



800 Main Street,  
Augusta, Arkansas

# CENTER FOR EDUCATION AND WELLNESS



**GENERAL PRE-ENGINEERED TRUSS NOTES:**

1. TRUSS MANUFACTURER SHALL PROVIDE PRE-ENGINEERED WOOD TRUSSES AT 2' - 0" O.C. MAX. AS SHOWN IN THESE ARCHITECTURAL AND STRUCTURAL DRAWINGS. COORDINATE WITH OTHER TRADES AS REQUIRED.
2. FIELD VERIFY AND MATCH EXISTING TRUSS EDGE/OVERHANG PROFILE.
3. COORDINATE WITH ATTIC PLAN 3/A1.2 TO PROVIDE OPENINGS IN TRUSSES AT MECHANICAL PLATFORMS.
4. COORDINATE WITH REFECTED CEILING PLAN AND STRUCTURAL DRAWINGS TO ALLOW FOR COLLATERAL LOAD FROM THERAPY SWINGS. GC SHALL PROVIDE MOUNTING KITS FROM TRUSSES TO FACE OF LAY-IN CEILING. EACH OF FOUR (4) LOCATIONS SHALL SUPPORT 500 LBS.
5. COORDINATE WITH STRUCTURAL DRAWINGS FOR CONNECTIONS AT BEARING LOCATIONS.

**FIRE SPRINKLER NOTES:**

1. PROVIDE DESIGN/BUILD WET PIPE FIRE SPRINKLER SYSTEM BY EXPANSION OF EXISTING SYSTEM THROUGHOUT ADDITION, INCLUDING ATTIC AS REQUIRED, IN ACCORDANCE WITH NFPA 13.
2. COORDINATE WITH INSTALLATION OF FIRE ALARM SYSTEM.
3. SEE NOTE ON ROOF DEMO PLAN REGARDING RELOCATION OF AN EXISTING PIPE.

## PROJECT DIRECTORY

OWNER:	ARCARE - STEVEN COLLIER, MD, CEO 117 SOUTH 2ND STREET P.O. BOX 497 AUGUSTA, AR 72006 870.347.2534
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STRUCTURAL:	PHILLIP LEWIS ENGINEERING, INC. 26320 I-30 FRONTAGE ROAD BRYANT, AR 72022 501.350.9840
MECHANICAL, ELECTRICAL & PLUMBING	HSA ENGINEERING CONSULTING SERVICES, INC. 5701 EUPER LANE, STE A FORT SMITH, AR 72903 501.327.5757

**GENERAL PROJECT NOTES:**

1. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS IN THE INDEX, THE PROPOSED SITE, AND OTHER INFORMATION PRESENTED FOR THE CONSTRUCTION OF THIS PROJECT. IF DISCREPANCIES ARE FOUND OR IF CONTRACTORS HAVE QUESTIONS REGARDING LAYOUTS, MATERIALS OR DETAILS WITHIN THE PROJECT THEY SHALL BE MADE KNOWN TO THE OWNER IN WRITING PRIOR TO BIDDING THE PROJECT. CLAIMS MADE SUBSEQUENT TO THE BID WILL NOT BE ACCEPTED IF IT IS DETERMINED THAT PROPER FAMILIARIZATION COULD HAVE AVOIDED SUCH CLAIM.
2. THE BUILDING PERSPECTIVE VIEW ON THIS SHEET IS FOR DIAGRAMMATIC PURPOSES ONLY AND NOT FOR CONSTRUCTION.
3. ONLY DOCUMENTS OBTAINED THROUGH STEWARCH ARCHITECTURE ARE CONSIDERED THE OFFICIAL VERSION AND TAKE PRECEDENCE IF ANY DISCREPANCIES OCCUR. IT IS THE SOLE RESPONSIBILITY OF EACH SUBCONTRACTOR AND EACH INVITED BIDDER TO VERIFY THAT THEIR BID IS BASED ON A COMPLETE SET OF CONSTRUCTION DOCUMENTS INCLUDING ALL ADDENDA.
4. WHERE A PRODUCT IS NOT SPECIFIED, THE BUILDING STANDARD SHALL BE USED.

## CODE DATA

OCCUPANCY CLASSIFICATION:	GROUP I-4, CHILD DAY CARE FACILITY
OCCUPANCY LOAD:	DAY CARE - 35 NET
TYPE OF CONSTRUCTION:	TYPE VB, SPRINKLERED
ALLOWABLE HEIGHT:	ADDITION IS LOWER THAN EXISTING BUILDING
ALLOWABLE BUILDING AREA:	27,000 SF ALLOWABLE WITH SPRINKLER
FLOOR AREA (GROSS):	EXISTING = 19,725 SF (FROM CONSTRUCTION PLANS) ADDITION = 4,483 SF TOTAL = 24,208 SF
EXIT REQUIREMENTS AND OCCUPANCY LOAD:	4,483 SF/35 = 129 OCCUPANTS (CONSERVATIVE CALCULATION) 129 X .15 = 19.35"; 32" REQ'D; 66" ACTUAL FROM ADDITION
AUTOMATIC FIRE SPRINKLER AND FIRE ALARM SYSTEMS:	SHALL BE INSTALLED
SEISMIC REQUIREMENTS:	SEE STRUCTURAL DRAWINGS

**MECHANICAL / ELECTRICAL / PLUMBING COORDINATION NOTES:**

1. THESE NOTES ARE PROVIDED FOR **BIDDING PURPOSES ONLY**. ALL WORK SHALL CONFORM TO MEP DRAWINGS UNLESS NOTED OTHERWISE.
2. RECEPTACLES FOR OWNER PROVIDED WALL MOUNTED TVS SHALL BE LOCATED WHERE INDICATED ON FLOOR PLAN WITH "TV". COORDINATE WITH ELEC. PLANS THAT SHOW A DIFFERENT LOCATION.
3. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL COORDINATION INFORMATION. THERE IS A GC OPTION FOR GAS SUPPLY AND SANITARY SEWER SHOWN ON THIS SITE PLAN AND IN MEP DRAWINGS.
4. SEE 4/A1.2 THE TOILET MARKED AS "ADA" AND IT'S ACCESSORIES SHALL MATCH THE ADULT TOILET IN THE STAFF RR. COORDINATE WITH PLUMBING PLANS THAT CALL FOR A NON-ACCESSIBLE TOILET. VERIFY WITH OWNER.

## INDEX OF DRAWINGS

SHEET NAME	
A0.1	COVER, INDEX & CODE DATA
A0.2	ARCH. SITE PLAN & LIFE SAFETY PLAN
A0.3	DEMOLITION PLAN
A1.1	FLOOR PLAN & SCHEDULES
A1.2	MISC. PLANS, DETAILS & MILLWORK
A1.3	ROOF PLANS & REFLECTED CEILING PLAN
A2.1	ELEVATIONS AND BUILDING SECTIONS
A3.1	WALL SECTIONS
S1.1	FOUNDATION PLAN
S1.2	ROOF FRAMING PLAN
P1.1	NOTES, LEGEND & SCHEDULES
P2.1	PLUMBING PLANS & KEYED NOTES
P3.1	PLUMBING DETAILS
P4.1	PLUMBING RISERS
M1.1	HVAC LEGEND AND NOTES
M2.1	HVAC PLANS
M3.1	HVAC DETAILS
M6.1	MECHANICAL AND PLUMBING SPECIFICATIONS
E1.1	ELECTRICAL LEGEND, NOTES, & DETAILS
E1.2	ELECTRICAL SPECIFICATIONS
E2.1	LIGHTING PLAN
E2.2	POWER PLAN
E2.3	MECHANICAL POWER PLAN
E2.4	SPECIAL SYSTEMS PLAN
E2.5	ELECTRICAL ATTIC PLAN
E3.1	ELECTRICAL SCHEDULES AND RISER DIAGRAM

I, JOSHUA STEWART - ARCHITECT, DO HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS.

RESPONSIBILITY MATRIX					
#	ITEM	OF / OI	OF / CI	CF / CI	REMARKS / OTHER COORDINATION
1	FIRE EXTINGUISHERS			X	ALLOW FOR (2) IN CABINETS
2	INTERIOR LIGHT FIXTURES AND LAMPS			X	SEE MEP SHEETS
3	INTERIOR SIGNAGE			X	RESTROOM SIGNAGE ONLY
4	RESTROOM ACCESSORIES			X	SEE ACCESSORY SCHEDULE
5	EXTERIOR SIGNAGE	X			NONE EXPECTED IN PROJECT
6	FURNITURE, FIXTURES AND EQUIPMENT	X			
7	WALL AND FLOOR FINISHES			X	SEE FINISH SCHEDULE
8	MILLWORK			X	SEE MILLWORK SHEET
9	FIRE ALARM SYSTEM			X	SEE MEP SHEETS
10	SPRINKLER SYSTEM			X	SEE NOTES THIS SHEET
11	HVAC SYSTEM			X	SEE MEP SHEETS
12	PLUMBING SYSTEM			X	SEE MEP SHEETS
13	ELECTRICAL SYSTEM			X	SEE MEP SHEETS
14	EMERGENCY LIGHTING / SIGNAGE			X	SEE MEP SHEETS
15	PHONE/DATA SYSTEM	X			NONE EXPECTED IN PROJECT
16	AUDIO / VIDEO SYSTEMS	X			NONE EXPECTED IN PROJECT
17	ACCESS CONTROL AND SECURITY SYSTEMS	X		X	CONTRACTOR TO FURNISH AND INSTALL CONDUIT ONLY; SEE FLOOR PLAN FOR DOORS MARKED WITH "A.C."

OF / OI - OWNER FURNISHED-OWNER INSTALLED  
OF / CI - OWNER FURNISHED-CONTRACTOR INSTALLED  
CF / CI - CONTRACTOR FURNISHED-CONTRACTOR INSTALLED

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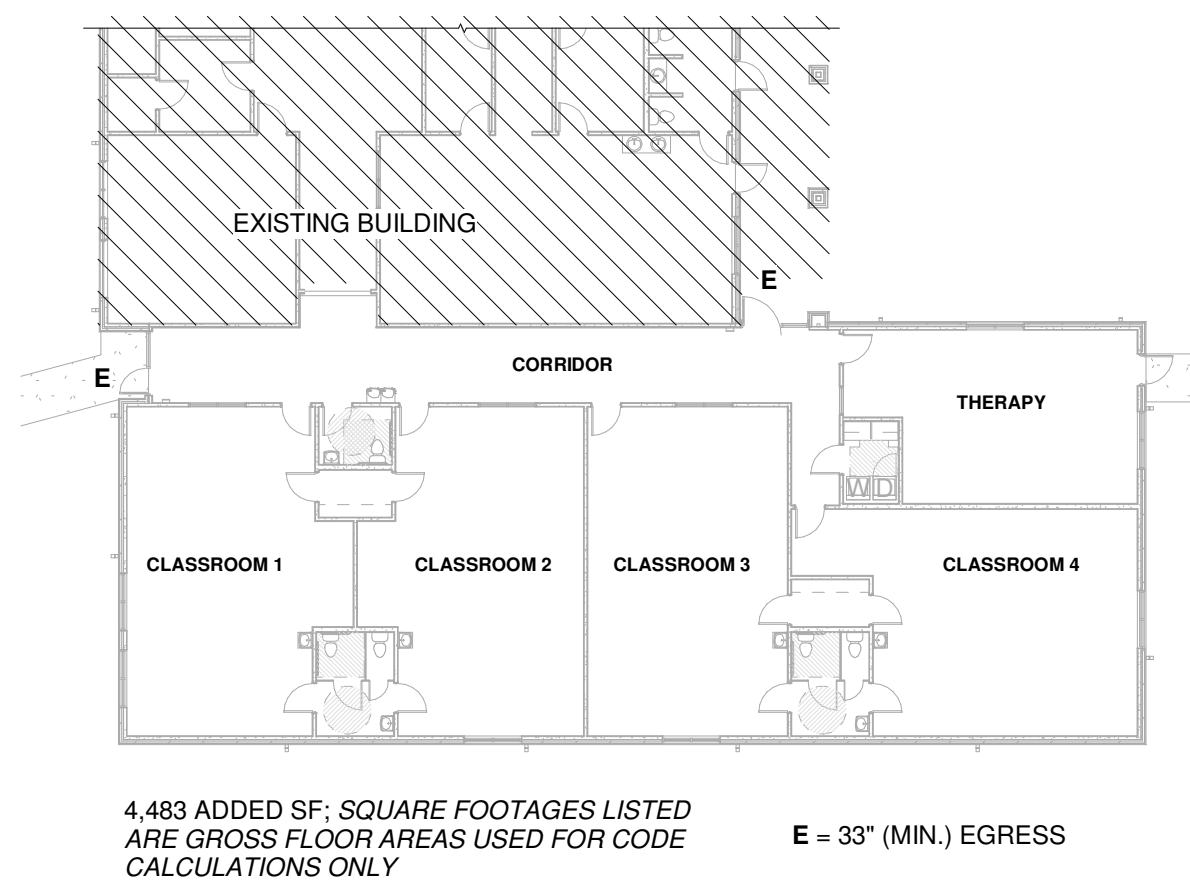
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Project number: 20100  
Date 03 March, 2021  
Revisions:

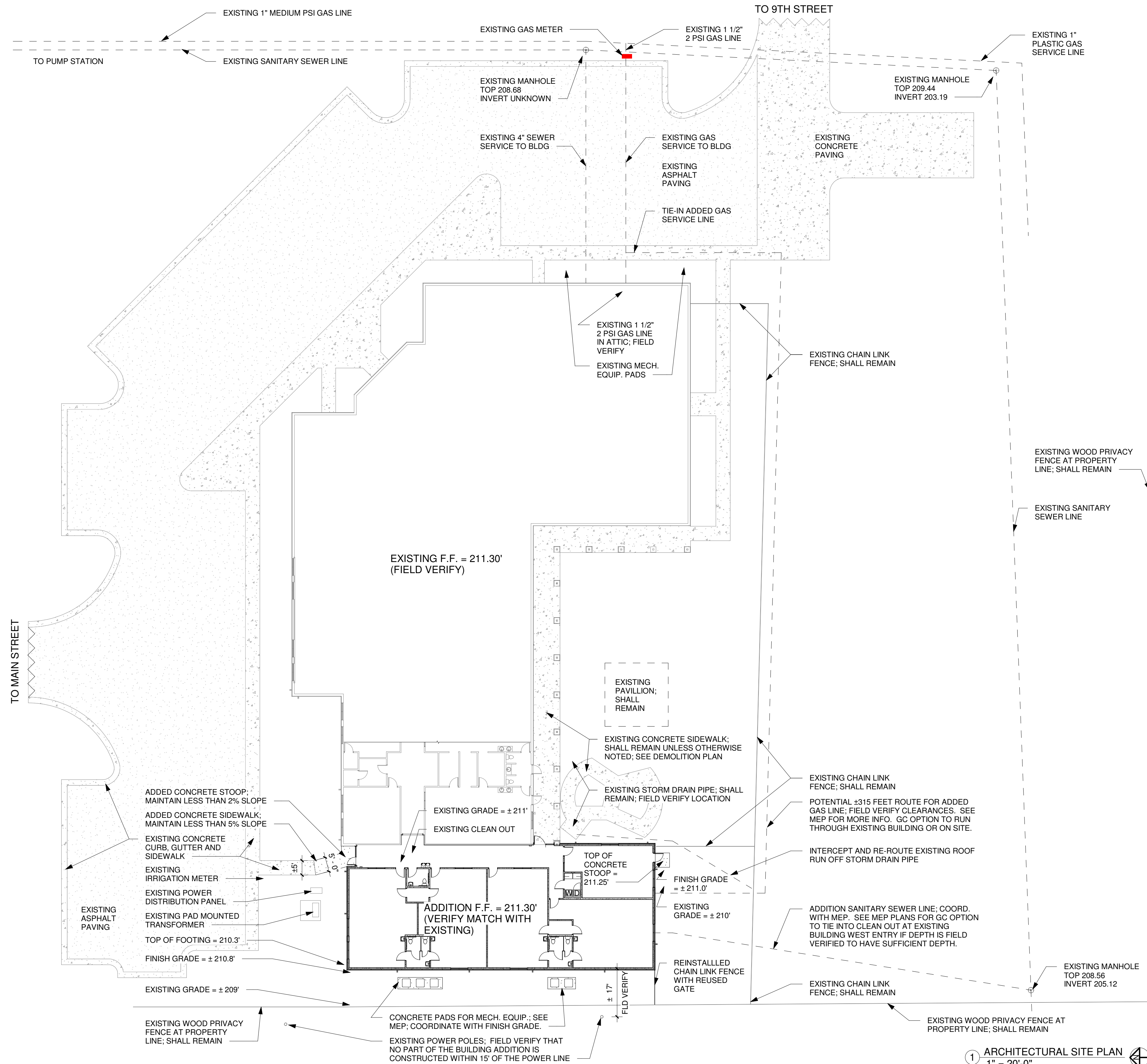
COVER, INDEX  
& CODE DATA

A0.1





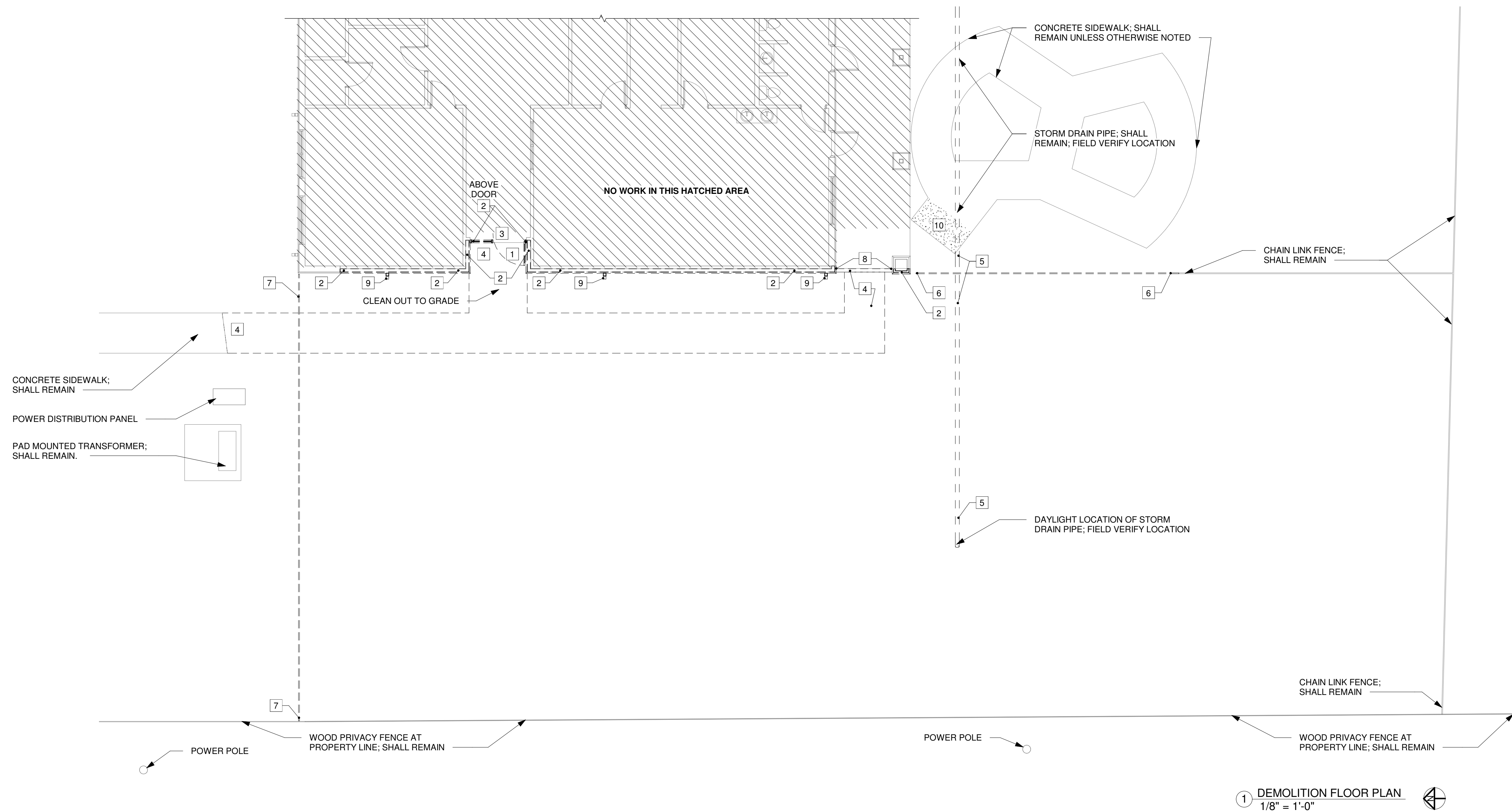
② LIFE SAFETY FLOOR PLAN  
1" = 20'-0"



GENERAL SITE WORK NOTES:

1. THIS PLAN PROVIDED FOR REFERENCE ONLY. ALL SITE LOCATIONS ARE APPROXIMATE. SITE VISIT BY GC PRIOR TO BID IS REQUIRED.
2. ELEVATIONS OF EXISTING BUILDING SLAB AND EXISTING MANHOLES WERE TAKEN FROM CONSTRUCTION DRAWINGS FOR EXISTING BUILDING AND ARE PROVIDED FOR REFERENCE ONLY.
3. DOWNSPOUTS ADDED TO THE SOUTH AND EAST SHALL CONNECT TO STORM DRAIN PIPE. PROVIDE SPLASH BLOCKS AT OTHERS ON NORTH AND WEST.
4. REGRADE AND REPLACE SOD AS REQUIRED WITHIN 12 FEET OF ADDITION. SEE PLAN FOR APPROXIMATE EXISTING GRADE; FIELD VERIFY. COORDINATE WITH STRUCT. FOUNDATION DETAILS.





**DEMOLITION KEYED NOTES:**

- 1 REMOVE STOREFRONT ENTRANCE SYSTEM AND PREPARE FOR REINSTALLATION. SEE DOOR SCHEDULE.
- 2 REMOVE PORTION OF BRICK AND STONE VENEER FROM EXTERIOR WALL/COLUMN AND PREPARE FOR INTERIOR FINISH; COORDINATE EXTENTS WITH FLOOR PLANS. INCLUDE HEADER VENEER DOORS INDICATED. SEE FINISH SCHEDULE. NOTIFY OWNER IMMEDIATELY IF CONFLICTS ARE FOUND WITHIN THE EXISTING WALLS.
- 3 REMOVE EXISTING ACCESS CONTROL TO THIS DOOR AND RETURN TO OWNER FOR RE-INSTALLATION
- 4 REMOVE PORTION OF SIDEWALK INDICATED BY DASHED LINES AND HATCH PATTERN. PREPARE TO CONNECT TO ADDED SIDEWALK AS SHOWN ON FLOOR PLAN. COORDINATE THE EXTENT TO REMOVE WITH THE REQUIRED SLOPE OF ADDED SIDEWALK.
- 5 REMOVE PORTION OF STORM DRAIN PIPE UNDER AREA OF ADDITION; FIELD VERIFY LOCATION; PREPARE TO RELOCATE; SEE ARCH. SITE PLAN.
- 6 REMOVE PORTION OF CHAINLINK FENCE AND PREPARE TO TERMINATE AT SOUTHEAST CORNER OF ADDITION. PREPARE TO REINSTALL REMOVED PORTION AT SOUTHWEST CORNER OF ADDITION; SEE ARCH. SITE PLAN.
- 7 REMOVE PORTION OF CHAINLINK FENCE AND REUSE AS NEEDED, AT MINIMUM REUSE GATE WHERE CALLED FOR ON ARCH. SITE PLAN.
- 8 REMOVE METAL GATE AND RETURN TO OWNER.
- 9 REMOVE THREE (3) PREFINISHED METAL DOWNSPOUTS AND PREPARE TO REINSTALL ON WEST SIDE OF ADDITION.
- 10 CONCRETE SIDEWALK; REMOVE AND REPLACE AS NECESSARY FOR STORM DRAIN REROUTING

**GENERAL DEMOLITION PLAN NOTES:**

(MATCHING NOTES ON EACH DEMOLITION PLAN)

1. FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY OWNER IF DISCREPANCIES ARE FOUND.
2. UNLESS EXPLICITLY CALLED FOR IN THAT AREA, NO WORK SHALL BE PERFORMED IN AREAS LABELED "NO WORK IN THIS HATCHED AREAS".
3. REFER TO AND COORDINATE WITH MEP PLANS FOR ADDITIONAL DEMOLITION REQUIREMENTS. PATCH/REPAIR AFFECTED/DISTURBED SURFACES THAT REMAIN.
4. COORDINATE WITH DEMOLITION ROOF PLAN 1/A.1.3



FINISH SCHEDULE						
#	NAME	FLOOR FINISH	BASE	WALL MATERIAL	WALL FINISH	COMMENTS
101	CORRIDOR	LVP	VINYL	GYP BD	PAINT	NEW GYP BD AT WEST SIDE
102	CLASSROOM 1	LVP	VINYL	GYP BD	PAINT	
103	STAFF RR	LVP	VINYL	GYP BD	PAINT	
104	STORAGE	LVP	VINYL	GYP BD	PAINT	
105	RR	LVP	VINYL	GYP BD	PAINT	
106	CLASSROOM 2	LVP	VINYL	GYP BD	PAINT	
107	CLASSROOM 3	LVP	VINYL	GYP BD	PAINT	
108	STORAGE	LVP	VINYL	GYP BD	PAINT	
109	RR	LVP	VINYL	GYP BD	PAINT	
110	CLASSROOM 4	LVP	VINYL	GYP BD	PAINT	
111	THERAPY	LVP	VINYL	GYP BD	PAINT	
112	LAUNDRY	LVP	VINYL	GYP BD	PAINT	

**FINISH SCHEDULE ABBREVIATIONS:**

GYP BD	- 5/8" TYPE 'X' GYPSUM WALLBOARD	MRGB	- 5/8" MOISTURE RESISTANT GYPSUM
LVP	- LUXURY VINYL PLANK; CR705 VIVID STEP WOOD BY MOHAWK; 2MM THK WITH 12 MIL WEAR LAYER; 6"X48"	PAINT	- PRIMER + 2 COATS WITH EGGSHELL SHEEN AT WALLS
		VINYL	- 4" VINYL WALL BASE

**FINISH NOTES:**

- VERIFY ALL FINISHES WITH OWNER PRIOR TO ORDERING.
- ALL WALLS WITH PLUMBING FIXTURES SHALL RECEIVE MOISTURE RESISTANT GYPSUM BOARD.
- PAINT DOOR FRAMES AND MISC. METAL WITH PRIMER + 2 COATS (OIL BASED) WITH SEMI GLOSS SHEEN
- SUBCONTRACTORS TO VERIFY ALL LISTED SQAURE FOOTAGES.
- PROVIDE FLOORING TRANSITION FROM EXISTING BUILDING TO CORRIDOR.
- GYP BD SHALL BE FINISHED PER GA-214 "RECOMMENDED LEVELS OF GYPSUM BOARD FINISH". UNLESS OTHERWISE NOTED FINISH LEVEL SHALL BE LEVEL 3 AT CEILINGS AND LEVEL 4 WALLS.

