

OFFICE ADDITION TO CHELSEA HIGH SCHOOL

10510 COUNTY ROAD 11, CHELSEA, ALABAMA 35043
SHELBY COUNTY BOARD OF EDUCATION

<p>SHELBY COUNTY BOARD OF EDUCATION</p> <p>DAVID BOBO BOARD PRESIDENT</p> <p>PEG HILL BOARD VICE PRESIDENT</p> <p>JIMMY BICE BOARD MEMBER</p> <p>BRIAN BOATMAN BOARD MEMBER</p> <p>AMBER POLK BOARD MEMBER</p> <p>DR. LEWIS BROOKS SUPERINTENDENT</p>	<p>OWNER SHELBY COUNTY BOARD OF EDUCATION 410 EAST COLLEGE STREET COLUMBIANA, ALABAMA 35051</p> <p>ARCHITECT LATHAN ASSOCIATES ARCHITECTS, P.C. 300 CHASE PARK SOUTH SUITE 200 HOOVER, ALABAMA 35244 EMAIL: RFI@LATHANASSOCIATES.COM</p>	<p>CIVIL TTL 10 INVERNESS CENTER PARKWAY HOOVER, ALABAMA 35242</p> <p>MECHANICAL / PLUMBING DEWBERRY ENGINEERS, INC. RIVERCHASE OFFICE PLAZA #2 SUITE 205 HOOVER, ALABAMA 35244</p>	<p>STRUCTURAL STRUCTURAL DESIGN GROUP, INC. 300 CHASE PARK SOUTH SUITE 125 HOOVER, ALABAMA 35244</p> <p>ELECTRICAL STEWART ENGINEERING, INC. P.O. BOX 2233 ANNISTON, ALABAMA 36202</p>
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DRAWING INDEX (SET - 53 TOTAL SHEETS)

GENERAL (2 SHEETS)

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- A2.4 - ROOF DETAILS
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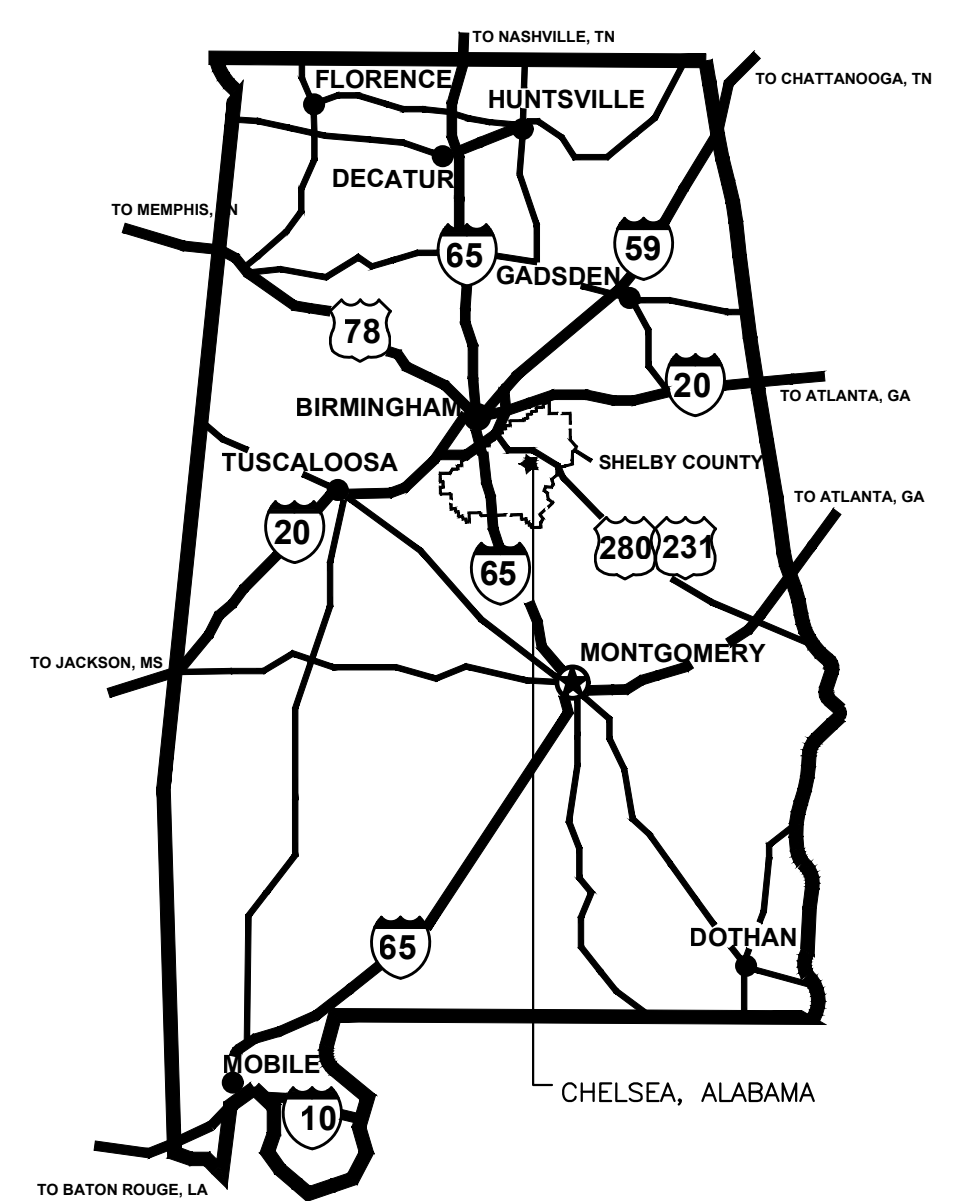
- P0.1 - PLUMBING SCHEDULES AND NOTES
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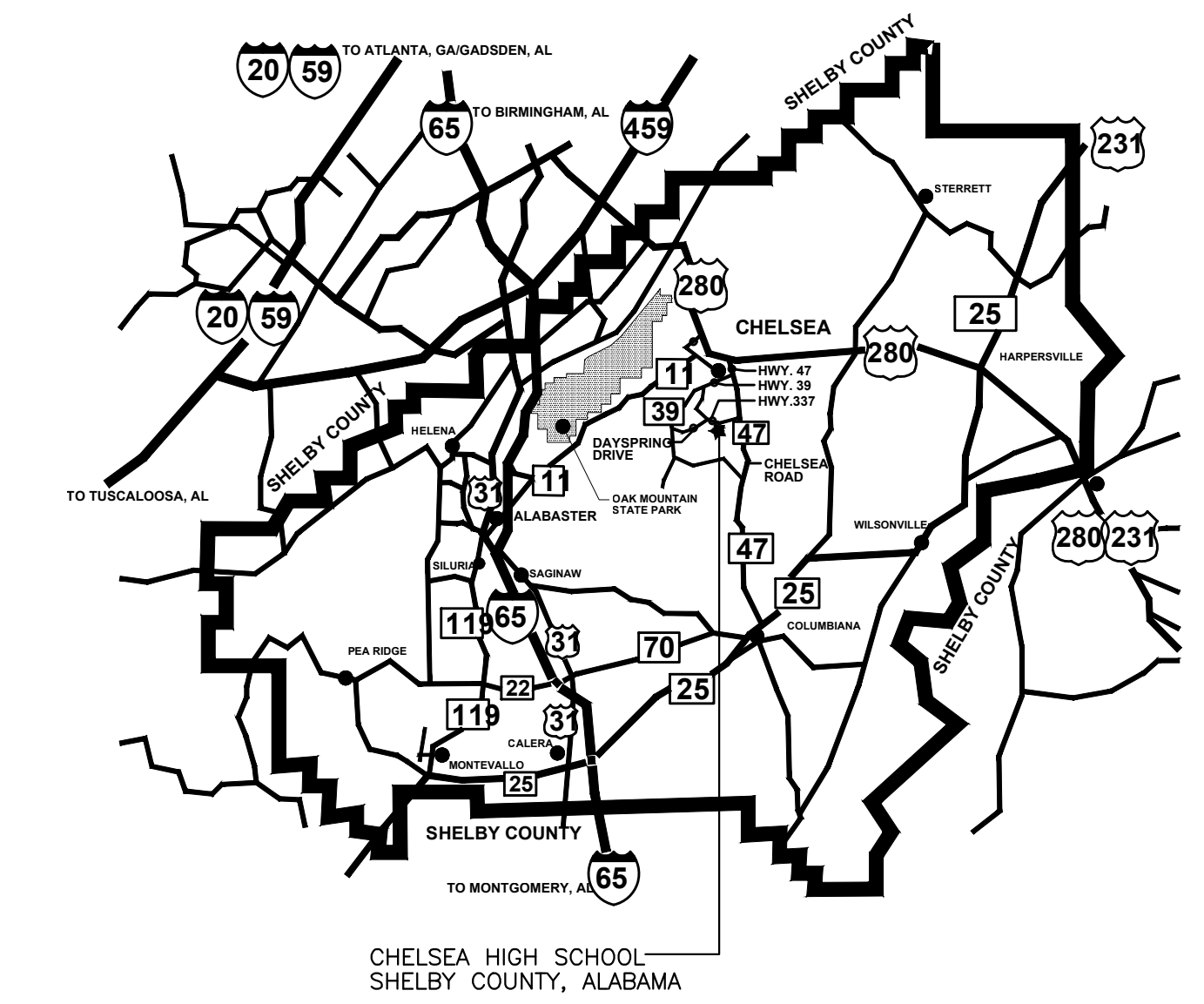
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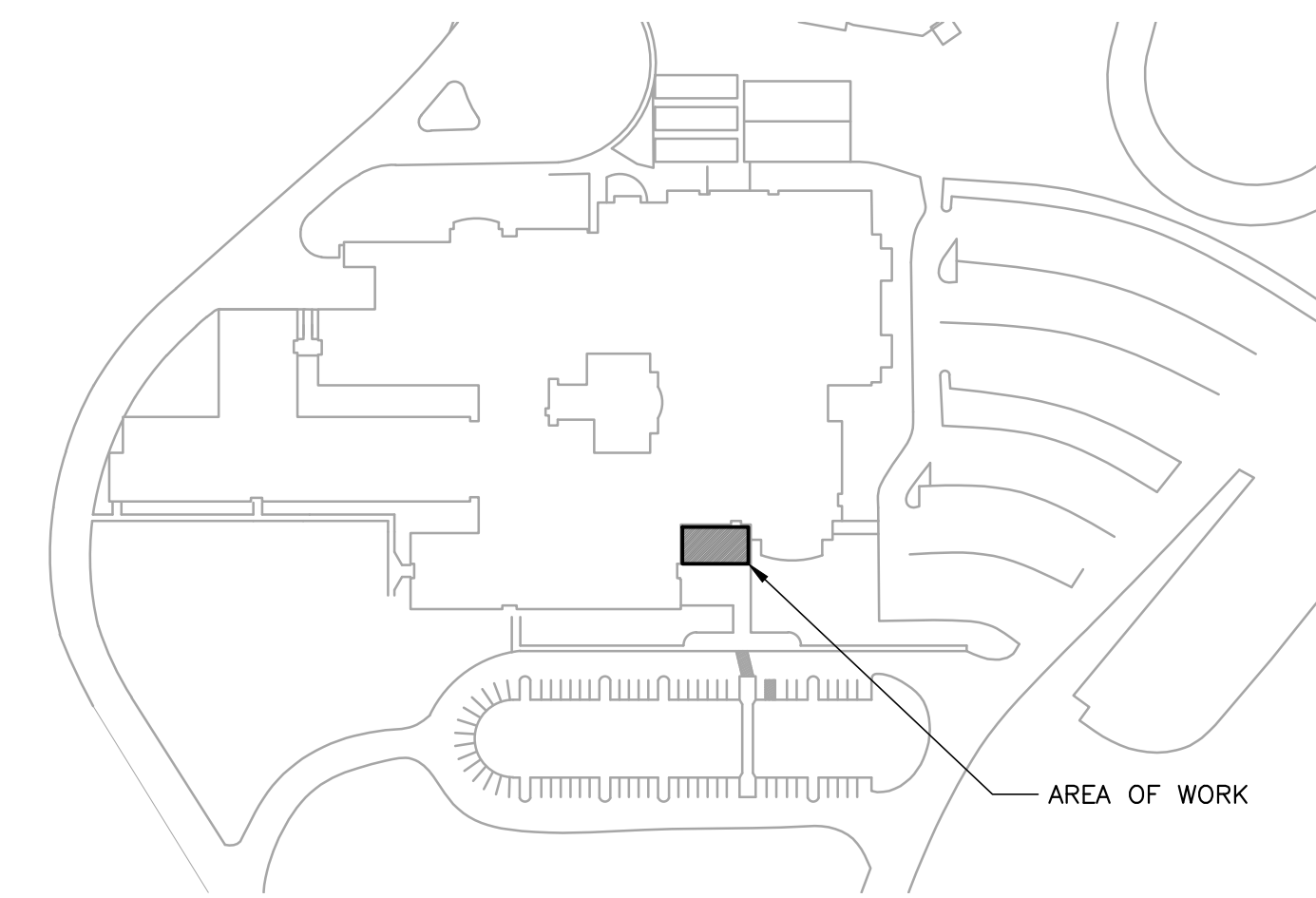
- E1.1 - SCHEDULES, SYMBOLS, AND NOTES
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- E3.1 - FLOOR PLAN - LIGHTING
- E4.1 - FLOOR PLAN - POWER
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AREA MAP
STATE OF ALABAMA

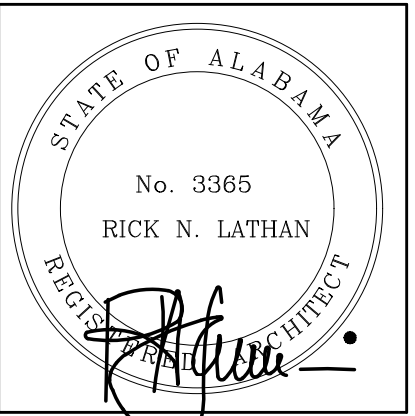


VICINITY MAP
SHELBY COUNTY, ALABAMA



SITE MAP

OFFICE ADDITION TO
CHELSEA HIGH SCHOOL
10510 COUNTY ROAD 11, CHELSEA, ALABAMA 35043
SHELBY COUNTY BOARD OF EDUCATION



SHEET TITLE:
TITLE AND INDEX

PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
DATE: MARCH 8, 2024

REVISIONS

JOB NO. **23-92**

SHEET NO:
T1

1 OF 2

GENERAL PROJECT NOTES

1. THE LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK. IN THE EVENT OF ANY DAMAGE TO IN-PLACE UTILITIES, THEY SHALL BE REPAIRED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
2. ANY EXISTING PROPERTY CORNERS (I.E.- IRON PIPES, CAPPED PIPES, CAPPED MONUMENTS, ETC), DISPLACED OR DAMAGED DURING CONSTRUCTION SHALL BE RESET.
3. EXISTING FENCING REMOVED AND/OR RELOCATED DURING CONSTRUCTION SHALL BE REPLACED IN EQUIVALENT OR BETTER CONDITION AFTER THE WORK REQUIRING THE FENCE REMOVAL IS COMPLETED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN. ANY DAMAGED FENCING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR MUST MAINTAIN ACCESSIBLE DRIVES AND PUBLIC ROADWAYS. ANY ADDITIONAL STONE, GRADING, INSTALLATION, ETC. TO MAKE SIDEWALKS, DRIVES, AND ROADWAYS ACCESSIBLE DURING CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
5. THE CONTRACTOR SHALL KEEP THE PROJECT RIGHTS-OF-WAY CLEAN FROM TRASH AND DEBRIS. PLACEMENT/DISCARDING OF TRASH AND REFUSE IN UTILITY TRENCHES AND/OR OTHER EXCAVATIONS ASSOCIATED WITH THE PROJECT SHALL BE PROHIBITED. THE CONTRACTOR SHALL PROVIDE TRASH RECEPTACLES FOR WORKER USE. THE ROADWAYS AND SIDEWALKS SHALL BE SWEEPED AND WASHED DOWN TO LIMIT THE TRACKING OF DIRT FROM THE PROJECT ONTO PUBLIC RIGHTS-OF-WAY DAILY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
6. CONFLICTS MAY ARISE BETWEEN EXISTING AND PROPOSED UNDERGROUND FACILITIES. CROSSINGS OF REQUIRED AND EXISTING GRAVITY UTILITIES SHALL BE EXCAVATED AND ELEVATIONS VERIFIED AT THE BEGINNING OF THE PROJECT BEFORE ANY UTILITIES ARE INSTALLED TO MAKE SURE THERE ARE NO CONFLICTS. WHEN THESE CONFLICTS ARE IDENTIFIED, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ARCHITECT. IF CONFLICTS OCCUR WHILE INSTALLING GRAVITY UTILITIES AND THE CONTRACTOR DID NOT IDENTIFY ELEVATIONS AT CROSSINGS IN ADVANCE, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE CORRECTIVE ACTION, INCLUDING BUT NOT LIMITED TO, REMOVING AND INSTALLING THE MAIN AND/OR STRUCTURES.
7. AT THE END OF THE PROJECT THE CONTRACTOR SHALL POWER WASH ALL CONCRETE SURFACES (I.E., CURBS AND GUTTERS, SIDEWALK, DRIVES, STORM SEWER BOXES, BRICK PAVERS, EXISTING BUILDING BRICK, ETC.), SPECIFICALLY EXISTING CONCRETE ABUTTING REQUIRED CONCRETE SURFACES TO ELIMINATE STAINING FROM EARTHEN MATERIAL, CONSTRUCTION EQUIPMENT, OILS, PAINTS, ETC. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
8. ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE ADA-COMPLIANT.
9. ALL TEMPORARY STONE FOR ROADWAY, SIDEWALK, DRIVES, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO TEMPORARY STONE SHALL BE WASTED ON THE SITE SPECIFICALLY IN THE FINAL SUBGRADE LAYER AND TOPSOIL. EXCESSIVE STONE WILL INHIBIT THE GROWTH OF THE LANDSCAPE. ALL STONE SHALL BE REMOVED FROM AREAS TO RECEIVE TOPSOIL, NO EXCEPTIONS.
10. WHEN ASPHALT PATCHING OCCURS, THE MIX SHALL BE HOT MIXED AS SPECIFIED IN THE PLANS. ASPHALT COLD MIXES SHALL NOT BE ACCEPTED. POORLY PATCHED CROSSINGS DISPLAYING NON-UNIFORM AND/OR UNSMOOTH FINISHES SHALL NOT BE ACCEPTED AND SHALL BE REMOVED AT ONCE. THE REPATCH OF THE AREA SHALL BE PAID FOR AT THE CONTRACTOR'S EXPENSE.
11. PROJECT CONDITIONS FOR THIS PROJECT SHALL VARY IN TERMS OF MATERIAL, EXCAVATION HEIGHTS, WORKING SPACE, ETC. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTE THE CONDITIONS AND PREPARE HIS BID WITH ALL NECESSARY MEASURES IN TERMS OF SHORING, NETTING FOR FALLING DEBRIS, TRENCH BOXES, ETC. TO ALLOW WORK TO TAKE PLACE ON ALL LOCATIONS ON THE PROJECT. NOTE THAT THE PROJECT CONDITIONS MAY CHANGE AS CONSTRUCTION PHASING OCCURS. NO ADDITIONAL PAY SHALL BE CONSIDERED FOR MEASURES RELATED TO MEANS AND METHODS, WORKER'S SAFETY, ETC. AS THIS IS THE CONTRACTOR'S RESPONSIBILITY.

DEMOLITION NOTES

1. IN LOCATIONS WHERE EXISTING SANITARY OR STORM DRAIN ARE TO BE REMOVED, THE CONTRACTOR MAY BACKFILL WITH NO. 57 STONE AS NOTED ON THE DEMOLITION SHEETS OR BACKFILL WITH ENGINEERED EARTHEN FILL MATERIAL MEETING THE MATERIAL, COMPACTION, AND MOISTURE REQUIREMENTS SET FORTH BY THE GEOTECHNICAL ENGINEER.
2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO CONFIRM THAT THEIR SERVICES HAVE BEEN TERMINATED AND CAPPED PRIOR TO REQUIRED REMOVAL.
3. THE PROJECT DEMOLITION REFLECTED ON THE DEMOLITION PLAN IS GENERAL IN NATURE AND IS INTENDED TO GIVE THE CONTRACTOR AN APPROXIMATE LIMIT OF DEMOLITION. REGARDLESS OF THE AREA SHOWN, THE CONTRACTOR SHALL DEMOLISH, CLEAR AND GRUB, AND REMOVE EXISTING INFRASTRUCTURE (ABOVE AND BELOW GROUND) AS NECESSARY TO COMPLETE ALL FINAL IMPROVEMENTS AS SHOWN ON THE CIVIL, ARCHITECTURAL, LANDSCAPE/IRRIGATION, ETC. CONSTRUCTION PLANS.
4. ALL AREAS DISTURBED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO ACTUAL IMPROVED AREAS, LAYDOWN AREAS, AREAS DISTURBED BY MOVING EQUIPMENT SHALL BE IMPROVED PER THE REQUIREMENTS OF THE PLANS, NO EXCEPTIONS.
5. ALL DEMOLITION, CLEARING, AND GRUBBING SHALL BE REMOVED FROM THE PROJECT SITE. NO BURNING OF PERISHABLE MATERIAL WILL BE PERMITTED.

PAVING, SIGNING AND STRIPING NOTES

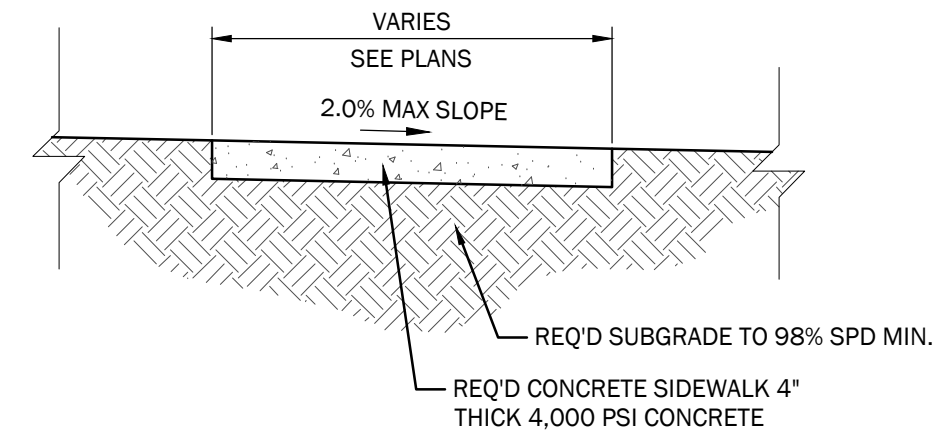
1. THE CONTRACTOR SHALL SAW-CUT ALL EXISTING PAVEMENTS TO BE REMOVED WITH A STRAIGHT, CLEAN CUT TO ENSURE PROPOSED PAVEMENTS JOIN TO EXISTING CLEANLY.
2. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
3. CONCRETE CONTROL JOINTS SHALL BE MEASURED FOR DEPTH. THEY MUST BE INSTALLED PROPERLY FOR CONTROL CRACKING OF THE CONCRETE PAVEMENT. IMPROPERLY INSTALLED CONCRETE SHALL BE REMOVED/REPLACED AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL ENSURE ALL PAVEMENTS ARE FINISHED OUT SMOOTHLY AND CLEANLY. IRREGULARITIES, "BIRD BATHS", RANDOM CRACKING, ETC. SHALL BE REMOVED/REPLACED AT THE CONTRACTOR'S EXPENSE.

GRADING NOTES

1. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" TOPSOIL APPLIED, BE GRASSED AND MULCHED, AND/OR SODDED AS SOON AS FINAL GRADING IS COMPLETE. REFER TO EROSION CONTROL NOTES FOR TEMPORARY GRASSING AND MULCHING DURING GRADING OPERATIONS.
2. ALL ENGINEERED FILL MATERIALS SHALL BE REVIEWED AND APPROVED BY THE GEOTECHNICAL ENGINEER WELL IN ADVANCE OF FINAL OPERATIONS. THE CONTRACTOR SHALL IDENTIFY ALL BORROW SOURCES FOR PD SAMPLES TO BE TAKEN AND EVALUATED. ALL EMBANKMENT FILL AND BORROW EXCAVATION MATERIALS SHALL BE COMPACTED IN LOOSE 8' LIFTS AS PER THE GEOTECHNICAL ENGINEER'S REQUIREMENTS.
3. THE CONTRACTOR SHALL CLEAR AND GRUB AS NECESSARY WHERE GRADING OPERATIONS ARE TO BE PERFORMED AS SHOWN.
4. BEFORE FINAL GRADING, THE CONTRACTOR SHALL MAKE ALL SURE UTILITIES INCLUDING STORM, SANITARY, WATER, FIRE PROTECTION, ELECTRICAL, VIDEO, IRRIGATION, ETC. IMPROVEMENTS HAVE BEEN INSTALLED.
5. THE CONTRACTOR SHALL NOTE CHANGE IN GRADES AND REQUIRED RAMPS WHEN LAYING OUT SCORING AND HANDICAP RAMPS. ALL ADA ACCESSIBLE RAMP GRADES AND SIDEWALK CROSS SLOPE SHALL MEET ADA REQUIREMENTS.
6. GRADING OPERATIONS SHALL INCLUDE TOPSOIL STRIPPING AND REMOVAL THROUGHOUT THE PROJECT SITE. UNCLASSIFIED EXCAVATION, AND BORROW EXCAVATION, ROCK REMOVAL, ETC. TO BRING THE SITE TO FINISHED SUBGRADE AS SHOWN ON THE CONSTRUCTION PLANS. NO EXTRA PAYMENT WILL BE MADE FOR EXCESS MATERIAL BROUGHT ON-SITE. MATERIAL REQUIRED TO BE MOVED MULTIPLE TIMES BECAUSE OF CONSTRUCTION PHASING, OR EXCESS MATERIAL TO BE REMOVED FROM THE SITE UPON GRADING COMPLETION.
7. THERE SHALL BE NO DEBRIS (ROOTS, ROCKS, ETC.) IN THE TOPSOIL LARGER THAN 1/2" IN DIAMETER. THERE ALSO SHALL BE NO WASTED TEMPORARY GRAVEL, CONCRETE, OR ANY OTHER BUILDING MATERIALS FOUND IN THE TOPSOIL. ANY FOUND DEBRIS SHALL BE REMOVED IMMEDIATELY.
8. ALL EMBANKMENT FILL AND BORROW EXCAVATION MATERIALS SHALL BE COMPACTED IN LOOSE 8' LIFTS TO 98%, ASTM D 698 MINIMUM AS DIRECTED BY THE GEOTECHNICAL REPRESENTATIVE.

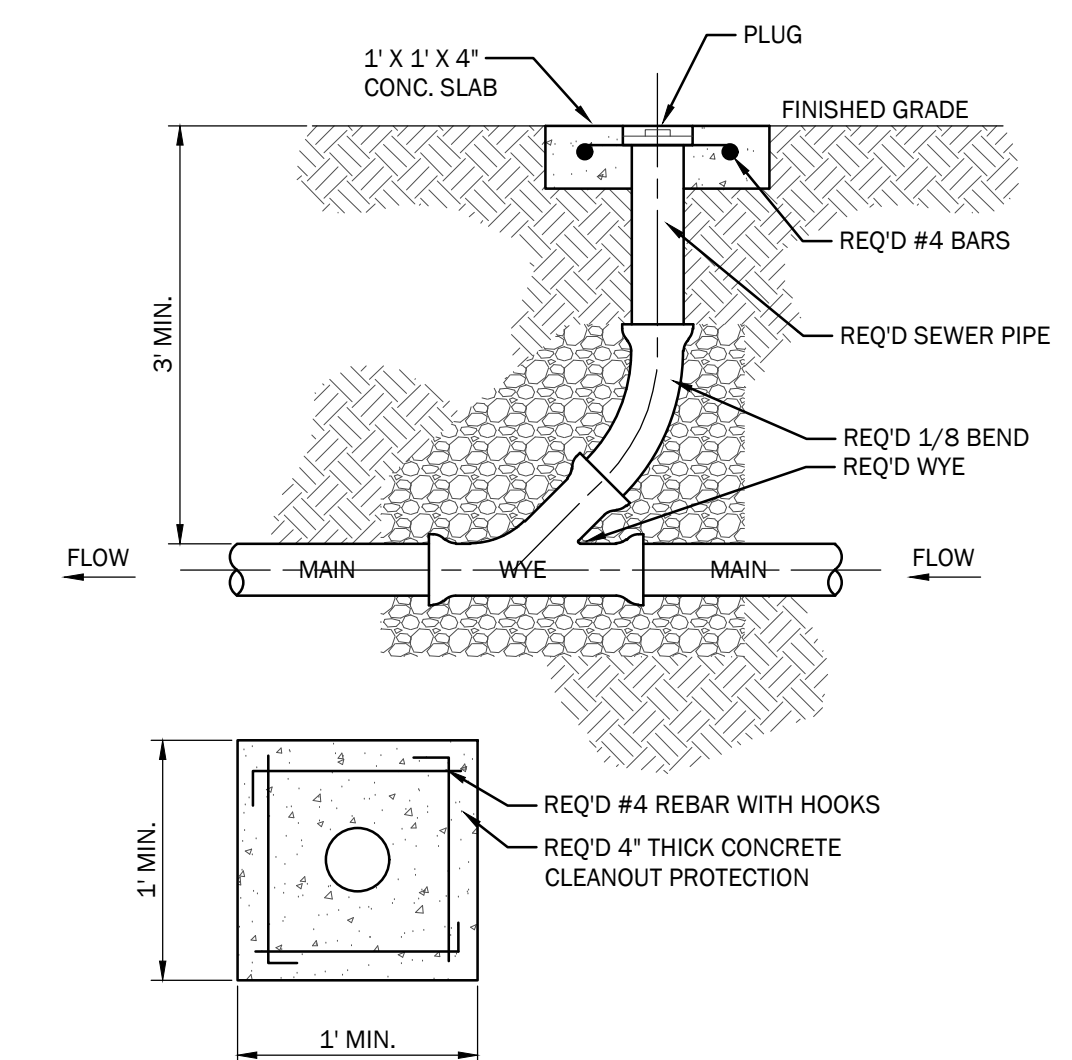
EROSION CONTROL NOTES:

1. DUE TO THE SMALL ACREAGE SIZE OF THE PROJECT, A NPDES STORMWATER PERMIT FROM ADEM MAY NOT BE REQUIRED; HOWEVER, THE CONTRACTOR SHALL VERIFY THIS AS IT IS HIS RESPONSIBILITY TO SECURE AND MAINTAIN THE REQUIREMENTS OF THE PERMIT THROUGH THE LENGTH OF THE PROJECT CONTRACT.
2. REGARDLESS IF AN NPDES PERMIT IS REQUIRED OR NOT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR USING BEST MANAGEMENT PRACTICES (BMP'S) FOR EROSION AND SEDIMENT CONTROL THROUGHOUT CONSTRUCTION. AN EROSION CONTROL PLAN IS PROVIDED AS A MINIMUM GUIDE FOR PROVIDING STRUCTURAL BMP'S, PHASING, TEMPORARY GRASSING, AND OTHER METHODS AS PROVIDED IN THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT. SHALL BE UTILIZED TO MINIMIZE EROSION. NO EXTRA COMPENSATION SHALL BE GIVEN TO THE CONTRACTOR FOR MAINTAINING EROSION CONTROL ITEMS OR ADDITIONAL EROSION CONTROL ITEMS REQUIRED TO COMPLY WITH THE NPDES PERMIT.
3. ANY FINES INCURRED DUE TO FAILURE TO MAINTAIN EROSION CONTROL MEASURES SHALL BE PAID FOR BY THE CONTRACTOR. ANY ADDITIONAL WORK AND MATERIALS REQUIRED TO COMPLY WITH ANY VIOLATIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.
4. ALL TEMPORARY RIPRAP USED FOR EROSION CONTROL PURPOSES SHALL BE INCLUDED IN THE PRICE OF EROSION CONTROL. TEMPORARY RIPRAP BERMS SHALL BE SPREAD OUT IN AREAS WHERE PERMANENT RIPRAP IS REQUIRED AND SHALL BE SPREAD IN A MANNER TO NOT IMPED FLOW OF STORM DRAINS AFTER THE SITE IMPROVEMENTS ARE COMPLETE AND THE PROJECT IS STABILIZED. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR TEMPORARY RIPRAP OR SPREADING IT UPON COMPLETION OF THE SITE IMPROVEMENTS. ALL TEMPORARY RIPRAP THAT IS SPREAD FOR USE AS PERMANENT RIPRAP SHALL BE PLACED ON THE STONE BEDDING AND FILTER FABRIC AS SHOWN IN THE DETAILS. COSTS FOR STONE AND FILTER FABRIC PLACED UNDERNEATH ALL TEMPORARY RIPRAP THAT IS SPREAD IN PERMANENT LOCATIONS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EROSION CONTROL MANAGEMENT AND MAINTENANCE, OR IF THERE ARE NO UNIT PRICES, THE COST SHALL BE INCIDENTAL TO THE PROJECT.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP CLEAN ALL EROSION & SEDIMENT CONTROL STRUCTURES UNTIL THE NPDES PERMIT IS ACCEPTED AS COMPLETE BY THE QCP & ADEM, AND IS TERMINATED BY THE CONTRACTOR.
6. SILT FENCES SHALL HAVE SEDIMENT DEPOSITS REMOVED IF THEY REACH A DEPTH OF FIFTEEN INCHES (15') OR 1/2 THE HEIGHT OF THE FENCE. SEDIMENT REMOVED FROM THE SILT FENCE SHALL BE PLACED ONSITE AND STABILIZED.
7. THE PROJECT AREA SHALL REMAIN CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO KEEP THE PROJECT AREA CLEAN, INCLUDING MOTORIZED STREET SWEEPERS, WATER AND VACUUM TRUCKS, HAND SWEEPING AND SHOVELING, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADDRESS THIS ISSUE EACH DAY INCLUDING WEEKENDS AND SPECIFICALLY PRE AND POST RAIN EVENTS.
8. THE CONTRACTOR SHALL IDENTIFY WORK AREA ENTRANCE/EXIT LOCATIONS FOR EQUIPMENT AND INSTALL TEMPORARY GRAVEL DRIVES TO REDUCE TRACKING ONTO PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL STREETS CLEAN OF ANY SEDIMENT FROM THE CONSTRUCTION SITE ON A DAILY BASIS, NO EXCEPTIONS.
9. ALL DISTURBED AREAS, INCLUDING THE EARTHEN STOCKPILES, SHALL BE MULCHED UPON COMPLETION OF GRADING OPERATIONS. ADEM REGULATIONS REQUIRE ALL DISTURBED AREAS NOT UNDERGOING ACTIVE DISTURBANCE OR ACTIVE CONSTRUCTION FOR LONGER THAN THIRTEEN (13) DAYS TO BE PROVIDED WITH TEMPORARY GROUND COVER.
10. THE CONTRACTOR SHALL INSTALL WATTLES, SANDBAGS, AND/OR SILT FENCE TRENCHED THROUGH PAVEMENT AFTER SAW-CUTTING THE ASPHALT TO AVOID RUNOFF INTO OTHER ROADWAYS, DRIVES, AND AREAS PARALLEL AND ADJACENT TO THE PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADDRESS THIS ISSUE EACH DAY INCLUDING WEEKENDS AND SPECIFICALLY PRE AND POST RAIN EVENTS.
11. THERE MAY BE LOCATIONS WHERE SILT FENCE MAY BE NEEDED ACROSS EXISTING PAVEMENT THAT IS TO BE RETAINED FOR TEMPORARY ALL WEATHER WORKING SURFACE AND/OR LAYDOWN YARD. IN THESE LOCATIONS THE EXISTING PAVEMENT SHALL BE SAW-CUT ENOUGH TO TRENCH THE SILT FENCE PROPERLY IN THE GROUND. SAND BAGS AND/OR PROPERLY SECURED SEDIMENT CONTROL LOGS COULD SERVE THIS PURPOSE AS WELL.
12. WATTLES FOR SEDIMENT CONTROL SHALL HAVE A MINIMUM DIAMETER OF 12".
13. THE CONTRACTOR SHALL INSTALL STONE AND/OR STABILIZE ENTRANCE/EXIT, SIDEWALKS, ROADWAY/DRIVES, ETC. AS NECESSARY. ALL STONE FOR CONSTRUCTION ENTRANCE/EXIT, SIDEWALKS, ROADWAY/DRIVES, ETC. ARE CONSIDERED INCIDENTAL REGARDLESS THE NUMBER OF TIMES FRESH STONE IS REQUIRED FOR EROSION CONTROL MEASURES. AT THE END OF THE PROJECT, ALL STONE SHALL BE REMOVED AND NOT WASTED ON THE PROJECT SITE.
14. WHEN INSTALLING SILT FENCE OR OTHER BMP'S, THE CONTRACTOR SHALL USE THE LOCATIONS PROVIDED ON THE DRAWINGS OR THE CBMP - WASTEFUL AND/OR POORLY PLANNED INSTALLATIONS SHALL NOT RECEIVE ADDITIONAL PAY FOR REINSTALLATION AFTER MOVING TO ANOTHER PHASE OF THE WORK.
15. ALL INLETS/STRUCTURES SHALL BE COVERED BY DOMED INLET PROTECTORS DURING CONSTRUCTION TO AVOID SEDIMENT RUNOFF. THESE UNITS SHALL BE KEPT CLEAN DURING CONSTRUCTION. IF THE INLET/STRUCTURE IS TOO LARGE, THEN SEDIMENT LOGS OR SILT FENCE SHALL BE USED TO PROTECT THE INLET.
16. ALL MEANS NECESSARY SHALL BE USED TO ESTABLISH TEMPORARY EROSION CONTROL INCLUDING EROSION CONTROL NETTING, SODDING, REPEATED SEEDING AND MULCHING, ETC.
17. A BEST MANAGEMENT PLAN SHALL AT A MINIMUM RETURN ALL EXPOSED OR DISTURBED AREAS TO ORIGINAL OR BETTER CONDITION WITH AT LEAST A GOOD STAND OF GRASS AND/OR SOD. EROSION CONTROL MEASURES INCLUDING CONSTRUCTION EXIT PADS, SHOWN HEREIN TO PREVENT EROSION AND SEDIMENT RUNOFF ARE A MINIMUM AND SHALL NOT BE INTERPRETED AS BEING ALL THAT IS REQUIRED FOR THE PROJECT. CONTRACTOR SHALL BE MINDFUL DURING ALL PHASES OF CONSTRUCTION AND INSTALL AND UTILIZE ANY AND ALL ADDITIONAL ITEMS NECESSARY TO CONTROL ALL EROSION AND SEDIMENTATION ON THE PROJECT AT ALL TIMES AS REQUIRED BY ADEM AND THE ALABAMA HANDBOOK FOR EROSION CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, MOST RECENT EDITION.
18. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO DIRECT ADDITIONAL ITEMS OR REVISE IN-FIELD PLACEMENT OF EROSION CONTROL ITEMS AS DEEMED NECESSARY DURING ALL PHASES OF THE PROJECT.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OUT ALL SANITARY OR STORM SEWER MAINS AND MANHOLES ON A CONTINUOUS BASIS IF CONSTRUCTION DEBRIS ENTERS SUCH MAINS. IN NO EVENT SHALL CONTRACTOR DISPOSE OF ANY DEBRIS OR MATERIALS IN SEWERS. CONTRACTOR SHALL IMMEDIATELY REMOVE ANY SUCH DEBRIS OR MATERIAL TO SATISFACTION OF OWNER'S REPRESENTATIVE.
20. CONTRACTOR SHALL BE OBSERVANT OF FORECASTED RAIN EVENTS AND PROMPTLY REPAIR, MAINTAIN, INSTALL NECESSARY EROSION CONTROL ITEMS PRIOR TO SUCH RAIN EVENTS. CONTRACTOR SHALL PROMPTLY MEDIATE, CLEAN UP, REMOVE ANY EROSION OR SEDIMENTATION FROM ALL EROSION CONTROL ITEMS, STRUCTURES, TRAPS, BASINS, ETC. AND REPAIR, MAINTAIN, RE-INSTALL, SUPPLEMENT SUCH IMMEDIATELY FOLLOWING EACH RAIN EVENT OR AS DIRECTED BY OWNER'S REPRESENTATIVE.



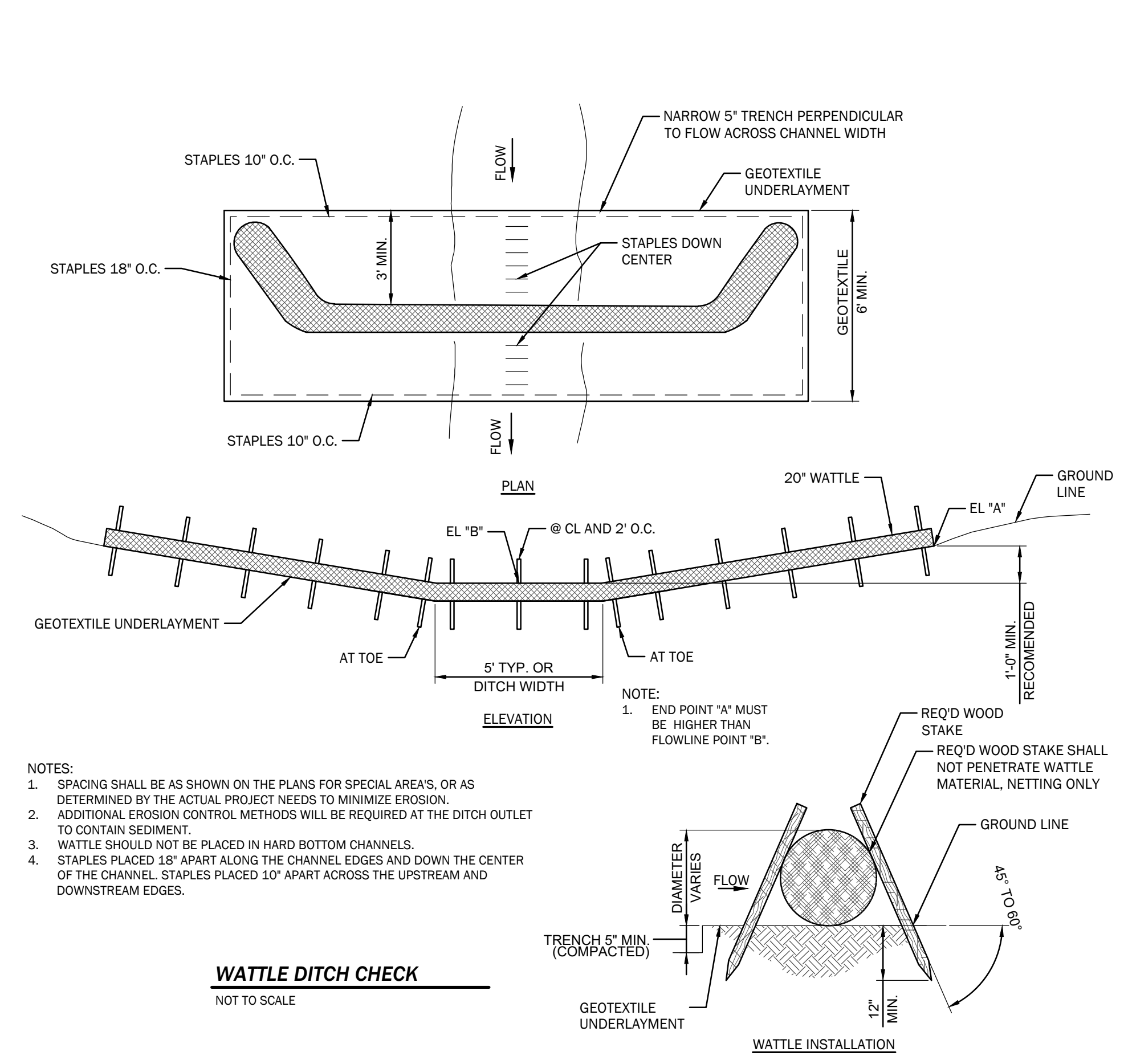
- NOTES:
1. EXPANSION JT. REQ'D. @ 40' MAX. INTERVALS BUT NOT LESS THAN 30' WITH EXPANSION JOINT MATERIAL.
 2. CONTRACTION JOINTS SHALL BE HAND-TOOLED ONLY. JOINTS SHALL BE INSTALLED AT A DEPTH OF 1/4 THICKNESS OF THE SLAB MIN. NO SAW-CUT OF JOINTS IS ALLOWED.
 3. SIDEWALKS SHALL HAVE AN EXPANSION JOINT INSTALLED IN ALL LOCATIONS WHERE NEW IMPROVEMENTS MEET EXISTING INFRASTRUCTURE.
 4. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
 5. EXPANSION JOINT MATERIAL SHALL BE PUSHED DOWN 1/8" FROM TOP OF SIDEWALK.
 6. EXPANSION JOINT MATERIAL SHALL BE CONTINUOUS THROUGH THE OVERALL DEPTH OF THE SIDEWALK.

CONCRETE SIDEWALK
NOT TO SCALE



- CLEANOUT PROTECTION DETAIL**
NOT TO SCALE
- NOTES:
1. CLEANOUTS LOCATED IN PAVED AREAS (SIDEWALK, ROADWAYS, ETC.) SHALL HAVE TRAFFIC RATED TOPS.

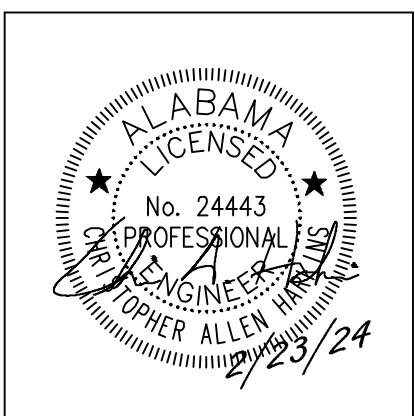
CLEANOUT DETAIL
NOT TO SCALE



WATTLE DITCH CHECK
NOT TO SCALE



OFFICE ADDITION TO
CHELSEA HIGH SCHOOL
 10510 HIGHWAY 11, CHELSEA, ALABAMA 35043
 SHELBY COUNTY BOARD OF EDUCATION

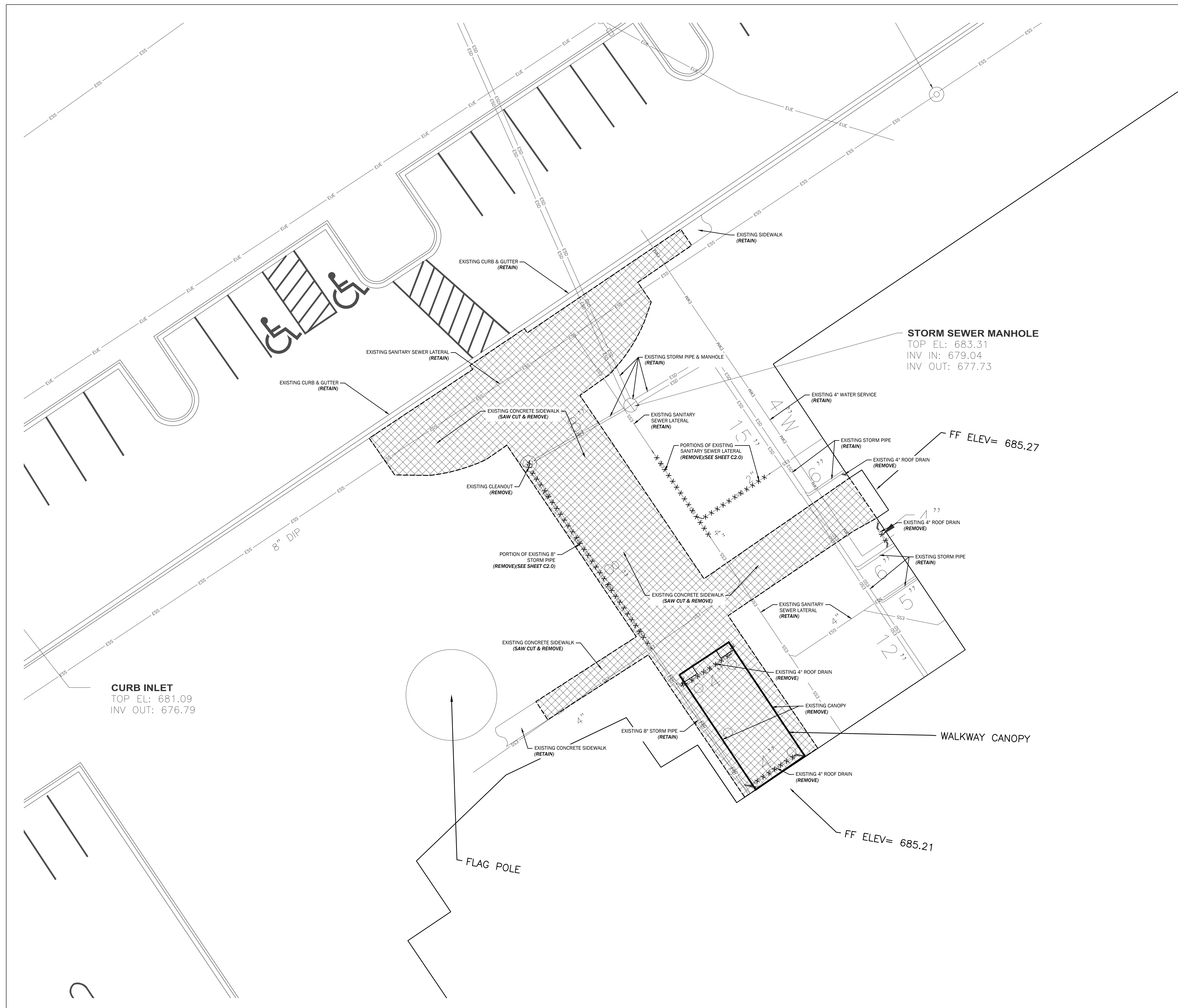


SHEET TITLE:
CIVIL NOTES AND DETAILS

PROJ. MGR.: CAH
 DRAWN: CAH
 DATE: 2/23/2024

REVISIONS	

JOB NO. **23-92**
 SHEET NO:
C0.1
 1 OF 4



CURB INLET
TOP EL: 681.09
INV OUT: 676.79

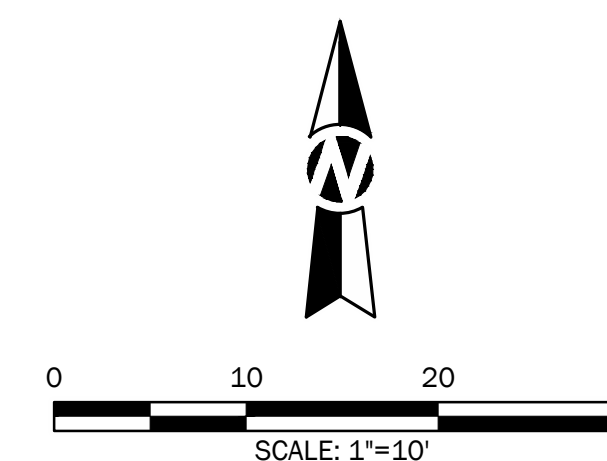
STORM SEWER MANHOLE
TOP EL: 683.31
INV IN: 679.04
INV OUT: 677.73

DEMOLITION LEGEND

- APPROXIMATE LIMITS OF CONCRETE PAVEMENT REMOVAL
- EXISTING UTILITY DEMOLITION

NOTES:

1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.
2. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR BUILDING DEMOLITION.



SHEET TITLE:
SITE DEMOLITION PLAN

PROJ. MGR.: CAH
DRAWN: CAH

DATE: 2/23/2024

REVISIONS

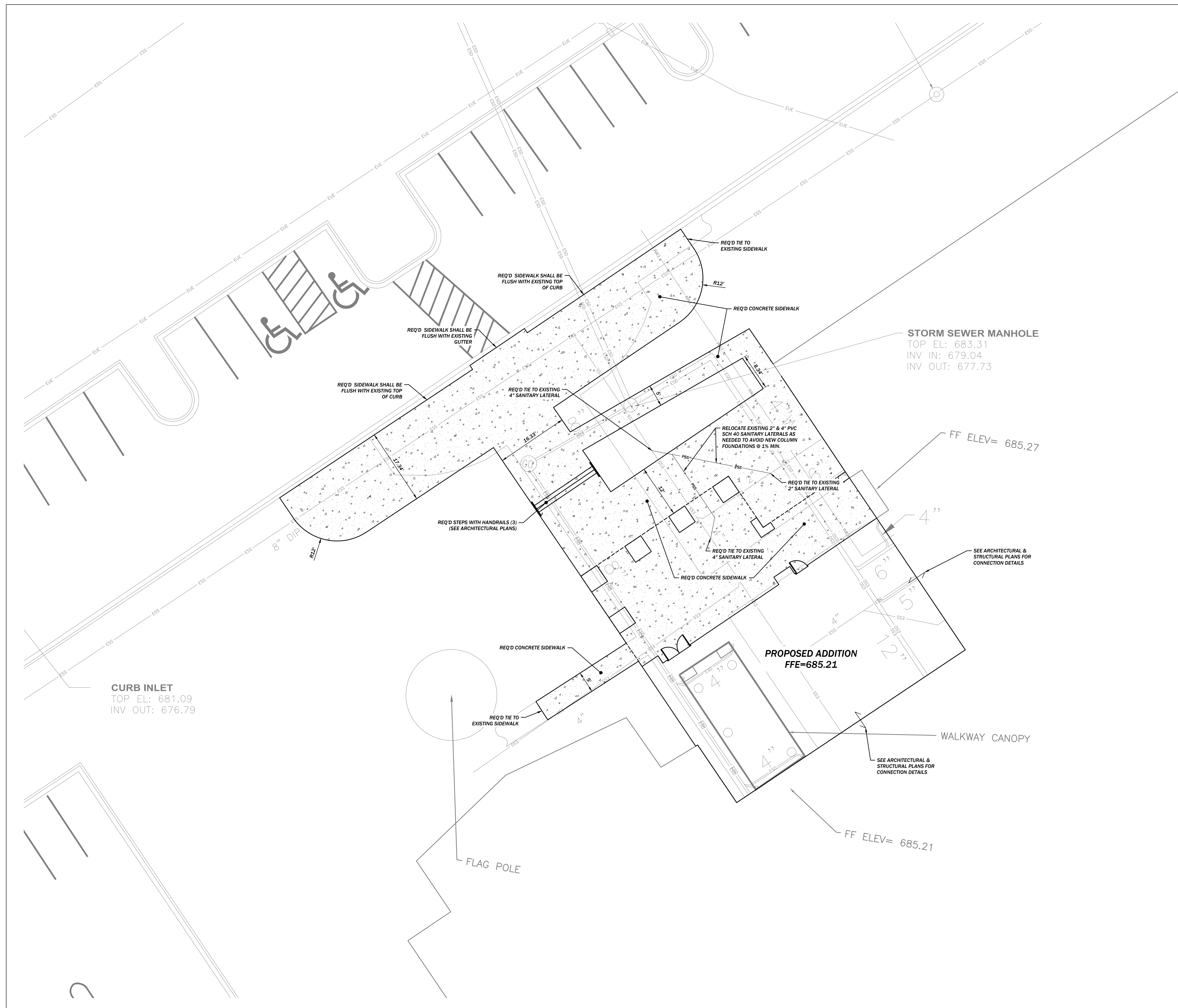
JOB NO. **23-92**

SHEET NO:

C1.0

2 OF 4



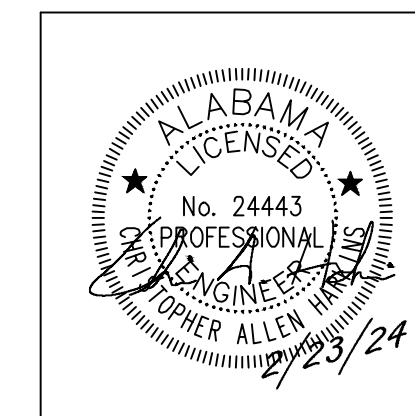
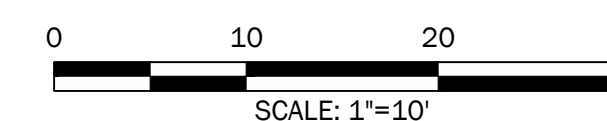


PAVING LEGEND

REQ'D CONCRETE SIDEWALK
(SEE DETAILS)

NOTE:

1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.



SHEET TITLE:
SITE LAYOUT AND
UTILITY PLAN

PROJ. MGR.: CAH
DRAWN: CAH

DATE: 2/23/2024
REVISIONS

JOB NO. 23-92

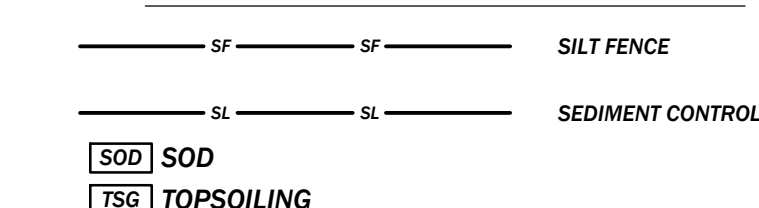
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C2.0

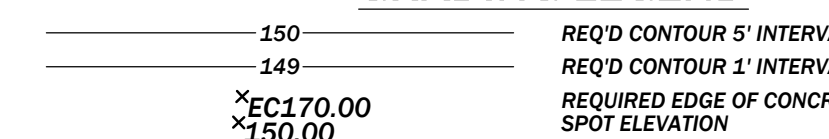
3 OF 4



EROSION CONTROL LEGEND



GRADING LEGEND



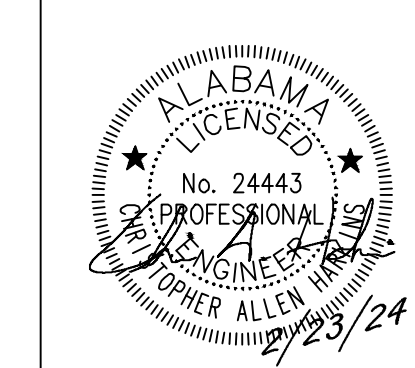
- NOTES:**
- SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.
 - ALL DISTURBED AREAS SHALL BE SODDED.

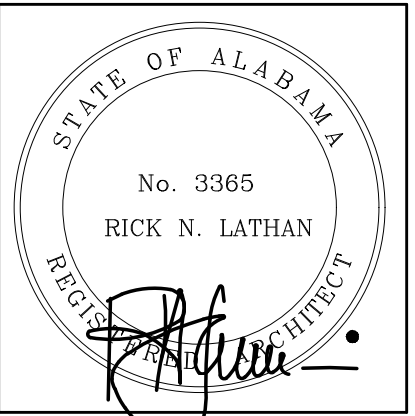
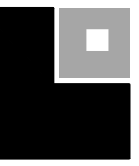


SHEET TITLE:
GRADING & EROSION
CONTROL PLAN

PROJ. MGR.: CAH
DRAWN: CAH
DATE: 2/23/2024
REVISIONS

JOB NO. 23-92
SHEET NO:
C3.0
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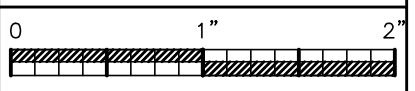
SHEET TITLE:
DEMOLITION PLAN

PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
vdr
DATE: MARCH 8, 2024
REVISIONS

JOB NO. 23-92
SHEET NO:

A1.1

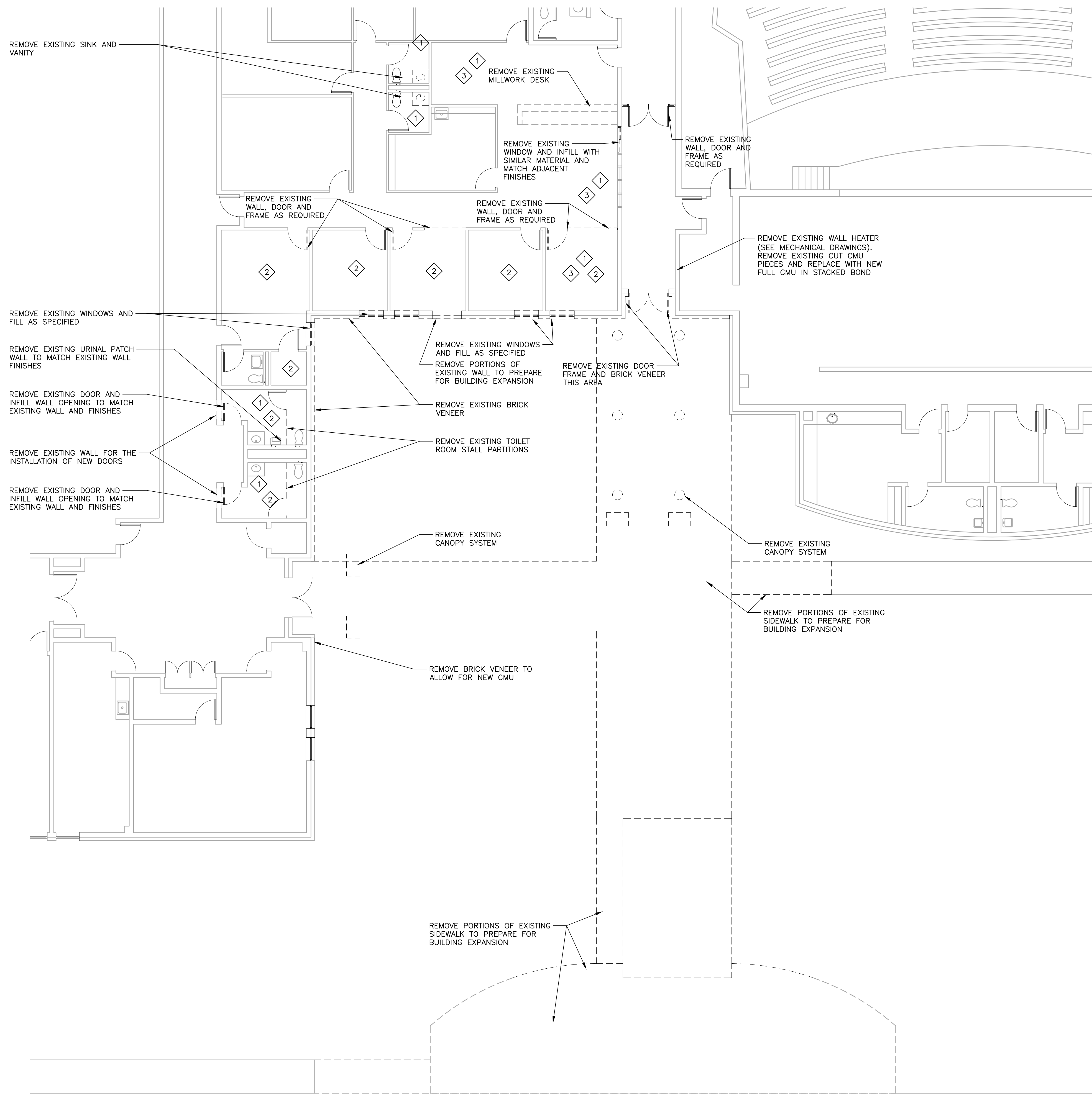
1 OF 17



DEMOLITION LEGEND	
	EXISTING TO BE REMOVED
	EXISTING WALL TO BE REMOVED
	EXISTING WALL/PARTITION PORTION TO REMAIN
	EXISTING TO REMAIN
	EXISTING DOOR TO REMAIN
	EXISTING TO BE REMOVED
	EXISTING DOOR TO BE REMOVED
	KEY NOTE KEY NOTE SYMBOL (REFER TO CORRESPONDING NOTES)

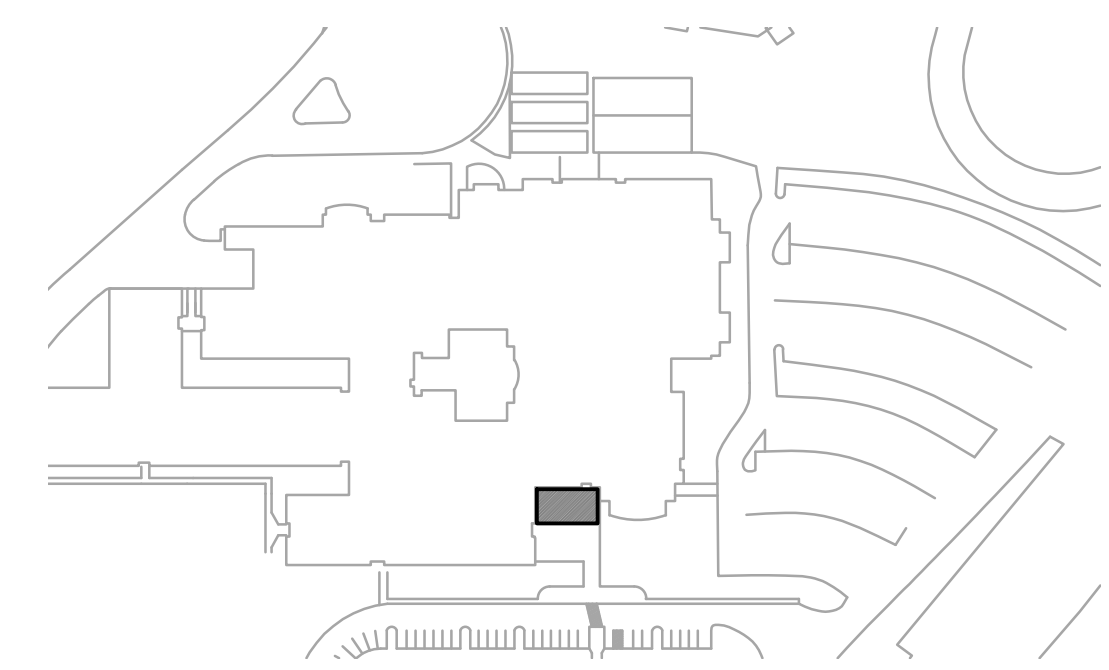
- DEMOLITION NOTES**
- DEMOLITION SCOPE OF WORK SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: ALL EXISTING FLOOR FINISHES, ALL CEILING SYSTEMS, GYPSUM BOARD SOFFITS, WALL & ASSOCIATED DOOR AS INDICATED, ALL PLUMBING FIXTURES & ACCESSORIES, MARKER BOARDS, TACK BOARDS, FOLDING PARTITION SYSTEMS, MILLWORK/CASEWORK, ETC. **IT IS THE INTENT OF THESE DOCUMENTS FOR ALL DEMOLITION WORK AS REQUIRED TO PROVIDE NEW CONSTRUCTION TO BE INCLUDED IN BASE BID, WHETHER INDICATED OR NOT.** DASHED LINES INDICATE GENERAL EXISTING CONSTRUCTION TO BE REMOVED. CONTACT ARCHITECT FOR DEMOLITION CLARIFICATION IF UNCLEAR ON WHICH ITEMS ARE TO BE REMOVED.
 - GENERAL CONTRACTOR SHALL REMOVE ALL ABANDONED ARCHITECTURAL, PLUMBING, MECHANICAL, ELECTRICAL CONSTRUCTION. PROTECT ITEMS TO BE RELOCATED OR DESIGNATED AS SALVAGED.
 - CONTRACTOR SHALL PROTECT EXISTING CONSTRUCTION & SYSTEMS TO REMAIN AND CORRECT ANY DAMAGE RESULTING FROM DEMOLITION WORK. PROTECT FIRE ALARM SYSTEM AND MAINTAIN OPERATIONAL. MAINTAIN EXISTING FIRE WALL FUNCTIONAL.
 - COORDINATE WITH FINISH LEGEND AND SCHEDULE TO DETERMINE EXISTING SURFACES TO RECEIVE NEW FINISHES REMOVE EXISTING FINISHES AS REQUIRED AND MAKE EXISTING SURFACES READY TO RECEIVE NEW FINISHES. PATCH AND/OR REPAIR EXISTING ADJACENT CONSTRUCTION TO REMAIN.
 - DISCONNECT & REMOVE ANY EXISTING ABANDONED FLOOR CONDUIT AND OUTLETS. PATCH AND REPAIR SLAB.
 - CONTACT AND COORDINATE W/ ARCHITECT & STRUCTURAL ENGINEER BEFORE REMOVING OR ALTERING ANY STRUCTURAL COMPONENTS. SEE RESPECTIVE CIVIL, STRUCTURAL, PLUMBING, HVAC AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
 - COORDINATE WITH THE OWNER BEFORE REMOVING ANY SALVAGEABLE MATERIALS & EQUIPMENT.
 - DEMOLITION WORK SHALL NOT CHANGE THE INTEGRITY OF EXISTING STRUCTURE, FIRE ALARM SYSTEM & FIRE RATED CONSTRUCTION TO REMAIN. ANY EXISTING FIRE RATED CONSTRUCTION TO REMAIN WHICH HAS BEEN AFFECTED BY DEMOLITION WORK MUST BE CORRECTED AND MADE TO MEET THE ORIGINAL RATING. COORDINATE WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS TO DETERMINE LIMITS OF DEMOLITION REQUIRED FOR NEW CONSTRUCTION.

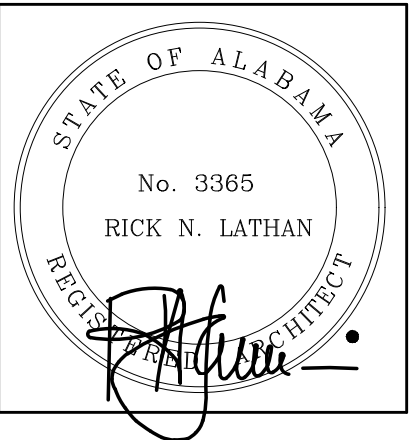
- DEMOLITION NOTES**
- REMOVE EXISTING CEILING SYSTEM
 - REMOVE EXISTING FLOORING AND BASE, PREP EXISTING SLAB TO RECEIVE NEW FINISHES AS REQUIRED.
 - REMOVE EXISTING LIGHT FIXTURES.



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

KEY PLAN



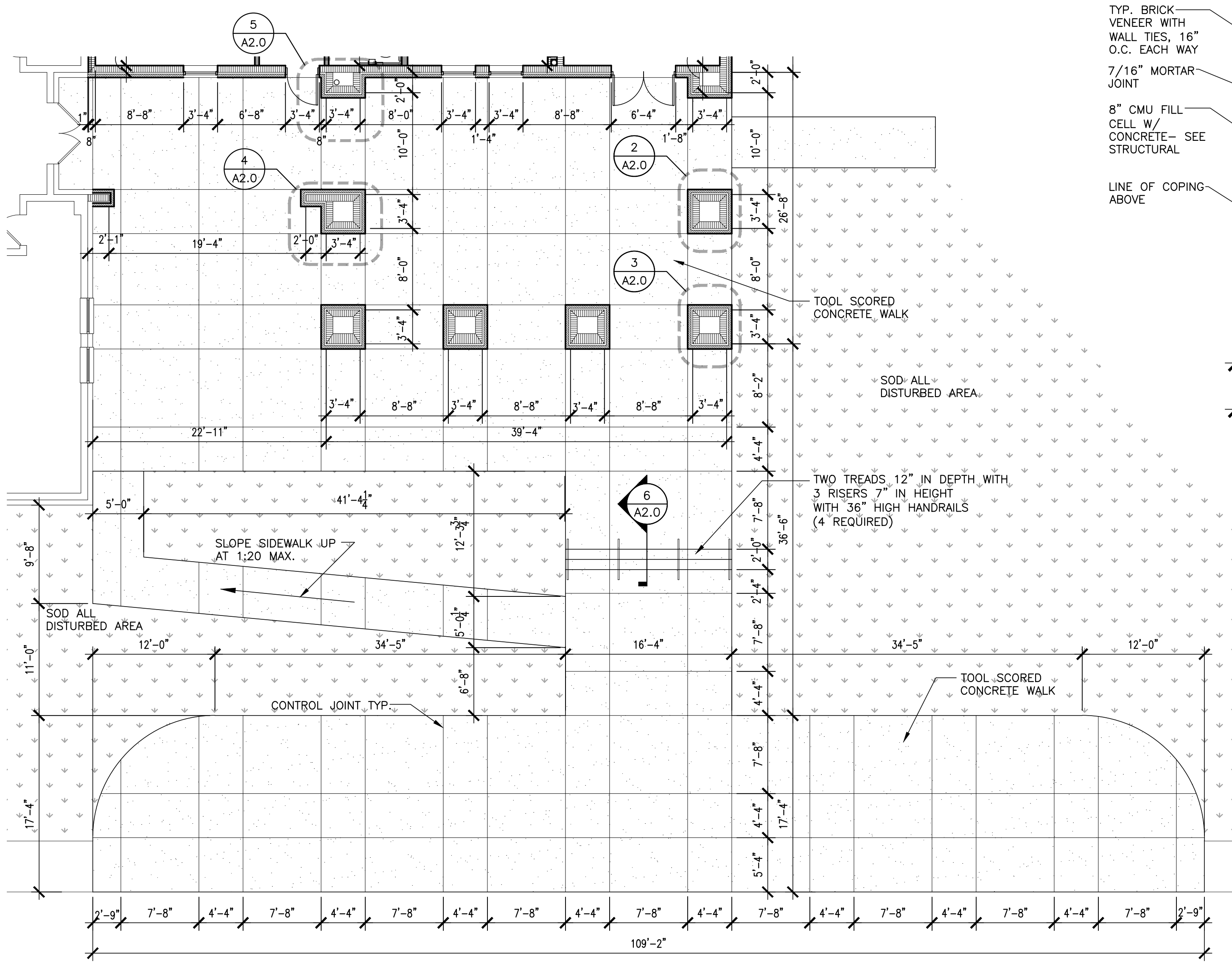


SHEET TITLE:
ENLARGED SIDEWALK PLAN

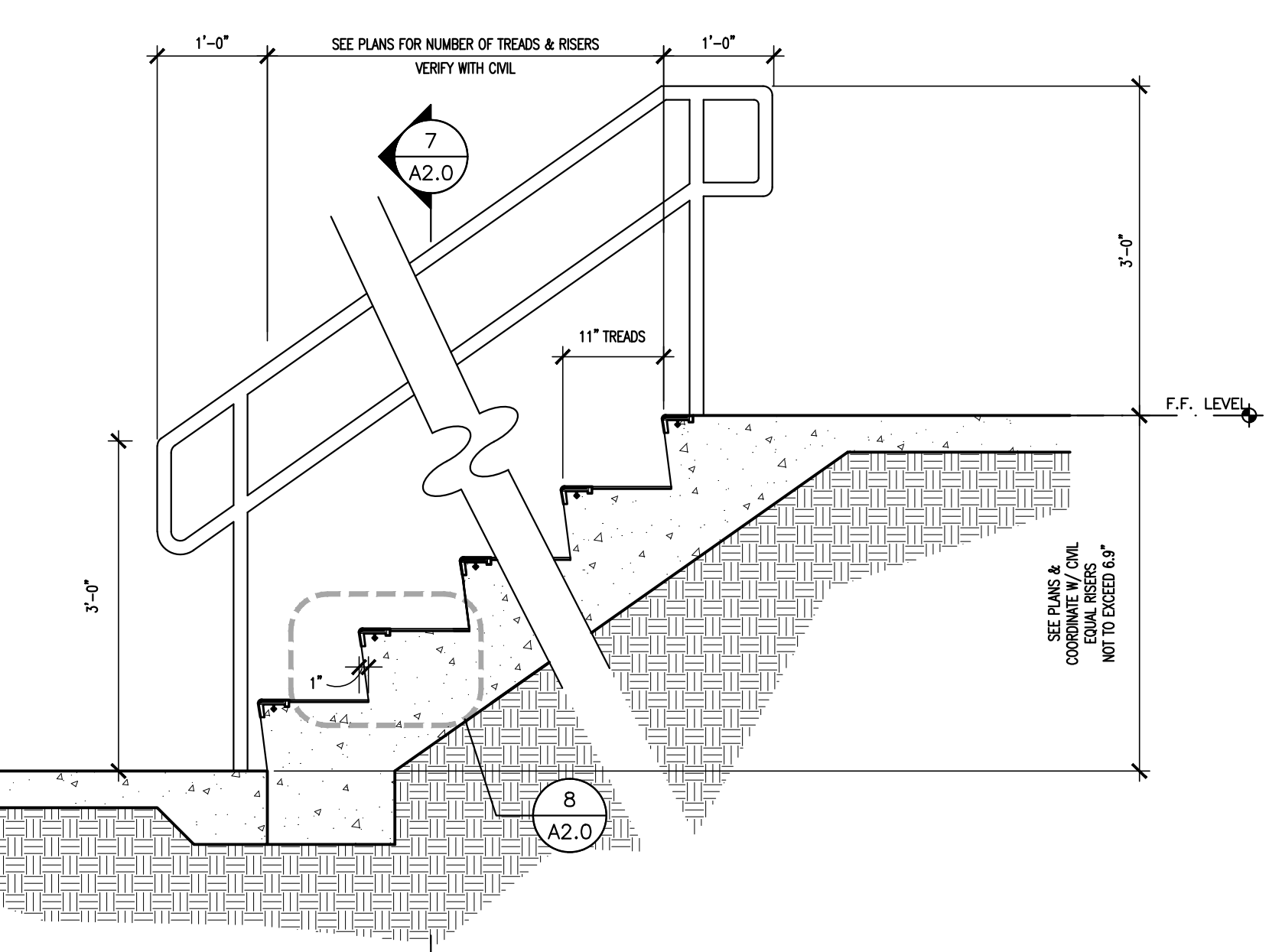
PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
DATE: MARCH 8, 2024

JOB NO. 23-92
SHEET NO.

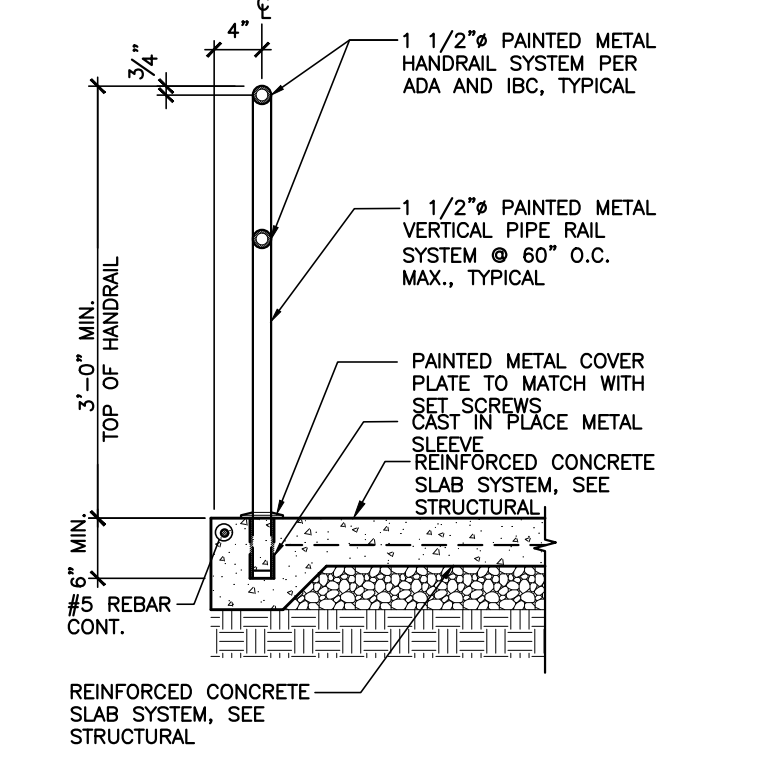
A2.0
2 OF 17



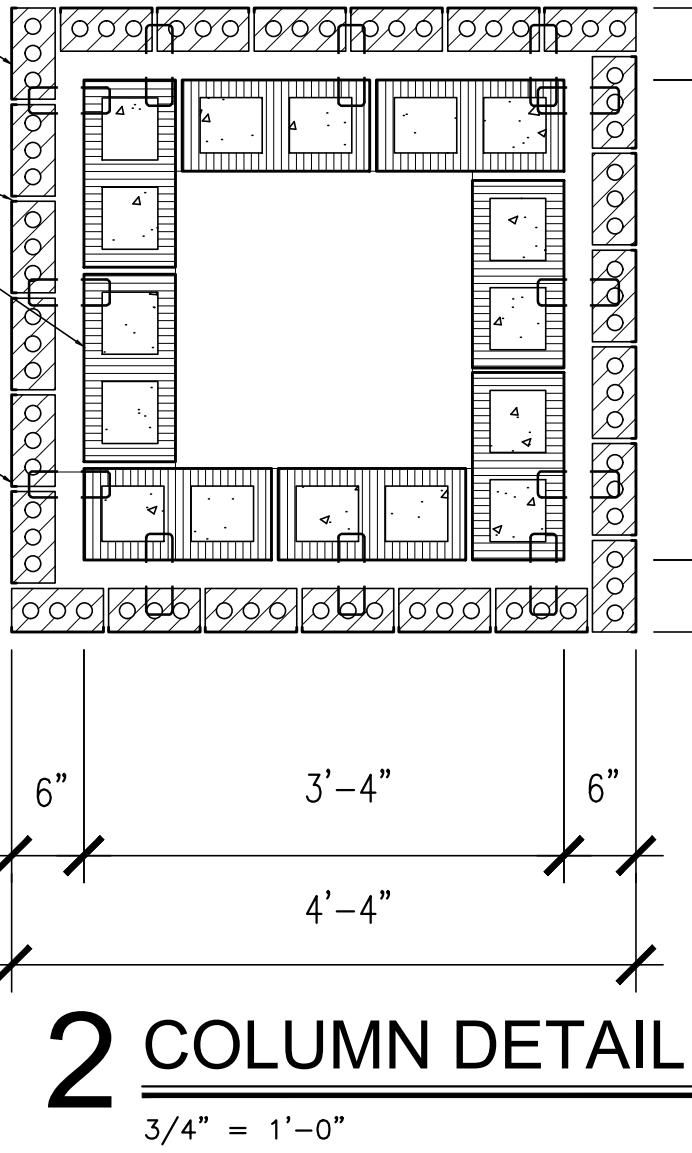
1 PARTIAL SIDEWALK / CANOPY PLAN
1/8" = 1'-0"



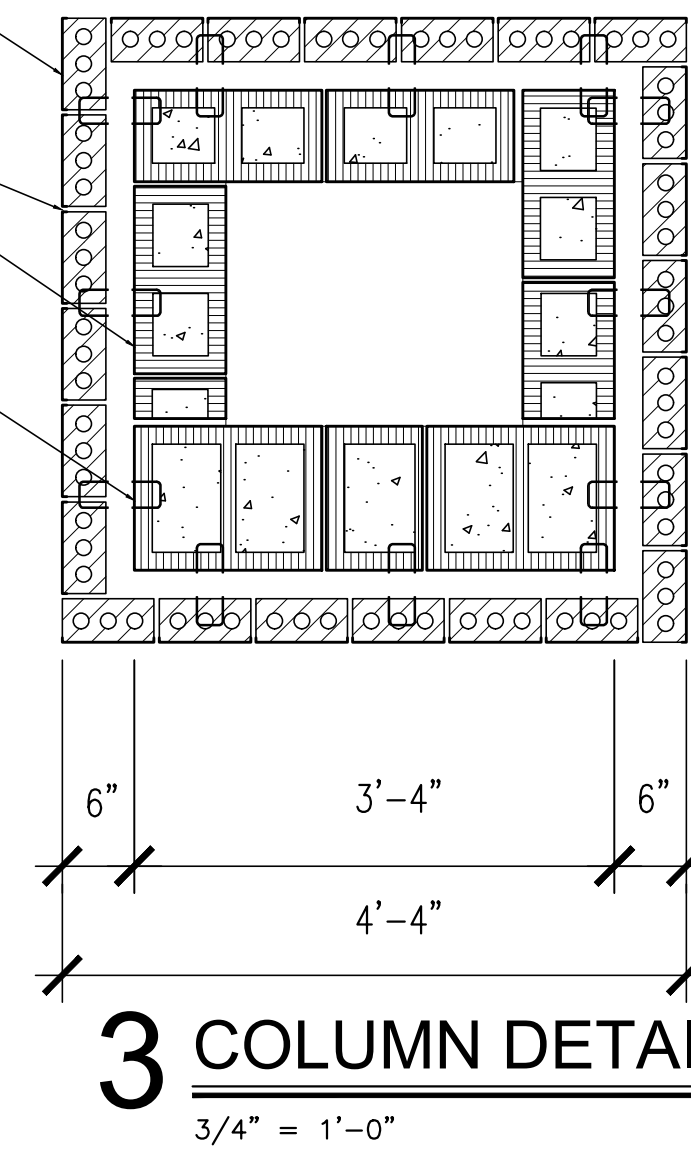
6 STAIR DETAIL
3/4" = 1'-0"



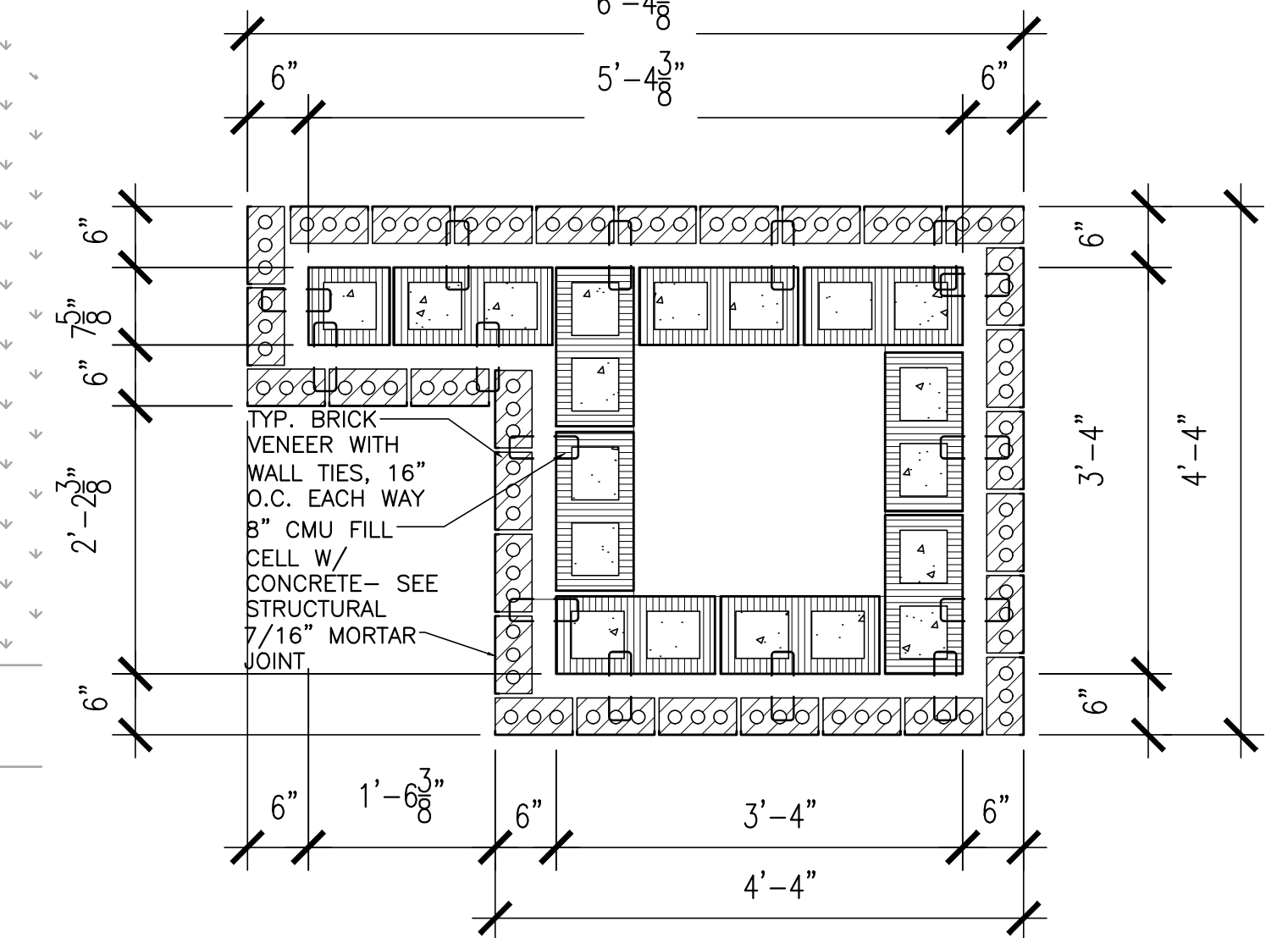
7 HANDRAIL DETAIL
3/4" = 1'-0"



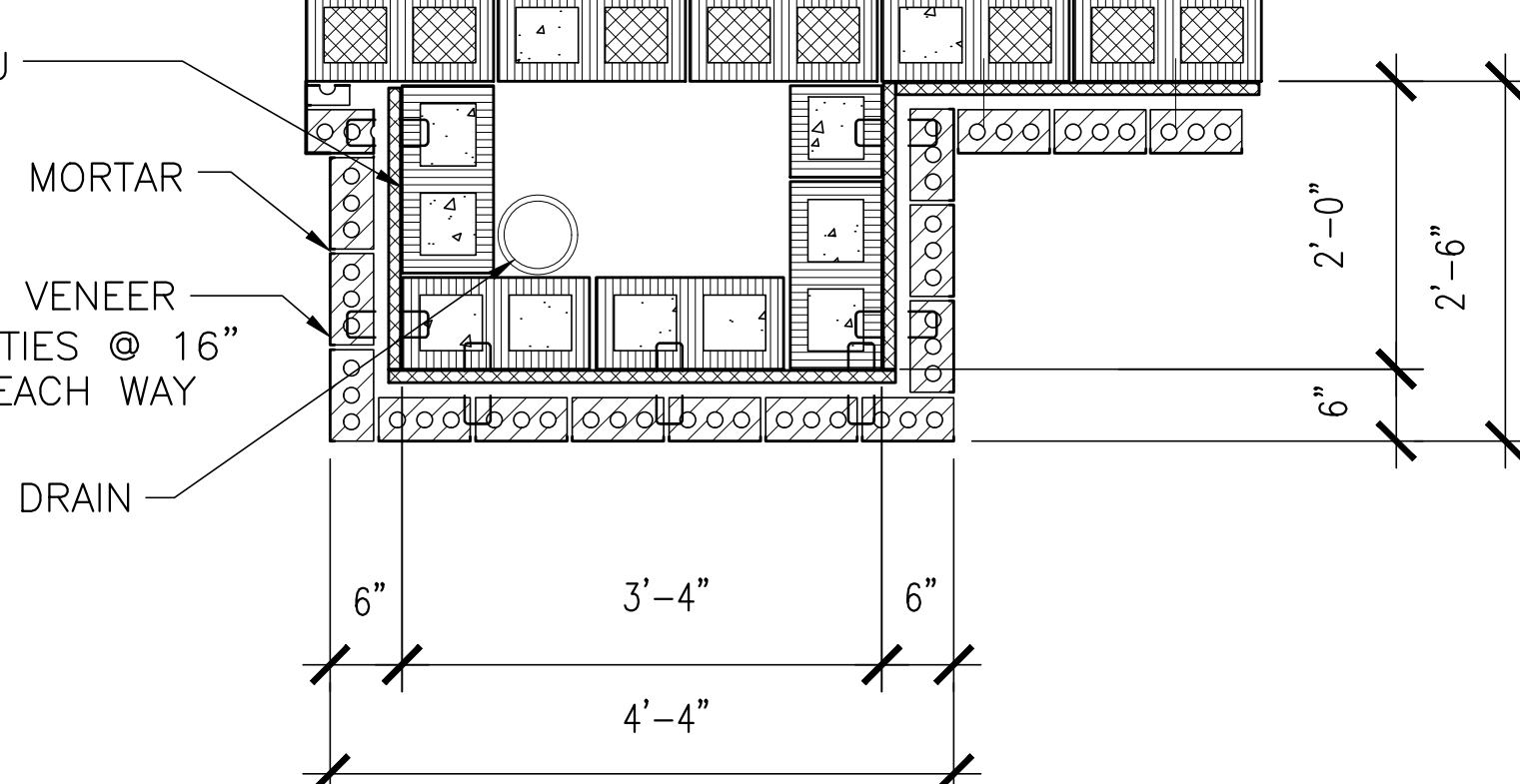
2 COLUMN DETAIL
3/4" = 1'-0"



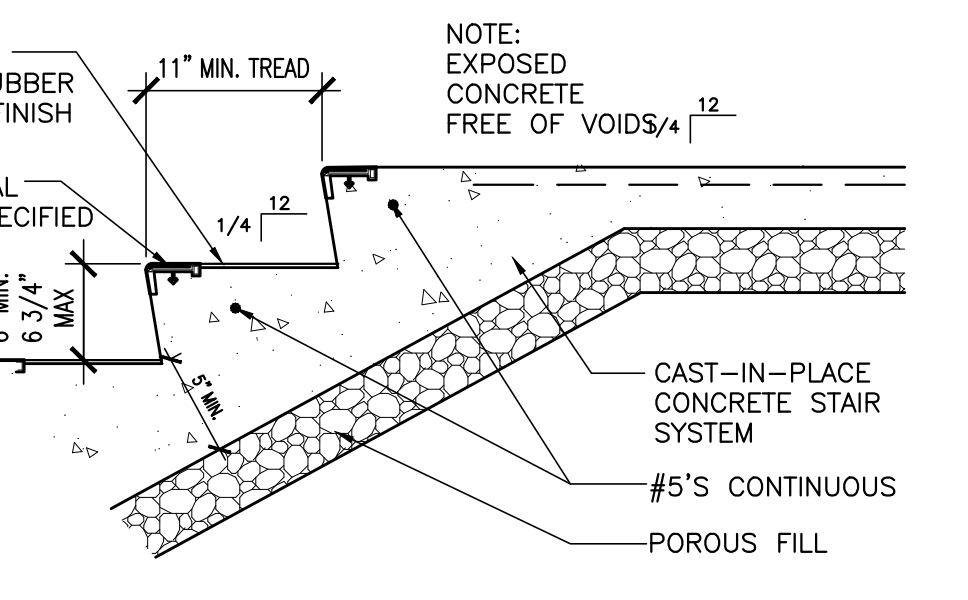
3 COLUMN DETAIL
3/4" = 1'-0"



4 COLUMN DETAIL
3/4" = 1'-0"



5 COLUMN DETAIL
3/4" = 1'-0"



8 STAIR DETAIL
1" = 1'-0"

SYMBOLS LEGEND	
A200 ROOM NUMBER	DOOR TYPE DOOR RATING HARDWARE SYMBOL
FEC RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER	DOOR TYPE DOOR RATING HARDWARE SYMBOL DOOR ALTERNATE
FE SURFACE MOUNT FIRE EXTINGUISHER	ELEV. MARK SHEET NUMBER
+ INTERIOR FLOOR ELEVATION	WALL SECT. MARK SHEET NUMBER
F.D. FLOOR DRAIN	BLDG. SECT. MARK SHEET NUMBER
PSM FULLY RECESSED PROJ. SCREEN-MOTORIZED	ELEV. MARK SHEET NUMBER INT. ELEVATION
CJ CONTROL JOINT	EXTERIOR WINDOW
EJ EXPANSION JOINT	STOREFRONT
AREA OF CONCRETE	INTERIOR WINDOW
AREA OF SOD	EXISTING DOOR
MR MIRROR	NEW DOOR AND SWING

WALL TYPE LEGEND	
EXTERIOR WALL	NEW 4" BRICK VENEER W/ AIR SPACE AND RIGID INSULATION ON REINFORCED CMU WITH DAMPROOFING. PROVIDE BRICK WALL TIES @ 16" O.C.
CMU WALL	8" OR 12" CONCRETE MASONRY WALL SEE PLAN FOR WALL WIDTH CHANGES SEE LIFE SAFETY PLAN FOR FIRE RATING
	5/8" GYPSUM BOARD EACH SIDE OF METAL STUDS AT 24"

GENERAL NOTES

EXTEND & KEY RATED WALLS TO BOTTOM OF ROOF DECK - SEE LIFE SAFETY DRAWINGS FOR RATED WALL LOCATIONS.

COORDINATE W/ ELECTRICAL & MECHANICAL AND PROVIDE CONCRETE EQUIPMENT PAD AS REQUIRED

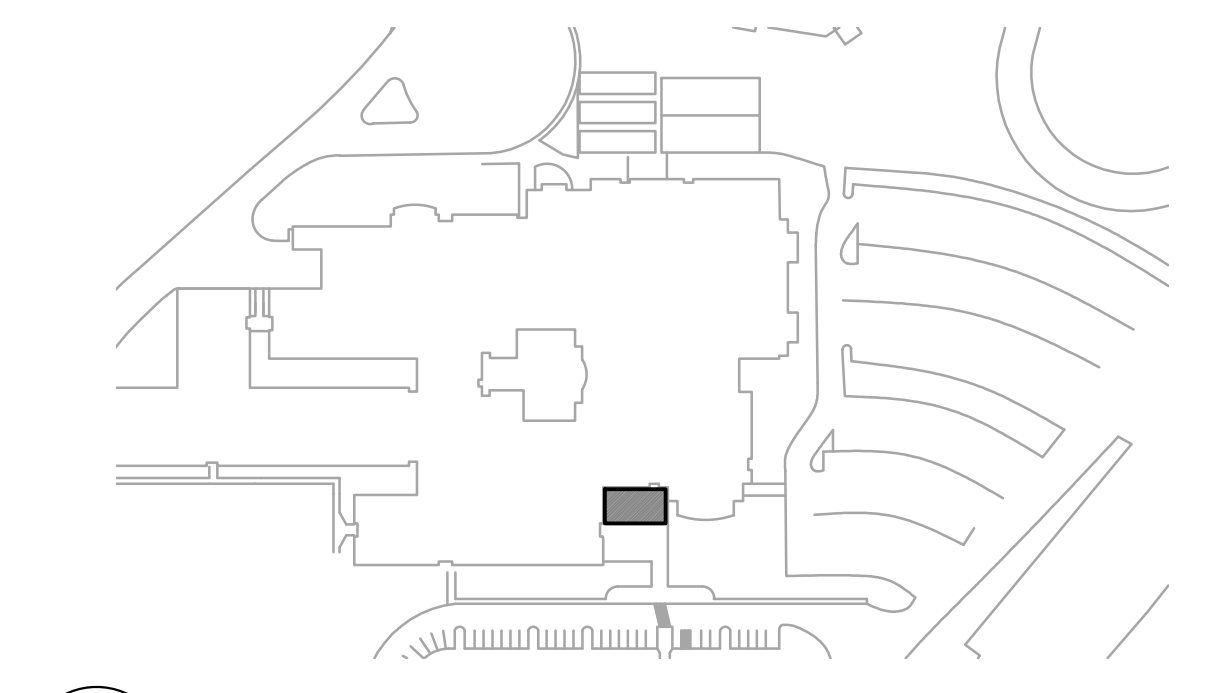
SEE ELEVATIONS AND ROOF PLAN FOR DOWNSPOUT LOCATIONS

SLOPE ALL SIDEWALKS AWAY FROM THE BUILDING

ALL DOWNSPOUTS INTERSECTING CONCRETE PADS AND/OR WALKS SHALL BE PROVIDED WITH BOOTS AND 4" DIAMETER LEADER PIPING EXTENDED AND TIED INTO STORM DRAINAGE SYSTEM

AT ALL AREAS OF WALL INFILL TOOTH IN NEW MASONRY AS REQUIRED TO MATCH EXISTING COURSING AS REQUIRED.

ALL PLAN DIMENSIONS ARE TO FACE OF CMU WALL UNLESS NOTED OTHERWISE



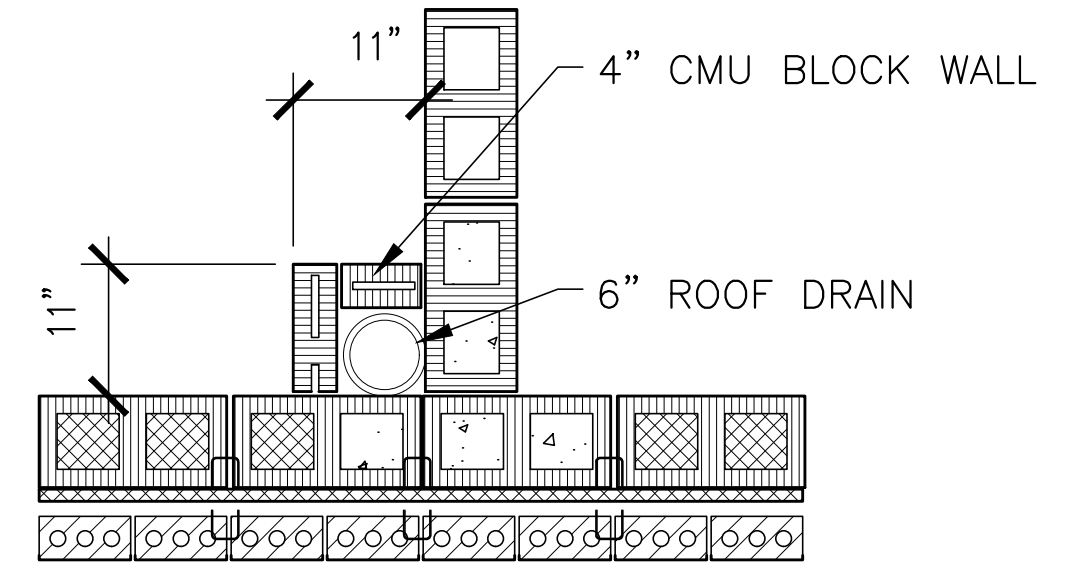
KEY PLAN

GENERAL NOTES	
EXTEND & KEY RATED WALLS TO BOTTOM OF ROOF DECK - SEE LIFE SAFETY DRAWINGS FOR RATED WALL LOCATIONS.	
COORDINATE W/ ELECTRICAL & MECHANICAL AND PROVIDE CONCRETE EQUIPMENT PAD AS REQUIRED	
SEE ELEVATIONS AND ROOF PLAN FOR DOWNSPOUT LOCATIONS	
SLOPE ALL SIDEWALKS AWAY FROM THE BUILDING	
ALL DOWNSPOUTS INTERSECTING CONCRETE PADS AND/OR WALKS SHALL BE PROVIDED WITH BOOTS AND 4" DIAMETER LEADER PIPING EXTENDED AND TIED INTO STORM DRAINAGE SYSTEM	
AT ALL AREAS OF WALL INFILL TOOTH IN NEW MASONRY AS REQUIRED TO MATCH EXISTING COURSING AS REQUIRED.	
ALL PLAN DIMENSIONS ARE TO FACE OF CMU WALL UNLESS NOTED OTHERWISE	

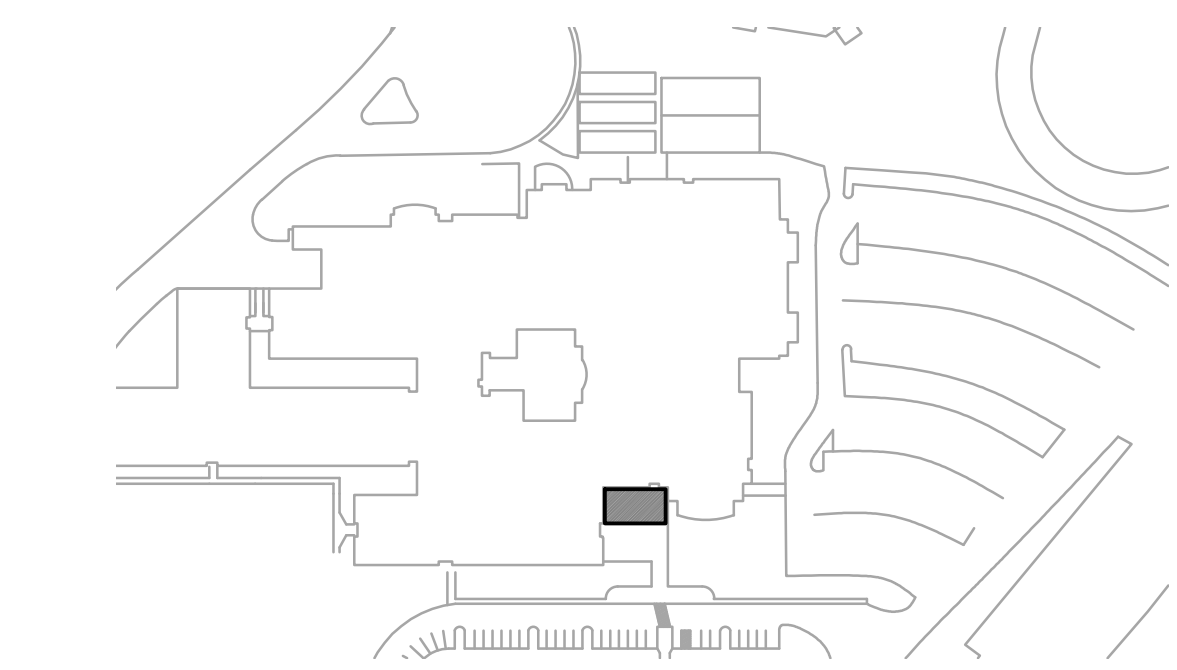
WALL TYPE LEGEND	
	NEW 4" BRICK VENEER W/ AIR SPACE AND RIGID INSULATION ON REINFORCED CMU WITH DAMPPROOFING. PROVIDE BRICK WALL TIES @ 16" O.C.
	8" OR 12" CONCRETE MASONRY WALL. SEE PLAN FOR WALL WIDTH CHANGES. SEE LIFE SAFETY PLAN FOR FIRE RATING.
	NEW 5/8" GYPSUM BOARD EACH SIDE OF METAL STUDS AT 24"
	EXISTING WALL
	SOUND ATTENUATION INSULATION

SYMBOLS LEGEND	
	ROOM NUMBER
	RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER
	SURFACE MOUNT FIRE EXTINGUISHER
	INTERIOR FLOOR ELEVATION
	FLOOR DRAIN
	FULLY RECESSED PROJ. SCREEN-MOTORIZED
	CONTROL JOINT
	EXPANSION JOINT
	AREA OF CONCRETE
	MIRROR
	EXISTING DOOR
	DOOR TYPE
	DOOR RATING
	DOOR HARDWARE SYMBOL
	DOOR ALTERNATE
	ELEV. MARK
	SHEET NUMBER
	WALL SECT. MARK
	BLDG. SECT. MARK
	ELEV. MARK
	SHEET NUMBER
	INTERIOR ELEVATION
	EXTERIOR WINDOW
	STOREFRONT
	INTERIOR WINDOW
	NEW DOOR AND SWING

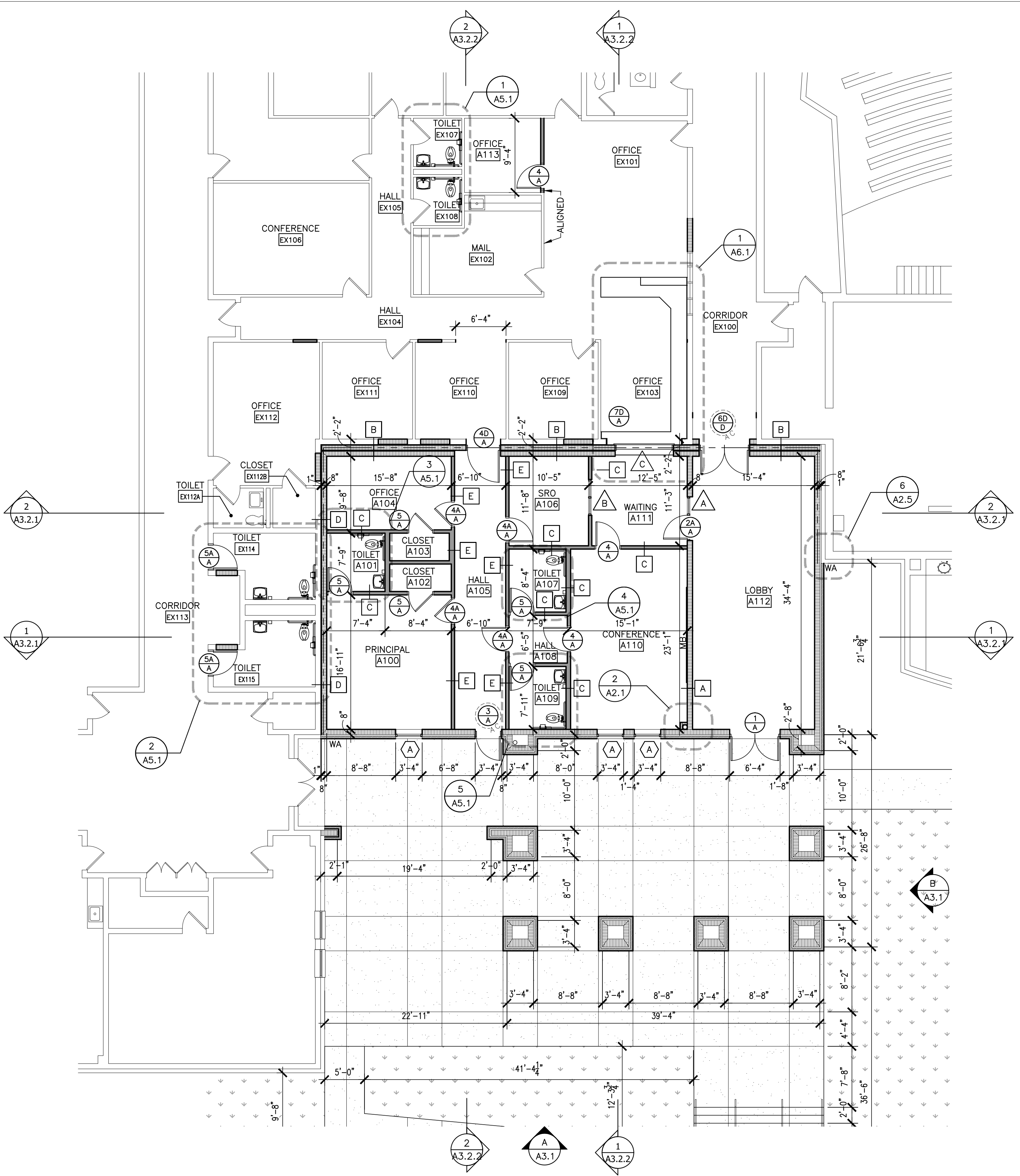
PARTITION SCHEDULE	
	TYPE A FIRE RATING NOT REQUIRED. SEAL AROUND DUCTS, PIPING, ETC.
	TYPE B FIRE RATING TWO HOUR FIRE WALL. SEAL AROUND DUCTS, PIPING, ETC.
	TYPE C FIRE RATING NOT REQUIRED. SEAL AROUND DUCTS, PIPING, ETC.
	TYPE D FIRE RATING TWO HOUR FIRE WALL. SEAL AROUND DUCTS, PIPING, ETC.
	TYPE E FIRE RATING ONE HOUR FIRE BARRIER WALL. SEAL AROUND DUCTS, PIPING, ETC.



