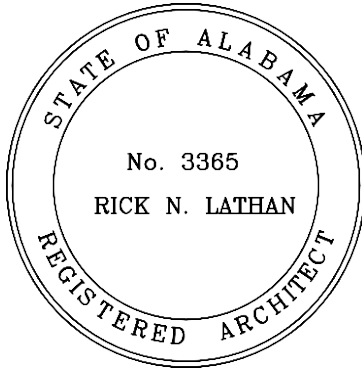




300 CHASE PARK SOUTH • SUITE 200 • HOOVER, ALABAMA 35244
205-988-9112

ADDENDUM NO. 3 - REVISED
CLASSROOM ADDITION TO LINCOLN HIGH SCHOOL
Architect Job No. 22-20
March 09, 2023
DCM # 2023129
Bid Number 1745

ALL BIDS SHALL BE OPENED AT:

2:00 p.m., local time on
Tuesday, March 21, 2023
At Talladega County Board of Education
106 South Street West
Talladega, AL 35161

IF BIDS ARE HAND DELIVERED, THEY MUST BE RECEIVED:

Tuesday, March 21, 2023 between
1:00 - 2:00 p.m., local time
At Talladega County Board of Education
106 South Street West
Talladega, AL 35161

IF BIDS ARE MAILED, THEY MUST BE RECEIVED AT THE OFFICE OF THE ARCHITECT BY:

Lathan Associates Architect, P.C.
300 Chase Park South, Suite 200
Birmingham, AL 35244
10:00 a.m., local time on
Tuesday, March 21, 2023

Non-Mandatory Pre-Bid Meeting

Thursday, March 9, 2023, at
2:00 p.m., local time
At Lincoln High School
78975 AL HWY 77
Lincoln, AL 35096

The Plans and Specifications are hereby amended. The following supersedes all contrary and/or conflicting information and is made part of the contract documents.

SPECIFICATIONS

Allowance No. 9: Include a contingency allowance of \$15,000.00 under Base Bid for the Owner's use in

providing any equipment, wiring, or connection as required for the Radio Transponder Coverage as required.

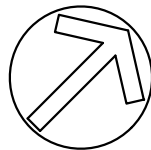
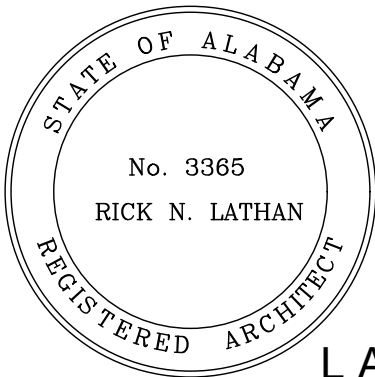
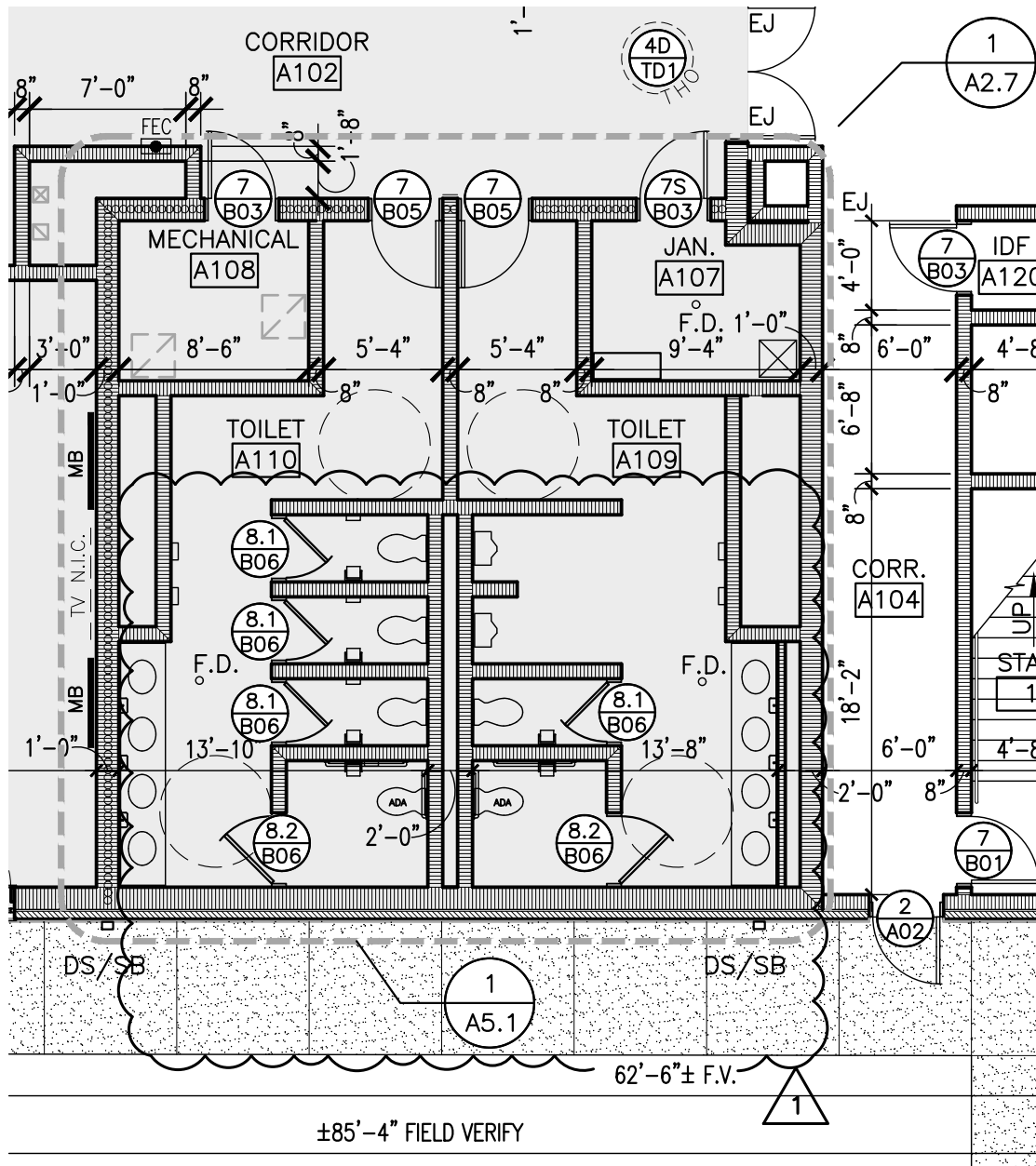
DRAWINGS

1. See attached **ASD 3.1** – added a plumbing chase behind the sinks in A109.
2. See attached **ASD 3.2** – added a plumbing chase in classroom A112 and made the chase larger at the entrance to classroom A112 and A113.
3. See attached **ASD 3.3 and ASD 3.4** – modified to plan details.
4. See attached **ASD 3.5** – modified punch out panel framing.
5. See attached **ASD 3.6** – modified wall section #3.
6. See attached **ASD 3.7** – modified reflected ceiling system.
7. See attached **M0.1, M1.1, M1.2, M1.3, M2.1, M2.2, M2.3** – for coordination revisions and state comments addressed.
8. **P1.1, and P2.1** – for coordination revisions.
9. See attached **Sheet S1.0** – Steel allowance quantities in General Notes 7.18 & 7.19 have been revised based on quantities noted/stated in the project specifications.
10. See attached **Sheet S2.1** – Layout revisions within the storm shelter as well as near/around IDF A120 have been made. Plan Note 20 has been added.
11. See attached **Sheet S2.2** – Layout revisions within the storm shelter as well as near/around IDF A120 have been made. Section cut at end of attic walkway has been revised based on pre-bid RFI response. Plan Notes 18-20 have been added and called out on the plan. Storm shelter roof shading has been corrected.
12. See attached **Sheet S2.3** – Layout revisions within the storm shelter as well as near/around IDF A120 have been made. Various roof penetrations have been shifted or removed.
13. See attached **Sheet S3.3** – 4” CMU veneer with steel lintel has been removed and CFS framing has been added.
14. See attached **Sheet S3.5** – T/Wall BB note for stair shaft has been revised. New wall has been added to frame out IDF A120. Approximate mech. duct penetration location has been shown.
15. See attached **Sheet S3.10** – New wall has been added to frame out IDF A120 and section was revised accordingly. Approximate mech. duct penetration location has been shown.

CLARIFICATIONS

1. E3.1 – Floor Plan – Lighting:
 - a. Change fixture “B” in Corridor A103 to emergency fixture type “BEM”.
2. E3.2 – Attic Floor Plan – Lighting:
 - a. Change (2) fixtures in front of panels to be night light style fixtures that are not part of lighting controls and never turn off. (1) “DEM” and (1) D fixture.
3. E4.1 – Floor Plan – Power:
 - a. Serve new exhaust fan VF-2 from receptacle circuit RPF1-32 in IDF A120 as required with 2#12 & 1#12[G] THWN in ½” conduit. Fan is only 40 watts. Fan will be controlled by thermostat – see mechanical plans.
 - b. Change all panel notations that read “RPF1” to be “RPF” to match single line diagram and panelboard schedule.
4. E4.2 – Attic Plan – Power:
 - a. Change all panel notations that read “RPF1” to be “RPF” to match single line diagram and panelboard schedule.
5. E5.1 – Floor Plan – Auxiliaries:
 - a. Remove 2=1” conduit sleeves going from Teachers Workroom A105 into IDF A120.

- b. Relocate 3-4" conduit sleeves going from Corridor A101 into Existing Corridor 101 so that they are not in conflict with attic walkway. This means moving to the left into Existing Special Education 108.
- 6. LS1.2 – Storm shelter plan and calculations: revised the EXISTING TORNADO STORM SHELTER CALCULATION TO READ:
 - a. EXISTING TORNADO STORM SHELTER CALCULATION 2020 ICC 500 (DCM BULLETIN #23-02: UPDATED GUIDANCE ON TORNADO STORM SHELTER REQUIREMENTS FOR PUBLIC K-12 SCHOOL NOVEMBER 22, 2022 AND DCM BULLETIN #23-03: UPDATED GUIDANCE ON TORNADO STORM SHELTER REQUIREMENTS FOR PUBLIC K-12 SCHOOL NOVEMBER 23, 2022)

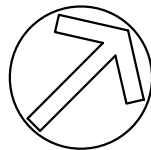
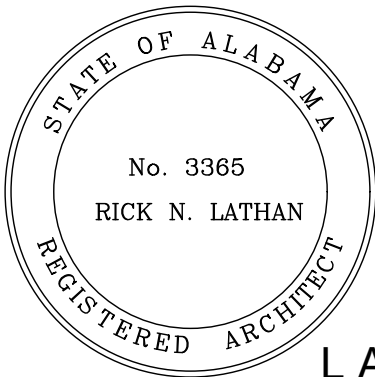
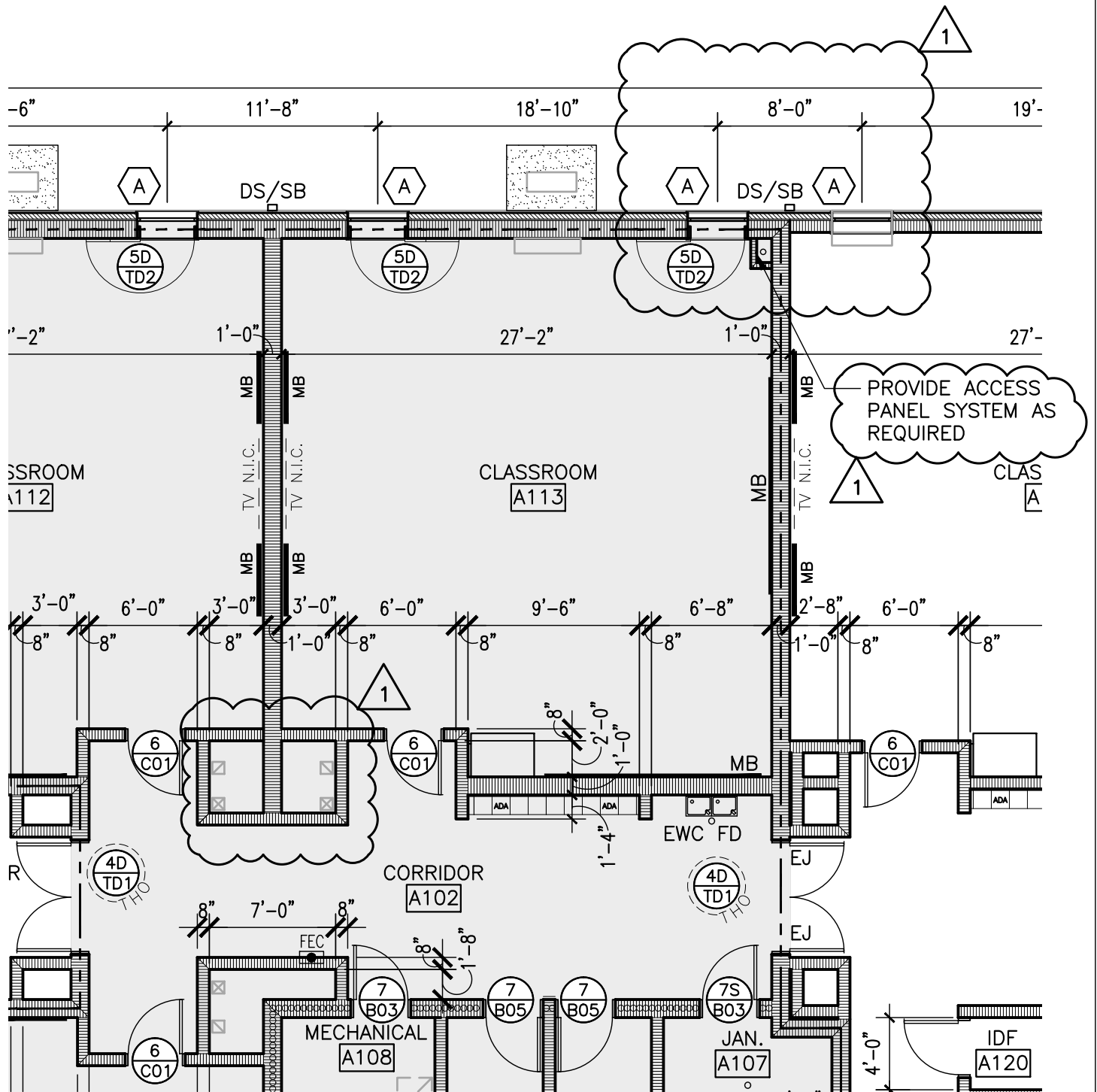


1 MAIN FLOOR PLAN

1/8" = 1'-0"

LATHAN
ARCHITECTS

PROJECT: CLASSROOM ADDITION TO LINCOLN HIGH SCHOOL	PROJECT NO. 22-20	REFERENCE: ADDENDUM #3
ARCHITECTURAL SUPPLEMENTAL DRAWING A2.1 - MAIN LEVEL FLOOR PLAN	DATE: 3-1-23	SHEET NO. ASD 3.1



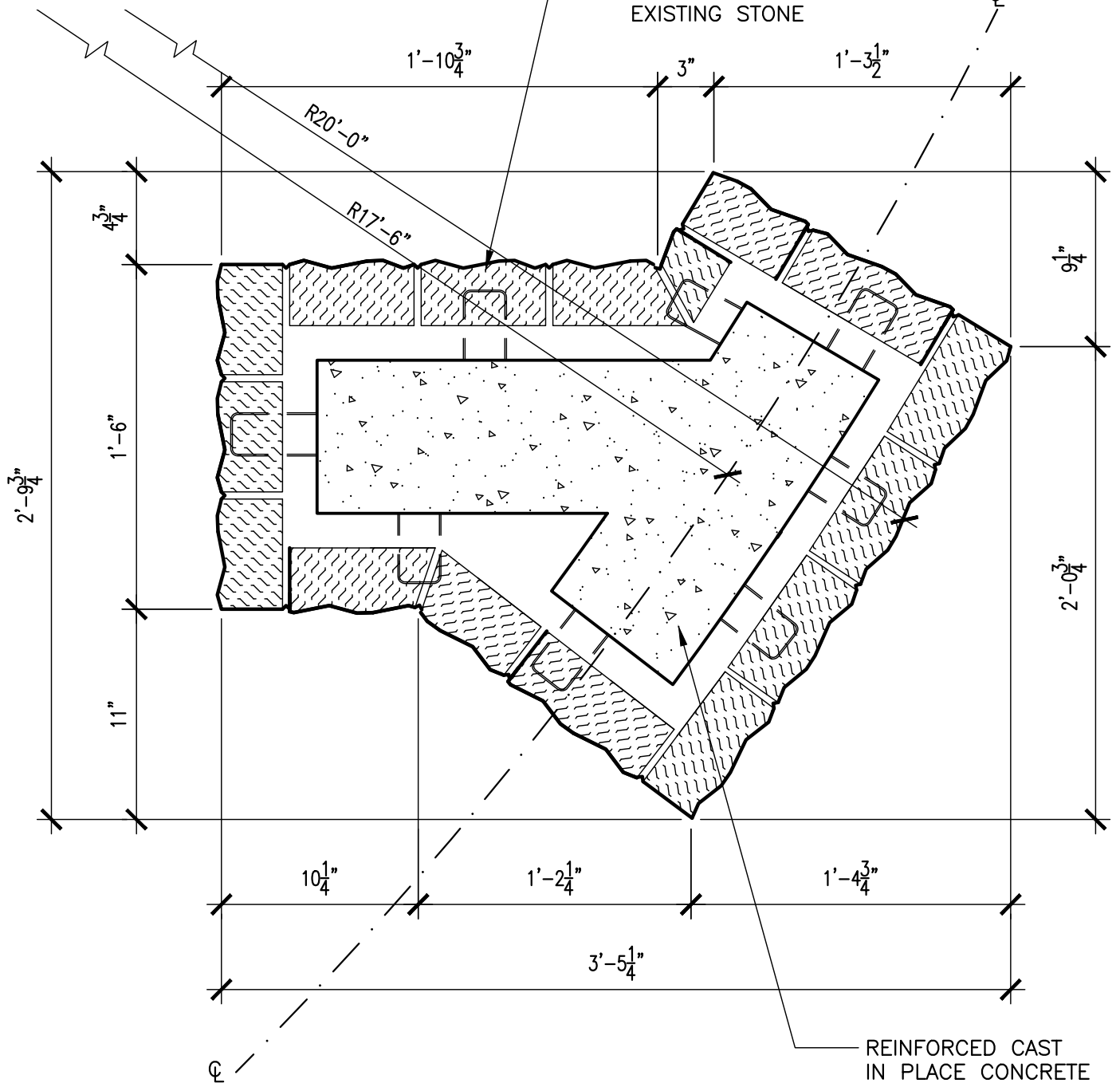
1 MAIN FLOOR PLAN

1/8" = 1'-0"

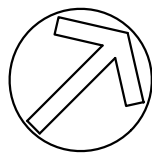
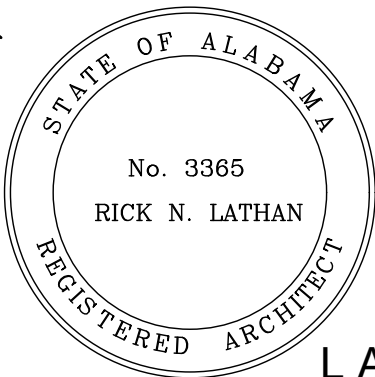
LATHAN
ARCHITECTS

PROJECT: CLASSROOM ADDITION TO LINCOLN HIGH SCHOOL	PROJECT NO. 22-20	REFERENCE: ADDENDUM #3
ARCHITECTURAL SUPPLEMENTAL DRAWING A2.1 – MAIN LEVEL FLOOR PLAN	DATE: 3-1-23	SHEET NO. ASD 3.2

STACKED STONE
 VENEER W/ WALL
 TIES @ 16" O.C.
 EACH WAY — MATCH
 EXISTING STONE



REINFORCED CAST
 IN PLACE CONCRETE
 COLUMNS — SEE
 STRUCTURAL FOR
 REINFORCING



2 DETAIL

1 1/2" = 1'-0"

1

LATHAN
 ARCHITECTS

PROJECT:
 CLASSROOM ADDITION TO
 LINCOLN HIGH SCHOOL

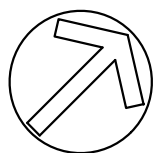
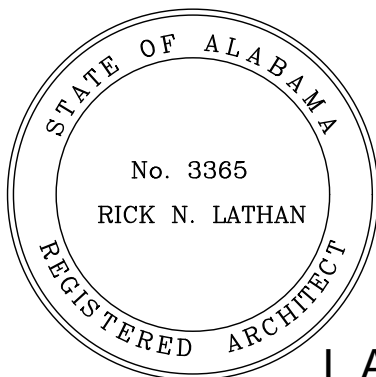
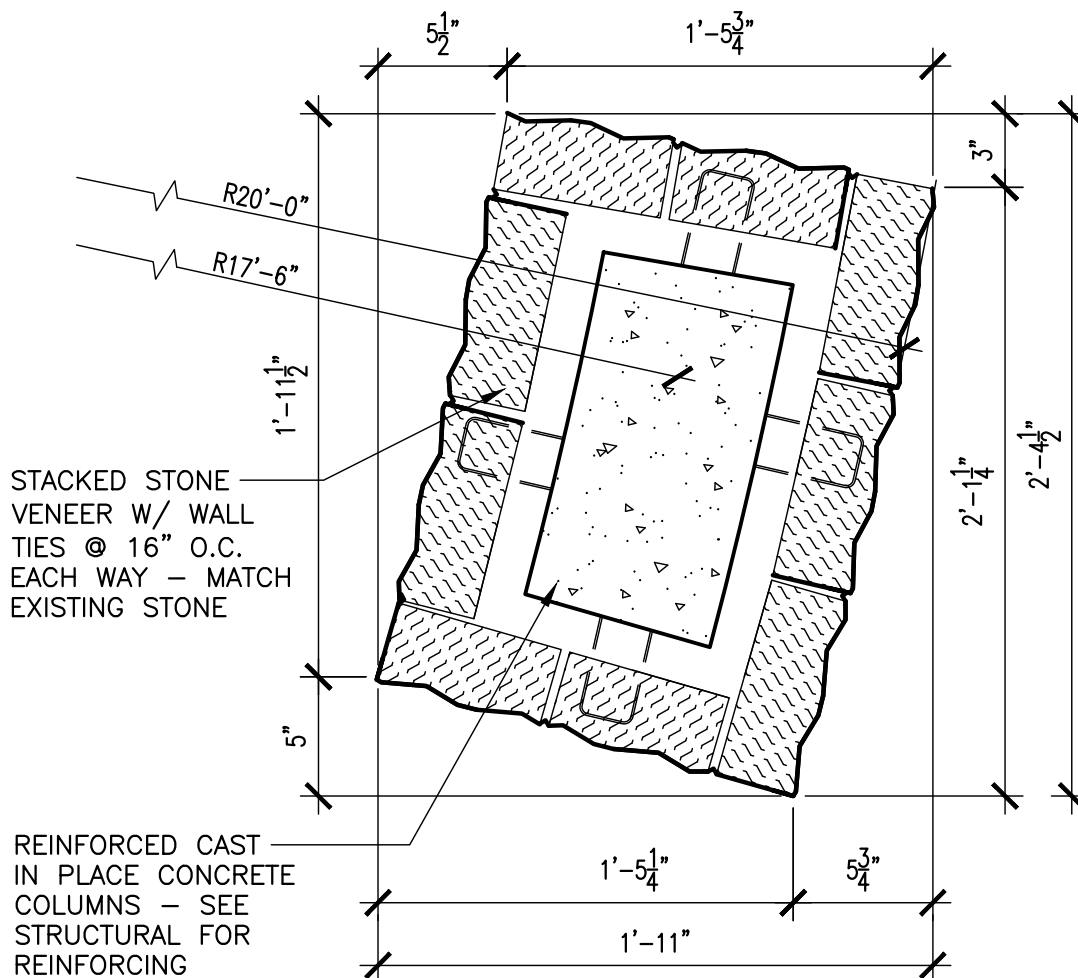
ARCHITECTURAL SUPPLEMENTAL DRAWING
 A2.7 — PLAN DETAILS

PROJECT NO.
 22-20

DATE:
 3-1-23

REFERENCE:
 ADDENDUM #3

SHEET NO.
ASD 3.3



3 DETAIL

$1\frac{1}{2}" = 1'-0"$



LATHAN
ARCHITECTS

PROJECT:
CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL

PROJECT NO.
22-20

REFERENCE:
ADDENDUM #3

ARCHITECTURAL SUPPLEMENTAL DRAWING
A2.7 - PLAN DETAILS

DATE:
3-1-23

SHEET NO.
ASD 3.4

BRICK DOUBLE
SOLDIER COURSE
SURROUND

RADIUSED STEEL
BRICK ANGLE W/
FLASHING

1

PREFINISHED
LOUVER AS
SCHEDULED

BRICK DOUBLE
SOLDIER COURSE
SURROUND

BRICK VENEER "B"
TO MATCH EXISTING
W/ WALL TIES @
16" O.C. BOTH WAYS

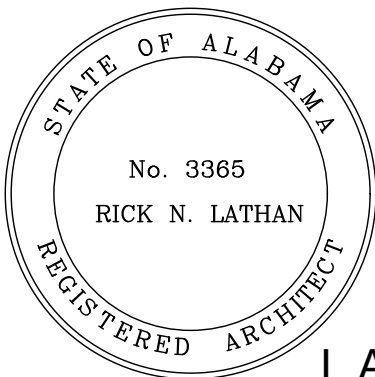
DAMPPROOFING AS
SPECIFIED

ATTIC
FLOOR

REMOVABLE LIGHT
GAUGE METAL STUD
WALL W/ R-19
INSULATION

1 WALL SECTION

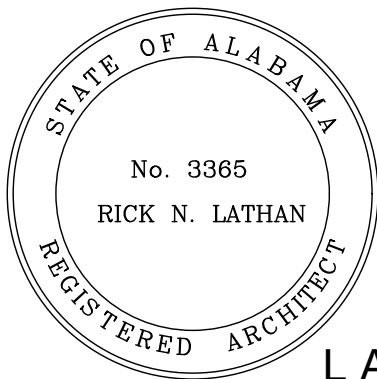
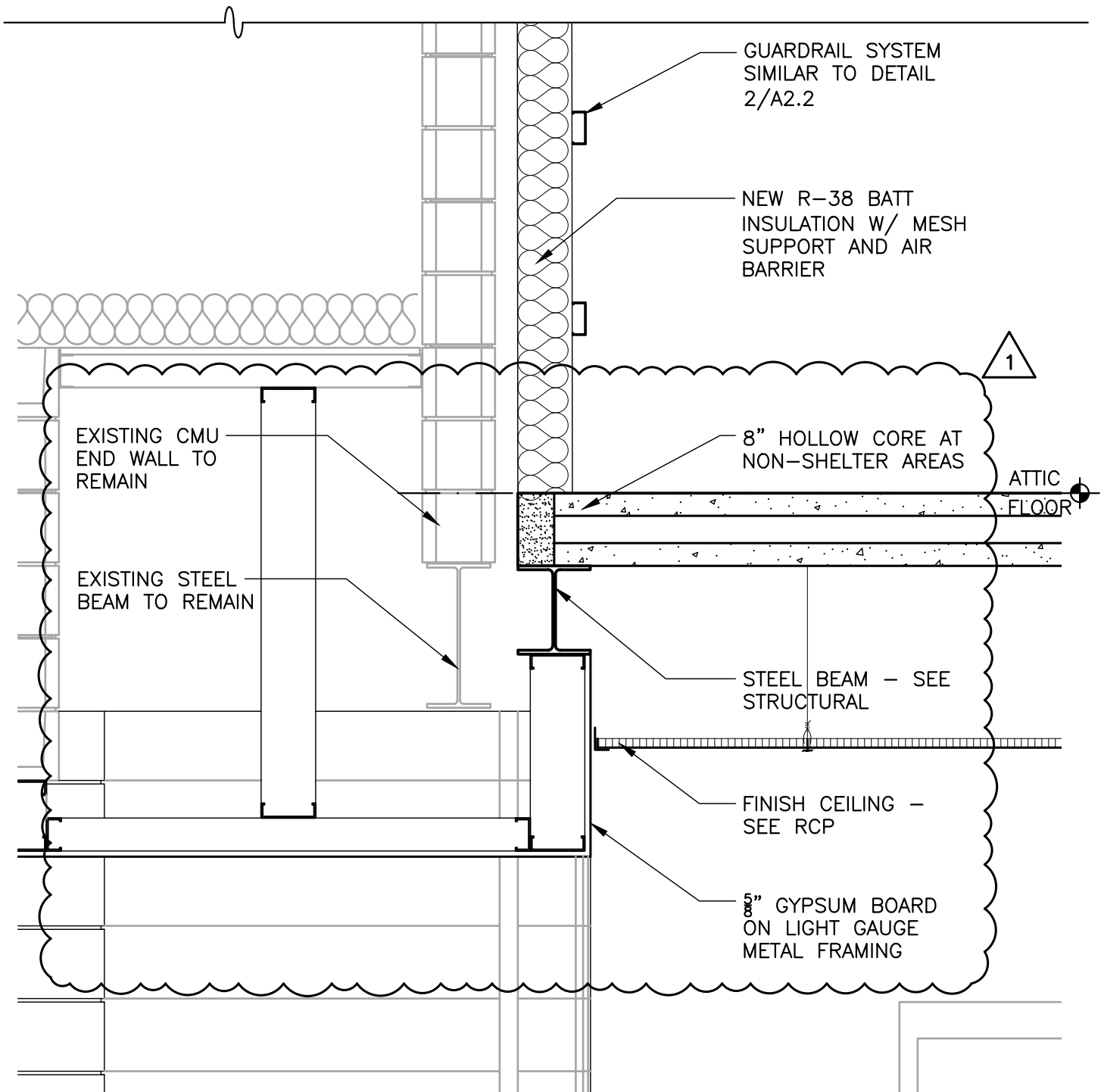
SCALE: 3/4" = 1'-0"



LATHAN
ARCHITECTS



PROJECT: CLASSROOM ADDITION TO LINCOLN HIGH SCHOOL	PROJECT NO. 22-20	REFERENCE: ADDENDUM #3
ARCHITECTURAL SUPPLEMENTAL DRAWING A3.3.2 - WALL SECTIONS	DATE: 3-1-23	SHEET NO. ASD 3.5



LATHAN
ARCHITECTS

3 WALL SECTION

SCALE: 3/4" = 1'-0"

PROJECT: CLASSROOM ADDITION TO LINCOLN HIGH SCHOOL	PROJECT NO. 22-20	REFERENCE: ADDENDUM #3
ARCHITECTURAL SUPPLEMENTAL DRAWING A3.3.2 - WALL SECTIONS	DATE: 3-1-23	SHEET NO. ASD 3.6



The seal is circular with a double-line border. The outer ring contains the text "STATE OF ALABAMA" at the top and "REGISTERED ARCHITECT" at the bottom. In the center, the text "No. 3365" is positioned above "RICK N. LATHAN".

