ADDENDUM



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ADDENDUM NO.: 01

PROJECT NAME: DUNNE TECHNOLOGY ACADEMY MODERNIZATION

PROJECT NO.: 05440

CONTRACT NO.: C1566

DATE OF ISSUE: February 27, 2015

NOTICE OF CHANGES, MODIFICATIONS, OR CLARIFICATIONS TO CONTRACT DOCUMENTS

The following changes, modifications, or clarifications are hereby incorporated and made an integral part of the Contract Documents. Unless clearly expressed otherwise by this Addendum, all terms and conditions defined in the original Contract Documents shall continue in full force and effect and shall have the same meaning in this Addendum.

ITEM NO. 1: CHANGE TO BID OPENING DATE AND TIME

1. None.

ITEM NO. 2: CONFIRMATION OF GENERAL CONTRACTOR RESPONSIBILITIES FOR MECHANICAL EQUIPMENT

- 1. Technical Review Meeting held on February 19, 2015.
 - a. The PBC will NOT be purchasing any mechanical equipment for this project. As indicated in the Bid Documents, RTU's and Switchgear equipment to be furnished and installed by the General Contractor.

ITEM NO. 3: CLARIFICATION TO PROJECT NAME AND TITLE

1. None.

ITEM NO. 4: REVISIONS TO BOOK 1

- Change Section III Instruction to Bidders, Item Q Basis of Award, 1st and 2nd paragraph, DELETE value of \$6,495,000 in its entirety and REPLACE WITH the following value of \$6,575,000.
- 2. Change Section III Instruction to Bidders, Item U Award of Contract; Rejection of Bids, subsection 1, 1st and 2nd paragraph, DELETE value of \$6,495,000 in its entirety and REPLACE WITH the following value of \$6,575,000.
- 3. Change Section V Proposal Support Documents, Item A1 Basis of Award (Award Criteria), 2nd and 3rd paragraph, DELETE value of \$6,495,000 in its entirety and REPLACE WITH the following value of \$6,575,000.

Date of Issue: February 27, 2015

ITEM NO. 5: REVISIONS TO BOOK 2

1. None.

ITEM NO. 6: REVISIONS TO BOOK 3, DIVISIONS 02 - 49 SPECIFICATION SECTIONS

- 1. Specification 00 01 10 TABLE OF CONTENTS
 - a. Delete "Section 08 41 13 Aluminum-Framed Entrances and Storefronts".
 - b. Change Section "08 51 13 Aluminum Windows" to read "08 51 13 Aluminum Windows (SF)".

2. Specification 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND FRAMING

a. Delete Section in its entirety.

3. Specification 08 51 13 – ALUMINUM WINDOWS

a. At Paragraph 2.6.E, change to read: "E. Aluminum Finish: 1. Class I, Clear Anodic Finish: AA-M12C22A41 (Mechanical Finish: non-specular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, clear coating 0.018 mm or thicker) complying with AAMA 611.".

4. Specification 32 12 16 - HOT MIX ASPHALT PAVING

a. At Paragraph 2.1.B.3.a, change sentence to read: "More than 25% of the proposed asphalt mix shall be RAP material."

5. Specification 32 12 36 - ASPHALT SEALCOAT

- a. At Paragraph 3.1.B.2 and 3.1.B.3, change items to read:
 - "2. Any cracks larger than ¼ inch shall be routed, cleaned and filled with an approved hot pour rubberized asphalt sealing compound at a temperature of 300 degrees prior to sealcoating. Crack fill material to be squeegee applied.
 - 3. Any cracks larger than 1" pavement shall be full depth removed and replaced."

ITEM NO. 7: REVISIONS TO DRAWING SHEETS

1. SHEET C1.4.1 - SITE UTILITY PLAN

- a. Revised storm sewer from 24" diameter to 36" diameter from CB-5 to CB-6
- b. Revised inverts from Storm Service at building, CB-1 and CB-2 as indicated on the drawing.
- c. Revised trench widths as indicated on the drawing.

2. SHEET C1.5.1 – SITE DETAILS (Refer to CSK-001)

a. Revise detail #5, note 7.

3. SHEET C1.5.2 - UTILITY DETAILS

- a. Revise detail #11, cross-section trench storage widths as indicated on plan.
- b. Update Turf Field detention cross-section per new trench dimension as shown on C1.4.1

4. SHEET C1.5.1 – SITE DETAILS

- a. DETAIL 10A Should read "FUEL EFFICIENT AND LOW-EMITTING VEHICLES ONLY" in lieu of, "FUEL EFFICIENT ONLY".
- b. TAG 10B Should read "CARPOOL DROP OFF ZONE" in lieu of, "CARPOOL PARKING ONLY".

- 5. SHEET AD6.1.0 DEMOLITION REFLECTED CEILING PLANS (Reference ASK-001)
 - a. Added Note D73 to read as follows: "REMOVE EXISTING SUSPENDED TILE AND GRID AS REQUIRED FOR INSTALLATION OF NEW KITCHEN HOOD. SEE M.E.P. DRAWINGS FOR PENETRATION DETAILS.".
 - b. Added Note D75 to read as follows: "REMOVE EXISTING SUSPENDED CEILING GRID AND TILES. SALVAGE EXISTING LIGHTING FIXTURES AND CEILING MOUNTED DEVICES FOR REINSTALLATION IN NEW CEILING."
 - c. At Corridors 13 (1st Floor) and 33 (2nd Floor), change keynote indicated from "D43" to read "D65" and delete keynote "D44".

6. SHEET A1.1.0 - FIRST FLOOR PLAN

- a. Added Note A18 to read as follows: "ELECTRICAL PANEL CHASES TO BE PAINTED.".
- b. Revised various plan dimensions to match the structural drawings.

7. SHEET A1.2.0 – SECOND FLOOR PLAN

- a. Added Note A18 to read as follows: "ELECTRICAL PANEL CHASES TO BE PAINTED.".
- b. Revised various plan dimensions to match the structural drawings.
- 8. SHEET A2.3.0 DOOR AND FRAME SCHEDULE, TYPES AND DETAILS (Reference ASK-002)
 - a. At Detail H2 add Note J12.

9. SHEET A6.1.0 - FIRST FLOOR REFLECTED CEILING PLAN (Reference ASK-001)

- a. At Kitchen 1 added Note C7 to read as follows: "NEW CEILING TILE AND GRID. COORDINATE WITH INSTALLATION OF KITCHEN HOOD. SEE M.E.P. DRAWINGS FOR PENETRATION DETAILS.".
- b. At Corridor 13, change keynote "C1" to read "C5". New grid shall be 2'x4'.
- c. At Classrooms 159 and 161, add keynote "C3" at each exterior window location where not indicated in plan.
- d. At Sheet Keynotes, change Keynote "C2" to read as follows: "REINSTALL EXISTING LIGHT FIXTURES (REFER TO E-SHEETS), EXISTING CEILING MOUNTED DEVICES, GRILLES, AND SPEAKERS. REPLACE DAMAGED CEILING GRID / HANGERS (ALLOW 10% OF ROOM CEILING AREA). PROVIDE ADDITIONAL NEW CEILING GRID AT WALLS.".

10. SHEET A6.2.0 – SECOND FLOOR REFLECTED CEILING PLAN (Reference ASK-003)

- a. At Elevator Lobby 251 add APC-4 ceiling.
- b. At Corridor 33 (including east-west section), add keynote "C5". New grid shall be 2'x4'.
- c. At Sheet Keynotes, change Keynote "C2" to read as follows: "REINSTALL EXISTING LIGHT FIXTURES (REFER TO E-SHEETS), EXISTING CEILING MOUNTED DEVICES, GRILLES, AND SPEAKERS. REPLACE DAMAGED CEILING GRID / HANGERS (ALLOW 10% OF ROOM CEILING AREA). PROVIDE ADDITIONAL NEW CEILING GRID AT WALLS.".

11. SHEET A8.1.0 - FIRST FLOOR FINISH PLAN

- a. Revised extents of FLM-2. See Sketch ASK-004.
- 12. SHEET A8.2.0 SECOND FLOOR FINISH PLAN
 - a. Revised extents of FLM-2. See Sketch ASK-005.
- 13. SHEET A9.1.0 FIRST FLOOR FURNITURE & WALL MOUNTINGS PLAN

- a. Revised Note A12 to read as follows: "PROVIDE 3" x 3" x 4'-0" HIGH STAINLESS STEEL CORNER GUARD."
- b. Added corner guards at the locations identified in the revision clouds.
- c. Added "NO SMOKING" signs. See ASK-006 for detail.

14. SHEET A9.2.0 - SECOND FLOOR FURNITURE & WALL MOUNTINGS PLAN

- a. Revised Note A12 to read as follows: "PROVIDE 3" x 3" x 4'-0" HIGH STAINLESS STEEL CORNER GUARD."
- b. Added corner guards at the locations identified in the revision clouds.

15. SHEET S2.1.1 - FOUNDATION SECTIONS & DETAILS

- a. Detail 5/S2.1.1 is revised (SSK-001)
- b. Detail 15/S2.1.1 is revised (SSK-002)
- c. Detail 17/S2.2.1 is revised (SSK-003)

16. SHEET S6.1.0 - ELEVATIONS

a. Lintels added (SSK-004, 005, 006)

17. SHEET MO.O.1 - MECHANICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES

- a. Add the following to Demolition General Note D: "DISPOSAL SHALL BE IN ACCORDANCE WITH SECTION 01 35 63" "CONSTRUCTION WASTE MANAGEMENT", OR "SECTION 31 23 18.13 SOIL, FILL GENERAL CONSTRUCTION & DEMOLITION DEBRIS DISPOSAL, AS APPLICABLE".
- b. Add the following to Demolition General Notes: E. "ALL MATERIALS CONTAINING ASBETOS OR LEAD-BASED PAINT SHALL BE HANDLED IN ACCORDANCE WITH SECTIONS 02 82 14 ASBESTOTS ABATEMENT – INTERIOR, 02 82 15 ASBESTOS ABATEMENT – EXTERIOR, AND 02 83 19.13 – LEAD-BASED PAINT ABATEMENT MITITGATION".

18. SHEET M1.1.2 - FIRST FLOOR MECHANICAL PLAN

- a. Replace key note 1 with the following:
 - "For each unit ventilator (AFF MCQUAY): Pull the unit from its wall position. The electrical connections should not be removed, if possible for checking operation after cleaning and adjustment.
 - a) Check and replace the air intake louver/bird screens and connection section of any dirt and debris.
 - b) Vacuum clean the air intake louvers/bird screens and connection section of any dirt and debris.
 - c) Clean units internally using a vacuum to remove all material.
 - d) Vacuum clean coils and straighten fins. If coils are very dirty, use degreaser to remove any dirt that prevents proper coil operation.
 - e) Vacuum clean fans (including internals to remove foreign material), housings and internal components.
 - f) Lubricate all linkages, fans, and all moving parts.
 - g) Clean filter housing and replace filters.
 - h) Pressure wash drain pans.
 - i) Confirm that the drain line is fully operational. If not working, clear drain line of any obstacles to liquid flow.
 - j) Clean, lubricate, and re-set damper linkages and damper operation. Exercise outside air and return air damper from fully open to fully closed and confirm that the dampers operate smoothly and without binding.

- k) Clean (degrease) and straighten damper blades.
- I) Check the system for the refrigerant valve operation.
- m) Evacuate and charge the system with the proper amount of refrigerant (R-22).
- n) Cycle compressors and test thermostat for operation to start and stop compressor when in cooling mode.
- Test operation of all components by operating the system through heating, cooling, and economizer modes. Reset dampers and controls as necessary for smooth operation.
- Verify that the control damper actuators work properly and all control wires are connected.
- g) Repair/replace panel clips and locking devices.
- r) After all work is completed, re-install unit in its original location and seal the unit to the wall with silicone caulk.
- s) Install a flexible waterproof membrane similar to gorilla tape or silicone caulk along any cracks in the floor beneath the unit ventilator prior to re-installing the unit."
- b. Change "FC-1 & FC-2" to read "FC-2 & FC-3" in key note 2.
- c. Add the following to key note 2: "THE CONTRACTOR SHALL INVESTIGATE THE EXISTING CEILING MOUNTED FANCOIL UNIT SIZES AND INSTALLATION DETAILS BEFORE ORDERING THE REPLACEMENT EQUIPMENT. THIS INCLUDES THE OUTSIDE AI CONNECTION AND RETURN AIR CONNECTIONS TO THE UNITS, THE CONDENSATE PUMP AND PIPING/TUBING AND THE METHOD OF SUPPORT FOR THE EXISTING EQUIPMENT. THE NEW EQUIPMENT SHALL BE THE SAME CAPACITY AS THE EXISTING TO ALLOW FOR THE RE-USE OF THE EXISTING UTILITIES. AFTER THE EXISTING UNITS HAVE BEEN REVIEWED, THE NEW EQUIPMENT MAY BE PROCESSED".
- d. Add the following to key note 2: "REPLACE THE TWO THERMOSTATS ASSOCIATED WITH FC-2 & 3 LOCATED ON THE NORTH AND SOUTH WALLS".
- e. Install EUH-6 & 7 in the main office (room 6) replacing the existing unit heaters on the outside wall and do not remove the existing unit heaters from staff toilet rooms 10 and 11.

19. SHEET M1.2.1 - SECOND FLOOR PLAN ANNEX

a. Change the note for the exhaust ducts to read: "36 X 30 EXHAUST DUCT FROM THE EXHAUST DAMPER. ROUTE ALONG ROOF TO A POINT15' FROM THE TRU AIR INTAKE. INSTALL BIRDSCREEN ON THE OUTLET. IF THE DUCTS PASS THROUGH THE SOUND SCREEN, INSTALL AN ALUMINUM ANGLE AROUND THE DUCT FASTENED TO THE SCREEN WITH STAINLESS STEEL NUTS AND BOLTS TO PROVIDE STRUCTURAL INTEGRITY TO THE SCREEN".

20. SHEET M1.2.2 - EXISTING BUILDING SECOND FLOOR PLAN

- a. Replace key note 1 with key note 1 changes above.
- b. Move key note 34 to drawing M1.1.2 as the equipment is on the north wall of room 110 and add the following: "CONTRACTOR SHALL TEST UNIT CNOTROL FOR THE CONNECTED EXHAUST FANS AND SHALL REPORT AND ISSUES WITH THE OPERATION OF THE FANS TO THE CONSTRUCTION MANAGER".

21. SHEET M7.0.2 - MECHANICAL SCHEDULES

a. Remove drawing M7.0.2 and replace with revised sheet, which includes the following changes: FC-2 &3 updates; FAN SCHEDULED additional information; added AI COOLED CONDENSER SCHEDULE; and a reference that RTU-1 and RTU-2 are furnished by others.

22. SHEET M9.0.1 - MECHANICAL DETAILS

a. Insert the attached MSK-1 as M3 showing the schematics for RTU-1 and RTU-2.

23. P1.1.1 FIRST FLOOR PLUMBING PLAN

a. Add a floor cleanout to room 159 for the 4" sanitary drain line and room 160 for the 3" storm drain line.

24. P8.0.1 PLUMBING FLOW DIAGRAMS

- a. Add the following to P1: 4. ISOLATION VALVES SHALL BE INSTALLED TO ALL DEVICES AND FIXTURES
- b. Add the following note to P3 and P4: "ACID RESISTENT VENT PIPING SHALL BE INSTALLED FOR ALL LAB SINKS. ACID VENT PIPING SHALL EXTEND THROUGH ROOF".

25. P9.0.1 PLUMBING DETAILS

- a. Add the following note to P1: "PROVIDE A 30" X 30" X 30" THRUST BLOCK TO THE CW RISER BASE AS IT ENTERS THE PUMP ROOM. THRUST BLOCK SHALL CONFROM TO DETAIL D-11 OF THE CITY OF CHICAGO STANDARD DETAILS FOR WATER MAIN INSTALLATIONS".
- b. For P8, change "3" MINIMUM to read 8" ".

26. SHEET ED1.0.2 - ELECTRICAL DEMOLITION FLOOR PLAN

a. Add the following to Demolition General Note 1: "ALL HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH DIVISION 02 SECTION 02 86 13 "HAZARDOUS AND UNIVERSAL WASTE MANAGEMENT." ALL ASBESTOS ABATEMENT OF INSULATED WIRING SHALL BE PERFORMED IN ACCORDANCE WITH SECTIONS 02 82 14 ASBESTOS ABATEMENT - INTERIOR PRIOR TO DEMOLITION.

27. SHEET E1.1.1 – ELECTRICAL FIRST FLOOR LIGHTING PLAN (Refer to ESK-001)

a. Add emergency battery pack (EBU) and exit signs to link corridor 164.

28. SHEET E1.2.1 – ELECTRICAL SECOND FLOOR LIGHTING PLAN (Refer to ESK-002)

- a. Add emergency battery pack (EBU) and exit signs to link corridor 230.
- b. Show existing lighting panel LP-2 which feeds existing lighting on the second floor.
- c. Indicate that fixtures in the MDF room need new lenses.
- d. Add keyed note #4: 'PROVIDE NEW LENSE FOR EXISTING LIGHT FIXTURE.'
- e. Reword keyed note #1 to indicate 'QUANTITY OF FIXTURE REPLACMENT ASSUMED TO BE 20%'.

29. SHEET E2.1.1 – ELECTRICAL FIRST FLOOR POWER AND LOW VOLTAGE PLAN (Refer to ESK -003)

- a. Show existing concentrator box as being reinstalled in Parents Room 111.
- 30. SHEET E2.2.1 ELECTRICAL SECOND FLOOR POWER AND LOW VOLTAGE PLAN (Refer to ESK-004)
 - a. Show existing 'IDF' panel in MDF room.
 - b. Add new CP-2 panel in MDF room
 - c. Show existing concentrator box as being reinstalled in Special Education/Resource Room 203.
 - d. Add keyed note #6: 'PROVIDE (3) CIRCUITS FROM NEW PANEL CP-2 TO FEED THE NEW SECURITY RACK AND (3) CIRCUITS TO FEED THE NEW POWER RACK'

- e. Reword keyed notes #3 and #4 to remove circuit provision information.
- 31. SHEET E3.1.1 ELECTRICAL FIRST FLOOR SECURITY PLAN
 - a. Remove glass break device in Gym Office room 158.
- 32. SHEET E7.0.1 ELECTRICAL SCHEDULES (Refer to ESK-005)
 - a. Add F18 feeder for new panel CP-2.
- 33. SHEET E7.0.2 ELECTRICAL PANEL SCHEDULES (Refer to ESK-006)
 - a. Add panel schedule for CP-2.
 - b. Modify load information for LP-3 for addition of new EBUs and exit lights in link corridors.
- 34. SHEET E8.0.1 ELECTRICAL SINGLE LINE DIAGRAM (Refer to ESK-007)
 - a. Add panel CP-2
- 35. SHEET E9.0.5 ELECTRICAL DETAILS
 - a. Modified title of detail E6 to 'TELEVISION MMTV OUTLET DETAIL'.
- 36. SHEET E9.0.7 ELECTRICAL DETAILS (Refer to ESK-008)
 - a. Modified MDF room details to match project requirements.

