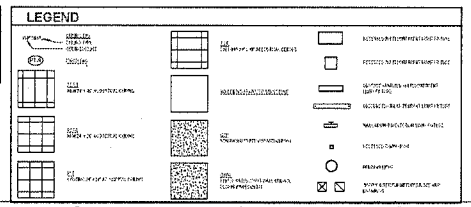


H10 FIRST FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"

REFLECTED CEILING PLAN KEYNOTES

1	EXPOSED STRUCTURE ABOVE, PAINTED EARTH
2	DECORAT. SUSPENDED CEILING
3	ADDITION TO EXISTING INTERIOR FLOOR, STRUCTURE TO BE UNPAINTED THROUGHOUT. DEVOTEDCH. FLOOR, AS WELL AS TRANSDEVANCE AND FIREWALL REQUIRED PER THE PROTECTION DRAWINGS.
4	EXPOSED STRUCTURE, PAINTED CEILING
5	TEMPORARY UNSUPPORTED PARTITION
6	SUPPORTED ASMT

LEGEND



GENERAL NOTES - CEILING

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5. [illegible]
6. [illegible]
7. [illegible]

FIRST FLOOR REFLECTED CEILING PLAN		
REVISIONS		
mark	date	description
1	05/22/2015	ADDENDUM #1

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: 15CTC-0437

date: 04-23-2015
scale: 1/8"=1'-0"
drawn by: KW
checked by: TEAM
project manager: KW
project architect: TEAM
plan checker: HS
drawing no.: A2.301

ON LEDGEWATER

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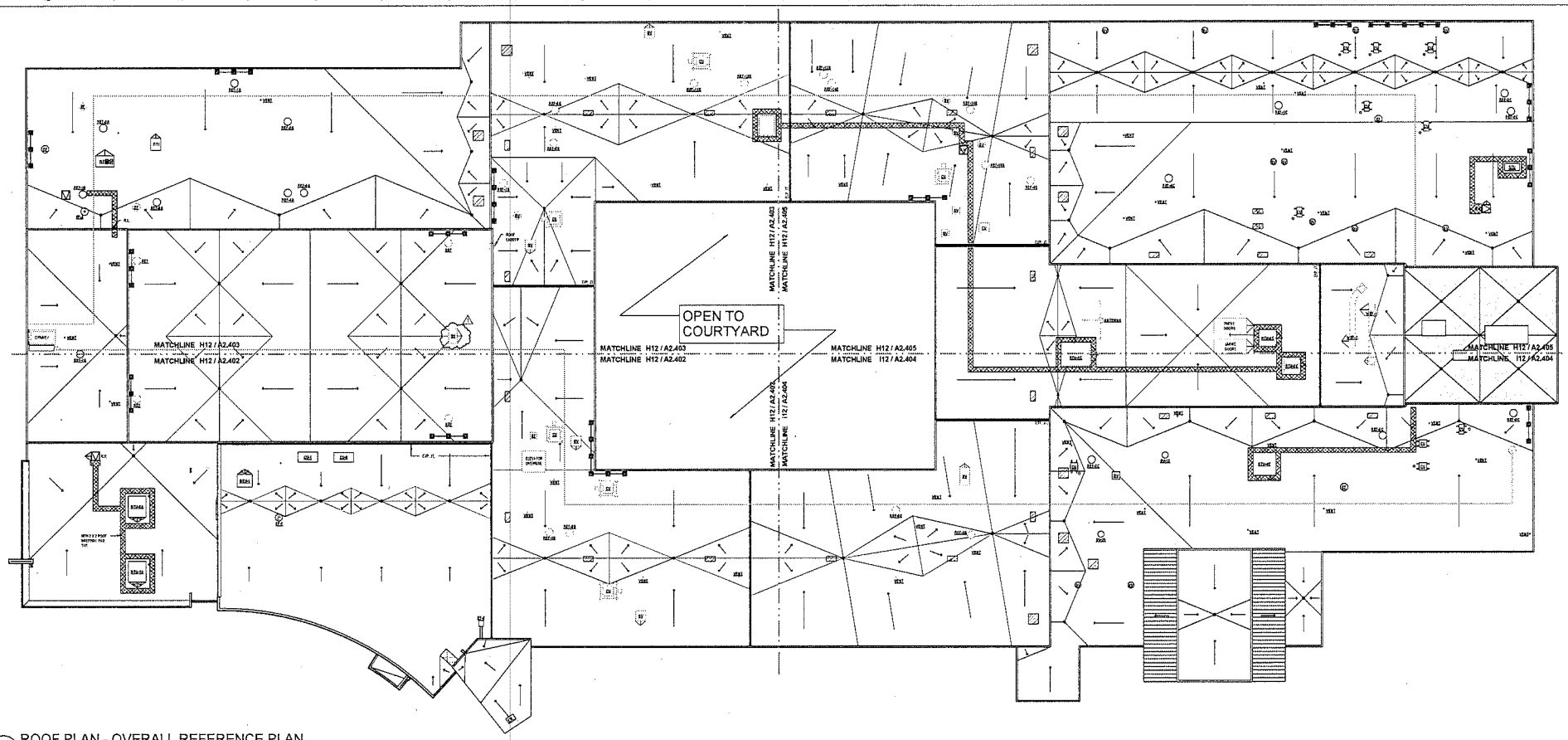
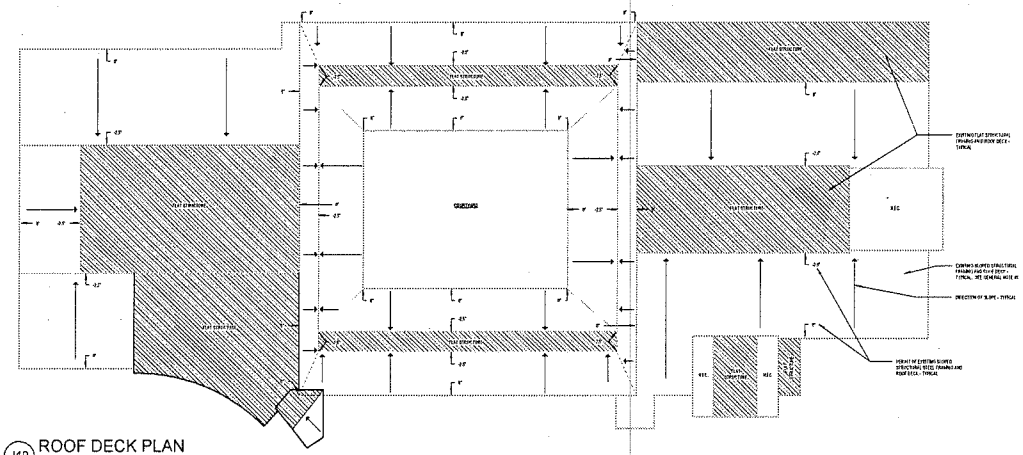


H12 ROOF PLAN - OVERALL REFERENCE PLAN
1/16" = 1'-0"



J12 ROOF DECK PLAN
1/32" = 1'-0"

REFER TO DRAWINGS A2.402, A2.403, A2.404 & A2.405 FOR ENLARGED 1/8" SCALE ROOF PLANS

DALEDEARTH

GENERAL NOTES

OVERALL ROOF PLAN & ROOF DECK PLAN

REVISIONS

Mark	Date	Description
1	06/05/2015	ADDENDUM #1

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

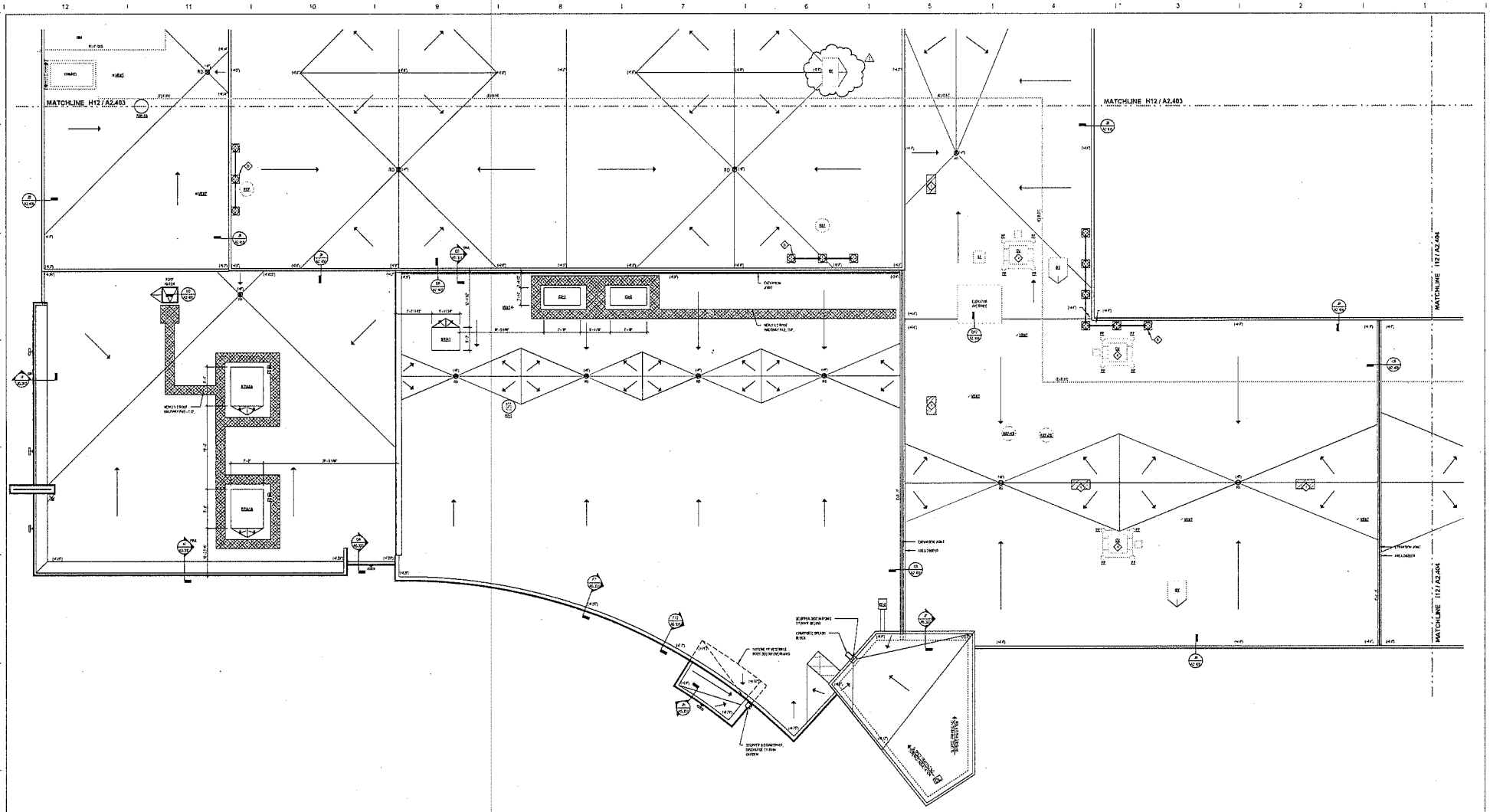
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06105

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

06-CTC-437

A2.401



H12 PARTIAL ROOF PLAN - NORTHEAST

1/8" = 1'-0"

ROOF KEYNOTES

1	EXISTING ROOF & ROOF DRAINAGE OPENINGS TO BE INFILLED. REFER TO TYPICAL DETAIL.
2	EXISTING ROOF & ROOF DRAINAGE OPENINGS TO BE INFILLED. REFER TO TYPICAL DETAIL.
3	ROOF FULL OVERHEAD ROOF GUTTER
4	CONSTRUCT NEW ROOF & EXISTING DRAINAGE STEEL TO BE RUNNING FROM EXISTING DRAINAGE STEEL
5	OVERHEAD GUTTER
6	ROOF LAPPABLE ROOF TYP CHANGES, PER MANUFACTURER'S STANDARDS

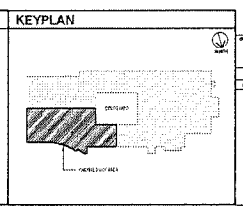
GENERAL NOTES

1. ROOF DRAINS AND OVERFLOW DRAINS SHALL BE PLACED AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE ADDITIONAL ROOF DRAINS AND OVERFLOW DRAINS AS REQUIRED BY THE ROOFING MANUFACTURER AND SHALL ADJUST ROOF DRAINS TO ACCOMMODATE ROOF DRAINS AND OVERFLOW DRAINS AS REQUIRED BY THE ROOFING MANUFACTURER AND THE CODE OF THE PROJECT.
2. SLOPE OF ROOF AS PER TYP. TYPICAL ROOF DETAILS.
3. ROOF DRAINS SHALL BE PLACED AS SHOWN ON THE PLANS AND SHALL BE SIZED AS REQUIRED BY THE ROOFING MANUFACTURER AND THE CODE OF THE PROJECT.
4. CONTRACTOR SHALL PROVIDE ROOF SLEEVES, FLASHING, FLASHING HOOD, SHEAR BLOCKS, TIE DOWN BLOCKS AS REQUIRED BY MANUFACTURER AND CODE OF THE PROJECT.
5. ALL NEW ROOF DRAINS SHALL BE PLACED AS SHOWN ON THE PLANS.
6. CONTRACTOR TO PROVIDE ADDITIONAL ROOF DRAINS AS REQUIRED BY THE ROOFING MANUFACTURER AND THE CODE OF THE PROJECT.

ROOF LEGEND

- KEYNOTE IN DIAMOND
- (+4.5") DEPTH OF TAPERED INSULATION
- DIRECTION OF ROOF TO RIPE, MINIMUM 1/4" PER FOOT MINIMUM SLOPE PITCH
- ROOF DRAIN, SEE TYPICAL DETAIL A4.402
- ROOF HATCH, SEE TYPICAL DETAIL A4.402
- 2'-0" OFF WALL PAD, SEE TYPICAL DETAIL A4.402
- EXISTING ROOF OPENINGS TO BE INFILLED, SEE TYPICAL DETAIL A4.402
- ROOF PITCH TO DRAIN, SEE TYPICAL DETAIL A4.402
- CONTINUING PARTIAL WALL OR CONTINUOUS COMPONENT RIDGE
- CONTINUING ROOF DRAIN AND OVERFLOW SCUPPER DRAINAGE
- OVERHEAD FLASH, SEE TYPICAL DETAIL A4.402
- ROOF SLOP LINE, SEE TYPICAL DETAILS A4.402
- GRAVITY VENT, SEE TYPICAL DETAIL A4.402
- TAPERED INSULATION ROOF CRICKET
- CONTINUOUS ROOF TOP UNIVERSAL DYNAMIC PROTECTION PADS

KEYPLAN



DRAWING TITLE: PARTIAL ROOF PLAN - NORTH EAST

REVISIONS

mark	date	description
1		

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing prepared by
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

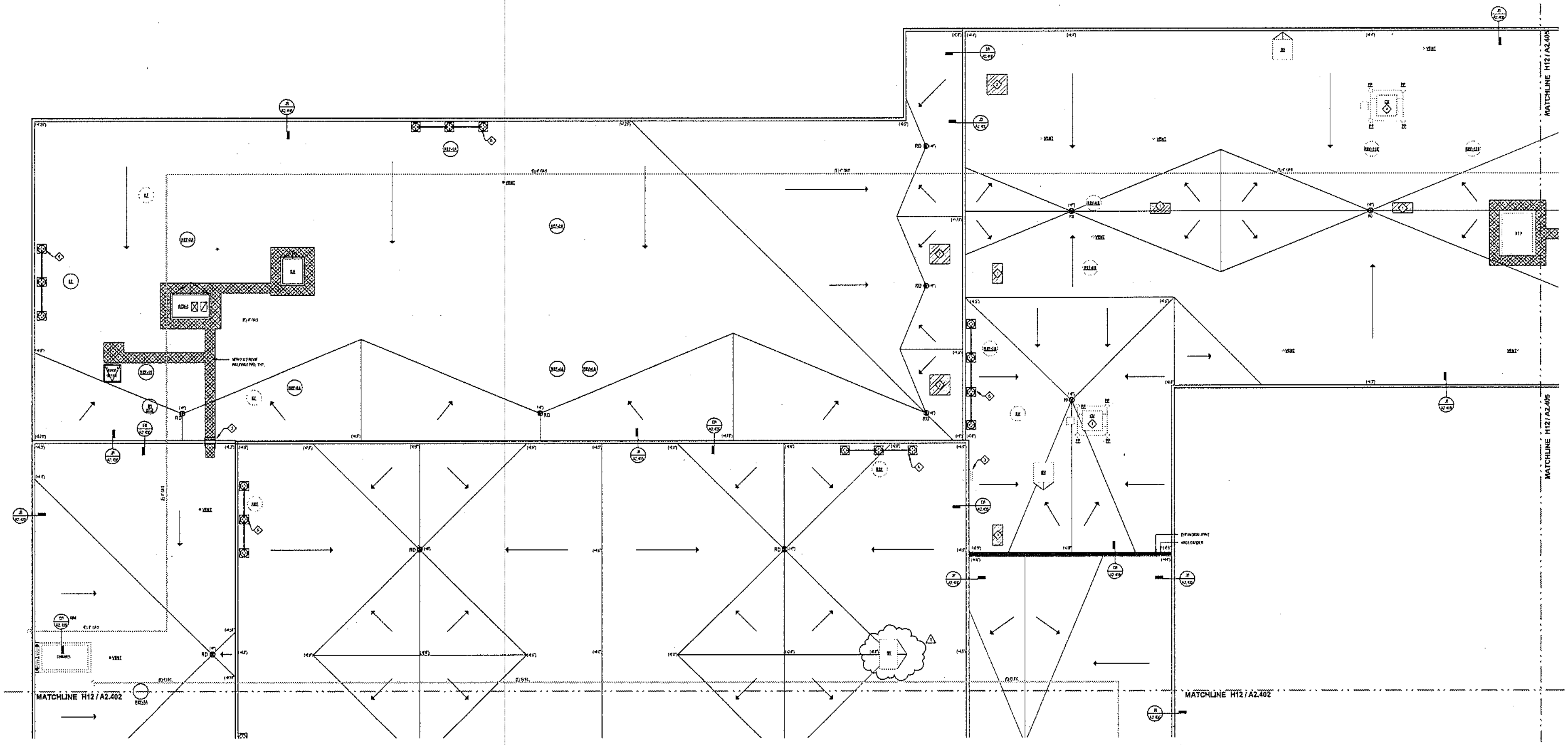
170 ELM STREET
ENFIELD, CT

date 04-27-2015
scale As indicated
project number 15041
project manager MC
project architect 15041
project number 15041
drawn by H.L.
drawing no. A2.402

project number BI-CT-437

DALLED NORTH

C:\Users\Tim\Documents\Arch_Central_Entry Addition_CTCTM_Tim.rvt



H12 PARTIAL ROOF PLAN - SOUTH EAST

1/8" = 1'-0"

ROOF KEYNOTES

1	EXISTING 2'-0" X 4'-0" SKYLIGHT OPENING TO BE INFILLED. REFER TO TYPICAL DETAIL.
2	EXISTING 4'-0" X 4'-0" SKYLIGHT OPENING TO BE INFILLED. REFER TO TYPICAL DETAIL.
3	RE-INSTALL EXISTING ROOF LADDER
4	CONDENSING UNIT & EXISTING DUNNAGE STEEL TO REMAIN. PAINT EXISTING DUNNAGE STEEL
5	EXISTING ANTENNA
6	COLLAPSIBLE ROOF TOP GUARDRAIL SYSTEM WITH PROTECTION PADS

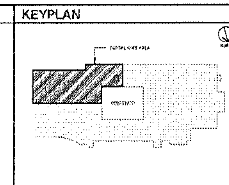
GENERAL NOTES

[illegible]

ROOF LEGEND

KEYNOTE SYMBOL	
(+4.5")	DEPTH OF TAPERED INSULATION
DIRECTION OF ROOF SLOPE. MAINTAIN 1/4"/FT PER FOOT MINIMUM PITCH	
RD	ROOF DRAIN. SEE TYPICAL DETAIL
	ROOF HATCH. SEE TYPICAL DETAIL
	2 X 2 FT WALKING PAD. SEE TYPICAL DETAIL
	EXISTING SKYLIGHT OPENINGS TO BE INFILLED. SEE TYPICAL DETAIL
VENT	ROOF PENETRATING VENT OR PIPE. SEE TYPICAL DETAIL
	CONDENSING UNIT SET ON COMPOSITE EQUIPMENT PADS
	CONDENSING UNIT SET ON EXISTING STEEL DUNNAGE
	EXHAUST FANS. SEE TYPICAL DETAIL
	ROOF TOP UNIT. SEE TYPICAL DETAILS
	GRAVITY VENT. SEE TYPICAL DETAIL
	TAPERED INSULATION ROOF CRICKET
	COLLAPSIBLE ROOF TOP GUARDRAIL SYSTEM WITH PROTECTION PADS

KEYPLAN



PARTIAL ROOF PLAN - SOUTH EAST

REVISIONS

mark	date	description
1		ADDENDUM #1

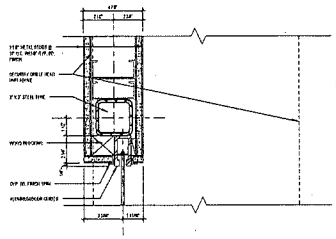
STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

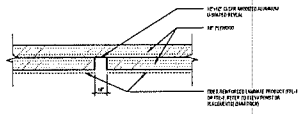
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE
170 ELM STREET
ENFIELD, CT

A2.403

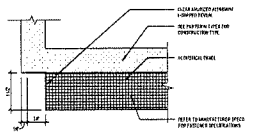
CALLED NORTH



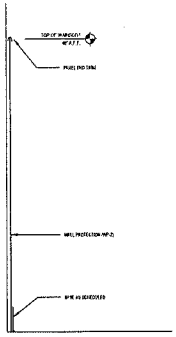
C12 SECURITY GRILL JAMB DETAIL
3" = 1'-0"



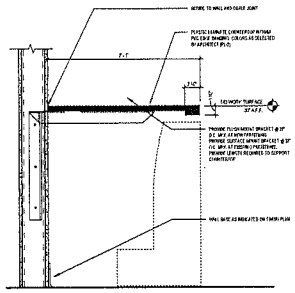
B10 FIBER REINFORCED LAMINATE DETAIL
6" = 1'-0"



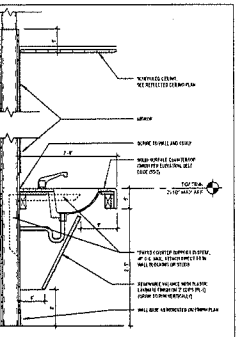
B8 ACOUSTICAL PANEL END DETAIL
6" = 1'-0"



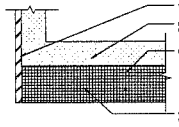
C6 WALL PANEL DETAIL
1 1/2" = 1'-0"



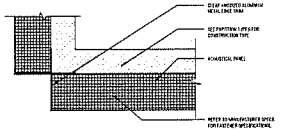
C4 TYP. WORK SURFACE DETAIL
1 1/2" = 1'-0"



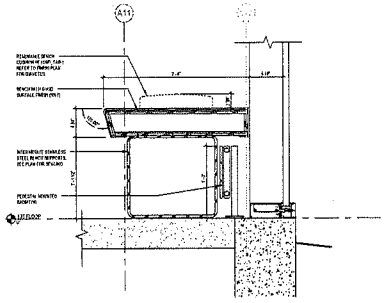
C2 VANITY SECTION
1" = 1'-0"



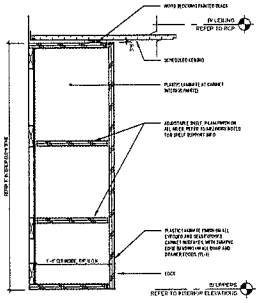
C10 ACOUSTICAL PANEL END DETAIL2
6" = 1'-0"



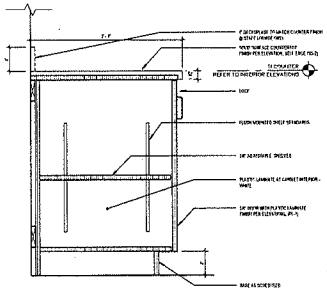
C8 ACOUSTICAL PANEL END DETAIL3
6" = 1'-0"



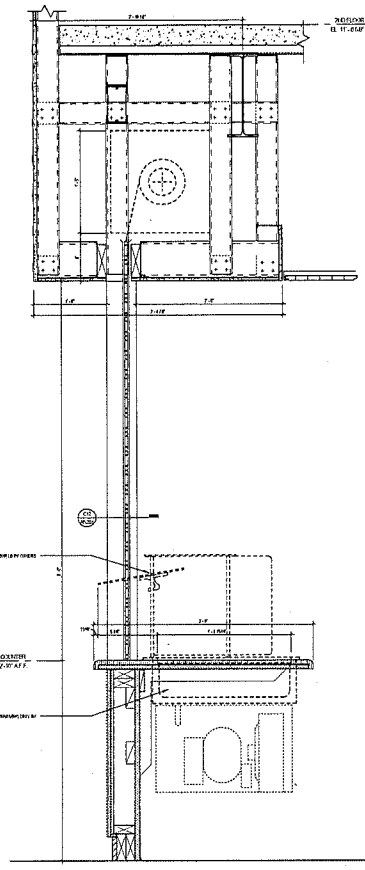
F7 BENCH DETAIL @ CURTAIN WALL
1 1/2" = 1'-0"



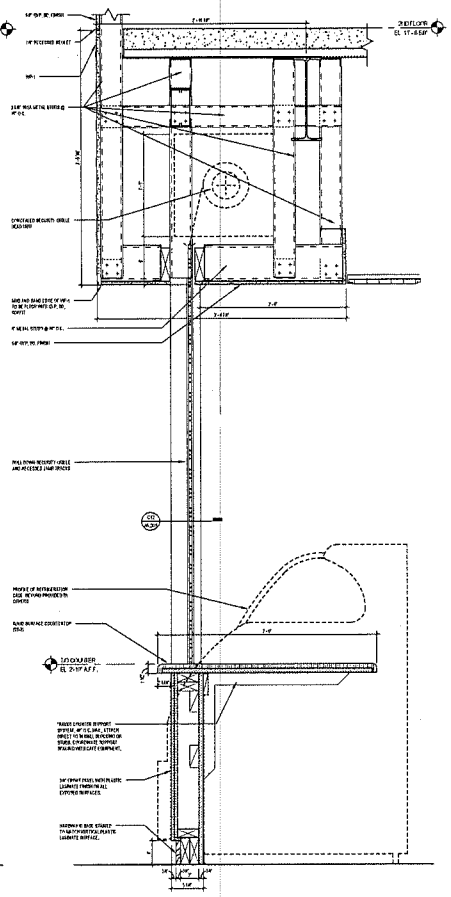
F4 UPPER CABINET SECTION
1 1/2" = 1'-0"



F3 LOWER CABINET SECTION
1 1/2" = 1'-0"

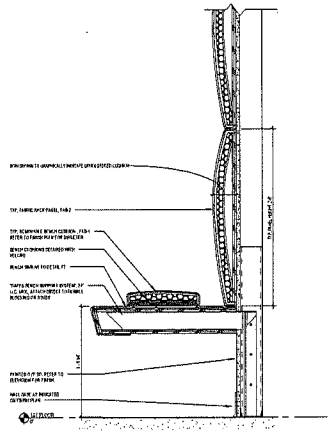


CONDITION AT WARMING TRAY

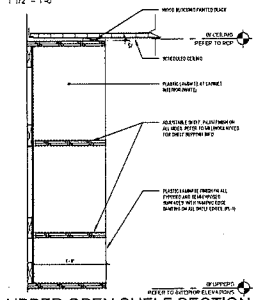


CONDITION AT TYPICAL SERVING COUNTER

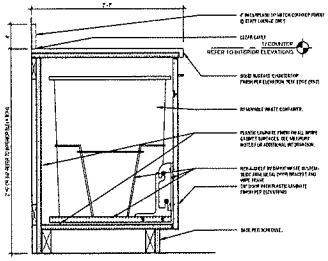
J12 SECURITY GRILL & COUNTER DETAILS
1 1/2" = 1'-0"



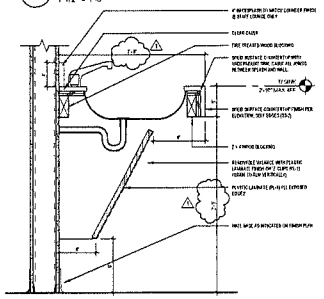
I7 TYPICAL BENCH DETAIL
1 1/2" = 1'-0"



H4 UPPER OPEN SHELF SECTION
1 1/2" = 1'-0"



H3 LOWER WASTE DRAWER SECTION
1 1/2" = 1'-0"



J5 LOWER CABINET SECTION AT SINK
1 1/2" = 1'-0"

Drawing title	MILLWORK
REVISIONS	
mark / date / description	
1 / 06-22-2015 / ADDENDUM #1	

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

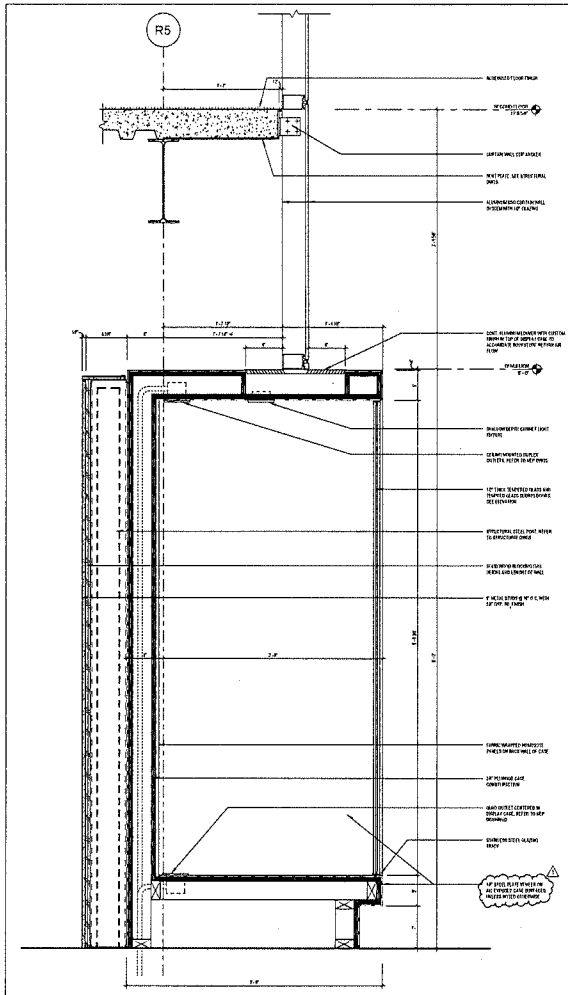
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project: CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

