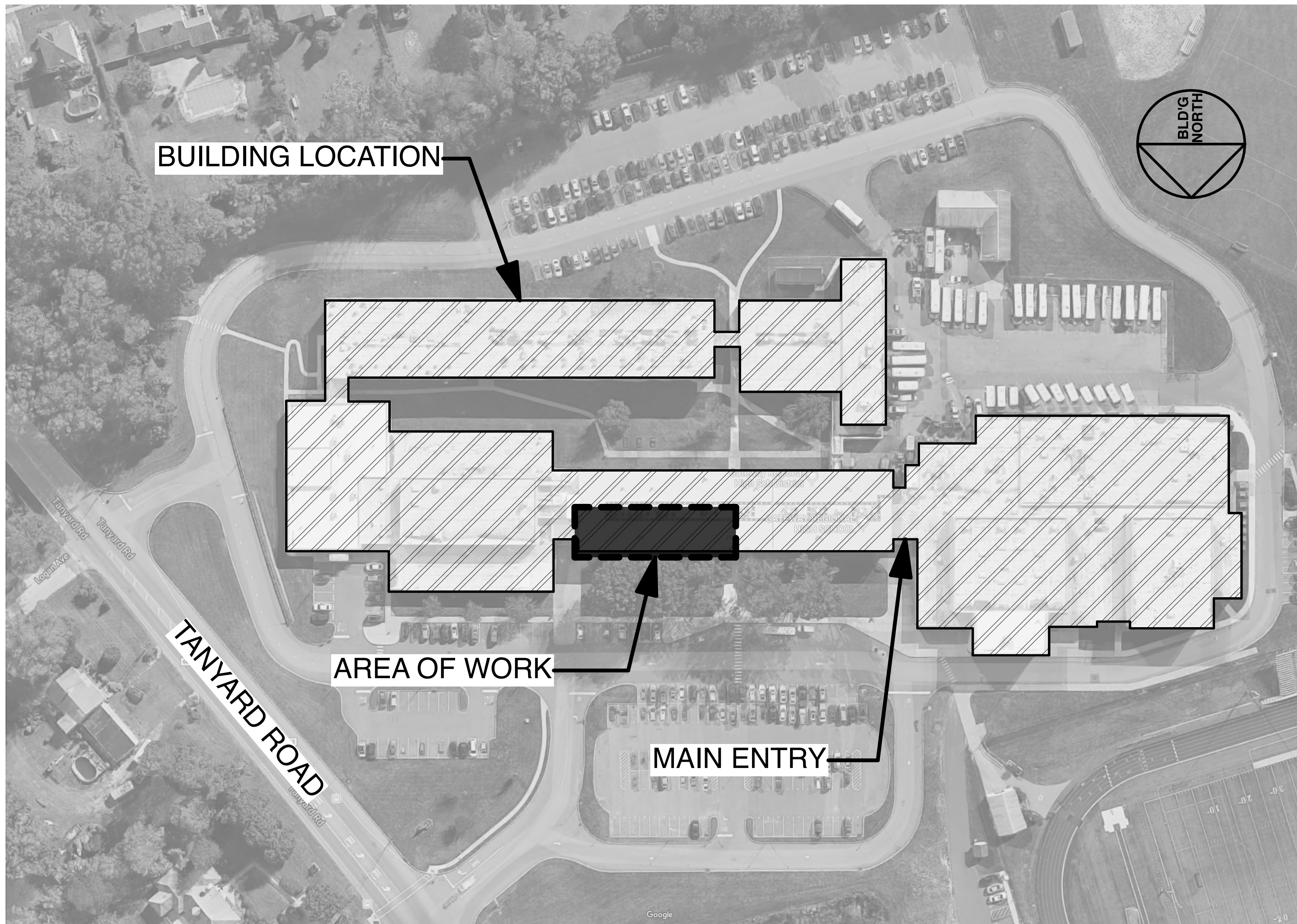


# GUIDANCE DEPARTMENT ALTERATION

GATEWAY REGIONAL HIGH SCHOOL  
 775 TANYARD ROAD  
 BLOCK 113, LOT 1  
 WOODBURY HEIGHTS, GLOUCESTER COUNTY, NJ 08096-6218

NJDOE SP #15-1715-050-19-1000

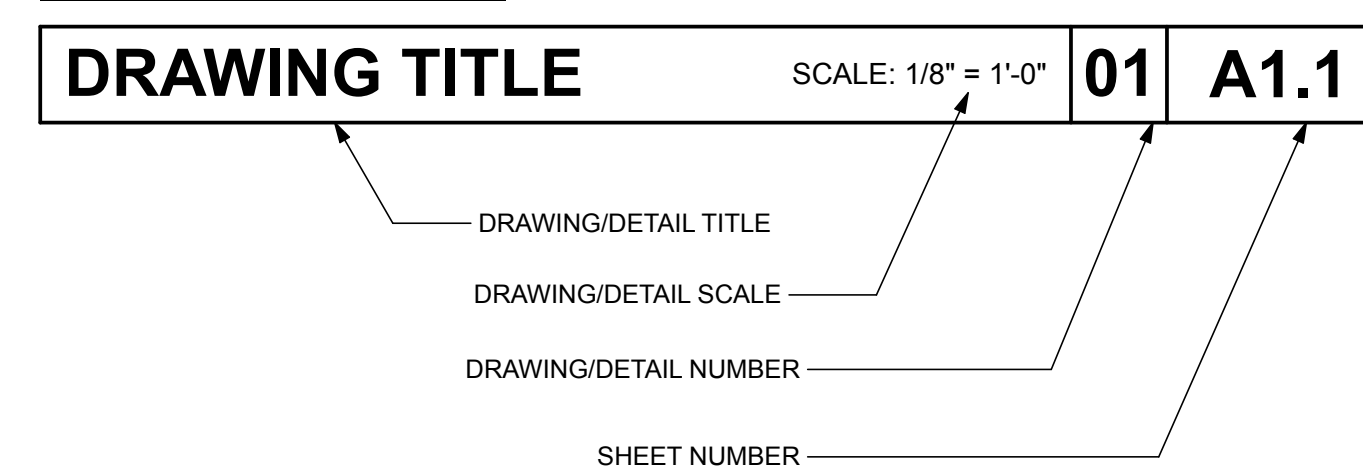


**ARCHITECT**  
 REGAN YOUNG ENGLAND BUTERA, PC  
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 MOUNT HOLLY, NJ 08060  
 609.265.2652 / FAX 609.265.0333

**MPE ENGINEER**  
 KELTER & GILLIGO  
 14 WASHINGTON ROAD  
 PRINCETON JUNCTION, NJ 08550  
 609.799.8336 / FAX 609.275.9306

**STRUCTURAL ENGINEER**  
 SE2 ENGINEERING  
 1705 BUTLER PIKE  
 CONSHOHOCKEN, PA 19428  
 610.828.1550 / FAX 610.828.5080

## DRAWING KEY



## LIST OF DRAWINGS

All Contractors shall examine all drawings indicated herein for required coordination between different trades and/or for work included in other sections of the Project Manual that may pertain to their respective contract.

- CS COVER SHEET
- A1.0 DEMO & PROPOSED PLANS AND DETAILS
- A1.1 REF CLG & FLR PATTERN PLANS AND DETAILS
- A1.2 ROOF PLAN & ED SPEC PLAN
- S1 STRUCTURAL GENERAL NOTES & HVAC DETAILS
- HD-1 PARTIAL FIRST FLOOR AND ROOF DEMOLITION PLANS - HVAC
- H-1 PARTIAL FIRST FLOOR PLAN AND ROOF PLANS - HVAC
- H-2 SYMBOLS, ABBREVIATIONS & SCHEDULES - HVAC
- H-3 DETAILS - HVAC
- H-4 REFRIGERANT PIPING & WIRING DIAGRAMS - HVAC
- P-1 PARTIAL FIRST FLOOR PLAN - PLUMBING
- ED-1 PARTIAL FIRST FLOOR DEMOLITION PLAN - ELECTRICAL
- E-1 PARTIAL FIRST FLOOR PLAN - ELECTRICAL
- E-2 PARTIAL ROOF PLAN AND DIAGRAMS - ELECTRICAL
- E-3 PARTIAL FIRST FLOOR PLAN AND SCHEDULES - ELECTRICAL

## SUBCODES

THE FOLLOWING SUBCODES AS ADOPTED BY THE NEW JERSEY UNIFORM CONSTRUCTION CODE (NJAC 5:23 et seq.) SHALL APPLY TO THIS PROJECT.

SUBCODE	NATIONAL MODEL CODE	UCC REFERENCE
BUILDING	INTERNATIONAL BUILDING CODE NJ ED/2015	NJAC 5:23-3.14
PLUMBING	NATIONAL PLUMBING CODE /2015	NJAC 5:23-3.15
ELECTRICAL	NATIONAL ELECTRICAL CODE /2014	NJAC 5:23-3.16
ENERGY	ASHRAE 90.1-2013	NJAC 5:23-3.18
MECHANICAL	INTERNATIONAL MECHANICAL CODE /2015	NJAC 5:23-3.20
FUEL GAS	INTERNATIONAL FUEL GAS CODE /2015	NJAC 5:23-3.22
REHABILITATION	REHABILITATION SUBCODE RENOVATION 6.5 AND ALTERATION 6.6	NJAC 5:23-6
BARRIER FREE	ICC/ANSI A117.1-2009	NJAC 5:23-7

NJDOE SP #15-1715-050-19-1000

GUIDANCE DEPARTMENT ALTERATION  
 GATEWAY REGIONAL HIGH SCHOOL

775 TANYARD ROAD  
 WOODBURY HEIGHTS, NEW JERSEY 08096

TITLE COVER SHEET

DRAWING DATE:  
 31 DEC 2018

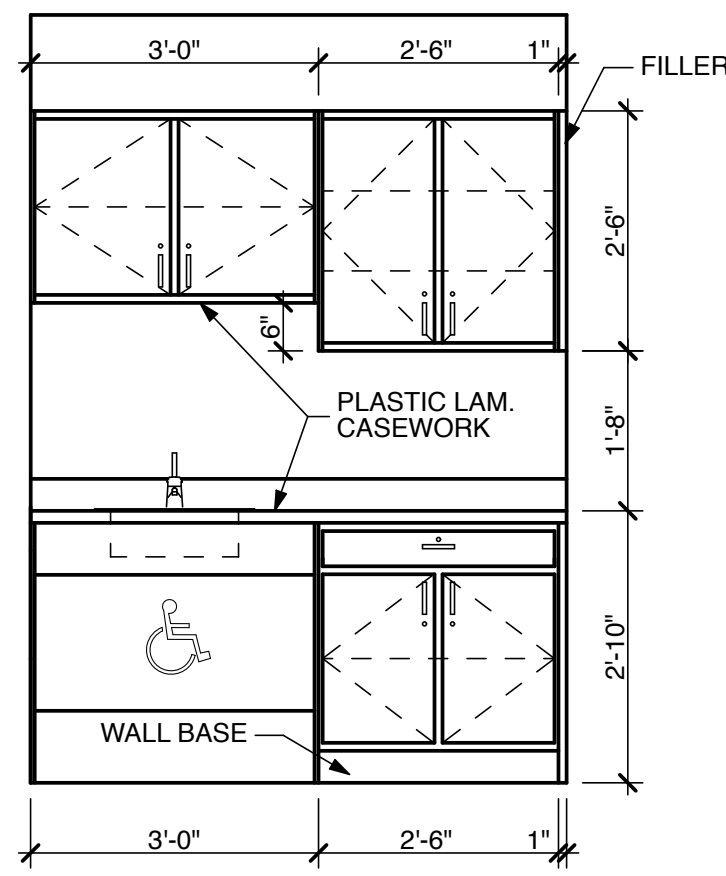
REVISION DATE:

DRAWN BY:  
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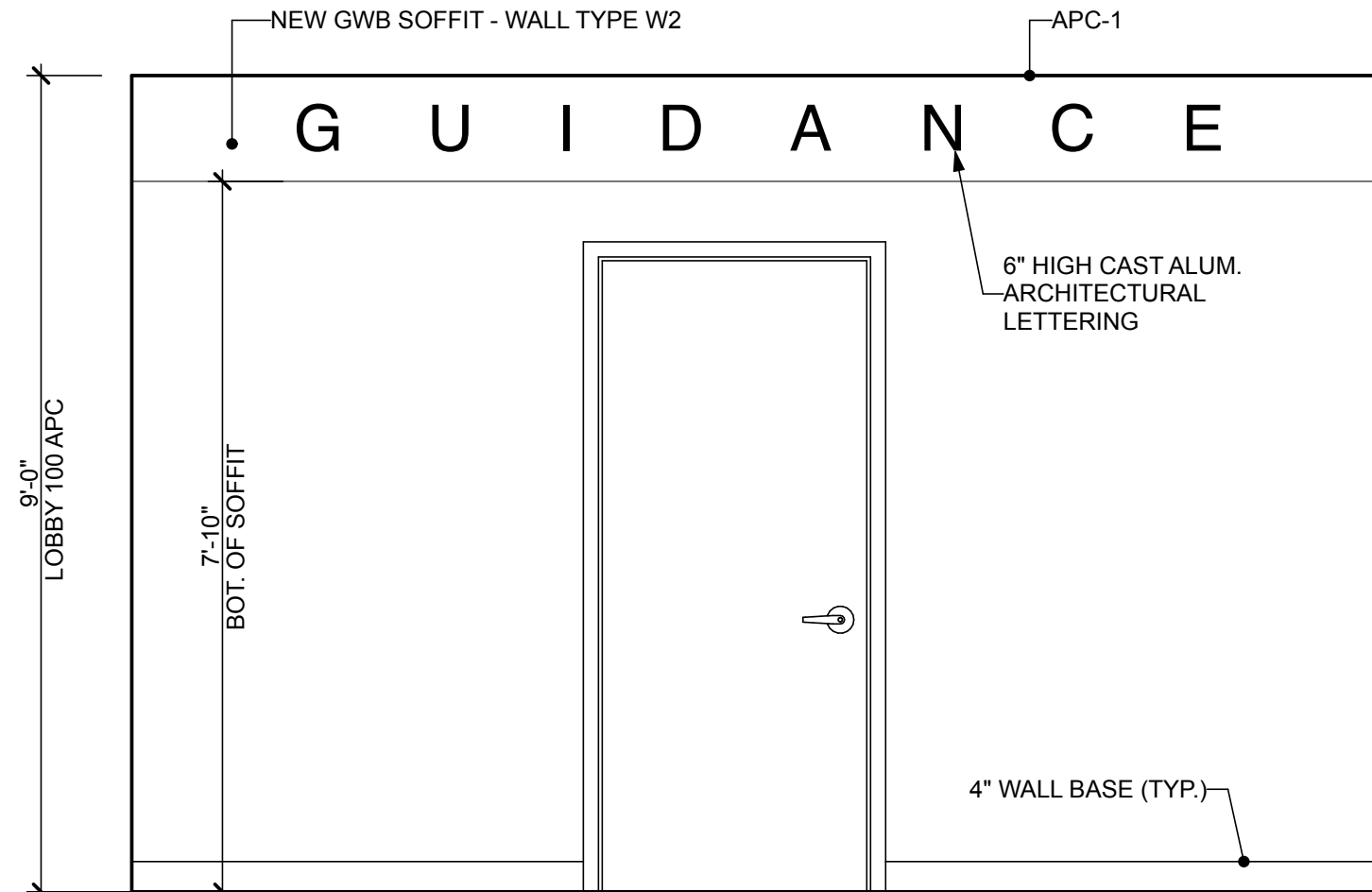
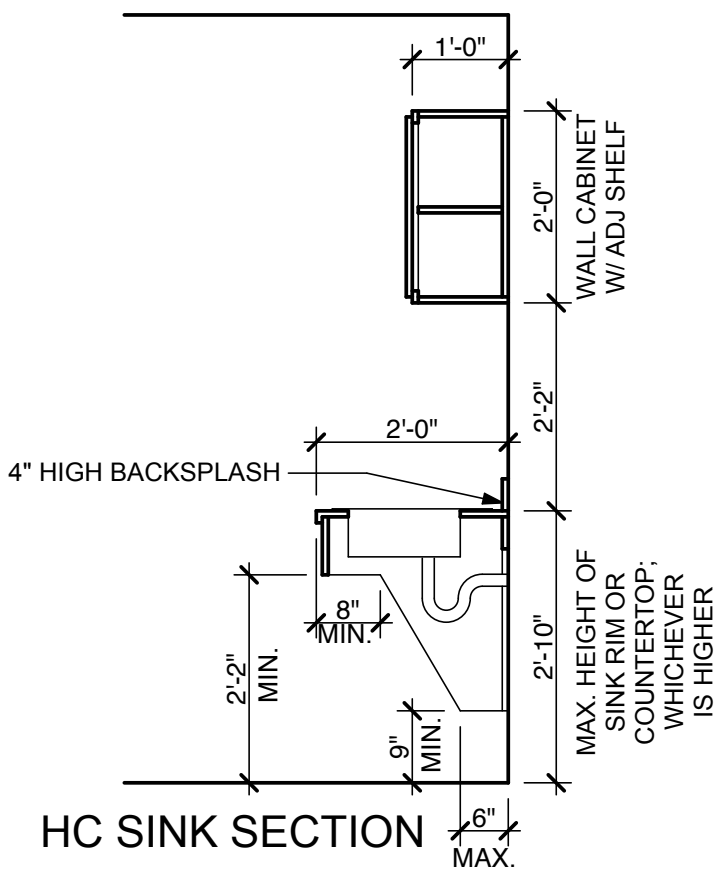
COMMISSION NO.  
 5550B

CS

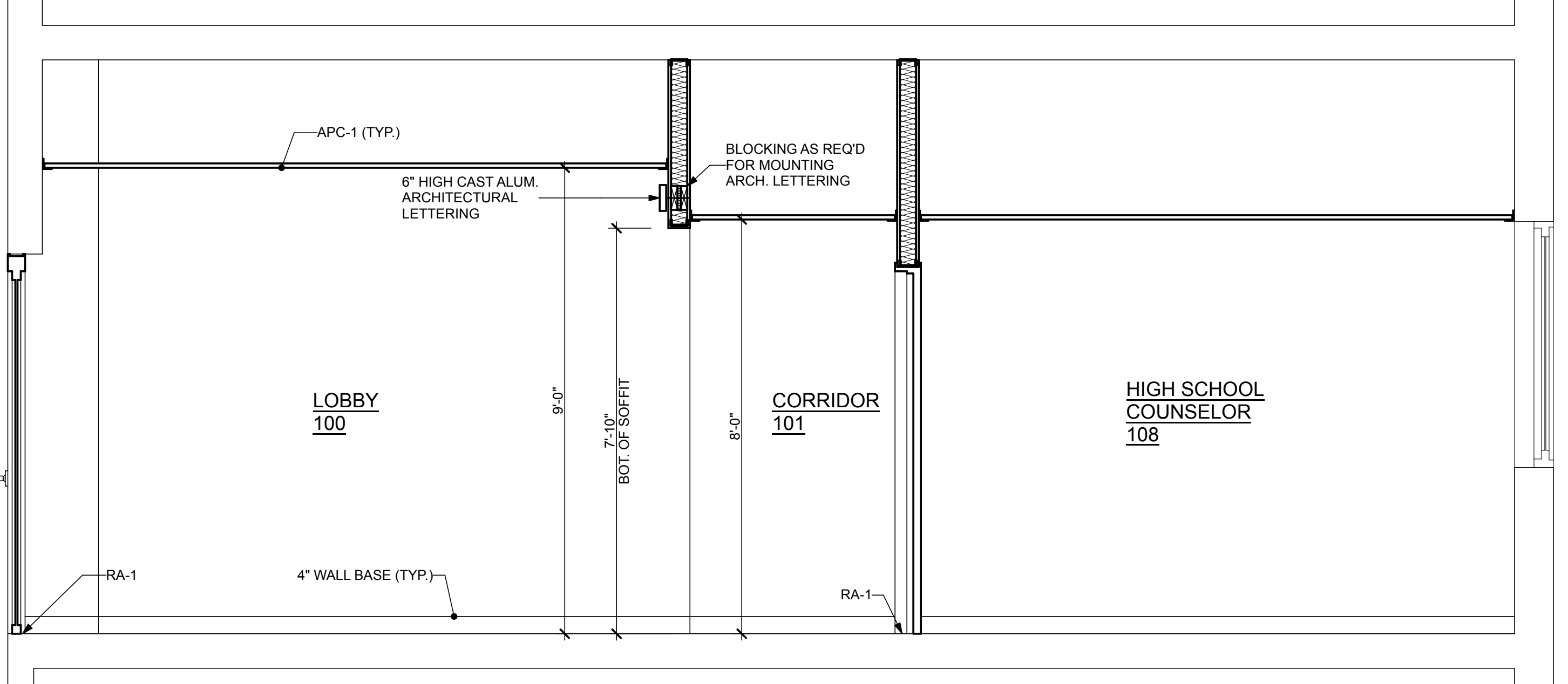
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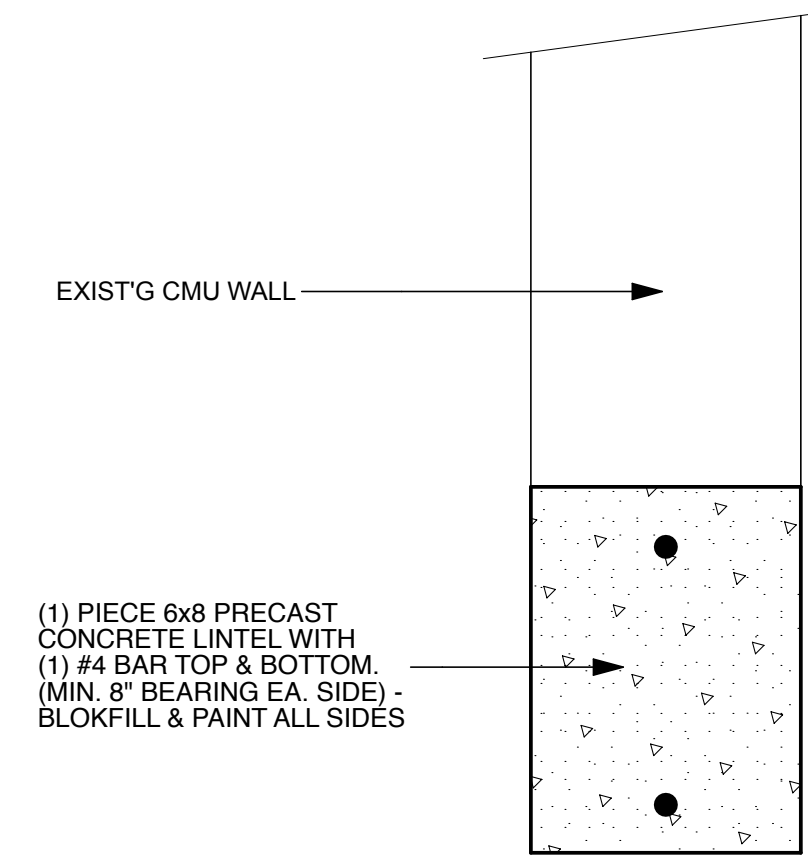
**INT. ELEVATION** SCALE: 1/2" = 1'-0" **05 A1.0**



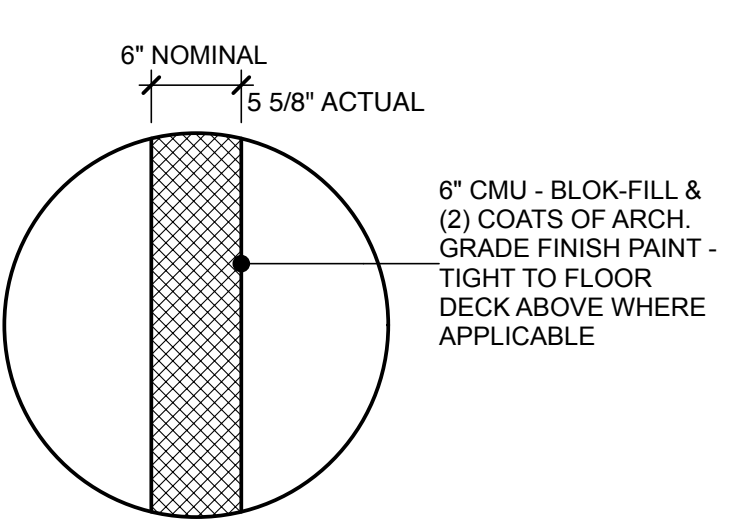
**INT. ELEVATION** SCALE: 1/2" = 1'-0" **04 A1.0**