ITEM NO. 8: REQUESTS FOR INFORMATION

1. **Statement:** The aluminum storefront spec does not call out a system. The drawings show a 6 inch deep thermal storefront. The 2 x 4 ½ standard storefront would work. Do you want an alternate deduct?

Response: Spec Section 08 41 13 – "Aluminum-Framed Entrances and Framing" shall be deleted from project specifications. Refer to Spec Section 08 51 13 – Aluminum Windows regarding new window openings. Refer to Spec Section 08 15 00 – "FRP Door Assemblies" regarding building entrances.

2. Statement: The storefront specs have no material and finish warranty called out. Do I bid standard 1-year warranty?

Response: Refer to Spec Sections 08 51 13 – "Aluminum Windows" and 08 15 00 – "FRP Door Assemblies" for specified finishes and warranty information.

3. Statement: The door schedule does not call out any aluminum storefront doors but the specs call out a wide stile aluminum door. When you look at elevation SF10 the doors are drawn like an aluminum door and not an RFRP door as called out on the schedule. Door 150-A, 150-B, 150-C, 150-D. Do I bid as my storefront aluminum doors?

Response: These doors are FRP doors with two lites; refer to Spec. Section 08 15 00 for entrance door and framing information. Spec. Section 08 41 13 shall be deleted.

- 4. **Statement**: The ceiling grid in both the 1st and 2nd floor Corridors may need to be removed and replaced for the following reasons please clarify:
 - i. Visual inspection shows that when the building was constructed the acoustic ceilings were installed prior to the modular walls see photo attached.
 - 1. Drawing A6.1.0 shows the Main Corridor ceiling grid not lining up with the Classroom grid which differs from site conditions.
 - 2. In order to extend the walls to the deck the grid on both sides of the walls will have to be removed approx. 3' on either side.

3. As the Corridor is only 10' wide this leaves a 4' strip down the middle which could be left in place. However, Drawing A6.1.0 shows the center row as 2x2 grid but my photo shows it is 2x4.

Response: Main Corridor existing ceiling grid on 1st and 2nd floors shall be removed and replaced. Grid shall be 2x4 to match existing ceiling grids in Existing Building.

5. Statement: The ceiling grid in the Corridor between doors 14A and 107A is shown as 2x2 but my attached photo shows that it is 2x4. Please clarify if this ceiling is to be removed and replaced with 2x2 or remain 2x4.

Response: This Corridor shall be considered as an extension of the Main Corridor and have the same scope of work. The existing ceiling grid / tiles shall be replaced with new 2x4 grid and tiles.

6. Statement: Will there be any other additional time allotted where we can gain access to allow our subcontractors to examine existing conditions.

Response: The PBC held a site visit on February 18, 2015. At this time, no other site visits are scheduled for this project. If that changes, you will be notified via an Addenda.

List of Attachments and Drawings:

(Available at Cross Rhodes Reprographics online plan room: http://www.x-rhodes.com)

- 1. This Addendum includes the following attached Documents and Specification Sections:
 - a. Book 1 No Attachments
 - b. Book 2 No Attachments
 - c. Book 3 No Attachments
- 2. This Addendum includes the following attachments:

CSK-001 dated 02/26/2015

ASK-001 thru ASK-006 dated 02/26/2015

SSK-001 thru SSK-006 dated 02/26/2015

MSK-001 dated 02/26/2015

ESK-001 thru ESK-008 dated 02/26/2015

3. This Addendum includes the following re-issued Drawings:

C1.4.1 dated 02/26/2015

C1.5.2 dated 02/26/2015

A1.1.0 dated 02/26/2015

A1.2.0 dated 02/26/2015

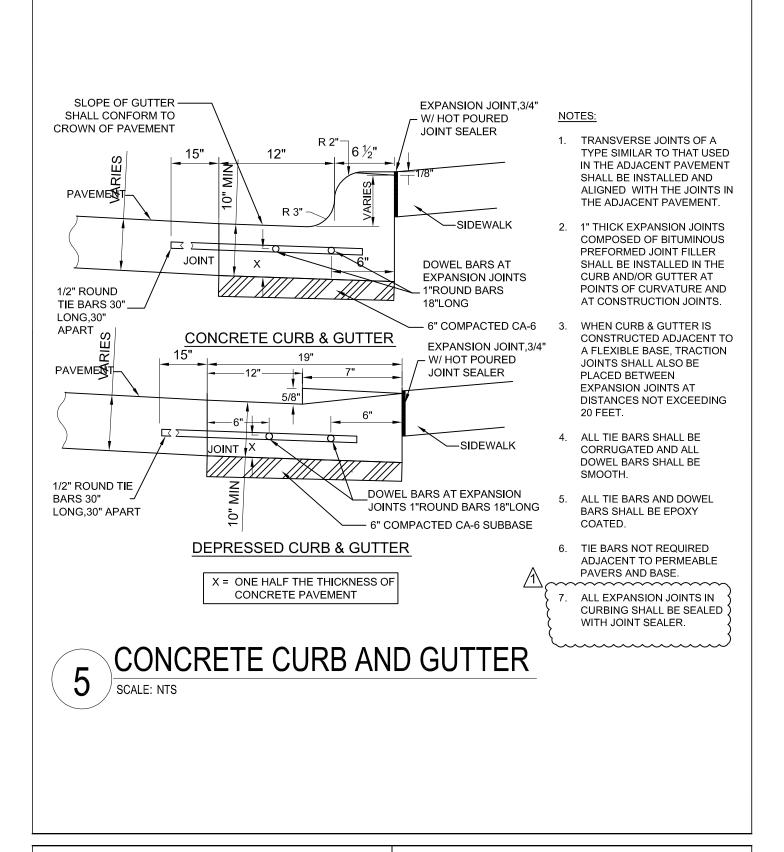
A9.1.0 dated 02/26/2015

A9.2.0 dated 02/26/2015

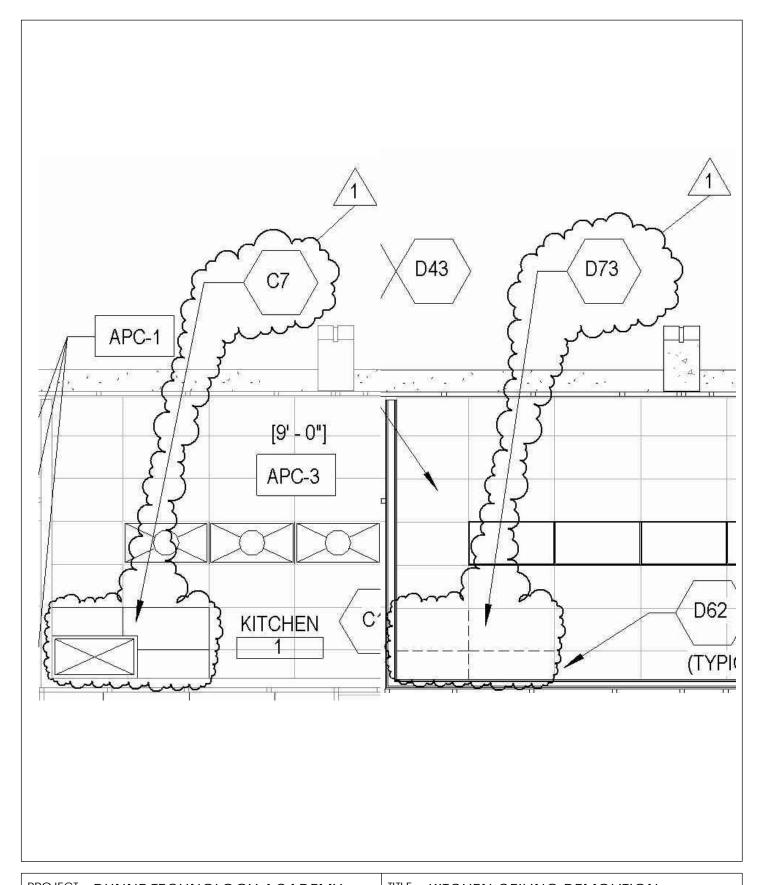
M7.0.1 dated 02/26/2015

M7.0.2 dated 02/26/2015

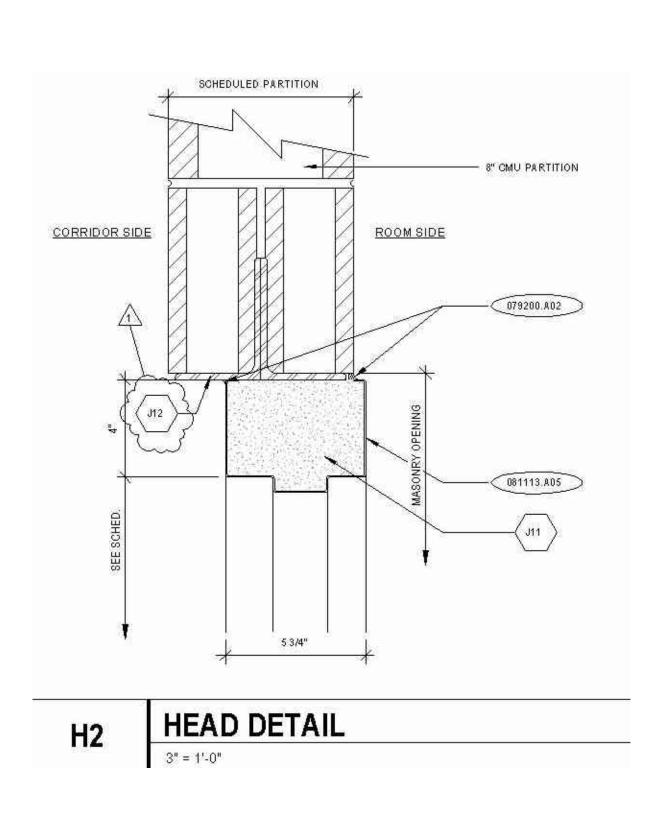
END OF ADDENDUM NO.1



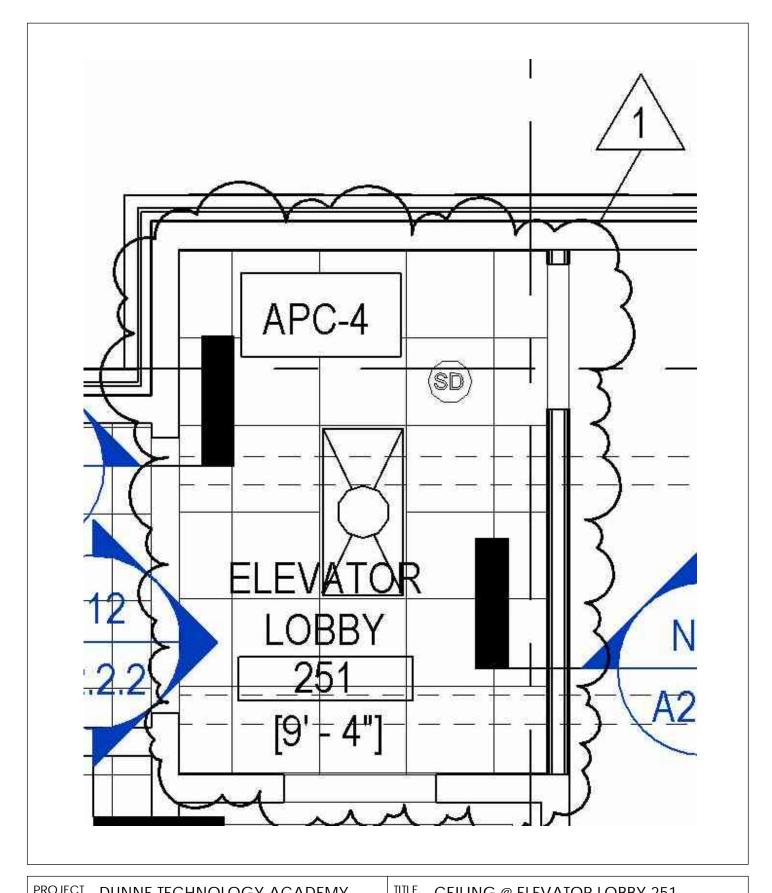
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FGM ARCHITECTS CHICAGO OAK BROOK O'FALLON ST. LOUIS	DRAWN Author	DATE 02/26/2015	SHEET NO. CSK-001
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PROFESSIONAL DESIGN FIRM - IL # 184-000350	Approver	15-1950.01	ADD #1



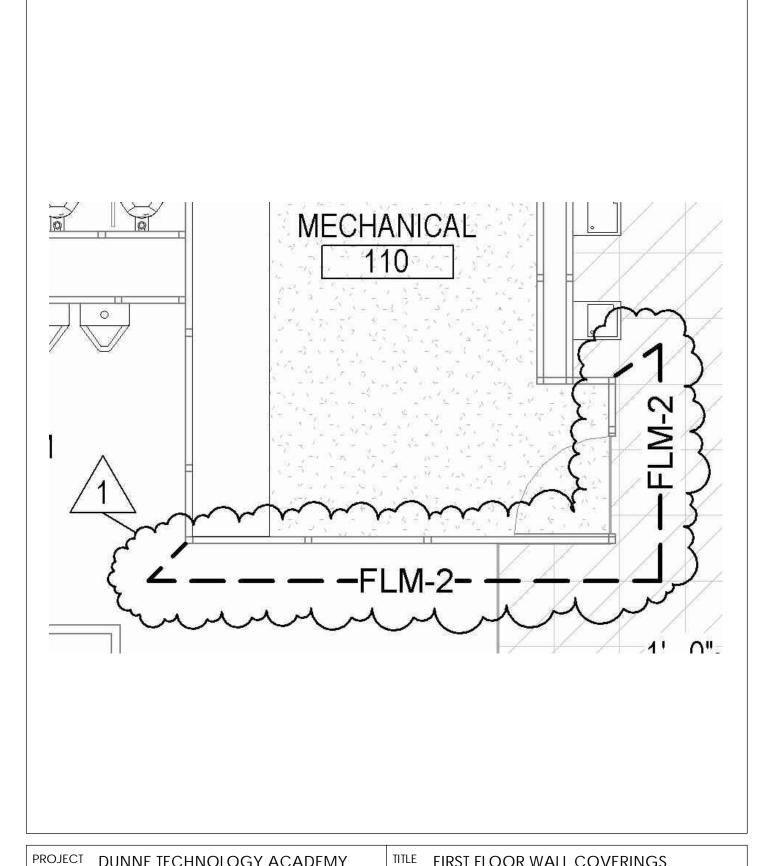
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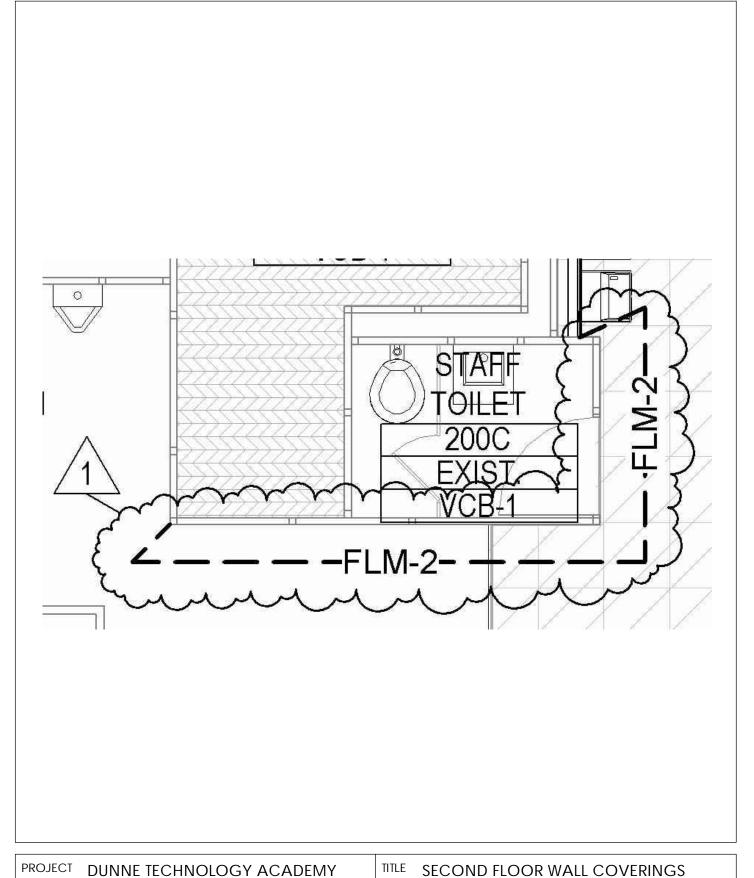
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MODERNIZATION (© 2015 FGM Architects Inc.) SHEET NO. DATE DRAWN ASK-005 ISSUED AS ADD #1 02/26/15 RVCHICAGO OAK BROOK O'FALLON **APPROVED** PBC JOB NO. 05440 JA PROFESSIONAL DESIGN FIRM - IL # 184-000350

1/4" THICK 8-1/2" X 11" ACRYLIC SIGN

NO SMOKING WITHIN 15 FT OF ENTRYWAY





INCLUDING E-CIGARETTES

If you see someone smoking, please notify the manager. If the problem persists, please call 311 and report it.





PROJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION

TITLE "NO SMOKING" SIGN

FGM

PROFESSIONAL DESIGN FIRM - IL # 184-000350

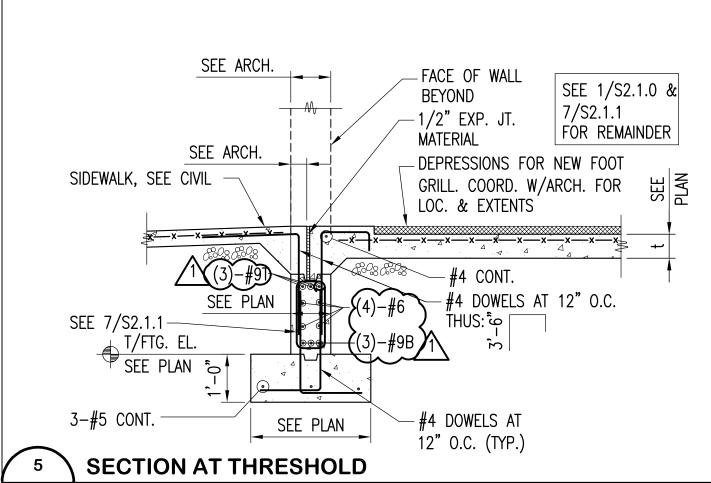
CHICAGO

drawn RV	DATE 02/26/2015	
APPROVED	PBC JOB NO.	
JA	05440	

ISSUED AS **ADD #1**

SHEET NO.

ASK-006



S2.1.1 1

1/2"=1'-0"

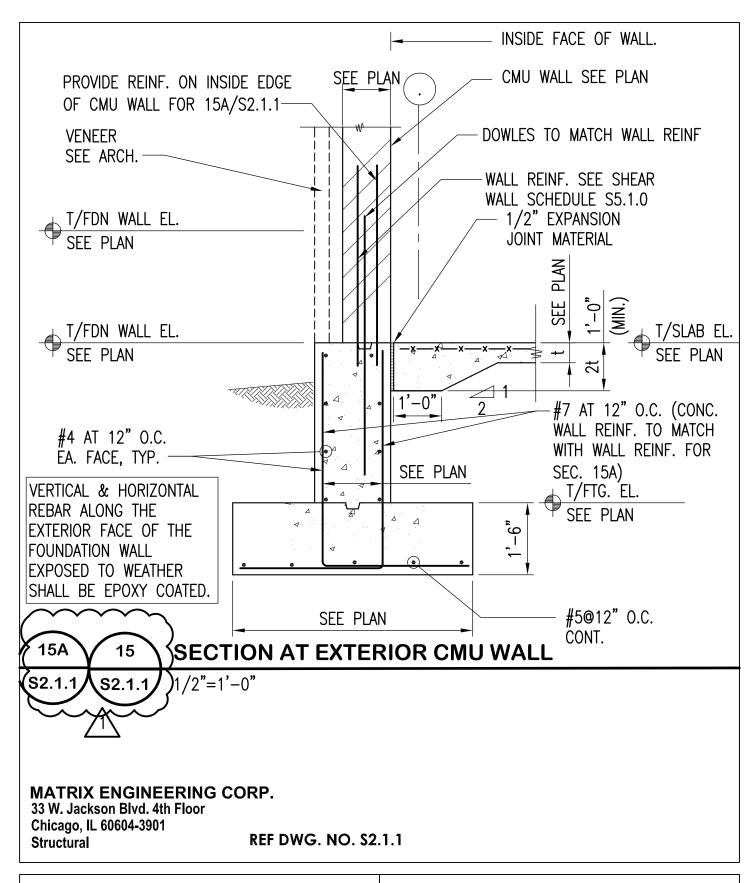
MATRIX ENGINEERING CORP.

33 W. Jackson Blvd. 4th Floor Chicago, IL 60604-3901 Structural

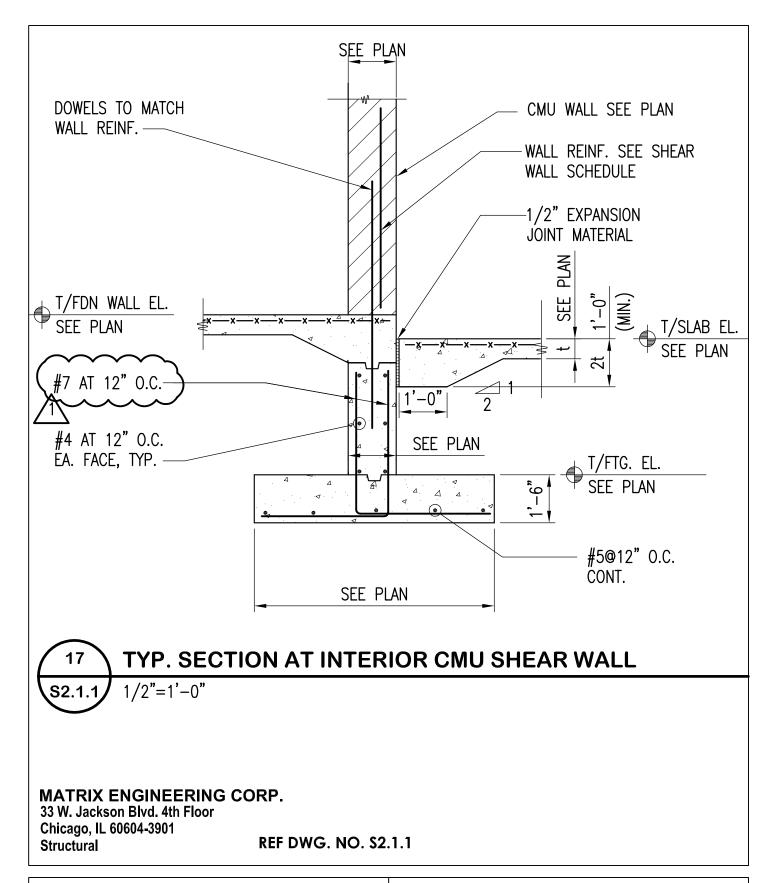
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PROJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION	TITLE FC	DUNDATION SE	CTION/DETAIL
I FLAM ARL HILFLIN I	drawn MATRIX	DATE 02/26/2015	SHEET NO.
	APPROVED MATRIX	JOB NO. 15-1950.01	ISSUED AS ADD #1

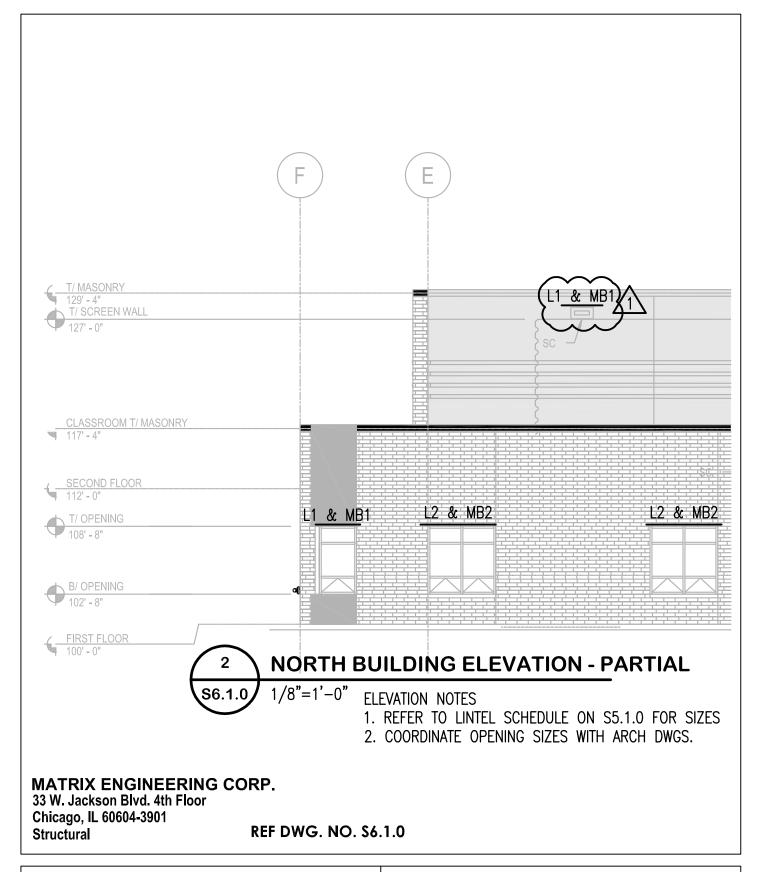




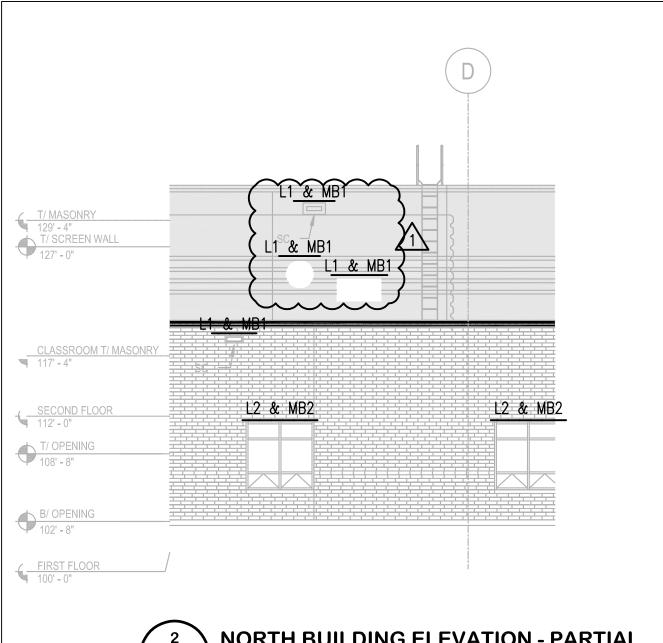
JC.)	PROJECT DUNNE TECHNOLOGY ACADEM MODERNIZATION	Y	TITLE FO	OUNDATION SE	CTION/DETAIL
Architects In	FGM ARCHITECTS CHICAGO OAK BROOK OFALLON ST. LOUIS	DRAWN MATRI		DATE 02/26/2015	SHEET NO. SSK-002
2015 FGW	PROFESSIONAL DESIGN FIRM - IL # 184-000350	APPRO MATRI		JOB NO. 15-1950.01	ISSUED AS ADD #1



PROJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION	TITLE FC	DUNDATION SE	CTION/DETAIL
FGM ARCHIECIS	drawn M ATRIX	DATE 02/26/2015	SHEET NO. SSK-003
0	approved MATRIX	JOB NO. 15-1950.01	ISSUED AS ADD #1



(:ɔr	PROJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION	Y	TITLE E l	EVATION	
Architects II	FGM ARCHITECTS CHICAGO OAK BROOK O'FALLON ST. LOUIS	drawn MATRIX		DATE 02/26/2015	SHEET NO.
(© 2015 FGM	PROFESSIONAL DESIGN FIRM - IL # 184-000350	approv MATRIX		JOB NO. 15-1950.01	issued as ADD #1





ELEVATION NOTES

- 1. REFER TO LINTEL SCHEDULE ON S5.1.0 FOR SIZES
- 2. COORDINATE OPENING SIZES WITH ARCH DWGS.

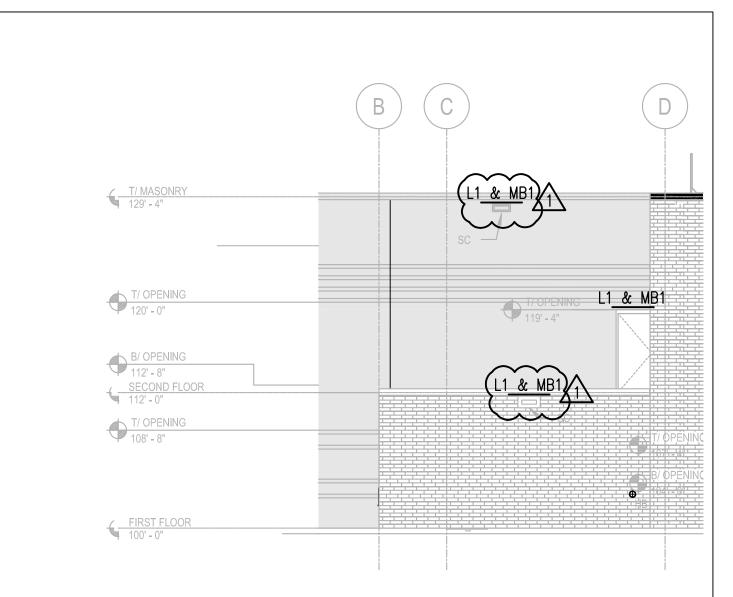
MATRIX ENGINEERING CORP.

33 W. Jackson Blvd. 4th Floor Chicago, IL 60604-3901

Structural

REF DWG. NO. \$6.1.0

Jc.)	PROJECT DUNNE TECHNOLOGY ACADEM MODERNIZATION	Y TITLE E	LEVATION	
Architects In	FGM ARCHITECTS CHICAGO OAK BROOK OFALLON ST. LOUIS	DRAWN MATRIX	DATE 02/26/2015	SHEET NO. SSK-005
° ¦` © 2015 FGM	PROFESSIONAL DESIGN FIRM - IL # 184-000350	APPROVED MATRIX	JOB NO. 15-1950.01	ISSUED AS ADD #1



3 SOUTH BUILDING ELEVATION - PARTIAL 56.1.0 1/8"=1'-0"

ELEVATION NOTES

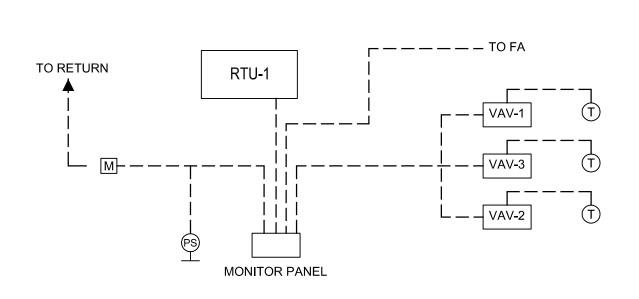
- 1. REFER TO LINTEL SCHEDULE ON S5.1.0 FOR SIZES
- 2. COORDINATE OPENING SIZES WITH ARCH DWGS.

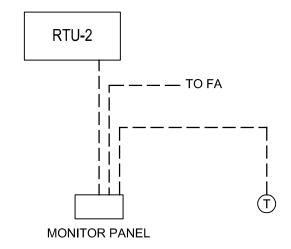
MATRIX ENGINEERING CORP.

33 W. Jackson Blvd. 4th Floor Chicago, IL 60604-3901 Structural

REF DWG. NO. \$6.1.0

PROJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION	TITLE EL	EVATION	
E PLAM ARCHIECTS	drawn MATRIX	DATE 02/26/2015	SHEET NO. SSK-006
05 FO	approved MATRIX	JOB NO. 15-1950.01	ISSUED AS ADD #1

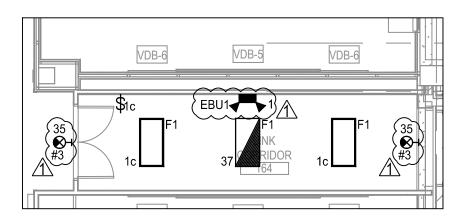


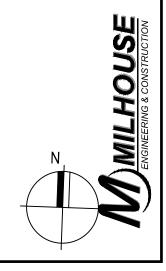




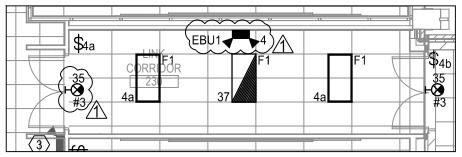
NOTE: CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT AND WIRING BETWEEN MONITORING PANELS, RTU, VAVS, DAMPERS, SENSORS, AND BACK TO EXISTING FIRE ALARM PANEL

JC.)	PROJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION	Y	TITLE M	SK-1-M3-RTU-1	1&2 SCHEMATICS
Architects It	FGM ARCHITECTS CHICAGO OAK BROOK O'FALLON ST. LOUIS	drawn JA	1	DATE 02/26/2015	SHEET NO. MSK-001
2015 FGM		APPRO'	VED	PBC JOB NO. 05440	issued as ADD #1





PROJECT DUNNI MODE	E TECHNOLOGY ACADEMY RNIZATION	TITLE	Electrical 1st floor lighting plan, link corridoor revisions	or lighting plan, visions
	RCHITEC	DRAWN AP	DATE 02/26/2015	SHEET NO.
CHICAGO OAK	brook ofallon st. louis	APPROVED	PBC JOB NO.	ISSUED AS
Professional [DESIGN FIRM - IL # 184-000350	WW	05440	ADD #1



\$4a	CORRIDOR 23 4a	BU1 4 F1	F1 4a	\$4b 35 \$35
(3)	441	37	4a	#3
KEY	NOTES - SHEE	т		

DESCRIPTION

IF FIXTURE WAS DETERMINED TO NEED REPLACEMENT, PROVIDE NEW FIXTURE TO MATCH EXISTING. QUANTITY OF FIXTURE REPLACEMENT ASSUMED TO BE 20%. IF FIXTURE WAS DETERMINED AS BEING RELOCATED CONTRACTOR SHALL REINSTALL FIXTURE IN LOCATION AS REQUIRED. REUSE EXISTING CONDUIT AND WIRING. DOCUMENT CIRCUIT NUMBERS

LIGHTING CONTROLS FOR GYM FIXTURES LOCATED ON THE FIRST FLOOR NEAR THE DOORS.

REPLACE BATTERY PACKS AND LIGHT BULBS IN EXISTING EMERGENCY

FIXTURES. AFTER REPLACEMENT, RETEST ALL FIXTURES. REPLACE ANY FIXTURES THAT ARE STILL NON-FUCTIONAL WITH A NEW EBU PER FIXTURE

REINSTALL FIXTURES WHICH WERE REMOVED FROM THIS ROOM DURING

FIXTURE SHALL BE MOUNTED BELOW THE TOP OF THE PARAPET WALL.

PROVIDE LABEL INDICATING SWITCH IS FOR CONTROLLING ROOFTOP

KEY NUMBER

2

3

4

5

6

7

8

LIGHTS.

FOR ALL FIXTURES.

REFER TO DRAWING E1.1.1.

SCHEDULE ON SHEET E7.0.1

DEMOLITION. CONNECT TO EXISTING WIRING.