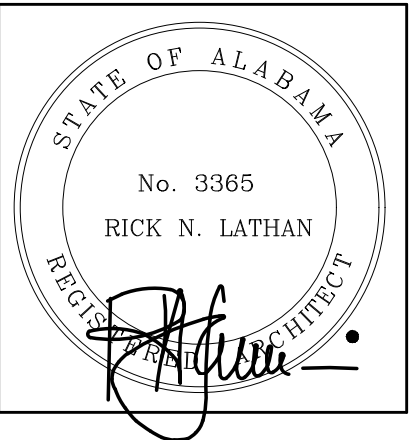
2 DETAIL
 3/4" = 1'-0"



KEY PLAN



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

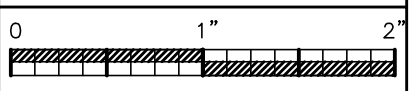


SHEET TITLE:
 ROOF PLAN AND DETAILS

PROJ. MGR.: R. LATHAN
 DRAWN: WW & ELM
 DATE: MARCH 8, 2024

JOB NO. **23-92**

SHEET NO:
A2.3
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- ROOF GENERAL NOTES**
- THE CONTRACTOR TO VERIFY EXISTING CONDITIONS TO HIS SATISFACTION PRIOR TO SUBMITTING HIS BID.
 - CONTRACTOR TO COORDINATE LOCATIONS OF ROOF PENETRATIONS WITH MECHANICAL AND/OR ARCHITECT.
 - SEE MECHANICAL, PLUMBING AND ELECTRICAL FOR ADDITIONAL ROOF WORK AND PENETRATIONS; MAKE ALL PENETRATIONS WEATHERTIGHT UNDER ROOFING SCOPE OF WORK.
- NOTE:** COORDINATE WITH PLUMBING, MECHANICAL AND ELECTRICAL FOR ROOF PENETRATIONS. FLASH ALL PENETRATIONS. ROOFING CONTRACTOR SHALL MAINTAIN SINGLE SOURCE RESPONSIBILITY FOR WEATHER TIGHTNESS OF ROOF PENETRATIONS AS PART OF ROOFING SYSTEM ENVELOPE.

ROOF LEGEND

	TPO ROOFING SYSTEM ON 1/2" COVERBOARD ON POLYISOCYANURATE INSULATION OVER METAL DECKING AS SPECIFIED AND DETAILED.
	WALK PADS @ EACH MECHANICAL UNIT AS DETAILED AND SPECIFIED, TYPICAL AT ALL EQUIPMENT.
	PREFINISHED ALUMINUM CANOPY SYSTEM AS DETAILED AND SPECIFIED.

ROOF LEGEND

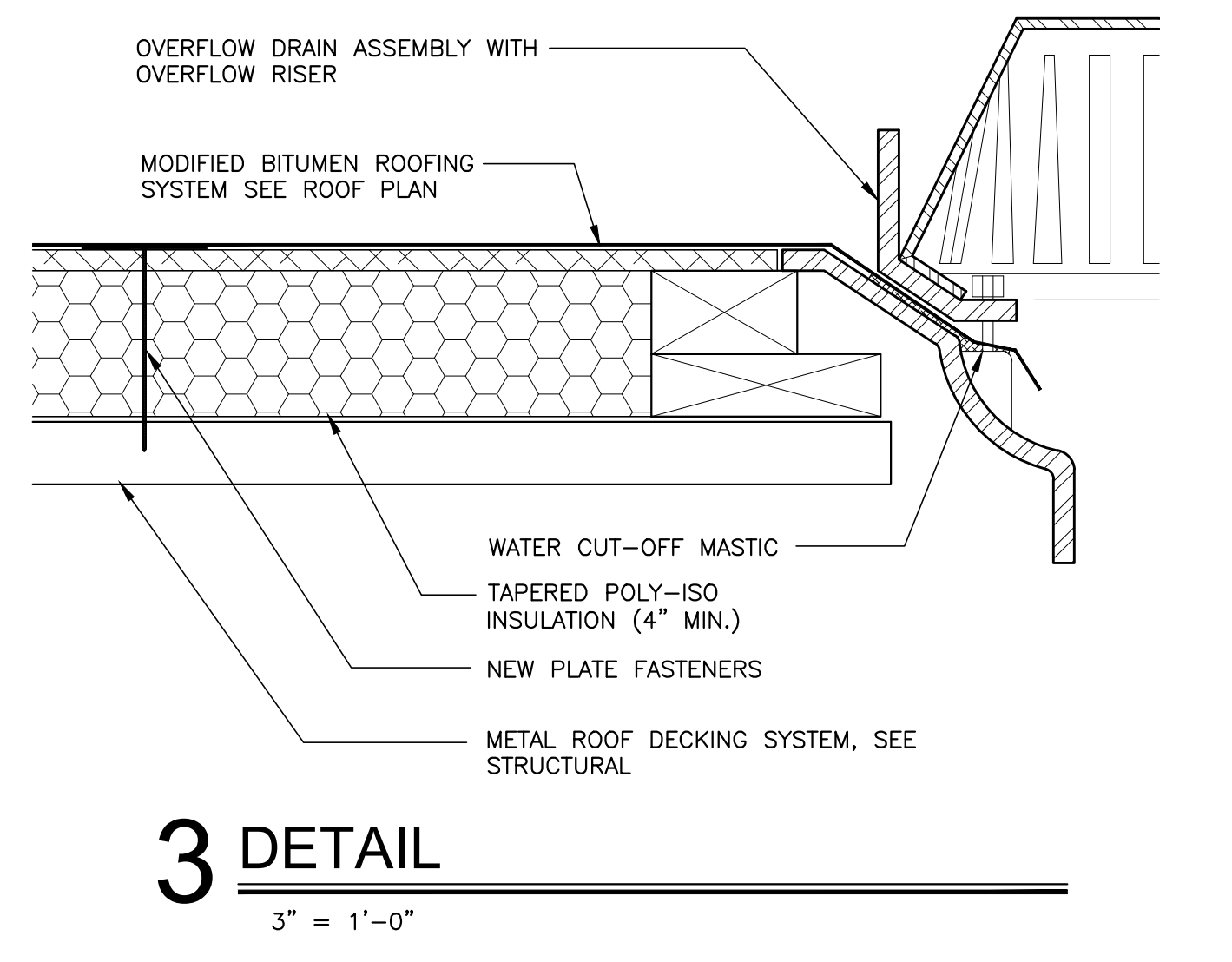
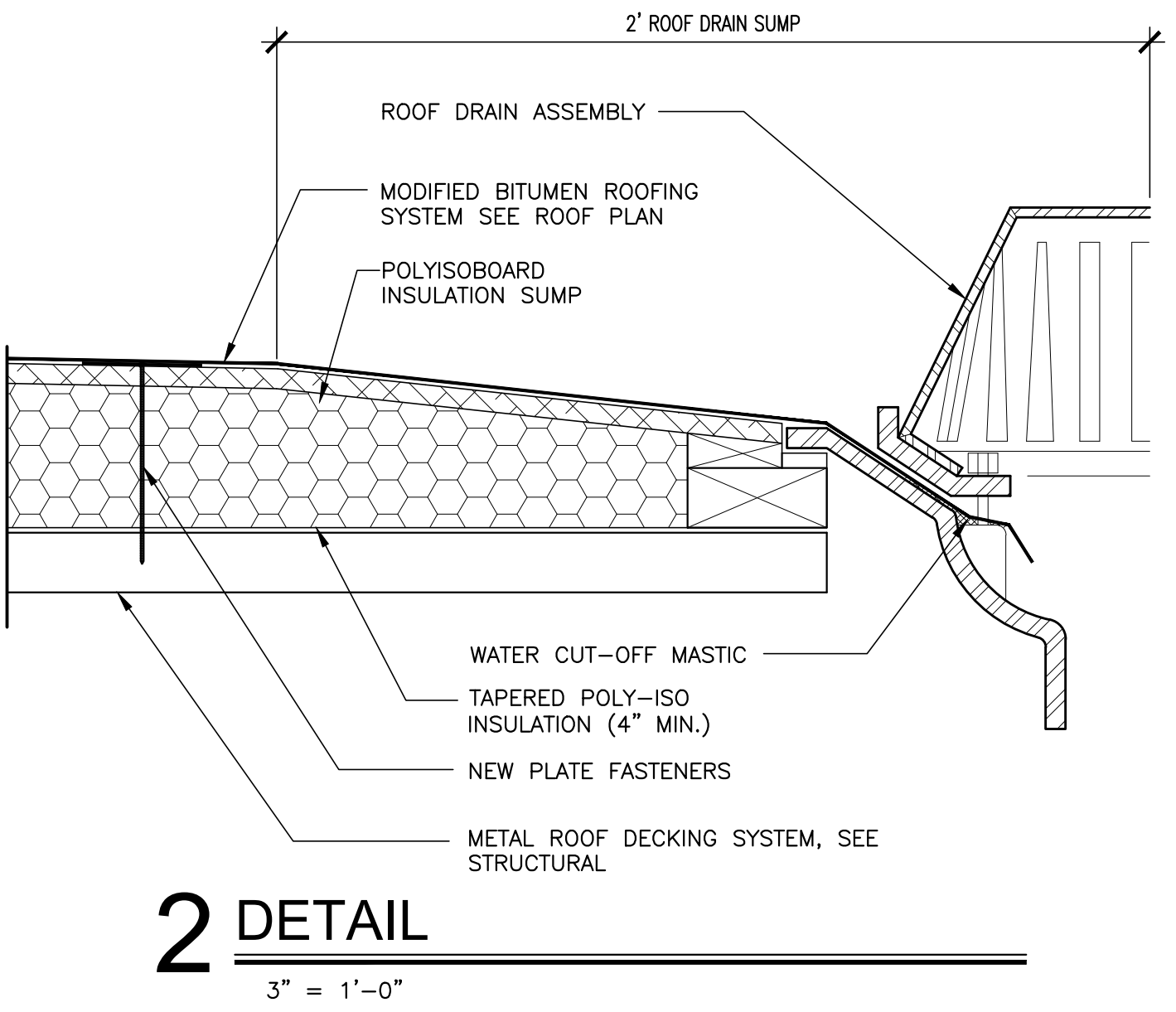
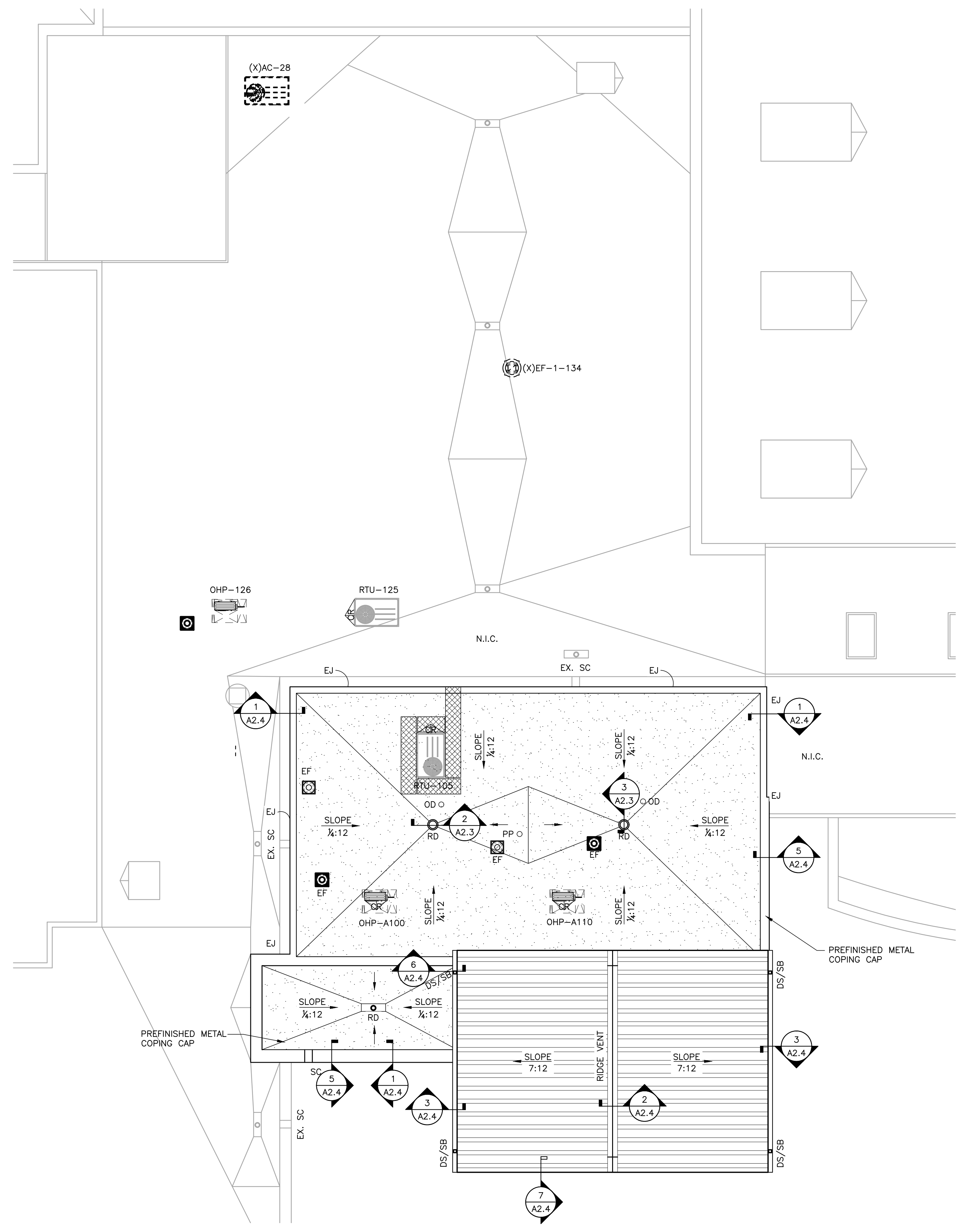
	DETAIL NUMBER
	ROOF DETAIL MARKER
	SHEET NUMBER
	ROOF SLOPE MARKER
	DIRECTION OF DOWNWARD SLOPE
	RISE:RUN

CR	CRICKET
RD	ROOF DRAIN
OD	OVERFLOW DRAIN
PV	PLUMBING VENT
RTU	ROOF TOP UNIT
PP	PITCH POCKET
EF	EXHAUST FAN
EJ	EXPANSION JOINT
N.I.C.	NOT IN CONTRACT
SC	SCUPPER

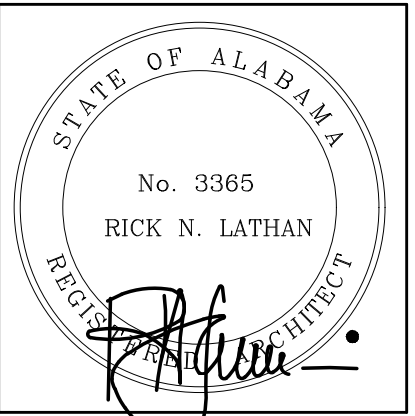
- NEW STANDING SEAM ROOF SCOPE OF WORK**
- PROVIDE ROOF DECKING SYSTEM AS INDICATED BY STRUCTURAL.
 - PROVIDE 1" POLY-ISO INSULATION.
 - PROVIDE BLOCKING, WOOD CANTS, FASCIA BOARDS ETC. AS INDICATED AND REQUIRED.
 - PROVIDE ICE AND WATER SHIELD IN ALL VALLEYS, PERIMETERS, AND ALONG PARAPET WALLS REGARDLESS OF SLOPE AS INDICATED IN SPECIFICATIONS.
 - PROVIDE STANDING SEAM ROOFING SYSTEM AS SPECIFIED. INSTALLED IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.

- GENERAL ROOF NOTES**
- INSURE ADEQUATE CIRCULATION IS PROVIDED FOR ALL AREAS. INSURE UNOBSTRUCTED SOFFIT VENTS AND PROPERLY OPERATING ATTIC EXHAUST FANS.
 - PROVIDE PREFINISHED SHEET METAL AND FLASHING COMPONENTS INCLUDING: EDGE METAL, PIPE FLASHING, EAVE DRIPS, FASCIA METAL, REGLET FLASHING, ETC.
 - ALL GUTTERS SHALL HAVE POSITIVE DRAINAGE TO DOWNSPOUT LOCATIONS AND SHALL HAVE PROPER ATTACHMENT AS REQUIRED. PREP AND SEAL ALL GUTTER JOINTS AND OUTLET TUBES AS REQUIRED.
 - PROVIDE CLEAN-UP AND CORRECT ANY DAMAGES TO EXISTING BUILDING AND GROUNDS.
 - PROVIDE FLASHING AS REQUIRED AT ALL MECHANICAL, PLUMBING AND ELECTRICAL PENETRATIONS WHETHER INDICATED OR NOT. MAKE ALL PENETRATIONS WEATHERTIGHT UNDER ROOFING SCOPE OF WORK.
 - SEE MECHANICAL, PLUMBING AND ELECTRICAL FOR ADDITIONAL ROOF WORK AND PENETRATIONS; MAKE ALL PENETRATIONS WEATHERTIGHT UNDER ROOFING SCOPE OF WORK.
 - ALL DOWNSPOUTS TO EXIT ON GRADE UNLESS NOTED OTHERWISE. PROVIDE SPLASH BLOCKS AT EACH DOWNSPOUT LOCATION. COORDINATE WITH CIVIL.
 - NEW DOWNSPOUTS SHOWN ON THIS SHEET ARE SHOWN AS REFERENCE ONLY. CONTRACTOR TO SEE ELEVATIONS FOR DOWNSPOUT LOCATIONS AND TO AVOID ANY CONFLICT WITH DOORS, WINDOWS, AND HEAVY TRAFFIC AREAS.
 - MODIFY EXISTING ROOFING SYSTEM AS REQUIRED TO TIE INTO AND BLEND INTO NEW ROOFING SYSTEM FOR A COMPLETE AND WATER TIGHT ROOFING SYSTEM WITH NEW AND EXISTING COMPONENTS.

- NEW TPO ROOF SCOPE OF WORK**
- PROVIDE ROOF DECKING SYSTEM AS INDICATED BY STRUCTURAL.
 - PROVIDE BLOCKING, WOOD CANTS, FASCIA BOARDS ETC. AS INDICATED AND REQUIRED.
 - PROVIDE ICE AND WATER SHIELD IN ALL VALLEYS, PERIMETERS, AND ALONG PARAPET WALLS REGARDLESS OF SLOPE AS INDICATED IN SPECIFICATIONS.
 - PROVIDE TAPERED POLYISOCYANURATE INSULATION SYSTEM WITH 5" MINIMUM START FULLY ADHERED IN MANUFACTURER'S RECOMMENDED SEALANT AS SPECIFIED.
 - PROVIDE COVER BOARD FULLY ADHERED IN MANUFACTURER'S APPROVED SEALANT AS SPECIFIED.
 - PROVIDE TPO ROOFING SYSTEM AS SPECIFIED. INSTALLED IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
 - PROVIDE PREFINISHED METAL FLASHING SYSTEM AT CONNECTOR TO THE EXISTING BUILDING AS REQUIRED.



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



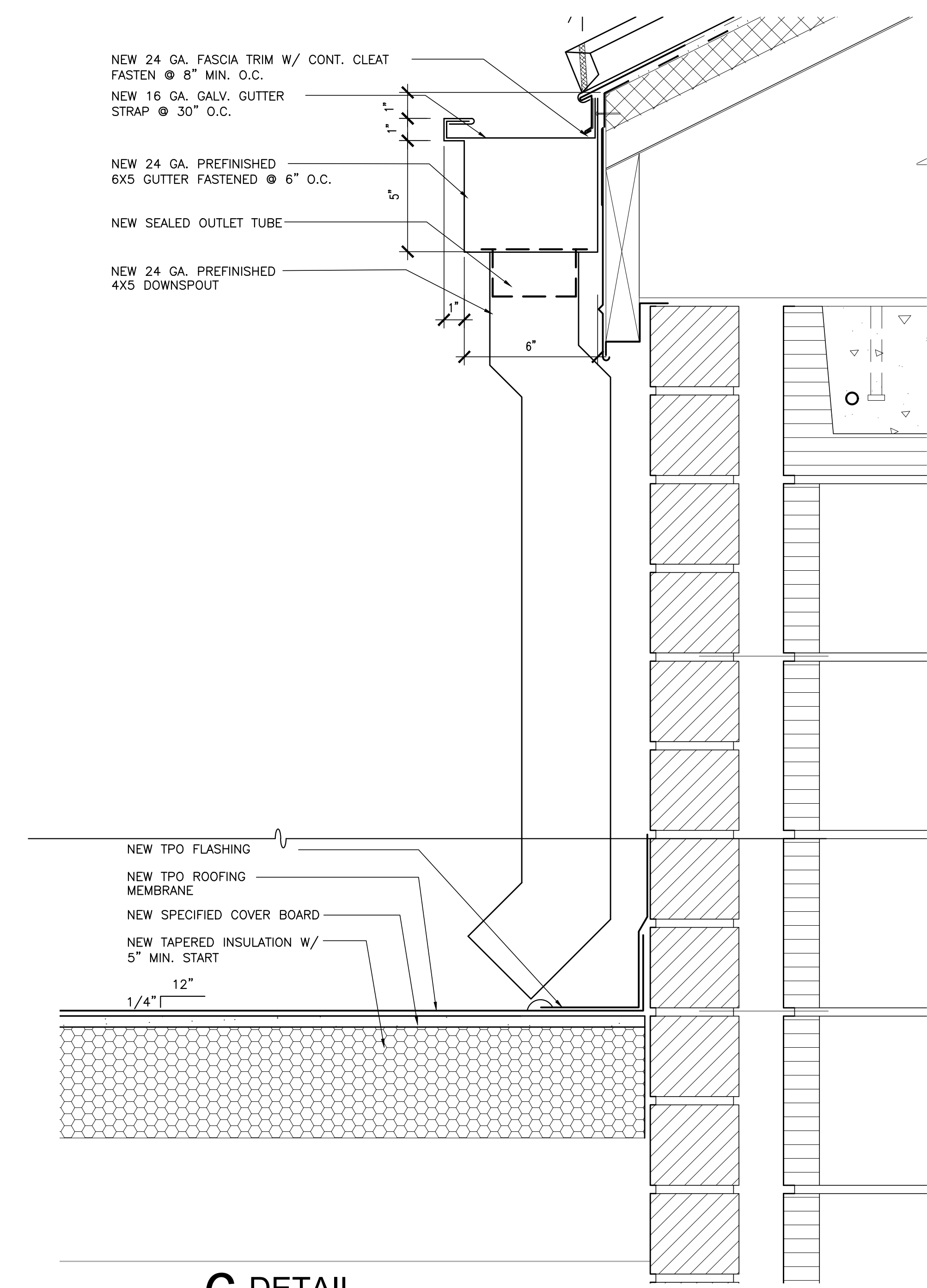
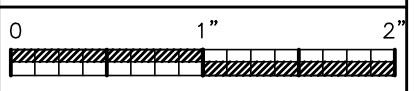
SHEET TITLE:
ROOF DETAILS

PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
DATE: MARCH 8, 2024
REVISIONS

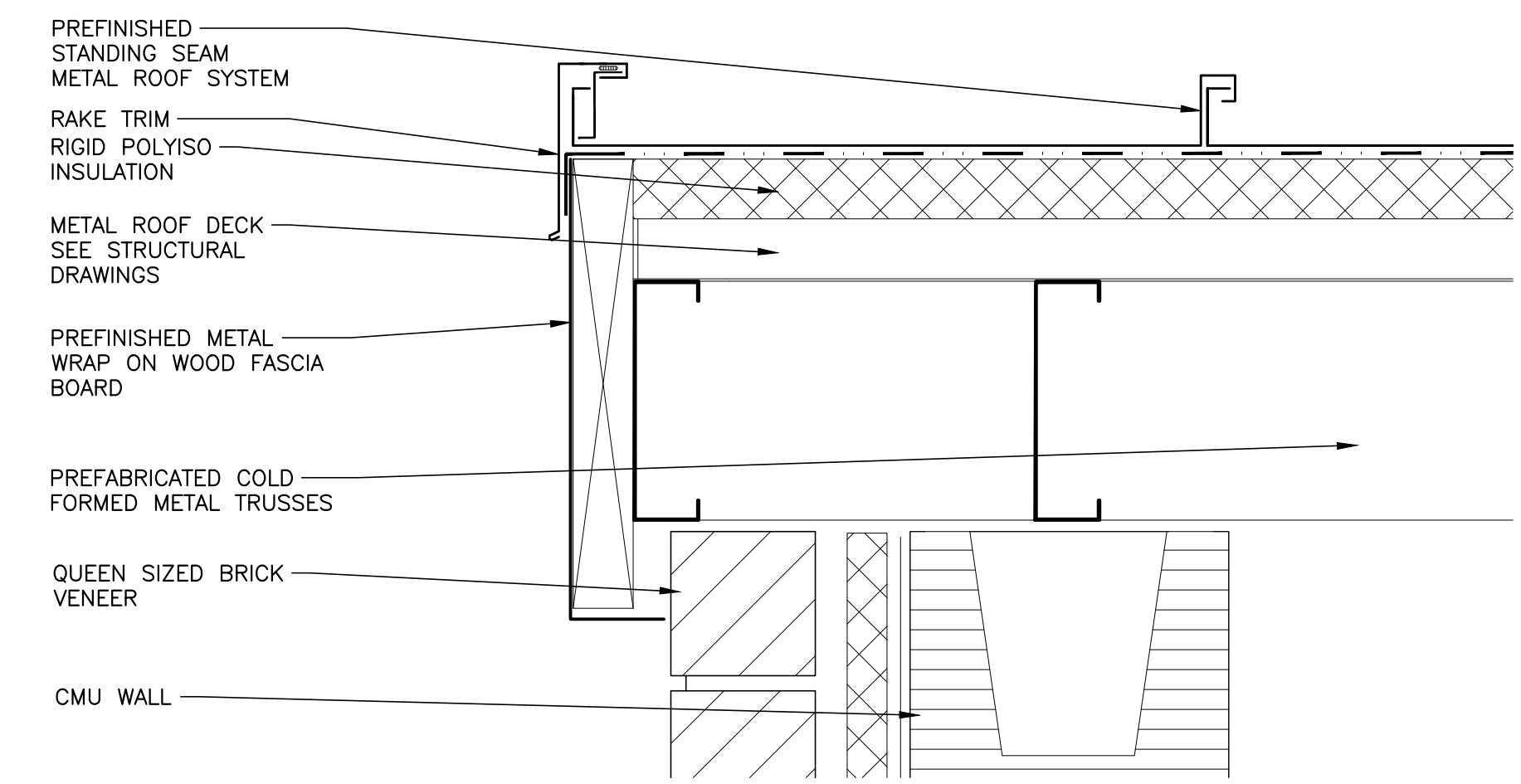
JOB NO. 23-92

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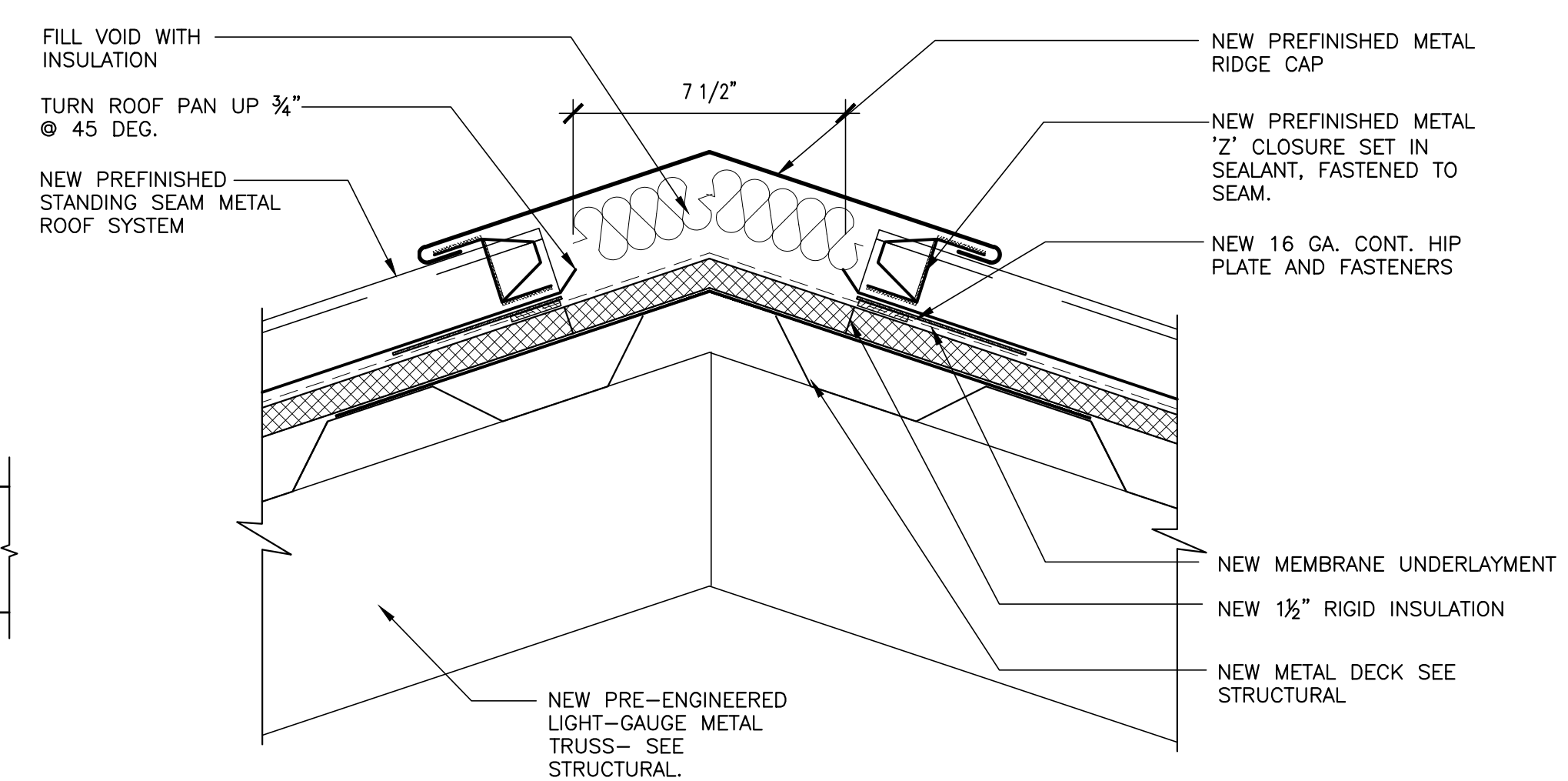
A2.4



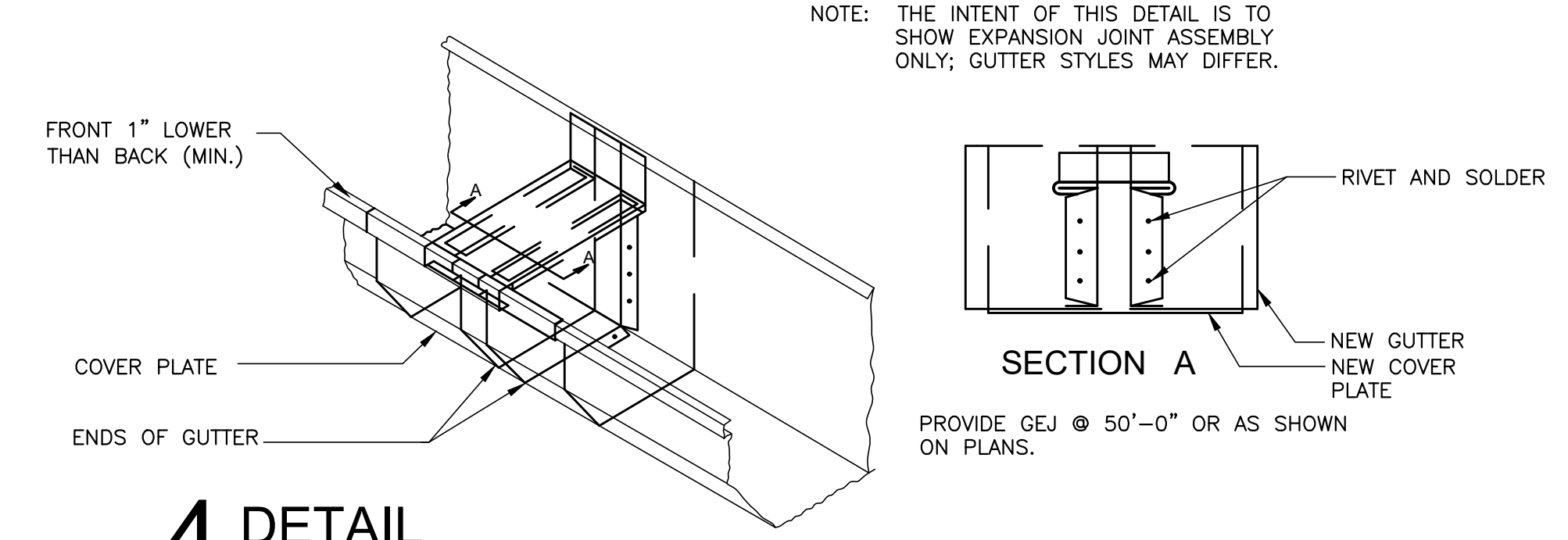
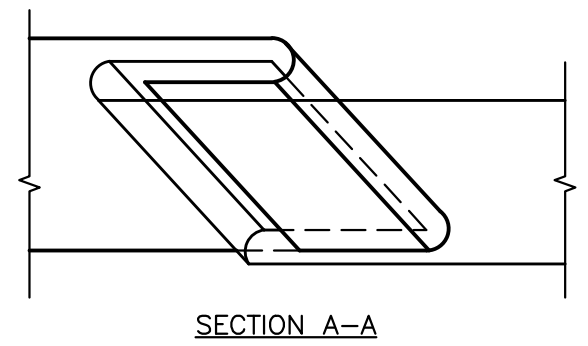
6 DETAIL
3" = 1'-0"



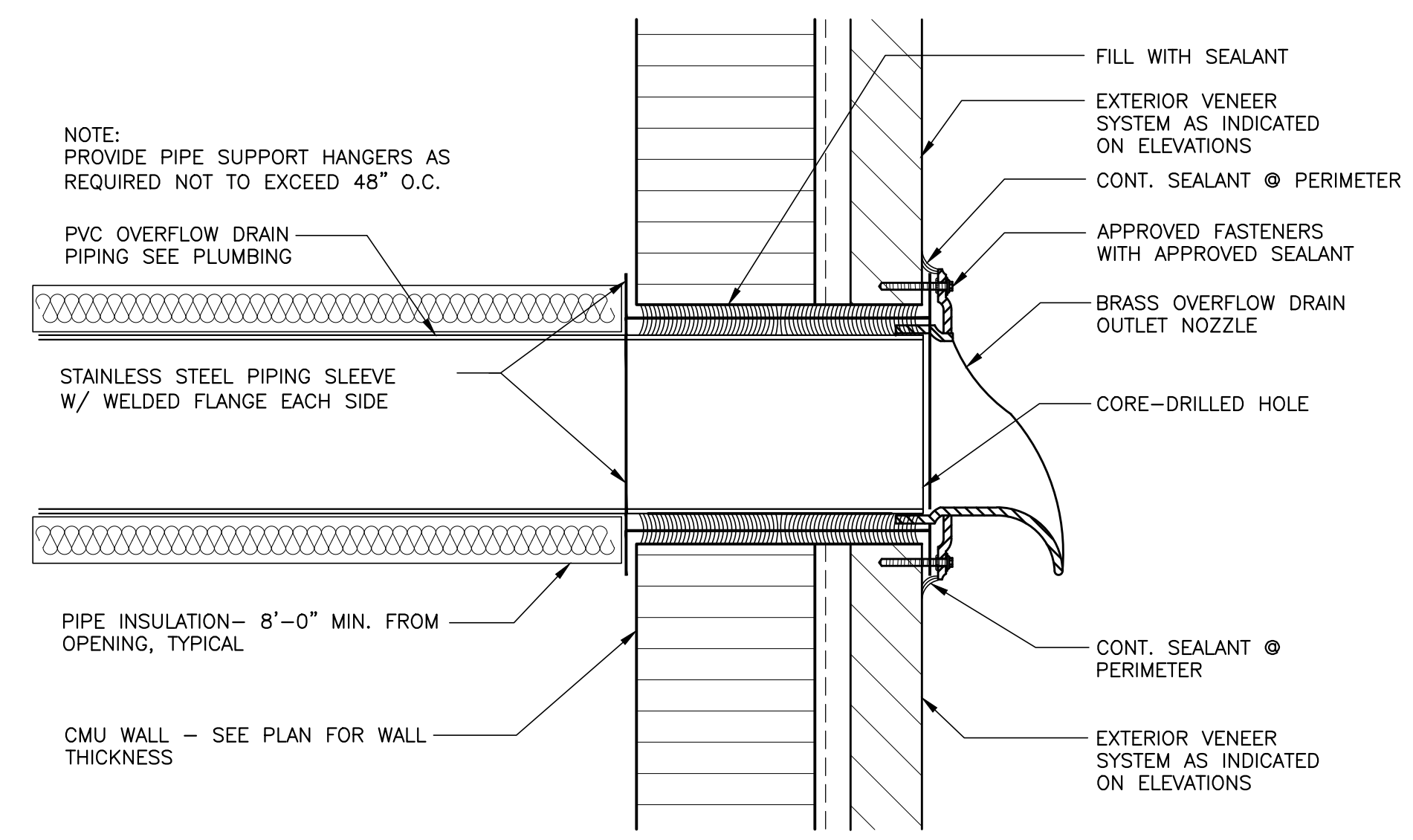
7 DETAIL
3" = 1'-0"



2 DETAIL
3" = 1'-0"

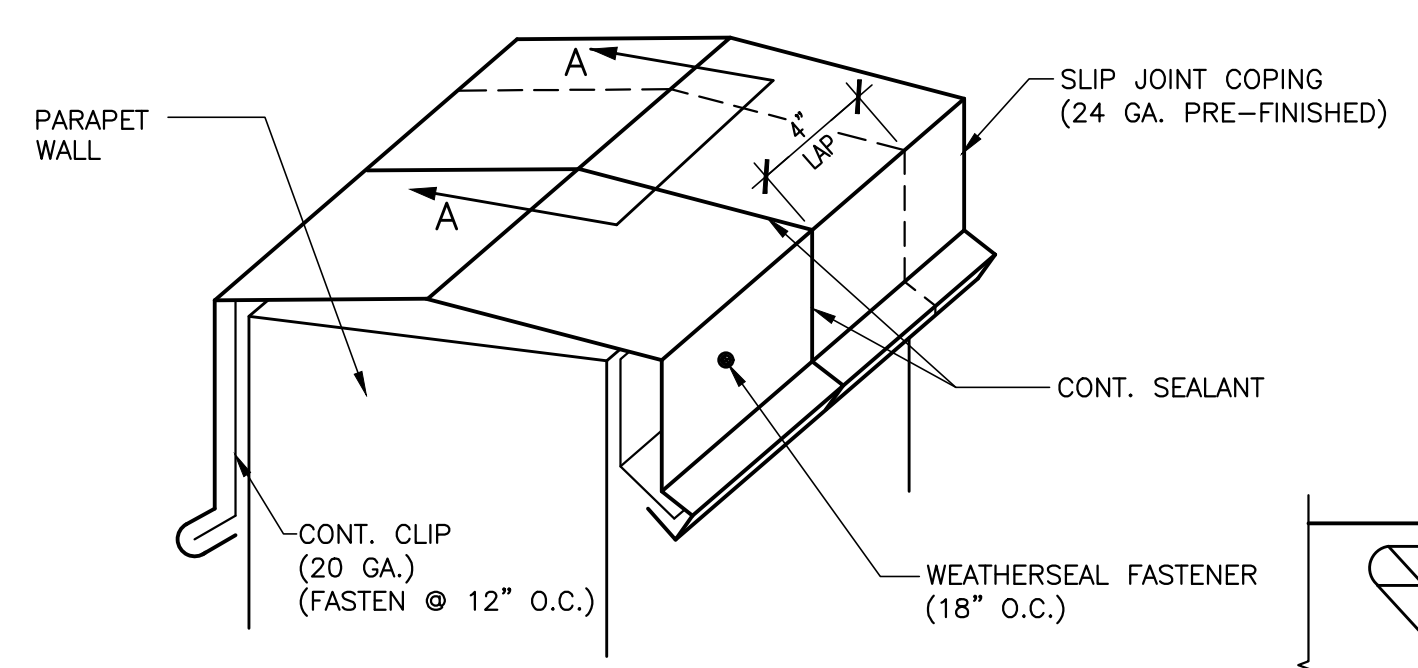


4 DETAIL
3" = 1'-0"

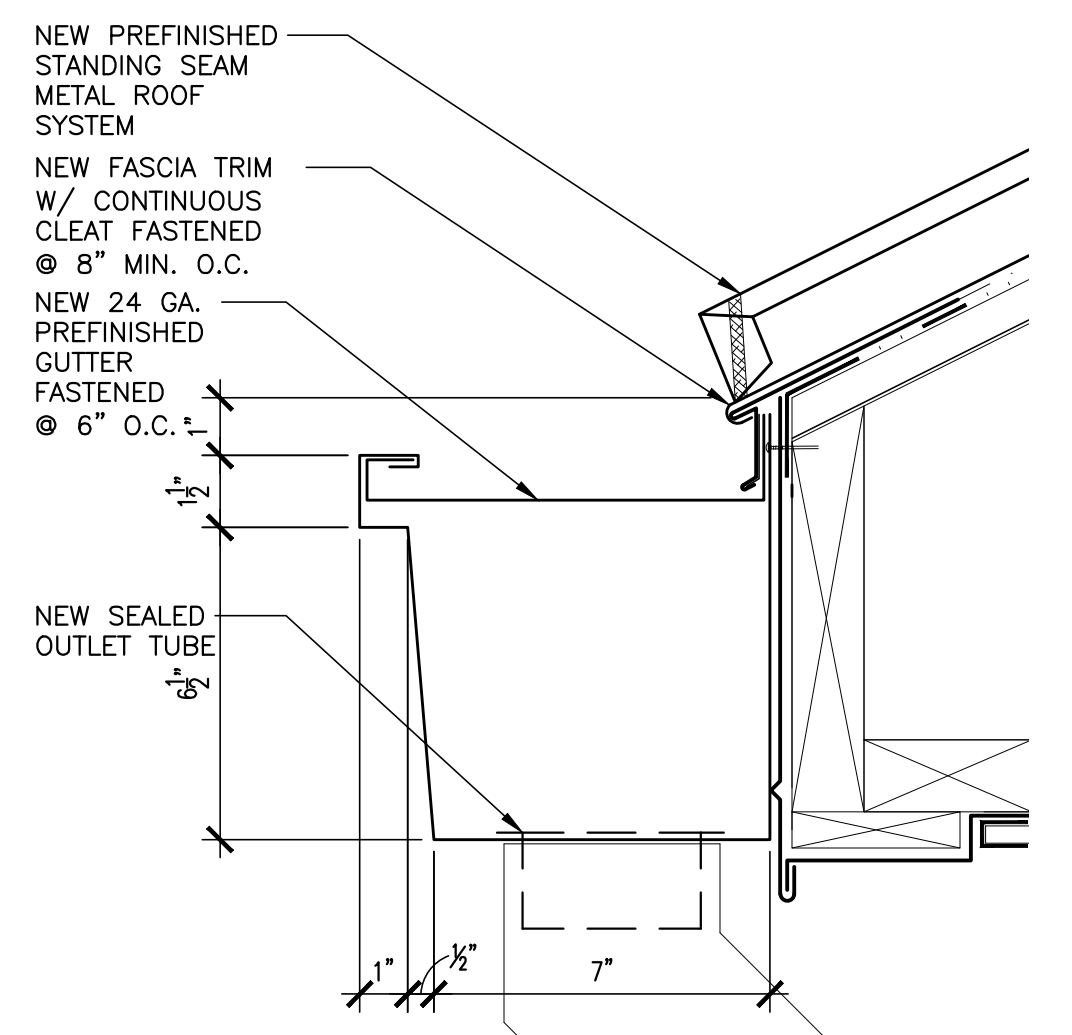


NOTE: PROVIDE PIPE SUPPORT HANGERS AS REQUIRED NOT TO EXCEED 48" O.C.

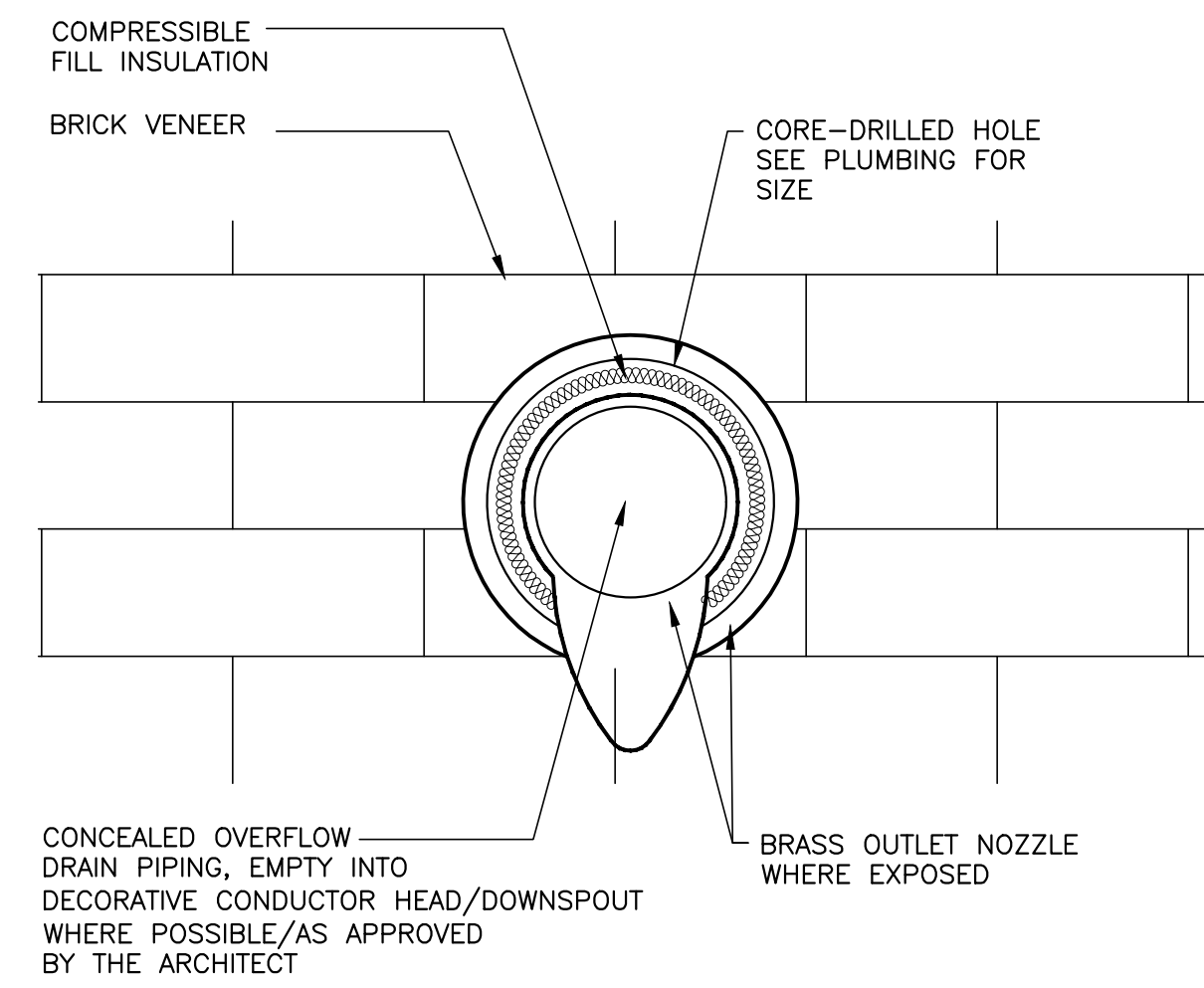
CMU WALL - SEE PLAN FOR WALL THICKNESS



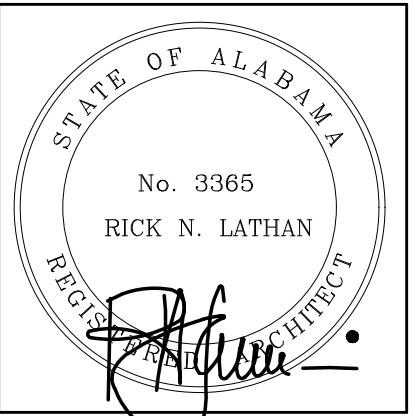
1 DETAIL
3" = 1'-0"



3 DETAIL
3" = 1'-0"



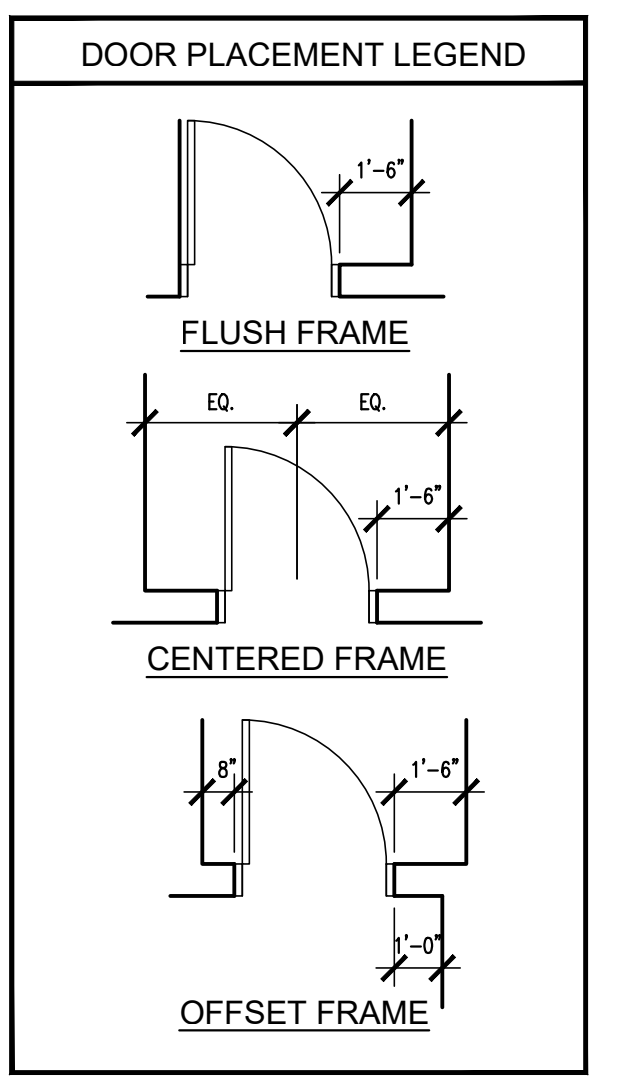
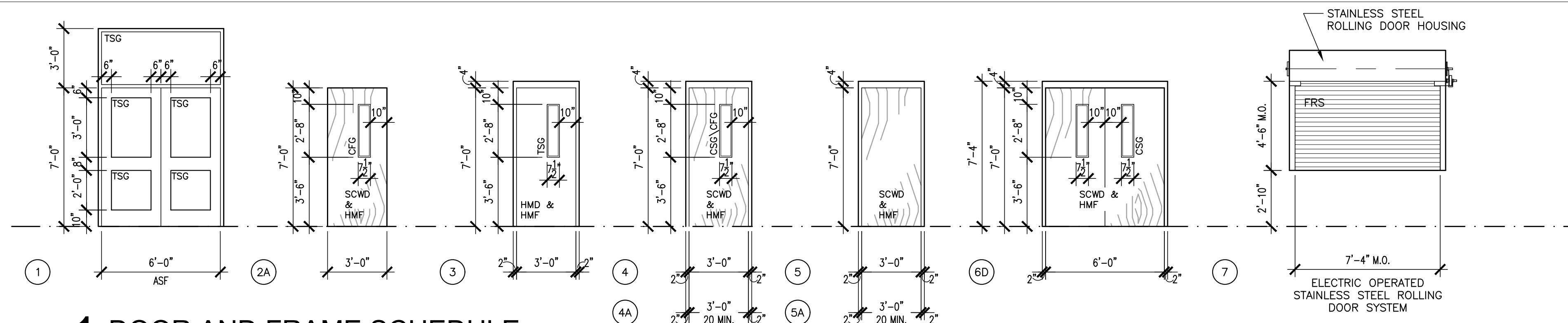
5 DETAIL
3" = 1'-0"



SHEET TITLE:
DOOR AND FRAME
SCHEDULE, WINDOW
SCHEDULE, AND DETAILS

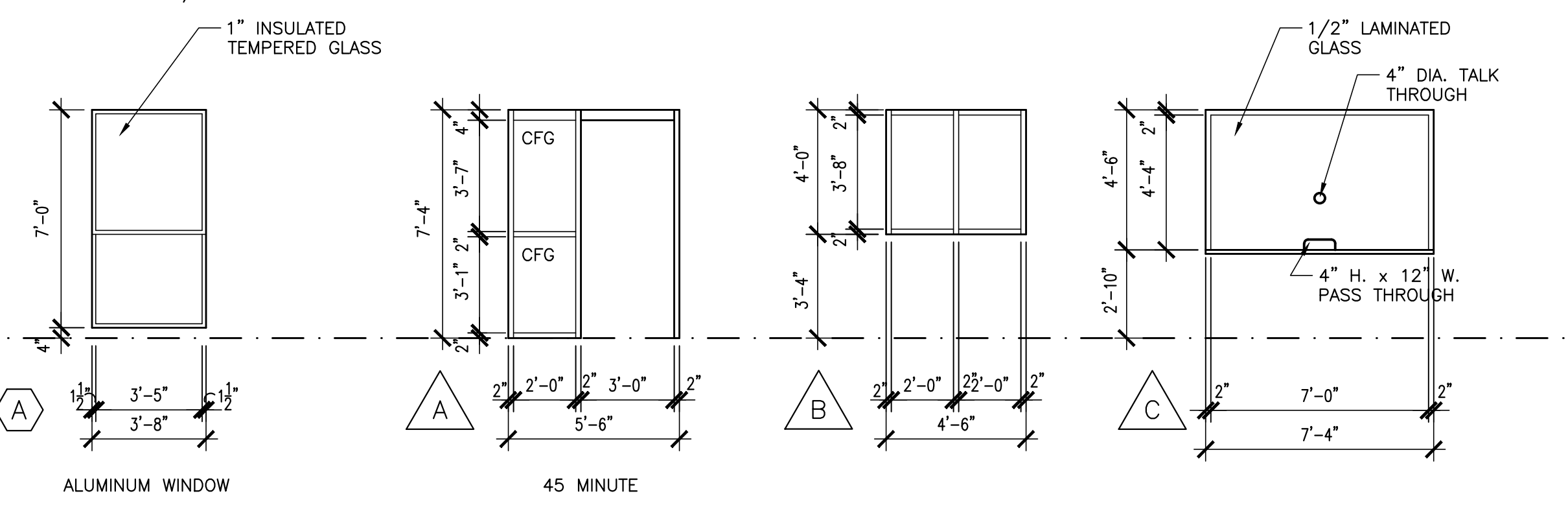
PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
VDR
DATE: MARCH 8, 2024
REVISIONS

JOB NO. **23-92**
SHEET NO. **A2.5**
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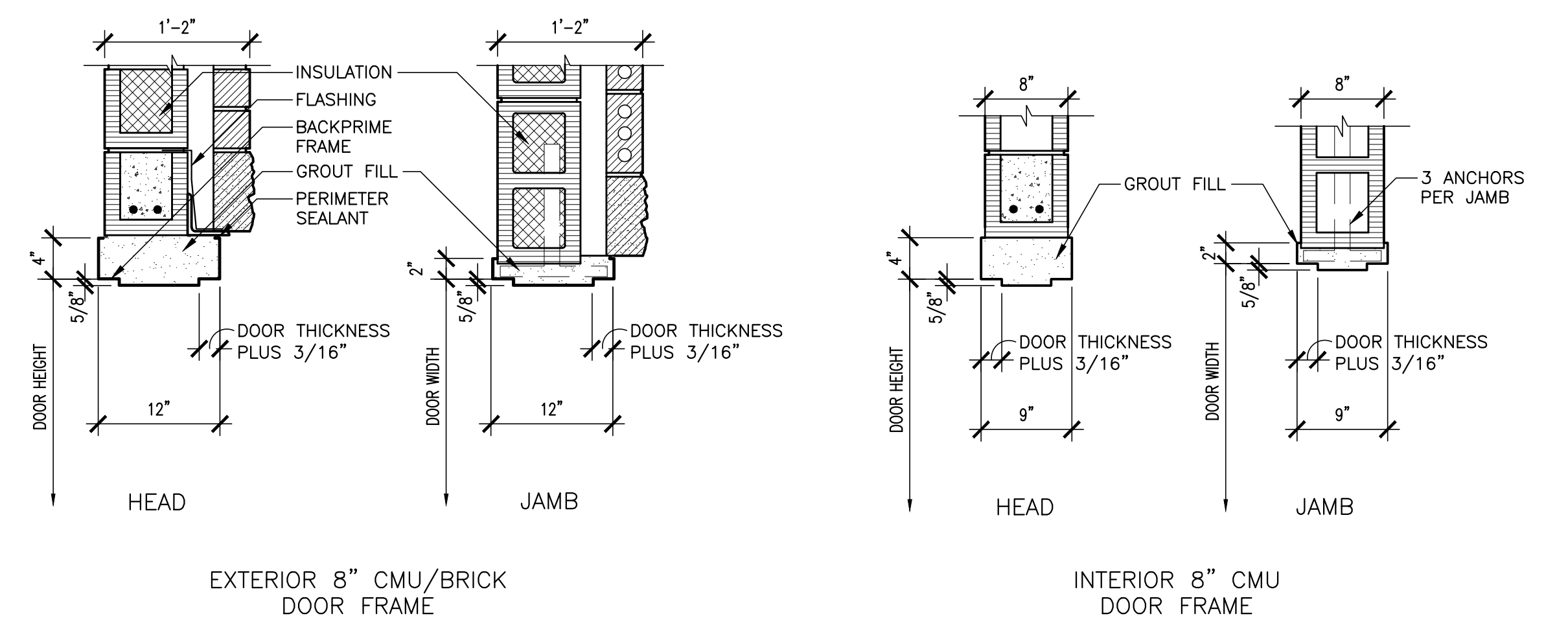


DOOR RATING LEGEND	
DOOR TYPE (2)	NO RATING
DOOR TYPE + A (2A)	20 MINUTE RATING
DOOR TYPE + B (2B)	45 MINUTE RATING
DOOR TYPE + C (2C)	60 MINUTE RATING
DOOR TYPE + D (2D)	90 MINUTE RATING
DOOR TYPE + E (2E)	180 MINUTE RATING
DOOR TYPE + S (2S)	SMOKE RATED

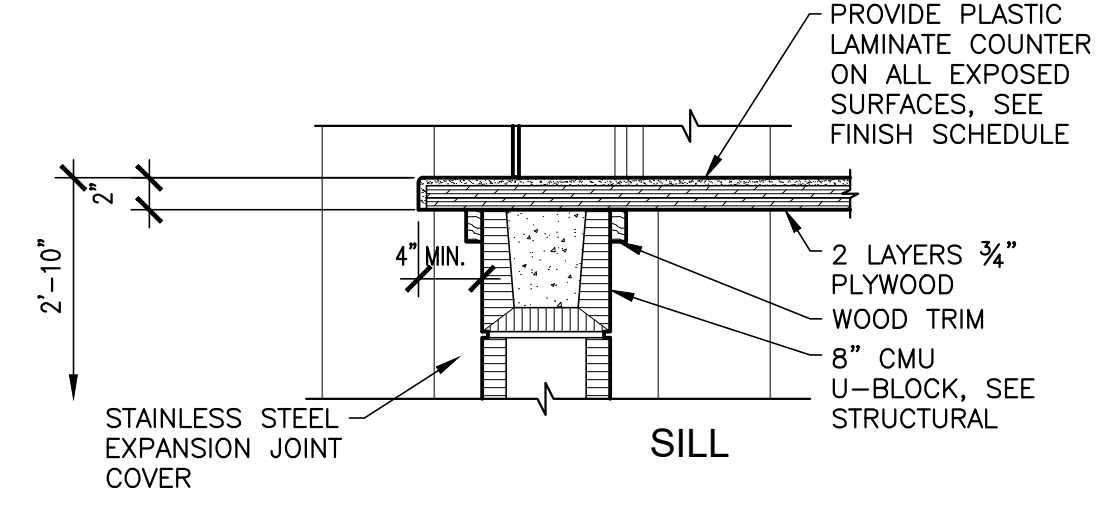
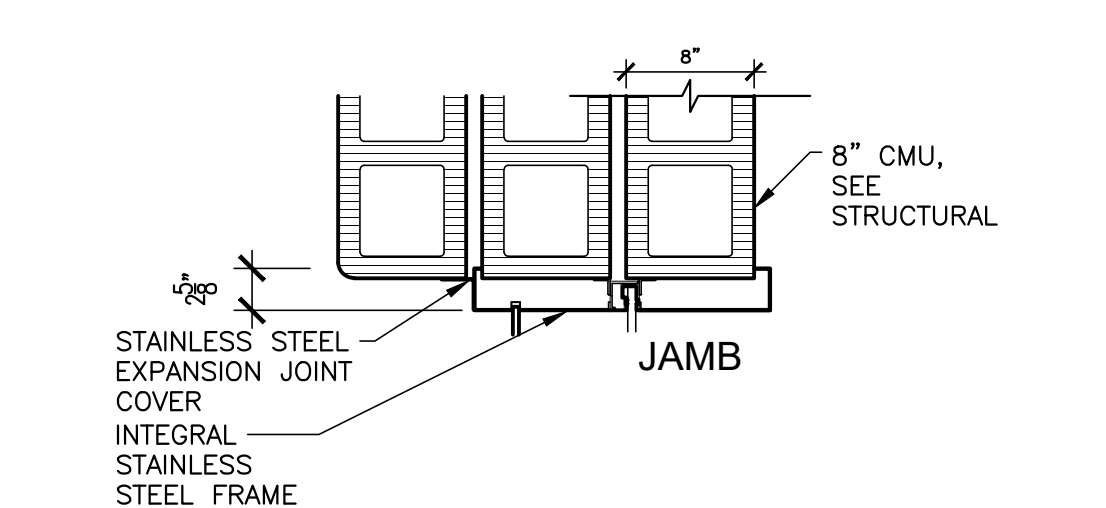
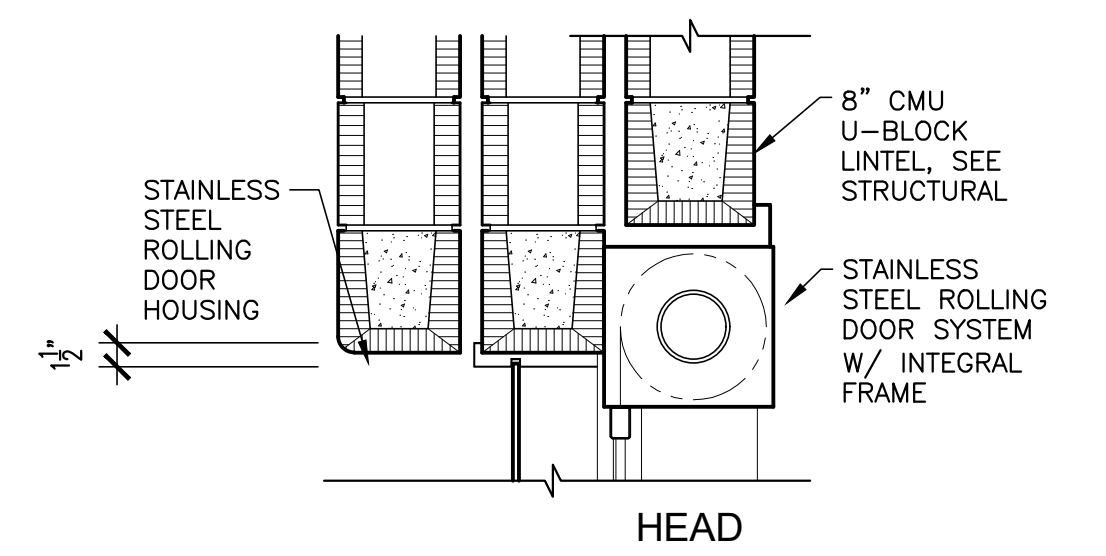
1 DOOR AND FRAME SCHEDULE
1/4" = 1'-0"



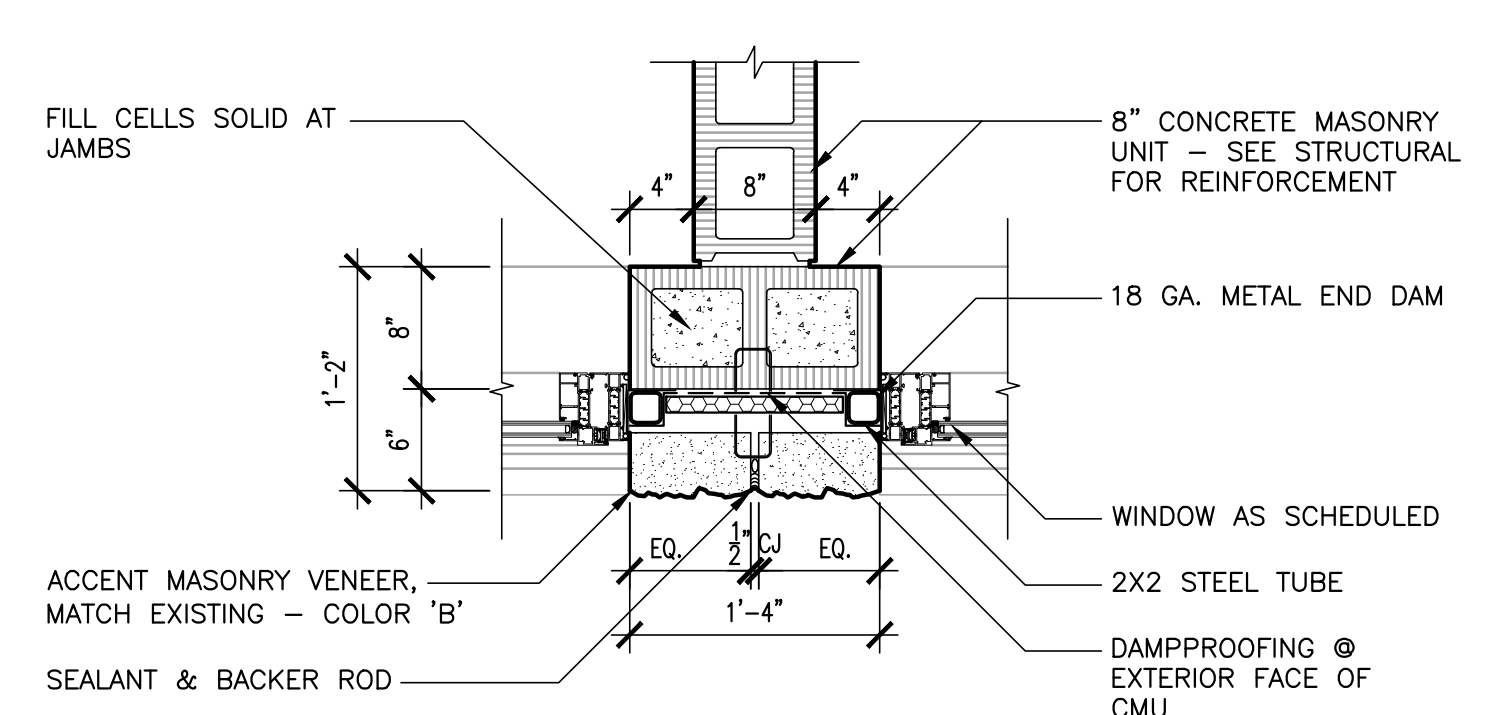
2 WINDOW SCHEDULE
1/4" = 1'-0"



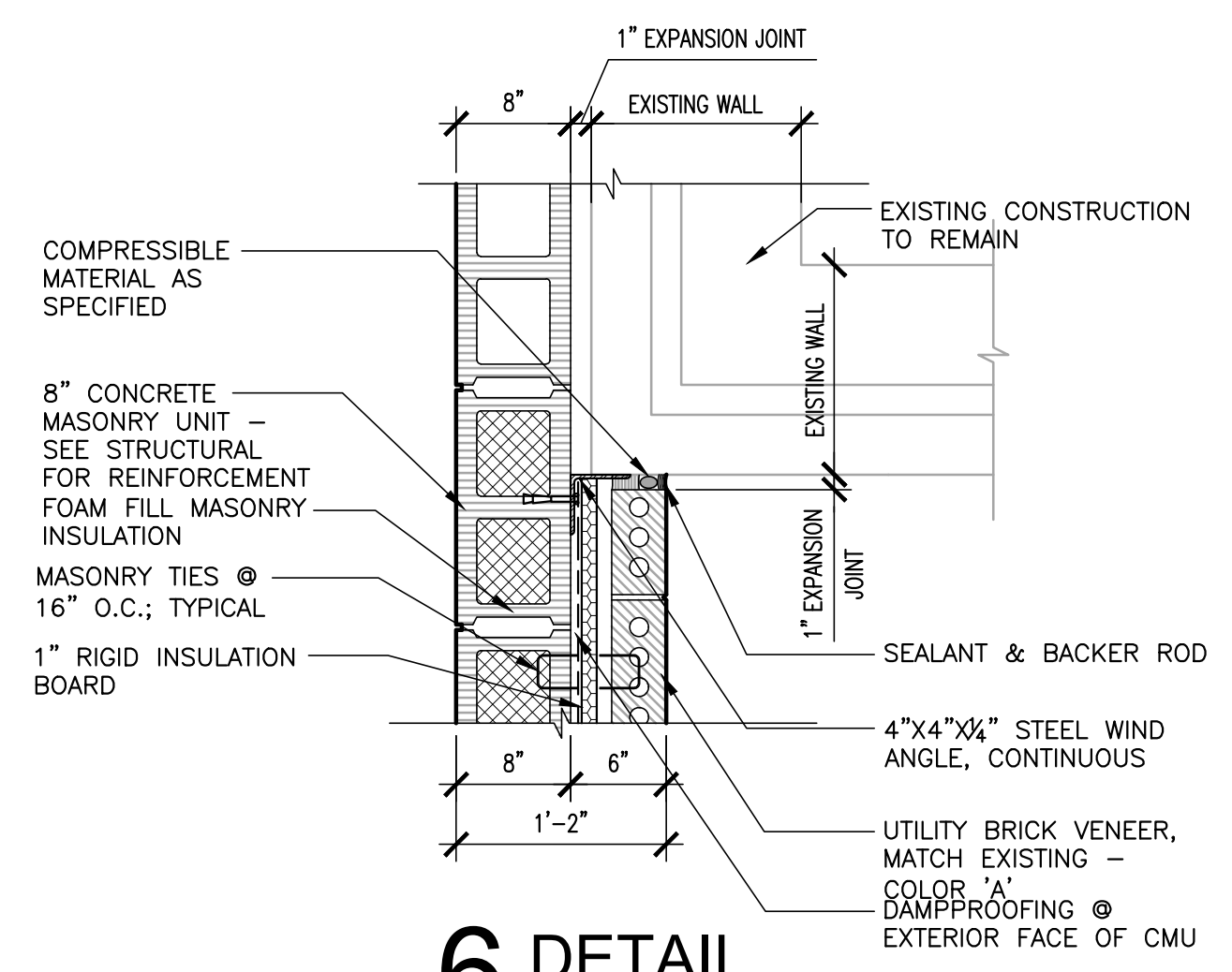
3 DETAILS
1" = 1'-0"



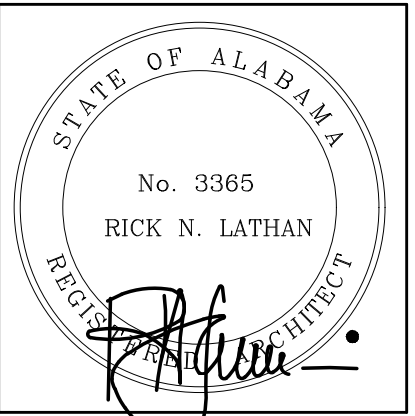
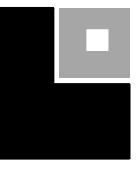
4 ROLLING DOOR DETAILS
1" = 1'-0"



5 DETAIL
1" = 1'-0"



6 DETAIL
1" = 1'-0"



SHEET TITLE:
ELEVATIONS

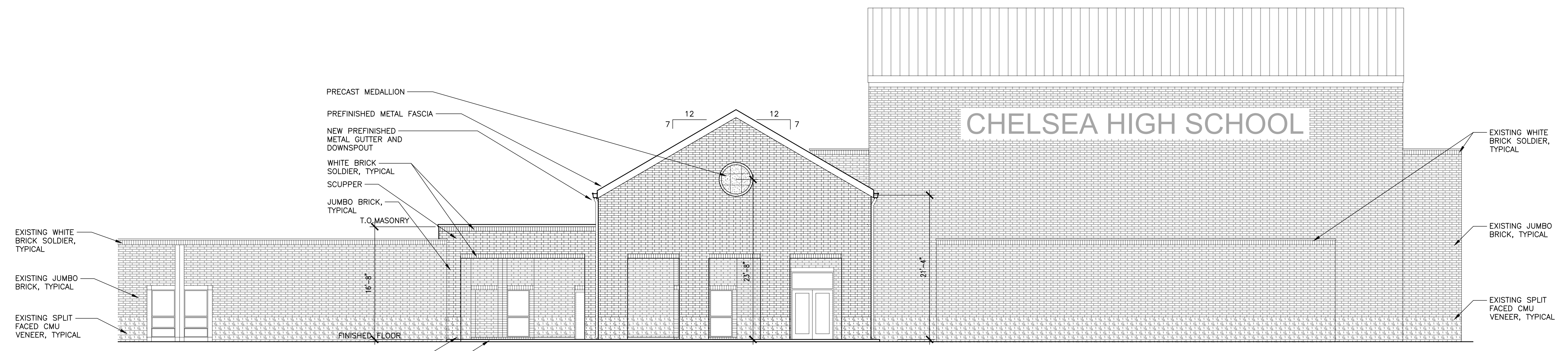
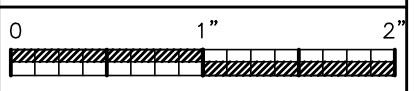
PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
DATE: MARCH 8, 2024
REVISIONS

JOB NO. 23-92

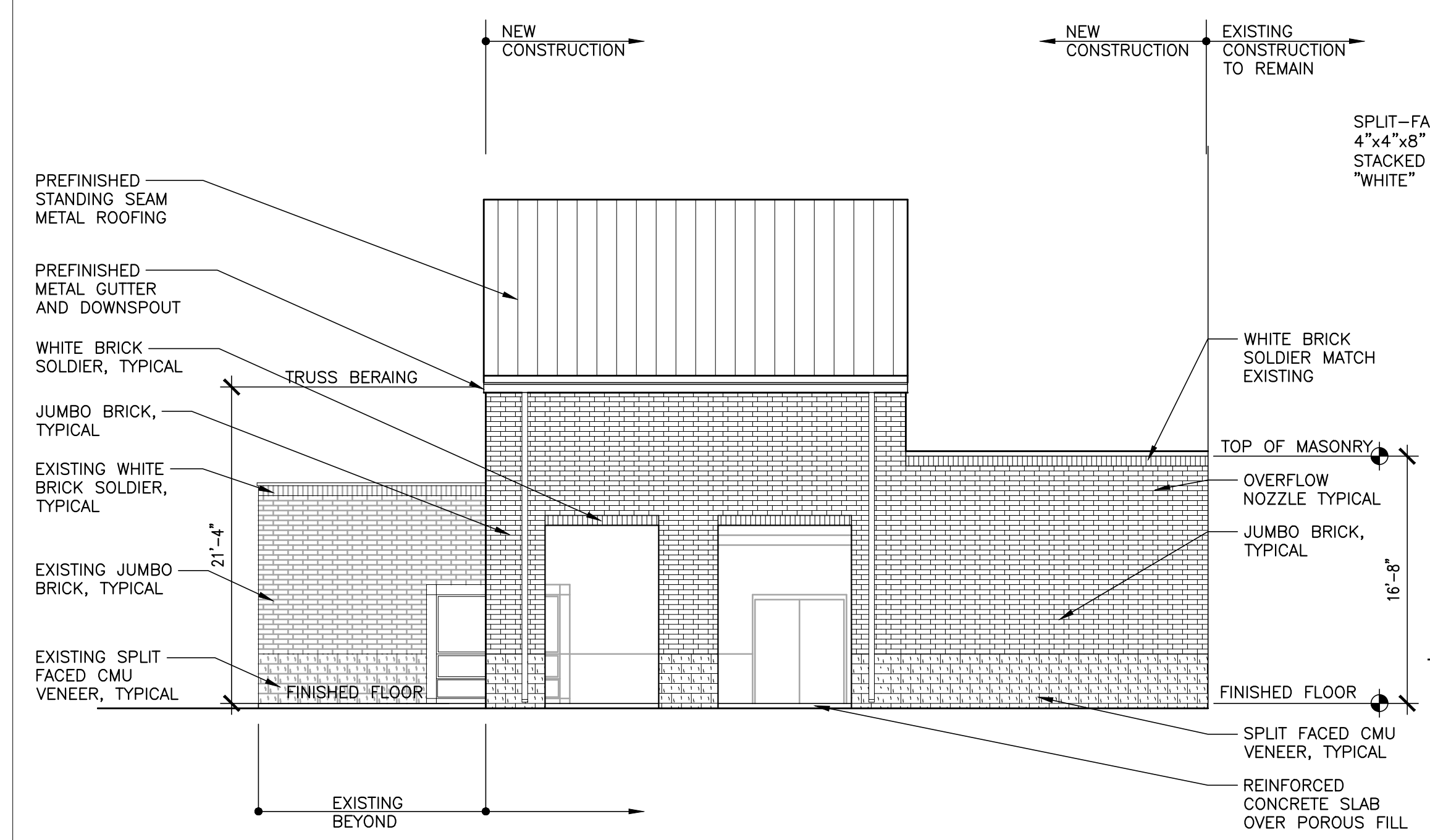
SHEET NO:

A3.1

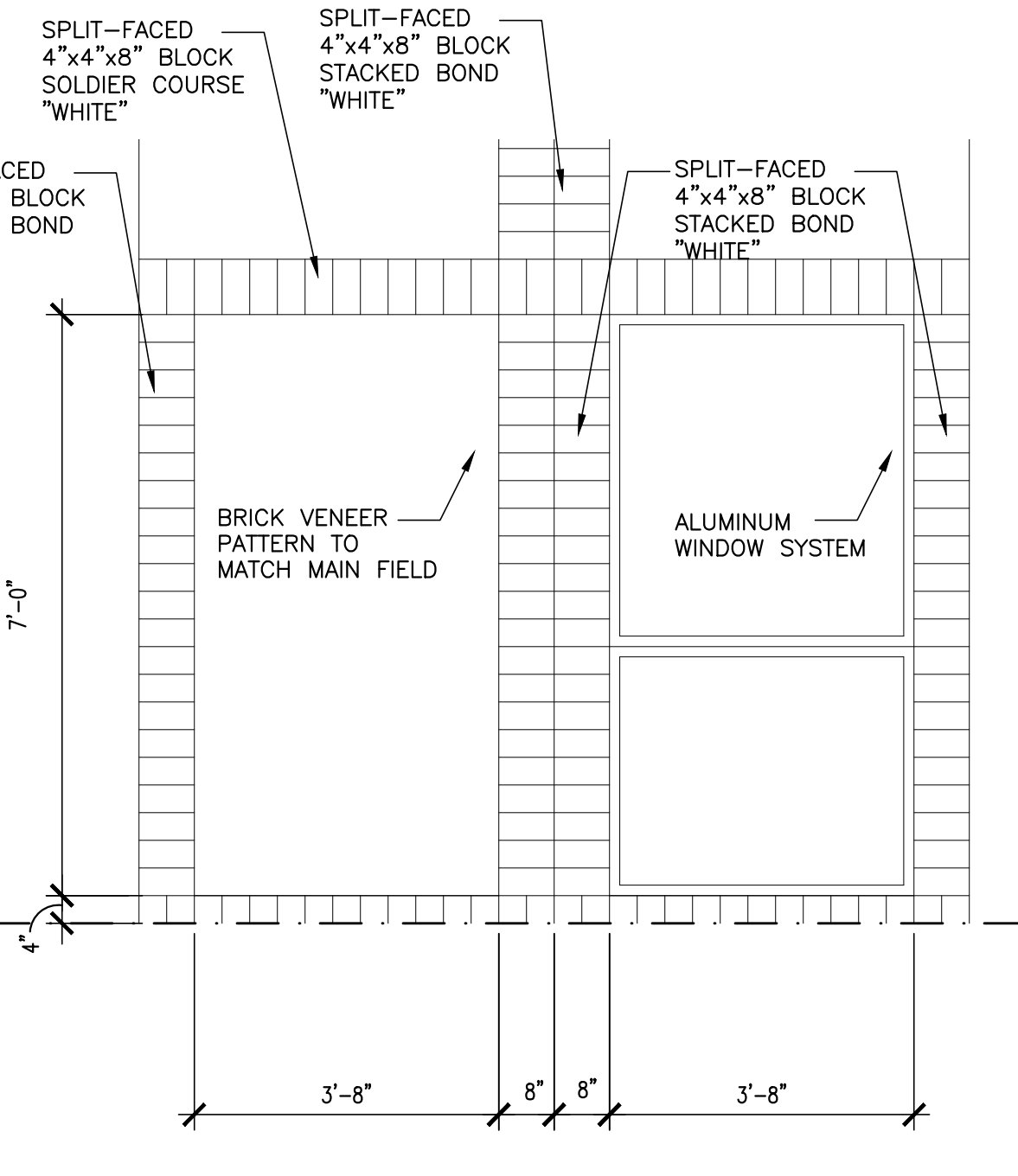
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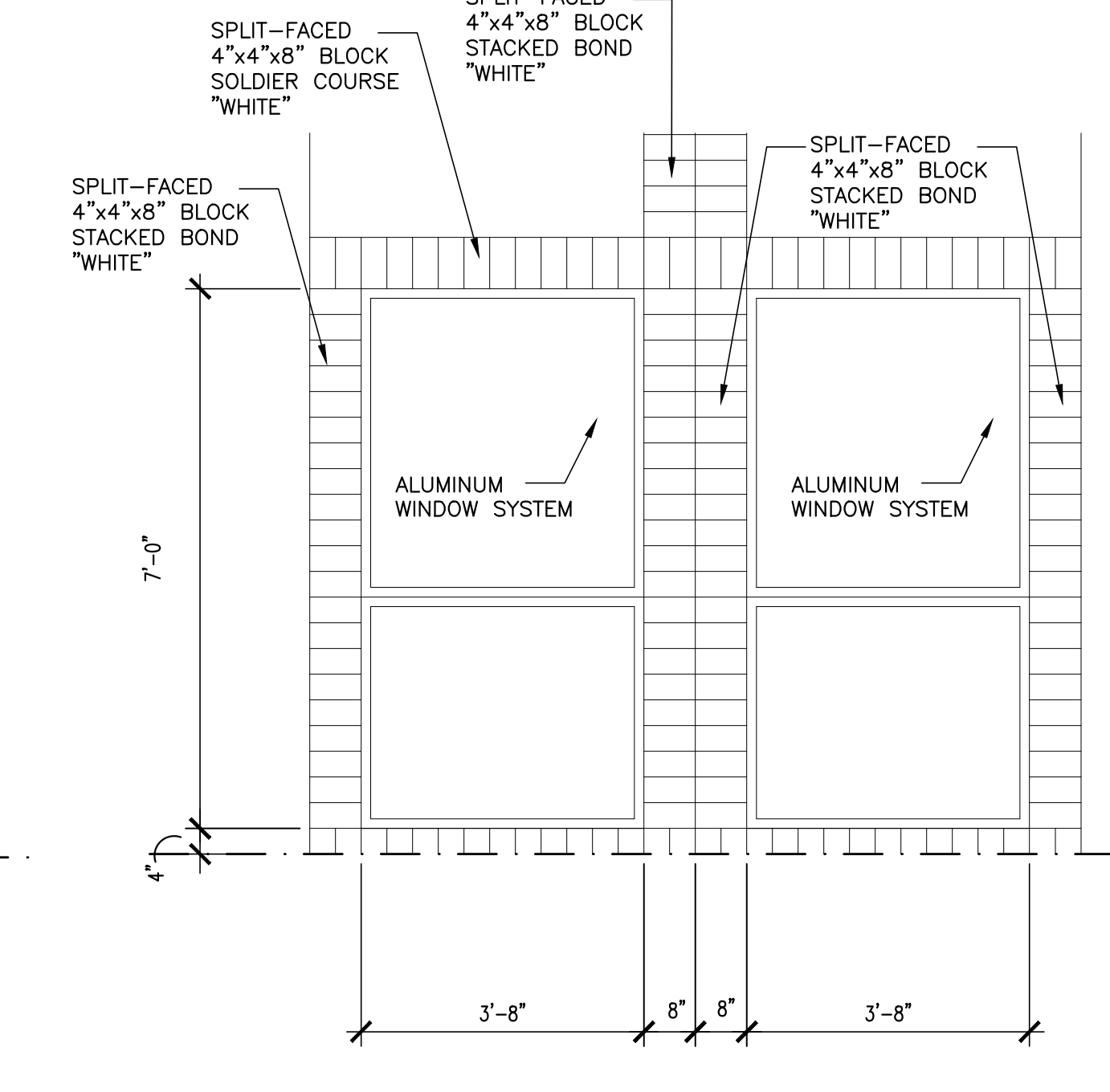
A ELEVATION
1/8" = 1'-0"



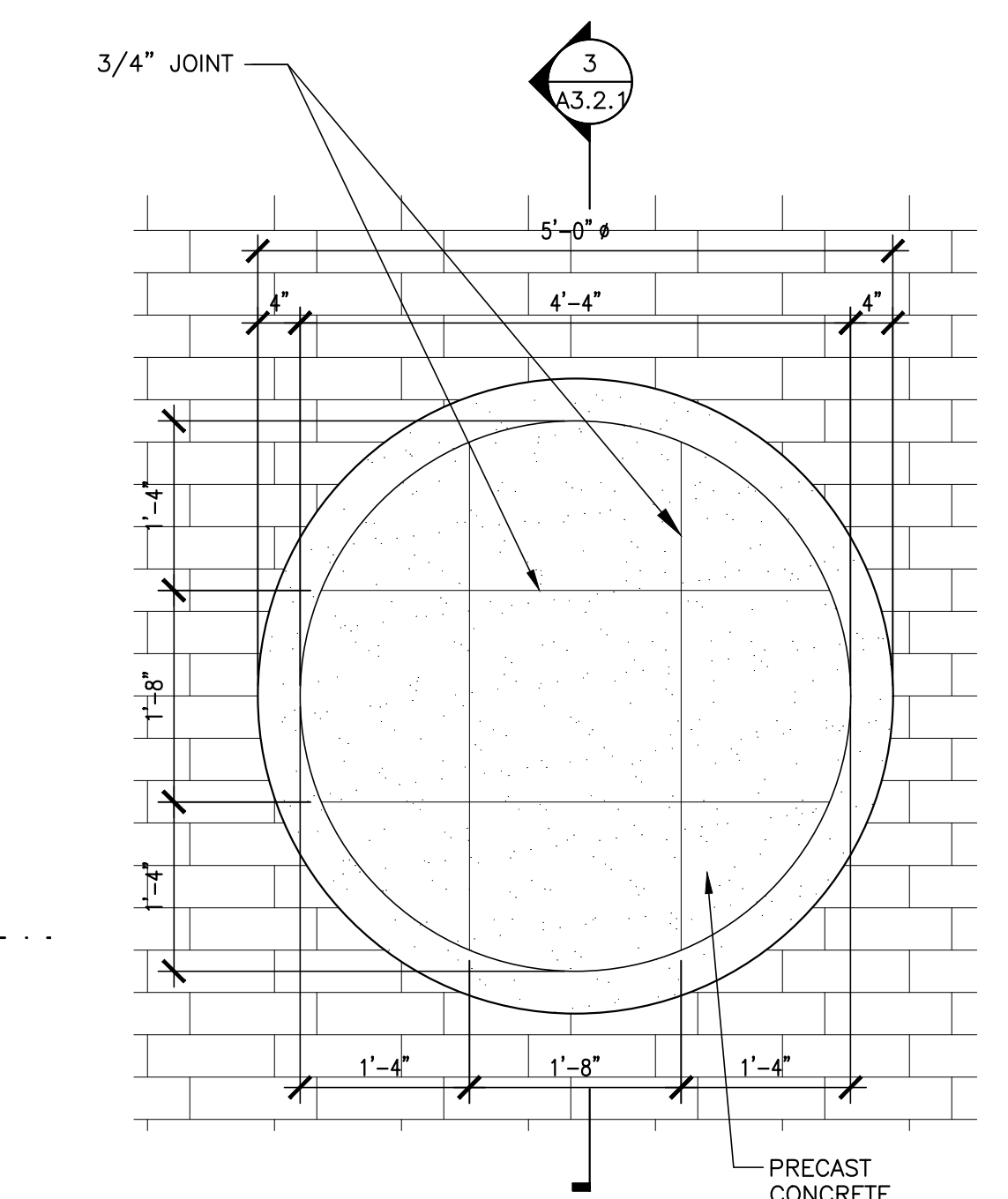
B ELEVATION
1/8" = 1'-0"



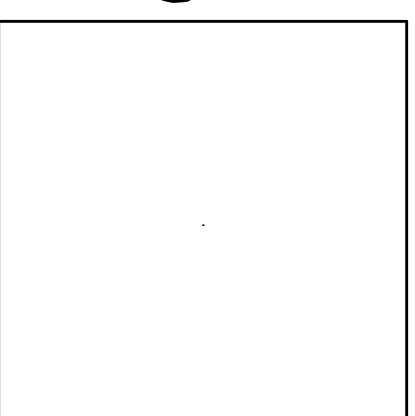
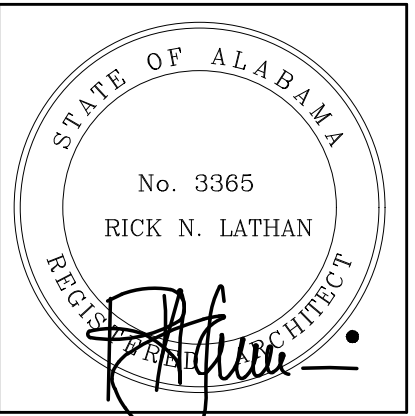
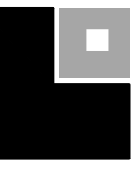
1 DETAIL
1/2" = 1'-0"



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

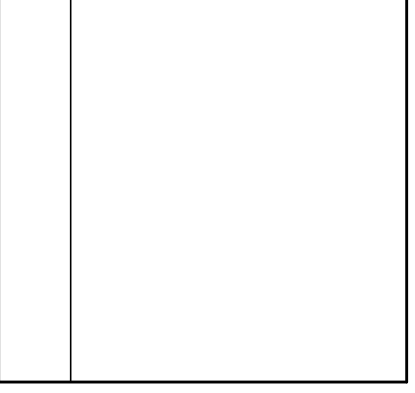


3 DETAIL
3/4" = 1'-0"

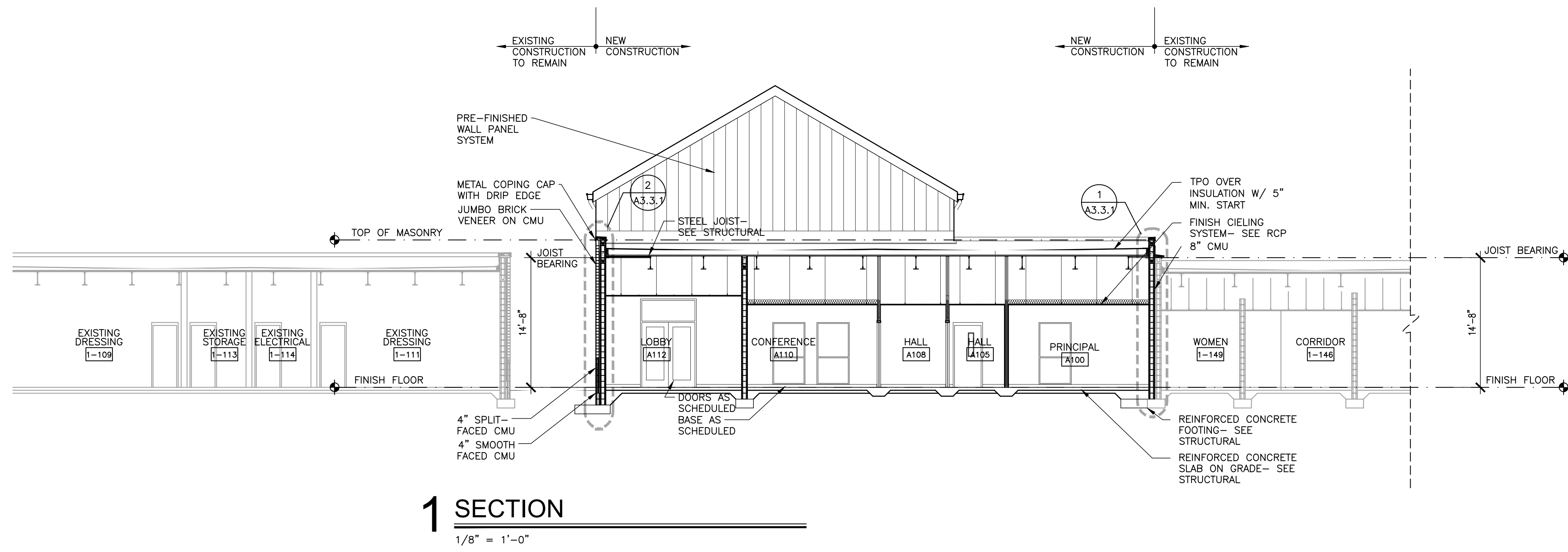
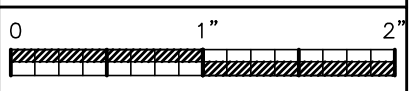


SHEET TITLE:
BUILDING SECTIONS

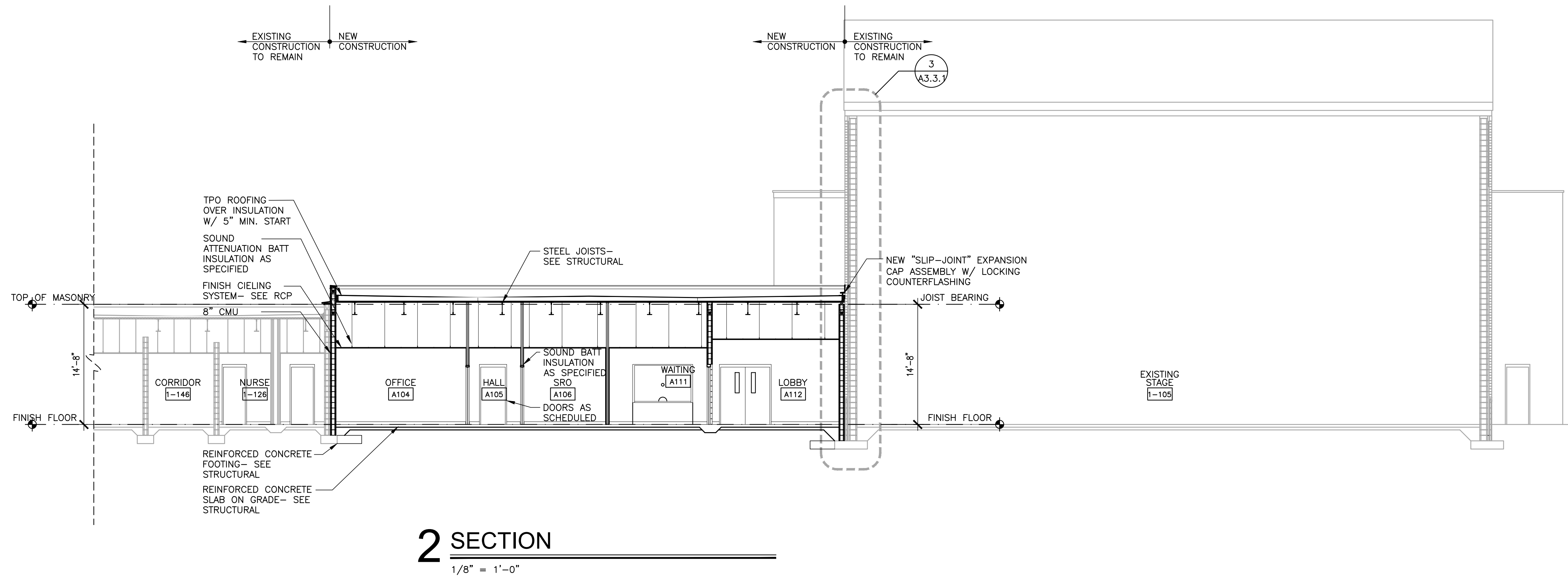
PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
VDR
DATE: MARCH 8, 2024
REVISIONS



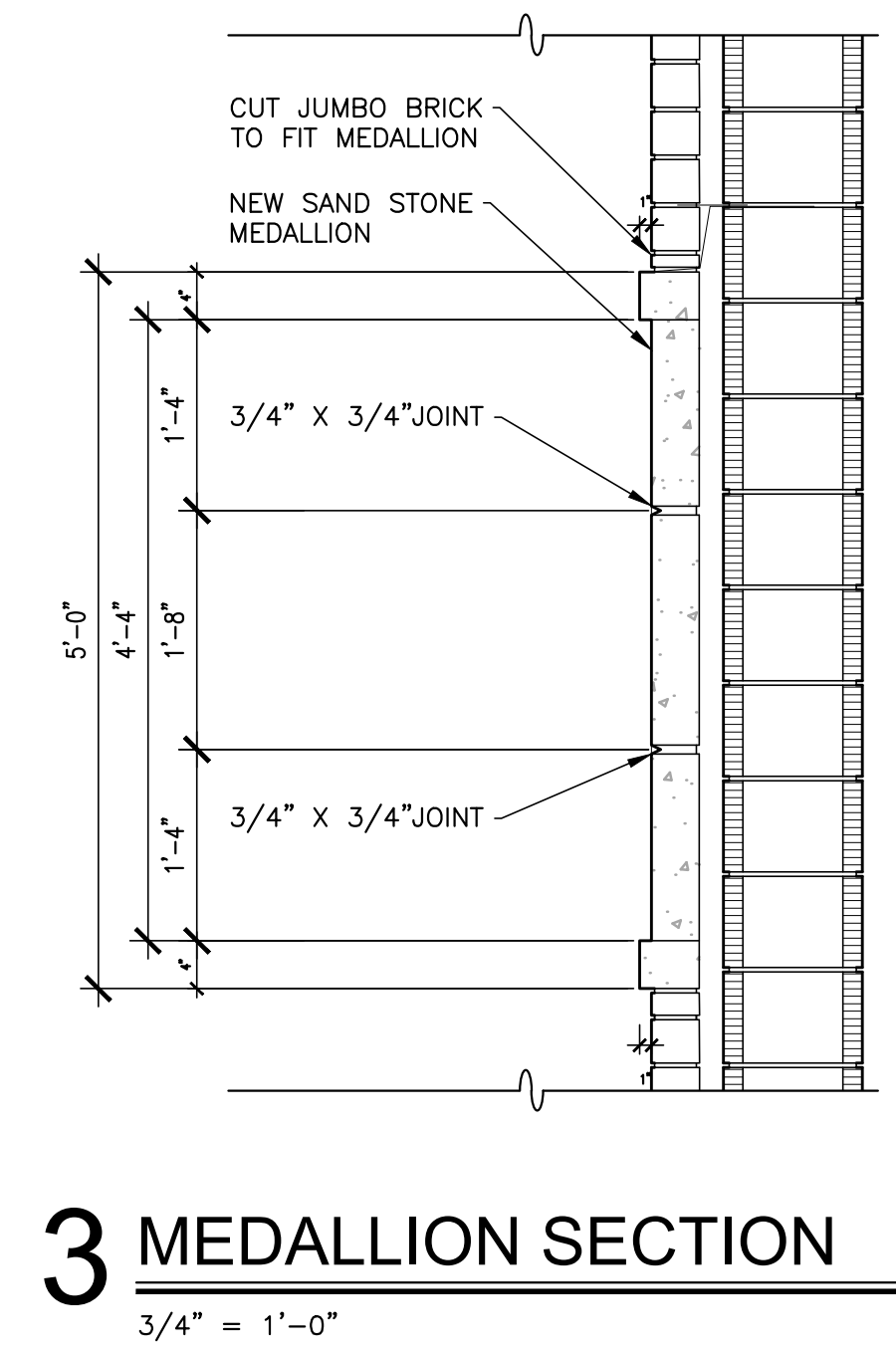
JOB NO. **23-92**
SHEET NO:
A3.2.1
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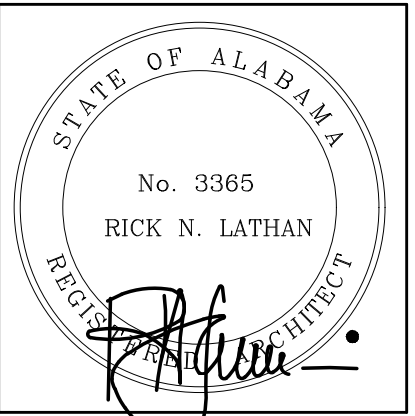
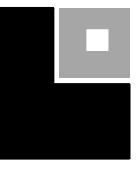
1 SECTION
1/8" = 1'-0"