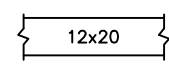
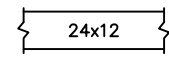
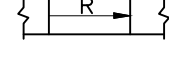
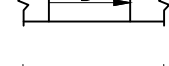
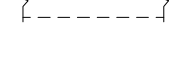
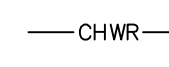
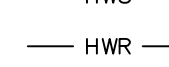
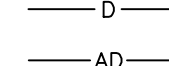
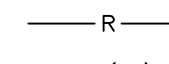
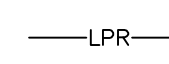
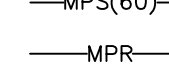
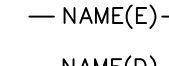
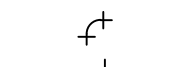
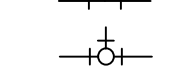
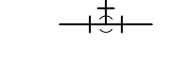
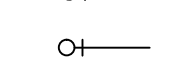
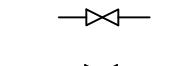
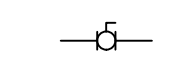
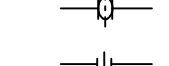
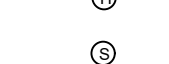
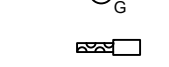
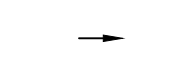
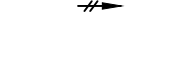
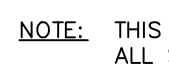
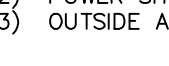


1

LATHAN
ARCHITECTS

SHEET NO.
ASD 3.7

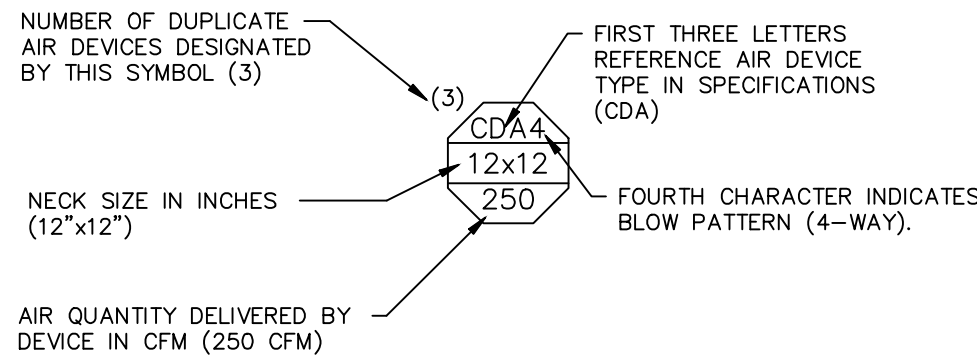
LEGEND

	DUCT SIZE, FIRST FIGURE IS SIDE SHOWN INSIDE CLEAR DIMENSION UNLESS NOTED OTHERWISE
	LOW PRESSURE, RECTANGULAR (GALVANIZED STEEL)
	DUCT RISE
	DUCT DROP
	EXISTING DUCTWORK TO REMAIN
	DUCT TRANSITION
	RECTANGULAR TO ROUND DUCT TRANSITION
	TURNING VANES
	CHILLED WATER SUPPLY PIPING
	CHILLED WATER RETURN PIPING
	HOT WATER SUPPLY PIPING
	HOT WATER RETURN PIPING
	CONDENSATE DRAIN PIPING
	AUXILIARY CONDENSATE DRAIN PIPING
	REFRIGERANT PIPING (2 LINES TOTAL)
	LOW PRESSURE STEAM SUPPLY
	LOW PRESSURE STEAM CONDENSATE RETURN
	MEDIUM PRESSURE STEAM SUPPLY
	MEDIUM PRESSURE STEAM CONDENSATE RETURN
	EXISTING PIPING
	EXISTING PIPING TO BE DEMOLISHED
	ELBOW, 90° (LONG RADIUS)
	TEE
	TEE, TURNED UP
	TEE TURNED DOWN
	ELBOW, TURNED DOWN
	ELBOW, TURNED UP
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	UNION
	WALL MOUNTED THERMOSTAT
	WALL MOUNTED HUMIDISTAT
	WALL MOUNTED TEMPERATURE SENSOR
	WALL MOUNTED CARBON DIOXIDE SENSOR
	WALL MOUNTED DEVICE W/ COVER GAURD
	SMOKE DETECTOR
	TIE NEW INTO EXISTING
	UNDERCUT DOOR 3/4 INCHES
	SUPPLY AIR FLOW
	RETURN OR EXHAUST AIR FLOW

NOTE: THIS LEGEND IS FOR REFERENCE ONLY.
ALL SYMBOLS WHICH APPEAR WITHIN THE
LEGEND MAY NOT APPLY TO THIS PROJECT.

ABBREVIATIONS

AB.CL'G	ABOVE CEILING
ABV.	ABOVE
AC	ALTERNATING CURRENT
A/C	AIR COMPRESSOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
ALT.	ALTERNATE
AMP	AMPERE
AO	ANALOG OUTPUT
APPROX.	APPROXIMATELY
ARCH.	ARCHITECTURAL
AVG	AVERAGE
B	BOILER
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHWP	CHILLED WATER PUMP
CLG	CEILING
CT	COOLING TOWER
CU	CONDENSING UNIT
CWP	CONDENSER WATER PUMP
DEFL	DEFLECTION
DET	DETAIL
DI	DIGITAL INPUT
DIA	DIAMETER
Ø	DIAMETER
DO	DIGITAL OUTPUT
EDB	ENTERING DRY BULB
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EWB	ENTERING WET BULB
EWI	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXIST.	EXISTING
F	DEGREES FAHRENHEIT
GF	GAS FIRED FURNACE
GPM	GALLONS PER MINUTE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FOOT OR FEET
HD.	HEAD
HP	HORSE POWER
HR	HOUR(S)
HT.	HEIGHT
HTR	HEATER
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HWP	HOT WATER PUMP
HX	HEAT EXCHANGER
HZ	FREQUENCY (HERTZ)
ID	INSIDE DIAMETER
IN.	INCHES
KW	KILOWATT
KWH	KILOWATT HOUR
MAX	MAXIMUM
MBH.	1000 BTU PER HOUR
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
NO.	NUMBER
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
O.D.	OUTSIDE DIAMETER
OA	OUTSIDE AIR
Ø	OVAL DUCTWORK
ORIG.	ORIGINAL
PH.	PHASE
PIU	POWERED INDUCTION UNIT
PRESS	PRESSURE
RTN	RETURN AIR
RTU	ROOFTOP AIR HANDLING UNIT
SDC	STAND ALONE DIGITAL CONTROLLER
SENS.	SENSIBLE
SQ.	SQUARE
SPLY	SUPPLY
TEMP	TEMPERATURE
VAV	VARIABLE AIR VOLUME
W	WATT
W/	WITH
W.P.D.	WATER PRESSURE DROP



AIR DEVICE LEGEND

NO SCALE

AIR PURIFICATION UNIT SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	UNIT SERVED	SUPPLY CFM	O.A. CFM	PRESS. DROP (IN. W.C.)	MINIMUM ION DENSITY (IONS/CC @ 1")	MOUNTING LOCATION	ELECTRICAL VOLTS WATTS	REMARKS
APU-PTHP	GPS CI-2	PTHP UNITS	390	3)	0.01	160 MILLION	INSIDE UNIT	24 12	1), 2), 3)
APU-DSS	GPS CI-2	DSS UNITS	840	3)	0.01	160 MILLION	INSIDE UNIT	24 12	1), 2), 3)

REMARKS:
1) INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2) POWER SHALL BE PROVIDED BY UNIT ON WHICH IT IS INSTALLED. PROVIDE TRANSFORMER AS NECESSARY.
3) OUTSIDE AIR FOR SPACE PROVIDED 100% BY ERV-1.

ELECTRIC UNIT HEATER SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	KW	STAGES	EAT (°F)	CFM	ELECTRICAL DISCONNECT VOLTS/PH./HZ.	MOUNTING	WGT (LBS.)	REMARKS
EUH-1	MARKEL P3P510SCA1N	5	1	60	400	INTEGRAL 480/3/60	SUSPENDED	30	1)
EUH-2	MARKEL P3P510SCA1N	5	1	60	400	INTEGRAL 480/3/60	SUSPENDED	30	1)

REMARKS:
1) PROVIDE WITH UNIT MOUNTED THERMOSTAT, CONTROL TRANSFORMER, AND DISCONNECT SWITCH.

PACKAGED THRU-WALL HEAT PUMP SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	CFM (HIGH SPEED)	O.A. CFM (FIXED)	FAN HP	COOLING CAP. (MBH) TOTAL SENSIBLE	HEATING CAP. (MBH) MBH AMB. (°F) AUX. KW STAGES	DISCONNECT	ELECTRICAL MCA MOC	VOLTS/PH./HZ.	EER	REMARKS
PTHP	AMANA PTH154G50	390	4)	---	14.6 ---	14.6 47 5.0 1	2)	23.9 25	265/1/60	9.7	1), 2), 3), 4)

REMARKS:
1) ROUTE CONDENSATE TO GRADE.
2) PROVIDE WITH MANUFACTURER'S HARD-WIRE KIT AND DISCONNECT SWITCH (PROVIDED BY DIV. 15, INSTALLED BY DIV. 16).
3) PROVIDE WITH BIPOLAR IONIZATION. SEE SCHEDULE, THIS SHEET.
4) CLOSE OFF AND SEAL WEATHERTIGHT OUTSIDE AIR. OUTSIDE AIR TO SPACE PROVIDED BY ERV-1.

INDOOR HEAT PUMP UNIT SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	CFM	OA CFM	E.S.P. (IN. W.C.)	FAN		COOLING COIL	ELECTRIC HEAT		ELECTRICAL				VIBRATION ISOLATION			MOUNTING	WEIGHT (LBS.)	REMARKS
					H.P.	DRIVE		TOTAL (KW)	STAGES	MCA	MOC	DISCONNECT	VOLTS/PH./HZ.	TYPE	DEFL. (IN.)	BASE			
IHP-1	CARRIER FV4CNB006L00	1,995	400	0.50	3/4	DIRECT	CC-1	20	1	34.3	35	BY DIV. 16	460/3/60	1	0.50	A	HORIZONTAL	225	1)

REMARKS:
1) PROVIDE UNIT WITH APR RAWAL DEVICE FOR CAPACITY MODULATION.

OUTDOOR HEAT PUMP SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	SERVICE	COOLING CAPACITY NOMINAL (TONS)	HEATING CAPACITY AMB. TEMP. (°F)	HEATING CAPACITY AMB. TEMP. (°F)	UNIT MCA	UNIT MOC	ELECTRICAL DISCONNECT	VOLTS/PH./HZ.	VIBRATION TYPE DEFL. (IN.)	ISOLATION BASE	SEER	EER	REMARKS
OHP-1	CARRIER 25HCE460AP06	IHP-1	5	95	54.6 47	10.5	15	BY DIV. 16	460/3/60	1 0.5	A	14	11.5	1)

REMARKS:
1) PROVIDE WITH OUTDOOR THERMOSTAT. SET THERMOSTAT AT 35°F (ADJUSTABLE)

COIL SCHEDULE

EQUIPMENT NO.	TYPE	ROWS (MIN.)	MAXIMUM FINS PER INCH	MAXIMUM FACE VEL. (FPM)	CFM	EDB (°F)	EWB (°F)	AIR LDB (°F)	LWB (°F)	PRESSURE DROP (IN. W.C.)	DX REFRIG. TYPE	REMARKS
CC-1	DIRECT EXPANSION	---	---	---	1,970	80	67	59.0	58.5	---	R-410A	1)

REMARKS:
1) FURNISHED WITH MECHANICAL EQUIPMENT

DUCTLESS INDOOR UNIT SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	SERVICE	CFM	OA CFM	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	MOUNTING	DISCONNECT	ELECTRICAL MOTOR STARTER	MCA MOC	VOLTS/PH./HZ.	WEIGHT (LBS)	REMARKS
DSS-1	CARRIER 40MAHBQ30XA3	CLASSROOM A111	840	4)	30.0	30.0	WALL	BY DIV. 16	INTEGRAL	---	---	208/1/60	50 1), 2), 3), 4)
DSS-2	CARRIER 40MAHBQ30XA3	CLASSROOM A112	840	4)	30.0	30.0	WALL	BY DIV. 16	INTEGRAL	---	---	208/1/60	50 1), 2), 3), 4)
DSS-3	CARRIER 40MAHBQ30XA3	CLASSROOM A113	840	4)	30.0	30.0	WALL	BY DIV. 16	INTEGRAL	---	---	208/1/60	50 1), 2), 3), 4)

REMARKS:
1) PROVIDE WIRED THERMOSTAT.
2) POWER FOR THIS UNIT IS PROVIDED FROM OUTDOOR UNIT.
3) PROVIDE WITH BIPOLAR IONIZATION. SEE SCHEDULE, THIS SHEET.
4) OUTSIDE AIR TO SPACE PROVIDED BY ERV-1.

DUCTLESS OUTDOOR UNIT SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	SERVICE	NOMINAL COOLING CAPACITY (TONS)	NOMINAL HEATING CAPACITY (MBH)	DISCONNECT	ELECTRICAL MCA MOC	VOLTS/PH./HZ.	WEIGHT (LBS)	VIBRATION TYPE DEFL. (IN.)	ISOLATION BASE	SEER	EER	REMARKS
DCU-1	CARRIER 38MARBQ30AA3	DSS-1	2.5	30	BY DIV. 16	23 30	208/1/60	175	---	---	---	20 11.5	1), 2)
DCU-2	CARRIER 38MARBQ30AA3	DSS-2	2.5	30	BY DIV. 16	23 30	208/1/60	175	---	---	---	20 11.5	1), 2)
DCU-3	CARRIER 38MARBQ30AA3	DSS-3	2.5	30	BY DIV. 16	23 30	208/1/60	175	---	---	---	20 11.5	1), 2)

REMARKS:
1) POWER FOR INDOOR UNIT IS PROVIDED FROM THIS UNIT.
2) COORDINATE EXACT LOCATION WITH ALL OTHER TRADES.

POWER VENTILATOR SCHEDULE

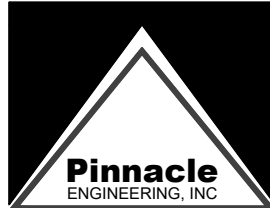
EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	SERVICE	CFM	E.S.P. (IN. W.C.)	RPM	MAX. SONES	DISCONNECT	ELECTRICAL MOTOR STARTER HP	MOTOR VOLTS/PH./HZ.	LOCATION	TYPE	DRIVE	VIBRATION TYPE DEFL. (IN.)	ISOLATION BASE	WGT (LBS.)	REMARKS
EF-1	COOK 120SQN17D	SHELTER EXHAUST	470	1.0	1714	12.5	BY DIV. 16	INTEGRAL 1/3	208/1/60	INLINE	CENTRIFUGAL	DIRECT	---	---	90	1), 3), 4), 5)
EF-2	COOK 135C17D	RESTROOM EXHAUST	470	1.0	1343	13.0	BY DIV. 16	INTEGRAL 1/4	277/1/60	ROOF	CENTRIFUGAL	DIRECT	---	---	70	1), 2), 4), 6)
VF-1	COOK 150SQN17D	SHELTER VENTILATION	2400	1.0	1612	18.2	BY DIV. 16	INTEGRAL 1	208/1/60	INLINE	CENTRIFUGAL	DIRECT	3	.75	A 135	1), 3), 4), 5)
VF-2	COOK GC-146	IDF	70	0.35	.	.	BY DIV. 26	INTEGRAL 0.313 A	115/1/60	INLINE	CENTRIFUGAL	DIRECT	---	---	20	1), 7)

REMARKS:
1) PROVIDE MANUFACTURER'S FAN SPEED CONTROLLER AND BACKDRAFT DAMPER.
2) INTERLOCK WITH LOCAL LIGHTING CONTROLS.
3) INTERLOCK WITH MUSHROOM PUSH-BUTTON SWITCH, DOMO CD16 PER.
4) PROVIDE ECM MOTOR.
5) PROVIDE FAN ON SHELTER BACKUP POWER.
6) PROVIDE FAN WITH MANUFACTURER'S ROOF CURB.
7) PROVIDE THERMOSTAT FOR CONTROL. HONEYWELL T834L1004/U, OR EQUAL. SET TO 80°F.

ENERGY RECOVERY VENTILATOR SCHEDULE

EQUIPMENT NO.	MANUFACTURER/ MODEL NO.	SUPPLY FAN CFM HP	ESP (IN. W.C.)	EXHAUST FAN CFM HP	ESP (IN. W.C.)	REGEN FAN CFM HP	ESP (IN. W.C.)	O.A. ERV WHEEL SUPPLY EDB (°F)EWB (°F) LDB (°F) LWB (°F)	ERV TO SPACE LDB (°F)LWB (°F)	DISCONNECT	MOTOR STARTER	ELECTRICAL PREHEAT KW REHEAT KW	MCA MOC	VOLTS/PH./HZ.	VIBRATION TYPE DEFL. (IN.)	ISOLATION BASE	WGT (LBS)	REMARKS
ERV-1	NOVELAIRE 4000DESDX-ERV	1710 3.0	1.5	1710 1.5	1.5	2238 1.5	0.0	83.0 79.0 74.9 57.5	70.0 54.8	BY DIV. 16	BY DIV. 15	N/A 30	73.4 80	480/3/60	1 0.50	A	3500	1), 2), 3), 4), 5)

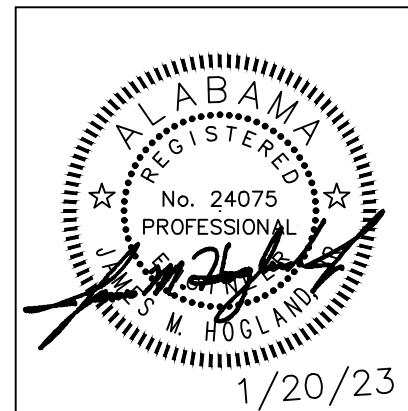
REMARKS:
1) SINGLE POINT POWER CONNECTION
2) PROVIDE WITH PREWIRED FAN SPEED CONTROLLERS.
3) BASED ON ROOM EXHAUST CONDITIONS: 72.0/60.0°F (DB/WB).
4) BASED ON A 5 TON DIGITAL COMPRESSOR WITH COOLING COIL LAT CONDITIONS: 51.1/51.1°F (DB/WB).
5) UNIT PERFORMANCE DATA: TOTAL COOLING EFFECT: 8.3 TONS, 76.1 LB/HR, 7.3 kW; FULL-LOAD MRE OF 10.4.



Engineering & Design Consultants
2111 Parkway Office Circle, Suite 125
Birmingham, AL 35244
(205) 733-6912 FAX: (205) 733-6913
Job No.: 22282 File: 22282D01

LATHAN
ARCHITECTS
LATHAN • BRYANT • CALMA

CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL
78975 HIGHWAY 77, LINCOLN, ALABAMA 35096
TALLADEGA COUNTY BOARD OF EDUCATION



SHEET TITLE:
MECHANICAL LEGEND,
ABBREVIATIONS, SCHEDULES
AND DETAILS

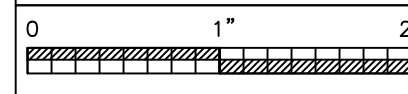
PROJ. MGR.: JMH
DRAWN: ZBL/CRA
DATE: 1/20/23
REVISIONS

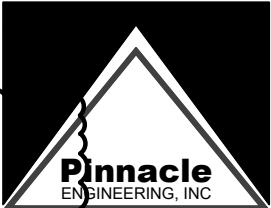
1 ADDENDUM NO. 3

JOB NO. 22-20

SHEET NO:

M0.1





Engineering & Design Consultants
2111 Parkway Office Circle, Suite 125
Birmingham, AL 35244
(205) 733-6912 FAX: (205) 733-6913
Job No.: 2225 File: 22282M01



LATHAN
ARCHITECTS
LATHAN • BRYANT • CALMA

CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL
78975 HIGHWAY 77, LINCOLN, ALABAMA 35096
TALLADEGA COUNTY BOARD OF EDUCATION



SHEET TITLE:
MECHANICAL FLOOR PLAN

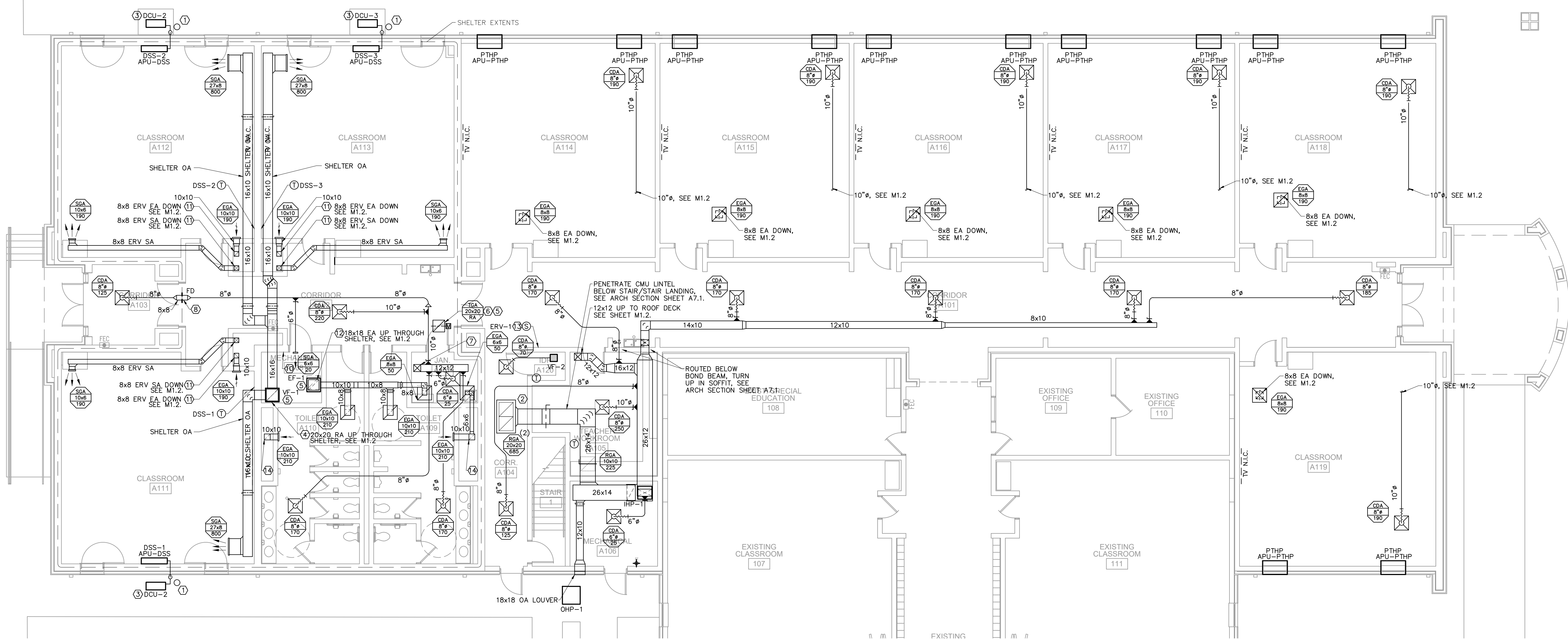
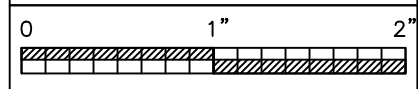
PROJ. MGR.: JMH
DRAWN: ZBL/CRA
DATE: 1/20/23
REVISIONS

1 ADDENDUM NO. 3

JOB NO. **22-20**

SHEET NO:

M1.1



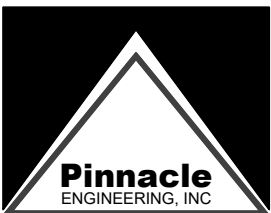
FLOOR PLAN
MECHANICAL
0 2 4 6 8 16
GRAPHIC SCALE (FEET)

GENERAL NOTES:

1. VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO BEGINNING WORK.
2. SPACE ABOVE CEILING IS LIMITED. CAREFUL COORDINATION WITH LIGHTING, ELECTRICAL, PLUMBING, STRUCTURAL, AND ARCHITECTURAL WORK IS CRITICAL TO DUCTWORK INSTALLATION.
3. PROVIDE NECESSARY OFFSETS IN PIPING, ELECTRICAL CONDUIT, AND DUCTWORK AS REQUIRED TO ACCOMMODATE NEW WORK. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL DETAILS NOR CHANGES IN DUCTWORK ELEVATIONS NECESSARY FOR COMPLETE INSTALLATION.
4. COORDINATE CEILING AIR DEVICE LOCATIONS WITH LIGHTING PLAN AND ARCHITECT'S REFLECTED CEILING PLAN.
5. DUCTWORK SHALL BE RUN TIGHT TO STRUCTURE. AVOID CROSSING OVER LIGHTS AND OTHER DUCTS DUE TO TIGHT CLEARANCES.
6. COORDINATE EXACT SIZE, LOCATION, AND COLOR OF WALL MOUNTED LOUVERS WITH ARCHITECT PRIOR TO ORDERING.
7. MOUNT TEMPERATURE CONTROLS 48" ABOVE FINISHED FLOOR. COORDINATE EXACT LOCATION WITH ARCHITECT.
8. SPILL CONDENSATE FROM IHP UP TO NEAREST FLOOR DRAIN.
9. SPILL CONDENSATE FROM PTHP TO GRADE.
10. BALANCE CEILING AIR DEVICES TO VALUES SHOWN ON THIS DRAWING.
11. PROVIDE ACCESS DOOR IN DUCT OR PLENUM FOR STORM LOUVER LABEL INSPECTION BY STATE INSPECTOR. INSTALL STORM LOUVER WITH LABEL VIEWABLE FROM ACCESS DOOR.

DRAWING NOTES:

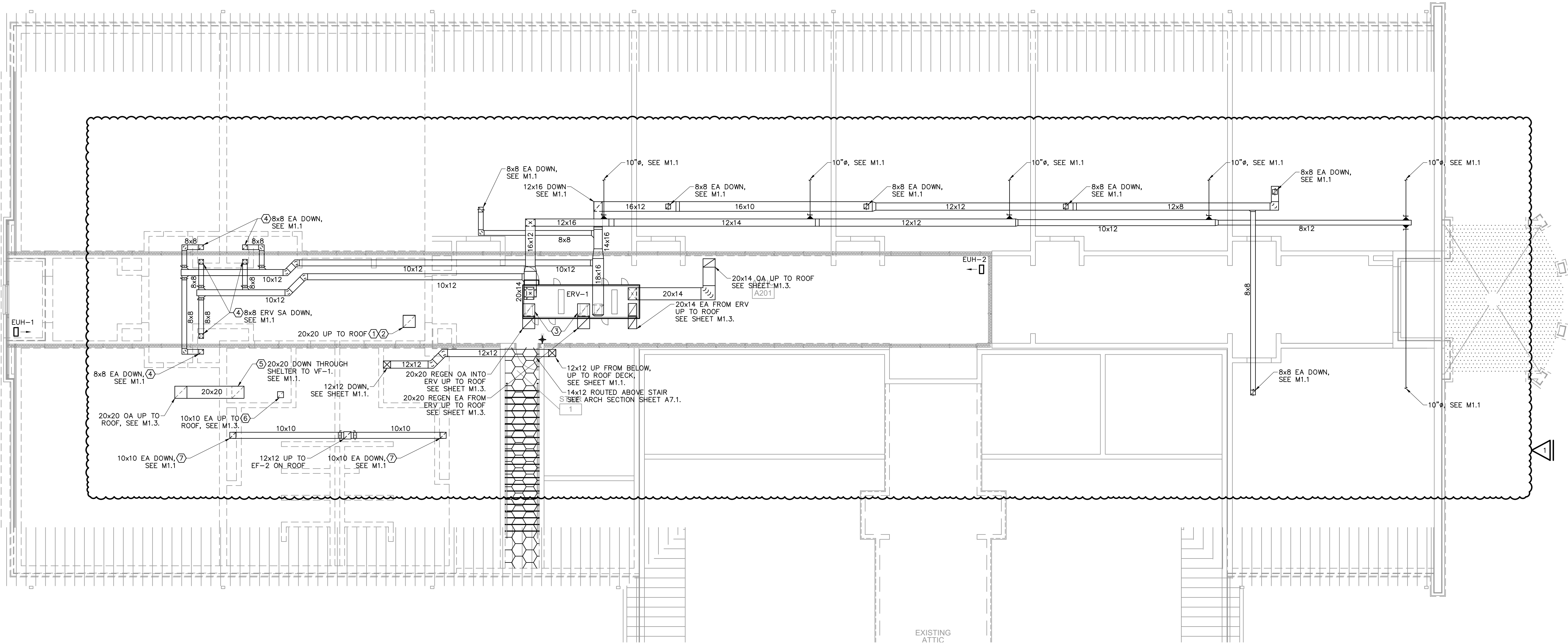
1. PROVIDE CONDENSATE DISPOSAL WELL. TERMINATE CONDENSATE LINE TO WELL. REFER TO DETAIL.
2. PROVIDE 26" DEEP PLENUM ON BACK SIDE OF EXHAUST GRILLE AND CONNECT 18x16 DUCT TO TOP OF PLENUM WITHIN CHASE.
3. EACH REFRIGERANT LINE AND THE CONDENSATE LINE PENETRATES SHELTER WALL SEPARATELY. PENETRATIONS TO BE LESS THAN 2" IN DIAMETER. PENETRATIONS FROM A SINGLE UNIT TO BE MINIMUM 4" ON CENTER. ONLY ONE PENETRATION PER BLOCK IN SHELTER WALL.
4. PROVIDE 20x20 DUCT UP THROUGH SHELTER CAP. TERMINATE TO ROOF CAP, COOK MODEL PR20. AT SHELTER PENETRATION, PROVIDE 20x20 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL.
5. PROVIDE ACCESS DOOR IN DUCT WITHIN STORAGE-A108 FOR LOUVER LABEL INSPECTION BY STATE INSPECTOR. INSTALL LOUVER WITH LABEL VIEWABLE FROM ACCESS DOOR.
6. PROVIDE 20x20 EA DUCT UP THROUGH SHELTER CAP. TERMINATE TO ROOF CAP, COOK MODEL PR20. AT SHELTER PENETRATION, PROVIDE 20x20 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL.
7. PROVIDE 12x12 DUCT THROUGH SHELTER ROOF. AT SHELTER PENETRATION, PROVIDE 12x12 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL.
8. TRANSITION TO 12x12 DUCT THROUGH SHELTER WALL. AT SHELTER PENETRATION, PROVIDE 12x12 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL.
9. PROVIDE 20x20 EA DUCT UP THROUGH SHELTER CAP. TERMINATE TO ROOF CAP, COOK MODEL PR20. AT SHELTER PENETRATION, PROVIDE 20x20 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL.
10. PROVIDE MUSHROOM PUSH-BUTTON SWITCH FOR VF-1 CONTROL. REFER TO CONTROL DIAGRAM, DETAIL 4 SHEET M2.3.
11. AT SHELTER PENETRATION, TRANSITION TO 12x12 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL. TRANSITION BACK TO 8x8 AFTER LOUVER/DAMPER.
12. PROVIDE 18x18 EXHAUST DUCT FROM EF-1 TO 18x18 STORM RATED LOUVER AND FIRE DAMPER AT SHELTER PENETRATION. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL. TRANSITION TO 10x10 AFTER LOUVER/DAMPER.
13. INSTALL TEMPERATURE AND HUMIDITY SENSOR SUPPLIED BY THE ERV MANUFACTURER. PROVIDE BALANCE OF CONTROL WIRING AS NECESSARY.
14. AT SHELTER PENETRATION, TRANSITION TO 12x12 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL. TRANSITION BACK TO 10x10 AFTER LOUVER/DAMPER. REFER TO SHEET M1.2.