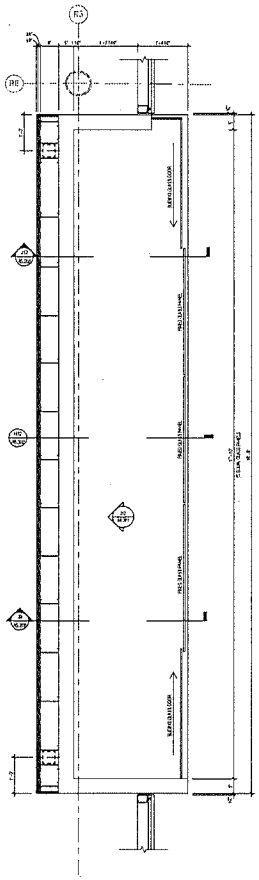
170 ELM STREET
ENFIELD, CT

project number: 13-CTC-437

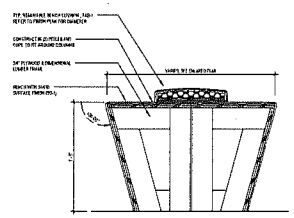
date: 06-22-2015
scale: As indicated
contract no.: TBA
project manager: JK
project architect: TBA
plan reviewer: N.L.
drawing no.: A6.301



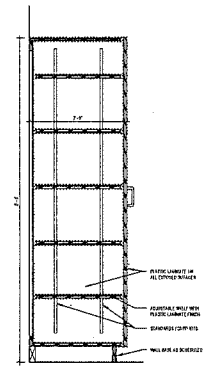
H12 DISPLAY CASE SECTION
1 1/2" = 1'-0"



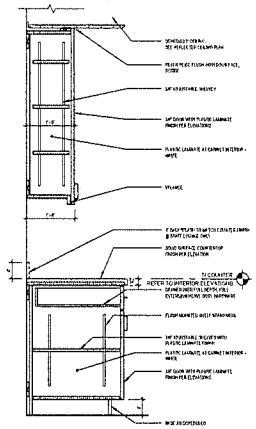
H8 DISPLAY CASE PLAN DETAIL
3/4" = 1'-0"



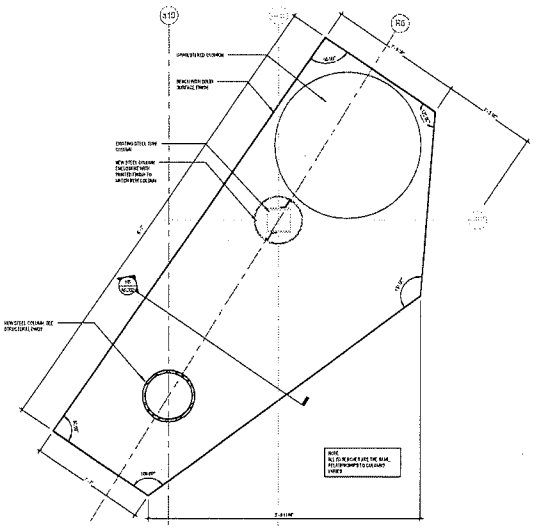
H6 BENCH SECTION
1 1/2" = 1'-0"



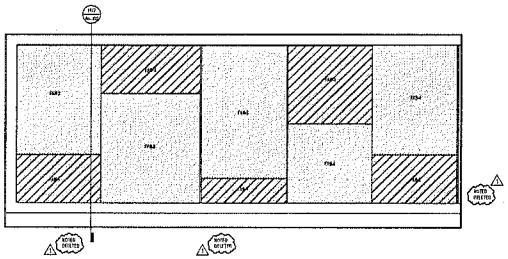
D4 TALL STORAGE
1" = 1'-0"



D2 UPPER & LOWER CABINET SECTION
1" = 1'-0"

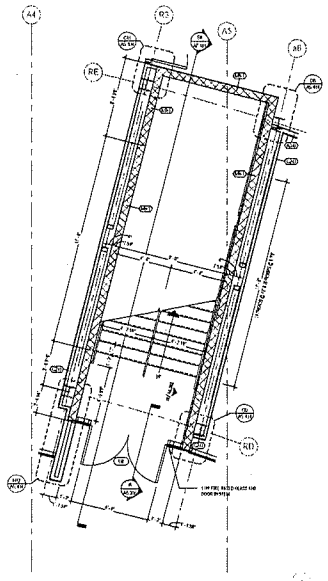


H4 PLAN DETAIL @ BENCH
1 1/2" = 1'-0"

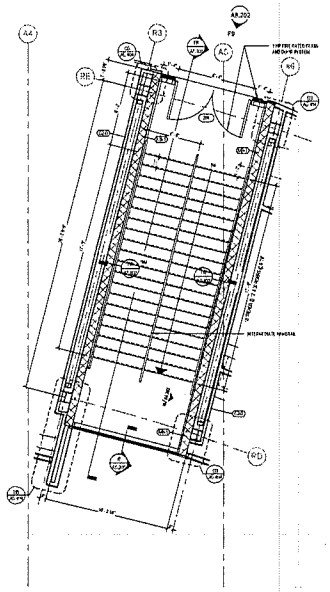


J12 DISPLAY CASE ELEVATION
1/2" = 1'-0"

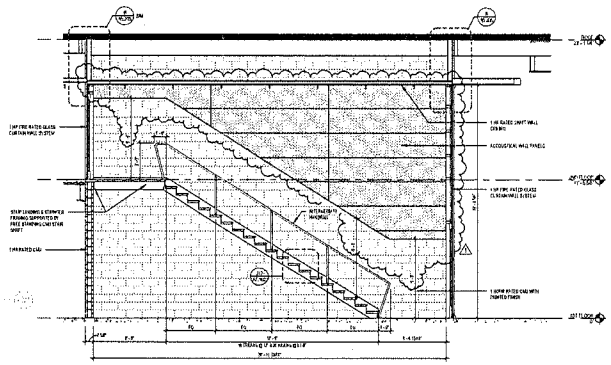
drawing title: MILLWORK			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF CONSTRUCTION SERVICES
BCHESTICAD			
mark	date	description	drawing prepared by: TECTON ARCHITECTS ONE HARTFORD SQUARE WEST HARTFORD, CT 06106
1	06/26/2018	ADDENDUM #1	date: 06.26.2018 scale: As indicated drawn by: EHM project manager: KJ checked by: TRM file name: H1 drawing no.: A6.302
project: CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE 170 ELM STREET ENFIELD, CT			
project number: 06CTC4437			



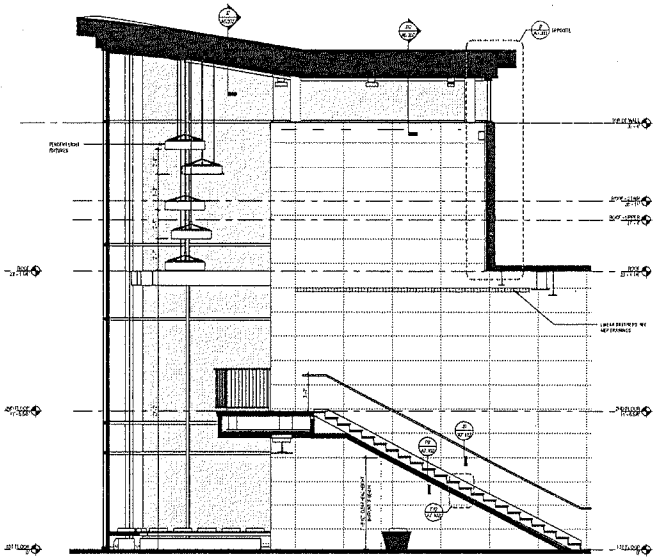
E12 EGRESS STAIR FIRST FLOOR
1/4" = 1'-0"



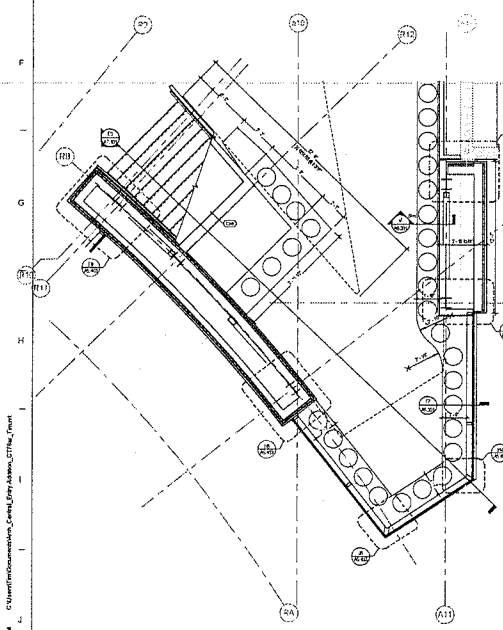
E10 EGRESS STAIR SECOND FLOOR
1/4" = 1'-0"



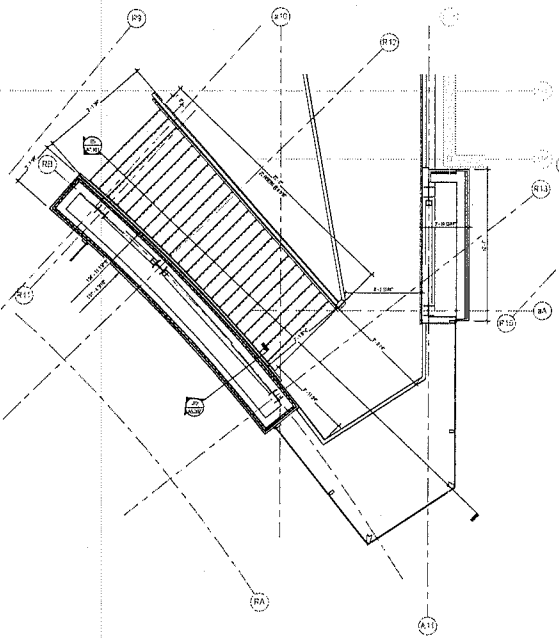
E8 SECTION THRU EGRESS STAIR
1/4" = 1'-0"



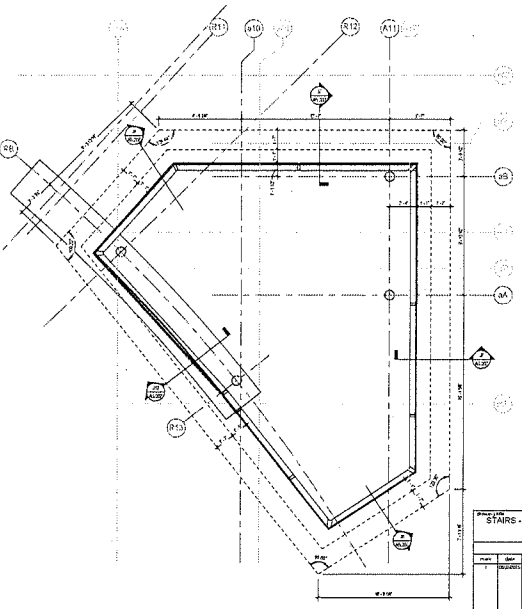
E5 SECTION THRU MONUMENTAL STAIR
1/4" = 1'-0"



J12 MONUMENTAL STAIR FIRST FLOOR
1/4" = 1'-0"



J8 MONUMENTAL STAIR SECOND FLOOR
1/4" = 1'-0"



J5 TOP OF WALL
1/4" = 1'-0"

CALLED NORTH

STAIRS - PLANS, SECTIONS

REVISIONS

mark	date	description
1	08/22/2013	PERMIT REVISIONS

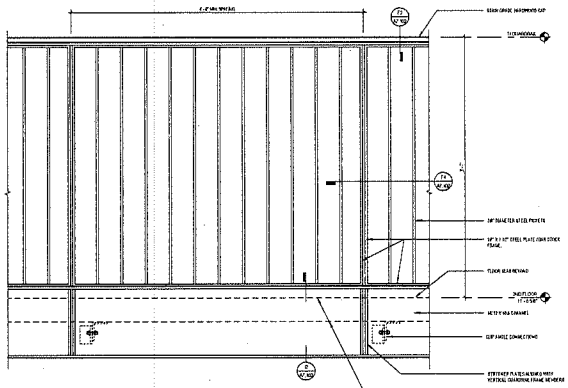
STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

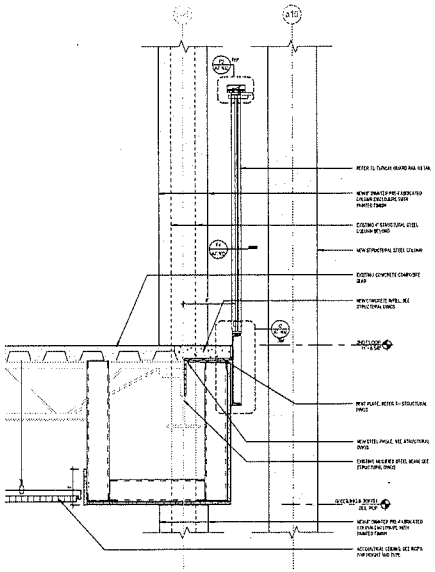
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

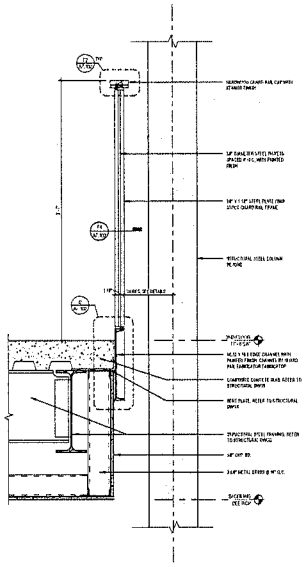
A7.101



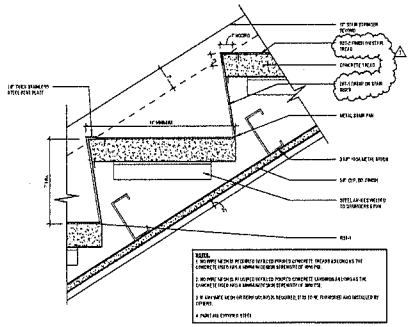
D9 GUARD RAIL ENLARGED ELEVATION
1 1/2" = 1'-0"



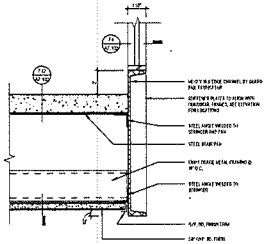
E6 GUARDRAIL DETAIL @ EXISTING 2ND FLOOR
1 1/2" = 1'-0"



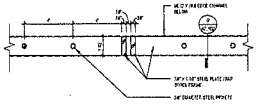
E3 TYPICAL GUARD RAIL / FLOOR EDGE DETAIL
1 1/2" = 1'-0"



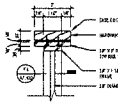
F12 TREAD AND RISER @ MONUMENTAL STAIR
3" = 1'-0"



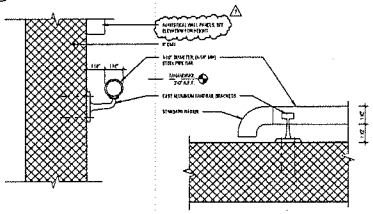
F9 STAIR STRINGER SECTION @ MONUMENTAL STAIR
3" = 1'-0"



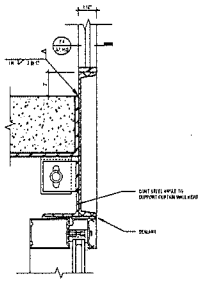
F4 GUARD RAIL PLAN DETAIL
3" = 1'-0"



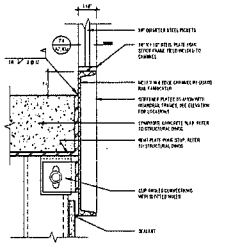
F2 GAURDRAIL CAP DETAIL
3" = 1'-0"



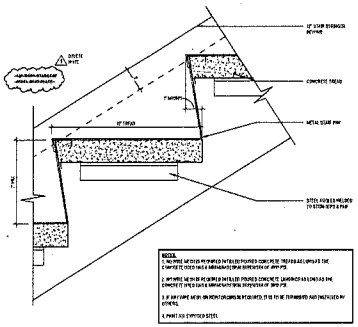
H9 HANDRAIL MOUNTING DETAIL @ CMU
3" = 1'-0"



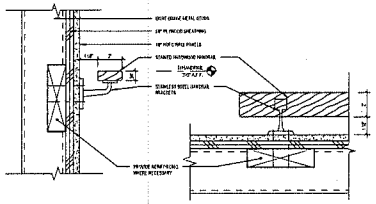
I4 GUARD RAIL BASE DETAIL ABOVE CURTAIN WALL
3" = 1'-0"



I2 GUARD RAIL BASE DETAIL
3" = 1'-0"

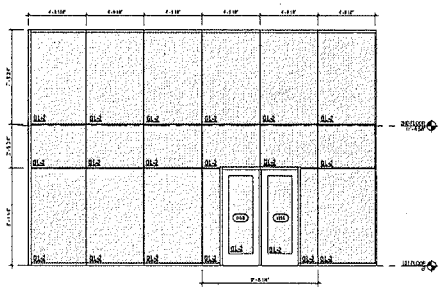


J12 TREAD AND RISER @ EGRESS STAIR
3" = 1'-0"

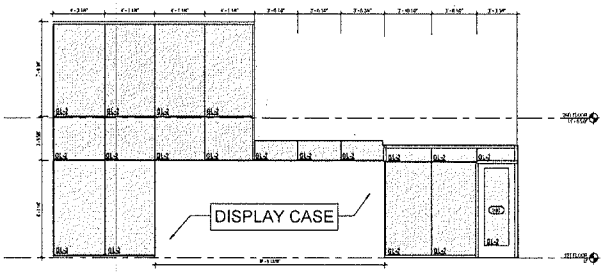


J9 HANDRAIL MOUNTING DETAIL @ MONUMENTAL STAIR
3" = 1'-0"

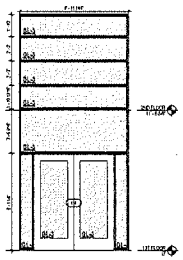
Drawing Title: STAIR DETAILS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF CONSTRUCTION SERVICES
REVISIONS			
mark	date	description	TECTON ARCHITECTS ONE HARTFORD SQUARE WEST HARTFORD, CT 06105
1	06-23-2015	INCIDENTAL ADDENDUM	CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE 170 ELM STREET ENFIELD, CT
			A7.102



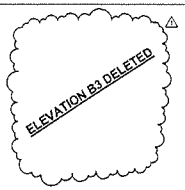
C12 INTERIOR GLAZING @ BKSTR ENTRY
1/4" = 1'-0"



C9 INTERIOR GLAZING @ BKSTR
1/4" = 1'-0"

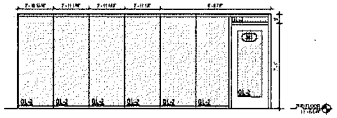


C5 INTERIOR GLAZING @ STAIR
1/4" = 1'-0"

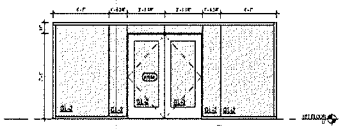


C3 SECURITY DESK SW
1/4" = 1'-0"

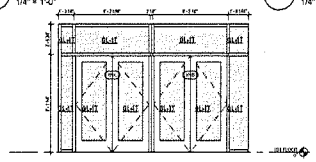
C2 SECURITY DESK NW
1/4" = 1'-0"



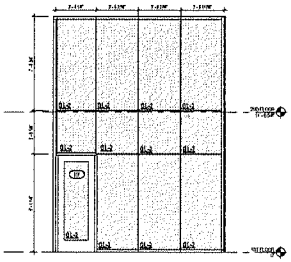
D12 INTERIOR GLAZING @ CONFERENCE
1/4" = 1'-0"



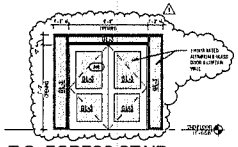
D9 INTERIOR GLAZING @ MEETING SPACE ENTRY
1/4" = 1'-0"



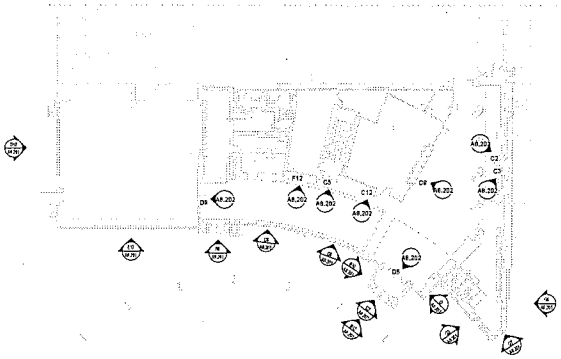
D5 VESTIBULE CURTAIN WALL
1/4" = 1'-0"



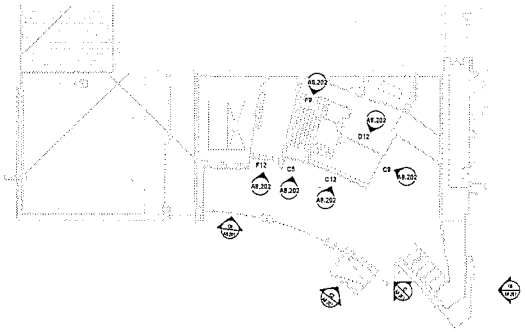
F12 INTERIOR GLAZING @ STUDENT LOUNGE
1/4" = 1'-0"



F9 T.O. EGRESS STAIR
1/4" = 1'-0"



J12 CURTAIN WALL ELEVATION KEY PLAN FIRST FLOOR
3/64" = 1'-0"



J8 CURTAIN WALL ELEVATION KEY PLAN SECOND FLOOR
3/64" = 1'-0"

GLASS TYPE LEGEND	
01-IT	1" INSULATED TEMPERED GLASS
01-3	1/2" TEMPERED & LAMINATED GLASS
01-3	1 HOUR FIRE RATED GLASS
01-4	1" INSULATED SPANDREL GLASS

Drawing Title: WINDOW SCHEDULE, DETAILS & INTERIOR WINDOW ELEVATIONS

REVISIONS

mark	date	description
1	06/23/2015	ADDENDUM #1

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: 15-CTC-0437

date: 06-23-2015
drawn: N.A. mr/dc/ed
checked by: EBM
checked by: MT
checked by: TBDM
date issued: N.I.
drawing no.: A8.202

CALED NORTH

DISTRIBUTION PANEL: HDM-1A

LOCATION: CORRIDOR EA202	VOLTAGE: 480/277 Wye	AISC RATING: 30K	
SUPPLY FROM: SWBD	PHASES: 3	MAINS TYPE: MCB	
MOUNTING: SURFACE	WIRES: 4	MAINS RATING: 400 A	
ENCLOSURE: TYPE 1	MAX # OF POLES: 42	MCB RATING: 400 A	

REMARKS NOTES:
[A] PROVIDE 30MA GROUND FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKERS.

GENERAL NOTES:
1. PROVIDE ALL ACTIVE AND SPARE C/B'S AND SPACES WITHIN (1) SECTION OF DISTRIBUTION PANELBOARD.
2. PROVIDE SPACES FOR FUTURE (2) 225A-3P C/B'S.
3. SEE SPECIFICATION SECTION 'PANELBOARDS' FOR FEATURES OF PANELBOARDS.
4. VERIFY SIZE, QUANTITY AND TYPES OF CIRCUIT BREAKERS IN PANELBOARDS WITH PLANS, RISERS, SCHEDULES, AND SPECIFICATIONS.

CKT	CIRCUIT DESCRIPTION	NOTES	TRIP	POLES	A	A	B	B	C	C	POLES	TRIP	NOTES	CIRCUIT DESCRIPTION	CKT
1	ECUH-A		20 A	3	2867	11343					3	80 A		AHU-1	2
3	–		–	–			2867	11343			–	–		–	4
5	–		–	–					2661	11343	–	–		–	6
7	CU-1		70 A	3	12450	12450					3	70 A		CU-2	8
9	–		–	–			12450	12450			–	–		–	10
11	–		–	–					12450	12450	–	–		–	12
13	HWP-1		20 A	3	943	943					3	20 A		HWP-2	14
15	–		–	–			943	943			–	–		–	16
17	–		–	–					943	943	–	–		–	18
19	EWH-1		20 A	3	1606	8340					3	80 A		TX-LVM-1A	20
21	–		–	–			1606	7035			–	–		–	22
23	–		–	–					1606	1028	–	–		–	24
25	LP-1A		70 A	3	4881	6090					3	30 A		EWH-2	26
27	–		–	–			3364	6099			–	–		–	28
29	–		–	–					4845	8090	–	–		–	30
31	Spare		50 A	3	0	0					3	100 A		Spare	32
33	–		–	–			0	0			–	–		–	34
35	–		–	–					0	0	–	–		–	36
37	RTU-2A		50 A	3	5810	5810					3	50 A		RTU-1A	38
39	–		–	–			5810	5810			–	–		–	40
41	–		–	–					5810	5810	–	–		–	42
	TOTAL LOAD:				73436 VA		69916 VA		76190 VA						
	TOTAL AMPS:				267 A		252 A		277 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	APPROX. PANEL TOTALS	
HVAC	1176 VA	100.00%	1176 VA		
Other	194804 VA	100.00%	194804 VA	TOTAL CONN. LOAD	219543 VA
RECEPTACLES	23563 VA	65.00%	15316 VA	TOTAL EST. LOAD	211296 VA
				TOTAL CONN. CURRENT	264 A
				TOTAL EST. DEMAND CURRENT	254 A

BRANCH PANEL: LVM-1A

LOCATION: CORRIDOR EA202	VOLTAGE: 120/208 Wye	AISC RATING: 22K	
SUPPLY FROM: TX-LVM-1A	PHASES: 3	MAINS TYPE: MCB	
MOUNTING: SURFACE	WIRES: 4	MAINS RATING: 225 A	
ENCLOSURE: TYPE 1	MAX # OF POLES: 42	MCB RATING: 150 A	

REMARK NOTES:
[A] PROVIDE 30MA GROUND FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKERS.

GENERAL NOTES:
1. SEE SPECIFICATION SECTION 'PANELBOARDS' FOR FEATURES OF PANELBOARDS.
2. VERIFY SIZE, QUANTITY AND TYPES OF CIRCUIT BREAKERS IN PANELBOARDS WITH PLANS, RISERS, SCHEDULES, AND SPECIFICATIONS.

CKT	CIRCUIT DESCRIPTION	NOTES	TRIP	POLES	A	A	B	B	C	C	POLES	TRIP	NOTES	CIRCUIT DESCRIPTION	CKT
1	EF-1		20 A	1	1176	964					1	20 A		EF-2	2
3	FPP-1		20 A	1			700	0			2	20 A		Spare	4
5	LV-1B		100 A	3					9920	0	–	–		–	6
7	–		–	–	7399	0					3	20 A		Spare	8
9	–		–	–			8335	0			–	–		–	10
11	Spare		30 A	3					0	0	–	–		–	12
13	–		–	–	0	0					1	20 A		UH-1	14
15	–		–	–			0	0			1	20 A		Spare	16
17	Spare		20 A	1					0	0	1	20 A		Spare	18
19	Spare		20 A	1	0	0					1	20 A		Spare	20
21	Spare		20 A	1			0	0			1	20 A		Spare	22
23	Spare		20 A	1					0	0	1	20 A		Spare	24
25	Spare		20 A	1	0	0					1	20 A		Spare	26
27	Spare		20 A	1			0	0			1	20 A		Spare	28
29	Spare		20 A	1					0	0	1	20 A		Spare	30
31	Spare		20 A	1	0	0					1	20 A		Spare	32
33	Spare		20 A	1			0	0			1	20 A		Spare	34
35	Spare		20 A	1					0	0	1	20 A		Spare	36
37	Spare		20 A	1	0	0					1	20 A		Spare	38
39	Spare		20 A	1			0	0			1	20 A		Spare	40
41	Spare		20 A	1					0	0	1	20 A		Spare	42
	TOTAL...				9349 VA		7035 VA		9920 VA						
	TOTAL...				81 A		59 A		0 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	APPROX. PANEL TOTALS	
HVAC	1176 VA	100.00%	1176 VA		
Other	1564 VA	100.00%	1564 VA	TOTAL CONN. LOAD	26303 VA
RECEPTACLES	23503 VA	65.00%	15316 VA	TOTAL EST. LOAD	18056 VA
				TOTAL CONN. CURRENT	73 A
				TOTAL EST. DEMAND CURRENT	50 A

BRANCH PANEL: LV-1A

LOCATION: CORRIDOR EA202	VOLTAGE: 120/208 Wye	AISC RATING: 22K	
SUPPLY FROM: EXIST DIST. PANEL "Y"	PHASES: 3	MAINS TYPE: MCB	
MOUNTING: SURFACE	WIRES: 4	MAINS RATING: 225 A	
ENCLOSURE: TYPE 1	MAX # OF POLES: 84	MCB RATING: 150 A	

REMARKS NOTES:
[A] PROVIDE 30MA GROUND FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKERS.
[B] PROVIDE 5MA GROUND FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKERS.

GENERAL NOTES:
1. SEE SPECIFICATION SECTION 'PANELBOARDS' FOR FEATURES OF PANELBOARDS.
2. VERIFY SIZE, QUANTITY AND TYPES OF CIRCUIT BREAKERS IN PANELBOARDS WITH PLANS, RISERS, SCHEDULES, AND SPECIFICATIONS.

