

RENOVATE INTERIOR & EXTERIOR

St. Clair Readiness Center

St. Clair, Missouri



OWNER: STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

DEPARTMENT OF
MISSOURI NATIONAL GUARD

PROJECT
MANAGEMENT: OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DESIGNER: VESTAL CORPORATION
1 THE PINES COURT, STE A
ST. LOUIS, MO 63141

PROJECT NUMBER: T2326-01

SITE NUMBER: 6304
FACILITY NUMBER: 8136304011

SHEET NUMBER:

G000
1 OF 85 SHEETS
2024.04.23

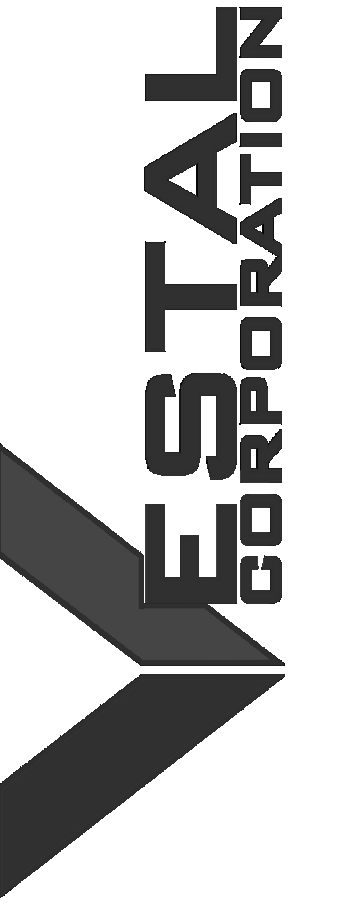
CODE DATA & LIFE SAFETY INFORMATION

PROJECT DESCRIPTION: NO. OF STORIES AT OR ABOVE GRADE 1 NO. OF STORIES BELOW GRADE 0 BUILDING HEIGHT 11'-2" TO 20'-5" BUILDING AREA APPROX 17,217 SF AUTOMATIC SPRINKLER SYSTEM NON-SPRINKLED	PLUMBING FIXTURE COUNTS: MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (TABLE 2902.1) BUSINESS OCCUPANTS = 115 occ			FIRE RESISTANCE REQUIREMENTS: BUILDING ELEMENTS (IBC TABLE 601) PRIMARY STRUCTURAL FRAME: TYPICAL SUPPORTING ROOF ONLY EXTERIOR WALLS: BEARING NONBEARING BY FIRE SEPARATION DISTANCE 0' TO 5' 5' TO 10' 10' TO 30' OVER 30' INTERIOR WALLS: BEARING TYPICAL SUPPORTING ROOF ONLY NONBEARING WALLS FLOOR CONSTRUCTION: TYPICAL ROOF CONSTRUCTION: TYPICAL 20' OR MORE ABOVE FLOOR BELOW SHAFT ENCLOSURES (IBC 708) 4 STORIES OR MORE 3 STORIES OR LESS OPENING PROTECTIVES (IBC TABLE 715.4) FIRE WALLS & FIRE BARRIERS 4 HOUR ASSEMBLY 3 HOUR ASSEMBLY 2 HOUR ASSEMBLY 1 1/2 HOUR ASSEMBLY SHAFT, EXIT ENCLOSURES & EXIT PASSAGEWAY 2 HOUR ASSEMBLY FIRE BARRIERS ENCLOSURES FOR SHAFTS & EXIT ACCESS 1 HOUR ASSEMBLY OTHER FIRE BARRIERS 1 HOUR ASSEMBLY FIRE PARTITIONS - CORRIDOR WALLS 1 HOUR ASSEMBLY 1/2 HOUR ASSEMBLY OTHER FIRE PARTITIONS 1 HOUR ASSEMBLY 1/2 HOUR ASSEMBLY EXTERIOR WALLS 3 HOUR ASSEMBLY 2 HOUR ASSEMBLY 1 HOUR ASSEMBLY SMOKE BARRIERS 1 HOUR ASSEMBLY FIRE DAMPERS (IBC TABLE 716.3.2.1) LESS THAN 3 HOUR ASSEMBLY 3 HOUR OR GREATER ASSEMBLY INTERIOR EXIT STAIRWAYS & RAMPS (IBC 1022) 4 STORIES OR MORE 3 STORIES OR LESS EXIT PASSAGEWAYS (IBC 1023) HORIZONTAL EXITS (IBC 1025)																																																							
	<table border="1"> <thead> <tr> <th></th> <th>MALE</th> <th>MALE/FEMALE</th> <th>FEMALE</th> </tr> </thead> <tbody> <tr> <td>BUSINESS (B)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WATER CLOSETS</td> <td></td> <td>1 PER 25 FIRST 50</td> <td></td> </tr> <tr> <td>LAVATORIES</td> <td></td> <td>1 PER 50 OVER 50</td> <td></td> </tr> <tr> <td></td> <td></td> <td>1 PER 40 FIRST 80</td> <td></td> </tr> <tr> <td></td> <td></td> <td>1 PER 80 OVER 80</td> <td></td> </tr> <tr> <td>DRINKING FOUNTAIN</td> <td></td> <td>1 PER 100</td> <td></td> </tr> <tr> <td>SERVICE SINK</td> <td></td> <td>1</td> <td></td> </tr> </tbody> </table>					MALE	MALE/FEMALE	FEMALE	BUSINESS (B)				WATER CLOSETS		1 PER 25 FIRST 50		LAVATORIES		1 PER 50 OVER 50				1 PER 40 FIRST 80				1 PER 80 OVER 80		DRINKING FOUNTAIN		1 PER 100		SERVICE SINK		1																								
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APPLICABLE CODES: 2018 INTERNATIONAL BUILDING CODE 2015 INTERNATIONAL MECHANICAL CODE 2015 INTERNATIONAL PLUMBING CODE 2009 INTERNATIONAL ENERGY CONSERVATION CODE 2014 NATIONAL ELECTRICAL CODE 2015 INTERNATIONAL FUEL GAS CODE 2015 INTERNATIONAL FUEL GAS CODE 2015 INTERNATIONAL FIRE CODE NFPA 13, INSTALLATION OF SPRINKLER SYSTEMS NFPA 14, STANDPIPE & HOSE SYSTEM NFPA 72, NATIONAL FIRE ALARM CODE AMERICANS WITH DISABILITY ACT (ADA) - ICC/ANSI 117.1-2009	<table border="1"> <thead> <tr> <th>MALE</th> <th>REQUIRED BUSINESS</th> <th>PROVIDED BUSINESS</th> <th>FEMALE</th> </tr> </thead> <tbody> <tr> <td>WATER CLOSETS</td> <td>X</td> <td>5</td> <td></td> </tr> <tr> <td>URINALS</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>LAVATORIES</td> <td>X</td> <td>4</td> <td></td> </tr> <tr> <td>FEMALE</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WATER CLOSETS</td> <td>X</td> <td>5</td> <td></td> </tr> <tr> <td>LAVATORIES</td> <td>X</td> <td>4</td> <td></td> </tr> <tr> <td>MALE/FEMALE</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WATER CLOSETS</td> <td>4</td> <td>10</td> <td></td> </tr> <tr> <td>URINALS</td> <td>0</td> <td>2</td> <td></td> </tr> <tr> <td>LAVATORIES</td> <td>3</td> <td>8</td> <td></td> </tr> <tr> <td>DRINKING FOUNTAINS</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>OTHER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SERVICE SINK</td> <td>1</td> <td>1</td> <td></td> </tr> </tbody> </table>			MALE	REQUIRED BUSINESS	PROVIDED BUSINESS	FEMALE	WATER CLOSETS	X	5		URINALS	X	2		LAVATORIES	X	4		FEMALE				WATER CLOSETS	X	5		LAVATORIES	X	4		MALE/FEMALE				WATER CLOSETS	4	10		URINALS	0	2		LAVATORIES	3	8		DRINKING FOUNTAINS	2	2		OTHER				SERVICE SINK	1	1	
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DESIGN PARAMETERS: GROUND SNOW LOAD= XX WIND SPEED = XX MPH SEISMIC DESIGN CATEGORY = D OCCUPANCY CATEGORY = XX FROST LINE DEPTH = XX"	INTERIOR FINISH REQUIREMENTS: INTERIOR EXIT STAIRWAYS, RAMPS & PASSAGEWAYS GROUP B CORRIDORS & ENCLOSURES FOR EXIT ACCESS STAIRWAYS & RAMPS GROUP B ROOMS & ENCLOSED SPACES GROUP B																																																										
	(IBC TABLE 803.13) CLASS A CLASS B CLASS C																																																										
TYPE OF CONSTRUCTION, BUILDING HEIGHT & AREA: CONSTRUCTION TYPE (IBC CHAPTER 6) TYPE II B ALLOWABLE HEIGHT (IBC TABLE 504.3 AND TABLE 504.4) 3 STORIES, 55'-0" ALLOWABLE AREA (IBC TABLE 506.2) 23,000 SF ALLOWABLE AREA INCREASE (IBC SECTION 506) XX,XXX SF (SECTION 506.3 - SPRINKLER) ALLOWABLE AREA INCREASE (IBC SECTION 506) XX,XXX SF (SECTION 506.2 - FRONTAGE) TOTAL ALLOWABLE AREA (W/INCREASES SECTION 506) 23,000 SF	EXIT REQUIREMENTS: OCCUPANT LOAD (IBC TABLE 1004.1.1) ACCESSORY STORAGE AREAS, MECHANICAL/EQUIPMENT BUSINESS AREAS 300 GROSS SF PER OCCUPANT 100 GROSS SF PER OCCUPANT CAPACITY & EXIT WIDTH (IBC 1005.1) STAIRWAYS OTHER EGRESS COMPONENTS 0.3" PER OCCUPANT 0.2" PER OCCUPANT DOOR WIDTH (IBC 1008.1.1) MINIMUM WIDTH MAXIMUM WIDTH 32" 48" STAIRWAY WIDTH (IBC 1009.1) MINIMUM WIDTH LESS THAN 50 OCCUPANTS 44" 36" RAMP WIDTH (IBC 1010.5.1) MEANS OF EGRESS RAMP RAMP BETWEEN HANDRAILS PER 1018.2 36" COMMON PATH OF TRAVEL (IBC 1014.3) ASSEMBLY OCCUPANCY BUSINESS OCCUPANCY 75' 100' MINIMUM NUMBER OF EXITS (IBC 1015.1) 1-49 OCCUPANTS 49-500 OCCUPANTS 501-1,000 OCCUPANTS MORE THAN 1,000 OCCUPANTS 1 EXIT 2 EXITS 3 EXITS 4 EXITS TRAVEL DISTANCE (IBC TABLE 1016.1) ASSEMBLY OCCUPANCY BUSINESS OCCUPANCY 250' 300' DEAD ENDS (IBC 1018.4) ASSEMBLY OCCUPANCY BUSINESS OCCUPANCY 20' 50' CORRIDOR WIDTH (IBC TABLE 1018.2) MINIMUM WIDTH ACCESS TO EQUIPMENT LESS THAN 50 OCCUPANTS 44" 24" 36"																																																										
OCCUPANCY CLASSIFICATION: PRIMARY OCCUPANCY CLASSIFICATIONS (IBC CHAPTER 3) BUSINESS GROUP - B	BUILDING ENVELOPE DESIGN REQUIREMENTS: ROOF INSULATION ENTIRELY ABOVE DECK R-20 ci WALLS (ABOVE GRADE) MASS R-9.5 ci METAL FRAMED R-13 + R-7.5 ci WALLS (BELOW GRADE) MASS NOT REQUIRED SLAB ON GRADE FLOORS NOT REQUIRED OPAQUE DOORS SWINGING (ASSEMBLY) U-0.70 ROLLING (ASSEMBLY) U-0.50 FENESTRATION - METAL FRAMING CURTAIN WALL / STOREFRONT U-0.50 ENTRANCE DOOR U-0.85 ALL OTHERS U-0.55																																																										
OCCUPANCY LOAD CALCULATION: BUSINESS GROUP "B" = 150 GROSS SQFT PER PERSON MAIN LEVEL: BUSINESS = 17,217 SQFT /150 = 114.78 occ (115) TOTAL OCCUPANTS = 115 OCCUPANTS	EGRESS EXIT CALCULATION: MAIN LEVEL: BUSINESS = 115 occ / 0.2" = 23" EGRESS PROVIDED = 1 = 64" WIDE DOORS 1 = 60" WIDE DOORS 1 = 42" WIDE DOORS 2 = 36" WIDE DOOR TOTAL WIDTH PROVIDED = 238" TOTAL OCCUPANTS = 115 OCCUPANTS / 0.2" = 22" REQUIRED TOTAL WIDTH OF EGRESS PROVIDED = 238" PROVIDED																																																										

STATE OF MISSOURI
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04/23/2024
PROFESSIONAL SEAL



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ST. CLAIR READINESS
CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
**CODE DATA AND
LIFE SAFETY**

SHEET NUMBER:

G002

3 OF 85 SHEETS
2024.04.23



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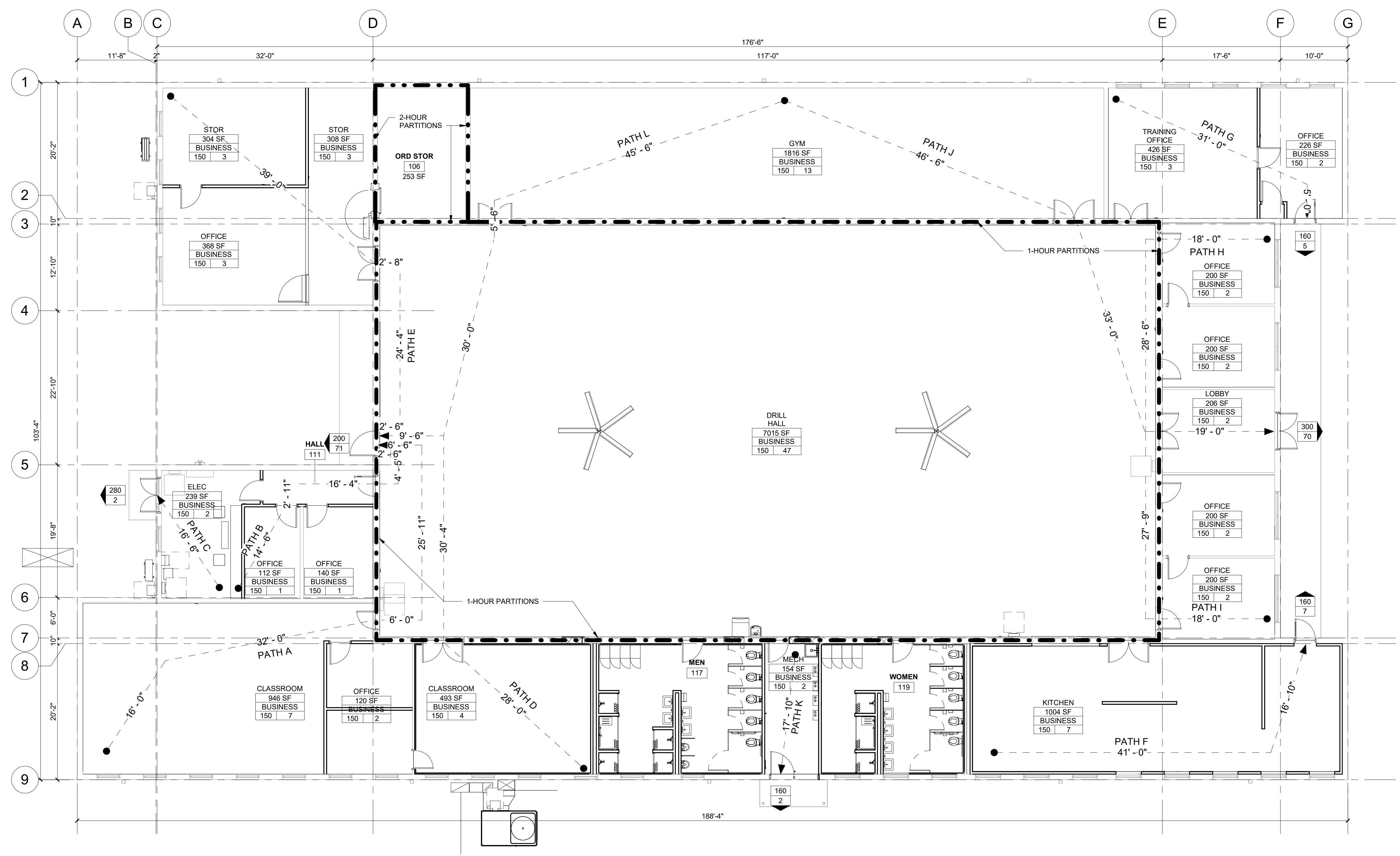
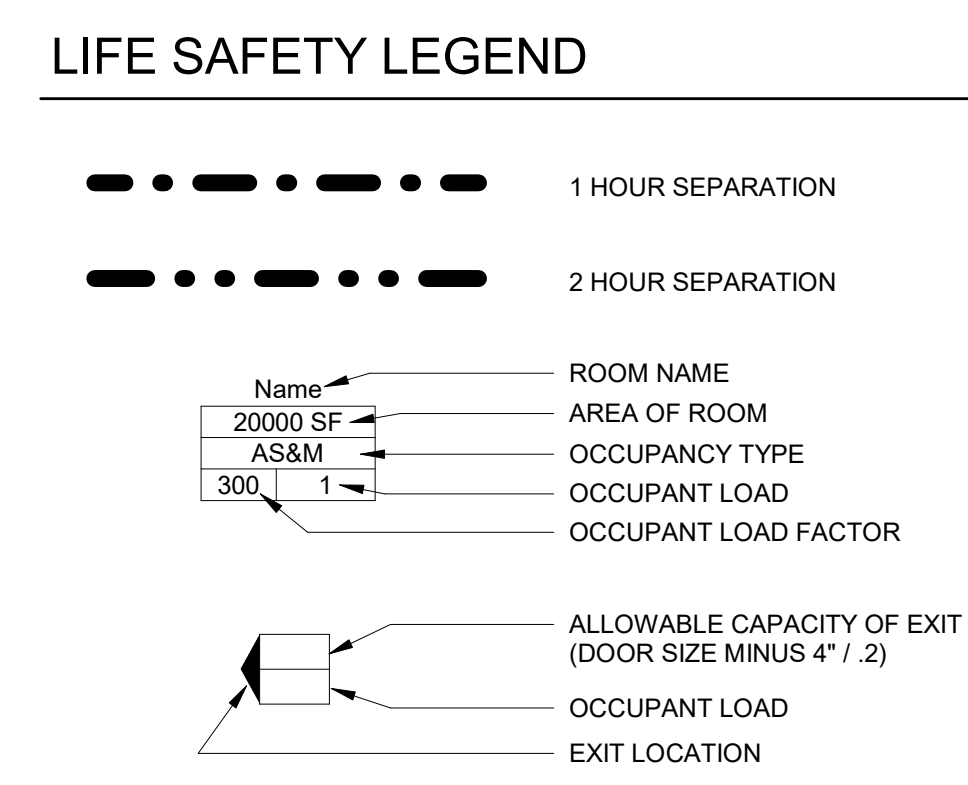
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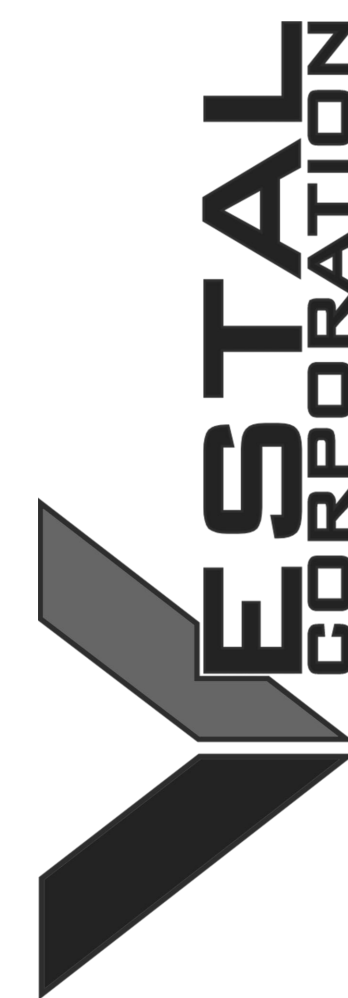
SHEET NUMBER:

G003

4 OF 85 SHEETS
2024.04.23

PATH	TOTAL TRAVEL DISTANCE
PATH A	86'-5"
PATH B	40'-8"
PATH C	16'-6"
PATH D	67'-10"
PATH E	68'-6"
PATH F	57'-10"
PATH G	36'-0"
PATH H	65'-6"
PATH I	64'-9"
PATH J	98'-6"
PATH K	17'-10"
PATH L	90'-6"





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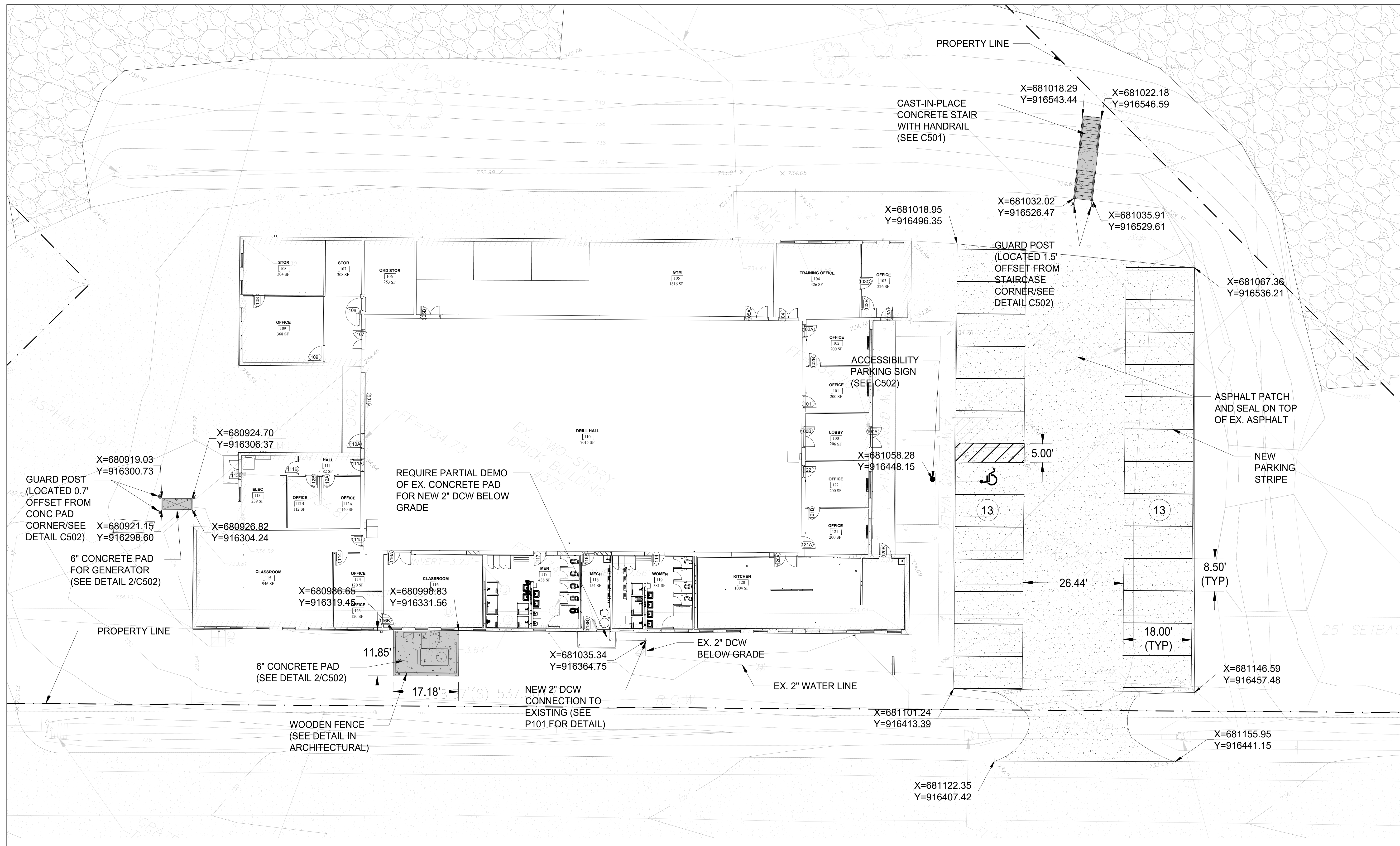
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DRAWN BY: DSL
CHECKED BY: CJM
DESIGNED BY: DSL

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SITE PLAN

SHEET NUMBER:

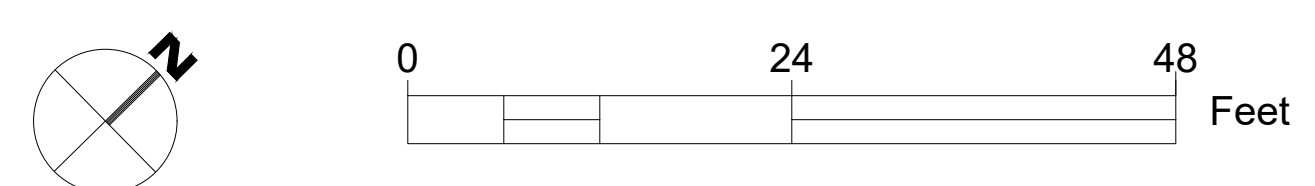
C101

6 OF 85 SHEETS
2024.04.23



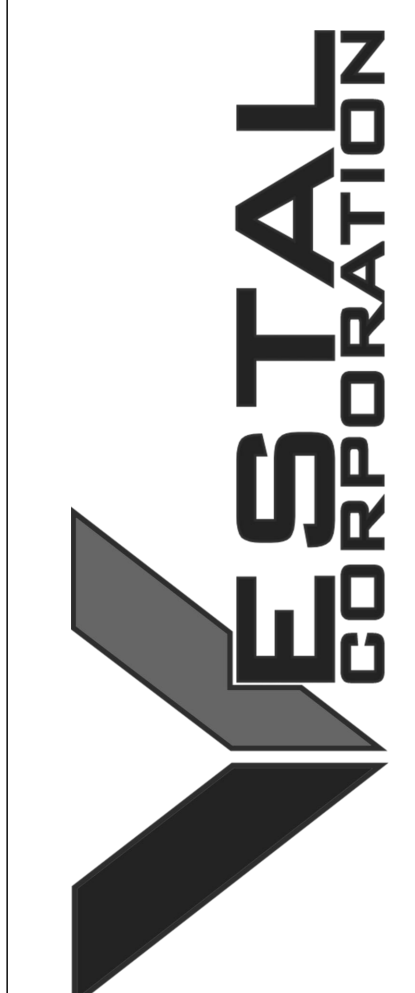
1 SITE PLAN
C101 1" = 1'-0"

- NOTES**
1. COMPLETELY SEPARATED JOINT IN THE CLAY PIPE DISCOVERED APPROXIMATELY 5 FEET OUTSIDE INTO THE YARD AND 4 FEET DEEP PER PLUMBING CONTRACTOR.
 2. BROKEN PIPE RUNS UNDER THE DITCH RIGHT BEFORE HWY 47 PER PLUMBING CONTRACTOR.
 3. 4" PARKING STRIP MATERIALS CAN BE SELECTED FROM ANY BRAND LISTED IN MoDOT FIELD SECTION 1048 TABLE 5 FOLLOWING A REVIEW BY THE CLIENT
 4. DAMAGED GRASS AND MULCH WILL BE REPAIRED AS NEEDED.





4-23-2024
PROFESSIONAL SEAL



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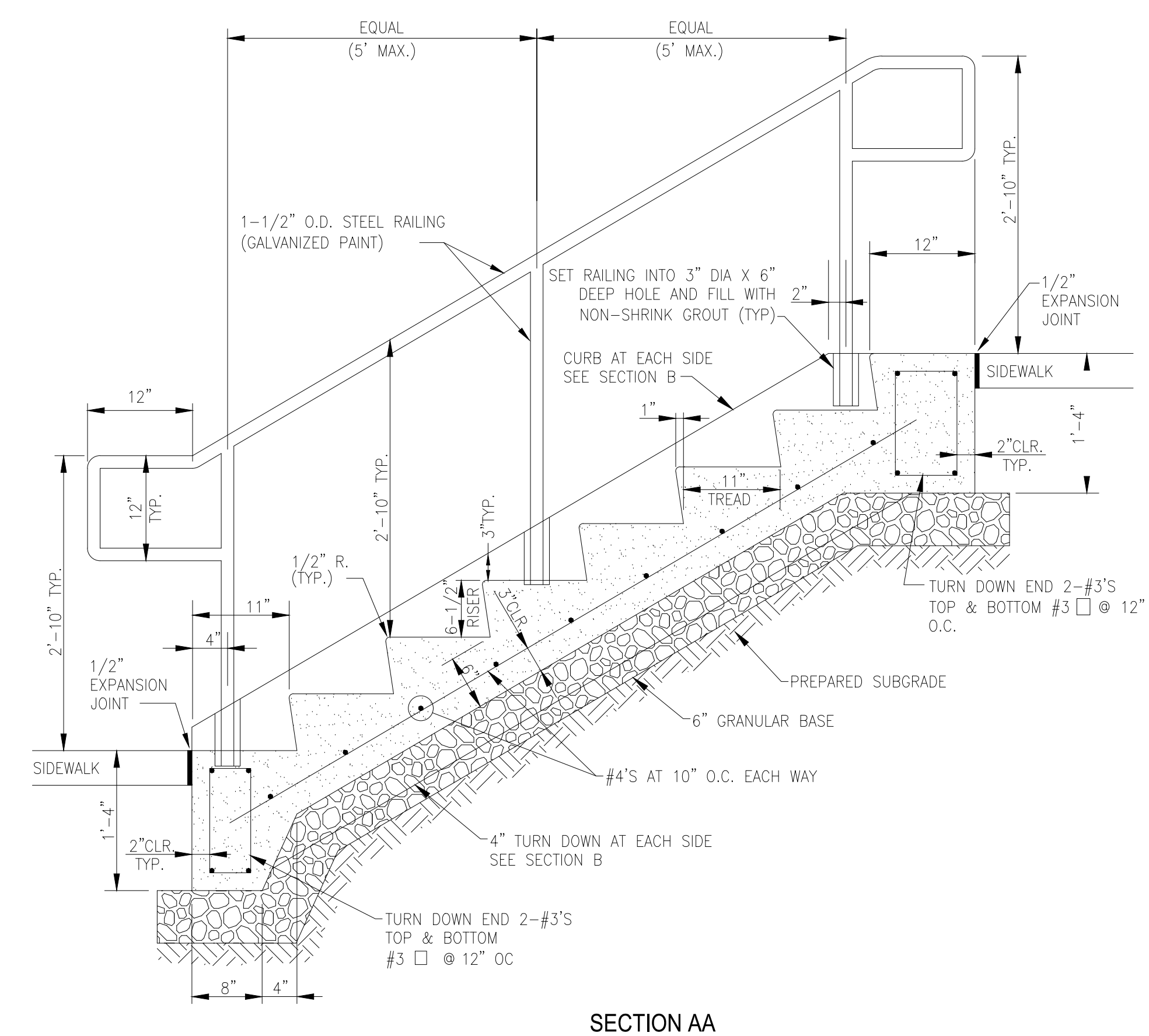
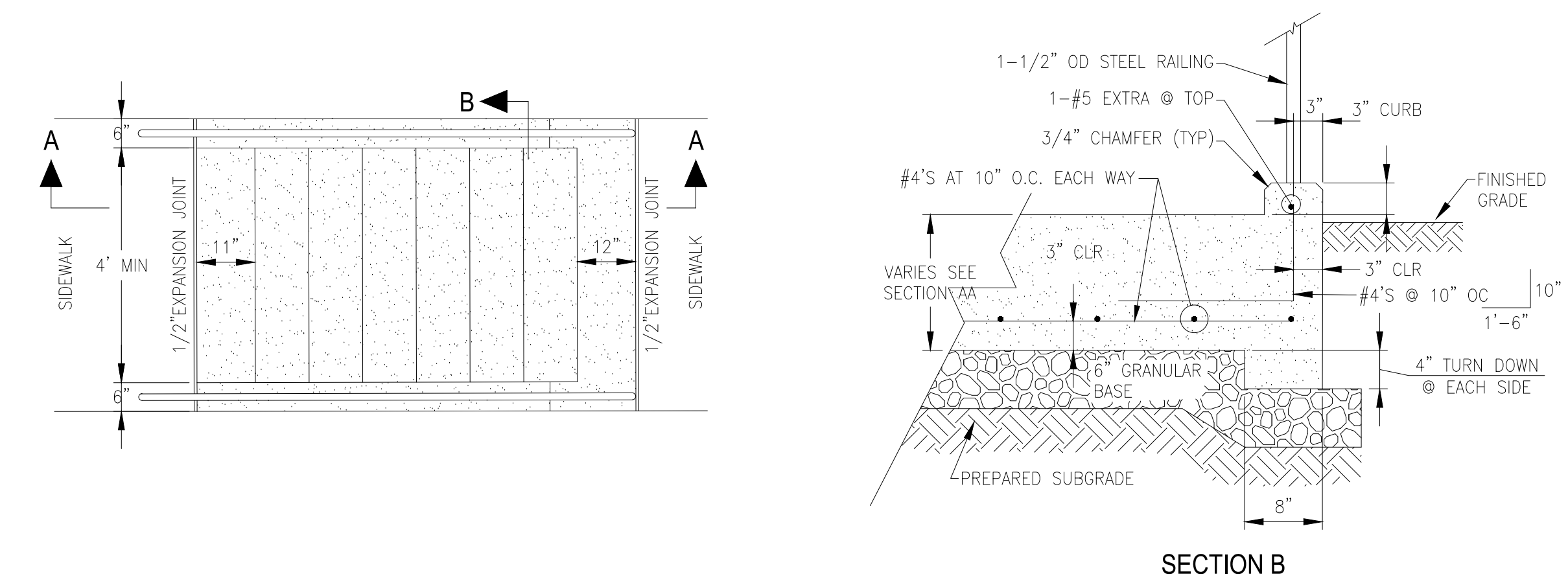
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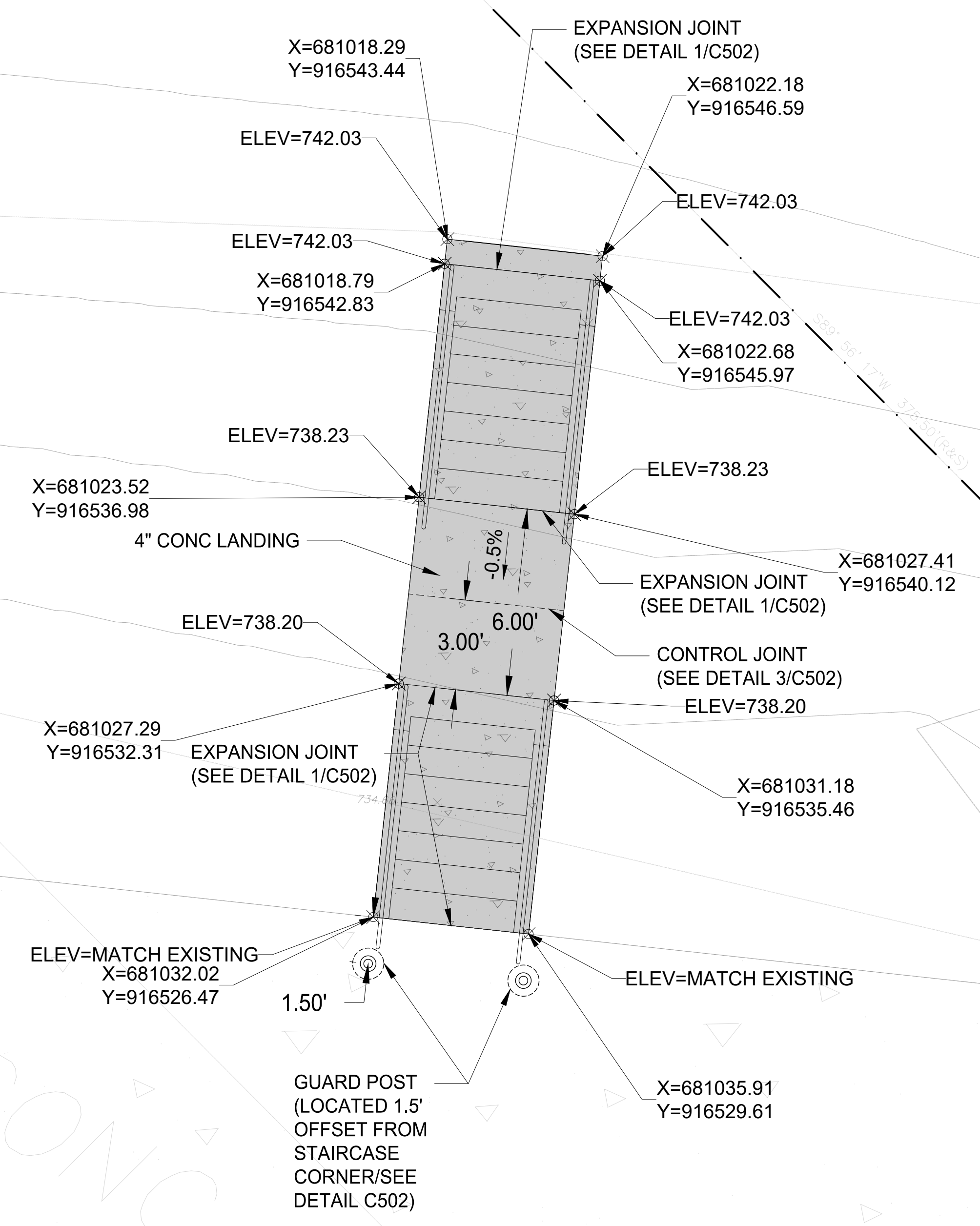
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DRAWN BY: DSL
CHECKED BY: CJM
DESIGNED BY: DSL

SHEET TITLE:
STAIR DETAILS

SHEET NUMBER:
C501
7 OF 85 SHEETS
2024.04.23



2
C501 STAIRCASE DETAILS
NTC



1
C501 STAIRCASE GRADING PLAN
1" = 3'-0"



4-23-2024
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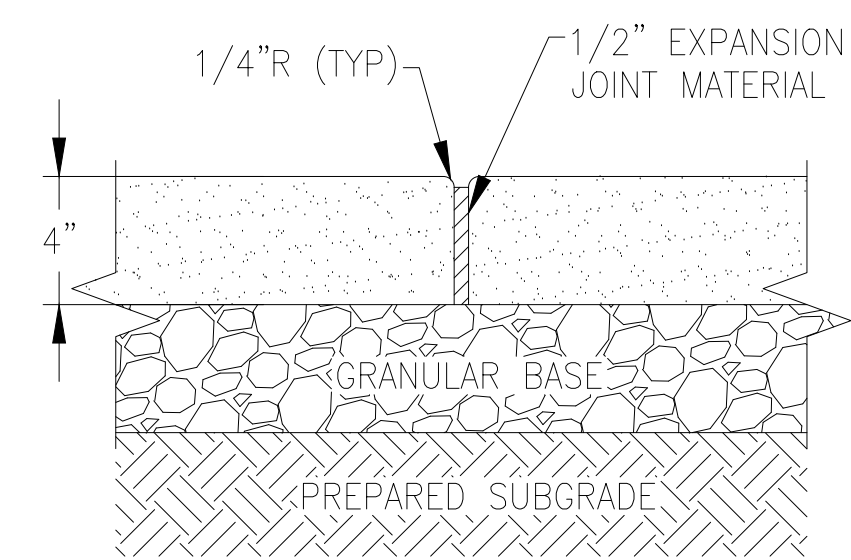
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DETAILS

SHEET NUMBER:

C502

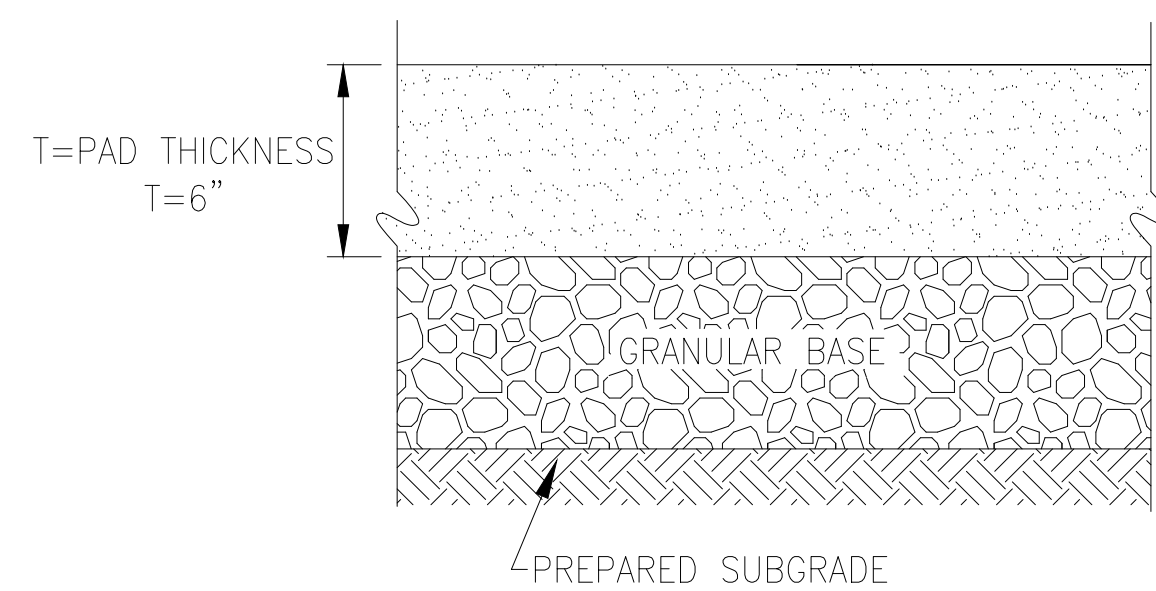
8 OF 85 SHEETS
2024.04.23



1 EXPANSION JOINT IN
CONCRETE SIDEWALK

1
C502

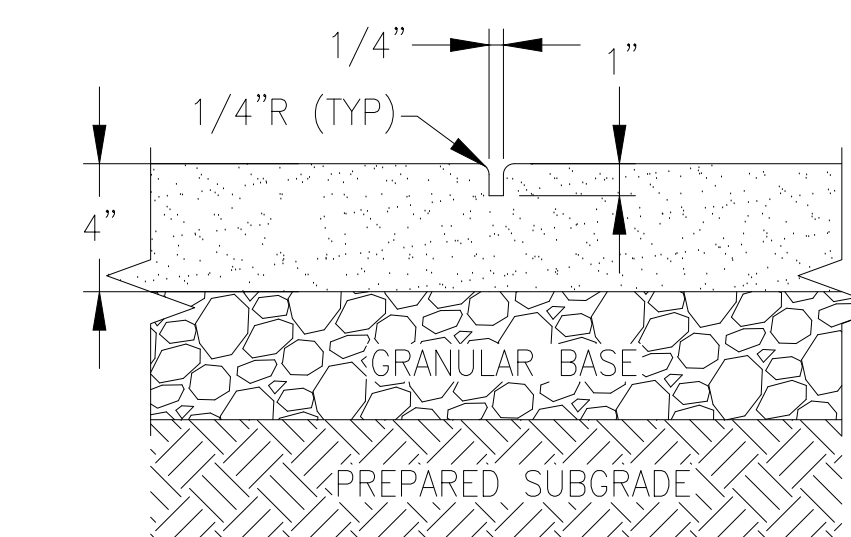
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2 CONCRETE PAD

2
C502

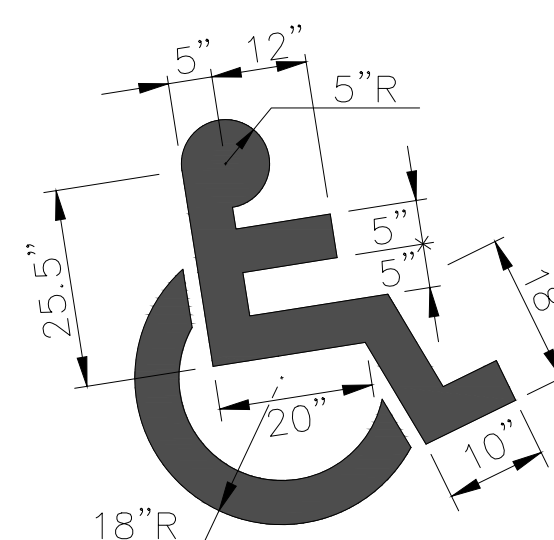
NTC



3 CONTROL JOINT IN
CONCRETE SIDEWALK

3
C502

NTC

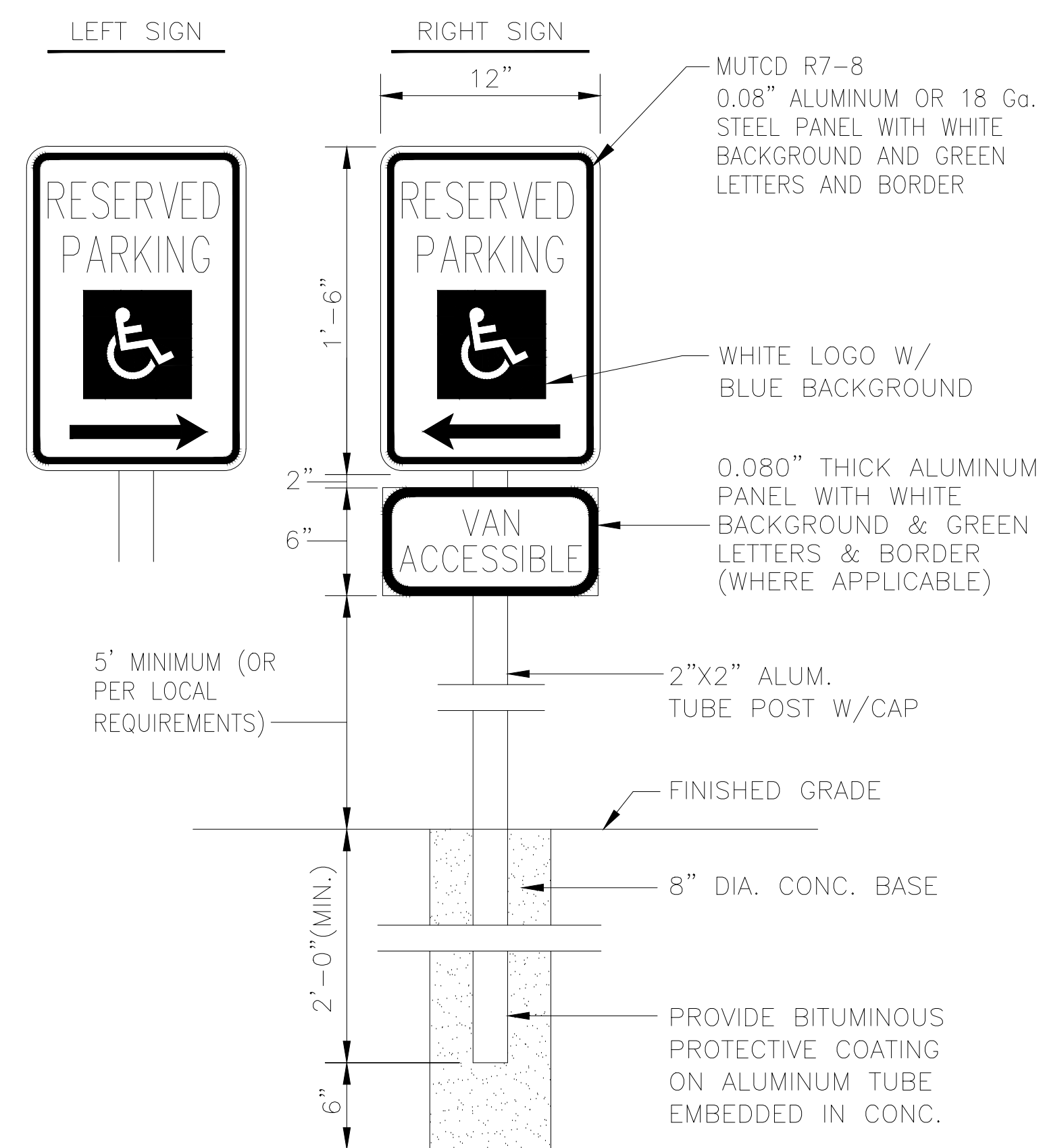


NOTE: SYMBOL TO BE PAINTED
WITH WHITE NON-REFLECTIVE
TRAFFIC PAINT.

4 PAINTED ACCESSIBLE SYMBOL

4
C502

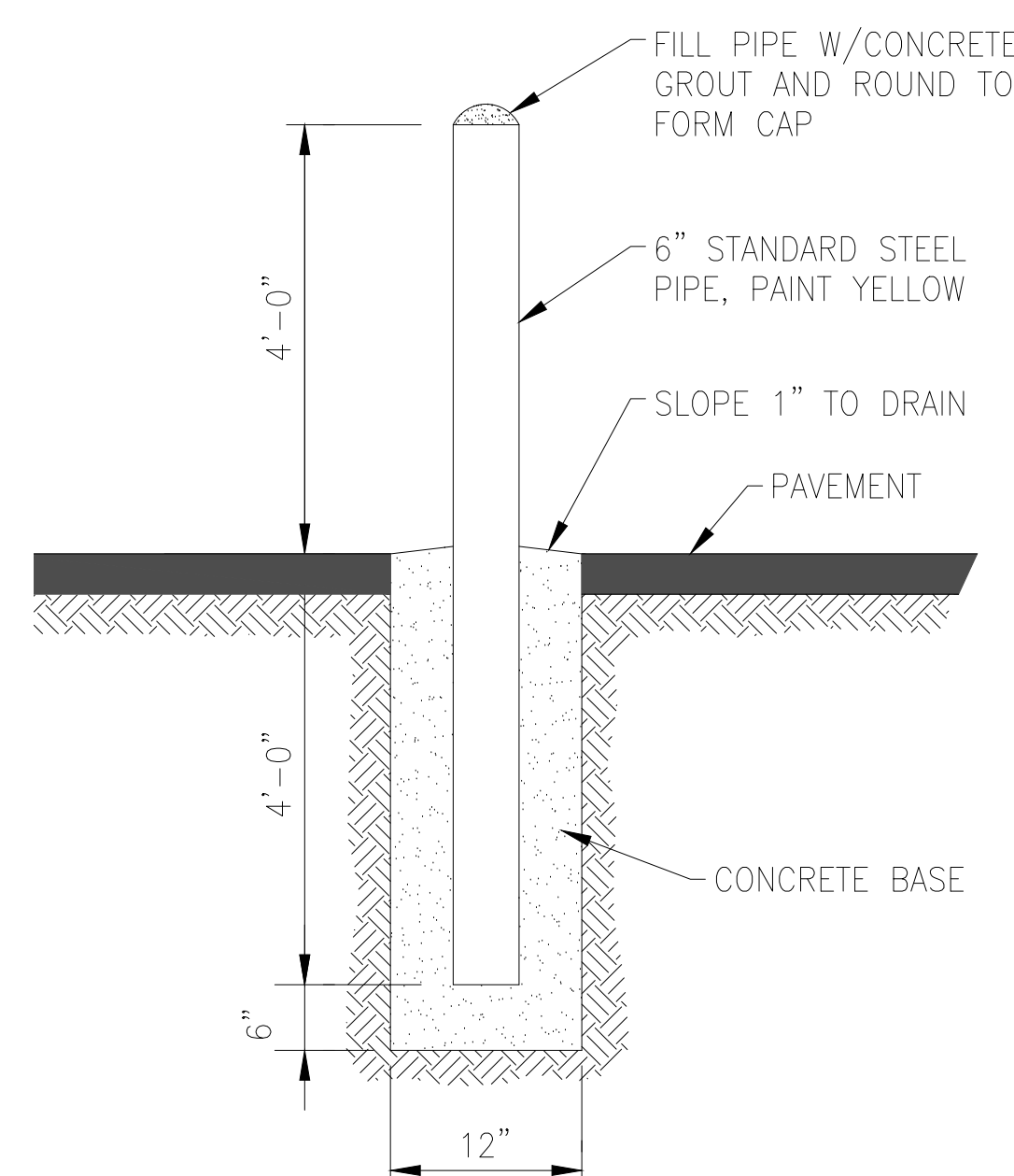
NTC



5 ACCESSIBILITY PARKING SIGN

5
C502

NTC



6 GUARD POST DETAIL

6
C502

NTC



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DESIGNED BY: JB

SHEET TITLE:
FLOOR DEMO PLAN

SHEET NUMBER:

D101

9 OF 85 SHEETS
2024.04.23

DEMOLITION / NEW CONSTRUCTION LEGEND

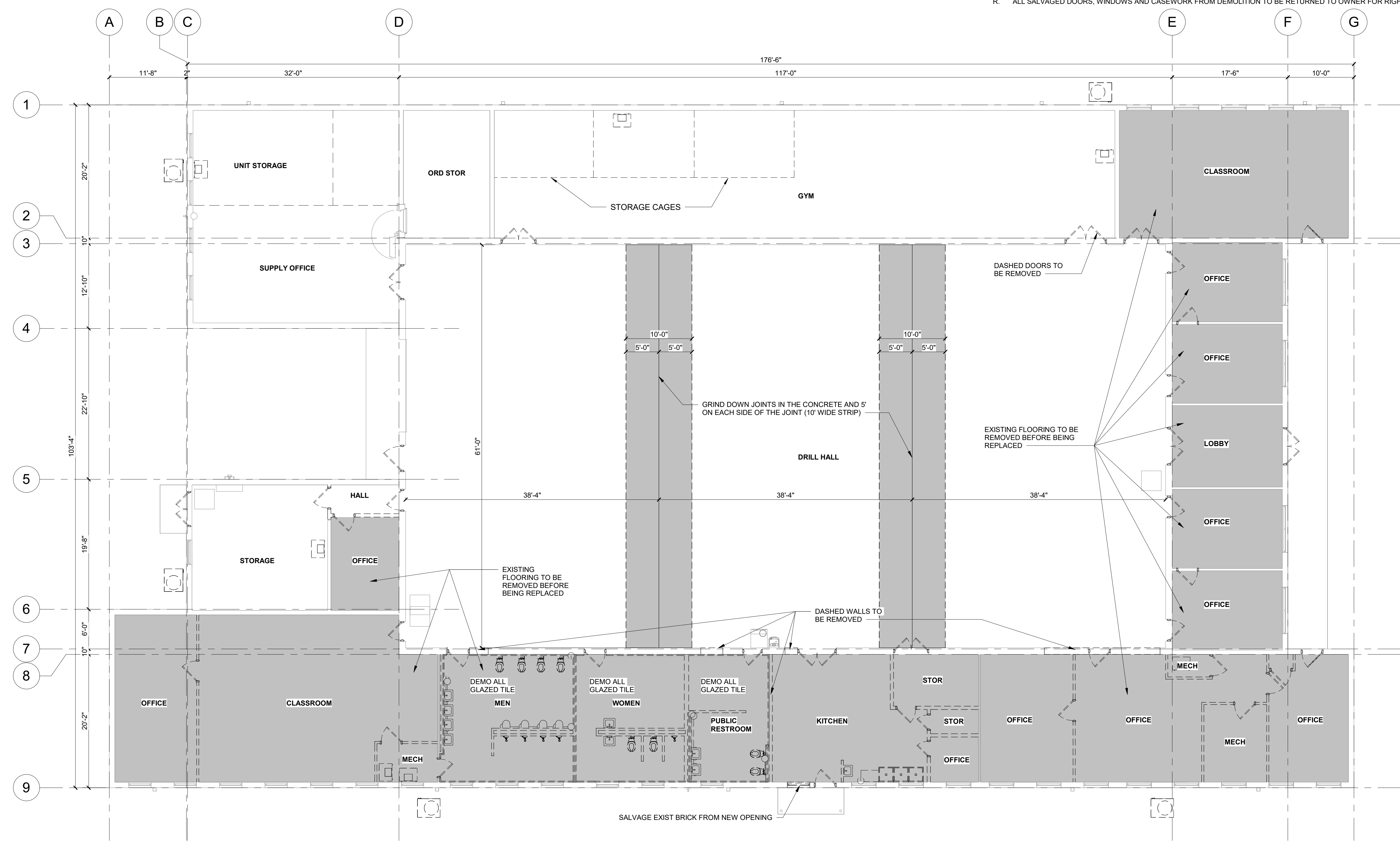
- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED
- NEW CONSTRUCTION
- EXISTING FLOOR TO BE DEMOLISHED

NOTE: NOT ALL TYPES USED

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR HIRING AN ABATEMENT CONTRACTOR TO IDENTIFY THE PROCESS AND WORK IN THE ASBESTOS. AIR MONITORING IS NEEDED BEFORE, DURING, AND AFTER THE ABATEMENT WORK. THE GENERAL CONTRACTOR NEEDS TO DO HAZARDOUS MATERIAL TESTING TO VERIFY THAT ALL ASBESTOS HAS BEEN CLEANED.



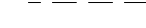
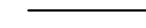
GENERAL DEMOLITION NOTES

- A. LIGHT GRAY WALLS INDICATE EXISTING CONSTRUCTION TO REMAIN.
- B. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED.
- C. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS TO DETERMINE EXACT EXTENT OF DEMOLITION REQUIRED TO COORDINATE WITH NEW CONSTRUCTION.
- D. CONTRACTOR TO CAREFULLY AND PRUDENTLY PERFORM DEMOLITION AS INDICATED. CONTRACTOR SHOULD CAREFULLY OBSERVE EXISTING CONDITIONS PRIOR TO ANY AND ALL DEMOLITION AND COORDINATE SUCH WORK WITH NEW CONSTRUCTION. ARCHITECT SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARISE.
- E. CONTRACTOR TO PROTECT AND SHORE ADJACENT AREAS THAT ARE TO REMAIN INTACT DURING DEMOLITION AND ENSURE MAINTENANCE OF EXISTING STRUCTURAL INTEGRITY.
- F. ALL STRUCTURAL COLUMNS, BEAMS, ETC. SHALL BE PROTECTED AGAINST DAMAGE DURING DEMOLITION.
- G. DEMOLITION WORK INCLUDES DISCONNECTIONS, CAPPING AND/OR REMOVAL OF ALL ELECTRICAL, PLUMBING AND HVAC LINES AND/OR EQUIPMENT WHICH IS FOUND WITHIN OR ADJACENT TO SPECIFIC ITEMS NOTED TO BE DEMOLISHED. CONFIRM ANY DISCREPANCIES WITH ARCHITECT IN WRITING. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.
- H. WHERE DEMOLITION INVOLVES ABANDONMENT OF EXISTING MECHANICAL, ELECTRICAL AND PLUMBING SERVICE. COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS.
- I. CONTRACTOR TO COORDINATE WITH THE OWNER THE DISCONNECTION OR INTERRUPTION OF ANY MECHANICAL, PLUMBING, ELECTRICAL, DATA OR COMMUNICATION SERVICES PRIOR TO DEMOLITION. CONTRACTOR TO COORDINATE WITH THE OWNER THE NEED FOR AND LOCATION OF TEMPORARY SERVICES.
- J. PATCH WALL FINISHES TO MATCH EXISTING AT ANY DEMOLISHED MECHANICAL, ELECTRICAL AND/OR PLUMBING EQUIPMENT. RETURN AIR SUPPLY / RETURN GRILLS, ELECTRICAL OUTLETS, RECEPTACLES, ETC. TO OWNER.
- K. ALL ITEMS NOTED TO BE REMOVED ARE TO BE INSPECTED PRIOR TO DEMOLITION TO DETERMINE IF MECHANICAL, ELECTRICAL OR PLUMBING IS AFFECTED. IF SO, THE DEMOLITION CONTRACTOR IS TO CONTACT THE RESPECTIVE MECHANICAL, ELECTRICAL OR PLUMBING CONTRACTOR TO HAVE THEIR WORK REMOVED, DISCONNECTED OR CAPPED, SO THAT DEMOLITION CAN PROCEED WITHOUT INTERRUPTION.
- L. WHERE NEW CONSTRUCTION WILL ADJOIN EXISTING, REMOVE ALL MISCELLANEOUS ACCESSORIES AS NECESSARY. LEAVE CLEAN SAWCUT EDGES OR EQUIVALENT.
- M. WHERE DEMOLITION EXPOSES REMAINING INTERIORS TO WEATHER, COORDINATE WITH NEW CONSTRUCTION R PROVIDE TEMPORARY WEATHER ENCLOSURE.
- N. WHERE DEMOLITION CREATES GAPS IN EXISTING FINISHES TO REMAIN, PATCH TO MATCH EXISTING / ADJACENT SURFACES. WHERE PATCHING INVOLVES FIRE RATED ASSEMBLIES, PATCH SHALL MAINTAIN FIRE RATING.
- O. ALL EXISTING SURFACES TO REMAIN, INCLUDING THOSE DAMAGED UNDER DEMOLITION, SHALL BE EXTENDED, REPAIRED OR REFINISHED AS REQUIRED TO ACCOMMODATE NEW CEILING, FLOOR OR WALL LAYOUTS. REPAIR LL DAMAGED ITEMS TO REMAIN TO MATCH EXISTING OR NEW FINISH.
- P. ALL EXISTING SURFACES TO REMAIN WHICH ARE AFFECTED BY THE DEMOLITION PROCESS ARE TO BE PATCHED OR CLEANED TO PROVIDE A SMOOTH, LEVEL FINISH SURFACE, READY TO RECEIVE NEW SCHEDULED FINISH.
- Q. EXISTING CONDITIONS WHICH ARE DISCOVERED DURING DEMOLITION THAT WILL INTERFERE WITH THE FINAL FLOOR PLAN ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.
- R. ALL SALVAGED DOORS, WINDOWS AND CASEWORK FROM DEMOLITION TO BE RETURNED TO OWNER FOR RIGHT OF FIRST REFUSAL.



Plan North True North
1 DEMOLITION FLOOR PLAN
1/8" = 1'-0"

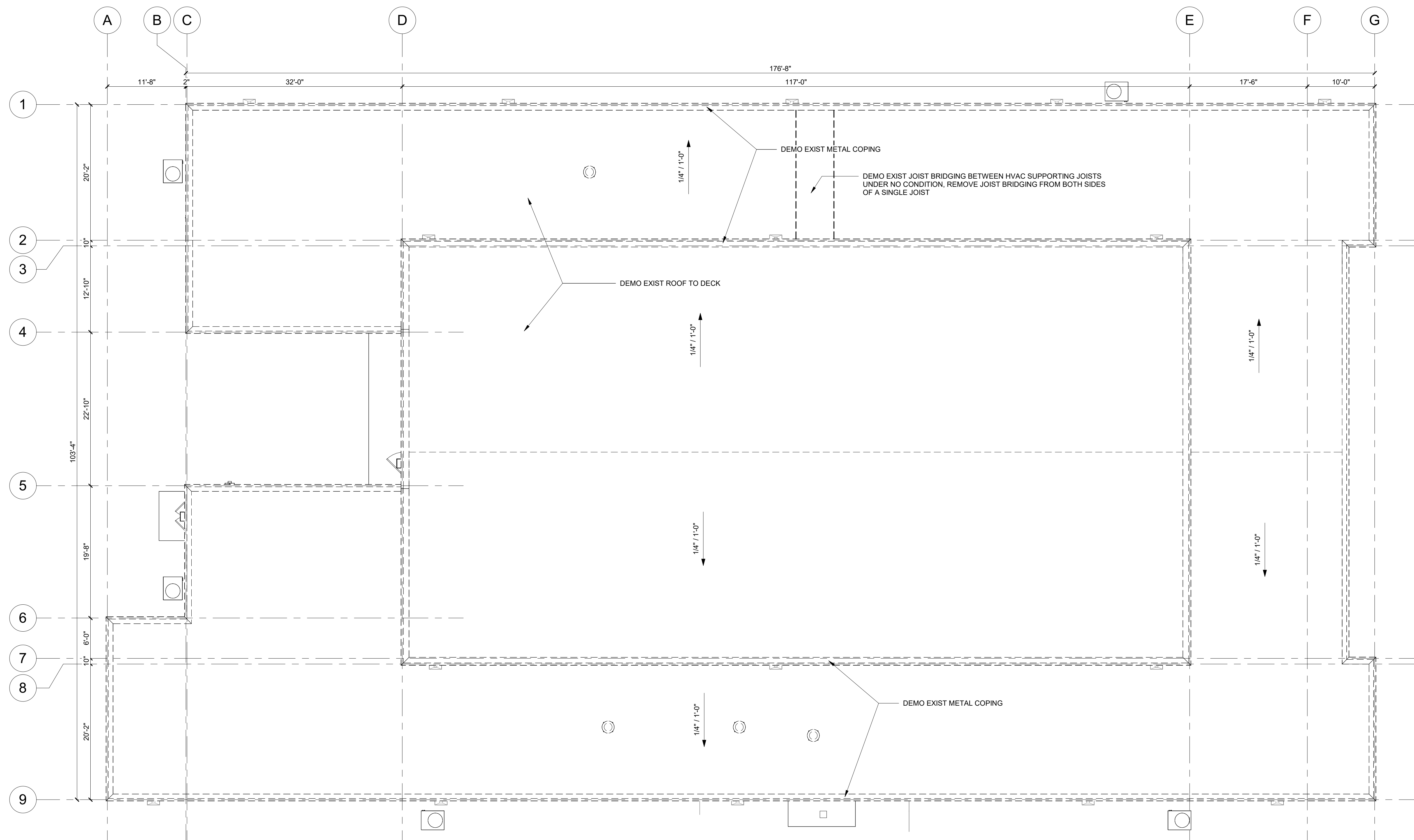
DEMOLITION / NEW CONSTRUCTION LEGEND

-  EXISTING CONSTRUCTION TO REMAIN
-  EXISTING CONSTRUCTION TO BE REMOVED
-  NEW CONSTRUCTION
-  EXISTING FLOOR TO BE DEMOLISHED

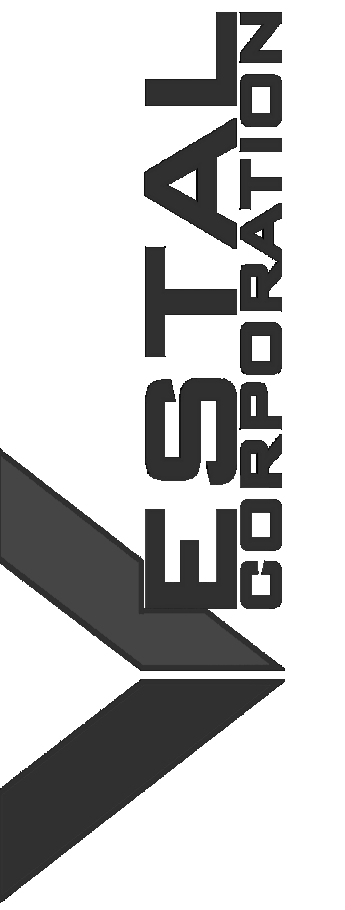
NOTE: NOT ALL TYPES USED

GENERAL DEMOLITION NOTES

- A. LIGHT GRAY WALLS INDICATE EXISTING CONSTRUCTION TO REMAIN.
- B. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED.
- C. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS TO DETERMINE EXACT EXTENT OF DEMOLITION REQUIRED TO COORDINATE WITH NEW CONSTRUCTION.
- D. CONTRACTOR TO CAREFULLY AND PRUDENTLY PERFORM DEMOLITION AS INDICATED. CONTRACTOR SHOULD CAREFULLY OBSERVE EXISTING CONDITIONS PRIOR TO ANY AND ALL DEMOLITION AND COORDINATE SUCH WORK WITH NEW CONSTRUCTION. ARCHITECT SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARISE.
- E. CONTRACTOR TO PROTECT AND SHORE ADJACENT AREAS THAT ARE TO REMAIN INTACT DURING DEMOLITION AND ENSURE MAINTENANCE OF EXISTING STRUCTURAL INTEGRITY.
- F. ALL STRUCTURAL COLUMNS, BEAMS, ETC. SHALL BE PROTECTED AGAINST DAMAGE DURING DEMOLITION.
- G. DEMOLITION WORK INCLUDES DISCONNECTIONS, CAPPING AND/OR REMOVAL OF ALL ELECTRICAL, PLUMBING AND HVAC LINES AND/OR EQUIPMENT WHICH IS FOUND WITHIN OR ADJACENT TO SPECIFIC ITEMS NOTED TO BE DEMOLISHED. CONFIRM ANY DISCREPANCIES WITH ARCHITECT IN WRITING. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.
- H. WHERE DEMOLITION INVOLVES ABANDONMENT OF EXISTING MECHANICAL, ELECTRICAL AND PLUMBING SERVICE, COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS.
- I. CONTRACTOR TO COORDINATE WITH THE OWNER THE DISCONNECTION OR INTERRUPTION OF ANY MECHANICAL, PLUMBING, ELECTRICAL, DATA OR COMMUNICATION SERVICES PRIOR TO DEMOLITION. CONTRACTOR TO COORDINATE WITH THE OWNER THE NEED FOR AND LOCATION OF TEMPORARY SERVICES.
- J. PATCH WALL FINISHES TO MATCH EXISTING AT ANY DEMOLISHED MECHANICAL, ELECTRICAL AND/OR PLUMBING EQUIPMENT. RETURN AIR SUPPLY / RETURN GRILLS, ELECTRICAL OUTLETS, RECEPTACLES, ETC. TO OWNER.
- K. ALL ITEMS NOTED TO BE REMOVED ARE TO BE INSPECTED PRIOR TO DEMOLITION TO DETERMINE IF MECHANICAL, ELECTRICAL OR PLUMBING IS AFFECTED. IF SO, THE DEMOLITION CONTRACTOR IS TO CONTACT THE RESPECTIVE MECHANICAL, ELECTRICAL OR PLUMBING CONTRACTOR TO HAVE THEIR WORK REMOVED, DISCONNECTED OR CAPPED, SO THAT DEMOLITION CAN PROCEED WITHOUT INTERRUPTION.
- L. WHERE NEW CONSTRUCTION WILL ADJOIN EXISTING, REMOVE ALL MISCELLANEOUS ACCESSORIES AS NECESSARY. LEAVE CLEAN SAWCUT EDGES OR EQUIVALENT.
- M. WHERE DEMOLITION EXPOSES REMAINING INTERIORS TO WEATHER, COORDINATE WITH NEW CONSTRUCTION R PROVIDE TEMPORARY WEATHER ENCLOSURE.
- N. WHERE DEMOLITION CREATES GAPS IN EXISTING FINISHES TO REMAIN, PATCH TO MATCH EXISTING / ADJACENT SURFACES. WHERE PATCHING INVOLVES FIRE RATED ASSEMBLIES, PATCH SHALL MAINTAIN FIRE RATING.
- O. ALL EXISTING SURFACES TO REMAIN, INCLUDING THOSE DAMAGED UNDER DEMOLITION, SHALL BE EXTENDED, REPAIRED OR REFINISHED AS REQUIRED TO ACCOMMODATE NEW CEILING, FLOOR OR WALL LAYOUTS. REPAIR LL DAMAGED ITEMS TO REMAIN TO MATCH EXISTING OR NEW FINISH.
- P. ALL EXISTING SURFACES TO REMAIN WHICH ARE AFFECTED BY THE DEMOLITION PROCESS ARE TO BE PATCHED OR CLEANED TO PROVIDE A SMOOTH, LEVEL FINISH SURFACE, READY TO RECEIVE NEW SCHEDULED FINISH.
- Q. EXISTING CONDITIONS WHICH ARE DISCOVERED DURING DEMOLITION THAT WILL INTERFERE WITH THE FINAL FLOOR PLAN ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.
- R. ALL SALVAGED DOORS, WINDOWS AND CASEWORK FROM DEMOLITION TO BE RETURNED TO OWNER FOR RIGHT OF FIRST REFUSAL.



Plan North True North
1 ROOF DEMO PLAN
 1/8" = 1'-0"



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ST. CLAIR READINESS
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375 COMMERCIAL AVE.
 ST. CLAIR, MO 63077

PROJECT # T2326-01
 SITE # 6304
 FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

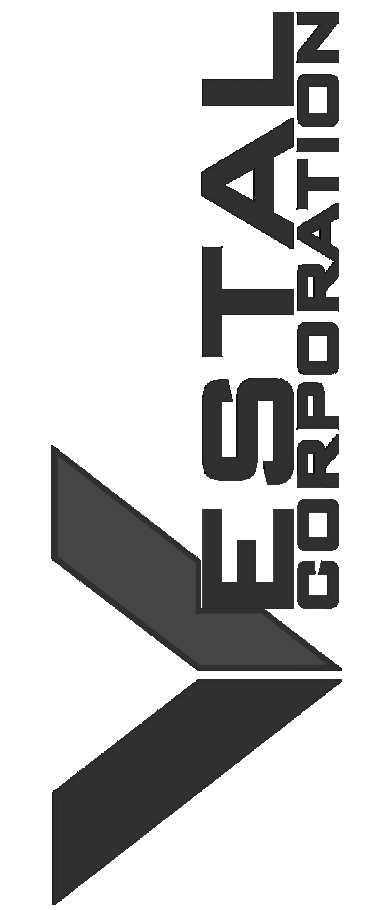
CAD DWG FILE:
 DRAWN BY: EE
 CHECKED BY: BH
 DESIGNED BY: JB

SHEET TITLE:
ROOF DEMO PLAN

SHEET NUMBER:

D102

10 OF 85 SHEETS
 2024.04.23



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ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
**REFLECTED CEILING
DEMO PLAN**

SHEET NUMBER:

D103

11 OF 85 SHEETS
2024.04.23

SYMBOL LEGEND

- ACOUSTICAL CEILING (RE: MATERIAL & FINISH SCHEDULE)
- EXPOSED (RE: SPEC & FINISH SCHEDULE)
- GYPSUM BOARD SOFFIT/CEILING (PAINT)
- WOOD CEILING (RE: SPEC & FINISH SCHEDULE)
- METAL PANEL SOFFIT/CEILING (RE: SPEC & FINISH SCHEDULE)
- HVAC DIFFUSER/RETURN AIR GRILLE (RE: MECH)
- LIGHT FIXTURE (RE: ELEC)
- LIGHT FIXTURE (RE: ELEC)
- LIGHT FIXTURE (RE: ELEC)

DEMOLITION / NEW CONSTRUCTION LEGEND

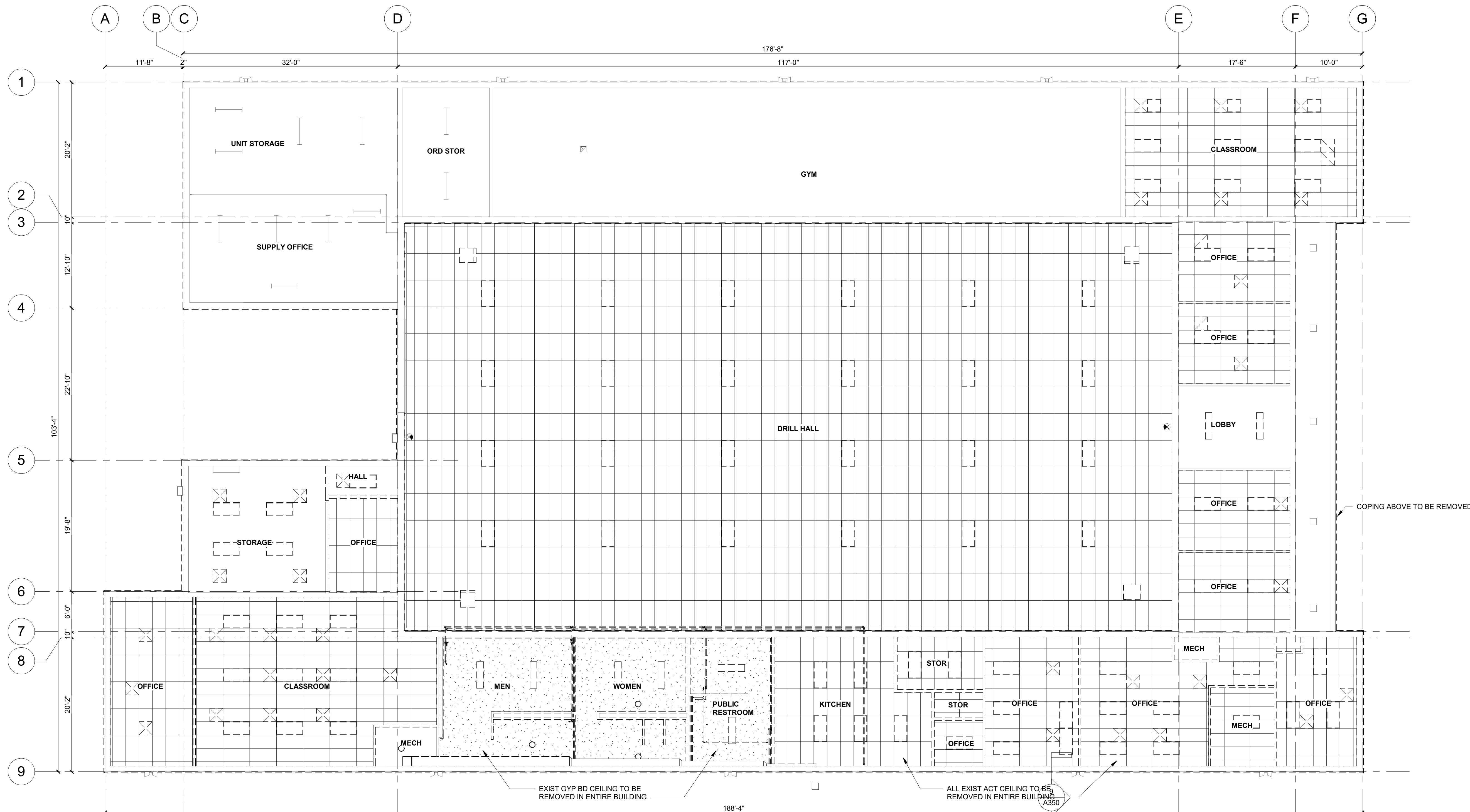
- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED
- NEW CONSTRUCTION
- EXISTING FLOOR TO BE DEMOLISHED

NOTE: NOT ALL TYPES USED

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR HIRING AN ABATEMENT CONTRACTOR TO IDENTIFY THE PROCESS AND WORK IN THE ASBESTOS. AIR MONITORING IS NEEDED BEFORE, DURING, AND AFTER THE ABATEMENT WORK. THE GENERAL CONTRACTOR NEEDS TO DO HAZARDOUS MATERIAL TESTING TO VERIFY THAT ALL ASBESTOS HAS BEEN CLEANED.

GENERAL DEMOLITION NOTES

- A. LIGHT GRAY WALLS INDICATE EXISTING CONSTRUCTION TO REMAIN.
- B. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED.
- C. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS TO DETERMINE EXACT EXTENT OF DEMOLITION REQUIRED TO COORDINATE WITH NEW CONSTRUCTION.
- D. CONTRACTOR TO CAREFULLY AND PRUDENTLY PERFORM DEMOLITION AS INDICATED. CONTRACTOR SHOULD CAREFULLY OBSERVE EXISTING CONDITIONS PRIOR TO ANY AND ALL DEMOLITION AND COORDINATE SUCH WORK WITH NEW CONSTRUCTION. ARCHITECT SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARISE.
- E. CONTRACTOR TO PROTECT AND SHORE ADJACENT AREAS THAT ARE TO REMAIN INTACT DURING DEMOLITION AND ENSURE MAINTENANCE OF EXISTING STRUCTURAL INTEGRITY.
- F. ALL STRUCTURAL COLUMNS, BEAMS, ETC. SHALL BE PROTECTED AGAINST DAMAGE DURING DEMOLITION.
- G. DEMOLITION WORK INCLUDES DISCONNECTIONS, CAPPING AND/OR REMOVAL OF ALL ELECTRICAL, PLUMBING AND HVAC LINES AND/OR EQUIPMENT WHICH IS FOUND WITHIN OR ADJACENT TO SPECIFIC ITEMS NOTED TO BE DEMOLISHED. CONFIRM ANY DISCREPANCIES WITH ARCHITECT IN WRITING. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.
- H. WHERE DEMOLITION INVOLVES ABANDONMENT OF EXISTING MECHANICAL, ELECTRICAL AND PLUMBING SERVICE, COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS.
- I. CONTRACTOR TO COORDINATE WITH THE OWNER THE DISCONNECTION OR INTERRUPTION OF ANY MECHANICAL, PLUMBING, ELECTRICAL, DATA OR COMMUNICATION SERVICES PRIOR TO DEMOLITION. CONTRACTOR TO COORDINATE WITH THE OWNER THE NEED FOR AND LOCATION OF TEMPORARY SERVICES.
- J. PATCH WALL FINISHES TO MATCH EXISTING AT ANY DEMOLISHED MECHANICAL, ELECTRICAL AND/OR PLUMBING EQUIPMENT. RETURN AIR SUPPLY / RETURN GRILLS, ELECTRICAL OUTLETS, RECEPTACLES, ETC. TO OWNER.
- K. ALL ITEMS NOTED TO BE REMOVED ARE TO BE INSPECTED PRIOR TO DEMOLITION TO DETERMINE IF MECHANICAL, ELECTRICAL OR PLUMBING IS AFFECTED. IF SO, THE DEMOLITION CONTRACTOR IS TO CONTACT THE RESPECTIVE MECHANICAL, ELECTRICAL OR PLUMBING CONTRACTOR TO HAVE THEIR WORK REMOVED, DISCONNECTED OR CAPPED, SO THAT DEMOLITION CAN PROCEED WITHOUT INTERRUPTION.
- L. WHERE NEW CONSTRUCTION WILL ADJOIN EXISTING, REMOVE ALL MISCELLANEOUS ACCESSORIES AS NECESSARY. LEAVE CLEAN SAWCUT EDGES OR EQUIVALENT.
- M. WHERE DEMOLITION EXPOSES REMAINING INTERIORS TO WEATHER, COORDINATE WITH NEW CONSTRUCTION R PROVIDE TEMPORARY WEATHER ENCLOSURE.
- N. WHERE DEMOLITION CREATES GAPS IN EXISTING FINISHES TO REMAIN, PATCH TO MATCH EXISTING / ADJACENT SURFACES. WHERE PATCHING INVOLVES FIRE RATED ASSEMBLIES, PATCH SHALL MAINTAIN FIRE RATING.
- O. ALL EXISTING SURFACES TO REMAIN, INCLUDING THOSE DAMAGED UNDER DEMOLITION, SHALL BE EXTENDED, REPAIRED OR REFINISHED AS REQUIRED TO ACCOMMODATE NEW CEILING, FLOOR OR WALL LAYOUTS. REPAIR LL DAMAGED ITEMS TO REMAIN TO MATCH EXISTING OR NEW FINISH.
- P. ALL EXISTING SURFACES TO REMAIN WHICH ARE AFFECTED BY THE DEMOLITION PROCESS ARE TO BE PATCHED OR CLEANED TO PROVIDE A SMOOTH, LEVEL FINISH SURFACE, READY TO RECEIVE NEW SCHEDULED FINISH.
- Q. EXISTING CONDITIONS WHICH ARE DISCOVERED DURING DEMOLITION THAT WILL INTERFERE WITH THE FINAL FLOOR PLAN ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.
- R. ALL SALVAGED DOORS, WINDOWS AND CASEWORK FROM DEMOLITION TO BE RETURNED TO OWNER FOR RIGHT OF FIRST REFUSAL.



Plan North
True North
REFLECTED CEILING DEMO PLAN
1/8" = 1'-0"

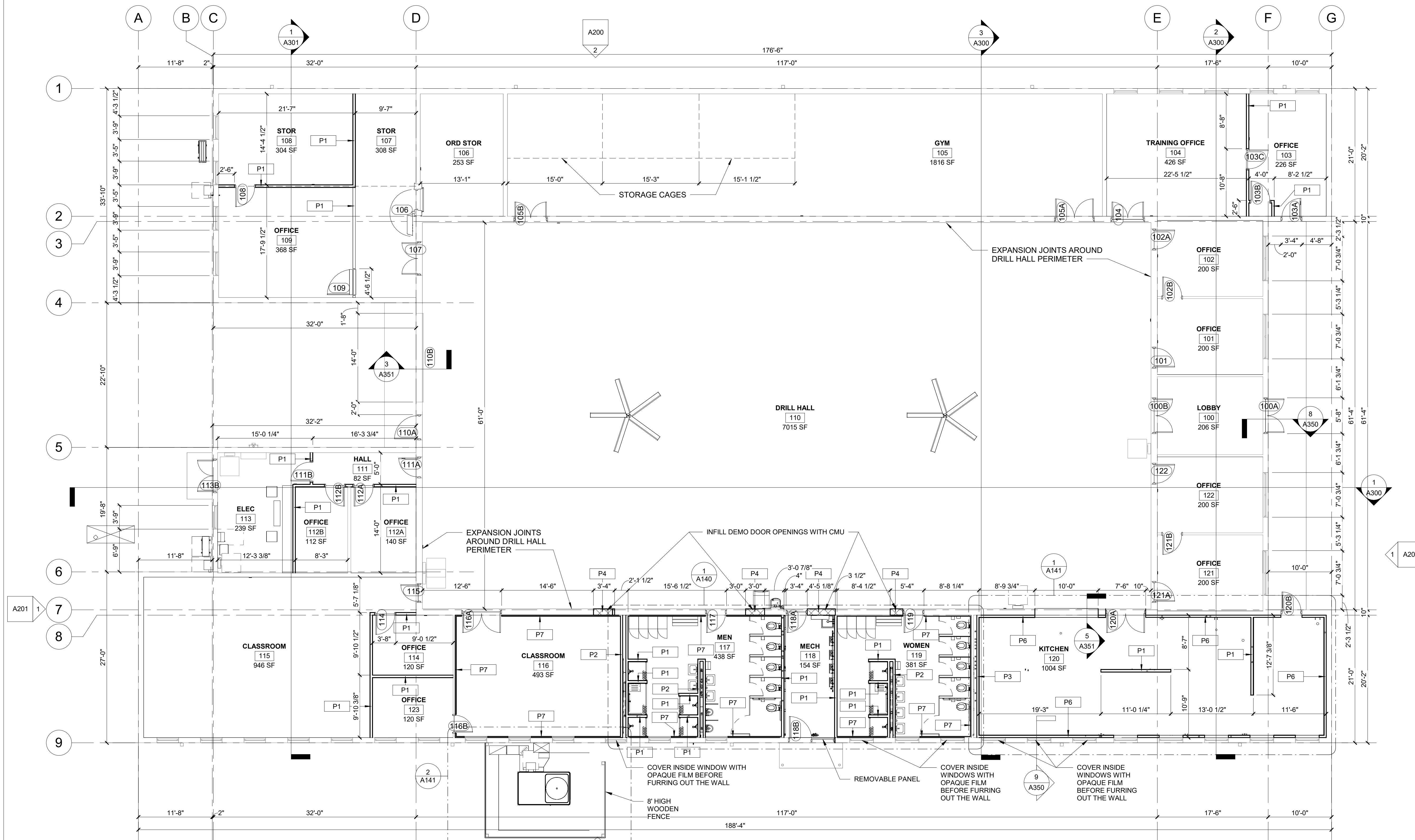
DEMOLITION / NEW CONSTRUCTION LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- - - EXISTING CONSTRUCTION TO BE REMOVED
- NEW CONSTRUCTION
- EXISTING FLOOR TO BE DEMOLISHED

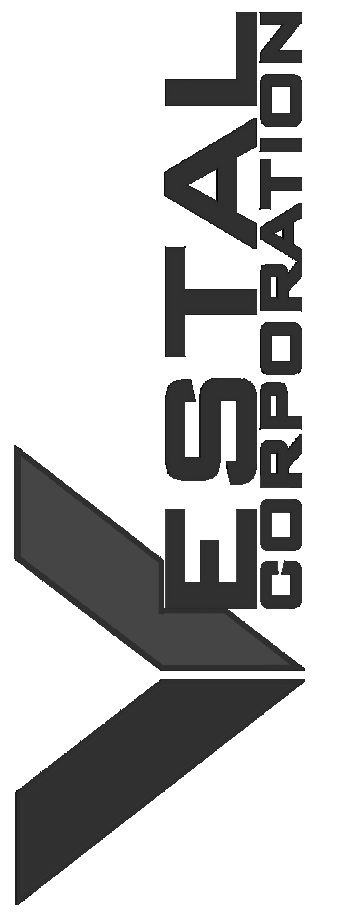
NOTE: NOT ALL TYPES USED

GENERAL FLOOR PLAN NOTES:

- A. DO NOT SCALE DRAWINGS - USE DIMENSIONS AND NOTES ONLY.
- B. FIELD VERIFY ANY EXISTING CONSTRUCTION, CONFIGURATION AND DIMENSIONS.
- C. CONTRACTOR TO CONFIRM ALL DIMENSIONS AGAINST ACTUAL SITE CONDITIONS. ANY CONFLICT OR DISCREPANCIES IN DIMENSIONS OR ELEVATIONS SHALL BE RESOLVED WITH THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK OR PROCUREMENT OF MATERIALS.
- D. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION OF COMPLETE SETS OF CONTRACT DOCUMENTS (DRAWINGS & SPECIFICATIONS) TO ALL TRADES. EACH TRADE SHALL REVIEW ALL CONTRACT DOCUMENTS SO AS TO BE AWARE OF ALL ITEMS OF WORK AFFECTING THEIR RESPECTIVE TRADE. NO CLAIMS FOR "EXTRAS" WILL BE HONORED DUE TO FAILURE TO REVIEW COMPLETE SET OF DOCUMENTS.
- E. EGRESS DOORS SHALL NOT LOCK AGAINST THE DIRECTION OF EGRESS TRAVEL.
- F. ALL NEW WOOD FRAMING, SHEATHING, BLOCKING, ETC., SHALL BE FIRE RETARDANT TREATED. PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING AT WALL AND CEILING FRAMING FOR ANCHORAGE OF ELEMENTS TO BE FASTENED OVER FINISHED SURFACES INCLUDING, BUT NOT LIMITED TO: WALL BUMPERS, HANDRAILS, GRAB BARS, WOOD TRIM, TOILET ACCESSORIES, AND WALL MOUNTED EQUIPMENT.
- G. INTERIOR DIMENSIONS ARE GIVEN TO THE FINISHED FACE OF WALL CONSTRUCTION, UNLESS NOTED OTHERWISE.
- H. PROVIDE CONTROL JOINTS IN GYPSUM BOARD AT SPACING NOT EXCEEDING 30'-0" O.C. AT LONG STRAIGHT RUNS OF WALL OR SOFFIT. IN FIRE RATED PARTITIONS, PROVIDE FIRE RATED CONTROL JOINTS. DO NOT ALLOW BRACING TO SPAN ACROSS CONTROL JOINTS. CONTROL JOINTS SHALL CONSIST OF DOUBLE STUDS OR DOUBLE FURRING CHANNELS AS PROVIDED BY CONTRACTOR.
- I. GENERAL CONTRACTOR MUST KEEP THE APPROVED SET OF BID DOCUMENTS ON SITE AT ALL TIMES.
- J. REFER TO PLAN FOR FIRE EXTINGUISHER CABINET (FEC) LOCATIONS. SEMI-RECESSED FIRE EXTINGUISHER CABINET AS NOTED IN SPECIFICATIONS.
- K. REPAIR EXISTING SURFACES TO REMAIN AS NEEDED DUE TO THE DEMOLITION OR THE REMOVAL OF CONSTRUCTION. REFER TO DEMOLITION PACKAGE.
- L. REPAIR HOLES IN EXISTING PARTITIONS TO REMAIN WHERE PARTITION MOUNTED ITEMS HAVE BEEN REMOVED.
- M. PATCH AND REPAIR ALL EXISTING DOOR FRAMES AS NEEDED.
- N. REFERENCE FINISH SHEET FOR FINISH INFORMATION.



FLOOR PLAN
1/8" = 1'-0"



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375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
FLOOR PLAN

SHEET NUMBER:

A100

12 OF 85 SHEETS
2024.04.23



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ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
ROOF PLAN

SHEET NUMBER:

A110

13 OF 85 SHEETS
2024.04.23

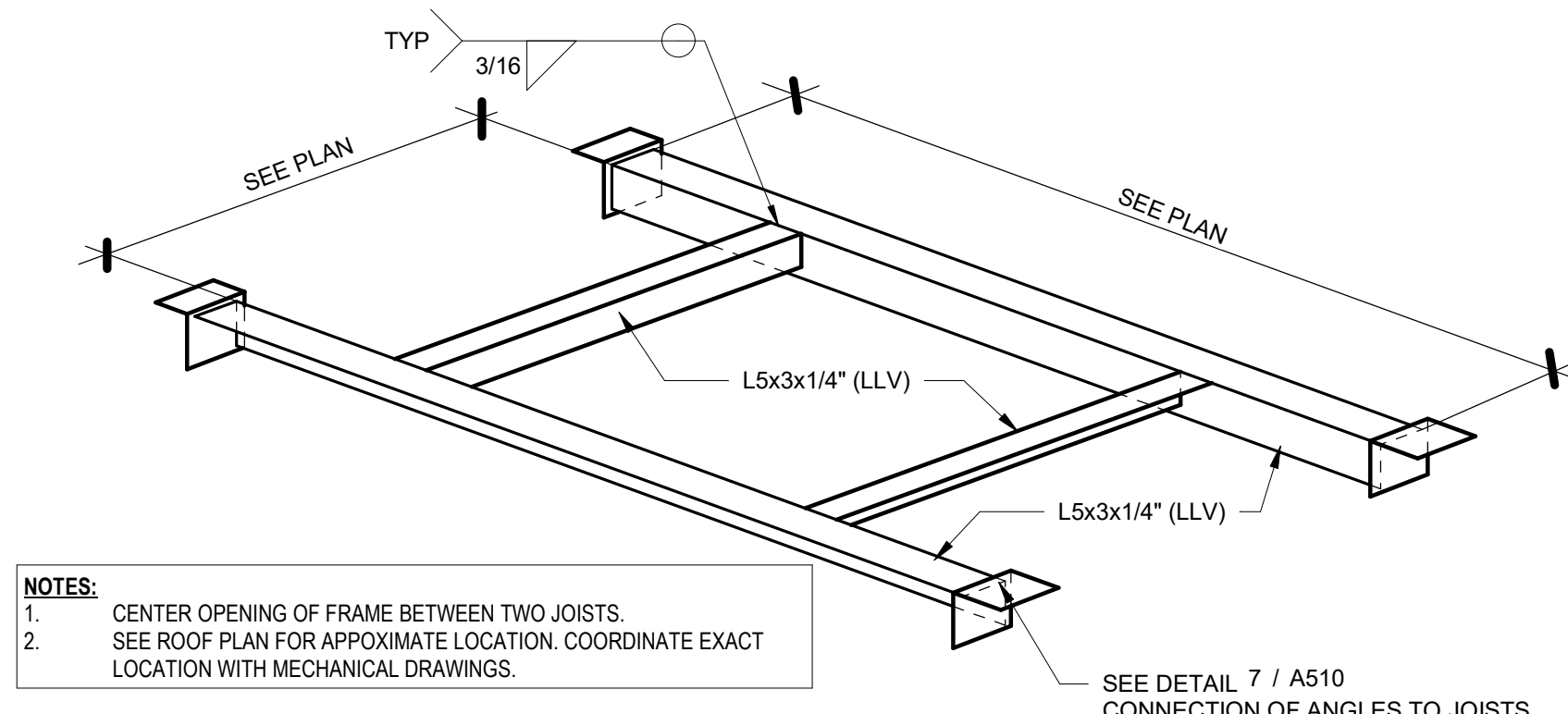
DEMOLITION / NEW CONSTRUCTION LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- - - EXISTING CONSTRUCTION TO BE REMOVED
- NEW CONSTRUCTION

NOTE: NOT ALL TYPES USED

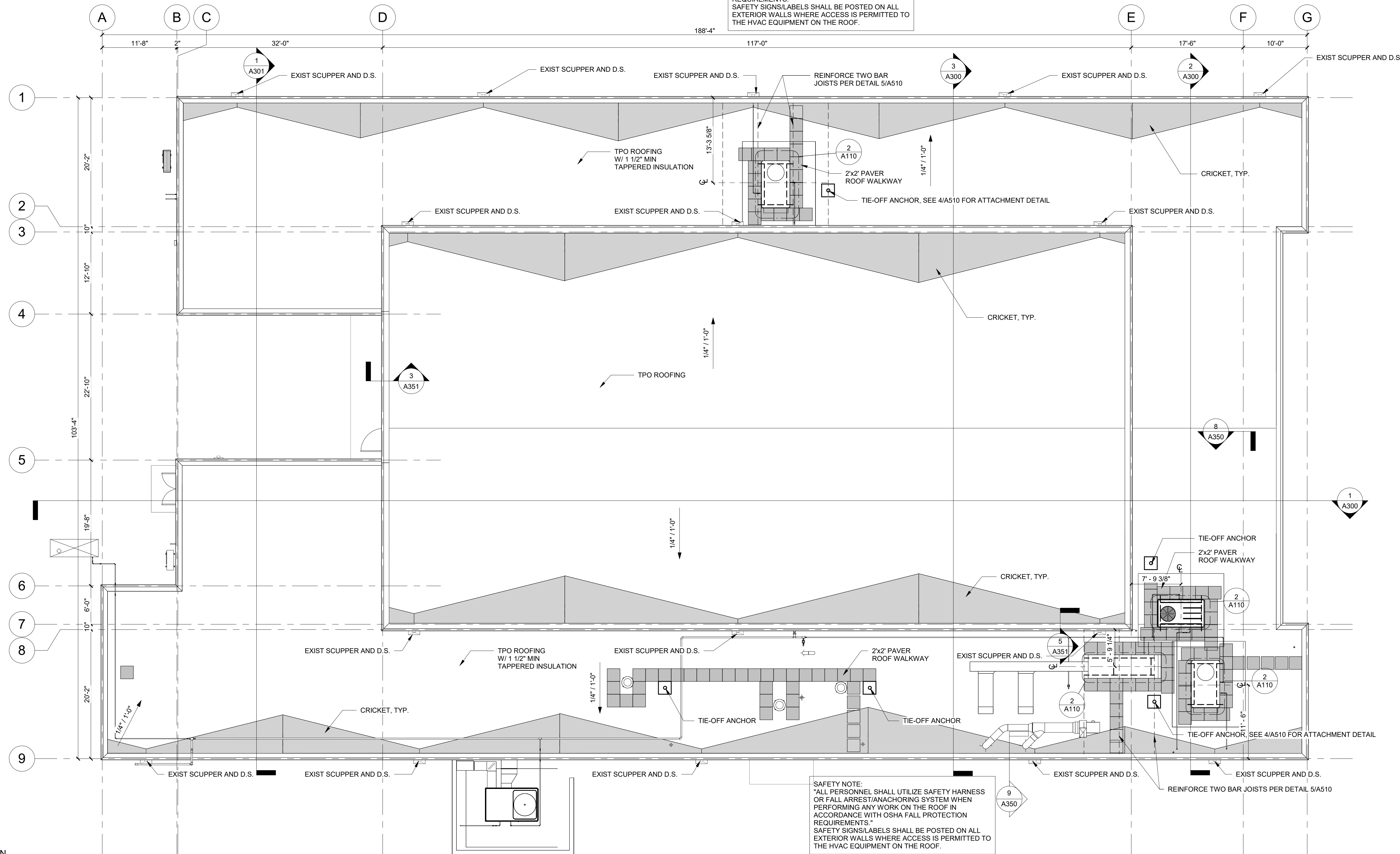
GENERAL ROOF PLAN NOTES:

- A. DO NOT SCALE DRAWINGS - USE DIMENSIONS AND NOTES ONLY.
- B. FIELD VERIFY ANY EXISTING CONSTRUCTION, CONFIGURATION AND DIMENSIONS.
- C. CONTRACTOR TO CONFIRM ALL DIMENSIONS AGAINST ACTUAL SITE CONDITIONS. ANY CONFLICT OR DISCREPANCIES IN DIMENSIONS OR ELEVATIONS SHALL BE RESOLVED WITH THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK OR PROCUREMENT OF MATERIALS.
- D. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION OF COMPLETE SETS OF CONTRACT DOCUMENTS (DRAWINGS & SPECIFICATIONS) TO ALL TRADES. EACH TRADE SHALL REVIEW ALL CONTRACT DOCUMENTS SO AS TO BE AWARE OF ALL ITEMS OF WORK AFFECTING THEIR RESPECTIVE TRADE. NO CLAIMS FOR "EXTRAS" WILL BE HONORED DUE TO FAILURE TO REVIEW COMPLETE SET OF DOCUMENTS.
- E. ALL NEW WOOD FRAMING, SHEATHING, BLOCKING, ETC., SHALL BE FIRE RETARDANT TREATED. PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING AT WALL AND CEILING FRAMING FOR ANCHORAGE OF ELEMENTS TO BE FASTENED OVER FINISHED SURFACES INCLUDING, BUT NOT LIMITED TO: WALL BUMPERS, HANDRAILS, GRAB BARS, WOOD TRIM, TOILET ACCESSORIES, AND WALL MOUNTED EQUIPMENT.
- F. GENERAL CONTRACTOR MUST KEEP THE APPROVED SET OF BID DOCUMENTS ON SITE AT ALL TIMES.
- G. REPAIR EXISTING SURFACES TO REMAIN AS NEEDED DUE TO THE DEMOLITION OR THE REMOVAL OF CONSTRUCTION. REFER TO DEMOLITION PACKAGE.
- H. REPAIR HOLES IN EXISTING PARTITIONS TO REMAIN WHERE PARTITION MOUNTED ITEMS HAVE BEEN REMOVED.



2 ANGLE FRAME AT NEW EQUIPMENT
3/4" = 1'-0"

SAFETY NOTE:
"ALL PERSONNEL SHALL UTILIZE SAFETY HARNESS OR FALL ARREST/ANCHORING SYSTEM WHEN PERFORMING ANY WORK ON THE ROOF IN ACCORDANCE WITH OSHA FALL PROTECTION REQUIREMENTS."
SAFETY SIGNS/LABELS SHALL BE POSTED ON ALL EXTERIOR WALLS WHERE ACCESS IS PERMITTED TO THE HVAC EQUIPMENT ON THE ROOF.



SAFETY NOTE:
"ALL PERSONNEL SHALL UTILIZE SAFETY HARNESS OR FALL ARREST/ANCHORING SYSTEM WHEN PERFORMING ANY WORK ON THE ROOF IN ACCORDANCE WITH OSHA FALL PROTECTION REQUIREMENTS."
SAFETY SIGNS/LABELS SHALL BE POSTED ON ALL EXTERIOR WALLS WHERE ACCESS IS PERMITTED TO THE HVAC EQUIPMENT ON THE ROOF.

1 ROOF PLAN
1/8" = 1'-0"



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CAD DWG FILE:
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
**REFLECTED CEILING
PLAN**

SHEET NUMBER:

A120

14 OF 85 SHEETS
2024.04.23

SYMBOL LEGEND

- ACOUSTICAL CEILING (RE: MATERIAL & FINISH SCHEDULE)
- EXPOSED (RE: SPEC & FINISH SCHEDULE)
- GYPSUM BOARD SOFFIT/CEILING (PAINT)
- WOOD CEILING (RE: SPEC & FINISH SCHEDULE)
- METAL PANEL SOFFIT/CEILING (RE: SPEC & FINISH SCHEDULE)
- HVAC DIFFUSER/RETURN AIR GRILLE (RE: MECH)
- LIGHT FIXTURE (RE: ELEC)
- LIGHT FIXTURE (RE: ELEC)
- LIGHT FIXTURE (RE: ELEC)

GENERAL CEILING NOTES:

- A. ALL ACT HEIGHTS ARE TO FACE OF TILE UNLESS NOTED OTHERWISE.
- B. SHADED PORTIONS ARE TO RECEIVE SOUND BATT INSULATION (INCLUDING FULL HEIGHT OF PARTITIONS ABOVE WINDOW AND DOOR HEADS).
- C. COORDINATE ALL LIGHTING FIXTURE LOCATIONS WITH ELECTRICAL DRAWINGS - REPORT ANY DISCREPANCIES TO ARCHITECT PRIOR TO CONSTRUCTION.
- D. ALL EXPOSED METAL DECK, STEEL BAR JOISTS, BEAMS, ANGLES, CONDUITS, JUNCTION BOXES, DUCTWORK, ETC. ARE TO BE PAINTED.
- E. ALL HVAC ROUTING IS TO BE COORDINATED WITH ARCHITECT.

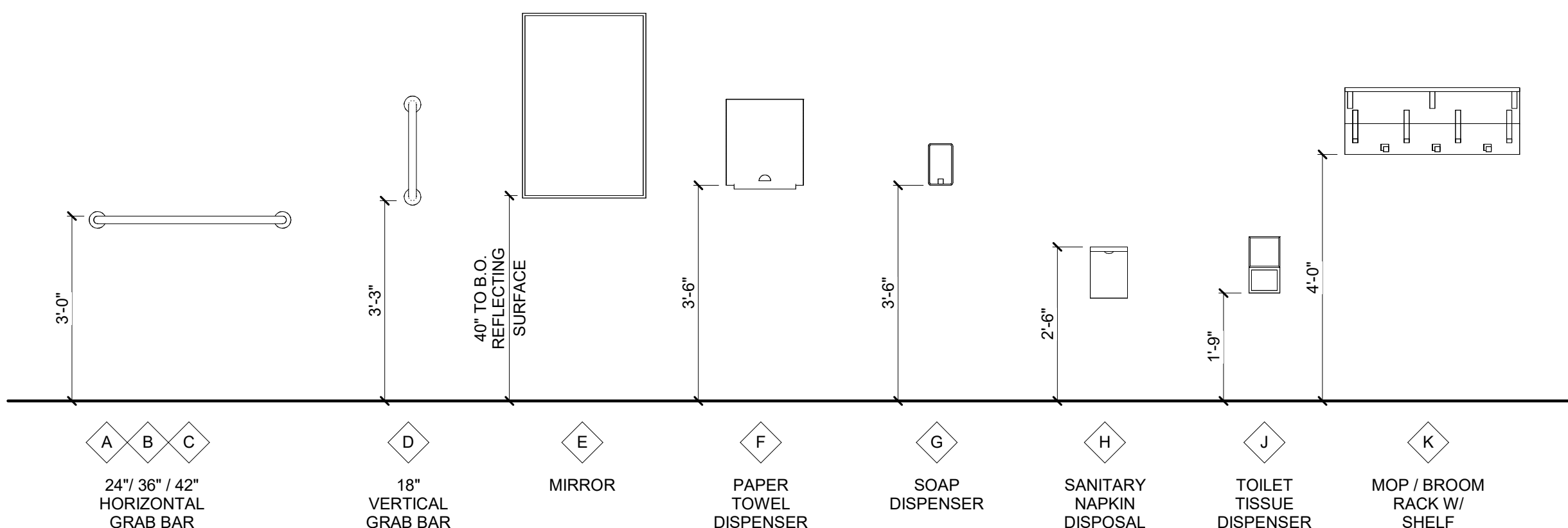


PLAN TRUE
1 FIRST FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"

RESTROOM ACCESSORIES SCHEDULE NOTES

- G.C. RESPONSIBLE FOR PROVIDING ALL WOOD BLOCKING AS REQUIRED FOR PROPERLY INSTALLING ALL ACCESSORIES (INCLUDING OWNER PROVIDED ITEMS)
- ALL ACCESSORIES SHALL BE INSTALLED PER A.D.A. REQUIREMENTS
- MODEL NUMBERS SHOWN FOR DESIGN INTENT. REFERENCE SPECIFICATIONS FOR ADDITIONAL APPROVED EQUALS

RESTROOM ACCESSORIES

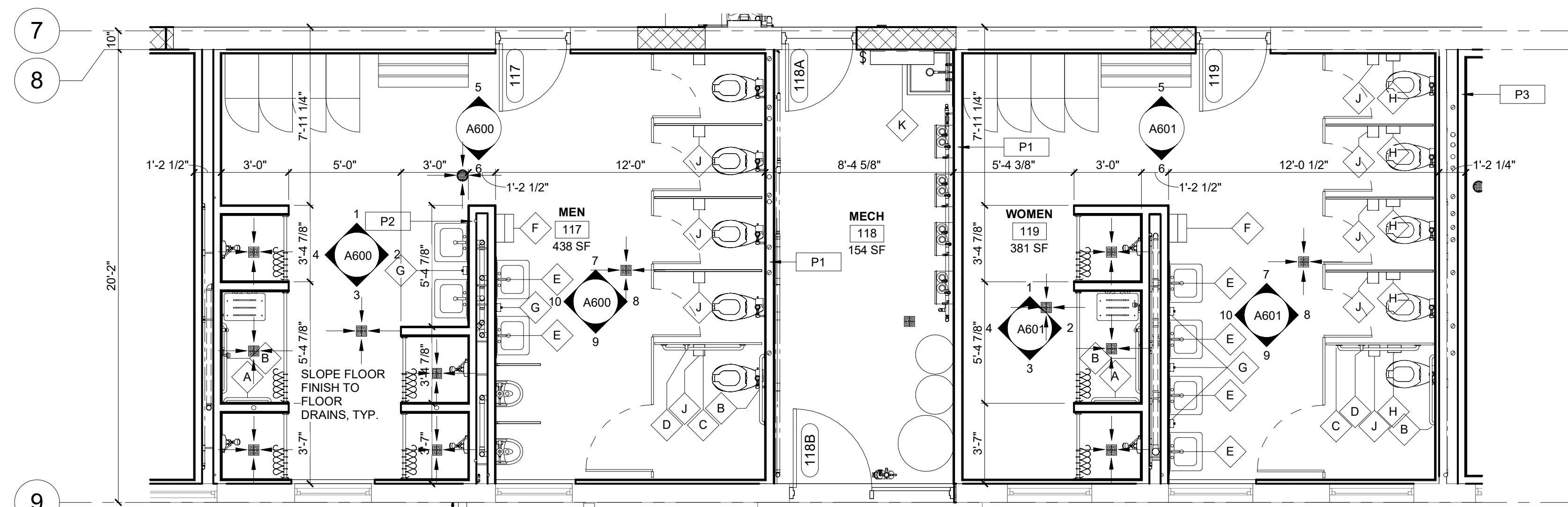


RESTROOM ACCESSORIES SCHEDULE

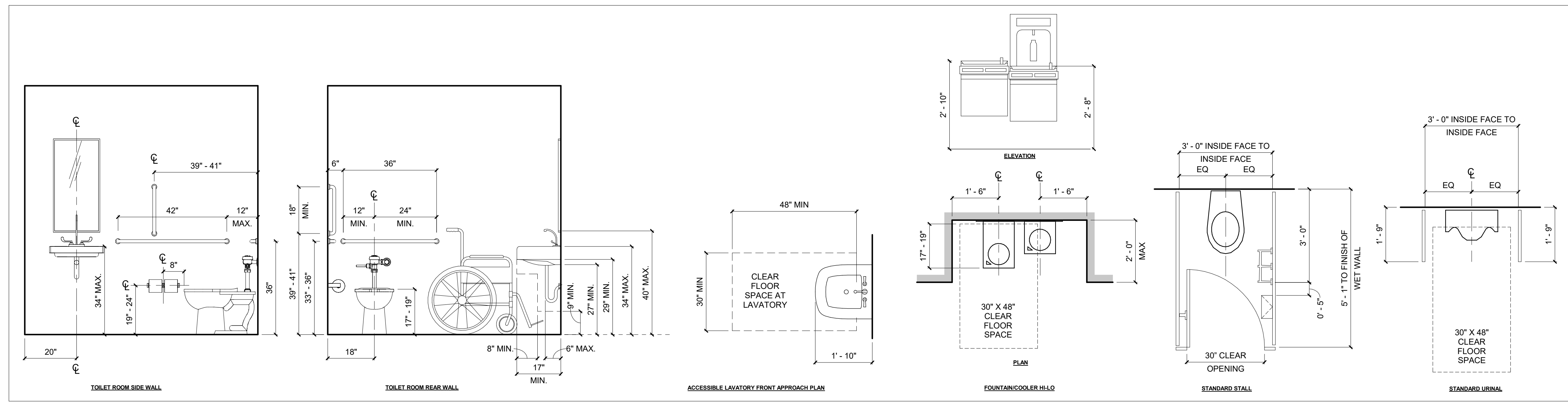
DESCRIPTION	MARK	Count	BY	MOUNTING HEIGHT	WIDTH	HEIGHT	DEPTH	MANUFACTURER	MODEL	COMMENTS
24" GRAB BAR	A	2	OF/CI	3'-0"				BOBRICK	B-5806 x 24	
36" GRAB BAR	B	4	OF/CI	3'-0"				BOBRICK	B-5806 x 36	
42" GRAB BAR	C	2	OF/CI	3'-0"				BOBRICK	B-5806 x 42	
18" GRAB BAR	D	2	OF/CI	3'-3"				BOBRICK	B-5806 x 18	
24"X36" MIRROR	E	8	OF/CI	3'-3"	24"	36"	3/4"	BOBRICK	B-290 2436	
PAPER TOWEL DISPENSER	F	2	OF/CI	3'-6"	12 5/8"	15 1/2"	9 1/16"	BOBRICK	B-2974	
SOAP DISPENSER	G	5	OF/CI	3'-6"	4 3/4"	8 1/8"	3 1/2"	BOBRICK	B-2111	
SANITARY NAPKIN DISPOSAL	H	5	OF/CI	2'-6"	7 1/2"	10"	3 13/16"	BOBRICK	B-270	
TOILET TISSUE DISPENSER	J	10	OF/CI	1'-9"	6 1/16"	11"	5 15/16"	BOBRICK	B-4288	
MOP / BROOM RACK WITH SHELF	K	1	OF/CI	4'-0"	34"	13"	-	BOBRICK	B-239 x 34	
SHOWER ROD	L	8	OF/CI	6'-6"				BOBRICK	B207 x 36	
Solid Phenolic Folding Shower / Dressing Area Seat	M	2	OF/CI		22"		15 13/16"	BOBRICK	B-5192	

GENERAL FLOOR PLAN NOTES:

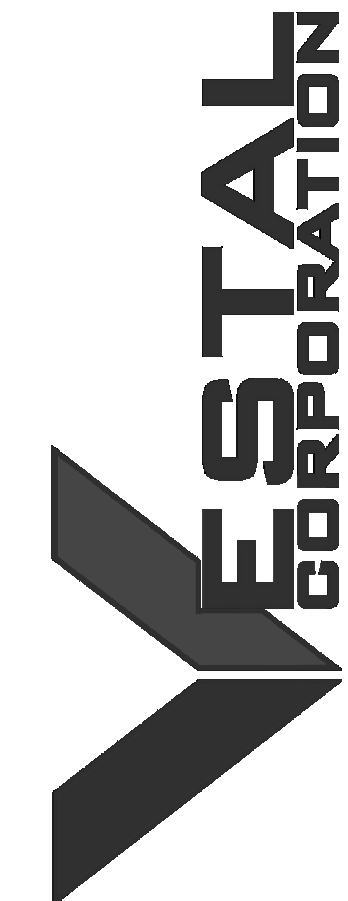
- DO NOT SCALE DRAWINGS - USE DIMENSIONS AND NOTES ONLY.
- FIELD VERIFY ANY EXISTING CONSTRUCTION, CONFIGURATION AND DIMENSIONS.
- CONTRACTOR TO CONFIRM ALL DIMENSIONS AGAINST ACTUAL SITE CONDITIONS. ANY CONFLICT OR DISCREPANCIES IN DIMENSIONS OR ELEVATIONS SHALL BE RESOLVED WITH THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK OR PROCUREMENT OF MATERIALS.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION OF COMPLETE SETS OF CONTRACT DOCUMENTS (DRAWINGS & SPECIFICATIONS) TO ALL TRADES. EACH TRADE SHALL REVIEW ALL CONTRACT DOCUMENTS SO AS TO BE AWARE OF ALL ITEMS OF WORK AFFECTING THEIR RESPECTIVE TRADE. NO CLAIMS FOR "EXTRAS" WILL BE HONORED DUE TO FAILURE TO REVIEW COMPLETE SET OF DOCUMENTS.
- EGRESS DOORS SHALL NOT LOCK AGAINST THE DIRECTION OF EGRESS TRAVEL.
- ALL NEW WOOD FRAMING, SHEATHING, BLOCKING, ETC., SHALL BE FIRE RETARDANT TREATED. PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING AT WALL AND CEILING FRAMING FOR ANCHORAGE OF ELEMENTS TO BE FASTENED OVER FINISHED SURFACES INCLUDING, BUT NOT LIMITED TO: WALL BUMPERS, HANDRAILS, GRAB BARS, WOOD TRIM, TOILET ACCESSORIES, AND WALL MOUNTED EQUIPMENT.
- INTERIOR DIMENSIONS ARE GIVEN TO THE FINISHED FACE OF WALL CONSTRUCTION, UNLESS NOTED OTHERWISE.
- PROVIDE CONTROL JOINTS IN GYPSUM BOARD AT SPACING NOT EXCEEDING 30'-0" O.C. AT LONG STRAIGHT RUNS OF WALL OR SOFFIT. IN FIRE RATED PARTITIONS, PROVIDE FIRE RATED CONTROL JOINTS. DO NOT ALLOW BRACING TO SPAN ACROSS CONTROL JOINTS. CONTROL JOINTS SHALL CONSIST OF DOUBLE STUDS OR DOUBLE FURRING CHANNELS AS PROVIDED BY CONTRACTOR.
- GENERAL CONTRACTOR MUST KEEP THE APPROVED SET OF BID DOCUMENTS ON SITE AT ALL TIMES.
- REFER TO PLAN FOR FIRE EXTINGUISHER CABINET (FEC) LOCATIONS. SEMI-RECESSED FIRE EXTINGUISHER CABINET AS NOTED IN SPECIFICATIONS.
- REPAIR EXISTING SURFACES TO REMAIN AS NEEDED DUE TO THE DEMOLITION OR THE REMOVAL OF CONSTRUCTION. REFER TO DEMOLITION PACKAGE.
- REPAIR HOLES IN EXISTING PARTITIONS TO REMAIN WHERE PARTITION MOUNTED ITEMS HAVE BEEN REMOVED.
- PATCH AND REPAIR ALL EXISTING DOOR FRAMES AS NEEDED
- REFERENCE FINISH SHEET FOR FINISH INFORMATION.