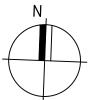
FIXTURE SHALL BE MOUNTED AT 24' ABOVE GRADE.

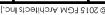
PROVIDE NEW LENSE FOR EXISTING LIGHT FIXTURE.

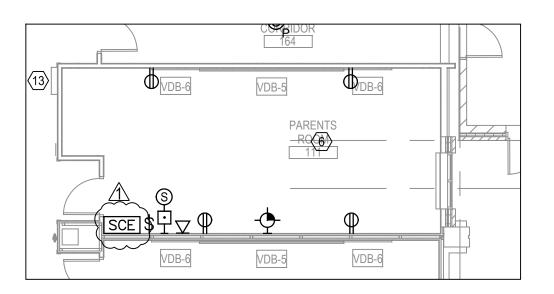
ANTOR /100E	18
GIRLS ESTROOM 200B	LP-2
ER 8	MyF 292A
	2000

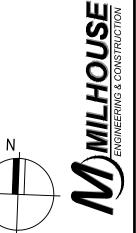
		ļ	T T
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١	(E	

PROJECT DUN	NNE TECHNOLO	NNE TECHNOLOGY ACADEMY DERNIZATION		E Electrical 2nd 1 corridoor and	TILE Electrical 2nd floor lighting plan, link corridoor and MDF room revisions
C C C C C C C C C C C C C C C C C C C) d V	A DO LITEOTO DRAWN	DRAWN	DATE	SHEET NO.
D OBO			AP	02/26/2015	ESK-002
₩Đ4 ¢			APPROVED	PBC JOB NO.	ISSUED AS
PROFESSION	nal design fi	JAL DESIGN FIRM - IL # 184-000350	MM	05440	ADD #1

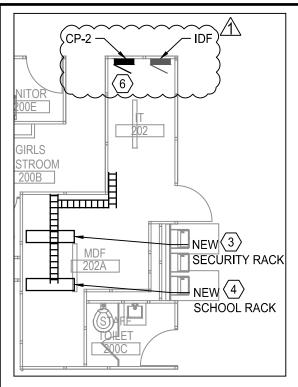


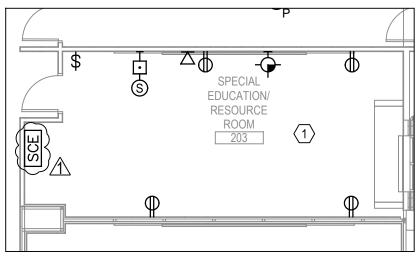






PROJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION	CADEMY	TITLE E	Electrical 1st floor power plan, Parents Room	or power plan,
POPULATION DRAWN	TC DRAWN	7	DATE	SHEET NO.
CHICAGO	ST. LOUIS		02/26/2015	ESK-003
	APPROVED	VED	PBC JOB NO.	ISSUED AS
PROFESSIONAL DESIGN FIRM - IL # 184-000350	00350 MM		05440	ADD #1





	KEYNOTES - SHEET
KEY Number	DESCRIPTION
1	ALL EXISTING DEVICES IN THIS CLASSROOM SHALL BE REINSTALLED AS REQUIRED.

1	ALL EXISTING DEVICES IN THIS CLASSROOM SHALL BE REINSTALLED AS REQUIRED. PROVIDE BOX EXTENSION TO ACCOMMODATE NEW DRYWALL AND METAL STUD THICKNESS. DEVICE LOCATIONS SHOWN FOR REFERENCE ONLY. COORDINATE WITH ARCHITECTURAL DRAWINGS.
2	FED FROM CIRCUIT #23 IN EXISTING KITCHEN POWER PANEL. REFER TO E2.1.1.
3 2	PROVIDE NEW SECURITY RACK IN EXISTING MDF ROOM TO SERVE NEW ANNEX BUILDING. PROVIDE NEW CABLE TRAY FROM EXISTING SECURITY RACK TO NEW SECURITY RACK. REFER TO DETAILS ON DRAWING E9.0.7.
4	PROVIDE NEW POWER RACK IN EXISTING MDF ROOM TO SERVE NEW ANNEX BUILDING. PROVIDE NEW CABLE TRAY FROM EXISTING POWER RACK TO NEW POWER RACK. REFER TO DETAILS ON DRAWING E9.0.7.
5	REINSTALL EXISTING PANEL. EXTEND CONDUIT AND WIRING AS REQUIRED.
6	PROVIDE (3) CIRCUITS FROM NEW PANEL CP-2 TO FEED THE NEW SECURITY RACK AND (3) CIRCUITS TO FEED THE NEW POWER RACK.





Jc.)	PROJECT DUNNE TECHNOLOGY ACADEM MODERNIZATION	Y			oor power plan, IT/MDF Resource rooms
Architects In	FGM ARCHITECTS CHICAGO OAK BROOK O'FALLON ST. LOUIS	drawn AP	1	DATE 02/26/2015	SHEET NO. ESK-004
15 FGM		APPRO	VED	PBC JOB NO.	ISSUED AS
(© 20	PROFESSIONAL DESIGN FIRM - IL # 184-000350	MM		05440	ADD #1

	CABLE AND CONDUIT SCHEDULE							
FEEDER TAG								
NUMBER	AMPACITY	CONDUIT SIZE	SETS	FEEDER	CONDUIT TYPE	FUNCTION	FROM	ТО
F1	3200A	5"	2	N/A	PVC	UTILITY FEED	COMED POLE	OUTDOOR TRANSFORMER
F2	1200A	3 1/2"	4 '	4#400KCMIL, #1/0G	PVC	UTILITY FEED	OUTDOOR TRANSFORMER	NEW DISTRIBUTION SWITCHBOARD SWBD-2
F3	125A	2"	1 1	4#2/0, #4G	PVC	FIRE PUMP CONTROLLER FEED	OUTDOOR TRANSFORMER	FIRE PUMP CONTROLLER
F4	2000A	4"	5	4#750KCMIL, #2/0G	PVC	EXISTING BUILDING FEED	OUTDOOR TRANSFORMER	EXISTING DISTRIBUTION SWITCHBOARD SWBD-1
F5	150A	2"	1 1	4#1/0, #6G	RGS	FEED TO BRANCH CIRCUIT PANEL	DISTRIBUTION SWITCHBOARD SWBD-2	BRANCH CIRCUIT PANEL LP-3
F6	200A	2 1/2"	1 1	3#3/0, #6G	RGS	FEED TO ROOF TOP UNIT	DISTRIBUTION SWITCHBOARD SWBD-2	ROOF TOP UNIT RTU-1
F7	300A	3 1/2"	<u> </u>	3#350KCMIL, #4G	RGS	FEED TO ROOF TOP UNIT	DISTRIBUTION SWITCHBOARD SWBD-2	ROOF TOP UNIT RTU-2
F8	20A	3/4"	1 1	3#12, #12G	RGS	FEED TO BOOSTER PUMP	DISTRIBUTION SWITCHBOARD SWBD-2	BOOSTER PUMP DBP-1
F9	150A	2"	<u> </u>	4#1/0, #6G	RGS	FEED TO BRANCH CIRCUIT PANEL	DISTRIBUTION SWITCHBOARD SWBD-2	BRANCH CIRCUIT PANEL PP-3
F10	150A	2"	1	3#1/0, #6G	RGS	FEED TO WATER HEATER	DISTRIBUTION SWITCHBOARD SWBD-2	WATER HEATER WH-1
F11	150A	2"	1 1	3#1/0, #6G	RGS	FEED TO WATER HEATER	DISTRIBUTION SWITCHBOARD SWBD-2	WATER HEATER WH-2
F12	2000A	N/A	5	4#750KCMIL, #250KCMIL G	N/A	EXISTING BUILDING FEED	NEW MANHOLE	EXISTING DISTRIBUTION SWITCHBOARD SWBD-1
F13	100A	1 1/2"	1 1	3#1, #8G	RGS	FEED TO ELEVATOR	DISTRIBUTION SWITCHBOARD SWBD-2	ELEVATOR CONTROL PANEL
F14	100A	1 1/2"	1 1	4#1,#1N, #8G	RGS	FEED TO BRANCH CIRCUIT PANEL	DISTRIBUTION SWITCHBOARD SWBD-2	BRANCH CIRCUIT PANEL CP-1
F15	150A	2"	<u> </u>	4#1/0, #6G	RGS	FEED TO BRANCH CIRCUIT PANEL	DISTRIBUTION SWITCHBOARD SWBD-2	BRANCH CIRCUIT PANEL LP-4
F16	125A	2"	<u> 1</u>	4#1/0, #6G	RGS	FIRE PUMP FEED	FIRE PUMP CONTROLLER	FIRE PUMP FP-1
~~*!\$~	~20A~				₩G9~	YOCKEY PUMP PEED	PREPUMP CONTROLLER V	
F18	100A	1 1/2"	1 1	4#1,#1N, #8G	RGS		DISTRIBUTION SWITCHBOARD SWBD-2	
<u> </u>				***************************************				
					<u>+</u>			

MOTOR WIRING

2@2 2@2.71

2.07 5.8

27.1 75.2

50

.041

40 111

40 111

6 16.7

.128 1.1

.0935 .8

.696

.696

.696 5.8

1/4

1/4

1/4 .696 5.8

DESCRIPTION

FIRE PUMP

BOOSTER PUMPS

JOCKEY PUMP

ELEVATOR

ROOF TOP UNIT

ROOF TOP UNIT

HOT WATER

RETRUN

WATER HEATER

WATER HEATER

VARIABLE AIR

VOLUME UNIT VARIABLE AIR

VOLUME UNIT VARIABLE AIR

VOLUME UNIT

EXHAUST FAN

EXHAUST FAN

EXHAUST FAN

EXHAUST FAN

EXHAUST FAN

EXHAUST FAN

DOMESTIC WATER WATER PUMP

FP-1

DBP-1

JP-1

EL-1

RTU-1

RTU-2

HWR-1

WH-1

WH-2

VAV-1

VAV-2

VAV-3

EF-1

EF-2

EF-3

EF-8

EF-9

EF-10

WATER PUMP 157

157 WATER PUMP

E. MACHINE 152

ROOF

ROOF

WATER PUMP

WATER PUMP 157

WATER PUMP

CORRIDOR 151

CORRIDOR 151

TOILET 154

E. MACHINE

152

KITCHEN

SCIENCE

STORAGE

ELEC. ROOM

KITCHEN

CORRIDOR 151 208

157

208 3 30 31.9 88.5

208

208 3

208

208

120

208

208 3

208

208

120 1 1/30

120

120

120

120 1

120

3

3

3

1

MILHOUSE	ENGINEERING & CONSTRUCTION
2	

	FEED FROM		0	CP	WIRING			DISCONNECT			
AMPS	PANEL	CCT			NO.						SEE NOTES
88.5	FPC		125A	3	F	SINGLE LINE		200A	3	N	
15	SWBD-2		20A	3		E FE F		30A	3	N	
5.8	FPC		20A	3	1	12	3/4"	30A	3	N	
75.2	SWBD-2		100A	3	SINGLE LINE		200A	3	Y	2	
141.1	SWBD-2		200A	3	REFER TO SINGLE LINE		200A	3	N		
227	SWBD-2		300A	3		EFEF		400A	3	N	
.34	PP-3	30	20A	1	1	12	3/4"	30A	1	N	
111	SWBD-2		150A	3		EFEF		200A	3	N	
111	SWBD-2		150A	3		E FE F		200A	3	N	
18.7	PP-3	7,9,11	30A	3	1	12	3/4"	30A	3	N	
16.7	PP-3	13,15,17	30A	3	1	12	3/4"	30A	3	N	
23.88	PP-3	14,16,18	30A	3	1	10	3/4"	30A	3	N	
1.1	PP-3	27	20A	1	1	12	3/4"	30A	1	N	1
90	PP-3	29	20A	1	1	12	3/4"	30A	1	N	1
5.8	PP-3	31	20A	11	1	12	3/4"	30A	1	N	
5.8	PP-3	32	20A	11	1	12	3/4"	30A	1	N	1
5.8	PP-3	34	20A	1	1	12	3/4"	30A	1	N	1
5.8	PP-3	36	20A	1	1	12	3/4"	30A	1	N	1

OJECT DUNNE TECHNOLOGY ACADEMY MODERNIZATION		ectrical schedi onduit schedul	TITLE Electrical schedules, cable and conduit schedule modification
ECAN A DO LITEOTO DRAWN	DRAWN	DATE	SHEET NO.
	AP	02/26/2015	ESK-0 (
	APPROVED	PBC JOB NO.	ISSUED AS
PROFESSIONAL DESIGN FIRM - IL # 184-000350	MM	05440	ADD i

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PROJECT

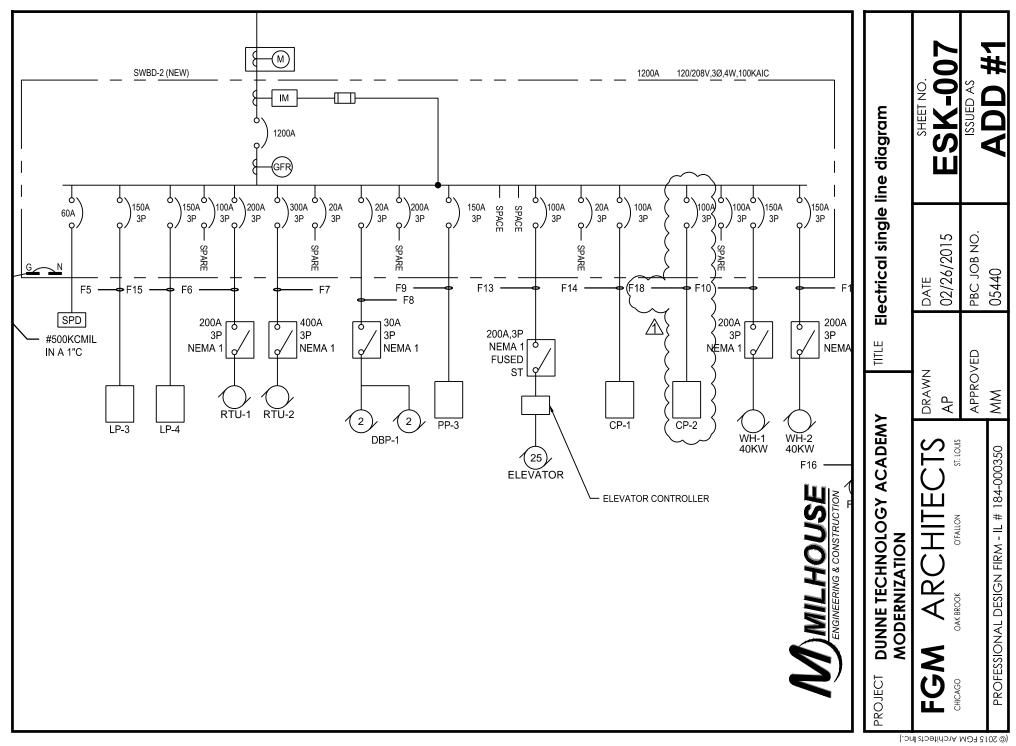


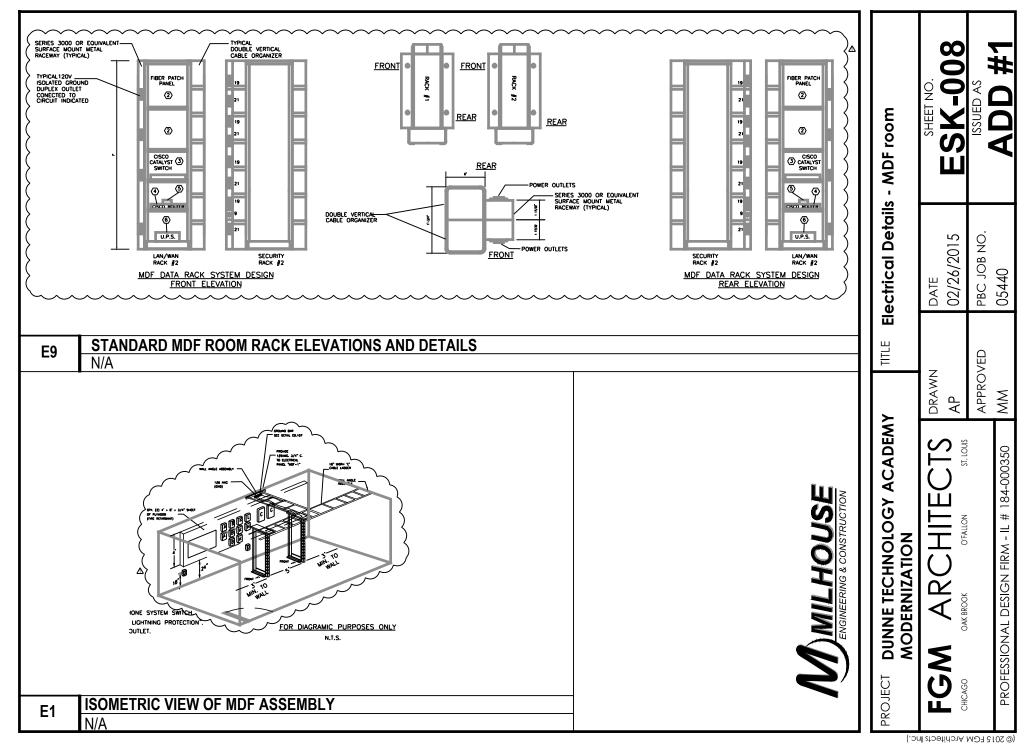
	PANEL SCHEDULE	DESIGNAT LOCATION VOLTAGE: PHASE:	:	208/120 V 3 PHASE,				ALL BI	IZE _ MOUNT REAKER		100 A 100 A SURFACE 35,000 A.I.C. (MINIMUM)	
CKT.	LOAD			BKR.		VA		CKT.			LOAD	CK
NO.	DESCRIPTION	VA	AMPS	POLE	A	В	С		POLE	VA	DESCRIPTION	NC
1	SECUIRTY RACK	500	20	1	1,000			20	1	500	POWER RACK	2
3	SECUIRTY RACK	500	20	1		1,000		20	1	500	POWER RACK	4
5	SECUIRTY RACK	500	20	1			1,000	20	1	500	POWER RACK	6
7	SPARE		20	1	0			20	1		SPARE	8
9	SPARE		20	1		0		20	1		SPARE	10
11	SPARE		20	1			0	20	1		SPARE	12
13	SPARE		20	1	0			20	1		SPARE	14
15	SPARE		20	1		0		20	1		SPARE	16
17	SPARE		20	1			0	20	1		SPARE	18
19	SPARE		20	1	0			20	1		SPARE	20
21	SPARE		20	1		0		20	1		SPARE	22
23	SPARE		20	1			0	20	1		SPARE	24
25	SPARE		20	1	0			20	1		SPARE	26
27	SPARE		20	1		0		20	1		SPARE	28
29	SPARE		20	1			0	20	1		SPARE	30
31	SPARE		20	1	0			20	1		SPARE	32
33	SPARE		20	1		0		20	1		SPARE	34
35	SPARE		20	1			0	20	1		SPARE	36
37	SPACE				0			000 000 888			SPACE	38
39	SPACE					0	_	986			SPACE	40
41	SPACE						0				SPACE	42
	TOTAL CONNECTED LOAD	D:			1,000	1,000	1,000	ТОТ	AL =	3.00	KVA	
			AMPERE		3	3	3	TOT	AL =	8	AMP	