CKT	CIRCUIT DESCRIPTION	NOTES	TRIP	POLES	A	A	B	B	C	C	POLES	TRIP	NOTES	CIRCUIT DESCRIPTION	CKT
1	EWC, RM 112		20 A	1	500	1262					1	20 A		RECEPTACLES, RM 119	2
3	RECEPTACLES, RM 106		20 A	1			1990	1600			1	20 A	A	VEND. MACH.	4
5	VEND. MACH.	A	20 A	1					1080	1001	1	20 A	A	VEND. MACH.	6
7	RECEPTACLES, RM E108		20 A	1	540	540					1	20 A		RECEPTACLES, RM 106	8
9	RECEPTACLES, 209		20 A	1			1250	540			1	20 A		RECEPTACLES, 209	10
11	RECEPTACLES		20 A	1					1080	540	1	20 A		RECEPTACLES, RM 204	12
13	RECEPTACLES, RM 205		20 A	1	540	1440					1	20 A		RECEPTACLES, RM 204	14
15	RECEPTACLES		20 A	1			540	0			1	20 A		RECEPTACLES, RM 202	16
17	RECEPTACLES, RM 207		20 A	1					900	540	1	20 A		RECEPTACLES, RM 207	18
19	MICROWAVE, RM 207		20 A	1	1000	1000					1	20 A		RECEPTACLES, RM 207.1	20
21	RECEPTACLES		20 A	1			1440	540			1	20 A		EXTERIOR RECEPTACLES	22
23	RECEPTACLES, RM 205		20 A	1					1080	720	1	20 A		RECEPTACLES	24
25	RECEPTACLES		20 A	1	1440	720					1	20 A		RECEPTACLES	26
27	RECEPTACLES, RM 106		20 A	1			1080	1080			1	20 A		RECEPTACLES, RM 108	28
29	RECEPTACLE, RM 118		20 A	1					900	900	1	20 A		FLOOR BOX, RM 119	30
31	FLOOR BOX, RM 119		20 A	1	900	540					1	20 A		RECEPTACLES, RM 108	32
33	MOTORIZED DOOR, RM 101		20 A	1			500	500			1	20 A		MOTORIZED DOOR, RM 101	34
35	MICROWAVE, RM 207		20 A	1					1000	1000	1	20 A	A	REF, RM 207	36
37	RECEPTACLES, RM 117		20 A	1	1080	1980					1	20 A		RECEPTACLES, RM 117	38
39	RECEPTACLES, RM 117		20 A	1			900	541			1	20 A		RECEPTACLES, RM 114	40
41	RECEPTACLES, RM 119		20 A	1					390	390	1	20 A		RECEPTACLES, RM E108	42
43	RECEPTACLES, RM E108		20 A	1	720	1980					1	20 A		RECEPTACLES, RM 111	44
45	RECEPTACLES, RM 106		20 A	1			360	380			1	20 A		RECEPTACLES, RM 207.1	46
47	Spare		20 A	1					0	0	1	20 A		Spare	48
49	AHU-1CR		20 A	1	500	540					1	20 A		Exterior Roof mounted Recp.	50
51	Future Hand Dryer, RM 113		20 A	1			1410	1410			1	20 A		Future Hand Dryer, RM 114	52
53	RECEPTACLES		20 A	1					900	1000	1	20 A		RECEPTACLES, RM 108	54
55	Spare	A	20 A	1	0	0					1	20 A	A	Spare	56
57	Spare		20 A	1			0	0			1	20 A		Spare	58
59	Spare		20 A	1					0	0	1	20 A		Spare	60
61	Spare		20 A	1	0	0					1	20 A		Spare	62
63	Spare		20 A	1			0	0			1	20 A		Spare	64
65	Spare		20 A	1					0	0	1	20 A		Spare	66
67	Spare		20 A	1	0	0					1	20 A		Spare	68
69	Spare		20 A	1			0	0			1	20 A		Spare	70
71	Spare		20 A	1					0	0	1	20 A		Spare	72
73	Spare		20 A	1	0	0					1	20 A		Spare	74
75	Spare		20 A	1			0	0			1	20 A		Spare	76
77	Spare		20 A	1					0	0	1	20 A		Spare	78
79	Spare		20 A	1	0	0					1	20 A		Spare	80
81	Spare		20 A	1			0	0			1	20 A		Spare	82
83	Spare		20 A	1					0	0	1	20 A		Spare	84
	TOTAL...				15550 VA		14540 VA		13350 VA						
	TOTAL...				131 A		123 A		111 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	APPROX. PANEL TOTALS	
Lighting	50 VA	125.00%	63 VA		
Other	6620 VA	100.00%	6620 VA	TOTAL CONN. LOAD	43450 VA
RECEPTACLES	36780 VA	65.00%	23907 VA	TOTAL EST. LOAD	30590 VA
SWITCHES	0 VA	0.00%	0 VA	TOTAL CONN. CURRENT	121 A
				TOTAL EST. DEMAND CURRENT	85 A

BRANCH PANEL: LP-1A

LOCATION: CORRIDOR EA202	VOLTAGE: 480/277 Wye	AISC RATING: 25	
SUPPLY FROM: HDM-1A	PHASES: 3	MAINS TYPE: MLO	
MOUNTING: SURFACE	WIRES: 4	MAINS RATING: 100 A	
ENCLOSURE: TYPE 1	MAX # OF POLES: 30	MCB RATING: 70 A	

REMARKS NOTES:
[A]
[B]

GENERAL NOTES:
1. SEE SPECIFICATION SECTION 'PANELBOARDS' FOR FEATURES OF PANELBOARDS.
2. VERIFY SIZE, QUANTITY AND TYPES OF CIRCUIT BREAKERS IN PANELBOARDS WITH PLANS, RISERS, SCHEDULES, AND SPECIFICATIONS.

CKT	CIRCUIT DESCRIPTION	NOTES	TRIP	POLES	A	A	B	B	C	C	POLES	TRIP	NOTES	CIRCUIT DESCRIPTION	CKT
1	CORRIDOR # 111		20 A	1	504	1372					1	20 A		RM # 117	2
3	RM # 119		20 A	1			1410	355			1	20 A		RM # 107,108	4
5	RM # 101		20 A	1					162	896	1	20 A		CORRIDOR # 121	6
7	RM # 106,107		20 A	1	650	430					1	20 A		CORRIDOR # 202	8
9	STAIR A # 206		20 A	1			126	680			1	20 A		RM # 206	10
11	RM #106,107		20 A	1					2950	732	1	20 A		RM # 107, 108	12
13	RM # 106,107		20 A	1	900	545					1	20 A		CORRIDOR # 200B	14
15	RM # 106,107		20 A	1			464	145			1	20 A		SITE LIGHTING	16
17	SITE LIGHTING		20 A	1					213	2523	1	20 A		RM # 108	18
19															20
21															22
23															24
25															26
27															28
29															30
	TOTAL...				4061 VA		3464 VA		6465 VA						
	TOTAL...				18 A		13 A		25 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	APPROX. PANEL TOTALS	
Other	14990 VA	100.00%	14990 VA		
				TOTAL CONN. LOAD	14990 VA
				TOTAL EST. LOAD	14990 VA
				TOTAL CONN. CURRENT	18 A
				TOTAL EST. DEMAND CURRENT	18 A

BRANCH PANEL: LV-1B

LOCATION: KITCHEN EA115	VOLTAGE: 120/208 Wye	AISC RATING: 22K	
SUPPLY FROM: LVM-1A	PHASES: 3	MAINS TYPE: MCB	
MOUNTING: RECESSED	WIRES: 4	MAINS RATING: 100 A	
ENCLOSURE: TYPE 1	MAX # OF POLES: 42	MCB RATING: 100 A	

REMARKS NOTES:
[A] PROVIDE 30MA GROUND FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKERS.
[B] PROVIDE 5MA GROUND FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKERS.

GENERAL NOTES:
1. PROVIDE PANELBOARD WITH STAINLESS STEEL TRIM AND DOOR.
2. SEE SPECIFICATION SECTION 'PANELBOARDS' FOR FEATURES OF PANELBOARDS.
3. VERIFY SIZE, QUANTITY AND TYPES OF CIRCUIT BREAKERS IN PANELBOARDS WITH PLANS, RISERS, SCHEDULES, AND SPECIFICATIONS.

CKT	CIRCUIT DESCRIPTION	NOTES	TRIP	POLES	A	A	B	B	C	C	POLES	TRIP	NOTES	CIRCUIT DESCRIPTION	CKT
1	RECEPTACLES, RM 116	A	20 A	1	1009	1244					1	20 A	A	REACH-IN REF, RM 115	2
3	RECEPTACLES, RM 115		20 A	1			540	1250			1	20 A		HOLDING CABINET, RM 116	4
5	RECEPTACLES		20 A	1					180	1244	1	20 A	A	DISPLAY REF, RM 116	6
7	RECEPTACLES, RM 115		20 A	1	180	1200					1	20 A		COFFEE BREWERS	8
9	RECEPTACLES, RM 116	A	20 A	1			1524	180			1	20 A		RECEPTACLES, RM 115	10
11	Recp. for AQRU-1, RM 115		20 A	1					1555	1072	1	20 A		TEA BREWER, RM 116	12
13	RECEPTACLES, RM 116		20 A	1	1391										14
15	SANDWICH UNIT, RM 116		20 A	1			180	180			1	20 A		RECEPTACLES, RM 115	16
17	RECEPTACLES		20 A	1					180						18
19	DROP-IN COLD PAN, RM 116		20 A	2	1500	1550					2	20 A		COFFEE BREWER, RM 116	20
21	–		–	–			1020	1550			–	–		–	22
23	SPEED OVEN, RM 115		30 A	2					1649	0	2	20 A		Spare	24
25	–		–	–	1600	0					–	–		–	26
27	Spare		30 A	2			0	0			1	20 A	A	Spare	28
29	–		–	–					0	0	1	20 A		Spare	30
31	Spare		20 A	1	0	0					1	20 A		Spare	32
33	Spare		20 A	1			0	0			1	20 A		Spare	34
35	Spare		20 A	1					0	0	1	20 A		Spare	36
37	Spare		20 A	1	0	0					1	20 A		Spare	38
39	Spare		20 A	1			0	0			1	20 A		Spare	40
41	Spare		20 A	1					0	0	1	20 A		Spare	42
	TOTAL...				9930 VA		7200 VA		6330 VA						
	TOTAL...				84 A		62 A		57 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	APPROX. PANEL TOTALS	
RECEPTACLES	23563 VA	65.00%	15316 VA	TOTAL CONN. LOAD	23563 VA
				TOTAL EST. LOAD	15316 VA
				TOTAL CONN. CURRENT	65 A
				TOTAL EST. DEMAND CURRENT	43 A

PANEL ID: [illegible]	MAIN: 30A	VOLTAGE: [illegible]			
SECTION #: 1 OF 1	BUSSING: 100A	MOUNTING: [illegible]			
POLES: 14	AISC RATING: 26,000A	LOAD (KW): 3.1			

CIRCUIT BREAKER #	POLE	C/B	LOAD DESCRIPTION	LOAD (KVA)	LOAD (KVA)	LOAD DESCRIPTION	C/B	POLE	#
1	1	20	EMERG. LIGHTS BOOK STORE LOUNG 106	0.24	0.32	EMERG. LIGHTS IN VEST. 101	20	1	2
3	1	20	EMERG. LIGHTS CORR 111	0.21	0.21	EMERG. LIGHTS IN BOOK STORE #110	20	1	4
5	1	20	EMERG. LIGHTS STAIR A 206	0.09	0.00	SPARE	20	1	6
7	1	20	EMERG. LIGHTS IN STAIR ON 2ND FLOOR	0.10	0.31	EMERG. LIGHTS CORR 200B	20	1	8
9	1	20	EMERG. LIGHTS CORR 202	0.22	0.34	EMERG. LIGHTS IN STAFF LOUNGE 207	20	1	10
11	1	20	EMERG. LIGHTS BOOK STORE LOUNG 106	0.67	0.30	EMERGENCY LIGHTING CONTROL PANEL ELPA-1-LC	20	1	12
13	1	20	SPARE	0.10	0.30	SPARE	20	1	14

GENERAL NOTES:
1. REFER TO POWER RISER DIAGRAM ON DRAWING #E3.101 FOR MORE INFORMATION.

BVH integrated services
STRUCTURAL, MECHANICAL, ELECTRICAL AND TECHNOLOGY

ELECTRICAL SCHEDULES

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE
170 ELM STREET
ENFIELD, CT

REVISIONS
mark	date	description
1	8/20/2015	ADDENDUM 4

date: 04-21-2015
project number: BI-CTC-437

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LUMINAIRES SCHEDULE

NOTES:

1. BIDS SHALL BE BASED ON THE LUMINAIRE SCHEDULE BELOW AND THE SPECIFICATIONS. REFER TO THE ELECTRICAL SPECIFICATIONS FOR ADDITIONAL GENERAL REQUIREMENTS.
2. LOW-MERCURY T8 LAMPS NOT TO EXCEED 1.7 MG TOTAL PER 4 FOOT LAMP IN ORDER TO QUALIFY FOR LEED INNOVATION CREDIT AS MANUFACTURED BY PHILIPS ALTO II TECHNOLOGY OR EQUIVALENT.
3. LOW-MERCURY T5 LAMPS NOT TO EXCEED 1.4 MG TOTAL PER 4 FOOT LAMP IN ORDER TO QUALIFY FOR LEED INNOVATION CREDIT AS MANUFACTURED BY PHILIPS ALTO TECHNOLOGY OR EQUIVALENT.
4. FINISHES OF ALL LUMINAIRE SHALL BE AS SELECTED BY ARCHITECT.

TYPE	MFR. & SERIES	LUMINAIRE DESCRIPTION	VOLTS	LAMPS
A1DL	BETA CALCO BUBBLE SERIES #BCBBWH276/BCLED10/IN OR ACCEPTABLE EQUIVALENT BY: SOLERA CIRC SERIES; DEL-RAY 6800 SERIES;	30" DIAMETER PENDANT MOUNTED LED LUMINAIRE; FULLY ADJUSTABLE AIR CRAFT CABLE; REMOTE CANOPY MOUNTED LED 0-10V DIMMING DRIVER; PROVIDE REMOTE MOUNTED LED DRIVER (POWER SUPPLY) IN CANOPY. LUMINAIRE SHALL BE CONTROLLED BY DAY LIGHTING SENSOR FOR DIMMING. (3) TYPE "A1DL" LUMINAIRE SHALL BE STACK MOUNTED AT VARIOUS HEIGHT. COORDINATE EXACT MOUNTING HEIGHT OF EACH LUMINAIRE HEAD WITH ARCHITECT PRIOR TO ORDER.	277 V	TOTAL 180W LED 6900 LUMENS 80 CRI MIN. 3000K
A1EDL	BETA CALCO BUBBLE SERIES #BCBBWH276/BCLED10/IN OR ACCEPTABLE EQUIVALENT BY: SOLERA CIRC SERIES; DEL-RAY 6800 SERIES;	LUMINAIRE AND LAMPS SAME AS [A1EDL] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT. LUMINAIRE SHALL BE CONTROLLED BY DAY LIGHTING SENSOR FOR DIMMING.	277 V	TOTAL 180W LED 6900 LUMENS 80 CRI MIN. 3000K
B1	NATIONAL LIGHTING # NICHES 2NS LED D/ID-4300-4-3500K-P48-UNV-DIM 0-10 SERIES OR ACCEPTABLE EQUIVALENT BY: PINNACLE EDGE EX28 SERIES; PICASSO KAYLA LED KAY24 SERIES;	4' LONG X 2-1/2" WIDE X 5" DEEP CONTINUOUS PENDANT ROW MOUNTED DIRECT/INDIRECT LINEAR LED LUMINAIRE; COLD ROLLED STEEL HOUSING HOUSING; DIE FORMED WHITE POWDER COATED STEEL REFLECTOR; END CAPS; JOINERS; OPAQUE WHITE LENS; INTEGRAL MOUNTED DIMMABLE LED DRIVER; MINIMUM OF 4' LONG FIELD CUTTABLE STEM	277 V	TOTAL 50W LED PER 4' SECTION 750/FT UPLIGHT LUMENS 300/FT DOWNLIGHT LUMENS 85 CRI MIN. 3500K
B1E	NATIONAL LIGHTING # NICHES 2NS LED D/ID-4300-4-3500K-P48-UNV-DIM 0-10 SERIES OR ACCEPTABLE EQUIVALENT BY: PINNACLE EDGE EX28 SERIES; PICASSO KAYLA LED KAY24 SERIES;	LUMINAIRE AND LAMPS SAME AS [B1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	TOTAL 50W LED PER 4' SECTION 750/FT UPLIGHT LUMENS 300/FT DOWNLIGHT LUMENS 85 CRI MIN. 3500K
B1DL	NATIONAL LIGHTING # NICHES 2NS LED D/ID-4300-4-3500K-P48-UNV-DIM 0-10 SERIES OR ACCEPTABLE EQUIVALENT BY: PINNACLE EDGE EX28 SERIES; PICASSO KAYLA LED KAY24 SERIES;	LUMINAIRE AND LAMPS SAME AS [B1] EXCEPT SHALL BE LUMINAIRE SHALL BE CONTROLLED BY DAY LIGHTING SENSOR FOR DIMMING		TOTAL 50W LED PER 4' SECTION 750/FT UPLIGHT LUMENS 300/FT DOWNLIGHT LUMENS 85 CRI MIN. 3500K
C1	ALERA LIGHTING CV4-275-PERF-CM48-EPU-MW SERIES OR ACCEPTABLE EQUIVALENT BY: FINELIGHT SERIES 8; FOCAL POINT FV2S SERIES;	4' LONG X 9.5" WIDE X 2.5" DEEP CONTINUOUS PENDANT ROW MOUNTED LINEAR FLUORESCENT LUMINAIRE; STEEL HOUSING; FLAT END CAPS; PERFORATED WHITE CROSS BAFFLES; MINIMUM OF 48" LONG FULLY ADJUSTABLE AIR CRAFT CABLE; (1) BALLAST.	277 V	(2) 28W T5
C1E	ALERA LIGHTING CV4-275-PERF-CM48-EPU-MW SERIES OR ACCEPTABLE EQUIVALENT BY: FINELIGHT SERIES 8; FOCAL POINT FV2S SERIES;	LUMINAIRE AND LAMPS SAME AS [C1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	(2) 28W T5
D1	NATIONAL LIGHTING # HLS LED-2850-4-3500K-AC-UNV-DIM 0-10 SERIES OR ACCEPTABLE EQUIVALENT BY: HE WILLIAMS LLM-SQ SERIES; PICASSO STR-108-LED SERIES;	4' LONG X 4-1/2" WIDE X 4" DEEP PENDANT MOUNTED LED LUMINAIRE; EXTRUDED ALUMINUM HOUSING; DIE FORMED STEEL REFLECTOR; END CAPS; JOINERS; ACRYLIC SATIN LENS; INTEGRAL MOUNTED NON-DIM LED DRIVER;	277 V	TOTAL 30W LED 2850 LUMENS 85 CRI MIN 3500K
D1E	NATIONAL LIGHTING # HLS LED-2850-4-3500K-AC-UNV-DIM 0-10 SERIES OR ACCEPTABLE EQUIVALENT BY: HE WILLIAMS LLM-SQ SERIES; PICASSO STR-108-LED SERIES;	LUMINAIRE AND LAMPS SAME AS [D1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	TOTAL 30W LED 2850 LUMENS 85 CRI MIN 3500K
E1	NATIONAL LIGHTING 4NR-1-T5-SFA-PRSB-UNV SERIES OR ACCEPTABLE EQUIVALENT BY: SELUX M100 SERIES; LITECONTROL MOD 44 SERIES;	RECESSED CEILING CONTINUOUS ROW MOUNTED OR/AND INDIVIDUAL MOUNTED 4' LONG X 4" WIDE X 5" DEEP LINEAR FLUORESCENT LUMINAIRE; STEEL HOUSING; STEEL POWDER COATED REFLECTOR; SNAP-ON FROSTED ACRYLIC DIFFUSER; TANDEM WIRING; (1) BALLAST FOR MAXIMUM OF 2-LAMPS; COORDINATE CEILING TYPE AND LENGTHS AS SHOWN.	277 V	(1) 28W T5
E1E	NATIONAL LIGHTING 4NR-1-T5-SFA-PRSB-UNV SERIES OR ACCEPTABLE EQUIVALENT BY: SELUX M100 SERIES; LITECONTROL MOD 44 SERIES;	LUMINAIRE AND LAMPS SAME AS [E1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	(1) 28W T5
E2	NATIONAL LIGHTING 4NR-1-T5-SFA-PRSB-UNV SERIES OR ACCEPTABLE EQUIVALENT BY: SELUX M100 SERIES; LITECONTROL MOD 44 SERIES;	RECESSED CEILING CONTINUOUS ROW MOUNTED LINEAR FLUORESCENT LUMINAIRE; STEEL HOUSING; STEEL POWDER COATED REFLECTOR; SNAP-ON FROSTED ACRYLIC DIFFUSER; TANDEM WIRING; (1) BALLAST FOR MAXIMUM OF 2-LAMPS; COORDINATE CEILING TYPE AND LENGTHS AS SHOWN. LENGTHS PER ARCHITECTURAL PLANS; FILL WITH LAMPS FROM END TO END; MAXIMIZE LENGTH OF LAMPS; PROVIDE END CAPS AT BOTH ENDS OF ROW.	277 V	(1) 28W T5 PER 4' SECTION (1) 21 W T5 PER 3' (1) 14 W T5 PER 2' SECTIONS AS REQUIRED
EM1	DUAL LITE LM SERIES OR ACCEPTABLE EQUIVALENT BY: ISOLITE; EVENLITE	EMERGENCY LIGHTING UNIT: IMPACT RESISTANT HOUSING; ACRYLIC PRISMATIC LENS; (2) 6 WATT, 6V TUNGSTEN HALOGEN LAMPS; WHITE FINISH; SEALED NICKEL CADMIUM BATTERY; INTEGRAL TEST SWITCH; CHARGER; LOW VOLTAGE DISCONNECT; INTEGRAL SELF-DIAGNOSTIC TEST FEATURE;	277 V	(2) 6 W BY MFR.
F1	PRESCOLITE# LF4SQLED-4SQLED7G4-30K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	RECESSED CEILING MOUNTED 4.5"X4.5" SQUARE OPEN APERTURE LED DOWN LIGHT LUMINAIRE; STEEL HOUSING; 6-1/2" DEEP HOUSING; SPECULAR CLEAR ALZAK REFLECTOR; INTEGRAL MOUNTED 0-10V LED DRIVER FOR ON/OFF SWITCHING.	277 V	TOTAL 27W LED 1100 LUMENS 80 CRI MIN. 3500 K
F1E	PRESCOLITE# LF4SQLED-4SQLED7G4-30K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	LUMINAIRE AND LAMPS SAME AS [F1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	TOTAL 27W LED 1100 LUMENS 80 CRI MIN. 3500 K
F1DL	PRESCOLITE# LF4SQLED-4SQLED7G4-30K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	LUMINAIRE AND LAMPS SAME AS [F1] EXCEPT SHALL BE LUMINAIRE SHALL BE CONTROLLED BY DAY LIGHTING SENSOR FOR DIMMING	277 V	TOTAL 27W LED 1100 LUMENS 80 CRI MIN. 3500 K
F2	PRESCOLITE# LF4SQLED-4SQLED5G4-35K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	RECESSED CEILING MOUNTED 4.5"X4.5" SQUARE OPEN APERTURE LED DOWN LIGHT LUMINAIRE; STEEL HOUSING; 6-1/4" DEEP HOUSING; SPECULAR CLEAR ALZAK REFLECTOR; INTEGRAL MOUNTED 0-10V LED DRIVER FOR ON/OFF SWITCHING.	277 V	TOTAL 17W LED 80 CRI MIN. 3500K
F2E	PRESCOLITE# LF4SQLED-4SQLED5G4-35K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	LUMINAIRE AND LAMPS SAME AS [F2] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	TOTAL 17W LED 80 CRI MIN. 3500K
F2D	PRESCOLITE# LF4SQLED-4SQLED5G4-35K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	RECESSED CEILING MOUNTED 4.5"X4.5" SQUARE OPEN APERTURE LED DOWN LIGHT LUMINAIRE; STEEL HOUSING; 6-1/4" DEEP HOUSING; SPECULAR CLEAR ALZAK REFLECTOR; INTEGRAL MOUNTED 0-10V LED DRIVER FOR DIMMING.	277 V	TOTAL 17W LED 80 CRI MIN. 3500K
F2DL	PRESCOLITE# LF4SQLED-4SQLED5G4-35K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	LUMINAIRE AND LAMPS SAME AS [F2] EXCEPT SHALL BE LUMINAIRE SHALL BE CONTROLLED BY DAY LIGHTING SENSOR FOR DIMMING	277 V	TOTAL 17W LED 80 CRI MIN. 3500K
F2EDL	PRESCOLITE# LF4SQLED-4SQLED5G4-35K SERIES OR ACCEPTABLE EQUIVALENT BY: PEACHTREE LIGHTING 4BLSD SERIES; EDISON PRICE FTS DL/4 SERIES;	LUMINAIRE AND LAMPS SAME AS [F2] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT. LUMINAIRE SHALL BE CONTROLLED BY DAY LIGHTING SENSOR FOR DIMMING.	277 V	TOTAL 17W LED 80 CRI MIN. 3500K
G1	NATIONAL LIGHTING AFF-24-2-T5-LPA-277 SERIES OR ACCEPTABLE EQUIVALENT BY: FINELIGHT HPR SERIES; FOCAL POINT FEQ SERIES;	RECESSED CEILING MOUNTED 2'X4' CENTER BASKET TYPE FLUORESCENT LUMINAIRE; STEEL HOUSING; STEEL POWDER COATED REFLECTOR; 0.06", FROSTED WHITE SIDE DIFFUSING PANELS; 0.125" THICK, TRANSLUCENT EXTRUDED LENS INCORPORATING INTERNAL LINEAR PRISMS CENTER DIFFUSER; (1) BALLAST.	277 V	(2) 28W T5
H1	NATIONAL LIGHTING AFF-22-2-T5HO-LPA-277 SERIES OR ACCEPTABLE EQUIVALENT BY: FINELIGHT HPR SERIES; FOCAL POINT FEQ SERIES;	RECESSED CEILING MOUNTED 2'X2' FLUORESCENT LUMINAIRE; STEEL HOUSING; PRISMATIC LENS, GASKETED, 0.125" THICK, (1) BALLAST.	277 V	(2) 24W T5HO
H1E	NATIONAL LIGHTING AFF-22-2-T5HO-LPA-277 SERIES OR ACCEPTABLE EQUIVALENT BY: FINELIGHT HPR SERIES; FOCAL POINT FEQ SERIES;	LUMINAIRE AND LAMPS SAME AS [H1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	(2) 24W T5HO
I1	BETA CALCO KIORA # 440902 SERIES OR ACCEPTABLE EQUIVALENT BY: DEL-RAY KONE II 823 SERIES; SCOTT S2080 SERIES;	PENDANT MOUNTED COMPACT FLUORESCENT LAMP DECORATIVE LUMINAIRE;	277 V	(1) 32W TRIPLE TUBE 3500K
J1	COLUMBIA CSR4-228-U-EPU/CSRWG/CSHC SERIES OR ACCEPTABLE EQUIVALENT BY: PHILIPS DAYBRITE SF SERIES; LITHONIA EJS SERIES;	CHAIN HUNG OR SURFACE MOUNTED 4' LONG FLUORESCENT INDUSTRIAL LIGHTING LUMINAIRE; WHITE ENAMEL REFLECTOR; 15% UP LIGHT; HEAVY STEEL HOUSING; WIRE GUARD; (1) BALLAST.	277 V	(2) 28 W T5
J1E	COLUMBIA CSR4-228-U-EPU/CSRWG/CSHC SERIES OR ACCEPTABLE EQUIVALENT BY: PHILIPS DAYBRITE SF SERIES; LITHONIA EJS SERIES;	LUMINAIRE AND LAMPS SAME AS [J1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	(2) 28 W T5
J2	COLUMBIA CS SERIES OR ACCEPTABLE EQUIVALENT BY LITHONIA PHILIPS DAY-BRITE.	4'-LONG FLUORESCENT CHANNEL LUMINAIRE; STEEL HOUSING; BAKED WHITE ENAMEL FINISH ; UL LISTED FOR DAMP LOCATION; (1) BALLAST; CHAIN HANGER; WIRE GUARD;	277 V	(2) 28W T5
K1	LITON LIGHTING #LCALD6450 SERIES OR ACCEPTABLE EQUIVALENT BY: PHILIPS LIGHTOLIER; PATHWAY C6BSLBV SERIES;	PENDANT MOUNTED LED CYLINDER, FINISH COLOR AS SELECTED BY ARCHITECT. INTEGRAL MOUNTED NON-DIM LED DRIVER.	277 V	TOTAL 50W LED 5000 LUMENS 80 CRI MIN 3500K
K1E	LITON LIGHTING #LCALD6450 SERIES OR ACCEPTABLE EQUIVALENT BY: PHILIPS LIGHTOLIER; PATHWAY C6BSLBV SERIES;	LUMINAIRE AND LAMPS SAME AS [K1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	TOTAL 50W LED 5000 LUMENS 80 CRI MIN 3500K
K2	LITON LIGHTING #LCALD6350 SERIES OR ACCEPTABLE EQUIVALENT BY: PHILIPS LIGHTOLIER; PATHWAY C6BSLBV SERIES;	SURFACE CEILING MOUNTED LED CYLINDER, FINISH COLOR AS SELECTED BY ARCHITECT. INTEGRAL MOUNTED NON-DIM LED DRIVER.	277 V	TOTAL 40W LED 4000 LUMENS 80 CRI MIN 3500K
L1	ZUMTOBEL ONDALEDS-27W-835-D-OL-XX-DU-XXX OR ACCEPTABLE EQUIVALENT BY: XAL VELA LED SERIES; PRUDENTIAL P4000LED SERIES-PREMIUM FINISH;	SURFACE CEILING MOUNTED DECORATIVE LED LUMINAIRE. INTEGRAL MOUNTED 0-10V LED DIMMING DRIVER	277 V	TOTAL 27W LED 1750 LUMENS 85 CRI MIN 3500K
L1D	ZUMTOBEL ONDALEDS-27W-835-D-OL-XX-DU-XXX OR ACCEPTABLE EQUIVALENT BY: XAL VELA LED SERIES; PRUDENTIAL P4000LED SERIES-PREMIUM FINISH;	LUMINAIRE AND LAMPS SAME AS [L1] EXCEPT SHALL BE LUMINAIRE SHALL BE CONTROLLED BY DAY LIGHTING SENSOR FOR DIMMING	277 V	TOTAL 27W LED 1750 LUMENS 85 CRI MIN 3500K
L1E	ZUMTOBEL ONDALEDS-27W-835-D-OL-XX-DU-XXX OR ACCEPTABLE EQUIVALENT BY: XAL VELA LED SERIES; PRUDENTIAL P4000LED SERIES-PREMIUM FINISH;	LUMINAIRE AND LAMPS SAME AS [L1] EXCEPT SHALL BE CONNECTED ONTO EMERGENCY GENERATOR POWER CIRCUIT.	277 V	TOTAL 27W LED 1750 LUMENS 85 CRI MIN 3500K
M1	ATLANTIC LIGHTING #LED40-DLM1100-35K OR ACCEPTABLE EQUIVALENT BY: PEECHTREE LIGHTING #4BLRD-10; EDISION PRICE #DL LED/4LS	RECESSED CEILING MOUNTED 4" DIAMETER LED LUMINAIRE; INTEGRAL MOUNTED 0-10V LED DIMMING DRIVER	277 V	TOTAL 18W LED 1100 LUMENS 80 CRI 3500K
N1	ZUMTOBEL #BR4WLED2-N-22W-835-D/ BR4WLED2-N-CS-N/9930 OR ACCEPTABLE EQUIVALENT BY: PHILIPS LIGHTOLIER #C4L10LW EDISON PRICE DLWL LED LED/4LS	RECESSED LED WALL WASHER LUMINAIRE: INTEGRAL MOUNTED 0-10V LED DIMMING DRIVER	277 V	TOTAL 22W LED 960 LUMENS 85 CRI 3500K
X1	DUAL LITE #LE-C-S-G-N-A-2C SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE;	CEILING MOUNTED LED EDGE EXIT SIGN; WATER-CLEAR INJECTION-MOLDED ACRYLIC PLAQUE; CLEAR BACKGROUND; GREEN LETTERS; SATIN ALUMINUM FINISH TRIM/HOUSING; SINGLE FACE; LAMP WIRED ON TWO SEPARATE NORMAL AND EMERGENCY POWER CIRCUITS; DIRECTIONAL ARROWS AS INDICATED ON LIGHTING PLANS	277 V	LED
X2	DUAL LITE #LE-C-D-G-N-A-2C SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE;	LUMINAIRE SAME AS [X1] EXCEPT PROVIDE WITH DOUBLE FACE WITH DIRECTIONAL ARROWS AS INDICATED ON LIGHTING PLANS.	277 V	LED
X1A	DUAL LITE #LE-C-S-G-N-A-2C SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE; DUAL LITE #LE-C-S-N-A-2C-SW18 SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE;	PROVIDE (2) SIGNS IN LOCATION WHERE THIS SYMBOL IS INDICATED: (1) TYPE "X1" AND (1) ADDITIONALLY UNIVERSAL ACCESSIBILITY SIGN WITH 6" HIGH SYMBOL MOUNTED DIRECTLY ADJACENT TO "X1" EXIT SIGN. WATER-CLEAR INJECTION-MOLDED ACRYLIC PLAQUE; CLEAR BACKGROUND; RED SYMBOL; SATIN ALUMINUM FINISH TRIM/HOUSING; SINGLE FACE; LAMP WIRED ON TWO SEPARATE NORMAL AND EMERGENCY POWER CIRCUITS;	277 V	LED
X1W	DUAL LITE #LE-W-S-G-N-A-2C SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE;	WALL MOUNTED LED EDGE EXIT SIGN; WATER-CLEAR INJECTION-MOLDED ACRYLIC PLAQUE; CLEAR BACKGROUND; GREEN LETTERS; SATIN ALUMINUM FINISH TRIM/HOUSING; SINGLE FACE; LAMP WIRED ON TWO SEPARATE NORMAL AND EMERGENCY POWER CIRCUITS; DIRECTIONAL ARROWS AS INDICATED ON LIGHTING PLANS	277 V	LED
X1WA	DUAL LITE #LE-W-S-G-N-A-2C SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE; DUAL LITE #LE-W-S-N-A-2C-SW18 SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE;	PROVIDE (2) SIGNS IN LOCATION WHERE THIS SYMBOL IS INDICATED: (1) TYPE "X1W" AND (1) ADDITIONALLY UNIVERSAL ACCESSIBILITY SIGN WITH 6" HIGH SYMBOL MOUNTED DIRECTLY ADJACENT TO "X1W" EXIT SIGN. WATER-CLEAR INJECTION-MOLDED ACRYLIC PLAQUE; CLEAR BACKGROUND; RED SYMBOL; SATIN ALUMINUM FINISH TRIM/HOUSING; SINGLE FACE; LAMP WIRED ON TWO SEPARATE NORMAL AND EMERGENCY POWER CIRCUITS;	277 V	LED
X3W	DUAL-LIT #LX-U-R-W-2C SERIES OR ACCEPTABLE EQUIVALENT BY: EMERGILITE; EVENLITE; ISOLITE;	WALL MOUNTED THERMOPLASTIC DUAL CIRCUITS LED EXIT SIGN; RED LETTERS; WHITE COLOR HOUSING; SINGLE FACE WITH DIRECTIONAL ARROWS AS NOTED ON PLANS; (1) LED LAMP; LAMP WIRED ON TWO SEPARATE NORMAL AND EMERGENCY POWER CIRCUITS.	277 V	LED
X4	EELP #TEX-1-R-BA-10 SERIES OR ACCEPTABLE EQUIVALENT;	WALL MOUNTED VANDAL RESISTANT SELF LUMINOUS EXIT SIGN; CAST ALUMINUM HOUSING; BRUSHED ALUMINUM FINISH; RED LETTERS; 10 YEARS LIFE; TRITIUM GAS LIGHT SOURCE; SECURITY HOUSING;	N/A	PROVIDED W/ LUMINAIRE
EW1E	SPAULDING LIGHTING #LMC-3OLU-4K-J SERIES OR ACCEPTABLE EQUIVALENT;	EXTERIOR WALL MOUNTED FULL CUT OFF LED LUMINAIRE; DIE-CAST ALUMINUM HOUSING; PROVIDE (2) 700mo INTEGRAL MOUNTED LED DRIVERS; BOTH DRIVERS WILL BE CONNECTED ON SAME CIRCUIT; UL LISTED FOR WET LOCATION	277 V	71W LED 6023 DELIVERED LUMENS 4000K 70 CRI
SA	BEGA-US SERIES #8977 LED OR ACCEPTABLE EQUIVALENT BY HESS SERIES #LN450 OR TRADDEL SERIES #63785	POLE MOUNTED LED LUMINAIRE; ONE PIECE THICK ALUMINUM EXTRUSION POLE; EXTRUDED ALUMINUM HOUSING; INTEGRAL MOUNTED LED DRIVER; UL LISTED FOR WET LOCATION; MOUNT ON 15 FT SQUARE POLE PROVIDE 880C TYPE ANCHORAGE. FINISH COLOR AS SELECTED BY ARCHITECT	277V	38W LED 2388 DELIVERED LUMENS 4000K 80 CRI
SB	BEGA-US SERIES #8819 LED OR ACCEPTABLE EQUIVALENT BY ARCLUCE SERIES #S8791 OR TRADDEL SERIES # 63505	SQUARE ALUMINUM POST LED BOLLARD; DIE-CAST ALUMINUM ENCLOSURE; INTEGRAL MOUNTED LED DRIVER; UL LISTED FOR WET LOCATION; PROVIDE 895A TYPE ANCHORAGE. FINISH AS SELECTED BY ARCHITECT	277V	19.8W LED 416 DELIVERED LUMENS 4000K 80 CRI