1 RESTROOM PLAN
1/4" = 1'-0"



2 TYP. TOILET ROOM DIMENSIONS W/ MULTI-STALL
1/2" = 1'-0"



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CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
ENLARGED PLANS

SHEET NUMBER:

A140

15 OF 85 SHEETS
2024.04.23



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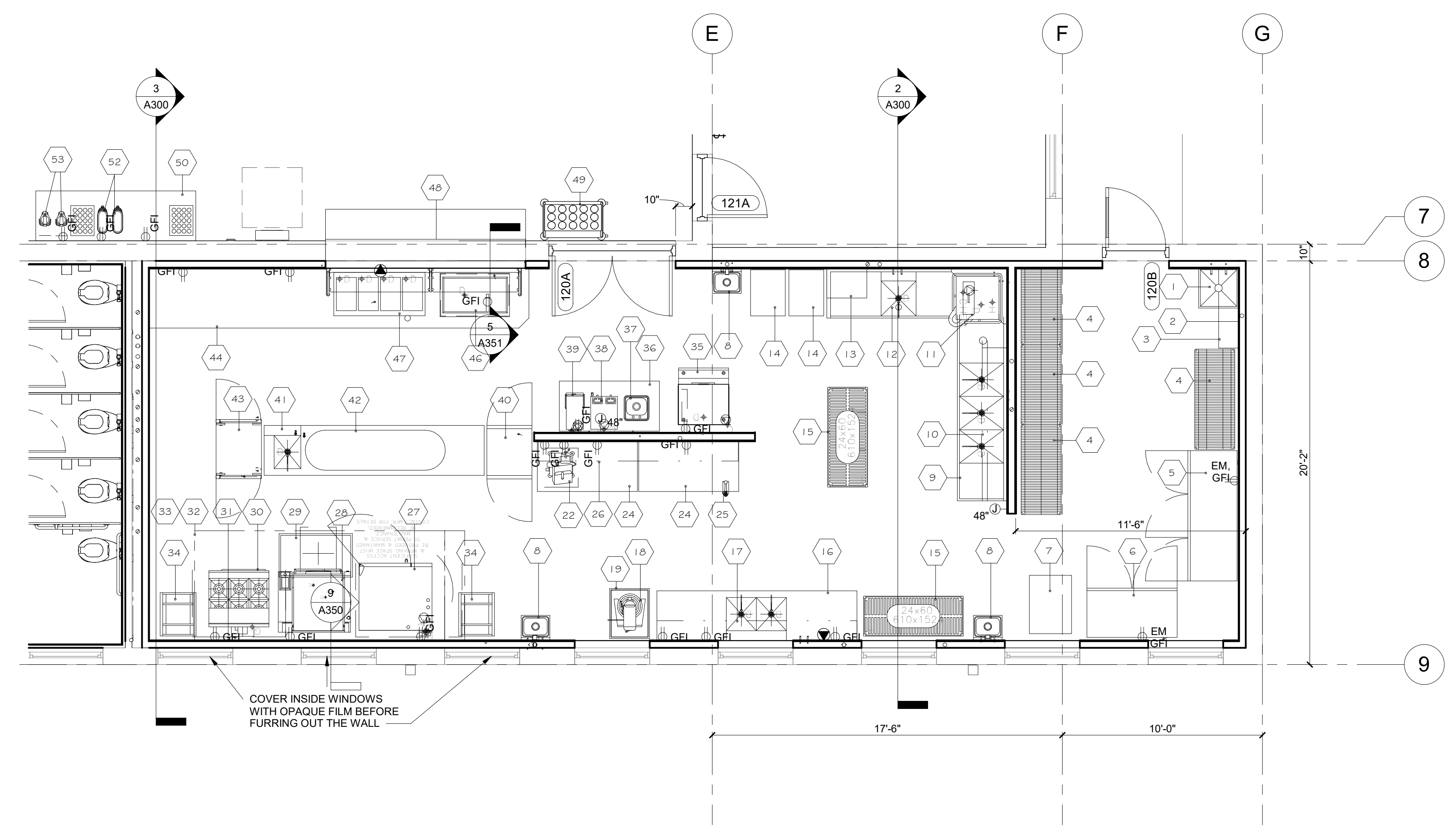
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ENLARGED PLANS

SHEET NUMBER:

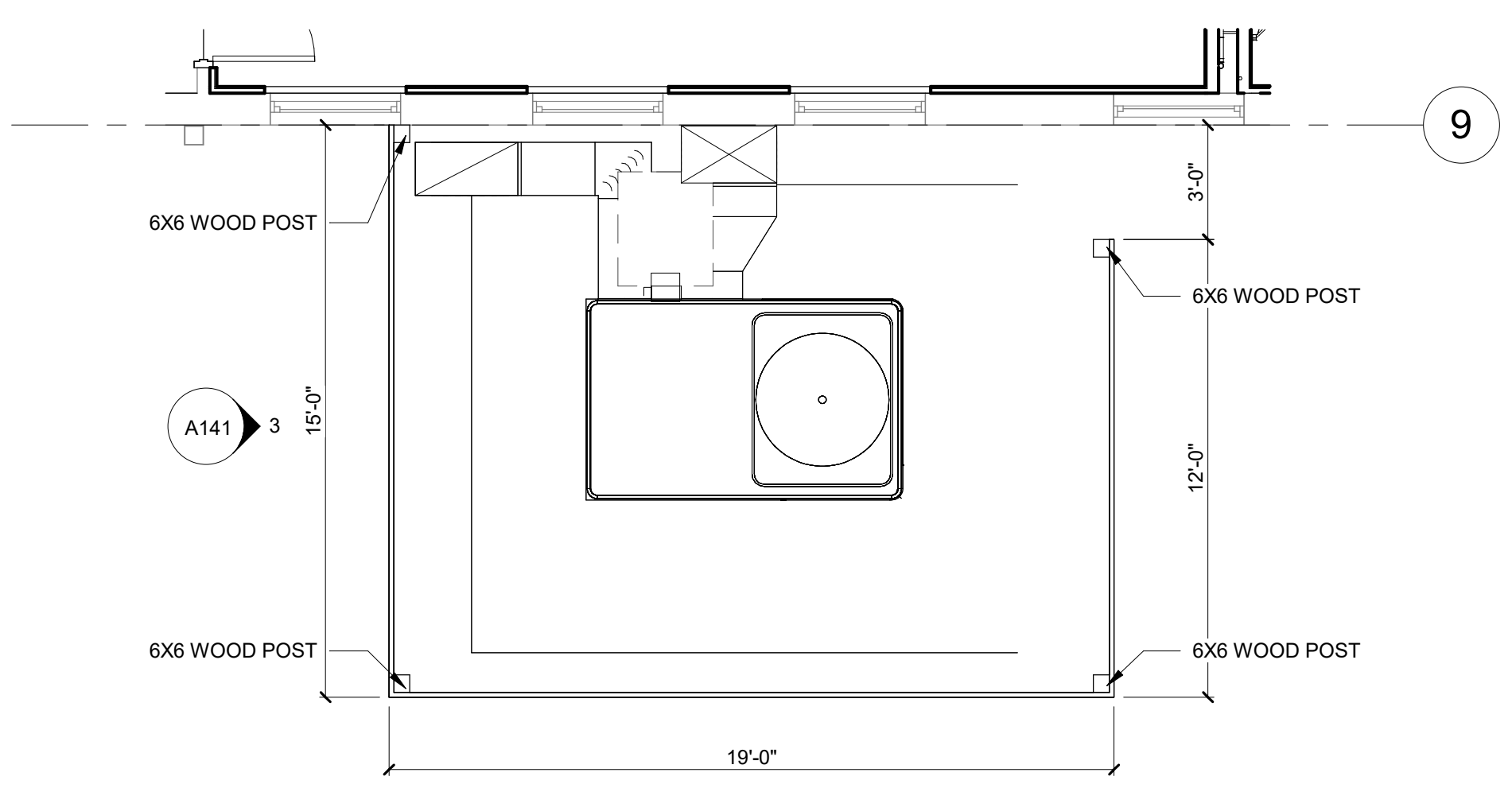
A141

16 OF 85 SHEETS
2024.04.23

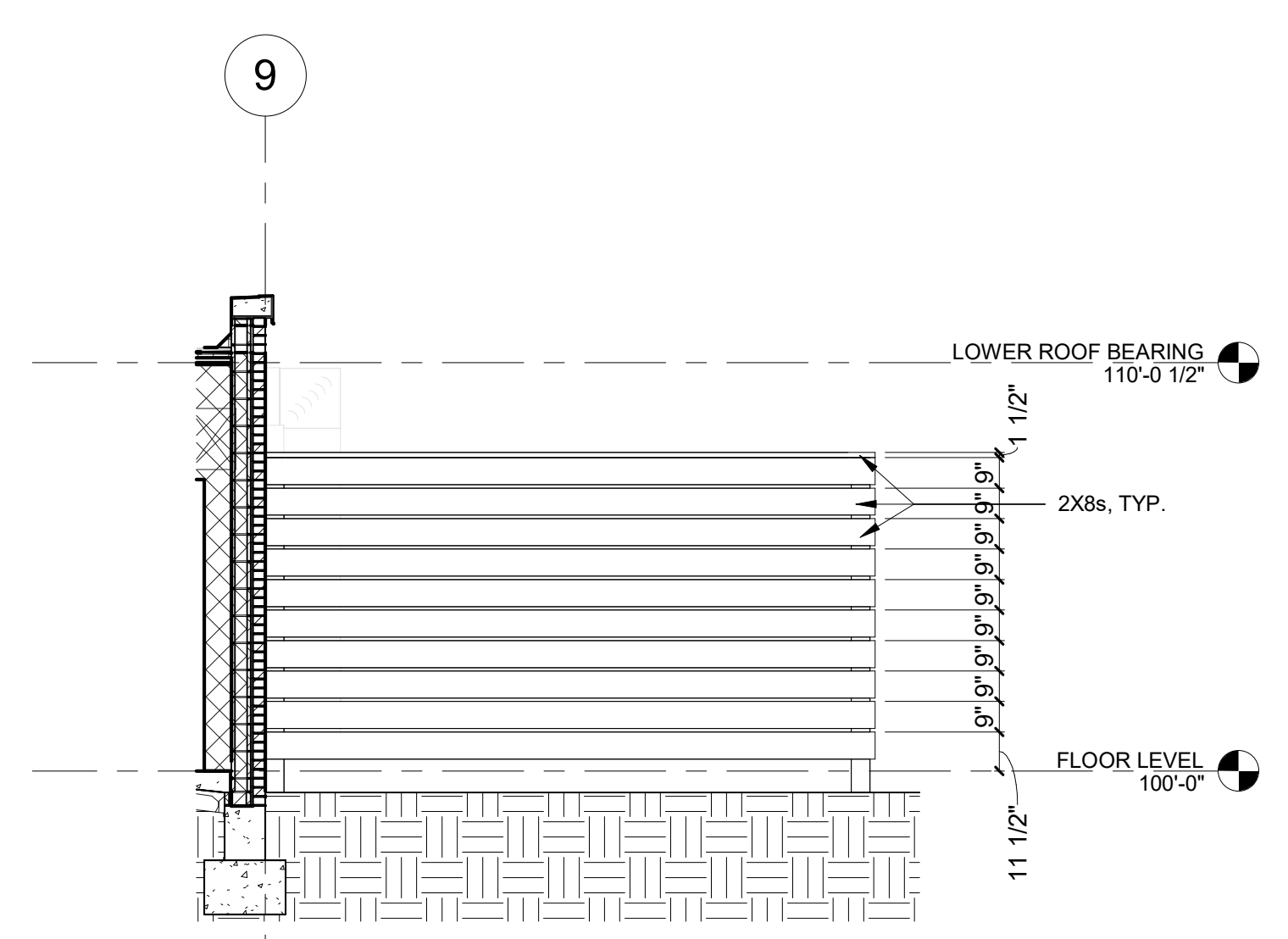
EQUIPMENT SCHEDULE			
ITEM NO.	QUANTITY	DESCRIPTION	REMARKS
1	1	MOP SINK	BY PLUMBER
2	1	MOP RACK	BY G.C.
3	1	WALL SHELF	BY G.C.
4	1 LOT	STORAGE SHELVING	
5	1	FREEZER	THREE SECTION WITH FULL HEIGHT DOORS
6	1	REFRIGERATOR	TWO SECTION WITH FULL HEIGHT DOORS
7	1	CAN RACK	
8	3	HAND SINKS	WITH SIDE SPLASHES
9	1	THREE COMPARTMENT SINK/ CLEAN DISH TABLE	
10	1	DOUBLE OVER SHELF	
11	1	DISH MACHINE	UL LISTED FOR VENTLESS OPERATION
12	1	SOILED DISH TABLE	
13	1	RACK SHELF	
14	3	SOILED DISH TRANSPORT CART	
15	2	POT AND PAN RACKS	
16	1	PREP TABLE	
17	1	WALL SHELF	
18	1	MIXER	20 QT
19	1	PORTABLE MIXER STAND	
20	0	SPARE NUMBER	
21	0	SPARE NUMBER	
22	1	SLICER	
23	0	SPARE NUMBER	
24	2	WORK TABLES	
25	1	CAN OPENER	
26	1	WALL SHELF	
27	1	COMBI OVEN	SINGLE DECK
28	1	BRAISING PAN	30 GALLON
29	1	TRENCH DRAIN	
30	1	RANGE	6 BURNER WITH CONVECTION OVEN BASE
31	1	STAINLESS STEEL WALL PANELING	
32	1	HOOD WITH FIRE PROTECTION SYSTEM	
33	1	DUCT AND FAN	BY HVAC
34	1	RACK	
35	1	ICE MACHINE	
36	1	BEVERAGE COUNTER	
37	1	DROP IN DUMP SINK	
38	1	COFFEE MAKER	BY VENDOR
39	1	TEA BREWER	BY VENDOR
40	1	PASS THRU REFRIGERATOR	SINGLE SECTION WITH HALF HEIGHT DOORS
41	1	WORK TABLE WITH SINK	
42	1	HANGING UTENSIL RACK	
43	1	HOT HOLDING CABINET	FULL HEIGHT - PASS THRU UNIT
44	1	SERVING COUNTER	
45	0	SPARE NUMBER	
46	1	DROP IN COLD PAN	3 PAN UNIT
47	1	DROP IN HOT FOOD UNIT	4 PAN UNIT
48	1	PROTECTOR GUARD	
49	1	TRAY AND SILVER CART	
50	1	BEVERAGE COUNTER	
51	0	SPARE NUMBER	
52	2	TEA DISPENSERS	BY VENDOR
53	2	COFFEE DISPENSERS	BY VENDOR



1 ENLARGED KITCHEN PLAN
1/4" = 1'-0"



2 ENLARGED FENCE PLAN
1/4" = 1'-0"



3 FENCE ELEVATION
1/4" = 1'-0"



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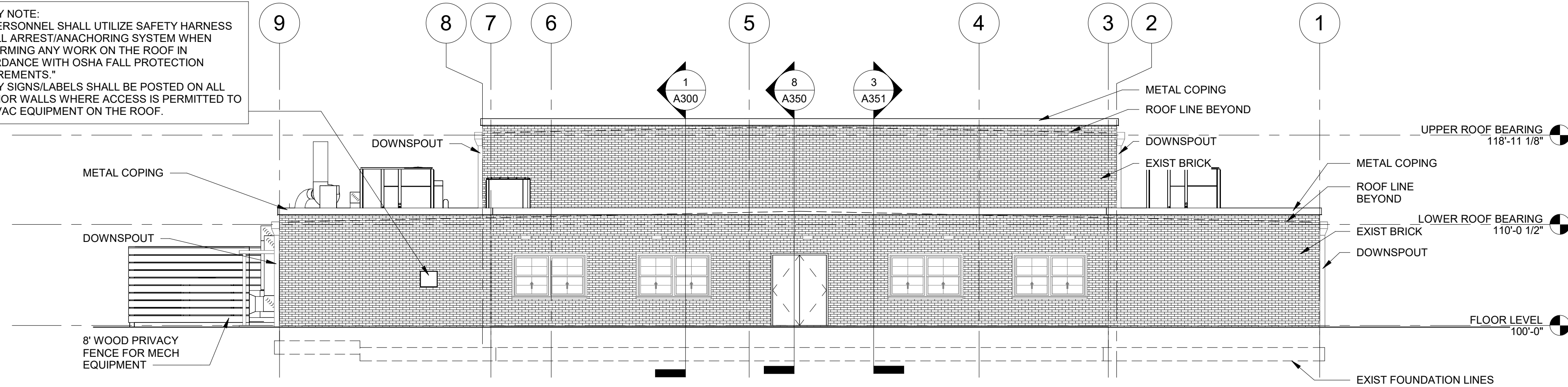
PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

GENERAL EXTERIOR ELEVATION NOTES

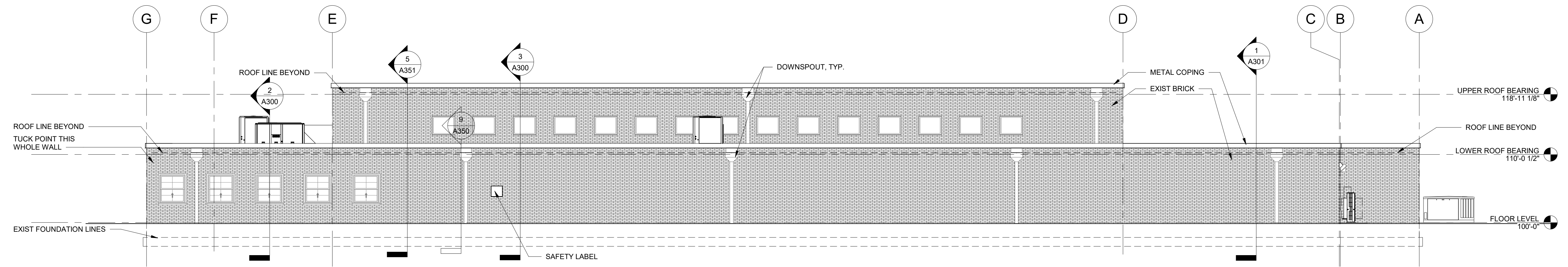
- A. COORDINATE ALL GRADES WITH CIVIL DRAWINGS. NO CONCRETE FOUNDATIONS ARE TO BE VISIBLE ABOVE FINISH GRADE. ONLY FINISH MATERIALS. G.C. TO FIELD VERIFY ALL GRADES AT BUILDING AND BRICK SHELF ELEVATION.
- B. FOR DOOR SCHEDULE AND FRAME ELEVATIONS, REFER TO A700 SERIES SHEETS.

- CONC1 - CAST-IN-PLACE CONCRETE 1**
INTEGRAL COLORED CAST-IN-PLACE CONCRETE
- MV1 - MASONRY VENEER 1**
RUNNING BOND, 4"x2-2/3"x8" (NOMINAL) BRICK VENEER (RE: SPEC)
- MP1 - METAL PANEL 1**
COMPOSITE PANEL, RAINSCREEN SYSTEM (RE: SPEC)
- GL1 - GLAZING 1**
GLAZING UNIT (RE: FRAME ELEVATIONS AND SPEC)
- GL2 - GLAZING 2**
SPANDREL GLAZING UNIT (RE: FRAME ELEVATIONS AND SPEC)

SAFETY NOTE:
"ALL PERSONNEL SHALL UTILIZE SAFETY HARNESS OR FALL ARREST/ANCHORING SYSTEM WHEN PERFORMING ANY WORK ON THE ROOF IN ACCORDANCE WITH OSHA FALL PROTECTION REQUIREMENTS."
SAFETY SIGNS/LABELS SHALL BE POSTED ON ALL EXTERIOR WALLS WHERE ACCESS IS PERMITTED TO THE HVAC EQUIPMENT ON THE ROOF.



1 EAST ELEVATION
1/8" = 1'-0"



2 NORTH ELEVATION
1/8" = 1'-0"

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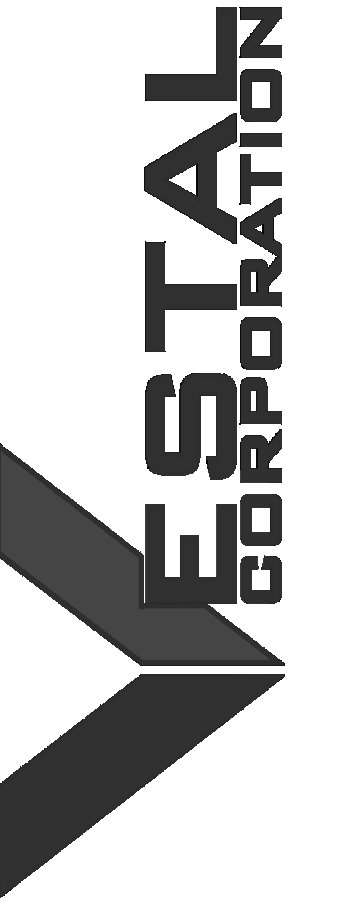
CAD DWG FILE: _____
DRAWN BY: EE _____
CHECKED BY: BH _____
DESIGNED BY: JB _____

SHEET TITLE:
**EXTERIOR
ELEVATIONS**

SHEET NUMBER:

A200

17 OF 85 SHEETS
2024.04.23



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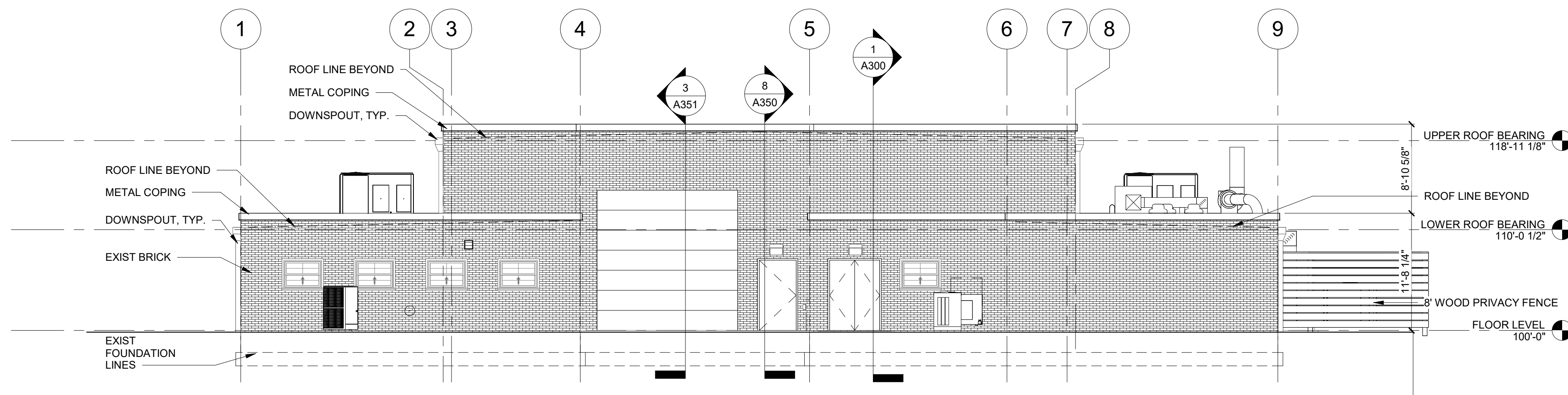
375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

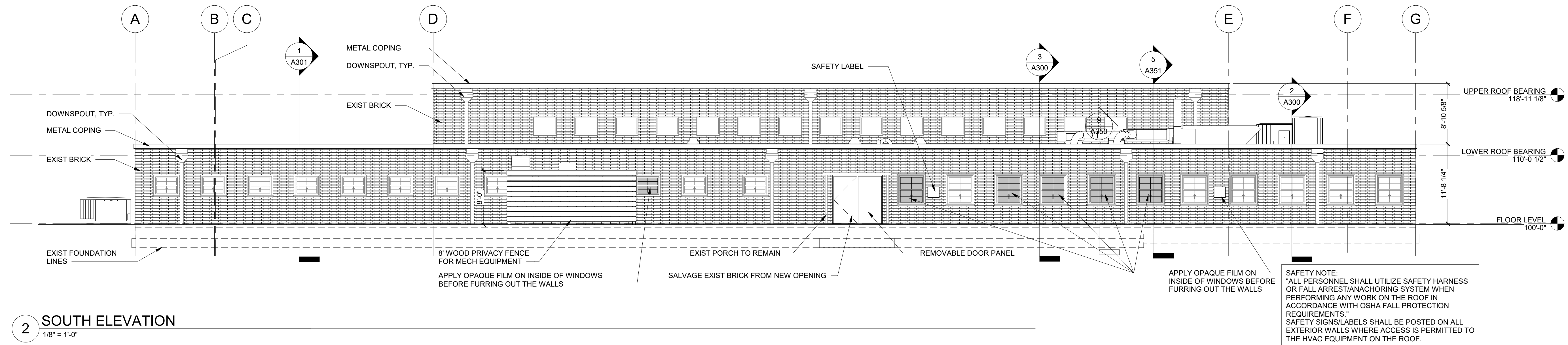
GENERAL EXTERIOR ELEVATION NOTES

- A. COORDINATE ALL GRADES WITH CIVIL DRAWINGS. NO CONCRETE FOUNDATIONS ARE TO BE VISIBLE ABOVE FINISH GRADE. ONLY FINISH MATERIALS. G.C. TO FIELD VERIFY ALL GRADES AT BUILDING AND BRICK SHELF ELEVATION.
- B. FOR DOOR SCHEDULE AND FRAME ELEVATIONS, REFER TO A700 SERIES SHEETS.

- CONC1 - CAST-IN-PLACE CONCRETE 1**
INTEGRAL COLORED CAST-IN-PLACE CONCRETE
- MV1 - MASONRY VENEER 1**
RUNNING BOND, 4"x2-2/3"x8" (NOMINAL) BRICK VENEER (RE: SPEC)
- MP1 - METAL PANEL 1**
COMPOSITE PANEL, RAINSCREEN SYSTEM (RE: SPEC)
- GL1 - GLAZING 1**
GLAZING UNIT (RE: FRAME ELEVATIONS AND SPEC)
- GL2 - GLAZING 2**
SPANDREL GLAZING UNIT (RE: FRAME ELEVATIONS AND SPEC)



1 WEST ELEVATION
1/8" = 1'-0"



2 SOUTH ELEVATION
1/8" = 1'-0"

SAFETY NOTE:
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SAFETY SIGNS/LABELS SHALL BE POSTED ON ALL EXTERIOR WALLS WHERE ACCESS IS PERMITTED TO THE HVAC EQUIPMENT ON THE ROOF.

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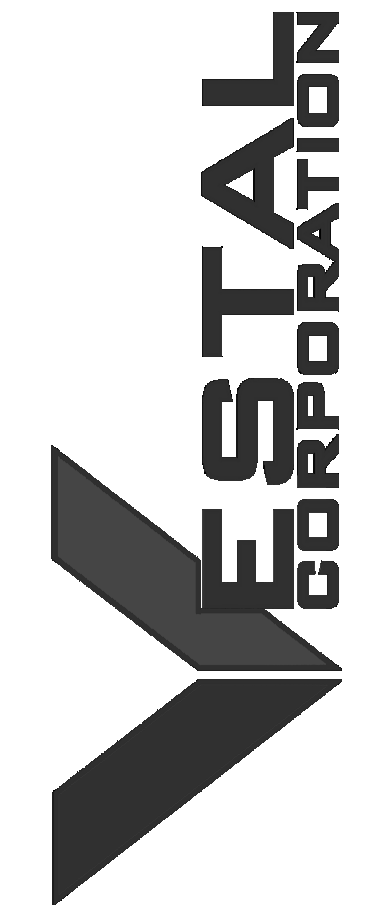
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DRAWN BY: EE _____
CHECKED BY: BH _____
DESIGNED BY: JB _____

SHEET TITLE:
**EXTERIOR
ELEVATIONS**

SHEET NUMBER:

A201

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2024.04.23



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SITE # 6304
FACILITY # 8136304011

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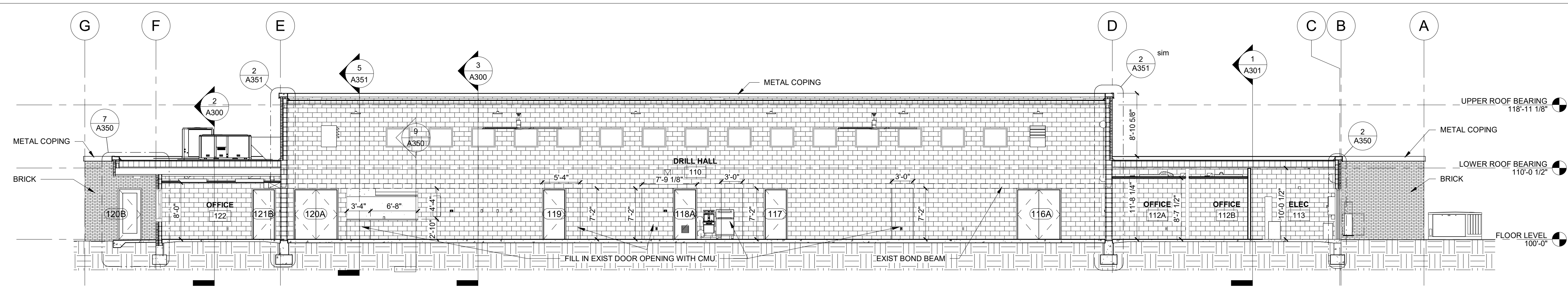
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SHEET TITLE:
BUILDING SECTIONS

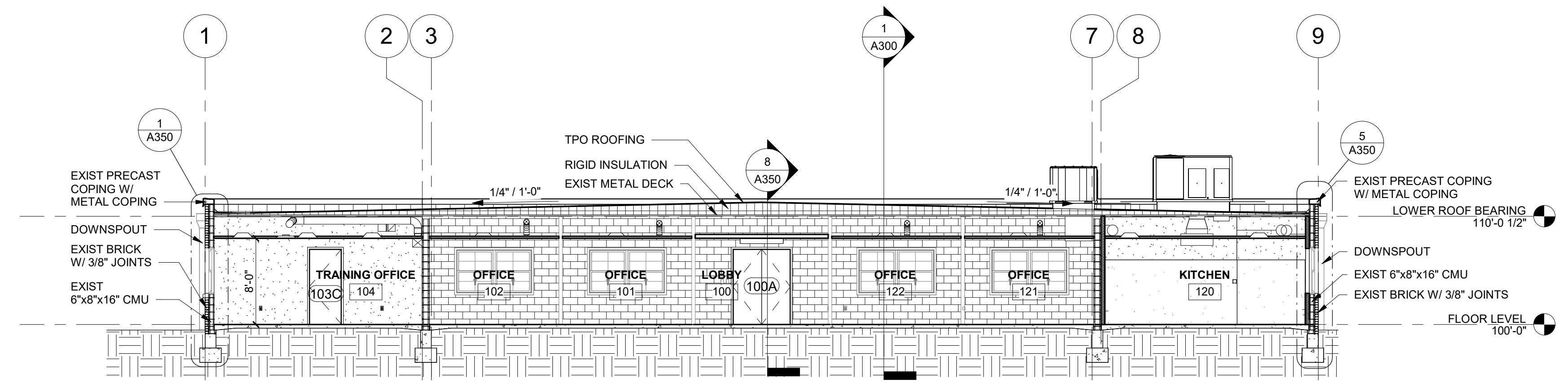
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A300

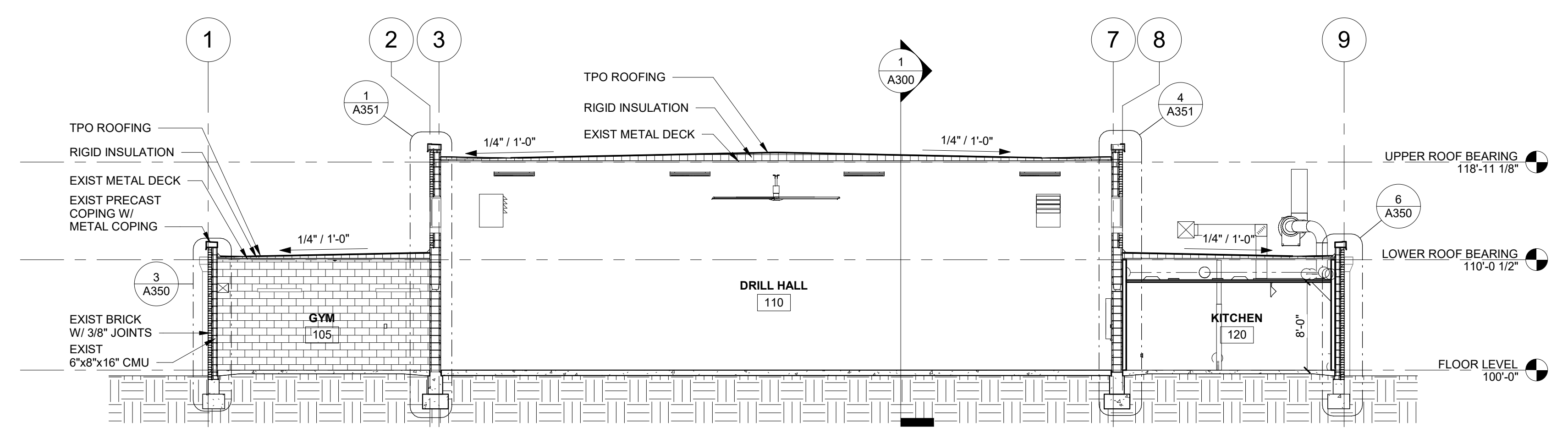
19 OF 85 SHEETS
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1 BUILDING SECTION
1/8" = 1'-0"



2 BUILDING SECTION
1/8" = 1'-0"



3 BUILDING SECTION
1/8" = 1'-0"



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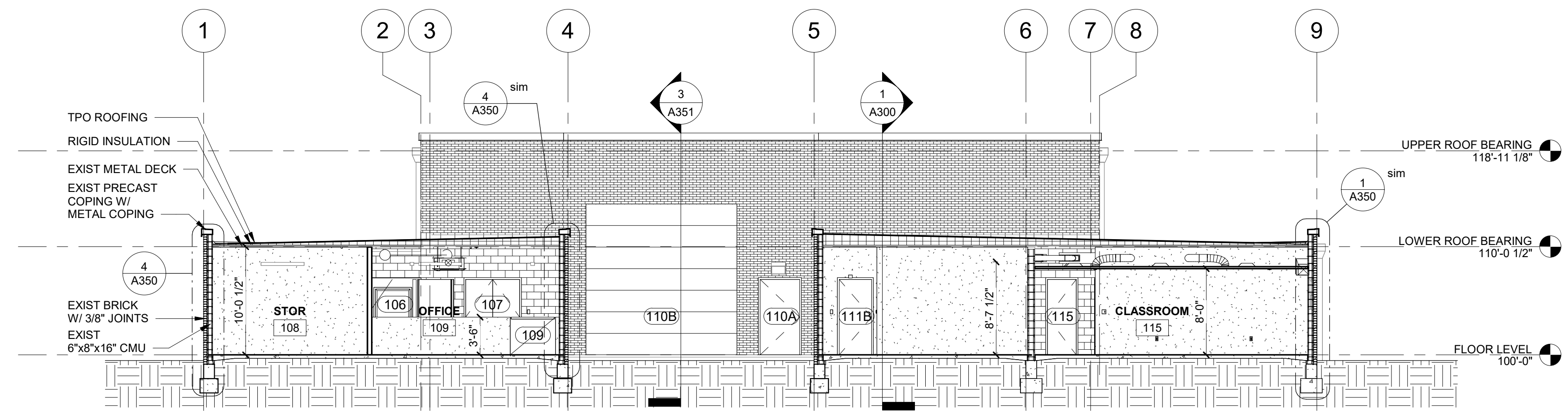
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SHEET TITLE:
BUILDING SECTIONS

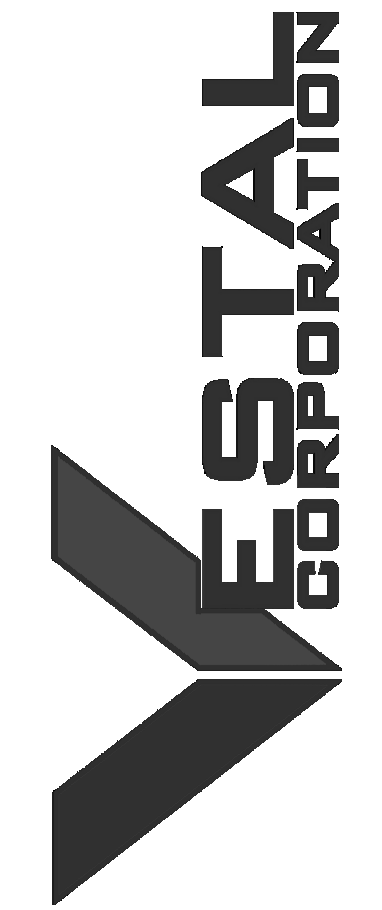
SHEET NUMBER:

A301

20 OF 85 SHEETS
2024.04.23



1 BUILDING SECTION
1/8" = 1'-0"



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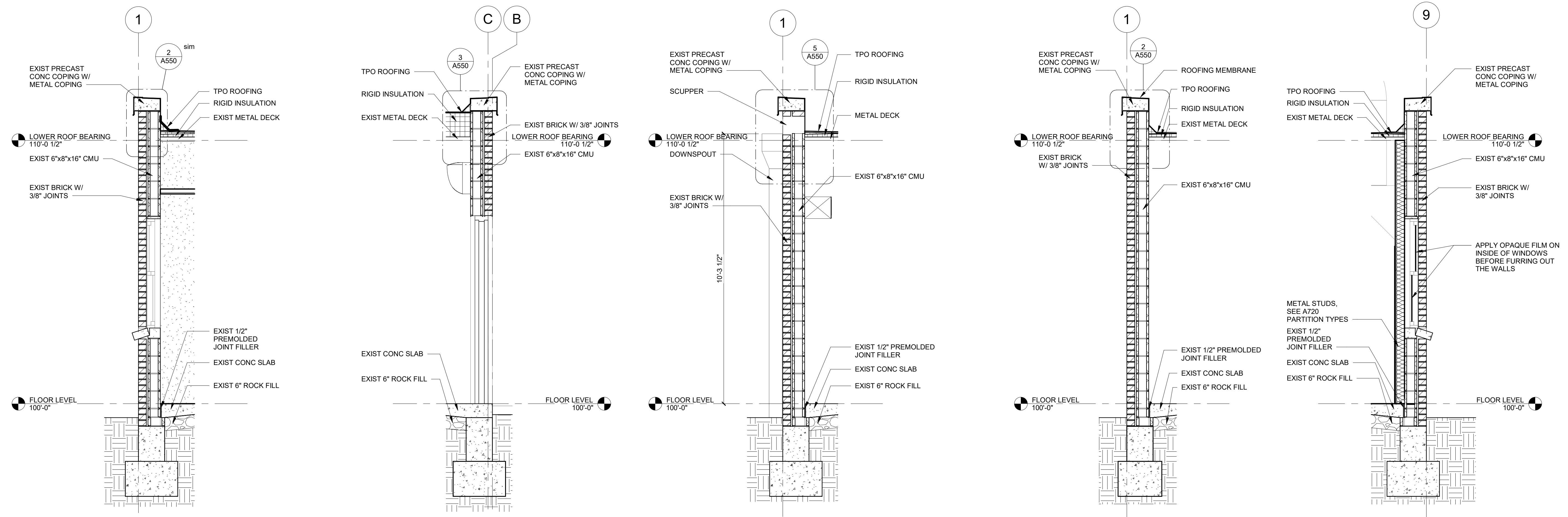
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DRAWN BY: EE
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DESIGNED BY: JB

SHEET TITLE:
WALL SECTIONS

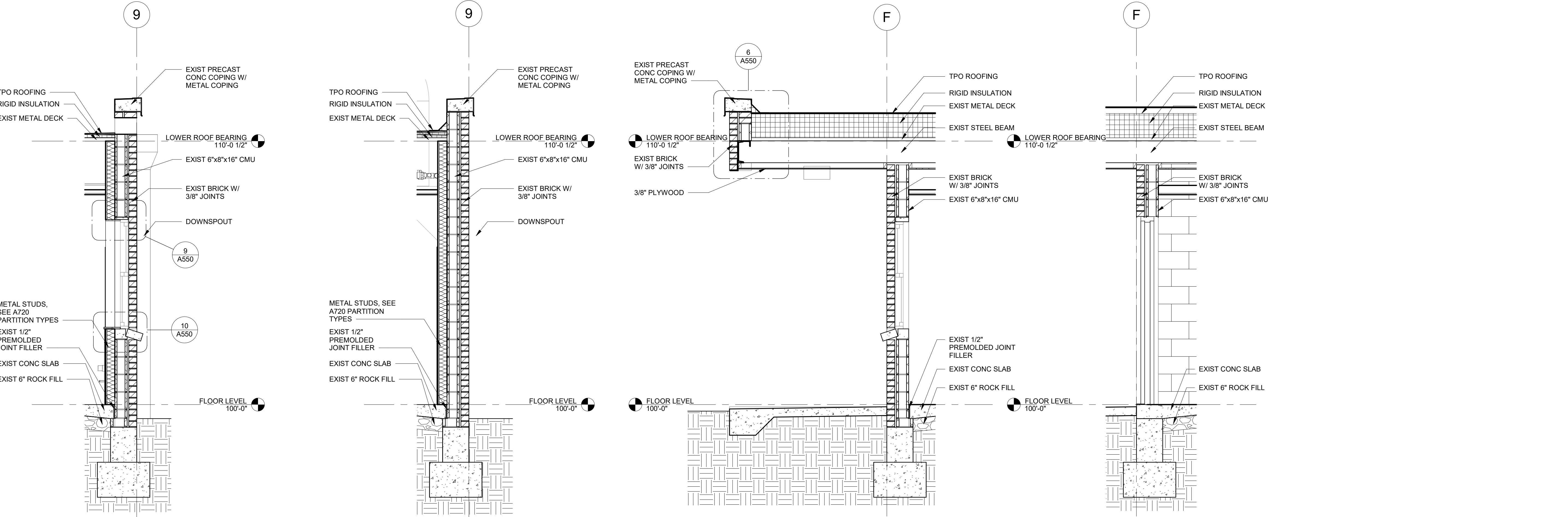
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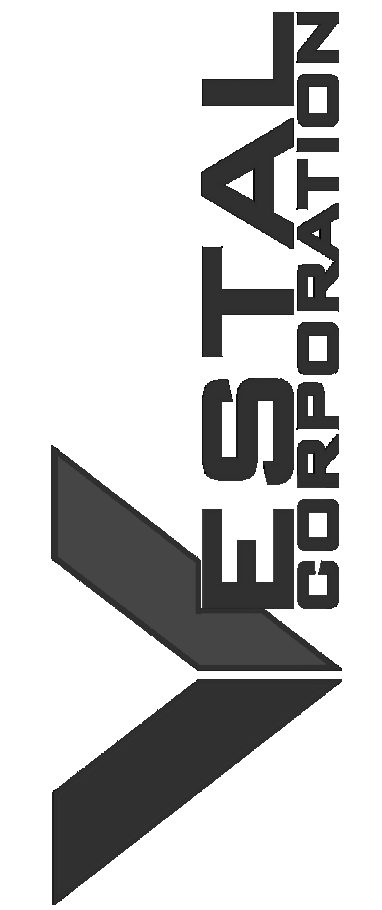
21 OF 85 SHEETS
2024.04.23



1 WALL SECTION 1/2" = 1'-0"
2 WALL SECTION 1/2" = 1'-0"
3 WALL SECTION 1/2" = 1'-0"
4 WALL SECTION 1/2" = 1'-0"
9 WALL SECTION 1/2" = 1'-0"



5 WALL SECTION 1/2" = 1'-0"
6 WALL SECTION 1/2" = 1'-0"
7 FRONT PORCH WALL SECTION 1/2" = 1'-0"
8 WALL SECTION 1/2" = 1'-0"



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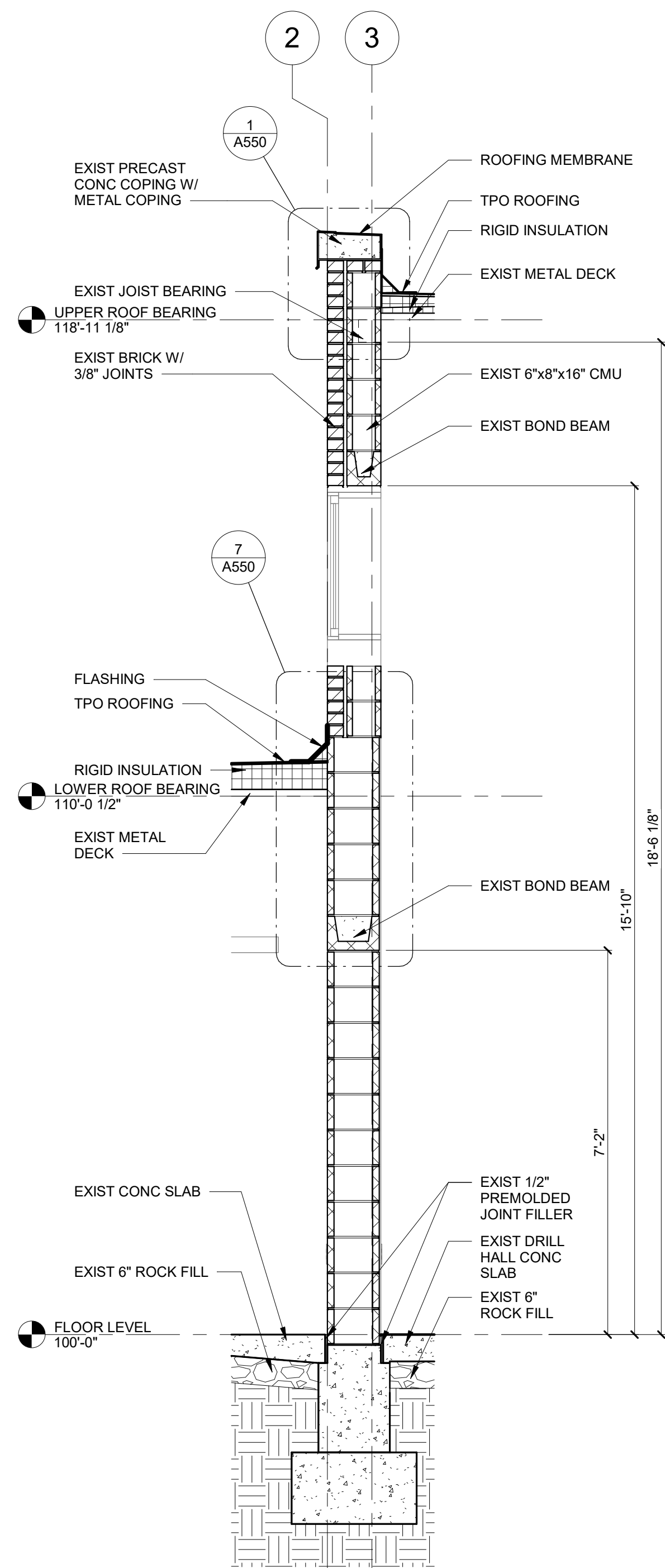
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WALL SECTIONS

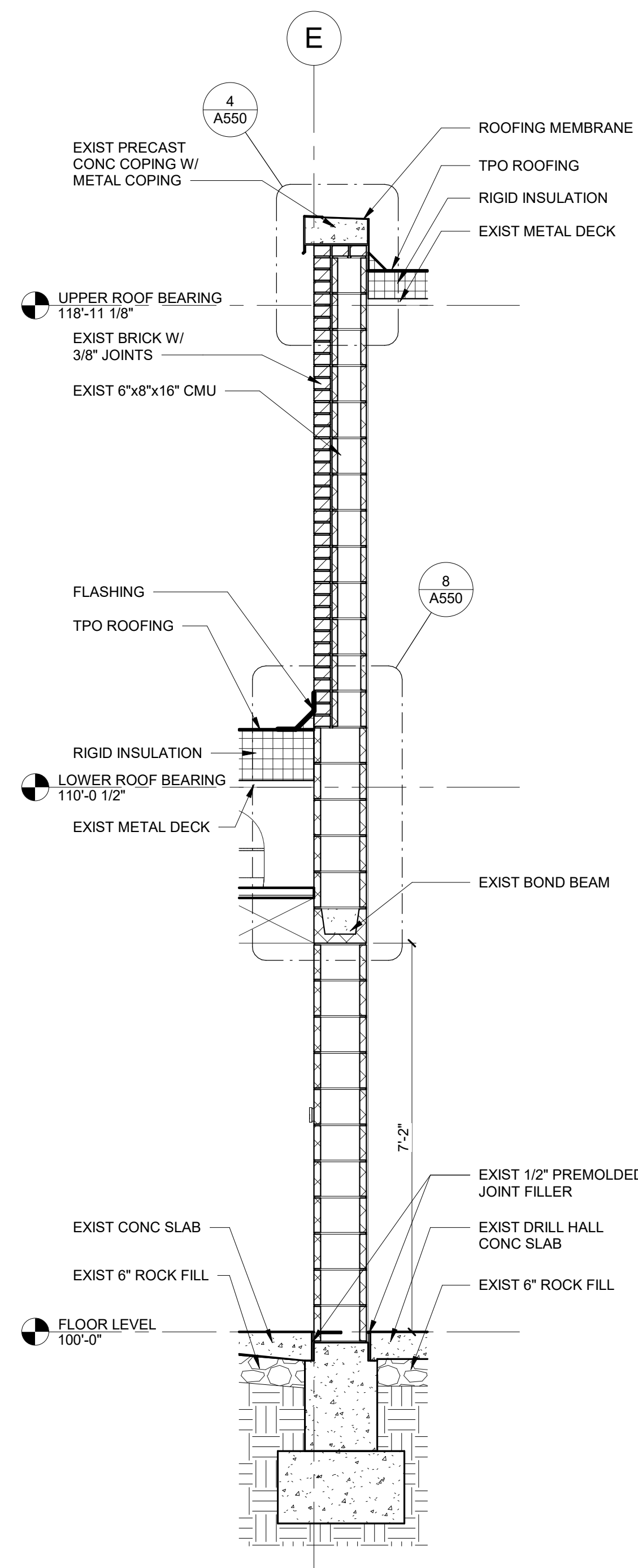
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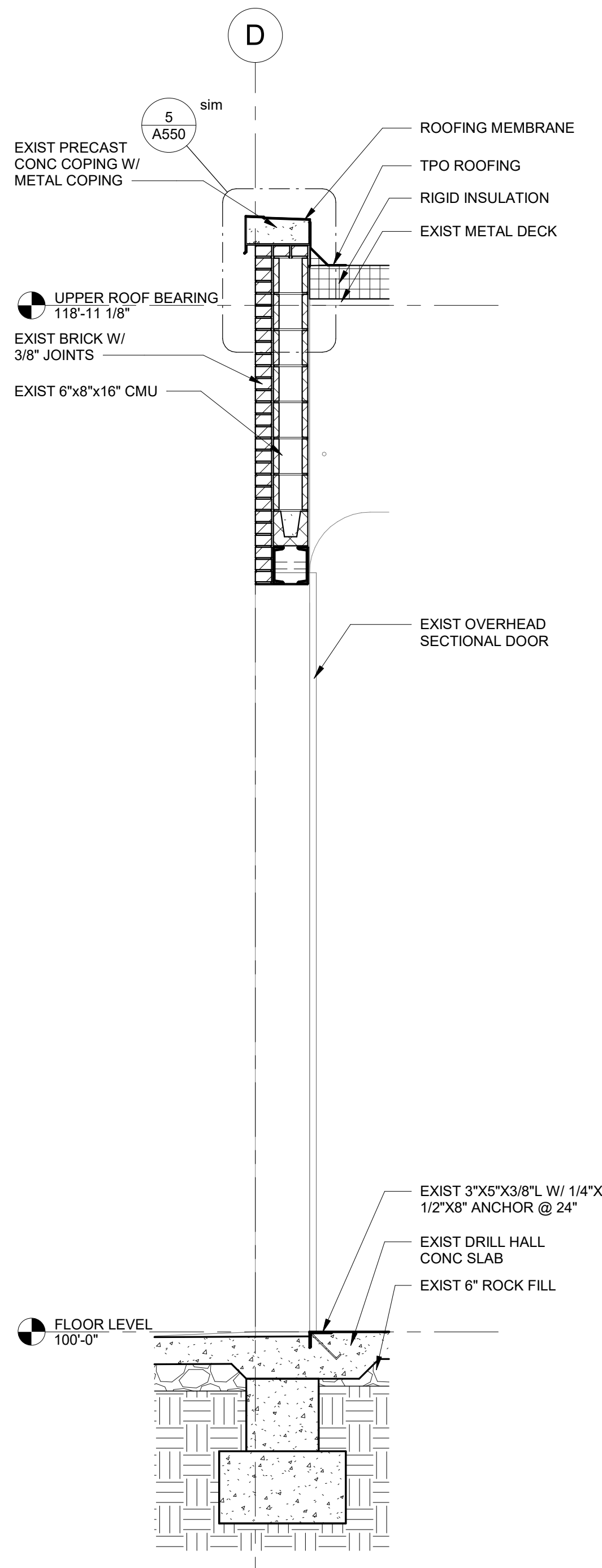
22 OF 85 SHEETS
2024.04.23



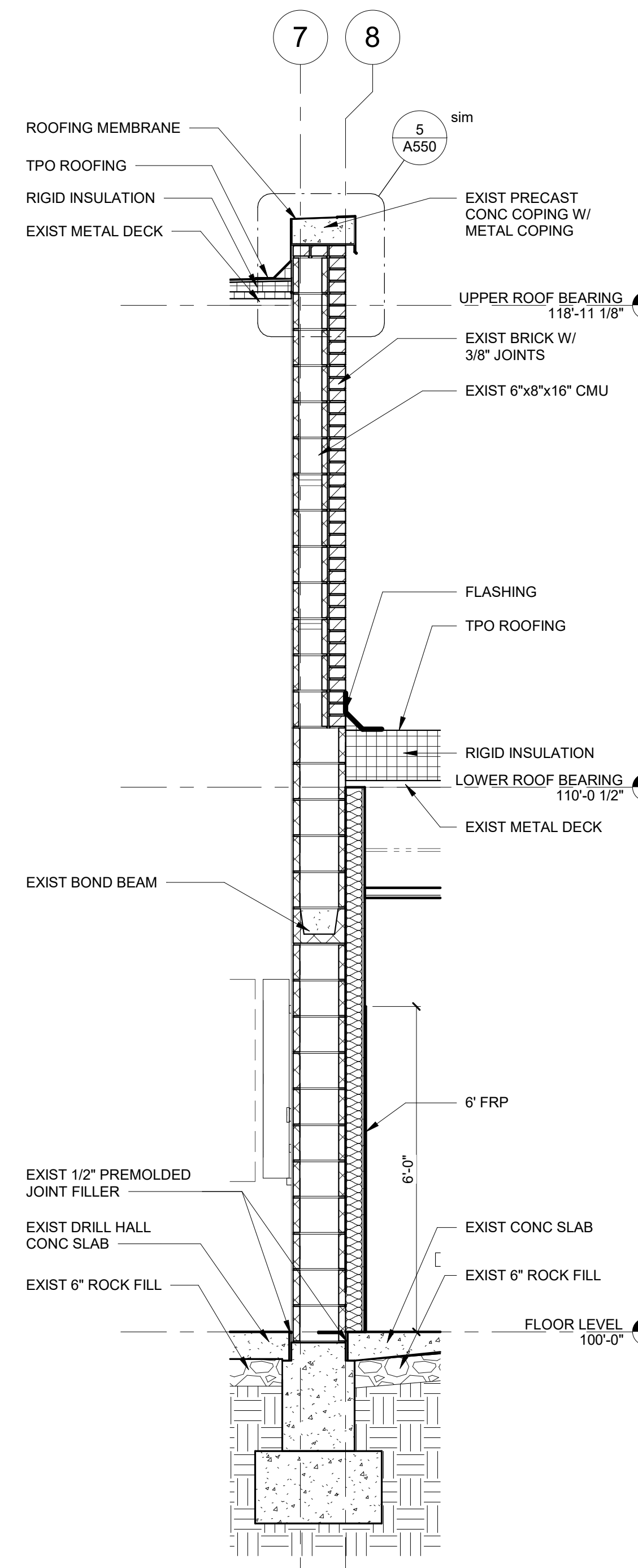
1 WALL SECTION
1/2" = 1'-0"



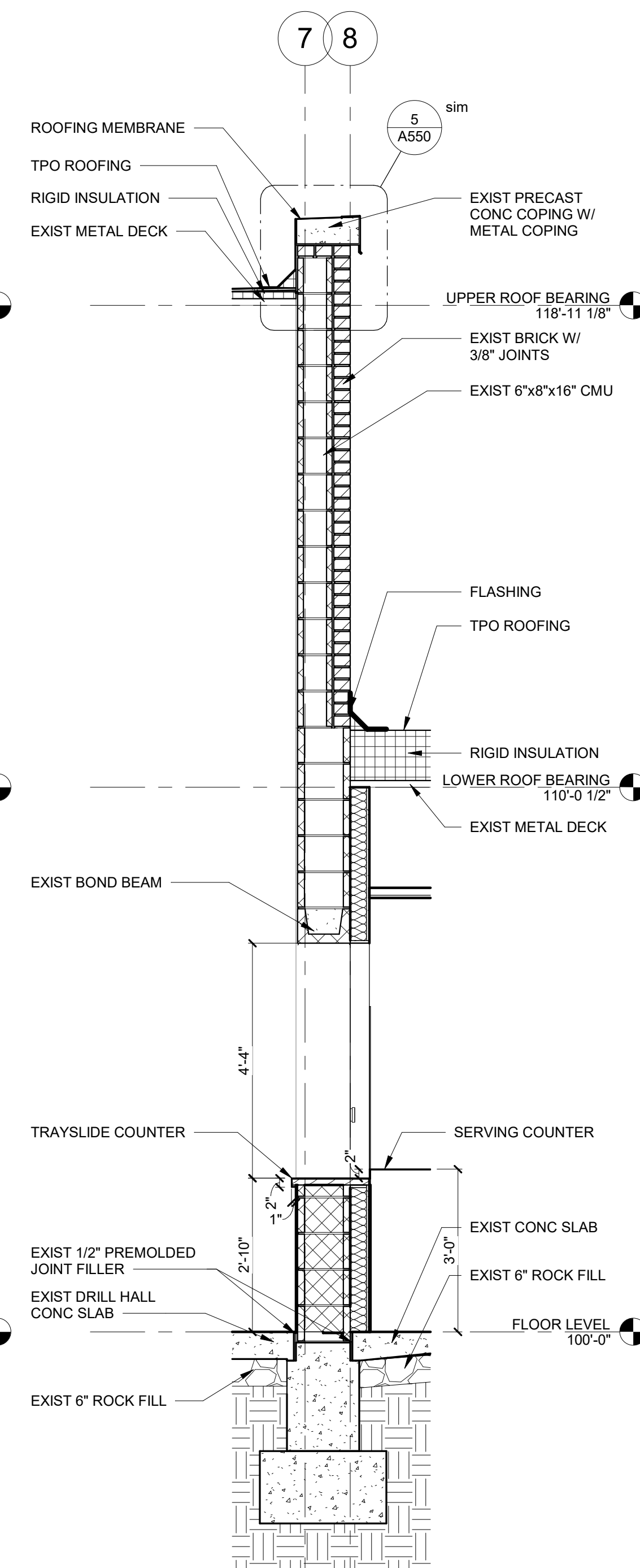
2 WALL SECTION
1/2" = 1'-0"



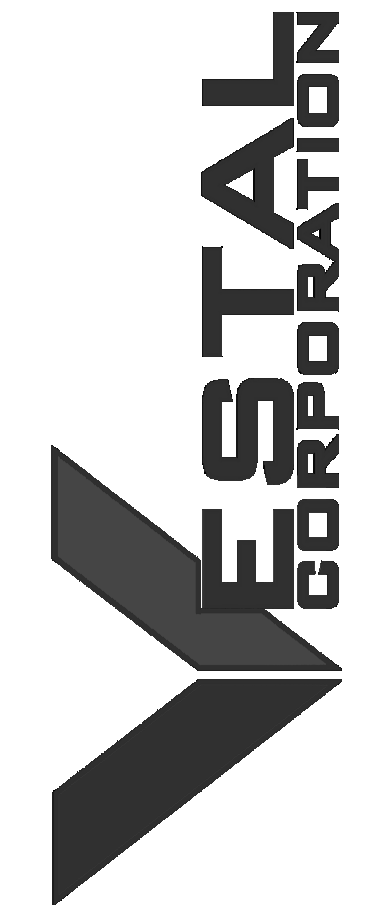
3 WALL SECTION
1/2" = 1'-0"



4 WALL SECTION
1/2" = 1'-0"



5 WALL SECTION
1/2" = 1'-0"



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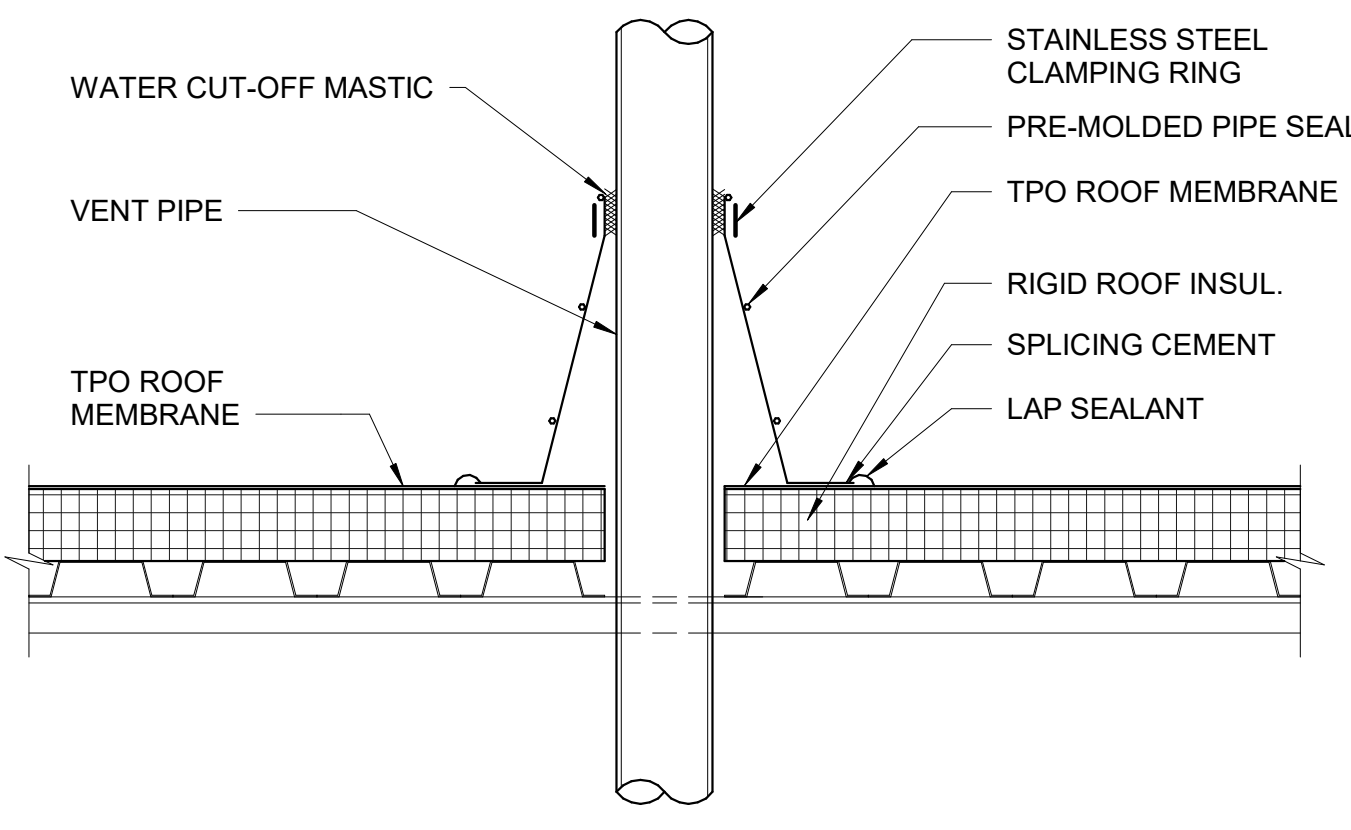
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SHEET TITLE:
ROOF DETAILS

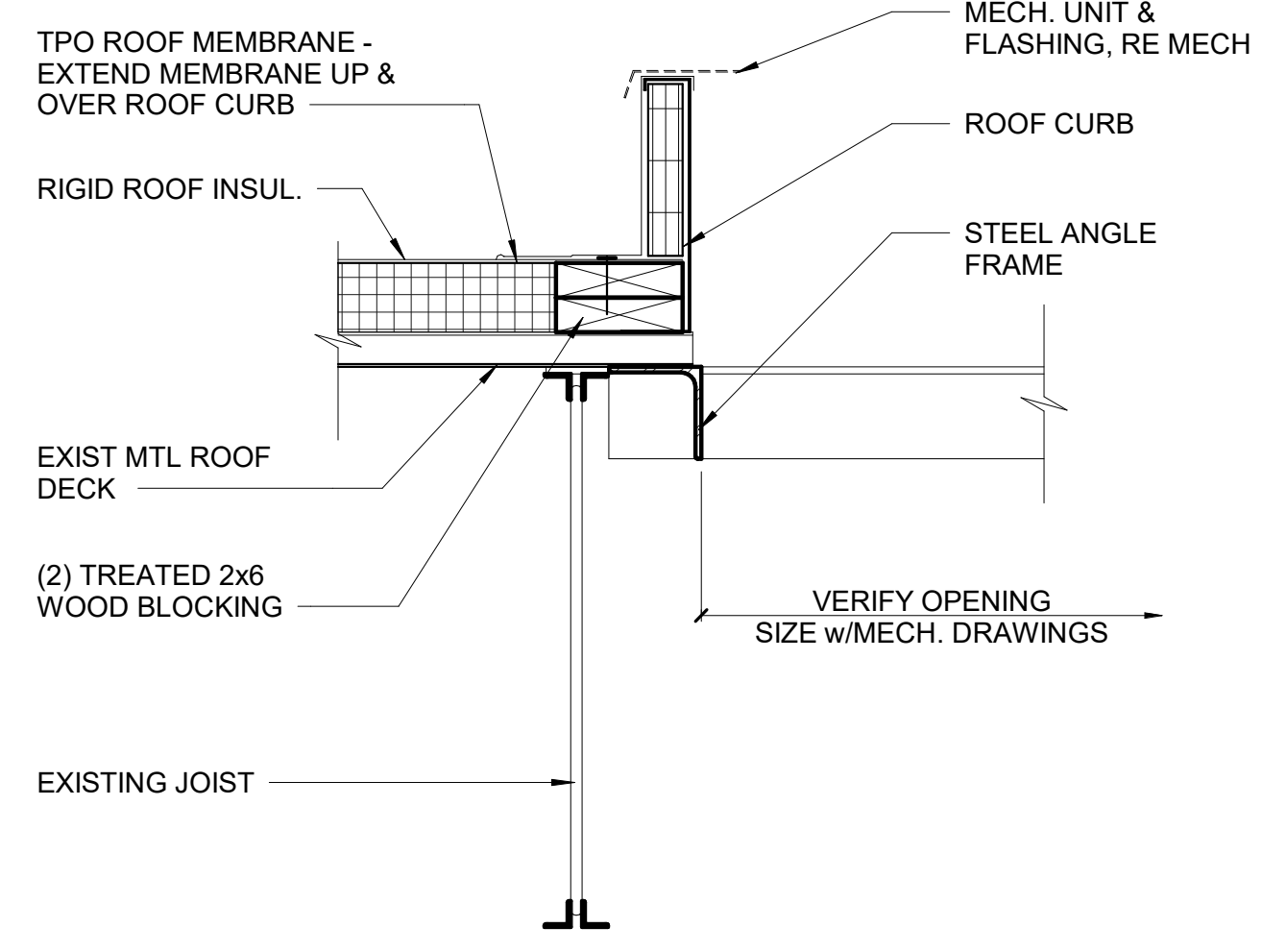
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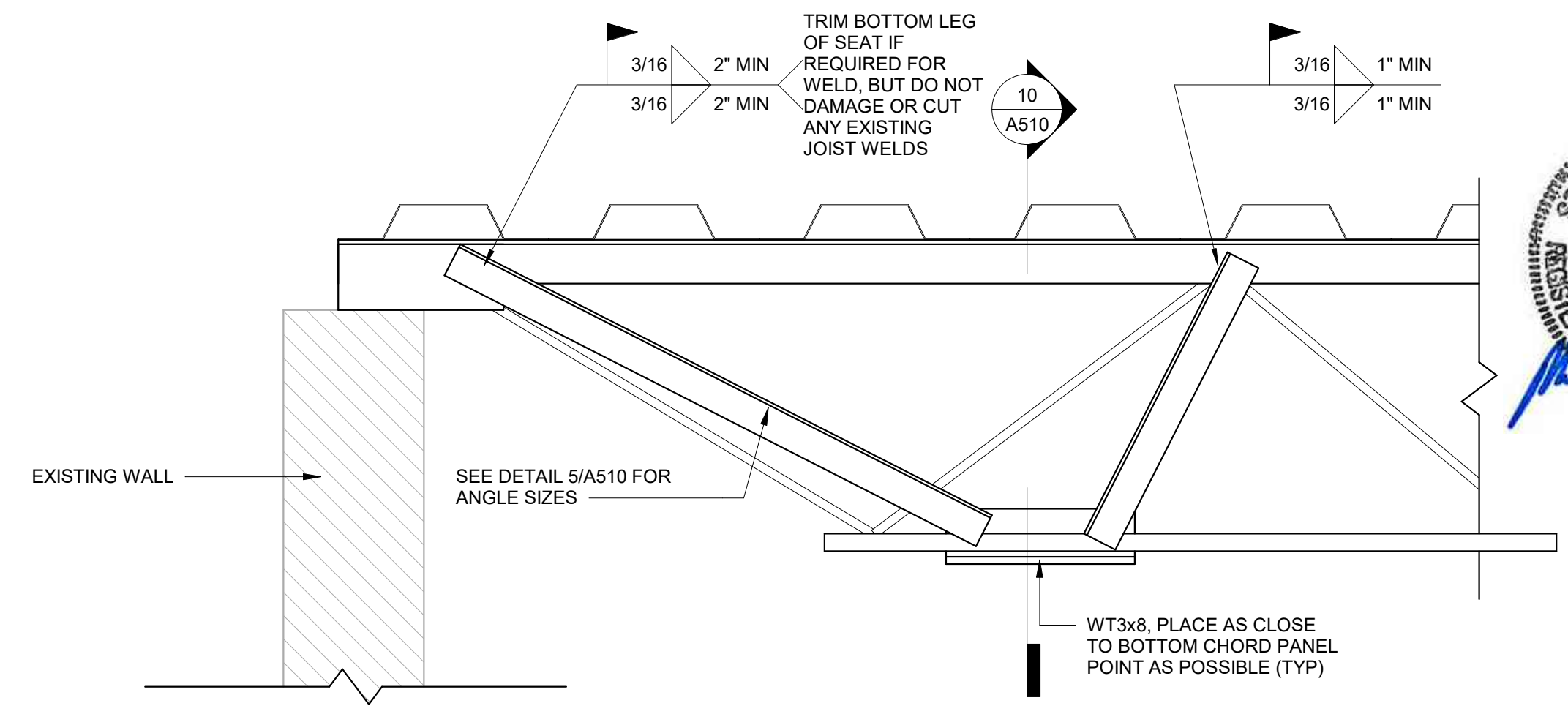
23 OF 85 SHEETS
2024.04.23



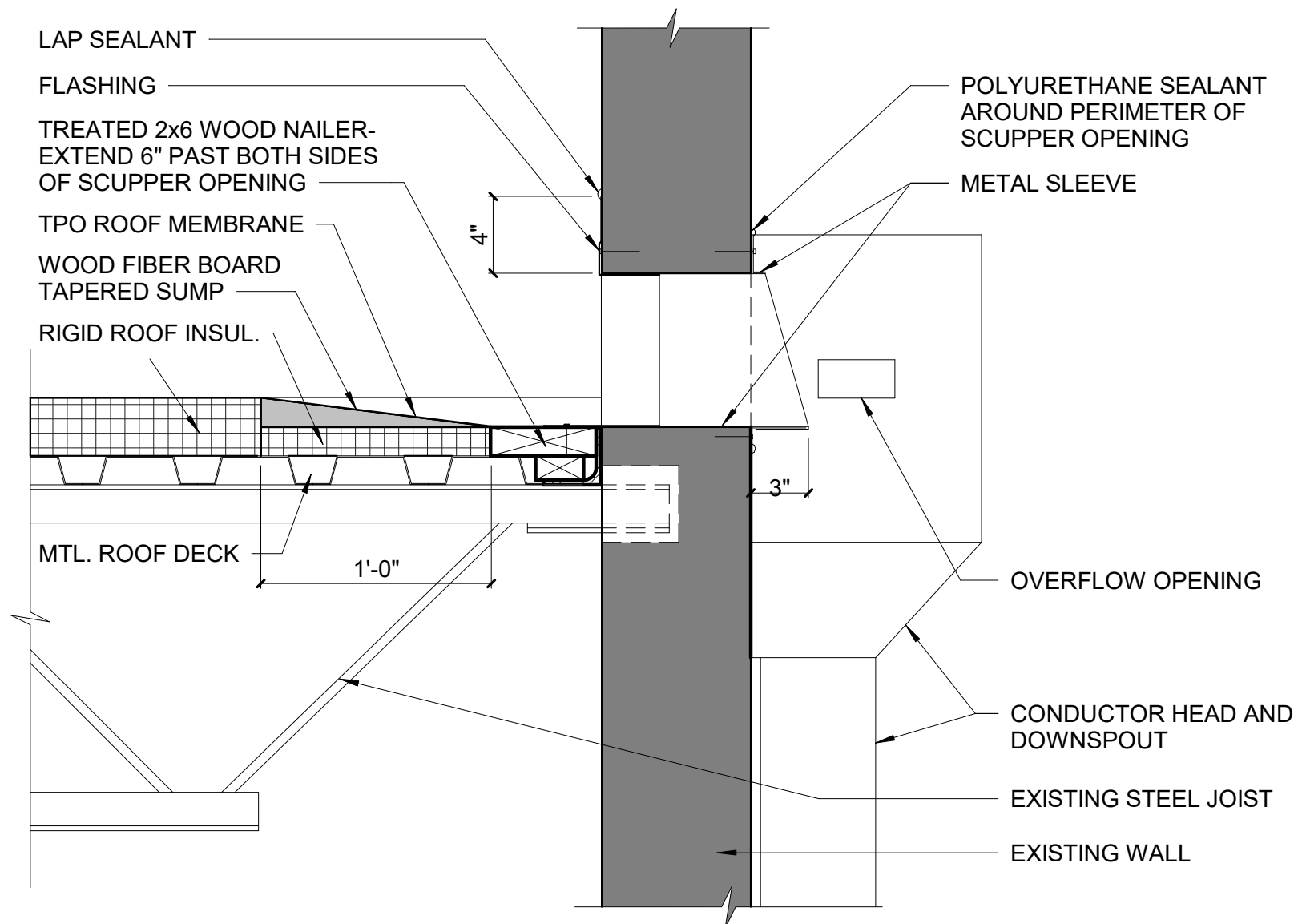
1 TYP. VENT STACK DETAIL
1 1/2" = 1'-0"



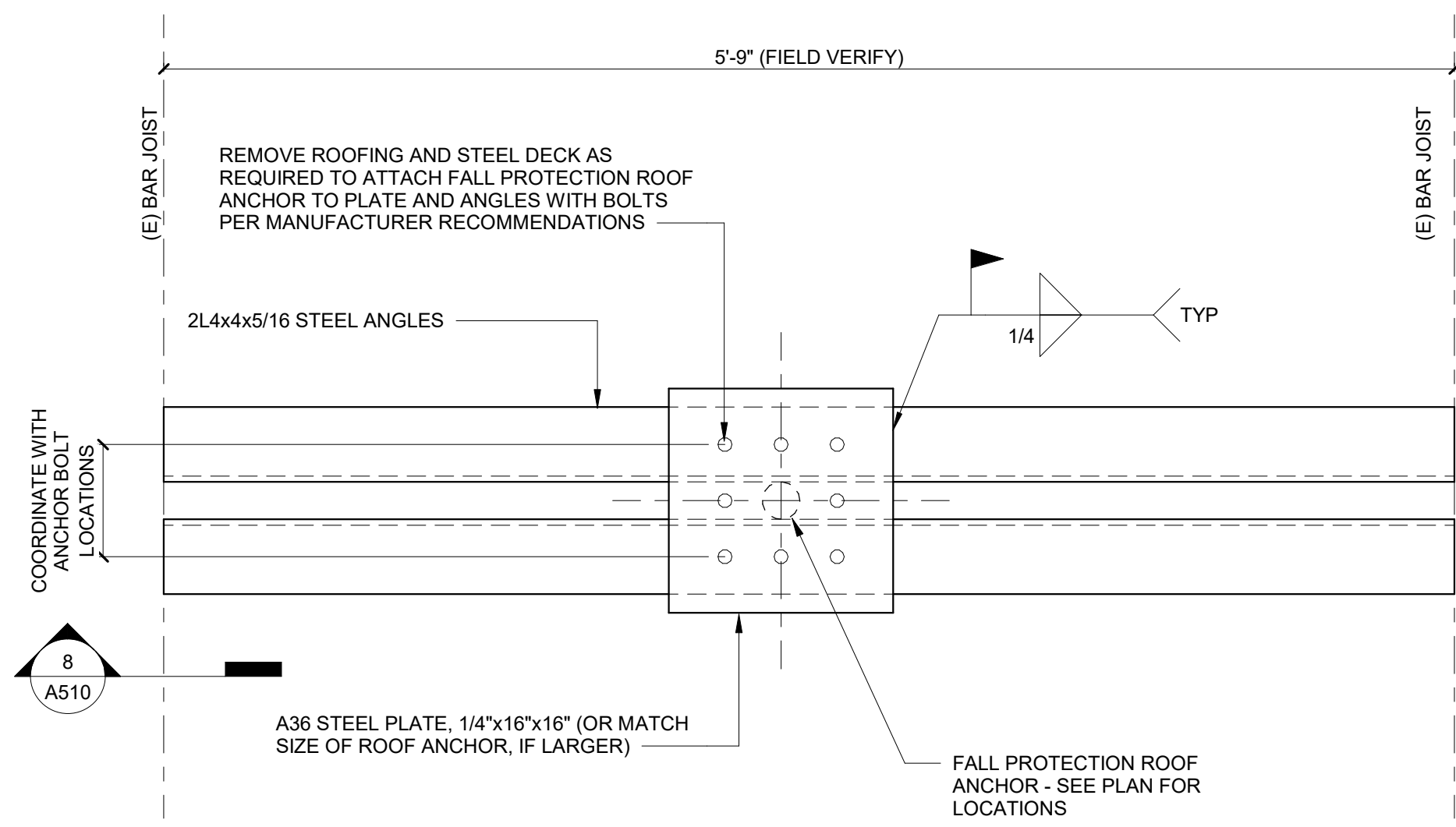
3 TYP. ROOF CURB DETAIL
1 1/2" = 1'-0"



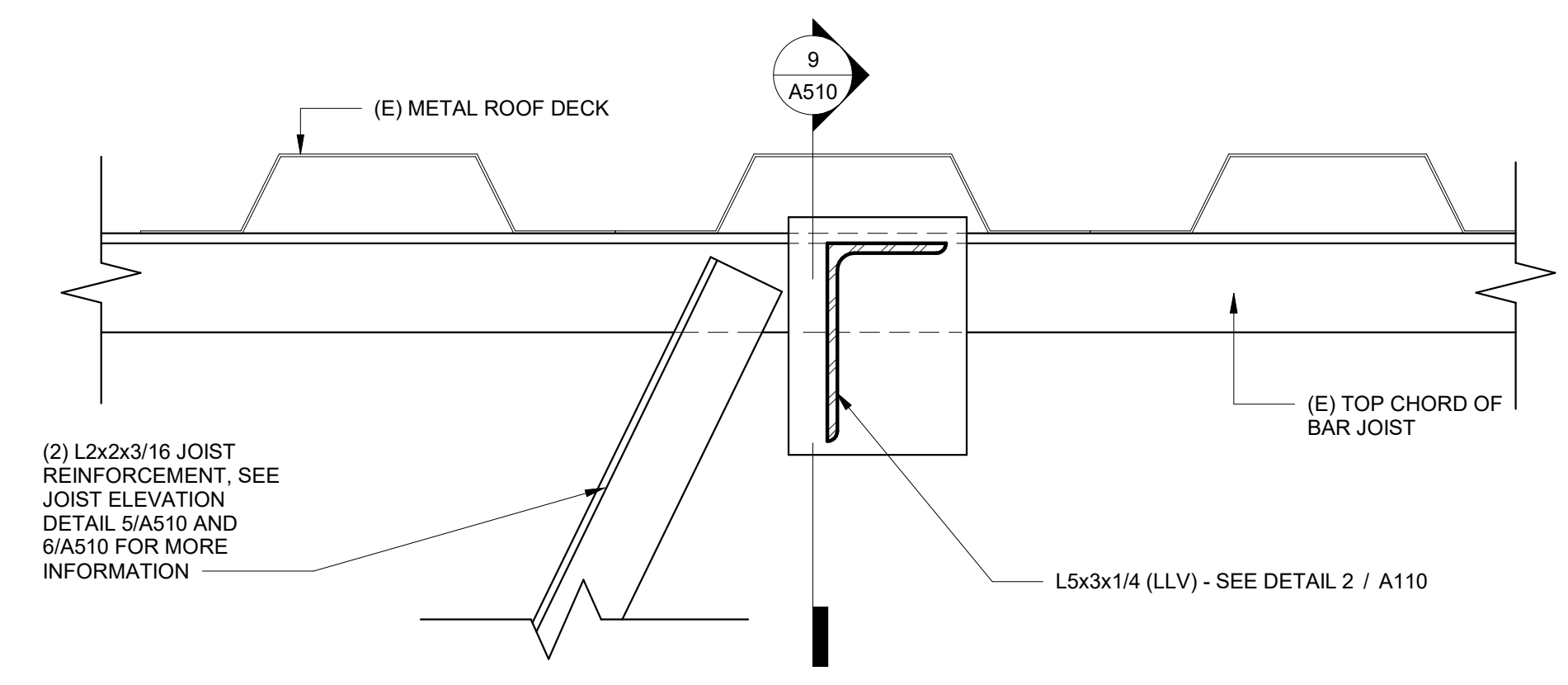
6 JOIST REINFORCEMENT DETAIL
1 1/2" = 1'-0"



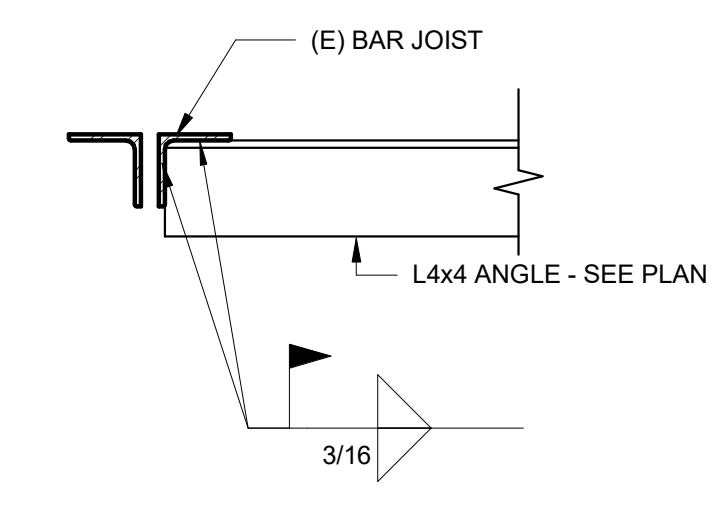
2 TYP. SCUPPER DETAIL
1 1/2" = 1'-0"



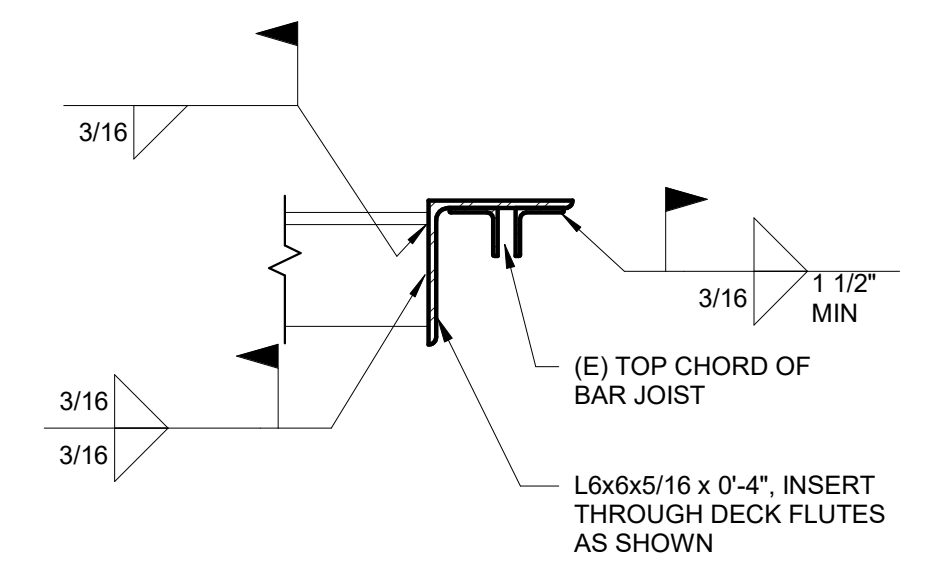
4 ROOF ANCHORAGE
1 1/2" = 1'-0"



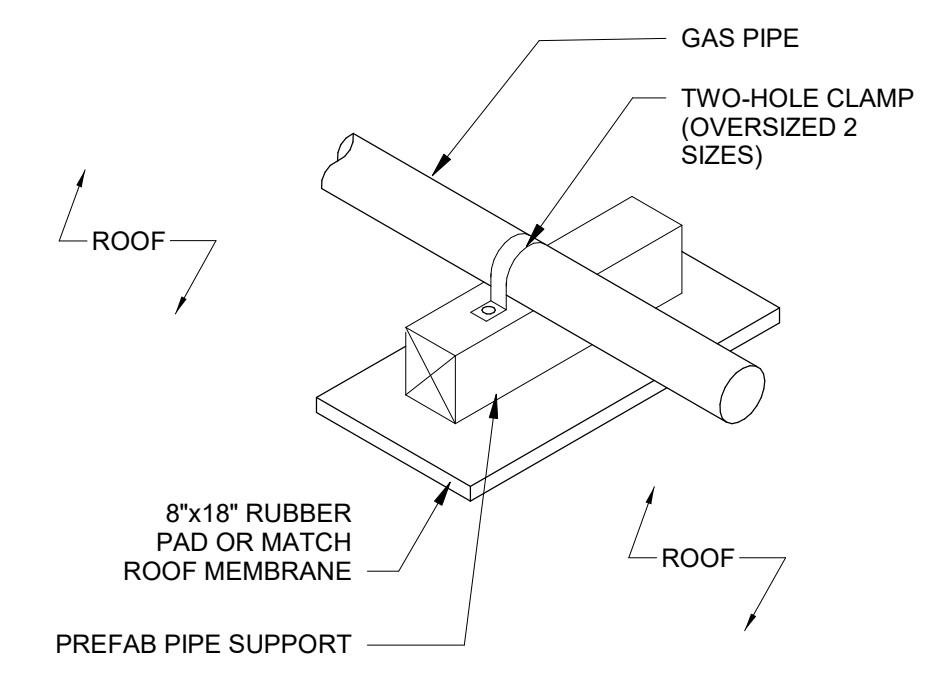
7 ANGLE FRAME SUPPORT AT JOIST
3" = 1'-0"



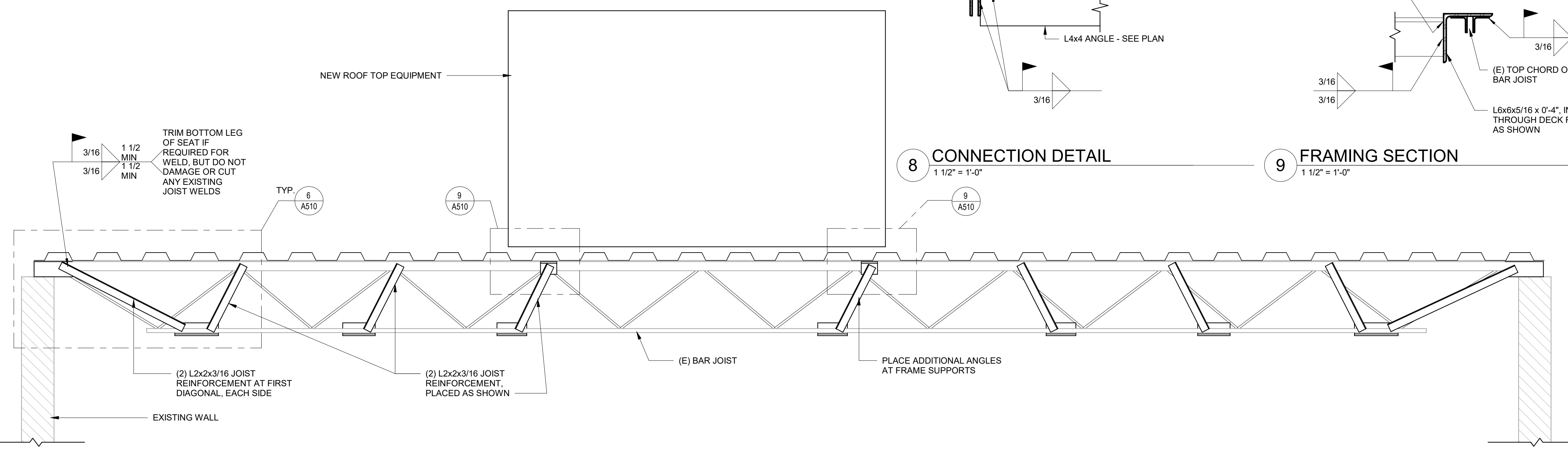
8 CONNECTION DETAIL
1 1/2" = 1'-0"



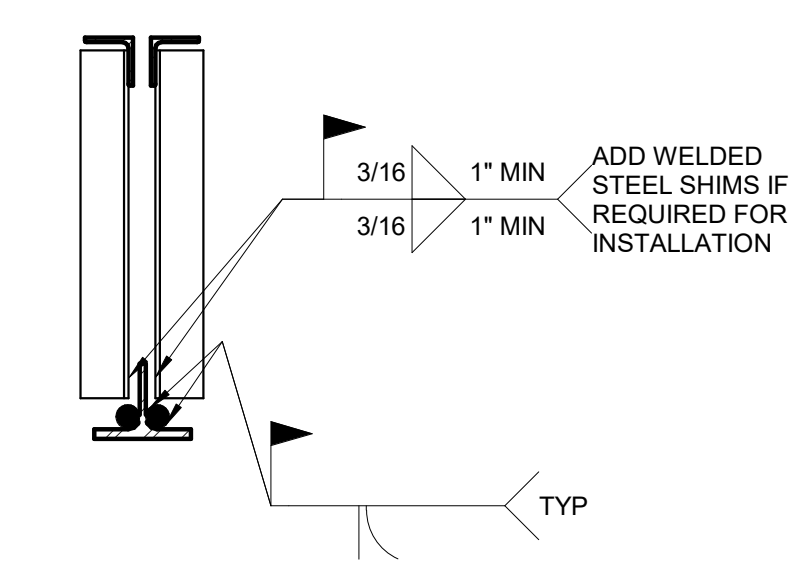
9 FRAMING SECTION
1 1/2" = 1'-0"



11 GAS PIPE ROOF SUPPORT
12" = 1'-0"



5 JOIST REINFORCEMENT ELEVATION
3/4" = 1'-0"



10 JOIST REINFORCEMENT SECTION
1 1/2" = 1'-0"



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ST. CLAIR READINESS
CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	DD	02/16/2024
B	IFB	04/23/2024

ISSUE DATE: 2024.04.23

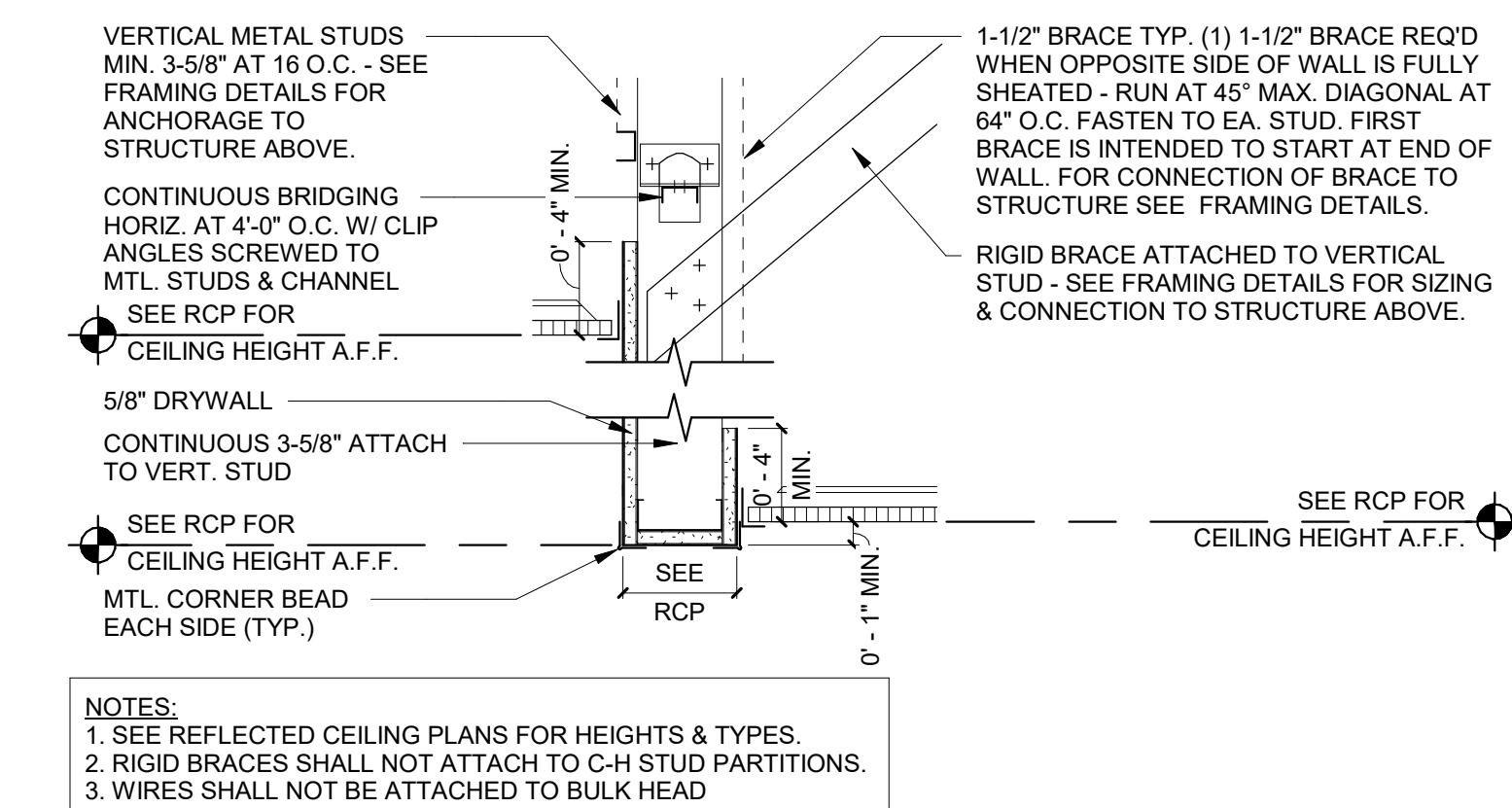
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DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
CEILING DETAILS

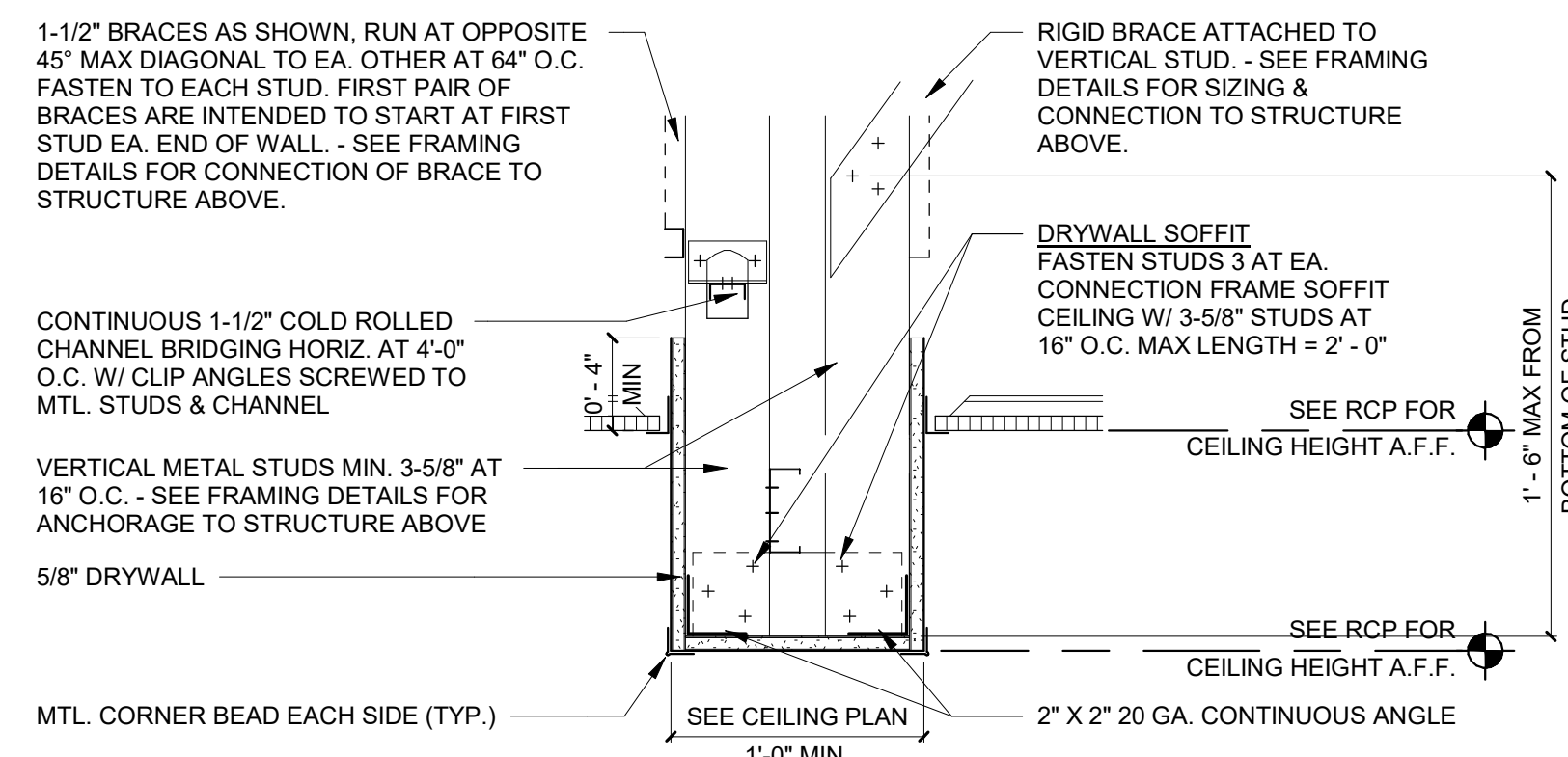
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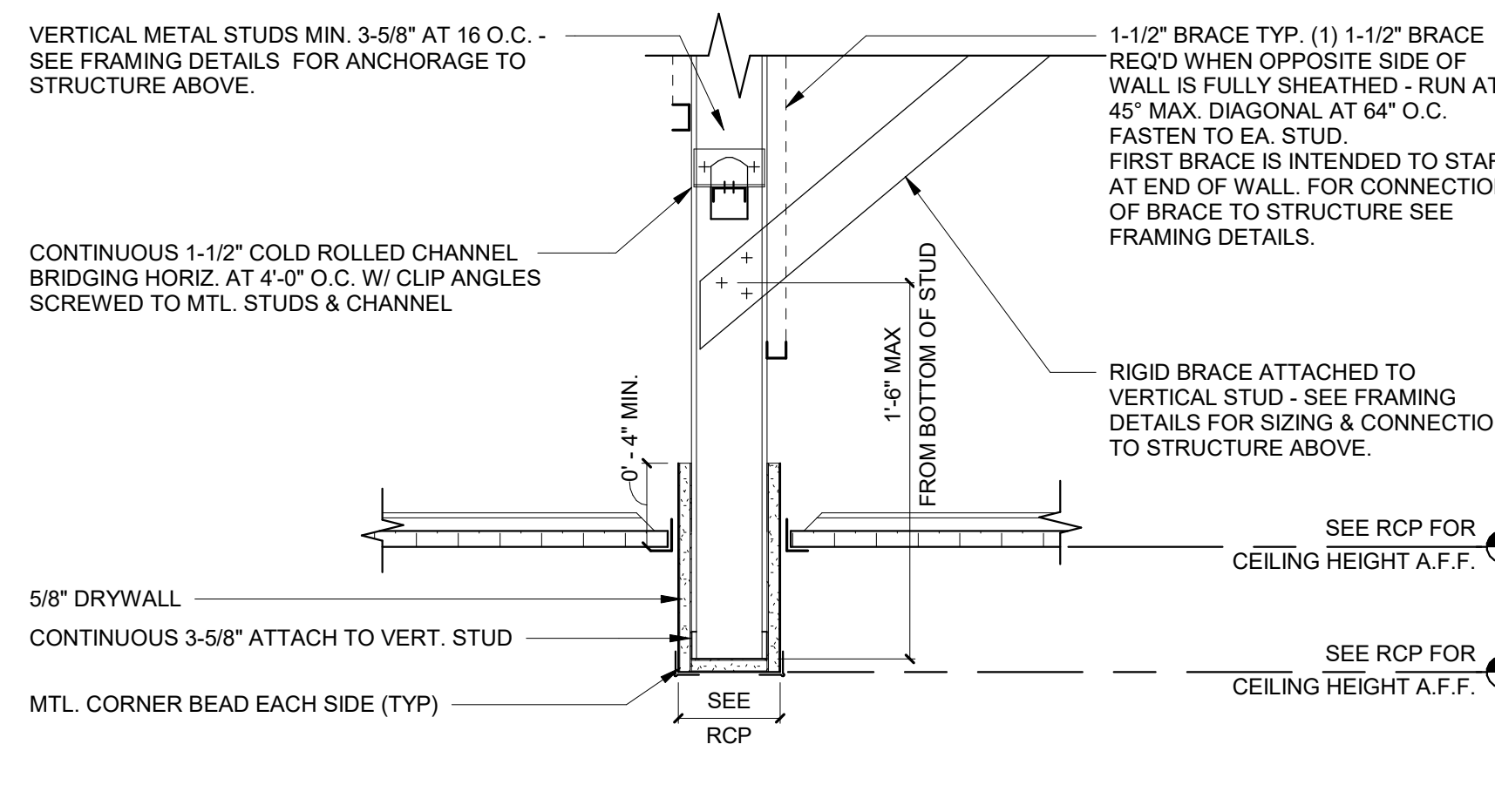
24 OF 85 SHEETS
2024.04.23



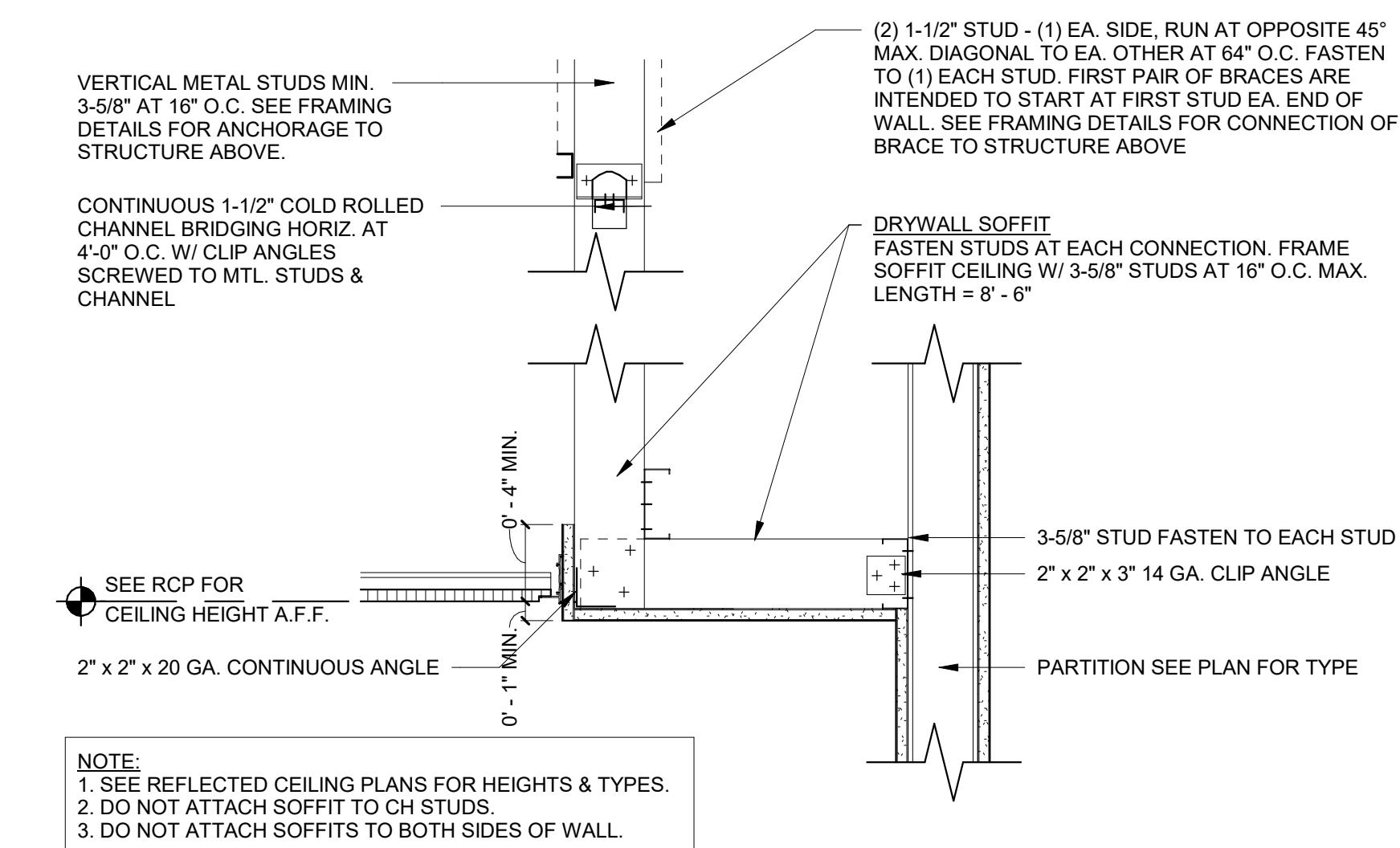
1 TYP. BULKHEAD DETAIL
1 1/2" = 1'-0"



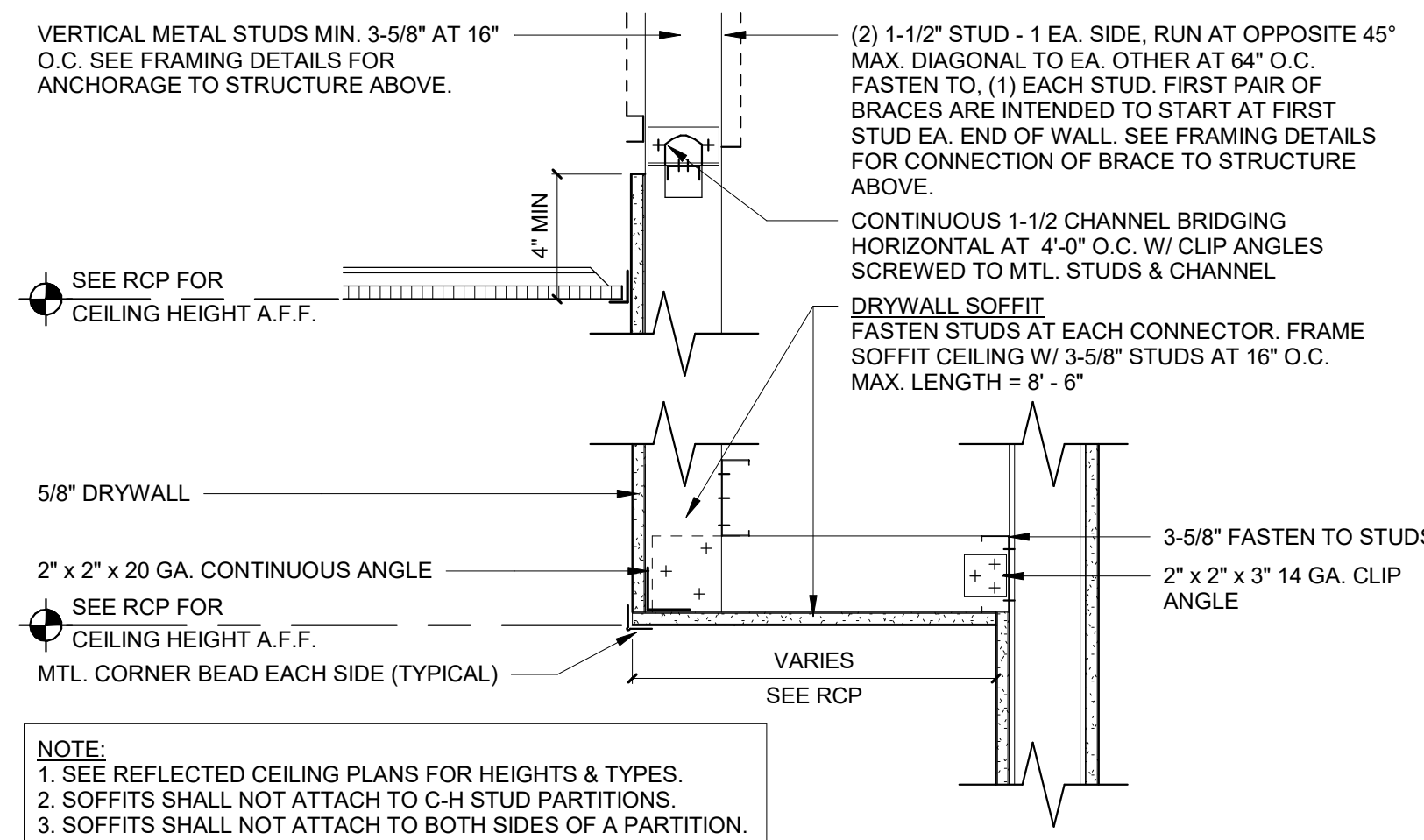
2 TYP. BULKHEAD DETAIL (1'-0" AND GREATER)
1 1/2" = 1'-0"



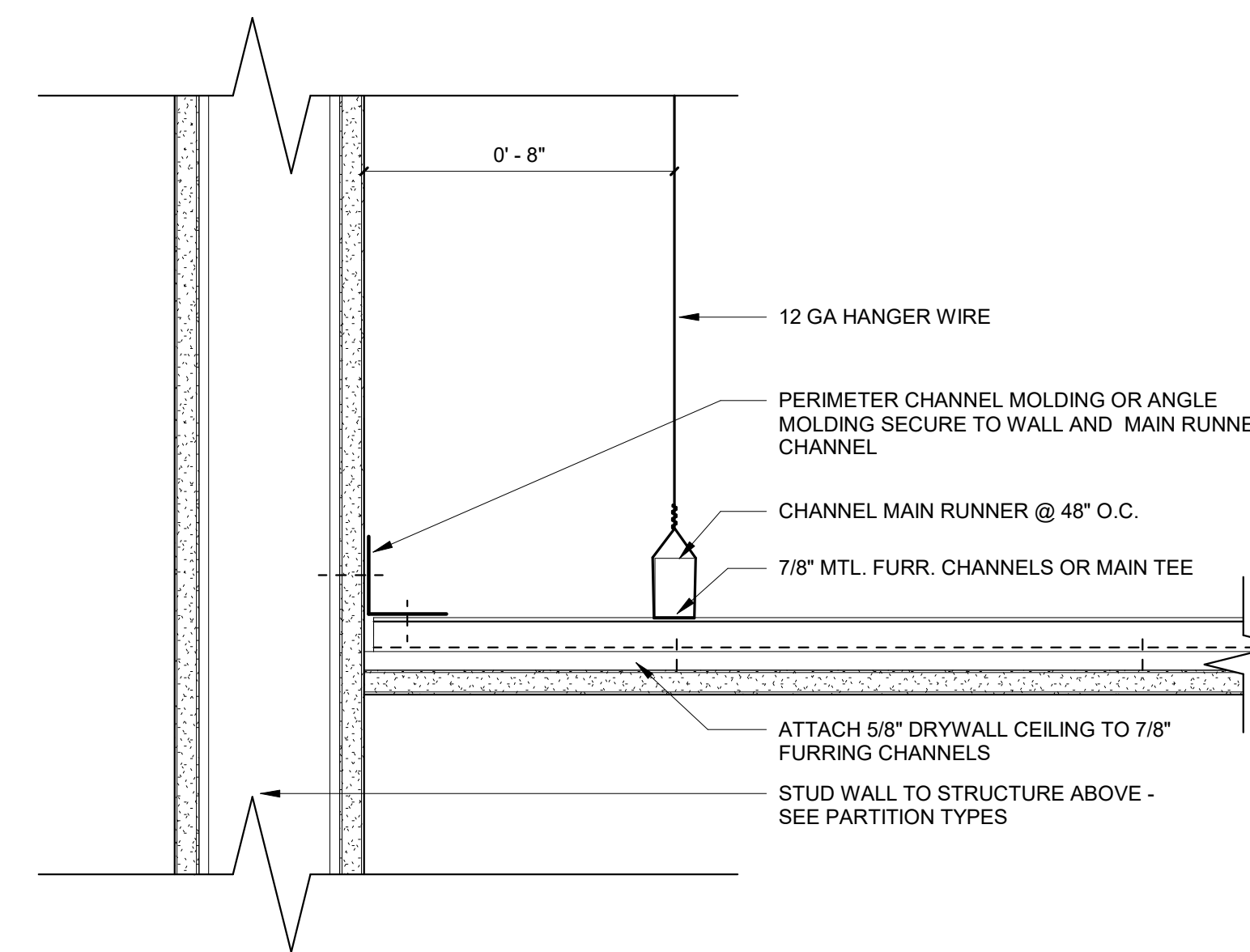
3 TYP. BULKHEAD DETAIL (LESS THAN 1'-0")
1 1/2" = 1'-0"



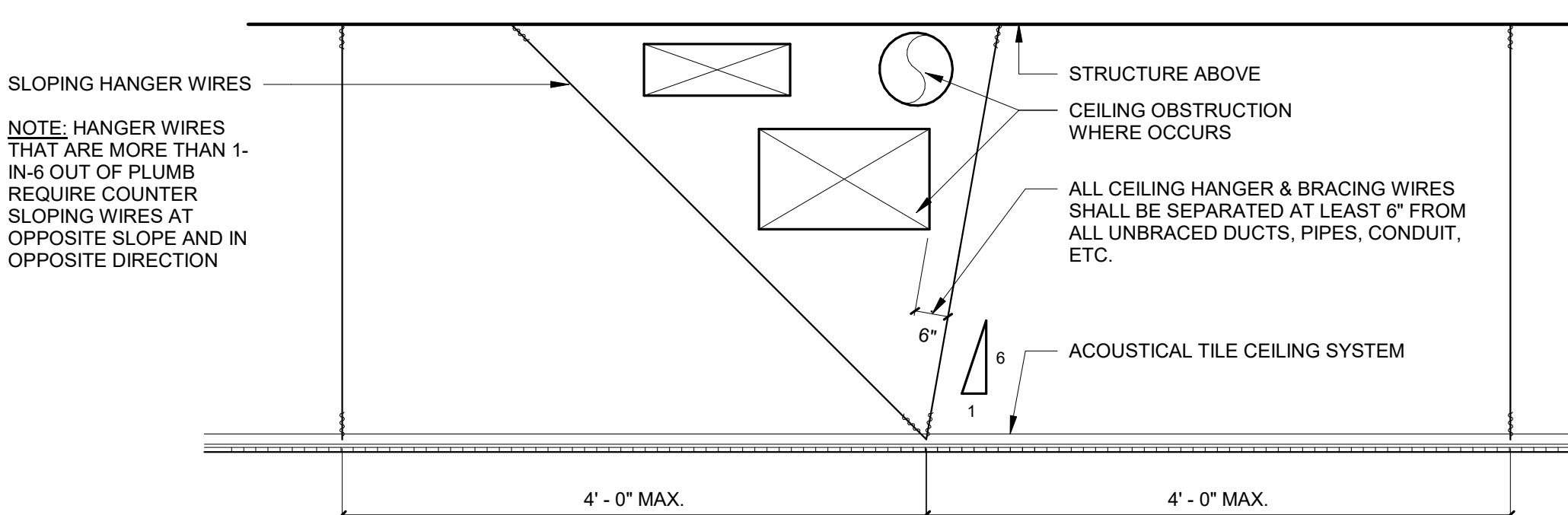
4 TYP. DROP SOFFIT AT CEILING HEIGHT DETAIL
1 1/2" = 1'-0"



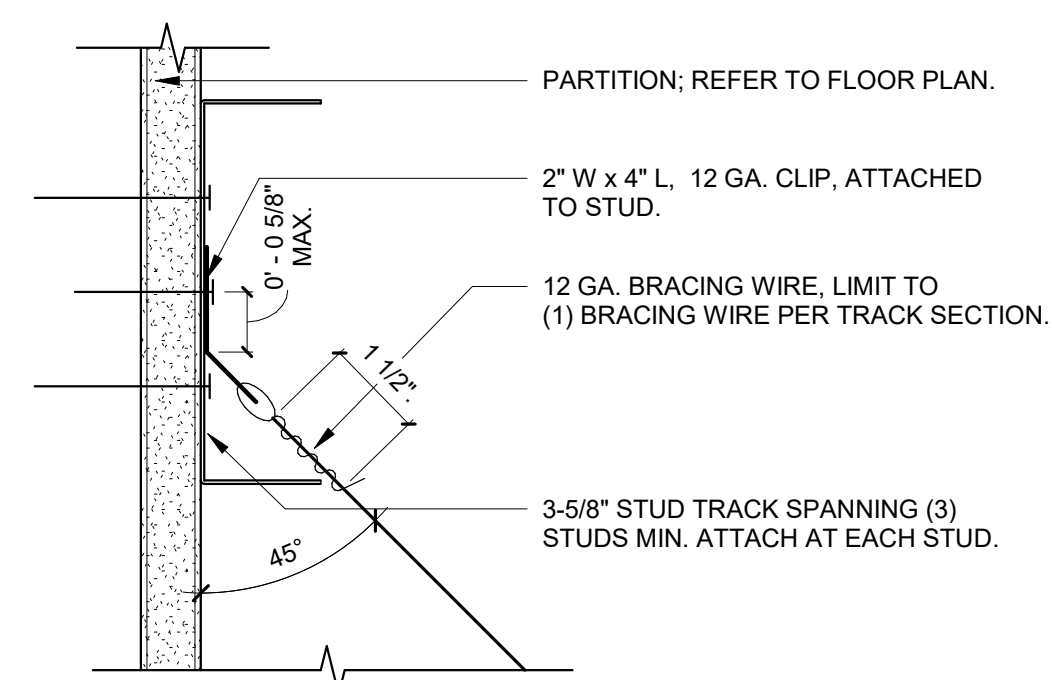
5 TYP. DROP SOFFIT BELOW CEILING DETAIL
1 1/2" = 1'-0"



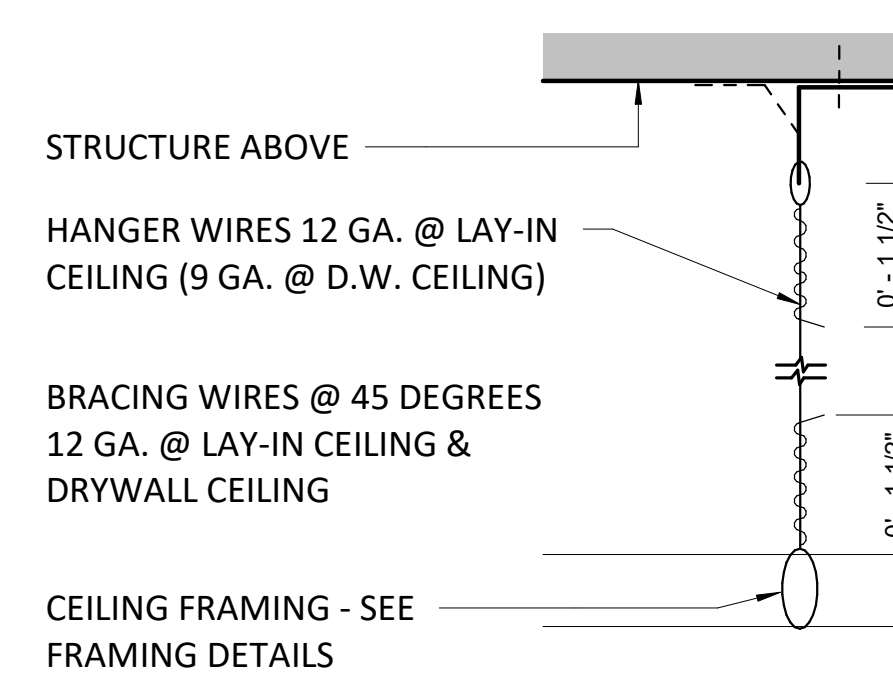
6 TYP. PARTITION CONNECTION DETAIL TO MAIN RUNNER CHANNELS
3" = 1'-0"



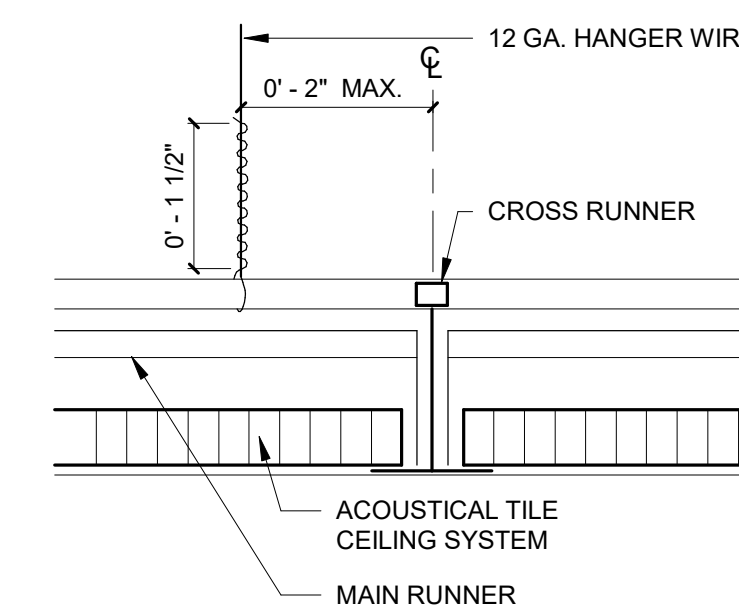
7 TYP. ACOUSTIC CEILING COUNTER SLOPING WIRES AT OBSTRUCTION
1" = 1'-0"



8 TYP. BRACING/STRAP HANGING WIRE CONNECTION AT WALL STUD
6" = 1'-0"



9 TYP. TRACK HANGER & BRACING WIRE CONNECTION DETAIL
6" = 1'-0"



10 TYP. WIRE CONNECTION TO ACOUSTIC LAY-IN CEILING GRID
6" = 1'-0"

SEISMIC CEILING REQUIREMENTS (SUSPENDED)

BASIC CONNECTIONS, PERIMETER AND LATERAL SPLAY BRACING REQUIREMENTS:

- MINIMUM INTERSECTION STRENGTH LIMITS AT MAIN TEE AND CROSS TEE IS 60 LBS.
- REQUIREMENT TO HAVE VERTICAL HANGER WIRE (12-GAUGE) @ 4'-0".
- INTERMEDIATE OR HEAVY DUTY MAIN TEE CLASSIFICATION REQUIRED.
- ALL VERTICAL HANGER WIRES TO BE 1 IN 6 MAX PLUMB OF VERTICAL.
- PERIMETER VERTICAL HANGER WIRES CAN NOT BE MORE THAN 8" FROM THE WALL IF MOLDING LESS THAN 7/8".
- GRID END / WALL CLEARANCE TO BE MINIMUM OF 3/8".
- PERIMETER CLOSURE (MOLDING) WIDTH TO BE MINIMUM 7/8".
- PERIMETER ATTACHMENT OF THE GRID ON TWO ADJACENT WALLS IS NOT PERMITTED.
- REQUIREMENT TO HAVE PERIMETER TEE ENDS TIED TOGETHER.
- HORIZONTAL RESTRAINT (SPLAY WIRES OR RIGID BRACING) WITHIN 2" OF INTERSECTION AND SPLAYED 90 DEGREES APART OF 45 DEGREES ANGLES IS NOT REQUIRED.
- COMPRESSION POSTS (STRUTS) 12" OC IN BOTH DIRECTIONS, STARTING 6'-0" FROM WALLS ARE NOT REQUIRED.
- PARTITIONS ARE NOT TO BE ATTACHED TO CEILING SYSTEM, UNLESS CEILING IS ABLE TO MOVE Laterally.
- SEISMIC SEPARATION JOINTS ARE NOT REQUIRED.