Engineering & Design Consultants
2111 Parkway Office Circle, Suite 125
Birmingham, AL 35244
(205) 733-6912 FAX: (205) 733-6913
Job No.: 22282 File: 22282M01

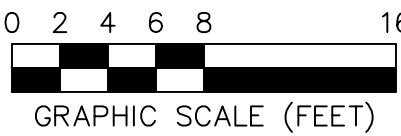


LATHAN
ARCHITECTS
LATHAN • BRYANT • CALMA



ATTIC FLOOR PLAN

MECHANICAL



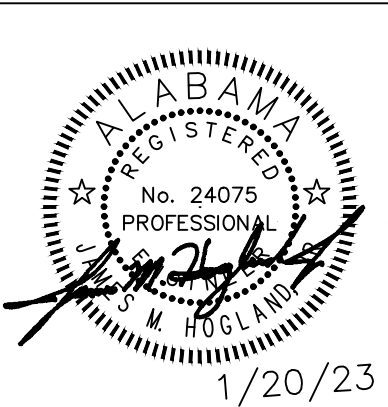
NEW WORK LEGEND	
---	EXISTING
---	NEW WORK

GENERAL NOTES:

- 1 VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO BEGINNING WORK.
- 2 SPACE ABOVE CEILING IS LIMITED. CAREFUL COORDINATION WITH LIGHTING, ELECTRICAL, PLUMBING, STRUCTURAL, AND ARCHITECTURAL WORK IS CRITICAL TO DUCTWORK INSTALLATION.
- 3 PROVIDE NECESSARY OFFSETS IN PIPING, ELECTRICAL CONDUIT, AND DUCTWORK AS REQUIRED TO ACCOMMODATE NEW WORK. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL DETAILS NOR CHANGES IN DUCTWORK ELEVATIONS NECESSARY FOR COMPLETE INSTALLATION.
- 4 COORDINATE CEILING AIR DEVICE LOCATIONS WITH LIGHTING PLAN AND ARCHITECT'S REFLECTED CEILING PLAN.
- 5 DUCTWORK SHALL BE RUN TIGHT TO STRUCTURE. AVOID CROSSING OVER LIGHTS AND OTHER DUCTS DUE TO TIGHT CLEARANCES.
- 6 COORDINATE EXACT SIZE, LOCATION, AND COLOR OF WALL MOUNTED LOUVERS WITH ARCHITECT PRIOR TO ORDERING.
- 8 SPILL CONDENSATE FROM ERV INTO NEAREST FLOOR DRAIN.
- 9 PROVIDE ACCESS DOOR IN DUCT OR PLENUM FOR STORM LOUVER LABEL INSPECTION BY STATE INSPECTOR. INSTALL STORM LOUVER WITH LABEL VIEWABLE FROM ACCESS DOOR.

DRAWING NOTES:

- 1 PROVIDE ACCESS DOOR IN DUCT WITHIN STORAGE-A108 FOR LOUVER LABEL INSPECTION BY STATE INSPECTOR. INSTALL LOUVER WITH LABEL VIEWABLE FROM ACCESS DOOR.
- 2 PROVIDE 20x20 RELIEF DUCT UP THROUGH SHELTER CAP. TERMINATE TO ROOF CAP, COOK MODEL PR20. AT SHELTER PENETRATION, PROVIDE 20x20 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL.
- 3 PROVIDE 20x20 REGEN AIR IN/OUT DUCT UP INTO ATTIC AND OFFSET AS NECESSARY TO ROOF VENTILATOR. SEE M1.3.
- 4 AT SHELTER PENETRATION, TRANSITION TO 12x12 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL. TRANSITION BACK TO 8x8 AFTER LOUVER/DAMPER.
- 5 PROVIDE 20x20 DUCT THROUGH SHELTER CAP. AT SHELTER PENETRATION, PROVIDE 20x20 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL.
- 6 TRANSITION FROM 18x18 STORM RATED LOUVER AND FIRE DAMPER AT SHELTER PENETRATION TO 10x10 EA DUCT.
- 7 AT SHELTER PENETRATION, TRANSITION TO 12x12 STORM RATED LOUVER AND FIRE DAMPER. ANCHOR TO SHELTER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. STORM LOUVER SHALL BE RUSKIN MODEL XP500 OR EQUAL. TRANSITION BACK TO 10x10 AFTER LOUVER/DAMPER.



SHEET TITLE:
MECHANICAL ATTIC
FLOOR PLAN

PROJ. MGR.: JMH

DRAWN: ZBL/CRA

DATE: 1/20/23

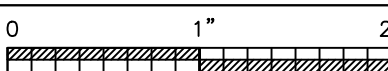
REVISIONS

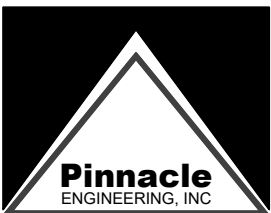
1 ADDENDUM NO. 3

JOB NO. 22-20

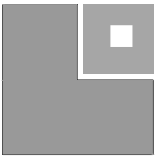
SHEET NO:

M1.2



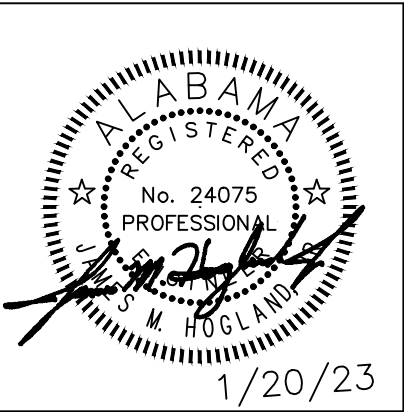


Engineering & Design Consultants
2111 Parkway Office Circle, Suite 125
Birmingham, AL 35244
(205) 733-6912 FAX: (205) 733-6913
Job No.: 22282 File: 22282M01



LATHAN
ARCHITECTS
LATHAN • BRYANT • CALMA

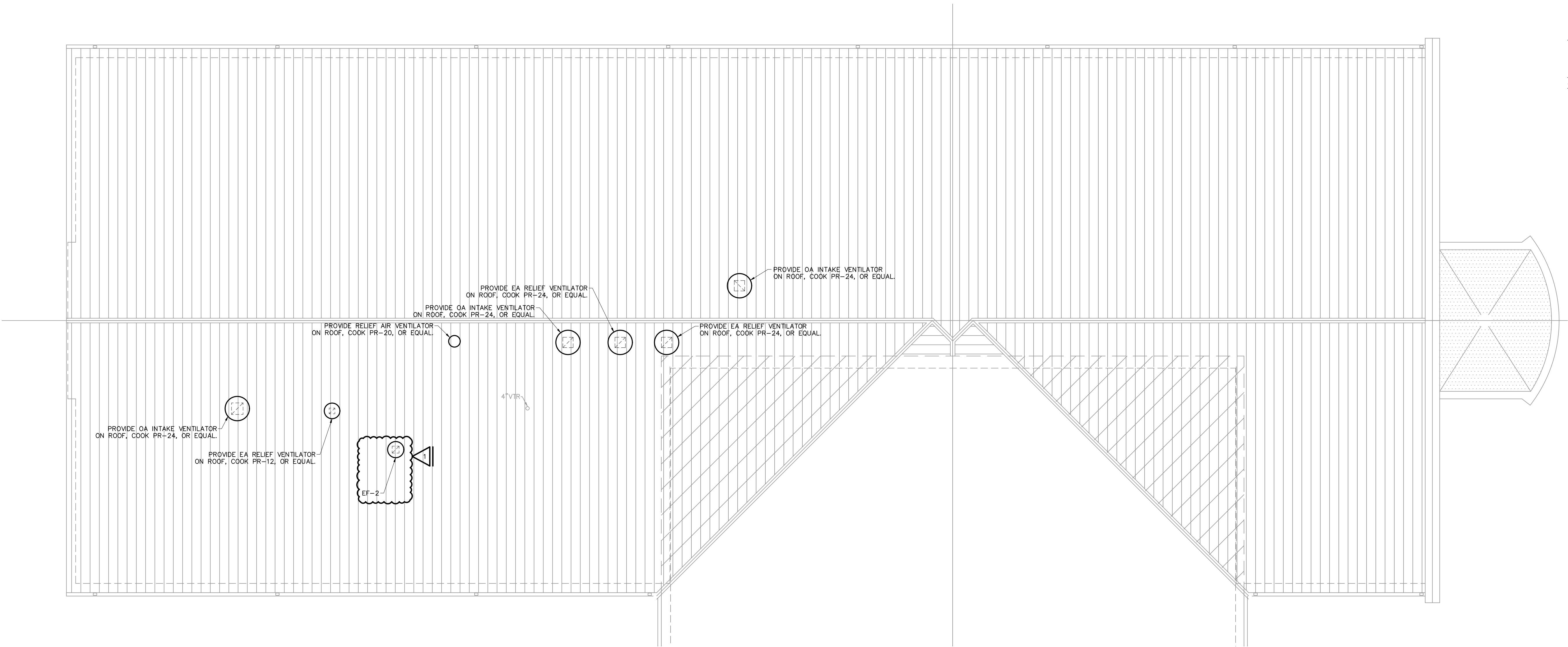
CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL
78975 HIGHWAY 77, LINCOLN, ALABAMA 35096
TALLADEGA COUNTY BOARD OF EDUCATION



SHEET TITLE:
MECHANICAL ROOF PLAN

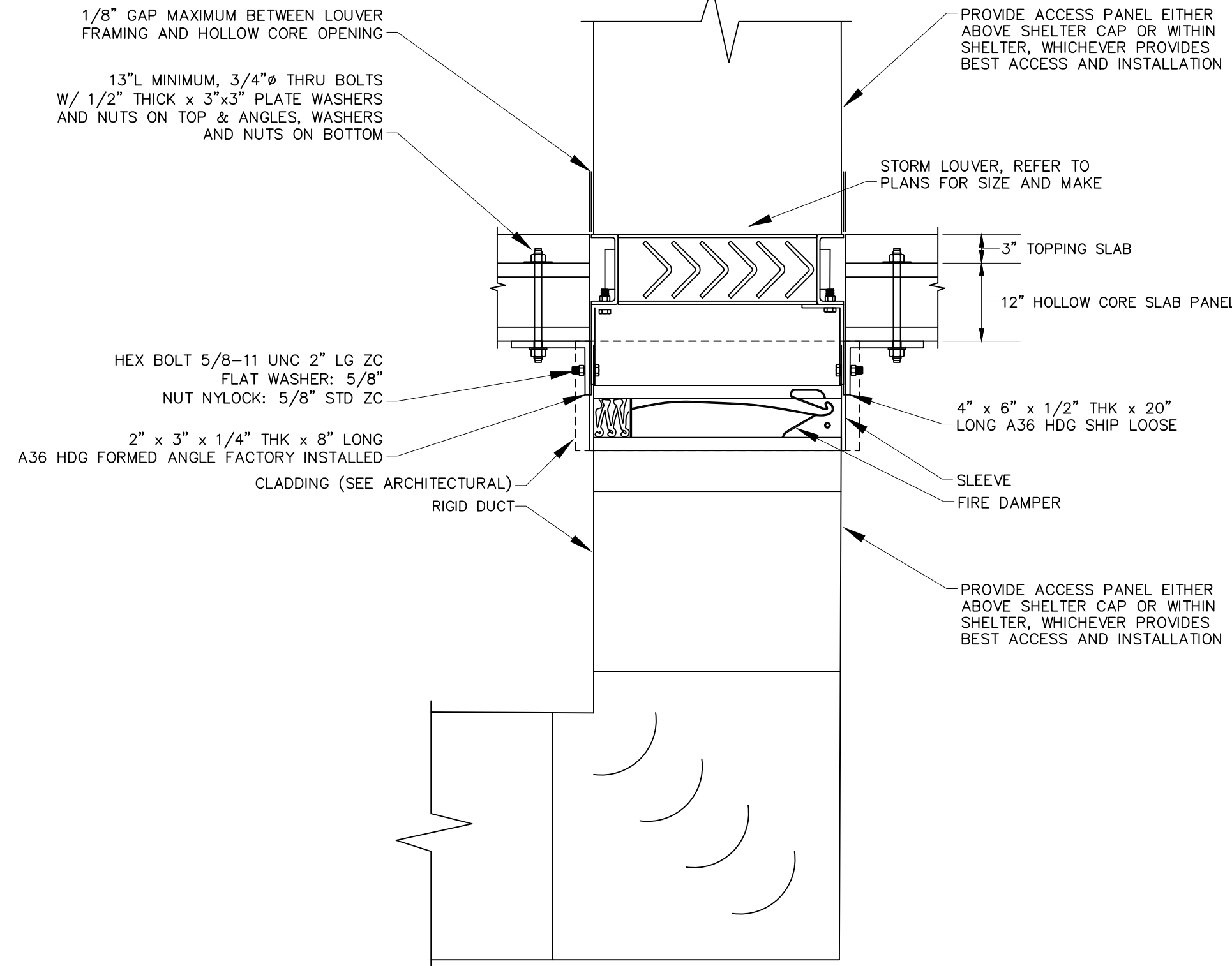
PROJ. MGR.:	JMH
DRAWN:	ZBL/CRA
DATE:	1/20/23
REVISIONS	
1	ADDENDUM NO. 3

JOB NO. 22-20
SHEET NO:
M1.3



ROOF PLAN
MECHANICAL
0 2 4 6 8 16
GRAPHIC SCALE (FEET)

GENERAL NOTES:
1 VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO BEGINNING WORK.

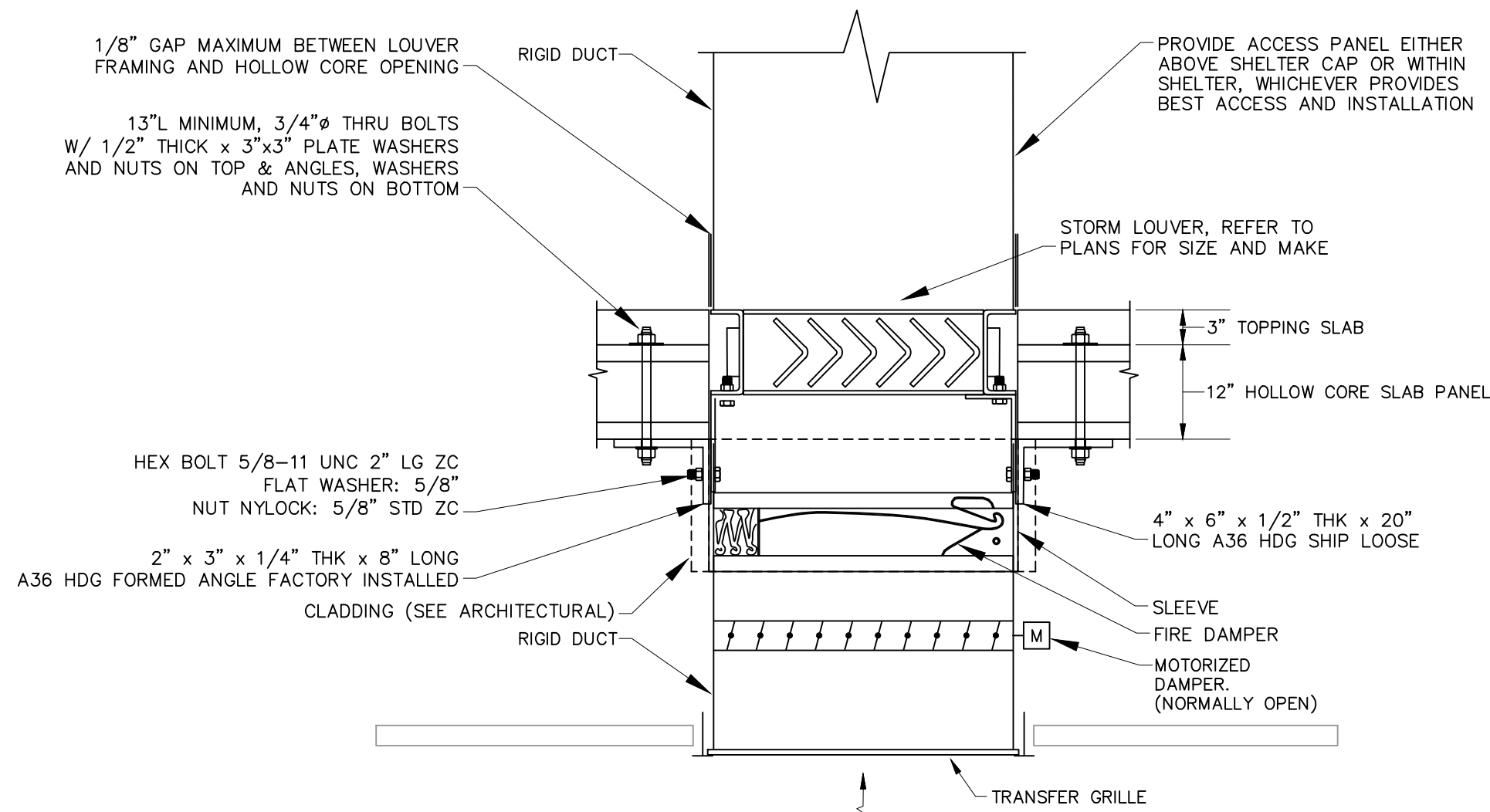


NOTE:
REFER TO SMACNA "FIRE DAMPER GUIDE" FOR REQUIRED DIMENSIONS, METAL GAUGES, CLEARANCES, ACCEPTABLE DUCT JOINTS, AND OTHER SPECIFICATIONS. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

THRU BOLTS WILL NEED TO BE POSITIONED/INSTALLED PRIOR TO PLACEMENT OF TOPPING SLAB.

3/4" THRU BOLTS AND NUTS AT 12" MAX. W/ 1/2" THICK x 3"x3" PLATE WASHER AND NUTS ABOVE THE HOLLOW CORE SLAB PANELS. MINIMUM 2 THRU BOLTS EACH SIDE AND AT END.

7 FIRE DAMPER/STORM LOUVER INSTALLATION DETAIL
M2.1 TYPICAL
NO SCALE

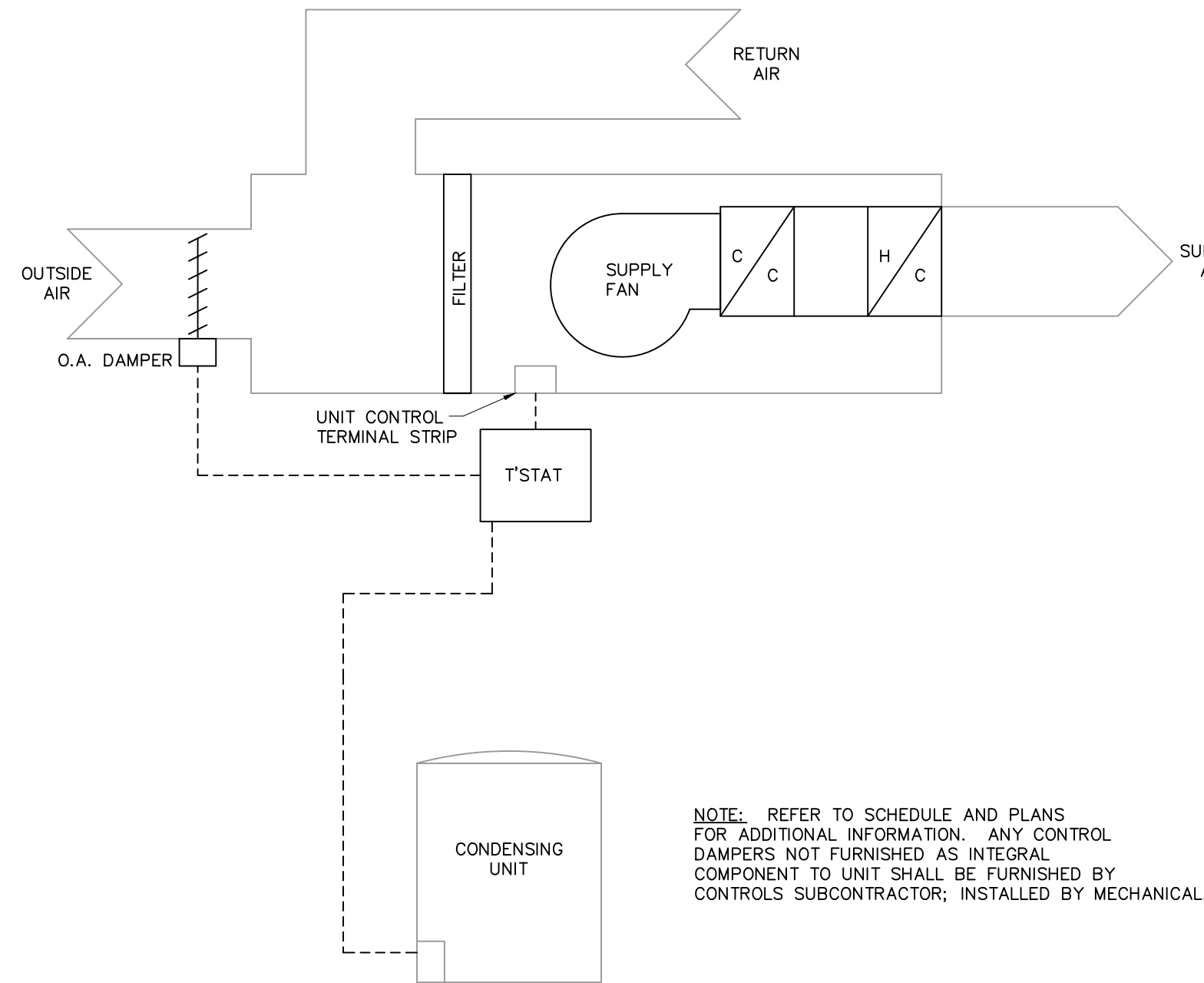


NOTE:
REFER TO SMACNA "FIRE DAMPER GUIDE" FOR REQUIRED DIMENSIONS, METAL GAUGES, CLEARANCES, ACCEPTABLE DUCT JOINTS, AND OTHER SPECIFICATIONS. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

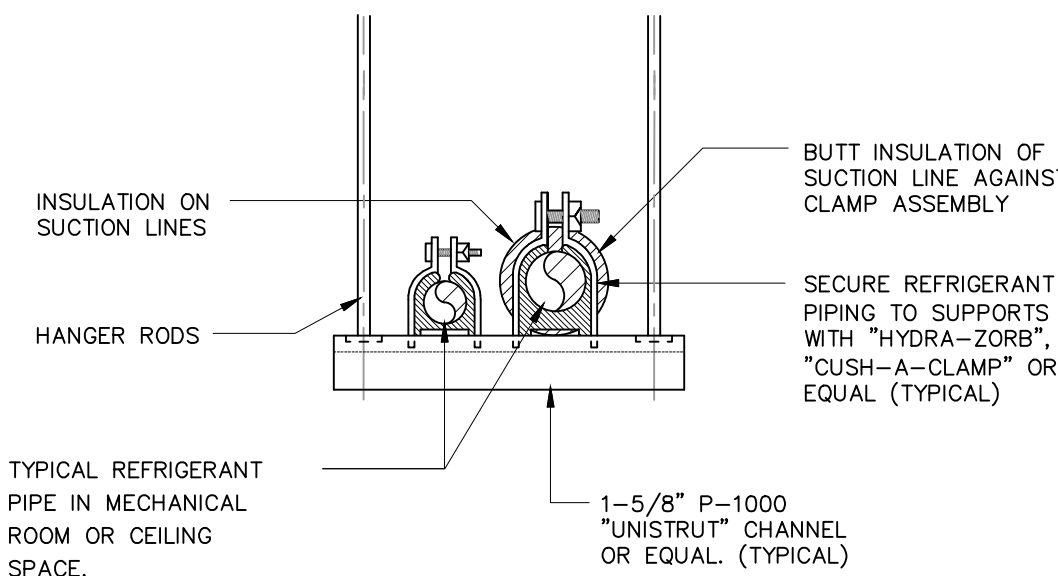
THRU BOLTS WILL NEED TO BE POSITIONED/INSTALLED PRIOR TO PLACEMENT OF TOPPING SLAB.

3/4" THRU BOLTS AND NUTS AT 12" MAX. W/ 1/2" THICK x 3"x3" PLATE WASHER AND NUTS ABOVE THE HOLLOW CORE SLAB PANELS. MINIMUM 2 THRU BOLTS EACH SIDE AND AT END.

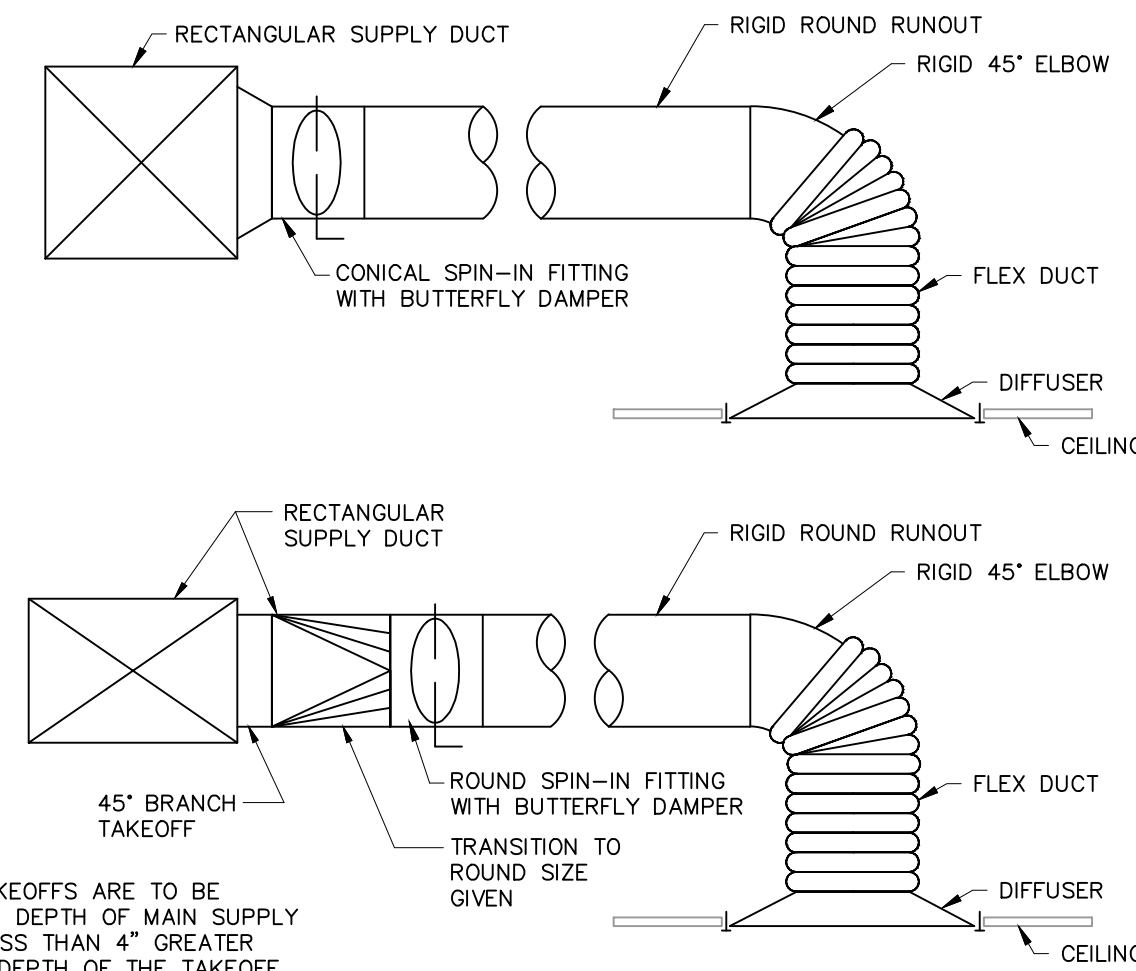
8 FIRE DAMPER/STORM LOUVER INSTALLATION DETAIL
M2.1 TYPICAL
NO SCALE



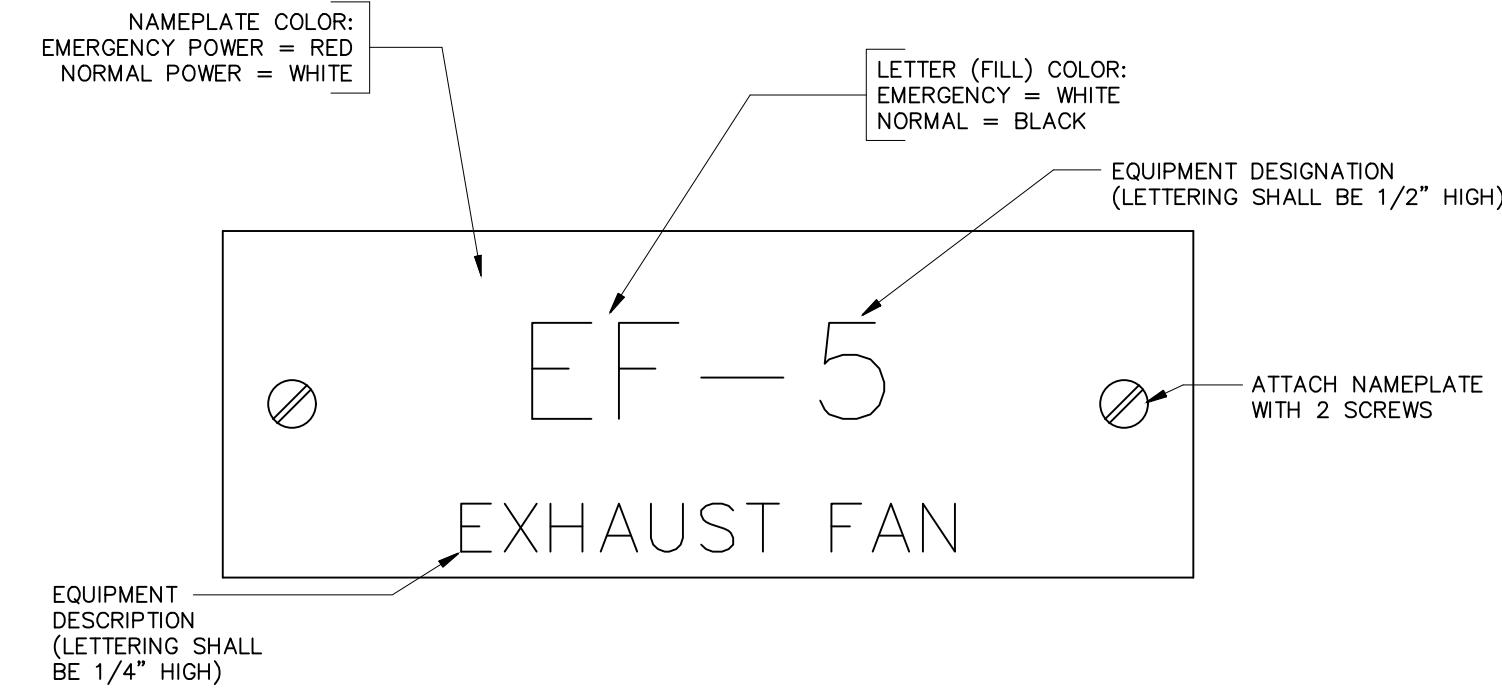
4 HVAC CONTROL DIAGRAM
M2.1 TYPICAL
NO SCALE