FLOOR BOX SCHEDULE

NOTES:

1. SEE SPECIFICATION SECTION "WIRING DEVICES" FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL COORDINATE EXACT FINISHES & STYLE OF COVER PLATES FOR ALL FLOOR BOXES WITH ARCHITECT TO MATCH FLOOR FINISHES.
3. FLOOR BOXES SHALL BE RATED FOR SCRUB WATER IN ACCORDANCE WITH UL514A.

TAG	DESCRIPTION	DEVICES	NOTES
FB-A	WIREMOLD #RFB6-OG SERIES 6-GANG COMPARTMENTS RECESSED STEEL FLOOR BOX.	RECESSED SLAB ON GRADE FLOOR BOX WITH COVER PLATE; (6) GANG COMPARTMENTS; (5) DUPLEX RECEPTACLE OUTLETS IN (5) GANG COMPARTMENTS, AND REMAINING (1) GANG COMPARTMENT FOR TELECOMMUNICATION DEVICES. PROVIDE DIVIDER BETWEEN TELECOMMUNICATION AND POWER DEVICES. PROVIDE (1) 1" CONDUIT FOR POWER WIRING. REFER TO TECHNOLOGY "TC" SERIES DRAWINGS FOR EXACT CONFIGURATION OF TELECOMMUNICATION DEVICES AND CONDUITS REQUIREMENTS. PROVIDE ALL NECESSARY ACCESSORIES FOR INSTALLATION OF DEVICES; FINISHES AND MATERIAL SHALL BE AS SELECTED BY ARCHITECT.	

POKE THRU SCHEDULE

NOTES:

1. SEE SPECIFICATION SECTION "WIRING DEVICES" FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL COORDINATE EXACT FINISHES & STYLE OF COVER PLATES FOR ALL POKE THRU DEVICES WITH ARCHITECT TO MATCH FLOOR FINISHES.
3. POKE THRU DEVICES SHALL BE RATED FOR SCRUB WATER IN ACCORDANCE WITH UL514A.

TAG	DESCRIPTION	DEVICES	NOTES
PT-A	WIREMOLD EVOLUTION 6AT SERIES RECESSED 6" POKE THRU DEVICE.	RECESSED POKE THRU DEVICE WITH COVER PLATE; (3) DUPLEX RECEPTACLE POWER OUTLETS MOUNTED IN SIDE COMPARTMENTS; (2) DATA OUTLETS IN CENTRAL COMPARTMENT. PROVIDE ALL NECESSARY ACCESSORIES FOR INSTALLATION OF ALL DEVICES. SEE TC SERIES DRAWINGS FOR MORE INFORMATION. PROVIDE (1) 1"C. FOR POWER WIRING AND (1) 2"C. FOR DATA WIRING.	

BVH integrated services

STRUCTURAL, MECHANICAL, ELECTRICAL AND TECHNOLOGY

ELECTRICAL SCHEDULES

REVISIONS

mark	date	description
1	9/29/15	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

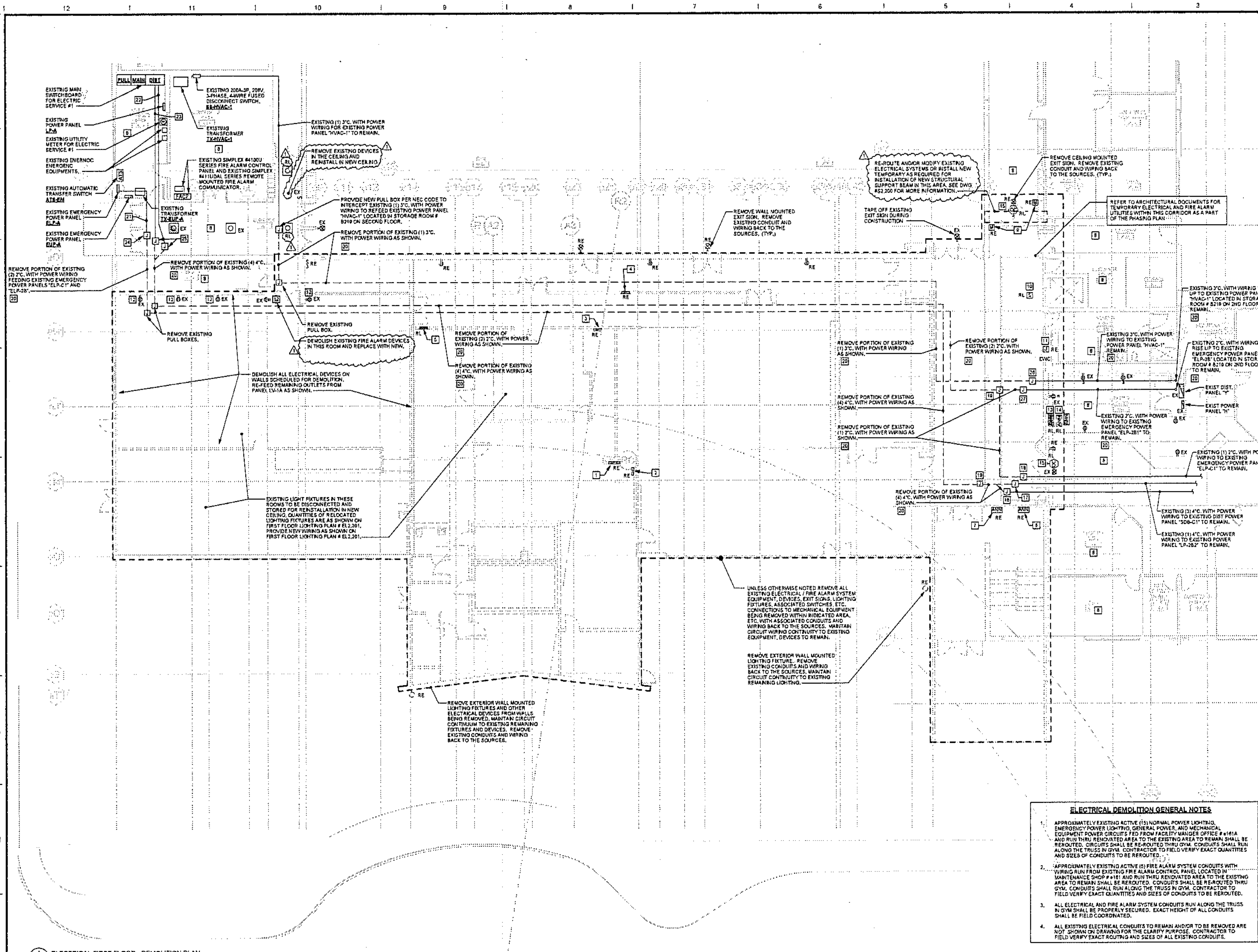
170 ELM STREET
ENFIELD, CT

BI-CTC-437

04-21-2015

NOT TO SCALE

E0.302



1 / E2.101 ELECTRICAL FIRST FLOOR - DEMOLITION PLAN
1/8" = 1'-0"

ELECTRICAL DEMOLITION DRAWING NOTES

1. REMOVE EXISTING ABANDONED POWER PANEL "S". REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES.
2. REMOVE EXISTING POWER PANEL "SN". REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES. REFEED APPROXIMATELY (8) EXISTING ACTIVE BRANCH CIRCUITS FROM NEW POWER PANEL "LV-1B". PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN. EXTEND EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN TO NEW POWER PANEL "LV-1B". PROVIDE NEW CONDUITS AND WIRING AS REQUIRED. CONTRACTOR SHALL FIELD VERIFY EXACT QUANTITIES OF EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN.
3. REMOVE EXISTING POWER PANEL "PE". REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES. REFEED APPROXIMATELY (8) EXISTING ACTIVE BRANCH CIRCUITS FROM NEW POWER PANEL "LV-1A". PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN. EXTEND EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN TO NEW POWER PANEL "LV-1A". PROVIDE NEW CONDUITS AND WIRING AS REQUIRED. CONTRACTOR SHALL FIELD VERIFY EXACT QUANTITIES OF EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN.
4. REMOVE EXISTING POWER PANEL "T". REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES. REFEED APPROXIMATELY (15) EXISTING ACTIVE BRANCH CIRCUITS FROM NEW POWER PANEL "LV-1A". PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN. EXTEND EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN TO NEW POWER PANEL "LV-1A". PROVIDE NEW CONDUITS AND WIRING AS REQUIRED. CONTRACTOR SHALL FIELD VERIFY EXACT QUANTITIES OF EXISTING ACTIVE BRANCH CIRCUITS TO REMAIN.
5. REMOVE AND RELOCATE EXISTING RECESSED WALL MOUNTED EMERGENCY ZONE CONTROL PANEL WITH (2) TEST SWITCH. PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CIRCUITS. EXTEND EXISTING CIRCUITS, CONDUITS AND WIRING TO NEW LOCATION. REFER TO FIRST ELECTRICAL POWER CONSTRUCTION PLAN # EP2.201 FOR NEW LOCATION.
6. REMOVE EXISTING SURFACE WALL MOUNTED FIRE ALARM SYSTEM REMOTE GRAPHIC ANNUNCIATOR PANEL. REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES.
7. REMOVE EXISTING SURFACE WALL MOUNTED FIRE ALARM SYSTEM LCD TYPE REMOTE ANNUNCIATOR PANEL. REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES.
8. EXISTING ELECTRICAL WORK TO REMAIN WITHIN ROOM OR AREA UNLESS OTHERWISE NOTED.
9. REMOVE EXISTING MAGNETIC DOOR HOLD OPEN DEVICES. REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES.
10. REMOVE EXISTING SMOKE DETECTOR FOR ELEVATOR RECALL SYSTEM AND RELOCATE WITHIN SAME PLACE TO ACCOMMODATE NEW CEILING CONSTRUCTION. RECONNECT INTO EXISTING FIRE ALARM SYSTEM CIRCUIT. EXTEND EXISTING FIRE ALARM CIRCUIT TO NEW LOCATION. PROVIDE NEW CONDUITS AND WIRING AS REQUIRED.
11. EXISTING WATER COOLER TO BE REMOVED. REMOVE EXISTING POWER CONNECTION, BACK BOX, CONDUIT AND WIRING BACK TO THE SOURCES.
12. EXISTING POWER OUTLET TO REMAIN. REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES. REWIRE EXISTING POWER OUTLETS WITH NEW WIRING AS SHOWN ON DRAWING # EP2.201.
13. REMOVE AND RELOCATE EXISTING SURFACE WALL MOUNTED GENERATOR ANNUNCIATOR PANEL. EXTEND EXISTING CONDUITS AND WIRING TO THE NEW LOCATION. PROVIDE NEW CONDUITS AND WIRING OF SAME SIZE AS REQUIRED.
14. REMOVE AND RELOCATE EXISTING RECESSED WALL MOUNTED CALL-FOR-AID SYSTEM ANNUNCIATOR PANEL. EXTEND EXISTING CONDUITS AND WIRING TO THE NEW LOCATION. PROVIDE NEW CONDUITS AND WIRING OF SAME SIZE AS REQUIRED.
15. REMOVE AND RELOCATE EXISTING WALL OR DOOR FRAME MOUNTED OCCUPANCY SENSOR FOR CONTROLLING EXISTING LIGHTING FIXTURES SERVING WITHIN RESPECTIVE AREA. PROVIDE TEMPORARY SUPPORT DURING DEMOLITION OF WALL OR DOOR FRAME. REUSE EXISTING CONTROL CIRCUIT TO RECONNECT INTO NEW LOCATION. PROVIDE NEW CONDUITS AND WIRING AS REQUIRED.
16. PROVIDE NEW PULL BOX PER NEC CODE TO INTERCEPT EXISTING (3) 4"C. WITH POWER WIRING TO EXISTING DIST POWER PANEL "SDB-C1" LOCATED IN EXISTING ELECTRICAL ROOM # 123 ON 1ST FLOOR.
17. PROVIDE NEW PULL BOX PER NEC CODE TO INTERCEPT EXISTING (1) 4"C. WITH POWER WIRING TO EXISTING POWER PANEL "LP-2B2" LOCATED IN STORAGE ROOM # B219 ON 2ND FLOOR.
18. PROVIDE NEW PULL BOX PER NEC CODE TO INTERCEPT EXISTING (1) 2"C. WITH POWER WIRING TO EXISTING EMERGENCY POWER PANEL "ELP-C1" LOCATED IN EXISTING ELECTRICAL ROOM # 123 ON 1ST FLOOR.
19. REMOVE EXISTING PULL BOX.
20. COORDINATE PHASING SO NO PARTS OF EXISTING BUILDING ARE LEFT WITHOUT POWER.
21. EXISTING (2) 2" CONDUITS AND WIRING FROM EXISTING EMERGENCY PANEL "ELP-A" TO NEW JUNCTION BOX TO REMAIN TO REFEED EXISTING EMERGENCY PANEL "ELP-C1" LOCATED IN ELECTRICAL ROOM #123 ON FIRST FLOOR AND EXISTING EMERGENCY POWER PANEL "ELP-2B1" LOCATED IN STORAGE ROOM #B219 ON SECOND FLOOR. COORDINATE EXACT CONDUITS ROUTING IN FIELD. REFER TO ELECTRICAL POWER RISER DIAGRAM ON DRAWING # E3.101 FOR MORE INFORMATION.
22. EXISTING (3) 4" CONDUITS AND WIRING FROM EXISTING MAIN SWITCHBOARD TO NEW JUNCTION BOX TO REMAIN TO REFEED EXISTING DISTRIBUTION PANELBOARD "SDB-C1" LOCATED IN ELECTRICAL ROOM #123 ON FIRST FLOOR. COORDINATE EXACT CONDUITS ROUTING IN FIELD. REFER TO ELECTRICAL POWER RISER DIAGRAM ON DRAWING # E3.101 FOR MORE INFORMATION.
23. EXISTING (1) 4" CONDUIT AND WIRING FROM EXISTING MAIN SWITCHBOARD TO NEW JUNCTION TO REMAIN TO REFEED EXISTING POWER PANEL "LP-2B2" LOCATED IN STORAGE ROOM #B211 ON SECOND FLOOR. COORDINATE EXACT CONDUIT ROUTING IN FIELD. REFER TO ELECTRICAL POWER RISER DIAGRAM ON DRAWING # E3.101 FOR MORE INFORMATION.
24. PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING TO REFEED EXISTING EMERGENCY POWER PANEL "ELP-C1" AND EXISTING EMERGENCY POWER PANEL "ELP-2B1". SPLICE NEW AND EXISTING WIRING IN RESPECTIVE NEW JUNCTION BOXES. REFER TO ELECTRICAL POWER RISER DIAGRAM ON DRAWING # E3.101 FOR MORE INFORMATION.
25. PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CONDUITS AND WIRING TO REFEED EXISTING POWER DIST. POWER PANEL "SDB-C1", AND EXISTING POWER PANEL "LP-2B2". SPLICE NEW AND EXISTING WIRING IN RESPECTIVE NEW JUNCTION BOXES. REFER TO ELECTRICAL POWER RISER DIAGRAM ON DRAWING # E3.101 FOR MORE INFORMATION.
26. PROVIDE NEW JUNCTION BOX PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING TO REFEED EXISTING POWER PANEL "HVAC-1". SPLICE NEW AND EXISTING WIRING IN NEW JUNCTION BOX. REFER TO ELECTRICAL POWER RISER DIAGRAM ON DRAWING # E3.101 FOR MORE INFORMATION.
27. PROVIDE NEW JUNCTION BOX PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING TO REFEED EXISTING EMERGENCY POWER PANEL "ELP-2B1". SPLICE NEW AND EXISTING WIRING IN NEW JUNCTION BOX. REFER TO ELECTRICAL POWER RISER DIAGRAM ON DRAWING # E3.101 FOR MORE INFORMATION. NEW CONDUIT AND WIRING TO REFEED EXISTING EMERGENCY POWER PANEL "ELP-C1" SHALL BE ALSO INTERCEPTED INTO THIS JUNCTION BOX. REFER TO DRAWING EP2.201 FOR MORE INFORMATION.

ELECTRICAL DEMOLITION GENERAL NOTES

1. APPROXIMATELY EXISTING ACTIVE (15) NORMAL POWER LIGHTING, EMERGENCY POWER LIGHTING, GENERAL POWER, AND MECHANICAL EQUIPMENT POWER CIRCUITS FED FROM FACILITY MANGER OFFICE # a161A AND RUN THRU RENOVATED AREA TO THE EXISTING AREA TO REMAIN SHALL BE REROUTED. CIRCUITS SHALL BE RE-ROUTED THRU GYM. CONDUITS SHALL RUN ALONG THE TRUSS IN GYM. CONTRACTOR TO FIELD VERIFY EXACT QUANTITIES AND SIZES OF CONDUITS TO BE REROUTED.
2. APPROXIMATELY EXISTING ACTIVE (5) FIRE ALARM SYSTEM CONDUITS WITH WIRING RUN FROM EXISTING FIRE ALARM CONTROL PANEL LOCATED IN MAINTENANCE SHOP # a161 AND RUN THRU RENOVATED AREA TO THE EXISTING AREA TO REMAIN SHALL BE REROUTED. CONDUITS SHALL BE RE-ROUTED THRU GYM. CONDUITS SHALL RUN ALONG THE TRUSS IN GYM. CONTRACTOR TO FIELD VERIFY EXACT QUANTITIES AND SIZES OF CONDUITS TO BE REROUTED.
3. ALL ELECTRICAL AND FIRE ALARM SYSTEM CONDUITS RUN ALONG THE TRUSS IN GYM SHALL BE PROPERLY SECURED. EXACT HEIGHT OF ALL CONDUITS SHALL BE FIELD COORDINATED.
4. ALL EXISTING ELECTRICAL CONDUITS TO REMAIN AND/OR TO BE REMOVED ARE NOT SHOWN ON DRAWING FOR THE CLARITY PURPOSE. CONTRACTOR TO FIELD VERIFY EXACT ROUTING AND SIZES OF ALL EXISTING CONDUITS.

KEYPLAN

BVH integrated services
50 Griffin Road South, Bloomfield, CT 06002
STRUCTURAL, MECHANICAL, ELECTRICAL, AND TECHNOLOGY

FIRST FLOOR ELECTRICAL DEMOLITION PLAN

REVISIONS

mark	date	description
1	8/20/2015	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE
170 ELM STREET
ENFIELD, CT

BI-CTC-437

04-21-2015
1/8" = 1'-0"
JP

E2.101

STATE OF CONNECTICUT · GREGORY H. VAN ... · No. 17926 · LICENSED PROFESSIONAL ENGINEER

8/20/2015 10:27:03 AM E:\Rh-A101400-Asnuntuck\101400l - MEP - Entrance Addition - (2014) (tm).rvt

4.8 KVA/KW INVERTER SHALL BE MANUFACTURED BY DUAL-LITE "LSK" SERIES CAT # D-277-48-S-277-C-30-14-RSP-SMT-BS-CL60-S SERIES WITH 30A-1P, 277V, 1-PHASE INPUT C/B AND (14) 20A-1P OUTPUT C/B'S. PROVIDE 25K AISC RATING INVERTER AND C/B'S. PROVIDE REMOTE STATUS PANEL, SYSTEM MONITORING TERMINAL, INTERNAL MAINTENANCE BYPASS SWITCH (MAKE BEFORE BREAK), SEISMIC QUALIFIED AND CABINET LOCKS). INVERTER SHALL BE UL 924 COMPLIANT, WITH 10 YEAR SEALED MAINTENANCE FREE (SMF) LEAD CALCIUM BATTERY FOR MINIMUM OF 90 MINUTES OPERATION. PROVIDE FACTORY START UP SERVICE WITH EXTENDED WARRANTY FOR 2 YEARS PARTS AND LABOR. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO TRAIN OWNER'S MAINTENANCE PERSONNEL TO ADJUST, OPERATE, AND MAINTAIN THE INVERTER. AS A MINIMUM AND IN ADDITION TO THE REQUIREMENTS OF OTHER SECTIONS, PROVIDE TWO (2) 8-HOUR DAYS OF OWNER TRAINING SESSIONS IN ADDITION TO MULTIPLE START-UP VISITS TO PROPERLY SUPPORT THE CONTRACTOR

TYPICAL 20A-1P LIGHTING CIRCUITS BETWEEN LIGHTING PANELS AND LIGHTING CONTROL RELAY PANELS. SEE CENTRAL LIGHTING CONTROL RELAY PANEL ON DRAWING # E4.101 FOR MORE INFORMATION.

FED BY 80A-3P C/B. PROVIDE 3 #4 & 1 #8 GND IN 1-1/4"C.

4 #4 & 1 #8 GND IN 1-1/4"C.

PROVIDE NEW (1) 2-1/2" CONDUIT WITH 4 #2/0 AND 1 #6 GND TO REFEED EXISTING EMERGENCY POWER PANEL "ELP-2B1" LOCATED IN STORAGE ROOM #6219 ON SECOND FLOOR. REFER TO DRAWING EP2.201 AND EP2.201 FOR MORE INFORMATION.

PROVIDE NEW (1) 3" CONDUIT WITH 4 #4/0 AND 1 #1/0 GND TO REFEED EXISTING POWER PANEL "HVAC-1" LOCATED IN STORAGE ROOM #6219 ON SECOND FLOOR. REFER TO DRAWING EP2.201 AND EP2.201 FOR MORE INFORMATION.

PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

EXISTING CONDUIT AND WIRING TO REMAIN. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

PROVIDE NEW (1) 4" CONDUIT WITH 4 #350 KCMIL AND 1 #2/0 GND TO REFEED EXISTING POWER PANEL "LP-2B2" LOCATED IN STORAGE ROOM #6211 ON SECOND FLOOR. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

PROVIDE NEW JUNCTION BOX PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

EXISTING CONDUIT AND WIRING TO REMAIN. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

TYPICAL 20A-1P LIGHTING CIRCUITS BETWEEN LIGHTING PANEL AND LIGHTING CONTROL RELAY PANEL. SEE CENTRAL LIGHTING CONTROL RELAY PANEL ON DRAWING # E4.101 FOR MORE INFORMATION.

4 #500 KCMIL & 1 #3 GND IN 4"C.

4 #1/0 & 1 #6 GND IN 2"C.

2 #10 & 1 #10 GND IN 1"C.