**BUILDING SECTION** SCALE: 1/2" = 1'-0" **03 A1.0**

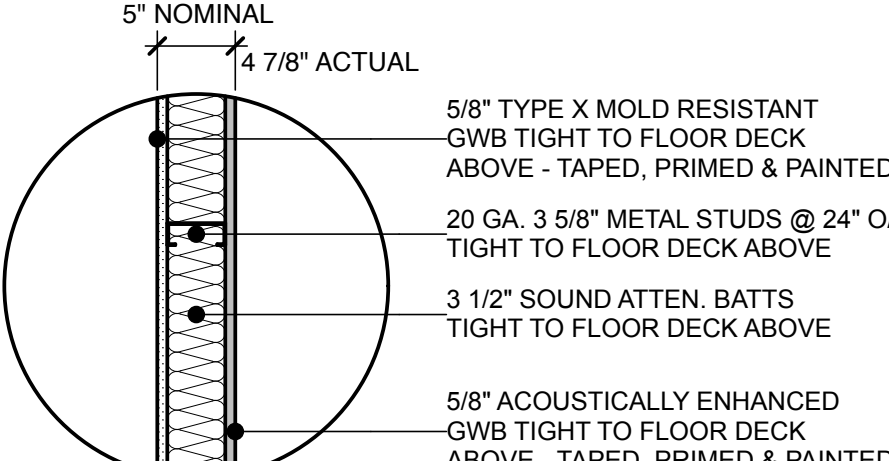


**LINTEL L-1** SCALE: 3" = 1'-0" **06 A1.0**



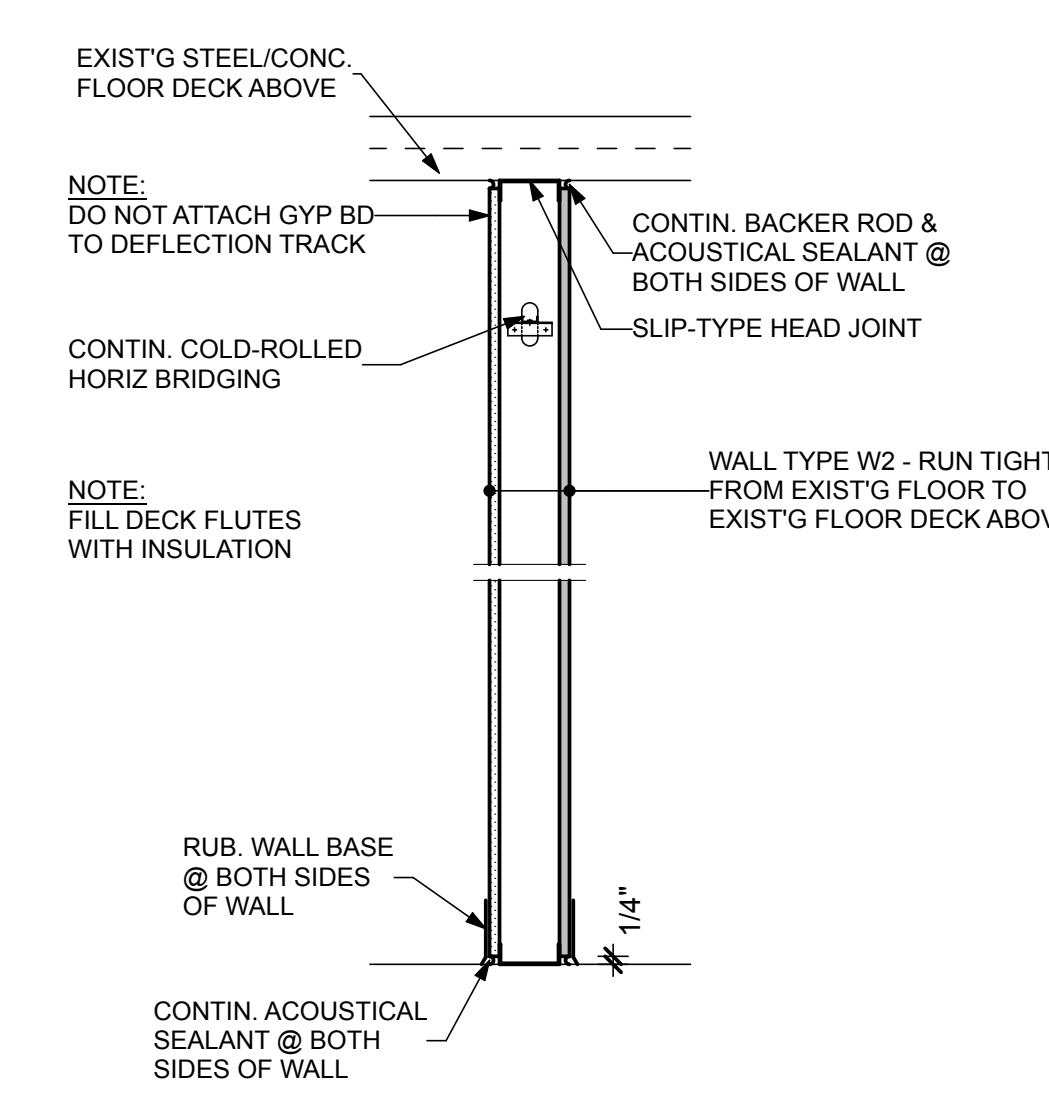
**WALL TYPE W1**

NOTE: INSTALL CONTIN. ACOUSTICAL SEALANT AROUND ALL WALL PENETRATIONS (TYP.)

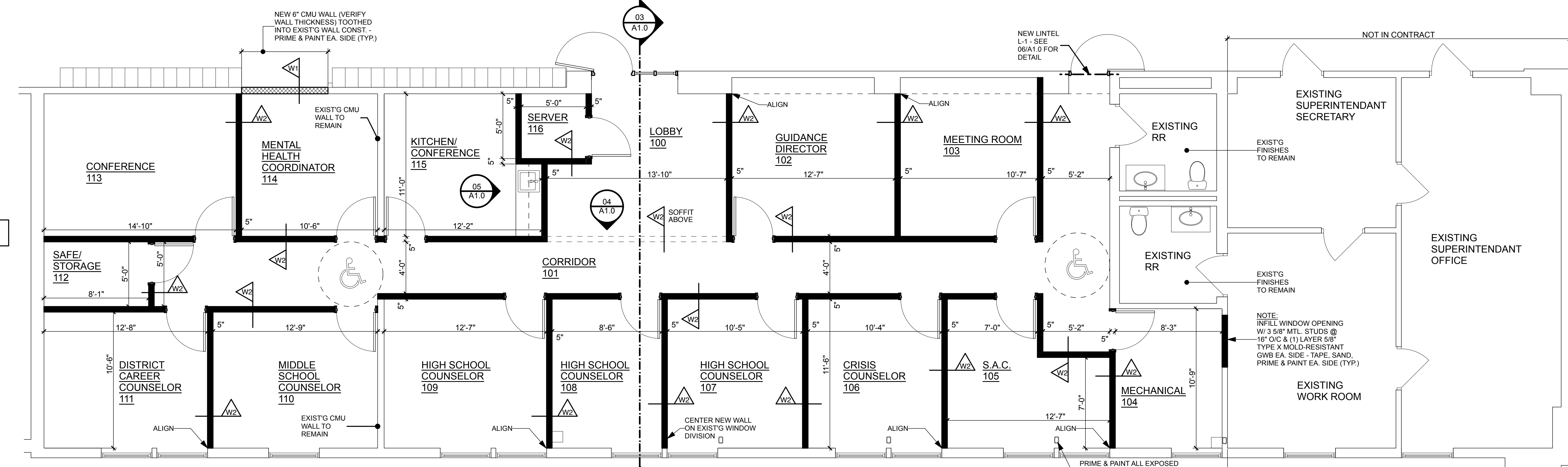


**WALL TYPE W2**

**WALL TYPES** SCALE: NTS



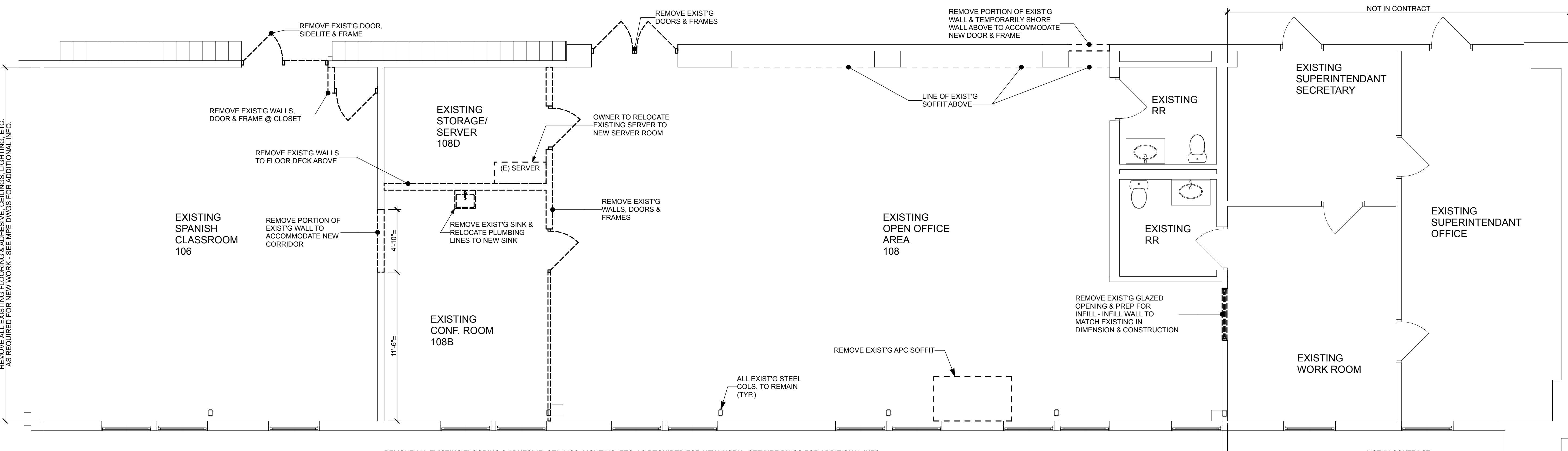
**W2 FLOOR/HEAD DTL.** SCALE: NTS



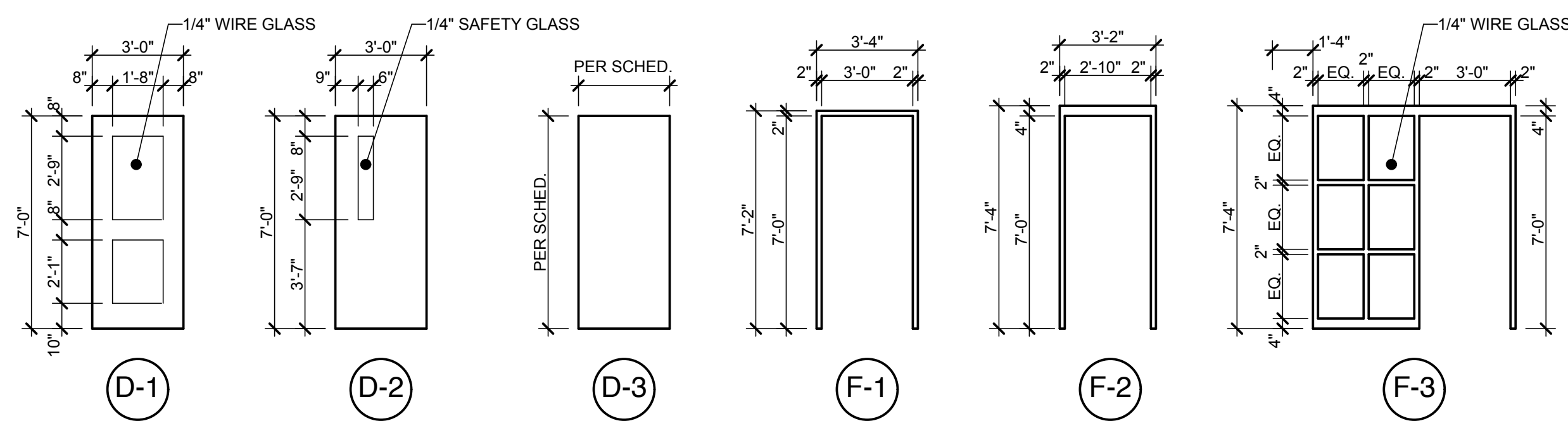
**PROPOSED PLAN** SCALE: 1/4" = 1'-0" **02 A1.0**

**KEY:**  
 APC-1: ACOUSTICAL PANEL CEILING  
 RS: ROLLER SHADES (ALT-BID)  
 RA-1: FLOOR ACCESSORY - SEE DETL. 03/A1.1

**NOTES:**  
 1. ALL DIMENSIONS ARE ± AND MUST BE FIELD VERIFIED  
 2. FOLLOW PLAN 01/A1.1 FOR DOOR & FRAME INFORMATION

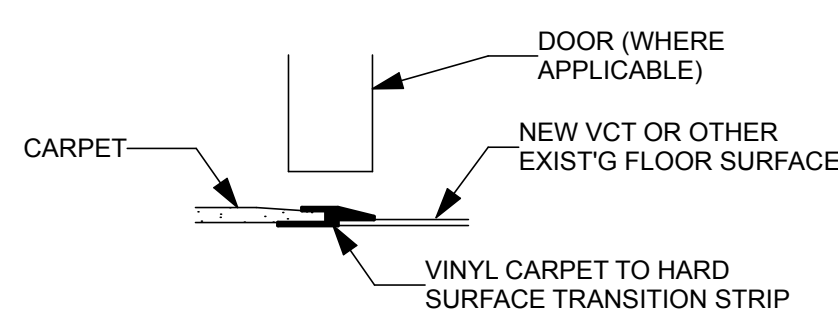


**DEMO PLAN** SCALE: 1/4" = 1'-0" **01 A1.0**



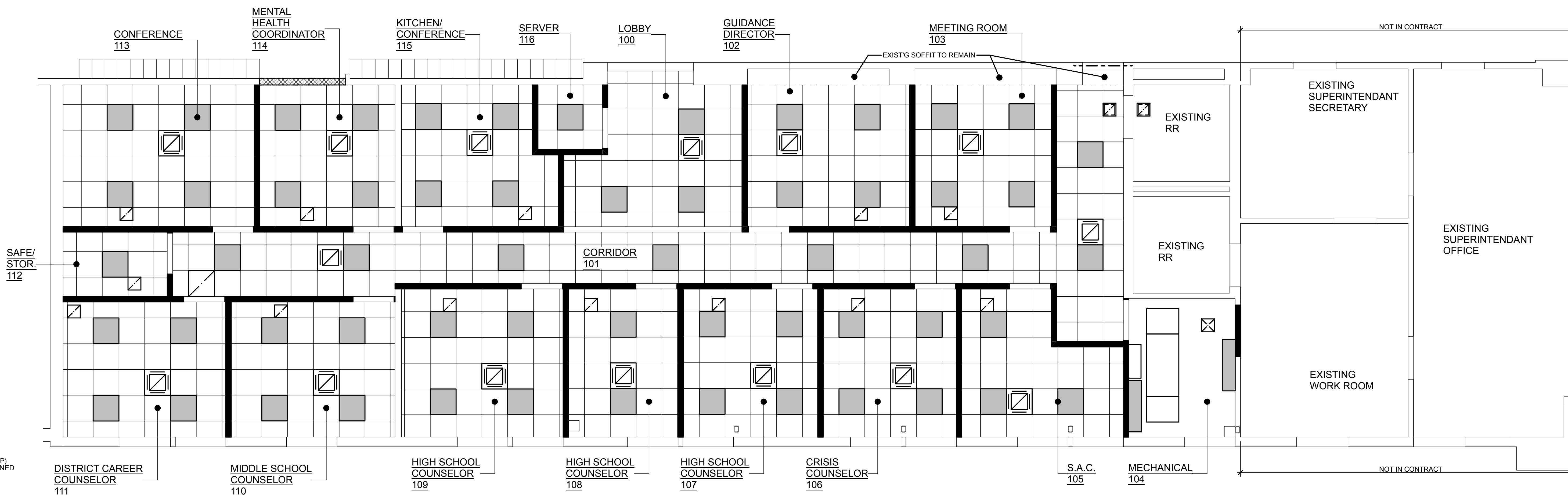
**DOOR/FRAME TYPES**

SCALE: 1/4" = 1'-0"



**FLOOR ACCESSORY RA-1**

SCALE: 3" = 1'-0" 03



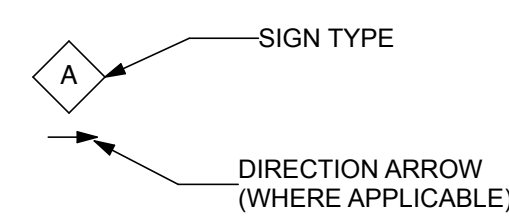
**REFLECTED CEILING PLAN**

SCALE: 1/4" = 1'-0"

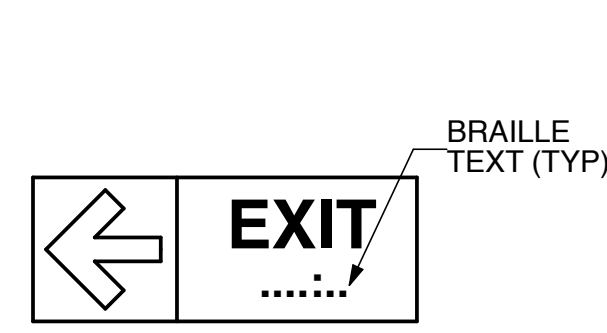
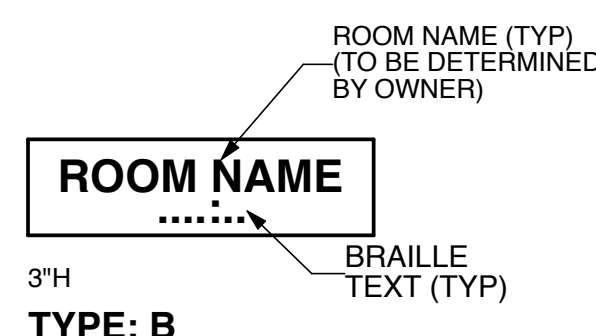
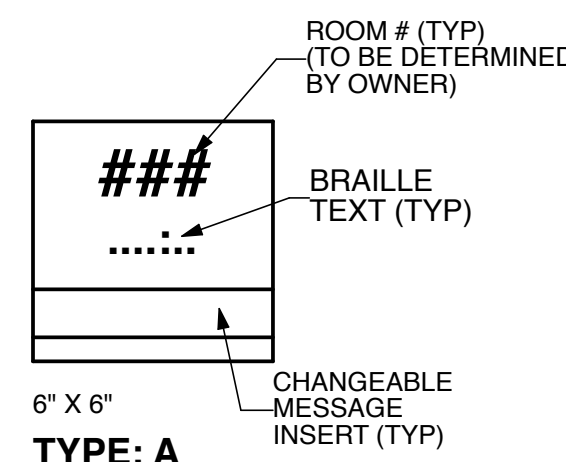
02

A1.1

NOTE: FOLLOW PROJECT MANUAL FOR DOOR & FRAME AND ROOM FINISH SCHEDULES



**SIGN TYPE SYMBOL**



**SIGNAGE MOUNTED ON GLASS:**

SIGNAGE REQUIRED TO BE MOUNTED TO GLASS SHALL HAVE A BLANK BACK PANEL MADE OF THE SAME MATERIAL AND OF THE SAME SIZE AND COLOR AS THE SIGN ADHERED TO THE OPPOSITE SIDE OF THE GLASS.

**MOUNTING LOCATION AND HEIGHT:**

WHERE PERMANENT IDENTIFICATION WITH TACTILE CHARACTERS IS PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. AT DOUBLE LEAF DOORS, THE SIGN SHALL BE TO THE RIGHT OF THE RIGHT-HAND DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR, OR THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE ON THE NEAREST ADJACENT WALL. SIGNS SHALL HAVE AN 18-INCH MINIMUM SPACE ON THE FLOOR OR GROUND, CENTERED ON THE SIGN, BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHERE SIGNS ARE INDICATED TO BE MOUNTED ON A WINDOW OR SIDELITE, A BLANK BACKER PANEL OF THE SAME SIZE AND COLOR AS THE SIGN SHALL BE PROVIDED ON THE OPPOSITE SIDE OF THE GLASS. MOUNTING HEIGHTS SHALL BE AS FOLLOWS:

60-INCHES MAXIMUM TO 48-INCHES MINIMUM ABOVE FINISH FLOOR TO THE BASELINE OF THE CHARACTERS.

**RAISED AND BRAILLED CHARACTERS AND PICTORIAL SYMBOL SIGNS:**

LETTERS AND NUMERALS SHALL BE RAISED 1/32-INCH, UPPER CASE, SANS SERIF OR SIMPLE SERIF TYPE AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE AT LEAST 5/8-INCH HIGH, BUT NO HIGHER THAN 2-INCHES. PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6-INCHES MINIMUM IN HEIGHT. REFER TO TABLES 703.4.2.4 & 703.5 FOR REQUIRED CHARACTER AND BRAILLE DIMENSIONS.