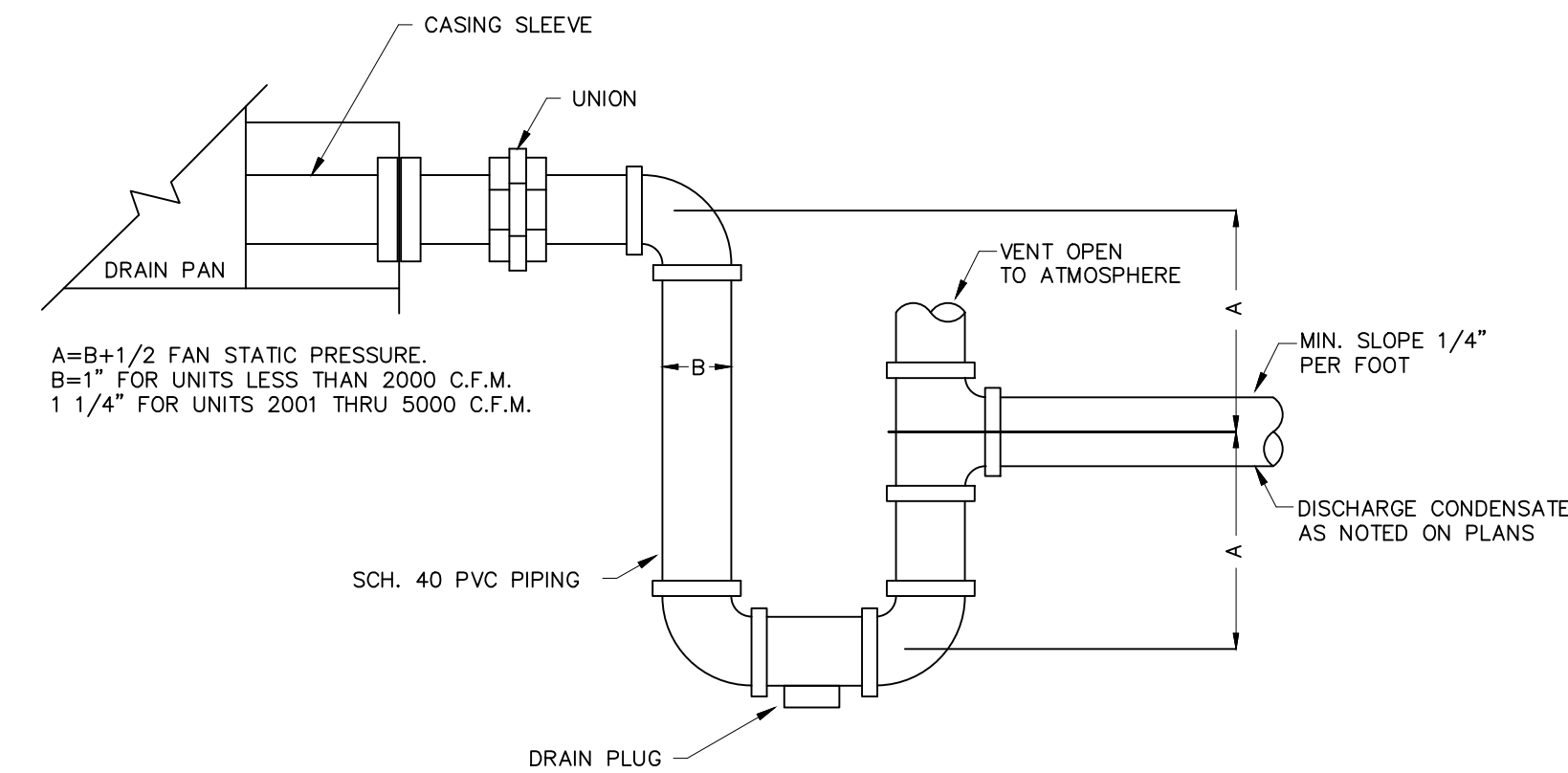
5 REFRIGERANT PIPING SUPPORT DETAIL
M2.1 TYPICAL FOR PIPING SUSPENDED FROM STRUCTURE
NO SCALE



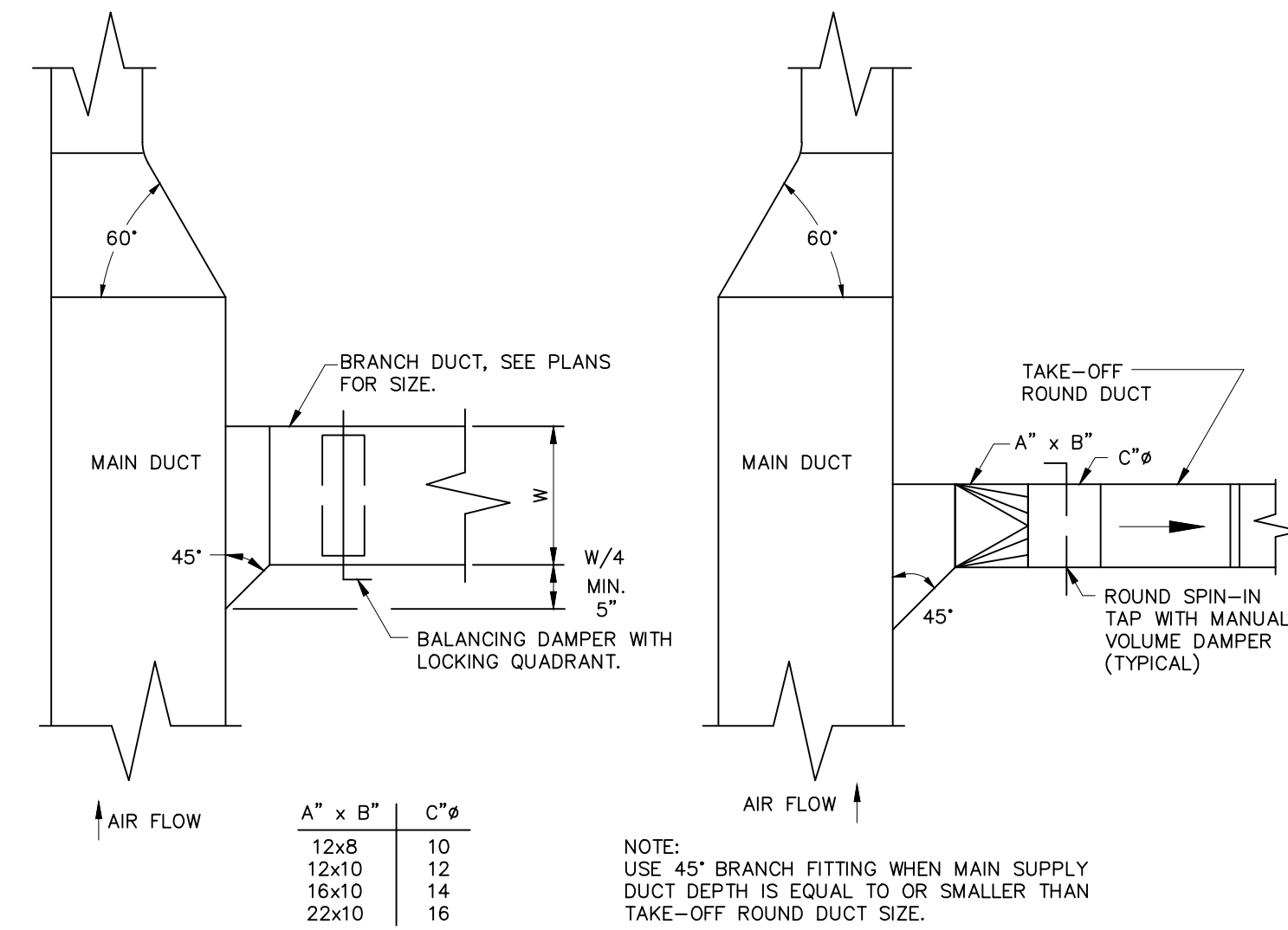
6 TYPICAL DIFFUSER RUN-OUT DETAIL
M2.1 TYPICAL
NO SCALE



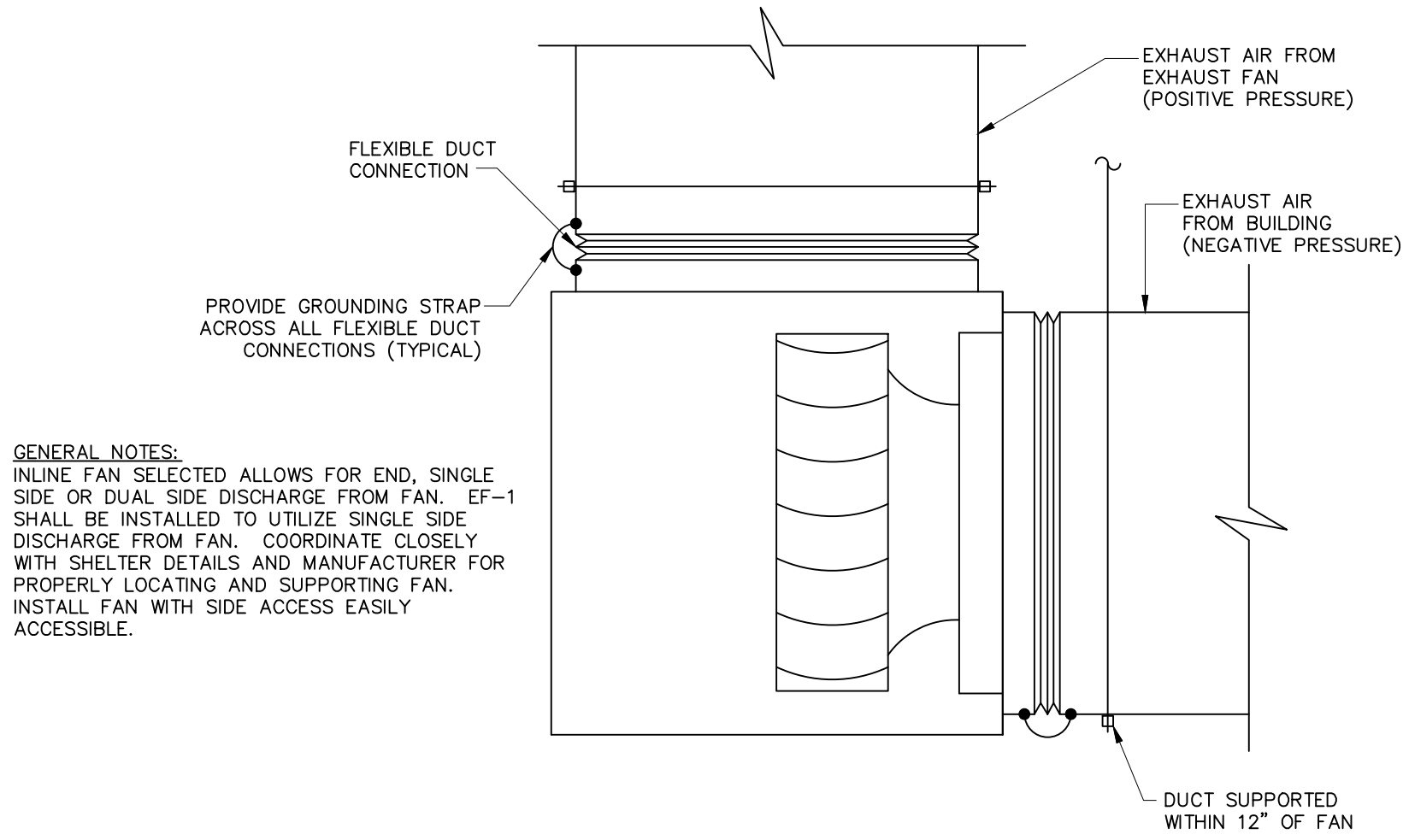
1 MECHANICAL EQUIPMENT NAMEPLATE DETAIL
M2.1 NO SCALE



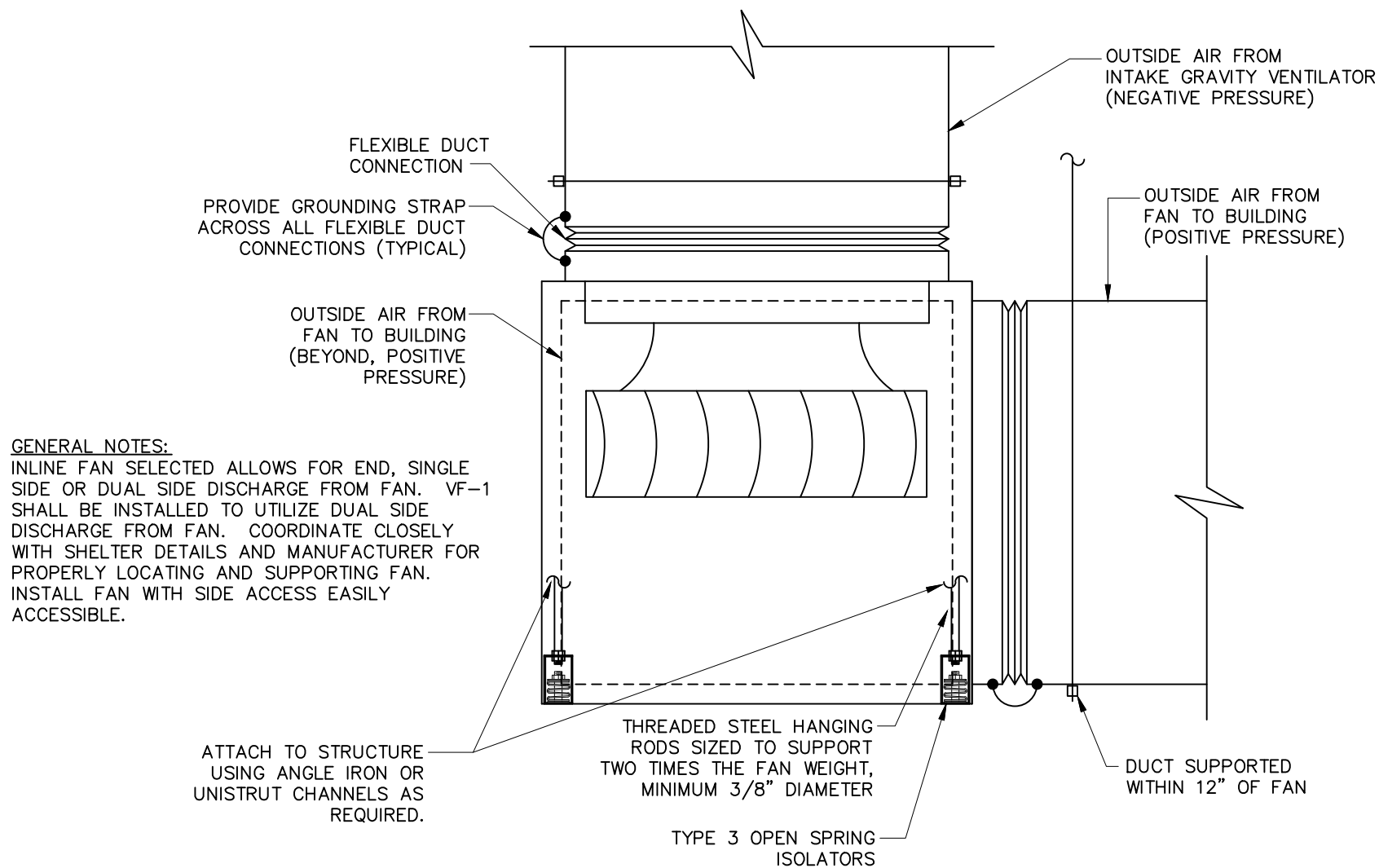
2 CONDENSATE DRAIN TRAP DETAIL
M2.1 NO SCALE



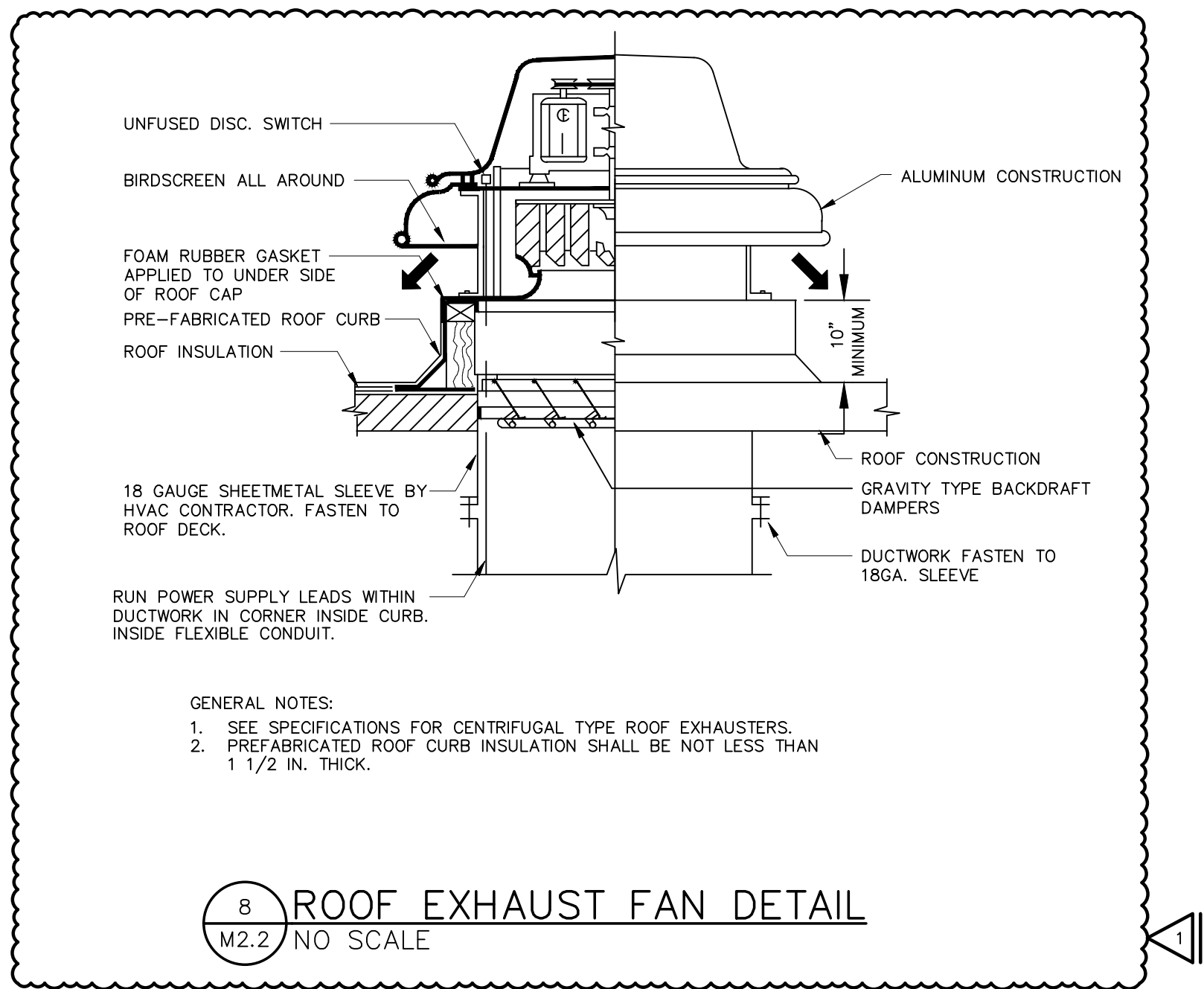
3 TYPICAL DUCT TAKEOFF DETAIL
M2.1 NO SCALE



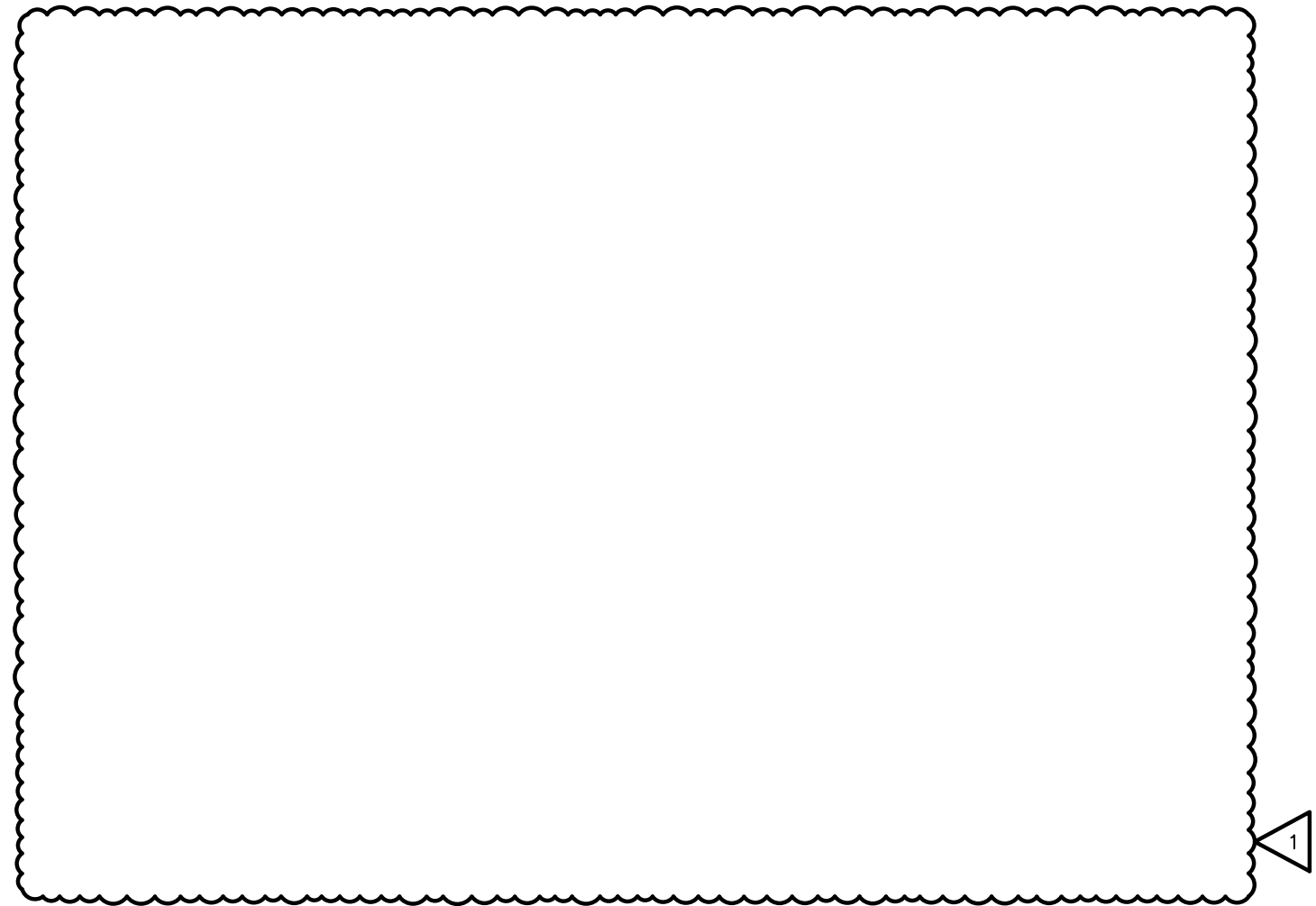
6
M2.2 NO SCALE
INLINE EXHAUST FAN INSTALLATION DETAIL



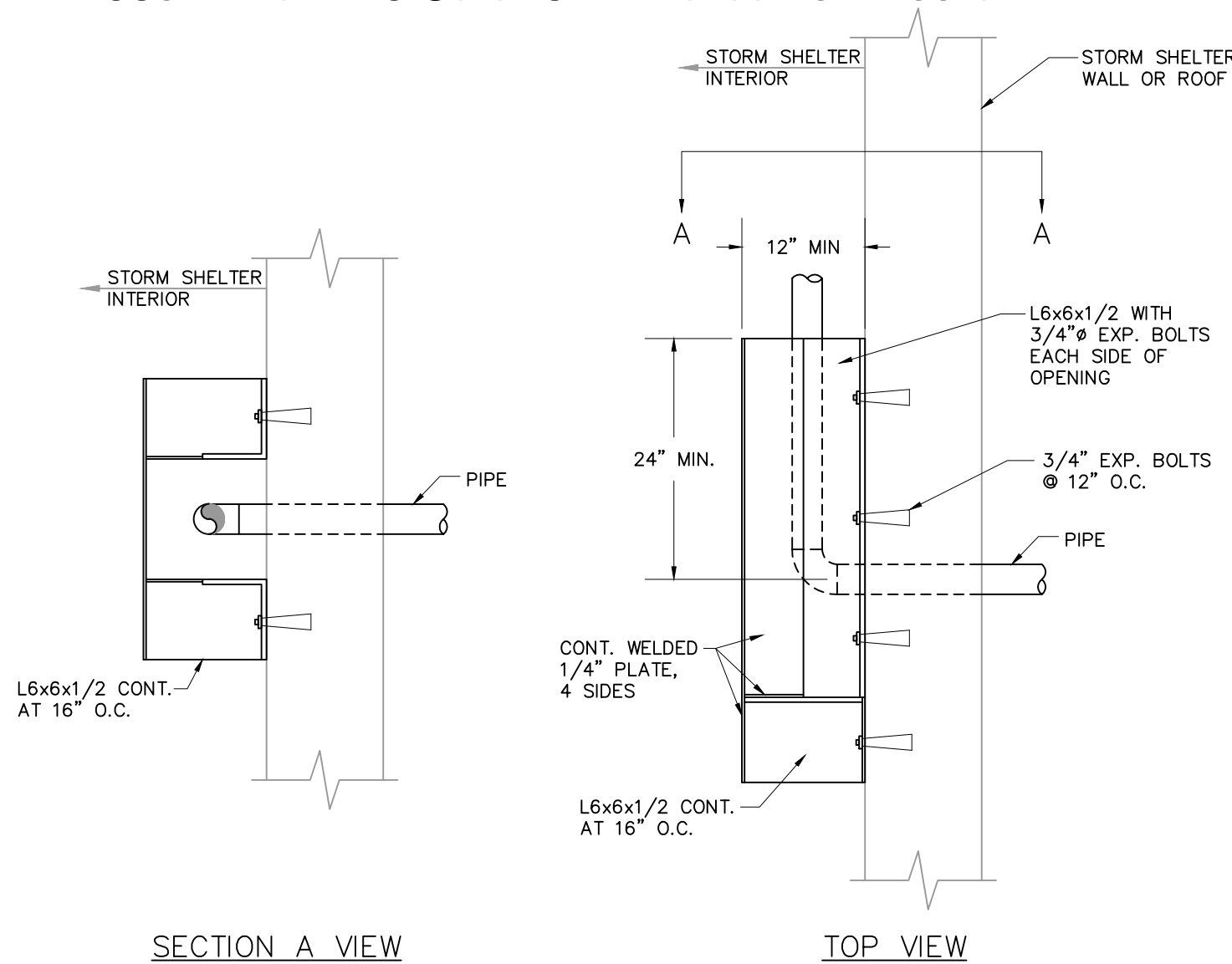
7
M2.2 NO SCALE
INLINE VENTILATION FAN INSTALLATION DETAIL



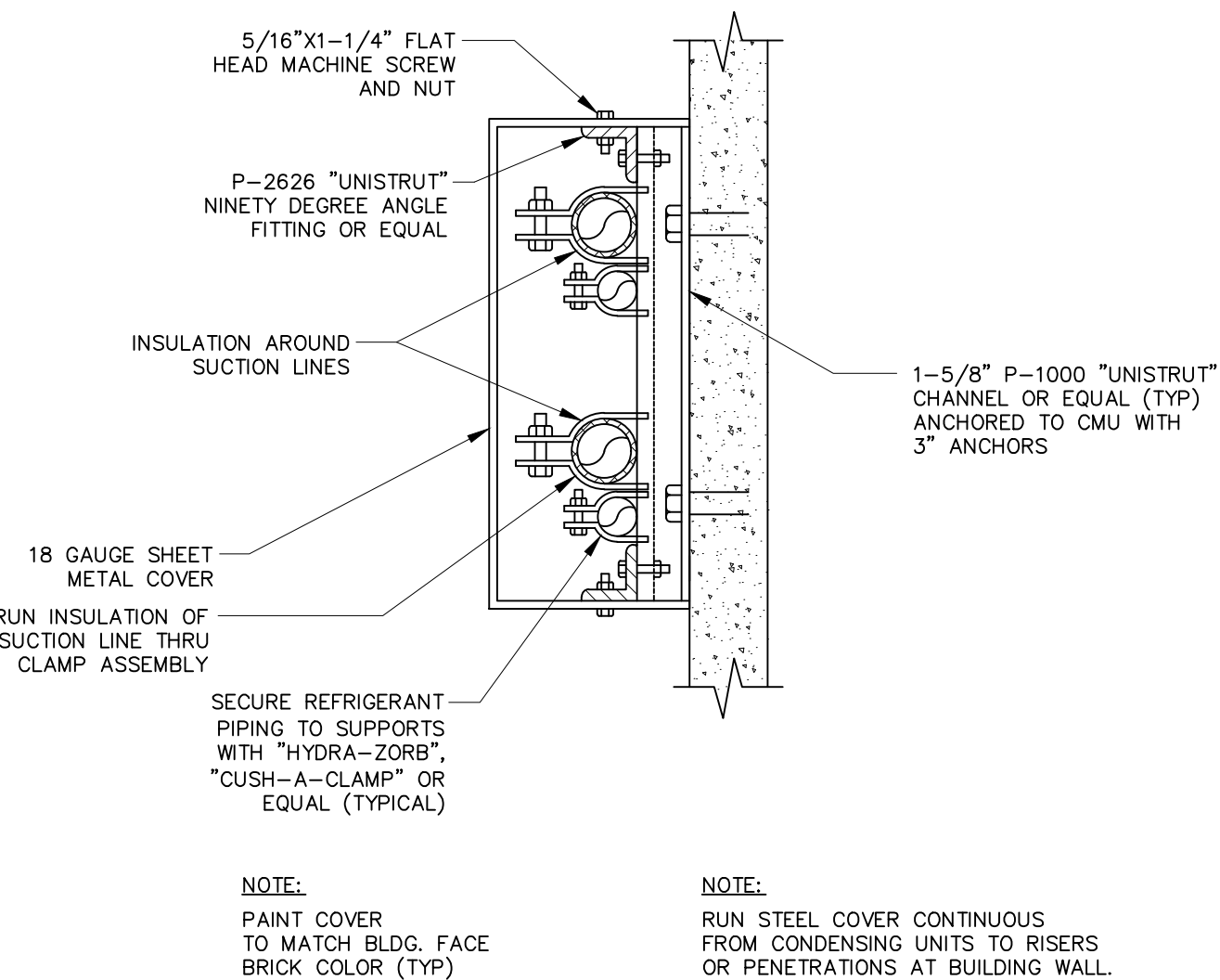
8
M2.2 NO SCALE
ROOF EXHAUST FAN DETAIL



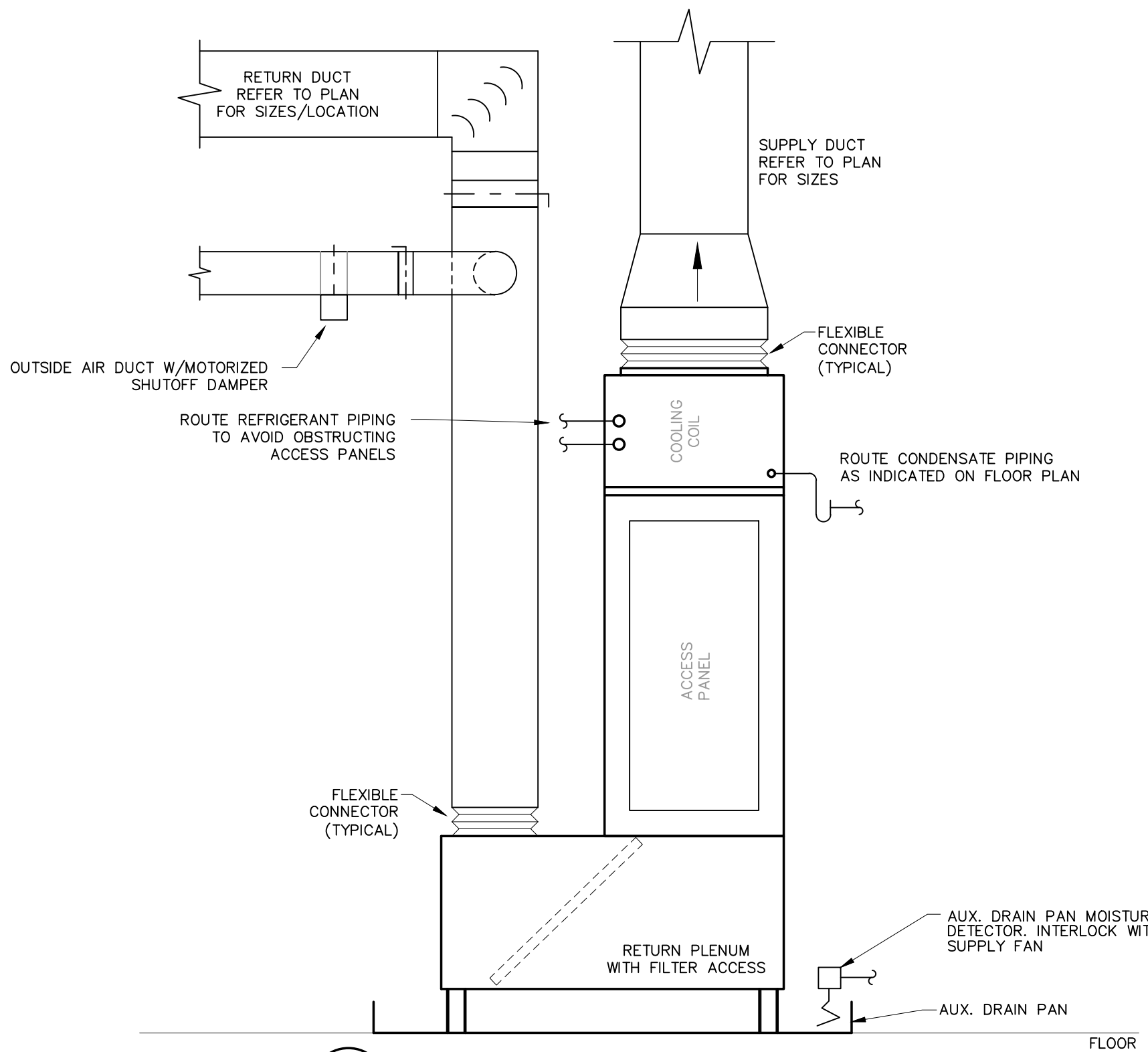
1
M2.2 NO SCALE
REFRIGERANT PIPING DETAIL