EXISTING 200A-3P, 208V, 3-PHASE, 4-WIRE FUSED DISCONNECT "SS-HVAC-1" TO REMAIN.

PROVIDE NEW 400A-3P C/B IN EXISTING SPACES TO FEED NEW MECHANICAL POWER DIST. PANEL "HDM-1A". PROVIDE 50,000 AISC RATING C/B.

EXIST. 2000A-3P MAIN C/B WITH GFI PROTECTION.

EXIST. PULL SECTION

EXISTING CONDUITS AND WIRING TO REMAIN. REFER TO DRAWING # E2.101 FOR MORE INFORMATION.

PROVIDE NEW 30A-1P C/B TO FEED NEW EMERGENCY LIGHTING INVERTER "ELP-A1". PROVIDE 30,000 AISC RATING C/B.

#4 GROUNDING ELECTRODE CONNECT GROUNDING ELECTRODE CONDUCTOR TO NEAREST STRUCTURAL STEEL AND NEAREST METALLIC COLD WATER PIPE PER NEC CODE. PROVIDE BONDING JUMPER PER NEC CODE.

PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

EXISTING CONDUITS AND WIRING TO REMAIN. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

4 #3/0 & 1 #1 GND IN 2-1/2"C. (VOLTAGE DROP)

4 #2 & 1 #6 GND IN 1-1/4"C.

PROVIDE NEW (1) 2-1/2" CONDUIT WITH 4 #2/0 AND 1 #6 GND TO REFEED EXISTING EMERGENCY POWER PANEL "ELP-C1" LOCATED IN ELECTRICAL ROOM #123 ON FIRST FLOOR. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

PROVIDE NEW (3) SETS OF 4" CONDUIT WITH 4 #500 KCMIL AND 1 #250 KCMIL GND TO REFEED EXISTING POWER DIST. PANEL "SDB-C1" LOCATED IN ELECTRICAL ROOM #123 ON FIRST FLOOR. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

PROVIDE NEW 150A-3P C/B IN EXISTING DIST. PANEL "Y" TO FEED NEW POWER PANEL "LV-1A". MATCH AISC RATING WITH EXISTING.

EXISTING CONDUITS AND WIRING TO EXIST. DISTRIBUTION PANEL "EMDB" TO REMAIN.

EXISTING CONDUITS AND WIRING TO REMAIN. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

SECOND FLOOR

FIRST FLOOR

EXISTING SECONDARY ELECTRIC SERVICE RUN UNDERGROUND TO UTILITY TRANSFORMER

EXISTING C.T.s, P.T.s, AND FUSING FOR UTILITY COMPANY METERING

EXISTING GROUNDING ELECTRODE CONDUCTOR.

RELOCATED EXISTING (2) 60A-3P C/B'S

EXIST. 2000A-3P, 480/277V, 3ϕ, 4W MAIN SWITCHBOARD (ELECTRIC SERVICE #1) 50,000 AISC

2000A, 480Y/277V, 3ϕ, 4W BUS

EXIST. EMERGENCY POWER AUTOMATIC TRANSFER SWITCH "ATS-EM"

TO EXIST. C/B IN GENERATOR ENCLOSURE

NEW PARTIAL POWER RISER DIAGRAM

NOT TO SCALE

EXISTING CONDUIT AND WIRING TO REMAIN. REFER TO DRAWING # E2.101 FOR MORE INFORMATION.

PROVIDE NEW JUNCTION BOX PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING. REFER TO DRAWING # E2.101 FOR MORE INFORMATION.

REMOVE EXISTING CONDUITS AND WIRING. REFER TO FIRST FLOOR ELECTRICAL DEMOLITION PLAN ON DRAWING # E2.101 FOR MORE INFORMATION.

PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

EXISTING CONDUIT AND WIRING TO REMAIN. REFER TO DRAWING # EP2.201 FOR MORE INFORMATION.

PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CONDUITS AND WIRING. REFER TO FIRST FLOOR ELECTRICAL DEMOLITION PLAN ON DRAWING # E2.101 FOR MORE INFORMATION.

SECOND FLOOR

EXISTING 200A-3P, 208V, 3-PHASE, 4-WIRE FUSED DISCONNECT "SS-HVAC-1" TO REMAIN.

REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES.

REMOVE EXISTING (2) 50A-3P C/B'S SERVING EXISTING RTU-1A AND RTU-2A BEING RELOCATED.

EXIST. 2000A-3P MAIN C/B WITH GFI PROTECTION.

EXIST. PULL SECTION

EXISTING CONDUITS AND WIRING TO REMAIN. REFER TO DRAWING # E2.101 FOR MORE INFORMATION.

EXISTING CONDUITS AND WIRING TO REMAIN.

PROVIDE NEW JUNCTION BOXES PER NEC CODE TO INTERCEPT EXISTING CONDUIT AND WIRING. REFER TO DRAWING # E2.101 FOR MORE INFORMATION.

EXISTING CONDUITS AND WIRING TO REMAIN. REFER TO DRAWING # E2.101 FOR MORE INFORMATION.

REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES.

REMOVE EXISTING CONDUITS AND WIRING BACK TO EXIST. DISTRIBUTION PANEL "EMDB"

REMOVE EXISTING CONDUITS AND WIRING BACK TO THE SOURCES.

EXISTING CONDUITS AND WIRING TO EXIST. DISTRIBUTION PANEL EMDB TO REMAIN.

EXISTING CONDUITS AND WIRING TO REMAIN. REFER TO DRAWING # E2.101 FOR MORE INFORMATION.

FIRST FLOOR

EXISTING SECONDARY ELECTRIC SERVICE RUN UNDERGROUND TO UTILITY TRANSFORMER

EXISTING C.T.s, P.T.s, AND FUSING FOR UTILITY COMPANY METERING

EXISTING GROUNDING ELECTRODE CONDUCTOR.

REMOVE AND RELOCATE EXISTING (2) 60A-3P C/B'S IN SWITCHBOARD TO ACCOMMODATE INSTALLATION OF NEW 400A-3P C/B. EXTEND EXISTING FEEDERS TO NEW LOCATION.

EXIST. 2000A-3P, 480/277V, 3ϕ, 4W MAIN SWITCHBOARD (ELECTRIC SERVICE #1) 50,000 AISC

2000A, 480Y/277V, 3ϕ, 4W BUS

EXIST. EMERGENCY POWER AUTOMATIC TRANSFER SWITCH "ATS-EM"

TO EXIST. C/B IN GENERATOR ENCLOSURE

DEMOLITION PARTIAL POWER RISER DIAGRAM

NOT TO SCALE

BVH Integrated Services

STRUCTURAL, MECHANICAL, ELECTRICAL AND TECHNOLOGY

drawing title	
ELECTRICAL POWER RISER DIAGRAM	

REVISIONS

mark	date	description
1	4/29/15	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing prepared for: TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project: CAMPUS RENOVATIONS - ASHNUTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: DA-CTC-437

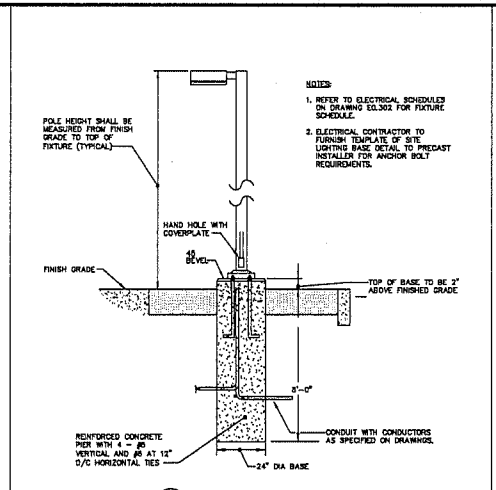
date: 04.27.2015
scale: NOT TO SCALE
drawn by: JP
checked by:
approved by:
drawing no. E3.101

SITE LIGHTING GENERAL NOTES:

1. REFER TO E0.302 FOR SITE LIGHT FIXTURE SCHEDULE.
2. PROPOSED LAYOUT, SHOWN FOR REFERENCE ONLY. REFER TO CIVIL AND LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.

SITE LIGHTING DRAWING NOTES

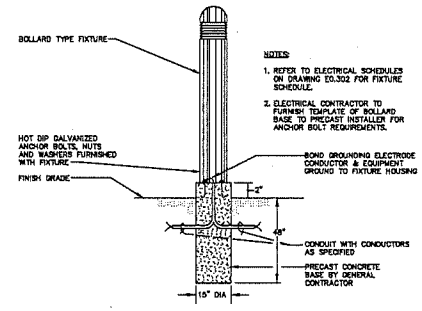
1. PROVIDE 1" EMPTY CONDUIT WITH PULL STRING TO LIGHTING CONTROL RELAY PANEL "LP-A-LC" FOR FUTURE POWER WIRING TO LIGHTING FIXTURES LOCATED AT FUTURE SCULPTURE.
2. PROVIDE 2 #10 & 1 #10 GND IN 1"C. FOR THE ENTIRE LENGTH OF THE CIRCUIT. PROVIDE APPROPRIATE SIZE LUGS TO ACCOMMODATE LARGER SIZE WIRES. LIGHTING CIRCUIT HOMERUN SHALL RUN THROUGH RELAY IN NORMAL LIGHTING CONTROL PANEL "LP-A-LC" TO 20A-1P CIRCUIT BREAKER LOCATED IN NEW NORMAL POWER PANEL "LP-1A". CIRCUIT HOMERUN SHALL BE CONTROLLED THROUGH RELAY VIA EXTERIOR MOUNTED PHOTOCELL AND BUILT-IN TIME CLOCK IN LIGHTING CONTROL RELAY PANEL. 1
3. PROVIDE 1-1/4"C., WEATHER-PROOF BACKBOX AND HORIZONTAL CABLING FOR FUTURE POLE MOUNTED SECURITY CAMERA (COORDINATE WITH OWNER'S SECURITY VENDOR) TERMINATION, TESTING, LABELING AND COMMISSIONING BY OTHERS. 1
4. PROVIDE 2 #10 & 1 #10 GND IN 1"C. FOR THE ENTIRE LENGTH OF THE CIRCUIT.
5. PROVIDE WEATHER-PROOF JUNCTION BOX FOR POWER WIRING TO FUTURE POLE MOUNTED SECURITY CAMERA (COORDINATE WITH OWNER'S SECURITY VENDOR) 1
6. PROVIDE WEATHER-PROOF JUNCTION BOX FOR FUTURE POWER WIRING TO LIGHTING FIXTURES LOCATED AT FUTURE SCULPTURE. COORDINATE EXACT LOCATION WITH LANDSCAPE ARCHITECT, CIVIL ENGINEER AND ARCHITECT.



NOTES:

1. REFER TO ELECTRICAL SCHEDULES ON DRAWING E0.302 FOR FIXTURE SCHEDULE.
2. ELECTRICAL CONTRACTOR TO FURNISH TEMPLATE OF SITE LIGHTING BASE DETAIL TO PRECAST INSTALLER FOR ANCHOR BOLT REQUIREMENTS.

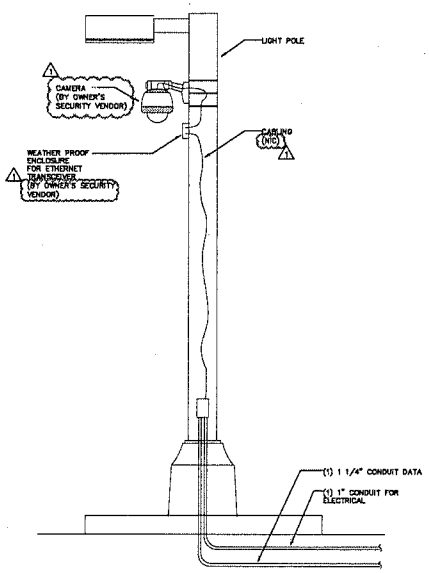
1 SE1.01 SITE LIGHTING BASE DETAIL
NOT TO SCALE



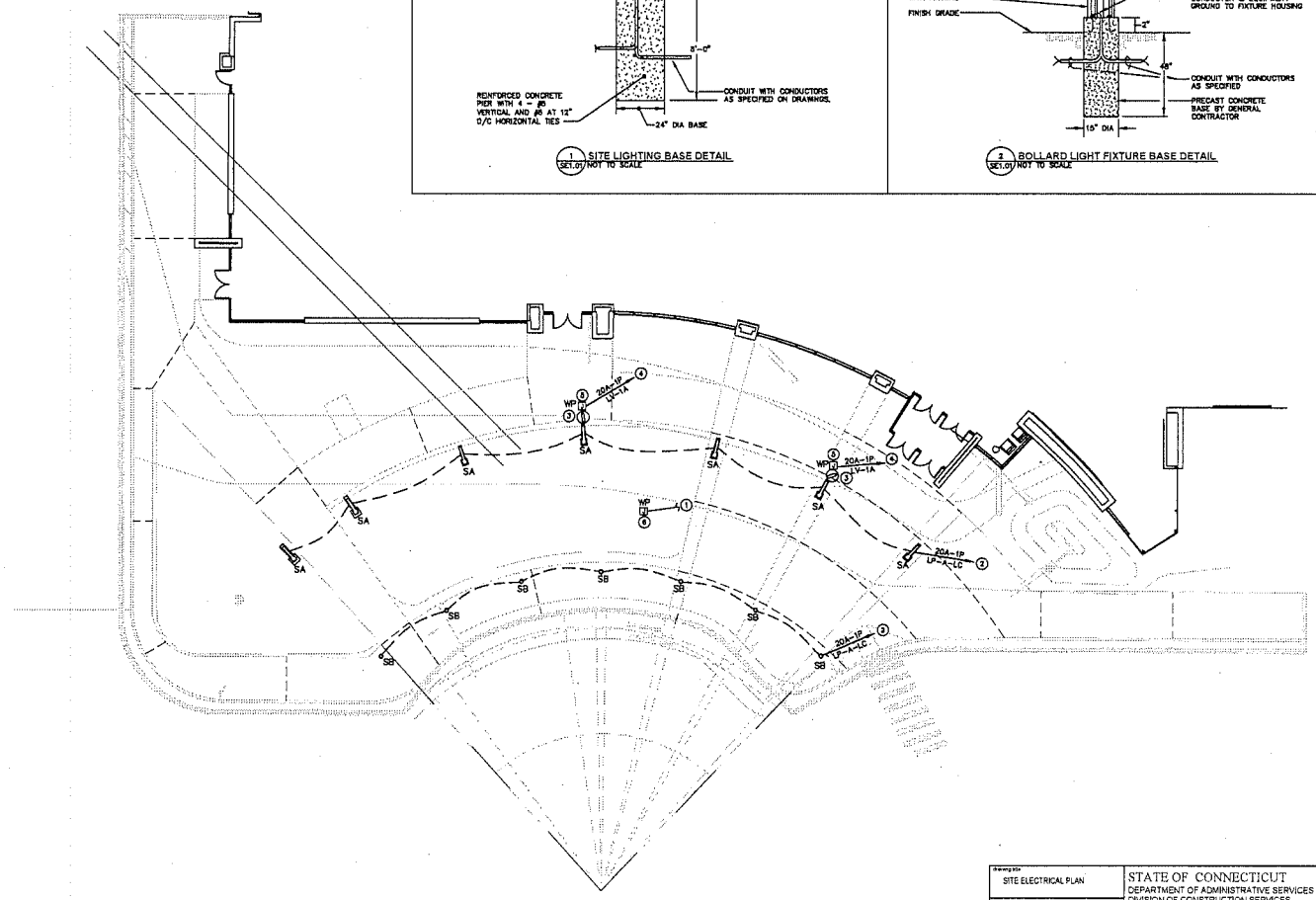
NOTES:

1. REFER TO ELECTRICAL SCHEDULES ON DRAWING E0.302 FOR FIXTURE SCHEDULE.
2. ELECTRICAL CONTRACTOR TO FURNISH TEMPLATE OF BOLLARD BASE TO PRECAST INSTALLER FOR ANCHOR BOLT REQUIREMENTS.

2 SE1.01 BOLLARD LIGHT FIXTURE BASE DETAIL
NOT TO SCALE



3 SE1.01 CAMERA - EXTERIOR LIGHT POLE MOUNT
NOT TO SCALE



drawing title		
SITE ELECTRICAL PLAN		
REVISIONS		
mark	date	description
1	3/23/15	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing prepared by
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

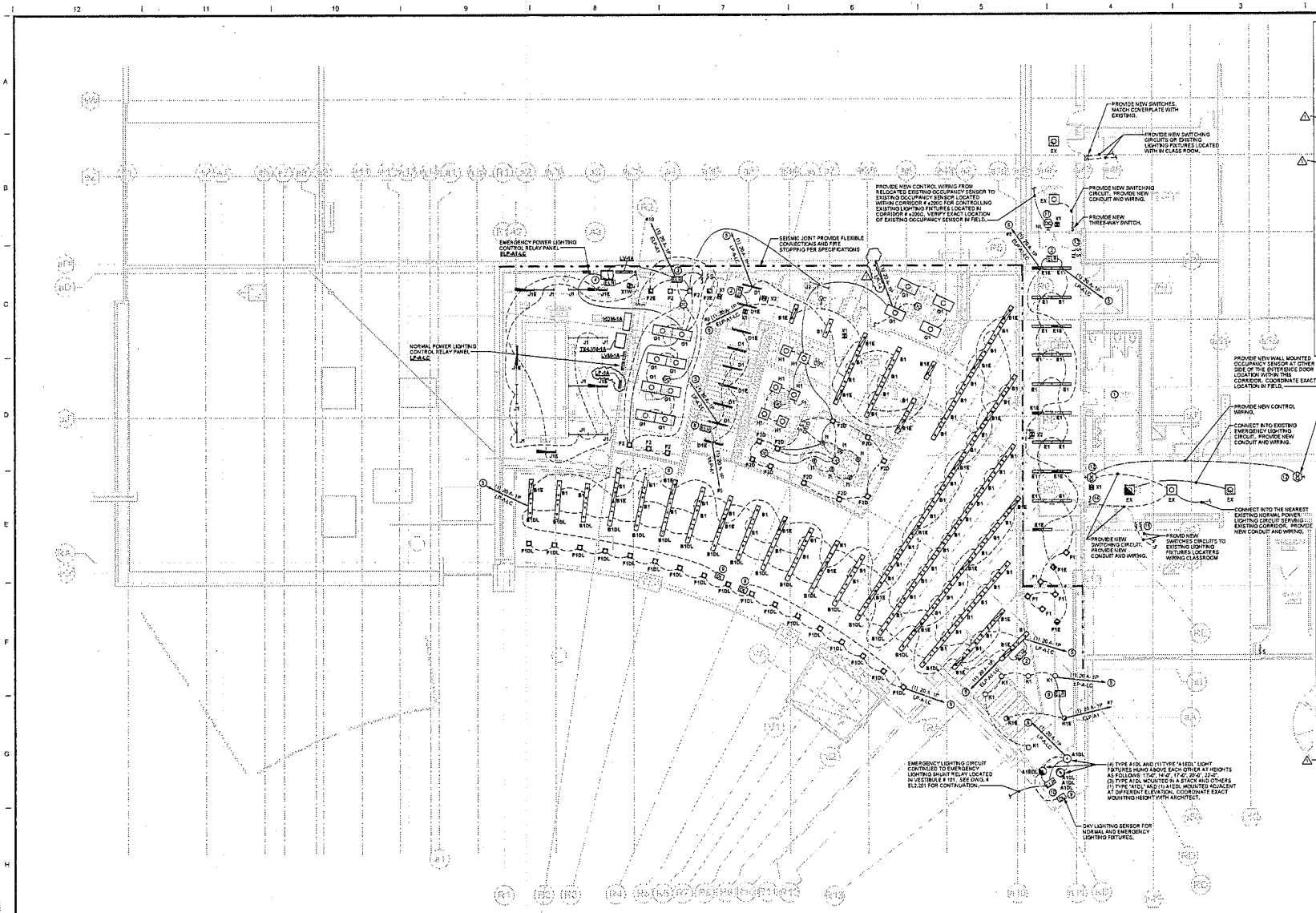
project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: DAS-TCC-437

date: Mar 27, 2015
scale: 1/16" = 1'-0"
drawing no.: SE1.01

BVH integrated services
STRUCTURAL, MECHANICAL, ELECTRICAL, AND TECHNOLOGY



1 SECOND FLOOR LIGHTING - CONSTRUCTION PLAN
EL2.202 1/8" = 1'-0"

ELECTRICAL LIGHTING DRAWING NOTES

1. EXISTING ELECTRICAL WORK TO REMAIN WITHIN ROOM OR AREA UNLESS OTHERWISE NOTED.
2. PROVIDE EMERGENCY LIGHTING SHUNT RELAY. REFER TO EMERGENCY LIGHTING DETAIL "A" ON DRAWING # E4.101 FOR MORE INFORMATION.
3. PROVIDE EMERGENCY LIGHTING SHUNT RELAY. REFER TO EMERGENCY LIGHTING DETAIL "B" ON DRAWING # E4.101 FOR MORE INFORMATION.
4. PROVIDE EMERGENCY LIGHTING SHUNT RELAY. REFER TO EMERGENCY LIGHTING DETAIL "D" ON DRAWING # E4.101 FOR MORE INFORMATION.
5. NORMAL POWER LIGHTING CIRCUIT HOMERUN SHALL RUN THRU RELAY IN NORMAL POWER LIGHTING CONTROL RELAY PANEL "LP-R-4-LC" TO 20A-1P C/B LOCATED IN NEW NORMAL POWER LIGHTING PANEL "LP-1A".
6. EMERGENCY POWER LIGHTING CIRCUIT HOMERUN SHALL RUN THRU RELAY IN EMERGENCY POWER LIGHTING CONTROL RELAY PANEL "EL-R-4-LC" TO 20A-1P C/B LOCATED IN NEW EMERGENCY POWER LIGHTING INVERTER "ELP-A1".
7. NOT USED.
8. PROVIDE EMERGENCY LIGHTING SHUNT RELAY. REFER TO EMERGENCY LIGHTING DETAIL "E" ON DRAWING # E4.101 FOR MORE INFORMATION.
9. INDOOR DAY LIGHTING DIMMING PHOTOSENSOR SHALL BE MANUFACTURED BY HUBBELL BUILDING AUTOMATION #LUXSTATLS SERIES WITH POWER PACK RELAY OR APPROVED ACCEPTABLE EQUIVALENT. DAYLIGHTING SENSOR SHALL CONTROL LUMINAIRE LOCATED ALONG GLASS WINDOWS OR WALL FOR DIMMING. EXACT LOCATION TO BE DETERMINED PER MANUFACTURER RECOMMENDATION.
10. PROVIDE EMERGENCY LIGHTING RELAY. REFER TO EMERGENCY LIGHTING DETAIL "F" ON DRAWING # E4.101 FOR MORE INFORMATION.
11. RELOCATED EXISTING WALL MOUNTED OCCUPANCY SENSOR FOR CONTROLLING EXISTING LIGHTING FIXTURES LOCATED IN CORRIDOR # 200C.
12. PROVIDE NEW WALL MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR MANUFACTURED BY WATT STOPPER #DW-100-1 SERIES OR ACCEPTABLE EQUIVALENT.
13. PROVIDE (1) LOW VOLTAGE SWITCH WITH (1) PUSH BUTTON, (1) DEDICATED PUSH BUTTON SHALL BE CONTROLLING RESPECTIVE NORMAL AND EMERGENCY LIGHTING CIRCUITS SIMULTANEOUSLY SERVING WITHIN AREA. PROVIDE (1) MASTER LOW VOLTAGE KEYED SWITCH STATION. COORDINATE EXACT PROGRAMMING OF EACH PUSH BUTTON WITH OWNER. REFER TO SPECIFICATION SECTION 260943-23 FOR MORE INFORMATION.
14. PROVIDE NEW THREE WAY SWITCH
15. PROVIDE NEW THREE WAY SWITCHS. MATCH COVERPLATE WITH EXISTING

ELECTRICAL LIGHTING GENERAL NOTES

1. PROVIDE POWER PACK RELAY WITH APPROPRIATE VOLTAGE RATING FOR EACH SWITCHING CIRCUITS CONTROLLED BY OCCUPANCY SENSOR.
2. PROVIDE MULTIPLE POWER PACK RELAYS WITH APPROPRIATE VOLTAGE RATING FOR MULTIPLE SWITCHING CIRCUITS CONTROLLED BY OCCUPANCY SENSOR.
3. PROVIDE MULTIPLE POWER PACK RELAYS FOR MULTIPLE OCCUPANCY SENSORS CONTROLLED LIGHTING FIXTURES WITHIN AREA.
4. PROVIDE SEPARATE POWER PACK RELAY FOR LUMINARIES CONTROLLED BY DAY LIGHTING SENSOR. COORDINATE EXACT WIRING REQUIREMENT WITH MANUFACTURER.
5. COORDINATE FINAL LOCATION, ORIENTATION AND TYPE OF OCCUPANCY SENSORS WITH MANUFACTURER PRIOR TO THE INSTALLATION.
6. PROVIDE SHOP DRAWING SUBMITTAL WITH LAYOUT OF ALL OCCUPANCY SENSORS ON LIGHTING PLANS PER APPLICATION OF OCCUPANCY SENSOR SPECIFIED IN SPECIFICATION SECTION 260923 "LIGHTING CONTROL DEVICES". PROVIDE MULTIPLE OCCUPANCY SENSORS FOR PROPER COVERAGE AS INDICATED IN SPECIFICATION SECTION 260923 "LIGHTING CONTROL DEVICES".
7. PROVIDE SEPARATE RELAY AND EXTRA SETS OF CONTACTS CLOSURES IN ALL TYPE OF CEILING MOUNTED OCCUPANCY SENSORS THAT NEEDS TO BE CONNECTED TO BMS SYSTEM FOR ACTIVATION OF HVAC SYSTEM. COORDINATE WITH DIVISION 23 CONTRACTOR FOR CONNECTION TO BMS SYSTEM.
8. ALL CONDUITS SERVING LIGHTING FIXTURES IN EACH STAIRWELL SHALL BE EMBEDDED IN THE CMU WALL AND NOT EXPOSED.
9. REFER TO SPECIFICATION SECTION 260519 "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR WIRE AND CONDUIT SIZE REQUIREMENT FOR ALL 20A-1P, 277 VOLT CIRCUITS UNLESS OTHERWISE NOTED ON DRAWINGS.
10. ALL NORMAL POWER LIGHTING CIRCUIT HOMERUNS ON BOTH FLOORS AS FED FROM EXISTING POWER PANEL LP-4 ON FIRST FLOOR ELECTRICAL LIGHTING CONSTRUCTION PLAN DRAWING # EL2.201 SHALL BE FED FROM NEW NORMAL POWER LIGHTING PANEL "LP-1A".
11. ALL NORMAL POWER LIGHTING CIRCUIT HOMERUNS RUN THRU RELAY IN NORMAL POWER LIGHTING CONTROL RELAY PANEL "LP-R-4-LC" AS SHOWN ON FIRST FLOOR ELECTRICAL LIGHTING CONSTRUCTION PLAN DRAWING # EL2.201 SHALL BE FED TO 20A-1P C/B LOCATED IN NEW NORMAL POWER LIGHTING PANEL "LP-1A" INSTEAD OF EXISTING POWER PANEL "LP-4".

KEYPLAN

SECOND FLOOR ELECTRICAL LIGHTING CONSTRUCTION PLAN

REVISIONS

mark	date	description
1	6/02/2015	ADDENDUM #4

BVH integrated services
50 Grillo Road South
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STRUCTURAL, MECHANICAL, ELECTRICAL, AND TECHNOLOGY

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number DCJ-TC-4457-

drawing no. EL2.202

date 06-12-2015
scale 1/8" = 1'-0"
project manager LP
project architect
drawn by
checked by

STATE OF CONNECTICUT
SECOND FLOOR
17828
LICENSED
PROFESSIONAL ENGINEER

CALLED NORTH

9/29/2015 10:27:08 AM E:\Revit\15-025 - Asnuntuck\15-025 - MEP - Enfield Addition - (2015) (revit)

FIRE PROTECTION DEMOLITION NOTES

1. REMOVE ALL EXISTING SPRINKLER HEADS AND BRANCH PIPING IN THIS AREA.

EXIST 3" SPK TO REMAIN

PROTECT AND SUPPORT EXISTING SPRINKLER HEADS IN THIS CORRIDOR DURING CEILING DEMOLITION AND REINSTALLATION

EXIST. 1 1/2" SPK TO REMAIN

NOTE: REMOVE EXISTING SPRINKLER MAIN AND ASSOCIATED BRANCH PIPING AND HEADS UP TO THIS POINT & CAP

EXIST 2 1/2" SPK TO REMAIN PROVIDE FOR ANY REWORK AND AS NEEDED TO ACCOMMODATE NEW CONSTRUCTION

NOTE: REWORK EXISTING SPRINKLER PIPING IN THIS AREA TO ALLOW FOR INSTALLATION OF NEW STRUCTURAL SUPPORT BEAM ALONG COLUMN LINE 4&B

RAISE EXISTING SPRINKLER PIPING IN THIS CORRIDOR TO ACCOMMODATE ALL NEW AND EXISTING MEP UTILITIES.

REFER TO ARCHITECTURAL DOCUMENTS FOR TEMPORARY FIRE PROTECTION UTILITIES WITHIN THIS CORRIDOR AS A PART OF THE PHASING PLAN

REMOVE AFTER NEW HEADS HAVE BEEN INSTALLED AND OPREATIONAL IN THIS AREA

NOTE: REMOVE EXISTING SPRINKLER HEADS WITHIN THIS OUTLINED AREA AND CAP DROPS ABOVE EXISTING CEILING LEVEL

EXISTING SPRINKLER HEAD TO BE REMOVED (TYP.)

REMOVE EXIST. INSPECTORS TEST DRAIN & CONNECTION

REMOVE EXISTING SPRINKLER HEADS AND ASSOCIATED BRANCH PIPING IN STAIR AND CAP AT MAIN.