**FINISH AND CONTRAST:**

THE CHARACTERS AND BACKGROUND OF SIGNS SHALL BE MATTE, OR OTHER NON-GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

REFER TO ICC/ANSI A117.1-2009 FOR ADDITIONAL REQUIREMENTS

**BARRIER FREE/SIGNAGE TYPES**

**FLOOR PATTERN PLAN**

SCALE: 1/4" = 1'-0"

01

A1.1

KEY:  
APC-1: ACOUSTICAL PANEL CEILING  
RS: ROLLER SHADES (ALT-BID)  
RA-1: FLOOR ACCESSORY - SEE DTL. 03/A1.1

NJDOE SP #15-1715-050-19-1000

**GUIDANCE DEPARTMENT ALTERATION**  
**GATEWAY REGIONAL HIGH SCHOOL**

775 TANYARD ROAD  
WOODBURY HEIGHTS, NEW JERSEY 08096

REF CLG & FLR PATTERN PLANS AND DETAILS

DRAWING DATE:  
31 DEC 2018

REVISION DATE:

DRAWN BY:  
PF

COMMISSION NO:  
5550B

**A1.1**

2 OF 3

FRONT DATE: 07/19

**REGAN YOUNG ENGLAND BUTERA**  
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+1 (609) 265-2662 / 0333 FAX • 21A00912100 • RYEBREAD.COM



01

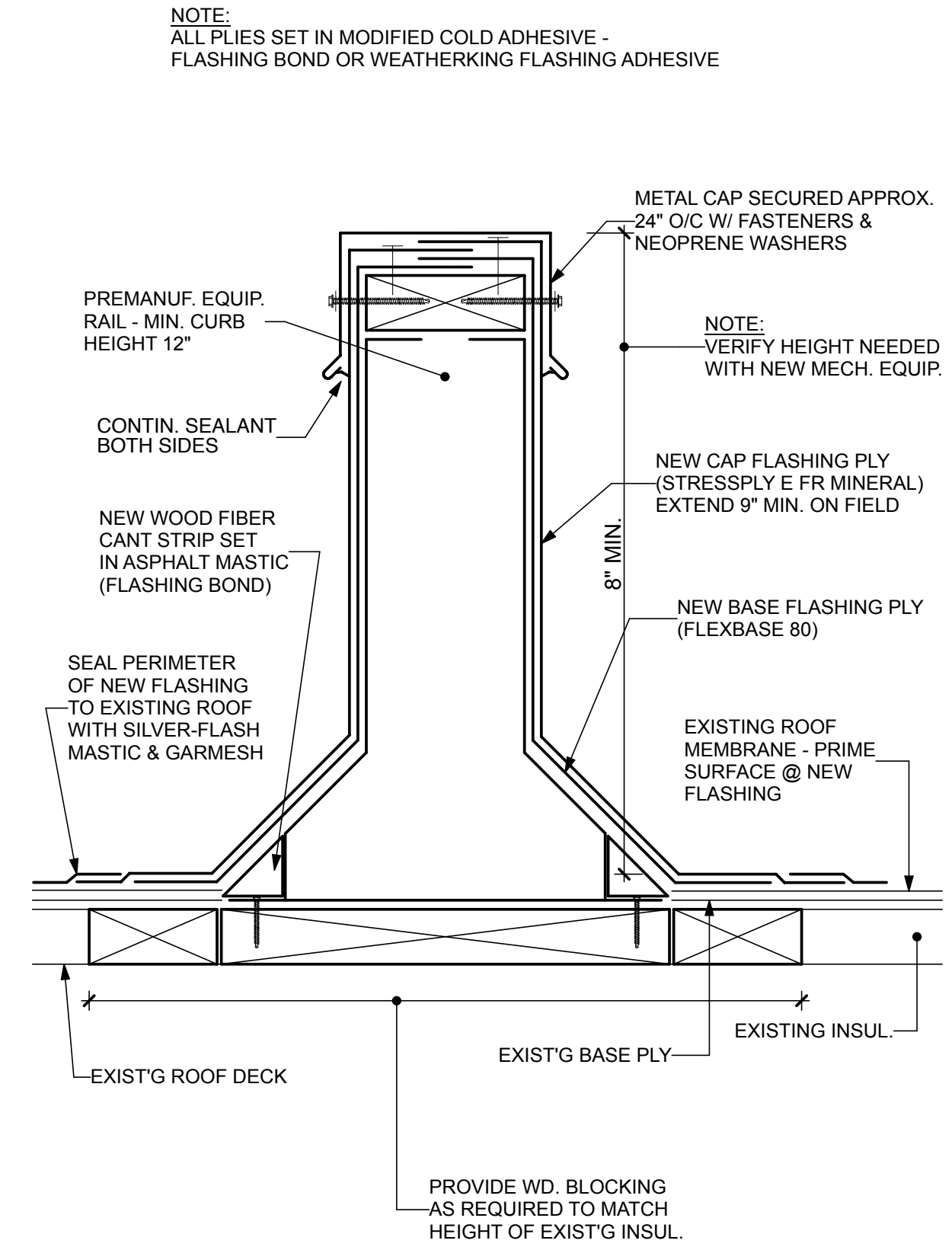


02

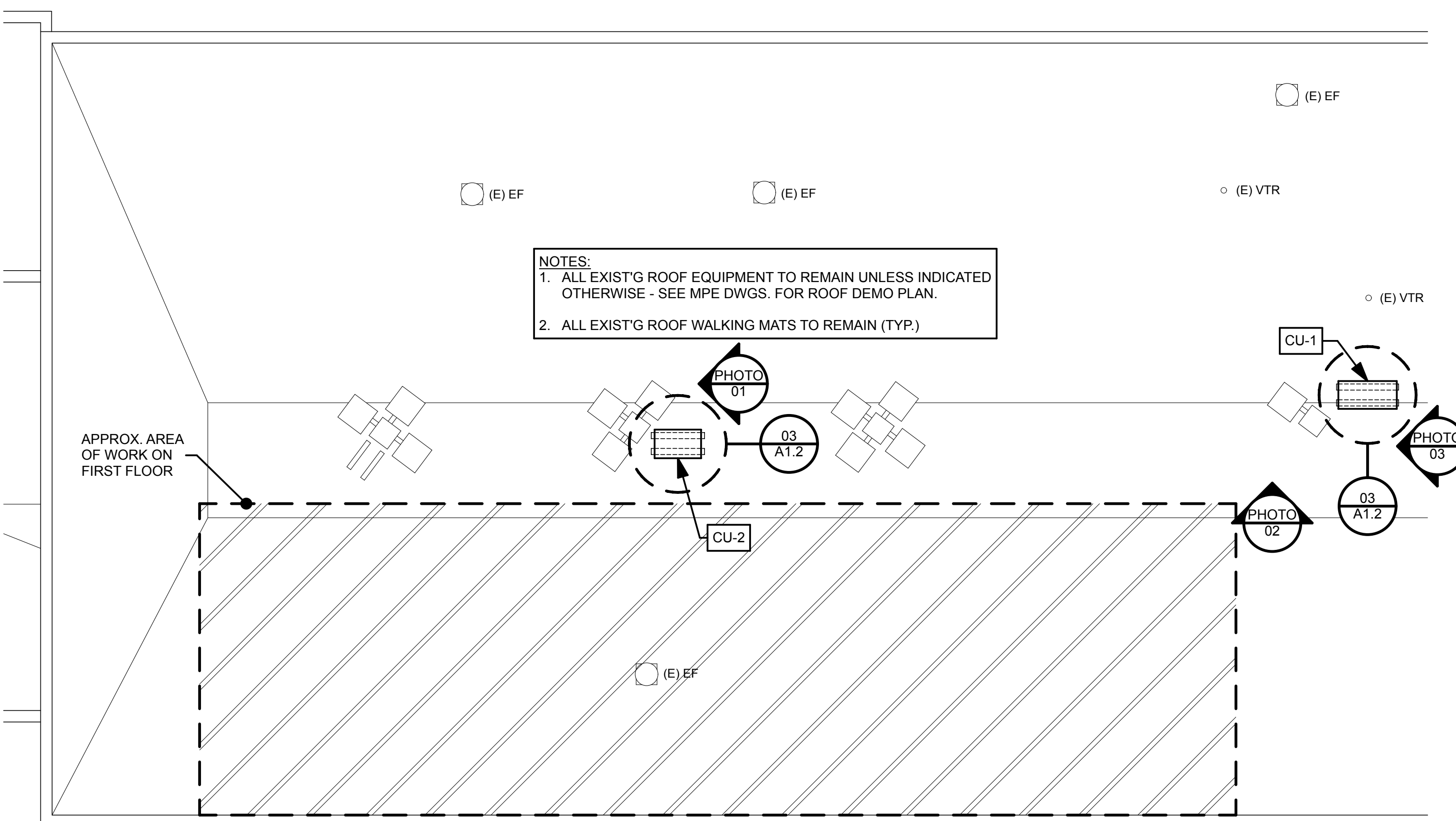


03

EXISTING ROOF PHOTOS

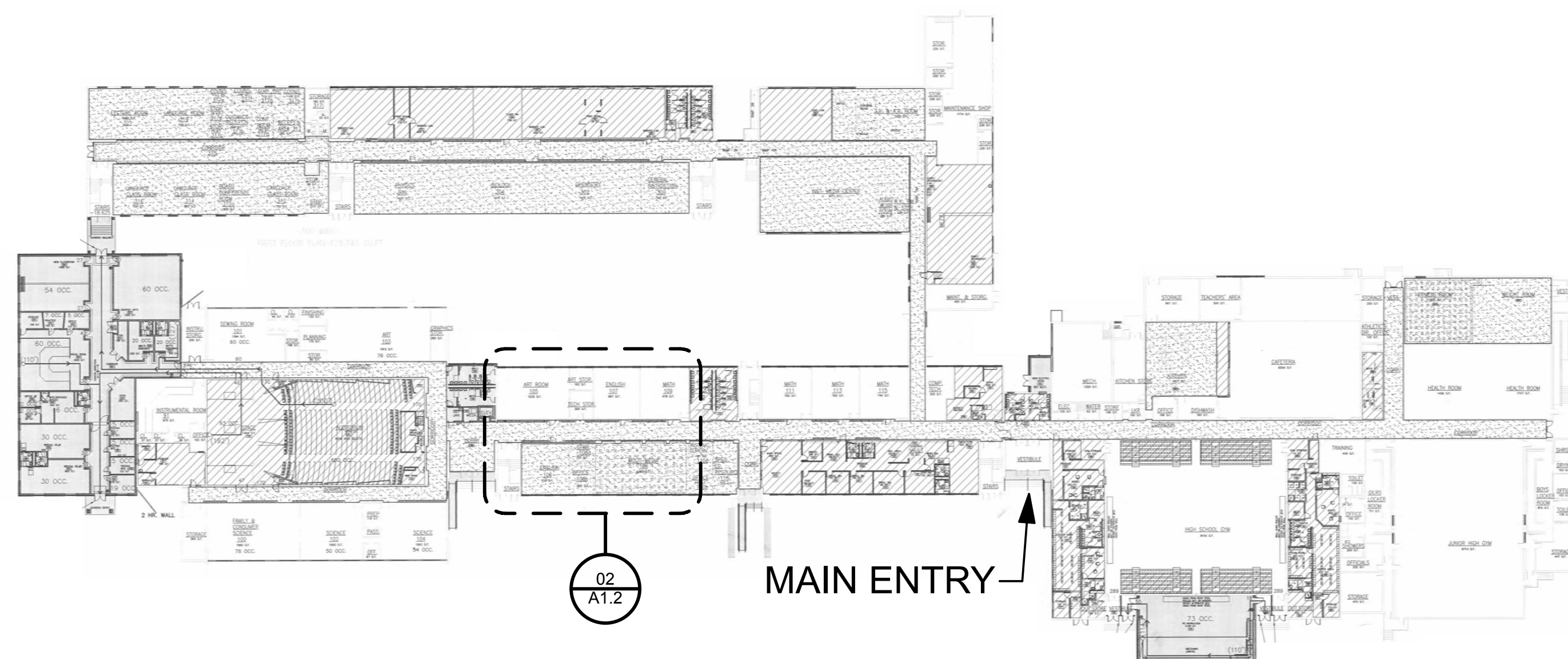


CURB DETAIL SCALE: 3" = 1'-0" 03 A1.2



PARTIAL ROOF PLAN SCALE: 1/8" = 1'-0" 02 A1.2

NOTE: ALL ROOFING WORK & DETAILS TO BE IN FULL COMPLIANCE WITH THE GARLAND COMPANY ROOF DETAILS & WARRANTY REQUIREMENTS (TYP.)



OVERALL PLAN SCALE: NTS 01 A1.2

PRINT DATE: 07/19

REGAN YOUNG, AIA  
21A00912100

**REGAN YOUNG ENGLAND BUTERA**  
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NJDOE SP #15-1715-050-19-1000

**GUIDANCE DEPARTMENT ALTERATION**  
**GATEWAY REGIONAL HIGH SCHOOL**  
775 TANYARD ROAD  
WOODBURY HEIGHTS, NEW JERSEY 08096  
TITLE: **ROOF PLAN & ED SPEC PLAN**

DRAWING DATE:	31 DEC 2018
REVISION DATE:	
DRAWN BY:	PF
COMMISSION NO.:	5550B

# GENERAL NOTES

## GENERAL NOTES

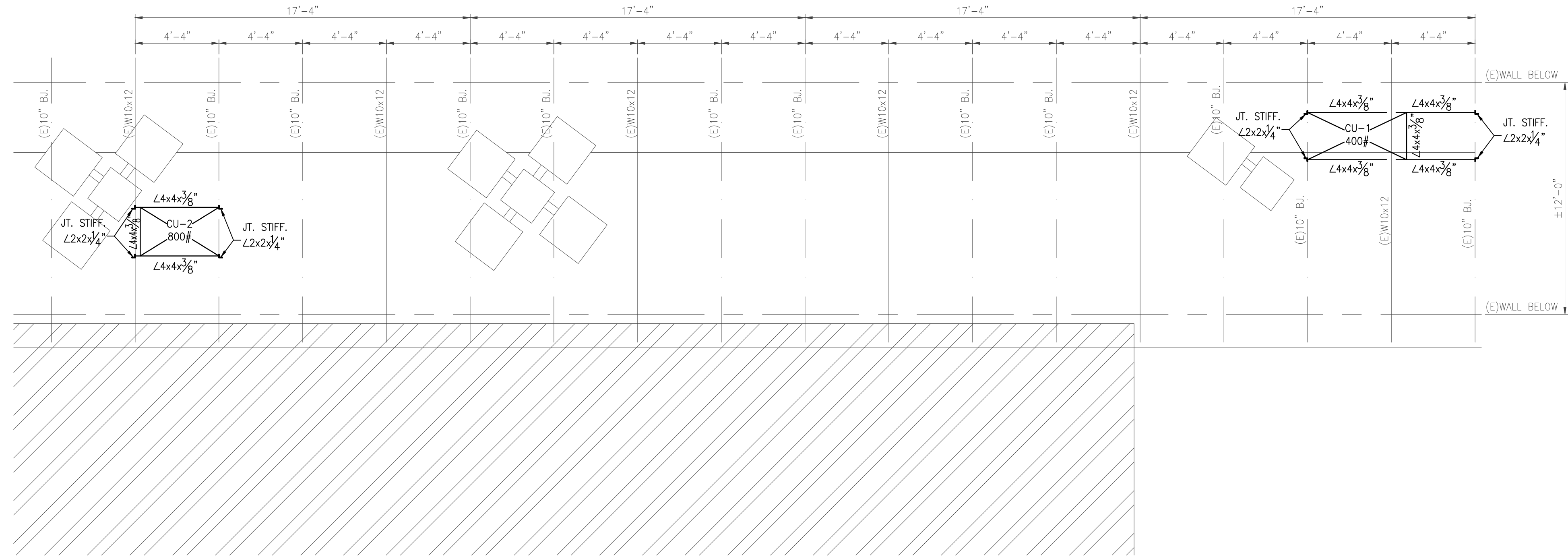
- BUILDING CODE - 2015 INTERNATIONAL BUILDING CODE (N) EDITION
- 20 P.S.F GROUND SNOW
- WIND - EXPOSURE B, I=1.0 RISK CATEGORY III = 121 MPH
- SEISMIC - SDS=0.28 USE GROUP 1 DESIGN CAT B SD1=0.06 SITE CLASS D
- USE PROPERLY DESIGNED SHORING, BRACING, UNDERPINNING, ETC. AS NECESSITATED BY CONDITIONS OR AS REQUIRED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION.
- NO FIELD REVISIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE ENGINEER. THIS INCLUDES (BUT IS NOT LIMITED TO) REVISIONS DUE TO MISLOCATION, MISFIT OR ANY OTHER CONSTRUCTION ERROR.
- BRACE ALL WALLS DURING CONSTRUCTION TO PREVENT DAMAGE FROM WIND, WATER, EARTH PRESSURE AND CONSTRUCTION LOADS UNTIL ALL SUPPORTING ELEMENTS ARE IN PLACE AND ARE OF SUFFICIENT STRENGTH.
- NO OPENINGS SHALL BE PLACED IN ANY STRUCTURAL MEMBER (OTHER THAN AS INDICATED ON APPROVED SHOP DRAWINGS) UNTIL THE LOCATION HAS BEEN APPROVED BY THE STRUCTURAL ENGINEER.
- PROVIDE SLEEVE LAYOUTS FOR ALL PIPES AND ELECTRICAL PENETRATIONS THROUGH STRUCTURAL MEMBERS (ALL TRADES ARE INCLUDED). LAYOUTS ARE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- STRUCTURAL DRAWINGS ARE TO BE COORDINATED AND USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS, SEE MECHANICAL DRAWINGS FOR EQUIPMENT PANS, BASES, SUPPORTS AND DUCT PENETRATIONS.
- SUPPORT AIR CONDITIONING UNITS, COMPRESSORS AND OTHER ROOF MOUNTED OR SUSPENDED EQUIPMENT ONLY ON JOISTS, TRUSSES OR BEAMS DESIGNATED FOR THAT PURPOSE. IF NO SUPPORT HAS BEEN DESIGNED (OR IF QUESTION ARISES) NOTIFY THE ARCHITECT PRIOR TO THE ERECTION OF EQUIPMENT AND BEFORE STRUCTURAL ERECTION IS COMPLETE.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE GOVERNING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
- WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES, SHALL BE REPEATED.
- CONTRACTOR SHALL VERIFY AND/OR ESTABLISH ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE.
- IF THE EXISTING FIELD CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY AND PROVIDE A SKETCH OF THE CONDITION WITH HIS PROPOSED MODIFICATION OF THE DETAILS GIVEN ON THE CONTRACT DOCUMENTS.
- WHERE ALTERATIONS INVOLVE THE EXISTING SUPPORTING STRUCTURE, THE CONTRACTOR SHALL PROVIDE SHORING AND PROTECTION REQUIRED TO INSURE THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE.
- BRACING, SHEETING, SHORING, ETC. REQUIRED TO SUPPORT UTILITIES, STRUCTURE, ETC. SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER ENGAGED BY THE CONTRACTOR. DETAILED SHOP DRAWINGS SHALL BE PREPARED INDICATING ALL WORK TO BE PERFORMED.
- IN NO CASE SHALL HEAVY EQUIPMENT BE PERMITTED CLOSER THAN 8 FEET FROM ANY PILE SUPPORTED STRUCTURE. IF THIS OCCURS, THE CONTRACTOR SHALL BE THE SOLELY RESPONSIBLE AND, AT HIS OWN EXPENSE, PROVIDE ADEQUATE SUPPORTS OR BRACE THE PILE SUPPORTED STRUCTURE TO WITHSTAND THE ADDITIONAL LOADS IMPOSED.
- THE NOTES ON THESE DRAWINGS DO NOT REPLACE THE SPECIFICATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SHOULD A CONFLICT ARISE BETWEEN THESE NOTES AND SPECIFICATIONS, WRITTEN CLARIFICATIONS SHOULD BE REQUESTED BY THE CONTRACTOR TO THE ARCHITECT/ENGINEER. INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- IF DURING THE PROGRESS OF THE WORK, THE CONTRACTOR MAY DISCOVER ANY INCONSISTENCY IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPORT THIS INCONSISTENCY TO THE ARCHITECT/ENGINEER. EXTRAS WILL NOT BE PERMITTED FOR CORRECTION OF DISCREPANCIES THAT COULD HAVE BEEN AVOIDED BY CAREFUL REVIEW AND THE MINOR ADJUSTMENT OF SIZE AND/OR LOCATION OF VARIOUS ITEMS.
- SHOULD THE CONTRACTOR SEEK APPROVAL OF A PRODUCT OTHER THAN SHOWN OR WITHIN THE SPECIFICATIONS, THE CONTRACTOR SHALL FURNISH WRITTEN EVIDENCE THAT THE PROPOSED PRODUCT CONFORMS IN ALL RESPECTS TO THE SPECIFIED PRODUCT.
- THE ENGINEER OF RECORD IS NOT AND SHALL NOT BE HELD LIABLE FOR SITE SAFETY ISSUES. THESE ARE THE RESPONSIBILITY OF THE CONTRACTOR/CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS.

## STRUCTURAL STEEL:

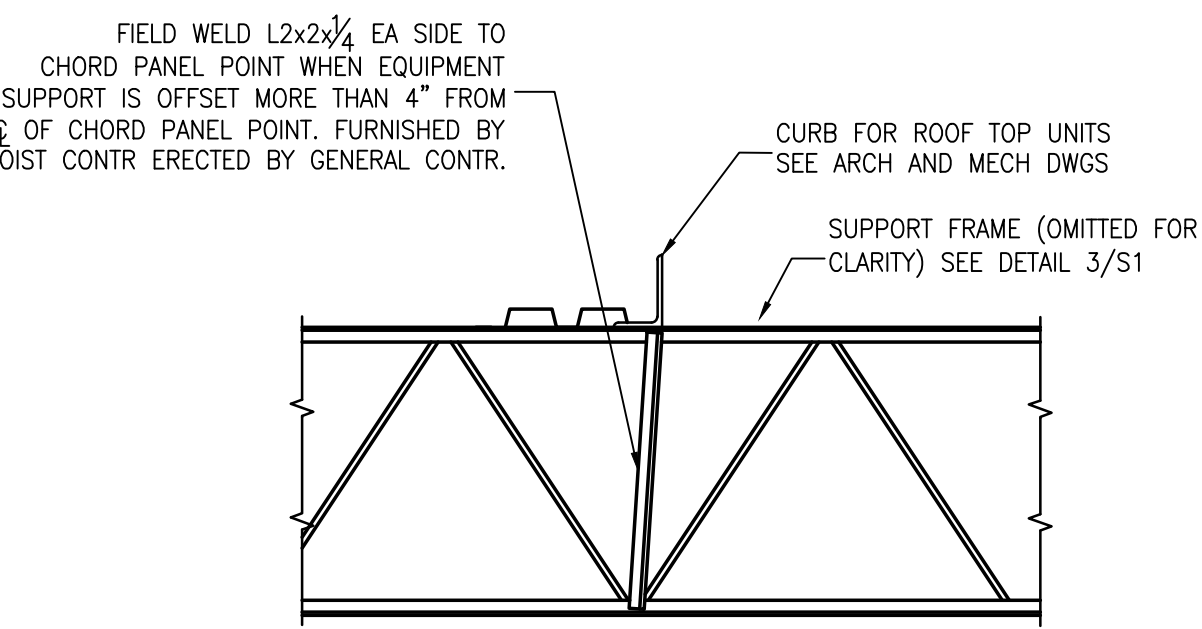
- STEEL SHALL CONFORM TO THE FOLLOWING GRADES:
 

ALL WF	A992 (FY=50 KSI)
ALL CHANNELS, ANGLES, PLATES, ETC. (LNO)	A36 (FY=36 KSI)
STRUCTURAL TUBE	A500 (FY=46 KSI)
STEEL PIPE	A53 (FY=35 KSI)
ANCHOR BOLTS	A307
BOLTS	A325
WELDING ELECTRODES	E70XX
- ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE (1986), EXCEPT AS MODIFIED IN THESE NOTES AND THE PROJECT SPECIFICATIONS.
- THE STEEL STRUCTURE IS A NON-Self-SUPPORTING STEEL FRAME AND IS DEPENDENT UPON DIAPHRAGM ACTION OF THE METAL ROOF DECK AND ATTACHMENT TO THE MASONRY WALLS FOR STABILITY AND FOR RESISTANCE TO WIND AND SEISMIC FORCES. PROVIDE ALL TEMPORARY SUPPORTS REQUIRED FOR STABILITY AND FOR RESISTANCE TO WIND AND SEISMIC FORCES UNTIL THESE ELEMENTS ARE COMPLETE AND ARE CAPABLE OF PROVIDING THIS SUPPORT.
- THE FABRICATOR IS RESPONSIBLE FOR THE DESIGN OF ALL CONNECTIONS. CONNECTIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE SCHEMATIC AND ARE ONLY INTENDED TO SHOW THE RELATIONSHIP OF MEMBERS CONNECTED. CONNECTION DETAILS INDICATED ON THE DRAWINGS SHALL BE INCORPORATED INTO FABRICATOR'S CONNECTION DESIGN. SEE SPECIFICATIONS. ALL SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE FABRICATOR'S ENGINEER WITH THE ENGINEER'S SEAL FOR THE STATE WHERE THE STRUCTURE IS LOCATED. ENGINEER'S SEAL MAY BE QUALIFIED FOR DESIGN OF CONNECTIONS ONLY.