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



3 MEDALLION SECTION
3/4" = 1'-0"



SHEET TITLE:
BUILDING SECTIONS

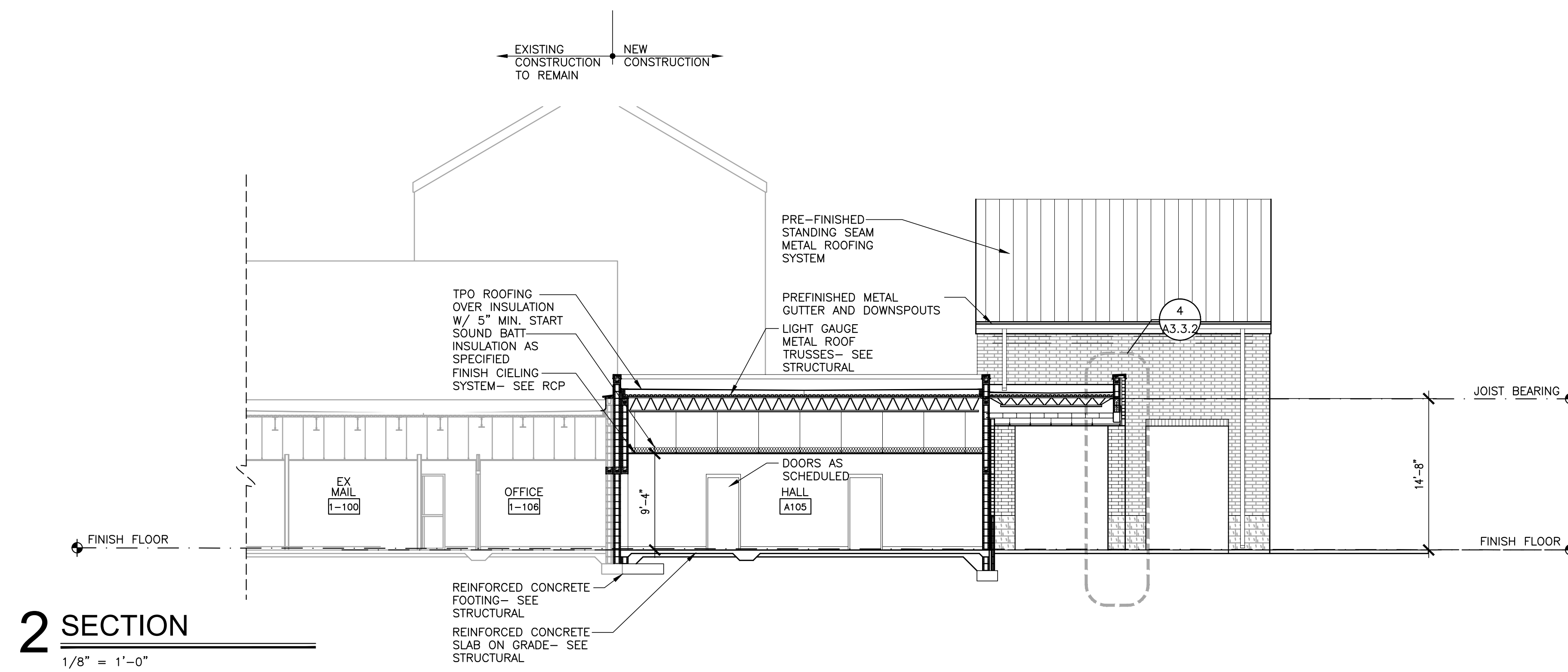
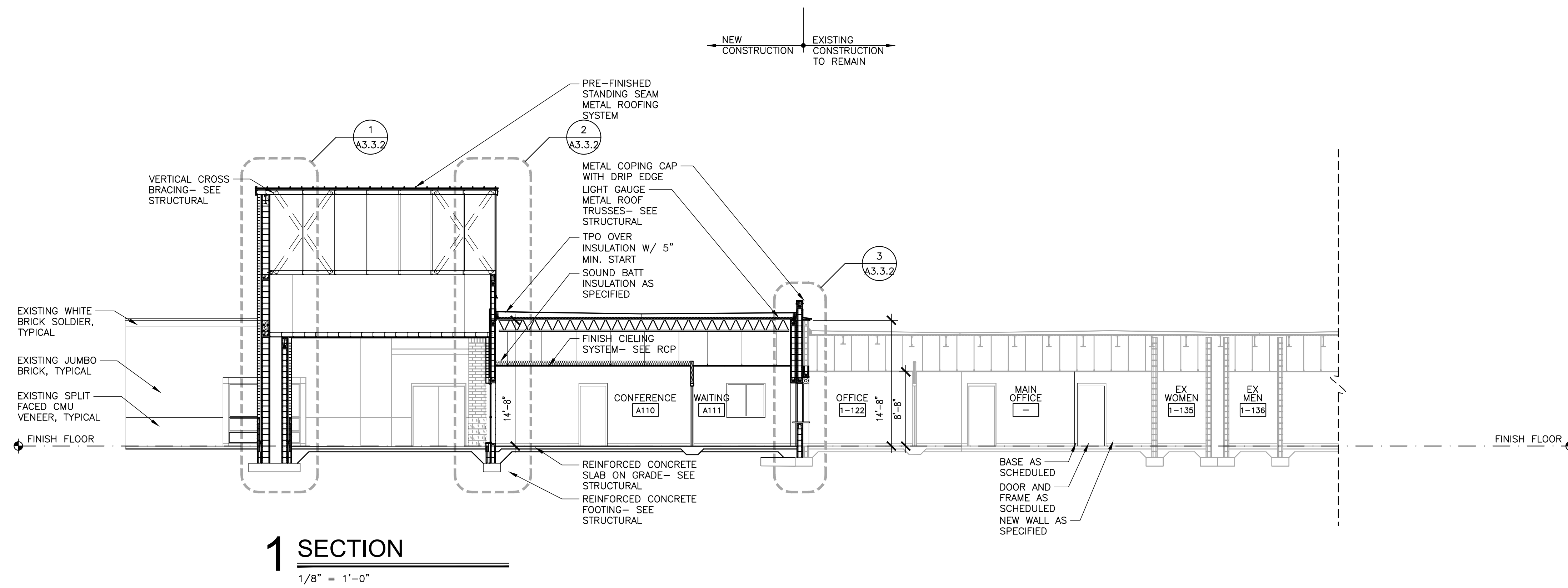
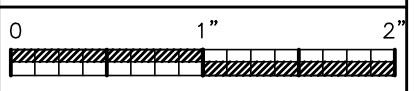
PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
VDR
DATE: MARCH 8, 2024
REVISIONS

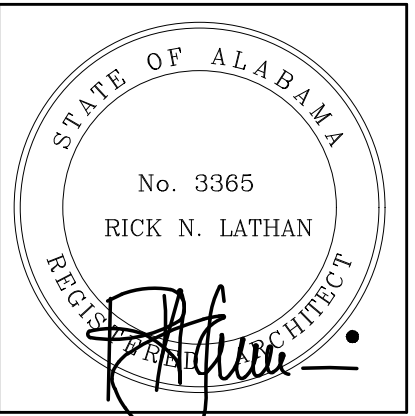
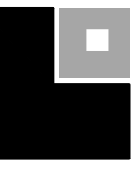
JOB NO. 23-92

SHEET NO:

A3.2.2

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SHEET TITLE:
BUILDING SECTIONS

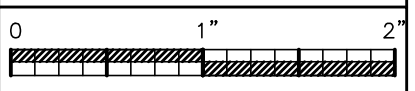
PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
DATE: MARCH 8, 2024

JOB NO. 23-92

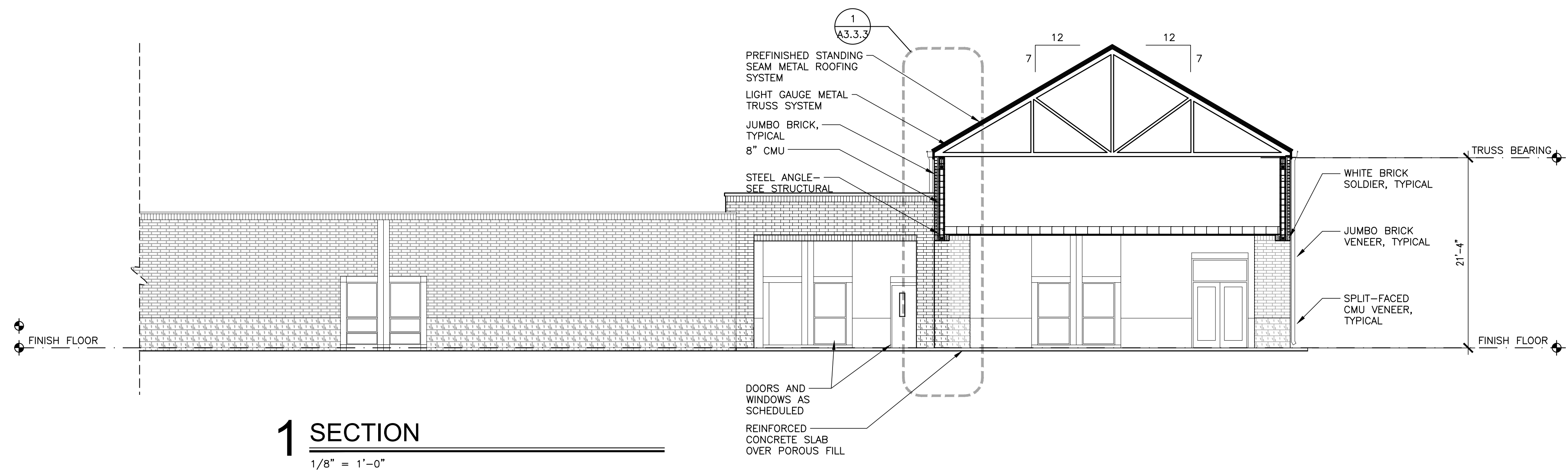
SHEET NO:

A3.2.3

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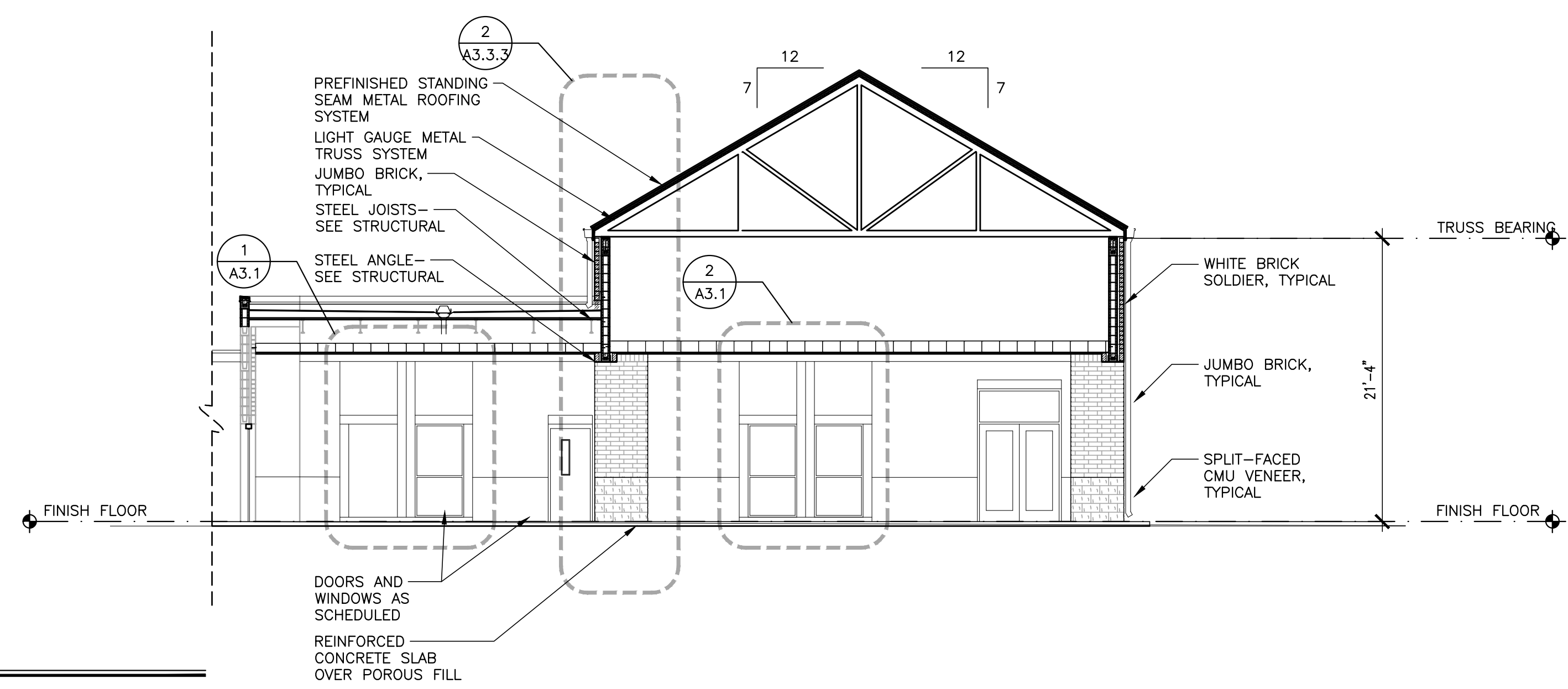


EXISTING CONSTRUCTION TO REMAIN
NEW CONSTRUCTION

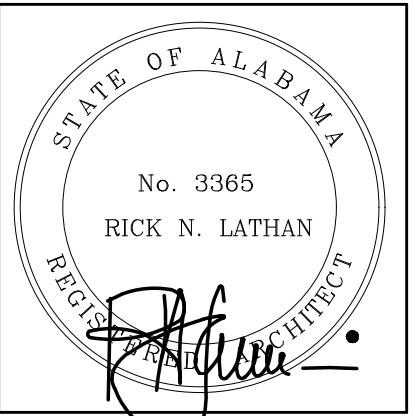


1 SECTION
1/8" = 1'-0"

EXISTING CONSTRUCTION TO REMAIN
NEW CONSTRUCTION



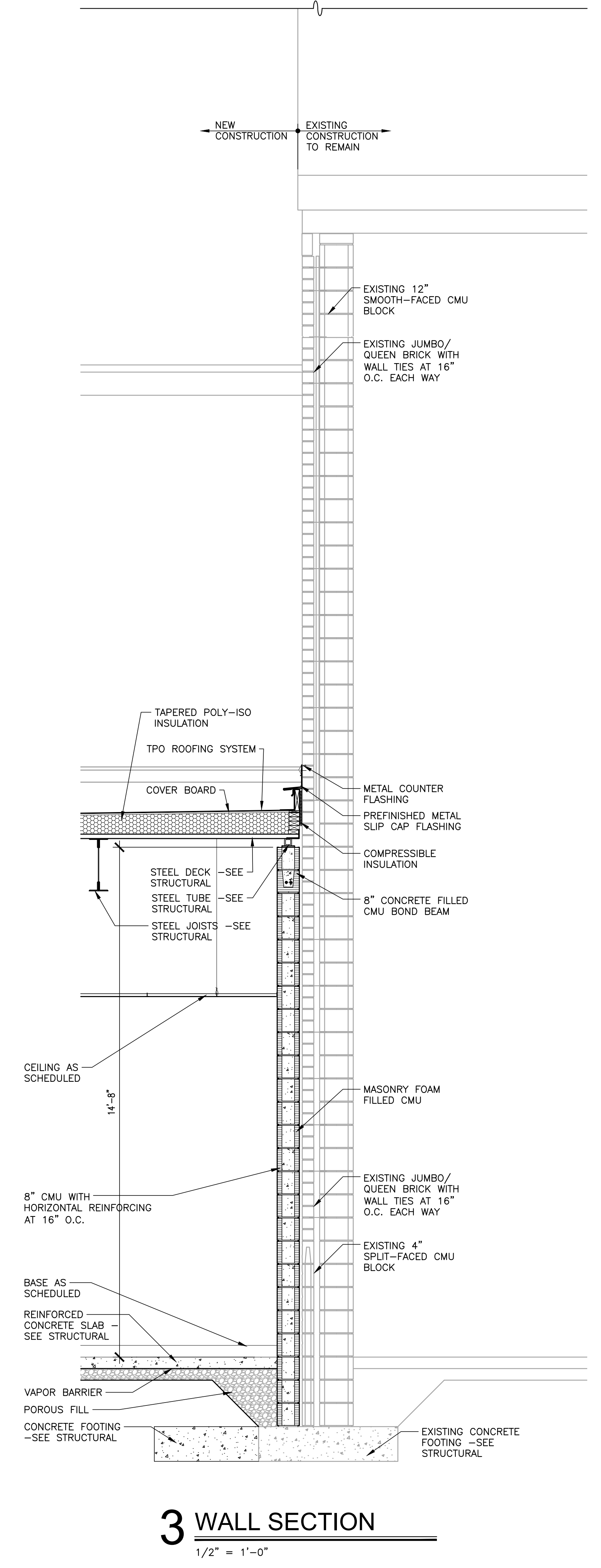
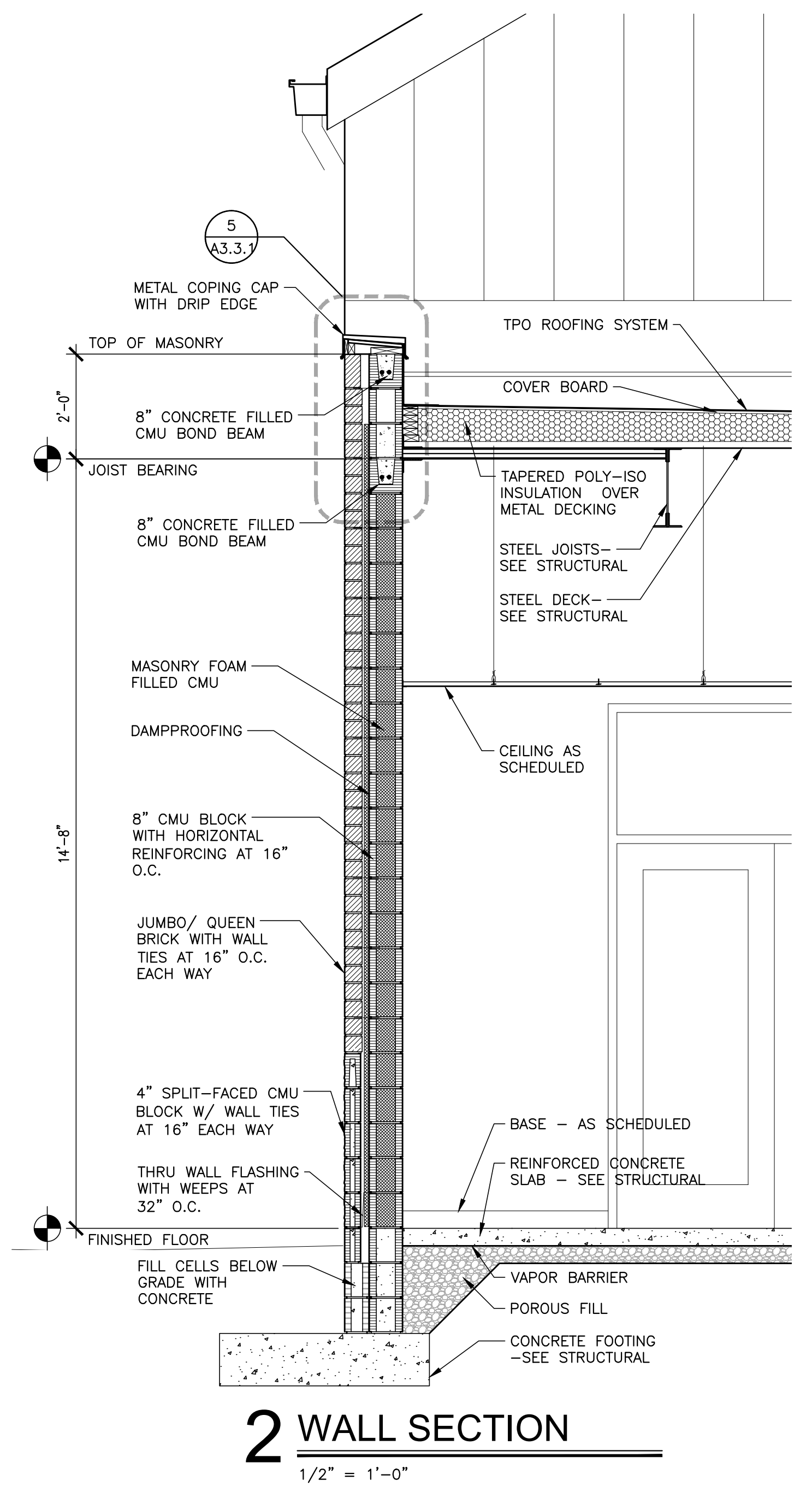
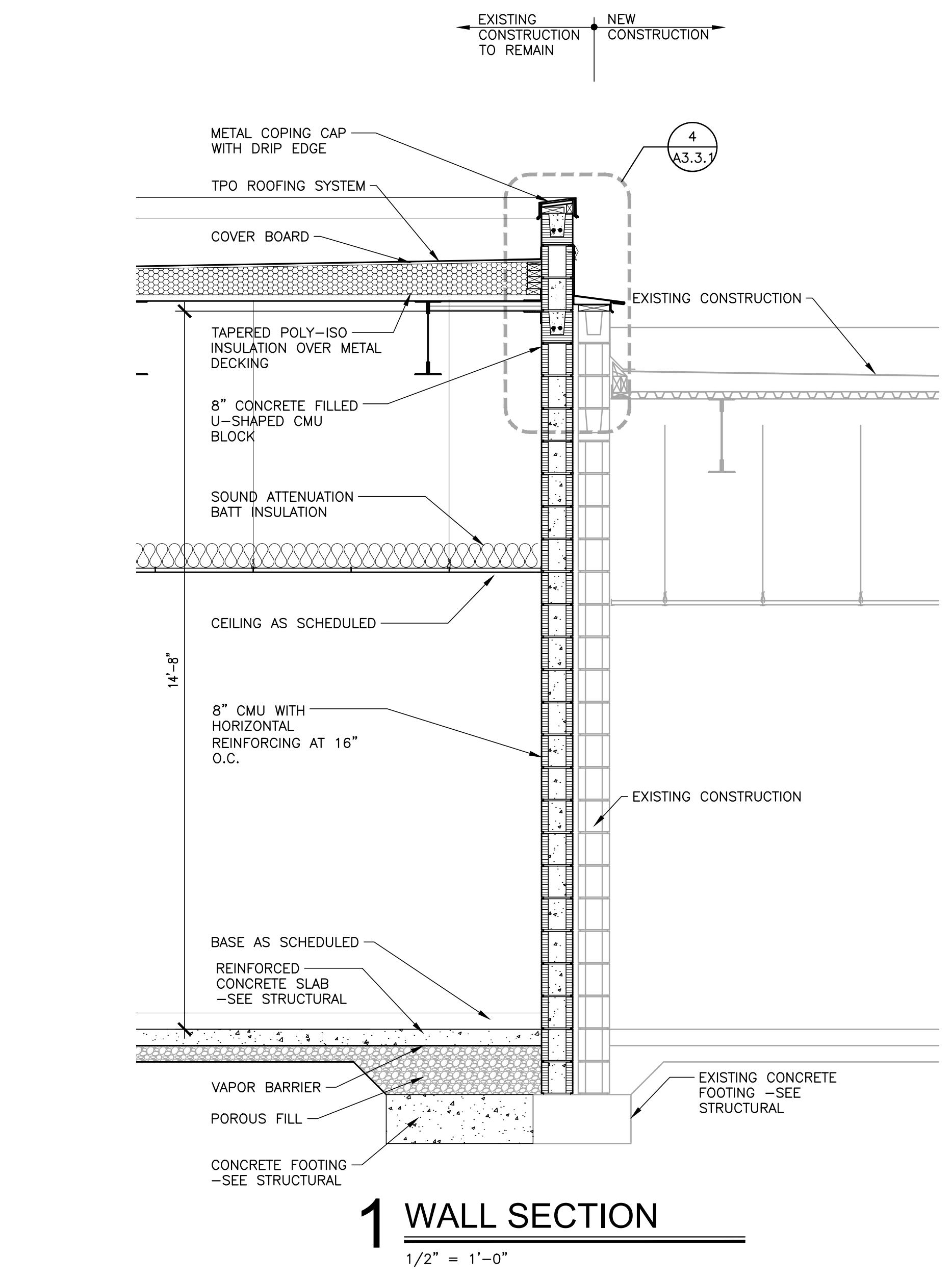
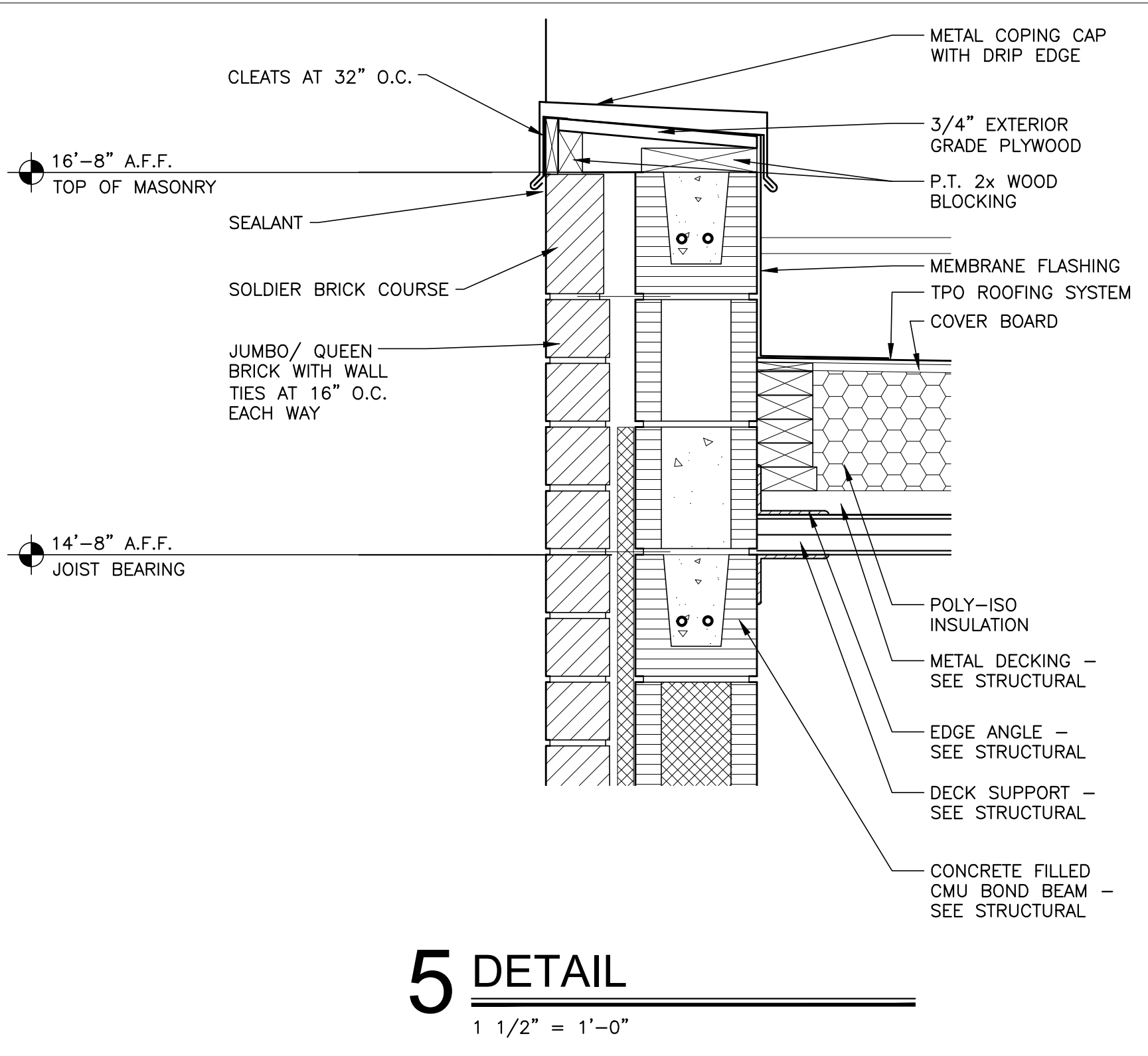
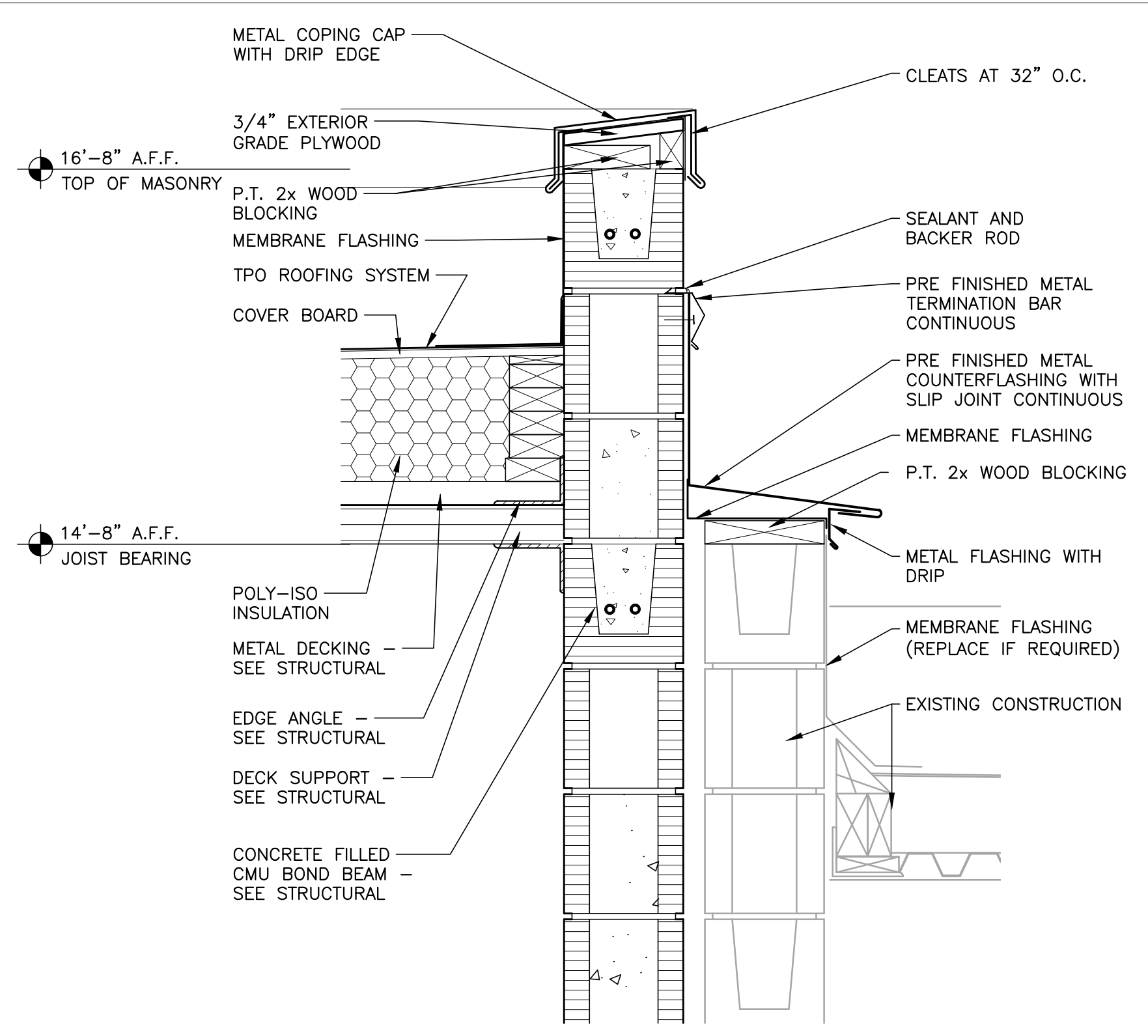
2 SECTION
1/8" = 1'-0"

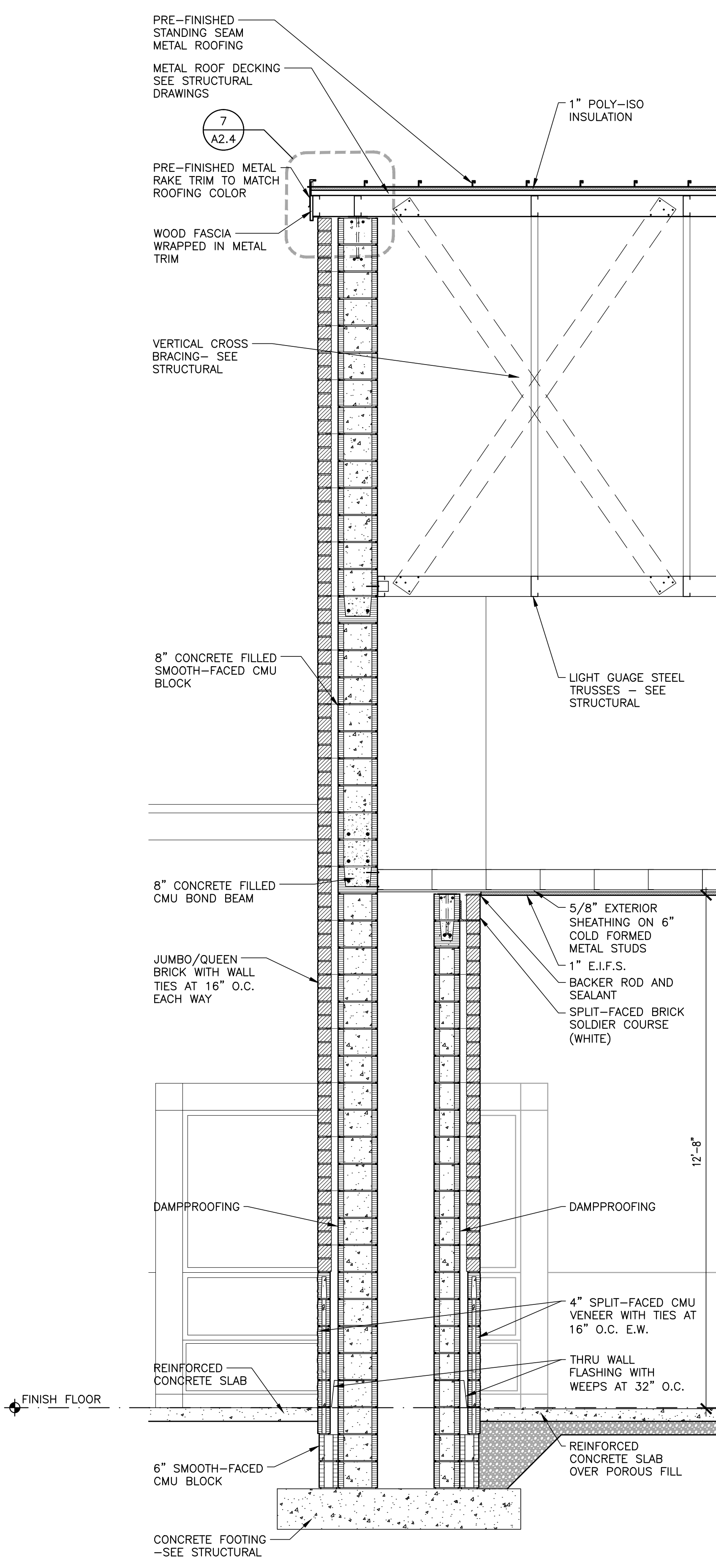


SHEET TITLE:
 WALL SECTIONS

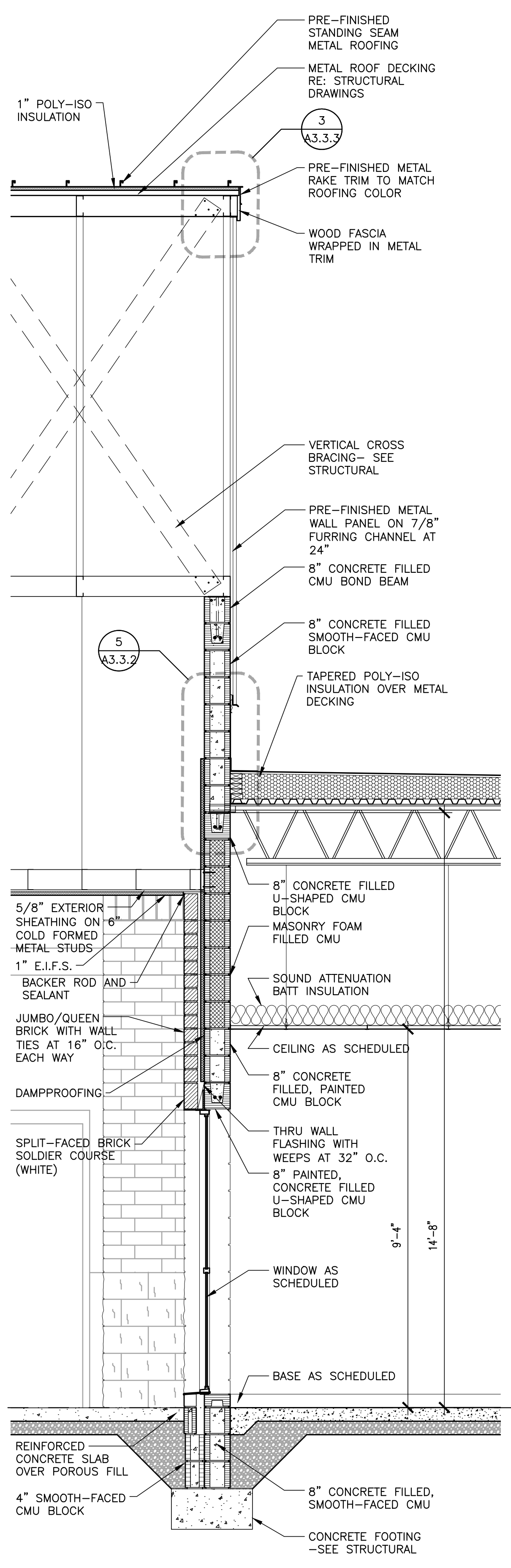
PROJ. MGR.: R. LATHAN
 DRAWN: WW & ELM
 DATE: MARCH 8, 2024

JOB NO. **23-92**
 SHEET NO. **A3.3.1**
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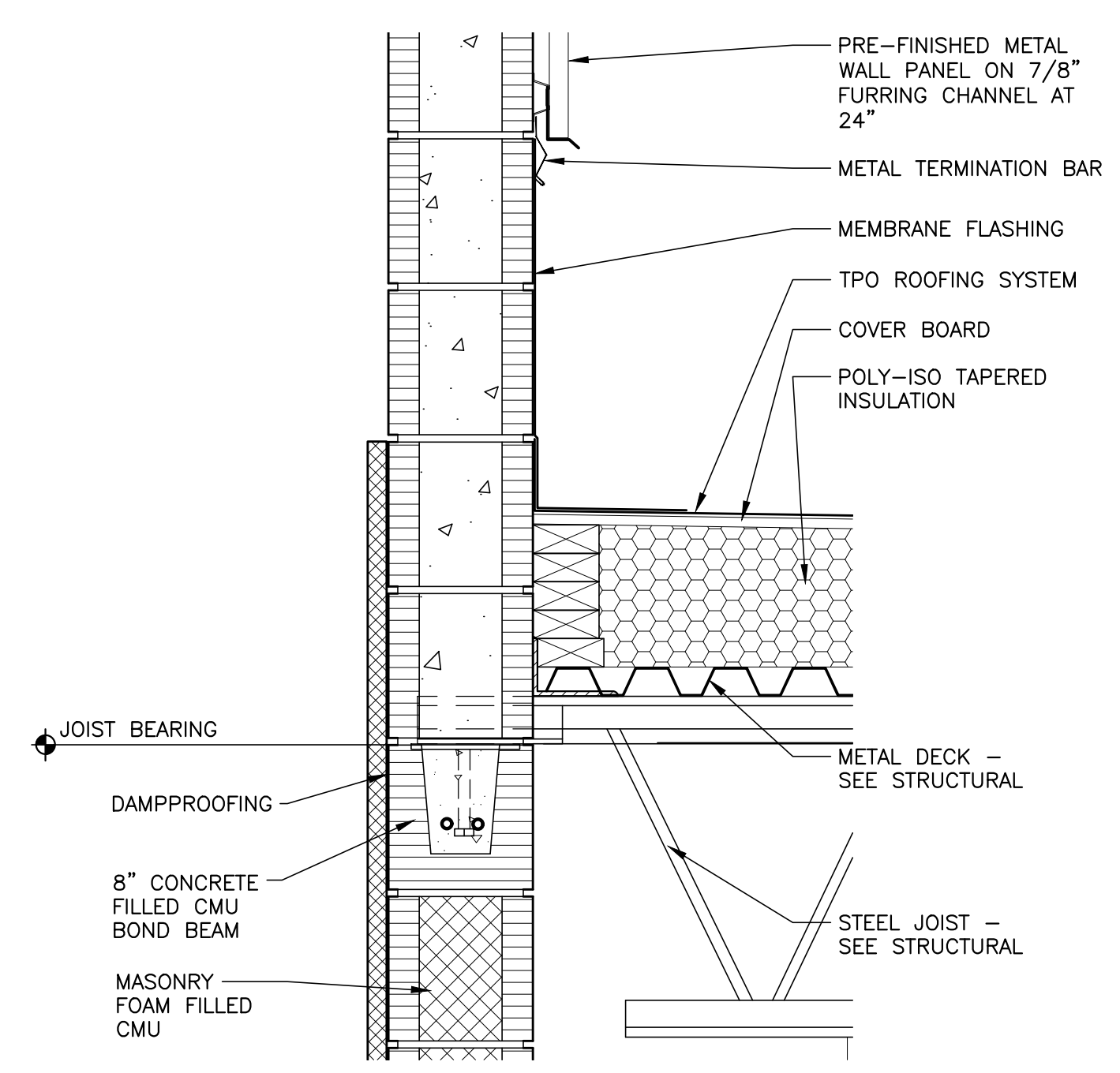




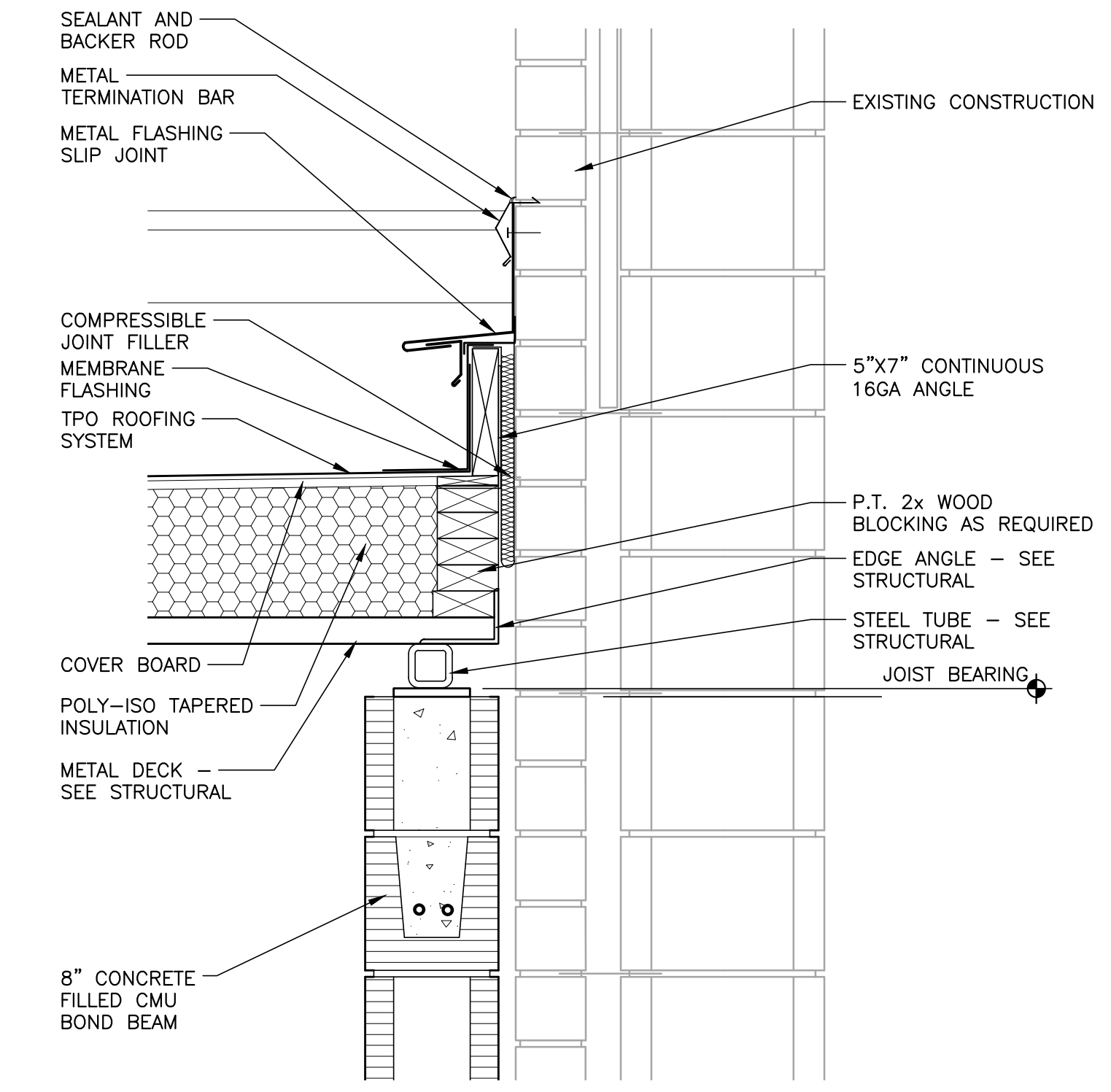
1 WALL SECTION
 1/2" = 1'-0"



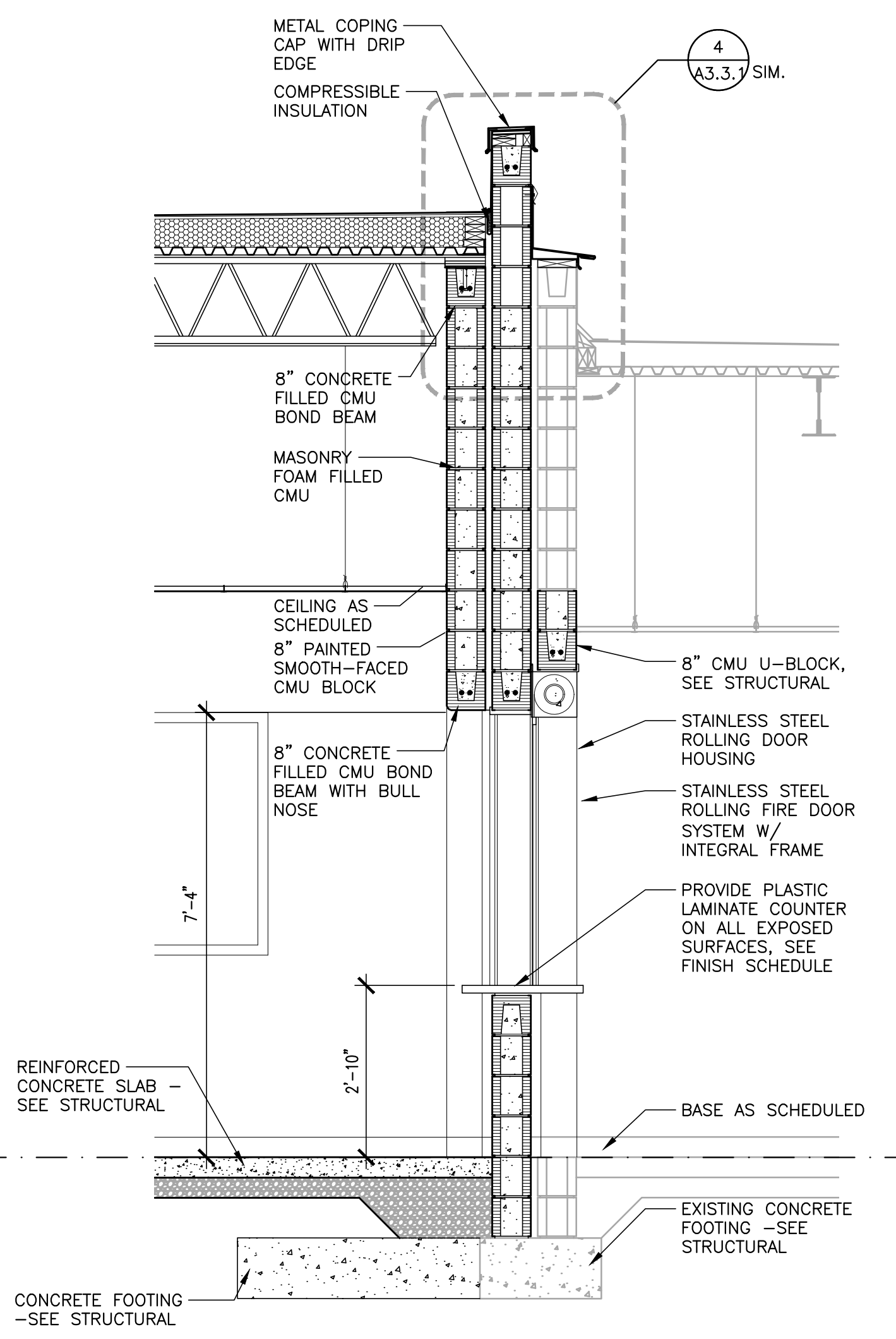
2 WALL SECTION
 1/2" = 1'-0"



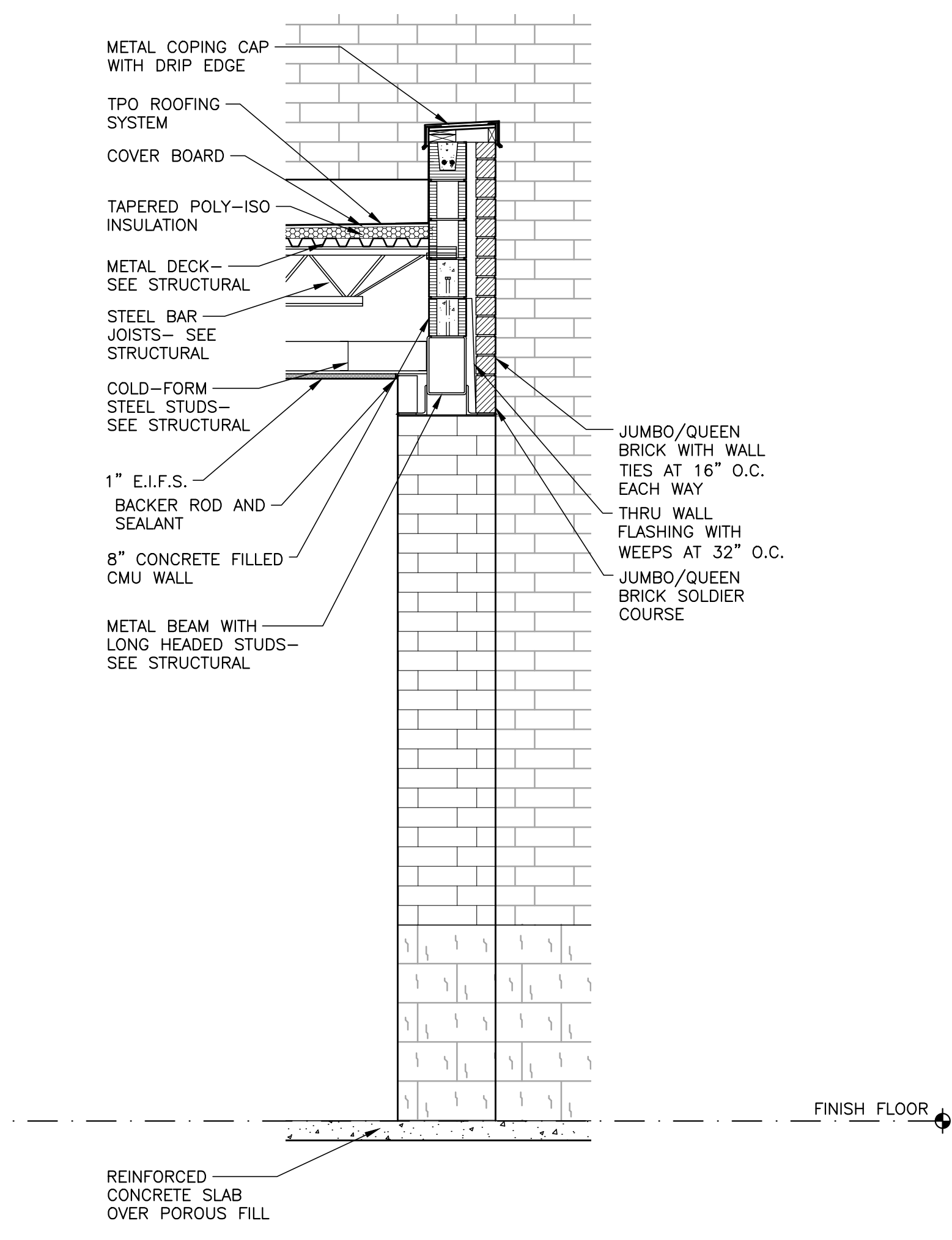
5 DETAIL
 1 1/2" = 1'-0"



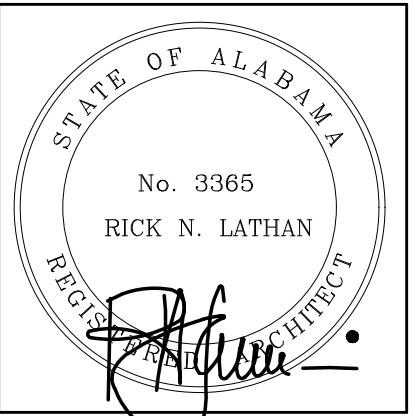
6 DETAIL
 1 1/2" = 1'-0"



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



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

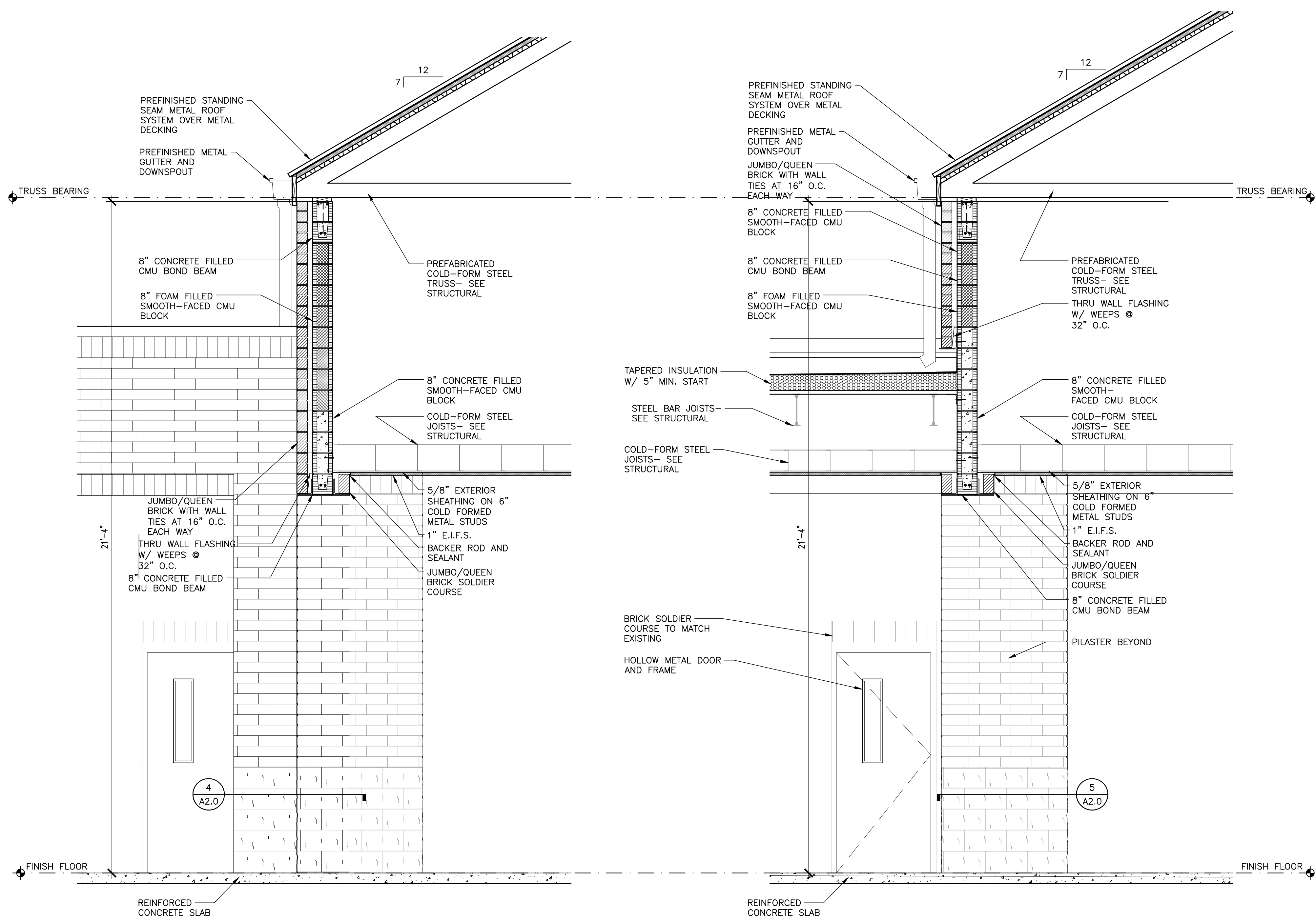


SHEET TITLE:
WALL SECTIONS

PROJ. MGR.: R. LATHAN
DRAWN: WW & ELM
DATE: MARCH 8, 2024

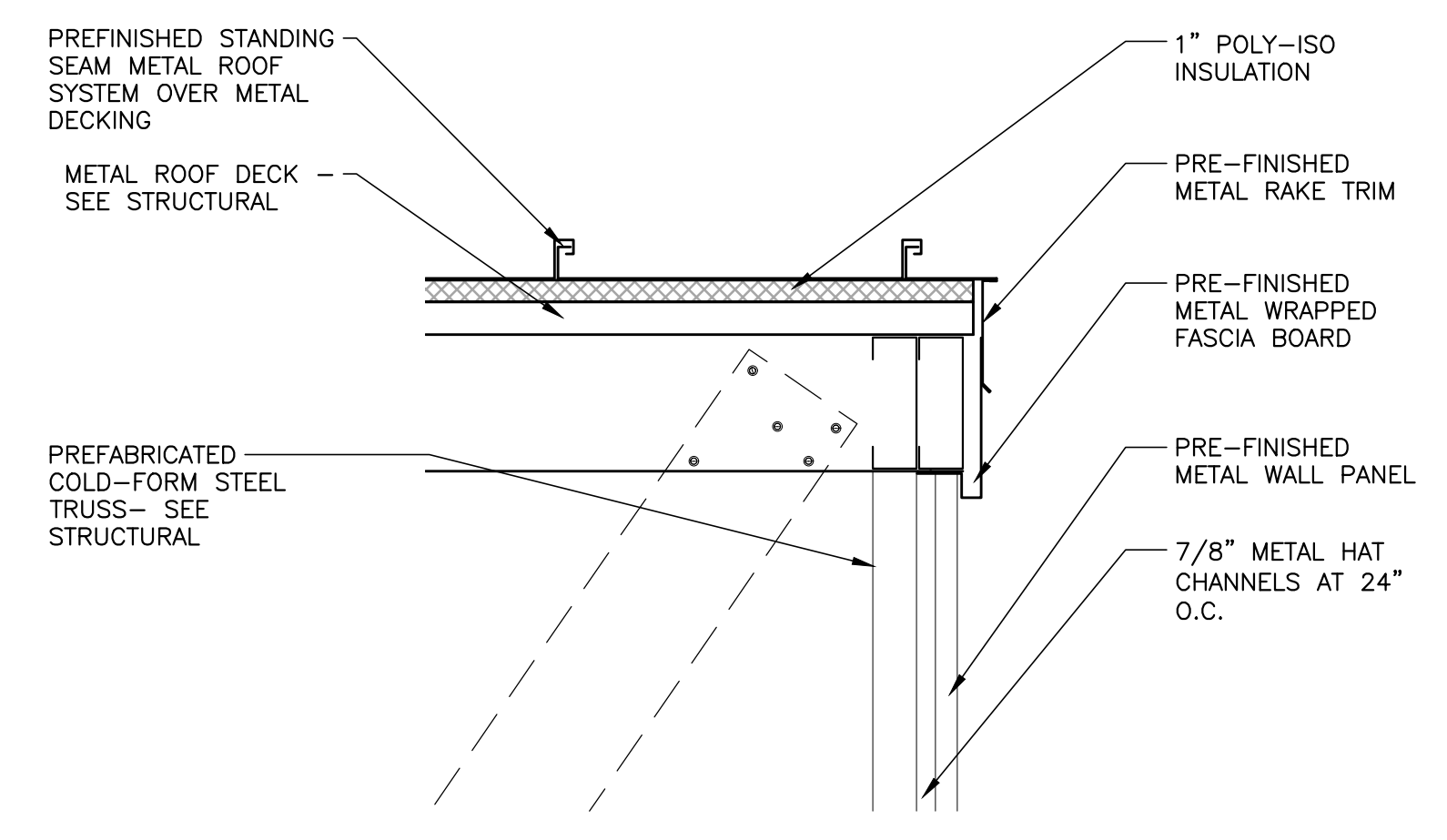
JOB NO. 23-92
SHEET NO:

A3.3.3

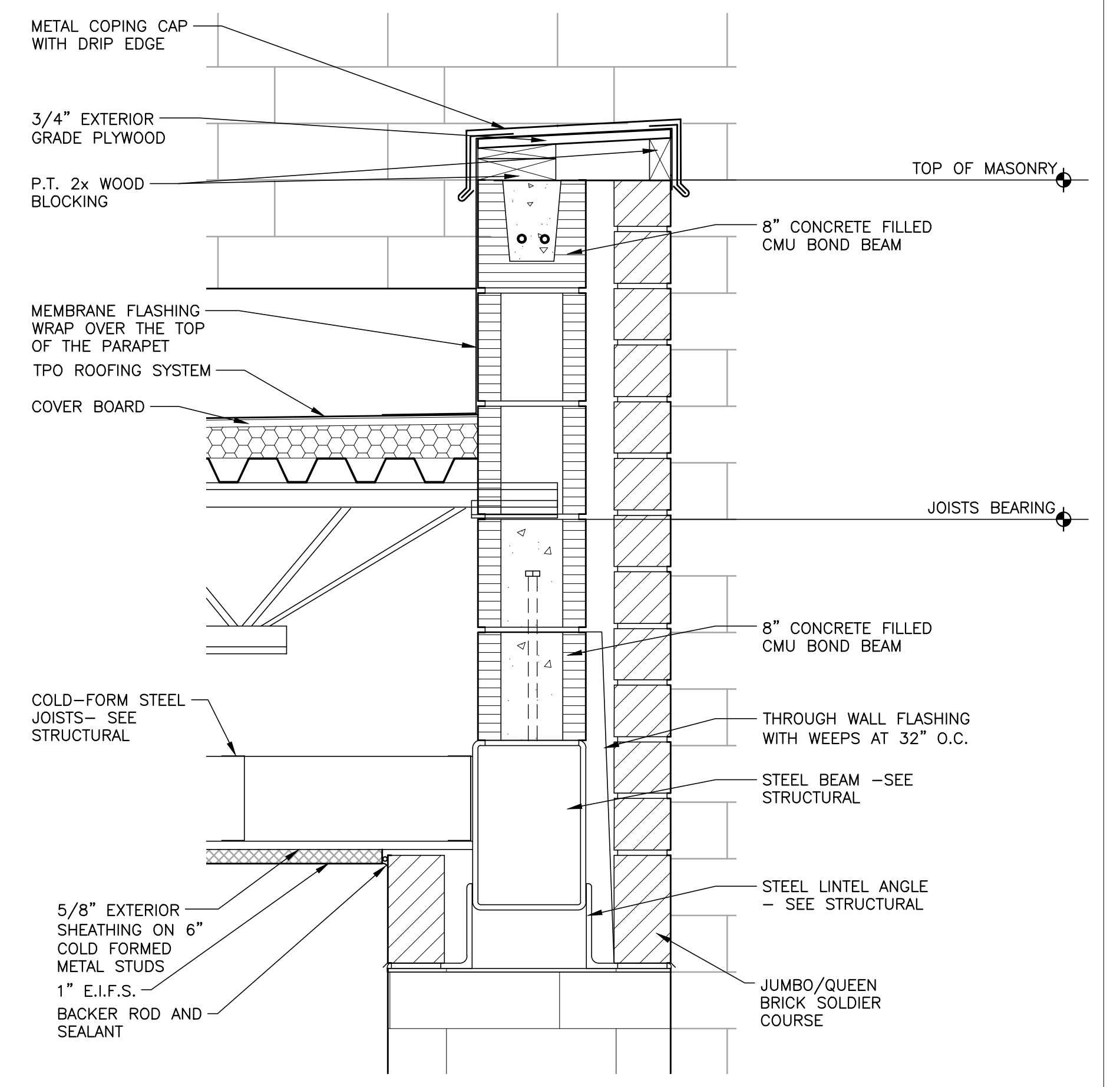


1 WALL SECTION
1/2" = 1'-0"

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

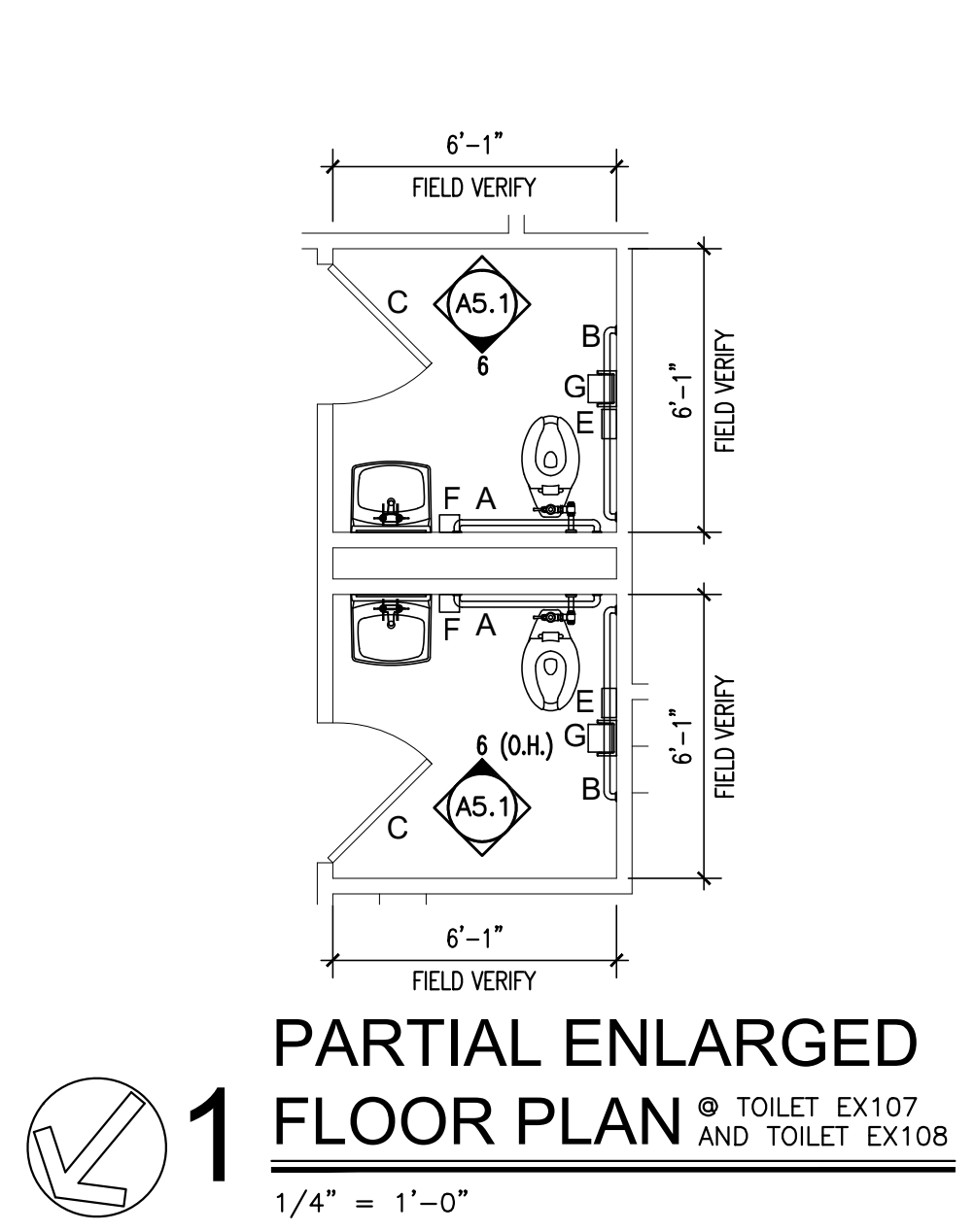


3 DETAIL
1 1/2" = 1'-0"

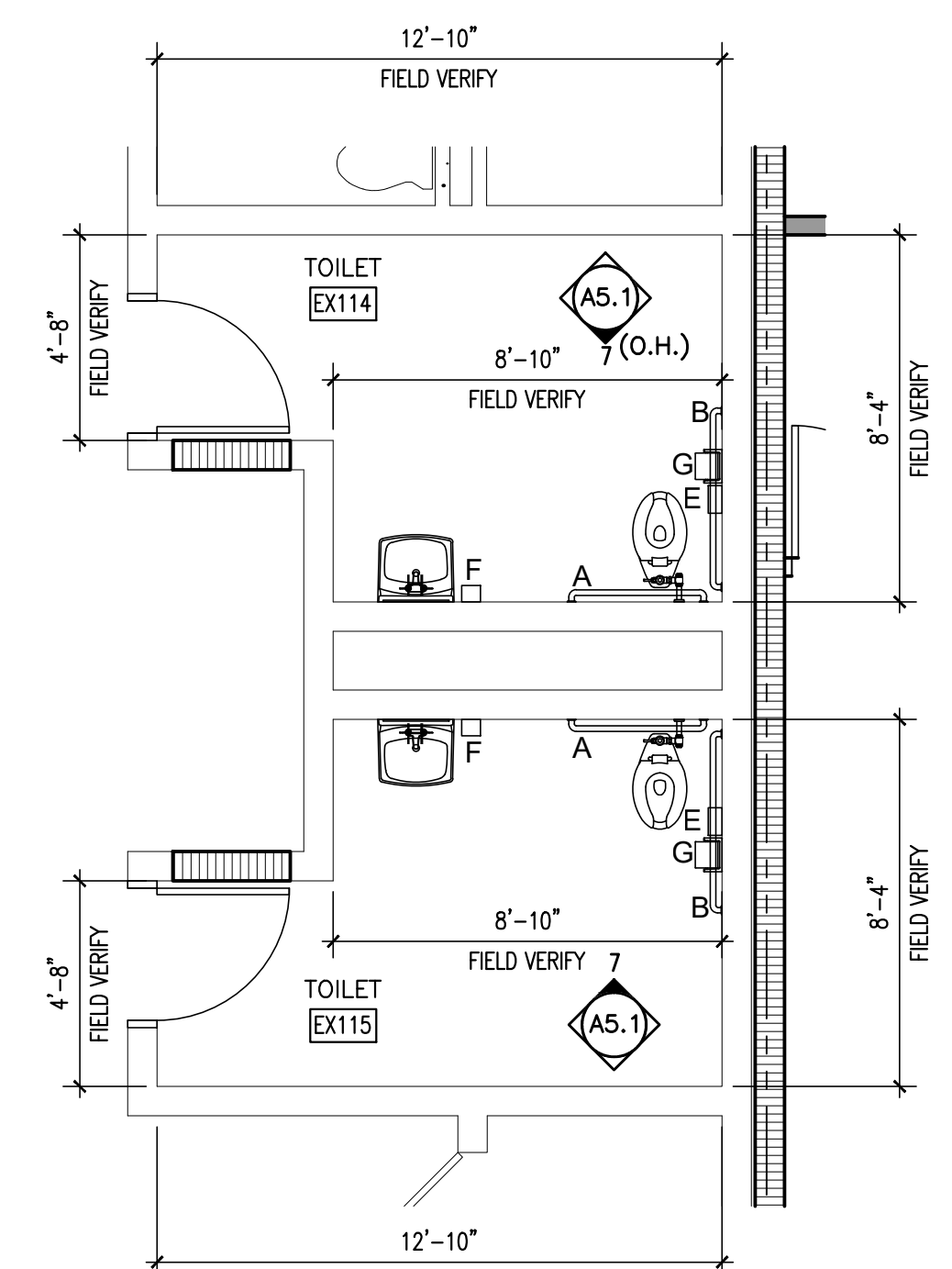


4 DETAIL
1 1/2" = 1'-0"

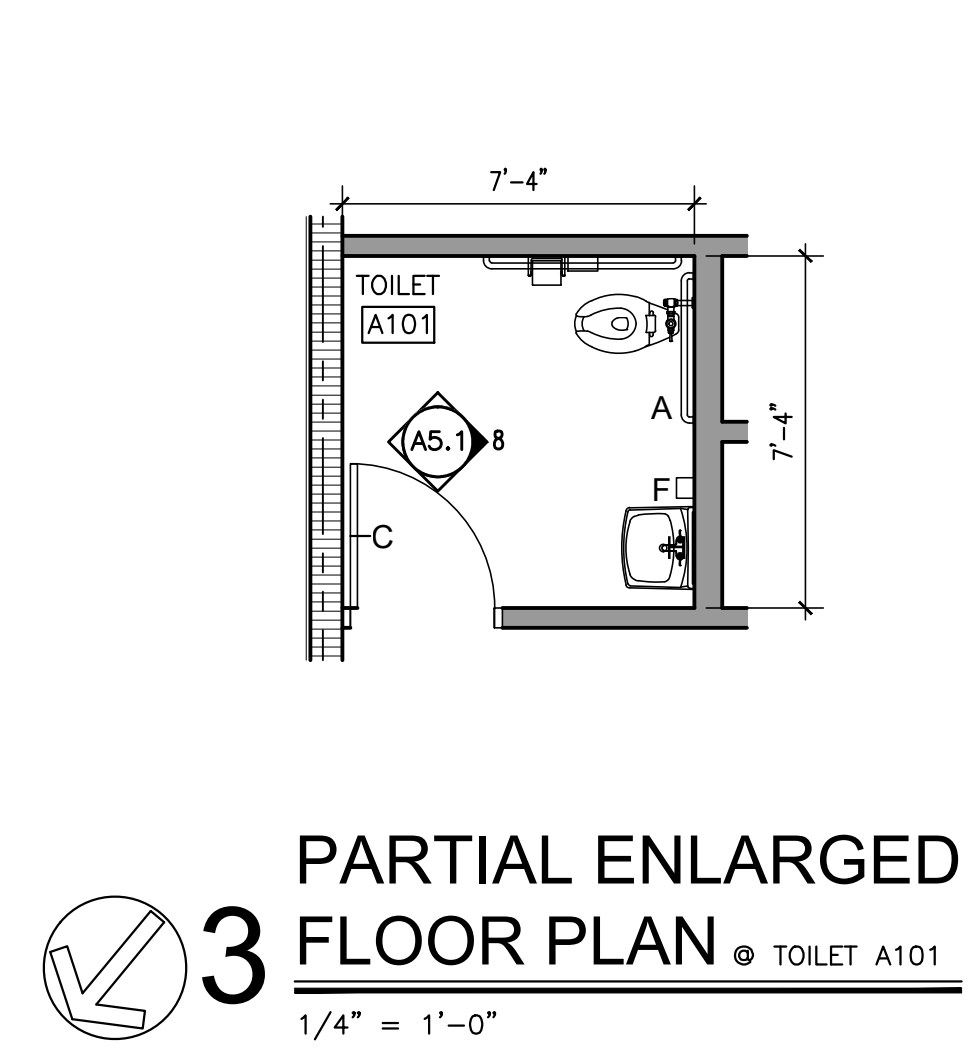
TOILET ACCESSORY LEGEND	
A	36" S.S. GRAB BAR
B	42" S.S. GRAB BAR
C	COAT HOOK
D	RECESSED PAPER TOWEL DISPENSER W/ WASTE RECEPTACLE
E	FEMININE NAPKIN DISPOSAL
F	SOAP DISPENSER - SURFACE MOUNT
G	TOILET TISSUE DISPENSER
H	FRAMED MIRROR 18" x 30"



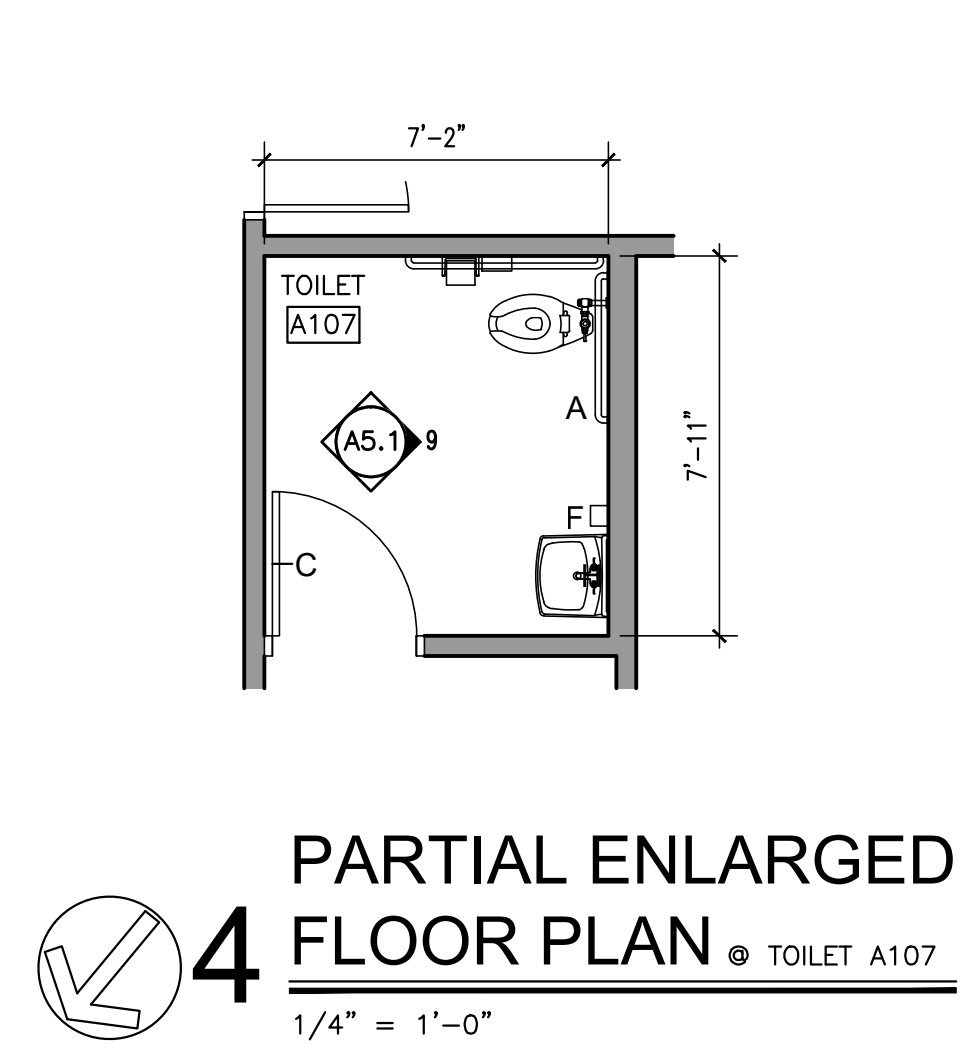
1 PARTIAL ENLARGED FLOOR PLAN © TOILET EX107 AND TOILET EX108
 1/4" = 1'-0"



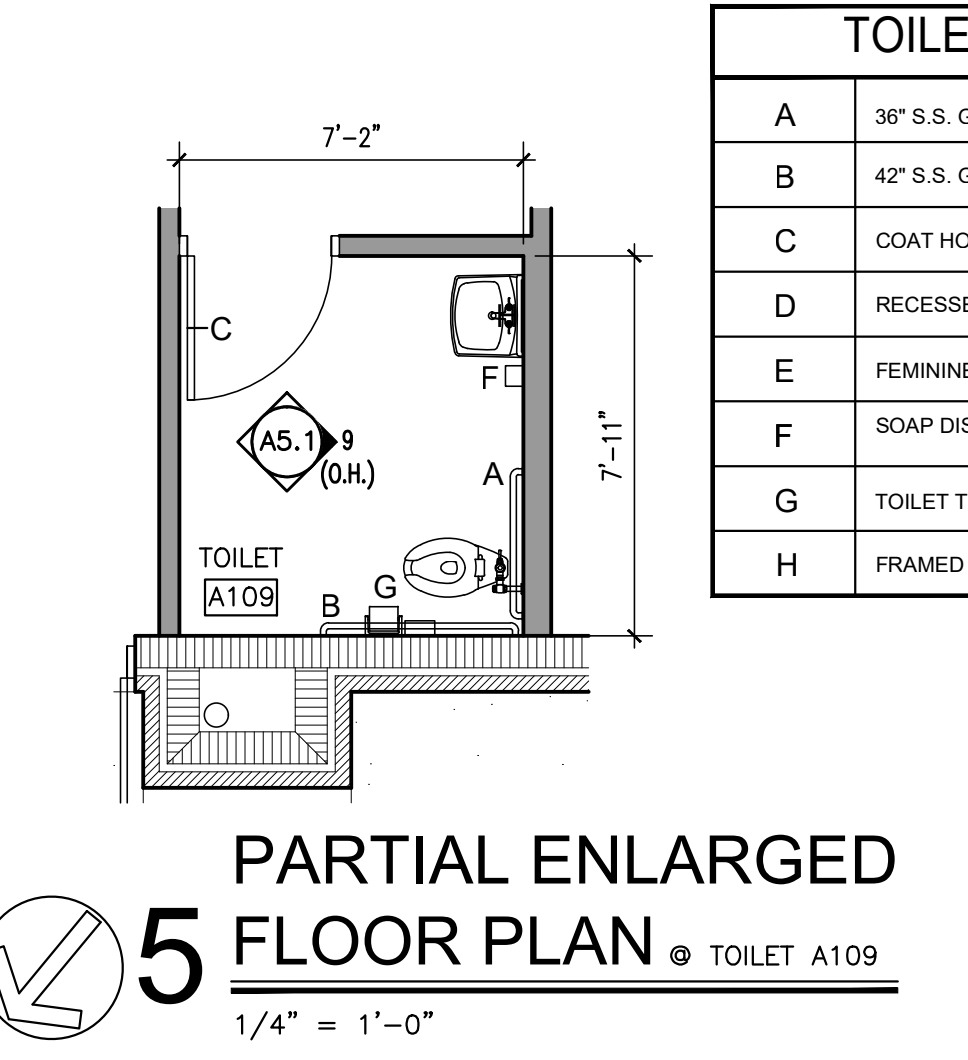
2 PARTIAL ENLARGED FLOOR PLAN © TOILET EX114 AND TOILET EX115
 1/4" = 1'-0"



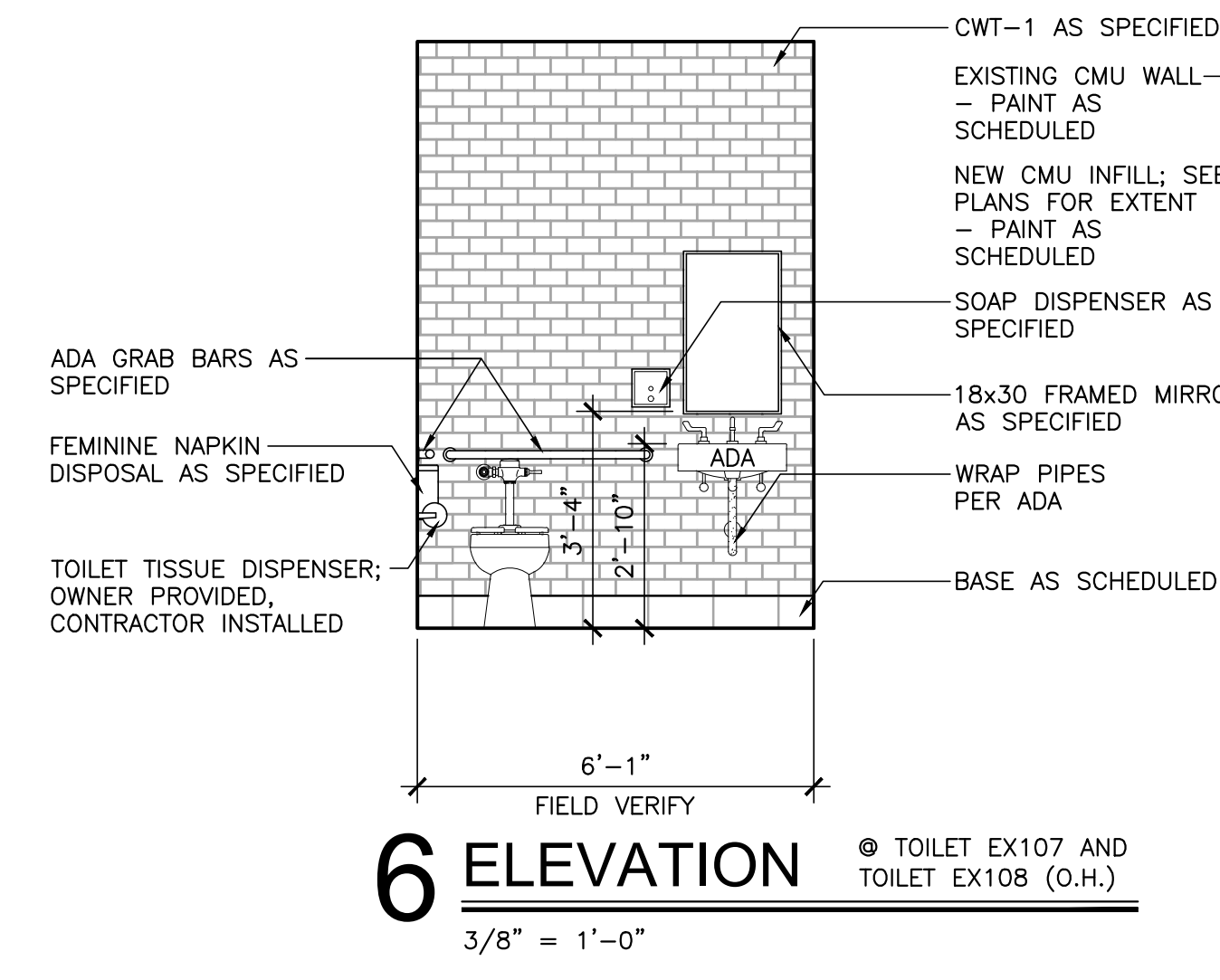
3 PARTIAL ENLARGED FLOOR PLAN © TOILET A101
 1/4" = 1'-0"



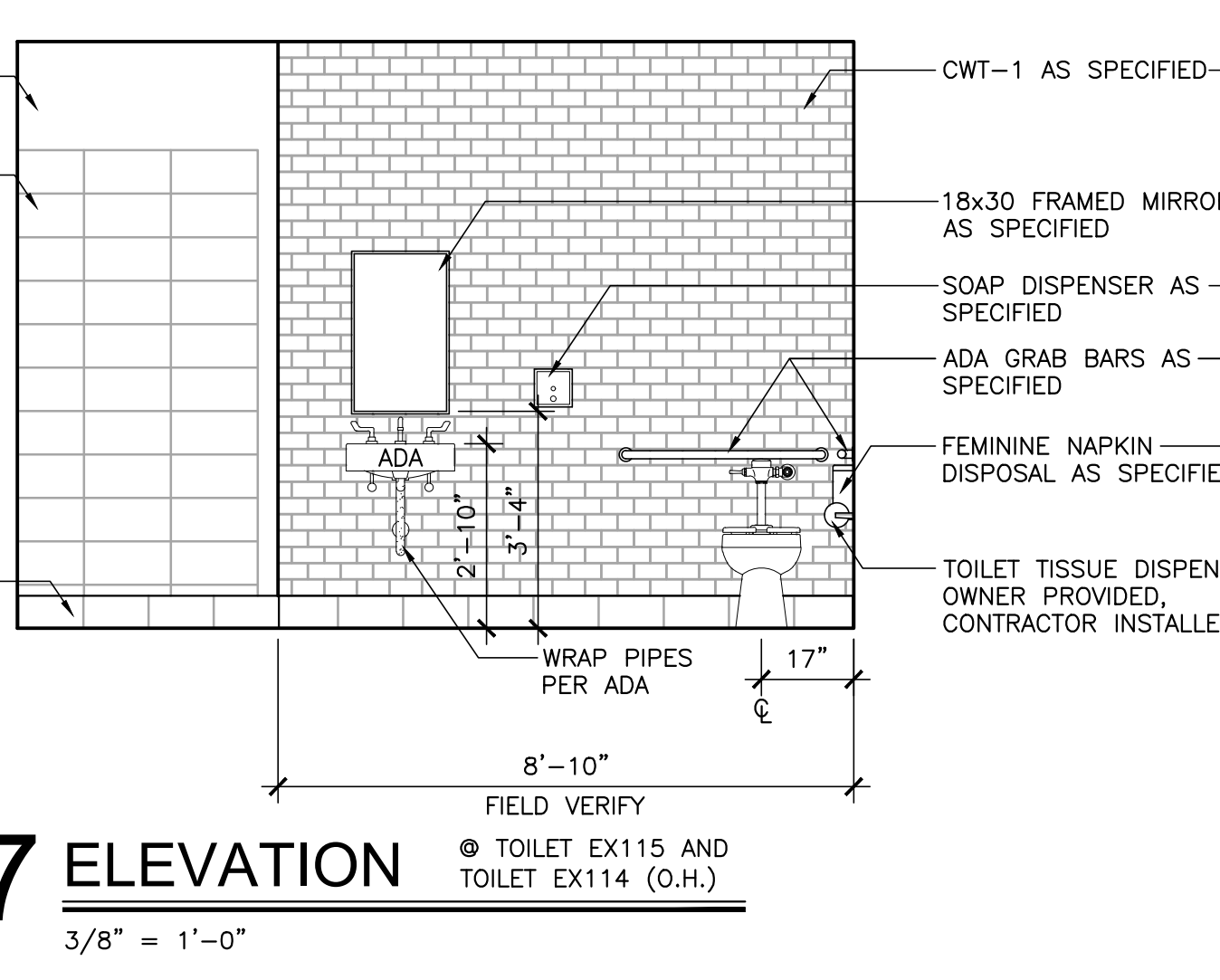
4 PARTIAL ENLARGED FLOOR PLAN © TOILET A107
 1/4" = 1'-0"



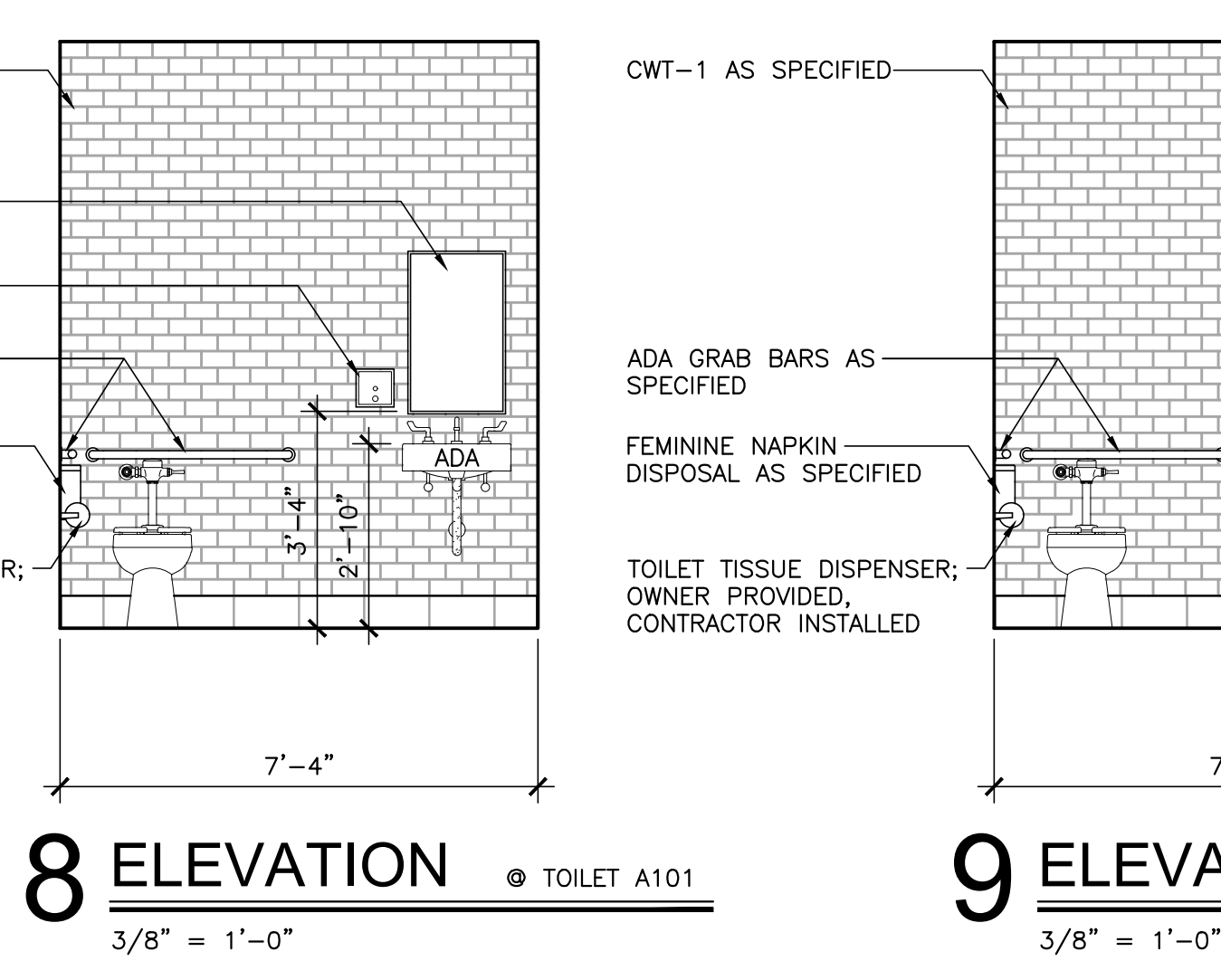
5 PARTIAL ENLARGED FLOOR PLAN © TOILET A109
 1/4" = 1'-0"



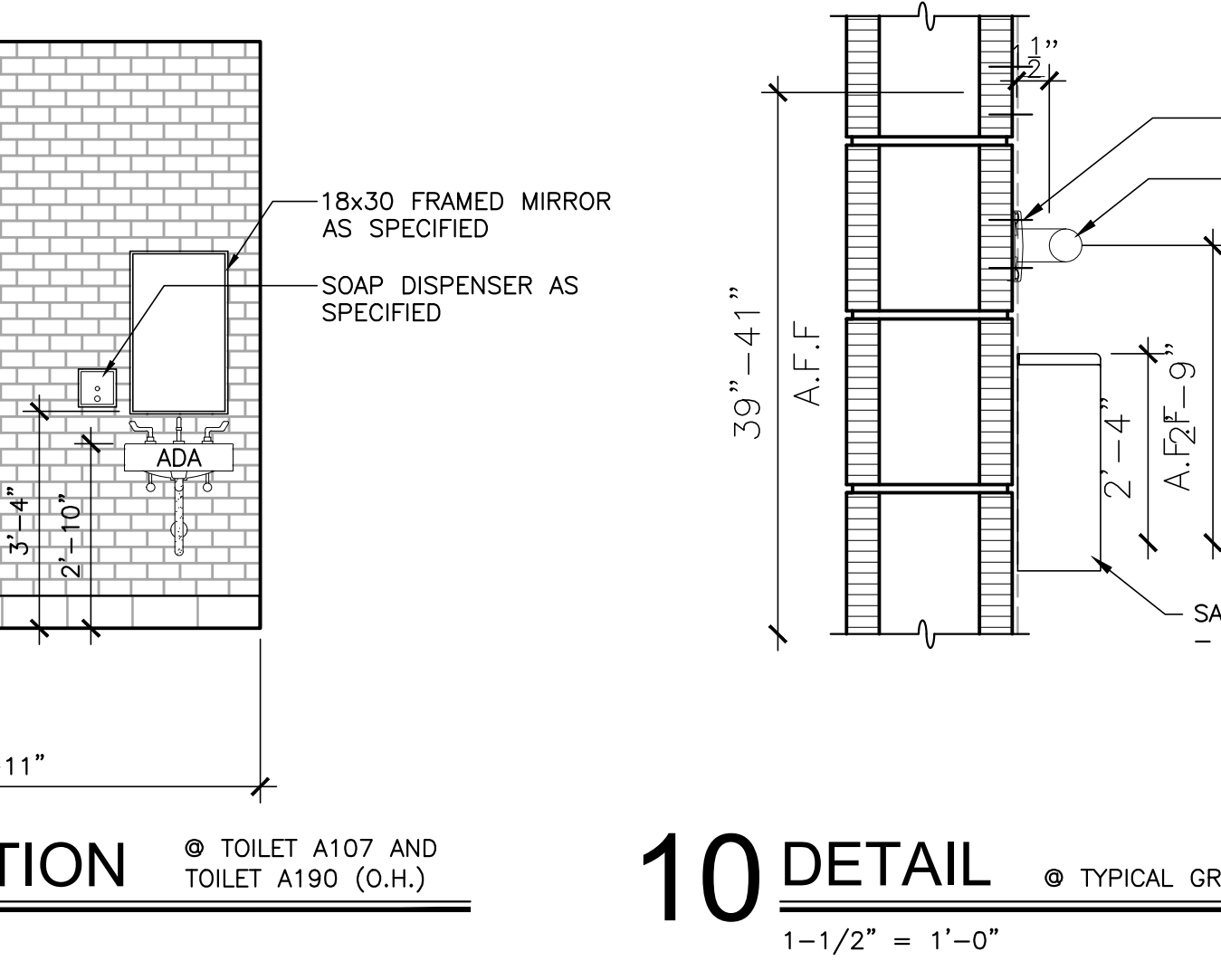
6 ELEVATION © TOILET EX107 AND TOILET EX108 (O.H.)
 3/8" = 1'-0"



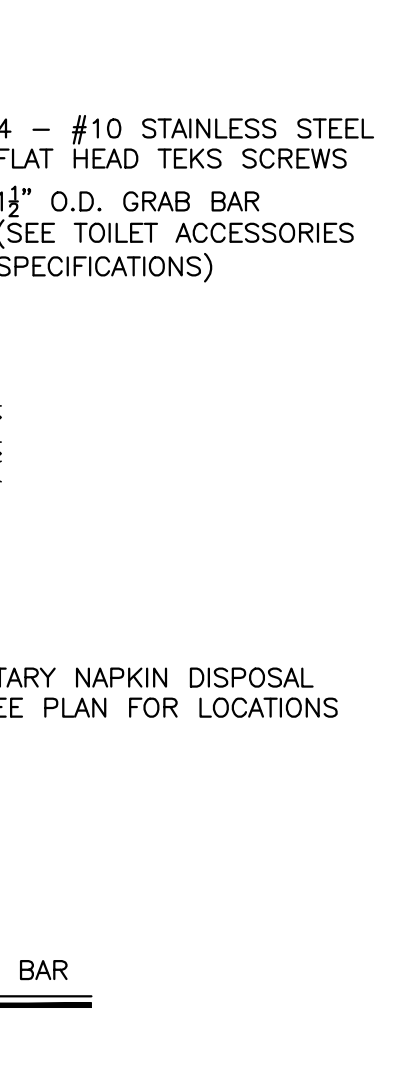
7 ELEVATION © TOILET EX115 AND TOILET EX114 (O.H.)
 3/8" = 1'-0"



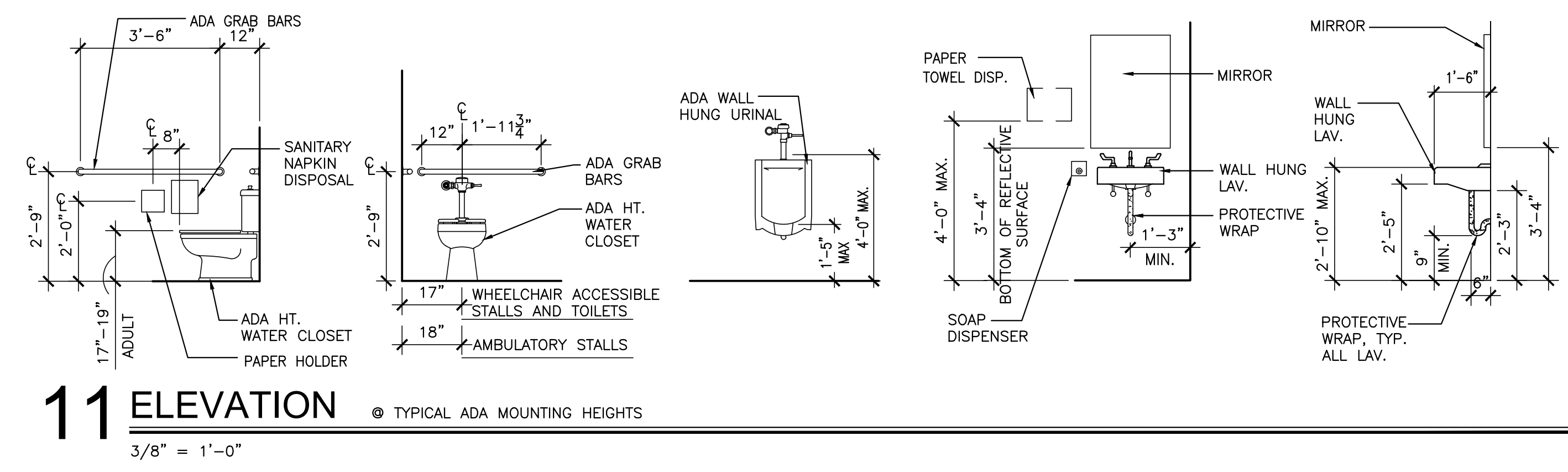
8 ELEVATION © TOILET A101
 3/8" = 1'-0"



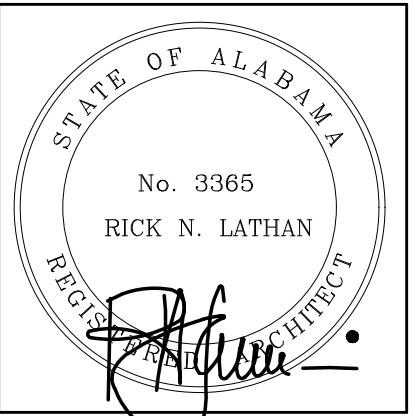
9 ELEVATION © TOILET A107 AND TOILET A109 (O.H.)
 3/8" = 1'-0"