**HARDWARE SCHEDULE:**

THE FOLLOWING IS A GENERAL LISTING OF THE MINIMUM HARDWARE REQUIREMENTS. ANY ITEM OF HARDWARE NORMALLY REQUIRED BY GOOD PRACTICE, OR AS TO MEET STATE OR LOCAL CODES, SHALL BE INSTALLED EVEN IF IT IS NOT SPECIFICALLY LISTED.

**SET 0 ( REUSED STOREFRONT DOOR )**  
REUSE EXISTING HARDWARE

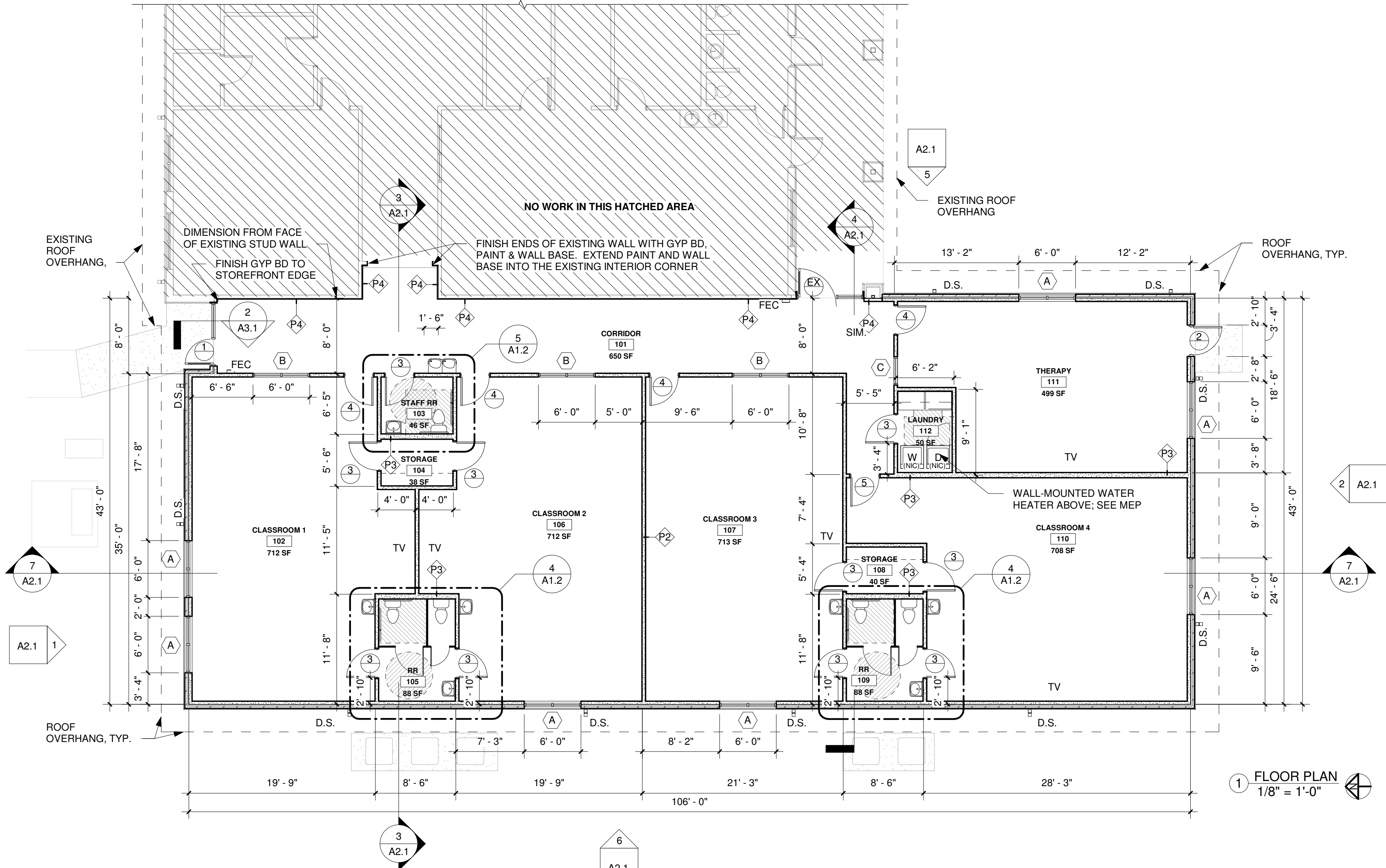
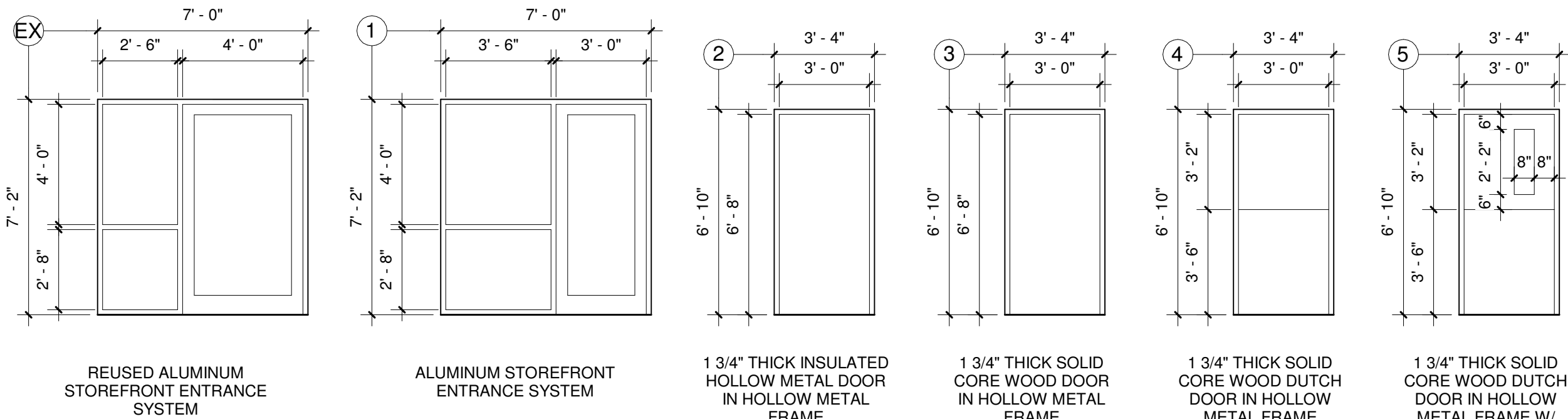
**SET 1 ( ADDED STOREFRONT DOOR )**  
CYLINDER TO OPERATE HARDWARE; BALANCE OF HARDWARE BY DOOR SUPPLIER. INCLUDE PANIC DEVICE.

**SET 2 ( EXTERIOR DOOR FROM THERAPY )**  
AT MIN. INCLUDING: LOCKSET, SURFACE CLOSER, KICK PLATE, THRESHOLD, WEATHER STRIPPING, SEALS & SWEEP, AND ANY ADDITIONAL ITEM(S) AS REQUIRED BY GOOD PRACTICE.

<b>SET 3 ( STORAGE )</b>	<b>SET 6 ( RR )</b>
3 HINGES	3 HINGES
1 ENTRANCE LOCKSET	1 PUSH / PULL SET
1 WALL STOP	1 SURFACE CLOSER
3 SILENCERS	1 KICK PLATE
	1 WALL STOP
<b>SET 4 ( LAUNDRY )</b>	3 SILENCERS
3 HINGES	
1 STOREROOM LOCKSET	<b>SET 7 ( CLASSROOMS &amp; THERAPY )</b>
1 SURFACE CLOSER	4 HINGES
1 KICK PLATE	1 ENTRANCE LOCKSET
1 WALL STOP	1 DUTCH DOOR BOLT
3 SILENCERS	1 WALL STOP
	1 DUTCH DOOR HOLDER
<b>SET 5 ( STAFF RR )</b>	4 SILENCERS
3 HINGES	
1 PRIVACY LOCKSET	
1 SURFACE CLOSER	
1 KICK PLATE	
1 WALL STOP	
3 SILENCERS	

**HARDWARE SCHEDULE NOTES:**

- CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL KEYING. HARDWARE SUPPLIER SHALL COORDINATE KEYING REQUIREMENTS WITH OWNER AND SUBMIT DETAILED KEYING SCHEDULE ACCORDINGLY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING & VERIFYING ALL HARDWARE IS PROVIDED TO COMPLETE EACH OPENING.
- EXISTING LOCKSETS ARE PDQ AND EXISTING HINGES ARE HAGER.
- WHERE A PRODUCT IS NOT SPECIFIED, THE BUILDING STANDARD SHALL BE USED.
- COORDINATE AND VERFIY ALL HARDWARE WITH OWNER.



**NOTES:**

- ALUMINUM STOREFRONT SYSTEMS SHALL BE KAWNEER TRIFAB VG 451T, 2" X 4 1/2", THERMALLY BROKEN SYSTEM OR EQUAL. ENSURE SYSTEMS ARE DESIGNED TO SPAN FULL DIMENSIONS OF ROUGH FRAMING.
- INTERIOR ALUMINUM STOREFRONT SYSTEMS SHALL BE KAWNEER TRIFAB 400, 1 3/4" X 4", OR EQUAL. ENSURE SYSTEMS ARE DESIGNED TO SPAN FULL DIMENSION OF ROUGH FRAMING. (DRAWINGS ARE DIAGRAMMATIC WITH 2" MULLIONS)
- FRAME COLOR SHALL BE DARK BRONZE. VERIFY WITH OWNER PRIOR TO FABRICATION.
- EXTERIOR GLASS SHALL BE 1" CLEAR INSULATED WITH LOW E.
- PROVIDE SAFETY GLASS AS REQUIRED BY CODE.
- GLASS SHALL BE CENTER-SET IN FRAME.

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

**DOOR SCHEDULE NOTES:**

- PROVIDE ADA COMPLIANT HARDWARE ON ALL DOORS.
- SEE HARWARE SCHEDULE. VERIFY SELECTIONS AND FINISH WITH OWNER PRIOR TO ORDERING. ALLOW FOR US10B.
- PROVIDE SURFACE MOUNTED DOOR CLOSER AT ALL EXTERIOR DOORS AND STAFF RESTROOM DOOR.
- ALUMINUM STOREFRONT ENTRANCE SYSTEMS SHALL BE KAWNEER TRIFAB VG 451T, 2" X 4 1/2", THERMALLY BROKEN SYSTEM OR EQUAL. ENSURE SYSTEMS ARE DESIGNED TO SPAN FULL DIMENSION OF ROUGH FRAMING WITH STEEL REINFORCEMENT BY MANUF. AS REQ'D.
- FRAME COLOR SHALL BE DARK BRONZE. VERIFY WITH OWNER PRIOR TO FABRICATION.
- EXTERIOR GLASS SHALL BE 1" CLEAR INSULATED WITH LOW E.
- ALL WOOD DOORS SHALL BE WOOD VENEER, STAINED TO MATCH BUILDING STANDARD.
- PROVIDE SAFETY GLASS AS REQUIRED BY CODE.
- COORDINATE WITH OWNER'S VENDOR FOR ACCESS CONTROL REQUIREMENTS.
- HARDWARE SUPPLIER SHALL COORDINATE WITH OWNER FOR KEYING PRIOR TO ORDERING.
- MAKE THE REINSTALLED EXISTING DOOR OPERATIONAL. THE ONLY CURRENT ISSUE THAT IS APPARENT IS A HANGING THRESHOLD.