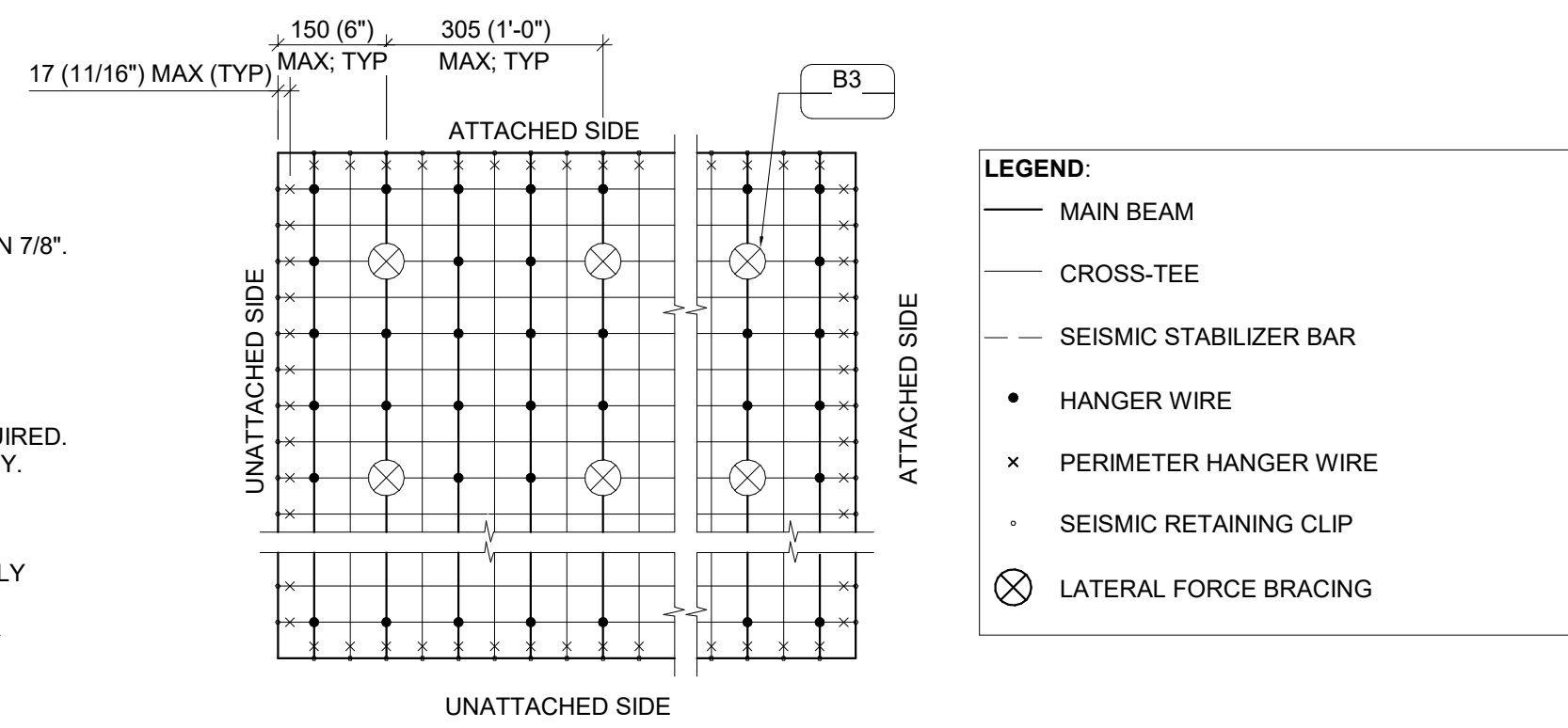
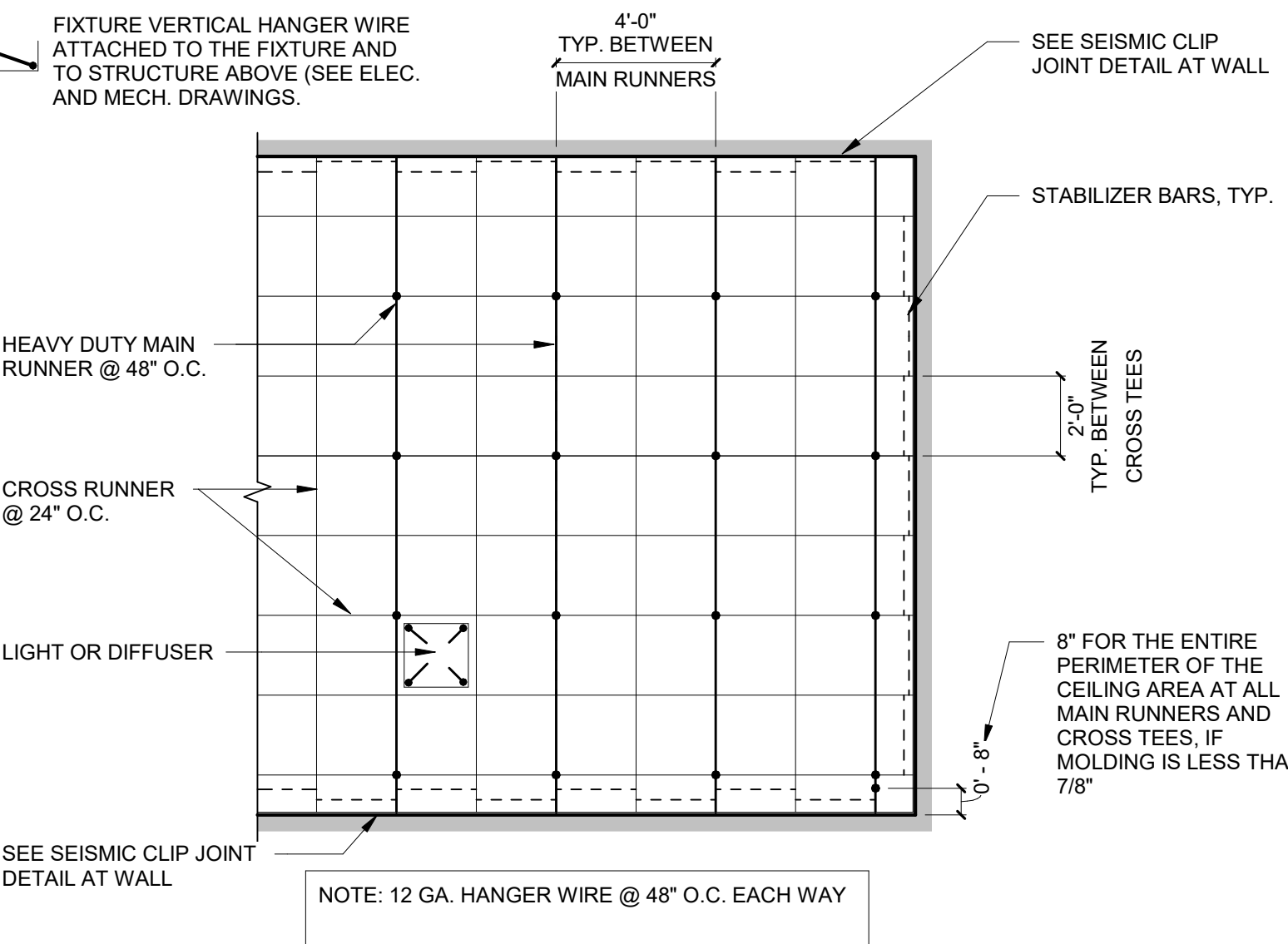
LIGHT FIXTURE ATTACHMENT REQUIREMENTS:

- LIGHT FIXTURE ARE TO BE MECHANICALLY ATTACHED TO GRID (TWO PER FIXTURE UNLESS INDEPENDENTLY SUPPORTED).
- PENDANT-HUNG FIXTURES ARE TO BE DIRECTLY SUPPORTED FROM STRUCTURE WITH 9-GAUGE WIRE (OR APPROVED ALTERNATE).
- RIGID LAY-IN OR CAN LIGHT FIXTURES REQUIRE TO BE ATTACHED DIRECTLY TO STRUCTURE.

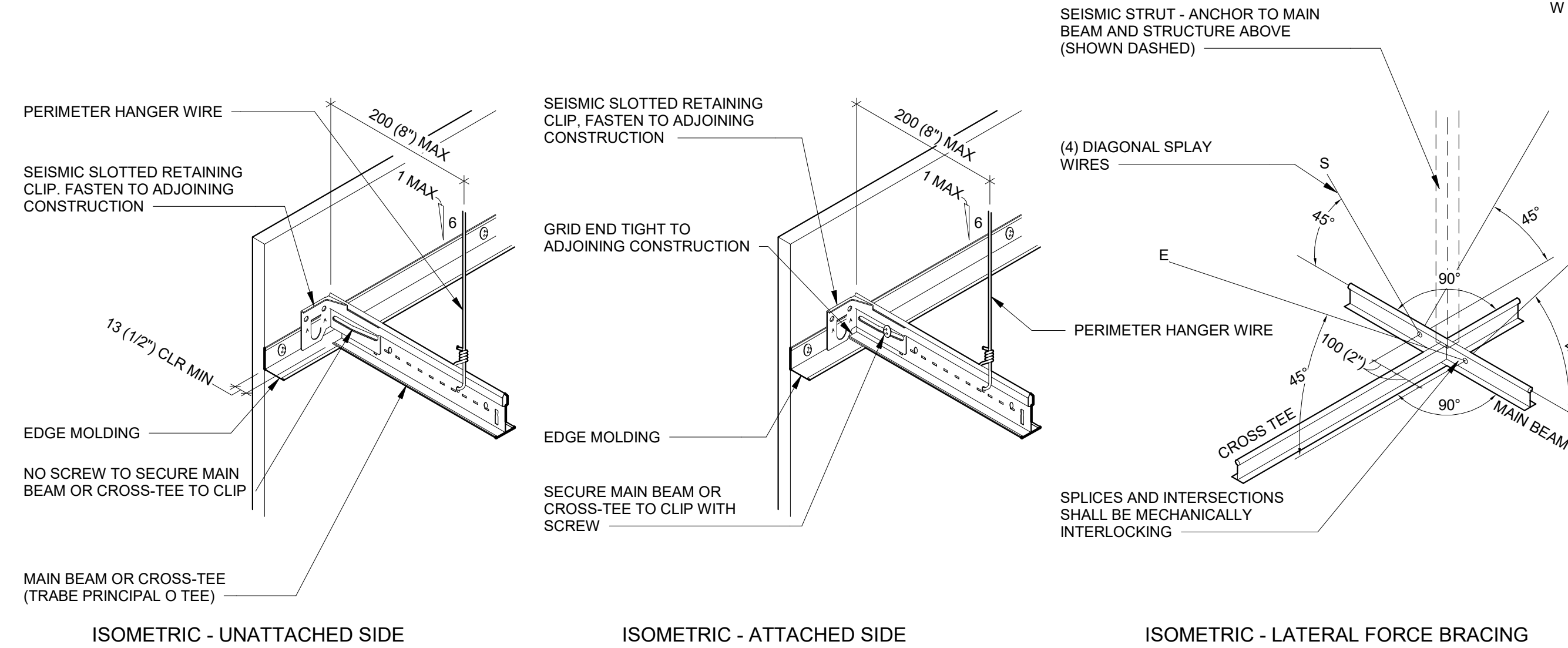
MISCELLANEOUS ATTACHMENT REQUIREMENTS:

- AIR TERMINALS LESS THAN OR EQUAL TO 20 LBS IS TO BE POSITIVELY ATTACHED TO GRID. AIR TERMINALS BETWEEN 21 LBS AND 56 LBS ARE TO BE POSITIVELY ATTACHED TO GRID AND WITH TWO WIRES TO STRUCTURE. GREATER THAN 57 LBS REQUIRES DIRECT SUPPORT TO STRUCTURE.
- SPRINKLER HEADS AND OTHER PENETRATIONS REQUIRE A MINIMUM 3/8" CLEARANCE ON ALL SIDES.
- CABLE TRAY AND ELECTRICAL CONDUIT IS NOT REQUIRED TO BE INDEPENDENTLY SUPPORTED OR BRACED.

- 12 GA. VERTICAL HANGER WIRE @ 48" O.C. EACH WAY.



PLAN - CEILING SUSPENSION DIAGRAM AND SEISMIC CRITERIA



ISOMETRIC - UNATTACHED SIDE

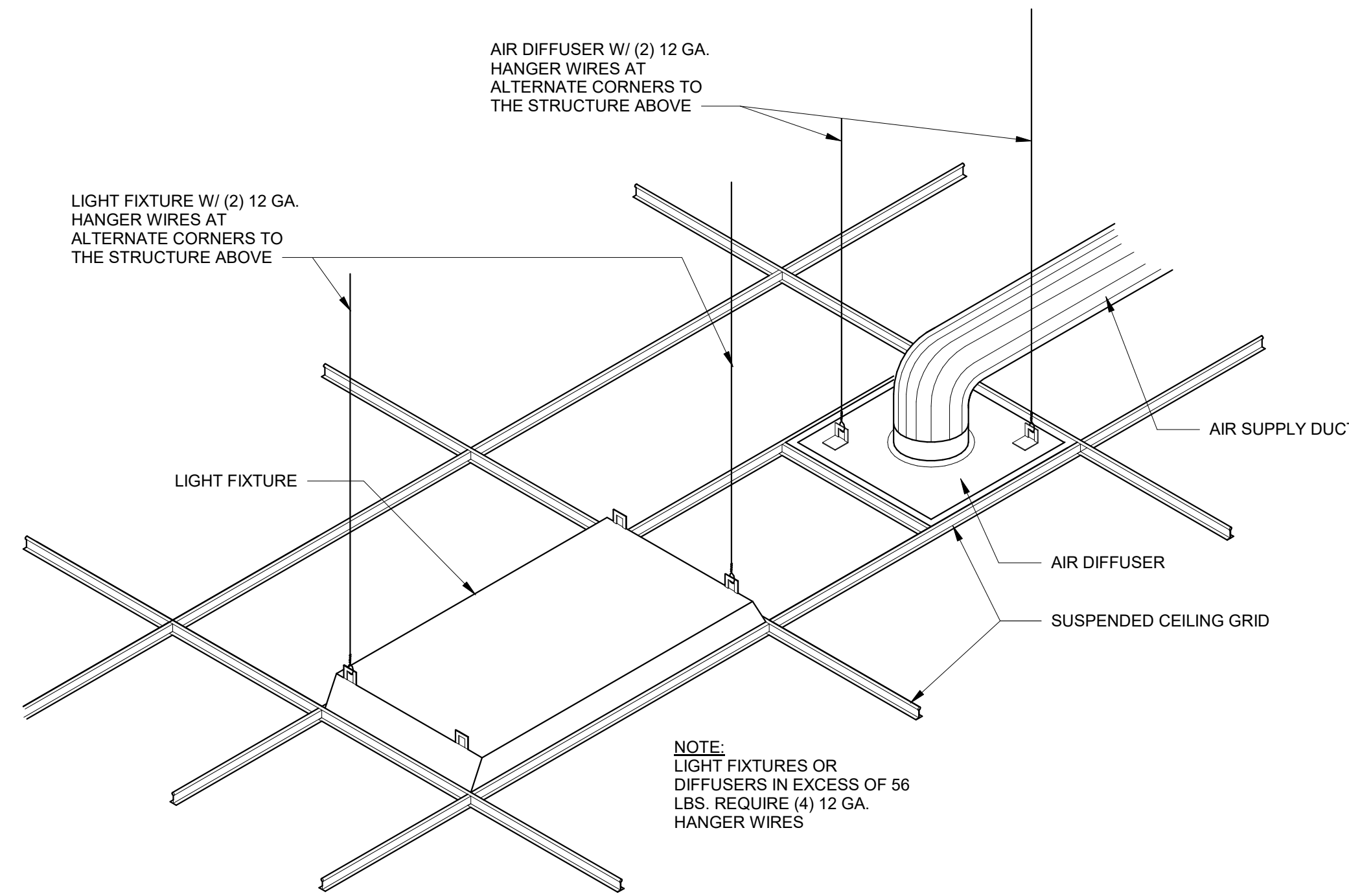
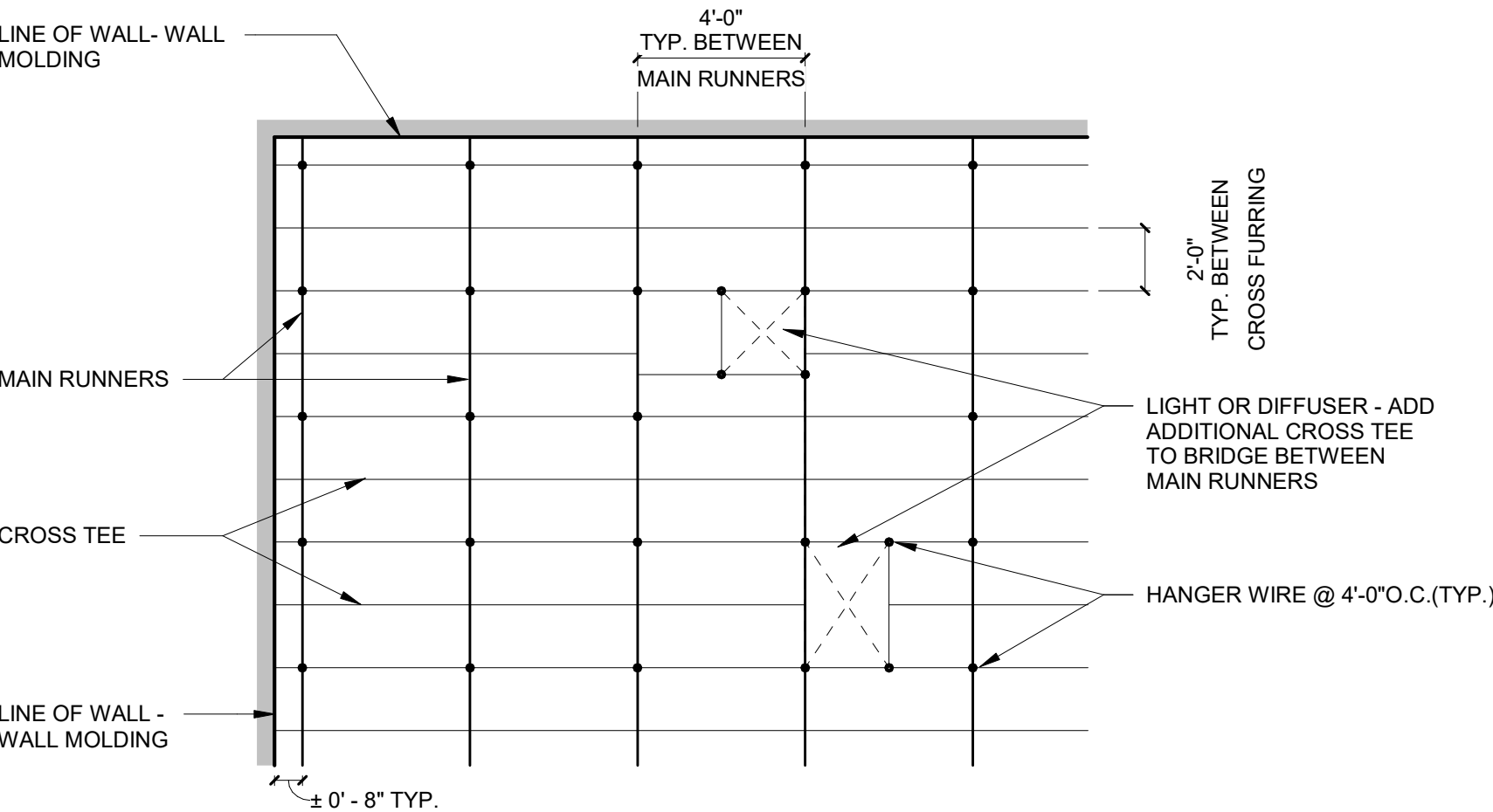
ISOMETRIC - ATTACHED SIDE

ISOMETRIC - LATERAL FORCE BRACING

SEISMIC CEILING REQUIREMENTS (GYP BD)

BASIC CONNECTIONS, PERIMETER AND LATERAL SPLAY BRACING REQUIREMENTS:

- MINIMUM INTERSECTION STRENGTH LIMITS AT MAIN TEE AND CROSS TEE IS 60 LBS.
- REQUIREMENT TO HAVE VERTICAL HANGER WIRE (12-GAUGE) @ 4'-0".
- NO MAIN TEE CLASSIFICATION REQUIRED.
- ALL VERTICAL HANGER WIRES TO BE 1 IN 6 MAX PLUMB OF VERTICAL.
- PERIMETER VERTICAL HANGER WIRES ARE NOT REQUIRED TO BE LESS THAN 8" FROM THE WALL.
- NO GRID END / WALL CLEARANCE REQUIRED.
- NO MINIMUM PERIMETER CLOSURE (MOLDING) WIDTH.
- NO REQUIREMENT TO HAVE PERIMETER TEE ENDS TIED TOGETHER.
- HORIZONTAL RESTRAINT (SPLAY WIRES OR RIGID BRACING) WITHIN 2" OF INTERSECTION AND SPLAYED 90 DEGREES APART OF 45 DEGREES ANGLES IS NOT REQUIRED.
- COMPRESSION POSTS (STRUTS) 12" OC IN BOTH DIRECTIONS, STARTING 6'-0" FROM WALLS ARE NOT REQUIRED.
- SEISMIC SEPARATION JOINTS ARE NOT REQUIRED.
- DRYWALL CONTROL JOINTS REQUIRED WHEN APPLICABLE OR AS NOTED ON DRAWINGS:
 1. INTERIOR CEILINGS WITH PERIMETER RELIEF: MAXIMUM 50'-0" SINGLE DIRECTION AND MAXIMUM 2,500 SFT.
 2. INTERIOR CEILINGS WITHOUT PERIMETER RELIEF: MAXIMUM 30'-0" SINGLE DIRECTION AND MAXIMUM 900 SFT.
 3. EXTERIOR CEILINGS: MAXIMUM 30'-0" SINGLE DIRECTION AND MAXIMUM 900 SFT.



SUSPENDED CEILING SEISMIC ISOMETRIC DETAILS

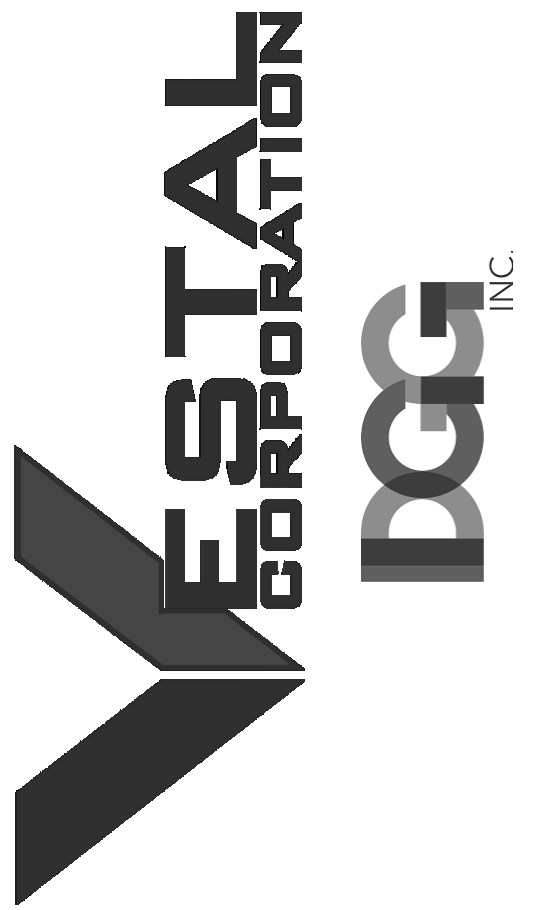
2 1 : 20

SUSPENDED CEILING SEISMIC GENERAL NOTES

- CEILING SYSTEMS MAY NOT BE USED TO SUPPORT WALLS OR PARTITIONS.
- 12 GA. (MIN.) HANGER WIRES MAY BE USED FOR UP TO AND INCLUDING 48" x 48" GRID SPACING AND SHALL BE ATTACHED TO MAIN RUNNER; NOT MORE THAN 6:1 OUT OF PLUMB UNLESS COUNTER SLOPING WIRES ARE PROVIDED.
- PROVIDE 12 GA. (MIN.) HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN 8" OF THE SUPPORT OR WITHIN (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LEAST, FOR THE PERIMETER OF THE CEILING AREA. END CONNECTIONS FOR RUNNERS WHICH ARE DESIGNED AND DETAILED TO RESIST THE APPLIED VERTICAL AND HORIZONTAL FORCES MAY BE USED IN LIEU OF THE 12 GA. HANGER WIRES.
- PROVIDE TRAPEZE AND OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO TYPICAL HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS AND BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS AND DISCONTINUOUS AREAS. HANGER WIRES THAT ARE MORE THAN 1" OUT OF PLUMB SHALL HAVE COUNTER-SLOPING WIRES.
- ATTACH CEILING GRID MEMBERS TO NO MORE THAN (2) ADJACENT WALLS. CEILING GRID MEMBERS SHALL BE AT LEAST 1/2" FREE OF OTHER WALLS. WHERE WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHALL BE FREE WITH MINIMUM OF 1/2" SPACE PROVIDED BETWEEN RUNNERS AND WALL.
- AT THE PERIMETER OF THE CEILING OR WHERE MAIN AND CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AND THE FREE END TO PREVENT LATERAL SPREADING. PROVIDE A METAL STRUT OR 16 GA. WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNER. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNER IS 12" OR LESS, INTERLOCK IS NOT REQUIRED.
 - EDGE MOLDING 7/8" WIDE (MINIMUM), UNLESS OTHERWISE NOTED.
 - PROVIDE PERIMETER HANGER WIRES AT ENDS OF MAIN BEAMS AND CROSS-TEES AT 8" MAXIMUM) FROM EACH WALL OR CHANGE IN PLANE.
 - PROVIDE SLOTTED RETAINING CLIP AT ENDS OF MAIN BEAMS AND CROSS-TEES. ANCHOR CLIP TO ADJOINING CONSTRUCTION ON EACH SIDE; ANCHOR CLIP TO BEAMS AND TEES ON 2 SIDES (ATTACHED SIDES).
- PROVIDE BRACING ASSEMBLIES CONSISTING OF A COMPRESSION STRUT AND (4) 12 GA. SPLAYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER AT THE FOLLOWING SPACING:
 - PLACE BRACING ASSEMBLIES AT A SPACING NOT MORE THAN 12" BY 12" ON CENTER.
 - PLACE BRACING ASSEMBLIES AT LOCATIONS NOT MORE THAN (1/2) THE SPACING GIVEN ABOVE, FROM EACH PERIMETER WALL AND AT THE EDGE OF VERTICAL CEILING OFFSETS. THE SLOPE OF THESE WIRES SHALL NOT EXCEED 45 DEGREES FROM THE PLANE OF THE CEILING AND SHALL BE TAUT. SPLICES IN BRACING WIRES ARE NOT TO BE PERMITTED.
 - SUSPENDED ACOUSTICAL CEILING SYSTEMS WITH A CEILING AREA OF 144 SQUARE FEET OR LESS, AND FIRE RATED SUSPENDED ACOUSTICAL CEILING SYSTEMS WITH A CEILING AREA OF 96 SQUARE FEET OR LESS, SURROUNDED BY WALLS WHICH CONNECT DIRECTLY TO THE STRUCTURE ABOVE, DO NOT REQUIRE BRACING ASSEMBLIES WHEN ATTACHED TO THE ADJACENT WALLS.
- PROVIDE LATERAL FORCE SPLAY WIRE BRACING CLUSTERS OF 4 WIRES ATTACHED TO MAIN BEAM WITHIN 2" OF CROSS-TEE INTERSECTION. WIRES ARRAYED AT 90-DEGREES FROM EACH OTHER AND AT ANGLE NOT GREATER THAN 45-DEGREES FROM PLANE OF CEILING. PROVIDE SEISMIC STRUT ATTACHED TO MAIN BEAMS AND STRUCTURE ABOVE AT EACH LATERAL FORCE BRACING LOCATION. RIGID BRACING AND SEISMIC STRUT MAY BE USED IN LIEU OF SPLAY WIRES AND SEISMIC STRUT. CONTINUOUS CEILING AREA NOT TO EXCEED 2,500 SQUARE FEET. LATERAL FORCE BRACING IS NOT REQUIRED AT CEILING AREAS LESS THAN 1,000 SQUARE FEET.
- FASTEN HANGER WIRES WITH NO LESS THAN (3) TIGHT TURNS. FASTEN BRACING WIRES WITH (4) TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF 1 1/2". HANGER AND BRACING WIRE ANCHORS TO THE STRUCTURE. INSTALL IN SUCH A MANNER THAT THE DIRECTION OF THE WIRE ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE FORCES ACTING ON THE WIRE.

NOTE: WIRE TURNS MADE BY MACHINE WHERE BOTH STRANDS HAVE BEEN DEFORMED OR BENT IN WRAPPING CAN WAIVE THE 1 1/2" REQUIREMENT, BUT THE NUMBER OF TURNS SHALL BE MAINTAINED AND BE AS TIGHT AS POSSIBLE.
- SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6" FROM ALL UNBRACED DUCTS, PIPES, CONDUITS, ETC. LIGHTWEIGHT ITEMS, SUCH AS SINGLE ELECTRICAL CONDUIT NOT EXCEEDING 3/4" NOMINAL DIAMETER, MAY BE ATTACHED TO HANGER WIRES USING CONNECTORS ACCEPTABLE TO THE ARCHITECT.
- CEILING PENETRATIONS (COLUMNS, WALLS, SPRINKLERS, ETC.) AND INDEPENDENTLY SUPPORTED FIXTURES OR SERVICES ARE TO BE TREATED AS PERIMETER CLOSURES AND SHALL MAINTAIN CLEARANCE AT END OF GRID WITH SUITABLE ESCUTCHEONS OR CLOSURES. EXCEPT WHEN RIGID BRACING AND SEISMIC STRUTS ARE USED, PROVIDE SPRINKLER HEADS AND OTHER PENETRATIONS WITH 2" OVER-SIZE ESCUTCHEON, SLEEVE, OR ADAPTER THROUGH THE CEILING PANEL TO ALLOW 1" FREE MOVEMENT IN ALL HORIZONTAL DIRECTIONS.
- ATTACH ALL LIGHT FIXTURES, CEILING MOUNTED AIR TERMINALS AND SERVICES TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURES. SCREWS OR APPROVED FASTENERS ARE REQUIRED.
- SUPPORT FLUSH LIGHT FIXTURES, RECESSED LIGHT FIXTURES, AIR TERMINALS AND SERVICES WEIGHING LESS THAN 56 LBS. DIRECTLY ON RUNNERS OF A HEAVY DUTY GRID SYSTEM. PROVIDE A MINIMUM OF (2) 12 GA. SLACK SAFETY WIRES ATTACHED TO FIXTURE AT DIAGONAL CORNERS AND ANCHORED TO STRUCTURE ABOVE. ALL 48" x 48" LIGHT FIXTURES SHALL HAVE SLACK SAFETY WIRES AT EACH CORNER.
- ALL FLUSH LIGHT FIXTURES, RECESSED LIGHT FIXTURES, AIR TERMINALS AND SERVICES WEIGHING 56 LBS. OR MORE SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN (4) TAUT 12 GA. WIRES EACH ATTACHED TO THE FIXTURE AND TO THE STRUCTURE. THE (4) TAUT 12 GA. WIRES INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE MUST BE CAPABLE OF SUPPORTING (4) TIMES THE WEIGHT OF THE UNIT.
- WHERE CONFLICT IN CEILING DEVICES OCCURS, COORDINATE WITH THE ARCHITECT.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



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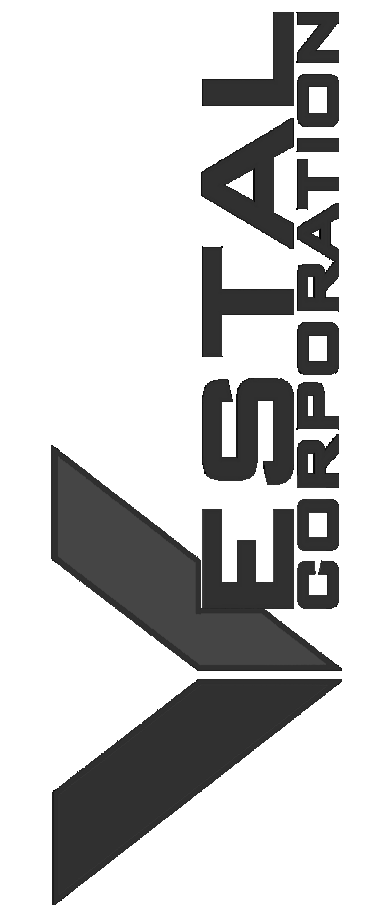
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CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
CEILING DETAILS

SHEET NUMBER:

A521

25 OF 85 SHEETS
2024.04.23



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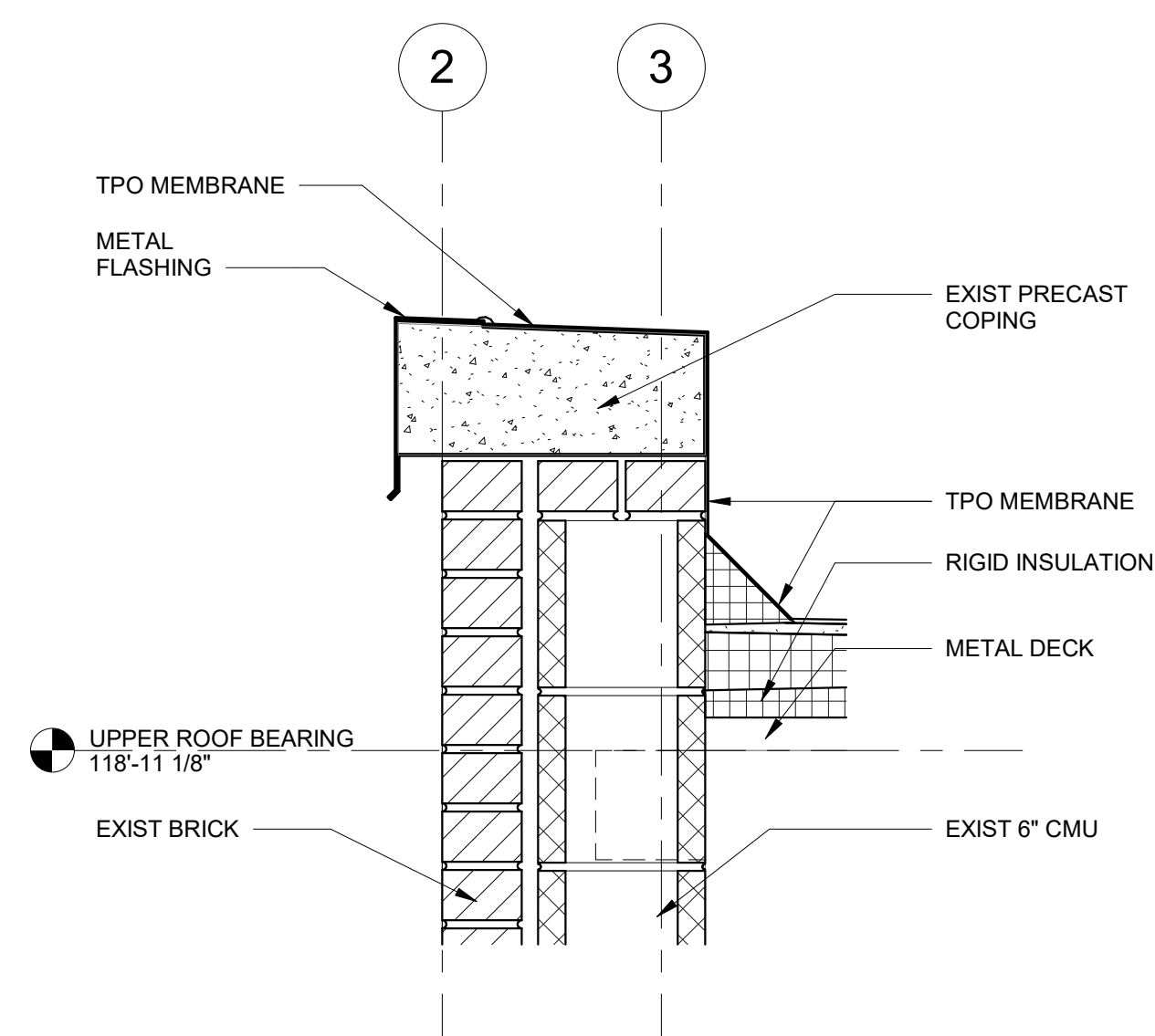
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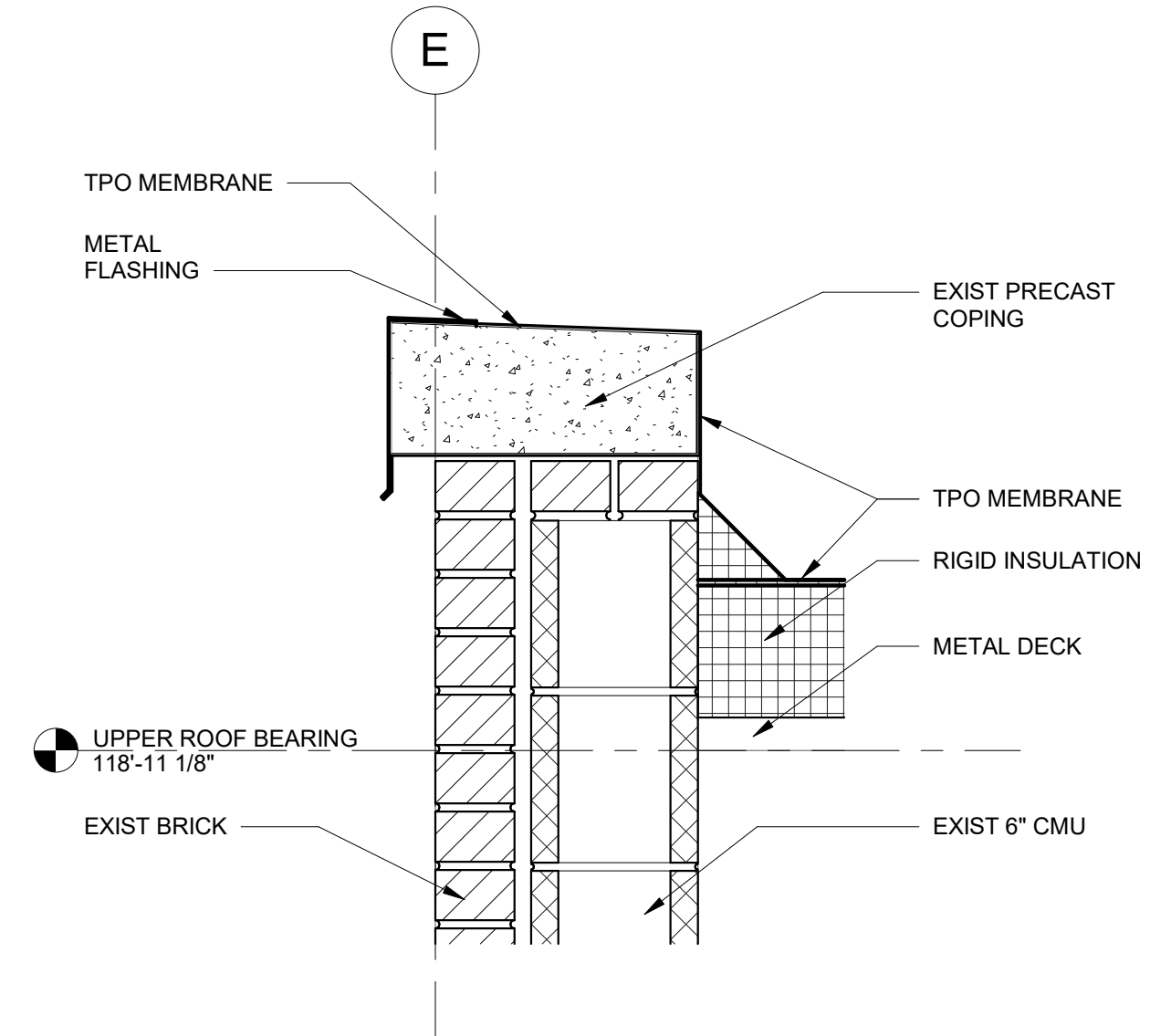
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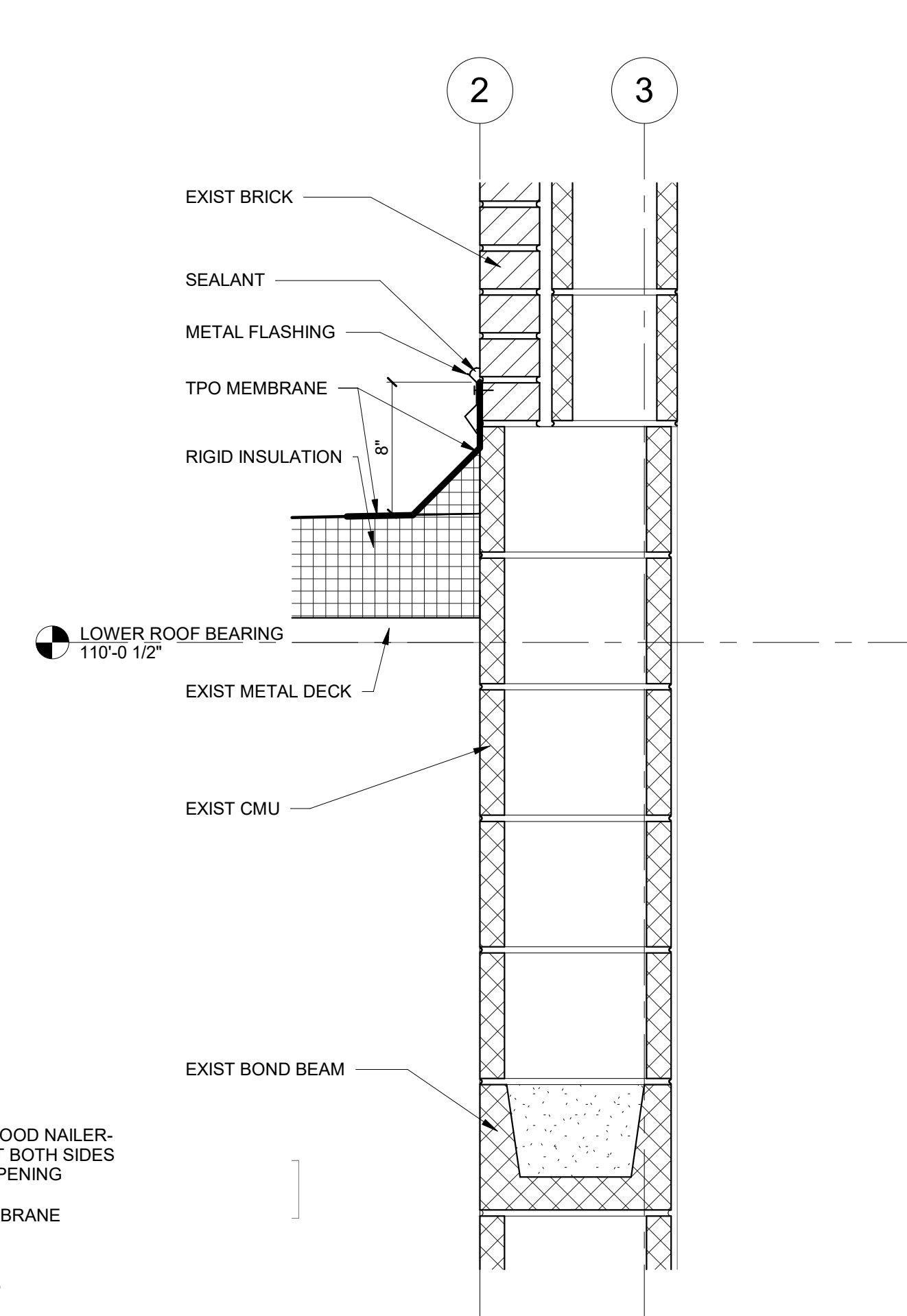
26 OF 85 SHEETS
2024.04.23



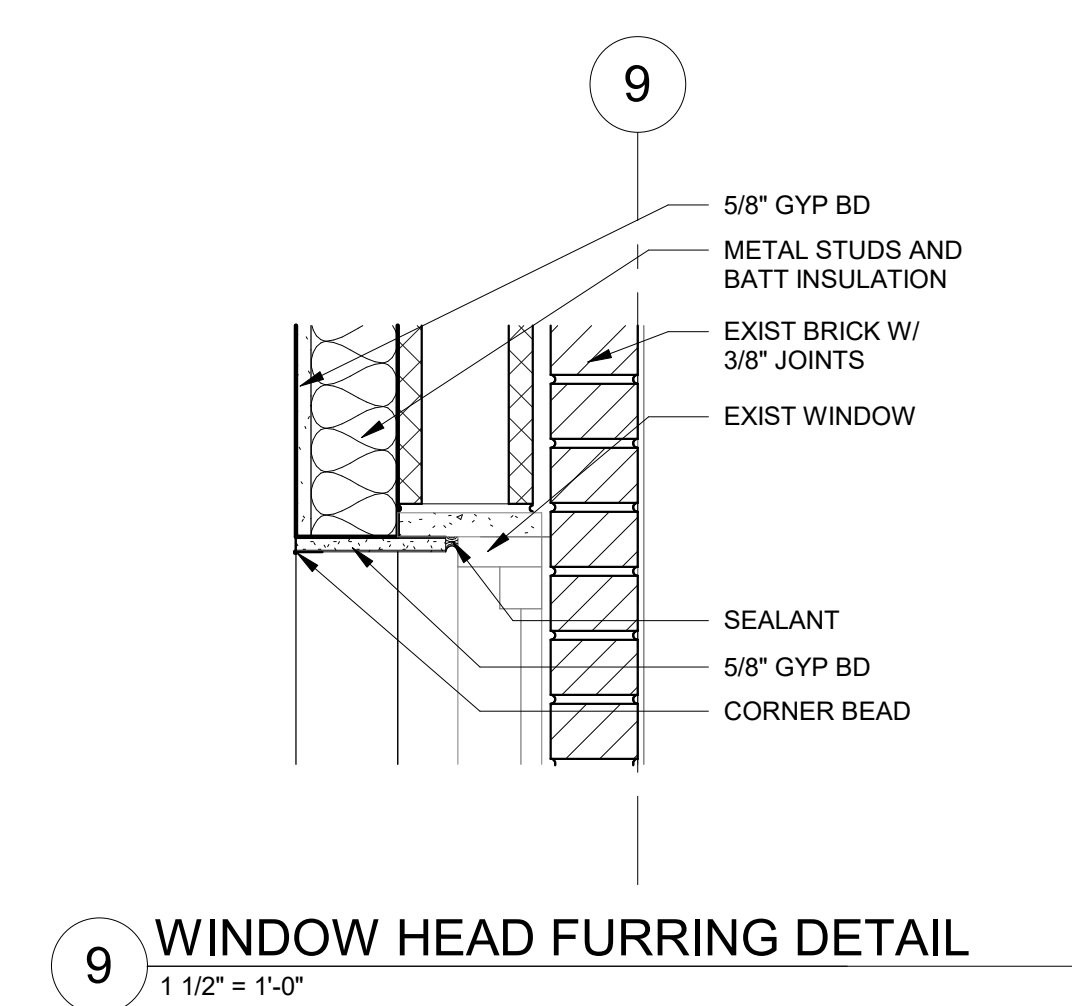
1 UPPER PARAPET DETAIL
1 1/2" = 1'-0"



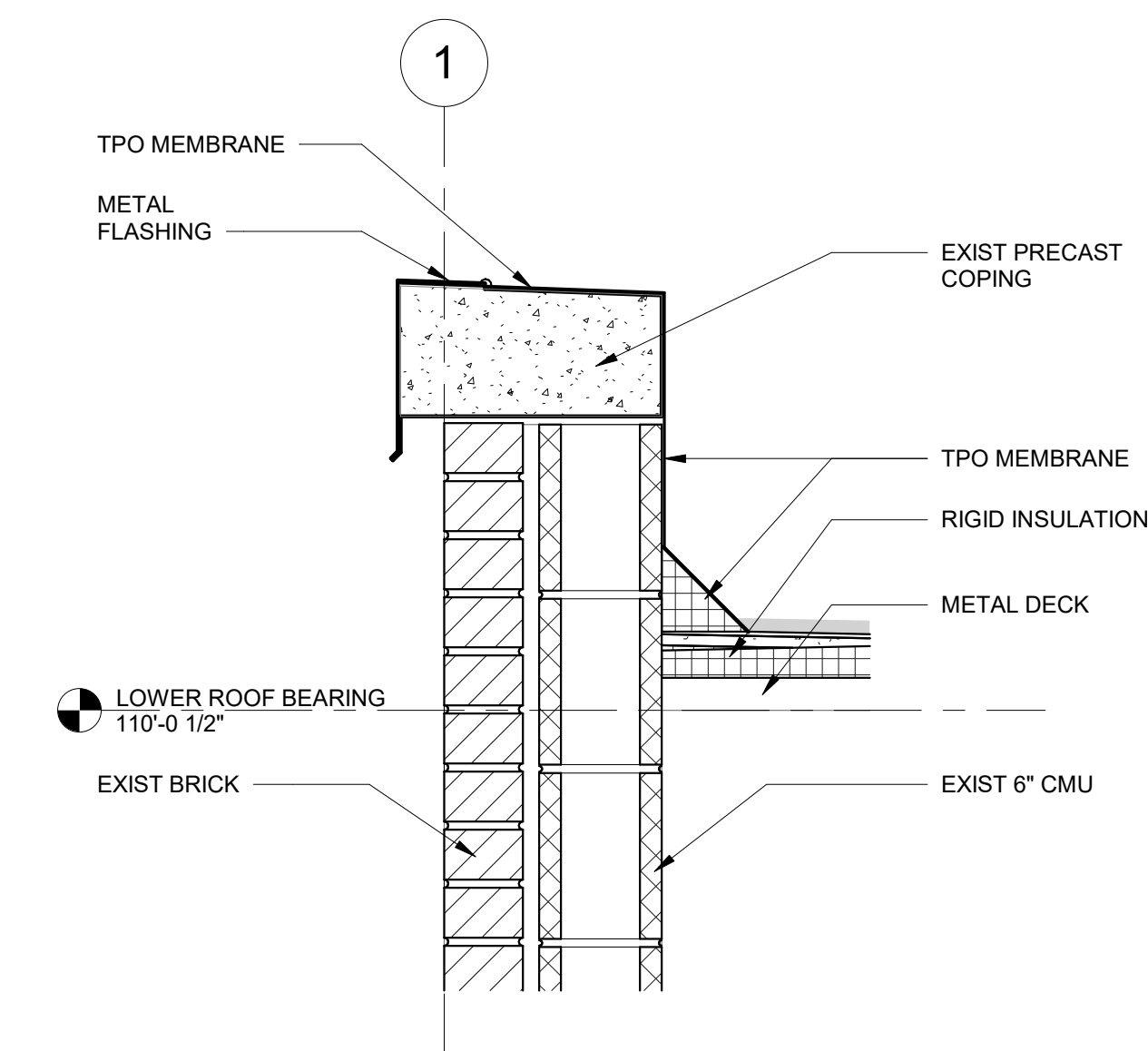
4 UPPER PARAPET DETAIL
1 1/2" = 1'-0"



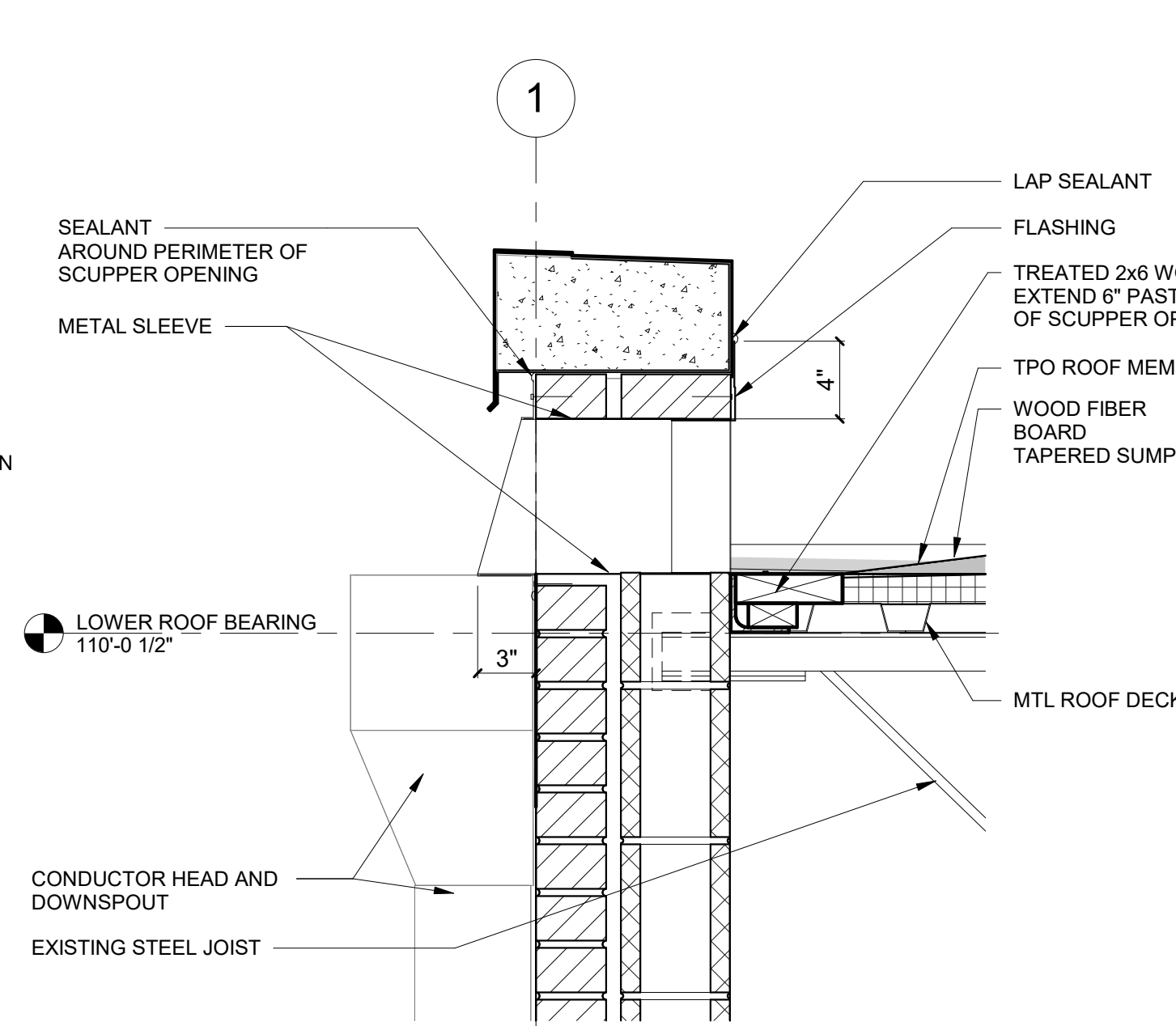
7 WALL TO LOWER ROOF DETAIL
1 1/2" = 1'-0"



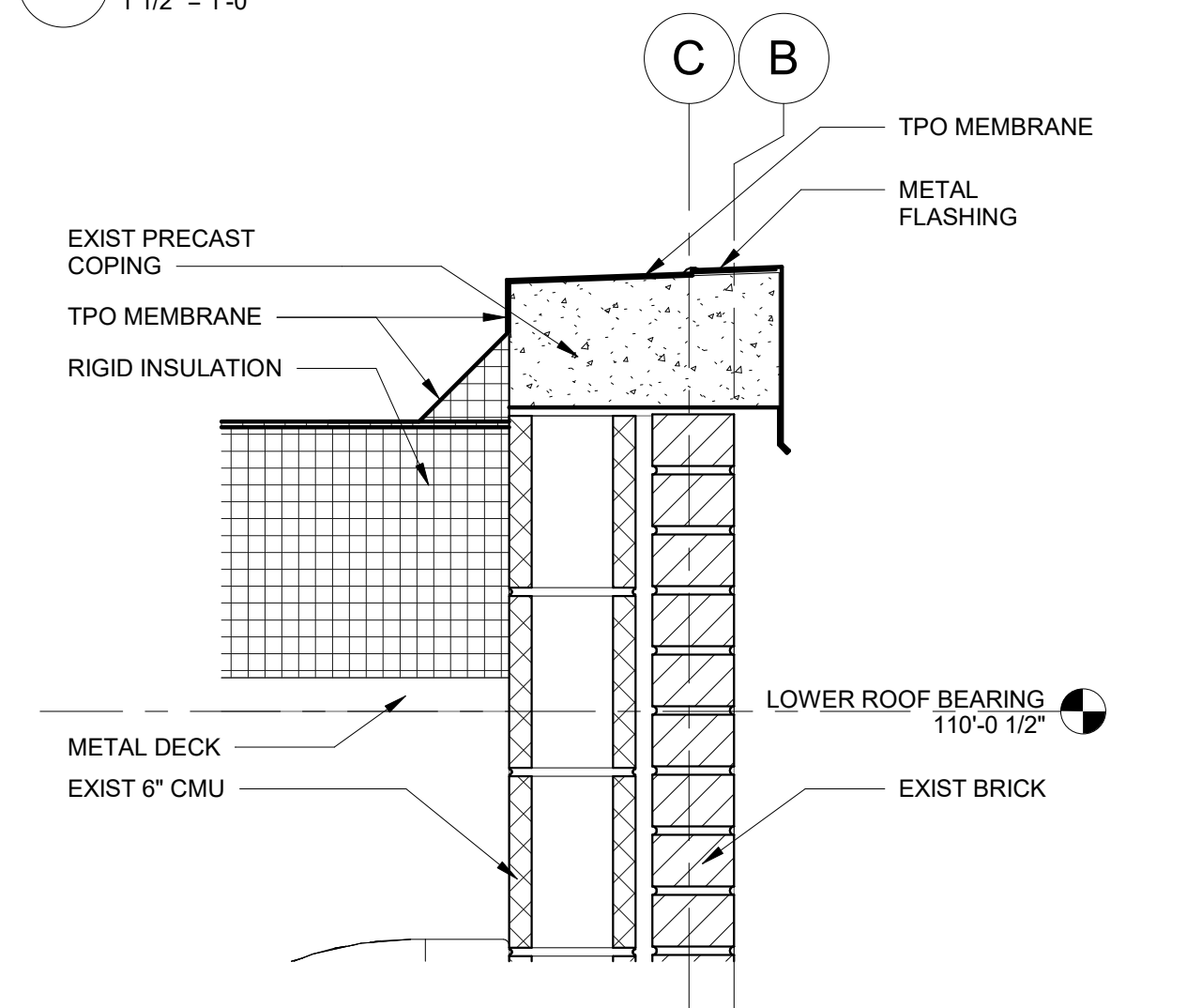
9 WINDOW HEAD FURRING DETAIL
1 1/2" = 1'-0"



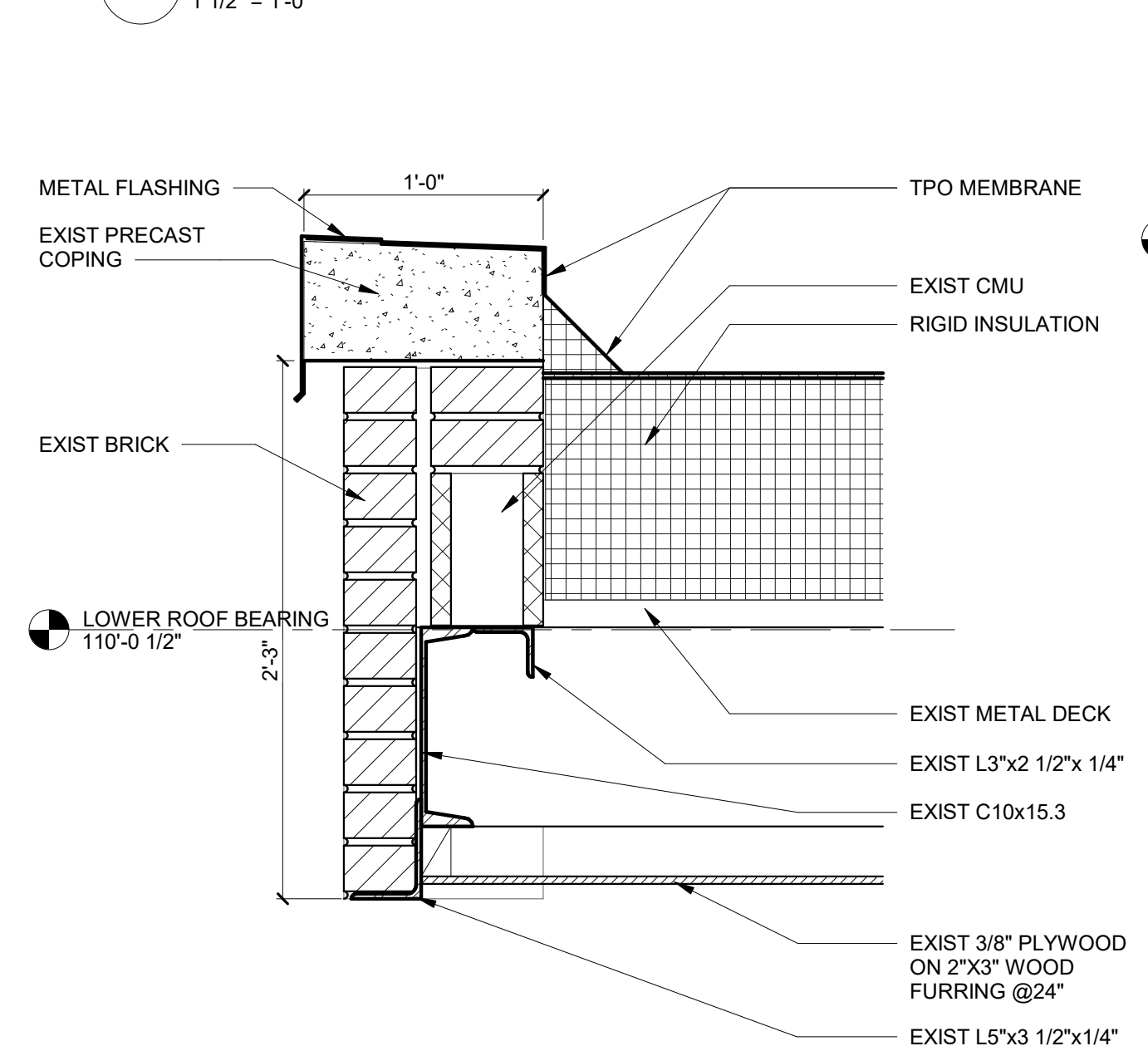
2 LOWER PARAPET DETAIL
1 1/2" = 1'-0"



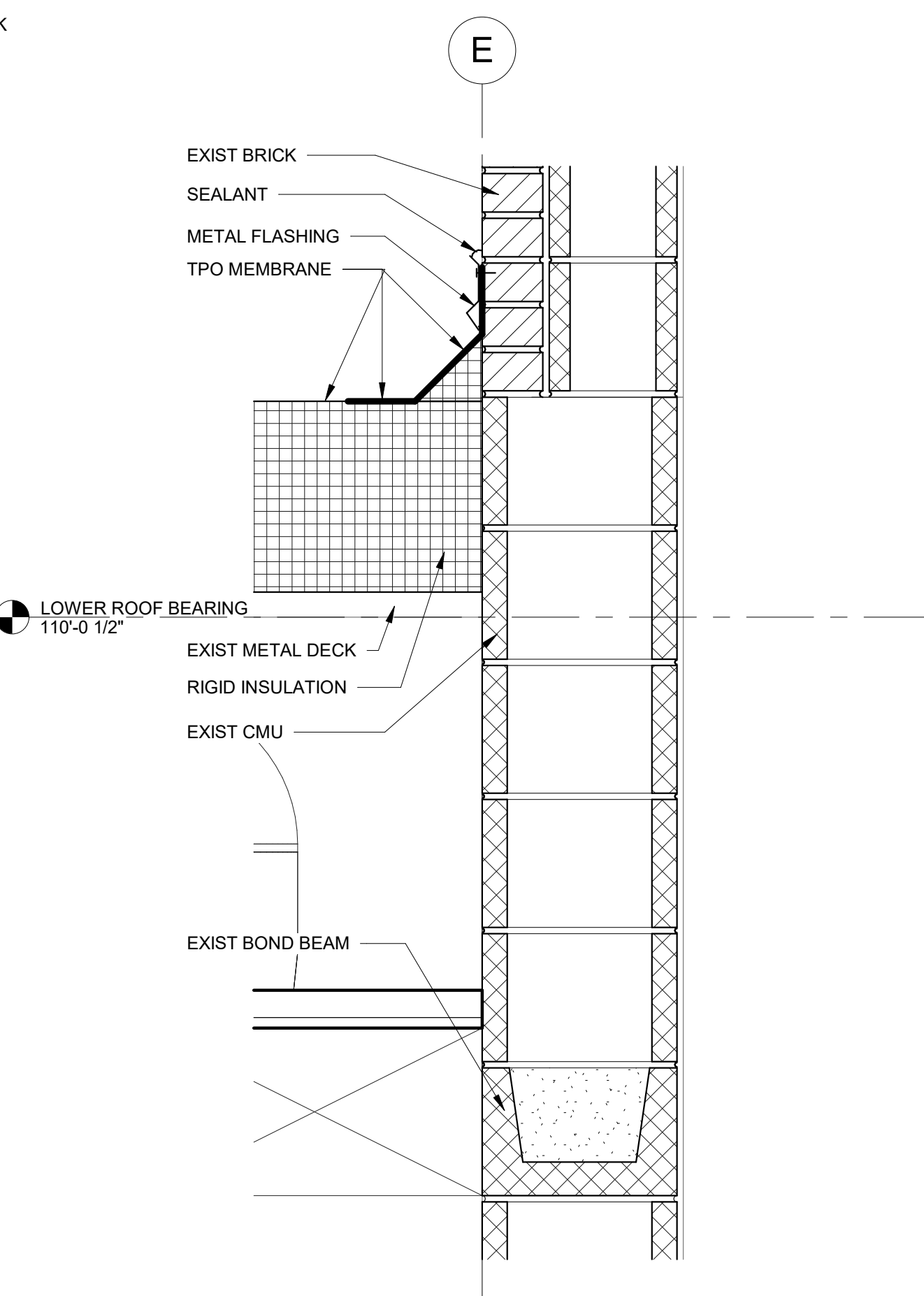
5 SCUPPER PARAPET DETAIL
1 1/2" = 1'-0"



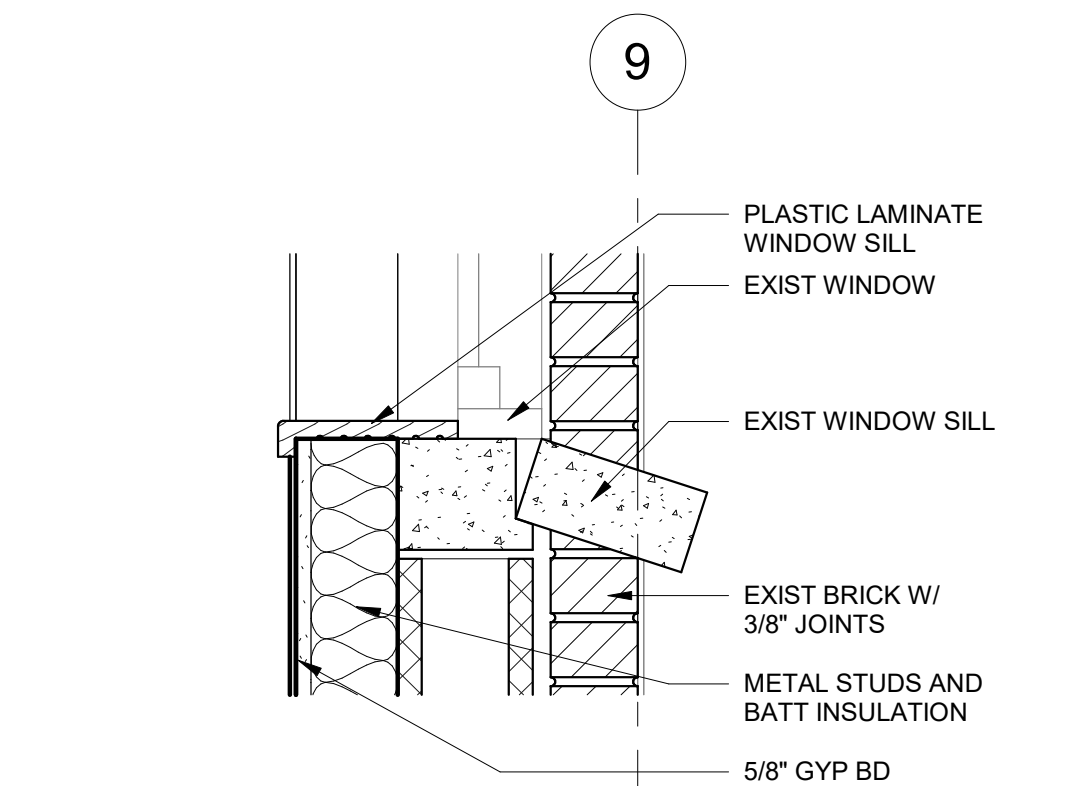
3 LOWER PARAPET DETAIL
1 1/2" = 1'-0"



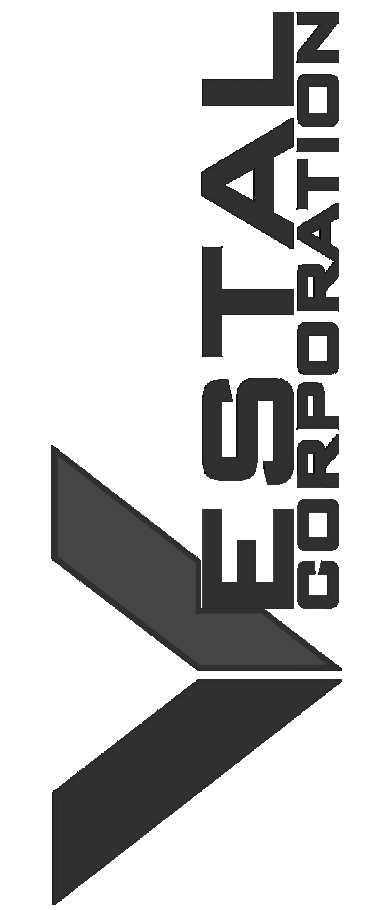
6 CANOPY PARAPET DETAIL
1 1/2" = 1'-0"



8 WALL TO LOWER ROOF DETAIL
1 1/2" = 1'-0"



10 WINDOW SILL FURRING DETAIL
1 1/2" = 1'-0"



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DESIGNED BY: JB

SHEET TITLE:

INTERIOR
ELEVATIONS -
RESTROOMS

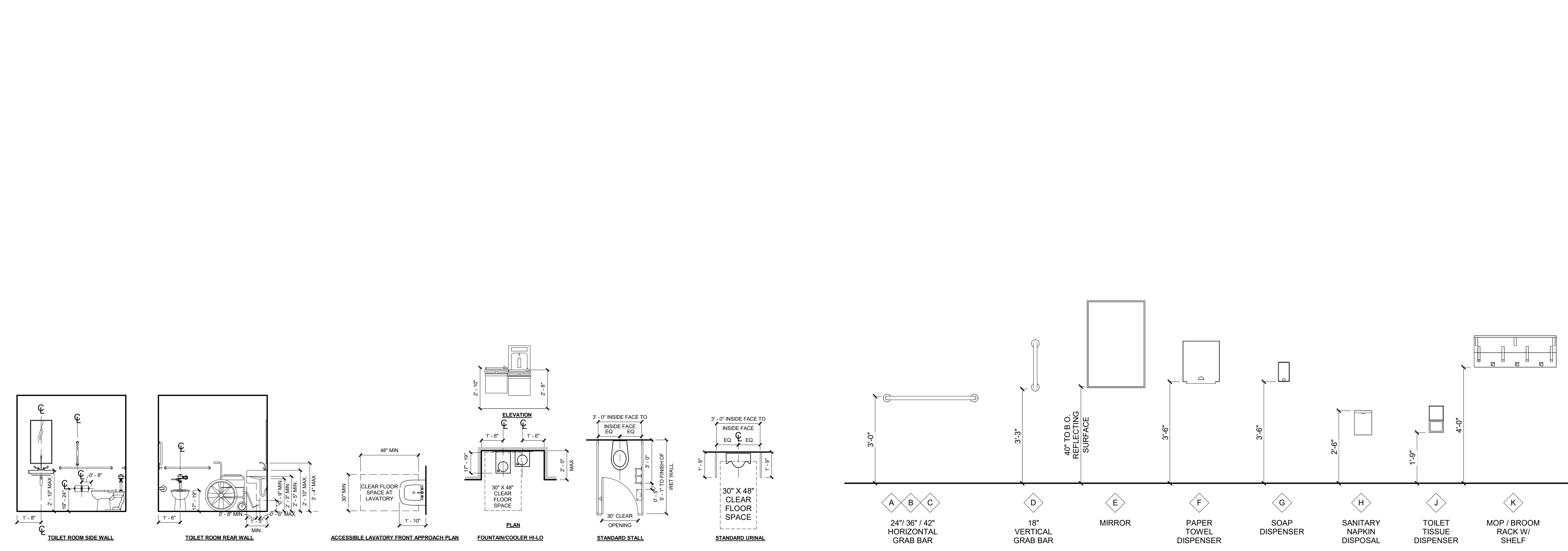
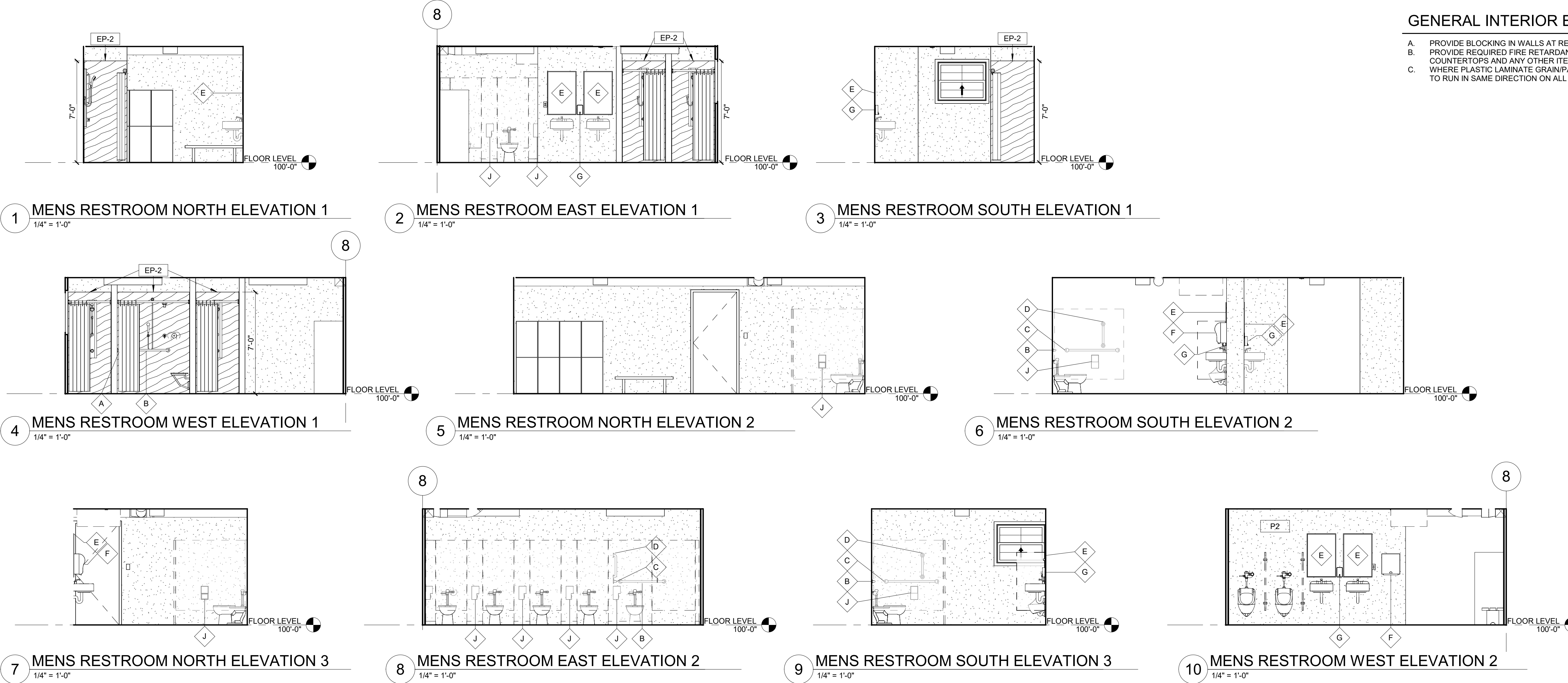
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A600

27 OF 85 SHEETS
2024.04.23

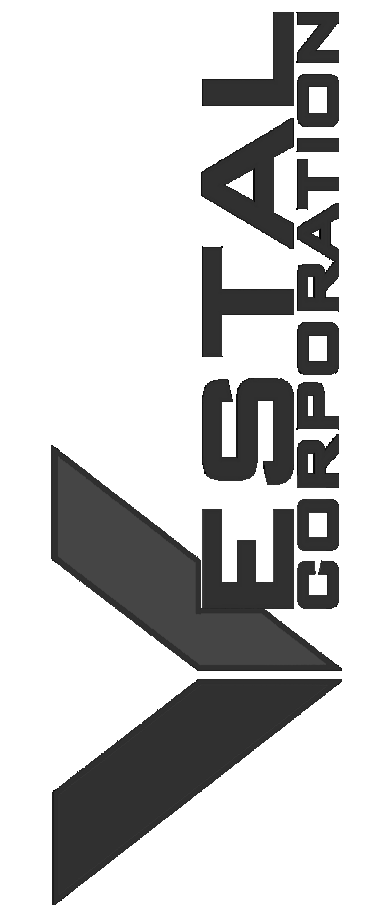
GENERAL INTERIOR ELEVATION NOTES:

- A. PROVIDE BLOCKING IN WALLS AT RESTROOM ACCESSORIES AND COUNTERTOPS.
- B. PROVIDE REQUIRED FIRE RETARDANT TREATED WOOD BLOCKING AT CASEWORK, COUNTERTOPS AND ANY OTHER ITEM ATTACHING OR ANCHORED TO THE WALL.
- C. WHERE PLASTIC LAMINATE GRAIN/PATTERN RETURN A CORNER, GRAIN/PATTERN TO RUN IN SAME DIRECTION ON ALL SIDES.



1 STANDARD TOILET ELEVATIONS
1/4" = 1'-0"

7 RESTROOM ACCESSORIES
1/2" = 1'-0"



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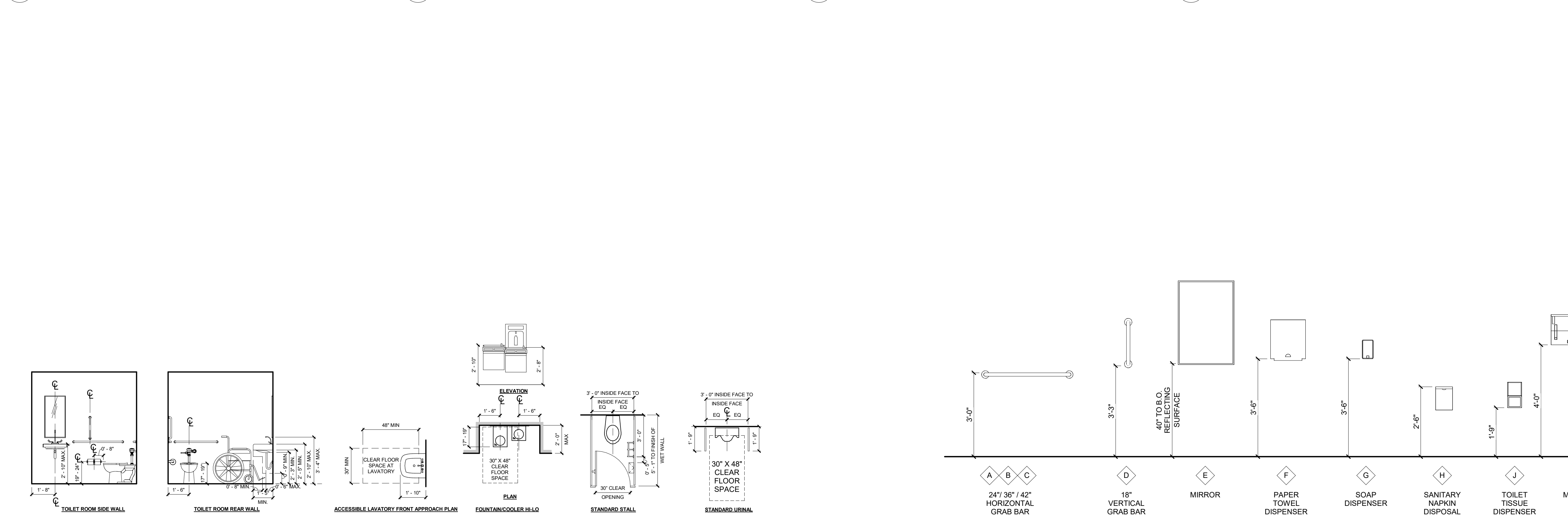
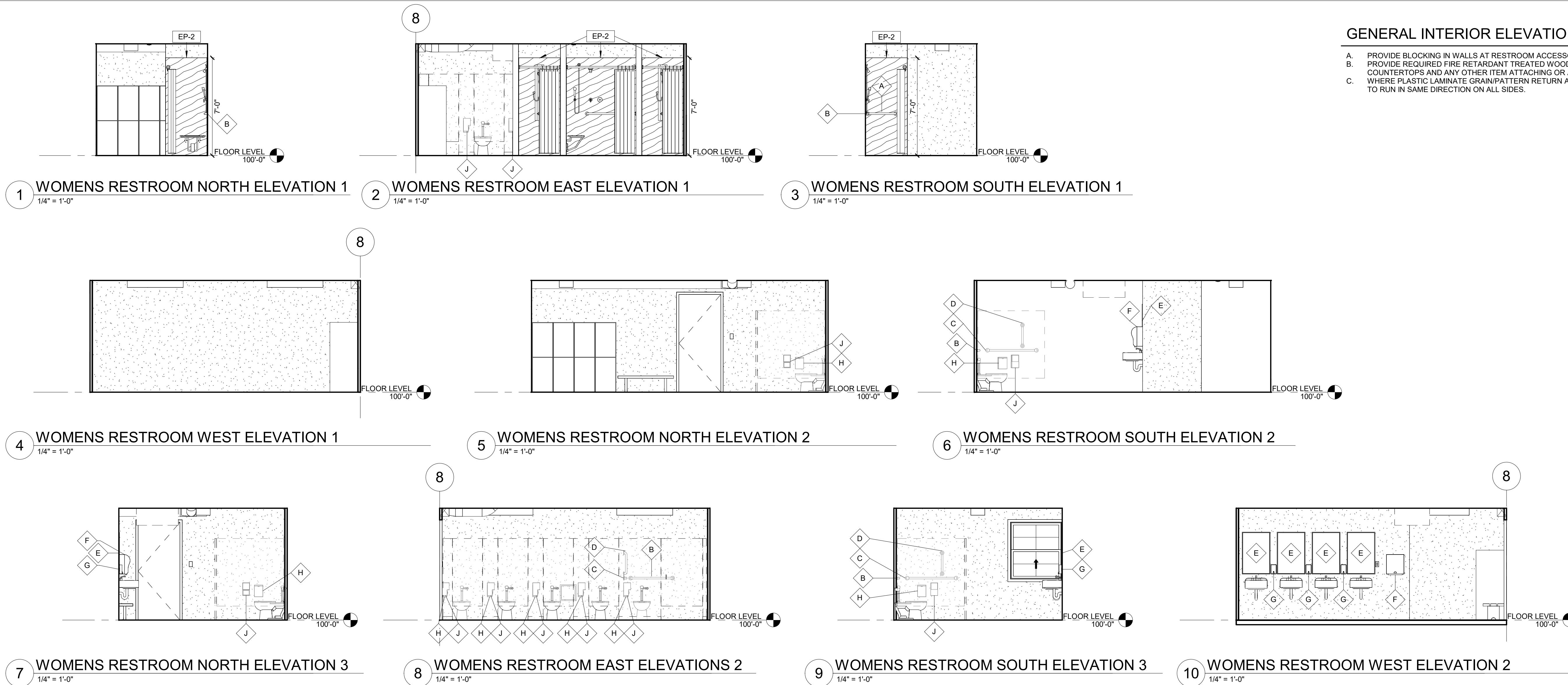
ST. CLAIR READINESS
CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

GENERAL INTERIOR ELEVATION NOTES:

- A. PROVIDE BLOCKING IN WALLS AT RESTROOM ACCESSORIES AND COUNTERTOPS.
- B. PROVIDE REQUIRED FIRE RETARDANT TREATED WOOD BLOCKING AT CASEWORK, COUNTERTOPS AND ANY OTHER ITEM ATTACHING OR ANCHORED TO THE WALL. WHERE PLASTIC LAMINATE GRAIN/PATTERN RETURN A CORNER, GRAIN/PATTERN TO RUN IN SAME DIRECTION ON ALL SIDES.
- C.



STANDARD TOILET ELEVATIONS
1/4" = 1'-0"

RESTROOM ACCESSORIES
1/2" = 1'-0"

REV.	DESCRIPTION	DATE
A	DD	02/16/2024
B	IFB	04/23/2024

ISSUE DATE: 2024.04.23

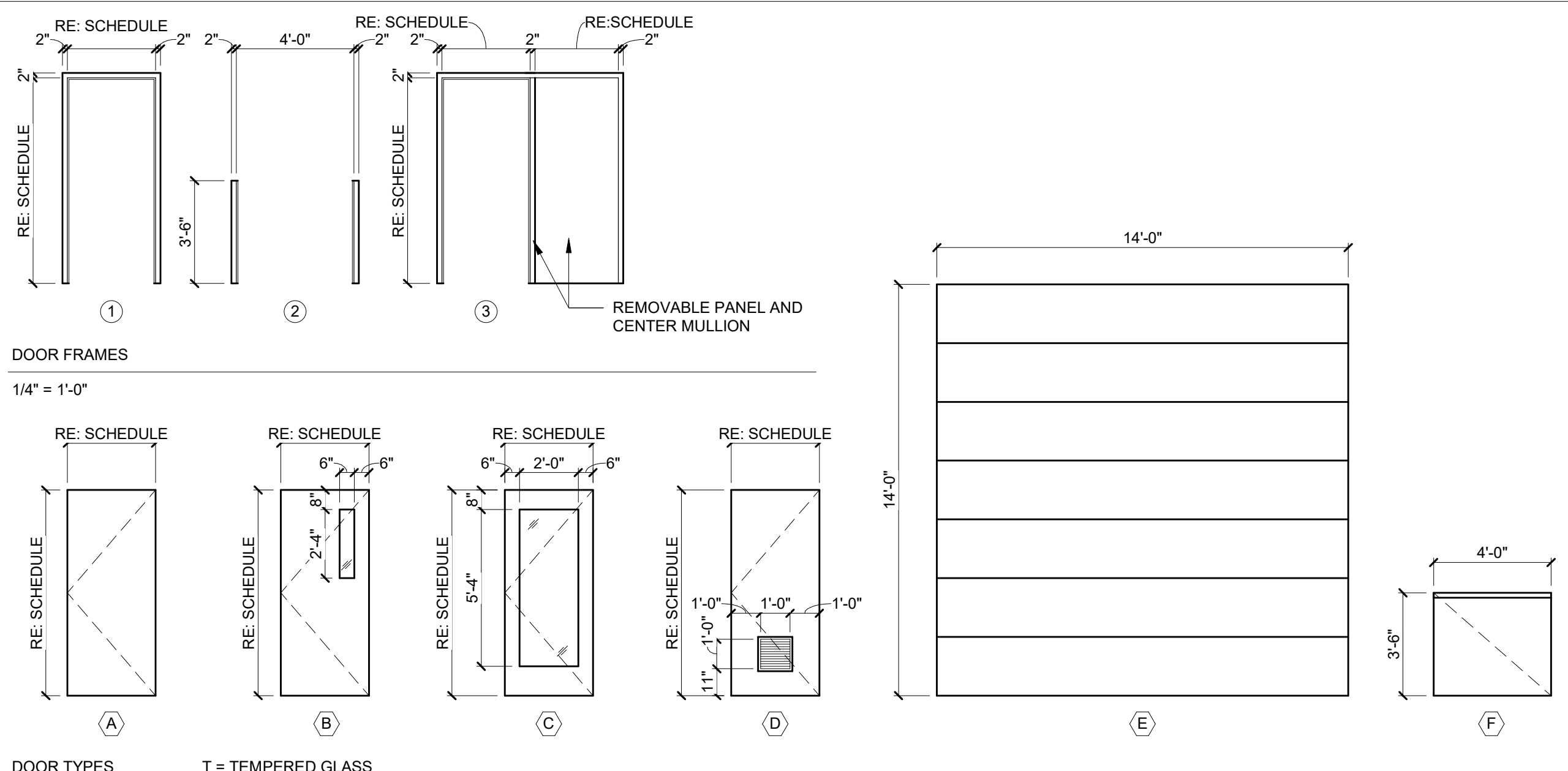
CAD DWG FILE:
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
INTERIOR
ELEVATIONS -
RESTROOMS

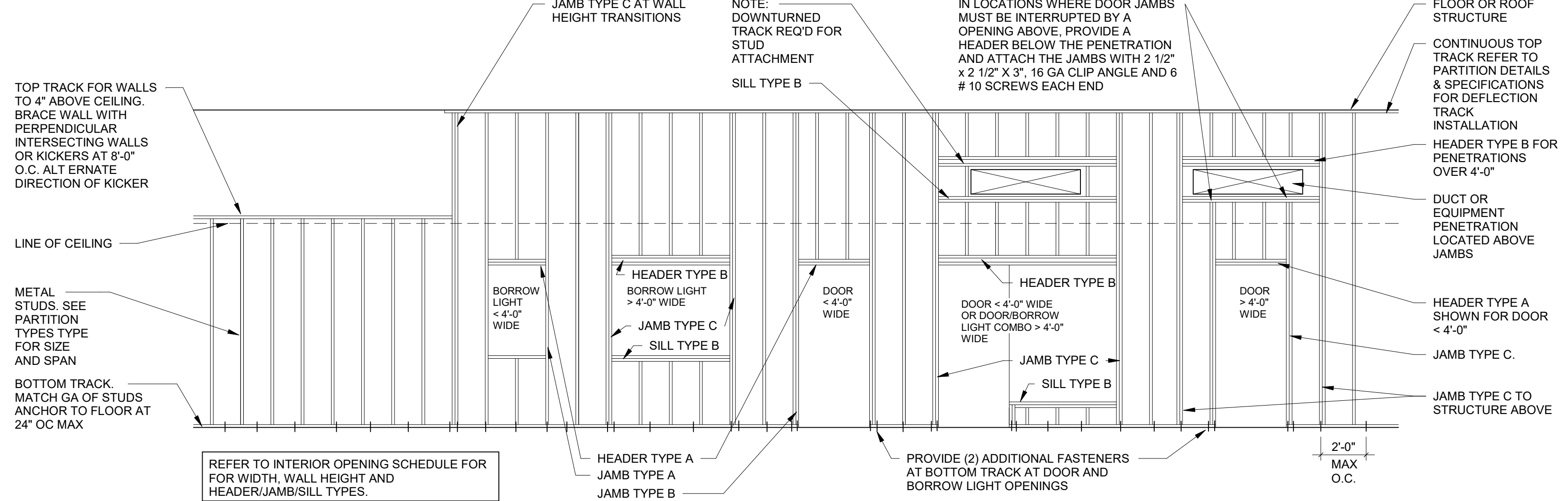
SHEET NUMBER:

A601

28 OF 85 SHEETS
2024.04.23



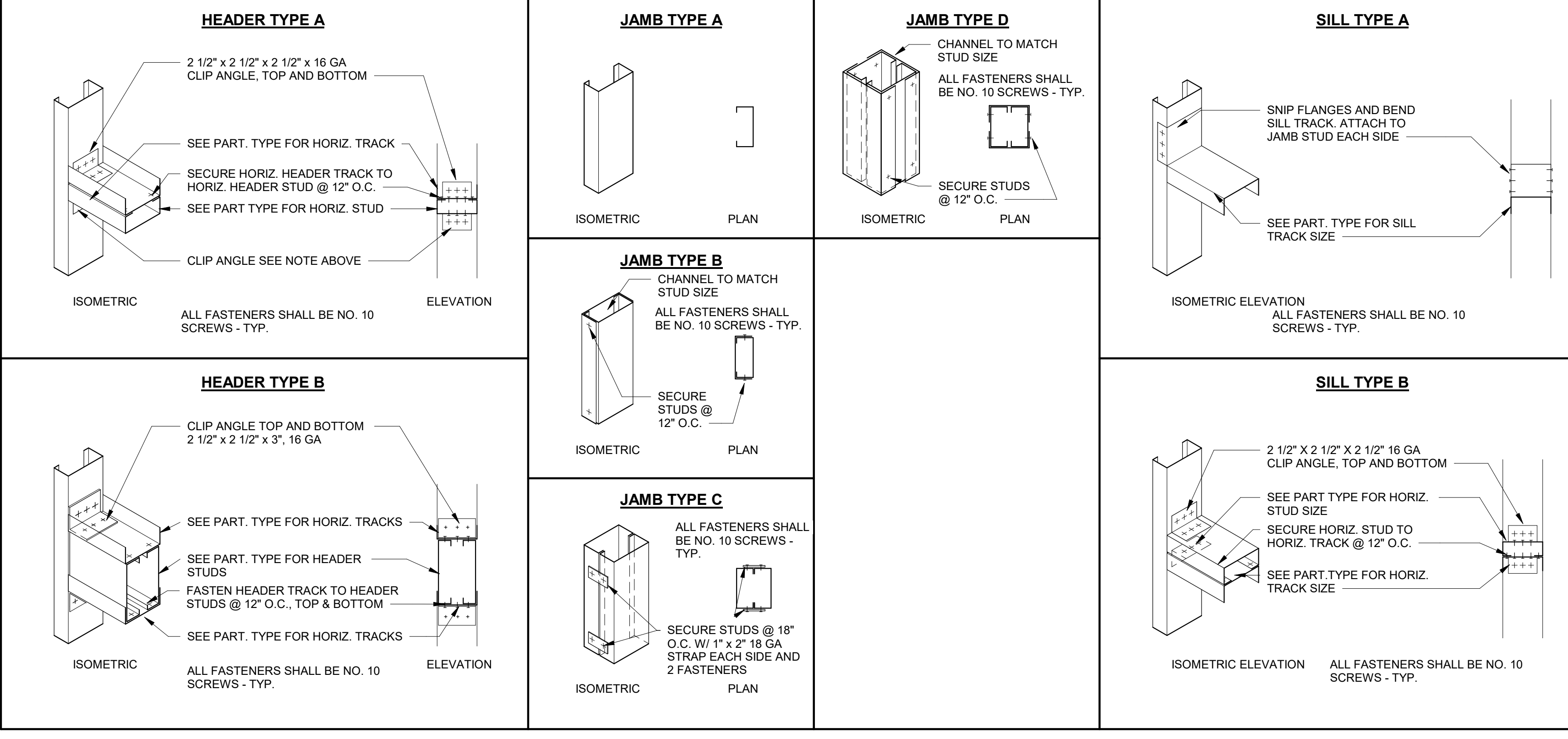
DOOR TYPES T = TEMPERED GLASS
1/4" = 1'-0"



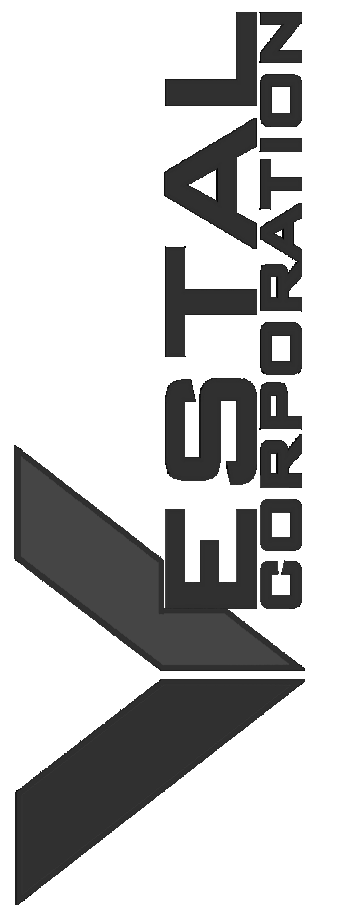
1 INTERIOR WALL TYP OPENINGS FRAMING
1/4" = 1'-0"

WALL HEIGHT "H" REF PART TYPE FOR STUD SIZE/GA	ROUGH OPENING WIDTH "W"	HEADER TYPE	JAMB TYPE	SILL TYPE	WALL HEIGHT "H" REF PART TYPE FOR STUD SIZE/GA	ROUGH OPENING WIDTH "W"	HEADER TYPE	JAMB TYPE	SILL TYPE
3 5/8" STUD - 1 LAYER 5/8" GYP BD EA SIDE					3 5/8" STUD - 2 LAYERS 5/8" GYP BD EA SIDE				
8'-0" - 12'-0"	0'-0" < W ≤ 4'-0"	A	A-OR-B	A	8'-0" - 12'-0"	0'-0" < W ≤ 4'-0"	A	A-OR-B	A
	4'-0" < W ≤ 8'-0"	B	B-OR-C	B		4'-0" < W ≤ 8'-0"	B	B-OR-C	B
	8'-0" < W ≤ 12'-0"	B	C	B		8'-0" < W ≤ 12'-0"	B	C	B
12'-0" < H ≤ 14'-0"	0'-0" < W ≤ 4'-0"	A	B	A	12'-0" < H ≤ 14'-0"	0'-0" < W ≤ 4'-0"	A	B	A
	4'-0" < W ≤ 8'-0"	B	B-OR-C	B		4'-0" < W ≤ 8'-0"	B	B-OR-C	B
	8'-0" < W ≤ 12'-0"	B	C	B		8'-0" < W ≤ 12'-0"	B	C	B
14'-0" < H ≤ 16'-0"	0'-0" < W ≤ 4'-0"	A	B	A	14'-0" < H ≤ 16'-0"	0'-0" < W ≤ 4'-0"	A	A-OR-B	A
	4'-0" < W ≤ 8'-0"	B	B-OR-C	B		4'-0" < W ≤ 8'-0"	B	B-OR-C	B
	8'-0" < W ≤ 12'-0"	B	D	B		8'-0" < W ≤ 12'-0"	B	D	B
6" STUD - 1 LAYER 5/8" GYP BD EA SIDE					6" STUD - 2 LAYERS 5/8" GYP BD EA SIDE				
8'-0" - 12'-0"	0'-0" < W ≤ 4'-0"	A	A-OR-B	A	8'-0" - 12'-0"	0'-0" < W ≤ 4'-0"	A	A-OR-B	A
	4'-0" < W ≤ 8'-0"	B	B-OR-C	B		4'-0" < W ≤ 8'-0"	B	B-OR-C	B
	8'-0" < W ≤ 12'-0"	B	C	B		8'-0" < W ≤ 12'-0"	B	C	B
12'-0" < H ≤ 14'-0"	0'-0" < W ≤ 4'-0"	A	B	A	12'-0" < H ≤ 14'-0"	0'-0" < W ≤ 4'-0"	A	B	A
	4'-0" < W ≤ 8'-0"	B	B-OR-C	B		4'-0" < W ≤ 8'-0"	B	B-OR-C	B
	8'-0" < W ≤ 12'-0"	B	C	B		8'-0" < W ≤ 12'-0"	B	C	B
14'-0" < H ≤ 16'-0"	0'-0" < W ≤ 4'-0"	A	B	A	14'-0" < H ≤ 16'-0"	0'-0" < W ≤ 4'-0"	A	B	A
	4'-0" < W ≤ 8'-0"	B	B-OR-C	B		4'-0" < W ≤ 8'-0"	B	B-OR-C	B
	8'-0" < W ≤ 12'-0"	B	D	B		8'-0" < W ≤ 12'-0"	B	D	B

INTERIOR WALL OPENING SCHEDULE - HEADER, JAMB AND SILL TYPES



DOOR #	PAIR	DOOR				FRAME		DETAILS			REMARKS				
		W	H	THK	ELEV	MATL	FINISH	GLAZING	ELEV	MATL		FINISH	HEAD	JAMB	HDW SET
100A	•	2'-8"	7'-0"	1 3/4"	A	HM	PT-2	-	1	HM	PT-2	H4	J4	8	-
100B	•	2'-8"	7'-0"	1 3/4"	C	WD	ST	GL-1	1	HM	PT-2	H2	J2	6	1
101	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	9	1
102A	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	9	1
102B	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H1	J1	9	-
103A	•	3'-0"	7'-0"	1 3/4"	B	HM	PT-2	-	1	HM	PT-2	H4	J4	8	-
103B	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H1	J1	5	-
103C	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	GL-1	1	HM	PT-2	H1	J1	11	-
104	•	2'-6"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	4	1
105A	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	4	1
105B	•	2'-6"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	4	1
106	•	2'-6"	7'-0"	1 3/4"	A	WD	ST	-	-	-	-	-	-	2	EXIST VAULT DOOR TO REMAIN
107	•	2'-6"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H2	J2	12	1
108	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H1	J1	2	-
109	•	3'-6"	7'-0"	1 3/4"	F	WD	ST	-	2	HM	PT-2	-	J1	5	-
110A	•	3'-8"	7'-0"	1 3/4"	A	HM	PT-2	-	1	HM	PT-2	H4	J4	8	1
110B	•	14'-0"	11'-2"	1 1/2"	E	STEEL	-	-	-	-	-	H6	J6	-	-
111A	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	-	1	HM	PT-2	H2	J2	5	1
111B	•	3'-0"	7'-0"	1 3/4"	A	HM	PT-2	GL-1	1	HM	PT-2	H1	J1	1	-
112A	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H1	J1	9	-
112B	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H1	J1	9	-
113B	•	2'-6"	7'-0"	1 3/4"	A	HM	PT-2	-	1	HM	PT-2	H4	J4	8	-
114	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	9	-
115	•	2'-8"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	4	1
116A	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H8	J2	4	1
116B	•	2'-8"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H1	J1	4	-
117	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H8	J2	7	1
118A	•	3'-0"	7'-0"	1 3/4"	D	WD	ST	-	1	HM	PT-2	H8	J2	2	1
118B	•	3'-6"	7'-0"	1 3/4"	A	HM	PT-2	-	3	HM	PT-2	H7	J4	8	-
119	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H8	J2	7	1
120A	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H3	J3	4	1
120B	•	3'-0"	7'-0"	1 3/4"	A	HM	PT-2	-	1	HM	PT-2	H5	J5	8	-
121A	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	9	-
121B	•	3'-0"	7'-0"	1 3/4"	A	WD	ST	-	1	HM	PT-2	H1	J1	9	-
122	•	3'-0"	7'-0"	1 3/4"	B	WD	ST	GL-1	1	HM	PT-2	H2	J2	9	1



OFFICE OF ADMINISTRATION
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375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

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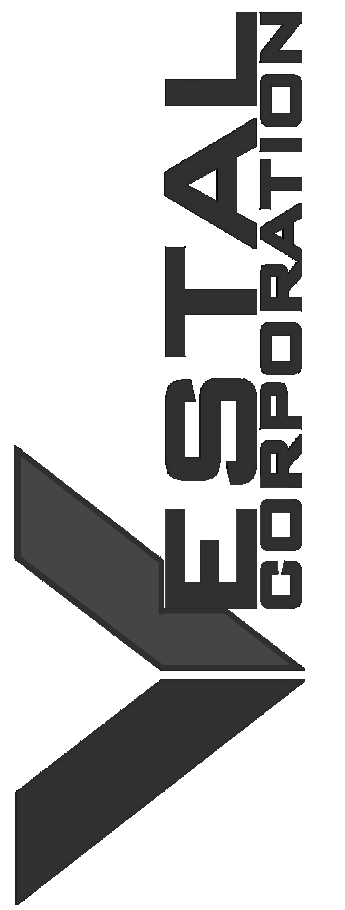
CAD DWG FILE: _____
DRAWN BY: EE
CHECKED BY: BH
DESIGNED BY: JB

SHEET TITLE:
**DOOR SCHEDULE
AND DETAILS**

SHEET NUMBER:

A700

29 OF 85 SHEETS
2024.04.23



OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
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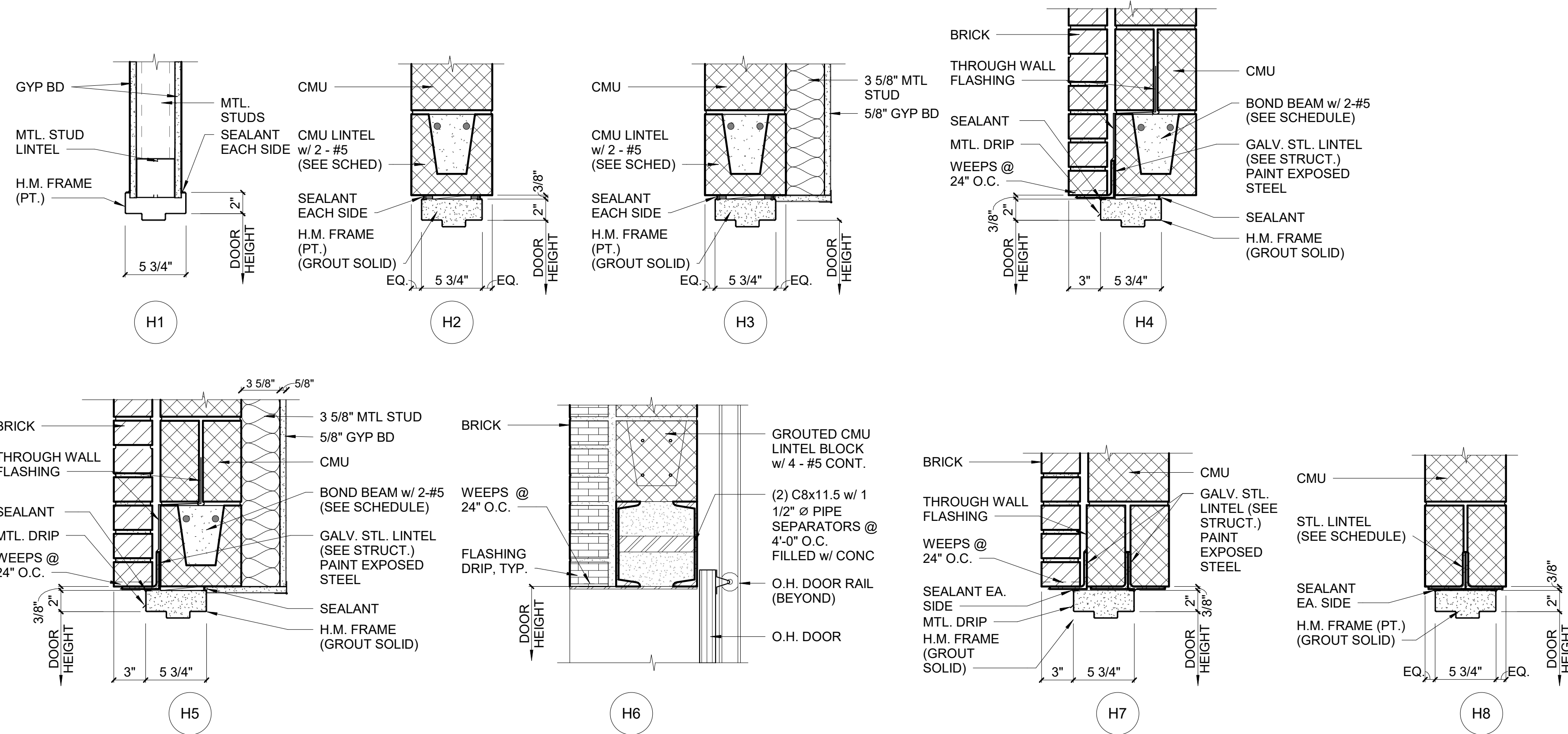
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DRAWN BY: EE _____
CHECKED BY: BH _____
DESIGNED BY: JB _____

SHEET TITLE:
DOOR DETAILS

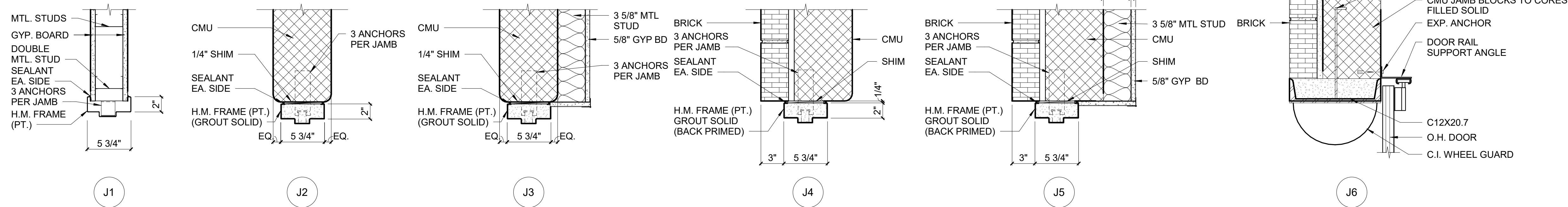
SHEET NUMBER:

A701

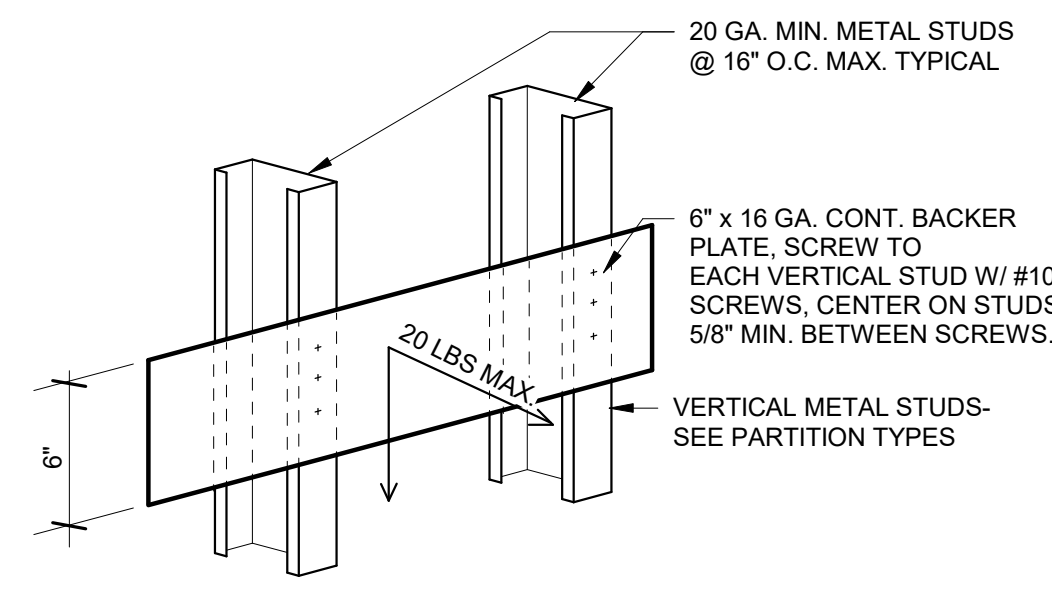
30 OF 85 SHEETS
2024.04.23



1 DOOR HEAD DETAILS
1 1/2" = 1'-0"

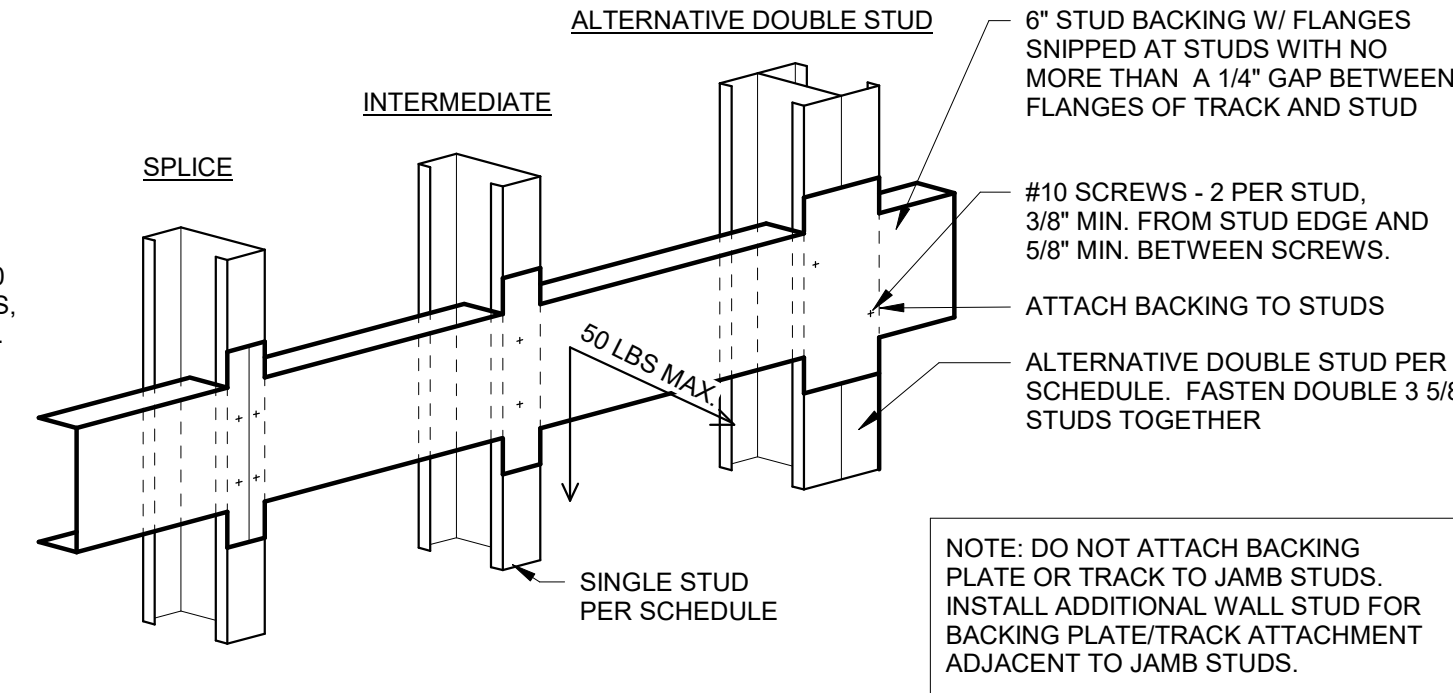


2 DOOR JAMB DETAILS
1 1/2" = 1'-0"



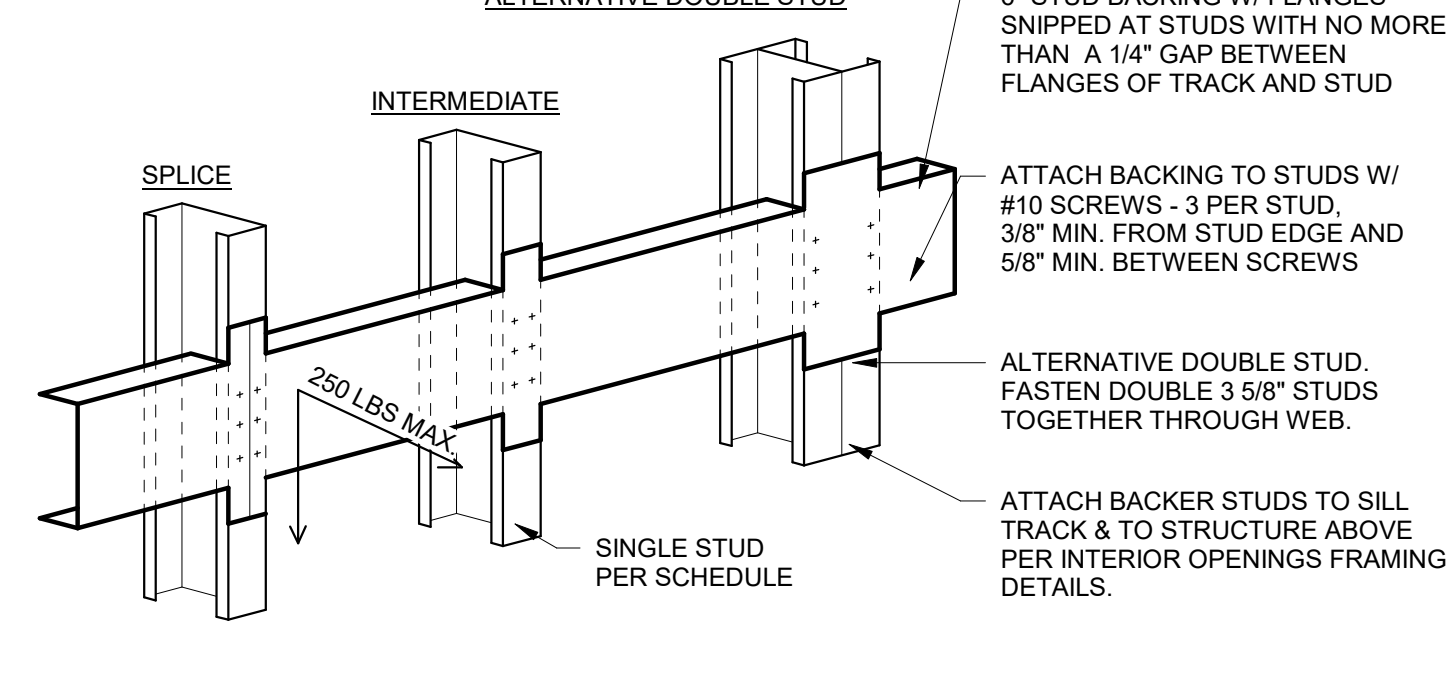
TYPICAL METAL BLOCKING DETAIL - 20 LB MAX. LOAD

- NOTE:**
- THIS DETAIL MAY BE USED FOR THE ATTACHMENT OF CABINETS OR EQUIPMENT DISTRIBUTING LESS THAN OR EQUAL TO 20 LBS TO EACH STUD UNLESS APPROVED OTHERWISE BY THE STRUCTURAL ENGINEER. (THE CENTER OF GRAVITY SHALL BE LESS THAN 6" FROM FACE OF STUDS.)
 - NOTCHING OR CUTTING OF BACKING PLATE IS NOT PERMITTED.
 - THIS DETAIL MAY BE USED FOR WALL DOOR STOP ATTACHMENT.
 - PRESCRIBED WEIGHT SHALL INCLUDE CONTENT WEIGHT. TYP. ALL DETAILS.
 - FOR WALLS THAT DO NOT EXTEND TO STRUCTURE ABOVE PROVIDE BRACING AT EACH STUD.