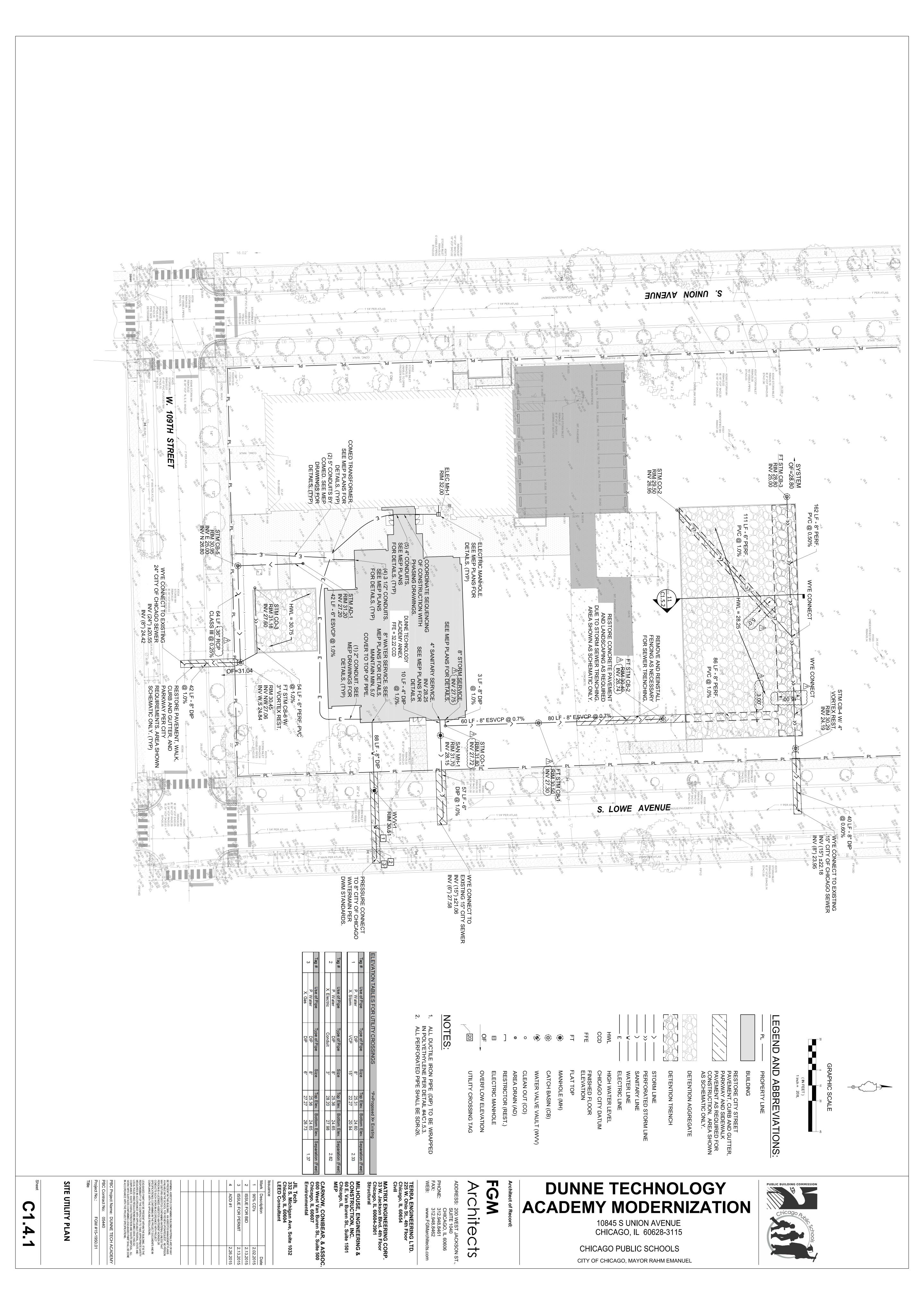
		DESIGNATION			ANEL LP-3			MAINS			125A	
	PANEL	LOCATION:		ELECTRIC	CAL ROOM	153		BUS S	IZE		150A	
	SCHEDULE	VOLTAGE:		208/120 V	OLT			PANEL	- MOUN	TING:	SURFACE	
		PHASE:		3 PHASE,	4 WIRE			ALL BI	REAKER	RS:	35,000 A.I.C. (MINIMUM)	
CKT.	LOAD		CKT	.BKR.		VA			BKR.		LOAD	CKT.
NO.	DESCRIPTION	~VA~	AMPS	POLE	Α	В	С	AMPS	POLE	VA	DESCRIPTION	NO.
1	ROOMS 150,151,164 LGTS (585	20	1	1,811			20	1	~1226~	EXTERIOR LIGHTS	2
3	ROOMS 159,160 LIGHTS	~1125~	A 20	1		1,439		20	1 (314	ROOM 230,250 LIGHTS	4
5	ROOMS 162,161 LIGHTS	1050	20	1			1,452	20	1	~402 ~	ROOM 251 LIGHTS	6
7	RMS152-154,156,ELEV. LGTS	681	20	1	1,681			20	1	1000	HAND DRYER	8
9	ROOMS 157,158 LIGHTS	357	20	1		405		20	1	48	EM LIGHTS	10
11	RECEPTS 159, 160	1080	20	1			1,080	20	1		SPARE	12
13	RECEPTS 160,161,162	1080	20	1	2,160			20	1	1080	OUTDOOR GFI RECPTS	14
15	RECEPTS 161	720	20	1		1,800		20	1	1080	CORRDR/VEST RECPTS	16
17	RECEPTS 161	720	20	1			1,980	20	1	1260	RECEPTS 152,153,154,156	18
19	RECEPTS 161	720	20	1	720			20	1		SPARE	20
21	RECEPTS 161	900	20	1		900		20	1		SPARE	22
23	RECEPTS 155,157,158	1440	20	1			1,440	20	1		SPARE	24
25	MCT 154	1000	20	1	1,000			20	1		SPARE	26
27	MOTORIZED SHADES 155	1000	20	1		1,000		20	1		SPARE	28
29	MOTORIZED SHADES 155	1000	20	1			2,260	20	1	1260	RECEPTS 155	30
31	MOTORIZED SHADES 155	1000	20	1	1,100			20	1	100	SCOREBOARD	32
33	MOTORIZED SHADES 155	~1000~	_ 20	1		1,000		20	1		SPARE	34
35	EXIT LIGHTS (33	20	1			33	20	1		SPARE	36
37	NIGHT LIGHTS	~600~	1 20	1	600			20	1		SPARE	38
39	SPACE					1,000		20	1	1000	LAPTOP CHRGNG STATION	40
41	SPACE						0				SPACE	42
	TOTAL CONNECTED LOAD:				9,072	7,544	8,245	ТОТ	AL =	24.86	KVA	
	•		AMPERE		25	21	23	TOT	AL =	69	AMP	

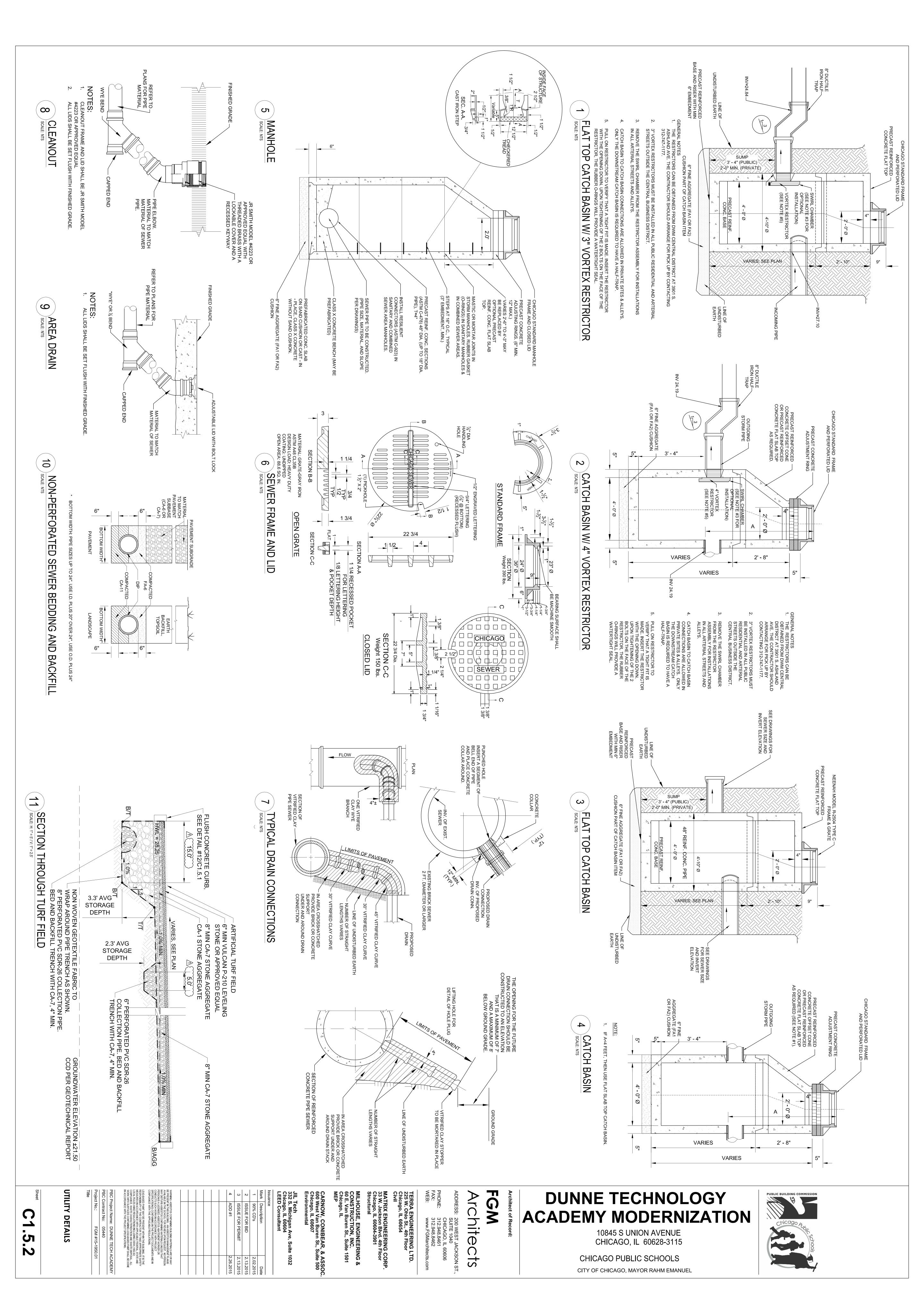
MILHOUSE ENGINEERING & CONSTRUCTION

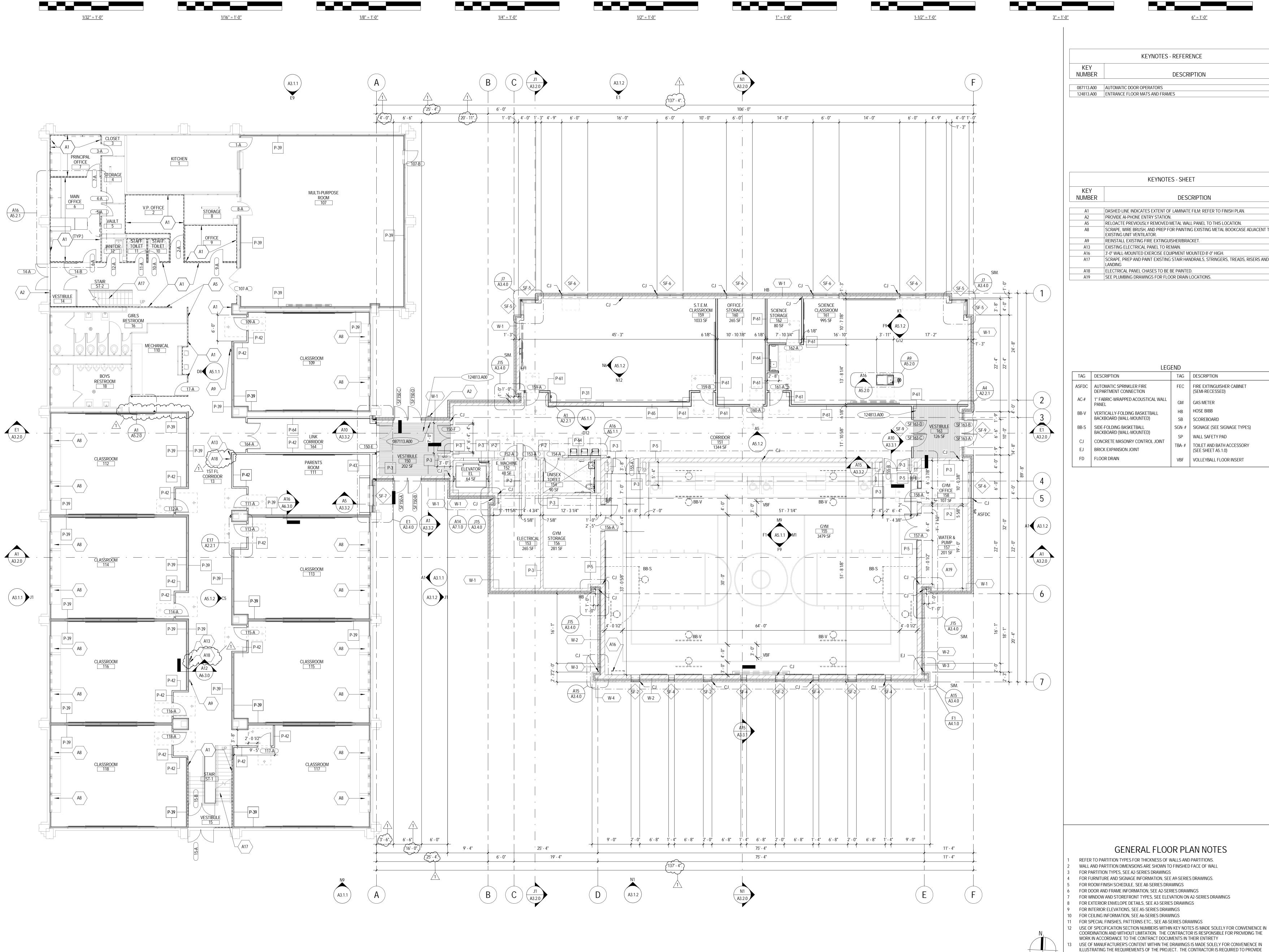
MODERNIZATION	/ IIILE EI	ectrical panel	schedules
FGM ARCHITECTS CHICAGO OAK BROOK OFALLON ST. LOUIS	drawn AP	date 02/26/2015	SHEET NO. ESK-006
PROFESSIONAL DESIGN FIRM - II # 184-000350	approved MM	PBC JOB NO. 05440	issued as ADD #1











KEYNOTES - REFERENCE

<u>6" = 1'-0"</u>

DESCRIPTION

087113.A00 AUTOMATIC DOOR OPERATORS
124813.A00 ENTRANCE FLOOR MATS AND FRAMES



	KEYNOTES - SHEET
KEY	
NUMBER	DESCRIPTION
A1	DASHED LINE INDICATES EXTENT OF LAMINATE FILM; REFER TO FINISH PLAN.
A2	PROVIDE AI-PHONE ENTRY STATION.
A 5	RELOACTE PREVIOUSLY REMOVED METAL WALL PANEL TO THIS LOCATION.
A8	SCRAPE, WIRE BRUSH, AND PREP FOR PAINTING EXISTING METAL BOOKCASE ADJACENT TO EXISTING UNIT VENTILATOR.
A9	REINSTALL EXISTING FIRE EXTINGUISHER/BRACKET.
A13	EXISTING ELECTRICAL PANEL TO REMAIN.
A16	3'-0" WALL-MOUNTED EXERCISE EQUIPMENT MOUNTED 8'-0" HIGH.
A17	SCRAPE, PREP AND PAINT EXISTING STAIR HANDRAILS, STRINGERS, TREADS, RISERS AND LANDING
A18	ELECTRICAL PANEL CHASES TO BE BE PAINTED.
A19	SEE PLUMBING DRAWINGS FOR FLOOR DRAIN LOCATIONS.

	LEG	END	
TAG	DESCRIPTION	TAG	DESCRIPTION
ASFDC	AUTOMATIC SPRINKLER FIRE DEPARTMENT CONNECTION	FEC	FIRE EXTINGUISHER CABINET (SEMI-RECESSED)
AC-#	1" FABRIC-WRAPPED ACOUSTICAL WALL PANEL	GM	GAS METER
BB-V	VERTICALLY-FOLDING BASKETBALL	НВ	HOSE BIBB
	BACKBOARD (WALL-MOUNTED)	SB	SCOREBOARD
BB-S	SIDE-FOLDING BASKETBALL	SGN-#	SIGNAGE (SEE SIGNAGE TYPES)
	BACKBOARD (WALL-MOUNTED)	SP	WALL SAFETY PAD
CJ	CONCRETE MASONRY CONTROL JOINT	 TBA-#	TOILET AND BATH ACCESSORY
EJ	BRICK EXPANSION JOINT	I DA- II	(SEE SHEET A5.1.0)
FD	FLOOR DRAIN	VBF	VOLLEYBALL FLOOR INSERT

PRODUCTS SPECIFIED AND APPROVED THROUGH THE SUBMITTAL PROCESS.