GALLED NORTH

1 FIRE PROTECTION FIRST FLOOR - DEMOLITION PLAN
FP2.101 1/8" = 1'-0"

KEYPLAN

BVH integrated services
50 Griffin Road South
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STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

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CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

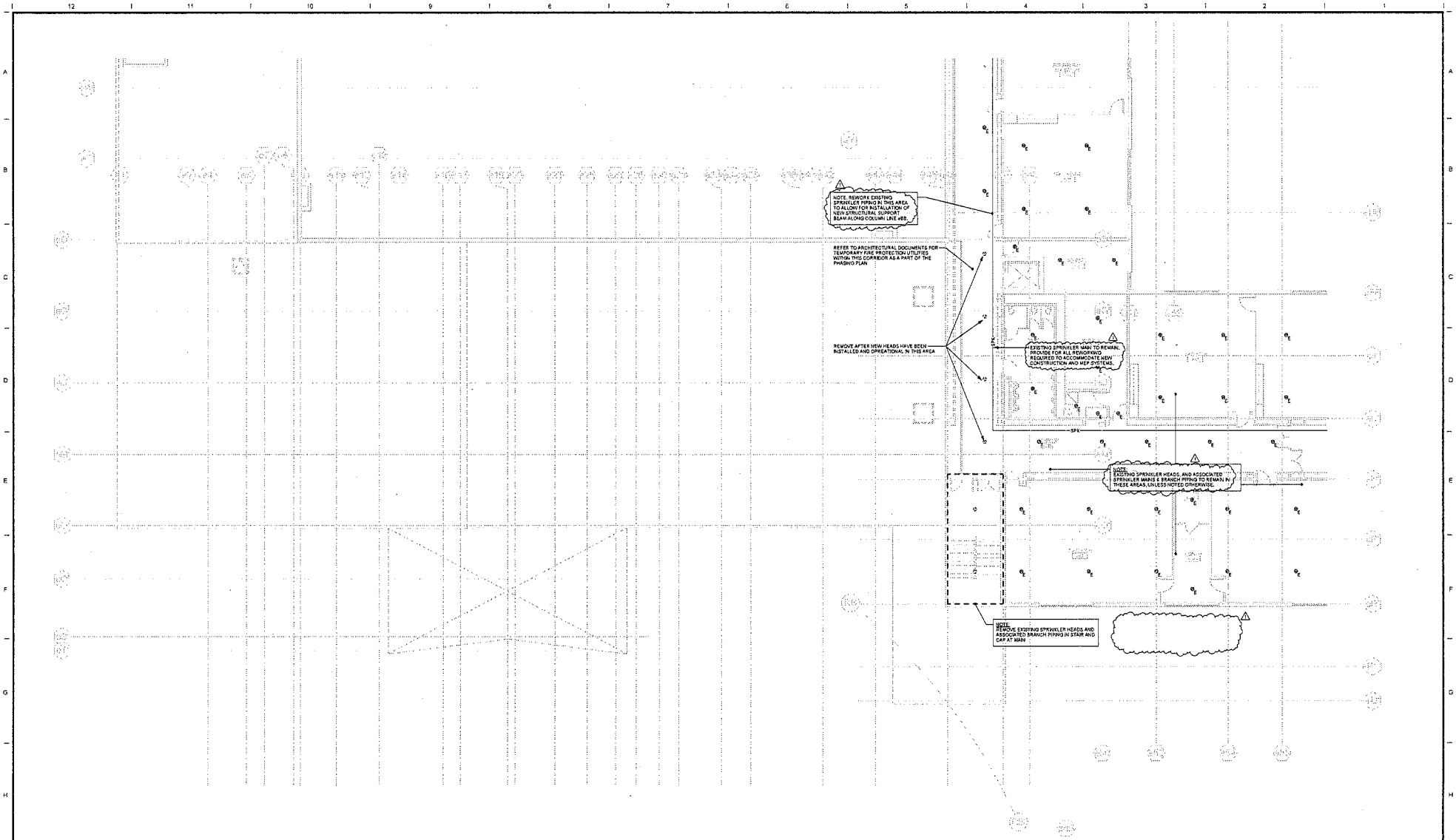
BCTC-A37

FIRST FLOOR FIRE PROTECTION DEMOLITION PLAN

REVISIONS

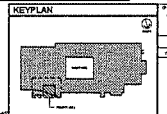
Mark	Date	Description
1	06/22/2015	ADDENDUM # 2

FP2.101



1 FP2.102 SECOND FLOOR FIRE PROTECTION- DEMOLITION PLAN
1/8" = 1'-0"

KEYPLAN



BVH integrated services
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STRUCTURAL, MECHANICAL, ELECTRICAL, AND REGINEERING

SECOND FLOOR FIRE PROTECTION DEMOLITION PLAN

mark	date	description
1	9/28/2015	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: BI-CTC-437

date: 08-17-2015
scale: 1/8" = 1'-0"
drawn by: JP
checked by: JP
approved by: JP
issue date: 9/28/2015
drawing no.: FP2.102

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CABINET UNIT HEATER SCHEDULE - ELECTRIC

TAG	MFR	MODEL	ARRANGEMENT	MBH	KW	NUMBER OF STEPS/SCR	CONTROL VOLTAGE	FAN CFM	FAN HP	FAN RPM
ECUH-A	QMARK	CU945	CEILING	27.3	8	2	480	400	1/5	1550

UNIT HEATER SCHEDULE - HOT WATER

TAG	VOLTS/ PHASE	MFR	MODEL NO.	ARRANGEMENT
UH-1	120/1	RITTLING	RH-18	HORIZONTAL

TAG	MBH	EWT (°F)	LWT (°F)	GPM	PIPE RUNOUT SIZE (IN)	MAX WPD (FT)	FAN CFM	FAN MOTOR HP	FAN RPM
UH-1	13	180	150	1.3	3/4"	0.49	400	1/30	1550

RADIATOR SCHEDULE - HOT WATER

TAG	MFR	MODEL NO.	LENGTH (FT)	TUBE / FIN MATERIAL	TUBE SIZE	CONNECTIONS	E.W.T.	L.W.T.
R-1	RUNTAL	R2F-3	4	STEEL	N/A	SAME END	180	150
R-2	RUNTAL	R2F-3	4	STEEL	N/A	SAME END	180	150
R-3A	RUNTAL	R2F-3	6	STEEL	N/A	OPPOSITE END, SERIES	180	150
R-3B	RUNTAL	R2F-3	13	STEEL	N/A	OPPOSITE END, SERIES	180	150
R-3C	RUNTAL	R2F-3	3	STEEL	N/A	SAME END, SERIES	180	150
R-4	RUNTAL	R2F-3	24	STEEL	N/A	OPPOSITE END	180	150
R-5	RUNTAL	R2F-3	24	STEEL	N/A	OPPOSITE END	180	150
R-6	RUNTAL	R2F-3	4	STEEL	N/A	SAME END	180	150
R-7A	RUNTAL	R2F-3	8	STEEL	N/A	OPPOSITE END, SERIES	180	150
R-7B	RUNTAL	R2F-3	5	STEEL	N/A	SAME END, SERIES	180	150
R-8A	RUNTAL	R2F-3	10	STEEL	N/A	OPPOSITE END, SERIES	180	150
R-8B	RUNTAL	R2F-3	8	STEEL	N/A	OPPOSITE END, SERIES	180	150
R-8C	RUNTAL	R2F-3	12	STEEL	N/A	SAME END, SERIES	180	150

TAG	BTU PER LF	GPM	ENCL. HEIGHT	MOUNTING HEIGHT	WIDTH	PIPE RUNOUT SIZE (IN)	REMARKS
R-1	1185	0.50	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-2	1185	0.50	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-3A	1185	0.75	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-3B	1185	1.00	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-3C	1185	0.25	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-4	1185	2.00	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-5	1185	2.00	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-6	1185	0.50	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-7A	1185	0.50	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-7B	1185	0.50	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-8A	1185	0.75	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-8B	1185	0.50	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT
R-8C	1185	1.00	8.6"	FLOOR MOUNT	1.6"	3/4"	PEDESTAL MOUNT

NOTES:

1. PROVIDE OPTIONAL COLOR AS SELECTED BY THE ARCHITECT
2. SEE FLAT PLATE RADIATOR DETAIL DRAWINGS AND SPECIFICATIONS
3. VERIFY ALL DIMENSIONS AND LAYOUT OF EACH FLAT PLATE RADIATOR UNIT WITH ARCHITECT, PROVIDE ADJUSTMENTS TO LENGTHS FOR AESTHETICS PER DIRECTION OF ARCHITECT.
4. PROVIDE END AND CORNER TRIM FOR COMPLETE FINISHED INSTALLATION.

SHUT OFF SINGLE DUCT AIR TERMINAL UNIT SCHEDULE

TAG	SIZE	CFM RANGE	HEATING COIL PERFOMANCE NOM. CFM	ROWS	LAT	GPM	PIPE SIZE
A	06	0-400	300	2	90	1	3/4"
A1	06	0-400	NONE	NONE	NONE	NONE	NONE
B	08	401-800	600	2	90	2	3/4"
B1	08	401-800	NONE	NONE	NONE	NONE	NONE
C	10	801-1200	900	2	90	3	3/4"
C1	10	801-1200	NONE	NONE	NONE	NONE	NONE
D	12	1201-1700	1275	2	90	4	1"
D1	12	1201-1700	NONE	NONE	NONE	NONE	NONE
E	14	1701-2300	1725	2	90	6	1"
E1	14	1701-2300	NONE	NONE	NONE	NONE	NONE
F	16	2301-3100	2325	2	90	8	1-1/4"
F1	16	2301-3100	NONE	NONE	NONE	NONE	NONE

GENERAL NOTES:

AIR TERMINAL UNITS ARE BASED ON ENVIRO-TEC

0.5%MAXIMUM ALLOWABLE STATIC PRESSURE DROP FOR BOX AND REHEAT COIL

HEATING COIL PERFORMANCE BASED ON NOMINAL CFM LISTED IN THE SCHEDULE @ 50° DEGREE F. ENTERING TEMPERATURE, 180° DEGREE F. ENTERING WATER TEMPERATURE, 150° DEGREE F. LEAVING WATER TEMPERATURE

PERFORMANCE DATA TAG

MAXIMUM COOLING CFM
MINIMUM COOLING CFM
HEATING CFM

AIR TERMINAL UNIT TAG

A — ID TYPE

GRILLE AND DIFFUSER SCHEDULE

CEILING SUPPLY DIFFUSER CFM	SQUARE NECK SIZE	ROUND NECK SIZE	DUCTED CEILING RETURN / EXHAUST GRILLE CFM	NECK SIZE	NON-DUCTED CEILING RETURN / EXHAUST GRILLE CFM	NECK SIZE	FLEXIBLE DUCT SIZES TO SUPPLY DIFFUSERS CFM	SIZE
0-100	6 x 6	5"Ø	0-150	6 x 6	0-350	12 x 12	0-100	5"Ø
101-250	9 x 9	8"Ø	151-350		351-1200	22 x 22	101-250	8"Ø
251-400	12 x 12	10"Ø	351-650				251-400	10"Ø
401-600	15 x 15	12"Ø	651-1000				401-600	12"Ø
601-800	18 x 18	14"Ø					601-800	14"Ø

TYPE	MODEL	DESCRIPTION
A1	TDC	SQUARE LOUVER FACE CEILING SUPPLY DIFFUSER WITH REMOVABLE CORE, LAY-IN, 1-WAY THROW, TRANSITIONAL ADAPTER.
A2	TDC	SQUARE LOUVER FACE CEILING SUPPLY DIFFUSER WITH REMOVABLE CORE, LAY-IN, 2-WAY CORNER THROW, TRANSITIONAL ADAPTER.
A3	TDC	SQUARE LOUVER FACE CEILING SUPPLY DIFFUSER WITH REMOVABLE CORE, LAY-IN, 3-WAY THROW, TRANSITIONAL ADAPTER.
A4	TDC	SQUARE LOUVER FACE CEILING SUPPLY DIFFUSER WITH REMOVABLE CORE, LAY-IN, 4-WAY THROW, TRANSITIONAL ADAPTER.
A5	TDC	SQUARE LOUVER FACE CEILING SUPPLY DIFFUSER WITH REMOVABLE CORE, LAY-IN, 2-WAY OPPOSITE THROW, TRANSITIONAL ADAPTER.
B	355 RL	LOUVER TYPE CEILING/WALL RETURN OR EXHAUST GRILLE, 35° FIXED DEFLECTION, 1/2" SPACING WITH BLADES PARALLEL TO THE LONG DIMENSION.
E	300RS	WALL SUPPLY GRILLE, DOUBLE DEFLECTION WITH ADJUSTABLE VERTICAL FRONT BLADES, 3/4" BLADE SPACING. SIZES INDICATED ON PLANS.
F	S300FL	EXTRUDED ALUMINUM SPIRAL DUCT-MOUNTED SUPPLY GRILLE, DOUBLE DEFLECTION WITH INDIVIDUALLY ADJUSTABLE BLADES, 3/4" BLADE SPACING, 10" WIDTH, 18" LENGTH UNLESS INDICATED OTHERWISE ON PLANS.
G	JNA (PRICE)	ALUMINUM SWIVEL JET THROW DIFFUSER, SIZE 21 UNLESS INDICATED OTHERWISE ON PLANS.
H	FL-10	FLOWBAR JET THROW LINEAR SLOT DIFFUSER, 1 SLOT, EXTRUDED ALUMINUM, 4'-0" SLOT LENGTH AND 3" SLOT WIDTH UNLESS INDICATED OTHERWISE ON PLANS, PROVIDE 24 GAUGE INSULATED PLENUM, COORDINATE WITH ARCHITECTURAL DRAWINGS FOR REQUIRED MOUNTING ARRANGEMENTS AND PROVIDE ALL NECESSARY MATERIAL AND ACCESSORIES SUITABLE FOR A COMPLETE APPLICATION.
J	301RL	WALL SUPPLY GRILLE, SINGLE DEFLECTION WITH ADJUSTABLE BLADES PARALLEL TO THE LONG DIMENSION, 3/4" BLADE SPACING, 8" WIDTH, 30" LENGTH UNLESS INDICATED OTHERWISE ON PLANS.

FAN SCHEDULE

TAG	MFR	MODEL	TYPE	DRIVE	CFM	ESP (IN WC)	MOTOR RPM	MOTOR BHP	MOTOR HP	VOLTS / PHASE	ECM	SERVES
EF-1	COOK	120C17DEC	DOWNBLAST	DIRECT	1250	0.75	1725	0.388	0.5	120/1	YES	GEN EXH
EF-2	COOK	80CPVD-EC	VENT SET	DIRECT	500	0.5	1725	0.157	0.25	120/1	YES	STAIR TWR

NOTES:

1. PROVIDE TENV-EC MOTOR ENCLOSURE FOR EF-2

PUMP SCHEDULE

TAG	MFR	TYPE	SERIES / SIZE MODEL NO.	MINIMUM EFFICIENCY	GPM	FT OF HEAD (TDH)
HWP-1	BELL & GOSSETT	IN-LINE	90 1-1/2A	43%	20	40
HWP-2	BELL & GOSSETT	IN-LINE	90 1-1/2A	43%	20	40
FPP-1	BELL & GOSSETT	IN-LINE	E-90 1AAB	54%	20	15

TAG	RPM	MOTOR HP	VOLTS/ PHASE	VFC	SERVES	OPERATION
HWP-1	1725	1	480/3	YES	HWS&R TO AHU-1	RUN
HWP-2	1725	1	480/3	YES	HWS&R TO AHU-1	STAND-BY
FPP-1	1725	1/4	120/1	NO	HWS&R TO AHU-1	FREEZE PROTECTION

1. PROVIDE MAXIMUM IMPELLER DIAMETER FOR NON-OVERLOADING PERFORMANCE FOR SPECIFIED HORSEPOWER.

AIR HANDLING UNIT SCHEDULE

TAG	MFR	MODEL NO.	TYPE	MIN. O.A.	AREA SERVED	AHU MODULE ARRANGEMENT
AHU-1	TRANE	CSAA	PERFORMANCE CLIMATE CHANGER	4500	ENTRANCE ADDITION	REFER TO DETAIL

SUPPLY FAN

TAG	CFM	TSP (IN WG)	DRIVE	TYPE	QTY	SIZE	CLASS	VOLTS/ PHASE	FAN RPM	MOTOR QTY	MOTOR HP	VFC
AHU-1	15,000	4.3	DIRECT	PLENUM	2	22.25"	II	460/3	1756	2	8	YES

RETURN FAN

TAG	CFM	TSP (IN WG)	DRIVE	TYPE	FAN QTY	SIZE	CLASS	VOLTS/ PHASE	FAN RPM	MOTOR QTY	MOTOR HP	VFC
AHU-1	15,000	2.1	DIRECT	PLENUM	2	22.25"	I	460/3	1464	2	5.5	YES

HOT WATER COIL

TAG	EAT (°F)	LAT (°F)	TOTAL MBH	EWT (°F)	LWT (°F)	GPM	PIPE RUNOUT SIZE (IN)	COIL FACE VELOCITY (FPM)	MAXIMUM WPD (FT)	ROWS
AHU-1	40	65	300	180	150	20	2	480	3.9	1

DX COIL

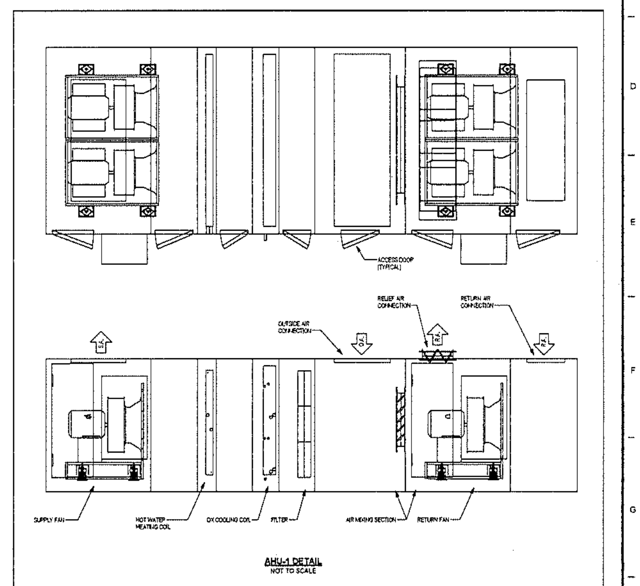
TAG	EAT DB / WB (°F)	LAT DB / WB (°F)	TOTAL MBH	SENSIBLE MBH	REFRIG TYPE	SUCTION TEMP (°F)	NUMBER OF CIRCUITS	COIL FACE VELOCITY (FPM)	DRAIN	ROWS
AHU-1	80.0/67.0	55.0/53.8	606.7	411.4	R-410A	45.0	2	429	YES	4

CONDENSING UNIT

TAG	MFR	VOLTS/ PHASE	MODEL	AMBIENT TEMP (°F)	CAPACITY (TONS)	IEER	MCA	SERVES
CU-1	TRANE	460/3	TTA300F4	95	25	11	51.6	AHU-1
CU-2	TRANE	460/3	TTA300F5	95	25	11	51.6	AHU-1

NOTES:

1. HEATING CAPACITIES BASED UPON DESIGN HEATING CFM AND MINIMUM OUTDOOR AIR CFM, 0°F OA (WINTER) HEATED TO 60°F
2. COOLING CAPACITIES BASED UPON DESIGN COOLING CFM AND MINIMUM OUTDOOR AIR CFM, 91°F DB / 73°F WB O.A., 75°F DB, 50% RH RA
3. AHU SHALL BE PREWIRED FOR SINGLE POINT POWER CONNECTION, INCLUDING FAN CIRCUITRY AND SEPARATE 120V LIGHT/RECEPTACLE CIRCUIT SHALL BE PROVIDED.
4. PROVIDE STAINLESS STEEL DRAIN PAN



AHU-1 DETAIL
NOT TO SCALE

MECHANICAL SCHEDULES

REVISIONS

mark	date	description
1	8/20/2015	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

BI-CTC-437

04-21-2015

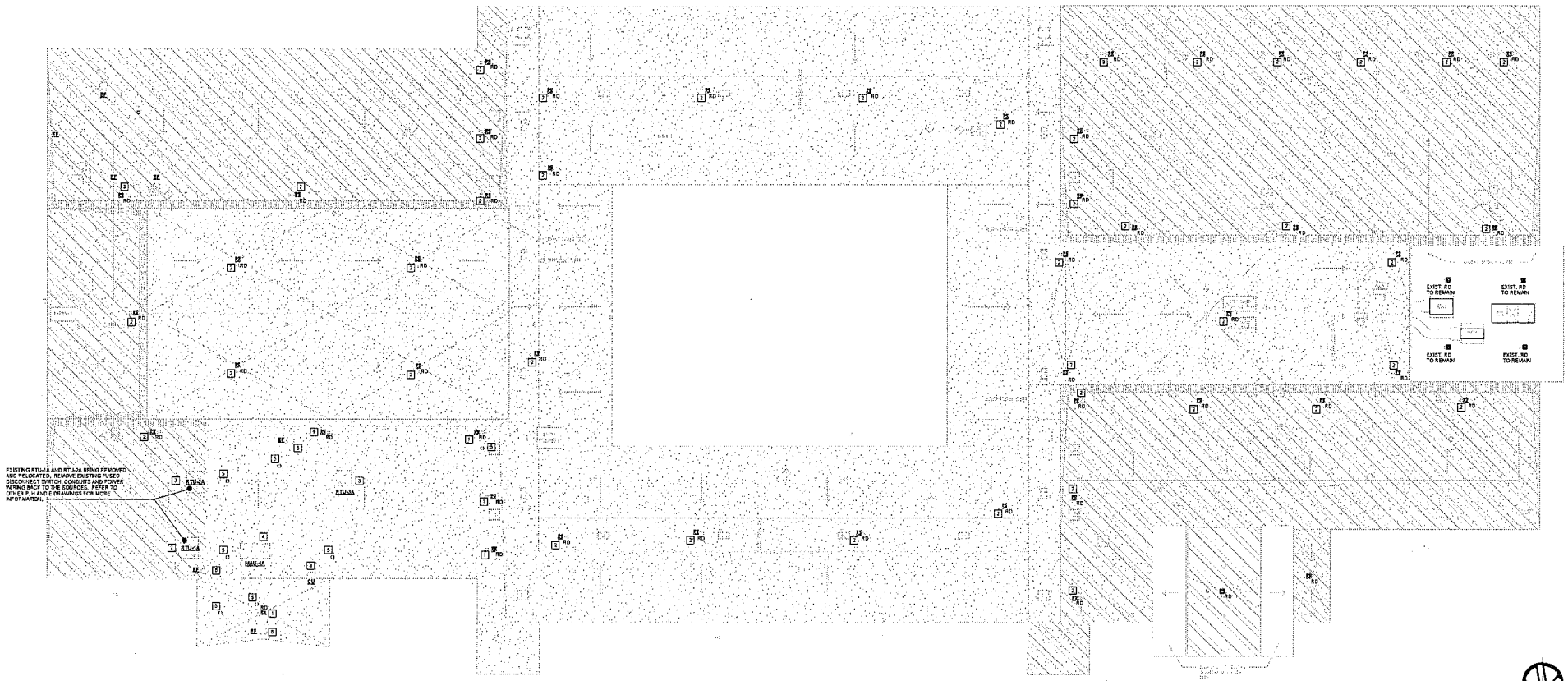
1/8" = 1'-0"

H0.301

BVH integrated services
STRUCTURAL, MECHANICAL, ELECTRICAL AND TECHNOLOGY

DEMOLITION NOTES

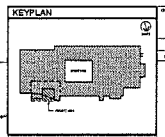
1. REMOVE EXISTING ROOF DRAIN AND ASSOCIATED RAIN WATER LEADER (RWL)
2. REMOVE EXISTING ROOF DRAIN
3. REMOVE EXISTING ROOF TOP UNIT (RTU) AND ALL ASSOCIATED DUCTWORK, PIPING, CONDUITS AND WIRING BACK TO THE SOURCE, CONTROLS AND ACCESSORIES.
4. REMOVE EXISTING MAKE-UP AIR UNIT (MAU) AND ALL ASSOCIATED DUCTWORK, PIPING, CONDUITS AND WIRING BACK TO THE SOURCE, CONTROLS AND ACCESSORIES.
5. REMOVE EXISTING 4" VENT THRU ROOF.
6. REMOVE EXISTING EXHAUST FAN AND ALL ASSOCIATED DUCTWORK, CONDUITS AND WIRING BACK TO THE SOURCE, CONTROLS AND ACCESSORIES.
7. REMOVE EXISTING ROOF TOP UNIT (RTU) AND RELOCATE TO NEW LOCATION AS SHOWN ON M2.202. CUT AND CAP ALL ASSOCIATED PIPING, CONTROLS, AND ACCESSORIES.
8. REMOVE EXISTING CONDENSING UNIT (CU) AND ALL ASSOCIATED DUCTWORK, PIPING, CONDUITS AND WIRING BACK TO THE SOURCE, CONTROLS AND ACCESSORIES.



1 OVERALL ROOF MEPT DEMOLITION PLAN
MEP2.100 1/16" = 1'-0"

GRID NORTH

KEYPLAN



Drawing title: MEP ROOF DEMOLITION PLAN

REVISIONS

mark	date	description
1	4/22/2015	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
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project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: DN-CT-0437

date: 04.20.2015
scale: 1/16" = 1'-0"
construction manager
project manager: JP
project architect
plot date/time
drawing by

MEP2.100

STATE OF CONNECTICUT
GREGORY W. PAUL
17926
LICENSED
PROFESSIONAL ENGINEER

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PLUMBING WATER SPECIALTIES SCHEDULE

GENERAL NOTE:
PROVIDE SUPPORTS, FITTINGS, ADAPTERS, ETC. AS NECESSARY TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR MISCELLANEOUS WATER SPECIALTIES AND FOR WATER SPECIALTIES EQUIVALENTS.

ITEM	SPECIALTY ITEM	DESCRIPTION	REMARKS
"WHA"	WATER HAMMER ARRESTORS	SIOUX CHIEF "HYDRA-RESTER" SEAMLESS PRESSURE CHAMBER. SPUN CLOSED COPPER TUBE PERMANENTLY SEALS A 60 PSIG. SHALL CONFORM TO ASME/ANSI STANDARDS AND PDI CERTIFIED. INSTALL PER FACTORY RECOMMENDATION. LIFETIME WARRANTY	PROVIDE AT QUICK CLOSING VALVES
"RPZ"	BACKFLOW PREVENTER (KITCHEN EQUIP)	WATTS #909QT-S, REDUCED PRESSURE BACKFLOW PREVENTER, ALL BRONZE BODY CONSTRUCTION WITH STRAINER & QUARTER TURN BALL VALVES, #909AG FIXED AIR GAP.	USE REQUIRED BY KITCHEN SETUP COORDINATION
"PRV"	PRESSURE REDUCING VALVE (KITCHEN EQUIP)	WATTS #5223-B-S, BRONZE BODY CONSTRUCTION, BUILT-IN BY-PASS, STRAINER WITH STAINLESS STEEL SCREEN, SENSITIVE ADJUSTMENT SPRING. PROVIDE 160 LB. GAUGE AND ISOLATION VALVES ON BOTH SIDES OF THE VALVE.	USE REQUIRED BY KITCHEN SETUP COORDINATION
"WH"	WALL HYDRANT (RECESSED)	J.R. SMITH #5509QT-NB, NICKEL BRONZE BOX, BRONZE NICKEL PLATED NONFREEZE QUARTER TURN WALL HYDRANT WITH INTEGRAL VACUUM BREAKER, 3/4"HOSE CONNECTION AND "T" HANDLE KEY.	SEE ARCHITECTURAL PLANS FOR WALL THICKNESS
"HB"	HOSE BIBB	WOODFORD #24P, CHROME FINISHED CONSTRUCTION WALL FAUCET WITH VACUUM BREAKER - BACKFLOW PREVENTER, 3/4"HOSE CONNECTION AND WHEEL HANDLE.	
"TMV-1"	TEMPERATURE MIXING VALVE	SYMMONS "MAX LINE" #7-225-CK-MS, THERMOSTATIC MIXING VALVE W/ 1/2" NPT CONNECTIONS AND CHECKS ON INLETS.	USE AT ALL LAVATORIES AND LOUNGE SINKS
"TP-1"	TRAP PRIMER (FLOW ACTIVATED)	PPP, INC., PRO1-500 "PRIME-PRO" TRAP PRIMER VALVE, MOUNT ABOVE CEILING ON 1/2" COLD WATER SUPPLY LINE TO FIXTURE.	

PLUMBING DRAINAGE SPECIALTIES SCHEDULE

GENERAL NOTE:
PROVIDE SUPPORTS, TRAPS, ADAPTERS, ETC. AND NECESSARY FITTINGS TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR MISCELLANEOUS DRAINAGE SPECIALTIES AND FOR DRAINAGE SPECIALTIES ITEMS EQUIVALENTS.