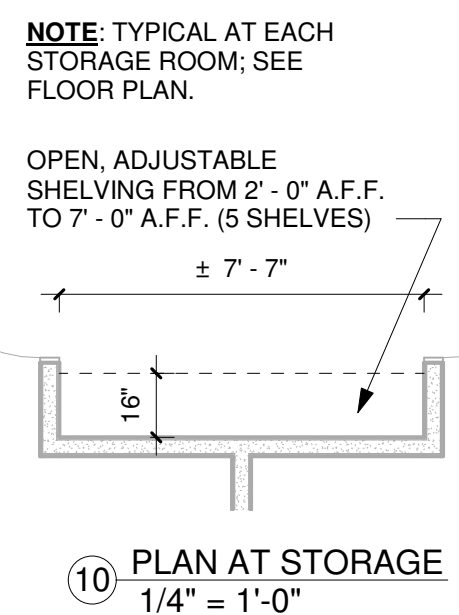
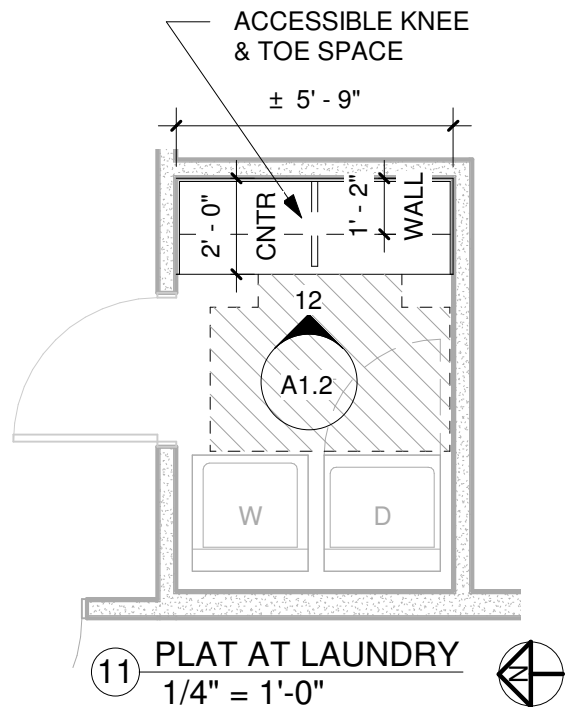
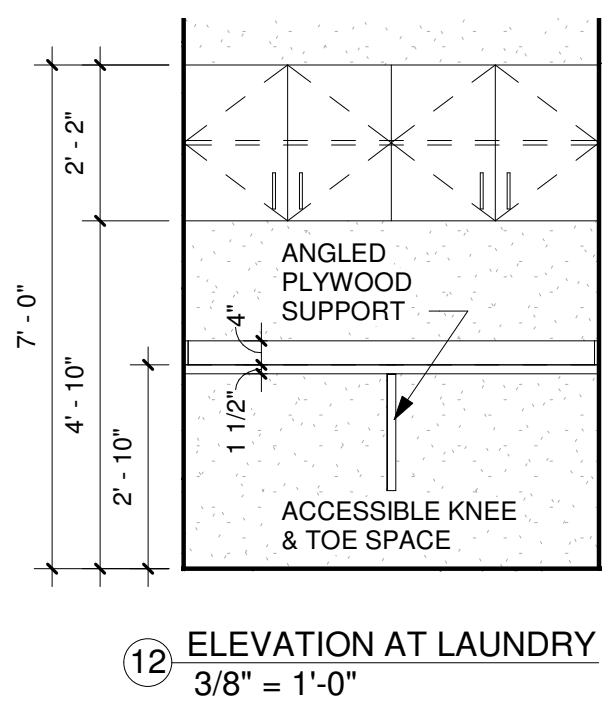
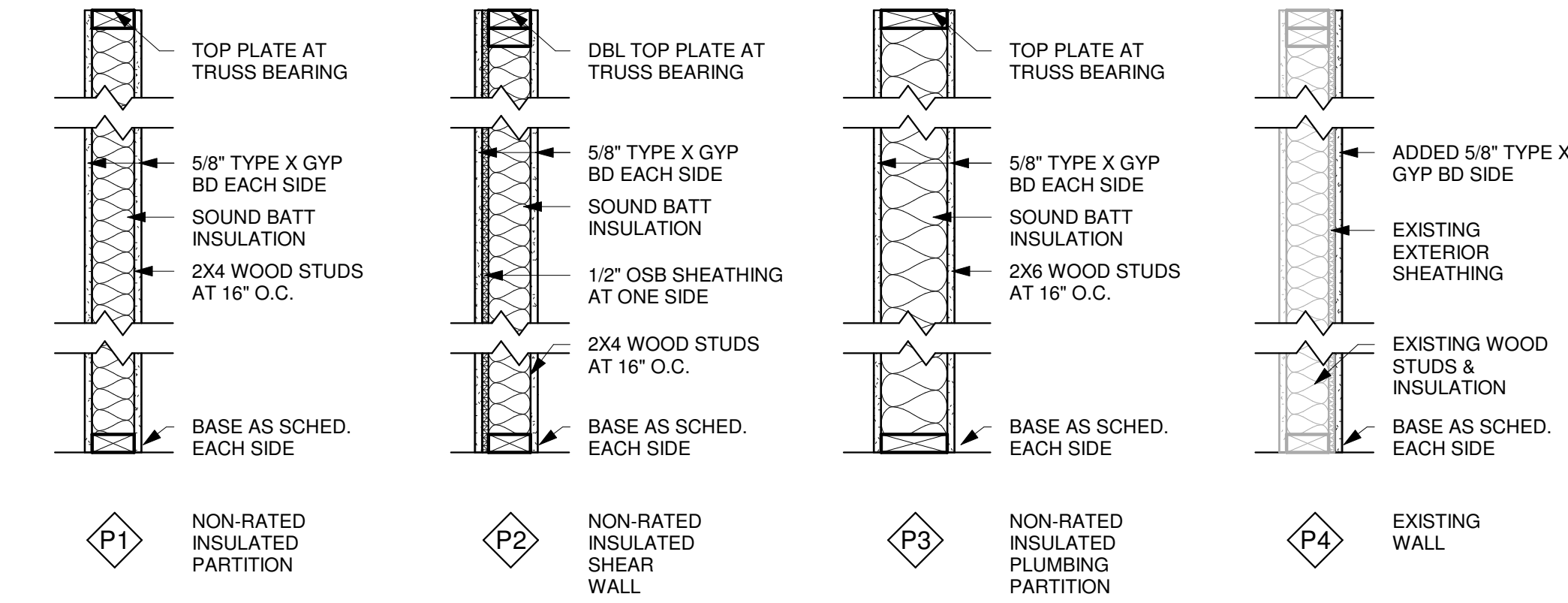
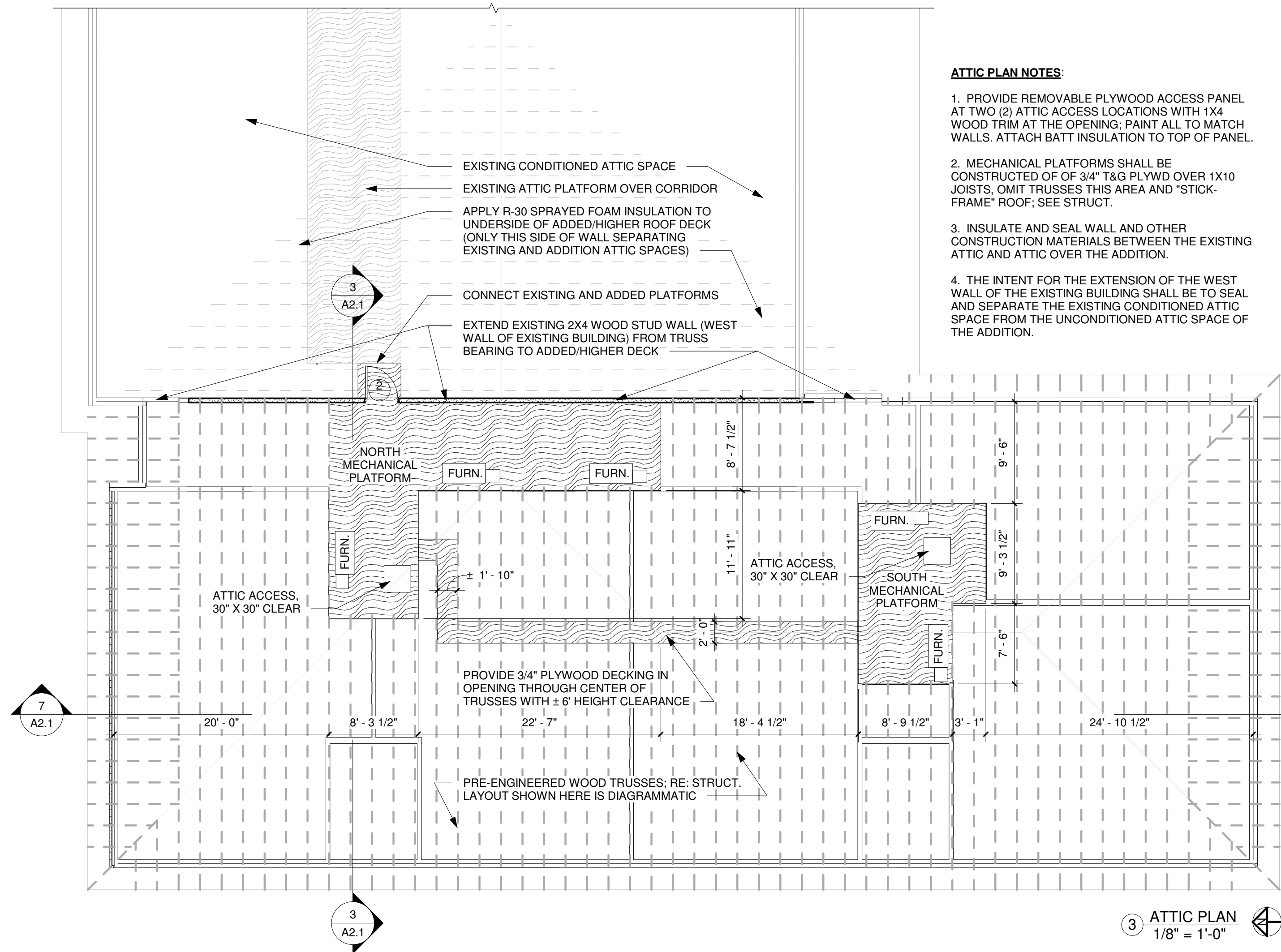
**DOOR SCHEDULE**  
1/4" = 1'-0"

**GENERAL FLOOR PLAN NOTES:**

- PROVIDE WOOD BLOCKING BEHIND ALL TOILET ACCESSORIES, TVS, WALL DOOR STOPS, CABINETS, SHELVES, AND OTHER LOCATIONS THAT REQUIRE SUPPORT FOR WALL HUNG OBJECTS. COORDINATE WITH OWNER FOR ADDITIONAL LOCATIONS.
- PROVIDE FIRE EXTINGUISHERS WITHIN RECESSED CABINETS INDICATED BY "FEC" ON FLOOR PLAN AND WHERE DIRECTED BY LOCAL FIRE MARSHAL. INSTALL 48" ABOVE FINISH FLOOR TO CENTER LINE OF HANDLE. ALLOW FOR (2) TWO.
- ALL DOOR HARDWARE SHALL BE ADA ACCESSIBLE. SEE DOOR SCHEDULE.
- REFER TO ARCH. SITE PLAN FOR ALL SITE WORK INCLUDING SIDEWALKS.
- REFER TO MILLWORK SHEET FOR ENLARGED PLANS AT MILLWORK.
- REFER TO MEP SHEETS FOR ADDITIONAL REQUIRED CONCRETE PADS AT GROUND MOUNTED EQUIPMENT.
- REFER TO 8/A1.2 FOR PARTITION TYPE SCHEDULE. ALL INTERIOR PARTITIONS TO BE TYPE "P1" UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE TO FACE OF STUD OR MASONRY OPENING UNLESS NOTED OTHERWISE.
- INTERIOR GYPSUM BOARD TO BE 5/8" TYPE 'X' UNLESS NOTED OTHERWISE.
- INSTALL GYPSUM CONTROL JOINTS IN CEILINGS AND WALLS AS RECOMMENDED BY GYPSUM BOARD MANUFACTURER AND AT MINIMUM (1) ONE OVER EVERY DOOR AND (1) ONE EVERY 30' O.C. IN WALLS WITHOUT DOORS. LOCATE ABOVE DOOR HEADS WHEREVER POSSIBLE
- ALL THROUGH WALL PENETRATIONS AT INTERIOR PARTITIONS SHALL BE SEALED AROUND WITH ACCOUSTICAL SEALANT.
- SUBCONTRACTORS TO VERIFY ALL NOTED SQAURE FOOTAGES.
- SEE ENLARGED FLOOR PLANS FOR ADDITIONAL DIMENSIONS AT RESTROOMS.
- TYPICAL EXTERIOR WALLS TO BE 2X4 WOOD STUDS WITH CELLULOSE INSULATION UNLESS NOTED OTHERWISE.
- WINDOWS, DOORS AND ALL OTHER PENETRATIONS THROUGH THE WEATHER RESISTANT BARRIER SHALL BE FLASHED AND SEALED WITH SELF-ADHERING AND SELF-SEALING WATERPROOFING MEMBRANE WITH FLEXIBLE PRODUCT AT SILL. FOLLOW ALL MANUF. SPECS.
- DENSE STIPPLED PATTERN WITHIN WALL CAVITY ON FLOOR PLANS AND WALL SECTIONS INDICATES BATT INSULATION, SEE PARTITION SCHEDULE AND DETAILS FOR FURTHER INFO.
- PROVIDE FIREBLOCKING TO AVOID 10' OPEN CAVITY AT STUDS AND OTHER PLACES WHERE CODE REQUIRED. UNFACED FIBERGLASS BATT INSULATION IS ACCEPTABLE IF INSTALLED PER IBC 718.2.1.2.
- COORDINATE DUTCH DOOR PLACEMENT TO ALLOW SPACE FOR SHELF WHEN OPENED TO 90 DEGREES, IF PROVIDED.