Architect of Record:

FGM Architects

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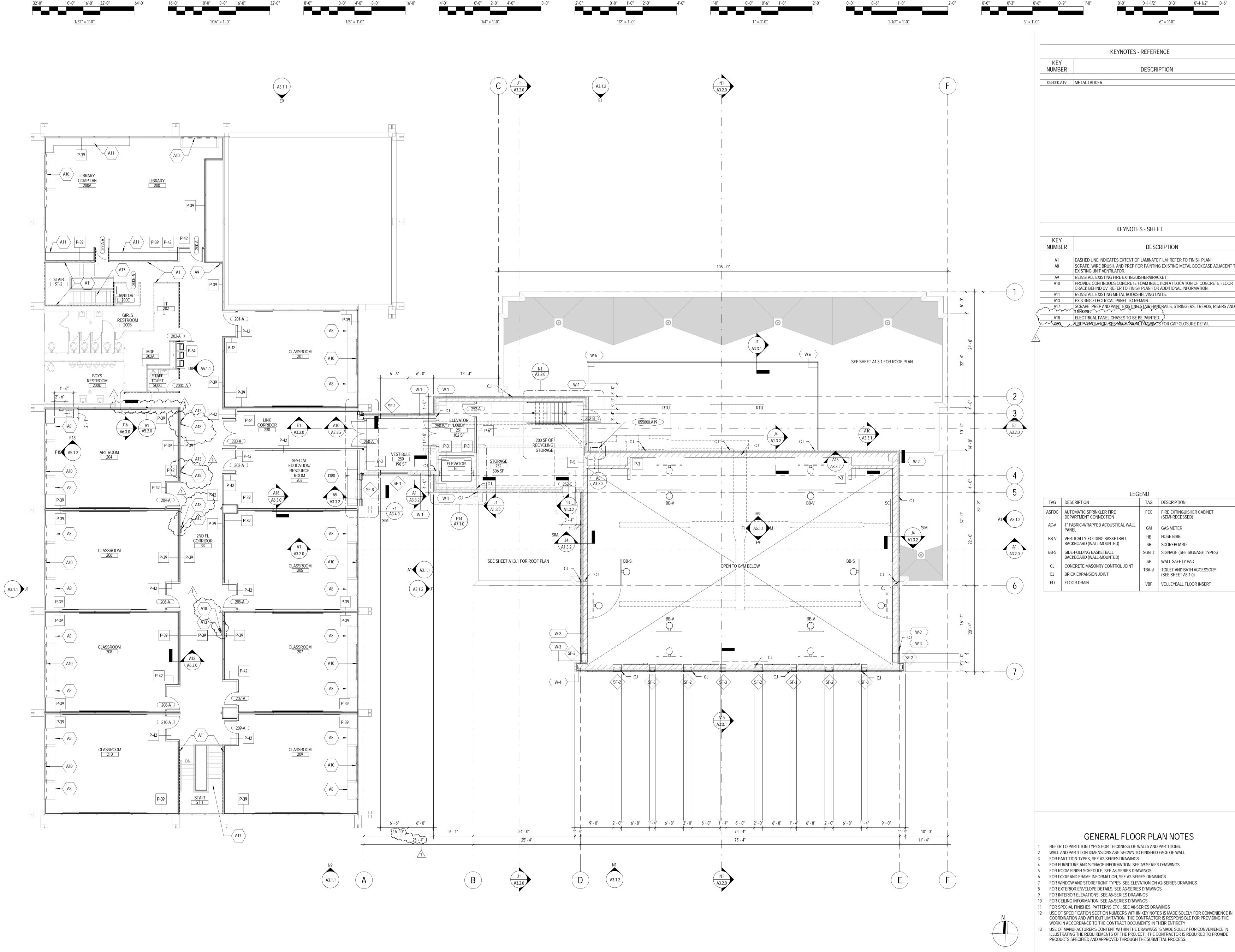
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PBC Project Name: DUNNE TECH ACADEMY PBC Contract No: C1566 PBC Project No.: 05440

FIRST FLOOR PLAN

FGM Project No.: 15-1950.01



KEYNOTES - REFERENCE DESCRIPTION 055000.A19 METAL LADDER

<u>6" = 1'-0"</u>



KEYNOTES - SHEET DESCRIPTION DASHED LINE INDICATES EXTENT OF LAMINATE FILM; REFER TO FINISH PLAN. SCRAPE, WIRE BRUSH, AND PREP FOR PAINTING EXISTING METAL BOOKCASE ADJACENT T EXISTING UNIT VENTILATOR. REINSTALL EXISTING FIRE EXTINGUISHER/BRACKET. PROVIDE CONTINUOUS CONCRETE FOAM INJECTION AT LOCATION OF CONCRETE FLOOR CRACK BEHIND UV; REFER TO FINISH PLAN FOR ADDITIONAL INFORMATION. REINSTALL EXISTING METAL BOOKSHELVING UNITS. EXISTING ELECTRICAL PANEL TO REMAIN. SCRAPE, PREP AND PAINT EXISTING STAIR HANDRAILS, STRINGERS, TREADS, RISERS AND

LEGEND

TAG DESCRIPTION

GM GAS METER

HB HOSE BIBB

SB SCOREBOARD

FEC FIRE EXTINGUISHER CABINET

SGN-# SIGNAGE (SEE SIGNAGE TYPES)

TBA-# | TOILET AND BATH ACCESSORY

(SEE SHEET A5.1.0)

VBF VOLLEYBALL FLOOR INSERT

(SEMI-RECESSED)

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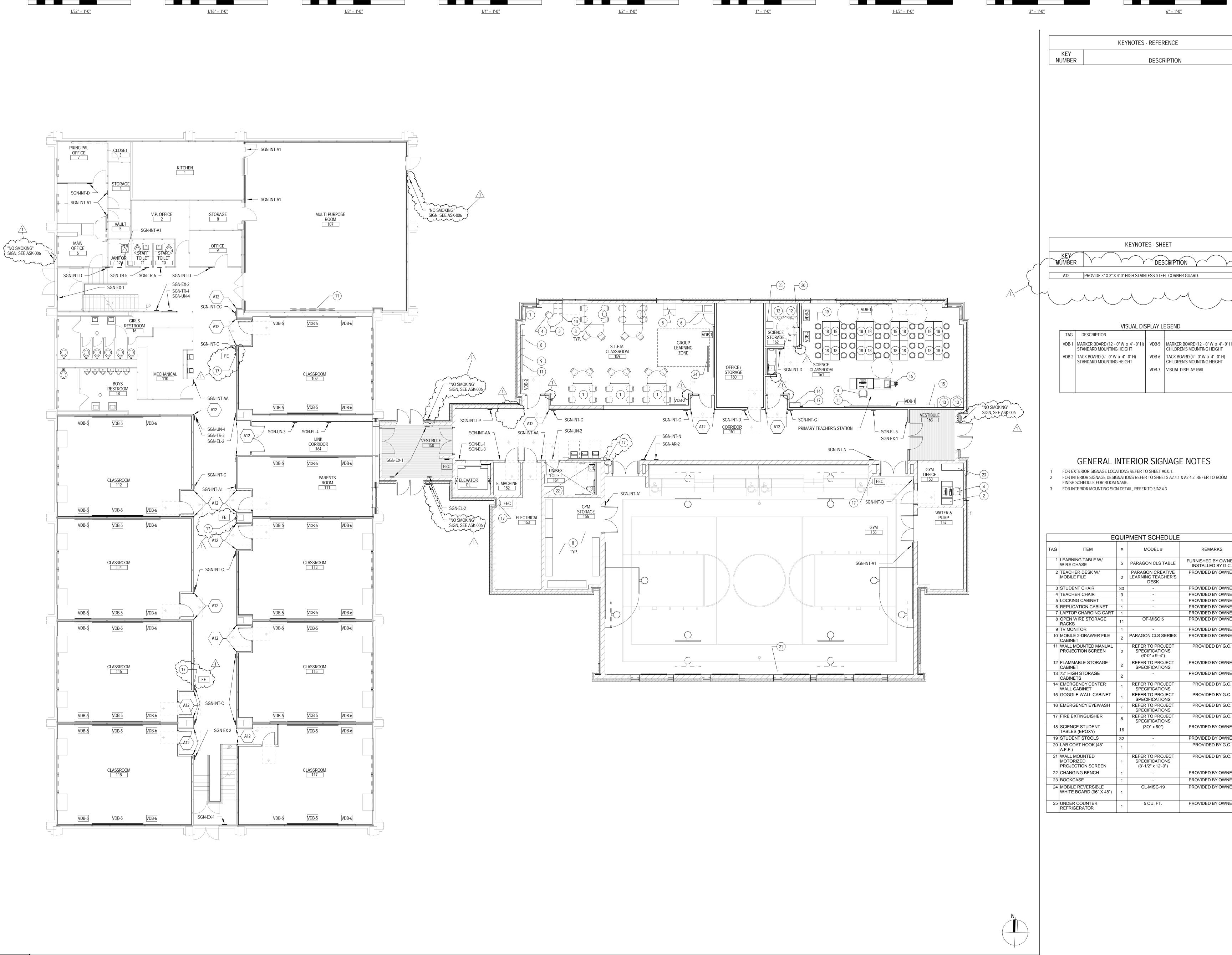
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PBC Project Name: DUNNE TECH ACADEMY PBC Contract No: C1566 PBC Project No.: 05440

SECOND FLOOR

FGM Project No.: 15-1950.01



0'-0" 1'-0" 2'-0"

KEYNOTES - REFERENCE DESCRIPTION

KEYNOTES - SHEET

VISUAL DISPLAY LEGEND

EQUIPMENT SCHEDULE

PARAGON CLS TABLE

PARAGON CREATIVE LEARNING TEACHER'S DESK

OF-MISC 5

PARAGON CLS SERIES

REFER TO PROJECT

SPECIFICATIONS

(6'-0" x 9'-4")

REFER TO PROJECT

SPECIFICATIONS

REFER TO PROJECT

SPECIFICATIONS

REFER TO PROJECT

SPECIFICATIONS

REFER TO PROJECT

SPECIFICATIONS

REFER TO PROJECT

SPECIFICATIONS

REFER TO PROJECT

SPECIFICATIONS

CL-MISC-19

DESCRIPTION

CHILDREN'S MOUNTING HEIGHT

CHILDREN'S MOUNTING HEIGHT

REMARKS

FURNISHED BY OWNER;

INSTALLED BY G.C.

PROVIDED BY OWNER

PROVIDED BY G.C.

PROVIDED BY OWNER

PROVIDED BY OWNER

PROVIDED BY G.C.

PROVIDED BY G.C.

PROVIDED BY G.C.

PROVIDED BY G.C.

PROVIDED BY OWNER

PROVIDED BY OWNER

PROVIDED BY G.C.

PROVIDED BY G.C.

PROVIDED BY OWNER

PROVIDED BY OWNER

PROVIDED BY OWNER

PROVIDED BY OWNER

VDB-6 TACK BOARD (4' - 0" W x 4' - 0" H)

VDB-7 VISUAL DISPLAY RAIL

<u>6" = 1'-0"</u>



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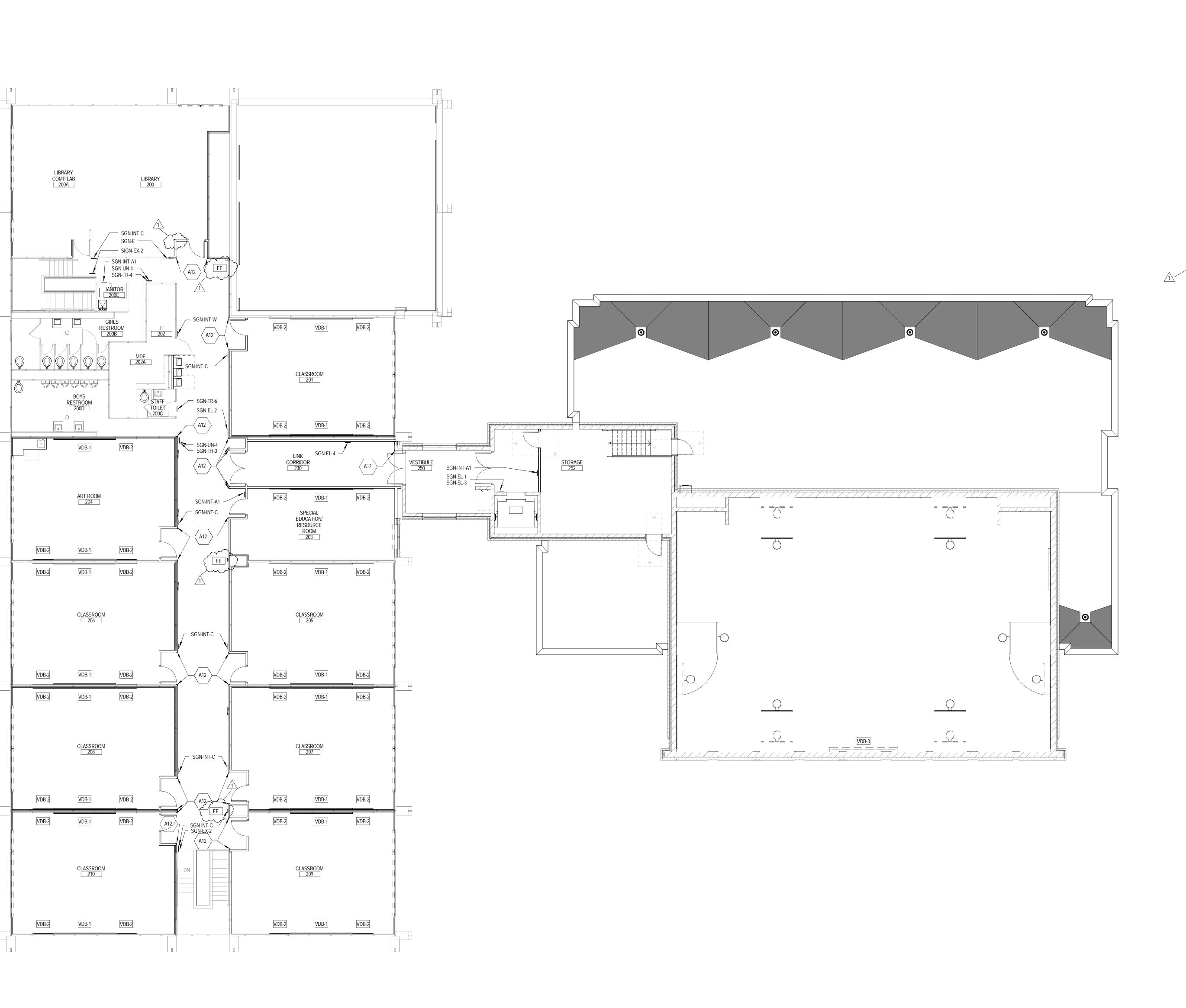
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PBC Project Name: DUNNE TECH ACADEMY PBC Contract No: C1566 PBC Project No.: 05440 FGM Project No.: 15-1950.01

FIRST FLOOR FURNITURE & WALL MOUNTINGS PLAN

0'-0" 8'-0" 16'-0"



<u>1/2" = 1'-0"</u>

1/4" = 1'-0"

<u>1" = 1'-0"</u>

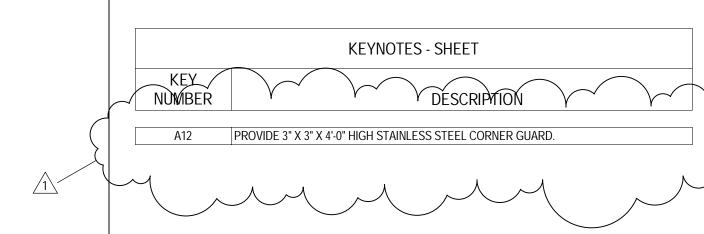
<u>1-1/2" = 1'-0"</u>



<u>6" = 1'-0"</u>

3" = 1'-0"





_		VISUAL DIS	SPLAY LI	EGEND
	TAG	DESCRIPTION		
	VDB-1	MARKER BOARD (12' - 0" W x 4' - 0" H) STANDARD MOUNTING HEIGHT	VDB-5	MARKER BOARD (12' - 0" W x 4' - 0" H CHILDREN'S MOUNTING HEIGHT
	VDB-2	TACK BOARD (4' - 0" W x 4' - 0" H) STANDARD MOUNTING HEIGHT	VDB-6	TACK BOARD (4' - 0" W x 4' - 0" H) CHILDREN'S MOUNTING HEIGHT
			VDB-7	VISUAL DISPLAY RAIL

GENERAL INTERIOR SIGNAGE NOTES

1 FOR EXTERIOR SIGNAGE LOCATIONS REFER TO SHEET A0.0.1. FOR INTERIOR SIGNAGE DESIGNATIONS REFER TO SHEETS A2.4.1 & A2.4.2. REFER TO ROOM FINISH SCHEDULE FOR ROOM NAME. 3 FOR INTERIOR MOUNTING SIGN DETAIL, REFER TO 3/A2.4.3