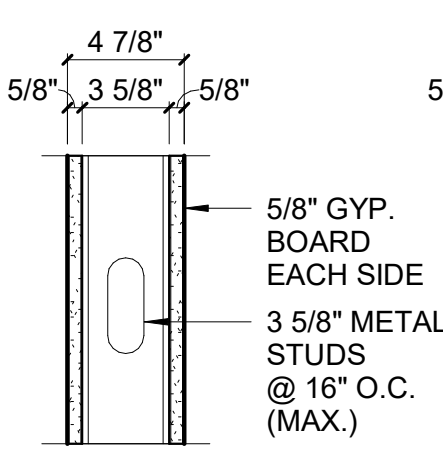
TYPICAL METAL BLOCKING DETAIL - 50 LB MAX. LOAD - 6007125 - 43 MIN. BACKER

- NOTE:**
- THIS DETAIL MAY BE USED FOR THE ATTACHMENT OF CABINETS, LIGHT FIXTURES, SHOWER CURTAIN RODS OR EQUIPMENT DISTRIBUTING LESS THAN OR EQUAL TO 50 LBS TO EACH STUD UNLESS APPROVED OTHERWISE BY THE STRUCTURAL ENGINEER. (THE CENTER OF GRAVITY SHALL BE LESS THAN 6" FROM FACE OF STUDS.)
 - NOTCHING OR CUTTING OF BACKING PLATE IS NOT PERMITTED.
 - FOR EXTERIOR WALL STUDS USE DOUBLE TYP. SPECIFIED STUDS FASTENED TOGETHER IN LIEU OF STUDS SPECIFIED HERE.
 - PRESCRIBED WEIGHT SHALL INCLUDE CONTENT WEIGHT. TYP. ALL DETAILS.
 - FOR WALLS THAT DO NOT EXTEND TO STRUCTURE ABOVE PROVIDE BRACING AT EACH STUD.

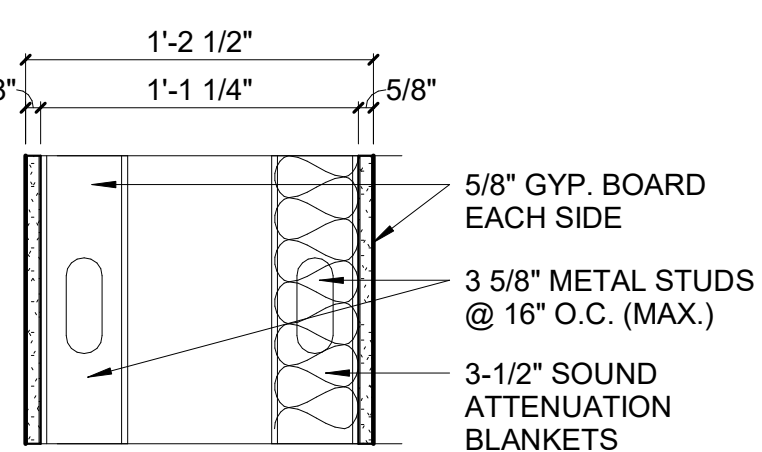


TYPICAL METAL BLOCKING DETAIL - 250 LB MAX. LOAD - 6007190 - 68 MIN. BACKER

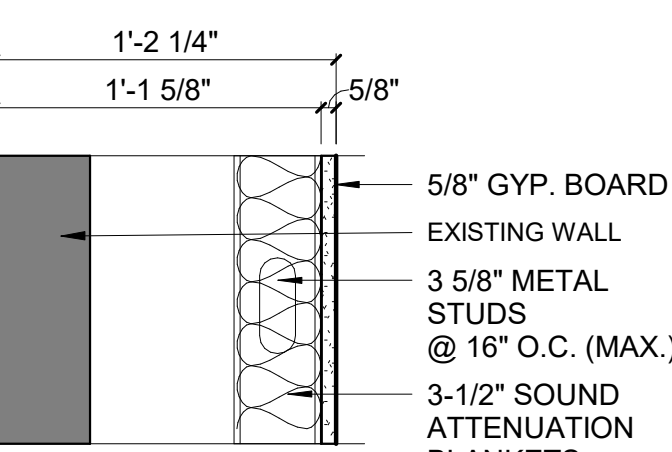
- NOTE:**
- THIS DETAIL MAY BE USED FOR THE ATTACHMENT OF WALL MOUNTED TOWEL BARS, GRAB BARS, SHOWER SEATS, SHELVING, HANDRAILS, COUNTERS, LAVS, INFANT CHANGING TABLES, CASEWORK, AND EQUIPMENT DISTRIBUTING LESS THAN OR EQUAL TO 250 LBS TO EACH STUD UNLESS APPROVED OTHERWISE BY THE STRUCTURAL ENGINEER. (THE CENTER OF GRAVITY SHALL BE LESS THAN 6" FROM FACE OF STUDS.)
 - NOTCHING OR CUTTING OF BACKING PLATE IS NOT PERMITTED.
 - THIS DETAIL MAY BE USED FOR WALL DOOR STOP ATTACHMENT
 - PRESCRIBED WEIGHT SHALL INCLUDE CONTENT WEIGHT. TYP. ALL DETAILS
 - FOR WALLS THAT DO NOT EXTEND TO STRUCTURE ABOVE PROVIDE BRACING AT EACH STUD.



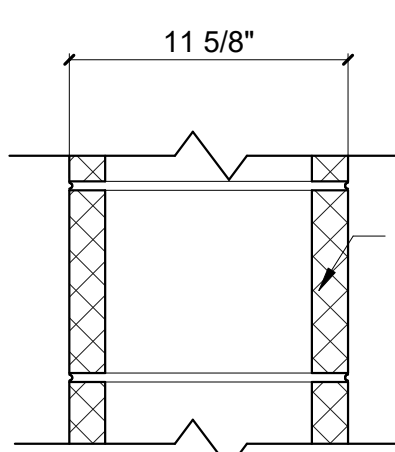
P1



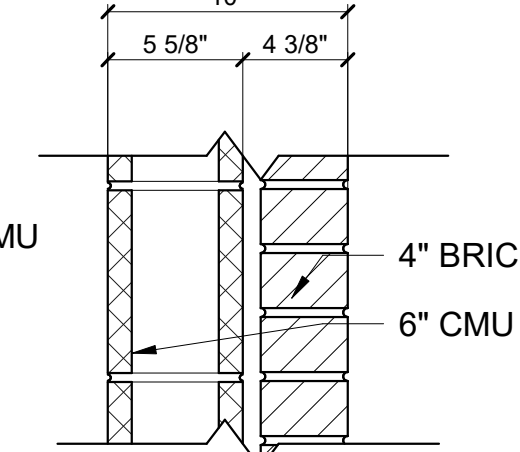
P2



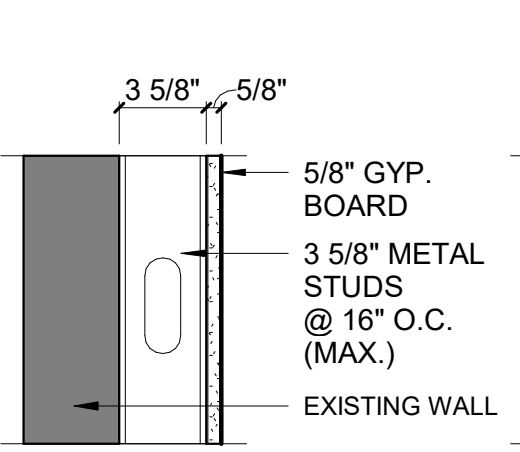
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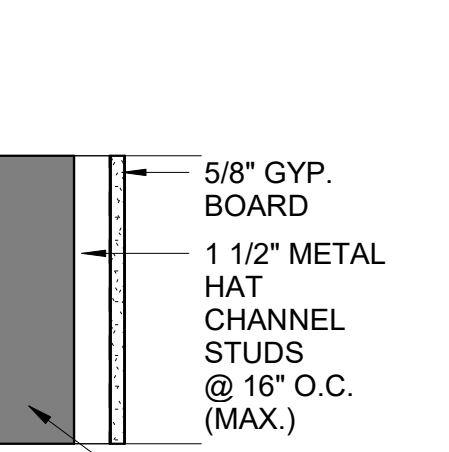
P4



P5



P6



P7

PARTITION TYPES

1 1/2" = 1'-0"

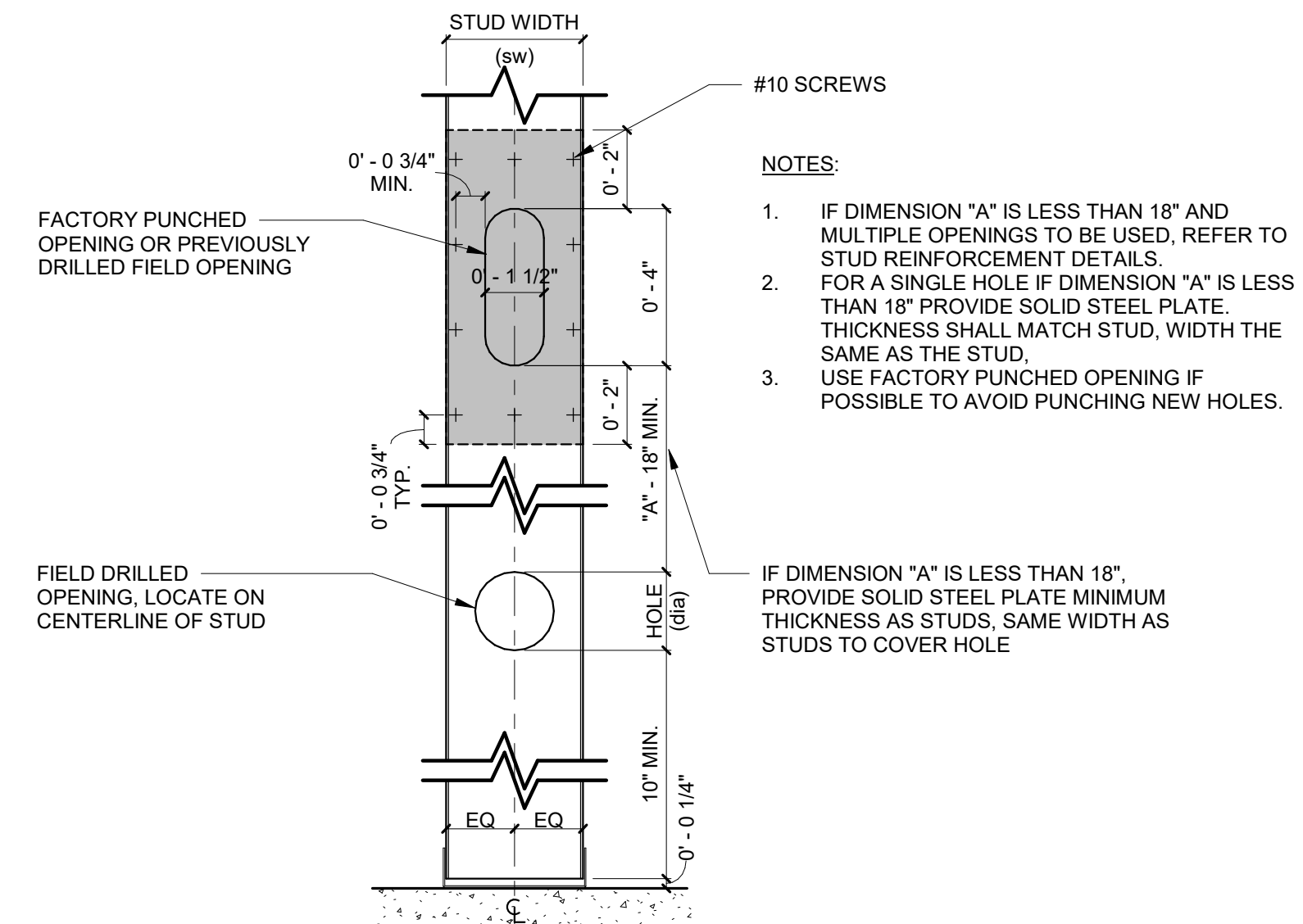
GENERAL PARTITION TYPE NOTES:

- REFER TO ARCHITECTURAL FLOOR PLANS FOR PARTITION TYPE DESIGNATIONS.
- SEE THIS SHEET FOR ACTUAL PARTITION TYPES, DETAILS AND GENERAL NOTES REGARDING CONSTRUCTION OF PARTITIONS SHOWN ON PLANS.
- REFER TO CODE DATA FOR ADDITIONAL FIRE RATINGS, SMOKE PARTITION LOCATIONS, INFORMATION AND REQUIREMENTS.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RATED ASSEMBLIES AS INDICATED ON CONSTRUCTION DOCUMENTS AND PER ALL LOCAL AND JURISDICTIONAL CODES IN FORCE.
- FIRE WALLS SHALL NOT BE PENETRATED EXCEPT AS ALLOWED AND PROTECTED BY CODE REGULATIONS AND REQUIREMENTS (E.G. APPROPRIATE USE OF FIRE STOPPING, DAMPERS, FIRE RESISTIVE MATERIALS AND METHODS OF CONSTRUCTION. GYPSUM BOARD IS TO BE WATER RESISTANT TYPE "X" GYPSUM BOARD ON WET FACES OF PLUMBING WALLS AND ON CERAMIC TILE FACED WALL SURFACES (E.G. TILED SERVARY WALLS, DRINKING FOUNTAIN WALLS, REST ROOM PLUMBING WALLS, OR TILED WALLS).
- WET WALLS THAT RECEIVE CERAMIC TILE THAT ARE SUBJECT TO BEING HOSED DOWN, SUCH AS "BACK OF HOUSE" AREAS (E.G. KITCHEN, DISH ROOM, JANITOR'S CLOSET, ETC.) SHALL BE CEMENTITIOUS BACKER BOARD (IN LIEU OF WATER RESISTANT GYPSUM BOARD). PLACE 6 MIL POLYETHYLENE MEMBRANE BEHIND CEMENT BACKER BOARD (AS A VAPOR BARRIER).
- ALL STRUCTURAL STEEL COLUMNS SHALL BE PROTECTED AS REQUIRED BY CODE (TYPICAL).
- AT ALL SMOKE BARRIER AND FIRE RATED PARTITIONS, FURR OUT ALL COLUMNS, BEAMS, JOISTS AND OTHER STRUCTURAL ITEMS AS REQUIRED TO SEAL GYPSUM BOARD TIGHT TO STRUCTURAL DECK OR EXTERIOR WALL TO MAINTAIN REQUIRED RATING.
- ALL GYPSUM BOARD AT STAIR, RAMP, & CORRIDOR WALLS TO BE IMPACT RESISTANT GYPSUM BOARD.
- GENERAL CONTRACTOR TO VERIFY THAT ALL EXISTING WALLS, REQUIRED TO BE FIRE RATED AS SHOWN ON PLANS, MEET CODE FOR RATINGS. IF EXISTING WALLS INDICATED AS RATED WALLS HAVE NOT BEEN CONSTRUCTED ACCORDING TO CODE REQUIREMENTS, GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT AND SHALL BRING SUCH WALLS UP TO CODE. IF EXISTING WALLS SHOWN AS RATED WALLS ON PLANS HAVE UNPROTECTED, OR IMPROPERLY PROTECTED OPENINGS, GENERAL CONTRACTOR SHALL PROPERLY INFILL OR PROTECT OPENINGS AS REQUIRED TO COMPLY WITH CODE.

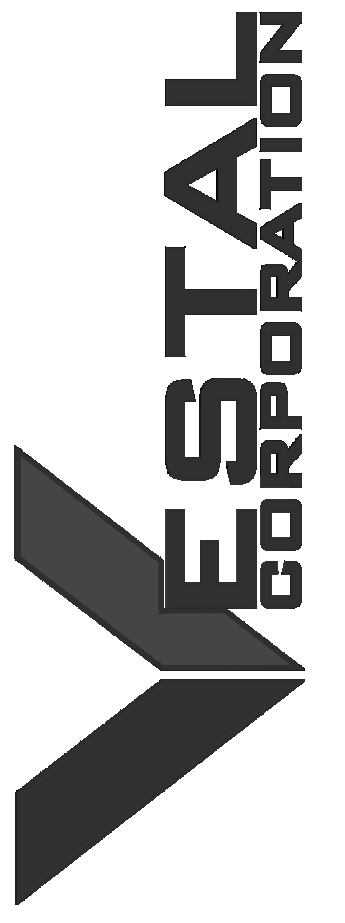
INTERIOR METAL STUD LIMITING HEIGHT SCHEDULE

STUD SIZE	STUD SPACING	ALLOWABLE DEFLECTION	LIMITING HEIGHT
1 5/8"	16" O.C.	L/240	8'-10" MAX HGT.
1 5/8"	24" O.C.	L/240	7'-9" MAX HGT.
2 1/2"	16" O.C.	L/240	12'-3" MAX HGT.
2 1/2"	24" O.C.	L/240	10'-8" MAX HGT.
3 5/8"	16" O.C.	L/240	16'-3" MAX HGT.
3 5/8"	24" O.C.	L/240	14'-3" MAX HGT.
4"	16" O.C.	L/240	17'-7" MAX HGT.
4"	24" O.C.	L/240	15'-4" MAX HGT.
6"	16" O.C.	L/240	24'-1" MAX HGT.
6"	24" O.C.	L/240	20'-1" MAX HGT.

- NOTES:**
- THE ABOVE LIMITING HEIGHTS ARE BASED ON THE CLARKDETRICH PROSTUD (PROSTUD 33MIL) (5.0 PSF), NON-COMPOSITE WALL (FULLY BRACED). CONTRACTOR TO VERIFY LIMITING HEIGHTS BASED ON MANUFACTURER OF STUD PROVIDED FOR PROJECT.



STUD WIDTH (sw)	MAXIMUM HOLE DIAMETER (dia)	MAXIMUM NOMINAL CONDUIT DIAMETER	MAXIMUM STEEL/IRON/PVC PIPING DIAMETER	MAXIMUM COPPER PIPING DIAMETER
2 1/2"	1 1/2" Ø	1" Ø	1" Ø	1 1/4" Ø
3 5/8"	2 5/16" Ø	1 1/2" Ø	1 1/2" Ø	2" Ø
4"	2 1/2" Ø	2" Ø	2" Ø	2" Ø
6"	4" Ø	3" Ø	3" Ø	3" Ø



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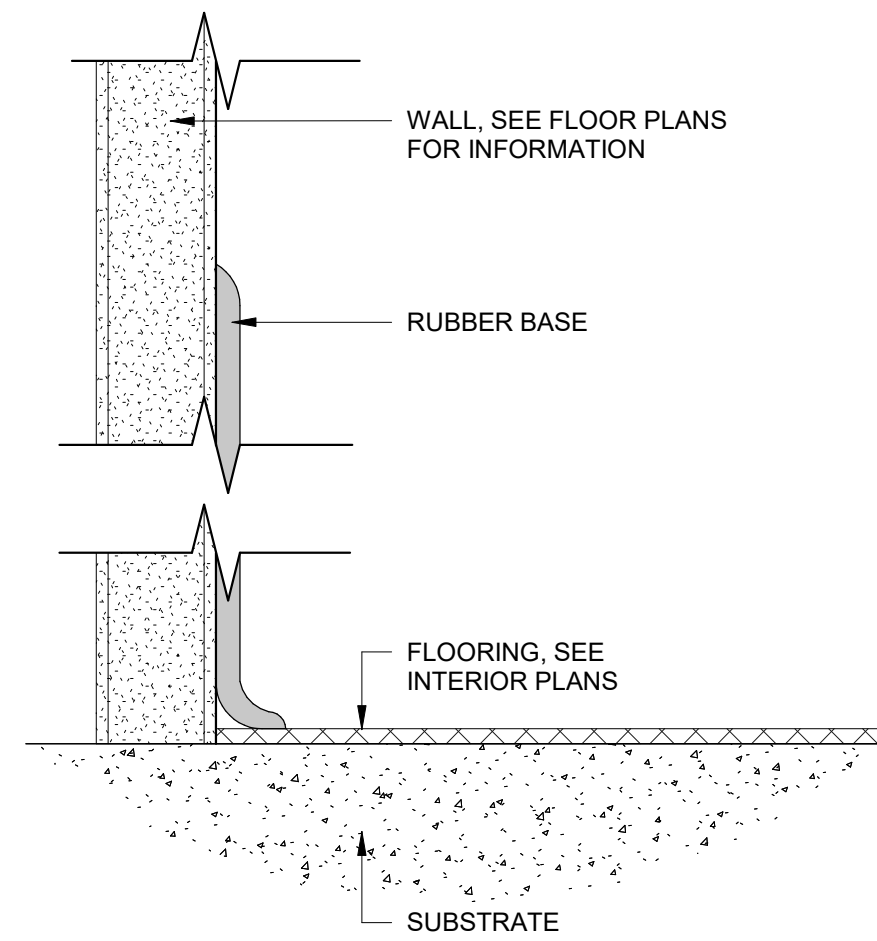
SHEET TITLE:
**PARTITION TYPES
AND DETAILS**

SHEET NUMBER:
A720

31 OF 85 SHEETS
2024.04.23

GENERAL FINISH NOTES:

- A. FINISH SYSTEMS DESCRIBE THE FINISH SPECIFICATION FOR THE VERTICAL SURFACE OF ALL FINISHES APPLIED TO A PARTITION. IF DISCREPANCY OCCURS, CONTACT THE ARCHITECT FOR CLARIFICATION PRIOR TO STARTING WORK WITHIN THE SUBJECT AREA.
- B. WORKMANSHIP SHALL BE THE BEST OF ITS RESPECTIVE KINDS FOR EACH OF THE VARIOUS TRADES EMPLOYED.
- C. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING AND CONFIRMING ALL SUBSTRATE CONDITIONS WHERE NEW MATERIALS ARE APPLIED. SUBSTRATE SHALL BE SMOOTH, FREE OF DEFECTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE FINISHED MATERIAL MANUFACTURERS WRITTEN RECOMMENDATIONS.
- D. UPON COMPLETION OF INSTALLATION OF PORCELAIN/CERAMIC TILE, CONTRACTOR TO CLEAN ALL TILE SURFACES PER MANUFACTURERS WRITTEN RECOMMENDATIONS SO THEY ARE FREE OF FOREIGN MATTER. SEAL ALL GROUT WITH (2) COATS OF MANUFACTURERS RECOMMENDED GROUT SEALER. PROHIBIT FOOT AND/OR WHEEL TRAFFIC FROM TILED FLOORS FOR AT LEAST 7 DAYS AFTER GROUTING IS COMPLETE.
- E. FINISH SUBSTITUTIONS SHALL BE APPROVED BY ARCHITECT ONLY. SEE SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS FOR ANY SUBSTITUTIONS.
- F. DURING INSTALLATION OF CARPET, CONTRACTOR MUST COMPLY WITH CARPET MANUFACTURERS WRITTEN RECOMMENDED INSTALLATION METHODS. THIS INCLUDES SEAM SEALERS, GLUE, TERMINATION OF ALL SEAMS AND EXPOSED EDGES.
- G. UPON COMPLETION OF INSTALLATION OF CARPET, CONTRACTOR TO REMOVE VISIBLE ADHESIVE, SEAM SEALER AND OTHER SURFACE BLEMISHES USING CLEANER RECOMMENDED BY CARPET MANUFACTURER. COMPLY WITH CRI 104, SECTION 15: "PROTECTION OF INDOOR INSTALLATION." REFER TO FINISH AND MATERIAL LEGEND FOR ARCHITECT DESIRED INSTALL. PROVIDE AND CONTINUE SCHEDULED FLOORING FROM PARTITION TO PARTITION AND UNDER MILLWORK UNLESS NOTED OTHERWISE.
- H. FLOOR TRANSITIONS SHALL OCCUR AT CENTERLINE OF DOOR, UNLESS NOTED OTHERWISE.
- J. TOLERANCE VARIATION FROM FLAT AND LEVEL SURFACE: 1/8" IN 10', UNLESS NOTED OTHERWISE IN SPECIFICATIONS.
- K. ALL WALLS SHALL BE PAINTED (P-XX) UNLESS NOTED OTHERWISE.
- L. ALL DOOR FRAMES TO BE PAINTED TO MATCH ADJACENT WALL, UNLESS NOTED OTHERWISE.
- M. ALL GYPSUM BOARD CEILINGS TO BE PAINTED (P-XXX), UNLESS NOTED OTHERWISE.
- N. ALL ACOUSTICAL CEILINGS TO BE (ACT-XX), UNLESS NOTED OTHERWISE.
- O. ALL WINDOW SILLS TO BE (SS-XX), UNLESS NOTED OTHERWISE.
- P. ALL RECEPTACLES, SWITCHES, COVER PLATES, ETC. ARE TO BE STAINLESS STEEL, UNLESS NOTED OTHERWISE.
- Q. WHERE PLASTIC LAMINATE GRAIN/PATTERN RETURN A CORNER, GRAIN/PATTERN TO RUN IN SAME DIRECTION ON ALL SIDES.



1 RUBBER COVE BASE
12" = 1'-0"

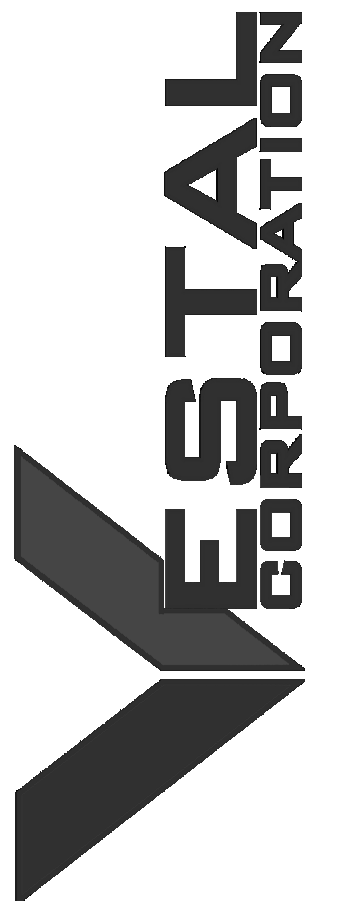
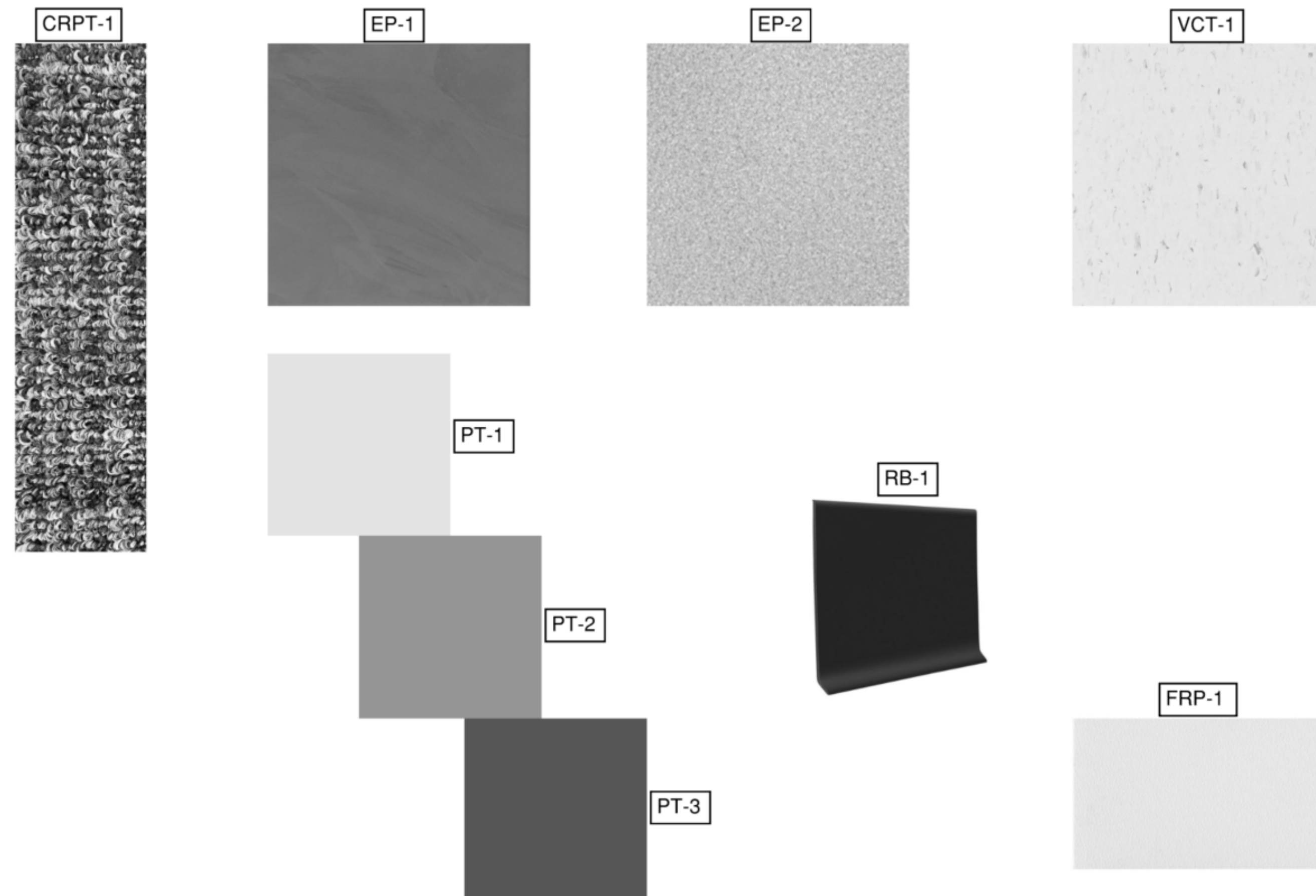
ROOM FINISH SCHEDULE

ROOM #	NAME	FLOOR FINISH	BASE FINISH	WALL FINISHES				CEILING FINISH	CEILING HEIGHT	COMMENTS
				NORTH	SOUTH	EAST	WEST			
100	LOBBY	EP-1	RB-1	PT-1	PT-1	PT-1	PT-2	ACT1	8'-0"	
101	OFFICE	CRPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACT1	8'-0"	
102	OFFICE	CRPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACT1	8'-0"	
103	OFFICE	CRPT-1	RB-1	PT-3	PT-1	PT-1	PT-1	ACT1	8'-0"	
104	TRAINING OFFICE	CRPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT1	8'-0"	
105	GYM	-	-	-	-	-	-	EXP	10'-0 1/2"	
106	ORD STOR	SCONC	-	-	-	-	-	EXP	9'-7"	
107	STOR	SCONC	-	-	-	-	-	EXP	10'-0 1/2"	
108	STOR	SCONC	-	-	-	-	-	EXP	10'-0 1/2"	
109	OFFICE	SCONC	-	PT-1	PT-1	PT-1	PT-3	EXP	10'-0 1/2"	
110	DRILL HALL	EP-1	-	PT-1	PT-1	PT-1	PT-1	EXP	18'-11"	
111	HALL	SCONC	-	PT-1	PT-1	PT-1	PT-1	ACT1	8'-7 1/2"	
112A	OFFICE	CRPT-1	RB-1	PT-1	PT-3	PT-1	PT-1	ACT1	8'-7 1/2"	
112B	OFFICE	CRPT-1	RB-1	PT-1	PT-3	PT-1	PT-1	ACT1	8'-7 1/2"	
113	ELEC	SCONC	-	PT-1	PT-1	PT-1	PT-1	EXP	10'-0 1/2"	
114	OFFICE	CRPT-1	RB-1	PT-1	PT-3	PT-1	PT-1	ACT1	8'-0"	
115	CLASSROOM	VCT-1	RB-1	PT-1	PT-2	PT-1	PT-1	ACT1	8'-0"	
116	CLASSROOM	VCT-1	RB-1	PT-1	PT-2	PT-1	PT-1	ACT1	8'-0"	
117	MEN	EP-1	-	PT-1	PT-1	PT-1	PT-1	GYP1	8'-0"	SEE ELEVATION FOR SHOWER WALL EPOXY DETAILS 7' HEIGHT
118	MECH	SCONC	-	PT-1	PT-1	PT-1	PT-1	EXP	10'-0 1/2"	
119	WOMEN	EP-1	-	PT-1	PT-1	PT-1	PT-1	GYP1	8'-0"	SEE ELEVATION FOR SHOWER WALL EPOXY DETAILS 7' HEIGHT
120	KITCHEN	EP-1	-	PT-1/FRP	PT-1/FRP	PT-1/FRP	PT-1/FRP	ACT2	8'-0"	SEE ELEVATIONS FOR FRP UP TO 6' HIGH ON ALL WALLS.
121	OFFICE	CRPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACT1	8'-0"	
122	OFFICE	CRPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACT1	8'-0"	
123	OFFICE	CRPT-1	RB-1	PT-1	PT-3	PT-1	PT-1	ACT1	8'-0"	

FINISH AND MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	STYLE	MODEL #	COLOR	SIZE	FINISH	REMARKS
ACT-1	ACOUSTIC CEILING TILE	ARMSTRONG	1912TEMP	-	WHITE	24" X 48"	-	FOR GENERAL AREAS
ACT-2	ACOUSTIC CEILING TILE	ARMSTRONG	1959	-	WHITE	24" X 48"	-	KITCHEN
GYP-1	GYPSUM BOARD	USG	-	-	WHITE	-	-	BATHROOMS
PT-1	PAINT	PPG	-	PPG1036-1	GRAY GLIMPSE	-	SEMI-GLOSS	ALL OVER USE
PT-2	PAINT	PPG	-	PPG1012-5	STEEPLE GRAY	-	SEMI-GLOSS	ACCENT PAINT FOR GENERAL USE
PT-3	PAINT	PPG	-	PPG1162-7	DRAGONFLY	-	SEMI-GLOSS	ACCENT PAINT FOR OFFICE
CRPT-1	CARPET TILE	BENTLEY	LONG STORY SHORT	401033	LAMPOON	18" X 36"	-	FOR OFFICE MONOLITHIC LAY PATTERN
EP-1	EPOXY	LIQUID ELEMENTS	SMOOTH-DUO	-	HALIFAX RAIN	-	MATTE	FOR LOBBY FLOOR AND SHOWER WALLS
EP-2	EPOXY	LIQUID ELEMENTS	POLISHED	-	RAW CONCRETE	-	-	FOR KITCHEN AND BATHROOM FLOORS
RB-1	RUBBER BASE	JOHNSONITE BY TARKETT	TRADITIONAL	DC-40	BLACK B	6"	-	FOR ALL AREAS
ST	STAIN	-	-	-	-	-	-	WOOD DOORS
VCT-1	VINYL COMPOSITION TILE	TARKETT	VCT II	480	PURE WHITE	12" X 12"	-	FOR CLASSROOMS
SCOC	SEALED CONCRETE	-	-	-	-	-	-	FOR ALL OTHER AREAS
FRP-1	FIBERGLASS REINFORCED PANEL	ALTRO	PURAGUARD	W140/400	SEA SALT	4'X10'	GLOSS	FOR KITCHEN WALLS, SEE ELEVATIONS

St. Clair Readiness Center Material Design Board



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375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE: _____
DRAWN BY: AM _____
CHECKED BY: BH _____
DESIGNED BY: JB _____

SHEET TITLE:
**INTERIOR FINISH
SCHEDULE AND
LEGEND**

SHEET NUMBER:

A800



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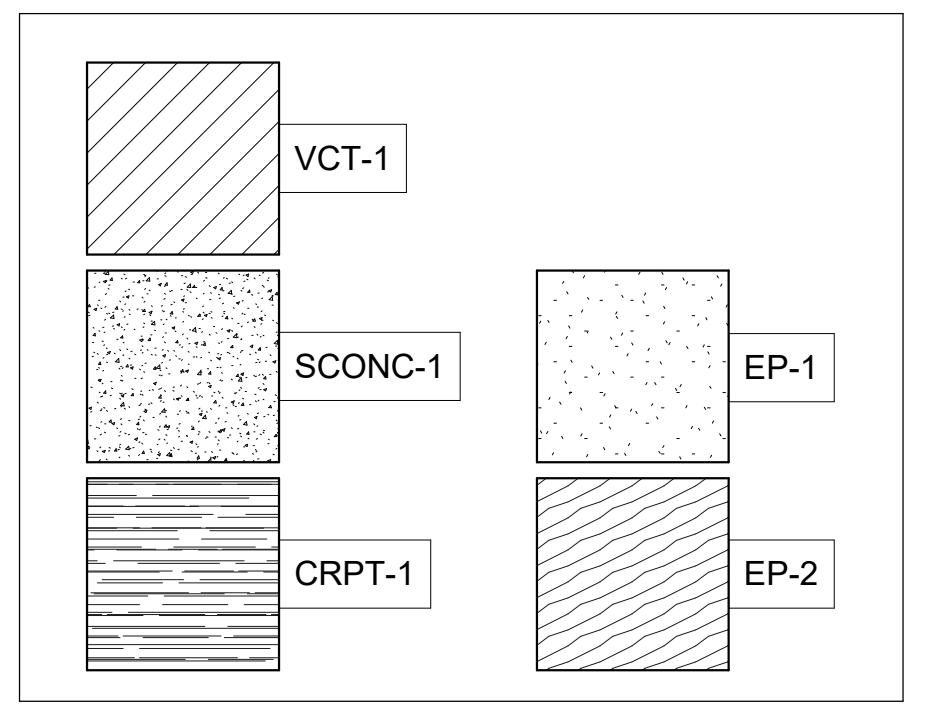
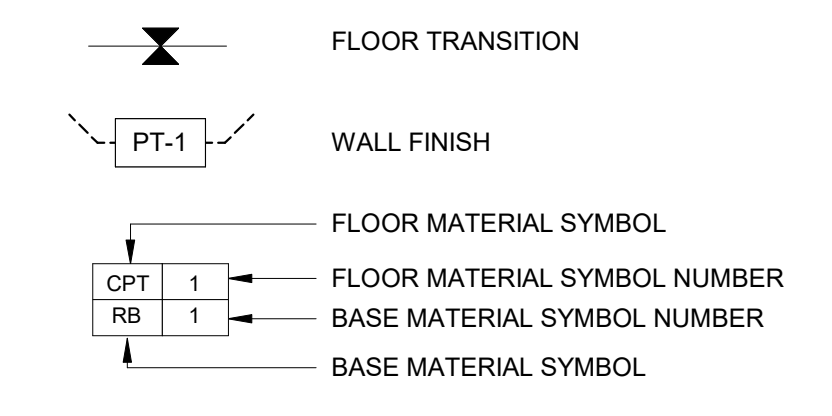
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FINISH PLAN

SHEET NUMBER:

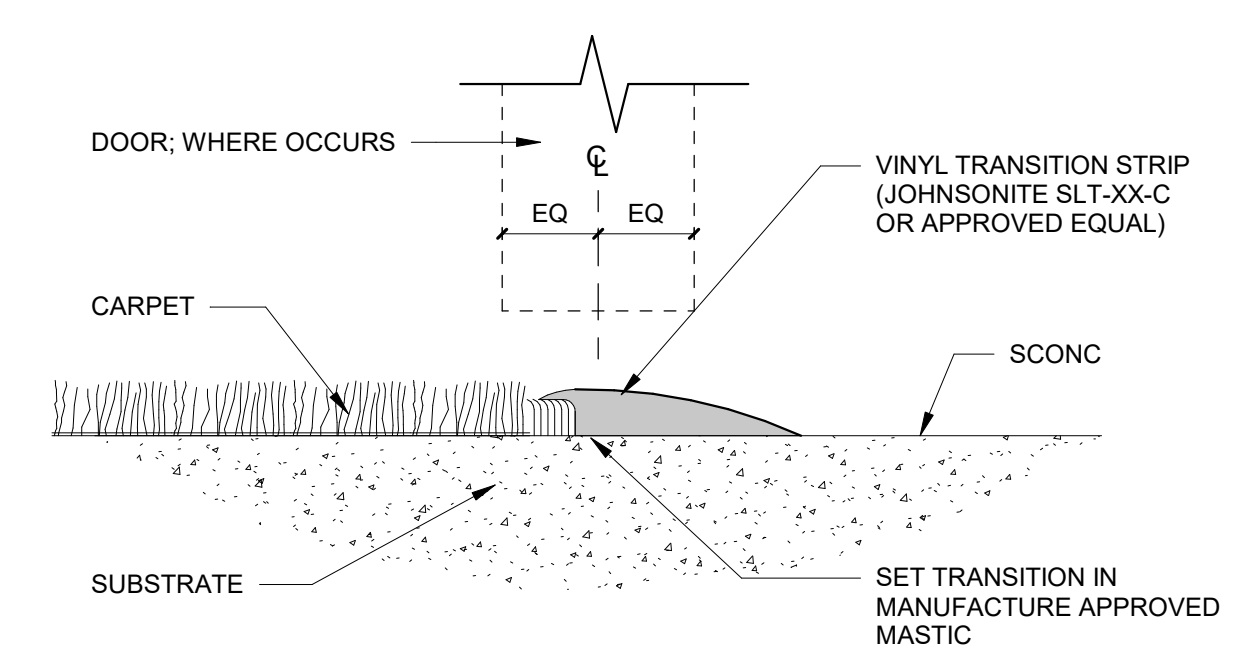
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33 OF 85 SHEETS
2024.04.23

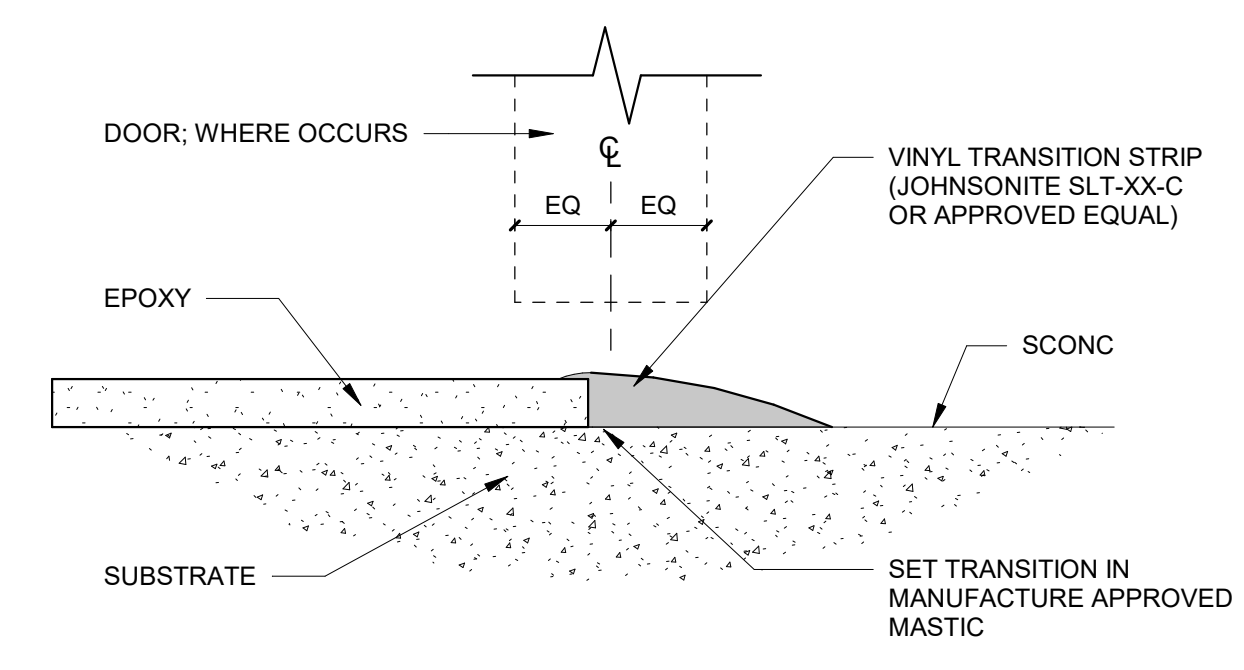
FINISH PLAN SYMBOLS AND MATERIAL LEGEND



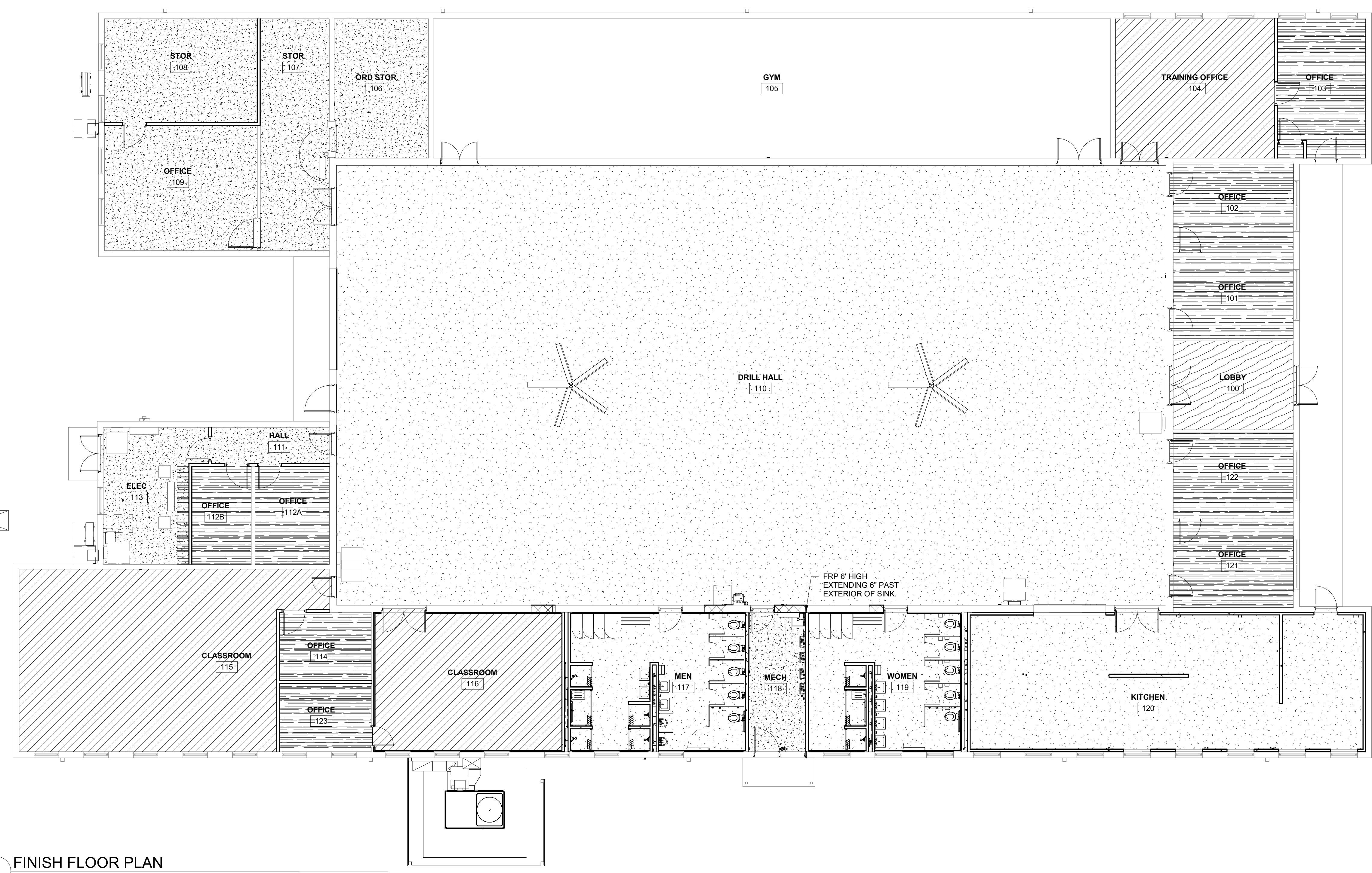
FINISH FLOOR LEGEND



2 CARPET TO CONCRETE
1/2" = 1'-0"



3 EPOXY TO CONCRETE
1/2" = 1'-0"



PLAN TRUE
1 FINISH FLOOR PLAN
1/8" = 1'-0"



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375 SOUTH COMMERCIAL
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MISSOURI 63077

PROJECT # T2326-01
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REV.	DESCRIPTION	DATE
A	SD	2023.12.06
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CAD DWG FILE:
DRAWN BY: NJA
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DESIGNED BY: NJA

SHEET TITLE:
**MECHANICAL
LEGEND**

SHEET NUMBER:

M001

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2024.04.23

MECHANICAL LEGEND

HVAC DUCTWORK SYMBOLS	HVAC PIPING SYMBOLS	HVAC GENERAL SYMBOLS	HVAC ABBREVIATIONS (CONTINUED)
			FLR FLOOR
			FCU FAN COIL UNIT
			FSD FIRE SMOKE DAMPER
			FTU FAN TERMINAL UNIT
			FTR FILTER
			FV FAN
			GALV GALVANIZED
			GPM GALLONS PER MINUTE
		HVAC ABBREVIATIONS	
		A/C AIR CONDITIONING	HP HORSE POWER
		AFF ABOVE FINISHED FLOOR	HTG HEATING
		AHU AIR HANDLING UNIT	HWP HOT WATER PUMP
		AUX AUXILIARY	KW KILOWATT
		BAS BUILDING AUTOMATED SYSTEM	L LOUVER
		BHP BRAKE HORSE POWER	LS SUPPLY LOUVER
		BTU BRITISH THERMAL UNITS	LIS LITERS PER SECOND
		BFP BACKFLOW PREVENTER	LWT LEAVING WATER TEMPERATURE
		CFM CUBIC FEET PER MINUTE	MCA MINIMUM CIRCUIT AMPACITY
		CIR CIRCULATING	MOCPP MAXIMUM OVER-CURRENT PROTECTION
		CLG CEILING	MEZZ MEZZANINE
		CM CONTROL MODULE	OA OUTSIDE AIR
		CONN CONNECTION	OAD OUTSIDE AIR DAMPER
		CONT CONTROL	PS POWER SUPPLY
		CV CONTROL VALVE	PVC POLYVINYL CHLORIDE
		CU CONDENSING UNIT	RA RETURN AIR
		D DIFFUSERS	RLA RATED LOAD AMPS
		DAC DOOR AIR CURTAIN	RM ROOM
		DEH DEHUMIDIFIER	RT RETURN
		DR DRY BULB	SA SUPPLY AIR
		DN DOWN	SAF SUPPLY AIR FAN
		DR DRAIN	SC SENSIBLE COOLING
		DX DIRECT EXPANSION	SD SMOKE DETECTOR
		EA EACH	SOV SHUT-OFF VALVE
		EAT ENTERING AIR TEMPERATURE	TC TOTAL COOLING
		ECM ELECTRONICALLY COMMUTATED MOTOR	TYP TYPICAL
		EMCS ENERGY MONITORING CONTROL SYSTEM	VAV VARIABLE AIR VOLUME
		EMER EMERGENCY	V.D. VOLUME DAMPER
		EMS ENERGY MONITORING SYSTEM	VOL VOLUME
		ENT ENTRANCE	VEF VENTILATION EXHAUST FAN
		ESP EXTERNAL STATIC PRESSURE	VRF VARIABLE REFRIGERANT FLOW
		EWC ELECTRIC WATER COOLING	VTR VENT THROUGH ROOF
		EWT ENTERING WATER TEMPERATURE	WB WET BULB
		EXH EXHAUST	
		FCU FAN COIL UNIT	
		FD FLOOR DRAIN	
		FLA FULL LOAD AMPS	
		FLEX FLEXIBLE	

GENERAL NOTES - MECHANICAL HVAC

- GENERAL NOTES, SYMBOL LIST AND DETAILS ARE APPLICABLE TO ALL HVAC/MECHANICAL DRAWINGS.
- COORDINATE THIS WORK WITH THAT OF OTHER TRADES.
- DIMENSIONS SHOWN ON PLAN ARE HORIZONTAL. DIMENSIONS SHOWN IN ELEVATION ARE VERTICAL EXCEPT IN WAY OF STRUCTURAL STEEL. DIMENSIONS ARE MEASURED PERPENDICULAR TO FLANGE.
- MANUFACTURERS MODEL NUMBERS ARE SPECIFIED SOLELY TO ESTABLISH STANDARDS OF QUALITY FOR PERFORMANCE AND MATERIALS.
- PRODUCT INSTALLATION SHALL ADHERE TO MANUFACTURERS RECOMMENDATIONS.
- PROVIDE ACCESS PANELS IN NON-ACCESSIBLE GENERAL CONSTRUCTION SUBSTRATES FOR MAINTENANCE AND ADJUSTMENT OF ALL CONCEALED DAMPERS, AIR CONTROL DEVICES, CONTROL DEVICES/INSTRUMENTATION, EQUIPMENT AND DUCTWORK ACCESS DOORS. WOOD, GYPSUM DRYWALL AND CONCEALED SPLINE CEILINGS ARE CONSIDERED NON-ACCESSIBLE. PROVIDE HANGERS, INSERTS, ANCHORS, SUPPLEMENTAL STEEL & SUPPORTS AS REQUIRED TO SUPPORT DUCTWORK, PIPING AND EQUIPMENT FROM STRUCTURE.
- COORDINATE ROOF PENETRATIONS WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS.
- RUN DUCTS AND PIPING CONCEALED, UNLESS OTHERWISE SPECIFIED AND CLEAR OF CEILING INSERTS.
- INSTALL AND CONTROL PANELS 4' ABOVE FINISHED FLOOR OR AS DIRECTED OTHERWISE BY ARCHITECT.
- ANY WELDING SHALL BE 1/4" FILLET UNLESS REQUIRED OTHERWISE.
- ALL PERSONNEL TO UTILIZE SAFETY HARNESS AND LINE WHEN PERFORMING ANY INSPECTION OR WORK ON THE ROOF IN ACCORDANCE WITH OSHA FALL PROTECTION REQUIREMENTS.

GENERAL DEMOLITION NOTES - MECHANICAL HVAC

- THE DRAWINGS DEPICT ONLY GENERALLY THE EXISTING CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD OBSERVATIONS AND CONFIRM THE LOCATIONS OF EXISTING HVAC EQUIPMENT THAT NEED TO BE RELOCATED AND ASSOCIATED PIPING AND DUCTWORK.
- DEMOLITION WORK SHALL BE DONE BY THE MECHANICAL CONTRACTOR. CONTRACTOR SHALL FOLLOW STANDARD DEMOLITION PROCEDURES TO REMOVE THE EXISTING PIPING AND/OR DUCTWORK AND THE EXISTING HVAC EQUIPMENT. CONTRACTOR TO COORDINATE THE DEMO WITH OWNER AND OTHER TRADES.
- THE CONTRACTOR IS RESPONSIBLE TO FOLLOW BUILDING MANAGEMENT RULES WITH REGARD TO TRASH AND NOISE.
- THE CONTRACTOR SHALL MAINTAIN IN OPERATION ALL EXISTING UTILITIES DURING CONSTRUCTION.
- ALL DEMOLITION WORK WILL BE SCHEDULED WITH BUILDING MANAGEMENT AND PERFORMED ONLY FOLLOWING APPROVAL.
- THE CONTRACTOR SHALL INFORM BUILDING MANAGEMENT AND RECEIVE SCHEDULE APPROVAL FOR ANY REQUIRED UTILITY SHUTDOWN.
- PATCH WALL AND/OR CEILING/ROOF LOCATIONS AFFECTED BY DEMOLITION/RELOCATION WORK TO MATCH ADJACENT SURFACES.
- ANY PIPING/DUCTWORK SHOWN TO BE REMOVED SHALL INCLUDE REMOVAL OF ALL ASSOCIATED FITTINGS, CONNECTIONS, HANGERS, INSULATION, ETC.

GENERAL NOTES - AIR SYSTEMS

- AIR SYSTEMS REFER TO ARCHITECT REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.
- INTERNAL AIRFLOW DIMENSIONS ARE SHOWN FOR DUCTS. INCREASE DUCT SIZE AS NECESSARY TO MAINTAIN FREE FLOW AREA INDICATED.
- USE FLAT TRANSVERSE SEAM FOR DUCTWORK WHERE SPACE AVAILABLE DICTATES.
- DIFFUSER SIZES SHOWN ARE NECK SIZES. REGISTERS AND GRILLE SIZES ARE NOMINAL.
- PROVIDE VOLUME DAMPERS OR OTHER APPROVED BALANCING DEVICES AT DUCT BRANCHES AND RUN OUTS.
- PROVIDE 3 FT CLEARANCE IN FRONT OF ALL ELECTRIC CONTROL PANELS PER N.E.C. AND MFG. REQUIREMENTS.

GENERAL NOTES - PIPING SYSTEMS

- REFRIGERANT PIPING SHALL BE TYPE ACR DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS AND BRAZED JOINTS ABOVE GROUND WITHIN BUILDING. TYPE K ANNEALED TEMPER COPPER TUBING FOR 2 INCHES AND SMALLER WITHOUT JOINTS.
- REFRIGERANT PIPE SHALL BE INSTALLED IN THE SHORTEST AND MOST DIRECT ARRANGEMENT AS POSSIBLE.
- REFRIGERANT SUCTION LINES SHALL BE INSULATED.
- CONDENSATE DRAIN LINES SHALL BE EITHER TYPE L DRAWN TEMPER COPPER TUBING WITH SOLDERED JOINTS OR SCHEDULE 40 PVC PIPE WITH SOLVENT WELDED JOINTS.
- PITCH PIPING 1:240 IN DIRECTION OF FLOW.
- PROVIDE TRAPS IN ALL CONDENSATE LINES.

GENERAL NOTES - INSULATION

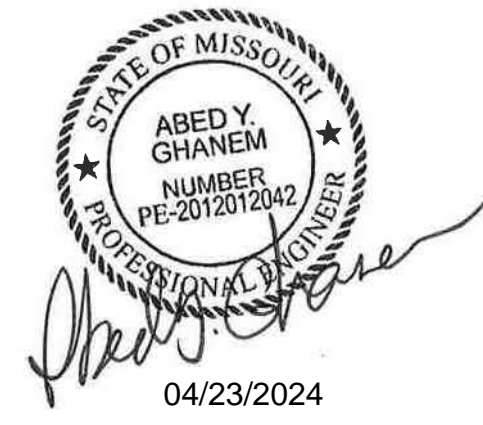
- EXTERIOR AND INTERIOR REFRIGERANT SUCTION AND HOT GAS BY-PASS PIPING SHALL BE INSULATED WITH EITHER CELLULAR GLASS, FLEXIBLE ELASTOMERIC OR CLOSED CELL TYPE INSULATION WITH VAPOR BARRIER AND FIELD APPLIED JACKET.
- INTERIOR CONDENSATE DRAIN SHALL BE INSULATED WITH EITHER CELLULAR GLASS, FLEXIBLE ELASTOMERIC OR CLOSED CELL TYPE INSULATION WITH VAPOR BARRIER.
- INTERIOR HEATING/COOLING SUPPLY AND RETURN DUCTWORK AND PLENUMS SHALL BE INSULATED WITH EXTERIOR BLANKET OR BOARD INSULATION WITH VAPOR BARRIER.
- EXTERIOR HEATING OR COOLING SUPPLY AND RETURN DUCTWORK AND PLENUMS SHALL BE INSULATED WITH EXTERIOR BLANKET OR BOARD INSULATION WITH VAPOR BARRIER AND PROTECTIVE COVER/JACKET.

GENERAL NOTES - GAS PIPING

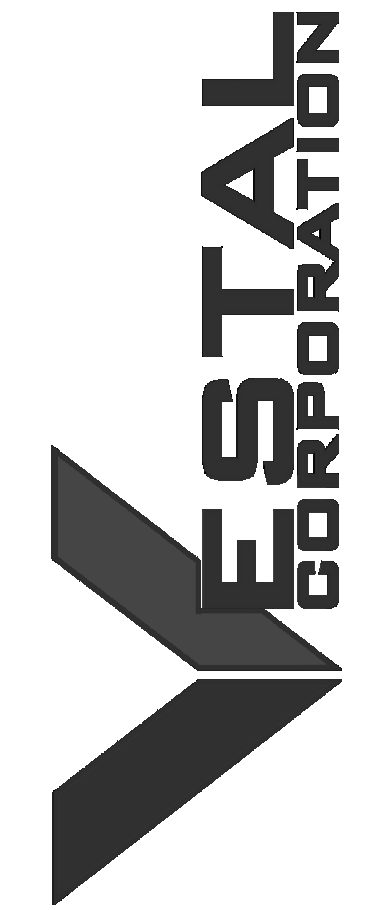
- LOW PRESSURE GAS STOPS, 2 INCHES AND SMALLER SHALL BE AGA CERTIFIED DESIGN FOR 2 PSIG OR LESS NATURAL GAS, WITH AGA STAMP, PLUG OR BALL TYPE, BRONZE BODY AND BRONZE PLUG.
- GAS VALVES 2 INCHES AND SMALLER SHALL BE RATED FOR 150 PSI WOG, BRONZE BODY, BRONZE PLUG, STRAIGHT-AWAY PATTERN SQUARE HEAD, TAPERED PLUG TYPE, WITH THREADED ENDS.
- GAS VALVES 2-1/2 INCHES AND LARGER, CLASS 125 OR 175 WOG, LUBRICATED PLUG TYPE, SEMI-STEEL BODY, WRENCHED OPERATED WITH FLANGED ENDS.
- EARTHQUAKE ACTUATED AUTOMATIC SHUTOFF VALVES SHALL BE MECHANICAL OPERATION WITH THREADED ENDS FOR 2 INCHES AND SMALLER AND FLANGED ENDS FOR 2-1/2 INCHES AND LARGER.
- GAS SHUTOFF VALVE SHALL BE PROVIDED DOWNSTREAM OF GAS METER, OUTSIDE BUILDING AT GAS SERVICE ENTRANCE.
- NATURAL GAS PIPING ABOVE GROUND WITHIN BUILDING SHALL BE STEEL PIPE, BUTT WELDING FITTINGS AND WELDED JOINTS.
- PROVIDE GAS VALVES FOR SHUT-OFF TO APPLIANCES.
- GAS PIPING MAY BE INSTALLED IN ACCESSIBLE ABOVE CEILING SPACES, HOWEVER LOCATION OF VALVES IN SUCH SPACES ARE PROHIBITED.
- DO NOT INSTALL GAS PIPING IN OR THROUGH CIRCULATING AIR DUCTS, CLOTHES OR TRASH CHUTES, CHIMNEYS OR GAS VENTS (FLUES), VENTILATING DUCTS, OR DUMBWAITER OR ELEVATOR SHAFTS.

GENERAL NOTES - PACKAGED OUTDOOR EQUIPMENT

- ROOF CURB SHALL BE MANUFACTURER'S STANDARD CONSTRUCTION, INSULATED AND HAVE A CORROSION PROTECTIVE COATING, COMPLETE WITH FACTORY INSTALLED WOOD NAILER AND DRAIN NIPPLE.
- ROOF TOP UNITS SHALL BE EQUIPPED WITH LOW AMBIENT CONTROL DESIGNED TO OPERATE AT TEMPERATURES DOWN TO 0 DEG. F.
- GROUND MOUNTED CONDENSERS SHALL BE INSTALLED 4 INCH THICK REINFORCED CONCRETE PAD, 4 INCHES LARGER ON EACH SIDE THAN THE CONDENSING UNIT.



PROFESSIONAL SEAL



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375 SOUTH COMMERCIAL
AVENUE, ST. CLAIR
MISSOURI 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	2023.12.06
B	DD	2024.02.19
C	IFB	2024.04.23

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CAD DWG FILE:
DRAWN BY: NJA
CHECKED BY: AYG
DESIGNED BY: NJA

SHEET TITLE:

**GROUND FLOOR
PLAN - HVAC DEMO**

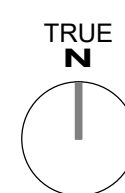
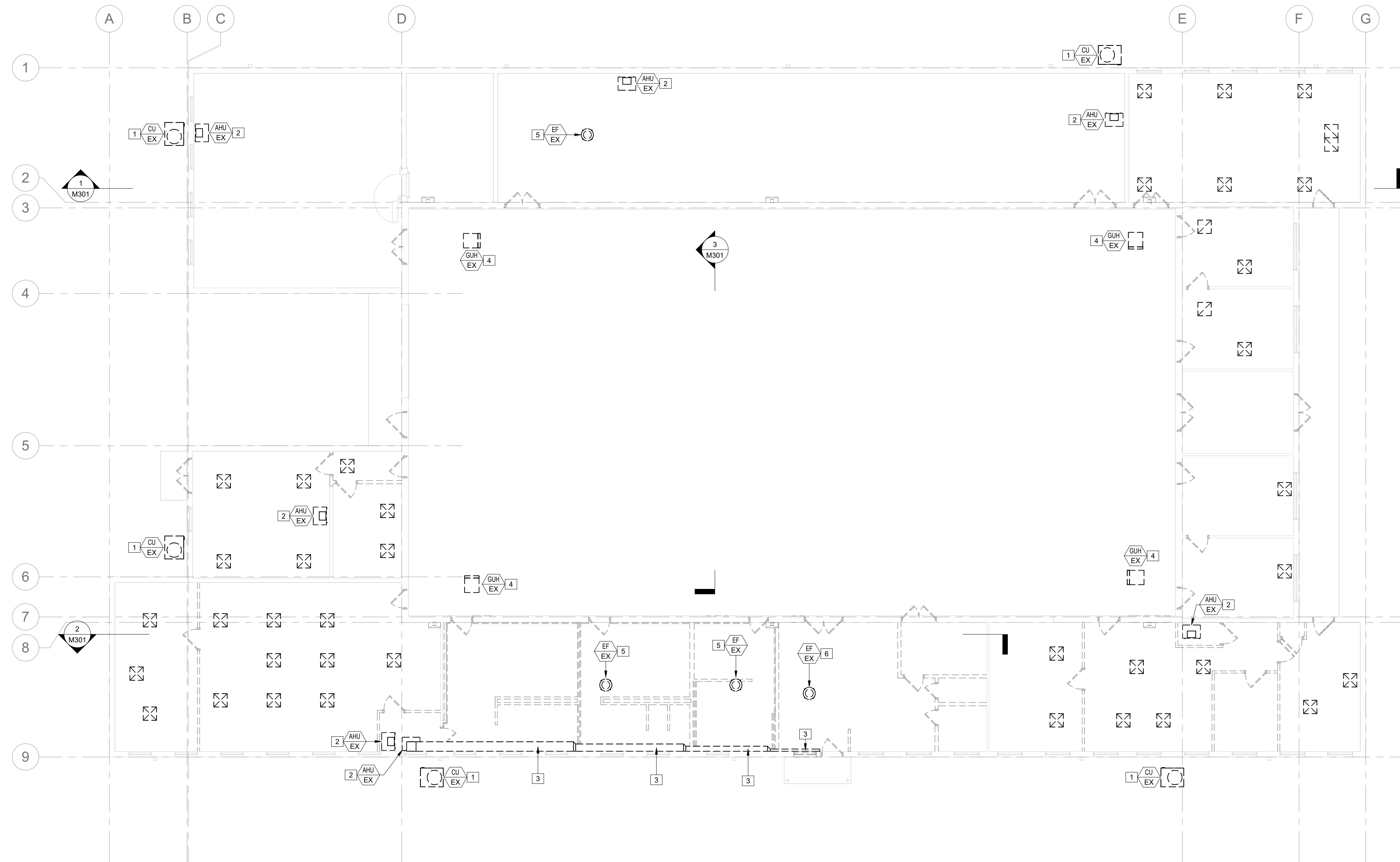
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MD101

35 OF 85 SHEETS
2024.04.23

KEYED NOTES:

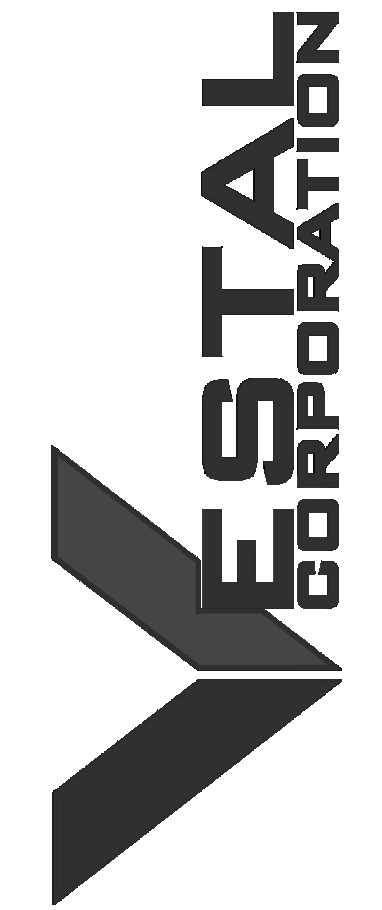
- EXISTING OUTDOOR CONDENSING UNIT AND ASSOCIATED POWER AND REFRIGERANT LINE TO BE DEMOLISHED AND DISPOSED OF.
- EXISTING AIR HANDLING UNIT/FURNACE AND ASSOCIATED GAS PIPING AND FLUE DUCTWORK TO BE DEMOLISHED AND DISPOSED OF. GAS PIPING TO BE DEMOLISHED BACK TO MAIN SERVICE LINE AT THE GAS METER IN THE SOUTH FACE OF BUILDING. PATCH ALL WALL AND/OR ROOF PENETRATIONS ACCORDINGLY.
- EXISTING DUCTWORK AND ASSOCIATED HANGERS TO BE DEMOLISHED AND DISPOSED OF.
- EXISTING GAS UNIT HEATERS (GUH) TO BE REMOVED AND DISPOSED OF. GAS PIPING TO BE DEMOLISHED BACK TO MAIN SERVICE LINE AT THE GAS METER IN THE SOUTH FACE OF BUILDING. ASSOCIATED FLUE DUCTWORK TO REMAIN FOR INSTALLATION OF NEW UNITS.
- EXISTING ROOF EXHAUST FAN TO BE DEMOLISHED AND DISPOSED OF. CAP AND SEAL ROOF CURB WEATHER TIGHT.
- EXISTING ROOF EXHAUST VENTILATOR SERVING RANGE HOOD TO BE DEMOLISHED AND DISPOSED OF. DEMOLISH ALL ASSOCIATED DUCTWORK AND CAP AND SEAL ROOF CURB WEATHER TIGHT.



1 GROUND FLOOR PLAN - HVAC DEMO
MD101 SCALE: 1/8" = 1'-0"



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375 SOUTH COMMERCIAL
AVENUE, ST. CLAIR
MISSOURI 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	2023.12.06
B	DD	2024.02.19
C	IFB	2024.04.23

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CAD DWG FILE:
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SHEET TITLE:

OVERALL GROUND
FLOOR PLAN - HVAC

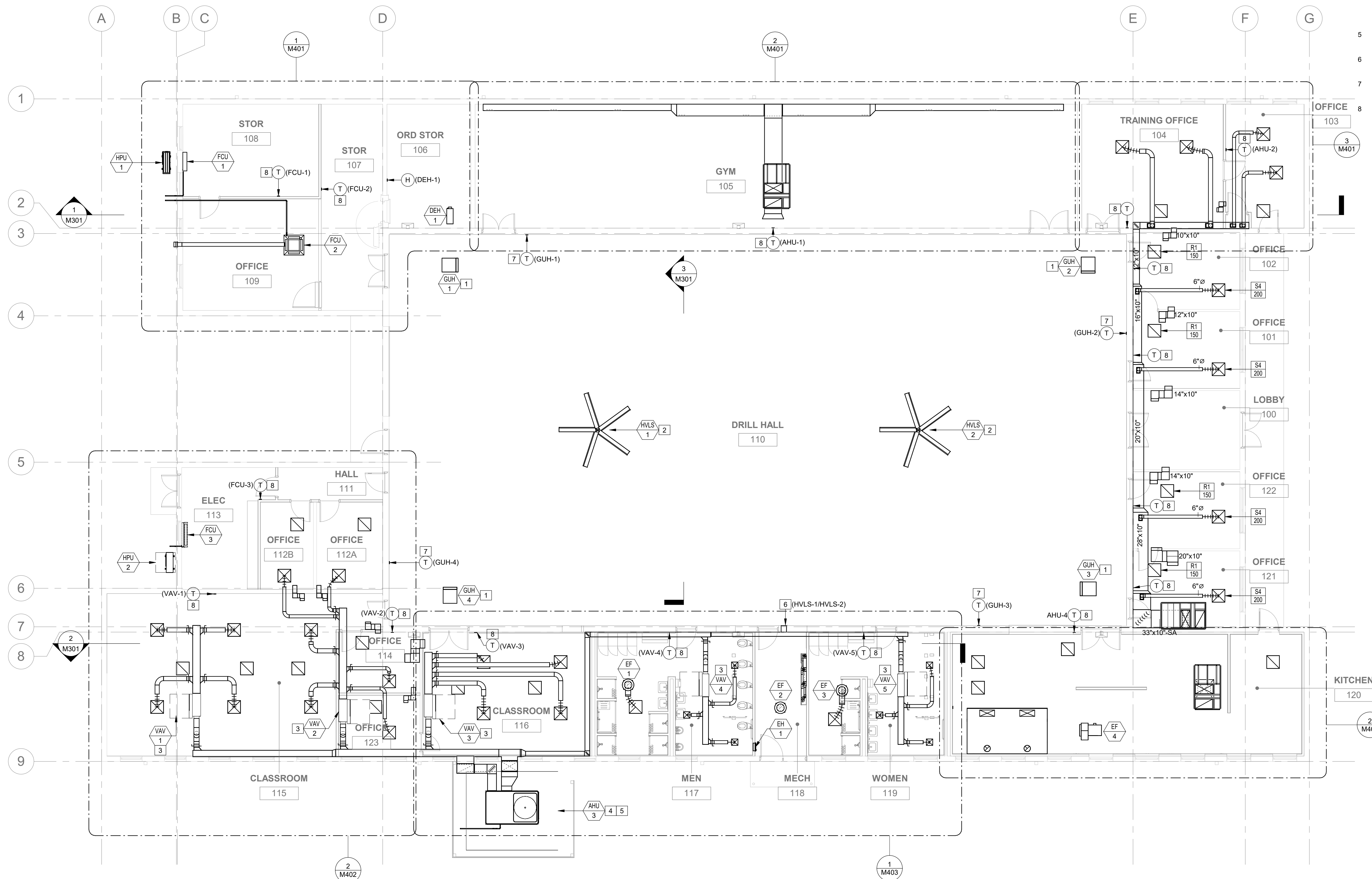
SHEET NUMBER:

M101

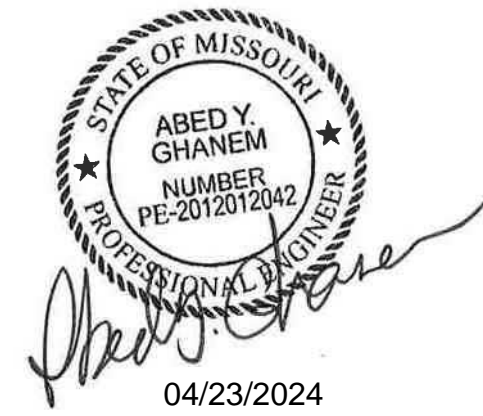
36 OF 85 SHEETS
2024.04.23

KEYED NOTES:

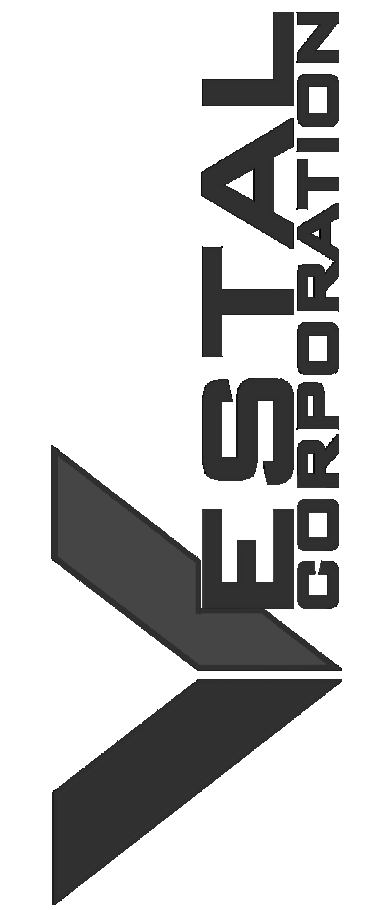
- 1 PROVIDE AND INSTALL GUH PER MANUFACTURER RECOMMENDATIONS. PROVIDE WITH NEW GAS SERVICE LINE AND CONNECT TO EXHAUST FLUE OFFSETTING FROM UNIT AS NEEDED. INSTALL UNIT AT ELEVATION TO MATCH ORIGINAL INSTALLATION. SUSPEND FROM STRUCTURE WITH HANGER ROD SIMILAR TO EXISTING.
- 2 PROVIDE HIGH VOLUME LOW SPEED (HVLS) FAN AND SUSPEND FROM JOISTS WITH UNIVERSAL MOUNTING KIT FROM MANUFACTURER. INSTALLED HEIGHT TO BE 15'-6" AFF.
- 3 PROVIDE A SINGLE DUCT VARIABLE AIR VOLUME (VAV-X) TERMINAL UNIT AND LOCATE AS SHOWN ON PLAN. FOR PROPER SUPPLY AIR FLOW, PROVIDE A MINIMUM LENGTH OF THREE TIMES THE INLETS DIAMETER, MEASURED FROM VAV TERMINAL INLET TO TRANSITION.
- 4 PROVIDE AND INSTALL PACKAGED AHU AND ASSOCIATED DUCTWORK. GAS & CONDENSATE PIPING AND CONTROL PER MFG'S INSTRUCTIONS. MOUNT UNIT ON GRADE WITH 6" CONCRETE PAD. PROVIDE RTU WITH MANUFACTURER'S RECOMMENDED CLEARANCE.
- 5 EXTEND CONDENSATE PIPING AND DISCHARGE AT A MIN. OF 5 FT AWAY FROM THE AHU. REFER TO CONDENSATE PIPING DETAIL.
- 6 HVLS CONTROLLER TO BE MOUNTED ON WALL AS SHOWN IN PLANS 4" ABOVE FINISH FLOOR. CONTROLLER TO SERVE TWO FANS.
- 7 GAS UNIT HEATER CONTROLLER TO BE MOUNTED ON WALL AS SHOWN IN PLANS 4" ABOVE FINISH FLOOR.
- 8 MOUNT T-STAT AT 48" AFF.



TRUE N
1 OVERALL GROUND FLOOR PLAN - HVAC
M101 SCALE: 1/8" = 1'-0"



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FACILITY # 8136304011

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CAD DWG FILE:
DRAWN BY: NJA
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SHEET TITLE:

OVERALL ROOF
PLAN - HVAC

SHEET NUMBER:

M102

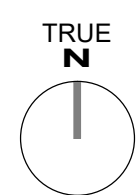
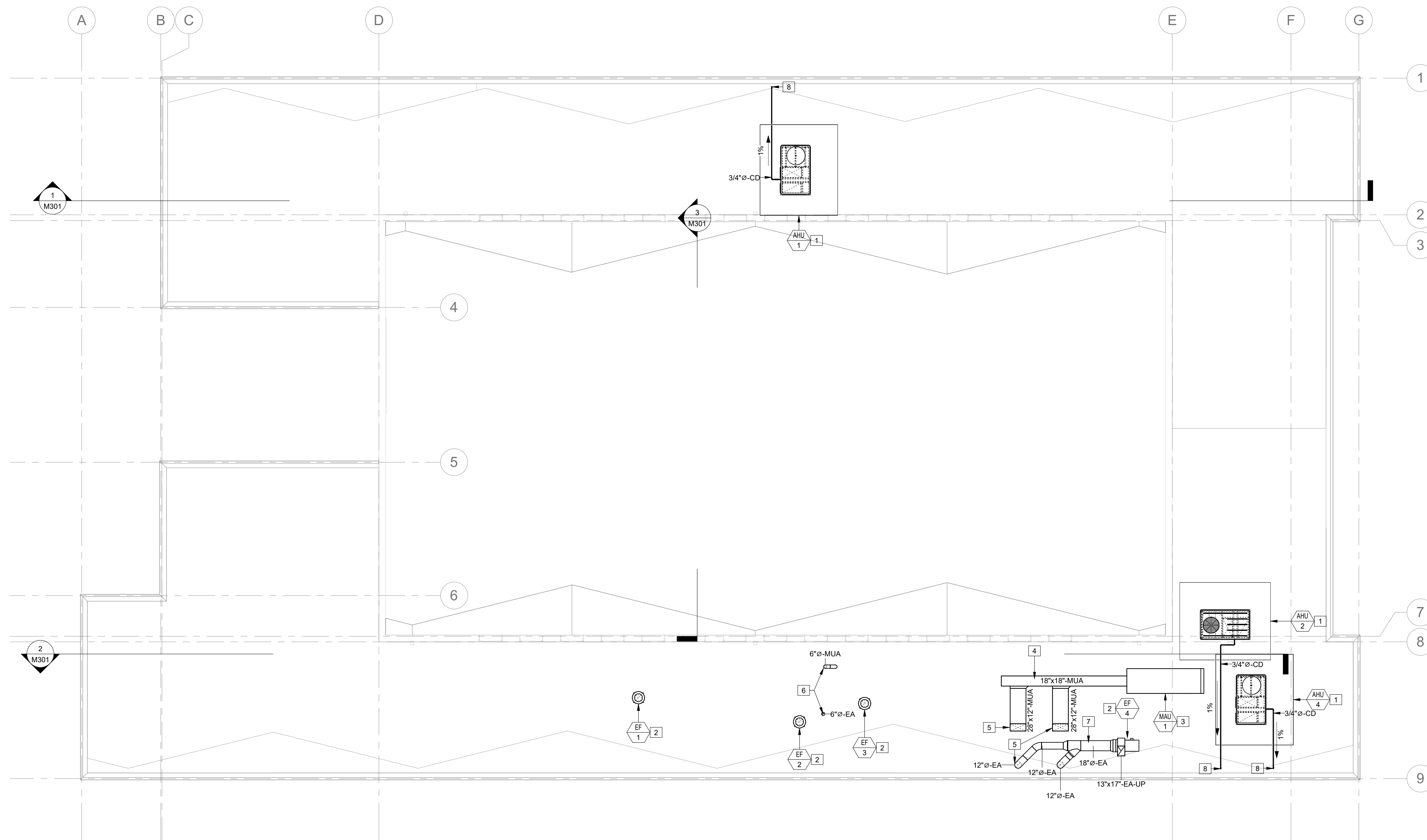
37 OF 85 SHEETS
2024.04.23

SAFETY NOTE:

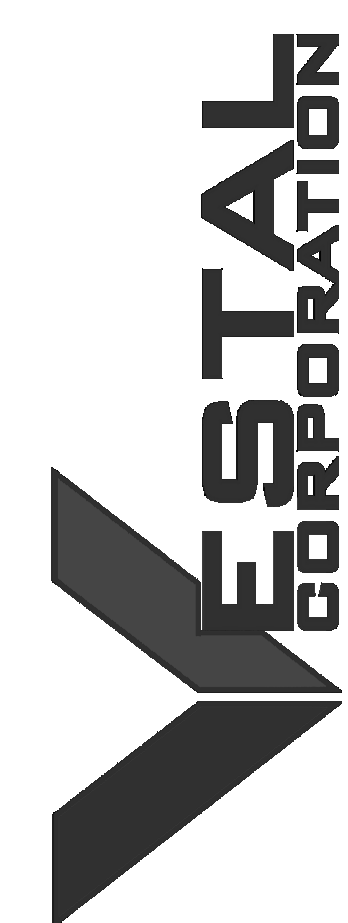
1. ALL HVAC PERSONNEL SHALL UTILIZE SAFETY HARNESS OR FALL ARREST/ANCHORING SYSTEM WHEN PERFORMING ANY WORK ON THE ROOF IN ACCORDANCE WITH OSHA FALL PROTECTION REQUIREMENTS. SAFETY SIGNS/LABELS SHALL BE POSTED ON ALL EXTERIOR WALLS WHERE ACCESS IS PERMITTED TO THE HVAC EQUIPMENT ON THE ROOF.

KEYED NOTES:

1. PROVIDE AHU, MOUNT ON MANUFACTURERS 14" ROOF CURB AND INSTALL UNIT AND ASSOCIATED DUCTWORK, PIPING & CONTROL PER MANUFACTURER'S INSTRUCTIONS. COORDINATE DUCTS DROPS WITH EXISTING ROOF FRAMING. ROUTE CONDENSATE PIPING TO SCUPPER DRAINS AS SHOWN IN PLAN.
2. PROVIDE EXHAUST/GREASE FAN AND MOUNT ON MANUFACTURER'S 14" EQUIPMENT ROOF CURB. INSTALL UNIT AND ASSOCIATED DUCT AND CONTROLS PER MANUFACTURER'S INSTRUCTIONS. SLOPE DUCTWORK AT MINIMUM OF 2%. REFER TO SCHEDULE AND DETAIL FOR MORE INFORMATION. INTERLOCK WITH MAU-1 AND KITCHEN HOOD SWITCH.
3. PROVIDE MAU, MOUNT ON MANUFACTURERS 14" ROOF CURB AND INSTALL UNIT AND ASSOCIATED DUCTWORK, GAS PIPING & CONTROL PER MANUFACTURER'S INSTRUCTIONS. INTERLOCK WITH EF-4 AND KITCHEN HOOD SWITCH.
4. ROUTE DUCT ON THE ROOF AND PROVIDE A MIN R-VALUE OF 8 FOR THE MAKEUP AIR DUCT. SUPPORT DUCT ON THE ROOF PER SMACNA STANDARDS.
5. PROVIDE ROOF CURB FOR DUCT PENETRATION THRU THE ROOF. PENETRATION SHALL BE WEATHER TIGHT.
6. COMBUSTION AIR INTAKE AND EXHAUST PENETRATE THROUGH ROOF FOR TANKLESS WATER HEATERS.
7. SLOPE DUCTWORK AT MINIMUM 2% DOWN TO KITCHEN HOOD. REFER TO DETAIL #1 ON SHEET M502 FOR MORE INFORMATION.
8. DISCHARGE CONDENSATE PIPING NEAR SCUPPER DRAINS AS SHOWN IN PLAN.



1 OVERALL ROOF PLAN - HVAC
M102 SCALE: 1/8" = 1'-0"



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A	IFB	2024.04.23

ISSUE DATE: 2023.12.06

CAD DWG FILE:
DRAWN BY: NJA
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SHEET TITLE:
**OVERALL GAS
PIPING PLAN - HVAC**

SHEET NUMBER:

M103

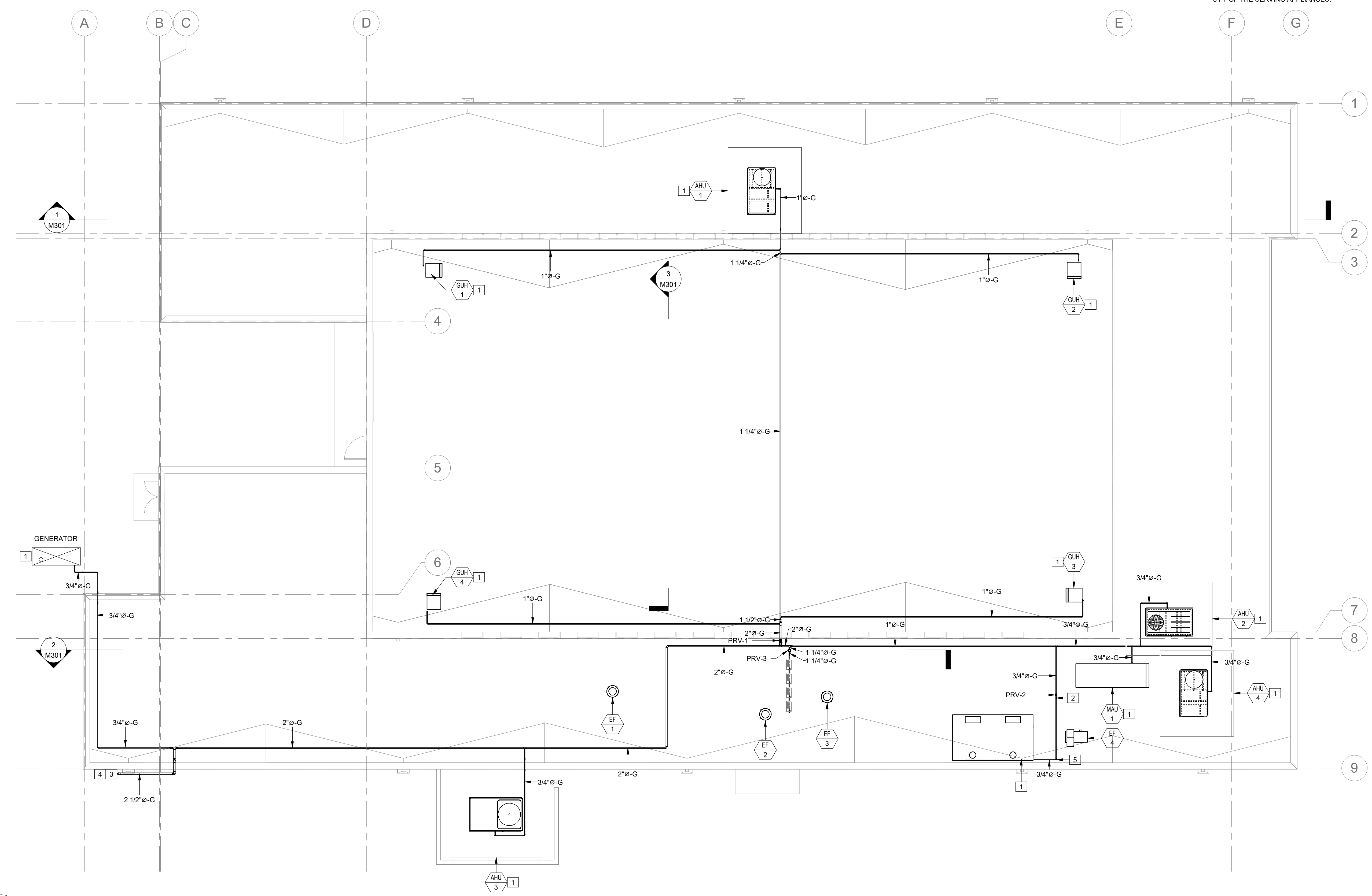
38 OF 85 SHEETS
2024.04.23

SAFETY NOTE:

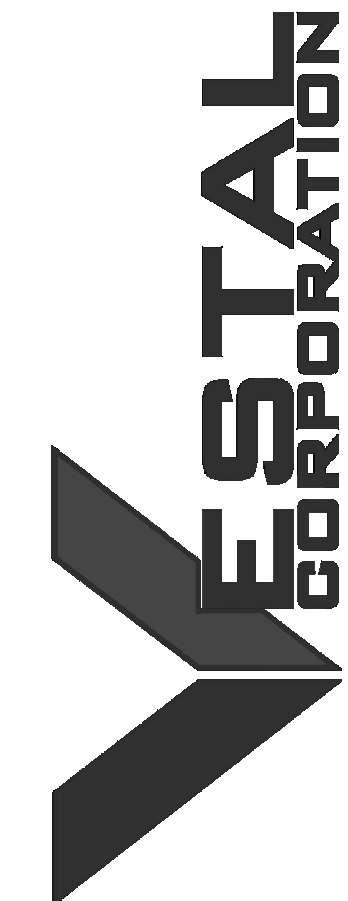
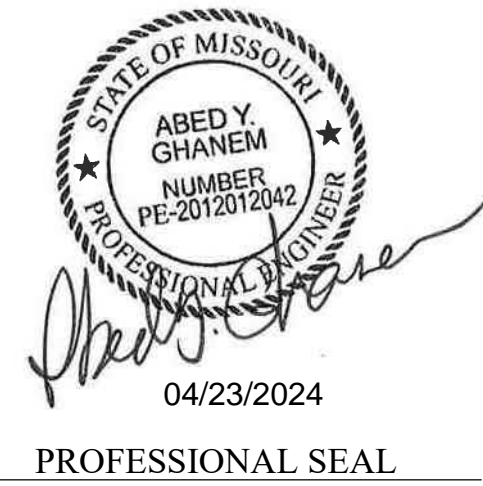
1. ALL HVAC PERSONNEL SHALL UTILIZE SAFETY HARNESS OR FALL ARREST/ANCHORING SYSTEM WHEN PERFORMING ANY WORK ON THE ROOF IN ACCORDANCE WITH OSHA FALL PROTECTION REQUIREMENTS. SAFETY SIGNS/LABELS SHALL BE POSTED ON ALL EXTERIOR WALLS WHERE ACCESS IS PERMITTED TO THE HVAC EQUIPMENT ON THE ROOF.

KEYED NOTES:

1. PROVIDE GAS TO EACH UNIT AND INSTAL PER MFG'S INSTRUCTIONS. REFER TO GAS REGULATOR SCHEDULE FOR MORE INFO.
2. PENETRATE GAS PIPING DOWN THROUGH ROOF. ROUTE REMAINING PIPING AS HIGH AS POSSIBLE BELOW ROOF DECK.
3. PROVIDE NATURAL GAS SEISMIC SHUT-OFF VALVE TO SHUT OFF THE GAS FLOW TO THE BUILDING DURING AN EARTHQUAKE EVENTS. USE PACIFIC SEISMIC PRODUCTS. 2-1/2" MODEL 318F FLANGED HORIZONTAL OR "EQUAL".
4. FIELD VERIFY THAT AN EXISTING GAS METER IS ADEQUATE TO ACCOMMODATE THE GAS LOAD OF 3.310 MBH. COORDINATE WITH LOCAL GAS PROVIDER AS NEEDED TO REPLACE THE EXISTING GAS METER, AS NEEDED. GAS PIPING IS SIZED BASED ON DELIVERY PRESUIRE OF 2 PSIG AT THE METER'S DISCHARGE. FIELD VERIFY SIZE AND LOCATION OF EXOSTING GAS METER.
5. PROVIDE AN EMERGENCY SHUT-OFF VALVE TO SHUT OFF THE GAS FLOW TO THE KITCHEN COOKING APPLIANCES. THE VALVE SHALL NOT BE LOCATED MORE THAN 6 FT OF THE SERVING APPLIANCES.



TRUE N
1 OVERALL GAS PIPING ROOF PLAN - HVAC
M103 SCALE: 1/8" = 1'-0"



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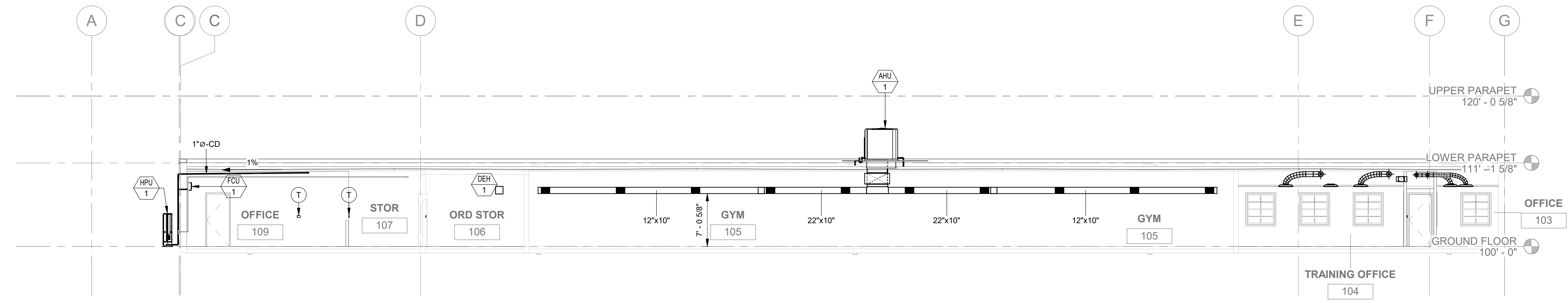
PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	2023.12.06
B	DD	2024.02.19
C	IFB	2024.04.23

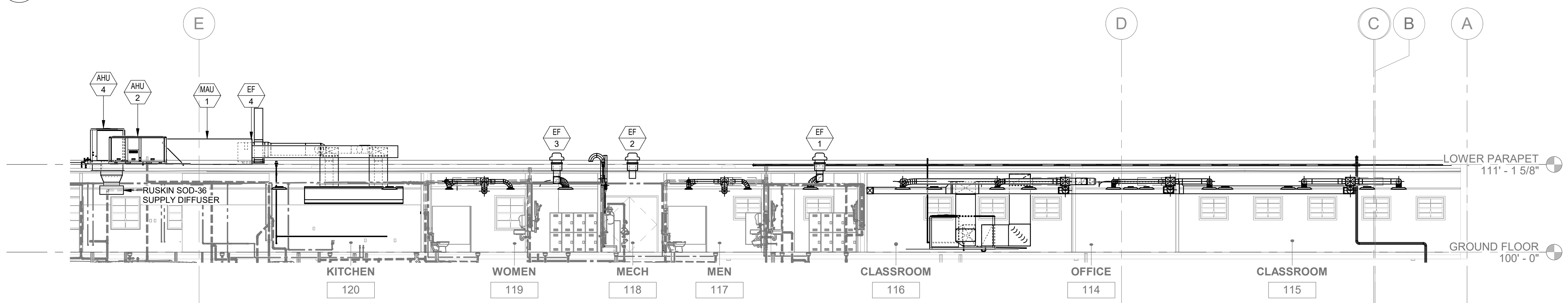
ISSUE DATE: 2023.12.06
CAD DWG FILE:
DRAWN BY: NJA
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DESIGNED BY: NJA

SHEET TITLE:
HVAC SECTIONS

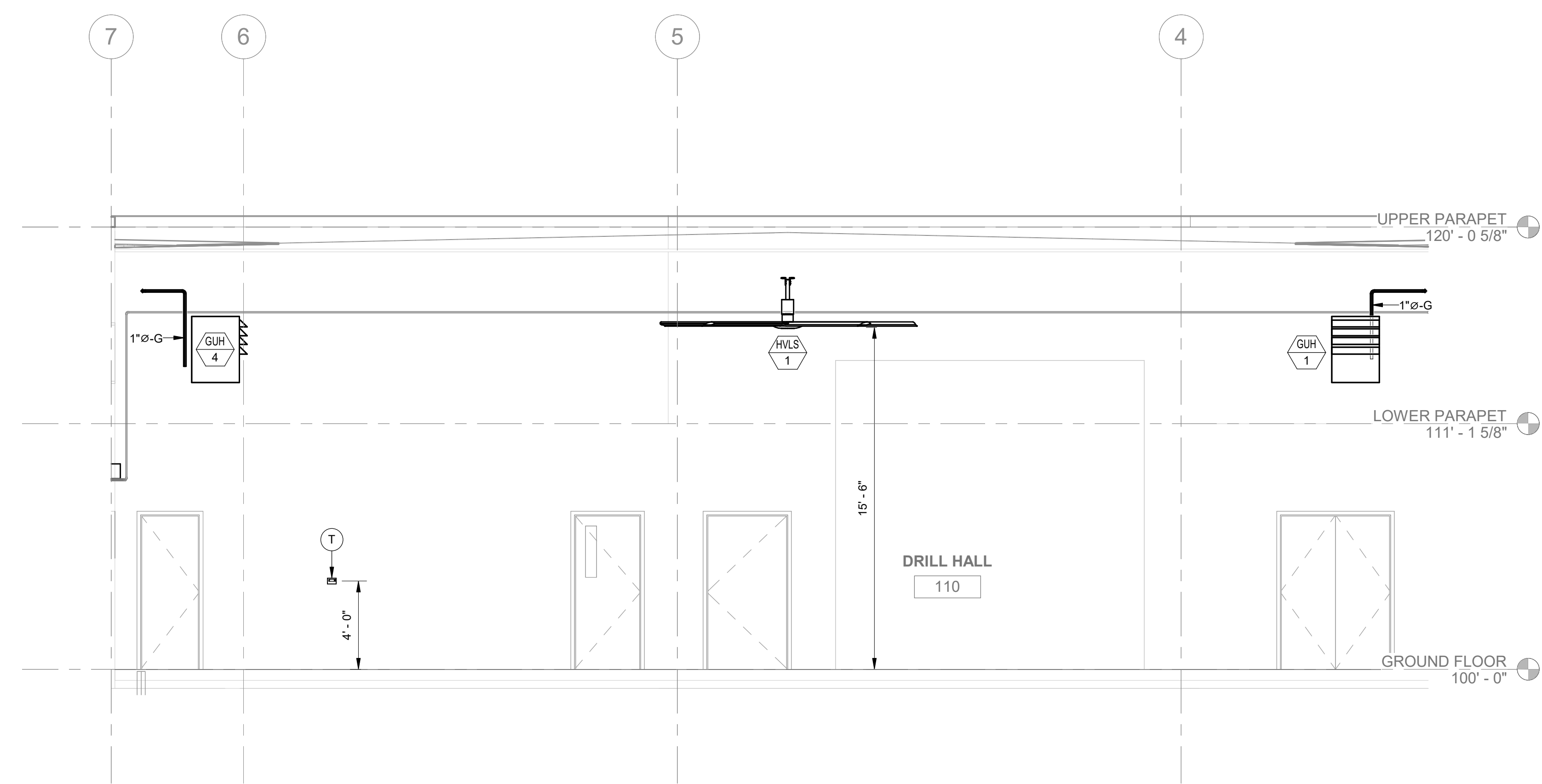
SHEET NUMBER:
M301
39 OF 85 SHEETS
2024.04.23



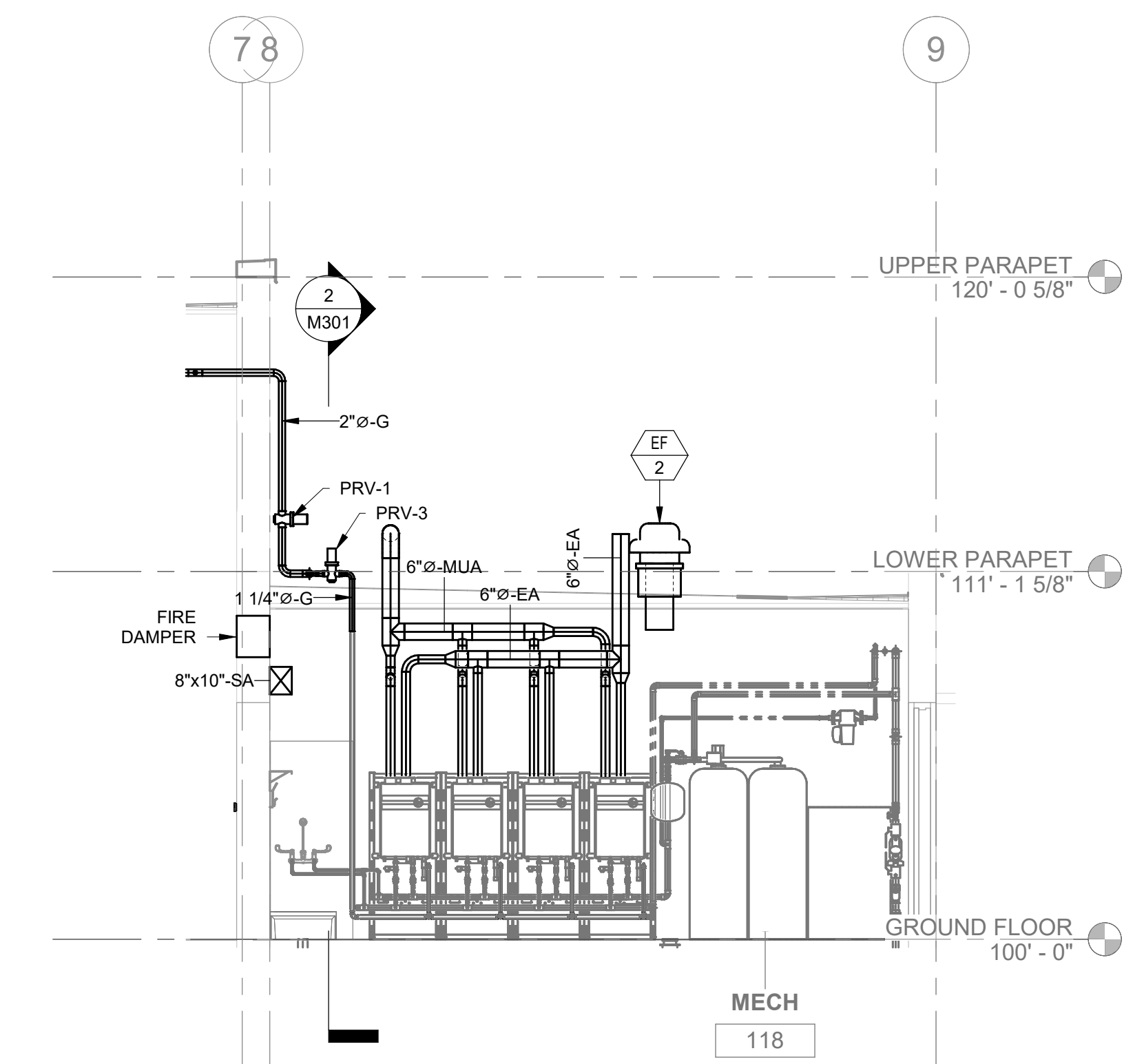
1 NORTH HVAC SECTION
SCALE: 1/8" = 1'-0"



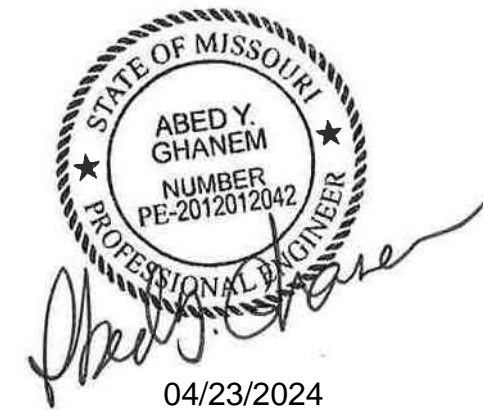
2 SOUTH HVAC SECTION
SCALE: 1/8" = 1'-0"



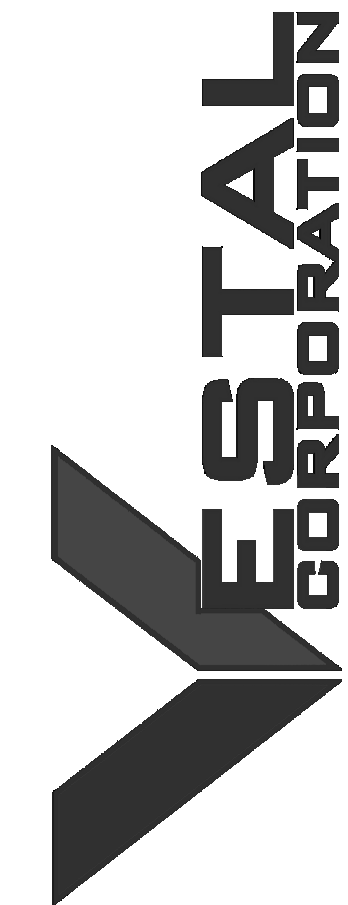
3 DRILL HALL HVAC SECTION
SCALE: 1/4" = 1'-0"



4 MECHANICAL ROOM SECTION
SCALE: 1/4" = 1'-0"



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ISSUE DATE: 2023.12.06

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SHEET TITLE:

ENLARGED FLOOR
PLANS - HVAC

SHEET NUMBER:

M401

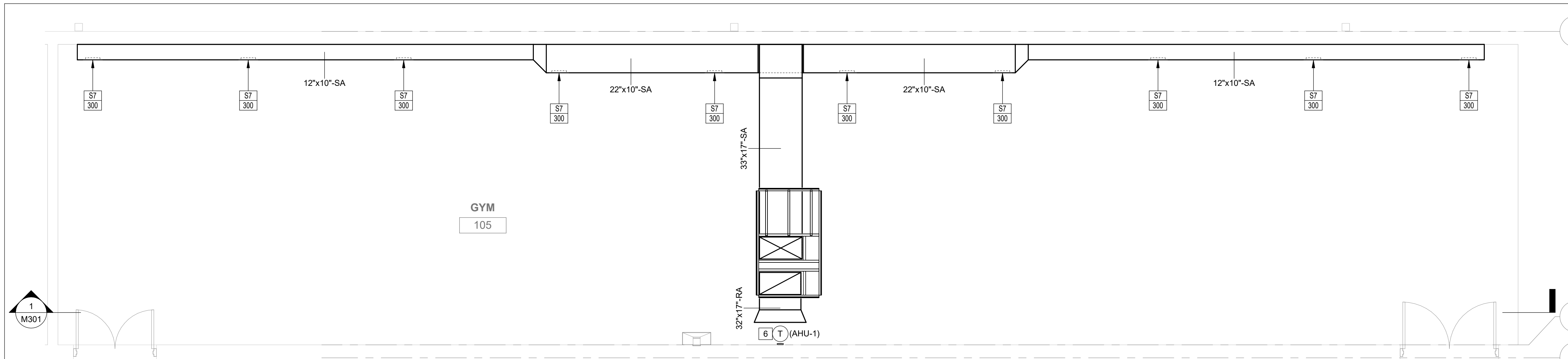
40 OF 85 SHEETS
2024.04.23

GENERAL NOTES:

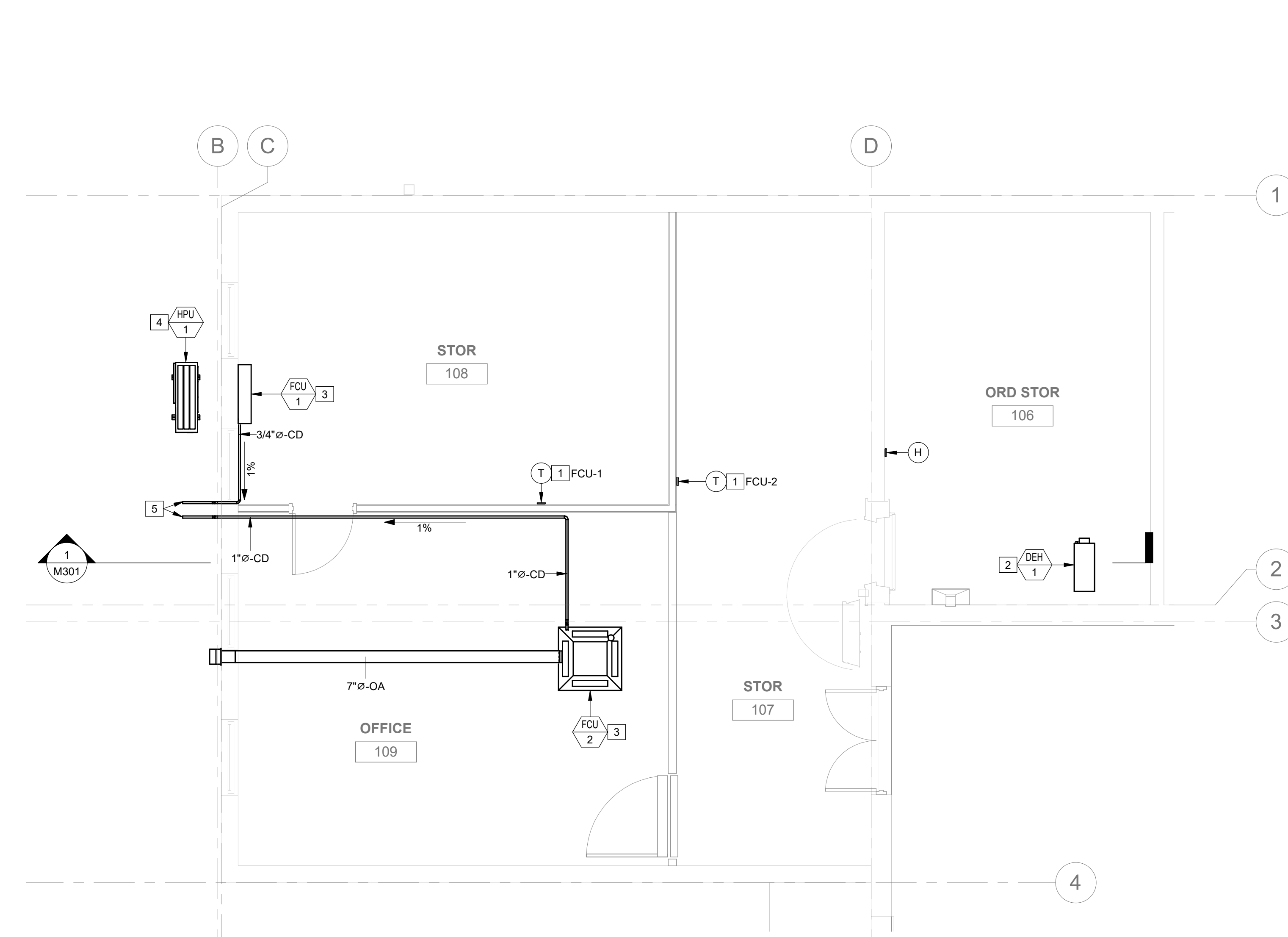
- ALL MAIN DUCTWORK FROM AHU TO BE ROUTED BELOW CEILING ELEVATION. SOFFIT TO BE INSTALLED AROUND MAIN DUCTWORK.
- ALL VAV TAPS ARE TO BE OFFSET FROM MAIN DUCTWORK TO ALLOW FOR VAV INSTALLATION CONCEALED ABOVE CEILING.
- AIR TERMINALS ARE TO BE COORDINATED WITHIN CEILING GRIDS. COORDINATE LOCATION WITH LIGHTING FIXTURES.