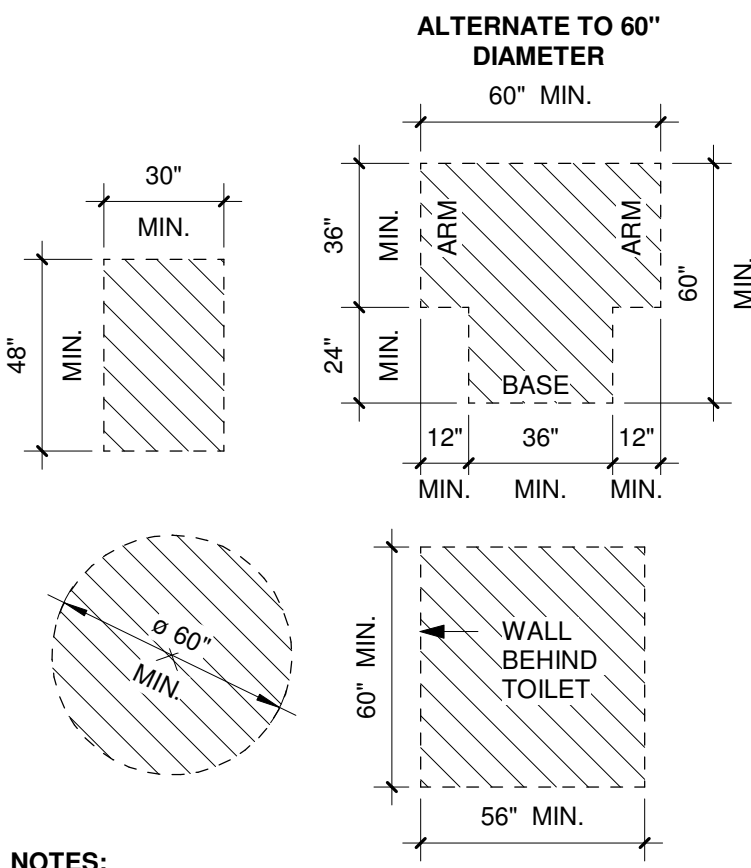






**MILLWORK NOTES:**

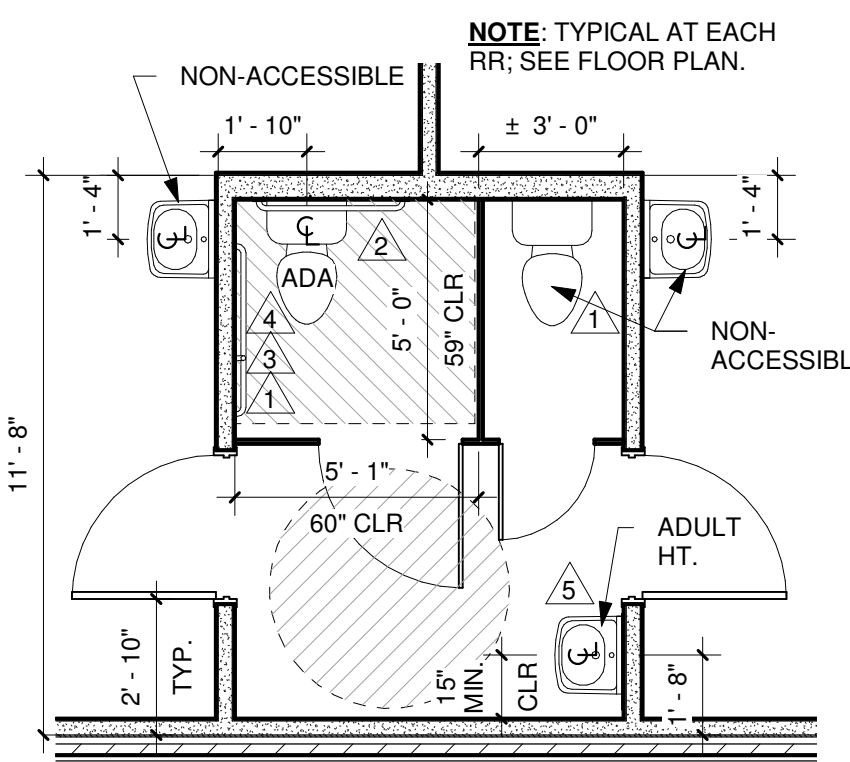
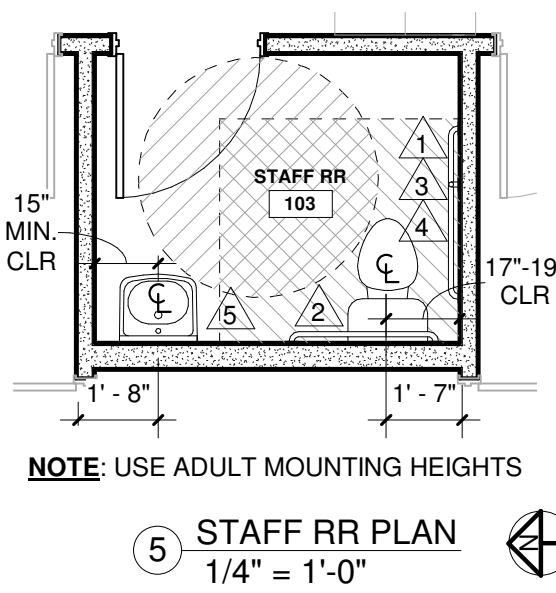
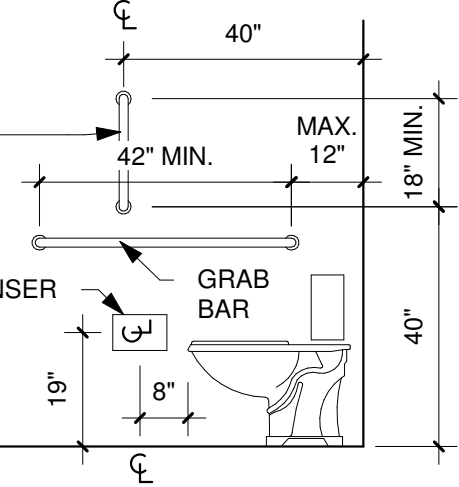
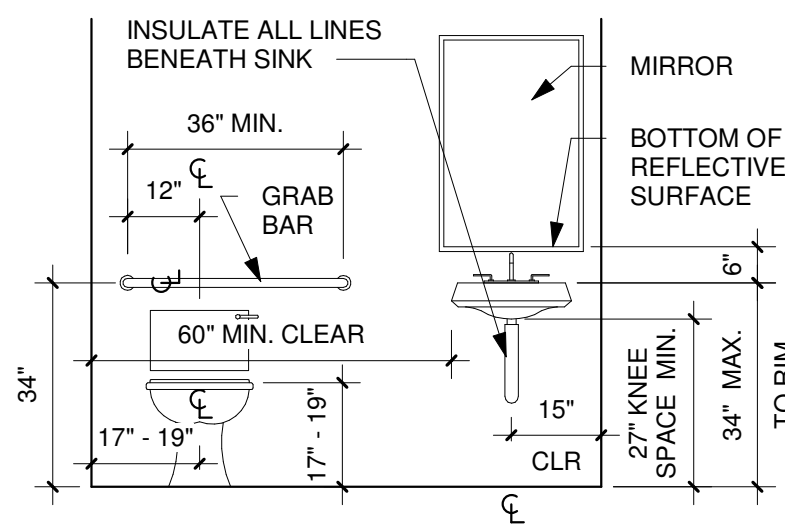
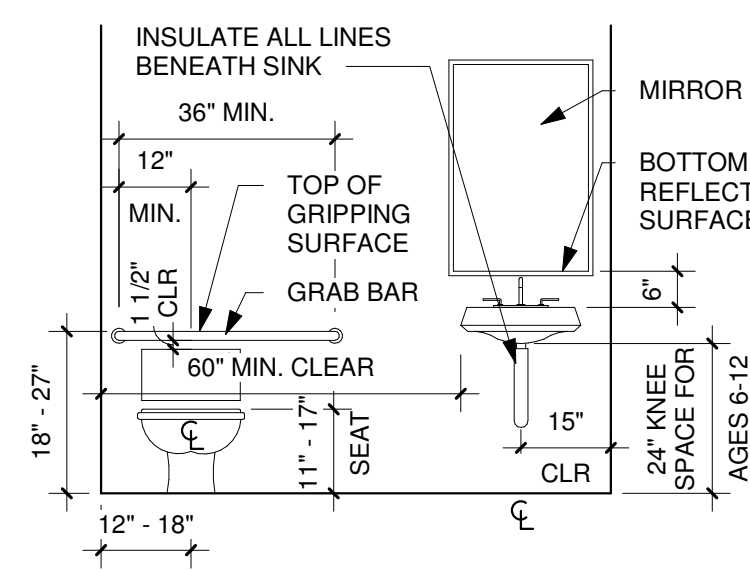
1. ALL MILLWORK, UNLESS OTHERWISE NOTED, SHALL BE EUROPEAN STYLE FULL FLUSH, PAINT GRADE CASEWORK; (STYLE OF CABINETS DRAWN IS DIAGRAMMATIC ONLY - PAINTED INTERIOR AND EXTERIOR)
  - 3/4" PLYWOOD (MDF ACCEPTABLE AT INTERIOR)
  - PULL = EPCO #AP128-SS OR EQUAL
  - 100lb FULL EXTENSION BALL BEARING GUIDES
  - 3/4" PAINTED DRAWERS, 1/4" BOTTOMS
  - EUROPEAN STYLE CONCEALED HINGES, 110 DEGREE
2. POST FORM PLASTIC LAMINATE COUNTERTOPS WITH PAINTED SUPPORTS.
3. PROVIDE ADJUSTABLE SHELVING WHERE INDICATED WITH DASHED LINES.
4. WHERE PAINTED, APPLY PRIMER + 2 COATS WITH SEMI GLOSS SHEEN
5. COORDINATE COLORS WITH OWNER.
6. ALL PLAN DIMENSIONS TO WALLS ARE ±1".
7. PROVIDE ALTERNATE PRICE FOR 1X4 WOOD CHAIR RAIL THROUGHOUT EACH CLASSROOM AND THERAPY ROOM.



**NOTES:**

1. PROVIDE CLEAR FLOOR SPACES AS INDICATED WITH THESE DASHED LINE SYMBOLS ON THE FLOOR PLAN TO ACCOMMODATE CLEARANCE AS DESCRIBED IN THESE DETAILS. SPACES REQUIRING A VARIATION ARE DIMENTIONED ON THE PLANS.
2. SLOPES LESS STEEP THAN 1:48 SHALL NOT BE PERMITTED.
3. REFERENCE FLOOR/DIMENSION PLANS, ENLARGED RESTROOM PLANS AND MILLWORK PLANS FOR REQUIRED CLEAR FLOOR SPACE FOR ACCESSIBILITY.

**2 ADA CLEAR FLOOR SPACES**  
1/4" = 1'-0"



- NOTES:**
1. TOILET PARTITIONS SHALL BE MOISTURE GUARD™ PLASTIC LAMINATE, GRAPHITE 2150 BY ASI GLOBAL PARTITIONS. EQUAL PRODUCTS BY OTHER MANUF. WILL BE CONSIDERED
  2. THE TOILET MARKED AS "ADA" AND IT'S ACCESSORIES SHALL MATCH THE ADULT TOILET IN THE STAFF RR.
  3. COORDINATE MOUNTING HEIGHTS OF NON-ACCESSIBLE FIXTURES WITH OWNER.

#	ACCESSORY	MOUNTING HEIGHT	RESPONSIBILITY
1	TOILET PAPER DISPENSER (DBL ROLL)	SEE 6/A1.2 & 7/A1.2	CF / CI
2	HORIZONTAL GRAB BAR, 36" LONG	SEE 6/A1.2 & 7/A1.2	CF / CI
3	HORIZONTAL GRAB BAR, 42" LONG	SEE 6/A1.2 & 7/A1.2	CF / CI
4	VERTICAL GRAB BAR, 18" LONG	SEE 6/A1.2 & 7/A1.2	CF / CI
5	MIRROR	SEE 6/A1.2 & 7/A1.2	CF / CI