10 DETAIL © TYPICAL GRAB BAR
 1-1/2" = 1'-0"



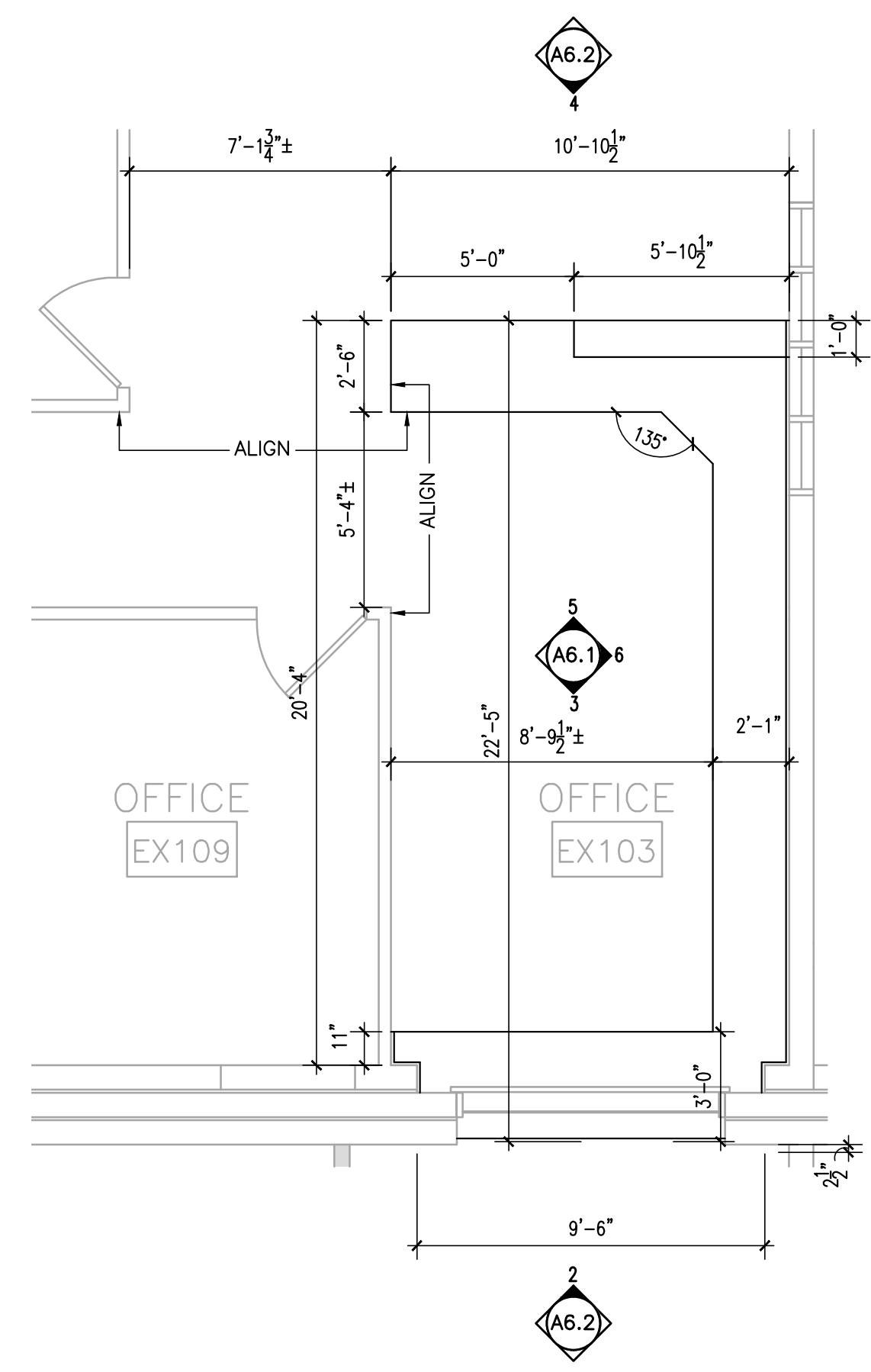
11 ELEVATION © TYPICAL ADA MOUNTING HEIGHTS
 3/8" = 1'-0"



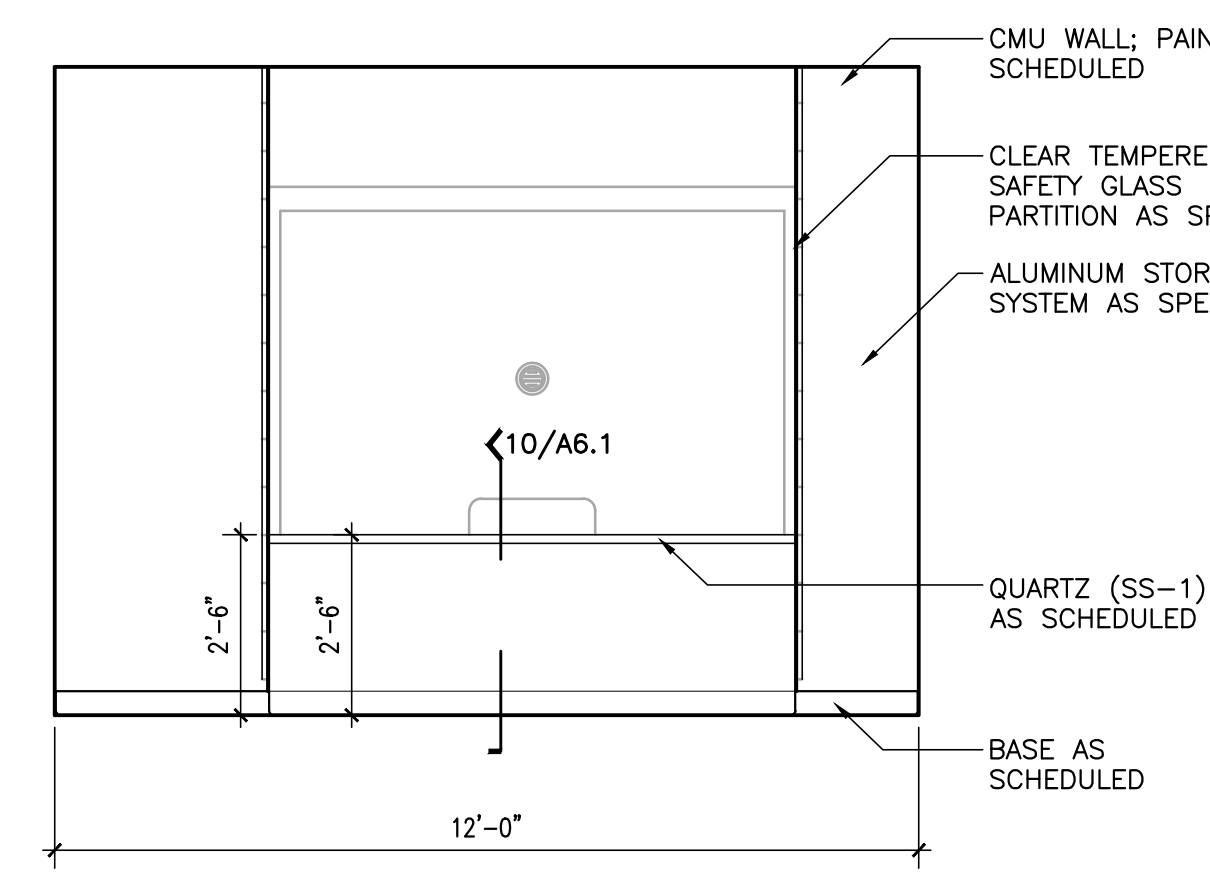
SHEET TITLE:
PARTIAL ENLARGED
CASEWORK FLOOR PLAN,
ELEVATIONS, AND SECTIONS

PROJ. MGR.: R. LATHAN
DRAWN: HR
DATE: MARCH 8, 2024
REVISIONS

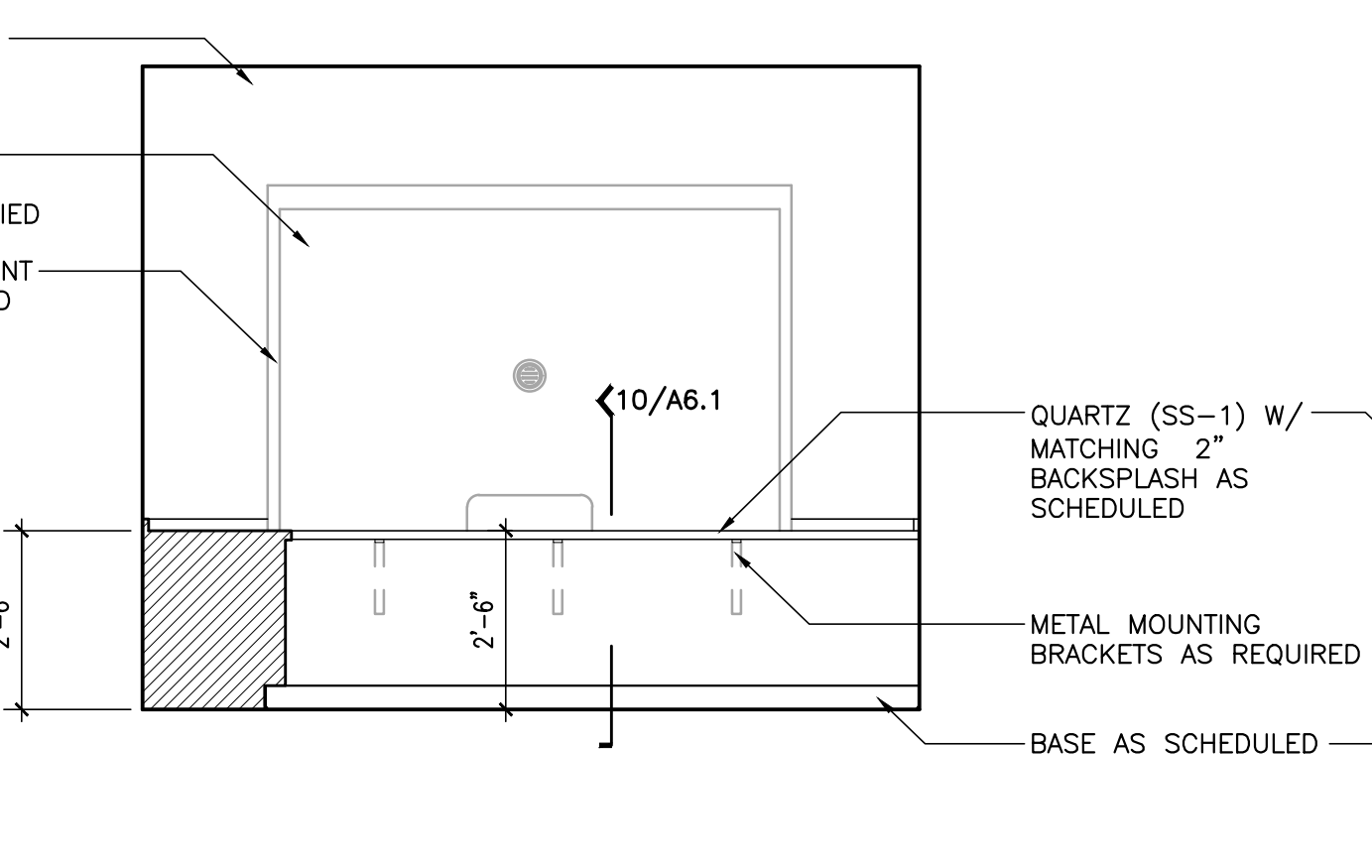
JOB NO. **23-92**
SHEET NO:
A6.1
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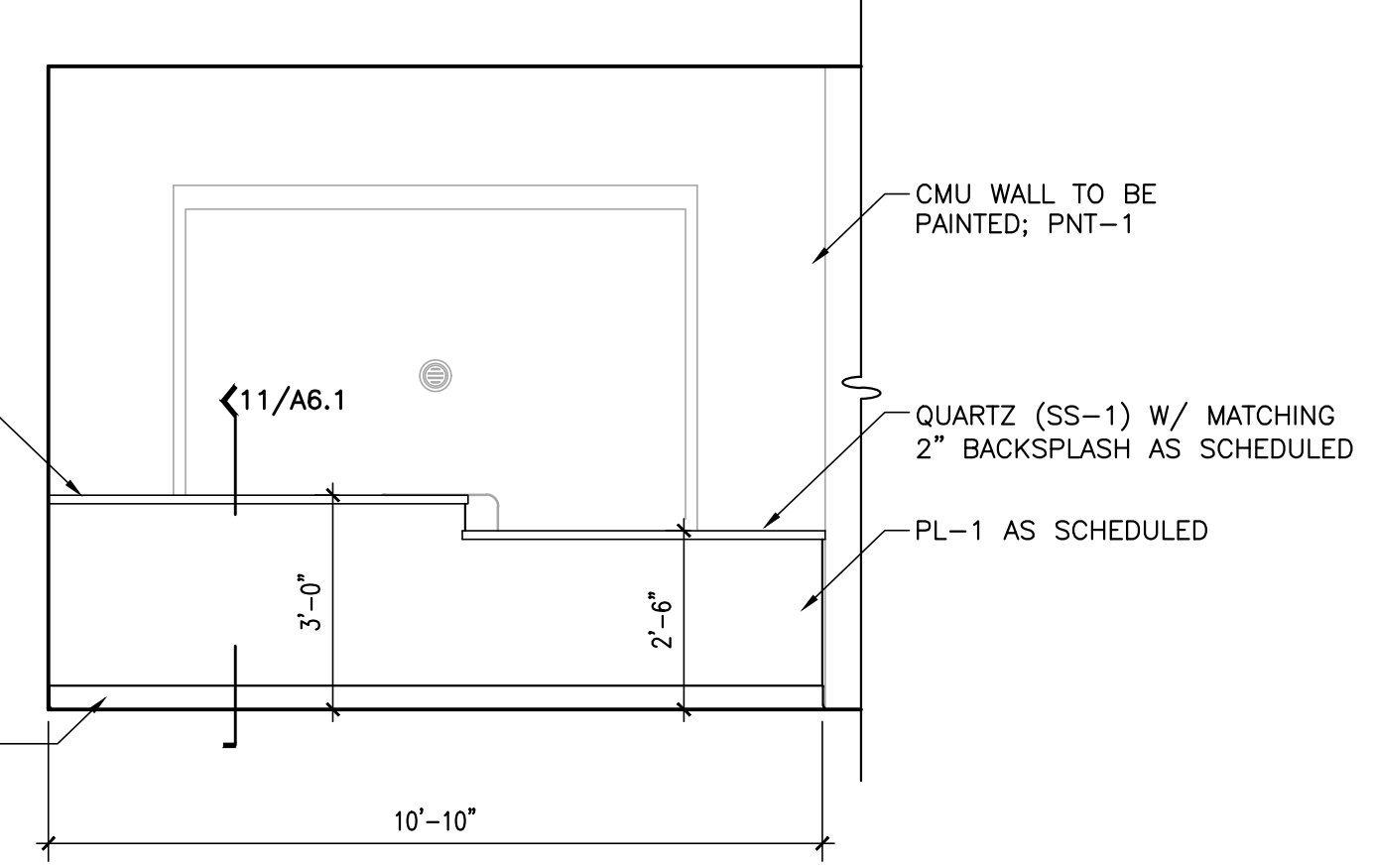
1 ENLARGED PARTIAL CASEWORK FLOOR PLAN @ OFFICE EX103
1/4" = 1'-0"



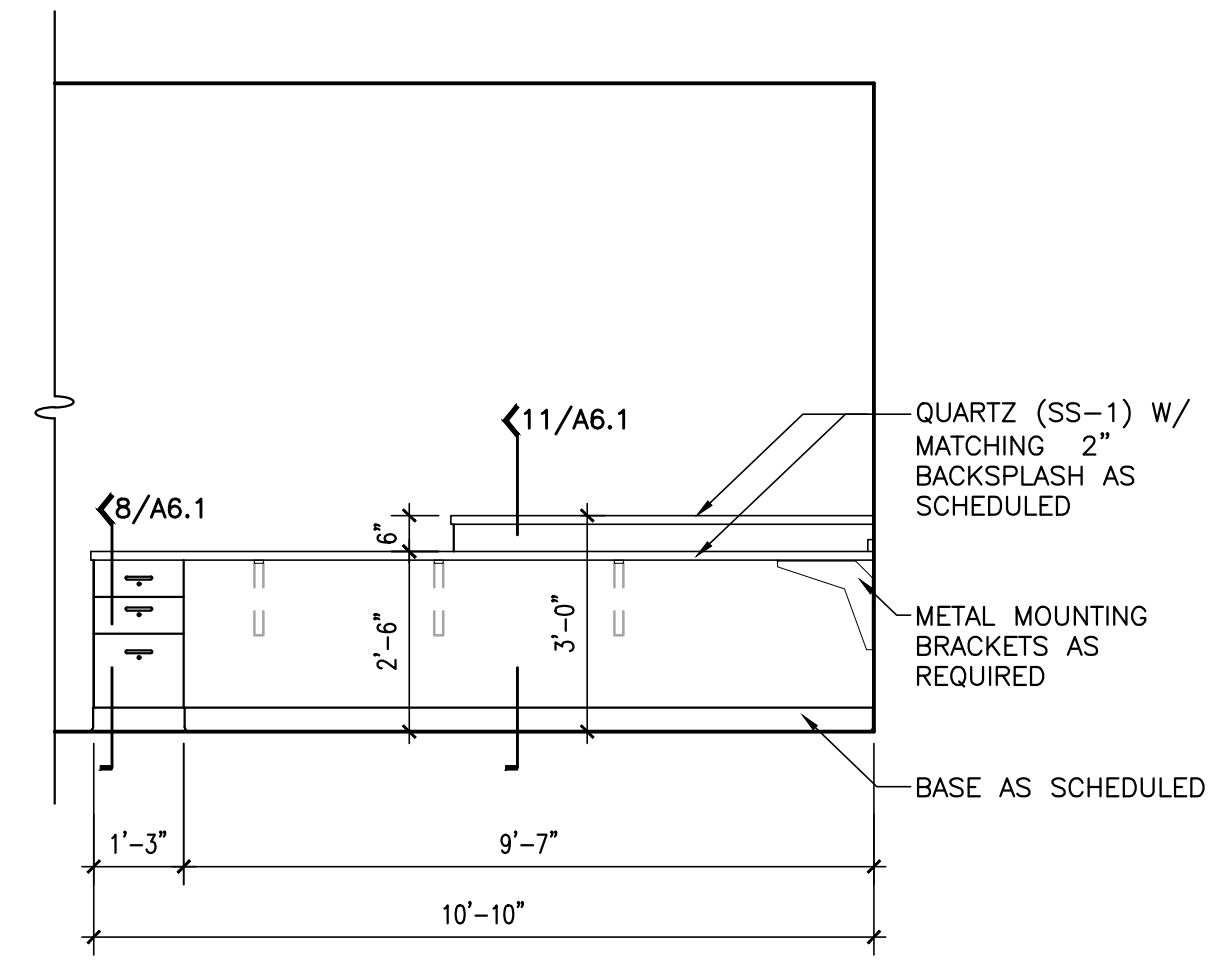
2 ELEVATION @ OFFICE EX103
3/8" = 1'-0"



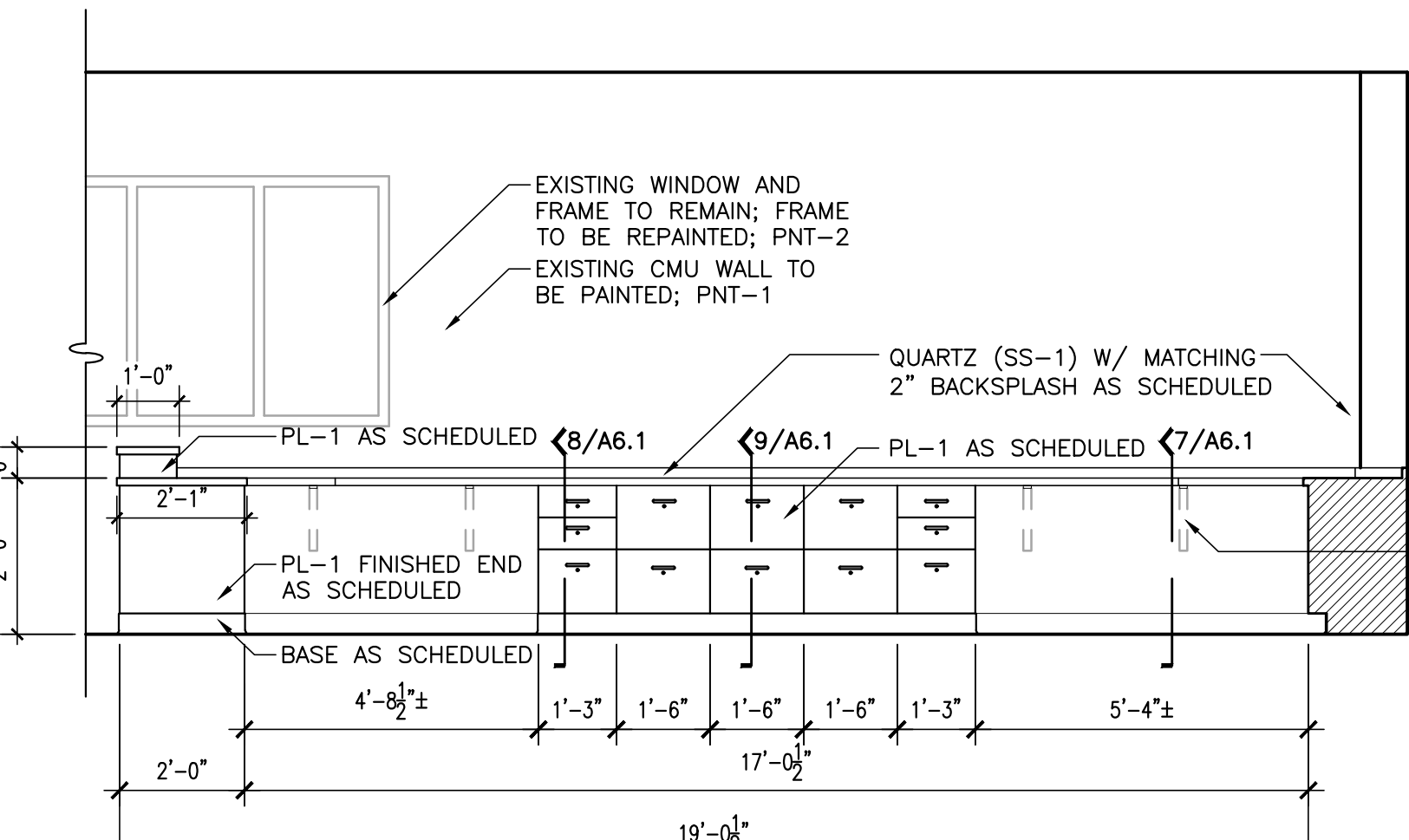
3 ELEVATION @ OFFICE EX103
3/8" = 1'-0"



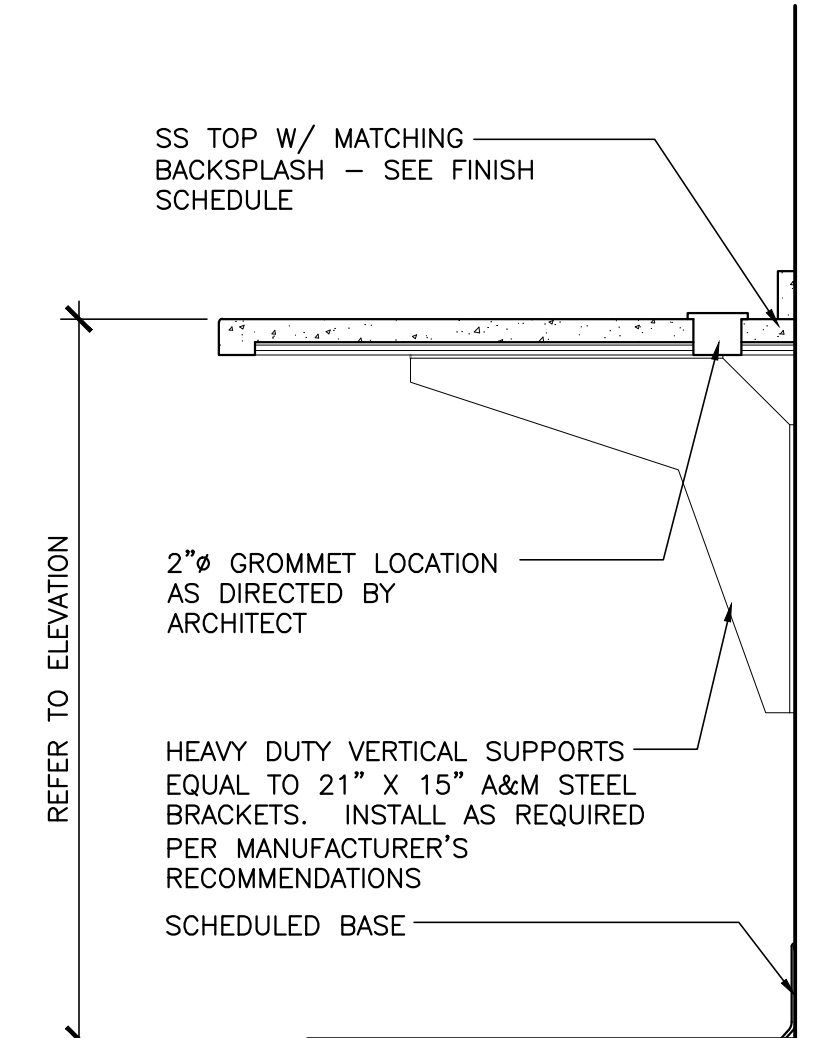
4 ELEVATION @ OFFICE EX103
3/8" = 1'-0"



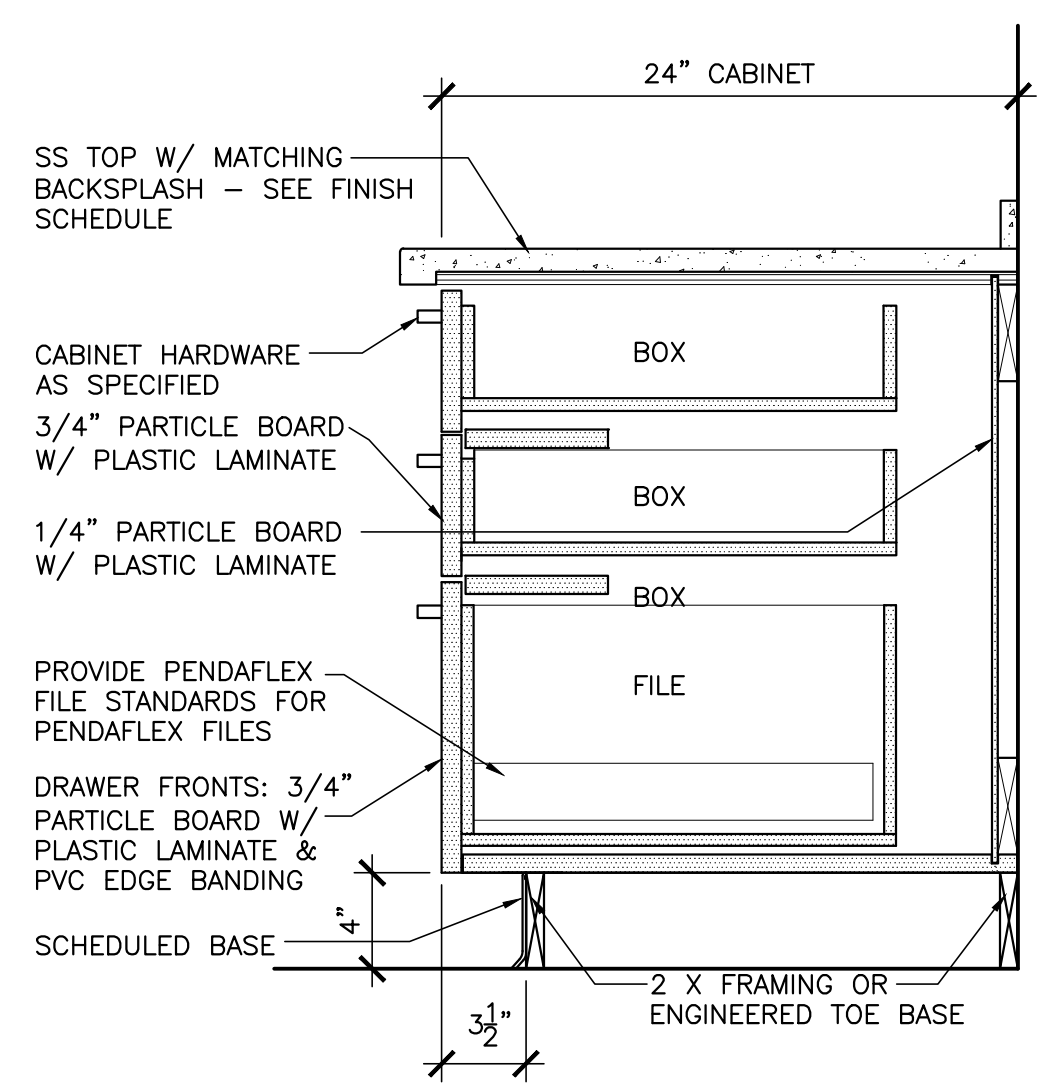
5 ELEVATION @ OFFICE EX103
3/8" = 1'-0"



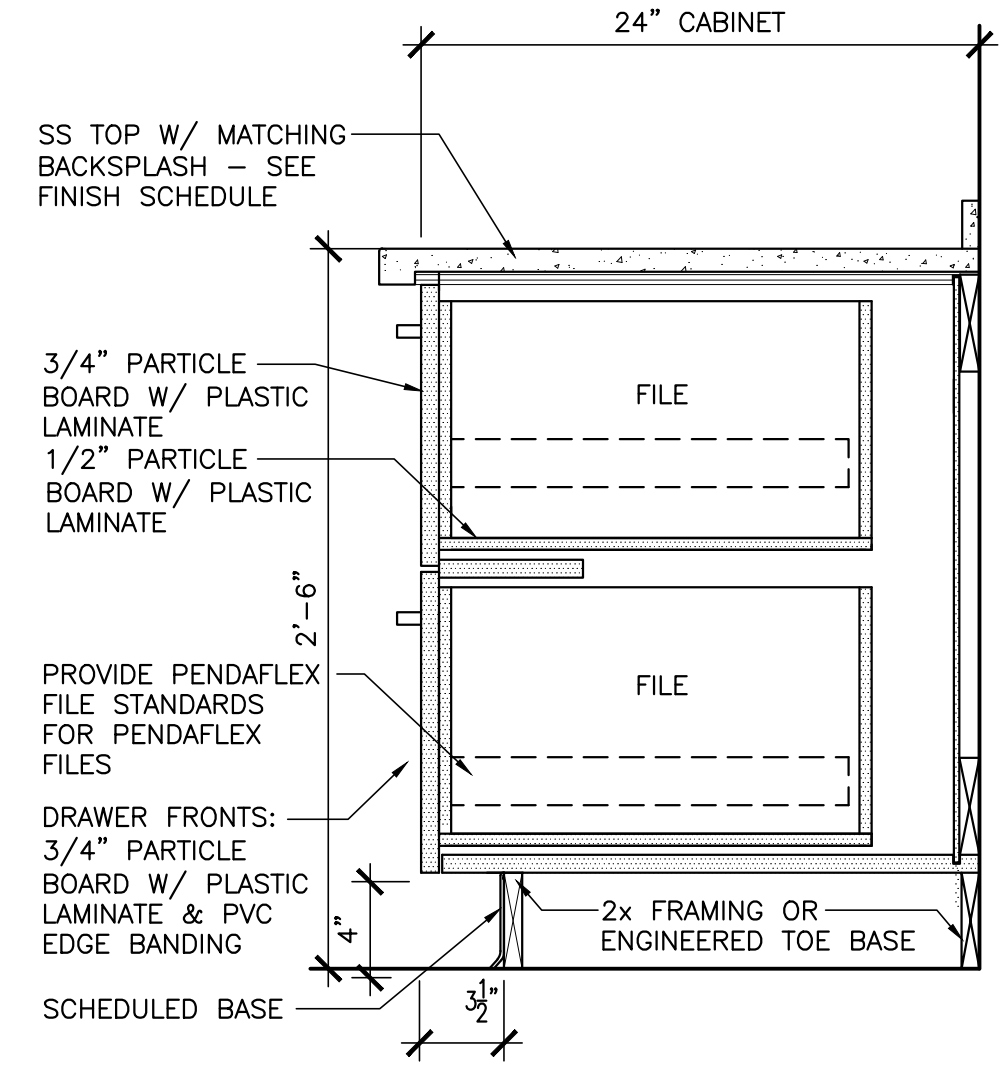
6 ELEVATION @ OFFICE EX103
3/8" = 1'-0"



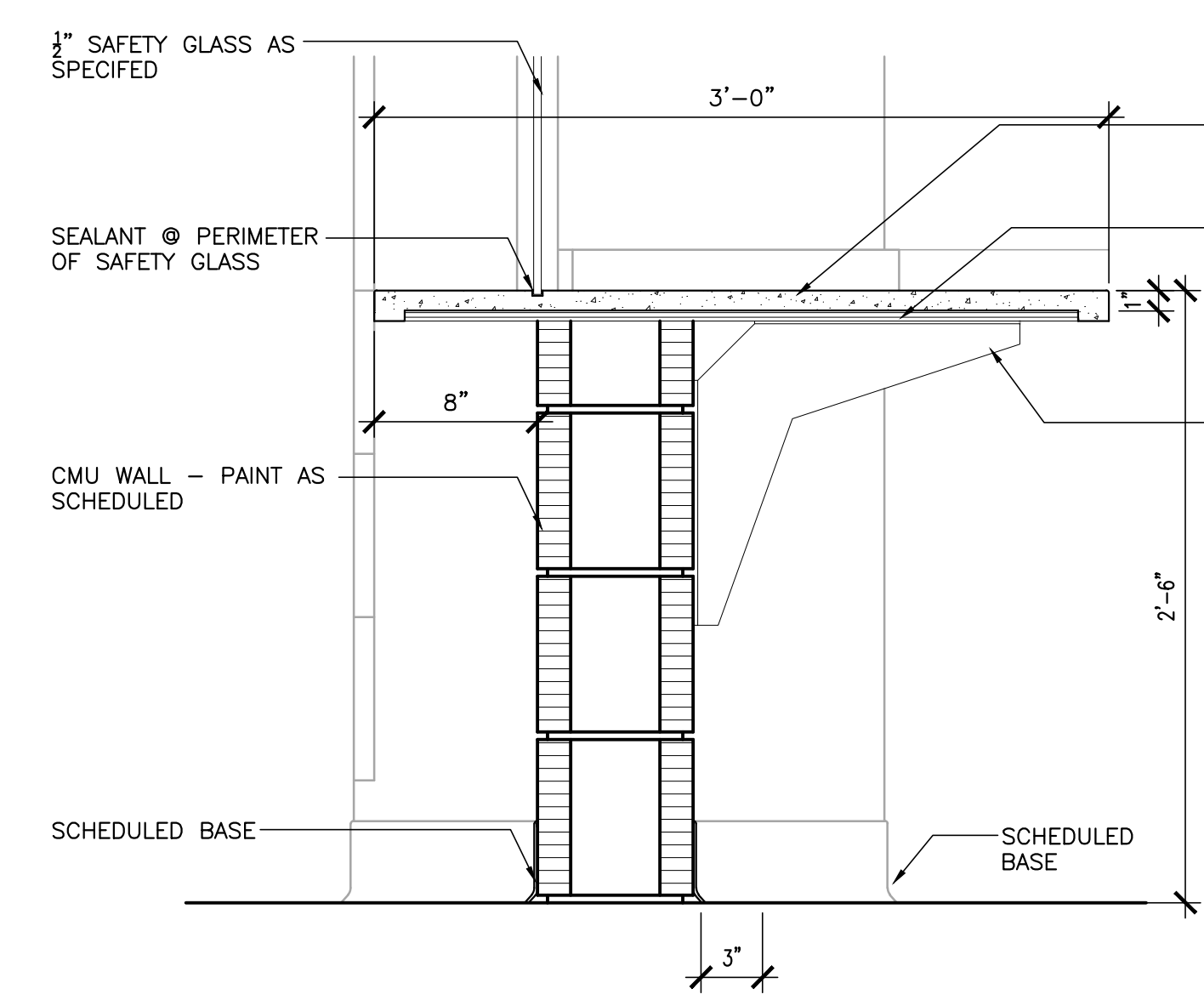
7 ELEVATION @ RECEPTION DESK
3/8" = 1'-0"



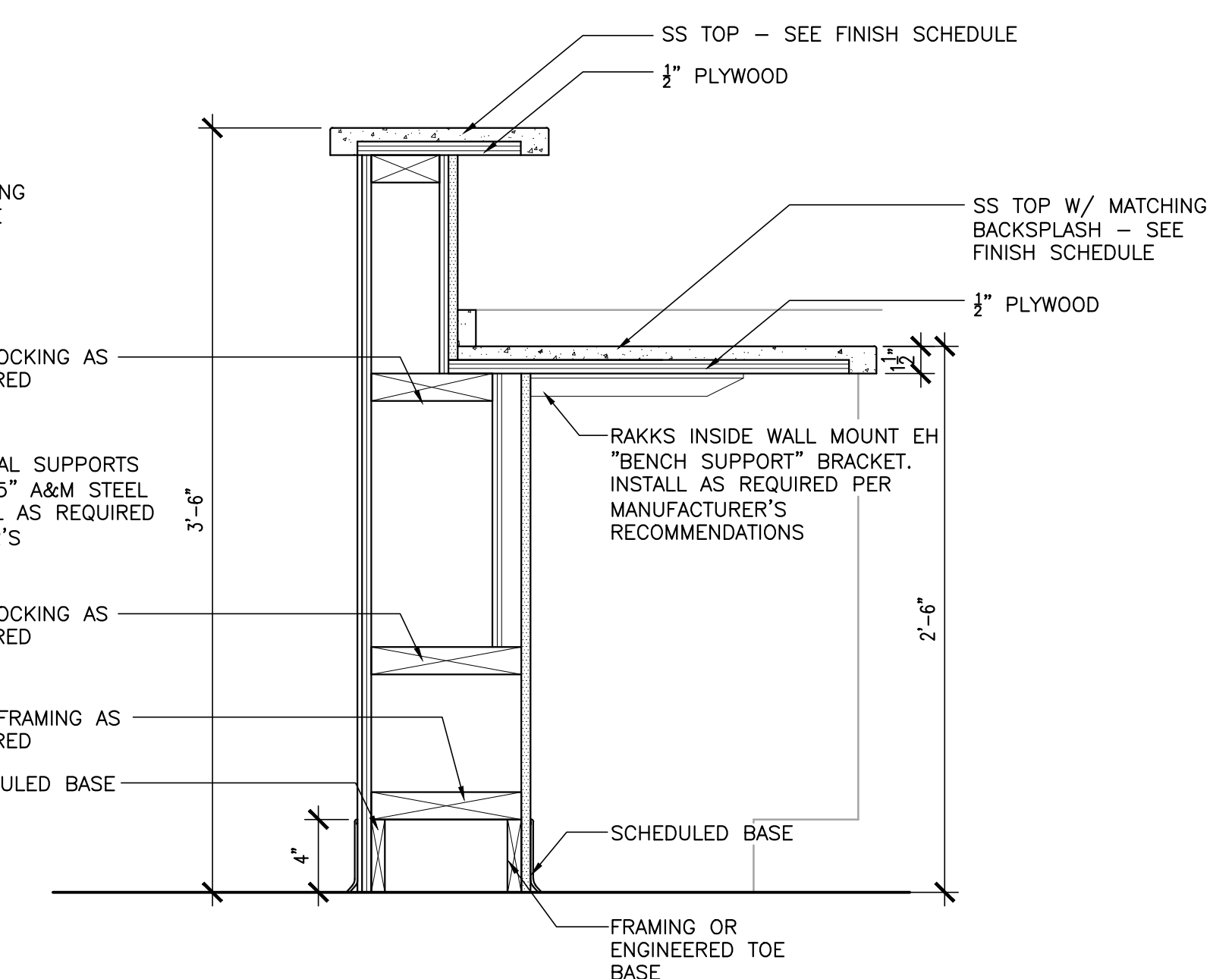
8 ELEVATION @ RECEPTION DESK
3/8" = 1'-0"



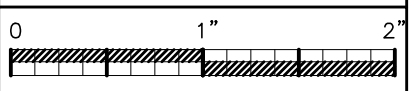
9 ELEVATION @ RECEPTION DESK
3/8" = 1'-0"

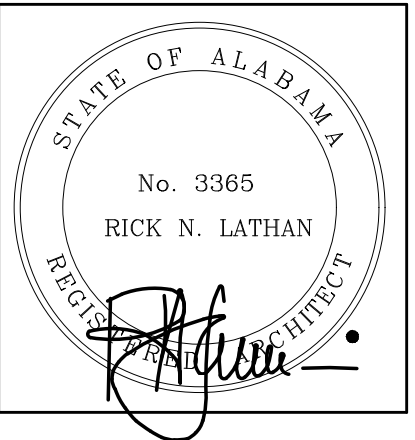


10 ELEVATION @ RECEPTION DESK
3/8" = 1'-0"



11 ELEVATION @ RECEPTION DESK
3/8" = 1'-0"

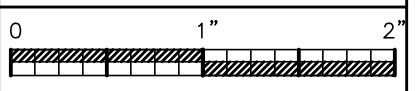




SHEET TITLE:
PARTIAL REFLECTED CEILING
PLAN

PROJ. MGR.: R. LATHAN
DRAWN: CB
DATE: MARCH 8, 2024
REVISIONS

JOB NO. 23-92
SHEET NO:
A7.1
16 OF 17



CEILING NOTES

AFF = ABOVE FINISH FLOOR
ALL CEILING HEIGHTS ARE FROM ADJACENT FINISHED FLOOR
CEILING HEIGHTS INDICATED ARE MINIMUM HEIGHTS. COORDINATE W/ PLUMBING, MECHANICAL, AND ELECTRICAL TO INSTALL CEILINGS AS HIGH AS POSSIBLE.
ALL CEILING GRIDS ARE TO BE CENTERED IN ROOM UNLESS SHOWN OR NOTED OTHERWISE
USE 2x4 LAY-IN CEILING TILES. CUT TO FIT AT ALL LOCATIONS LESS THAN 12" AT PERIMETER OF ROOM. WHERE 2x4 TILES OCCUR THEY SHALL MATCH SPECIFIED TILE AS INDICATED FOR EACH ROOM.
COORDINATE W/ PLUMBING, MECHANICAL AND PLUMBING DRAWINGS AND PROVIDE FRAMING AS REQUIRED TO ACCOMMODATE MECHANICAL AND PLUMBING SYSTEMS
R - 1" REVEAL AT ALL GYPSUM SOFFITS; HORIZONTAL AS SHOWN, EXTEND VERTICAL - PAINTED TO MATCH SOFFIT

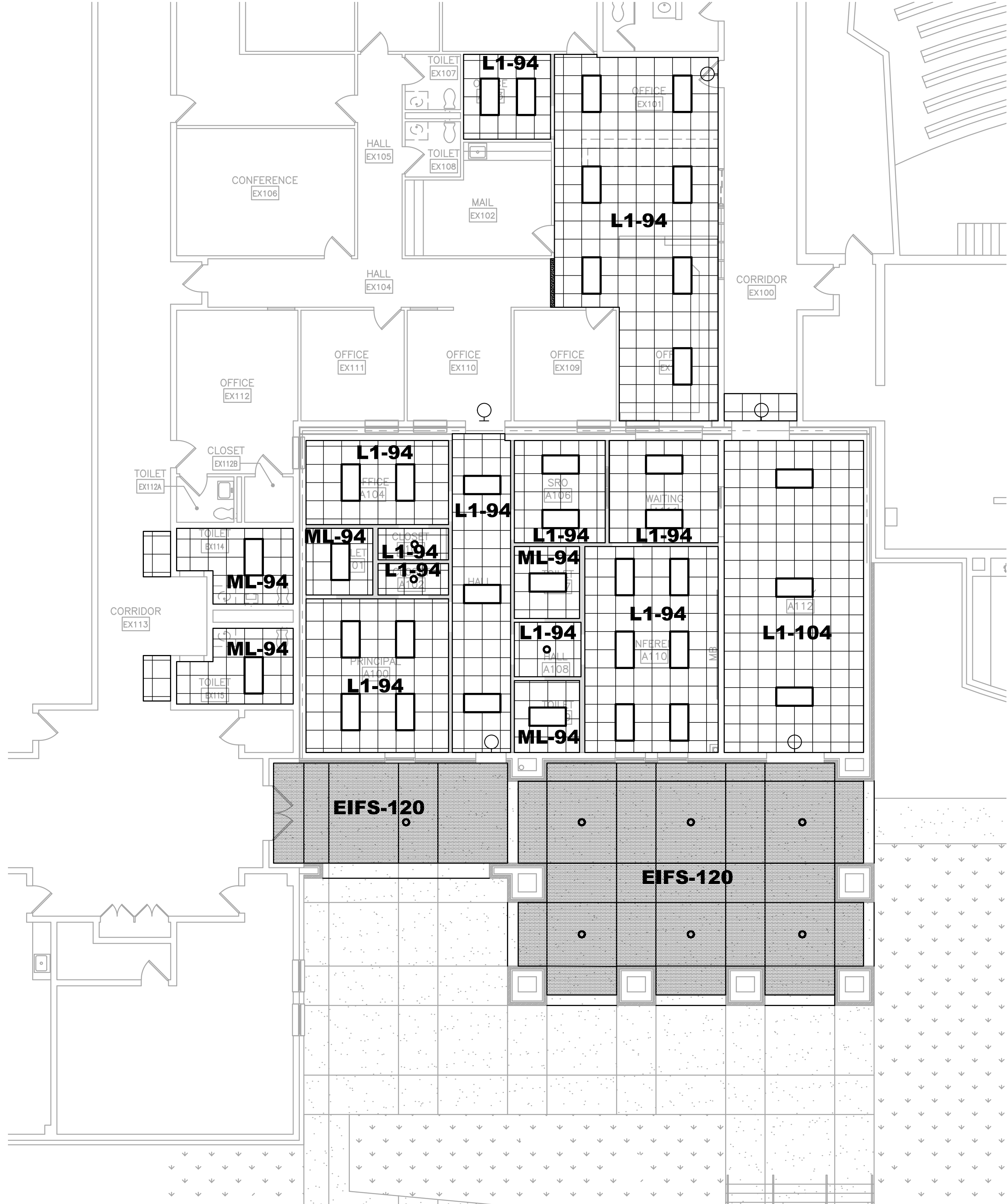
LIGHTING/ELECTRICAL NOTES

COORDINATE LIGHTING LAYOUTS WITH ELECTRICAL DRAWINGS. CONTACT ARCHITECT WITH ANY DISCREPANCIES
PROJECTOR UNIT FURNISHED BY OWNER. COORDINATE ROUGH-IN LOCATION WITH ELECTRICAL BASED ON PROJECTOR REQUIREMENTS.

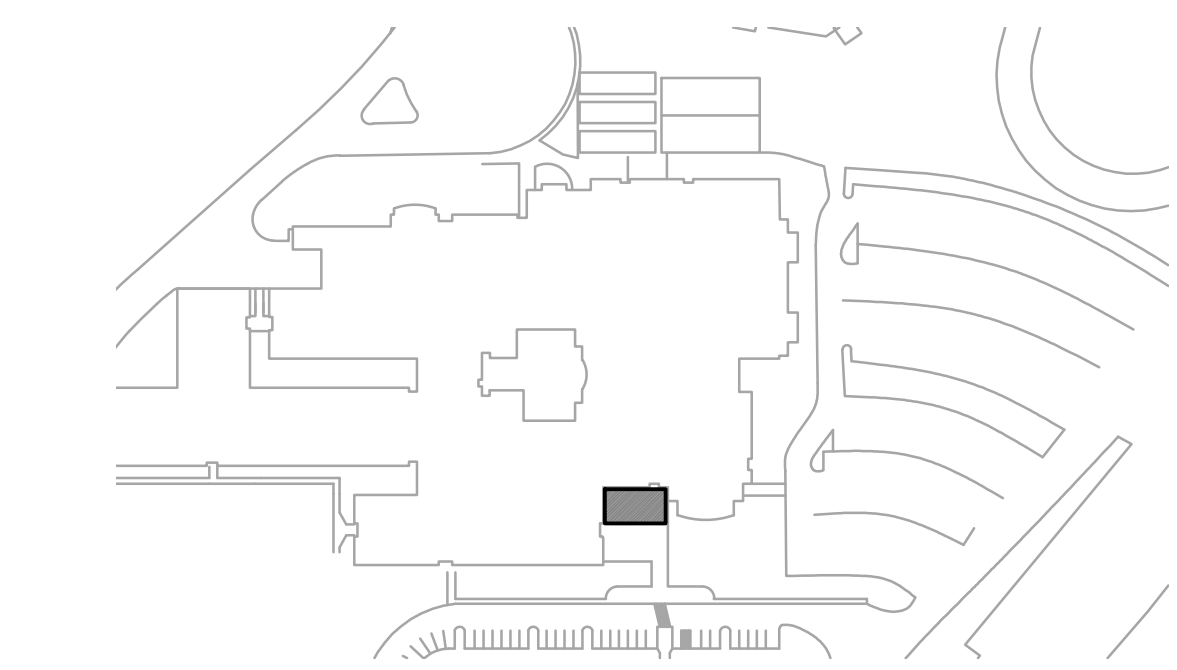
CEILING LEGEND

FIXTURE TYPES - SEE ELECTRICAL

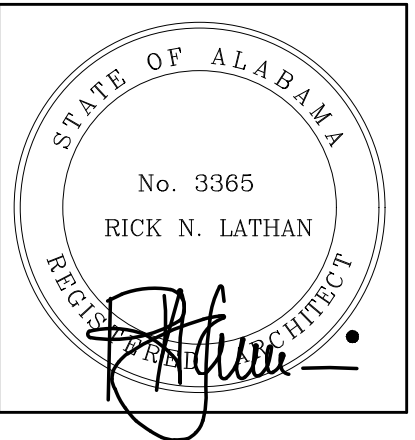
CEILING TYPE	CEILING HEIGHTS
GB - GYPSUM BOARD	74 = 7'-4" AFF
L1 - 2 x 2 LAY-IN FINE FISSURED	80 = 8'-0" AFF
ML - MOISTURE RESISTANT LAY-IN	88 = 8'-8" AFF
EIFS - EXTERIOR INSULATION FINISH SYSTEM	90 = 9'-0" AFF
REFER TO FINISH SYMBOLS ON PLAN FOR MATERIALS AND CEILING HEIGHTS	98 = 9'-8" AFF
CEILING TYPE — L1-90	100 = 10'-0" AFF
CEILING HEIGHT	120 = 12'-0" AFF



1 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"



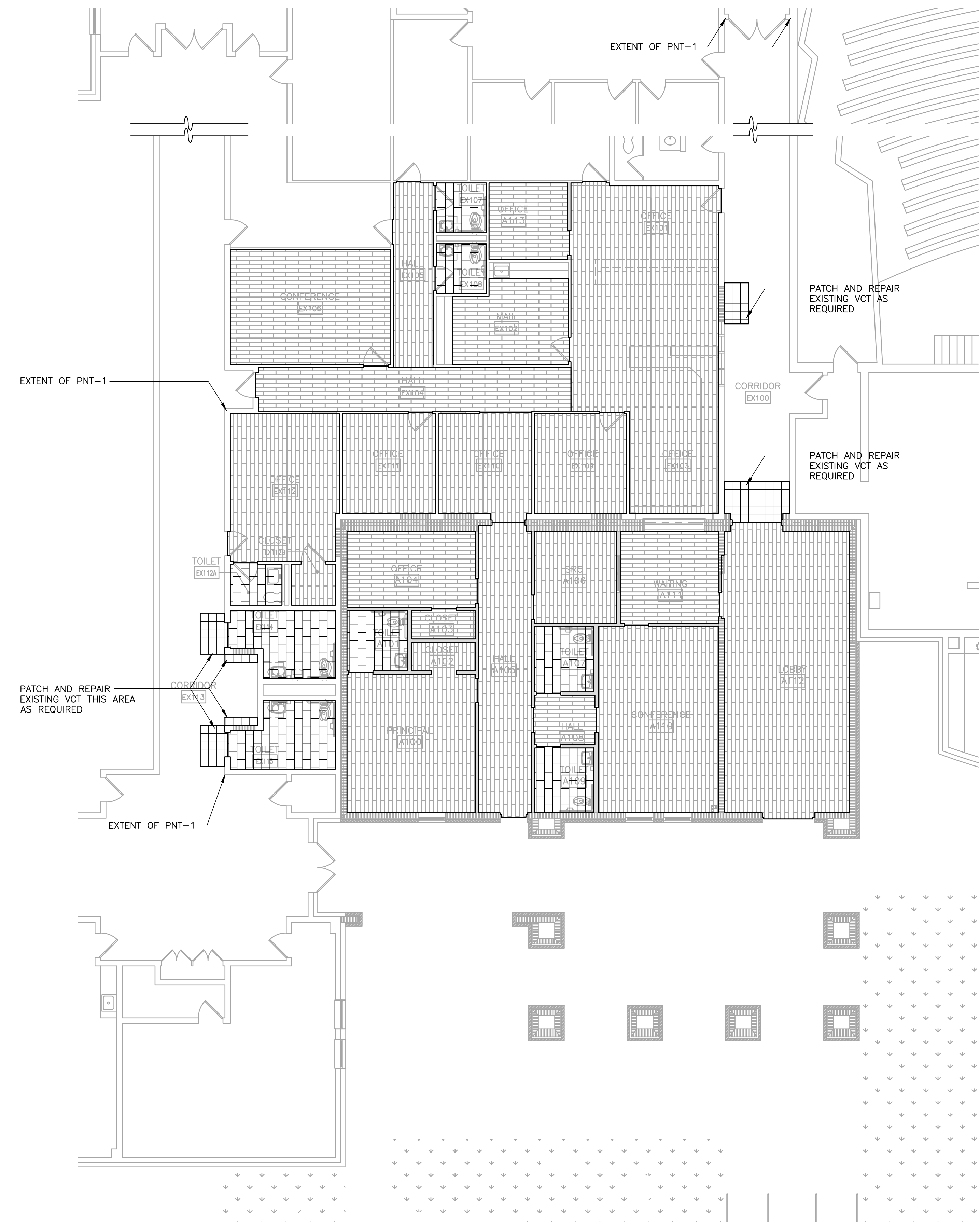
KEY PLAN



SHEET TITLE:
PARTIAL FINISH FLOOR PLAN

PROJ. MGR.: R. LATHAN
DRAWN: CB
DATE: MARCH 8, 2024
REVISIONS

JOB NO. **23-92**
SHEET NO:
A8.1
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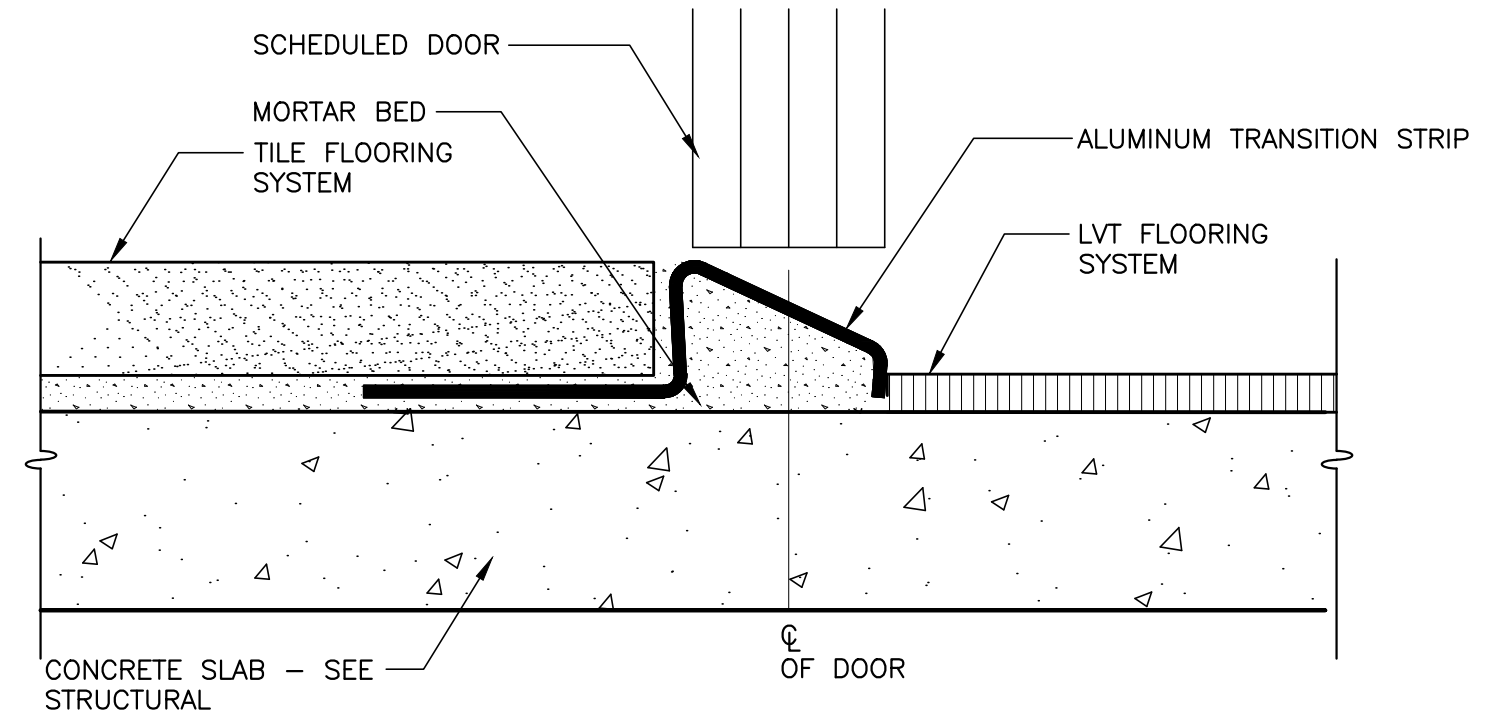


1 PARTIAL FINISH FLOOR PLAN
1/8" = 1'-0"

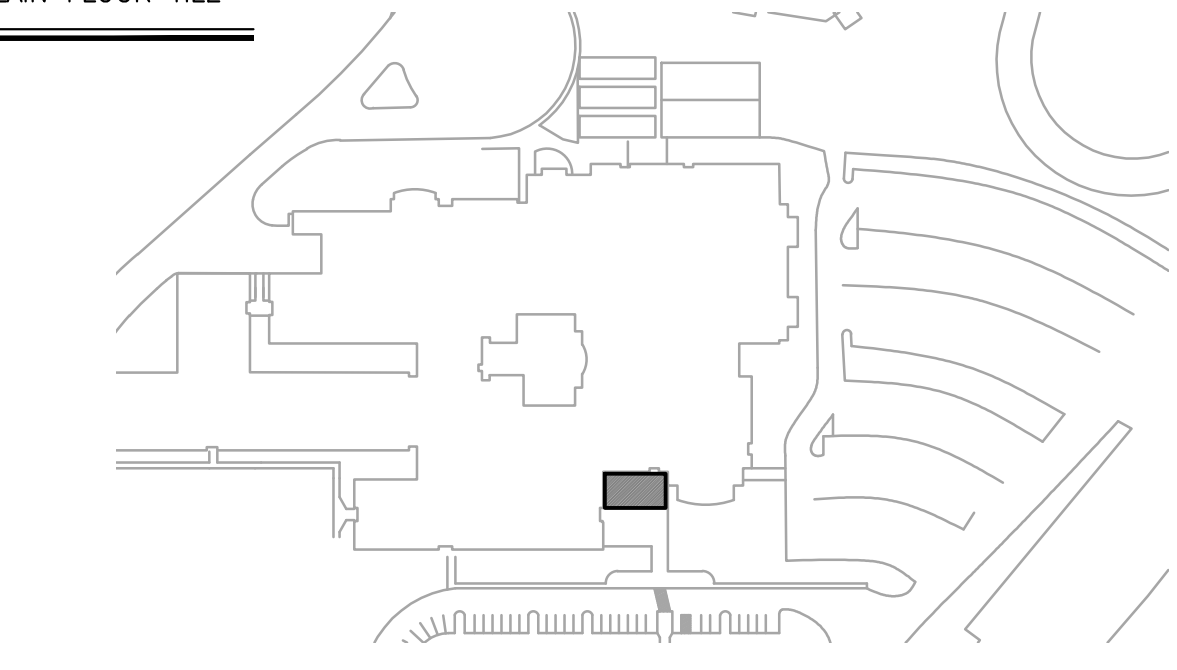
FINISH LEGEND			
ITEM	MANUFACTURER	ITEM NAME / NUMBER	NOTES
PAINT			
PNT-1	SHERWIN WILLIAMS	SW ### "NAME"	WALL PAINT
PNT-2	SHERWIN WILLIAMS	SW ### "NAME"	TRIM PAINT
PNT-3	SHERWIN WILLIAMS	SW 7007 CEILING BRIGHT WHITE	SOFFIT PAINT - SEE FINISH SCHEDULE FOR LOCATIONS
PORCELAIN TILE FLOORING			
PFT-1	DALTILE	12X24 COHESION	---
GROUT			
G-1	LATICRETE	---	---
RESILIENT FLOORING			
LVT-1	MANNINGTON COMMERCIAL	6x36	INSTALLED AS SHOWN ON FINISH PLAN
LVT-2	MANNINGTON COMMERCIAL	6x36	INSTALLED AS SHOWN ON FINISH PLAN
WALL BASE			
RB-1	MANNINGTON COMMERCIAL	COLOR:	4" HIGH
PLASTIC LAMINATE			
PL-1	WILSONART	PREMIUM LAMINATE WITH MATCHING EDGE BAND	---
QUARTZ			
SS-1	CORAIN	---	---
CERAMIC WAELE TILE			
CWT-1	DALTILE	3x6 ARCTIC WHITE 0190(1)	---
PORCELAIN TILE BASE			
PTB-1	DALTILE	6x12 COVE BASE S36C9TA	---

FINISH PATTERN LEGEND AND NOTES			
	LVT-1 (LUXURY VINYL TILE)		VCT-1 (VINYL COMPOSITION TILE)
	PFT-1 (PORCELAIN FLOOR TILE)		
NOTE: 1. SEE DETAILS FOR TRANSITION BETWEEN FLOORING MATERIALS. 2. DRY LAY INSTALL OF ALL FLOORING MATERIAL IS REQUIRED BEFORE FINAL INSTALLATION. THIS WILL NEED TO BE COORDINATED WITH THE ARCHITECT AND THE OWNER AND MUST BE APPROVED ON SITE BY THE ARCHITECT AND OWNER			

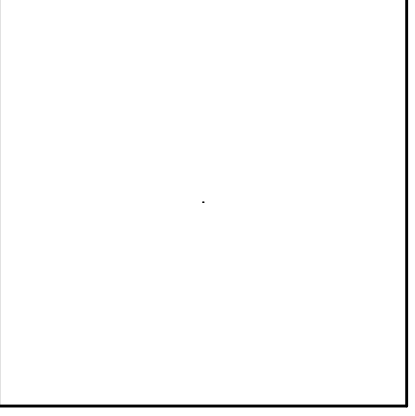
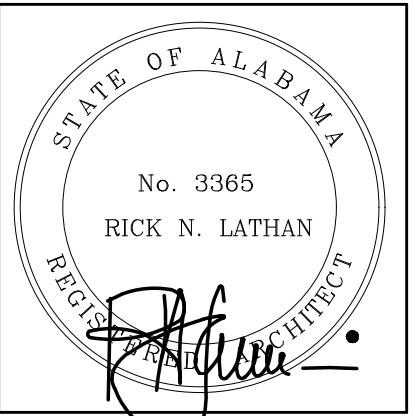
FINISH SCHEDULE												
ROOM NO.	ROOM NAME	FLOOR	BASE	MILLWORK FACE	TOP	WALLS (PROJECT NORTH)	SOUTH	EAST	WEST	DOOR FRAME	SOFFIT PAINT	NOTES
FIRST FLOOR												
A100	PRINCIPAL	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A101	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT @ WET AREAS. PWT-1 @ EWC
A102	CLOSET	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A103	CLOSET	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A104	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A105	HALL	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A106	SRO	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A107	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT @ WET AREAS. PWT-1 @ EWC
A108	HALL	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A109	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT @ WET AREAS. PWT-1 @ EWC
A110	CONFERENCE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A111	WAITING	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A112	LOBBY	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
A113	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX100	CORRIDOR	VCT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		REPAINT ENTIRE CORRIDOR (PNT-1) AND DOOR TRIM (PNT-2)
EX101	OFFICE	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
EX102	MAIL	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX103	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX104	HALL	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		PNT-3
EX105	HALL	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX106	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX107	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX108	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX109	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX110	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT @ WET AREAS. PWT-1 @ EWC
EX111	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX112	OFFICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		SEE FINISH PLAN FOR EXTENTS OF CORRIDOR (PNT-1) AND DOOR TRIM (PNT-2)
EX112A	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT @ WET AREAS. PWT-1 @ EWC
EX112B	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT @ WET AREAS. PWT-1 @ EWC
EX113	CORRIDOR	VCT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX114	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
EX115	TOILET	PFT-1	PTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		



2 TRANSITION DETAIL @LVT TO PORCELAIN FLOOR TILE
NOT TO SCALE



KEY PLAN

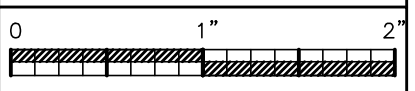


SHEET TITLE:
SIGNAGE PLAN

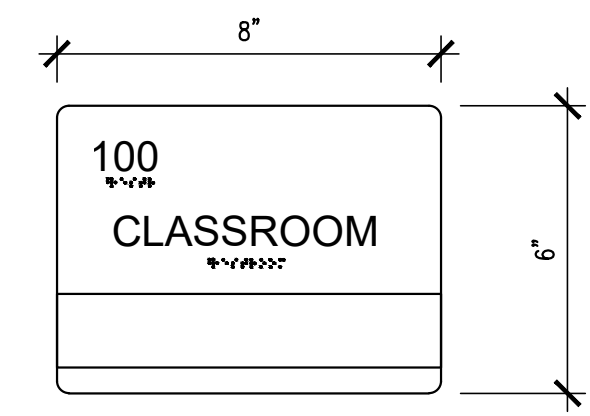
PROJ. MGR.: R. LATHAN
DRAWN: BL
DATE: MARCH 8, 2024
REVISIONS

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JOB NO. **23-92**
SHEET NO:
A9.1
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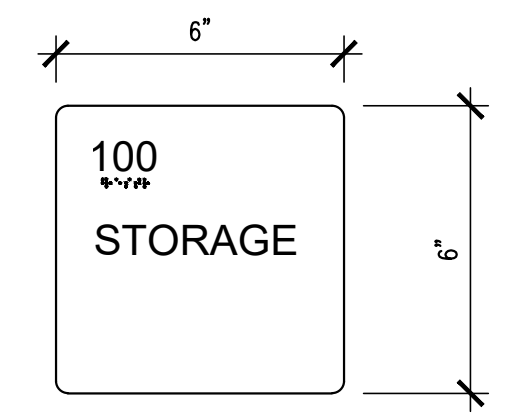


INTERIOR SIGNAGE LEGEND	
A	SIGN WITH MESSAGE STRIP (OFFICES/CLASSROOM/INSTRUCTIONAL AREA)
B	ROOM NUMBER AND NAME (STORAGE, ELECTRICAL, ETC)
C	RESTROOM SIGNAGE WITH PICTOGRAM/BRAILLE
D	TACTILE EXIT SIGN TO EXTERIOR (EXIT)



INTERIOR SIGNAGE (SIGN TYPE - A)

SCALE: 3" = 1'-0"



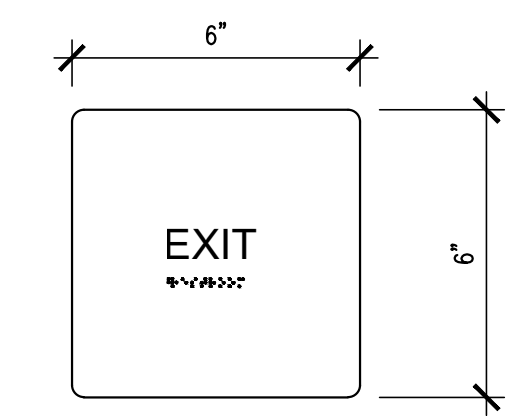
INTERIOR SIGNAGE (SIGN TYPE - B)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - C)

SCALE: 3" = 1'-0"

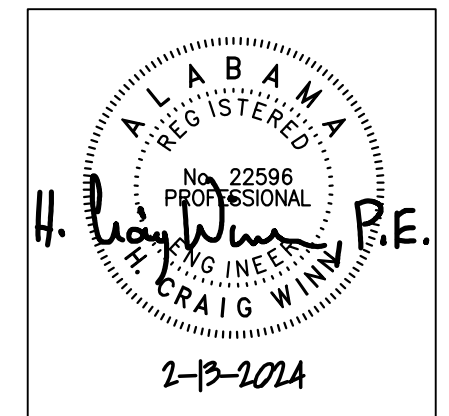


INTERIOR SIGNAGE (SIGN TYPE - D)

SCALE: 3" = 1'-0"

1 PARTIAL SIGNAGE PLAN
1/8" = 1'-0"

OFFICE ADDITION TO
CHELSEA HIGH SCHOOL
10510 HIGHWAY 11, CHELSEA, ALABAMA 36043
SHELBY COUNTY BOARD OF EDUCATION



SHEET TITLE:
GENERAL NOTES

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	2-13-2024
REVISIONS:	

JOB NO. **23-92**
SHEET NO:
S1.0
1 OF 12
0 1" 2"

GENERAL NOTES

1.0 DESIGN CRITERIA

1.1 CODES AND SPECIFICATIONS:

- A. GENERAL BUILDING CODE:
INTERNATIONAL BUILDING CODE, 2021 EDITION.
- B. CONCRETE:
BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-19)
- C. STRUCTURAL STEEL:
SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (ANSI/AISC 360-16)
- D. STEEL DECK:
STEEL DECK INSTITUTE DESIGN MANUALS FOR COMPOSITE DECKS, NON-COMPOSITE DECKS, AND ROOF DECKS, LATEST EDITIONS.
- E. MASONRY:
SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-16).
BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402-16).
NATIONAL CONCRETE MASONRY ASSOCIATION'S STANDARD PRACTICES AND "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY"
- F. COLD-FORMED STEEL FRAMING:
AISI NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE (AISI S100-16 [2020] w/ S2-20)

1.2 DESIGN GRAVITY LOADS (PSF):

- A. DEAD LOADS:
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.
- B. FLOOR LIVE LOADS:
NON-REDUCIBLE PARTITION LIVE LOAD OF 20 PSF HAS BEEN INCLUDED PER IBC SECTION 1607.5.
LIVE LOAD REDUCTIONS AS DETERMINED BY IBC SECTION 1607.10 HAVE BEEN TAKEN WHERE PERMITTED.
FLOOR (REDUCIBLE)-----100
STAIRS-----125
STAIRS & EXITWAYS-----100
- C. ROOF LIVE LOADS:
WHERE PERMITTED ROOF LIVE LOADS ARE REDUCED FROM THE BASE VALUE SHOWN BELOW IN ACCORDANCE WITH IBC SECTION 1607.12
ROOF -----20
- D. ROOF SNOW LOADS:
GROUND SNOW LOAD (Pg)-----5.0
IMPORTANCE FACTOR (I)-----1.1
EXPOSURE FACTOR (Ce)-----1.0
THERMAL FACTOR (CT)-----1.0

1.3 DESIGN LATERAL LOADS:

- A. WIND LOADS:
ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)-----115MPH
BASIC WIND SPEED (3-SECOND GUST)-----90MPH
WIND IMPORTANCE FACTOR (I)-----1.00
WIND EXPOSURE CATEGORY-----C
INTERNAL PRESSURE COEFFICIENTS----- +/- 0.18
SEE TYPICAL DETAILS FOR COMPONENT AND CLADDING LOADS
- B. SEISMIC LOADS:
OCCUPANCY CATEGORY III (GROUP E OCCUPANCIES WITH OCCUPANCY > 250)
SEISMIC IMPORTANCE FACTOR-----1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
Ss-----0.287
SI-----0.097
ASSUMED SITE CLASS-----D
SPECTRAL RESPONSE COEFFICIENTS:
SDS-----0.301
SDI-----0.155
SEISMIC DESIGN CATEGORY-----C
BASIC SEISMIC-FORCE-RESISTING SYSTEM-----INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR-----10 KIPS
SEISMIC RESPONSE COEFFICIENT, Cs-----0.107
RESPONSE MODIFICATION FACTOR, R-----3.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

2.0 GENERAL CONDITIONS

- 2.1 THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL DESIGN GROUP.
- 2.2 ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES, AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY STRUCTURAL DESIGN GROUP AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF STRUCTURAL DESIGN GROUP. STRUCTURAL DESIGN GROUP SHALL RETAIN ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREON.
- 2.3 CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER OR ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.
- 2.4 WHERE SHOP DRAWINGS, CALCULATIONS, OR SUBMITTALS ARE CALLED FOR IN THE PROJECT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) AND ARE NOT PROVIDED BY THE CONTRACTOR, THE CONTRACTOR ASSUMES TOTAL RESPONSIBILITY FOR THE DESIGN AND ASSOCIATED WORK.
- 2.5 ENGINEER'S SHOP DRAWING REVIEW IS LIMITED TO REVIEW FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT REFLECTED IN THE STRUCTURAL PORTION OF THE CONTRACT DOCUMENTS. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS OR OTHER PROJECT CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED OR IMPLIED FOR THE CORRECTNESS OF DIMENSIONS OR DETAILS. THIS REVIEW DOES NOT AUTHORIZE CHANGES TO THE CONTRACT SUM UNLESS STATED IN A SEPARATE WRITTEN FORM OR CHANGE ORDER. CONTRACTOR SHALL CONFIRM AND CORRELATE ALL QUANTITIES AND DIMENSIONS, SELECT FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATE HIS WORK WITH THAT OF OTHER TRADES, AND PERFORM HIS WORK IN A SAFE AND SATISFACTORY MANNER. CONTRACTOR SHALL ALSO REFER TO THE REQUIREMENTS OF THE GENERAL AND SUPPLEMENTARY GENERAL CONDITIONS.
- 2.6 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.

- 2.7 VERIFY ALL DIMENSIONS AND DETAILS SHOWN ON THESE DRAWINGS. ANY DISCREPANCIES OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY RELATED WORK.
- 2.8 THESE DRAWINGS DO NOT INCLUDE PROVISIONS TO SATISFY JOB SITE SAFETY REQUIREMENTS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING SAFETY DURING CONSTRUCTION AND FOR CONFORMANCE TO ALL APPLICABLE OSHA STANDARDS. JOBSITE VISITS BY ENGINEER SHALL NOT CONSTITUTE APPROVAL, AWARENESS OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.
- 2.9 STRUCTURAL DESIGN GROUP IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, SAFETY PROCEDURES, CONSTRUCTION SUPERVISION OR SITE SAFETY, AND DOES NOT HAVE THE AUTHORITY TO STOP WORK FOR THESE ITEMS. DRAWINGS FURTHER DO NOT PROVIDE ENGINEERING CONTROLS FOR SILICA STANDARD OR ANY OTHER SAFETY STANDARD.
- 2.10 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR BRACING AND SHORING ALL EXCAVATIONS, DEWATERING OF EXCAVATION FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE, TEMPORARY AND EXISTING STRUCTURES, AND PARTIALLY COMPLETED PORTIONS OF THE WORK TO ASSURE THE SAFETY OF ANY PERSON COMING IN CONTACT WITH THE WORK.
- 2.11 THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT UPON COMPLETION ACCORDING TO THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER OF RECORD ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ANY NECESSARY BRACING, GUYS, ETC. TO PROPERLY BRACE THE STRUCTURE AGAINST WIND, DEAD AND LIVE LOADS UNTIL THE BUILDING IS COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. ANY QUESTIONS REGARDING TEMPORARY BRACING REQUIREMENTS SHOULD BE FORWARDED TO A STRUCTURAL ENGINEER FOR REVIEW.
- 2.12 MECHANICAL UNITS AND ANY OTHER EQUIPMENT SUPPORTED BY THE STRUCTURE WITH WEIGHTS IN EXCESS OF 200 LBS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.
- 2.13 WHERE NOTED IN DRAWINGS AND SPECIFICATIONS TO INSTALL PRODUCTS PER THE MANUFACTURER'S RECOMMENDATIONS, IT SHALL BE REQUIRED THAT THE CONTRACTOR FOLLOWS THE MANUFACTURER'S RECOMMENDATIONS.
- 2.14 STRUCTURAL OBSERVATION IS VISUAL OBSERVATION OF THE IN PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT THE TIME OF THE OBSERVATION AND SHALL NOT BE CONSTRUED AS INSPECTION OR APPROVAL OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TESTING AND SPECIAL INSPECTIONS PER THE REQUIREMENTS IN THE PROJECT MANUAL.
- 2.15 OBSERVATION BY THE ENGINEER OF RECORD'S OFFICE DOES NOT REPLACE INSPECTIONS AND TESTING BY THE TESTING AGENCY OR SPECIAL INSPECTOR.

3.0 FOUNDATIONS

- 3.1 A GEOTECHNICAL ENGINEER, EMPLOYED BY THE GENERAL CONTRACTOR, SHALL PROVIDE COMPACTED FILL REQUIREMENTS FOR THE BUILDING PAD AND REVIEW THE FOUNDATION BEARING SURFACE TO VERIFY THE ASSUMED ALLOWABLE BEARING PRESSURE AND ASSUMED SEISMIC SITE CLASS NOTED. DO NOT PLACE CONCRETE PRIOR TO GEOTECHNICAL ENGINEER'S APPROVAL.
- 3.2 ASSUMED ALLOWABLE BEARING PRESSURE: 2000 PSF.
NOTE: ALL FOOTING BEARING ELEVATIONS SHALL BE BEARING IN SIMILAR MATERIAL EXTEND FOOTINGS AS NECESSARY WITH LEAN CONCRETE FILL.
- 3.3 ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL FOOTING ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
- 3.4 COMPACTED FILL WITHIN THE BUILDING AREA (AND EXTENDING 10'-0" OUTSIDE THE EXTERIOR BUILDING LINE) SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.
- 3.5 BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL, SUCH AS SIZE #57 STONE. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE FOOTING TO WITHIN 18" OF FINISH GRADE ON EXTERIOR AND TO UNDERSIDE OF SLAB ON INTERIOR.
- 3.6 GRANULAR BACKFILL SUPPORTING A FOOTING SHALL BE COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. PROVIDE A 12" THICK CAP OF PROPERLY COMPACTED CRUSH AND RUN STONE BETWEEN THE FOOTING AND THE PROPERLY COMPACTED GRANULAR BACKFILL. EXTEND CRUSH AND RUN CAP TWO FEET BEYOND THE PERIMETER OF THE FOOTING OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- 3.7 FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28 DAY COMPRESSIVE STRENGTH.
- 3.8 DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS UNTIL UPPER BRACING FLOORS ARE IN PLACE FOR AT LEAST SEVEN DAYS AND HAVE ATTAINED 75% OF DESIGN STRENGTH.
- 3.9 REINFORCING STEEL IN CONTINUOUS WALL FOOTINGS SHALL EXTEND THRU SPREAD FOOTINGS AT THE SAME ELEVATION AS WALL FOOTING. STEP WALL FOOTING DOWN ON SPREAD FOOTING WHERE SPREAD FOOTING IS BELOW CONTINUOUS WALL FOOTING.
- 3.10 SUBGRADE AND GRANULAR FILL SUPPORTING SLABS ON GRADE SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL REPORT AND COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. SEE SPECIFICATIONS FOR VAPOR RETARDER BENEATH SLABS ON GRADE.
- 3.11 GRANULAR FILL BENEATH SLABS, UNLESS NOTED OTHERWISE, SHALL BE 4" COMPACTED #57 STONE.
- 3.12 VAPOR RETARDER BENEATH SLABS ON GRADE, UNLESS NOTED, SHALL MEET ASTM E 1745, CLASS A, 15 MIL MINIMUM THICKNESS WITH MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE TAPE AND PIPE BOOTHS, SUCH AS W.R. MEADOWS INC. PRODUCT PERMINATOR 15.
- 3.13 NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 2:1 (TWO HORIZONTAL TO ONE VERTICAL) TO A FOOTING.

4.0 CONCRETE

- 4.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.
- 4.2 CONCRETE STRENGTH AND DURABILITY REQUIREMENTS -- MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (PSI), TYPE OF CONCRETE, MAXIMUM WATER/CEMENTITIOUS RATIO, AIR CONTENT, SLUMP, AND CONCRETE USE:
STRENGTH TYPE MAX W/C AIR SLUMP USE

3000 NORMAL WT. 0.57 ---- 3" TO 5" FOOTINGS
3500 NORMAL WT. 0.50 ---- 3" TO 5" SLABS ON GRADE
4000 NORMAL WT. 0.45 4-6% 3" TO 5" UNLESS NOTED
- A. CONCRETE MIX DESIGN SHALL BE WORKABLE WITH LOWEST TOTAL WATER PER CUBIC YARD USING LARGEST PRACTICAL MAXIMUM SIZE OF COURSE AGGREGATE.

- 4.3 REINFORCING BARS: ASTM A615 GRADE 60.
- 4.4 WATERSTOPS: FLEXIBLE PVC WATERSTOPS, CE CRD-C 572 UNLESS NOTED OTHERWISE, WITH FACTORY-INSTALLED METAL EYELETS, FOR EMBEDDING IN CONCRETE TO PREVENT PASSAGE OF FLUIDS THROUGH JOINTS. FACTORY FABRICATED CORNERS, INTERSECTIONS, AND DIRECTIONAL CHANGES. ACCEPTABLE MANUFACTURER IS THE GREENSTREAK GROUP, INC. 800-325-9504, OR EQUAL. PROFILE SHALL BE FLAT, DUMBELL WITH CENTER BULB WITH DIMENSIONS OF 6 INCHES BY 3/8 INCH THICK.
A. FLEXIBLE WATERSTOP INSTALLATION: INSTALL IN CONSTRUCTION JOINTS AND AT OTHER JOINTS INDICATED TO FORM A CONTINUOUS DIAPHRAGM. INSTALL IN LONGEST LENGTHS PRACTICABLE. SUPPORT AND PROTECT EXPOSED WATERSTOPS DURING PROGRESS OF THE WORK.
- 4.5 REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.
- 4.6 REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL.
- 4.7 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED UNLESS NOTED OR APPROVED BY THE ENGINEER.
- 4.8 ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.
- 4.9 ALL REINFORCING MARKED "CONT." INDICATES REINFORCING SHALL BE "CONTINUOUS" AND SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.
- 4.10 PROVIDE CORNER BARS AT ALL CORNERS OF CONTINUOUS REINFORCING IN FOOTINGS, SLABS OR WALLS. CORNER BARS SHALL BE LONG ENOUGH TO PROVIDE A CLASS "B" LAP SPLICE OF REINFORCING BARS.
4.11 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:
FOOTINGS-----2" TOP & 3" BOTTOM & SIDES
COLUMNS & PEDESTALS-----1-1/2" CLEAR OF TIES
BASEMENT WALLS-----2" BOTH FACES
FOUNDATION RETAINING WALLS-----2" BOTH FACES
SUMM & PIT WALLS-----3" BOTH FACES
BEAMS-----1-1/2" CLEAR OF STIRRUPS
SLAB FACES NOT EXPOSED TO WEATHER OR EARTH-----3/4"
SLAB FACES EXPOSED TO WEATHER
#5 AND LESS-----1-1/2"
#6 AND GREATER-----2"
NOTE: SLAB ON GRADE W/R OR REINFORCEMENT EACH WAY SHALL BE 2" CLEAR FROM TOP OF SLAB. SEE EARTH SUPPORTED SLABS SECTION BELOW.
- 4.12 COLUMN, PEDESTAL AND WALL VERTICAL REINFORCING: DOWEL TO FOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING.
- 4.13 WELDED WIRE REINFORCEMENT (WWR): ASTM A185. MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR 6 INCHES.
- 4.14 EARTH SUPPORTED SLABS:
4" THICK (UNLESS NOTED), REINFORCED WITH 6X6 W2.9/W2.9 W/R FLAT SHEETS SUPPORTED 2" CLEAR OF TOP OF SLAB, UNLESS NOTED. W/R TO BE CHAIRED AT 36 INCHES EACH WAY MINIMUM. SEE FOUNDATION NOTES FOR SUBGRADE REQUIREMENTS.
PROVIDE CONTROL AND CONSTRUCTION JOINTS AT MAXIMUM OF 3-4 TIMES SLAB THICKNESS IN FEET OR AS REQUIRED TO PREVENT UNCONTROLLED CRACKING PER ACI RECOMMENDATIONS. AS AN EXAMPLE, FOR A 4" THICK SLAB, PROVIDE JOINTS SPACED 12 - 16 FEET MAXIMUM. PANELS TO BE RECTANGULAR WITH LONG SIDE NOT TO EXCEED 1-1/2X SHORT SIDE. CUTTING SHOULD BE STARTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM BEING DISLOOGE. CONTRACTOR SUBMIT PLAN SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS.
FLOOR DESIGN AND CONSTRUCTION BASIS IS ACI 302 AND 360, AND IT IS UNREALISTIC TO EXPECT CRACK-FREE OR CURL-FREE FLOORS. IT IS NORMAL TO EXPECT SOME AMOUNT OF CRACKING AND CURLING IN THE SLAB ON GRADE, AND SUCH OCCURRENCE DOES NOT NECESSARILY REFLECT ADVERSELY ON EITHER THE ADEQUACY OF THE FLOOR DESIGN OR THE QUALITY OF ITS CONSTRUCTION.
EARTH SUPPORTED SLABS SHALL BE MOIST CURED FOR A MINIMUM OF SEVEN DAYS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. CURING COMPOUNDS, UNLESS NOTED, SHALL BE A MINIMUM OF CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND MEETING ASTM C 309, TYPE 1, CLASS B, SELF-DESPRATING, CERTIFIED BY CURING COMPOUND MANUFACTURER TO NOT INTERFERE WITH BONDING OF FLOOR COVERING.
WHERE CONTROL JOINTS TERMINATE INTO NON-PARALLEL CONTROL JOINTS, PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB PERPENDICULAR TO TERMINAL CONTROL JOINT.
PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB AT REENTRANT CORNERS.
WHERE CONTROL JOINTS TERMINATE AT EMBEDDED STEEL ELEMENTS (SUCH AS EDGE REINFORCEMENT AT LOADING DOCKS), PROVIDE JOINT IN STEEL ELEMENT.

- 4.15 CONTRACTION JOINTS IN WALLS: WALL JOINTS SHALL NOT BE SPACED FARTHER THAN 25 FEET. WALL JOINTS SHALL ADDITIONALLY NOT BE LOCATED WITHIN 4'-0" OF EMBED PLATES OR CORNERS OF THE WALL. DISCONTINUE 50% OF THE WALL HORIZONTAL REINFORCING THROUGH JOINTS; TRIMMING BACK THE REINFORCING BARS 2" FROM THE CONTROL JOINT LOCATION. LOCATE CONTROL JOINTS EACH SIDE OF THE WALL. SEAL JOINTS WITH ELASTOMERIC SEALANT. SEE WALL CONTRACTION JOINT TYPICAL DETAIL.
 - 4.16 WALL AND SLAB OPENINGS AND SLEEVES SMALLER THAN 12" (IN LARGER DIMENSION) ARE NOT SHOWN ON PLANS. CONTRACTOR SHALL SUBMIT ALL OPENINGS (SIZE AND LOCATIONS) AS A SINGLE COORDINATED SLEEVE PLAN FOR REVIEW AND APPROVAL.
 - 4.17 CAST IN PLACE ALL SLEEVES AND INSERTS.
 - 4.18 NO CONDUIT OR PIPE SHALL BE CAST IN THE SLAB ON GRADE WITHOUT THE WRITTEN APPROVAL OF STRUCTURAL DESIGN GROUP.
- ### 5.0 STRUCTURAL STEEL
- 5.1 FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
 - 5.2 THE STEEL FRAME IS "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE.
 - 5.3 STRUCTURAL STEEL: ASTM A992 FOR WIDE FLANGE BEAMS AND COLUMNS; ASTM A36 FOR S, M, AND HP SHAPES AND CHANNELS; ASTM A36 FOR STIFFENER PLATES, BASE PLATES, COLUMN CAP PLATES, BEAM CONNECTION PLATES, AND STEEL ANGLES.

- 5.4 HOLLOW STRUCTURAL SECTIONS (HSS): ASTM A500, GRADE B.
 - 5.5 WELDED CONNECTIONS: E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16". WELDING QUALIFICATION, PROCEDURES AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.1, THE STRUCTURAL WELDING CODE - STEEL.
 - 5.6 THREADED AND PLAIN STEEL RODS: ASTM A36.
 - 5.7 HIGH STRENGTH THREADED RODS: ASTM A193 B7
 - 5.8 ANCHOR RODS: ASTM F1554 GRADE 36 ANCHOR AND HEAVY HEX NUT, UNLESS OTHERWISE INDICATED.
 - 5.9 HEADED STUDS: TYPE B SHEAR STUD CONNECTORS MADE FROM ASTM A108, GRADE 1015 OR 1020, COLD-FINISHED CARBON, AND COMPLYING WITH AWS D1.1.
 - 5.10 CONNECTIONS:
A. BEARING TYPE A325-N IN ACCORDANCE WITH RCSC (LRFD OR ASD VERSION) "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". BOLTS THROUGH 4" WIDE BEAM FLANGES SHALL BE 5/8" DIAMETER. OTHER BOLTS SHALL BE 3/4" DIAMETER.
B. USE SLIP-CRITICAL CONNECTIONS WHERE NOTED, USE SNUG TIGHT BEARING CONNECTIONS FOR ALL OTHER BOLTED CONNECTIONS.
C. BOLTS SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT BOLTS MAY BE USED. ACTUAL NUMBER, UNLESS SPECIFIED, TO BE IN ACCORDANCE WITH AISC.
D. ALL STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST FORCES INDICATED, BY THE CONTRACTOR.
1. WHERE BEAM REACTIONS ARE SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL DEVELOP THE REACTIONS SHOWN. WHERE CONNECTIONS ARE SUBJECT TO ECCENTRICITY, SUCH ECCENTRICITY SHALL BE TAKEN INTO ACCOUNT WHEN DESIGNING AND DETAILING THE CONNECTION.
2. WHERE BEAM REACTIONS OR DESIGN FORCES ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL CONTACT STRUCTURAL DESIGN GROUP FOR DIRECTION.
E. DESIGN CALCULATIONS FOR THE CONNECTIONS DESIGNED BY THE CONTRACTOR SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.
 - 5.11 ALL STRUCTURAL STEEL, INCLUDING EXPOSED BOLTS, NUTS, WASHERS OR ANCHOR RODS, EXPOSED TO WEATHER IN THE FINAL CONFIGURATION OF THE STRUCTURE SHALL BE HOT-DIP GALVANIZED, UNLESS NOTED, PER ASTM A 123/A 123M. VENT HOLES SHALL BE FILLED AND GROUND SMOOTH AFTER GALVANIZING. DAMAGE TO GALVANIZING SHALL BE PAINTED WITH GALVANIZING REPAIR PAINT, SSPC-PAINT 20. SEE 05120 SPECIFICATION FOR PAINT REQUIREMENTS FOR STEEL THAT IS GALVANIZED AND PAINTED.
 - 5.12 ALL STEEL EXPOSED TO WEATHER, INCLUDING STEEL LINTELS FOR MASONRY OPENINGS, EXCEPT WHERE FABRICATED OF APPROVED CORROSION-RESISTANT STEEL OR OF STEEL HAVING A CORROSION RESISTANT OR OTHER APPROVED COATING, SHALL BE PROTECTED AGAINST CORROSION WITH AN APPROVED COAT OF PAINT, ENAMEL, OR OTHER APPROVED PROTECTION.
 - 5.13 STEEL STAIRS AND ASSOCIATED EMBEDS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST THE PROJECT DESIGN LOADS INDICATED ABOVE. BY THE CONTRACTOR, UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. STAIRS SHALL BE DESIGNED IN ACCORDANCE WITH THE NAAM METAL STAIR MANUAL AND AISC, AND AS LISTED BELOW. CALCULATIONS SHALL BEAR THE SEAL OF THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE INCLUDED WITH THE STAIR SHOP DRAWINGS.
A. STAIR FRAMING SHALL BE CAPABLE OF WITHSTANDING STRESSES RESULTING FROM RAILING LOADS IN ADDITION TO LOADS SPECIFIED ABOVE.
B. LIMIT DEFLECTION OF TREADS, PLATFORMS, AND FRAMING MEMBERS TO L/360 OR 1/4 INCH, WHICHEVER IS LESS.
C. DESIGN OF STAIR FRAMING SHALL ALSO COMPLY WITH AISI'S "STEEL DESIGN GUIDE SERIES 11; FLOOR VIBRATIONS DUE TO HUMAN ACTIVITY."
 - 5.14 ALL HANDRAILS, GUARDRAILS, AND EMBEDS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE NOTED ABOVE, BY THE CONTRACTOR, UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. CALCULATIONS SHALL BEAR THE SEAL OF THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND SHALL BE INCLUDED WITH THE SHOP DRAWINGS.
 - 5.15 WHERE STEEL BEAMS ARE CONTINUOUS OVER COLUMNS, PROVIDE WEB STIFFENER PLATES EACH SIDE OF BEAM WEB, OF THICKNESS EQUAL TO BEAM FLANGE THICKNESS, LOCATED IN ALIGNMENT WITH COLUMN WEB OR FLANGES OR CENTER LINE OF HSS COLUMNS.
 - 5.16 PROVIDE 3/4" THICK CLOSURE PLATES ON THE ENDS OF TUBE STEEL BEAMS. SHOP WELD TO BEAM WITH 1/4" PARTIAL PENETRATION WELDS ALL AROUND.
 - 5.17 INCLUDE A QUANTITY ALLOWANCE UNDER BASE BID FOR PROVIDING AN ADDITIONAL 4 TONS OF IN-PLACE MEDIUM - HEAVY STRUCTURAL STEEL SYSTEM CONSTRUCTION, NOT OTHERWISE INDICATED, TO BE SHOP FABRICATED, PRIME, AND INSTALLED AT THE DIRECTION OF THE ARCHITECT. THIS STEEL MAY BE USED THROUGHOUT THE PROJECT AT MULTIPLE LOCATIONS OF ANY DIVISIBLE QUANTITY DENOMINATION OR LOCATION, INCLUDING BUT NOT LIMITED TO: LINTELS, BEAMS, COLUMNS, SHELF ANGLES, EDGE ANGLES, BENT PLATES, REBAR, JOISTS, ETC.
 - 5.18 INCLUDE A QUANTITY ALLOWANCE UNDER BASE BID FOR PROVIDING AN ADDITIONAL 1 1/2 TONS OF IN-PLACE MISCELLANEOUS STEEL SYSTEM CONSTRUCTION, NOT OTHERWISE INDICATED, TO BE FABRICATED, PRIME, AND INSTALLED AT THE DIRECTION OF THE ARCHITECT. THIS STEEL MAY BE USED THROUGHOUT THE PROJECT AT MULTIPLE LOCATIONS OF ANY DIVISIBLE QUANTITY DENOMINATION OR LOCATION, INCLUDING BUT NOT LIMITED TO: FINISHED RAILINGS, CLIP ANGLES, EMBEDS, STAIR COMPONENTS, ETC.
- ### 6.0 STEEL DECK
- 6.1 DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.
 - 6.2 DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS. WHERE DECK SPANS LESS THAN THREE SPANS ARE REQUIRED, THEY SHOULD BE CLEARLY MARKED ON THE SHOP DRAWINGS.
 - 6.3 ROOF DECK SHALL BE CONNECTED TO SUPPORTING STRUCTURE AS SHOWN IN THE TYPICAL DETAILS AND/OR PLAN NOTES.
A. MANUFACTURER SHALL VERIFY ROOF DECK ATTACHMENT IS ADEQUATE TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENTS AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.

GENERAL NOTES CONTINUED

- 6.4 ROOF DECK: WIDE RIB TYPE "WR", STEEL ROOF DECK, 22 GAGE, 1 1/2" DEEP, GALVANIZED.
- 6.5 1 1/2" ROOF DECK SHALL BE CONNECTED TO SUPPORTING STRUCTURE WITH #12 TEK SCREWS, SEE TYPICAL DETAILS. SIDE LAP FASTENERS SHALL BE #10 TEK SCREWS. SEE PLAN AND TYPICAL DETAILS FOR ADDITIONAL SIDE LAP INFORMATION. UNLESS NOTED OTHERWISE ROOF DECK GALVANIZING DAMAGED BY WELDING AND WELD ITSELF SHALL BE PAINTED WITH A COLD GALVANIZING PAINT.
- 6.6 WELDED CONNECTIONS: E60XX ELECTRODES: WELDING QUALIFICATION, PROCEDURES AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.3, THE STRUCTURAL WELDING CODE - SHEET STEEL.
- 6.7 COLD-FORMED STEEL FRAMING, SUSPENDED CEILING, LIGHT FIXTURES, DUCTS, PIPING, AND/OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.

7.0 MASONRY

- 7.1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1-13 SPECIFICATION.
- 7.2 ALL MASONRY MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE RECOMMENDATIONS OF BRICK INSTITUTE OF AMERICA (BIA) AND NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) AND MINIMUM REQUIREMENTS ESTABLISHED BY THE LOCAL BUILDING CODE.
- 7.3 MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT (f'm) SHALL BE 2000 PSI AT 28 DAYS.
- 7.4 NET COMPRESSIVE STRENGTH FOR EACH CMU UNIT SHALL MEET OR EXCEED 2000 PSI AT 28 DAYS. FOR TYPE N MORTAR, NET COMPRESSIVE STRENGTH FOR BLOCK SHALL BE GREATER THAN 2650 PSI.
- 7.5 ALL MASONRY SHALL BE NORMAL WEIGHT IN ACCORDANCE WITH ASTM C90.
- 7.6 GROUT COMPRESSIVE STRENGTH SHALL BE 2500 PSI AT 28 DAYS. GROUT SHALL ADDITIONALLY COMPLY WITH TABLE 7 OF ACI 530.1/ASCE 6/TMS 602 FOR DIMENSIONS OF GROUT SPACES AND POUR HEIGHTS. COURSE GROUT SHALL BE USED WHERE POSSIBLE.
- 7.7 MORTAR SHALL BE TYPE S OR M. TYPE N MORTAR ALLOWED ONLY IF THE CMU NET COMPRESSIVE STRENGTH IS GREATER THAN 2650 PSI.
- 7.8 ALL MASONRY SHALL BE STACK BOND, UNLESS NOTED.
- 7.9 ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR GROUT.
- 7.10 MASONRY REINFORCING LAP SPLICE LENGTHS PER SCHEDULE. SEE MASONRY LAP SPLICE LENGTHS TYPICAL DETAIL.
- 7.11 THE CONTRACTOR SHALL PROVIDE DETAILED SHOP DRAWINGS OF THE CMU REINFORCEMENT.
 - A. SHOP DRAWINGS SHALL INCLUDE AN ELEVATION VIEW OF EACH REINFORCED WALL WITH ALL VERTICAL AND HORIZONTAL REINFORCING AS WELL AS WALL OPENINGS/PENETRATIONS SHOWN. REINFORCING SHOP DRAWINGS NOT CONTAINING THESE ELEVATION DRAWINGS WILL BE RETURNED AS AN INCOMPLETE SUBMITTAL.
- 7.12 CONTROL JOINTS IN CMU WALLS SHALL BE DISCONTINUOUS AT MASONRY BOND BEAMS. BOND BEAM REINFORCING SHALL EXTEND CONTINUOUS WITH 48 BAR DIAMETER LAPS AND CORNER BARS. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
- 7.13 WHEN REINFORCING IS SPECIFIED, PROVIDE AT EACH SIDE OF CONTROL JOINTS, OPENINGS AND WALL ENDS.
- 7.14 EXTEND REBAR AT WALL OPENINGS A MINIMUM OF 2'-0" PAST THE OPENING AT ALL CORNERS, UNLESS NOTED. AT WINDOWS, PROVIDE A MINIMUM OF 2#4 BARS AT THE SILL OF THE WINDOWS.
- 7.15 AT CMU PARTITIONS OVER 8'-0" TALL, SUPPORTED BY SLAB ON GRADE, PROVIDE THICKENED SLAB PER TYPICAL DETAILS.
- 7.16 PROVIDE WALL TOP SUPPORT AT 8'-0" OC FOR ALL INTERIOR NON-LOAD BEARING CMU WALLS WHERE CONTINUOUS WALL SPAN BETWEEN PERPENDICULAR BRACING WALLS EXCEEDS 20'-0".
- 7.17 GROUT SHALL COMPLY WITH TABLE 7 OF ACI 530.1/ASCE 6/TMS 602 FOR DIMENSIONS OF GROUT SPACES AND POUR HEIGHTS.
- 7.18 PROVIDE HORIZONTAL JOINT REINFORCING IN REINFORCED MASONRY WALLS AS DIRECTED BY THE ARCHITECT. AT WALL CORNERS AND INTERSECTIONS, PROVIDE PREFABRICATED T AND L SHAPES. FIELD BENDING IS NOT PERMITTED. MINIMUM OF LADDER TYPE ZINC COATED CONFORMING TO ASTM A82 HOHMANN & BARNARD 220 LADDER-MESH OR EQUIVALENT AT EVERY OTHER BLOCK COURSE ABOVE FOOTING. REINFORCEMENT SHOULD CONSIST OF TWO OR MORE LONGITUDINAL WIRES, NO. 9 GAUGE OR LARGER, WELDED WITH NO. 9 GAUGE OR LARGER CROSS WIRES. LAP SPLICE HORIZONTAL JOINT REINFORCING A MINIMUM OF 12".
- 7.19 PROVIDE DOVETAILED ANCHORS AT 16" O/C, UNLESS NOTED OTHERWISE, WHERE MASONRY WALLS ABUT CONCRETE SURFACES.
- 7.20 PROVIDE GROUT FILLED LINTEL BLOCK AT TOP OF ALL CMU WALLS REINFORCED WITH 2#4 BARS CONTINUOUS, UNLESS NOTED.
- 7.21 WHERE MASONRY WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.
- 7.22 WHERE TOP OF FOOTING SUPPORTING MASONRY WALLS IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6@16, UP TO THE FINISH FLOOR ELEVATION, IN ADDITION TO SPECIFIED REINFORCEMENT.
- 7.23 CONDUITS OR CONDENSATE DRAIN LINES UP TO 2" IN OUTSIDE DIAMETER MAY EXTEND CONT THRU MASONRY BOND BEAMS. COORDINATE WITH MECHANICAL OR ELECTRICAL DRAWINGS FOR SIZE AND LOCATION. DO NOT INTERRUPT CONTINUOUS REINFORCING STEEL IN PLACEMENT OF DRAIN OR CONDUIT LINES.
- 7.24 THE MASONRY WALLS ARE "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE. BRACING SHALL BE PER THE FOLLOWING, AND CONTRACTOR SHALL PROVIDE ADDED REINFORCING AND GROUT IF REQUIRED BY THE BRACING.
 - A. THE "2012 STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION"
 - B. THE "MASONRY WALL BRACING HANDBOOK" AS PUBLISHED BY THE MASONRY CONTRACTORS ASSOCIATION OF AMERICA (MCAA) SHOULD BE USED IN CONJUNCTION WITH THE "STANDARD PRACTICE".
- 7.25 PROVIDE 2 COURSES OF GROUT FILLED OPEN BOTTOM BOND BEAM BLOCKS REINFORCED WITH 2#5 BARS CONTINUOUS AT ALL STEEL STAIR ATTACHMENT LOCATIONS, UNLESS NOTED OTHERWISE. CONTRACTOR COORDINATE EXACT LOCATIONS WITH STEEL STAIR DESIGNER.

8.0 COLD-FORMED STEEL FRAMING

- 8.1 STRUCTURAL PROPERTIES OF STUDS AND JOISTS SHALL BE COMPUTED IN ACCORDANCE WITH AISI "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
- 8.2 GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL COLD-FORMED STEEL FRAMING. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR FRAMING LAYOUT, SIZES, SPACING, AND SECTIONS. THE GAGE OF THE STUDS, IF SHOWN, SHALL NOT BE REVISED UNLESS IT IS REQUIRED TO BE INCREASED AS DIRECTED BY THE COLD-FORMED STEEL DESIGN ENGINEER. COLD-FORMED STEEL FRAMING SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SUBMITTED FOR FILES OF THE STRUCTURAL ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE CONTRACTOR SHALL INCLUDE THE COST OF SHOP DRAWINGS AND CALCULATIONS, INCLUDING ENGINEERING FEES, IN THE BASE BID OF THE CONTRACT.
- 8.3 DEFLECTION LIMITS FOR MEMBERS:

A. SOFFITS:	DL L/240	LL L/240	TL L/180
B. WALL SUPPORTING BRICK:	HORIZONTAL DEFLECTION OF L/600		
C. WALL SUPPORTING STUCCO:	HORIZONTAL DEFLECTION OF L/360		
D. END WALL SUPPORTING EIFS:	HORIZONTAL DEFLECTION OF L/240		
E. WALL PARTITIONS:	HORIZONTAL DEFLECTION OF L/180		
- 8.4 COLD-FORMED STEEL FRAMING MEMBERS SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.
- 8.5 COLD-FORMED STEEL FRAMING MEMBERS ABUTTING STRUCTURE SHALL HAVE VERTICAL SLIP TRACKS TO ACCOMMODATE UP TO 1-1/2" VERTICAL MOVEMENT UP OR DOWN.
- 8.6 PROVIDE WALL BRACING, CONNECTION DETAILS, WINDOW/DOOR HEADERS, ETC AS RECOMMENDED BY THE STUD MANUFACTURER FOR COLD-FORMED STEEL FRAMING MEMBERS.
- 8.7 TRACK SHALL BE SCREWED TO STUD WITH 2#8 TEK SCREWS EACH FLANGE, OR AS REQUIRED BY DESIGN.
- 8.8 PROVIDE SHOP DRAWINGS SHOWING PLANS, ELEVATIONS AND CONNECTION DETAILS AT ALL COLD-FORMED STEEL LOAD-BEARING STUD WALLS.
- 8.9 ALL CONNECTIONS OF THE COLD-FORMED STEEL FRAMING MEMBERS TO THE STRUCTURE SHALL BE FULLY DETAILED ON THE COLD-FORMED STEEL FRAMING SHOP DRAWINGS. ANY SPECIAL LOADING IMPOSED ON THE STRUCTURE SHALL BE CLEARLY INDICATED ON THE SHOP DRAWINGS.