KEYED NOTES:

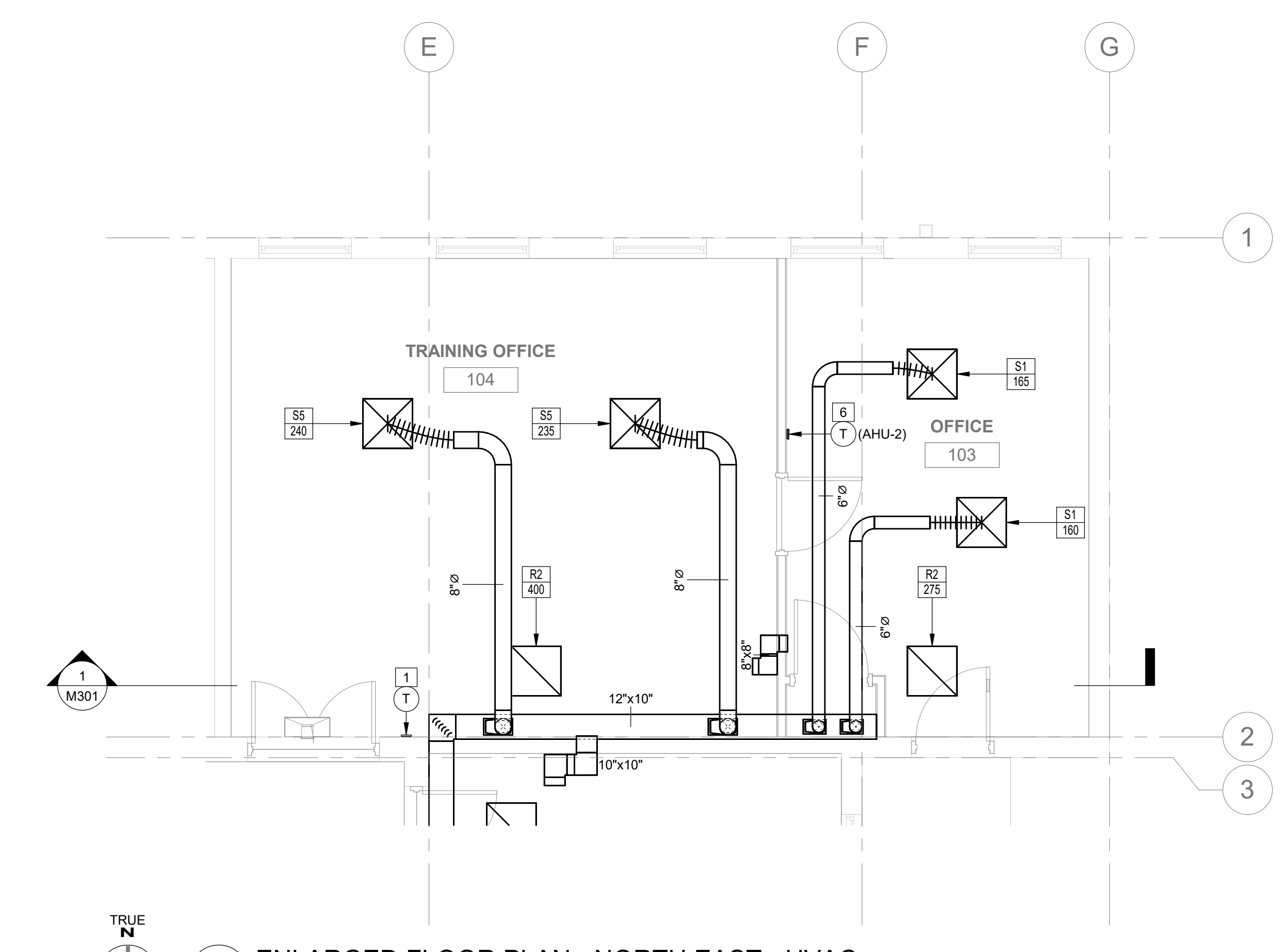
- PROVIDE DIGITAL THERMOSTAT AND MOUNT AT 48" AFF. COORDINATE WITH LIGHT SWITCHES OR OTHER WALL MOUNTED ITEMS.
- PROVIDE AND INSTALL DEHUMIDIFIER (DEH) PER MANUFACTURER'S INSTRUCTIONS. MOUNT ON WALL BRACKET 8' AFF AND RUN DRAIN FROM UNIT TO EXISTING FLOOR DRAIN. REFER TO SCHEDULE FOR MORE INFORMATION.
- PROVIDE AND INSTALL FCU AND ASSOCIATED DUCTWORK, PIPING AND CONTROL PER MANUFACTURER'S INSTRUCTIONS. MOUNT UNIT AT 8FT AFF. CONNECT INSULATED REFRIGERANT LINES AND SLOPE INSULATED COPPER CONDENSATE PIPING AT 1% TO DISCHARGE ON GRADE.
- PROVIDE AND INSTALL OUTDOOR HPU TO SERVE VRF FCU(S) PER MANUFACTURER'S INSTRUCTIONS. INSTALL LEVEL ON HOUSEKEEPING PAD IN EXISTING CONDENSER UNIT LOCATION. REFER TO SCHEDULE FOR MORE INFORMATION.
- FCU CONDENSATE TO DISCHARGE ON GRADE WITH SPLASH BLOCK.
- PROVIDE DIGITAL PROGRAMMABLE THERMOSTAT AND MOUNT AT 48" AFF. COORDINATE WITH LIGHT SWITCHES OR OTHER WALL MOUNTED ITEMS.



TRUE N
2 ENLARGED FLOOR PLAN - NORTH EAST - HVAC
M401 SCALE: 1/4" = 1'-0"



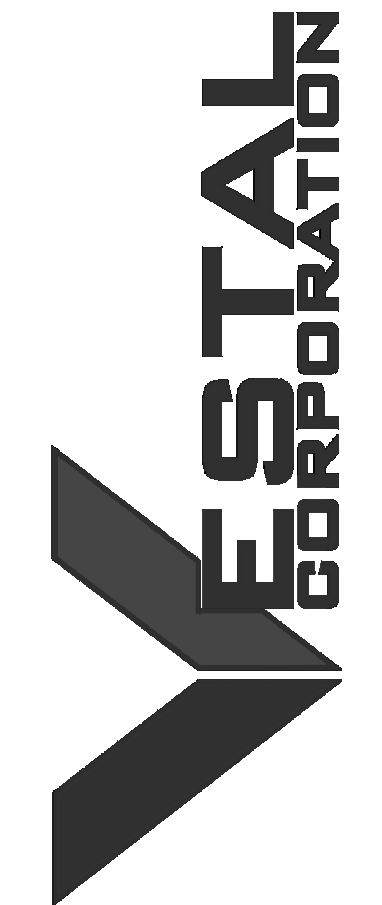
TRUE N
1 ENLARGED FLOOR PLAN - NORTH STORAGE - HVAC
M401 SCALE: 1/4" = 1'-0"



TRUE N
3 ENLARGED FLOOR PLAN - NORTH EAST - HVAC
M401 SCALE: 1/4" = 1'-0"



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SHEET TITLE:

ENLARGED FLOOR
PLANS - HVAC

SHEET NUMBER:

M402

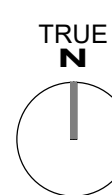
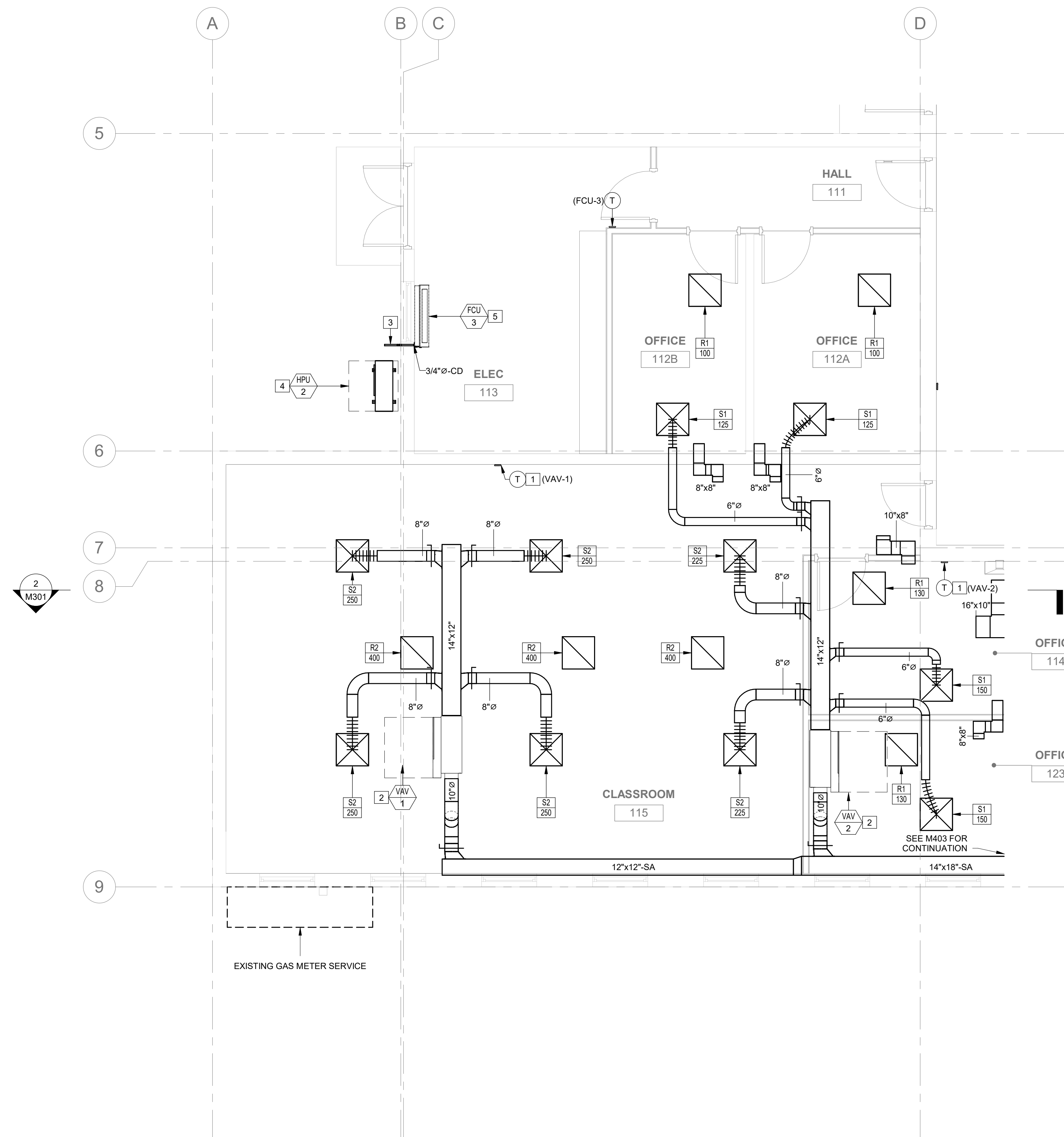
41 OF 85 SHEETS
2024.04.23

GENERAL NOTES:

- ALL MAIN DUCTWORK FROM AHU TO BE ROUTED BELOW CEILING ELEVATION. SOFFIT TO BE INSTALLED AROUND MAIN DUCTWORK.
- ALL VAV TAPS ARE TO OFFSET FROM MAIN DUCTWORK TO ALLOW FOR VAV INSTALLATION CONCEALED ABOVE CEILING.
- AIR TERMINALS ARE TO BE COORDINATED WITHIN CEILING GRIDS. COORDINATE LOCATION WITH LIGHTING FIXTURES.

KEYED NOTES:

- PROVIDE DIGITAL THERMOSTAT AND MOUNT AT 48" AFF. COORDINATE WITH LIGHT SWITCHES OR OTHER WALL MOUNTED ITEMS.
- PROVIDE A SINGLE DUCT VARIABLE AIR VOLUME (VAV-X) TERMINAL UNIT AND LOCATE AS SHOWN ON PLAN. FOR PROPER SUPPLY AIR FLOW, PROVIDE A MINIMUM LENGTH OF THREE TIMES THE INLETS DIAMETER, MEASURED FROM VAV TERMINAL INLET TO TRANSITION.
- FCU CONDENSATE TO DISCHARGE ON GRADE WITH SPLASH BLOCK.
- PROVIDE AND INSTALL OUTDOOR HPU TO SERVE VRF FCU(S) PER MANUFACTURER'S INSTRUCTIONS. INSTALL LEVEL ON HOUSEKEEPING PAD IN EXISTING CONDENSER UNIT LOCATION. REFER TO SCHEDULE FOR MORE INFORMATION.
- PROVIDE AND INSTALL FCU AND ASSOCIATED DUCTWORK, PIPING AND CONTROL PER MANUFACTURER'S INSTRUCTIONS. MOUNT UNIT AT 8FT AFF. CONNECT INSULATED REFRIGERANT LINES AND SLOPE INSULATED COPPER CONDENSATE PIPING AT 1% TO DISCHARGE ON GRADE.



2 ENLARGED FLOOR PLAN - SOUTH WEST - HVAC
SCALE: 1/4" = 1'-0"

M402



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SHEET TITLE:

ENLARGED FLOOR
PLANS - HVAC

SHEET NUMBER:

M403

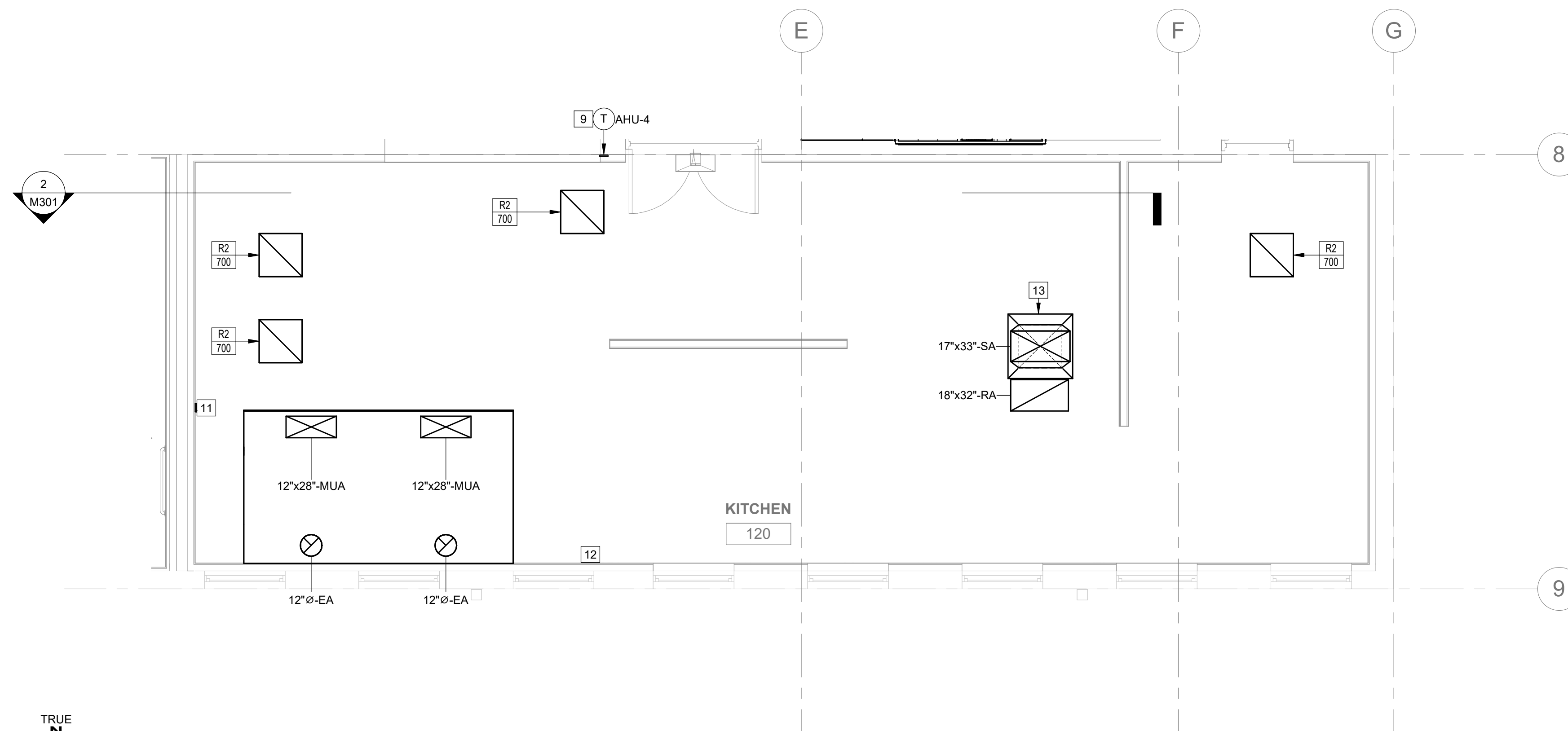
42 OF 85 SHEETS
2024.04.23

GENERAL NOTES:

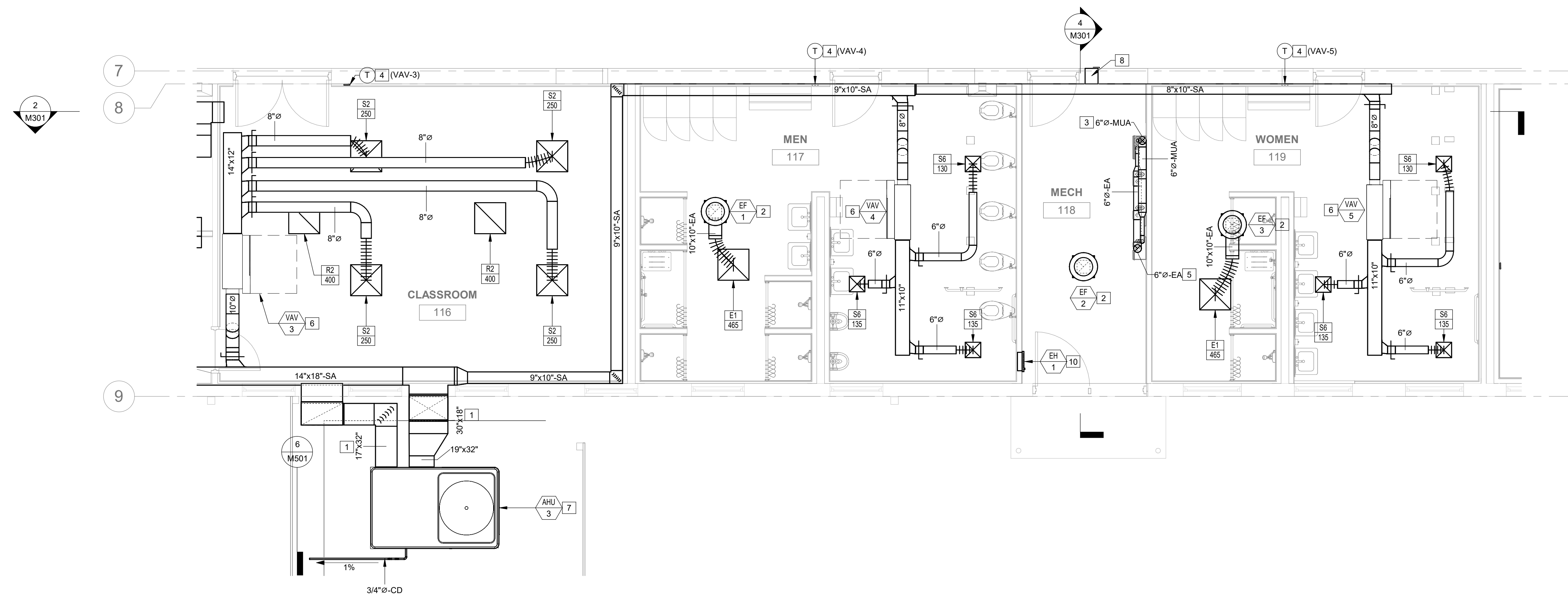
- ALL MAIN DUCTWORK FROM AHU TO BE ROUTED BELOW CEILING ELEVATION. SOFFIT TO BE INSTALLED AROUND MAIN DUCTWORK.
- ALL VAV TAPS ARE TO BE OFFSET FROM MAIN DUCTWORK TO ALLOW FOR VAV INSTALLATION CONCEALED ABOVE CEILING.
- AIR TERMINALS ARE TO BE COORDINATED WITHIN CEILING GRIDS. COORDINATE LOCATION WITH LIGHTING FIXTURES.

KEYED NOTES:

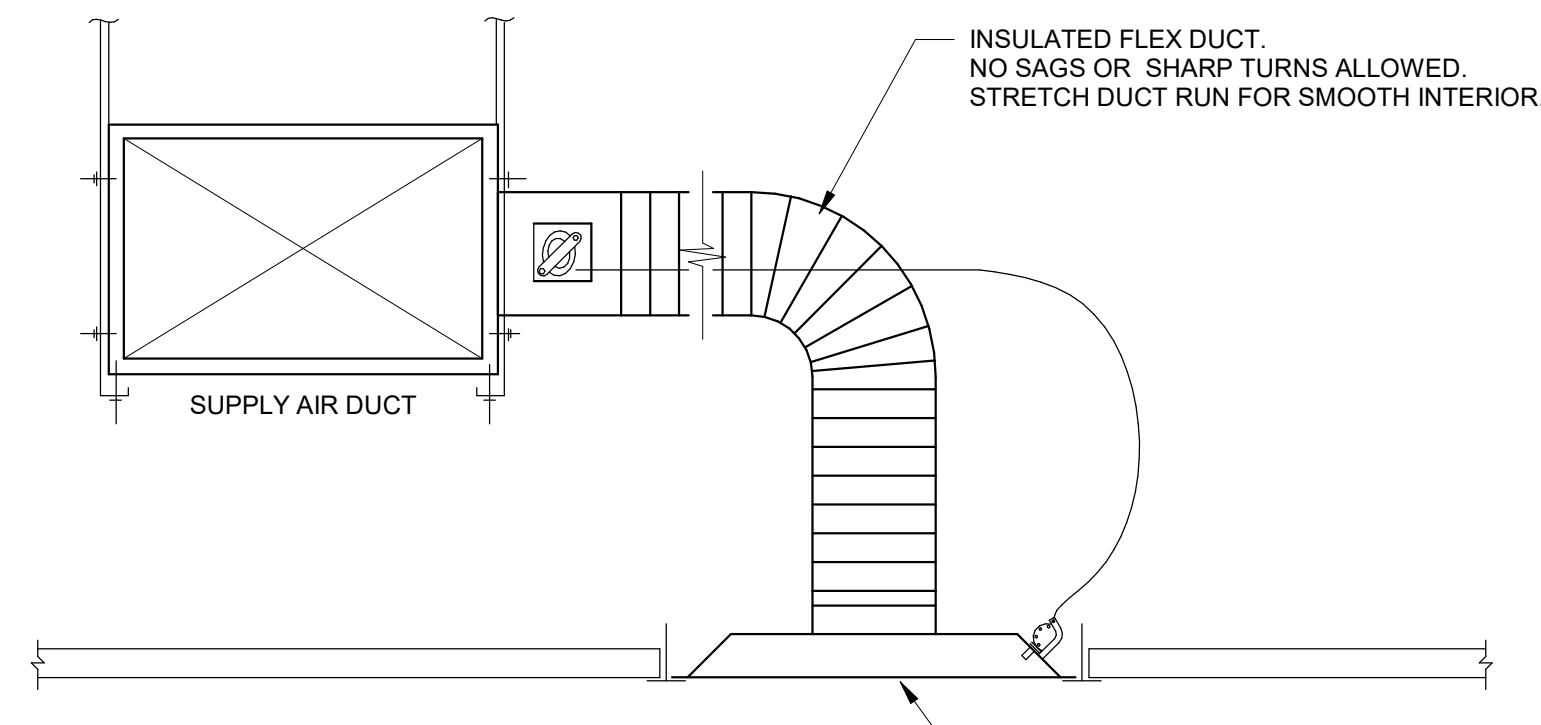
- ANY DUCTWORK LOCATED OUTSIDE THE BUILDING SHALL BE PROVIDED WITH A MIN. 2" LINER INSULATION (MIN R-VALUE OF 8). EXTERIOR DUCTWORK TO BE SEALED WEATHER TIGHT OR PROVIDED WITH JACKETING AND VAPOR BARRIER.
- EXHAUST FAN TO BE INSTALLED ON ROOF IN LOCATION SHOWN. COORDINATE LOCATION WITH EXISTING CONDITIONS AND STRUCTURE. FRAME OUT OPENING AS NEEDED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DETAIL AND SCHEDULE FOR MORE INFORMATION.
- AIR INTAKE FOR GAS WATER HEATERS TO BE ROUTED FROM ROOF. TERMINATE ROOF DUCTWORK WITH GOOSENECK. ROUTE DUCTWORK TO MAINTAIN AT MINIMUM 10' CLEARANCE FROM INTAKE TO ROOF EXHAUST VENTS/EQUIPMENT.
- PROVIDE DIGITAL THERMOSTAT AND MOUNT AT 48" AFF. COORDINATE WITH LIGHT SWITCHES OR OTHER WALL MOUNTED ITEMS.
- EXHAUST VENT FROM GAS WATER HEATERS TO BE ROUTED THROUGH ROOF. COORDINATE ROUTING WITH EXISTING CONDITIONS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. TERMINATE WITH WEATHER CAP.
- PROVIDE A SINGLE DUCT VARIABLE AIR VOLUME (VAV-X) TERMINAL UNIT AND LOCATE AS SHOWN ON PLAN. FOR PROPER SUPPLY AIR FLOW, PROVIDE A MINIMUM LENGTH OF THREE TIMES THE INLET'S DIAMETER, MEASURED FROM VAV TERMINAL INLET TO TRANSITION.
- PROVIDE AND INSTALL PACKAGED AHU AND ASSOCIATED DUCTWORK, GAS & CONDENSATE PIPING AND CONTROL PER MFG'S INSTRUCTIONS. MOUNT UNIT ON GRADE WITH 6" CONCRETE PAD. PROVIDE RTU WITH MANUFACTURER'S RECOMMENDED CLEARANCE.
- PROVIDE 15"x10" GREENHECK MODEL DFD-110 OR EQUIVALENT FIRE DAMPER. MOUNT AT 8" AFF. PROVIDE WITH FACTORY SLEEVE OPTION. PROVIDE OPENINGS WITH GRILLE AND BIRD SCREEN.
- PROVIDE DIGITAL PROGRAMMABLE THERMOSTAT AND MOUNT AT 48" AFF. COORDINATE WITH LIGHT SWITCHES OR OTHER WALL MOUNTED ITEMS.
- INSTALL EH PER MFG'S INSTRUCTIONS. MOUNT UNIT AT 1' AFF. REFER TO SCHEDULE FOR MORE INFO.
- LOCATE KITCHEN CONTROL PANEL ON THE WALL AND MOUNT AT 60" AFF. GREASE FAN AND MAKE-UP AIR UNIT TO INTERLOCK WITH TYPE 1 HOOD. REFER TO KITCHEN DRAWINGS FOR WIRING DIAGRAM.
- PROVIDE AN EMERGENCY SHUT-OFF VALVE TO SHUT OFF THE GAS FLOW TO THE KITCHEN COOKING APPLIANCES. THE VALVE SHALL NOT BE LOCATED MORE THAN 6 FT OF THE SERVING APPLIANCES.
- PROVIDE WITH RUSKIN SOD-36 DOUBLE DEFLECTION SUPPLY DIFFUSER.



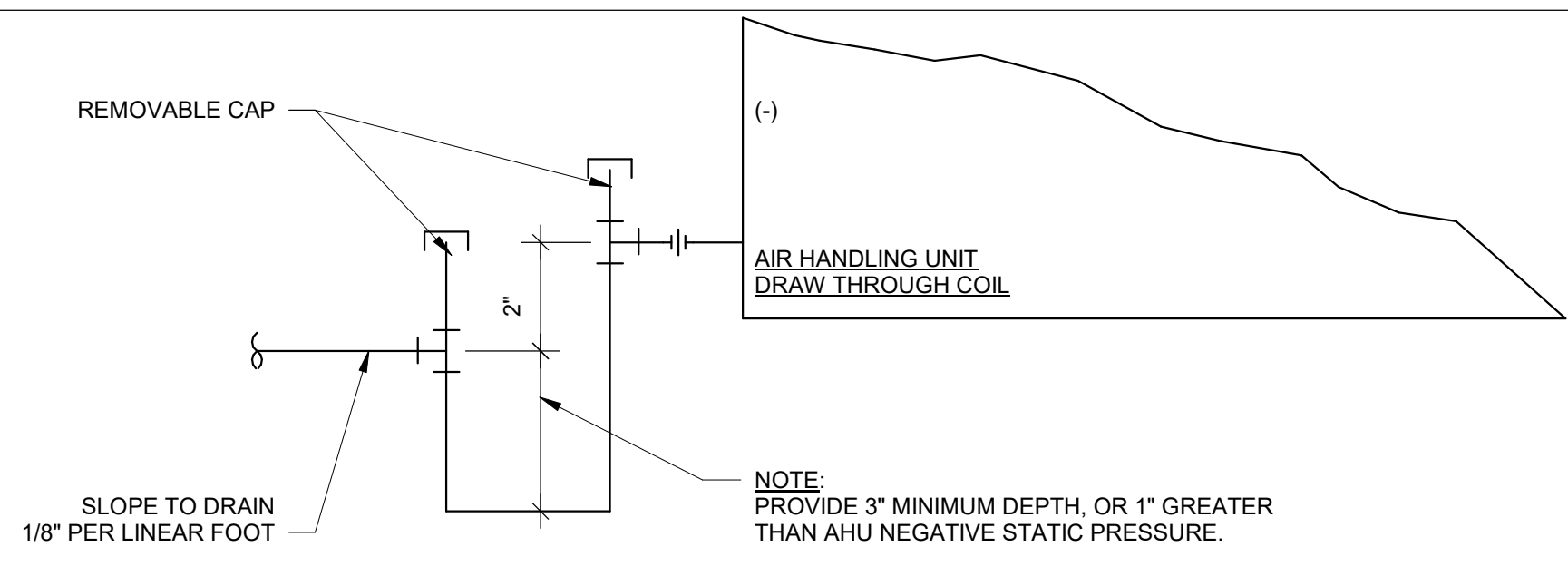
TRUE N
2 ENLARGED FLOOR PLAN - KITCHEN - HVAC
SCALE: 1/4" = 1'-0"



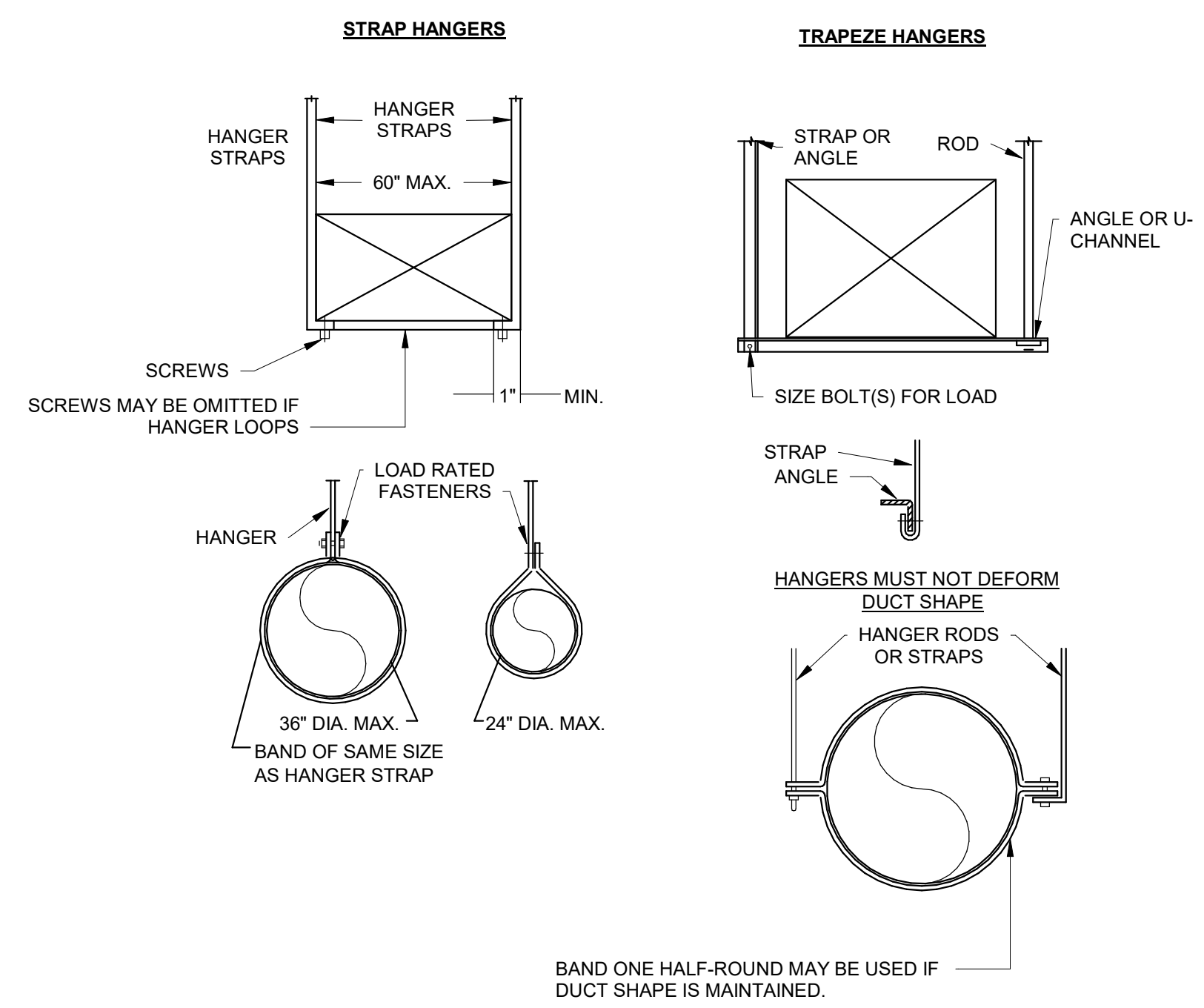
TRUE N
1 ENLARGED FLOOR PLAN - SOUTH - HVAC
SCALE: 1/4" = 1'-0"



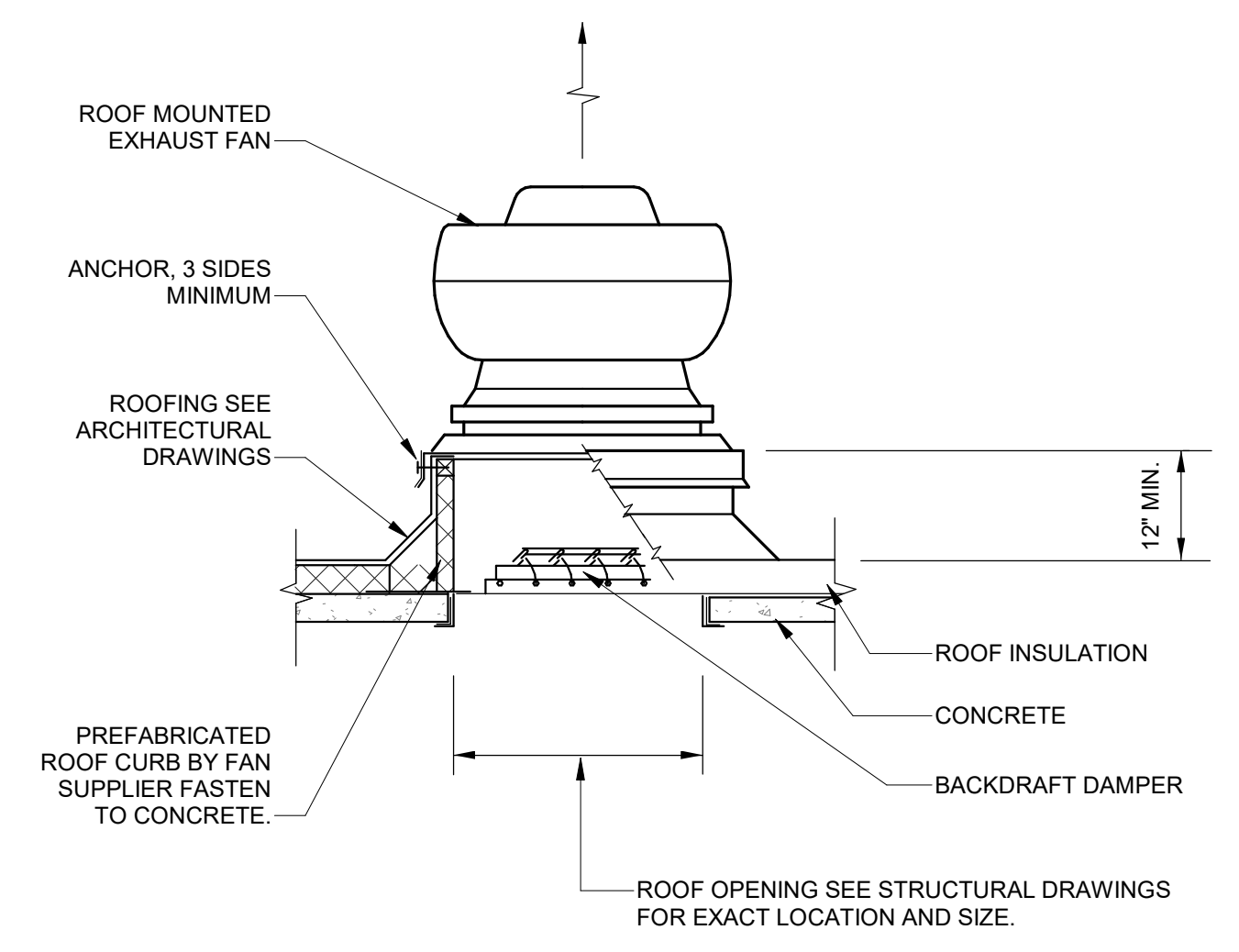
1 AIR DEVICE WITH CONTROLLER DETAIL
SCALE: NTS



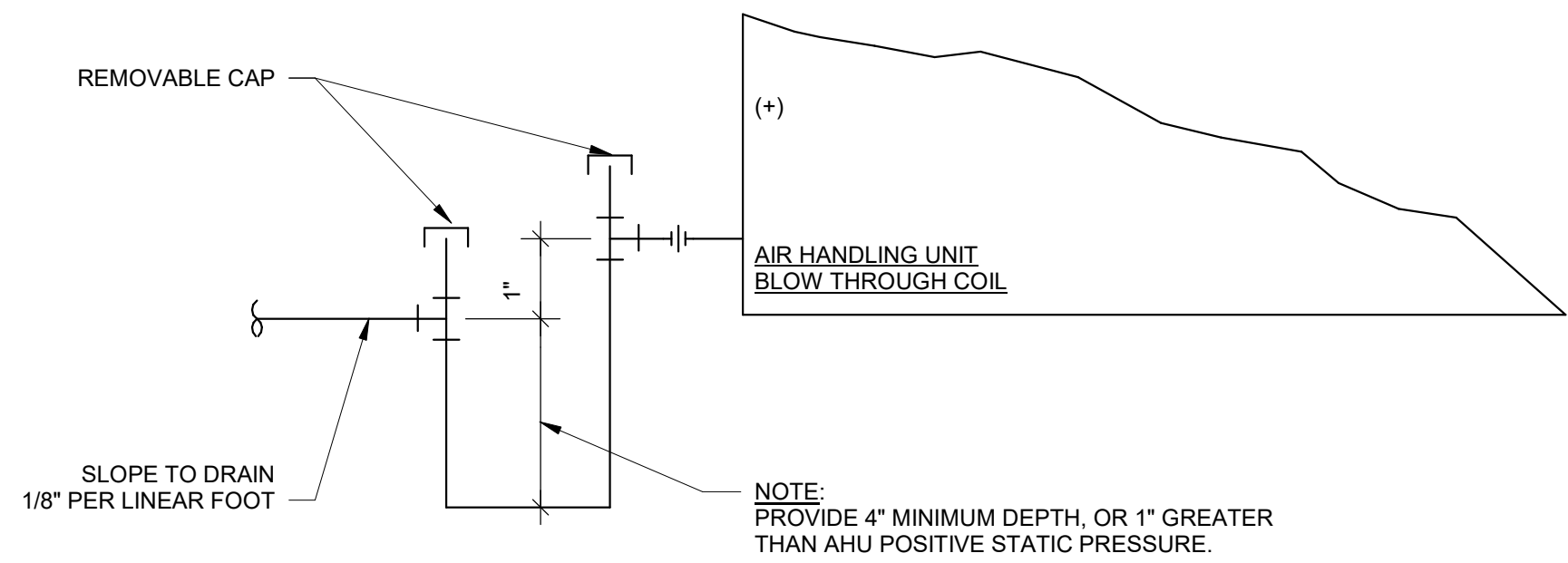
2 AIR HANDLING UNIT TRAP DETAIL
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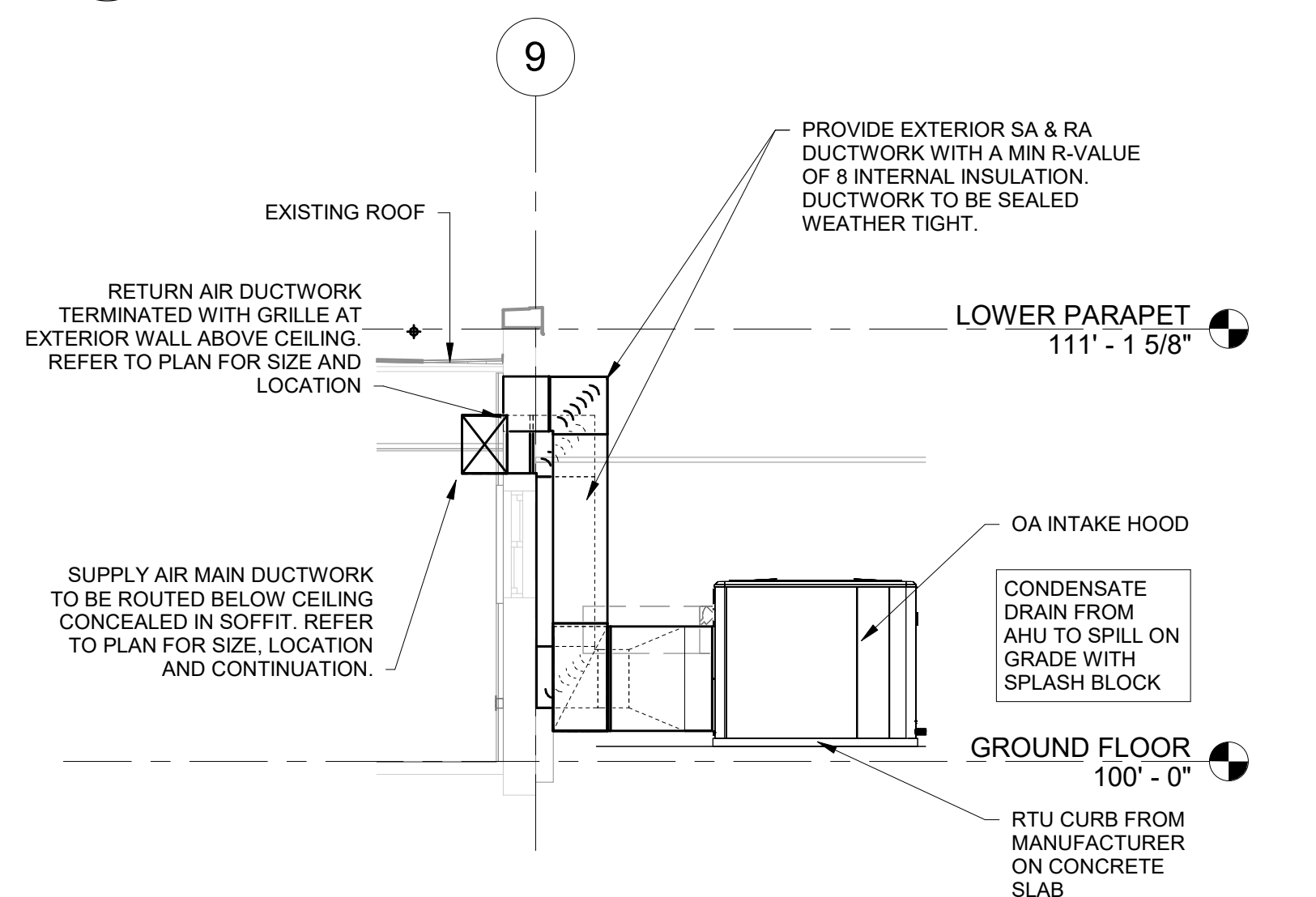
3 HARD DUCT SUPPORT DETAIL
SCALE: NTS



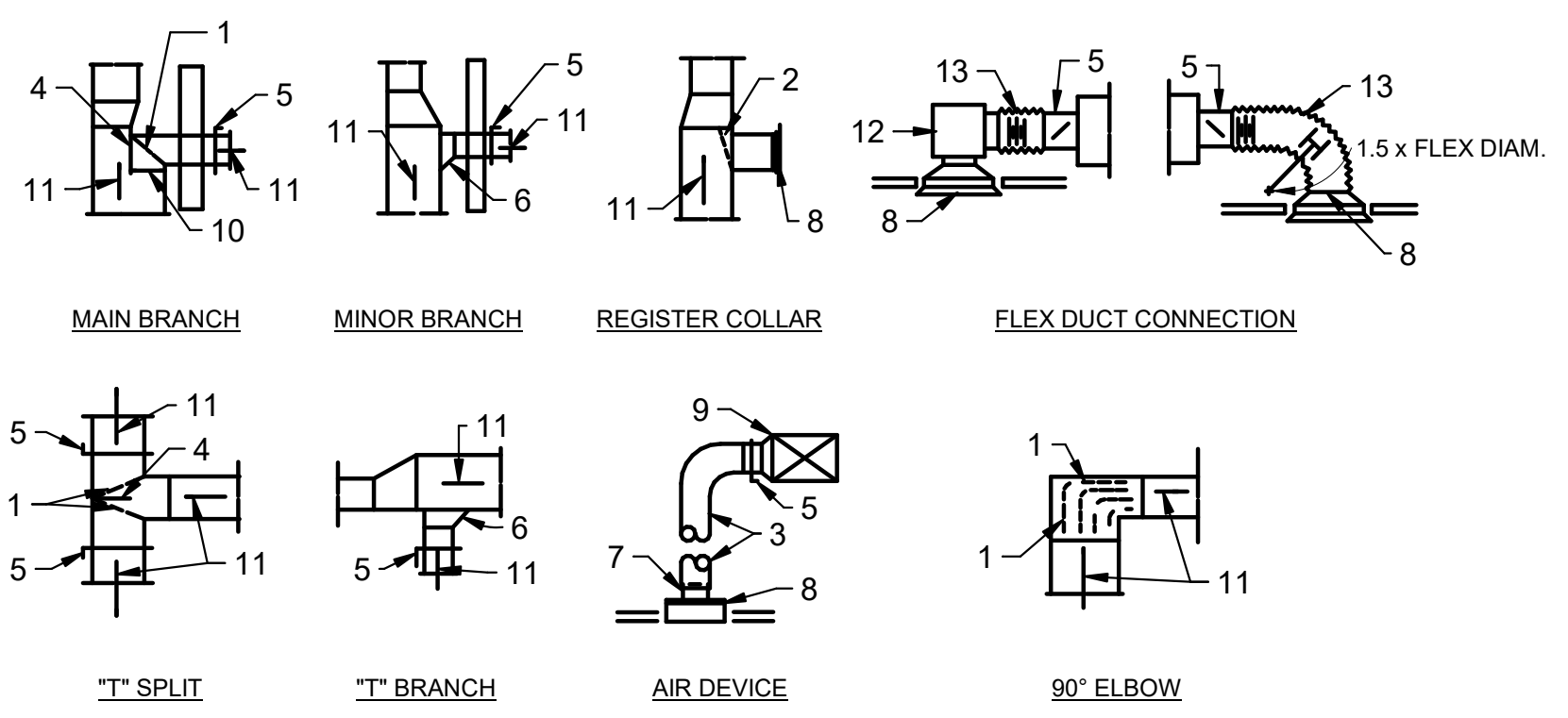
4 ROOF MOUNTED EXHAUST FAN DETAIL
SCALE: NTS



8 MAKE-UP AIR UNIT (MAU) DETAIL
SCALE: NTS

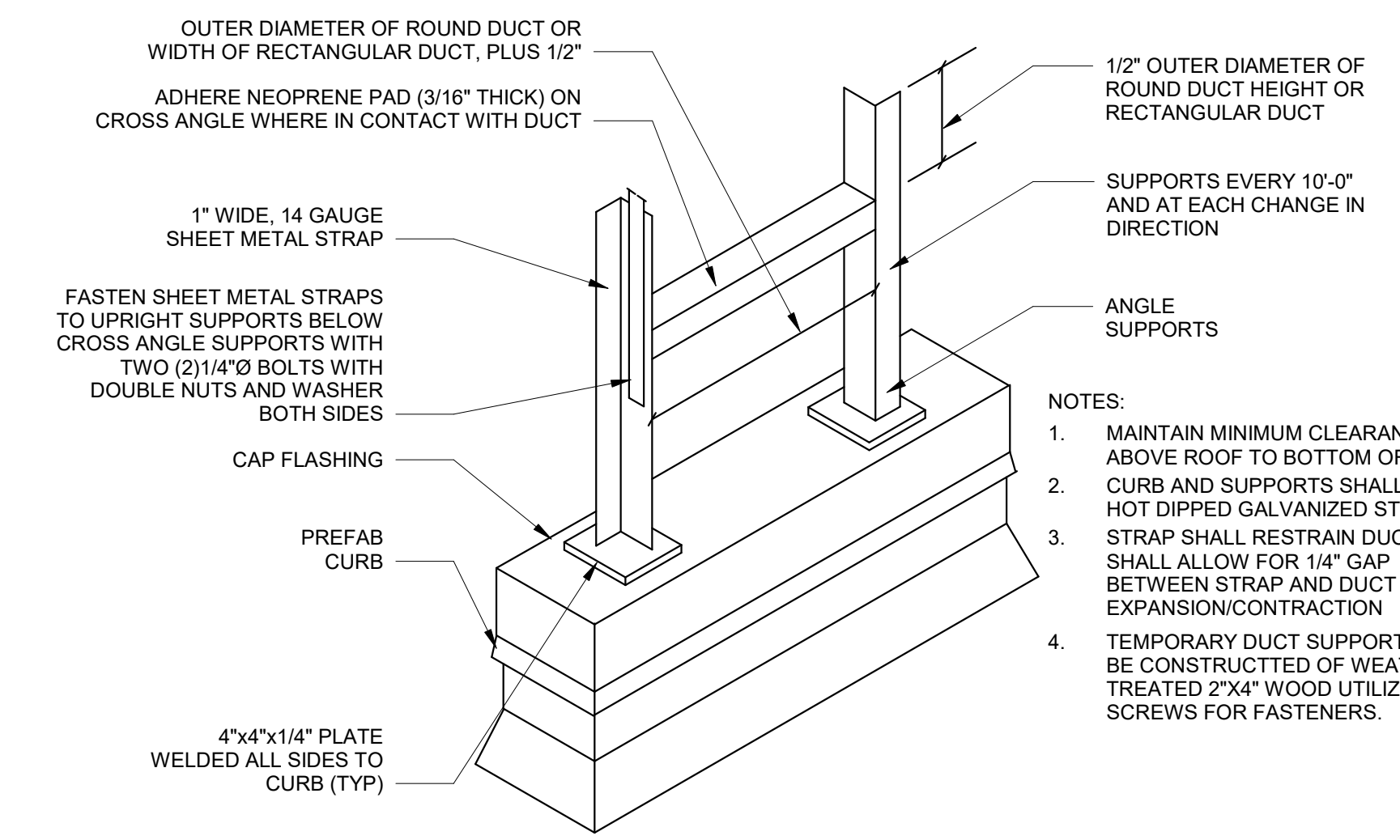


6 PACKAGED AHU DETAIL LOCATED ON GRADE
SCALE: NTS



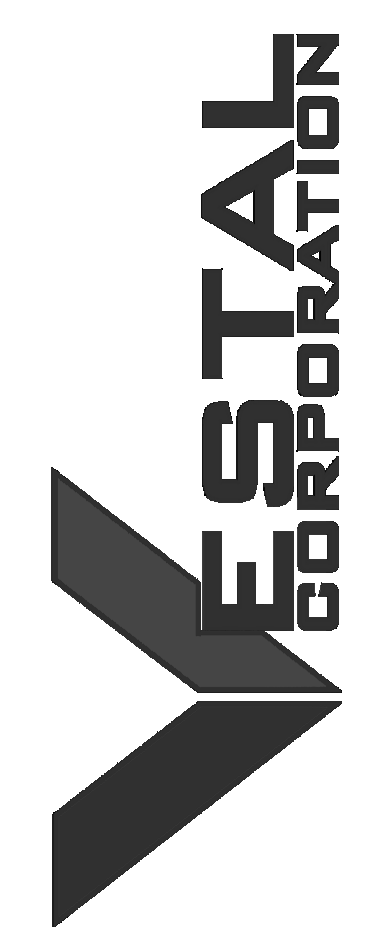
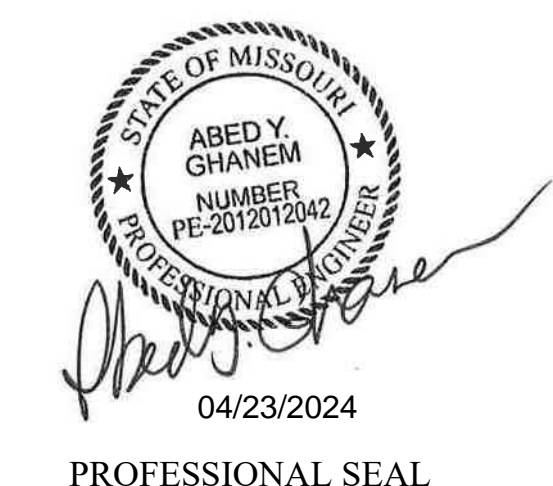
- NOTES:**
- TURNING VANES OR EXTRACTOR WITH LEADING AND TRAILING EDGES PARALLEL TO SIDE OF DUCT.
 - ADJUSTABLE AIREXTRACTOR.
 - BRANCH DUCTWORK AS SHOWN ON PLAN.
 - FIXED SPLITTER.
 - MANUAL DAMPER.
 - 45° SHOE TAP.
 - ROUND DUCT ADAPTER, WHERE REQUIRED.
 - AIR DEVICE.
 - SPIN COLLAR TAP WITH QUADRANT DAMPER, IF BRANCH DUCTWORK IS ROUND.
 - THROAT SIZE, KEY NOTED ON PLAN.
 - AIR FLOW.
 - AIR PLENUM BOX TO BE USED WHEN THERE IS NOT ADEQUATE SPACE FOR MINIMUM RADIUS OF 1.5X FLEX DIAM.
 - FLEXIBLE DUCT.

5 DUCT CONNECTIONS DETAIL
SCALE: NTS



7 HVLS JOIST MOUNTING DETAIL
SCALE: NTS

9 ROOF DUCT SUPPORT
SCALE: NTS



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MISSOURI 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	2023.12.06
B	DD	2024.02.19
C	IFB	2024.04.23

ISSUE DATE: 2023.12.06

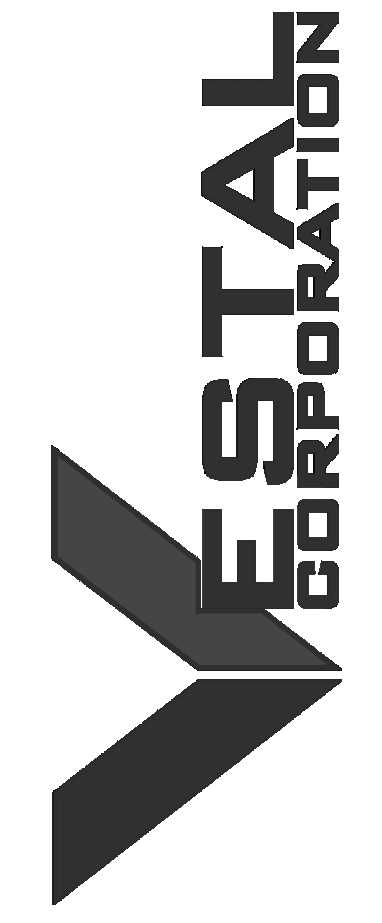
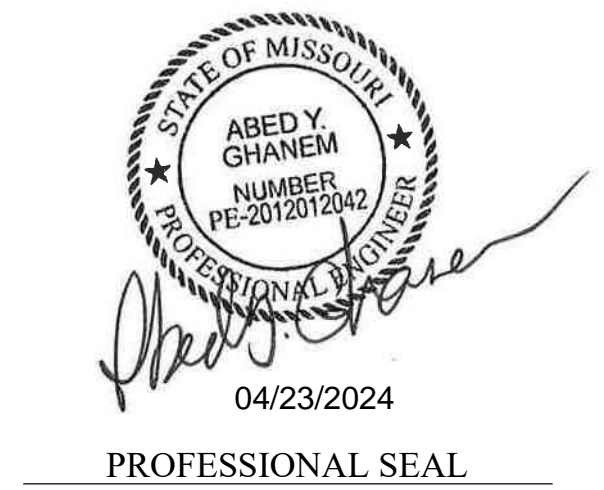
CAD DWG FILE:
DRAWN BY: NJA
CHECKED BY: AYG
DESIGNED BY: NJA

SHEET TITLE:
HVAC DETAILS

SHEET NUMBER:

M501

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2024.04.23



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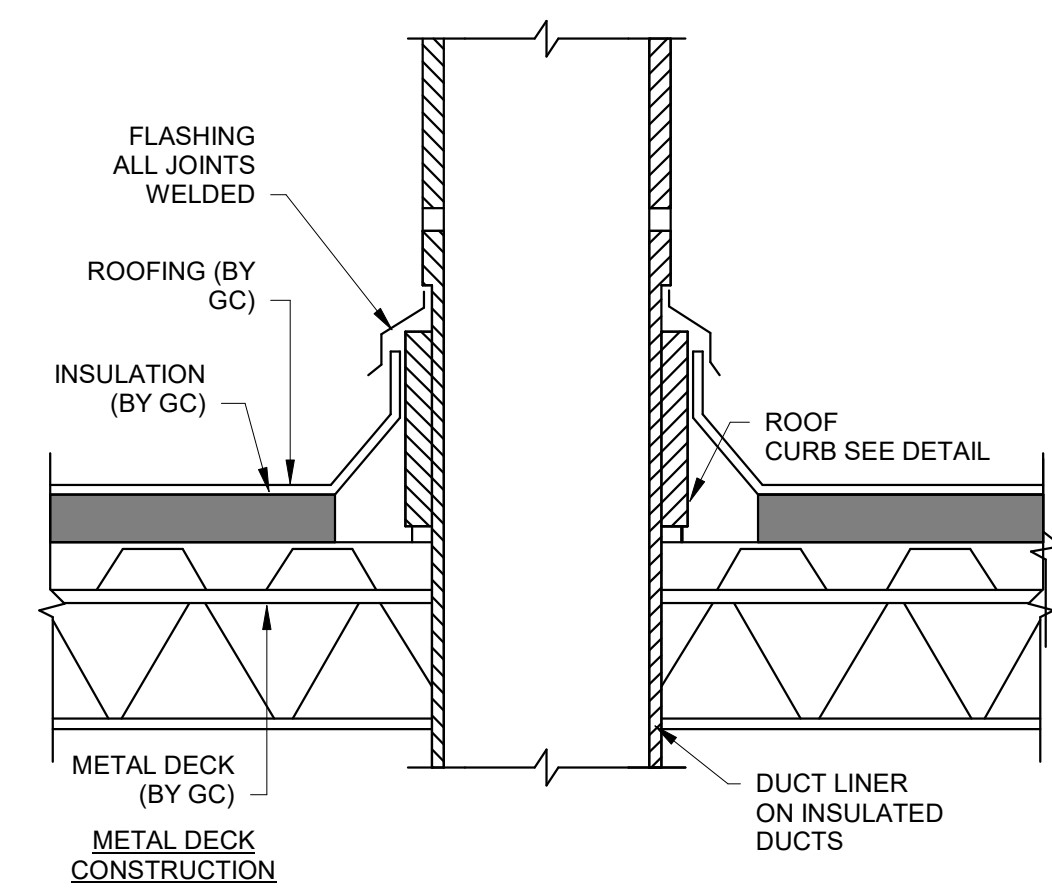
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SHEET TITLE:
HVAC DETAILS

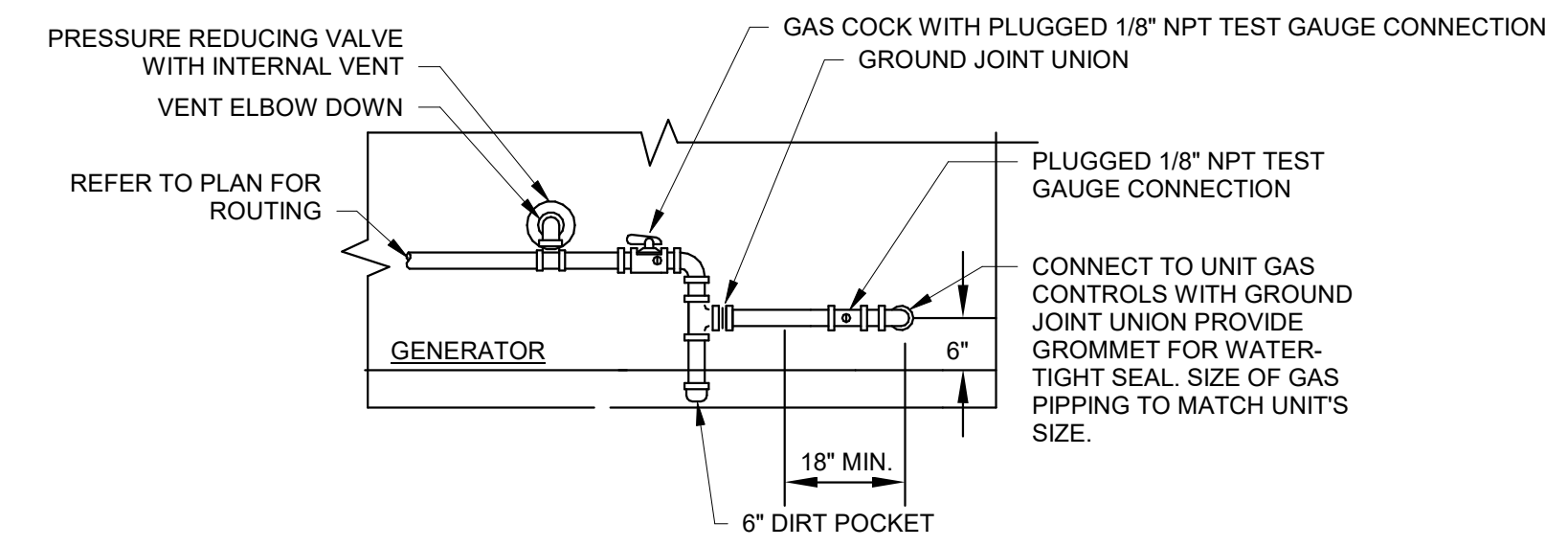
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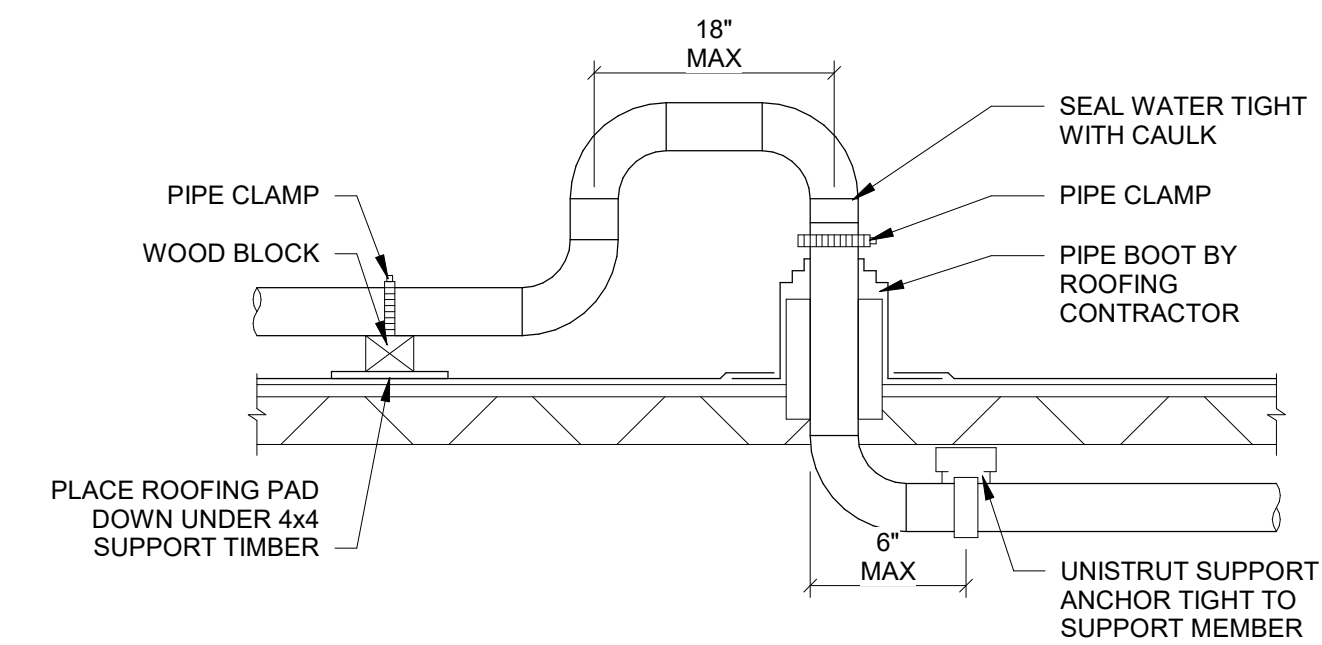
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2024.04.23



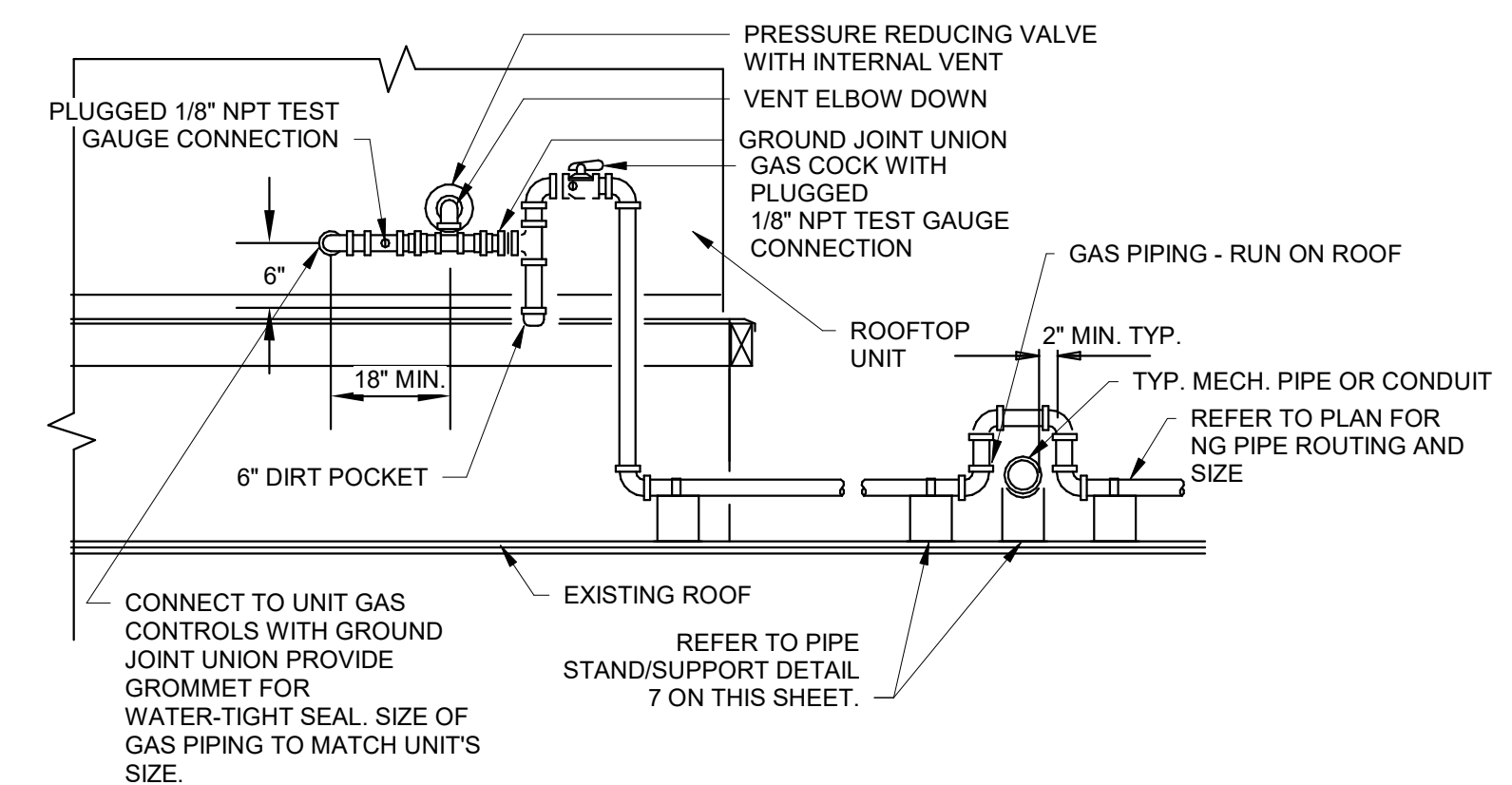
3 DUCT PENETRATION THROUGH ROOF
SCALE: NTS



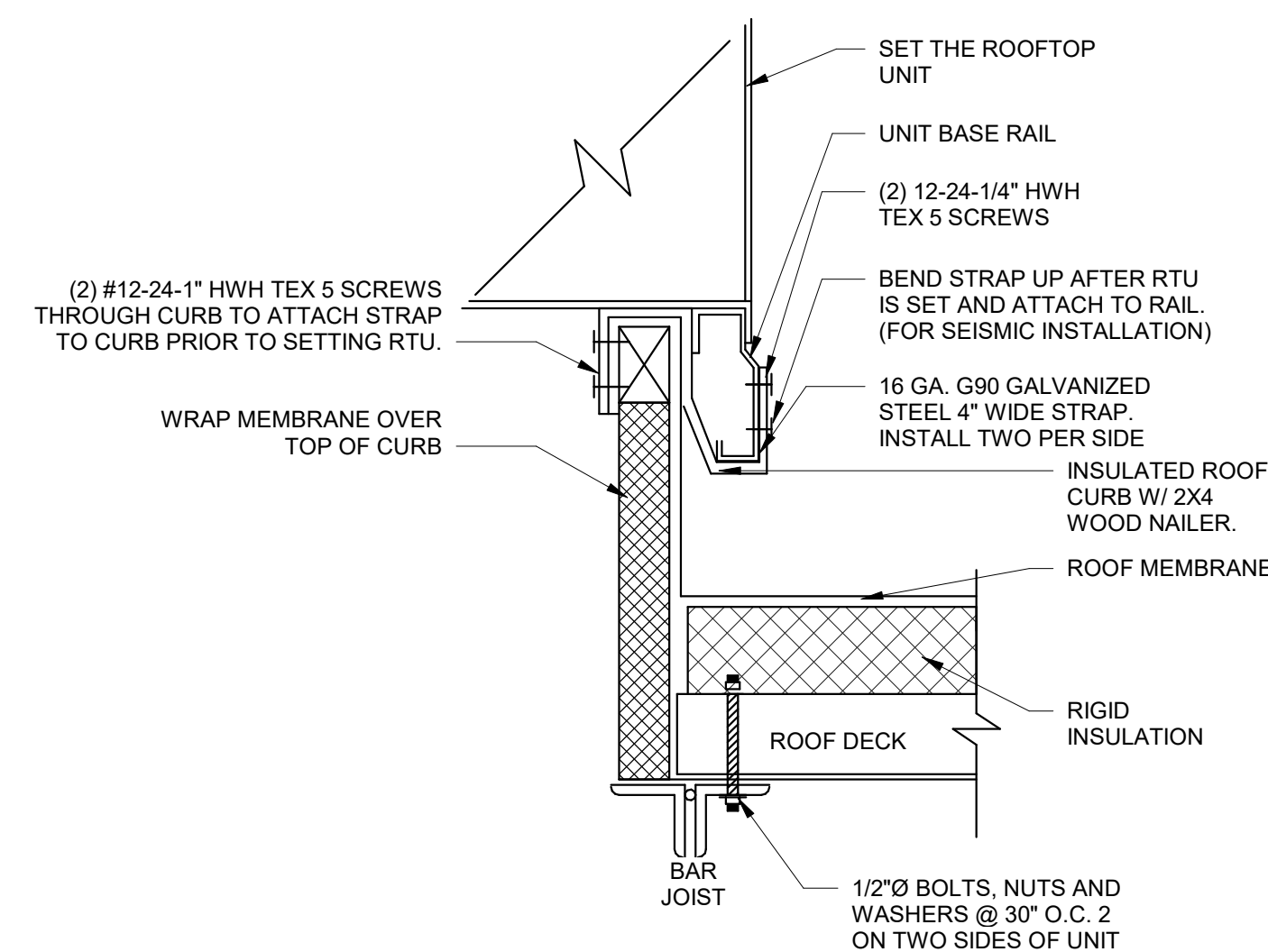
6 GENERATOR GAS PIPE CONNECTION
SCALE: NTS



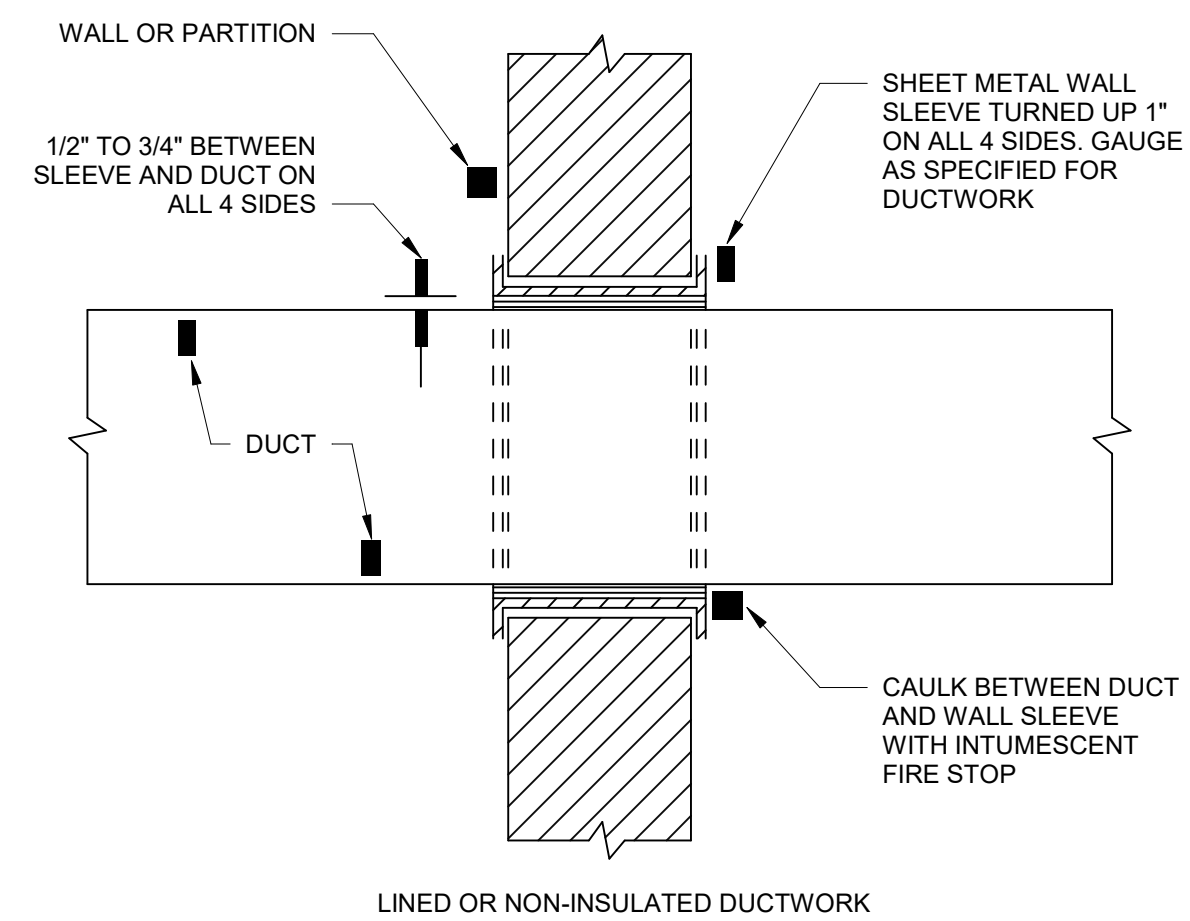
8 GAS PIPE BOOT
SCALE: NTS



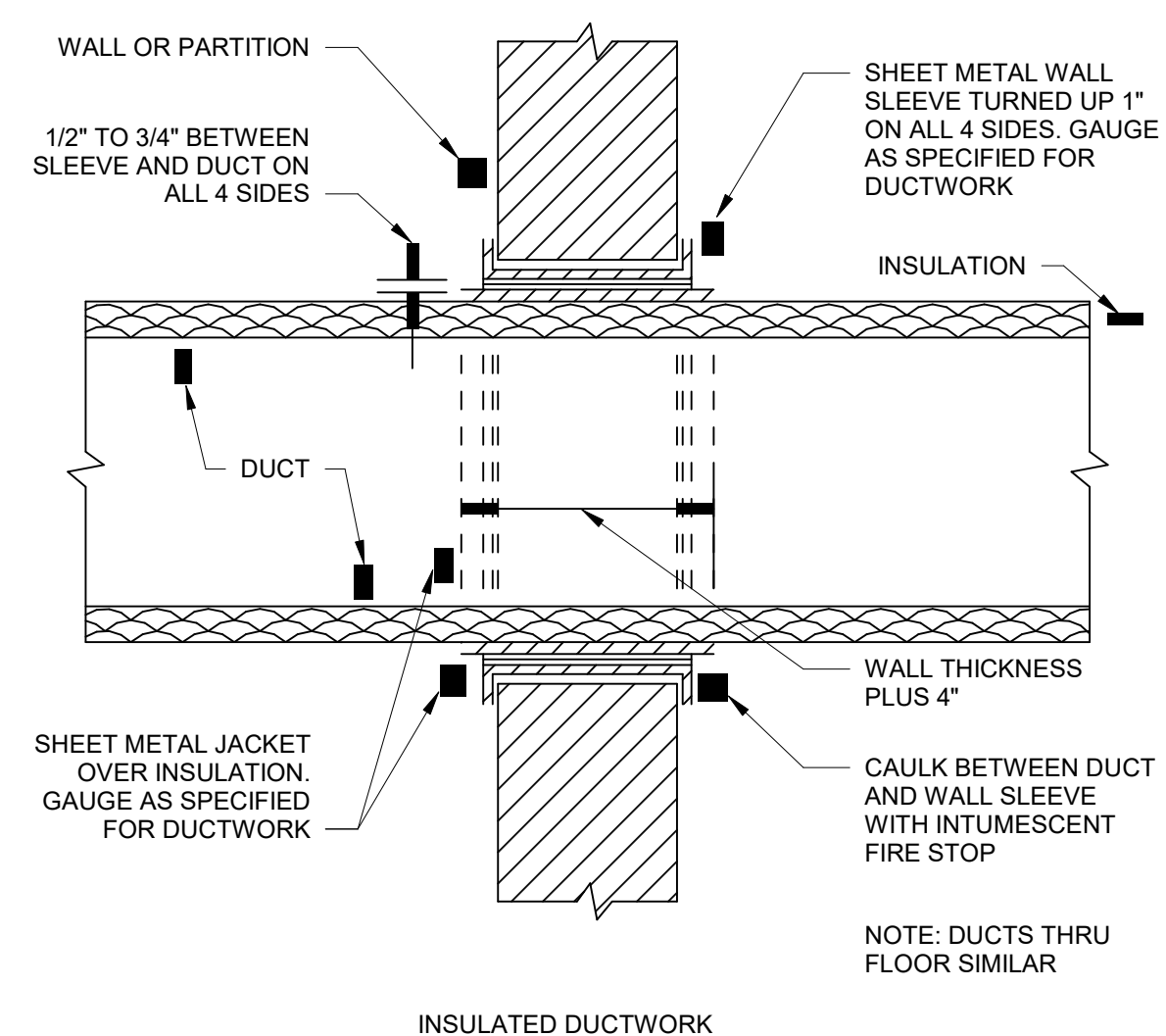
5 RTU GAS PIPE CONNECTION
SCALE: NTS



2 SEISMIC ROOF CURB (TYP)
SCALE: NTS

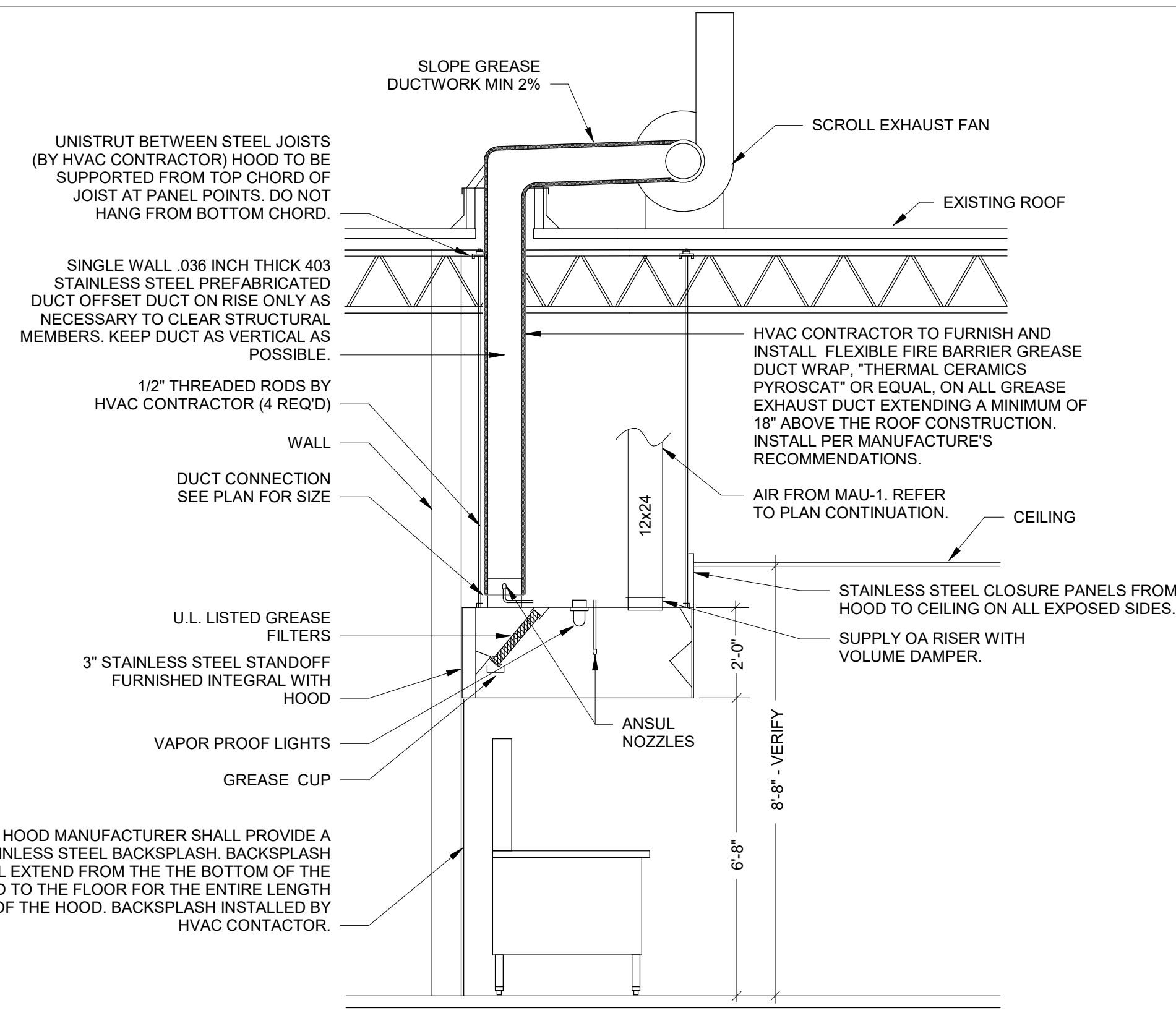


9 DUCT PENETRATION DETAIL
SCALE: NTS

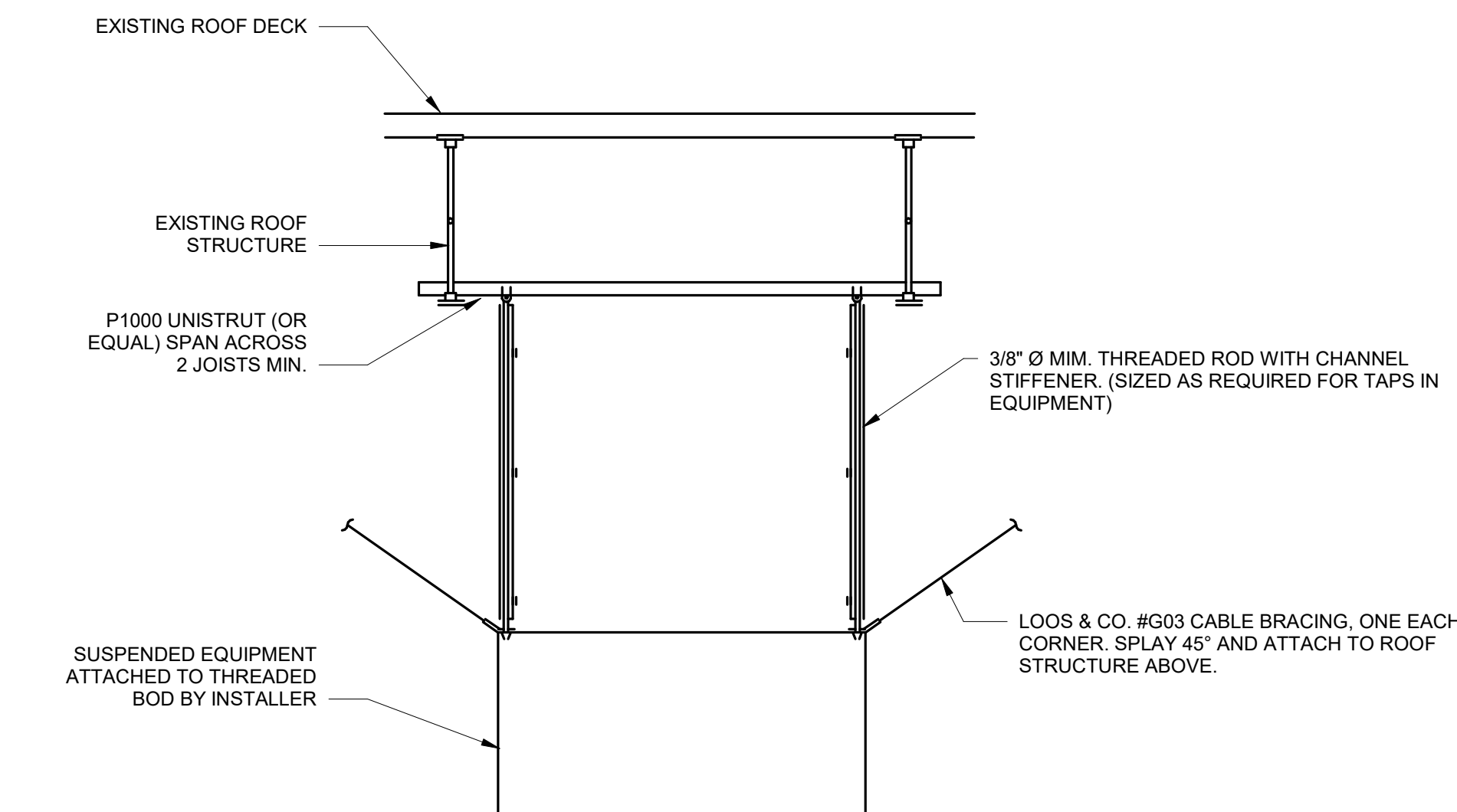


INSULATED DUCTWORK

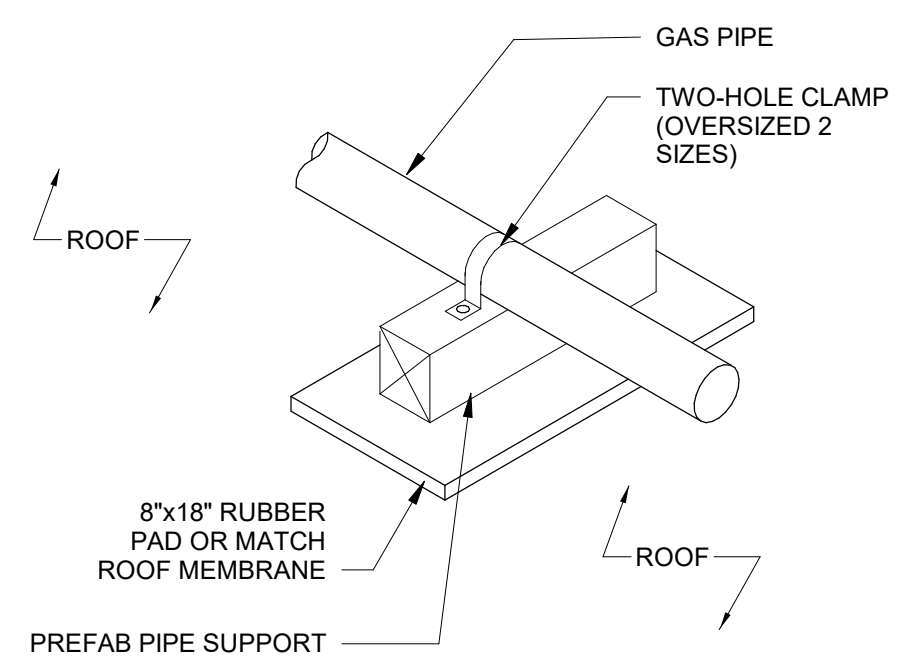
9 DUCT PENETRATION DETAIL
SCALE: NTS



1 SECTION THRU EXHAUST HOOD
SCALE: NTS



4 SEISMIC SUSPENDED VAV UNIT DETAIL
SCALE: NTS

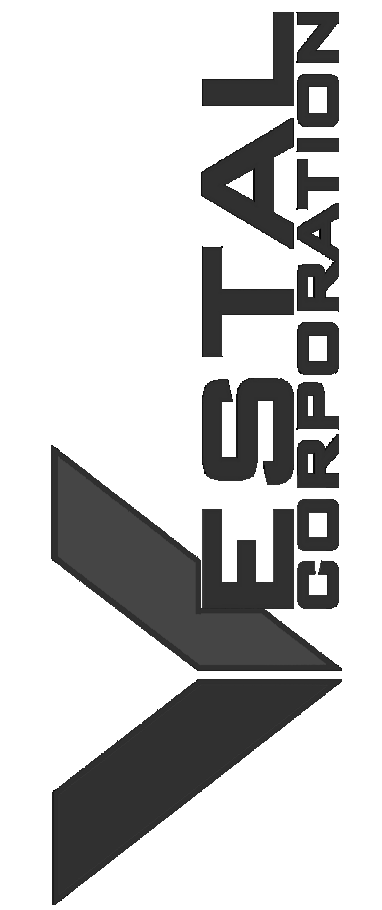


7 GAS PIPE ROOF SUPPORT
SCALE: NTS

NOTE:
ROOFING PAD IS RECOMMENDED TO AVOID ABRASION TO ROOF BUT IS NOT SUPPLIED BY WAI.



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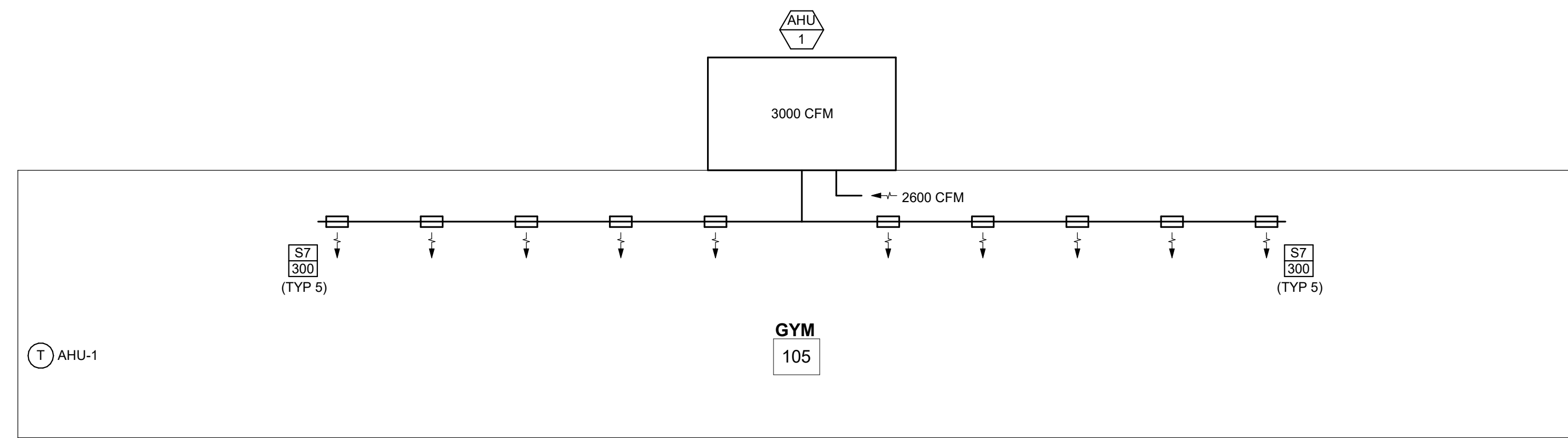
CAD DWG FILE:
DRAWN BY: NJA
CHECKED BY: AYG
DESIGNED BY: NJA

SHEET TITLE:
**AIRFLOW
SCHEMATICS**

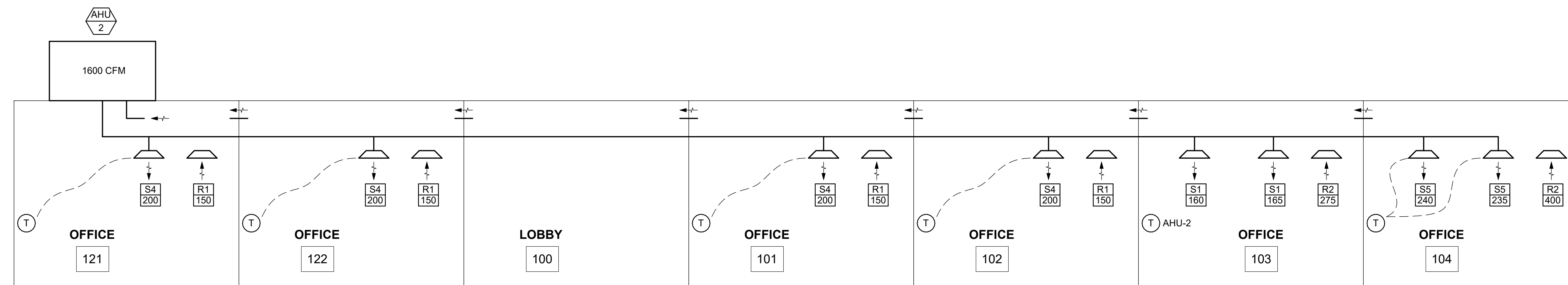
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M701

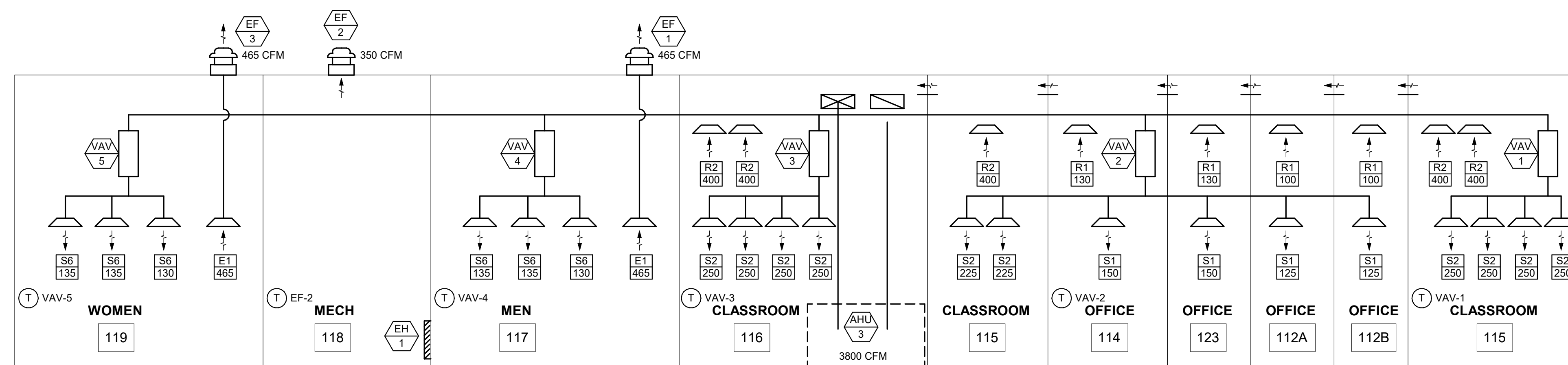
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2024.04.23



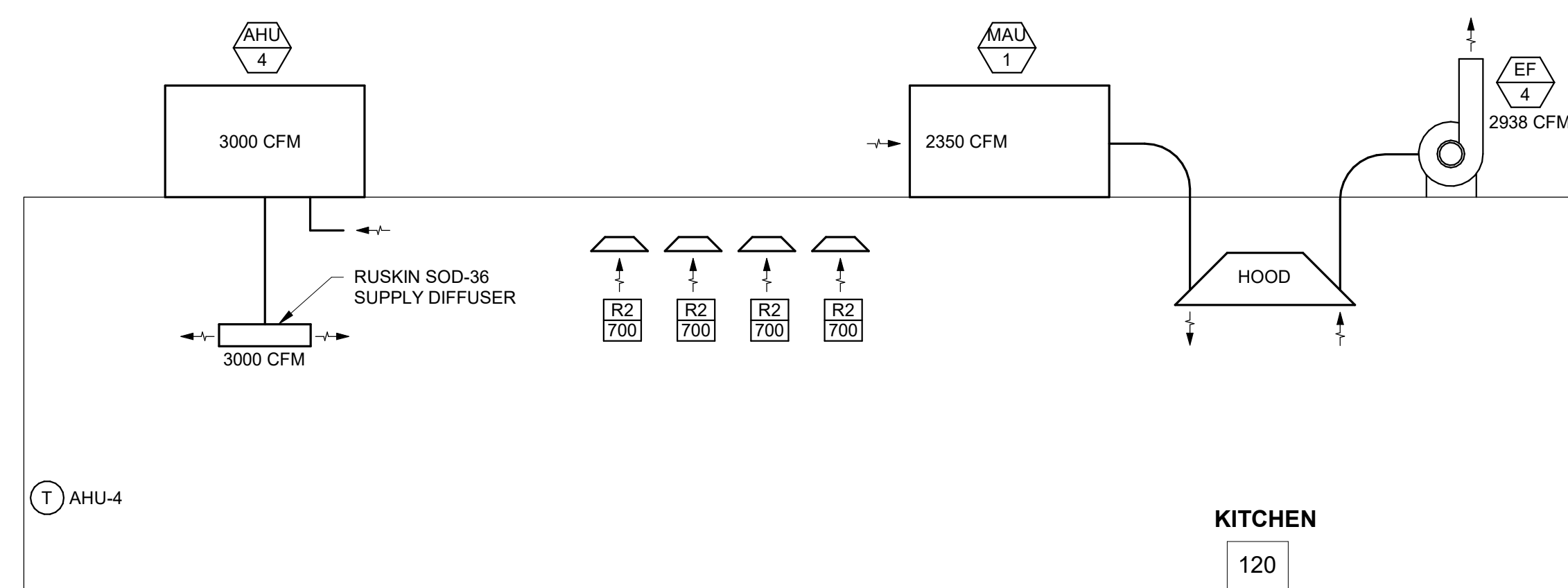
1 AIRFLOW DIAGRAM - GYM
SCALE: NTS



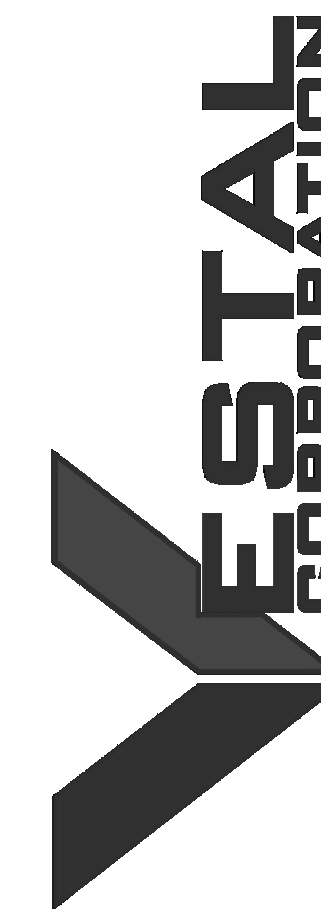
2 AIRFLOW DIAGRAM - EAST OFFICES
SCALE: NTS



3 AIRFLOW DIAGRAM - SOUTH OFFICES
SCALE: NTS



4 AIRFLOW DIAGRAM - KITCHEN
SCALE: NTS



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SHEET TITLE:
**GAS PIPING
ISOMETRIC**

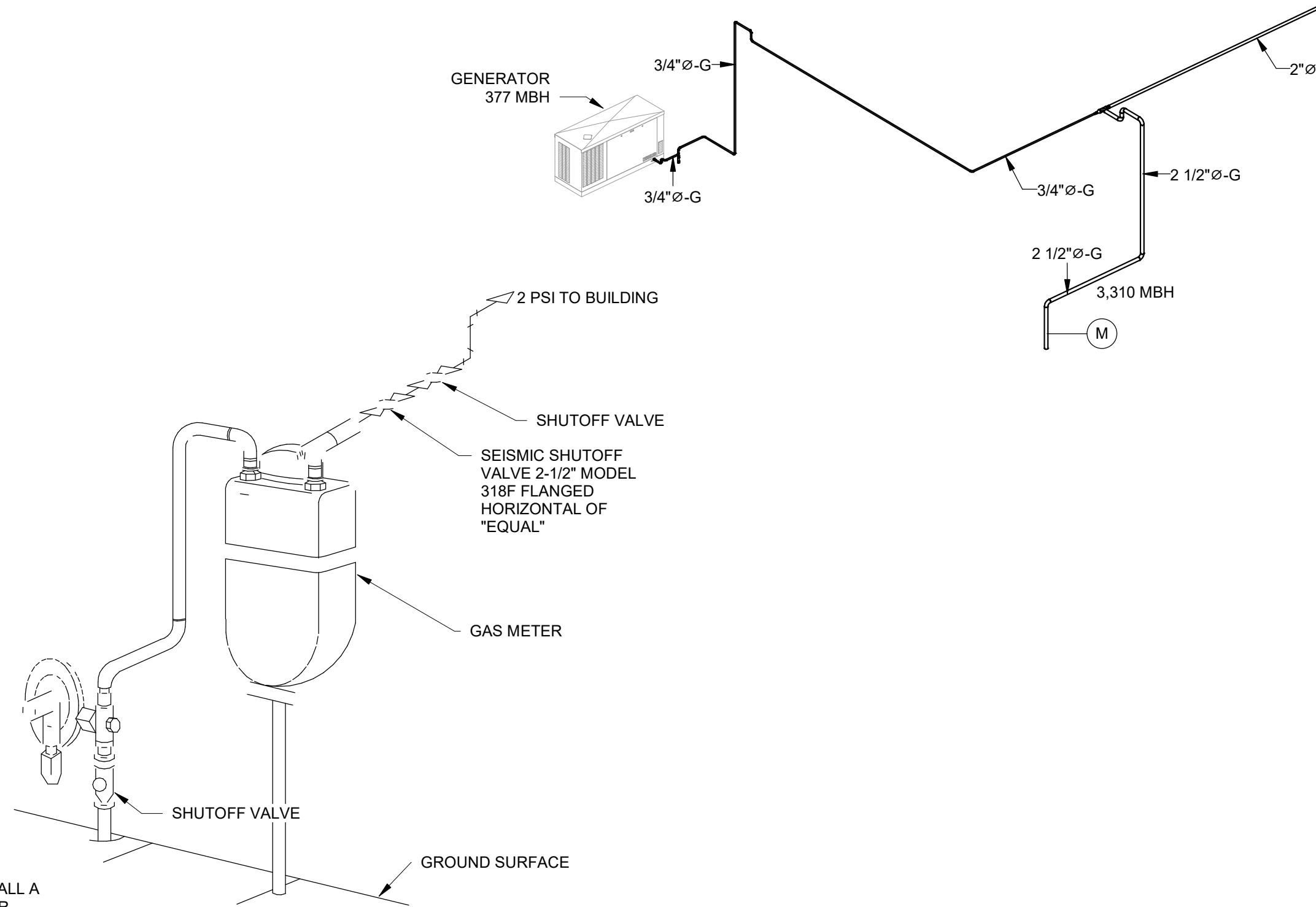
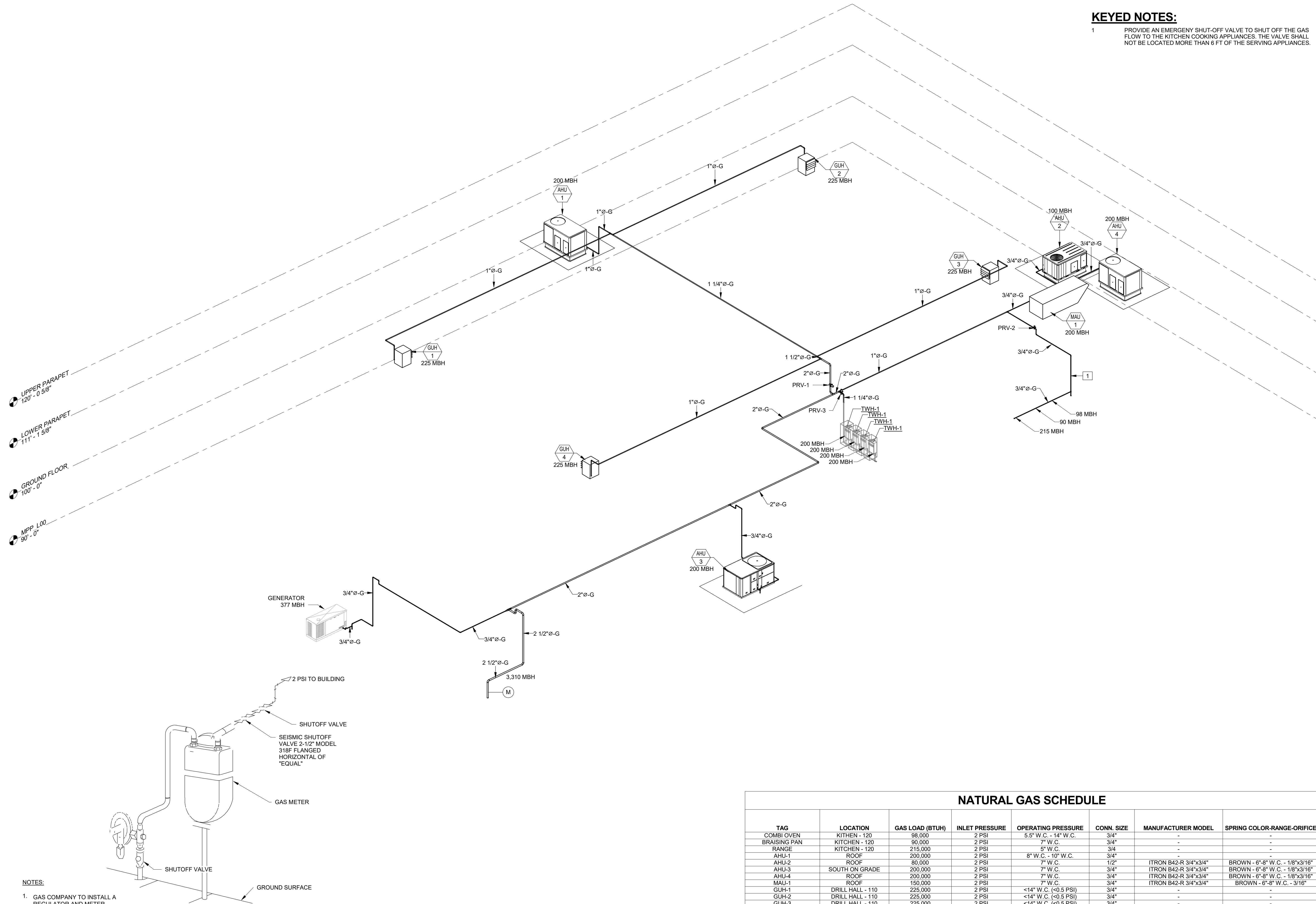
SHEET NUMBER:

M901

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2024.04.23

KEYED NOTES:

- 1 PROVIDE AN EMERGENCY SHUT-OFF VALVE TO SHUT OFF THE GAS FLOW TO THE KITCHEN COOKING APPLIANCES. THE VALVE SHALL NOT BE LOCATED MORE THAN 6 FT OF THE SERVING APPLIANCES.



- NOTES:**
1. GAS COMPANY TO INSTALL A REGULATOR AND METER. MECHANICAL CONTRACTOR TO MAKE ALL CONNECTIONS FROM METER TO BUILDING SERVICE
 2. TOTAL LOAD IS 3,192 CFH.