ITEM	SPECIALTY ITEM	DESCRIPTION	REMARKS
WALL	CLEANOUT (ROUND)	J.R. SMITH #4720-U, CHROME-PLATED BRONZE ROUND FRAME AND SECURED COVER, VANDAL PROOF SCREWS.	
FLOOR (CO)	CLEANOUT (ROUND)	J.R. SMITH #4032L-U, CAST IRON CLEANOUT, WITH ROUND ADJUSTABLE NICKEL-BRONZE TOP AND BRONZE PLUG, VANDAL PROOF TOP.	PROVIDE "Y" CARPET MARKER FOR CARPETED AREAS
"RD"	ROOF DRAIN - REPLACEMENT FOR EXISTING	J.R. SMITH #1310Y-R-C-CID, CAST IRON BODY ROOF DRAIN WITH COMBINATION FLASHING CLAMP AND GRAVEL STOP, CAST IRON DOME, SUMP RECEIVER AND UNDER DECK CLAMP.	EXISTING ROOF AREAS BEING REPLACED WITH NEW ROOFING
"RD1"	COMBINATION ROOF DRAIN (BI-FUNCTIONAL)	J.R. SMITH #SO-1-400TY-C-R, CAST IRON BODY WITH SIDE OUTLET DRAIN CONNECTION AND BOTTOM OUTLET OVERFLOW CONNECTION WITH STANDPIPE, COMBINED FLASHING CLAMP AND GRAVEL STOP, CAST IRON DOME, UNDERDECK CLAMP AND SUMP RECEIVER.	NEW ADDITION ROOF
"FD1"	FLOOR DRAIN	J.R. SMITH #2005Y-A-U, CAST IRON BODY WITH FLASHING COLLAR, 6"DIA. ROUND NICKEL-BRONZE ADJUSTABLE STRAINER, VANDAL PROOF SCREWS. INSTALL W/PROSET #TG3H TRAP GUARD	FINISHED FLOOR AREAS
"FD2"	FLOOR DRAIN	J.R. SMITH #2131Y-U-P, CAST IRON DEEP BODY, AND FLASHING COLLAR 12" DIA. CAST IRON BAR GRATE. VANDAL PROOF SCREWS. INSTALL W/ PROSET #TG3H TRAP GUARD	LOCATED IN MECH. ROOMS.
"FS1"	FLOOR SINK	J.R. SMITH #3150-13-U, 8"DEEP CAST IRON FLANGED RECEPTOR W/ACID RESISTANT COATED INTERIOR AND 12 1/2"SQ. NICKEL BRONZE RIM AND 3/4 SECURED GRATE. DOME BOTTOM STRAINER, VANDAL PROOF SCREWS.	LOCATED IN KITCHEN
"FD-F"	FLOOR DRAIN W/ FUNNEL	SAME AS FD1 EXCEPT WITH J.R. SMITH #3581 STRAINER MOUNTED FUNNEL. 5" DIA X 2-1/2" DIA X 4-1/4" HIGH.	LOCATED IN KITCHEN

PLUMBING FIXTURES SCHEDULE

GENERAL NOTES:
PIPE SIZES SHOWN ARE FOR SUPPLY AND DRAINAGE ONLY. PROVIDE SUPPLIES WITH SCREWDRIVER STOPS, WALL ESCUTCHEON, 17-GAUGE, SEMI-CAST "P" TRAPS WITH CLEANOUT PLUG. PLUMBING FIXTURE SUPPORTS AND NECESSARY FITTINGS TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR EQUIVALENTS.
NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING ELEVATION OF PLUMBING FIXTURES, CLEARANCE BELOW SINKS AND LAVATORIES AND OFFSET DRAIN LOCATIONS. OFFSET DRAINS SHALL BE OFFSET LEFT REAR OR OFFSET RIGHT REAR. COORDINATE WITH ARCHITECTURAL DRAWINGS. INSTALL HANDICAPPED FIXTURES PER STATE OF CT HANDICAPPED REQUIREMENTS. COORDINATE MOUNTING HEIGHTS FOR CHILDREN AND ADULT FIXTURES WITH ARCHITECTURAL DRAWINGS.

TYPE	FIXTURE	SOIL	VENT	COLD	HOT	MOUNT	DESCRIPTION	REMARKS
"A"	WATER CLOSET	4"	2"	1"	—	WALL	AMERICAN STANDARD "AFWALL" #2257.001, ELONGATED BOWL, TOP SPUD, 1.28 GPF TO 1.6 GPF SLOAN "ROYAL" #111-1.28-YO-SG FLUSH VALVE. OLSONITE #95 WHITE OPEN FRONT SEAT.	PROVIDE WITH FLOOR MOUNTED SUPPORT CARRIER
"A1"	WATER CLOSET ♿	4"	2"	1"	—	WALL	AMERICAN STANDARD "AFWALL" #2257.001, ELONGATED BOWL, TOP SPUD, 1.28 GPF to 1.6 GPF, SLOAN "ROYAL" #111-1.28-YO-SG FLUSH VALVE. OLSONITE #95 WHITE OPEN FRONT SEAT.	MOUNT FLUSH VALVE HANDLE, PER A.D.A. (ANSI STANDARD). PROVIDE WITH FLOOR MOUNTED SUPPORT CARRIER
"B"	URINAL ♿	2"	1 1/2"	3/4"	—	WALL	AMERICAN STANDARD "WASHBROOK" #6590.001 ELONGATED ~~RIM, 3/4"~~ TOP SPUD, SIPHON JET ACTION 0.125 GPF. △ SLOAN "ROYAL" #186-0.125-SG.	MOUNT FLUSH VALVE HANDLE, PER A.D.A. (ANSI STANDARD
"C"	LAVATORY ♿	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	AMERICAN STANDARD "AQUALYN #0476.028, VITREOUS CHINA, (4") CENTERS DROP IN SINK, CHICAGO FAUCETS #3300-ABCP, METERING MIXING FAUCET, VANDAL RESISTANT HANDLE, 0.5 GPM. INSTALL PER STATE OF CT AND 2010 ADAAG REQUIREMENTS.	PROVIDE TRUEBRO "SOFT-GUARD PLUS" INSULATION KIT AND TEMPERATURE MIXING VALVE (TMV-1).
"D"	SINGLE BOWL SINK (GENERAL USE)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY "LUSTERTONE" #LRAD-2521-3-5.5, 18 GAUGE, TYPE 302 STAINLESS STEEL SINK, SATIN FINISH, SELF RIMMING, SOUND DEADENED, (3) FAUCET HOLES, 25"X21"X5.5" DEEP BOWL OFF-CENTERED REAR DRAIN, #LKAD-35 STRAINER AND OFFSET TAILPIECE. ELKAY #LK-4000 DECK MOUNTED SINGLE LEVER FAUCET WITH PULLOUT SPRAY AND 3 HOLE ESCAPE PLATE. INSTALL PER STATE OF CT AND 2010 ADAAG REQUIREMENTS. PROVIDE WITH INSULATION KIT FOR PIPING BELOW SINK.	PROVIDE TRUEBRO "SOFT-GUARD PLUS" INSULATION KIT LOCATED IN STAFF LOUNGE #207
"J"	JANITOR MOP SINK	3"	1 1/2"	1/2"	1/2"	FLOOR	FIAT "MOLDED-STONE" #MSB-3624, 24"X36"X10"DEEP MOP SERVICE BASIN WITH THE FOLLOWING OPTIONS. #E-77AA-36 BUMPER GUARDS, #889CC MOP HANGER, # 832AA HOSE & BRACKET #830AA WALL FAUCET WITH VACUUM BREAKER, #MSG3624 S.S. WALL GUARD	
"EEW-1"	EMERGENCY EYEWASH	-	-	1/2"	1/2"	WALL	GUARDIAN #G5046BP, EYEWASH, FRENCH HOSE UNIT, WITH WALL MOUNTING BRACKET, 12' HOSE, BACK FLOW PREVENTER AND #G3600LF MIXING VALVE	

DRINKING FOUNTAIN SCHEDULE

GENERAL NOTES:
PIPE SIZES SHOWN ARE FOR SUPPLY AND DRAINAGE ONLY. PROVIDE SUPPLIES WITH STOPS, SEMI-CAST "P" TRAPS, PLUMBING FIXTURE SUPPORTS AND NECESSARY FITTINGS TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR EQUIVALENTS.

TYPE	FIXTURE	SOIL	VENT	COLD	HOT	MOUNT	DESCRIPTION	REMARKS
"EWC"	WATER COOLER BI-LEVEL W/ BOTTLE FILLING STATION ♿ △	1 1/2"	1 1/2"	1/2"	—	WALL PER ANSI/ADA STANDARD	△ ELKAY #LZSTL8WS, BI-LEVEL WATER COOLER WITH BOTTLE FILLING STATION, NO LEAD DESIGN, MINIMUM 40 PSI SUPPLY LINE PRESSURE REQUIRED, STAINLESS STEEL BASIN, FLEXI-GUARD ANTI-MICROBIAL SAFETY BUBBLER STREAM HEIGHT REGULATOR, PUSH BAR SHALL BE MOUNTED FRONT AND SIDES IN COMPLIANCE WITH ADA/ANSI REQUIREMENTS, RATED CAPACITY FOR 8 GPH OF 50F DRINKING WATER. 4.0 A, 120 V	REFER TO POWER PLANS FOR CIRCUITING ARRANGEMENTS. CABINET COLOR BY THE ARCHITECT

ELECTRIC WATERS HEATER SCHEDULE

TYPE	EQUIPMENT	DESCRIPTION	REMARKS
"EWH-1"	ELECTRIC WATER HEATER (TOILET ROOMS)	HUBBELL #E10-3-0-SL-RS, 10 GALLON HYDRASTONE CEMENT LINED TANK, 150 PSI WORKING PRESSURE, RATED AT 3.0 KW., HEATER SHALL BE EQUIPPED WITH (1) 3.0 KW LOWER ELEMENTS, 460V-3 PHASE. WATER HEATER SHALL INCLUDE, THERMOSTAT, HIGH LIMIT-TEMPERATURE CUTOFF, T&P RELIEF VALVE, DRAIN VALVE, INSULATION, OUTER JACKET, HEATER SHALL COMPLY WITH ASHRAE STANDARDS, UL LISTED, 5 YEAR WARRANTY.	LOCATED IN JANITOR CLOSET #112.1
"EWH-2"	ELECTRIC WATER HEATER (KITCHEN)	HUBBELL #SE 120-0-18 SL T4, 120 GALLON HYDRASTONE CEMENT LINED TANK, 150 PSI WORKING PRESSURE, RATED FOR 18.0 KW WITH 74 GPH RECOVERY RATE AT 100°F TEMPERATURE RISER, 22 AMPS AT 480 VOLT 3-PHASE 60 Hz. WATER HEATER SHALL INCLUDE THE FOLLOWING THERMOSTAT, HIGH LIMIT TEMPERATURE CUT-OFF, T&P RELIEF VALVE, DRAIN VALVE, INSULATION & OUTER JACKET, HEATER SHALL COMPLY WITH ASHRAE STANDARDS, SHALL BE U.L. LISTED & SHALL CARRY A (5) FIVE YEAR WARRANTY.	LOCATED IN MECHANICAL ROOM #207.1

GREASE INTERCEPTOR SCHEDULE

TYPE	EQUIPMENT	DESCRIPTION	REMARKS
"AGRU-1"	AUTOMATIC GREASE REMOVAL UNIT	HIGHLAND TANK MODEL #AGI-35 "GREASE STOPPER" AUTOMATIC GREASE INTERCEPTOR. UNIT SHALL BE RATED FOR 35 GPM WITH A STATIC WATER CAPACITY OF 44 GALLONS & A 235 LBS. GREASE HOLDING CAPACITY, 3" INLET & 3" OUTLET, INTERNAL FLOW CONTROL, REMOVABLE S.S. SCREEN BASKETS FOR SOLIDS SEPARATION, ELECT. POWERED, DIRECT DRIVE GREASE SKIMMER, VAPOR-TIGHT LID WITH GASKETS, 5 GALLON GREASE CONTAINER, 115 VOLT-1 PHASE-60 Hz.	LOCATED IN FOOD PREP #115

BVH integrated services
50 Griffin Road South, Bloomfield, CT 06002
STRUCTURAL, MECHANICAL, ELECTRICAL, AND TECHNOLOGY

STATE OF CONNECTICUT ★ GREGORY H. VAN DEUSEN ★ No. 17826 ★ LICENSED PROFESSIONAL ENGINEER

drawing title	PLUMBING SCHEDULES

REVISIONS

mark	date	description
1	8/20/2015	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing prepared by:
TECTON ARCHITECTS
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HARTFORD, CT 06106

project:
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE
170 ELM STREET
ENFIELD, CT

project number: BI-CTC-437

date: 04-21-2015
scale: N.T.S.

drawing no.: P0.301

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TECHNOLOGY GENERAL NOTES

GENERAL

1. THE PROJECT DRAWINGS AND SPECIFICATIONS ARE BASED ON THE CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI) DOCUMENTATION FORMAT. SPECIFICATION AND DRAWING CONTENTS ARE ARRANGED BY TOPIC AND CATEGORY AND ARE NOT INTENDED TO AWARD DIVISION OF WORK.
2. THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED FIRE PROTECTION, PLUMBING, HVAC, ELECTRICAL AND SPECIAL SYSTEMS SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL, TESTED, ADJUSTED, CALIBRATED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
3. THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
4. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST.
5. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF VARIOUS EQUIPMENT. ALL SUCH EQUIPMENT AND EQUIPMENT COLORS AND FINISHES SHALL BE COORDINATED WITH THE ARCHITECT. MOUNTING HEIGHTS SHALL BE APPROVED BY THE ARCHITECT.
6. PERFORM ALL WORK IN COMPLIANCE WITH THE SPECIFICATIONS, APPLICABLE CODES, ORDINANCES AND THE REGULATORY AGENCIES HAVING JURISDICTION. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
7. INSTALL ALL EQUIPMENT IN ACCESSIBLE LOCATIONS. WHERE EQUIPMENT MUST BE INSTALLED ABOVE AN INACCESSIBLE CEILING OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED AND THE LOCATION SHALL BE COORDINATED WITH THE ARCHITECT.
8. COORDINATE PIPING AND CONDUITS ENTERING OR LEAVING THE BUILDING WITH THE SITE CONTRACTOR(S) BEFORE INSTALLATION. COORDINATE INVERTS WITH THE STRUCTURE AND SYSTEM REQUIREMENTS PRIOR TO INSTALLATION.
9. WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
10. BEFORE INSTALLATION, COORDINATE THE WORK WITH OWNER-FURNISHED EQUIPMENT, INCLUDING REQUIRED SERVICE CONNECTIONS, FACTORY START UPS AND INSTALLATION OF FIELD DEVICES.
11. PROVIDE THE REQUIRED/SPECIFIED SLEEVES AND SEALS FOR PIPES OR CONDUIT PENETRATING INTERIOR AND EXTERIOR WALLS OR FLOOR SLABS.
12. INSTALL FLOOR-MOUNTED EQUIPMENT ON A CONCRETE HOUSEKEEPING PAD.
13. SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT ON THE FINDINGS.
14. PROVIDE MEP COORDINATION DRAWINGS AS REQUIRED BY THE SPECIFICATIONS.
15. ENCLOSED CONTROLLERS SHALL BE PROVIDED BY THE CONTRACTOR PROVIDING THE EQUIPMENT REQUIRING AN ENCLOSED CONTROLLER. REQUIREMENTS ARE SPECIFIED UNDER DIVISION 26: "ENCLOSED CONTROLLERS". MOTOR EFFICIENCIES SHALL BE AS INDICATED IN THE SPECIFICATIONS.
16. PROVIDE PIPING, DUCTWORK, CONDUIT AND ALL OTHER ACCESSORIES AS REQUIRED FOR PROPER AND PROFESSIONAL SYSTEMS INSTALLATION.
17. TEST AND BALANCE ALL MECHANICAL AND ELECTRICAL SYSTEMS. PROVIDE ADDITIONAL TESTS AS REQUIRED BY THE SPECIFICATIONS.
18. DO NOT INSTALL PIPING OR DUCTWORK OVER ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, ELEVATOR MACHINE ROOMS OR SHAFTS.
19. DO NOT INSTALL ANY SYSTEMS IN OR THROUGH ELEVATOR MACHINE ROOMS THAT DO NOT SERVE THE ROOM. MAINTAIN A MINIMUM OF SEVEN (7) FOOT HEAD CLEARANCE IN THE ELEVATOR MACHINE ROOM.
20. DO NOT INSTALL IN STAIRWELL OR STAIRWELL WALLS, PIPING, DUCTWORK, CONDUIT OR OTHER DEVICES OR EQUIPMENT NOT ASSOCIATED WITH OR SERVING THE RESPECTIVE STAIR.
21. PROVIDE PIPE EXPANSION COMPENSATION FOR THE VARIOUS PIPING SYSTEMS. SUBMIT ENGINEERED DETAILS FOR APPROVAL AND VERIFY INSTALLATION IS IN ACCORDANCE WITH CODE. THE CONTRACTOR'S CONSULTING ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT OF THE FINDINGS.
22. PROVIDE ADDITIONAL TRANSITIONS AND OFFSETS IN ALL PIPING, DUCTWORK OR CONDUIT FOR COORDINATION WITH BUILDING STRUCTURE AND CONSTRUCTION.
23. NO MECHANICAL OR ELECTRICAL SYSTEM COMPONENTS MAY BE SUPPORTED FROM STRUCTURAL BRACED FRAMES.

RENOVATION

1. THIS PROJECT INVOLVES THE RENOVATION OF AN EXISTING FACILITY; BEFORE SUBMITTING THE BID, CONTRACTORS SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS UNDER WHICH THE PROJECT IS TO BE COMPLETED.
2. CONTRACTORS SHALL BE HELD RESPONSIBLE FOR ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS.
3. IT IS NOT THE INTENT OF THESE DOCUMENTS TO SHOW EVERY DEVICE, APPURTENANCE, PIPE, WIRE OR CONDUIT TO BE REMOVED. MEP EQUIPMENT, UNITS, AND SYSTEMS NOT BEING REUSED, SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ASSOCIATED HANGERS, SUPPORTS, BASES, PADS, PIPES, DUCTS, CONDUITS, WIRES, INSULATION, AND CONTROLS BACK TO THE POINT OF ORIGIN.
4. EQUIPMENT, PIPING, OR CONDUIT SHALL NOT BE ABANDONED IN-PLACE UNLESS SPECIFICALLY SO NOTED.
5. PROPERLY DISPOSE OF DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES, REGULATIONS, AND DEEP STANDARDS. TURN OVER TO THE OWNER EQUIPMENT SO INDICATED.
6. RELOCATE EXISTING EQUIPMENT, DEVICES, PIPING, WIRING, AND RELATED SYSTEMS AS REQUIRED FOR CONSTRUCTION PURPOSES. ALL EXISTING SYSTEMS SHALL BE FULLY OPERATIONAL, INCLUDING RECONNECTION TO SERVICES AND UPGRADED SYSTEMS. ALL RELOCATED EQUIPMENT SHALL BE PROTECTED DURING CONSTRUCTION.
7. PROVIDE TEMPORARY CONNECTIONS AND SYSTEM MODIFICATIONS AS REQUIRED FOR CONSTRUCTION AND PHASING PURPOSES.
8. INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHEN NECESSARY. COORDINATE WITH GENERAL CONTRACTOR/CONSTRUCTION MANAGER FOR PHASING REQUIREMENTS.
9. ALL EXISTING EQUIPMENT, FIXTURES, AND DEVICES TO BE REMOVED AND RELOCATED SHALL BE FIELD VERIFIED FOR EXACT QUANTITY AND CONDITION. KEEP AN ACCURATE RECORD OF STORED EQUIPMENT AND ITS CONDITION.
10. REBALANCE NEW AND EXISTING MECHANICAL AND ELECTRICAL SYSTEMS ASSOCIATED WITH THE RENOVATION, INCLUDING RENOVATED AREAS AND AREAS AFFECTED BY SYSTEM MODIFICATIONS.
11. SYSTEMS REQUIRING TO REMAIN IN OPERATION DURING DEMOLITION SHALL BE CAREFULLY PROTECTED FROM DAMAGE AND CONTAMINATION BY THE CONSTRUCTION PROCESS.

TECHNOLOGY

1. COORDINATE WITH CONSTRUCTION MANAGER, OTHER TRADES AND THE OWNER DURING ALL PHASES. ALL COMMUNICATIONS MUST BE MAINTAINED AT ALL TIMES UNLESS PHASING REQUIRES OTHERWISE. INTERRUPTIONS AND SHUTDOWNS SHALL BE SCHEDULED IN ADVANCE AND APPROVED FOR TIME TO COMPLETE WORK. TAG CABLES TO REMAIN DURING ALL PHASES TO PROPERLY KEEP THE TELECOMMUNICATIONS ACTIVE. UPON COMPLETION OF CONSTRUCTION, ANY CABLES THAT ARE NOT ACTIVE OR TAGGED TO REMAIN FOR FUTURE USE SHALL BE REMOVED PER THE NEC.
2. BEFORE CONSTRUCTION CAN BEGIN IN ANY TELECOMMUNICATIONS ROOM (TR) OR TELECOMMUNICATIONS EQUIPMENT ROOM (ER) THE CONTRACTOR SHALL COORDINATE LAYOUT LOCATIONS AND CLEARANCES OF ALL EQUIPMENT WITH THE TECHNOLOGY OWNER TO APPROVE THE INSTALLATIONS AND ANY FUTURE SPACE.
3. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF EQUIPMENT. ALL SUCH EQUIPMENT AND COLORS SHALL BE COORDINATED WITH THE ARCHITECT, CONTACT ARCHITECT FOR ANY CLARIFICATION.
4. REFER TO REFLECTED CEILING PLANS FOR FLUSH MOUNTED CEILING DEVICES.
5. PROVIDE SEPARATION BETWEEN RACEWAY, CABLES AND OTHER SOURCES (EMI) PER ANSI/TIA-569-B.
6. ELBOW RADIUS FOR RACEWAYS SMALLER THAN 2" TO BE (6) SIX TIMES THE RACEWAY DIAMETER. ELBOW RADIUS FOR CONDUITS 2" OR LARGER TO BE (10) TEN TIMES THE RACEWAY DIAMETER.
7. ALL EMPTY RACEWAYS SHALL BE PROVIDED WITH A (PLENUM RATED, IF PLENUM CEILING SPACE) NYLON PULL CORD.
8. COORDINATE PROPER METHODS FOR PENETRATIONS WITH FIRESTOPPING AS REQUIRED THROUGH FIRE/SMOKE RATED CONSTRUCTION PER DIVISION 07 SPECIFICATIONS.
9. NO PENETRATIONS ARE PERMITTED INTO ANY STAIRWELLS EXCEPT FOR SYSTEMS SERVING THAT STAIRWELL.
10. CONDUITS AND CABLING FOR SERVICE ENTRANCE SHALL BE PROVIDED PER SITE UTILITY DRAWINGS, TECHNOLOGY/ELECTRICAL POWER DRAWINGS AND DIVISION 28 SPECIFICATIONS. COORDINATE LOCATION OF DEMARCATION POINT.
11. LADDER RACKS, CONDUITS, D-RINGS, ETC. FOR CABLE SUPPORT IN ANY TELECOMMUNICATIONS ROOM (TR) OR TELECOMMUNICATIONS EQUIPMENT ROOM (ER) SHALL BE PROVIDED PER PLANS AND DIVISION 28 SPECIFICATIONS.
12. CONDUITS, SLEEVES AND J-HOOKS FOR FIBER BACKBONE CABLING AND OTHER BACKBONE CABLING SHALL BE PROVIDED PER DIVISION 28 SPECIFICATIONS.
13. SURFACE MOUNTED RACEWAYS, CONDUITS, SLEEVES AND J-HOOKS FOR HORIZONTAL CABLING FROM COMMUNICATIONS EQUIPMENT ROOM TO THE TELECOMMUNICATIONS OUTLETS/CONNECTORS SHALL BE PROVIDED PER DIVISION 28 SPECIFICATIONS.
14. COORDINATE THE INSTALLATION OF ALL CABLE TRAYS, SURFACE MOUNTED RACEWAYS, CONDUITS, SLEEVES AND J-HOOKS PER DIVISION 28 SPECIFICATIONS.
15. COORDINATE OUTLET INSTALLATIONS, WALL: RECESSED OR SURFACE; CEILING; FLOOR: SLEEVE OR INFLOOR SYSTEM; UTILITY COLUMN, PER TECHNOLOGY/ELECTRICAL POWER DRAWINGS AND DIVISION 28 SPECIFICATIONS.
16. COORDINATE WITH CONSTRUCTION MANAGER, OWNER AND DIVISION 16/28 FOR TELEPHONE LINE CONNECTION TERMINATION FROM THE TELECOMMUNICATIONS EQUIPMENT ROOM (ER) TO THE FIRE ALARM CONTROL PANEL.

MEPT ABBREVIATIONS

A	GENERAL SERVICE COMPRESSED AIR
a	48" ABOVE FINISHED FLOOR
A/AMP	AMPERE
AC	ALTERNATING CURRENT
AD	ACCESS DOOR
AF	ARC FAULT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPS INTERRUPTING CURRENT
AMB	AMBIENT
ANN	ANNUNCIATOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AVG	AVERAGE
AWG	AMERICAN WIRE GAUGE
b	42" ABOVE FINISHED FLOOR
BCT	BONDING CONDUCTOR FOR TELECOMMUNICATIONS
BHP	BRAKE HORSEPOWER
BICSI	BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL
BNC	BAYONET NEIL-CONCELMAN
BSMT	BASEMENT
BTU	BRITISH THERMAL UNITS
C	CONDUIT(S)
C/B	CIRCUIT BREAKER
CAT	CATEGORY ETHERNET CABLE
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CKT	CIRCUIT
CLG	CEILING
CO	CLEANOUT
CO2	CARBON DIOXIDE
COAX	COAXIAL CABLING
COMP	COMPRESSOR
COND	CONDENSER
CONV	CONVECTOR
COP	COPPER CABLING
CPU	CENTRAL PROCESSING UNIT
CRU	COMPUTER ROOM UNIT
CRV	CENTRIFUGAL ROOF VENTILATOR
CT	CABLE TRAY
CT	COOLING TOWER
CT	CURRENT TRANSFORMER
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CV	CONSTANT VOLUME
CVP	CEILING VIDEO PRESENTATION
D	DATA
D	DEPTH
DA	DISTRIBUTOR A
DB	DISTRIBUTOR B
dB	DECIBEL
DC	DIRECT CURRENT
DC	DISTRIBUTOR C
DEG or °	DEGREE
DEMARC	DEMARCATION
DIA or Ø	DIAMETER
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EF	ENTRANCE FACILITY
EFF	EFFICIENCY
EHC	ELECTRICAL HEATING CABLES
EIA	ELECTRONICS INDUSTRIES ALLIANCE
ELEC	ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMI	ELECTROMAGNETIC INTERFERENCE
EMT	ELECTRICAL METALLIC TUBING
ER	EQUIPMENT ROOM
ESP	EXTERNAL STATIC PRESSURE
ETP	ELECTRIC TRAP PRIMER
EUH	ELECTRIC UNIT HEATER
EXH	EXHAUST
EXP	EXPANSION

MEPT ABBREVIATIONS

F	FAHRENHEIT
FA	FIRE ALARM
FC	FOOT CANDLE
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FD	FLOOR DRAIN
F	FIBER
FDC	FIRE DEPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
FM	FLOW METER
FMC	FLEXIBLE METALLIC TUBING
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FP	FIRE PUMP
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FOOT OR FEET
FVC	FIRE VALVE CABINET
G	GAS
GA	GAUGE
GE	GROUNDING EQUALIZER
GEC	GROUNDING ELECTRODE CONDUCTOR
GF	GROUND FAULT
GND	GROUND
GR	GRAINS
H	HEIGHT
H/C	HEATING/COOLING
HC	HORIZONTAL CROSS-CONNECT
HD	HEAD
HDCP	HANDICAP
HP	HORSEPOWER
HR	HOUR(S)
HT	HEAT
HV	HEATING/VENTILATION UNIT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HZ	FREQUENCY (CYCLES PER SECOND)
IC	INTERMEDIATE CROSS-CONNECT
ID	INSIDE DIAMETER
IG	ISOLATED GROUND
IN	INCHES
JB	JUNCTION BOX
KVA	KILOVOLT AMPERE
KW	KILOWATT
L	LENGTH
L&S	LOCAL SOUND SPEAKER
LAN	LOCAL AREA NETWORK
LAV	LAVATORY
LF	LINEAR FEET
LIQ	LIQUID
LVP	LOW VIDEO PRESENTATION
MA	MILLIAMPERE
MA	MIXED AIR
MAGP	MASTER ALARM GAS PANEL
MAX	MAXIMUM
MC	MAIN CROSS-CONNECT
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MM	MULTI-MODE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT WALK-THRU
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
OF	OPTICAL FIBER
P	POLE
PA	PUBLIC ADDRESS
PBX	PRIVATE BRANCH EXCHANGE
PE	PRIMARY ELECTRIC SERVICE
PF	POWER FACTOR

MEPT ABBREVIATIONS

PH / Ø	PHASE
PIV	POST INDICATOR VALVE
PNL	PANELBOARD
POE	POWER OVER ETHERNET
PP	PATCH PANEL
PR	PAIR
PRESS	PRESSURE
PT	POTENTIAL TRANSFORMER
QTY	QUANTITY
RE	EXISTING EQUIPMENT TO BE DISCONNECTED AND REMOVED
REG	REGISTER
RGS	RIGID GALVANIZED STEEL CONDUIT
RH	RELATIVE HUMIDITY
RL	EXISTING EQUIPMENT TO BE DISCONNECTED, REMOVED AND RELOCATED
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RU	RACK UNIT
S	SLEEVE(S)
S&R	SUPPLY AND RETURN
SE	SECONDARY ELECTRIC SERVICE
SM	SINGLE-MODE
SP	STANDPIPE
SP	STATIC PRESSURE
SPDT	SINGLE POLE DOUBLE THROW
SPEC	SPECIFICATION
SPST	SINGLE POLE SINGLE THROW
SQ	SQUARE
SS	STAINLESS STEEL
ST	STORM
STD	STANDARD
STP	SHIELDED TWISTED PAIR
SW	SWITCH
SWBD	SWITCHBOARD
TSTAT	THERMOSTAT
TAG	IDENTIFICATION OF EQUIPMENT
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TD	TEMPERATURE DIFFERENCE
TE	TELECOMMUNICATIONS ENCLOSURE
TEBC	TELECOMMUNICATIONS EQUIPMENT BONDING CONDUCTOR
TEL	TELECOMMUNICATIONS SERVICE
TEMP	TEMPERATURE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TIA	TELECOMMUNICATIONS INDUSTRY ASSOCIATION
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TP	TAMPERPROOF
TR	TELECOMMUNICATIONS ROOM
TS	TELEPHONE SERVICE
TSP	TOTAL STATIC PRESSURE
TV	TELEVISION
TVS	TRANSIENT VOLTAGE SUPPRESSOR
TX	TRANSFORMER
TYP	TYPICAL
UF	UNFUSED
UH	UNIT HEATER
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
V	VENT
V	VOICE
V	VOLTAGE
VA	VOLT AMPERE
VEL	VELOCITY
VFC	VARIABLE FREQUENCY CONTROLLER
VIF	VERIFY IN FIELD
VOIP	VOICE OVER INTERNET PROTOCOL
VOL	VOLUME
W	WALL TELEPHONE
W	WATT
WAO	WORK AREA OUTLET
WAP	WIRELESS ACCESS POINT
WG	WIREGUARD
WI	WIDTH
WP	WEATHERPROOF
WTR	WATER
WWM	WELDED WIRE MESH