9.0 PRE-MANUFACTURED COLD-FORMED STEEL TRUSSES

- 9.1 STRUCTURAL PROPERTIES OF FRAMING SHALL BE COMPUTED IN ACCORDANCE WITH AISI "NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING".
- 9.2 GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL COLD FORMED STEEL TRUSSES AND RAFTERS, ALSO SEE SPECIFICATION 05400.
- 9.3 IN ADDITION TO PROVIDING THE COLD-FORMED STEEL TRUSS SYSTEM CALLED FOR IN THESE DOCUMENTS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:
 - A. DESIGN OF THE TRUSS SYSTEM AND RAFTER SYSTEM, COLLECTIVELY THE "TRUSSES".
 - B. ENGINEERING PROVIDED BY MANUFACTURER SHALL BE A COMPLETE PACKAGE SIMILAR TO THE "WORKS" PACKAGE PROVIDED BY AEGIS METAL FRAMING OR EQUAL.
 - C. DESIGN OF ALL TRUSS COMPONENTS, TEMPORARY AND PERMANENT BRACING, TRUSS TO TRUSS CONNECTIONS, AND TRUSS TO STRUCTURE CONNECTIONS.
 - D. WHERE TRUSSES ARE SUPPORTED BY CONCRETE, AND THE TRUSS TO STRUCTURE CONNECTION DESIGNED BY THE CONTRACTOR CALLS FOR EMBED STEEL PLATES, SUCH PLATES SHALL ALSO BE DESIGNED BY THE CONTRACTOR. THE DESIGN SHALL MEET THE PROVISIONS OF ACI 318-14.
 - E. DIMENSIONED TRUSS FRAMING PLAN.
 - F. TRUSS ERECTION PLAN.
 - G. PLAN SHOWING LAYOUT AND DETAILS OF ANY TEMPORARY AND PERMANENT BRACING REQUIRED.
 - H. DETAILED AND DIMENSIONED PLAN SHOWING THE LOCATION AND TYPE OF EMBEDS OR CONNECTION MATERIAL REQUIRED TO ANCHOR THE TRUSSES TO THE STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS REQUIRED TO ANCHOR THE TRUSS TO THE STRUCTURE.
 - I. CALCULATIONS FOR THE ABOVE SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE ENGINEER SHALL HAVE PERSONALLY SUPERVISED THE DESIGN AND PREPARATIONS OF THE CALCULATIONS, SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH THESE CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.
- 9.4 TRUSS MANUFACTURER SHALL DESIGN FOR THE FOLLOWING SUPERIMPOSED LOADS:

A. TOP CHORD DEAD LOAD	-----10 PSF
B. BOTTOM CHORD DEAD LOAD	-----10 PSF
C. TOP CHORD LIVE LOAD	-----20 PSF
- 9.5 DEFLECTION LIMITS FOR MEMBERS:

A. SOFFITS:	DL L/240	LL L/360	TL L/180
B. ROOF:	DL L/240	LL L/360	TL L/180
C. END WALL GABLE SUPPORTING BRICK:	HORIZONTAL DEFLECTION OF L/600		
D. END WALL GABLE SUPPORTING STUCCO:	HORIZONTAL DEFLECTION OF L/360		
E. END WALL GABLE SUPPORTING EIFS:	HORIZONTAL DEFLECTION OF L/240		
- 9.6 DESIGN TRUSSES TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENT AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.
- 9.7 IN ADDITION TO THE ABOVE LOADS, TRUSSES SHALL BE DESIGNED FOR CONCENTRATED LOADS HUNG FROM OR SUPPORTED ON TRUSSES. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOADING INFORMATION AND LOCATION. LOADING AS REQUIRED BY OTHER SUBCONTRACTORS, SUCH AS FIRE PROTECTION, SHALL BE COORDINATED BY THE GENERAL CONTRACTOR.
- 9.8 ALL TEMPORARY AND PERMANENT BRACING MEMBERS AND CONNECTIONS REQUIRED FOR TRUSSES SHALL BE DETAILED ON THE TRUSS MANUFACTURER'S ERECTION PLANS. BRACING MEMBERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

- 9.9 TEMPORARY BRACING SHALL NOT IMPOSE ANY FORCE ON THE SUPPORTING STRUCTURE. PERMANENT BRACING FORCES SHALL BE TRANSFERRED TO THE ROOF DIAPHRAGM BY THE BRACING DESIGN PROVIDED BY THE TRUSS MANUFACTURER.
- 9.10 WELDED CONNECTIONS: E60XX ELECTRODES, MINIMUM SIZE FILLET WELD 1/8". WELDING QUALIFICATION, PROCEDURES, AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.3, THE STRUCTURAL WELDING CODE - SHEET STEEL.

10.0 POST-INSTALLED ANCHORS AND REINFORCING

- 10.1 POST-INSTALLED ANCHORS AND/OR REINFORCING SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS AND/OR REINFORCING IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS AND/OR REINFORCING.
- 10.2 THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THIS PROJECT. PRODUCT DIAMETER AND EMBEDMENT SHALL BE SHOWN IN THE DETAILS.
- 10.3 FOR ANCHORING INTO CONCRETE:
 - A. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 308.2 AND ICC-ES AC108 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. PRE-APPROVED PRODUCTS INCLUDE:
 - 1. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713)
 - 2. SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
 - 3. SIMPSON STRONG-TIE "TORQ-CUT" (ICC-ES ESR-2705)
 - 4. SIMPSON STRONG-TIE "TITEN-HD ROD HANGER" (ICC-ES ESR-2713)
 - 5. HILTI KWIK HUS-EZ AND KWIK HUS EZ-I SCREW ANCHORS (ICC ESR-3027)
 - 6. HILTI KWIK BOLT-TZ EXPANSION ANCHORS (ICC ESR-1917)
 - 7. HILTI KWIK BOLT 3 EXPANSION ANCHORS (UNCRACKED CONCRETE ONLY) (ICC ESR-2302)
 - 8. HILTI HDA UNDERCUT ANCHORS (ICC ESR 1546)
 - 9. HILTI HSL-3 EXPANSION ANCHORS (ICC ESR 1545)
 - 10. DEWALT SCREW-BOLTA (ICC-ES ESR-3889)
 - 11. DEWALT POWER-STUD+ SD1 (ICC-ES ESR-2502)
 - 12. DEWALT POWER-STUD S01 (ICC-ES ESR-2818)
 - 13. DEWALT HANGERMATE+ (ICC-ES ESR-3889)
 - 14. DEWALT CQU UNDERCUT (ICC-ES ESR-4810)
 - 15. DEWALT POWER-BOLTA (ICC-ES ESR-3260)
 - B. MECHANICAL ANCHORS FOR USE IN THE UNDER SIDE OF NORMAL WEIGHT HOLLOW CORE AND POST TENSION SLAB WHERE EMBEDMENT DEPTH MUST NOT EXCEED 8". PRE-APPROVED PRODUCTS INCLUDE:
 - 1. DEWALT MINI-UNDERCUT+ (ICC-ES ESR-3912)
 - C. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 308.2 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 308.2 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS, SUCH AS HORIZONTAL TO UPWARD INCLINED ORIENTATION UNDER SUSTAINED TENSION LOADING, SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.9.2.4. PRE-APPROVED PRODUCTS INCLUDE:
 - 1. SIMPSON STRONG-TIE "SET-3G" (ICC-ES ESR-4057)
 - 2. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-263)
 - 3. SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
 - 4. HILTI HIT-HY 200 (ICC ESR-3187)
 - 5. HILTI HIT-RE 500 V3 (ICC ESR-3814)
 - 6. DEWALT PURE110+ (ICC-ES ESR-3298)
 - 7. DEWALT AC200+ (ICC-ES ESR-4027)
 - D. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:
 - 1. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
 - 2. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
 - 3. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
 - 4. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
 - 5. DEWALT TRAK-IT C5, GAS ACTUATED (ICC-ES-ESR 3275)
- 10.4 FOR ANCHORING INTO MASONRY:
 - A. SOLID-GROUTED CONCRETE MASONRY
 - 1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC01 OR ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:
 - a. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
 - b. SIMPSON STRONG-TIE "STRONG-BOLT 2" (IAPMO-UES ER-240)
 - c. SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES ESR-1396)
 - d. HILTI KWIK HUS-EZ SCREW ANCHOR (ICC ESR-3056)
 - e. HILTI KWIK BOLT-3 EXPANSION ANCHORS (ICC ESR-1385)
 - f. DEWALT "SCREW-BOLTA" (ICC-ES ESR 4042)
 - g. DEWALT "POWER-STUD+ SD1" (ICC-ES ESR 2966)
 - 2. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED PRODUCTS INCLUDE:
 - a. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-281)
 - b. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
 - c. HILTI HIT-HY 70 (ICC ESR-2682)
 - d. DEWALT AC100+ GOLD (ICC-ES ESR-3200)
 - 3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:
 - a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
 - b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
 - c. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
 - d. DEWALT TRAK-IT C5, GAS ACTUATED (ICC-ES-ESR 3275)

B. HOLLOW CONCRETE MASONRY

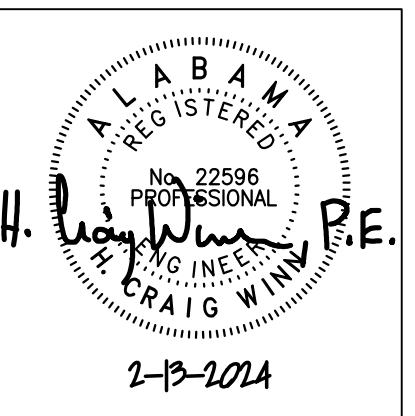
- 1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:
 - a. SIMPSON STRONG-TIE "TITEN-HD"
- 2. ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC58. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:
 - a. SIMPSON STRONG-TIE "SET-XP"
 - b. HILTI HIT-HY 70 MASONRY ADHESIVE ANCHORING SYSTEM WITH HAS-E THREADED ROD OR CONTINUOUSLY DEFORMED REBAR (ICC ESR-3342)
 - c. DEWALT AC100+ GOLD (ICC-ES ESR-3200)
- 3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:
 - a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
 - b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
 - c. HILTI "DRYWALL TRACK FASTENERS" X-DW (ICC ESR-1663)
- 4. UNREINFORCED BRICK MASONRY (URB): ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC60. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:
 - 1. SIMPSON STRONG-TIE "SET" (ICC-ES ESR-1772)
 - 2. SIMPSON STRONG-TIE "AT" (ICC-ES ESR-1958)
 - 3. SIMPSON STRONG-TIE "ET-HP" (ICC-ES ESR-3638)
 - 4. HILTI HIT-HY 70 MASONRY ADHESIVE ANCHORING SYSTEM WITH HAS-E THREADED ROD OR CONTINUOUSLY DEFORMED REBAR (ICC ESR-2682)
 - 5. DEWALT "AC100+ GOLD" (ICC-ES ESR-4105)
- 10.5 FOR FASTENING INTO STEEL: POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:
 - A. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
 - B. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
 - C. HILTI FASTENERS IN LIEU OF #12 TEK SCREWS:
 - 1. HILTI S-HD 12-24x1-5/8 HHWS SCREWS FOR STUDS, JOISTS AND BEAMS 16 GA ≤ TF ≤ 1/4"
 - 2. HILTI X-HSN 24 PINS FOR JOISTS AND BEAM 1/8" ≤ TF ≤ 3/8"
 - 3. HILTI X-ENP 19 L15 PINS FOR BEAMS TF ≥ 1/4".
 - D. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
 - E. DEWALT TRAK-IT C5, GAS ACTUATED (ICC-ES-ESR 3275)

- 10.6 REFER TO THE PROJECT BUILDING CODE AND/OR EVALUATION REPORT FOR SPECIAL INSPECTIONS AND PROOF LOAD REQUIREMENTS.
- 10.7 SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED MAY BE SUBMITTED BY THE CONTRACTOR TO THE EOR FOR REVIEW NO LESS THAN TWO WEEKS PRIOR TO BID. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS HAVING A RESEARCH REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION UNDER THE PROJECT BUILDING CODE. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
- 10.8 INSTALL ANCHORS PER THE MANUFACTURER PRINTED INSTRUCTIONS (MPII), OR AS INCLUDED IN THE ANCHOR PACKAGING.
- 10.9 OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE MANUFACTURER INSTRUCTIONS.
- 10.10 THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
- 10.11 THE CONTRACTOR SHALL COORDINATE WITH THE OWNERS SPECIAL INSPECTION AGENCY FOR CONTINUOUS SPECIAL INSPECTION OF ADHESIVE ANCHORS AND PERIODIC INSPECTION OF MECHANICAL ANCHORS, SEE SPECIAL INSPECTION SCHEDULE FOR ADDITIONAL INFORMATION.
- 10.12 ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
- 10.13 EXISTING REINFORCING BARS AND/OR CONDUIT IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS AND/OR REINFORCING TO AVOID CONFLICTS WITH EXISTING REBAR AND/OR CONDUIT. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.

11.0 PREFABRICATED CANOPY

- 11.1 PROTECTIVE COVER WALKWAYS AND PREFABRICATED CANOPIES SHALL BE CONSIDERED A DEFERRED SUBMITTAL TO THE BUILDING INSPECTION AGENCY.
- 11.2 PROTECTIVE COVER WALKWAYS AND PREFABRICATED CANOPIES SHALL BE FULLY ENGINEERED BY THE CANOPY MANUFACTURER AND CONTRACTOR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE THE PROJECT IS LOCATED.
- 11.3 CALCULATIONS SHALL ACCOMPANY THE SHOP DRAWINGS AND SHALL INCLUDE DESIGN FOR ALL MEMBERS OF THE CANOPY, INCLUDING FOOTINGS AND ATTACHMENT TO STRUCTURE.
- 11.4 PROTECTIVE COVER WALKWAY AND PREFABRICATED CANOPY SHOP DRAWINGS SHALL BE SUBMITTED TO INCLUDE A FULL DESCRIPTION OF ALL CANOPY MEMBERS, INCLUDING COLUMNS, BEAMS, FOOTINGS, FASCIA, ETC. SHOP DRAWINGS SHALL BEAR THE SEAL OF THE PROFESSIONAL ENGINEER.
- 11.5 IF PROTECTIVE COVER WALKWAYS AND PREFABRICATED CANOPIES SHALL BE ATTACHED TO BUILDING, MINIMUM 16" DEEP BOND BEAM IS TO BE PROVIDED WITHIN THE LOAD-BEARING MASONRY WALL FOR WALKWAY AND CANOPY ANCHORAGE AS REQUIRED. MINIMUM 16" DEEP BOND BEAM IS TO BE CONSTRUCTED ON (2) 8" DEEP FORM BLOCKS WITH 2#5 CONTINUOUS IN EACH COURSE. CONNECTIONS TO BUILDING BY CANOPY MANUFACTURER, CONTRACTOR COORDINATE. DO NOT ANCHOR WALKWAY AND CANOPY TO VENEER. ANCHOR WALKWAY AND CANOPY INTO LOAD-BEARING MASONRY WALL WITH THREADED RODS IN PIPE SLEEVES. FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL DRAWINGS.

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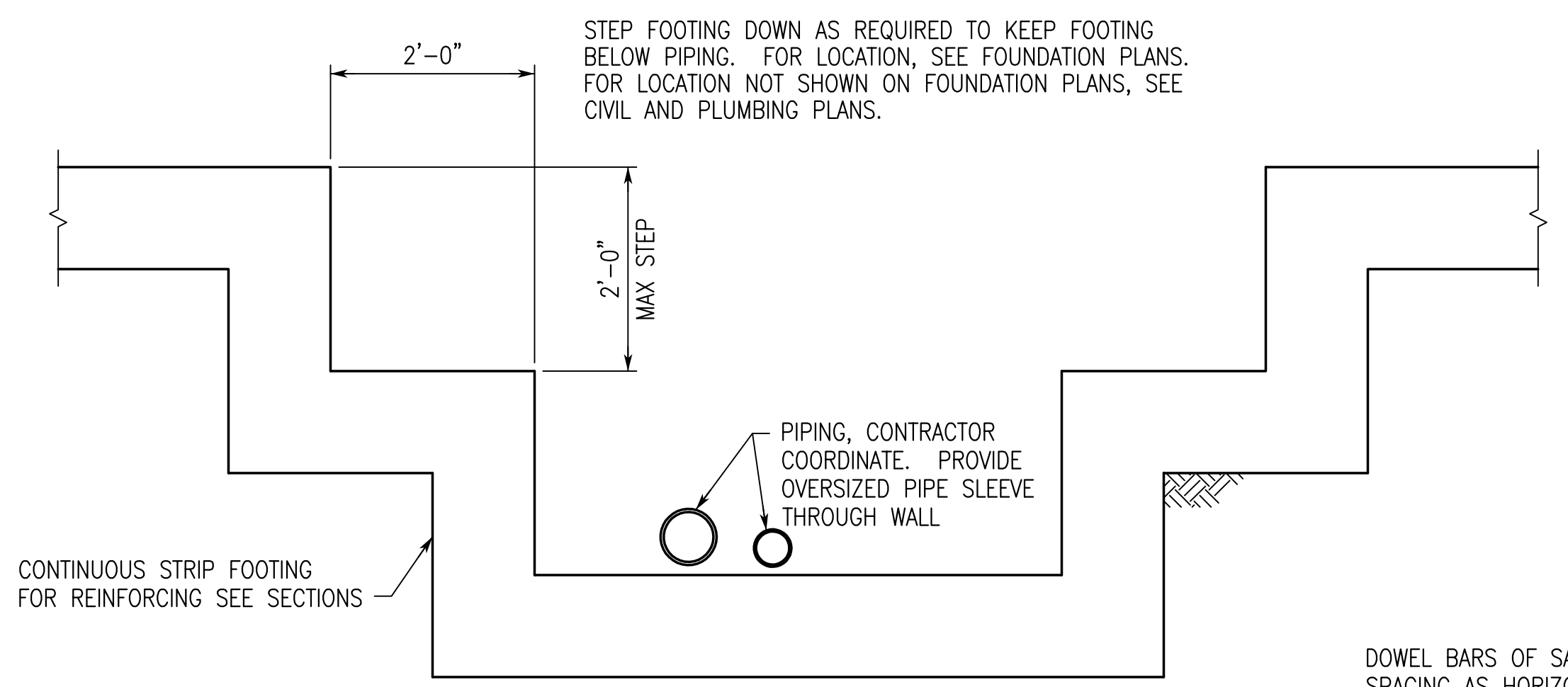
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GENERAL NOTES CONTINUED

PROJ. MGR.: HCW
 DRAWN: ABS

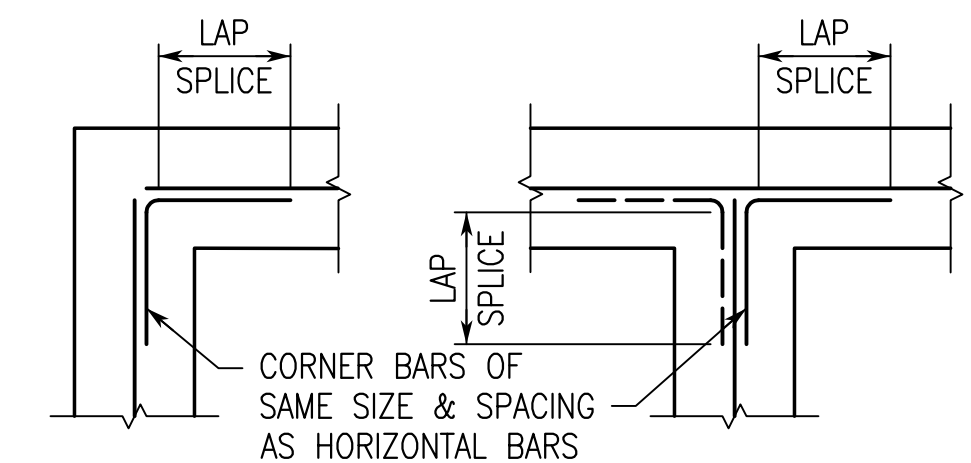
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REVISIONS

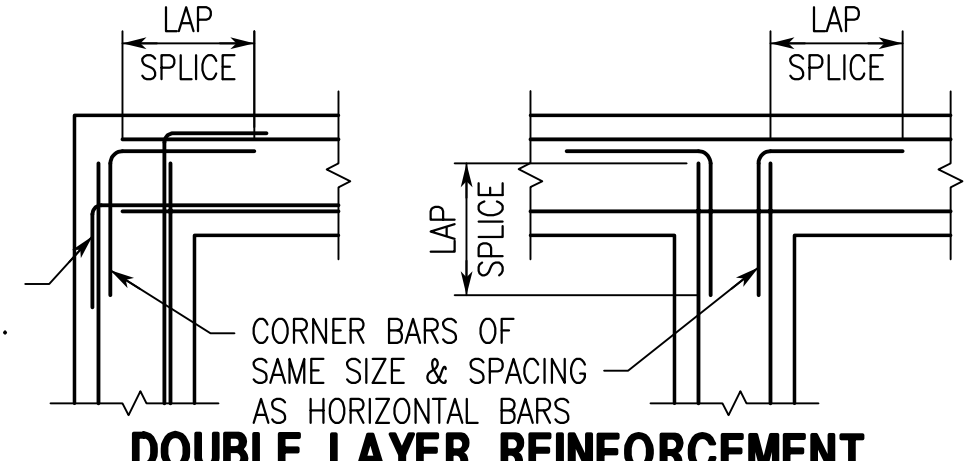
JOB NO. **23-92**
 SHEET NO:
S1.1
 2 OF 12



FOOTING/FOUNDATION WALL AT PIPING
TYPICAL



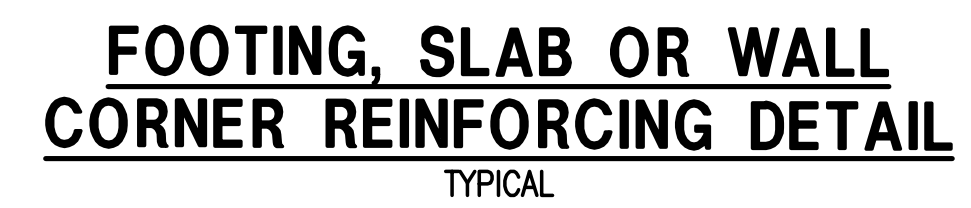
SINGLE LAYER REINFORCEMENT



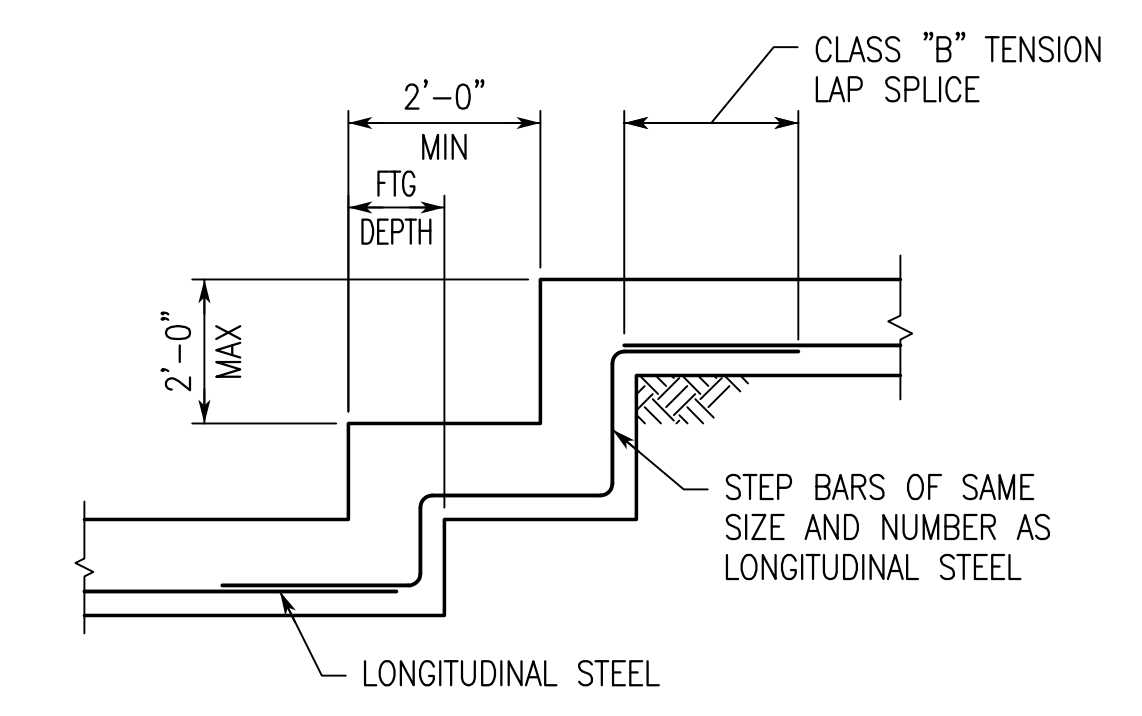
DOUBLE LAYER REINFORCEMENT

DOWEL BARS OF SAME SIZE & SPACING AS HORIZONTAL BARS. LAP 48 BAR DIAMETERS PAST INTERSECTION OF HORIZONTAL BARS

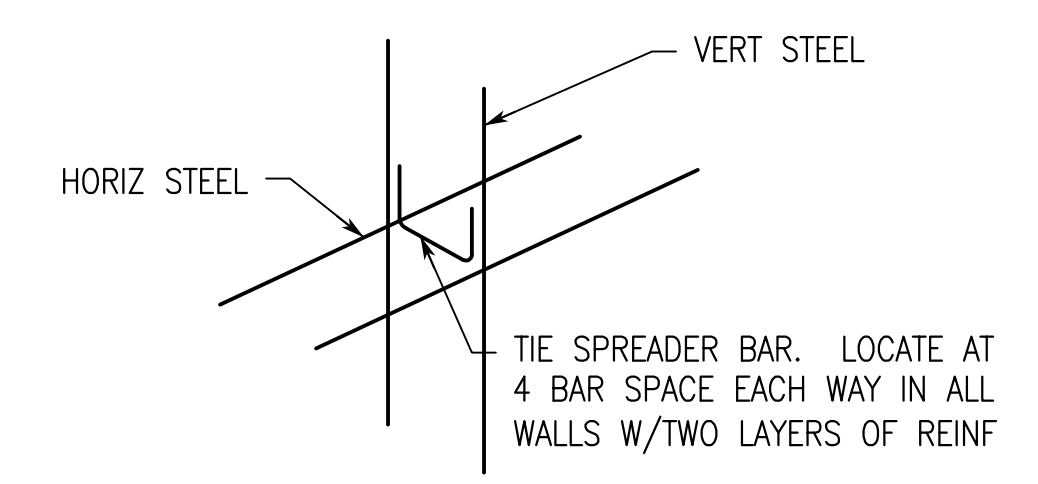
NOTE: ALL LAP SPLICES CLASS "B" TENSION



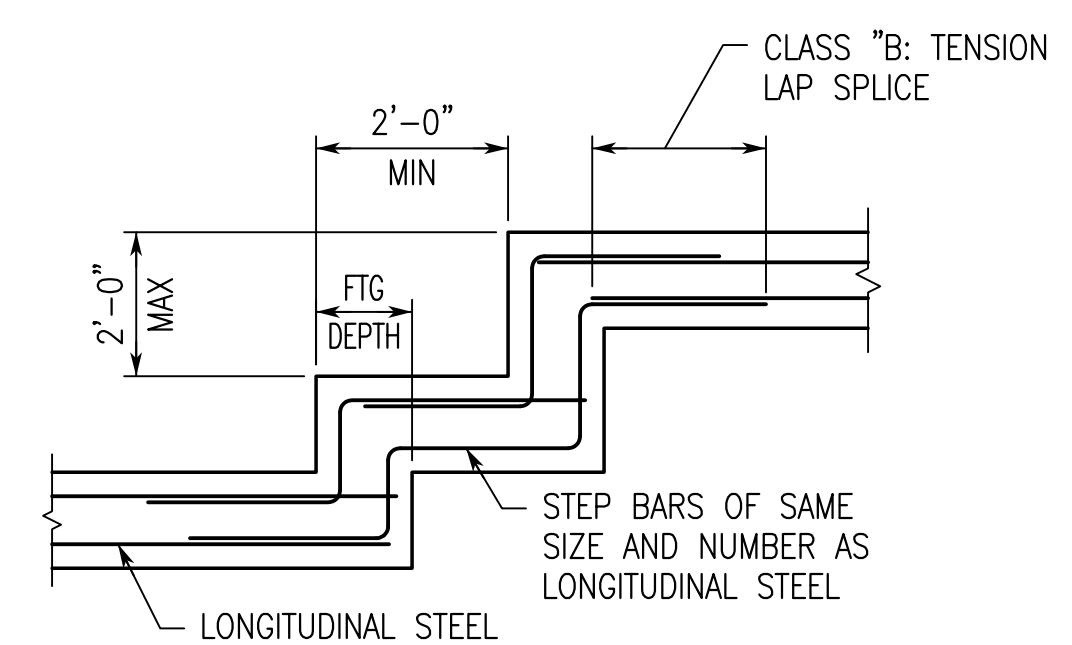
FOOTING, SLAB OR WALL CORNER REINFORCING DETAIL
TYPICAL



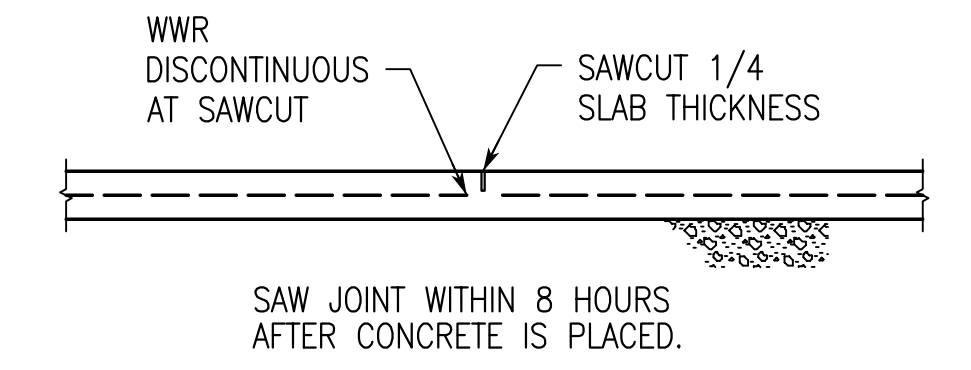
FOOTING STEP DETAIL
TYPICAL



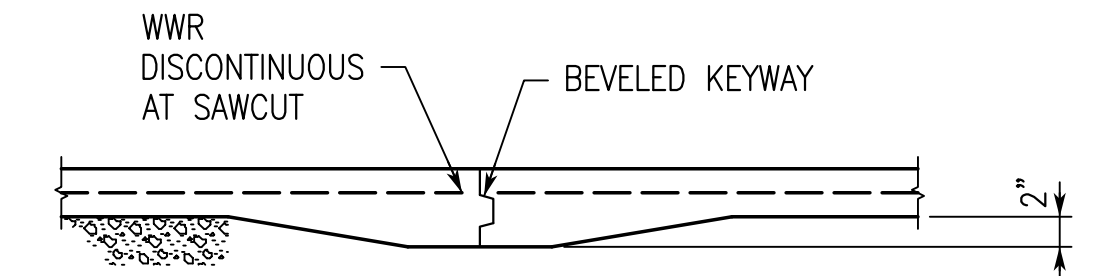
WALL STEEL TIE-SPREADER DETAIL
TYPICAL



FOOTING STEP DETAIL
TYPICAL

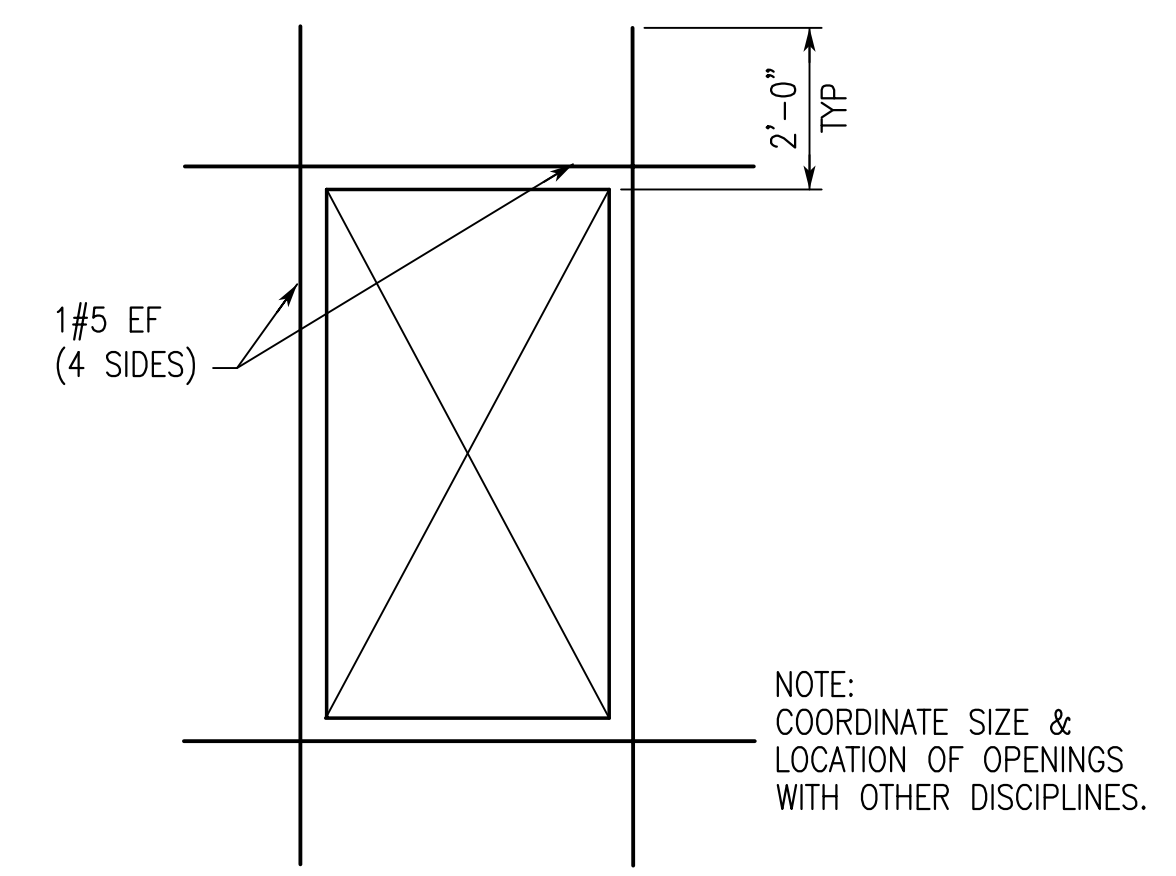


SAWED JOINT

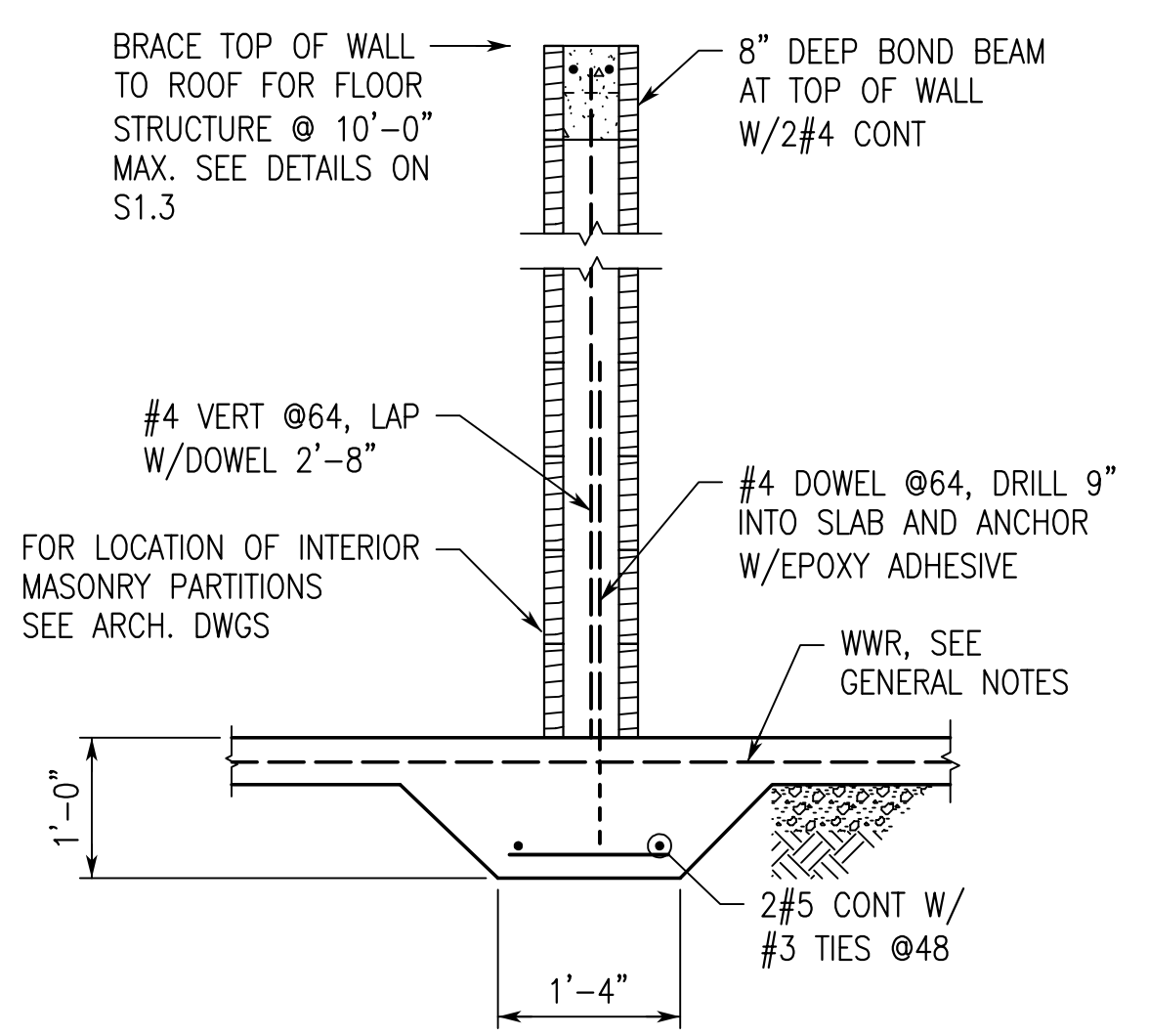


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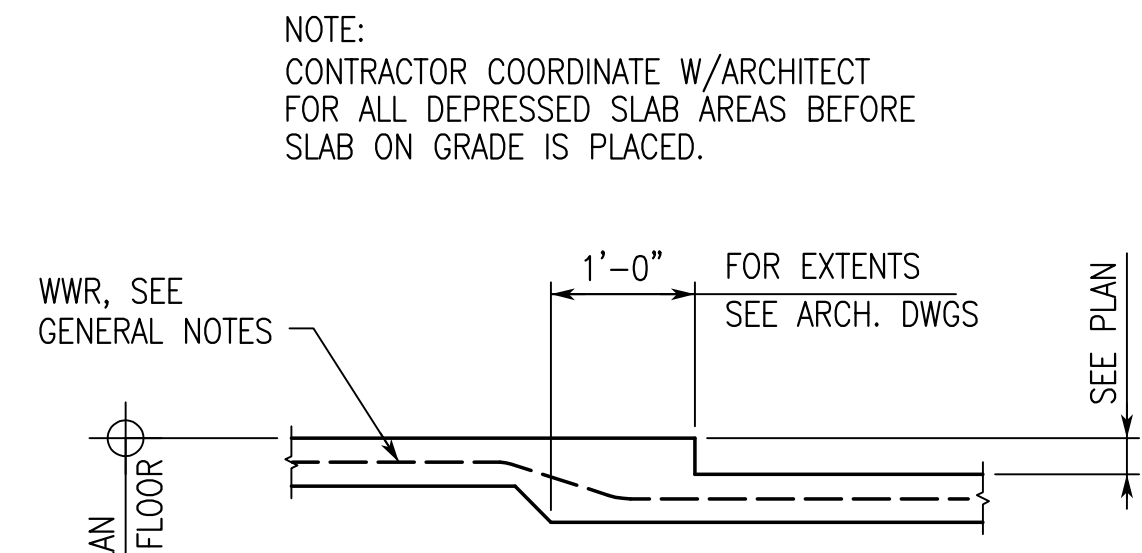
SLAB CONTROL JOINT DETAILS
TYPICAL
JOINT TYPE IS OPTIONAL



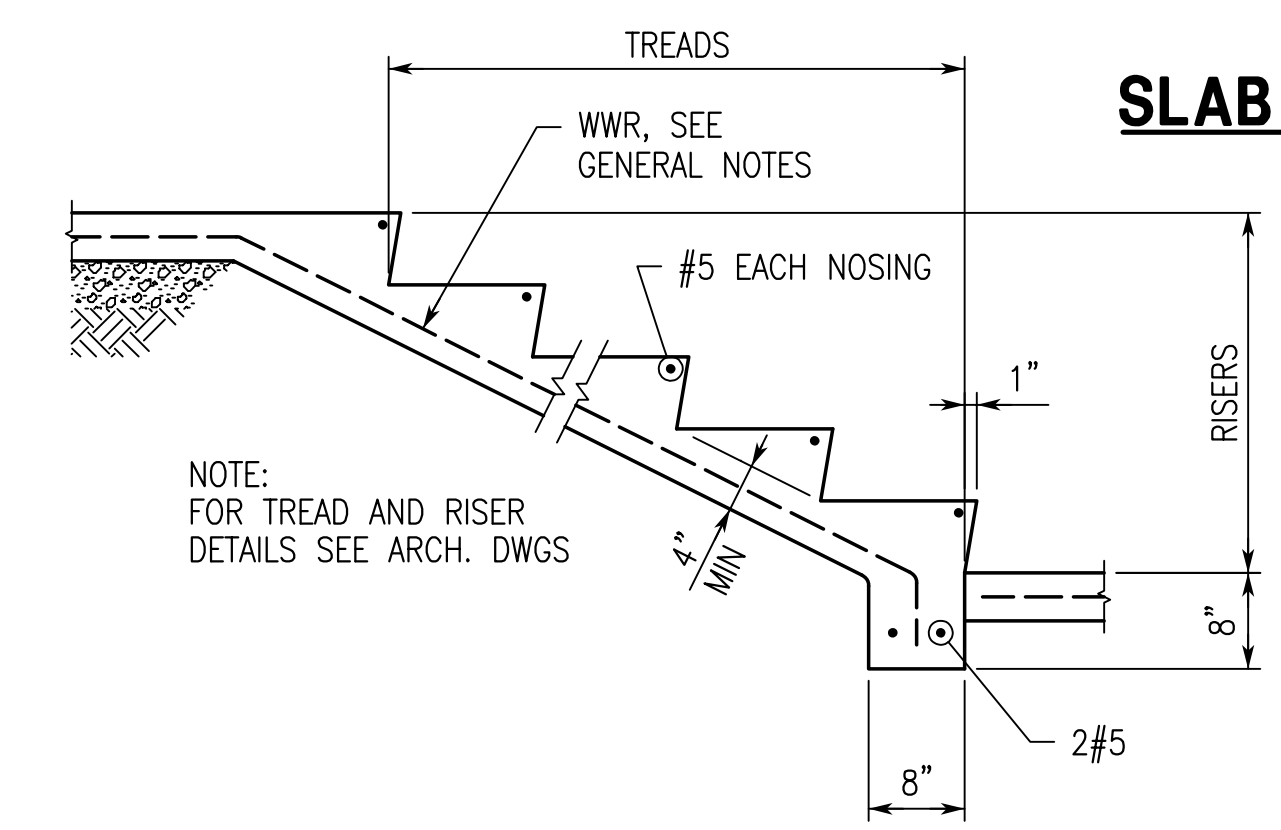
WALL OPENING REINFORCEMENT DETAIL
TYPICAL



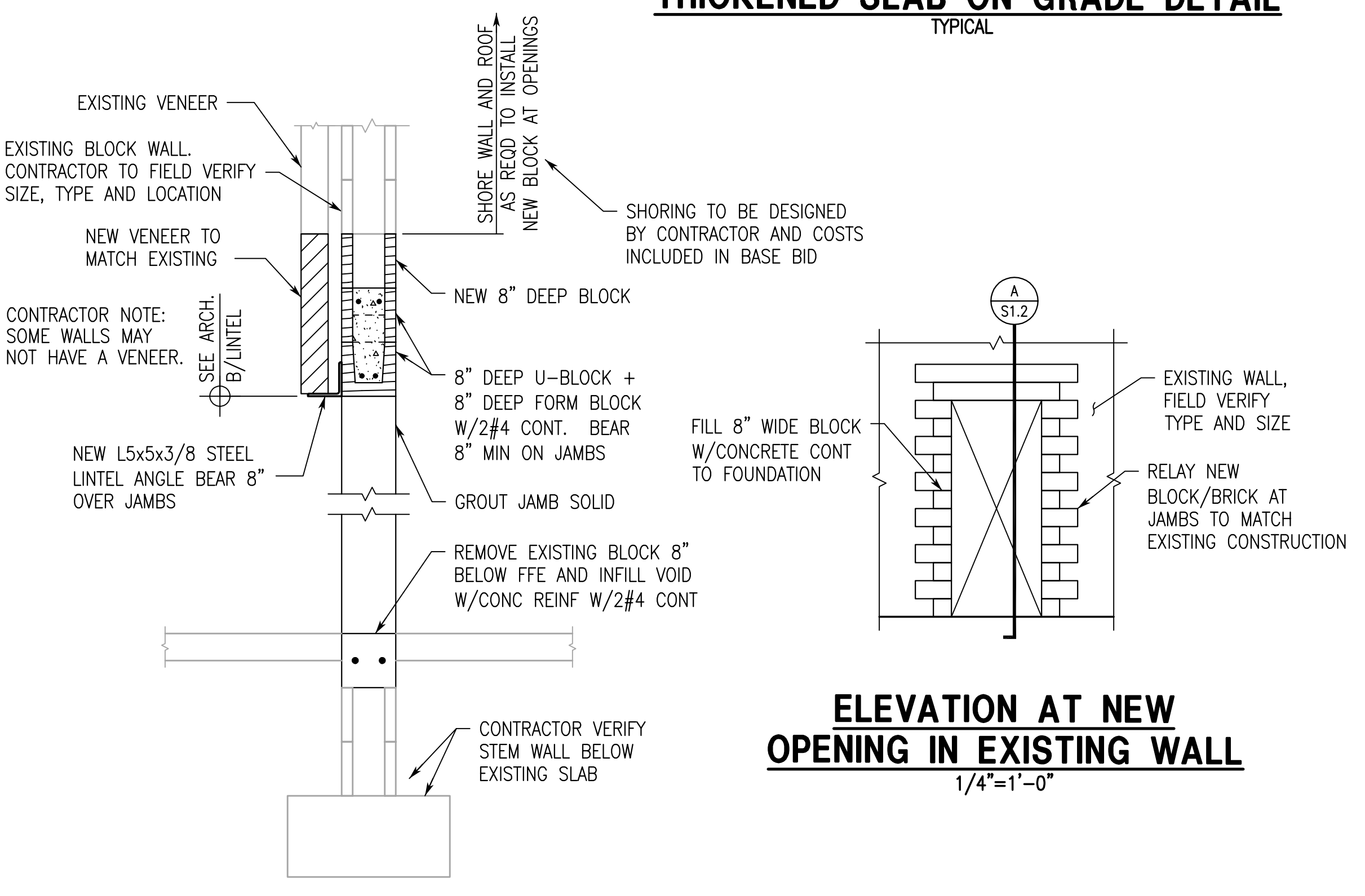
INTERIOR PARTITION WALL ON THICKENED SLAB ON GRADE DETAIL
TYPICAL



DEPRESSED SLAB ON GRADE DETAIL
TYPICAL



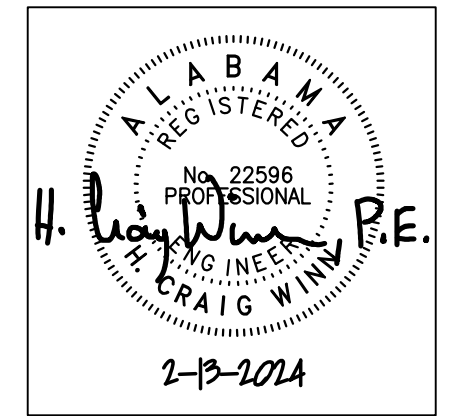
STAIR ON GRADE DETAIL
TYPICAL



ELEVATION AT NEW OPENING IN EXISTING WALL
1/4"=1'-0"

SECTION
3/4"=1'-0"

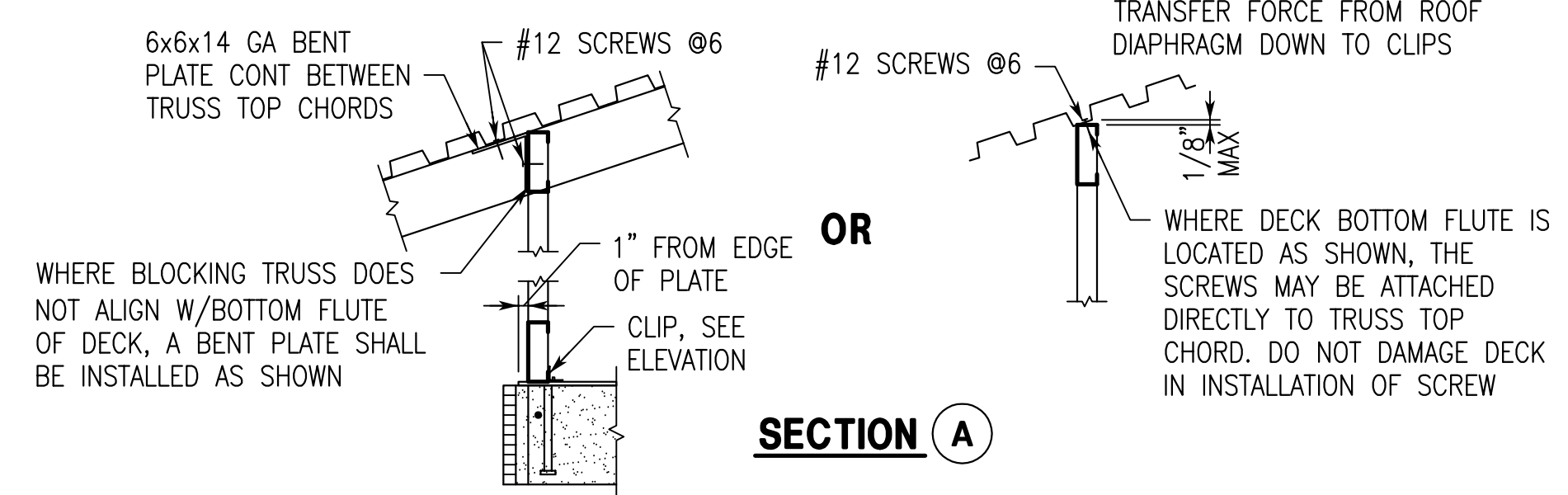
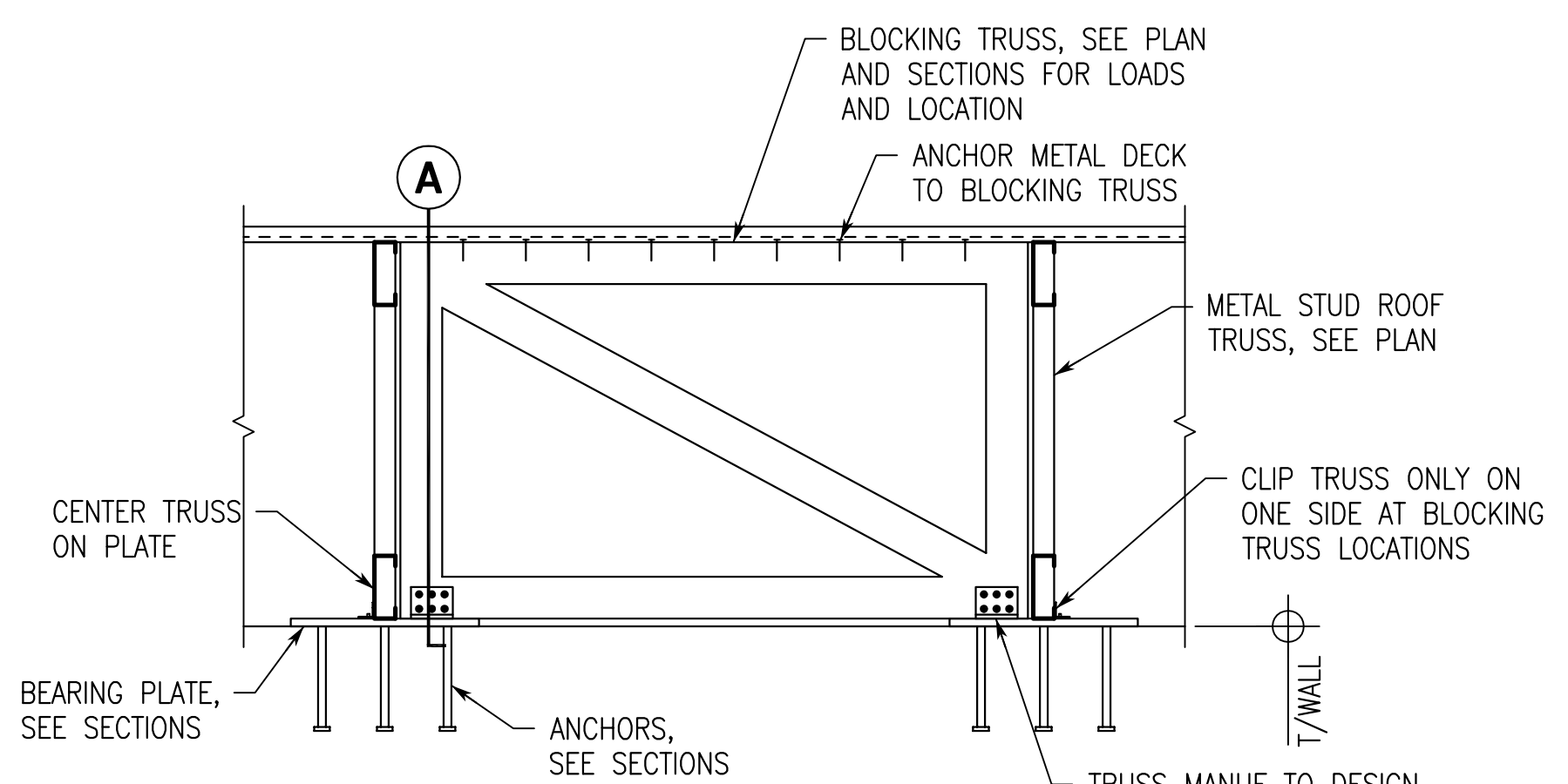
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SHEET TITLE:
TYPICAL DETAILS

PROJ. MGR.: HCW
 DRAWN: ABS
 DATE: 2-13-2024
 REVISIONS:

JOB NO. 23-92
 SHEET NO. **S1.2**
 3 OF 12
 0 1" 2"



METAL TRUSS BLOCKING TRUSS OR SHEAR TRANSFER PLATE DETAIL
NOT TO SCALE
ALTERNATE CONDITION

LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING			
	DEPTH	8" WALL	12" WALL	12" WALL
4'-0"	24	2#5 BOT & 2#5 TOP	2#5 BOT & 2#5 TOP	2#5 BOT & 2#5 TOP
6'-0"	32	2#5 BOT & 2#5 TOP	2#5 BOT & 2#5 TOP	2#5 BOT & 2#5 TOP
8'-0"	32	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP
10'-0"	32	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP

- PROVIDE 24" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS. (JAMB BARS OF SAME SIZE AS VERTICAL WALL REINFORCING BARS.)
- SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
- PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 2#5 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 24" PAST OPENING ON EACH SIDE OF OPENING.

NON-LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING				
	DEPTH	8" WALL		12" WALL	
		REINFORCING	MAX HEIGHT OF WALL ABOVE LINTEL	REINFORCING	MAX HEIGHT OF WALL ABOVE LINTEL
2'-0"	8	1#4 BOT	20'-0"	1#4 BOT	22'-0"
4'-0"	8	1#4 BOT	10'-0"	2#4 BOT	9'-4"
6'-0"	8	1#5 BOT & 1#4 TOP	4'-0"	2#5 BOT & 2#4 TOP	4'-8"
8'-0"	16	1#6 BOT & 1#5 TOP	15'-4"	2#5 BOT & 2#4 TOP	16'-0"
10'-0"	16	1#7 BOT & 1#5 TOP	10'-0"	2#6 BOT & 2#4 TOP	12'-0"
12'-0"	16	1#8 BOT & 1#5 TOP	7'-4"	2#7 BOT & 2#5 TOP	10'-8"

- DO NOT USE THIS SCHEDULE IF WALL IS LOAD BEARING SUPPORTING ANYTHING OTHER THAN WALL WEIGHT ONLY. IF WALL IS LOAD BEARING USE THE LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE.
- PROVIDE 2'-0" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS.
- WHERE MAXIMUM HEIGHT OF WALL ABOVE LINTEL IS EXCEEDED, PROVIDE ADDITIONAL LINTELS EQUALLY SPACED ABOVE TO LIMIT WALL HEIGHTS ABOVE LINTEL TO THAT SHOWN IN THE TABLE ABOVE.
- SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
- PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 2#4 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 2'-0" PAST OPENING ON EACH SIDE OF OPENING.

TENSION LAP SPLICE LENGTHS

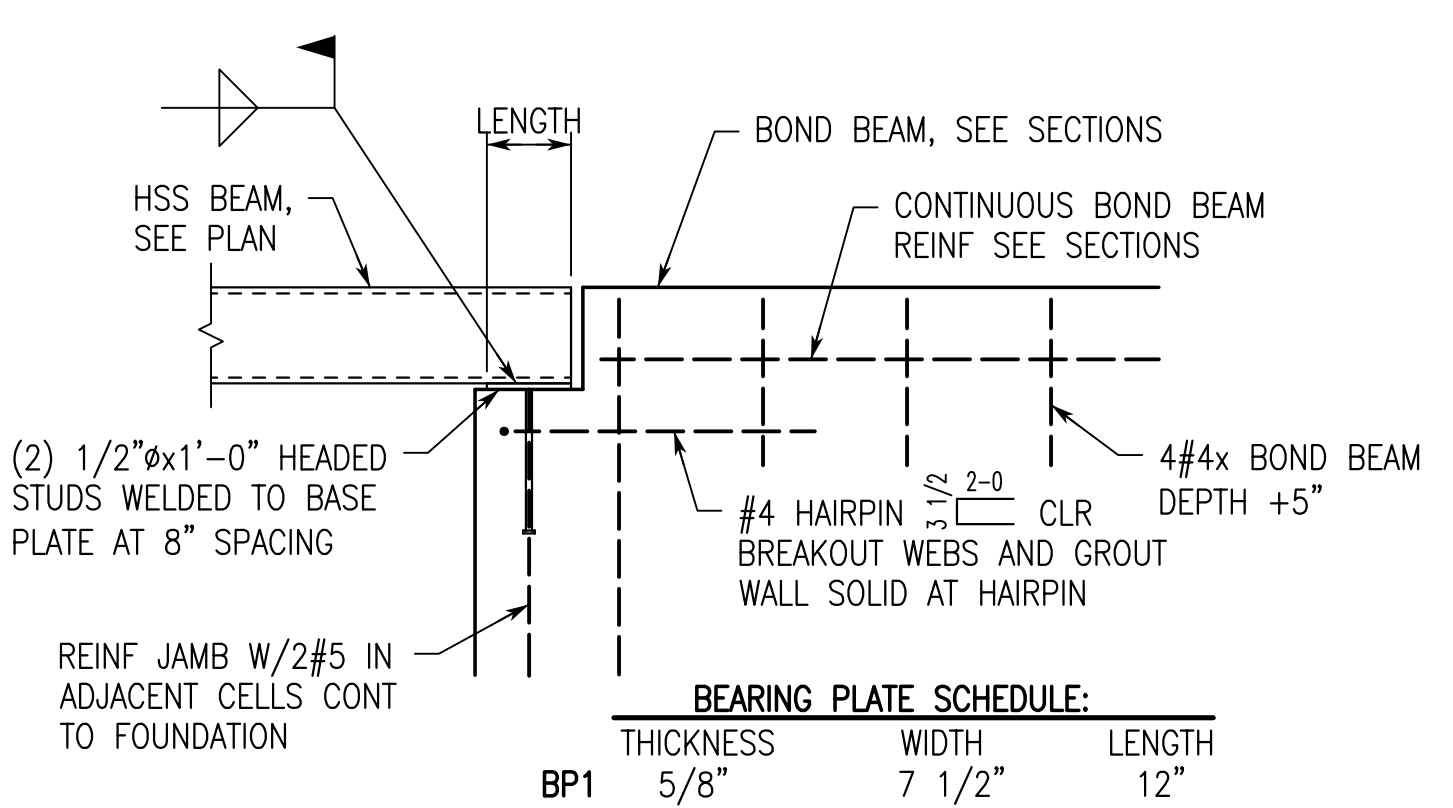
BAR SIZE	f _c = 3000 PSI				f _c = 4000 PSI			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	A	B	A	B	A	B	A	B
#3	22"	28"	17"	22"	19"	24"	15"	19"
#4	29"	37"	22"	29"	25"	32"	19"	25"
#5	36"	47"	28"	36"	31"	40"	24"	31"
#6	43"	56"	33"	43"	37"	48"	29"	37"
#7	63"	81"	48"	63"	54"	70"	42"	54"
#8	72"	93"	55"	72"	62"	80"	48"	62"
#9	81"	105"	62"	81"	70"	91"	54"	70"
#10	91"	118"	70"	91"	79"	102"	61"	79"
#11	101"	131"	78"	101"	87"	113"	67"	87"

TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINFORCEMENT.

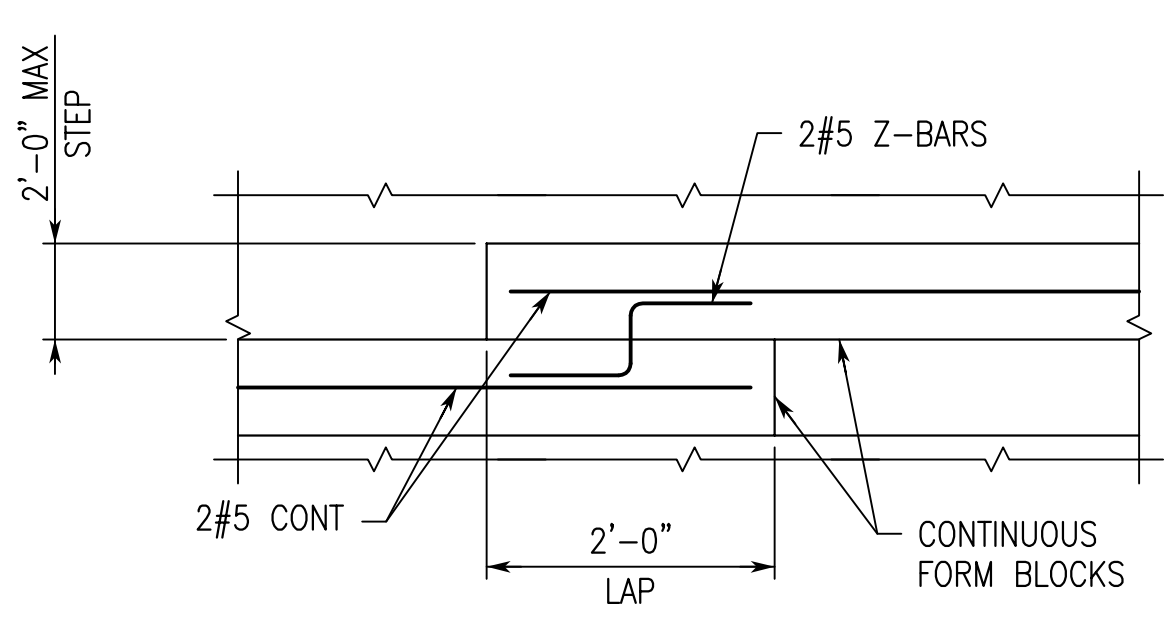
PIPING WEIGHTS

PIPE DIAMETER	PIPE WT PER/FOOT (PLF)	FLUID WT PER/FOOT (PLF)	INSULATION & HANGERS (PLF)	TOTAL WT PER/FOOT (PLF)
4"	10.80	6.10	2.00	18.90
6"	19.00	13.80	3.00	35.80
8"	28.60	23.90	4.00	56.50
10"	40.50	37.50	4.00	82.00
12"	49.60	54.00	5.00	108.60
14"	54.60	65.70	5.00	125.30
16"	62.60	87.10	5.00	154.70

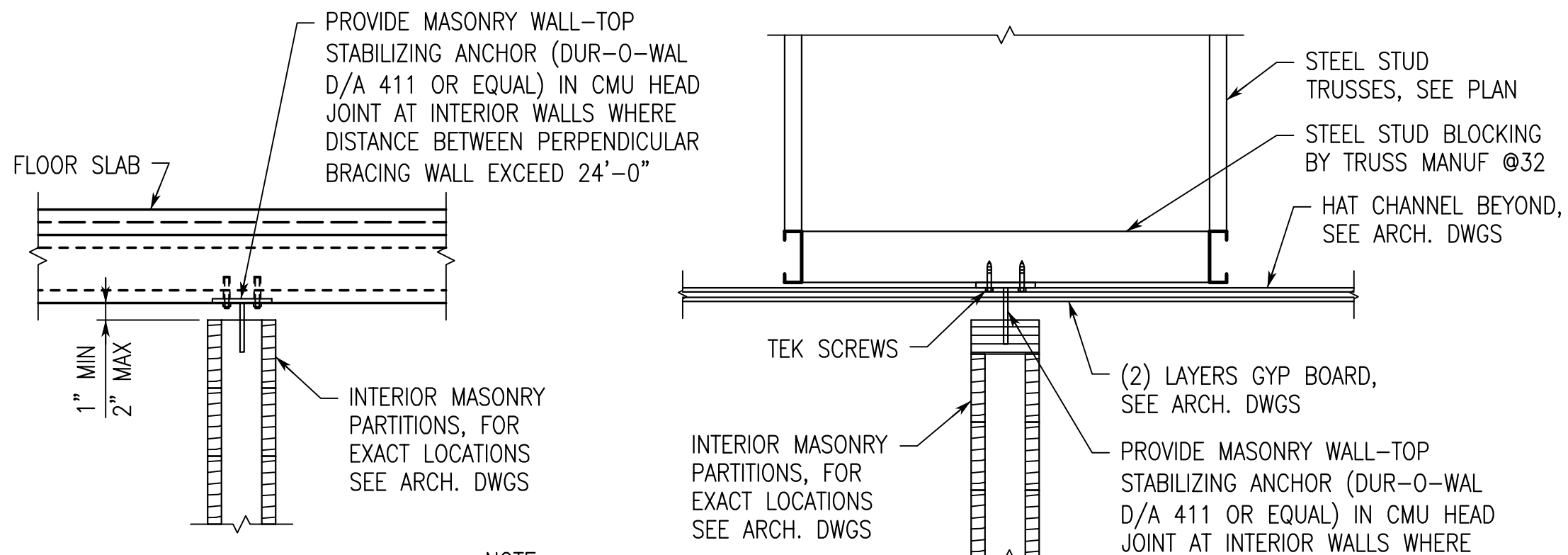
- NOTES:
- FROM ANVIL INTERNATIONAL PIPE FITTERS HANDBOOK.
 - ALL PIPES ASSUMED TO BE SCHEDULE 40.
 - FLUID WEIGHT INCLUDES ALLOWANCE FOR GLYCOL CONCENTRATION.
 - PIPING SUPPORT AND THRUST BRACING REQUIREMENTS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE STEEL/JOIST FABRICATOR. SEE MECHANICAL/PLUMBING DRAWINGS FOR PIPING SUPPORT AND THRUST BRACING REQUIREMENTS.
 - FOR PIPE SIZES NOT LISTED, CONTACT STRUCTURAL ENGINEER.



BEAM BEARING DETAIL IN LINE WITH CMU WALL
TYPICAL

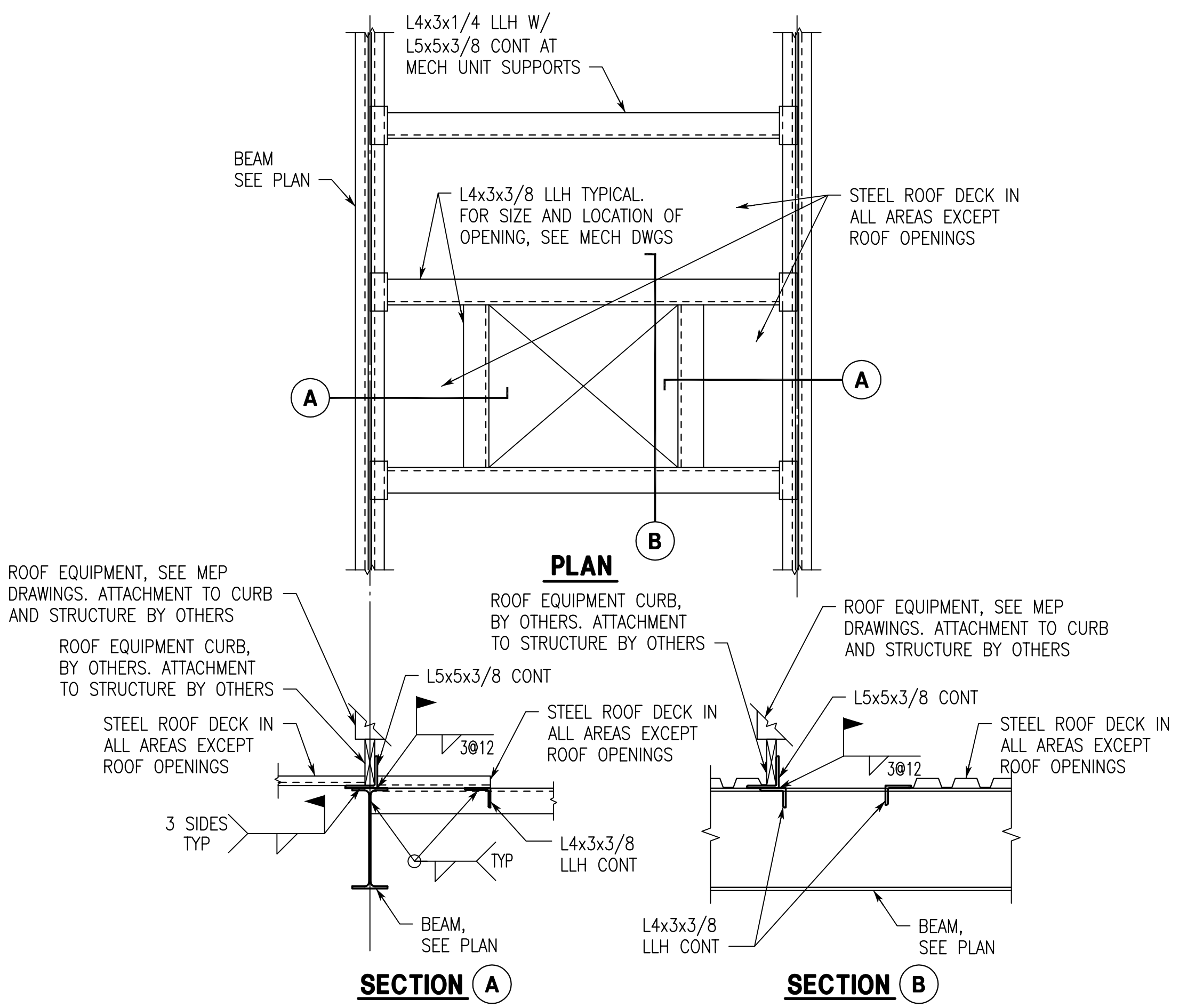


MASONRY BOND BEAM STEP DETAIL
TYPICAL



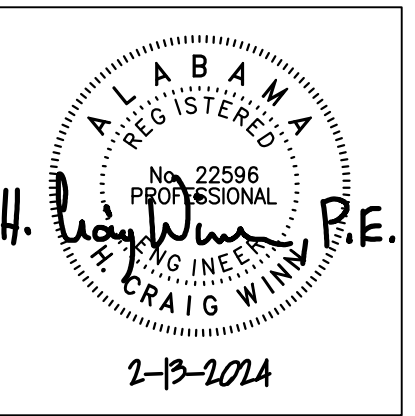
- NOTE:
1. ALL INTERIOR WALLS TO BE BUILT TIGHT TO UNDERSIDE OF CONCRETE ABOVE.

INTERIOR MASONRY WALL BRACING DETAILS
TYPICAL



- NOTES:
- PROVIDE L4x3x3/8 LLH FRAMES AT ALL WATER/POWER BOXES.
 - AT ROOF DRAINS SUPPORT, PROVIDE L3x3x5/16 AT THE TOP OF BEAM.
 - CONTRACTOR COORDINATE ROOF EQUIPMENT FRAMES WITH EQUIPMENT MANUFACTURER. DETAIL IS SCHEMATIC DEPICTION AND OTHER CONFIGURATIONS MAY BE REQUIRED.
 - FASTEN STEEL ROOF DECK TO ALL ANGLES PER DECK FASTENING REQUIREMENT.

ROOF EQUIPMENT FRAME DETAIL
TYPICAL AT ALL OPENINGS IN ROOF LARGER THAN 8"

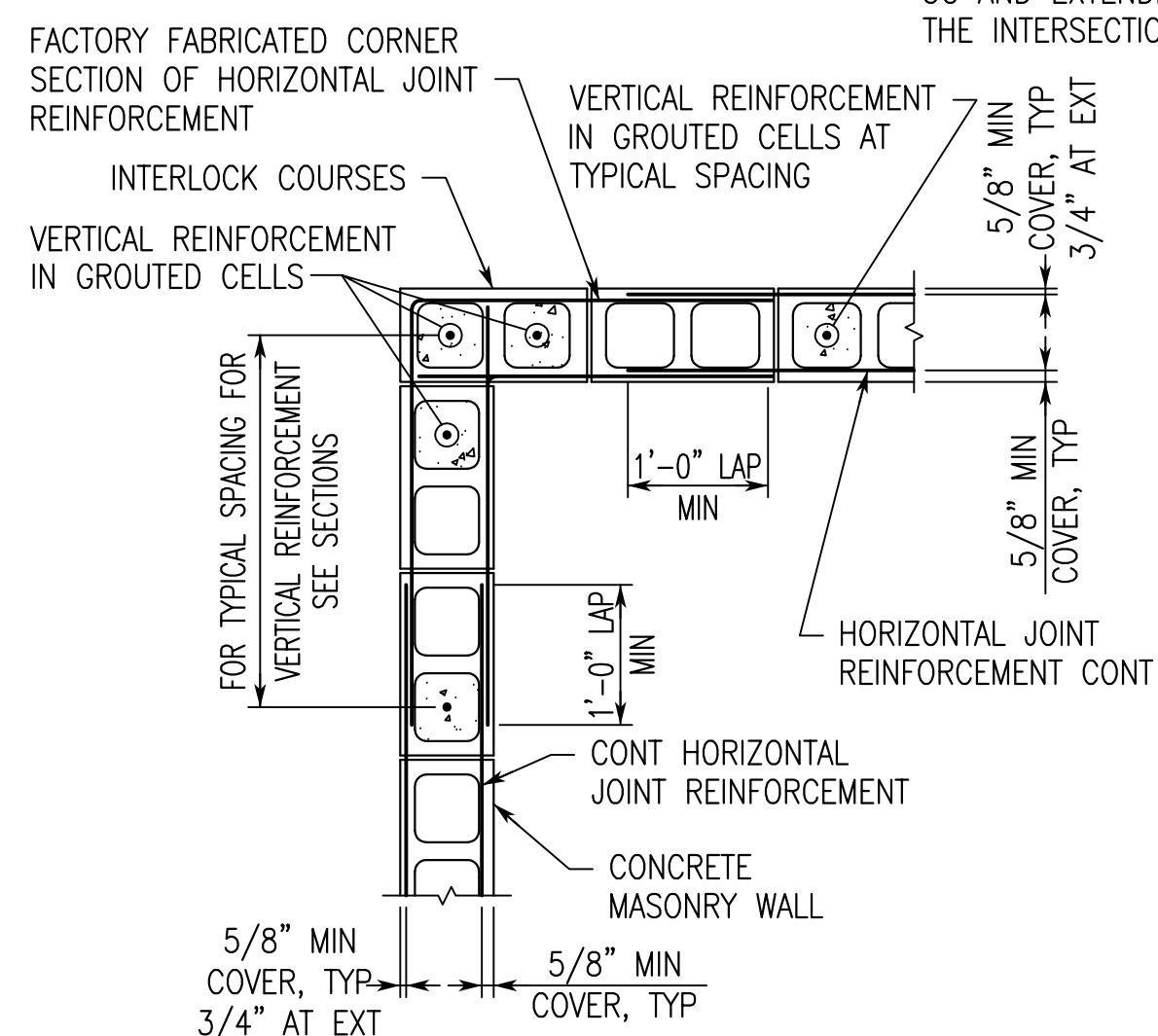


SHEET TITLE:
TYPICAL DETAILS

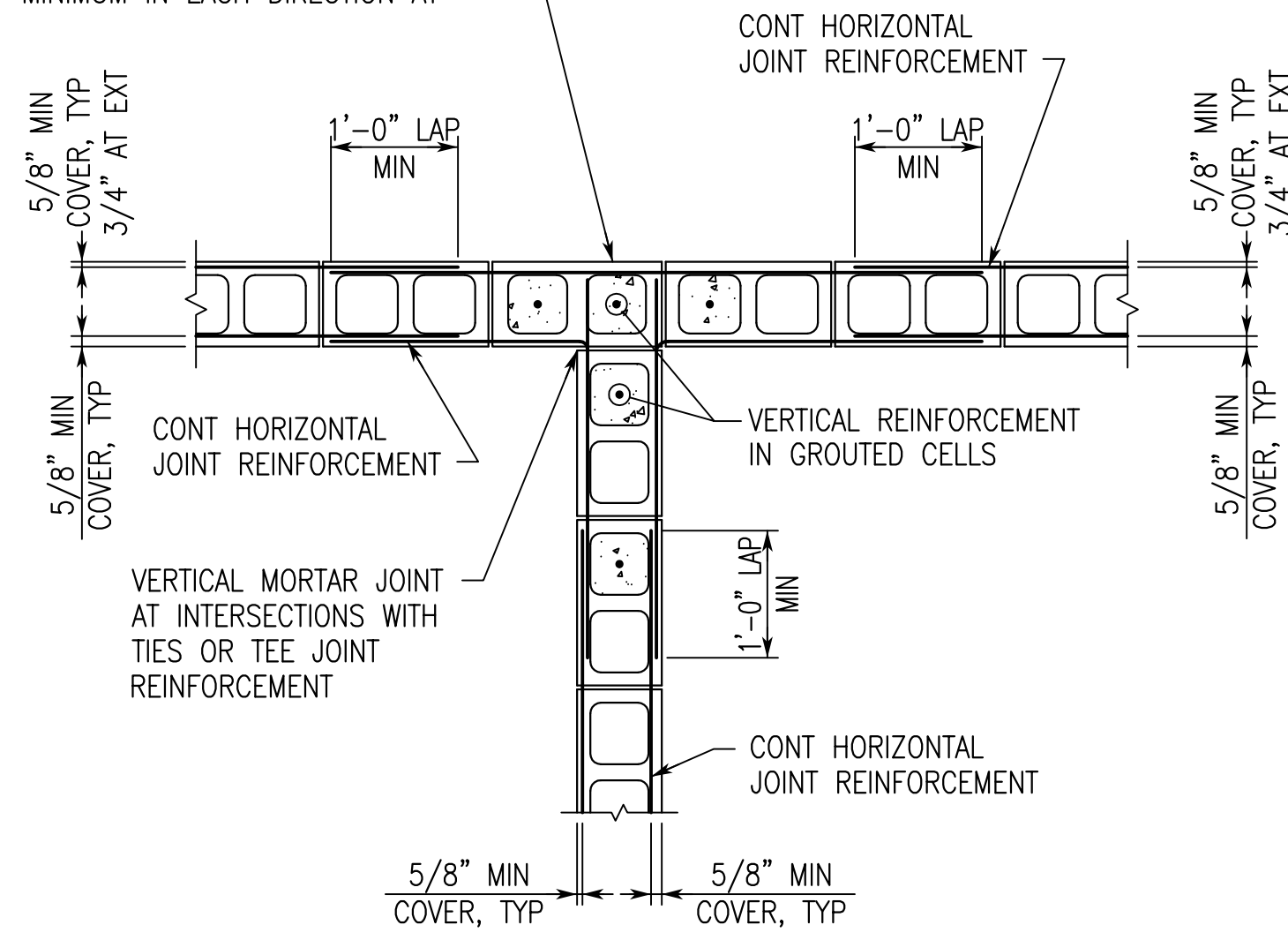
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DRAWN: ABS
DATE: 2-13-2024
REVISIONS:

JOB NO. 23-92
SHEET NO. S1.3
4 OF 12

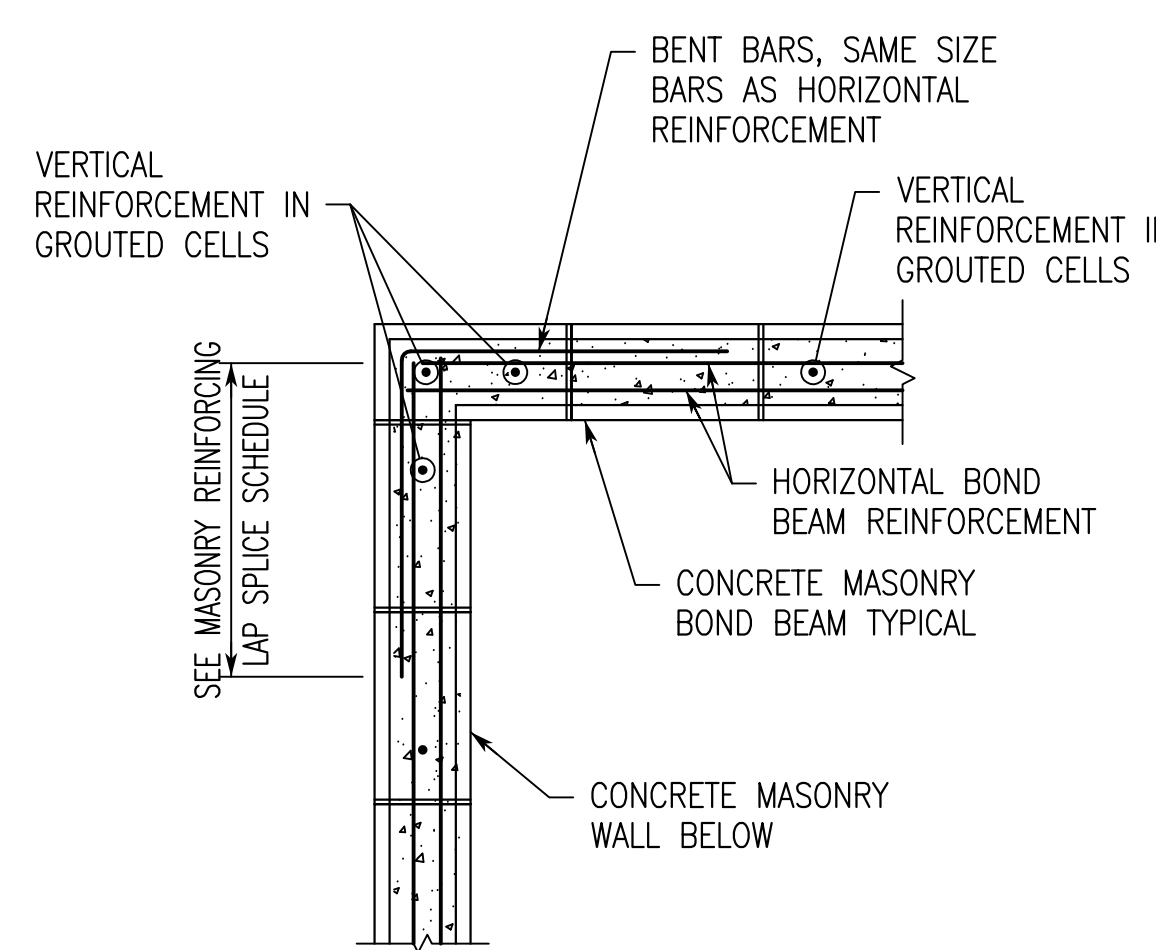
- ANCHOR WALLS BY:
- INTERSECTING 50% OF UNITS OVERLAPPING WITH ALTERNATE UNITS BEARING 3" MINIMUM ON THE UNIT BELOW.
 - GALV PL 1/4x1 1/2x2'-4" TIE @ 4'-0" OC WITH ENDS BENT 2", ALTERNATING ENDS UP AND DOWN.
 - FACTORY FABRICATED TEE JOINT REINFORCING SPACED 8" OC AND EXTENDING 30" MINIMUM IN EACH DIRECTION AT THE INTERSECTION.



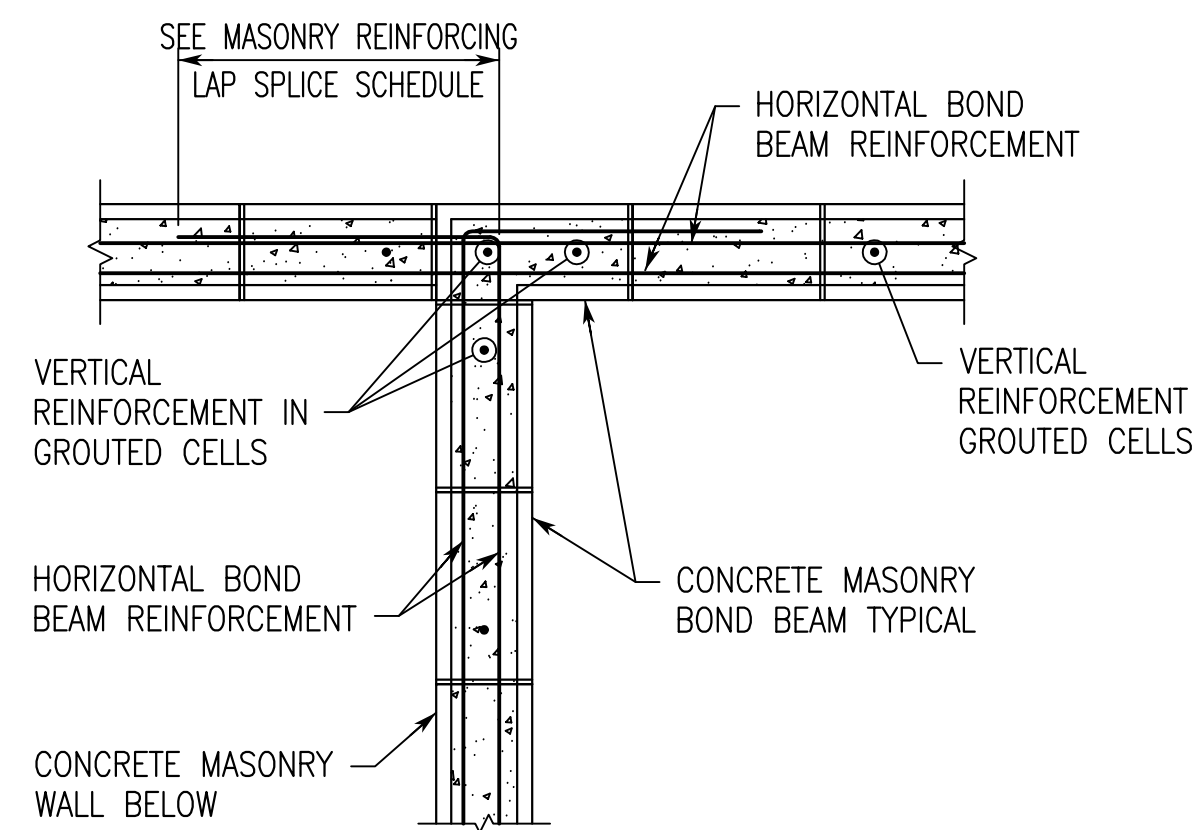
PLAN SHOWING JOINT REINFORCEMENT AT WALL CORNER
TYPICAL



PLAN SHOWING JOINT REINFORCING AT STRUCTURAL WALL INTERSECTION
TYPICAL



PLAN SHOWING BOND BEAM REINFORCEMENT AT WALL CORNER
TYPICAL



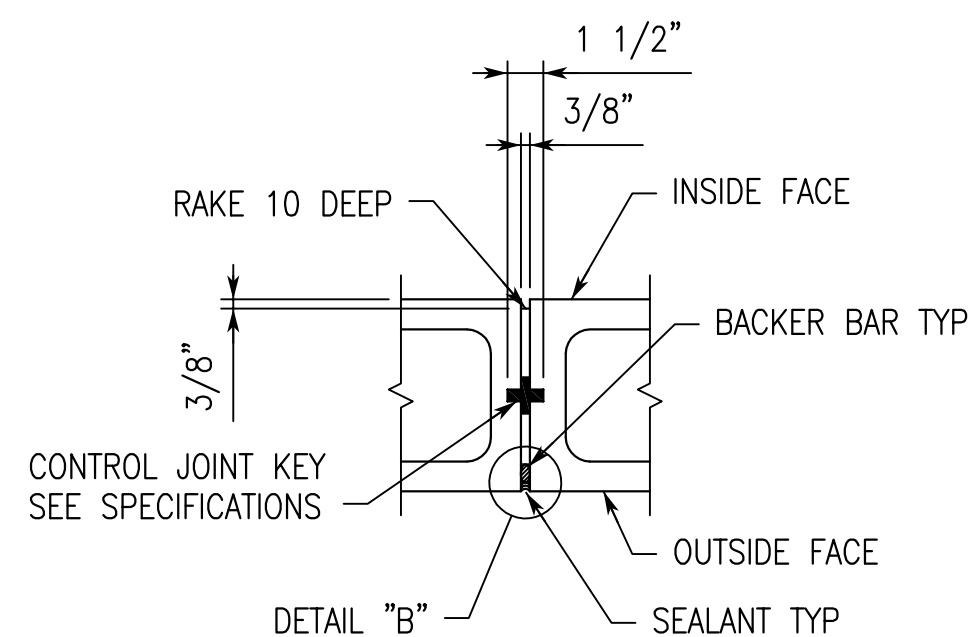
PLAN SHOWING BOND BEAM REINFORCEMENT AT STRUCTURAL WALL INTERSECTION
TYPICAL



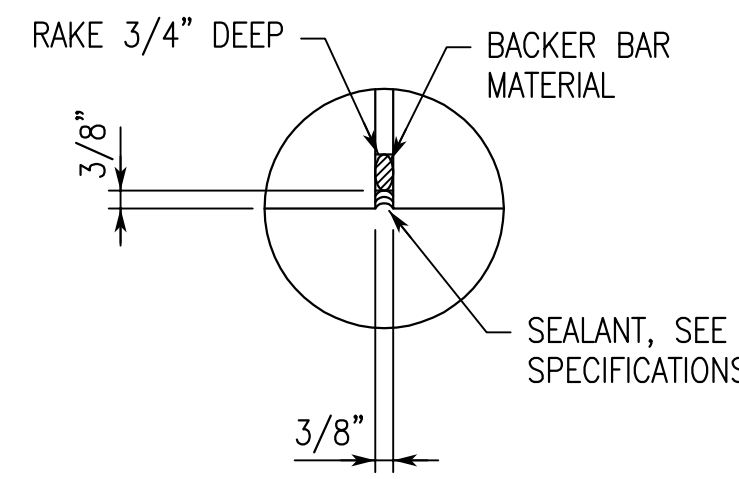
GROUT CELLS SOLID ENTIRE HEIGHT OF WALL

NOTE: SEE ARCH. DWGS FOR LOCATION. PROVIDE JOINT IN CMU AT ALL JOINTS IN ANY BRICK.

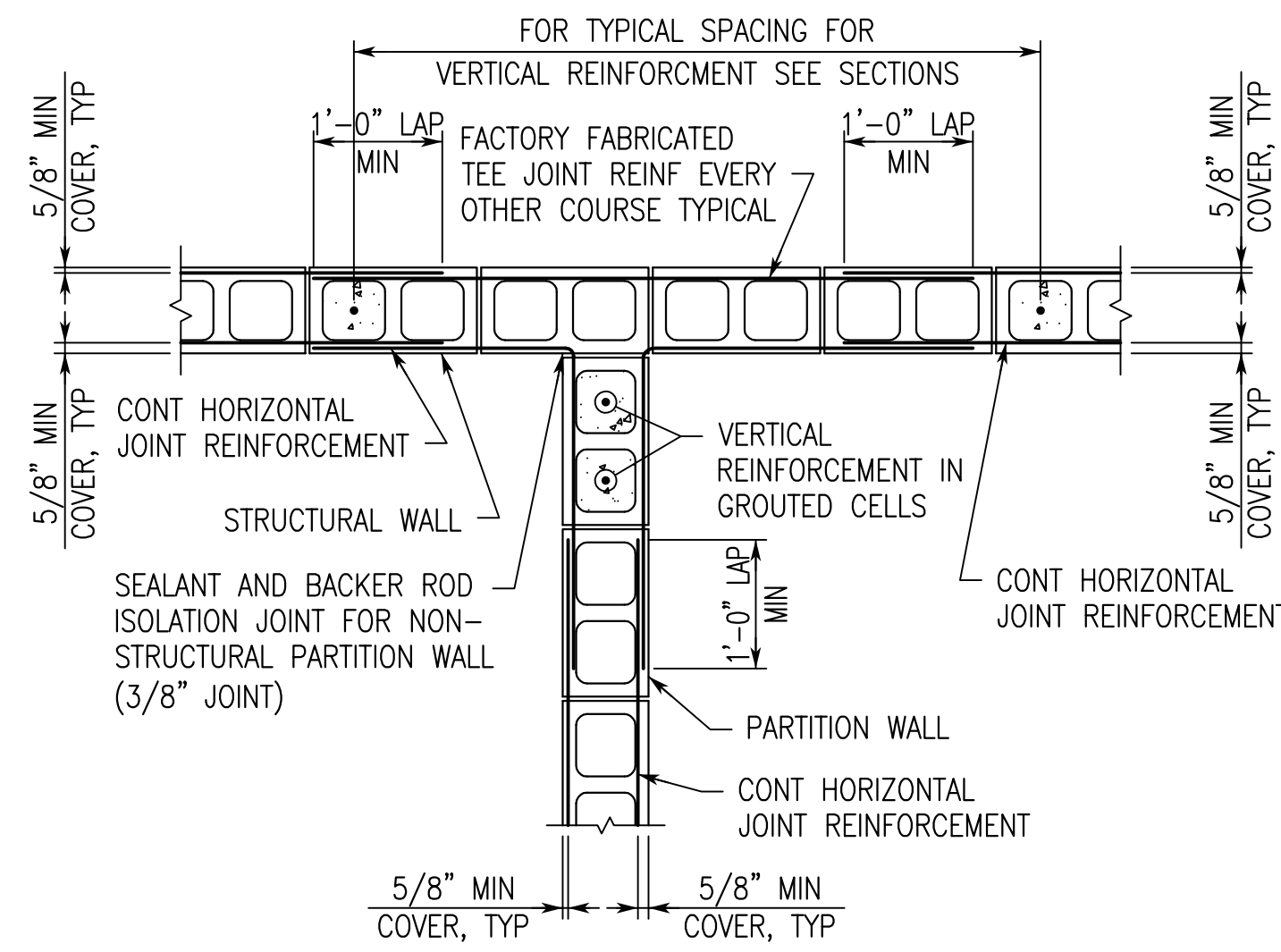
MASONRY CONTROL JOINT
3/4"=1'-0"



DETAIL "A" MASONRY CONTROL JOINT
1 1/2"=1'-0"



DETAIL "B" MASONRY CONTROL JOINT
3"=1'-0"



PARTITION WALLS ABUTTING STRUCTURAL WALLS
TYPICAL

MASONRY REINFORCING LAP SPLICE LENGTHS

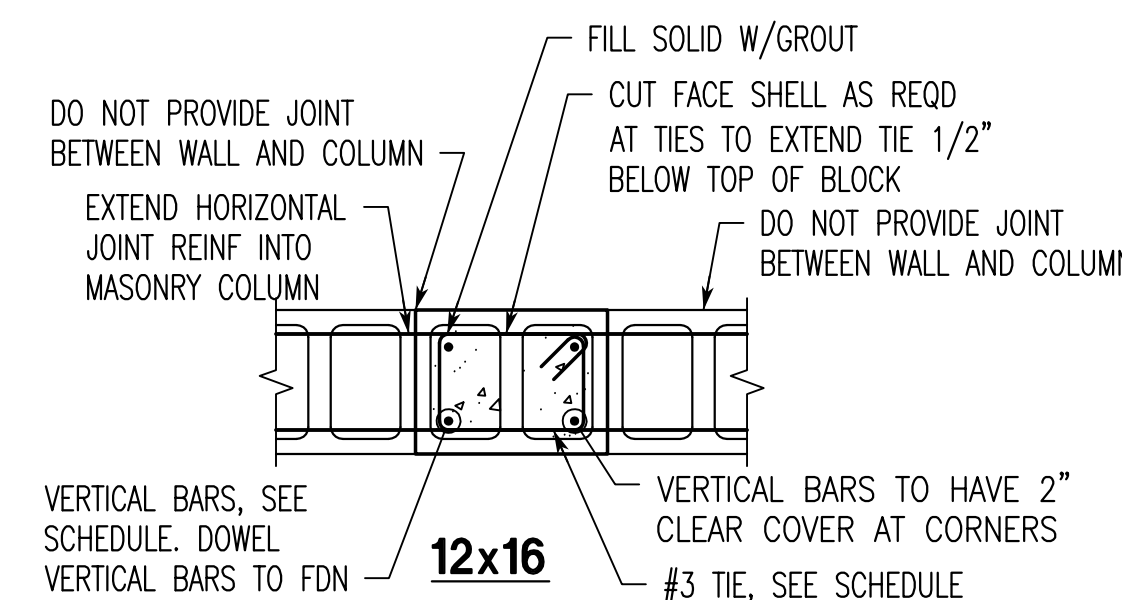
BAR SIZE (#)	CENTERED (IN.)	EDGE (IN.)
3	18.0	18.0
4	24.0	29.0
5	30.0	45.0
6	43.0	54.0
7	60.0	63.0
8	72.0	72.0
9	82.0	82.0

- NOTES:
- LAP SPLICE LENGTHS APPLY TO BOTH HORIZONTAL AND VERTICAL REINFORCING. REINFORCEMENT LARGER THAN NO. 9 BAR SHALL BE SPLICED USING MECHANICAL CONNECTIONS IN ACCORDANCE WITH ACI 530 & ACI 530.1.

VENEER LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	STEEL FOR EACH 4" OF WALL THICKNESS
2'-0"	L6x6x3/8
4'-0"	L6x6x3/8
6'-0"	L6x6x3/8
8'-0"	L6x6x3/8
LARGER	NOTE 3

- PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS.
- ALL EXPOSED LINTEL ANGLES TO BE HOT DIP GALVANIZED.
- ANCHOR L6x6x3/8 ANGLE TO WALL WITH 3/4" HILTI KWIK HUS-EZ SCREW ANCHORS (6 1/4" EFFECTIVE EMBEDMENT) @24 ON CENTER.
- CONTRACTOR TO COORDINATE DIMENSION OF OUTSTANDING LEG WITH MINIMUM BRICK SUPPORT REQUIREMENT(S) AND WITH DETAILS INDICATED ON ARCH. DWGS.



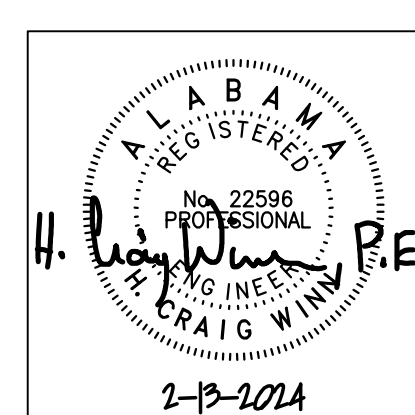
MASONRY COLUMN (MC)
TYPICAL

MASONRY COLUMN SCHEDULE (MC)

COLUMN DESIGNATION	MC1		
SIZE	12x16		
VERTICALS	4#5		
TIES	#3@8		
NOTES	1,2,3		

- NOTES:
- SEE 'MASONRY COLUMN (MC)' DETAIL THIS SHEET.
 - DOWEL VERTICAL STEEL INTO FOOTING THE THICKNESS OF THE FOOTING MINUS 3" WITH STANDARD HOOK. LAP DOWELS WITH VERTICALS 72 BAR DIA.
 - EXTEND VERTICALS FULL HEIGHT OF WALL UNLESS NOTED.

OFFICE ADDITION TO
CHELSEA HIGH SCHOOL
10510 HIGHWAY 11, CHELSEA, ALABAMA 35043
SHELBY COUNTY BOARD OF EDUCATION



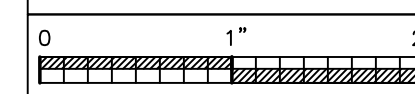
SHEET TITLE:
TYPICAL DETAILS

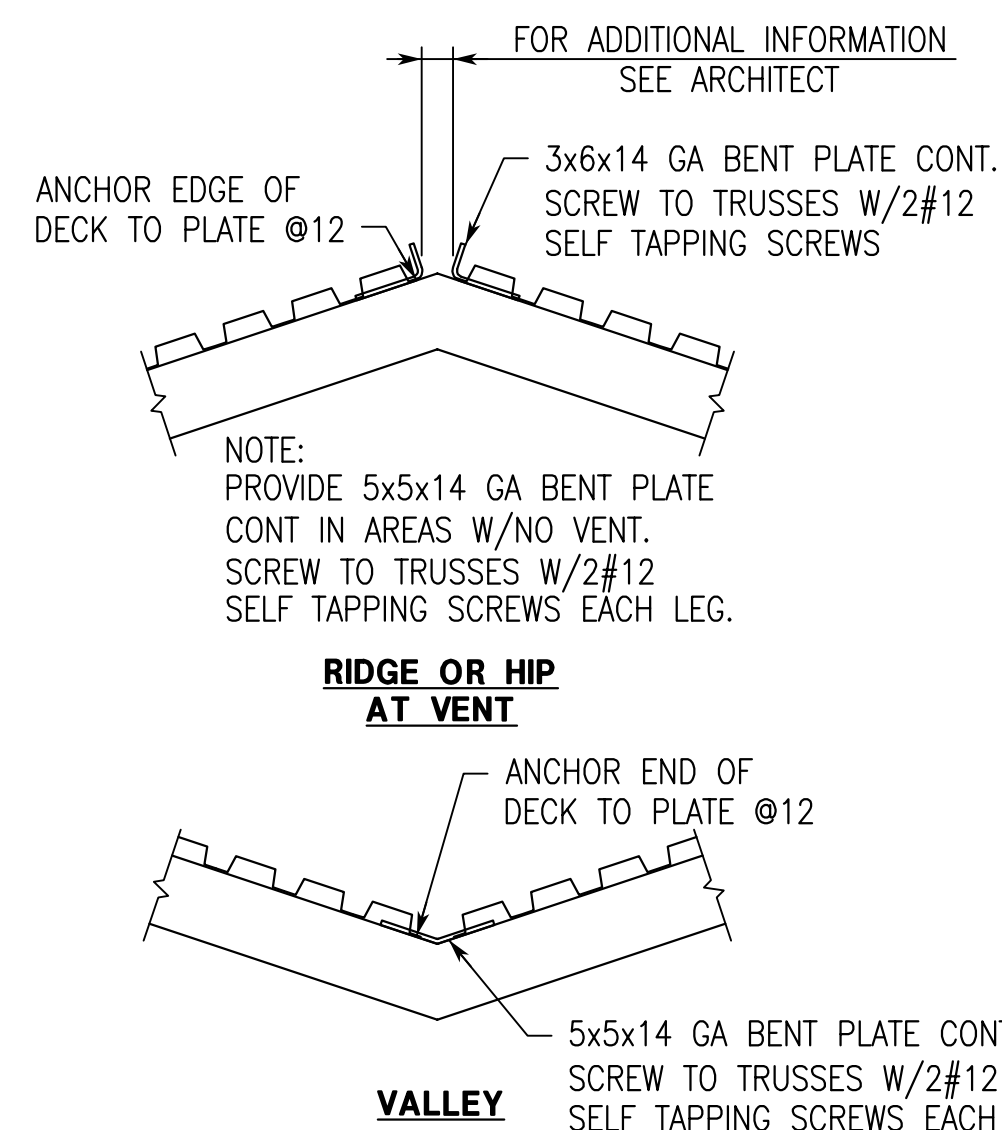
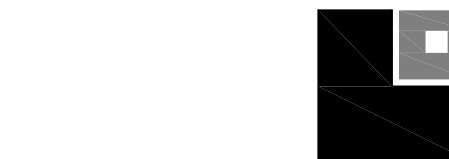
PROJ. MGR.: HCW
DRAWN: ABS

DATE: 2-13-2024
REVISIONS

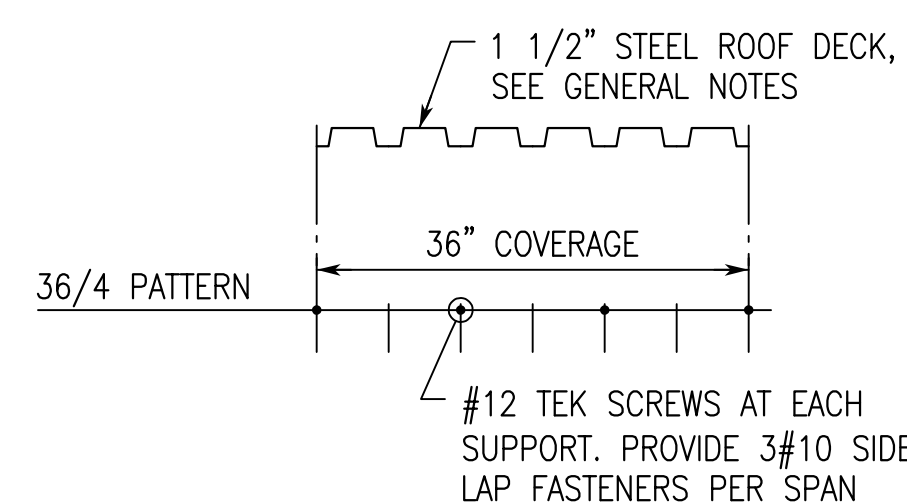
JOB NO. 23-92
SHEET NO.