2 GAS METER AND EARTHQUAKE VALVE DETAILS

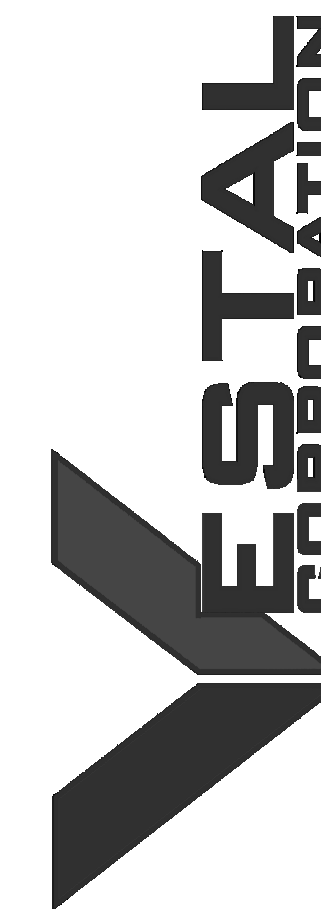
M901 SCALE: NTS

NATURAL GAS SCHEDULE

TAG	LOCATION	GAS LOAD (BTUH)	INLET PRESSURE	OPERATING PRESSURE	CONN. SIZE	MANUFACTURER MODEL	SPRING COLOR-RANGE-ORIFICE
COMBI OVEN	KITCHEN - 120	98,000	2 PSI	5.5" W.C. - 14" W.C.	3/4"	-	-
BRAISING PAN	KITCHEN - 120	90,000	2 PSI	7" W.C.	3/4"	-	-
RANGE	KITCHEN - 120	215,000	2 PSI	5" W.C.	3/4"	-	-
AHU-1	ROOF	200,000	2 PSI	8" W.C. - 10" W.C.	3/4"	-	-
AHU-2	ROOF	80,000	2 PSI	7" W.C.	1/2"	ITRON B42-R 3/4"x3/4"	BROWN - 6"-8" W.C. - 1/8"x3/16"
AHU-3	SOUTH ON GRADE	200,000	2 PSI	7" W.C.	3/4"	ITRON B42-R 3/4"x3/4"	BROWN - 6"-8" W.C. - 1/8"x3/16"
AHU-4	ROOF	200,000	2 PSI	7" W.C.	3/4"	ITRON B42-R 3/4"x3/4"	BROWN - 6"-8" W.C. - 1/8"x3/16"
MAU-1	ROOF	150,000	2 PSI	7" W.C.	3/4"	ITRON B42-R 3/4"x3/4"	BROWN - 6"-8" W.C. - 3/16"
GUH-1	DRILL HALL - 110	225,000	2 PSI	<14" W.C. (<0.5 PSI)	3/4"	-	-
GUH-2	DRILL HALL - 110	225,000	2 PSI	<14" W.C. (<0.5 PSI)	3/4"	-	-
GUH-3	DRILL HALL - 110	225,000	2 PSI	<14" W.C. (<0.5 PSI)	3/4"	-	-
GUH-4	DRILL HALL - 110	225,000	2 PSI	<14" W.C. (<0.5 PSI)	3/4"	-	-
TWH-1	MECH - 118	200,000	2 PSI	4" W.C. - 10.5" W.C.	3/4"	-	-
TWH-2	MECH - 118	200,000	2 PSI	4" W.C. - 10.5" W.C.	3/4"	-	-
TWH-3	MECH - 118	200,000	2 PSI	4" W.C. - 10.5" W.C.	3/4"	-	-
TWH-4	MECH - 118	200,000	2 PSI	4" W.C. - 10.5" W.C.	3/4"	-	-
GENERATOR	WEST ON GRADE	377,000	2 PSI	5" W.C. - 11" W.C.	1"	ITRON B42-R 3/4"x3/4"	BROWN - 6"-8" W.C. - 3/8"
GAS METER REGULATOR	SOUTH OF BUILDING	3,310,000	50 PSI	2 PSI	2-1/2"	-	-
PRV-1	ROOF	-	2 PSI	-	2"	ITRON B34-R 2"x2"	BLACK - 6.5"-13" W.C. - 3/8"
PRV-2	ROOF	-	2 PSI	-	3/4"	ITRON B42-R 3/4"x3/4"	BROWN - 6"-8" W.C. - 3/8"
PRV-3	ROOF	-	2 PSI	-	1-1/4"	ITRON B34-R 1-1/4"x1-1/4"	GREEN - 5"-8" W.C. - 3/8"



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DRAWN BY: MDC
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DESIGNED BY: MDC

SHEET TITLE:
PLUMBING LEGEND

SHEET NUMBER:

P001

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PLUMBING LEGEND

PLUMBING PIPING SYMBOLS	PLUMBING ABBREVIATIONS
<p>— DCW — DOMESTIC COLD WATER</p> <p>--- DHW --- DOMESTIC HOT WATER</p> <p>— DHWR — DOMESTIC HOT WATER RETURN</p> <p>— ST — STORM DRAINAGE</p> <p>— OD — OVERFLOW DRAINAGE</p> <p>— INDS — INDUSTRIAL SEWER</p> <p>— SAN — SANITARY SEWER</p> <p>— V — SANITARY VENT</p>	<p>AC ABOVE CEILING AREA</p> <p>AFF ABOVE FINISHED FLOOR</p> <p>AP ACCESS PANEL</p> <p>BFP BACKFLOW PREVENTER</p> <p>B.O.P BOTTOM OF PIPE</p> <p>C.L. CENTER LINE</p> <p>CO CLEANOUT</p> <p>EWC ELECTRIC WATER COOLER</p> <p>EWB ELECTRIC WATER HEATER</p> <p>FCO FLOOR CLEANOUT</p> <p>FD FLOOR DRAIN</p> <p>I.E. INVERT ELEVATION</p> <p>GPM GALLONS PER MINUTE</p> <p>LAV LAVATORY</p> <p>LS LITER PER SECOND</p> <p>MB MOP BASIN</p> <p>N.I.C. NOT IN CONTRACT</p> <p>OD OVERFLOW DRAIN</p> <p>RD ROOF DRAIN</p> <p>RG REGISTER</p> <p>RPZ REDUCED PRESSURE ZONE BACKFLOW PREVENTER</p> <p>SAN SANITARY SEWER</p> <p>SH SHOWER</p> <p>SK SINK</p> <p>SOV SHUT-OFF VALVE</p> <p>SSD SUBSOIL DRAINAGE</p> <p>T.O.P TOP OF PIPE</p> <p>TR TRENCH DRAIN</p> <p>UR URINAL</p> <p>VTR VENT THRU ROOF</p> <p>WC WATER CLOSET</p> <p>WCO WALL CLEANOUT</p> <p>WHA WATER HAMMER ARRESTER</p>
LABORATORY GAS SYMBOLS	
<p>— Ar — ARGON</p> <p>— CA — COMPRESSED AIR</p> <p>— He — HELIUM</p> <p>— N2 — NITROGEN</p> <p>— O2 — OXYGEN</p>	
PLUMBING GENERAL SYMBOLS	
<p> REVISION TAG</p> <p> KEYED NOTE TAG</p> <p> FLOW ARROW</p> <p> SECTION DESIGNIGATION</p> <p> SHEET No. WHERE SECTION IS SHOWN</p> <p> CONNECT TO EXISTING</p> <p> SPOT ELEVATION</p>	

GENERAL NOTES - PLUMBING

- THE CONTRACTOR IS TO OBTAIN ALL PERMITS, PATENT RIGHTS, AND LICENSES THAT ARE REQUIRED FOR PERFORMING THE WORK UNDER ALL LAWS, ORDINANCES, RULES AND REGULATIONS, OR ORDERS OF ANY OFFICER AND/OR GOVERNING BODY, HAVING JURISDICTION FOR THE WORK UNDER THIS SECTION. THE CONTRACTOR IS TO GIVE ALL NOTICES NECESSARY IN CONNECTION WITH, PAY ALL FEES RELATING TO AND ALL COSTS AND EXPENSES INCURRED ON ACCOUNT OF THE WORK UNDER THIS SECTION. NO WORK IS TO BE COVERED BEFORE INSPECTION BY THE JURISDICTIONAL INSPECTOR AND THE OWNER'S REPRESENTATIVE. POST PERMITS AS REQUIRED.
- THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC, AND REQUIRE COORDINATION BETWEEN DISCIPLINES. SUCH COORDINATION IS THE EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACT DOCUMENTS INDICATE THE AVAILABLE INFORMATION ON EXISTING UTILITIES AND SERVICES, AND ON NEW SERVICES TO BE PROVIDED TO THE PROJECT BY UTILITY COMPANIES AND AGENCIES. COORDINATE ALL UTILITY INTERRUPTIONS WITH THE OWNER AND THE UTILITY COMPANY. PLAN WORK SO THAT THESE INTERRUPTIONS ARE KEPT TO A MINIMUM.
- THE EQUIPMENT INDICATED ON THE CONTRACT DOCUMENTS REPRESENT A STANDARD OF QUALITY TO BE MAINTAINED. SUBSTITUTIONS OF EQUAL QUALITY MAY BE SUBMITTED TO THE ENGINEER FOR REVIEW. ALL EQUIPMENT AND MATERIALS ARE TO BE NEW AND UNUSED AND INSTALLED BY ONLY QUALIFIED PERSONNEL. THE CONTRACTOR IS TO INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, IN ADDITION TO ANY STATE AND LOCAL CODES THAT MAY APPLY. WORKMANSHIP: ALL LABOR IS TO BE CAREFULLY SKILLED FOR THIS KIND OF WORK, THOROUGH IN ALL RESPECTS AND UNDER THE DIRECTION OF A COMPETENT FOREMAN.
- EQUIPMENT FURNISHED UNDER THIS CONTRACT IS TO HAVE A PERMANENT LABEL CLEARLY INDICATING THE MAINTENANCE TO BE PERFORMED TO MAINTAIN THE EQUIPMENT IN EFFICIENT OPERATING CONDITION. EQUIPMENT SUPPLIERS ARE TO FURNISH THE FULL AND PARTIAL INPUT AND OUTPUT CAPACITIES TO ENABLE THE DETERMINATION OF COMPLIANCE WITH THE ENERGY CONSERVATION CODE.
- ELECTRONICALLY SUBMIT COPIES OF SHOP DRAWINGS IN PDF FORMAT ON ALL EQUIPMENT AND MATERIALS FOR ENGINEERS REVIEW. SUBMITTAL INFORMATION IS TO INDICATE ALL PERFORMANCE DATA (RATED FOR THE ALTITUDE OF THIS PROJECT) THAT COMPLIES WITH THE SCHEDULED DATA. LIST ALL DEVIATIONS AND REASONS FOR DEVIATION. SUBMITTALS WITHOUT PROPER INFORMATION WILL BE REJECTED.
- SUBMIT TYPED AND BOUND COPIES OF OPERATING AND MAINTENANCE MANUALS PRIOR TO SCHEDULING SYSTEMS DEMONSTRATION FOR THE OWNER. MANUALS ARE TO HAVE INDEX WITH TAB DIVIDERS FOR EACH MAJOR EQUIPMENT SECTION TO FACILITATE LOCATING INFORMATION ON A SPECIFIC PIECE OF EQUIPMENT. ALPHABETICAL LIST OF SYSTEM COMPONENTS, WITH THE NAME, ADDRESS AND 24 HOUR TELEPHONE NUMBER OF THE COMPANY RESPONSIBLE FOR SERVICING EACH ITEM DURING THE FIRST YEAR OF OPERATION.
- DELIVERY AND STORAGE OF MATERIALS: PROVIDE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS AND EQUIPMENT UNTIL FINAL ACCEPTANCE BY THE OWNERS REPRESENTATIVE. PROTECT ALL MATERIALS AND EQUIPMENT FROM DAMAGE AND PROVIDE ADEQUATE AND PROPER STORAGE FACILITIES DURING THE PROGRESS OF THE WORK. REPLACE ALL DAMAGED AND DEFECTIVE WORK BEFORE FILING APPLICATION FOR FINAL ACCEPTANCE.
- BEFORE SUBMITTING HIS BID, THE CONTRACTOR FOR THE WORK UNDER THIS SECTION IS TO CAREFULLY STUDY ALL DRAWINGS, AND MAKE A CAREFUL EXAMINATION OF THE PREMISES. HE IS TO DEFINITELY DETERMINE IN ADVANCE, THE METHODS OF INSTALLATION AND CONNECTING THE APPARATUS AND THE MEANS TO BE PROVIDED FOR GETTING THE EQUIPMENT INTO PLACE. AFTER AWARD OF THE CONTRACT, NO SUBSEQUENT ALLOWANCES WILL BE MADE TO THE CONTRACTOR DUE TO HIS FAILURE TO COMPLY WITH THE ABOVE REQUIREMENTS AND ANY OTHER CONDITIONS AFFECTING THE INSTALLATION AND COMPLETION OF ALL WORK.
- ACCURATELY RECORD ALL CHANGES TO THE CONTRACT DOCUMENTS ON ONE SET OF DRAWINGS. TRANSMIT THE INFORMATION TO THE ENGINEER AND OWNER'S REPRESENTATIVE.
- FURNISH WRITTEN CERTIFIED GUARANTEE, IN ACCEPTANCE FORM, TO THE OWNER AGAINST DEFECTIVE WORKMANSHIP, MATERIALS AND OPERATING EQUIPMENT. IN ADDITION TO THE GUARANTEES REQUIRED ELSEWHERE. ALL WORK, MATERIALS AND EQUIPMENT PROVIDED UNDER THE MECHANICAL CONDITIONS ARE TO BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR UNDER THIS GUARANTEE, IS RESPONSIBLE FOR ALL DAMAGE TO ANY PART OF THE PREMISES CAUSED BY EQUIPMENT AND MATERIALS FURNISHED UNDER THIS SECTION. PROVIDE CERTIFICATES FOR ALL EQUIPMENT HAVING WARRANTIES IN EXCESS OF (1) YEAR.
- ALL WORK AND MATERIALS ARE TO BE IN FULL ACCORDANCE WITH THE GOVERNING EDITION OF THE LOCAL PLUMBING CODE AND OTHER APPLICABLE CODES. LAWS OR REGULATIONS OF BODIES LAWFULLY EMPOWERED AND HAVING JURISDICTION OVER THIS PROJECT. NOTHING IN THE PLANS OR THESE SPECIFICATIONS IS TO BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THESE CODES.
- RESOLVE ALL QUESTIONS, DISCREPANCIES OR CONFLICTS WITH ENGINEER BEFORE ANY EQUIPMENT IS ORDERED, MATERIALS FABRICATED OR SYSTEMS INSTALLED.
- PROVIDE IDENTIFICATION TAGS FOR ALL SCHEDULED EQUIPMENT.
- COORDINATE THE INSTALLATION OF PLUMBING SYSTEMS WITH OTHER TRADES AND PROVIDE OFFSETS AND ADJUSTMENTS AS NECESSARY TO ACCOMMODATE STRUCTURE AND OTHER TRADES.
- LEVEL ALL EQUIPMENT CURBS / BASES PRIOR TO INSTALLATION OF ANY EQUIPMENT.
- SEAL ALL WALL AND ROOF PENETRATIONS WATERTIGHT WITH SILICONE CAULKING AND BACKER ROD. U.L. LISTED AND FM APPROVED SEALANTS ARE TO BE USED AT ALL PENETRATIONS OF RATED WALLS, CEILINGS AND FLOORS.
- COORDINATE TO PROVIDE ALL THE MISCELLANEOUS SUPPORT AND FRAMING REQUIRED FOR THE PLUMBING EQUIPMENT.
- COORDINATE AND VERIFY ALL OPENINGS IN STRUCTURAL WALLS, ABOVE CEILINGS, AND FLOORS WITH THE STRUCTURAL CONTRACTOR.
- PROVIDE EQUIPMENT VIBRATION ISOLATION FROM STRUCTURE AND ASSOCIATED PIPING SYSTEMS.
- COORDINATE WITH THE GENERAL CONTRACTOR TO PROVIDE OPENINGS THROUGH CONCRETE FOR PIPE PENETRATIONS AND SIMILAR SERVICES BY CORE DRILLING AND SAWING. REVIEW THE PROPOSED CUTTING WITH THE INSTALLER OF THE WORK TO BE CUT, AND COMPLY WITH HIS RECOMMENDATIONS TO MINIMIZE DAMAGE.
- THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE PLUMBING REQUIREMENTS FOR ALL CUTTING AND PATCHING OF EXISTING FACILITIES TO BE COMPLETED BY THE GENERAL CONTRACTOR OR OTHERS.
- USE ADJUSTABLE PIPE HANGERS ON SUSPENDED PIPE. ISOLATE HANGERS COMING IN CONTACT WITH BARE COPPER PIPE WITH DIELECTRIC HANGER LINERS. PROVIDE SUPPORTS BETWEEN PIPING AND BUILDING STRUCTURE WHERE NECESSARY TO PREVENT SWAYING. CONFORM TO THE MICHIGAN STATE PLUMBING CODE FOR HANGER SIZES AND SPACING. DO NOT SUPPORT PIPE FROM OTHER PIPE OR DUCT SYSTEMS. INSTALL HANGERS AND SUPPORTS TO ALLOW CONTROLLED MOVEMENT OF PIPING SYSTEM AND TO PERMIT PROPER MOVEMENT BETWEEN PIPE ANCHORS.
- INSTALL PIPE, TUBE AND FITTINGS IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES WHICH WILL ACHIEVE PERMANENTLY-LEAKPROOF PIPING SYSTEMS, CAPABLE OF PERFORMING EACH INDICATED SERVICE WITHOUT PIPING FAILURE. INSTALL EACH RUN WITH A MINIMUM OF JOINTS AND COUPLINGS, BUT WITH ADEQUATE AND ACCESSIBLE UNIONS FOR DISASSEMBLY, MAINTENANCE OR REPLACEMENT OF VALVES AND EQUIPMENT. REDUCE SIZES BY USE OF REDUCING FITTINGS. INSTALL PIPING WITHOUT SPRINGING OR FORCING. SUPPORT PIPING INDEPENDENTLY AT EQUIPMENT SO ITS WEIGHT WILL NOT BE SUPPORTED BY THE EQUIPMENT. FURNISH ALL DEVICES NECESSARY FOR FINAL CONNECTION, INCLUDING BUT NOT LIMITED TO TAIL PIECES, STOPS AND SUPPLIES. LOCATE PIPING RUNS, EXCEPT AS OTHERWISE INDICATED, VERTICALLY AND HORIZONTALLY. AVOID DIAGONAL RUNS WHEREVER POSSIBLE. ORIENT HORIZONTAL RUNS PARALLEL WITH WALLS AND COLUMN LINES. HOLD PIPING CLOSE TO WALLS, OVERHEAD CONSTRUCTION. COLUMNS AND OTHER STRUCTURAL AND PERMANENT-ENCLOSURE ELEMENTS OF THE BUILDING. LIMIT CLEARANCE OF 0.5" WHERE FURRING IS SHOWN FOR ENCLOSURE OR CONCEALMENT OF PIPING, BUT ALLOW FOR INSULATION THICKNESS, IF ANY.
- FLUSH OUT PIPING SYSTEMS WITH CLEAN WATER BEFORE PROCEEDING WITH THE REQUIRED TESTS. PROVIDE TEMPORARY EQUIPMENT FOR TESTING, INCLUDING PUMP AND GAUGES. TEST PIPING SYSTEM BEFORE INSULATION IS INSTALLED WHEREVER FEASIBLE. TEST EACH NATURAL SECTION OF EACH PIPING SYSTEM INDEPENDENTLY. BUT DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. FILL EACH SECTION OF WATER, DRAIN OR VENT PIPING WITH WATER AND PRESSURIZE FOR TWO HOURS AT 150% OF OPERATING PRESSURE, BUT NOT LESS THAN 50 PSIG FOR PRESSURE PIPING AND TEN FEET FOR DRAIN AND VENT PIPING. TEST FAILS IF LEAKAGE IS OBSERVED OR IF PRESSURE DROP EXCEEDS 5% OF TEST PRESSURE. REPAIR PIPING SYSTEMS SECTIONS WHICH FAIL BY DISASSEMBLY AND RE-INSTALLATIONS, USING NEW MATERIALS TO THE EXTENT REQUIRED TO OVERCOME LEAKAGE. DO NOT USE CHEMICALS, STOP-LEAK COMPOUNDS, MASTICS OR OTHER TEMPORARY REPAIR METHODS. AFTER TESTING AND REPAIR WORK HAVE BEEN COMPLETED, DRAIN TEST WATER FROM PIPING SYSTEMS.
- FILL ALL DOMESTIC WATER LINES WITH A CHLORINE WATER SOLUTION OF 50 PARTS PER MILLION. MINIMUM. HOLD SOLUTION IN PIPE FOR AT LEAST 24 HOURS. OPEN AND CLOSE ALL VALVES 3 TIMES DURING CHLORINATION. WASTE CHLORINE SOLUTION FROM EACH OUTLET MEASURE SOLUTION FLOW RESIDUAL CHLORINE AT END, IF NOT LESS THAN 10 PPM. REPEAT. ALL NEW POTABLE WATER SYSTEMS ARE TO BE CLEANED AS HEREIN SPECIFIED PRIOR TO TESTING OR APPLICATION OF INSULATION. COMPLY WITH ALL APPLICABLE HEALTH CODES WHICH EVER IS MORE STRINGENT.
- PROVIDE SHUT OFF VALVES ON ALL DOMESTIC AND PROCESS WATER SYSTEMS ON ALL BRANCHES AT EACH EQUIPMENT / FIXTURE GROUP, AS CLOSE TO MAIN AS POSSIBLE.
- BALL VALVES 1" AND SMALLER - NIBCO T585 (THREADED ENDS) OR NIBCO S585 (SOLDERED ENDS), RATED FOR 400 PSI NON-SHOCK WOG 2-PIECE CAST BRONZE BODIES, TFE SEAT, FULL PORT, BRONZE TRIM, BLOWOUT PROOF STEMS BRASS/BRONZE BALL. VALVE ENDS ARE TO HAVE FULL DEPTH ANSI THREADS OR EXTENDED SOLDER CONNECTIONS. BALL VALVES 1 1/4" THRU 3"; NIBCO T-590 (THREADED ENDS) OR S-590 (SOLDER ENDS), RATED FOR 400 PSI NON-SHOCK WOG, 3-PIECE CAST BRONZE BODY, TFE SEAT, CONVENTIONAL PORT, BRONZE TRIM, BLOWOUT PROOF STEM, BRONZE BALL. VALVE ENDS ARE TO HAVE FULL DEPTH ANSI THREADS OR EXTENDED SOLDER CONNECTIONS. CHECK VALVES 2 1/2" AND SMALLER - NIBCO T413 (THREADED ENDS) OR NIBCO T413 (SOLDERED ENDS), Y-PATTERN HORIZONTAL SWING TYPE, CLASS 125, RATED FOR 200 PSI WOG BRONZE ASTM B-62 BODY WITH TFE SEAT DISC. GAS VALVES; ALL SIZES- CORROSION RESISTANT LUBRICATED PLUG TYPE WITH CORROSION RESISTANT BEARINGS SUITABLE FOR INTENDED SERVICE, LEVER OPERATED.
- INSTALL VALVES ON HORIZONTAL PIPING WITH STEMS POINTING UP, AND AS CLOSE TO VERTICAL AS POSSIBLE. INSTALL VALVES AT EACH PIECE OF EQUIPMENT, FIXTURE OR APPLIANCE SO THAT THE SUPPLY AND RETURN SERVICES CAN BE SHUT OFF TO REMOVE THE ITEM WITHOUT DISTURBING THE PIPING SYSTEM. INSTALL VALVES WHERE REQUIRED FOR PROPER OPERATION OF PIPING AND EQUIPMENT, INCLUDING VALVES IN BRANCH LINES TO ISOLATE SECTIONS OF PIPING.
- DOMESTIC WATER PIPING: ABOVE GROUND INSIDE BUILDINGS, SIZE 2" AND UNDER IS TO BE COPPER TUBE, HARD TEMPER, TYPE "L" PIPE WITH WROUGHT COPPER, OR CAST BRONZE FITTINGS AND LEAD FREE, 95% TIN ANTIMONY SOLDER. BELOW GROUND, SIZE 2" AND UNDER IS TO BE COPPER TUBE, ANNEALED, TYPE K PIPE WITH WROUGHT COPPER, AND SILVER SOLDERED FITTINGS.
- LAY UNDERGROUND PIPING TRUE TO THE GRADES AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. INSTALL GASKETS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR THE USE OF LUBRICANTS, CEMENTS AND OTHER SPECIAL INSTALLATION REQUIREMENTS. CLEAR THE INTERIOR OF CONDUIT OF DIRT AND OTHER SUPERFLUOUS MATERIAL AS THE WORK PROGRESSES. PLACE PLUGS IN THE END OF UNCOMPLETED CONDUIT AT THE END OF THE DAY OR WHENEVER WORK STOPS. FLUSH LINES, IF REQUIRED, TO REMOVE COLLECTED DEBRIS. MAKE JOINTS BETWEEN CAST IRON PIPE AND OTHER TYPES OF PIPE WITH STANDARD MANUFACTURED CAST IRON ADAPTERS AND FITTINGS. SET GRADE CLEANOUTS LOCATED IN UNPAVED AND ASPHALT PAVED AREAS IN 12"x12"x4" CONCRETE PADS.
- CLEAN AND DRY PIPE SURFACES PRIOR TO INSULATING. EXTEND PIPING INSULATION WITHOUT INTERRUPTION THROUGH WALLS, FLOORS AND SIMILAR PIPING PENETRATIONS, EXCEPT WHERE OTHERWISE INDICATED. INSTALL PROTECTIVE SHEETMETAL SHIELD AROUND BOTTOM HALF OF PIPE INSULATION AT EACH PIPE SUPPORT SUFFICIENT TO PREVENT CRUSHING OF THE INSULATION. AT CONTRACTORS OPTION, INSTALL PRE-MANUFACTURED HEAVY DENSITY PIPE SHIELDS IN LIEU OF PIPE INSULATION AT EACH PIPE SUPPORT. EXCEPT AS NOTED, COVER VALVES, FLANGES, FITTINGS AND SIMILAR ITEMS IN EACH PIPING SYSTEM WITH EQUIVALENT THICKNESS AND COMPOSITION OF INSULATION AS APPLIED TO ADJOINING PIPE RUN. DO NOT COVER VALVE OPERATORS, THREADED OR SOLDER JOINT STRAINERS OR BLOWDOWN END OF STRAINERS. MARK LOCATION OF UNIONS AND FLANGES COVERED BY INSULATION WITH PERMANENT PAINT OR INK, PAINTED STENCIL OR APPROVED LABEL. MAINTAIN INTEGRITY OF VAPOR-BARRIER JACKETS ON INSULATION OF COLD PIPES AND PROTECT TO PREVENT PUNCTURE OR OTHER DAMAGE. INSULATE BETWEEN PIPE AND PIPE SADDLES. ON UNDERGROUND PIPE INSULATION, INSTALL UNICELLULAR INSULATION ON PIPE WITHOUT SLITTING INSULATION. SEAL ALL TRANSVERSE JOINTS WITH ADHESIVE. PROVIDE COMPOSITE INSTALLATION (INSULATION, JACKET, COVERING, SEALER, MASTIC AND ADHESIVE) COMPLYING WITH THE FOLLOWING: FLAME SPREAD: 25 OR LESS. SMOKE DEVELOPED: 50 OR LESS. METHOD: ASTM E84 (NFPA 255). FIBERGLASS PIPE INSULATION: SCHULLER MICRO-LOK 850. HEAVY DENSITY PIPE INSULATION WITH AP-T JACKET. FIBERGLASS FITTING INSULATION: SCHULLER "ZESTON" FITTING COVERS WITH FACTORY-CUT FIBERGLASS INSULATION INSERT.
- BUILDING PLUMBING SYSTEMS WILL BE EXTENDED TO CONNECT TO EXISTING SERVICE. FIELD VERIFY SIZE, LOCATION, AND CONDITION OF EXISTING SERVICE.
- SANITARY WASTE AND VENT (SWV) PIPING ABOVE GROUND IN RETURN AIR PLENUMS IS SHALL BE CAST IRON, NO HUB, NEOPRENE GASKET, STAINLESS STEEL SLEEVE JOINT, SCHEDULE 40 PVC IS PERMISSIBLE ABOVE GROUND IN NON PLENUM RATED APPLICATIONS. BELOW GROUND SWV PIPING SHALL BE SCHEDULE 40 PVC WITH SOLVENT GLUED FITTINGS AND JOINTS.



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PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	2023.12.06
B	DD	2024.02.19
C	IFB	2024.04.23

ISSUE DATE: 2023.12.06

CAD DWG FILE: _____
DRAWN BY: MDC
CHECKED BY: AYG
DESIGNED BY: MDC

SHEET TITLE:
**GROUND FLOOR
PLAN - PLUMBING
DEMOLITION**

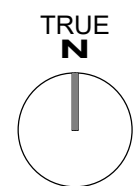
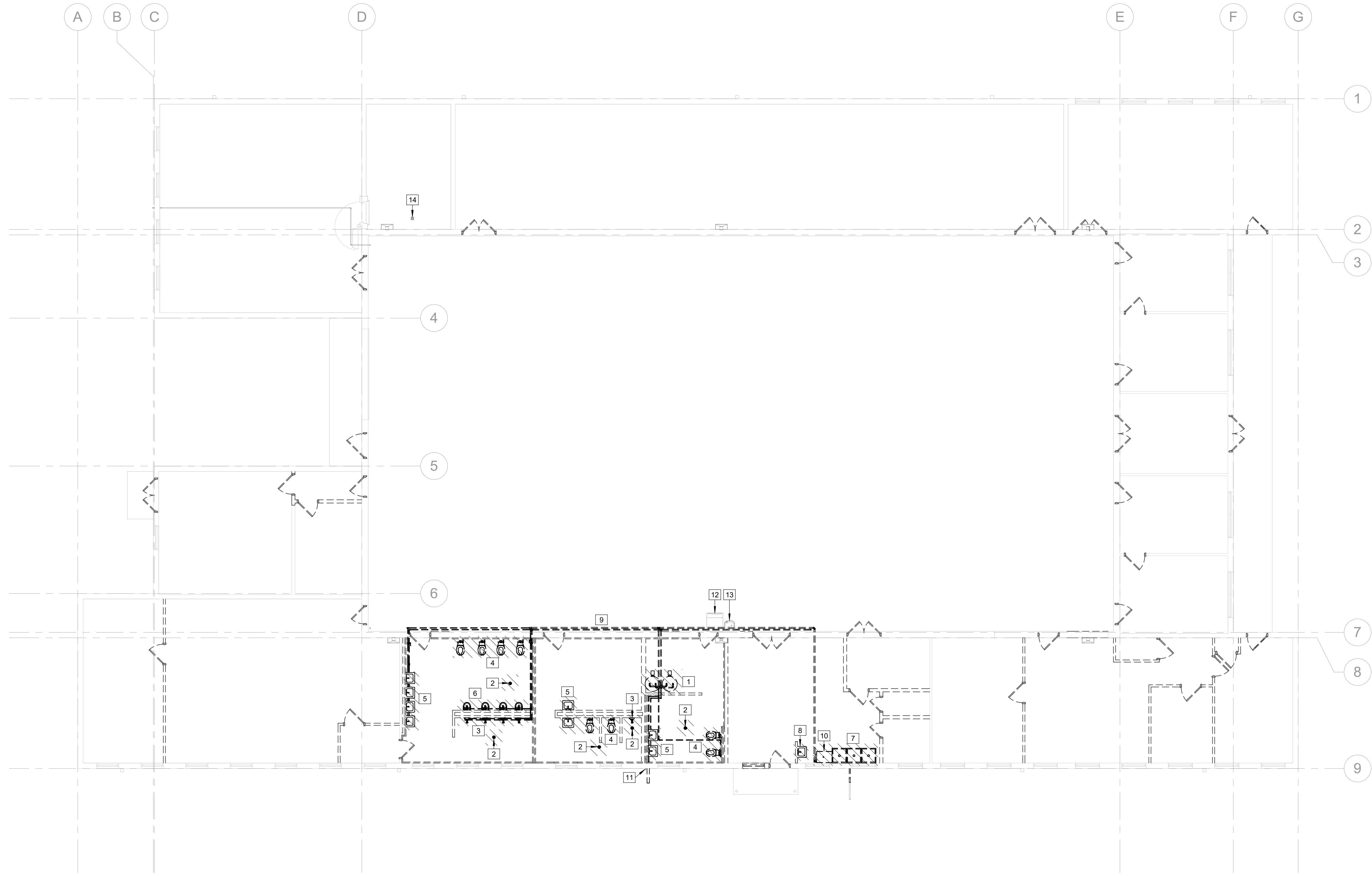
SHEET NUMBER:
PD101
49 OF 85 SHEETS
2024.04.23

GENERAL DEMOLITION NOTES - PLUMBING

1. THE DRAWINGS DEPICT ONLY GENERALLY THE EXISTING CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD OBSERVATIONS AND CONFIRM THE LOCATIONS OF EXISTING PLUMBING FIXTURES AND ASSOCIATED PIPING THAT NEED TO BE REMOVED.
2. DEMOLITION WORK SHALL BE DONE BY THE PLUMBING CONTRACTOR. CONTRACTOR SHALL FOLLOW STANDARD DEMOLITION PROCEDURES TO REMOVE THE EXISTING PIPING AND/OR FIXTURES. CONTRACTOR TO COORDINATE THE DEMO WITH OWNER AND OTHER TRADES.
3. THE CONTRACTOR IS RESPONSIBLE TO FOLLOW BUILDING MANAGEMENT RULES WITH REGARD TO TRASH AND NOISE.
4. THE CONTRACTOR SHALL MAINTAIN IN OPERATION ALL EXISTING UTILITIES DURING CONSTRUCTION.
5. ALL DEMOLITION WORK WILL BE SCHEDULED WITH BUILDING MANAGEMENT AND PERFORMED ONLY FOLLOWING APPROVAL.
6. THE CONTRACTOR SHALL INFORM BUILDING MANAGEMENT AND RECEIVE SCHEDULE APPROVAL FOR ANY REQUIRED UTILITY SHUTDOWN.
7. PATCH WALL AND/OR CEILING/ROOF LOCATIONS AFFECTED BY DEMOLITION/RELOCATION WORK TO MATCH ADJACENT SURFACES.
8. ANY FIXTURES/PIPING SHOWN TO BE REMOVED SHALL INCLUDE REMOVAL OF ALL ASSOCIATED FITTINGS, CONNECTIONS, HANGERS, INSULATION, ETC.

KEYED NOTES:

- 1 DEMOLISH AND REMOVE WATER HEATERS AND ALL ASSOCIATED PIPING.
- 2 DEMOLISH AND REMOVE FLOOR DRAIN AND ALL ASSOCIATED PIPING.
- 3 DEMOLISH AND REMOVE SHOWER HEADS AND ALL ASSOCIATED HW & CW PIPING.
- 4 DEMOLISH AND REMOVE TOILETS AND ALL ASSOCIATED PIPING.
- 5 DEMOLISH AND REMOVE LAVATORIES AND ALL ASSOCIATED PIPING.
- 6 DEMOLISH AND REMOVE URINALS AND ALL ASSOCIATED PIPING.
- 7 DEMOLISH AND REMOVE THREE-COMPARTMENT SINK AND ALL ASSOCIATED PIPING.
- 8 DEMOLISH AND REMOVE HAND WASHING SINK AND ALL ASSOCIATED PIPING.
- 9 DEMOLISH AND REMOVE ALL HW & CW PIPING.
- 10 DEMOLISH AND REMOVE GREASE INTERCEPTOR AND ALL ASSOCIATED PIPING.
- 11 EXISTING HOSE BIBB TO BE REUSED.
- 12 ICE MACHINE TO BE REUSED.
- 13 DRINKING FOUNTAIN TO BE REUSED
- 14 EXISTING FLOOR DRAIN TO REMAIN.



1 GROUND FLOOR PLAN - PLUMBING DEMOLITION
PD101 SCALE: 1 : 100



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SHEET TITLE:
**UNDERGROUND
PLAN - PLUMBING**

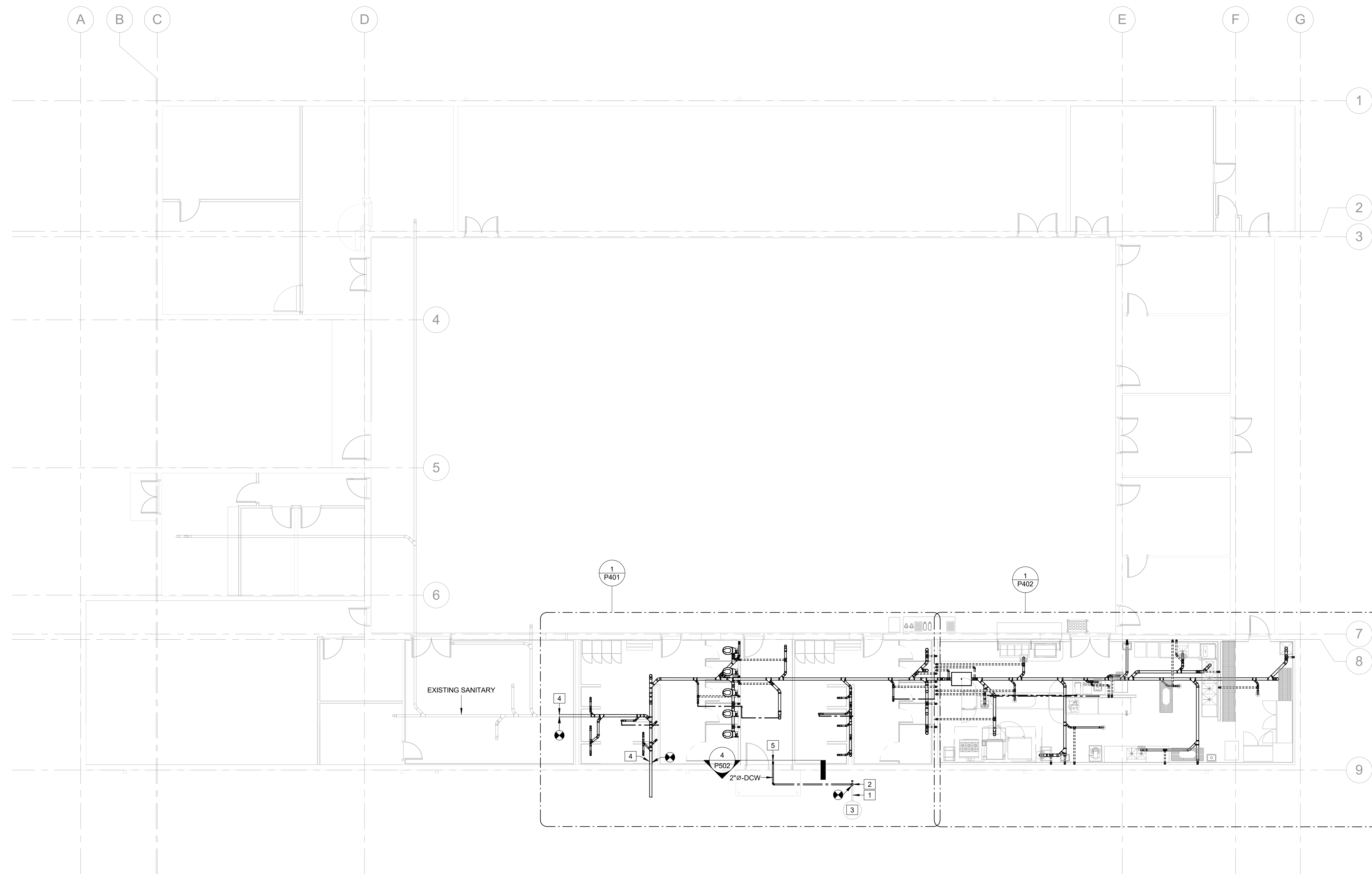
SHEET NUMBER:

P101

50 OF 85 SHEETS
2024.04.23

KEYED NOTES:

- 1 EXISTING 2"Ø-DCW BELOW GRADE TO REMAIN.
- 2 CONNECT NEW 2"Ø-DCW TO EXISTING 2"Ø-DCW BELOW GRADE AND ROUTE TO MECHANICAL ROOM AS SHOWN ON PLAN. FIELD VERIFY CONDITION, SIZE, AND EXACT LOCATION. REFER TO CIVIL SHEET C101.
- 3 EXISTING 2" WATER METER
- 4 REFER TO CIVIL FOR CONTINUATION.
- 5 2"Ø-DCW SERVICE MAIN UP THROUGH FLOOR TO RPZ-1.



TRUE
N
1
P101
UNDERGROUND PLAN - PLUMBING
SCALE: 1/8" = 1'-0"



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SHEET TITLE:
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PLAN - PLUMBING**

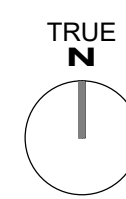
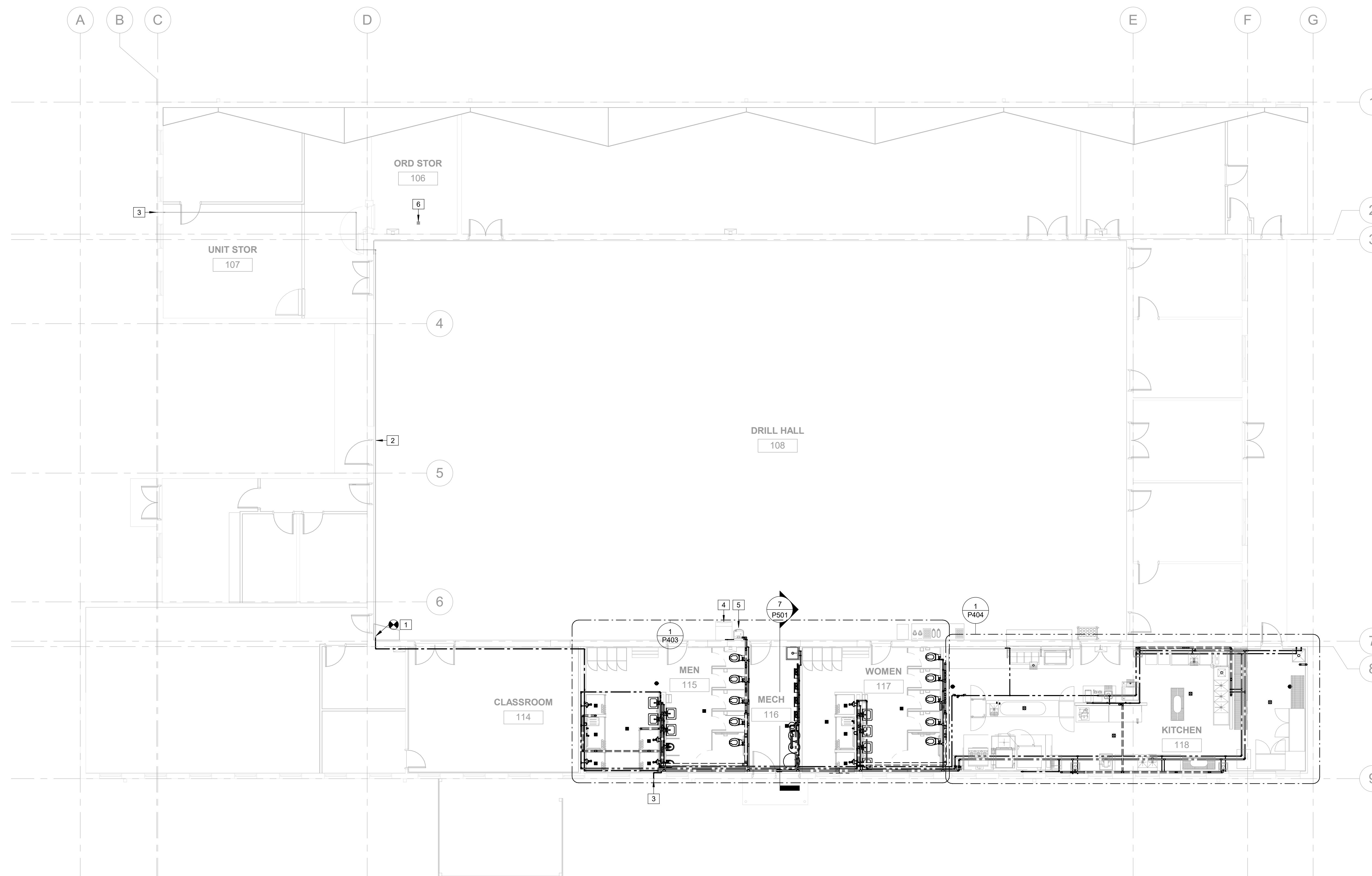
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P102

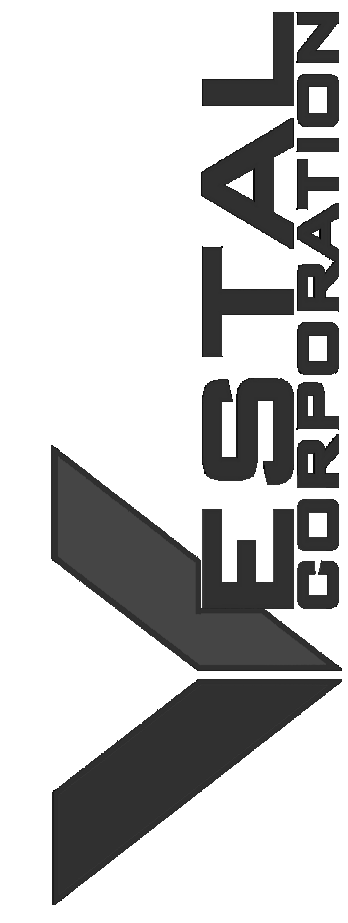
51 OF 85 SHEETS
2024.04.23

KEYED NOTES:

- 1 CONNECT NEW 3/4"Ø-DCW TO EXISTING 3/4"Ø-DCW THAT SERVES EXISTING HOSE BIBB. VERIFY THAT THE EXISTING LINE IS ACTIVE BEFORE MAKING ANY CONNECTIONS. VERIFY EXACT LOCATION, SIZE, AND CONDITION.
- 2 EXISTING 3/4"Ø-DCW TO REMAIN.
- 3 EXISTING HOSE BIBB TO BE REUSED.
- 4 PROVIDE NEW 1/2"Ø-DCW AND CONNECT TO ICE MACHINE. ROUTE PUMP DISCHARGE TO MOP SINK IN MECHANICAL ROOM.
- 5 PROVIDE NEW 2"Ø-SAN AND 1/2"Ø-DCW AND CONNECT TO DRINKING FOUNTAIN.
- 6 EXISTING FLOOR DRAIN TO REMAIN.



1 GROUND FLOOR PLAN - PLUMBING
P102 SCALE: 1/8" = 1'-0"



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SHEET TITLE:
**ENLARGED
UNDERGROUND
PLANS - PLUMBING**

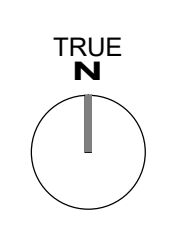
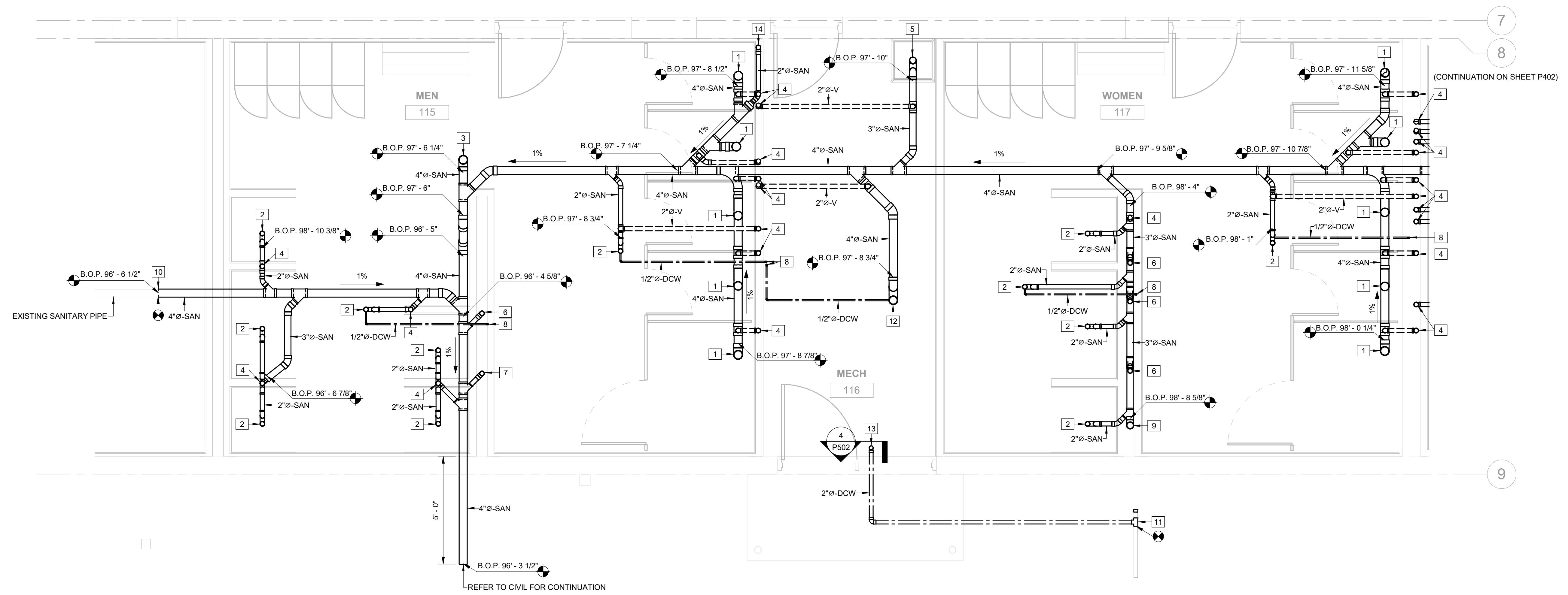
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P401

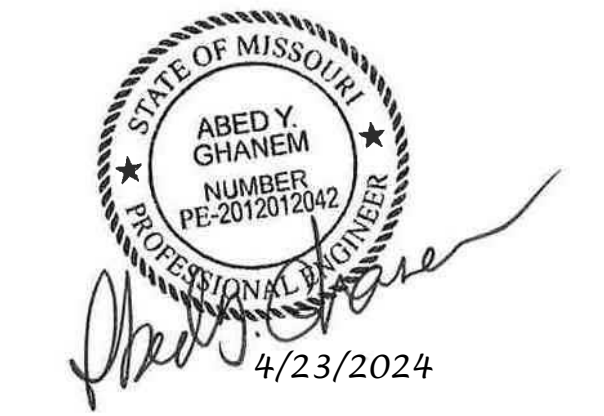
52 OF 85 SHEETS
2024.04.23

KEYED NOTES:

- 1 4"Ø-SAN UP TO WC-1
- 2 2"Ø-SAN UP TO FD-1
- 3 4"Ø-SAN UP TO FCO-1
- 4 2"Ø-V UP
- 5 3"Ø-SAN UP TO MB-1
- 6 2"Ø-SAN UP TO LAV-1
- 7 2"Ø-SAN UP TO UR-1
- 8 1/2"Ø-DCW UP TO TP-1
- 9 3"Ø-SAN UP TO WCO-1
- 10 REFER TO CIVIL FOR CONTINUATION.
- 11 CONNECT NEW 2"Ø-DCW TO EXISTING 2"Ø-DCW BELOW GRADE AND ROUTE TO MECHANICAL ROOM AS SHOWN ON PLAN. FIELD VERIFY CONDITION, SIZE, AND EXACT LOCATION. REFER TO CIVIL SHEET C101.
- 12 4"Ø-SAN UP TO FD-1
- 13 2"Ø-DCW SERVICE MAIN UP THROUGH FLOOR TO RPZ-1.
- 14 2"Ø-SAN UP TO SERVE DRINKING FOUNTAIN.



1 ENLARGED UNDERGROUND PLAN - RESTROOMS
SCALE: 3/8" = 1'-0"



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CHECKED BY: AYG _____
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SHEET TITLE:

ENLARGED
UNDERGROUND
PLANS - PLUMBING

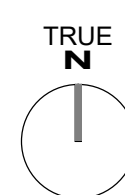
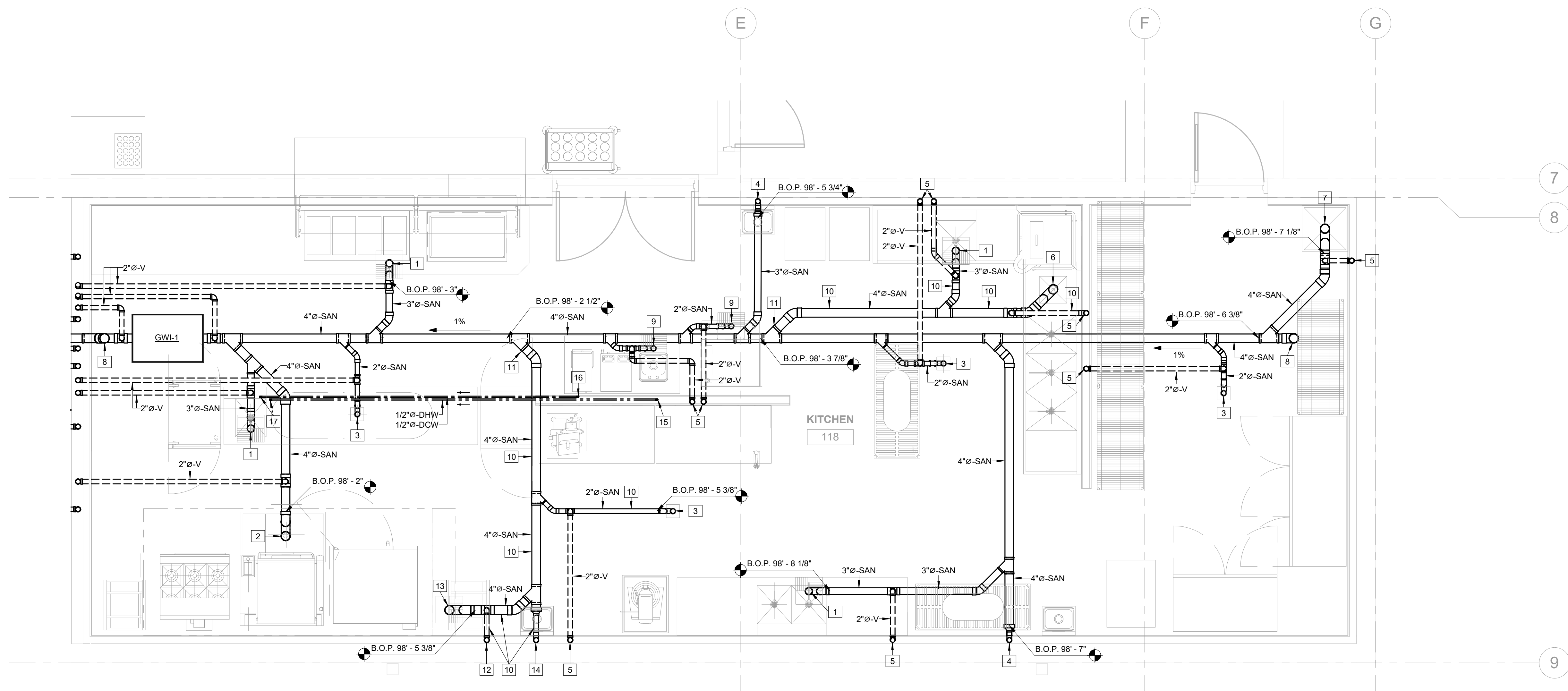
SHEET NUMBER:

P402

53 OF 85 SHEETS
2024.04.23

KEYED NOTES:

- 1 3"Ø-SAN UP TO FLOOR SINK
- 2 4"Ø-SAN UP TO TRENCH DRAIN
- 3 2"Ø-SAN UP TO FLOOR DRAIN
- 4 2"Ø-SAN UP TO HAND SINK
- 5 2"Ø-V UP
- 6 4"Ø-SAN UP TO FLOOR SINK. PROVIDE CAST IRON DRAIN MATERIAL AND PIPING FOR HIGH TEMPERATURE DISCHARGE FROM DISHWASHING MACHINE.
- 7 4"Ø-SAN UP TO MOP SINK
- 8 4"Ø-SAN UP TO FCO-1
- 9 2"Ø-SAN UP TO FLOOR SINK
- 10 PROVIDE CAST IRON PIPE FOR HIGH TEMPERATURE DISCHARGE. MAKE TRANSITION BETWEEN PVC AND CAST IRON WITH HUSKY 4-BAND COUPLING.
- 11 2"Ø-V UP. PROVIDE CAST IRON PIPING FOR HIGH TEMPERATURE VENT
- 12 4"Ø-SAN UP TO FLOOR SINK. PROVIDE CAST IRON PIPING FOR HIGH TEMPERATURE DISCHARGE.
- 13 2"Ø-SAN UP TO HAND SINK. PROVIDE CAST IRON PIPING.
- 14 1/2"Ø-DHW UP
- 15 1/2"Ø-DCW UP
- 16 1/2"Ø-DCW & 1/2"Ø-DHW UP TO SINK
- 17

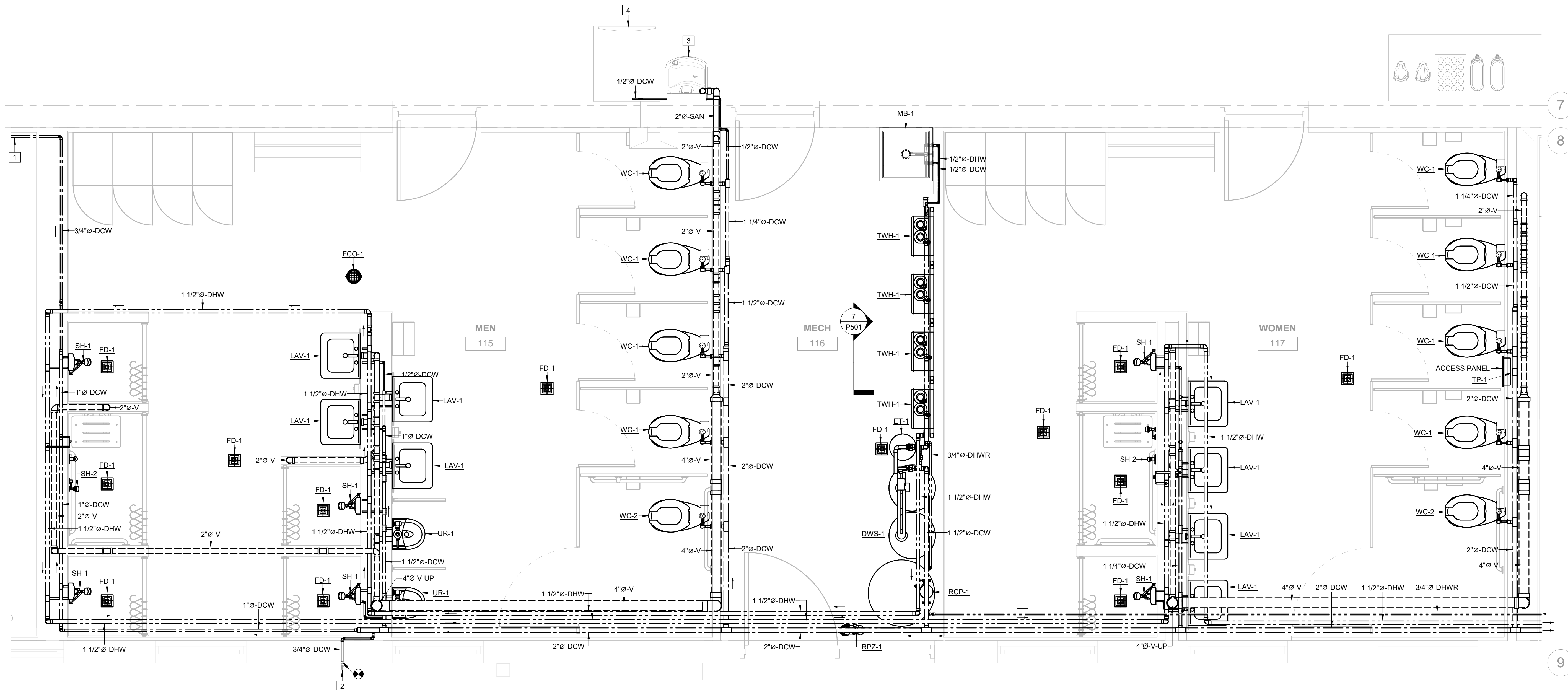


1 ENLARGED UNDERGROUND PLAN - KITCHEN
P402 SCALE: 3/8" = 1'-0"



KEYED NOTES:

- 1 CONNECT TO EXISTING 3/4"Ø-DCW THAT SERVES THE EXISTING HOSE BIBB ON THE EXTERIOR OF ROOM 107-UNIT STORAGE. EXISTING HOSE BIBB TO BE REUSED.
- 2 PROVIDE NEW 2"Ø-SAN AND 1/2"Ø-DCW AND CONNECT TO DRINKING FOUNTAIN.
- 3 PROVIDE NEW 1/2"Ø-DCW AND CONNECT TO ICE MACHINE. ROUTE PUMP DISCHARGE TO MOP SINK IN MECHANICAL ROOM.



TRUE N
1 ENLARGED FLOOR PLAN - PLUMBING
P403 SCALE: 1/2" = 1'-0"

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DESIGNED BY: MDC _____

SHEET TITLE:
ENLARGED FLOOR
PLANS - PLUMBING

SHEET NUMBER:

P403

54 OF 85 SHEETS
2024.04.23



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PLANS - PLUMBING**

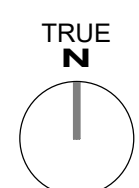
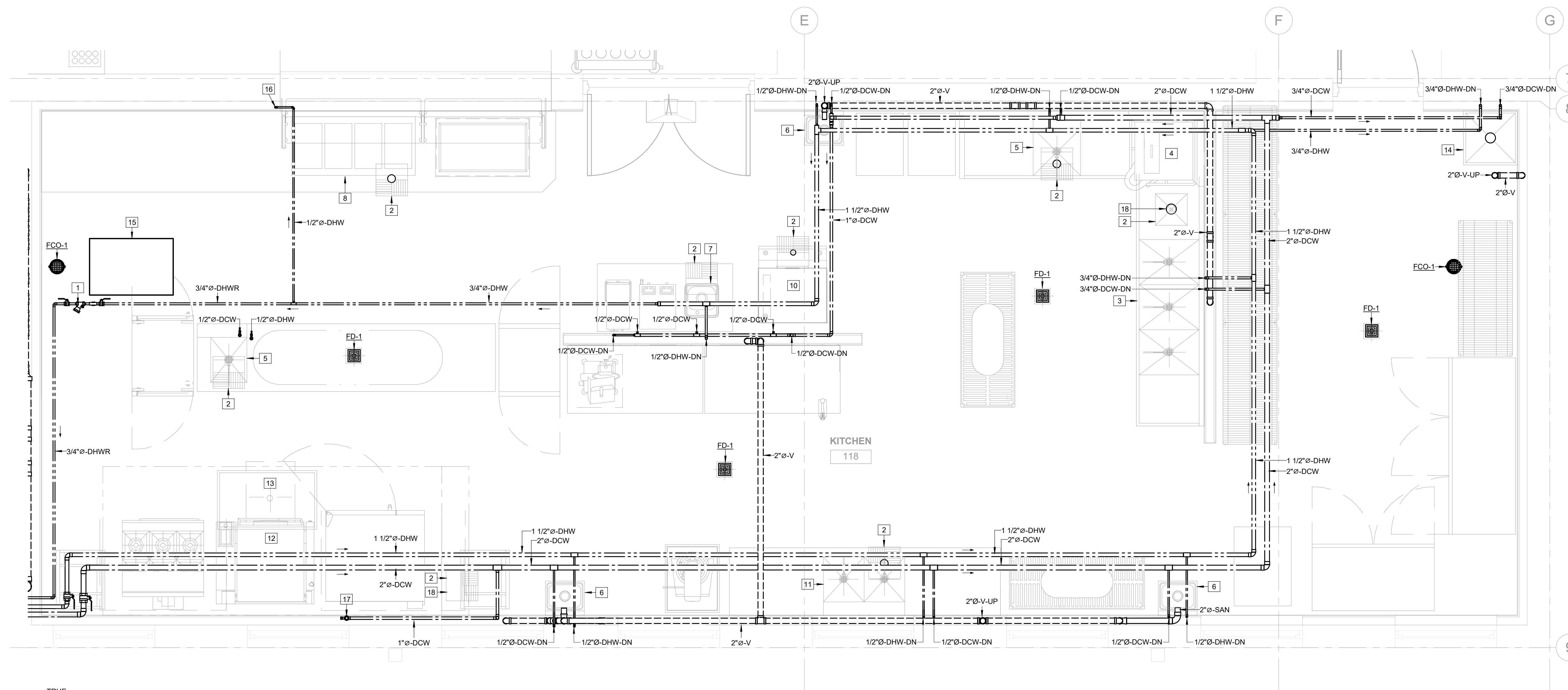
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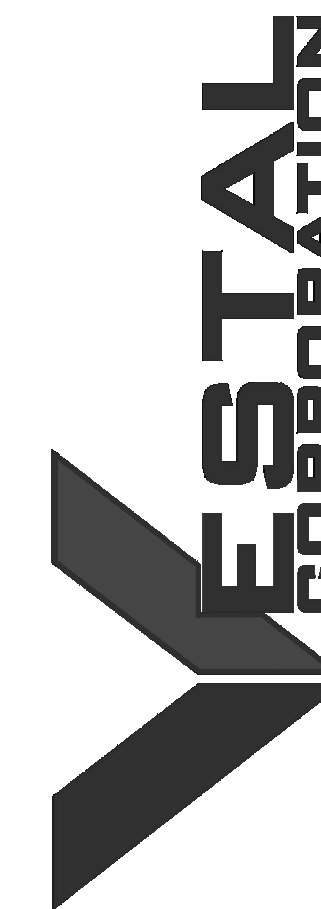
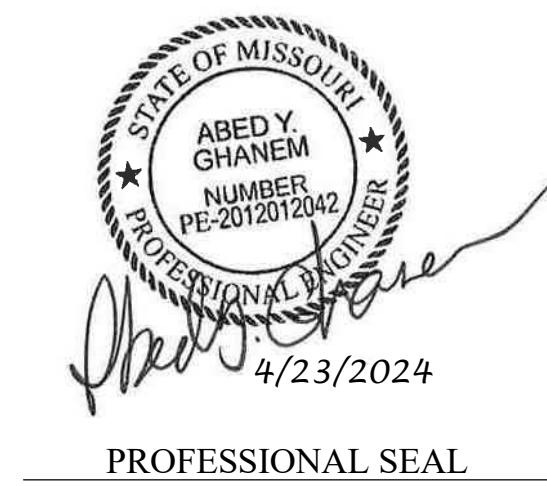
55 OF 85 SHEETS
2024.04.23

KEYED NOTES:

- 1 CIRCUIT SETTER BALANCING VALVE - REFER TO DETAIL 3 / P502.
- 2 FLOOR SINK (ES-1)
- 3 TRIPLE COMPARTMENT PRE-RINSE SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK. REFER TO DETAIL 5 / P502.
- 4 DISHWASHING MACHINE - PLUMBING CONTRACTOR SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.
- 5 SINGLE COMPARTMENT SINK - PLUMBING CONTRACTOR SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.
- 6 HAND WASHING SINK
- 7 DROP-IN SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 8 DROP-IN HOT FOOD UNIT - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 9 DROP-IN COLD PAN - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 10 ICE MACHINE
- 11 DOUBLE COMPARTMENT SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 12 BRAISING PAN - PLUMBING CONTRACTOR TO PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.
- 13 TRENCH DRAIN
- 14 MOP SINK
- 15 GREASE INTERCEPTOR
- 16 1/2"Ø-DHW FOR FILL FAUCET AT HOT WELL.
- 17 1"Ø-DW TO SERVE COMBO OVEN AND BRAISING PAN
- 18 PROVIDE CAST IRON PIPE FOR HIGH TEMPERATURE DISCHARGE.



1 ENLARGED FLOOR PLAN - KITCHEN PLUMBING
SCALE: 1/2" = 1'-0"



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PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

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B	DD	2024.02.19
C	IFB	2024.04.23

ISSUE DATE: 2023.12.06

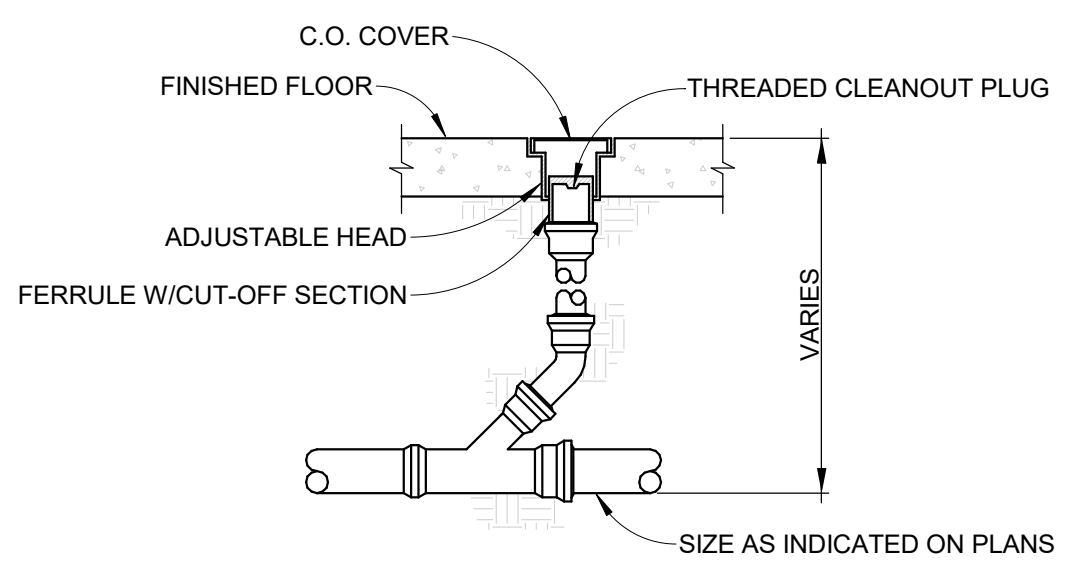
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DESIGNED BY: MDC

SHEET TITLE:
PLUMBING DETAILS

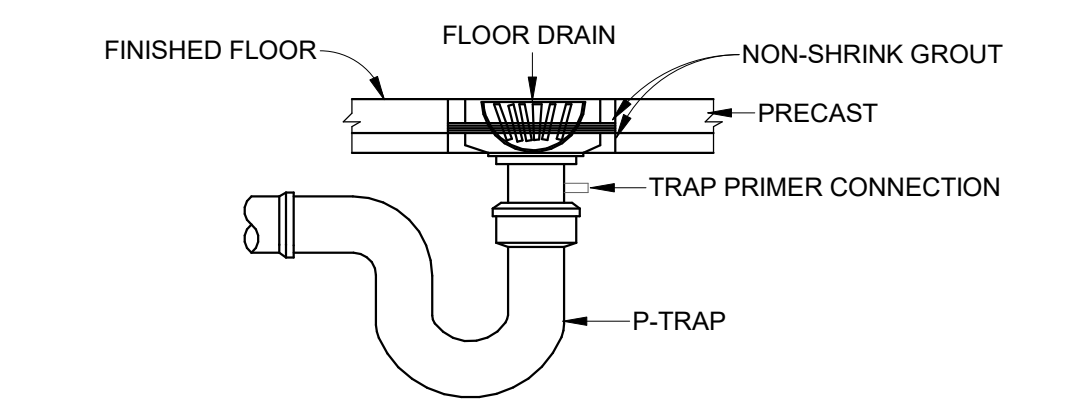
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P501

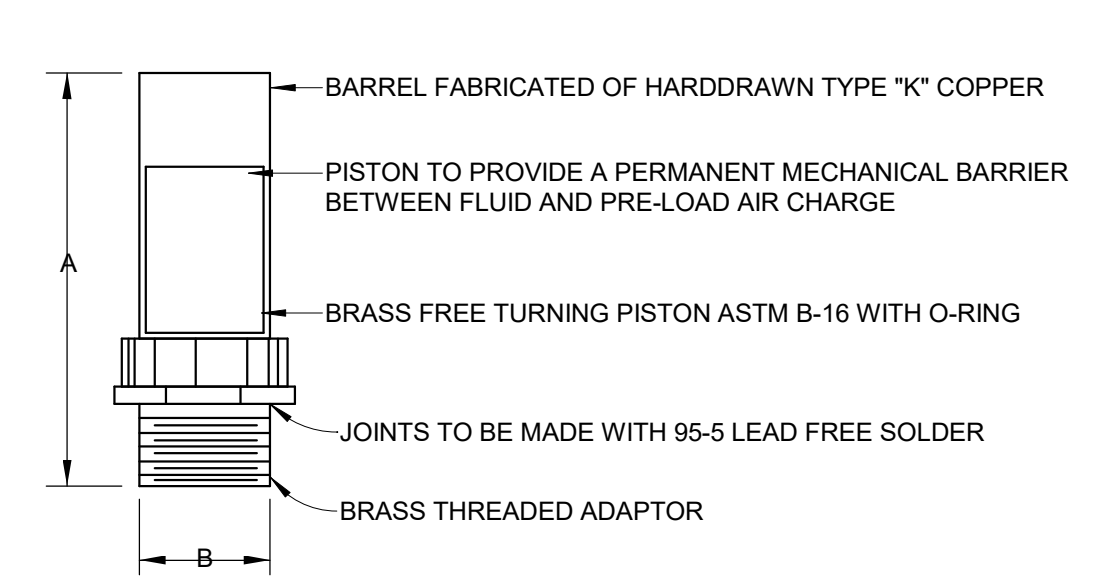
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5 TYPICAL FLOOR CLEANOUT DETAIL
SCALE: NTS

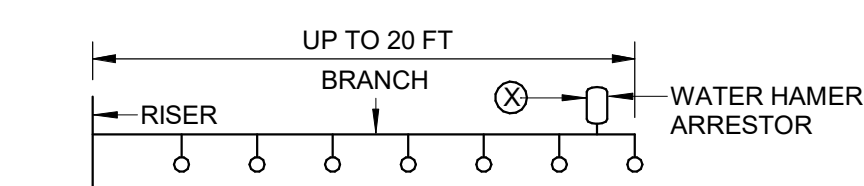


3 FLOOR DRAIN DETAIL
SCALE: NTS

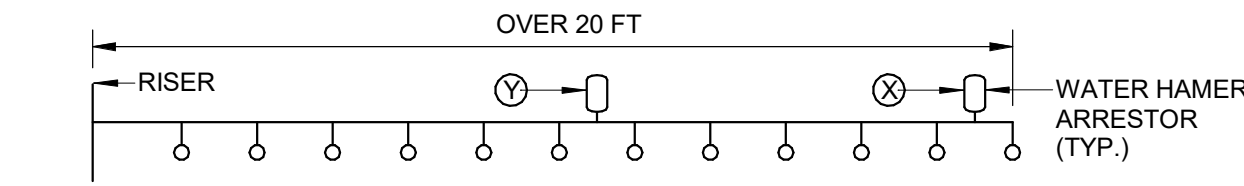


WATER HAMMER ARRESTOR SCHEDULE							
PIPE SIZE		P.D.I. SYMBOL	FIXTURE UNIT RATING	A SIZE		B SIZE	
in.	mm			in.	mm	in.	mm
1/2"	13	'A'	1-11	5"	127	1/2"	13
3/4"	19	'B'	12-32	5"	127	3/4"	19
1"	1"	'C'	33-60	7"	178	1"	1"
1 1/4"	31	'D'	61-113	7"	178	1 1/4"	31
1 1/2"	38	'E'	114-154	9"	228	1 1/2"	38
2"	50	'F'	155-330	9"	228	2"	50

BASIC RULES:
RULE 1: COVERS MULTIPLE FIXTURE BRANCH LINES WHICH DO NOT EXCEED 20 FT. IN LENGTH.

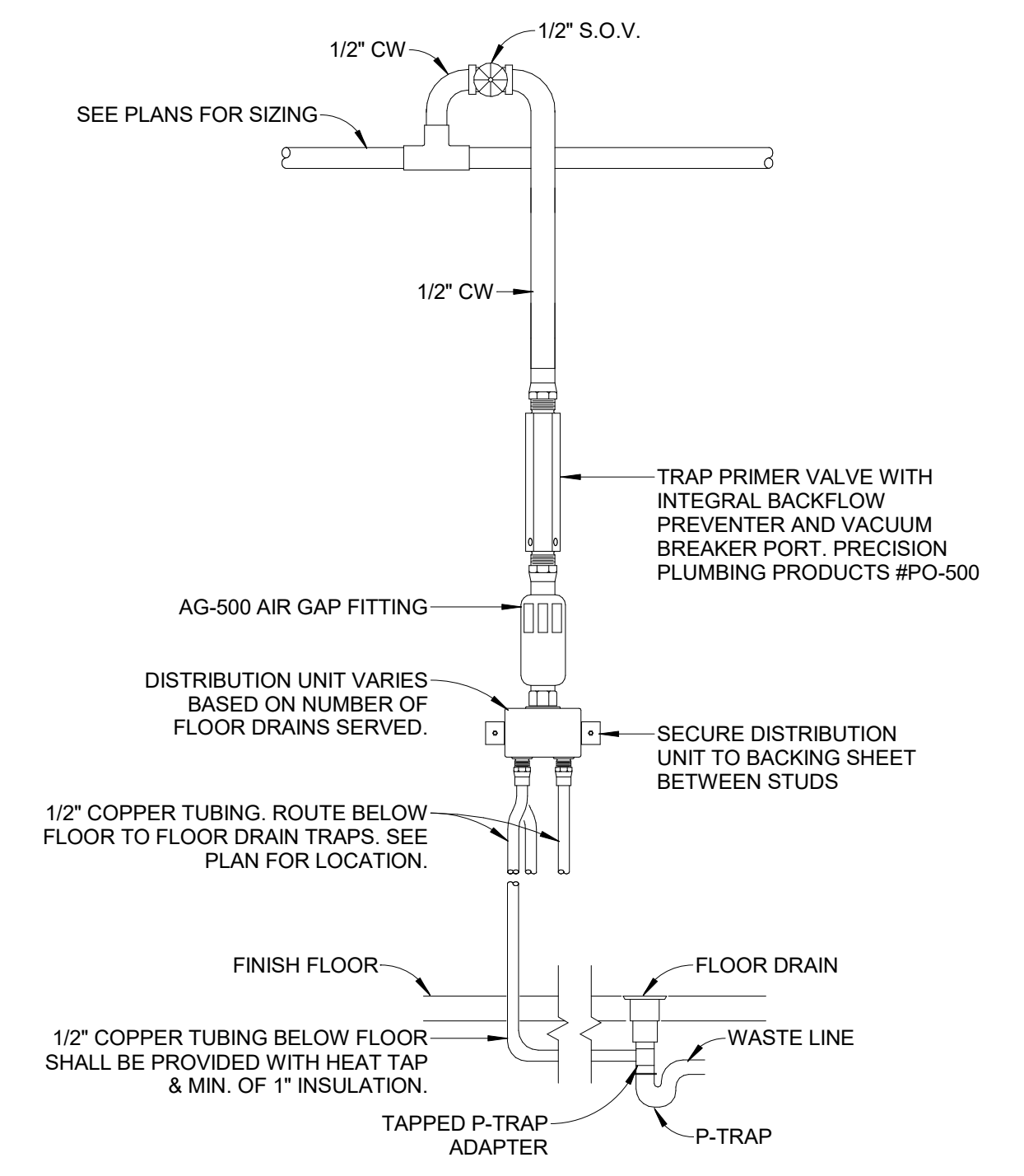


RULE 2: COVERS MULTIPLE FIXTURE BRANCH LINES WHICH DO NOT EXCEED 20 FT. IN LENGTH. THE SUM OF THE FIXTURE UNITS RATINGS OF UNITS AND SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF THE BRANCHES.

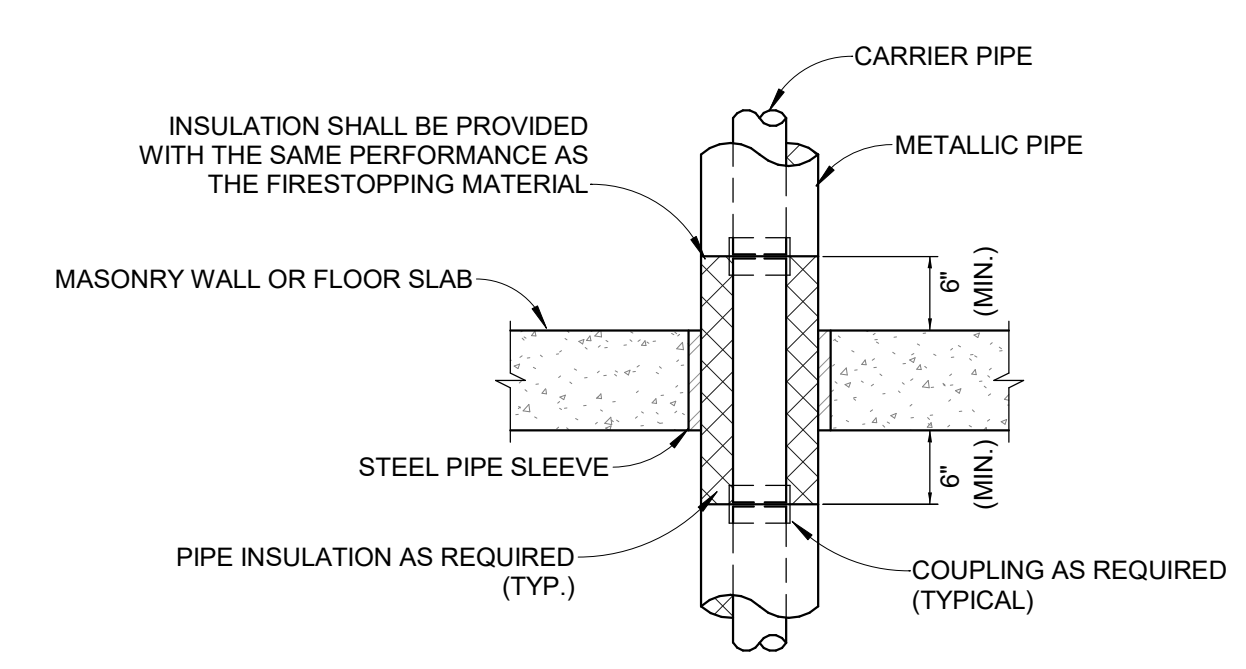


REFER TO MANUFACTURERS RECOMMENDATION FOR EXACT WATER HAMMER ARRESTOR INSTALLATION.

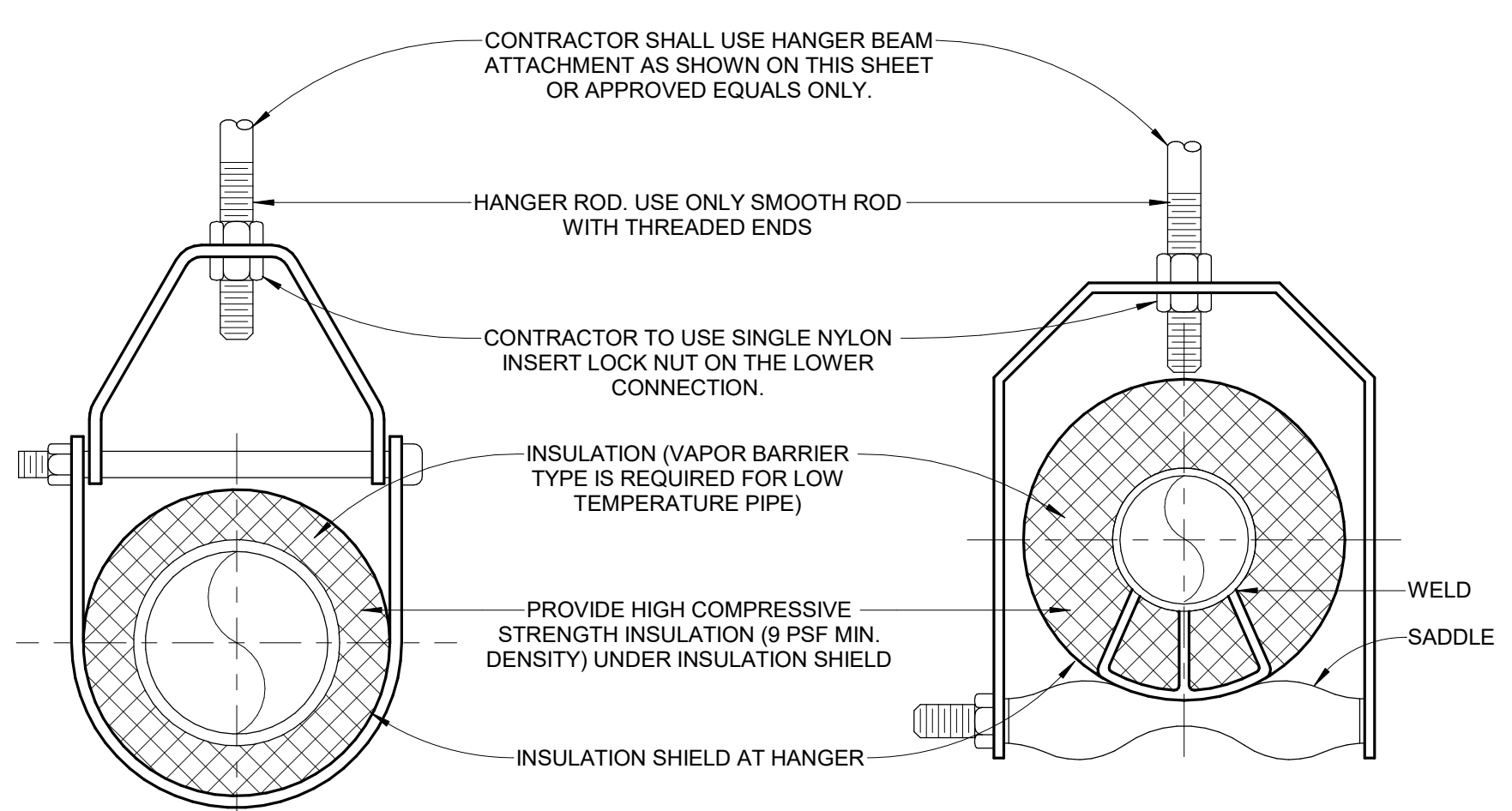
2 WATER HAMMER ARRESTOR SCHEDULE
SCALE: NTS



6 TRAP PRIMER W/ DISTRIBUTION UNIT
SCALE: NTS

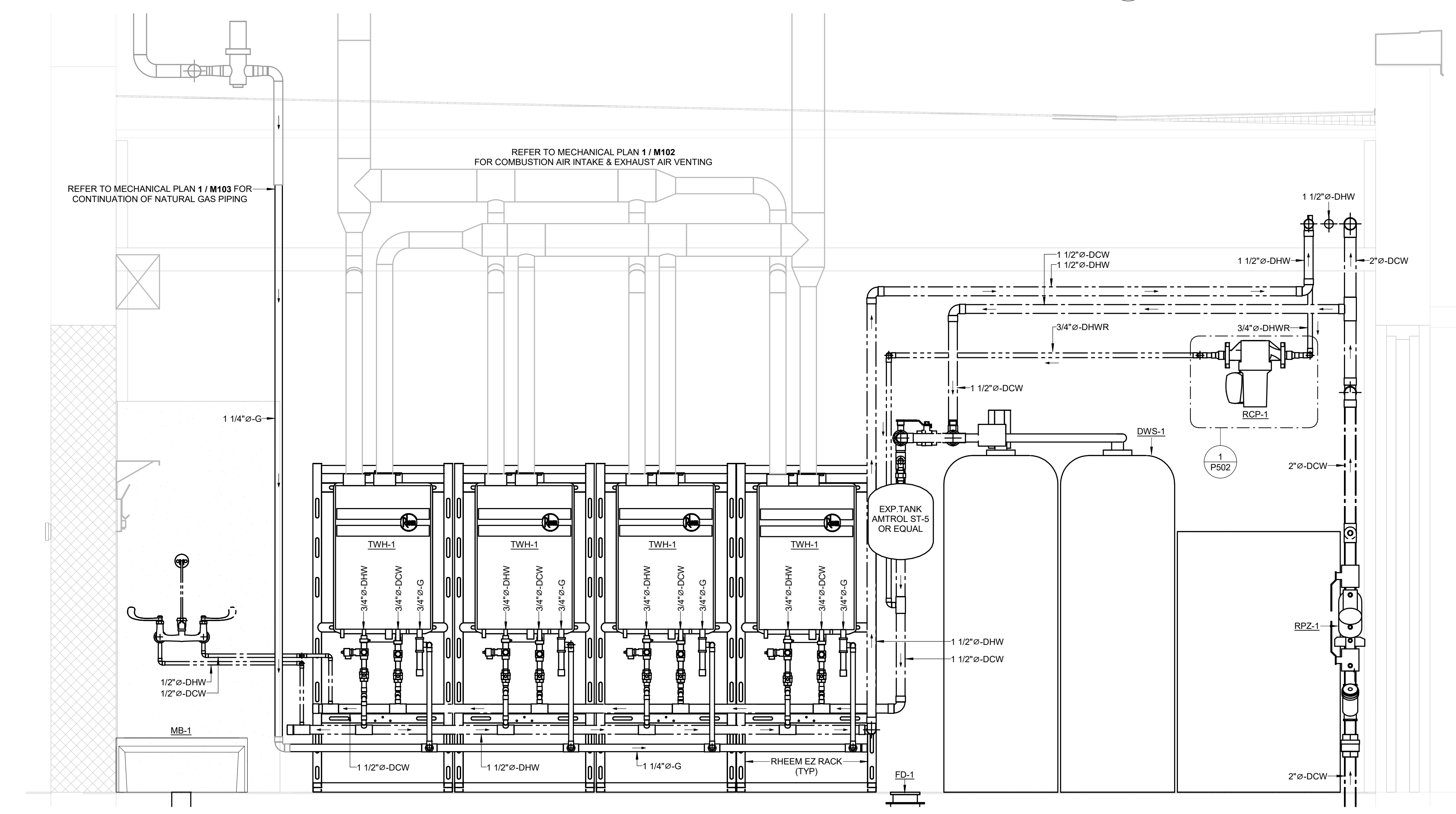


1 TYPICAL CONCRETE FLOOR OR MASONRY WALL PENETRATION DETAIL
SCALE: NTS



4 ADJUSTABLE CLEVIS HANGER
SCALE: NTS

4 PIPE HANGER DETAIL
SCALE: NTS



7 TANKLESS WATER HEATERS & WATER SOFTENER DETAIL
SCALE: NTS



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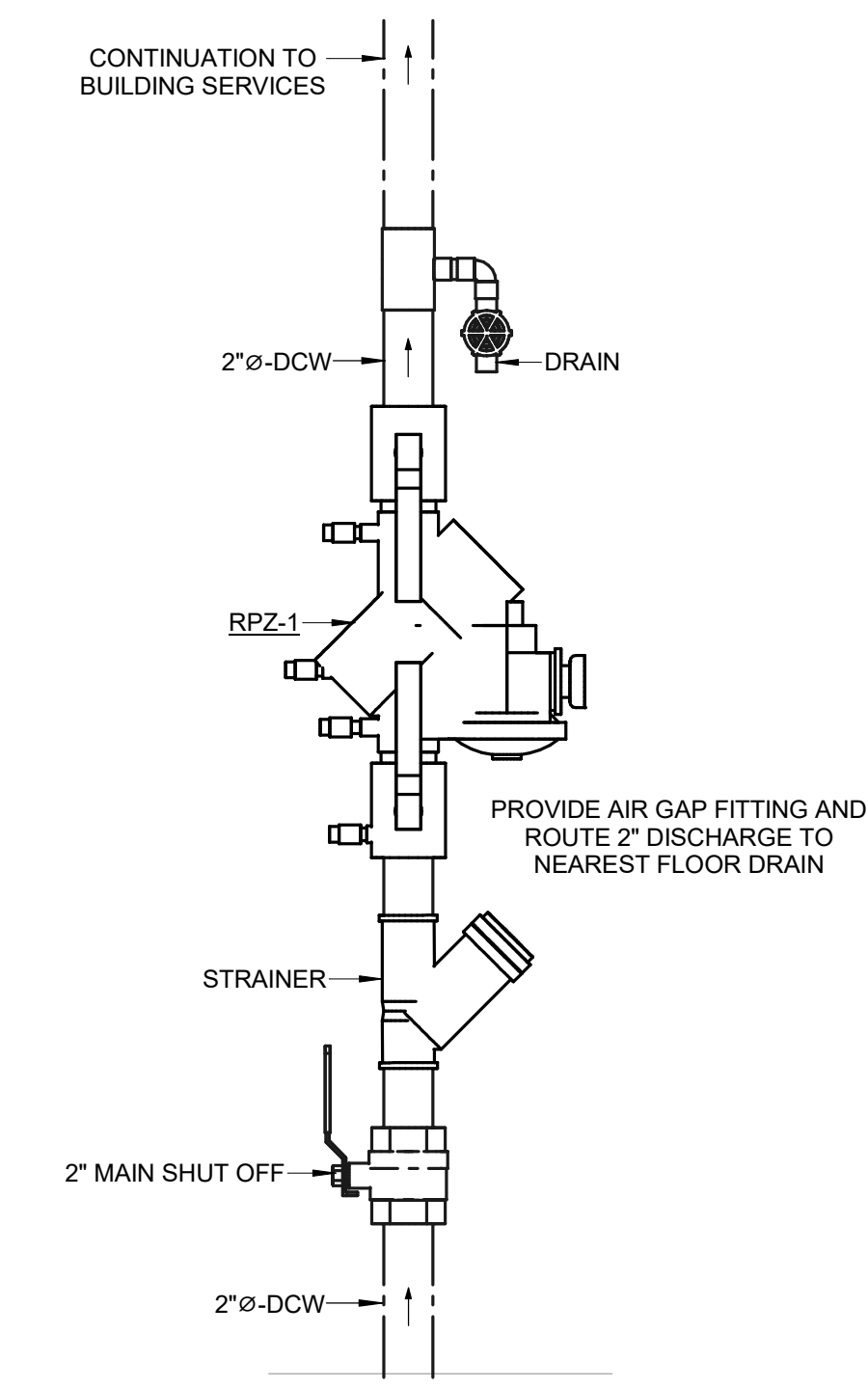
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SHEET TITLE:
PLUMBING DETAILS

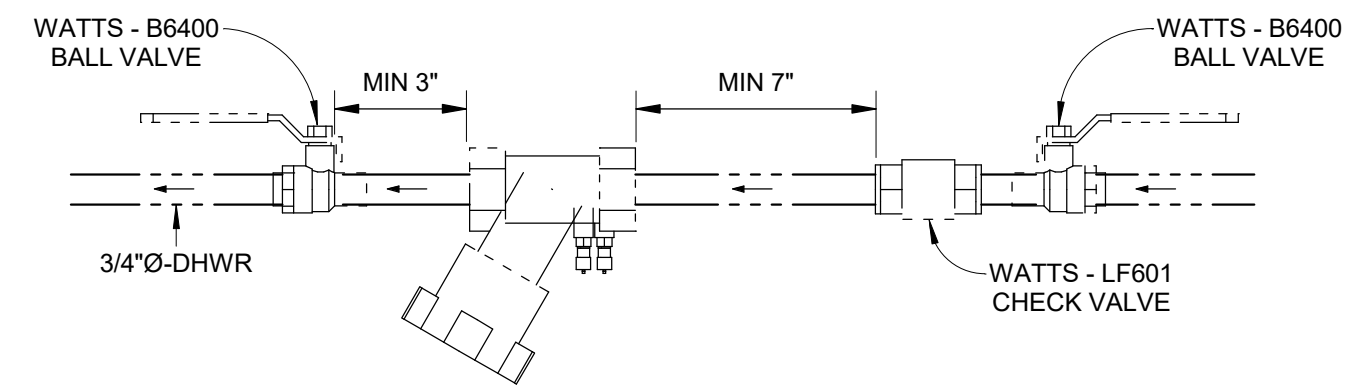
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P502

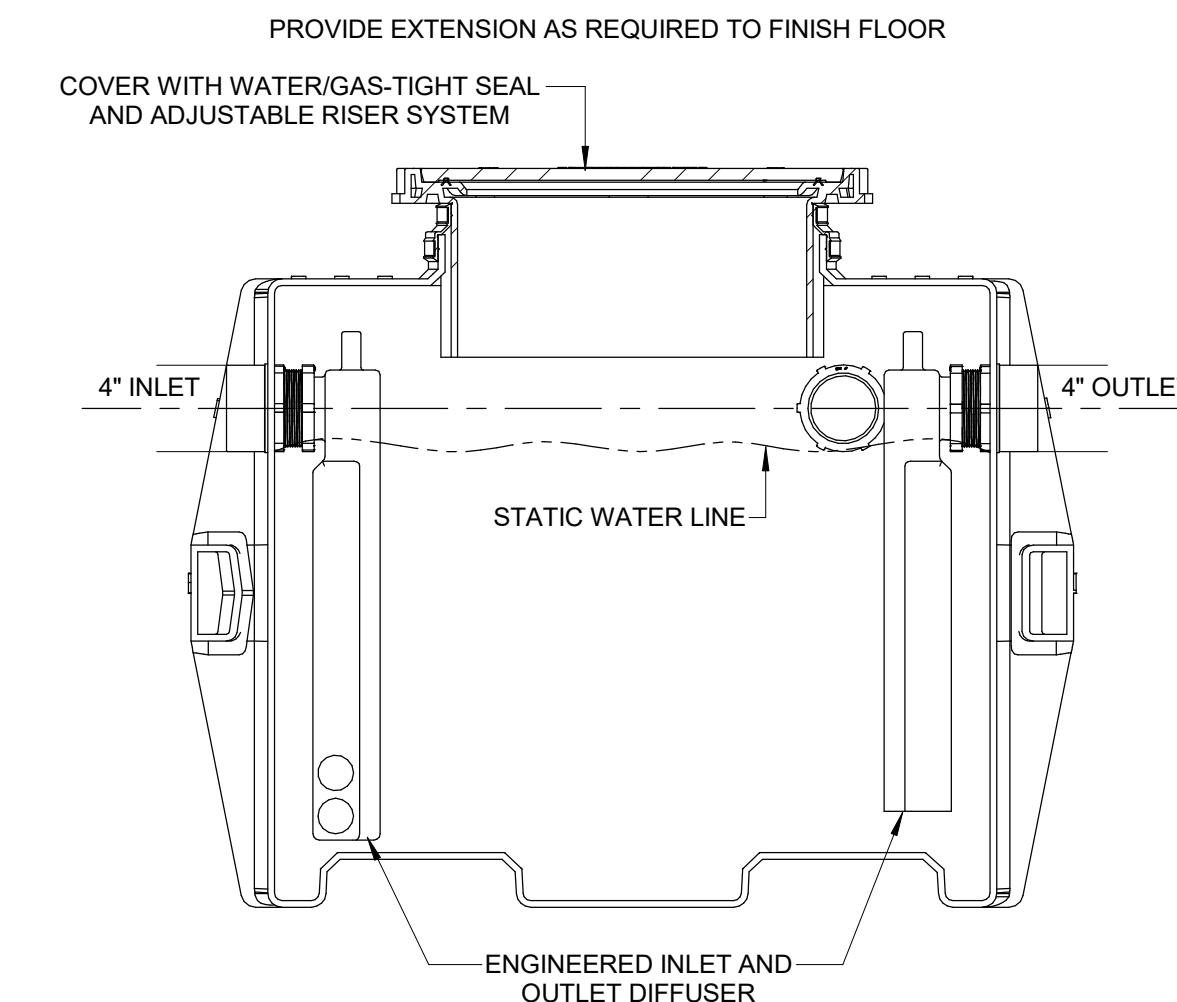
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4 BACKFLOW PREVENTER DETAIL
SCALE: NTS

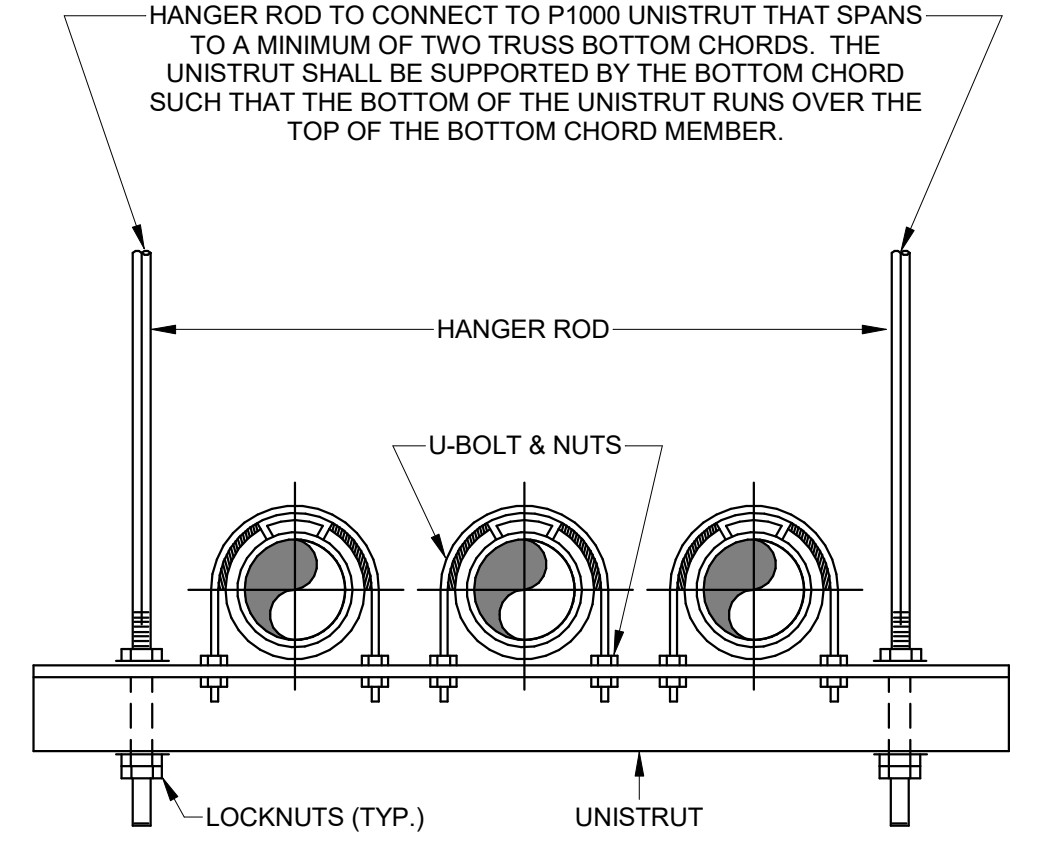


3 CIRCUIT SETTER DETAIL
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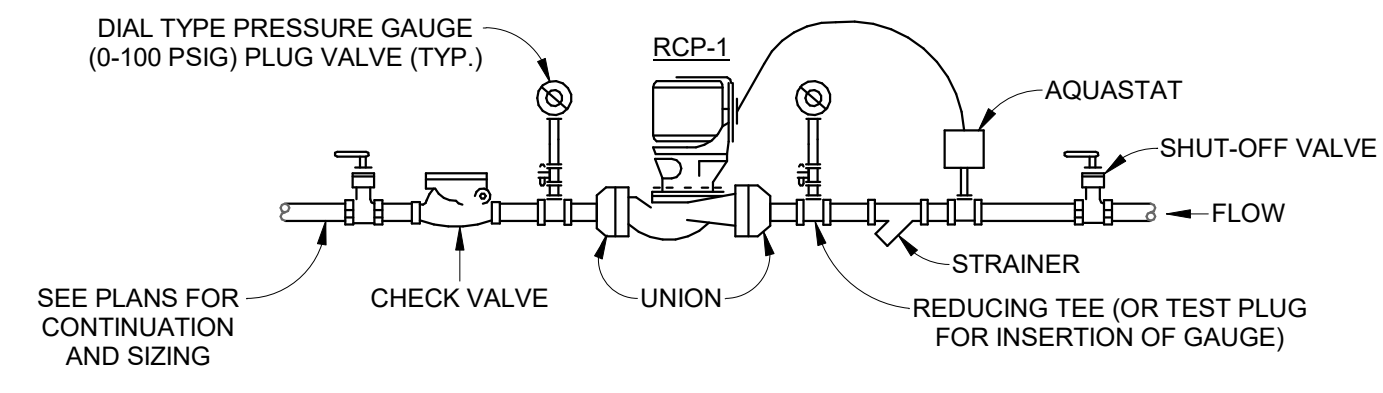


NOTE:
INSTALL & ANCHOR GREASE INTERCEPTOR PER MANUFACTURERS
INSTRUCTIONS. REFER TO PLAN FOR EXACT LOCATION.

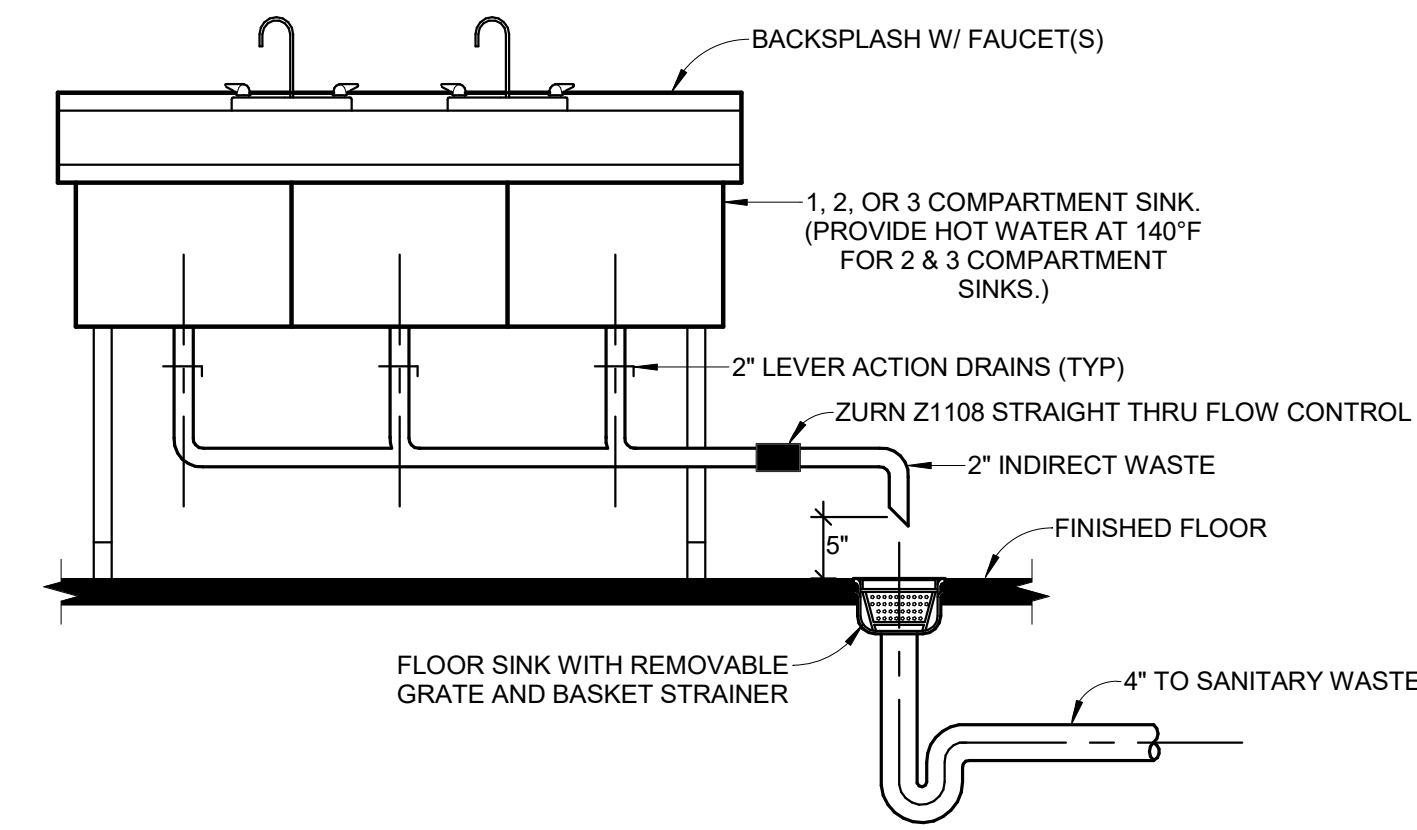
6 GREASE INTERCEPTOR DETAIL
SCALE: NTS



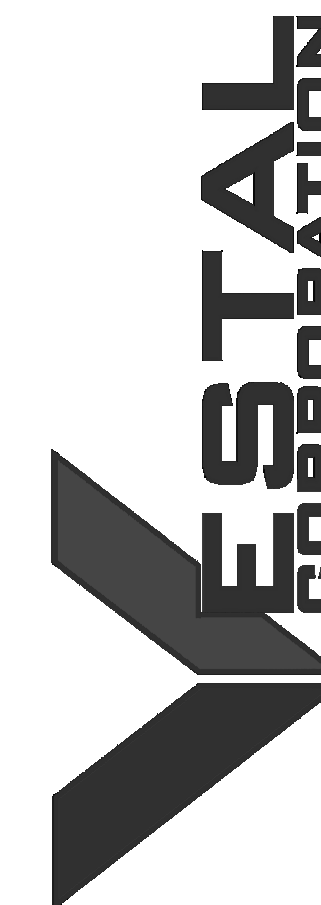
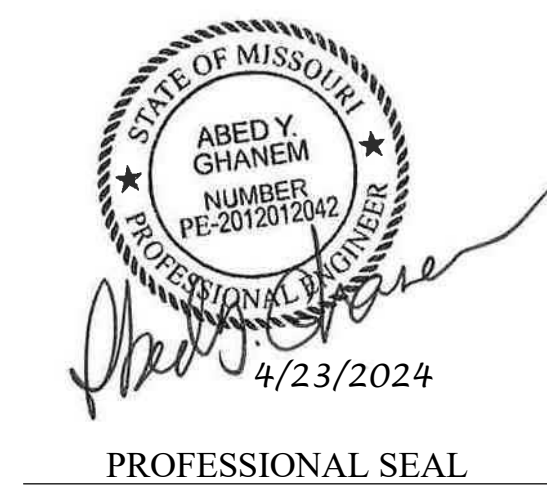
2 TYPICAL TRAPEZE HANGER DETAIL
SCALE: NTS



1 INLINE CIRCULATING PUMP (RCP-1)
SCALE: NTS



5 THREE COMPARTMENT KITCHEN SINK DETAIL
SCALE: NTS



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SHEET TITLE:

**PLUMBING
SCHEDULE**

SHEET NUMBER:

P601

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2024.04.23

PLUMBING PIPING AND INSULATION SPECIFICATIONS
PLUMBING SYSTEM COMPONENTS - MATERIAL TYPES AND REQUIREMENTS

SYSTEM TYPE	EXTERIOR BELOW GRADE				INTERIOR BELOW GRADE				INTERIOR ABOVE GRADE			
	MATERIAL	JOINT TYPE	INSULATION THICKNESS	NOTES	MATERIAL	JOINT TYPE	INSULATION THICKNESS	NOTES	MATERIAL	JOINT TYPE	INSULATION THICKNESS	NOTES
DOMESTIC WATER PIPING	COPPER - TYPE K	SILVER SOLDERED	1"	1,3	COPPER - TYPE K	SILVER SOLDERED	1"	1,3	COPPER - TYPE L	BRAZED OR SOLDERED	1"	1,3
SANITARY WASTE PIPING	PVC ASTM 1785-SCHEDULE 40	SOLVENT WELD	N/A	2,3	PVC ASTM 1785-SCHEDULE 40	SOLVENT WELD	N/A	2,3	PVC ASTM 1785-SCHEDULE 40	SOLVENT WELD	N/A	2,3,4
SANITARY VENT PIPING	PVC ASTM 1785-SCHEDULE 40	SOLVENT WELD	N/A	2,3	PVC ASTM 1785-SCHEDULE 40	SOLVENT WELD	N/A	2,3	PVC ASTM 1785-SCHEDULE 40	SOLVENT WELD	N/A	2,3,4

NOTES:
1. PIPE TUBE AND FITTINGS CARRYING WATER USED IN POTABLE WATER SYSTEMS SHALL MEET THE REQUIREMENTS OF NSF 61.
2. WHERE THE WASTE WATER TEMPERATURE WILL BE GREATER THAN 140 F, THE DRAINAGE PIPING MATERIAL SHALL BE RATED FOR THE HIGHEST TEMPERATURE OF THE WASTE WATER. REFER TO DRAWINGS FOR SPECIFICATION.
3. ALL PIPING SHALL BE CLEARLY LABELED AND IDENTIFIED ACCORDING TO THE UNIFORM PLUMBING CODE.
4. ALL PIPING AND INSULATION IN RETURN AIR PLENUM SPACE MUST MEET 25/50 FLAME/SMOKE SPREAD REQUIREMENTS OR BE WRAPPED WITH AN APPROVED FIRE PROTECTION MATERIAL.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	CONNECTIONS			
				DRAIN	DCW	DHW	VENT
WC-1	AMERICAN STANDARD	2234001.020	WATER CLOSET - FLOOR MOUNTED MADERA® 15" HEIGHT WITH TOUCHLESS SELECTRONIC® PISTON FLUSH VALVE, 1.28 GPF/4.8 LPF. AMERICAN STANDARD SEAT #5901.100 HEAVY DUTY OPEN FRONT, NO COVER.	4"	1"	-	2"
WC-2	AMERICAN STANDARD	3462001.020	WATER CLOSET - FLOOR MOUNTED MADERA® ADA 16.5 INCH TOILET SYSTEM WITH TOUCHLESS SELECTRONIC® PISTON FLUSH VALVE, 1.28 GPF/4.8 LPF. PROVIDE SAME SEAT AS WC-1.	4"	1"	-	2"
UR-1	AMERICAN STANDARD	6590001EC.020	URINAL - WASHBROOK® 1.0 GPF/3.8 LPF TOP SPUD SIPHON JET URINAL WITH TOUCHLESS SELECTRONIC® PISTON FLUSH VALVE, 1.0 GPF/3.8 LPF.	2"	3/4"	-	2"
LAV-1	AMERICAN STANDARD	0356015.020	LUCERNE WALL-HUNG ADA LAVATORY. PROVIDE INNSBROOK SELECTRONIC BATTERY POWERED FAUCET. PROVIDE P-TRAP, SUPPLY STOPS, AND MIXING VALVE. SET MAXIMUM HOT WATER TEMPERATURE TO 110°F. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHT.	2"	1/2"	1/2"	2"
MB-1	ZURN	Z1996-24	MOP SERVICE BASIN - 24" X 24" X 10". MOLDED HIGH DENSITY COMPOSITE BASIN, PVC DRAIN BODY, STAINLESS STEEL STRAINER AND GASKETED OUTLET CONNECTION. PROVIDE WITH HOSE & HOSE BRACKET, MOP HANGER, Z1996-SF SERVICE FAUCET: MODEL Z1996-SF, AND #20 GAGE 304 STAINLESS STEEL WALL GUARD. PROVIDE MIXING VALVE FOR WALL-MOUNT FAUCET. SET MAXIMUM HOT WATER TEMPERATURE TO 110°F.	3"	1/2"	1/2"	2"
SH-1	BRADLEY	WS-1X	INDIVIDUAL PIVOTING WALL SHOWER. PROVIDE WITH THERMOSTATIC MIXING VALVE. PROVIDE WATTS MIXING VALVE - SERIES 1170C-M2. SET MAXIMUM HOT WATER TEMPERATURE TO 110°F.	2"	1/2"	1/2"	2"
SH-2	BRADLEY	HN300	ADA COMPLIANT IN-WALL SHOWER. PROVIDE WITH ALL OPTIONAL MANUFACTURER ACCESSORIES INCLUDING: HAND SHOWER, BARRIER-FREE SEAT, SHOWERHEAD ANCHOR PLATE, SHOWERHEAD BACK PLATE, SHOWER CURTAIN WITH ROD AND HOOKS, L-SHAPED GRAB BAR, AND THERMOSTATIC MIXING VALVE. SET MAXIMUM HOT WATER TEMPERATURE TO 110°F.	2"	1/2"	1/2"	2"

PLUMBING EQUIPMENT SCHEDULE

MARK	MANUFACTURER	MODEL	VOLTAGE/ PHASE	DESCRIPTION	CONNECTIONS			
					DRAIN	DCW	DHW	VENT
DWS-1	FLECK	9500 140-95-150-M	120/1	TWIN ALTERNATING WATER SOFTENER. 150,000 GRAIN CAPACITY WITH CONTINUOUS SERVICE FLOW RATE OF 25 GPM. PROVIDE SXT ELECTRONIC CONTROLLER AND INSTALL PER MANUFACTURERS INSTRUCTIONS. PROVIDE A THREE VALVE SERVICE BYPASS BETWEEN THE INLET AND OUTLET OF THE WATER SOFTENER AS RECOMMENDED BY THE MANUFACTURER.	-	1-1/2"	-	-
GW-1	SCHIER	GB-75	-	GREASE WASTE INTERCEPTOR. 75 GPM FLOWRATE AND 861 LB GREASE CAPACITY. PROVIDE VERTICAL EXTENSION AS NECESSARY FOR BELOW GRADE INSTALLATION. INSTALL PER MANUFACTURERS INSTRUCTIONS.	4"	-	-	2"

WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	FUEL	VOLTAGE/ PHASE	INPUT	NOMINAL CAPACITY (GAL)	RATED CAPACITY (GAL)	FIRST HOUR RATING (GAL)	RECOVERY RATE (GPH)	TEMP RISE (°F)	DESCRIPTION	CONNECTIONS				
												DRAIN	DCW	DHW	INTAKE	EXHAUST
TWH-1	RHEEM	RTGH-CM95DVL	NAT. GAS	120/1	199.9 MBH	-	-	264	264	90	HIGH EFF. TANKLESS WATER HEATER - PROVIDE WITH RHEEM MIC-6 MANIFOLD CONTROLLER - MODEL# RTG20213A, AND MANIFOLD CONTROL CABLES - MODEL# RTG20213C. PROVIDE WEBSTONE EXP2 TANKLESS SERVICE VALVE KITS AND TANKLESS PRESSURE RELIEF VALVES, AND INSTALL IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PROVIDE RHEEM EZ-RACK KITS POSITIONED IN WALL MOUNT CONFIGURATION AND SECURED TOGETHER. REFER TO MANUFACTURER INSTRUCTIONS FOR MOUNTING TANKLESS WATER HEATERS TO EZ-RACK SYSTEM. REFER TO DETAIL 7 / P501 FOR GENERAL PIPING DIAGRAM. SET WATER DELIVERY TEMPERATURE TO 140°F. ROUTE PRESSURE RELIEF PIPING AND CONDENSATE DISCHARGE TO THE NEAREST FLOOR DRAIN IN THE SAME ROOM. PROVIDE WITH AMTROL ST-5 EXP. TANK.	1/2"	3/4"	3/4"	3"	3"

PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	VOLTAGE/ PHASE	HP	RPM	WEIGHT (LBS)	MAX OPERATING PRESSURE (PSI)	MAX OPERATING TEMPERATURE (°F)	FLOWRATE (GPM)	HEAD (FT)	DESCRIPTION	CONNECTIONS	
												DRAIN	DHWR
RCP-1	BELL & GOSSETT	PL36B	115/1	1/6	3300	13.1	150	225	4	28	DHW INLINE RECIRCULATION PUMP. LEAD FREE BRONZE BODY WITH STAINLESS STEEL FACEPLATE. REFER TO DETAIL 1 / P502.	-	3/4"

PLUMBING ACCESSORY SCHEDULE

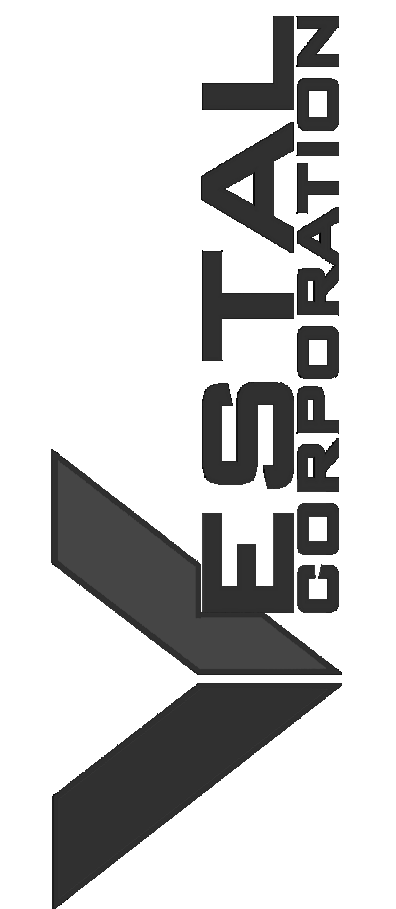
MARK	MANUFACTURER	MODEL	DESCRIPTION	CONNECTIONS			
				DRAIN	DCW	DHW	VENT
RPZ-1	WATTS	LF909M1-QT-S	BACKFLOW PREVENTOR - REDUCED PRESSURE ZONE ASSEMBLY. PROVIDE AIR GAP FITTING. PIPE FULL SIZE INDIRECT WASTE TO NEAREST FLOOR DRAIN IN THE SAME ROOM.	-	2"	-	-
TP-1	WATTS	LFTP300	TRAP PRIMER - BRASS BODY WITH EPDM SEALS AND BUILT IN VACUUM BREAKER. PROVIDE DISTRIBUTION UNIT TO SERVE MULTIPLE FLOOR DRAINS WHERE REQUIRED.	-	1/2"	-	-

DRAIN AND CLEANOUT SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	CONNECTIONS			
				DRAIN	DCW	DHW	VENT
FD-1	WATTS	FD-100-L	FLOOR DRAIN WITH SQUARE HEAVY DUTY BRONZE NICKEL STRAINER.	2" - 4"	1/2"	-	2"
FCO-1	ZURN	Z1400-B21	DURA-COATED CAST IRON FLOOR CLEANOUT WITH POLISHED NICKEL BRONZE TOP.	4"	-	-	-
FS-1	ZURN	Z1750	STAINLESS STEEL FLOOR SINK. PROVIDE WITH REMOVABLE HALF-GRATE AND SEDIMENT BUCKET.	2" - 4"	-	-	-
WCO-1	ZURN	Z1468	WALL CLEAN OUT WITH BRONZE RAISED HEX HEAD PLUG AND STAINLESS STEEL ACCESS COVER.	4"	-	-	-



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**PLUMBING
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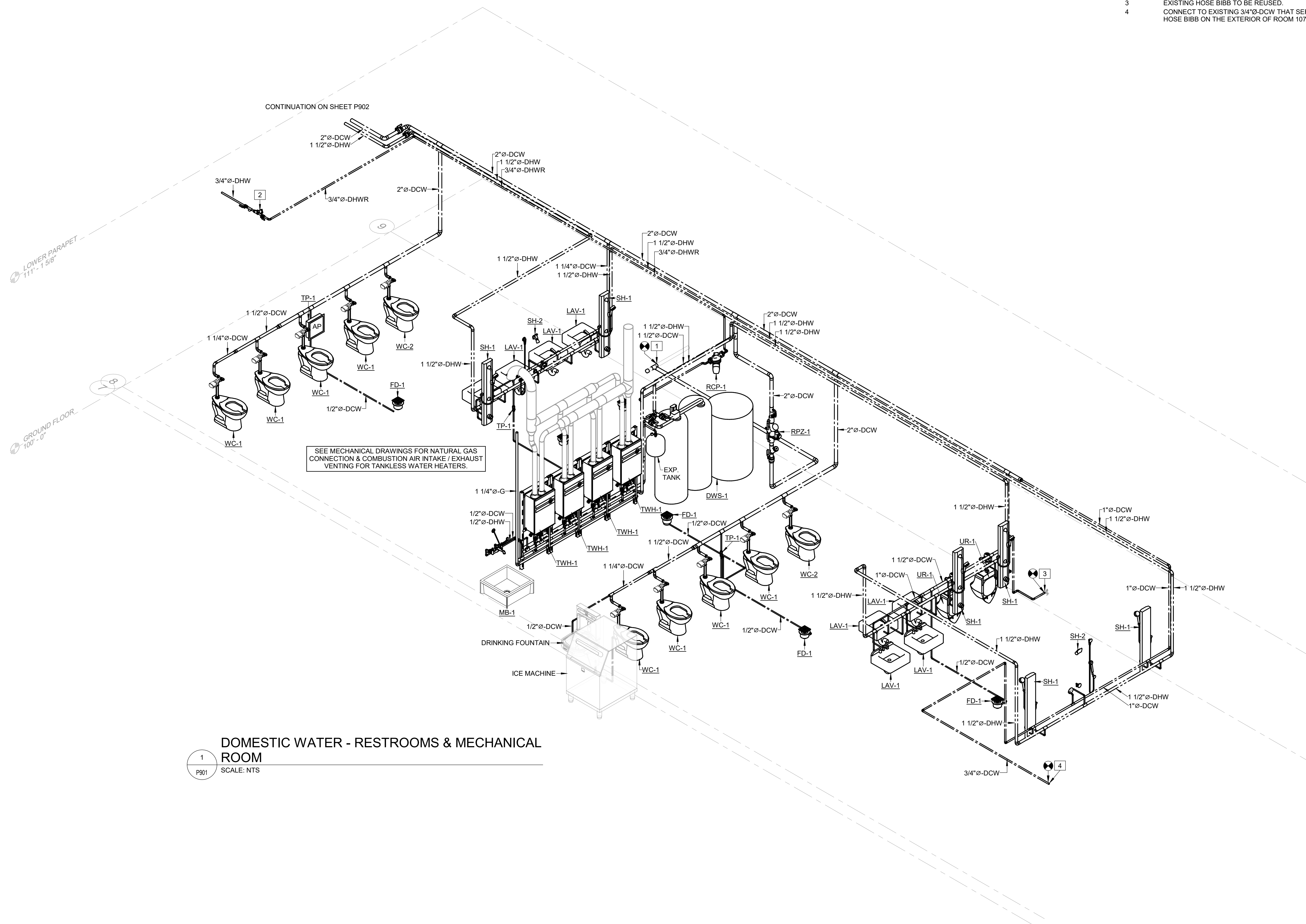
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KEYED NOTES:

- 1 CONNECT NEW 2"Ø-DCW TO EXISTING 2"Ø-DCW BELOW GRADE AND ROUTE TO MECHANICAL ROOM AS SHOWN ON PLAN. FIELD VERIFY CONDITION, SIZE, AND EXACT LOCATION. REFER TO CIVIL SHEET C101.
- 2 CIRCUIT SETTER BALANCING VALVE - REFER TO DETAIL 3 / P502.
- 3 EXISTING HOSE BIBB TO BE REUSED.
- 4 CONNECT TO EXISTING 3/4"Ø-DCW THAT SERVES THE EXISTING HOSE BIBB ON THE EXTERIOR OF ROOM 107-UNIT STORAGE.