CODES LISTED BELOW APPLY TO ALL DRAWINGS AND SPECIFICATIONS ON THIS PROJECT

- 2005 CONNECTICUT STATE BUILDING CODE WITH 2009, 2011 AND 2013 AMMENDMENTS
- 2005 CONNECTICUT STATE FIRE SAFETY CODE WITH 2009 AMMENDMENTS
- THE FOLLOWING AS REFERENCED BY THE ABOVE CODES AND AMENDMENTS:
  - 2003 INTERNATIONAL BUILDING CODE (IBC)
  - 2003 INTERNATIONAL EXISTING BUILDING CODE
  - NFPA 70 - NATIONAL ELECTRICAL CODE (NEC), 2011
  - NFPA 72 - NATIONAL FIRE ALARM CODE, 2011

GENERAL SYMBOLS

Symbol	Description
(thick dark solid line)	THICK, DARK SOLID LINES INDICATE NEW OR RELOCATED ITEMS OR NEW RACEWAY AND WIRING
(thin light line)	THIN, LIGHT LINES INDICATE EXISTING ITEMS OR RACEWAY TO REMAIN IN PLACE AND BE REUSED
(thick dashed line)	THICK, DASHED LINES INDICATE EXISTING ITEMS TO BE REMOVED
(point of connection)	POINT OF NEW TO EXISTING CONNECTION, INCLUDING TRANSITIONS
EX	SUB LETTERS "EX" INDICATES EXISTING EQUIPMENT TO REMAIN INTACT
RE	SUB LETTER "RE" INDICATES EXISTING EQUIPMENT TO BE DISCONNECTED AND REMOVED
RL	SUB LETTER "RL" INDICATES EXISTING EQUIPMENT TO BE DISCONNECTED, REMOVED AND RELOCATED
NL	SUB LETTER "NL" INDICATES NEW LOCATION OF RELOCATED EQUIPMENT
NR	SUB LETTER "NR" INDICATES NEW EQUIPMENT TO REPLACE EXISTING
RR	SUB LETTER "RR" INDICATES REMOVE EQUIPMENT AND REPLACE ON NEW SURFACE
*	* = a, b, dg, AF, OF ID OR TP, WHEN TAGGED IN THE ELECTRICAL SYMBOL LIST, REFER TO THE ABBREVIATION LIST

COMMUNICATIONS SYMBOLS

Symbol	Description
X	VOICE OUTLET(S); REFER TO ABBREVIATIONS (X)
X/X	DATA AND VOICE OUTLET(S); REFER TO ABBREVIATIONS (X)
X	DATA OUTLET(S); REFER TO ABBREVIATIONS (X)
X/X	SPECIALTY OUTLET(S); REFER TO ABBREVIATIONS (X)
WAP	WIRELESS ACCESS POINT
TV	TELEVISION DATA OUTLET
FB-X	FLOOR SERVICE FITTING WITH OUTLET(S); REFER TO SCHEDULE (X)
PT-X	POKE-THRU ASSEMBLY WITH OUTLET(S); REFER TO SCHEDULE (X)
TP-X	TELEPOWER POLE WITH OUTLET(S); REFER TO SCHEDULE (X)
CB-X	CEILING BOX ASSEMBLY WITH OUTLET(S); REFER TO SCHEDULE (X)
TB-X	TABLE BOX WITH OUTLET(S); REFER TO SCHEDULE (X)
(solid bar)	DIGITAL SIGNAGE DISPLAY (BY OTHERS)
S X	BACK BOX AND CONDUIT FOR CEILING OR WALL-MOUNTED SPEAKER (SPEAKERS BY OTHERS). REFER TO ABBREVIATIONS (X)
M	FLOOR OR WALL-MOUNTED SOUND SYSTEM MICROPHONE
C	BATTERY OPPERATED CLOCK.
(line with open circle)	RACEWAY UP
(line with dot)	RACEWAY DOWN

SECURITY SYMBOLS

ACCESS CONTROL

Symbol	Description
DO	DOOR OPERATOR
PP	PUSH PLATE
ML	MAGNETIC DOOR LOCK
ES	ELECTRONIC DOOR STRIKE
ELR	ELECTRONIC DOOR LATCH RETRACTION
CR	CARD READER
REX	REQUEST TO EXIT
EH	ELECTRONIC DOOR HARDWARE

INTRUSION DETECTION

Symbol	Description
AS	AUDIBLE SIREN/HORN
IDP	INTRUSION DETECTION PANEL
GB	GLASS BREAK ALARM
KP	KEYPAD
●	DOOR CONTACT SWITCH
M	MOTION DETECTOR
SD	SOUND DETECTOR
DA	BACK BOX AND CONDUIT FOR FURTURE DURESS ALARM

SURVEILLANCE

Symbol	Description
(camera)	BACK BOX AND CONDUIT FOR FUTURE VIDEO SURVEILLENCE CAMERA
VM	VIDEO MONITOR
NVR	NETWORK VIDEO RECORDER
DVR	DIGITAL VIDEO RECORDER

RISER DIAGRAM SYMBOLS

Symbol	Description
(line)	BACKBONE COAX CABLING
(line)	BACKBONE FIBER CABLING
(dashed line)	BACKBONE UTP COPPER CABLING
(line)	HORIZONTAL COAX CABLING
(dotted line)	HORIZONTAL UTP COPPER CABLING
(box with X)	CROSS-CONNECT
XXX X	EQUIPMENT RACK

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STRUCTURAL, MECHANICAL, ELECTRICAL AND TECHNOLOGY

STATE OF CONNECTICUT, PROFESSIONAL ENGINEER, GREGORY H. VAN [illegible], No. 17926, LICENSED

drawing title: TECHNOLOGY GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS

REVISIONS

mark	date	description
1	8/20/2015	ADDENDUM 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

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project: CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE
170 ELM STREET
ENFIELD, CT

project number: BI-CTC-437

date: 06-21-2015
scale: 1/8" = 1'-0"

T0.101

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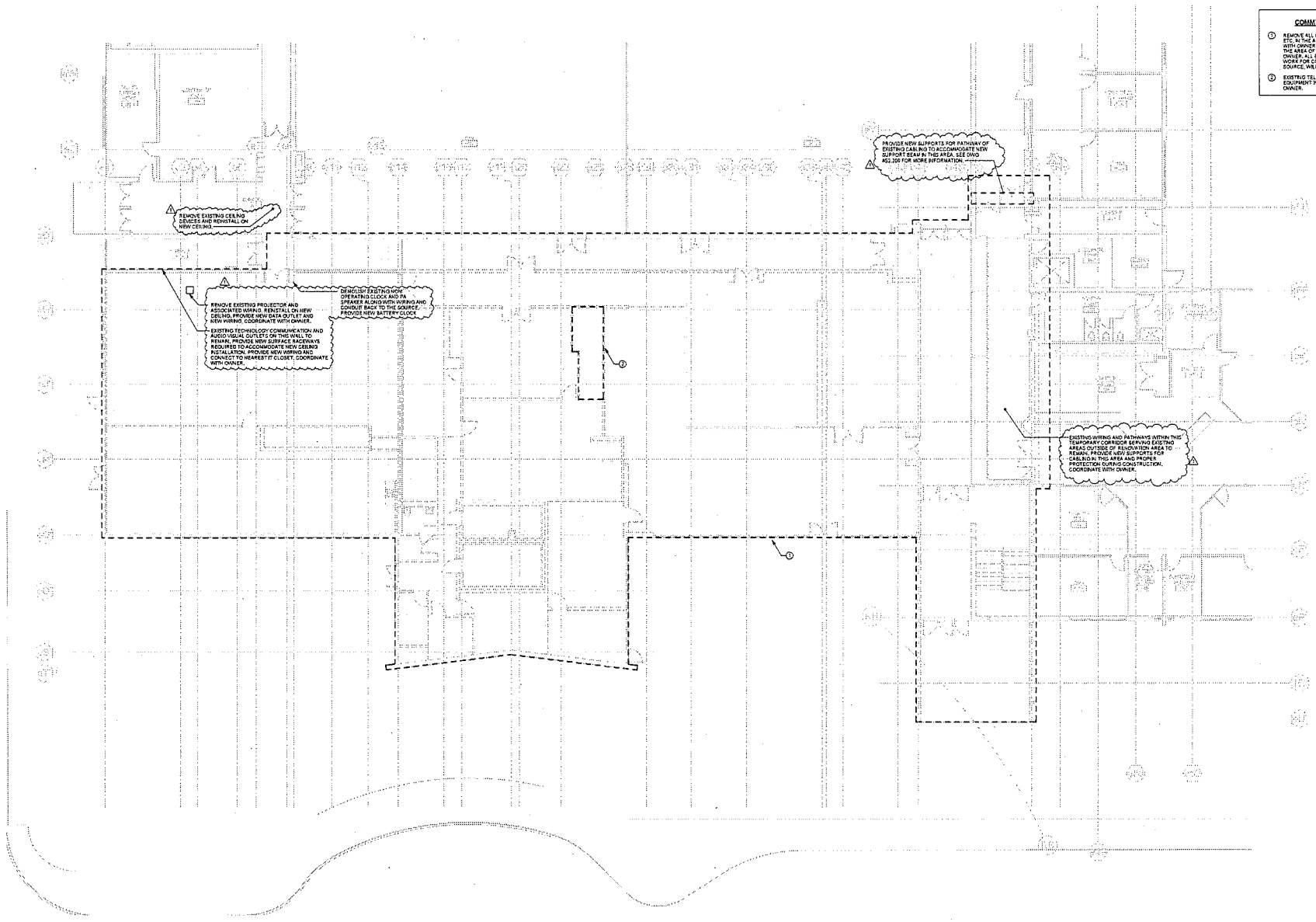
COMMUNICATIONS/SECURITY DRAWING NOTE

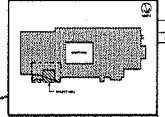
1. REMOVE ALL EXISTING LOW VOLTAGE PATHWAYS, BACK BOXES/SUPPORTS, ETC. IN THE AREA OF WORK, UNLESS OTHERWISE INDICATED. COORDINATE WITH OWNER "IT" FOR ANY PATHWAYS AND WIRING CONTINUING OUTSIDE OF THE AREA OF WORK, WHICH ARE TO REMAIN OR BE RELOCATED BY THE OWNER. ALL EXISTING LOW VOLTAGE CABLING CONNECTED TO IN THE AREA OF WORK FOR COMMUNICATIONS AND SECURITY, WIRED BACK TO THE MAIN SOURCE, WILL BE REMOVED BY OWNER, UNLESS OTHERWISE NOTED.
2. EXISTING TELECOMMUNICATIONS SPACE, ANY PASSIVE AND ACTIVE EQUIPMENT IN THIS SPACE SHALL BE REMOVED AND RELOCATED BY THE "IT" OWNER.



1 (T2.101) FIRST FLOOR TECHNOLOGY - DEMOLITION PLAN
1/8" = 1'-0"

GRID NORTH

KEYPLAN



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170 ELM STREET
ENFIELD, CT

DRAWING TITLE: FIRST FLOOR TECHNOLOGY DEMOLITION PLAN

REVISIONS

mark	date	description
1	6/22/2015	ADDENDUM 4

DATE: 06-22-2015
SCALE: 1/8" = 1'-0"
DRAWING NO.: T2.101

BK-CTC-437

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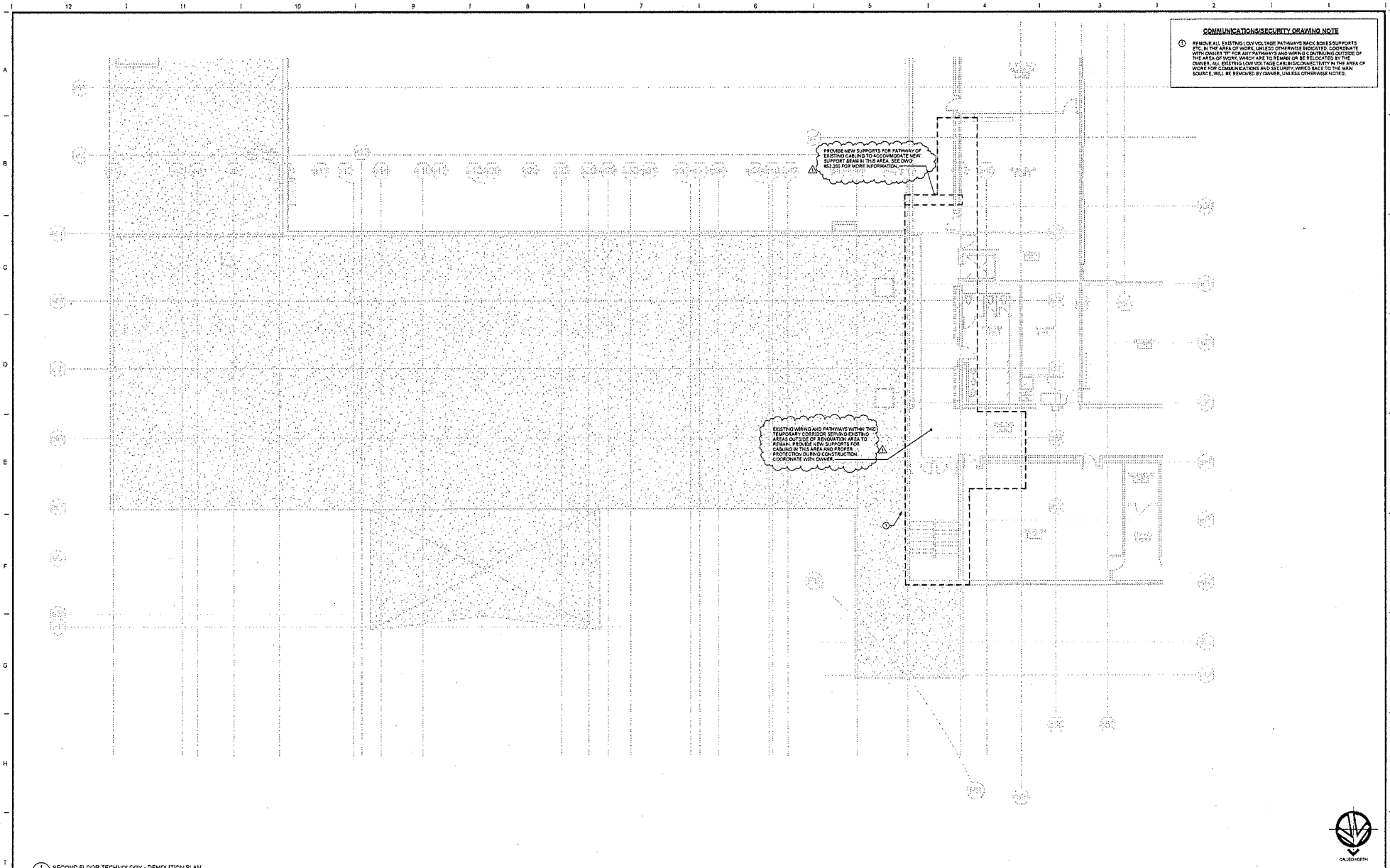

COMMUNICATIONS/SECURITY DRAWING NOTE

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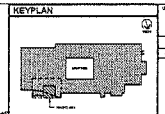
1 (T2.102) SECOND FLOOR TECHNOLOGY - DEMOLITION PLAN
1/8" = 1'-0"

KEYPLAN



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SECOND FLOOR TECHNOLOGY DEMOLITION PLAN

REVISIONS

mark	date	description
1	9/22/2015	ADDEDUM # 4

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

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project
CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

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ENFIELD, CT

project number
06-21C-437

date: 06-23-2015
scale: 1/8" = 1'-0"
project manager: P
project architect:
project engineer:
drawing no.: T2.102

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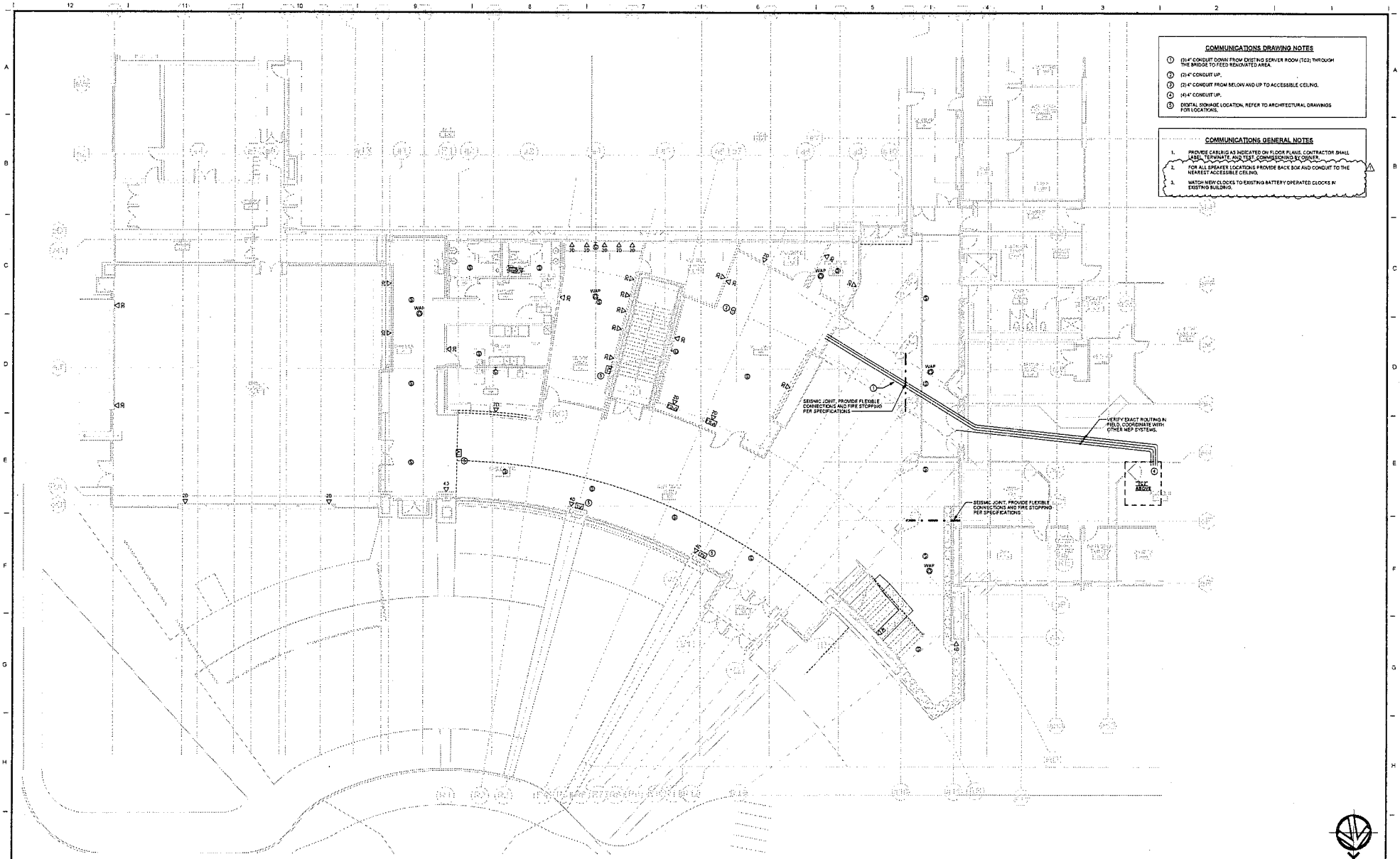


1 FIRST FLOOR TECHNOLOGY COMMUNICATIONS - CONSTRUCTION PLAN
TC2.201 1/8" = 1'-0"

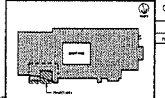
COMMUNICATIONS DRAWING NOTES

1. (3) 4" CONDUIT DOWN FROM EXISTING SERVER ROOM (TC2) THROUGH THE BRIDGE TO FEED RENOVATED AREA.
2. (2) 4" CONDUIT UP.
3. (2) 4" CONDUIT FROM BELOW AND UP TO ACCESSIBLE CEILING.
4. (4) 4" CONDUIT UP.
5. DIGITAL SIGNAGE LOCATION, REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS.

COMMUNICATIONS GENERAL NOTES

1. PROVIDE CABLING AS INDICATED ON FLOOR PLANS. CONTRACTOR SHALL LABEL, TERMINATE, AND TEST. COORDINATION BY OWNER.
2. FOR ALL SPEAKER LOCATIONS PROVIDE BACK BOX AND CONDUIT TO THE NEAREST ACCESSIBLE CEILING.
3. MATCH NEW CLOCKS TO EXISTING BATTERY OPERATED CLOCKS IN EXISTING BUILDING.

KEYPLAN



BVH integrated services
10 Griffin Road North
Bloomfield, CT 06002
Tel (860) 286-0171
www.bvhis.com
STRUCTURAL, MECHANICAL, ELECTRICAL, AND TECHNOLOGY

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

drawing entitled: FIRST FLOOR TECHNOLOGY COMMUNICATIONS CONSTRUCTION PLAN

REVISIONS

mark	date	description
1	8/24/2015	ADDE ADDUM 4

drawing prepared by
TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06105

project
CAMPUS RENOVATIONS - ASHUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

project number: BLCTC-037

date: 06.27.2015
scale: 1/8" = 1'-0"
project manager
project architect
project engineer
drawing no.: TC2.201

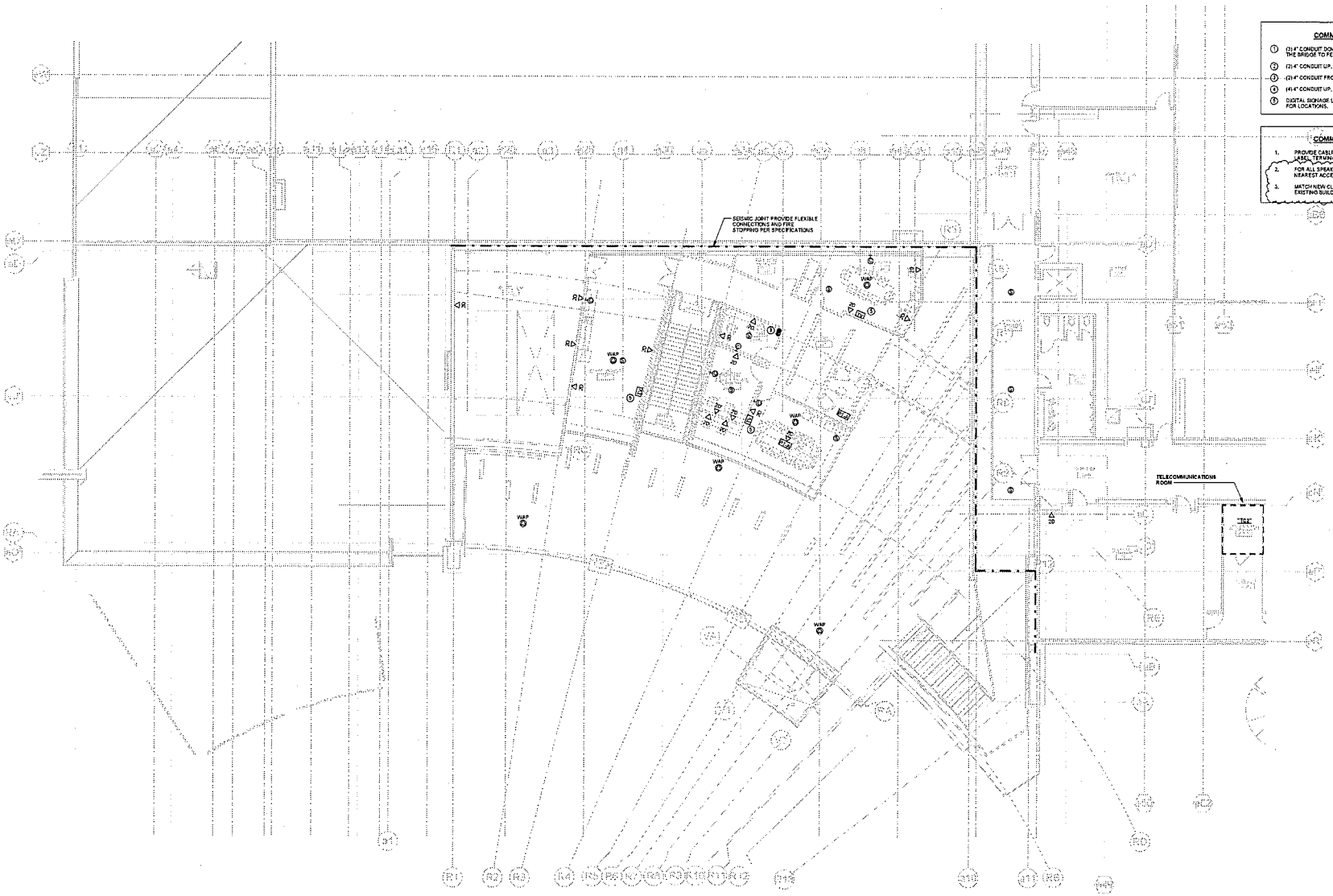
STATE OF CONNECTICUT
GREGORY H. MAY
No. 17926
LICENSED PROFESSIONAL ENGINEER

COMMUNICATIONS DRAWING NOTES

1. (3) 4" CONDUIT DOWN FROM EXISTING SERVER ROOM (TC2) THROUGH THE BRIDGE TO FEED RENOVATED AREA.
2. (2) 4" CONDUIT UP.
3. (2) 4" CONDUIT FROM BELOW AND UP TO ACCESSIBLE CEILING.
4. (4) 4" CONDUIT UP.
5. DIGITAL SIGNAGE LOCATION. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS.

COMMUNICATIONS GENERAL NOTES

1. PROVIDE CABLING AS INDICATED ON FLOOR PLANS. CONTRACTOR SHALL LABEL, TERMINATE, AND TEST. COMMISSIONING BY OWNER.
2. FOR ALL SPEAKER LOCATIONS PROVIDE BACK BOX AND CONDUIT TO THE NEAREST ACCESSIBLE CEILING.
3. MATCH NEW CLOCKS TO EXISTING BATTERY OPERATED CLOCKS IN EXISTING BUILDING.



1 SECOND FLOOR TECHNOLOGY COMMUNICATIONS - CONSTRUCTION PLAN
TC2.201 1/8" = 1'-0"

GRID NORTH

KEYPLAN

BVH integrated services
50 Grand Pavilion Drive
Glastonbury, CT 06033
Tel 860.633.4600
www.bvhinc.com
STRUCTURAL, MECHANICAL, ELECTRICAL, AND TECHNOLOGY

STATE OF CONNECTICUT
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF CONSTRUCTION SERVICES

TECTON ARCHITECTS
ONE HARTFORD SQUARE WEST
HARTFORD, CT 06106

CAMPUS RENOVATIONS - ASNUNTUCK COMMUNITY TECHNICAL COLLEGE

170 ELM STREET
ENFIELD, CT

TC2.202

Connecticut

Department of Construction Services

7001
Equal or Substitute Product Request

Request Phase Pre-Bid ☒ Post Bid ☐ *(See Article 15 Materials: Standards, General Conditions)*

(If Pre-bid only) Current Bid Due Date: 9/2/2015 **Request No.:** _____ **Dated:** 8/14/2015

To: **State of Connecticut** **CTDCS Project No.:** BI-CTC-437
Department of Construction Services **Project Name / Location:**

References: Specification(s): Section(s): 074213.23 Paragraph(s): 2.01.A.1
Drawing(s): Drawing(s) No(s): _____ Detail(s) No(s): _____

Contractually Specified Product: FormaBond II, Alucobond, Reynobond
Contractor Proposed Product: VITRABOND

Proposed Product is: Equal: ☒ Substitute: ☐ Model No.: _____

*See attached data for **both** specified and proposed products as required by Article 15 General Conditions.*

Data attached: Drawings: ☐ Product Data: ☒ Reports: ☒ Samples: ☐
Tests: ☐ Other: Project Case Studies

Reason(s) for not providing the Specified Product: Performance equal, different manufacturer.
VITRABOND meets the specified material, performance, and finish requirements. Local presence - based in Bloomfield CT - allows for quick delivery and readily available replacement material.

Similar Installation:
Project: UConn Ambulatory Care Center Architect: Centerbrook Architects, HDR
Address: Farmington, CT Owner: University of Connecticut
Date Installed: 2013 / 2014

Will proposed substitution impact other parts of the Work? No ☒ Yes ☐ *If yes attach explanation.*
Will proposed substitution increase Contract Time? No ☒ Yes ☐ *by number of Days* _____

Actual Dollar Savings to the State of Connecticut if substitution is accepted: $ No increase

The Undersigned Certifies that the proposed Request for an Equal or Substitute Product conforms to all of the requirements of Division 01 General Requirements, Section 01 25 00 Substitution Procedures .

Request Submitted By General Contractor / CMR: Fairview Architectural
(Firm's Typed Name)

By: Mark Forbes (*Typed Name*) Account Manager (*Title*) Mark Forbes (*Signature*) 8/14/2015 (*Date*)

CONTRACTOR / CMR Send copies to DCS PM: ☐ CA/OR: ☐

Consultant's Review – This Substitution Request is: Request Received on (Date): _____

☒ **Approved:** *(Submittals in accordance with Div. 01 General Requirements, Section 01 33 00 Submittal Procedures.)*
☐ **Approved as Noted:** *(Submittals in accordance with Div. 01 General Requirements, Section 01 33 00 Submittal Procedures.)*
☐ **Rejected:** **Use Specified Materials.**
☐ **Rejected:** **Request Not Received Within Specified Time Period - Use Specified Materials.**

Reviewed Issued By: Timothy Mailloux, Tecton Architects (*Typed Name*) Timothy Mailloux (*Signature*) 08/17/2015 (*Date*)

CONSULTANT Send copies to: DCS PM: ☒ CA/OR: ☐ Chief Architect ☒ Chief Engineer ☐

If Approved: As noted by Consultant,
DCS Chief Architect: Director (*Signature*) 8/20/15 (*Date*)

Copies: Project File Red R2