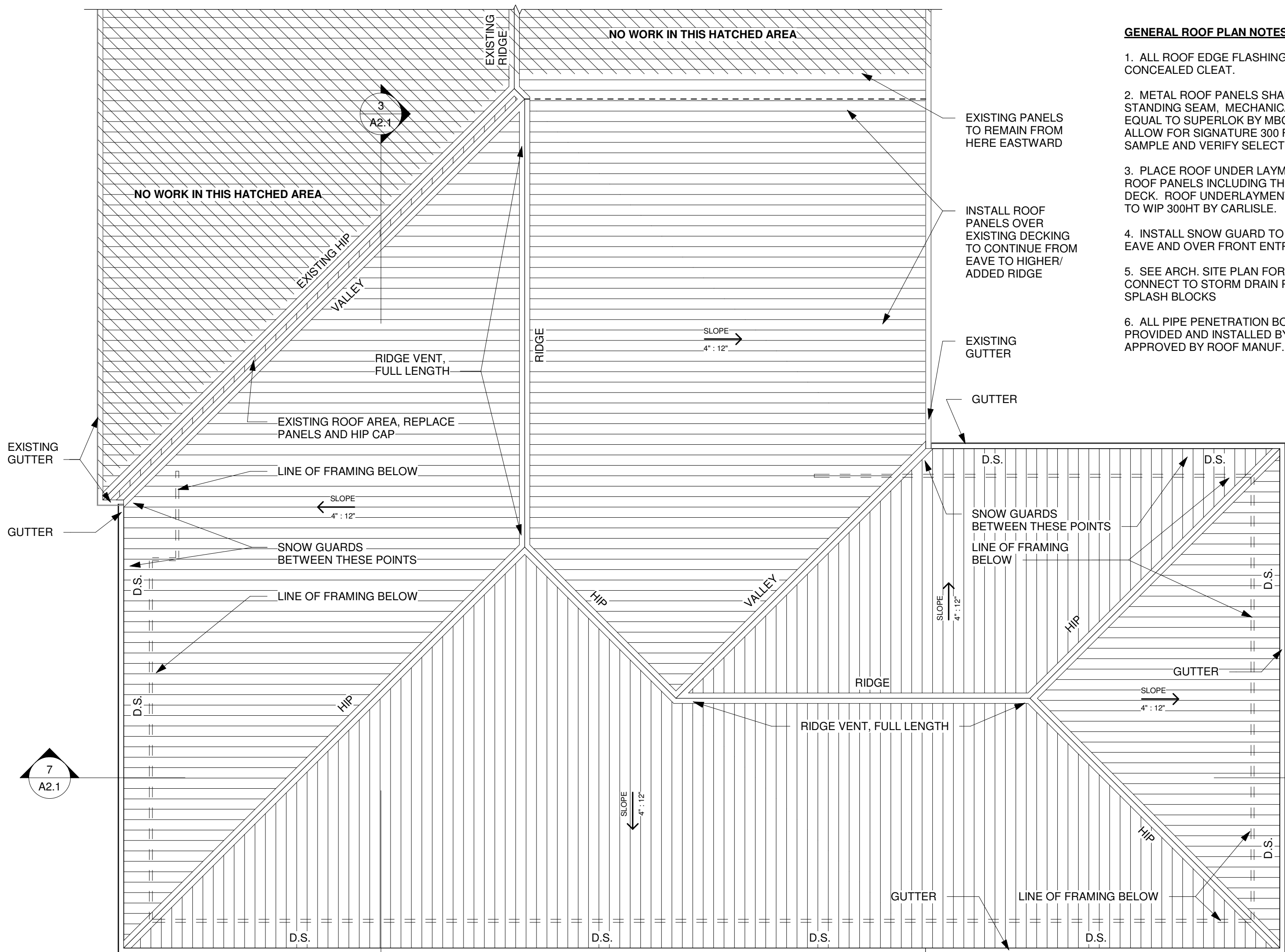
NOTE: COORDINATE ELECTRICAL RECEPTACLE LOCATIONS WITH MIRROR INSTALLATION.  
OF / OI = OWNER FURNISH / OWNER INSTALL  
OF / CI = OWNER FURNISH / CONTRACTOR INSTALL  
CF / CI = CONTRACTOR FURNISH / OWNER INSTALL

**9 ACCESSORY SCHEDULE**  
1/4" = 1'-0"

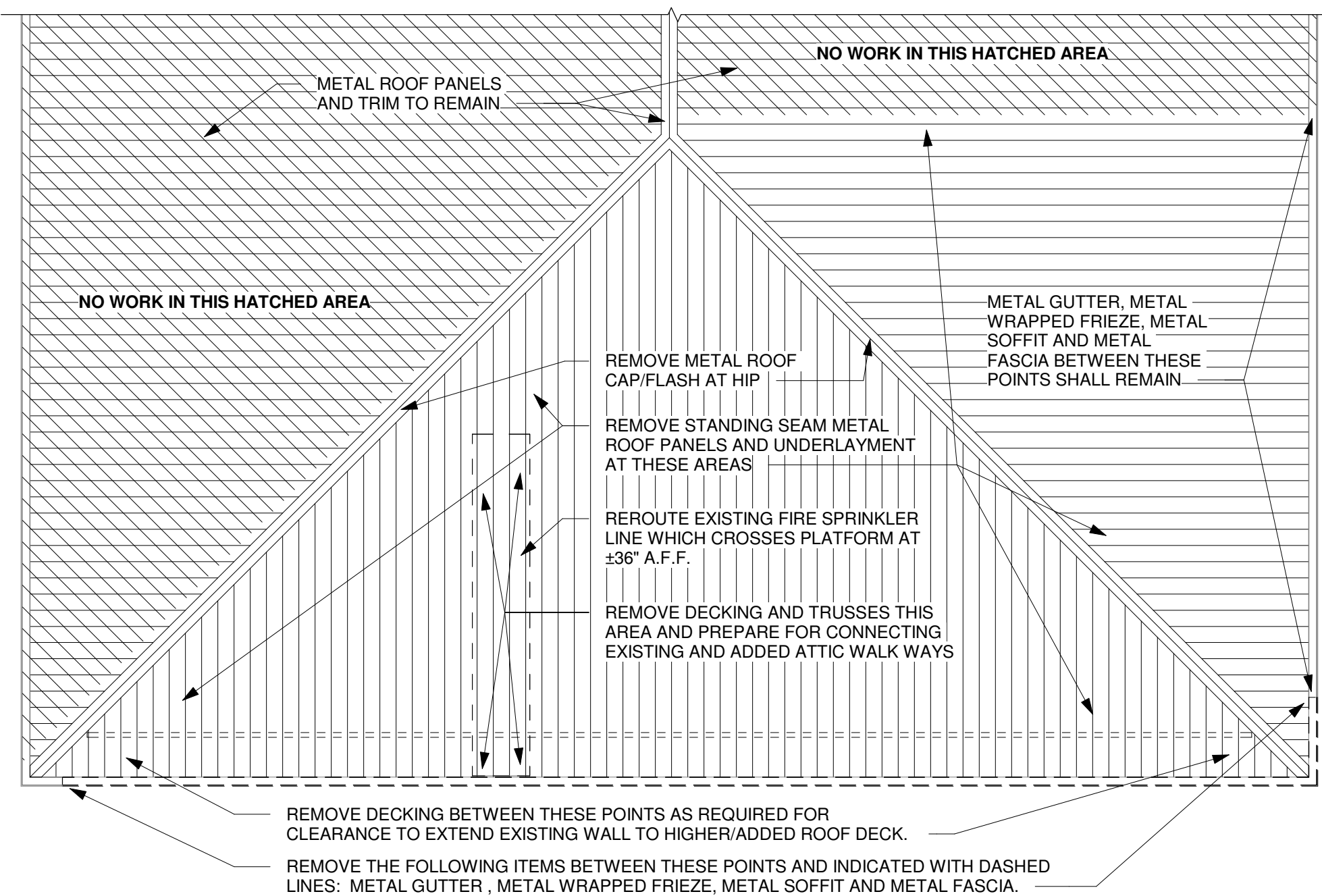




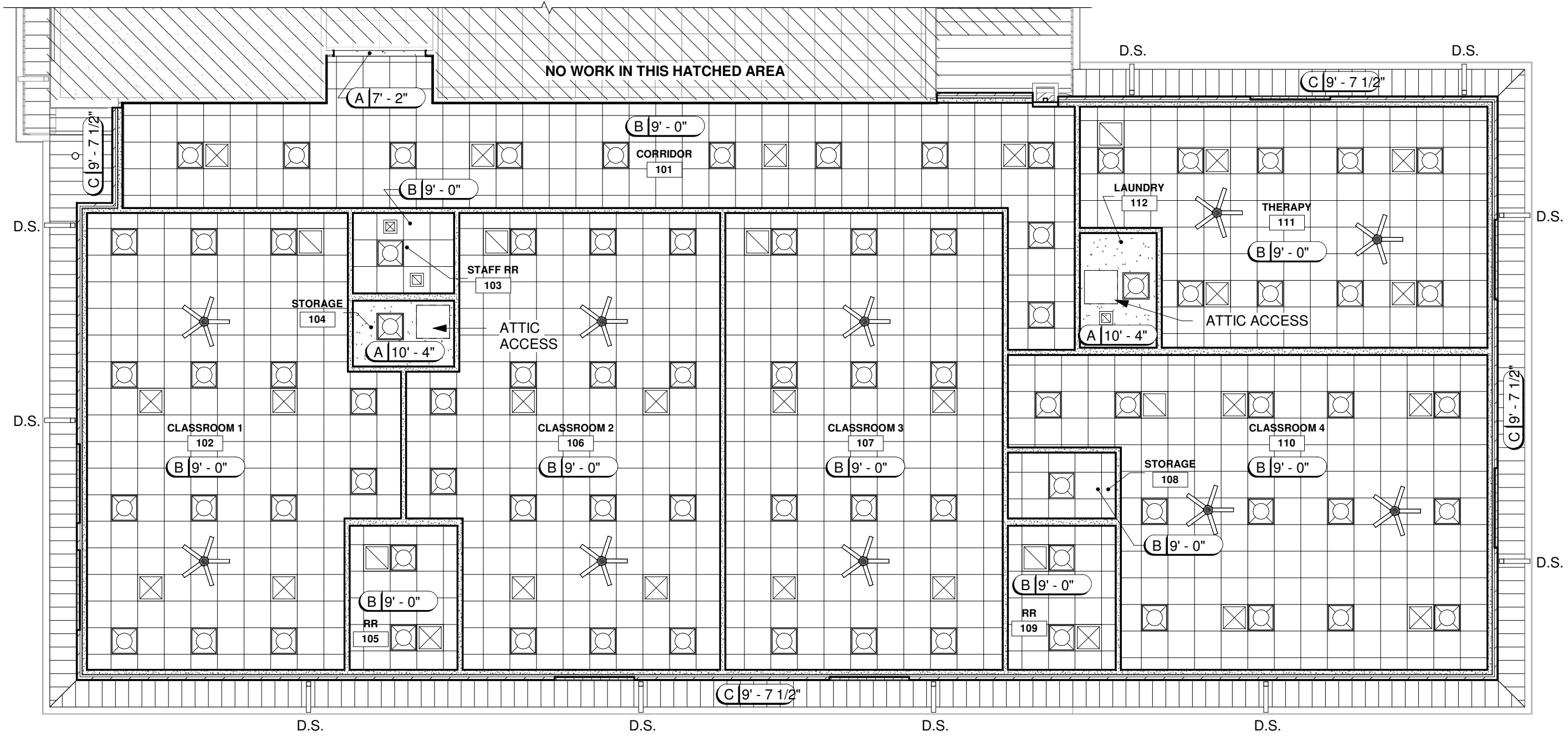
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2 ROOF PLAN  
1/8" = 1'-0"