DOMESTIC WATER - RESTROOMS & MECHANICAL ROOM

1
P901
SCALE: NTS

1



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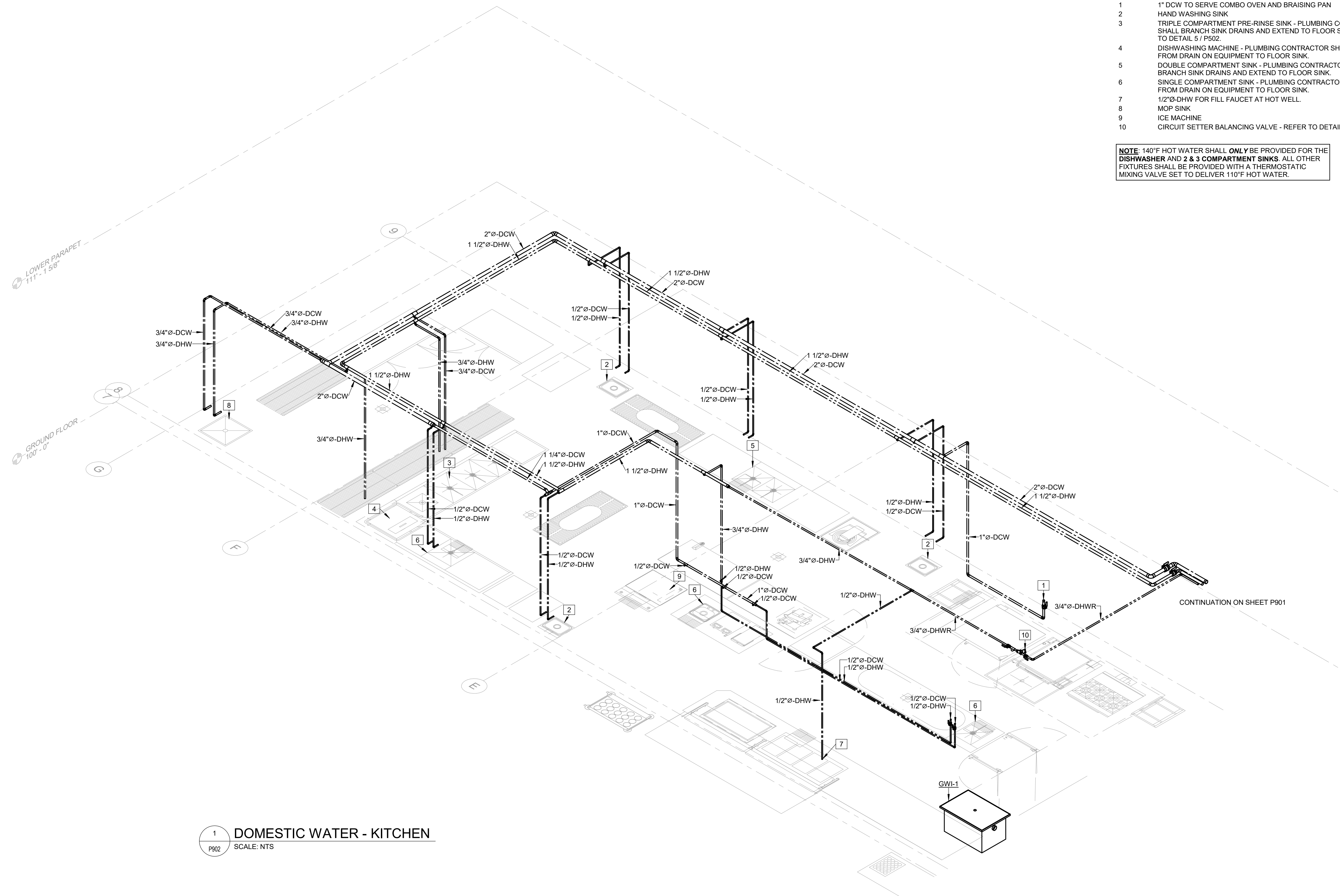
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60 OF 85 SHEETS
2024.04.23

KEYED NOTES:

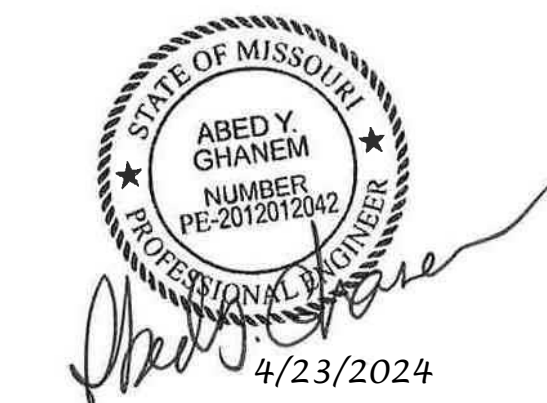
- 1 1" DCW TO SERVE COMBO OVEN AND BRAISING PAN
- 2 HAND WASHING SINK
- 3 TRIPLE COMPARTMENT PRE-RINSE SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK. REFER TO DETAIL 5 / P502.
- 4 DISHWASHING MACHINE - PLUMBING CONTRACTOR SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.
- 5 DOUBLE COMPARTMENT SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 6 SINGLE COMPARTMENT SINK - PLUMBING CONTRACTOR SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.
- 7 1/2" Ø-DHW FOR FILL FAUCET AT HOT WELL.
- 8 MOP SINK
- 9 ICE MACHINE
- 10 CIRCUIT SETTER BALANCING VALVE - REFER TO DETAIL 3 / P502.

NOTE: 140°F HOT WATER SHALL ONLY BE PROVIDED FOR THE DISHWASHER AND 2 & 3 COMPARTMENT SINKS. ALL OTHER FIXTURES SHALL BE PROVIDED WITH A THERMOSTATIC MIXING VALVE SET TO DELIVER 110°F HOT WATER.

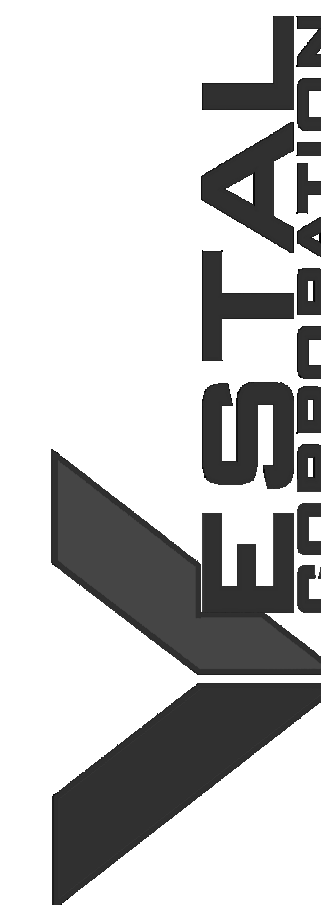


1 DOMESTIC WATER - KITCHEN
P902 SCALE: NTS

CONTINUATION ON SHEET P901



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DEPARTMENT OF
MISSOURI NATIONAL
GUARD

STATE OF MISSOURI -
ST. CLAIR READINESS
CENTER

375 SOUTH COMMERCIAL
AVENUE, ST. CLAIR
MISSOURI 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	DD	2024.02.19
B	IFB	2024.04.23

ISSUE DATE: 2023.12.06

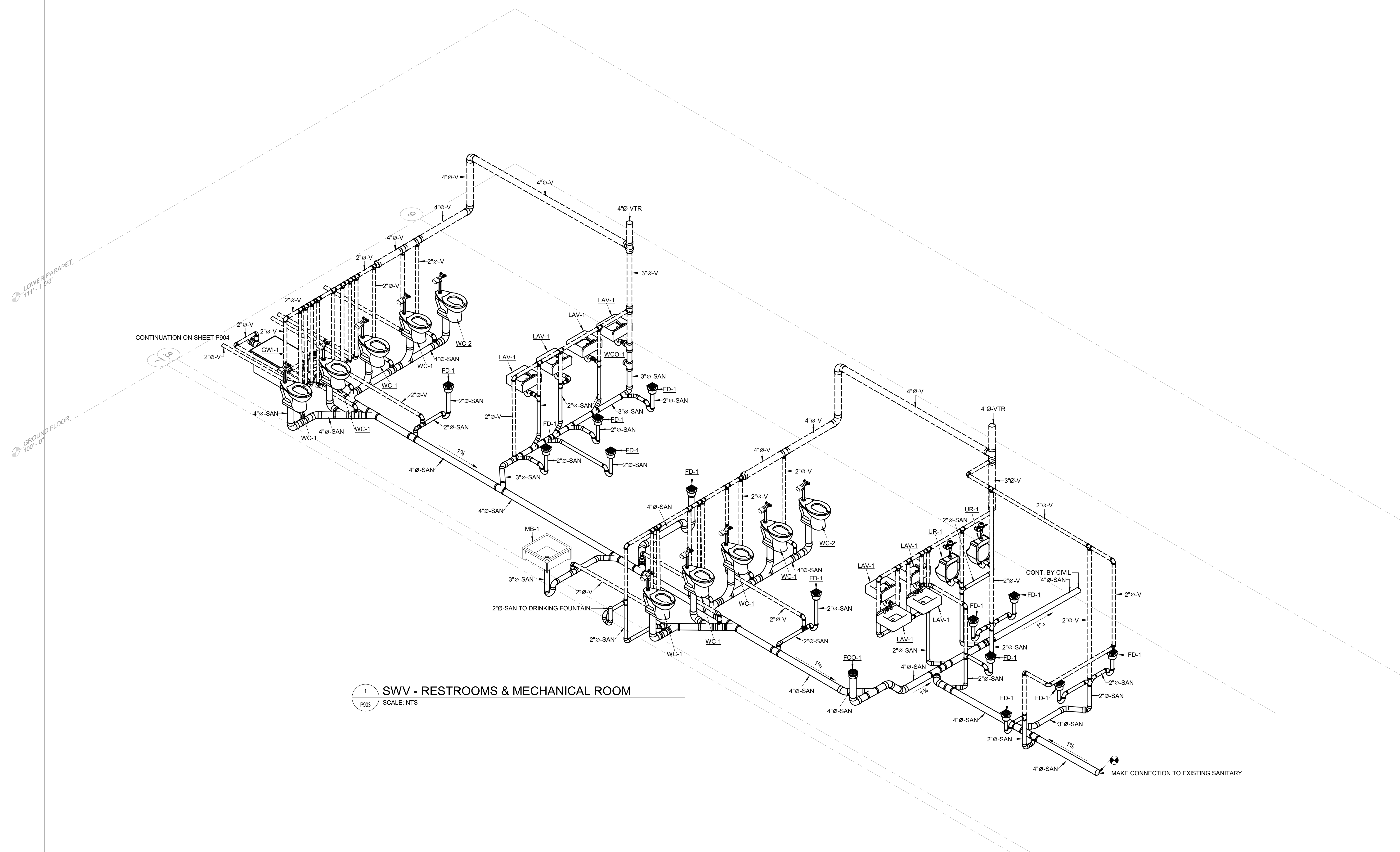
CAD DWG FILE: _____
DRAWN BY: MDC
CHECKED BY: AYG
DESIGNED BY: MDC

SHEET TITLE:
**PLUMBING
ISOMETRICS**

SHEET NUMBER:

P903

61 OF 85 SHEETS
2024.04.23



1 SWV - RESTROOMS & MECHANICAL ROOM
SCALE: NTS
P903



PROFESSIONAL SEAL



OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN AND
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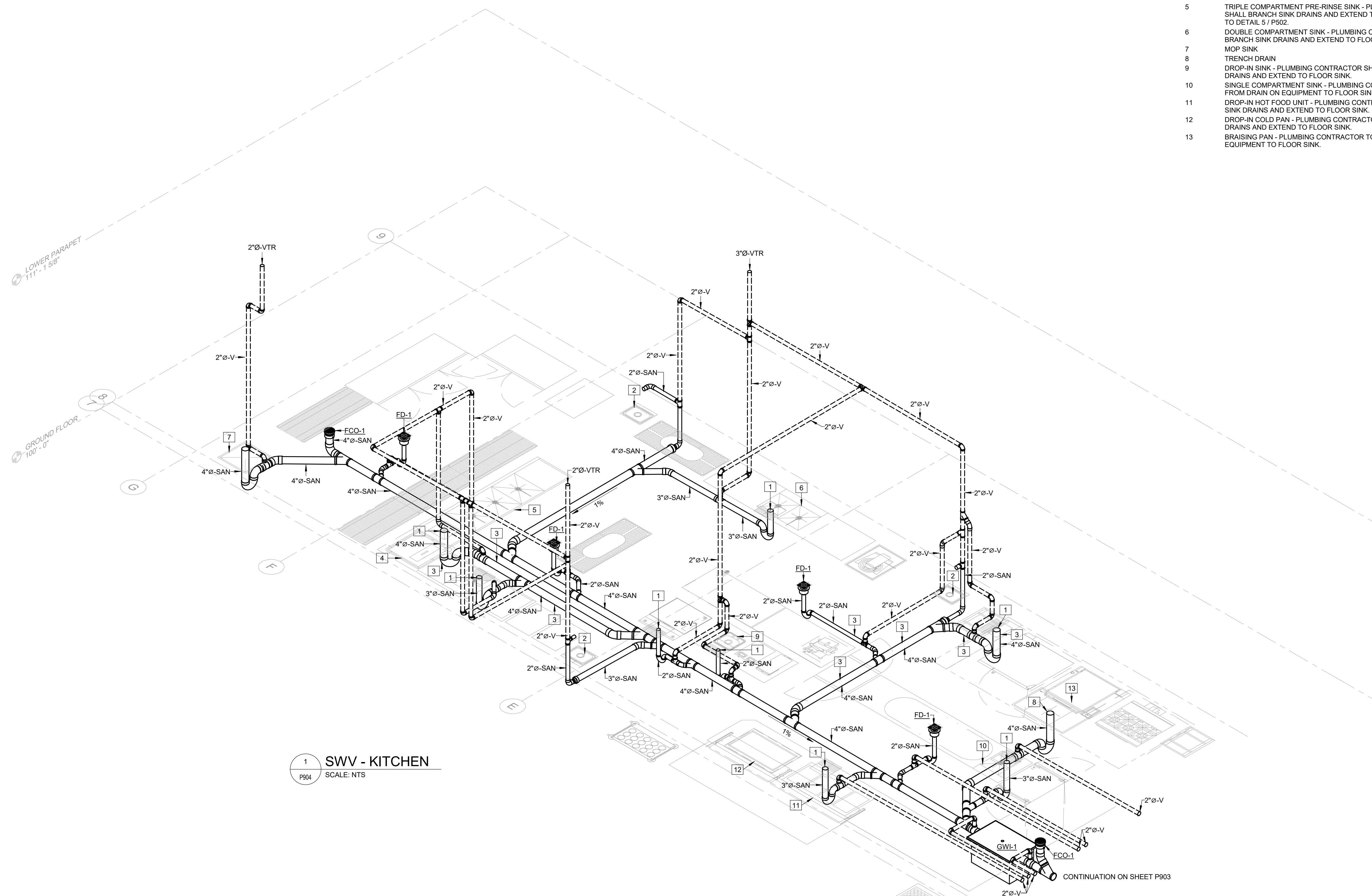
SHEET NUMBER:

P904

62 OF 85 SHEETS
2024.04.23

KEYED NOTES:

- 1 FLOOR SINK (ES.1)
- 2 HAND WASHING SINK
- 3 PROVIDE CAST IRON PIPE FOR HIGH TEMPERATURE DISCHARGE.
- 4 DISHWASHING MACHINE - PLUMBING CONTRACTOR SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.
- 5 TRIPLE COMPARTMENT PRE-RINSE SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK. REFER TO DETAIL 5 / P502.
- 6 DOUBLE COMPARTMENT SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 7 MOP SINK
- 8 TRENCH DRAIN
- 9 DROP-IN SINK - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 10 SINGLE COMPARTMENT SINK - PLUMBING CONTRACTOR SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.
- 11 DROP-IN HOT FOOD UNIT - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 12 DROP-IN COLD PAN - PLUMBING CONTRACTOR SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK.
- 13 BRAISING PAN - PLUMBING CONTRACTOR TO PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.

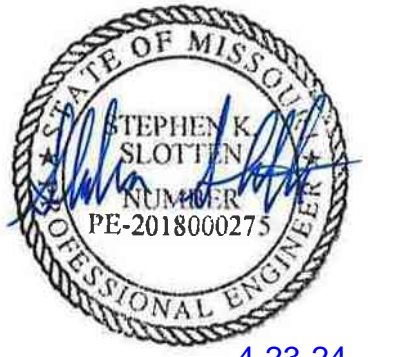


1 SWV - KITCHEN
SCALE: NTS
P904

CONTINUATION ON SHEET P903

ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES

POWER, LIGHTING, AND SYSTEMS SYMBOLS LEGEND	ONE-LINE DIAGRAM LEGEND	ABBREVIATIONS LEGEND	GENERAL NOTES																												
<p>A LIGHT FIXTURE - LETTER REFERS TO LIGHTING FIXTURE SCHEDULE.</p> <p>A LIGHT FIXTURE - LETTER REFERS TO LIGHTING FIXTURE SCHEDULE. FIXTURE CONNECTED TO EMERGENCY POWER.</p> <p>RE LIGHT FIXTURE - RELOCATED</p> <p>B STRIP LIGHT FIXTURE - LETTER REFERS TO LIGHTING FIXTURES SCHEDULE.</p> <p>B STRIP LIGHT FIXTURE - LETTER REFERS TO LIGHTING FIXTURE SCHEDULE. FIXTURE CONNECTED TO EMERGENCY POWER.</p> <p>C RECESSED DOWN LIGHT- LETTER REFERS TO THE LIGHTING FIXTURE SCHEDULE.</p> <p>C RECESSED DOWN LIGHT - LETTER REFERS TO LIGHTING FIXTURE SCHEDULE. FIXTURE CONNECTED TO EMERGENCY POWER.</p> <p>G WALL MOUNTED LIGHT FIXTURE - LETTER REFERS TO LIGHTING SCHEDULE.</p> <p>G WALL MOUNTED LIGHT FIXTURE - LETTER REFERS TO LIGHTING SCHEDULE. FIXTURE CONNECTED TO EMERGENCY POWER.</p> <p>Y BATTERY POWERED EMERGENCY LIGHT - MOUNT ON WALL AT 7'-6" AFF TO CENTER. LETTER REFERS TO LIGHTING FIXTURE SCHEDULE. FIXTURE CONNECTED TO EMERGENCY POWER.</p> <p>X EXIT LIGHT - CEILING MOUNTED OR WALL MOUNTED. ARROWS AS INDICATED - LETTER REFERS TO LIGHTING FIXTURE SCHEDULE. FIXTURE CONNECTED TO EMERGENCY POWER.</p> <p>\$a SINGLE POLE SWITCH - MOUNT AT 48" AFF TO CENTER. 'a' INDICATES SWITCH LEG.</p> <p>b\$3 3 WAY SWITCH - MOUNT AT 48" AFF TO CENTER 'b' INDICATES SWITCH LEG.</p> <p>\$M MOTOR RATED DISCONNECT SWITCH WITH THERMAL OVERLOAD PROTECTION.</p> <p>\$OC DUAL TECHNOLOGY WALL MOUNTED OCCUPANCY SENSOR SWITCH - MOUNT AT 48" AFF TO CENTER.</p>	<p> DUPLEX RECEPTACLE - MOUNT AT 18" AFF TO CENTER UNLESS OTHERWISE NOTED</p> <p>EM DUPLEX RECEPTACLE CONNECTED TO EMERGENCY POWER- RED DEVICE WITH RED FACEPLATE. MOUNT AT 18" AFF TO CENTER UNLESS OTHERWISE NOTED</p> <p> SPECIAL PURPOSE RECEPTACLE</p> <p> TWO DUPLEX RECEPTACLES MOUNTED UNDER A COMMON COVERPLATE - MOUNT AT 18" AFF UNLESS OTHERWISE NOTED.</p> <p> DATA OUTLET - WALL - MOUNT AT 18" AFF TO CENTER UNLESS OTHERWISE NOTED. PROVIDE A SINGLE BOX. EXTEND A 1/2" CONDUIT, WITH PULLWIRE, TO ABOVE ACCESSIBLE CEILING AND MARK.</p> <p> JUNCTION BOX - WALL MOUNTED</p> <p> JUNCTION BOX - CEILING MOUNTED</p> <p> DISCONNECT SWITCH - MOUNT 72" TO TOP OF SWITCH</p> <p> JUNCTION BOX - FLOOR MOUNTED</p> <p> WIREMOLD</p> <p> MOTOR</p> <p> PANEL - SURFACE MOUNTED</p> <p> PANEL - RECESSED MOUNTED</p> <p> DISTRIBUTION / SWITCHBOARD - SURFACE MOUNTED</p> <p> HOMERUN CONDUIT</p>	<p> UTILITY TRANSFORMER</p> <p> GENERATOR</p> <p> CABLE SIZE CALLOUT</p> <p> EQUIPMENT CALLOUT</p> <p> INLINE TRANSFORMER</p> <p> AUTOMATIC TRANSFER SWITCH</p> <p> CIRCUIT BREAKER</p> <p> CURRENT TRANSFORMER</p> <p> DISCONNECT SWITCH</p> <p> STARTER SWITCH</p> <p> STARTER / DISCONNECT SWITCH</p> <p> GROUND</p> <p> METER</p> <p> MOTOR</p> <p> PANEL</p> <p> SPARE</p> <p> SWITCH AND FUSE</p>	<p style="text-align: center;">ABBREVIATIONS LEGEND</p> <p>AFF ABOVE FINISHED FLOOR</p> <p>AL ALUMINUM</p> <p>AWG AMERICAN WIRE GAUGE</p> <p>A AMPERE</p> <p>AHJ AUTHORITY HAVING JURISDICTION</p> <p>B</p> <p>BLDG. BUILDING</p> <p>C</p> <p>CB CIRCUIT BREAKER</p> <p>C CONDUIT</p> <p>CU COPPER</p> <p>D</p> <p>DISC DISCONNECT SWITCH</p> <p>DWG DRAWING</p> <p>E</p> <p>EMT ELECTRIC METALLIC TUBING</p> <p>EC ELECTRICAL CONTRACTOR</p> <p>EG EQUIPMENT GROUNDING</p> <p>EGC EQUIPMENT GROUNDING CONDUCTOR</p> <p>F</p> <p>FA FIRE ALARM</p> <p>FAFPC FIRE ALARM CONTROL PANEL</p> <p>F FUSE</p> <p>G</p> <p>G GROUND</p> <p>GFCI GROUND FAULT CIRCUIT INTERRUPTER</p> <p>GEC GROUNDING ELECTRODE CONDUCTOR</p> <p>H</p> <p>HP HORSE POWER</p> <p>I</p> <p>IC INTERRUPTING CAPACITY</p> <p>J</p> <p>JB JUNCTION BOX</p> <p>K</p> <p>KAIC KILOAMP INTERRUPTING CAPACITY</p> <p>KV KILOVOLT</p> <p>KVA KILOVOLT AMPERE</p> <p>KW KILOWATT</p> <p>KCMIL THOUSAND CIRCULAR MILLS</p> <p>L</p> <p>LTG LIGHTING</p> <p>M</p> <p>MCB MAIN CIRCUIT BREAKER</p> <p>N</p> <p>NRTL NATIONALLY RECOGNIZED TESTING LABORATORY</p> <p>N NEUTRAL</p> <p>NTS NOT TO SCALE</p> <p>P</p> <p>PH PHASE</p> <p>PB PULL BOX</p> <p>R</p> <p>RGS RIGID GALVANIZED STEEL</p> <p>S</p> <p>SD SMOKE DETECTOR</p> <p>SPD SURGE PROTECTIVE DEVICE</p> <p>SYS SYSTEM</p> <p>T</p> <p>TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR</p> <p>U</p> <p>UPS UNINTERRUPTED POWER SUPPLY</p> <p>UON UNLESS OTHERWISE NOTED</p> <p>V</p> <p>VA VOLT AMPERE</p> <p>V VOLT OR VOLTAGE</p> <p>W</p> <p>W WATT</p> <p>WP WEATHERPROOF</p>	<p>GENERAL NOTES</p> <p>COORDINATION</p> <ol style="list-style-type: none"> PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS. REVIEW THE GENERAL NOTES AND ALL OTHER TRADE DRAWINGS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER OR OWNER, AS SPECIFIED, OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMITTING BID. REFER TO ARCHITECTURAL PLANS, SECTIONS AND ELEVATIONS FOR EXACT LOCATION OF ELECTRICAL DEVICES AND LIGHT FIXTURES PRIOR TO ROUGH IN. ALL CONDUCTOR LENGTHS PROVIDED IN THESE DESIGN DOCUMENTS ARE INTENDED SOLELY FOR USE IN THE DESIGN CALCULATIONS BY THE DESIGN PROFESSIONAL UNLESS SPECIFICALLY NOTED OTHERWISE IN THESE DOCUMENTS. THEY SHALL NOT BE USED BY CONTRACTORS IN BIDDING OF CONSTRUCTING THE PROJECT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MATERIAL QUANTITIES REQUIRED TO BID AND CONSTRUCT THE COMPLETE PROJECT. CONDUIT RUNS ARE SHOWN DIAGRAMMATIC. INSTALL CONDUIT TO SUIT FIELD CONDITIONS. VERIFY RATINGS, LOCATIONS, AND CONNECTIONS OF ALL EQUIPMENT PROVIDED BY OTHERS AND INSTALLED AND/OR CONNECTED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO OWNER'S EQUIPMENT. CONNECTIONS TO EQUIPMENT FURNISHED BY OTHER SHALL BE COORDINATED. OBTAIN MANUFACTURERS' SHOP DRAWINGS PRIOR TO ROUGH IN, IN ALL CONDUIT TO THIS EQUIPMENT. CONFIRM WITH MECHANICAL EQUIPMENT MANUFACTURER'S RECOMMENDATIONS FOR EXACT OVERCURRENT PROTECTION DEVICES TYPE AND SIZE PRIOR TO ROUGH IN ALL ELECTRICAL EQUIPMENT SHALL BE NRTL LABELED AND LISTED FOR THE USE. ALL EMPTY CONDUIT/RACEWAY SHALL BE INSTALLED WITH PULL STRINGS. PROVIDE PROPERLY SIZED LUGS AT ALL CIRCUIT BREAKERS PANELS AND SWITCHBOARDS, FOR THE CONDUCTORS SHOWN TO CONNECT TO THESE LUGS. SUPPLY POWER AND MAKE CONNECTIONS TO ALL MOTORS AND EQUIPMENT REQUIRING ELECTRICAL, INCLUDING ALL FRACTIONAL HORSEPOWER MOTORS. <p style="text-align: center;">CODE COMPLIANCE</p> <ol style="list-style-type: none"> ALL ELECTRICAL EQUIPMENT SHALL BE NRTL LABELED AND LISTED FOR THE USE. ALL ELECTRICAL WORK SHALL COMPLY WITH 2020 NATIONAL ELECTRIC CODE AND ALL LOCAL CODES AND REGULATIONS. <p style="text-align: center;">PENETRATIONS</p> <ol style="list-style-type: none"> EXACT METHOD AND LOCATION OF CONDUIT PENETRATIONS AND/OR OPENINGS IN CONCRETE WALLS AND FLOORS SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PROVIDE PROPER FIRE PROOFING AND SEALANT FOR PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. <p style="text-align: center;">GROUNDING</p> <ol style="list-style-type: none"> PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN ALL LINE-VOLTAGE CONDUITS. ALL EQUIPMENT, DEVICES AND FIXTURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC REQUIREMENTS. PROVIDE EQUIPMENT BONDING JUMPERS SIZED PER NEC ART.250.102 (C) AT ALL EQUIPMENT WITH METALLIC ENCLOSURES THAT REQUIRE ELECTRICAL CONNECTIONS. <p style="text-align: center;">WIRING DEVICES</p> <ol style="list-style-type: none"> CONTRACTOR SHALL PERMANENTLY MARK THE INTERIOR OF WIRING DEVICES COVERPLATES AND EXTERIOR OF JUNCTION BOXES OF LUMINARIES AND EQUIPMENT WITH CIRCUIT IDENTIFICATION. 																											
<p>CONDUIT SIZE TABLES</p> <table border="1" style="margin: auto;"> <tr> <th colspan="2">CONDUIT SIZE TABLE FOR # 12 CONDUCTORS (3/4" MIN)</th> </tr> <tr> <td>UP TO 8 #12-----</td> <td>=3/4"C</td> </tr> <tr> <td>9 #12 TO 12 #12-----</td> <td>=1"C</td> </tr> </table> <table border="1" style="margin: auto;"> <tr> <th colspan="2">CONDUIT SIZE TABLE FOR #10, #8, #6, AND #4 CONDUCTORS (3/4" MIN)</th> </tr> <tr> <td>#10 → UP TO 6 #10-----</td> <td>=3/4"C</td> </tr> <tr> <td>7 #10 TO 11 #10-----</td> <td>=1"C</td> </tr> <tr> <td>#8 → UP TO 3 #8-----</td> <td>=3/4"C</td> </tr> <tr> <td>4 #8 TO 5 #8-----</td> <td>=1"C</td> </tr> <tr> <td>6 #8 TO 10#8-----</td> <td>=1-1/4"C</td> </tr> <tr> <td>#6 → UP TO 2 #6-----</td> <td>=3/4"C</td> </tr> <tr> <td>3 #6 TO 4 #6-----</td> <td>=1"C</td> </tr> <tr> <td>5 #6 TO 7#6-----</td> <td>=1-1/4"C</td> </tr> <tr> <td>#4 → UP TO 3 #4-----</td> <td>=1"C</td> </tr> <tr> <td>4 #4 TO 5 #4-----</td> <td>=1-1/4"C</td> </tr> <tr> <td>6 #4 TO 7#4-----</td> <td>=1-1/2"C</td> </tr> </table> <ol style="list-style-type: none"> PROVIDE ALL CONDUIT RUNS WITH GREEN EQUIPMENT GROUNDING CONDUCTORS SIZED PER NEC TABLE 250-122. ALLOW FOR THE ADDITIONAL EQUIPMENT GROUNDING CONDUCTORS IN DETERMINING PROPER CONDUIT SIZES. USE SIZE #10 CONDUCTORS FOR ANY 20A, 120V BRANCH CIRCUIT RUN OVER 100' IN LENGTH. NO MORE THAN THREE 20A, 120V, CIRCUITS SHALL BE RUN IN CONDUITS U.O.N 		CONDUIT SIZE TABLE FOR # 12 CONDUCTORS (3/4" MIN)		UP TO 8 #12-----	=3/4"C	9 #12 TO 12 #12-----	=1"C	CONDUIT SIZE TABLE FOR #10, #8, #6, AND #4 CONDUCTORS (3/4" MIN)		#10 → UP TO 6 #10-----	=3/4"C	7 #10 TO 11 #10-----	=1"C	#8 → UP TO 3 #8-----	=3/4"C	4 #8 TO 5 #8-----	=1"C	6 #8 TO 10#8-----	=1-1/4"C	#6 → UP TO 2 #6-----	=3/4"C	3 #6 TO 4 #6-----	=1"C	5 #6 TO 7#6-----	=1-1/4"C	#4 → UP TO 3 #4-----	=1"C	4 #4 TO 5 #4-----	=1-1/4"C	6 #4 TO 7#4-----	=1-1/2"C
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4-23-24

PROFESSIONAL SEAL



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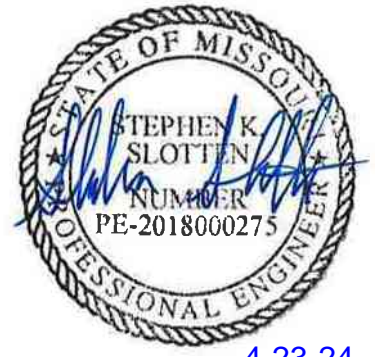
ISSUE DATE: 2024.04.03

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DESIGNED BY: SKS

SHEET TITLE:
**SYMBOLS,
ABBREVIATIONS,
NOTES**

SHEET NUMBER:

E001



4-23-24

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SHEET TITLE:

**DEMOLITION
LIGHTING PLAN**

SHEET NUMBER:

E101

64 OF 85 SHEETS
2024.04.23

SYMBOL
#

KEYED NOTES - E101

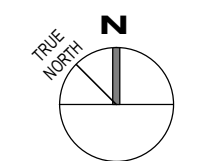
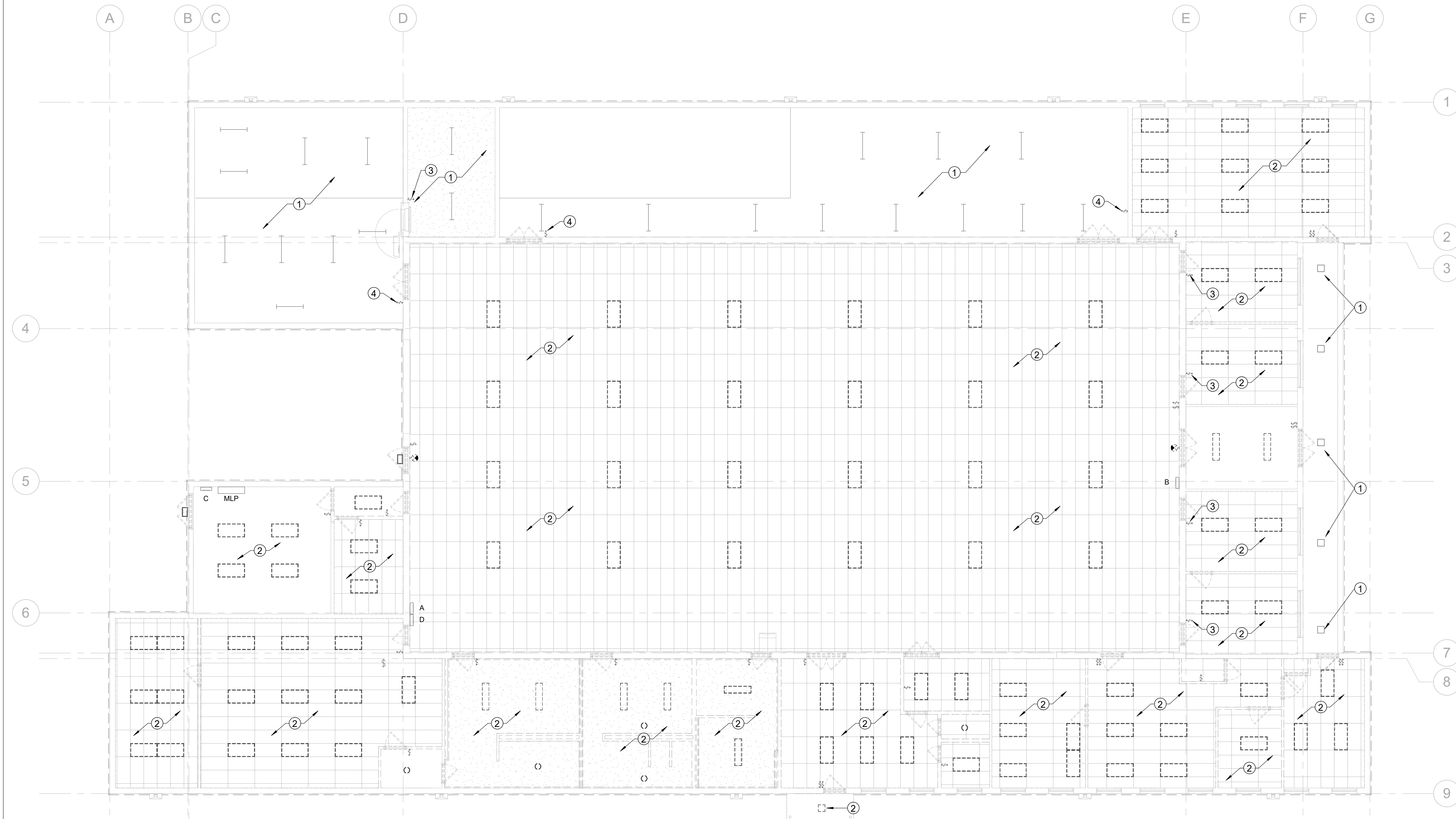
- 1 EXISTING LIGHTING TO REMAIN. LIGHTING CONTROL COMPONENTS SHALL BE ADDED TO UPGRADE LIGHTING TO COMPLY WITH IECC ENERGY CODE. SEE NEW WORK PLAN.
- 2 DISCONNECT AND REMOVE TURN OVER EXISTING LIGHTING.
- 3 REMOVE EXISTING LIGHTING CONTROL TOGGLE SWITCH AND REPLACE WITH NEW OCCUPANCY SENSER / DIMMER. SEE NEW WORK DRAWING E121.
- 4 REMOVE EXISTING LIGHTING CONTROL TOGGLE SWITCH AND REPLACE WITH NEW LOW VOLTAGE DIMMER. SEE NEW WORK DRAWING E121.

GENERAL NOTES - E101

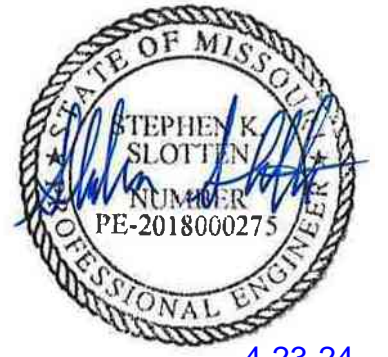
- 1 ITEMS SHOWN AS A DASHED LINETYPE ARE EXISTING TO BE REMOVED UNLESS OTHERWISE NOTED. ITEMS SHOWN AS A LIGHT SOLID LINETYPE ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
- 2 FOR PORTIONS OF CIRCUITS REMOVED AND NOT RE-USED, REMOVE CONDUCTORS TO THEIR SOURCE OF SUPPLY.
- 3 DISCONNECT ELECTRICAL SYSTEMS IN WALLS AND CEILINGS TO BE REMOVED.
- 4 DISCONNECT AND REMOVE ABANDONED LUMINAIRES. REMOVE BRACKETS, STEMS, HANGERS, AND OTHER ACCESSORIES.
- 5 PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION.
- 6 REMOVE EXPOSED ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILING FINISHES. CUT CONDUIT FLUSH WITH WALLS AND FLOORS AND PATCH SURFACES.

GENERAL NOTES - E101

- 7 DISCONNECT ABANDONED OUTLETS AND REMOVE DEVICES. REMOVE ABANDONED OUTLETS IF CONDUIT SERVICING THEM IS ABANDONED AND REMOVED. PROVIDE BLANK COVER FOR ABANDONED OUTLETS NOT REMOVED.
- 8 REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK.
- 9 EXTEND EXISTING INSTALLATIONS USING MATERIALS AND METHODS COMPATIBLE WITH EXISTING ELECTRICAL INSTALLATIONS, OR AS SPECIFIED.
- 10 DEVICES WITH SUBSCRIPT (E) ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- 11 DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND NOT ALL EXISTING WIRING DEVICES MAY BE SHOWN. RECEPTACLES AND DATA OUTLETS IN WALLS NOT BEING DEMOLISHED MAY REMAIN IN SERVICE.



1 DEMOLITION REFLECTED CEILING LIGHTING PLAN
E101 1/8" = 1'-0"



4-23-24

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SHEET TITLE:

**DEMOLITION POWER
PLAN**

SHEET NUMBER:

E102

65 OF 85 SHEETS
2024.04.23

SYMBOL

(#)

KEYED NOTES - E102

- 1 EXISTING PANEL MLP, 400A 120/240V 3-WIRE.
- 2 EXISTING PANEL 'A', 225A 120/240V 3-WIRE 30 POLES.
- 3 EXISTING PANEL 'B', 225A 120/240V 3-WIRE 30 POLES.
- 4 EXISTING PANEL 'C', 100A 120/240V 3-WIRE 20 POLES.
- 5 EXISTING PANEL 'D', 125A 120/240V 3-WIRE 24 POLES.
- 6 DISCONNECT AND REMOVE POWER TO EXISTING OUTDOOR CONDENSING UNIT.
- 7 DISCONNECT AND REMOVE POWER TO EXISTING INDOOR AIR HANDLING UNIT.

KEYED NOTES - E102

- 8 DISCONNECT AND REMOVE POWER TO EXISTING OVERHEAD HEATER.
- 9 DISCONNECT AND REMOVE POWER TO EXISTING ROOFTOP EXHAUST FAN.
- 10 POWER FOR SECURITY LOCATED IN ORDINANCE VAULT. DISCONNECT AND REMOVE POWER. PROVIDE NEW 120V CIRCUIT ON EMERGENCY BACKUP PANEL. SEE NEW WORK FLOORPLAN.
- 11 DISCONNECT AND REMOVE EXISTING RECEPTACLE. PRESERVE BACKBOX AND CONDUIT. PROVIDE NEW RED RECEPTACLE AND COVERPLATE AND WIRE TO NEW 120V EMERGENCY POWER PANEL. SEE NEW WORK PLAN.
- 12 DISCONNECT AND REMOVE POWER TO EXISTING KITCHEN EXHAUST HOOD.

GENERAL NOTES - E102

- 1 ITEMS SHOWN AS A DASHED LINETYPE ARE EXISTING TO BE REMOVED UNLESS OTHERWISE NOTED. ITEMS SHOWN AS A LIGHT SOLID LINETYPE ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
- 2 FOR PORTIONS OF CIRCUITS REMOVED AND NOT RE-USED, REMOVE CONDUCTORS TO THEIR SOURCE OF SUPPLY.
- 3 DISCONNECT ELECTRICAL SYSTEMS IN WALLS AND CEILINGS TO BE REMOVED.
- 4 PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION.
- 5 REMOVE EXPOSED ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILING FINISHES. CUT CONDUIT FLUSH WITH WALLS AND FLOORS AND PATCH SURFACES.
- 6 DISCONNECT ABANDONED OUTLETS AND REMOVE DEVICES. REMOVE ABANDONED OUTLETS IF CONDUIT SERVICING THEM IS ABANDONED AND REMOVED. PROVIDE BLANK COVER FOR ABANDONED OUTLETS NOT REMOVED.

GENERAL NOTES - E102

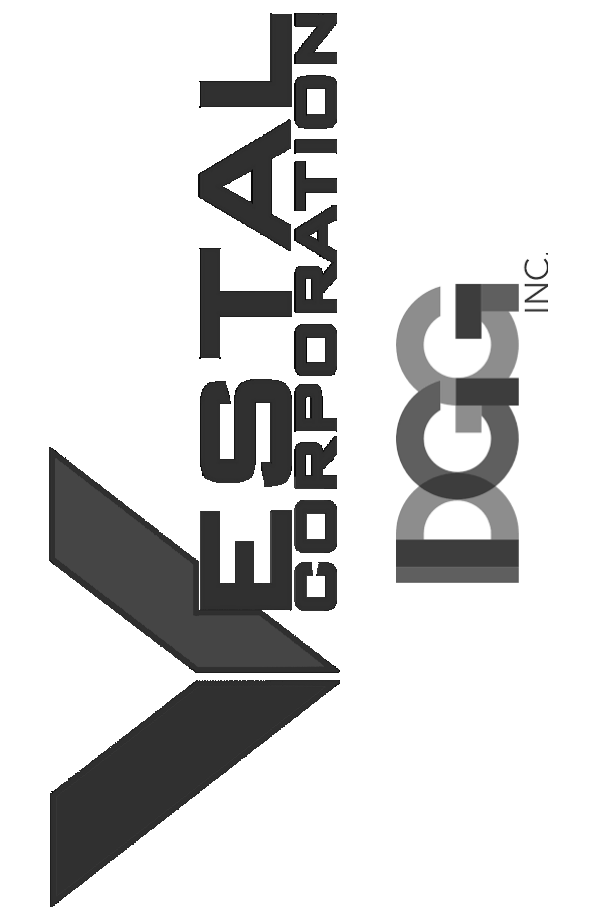
- 7 REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK.
- 8 EXTEND EXISTING INSTALLATIONS USING MATERIALS AND METHODS COMPATIBLE WITH EXISTING ELECTRICAL INSTALLATIONS, OR AS SPECIFIED.
- 9 DEVICES WITH SUBSCRIPT (E) ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- 10 DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND NOT ALL EXISTING WIRING DEVICES MAY BE SHOWN. RECEPTACLES AND DATA OUTLETS IN WALLS NOT BEING DEMOLISHED MAY REMAIN IN SERVICE.





4-23-24

PROFESSIONAL SEAL



OFFICE OF ADMINISTRATION
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DEPARTMENT OF
MISSOURI NATIONAL
GUARD

ST. CLAIR READINESS
CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/19/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.03

CAD DWG FILE:
DRAWN BY: SKS
CHECKED BY: Checker
DESIGNED BY: SKS

SHEET TITLE:
LIGHTING PLAN

SHEET NUMBER:

E121

66 OF 85 SHEETS
2024.04.23

LIGHT FIXTURE SCHEDULE							
TYPE	MANUFACTURER	CATALOG NO.	MOUNTING	VOLTAGE	LAMP	WATTS	REMARKS
A1	LITHONIA	2VTL4-40L-ADP-EZ1-LP840-N100	RECESSED	120/277	LED 4000 K	31.4	WITH EMBEDDED LIGHTING CONTROL INTERFACE
A1-EM	LITHONIA	2VTL4-40L-ADP-EZ1-LP840-N100EMG	RECESSED	120/277	LED 4000 K	31.4	WITH EMBEDDED LIGHTING CONTROL INTERFACE
A2	LITHONIA	2VTL4-48L-ADP-EZ1-LP840-N100	RECESSED	120/277	LED 4000 K	38.4	WITH EMBEDDED LIGHTING CONTROL INTERFACE
A2-EM	LITHONIA	2VTL4-48L-ADP-EZ1-LP840-N100EMG	RECESSED	120/277	LED 4000 K	38.4	WITH EMBEDDED LIGHTING CONTROL INTERFACE
B	LITHONIA	LBL4-4000LM-80CRI-40K-MIN1-ZT-MVOLT-NLIGHT	SURFACE	120/277	LED 4000 K	32.4	WITH EMBEDDED LIGHTING CONTROL INTERFACE
C	LITHONIA	WF4-REG-SWW5-90CRI-MW-M6	RECESSED	120	LED 4000 K	9	LISTED FOR WET LOCATIONS
EM	LITHONIA	ELM2L	WALL	120/277	LED	2	EMERGENCY LIGHT
HB	LITHONIA	IBH-15000LM-SD080-ND-MVOLT-40K-80CRI-WH-WGIBH-nPP16D	SUSPENDED	120/277	LED 4000 K	140	WITH WIRE GUARD, EMBEDDED LIGHTING CONTROL
HB-EM	LITHONIA	IBH-15000LM-SD080-ND-MVOLT-40K-80CRI-WH-WGIBH-nPP16DER	SUSPENDED	120/277	LED 4000 K	140	WITH WIRE GUARD, EMBEDDED LIGHTING CONTROL
S	LITHONIA	CLX-L48-4000LM-SEF-FDL-MVOLT-EZ1-40K-80CRI-WH-HC36M12-N100	SUSPENDED	120/277	LED 4000 K	22.8	WITH EMBEDDED LIGHTING CONTROL INTERFACE
X1	LITHONIA	LQM-S-W-3-R-120/277 M6	WALL OR CEILING	120/277	LED	4	EXIT SIGN, DIRECTIONAL ARROWS PER PLANS
X2	LITHONIA	ECRG-RD-M6	WALL OR CEILING	120/277	LED	2	EMERGENCY LIGHT / EXIT SIGN COMBO

LIGHTING CONTROL SYMBOLS (NOT ALL MAY BE USED):

LIGHTING CONTROL CATALOG NUMBERS ARE THOSE OF ACQUITY BRANDS AND ARE MEANT TO ESTABLISH A BASIS OF DESIGN AND PERFORMANCE CRITERIA. 'OR EQUAL' LIGHTING CONTROL SYSTEMS IN COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS MAY BE SUBMITTED FOR APPROVAL. LIGHTING CONTROLS ARE DESIGNED TO INTEGRATE WITH MANUFACTURER'S EMBEDDED LIGHTING CONTROLS.

- OC nCM 10 OCCUPANCY SENSOR (CORRIDOR)
- OC nCM PDT 9 OCCUPANCY SENSOR
- D nPODMA 2P DX ON/OFF & RAISE/LOWER WALL POD
- S nPODMA ON/OFF WALL POD
- OC nWSXA PDT LV DX WALL SWITCH OCCUPANCY SENSOR ON/OFF & RAISE/LOWER
- LSC nECY-MVOLT-BAC-ENC-SEP LIGHTING NETWORK SYSTEM CONTROLLER
- P nPP16 POWER PACK

LIGHTING CONTROL LINETYPES:

- LINE POWER
- - - - - CAT-5e CABLE

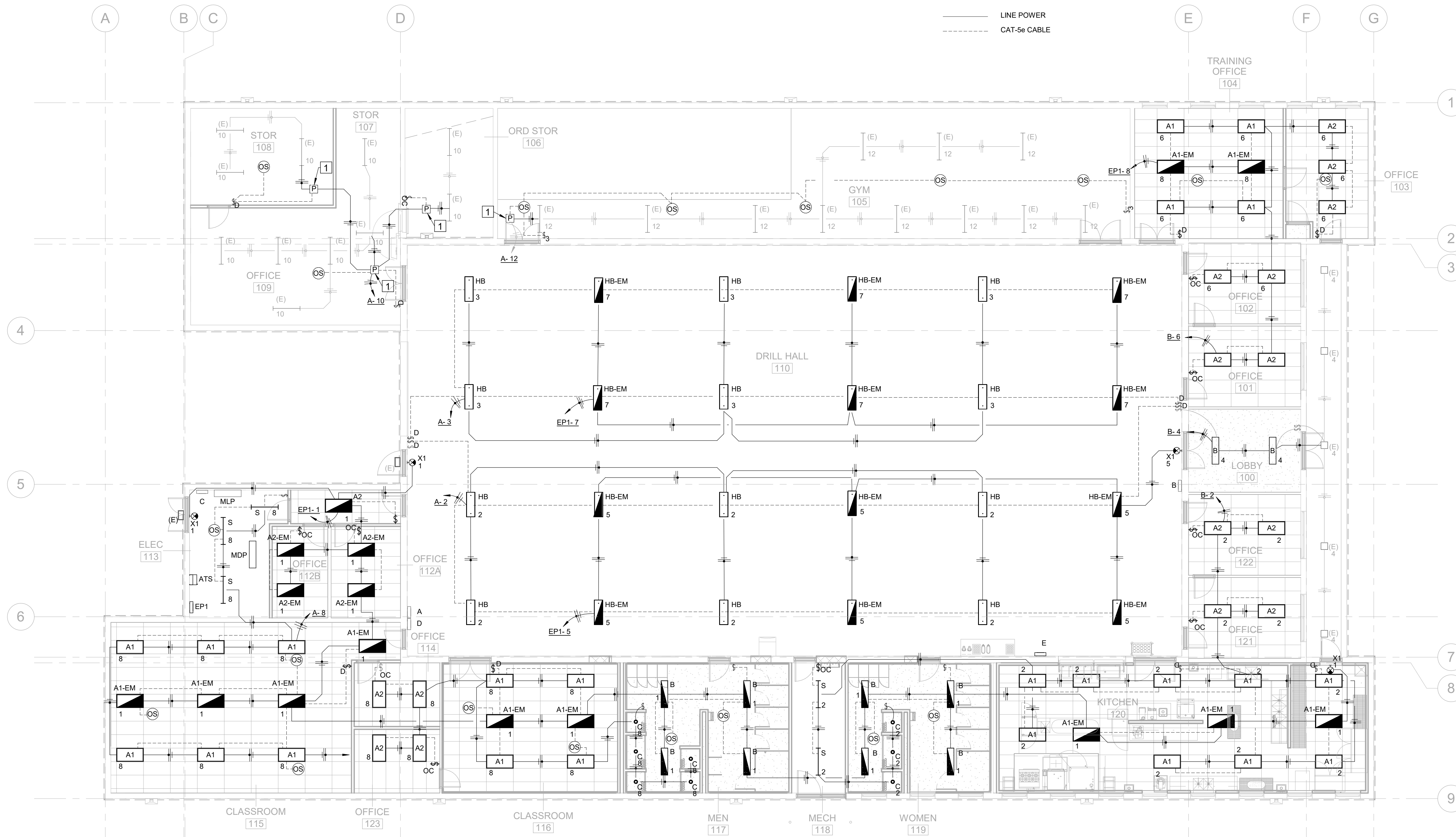
GENERAL NOTES - E121

- EMERGENCY EXIT SIGNS AND EMERGENCY FIXTURES SHALL BE CONNECTED TO UNSWITCHED PORTION OF LIGHTING CIRCUIT.
- DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND NOT ALL EXISTING WIRING DEVICES MAY BE SHOWN. RECEPTACLES AND DATA OULETS IN WALLS NOT BEING DEMOLISHED MAY REMAIN IN SERVICE.
- DEVICES WITH SUBSCRIPT (E) ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.

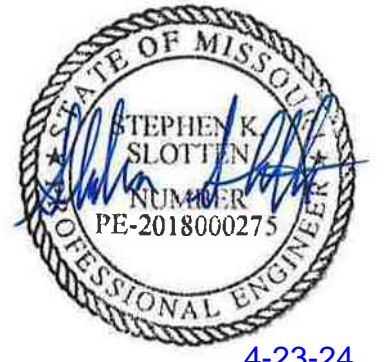
SYMBOL #

KEYED NOTES - E121

- INTERCEPT EXISTING LIGHTING CIRCUIT AND INSTALL A 120V LIGHTING CONTROL RELAY POWER PACK TO PROVIDE LOW VOLTAGE LIGHTING CONTROL.



1 REFLECTED CEILING LIGHTING PLAN
SCALE: 1/8" = 1'-0"



4-23-24

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ISSUE DATE: 2024.04.03

CAD DWG FILE:
DRAWN BY: SKS
CHECKED BY: JCA
DESIGNED BY: SKS

SHEET TITLE:
POWER PLAN

SHEET NUMBER:

E131

67 OF 85 SHEETS
2024.04.23

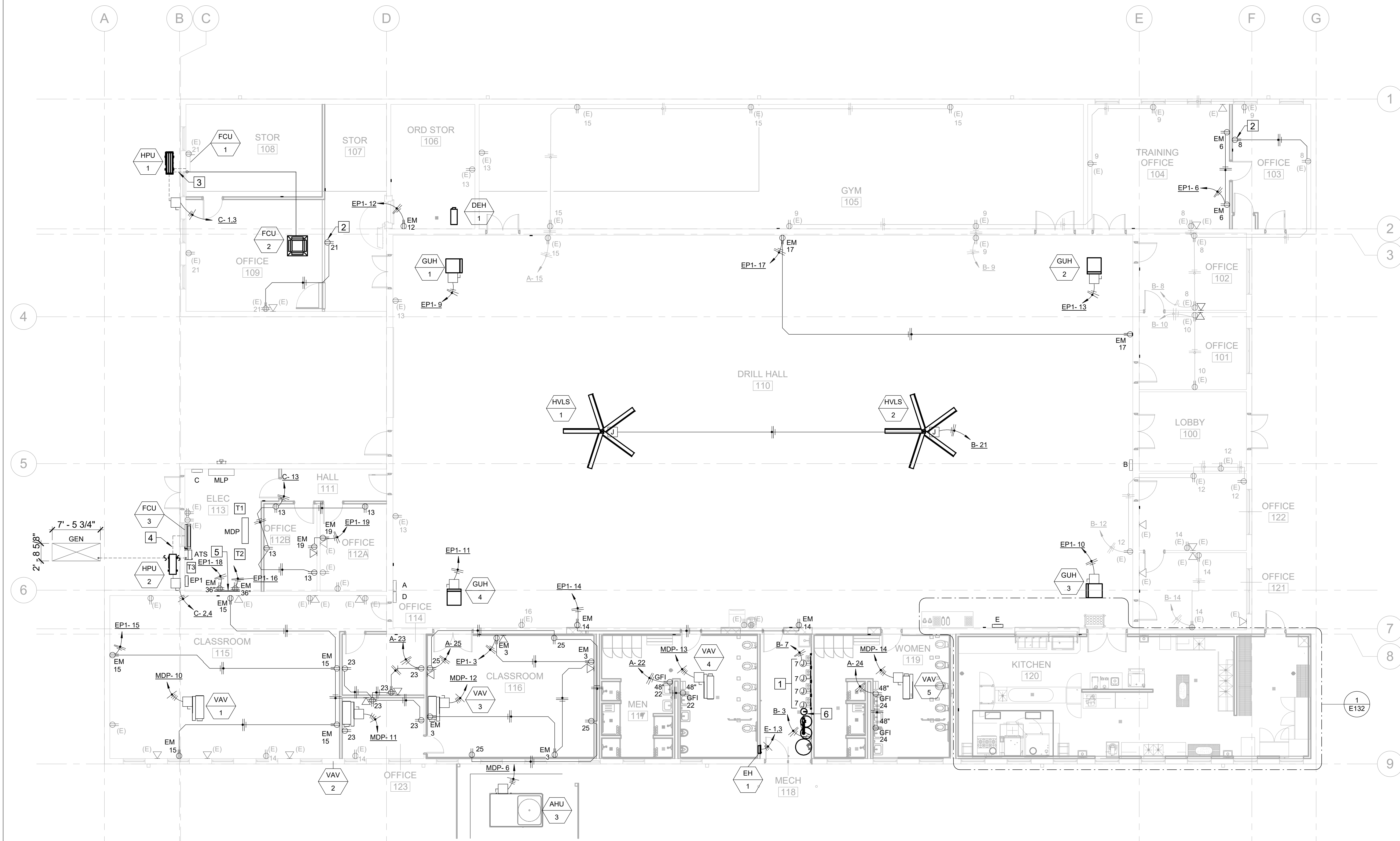
SYMBOL
#

KEYED NOTES - E131

- 1 JUNCTION BOX FOR 120V CONNECTION TO TANKLESS WATER HEATER.
- 2 NEW RECEPTACLE ON EXISTING CIRCUIT SERVING THIS ROOM.
- 3 PROVIDE 2#12 AWG IN 1/2" CONDUIT TO EACH FCU-1 AND FCU-2 FOR CONTROL CONNECTIONS TO UNIT HPU-1.
- 4 PROVIDE 2#12 AWG IN 1/2" CONDUIT TO EACH FCU-3 FOR CONTROL CONNECTIONS TO UNIT HPU-2.
- 5 PROVIDE WALL MOUNTED PLYWOOD BACKBOARD FOR MOUNTING OF DATA / COMMUNICATIONS EQUIPMENT.
- 6 PROVIDE 120V CONNECTION TO RECIRCULATION PUMP.

GENERAL NOTES - E131

- 1 DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND NOT ALL EXISTING WIRING DEVICES MAY BE SHOWN. RECEPTACLES AND DATA OUTLETS IN WALLS NOT BEING DEMOLISHED MAY REMAIN IN SERVICE.
- 2 DEVICES WITH SUBSCRIPT (E) ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- 3 RECEPTACLES TAGGED WITH 'EM' SHALL HAVE RED DEVICE AND RED COVERPLATE TO DENOTE CONNECTION TO EMERGENCY POWER.
- 4 DEVICES AND CIRCUITS SHOWN WITH LIGHT LINETYPE ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED. CIRCUITS ARE SCHEMATIC AND MAY NOT MATCH ACTUAL FIELD CONDITIONS.
- 5 CIRCUIT NUMBERS INDICATED ON EXISTING PANELS ARE FOR REFERENCE ONLY AND ARE BASED ON EXISTING DRAWINGS AND MAY NOT MATCH CURRENT FIELD CONDITIONS. USE SPARE CIRCUITS OR CIRCUITS MADE SPARE BY DEMOLITION.

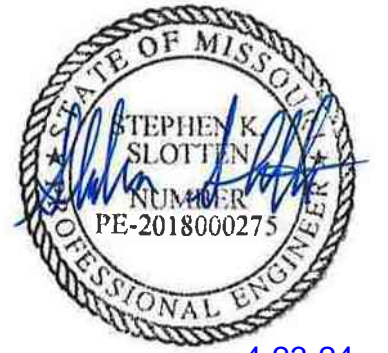


1 POWER PLAN
1/8" = 1'-0"

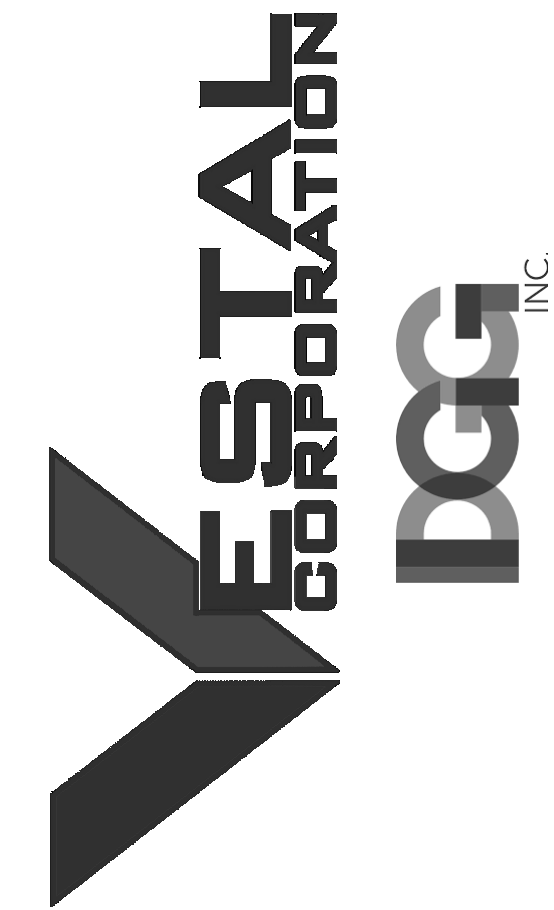
GENERAL NOTES - E132

- ELECTRICAL CONTRACTOR SHALL VERIFY DIMENSIONAL LOCATIONS WITH THE KITCHEN EQUIPMENT CONTRACTOR'S SHOP DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL MAKE ALL EXTERNAL AND INTERNAL CONNECTIONS AS NECESSARY TO MAKE FOOD SERVICE EQUIPMENT FUNCTIONAL.
- DEVICE COVERPLATES IN THE FOOD SERVICE KITCHEN SHALL BE STAINLESS STEEL TYPE.
- RECEPTACLES MOUNTED GREATER THAN 48" FOR KITCHEN EQUIPMENT SHALL BE INSTALLED HORIZONTALLY.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



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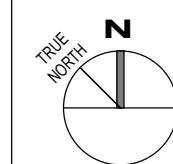
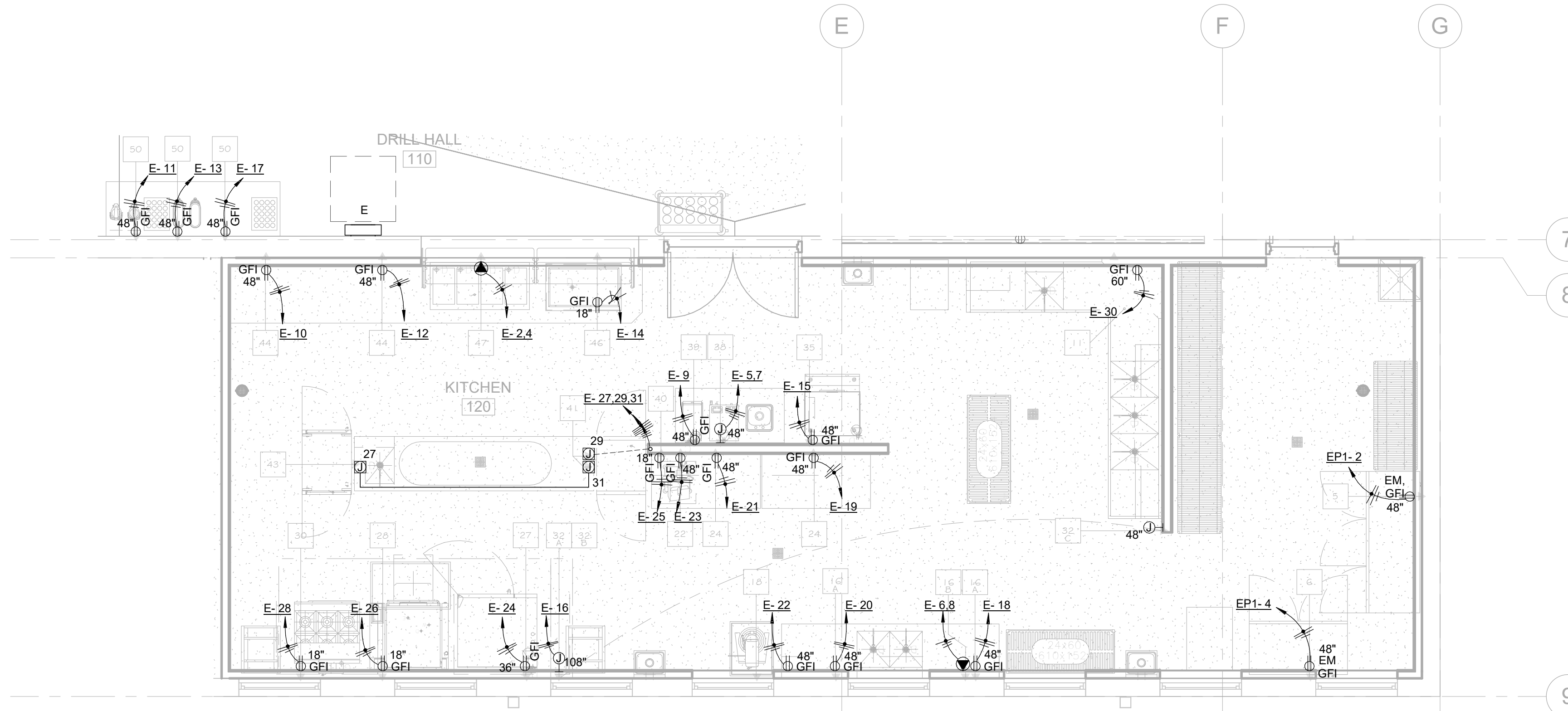
CAD DWG FILE: _____
DRAWN BY: SKS _____
CHECKED BY: JCA _____
DESIGNED BY: SKS _____

SHEET TITLE:
**ENLARGED PLAN -
KITCHEN**

SHEET NUMBER:

E132

68 OF 85 SHEETS
2024.04.23

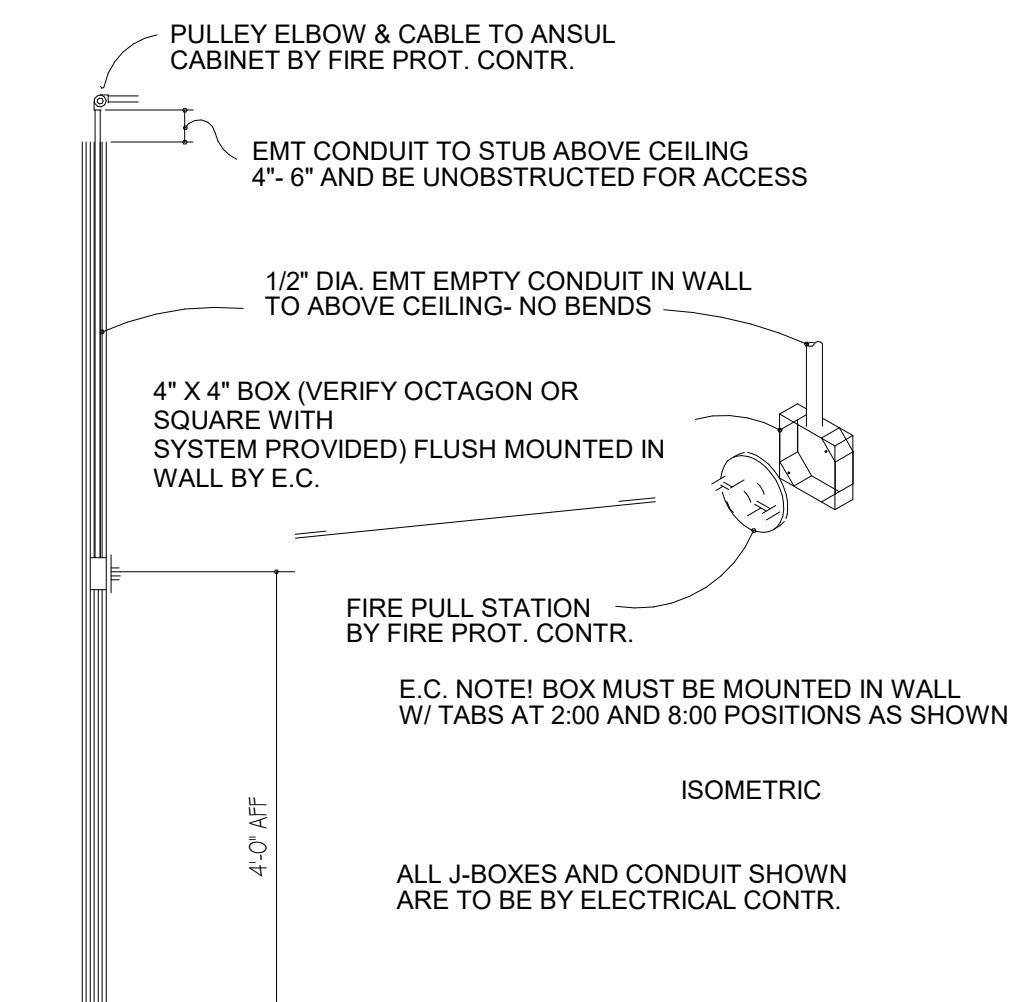


1 ENLARGED POWER PLAN - KITCHEN

1/4" = 1'-0"

ITEM NO.	QTY.	DESCRIPTION	REMARKS
1	1	MOP SINK	BY PLUMBER
2	1	MOP RACK	BY G.C.
3	1	WALL SHELVE	BY G.C.
4	1 LOT	STORAGE SHELVING	
5	1	FREEZER	THREE SECTION WITH FULL HGT DOORS
6	1	REFRIGERATOR	TWO SECTION WITH FULL HGT DOORS
7	1	CAN RACK	
8	3	HAND SINKS	WITH SIDE SPLASHES
9	1	THREE COMPARTMENT SINK/CLEAN DISH TABLE	
10	1	DOUBLE OVER SHELF	
11	1	DISH MACHINE	UL LISTED FOR VENTLESS OPERATION
12	1	SOILED DISH TABLE	
13	1	RACK SHELF	
14	1	SOILED DISH TRANSPORT CART	
15	2	POT AND PAN RACKS	
16	1	PREP TABLE	
17	1	WALL SHELF	
18	1	MIXER	20 QT
19	1	PORTABLE MIXER STAND	
20	0	SPARE NUMBER	
21	0	SPARE NUMBER	
22	1	SLICER	
23	0	SPARE NUMBER	
24	2	WORK TABLES	
25	1	CAN OPENER	
26	1	WALL SHELF	
27	1	COMBI OVEN	SINGLE DECK
28	1	BRAISING PAN	30 GALLON
29	1	TRENCH DRAIN	
30	1	RANGE	6 BURNER WITH CONVECTION OVEN BASE
31	1	STAINLESS STEEL WALL PANELING	
32	1	HOOD WITH FIRE PROTECTION SYSTEM	
33	1	DUCT AND FAN	BY HVAC
34	1	RACK	
35	1	ICE MACHINE	
36	1	BEVERAGE COUNTER	
37	1	DROP IN DUMP SINK	
38	1	COFFEE MAKER	BY VENDOR
39	1	TEA BREWER	BY VENDOR
40	1	PASS THRU REFRIGERATOR	SINGLE SECTION WITH HALF HGT DOORS
41	1	WORK TABLE WITH SINK	
42	1	HANGING UTENSIL RACK	
43	1	HOT HOLDING CABINET	FULL HGT - PASS THRU UNIT
44	1	SERVING COUNTER	
45	0	SPARE NUMBER	
46	1	DROP IN COLD PAN	3 PAN UNIT
47	1	DROP IN HOT FOOD UNIT	4 PAN UNIT
48	1	PROTECTOR GUARD	
49	1	TRAY AND SILVER CART	
50	1	BEVERAGE COUNTER	
51	0	SPARE NUMBER	
52	2	TEA DISPENSERS	BY VENDOR
53	2	COFFEE DISPENSERS	BY VENDOR

CONN. NO.	VOLTAGE	PHASE	AMPS LOAD	K.W. LOAD	CONN. TYPE	HGT. A.F.F.	COMMENTS
5	115	1	14		D.R.	4'-0"	
6	115	1	5.4		D.R.	4'-0"	
11	115	1	16		D.R.	5'-0"	
16A	115	1	20	1.92	D.R.	4'-0"	CONVENIENCE OUTLET
16B	208	1	30		S.R.	4'-0"	CONVENIENCE OUTLET
18	115	1	6		D.R.	4'-0"	
22	115	1	4		D.R.	4'-0"	
24	115	1	20	1.92	D.R.	4'-0"	CONVENIENCE OUTLET
27	115	1	6.8		J.B.	3'-0"	
29	115	1	9		D.R.	1'-6"	
30	115	1	4		D.R.	1'-6"	
32A	115	1	20		J.B.	9'-0"	ELECT. CONTR. SHALL PROVIDE 20 AMP 24 HR DEDICATED CIRCUIT FOR HOOD CONTROL AND FIRE PROTECTION SYSTEM AT HOOD - REFER TO HOOD WIRING DIAGRAM
32B					J.B.	9'-0"	ELECT. CONTR. SHALL INNERCONNECT EXHAUST FANS AND MAKE-UP AIR FANS TO MICRO-SWITCH IN CONTROL PANEL - REFER TO HOOD DWG FOR WIRING DIAGRAMS
32C					J.B.	4'-0"	ELECT. CONTR. SHALL BROVIDE J-BOX AND EMPTY CONDUIT IN WALL FOR REMOTE MANUAL PULL STATION - REFER TO HOOD DWG FOR WIRING DIAGRAMS
35	115	1	15.2		D.R.	4'-0"	
38	115/240	1	26	6.2	J.B.	4'-0"	VERIFY - EQUIPMENT SUPPLIED BY VENDOR
39	115	1	14	1.7	D.R.	4'-0"	VERIFY - EQUIPMENT SUPPLIED BY VENDOR
40	115	1	2.2		D.R.	1'-6"	
41	115	1	20	1.92	S.C.	4"	ELECT. CONTR. SHALL CONNECT TO J-BOX BELOW BOTTOM SHELF FOR PRE-WIRED RECEPTACLES ON TABLE
43	115	1	12.5	1.5	S.C.	4"	ELECT. CONTR. SHALL CONNECT TO J-BOX BELOW BOTTOM SHELF FOR PRE-WIRED RECEPTACLES ON TABLE
44	115	1	20	1.92	D.R.	4'-0"	CONVENIENCE OUTLET
46	115	1	3.5		D.R.	1'-6"	
47	208	1	14.4	4	S.R.	1'-6"	
50	115	1	20	1.92	D.R.	4'-0"	CONVENIENCE OUTLET



3 32C PULL STATION DETAIL

12" = 1'-0"





4-23-24

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FACILITY # 8136304011

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B	DD	02/19/2024
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ISSUE DATE: 2024.04.03

CAD DWG FILE: _____
DRAWN BY: SKS
CHECKED BY: JCA
DESIGNED BY: SKS

SHEET TITLE:
**ELECTRICAL - ROOF
POWER PLAN**

SHEET NUMBER:

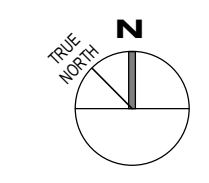
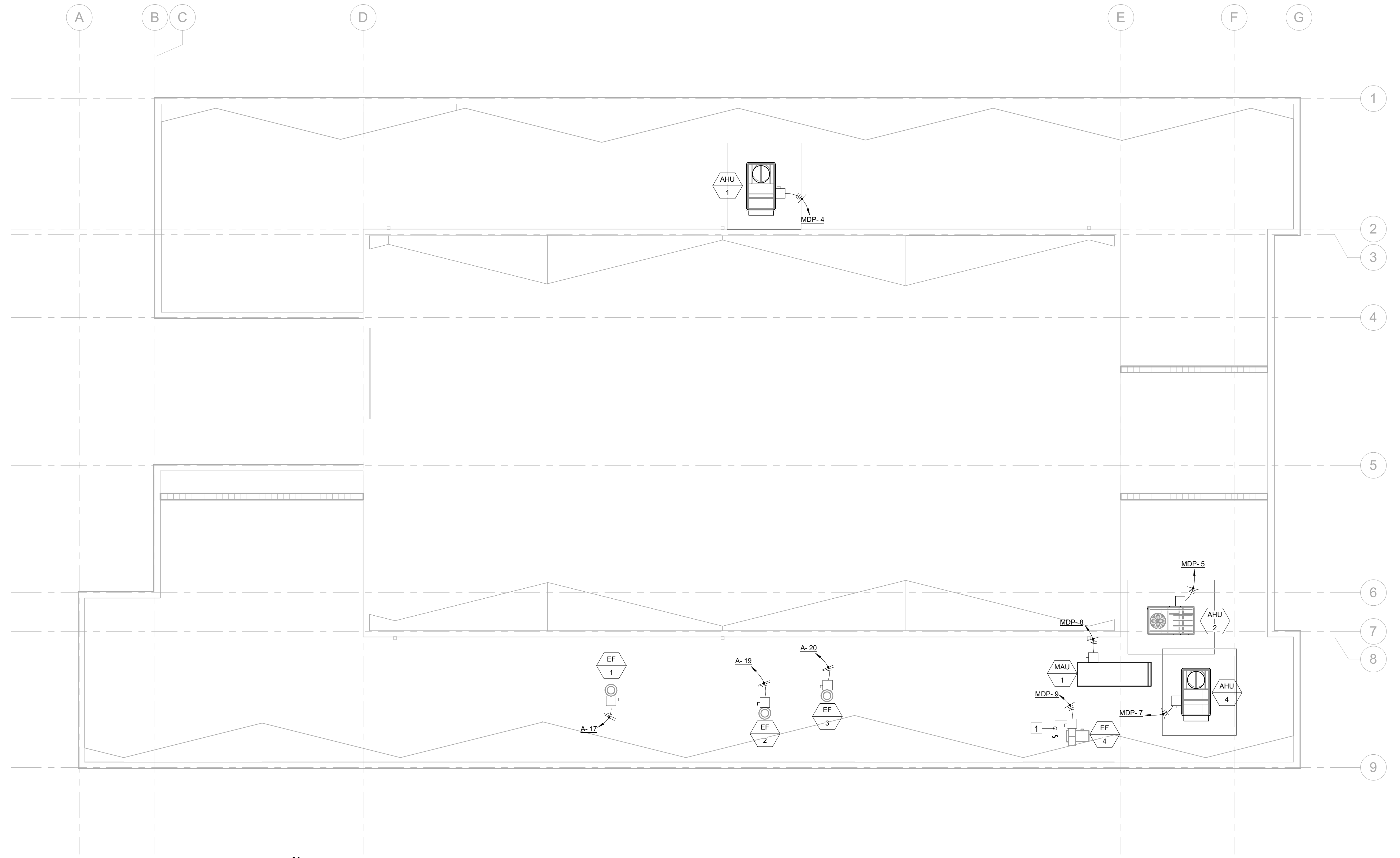
E133

69 OF 85 SHEETS
2024.04.23

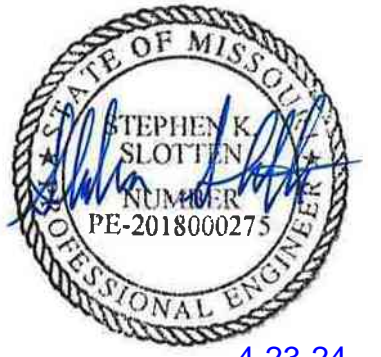
SYMBOL
#

KEYED NOTES - E133

- 1 PROVIDE CONDUIT AND CONTROL WIRING TO KITCHEN EXHAUST HOOD CONTROLLER FOR HOOD / FAN INTERLOCK.



1 ROOF PLAN
E133
1/8" = 1'-0"



4-23-24

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DRAWN BY: SKS _____
CHECKED BY: JCA _____
DESIGNED BY: SKS _____

SHEET TITLE:
**ELECTRICAL -
DETAILS**

SHEET NUMBER:

E501

70 OF 85 SHEETS
2024.04.23

MECHANICAL EQUIPMENT DATA SCHEDULE																	
PLAN MARK	EQUIPMENT	LOCATION	HP	KW	VOLTS	PHASE	MCA	DISCONNECT AT EQUIPMENT				STARTER				REMARKS	
								FEEDER	FURN. BY	INST. BY	TYPE	SIZE	FURN BY	INST. BY	TYPE		SIZE
AHU-1	AIR HANDLING UNIT	ROOF			480	3	29	REF. E701	M.C.	M.C.				M.C.			
AHU-2	AIR HANDLING UNIT	ROOF			480	3	14	REF. E701	M.C.	M.C.				M.C.			
AHU-3	AIR HANDLING UNIT	GRADE			480	3	31	REF. E701	M.C.	M.C.				M.C.			
AHU-4	AIR HANDLING UNIT	ROOF			480	3	29	REF. E701	M.C.	M.C.				M.C.			
EF-1	EXHAUST FAN	ROOF	1/12		120	1	<1	2#12,1#12G	ELEC	E.C.	NEMA 3R	30A, NF	E.C.				
EF-2	EXHAUST FAN	ROOF	1/25		120	1	<1	2#12,1#12G	ELEC	E.C.	NEMA 3R	30A, NF	E.C.				
EF-3	EXHAUST FAN	ROOF	1/12		120	1	<1	2#12,1#12G	ELEC	E.C.	NEMA 3R	30A, NF	E.C.				
EF-4	EXHAUST FAN	ROOF	3/4		480	3	2	REF. E701	ELEC	E.C.	NEMA 3R	30A, NF	E.C.				INTERLOCK WITH KITCHEN HOOD
EH-1	ELECTRIC UNIT HEATER	MECH 118		3	208	1		2#12,1#12G	M.C.	M.C.	-	-	M.C.				
FCU-1	FAN COIL UNIT	STOR. 108			230	1	1	2#12,1#12G	ELEC	E.C.	NEMA 1	30A, NF	M.C.				
FCU-2	FAN COIL UNIT	OFFICE 109			230	1	1	2#12,1#12G	ELEC	E.C.	NEMA 1	30A, NF	M.C.				
FCU-3	FAN COIL UNIT	ELEC 113			230	1	1	2#12,1#12G	ELEC	E.C.	NEMA 1	30A, NF	M.C.				
GUH-1	GAS FIRED UNIT HEATER	DRILL 110			115	1		2#12,1#12G	M.C.	M.C.	-	-	M.C.				
GUH-2	GAS FIRED UNIT HEATER	DRILL 110			115	1		2#12,1#12G	M.C.	M.C.	-	-	M.C.				
GUH-3	GAS FIRED UNIT HEATER	DRILL 110			115	1		2#12,1#12G	M.C.	M.C.	-	-	M.C.				
GUH-4	GAS FIRED UNIT HEATER	DRILL 110			115	1		2#12,1#12G	M.C.	M.C.	-	-	M.C.				
HPU-1	HEAT PUMP	GRADE			230	1	42	2#8,1#10G	ELEC	E.C.	NEMA 3R	60A, NF	M.C.				POWERS UNITS FCU-1 / FCU-2
HPU-2	HEAT PUMP	GRADE			230	1	19	2#10,1#10G	ELEC	E.C.	NEMA 3R	30A, NF	M.C.				POWERS UNITS FCU-3
HVLS-1	FAN	DRILL 110			115	1	7	2#12,1#12G					M.C.				
HVLS-2	FAN	DRILL 110			115	1	7	2#12,1#12G					M.C.				
MAU-1	MAKE-UP AIR UNIT	ROOF	5		460	3	4.6	REF. E701	M.C.	M.C.	NEMA 3R	30A, NF	M.C.	M.C.	VFD		
VAV-1	VARIABLE AIR VOLUME	CLASS. 115		6	480	3	7.2	REF. E701	M.C.	M.C.			M.C.				
VAV-2	VARIABLE AIR VOLUME	CLASS. 115		6	480	3	7.2	REF. E701	M.C.	M.C.			M.C.				
VAV-3	VARIABLE AIR VOLUME	CLASS. 115		6	480	3	7.2	REF. E701	M.C.	M.C.			M.C.				
VAV-4	VARIABLE AIR VOLUME	MEN 117		2	480	3	3	REF. E701	M.C.	M.C.			M.C.				
VAV-5	VARIABLE AIR VOLUME	WOMEN 119		2	480	3	3	REF. E701	M.C.	M.C.			M.C.				



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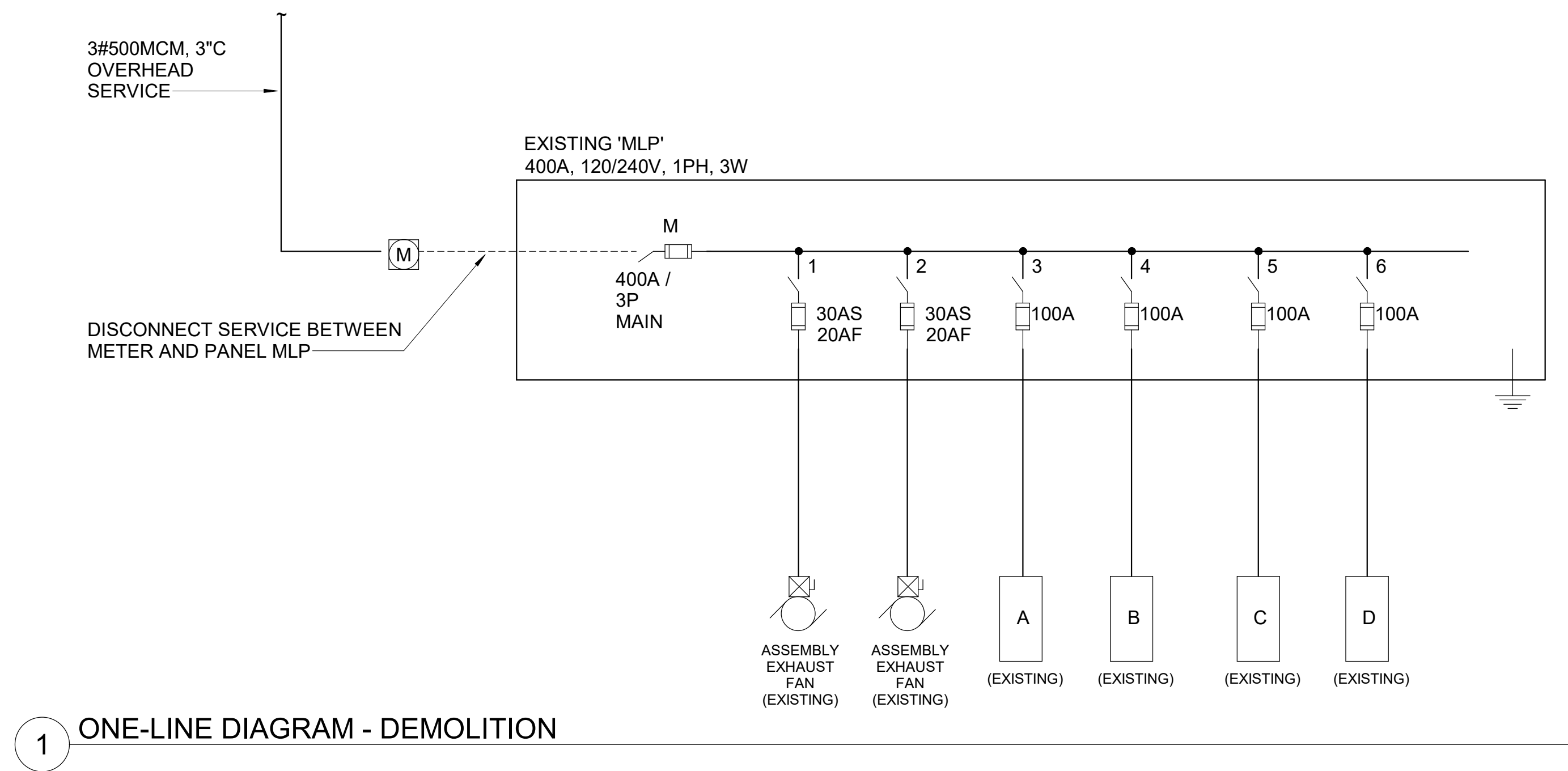
SHEET TITLE:
**ONE-LINE RISER
DIAGRAM**

SHEET NUMBER:

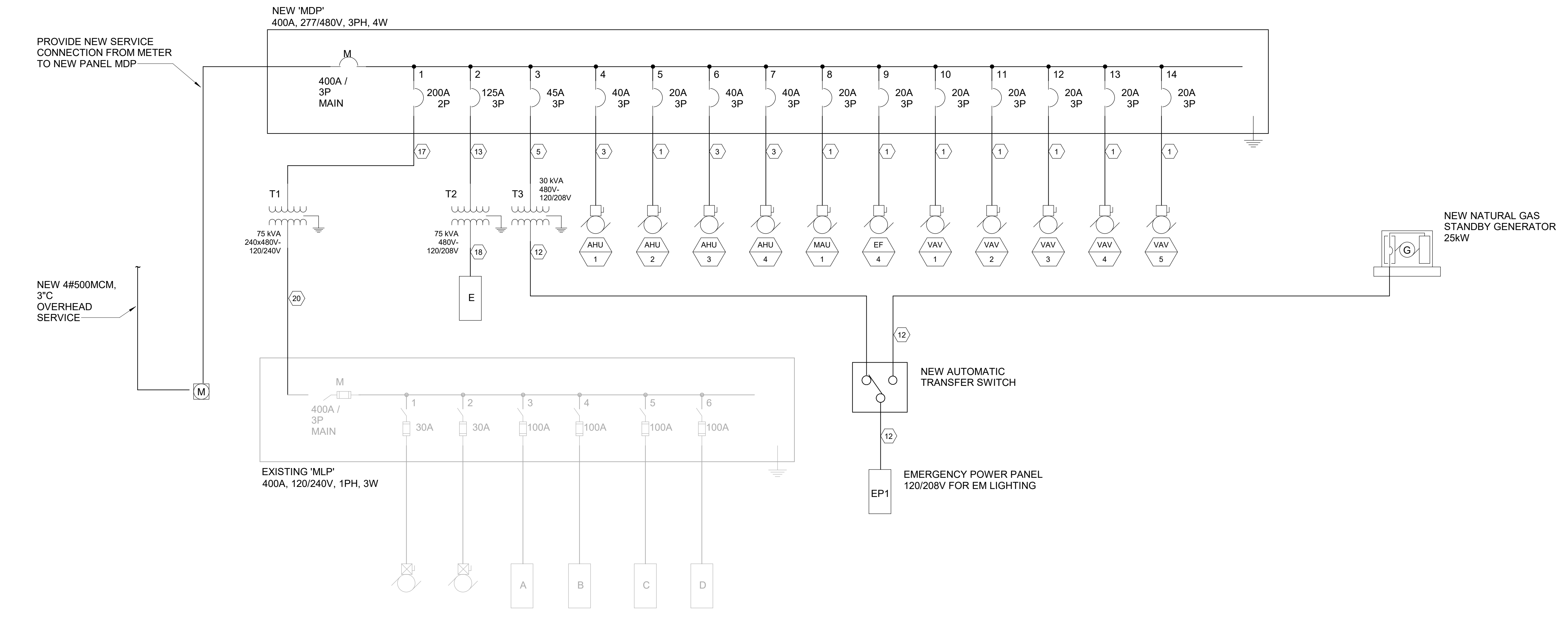
E701

73 OF 85 SHEETS
2024.04.23

FEEDER #	PHASE		NEUTRAL		EQUIPMENT GROUND		MINIMUM CONDUIT		RATED AMPS (NEC)
	NO.	SIZE	NO.	SIZE	NO.	SIZE	NO.	SIZE	
1	3	12			1	12	1	3/4"	20
2	3	12	1	12	1	12	1	3/4"	20
3	3	10			1	10	1	3/4"	30
4	3	10	1	10	1	10	1	3/4"	30
5	3	8			1	10	1	3/4"	50
6	3	8	1	8	1	10	1	3/4"	50
7	3	6			1	10	1	3/4"	60
8	3	6	1	6	1	10	1	1"	60
9	3	4			1	8	1	1-1/4"	80
10	3	4	1	4	1	8	1	1-1/4"	80
11	3	3			1	8	1	1-1/4"	100
12	3	3	1	3	1	8	1	1-1/4"	100
13	3	1			1	6	1	1-1/2"	125
14	3	1	1	1	1	6	1	1-1/2"	125
15	3	1/0			1	6	1	1-1/2"	150
16	3	1/0	1	1/0	1	6	1	1-1/2"	150
17	3	4/0			1	4	1	2"	225
18	3	4/0	1	4/0	1	4	1	2-1/2"	225
19	3	500			1	3	1	3"	400
20	3	500	1	500	1	3	1	4"	400



1 ONE-LINE DIAGRAM - DEMOLITION



2 ONE-LINE DIAGRAM - NEW



OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN AND
CONSTRUCTION

DEPARTMENT OF
MISSOURI NATIONAL
GUARD

ST. CLAIR READINESS
CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: MDG
CHECKED BY: MDG
DESIGNED BY: MDG

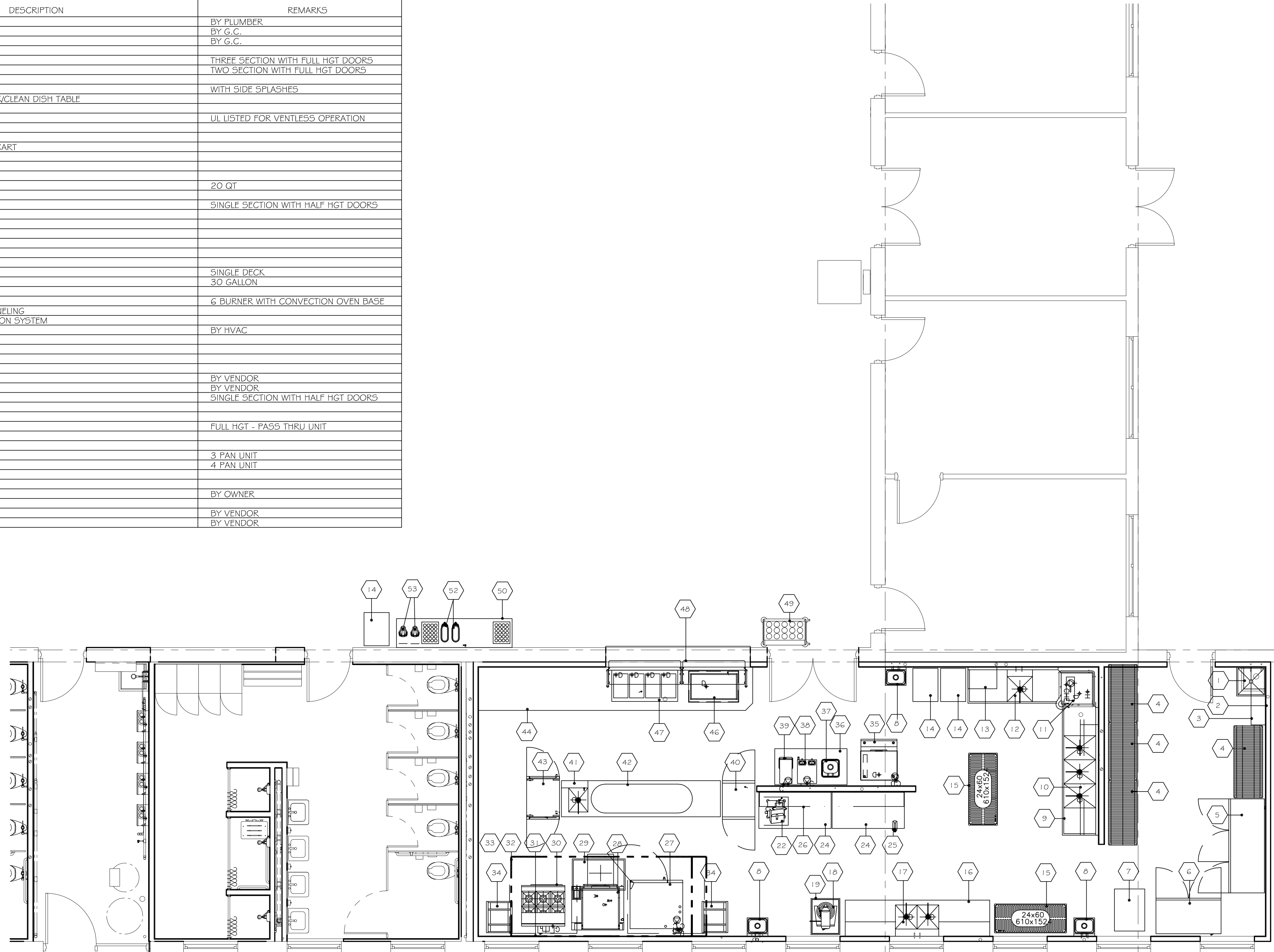
SHEET TITLE:
FLOOR PLAN

SHEET NUMBER:

Q-FP-01

74 OF 85 SHEETS
2024.04.23

EQUIPMENT SCHEDULE			
ITEM NO.	QTY.	DESCRIPTION	REMARKS
1	1	MOP SINK	BY PLUMBER
2	1	MOP RACK	BY G.C.
3	1	WALL SHELF	BY G.C.
4	1 LOT	STORAGE SHELVING	
5	1	FREEZER	THREE SECTION WITH FULL HGT DOORS
6	1	REFRIGERATOR	TWO SECTION WITH FULL HGT DOORS
7	1	CAN RACK	
8	3	HAND SINKS	WITH SIDE SPLASHES
9	1	THREE COMPARTMENT SINK/CLEAN DISH TABLE	
10	1	DOUBLE OVER SHELF	
11	1	DISH MACHINE	UL LISTED FOR VENTLESS OPERATION
12	1	SOILED DISH TABLE	
13	1	RACK SHELF	
14	3	SOILED DISH TRANSPORT CART	
15	2	POT AND PAN RACKS	
16	1	PREP TABLE	
17	1	WALL SHELF	
18	1	MIXER	20 QT
19	1	PORTABLE MIXER STAND	
20	0	SPARE NUMBER	SINGLE SECTION WITH HALF HGT DOORS
21	0	SPARE NUMBER	
22	1	SLICER	
23	0	SPARE NUMBER	
24	2	WORK TABLES	
25	1	CAN OPENER	
26	1	WALL SHELF	
27	1	COMBI OVEN	SINGLE DECK
28	1	BRAISING PAN	30 GALLON
29	1	TRENCH DRAIN	
30	1	RANGE	6 BURNER WITH CONVECTION OVEN BASE
31	1	STAINLESS STEEL WALL PANELING	
32	1	HOOD WITH FIRE PROTECTION SYSTEM	
33	1	DUCT AND FAN	BY HVAC
34	1	RACK	
35	1	ICE MACHINE	
36	1	BEVERAGE COUNTER	
37	1	DROP IN DUMP SINK	
38	1	COFFEE MAKER	BY VENDOR
39	1	TEA BREWER	BY VENDOR
40	1	PASS THRU REFRIGERATOR	SINGLE SECTION WITH HALF HGT DOORS
41	1	WORK TABLE WITH SINK	
42	1	HANGING UTENSIL RACK	
43	1	HOT HOLDING CABINET	FULL HGT - PASS THRU UNIT
44	1	SEFRVING COUNTER	
45	0	SPARE NUMBER	
46	1	DROP IN COLD PAN	3 PAN UNIT
47	1	DROP IN HOT FOOD UNIT	4 PAN UNIT
48	1	PROTECTOR GUARD	
49	1	TRAY AND SILVER CART	
50	1	BEVERAGE TABLE	BY OWNER
51	0	SPARE NUMBER	
52	2	TEA DISPENSERS	BY VENDOR
53	2	COFFEE DISPENSERS	BY VENDOR





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PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

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B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: MDG
CHECKED BY: MDG
DESIGNED BY: MDG

SHEET TITLE:
FOODSERVICE
EQUIPMENT SPOT
ELECTRICAL PLAN

SHEET NUMBER:

Q-FP-02

75 OF 85 SHEETS
2024.04.23

ELECTRICAL SCHEDULE						
CONN. NO.	VOLTAGE	PHASE	AMPS LOAD	K.W. LOAD	CONN. TYPE	TIGHT A.F.F.
5	115	1	1.4		D.R.	4'-0"
6	115	1	5.4		D.R.	4'-0"
11	115	1	1.6		D.R.	5'-0"
16A	115	1	2.0	1.92	D.R.	4'-0"
16B	208	1	3.0		S.R.	4'-0"
18	115	1	6		D.R.	4'-0"
22	115	1	4		D.R.	4'-0"
24	115	1	2.0	1.92	D.R.	4'-0"
27	115	1	6.8		J.B.	3'-0"
29	115	1	9		D.R.	1'-6"
30	115	1	4		D.R.	1'-6"
32A	115	1	2.0		J.B.	9'-0"
32B					J.B.	9'-0"
32C					J.B.	4'-0"
35	115	1	15.2		D.R.	4'-0"
36	115/240	1	26	6.2	J.B.	4'-0"
39	115	1	1.4	1.7	D.R.	4'-0"
40	115	1	2.2		D.R.	1'-6"
41	115	1	2.0	1.92	S.C.	4'
43	115	1	12.5	1.5	S.C.	4'
44	115	1	2.0	1.92	D.R.	4'-0"
46	115	1	3.5		D.R.	1'-6"
47	208	1	14.4	4	S.R.	1'-6"
50	115	1	2.0	1.92	D.R.	4'-0"

ELECTRICAL NOTES:

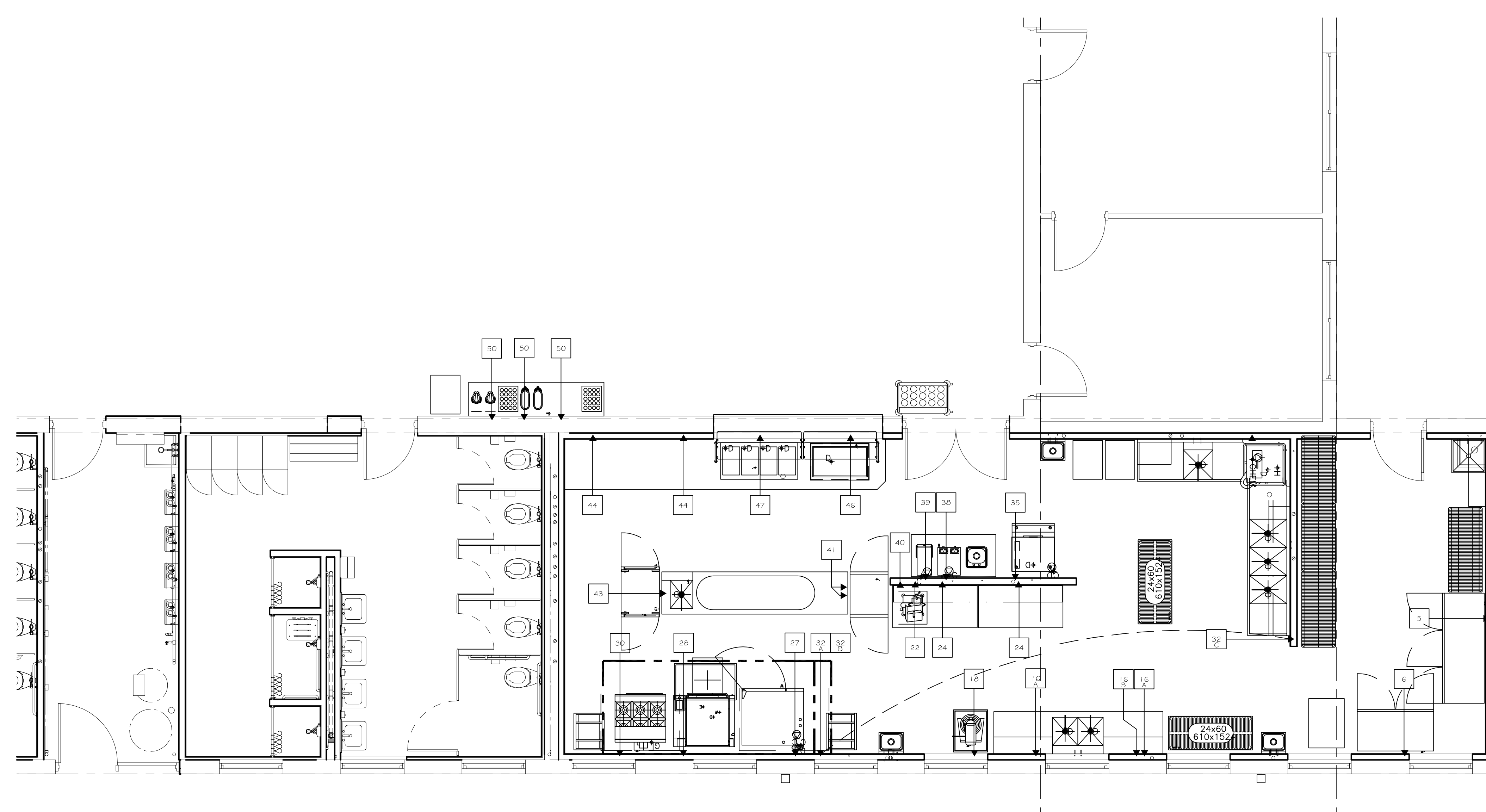
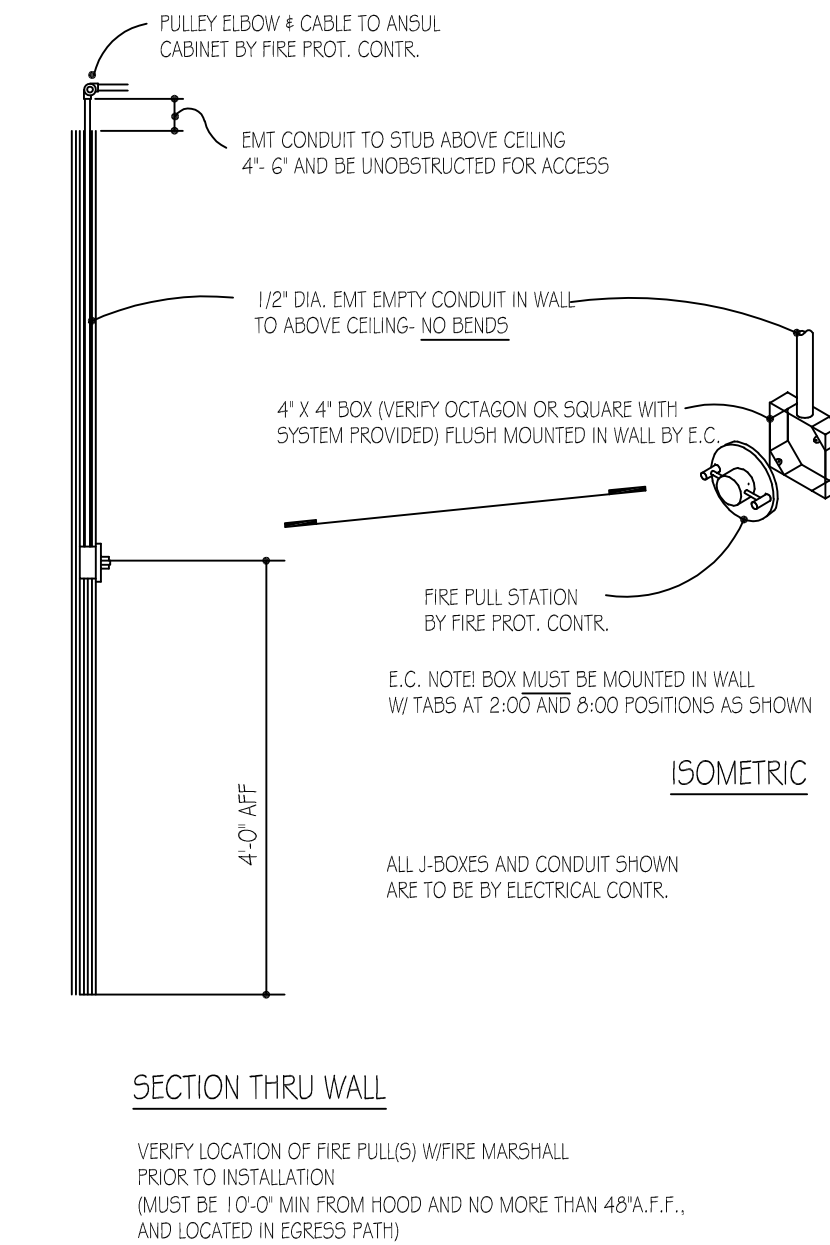
- ALL ELECTRICAL OUTLETS AND CONNECTIONS SHOWN ON PLAN ARE FOR FOODSERVICE EQUIPMENT AND ARE FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR SHALL VERIFY ALL LEFT TO RIGHT DIMENSIONAL LOCATIONS WITH THE KITCHEN EQUIPMENT CONTRACTORS SHOP DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL INCOMING SERVICES, MAKE ALL EXTERNAL & INTERNAL CONNECTIONS AND PROVIDE ALL SWITCHES, BREAKERS, PANEL BOARDS, CONDUITS, J-BOXES, ETC. AS NECESSARY TO MAKE FOODSERVICE EQUIPMENT FUNCTIONAL.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL J-BOXES, OUTLETS AND RECEPTACLES IN FIXTURES. FIXTURE FABRICATOR TO LOCATE ALL RECEPTACLES AND/OR SWITCHES WHEN PART OF THE FIXTURE. INTERNAL WIRING SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- ELECTRICAL CONTRACTOR SHALL MAKE ALL INTER-CONNECTIONS FOR ALL FOODSERVICE EQUIPMENT REQUIRING A FIELD JOINT DUE TO LENGTH OR OTHER CONSTRAINTS. (THIS MAY INCLUDE BUT IS NOT LIMITED TO: EXHAUST VENTILATORS, CHEFS COUNTERS, BUFFET COUNTERS, CONVEYORS, ETC.)
- ALL SYMBOLS NOTED AS 1/2", 1/8", 24", ETC. ARE FROM FINISHED FLOOR TO CENTERLINE OF STUB-OUT AT HEIGHT INDICATED ON PLAN. ALL SYMBOLS NOTED AS STUB-UP SHALL TERMINATE IN A J-BOX MOUNTED HORIZONTAL TO THE FINISHED FLOOR. THE J-BOX TOP SHALL BE AT 5 1/2" A.F.F. AND SHALL BE FITTED WITH APPROPRIATE RECEPTACLE AND FACE PLATE.
- ELECTRICAL CONTRACTOR SHALL PROVIDE A 6'-0" HGTAL FLEX CONDUIT AT ALL DIRECT CONNECT STUB-OUTS. ELECTRICAL CONTRACTOR TO EXTEND AND CONNECT TO ALL EQUIPMENT AND/OR FIXTURES AS REQUIRED.
- ELECTRICAL CONTRACTOR SHALL CONNECT 120V CONTROL CIRCUIT FROM FIRE PROTECTION SYSTEM TO CONTROL COIL.
- ELECTRICAL CONTRACTOR SHALL PROVIDE A MINIMUM OF 3 WIRES ON ALL 208 OR 230 VOLT CIRCUITS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL SERVICE ON ROOF FOR EXHAUST AND/OR MAKE-UP AIR SYSTEMS. ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL UNDERBAR LIGHTING AND CONNECT BACKBAR DISPLAY LIGHTING.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL STAINLESS STEEL COVER PLATES ON ALL RECEPTACLES AND SWITCHES IN FOODSERVICE AREAS. ALL RECEPTACLES ABOVE 48" SHALL BE SET HORIZONTALLY.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL GENERAL LIGHTING FIXTURES, DECORATIVE LIGHTING FIXTURES SUPPLIED BY THE KITCHEN EQUIPMENT CONTRACTOR SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR.
- ELECTRICAL CONTRACTOR SHALL PROVIDE CAPS AND CORDS FOR ALL ITEMS WHICH USE CONVENIENCE OUTLETS WHEN NOT SUPPLIED BY THE MANUFACTURER. ELECTRICAL CONTRACTOR SHALL SHORTEN ANY CORDS IF NECESSARY OR IF REQUESTED. KITCHEN EQUIPMENT CONTRACTOR SHALL COORDINATE.
- ELECTRICAL CONTRACTOR SHALL PROVIDE TWIST-LOCK TYPE RECEPTACLES ON ALL PENDANT CORDS THAT HANG FROM A CEILING JUNCTION BOX. KITCHEN EQUIPMENT CONTRACTOR SHALL PROVIDE TWIST-LOCK PLUGS ON ALL FOODSERVICE EQUIPMENT POWERED BY THE PENDANT CORDS.
- ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL FLY YANES AND/OR AIR CURTAINS PROVIDED AND INSTALLED BY THE KITCHEN EQUIPMENT CONTRACTOR.
- LIGHT AND POWER PANELS SHALL BE SELECTED AND SIZED TO ALLOW FOR A 20 PERCENT CIRCUIT CAPACITY FOR FUTURE USE.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT FOR BEVERAGE AND REMOTE REFRIGERATION LINES AS REQUIRED. CONDUIT BENDS SHALL BE A MINIMUM OF 24" RADIUS.
- BEVERAGE AND/OR REFRIGERATION CONDUIT LINES DEPICTED ON PLAN ARE SCHEMATIC ONLY. ACTUAL LINE RUN LOCATION/ROUTE SHALL BE VERIFIED AND COORDINATED BY THE ELECTRICAL CONTRACTOR AND KITCHEN EQUIPMENT CONTRACTOR AND/OR VENDOR.
- BEVERAGE CONDUITS REQUIRE A PULL BOX OR PULL SLEEVE EVERY 75'-0" OR EVERY THREE (3) BENDS, WHICHEVER COMES FIRST. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL PULL BOXES. KITCHEN EQUIPMENT CONTRACTOR TO COORDINATE LOCATION BASED ON MANUFACTURER'S RECOMMENDATION.
- ELECTRICAL CONTRACTOR SHALL CONNECT ALL COMPRESSORS COMPLETE WITH DISCONNECT SWITCHES AND MAGNETIC STARTERS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ON/OFF SWITCH WITH MAGNETIC STARTERS FOR EXHAUST FAN AND/OR MAKE-UP AIR FAN.
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL WIRING OF WALK-IN COOLERS/FREEZERS, EXHAUST HOODS, BUFFET COUNTER, DISH MACHINES AND BOOSTER HEATERS, ETC. WITH SHOP DETAILS.
- ELECTRICAL CONTRACTOR SHALL VERIFY TYPE OF CONDUIT THAT MEETS LOCAL CODES.
- ELECTRICAL CONTRACTOR SHALL PROVIDE SEAL TIGHT CONDUIT IN ALL EXPOSED AREAS.
- KITCHEN EQUIPMENT CONTRACTOR SHALL VERIFY ALL UTILITY LOADS SHOWN ON THIS PLAN. IF DISCREPANCIES ARE FOUND, THE KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CHANGES REQUIRED WITH ALL TRADES AND PARTIES INVOLVED PRIOR TO PURCHASE AND INSTALLATION OF EQUIPMENT. THE KITCHEN EQUIPMENT CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH ANY CHANGES REQUIRED AS A RESULT OF ITS FAILURE TO COORDINATE AS REQUIRED.
- ELECTRICAL CONTRACTOR SHALL PROVIDE A DEDICATED CIRCUIT WITH AN ISOLATED GROUND FOR ALL POINT OF SALE AND COMPUTER EQUIPMENT SHOWN ON PLAN.
- ELECTRICAL CONTRACTOR SHALL INTER-WIRE ALL WALK-IN COOLERS/ FREEZER LIGHTS (AS REQUIRED) ALL CONDUIT SHALL BE RUN ON THE TOP EXTERIOR CEILING OF THE WALK-IN. ALL PENETRATIONS SHALL BE SEALED BY THE KITCHEN EQUIPMENT CONTRACTOR.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A SHUNT-TRIP BRANCH BREAKER FOR ALL ELECTRICAL APPLIANCES UNDER THE EXHAUST HOODS UNLESS OTHERWISE NOTED OR PROVIDED IN A UTILITY DISTRIBUTION SYSTEM.

LEGEND

- A. AMPERES
- A.F.F. ABOVE FINISHED FLOOR
- C.O. CONVENIENCE OUTLET
- D.F.A. DOWN FROM ABOVE
- E.C. ELECTRICAL CONNECTION
- D.R. DUPLEX RECEPTACLE
- J.B. JUNCTION BOX
- S.R. SINGLE RECEPTACLE
- H.P. HORSE POWER
- K.E.C. KITCHEN EQUIPMENT CONTRACTOR
- K.W. KILOWATTS
- P.W. PRE-WIRED
- P. PHONE LINE SYSTEM
- S.D. STUB-DOWN
- S.O. STUB-OUT
- S.U. STUB-UP

NOTES:

- MECHANICAL AND ELECTRICAL REQUIREMENTS SHOWN ARE FOR FOOD SERVICE EQUIPMENT ONLY.
- ALL DIMENSIONS SHOWN ARE FROM FINISHED SURFACE FLOOR (FLOOR, WALL OR CEILING) TO THE CENTERLINE OF ROUGH-INS.