S1.4
5 OF 12



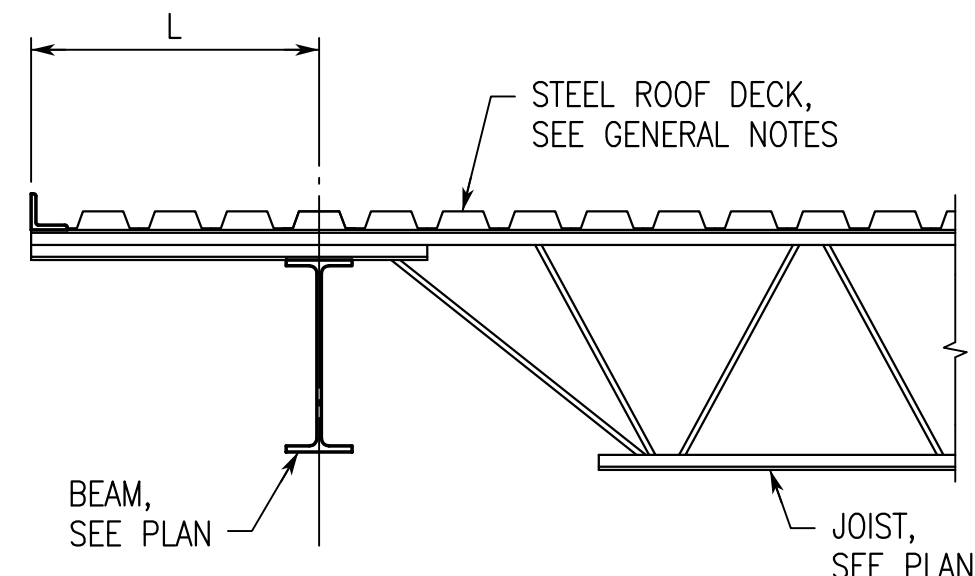


**RIDGE, HIP AND VALLEY
SUPPORTS FOR METAL DECK**
TYPICAL



**1 1/2" STEEL ROOF DECK
ATTACHMENT PATTERN LAYOUT**
TYPICAL

NOTE: CONTRACTOR OPTION TO USE HILTI S-SLC 02 M HWH IN LIEU OF #10 SIDELAP SCREWS AND HILTI FASTENERS IN LIEU OF #12 TEK SCREWS AS FOLLOWS:
HILTI S-MD 12-24x1-5/8 HWH5 SCREWS FOR STUDS, JOISTS AND BEAMS $16 GA \leq tf \leq 1/4"$
HILTI X-HSN 24 PINS FOR JOISTS AND BEAMS $1/8" \leq tf \leq 3/8"$
HILTI X-ENP 19 L15 PINS FOR BEAMS $tf \geq 1/4"$



JOIST SEAT EXTENSION

L	EXTENDED END, "R" TYPE
6"	R1
1'-0"	R1
1'-6"	R1
2'-0"	R1
2'-6"	R5
3'-0"	R11
3'-6"	R12
4'-0"	R12
4'-6"	R12
5'-0"	R12

JOIST SEAT EXTENSION
TYPICAL

COMPONENTS AND CLADDING WIND LOADS FOR WALLS (PSF)

115 MPH VELOCITY (3-SEC. GUST)	EFFECTIVE WIND AREA (FT ²)	ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
10	33.3	-36.2	-44.7	
20	31.8	-34.6	-41.7	
50	29.9	-32.7	-37.7	
100	28.4	-31.1	-34.7	
200	26.9	-29.6	-31.7	
500	24.9	-27.7	-27.7	

- NOTES:
- WIDTH OF EDGE STRIP 'a' = 3'-0".
 - VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
 - PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
 - EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.

COMPONENTS AND CLADDING WIND LOADS FOR FLAT ROOF (PSF)

115 MPH VELOCITY (3-SEC. GUST)	EFFECTIVE WIND AREA (FT ²)	ROOF				OVERHANG		
		Positive Max. Net Pressure 'p' (PSF)	Zone 1' (Int.)	Zone 1 (Int.)	Zone 2 (Edge)	Zone 3 (Corner)	Zone 1' & 1 (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2 (Edge) - Max. Net Pressure 'p' (PSF)
10	16.0	-27.4	-47.7	-62.9	-85.8	-43.1	-58.4	-81.2
20	16.0	-27.4	-44.6	-58.9	-77.7	-42.4	-53.0	-71.8
50	16.0	-27.4	-40.4	-53.5	-67.0	-41.4	-45.8	-59.3
100	16.0	-27.4	-37.3	-49.5	-58.9	-40.6	-40.5	-49.8
200	16.0	-23.6	-34.1	-45.5	-50.8	-34.1	-35.1	-40.4
500	16.0	-18.5	-30.0	-40.1	-40.1	-25.4	-27.9	-27.9

- NOTES:
- WIDTH OF EDGE STRIP 'a' = 3'-6".
 - VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
 - PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
 - EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
 - CONSIDER 5 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF TRUSSES AND 2 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF DECK.

COMPONENTS AND CLADDING WIND LOADS FOR SLOPING ROOF (PSF)

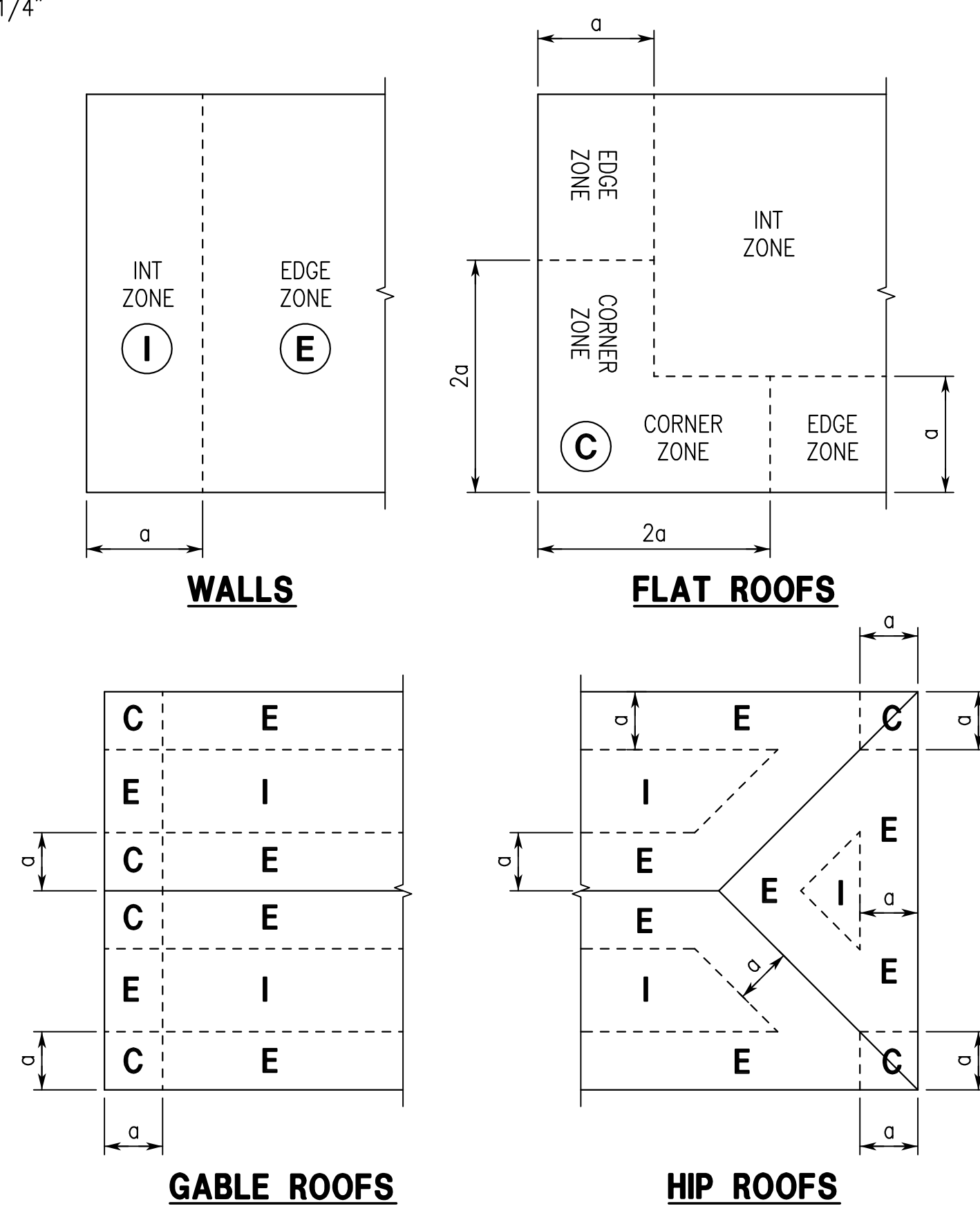
115 MPH VELOCITY (3-SEC. GUST)	EFFECTIVE WIND AREA (FT ²)	ROOF			OVERHANG		
		Positive Max. Net Pressure 'p' (PSF)	Zone 1, 2e & 2r (Int.)	Zone 2n & 3r (Edge)	Zone 3e (Corner)	Zone 1 & 2e (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2n & 2r (Edge) - Max. Net Pressure 'p' (PSF)
10	30.5	-56.0	-61.6	-75.5	-73.5	-79.1	-93.1
20	27.1	-47.4	-55.1	-66.9	-65.0	-72.6	-84.5
50	22.6	-36.2	-46.4	-55.6	-53.7	-63.9	-73.1
100	19.2	-27.7	-39.9	-47.0	-45.2	-57.4	-64.5
200	19.2	-27.7	-33.3	-38.4	-45.2	-50.9	-55.9
500	19.2	-27.7	-33.3	-33.3	-45.2	-50.9	-50.9

- NOTES:
- WIDTH OF EDGE STRIP 'a' = 3'-0".
 - VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
 - PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
 - EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
 - CONSIDER 5 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF TRUSSES AND 2 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF DECK.

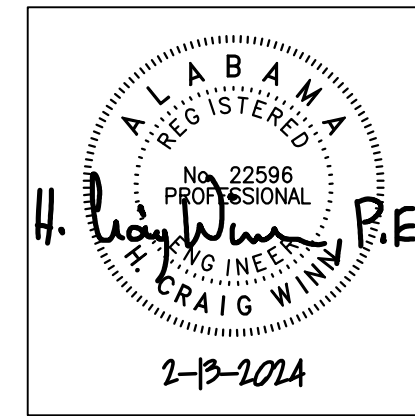
COMPONENTS AND CLADDING WIND LOADS FOR PARTIALLY ENCLOSED ROOF (PSF)

115 MPH VELOCITY (3-SEC. GUST)	EFFECTIVE WIND AREA (FT ²)	ROOF			OVERHANG		
		Positive Max. Net Pressure 'p' (PSF)	Zone 1, 2e & 2r (Int.)	Zone 2n & 3r (Edge)	Zone 3e (Corner)	Zone 1 & 2e (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2n & 2r (Edge) - Max. Net Pressure 'p' (PSF)
10	41.0	-66.4	-72.1	-86.0	-73.5	-79.1	-93.1
20	37.6	-57.9	-65.5	-77.4	-65.0	-72.6	-84.5
50	33.1	-46.7	-56.9	-66.0	-53.7	-63.9	-73.1
100	29.7	-38.2	-50.3	-57.4	-45.2	-57.4	-64.5
200	29.7	-38.2	-43.8	-48.8	-45.2	-50.9	-55.9
500	29.7	-38.2	-43.8	-43.8	-45.2	-50.9	-50.9

- NOTES:
- WIDTH OF EDGE STRIP 'a' = 3'-0".
 - VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
 - PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
 - EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
 - CONSIDER 5 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF TRUSSES AND 2 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF DECK.



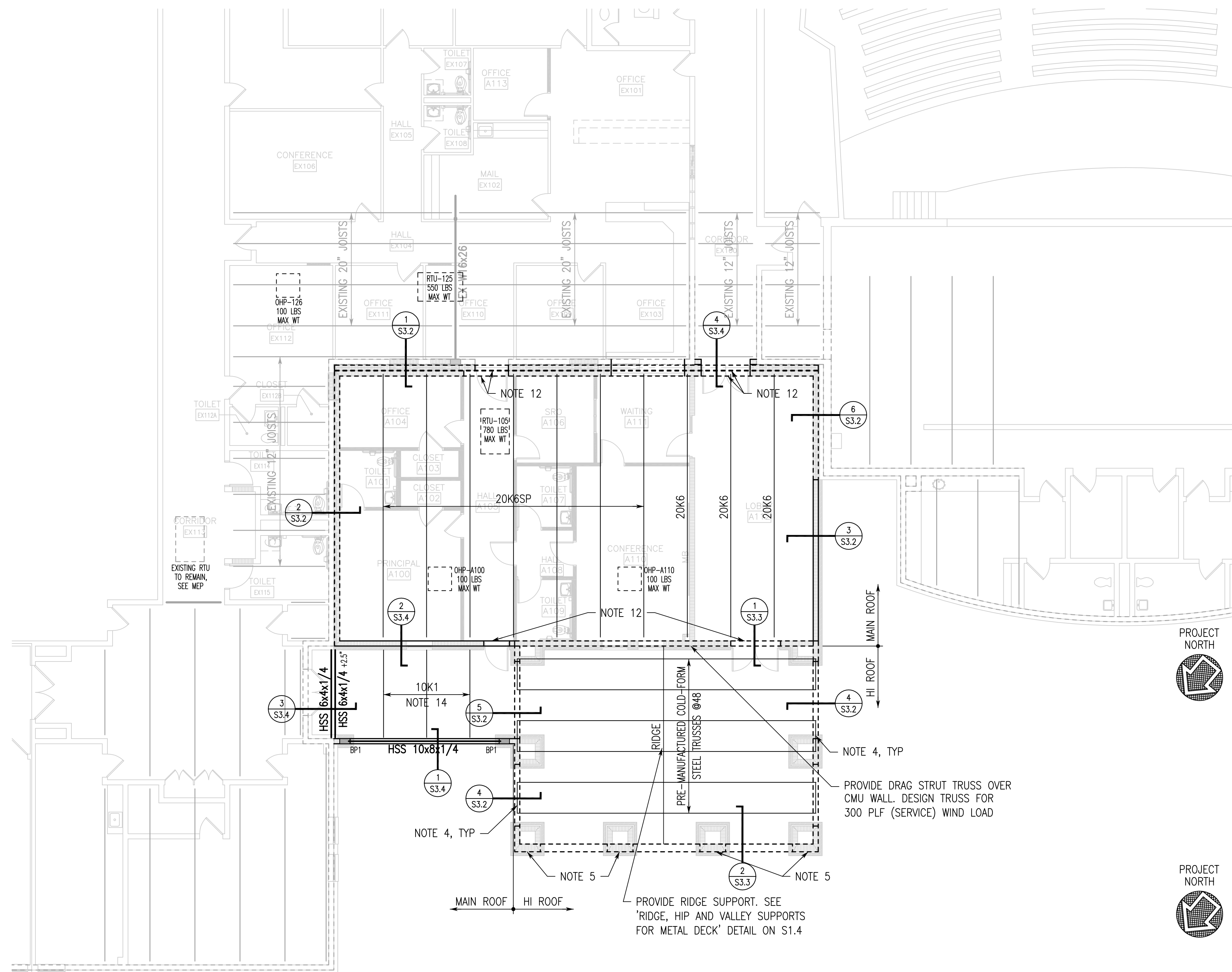
WALL AND ROOF WIND PRESSURE ZONE DIAGRAMS
TYPICAL



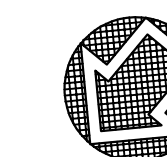
SHEET TITLE:
TYPICAL DETAILS

PROJ. MGR.: HCW
DRAWN: ABS
DATE: 2-13-2024
REVISIONS:

JOB NO. 23-92
SHEET NO. S1.5
6 OF 12
0 1" 2"



PROJECT NORTH

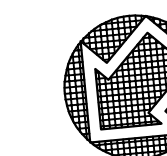


HI ROOF FRAMING PLAN

1/8"=1'-0"

- TRUSS BEARING ELEVATION 21'-4" ABOVE FINISH FLOOR, UNLESS NOTED.
- ROOF SYSTEM: 1 1/2" DEEP, GALVANIZED STEEL DECK ON COLD-FORMED STEEL TRUSSES SPACED AT 4'-0" MAXIMUM ON CENTER. TRUSS LAYOUT SHOWN IS APPROXIMATE. ACTUAL TRUSS LAYOUT AND PROFILES TO BE BY TRUSS MANUFACTURER UNLESS NOTED OTHERWISE. SEE TYPICAL DETAILS ON S1.4 FOR DECK ATTACHMENT PATTERN. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION ON COLD-FORMED STEEL TRUSSES.
- FOR LOAD BEARING AND NON-LOAD BEARING CMU WALL PLAN DIMENSIONS AS WELL AS OTHER PLAN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
- PROVIDE SHEAR TRANSFER PLATE AT 8'-0" MAXIMUM ON CENTER. SEE 'COLD-FORMED BLOCKING TRUSS' DETAIL ON S1.3 FOR ADDITIONAL INFORMATION.
- CONTINUE #5@8 VERTICAL REBAR IN 12" PORTION OF CMU PILASTER TO TOP OF GABLE WALL.

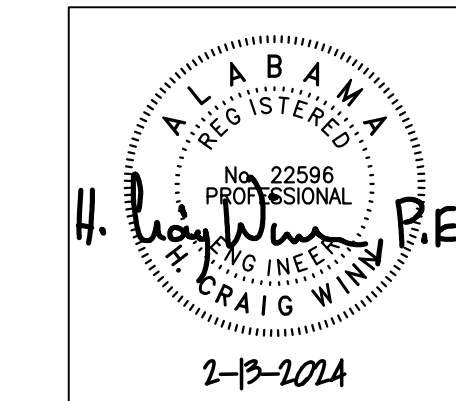
PROJECT NORTH



MAIN ROOF FRAMING PLAN

1/8"=1'-0"

- JOIST BEARING ELEVATION 14'-8" ABOVE FINISH FLOOR, UNLESS NOTED. ROOF JOISTS ARE FLAT AND INSTALLED IN ONE PLANE. ROOF SLOPES ARE ACHIEVED WITH TAPERED INSULATION.
- ROOF SYSTEM: 1 1/2" DEEP, GALVANIZED STEEL DECK ON STEEL JOISTS SPACED AT 6'-0" MAXIMUM ON CENTER, SEE GENERAL NOTES AND TYPICAL DETAILS.
- SPACE STEEL JOISTS EQUALLY BETWEEN BEAMS OR WALLS, UNLESS NOTED.
- HANGER LOCATIONS FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY GENERAL CONTRACTOR WITH THE JOIST MANUFACTURER. FOR PIPING WEIGHTS SEE TABLE ON SHEET S1.3.
- COORDINATE MECHANICAL OPENINGS WITH MECHANICAL DRAWINGS AND UNIT MANUFACTURER. SEE ROOF EQUIPMENT FRAME DETAIL ON S1.3 FOR MECHANICAL UNIT FRAMING, UNLESS NOTED OTHERWISE ON PLAN.
- EQUIPMENT LOCATIONS AND WEIGHTS SHOWN ARE APPROXIMATE. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT AND LOCATION OF ALL MECHANICAL UNITS AND AV EQUIPMENT WITH THE JOIST MANUFACTURER. DO NOT SCALE FROM THIS DRAWING.
- EXISTING BUILDING IS INDICATED BY HALF-TONE LINES.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS PRIOR TO STEEL FABRICATION.
- ROOF HATCH, FOR LOCATION AND HATCH DETAILS, SEE ARCHITECTURAL DRAWINGS. FOR FRAMING, SEE ROOF EQUIPMENT FRAME DETAIL ON S1.3.
- FOR LOAD BEARING AND NON-LOAD BEARING CMU WALL PLAN DIMENSIONS AS WELL AS OTHER PLAN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
- PROVIDE CMU LINTEL OVER OPENING. SEE 'LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE' ON S1.3 FOR ADDITIONAL INFORMATION.
- 'BPX' INDICATES BEARING PLATE. SEE SCHEDULE ON S1.3 FOR ADDITIONAL INFORMATION.
- JOIST MANUFACTURER DESIGN JOISTS FOR WIND FORCES FOR PARTIALLY ENCLOSED WIND PRESSURES (SEE C&C CHARTS ON S1.5).
- AT JOISTS DESIGNATED 'SP', JOIST MANUFACTURER SHALL DESIGN JOISTS FOR 23 PSF DEAD LOAD AND 20 PSF LIVE LOAD PLUS ANY ADDITIONAL LOADS FROM MECHANICAL UNITS OR LOADS SHOWN ON PLAN OR IN SECTIONS. LIMIT DEAD LOAD DEFLECTION OF JOISTS TO 0.75".
- PROVIDE 2 1/2" JOIST SEATS ON ALL JOISTS.



SHEET TITLE:
ROOF FRAMING PLAN

PROJ. MGR.: HCW

DRAWN: ABS

DATE: 2-13-2024

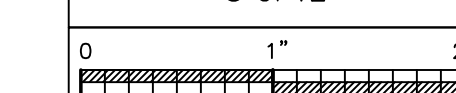
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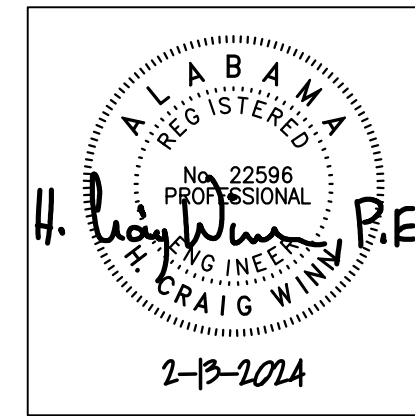
JOB NO. 23-92

SHEET NO.

S2.2

8 OF 12



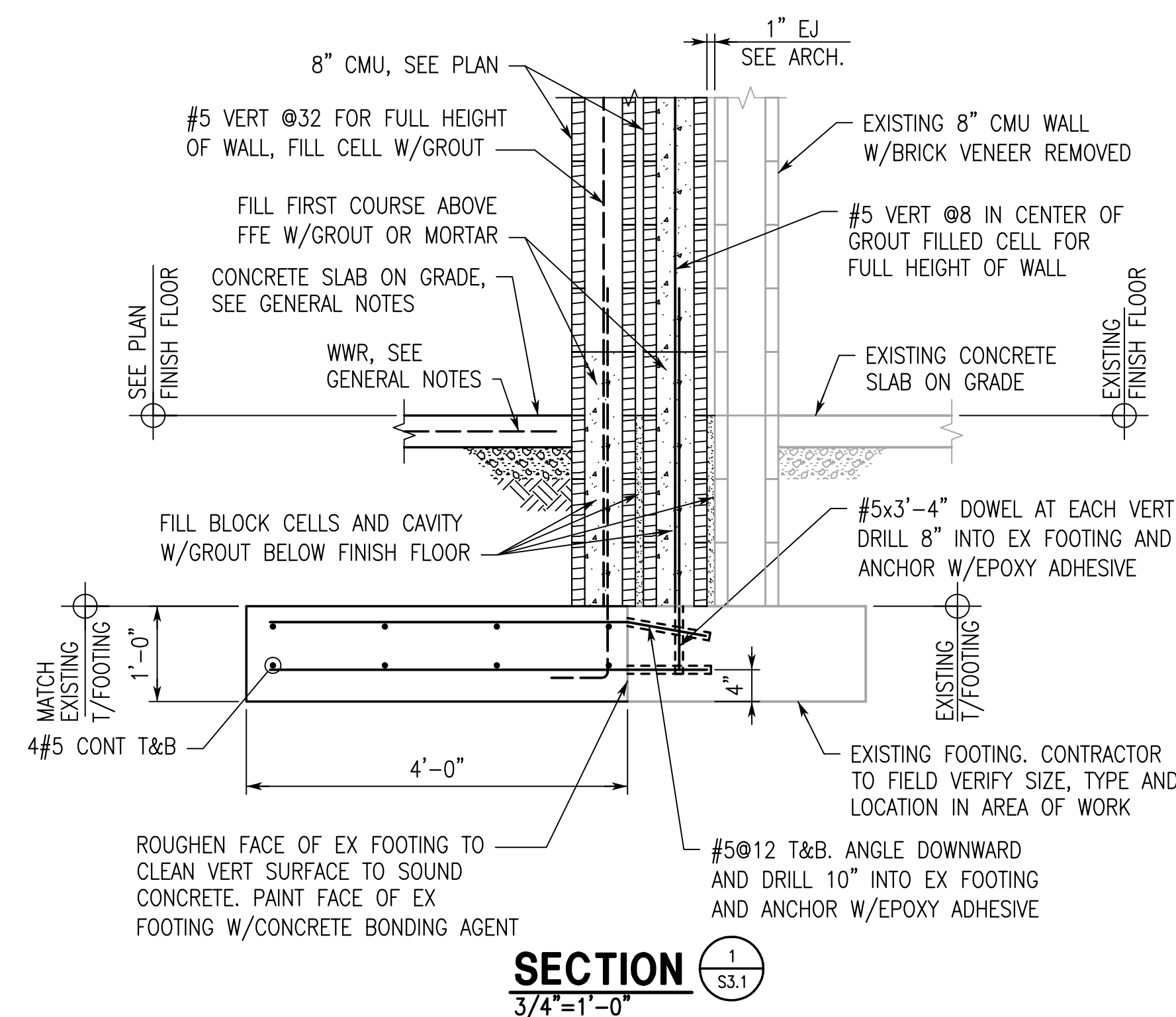
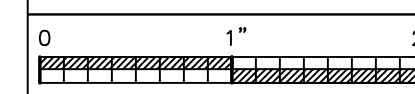


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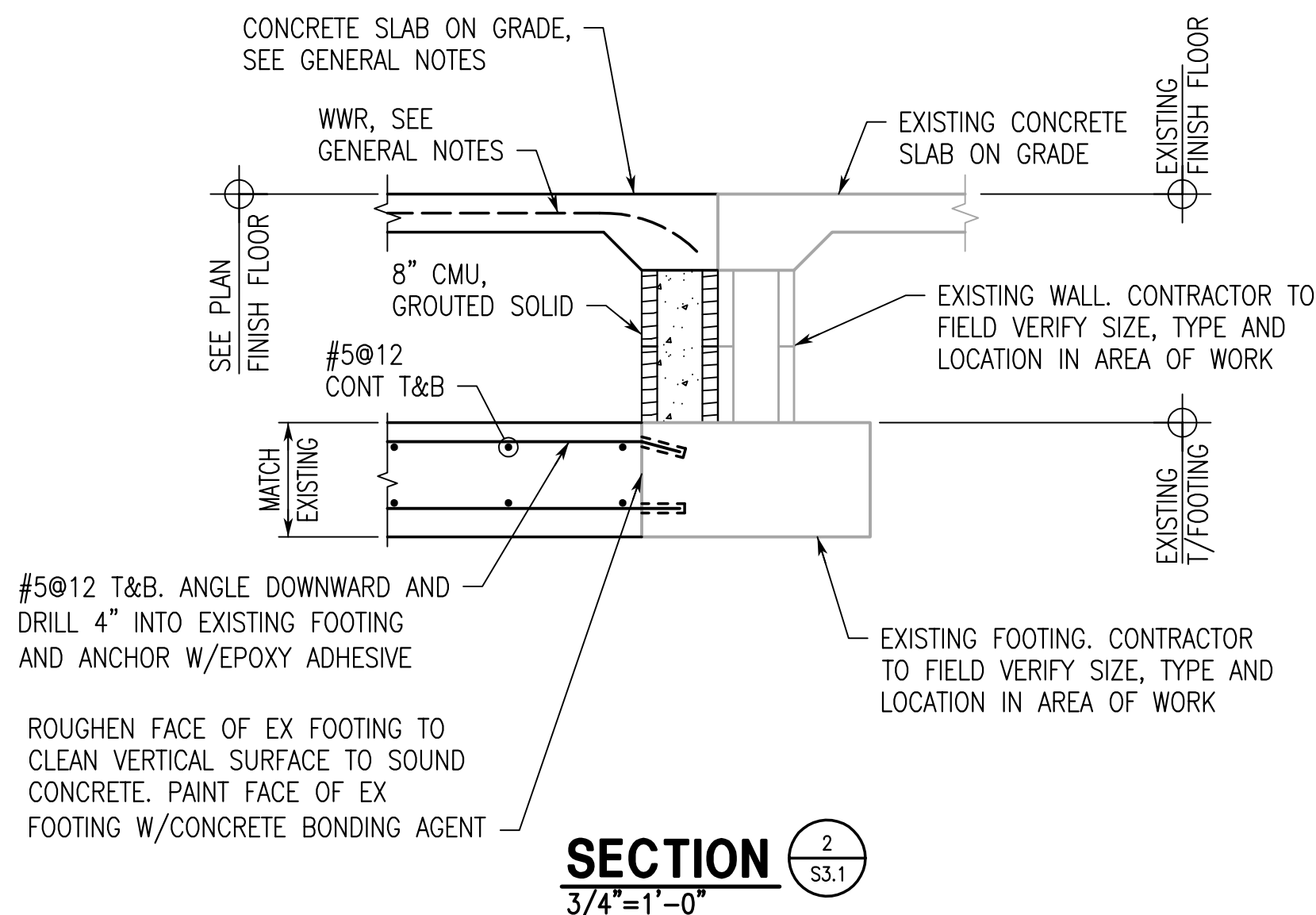
PROJ. MGR.: HCW
 DRAWN: ABS
 DATE: 2-13-2024
 REVISIONS:

JOB NO. 23-92

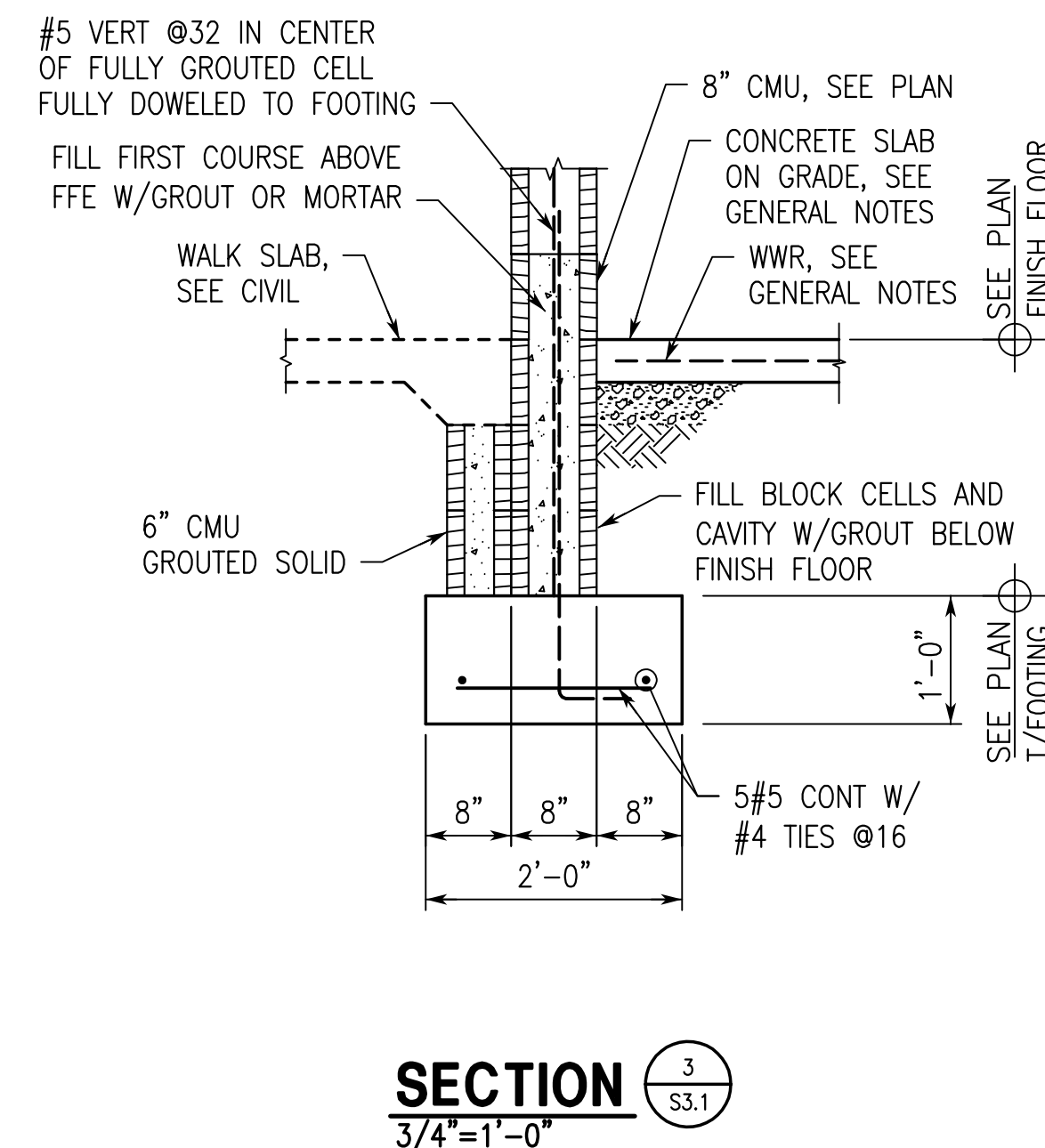
SHEET NO.
S3.1
 9 OF 12



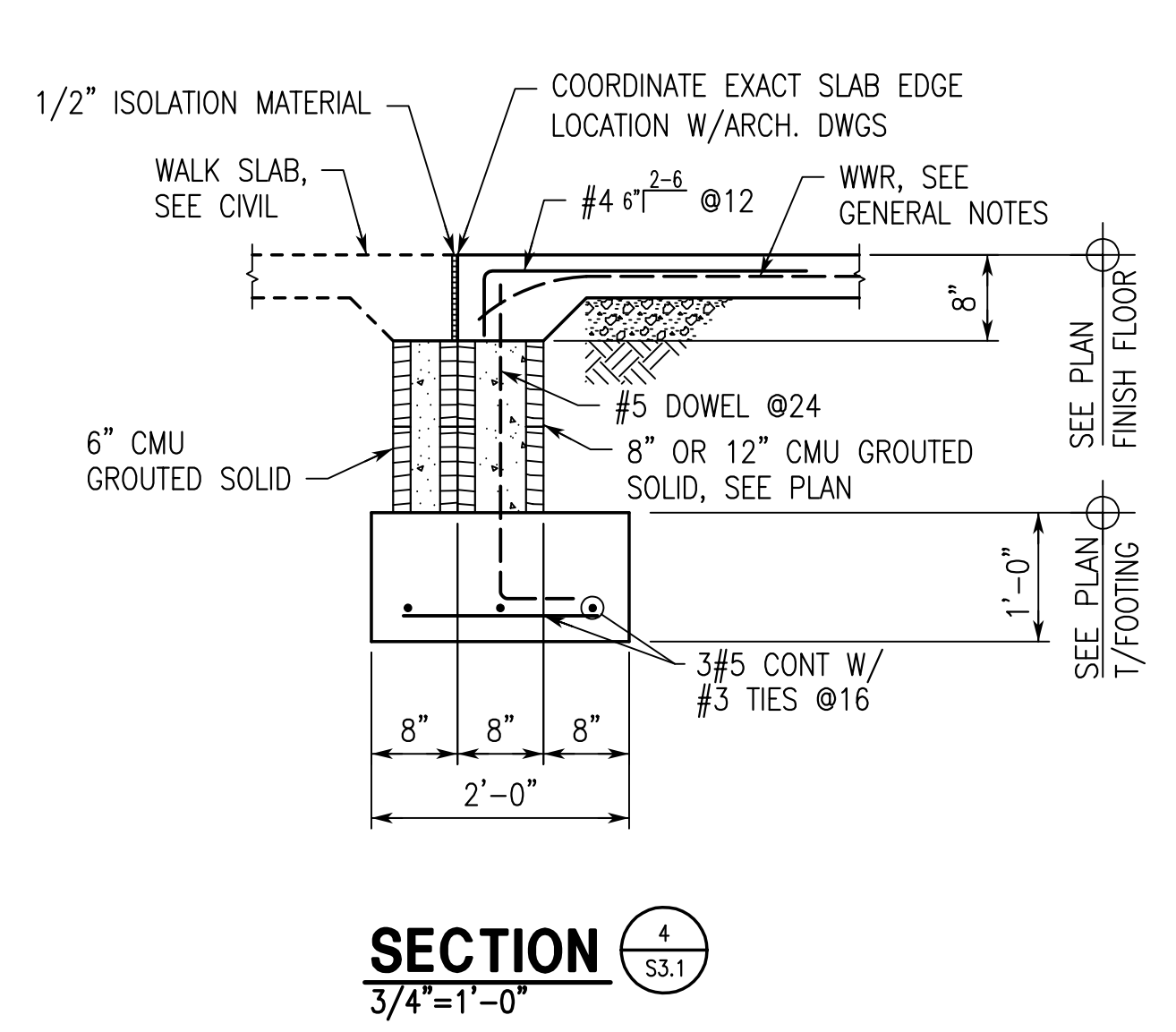
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 3/4"=1'-0"
 S3.1



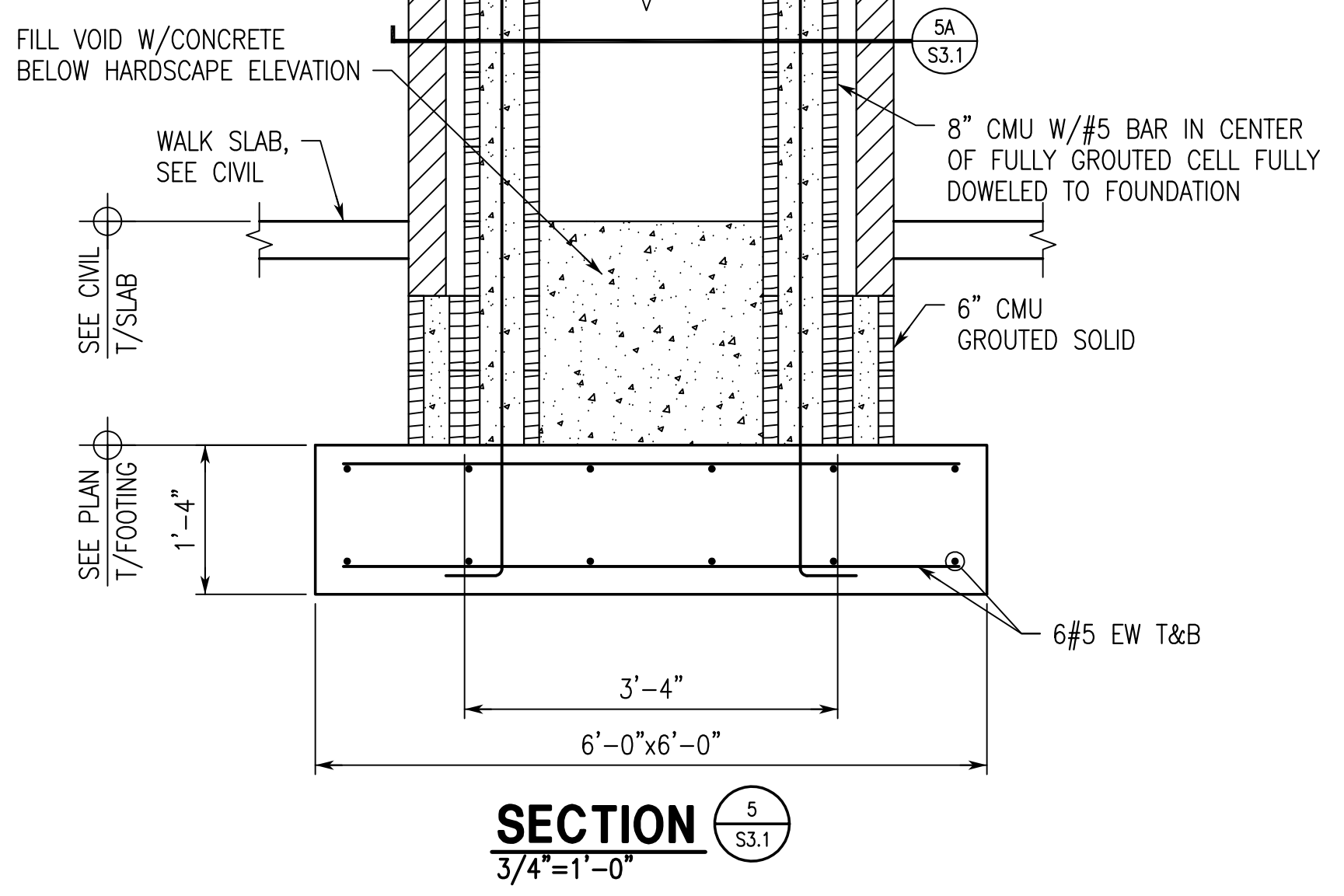
SECTION 2
 3/4"=1'-0"
 S3.1



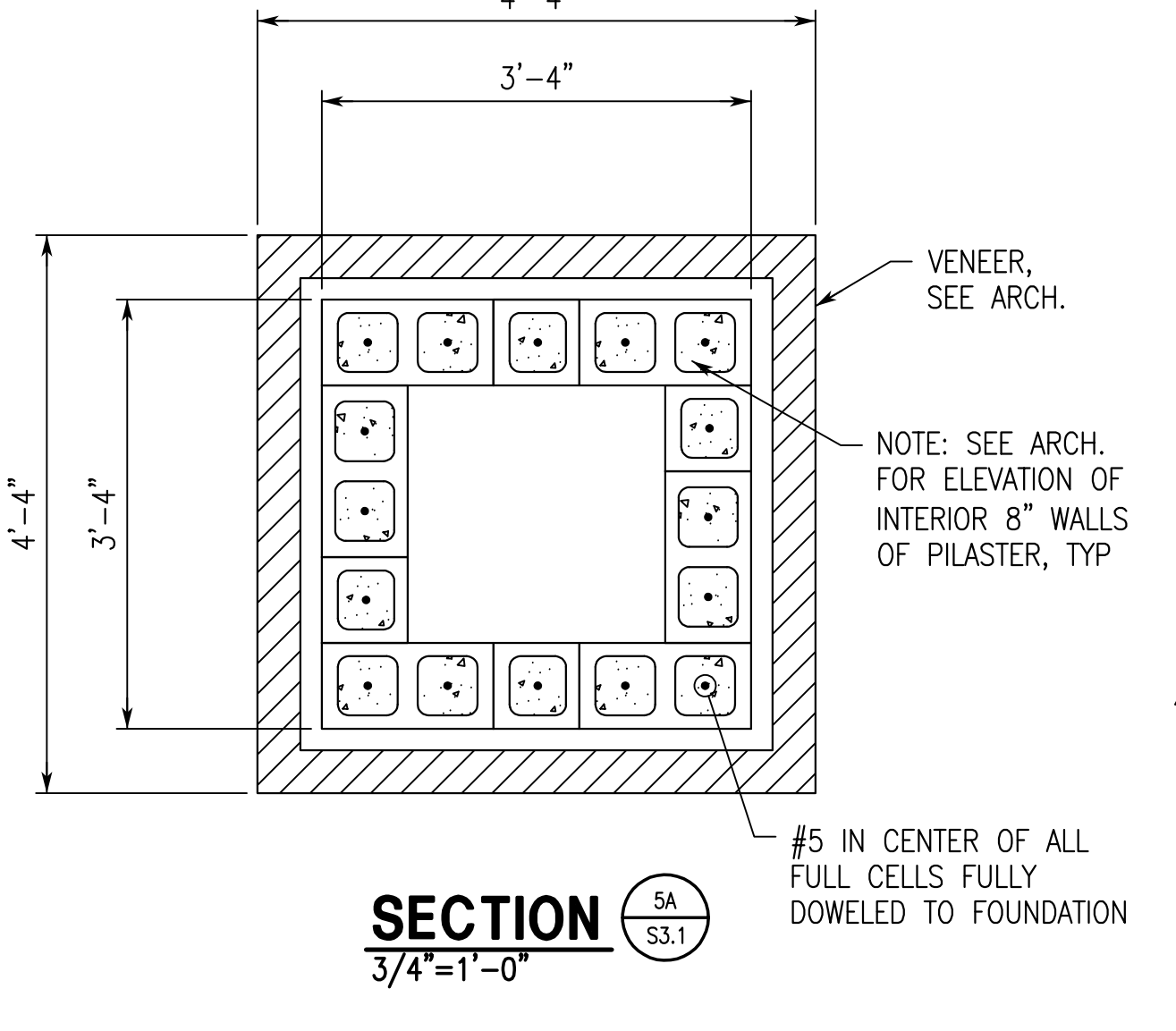
SECTION 3
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 S3.1



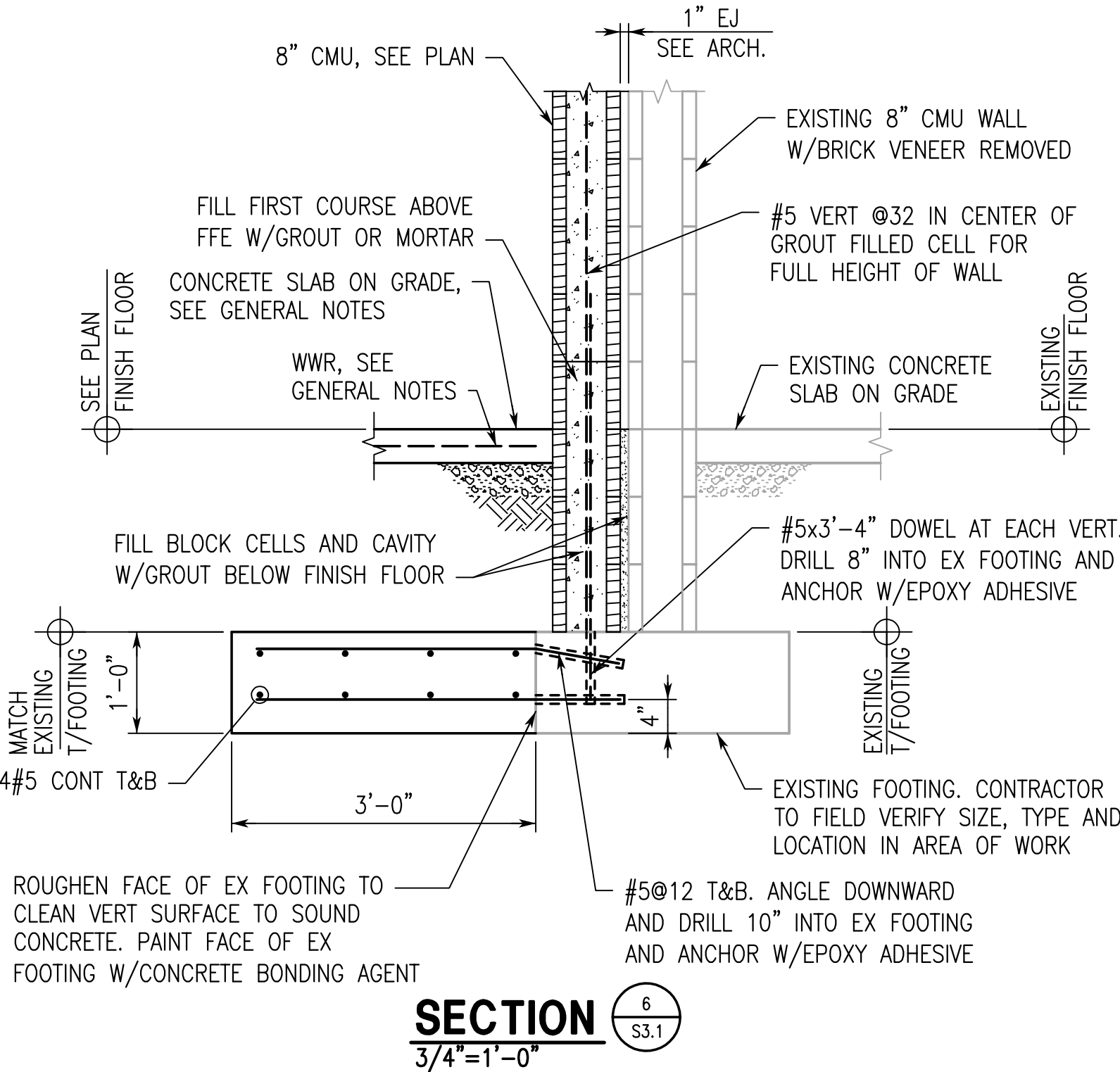
SECTION 4
 3/4"=1'-0"
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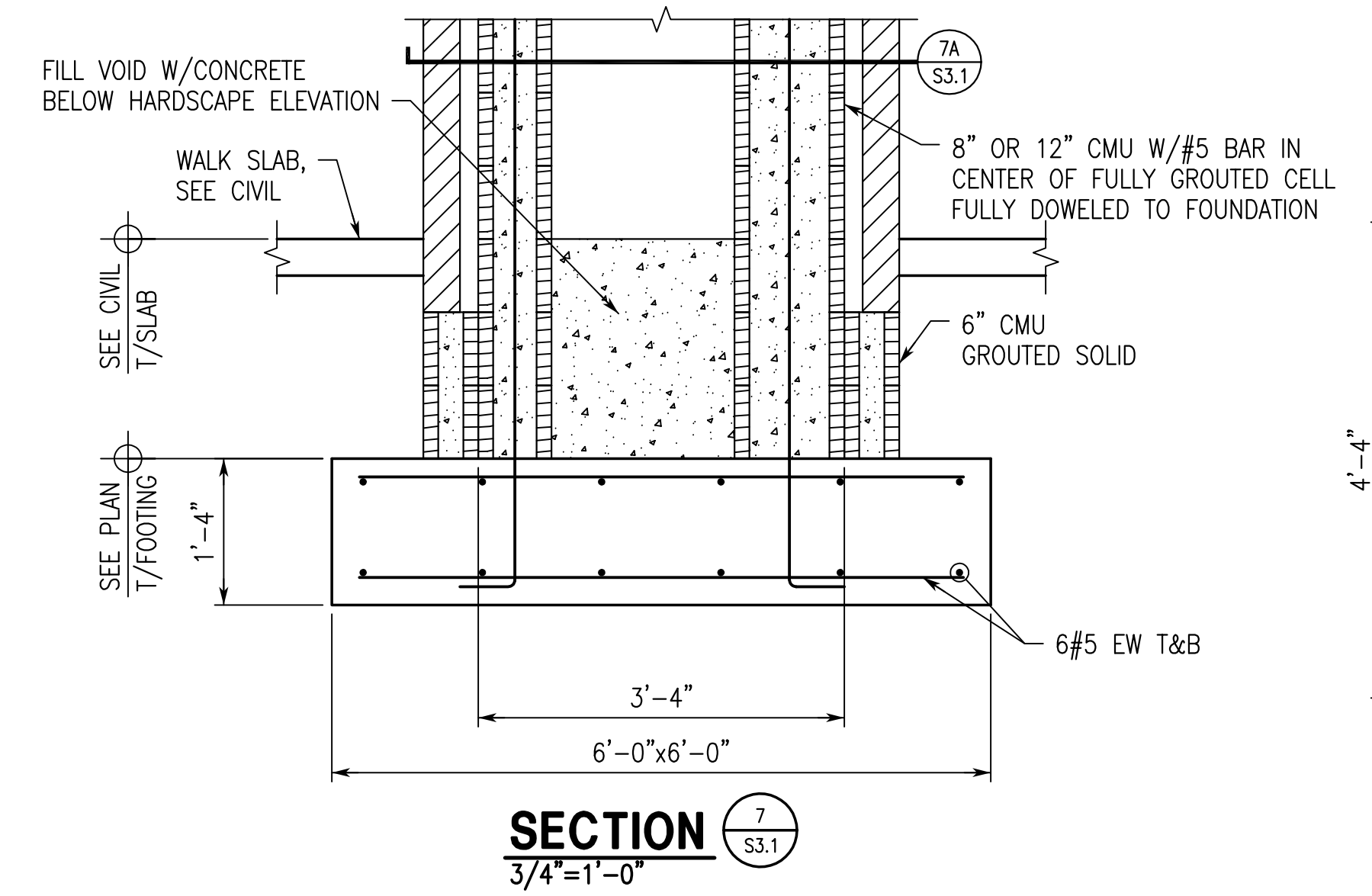
SECTION 5
 3/4"=1'-0"
 S3.1



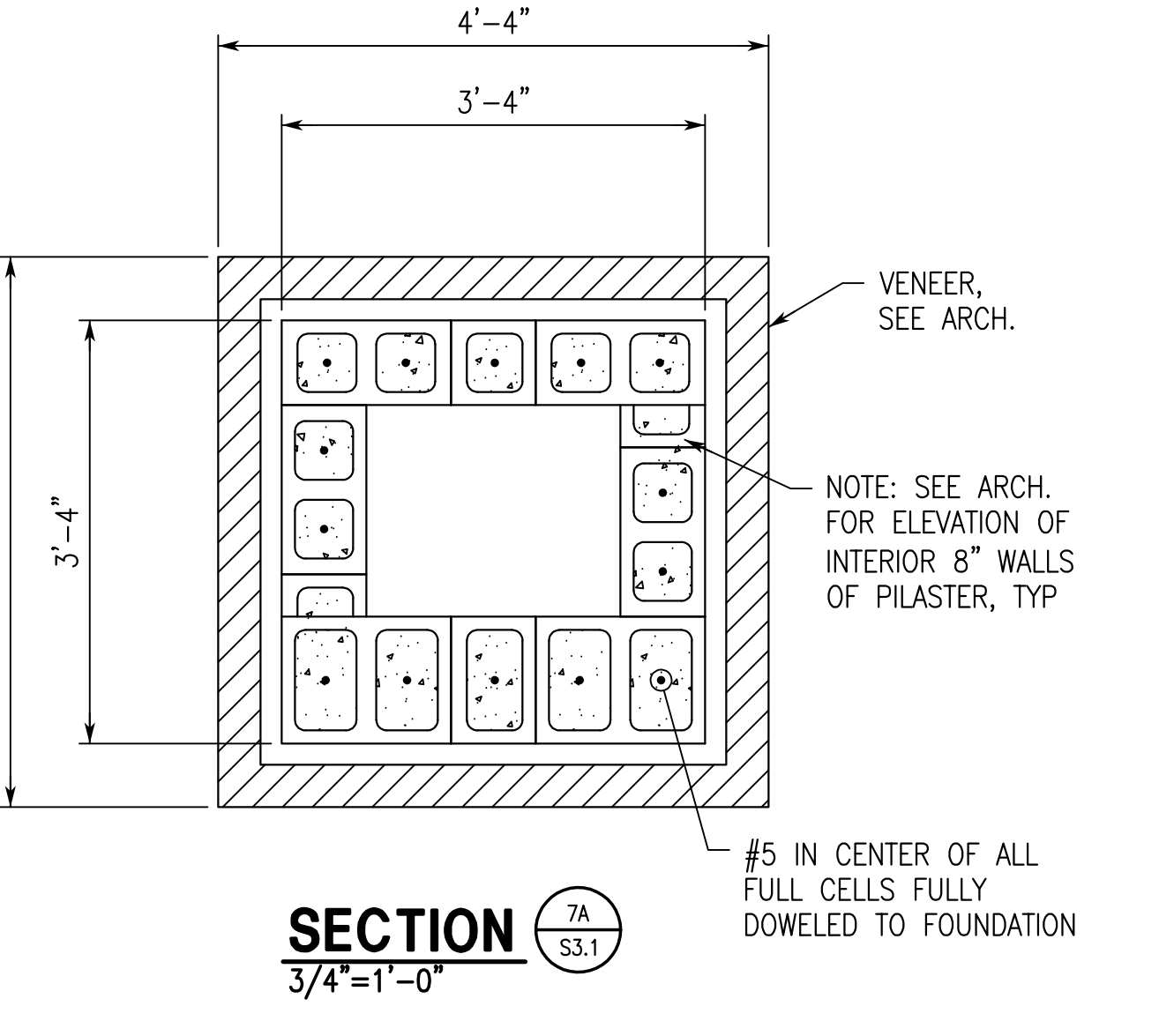
SECTION 5A
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 S3.1



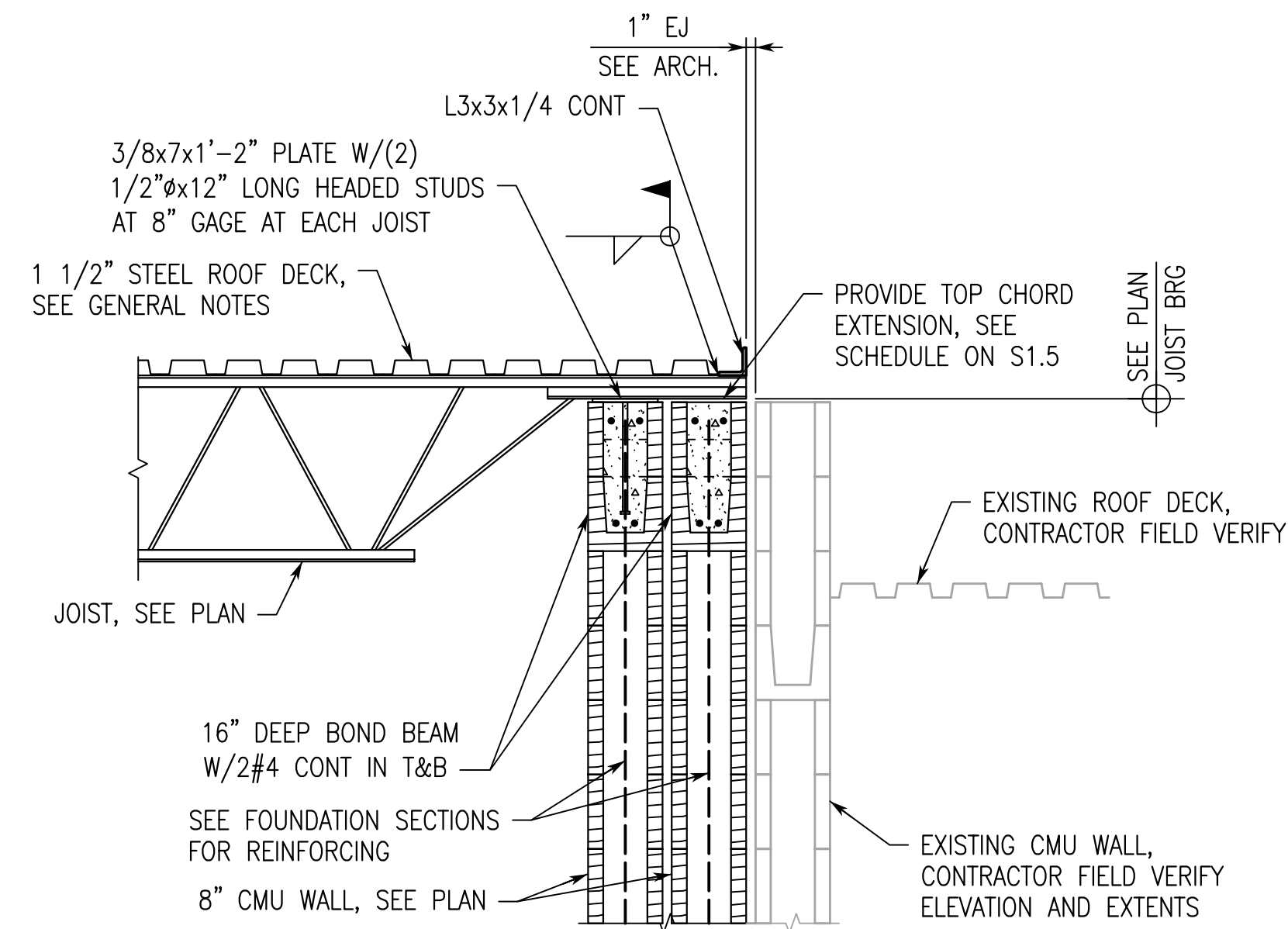
SECTION 6
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 S3.1



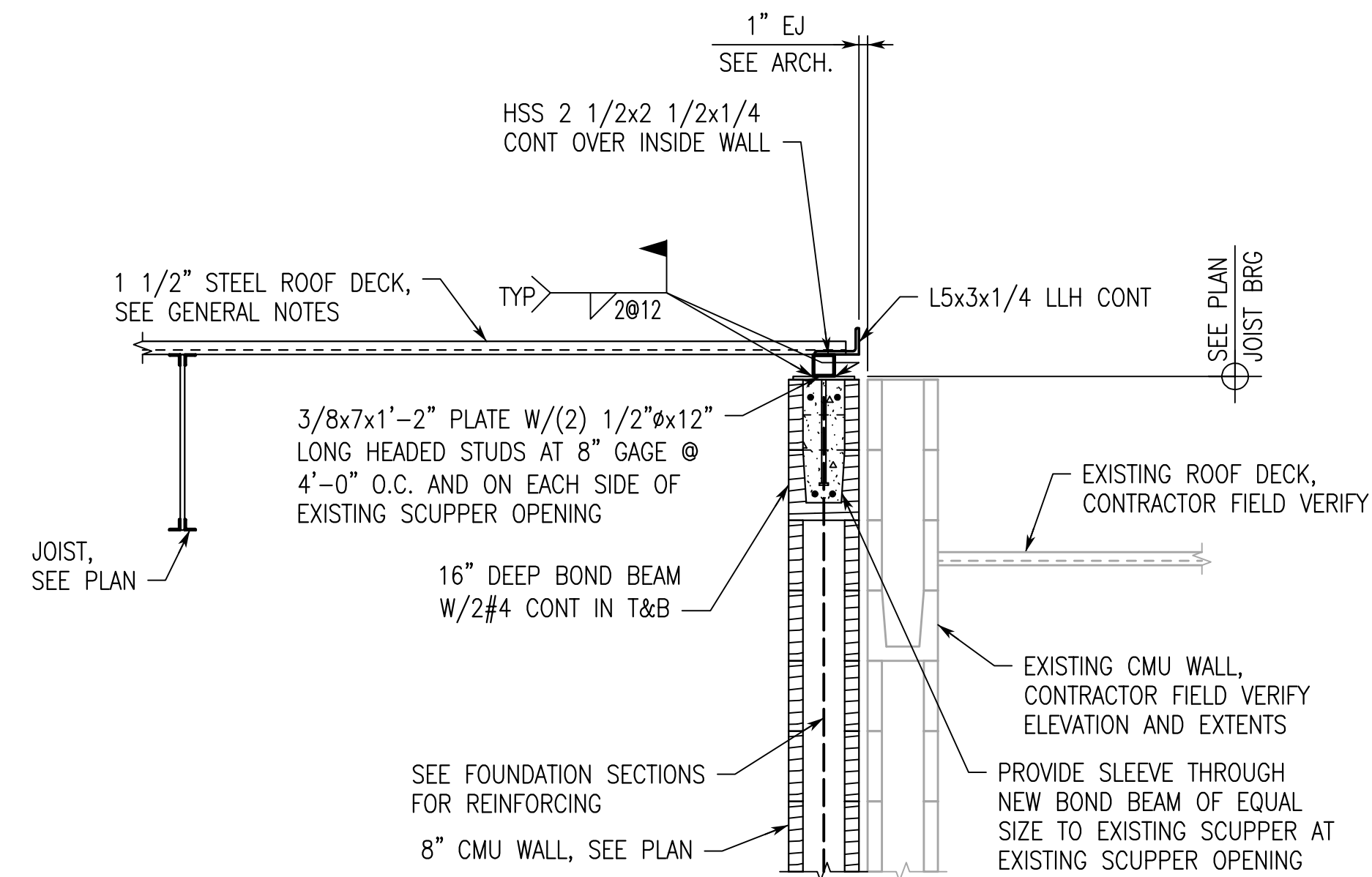
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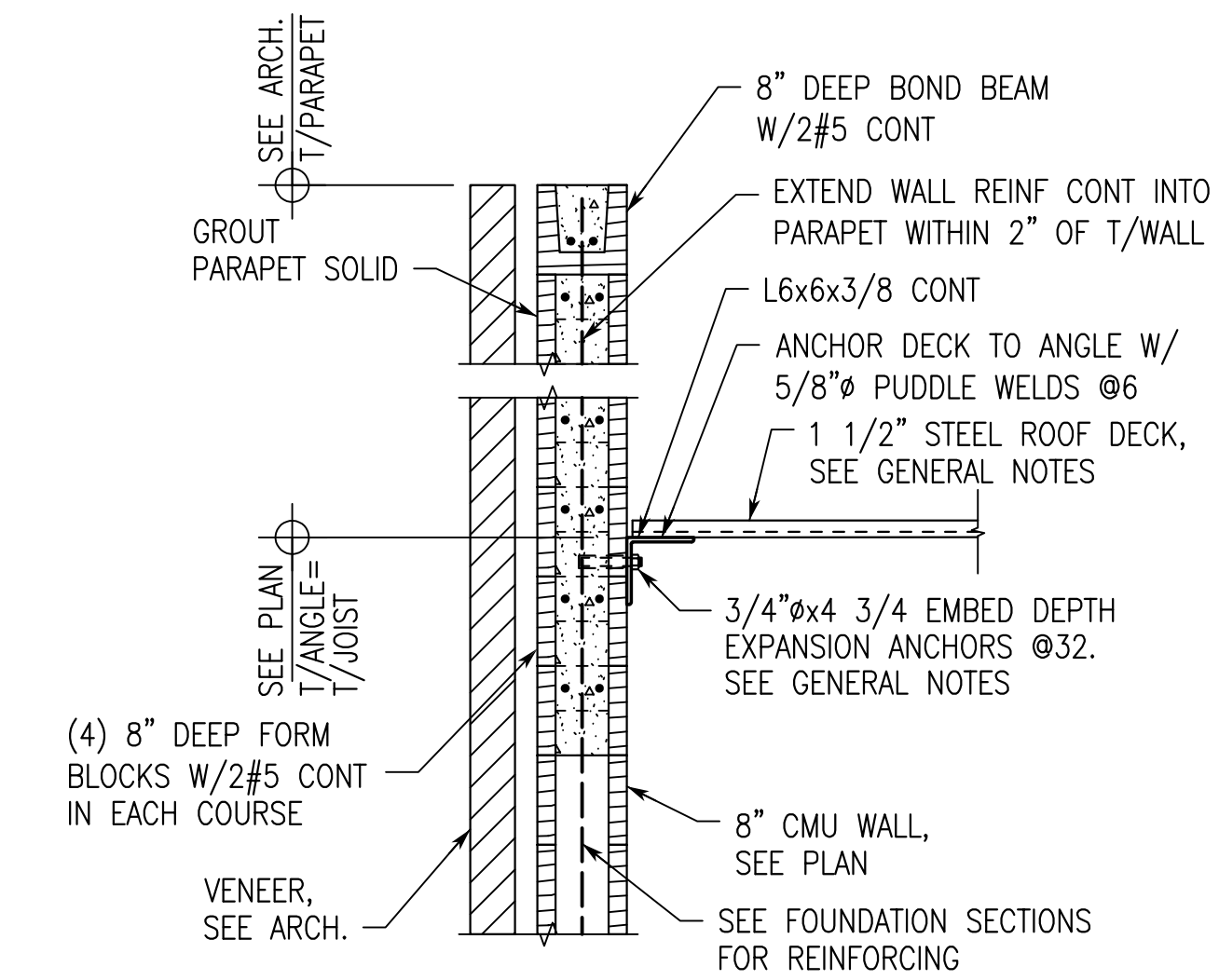
SECTION 7A
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 S3.1



SECTION 1
 3/4"=1'-0"

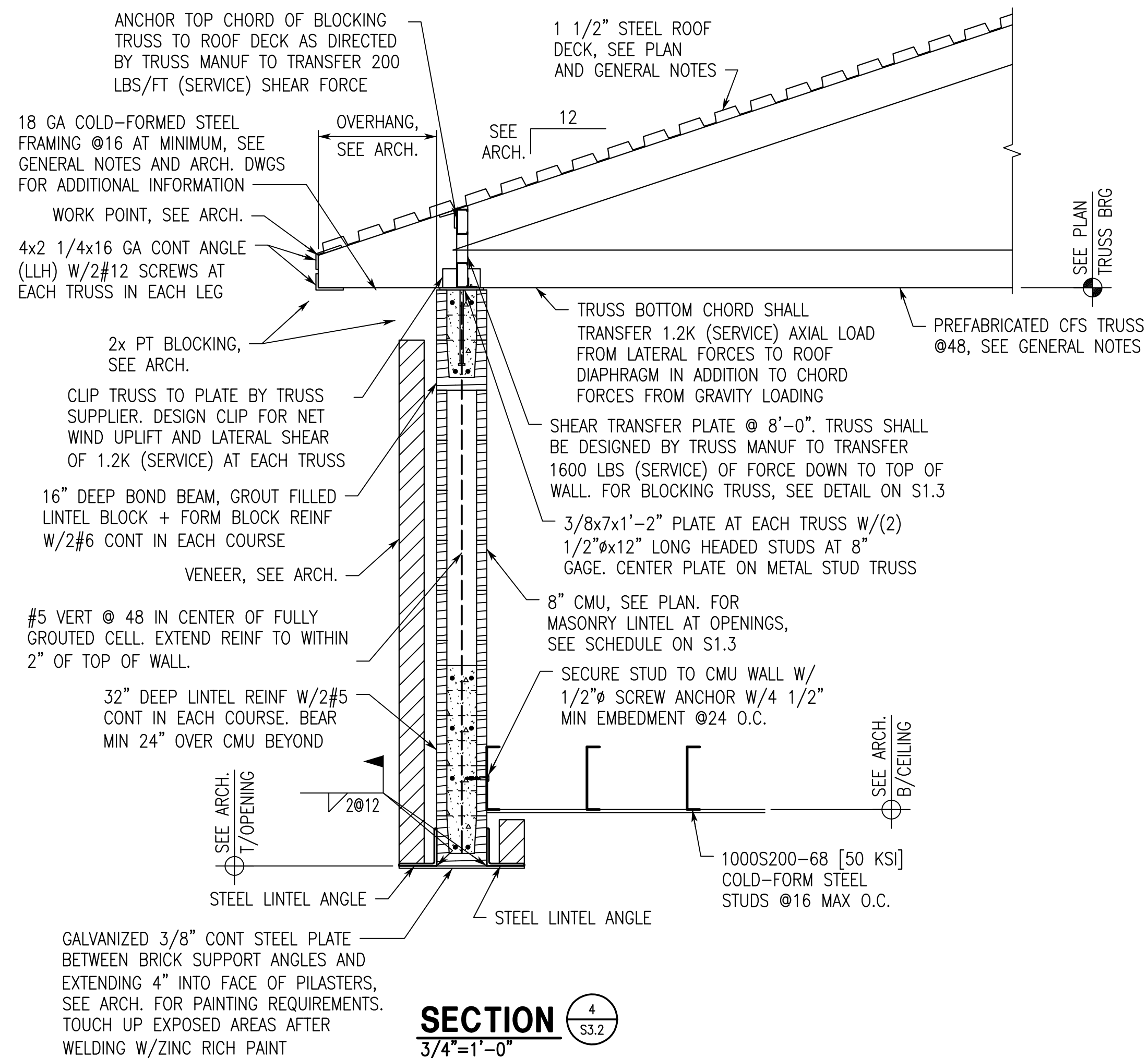


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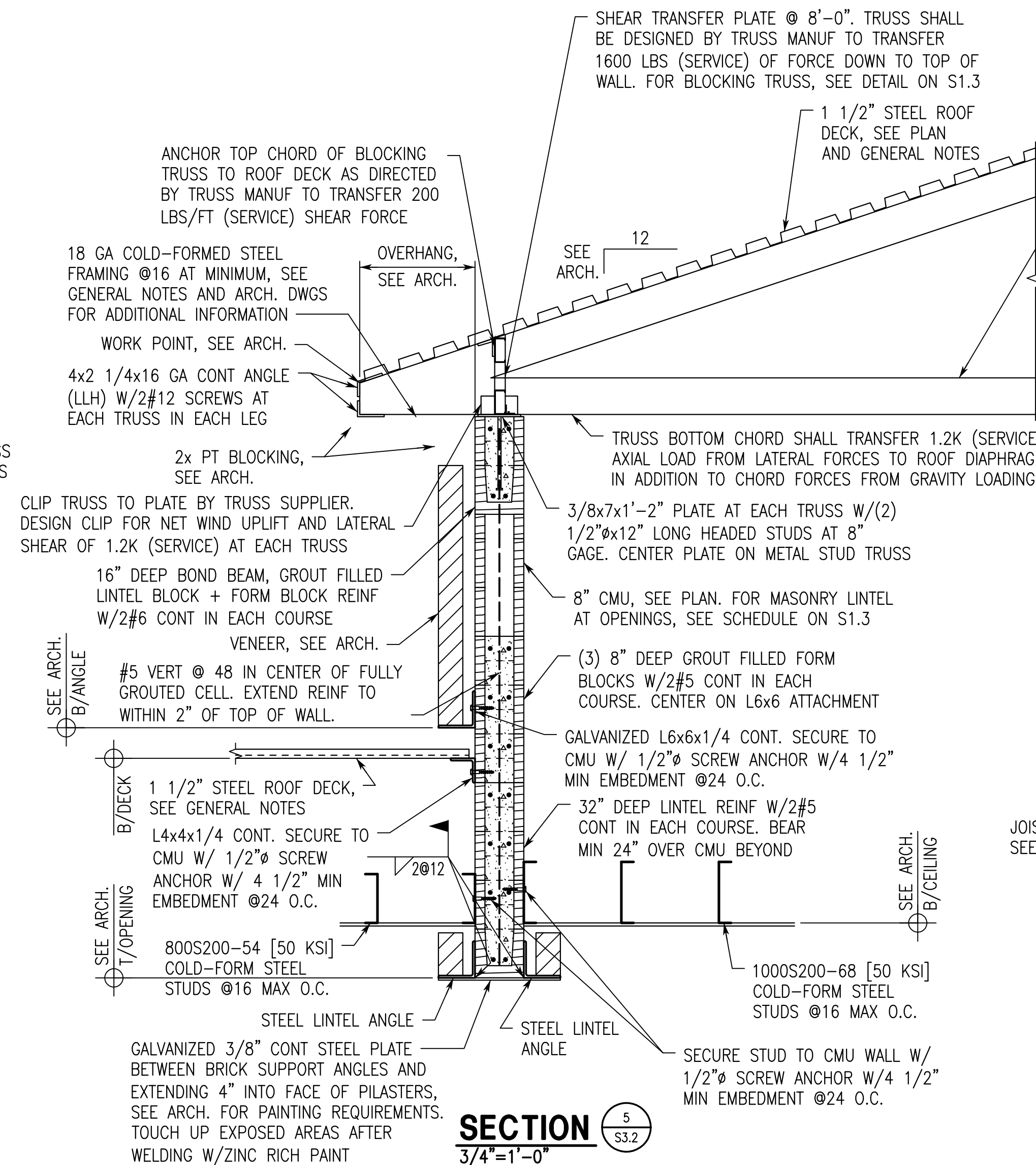


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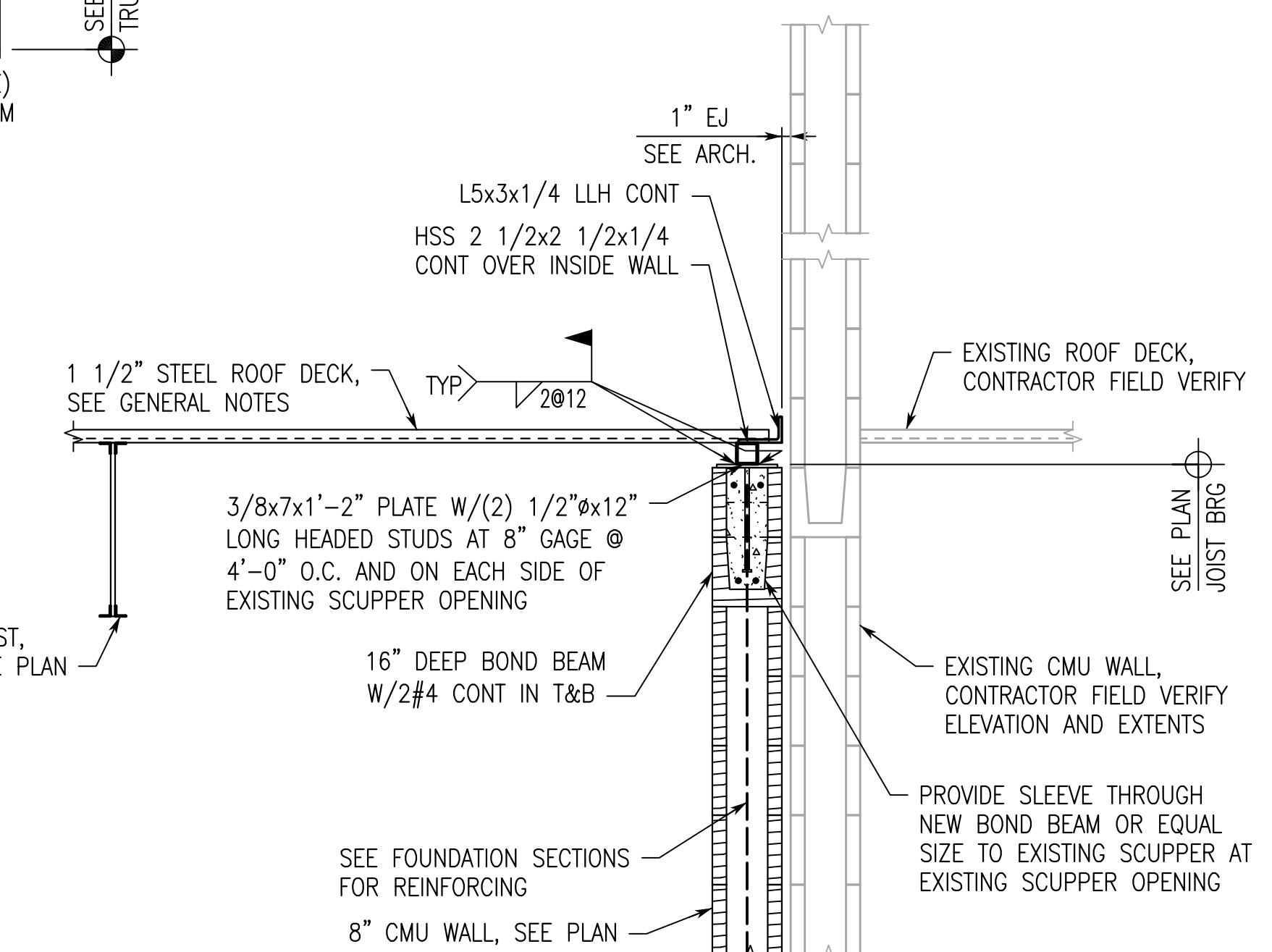
NOTE:
 T/VENEER VARIES,
 SEE ARCH.



SECTION 4
 3/4"=1'-0"

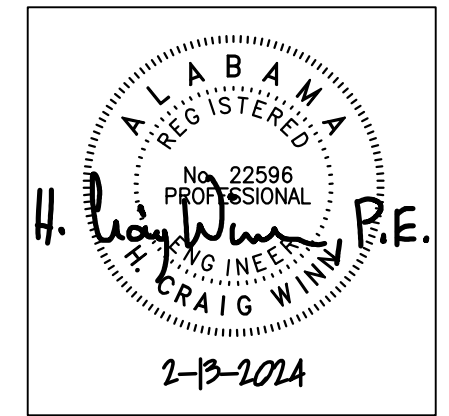


SECTION 5
 3/4"=1'-0"



SECTION 6
 3/4"=1'-0"

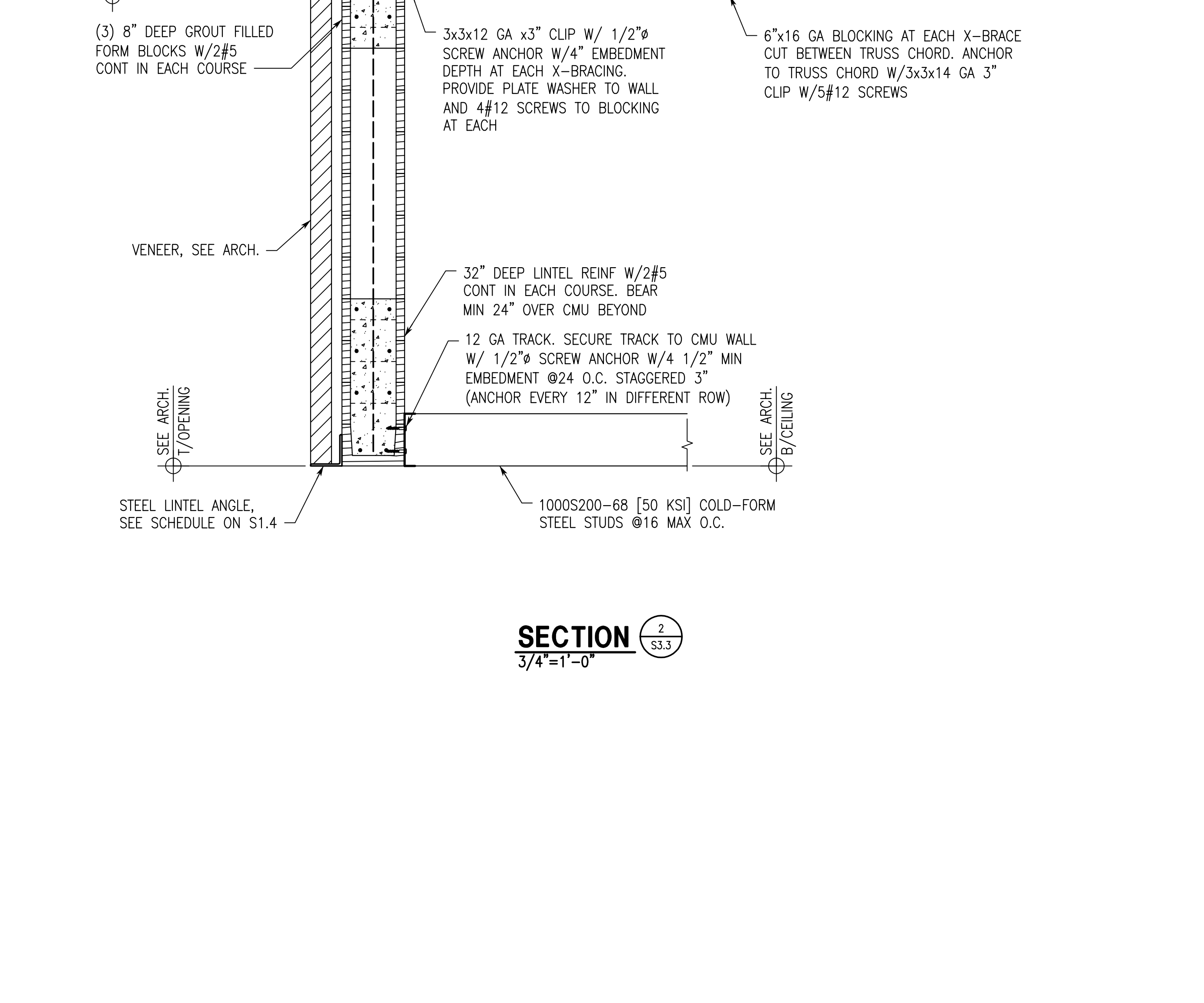
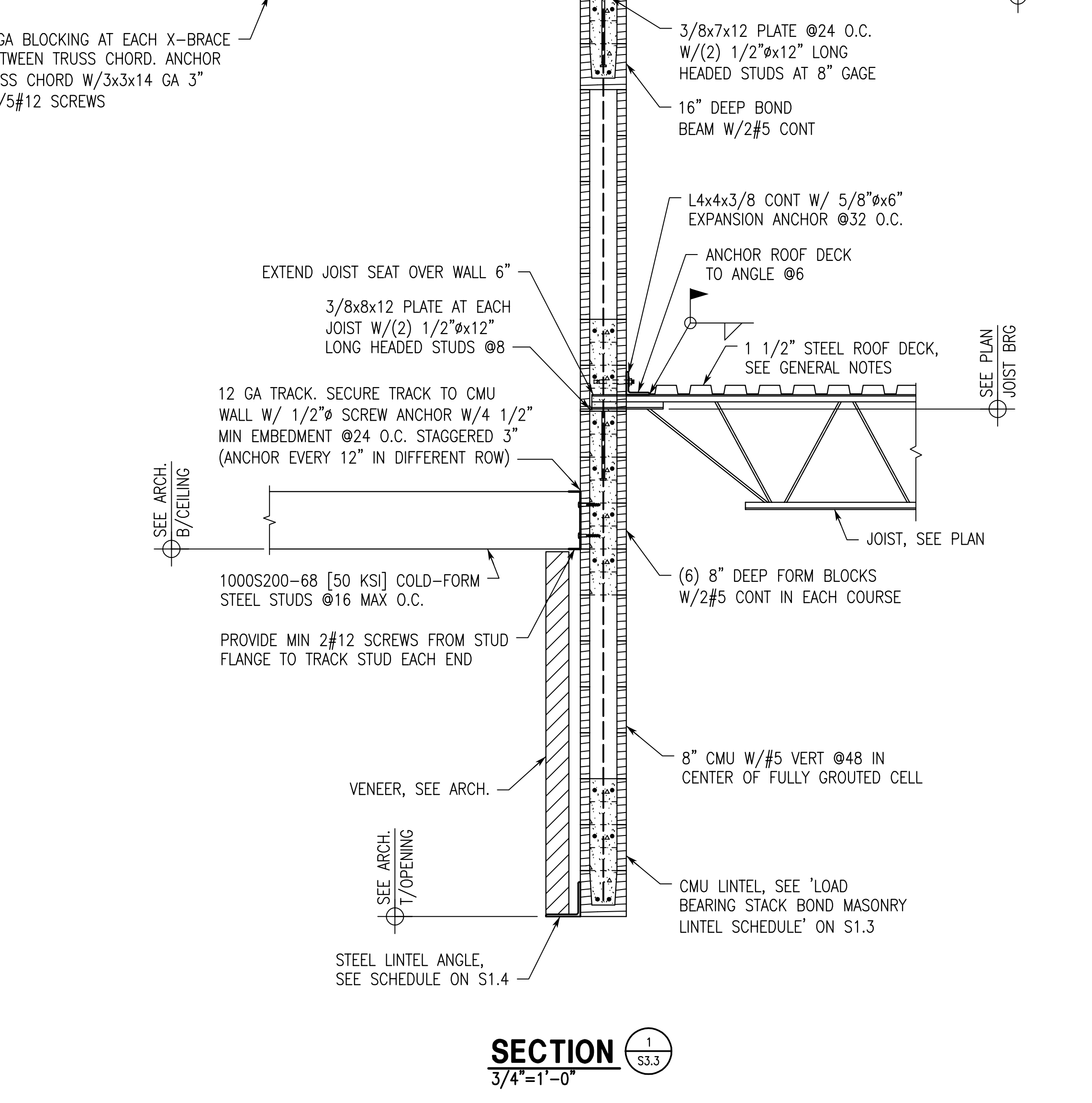
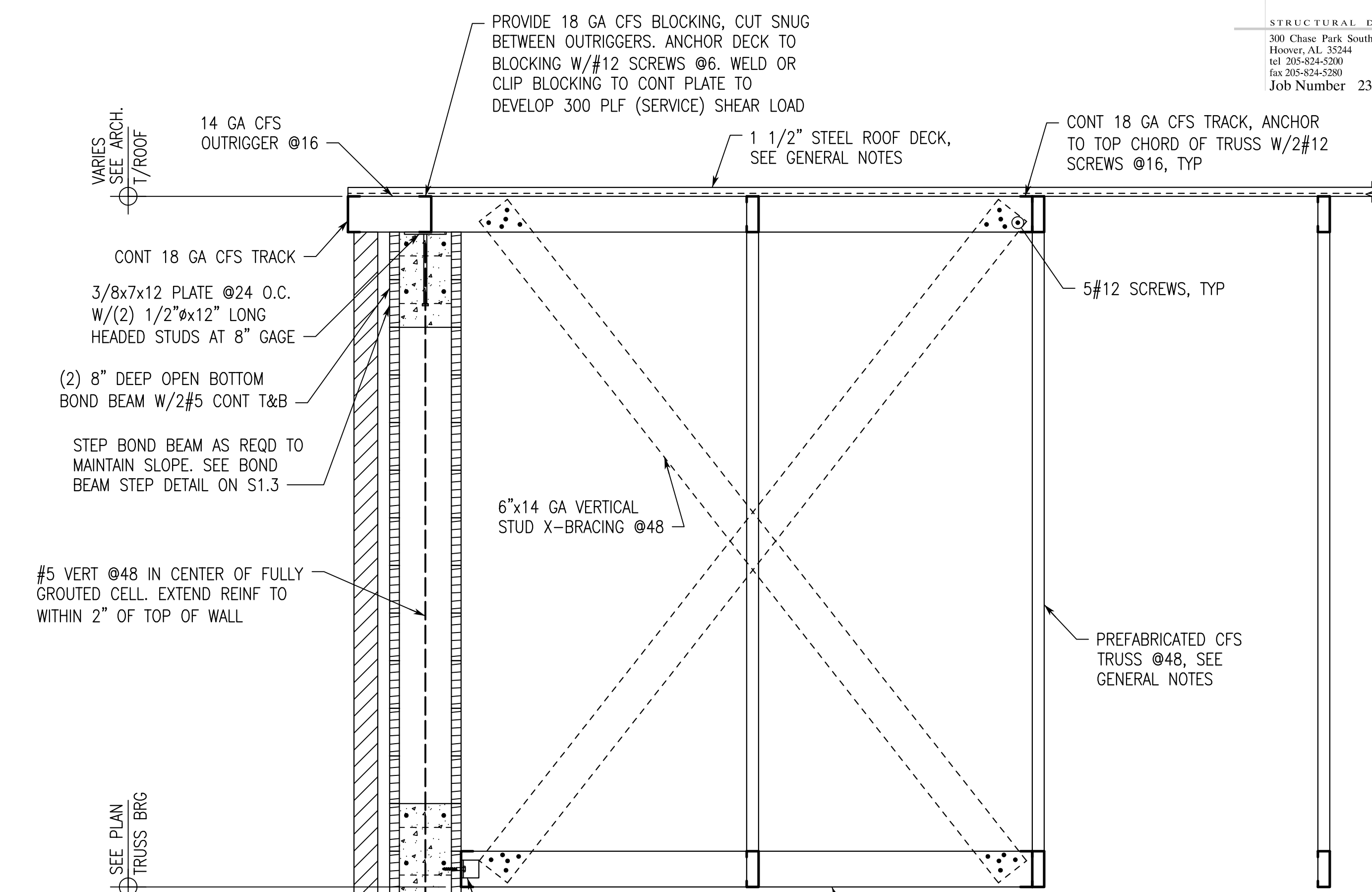
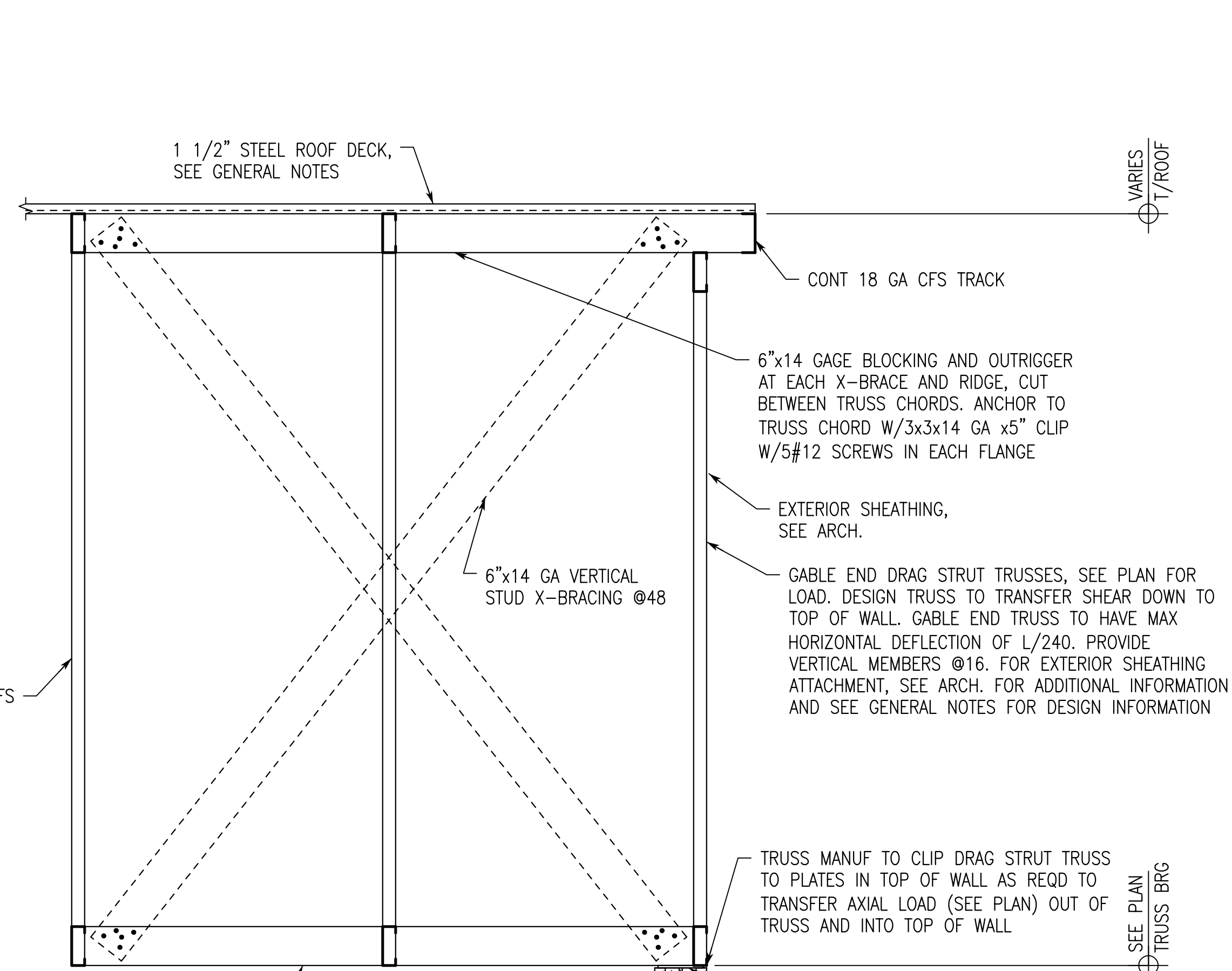
OFFICE ADDITION TO
CHELSEA HIGH SCHOOL
10510 HIGHWAY 11, CHELSEA, ALABAMA 35043
SHELBY COUNTY BOARD OF EDUCATION



SHEET TITLE:
**SECTIONS
AND DETAILS**

PROJ. MGR.: HCW
DRAWN: ABS
DATE: 2-13-2024
REVISIONS:

JOB NO. 23-92
SHEET NO.
S3.3
11 OF 12

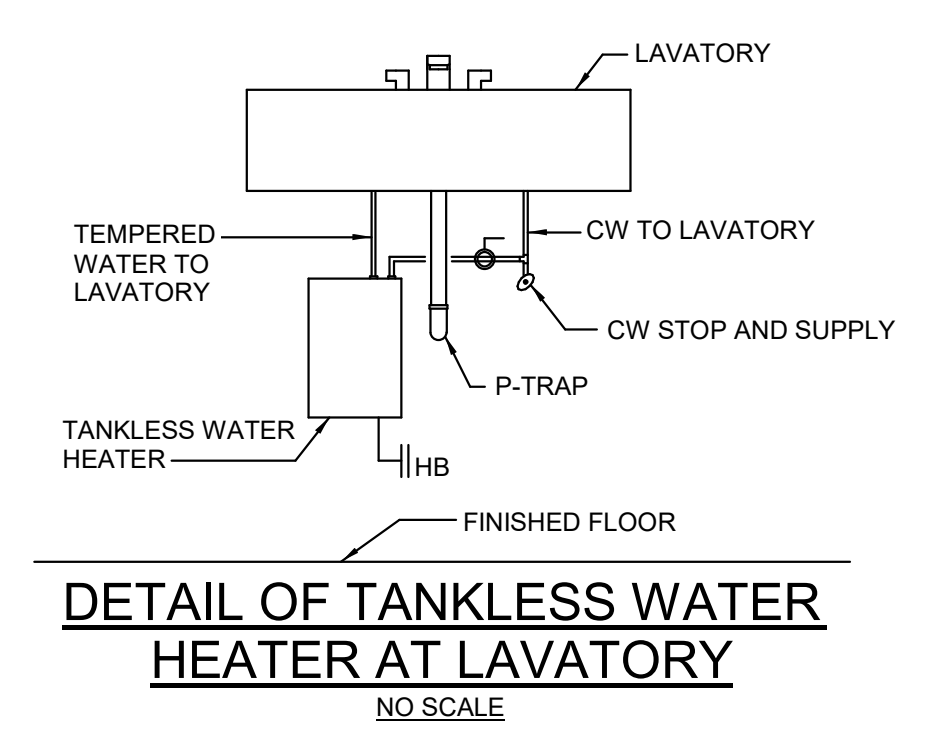
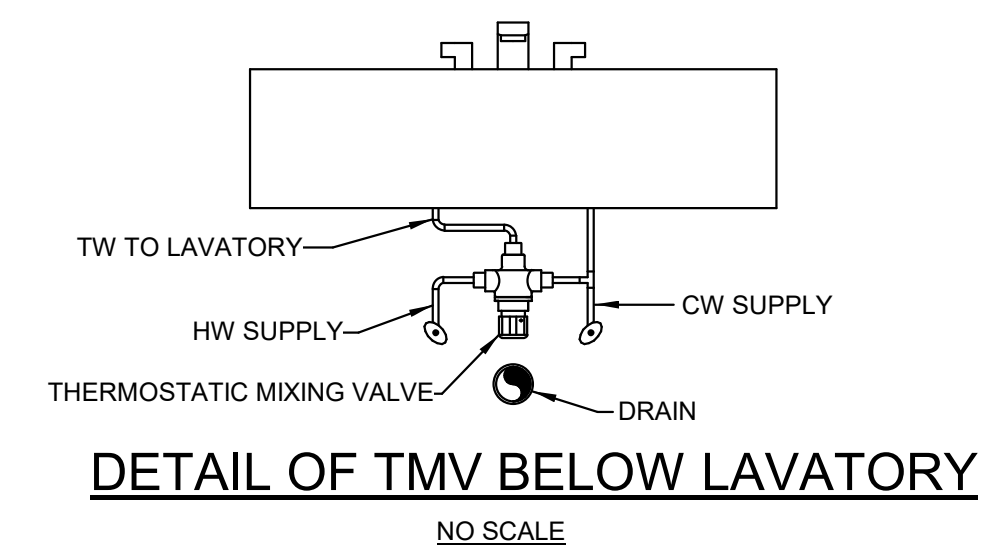
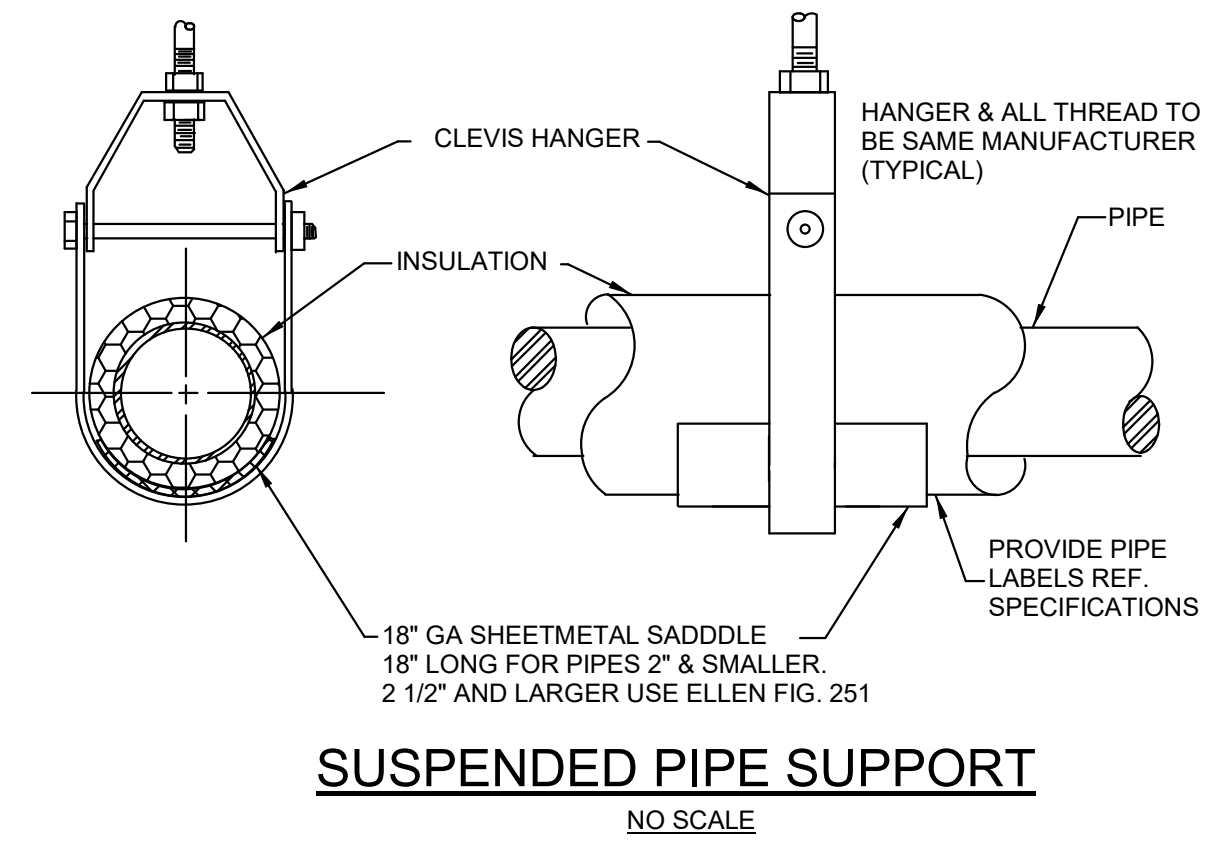


PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	WASTE	HW	CW	REMARKS
DSN	DOWNSPOUT NOZZLE	6"	-	-	J.R. SMITH #1770 DOWNSPOUT NOZZLE. MOUNT 1'-0" ABV FINISH GRADE. COORDINATE EXACT LOCATION WITH ARCHITECT.
FD	FLOOR DRAIN	3"	-	-	J.R. SMITH #2010 WITH 6" ROUND NICKEL BRONZE GRATE. PROVIDE WITH J.R. SMITH TRAP INSERT.
OD	OVERFLOW DRAIN	SEE PLAN	-	-	J.R. SMITH #1080, COMPLETE WITH SUMP RECEIVER, UNDER DECK CLAMP, 2" EXTERNAL DAM, AND CAST IRON OR ALUMINUM DOME.
P-1	WATER CLOSET - ADA COMPLIANT	4"	-	1"	FLOOR MOUNTED - KOHLER K-96057-SS-0 COMPLETE SLOAN #111 FLUSH VALVE WITH YJ BRACKET AND CHURCH "DURA GUARD" MODEL # 2155 SSC SEAT.
P-2	LAVATORY - ADA COMPLIANT	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. MOUNT WITH RIM MAXIMUM 34" AFF. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET. MUST MEET A.D.A. GUIDELINES.
P-3	DRAIN BOX	1 1/2"	-	-	PROVIDE A SIOUX CHIEF MODEL #696-3F DRAIN BOX, #696-LC LOUVERED COVER, #696-CF SECONDARY DRAINAGE FUNNEL, AND J.R. SMITH TRAP SEAL INSERT. BOX TO COME COMPLETE WITH WALL FLANGE AND LOUVER. COORDINATE WITH MECHANICAL TO RECEIVE CONDENSATE WASTE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECT.
RD	ROOF DRAIN	SEE PLAN	-	-	J.R. SMITH #1011, COMPLETE WITH SUMP RECEIVER AND UNDER DECK CLAMP, AND CAST IRON OR ALUMINUM DOME. PROVIDE 4" HIGH, 1/16" THICK PERFORATED STAINLESS STEEL GRAVEL TRAP AROUND DOME.
WH	WALL HYDRANT	-	-	3/4"	J.R. SMITH #5509-QT, WITH INTEGRAL BACKFLOW PREVENTER, LATCHING COVER, FREEZE-PROOF AND OF PROPER LENGTH FOR WALL IN WHICH INSTALLED. ALL BRONZE BOX. VALVE SEAT MUST BE ON BUILDING SIDE OF EXTERIOR WALL INSULATION. INSTALL WITH CENTER LINE 24" ABOVE FINISH GRADE. PROVIDE OWNER WITH ONE (1) LOOSE KEY FOR EACH WALL HYDRANT.