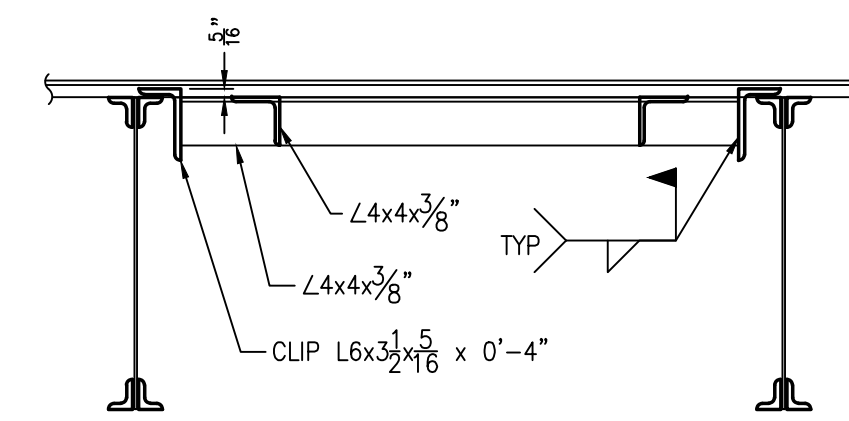
- SPlicing OF STEEL MEMBERS, UNLESS SHOWN ON THE DRAWINGS, IS PROHIBITED WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
- STRUCTURAL STEEL WORK SHALL BE SUBJECT TO QUALITY ASSURANCE TESTING AND INSPECTIONS. SEE QUALITY ASSURANCE GENERAL NOTES AND PROJECT SPECIFICATIONS.
- WELDING SHALL BE PERFORMED WITH E70XX ELECTRODES. ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS AND SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE.
- AFTER FABRICATIONS, ALL STEEL SHALL BE CLEANED OF ALL RUST, LOOSE MILL SCALE AN OTHER FOREIGN MATERIALS PRIOR TO THE APPLICATION OF TWO COATS OF SHOP PRIMER.
- STEEL ANGLES AND PLATES ALONG WITH BOLTS AND WASHERS, IN DIRECT AND PERMANENT CONTACT WITH EXTERIOR FINISH MASONRY, AND ALL EXPOSED STRUCTURAL STEEL, SHALL BE HOT-DIPPED GALVANIZED.
- STEEL BEAMS AND COLUMNS ADJACENT TO MASONRY SHALL HAVE ADJUSTABLE MASONRY TIES.
- STEEL SURFACES WITHIN 4 INCHES OF FIELD WELDS SHALL BE CLEANED AND GROUND SMOOTH, AFTER WELDING COAT SURFACE WITH PRIMER/PAIN.
- FULL DEPTH DOUBLE ANGLE END CONNECTIONS ARE TO BE USED ON ALL ORDER AND BEAM CONNECTIONS.
- PROVIDE A MINIMUM OF 3/8 INCH THICK FULL DEPTH THRU-PLATE FOR ALL PIPE AND TUBE COLUMN CONNECTIONS.
- ALL CONNECTIONS SHALL BE DESIGNED FOR THE GREATER OF THE REACTIONS GIVEN ON THE FRAMING PLANS OR 1/2 THE AISC UNIFORM LOAD CAPACITY OF THE BEAM UNLESS A MORE STRINGENT CRITERIA IS GIVEN ON THE CONTRACT DOCUMENTS.
- ALL STEEL TO OTHER METAL CONNECTIONS ARE TO BE TREATED OR PROPERLY SEPARATED TO PREVENT GALVANIC AND CORROSIVE EFFECTS.
- FABRICATE BEAMS WITH THE NATURAL CAMBER UP.
- ALL STEEL NOT RECEIVING FIREPROOFING SHALL BE PAINTED WITH THE FABRICATOR'S RUST INHIBITIVE PRIMER. OMIT PAINT AT SLIP CRITICAL CONNECTIONS.
- NON-SHRINK GROUT FOR COLUMN BASE PLATES SHALL BE PREPARED, NONMETALLIC GROUT COMPLYING WITH ASTM C-1107.
- ALL STEEL EXPOSED TO WEATHER OR IN EXTERIOR WALLS SHALL BE HOT DIPPED GALVANIZED.



**1 PLAN @ NEW HVAC**  
SCALE: 3/8" = 1'-0"



**2 TYP DETAIL @ HVAC**  
SCALE: 3/4" = 1'-0"



**3 TYP SUPPORT FRAME**  
SCALE: 3/4" = 1'-0"

PRINT DATE: 10/19

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+1(609)265-2652/0333FAX • 214(0)912100 • RYEBREAD.COM

**NIDOE SP #15-1715-050-19-1000**

GUIDANCE DEPARTMENT ALTERATION  
GATEWAY REGIONAL HIGH SCHOOL

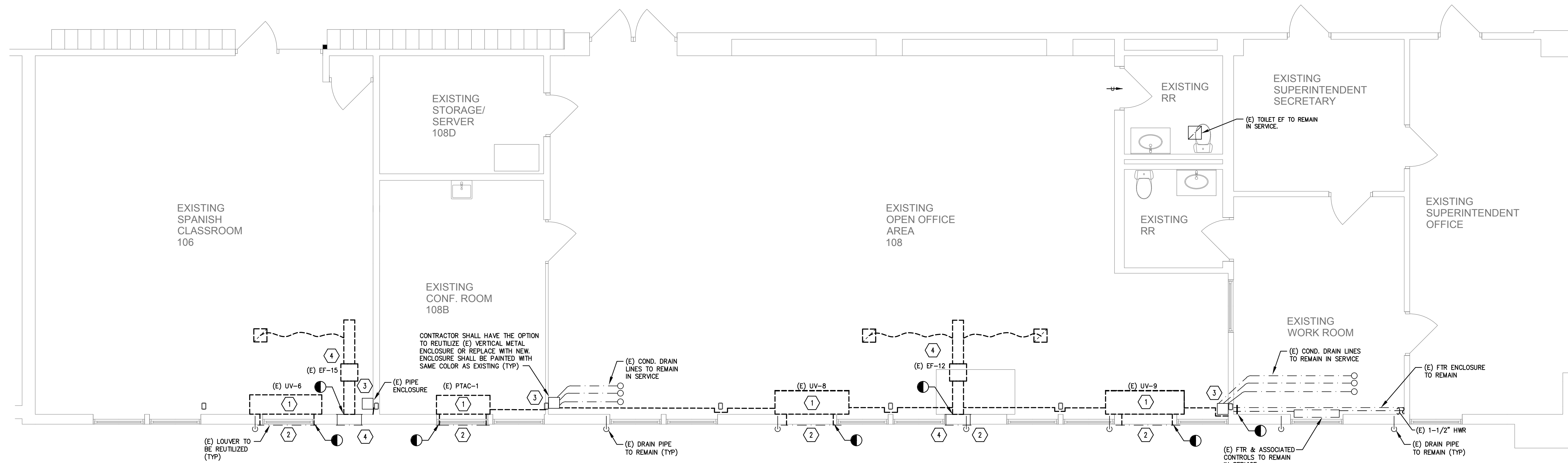
775 TANNYARD ROAD  
WOODBURY HEIGHTS, NEW JERSEY 08096

TITLE: **STRUCTURAL GENERAL NOTES & HVAC DETAILS**

DRAWING DATE:	31 DEC 2018
REVISION DATE:	
DRAWN BY:	
COMMISSION NO.:	<b>5550B</b>

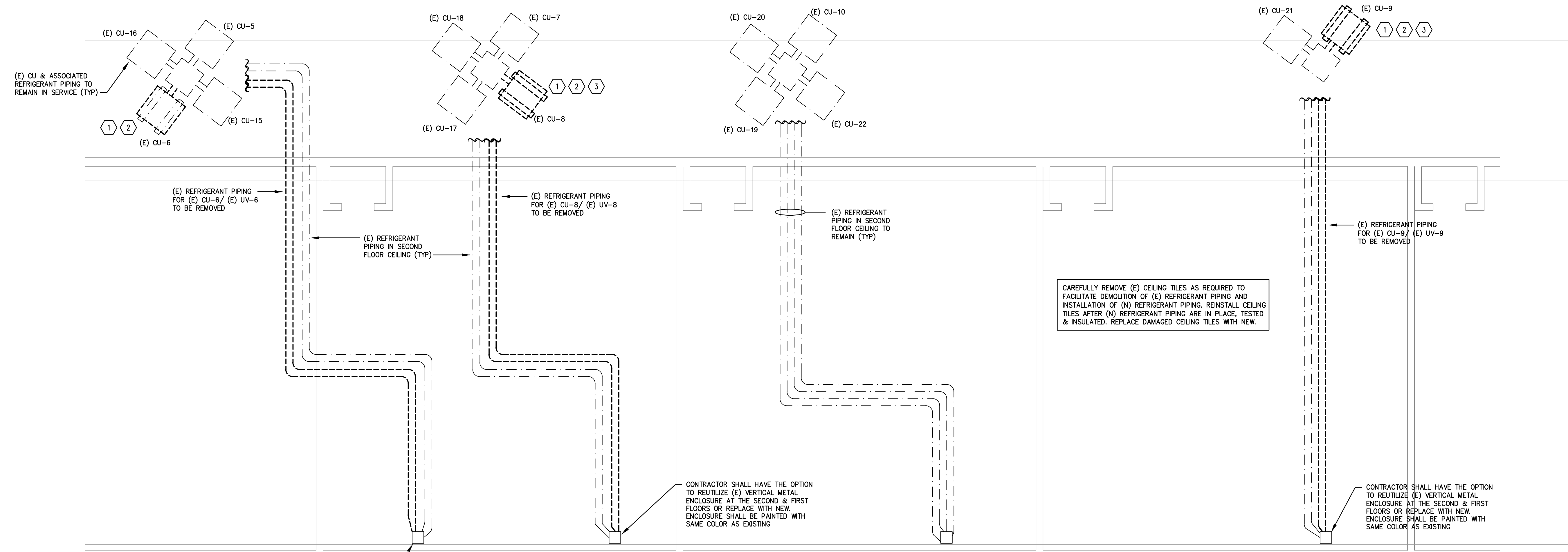
**S1**

1 OF 1  
SE2 JOB# 19-018



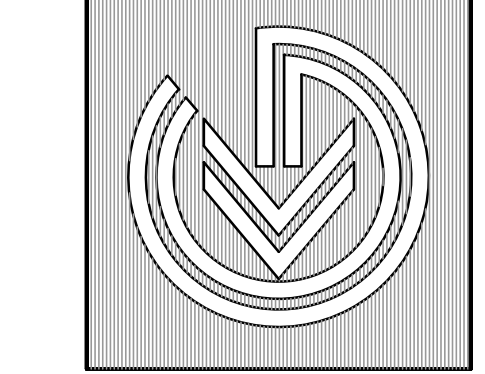
**1 PARTIAL FIRST FLOOR DEMOLITION PLAN - HVAC**  
 HD-1 SCALE 1/4" = 1'-0"

- DEMOLITION KEY NOTES:**
- 1 EXISTING UV/PTAC UNIT AND ASSOCIATED CONTROLS, REFRIGERANT PIPING, HWS/R PIPING, CONDENSATE DRAIN PIPING, VALVING & PIPING ENCLOSURES SHALL BE DEMOLISHED IN THEIR ENTIRETY. PORTION OF EXISTING MAIN HORIZONTAL HWS/R SHALL BE REUTILIZED. RECOVER REFRIGERANT PIPING PER LATEST EPA STANDARDS PRIOR TO DEMOLITION OF REFRIGERANT PIPING.
  - 2 EXISTING OUTSIDE WALL LOUVER SHALL BE ABANDONED IN PLACE. BLANK-OFF WALL OPENING WITH 18 GAUGE GALVANIZED METAL WITH 2" THICK, FOL FACED, 6 LB. DENSITY INSULATION. CAULK FOR AIR AND WATER TIGHT SEAL.
  - 3 ALL VERTICAL METAL PIPE ENCLOSURES SHALL BE CAREFULLY TEMPORARILY REMOVED TO FACILITATE REMOVAL OF EXISTING REFRIGERANT PIPING. REINSTALL VERTICAL ENCLOSURES AFTER ALL DEMOLITION WORK IS COMPLETE AND NEW REFRIGERANT PIPING IS INSTALLED, TESTED AND INSULATED. CONTRACTOR SHALL HAVE THE OPTION TO REUTILIZE (E) VERTICAL METAL ENCLOSURE AT THE SECOND & FIRST FLOORS OR REPLACE WITH NEW. ENCLOSURE SHALL BE PAINTED WITH SAME COLOR AS EXISTING.
  - 4 EXISTING EXHAUST FAN AND ASSOCIATED GRILLES, DUCTWORK AND CONTROLS SHALL BE REMOVED. ASSOCIATED LOUVER SHALL BE REUTILIZED.

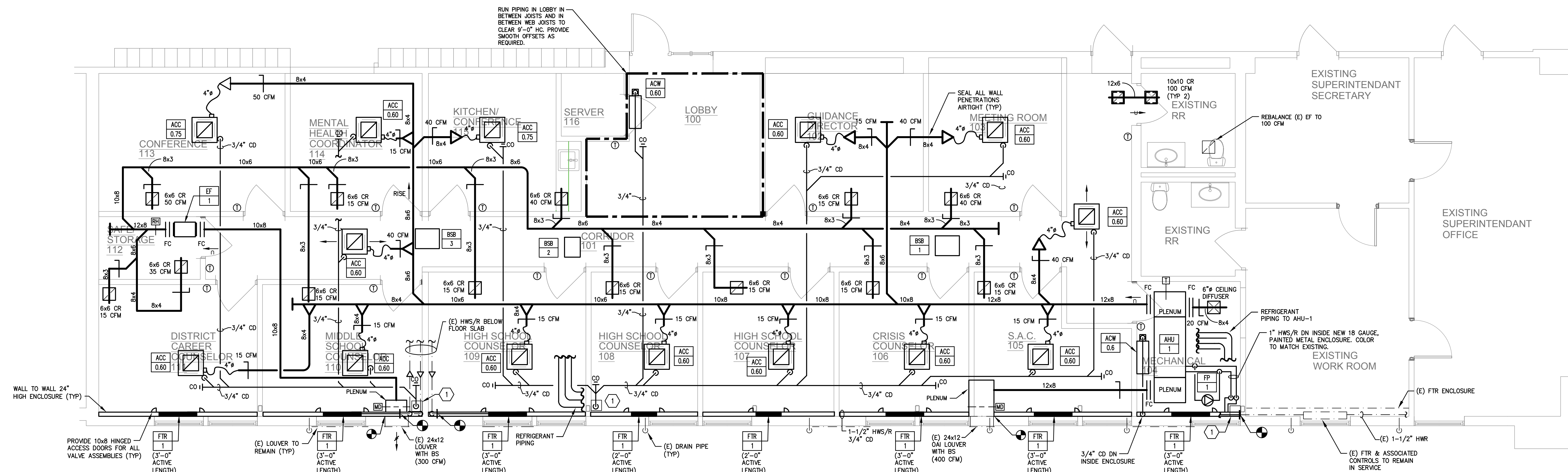


**2 PARTIAL ROOF DEMOLITION PLAN - HVAC**  
 HD-1 SCALE 1/4" = 1'-0"

- DEMOLITION KEY NOTES:**
- 1 EXISTING CU AND ASSOCIATED DISCONNECT AND REFRIGERANT PIPING DOWN TO UV UNIT ON THE FIRST FLOOR SHALL BE REMOVED IN THEIR ENTIRETY. CAREFULLY TEMPORARILY REMOVE TOP OF PREFABRICATED PIPING PORTAL TO FACILITATE REMOVAL OF EXISTING REFRIGERANT PIPING. REINSTALL TOP OF PIPING PORTAL AFTER NEW REFRIGERANT PIPING HAS BEEN INSTALLED, TESTED AND INSULATED. RECOVER REFRIGERANT PIPING PER LATEST EPA STANDARDS PRIOR TO DEMOLITION OF CONDENSING UNIT AND REFRIGERANT PIPING.
  - 2 EXISTING WOOD BASES SHALL BE REMOVED OR RETURNED TO THE SCHOOL AT THE SCHOOL'S DISCRETION.
  - 3 CONSULT ARCHITECTURAL DRAWINGS FOR STEEL BAR JOIST REINFORCEMENT DETAILS.
- GENERAL DEMOLITION NOTES:**
1. ANY WORK CONDUCTED ON THE ROOF AND PIPING PORTALS MUST COMPLY WITH THE WARRANTY REQUIREMENTS OF GARLAND ROOFING SYSTEMS.



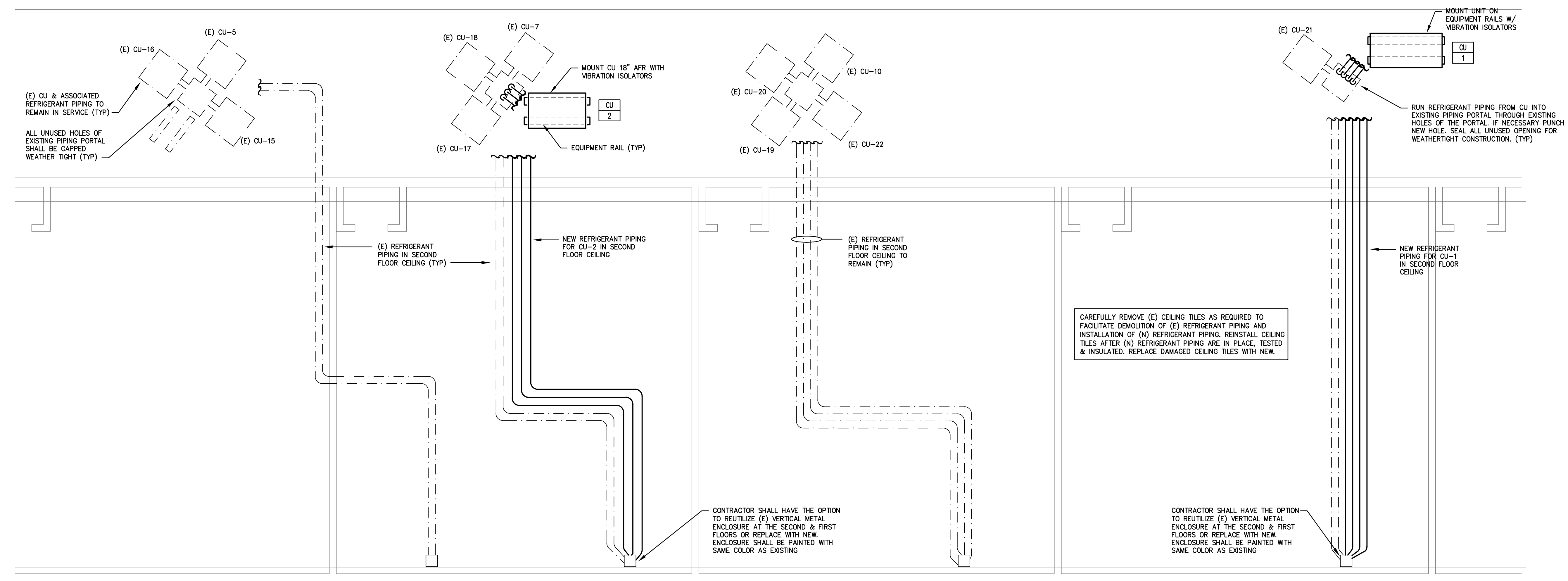
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COMMISSION NO.:	5550B



**1 PARTIAL FIRST FLOOR PLAN - HVAC**  
 H-1 SCALE 1/4" = 1'-0"

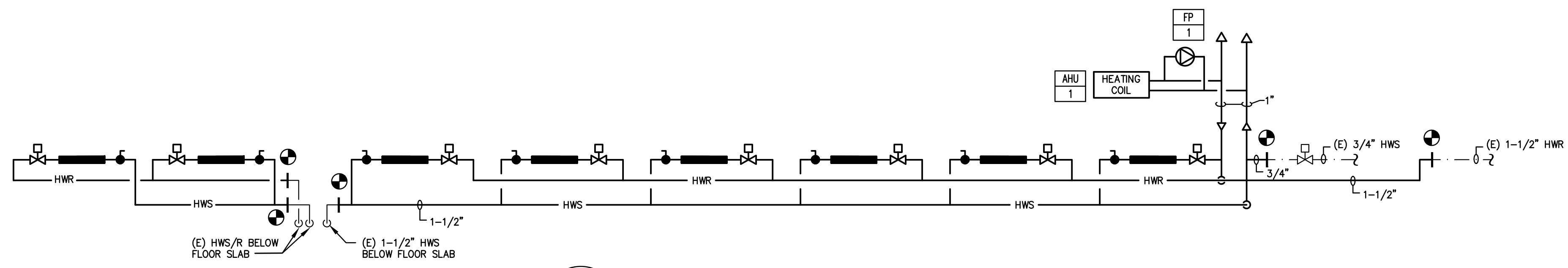
- GENERAL NOTES:
1. RUN INSULATED REFRIGERANT PIPING BETWEEN ACC, ACW, & CORRESPONDING BSB, BETWEEN BSB'S AND CU-1, BETWEEN AHU-1 CO & CU-2. REFER TO DRAWING H-1 FOR QUANTITY AND SIZE OF REFRIGERANT PIPING.
  2. RUN SUPPLY DUCTWORK TIGHT TO UNDERSIDE OF (E) STEEL BEAMS AND JOISTS.
  3. RUN EXHAUST DUCTWORK BELOW SUPPLY DUCTWORK.
  4. PROVIDE WALL TO WALL FTR & HWS/R ENCLOSURE. PROVIDE OFFSETS AROUND EXISTING COLUMNS.

- KEY NOTE:
1. 3/4" CONDENSATE DRAIN DOWN INSIDE EXISTING OR NEW METAL PIPING ENCLOSURE. FTR ENCLOSURE. CONNECT TO EXISTING CONDENSATE DRAIN PIPING.



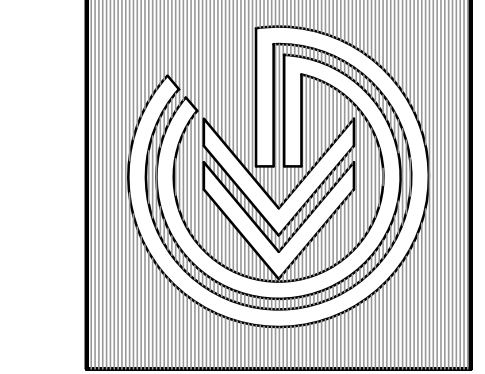
**2 PARTIAL ROOF PLAN - HVAC**  
 H-1 SCALE 1/4" = 1'-0"

- NOTE:
1. ROOF LEVEL IS SECOND STORY.