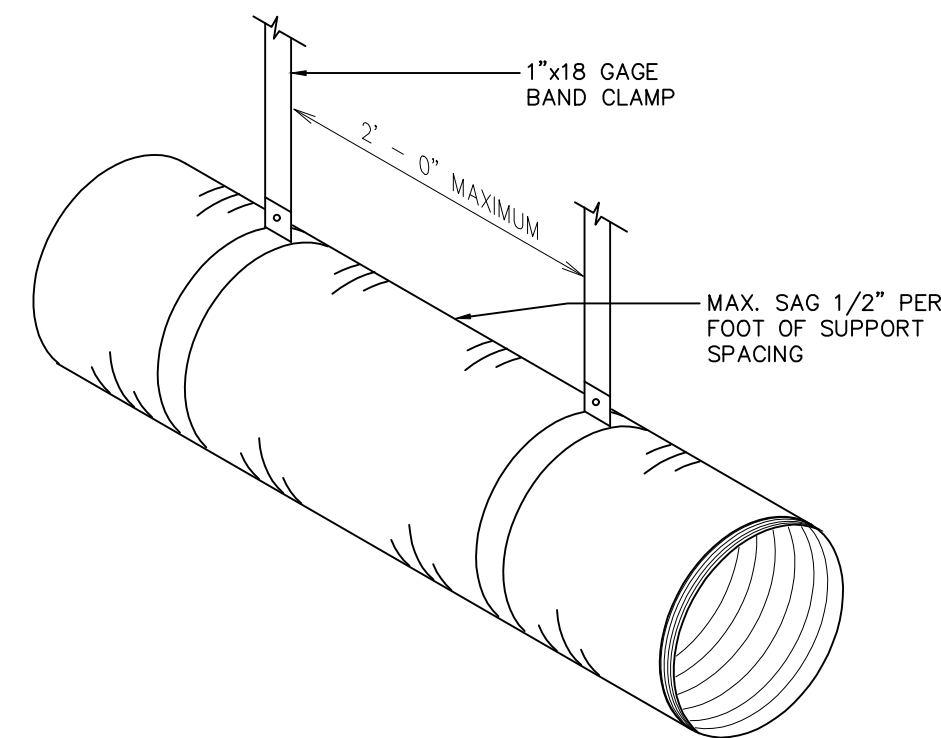
4
M2.2 NO SCALE
STORM SHELTER PENETRATION PROTECTION DETAIL



2
M2.2 NO SCALE
EXTERIOR REFRIGERANT PIPE SUPPORT DETAIL
TYPICAL FOR WALL-MOUNTED REFRIGERANT,
CONCRETE PAD-MOUNTED SIMILAR



5
M2.2 NO SCALE
INDOOR HEAT PUMP UNIT DETAIL

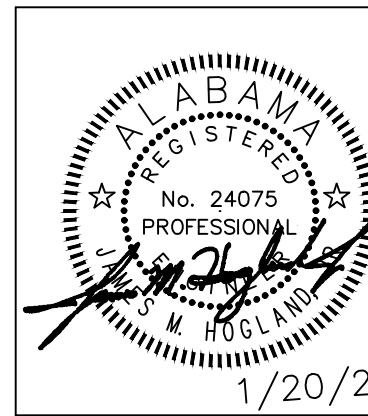


3
M2.2 NO SCALE
FLEXIBLE DUCT SUPPORT DETAIL



Engineering & Design Consultants
2111 Parkway Office Circle, Suite 125
Birmingham, AL 35244
(205) 733-6912 FAX: (205) 733-6913
Job No.: 22282 File: 22282D01

CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL
78975 HIGHWAY 77, LINCOLN, ALABAMA 35096
TALLADEGA COUNTY BOARD OF EDUCATION

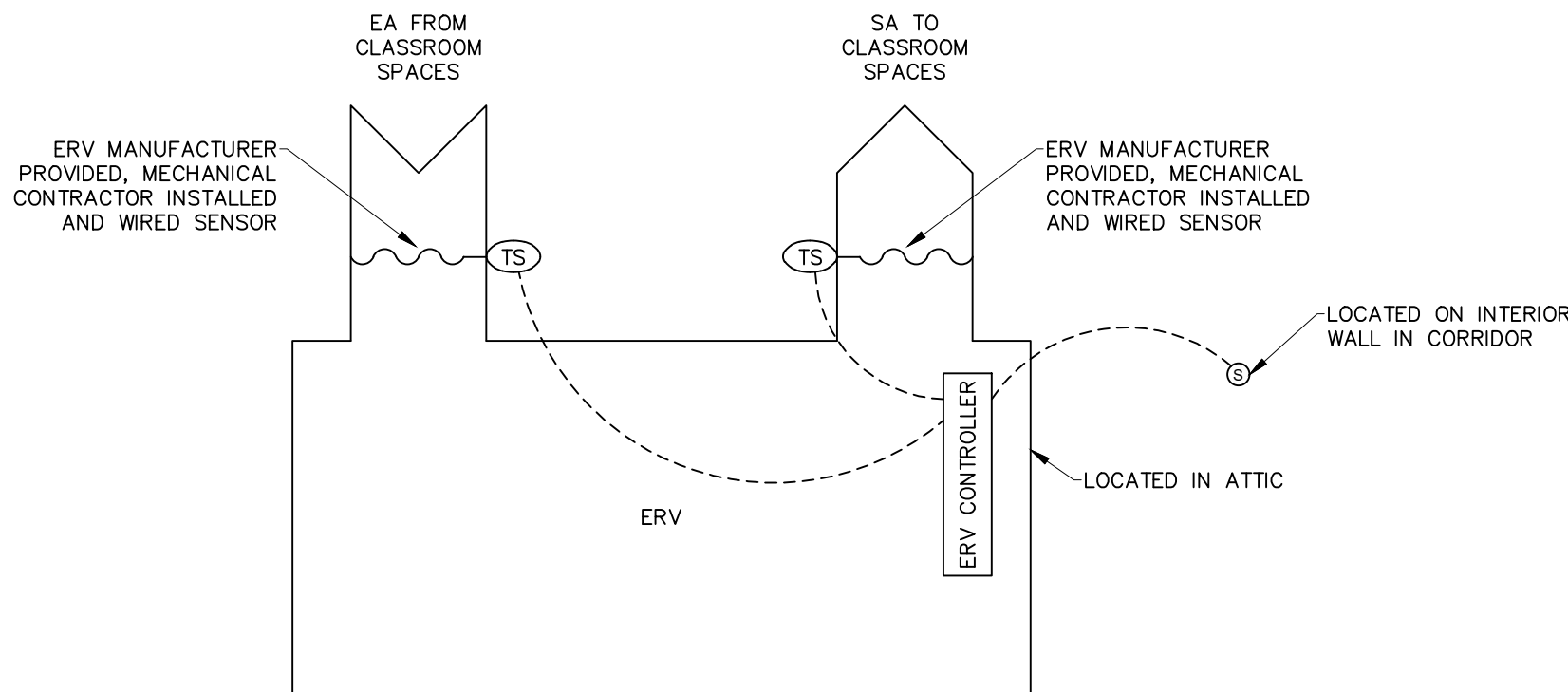


SHEET TITLE:
MECHANICAL OUTSIDE AIR
CALCULATIONS AND
CONTROL DIAGRAMS

PROJ. MGR.: JMH
DRAWN: ZBL/CRA
DATE: 1/20/23
REVISIONS

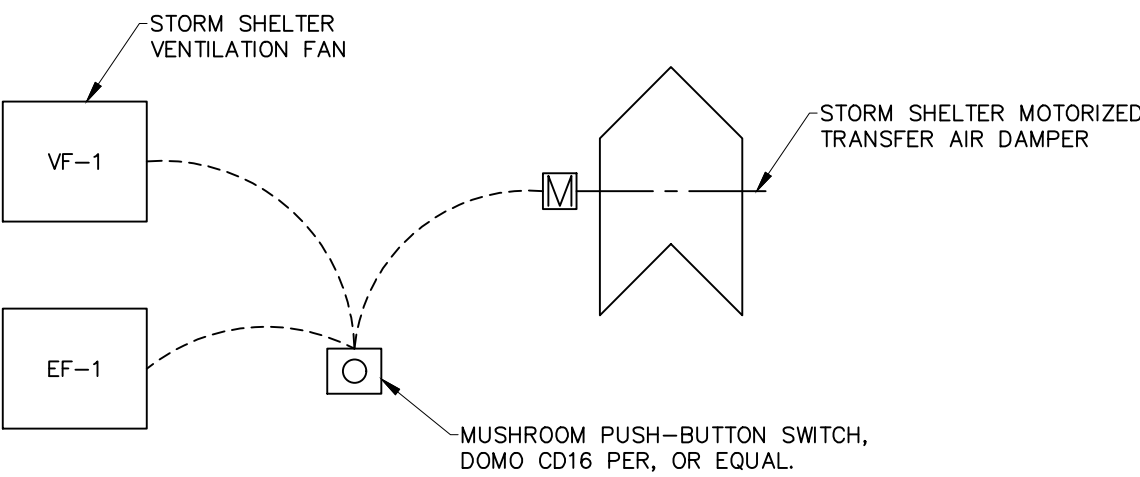
1	ADDENDUM NO. 3
---	----------------

JOB NO. 22-20
SHEET NO:
M2.3
0 1" 2"



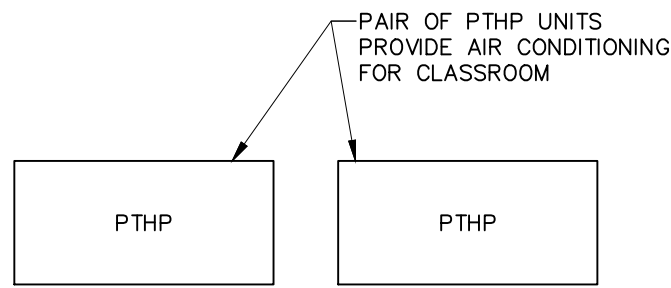
- NOTES:
- ERV AND ITS SENSORS, ETC. ARE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.
 - ERV MANUFACTURER SUPPLIES ON BOARD SENSORS TO BE COILED AND FIELD INSTALLED IN OUTSIDE AIR AND SUPPLY AIR DUCTWORK. REFER TO MANUFACTURER'S RECOMMENDATIONS ON LOCATION OF SENSORS.
 - ERV MANUFACTURER SUPPLIES REMOTE SPACE TEMPERATURE AND HUMIDITY SENSOR(S) TO BE WALL-MOUNTED AND WIRED BY THE MECHANICAL CONTRACTOR.

3 ERV CONTROL DIAGRAM M2.3 NO SCALE



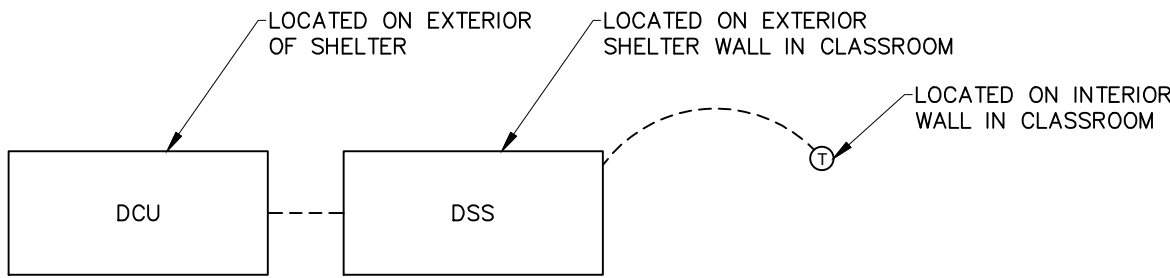
- NOTES:
- PROVIDE PERMANENT SIGN ABOVE MUSHROOM PUSH-BUTTON SWITCH. SIGN SHALL READ AS FOLLOWS: "WHEN SHELTER IS IN USE, TWIST AND RELEASE BUTTON TO ENGAGE SHELTER VENTILATION SYSTEM. WHEN SHELTER USE HAS ENDED, PUSH BUTTON TO DIS-ENGAGE SYSTEM."
 - PROVIDE ANY NECESSARY TRANSFORMER(S) AND/OR CONTACTOR(S) TO START EF-1 AND VF-1 AND OPEN THE RELIEF AIR DAMPER, UPON THE TWIST AND RELEASE OF THE MUSHROOM PUSH-BUTTON SWITCH.

4 SHELTER CONTROL DIAGRAM M2.3 NO SCALE



- NOTES:
- INDIVIDUAL PTHP SHALL BE PROVIDED WITH ON-BOARD FACTORY-INSTALLED THERMOSTAT AND CONTROLLER. NO REMOTE THERMOSTATS REQUIRED.

5 PTHP CLASSROOM CONTROL DIAGRAM M2.3 NO SCALE



- NOTES:
- INDIVIDUAL DSS SHALL BE PROVIDED WITH MANUFACTURER'S REMOTE CONTROLLER. REFER TO SPECIFICATIONS.

6 DSS CLASSROOM CONTROL DIAGRAM M2.3 NO SCALE

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft)	Zone Max Occupancy	Table 6.1 OA CFM per Occupant Rp	Table 6.1 cfm/f2 Ra	Pz * Rp	Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Vto/Ez)
DSS	Educational Facilities	Classrooms (age 9 plus)	415.0	14	10.0	0.12	140	50	0.8	237 OA required per VRP
Zone Height (feet)	9.0									
Desired Outside Air (Vol) (ACF)	200									
Supply Air Full Flow (Vol) (CFM)	840									
Supply Air Minimum Flow (Vol) (CFM)	350									
Return Air (Vol) (CFM)	640									
Recirc. Flow Factor (R)	0.26									
Design Flow Reduction Factor (F)	0.65									
Ventilation Effectiveness (Ez)	0.8									
Level of Physical Activity	Standing (desk work)									
Filter Location	8									
HVAC Flow Type	VAV									
Outdoor Air Flow Type	Constant									
Indoor Contaminants										
Generated By People & From Outdoors	Maximum Threshold Value (PPM)	(Prescribed OA) Plasma Off	(Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (lb/person/min)	Filtration Effectiveness	Cognizant Authority**			
Acetaldehyde	100.0	2.69E-09	1.39E-09	Yes	1.95E-05	50%	OSHA			
Acetone	250.0	1.47E-08	9.60E-09	Yes	1.96E-07	50%	NIOSH			
Ammonia	25.00	3.40E-07	2.24E-07	Yes	4.61E-06	50%	NIOSH			
Benzene	1.00	1.66E-08	1.06E-08	Yes	2.21E-07	50%	OSHA			
2-Butanone (MEK)	200.0	9.85E-07	6.50E-07	Yes	1.33E-05	50%	NIOSH			
Carbon dioxide**	5000	4.77E-05	4.82E-05	Yes	3.73E-05	0%	NIOSH			
Chloroform	2.0	3.05E-08	2.01E-08	Yes	4.13E-07	50%	NIOSH			
Dioxane	100.0	0.00E+00	0.00E+00	Yes	0.00E+00	50%	OSHA			
Hydrogen Sulfide	10.0	0.00E+00	0.00E+00	Yes	0.00E+00	50%	NIOSH			
Methane	NA	6.87E-08	6.87E-08	Yes	0.00E+00	0%	NA			
Methanol	200.0	1.24E-05	1.46E-05	Yes	1.65E-07	0%	NIOSH			
Methylene Chloride	25.0	8.94E-07	5.90E-07	Yes	1.21E-05	50%	OSHA			
Propane	1000.0	1.12E-09	1.12E-09	Yes	0.00E+00	0%	NIOSH			
Tetrachloroethane	5.0	0.00E+00	0.00E+00	Yes	0.00E+00	50%	OSHA			
Tetrachloroethylene	100.0	1.02E-06	6.70E-07	Yes	1.38E-05	50%	OSHA			
Toluene	100.0	3.79E-09	2.02E-09	Yes	3.44E-08	50%	NIOSH			
1,1,1-Trichloroethane	350.0	4.27E-05	9.98E-05	Yes	3.78E-04	50%	NIOSH			
Xylene	100.0	6.25E-10	1.74E-10	Yes	0.00E+00	50%	OSHA			

Building materials and furnishings assumed to have no VOCs and off-gassing is complete
All yellow shaded boxes require user input or review

Is IAQ acceptable at reduced outside air levels? Yes

1 IAQ METHOD CALCULATION M2.3 DSS (TYPICAL)

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft)	Zone Max Occupancy	Table 6.1 OA CFM per Occupant Rp	Table 6.1 cfm/f2 Ra	Pz * Rp	Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Vto/Ez)
PTHP	Educational Facilities	Classrooms (age 9 plus)	415.0	14	10.0	0.12	140	50	0.8	237 OA required per VRP
Zone Height (feet)	9.0									
Desired Outside Air (Vol) (ACF)	100									
Supply Air Full Flow (Vol) (CFM)	300									
Supply Air Minimum Flow (Vol) (CFM)	250									
Return Air (Vol) (CFM)	250									
Recirc. Flow Factor (R)	0.14									
Design Flow Reduction Factor (F)	0.64									
Ventilation Effectiveness (Ez)	0.8									
Level of Physical Activity	Standing (desk work)									
Filter Location	8									
HVAC Flow Type	VAV									
Outdoor Air Flow Type	Constant									
Indoor Contaminants										
Generated By People & From Outdoors	Maximum Threshold Value (PPM)	(Prescribed OA) Plasma Off	(Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (lb/person/min)	Filtration Effectiveness	Cognizant Authority**			
Acetaldehyde	100.0	2.69E-09	2.39E-09	Yes	1.95E-05	50%	OSHA			
Acetone	250.0	1.47E-08	2.04E-08	Yes	1.96E-07	50%	NIOSH			
Ammonia	25.00	3.40E-07	4.77E-07	Yes	4.61E-06	50%	NIOSH			
Benzene	1.00	1.66E-08	2.30E-08	Yes	2.21E-07	50%	OSHA			
2-Butanone (MEK)	200.0	9.85E-07	1.39E-06	Yes	1.33E-05	50%	NIOSH			
Carbon dioxide**	5000	4.77E-05	5.19E-05	Yes	3.73E-05	0%	NIOSH			
Chloroform	2.0	3.05E-08	4.27E-08	Yes	4.13E-07	50%	NIOSH			
Dioxane	100.0	0.00E+00	0.00E+00	Yes	0.00E+00	50%	OSHA			
Hydrogen Sulfide	10.0	0.00E+00	0.00E+00	Yes	0.00E+00	50%	NIOSH			
Methane	NA	6.87E-08	6.87E-08	Yes	0.00E+00	0%	NA			
Methanol	200.0	1.24E-05	2.35E-05	Yes	1.65E-07	0%	NIOSH			
Methylene Chloride	25.0	8.94E-07	1.25E-06	Yes	1.21E-05	50%	OSHA			
Propane	1000.0	1.12E-09	1.12E-09	Yes	0.00E+00	0%	NIOSH			
Tetrachloroethane	5.0	0.00E+00	0.00E+00	Yes	0.00E+00	50%	OSHA			
Tetrachloroethylene	100.0	1.02E-06	1.42E-06	Yes	1.38E-05	50%	OSHA			
Toluene	100.0	3.79E-09	3.90E-09	Yes	3.44E-08	50%	NIOSH			
1,1,1-Trichloroethane	350.0	4.27E-05	9.98E-05	Yes	3.78E-04	50%	NIOSH			
Xylene	100.0	6.25E-10	1.65E-10	Yes	0.00E+00	50%	OSHA			

Building materials and furnishings assumed to have no VOCs and off-gassing is complete
All yellow shaded boxes require user input or review

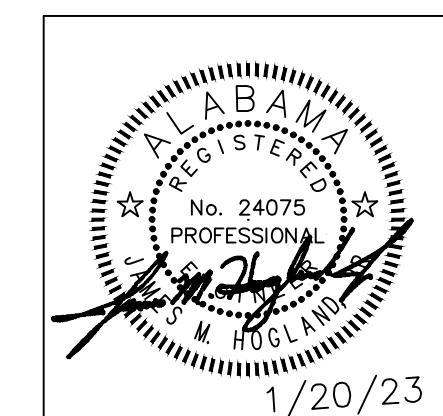
Is IAQ acceptable at reduced outside air levels? Yes

2 IAQ METHOD CALCULATION M2.3 PTHP (TYPICAL)



LATHAN
ARCHITECTS
LATHAN • BRYANT • CALMA

CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL
78975 HIGHWAY 77, LINCOLN, ALABAMA 35096
TALLADEGA COUNTY BOARD OF EDUCATION



SHEET TITLE:
PLUMBING GRAVITY
FLOOR PLAN

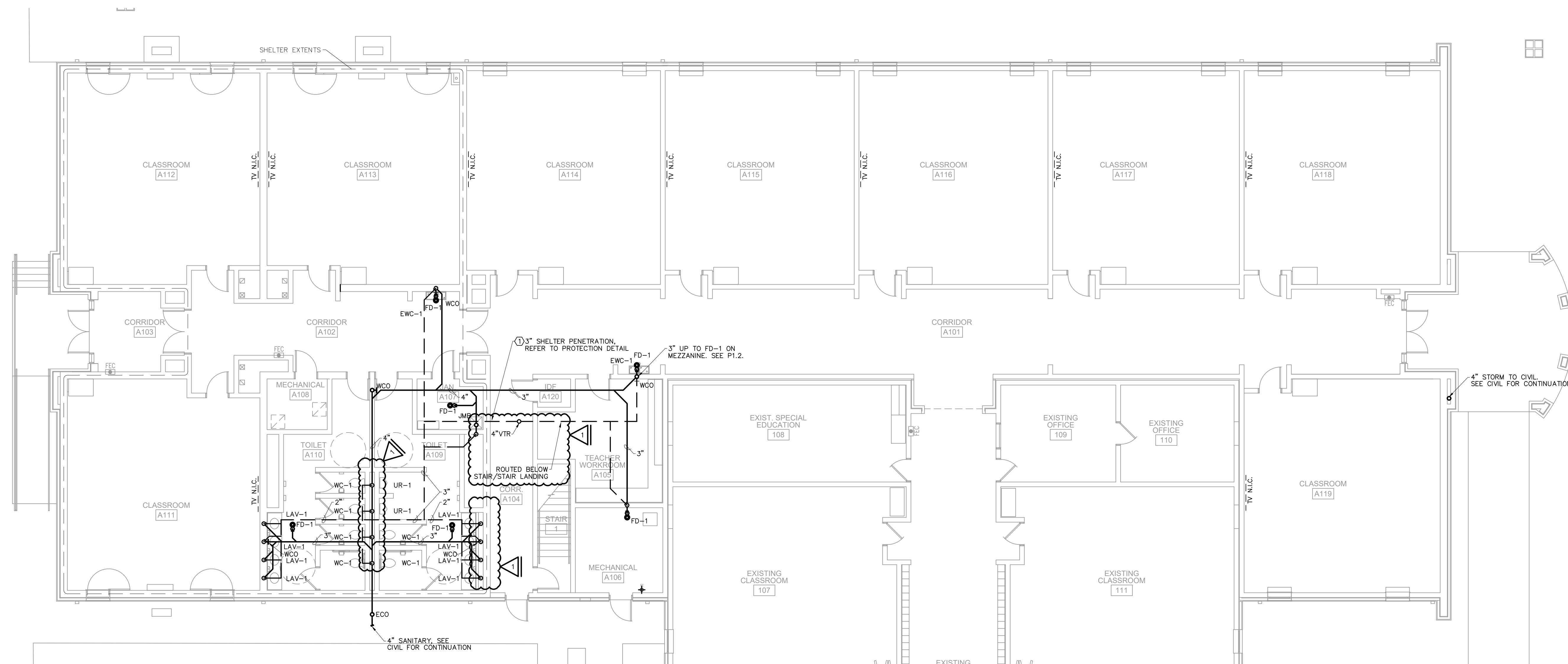
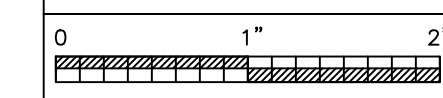
PROJ. MGR.:	JMH
DRAWN:	ZBL/CRA
DATE:	1/20/23
REVISIONS	

1	ADDENDUM NO. 3
---	----------------

JOB NO. 22-20

SHEET NO:

P1.1



FLOOR PLAN

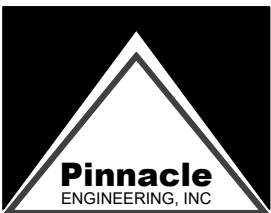


GENERAL NOTES:

- 1 CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO BEGINNING WORK.
- 2 SPACE ABOVE CEILING IS LIMITED. CAREFUL COORDINATION WITH LIGHTING, ELECTRICAL, MECHANICAL, FIRE PROTECTION, STRUCTURAL, AND ARCHITECTURAL WORK IS CRITICAL FOR COMPLETE PIPING INSTALLATION. CONTRACTOR SHALL PROVIDE NECESSARY OFFSETS IN NEW AND EXISTING PIPING AND ELECTRICAL CONDUIT AS REQUIRED TO ACCOMMODATE NEW WORK. CONTRACTOR SHALL ALLOW FOR ANY CONFLICTS ENCOUNTERED.
- 3 COORDINATION SHOP DRAWINGS SHALL BE PREPARED FOR THE ENTIRE PROJECT DRAWN TO 1/4" = 10' SCALE (MINIMUM). DRAWINGS SHALL BE FULLY DIMENSIONED, INCLUDING ELEVATIONS OF DUCTWORK AND PIPING, SHOWING CEILING GRIDS, LIGHTING LAYOUTS, PIPING UNDER OTHER DEVICES, CABLE TRAYS AND MAJOR ELECTRICAL CONDUIT (2" AND LARGER).
- 4 PIPING LAYOUTS ARE DIAGRAMMATIC AND DO NOT SHOW ALL ELEMENTS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGES IN DIRECTION, ELEVATION AND MINOR OFFSETS NECESSARY FOR COMPLETE INSTALLATION OF ELEMENTS SHOWN.
- 5 ALL WASTE PIPING SHOWN IS BELOW FINISHED FLOOR UNLESS OTHERWISE NOTED. ALL VENT PIPING SHOWN IS ABOVE CEILING UNLESS OTHERWISE NOTED.
- 6 REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF ALL CEILING MOUNTED DEVICES. REFER TO ARCHITECTURAL FLOOR PLANS FOR ALL DIMENSIONS.
- 7 COORDINATE ACCESS DOOR LOCATIONS WITH GENERAL CONTRACTOR AND ARCHITECT.
- 8 RESTROOM FLOOR DRAINS HAVE BEEN COORDINATED WITH PARTITIONS AND FIXTURES. REFER TO ARCHITECTURAL PLANS TO ENSURE FINAL LOCATION OF PARTITIONS DOES NOT INTERFERE WITH FLOOR DRAINS.

DRAWING NOTES:

- ① PROTECT PENETRATION OPENINGS THROUGH STORM SHELTER PERIMETER IN ACCORDANCE WITH ICC 500 REQUIREMENTS. COORDINATE WITH STRUCTURAL PLANS. ANCHOR PIPING TO INTERIOR OF SHELTER WALL AT PENETRATION. REFER TO DETAIL #4, SHEET P0.1.

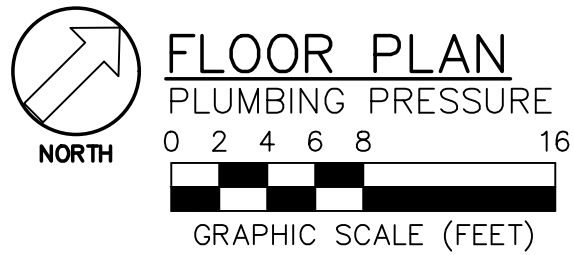
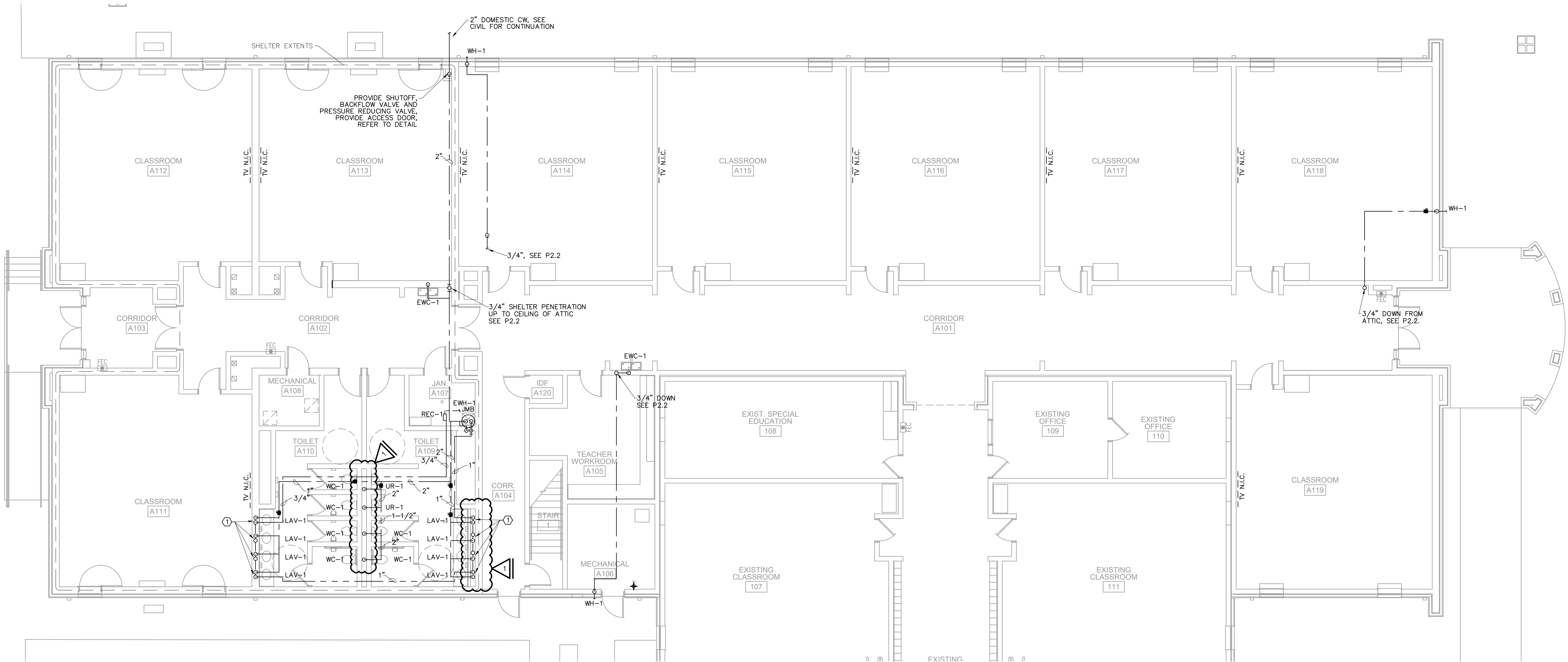


Engineering & Design Consultants
2111 Parkway Office Circle, Suite 125
Birmingham, AL 35244
(205) 733-6912 FAX: (205) 733-6913
Job No.: 22282 File: 22282U01



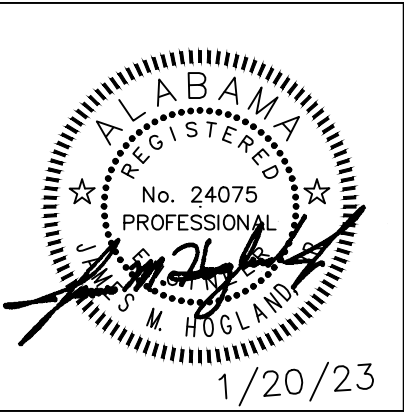
LATHAN
ARCHITECTS
LATHAN • BRYANT • CALMA

CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL
78975 HIGHWAY 77, LINCOLN, ALABAMA 35096
TALLADEGA COUNTY BOARD OF EDUCATION



- GENERAL NOTES:**
- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO BEGINNING WORK.
 - SPACE ABOVE CEILING IS LIMITED. CAREFUL COORDINATION WITH LIGHTING, ELECTRICAL, MECHANICAL, FIRE PROTECTION, STRUCTURAL AND ARCHITECTURAL WORK IS CRITICAL FOR COMPLETE PIPING INSTALLATION. CONTRACTOR SHALL PROVIDE NECESSARY OFFSETS IN NEW AND EXISTING PIPING AND ELECTRICAL CONDUIT AS REQUIRED TO ACCOMMODATE NEW WORK. CONTRACTOR SHALL ALLOW FOR ANY CONFLICTS ENCOUNTERED.
 - COORDINATION SHOP DRAWINGS SHALL BE PREPARED FOR THE ENTIRE PROJECT DRAWN TO 1/4" = 1'0" SCALE (MINIMUM.) DRAWINGS SHALL BE FULLY DIMENSIONED, INCLUDING ELEMENTS OF DUCTWORK AND PIPING, SHOWING CEILING GRIDS, LIGHTING LAYOUTS, PIPING UNDER OTHER DIVISIONS, CABLE TRAYS AND MAJOR ELECTRICAL CONDUIT (2" AND LARGER).
 - PIPING LAYOUTS ARE DIAGRAMMATIC AND DO NOT SHOW ALL ELEMENTS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES ON DIRECTION, ELEVATION AND MINOR OFFSETS NECESSARY FOR COMPLETE INSTALLATION OF ELEMENTS SHOWN.
 - ALL PRESSURE PIPING SHOWN IS ABOVE THE CEILING UNLESS OTHERWISE NOTED.
 - REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF ALL CEILING MOUNTED DEVICES. REFER TO ARCHITECTURAL FLOOR PLANS FOR ALL DIMENSIONS.
 - COORDINATE ACCESS DOOR LOCATIONS WITH GENERAL CONTRACTOR AND ARCHITECT.