WATER HEATER SCHEDULE

MARK	FIXTURE	ELEC INFO.	REMARKS
TWH-1	TANKLESS WATER HEATER	208V; 1 PHASE; 3.6 KW.	EEMAX MODEL AM005240T WITH INTEGRAL ASSE 1070 MIXING VALVE. PROVIDES 68°F TEMP. RISE AT 0.5 GPM. MOUNT BELOW LAVATORY WHERE SHOWN ON DRAWINGS. PIPE TO HW INLET OF FAUCET.
TWH-2	TANKLESS WATER HEATER	208V; 1 PHASE; 7.5 KW.	EEMAX MODEL AM010240T WITH INTEGRAL ASSE 1070 MIXING VALVE. PROVIDES 51°F TEMP. RISE AT 1.0 GPM. MOUNT BELOW LAVATORY WHERE SHOWN ON DRAWINGS. PIPE TO HW INLET OF FAUCET.

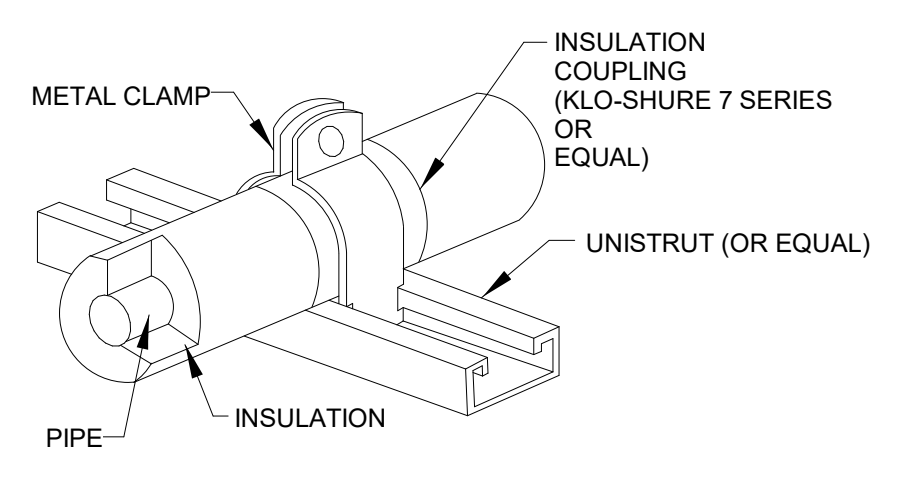
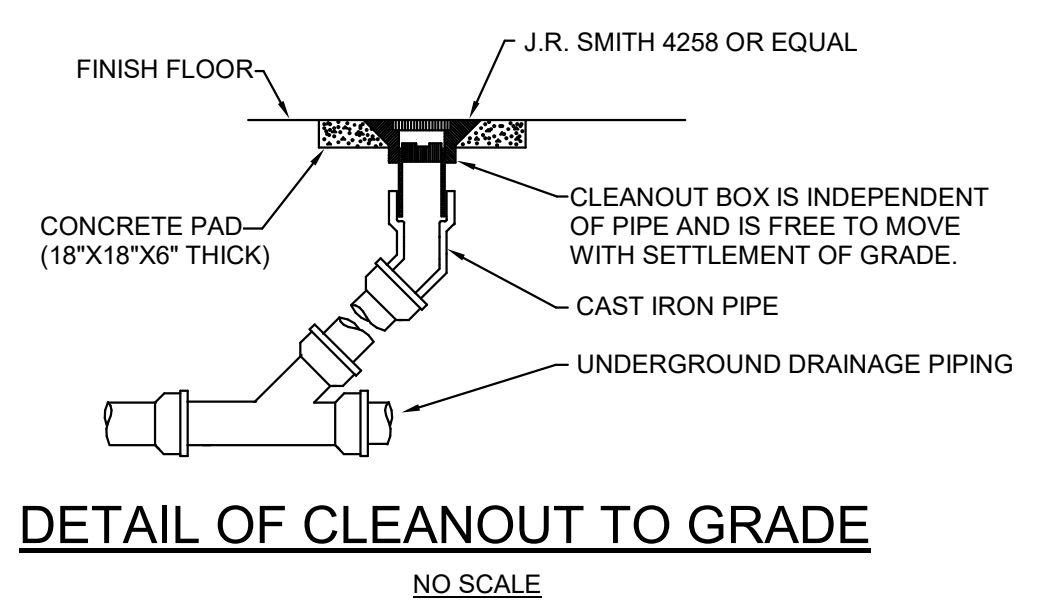
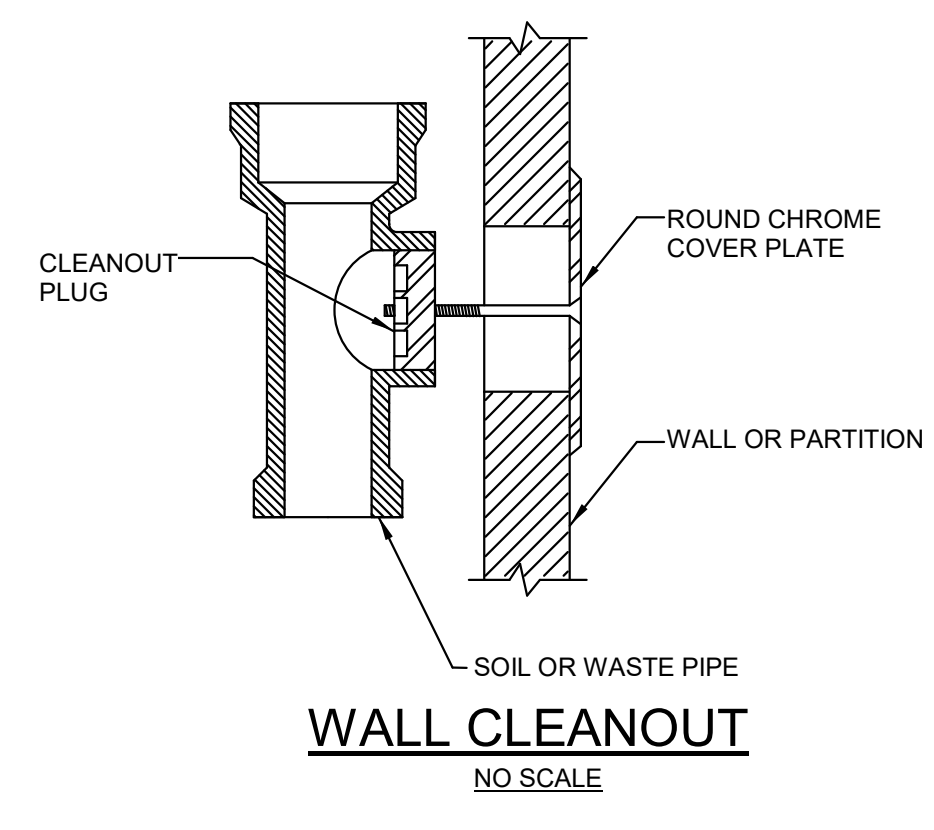


PLUMBING LEGEND

---	DOMESTIC COLD WATER	○	BALL VALVE
----	DOMESTIC HOT WATER SUPPLY	☐	CAP ON END OF PIPE
-----	DOMESTIC HOT WATER RETURN	TYP	TYPICAL
-----	SOIL, WASTE, OR SANITARY SEWER	CO	CLEANOUT
-----	VENT	BFF	BELOW FINISHED FLOOR
○	PIPE TURNING DOWN	P-#	PLUMBING FIXTURE
○	PIPE TURNING UP	VS	VENT STACK
⊥	TEE DOWN	VSTR	VENT THROUGH ROOF
⊥	TEE UP	⊗	CONNECT TO EXISTING
S	STORM PIPING	WS	WASTE STACK
CW	COLD WATER	HWR	HOT WATER RETURN
DN	DOWN	HW	HOT WATER
WH - #	WATER HEATER	ABV	ABOVE
EX	EXISTING	AFF	ABOVE FINISHED FLOOR

GENERAL NOTES

- LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
- CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
- ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN 18"x18"x6" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)
- WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
- ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
- ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
- ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
- ALL WALL HYDRANTS AND HOSE BIBBS SHALL BE MOUNTED 24" ABOVE FINISH GRADE OF FINISH FLOOR UNLESS OTHERWISE NOTED.
- ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
- NO VENT THRU ROOF IS TO BE LOCATED WITHIN 10 FEET OF ANY BUILDING AIR INTAKES, PER CODE. COORDINATE WITH MECHANICAL AND GENERAL CONTRACTORS.
- DOMESTIC WATER PIPING LOCATED ABOVE THE CEILING, SHALL BE INSTALLED BELOW CEILING INSULATION.
- CONTRACTOR SHALL COORDINATE FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE SHOCK ARRESTORS ON ALL BRANCH LINES.
- CONTRACTOR SHALL COORDINATE ALL SINKS WITH CASEWORK PRIOR TO ORDERING SINKS.
- DOMESTIC WATER PIPING SHALL NOT BE INSTALLED IN EXTERIOR WALLS.
- PROVIDE DISINFECTION OF WATER PIPING SYSTEM WITH CHLORINE SOLUTION AS PER CODE.
- INSTALLATION OF BACKFLOW PREVENTER SHALL COMPLY WITH CURRENT INTERNATIONAL BUILDING CODE AND CURRENT INTERNATIONAL PLUMBING CODE.
- ALL OVERHEAD WATER PIPING TO BE RUN BELOW INSULATION AT BOTTOM OF TRUSSES FOR FREEZE PROTECTION.
- ALL FLOOR DRAINS AND INDIRECT DRAINS TO HAVE INSULATED DEEP SEAL P-TRAPS WITH TRAP SEAL PROTECTION AS APPROVED BY LOCAL AUTHORITY.
- ALL WALL HYDRANTS TO BE FREEZE PROOF AND TO HAVE VACUUM BREAKERS.
- INSULATION ON ALL PIPING SHALL MEET SMOKE/ FLAME RATING OF 25 & 50.
- THE LOCATION OF LAVATORIES AND WATER CLOSETS RELATIVE TO THE FINISHED WALL IS CRITICAL. REFER TO ARCHITECTURAL AND THE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WATER CLOSETS TO BE 18" FROM FINISH WALL TO CENTER OF WATER CLOSET.
- WATER HAMMER ARRESTORS ARE REQUIRED TO PROTECT WATER PIPING SYSTEMS WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
- THESE DRAWINGS NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE PLUMBING SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES AND CONTROLS. COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE PROJECT. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
- COORDINATE PLUMBING PIPING WITH STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL. MAKE OFFSETS AND TRANSITIONS TO COORDINATE WITH OTHER TRADES WITHOUT ANY ADDITIONAL COST TO THE PROJECT.
- COORDINATE ALL PLUMBING IN SLAB WITH BUILDING FOOTINGS.
- NO PIPING TO BE RUN ABOVE ELECTRICAL PANELS. MAINTAIN ALL REQUIRED CLEARANCES.
- CONTRACTOR SHALL VISIT JOB SITE AND VERIFY EXISTING CONDITIONS BEFORE SUBMITTING A PRICE, ORDERING MATERIALS OR PERFORMING ANY WORK. NOTIFY THE ARCHITECT OF ANY DEVIATION FROM PLUMBING PLAN.
- SUPPORT PIPE AS REQUIRED BY THE CURRENT INTERNATIONAL PLUMBING CODE.
- ALL FOOTINGS AT PLUMBING CHASE WALLS SHALL BE MIN 24" BELOW FINISHED GRADE TO COORDINATE WITH WASTE PIPING IN SLAB.
- FIRESTOP ALL RATED WALL AND FLOOR PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALL AND FLOOR LOCATIONS.
- OFFSET ALL VTR'S TO BACKSIDE OF ROOF RIDGE.
- DO NOT BEGIN WORK UNTIL ELEVATION OF FINAL CONNECTION POINT IS VERIFIED AND GRADING OF ENTIRE SYSTEM CAN BE DETERMINED (EVEN IF FINAL CONNECTION IS SPECIFIED UNDER ANOTHER SECTION).



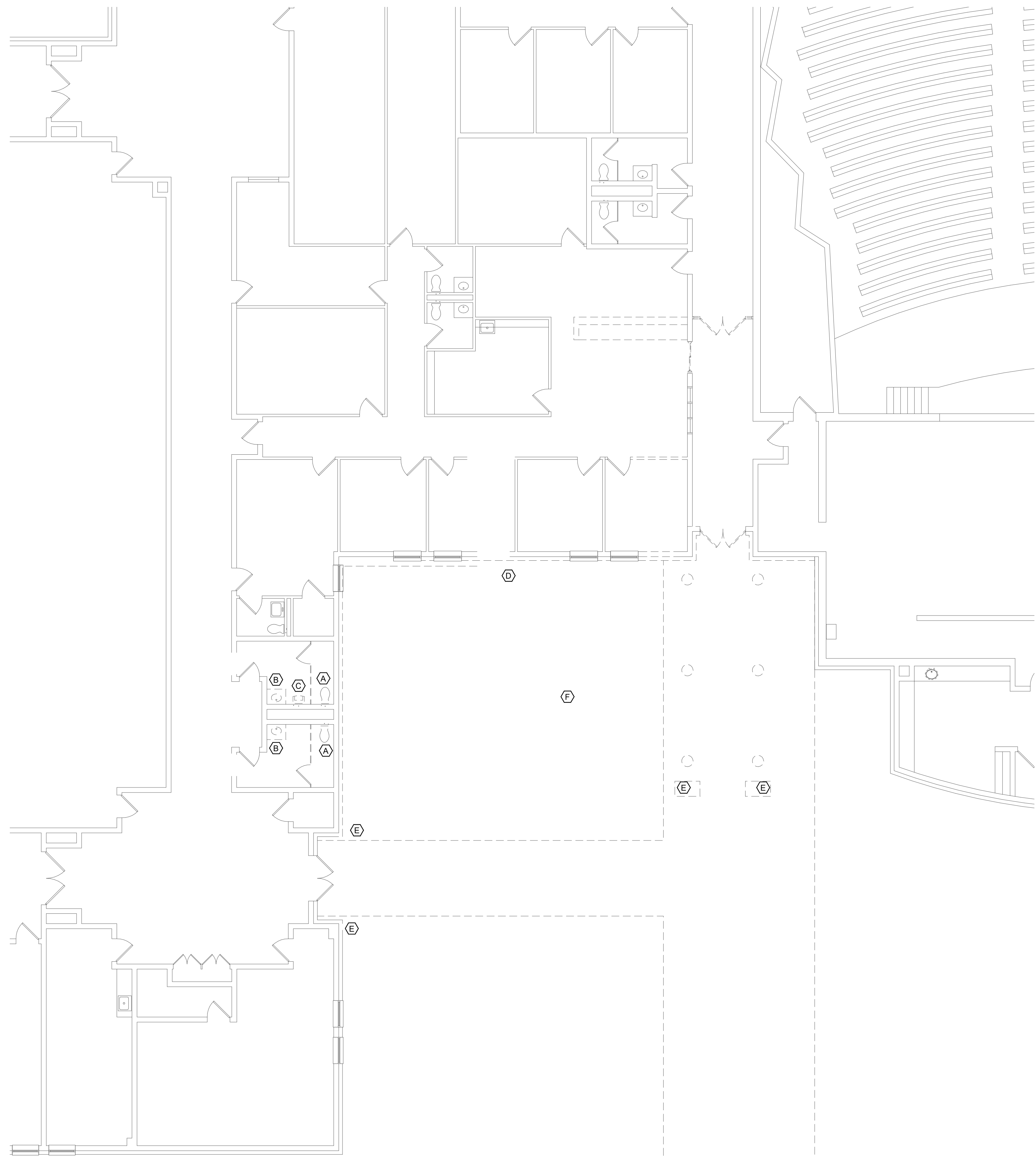
- NOTES:**
- APPLICATION: FOR STRUT MOUNTED, 4 INCH AND SMALLER, COFFEE PIPE WITH FOAMED PLASTIC (ARMAFLEX) OR FIBERGLASS INSULATION.
 - ALLOWED FOR HORIZONTAL OR VERTICAL INSTALLATION.
 - FOR COLD PIPE APPLICATION, APPLY ADHESIVE TO END OF FOAMED PLASTIC INSULATION PRIOR TO INSERTING INTO COUPLING.

SHEET TITLE:
PLUMBING SCHEDULES AND NOTES

PROJ. MGR.: SMC
DRAWN: ADH
DATE: MARCH 8, 2024
REVISIONS

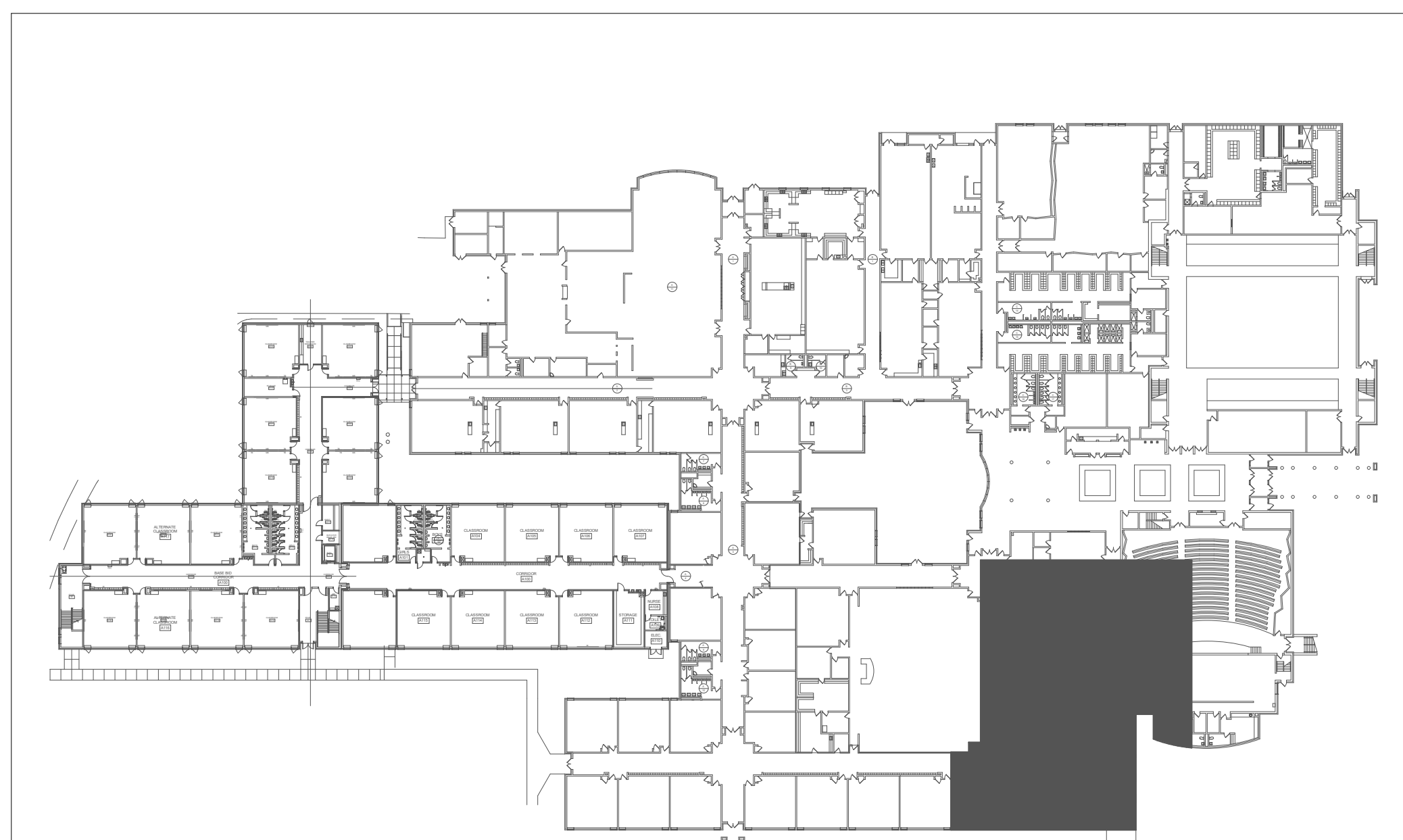
JOB NO. 23-92
SHEET NO. P0.1
1 OF 5

OFFICE ADDITION TO
CHELSEA HIGH SCHOOL
 10510 COUNTY ROAD 11, CHELSEA, ALABAMA 35043
 SHELBY COUNTY BOARD OF EDUCATION



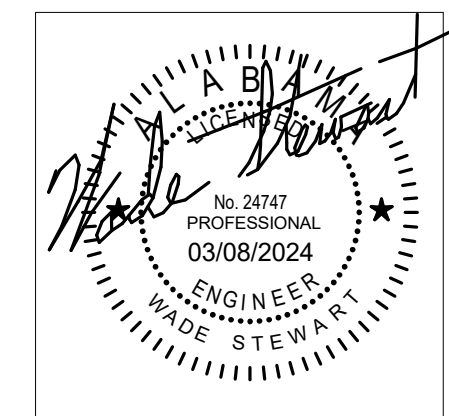
- DEMOLITION GENERAL NOTES**
1. CONTRACTOR SHALL REMOVE ALL FIXTURES IN AREAS WHERE NOTED.
 2. WHERE FIXTURES ARE SHOWN TO BE REMOVED, CONTRACTOR SHALL REMOVE FIXTURE AND ALL ASSOCIATED WASTE, VENT, WATER OR GAS PIPING BACK TO MAINS IN WALLS, ABOVE CEILING OR BELOW FLOOR AND CAP IN ACCORDANCE WITH LOCAL CODES.
 3. ALL REMOVED FIXTURES SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED TO THE OWNERS WAREHOUSE BY THIS CONTRACTOR.
 4. IF THE OWNER DECIDES NOT TO RETAIN FIXTURES OR EQUIPMENT REMOVED, THE FIXTURES SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
 5. ONCE DEMOLITION IS COMPLETE, ALL PIPING THAT IS NOT IN USE OR THAT IS NOT TO BE USED UNDER THE RENOVATION PORTION SHOULD HAVE BEEN REMOVED.

- DEMOLITION KEY NOTES**
- (A) EXISTING WATER CLOSET TO BE REMOVED.
 - (B) EXISTING LAVATORY TO BE REMOVED.
 - (C) EXISTING URINAL TO BE REMOVED.
 - (D) EXISTING WALL HYDRANT TO BE REMOVED.
 - (E) EXISTING DOWNSPOUT BOOT TO BE REMOVED.
 - (F) EXISTING CLEANOUT TO BE REMOVED.



1 PLUMBING - FLOOR PLAN - DEMOLITION
 1/8" = 1'-0"
 NORTH

KEY PLAN
 NORTH

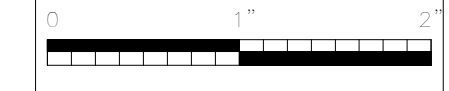


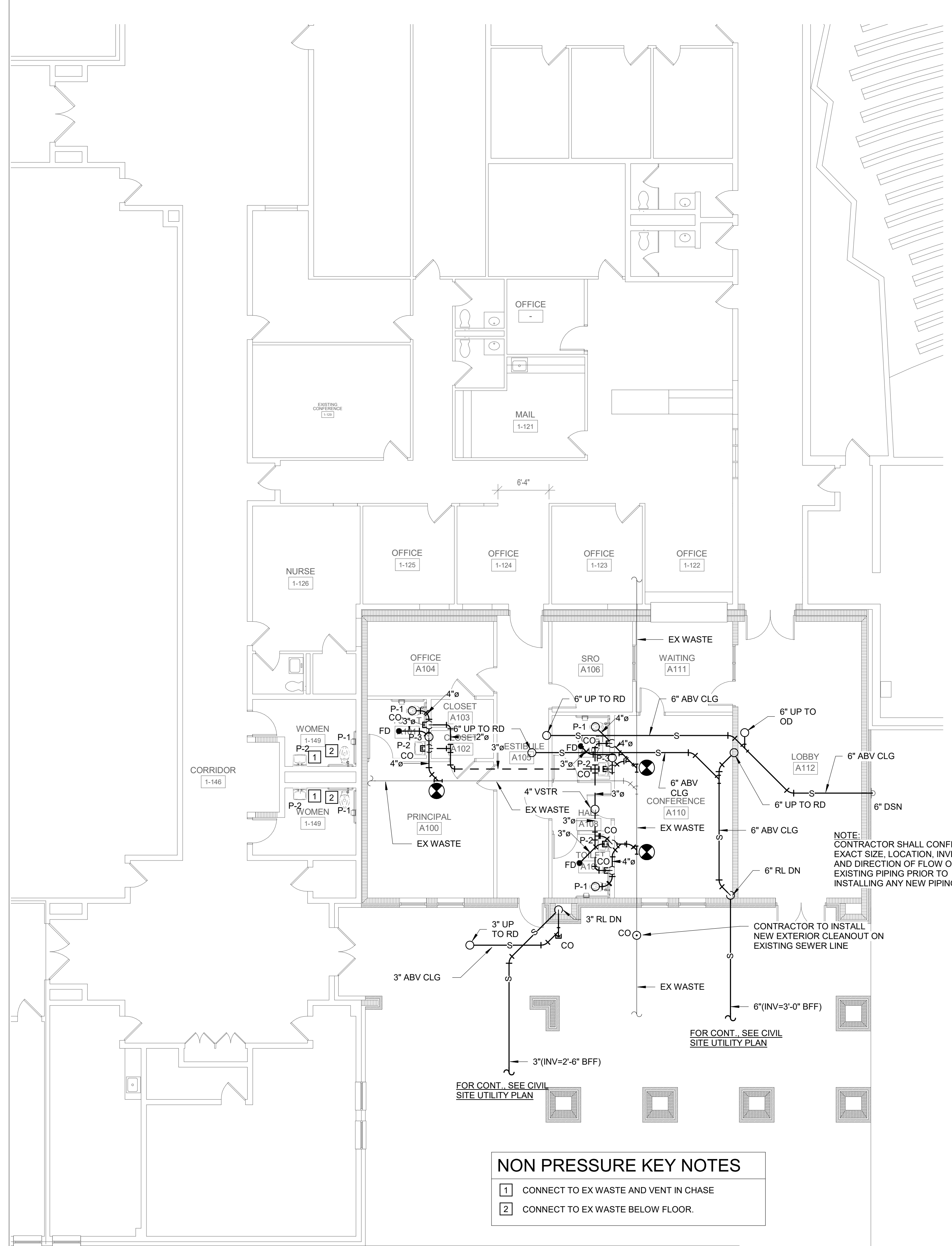
SHEET TITLE:
 PLUMBING FLOOR PLAN
 DEMOLITION

PROJ. MGR.: SMC
 DRAWN: ADH
 DATE: MARCH 8, 2024
 REVISIONS:

JOB NO. 23-92
 SHEET NO.:

P1.0
 2 OF 5



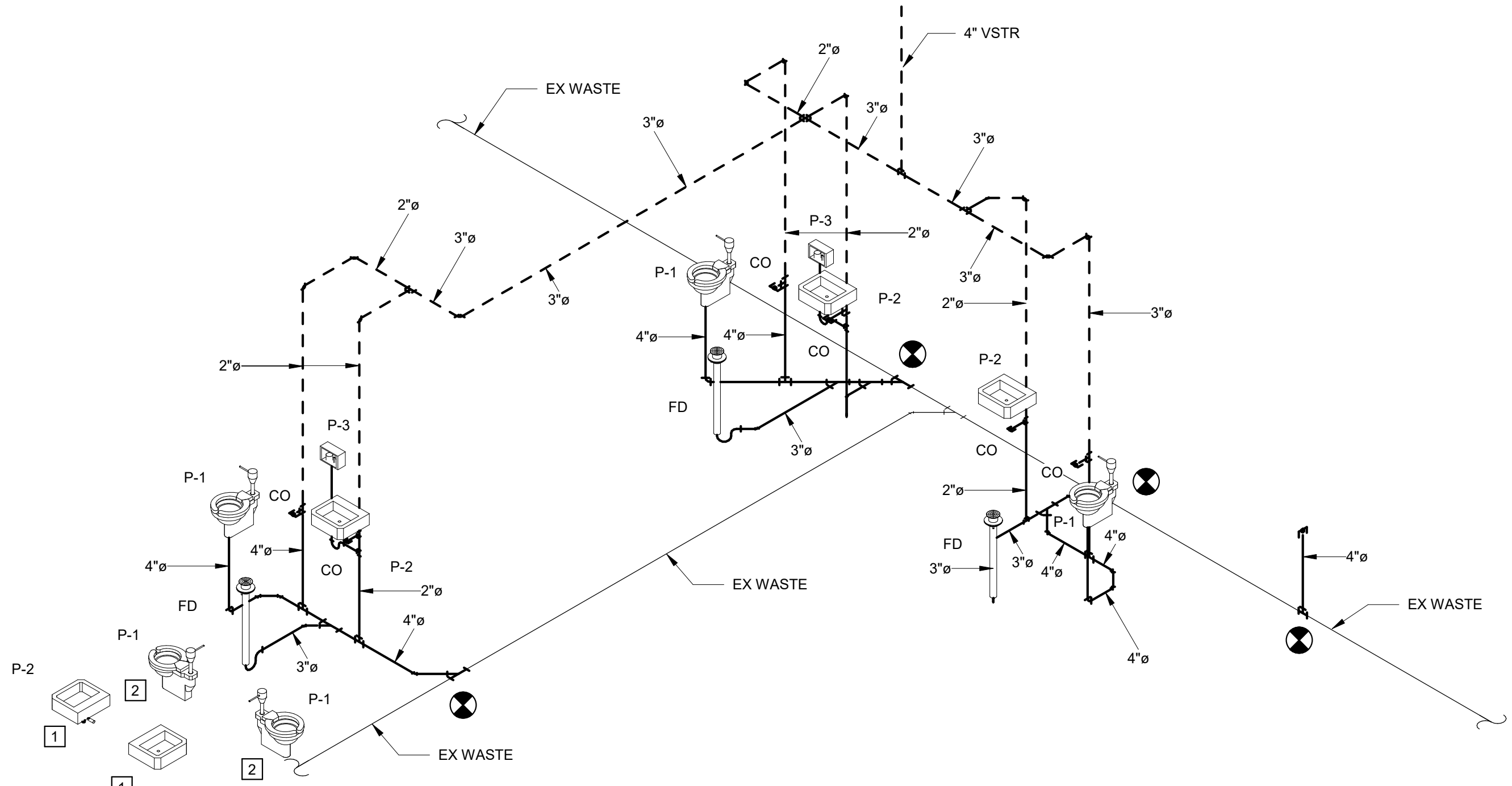


NON PRESSURE KEY NOTES

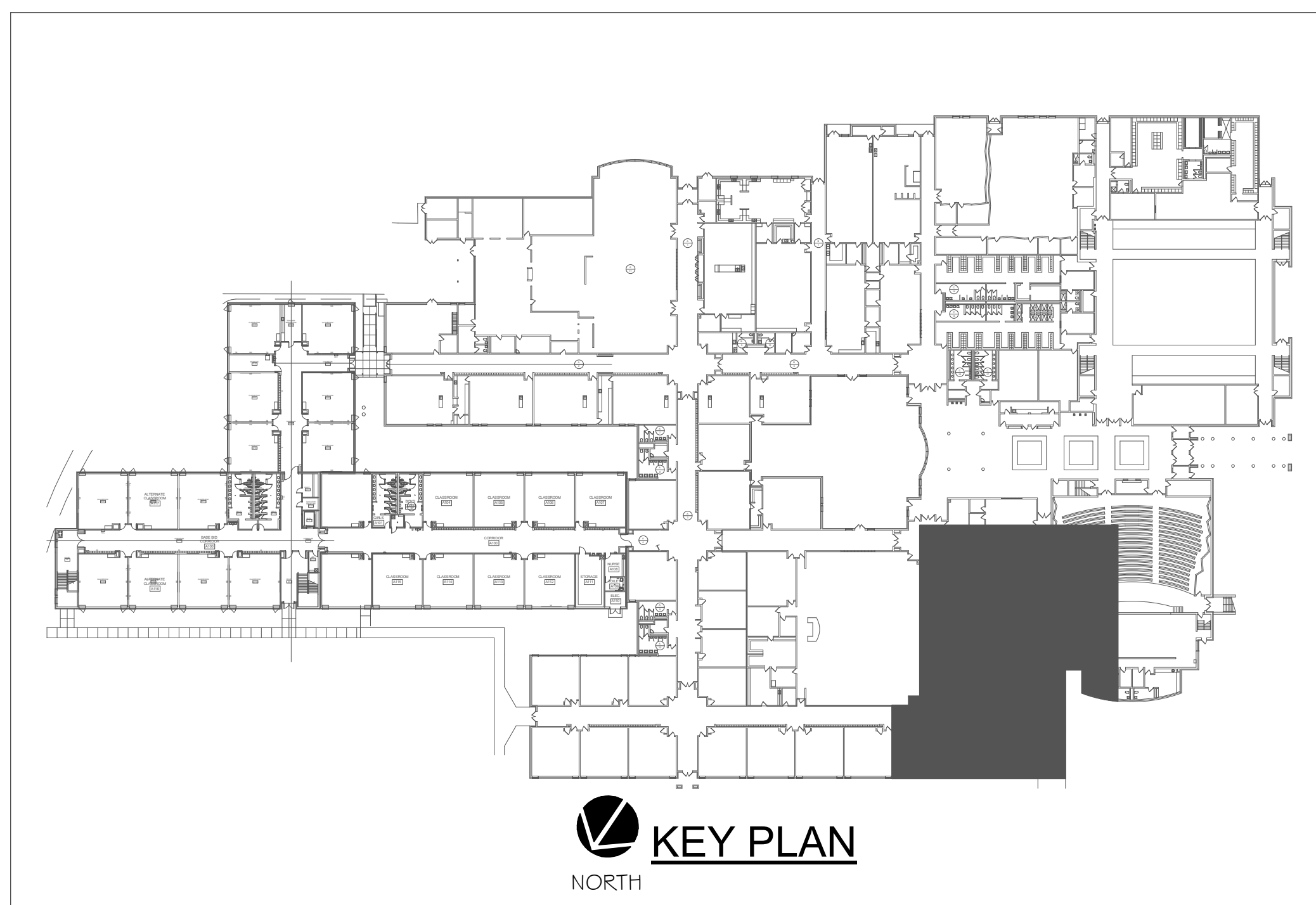
1 CONNECT TO EX WASTE AND VENT IN CHASE

2 CONNECT TO EX WASTE BELOW FLOOR.

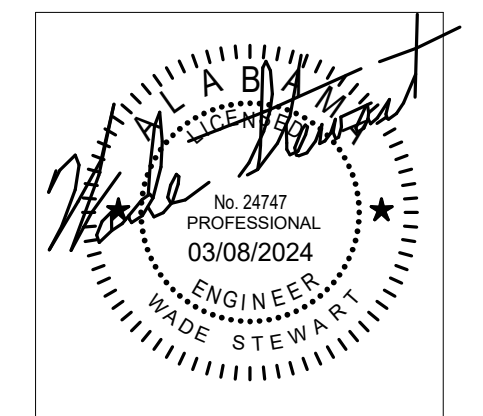
NON-PRESSURE PIPING - FLOOR PLAN
1/8" = 1'-0"
NORTH



2 NON-PRESSURE - RISER



KEY PLAN
NORTH

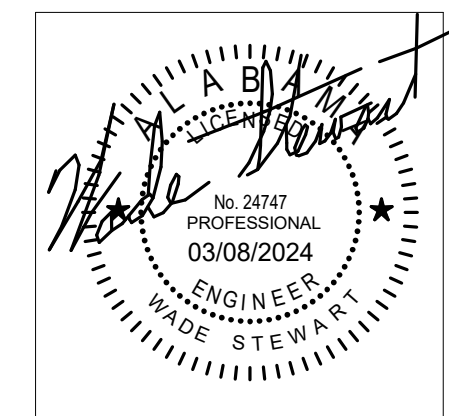


SHEET TITLE:
NON-PRESSURE PIPING
FLOOR PLAN

PROJ. MGR.: SMC
DRAWN: ADH
DATE: MARCH 8, 2024
REVISIONS:

JOB NO. 23-92
SHEET NO. P1.1
3 OF 5

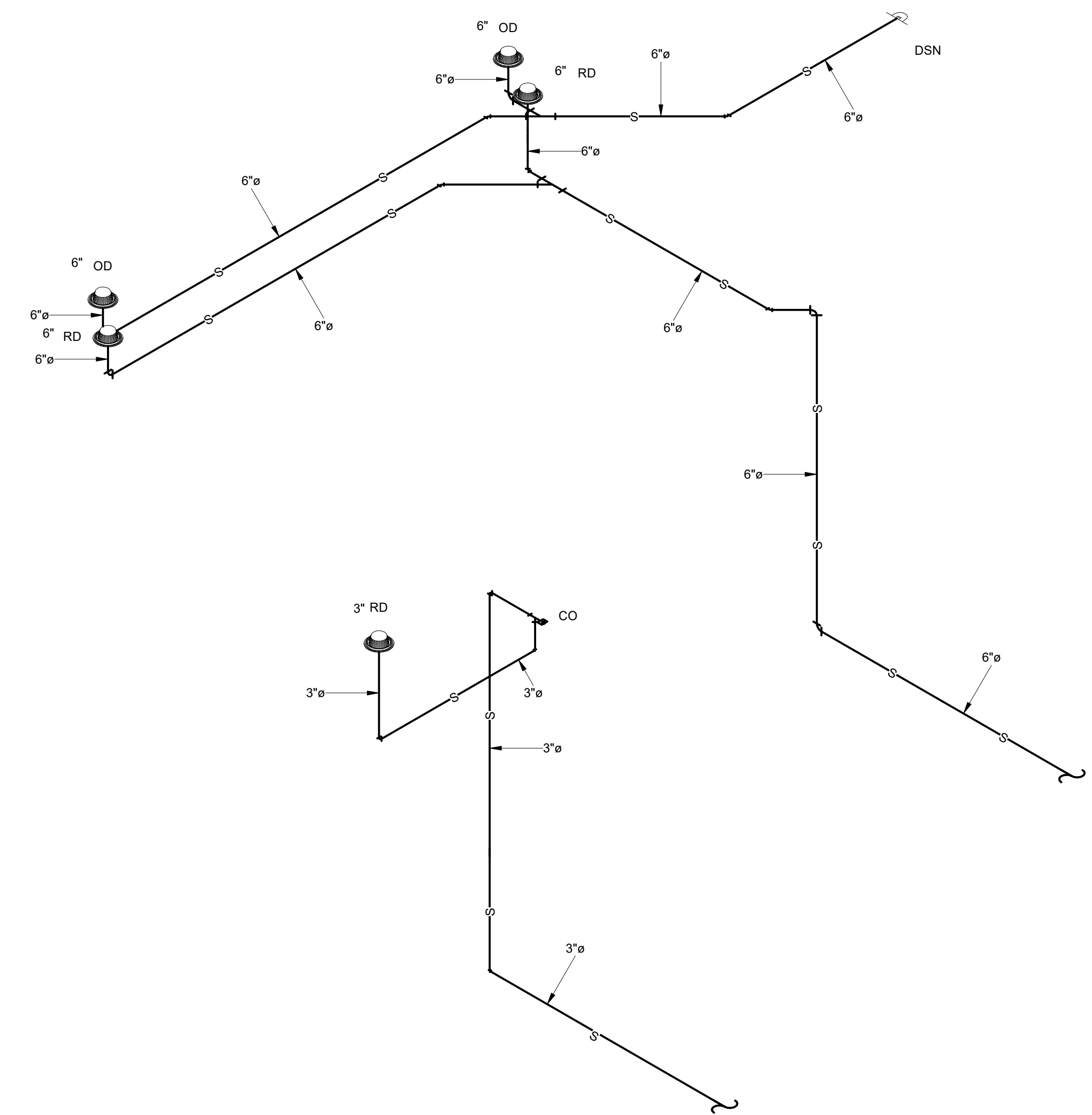
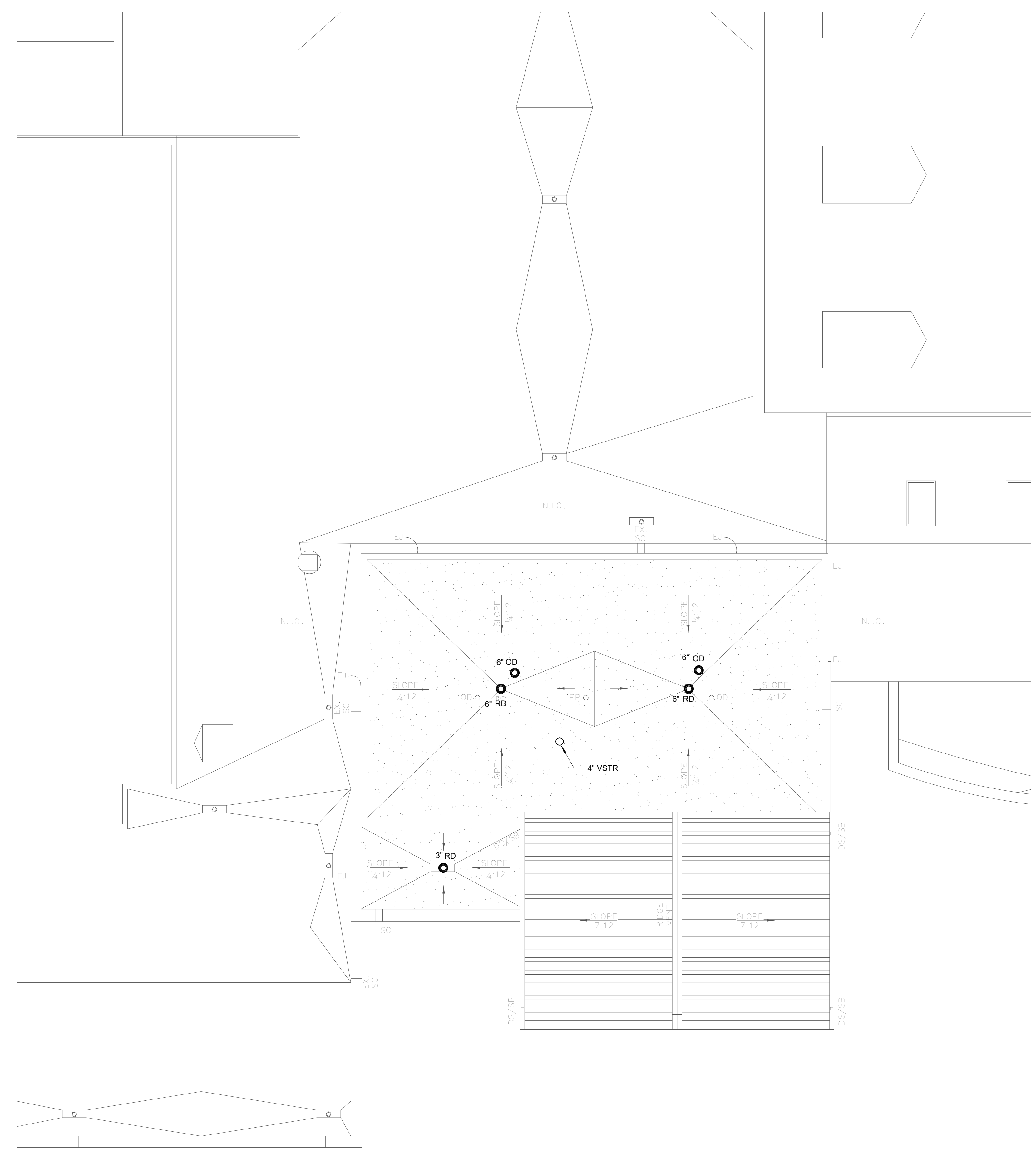
OFFICE ADDITION TO
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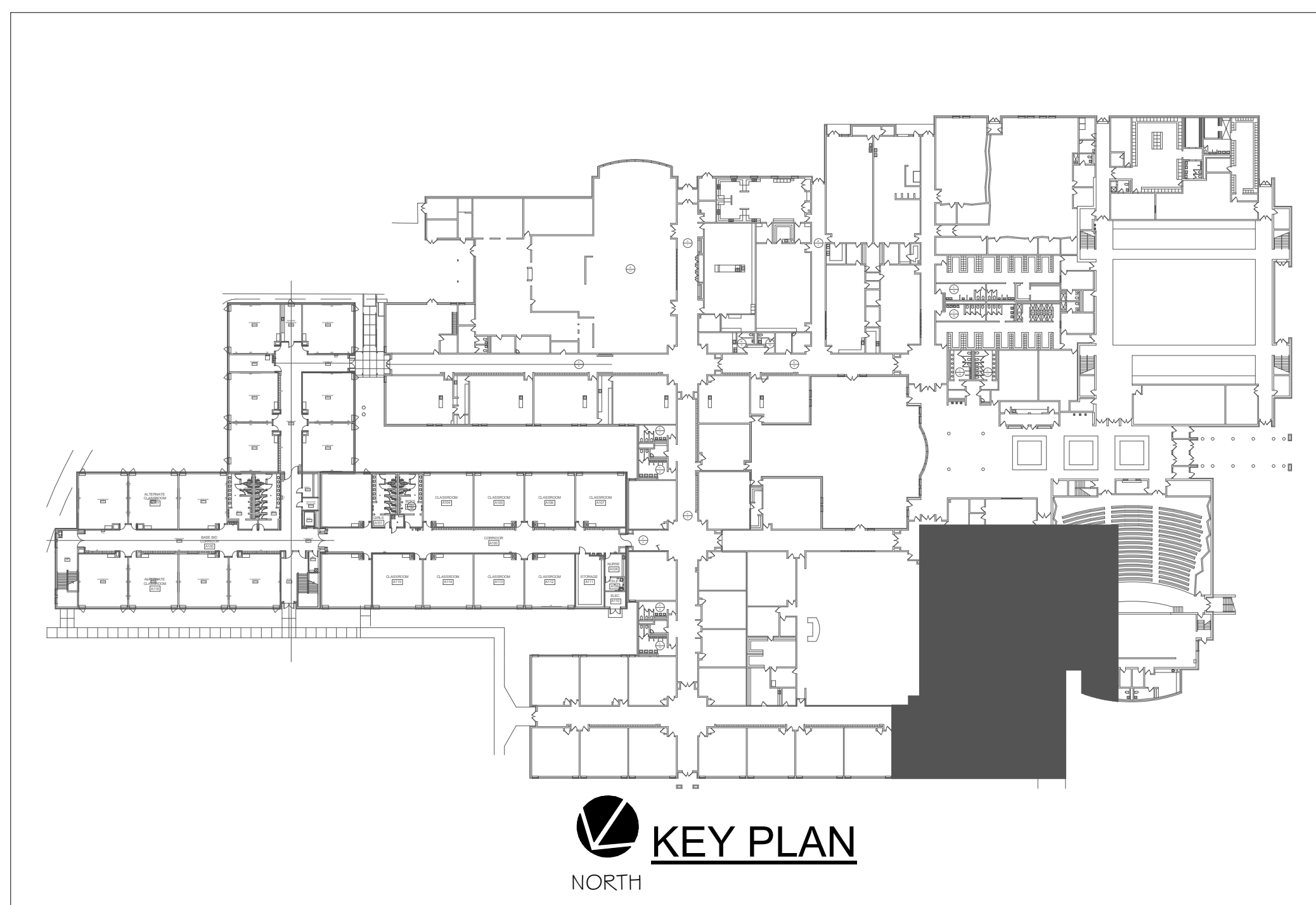
SHEET TITLE:
 NON-PRESSURE PIPING ROOF PLAN

PROJ. MGR.: SMC
 DRAWN: ADH
 DATE: MARCH 8, 2024
 REVISIONS:

JOB NO. 23-92
 SHEET NO. P1.2
 4 OF 5

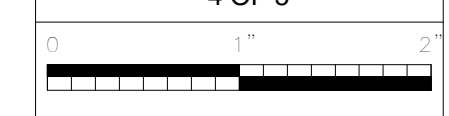


2 STORM - RISER



1 NON-PRESSURE PIPING - ROOF PLAN
 1/8" = 1'-0"
 NORTH

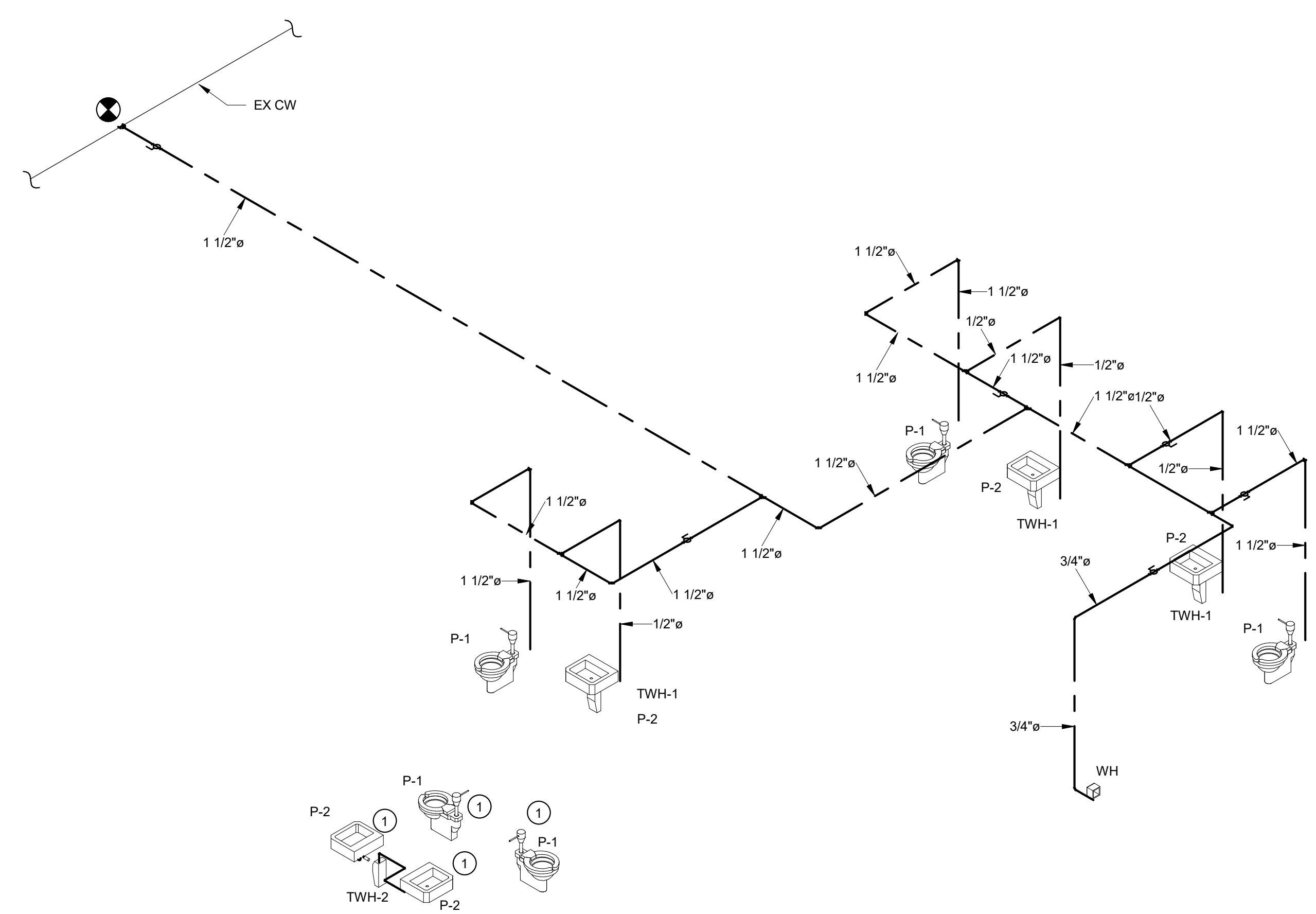
KEY PLAN
 NORTH



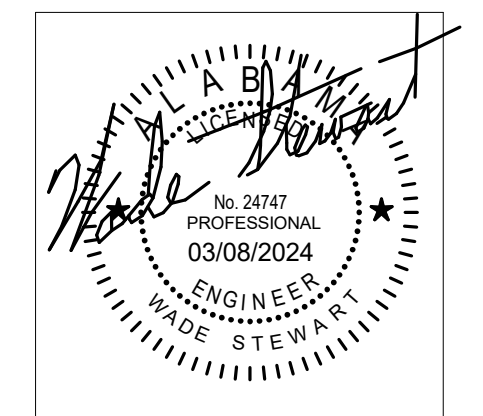
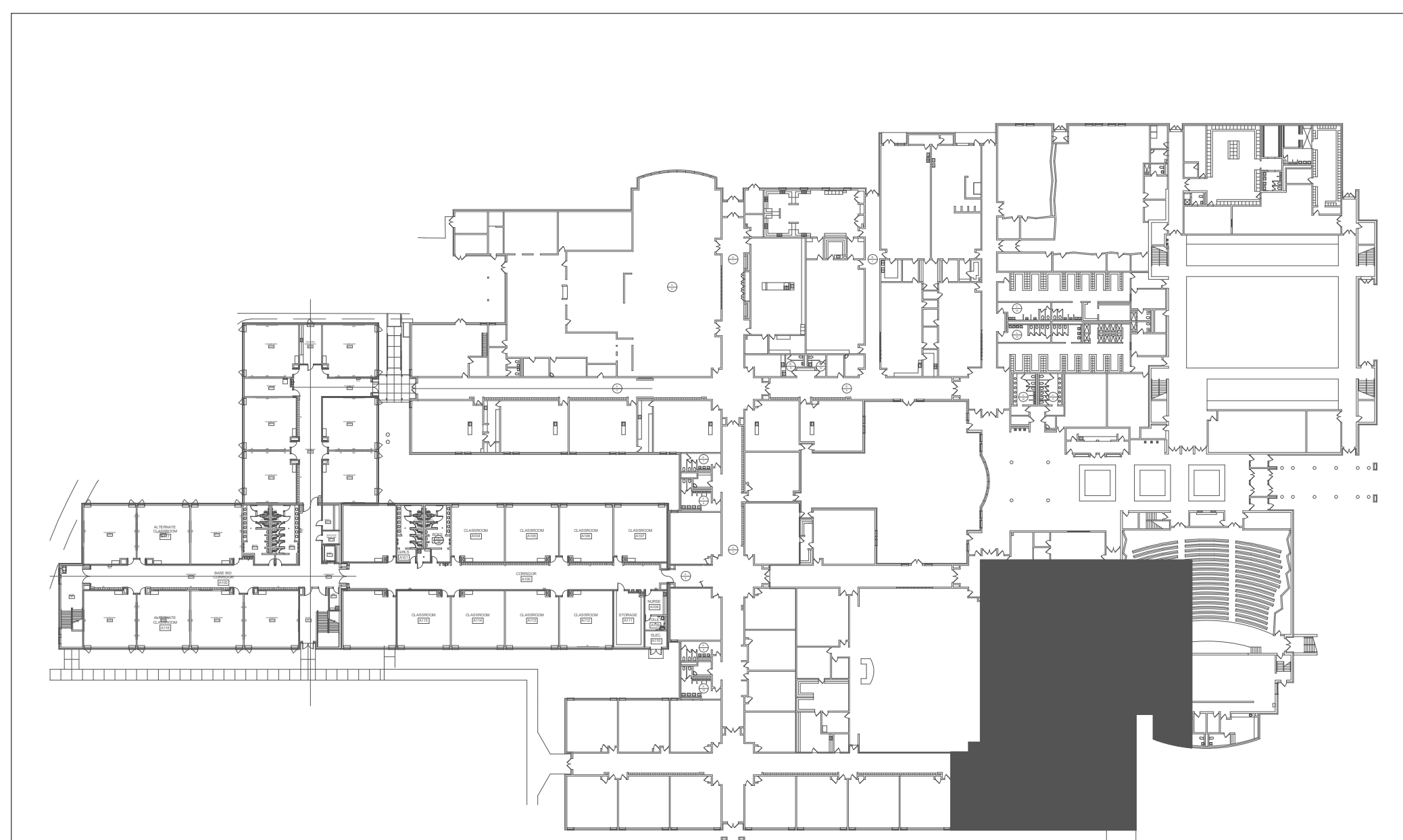


PRESSURE KEY NOTES

① CONNECT TO EX CW IN CHASE



2 PRESSURE - RISER



SHEET TITLE:
PRESSURE PIPING FLOOR PLAN

PROJ. MGR.: SMC
DRAWN: ADH
DATE: MARCH 8, 2024
REVISIONS:

DUCTWORK LEGEND

(CFM) S	SUPPLY DIFFUSER
(CFM) R	RETURN GRILLE
(CFM) E	EXHAUST GRILLE
(CFM) T	TRANSFER AIR GRILLE
(CFM) SR	SIDEWALL REGISTER
o	ROUND DUCT SYMBOL
W X H	RECTANGULAR DUCT (WIDTH X HEIGHT)
---	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO REMAIN.
---	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO BE REMOVED.
	RECTANGULAR SUPPLY DUCT TURNING UP
	RECTANGULAR SUPPLY AIR DUCT TURNING DOWN
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN
	ROUND DUCT TURNING DOWN
	ROUND DUCT TURNING UP
	MAXIMUM 5' FLEXIBLE DUCT ALL BRANCH DUCTS
	RECTANGULAR 90° ELBOW WITH TURNING VANES FOR SUPPLY.
	RISE OR DROP IN DUCT
	RECTANGULAR BRANCH OFF OF RECTANGULAR DUCT WITH MANUAL DAMPER
	CONICAL SPIN-IN WITH MANUAL DAMPER
	MD MANUAL DAMPER
	FD FIRE DAMPER (PROVIDE ACCESS DOOR)
	AD AUTOMATIC DAMPER
	SFD COMBINATION SMOKE/FIRE DAMPER (PROVIDE ACCESS DOOR)
	T TEMPERATURE SENSOR
	CONNECT TO EXISTING, FIELD VERIFY EXACT SIZE AND LOCATION.

HVAC ABBREVIATIONS

A	AMPS
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
AMB.	AMBIENT
ARCH.	ARCHITECTURAL
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
DN.	DOWN
*F	DEGREES FAHRENHEIT
ΔP	CHANGE IN PRESSURE
ΔT	CHANGE IN TEMPERATURE
DIA.	DIAMETER
EA	EXHAUST AIR
ENT.	ENTERING
EAT	ENTERING AIR TEMPERATURE
EMG	EXPANDED METAL GRILLE
EWT	EXTERNAL WATER TEMPERATURE
E.S.P.	EXTERNAL STATIC PRESSURE
EX.	EXISTING
EXT.	EXTERNAL
FFM	FEET PER MINUTE
FT.	FEET
F.V.	FACE VELOCITY
GAL.	GALLONS
GPM	GALLONS PER MINUTE
H	HEIGHT
HP	HORSEPOWER
IN.	INCHES
I.D.	INSIDE DIAMETER
KW	1000 WATTS
L	LENGTH
LBS.	POUNDS
LRA	LOCKED ROTOR AMPS
L.V.G.	LEAVING
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MAX.	MAXIMUM
MAT	MIXED AIR TEMPERATURE
MBH	1000 BTUH
MCA	MINIMUM CIRCUIT AMPACITY
MIN.	MINIMUM
MOC.P	MAXIMUM OVER CURRENT PROTECTION
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
NPLV	NON-STAND PART LOAD VALUE
OSA	OUTSIDE AIR
O.D.	OUTSIDE DIAMETER
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ATMOSPHERIC
PSIG	PSI GAUGE
RA	RETURN AIR
RAT	RETURN AIR TEMPERATURE
RH	RELATIVE HUMIDITY
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
T.S.P.	TOTAL STATIC PRESSURE
TD	TRANSFER DUCT
TOD	TOP OF DUCT
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLUME
V/Ø/Hz	VOLTS/PHASE/HERTZ
W.G.	WATER GAGE
W	WIDTH
WB	WET BULB
(X)	EXISTING

HVAC CONTROLS LEGEND

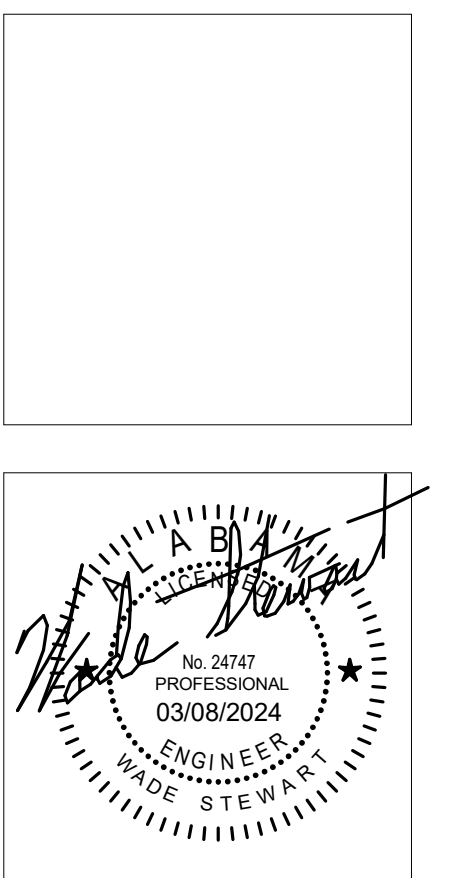
	TEMPERATURE SENSOR
	HUMIDITY SENSOR
	120V HVAC CONTROLS POWER
	AVERAGING TEMPERATURE SENSOR
	DUCT MOUNTED HUMIDITY SENSOR
	ANALOG OUTPUT
	ANALOG INPUT
	DIGITAL OUTPUT
	DIGITAL INPUT
	DUCT MOUNTED SMOKE DETECTOR. SMOKE DETECTOR FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR. INSTALLED IN DUCT BY MECHANICAL CONTRACTOR.
	DUCT STATIC PRESSURE SENSOR
	DIFFERENTIAL PRESSURE SENSOR
	INTERLOCK WITH FIRE ALARM SYSTEM
	CURRENT TRANSDUCER
	DIRECTION OF FLOW
	AIR FLOW MONITOR. (PROVIDE ACCESS DOOR AT EACH AIR FLOW MONITOR.)

HVAC GENERAL NOTES

- MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND SUBJECT TO REQUIREMENTS OF ARCHITECTURAL DRAWINGS AND CONDITIONS EXISTING IN THE FIELD. MECHANICAL DRAWINGS INDICATE GENERALLY THE LOCATION OF COMPONENTS AND ARE NOT INTENDED TO SHOW ALL FITTINGS OR ALL DETAILS OF THE WORK TO BE PERFORMED.
- DETAIL THE DRAWINGS CLOSELY. COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS OF SYSTEM COMPONENTS.
- COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.
- MAKE NO CHANGES WITHOUT THE ARCHITECT'S WRITTEN PERMISSION. IN CASE OF DOUBT, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING WITH WORK. FAILURE TO FOLLOW THIS INSTRUCTION SHALL MAKE THE CONTRACTOR LIABLE FOR DAMAGE TO OTHER WORK AND RESPONSIBLE FOR REMOVING AND REPAIRING DEFECTIVE OR MISLOCATED WORK IN PROPER MANNER.
- DO NOT SCALE DRAWINGS TO LOCATE DIFFUSERS AND EQUIPMENT. COORDINATE WITH NEW AND EXISTING LIGHTING, ELECTRICAL CONDUIT, AND ALL EXISTING FIELD CONDITIONS.
- PRIOR TO PREPARING SUBMITTALS, VERIFY ALL EQUIPMENT VOLTAGES WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT PRIOR TO ORDERING EQUIPMENT. ANY FAILURE TO DO SO WILL MAKE THE MECHANICAL CONTRACTOR RESPONSIBLE FOR ANY EQUIPMENT ORDERED WITH THE INCORRECT VOLTAGE.
- PROTECT MECHANICAL EQUIPMENT FROM DAMAGE DURING CONSTRUCTION. WHEN INSTALLATION IS COMPLETE, CLEAN EQUIPMENT AS REQUIRED AND PROVIDE ALL NEW FILTERS.
- INSTALL ALL EQUIPMENT TO PROVIDE NORMAL SERVICE ACCESS TO ALL COMPONENTS. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS CONFLICT WITH CONTRACT DOCUMENTS, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING.
- FURNISH ACCESS DOORS FOR VALVES, FIRE DAMPERS, DAMPERS, CONTROLS, AIR VENTS, TRAP CLEAN OUTS, AND OTHER ITEMS LOCATED ABOVE NON-LIFTOUT CEILINGS OR BEHIND PARTITIONS OR WALLS. PROVIDE FIRE DAMPERS IN DUCTWORK, GRILLES, AND REGISTERS WITH FIRE RATING EQUAL TO RATING OF WALL OR CEILING. ALL FIRE DAMPERS MAY OR MAY NOT BE SHOWN ON MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL FIRE RATED WALL AND CEILING LOCATIONS AND RATINGS WITH ARCHITECTURAL DRAWINGS.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS (SEE SPECIFICATIONS).
- MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120 V CONTROLS POWER TO NECESSARY CONTROL PANELS.
- MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120 V CONTROL POWER FOR VAV TERMINAL UNIT CONTROLS, AUTOMATIC CONTROL VALVES, AND AUTOMATIC DAMPER ACTUATORS.
- PROVIDE ALL NECESSARY RELAYS, SWITCHES, SENSORS, LOW VOLTAGE CONTROL WIRING, ACTUATORS, ETC. FOR A COMPLETE AND FUNCTIONAL BAS CONTROLS SYSTEM.
- COORDINATE EXACT LOCATION OF ALL WALL MOUNTED DEVICES (THERMOSTATS, HUMIDITY SENSORS, ETC.) WITH ARCHITECT PRIOR TO ROUGH IN. ALL WALL MOUNTED DEVICES SHALL BE INSTALLED 48" A.F.F. TO THE TOP OF THE DEVICE.
- COORDINATE EXACT LOCATION ON WALL OF ALL WALL MOUNTED SUPPLY AND RETURN GRILLES/REGISTERS SHALL BE PAINTED BY OTHERS.
- COORDINATE ALL DUCT DETECTORS, LOW VOLTAGE WIRING TO ASSOCIATED PROGRAMMING WITH FIRE ALARM CONTRACTOR TO PROVIDE A FULLY FUNCTIONING SYSTEM. VERIFY PROPER OPERATION OF ALL EXISTING DUST SMOKE DETECTORS. REPLACE AS REQUIRED. UPON SENSING SMOKE THE DUCT DETECTOR SHALL SHUT DOWN THE RESPECTIVE UNIT.

AIR DEVICE LEGEND																									
MARK	EXAMPLE	DESCRIPTION	SIZE	BASIS OF DESIGN																					
"S"		PLAQUE FACE CEILING DIFFUSER WITH ROUND NECK. ALL CEILING DIFFUSERS TO HAVE A 24X24 CEILING PANEL (EXCEPT WHERE SHOWN AS 12X12). ALL CEILING DIFFUSERS TO HAVE ROUND NECKS.	CFM SHOWN ON PLANS. NECK & RUN-OUT SIZED PER THE FOLLOWING: <table border="1"> <thead> <tr> <th>CFM</th> <th>NECK SIZE</th> <th>RUN-OUT SIZE</th> </tr> </thead> <tbody> <tr><td>0 - 100</td><td>6"</td><td>6"</td></tr> <tr><td>101 - 200</td><td>8"</td><td>8"</td></tr> <tr><td>201 - 300</td><td>10"</td><td>10"</td></tr> <tr><td>301 - 500</td><td>12"</td><td>12"</td></tr> <tr><td>501 - 750</td><td>15"</td><td>15"</td></tr> <tr><td>751 - 1000</td><td>18"</td><td>18"</td></tr> </tbody> </table>	CFM	NECK SIZE	RUN-OUT SIZE	0 - 100	6"	6"	101 - 200	8"	8"	201 - 300	10"	10"	301 - 500	12"	12"	501 - 750	15"	15"	751 - 1000	18"	18"	TITUS OMNI
CFM	NECK SIZE	RUN-OUT SIZE																							
0 - 100	6"	6"																							
101 - 200	8"	8"																							
201 - 300	10"	10"																							
301 - 500	12"	12"																							
501 - 750	15"	15"																							
751 - 1000	18"	18"																							
"R", "E"		CEILING MOUNTED RETURN (R), EXHAUST (E), OR TRANSFER (T) EGGRATE GRILLE. ALL GRILLES IN A LAY-IN CEILING TO HAVE A 24X24 CEILING PANEL.	CFM SHOWN ON PLANS. NECK SIZED PER THE FOLLOWING: <table border="1"> <thead> <tr> <th>CFM</th> <th>NECK SIZE</th> </tr> </thead> <tbody> <tr><td>0 - 100</td><td>6x6</td></tr> <tr><td>101 - 200</td><td>8x8</td></tr> <tr><td>201 - 350</td><td>10x10</td></tr> <tr><td>351 - 500</td><td>12x12</td></tr> <tr><td>501 - 750</td><td>14x14</td></tr> <tr><td>751 - 950</td><td>16x16</td></tr> <tr><td>951 - 1200</td><td>18x18</td></tr> <tr><td>1201 - 1500</td><td>20x20</td></tr> <tr><td>1501 - 2000</td><td>24x24</td></tr> </tbody> </table>	CFM	NECK SIZE	0 - 100	6x6	101 - 200	8x8	201 - 350	10x10	351 - 500	12x12	501 - 750	14x14	751 - 950	16x16	951 - 1200	18x18	1201 - 1500	20x20	1501 - 2000	24x24	TITUS 50F	
CFM	NECK SIZE																								
0 - 100	6x6																								
101 - 200	8x8																								
201 - 350	10x10																								
351 - 500	12x12																								
501 - 750	14x14																								
751 - 950	16x16																								
951 - 1200	18x18																								
1201 - 1500	20x20																								
1501 - 2000	24x24																								
NOTES:																									
1. SEE SPECIFICATIONS FOR FINISH AND CONSTRUCTION MATERIAL FOR EACH AIR DEVICE.																									
2. COORDINATE WITH ARCHITECT'S CEILING PLAN FOR LAY-IN OR SURFACE MOUNTING OF CEILING MOUNTED AIR DEVICES.																									
3. COORDINATE LOCATIONS OF CEILING MOUNTED AIR DEVICES WITH LIGHT FIXTURES, SPRINKLER HEADS, AND OTHER CEILING MOUNTED DEVICES. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS.																									

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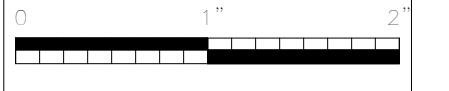
SHEET TITLE:
MECHANICAL LEGENDS & NOTES

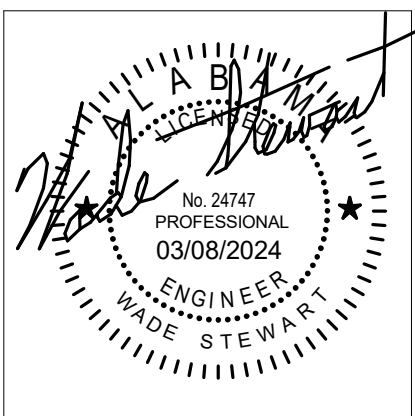
PROJ. MGR.: JWS
DRAWN: CAV
DATE: MARCH 8, 2024

REVISIONS

JOB NO. **23-92**

SHEET NO.
M0.1
1 OF 7





SHEET TITLE:
 MECHANICAL SCHEDULES

PROJ. MGR.: JWS
 DRAWN: CAV
 DATE: MARCH 8, 2024

REVISIONS

JOB NO. **23-92**
 SHEET NO.

PACKAGED ROOFTOP UNIT - ELECTRIC HEAT

TYPE: PACKAGED AC UNIT WITH AUXILLARY ELECTRIC HEAT.

NOTES:
 1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.
 2. UNIT SHALL BE ASHRAE 90.1 - 2013 COMPLIANT.

ACCESSORIES:
 1. 2" THICK THROWAWAY FILTER, 30% EFFICIENT.
 2. CONDENSER COIL GUARD.
 3. BELT DRIVE EVAPORATOR FAN.
 4. HEAD PRESSURE CONTROL TO 10°F AMBIENT.
 5. HINGED ACCESS DOORS.
 6. STAINLESS STEEL DRAIN PAN.

7. OSA INTAKE HOOD WITH AUTO DAMPER, ECONOMIZER, DIFFERENTIAL ENTHALPY CONTROLS, AND BAROMETRIC RELIEF.
 8. HOT GAS REHEAT COIL.
 9. SINGLE ZONE VAV.

MARK	SUPPLY FAN			MIN OSA	MAX OSA	ENTERING AIR TEMP.		DX COOLING CAPACITY			ELECTRICAL					ELECTRIC HEAT		EER	WEIGHT	ACCESSORIES	BASIS OF DESIGN TRANE
	CFM	"W.G. E.S.P."	MOTOR HP			D.B. (°F)	W.B. (°F)	TOTAL (MBH)	SENS (MBH)	NOM. TONS	V	PH	Hz	MCA	MOCP	kW	STAGES				
RTU-105	1200	1"	3/4 HP	150	150	77.1	64.5	34.8	25.9	3	208	3	60	42	45	9	2	13.0	780	1,2,3,6,7,8,	THC

PACKAGED ROOFTOP UNIT - HEAT PUMP

TYPE: PACKAGED AC UNIT, HEAT PUMP WITH AUXILLARY ELECTRIC HEAT.

NOTES:
 1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.
 2. UNIT SHALL BE ASHRAE 90.1 - 2013 COMPLIANT.

ACCESSORIES:
 1. 2" THICK THROWAWAY FILTER, 30% EFFICIENT.
 2. CONDENSER COIL GUARD.
 3. BELT DRIVE EVAPORATOR FAN.
 4. HEAD PRESSURE CONTROL TO 10°F AMBIENT.
 5. HINGED ACCESS DOORS.
 6. STAINLESS STEEL DRAIN PAN.

7. OSA INTAKE HOOD WITH AUTO DAMPER, ECONOMIZER, DIFFERENTIAL ENTHALPY CONTROLS, AND BAROMETRIC RELIEF.
 8. HOT GAS REHEAT COIL.
 9. SINGLE ZONE VAV.

MARK	SUPPLY FAN			MIN OSA	MAX OSA	ENTERING AIR TEMP.		DX COOLING CAPACITY			TOTAL HEATING CAPACITY (MBH)	ELECTRICAL					ELECTRIC HEAT		EER	WEIGHT	ACCESSORIES	BASIS OF DESIGN TRANE
	CFM	"W.G. E.S.P."	MOTOR HP			D.B. (°F)	W.B. (°F)	TOTAL (MBH)	SENS (MBH)	NOM. TONS	V	PH	Hz	MCA	MOCP	kW	STAGES					
RTU-125	800	0.5"	1/2 HP	20	20	75	62.9	23.8	16.6	2	22.8	208	1	60	61	70	6	1	11	550	1,2,4,7,	4WCZ

AIR PURIFICATION SCHEDULE

FLOW	GPS MODEL	GPS QUANTITY	MINIMUM NEEDLE SPACING	VOLTAGE	MOUNTING LOCATION	MINIMUM ION DENSITY (IONS/CC)
CV	GPS-FC	1	1 EVERY 3/4"	208	UNIT SERVED	40 MILLION PER 0.75"

1. BASIS OF DESIGN: GLOBAL PLASMA SOLUTIONS: APPROVED EQUALS BY PHENOMENAL AIRE, ACTIVE AIR, AIRGENICS AND BIOKGEN SUBJECT TO SPECIFICATION COMPLIANCE.
 2. MOUNT GPS-FC TO AIR INLET SIDE OF COOLING COIL.
 3. IF CONTRACTOR SUBSTITUTES BASIS OF DESIGN WITH ANOTHER MANUFACTURER, CONTRACTOR SHALL COORDINATE ALL ELECTRICAL AND MECHANICAL CHANGES.
 4. BI-POLAR IONIZATION SYSTEMS REQUIRING PERISHABLE GLASS TUBES ARE NOT ACCEPTABLE.
 5. ALL MANUFACTURERS MUST PASS UL-867-2007 OZONE CHAMBER TESTING BY EITHER US OR ETL.
 6. PROVIDE STAND ALONE ION DETECTOR TO COMMUNICATE WITH THE BAS. SYSTEMS WITHOUT ION DETECTORS SHALL NOT BE ACCEPTABLE.
 7. IONIZATION BAR TO HAVE A MINIMUM OF 1 NEEDLEPOINT EVERY 0.75" OF COIL WIDTH. SYSTEMS WITH NEEDLES FURTHER APART SHALL NOT BE ACCEPTABLE.
 8. IONIZATION SYSTEMS WITH MULTIPLE ION MODULES MOUNTED TO A BAR SHALL NOT BE AN ACCEPTABLE SUBSTITUTE.
 9. IONIZATION SYSTEMS THAT DO NOT USE EPOXY TO PROTECT THE ION CIRCUITRY SHALL NOT BE ACCEPTABLE.
 10. IONIZATION OUTPUT SHALL BE A MINIMUM OF 40 MILLION IONS/CC FOR EVERY 0.75" OF COIL WIDTH.

*PROVIDE FOR ALL RTU'S AND IHP'S

INDOOR HEAT PUMP (DUCTLESS SPLIT SYSTEM) SCHEDULE

TYPE: CEILING MOUNTED CASSETTE

NOTES:
 1. AIRFLOW RATED AT HIGH FAN SPEED.
 2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT.
 3. COOLING CAPACITY RATED AT 95°F.
 4. HEATING CAPACITY RATED AT 47°F.

ACCESSORIES:
 1. 3-POLE DISCONNECT SWITCH.
 2. HARD WIRED UNIT CONTROLLER.
 3. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS.
 4. CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD.
 5. BRANCH KNOCKOUT FOR OSA INTAKE.

MARK	TYPE	AIRFLOW	COOLING CAPACITY	HEATING CAPACITY	DIMENSIONS (WxLxH)	ELECTRICAL			ACCESSORIES	BASIS OF DESIGN TRANE	
						V	PH	Hz			
IHP-126	1	600	18,000 BTUH	23,000 BTUH	33" X 33" X 10"	208	1	60	1	1,2,3,4,5	TPLA
IHP-A100	1	600	18,000 BTUH	23,000 BTUH	33" X 33" X 10"	208	1	60	1	1,2,3,4,5	TPLA
IHP-A110	1	600	18,000 BTUH	23,000 BTUH	33" X 33" X 10"	208	1	60	1	1,2,3,4,5	TPLA

OUTDOOR HEAT PUMP (DUCTLESS SPLIT SYSTEM) SCHEDULE

TYPE: OUTDOOR HEAT PUMP

NOTES:
 1. AIRFLOW RATED AT HIGH FAN SPEED.
 2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT.
 3. COOLING CAPACITY RATED AT 95°F.
 4. HEATING CAPACITY RATED AT 47°F.

5. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING TYPE TAMPER RESISTANT CAPS.

MARK	TYPE	COOLING CAPACITY	HEATING CAPACITY	ELECTRICAL					EFFICIENCY		BASIS OF DESIGN TRANE
				V	PH	Hz	MCA	MOCP	SEER	HSPF	
OHP-126	1	18,000 BTUH	23,000 BTUH	208	1	60	11	15	25	9.2	TRUZ
OHP-A100	1	18,000 BTUH	23,000 BTUH	208	1	60	11	15	25	9.2	TRUZ
OHP-A110	1	18,000 BTUH	23,000 BTUH	208	1	60	11	15	25	9.2	TRUZ

AIR PURIFICATION SCHEDULE (Detailed)

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft)	Zone Max Occupancy	Table 6.1 CA per Occupant (R)	Table 6.1 (R) x (P)	P1 * Rp	A2 * Ra	Table 6.2 CA per person (E)	Outdoor Air to Zone CFM with EC correction (V) x (E)
CONFERENCE-ALLD	Educational Facilities	Conference/Meeting	231.0	2.0	5.0	0.06	10	11	0.8	29

Indoor Contaminants Generated by People & From Outdoors

Contaminant	Maximum Threshold Value (PPM)	Steady State Using the VPP (Predicted) (CA) (Plasma On)	Steady State Using the AQ Method (Reduced) (CA) (Plasma On)	Is Steady State Level Acceptable at Reduced CA Level?	Generation Rate (PPM)	Filtration Effectiveness	Capignat Authority**
Acetone	250.0	0.00143	0.00005	Yes	0.00433	50%	OSHA
Acrylonitrile	25.0	0.00136	0.00119	Yes	0.14121	50%	NIOSH
Benzene	1.0000	0.00022	0.00004	Yes	0.00015	50%	OSHA
CO (Carbon Monoxide)	200.0	0.00021	0.00001	Yes	0.00088	50%	OSHA
Carbon Dioxide**	5000	1107	2489	Yes	262	0%	NIOSH
Chloroform	0.0050	0.00011	0.00000	Yes	0.00003	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	50%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68004	1.68004	Yes	0.00000	0%	NA
Methylene Chloride	25.0	0.00078	0.00002	Yes	0.00000	50%	OSHA
Propene	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Tetrahydrofuran	1.0000	0.00007	0.00000	Yes	0.00001	50%	OSHA
Trichloroethylene	100.0000	0.00007	0.00001	Yes	0.00001	50%	OSHA
Toluene	100.0000	0.00032	0.00009	Yes	0.00021	50%	NIOSH
V.O.C.s (Volatile Organic Compounds)	100.0000	0.00077	0.00002	Yes	0.00008	50%	OSHA
Xylene	100.0000	0.00020	0.00004	Yes	0.00000	50%	OSHA

Building materials and furnishings assumed to have no VOCs and off-gassing to a complete extent. All other models should require user input or review.

Is AQ acceptable at reduced outdoor air level? Yes

FAN SCHEDULE

FAN TYPE: CEILING MOUNTED EXHAUST FAN

FAN ACCESSORIES:
 1. BACKDRAFT DAMPER.
 2. DISCONNECT SWITCH.
 3. ALUMINUM CEILING GRILLE.
 4. 5A-120V FAN SPEED CONTROLLER.
 5. INTERLOCK WITH LIGHT SWITCH.

MARK	FAN TYPE	AIRFLOW (CFM)	E.S.P. (in-wg)	WHEEL SIZE	RPM	MOTOR (HP / W)	ELECTRICAL			ACCESSORIES	BASIS OF DESIGN	
							V	PH	Hz		MANUFACTURER	MODEL
EF-A101	1	70	0.25	7.6"	779	30 W	115 V	1	60	1,2,3,4,5	Loren Cook Company GC	
EF-A107	1	70	0.25	7.6"	779	30 W	115 V	1	60	1,2,3,4,5	Loren Cook Company GC	
EF-A109	1	70	0.25	7.6"	779	30 W	115 V	1	60	1,2,3,4,5	Loren Cook Company GC	

AIR PURIFICATION SCHEDULE (Detailed)

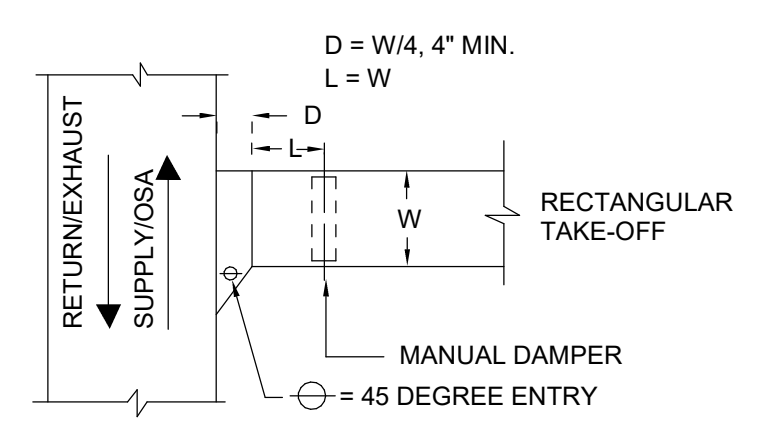
Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft)	Zone Max Occupancy	Table 6.1 CA per Occupant (R)	Table 6.1 (R) x (P)	P1 * Rp	A2 * Ra	Table 6.2 CA per person (E)	Outdoor Air to Zone CFM with EC correction (V) x (E)
PRINCIPAL-ALLD	Educational Facilities	Office Space	805.0	3.0	5.0	0.06	15	10	0.8	24

Indoor Contaminants Generated by People & From Outdoors

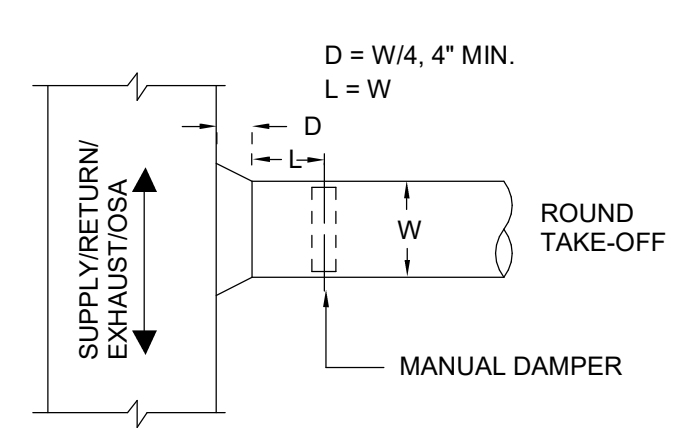
Contaminant	Maximum Threshold Value (PPM)	Steady State Using the VPP (Predicted) (CA) (Plasma On)	Steady State Using the AQ Method (Reduced) (CA) (Plasma On)	Is Steady State Level Acceptable at Reduced CA Level?	Generation Rate (PPM)	Filtration Effectiveness	Capignat Authority**
Acetone	250.0	0.00147	0.00005	Yes	0.00433	50%	OSHA
Acrylonitrile	25.0	0.00136	0.00119	Yes	0.14121	50%	NIOSH
Benzene	1.0000	0.00022	0.00004	Yes	0.00015	50%	OSHA
CO (Carbon Monoxide)	200.0	0.00021	0.00001	Yes	0.00088	50%	OSHA
Carbon Dioxide**	5000	796	818	Yes	262	0%	NIOSH
Chloroform	0.0050	0.00011	0.00000	Yes	0.00003	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	50%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68004	1.68004	Yes	0.00000	0%	NA
Methylene Chloride	25.0	0.00078	0.00002	Yes	0.00000	50%	OSHA
Propene	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Tetrahydrofuran	1.0000	0.00007	0.00000	Yes	0.00001	50%	OSHA
Trichloroethylene	100.0000	0.00007	0.00001	Yes	0.00001	50%	OSHA
Toluene	100.0000	0.00032	0.00009	Yes	0.00021	50%	NIOSH
V.O.C.s (Volatile Organic Compounds)	100.0000	0.00077	0.00002	Yes	0.00008	50%	OSHA
Xylene	100.0000	0.00020	0.00004	Yes	0.00000	50%	OSHA

Building materials and furnishings assumed to have no VOCs and off-gassing to a complete extent. All other models should require user input or review.

Is AQ acceptable at reduced outdoor air level? Yes

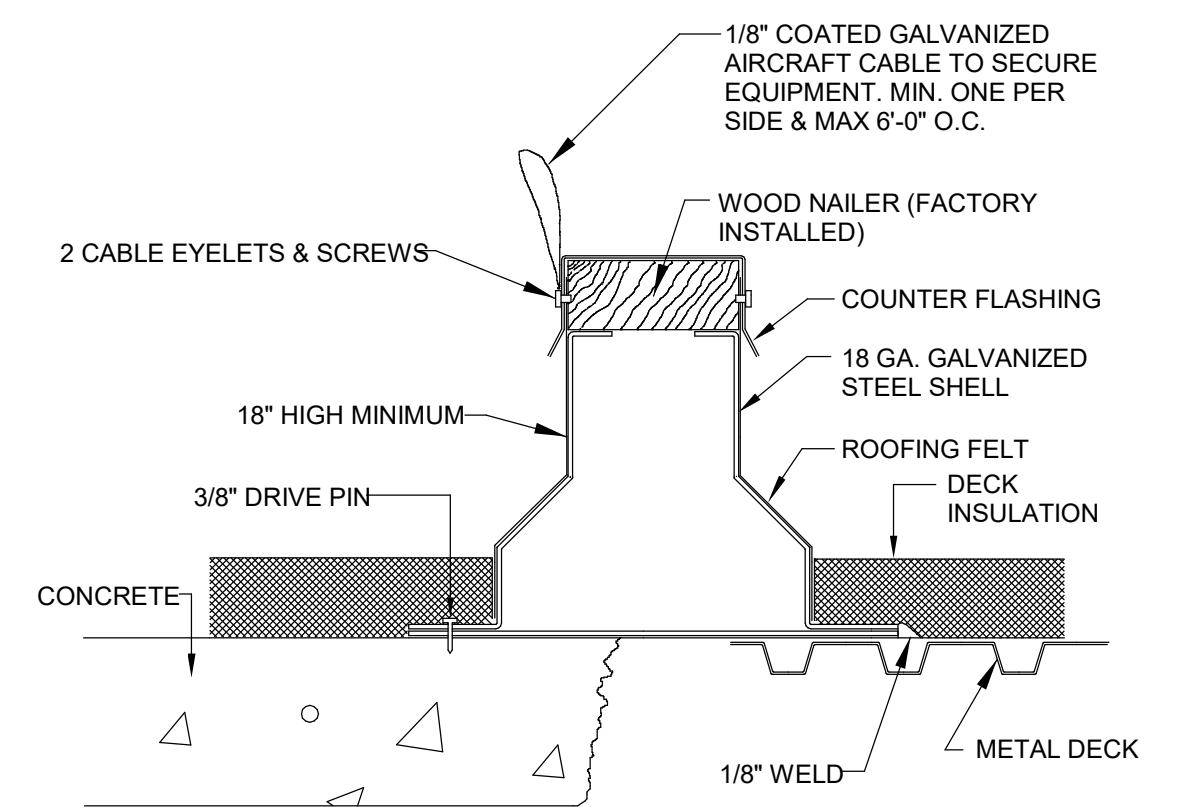


RECTANGULAR DUCT TAKE-OFF
NO SCALE



ROUND DUCT TAKE-OFF
NO SCALE

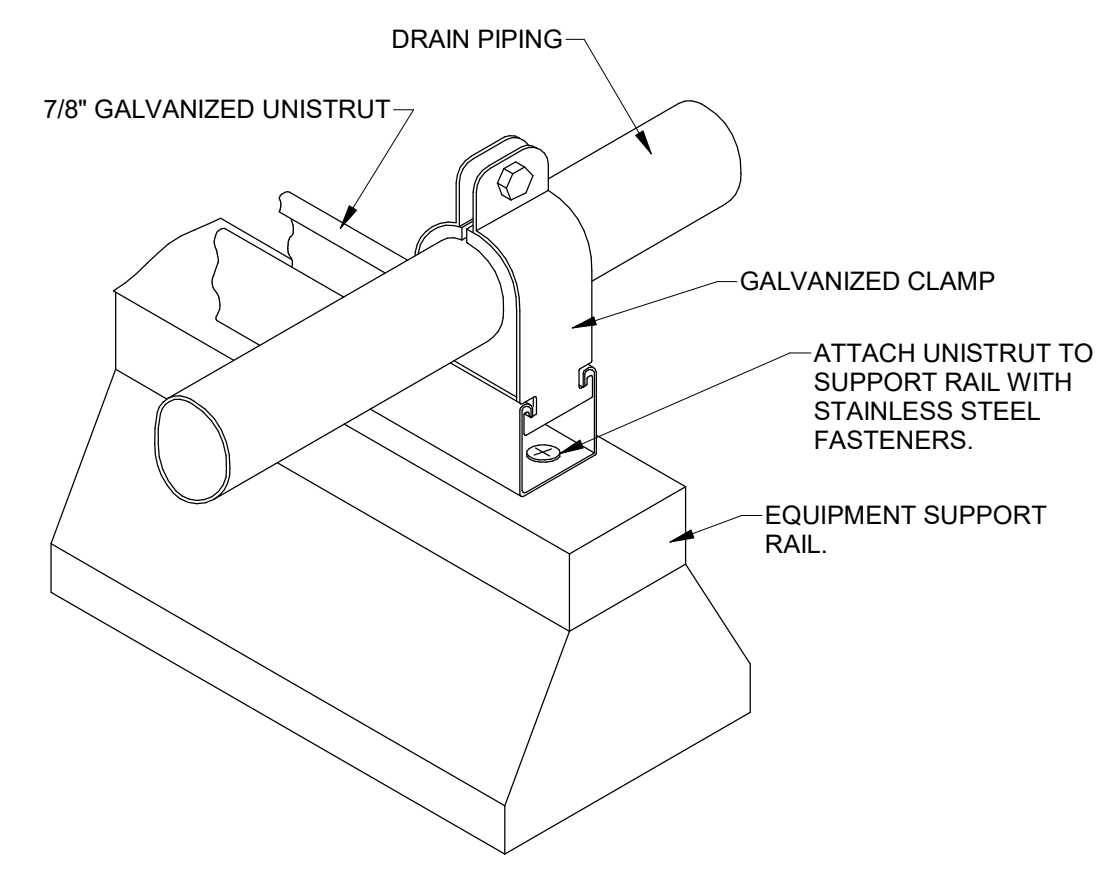
DUCT TAKE-OFF CONNECTION DETAIL
NO SCALE



ANCHOR METHODS:

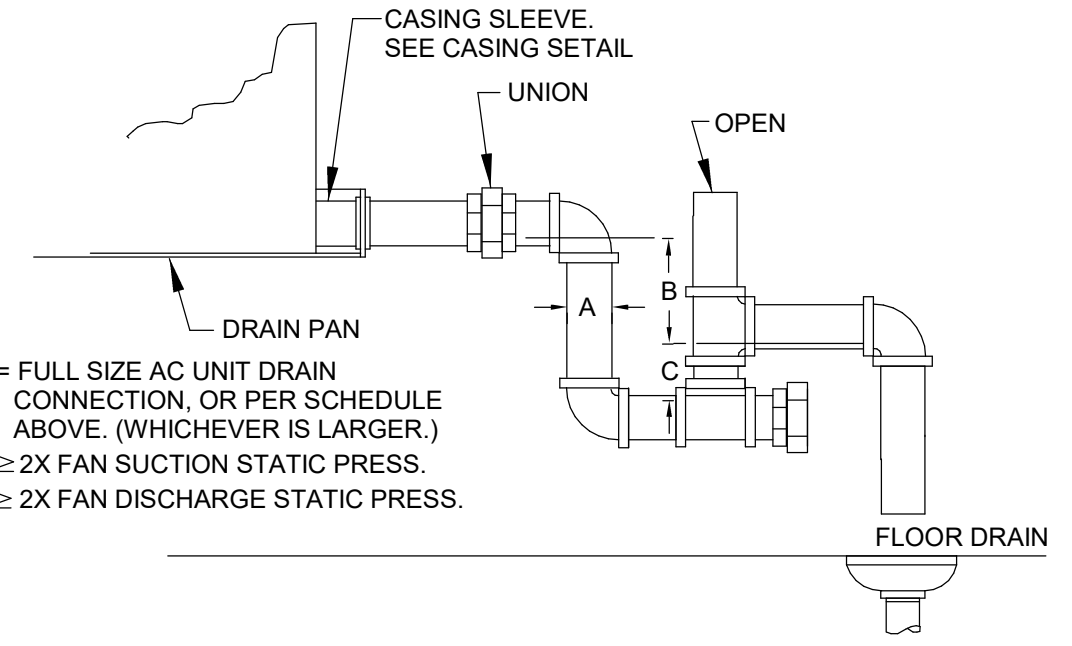
- FOR STEEL STRUCTURES: ANCHOR CURB TO ROOF STRUCTURE WITH 1/4"-14 SELF DRILLING SCREWS. MINIMUM OF 1/2" OF THREADS SHALL BE SHOWING ON THE UNDERSIDE OF THE STRUCTURE. PROVIDE MINIMUM (4) FASTENERS PER SIDE, (TOTAL OF 16), EQUALLY SPACED ON EACH SIDE.
- FOR CONCRETE STRUCTURES: ANCHOR CURB TO ROOF STRUCTURE WITH 3/8" HILT EXPANSION ANCHORS, MINIMUM 2-1/2" ENGAGEMENT. PROVIDE MINIMUM (2) ANCHORS PER SIDE, (TOTAL OF 8), EQUALLY SPACED ON EACH SIDE.

EQUIPMENT ROOF SUPPORT DETAIL
NO SCALE

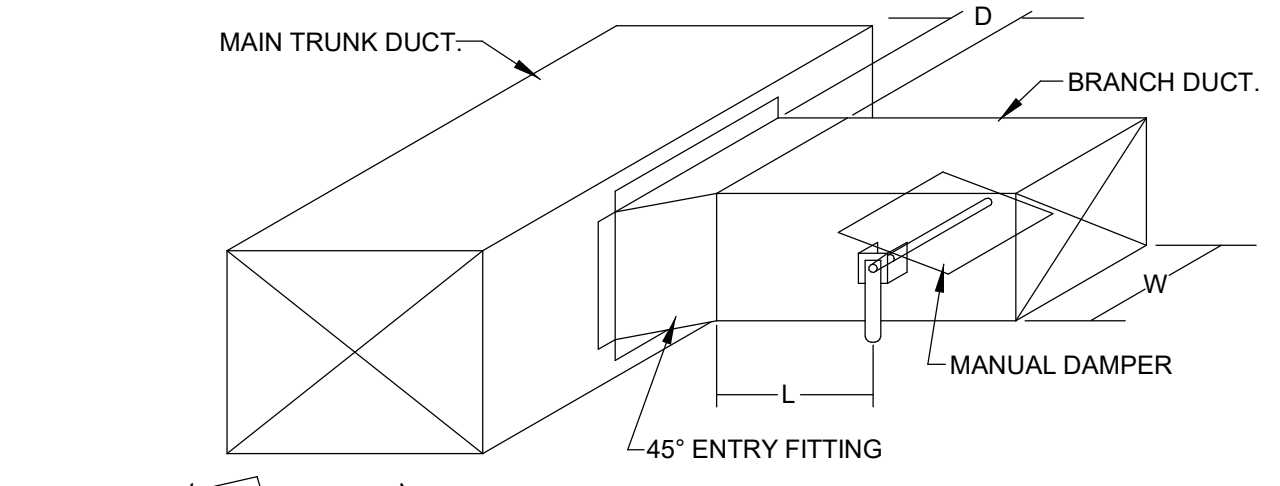


PIPING SUPPORT DETAIL
NO SCALE

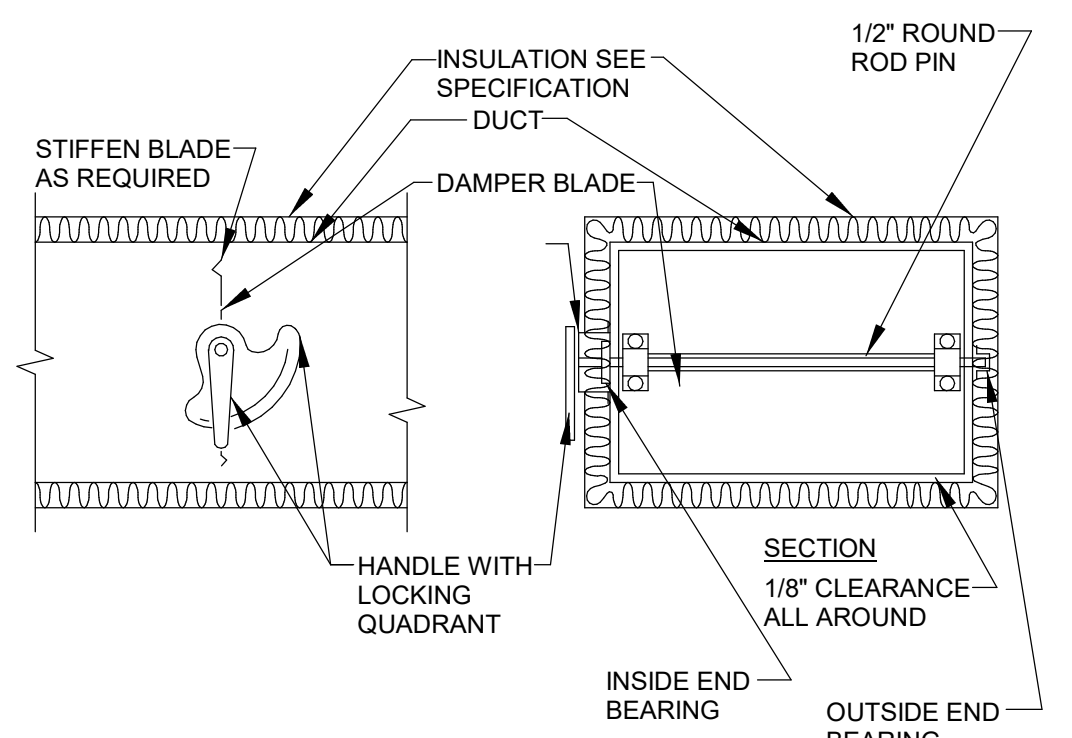
MINIMUM CONDENSATE PIPE SIZE	
AC TONS	MIN. DRAIN SIZE
0 TO 20	1"
21 TO 40	1-1/4"
41 TO 60	1-1/2"
61 TO 100	2"
101 TO 250	3"
251 & LARGER	4"



AC UNIT DRAIN TRAP DETAIL
NO SCALE



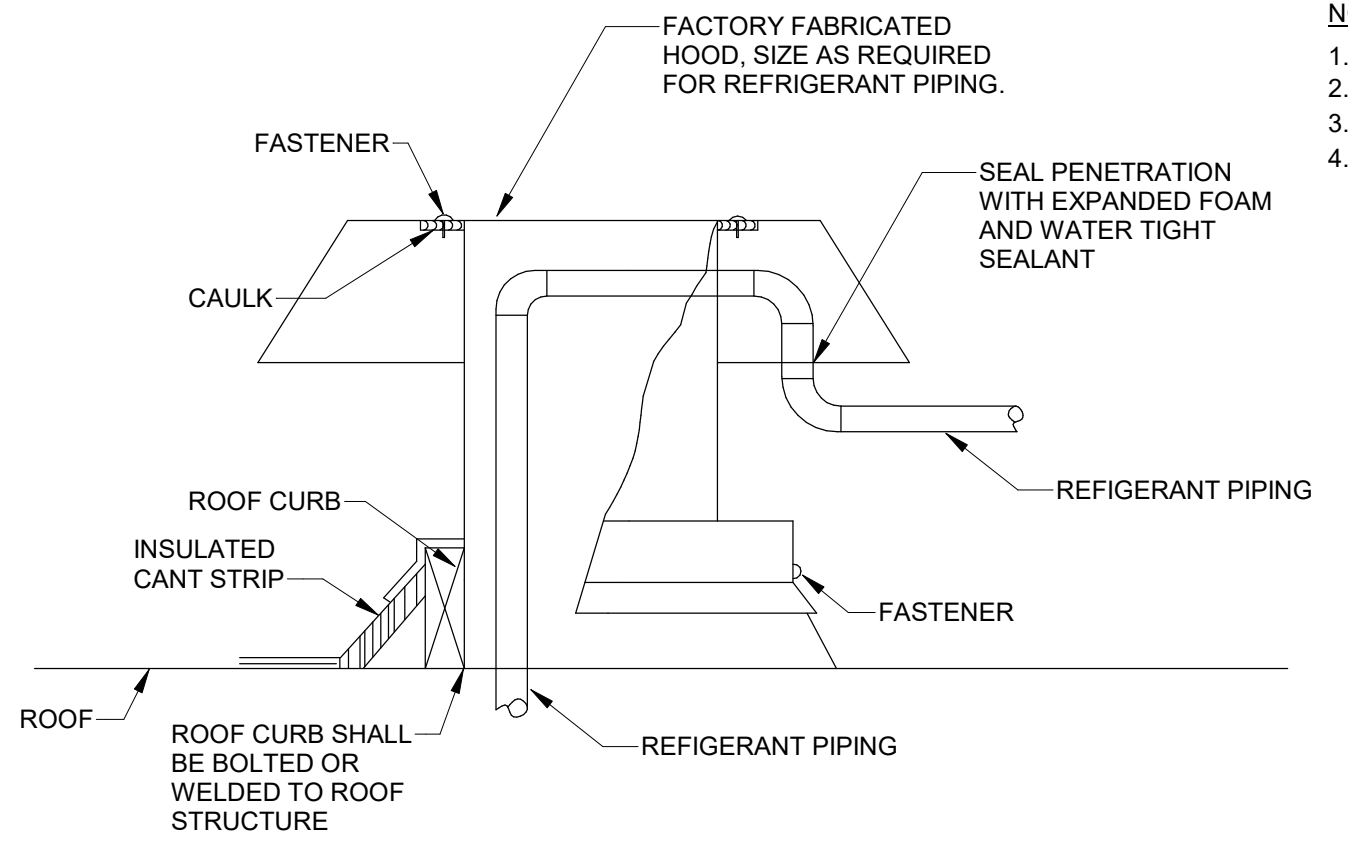
DUCT BRANCH CONNECTION
NO SCALE



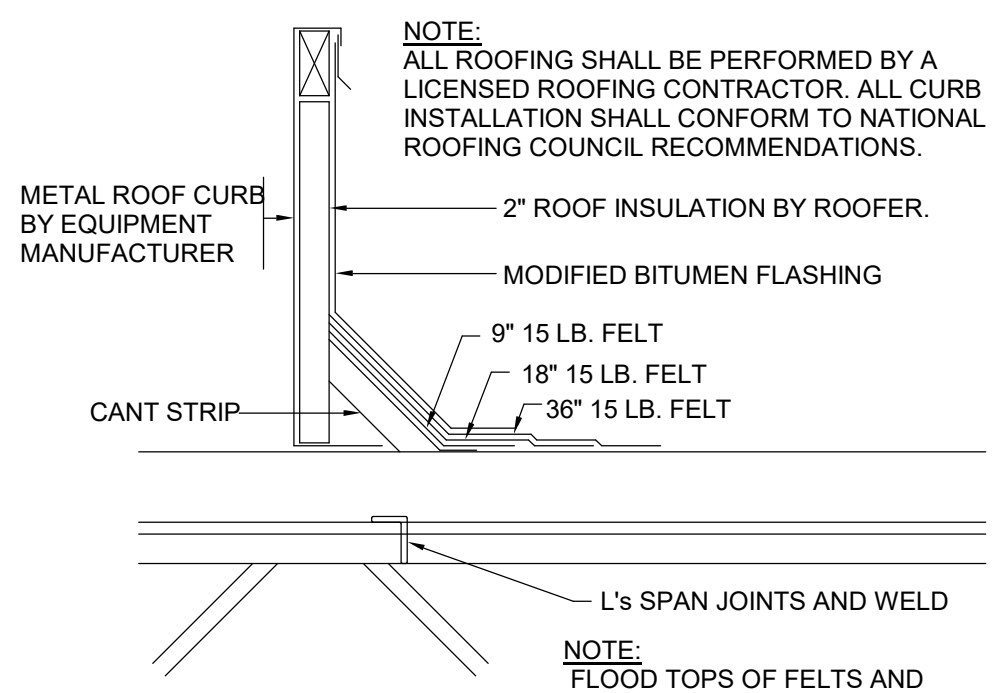
NOTE:

- DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
- DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.
- MANUAL DAMPERS SHALL BE EQUAL TO RUSKIN MD35 (FOR RECTANGULAR DUCTS) AND SHALL BE EQUAL TO RUSKIN MDRS25 (FOR ROUND DUCTS).