	E(ווטג	PMENT SCHEDULE	
TAG	ITEM	#	MODEL#	REMARKS
1	LEARNING TABLE W/ WIRE CHASE	5	PARAGON CLS TABLE	FURNISHED BY OWNER INSTALLED BY G.C.
2	TEACHER DESK W/ MOBILE FILE	2	PARAGON CREATIVE LEARNING TEACHER'S DESK	PROVIDED BY OWNER
3	STUDENT CHAIR	30	-	PROVIDED BY OWNER
	TEACHER CHAIR	3	-	PROVIDED BY OWNER
5	LOCKING CABINET	1	-	PROVIDED BY OWNER
6	REPLICATION CABINET	1	-	PROVIDED BY OWNER
7	LAPTOP CHARGING CART	1	-	PROVIDED BY OWNER
	OPEN WIRE STORAGE RACKS	11	OF-MISC 5	PROVIDED BY OWNER
	TV MONITOR	1	-	PROVIDED BY OWNER
	MOBILE 2-DRAWER FILE CABINET	2	PARAGON CLS SERIES	PROVIDED BY OWNER
11	WALL MOUNTED MANUAL PROJECTION SCREEN	2	REFER TO PROJECT SPECIFICATIONS (6'-0" x 9'-4")	PROVIDED BY G.C.
12	FLAMMABLE STORAGE CABINET	2	REFER TO PROJECT SPECIFICATIONS	PROVIDED BY OWNER
	72" HIGH STORAGE CABINETS	2	-	PROVIDED BY OWNER
	EMERGENCY CENTER WALL CABINET	1	REFER TO PROJECT SPECIFICATIONS	PROVIDED BY G.C.
	GOGGLE WALL CABINET	1	REFER TO PROJECT SPECIFICATIONS	PROVIDED BY G.C.
	EMERGENCY EYEWASH	1	REFER TO PROJECT SPECIFICATIONS	PROVIDED BY G.C.
	FIRE EXTINGUISHER	8	REFER TO PROJECT SPECIFICATIONS	PROVIDED BY G.C.
	SCIENCE STUDENT TABLES (EPOXY)	16	(3O" x 60")	PROVIDED BY OWNER
	STUDENT STOOLS	32	-	PROVIDED BY OWNER
	LAB COAT HOOK (48" A.F.F.)	1	-	PROVIDED BY G.C.
21	WALL MOUNTED MOTORIZED PROJECTION SCREEN	1	REFER TO PROJECT SPECIFICATIONS (8'-1/2" x 12'-0")	PROVIDED BY G.C.
22	CHANGING BENCH	1	-	PROVIDED BY OWNER
23	BOOKCASE	1	-	PROVIDED BY OWNER
24	MOBILE REVERSIBLE WHITE BOARD (96" X 48")	1	CL-MISC-19	PROVIDED BY OWNER
25	UNDER COUNTER REFRIGERATOR	1	5 CU. FT.	PROVIDED BY OWNER



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PBC Project Name: DUNNE TECH ACADEMY PBC Contract No: C1566 PBC Project No.: 05440 FGM Project No.: 15-1950.01

SECOND FLOOR FURNITURE & WALL MOUNTINGS PLAN

<u>1/16" = 1'-0"</u>

<u>1/8" = 1'-0"</u>

1/32" = 1'-0"

CHICAGO ENERGY NOTES

- MINIMUM EQUIPMENT COOLNG EFFICIENCY SHALL BE 9.7 EER.
- 2. ALL ROOFTOP UNITS AND AIR HANDLERS SHALL BE FURNISHED WITH ECONOMIZERS.
- 3. MOTORIZED DAMPERS SHALL BE INSTALLED ON ALL INTAKES AND EXHAUST OPENINGS UNLESS NOTED OTHERWISE.
- 4. MAXIMUM FAN NAMEPLATE HORSEPOWER SHALL NOT EXCEED 1.1 HP/1000CFM.
- 5. LOAD CALCULATIONS WERE BASED ON ASHRE 2001 FUNDAMENTALS.
- 6. ALL PROGRAMMABLE THERMOSTATS SHALL HAVE 5 DEGREE DEADBAND AND SHALL HAVE 7-DAY CLOCK, 2-HOUR MANUAL OVERRIDE, 10 HOUR BACKUP AND SETBACK CAPABLE OF 55 DEGREES HEATING AND 85 DEGREES COOLING. (EXCEPT CONTINUOUS OPERATING ZONES)
- 7. DUCT INSULATION AS SPECIFIED WITH MINIMUM VALUES AS FOLLOWS:
 - R-6 SUPPLY AND RETURN DUCT INSULATION IN UNCONDITIONED SPACES.
 - R-8 SUPPLY AND RETURN DUCT INSULATION FOR EXTERIOR DUCTS. R-3 SUPPLY AND RETURN DUCT INSULATION UNDERGROUND.
- 8. ALL DUCTWORK SHALL BE SEALED PRESSURE SENSITIVE TAPE IS NOT USED AS THE PRIMARY SEALANT. LONGITUDINAL AND TRANSVERSE SEAMS FOR DUCTS IN UNCONDITIONED SPACES AND WALL PENETRATIONS. TRANSVERSE SEAMS ON BURIED DUCTS.

CITY OF CHICAGO PERMITTING NOTES

- 1. ALL WORK PERFORMED AND EQUIPMENT INSTALLED UNDER THIS CONTRACT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CITY OF CHICAGO CODES.
- 2. ALL NEW DUCTWORK SHALL BE FABRICATED FROM PRIME FIRST QUALITY GALVANIZED SHEET METAL, UNLESS OTHERWISE NOTED. GAUGES OF METAL, HANGER SPACING, ETC. SHALL CONFORM TO THE LATEST EDITION OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS FOR DUCT CONSTRUCTION (18-28-603.3).
- PROVIDE MANUAL LOCKING TYPE VOLUME DAMPERS IN ALL BRANCH DUCTWORK TO AIR DIFFUSERS, REGISTERS AND GRILLES. (13-184-080(15))
- 4. ALL FLEXIBLE LOW-PRESSURE DUCTWORK SHALL BE INSULATED, CHICAGO APPROVED AND NOT EXCEED 6'-0" IN LENGTH. MANUFACTURER TO BE WIREMOLD, TYPE WK UL-181, CLASS 1.
- 5. PROVIDE TURNING VANES IN ALL LOW-PRESSURE 90-DEGREE DUCT TURNS.
- 6. TRANSFER DUCTS SHALL NOT EXCEED 5'-0" IN LENGTH.
- 7. ALL AIR MOVING EQUIPMENT SHALL BE INSTALLED WITH VIBRATION ISOLATORS AND PROVIDED WITH FLEXIBLE DUCT CONNECTIONS.
- 8. ALL EQUIPMENT SHALL HAVE TOTALLY ENCLOSED MOTORS AND BE RATED TO OPERATE IN PLENUM CEILINGS, INCLUDING ALL SUPPLY AIR AND RETURN AIR FAN MOTORS EXPOSED TO THE AIR STREAM.
- 9. THE CONTRACTOR SHALL GUARANTEE THAT THE PLENUM CHAMBER USED FOR RECIRCULATION OF AIR WILL BE OF TIGHT CONSTRUCTION AND THAT ALL SOURCES OF AIR CONTAMINATION FROM TRAPS, SOIL STACKS, DOWN SPOUTS, VENTS, EXHAUST DISCHARGES AND OTHER SOURCES WILL BE ENCLOSED SO THAT NO CONTAMINATED AIR WILL BE RECIRCULATED.
- 10. THE MAXIMUM SOUND PRESSURE LEVEL, "A-SCALE LEVELS", AT THE PROPERTY LINE BORDERING RESIDENTIAL AREAS SHALL NOT EXCEED 55 DECIBELS (dB) FOR HVAC EQUIPMENT INSTALLED UNDER THIS CONTRACT.
- 11. OUTSIDE AIR INTAKES SHALL BE AT LEAST 10'-0" ABOVE GRADE AND A MINIMUM OF 15'-0" FROM ALL EXHAUST AIR AND SOURCES OF CONTAMINATION. MAXIMUM VELOCITY THROUGH OUTSIDE AIR LOUVERS AND DUCTWORK SHALL NOT EXCEED 1000 FPM.
- 12. ALL FLUES SHALL TERMINATE 6'-0" ABOVE THE ROOFLINE.
- 13. STRAINERS, ISOLATION VALVES AND BALANCE VALVES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
- 14. PROVIDE MANUAL AIR VENTS TO ALL HIGH POINTS IN PIPING.
- 15. ALL EXPANSION VALVES, DEVICES AND CONNECTIONS SHALL BE REMOVED FROM THE AIRSTREAM OF ALL MECHANICAL EQUIPMENT AS PER CITY OF CHICAGO CODE. (13-192-380)
- 16. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL A SAFETY RELIEF VALVE DESIGNED TO RELIEVE AND/OR PREVENT THE BUILD-UP OF EXCESSIVE REFRIGERANT PRESSURE WITHIN THE DIRECT-EXPANSION SYSTEM. THE PRESSURE RELIEF DEVICE SHALL BE SET AT 400 psi AND SHALL BE INSTALLED ON THE HIGH PRESSURE SIDE AT THE DISCHARGE OF THE COMPRESSOR AND UPSTREAM OF THE COMPRESSOR SHUT-OFF (STOP) VALVE. (13-192-520 thru 560)
- 17. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL A REFRIGERANT-RELIEF DISCHARGE PIPE. THE DISCHARGE PIPE OUTLET SHALL BE INSTALLED A MINIMUM OF 12'-0" ABOVE THE GROUND AND A MINIMUM OF 10'-0" FROM ANY OPENING, AND 20'-0" FROM ANY FIRE ESCAPE AND SHALL DISCHARGE THROUGH A TURNED DOWN ELBOW. (18-28-1106.13).
- 18. REFRIGERATION PIPING SHALL BE TYPE K COPPER WITH BRAZED SOCKET TYPE FITTINGS. (18-28-1107.4.4).

			CHIC	CAGO	HEAT	SCHE	DULE			
ROOM TAG	ROOM NAME	FLOOR AREA (SF)	BASIS	HEAT	LOSS DATA (BTUH)	HEAT SUPPLY DATA (BTUH)	REQUIRED SUPPLY (CFM)	ACTUAL SUPPLY (CFM)	REMARKS
				ENVELOPE	VENTILATION	TOTAL	(61011)			
150	WEST VESTIBULE	200	ASHRAE	4,584	0	4,584	17,065	0	0	3
152	ELEV MACHINE RM	48	ASHRAE	254	0	254	2,820	0	0	1
154	TOILET	80	ASHRAE	336	0	336	2,820	0	100	1
153	ELECTRICAL	265	ASHRAE	3,522	0	3,522	6,826	0	0	3
156	GYM STORAGE	281	ASHRAE	1,742	0	1,742	5,120	0	0	2
159	STEM CLASSROOM	1033	ASHRAE	19,652	43,200	62,852	83,618		1,600	1
151	CORRIDOR	1345	ASHRAE	6,806	24,300	31,106	50,750	0	900	1
160	OFFICE/STORAGE	265	ASHRAE	3,337	4,050	7,387	8,458		150	1
162	SCIENCE STORAGE	80	ASHRAE	833	2,700	3,533	5,213		100	1
161	SCIENCE CLASSROOM	1007	ASHRAE	13,150	41,040	54,190	74,993		1,520	1
163	EAST VESTIBULE	126	ASHRAE	4,584	0	4,584	17,065	0	0	3
158	GYM OFFICE	104	ASHRAE	2,814	3,845	6,659	5,461		150	2
157	WATER & PUMP RM	205	ASHRAE	2,397	0	2,397	5,120	0	0	3
155	GYM	3483	ASHRAE	29,119	188,406	217,525	267,579		7,000	2
250	2ND FL VESTIBULE	250	ASHRAE	5,374	0	5,374	17,065	0	0	3
251	STORAGE	506	ASHRAE	8,485	0	8,485	10,239	0	0	3
			•	106,989	307,541	414,530	580,211	BTUH		

	1	SERVED BY RTU-1 + LOCAL REHEAT COIL
-	2	SERVED BY RTIL2

ROOF MOUNTED

3 SERVED BY LOCAL HEATER

CU-3

			CHIC	CAGO	HEAT	SCHE	DULE			
ROOM TAG	ROOM NAME	FLOOR AREA (SF)	BASIS	HEAT	LOSS DATA (BTUH)	HEAT SUPPLY DATA	REQUIRED SUPPLY (CFM)	ACTUAL SUPPLY (CFM)	REMARKS
		. ,		ENVELOPE	VENTILATION	TOTAL	(BTUH)	, ,	, ,	
150	WEST VESTIBULE	200	ASHRAE	4,584	0	4,584	17,065	0	0	3
152	ELEV MACHINE RM	48	ASHRAE	254	0	254	2,820	0	0	1
154	TOILET	80	ASHRAE	336	0	336	2,820	0	100	1
153	ELECTRICAL	265	ASHRAE	3,522	0	3,522	6,826	0	0	3
156	GYM STORAGE	281	ASHRAE	1,742	0	1,742	5,120	0	0	2
159	STEM CLASSROOM	1033	ASHRAE	19,652	43,200	62,852	83,618		1,600	1
151	CORRIDOR	1345	ASHRAE	6,806	24,300	31,106	50,750	0	900	1
160	OFFICE/STORAGE	265	ASHRAE	3,337	4,050	7,387	8,458		150	1
162	SCIENCE STORAGE	80	ASHRAE	833	2,700	3,533	5,213		100	1
161	SCIENCE CLASSROOM	1007	ASHRAE	13,150	41,040	54,190	74,993		1,520	1
163	EAST VESTIBULE	126	ASHRAE	4,584	0	4,584	17,065	0	0	3
158	GYM OFFICE	104	ASHRAE	2,814	3,845	6,659	5,461		150	2
157	WATER & PUMP RM	205	ASHRAE	2,397	0	2,397	5,120	0	0	3
155	GYM	3483	ASHRAE	29,119	188,406	217,525	267,579		7,000	2
250	2ND FL VESTIBULE	250	ASHRAE	5,374	0	5,374	17,065	0	0	3
251	STORAGE	506	ASHRAE	8,485	0	8,485	10,239	0	0	3
				106,989	307,541	414,530	580,211	BTUH		

					REF	RIGERAT	ION SCH	EDULE						
ITEM TAG	DESCRIPTION	NO. OF COMP.	TYPE	TON PER	HP PER	REFRIDG.	CHARGE	ARRANG	GEMENT	C00	LING	LOCATION	GROUP OR	REMARKS
	J		=	COMP.	COMP.	TYPE	(LBS)	REMOTE	SELF CONTAINED	AIR	WATER		SPECIAL	
RTU-1	ROOF TOP UNIT	2	SCROLL	6.75	8.00	R410A	40.16		Х	Х		SEE PLAN		1, 3, 4, 6
RTU-2	ROOF TOP UNIT	2	SCROLL	7.50	9.50	R410A	50.16		Х	Х		SEE PLAN		1, 3, 4, 6
CU-1	ROOF MOUNTED	1	ROTORY	2.50	3.00	R410A	5.50		X	Х		SEE PLAN		1, 2, 3, 4, 6

5.50

ROTORY 2.50 WALL MOUNTED 3.00 R410A 5.50 REMARKS 1. INSTALL PRESSURE RELIEF VALVE ON HIGH PRESSURE SIDE OF SYSTEM, UPSTREAM OF ANY INTERVENING VALVES.

3.00

2.50

2. THROUGH WALL UNIT 3. REFRIDGERATION PIPING TO BE TYPE "K" COPPER

4. ALL CONNECTIONS AND DEVICES TO BE BRAIZED.

ROTORY

1 EXISTING UNIT CAPACITY IS 750 CFM SUPPLY WITH AN OUTSIDE AIR RATE OF 250 CFM

5. ALL COMPRESSOR LOCATIONS ARE SHOWN ON PLAN. 6. REFRIDGERANT PIPING SHALL BE INSULATED WITH 3/4" ARMSTRONG ARMFLEX INSULATION INSULATION OR APPROVED EQUAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

R410A

			ORDIN	IANCE REQUIRE	MENTS	_				ACTUAL	PROVIDED			REMARKS
ROOM TAG	ROOM NAME	NET FLOOR AREA (SQFT)	ROOM PURPOSE PER TABLES	NATURAL L	IGHT & VENT	MECHAN	IICAL VENT	NATURAL L	IGHT & VENT	MECHAN	ICAL VENT	EQUIPME	ENT SERVING	
rtoom into	TOOM IV WIL	THE TEST (OUT)	TOOM FOR OUT EN TABLES	GLASS (SQFT)	VENT (SQFT)	SUP. (CFM)	EXH. (CFM)	GLASS (SQFT)	VENT (SQFT)	SUP. (CFM)	EXH. (CFM)	SUP.	EXH.	
159	STEM CLASSROOM	1,033	CLASSROOM			1,550	775			1,600	1,600	RTU-1		
160	OFFICE/STORAGE	265	OFFICE			159	80			150	150	RTU-1		
162	SCIENCE STORAGE	80	STORAGE, INACTIVE			NR	NR			100		RTU-1	EF-8	
161	SCIENCE CLASSROOM	1,007	CLASSROOM			1,511	755			1,520	1,470	RTU-1	RTU-1/EF-8	EF-8 EXHAUSTS 1010 CFM FROM ROC
150	WEST VESTIBULE	203	CORRIDOR			NR	NR							
151	CORRIDOR	1,345	CORRIDOR			NR	NR			900	800			
163	EAST VESTIBULE	104	CORRIDOR			NR	NR							
152	ELEV. MACHINE ROOM	48	MECHANICAL			NR	NR				100	RTU-1	EF-2	
154	TOILET	90	TOILET			0	180			100	200		EF-1	ADD'L FROM CORRIDOR
153	ELECTRICAL ROOM	265	UTILITY			NR	NR							
156	GYMNASIUM STORAGE	281	MECHANICAL			NR	NR							
155	GYMNASIUM	3,483	GYMNASIUM			6,966	5,225			7,000	7,000	RTU-2		
158	GYMNASIUM OFFICE	104	OFFICE			62	31			150	150	RTU-2		THROUGH ROOM 155
157	WATER & PUMP ROOM	205	MECHANICAL			NR	NR							
250	VESTIBULE, 2nd FI	250	CORRIDOR			NR	NR							
251	STORAGE	251	STORAGE, INACTIVE			NR	NR							

X

SEE PLAN

SEE PLAN

1, 3, 4, 6

1, 3, 4, 6

1710

BUILDING PRESSURIZATION TABLE

Total Ordinance Required Outside Air (CFM)

Note: This table is to show conformity to Section 18-28-501.4.