- DRAWING NOTES:**
- HW PIPING SHALL BE ROUTED DOWN IN WALL TO FIXTURE STOP AND LOOPED BACK UP TO NEXT FIXTURE PER IECC CODE. TYPICAL FOR HANDWASHING LAVS.



SHEET TITLE:
PLUMBING PRESSURE
FLOOR PLAN

PROJ. MGR.:	JMH
DRAWN:	ZBL/CRA
DATE:	1/20/23
REVISIONS	
1	ADDENDUM NO. 3

JOB NO. 22-20
SHEET NO:
P2.1

GENERAL NOTES

1.0 DESIGN CRITERIA

1.1 CODES AND SPECIFICATIONS:

- A. GENERAL BUILDING CODE:
INTERNATIONAL BUILDING CODE, 2021 EDITION
- B. CONCRETE:
BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-19)
- C. PRECAST CONCRETE:
PCI DESIGN HANDBOOK, LATEST EDITION
PCI MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTIONS FOR PRECAST CONCRETE PRODUCTS, LATEST EDITION
- D. ARCHITECTURAL PRECAST CONCRETE:
PCI MNL-122 ARCHITECTURAL PRECAST CONCRETE, LATEST EDITION
PCI MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF ARCHITECTURAL PRECAST CONCRETE PRODUCTS, LATEST EDITION
- E. STRUCTURAL STEEL:
SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISI/AISC 360-16)
- F. STEEL DECK:
STEEL DECK INSTITUTE DESIGN MANUALS FOR COMPOSITE DECKS, NON-COMPOSITE DECKS, AND ROOF DECKS, LATEST EDITIONS
- G. MASONRY:
SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-16)
BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402-16)
NATIONAL CONCRETE MASONRY ASSOCIATION'S STANDARD PRACTICES AND "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY", LATEST EDITION
- H. COLD-FORMED STEEL FRAMING:
NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE (AISI 5100-16(2020) W/S2-20)
OTHER APPLICABLE AISI STANDARDS, AMERICAN IRON AND STEEL INSTITUTE, LATEST EDITION
- I. STORM SHELTER SAFE SPACE:
ICC/NSA STANDARD FOR THE DESIGN AND CONSTRUCTION OF STORM SHELTERS (ICC 500-2020)

1.2 DESIGN GRAVITY LOADS (PSF):

- A. DEAD LOADS:
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.
- B. FLOOR LIVE LOADS:
NON-REDUCIBLE PARTITION LIVE LOAD OF 20 PSF HAS BEEN INCLUDED PER IBC SECTION 1607.5.
LIVE LOAD REDUCTIONS AS DETERMINED BY IBC SECTION 1607.12 HAVE BEEN TAKEN WHERE PERMITTED.
- FLOOR (REDUCIBLE)-----100
SHELTER FLOOR (UNREDUCIBLE)-----100
SHELTER ROOF (UNREDUCIBLE)-----100
STORAGE-----125
MECHANICAL ROOM-----150
MECHANICAL MEZZANINE-----150
STAIRS & EXITSWAYS-----100
- C. ROOF LIVE LOADS:
WHERE PERMITTED ROOF LIVE LOADS ARE REDUCED FROM THE BASE VALUE SHOWN BELOW IN ACCORDANCE WITH IBC SECTION 1607.14.
- ROOF-----20
SHELTER ROOF (UNREDUCIBLE)-----100
SHELTER COLLAPSE LOAD (UNREDUCIBLE)-----135
- D. ROOF SNOW LOADS:
GROUND SNOW LOAD (Pg)-----5.0
IMPORTANCE FACTOR (I)-----1.1
EXPOSURE FACTOR (Ce)-----1.0
THERMAL FACTOR (Ct)-----1.0

1.3 DESIGN LATERAL LOADS:

- A. WIND LOADS:
ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)-----116 MPH
NOMINAL WIND SPEED (3-SECOND GUST)-----96 MPH
RISK CATEGORY-----III
WIND IMPORTANCE FACTOR (I)-----1.00
WIND EXPOSURE CATEGORY-----C
ENCLOSURE CATEGORY-----ENCLOSED
INTERNAL PRESSURE COEFFICIENTS----- +/- 0.18
SEE TYPICAL DETAILS FOR COMPONENT AND CLADDING LOADS
- B. SEISMIC LOADS:
OCCUPANCY CATEGORY III (GROUP E OCCUPANCIES WITH OCCUPANCY > 250)
SEISMIC IMPORTANCE FACTOR-----1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
Ss-----0.253
S1-----0.094
SITE CLASS-----D
SPECTRAL RESPONSE COEFFICIENTS:
SDS-----0.270
SD1-----0.153
SEISMIC DESIGN CATEGORY-----C
BASIC SEISMIC-FORCE-RESISTING SYSTEM:
INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR:-----150 KIPS
SEISMIC RESPONSE COEFFICIENT, Cs-----0.0962
RESPONSE MODIFICATION FACTOR, R-----3.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
- C. STORM SHELTER SAFE SPACE WIND LOADS:
TYPE OF SHELTER-----TORNADO
SHELTER DESIGN WIND SPEED-----250 MPH
WIND IMPORTANCE FACTOR (I)-----1.0
WIND EXPOSURE CATEGORY-----C
INTERNAL PRESSURE COEFFICIENTS (Gcpi)----- +/- 0.55
TOPOGRAPHIC FACTOR (Kzt)-----1.0
DIRECTIONALITY FACTOR (Kd)-----1.0
HOST BUILDING CONNECTIONS TO SHELTER HAVE BEEN DESIGNED PER INTENT OF ICC 500.
STORM SHELTER HAS NOT BEEN CONSTRUCTED IN AN AREA SUSCEPTIBLE TO FLOODING PER ICC 500 SECTION 402.1.
PER ICC 500, SPECIAL INSPECTION AND QUALITY ASSURANCE REQUIREMENTS HAVE BEEN INCLUDED WITHIN THE PROJECT SPECIFICATIONS - REFER TO SPEC. SECTION 01410.

2.0 GENERAL CONDITIONS

- 2.1 THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL DESIGN GROUP.
- 2.2 ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES, AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY STRUCTURAL DESIGN GROUP AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF STRUCTURAL DESIGN GROUP. STRUCTURAL DESIGN GROUP SHALL RETAIN ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THERETO.

- 2.3 CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER AND ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.
- 2.4 WHERE SHOP DRAWINGS, CALCULATIONS, OR SUBMITTALS ARE CALLED FOR IN THE PROJECT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) AND ARE NOT PROVIDED BY THE CONTRACTOR, THE CONTRACTOR ASSUMES TOTAL RESPONSIBILITY FOR THE DESIGN AND ASSOCIATED WORK.
- 2.5 ENGINEER'S SHOP DRAWING REVIEW IS LIMITED TO REVIEW FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT REFLECTED IN THE STRUCTURAL PORTION OF THE CONTRACT DOCUMENTS. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS OR OTHER PROJECT CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED OR IMPLIED FOR THE CORRECTNESS OF DIMENSIONS OR DETAILS. THIS REVIEW DOES NOT AUTHORIZE CHANGES TO THE CONTRACT SIN UNLESS STATED IN A SEPARATE WRITTEN FORM OR CHANGE ORDER. CONTRACTOR SHALL CONFIRM AND CORRELATE ALL QUANTITIES AND DIMENSIONS, SELECT FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATE HIS WORK WITH THAT OF OTHER TRADES, AND PERFORM HIS WORK IN A SAFE AND SATISFACTORY MANNER. CONTRACTOR SHALL ALSO REFER TO THE REQUIREMENTS OF THE GENERAL AND SUPPLEMENTARY GENERAL CONDITIONS.
- 2.6 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.
- 2.7 VERIFY ALL DIMENSIONS AND DETAILS SHOWN ON THESE DRAWINGS. ANY DISCREPANCIES OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY RELATED WORK.
- 2.8 THESE DRAWINGS DO NOT INCLUDE PROVISIONS TO SATISFY JOB SITE SAFETY REQUIREMENTS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING SAFETY DURING CONSTRUCTION AND FOR CONFORMANCE TO ALL APPLICABLE OSHA STANDARDS. JOBSITE VISITS BY ENGINEER SHALL NOT CONSTITUTE APPROVAL, AWARENESS OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.
- 2.9 STRUCTURAL DESIGN GROUP IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, SAFETY PROCEDURES, CONSTRUCTION SUPERVISION OR SITE SAFETY, AND DOES NOT HAVE THE AUTHORITY TO STOP WORK FOR THESE ITEMS. DRAWINGS FURTHER DO NOT PROVIDE ENGINEERING CONTROLS FOR SILICA STANDARD OR ANY OTHER SAFETY STANDARD.
- 2.10 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR BRACING AND SHORING ALL EXCAVATIONS, Dewatering of excavation from either surface water, ground water or seepage, temporary and existing structures, and partially completed portions of the work to assure the safety of any person coming in contact with the work.
- 2.11 THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT UPON COMPLETION ACCORDING TO THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER OF RECORD ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ANY NECESSARY BRACING, GUYS, ETC. TO PROPERLY BRACE THE STRUCTURE AGAINST WIND, DEAD AND LIVE LOADS UNTIL THE BUILDING IS COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. ANY QUESTIONS REGARDING TEMPORARY BRACING REQUIREMENTS SHOULD BE FORWARDED TO A STRUCTURAL ENGINEER FOR REVIEW.
- 2.12 MECHANICAL UNITS AND ANY OTHER EQUIPMENT SUPPORTED BY THE STRUCTURE WITH WEIGHTS IN EXCESS OF 200 LBS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.
- 2.13 WHERE NOTED IN DRAWINGS AND SPECIFICATIONS TO INSTALL PRODUCTS PER THE MANUFACTURER'S RECOMMENDATIONS, IT SHALL BE REQUIRED THAT THE CONTRACTOR FOLLOWS THE MANUFACTURER'S RECOMMENDATIONS.
- 2.14 THE OWNER SHALL RETAIN THE SERVICES OF INDEPENDENT AGENCIES TO PERFORM THE CONSTRUCTION MATERIAL TESTING AND CODE REQUIRED SPECIAL INSPECTIONS. AS CONSTRUCTION PROGRESSES, FORWARD COPIES OF TESTING AND INSPECTION REPORTS TO THE STRUCTURAL ENGINEER FOR REVIEW. SDG CANNOT ISSUE A CERTIFICATE OF SATISFACTORY COMPLETION OR ANY OTHER TYPE OF REPORTS AND FINAL CERTIFICATES ISSUED BY EACH OF THE INDEPENDENT AGENCIES.

- 2.15 STRUCTURAL OBSERVATIONS BY SDG ARE VISUAL OBSERVATIONS OF THE IN-PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED STRUCTURAL PORTIONS OF THE CONSTRUCTION DOCUMENTS AT THE TIME OF THE OBSERVATION AND SHALL NOT BE CONSTRUED AS INSPECTION OR APPROVAL OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TESTING AND SPECIAL INSPECTIONS PER THE REQUIREMENTS IN THE PROJECT MANUAL AND CONSTRUCTION DOCUMENTS.
- 2.16 OBSERVATION BY THE STRUCTURAL ENGINEER OF RECORD'S OFFICE DOES NOT REPLACE INSPECTIONS AND TESTING BY THE SPECIAL INSPECTOR AND TESTING AGENCY.
- 2.17 ANY CLAIMS FOR DELAYS OR DAMAGES SHALL BE SENT TO THE OWNER, ARCHITECT AND STRUCTURAL ENGINEER IN A STANDALONE LETTER TITLED "DELAY/DAMAGE NOTICE" WITHIN 48 HOURS OF THE CONTRACTOR LEARNING OF THE CLAIM. CLAIMS EMBEDDED IN DAILY REPORTS WILL NOT BE CONSIDERED.

- 2.18 THE OWNER SHALL RETAIN THE SERVICES OF INDEPENDENT AGENCIES TO PERFORM THE CONSTRUCTION MATERIAL TESTING AND CODE REQUIRED SPECIAL INSPECTIONS. AS CONSTRUCTION PROGRESSES, FORWARD COPIES OF TESTING AND INSPECTION REPORTS TO THE STRUCTURAL ENGINEER FOR REVIEW. SDG CANNOT ISSUE A CERTIFICATE OF SATISFACTORY COMPLETION OR ANY OTHER TYPE OF REPORTS AND FINAL CERTIFICATES ISSUED BY EACH OF THE INDEPENDENT AGENCIES.
- 2.19 STRUCTURAL OBSERVATIONS BY SDG ARE VISUAL OBSERVATIONS OF THE IN-PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED STRUCTURAL PORTIONS OF THE CONSTRUCTION DOCUMENTS AT THE TIME OF THE OBSERVATION AND SHALL NOT BE CONSTRUED AS INSPECTION OR APPROVAL OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TESTING AND SPECIAL INSPECTIONS PER THE REQUIREMENTS IN THE PROJECT MANUAL AND CONSTRUCTION DOCUMENTS.
- 2.20 OBSERVATION BY THE STRUCTURAL ENGINEER OF RECORD'S OFFICE DOES NOT REPLACE INSPECTIONS AND TESTING BY THE SPECIAL INSPECTOR AND TESTING AGENCY.

3.0 FOUNDATIONS

- 3.1 GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL ENGINEERING REPORT BY TERRACON CONSULTANTS, INC., TITLED "PROPOSED LINCOLN HIGH SCHOOL CLASSROOM ADDITION, LINCOLN, TALLADEGA COUNTY, ALABAMA, DATED DECEMBER 7, 2022, TERRACON PROJECT NO. E1225186" ALONG WITH ANY SUPPLEMENTAL CORRESPONDENCE. THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS AND RECOMMENDATIONS. GEOTECHNICAL RECOMMENDATIONS SHALL TAKE PRECEDENCE OVER THE ITEMS THAT FOLLOW IN THIS SECTION OF THE STRUCTURAL GENERAL NOTES.
- 3.2 MAXIMUM ALLOWABLE BEARING PRESSURE PER GEOTECHNICAL REPORT: 2000 PSF
NOTE: ALL FOOTING BEARING ELEVATIONS SHALL BE BEARING IN SIMILAR MATERIAL (NATIVE SOILS OR WEATHERED BEDROCK). EXTEND FOOTINGS AS NECESSARY WITH LEAN CONCRETE OR FLOWABLE FILL.
- 3.3 ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL FOOTING ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
- 3.4 COMPACTED FILL WITHIN THE BUILDING AREA (AND EXTENDING 10'-0" OUTSIDE THE EXTERIOR BUILDING LINE) SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.
- 3.5 BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL, SUCH AS SIZE #57 STONE. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE FOOTING TO WITHIN 18" OF FINISH GRADE ON EXTERIOR AND TO UNDERSIDE OF SLAB ON INTERIOR. AT EXTERIOR, CAP GRANULAR BACKFILL WITH 18" OF SOIL.
- 3.6 GRANULAR BACKFILL SUPPORTING A FOOTING SHALL BE COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. PROVIDE A 12" THICK CAP OF PROPERLY COMPACTED CRUSHER RUN STONE BETWEEN THE FOOTING AND THE PROPERLY COMPACTED GRANULAR BACKFILL. EXTEND CRUSHER RUN CAP TWO FEET BEYOND THE PERIMETER OF THE FOOTING OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- 3.7 FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28 DAY COMPRESSIVE STRENGTH.
- 3.8 DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS UNTIL UPPER BRACING FORCES ARE IN PLACE FOR AT LEAST SEVEN DAYS AND HAVE ATTAINED 75% OF DESIGN STRENGTH.
- 3.9 WHERE CONCRETE WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.
- 3.10 WHERE SPREAD FOOTINGS ARE AT THE SAME ELEVATION AS CONTINUOUS WALL FOOTINGS, REINFORCING STEEL IN CONTINUOUS WALL FOOTINGS SHALL EXTEND THRU SPREAD FOOTINGS. WHERE SPREAD FOOTINGS ARE BELOW CONTINUOUS WALL FOOTINGS, CONTINUOUS WALL FOOTINGS ARE TO STEP DOWN ONTO SPREAD FOOTINGS.
- 3.11 SUBGRADE AND GRANULAR FILL SUPPORTING SLABS ON GRADE SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL REPORT AND COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. SPECIFICATIONS FOR VAPOR RETARDER BENEATH SLABS ON GRADE
- 3.12 GRANULAR FILL BENEATH SLABS, UNLESS NOTED OTHERWISE, SHALL BE 4" COMPACTED #57 STONE.

- 3.13 VAPOR RETARDER BENEATH SLABS ON GRADE, UNLESS NOTED, SHALL MEET ASTM E 1745, CLASS A, 15 MIL MINIMUM THICKNESS WITH MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE TAPE AND PIPE BOOTIS, SUCH AS W.R. MEADOWS INC. PRODUCT PERMINATOR 15.
- 3.14 NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 2:1 (TWO HORIZONTAL TO ONE VERTICAL) TO A FOOTING.

4.0 CONCRETE

- 4.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.
- 4.2 CONCRETE STRENGTH AND DURABILITY REQUIREMENTS: MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (PSI), TYPE OF CONCRETE, MAXIMUM WATER/CEMENTITIOUS RATIO, AIR CONTENT, SLUMP, AND CONCRETE USE:
- | STRENGTH TYPE | MAX W/C | AIR | SLUMP | USE |
|-----------------|---------|------|----------|----------------|
| 3000 NORMAL WT. | 0.57 | ---- | 3" TO 5" | FOOTINGS |
| 3500 NORMAL WT. | 0.50 | ---- | 3" TO 5" | SLABS ON GRADE |
| 4000 NORMAL WT. | 0.45 | 4-6% | 3" TO 5" | UNLESS NOTED |
- A. CONCRETE MIX DESIGN SHALL BE WORKABLE WITH LOWEST TOTAL WATER PER CUBIC YARD USING LARGEST PRACTICAL MAXIMUM SIZE OF COURSE AGGREGATE.

4.3 REINFORCING BARS: ASTM A615 GRADE 60.

- 4.4 WATERSTOPS: FLEXIBLE PVC WATERSTOPS, CR C90-C 572, UNLESS NOTED OTHERWISE, WITH FACTORY-INSTALLED METAL VEELETS. FOR EMBEDDING IN CONCRETE TO PREVENT PASSAGE OF FLUIDS THROUGH JOINTS, FACTORY FABRICATE CORNERS, INTERSECTIONS, AND DIRECTIONAL CHANGES. ACCEPTABLE MANUFACTURER IS THE GREENSTREAK GROUP, INC, 800-325-9504, OR EQUAL. PROFILE SHALL BE FLAT, DUMBELL WITH CENTER BULB WITH DIMENSIONS OF 6 INCHES BY 3/8 INCH THICK.
- A. FLEXIBLE WATERSTOP INSTALLATION: INSTALL IN CONSTRUCTION JOINTS AND AT OTHER JOINTS INDICATED TO FORM A CONTINUOUS DIAPHRAGM. INSTALL IN LONGEST LENGTHS PRACTICABLE. SUPPORT AND PROTECT EXPOSED WATERSTOPS DURING PROGRESS OF THE WORK.
- 4.5 REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.
- 4.6 REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL.
- 4.7 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED, UNLESS NOTED OR APPROVED BY THE ENGINEER.
- 4.8 ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.
- 4.9 ALL REINFORCING MARKED "CONT." INDICATES REINFORCING SHALL BE "CONTINUOUS" AND SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.
- 4.10 PROVIDE CORNER BARS AT ALL CORNERS OF CONTINUOUS REINFORCING IN FOOTINGS, SLABS, OR WALLS. CORNER BARS SHALL BE LONG ENOUGH TO PROVIDE A CLASS "B" LAP SPLICE OF REINFORCING BARS.
- 4.11 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:

- FOOTINGS-----2" TOP & 3" BOTTOM & SIDES
COLUMNS & PEDESTALS-----1-1/2" CLEAR OF TIES
BASEMENT WALLS-----2" BOTH FACES
FOUNDATION RETAINING WALLS-----2" BOTH FACES
SLUMP AND PIT WALLS-----3" BOTH FACES
BEAMS-----1-1/2" CLEAR OF STIRRUPS
SLAB FACES NOT EXPOSED TO WEATHER OR EARTH-----3/4"
#5 AND LESS-----1-1/2"
#6 AND GREATER-----2"
- NOTE: SLAB ON GRADE WWR OR REINFORCEMENT EACH WAY SHALL BE 2" CLEAR FROM TOP OF SLAB. SEE EARTH SUPPORTED SLABS SECTION BELOW.

- 4.12 PEDESTAL, COLUMN AND WALL VERTICAL REINFORCING: DOWEL TO FOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING.
- 4.13 WELDED WIRE REINFORCEMENT (WWR): ASTM A385, MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR 6 INCHES.
- 4.14 EARTH SUPPORTED SLABS:

- 4" THICK (UNLESS NOTED), REINFORCED WITH 6X6 W1.9/W2.9 WWR FLAT SHEETS SUPPORTED 2" CLEAR OF TOP OF SLAB, UNLESS NOTED. WWR TO BE CHAIRED AT 36 INCHES EACH WAY MINIMUM. SEE FOUNDATION NOTES FOR SUBGRADE REQUIREMENTS.

- PROVIDE CONTROL AND CONSTRUCTION JOINTS AT 3-4 TIMES SLAB THICKNESS IN FEET MAXIMUM OR AS REQUIRED TO PREVENT UNCONTROLLED CRACKING PER ACI RECOMMENDATIONS. AS AN EXAMPLE, FOR A 4" THICK SLAB PROVIDE JOINTS SPACED 12 - 16 FEET MAXIMUM. PANELS TO BE RECTANGULAR WITH LONG SIDE NOT TO EXCEED 1-1/2 TIMES SHORT SIDE. CUTTING SHOULD BE STARTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM BEING DISLODGE. CONTRACTOR SUBMIT PLAN SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS.

- FLOOR DESIGN AND CONSTRUCTION BASIS IS ACI 302 AND 360, AND IT IS UNREALISTIC TO EXPECT CRACK-FREE OR CURIL-FREE FLOORS. IT IS NORMAL TO EXPECT SOME AMOUNT OF CRACKING AND CURLING IN THE SLAB ON GRADE, AND SUCH OCCURENCE DOES NOT NECESSARILY REFLECT ADVERSELY ON EITHER THE ADEQUENCY OF THE FLOOR DESIGN OR THE QUALITY OF ITS CONSTRUCTION.

- EARTH SUPPORTED SLABS SHALL BE MOIST CURED FOR A MINIMUM OF SEVEN DAYS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. CURING COMPOUNDS, UNLESS NOTED, SHALL BE A MINIMUM OF CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND MEETING ASTM C 309, TYPE 1, CLASS B, SELF-DISSIPATING, CERTIFIED BY CURING COMPOUND MANUFACTURER TO NOT INTERFERE WITH BONDING OF FLOOR COVERING.

- WHERE CONTROL JOINTS TERMINATE INTO NON-PARALLEL CONTROL JOINTS, PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB PERPENDICULAR TO TERMINAL CONTROL JOINT.

- PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB AT REENTRANT CORNERS.

- WHERE CONTROL JOINTS TERMINATE AT EMBEDDED STEEL ELEMENTS (SUCH AS EDGE REINFORCEMENT AT LOADING DOCKS), PROVIDE JOINT IN STEEL ELEMENT.

- 4.15 CONTRACTION JOINTS IN WALLS: WALL JOINTS SHALL NOT BE SPACED FARTHER THAN 15 FEET FOR 8" WALLS, 20 FEET FOR 10" WALLS AND 30 FEET FOR 12" WALLS. WALL JOINTS SHALL ADDITIONALLY NOT BE LOCATED WITHIN 4'-0" OF EMBED PLATES OR CORNERS OF THE WALL. DISCONTINUE 50% OF THE WALL HORIZONTAL REINFORCING THROUGH JOINTS; TRIMMING BACK THE REINFORCING BARS 2" FROM THE CONTROL JOINT LOCATION. LOCATE CONTROL JOINTS EACH SIDE OF THE WALL. SEAL JOINTS WITH ELASTOMERIC SEALANT. SEE WALL CONTRACTION JOINT TYPICAL DETAIL.

- 4.16 WALL AND SLAB OPENINGS AND SLEEVES SMALLER THAN 12" (IN LARGER DIMENSION) ARE NOT SHOWN ON PLANS. CONTRACTOR SHALL SUBMIT ALL OPENINGS (SIZE AND LOCATIONS) AS A SINGLE COORDINATED SLEEVE PLAN FOR REVIEW AND APPROVAL.

- 4.17 CAST IN PLACE ALL SLEEVES AND INSERTS.

- 4.18 NO CONDUIT OR PIPE SHALL BE CAST IN THE SLAB ON GRADE WITHOUT THE WRITTEN APPROVAL OF STRUCTURAL DESIGN GROUP.

5.0 ARCHITECTURAL AND STRUCTURAL PRECAST CONCRETE

- 5.1 REFER TO ARCHITECT'S DRAWINGS AND SPECIFICATIONS FOR DIMENSIONAL, FINISHING, AND OTHER REQUIREMENTS OF THE ARCHITECTURAL PRECAST.
- 5.2 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO THE STRUCTURE AS WELL AS THE DESIGN OF THE ANY REQUIRED TOPPING SLABS FOR GRAVITY AND LATERAL LOADS. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

- 5.3 ANY CONNECTIONS SHOWN ON CONTRACT DRAWINGS ARE SHOWN FOR GENERAL ARRANGEMENT ONLY. THE CONTRACTOR SHALL COORDINATE ALL PRECAST CONNECTIONS AND EMBEDDED ITEMS WITH THE PRECAST MANUFACTURER.

- A. CONNECTIONS OF THE PRECAST TO THE STRUCTURE SHALL NOT RESTRAIN THE STRUCTURE'S 1" DOWNWARD MOVEMENT AT ALL BEAMS AND 1" UPWARD MOVEMENT AT ROOF BEAMS.

- 5.4 ERECTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY BRACING UNTIL ALL CONNECTIONS HAVE BEEN MADE AND TOPPING HAS BEEN CAST.

- 5.5 PRECAST MANUFACTURER SHALL PROVIDE STABILIZING ANGLES AND SIMILAR MISCELLANEOUS METALS, AS REQUIRED, FOR ALL PRECAST WORK.

- 5.6 ALL EXPOSED STEEL CONNECTIONS AND SUPPORT ANGLES, PLATES, BARS AND BOLTS IN CONJUNCTION WITH ALL PRECAST CONCRETE SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION AND FIELD TOUCHED UP WITH ZINC RICH PAINT.

- 5.7 ADJUSTMENT AND POSSIBLY RESETTING OF PRECAST MAY BE REQUIRED TO ALIGN PRECAST DUE TO SUPPORT DEFLECTION AND/OR ROTATION.

- 5.8 SUPPORTING BEAMS AND STRUCTURE WILL DEFLECT AND/OR ROTATE. PRECAST MANUFACTURER AND ERECTOR SHALL COORDINATE CONNECTION/ERECTION SEQUENCE TO ACCOUNT FOR THIS MOVEMENT AND MAKE FINAL ADJUSTMENTS TO ALIGN AND PLUMB PRECAST. THIS MAY REQUIRE ADJUSTING CONNECTIONS OR RECONNECTING.

6.0 PRECAST CONCRETE HOLLOW CORE SLABS

- 6.1 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO THE STRUCTURE. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

- A. PRECAST MANUFACTURER SHALL LIMIT USE TO 2" MAXIMUM OF THE TOPPING SLAB FOR COMPOSITE ACTION IN THE DESIGN OF THE PRECAST PANELS TO ALLOW FOR A 1" MAXIMUM CAMBER IN THE SELF-WEIGHT INSTALLED CONDITION.

1. THE REMAINING 1" OF THE TOPPING SLAB IS TO BE APPLIED AS SUPERIMPOSED DEAD LOAD TO THE PRECAST PANELS.

2. PRECAST MANUFACTURER IS TO PROVIDE ANTICIPATED CAMBER & DEFLECTION CALCULATIONS FOR ALL PRECAST PANELS SO THAT IT CAN BE VERIFIED THAT THE POSITIVE CAMBER IN THE SELF-WEIGHT INSTALLED CONDITION HAS BEEN LIMITED TO 1" MAXIMUM.

3. PRECAST MANUFACTURER IS RESPONSIBLE FOR ADDING AND INCLUDING IN THE BASE BID ANY ADDITIONAL REINFORCING STEEL IN THE TOPPING SLAB AS MAY BE REQUIRED TO CONTROL LONG-TERM CREEP ISSUES WITH THE PRESTRESSED SLAB PANELS.

4. STORM SHELTER PRECAST PANELS SHALL BE DESIGNED FOR 235 PSF SHELTER ROOF LIVE LOAD + SHELTER COLLAPSE LOAD IN ADDITION TO OTHER LOADS (Sw, DL, COL, & WL).

- B. PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR DETERMINING AND VERIFY ANY NECESSARY STEPS, SUCH AS THE ROUGHENING OF PRECAST PANELS AND/OR THE USE OF A CONCRETE BONDING AGENT, IN ORDER TO OBTAIN COMPOSITE ACTION OF THE PRECAST PANELS WITH THE STRUCTURAL TOPPING SLAB. ANY NECESSARY STEPS SHALL BE INDICATED ON THE SUBMITTED CALCULATIONS AND SHOP DRAWINGS BY THE PRECAST MANUFACTURER.

- C. PRECAST MANUFACTURER IS TO PROVIDE WEEP HOLES IN ALL CORES AT EACH END OF ALL PRECAST PANELS. CONTRACTOR HAS THE OPTION TO FIELD INSTALL WEEP HOLES PER PRECAST MANUFACTURER'S WRITTEN INSTRUCTIONS.