**3 HWS/R FLOW DIAGRAM**  
 H-1 NOT TO SCALE

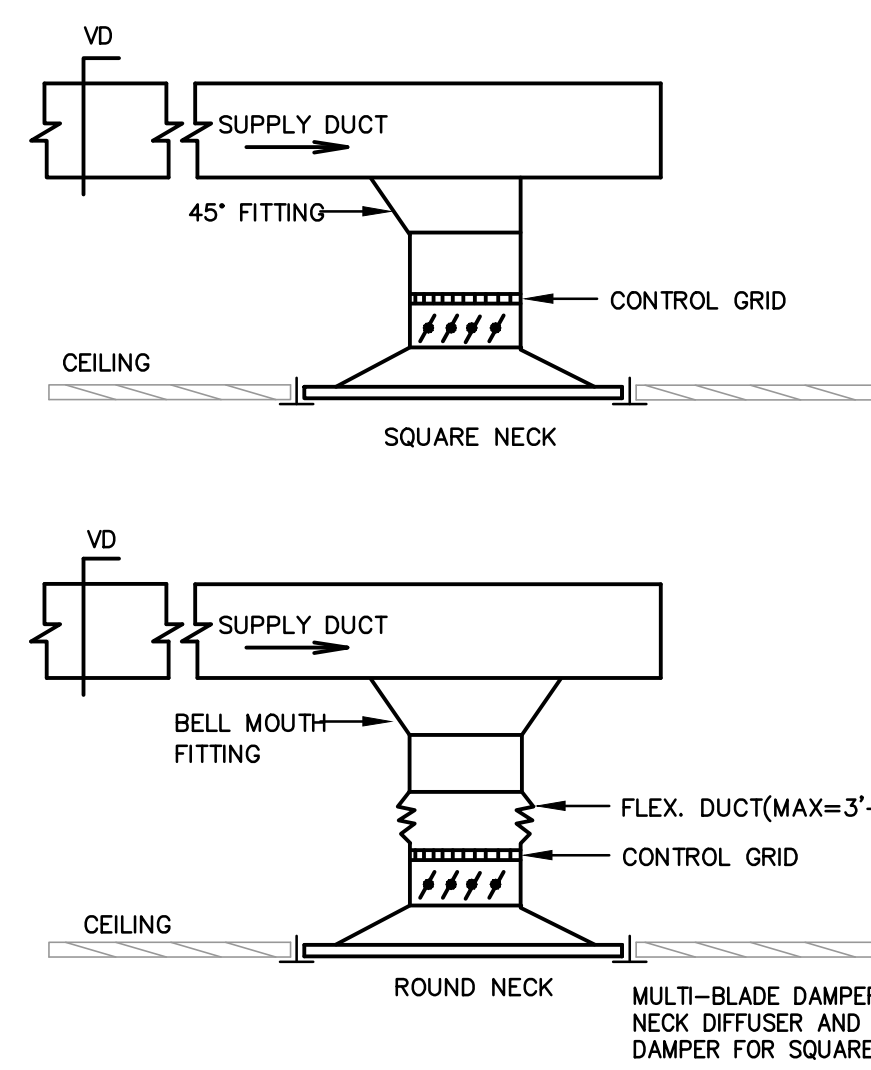
**4 SECTION OF FTR**  
 H-1 NOT TO SCALE



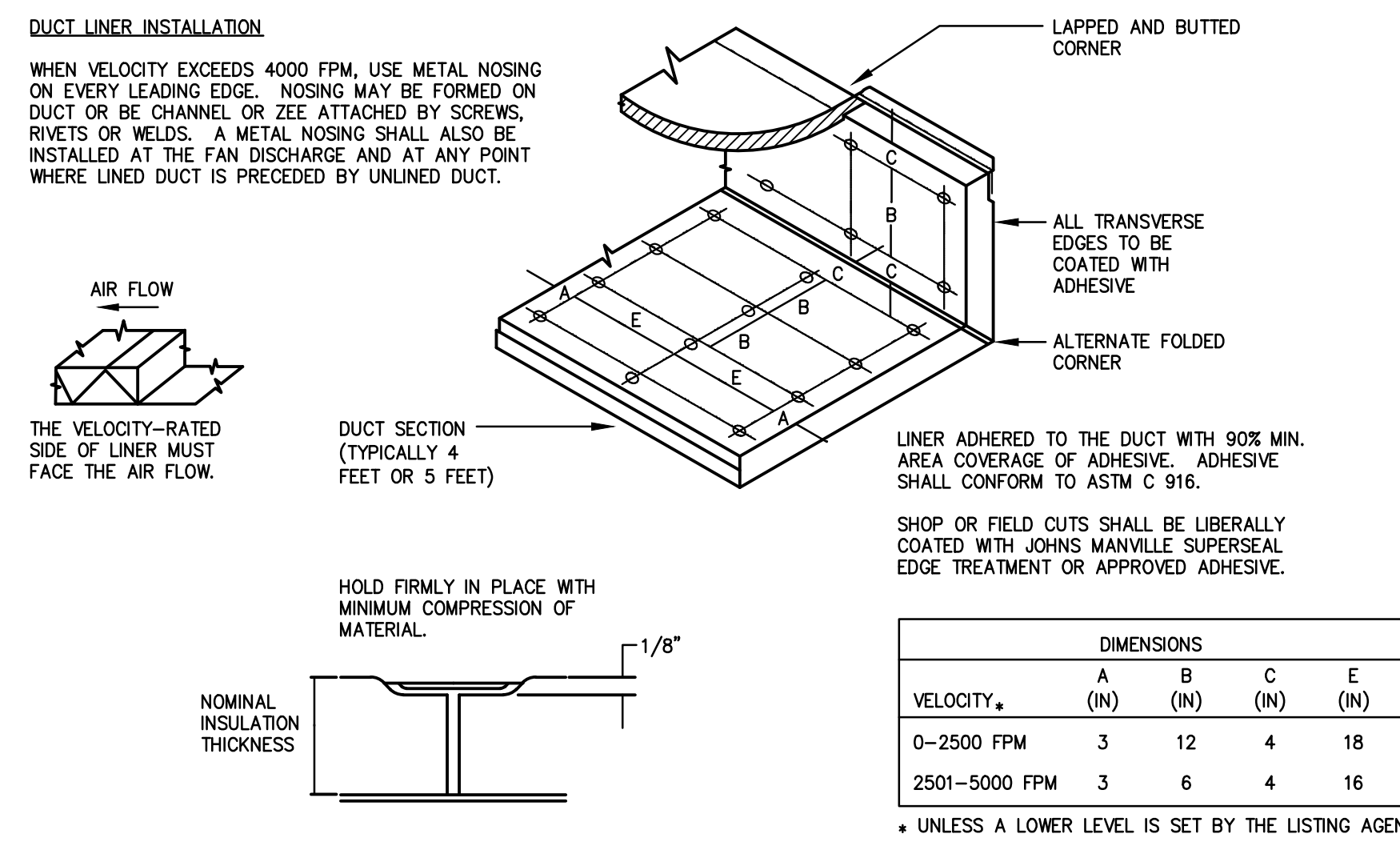
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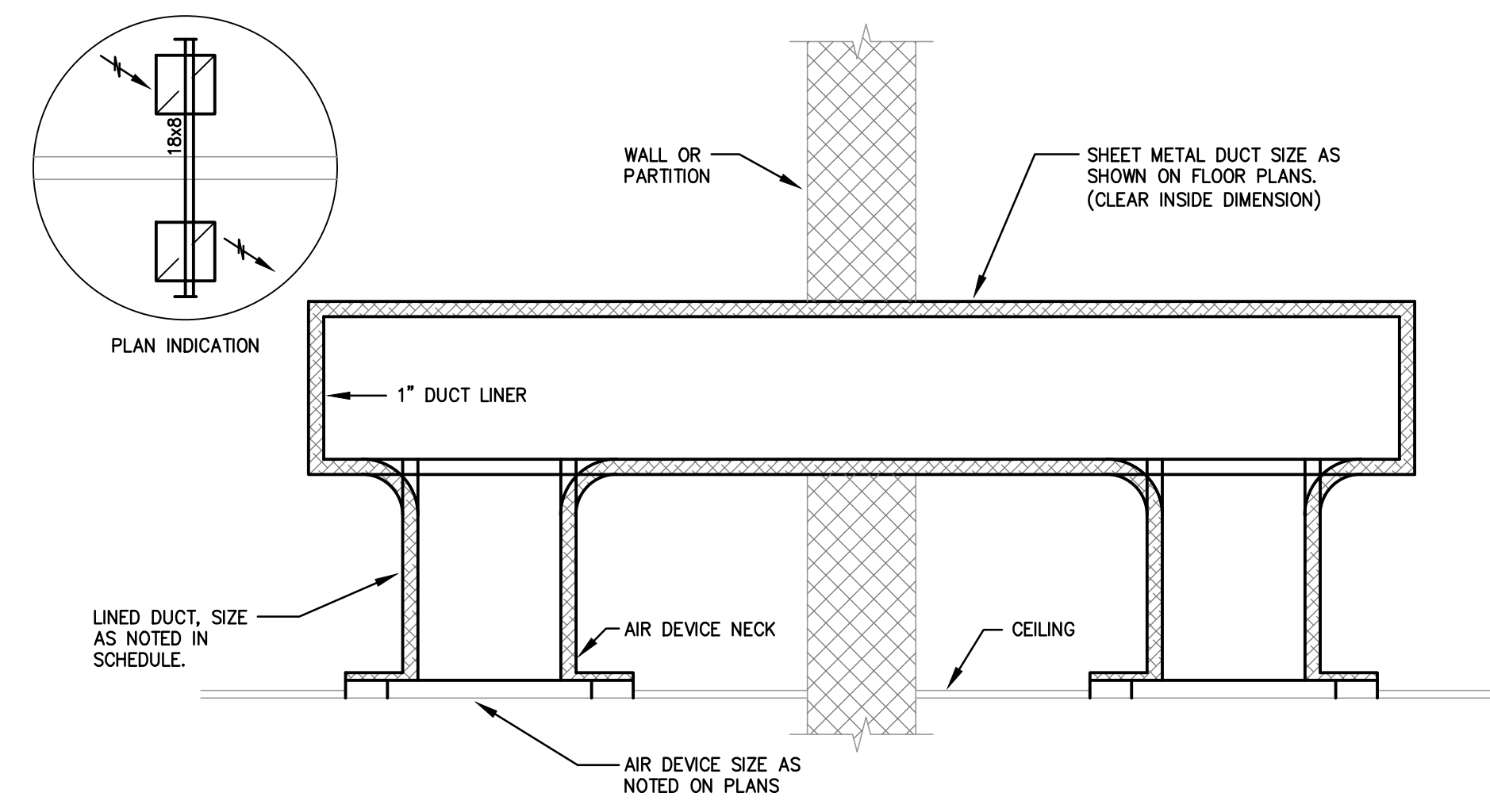




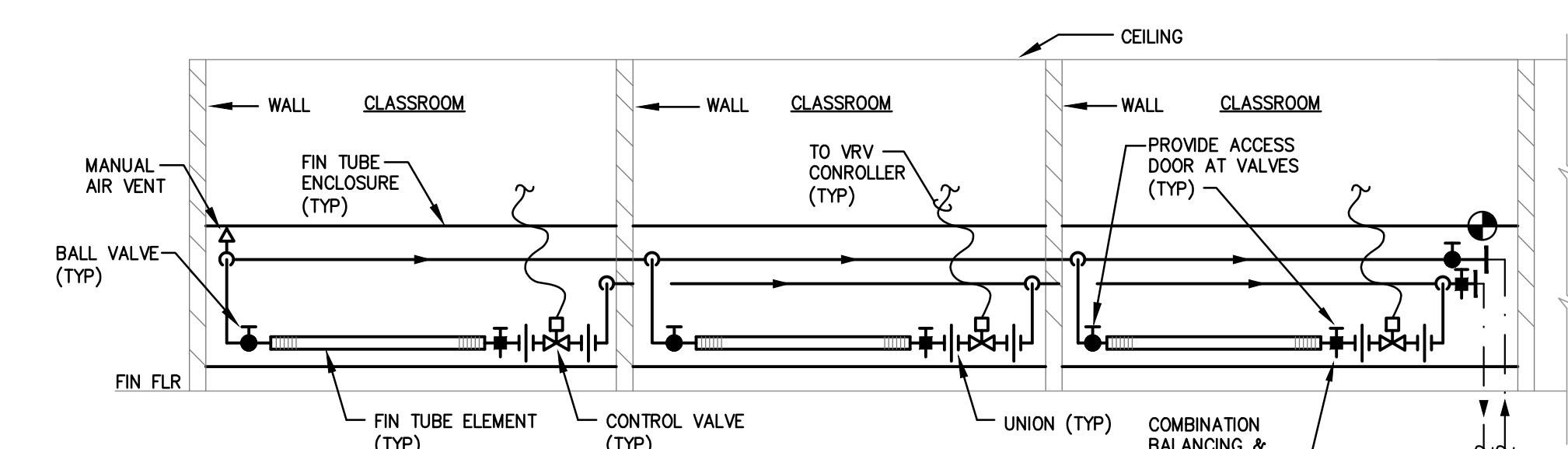
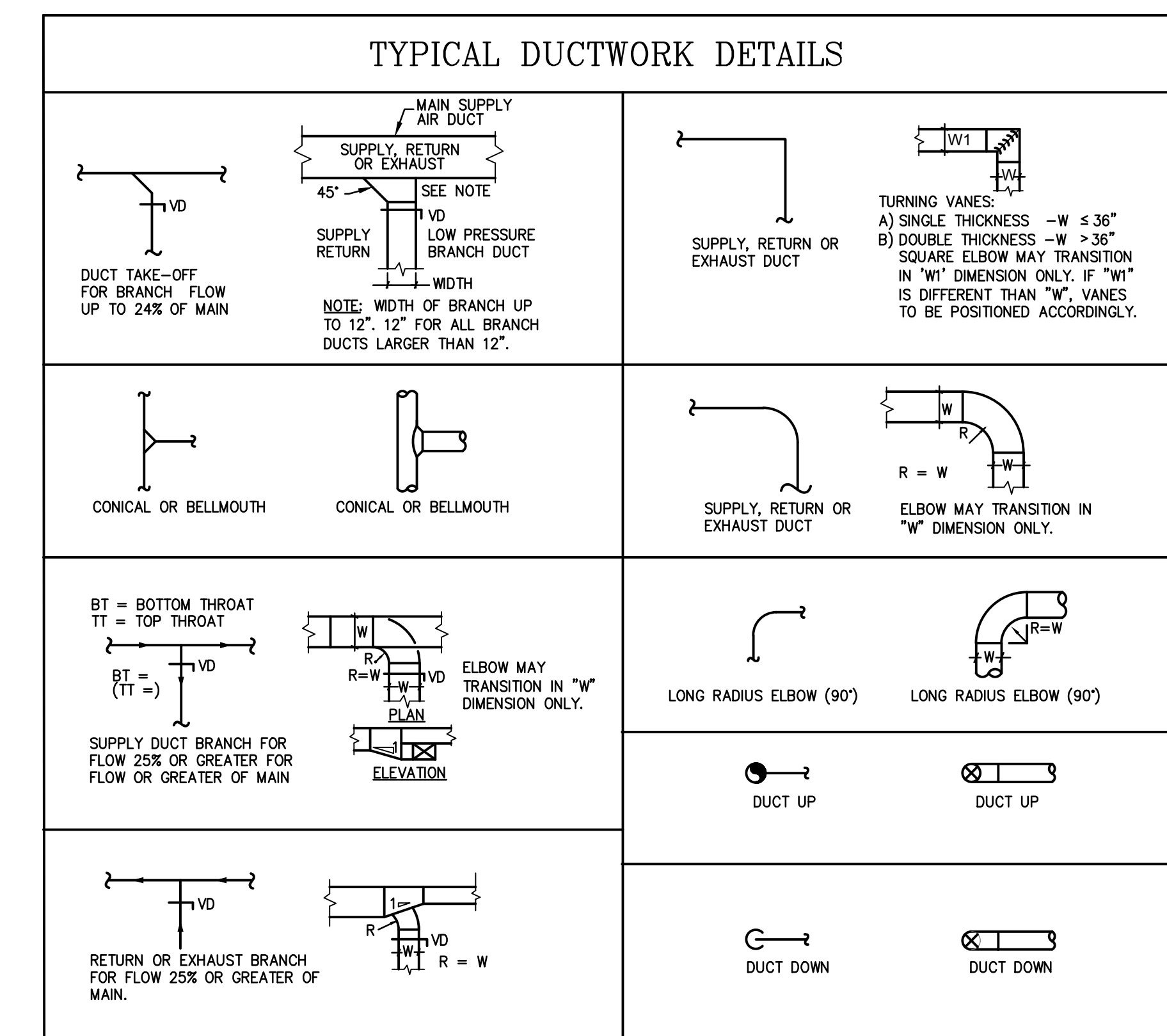
1 CEILING DIFFUSER TAKE-OFF  
H-3 NOT TO SCALE



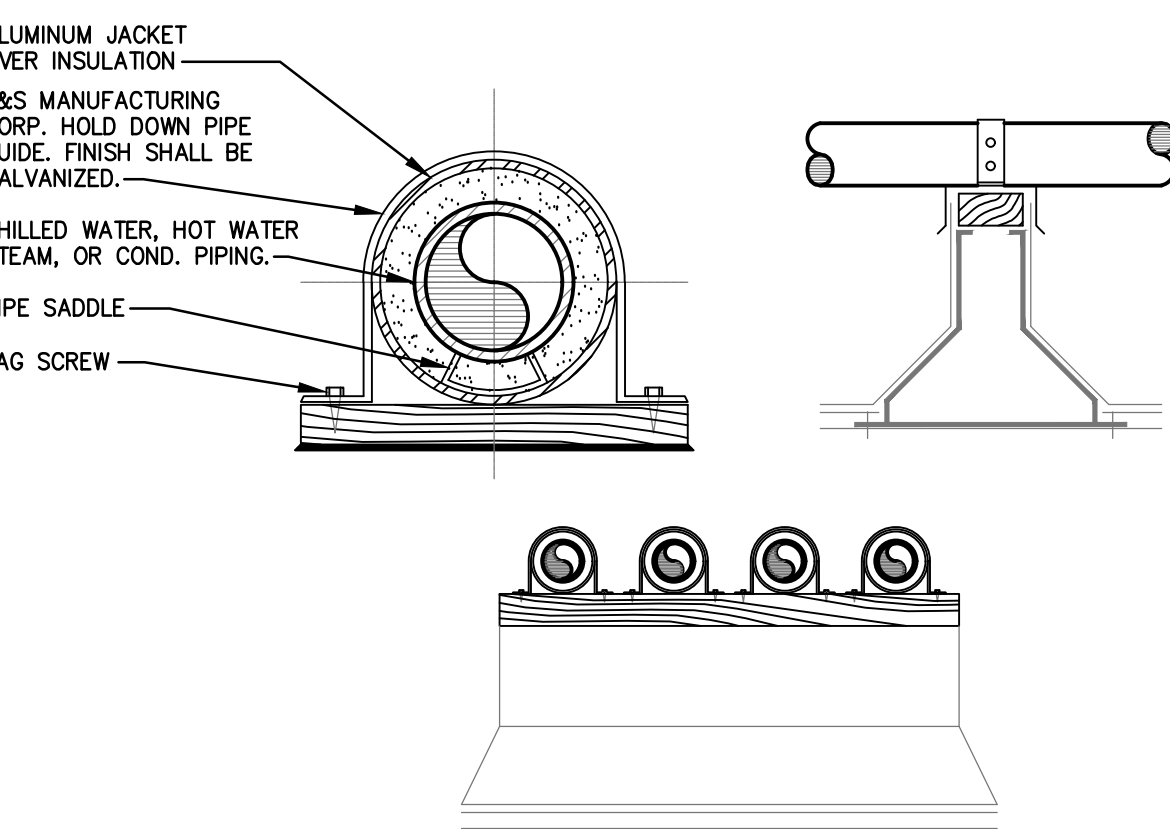
2 DUCT LINER INSTALLATION DETAIL  
H-3 NOT TO SCALE



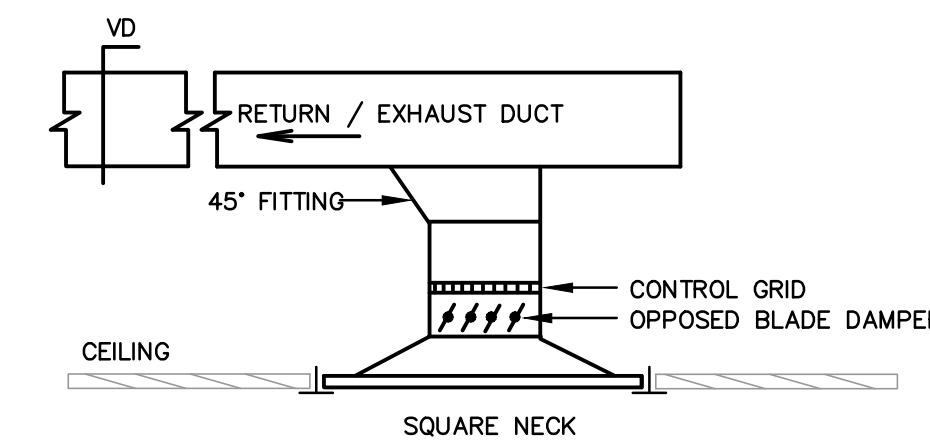
3 TRANSFER DUCT DETAIL  
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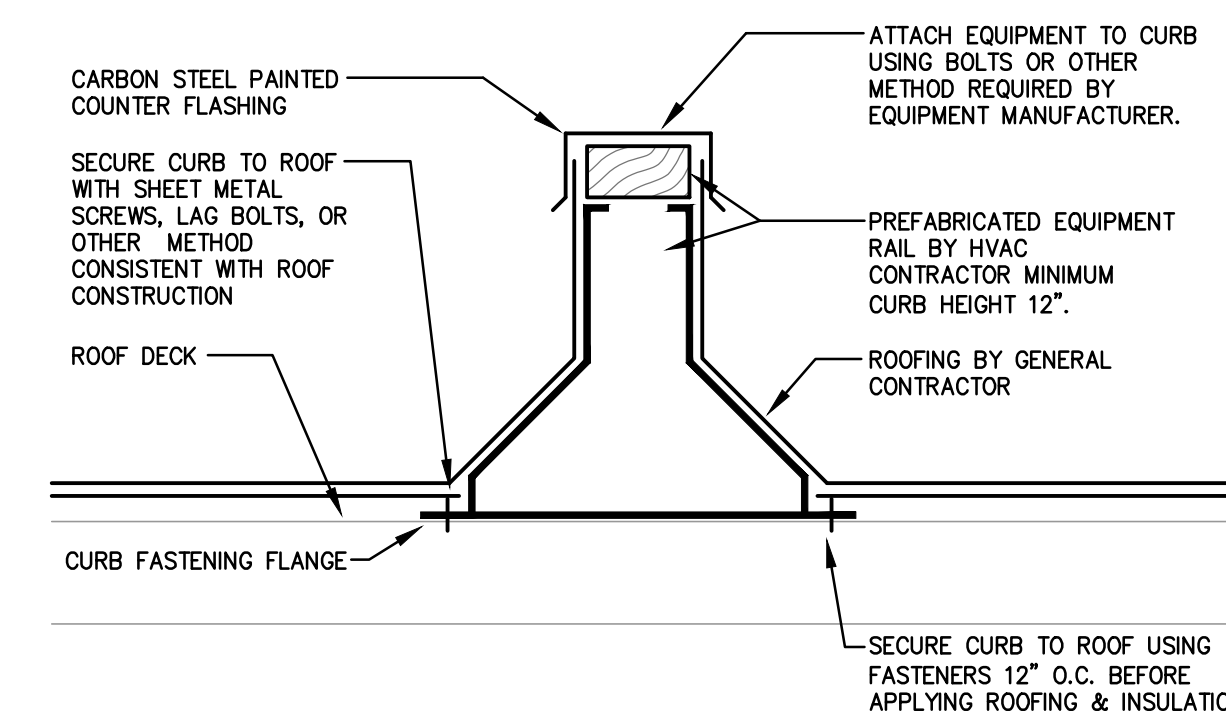
7 HOT WATER FIN TUBE RADIATION PIPING SCHEMATIC DETAIL  
H-3 NOT TO SCALE



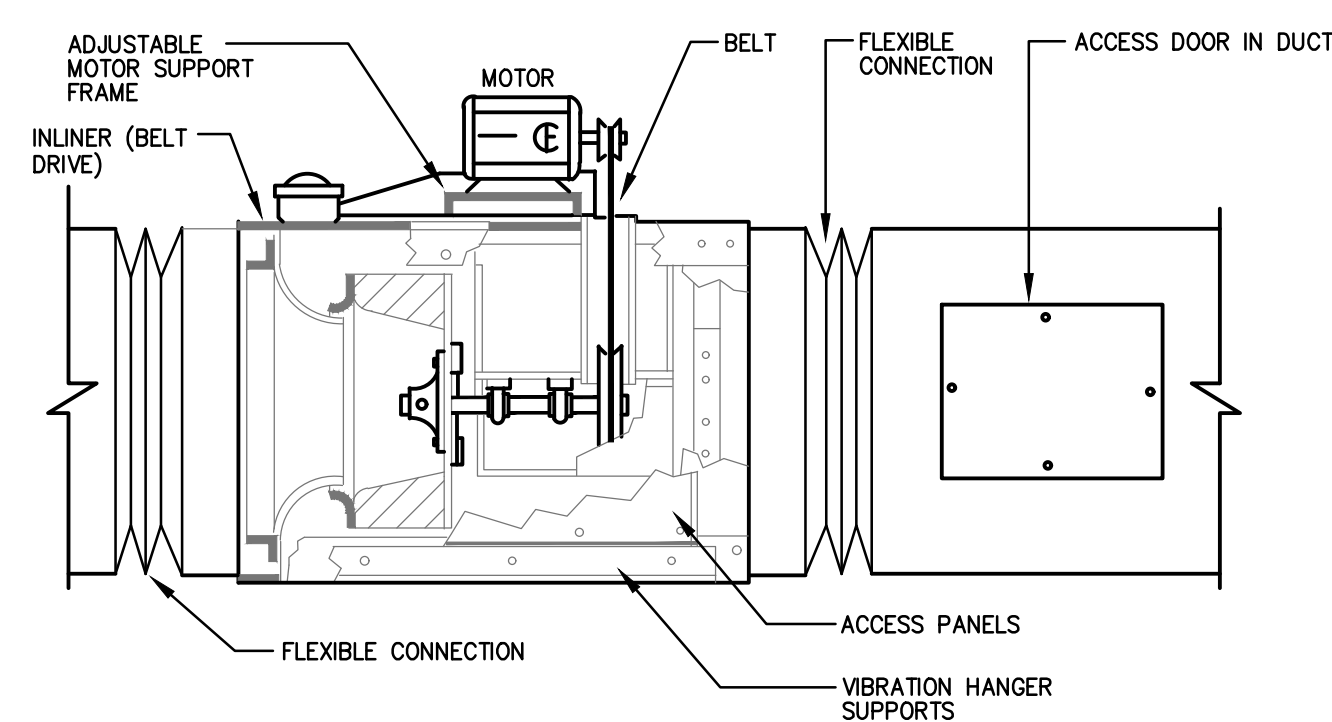
4 ROOF-TOP PIPE SUPPORT DETAIL  
H-3 NOT TO SCALE