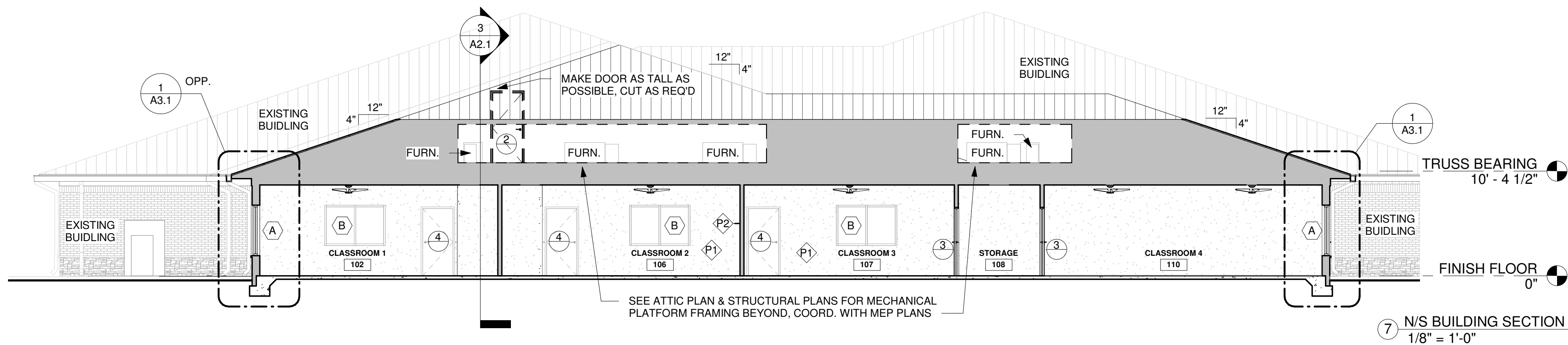
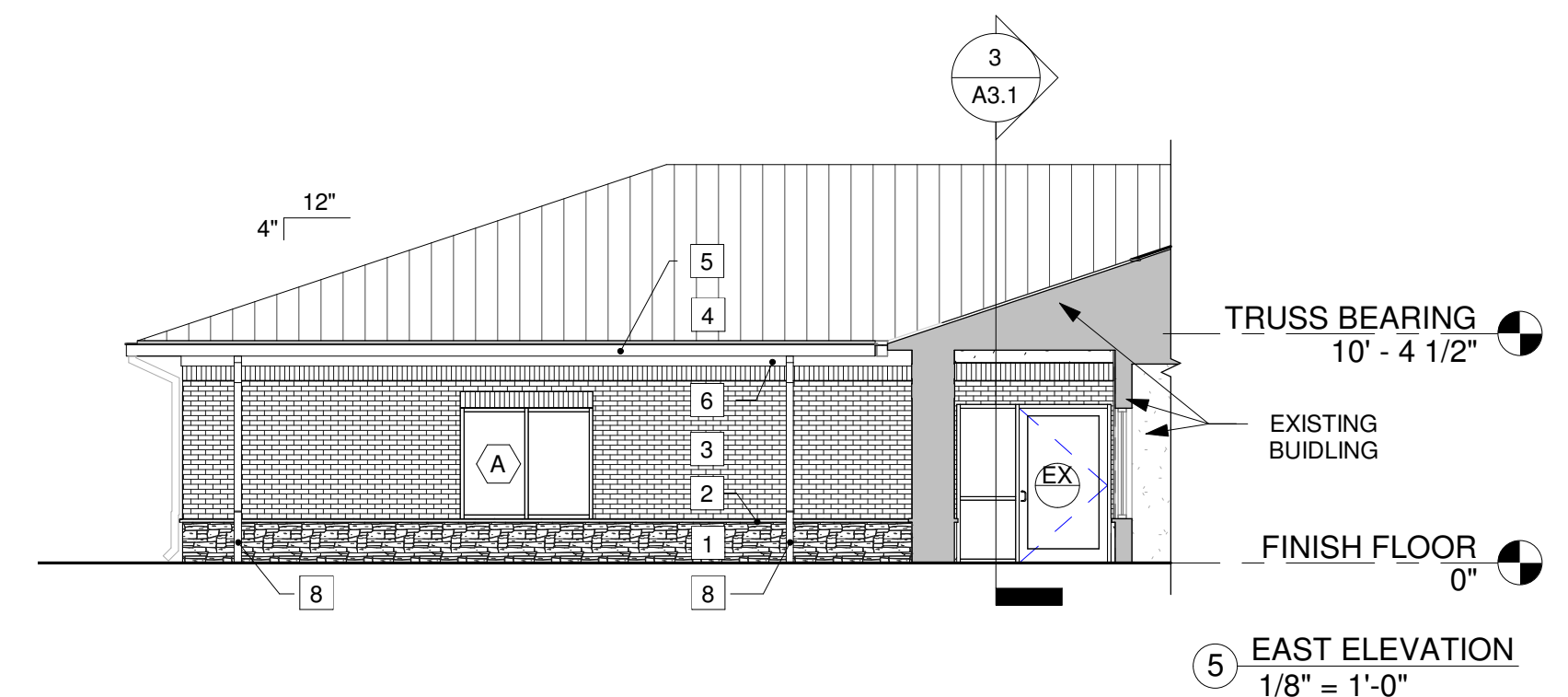
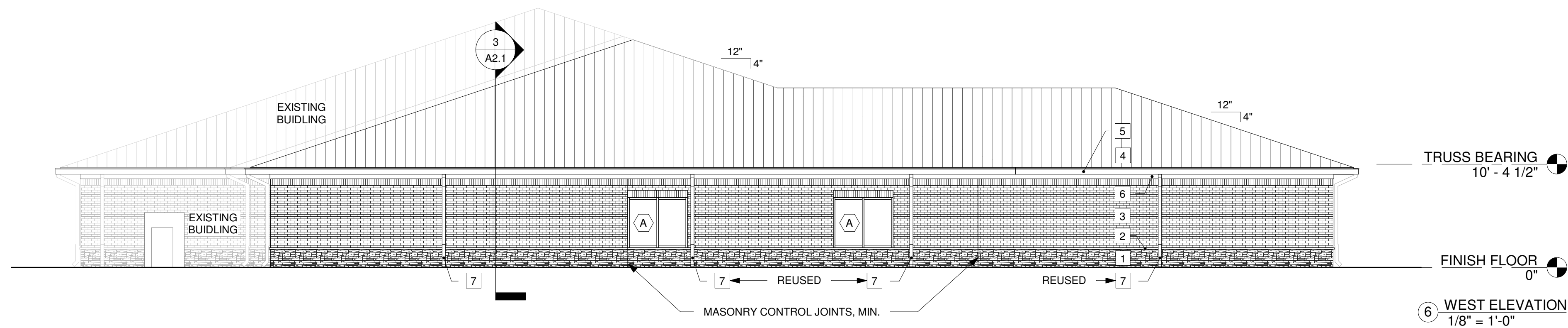
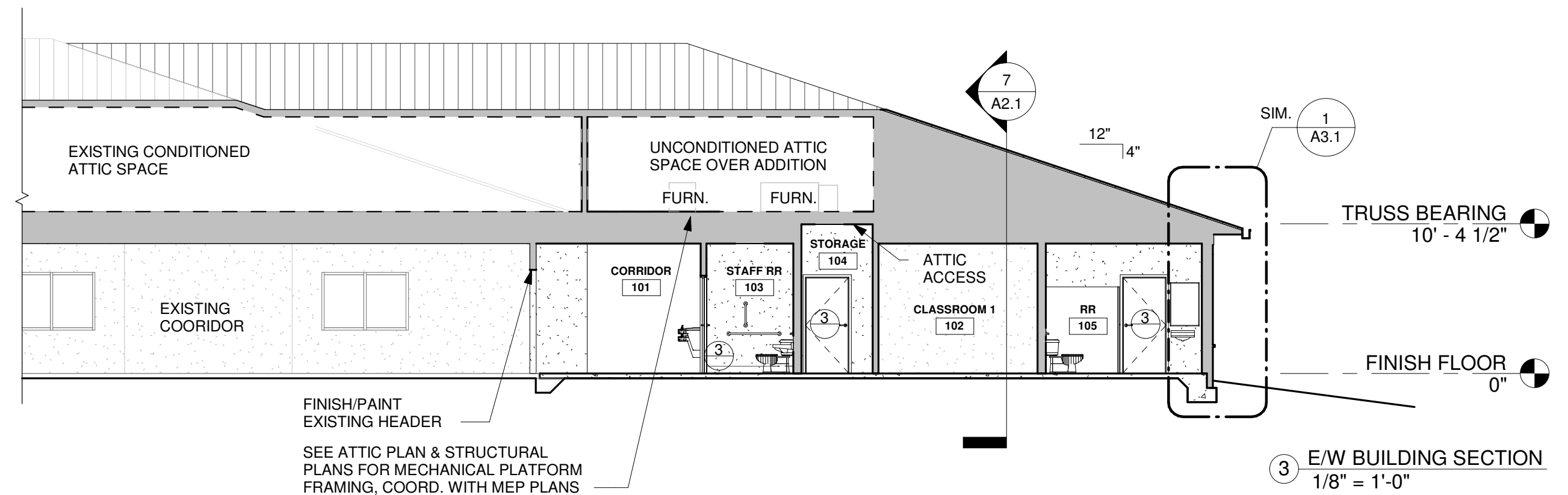
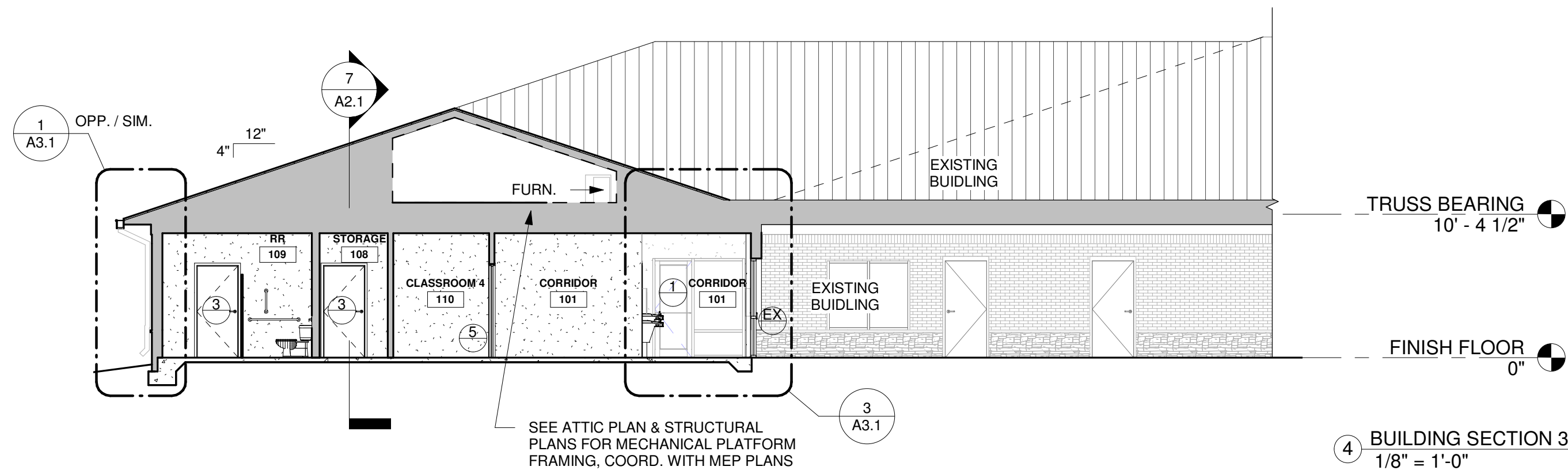
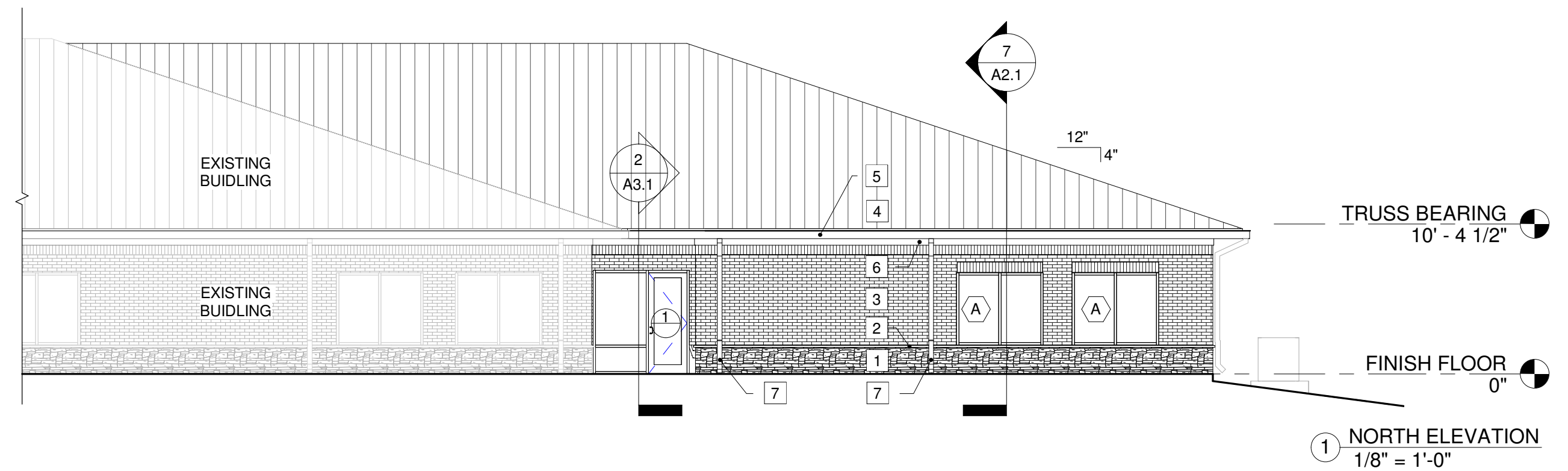
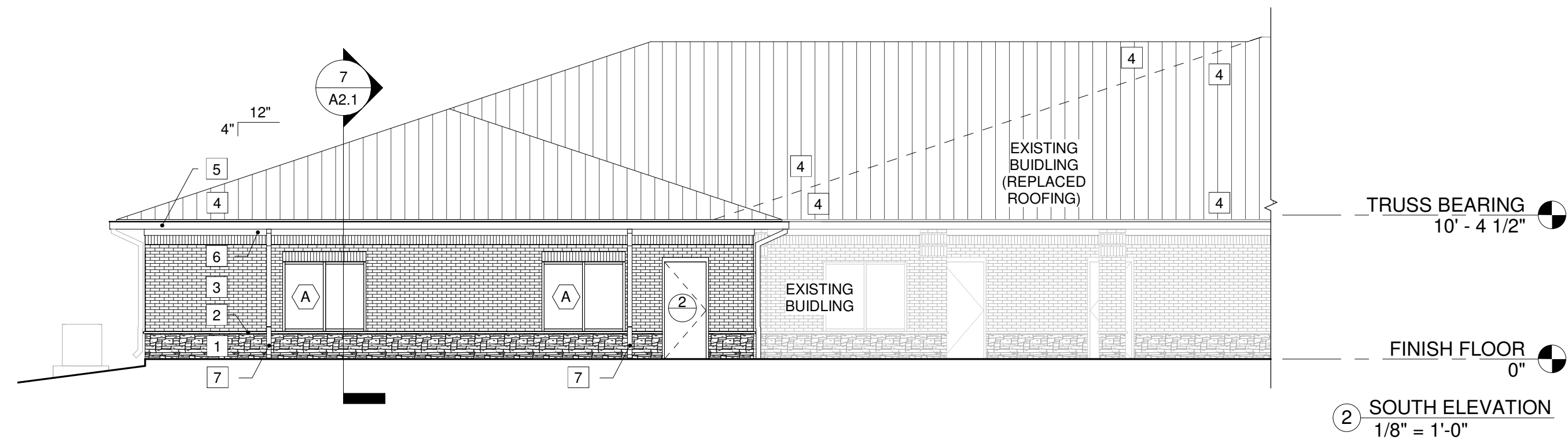
1 DEMOLITION ROOF PLAN  
1/8" = 1'-0"