- 6.2 PRECAST MANUFACTURER SHALL DESIGN HOLLOW CORE SLABS FOR THE SUPERIMPOSED LOADS LISTED BELOW PLUS SELF-WEIGHT PLUS ALL MASONRY BLOCK WEIGHTS, LIVE LOADS, WIND LOADS, OTHER LOADS SHOWN IN THESE DRAWINGS. DESIGN AND ACTION OF THE PRECAST PANELS WITH THE STRUCTURAL TOPPING SLAB, ANY NECESSARY STEPS SHALL BE INDICATED ON THE SUBMITTED CALCULATIONS AND SHOP DRAWINGS BY THE PRECAST MANUFACTURER.

- 3" TOPPING SLAB-----38 PSF
COLLATERAL DEAD LOAD-----20 PSF

- FOR LIVE LOADS, SEE GENERAL NOTES 1.2.B & 1.2.C, PLAN NOTES, AND SECTION NOTES

- FOR WIND LOADS, SEE GENERAL NOTE 1.3.C, COMPONENTS AND CLADDING WIND LOAD TABLES ON S1.4, TYPICAL DETAILS, PLAN NOTES, AND SECTION NOTES

- FOR HOUSEKEEPING PADS UNDER MECHANICAL UNITS, COORDINATE SIZE AND LOCATION OF HOUSEKEEPING PADS WITH MECHANICAL DRAWINGS

- 6.3 ANY CONNECTIONS SHOWN ON CONTRACT DRAWINGS ARE SHOWN FOR GENERAL ARRANGEMENT ONLY. THE CONTRACTOR SHALL COORDINATE ALL PRECAST CONNECTIONS AND EMBEDDED ITEMS WITH THE PRECAST MANUFACTURER.

- 6.4 REINFORCE 3" TOPPING SLAB WITH 6X6 WL.4/WL.4 WWR FLAT SHEETS AT MID-DEPTH OF TOPPING.

- A. CONDUITS AND PIPING SHALL NOT BE PLACED IN THE TOPPING SLAB.

- 6.5 ERECTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY BRACING UNTIL ALL CONNECTIONS HAVE BEEN MADE AND TOPPING HAS BEEN CAST.

- 6.6 PRECAST MANUFACTURER SHALL PROVIDE STABILIZING ANGLES AND SIMILAR MISCELLANEOUS METALS, AS REQUIRED, FOR ALL PRECAST WORK.

- 6.7 ALL EXPOSED STEEL CONNECTIONS AND SUPPORT ANGLES, PLATES, BARS, AND BOLTS IN CONJUNCTION WITH ALL PRECAST CONCRETE SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION AND FIELD TOUCHED UP WITH ZINC RICH PAINT.

- 6.8 PRECAST CONCRETE HOLLOW CORE SLAB LOCATIONS SHOWN ON THE DRAWINGS ARE ESTIMATED AND SHALL BE VERIFIED BY THE PRECAST MANUFACTURER.

- 6.9 CONTRACTOR IS TO COORDINATE (MECHANICAL, ELECTRICAL, PLUMBING, ETC.) OPENINGS IN HOLLOW CORE PRECAST CONCRETE SLAB PANELS WITH PRECAST MANUFACTURER.

- A. ALL FIELD CUT OPENINGS THROUGH HOLLOW CORE PRECAST CONCRETE SLAB PANELS SHALL BE LOCATED TO AVOID CUTTING PRESTRESS STRANDS, UNLESS GIVEN APPROVAL BY THE PRECAST MANUFACTURER PRIOR TO COMMENCING WORK.

- 6.10 ALL OPENINGS IN THE PRECAST PANELS SHALL BE SHOWN ON THE PRECAST PANEL SHOP DRAWINGS. EXACT LOCATIONS AND OPENING DIMENSIONS SHALL BE INDICATED. ANY DETAILING NECESSARY FOR THE SUPPORT OF THE PANELS AT THE OPENINGS SHALL BE INDICATED ON THE SHOP DRAWINGS. ANY ADDITIONAL STEEL FRAMING REQUIRED AT SLAB OPENINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED IN THE BASE BID AND SHALL BE PROVIDED AT NO ADDITIONAL EXPENSE TO THE OWNER.

- 6.11 BEARING STRIPS SHALL BE RANDOM ORIENTED FIBER REINFORCED MATERIAL CAPABLE OF SUPPORTING A COMPRESSIVE STRESS OF 3000 PSI WITH NO CRACKING, SPLITTING, OR DELAMINATION.

7.0 STRUCTURAL STEEL

- 7.1 FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". FABRICATOR SHALL BE QUALIFIED BY PARTICIPATING IN THE AISC QUALITY CERTIFICATION PROGRAM AND HOLD THE AISC BUILDING FABRICATOR QMS CERTIFICATION (BU).

- 7.2 THE STEEL FRAME IS "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE.

- 7.3 STRUCTURAL STEEL: ASTM A992 FOR WIDE FLANGE BEAMS AND COLUMNS; A36 FOR S, M AND UP SHAPES AND CHANNELS; ASTM A36 FOR STIFFENER PLATES, BASE PLATES, COLUMN CAP PLATES, BEAM CONNECTION PLATES AND STEEL ANGLES.

- 7.4 HOLLOW STRUCTURAL SECTIONS (HSS): ASTM A500, GRADE B.

- 7.5 STRUCTURAL STEEL PIPE: ASTM A53, GRADE B.

- 7.6 WELDED CONNECTIONS: E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16". WELDING QUALIFICATION, PROCEDURES AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.1, THE STRUCTURAL WELDING CODE - STEEL.

- 7.7 THREADED AND PLAIN STEEL RODS: ASTM A36

- 7.8 HIGH STRENGTH THREADED RODS: ASTM A193 B7

- 7.9 ANCHOR RODS: ASTM F1554 GRADE 36 ANCHOR AND HEAVY HEX NUT OR ASTM F1554 GRADE 55 ANCHOR AND HEAVY HEX NUT WITH SUPPLEMENTARY REQUIREMENT S1, UNLESS OTHERWISE INDICATED.

- A. IF ANCHOR ROD ASSEMBLIES ARE NOT ENCASED IN MINIMUM OF 3" OF CONCRETE, ANCHOR ROD ASSEMBLIES ARE TO BE HOT-DIP GALVANIZED.

- 7.10 HEADED STUDS: TYPE B SHEAR STUD CONNECTORS MADE FROM ASTM A108, GRADE 1015 OR 1020, COLD-FINISHED CARBON, AND COMPLYING WITH AWS D1.1.

7.11 CONNECTIONS:

- A. BEARING TYPE A325-N AND SLIP-CRITICAL TYPE A325-SC IN ACCORDANCE WITH RCSC (LRFD OR ASD VERSION) "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". BOLTS THROUGH 4" WIDE BEAM FLANGES SHALL BE 5/8" DIAMETER. OTHERWISE, BOLTS SHALL BE 3/4" DIAMETER.

- B. USE SLIP-CRITICAL CONNECTIONS WHERE NOTED. USE SNUG TIGHT BEARING CONNECTIONS FOR ALL OTHER BOLTED CONNECTIONS.

- C. BOLTS SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT BOLTS MAY BE USED. ACTUAL NUMBER, UNLESS SPECIFIED, TO BE IN ACCORDANCE WITH AISC.

- D. ALL STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST FORCES INDICATED, BY THE CONTRACTOR.

1. WHERE BEAM REACTIONS ARE SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL DEVELOP THE REACTIONS SHOWN. WHERE CONNECTIONS ARE SUBJECT TO ECCENTRICITY, SUCH ECCENTRICITY SHALL BE TAKEN INTO ACCOUNT WHEN DESIGNING AND DETAILING THE CONNECTION.

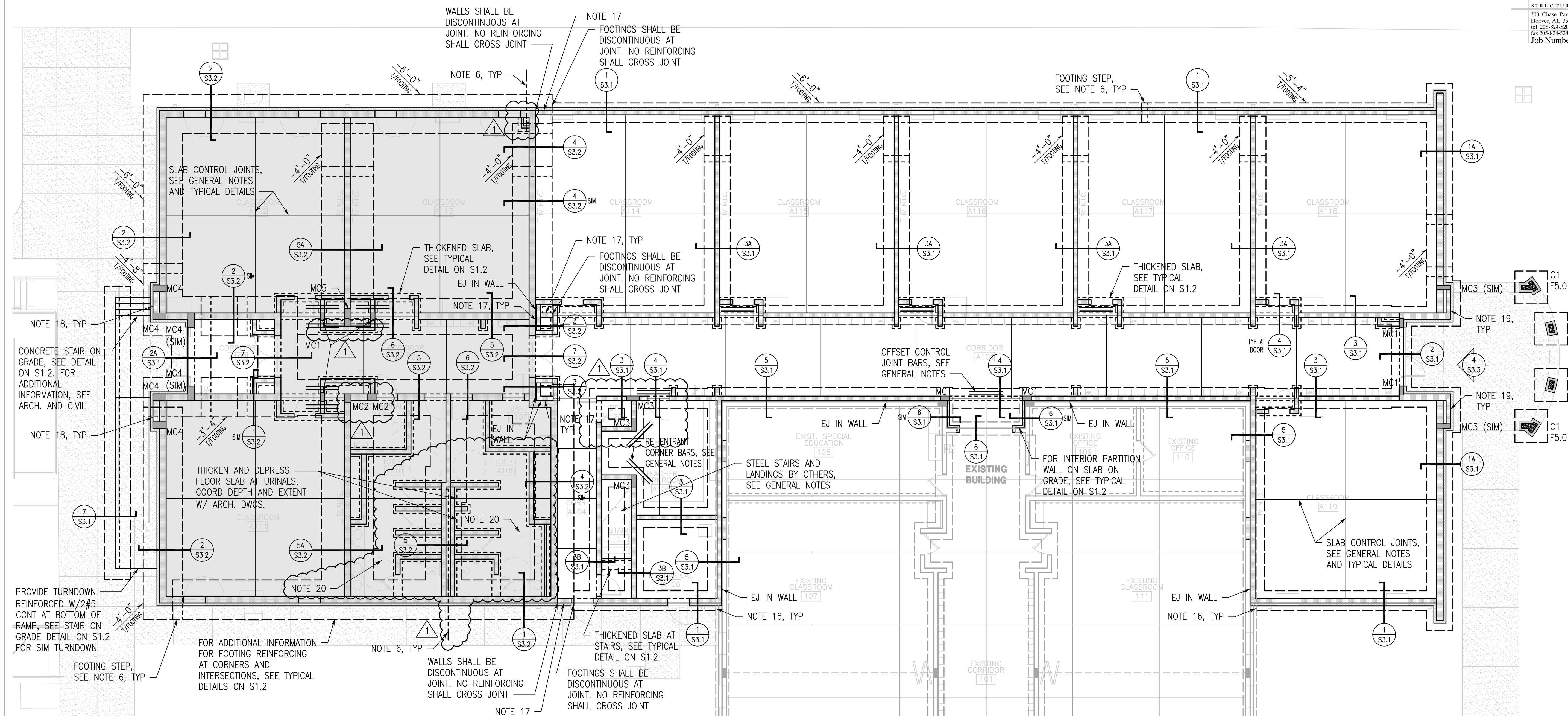
2. WHERE BEAM REACTIONS OR DESIGN FORCES ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL CONTACT STRUCTURAL DESIGN GROUP FOR DIRECTION.

- E. DESIGN CALCULATIONS FOR THE CONNECTIONS DESIGNED BY THE CONTRACTOR SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

- 7.12 ALL STRUCTURAL STEEL, INCLUDING EXPOSED BOLTS, NUTS, WASHERS, OR ANCHOR RODS, EXPOSED TO WEATHER IN THE FINAL CONFIGURATION OF THE STRUCTURE SHALL BE HOT-DIP GALVANIZED, UNLESS NOTED OTHERWISE, PER ASTM A123/A123M. VENT HOLES SHALL BE FILLED AND GROUND SMOOTH AFTER GALVANIZING. DAMAGE TO GALVANIZING SHALL BE PAINTED WITH GALVANIZING REPAIR PAINT, SSPC-PAINT 20. SEE 05120 SPECIFICATION FOR PAINT REQUIREMENTS FOR STEEL THAT IS GALVANIZED AND PAINTED.

- 7.13 WHERE STEEL BEAMS ARE CONTINUOUS OVER COLUMNS, TO BEAM FLANGE THICKNESS, LOCATED IN ALIGNMENT WITH COLUMN WEB OR FLANGES OR CENTER LINE OF HSS COLUMNS.

- 7.14 PROVIDE 3/4" THICK CLOSURE PLATES ON THE ENDS OF HSS BEAMS. SHOP W



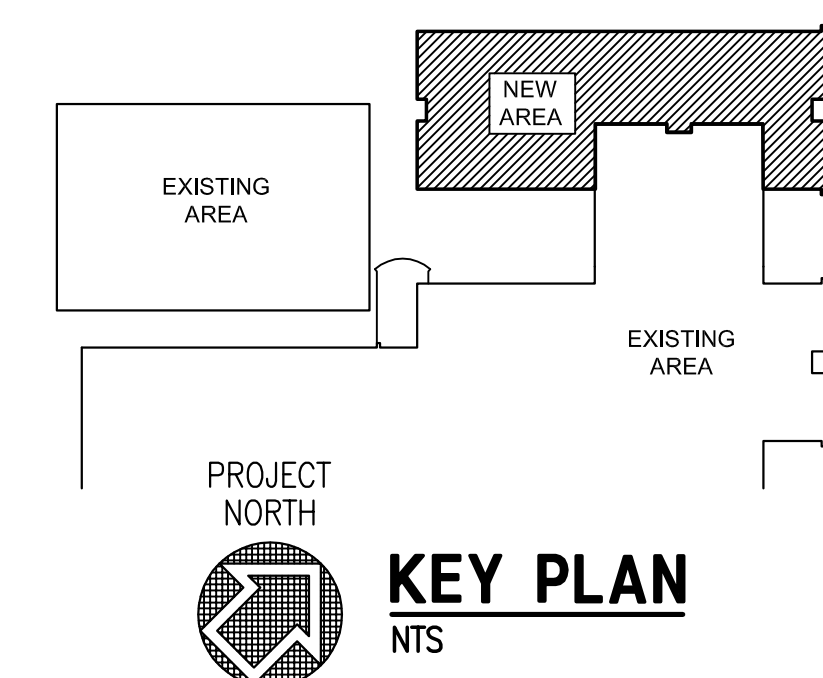
FOUNDATION PLAN

1/8"=1'-0"

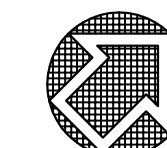
- FINISH FLOOR (TOP OF SLAB) ELEVATION TO MATCH EXISTING, UNLESS NOTED.
- TOP OF FOOTING ELEVATION -2'-0" BELOW FINISH FLOOR ELEVATION, UNLESS NOTED.
- FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS.
- FOR SLAB RECESS AND RAMP LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
- GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS.
- FOOTING STEP LOCATIONS SHOWN ARE APPROXIMATE. GENERAL CONTRACTOR COORDINATE LOCATION OF ALL (EXTERIOR & INTERIOR) FOOTING STEPS WITH THE LATEST CIVIL, PLUMBING AND UTILITY DRAWINGS. SEE FOOTING STEP DETAIL ON S1.2.
- FOOTING WIDTHS INDICATED ON PLAN MAY OR MAY NOT BE TO SCALE. COORDINATE WITH SECTION CUTS FOR FOOTING WIDTHS AND ADDITIONAL INFORMATION.
- THE HATCHED/SHADED AREA ON THE PLAN INDICATES AREA TO BE USED AS STORM SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
- "MCx" INDICATES MASONRY COLUMN. SEE SCHEDULE ON S1.3 FOR ADDITIONAL INFORMATION.
- C1 AND C2 INDICATES END AND INTERIOR CONCRETE COLUMNS, RESPECTIVELY, FOR THE ENTRY CANOPY. FOR COLUMN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS. REINFORCE COLUMN WITH #5 VERTICAL IN EACH CORNER AND INFILL WITH ADDITIONAL #5 VERTICALS WITH 6" MAXIMUM SPACING. DOWEL TO FOOTING WITH STANDARD HOOK. USE #3 TIES AT 8" ON CENTER. ALL VERTICALS ARE TO BE SUPPORTED BY THE CORNER OF A TIE. SEE COLUMN BASE AND FOOTING DETAIL ON S1.2 AND COLUMN TIE DETAILS ON S1.3. FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL DRAWINGS.
- F5.0 INDICATES 5'-0"x5'-0"x1'-0" CONCRETE SPREAD FOOTING REINFORCED WITH 6#5 EACH WAY TOP AND BOTTOM. SEE COLUMN BASE AND FOOTING DETAIL ON S1.2 FOR ADDITIONAL INFORMATION.
- CONTRACTOR NOTE: DO NOT PROVIDE MASONRY CONTROL JOINTS IN STORM SHELTER CMU WALLS.
- FOR PAVEMENT AND HARDSCAPE INFORMATION, SEE ARCHITECTURAL DRAWINGS AND CIVIL DRAWINGS.
- FOR LOAD BEARING AND NON-LOAD BEARING CMU WALL PLAN DIMENSIONS AS WELL AS OTHER PLAN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.

- CONTRACTOR SHALL COORDINATE EMBEDS INTO MASONRY WITH LOUVER OR DOOR MANUFACTURER. PROVIDE MODIFICATIONS TO STRUCTURE AS REQUIRED TO FULLY COMPLY WITH MANUFACTURERS INSTALLATION DETAILS. SUBMIT ANY MODIFICATIONS TO DESIGN TEAM FOR REVIEW.
- GENERAL CONTRACTOR COORDINATE FOOTING ELEVATIONS AND STEP NEW FOOTINGS AS REQUIRED TO MATCH EXISTING FOOTING ELEVATIONS. DOWEL CONTINUOUS REINFORCING 9" INTO EXISTING FOOTING BY DRILLING AND ANCHORING WITH EPOXY ADHESIVE.
- VERTICAL DOWELS AT INDICATED LOCATIONS ARE TO ONLY EXTEND ABOVE TOP OF FOOTING ELEVATIONS BY 1'-0". LAP DOWELS 1'-0" INTO WALL OR MASONRY COLUMN. PROVIDE DECREASED LAP LENGTH WHEN DOWELING NON-STORM SHELTER WALLS OR MASONRY COLUMNS TO STORM SHELTER WALL FOOTINGS.
- STORM SHELTER 12" CMU BUMP OUT WALL, REINFORCE WITH #6 VERTICAL AT 8" FOR FULL HEIGHT OF WALL. FILL CELLS WITH GROUT. DOWEL TO FOOTING. TIE 12" CMU WALLS TOGETHER HARD. FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL DRAWINGS.
- NON-STORM SHELTER 8" OR 12" CMU BUMP OUT WALL, REINFORCE WITH #5 VERTICALS AT 16" FOR FULL HEIGHT OF WALL. FILL CELLS WITH GROUT. DOWEL TO FOOTING. PROVIDE WALL TIES AS REQUIRED AND PER ARCHITECTURAL DRAWINGS. FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL DRAWINGS.

- FLOOR SLAB IN TOILET A109 AND A110 TO BE SLOPED TO FLOOR DRAINS, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. INDICATED FLOOR SLAB TO BE PLACED SEPARATELY DUE TO FLOOR FINISH BEING SEALED CONCRETE. CONTRACTOR TO TAKE CARE WITH FLOOR SLAB DUE TO SLOPING AND FINISHING REQUIREMENTS.



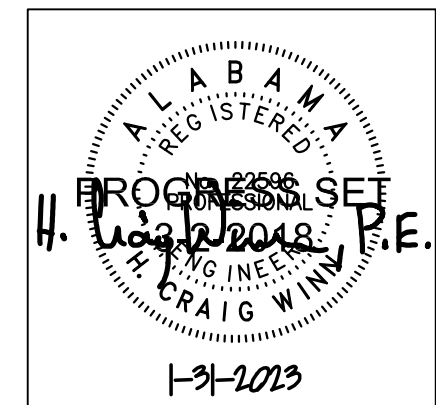
PROJECT
NORTH



KEY PLAN
NTS


$$\overline{1/8'' = 1' - 0''}$$

11. WHERE MECHANICAL DUCTS EXTEND THRU LOAD BEARING WALLS BELOW HOLLOW CORE SLABS, PROVIDE MASONRY BOND BEAM PER DETAIL/SCHEDULE ON S1.5.
12. CONTRACTOR NOTE: ALL MECHANICAL OPENING SIZES AND LOCATIONS IN LOAD BEARING MASONRY WALLS SHOULD BE COORDINATED BY THE CONTRACTOR AND INDICATED ON THE MASONRY WALL REBAR SHOP DRAWINGS.
13. CONTRACTOR SHALL COORDINATE EMBEDS INTO MASONRY WITH LOUVER OR DOOR MANUFACTURER. PROVIDE MODIFICATIONS TO STRUCTURE AS REQUIRED TO FULLY COMPLY WITH MANUFACTURERS INSTALLATION DETAILS. SUBMIT ANY MODIFICATIONS TO DESIGN TEAM FOR REVIEW.
14. CONTRACTOR SHALL COORDINATE MECHANICAL DUCT LAYOUT AND ROUTE. DUCT LAYOUT IS TO BE PROVIDED TO STRUCTURAL EOR FOR REVIEW AND APPROVAL PRIOR TO MASONRY WALL CONSTRUCTION. SUBMITTED LAYOUT TO HAVE ROUTE, SIZE, ELEVATION, ETC. AS WELL AS ANY REQUIRED WALL OPENINGS (LOCATION, SIZE, ETC.).
15. CONTRACTOR TO PROVIDE PENETRATION PROTECTION AT ANY AND ALL STORM SHELTER WALL/ROOF PENETRATIONS LARGER THAN 3 1/2" SQUARE INCHES IN AREA FOR RECTANGULAR PENETRATIONS OR 2 1/16" INCHES IN DIAMETER. ALL PENETRATIONS/OPENINGS (MECHANICAL, ELECTRICAL, PLUMBING, ETC.) SHALL BE A MINIMUM OF 6 INCHES CLEAR FROM EACH OTHER WHERE INSTALLED IN MULTIPLE ROWS AND/OR COLUMNS.
16. "EP" INDICATES EMBED PLATE, SEE TYPICAL DETAIL WITH SCHEDULE ON SHEET S1.5.
17. CONTRACTOR BUILD ALL CMU PARTITION WALLS (EXCEPT TOILET AND URINAL PARTITION WALLS) WITHIN THE STORM SHELTER HARD TO UNDERSIDE OF HOLLOW CORE SLAB.
18. EMBED PLATE TO BE SET FLUSH WITH MASONRY OR CONCRETE FACE. PROVIDE FULL DEPTH DOUBLE ANGLE CONNECTION AT EACH END OF STEEL BEAM. CONTRACTOR TAKE EXTREME CARE NOT TO OVERHEAT EMBED PLATE DURING WELDING PROCESS.
19. OVER MASONRY COLUMN MC1 AT BEAM BEARING LOCATION, PROVIDE 3/4"x8"x1'-6" EMBED PLATE WITH (2) 3/4"x12" LONG HEADED STUDS (10" GAGE) AS BEAM BEARING PLATE. SEE BEAM BEARING DETAILS ON S1.5 FOR ADDITIONAL INFORMATION. BEAM PLATE TO BE WELDED ALONG FULL LENGTH ON EACH SIDE TO EMBED PLATE. BEAM PLATE AND HSS BEAM TO BE WELDED 8" MINIMUM ALONG EACH SIDE AT BEARING LOCATION. CONTRACTOR TAKE EXTREME CARE NOT TO OVERHEAT EMBED PLATE DURING WELDING PROCESS.
20. OVER MASONRY COLUMN MC2 & MC5 AT BEAM BEARING LOCATION, PROVIDE 3/4"x12"x2'-0" EMBED PLATE WITH (3) 3/4"x12" LONG HEADED STUDS (8" GAGE) AS BEAM BEARING PLATE. SEE BEAM BEARING DETAILS ON S1.5 FOR ADDITIONAL INFORMATION. BEAM PLATE TO BE WELDED ALONG FULL LENGTH ON EACH SIDE TO EMBED PLATE. BEAM PLATE AND HSS BEAM TO BE WELDED 12" MINIMUM ALONG EACH SIDE AT BEARING LOCATION. CONTRACTOR TAKE EXTREME CARE NOT TO OVERHEAT EMBED PLATE DURING WELDING PROCESS.



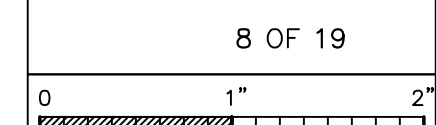
SHEET TITLE:
ATTIC FRAMING
PLAN

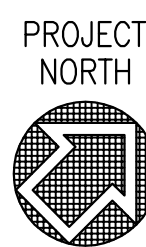
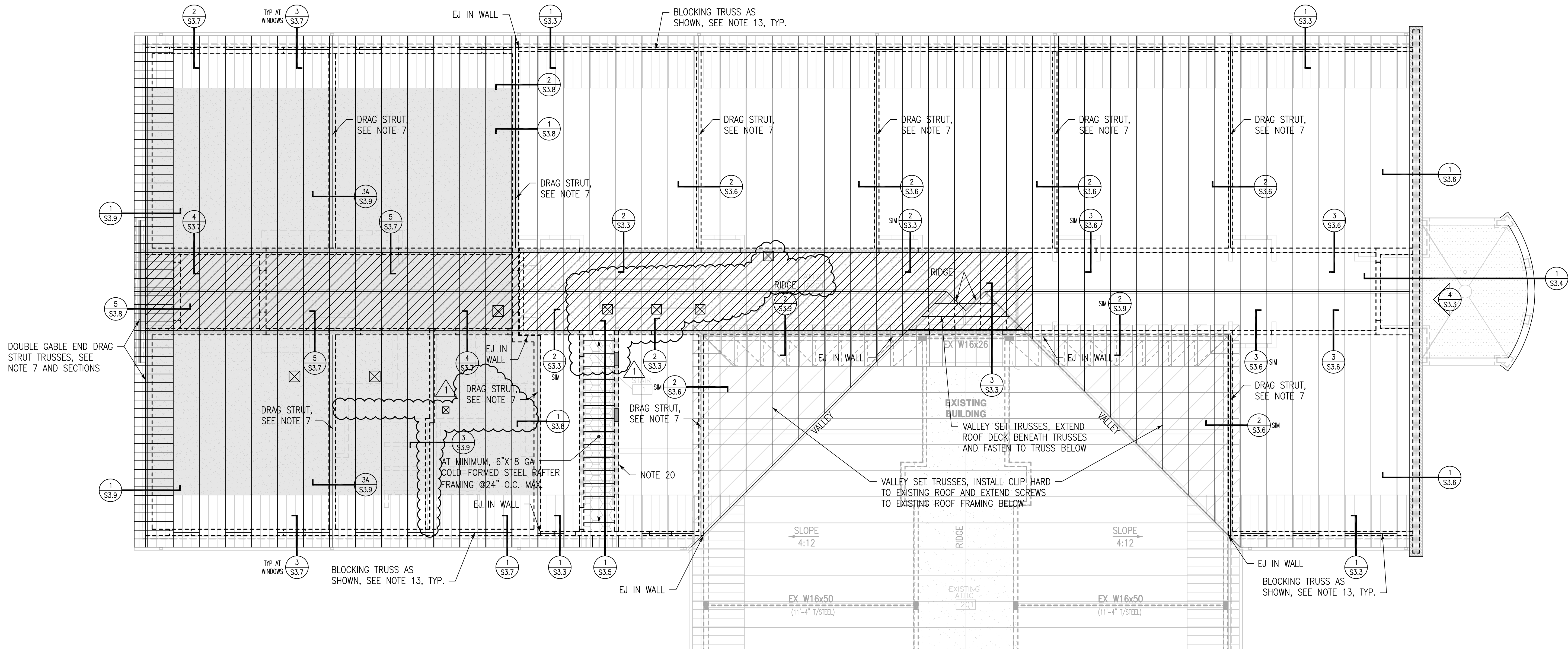
PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	JANUARY 31, 2023
REVISIONS	
	ADDENDUM NO. 3 03-06-2023

JOB NO. 22-20

SHEET NO:

S2.2

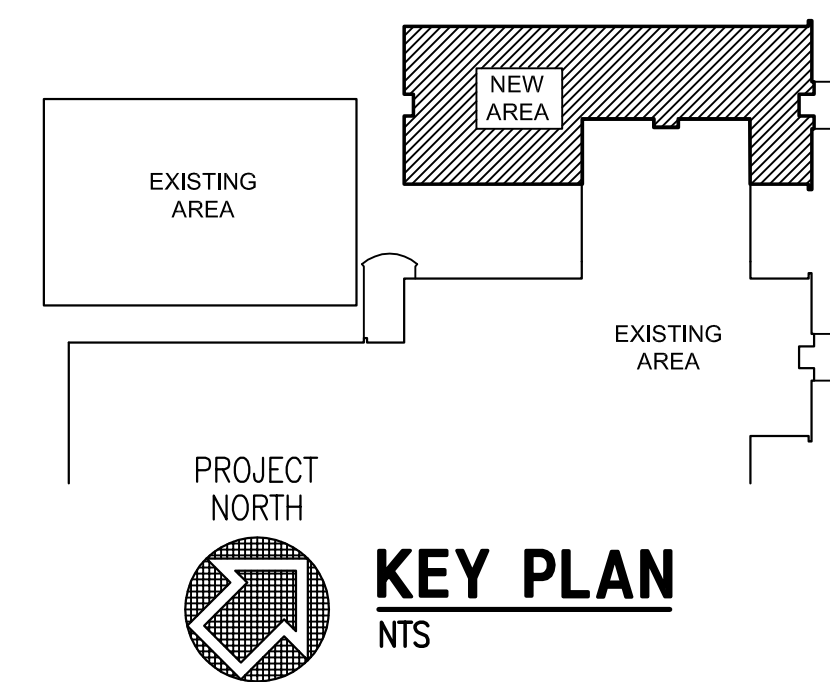


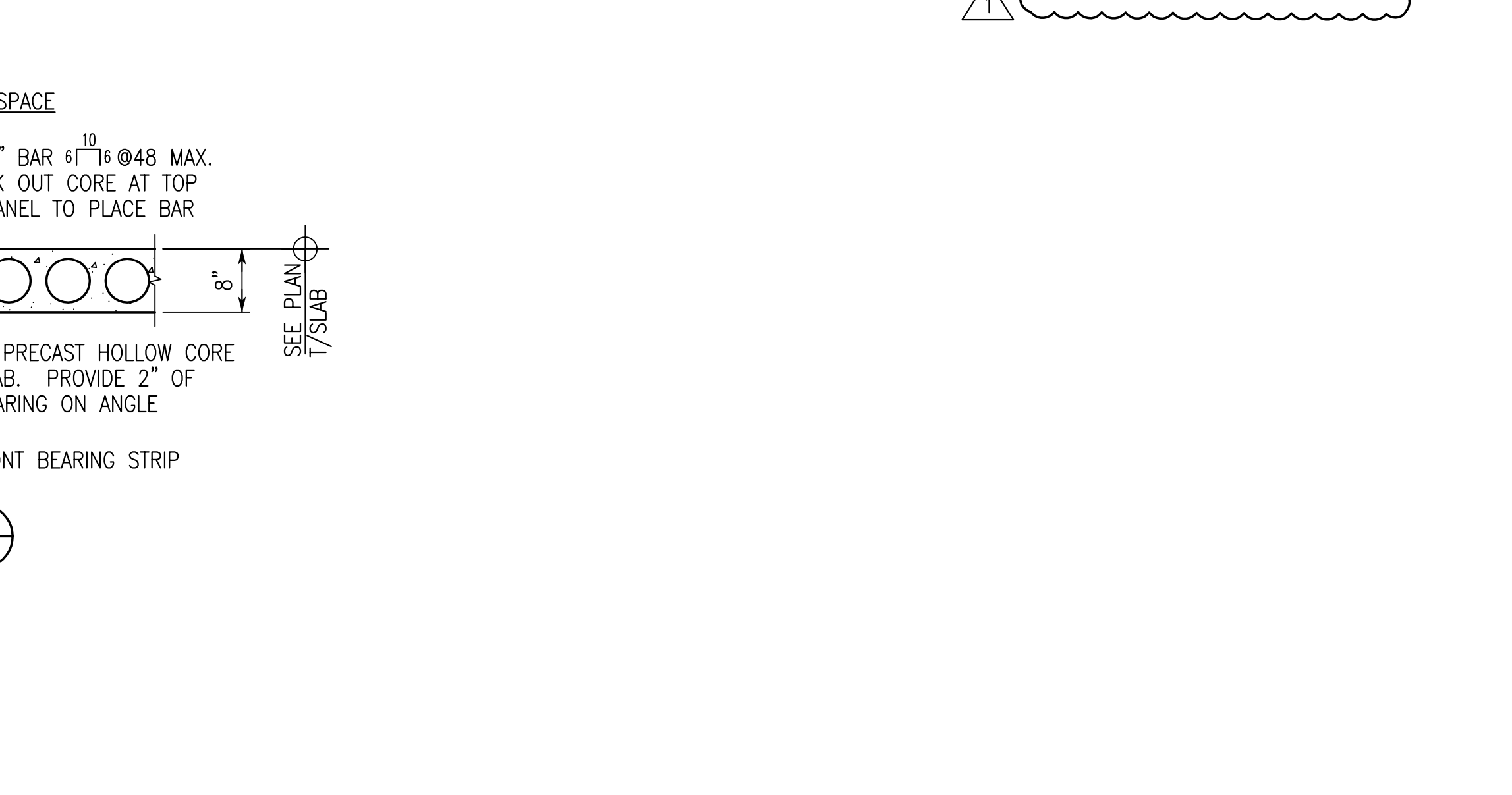
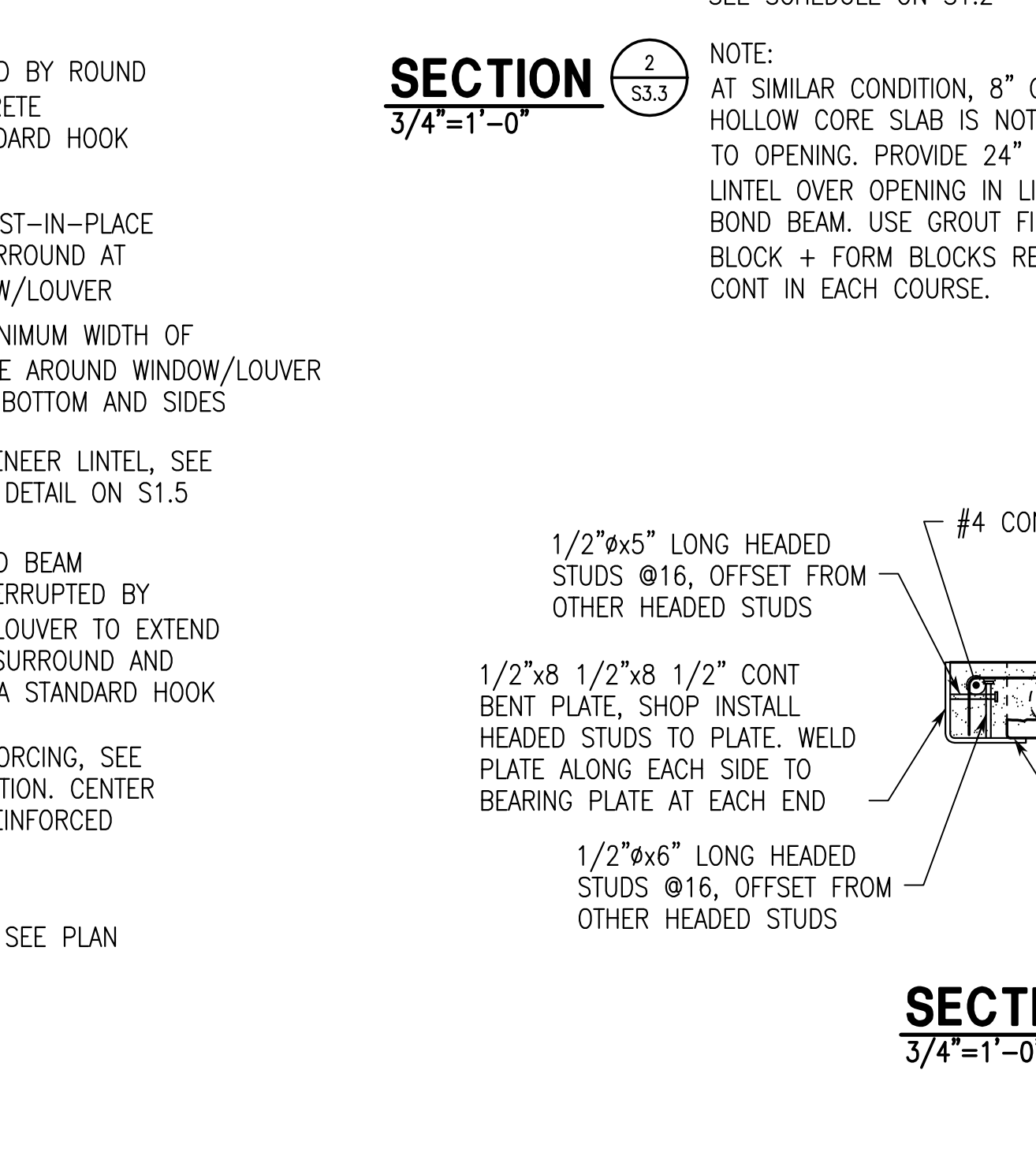
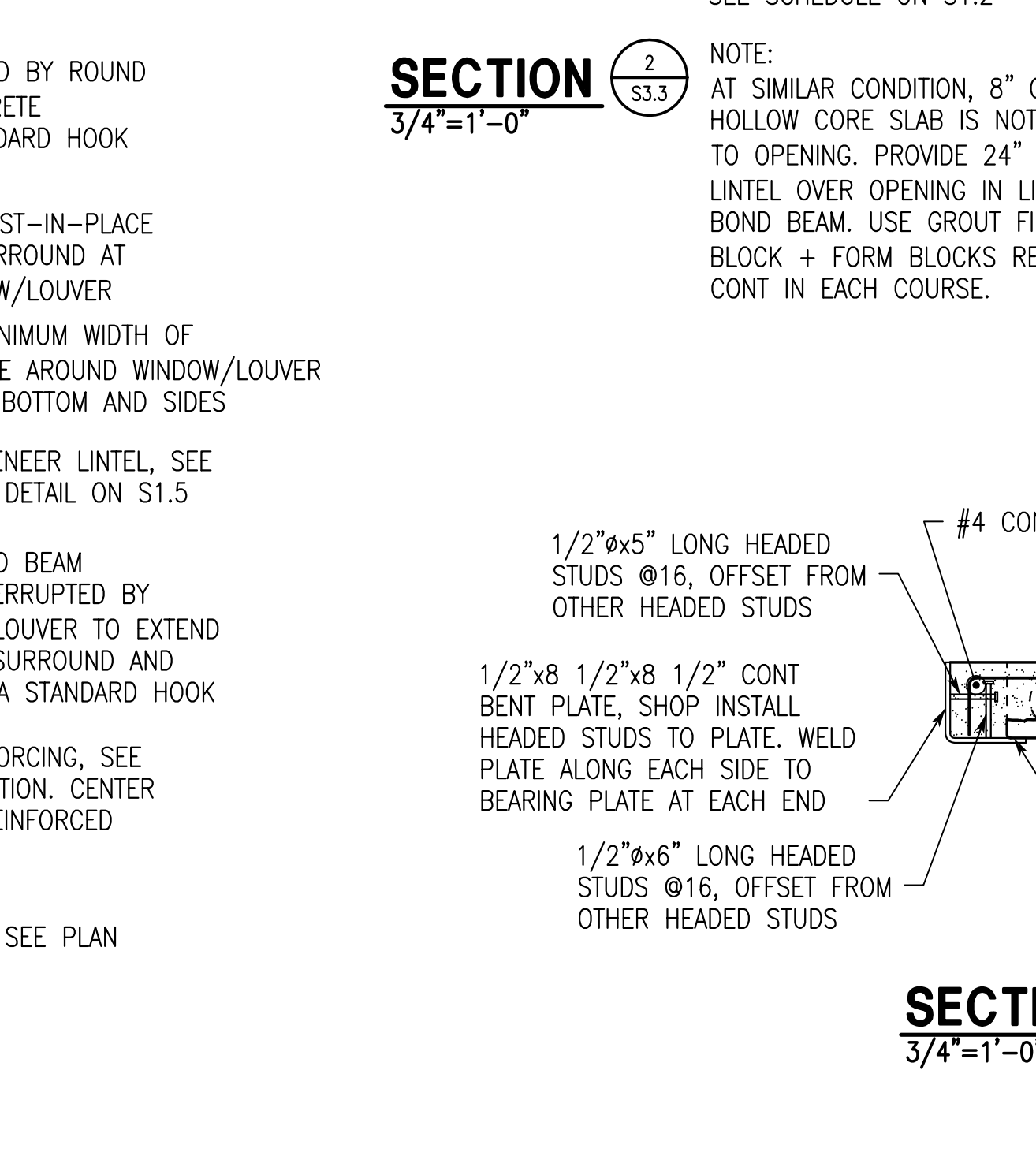
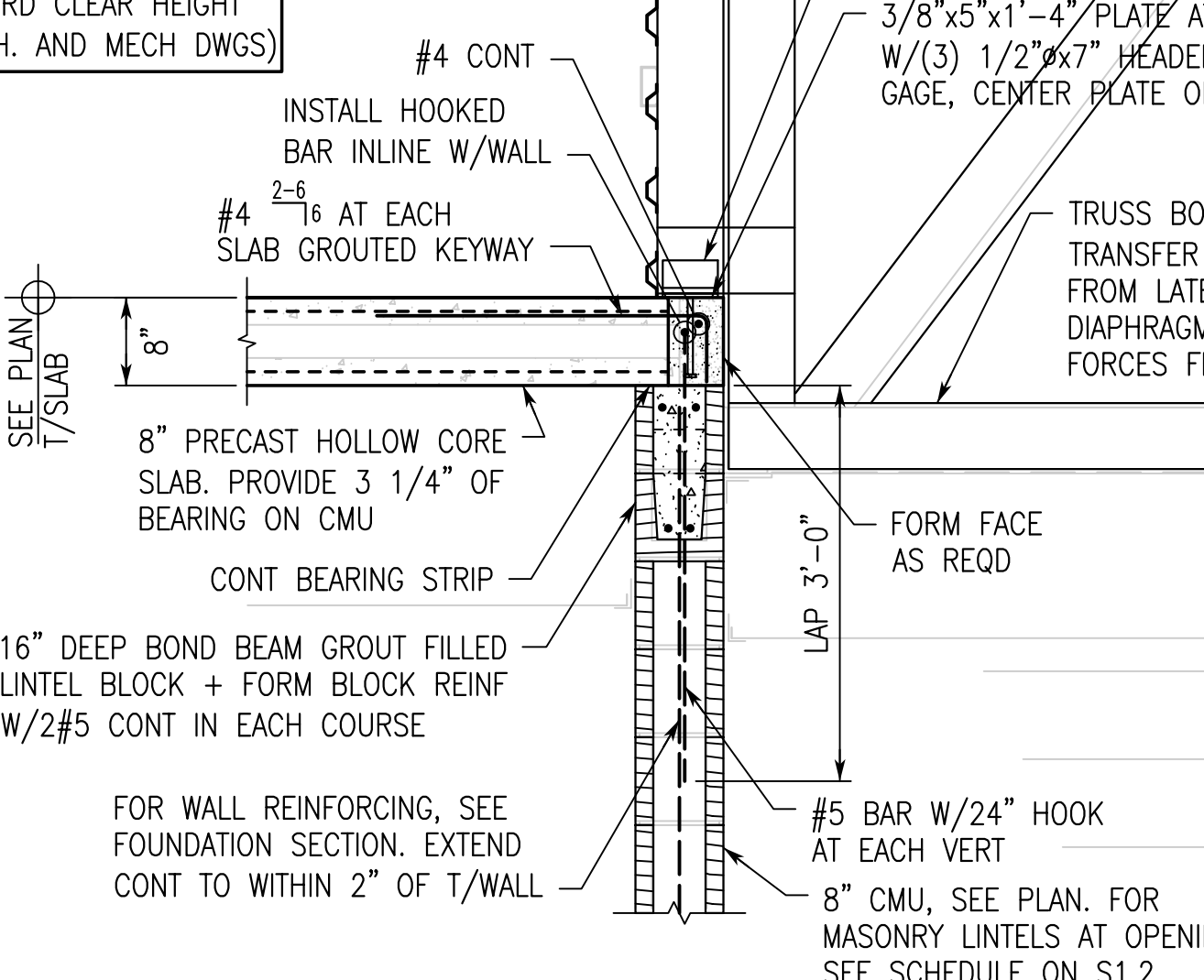
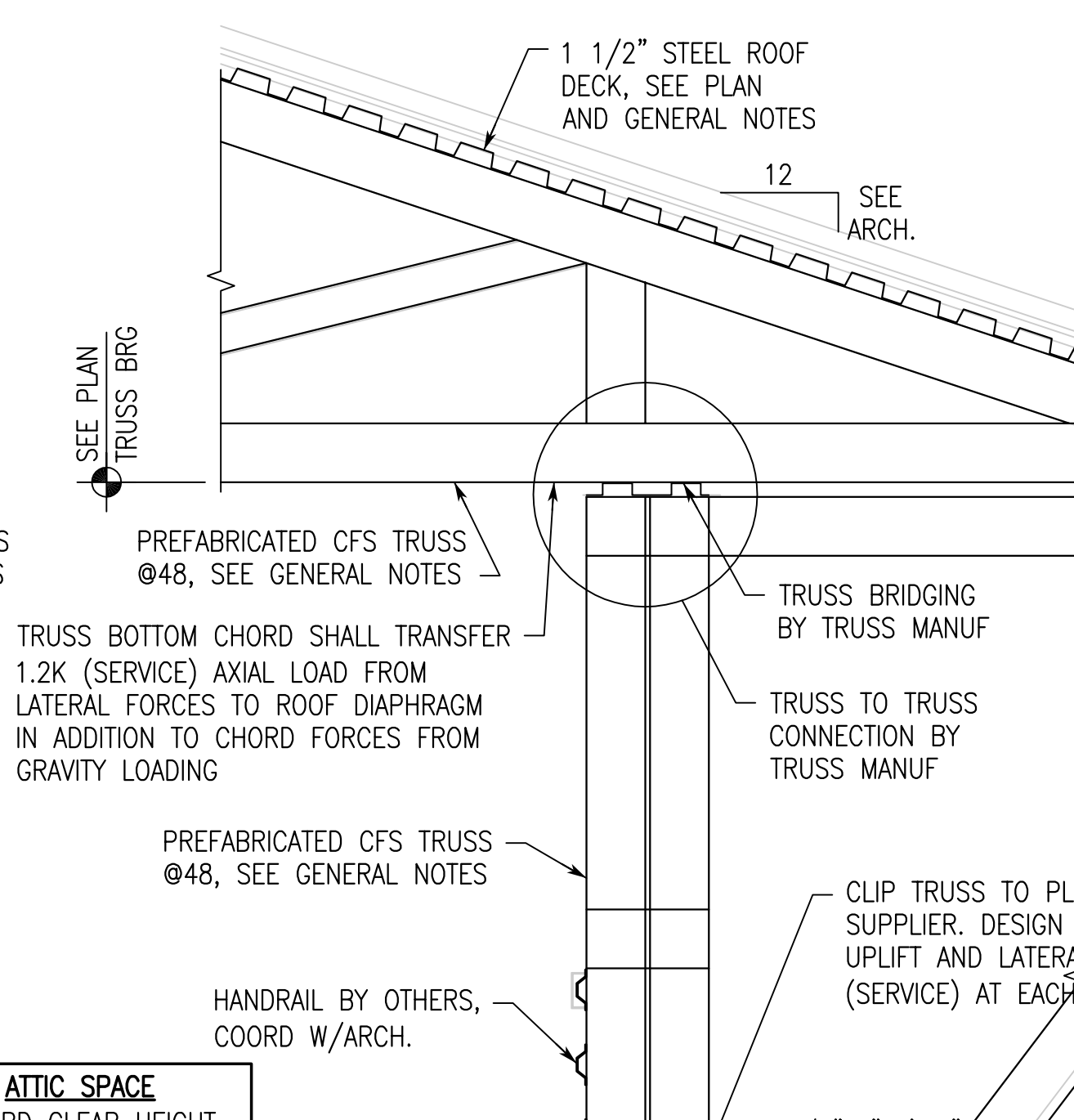


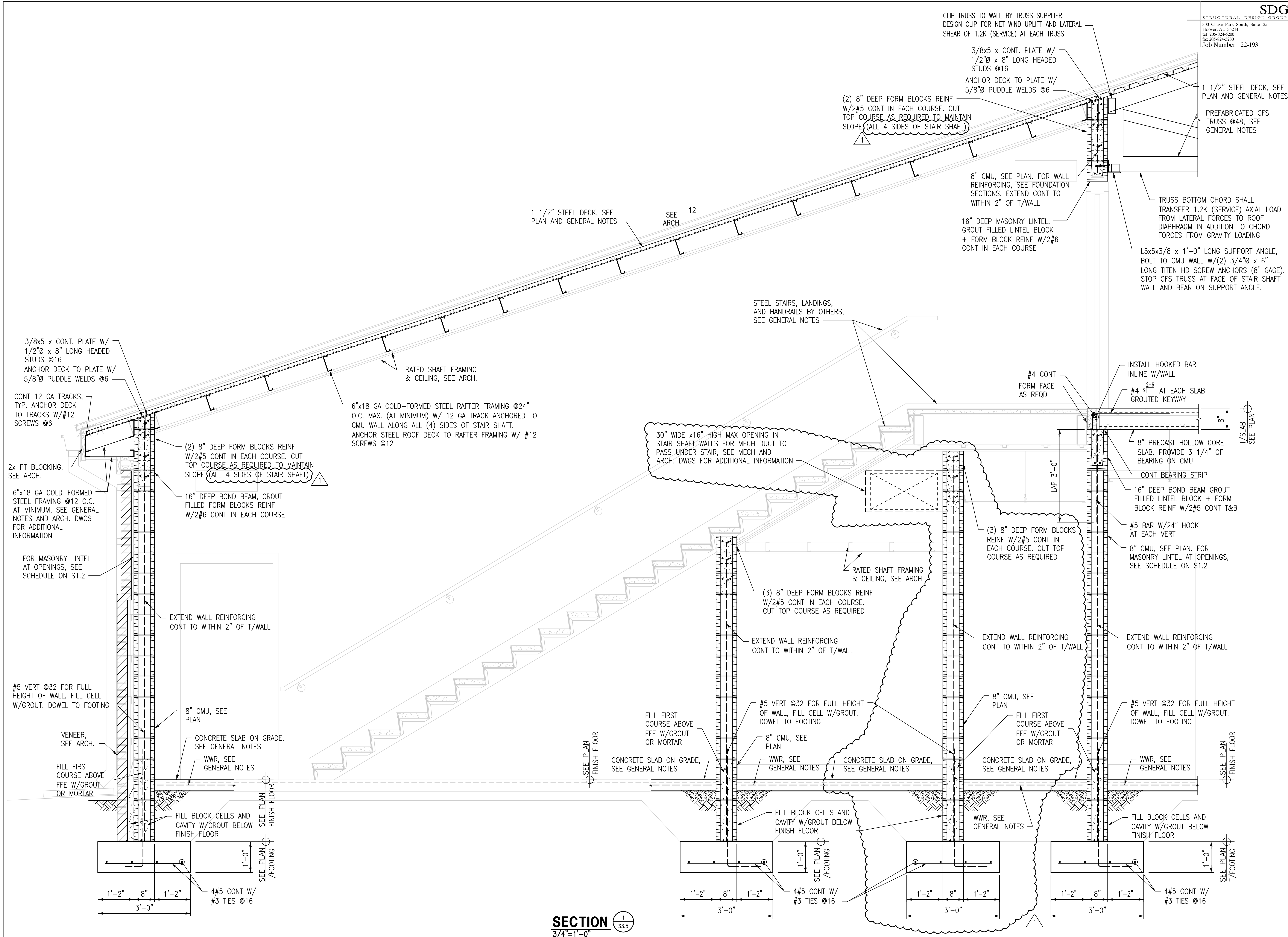
ROOF FRAMING PLAN

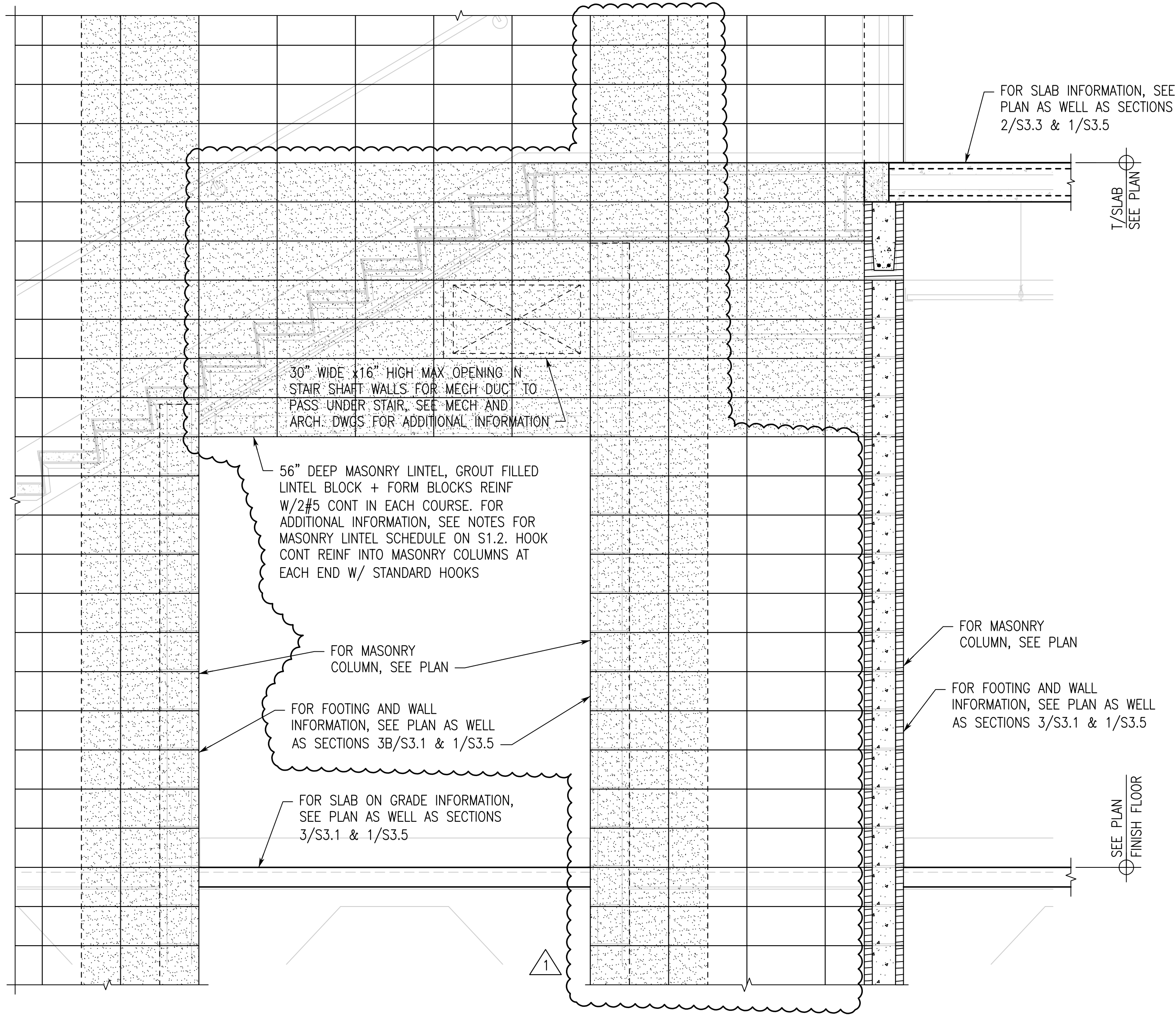
1/8"=1'-0"

- FINISH FLOOR (TOP OF SLAB) ELEVATION 11'-2" ABOVE MAIN FINISHED FLOOR AT STORM SHELTER, UNLESS NOTED. FINISH FLOOR (TOP OF SLAB) ELEVATION 12'-0" ABOVE MAIN FINISHED FLOOR AT CORRIDORS (STORM SHELTER AND NON-STORM SHELTER), UNLESS NOTED. TOP OF CMU WALL ELEVATION 10'-8" ABOVE MAIN FINISHED FLOOR AT NON-STORM SHELTER, UNLESS NOTED. TOP OF CMU WALL ELEVATION 12'-0" ABOVE MAIN FINISHED FLOOR AT NON-STORM SHELTER CORRIDOR, UNLESS NOTED.
- ROOF SYSTEM: 1 1/2" x 22 GA GALV METAL DECK ON PRE-MANUFACTURED METAL STUD TRUSSES AT 4'-0" MAXIMUM ON CENTER. SEE GENERAL NOTES. ANCHOR METAL DECK TO TRUSSES WITH #12 SCREWS IN 36/4 PATTERN WITH 2#10 SIDELAP SCREWS BETWEEN TRUSSES.
- TOP OF CMU IS EITHER LEVEL OR SLOPING UNIFORMLY BETWEEN NOTED ELEVATIONS.
- TRUSS MANUFACTURER TO COORDINATE DRAFT STOP TRUSS LOCATIONS WITH ARCHITECTURAL DRAWINGS.
- FOR WALL LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
- GENERAL CONTRACTOR SHALL COORDINATE THE LOAD MAGNITUDE AND LOCATION OF ANY EQUIPMENT SUPPORTED FROM THE METAL STUD TRUSSES. THESE LOADS AND LOCATIONS ARE TO BE SHOWN ON THE TRUSS SHOP DRAWINGS. ANY ATTACHMENT OF EQUIPMENT TO THE TRUSSES SHALL BE BY THE EQUIPMENT SUPPLIERS.
- PROVIDE DRAG STRUT TRUSS AS NOTED ON PLAN. TRUSS MANUFACTURER TO DESIGN TRUSS AND CONNECTION TO STRUCTURE FOR A SERVICE LOAD OF 160 PLF (SERVICE) FOR THE LENGTH OF THE TRUSS.
- PROVIDE MASONRY AND VENEER LINTELS AT ALL OPENINGS. SEE SCHEDULES ON S1.2.
- "BP" INDICATES BEAM BEARING PLATE. SEE TYPICAL DETAIL ON SHEET S1.5.
- GENERAL CONTRACTOR SHALL COORDINATE METAL STUD TRUSS LAYOUT WITH MECHANICAL EQUIPMENT AND DUCT LOCATIONS.
- HANGER LOCATIONS FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE TRUSS MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAIL ON S1.4.
- WHERE MECHANICAL DUCTS MUST EXTEND THRU LOAD BEARING WALLS BELOW HOLLOW CORE SLABS, PROVIDE MASONRY BOND BEAM PER DETAIL/SCHEDULE ON S1.5.
- TRUSS MANUFACTURER TO PROVIDE ALL MISC STEEL CLOSURE PLATES, SUCH AS RIDGE, HIP AND VALLEY PLATES.
- BLOCKING TRUSS/PLATE SHALL BE LOCATED AS SHOWN ON PLAN. TRUSS/PLATE SHALL BE DESIGNED BY TRUSS MANUFACTURER TO TRANSFER 2000 LBS (SERVICE) OF FORCE DOWN TO TOP OF WALL. SEE DETAIL ON S1.4. ANCHOR TOP CHORD OF BLOCKING TRUSS TO ROOF DECK AS DIRECTED BY TRUSS MANUFACTURER TO TRANSFER 500 LBS/FT (SERVICE) SHEAR FORCE.
- METAL STUD SOFFIT FRAMING SHALL BE DESIGNED BY CONTRACTOR TO HANG FROM ROOF STRUCTURE. CONTRACTOR SHALL ENGAGE METAL STUD ENGINEER AND PROVIDE CALCULATIONS AND SHOP DRAWINGS FOR SOFFIT DESIGN. DESIGN SOFFIT FOR DEAD WEIGHT PLUS ANY SUSPENDED EQUIPMENT AND A 5 PSF HORIZONTAL LOAD OVER SURFACE. TRUSS MANUFACTURER TO DESIGN TRUSSES IN THIS AREA FOR MINIMUM 250 PLF DEAD WEIGHT FROM SOFFIT.
- HANGER LOCATIONS FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE TRUSS MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAIL ON S1.4.
- BLOCKING TRUSSES/PLATES, BRIDGING, PERMANENT BRACING, MISCELLANEOUS STEEL CLOSURE PLATES, ETC. SHALL BE DESIGNED AND INDICATED ON THE TRUSS LAYOUT SHOP DRAWINGS. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES.
- CONTRACTOR NOTE: ALL MECHANICAL OPENING SIZES AND LOCATIONS IN LOAD BEARING MASONRY WALL SHOULD BE COORDINATED BY THE CONTRACTOR AND INDICATED ON THE MASONRY WALL REINFORCING SHOP DRAWINGS.
- METAL STUD SUPPORT FRAMING SHALL BE DESIGNED BY CONTRACTOR TO SUPPORT INTAKE HOODS, RELIEF HOODS, ETC. CONTRACTOR SHALL ENGAGE METAL STUD ENGINEER AND PROVIDE CALCULATIONS AND SHOP DRAWINGS FOR ALL NECESSARY METAL STUD FRAMING DESIGNS.
- DIAGONAL HATCH PATTERN INDICATES MECHANICAL ATTIC IN THE PLANE OF THE TRUSSES. PREFABRICATED CFS TRUSS MANUFACTURER SHALL DESIGN TRUSSES AS REQUIRED TO PROVIDE MAXIMUM HEAD HEIGHT IN THESE AREAS. FOR ADDITIONAL INFORMATION, SEE ARCH. AND MECH. DWGS.
- EXTEND TOP OF WALL ELEVATION UP TO DECK BEARING ELEVATION AT STAIR SHAFT. PROVIDE 3/8x5 x CONT. PLATE W/ 1/2"x8x8" LONG HEADED STUDS @16 IN TOP OF WALL. PROVIDE AND ANCHOR 12 GA TRACK TO INSIDE FACE OF STAIR SHAFT CMU WALL. ANCHOR STEEL ROOF DECK TO TRACK W/ #12 SCREWS @12 AND TO PLATE W/ 5/8" PUDDLE WELDS @6.



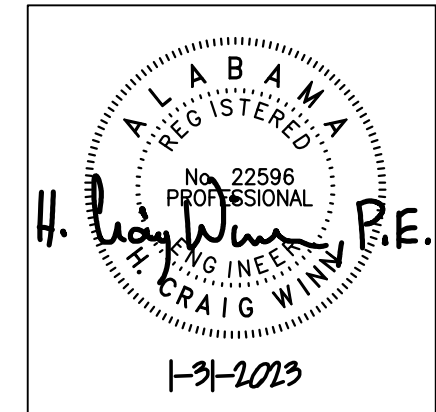






ELEVATION $\frac{1}{3/4"=1'-0"}$ S3.10

CLASSROOM ADDITION TO
LINCOLN HIGH SCHOOL
78989 AL HIGHWAY 77, LINCOLN, ALABAMA 35096
TALLADEGA COUNTY BOARD OF EDUCATION



SHEET TITLE:
**SECTIONS
AND DETAILS**

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	JANUARY 31, 2023
REVISIONS	
Δ 1	ADDENDUM NO. 3 03-06-2023

JOB NO.	22-20
SHEET NO:	S3.10
19 OF 19	