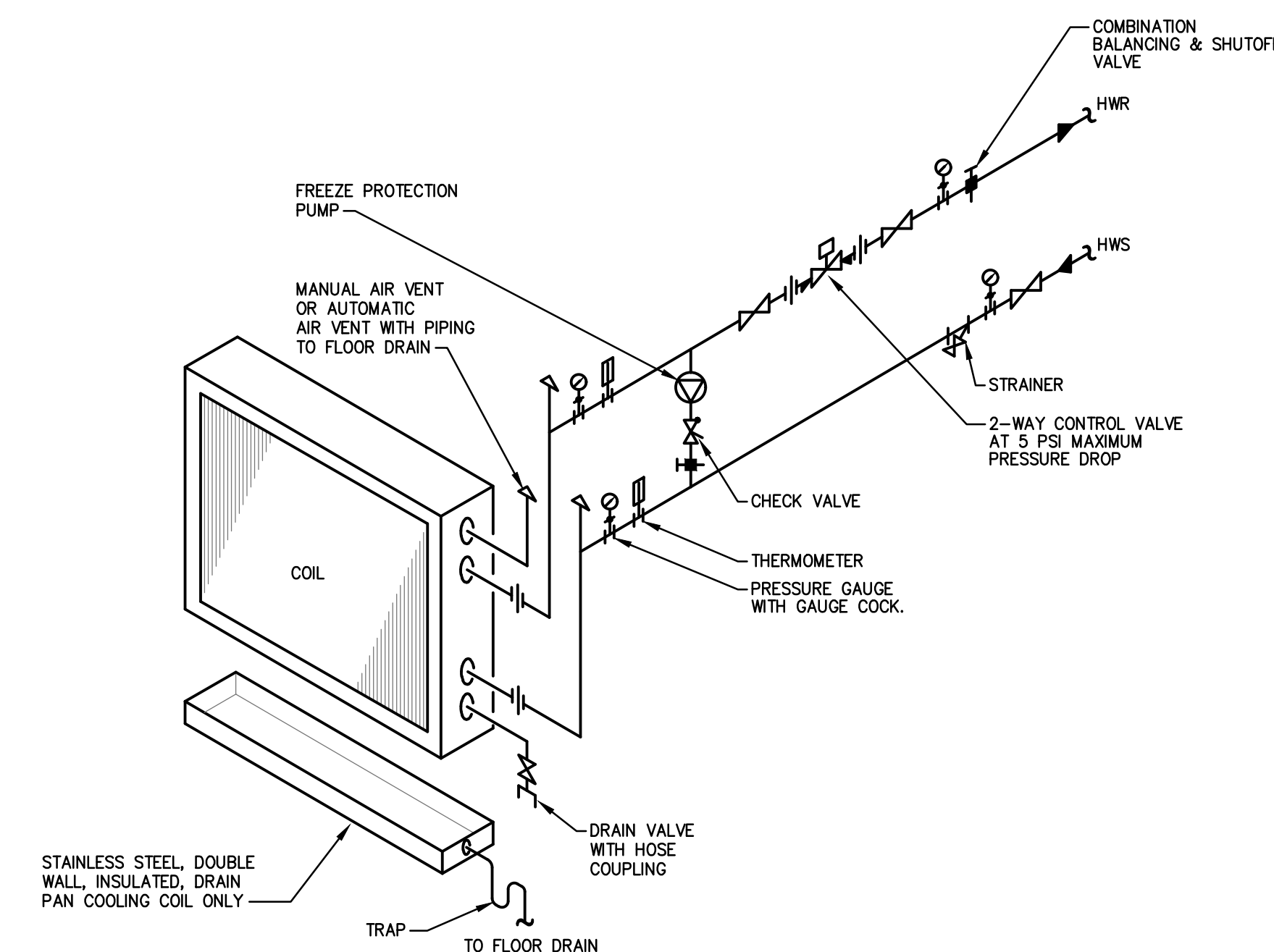
5 CEILING REGISTER TAKE-OFF  
H-3 NOT TO SCALE



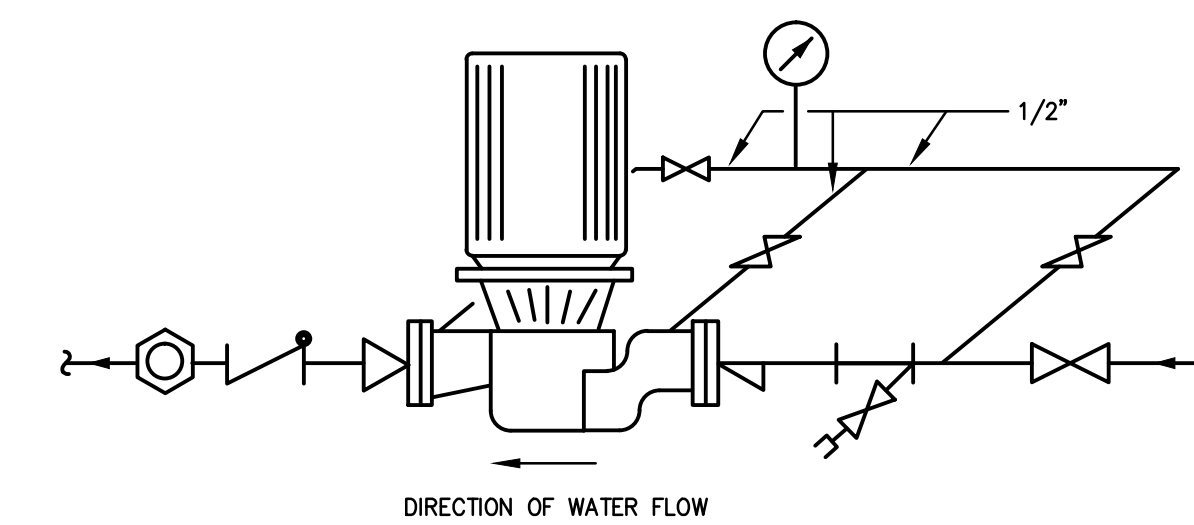
6 EQUIPMENT RAIL DETAIL  
H-3 NOT TO SCALE



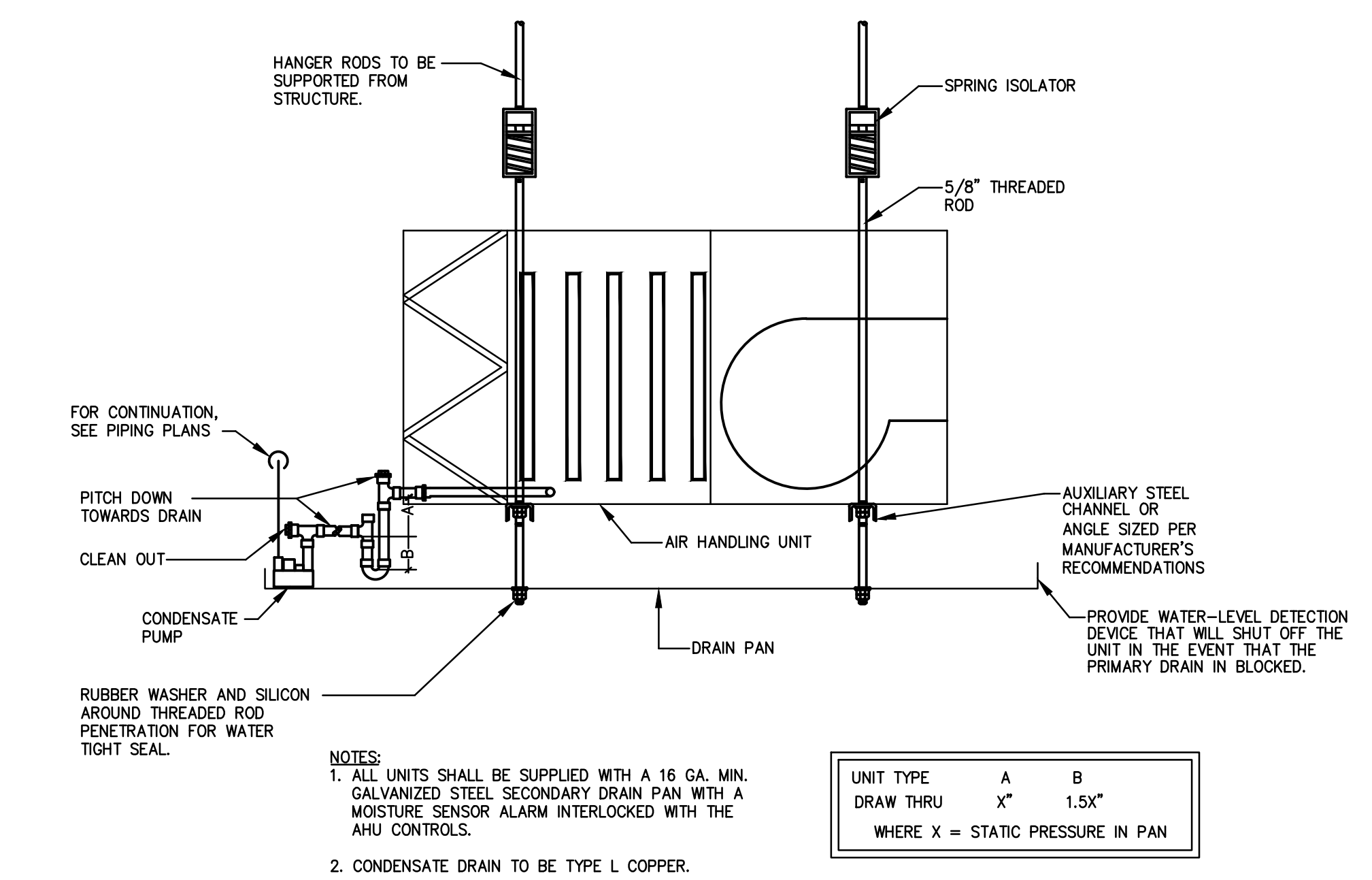
8 IN-LINE CENTRIFUGAL FAN DETAIL  
H-3 NOT TO SCALE



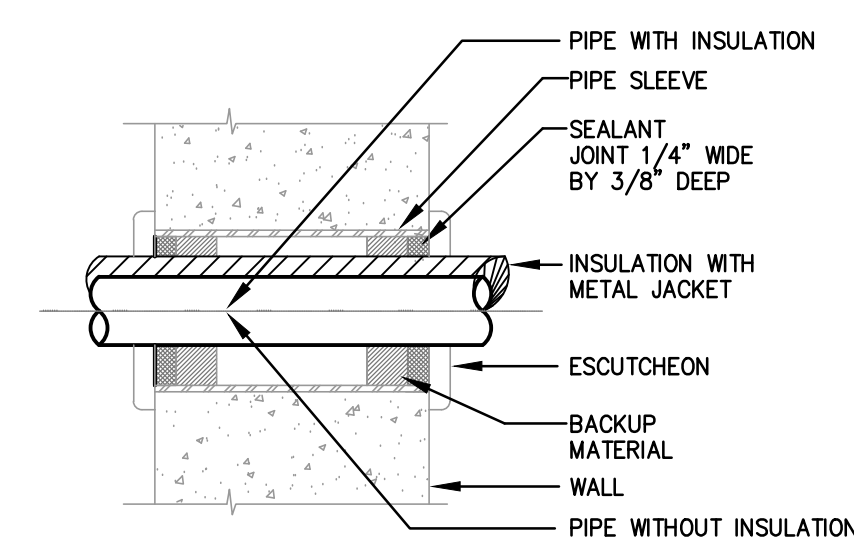
10 HEATING/COOLING COIL WITH FREEZE PROTECTION PUMP PIPING DETAIL  
H-3 NOT TO SCALE



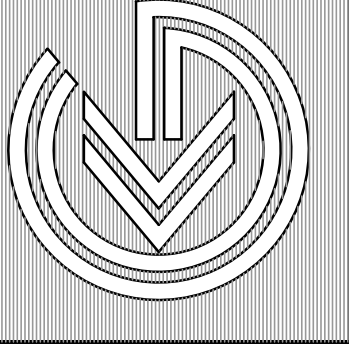
11 TYPICAL CONNECTIONS TO IN-LINE WATER PUMP  
H-3 NOT TO SCALE

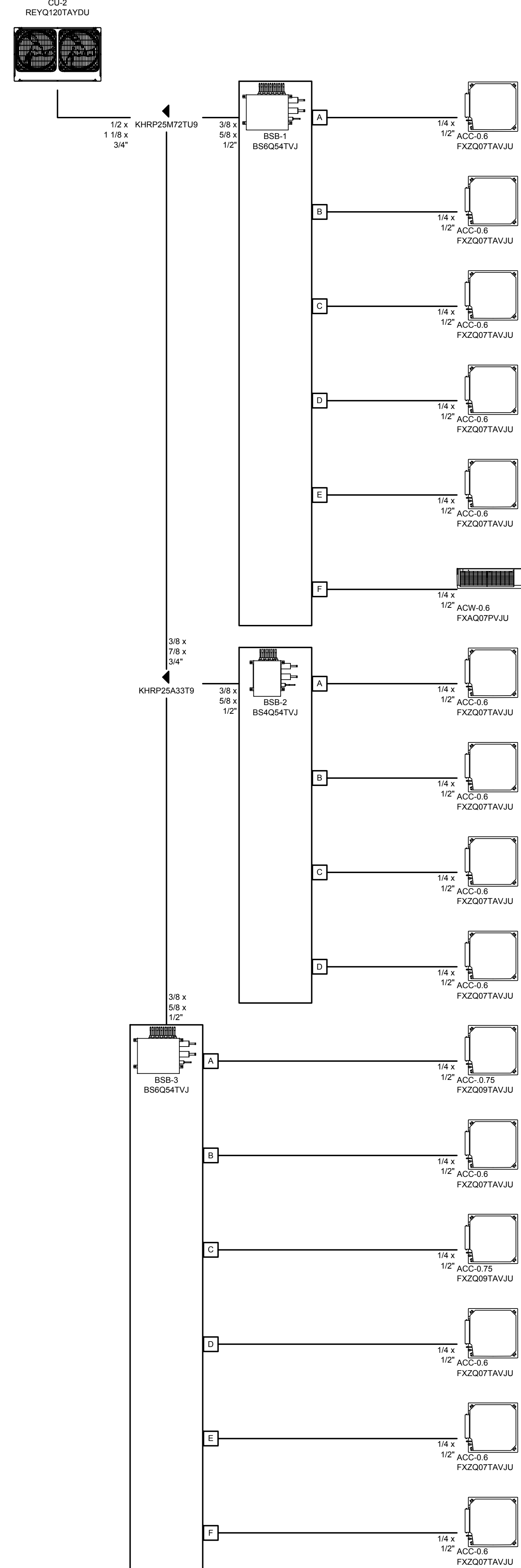


12 CEILING HUNG AIR HANDLING UNIT SUPPORT DETAIL  
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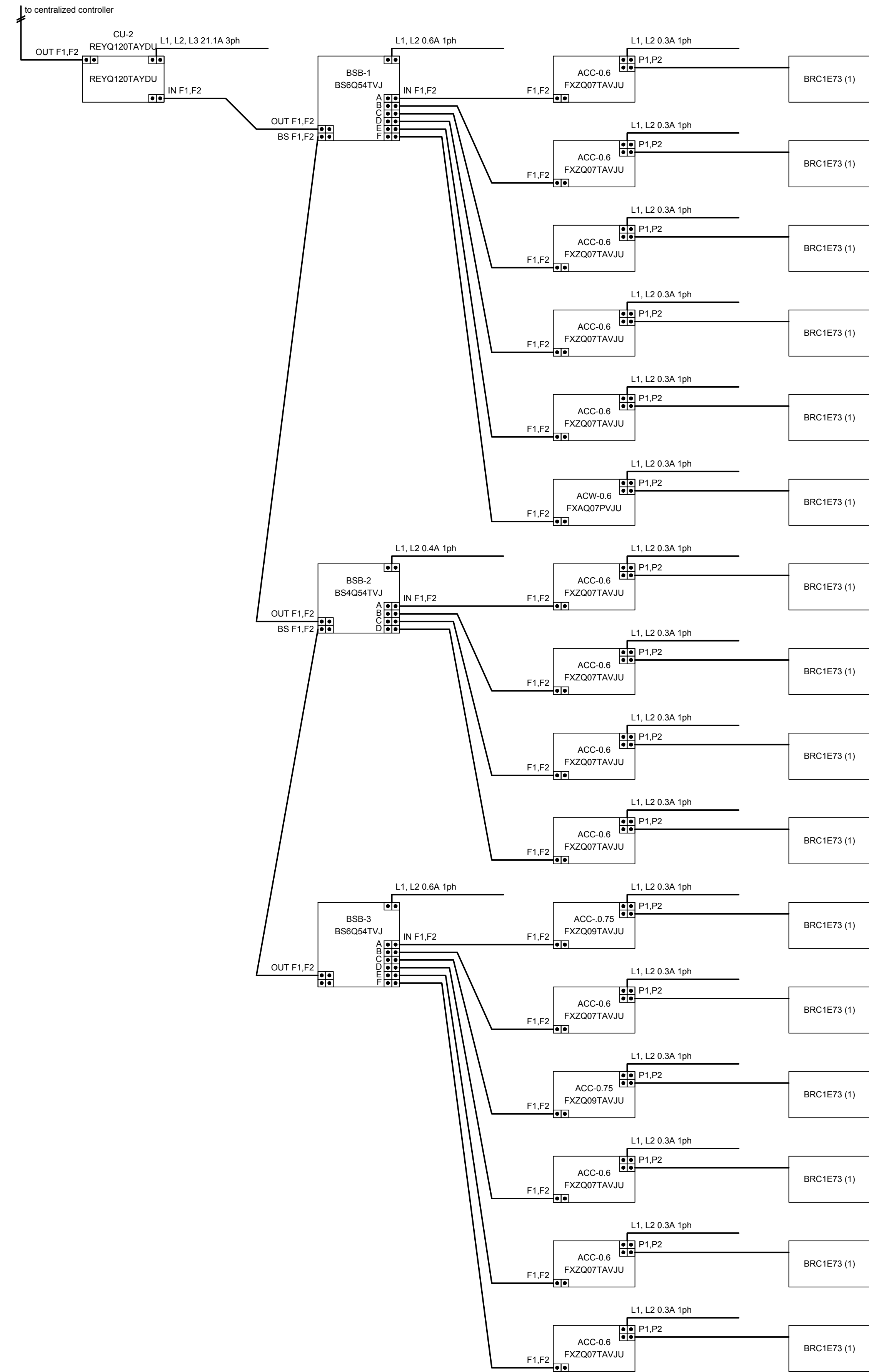


9 PIPE THROUGH INTERIOR WALL DETAIL  
H-3 NOT TO SCALE

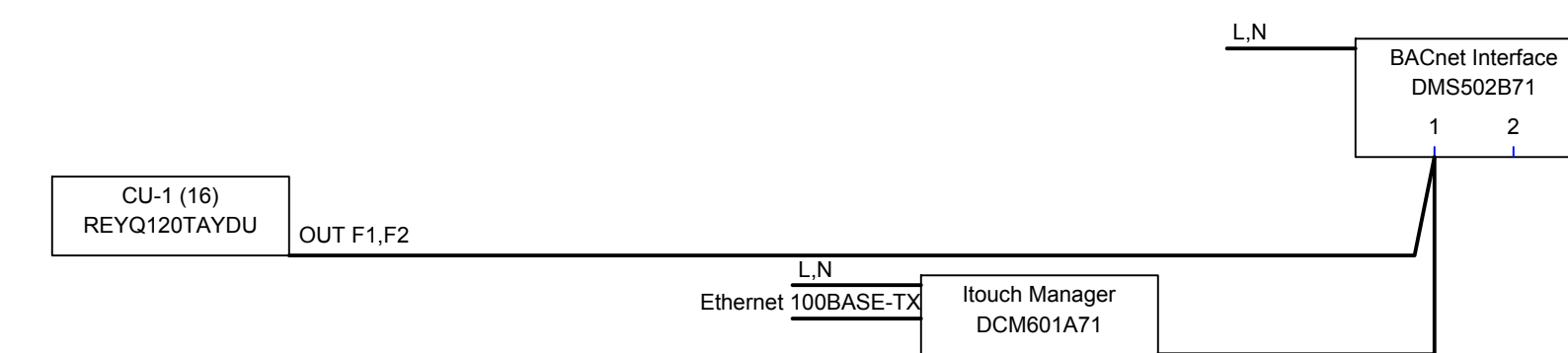




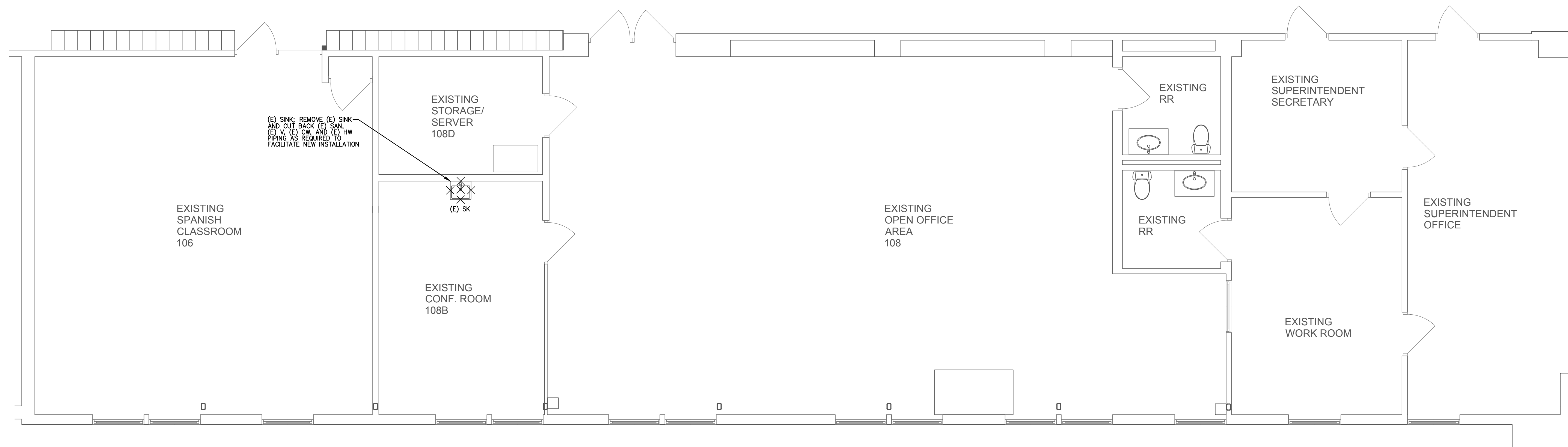
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H-4 VRV SYSTEM PIPING DIAGRAM  
NOT TO SCALE