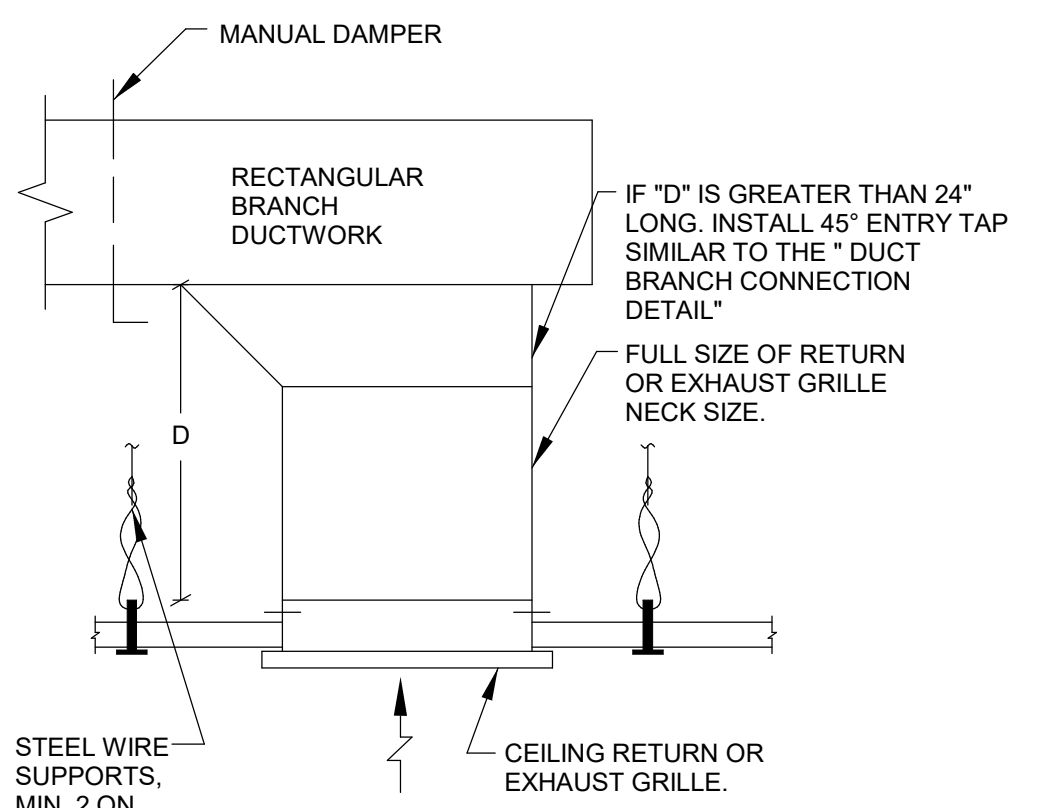
MANUAL DAMPER DETAIL
NO SCALE



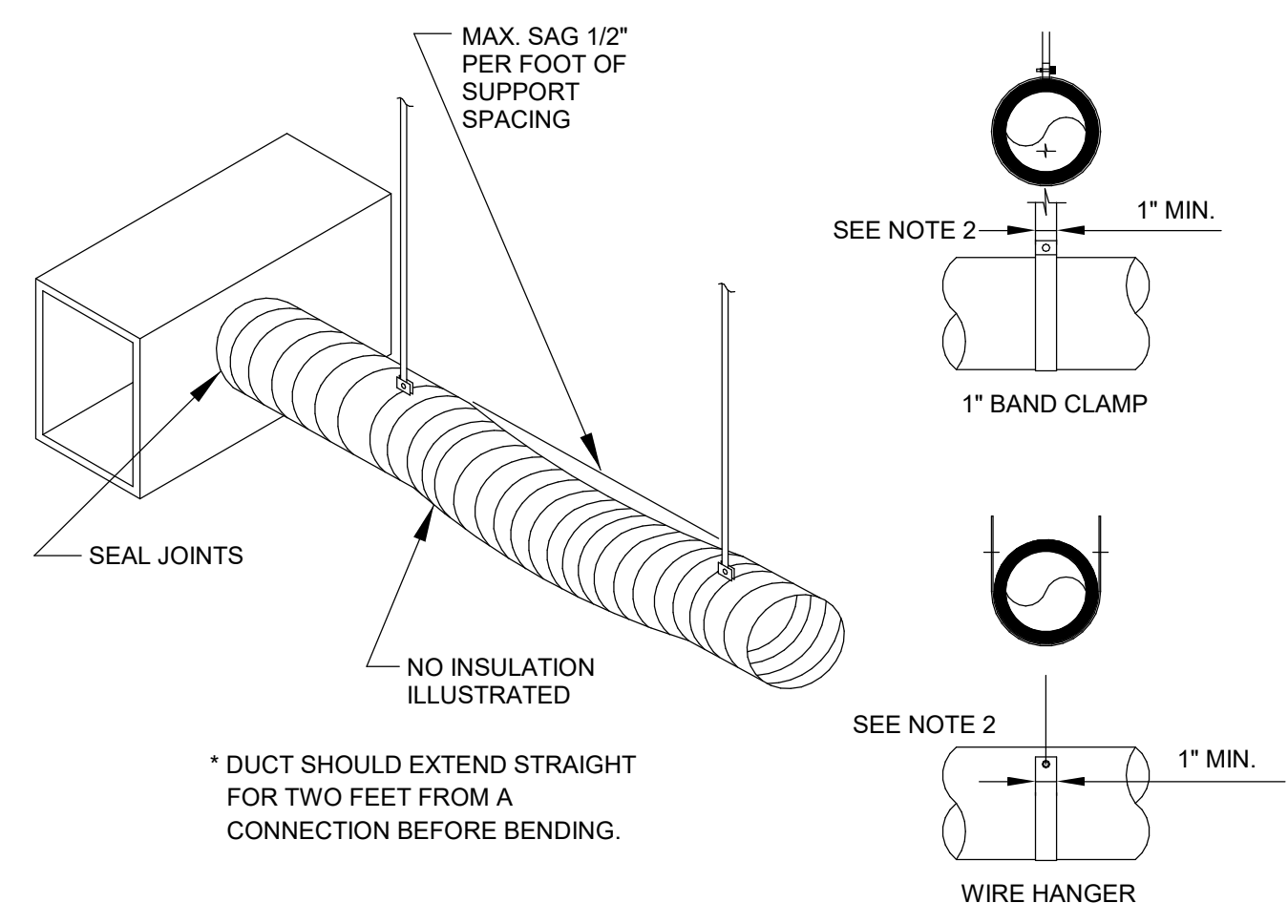
PIPE PENETRATION THRU ROOF
NO SCALE



ROOF CURB DETAIL
NO SCALE



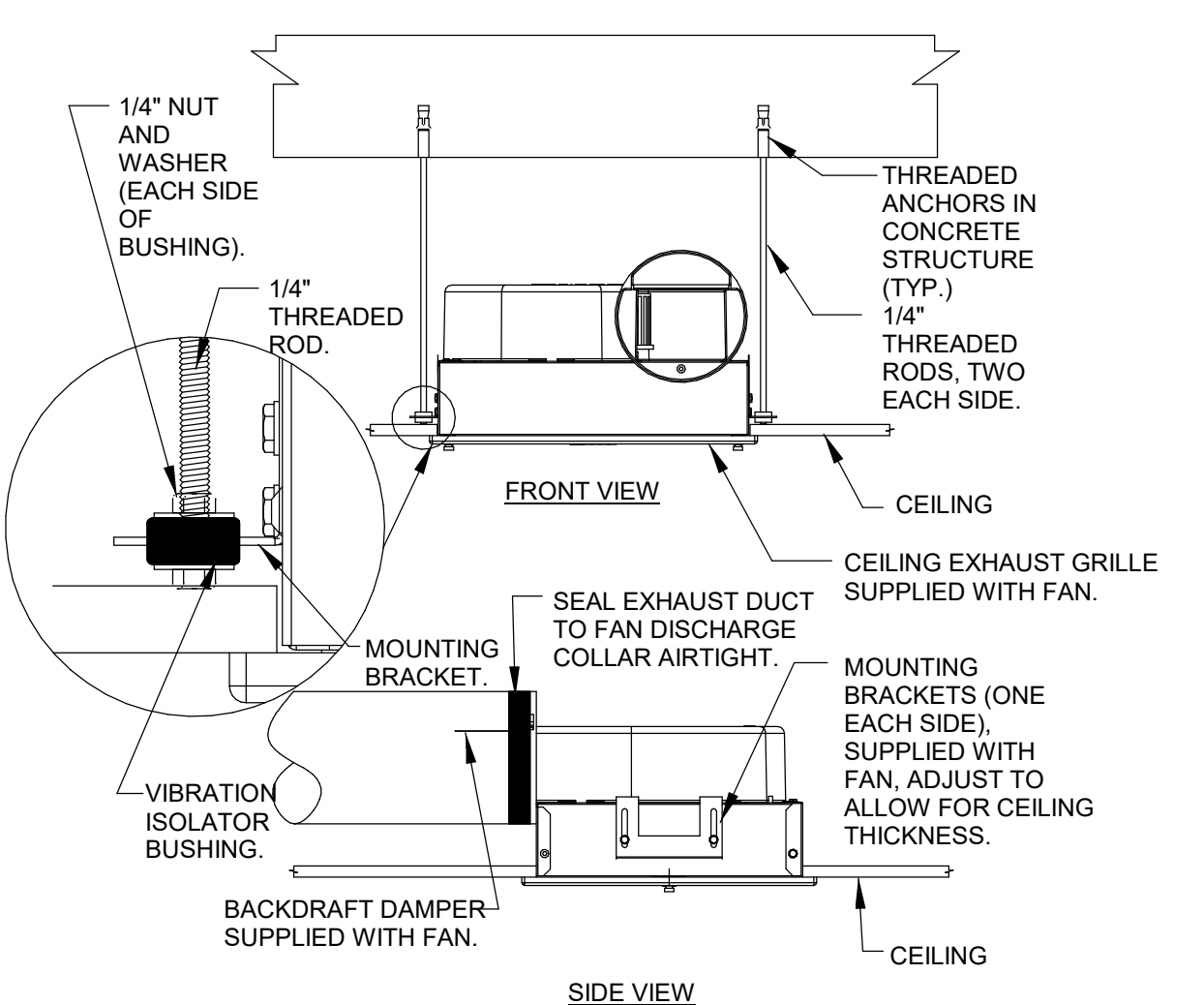
CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL
NO SCALE



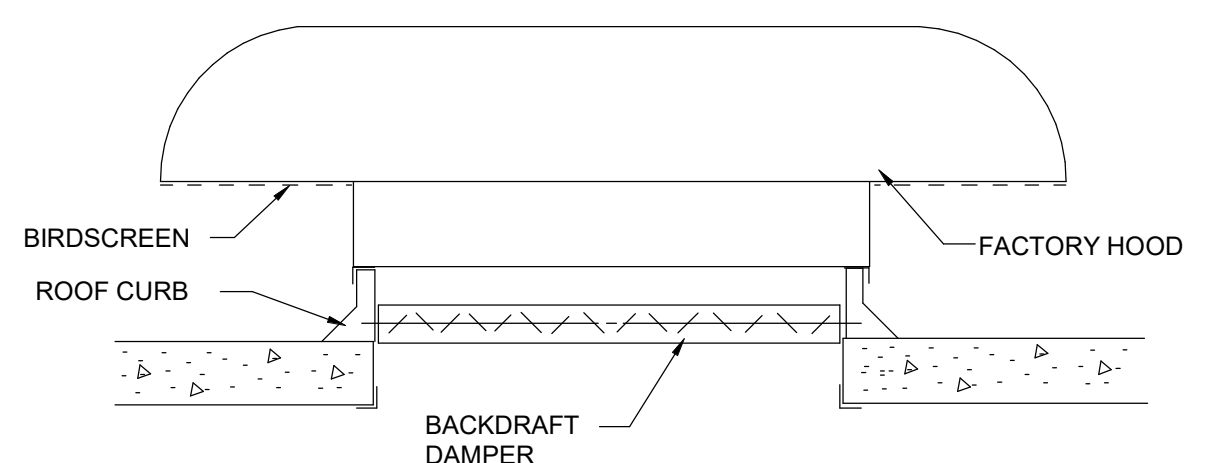
NOTES:

- SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.
- DUCTS ARE FLEXIBLE WITH EXTERNAL INSULATION AND VAPOR BARRIER JACKETING.
- MIN. CENTER LINE BEND LINE RADIUS IS ONE DIA. (OR INSIDE RADIUS OF D/2).
- FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 5 LINEAR FEET.

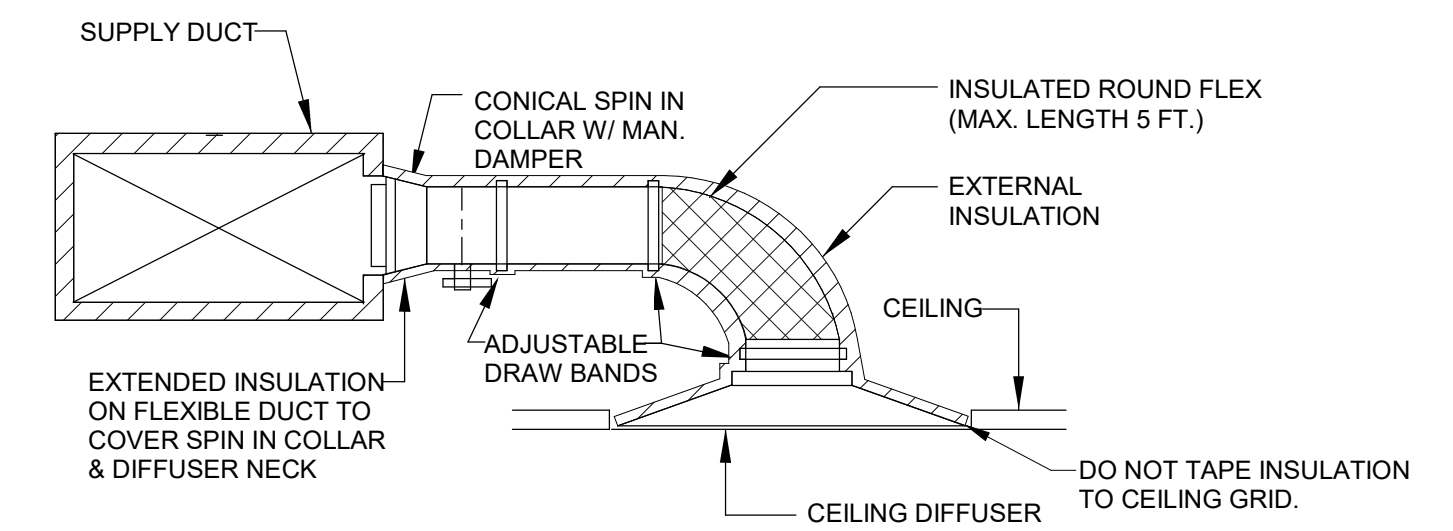
FLEXIBLE DUCT SUPPORT DETAIL
NO SCALE



CEILING EXHAUST FAN DETAIL
NO SCALE



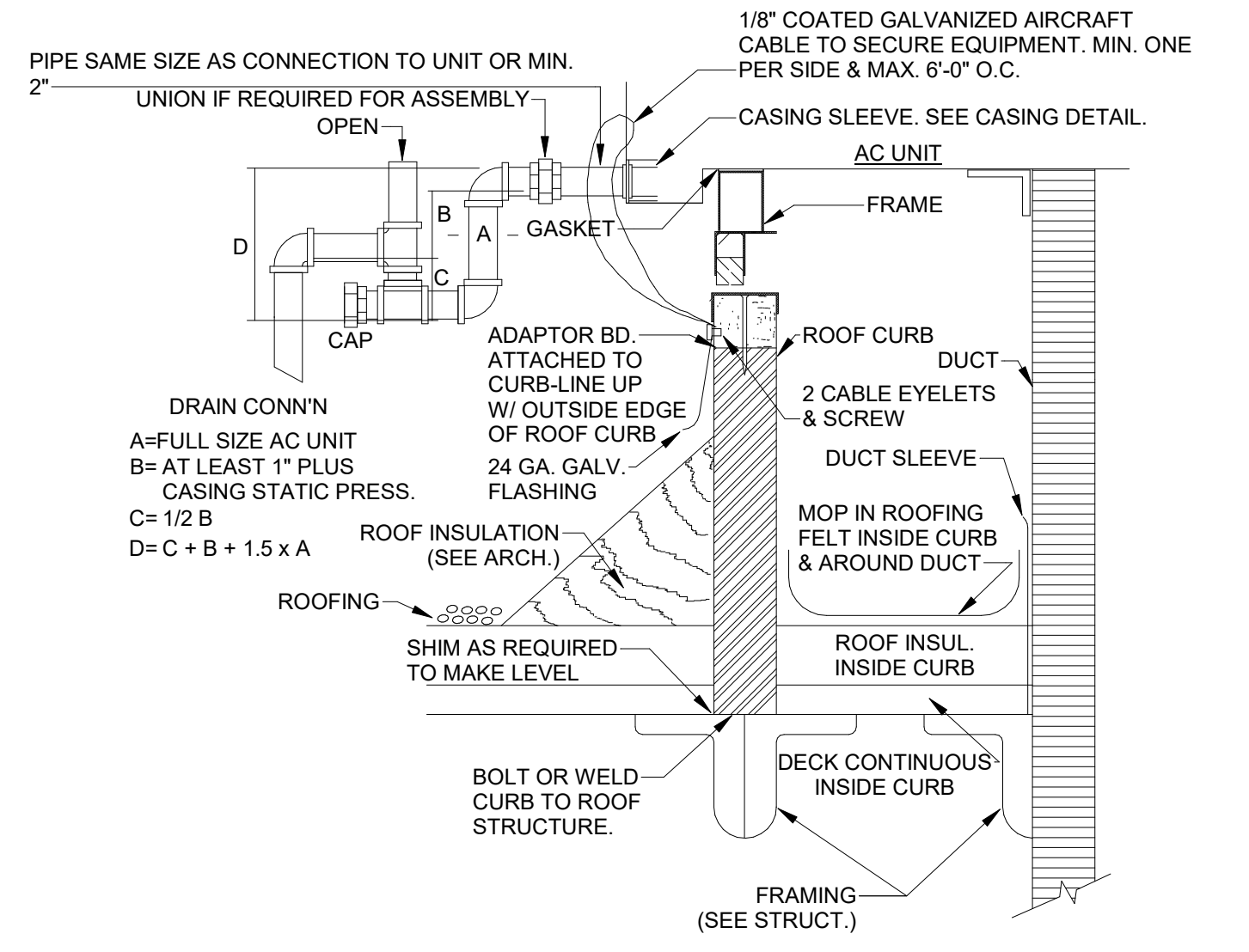
EXHAUST HOOD DETAIL
NO SCALE



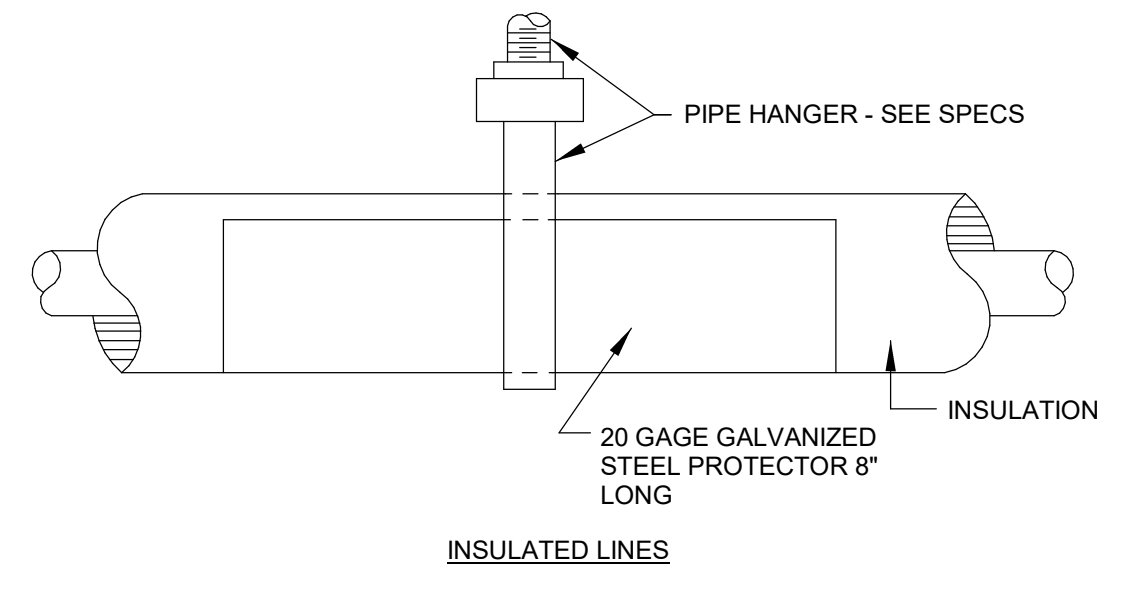
NOTE:

- WHEREVER THE SUPPLY DUCT HEIGHT IS INSUFFICIENT TO CONNECT THE SPIN-IN, THE SPIN-IN MAY BE CONNECTED TO THE TOP OR BOTTOM OF THE DUCT. IF THE BRANCH DUCT MUST BE CONNECTED TO THE SIDE OF THE MAIN DUCT, USE A RECTANGULAR BRANCH DUCT CONNECTION OF EQUAL AIR VELOCITY AND TRANSITION TO ROUND DUCT. REFER TO SPECIFICATION FOR MAXIMUM TURNS IN FLEX DUCT.
- PROVIDE EXTERNAL INSULATION ON ALL ROUND BRANCH DUCTWORK SEE SPECS FOR THICKNESS AND EXTENT.
- PROVIDE EXTERNAL INSULATION ON BACK SIDE OF CEILING DIFFUSERS. THICKNESS TO MATCH BRANCH DUCT INSULATION THICKNESS.

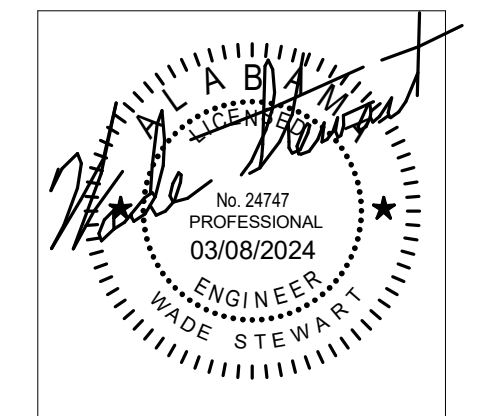
CEILING DIFFUSER INSTALLATION DETAIL
NO SCALE



ROOFTOP AC UNIT DETAIL
NO SCALE



REFRIGERANT PIPING HANGER DETAIL
NO SCALE



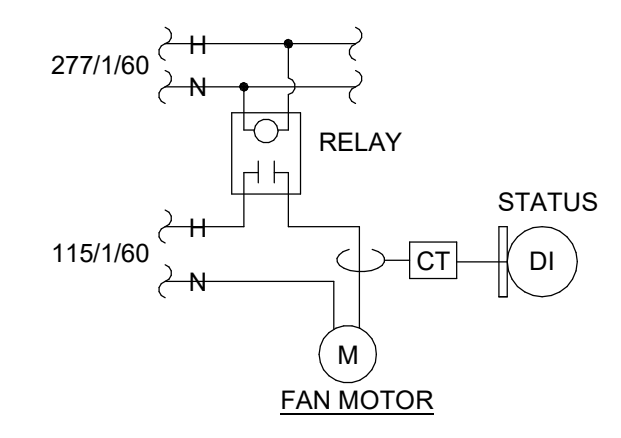
SHEET TITLE:
MECHANICAL DETAILS

PROJ. MGR.: JWS
 DRAWN: CAV
 DATE: MARCH 8, 2024
 REVISIONS:

JOB NO. 23-92
 SHEET NO. M0.3

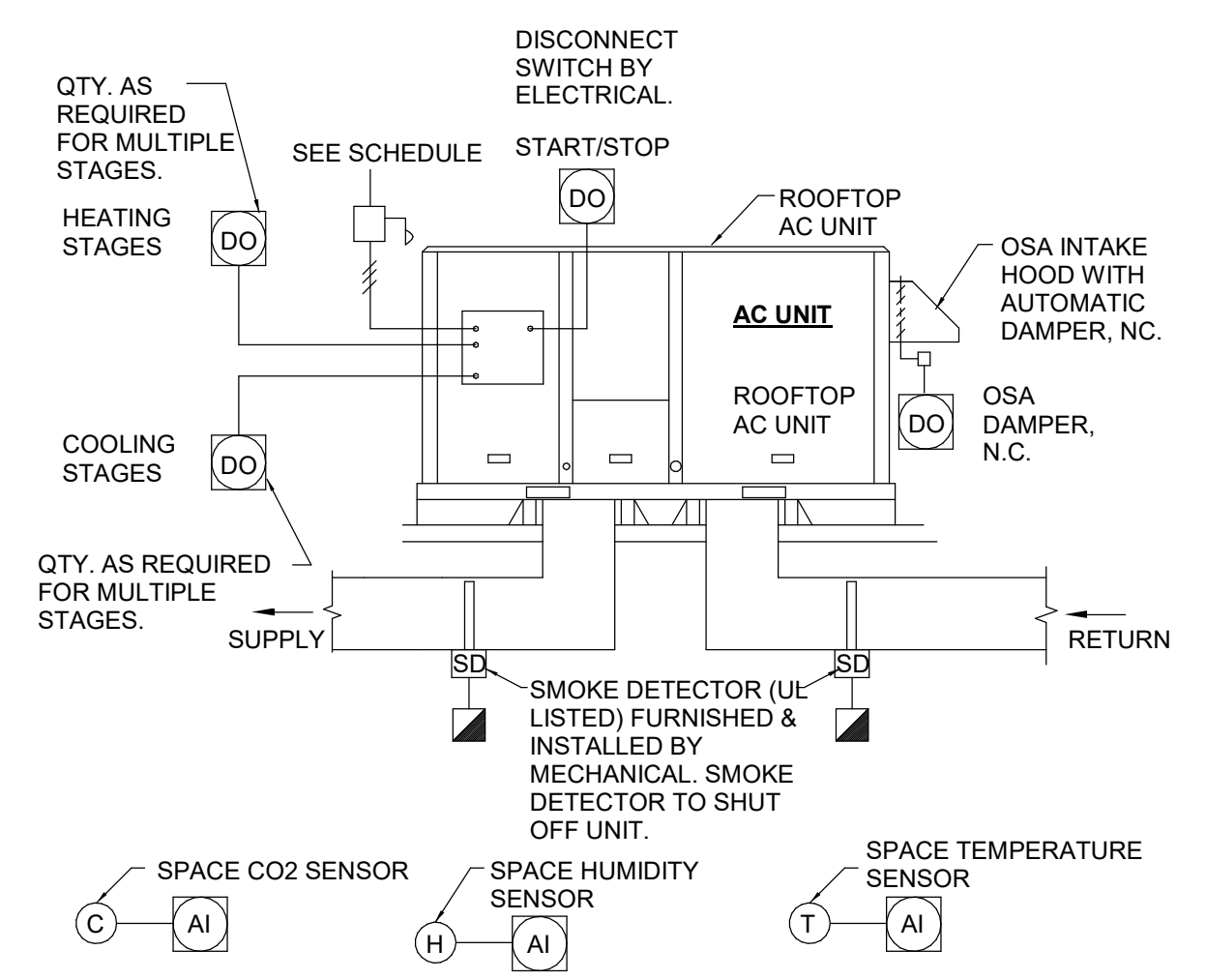
HVAC CONTROLS - GENERAL NOTES

- MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120V CONTROL POWER NECESSARY TO CONTROL PANELS AND EQUIPMENT THROUGHOUT PROJECT.
- MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120V CONTROL POWER NECESSARY TO POWER AUTOMATIC CONTROL VALVES, AUTOMATIC DAMPER ACTUATORS, AND SMOKE DAMPER ACTUATORS.
- ALL SMOKE DETECTORS ARE PROVIDED AND WIRED BY ELECTRICAL, INSTALLED BY MECHANICAL.
- PROVIDE ALL NECESSARY RELAYS, SWITCHES, SENSORS, LOW VOLTAGE CONTROL WIRING, ACTUATORS, ETC. FOR A COMPLETE AND FUNCTIONAL CONTROL SYSTEM.
- FOR ALL ROOFTOP AC UNITS AND ALL ENERGY RECOVERY UNITS, PROVIDE A FULLY FUNCTIONAL BUILDING AUTOMATION SYSTEM. PROVIDE A CONTROL PANEL. THE CONTROL PANEL SHALL HAVE A GRAPHICAL USER INTERFACE FOR EASY ADJUSTMENT OF THE CORRESPONDING AC UNIT, INCLUDING SETPOINT ADJUSTMENTS AND OCCUPIED AND UNOCCUPIED HOURS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- PROVIDE LOCKING COVERS ON ALL THERMOSTATS AND CONTROL DEVICES AS INDICATED ON THE FLOOR PLANS.



EXHAUST FAN CONTROLLED BY LIGHTING CIRCUIT.

EXHAUST FAN CONTROLS
NO SCALE



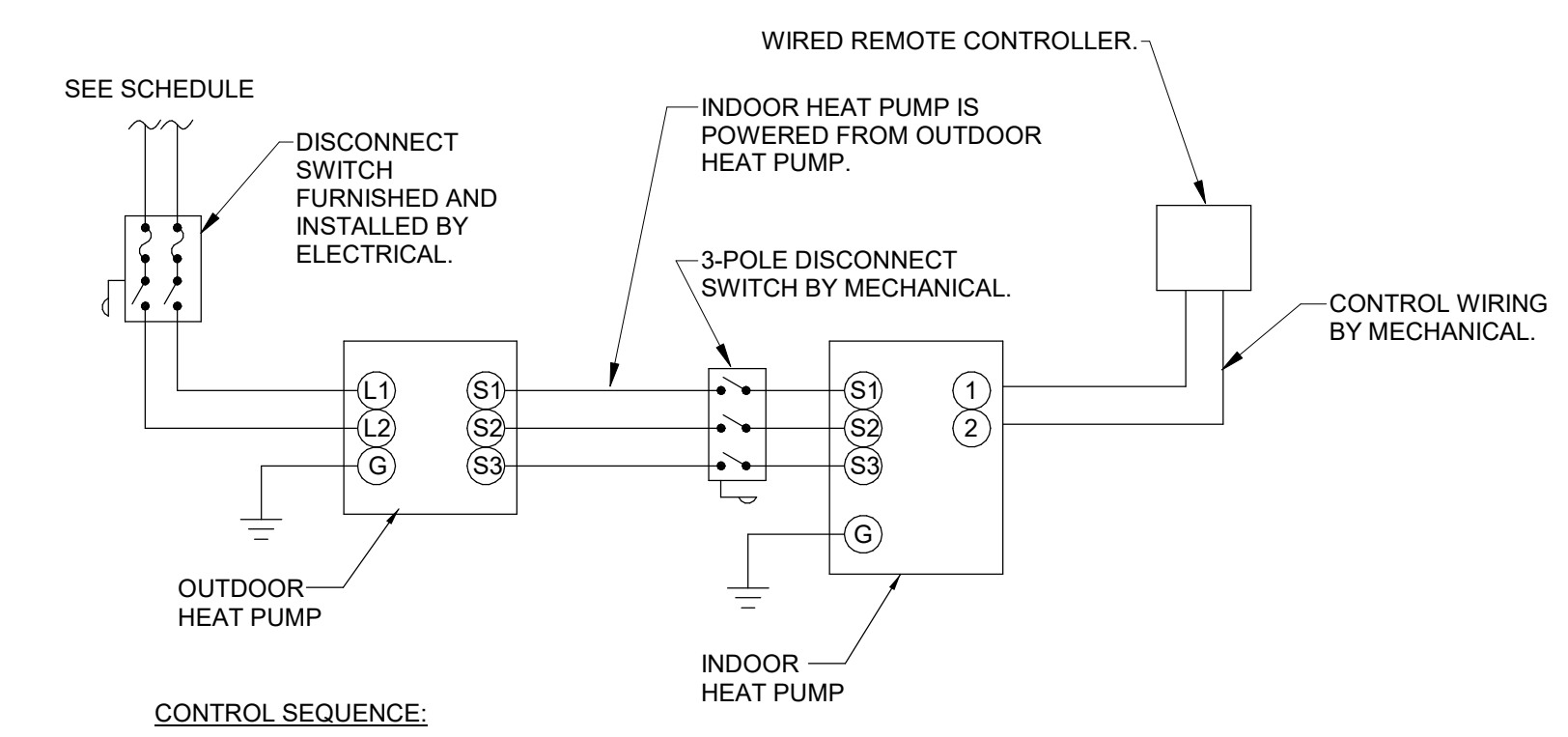
CONTROL SEQUENCE

OCCUPIED MODE:
BAS SHALL INITIATE STARTING CONTROLS. THE SUPPLY FAN SHALL START SUBJECT TO THE SMOKE DETECTOR INTERLOCK. THE BAS SHALL MONITOR THE SPACE TEMPERATURE SENSOR TO CYCLE ON COMPRESSOR FOR COOLING TO MAINTAIN COOLING SETPOINT (75°F - ADJUSTABLE). COMPRESSOR AND ELEC STRIP HEAT TO STAGE AS REQUIRED TO MAINTAIN HEATING SETPOINT (72°F - ADJUSTABLE). WHEN THE AC UNIT IS IN OCCUPIED MODE, THE OSA DAMPER SHALL OPEN TO MINIMUM POSITION TO PROVIDE SCHEDULED MINIMUM OUTSIDE AIR CFM.

UNOCCUPIED MODE:
THE SPACE TEMPERATURE SENSOR SHALL CYCLE THE SUPPLY FAN, DX COOLING, HEATING AND ELEC HEAT TO MAINTAIN THE UNOCCUPIED SPACE SETPOINT (80°F HEATING / 80°F COOLING - ADJUSTABLE). THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED.

DEHUMIDIFICATION SEQUENCE (WHERE SHOWN ONLY):
UPON A RISE IN SPACE HUMIDITY (ABOVE 60% RH), THE AC UNIT SHALL GO INTO FULL COOLING AND STAGE ON THE HOT GAS REHEAT COIL TO MAINTAIN A SPACE TEMPERATURE OF 75°F. (ADJUSTABLE). UPON THE HUMIDITY FALLING BACK BELOW SETPOINT THE UNIT SHALL RETURN TO NORMAL OPERATION.

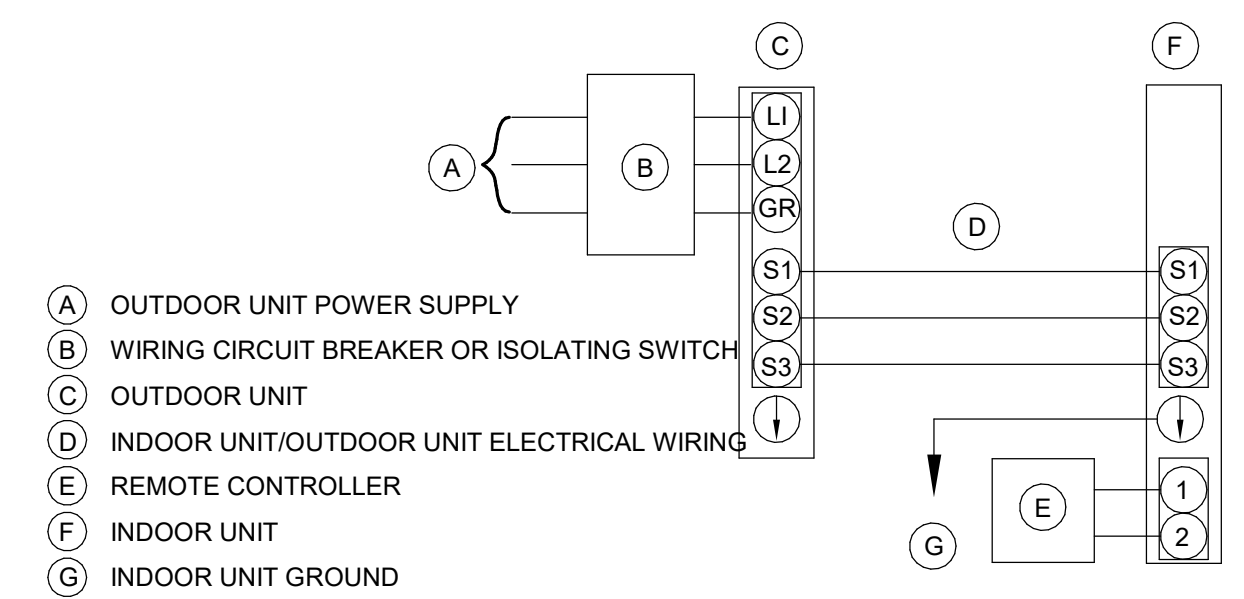
PACKAGED AC UNIT CONTROLS
NO SCALE



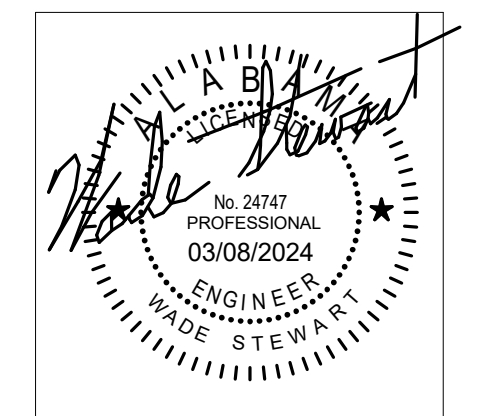
CONTROL SEQUENCE:

THE AC UNIT SHALL BE CONTROLLED BY A WIRED WALL MOUNTED REMOTE CONTROLLER. THE CONTROLLER SHALL CYCLE ON COMPRESSOR(S) TO MAINTAIN COOLING SETPOINT (74°F - ADJUSTABLE) AND HEATING SETPOINT (70°F - ADJUSTABLE). ALL MINI-SPLIT AC UNITS THAT SERVE ELECTRICAL AND IT ROOMS SHALL NOT SET THEIR TEMPERATURE BACK AT NIGHT. FOR ALL MINI-SPLIT AC UNITS THAT SERVE OFFICES, CLASSROOMS, ETC. SHALL SET THEIR TEMPERATURE BACK TO 4°F ABOVE SETPOINT IN SUMMER AND 4°F BELOW SETPOINT IN THE WINTER. COORDINATE WITH OWNER TO ESTABLISH OCCUPIED / UNOCCUPIED SCHEDULES.

DUCTLESS SPLIT SYSTEM CONTROLS
NO SCALE



WIRING DETAIL FOR DUCTLESS MINI-SPLIT
NO SCALE

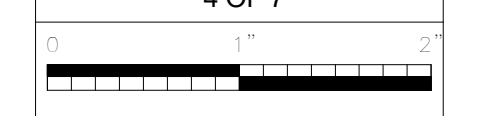


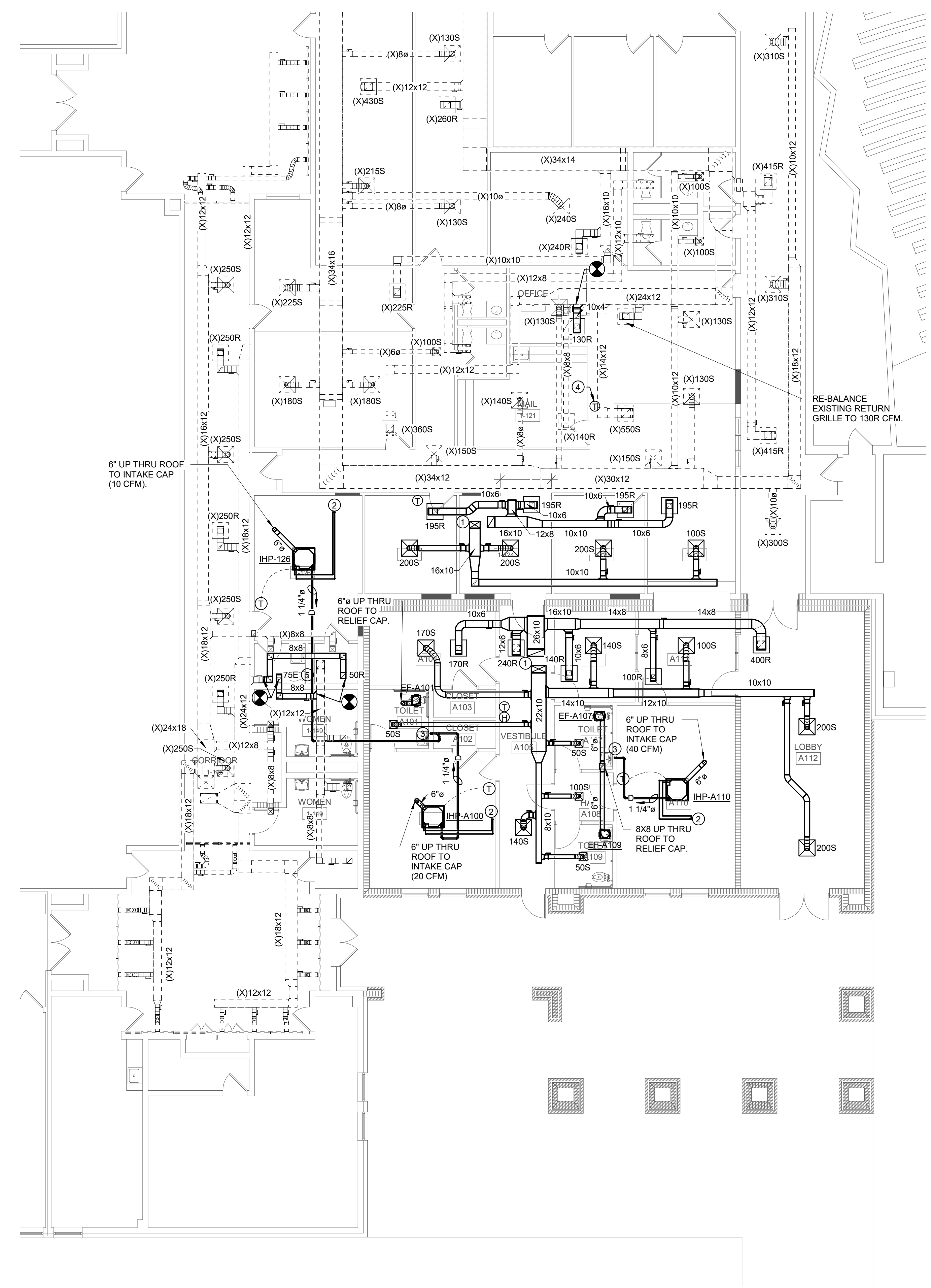
SHEET TITLE:
MECHANICAL CONTROLS

PROJ. MGR.: JWS
DRAWN: CAV
DATE: MARCH 8, 2024
REVISIONS

JOB NO. 23-92
SHEET NO.

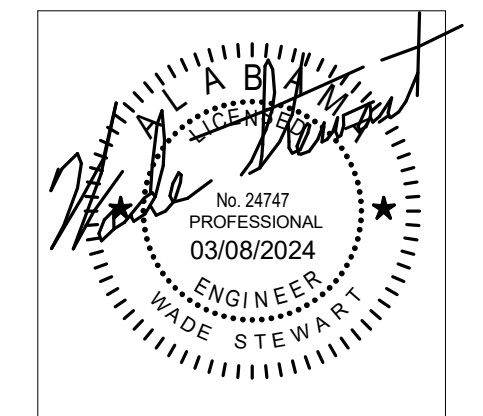
M0.4
4 OF 7





- KEYED NOTES**
- 1 SUPPLY AND RETURN DUCTS DOWN THRU ROOF FROM RESPECTIVE UNITS. FULL SIZE UNIT CONNECTIONS WITH FLEX CONNECTION.
 - 2 ROUTE REFRIGERANT LINES UP THRU ROOF TO RESPECTIVE OHP. SIZE LINES PER MANUFACTURER'S RECOMMENDATIONS.
 - 3 1-1/4" CONDENSATE DRAIN DOWN TO WALL HUB BOX. SEE PLBG.
 - 4 EXISTING THERMOSTAT TO REMAIN.
 - 5 CONNECT THE EXISTING EXH GRILLE IN TOILET TO THE EXISTING EXHAUST MAIN FROM EXISTING EXH FAN (X)EF-1-127. CONNECT THE EXISTING RETURN GRILLE IN STOR. CLOSET TO EXISTING RETURN MAIN FROM (X)AC-27. BALANCE TO CFM'S SHOWN.

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



SHEET TITLE:
MECHANICAL FLOOR PLAN

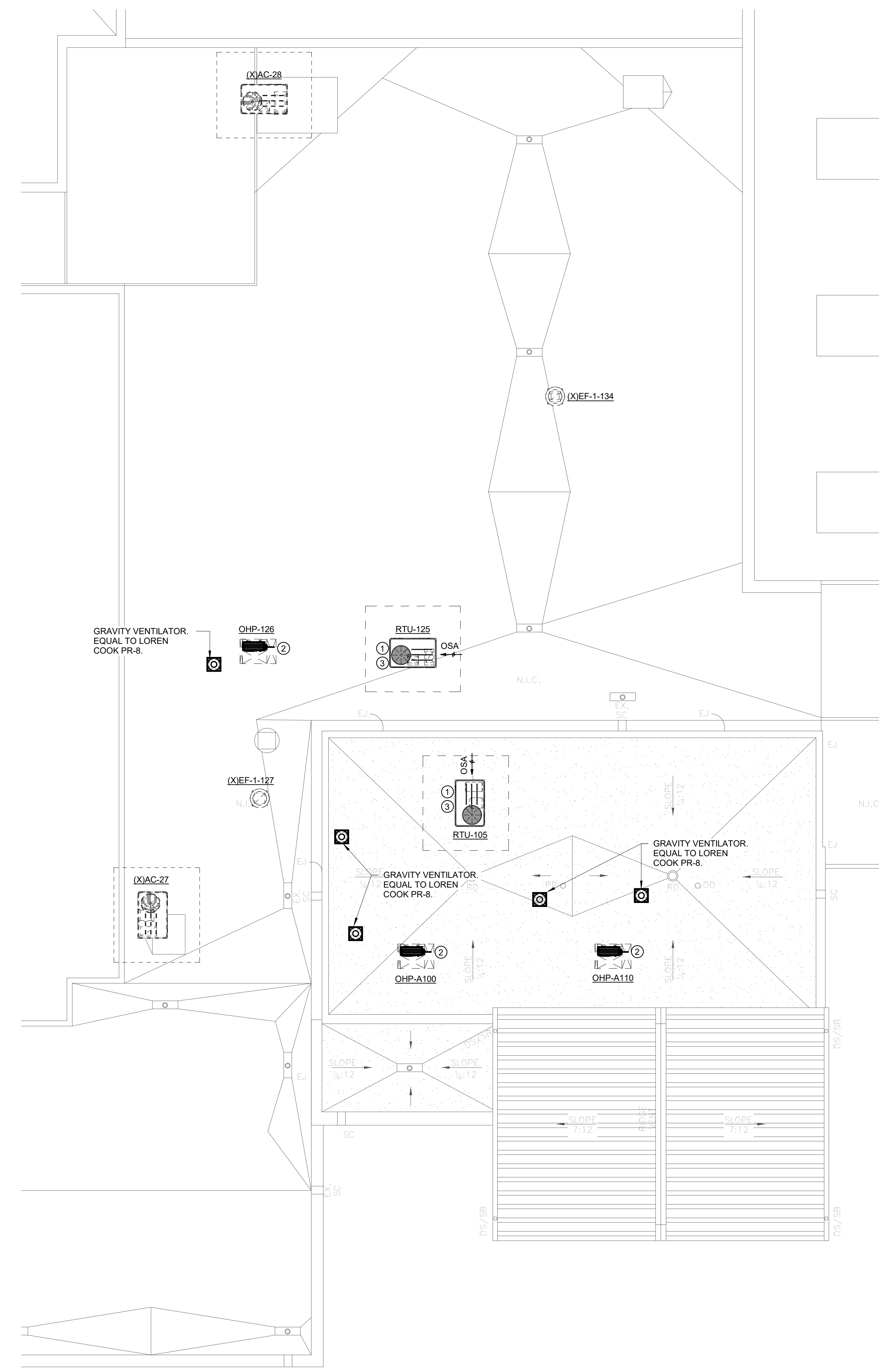
PROJ. MGR.: JWS
DRAWN: CAV
DATE: MARCH 8, 2024
REVISIONS

JOB NO. 23-92
SHEET NO.

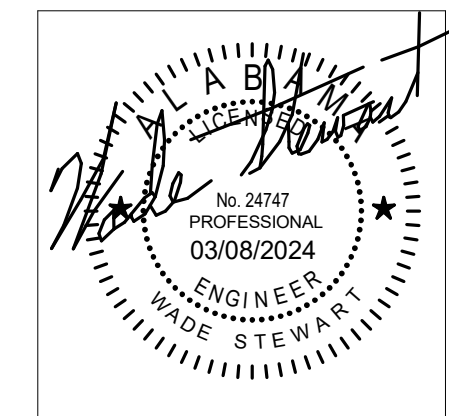
M1.1
6 OF 7

OFFICE ADDITION TO
CHELSEA HIGH SCHOOL
 10510 COUNTY ROAD 11, CHELSEA, ALABAMA 35043
 SHELBY COUNTY BOARD OF EDUCATION

- KEYED NOTES
- 1 SUPPLY AND RETURN DUCTS DOWN THRU ROOF FROM RESPECTIVE UNITS. FULL SIZE UNIT CONNECTIONS WITH FLEX CONNECTION.
 - 2 REFRIGERANT LINES DOWN THRU ROOF TO RESPECTIVE IHP. SIZE LINES PER MANUFACTURERS RECOMMENDATIONS.
 - 3 ROUTE 1" CONDENSATE DRAIN TO NEAREST ROOF DRAIN. PROVIDE MANUFACTURER REQUIRED CLEARANCES.



M2.0 MECHANICAL - ROOF PLAN
 1/8" = 1'-0"
 NORTH



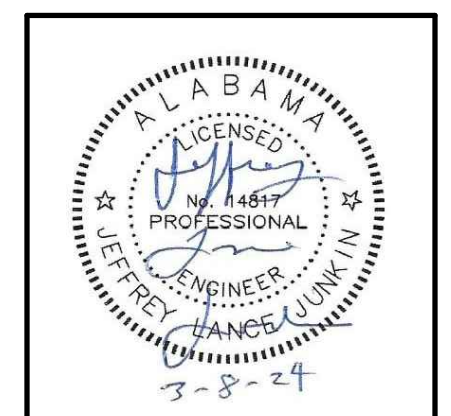
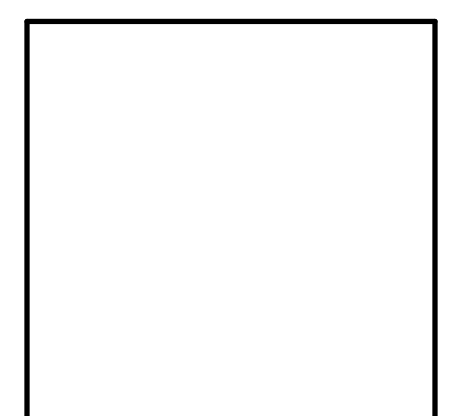
SHEET TITLE:
 MECHANICAL ROOF PLAN

PROJ. MGR.: JWS
 DRAWN: CAV
 DATE: MARCH 8, 2024
 REVISIONS:

JOB NO. 23-92
 SHEET NO.:

M2.0
 7 OF 7





SHEET TITLE:
SCHEDULES, SYMBOLS,
AND NOTES

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: MARCH 8, 2024
REVISIONS

--

JOB NO. **23-92**
SHEET NO:
E11
1 OF 5

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NO.	LAMPS			MOUNTING HEIGHT	TYPE MOUNTING	RECESS DEPTH	REMARKS
			NO.	WATTS	TYPE				
A	METALUX	24CGT5535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
A (EM)	METALUX	24CGT5535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
B	METALUX	24CGT4535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
B (EM)	METALUX	24CGT4535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
C	PATHWAY LIGHTING	6VLF2X-3000-35K-DA-6VLEDM-SCLPF	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	
C (EM)	PATHWAY LIGHTING	6VLF2X-3000-35K-DA-6VLEDM-SCLPF-EM	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	SEE NOTE 1
D	ALUMILITE	YRP-830/LED-40K-PG-WH	FURNISHED WITH FIXTURE			VERIFY WITH ARCH.	PENDANT		
D (EM)	ALUMILITE	YRP-830/LED-40K-PG-EMD-WH	FURNISHED WITH FIXTURE			VERIFY WITH ARCH.	PENDANT		SEE NOTE 1
X	SURE-LITES	EUX7-R-UNV	FURNISHED WITH FIXTURE			6" ABOVE DOOR	BRACKET		

- NOTES:**
- FEED ALL "EM" FIXTURES WITH SWITCHED AND UNSWITCHED HOT LEGS. UNSWITCHED HOT LEG IS USED FOR VOLTAGE SENSING.
 - VERIFY ALL FIXTURE COLORS WITH ARCHITECT PRIOR TO SUBMITTALS.
 - EQUAL FIXTURES BY LITHONIA, PARKER, DAYBRITE, AND COLUMBIA WILL BE CONSIDERED APPROVED EQUALS.

GENERAL NOTES

- SERVICE TO BUILDING IS 277/480 VOLTS, 3 PHASE, 4 WIRE.
- VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING IN SWITCHES.
- VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
- CONTRACTOR TO VERIFY LOCATION OF ALL OUTLETS PRIOR TO INSTALLATION.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF COUNTERTOPS AND BACKSPASHES ON ARCHITECTURAL DETAILS AND/OR CASEWORK SHOP DRAWINGS AND ADJUST SPECIFIED MOUNTING HEIGHT OF WALL OUTLETS AS REQUIRED TO AVOID CONFLICTS.
- CONTRACTOR WILL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE MOUNTING AND SPACE REQUIRED BEFORE ROUGHING IN.
- FURNISH AND INSTALL PLASTER FRAMES FOR ALL RECESSED FIXTURES AS REQUIRED.
- SUPPORT OF ALL LIGHTING FIXTURES TO BE THE RESPONSIBILITY OF THIS CONTRACTOR. FIXTURES TO BE SUPPORTED INDEPENDENT OF CEILING FROM STRUCTURAL MEMBERS OF THE BUILDING.
- ELECTRICAL CONTRACTOR MUST CHECK THE CORRESPONDING MECHANICAL SHEETS AND BE RESPONSIBLE FOR INCLUDING PROPER SERVICE AND CONNECTIONS TO ALL MECHANICAL ITEMS SHOWN THEREON REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL SHEETS.
- ALL CONDUIT CONCEALED UNLESS SPECIFICALLY SHOWN EXPOSED.
- COORDINATE SERVICES WITH POWER AND COMMUNICATIONS COMPANIES. REMOVE OR RELOCATE ALL POWER AND COMMUNICATIONS CIRCUITS ABOVE OR BELOW GRADE THAT WOULD OBSTRUCT THE CONSTRUCTION OF THE PROJECT OR CONFLICT IN ANY MANNER WITH COMPLETION OF THE PROJECT OR ANY CODE PERTAINING THERETO. IF UTILITY COMPANY REQUIREMENTS ARE AT VARIANCE WITH THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACT PRICE SHALL INCLUDE THE ADDITIONAL COST.
- IT IS INTENDED THAT SPECIFICATIONS AND PLANS SHALL INCLUDE EVERYTHING REQUIRED AND NECESSARY FOR PROPER AND COMPLETE INSTALLATION OF THE COMPLETE SYSTEMS SHOWN EVEN THOUGH EVERY ITEM MAY NOT BE PARTICULARLY MENTIONED IN DETAIL. THE CONTRACTOR SHALL DELIVER TO OTHER TRADES ANY EQUIPMENT THAT MUST BE INSTALLED DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENTS AND COORDINATION OF THE PHYSICAL SIZE OF ALL EQUIPMENT WITH THE ARCHITECTURAL REQUIREMENTS OF THE SPACES INTO WHICH THE EQUIPMENT WILL BE INSTALLED.
- THIS CONTRACTOR SHALL INSTALL EQUIPMENT GROUNDS THROUGHOUT THIS PROJECT, USING GREEN INSULATED GROUND WIRE. USE OF CONDUIT AS THE ONLY GROUND CONDUCTOR WILL NOT BE ALLOWED. (SIZE GROUND WIRES PER N.E.C.)
- REMOVE ALL EXISTING PANELBOARDS, DISCONNECTS, FIXTURES, RECEPTACLES, AUXILIARY SYSTEM DEVICES, CONDUIT, CONDUCTORS, ETC. BEING RENDERED OBSOLETE BY THIS PROJECT.
- WHERE EXISTING REMAINING CIRCUITS ARE BEING INTERRUPTED DUE TO STRUCTURAL AND/OR DESIGN CHANGES, THIS CONTRACTOR WILL EXTEND EXISTING CIRCUITS AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY TO REMAINING ACTIVE DEVICES.

CODE EXCEPTION NOTE

THIS PROJECT HAS BEEN DESIGNED UNDER ASHRAE 90.1 2013, EXCEPT AS FOLLOWS: WE TAKE EXCEPTION TO SECTION 8.4.2 FOR REQUIRING CONTROLLED RECEPTACLES, AND SECTION 8.4.3 FOR REQUIRING ENERGY MONITORING. WE OFFICIALLY REQUEST THAT THIS PROJECT BE APPROVED WITHOUT THOSE ITEMS.

COLOR CODE FOR ELECTRICAL WIRING

- 120/208 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
PHASE A-BLACK
B-RED
C-BLUE
N-WHITE
- 277/480 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
PHASE A-BROWN
B-ORANGE
C-YELLOW
N-GRAY
- GROUND-GREEN

COLOR CODE FOR JUNCTION BOXES

NOTE:
PAINT ALL JUNCTION BOXES AND COVERS WITH COLORS AS SHOWN BELOW. PAINTING COVERS ONLY IS NOT ACCEPTABLE.

FUNCTION:	COLOR:
LIGHTING	BLUE
POWER	GREEN
FIRE ALARM	RED
MISC. AUXILIARIES (SOUND, ETC.)	BROWN

ELECTRICAL SYMBOLS

CEILING OUTLET - FIXTURE "A", CIRCUIT 1, SWITCH α.
 CEILING OUTLET - FLUORESCENT FIXTURE.
 CEILING OUTLET - FLUORESCENT INDUSTRIAL OR STRIP TYPE.
 WALL OUTLET - INCANDESCENT BRACKET TYPE.
 WALL OUTLET - FLUORESCENT BRACKET TYPE.
 WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR.
 WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR - MOUNT AT 6" ABOVE COUNTER.
 WALL OUTLET - ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PTIG5362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES)
 WALL OUTLET - ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PTIG5362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES)
 WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR.
 WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, WEATHERPROOF, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR. INSTALL #WUIC10-CAGV WEATHERPROOF COVER. DEVICE SHALL BE LABELED AS "EXTRA DUTY".
 FLOOR OUTLET - CONDUIT STUB UP.
 CEILING OUTLET - JUNCTION BOX.
 WALL OUTLET - JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT.
 SWITCH OUTLET - AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #1221 - GREY. ("N" DENOTES NARROW)
 SWITCH OUTLET - FLUORESCENT DIMMER - LUTRON NOVA-T SERIES #NTF-103P.
 SWITCH OUTLET - AC TYPE, TWO POLE, 20A, 120/277V, HUBBELL #1222 - GREY.
 SWITCH OUTLET - AC TYPE, THREE WAY, 20A, 120/277V, HUBBELL #1223 - GREY.
 SWITCH OUTLET - AC TYPE, FOUR WAY, 20A, 120/277V, HUBBELL #1224 - GREY.
 SWITCH MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOAD PROTECTION.
 SWITCH OUTLET - AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #12211LC.
 LIGHTING PANEL - SEE SPECIFICATIONS AND SCHEDULE.
 POWER PANELS - SEE SPECIFICATIONS AND SCHEDULE.
 BRANCH CIRCUIT CONCEALED IN WALL OR CEILING.
 BRANCH CIRCUIT CONCEALED IN FLOOR OR GROUND.
 HOMERUN TO PANELBOARD - ANY CIRCUIT WITHOUT FURTHER DESIGNATION 2 # 12 & 1 # 12(G) - 1/2" CONDUIT.
 3 # 12 & 1 # 12(G) - 3/4" CONDUIT. 4 # 12 & 1 # 12(G) - 3/4" CONDUIT.
 EMPTY CONDUIT - 3/4".
 BRANCH CIRCUIT EXPOSED.
 CONDUIT RUN DOWN WALLS, CONCEALED
 CONDUIT RUN UP WALLS, CONCEALED
 MOTOR SHOWN 5hp (TYPICAL) OR 40 AMPS (TYPICAL).
 EXHAUST FAN MOTOR - FRACTIONAL HORSEPOWER.
 MAGNETIC MOTOR STARTER.
 NON-FUSED DISCONNECT SWITCH. (RT - RAINIGHT).
 FUSED DISCONNECT SWITCH.
 ABOVE FINISHED FLOOR.
 VERIFY LOCATION.
 NATIONAL ELECTRICAL CODE.
 GROUND FAULT CIRCUIT INTERRUPTER
 WEATHER PROOF
 ISOLATED GROUND
 FIRE ALARM - SMOKE DETECTOR - SEE SPEC.
 FIRE ALARM - MANUAL PULL STATION - SEE SPEC.
 FIRE ALARM - STROBE LIGHT - SEE SPEC.
 FIRE ALARM - SPEAKER STROBE - SEE SPEC.
 FIRE ALARM CONTROL PANEL - EXISTING - SEE SPEC.
 MASTER SOUND CONSOLE - EXISTING BEING REPLACED - SEE SPEC.
 SOUND SYSTEM - INTERCOM CONTROL STATION - SEE SPEC.
 WALL SWITCH WITH BUILT IN MOTION SENSOR - COOPER #OSW-P-0451-W WITH WALL PLATE
 CEILING MOUNTED MOTION DETECTOR - COOPER #OMC-P-1200-R
 MOTION SENSOR SWITCHPACK - COOPER #SP20-MV (INSTALLED ABOVE LAY-IN CEILING)
 MOTION SENSOR WIRING - LOW VOLTAGE WIRING (#14 THHN AS REQUIRED)
 DATA CONDUIT - BELOW GRADE DATA CONDUIT WITH DATA CABLES (3/4" UNLESS OTHERWISE SPECIFIED)
 COMPUTER OUTLET - 3/4" CONDUIT WITH CABLING-SEE SPEC.
 COMPUTER OUTLET - 3/4" CONDUIT WITH CABLING-MOUNT 6" ABOVE COUNTER-SEE SPEC.
 CCTV SYSTEM - FUTURE CAMERA LOCATION - ABOVE CEILING SHALL BE 1 CAT 6 CABLE CONNECTED TO MDF (IN 3/4" CONDUIT WHEN NOT ABOVE CEILING).
 FLOOR BOX - COMBINATION EMPTY / DATA / POWER OUTLET. PROVIDE WITH TWO DUPLEX OUTLETS AND EMPTY COMPARTMENTS FOR DATA AND POWER (WIREMOLD EFB10S BOX WITH EFB10SM COMPARTMENTS EFB10-B, EFB10-DP, EFB10-DEC PLATES AS REQUIRED AND EFB10S-DIVIDERS AS REQUIRED AND EFB10BTBZ COVER).

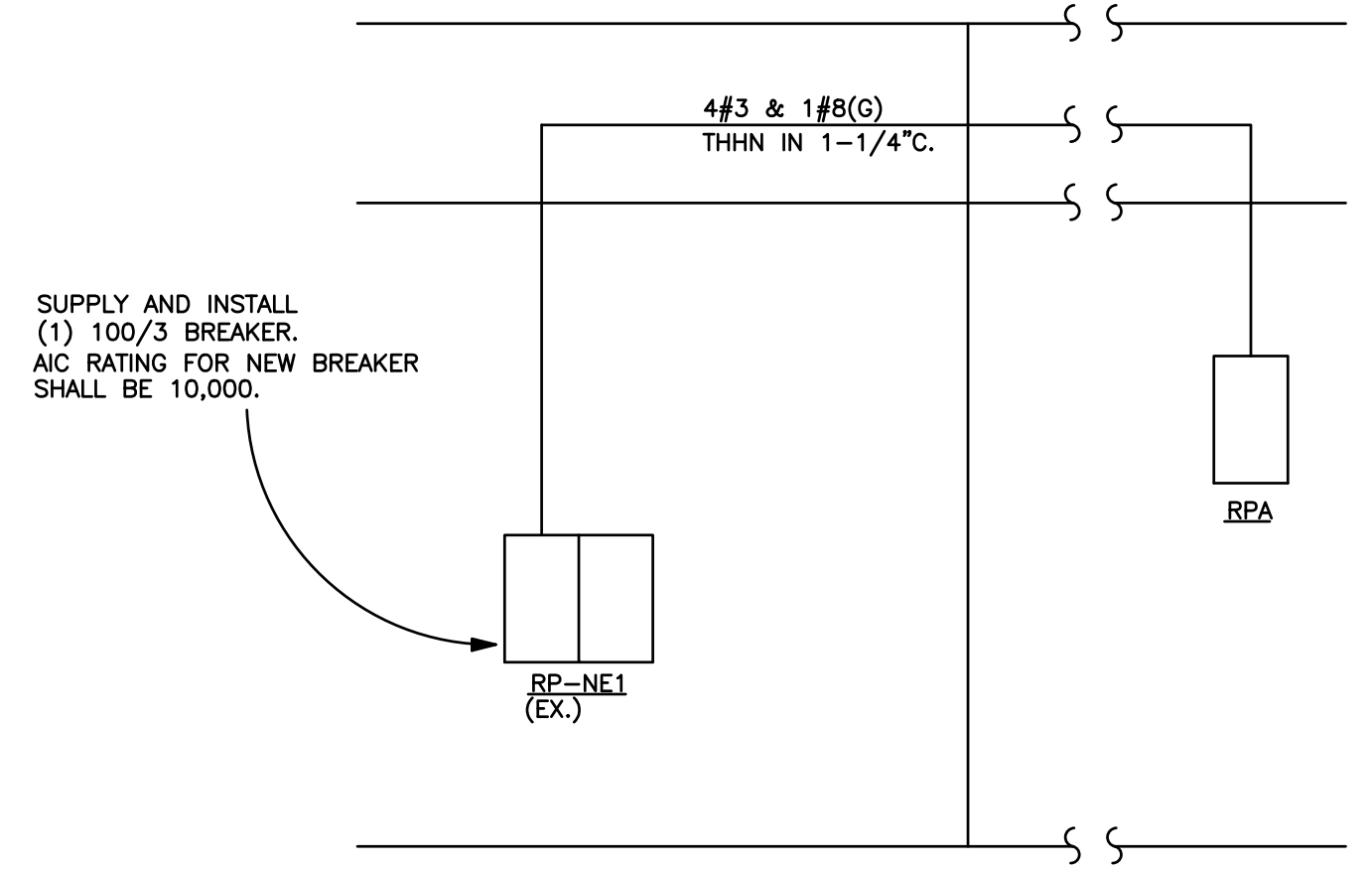
FIRE ALARM SYSTEM NOTES

- PROVIDE FIRE ALARM COMPLETION DOCUMENTS AT THE STATE FINAL INSPECTION. THIS ITEM WILL BE REQUIRED BY STATE BUILDING INSPECTOR AT THE TIME OF FINAL INSPECTION (OLD CERTIFICATION FORM).
- ADDITIONS AND ALTERATIONS TO THE FIRE ALARM SYSTEM REQUIRE TESTING, A RECORD OF COMPLETION, AND RECERTIFICATION. ALL FIRE ALARM WORK SHALL BE PERFORMED BY QUALIFIED PERSONNEL AS DEFINED IN NFPA-72 (2013) 10.4.2, 10.5.2, AND 10.18.1.
- ALL WORK SHALL BE PERFORMED BY A CERTIFIED FIRE ALARM CONTRACTOR - SEE SPECS.

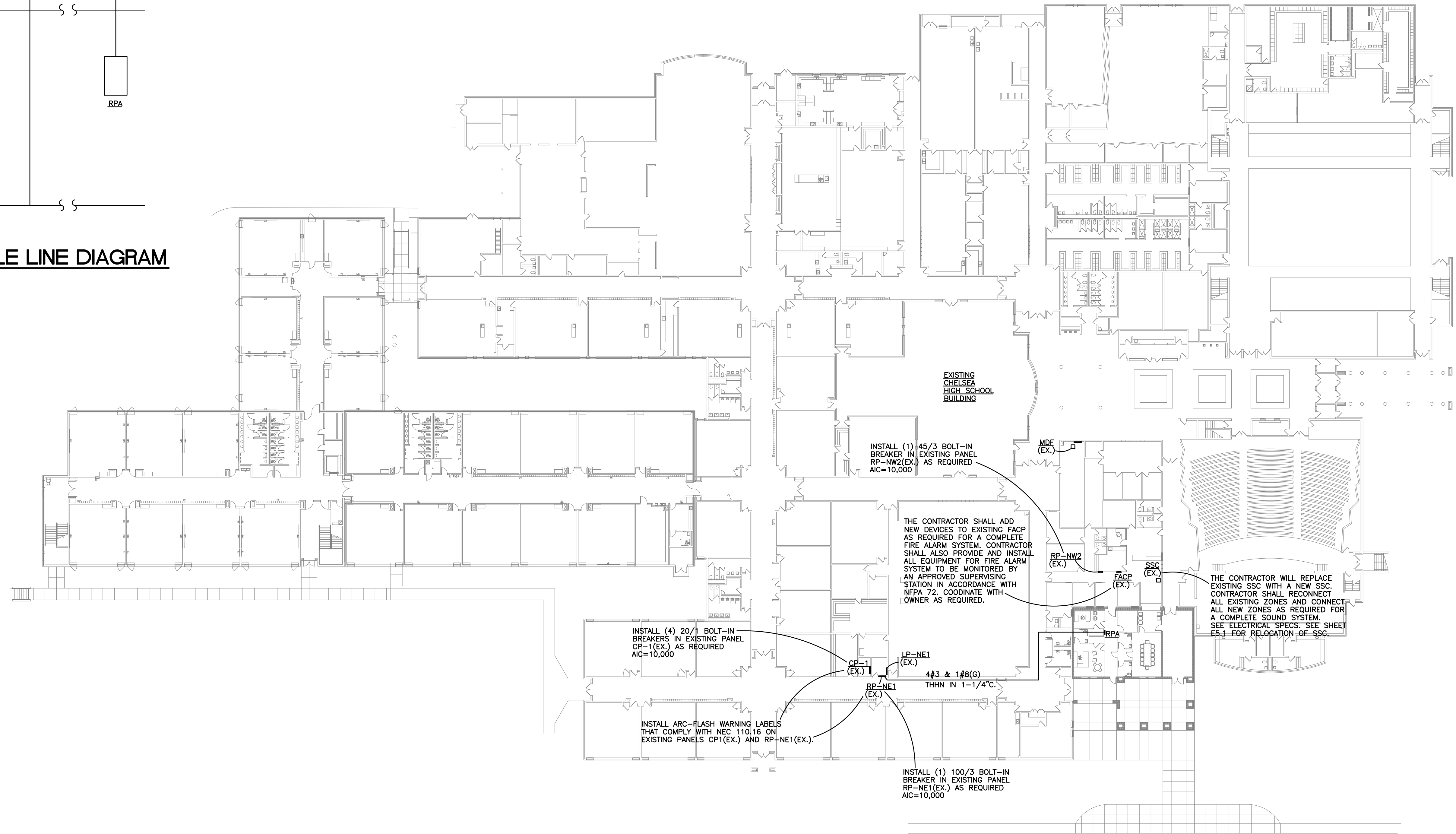
STEWART ENGINEERING ELECTRICAL CONSULTANTS

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Project Number: 2430



ELECTRICAL SINGLE LINE DIAGRAM
N.T.S.



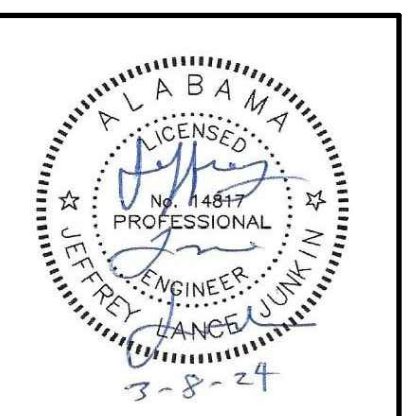
PANELBOARD SCHEDULE

MARK	TYPE	MAINS		BRANCHES					LUG LOCATION	TYPE MOUNTING	AREA PANEL LOCATED	AVAILABLE FAULT CURRENT	REMARKS	
		TYPE	AMPS	1 POLE	2 POLE	3 POLE	SPARES	SPACES						
RPA	NOOD	LUGS	100	120/208V 3ø, 4W	8-20	3-20 1-70		6-20/1	8-1PS	TOP	RECESSED	VEST A105	10,000	SEE NOTES 1, 2, & 3

- NOTES:**
 1. ALL PANELBOARDS SHALL BE CAPABLE OF WITHSTANDING AND INTERRUPTING THE AVAILABLE FAULT CURRENTS AS LISTED ABOVE.
 2. ALL PANELBOARDS SHALL HAVE MICARTA LABELS SHOWING PANELBOARD DESIGNATION, AND OPERATING VOLTAGE.
 3. NO SERIES RATING WILL BE ALLOWED ON ANY PANELBOARDS.

- PANELBOARD NOTES:**
 1. MANUFACTURER OF SWITCHBOARDS AND/OR PANELBOARDS SHALL PERFORM FAULT CURRENT CALCULATIONS, COORDINATION STUDY, AND ARC FLASH HAZARD ANALYSIS, AND LABEL ALL SWITCHBOARDS AND/OR PANELBOARDS, IN ACCORDANCE WITH NFPA 70E-2009 (ARTICLE 130) AND NFPA 70-2008 (ARTICLE 110.16).
 2. CONTRACTOR SHALL FIELD MARK ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT PER NEC 110.24.
 3. CONTRACTOR SHALL FIELD MARK ELECTRICAL PANELS WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES WHERE PANELS ARE FED FROM PER NEC 408.4(B).

MASTER PLAN
SCALE: 1" = 30'



SHEET TITLE:
MASTER PLAN AND
SINGLE LINE DIAGRAM

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: MARCH 8, 2024
REVISIONS

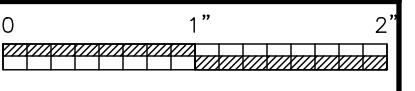
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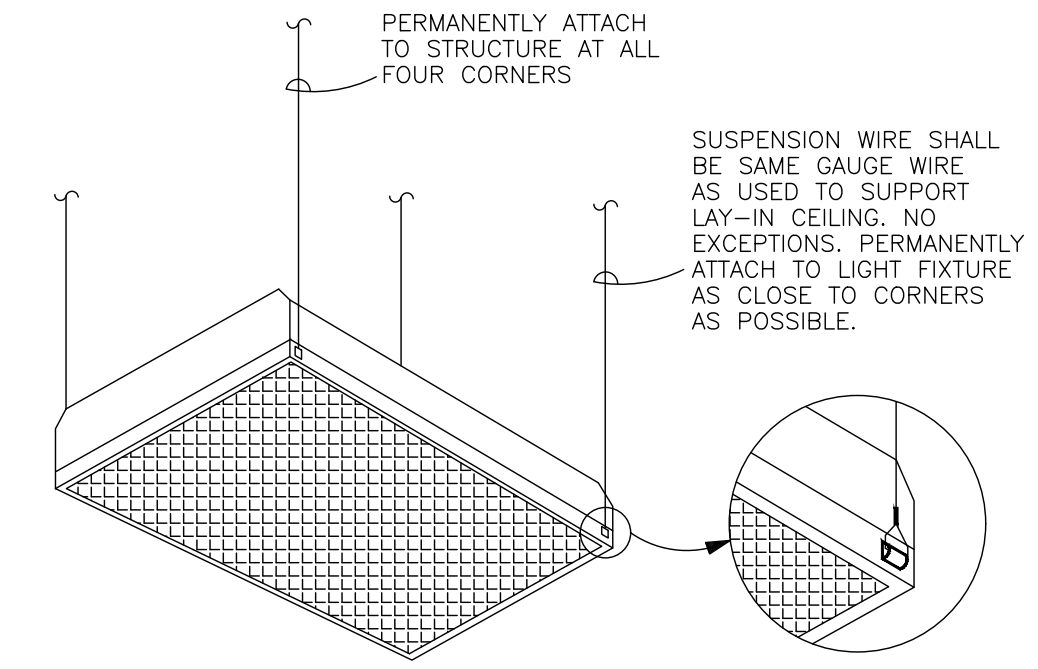
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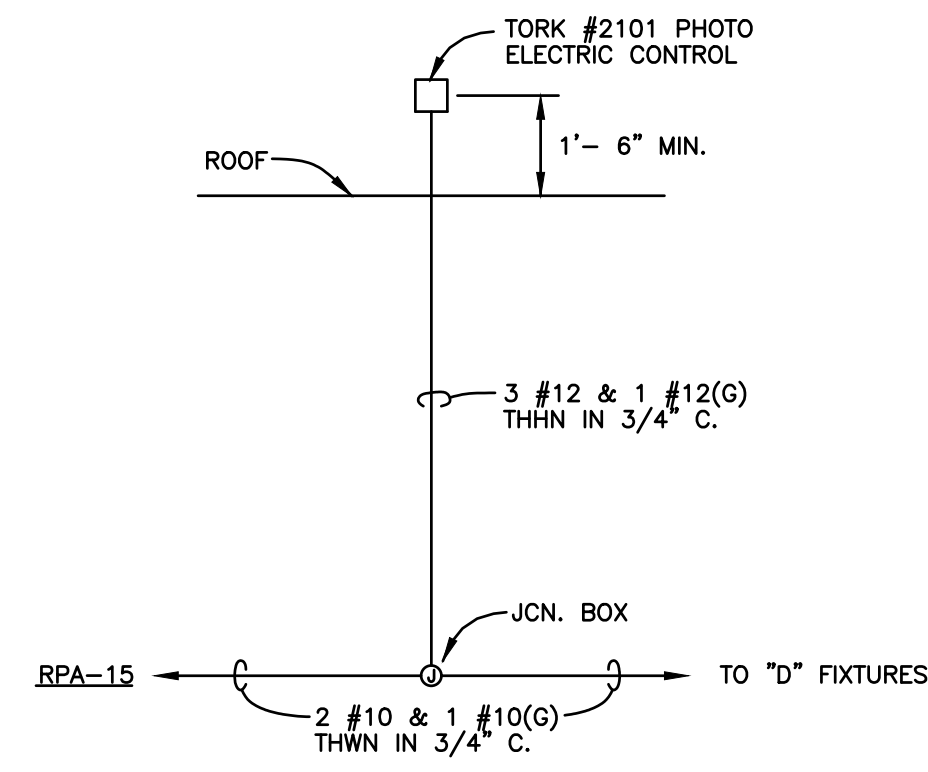
Project Number: 2430

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SHEET NO:
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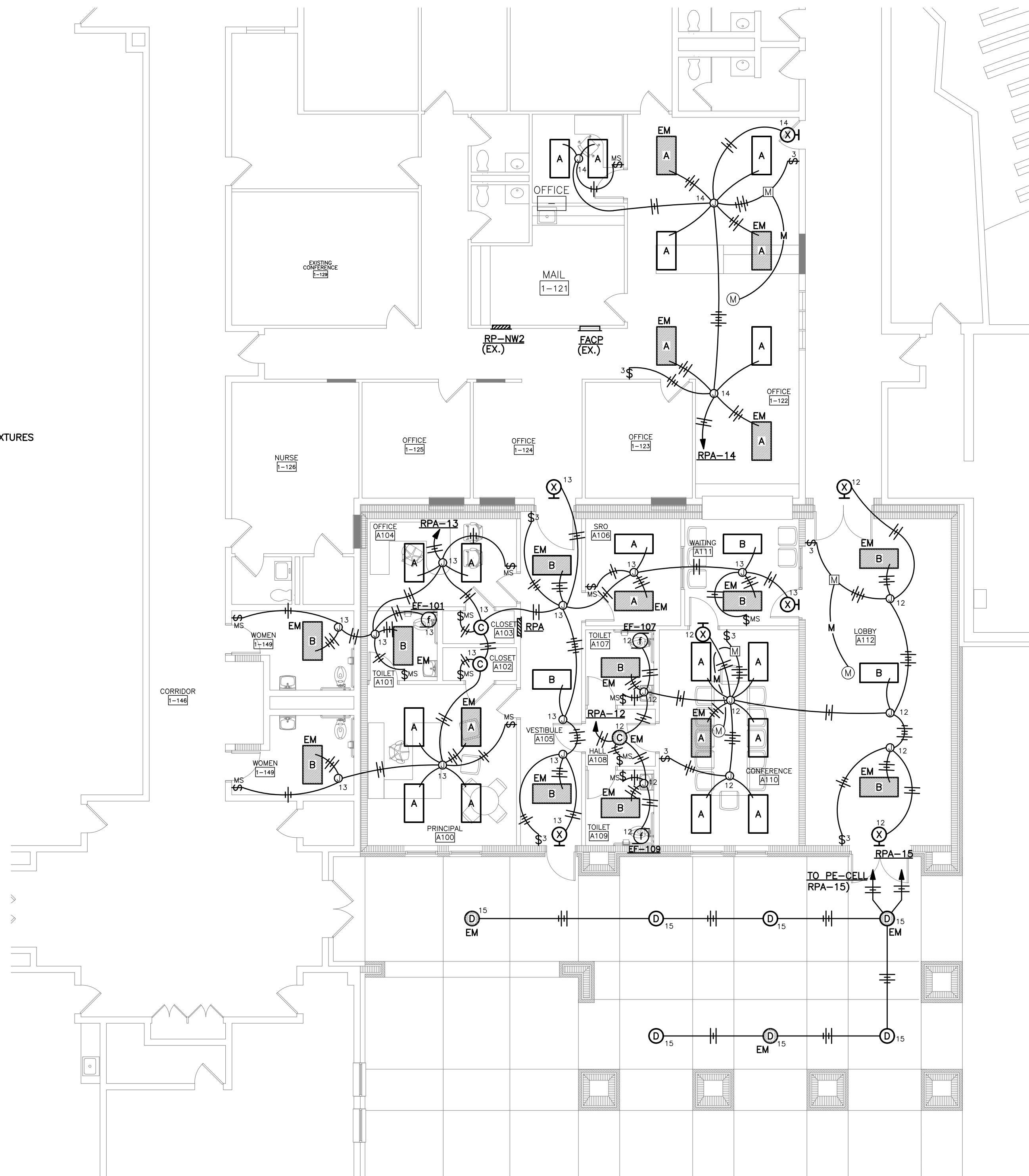




DETAIL - LIGHT FIXTURE SUPPORT
N.T.S.



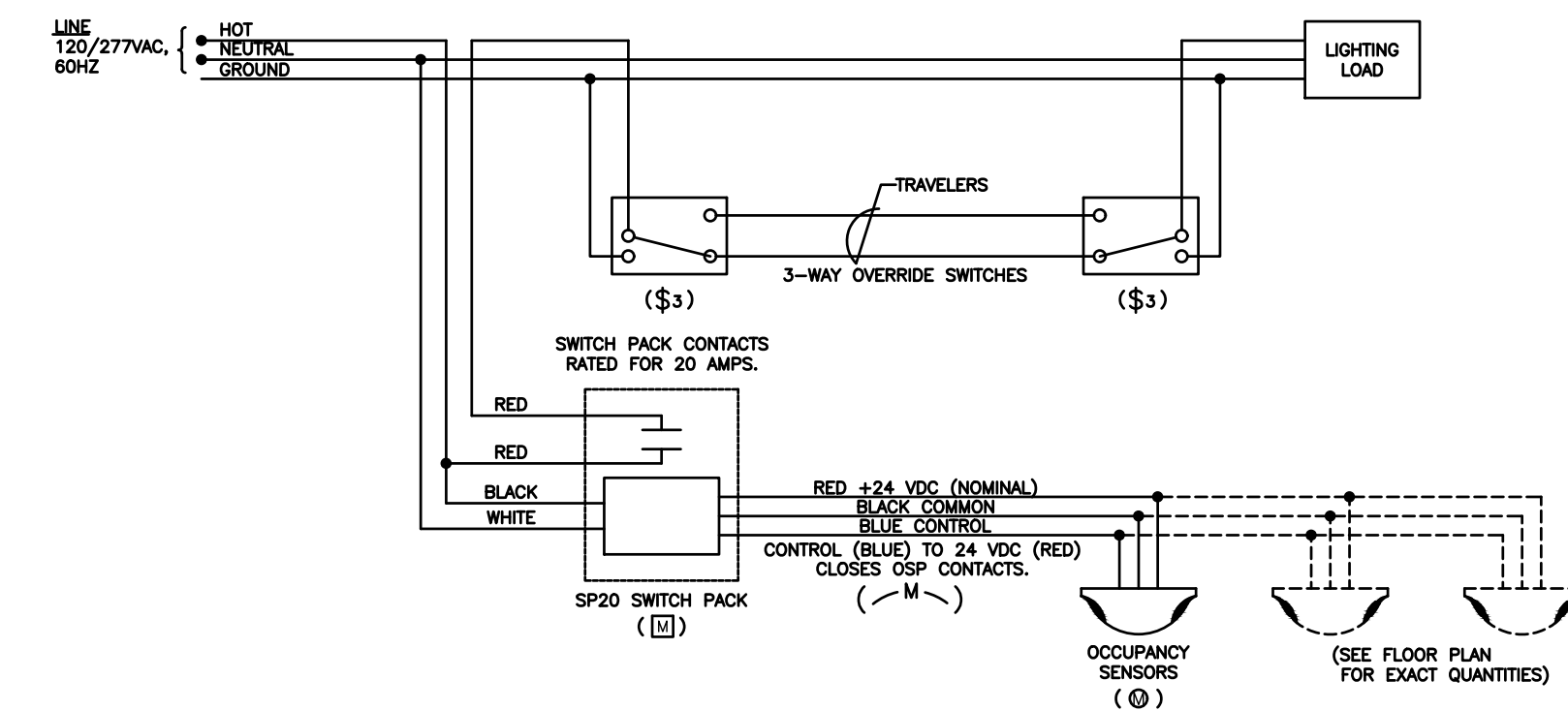
DETAIL - P.E. CELL
N.T.S.



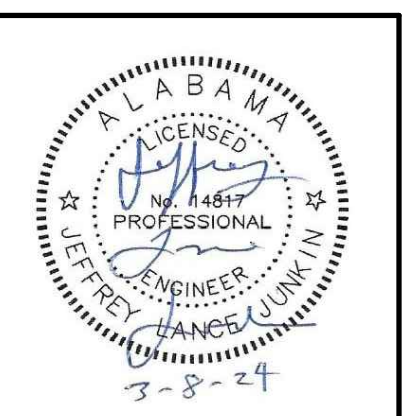
FLOOR PLAN - LIGHTING

SCALE: 1/8" = 1'-0"

NOTES:
1. ALL WIRING SHOWN FEEDING EXTERIOR FIXTURES SHALL BE #10 THHN.



OCCUPANCY SENSOR - 3 WAY
USING POWER PACK SENSORS IN A 3-WAY SWITCHED CIRCUIT
NOT TO SCALE

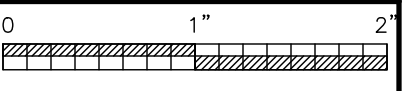


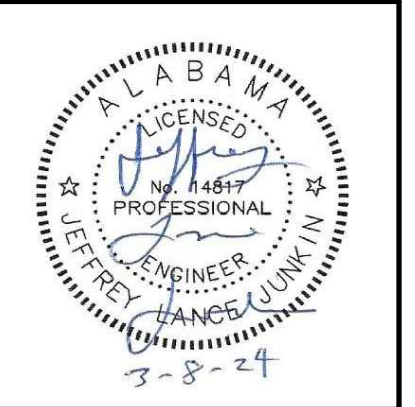
SHEET TITLE:
FLOOR PLAN - LIGHTING

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: MARCH 8, 2024
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SHEET NO:
E3.1
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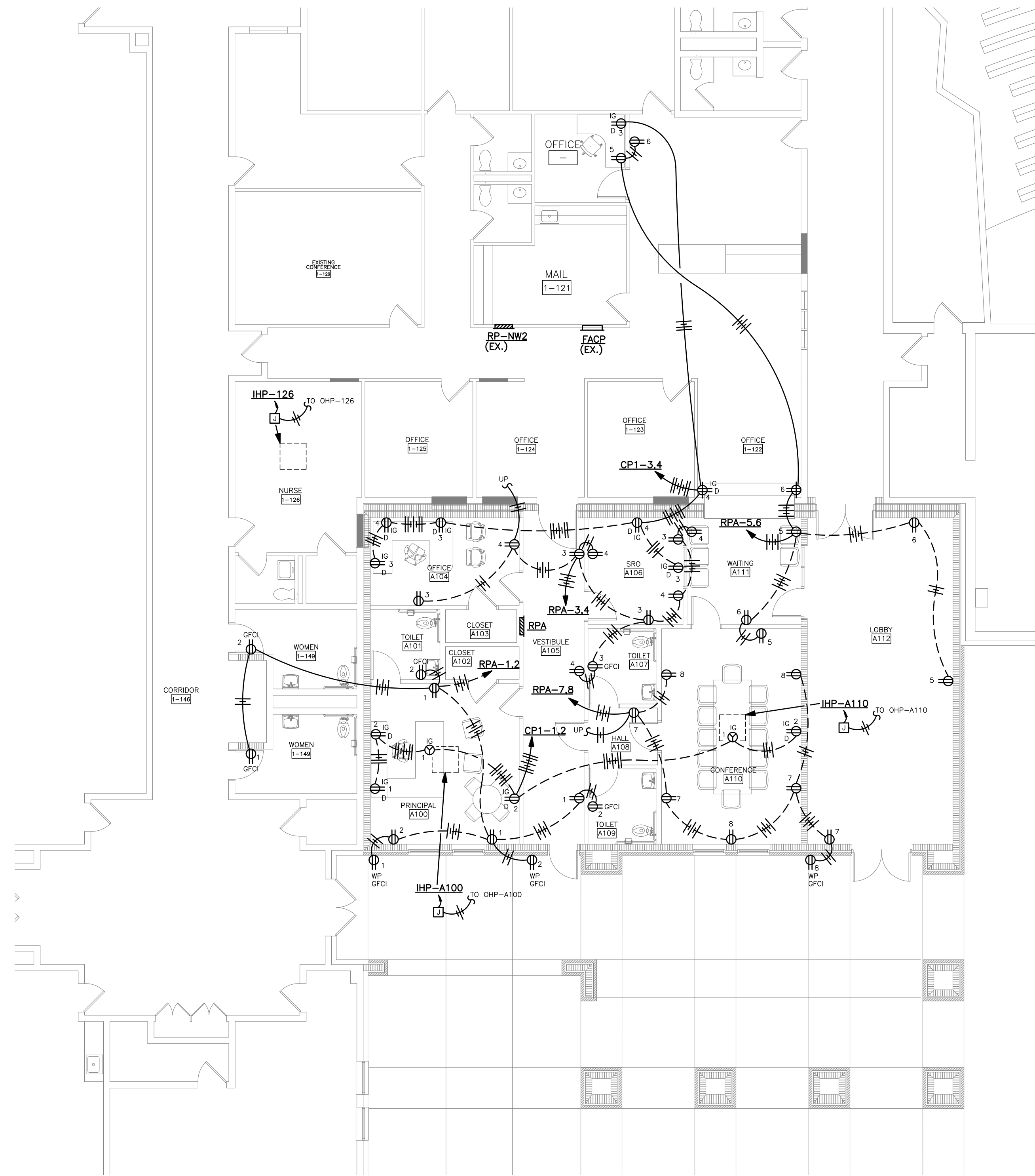
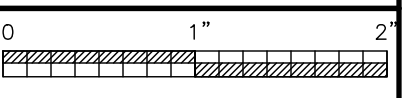
SHEET TITLE:
FLOOR PLAN -
POWER

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: MARCH 8, 2024
REVISIONS

JOB NO. **23-92**
SHEET NO:

E4.1

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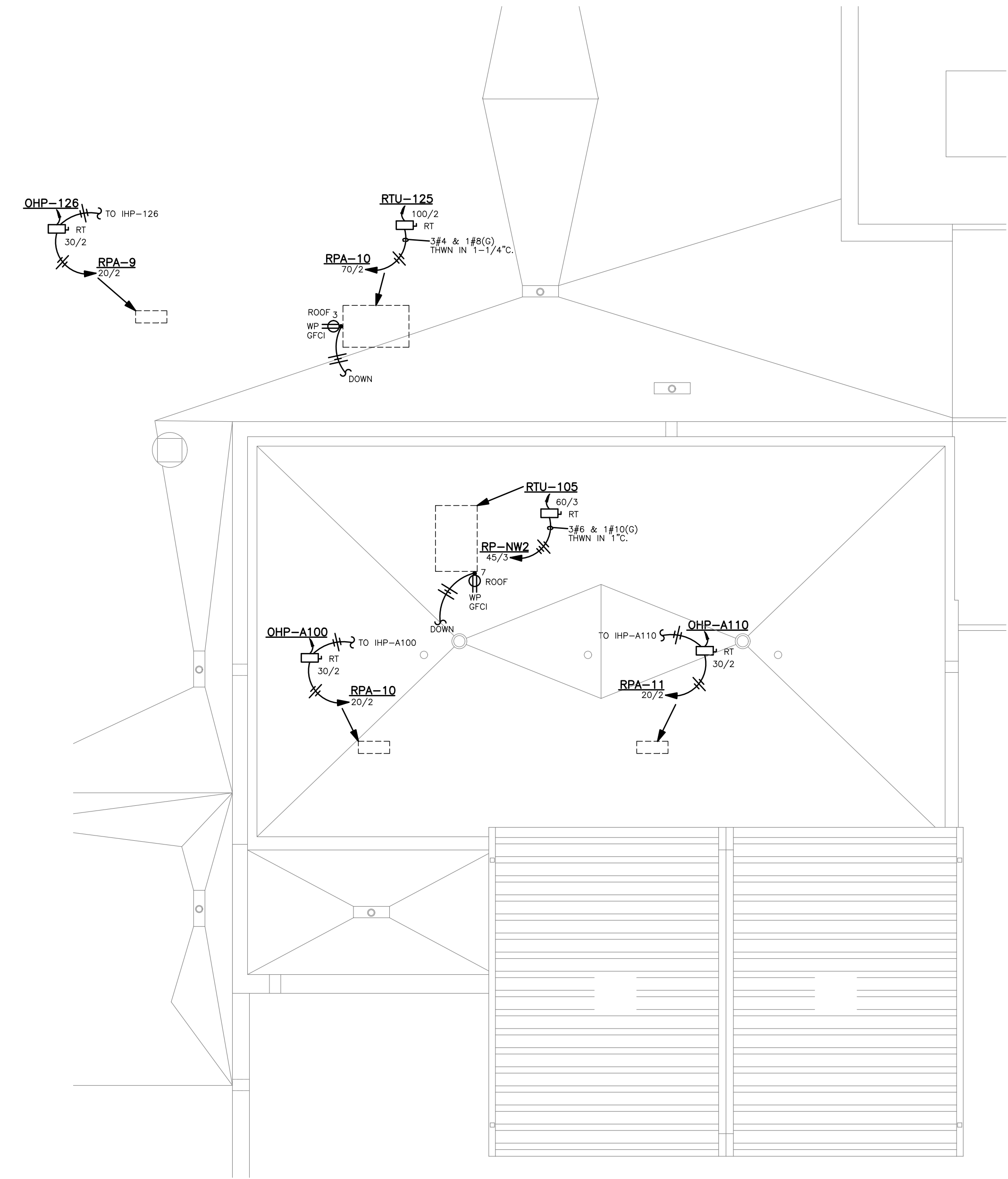


FLOOR PLAN - POWER

SCALE: 1/8" = 1'-0"

NOTES:

1. ALL ISOLATED GROUND TYPE RECEPTACLE OUTLET BRANCH CIRCUITS CONTAIN TWO EQUIPMENT GROUNDING CONDUCTORS. ONE INSULATED GROUND WIRE, CONNECTED TO THE ISOLATED GROUND BUS AT PANELBOARD, CONNECTS TO GROUNDING SCREW ON THE ACTUAL RECEPTACLE. THE OTHER, CONNECTED TO THE "NORMAL" EQUIPMENT GROUND BUS AT PANELBOARD, CONNECTS TO A GROUNDING SCREW IN THE RECEPTACLE OUTLET BOX.
2. COORDINATE ALL OUTLETS AT COUNTER AREAS CLOSELY WITH ARCHITECTURAL CASEWORK DRAWINGS. PLACE OUTLETS BELOW COUNTERS, AT STANDARD MOUNTING HEIGHT, WHEN KNEE SPACE PERMITS ACCESS (COORDINATE INSTALLATION OF HOLES WITH RUBBER GROMMETS IN THOSE CASES).
3. COORDINATE INSTALLATION OF OUTLETS CLOSELY WITH FURNITURE SUPPLIER.
4. ALL BRANCH CIRCUIT HOME RUNS THAT EXCEED 100' IN LENGTH SHALL BE #10 THHN.

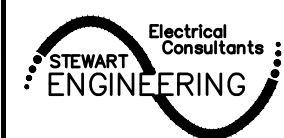


ROOF PLAN - POWER

SCALE: 1/8" = 1'-0"

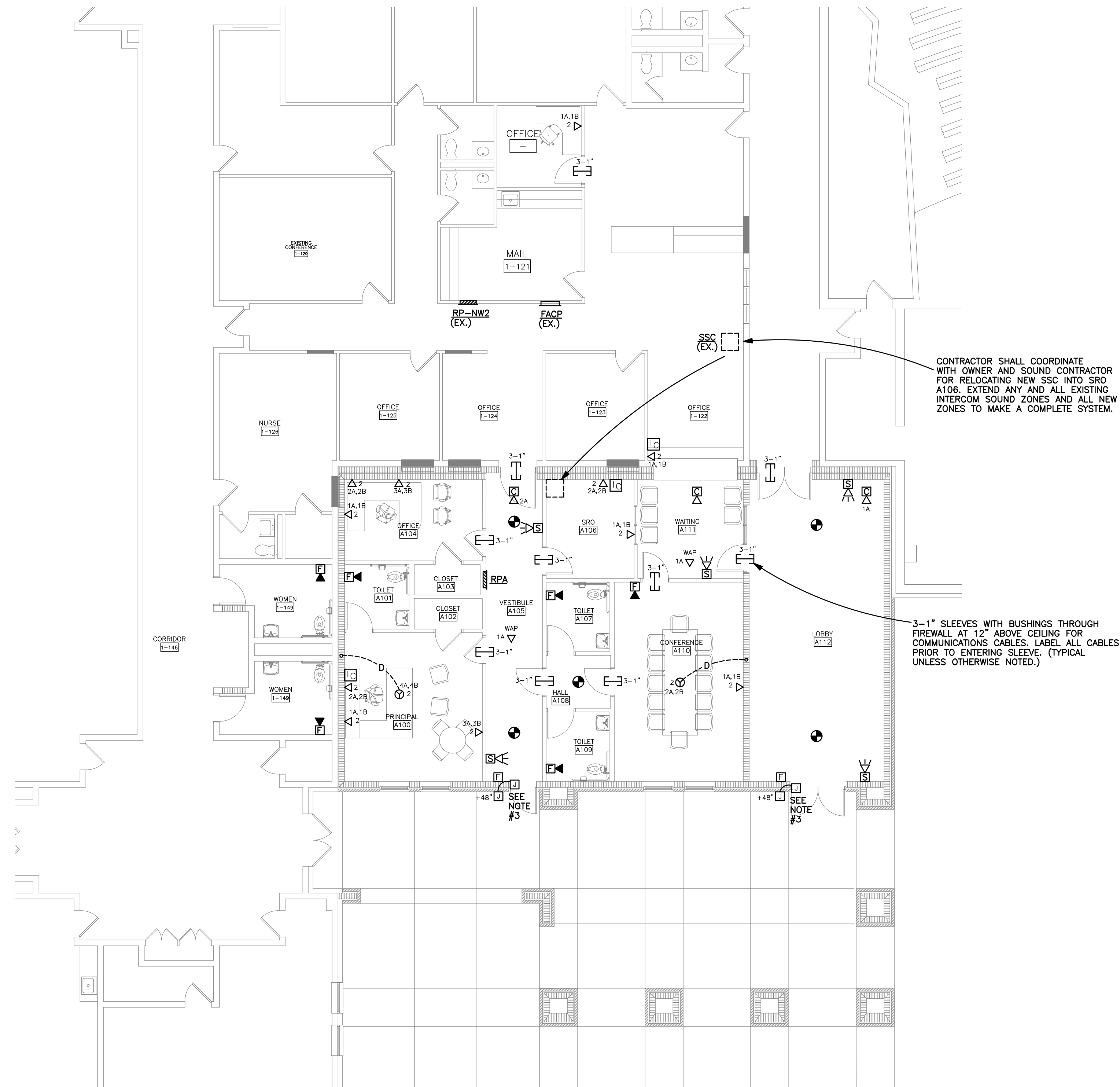
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Project Number:
2430



AUXILIARY CIRCUIT LEGEND	
△ 2A	DATA OUTLET 2A (1 CAT. 6 CABLE PULLED TO JUNCTION BOX AND TERMINATED, LEAVE 12" SLACK ON EACH CABLE)

OUTLET NUMBER:	ROOM NUMBER:
2A	A104
IDF NUMBER:	PATCH PANEL/PORT #:
MDF	1 / 1

DETAIL - DATA CABLE LABEL
N.T.S.

NOTES:

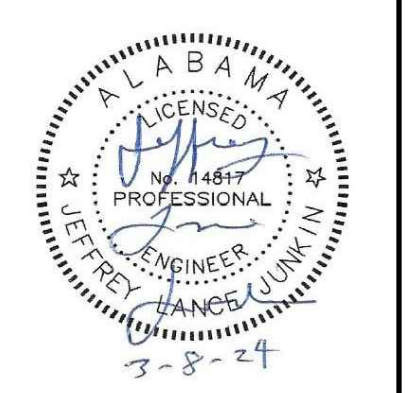
- LABEL ALL CABLES EVERY 50' AND AT EACH END.
- EXACT LABEL METHOD SHALL BE COORDINATED WITH, AND APPROVED BY, ENGINEER PRIOR TO PURCHASE AND INSTALLATION.
- IF ONLY ONE (1) OUTLET IN A ROOM, LABEL OUTLET AS 1A.
- ROOM NUMBERS ON LABELS SHALL CORRESPOND TO FINAL ROOM NUMBERS IN FIELD (NOT NECESSARILY SAME AS ON CONSTRUCTION DRAWINGS).

FLOOR PLAN - AUXILIARIES

SCALE: 1/8" = 1'-0"

- NOTES:**
- ALL COMPUTER OUTLETS SHOWN ON THIS PLAN ARE SERVED FROM MDF(EX.).
 - COORDINATE FINAL LOCATIONS OF ALL CEILING SPEAKERS, SMOKE DETECTORS, CAMERAS, ETC. TO AVOID CONFLICT WITH LIGHT FIXTURES AND MECHANICAL DIFFUSERS. PLACE THESE DEVICES AS CLOSE AS POSSIBLE TO LOCATION SHOWN ON THESE DRAWINGS. COORDINATE WITH FIRE ALARM SYSTEM MANUFACTURER WITH REGARD TO APPROPRIATE "MINIMUM" DISTANCE FROM DIFFUSERS.
 - AT THESE DOOR LOCATIONS, CONTRACTOR SHALL INSTALL EMPTY JUNCTION BOX WITH 3/4" EMPTY CONDUIT WITH PULL STRING TO ABOVE LAY-IN CEILING FOR FUTURE CARD ACCESS SYSTEM. COORDINATE CLOSELY WITH ARCHITECT FOR DOOR HARDWARE CONFIGURATION.

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SHEET TITLE:
FLOOR PLAN -
AUXILIARIES

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: MARCH 8, 2024

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JOB NO. **23-92**
SHEET NO:
E5.1
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