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375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
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ISSUE DATE: 2024.04.23

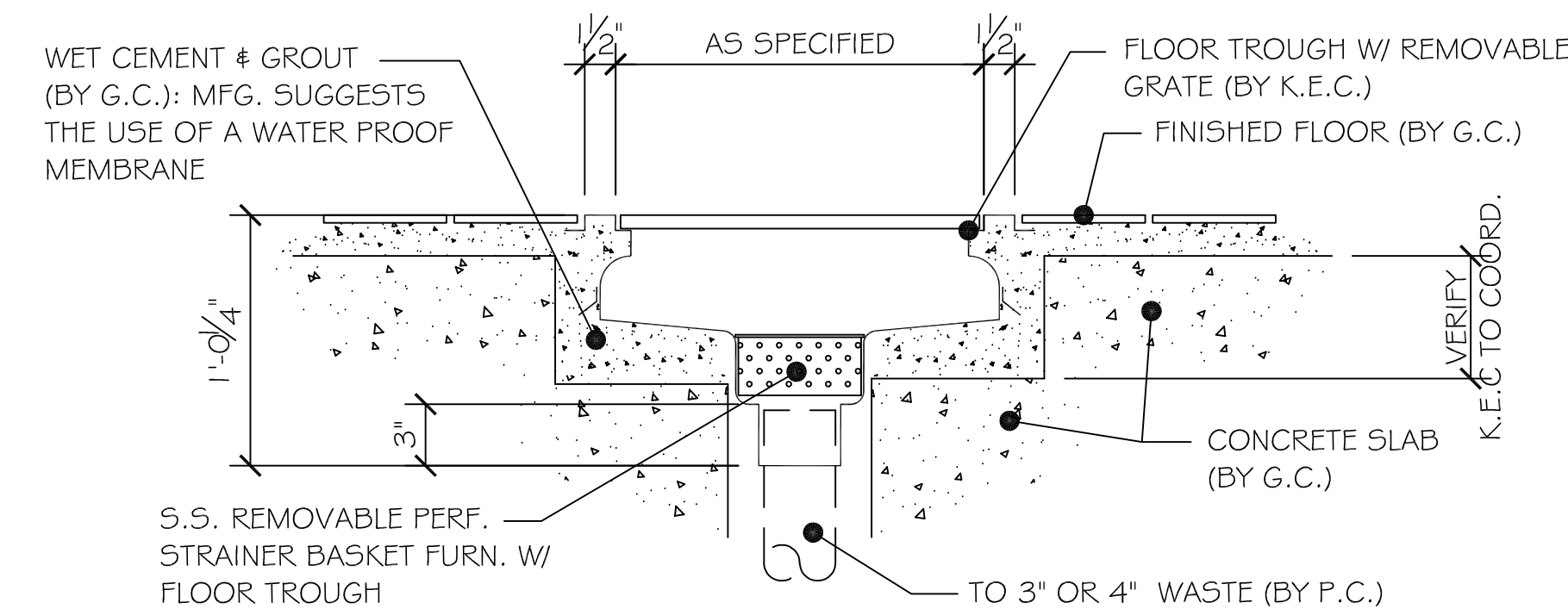
CAD DWG FILE: _____
DRAWN BY: MDG
CHECKED BY: MDG
DESIGNED BY: MDG

SHEET TITLE:
**FOODSERVICE
EQUIPMENT SPOT
PLUMBING**

SHEET NUMBER:

Q-FP-03

76 OF 85 SHEETS
2024.04.23



NOTE: FLOOR TROUGH TO BE INSTALLED FLUSH TO FINISHED FLOOR TO ELIMINATE TRIP HAZARD.

FLOOR TROUGH TO BE PROVIDED BY THE KITCHEN EQUIPMENT CONTRACTOR. PLUMBING CONTRACTOR TO INSTALL.

PLUMBING NOTES:

- ALL PLUMBING OUTLETS AND CONNECTIONS SHOWN ON PLAN ARE FOR FOODSERVICE EQUIPMENT AND ARE FOR REFERENCE ONLY. PLUMBING CONTRACTOR TO VERIFY ALL LEFT TO RIGHT DIMENSIONAL LOCATIONS WITH THE KITCHEN EQUIPMENT CONTRACTOR'S SHOP DRAWINGS.
- PLUMBING CONTRACTOR SHALL VERIFY ALL INCOMING SERVICES, MAKE ALL EXTERNAL & INTERNAL CONNECTIONS AND PROVIDE ALL PIPING, FITTINGS, BAGS, FLOW PREVENTOR, PARTS, ETC. AS NECESSARY TO MAKE FOODSERVICE EQUIPMENT FUNCTIONAL.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL INDIVIDUAL SHUT-OFF VALVES FOR ALL WATER & GAS LINES AS REQUIRED.
- ALL FLOOR, WALL & CEILING PENETRATIONS MUST BE SEALED WATER TIGHT AND VERMIN PROOF.
- ALL SYMBOLS NOTED AS 12", 18", 24", ETC. ARE FROM FINISHED FLOOR TO CENTERLINE OF STUB-UP AT HEIGHT INDICATED ON PLAN. ALL SYMBOLS NOTED AS STUB-UP SHALL BE STUBBED-UP ABOVE FINISHED FLOOR AT HEIGHT INDICATED ON PLAN.
- ALL FLOOR SINKS SHOWN ARE TO BE FLUSH WITH THE FINISHED FLOOR UNLESS OTHERWISE REQUIRED BY LOCAL BUILDING AND/OR HEALTH CODE. FLOOR SINKS SHALL BE LOCATED IN MANNER SO AS TO ALLOW FOR SIGHT INSPECTION BY CODE OFFICIALS.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL REMOVABLE GRILLS OR COVERS FOR ALL FULLY OR PARTIALLY EXPOSED FLOOR SINKS.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL TYPE 1" COPPER TUBING DRAIN LINES FROM ALL APPLICABLE EQUIPMENT TO FLOOR SINKS. ALL DRAIN LINES FROM ICE BIN MACHINES, WALK-IN AND/OR BEER REFRIGERATION SYSTEMS, ETC. ARE TO BE INSULATED.
- FLOOR SINKS FOR DISHWASHING MACHINES SHALL HAVE A MINIMUM OF A 3" CAST IRON DRAIN PIPE. PVC WILL MELT OR DEFORM FROM HEAT.
- PLUMBING CONTRACTOR SHALL PROVIDE 140 DEGREE HOT WATER TO DISHWASHING MACHINE.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL PRESSURE REGULATING VALVE FOR DISHWASHING MACHINE IF HOT WATER PRESSURE IS IN EXCESS OF 25 LBS. FLOW PRESSURE.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL AUTOMATIC SHUT-OFF VALVE(S) IN GAS LINE FOR ALL FOODSERVICE EQUIPMENT BELOW EXHAUST VENTILATOR.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL LINE STRAINER AND/OR APPROVED FILTER ON GAS SUPPLY LINE.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL HOT WATER TANK (UNLESS OTHERWISE NOTED) UNIT SHALL BE SIZED FOR ADEQUATE WATER CONSUMPTION TO MEET ALL APPLICABLE CODES.
- KITCHEN EQUIPMENT CONTRACTOR SHALL PROVIDE AND PLUMBING CONTRACTOR TO INSTALL APPLIANCE GAS PRESSURE REGULATOR(S) FOR EQUIPMENT (AS REQUIRED) BLDG. MAIN LINE PRESSURE REGULATOR(S) SHALL BE FURNISHED AND INSTALLED BY THE PLUMB. CONTR.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL GATE VALVES ON ALL WATER AND GAS LINES.
- PLUMBING CONTRACTOR SHALL PROVIDE CHROME PLATED PIPES AND FITTINGS FOR ALL EXPOSED LINE RUNS (AS REQUIRED) EXPOSED PIPING SHALL BE HELD OFF THE WALL FOR CLEANING.
- PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL GREASE TRAPS AS REQUIRED BY BUILDING/HEALTH CODE.
- KITCHEN EQUIPMENT CONTRACTOR SHALL VERIFY ALL UTILITY SIZES AND LOAD REQUIREMENTS SHOWN ON PLANS.
- KITCHEN EQUIPMENT CONTRACTOR AND PLUMBING CONTRACTOR SHALL COORDINATE AND VERIFY ALL DIMENSIONS AT THE JOB-SITE.
- ALL WALK-IN DRAIN LINES TO HAVE A MINIMUM SLOPE OF 1" PER 1'-0" ALL DRAIN LINES SHALL BE VENTED 1" FROM WALLS.
- PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXTERNAL AND/OR INTERNAL HOOK-UPS OF WATER, GAS, STEAM, ETC. TO ALL NEW AND REUSED EQUIPMENT PER PLAN.
- PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL INTER-CONNECTIONS REQUIRED DUE TO FIELD JOINTS REQUIRED IN FOODSERVICE EQUIPMENT. KITCHEN EQUIPMENT CONTRACTOR TO COORDINATE AS REQUIRED.
- KITCHEN EQUIPMENT CONTRACTOR SHALL VERIFY ALL UTILITY LOADS SHOWN ON THIS PLAN. IF DISCREPANCIES ARE FOUND THE KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CHANGES REQUIRED WITH ALL TRADES AND PARTIES INVOLVED.
- KITCHEN EQUIPMENT CONTRACTOR SHALL FURNISH ALL FAUCETS LOOSE FOR PLUMBING CONTRACTOR TO INSTALL ON SINKS, COUNTERS, DISH TABLES, ETC....

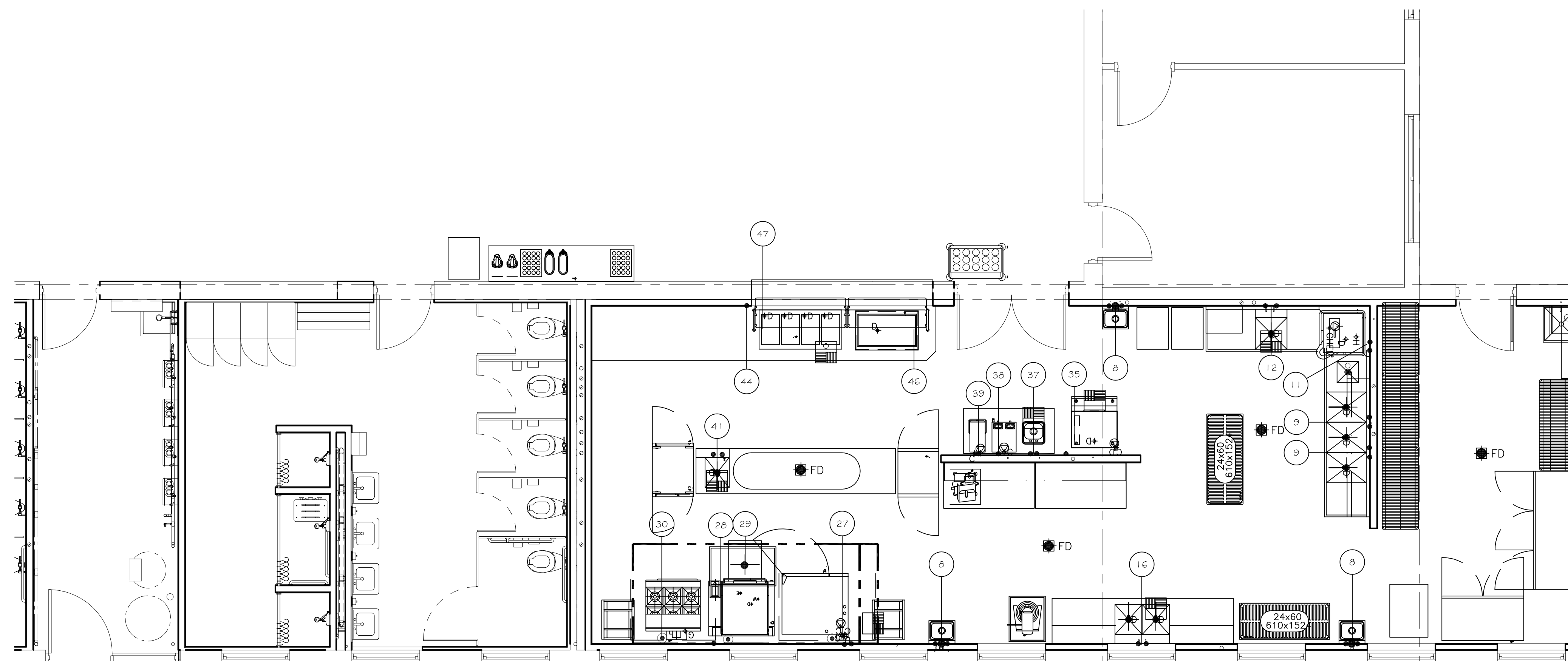
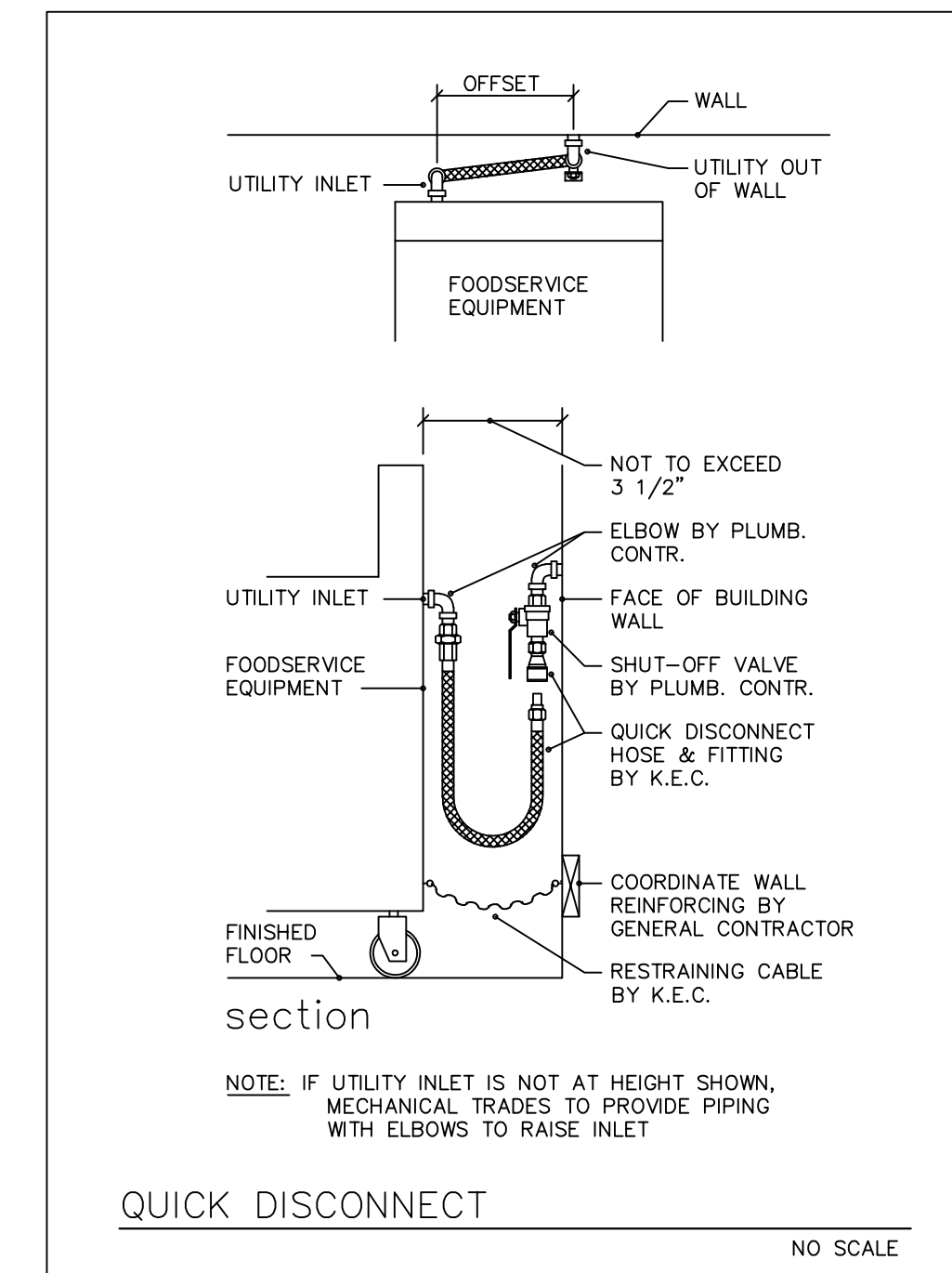
LEGEND

- A. AMPERES
- A.F.F. ABOVE FINISHED FLOOR
- C.O. CONVENIENCE OUTLET
- C.W. COLD WATER
- D.F.A. DOWN FROM ABOVE
- E.C. ELECTRICAL CONNECTION
- E.D.R. DUPLEX RECEPTACLE
- E.J.B. JUNCTION BOX
- E.S.R. SINGLE RECEPTACLE
- F.D. FLOOR DRAIN
- F.F.D. FUNNEL FLOOR DRAIN
- F.S. FLOOR SINK
- G.T. GREASE TRAP
- H.D. HUB DRAIN
- H.P. HORSE POWER
- H.W. HOT WATER
- K.E.C. KITCHEN EQUIPMENT CONTRACTOR
- K.W. KILOWATTS
- P.W. PRE-WIRED
- S.D. STUB-DOWN
- S.O. STUB-OUT
- S.U. STUB-UP
- W.V. WASTE WITH VENT

NOTES:

- MECHANICAL AND ELECTRICAL REQUIREMENTS SHOWN ARE FOR FOOD SERVICE EQUIPMENT ONLY.
- ALL DIMENSIONS SHOWN ARE FROM FINISHED SURFACE FLOOR (FLOOR, WALL OR CEILING) TO THE CENTERLINE OF ROUGH-INS.
- PLUMB. CONTR. IS RESPONSIBLE FOR REDUCING BUILDING GAS SUPPLY PRESSURE TO ACCEPTABLE LEVELS FOR EQUIPMENT TO OPERATE PROPERLY.

PLUMBING SCHEDULE										
CONN. NO.	HOT WATER	COLD WATER	DIRECT WASTE	INDIRECT WASTE	GAS SIZE	GAS MBTUS	CONN. TYPE	HGT. A.F.F.	COMMENTS	
8	1/2"	1/2"					S.O.	1'-6"		
9	1/2"	1/2"	1-1/2"				S.O.	1'-9"		
		1/2"					S.O.	1'-6"		
11	3/4"			1-1/2"			F.S.	6'-6"	PLBG. CONTR. SHALL BRANCH SINK DRAINS AND EXTEND TO FLOOR SINK. FLOOR SINK SHALL BE BRANCHED TO GREASE TRAP. PLBG. CONTR. SHALL PROVIDE AND INSTALL GREASE TRAP FOR (3) 20X27X41D SINKS	
12	1/2"			2"			F.S.	1'-6"	PLBG. CONTR. SHALL BRANCH FROM DRAIN ON EQUIPMENT TO FLOOR SINK. PROVIDE DRAIN MATERIAL FOR HIGH TEMPERATURE DISCHARGE	
16	1/2"	1/2"		1-1/2"			S.O.	1'-6"	PLBG. CONTR. SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.	
		1/2"					S.O.	1'-6"		
27	3/4"	3/4"		1-1/2"			F.S.	1'-6"	PLBG. CONTR. SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.	
		3/4"					S.O.	5'-6"	PLBG. CONTR. SHALL PIPE THRU KEC PROVIDED FILTER TO TREATED WATER INLET UNTREATED WATER	
				1-1/2"			F.S.	1'-6"	PLBG. CONTR. SHALL BRANCH FROM DR. ON EQUIPMENT TO FLOOR SINK. PROVIDE DRAIN MATERIAL FOR HIGH TEMPERATURE DISCHARGE	
28	1/2"			3/4"	98		S.O.	2'-6"	FOR FILL FAUCET	
29				4"			S.O.	0"	PLBG. CONTR. SHALL CONNECT TO KEC PROVIDED TRENCH DRAIN - SEE DETAIL	
30		1/2"		3/4"	215		S.O.	2'-6"	PLBG. CONTR. SHALL PIPE THRU KEC PROVIDE FILTER SYSTEM TO ICE MACHINE	
35				(2) 3/4"			F.S.	6'-0"	PLBG. CONTR. SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK.	
37	1/2"	1/2"		1-1/2"			S.O.	1'-6"		
		1/2"					F.S.	1'-6"	PLBG. CONTR. SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK	
38	1/2"			1-1/2"			S.O.	4'-0"	VERIFY VENDOR PROVIDED EQUIPMENT	
39	1/2"						S.O.	4'-0"	VERIFY VENDOR PROVIDED EQUIPMENT	
41	1/2"						S.O.	1'-6"		
		1/2"					S.O.	1'-6"	PLBG. CONTR. SHALL PIPE FROM DRAIN ON EQUIPMENT TO FLOOR SINK	
44	1/2"			1-1/2"			F.S.	1'-6"	FOR FILL FAUCET AT HOT WELL	
46				3/4"			F.S.	1'-6"	PLBG. CONTR. SHALL BRANCH FROM DR. ON EQUIPMENT TO FLOOR SINK	
47				3/4"			F.S.	1'-6"	PLBG. CONTR. SHALL BRANCH FROM DR. ON EQUIPMENT TO FLOOR SINK	





OFFICE OF ADMINISTRATION
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DEPARTMENT OF
MISSOURI NATIONAL
GUARD

ST. CLAIR READINESS
CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE:
DRAWN BY: MDG
CHECKED BY: MDG
DESIGNED BY: MDG

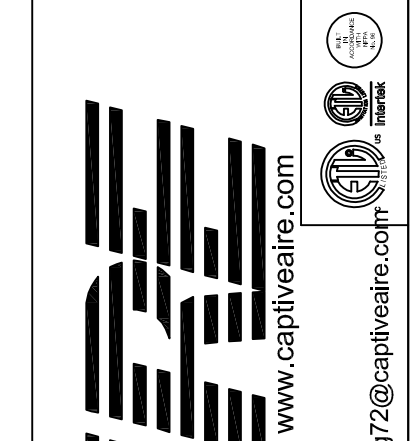
SHEET TITLE:
**FOODSERVICE
EQUIPMENT HOOD
DRAWINGS**

SHEET NUMBER:

Q-DT-01

77 OF 85 SHEETS
2024.04.23

REVISIONS	
DESCRIPTION	DATE



Missouri Readiness Center St. Clair R1
SAINT CLAIR, MO, 63077

DATE: 2/27/2024
DWG.#: 6644084
DRAWN BY:
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 1

St. Louis & Little Rock Office
16024 Manchester Rd., Suite 233, Ellisville, MO, 63011 PHONE: (636) 225-3113 FAX: 9182275939 EMAIL: reg72@captivate.com

FOR QUESTIONS, CALL THE
St. Louis & Little Rock Office
REGION 72
PHONE: (636) 225-3113
EMAIL: reg72@captivate.com

PATENT NUMBERS
AC-PSP (UNITED STATES) - US PATENT 7963830 B2.
AC-PSP WALL (CANADA) - CA PATENT 2820509.
AC-PSP ISLAND (CANADA) - CA PATENT 2520330.

HOOD INFORMATION - JOB#6644084

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)						TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG		
										WIDTH	LENG	HEIGHT	DIA	CFM	VEL			SP	END TO END	ROW
1	Item 32	6618 SND-2-PSP-F	CAPTIVEAIRE	12' 6"	600 DEG	I	HEAVY	235	2938			4"	12"	1469	1870	-0.756"	2350	304 SS WHERE EXPOSED	ALONE	ALONE
												4"	12"	1469	1870	-0.756"				

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT		
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM TYPE	SIZE			ELECTRICAL MODEL #	SWITCHES QUANTITY
1	Item 32	CAPTRATE SOLO FILTER	9	20"	16"	85% SEE FILTER SPEC	6	RECESSED ROUND	NO	LEFT	12"x27"x24"					YES	871 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	Item 32	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT. BACKSLASH 116.00" HIGH X 198.00" LONG 304 SS VERTICAL. RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 74" HIGH INSULATED 304 SS. LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 74" HIGH INSULATED 304 SS. SENSOR-CV.

PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG	DIA	CFM	SP
1	Item 32	Front	150"	20"	6"	MUA	12"	28"		1174	0.388"
						MUA	12"	28"		1174	0.388"

WALL-MOUNT UTILITY CABINET

HOOD NO	LOCATION	SIZE	UTILITY CABINET(S)				WEIGHT
			FIRE SYSTEM TYPE	SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	
1	WALL MNT	12"x36"x24"	TANK FS	4.0/4.0			300.00 LBS

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted

Approved with NO Exception Taken

Revise and Resubmit

SIGNATURE: _____
Your Title _____ Date _____

CAPTIVE-AIRE HOODS ARE
BUILT IN COMPLIANCE WITH
UL 710 AND NFPA 96
AND ARE RECOGNIZED BY ONE
OR MORE OF THE FOLLOWING:

ETL SANITATION LISTED

ETL LISTED
FILE# 102900319PRT-001

SND-2 Series with PSP Accessory Specification

The SND-2 series hood with PSP accessory is a low proximity compensating hood system. The hood shall have the size, shape and performance specified on drawings.

Construction shall be type 430 stainless steel with a #3 or #4 polish where exposed. Individual component construction shall be determined by the manufacturer and ETL. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints and penetrations of the hood enclosure to the lower outermost perimeter that directs and captures grease-laden vapor and exhaust gases shall have a liquid-tight continuous external weld in accordance with NFPA 96. Hood shall be wall type with fully welded 10 gauge corner hanging angles. Corner hanging angles have a .625 x 1.500 slot pre-punched at the factory, allowing hanging rods to be used for quick and safe installations. Hanging rod and connection is provided by and installed by others.

Ventilator shall be furnished with U.L. classified aluminum baffle filters, supplied in size and quantity as required by ventilator. The filters shall extend the full length of the hood and the filter panels shall not be more than 6" in width.

The hood manufacturer shall supply complete computer generated submittal drawings including hood section view(s) and hood plan view(s). These drawings must be available to the engineer, architect and owner for their use in construction, operation and maintenance.

Exhaust duct collar to be 4" high with 1" flange. Duct sizes, CFM and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

U.L. incandescent light fixtures and globes shall be installed and pre-wired to a junction box. The light fixtures shall be installed with a maximum of 4'0" spacing on center and allow up to a 100 watt standard light bulb.

The hood shall have:
-A double wall insulated front to eliminate condensation and increase rigidity. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 90A and 90B.
-An integral front baffle to direct grease laden vapors toward the exhaust filter bank.
-A built-in wiring chase provided for outlets and electrical controls on the hood face and shall not penetrate the capture area or require an external chaseway.
-Low velocity make-up air (up to 90%) is provided through front and side plenums (PSP accessory).
-A removable grease cup for easy cleaning.

The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper", ETL Sanitation Listed and built in accordance with NFPA 96. The hood shall be listed for 450°F cooking surfaces at 228 CFM/ft and 600°F cooking surfaces at 294 CFM/ft.

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

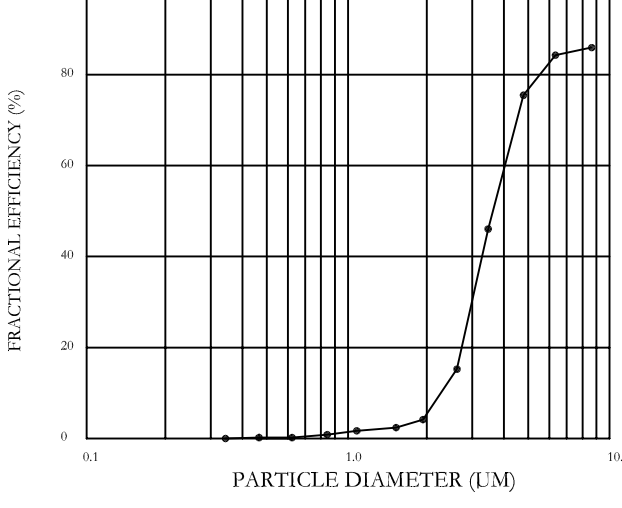
THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

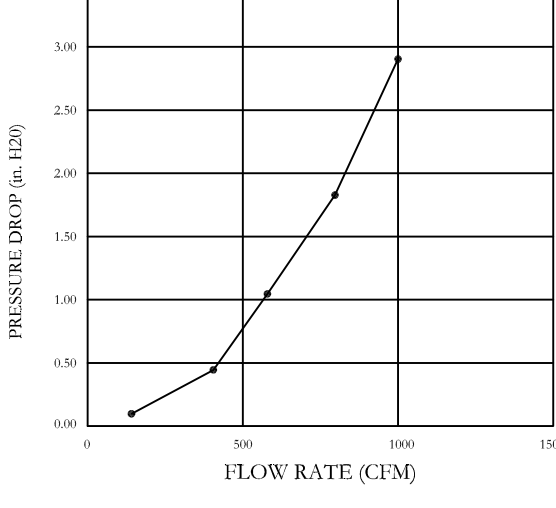
UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE. THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F219-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



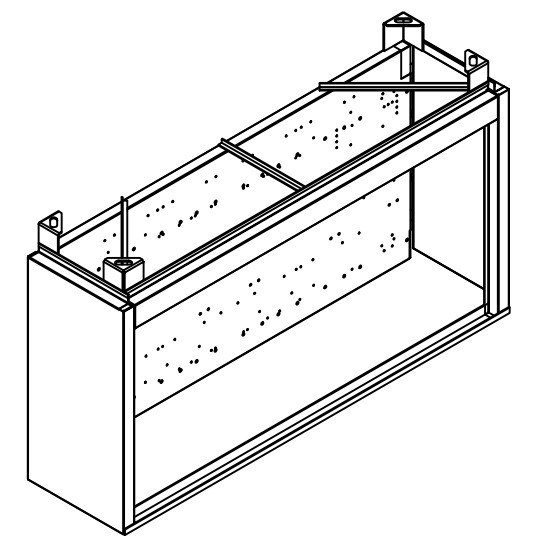
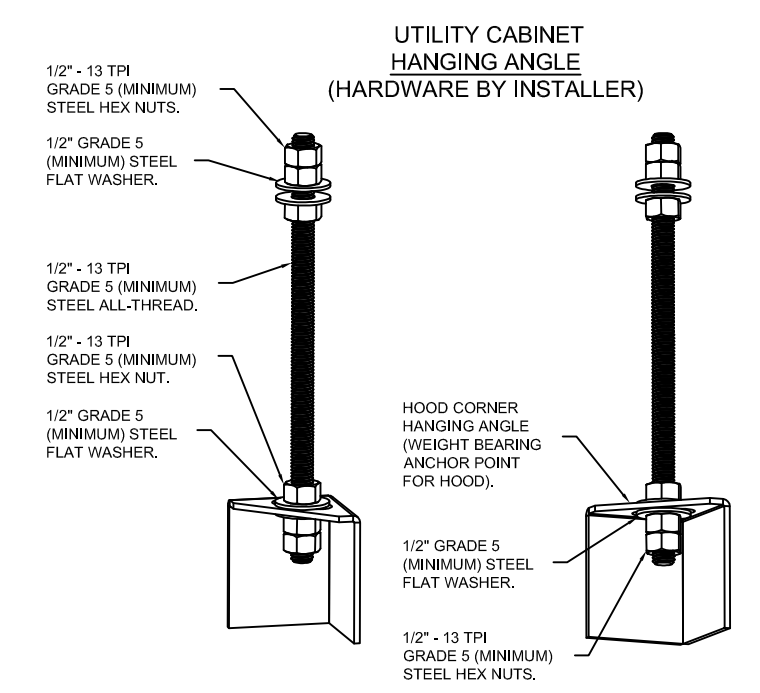
CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:
NFPA #96
NSF STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC).
ULC-S649.

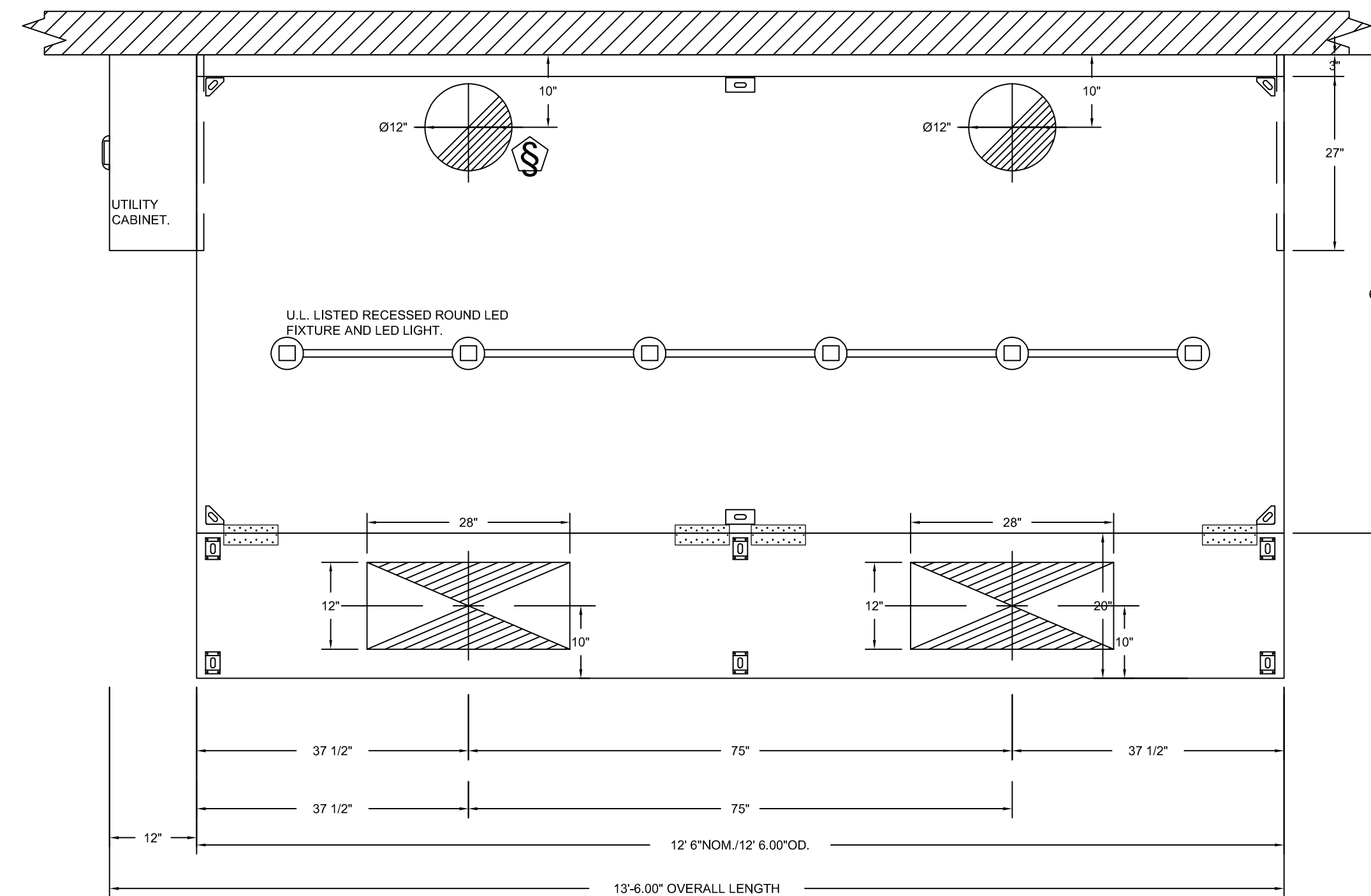


WALL-MOUNT UTILITY CABINET ASSEMBLY INSTRUCTIONS

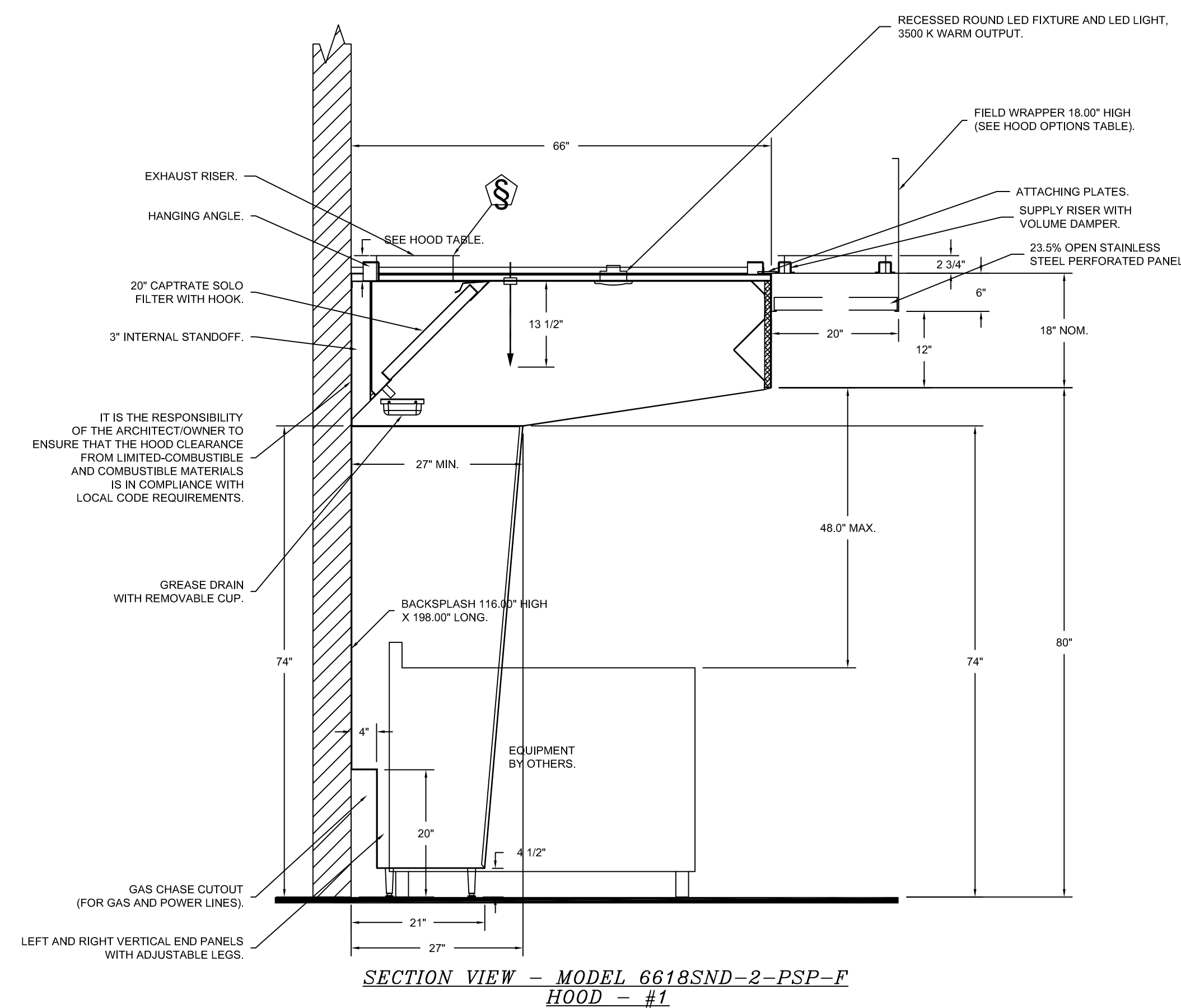
HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH UTILITY CABINET HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

CABINET TO BE HUNG BY HOOD INSTALLER. SEE UTILITY CABINET SCHEDULE FOR CABINET SIZE.





PLAN VIEW - HOOD #1 (Item 32)
12' 6.00\"/>



SECTION VIEW - MODEL 6618SND-2-PSP-F
HOOD - #1

REVISIONS	
DESCRIPTION	DATE

CAPTIVE
www.captiveair.com

St. Louis & Little Rock Office
16024 Manchester Rd., Suite 233, Ellisville, MO, 63011 PHONE: (636) 225-3113 FAX: 9182275939 EMAIL: rog2@captiveair.com

Missouri Readiness Center St. Clair R1
SAINT CLAIR, MO, 63077

DATE: 2/27/2024
DWG.#: 6644084
DRAWN BY:
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 2



OFFICE OF ADMINISTRATION
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ST. CLAIR, MO 63077

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CAD DWG FILE:
DRAWN BY: MDG
CHECKED BY: MDG
DESIGNED BY: MDG

SHEET TITLE:
FOODSERVICE
EQUIPMENT HOOD
DRAWINGS

SHEET NUMBER:
Q-DT-02
78 OF 85 SHEETS
2024.04.23



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375 COMMERCIAL AVE.
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CAD DWG FILE:
DRAWN BY: MDG
CHECKED BY: MDG
DESIGNED BY: MDG

SHEET TITLE:
**FOODSERVICE
EQUIPMENT HOOD
DRAWINGS**

SHEET NUMBER:

Q-DT-03

79 OF 85 SHEETS
2024.04.23

FIRE SYSTEM INFORMATION - JOB#6644084

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	40	36	WALL UTILITY CABINET LEFT	N/A

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	2.000	CAPTIVEAIRE SYSTEMS

FIRE SYSTEM PARTS LIST KEY

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
		0 - 0 - TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - 12-F28021-32144-OT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO. CLOSE ON TEMP RISE AT 360°F.	2	0
		0 - 0 - 32-00002 QUIK SEAL - 1/2" (UL).	2	0
		0 - 0 - 361091 3/8" BRASS PLUG.	3	0
		0 - 0 - 4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS.	2	0
		0 - 0 - 4429K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
		0 - 0 - 79425 3/8" NPT FEMALE TO 1/2" MALE PROPPRESS ADAPTER.	3	0
		0 - 0 - 79525 1/2" 90 PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
		0 - 0 - 79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA.	2	0
		0 - 0 - 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5' BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	2	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	8	0
		0 - 0 - 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	6	0
		0 - 0 - 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD.	8	0
		0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	4	0
		0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION, 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 - 0 - A31484 1/4" NPT SCHRADER VALVE AND CAP, JB INDUSTRIES, 1/4" FLARE X 1/4" MPT HALF UNION, USED ON TANK SERVICE PORT.	1	0
		0 - 0 - B145 3/8" BLACK IRON 90 ELL.	4	0
		0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - SLPCON-40FT SUPERVISED LOOP CONNECTION KIT, CONTAINS THE PARTS NEEDED TO CONNECT THE SUPERVISED LOOP BETWEEN HOODS WITH UP TO 3' GAP. KIT CONTAINS 42 FEET OF BLACK MG WIRE, 42 FEET OF TAN MG WIRE, 40 FEET OF FLEXIBLE CONDUIT, AND TWO 7/8" CONNECTORS.	2	0
		0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	6	0
		0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	2	0
		16 - 16 - 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	8	0
		16 - 16 - OL-F NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE).	8	0
		26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL).	8	0
		34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT, RED COLOR.	1	0

NOTES

- FIELD PIPE DROPS AS SHOWN
- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY GAS
- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

- OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

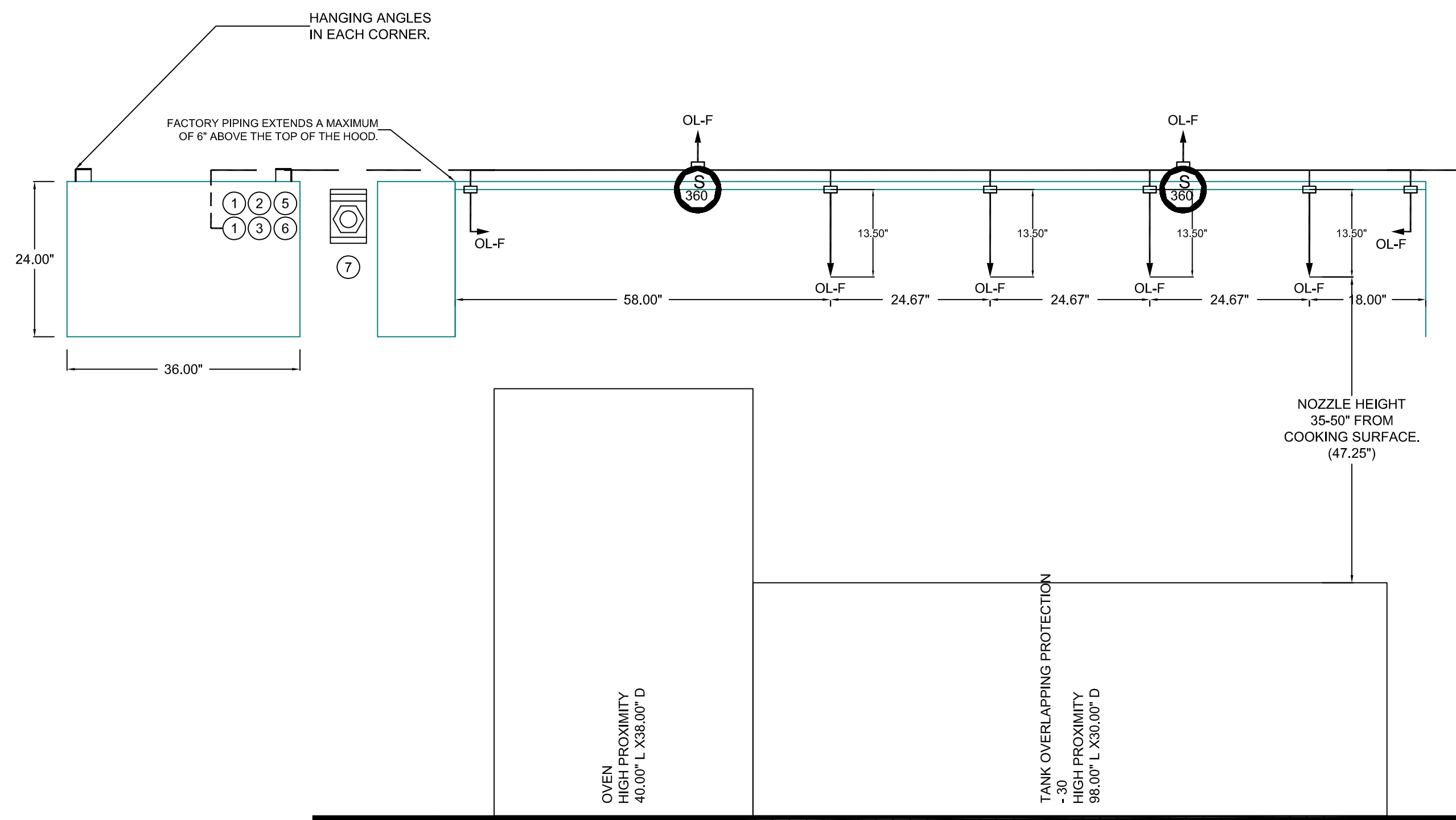
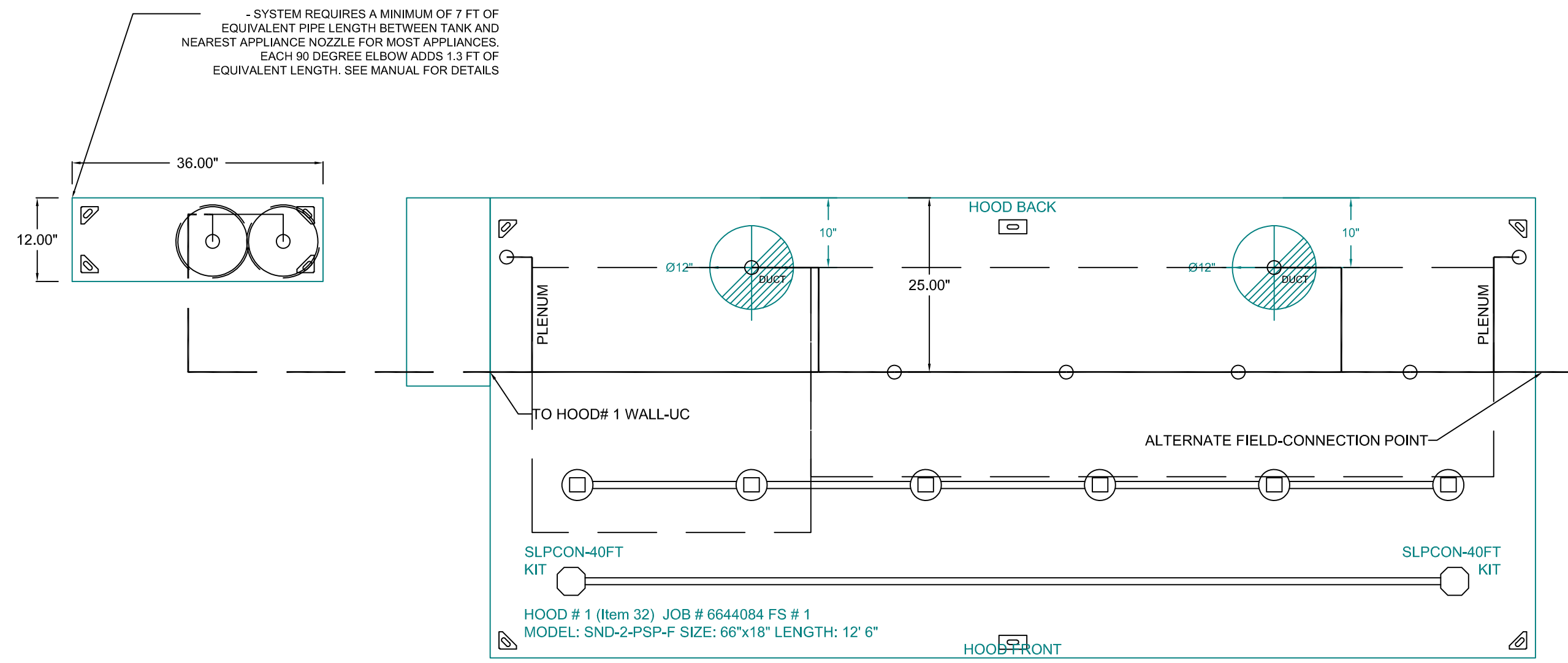
JOB #: 6644084
JOB NAME: MISSOURI READINESS CENTER ST. CLAIR R1.

SYSTEM SIZE: TANK-SP-2-WC DESIGN FP: 36, MAXIMUM FP: 40.
HOOD # 1 12' 6.00" LONG X 66" WIDE X 18" HIGH.
RISER # 1 SIZE: 12" DIA.
RISER # 2 SIZE: 12" DIA.
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

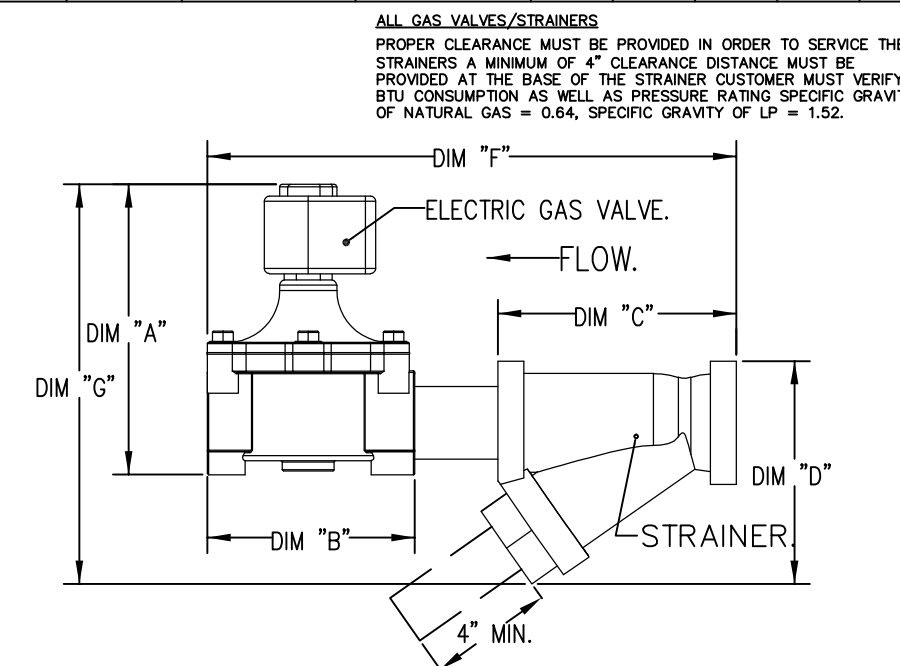
- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND - FIRE CABINET TANK SYSTEM

- 4 GALLON TANK.
- PRIMARY ACTUATOR RELEASE.
- SECONDARY ACTUATOR RELEASE.
- PRESSURE SUPERVISION SWITCH.
- PRIMARY HOSE ASSEMBLY.
- SECONDARY HOSE ASSEMBLY.
- REMOTE MANUAL ACTUATION DEVICE.



GAS VALVES AND STRAINERS																
TYPE	SIZE	VOLTAGE	GAS VALVE SIZING			GAS VALVE DIMENSIONS				INSTALLATION ORIENTATION	PART NUMBERS					
			MIN. INLET PRESSURE (0 IN.W.C.)	MAX. INLET PRESSURE (138 IN.W.C.)	FLOW AT 1 IN.W.C. DROP NATURAL GAS (240,000 BTU/HR)	FLOW AT 1 IN.W.C. DROP PROPANE (130,000 BTU/HR)	DIM "A"	DIM "B"	DIM "C"		DIM "D"	GAS VALVE PART NUMBER	STRAINER PART NUMBER	GAS VALVE/STRAINER KIT		
ELECTRICAL	2"	120 VAC	0 PSI	5 PSI	240,000 (0 IN.W.C.)	130,000 (138 IN.W.C.)	7-5/8"	6-3/8"	7-1/4"	7-13-1/8"	15-5/8"	13-15/16"	HORIZONTAL/VERTICAL	8244280	4417668	SC3C0VA2



REVISIONS

DESCRIPTION	DATE

CAPTIVEAIRE

St. Louis & Little Rock Office
16024 Manchester Rd., Suite 233, Ellisville, MO, 63011 PHONE: (636) 225 - 3113 FAX: 9192279599 EMAIL: reg72@captiveaire.com

Missouri Readiness Center St. Clair R1
SAINT CLAIR, MO, 63077

DATE: 2/27/2024
DWG.#: 6644084
DRAWN BY: MDG
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 3



OFFICE OF ADMINISTRATION
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DESIGNED BY: MDG

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FOODSERVICE
EQUIPMENT HOOD
DRAWINGS

SHEET NUMBER:

Q-DT-04

80 OF 85 SHEETS
2024.04.23

REVISIONS

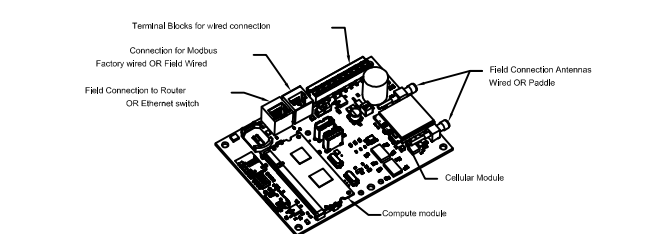
NO.	DESCRIPTION	DATE

MISSOURI READINESS CENTER ST. CLAIR R1
SAINT CLAIR, MO, 63077

DATE: 2/27/2024
DWG.#: 6644084
DRAWN BY: MDG
SCALE: 1/2" = 1'-0"
MASTER DRAWING
SHEET NO. 4

ELECTRICAL PACKAGE - JOB#6644084

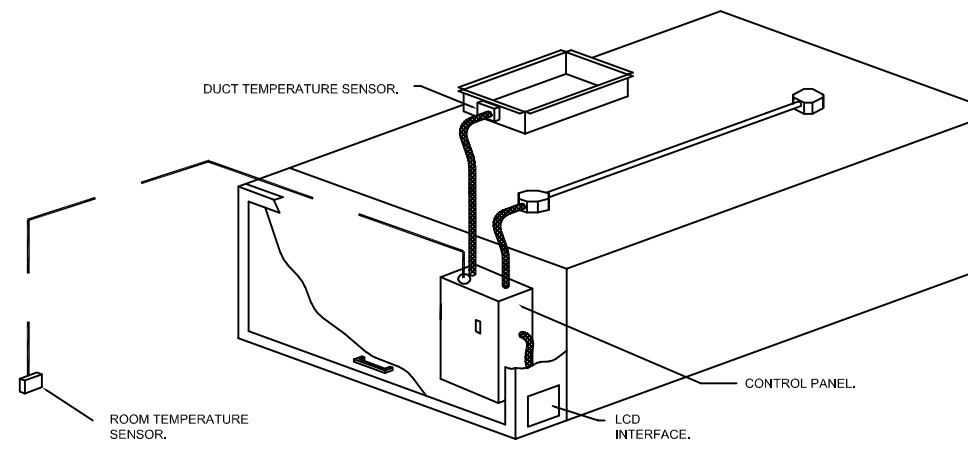
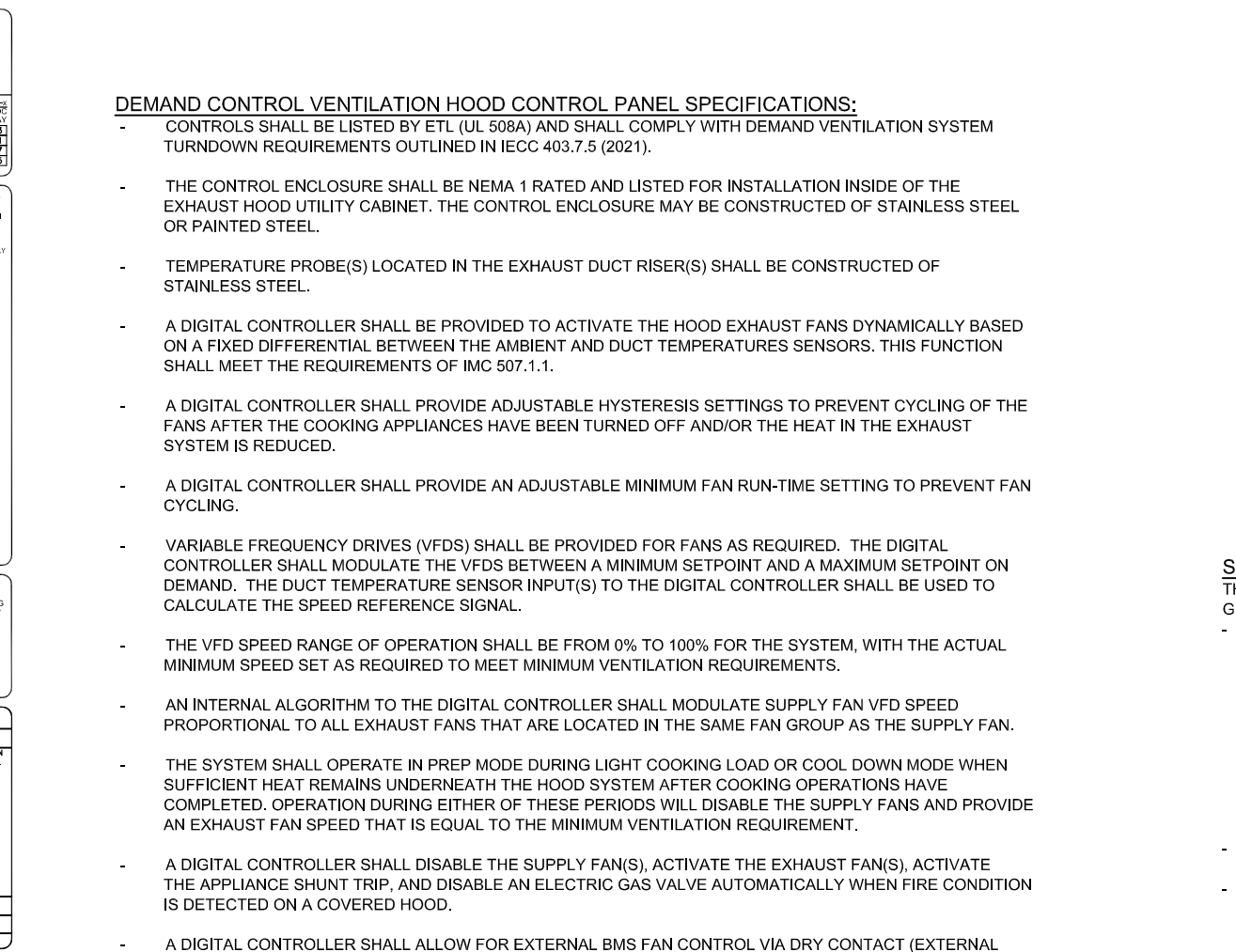
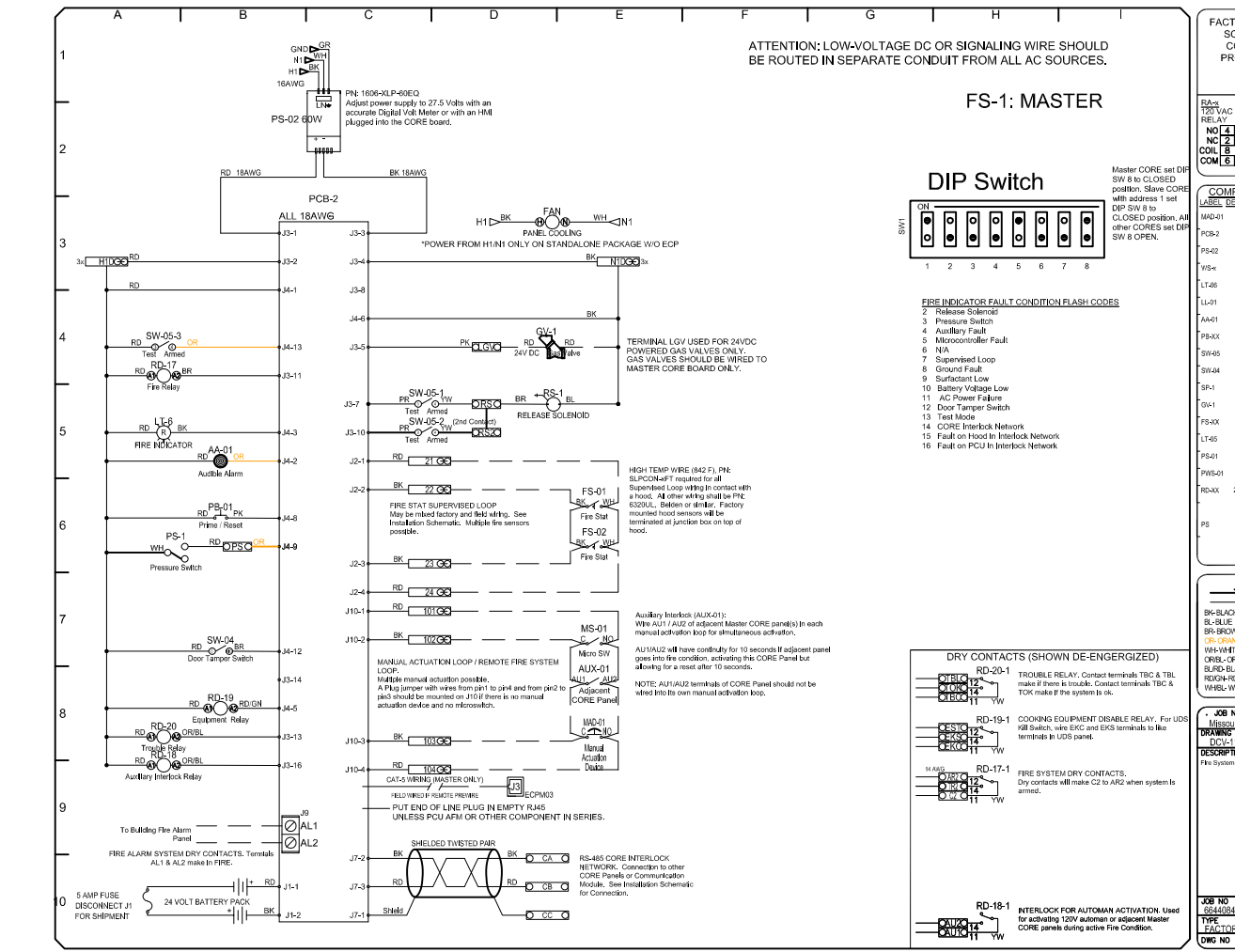
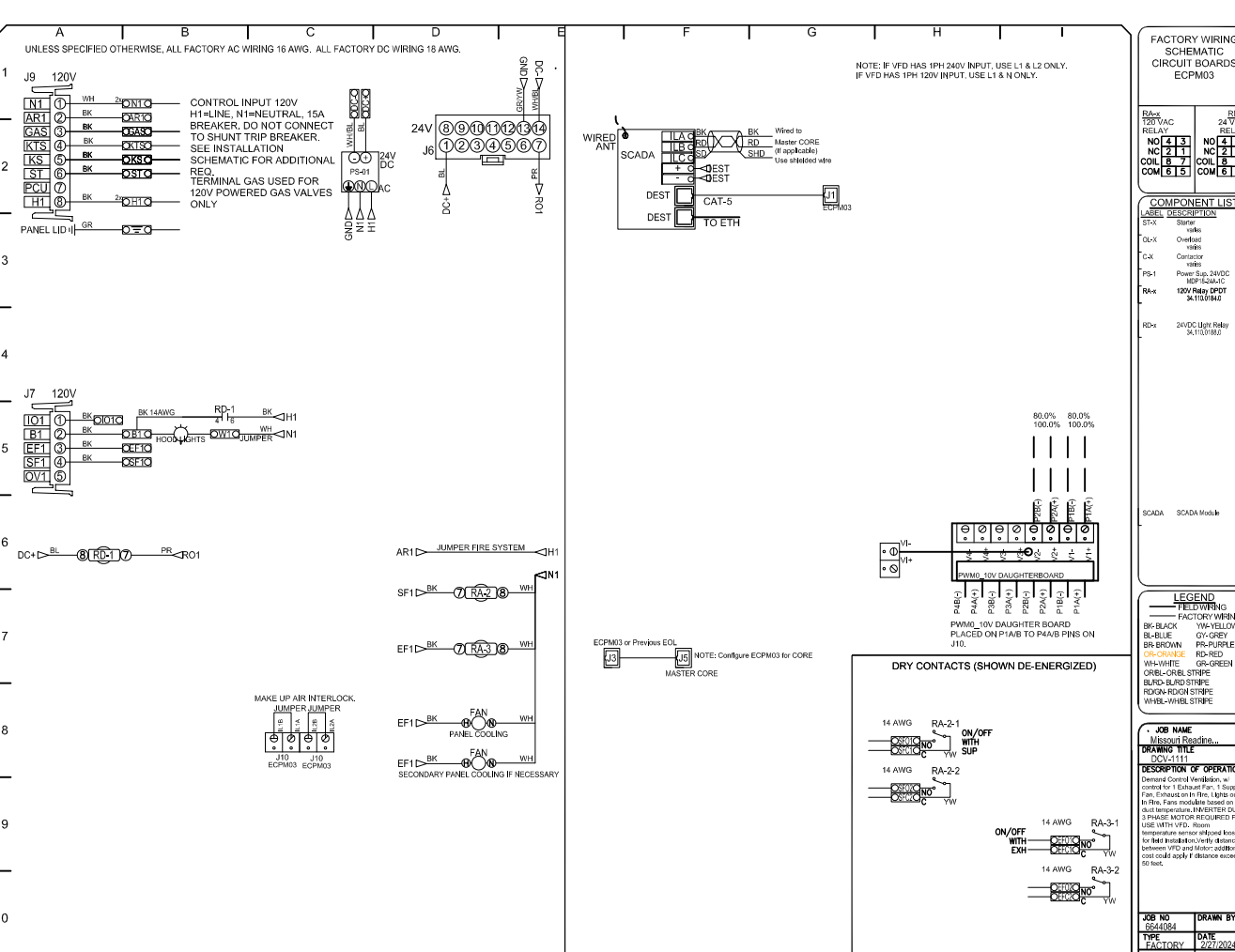
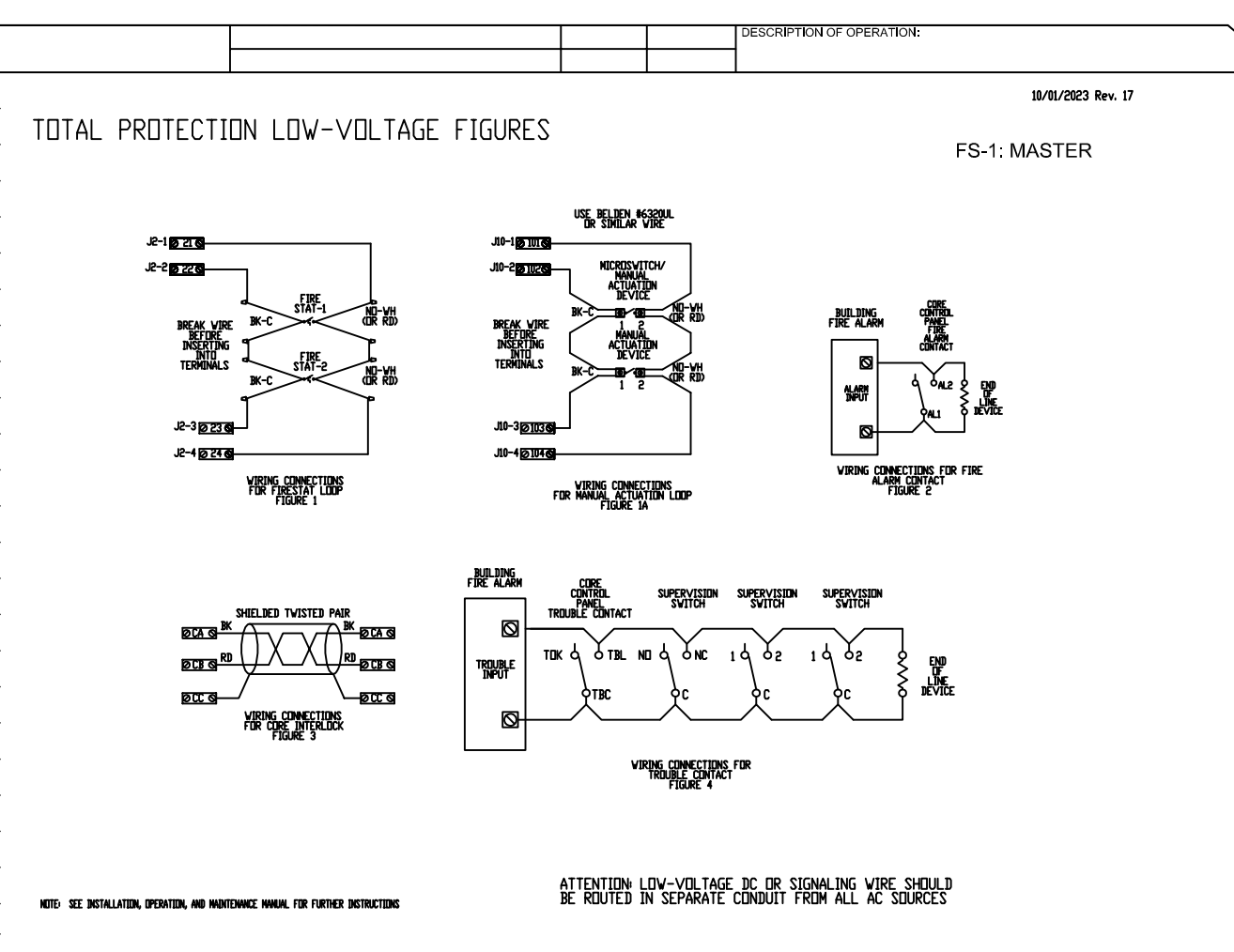
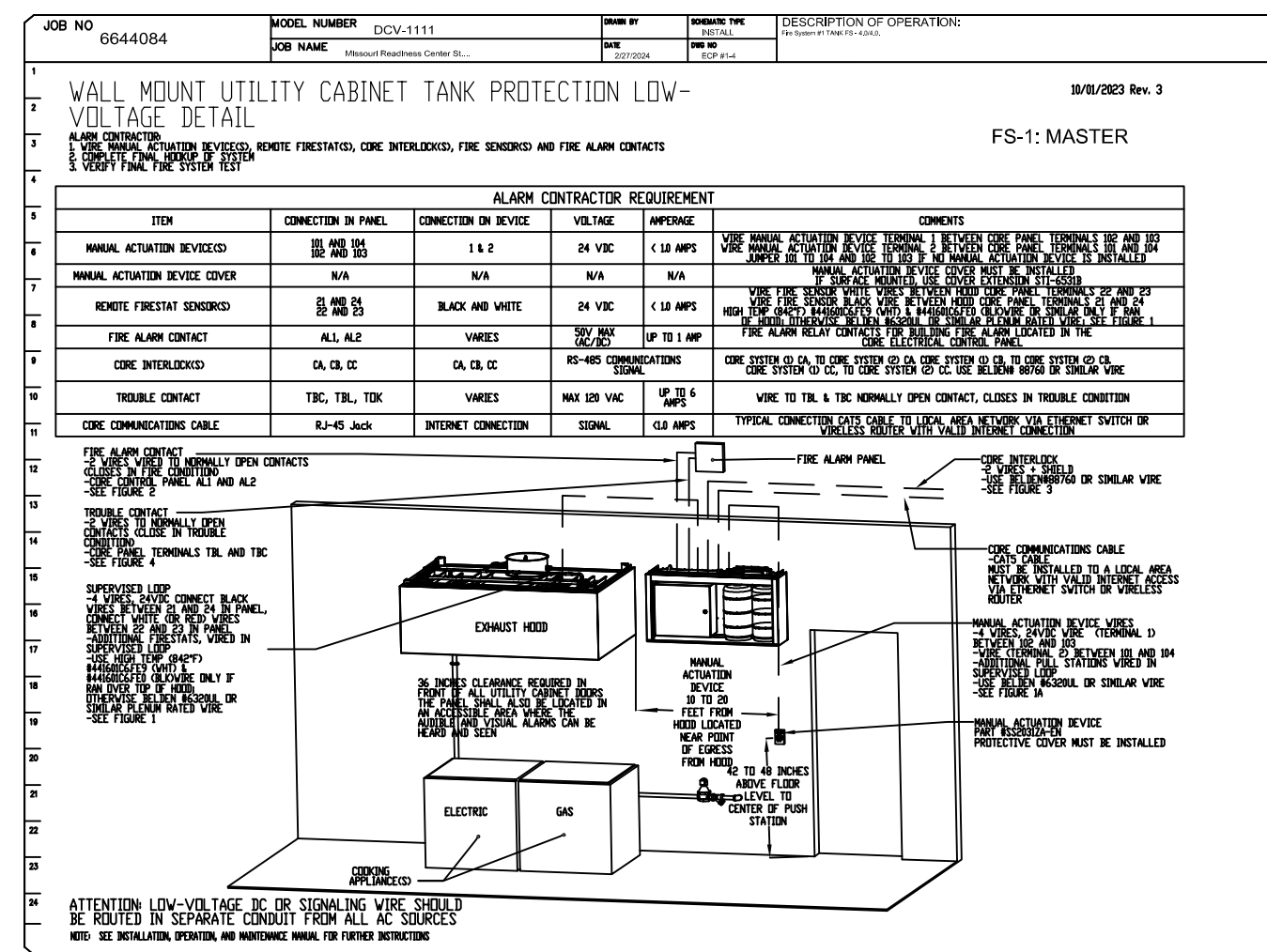
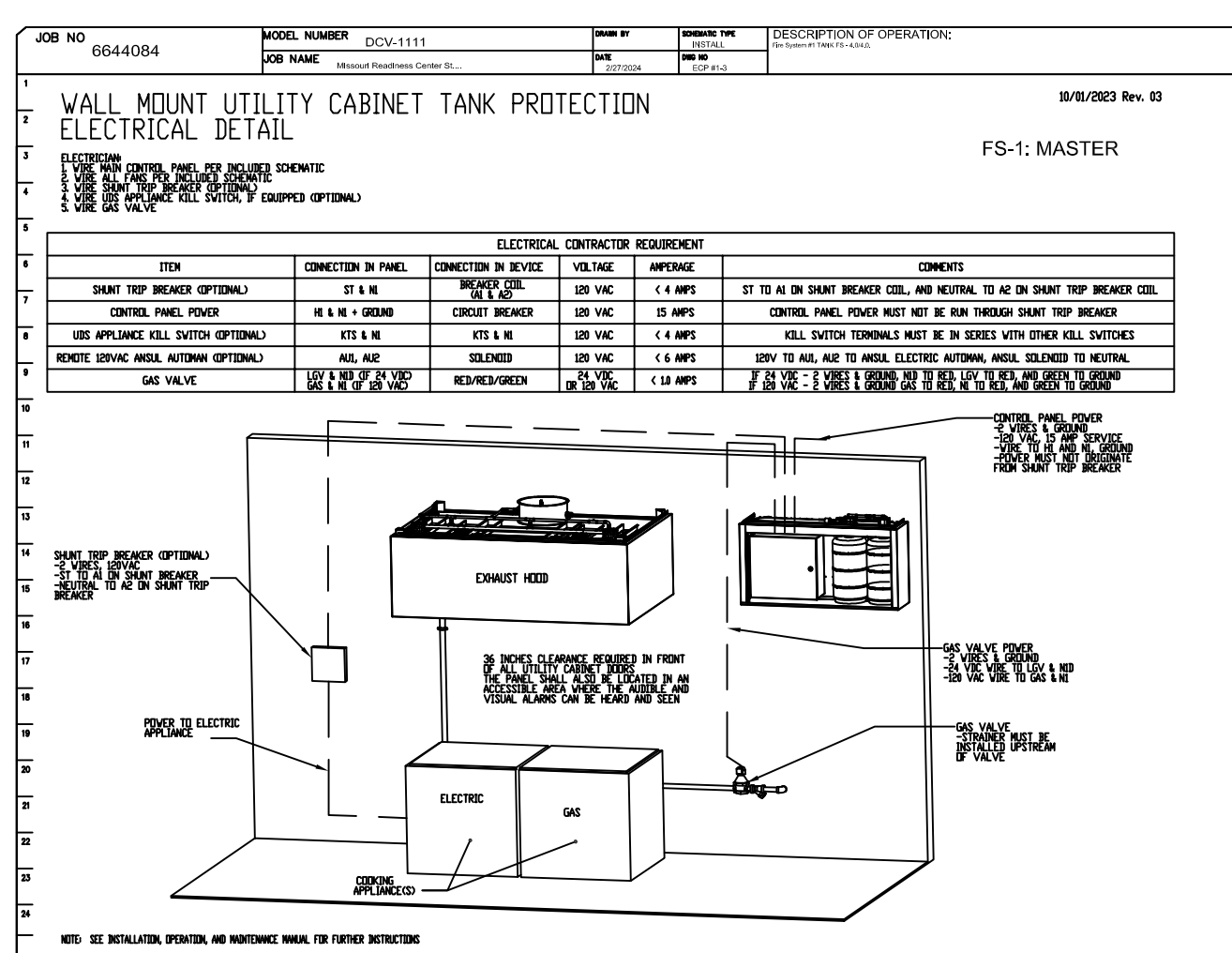
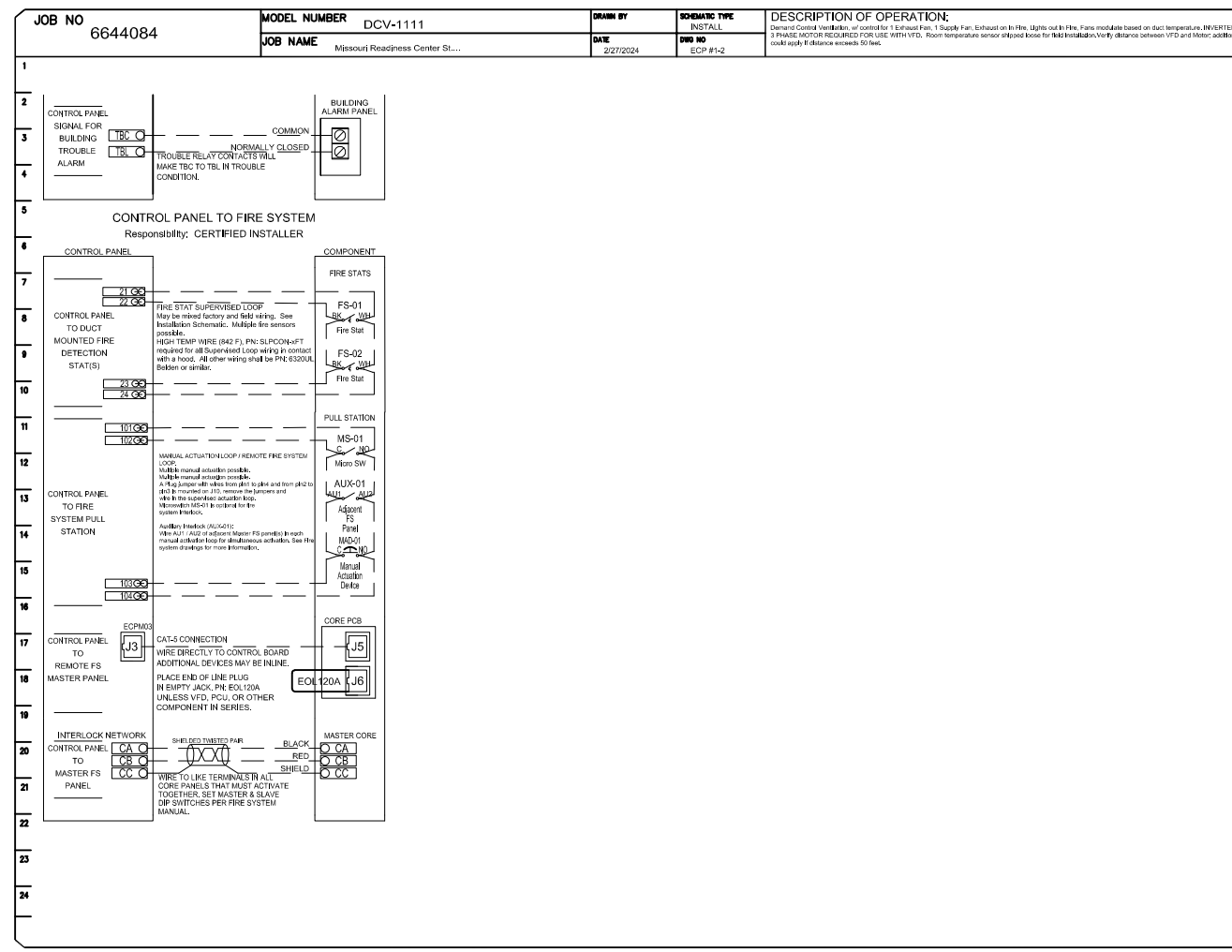
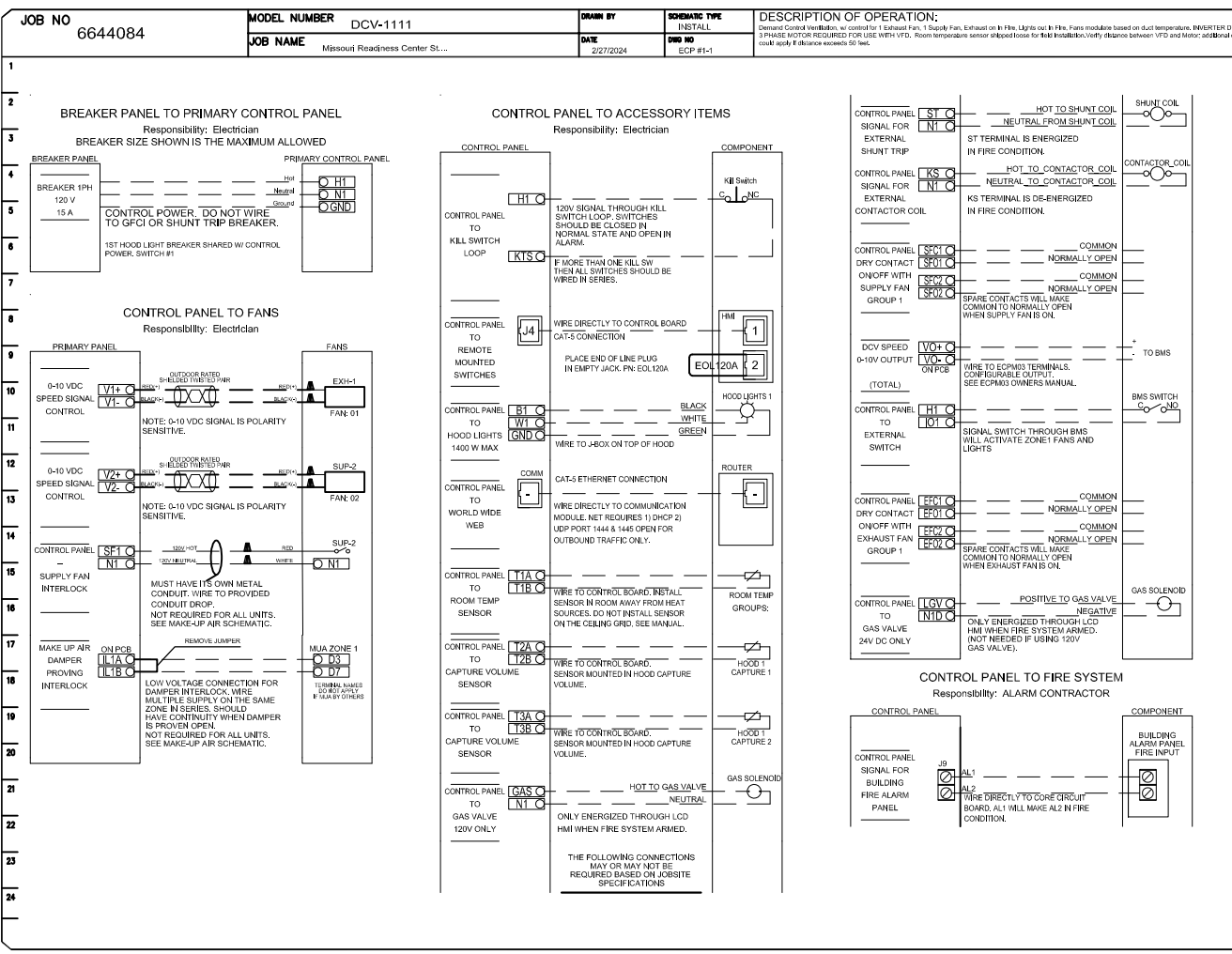
NO.	TAG	PACKAGE #	LOCATION	SWITCHES	QUANTITY	OPTION	PANEL CONTROLLED
1							
1							



CASHink Monitor and Control
This device is used to support communication in cloud-based building management systems. It is a cloud-based device that supports building management systems to control equipment and systems in the cloud. It is a cloud-based device that supports building management systems to control equipment and systems in the cloud. It is a cloud-based device that supports building management systems to control equipment and systems in the cloud.

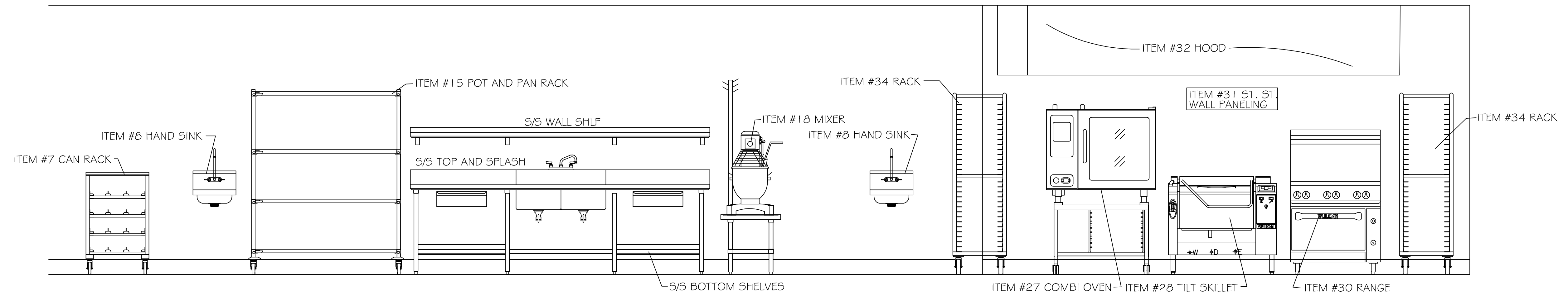
MONITORING AND CONTROL POINTS LIST

Point Name	Location	Point Name	Location

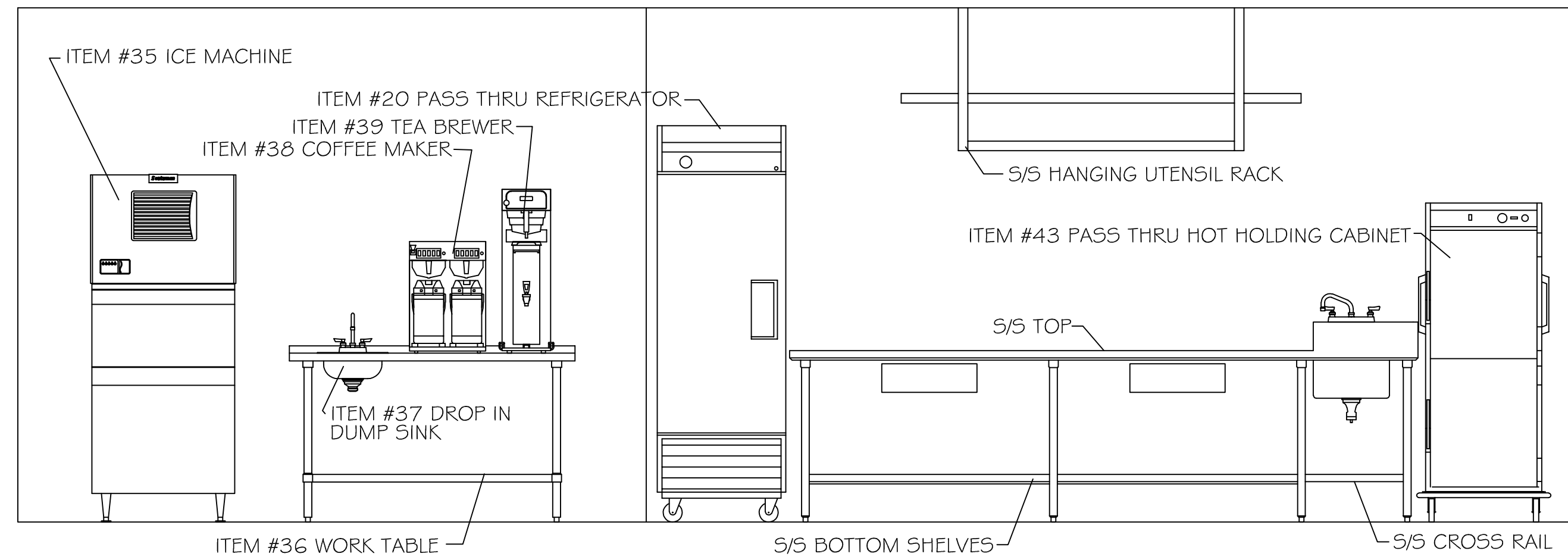


SEQUENCE OF OPERATIONS:
THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:
A. **MANUAL:** THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HM.
B. **SCHEDULE:** A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS. ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNOCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNEXPECTED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.
C. **OTHER:** THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARDWIRED INTERLOCK).
D. **IFB:** UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR CONTINUE TO RUN. THE HOOD MAKEUP AIR WILL SHUTDOWN AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN. FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.

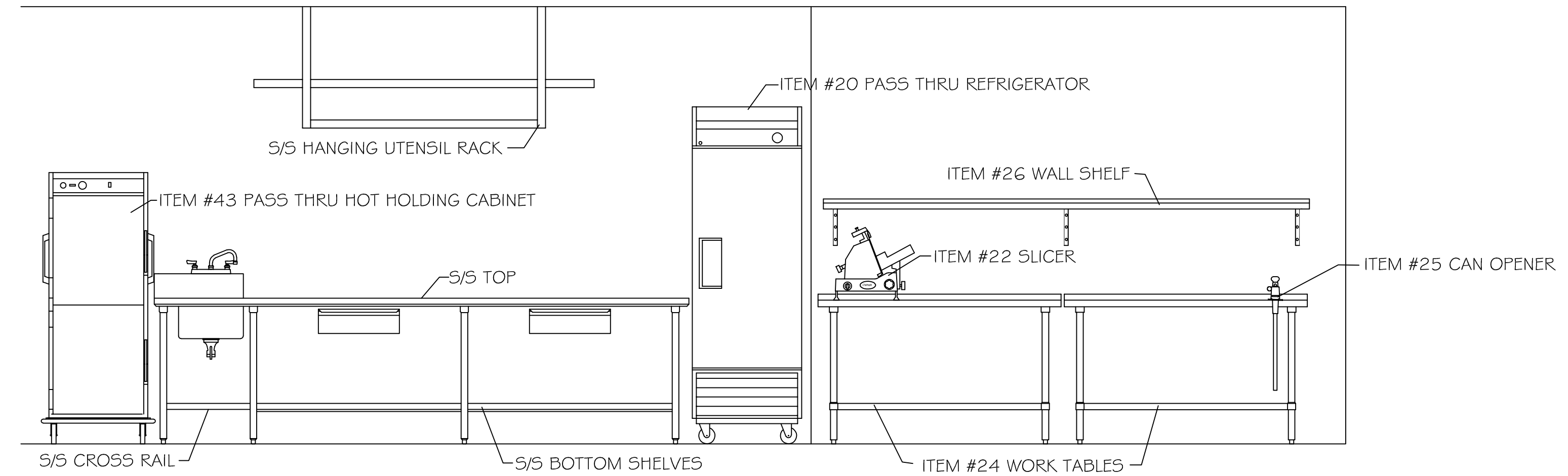
DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS:
A. THE CONTROL ENCLOSURE SHALL BE LISTED BY ETL, UL, CSA AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM TURNDOWN REQUIREMENTS OUTLINED IN IECC 403.7.5 (2021).
B. THE CONTROL ENCLOSURE SHALL BE NEMA 1 RATED AND LISTED FOR INSTALLATION INSIDE OF THE EXHAUST HOOD UTILITY CABINET. THE CONTROL ENCLOSURE MAY BE CONSTRUCTED OF STAINLESS STEEL OR PAINTED STEEL.
C. TEMPERATURE PROBE(S) LOCATED IN THE EXHAUST DUCT RISER(S) SHALL BE CONSTRUCTED OF STAINLESS STEEL.
D. A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FANS DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURE SENSORS. THIS FUNCTION SHALL MEET THE REQUIREMENTS OF IEC 60731-1.
E. A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST SYSTEM IS REDUCED.
F. A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN CYCLING.
G. VARIABLE FREQUENCY DRIVES (VFD) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE DIGITAL CONTROLLER SHALL MODULATE THE VFD BETWEEN A MINIMUM SETPOINT AND A MAXIMUM SETPOINT ON DEMAND. THE DUCT TEMPERATURE SENSOR INPUT(S) TO THE DIGITAL CONTROLLER SHALL BE USED TO CALCULATE THE SPEED REFERENCE SIGNAL.
H. THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.
I. AN INTERNAL ALGORITHM TO THE DIGITAL CONTROLLER SHALL MODULATE SUPPLY FAN VFD SPEED PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN. THE SYSTEM SHALL OPERATE IN PREP MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN SUFFICIENT HEAT REMAINS UNDERNEATH THE HOOD SYSTEM AFTER COOKING OPERATIONS HAVE COMPLETED. OPERATION DURING THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE AN EXHAUST FAN SPEED THAT IS EQUAL TO THE MINIMUM VENTILATION REQUIREMENT.
J. A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FANS, ACTIVATE THE EXHAUST FANS, ACTIVATE THE APPLIANCE SHUNT TRIP, AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION IS DETECTED ON A COVERED HOOD.
K. A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL, VIA DRY CONTACT (EXTERNAL CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).
L. AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:
A. ON/OFF PUSH BUTTON FAN & LIGHT SWITCH ACTIVATION.
B. INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES (NO RESET RELAY REQUIRED).
C. VFD FAULT DISPLAY WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
D. DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
E. MEASURED DUCT TEMPERATURE SENSOR DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
F. A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.
G. AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED kWh FROM THE VFDs.



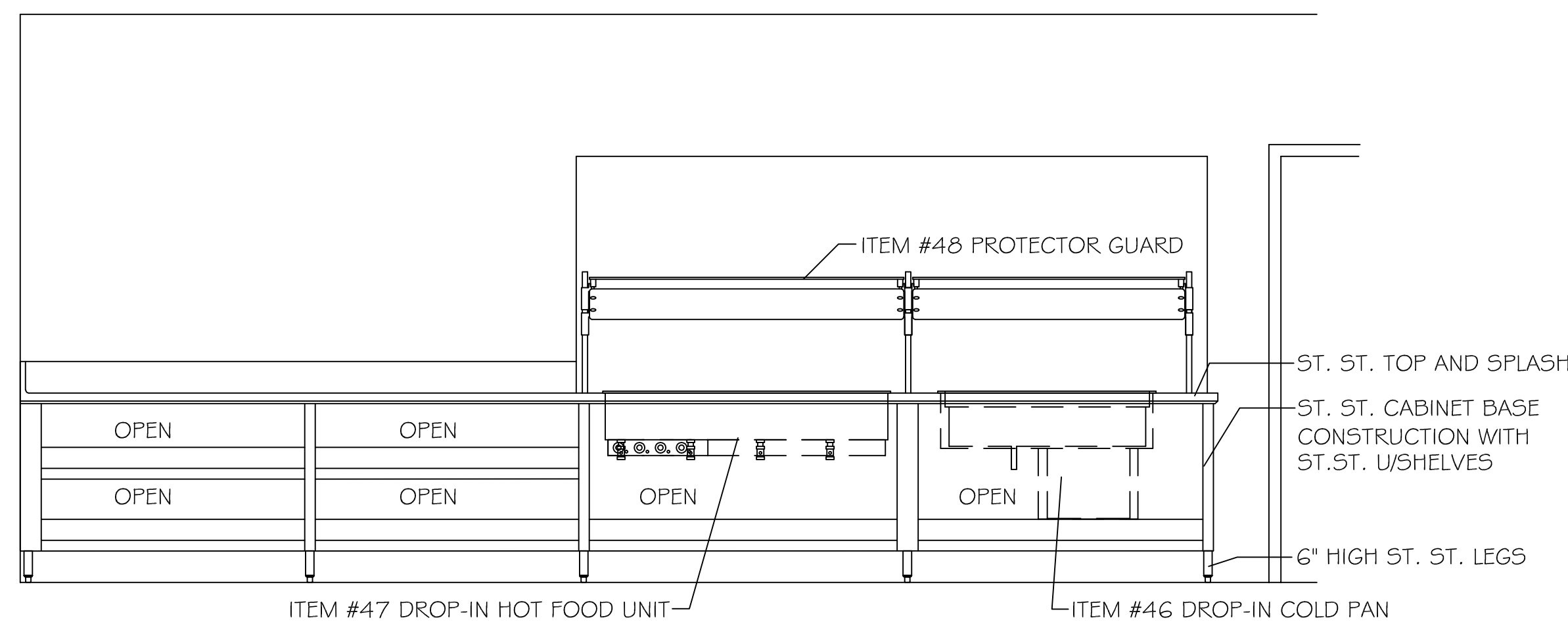
ELEVATION - ITEM #16 PREP TABLE
SCALE: 1/2" = 1'-0"



ELEVATION - ITEM #41 WORK TABLE WITH SINK
SCALE: 1/2" = 1'-0"



ELEVATION - ITEM #41 WORK TABLE WITH SINK
SCALE: 1/2" = 1'-0"



ELEVATION - ITEM #44 SERVING COUNTER
SCALE: 1/2" = 1'-0"



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ST. CLAIR READINESS
CENTER

375 COMMERCIAL AVE.
ST. CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	SD	12/06/2023
B	DD	02/16/2024
C	IFB	04/23/2024

ISSUE DATE: 2024.04.23

CAD DWG FILE: _____
DRAWN BY: MDG _____
CHECKED BY: MDG _____
DESIGNED BY: MDG _____

SHEET TITLE:
**FOODSERVICE
EQUIPMENT
ELEVATIONS**

SHEET NUMBER:

Q-DT-05

81 OF 85 SHEETS
2024.04.23



4-23-24

PROFESSIONAL SEAL



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CENTER

375 COMMERCIAL AVE.
ST CLAIR, MO 63077

PROJECT # T2326-01
SITE # 6304
FACILITY # 8136304011

REV.	DESCRIPTION	DATE
A	DD	02/19/2024
B	IFB	04/23/2024

ISSUE DATE: 2023.12.06

CAD DWG FILE: _____
DRAWN BY: RHL
CHECKED BY: JCA
DESIGNED BY: RHL

SHEET TITLE:
FIRE ALARM SYSTEM

SHEET NUMBER:

FA100

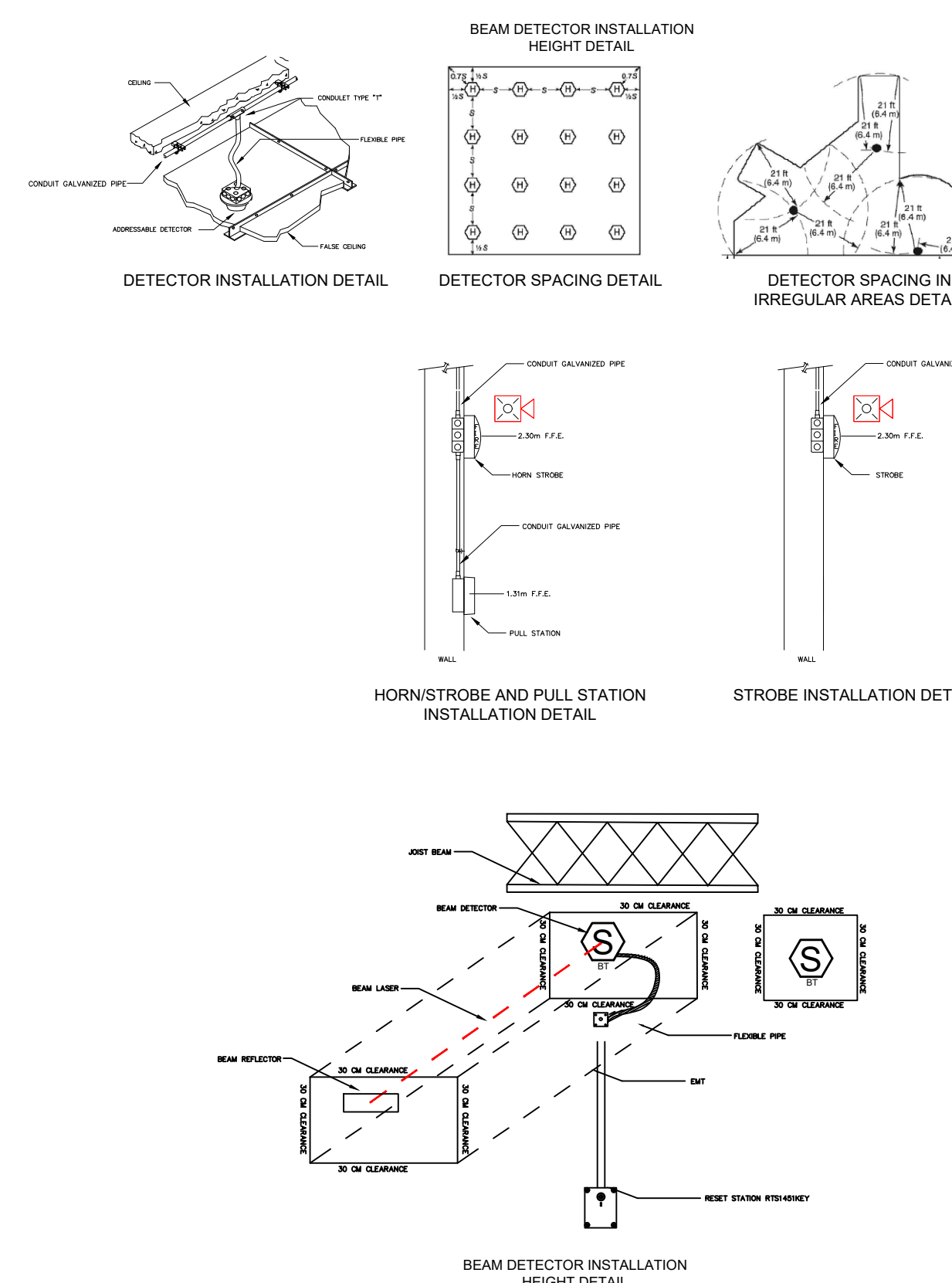
82 OF 85 SHEETS
2024.04.23

GENERAL NOTES

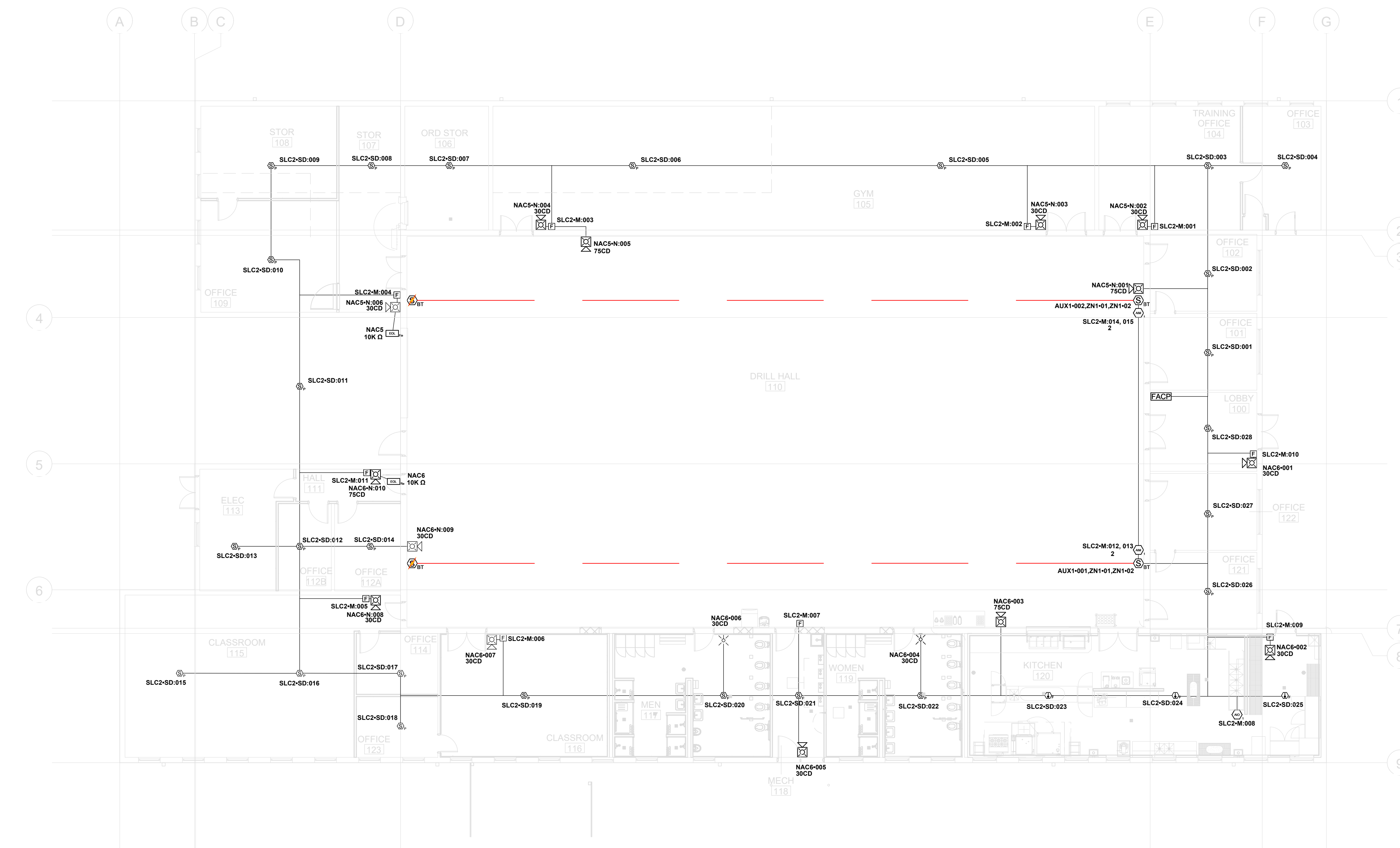
- ALL WORK AND CONNECTIONS SHALL BE ACCORDING WITH THE CURRENT EDITION OF NFPA-72 (EDITION 2022) AND NFPA-70 (NEC EDITION 2023).
- ALL WIRING EXPOSED TO PHYSICAL DAMAGE MUST BE INSTALLED IN 1/2" EMT CONDUITS.
- ALL WIRING AND EMT CONDUIT ROUTES SHALL BE COORDINATED WITH ALL TRADES.
- NOTIFICATION CIRCUITS FOR ALL AREAS MUST BE TAKEN FROM NAC OUTPUTS FROM PANEL.
- USE FIRE ALARM CABLE, RISER-FPLR, 2-16 AWG SOLID BARE COPPER CONDUCTORS WITH POLYOLEFIN INSULATION, PVC-JACKET WITH RIPCORD FOR SIGNALING LINE CIRCUIT (SLC) AND NOTIFICATION CIRCUITS.
- CONTRACTOR TO SUPPLY/INSTALL LASER SMOKE DETECTORS FOR DRILL HALL. DETECTORS SHALL MOUNT TO BOTTOM SIDE OF JOISTS. DETECTOR SPACING AND SPECIFICATIONS SHALL BE INCLUDED IN SHOP DRAWINGS.
- LASER SMOKE DETECTORS IN DRILL HALL SHALL BE SUPPLIED WITH 24V FROM REMOTE POWER SUPPLIES.
- NOTIFICATION DEVICES IN PLANT SPACE SHALL BE SUPPLIED WITH 24V FROM REMOTE POWER SUPPLIES.
- REMOTE POWER SUPPLIES SHALL BE SUPPLIED WITH 127VAC IN AN INDEPENDENT CIRCUIT.

KEYED NOTES

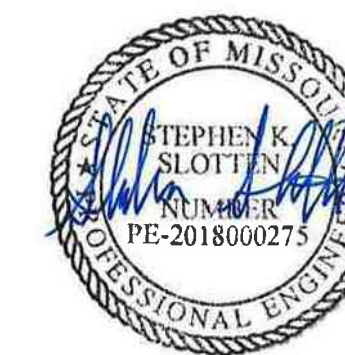
- PROVIDE CONTROL PANEL AS INDICATED.
- PROVIDE SMOKE DETECTORS AS INDICATED.
- PROVIDE THERMAL DETECTOR AS INDICATED.
- PROVIDE LASER SMOKE DETECTORS AS INDICATED.
- PROVIDE MANUAL PULL STATIONS AS INDICATED.
- PROVIDE HORN STROBES AS INDICATED.
- ALL HORN STROBES IN THE SAME LINE OF SIGHT SHALL BE SYNCHRONIZED.



SYMBOL	DESCRIPTION
FACP	NFS-320 INTELLIGENT ADDRESSABLE FIRE ALARM SYSTEM
⊕	INTELLIGENT THERMAL HEAT DETECTOR, LOW PROFILE, FIXED 135F
⊙	OSID SMOKE DETECTION, EMITTER BATTERY OPERATED
⊙	SMOKE DETECTION, IMAGER 80° COVERAGE
⊙	LOW PROFILE INTELLIGENT PHOTO SENSOR, WHITE
⊙	DUAL MONITOR MODULE, ADDRESSABLE
⊙	MONITOR MODULE W/FLASHSCAN, ADDRESSABLE
F	PULL STATION, NBG-12L, FLASHSCAN, ADDRESSABLE
⊗	L-SERIES STROBE, RED, WALL
⊗	L-SERIES 2-WIRE, HORN STROBE, RED, WALL
⊗	L-SERIES 2-WIRE, HORN STROBE, RED, WALL
⊗	GEN EOL 10K



1 FIRE ALARM SYSTEM PLAN
FA100 / 1/16" = 1'-0"



4-23-24

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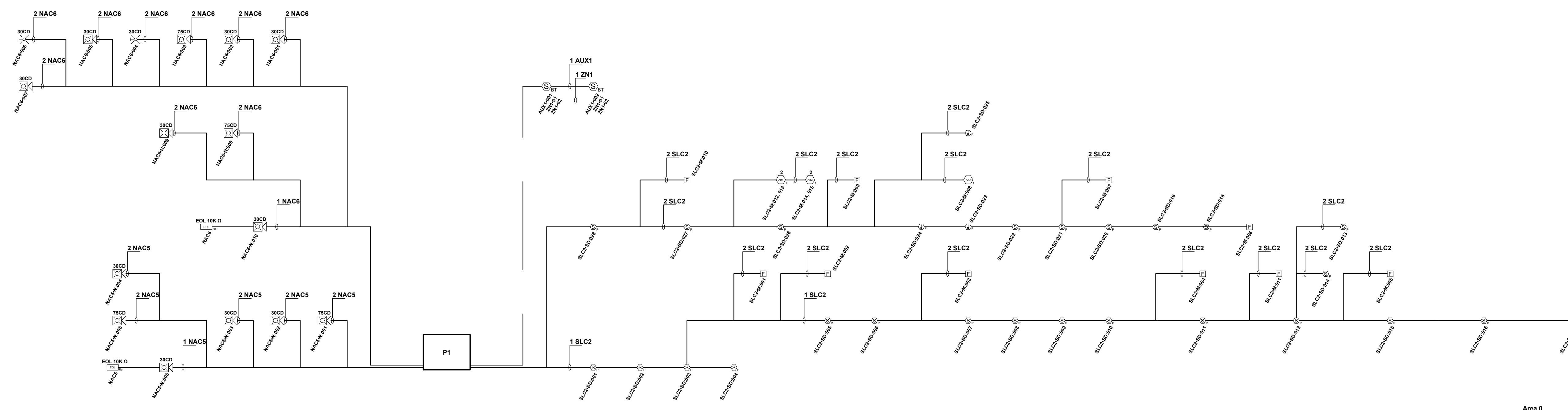
CAD DWG FILE: _____
DRAWN BY: RHL _____
CHECKED BY: JCA _____
DESIGNED BY: RHL _____

SHEET TITLE:
**FIRE ALARM SYSTEM
RISER DIAGRAM**

SHEET NUMBER:

FA102

84 OF 85 SHEETS
2024.04.23





4-23-24

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ISSUE DATE: 2023.12.06

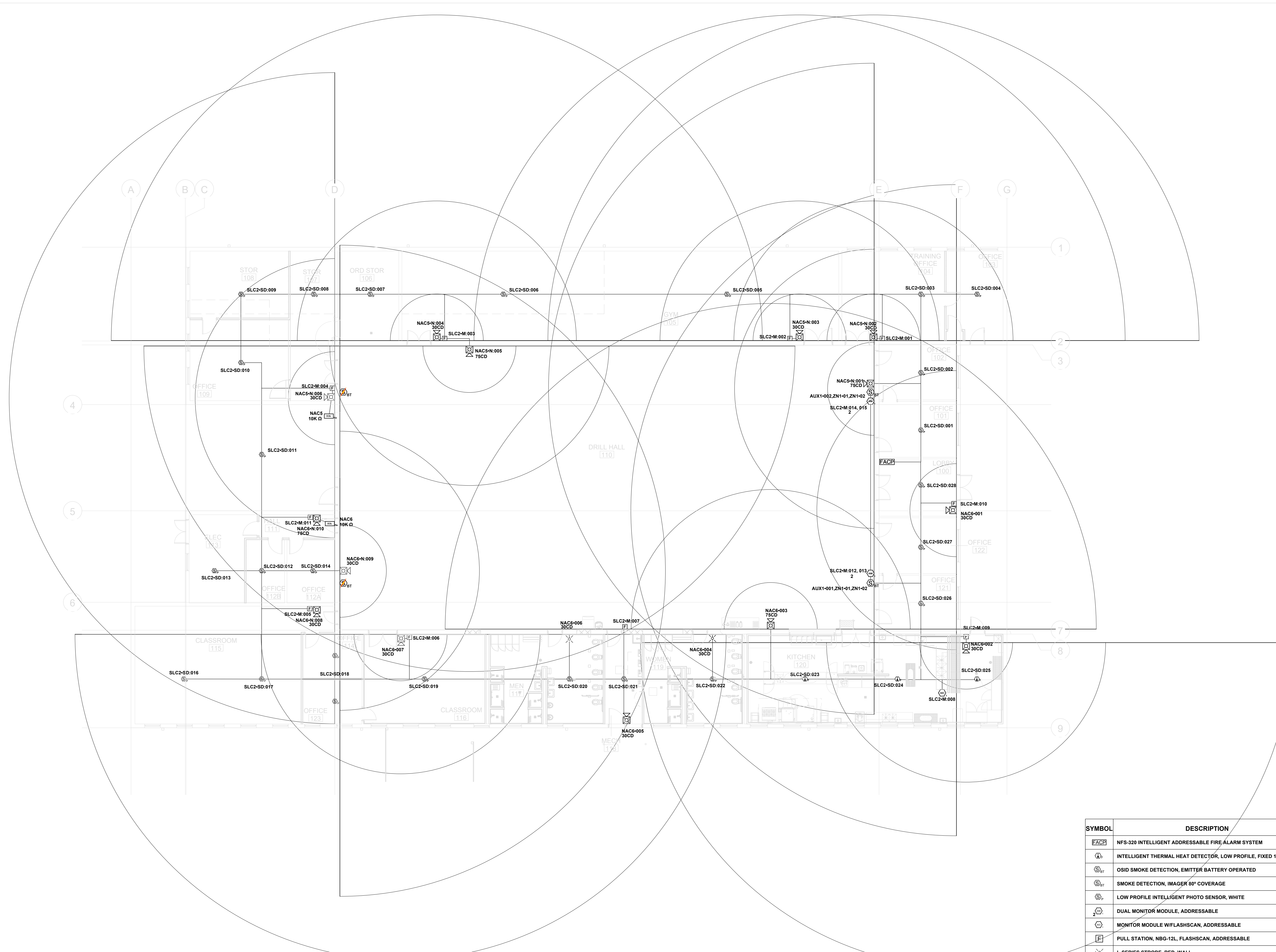
CAD DWG FILE:
DRAWN BY: RHL
CHECKED BY: JCA
DESIGNED BY: RHL

SHEET TITLE:
**FIRE ALARM SYSTEM
HORN STROBE
COVERAGE**

SHEET NUMBER:

FA103

85 OF 85 SHEETS
2024.04.23



1 HORN STROBE COVERAGE
FA102 / N/S

SYMBOL	DESCRIPTION
FACP	NFS-320 INTELLIGENT ADDRESSABLE FIRE ALARM SYSTEM
⊕	INTELLIGENT THERMAL HEAT DETECTOR, LOW PROFILE, FIXED 135F
⊙	OSID SMOKE DETECTION, EMITTER BATTERY OPERATED
⊙	SMOKE DETECTION, IMAGER 80° COVERAGE
⊙	LOW PROFILE INTELLIGENT PHOTO SENSOR, WHITE
⊙	DUAL MONITOR MODULE, ADDRESSABLE
⊙	MONITOR MODULE W/FLASHSCAN, ADDRESSABLE
⊕	PULL STATION, NBG-12L, FLASHSCAN, ADDRESSABLE
⊕	L-SERIES STROBE, RED, WALL
⊕	L-SERIES 2-WIRE, HORN STROBE, RED, WALL
⊕	L-SERIES 2-WIRE, HORN STROBE, RED, WALL
⊕	GEN EOL 10K