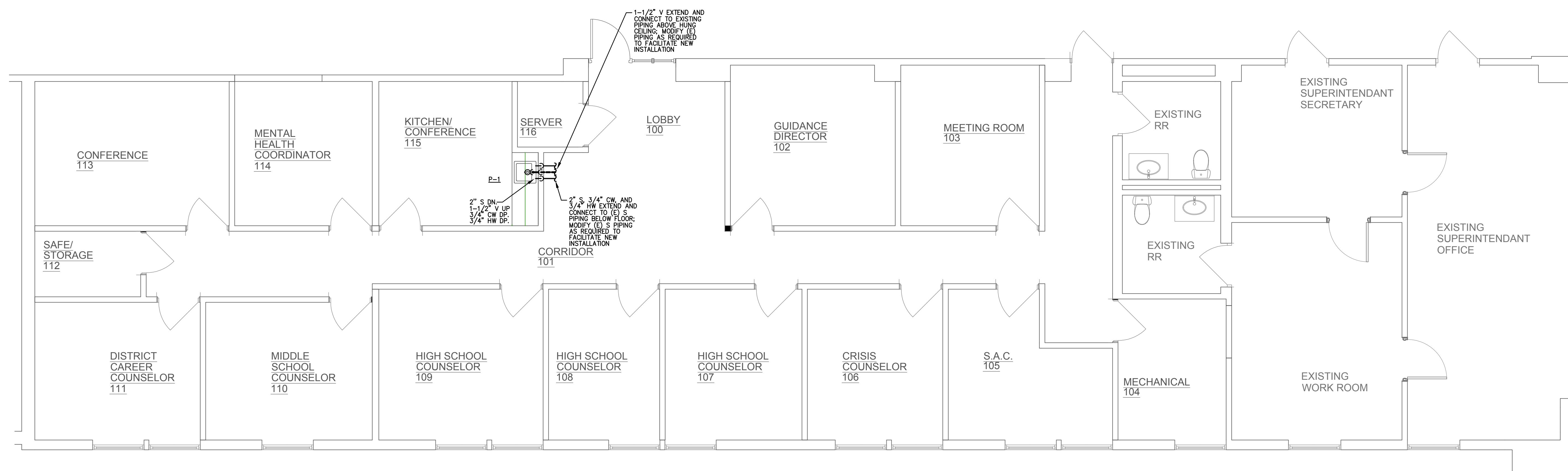
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H-4 VRV SYSTEM WIRING DIAGRAM  
NOT TO SCALE



3  
H-4 CONTROLLER WIRING DIAGRAM  
NOT TO SCALE



**1 PARTIAL FIRST FLOOR PLAN - PLUMBING DEMOLITION**  
 P-1 SCALE 1/4" = 1'-0"



**2 PARTIAL FIRST FLOOR PLAN - PLUMBING**  
 P-1 SCALE 1/4" = 1'-0"

**PLUMBING SYMBOL LIST**

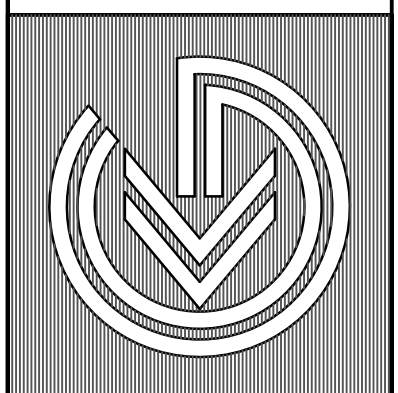
ABBREVIATION	SYMBOL	DESCRIPTION	ABBREVIATION	SYMBOL	DESCRIPTION
CW	—	COLD WATER PIPING	BV	●	BALL VALVE
HW	—	HOT WATER PIPING	CV	⌵	CHECK VALVE
HWR	—	HOT WATER RETURN PIPING		—	PIPING DROP
(E) CW	—	(E) COLD WATER PIPING		—	PIPING RISE
(E) HW	—	(E) HOT WATER PIPING		—	BRANCH - TOP CONNECTION
(E) HWR	—	(E) HOT WATER RETURN PIPING		—	BRANCH - BOTTOM CONNECTION
EX	XXXXXX	EXISTING PIPING TO BE REMOVED		—	NEW CONNECTION TO EXISTING
V	—	VENT		—	TRAP
(E) V	—	(E) VENT		—	CAPPED OUTLET
SAN	—	SOIL, WASTE, OR SANITARY SEWER		—	VALVED & CAPPED OUTLET
SAN	—	UNDERGROUND/BELOW SLAB SOIL, WASTE, OR SANITARY SEWER			
(E) SAN	—	(E) SOIL, WASTE OR SANITARY SEWER			

**PLUMBING FIXTURE & CONNECTION SCHEDULE**

MARK	FIXTURE	MOUNTING	MANUFACTURER	MODEL NO.	TRIM NO.	SUPPORT NO.	TRAP	WASTE	VENT MIN.	CW	HW	REMARKS
P-1	STAINLESS STEEL SINK	COUNTER MOUNTED	ELKAY	LRAD202265	ELKAY LK800GN0516	COUNTERTOP	1-1/2" x 1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	18 GAUGE ADA COMPLIANT STAINLESS STEEL SINK. PUNCHED FOR 3-HOLE FAUCET, WITH LK901 DRAIN & STRAINER, PROVIDE ANGLE STOPS WITH BRAIDED STEEL HOSE & CHROMED P-TRAP

**NOTE:**

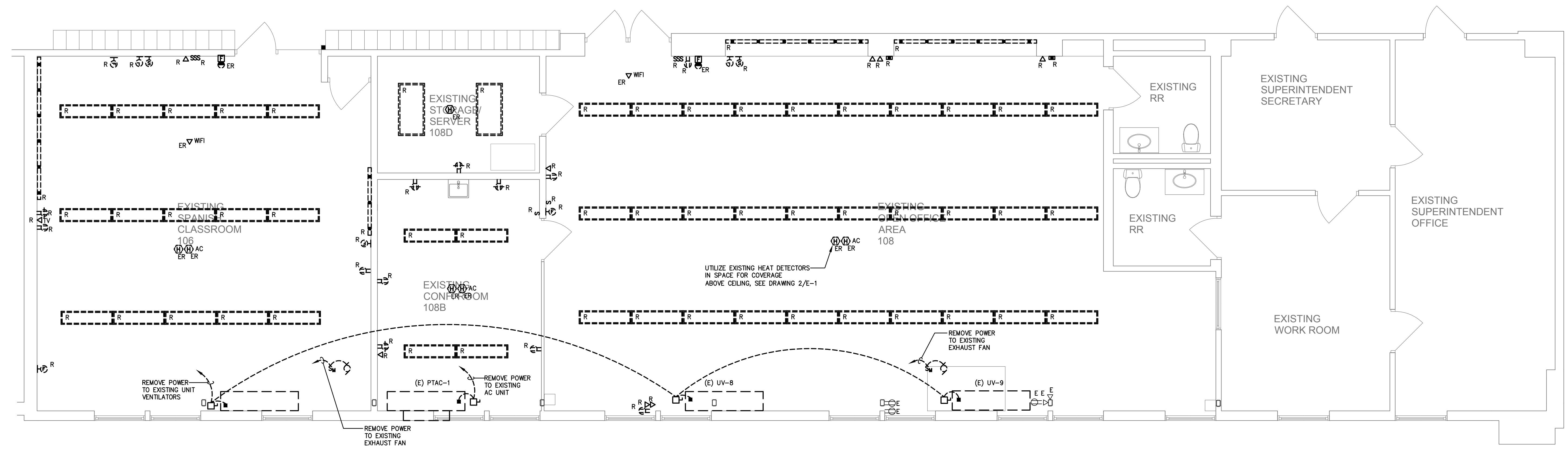
- ALL EXPOSED TRAP ASSEMBLIES AND WATER SUPPLIES TO BE INSULATED.
- MOUNTING HEIGHTS FOR ALL FIXTURES SHALL BE AS INDICATED AND DIRECTED BY ARCHITECT.
- PLUMBING CONTRACTOR SHALL COORDINATE SPECIFIED COUNTER SINKS WITH MILLWORK CONSTRUCTION DRAWINGS PRIOR TO PURCHASE OF ANY PLUMBING FIXTURES, AND SUBMIT MILLWORK DRAWINGS WITH FIXTURE SHOP DRAWINGS FOR REVIEW AND APPROVAL.



**DEMOLITION NOTES:**

- THESE DEMOLITION PLANS ARE INTENDED TO BE USED AS A GUIDE TO THE CONTRACTOR. ALL DEMOLITION WORK REQUIRED, OR NECESSARY FOR THE INSTALLATION OF NEW WORK OR THE REMOVAL OF EXISTING EQUIPMENT, IS HEREBY INCLUDED, WHETHER SHOWN ON THESE PLANS OR NOT. REFER TO DRAWINGS OF ALL TRADES FOR ADDITIONAL WORK, AND COORDINATE IN THE FIELD.
- THE CONTRACTOR SHALL VERIFY ACTUAL SITE CONDITIONS PRIOR TO SUBMITTING HIS BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEMS. THE CONTRACTOR SHALL ALSO INCLUDE TEMPORARY REMOVAL AND REINSTALLATION OF EXISTING WORK WHERE NECESSARY. THE OWNER SHALL NOT ACCEPT EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.
- THIS CONTRACTOR SHALL REMOVE ALL LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED ON THE DEMOLITION PLANS, OR THAT ARE NO LONGER NEEDED BY THE OWNER. ALL EXISTING WIRING AND CONDUIT WHERE NO LONGER REQUIRED SHALL BE REMOVED BACK TO EXISTING PANEL. ALL EXISTING DISCONNECTED CIRCUITS NOT BEING REUSED SHALL BE TURNED OFF AND LABELED "SPARE". WHERE CONDUITS ARE INACCESSIBLE, REMOVE WIRE AND ABANDON CONDUITS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY POWER IS BEING PROVIDED TO ALL EXISTING EQUIPMENT REQUIRED TO REMAIN IN SERVICE. RECONNECT ALL DISTURBED FACILITIES WHICH ARE EXISTING TO REMAIN AND PLACE THEM IN OPERATIONAL CONDITION.
- REMOVE ALL WIRING DEVICES FROM WALLS TO BE DEMOLISHED. REMOVE EXISTING LIGHT SWITCHES WHERE NO LONGER REQUIRED. REUSE ALL EXISTING CONCEALED CONDUIT AND RECESSED DEVICE BOXES WHERE POSSIBLE. ABANDON BOXES IF THEY ARE IN EXISTING WALLS TO REMAIN. PATCH WALLS OVER ABANDONED BOXES TO MATCH ADJACENT SURFACES.
- REMOVE ABANDONED OUTLET BOXES, SURFACE METAL RACEWAY AND CONDUIT THAT WOULD BE EXPOSED, AND REPAIR DISTURBED SURFACES TO MATCH ADJACENT AREAS.
- MAJOR PIECES OF EQUIPMENT ARE TO BE TURNED OVER TO THE OWNER FOR HIS USE, OR AT THE OWNER'S DISCRETION, REMOVED FROM THE SITE AND DISPOSED OF, IF NO LONGER REQUIRED.
- PATCH ALL WALLS TIGHT AT REMOVALS. MAINTAIN FIRE RATINGS AS REQUIRED.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXTENT OF WALL FINISHES AND CEILINGS TO BE REPLACED. ALL EXISTING DEVICES TO REMAIN SHALL BE TEMPORARILY DISCONNECTED AND REINSTALLED. WHERE TEMPORARY REMOVAL IS NOT POSSIBLE THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT OF EXISTING EQUIPMENT IN PLACE.

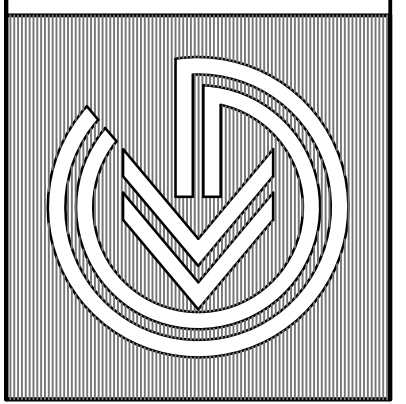
SYMBOL LIST & ABBREVIATIONS	
	LIGHT FIXTURE - REFER TO LIGHTING FIXTURE SCHEDULE
	LIGHT FIXTURE WITH INTEGRAL BATTERY BACKUP - REFER TO LIGHTING FIXTURE SCHEDULE
	EXIT SIGN - REFER TO LIGHTING FIXTURE SCHEDULE
	OCCUPANCY SENSOR - LETTER DENOTES TYPE OF SENSOR TO BE INSTALLED. WALTSTOPPER OR APPROVED EQUAL. CI = CI-300, CI1 = CI-355 PASSIVE INFRARED SENSOR PW = PW-100 PASSIVE INFRARED WALL SWITCH SENSOR
	POWER PACK TRANSFORMER AND RELAY, OUTPUT RELAYS RATED 20A BALLAST OR INCANDESCENT, PROVIDE QUANTITY OF RELAYS AS REQUIRED, REFER TO AUTOMATIC LIGHTING CONTROL NOTES
	DUPLEX RECEPTACLE, 20A, 125V, 2 POLE, 3 WIRE, GROUNDED GFI INDICATES GROUND FAULT INTERRUPTION, TR INDICATES TAMPER-RESISTANT WITH UL LISTED TAMPER-RESISTANT SHUTTER.
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER HEIGHT
	DOUBLE DUPLEX RECEPTACLE (QUAD)
	SPECIAL PURPOSE RECEPTACLE, TYPE AS NOTED, COORDINATE WITH WITH EQUIPMENT VENDOR IN FIELD
	SURFACE MOUNTED RACEWAY
	VOICE/DATA/VIDEO OUTLET - 4" X 4" OUTLET BOX WITH 1-1/4" STUBBED UP ABOVE NEAREST ACCESSIBLE CEILING VERIFY LOCATION IN FIELD
	SINGLE POLE SWITCH
	THREE WAY SWITCH
	MANUAL MOTOR STARTER
	UNFUSED DISCONNECT SWITCH
	MOTOR
	CLOCK
	480/277V PANELBOARD
	208/120V PANELBOARD
	FIRE ALARM CONTROL PANEL
	FIRE ALARM AUDIO/VISUAL DEVICE
	FIRE ALARM VISUAL DEVICE
	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM HEAT DETECTOR,
	FIRE ALARM HEAT DETECTOR (LOCATED ABOVE CEILING)
	FIRE ALARM SMOKE DETECTOR
	FIRE ALARM COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
	WIRE & CONDUIT, CONCEALED IN CEILING OR WALL
	WIRE & CONDUIT, HOMERUN TO PANEL
	CONNECTION TO EQUIPMENT
	AHU AIR HANDLING UNIT
	CU CONDENSING UNIT
	E EXISTING TO REMAIN
	EF EXHAUST FAN
	R EXISTING TO BE REMOVED
	RL RELOCATE EXISTING TO THIS LOCATION, COORDINATE EXACT LOCATION IN FIELD, PROVIDE NEW WIRING TO EXTEND EXISTING WIRING AS REQUIRED, MATCH EXISTING WIRING TYPE AND SIZE
	WP WEATHERPROOF



**1** PARTIAL FIRST FLOOR DEMOLITION PLAN - ELECTRICAL  
ED-1 SCALE 1/4" = 1'-0"

**REGAN YOUNG ENGLAND BUTERA**  
456 HIGH STREET, MT. HOLLY, NEW JERSEY 08060  
+1(609)262-2627-033FAX- 21A00912100- RTB@REGAN.COM

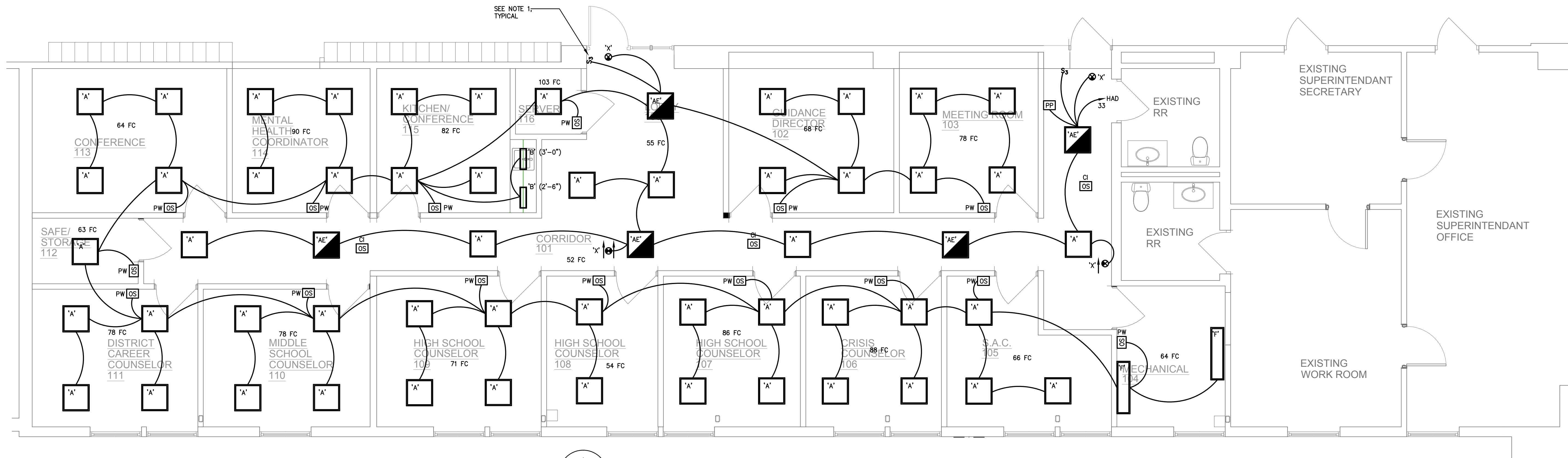
**KELTER & GILLICO**  
consulting engineers  
P.O. BOX 777 14 WASHINGTON RD.  
FANEGRAVE, NJ 08039  
Frank T. Kelter, P.E.  
Professional Engineer  
NJ 38866



**NJDOE SP #15-1715-050-19-1000**  
**GUIDANCE DEPARTMENT ALTERATION**  
**GATEWAY REGIONAL HIGH SCHOOL**  
775 TANYARD ROAD  
WOODBURY HEIGHTS, NEW JERSEY 08096  
TITLE: PARTIAL FIRST FLOOR DEMOLITION PLAN - ELECTRICAL

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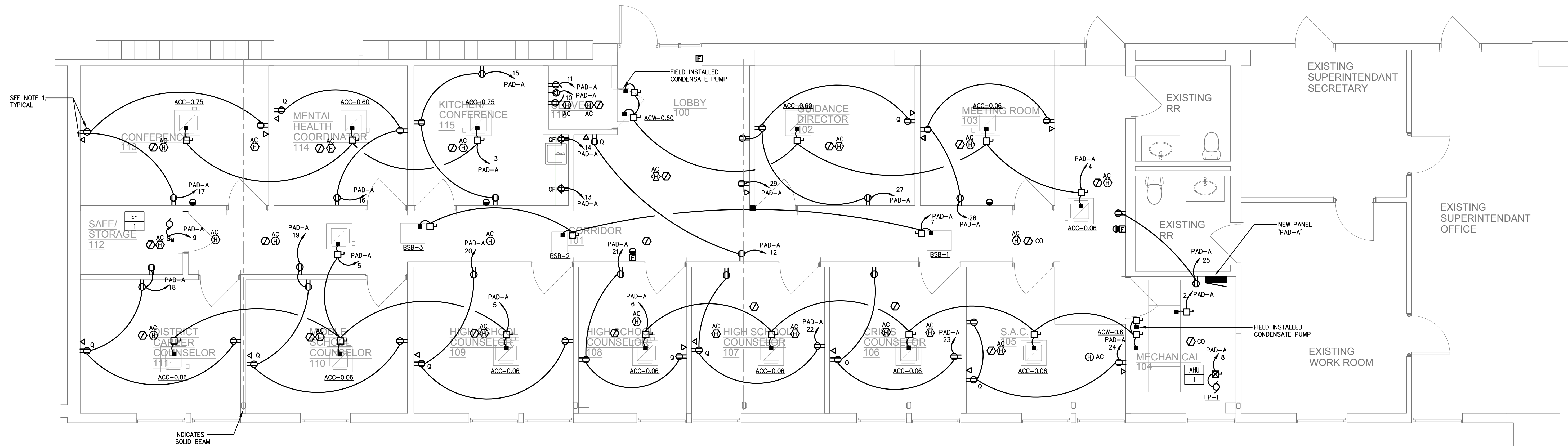
**ED-1**  
1 OF 4



**1 PARTIAL FIRST FLOOR PLAN - LIGHTING**  
 SCALE 1/4" = 1'-0"

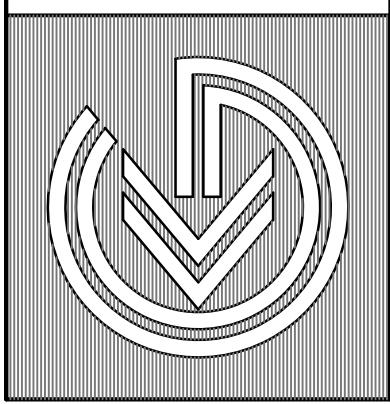
- NOTES:**
1. THE EC SHALL COORDINATE ALL FINAL LOCATIONS OF WALL RECEPTACLES, DATA, LIGHT SWITCHES ETC WITH ARCHITECT/ENGINEER BEFORE INSTALLATION. NO ADDITIONAL COST WILL BE ADDED FOR ANY DEVICE MOVED WITHIN 10' FEET OF LOCATION SHOWN.
  2. ALL SWITCHES AND RECEPTACLES SHALL BE STAGGERED FROM ONE WALL TO ANOTHER TO AVOID SOUND MIGRATION TRANSMITTING FROM ONE SPACE TO ANOTHER, ANY PENETRATION MUST BE SEALED WITH ACOUSTICAL SEALANT.
  3. CONTINUOUS ACOUSTICAL SEALANT AROUND ALL ELECTRICAL BOXES, SWITCHES, RECEPTACLES, ETC. (TYPICAL).