Total Actual Continuous Exhaust (CFM)

Note: Table reflect new building addition Only

			ORDINA	ANCE REQUIREMEN	ITS				ACTUAL I	PROVIDED			REMARKS
				NATURAL LIGHT	C & VENT	MECHANIC	AL VENT	NATURAL LIGHT & VENT	MECHAN	ICAL VENT	EQUIPMEN	NT SERVING	
ROOM TAG	ROOM NAME	FLOOR AREA (SQFT)	ROOM PURPOSE PER TABLES	GLASS (SQFT)	NT (SQFT) SU	JP. (CFM)	EXH. (CFM)	GLASS (SQFT) VENT (SQFT)	SUP. (CFM)	EXH. (CFM)	SUP.	EXH.	
164	NEW LINK CORRIDOR	263	CORRIDOR			NR	NR						
111	PARENTS ROOM	415	CLASSROOM			623	311		750	750	UV	UV	EXISTING UNIT VENTILATOR, 1
230	NEW LINK CORRIDOR	263	CORRIDOR			NR	NR						
203	SPECIAL EDUCATION/RESOURCE	415	CLASSROOM			623	311		750	750	UV	UV	EXISTING UNIT VENTILATOR, 1
TOTAL		1,356				1,245	623		1,500	1,500			



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Issuance

Mark	Description	Date
	ISSUED FOR BID / PERMIT	2.13.2015
1	ADD # 1	2.26.2015

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PBC Project Name: DUNNE TECH ACADEMY PBC Contract No: 05440 Project No.: FGM #15-1950.01

REFRIGERATION

SCHEDULES

M7.0.1

	_							DUC.	T SILE	NCERS	3					_	
TAG	SYSTEM	FACE	DIMS	LENGTH	FLOW	VEL	DELTA P		DYNAMIC	INSERTION	LOSS GE	RATED NO	ISE AT FR	EQUENCY		VIBRO-ACOUSTICS	COMMENTS
.,		W (IN)	H (IN)		(CFM)	(FPM)	(IN WC)	63	125	250	500	1000	2000	4000	8000	MODEL NUMBER	
S-1	RTU-1	24	48	60	4400	519+	0.21	11	11	6	14	10	6	6	5	REFL-XV-FX	1,2
S-2	RTU-1	24	48	60	4400	519-	0.19	8	11	9	2	1	0	0	0	REFL-XV-FX	1,2
S-3	RTU-2	24	48	60	7150	795+	0.25	6	10	11	16	14	15	16	15	REFL-XV-FX	1,2
S-4	RTU-2	24	48	84	7150	596-	0.25	13	4	0	0	0	0	0	0	REFL-XV-FX	1,2

				НО	OD SC	CHED	ULE		
TAG	LOCATION	SERVICE	TYPE	HOC	D DATA W	CFM	MANUFACTURER (GREENHECK) AND MODEL	UNIT WT LBS	REMARKS
EH-1	KITCHEN	WARMERS	l II	60	407	900	GHEW	250	

^^^^^

NOTE: UNIT SERVES AS AN EXISTING BOLDGETT STACKED 11 KW CONVECTION OVEN SET (2 UNITS) TO REMOVE HEAT FROM SPACE. CENTER HOOD OVER OVEN SET.

2 SUPPLIER SHALL PROVIDE PRESSURE DROP CALCULATIONS WITH PE STAMP, INCLUDING SYSTEM EFFECTS, AT THE TIME OF SUBMITTALS.

					SPLIT	SYSTE	M FAN CC	IL SCI	HEDUL	E				
TAG	LOCATION	COND UNIT	AIR FLOW	STATIC	INPUT (WATTS)	TOTAL CAPACITY	FILTER TYPE		ELECTRIC	CAL DATA		UNIT WT (LBS)	MANUFACTURER & MODEL	REMARKS
			(CFM)	(IN WG)		(BTUH)		V	PH	HZ	HTR] ` ´		
FC-1	OFFICE	CU-1	335	N/A	2600	14000	WASH / ANTI- MOLD	208	1	60	2.5kW	60	TRANE PTHC-15	1
FC-2	MULTIPURPOSE	CU-2	1500	1	48000	30000	WASH / ANTI- MOLD	208	1	60	3kW	60	DAIKIN FXFQPVJU	1, 3, 4
FC-3	MULTIPURPOSE	CU-3	1500		48000	30000	WASH / ANTI- MOLD	208	1	60	3kW	60	DAIKIN FXFQPVJU	1, 3, 4

1 USE THE POWER CONNECTION FOR THE EXISTING AC UNIT.

2 PROVIDE SLEEVE AND SUPPORT SYSTEM FOR INSTALLATION IN THE PANEL WALL. 3 UNIT REPLACES EXISTING CLG MOUNTED FAN COIL.

(4 EQUIP WITH MIN 10KW HEATER W/HEATER W/ 3 STAGES TO MATCH EXIST

								F.A	AN SC	HEDL	JLE							
						FAN	N DATA		DISCH	ARGE		MC	TOR DA	ATA		MANUFACTURER		
TAG	LOCATION	SERVICE	CFM	SP IN WC	TYPE	CLASS	RPM	DRIVE	HORIZ	VERT	BHP	HP	VOLT	PH	HZ	(GREENHECK) MODEL	UNIT WT LBS	REMARKS
EF-1	CEILING	TOILET	200	0.375	CENT		1550	DIRECT		Χ		128W	120	1	60	SPB-150	10	\wedge
EF-2	ROOF	ELEV MACH RM	100	0.375	CENT		1550	DIRECT		Χ	0.02	1/60	120	1	√ 60	VG-060	15	(1)/1
EF-3	ROOF	KITCHEN	1200	0.5	CENT		1140	BELT		Χ	0.17	1/4	120	1) 0	GB-131	25	*MATCH EXIST ELECTRICAL
EF-4E																1		EXISTING TO REMAIN
EF-5E															Z	1,7		EXISTING TO REMAIN
EF-6E																		EXISTING TO REMAIN
EF-7E																		EXISTING TO REMAIN
EF-8	ROOF	SCIENCE & STORAGE	1110	0.25	CENT		1210	BELT		Χ	0.2	1/4	120	1	60	GB-081	50	(1)
EF-9	ROOF	ELEC ROOM	300	0.25	CENT		1070	BELT		Х	0.2	1/6	120	1	60	GB-101	61	> 1 \
EF-10	ROOF	KITCHEN HOOD EXH	900	0.75	CENT		1550	BELT		Χ	0.22	1/4	120	1	60	GB-101	61	
																		/1\

REMARKS: 1. PROVIDE GRAVITY BACKDRAFT DAMPER, INSECT SCREEN AND ROOF CURB.

PROVIDE BACKDRAFT DAMPER ON DISCHARGE, INSECT SCREEN AND DISCHARGE HOODED WALL CAP.

3. INTERLOCK FAN WITH ROOM LIGHTING.

					AIR C	OOLE	O CON	DENS	SER S	CHE	DULE						
TAC	LOCATION	UNIT	AMB. TEMP.	REJECTION	COI	MPRESSOR	DATA	CONE	ENSER FA	N	ELE	CTR I CAL I	DATA		UNIT WEIGHT	MANUFACTURER	REMARKS
TAG	LOCATION	SERVED	°F	CAPACITY BTUH	TYPE	QTY/HP	STEPS	QTY	HP EA.	CFM TOTAL	V	PH	HZ	FLA	(LBS)	AND MODEL	INLIMATING
CU-1	WALL	FCU-1	95	14800 1	ROTARY	1/0.5	1	1	0.5	500	208	3	60	15	130	TRANE PTHC-15	\sim
CU-2	ROOF	FCU-2	95	48000	ROTARY	1/0.5	1	1	1.0	790	208	3	60	20	80	DAIKIN-RZQ30PVJU	1
CU-3	ROOF	FCU-3	95	48000	ROTARY	1/0.5	1	1	1.0	790	208	3	60	20	80	DAIKIN-RZQ30PVJU	1
REMA		~~~							<u> </u>	/1	-	-					

1. REPLACE EXISTING CONDENSATE PUMP, CLEAN PIPING & MAKE SURE CONDENSATE DRAINS FROM UNIT.

												R1	TU SC	HEDL	JLE													
TAG	S	ERVICE TYPE	LOCATION	NOMINAL TONS	OA CFM		COOLING	SECTION		HEATING S	SECTION	E	EVAPORA	ATOR FA	N	Co	OMPRESSOI	RS	CONDE FA		ELE	CTRICAL		UNIT		MANUFACTURER - & MODEL No.	WEIGHT	REMARKS
	CAV	VAV MULTIZONE		TONS		TOTAL MBH	SENSIBLE HEAT	EAT DB/WB	LAT DB/WB	STAGES	Kw	#	CFM	HP	ESP	#	RLA	LRA	#	HP	V	PH HZ	MCA	МОСР	LRA	A MODEL NO.		
RTU-1	X		ROOF	12.5	1375	147.47	108.5	82/67	57.2/56.3	3	50	1	4370	3~(2.3	2	17.6/23.2	123/164	3	1	208	3 60	155.3	175	456	CARRIER 50LC-14	2700	1-10
RTU-2	X		ROOF	15	2542	189.8	154.5	83/67	59.6/58.7	3	80	1	7150 <i>(</i>	10	1.6	2	19.1/27.6	123/191	4	1	208	3 60	227	250	544	CARRIER 50LC-17	3000	1-10

REMARKS:

1. PROVIDE MERV13 EFFICIENCY FILTERS

- 2. PROVIDE SINGLE POINT POWER CONNECTION AND WEATHER PROOF MAIN DISCONNECT. 3. PROVIDE PREFABRICATED INSULATED FULL PERIMETER ROOF CURB 14" HIGH LEVELED TO ROOF WITH
- THRU-THE CURB POWER CONNECTIONS. 5. OUTSIDE AIR INTAKE SHALL BE 15'-0" MINIMUM AWAY FROM ANY EXHAUST DISCHARGE. 4. PROVIDE FLEXIBLE CANVAS CONNECTIONS AT SUPPLY AND RETURN DUCT CONNECTIONS.
- 5. UNIT SHALL HAVE SCR HEATING CONTROLS.
- 6. MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES. 7. UNIT SHALL INCLUDE FACTORY MOUNTED SMOKE DETECTOR AND CONTACTS FOR SMOKE ALARM 8. PROVIDE FULLY MODULATING 0-100 PERCENT MOTORIZED ECONOMIZER.
- 9. PROVIDE LOW AMBIENT CONTROL.
- 10. UNITS SHALL INCLUDE HARD-WIRED MONITOR/ CONTROL PANELS.

								C	CABINET/	UNIT H	HEATE	R SCH	HEDULE (ELE	CTRIC)							
		N	IOUNTING		THERMOS	TAT	UNIT	HTG. E	LEMENT	FAN/M	OTOR DATA		DISCH	HARGE		UNIT DATA				MANUFACTURER	
TAG	LOCATION	SURFACE MOUNTED	RECESSED	SEMI- RECESSED	REMOTE	UNIT MOUNTED	SIZE	KW	LAT °F @ 70°F EAT	CFM	QTY	HP	HORIZONTAL	VERTICAL	DIMENSIONS WxHxD	WEIGHT, LBS	V	PH	HZ	AND MODEL	REMARKS
CUH-1	VEST		X		Х			5	91	450	1	1/60		Х	24X24	31	208	3	60	INDEECO CDIR	1
CUH-2	VEST		X		Х			5	91	450	1	1/60		Х	24X24	31	208	3	60	INDEECO CDIR	
CUH-3	VEST		X		X			5	91	450	1	1/60		Х	24X24	31	208	3	60	INDEECO CDIR	1

REMARKS: 1. RECESSED CEILING UNIT

		ELECTRIC	UNIT H	EATER	SCHE	EDULI	Ε	
TAG	LOCATION	TYPE	SIZE (kW)	VOLT	PH	HZ	MANUFACTURER MODEL NUMBER	REMARKS
EUH-1	ELECTRICAL ROOM	HORIZONTAL	2	208	1	60	REZNDR ELW	
EUH-2	GYM STORAGE	HORIZONTAL	1.5	208	1	60	REZNDR ELW	
EUH-3	WATER AND PUMP	HORIZONTAL	1.5	208	1	60	REZNDR ELW	
EUH-4	MAIN ENTRANCE	HORIZONTAL	2	208	1	60	TRANE UHWA	REUSE EXISTING POWER SUPPLY
EUH-5	MAIN ENTRANCE	HORIZONTAL	2	208	1	60	TRANE UHWA	REUSE EXISTING POWER SUPPLY
EUH-6	TOILET	HORIZONTAL	2	208	1	60	TRANE UHWA	REUSE EXISTING POWER SUPPLY
EUH-7	TOILET	HORIZONTAL	2	208	1	60	TRANE UHWA	REUSE EXISTING POWER SUPPLY
EUH-8	STORAGE	HORIZONTAL	3	208	1	60	TRANE ELW	
DEMARKS.	•	_						

HORIZONTAL	3	208	1	60	TRANE ELW	1. 2.	PROVIDE ADAPTER BOOTS AND F

ITEM TAG	MANUFACTURER AND MODEL NUMBER	TYPE	DESCRIPTION	REMARK
А	"TITUS" #TMR-AA	ROUND CEILING DIFFUSER	LOUVERED, FULLY ADJUSTABLE ROUND SUPPLY DIFFUSER, ALUMINUM	1, 2, 3
В	"TITUS" #PAS-AA	24"x24" LAYIN DIFFUSER	PERFORATED SUPPLY CEILING DIFFUSER, 24x24	1, 2, 3
С	"TITUS" #PAR-AA	24"x24" LAYIN RETURN	PERFORATED RETURN CEILING DIFFUSER FOR DUCTED RETURN	1, 2, 3
D	"TITUS" #350RL "TITUS" #R-301F	SUPPLY / RETURN EXHAUST GRILLE	SINGLE DEFLECTION ANGLED FIXED 35 AND 45 DEG BLADE	1, 2, 3

ID PLENUM BOXES AS REQUIRED. SH IN LAY-IN AND DRYWALL AREAS. COORDINATE FINISH WITH ARCHITECT.

				LOU\	/ER SCHI	EDULE				
TAG	LOCATION	SERVING SYSTEM	SERVICE	CFM	MIN. FREE AREA SQ.FT.	MAX FPM THRU GROSS AREA	SPD IN W.C.	LOUVER DIMENSION WxHxD IN.	MANUFACTURER AND MODEL	REMARKS
L-1	ELEC. ROOM	ELECTRICAL	VENT	300	0.4	400	0.15	16x16	GREENHECK EAC-401	1

1. EQUIPMENT WITH ELECTRIC MOTOR OPERATED DAMPER INTERLOCKED WITH EF-9 TO OPEN WHEN EF-9 STARTS AND CLOSE WHEN EF-9 STOPS.

				REL	IEF VE	NT SCH	IEDULE			
TAG	LOCATION	CFM CAPACITY	MAX.S.P. IN.WG	THROAT AREA SQ. FT.	THROAT SIZE	THROAT VELOCITY	DAMPER BACKDRAFT	OPENING THRU ROOF	MANUFACTURER AND MODEL NO.	REMARKS
RV-1	GYM ROOF	3500	0.1	9	36x36	800	BACKDRAFT	24X24	GREENHECK GRSR-36	1,2,3
RV-2	GYM ROOF	3500	0.1	9	36x36	800	BACKDRAFT	24x24	GREENHECK GRSR-36	1,2,3
RV-3	ROOF	200	0.1	0.45	8x8	445	BACKDRAFT	8x8	GREENHECK GRSR-36	1,2,3

REMARKS: 1. INSECT SCREEN 2. INSULATED 3. ROOF CURB MIN 14"

1. ALL EUH'S INCLUDE SELF CONTAINED THERMOSTATS.

		C	ONSTA	ANT/VARI	ABLE AIR	VOLUM	E TERMII	NAL UNI	Γ SCHE	OULE (E	ELECT	RIC	COIL)			
TAG	LOCATION	MAX.	MIN	DUCT SIZES	LIEATING (OFM)	BOX	TOTAL UNIT AIR	MAX	NC		EL	ECTRIC (COIL		MANUFACTURER	DEMARKS
140	LOCATION	CFM	CFM	INLET/OUTLET	HEATING (CFM)	AIR P.D. INCH W.C.	P.D. INCH W.C.	DISCHARGE	RADIATED	EAT °F	LAT °F	KW	V/PH/HZ	STAGES	AND MODEL	REMARKS
VAV-1	CORRIDOR	1600	400	8/12X12	800	0.3	0.5	25	25	70	94	6	208/3/60	3	NAILOR D30RE	
VAV-2	CORRIDOR	1020	375	8/14X12	760	0.3	0.5	25	25	70	95	6	208/3/60	3	NAILOR D30RE	
VAV-3	CORRIDOR	1150	375	8/14X12	575	0.3	0.5	25	25	70	97	5	208/3/60	3	NAILOR D30RE	

SEQUENCE OF OPERATIONS

THE PRESSURE SENSOR SHALL CONTROL THE BYPASS DAMPER TO MAINTAIN THE SETPOINT PRESSURE IN THE DUCT. INITIAL SETPOINT = 1.1" W.C EXHAUST FANS

THE EXHAUST FANS SHALL OPERATE AS FOLLOWS: KITCHEN HOOD:

a. UNIT SHALL BE STARTED AND STOPPED THROUGH A WALL SWITCH (WEST WALL) IN THE KITCHEN ADJACENT TO THE HOOD.

a. A THERMOSTAT LOCATED AT THE ROOF OPENING SHALL START THE FAN WHEN THE TEMPERATURE RISES ABOVE 90°F (ADJUSTABLE) AND STOP WHEN THE TEMPERATURE FALLS BELOW 90°F b. WHEN THE EXHAUST FAN STARTS, THE OUTSIDE AIR LOUVER/DAMPER COMBINATION SHALL OPEN TO ITS FULL POSITION. WHEN THE FAN STOPS, THE DAMPER SHALL CLOSE.

3. ELEVATOR MACHINE ROOM EXHAUST FAN a. A THERMOSTAT LOCATED IN THE ROOM SHALL START THE FAN WHEN THE TEMPERATURE RISES ABOVE 90°F (ADJUSTABLE) AND STOP THE FAN WHEN THE TEMPERATURE FALLS BELOW 90°F

4. TOILET EXHAUST a. THE TOILET EXHAUST SHALL BE STARTED AND STOPPED FROM A WALL SWITCH LOCATED ADJACENT TO THE LIGHT SWITCH NEAR THE DOOR.



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Environmental

Issuance

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Mark	Description	Date
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1	ADD # 1	2.26.2015
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PBC Project Name: DUNNE TECH ACADEMY PBC Contract No: 05440 Project No.: FGM #15-1950.01

MECHANICAL SCHEDULES

M7.0.2