ID	LAMPS	MANUF.	CAT. NO.	MOUNTING	DESCRIPTION
A	(1)-38W LED SPX 35	METALUX	22RTC-48-UNV-LB35-CD-U	RECESSED	2'x2' BASKETED FIXTURE, ACRYLIC PRISMATIC LENS, DIE FORMED HOUSING, WHITE ENAMEL FINISH, 277V INPUT
AE	(1)-38W LED SPX 35	METALUX	22RTC-48-UNV-EL14W-LB35-CD-U	RECESSED	2'x2' BASKETED FIXTURE, ACRYLIC PRISMATIC LENS, DIE FORMED HOUSING, WHITE ENAMEL FINISH, 90 MINUTE EMERGENCY BATTERY BACKUP, 277V INPUT
B	LED SPX 40	HALO	HU10-XX-9-40-X	UNDER-COUNTER	4.37"W X .72"D UNDERCOUNTER FIXTURE WITH INTERNAL SWITCH, PROVIDE LENGTHS AS REQUIRED, FINISH AS SELECTED BY ARCHITECT, 120V INPUT
F	(1) 32W LED SPX 35	METALUX	4BCLED-LD4-32SL-F-UNV-LB35-CD-U	WALL	4-3/4"W X 4-1/2"D X 4"L UTILITY LIGHT WITH LENS 120V INPUT
X	LED	SURE-LITE	CAX-6-00-R-W	WALL/CEILING	DIE-CAST ALUMINUM EXT SIGN, WHITE BODY AND FACE WITH 6" x 3/4" RED LETTERS, SINGLE OR DOUBLE FACE AS REQ'D, ARROWS AS SHOWN, 277V INPUT

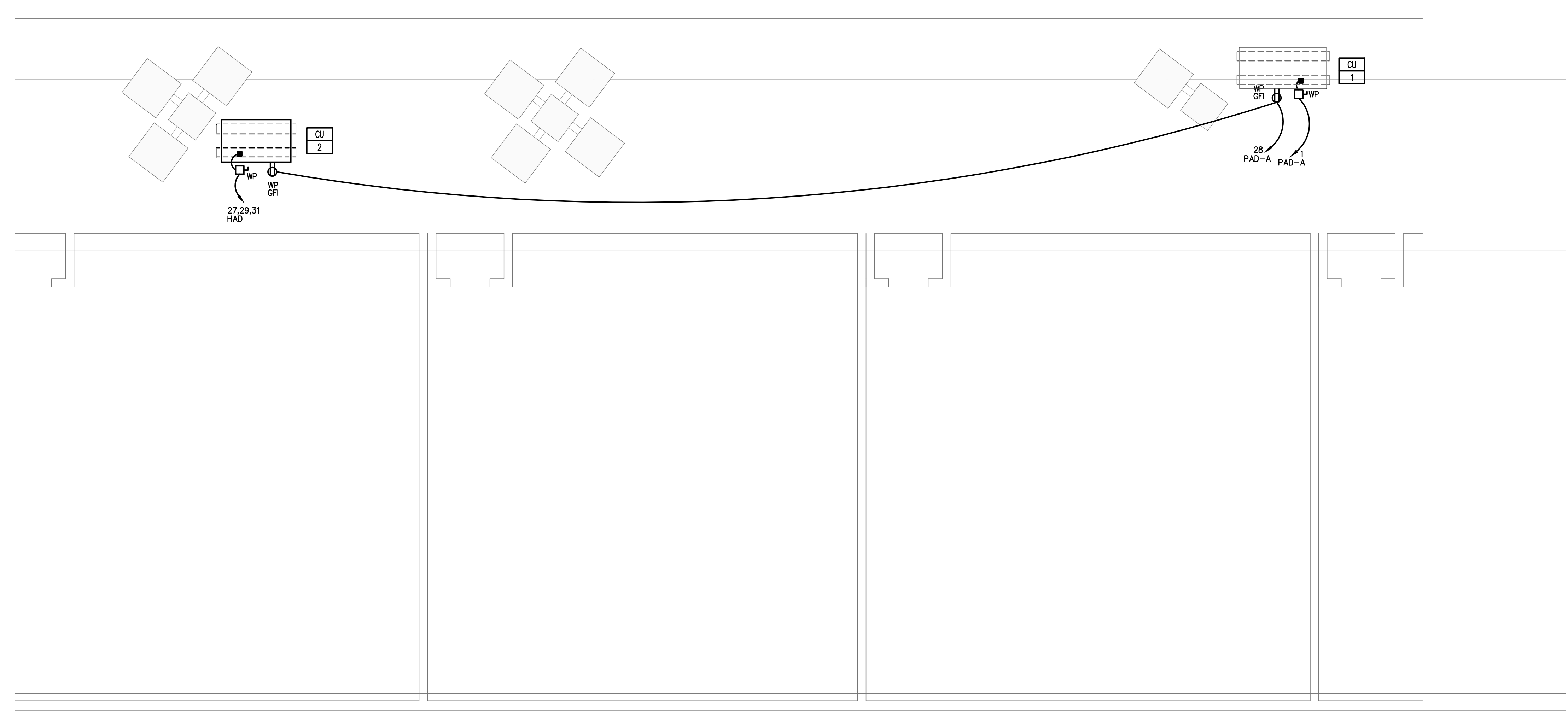


**2 PARTIAL FIRST FLOOR PLAN - POWER**  
 SCALE 1/4" = 1'-0"

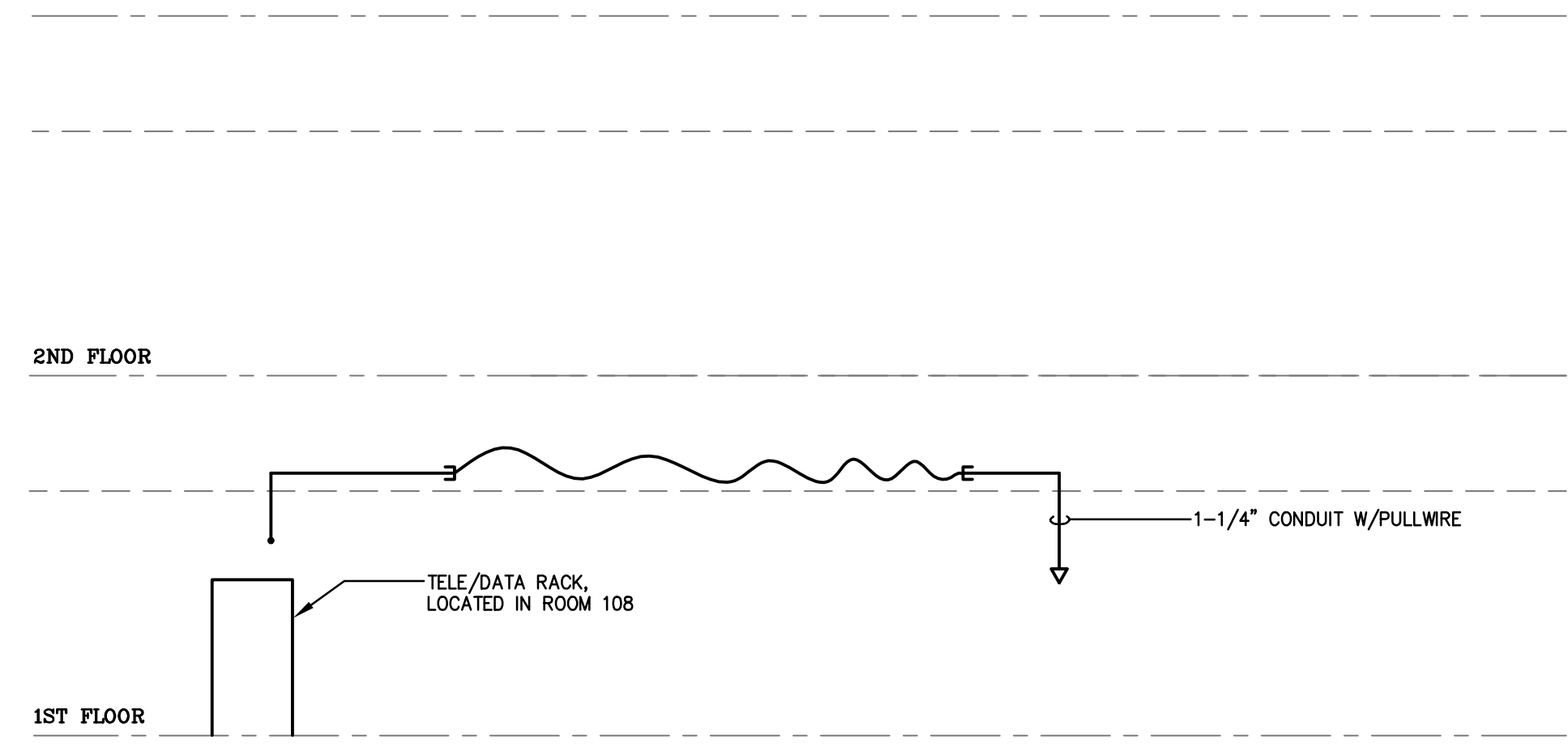
- NOTES:**
1. THE EC SHALL COORDINATE ALL FINAL LOCATIONS OF WALL RECEPTACLES, DATA, LIGHT SWITCHES ETC WITH ARCHITECT/ENGINEER BEFORE INSTALLATION. NO ADDITIONAL COST WILL BE ADDED FOR ANY DEVICE MOVED WITHIN 10' FEET OF LOCATION SHOWN.
  2. ALL SWITCHES AND RECEPTACLES SHALL BE STAGGERED FROM ONE WALL TO ANOTHER TO AVOID SOUND MIGRATION TRANSMITTING FROM ONE SPACE TO ANOTHER, ANY PENETRATION MUST BE SEALED WITH ACOUSTICAL SEALANT.



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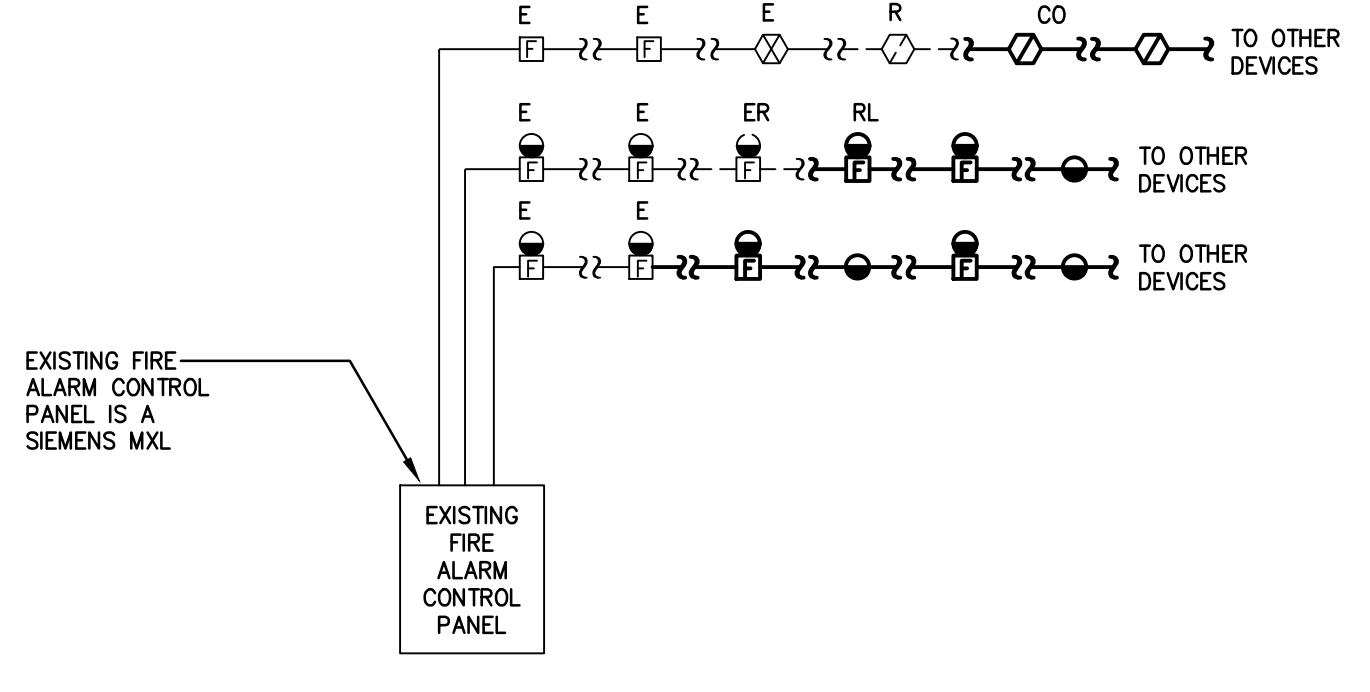


**1 PARTIAL ROOF PLAN - ELECTRICAL**  
 SCALE 1/4" = 1'-0"



**2 TELEPHONE/DATA RISER DIAGRAM**  
 SCHEMATIC

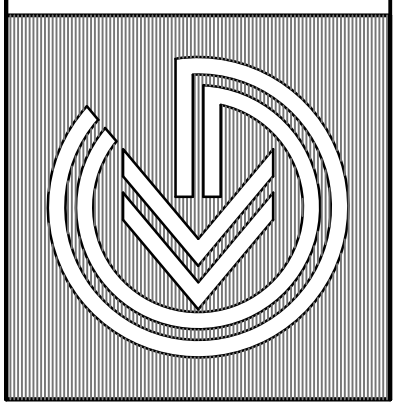
NOTES:  
 1. PROVIDE FIRE RATED THROUGH WALL PENETRATIONS, E2-PATH SERIES 444 WITH EZD444ES AND EZRCM44S ACCESSORIES, WHERE CONDUITS PENETRATE FIRE RATED WALLS AND FLOORS. COORDINATE WITH ARCHITECTURAL DRAWINGS.



**3 FIRE ALARM SYSTEM RISER DIAGRAM**  
 SCHEMATIC

**FIRE ALARM SYSTEM NOTES:**

1. PROVIDE ALL WIRING AS RECOMMENDED BY MANUFACTURER. ALL WIRING SHALL BE IN CONDUIT. FIRE ALARM LABELED MC CABLE MAY BE USED IN CONCEALED LOCATIONS WHERE PERMITTED BY CODE.
2. ALL EQUIPMENT AND WIRING SHALL MATCH EXISTING.
3. CONTRACTOR IS RESPONSIBLE FOR INSURING THAT COMPLETE SYSTEM MEETS ALL APPLICABLE CODES AND FOR OBTAINING FINAL APPROVAL FROM LOCAL FIRE INSPECTOR(S).
4. PROVIDE AT EACH LOCATION SHOWN, AUDIO/VISUAL DEVICES WITH OUTPUT LEVELS AS RECOMMENDED BY MANUFACTURER FOR THE SPACE TO COMPLY WITH ADA & CODE REQUIREMENTS. PROVIDE ADDITIONAL DEVICES TO THOSE SHOWN IF/AS REQUIRED TO MEET LEVELS.
5. FIRE ALARM SHOP DRAWINGS MUST BE SIGNED AND SEALED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER AND AFTER THEY HAVE BEEN REVIEWED AND APPROVED BY A/E, THEY MUST BE SUBMITTED TO AHJ FOR THEIR APPROVAL PRIOR TO RELEASE OR INSTALLATION OF ANY WORK. FIRE ALARM SHOP DRAWING MUST CONTAIN SCALED DRAWINGS THAT INCLUDE LOCATIONS OF ALL INITIATING, NOTIFICATION DEVICES; CONTROL UNIT, ANNUNCIATORS AND POWER SUPPLIES. INDICATE CANDELA RATING FOR ALL VISUAL DEVICES AND DB RATINGS FOR AUDIBLE DEVICES. PROVIDE MOUNTING DETAILS FOR ALL DEVICES. INCLUDE MANUFACTURER'S CUT SHEET FOR EACH TYPE OF DEVICE, A COMPLETE FIRE ALARM RISER, VOLTAGE DROP AND BATTERY CALCULATIONS, A COMPLETE SEQUENCE OF OPERATION AND ALL INFO REQUIRED BY IBC 907.11.
6. UPON COMPLETION OF FIRE ALARM WORK, PROVIDE AN ACCEPTANCE TEST OF THE ENTIRE SYSTEM PER NFPA 72.

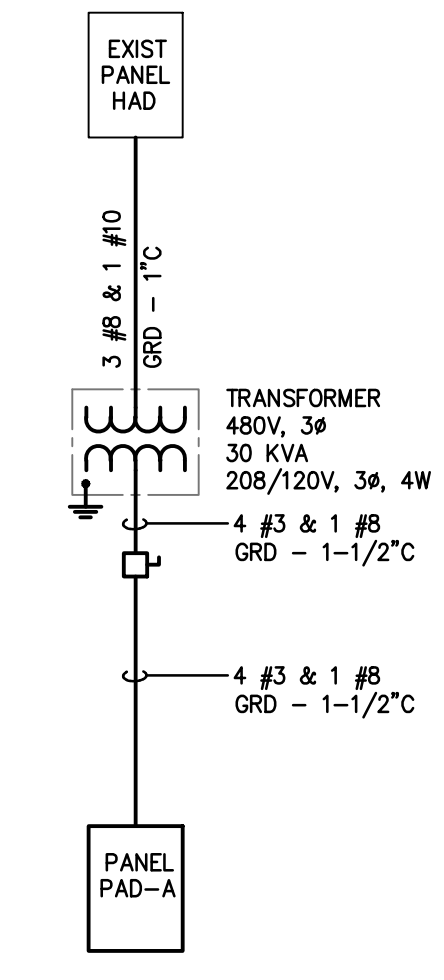


DRAWING DATE: 31 DEC 2018
REVISION DATE:
DRAWN BY:
COMMISSION NO.: 5550B

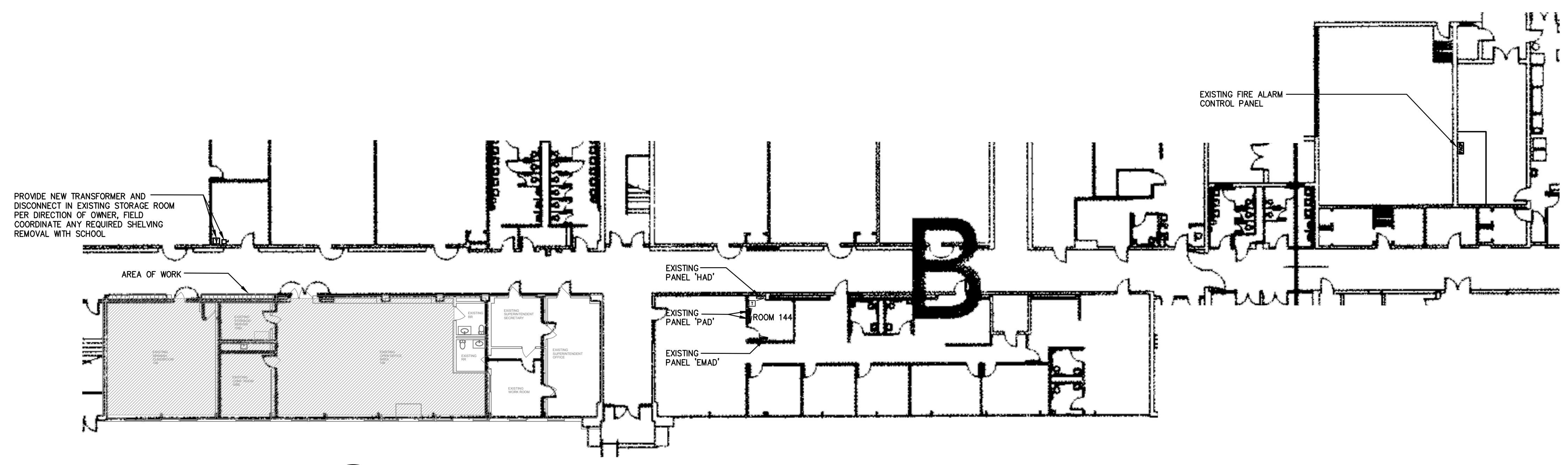
EXISTING PANELBOARD 'HAD'														
480/277V, 3ø, 4W, 5/N, SURFACE, 225A MAIN LUGS ONLY, 22 KAIC														
CKT#	DESCRIPTION	LOAD KVA	OR BREAKER POLES	AMP	WIRE & CONDUIT	#A	#B	#C	WIRE & CONDUIT	CIR. BREAKER AMP POLES	LOAD KVA	DESCRIPTION	CKT#	
1	UV-12, 13, 14	1.8	1	20	EXISTING				EXISTING	20	1	2.0	LIGHTING	2
3	SPARE	-	1	20	-				EXISTING	20	1	2.0	LIGHTING	4
5	SPARE	-	1	20	-				EXISTING	20	1	2.0	LIGHTING	6
7	SPARE	-	1	20	-				EXISTING	15	3	10.0	RTU#3	8
9	SPARE	-	1	20	-				EXISTING	15	3	10.0	RTU#4	10
11	LIGHTING	2.0	1	20	EXISTING				EXISTING	15	3	10.0	RTU#4	12
13	SPARE	-	1	20	-				EXISTING	15	3	10.0	RTU#4	14
15	SPARE	-	1	20	-				EXISTING	15	3	10.0	RTU#4	16
17	SPARE	-	1	20	-				EXISTING	15	3	10.0	RTU#4	18
19	SPARE	-	1	20	-				EXISTING	15	3	10.0	RTU#4	20
21	EXISTING	10.0	3	15	EXISTING				EXISTING	20	1	-	SPARE	22
23									EXISTING	20	1	-	SPARE	24
25									EXISTING	20	1	-	SPARE	26
27	CU-2	16.80	3	25	3#10 & 1#10 GRD - 3/4"C				EXISTING	20	1	-	SPARE	28
29									EXISTING	20	1	-	SPARE	30
31									EXISTING	20	1	-	SPARE	32
33	LTG RMS 100-116	2.20	1	20	2#12 & 1#12 GRD - 3/4"C				EXISTING	20	1	-	SPARE	34
35	PANEL PAD-A	19.25	3	50	SEE SINGLE LINE DIAGRAM				EXISTING	80	3	45.0	TRANSFORMER TAD	36
37									EXISTING	80	3	45.0	TRANSFORMER TAD	38
39									EXISTING	80	3	45.0	TRANSFORMER TAD	40
41	SPACE	-	1	-	-				EXISTING	80	3	45.0	TRANSFORMER TAD	42
SUB TOTAL KVA 52.05											71.0	SUB TOTAL KVA		
123.05 TOTAL CONNECTED LOAD														

\* PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE, TYPE AND AIC RATING TO MATCH EXISTING IN PANELBOARD.

NEW PANELBOARD 'PAD-A'										
208/120V, 3ø, 4W, 5/N, SURFACE, 100A MAIN LUGS ONLY, 22 KAIC										
CKT NO.	CIRCUIT BREAKER AMPS	POLES	LOAD KVA	HP	CIRCUIT DESCRIPTION	WIRE & CONDUIT				
1	20	3	1.08	-	CU-1	3 #12 & 1 #12 GRD - 3/4"C				
2	20	3	3.24	-	AHU-1	3 #12 & 1 #12 GRD - 3/4"C				
3	20	2	0.25	-	AC UNITS	2 #12 & 1 #12 GRD - 3/4"C				
4	20	2	0.25	-	AC UNITS	2 #12 & 1 #12 GRD - 3/4"C				
5	20	2	0.25	-	AC UNITS	2 #12 & 1 #12 GRD - 3/4"C				
6	20	2	0.25	-	AC UNITS	2 #12 & 1 #12 GRD - 3/4"C				
7	20	2	0.32	-	BSB-1, 2, 3	2 #12 & 1 #12 GRD - 3/4"C				
8	20	1	1.30	-	FP-1	2 #12 & 1 #12 GRD - 3/4"C				
9	20	1	0.23	-	EF-1	2 #12 & 1 #12 GRD - 3/4"C				
10	20	2	1.00	-	SERVER ROOM RACK RECEP.	2 #12 & 1 #12 GRD - 3/4"C				
11	20	1	0.72	-	SERVER ROOM QUADS	2 #12 & 1 #12 GRD - 3/4"C				
12	20	1	0.54	-	LOBBY 100 DESK/CORR. RECEP.	2 #12 & 1 #12 GRD - 3/4"C				
13	20	1	0.50	-	KITCHEN GF1 RECEP.	2 #12 & 1 #12 GRD - 3/4"C				
14	20	1	0.50	-	KITCHEN GF1 RECEP.	2 #12 & 1 #12 GRD - 3/4"C				
15	20	1	0.54	-	KITCHEN CONVENIENCE RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
16	20	1	0.72	-	ROOM 114 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
17	20	1	0.72	-	ROOM 113 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
18	20	1	0.72	-	ROOM 111 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
19	20	1	0.72	-	ROOM 110/CORR. RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
20	20	1	0.72	-	ROOM 109 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
21	20	1	0.72	-	ROOM 108 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
22	20	1	0.72	-	ROOM 107 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
23	20	1	0.72	-	ROOM 106 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
24	20	1	0.72	-	ROOM 105 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
25	20	1	0.36	-	ROOM 104/CORR. RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
26	20	1	0.54	-	ROOM 103 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
27	20	1	0.54	-	ROOM 102 RECEPS.	2 #12 & 1 #12 GRD - 3/4"C				
28	20	1	0.36	-	CU-2/CU-1 SERVICE RECEP.	2 #12 & 1 #12 GRD - 3/4"C				
29	20	1	-	-	LOBBY RECEPTACLE	2 #12 & 1 #12 GRD - 3/4"C				
30	20	1	-	-	SPARE	-				
31	20	1	-	-	SPARE	-				
32	20	1	-	-	SPARE	-				
TOTAL CONNECTED LOAD						19.25				



1 PARTIAL SINGLE LINE DIAGRAM - ELECTRICAL  
E-3 SCHEMATIC

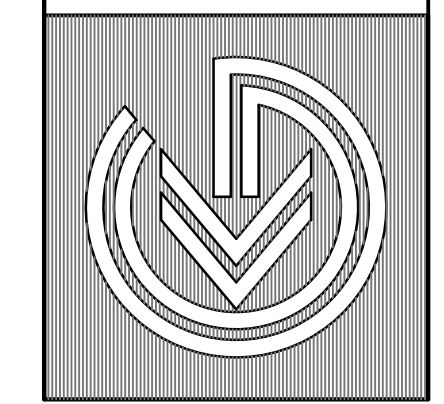


2 PARTIAL FIRST FLOOR PLAN - ELECTRICAL  
E-3 SCALE 1/16" = 1'-0"

PRINT DATE: 12/18  
REGAN YOUNG, AIA  
21A00912100

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GUIDANCE DEPARTMENT ALTERATION  
GATEWAY REGIONAL HIGH SCHOOL  
775 TANYARD ROAD  
WOODBURY HEIGHTS, NEW JERSEY 08096  
TITLE: PARTIAL FIRST FLOOR PLAN AND SCHEDULES - ELECTRICAL

DRAWING DATE:	31 DEC 2018
REVISION DATE:	
DRAWN BY:	
COMMISSION NO.:	5550B

E-3  
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