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



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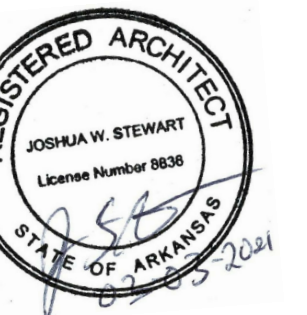


**EXTERIOR MATERIALS LEGEND:**

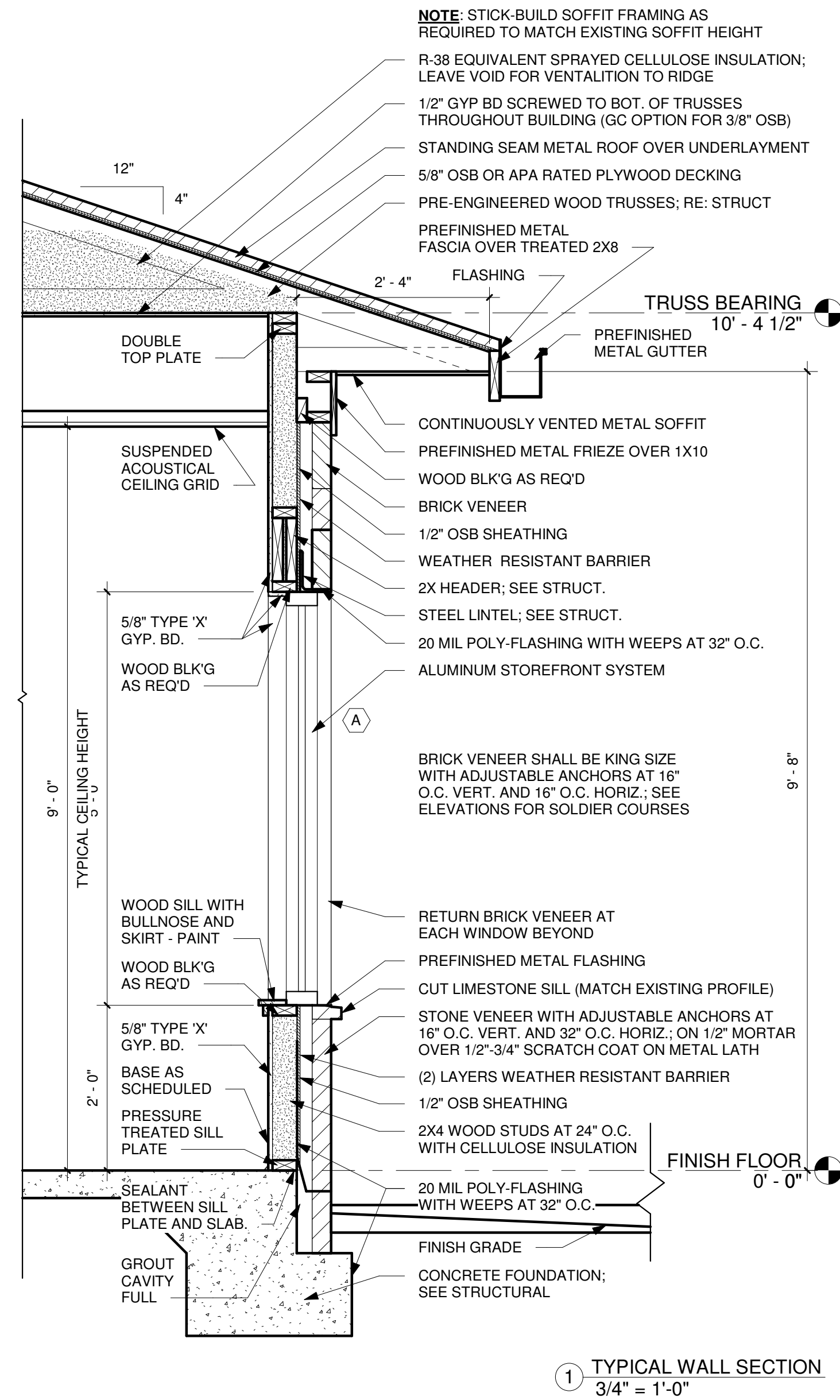
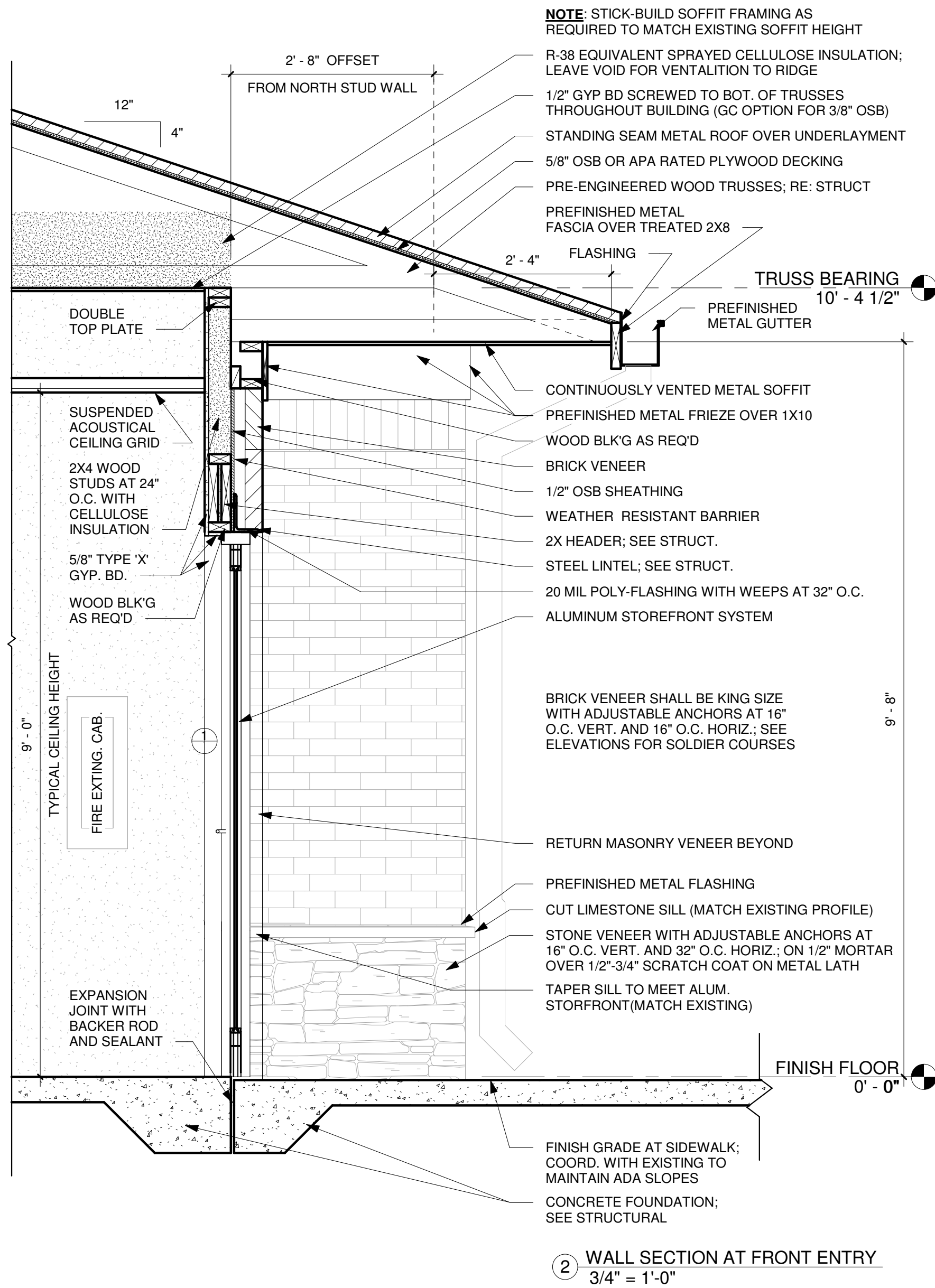
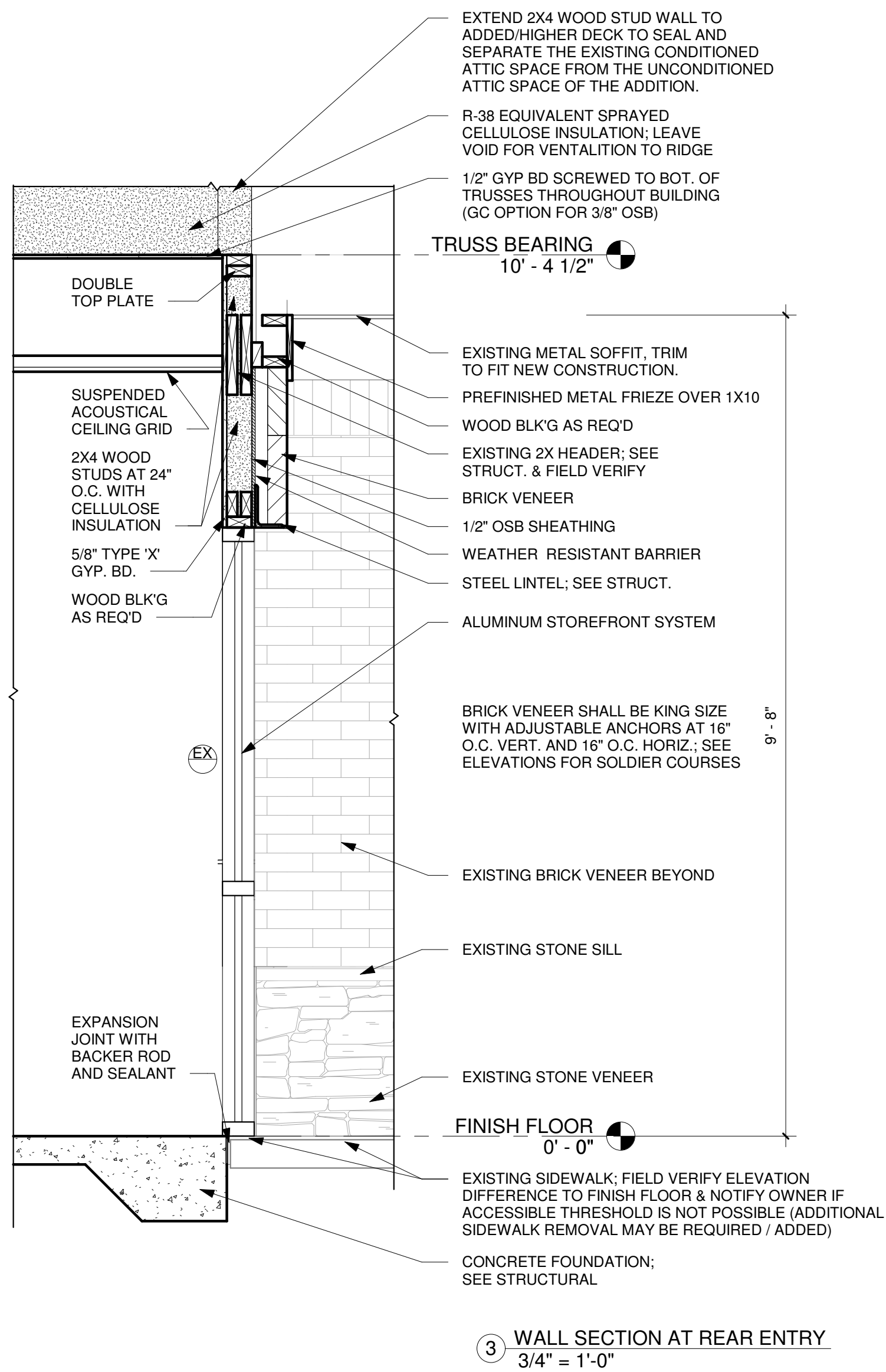
- 1 STONE VENEER
- 2 CUT LIMESTONE SILL (MATCH EXISTING PROFILE)
- 3 BRICK VENEER
- 4 STANDING SEAM METAL ROOF WITH VENTED RIDGE
- 5 PREFINISHED METAL GUTTER OVER PREFINISHED METAL FASCIA OVER TREATED 2X8
- 6 PREFINISHED METAL FRIEZE OVER 1X10
- 7 DOWNSPOUT AND SPLASH BLOCK, TYP.
- 8 DOWNSPOUT TO STORM DRAIN PIPE

**NOTES:**

1. SEE SCHEDULES FOR TAGGED WINDOWS AND DOORS.
2. RETURN MASONRY VENEER AT EACH WINDOW AND DOOR.
3. BRICK VENEER SHALL BE ACME, KING SIZE, MARBLE GREY; VERIFY WITH OWNER. PLACE WITH ADJUSTABLE ANCHORS AT 16" O.C. VERT. AND 16" O.C. HORIZ.; LAY SOLDIER COURSES WHERE SHOWN IN ELEVATIONS ABOVE WINDOWS AND DOORS.
4. STONE VENEER SHALL BE ARNOLD STONE, SIENNA WITH SIZES OF 4-8"; A BLEND OF WHITE GRANBURY AND LUEDERS LIMESTONE. PLACE WITH ADJUSTABLE ANCHORS AT 16" O.C. VERT. AND 32" O.C. HORIZ.
5. VERIFY MATERIALS SELECTIONS WITH OWNER.
6. TAPPER STONE SILL AT DOORS. (MATCH EXISTING)





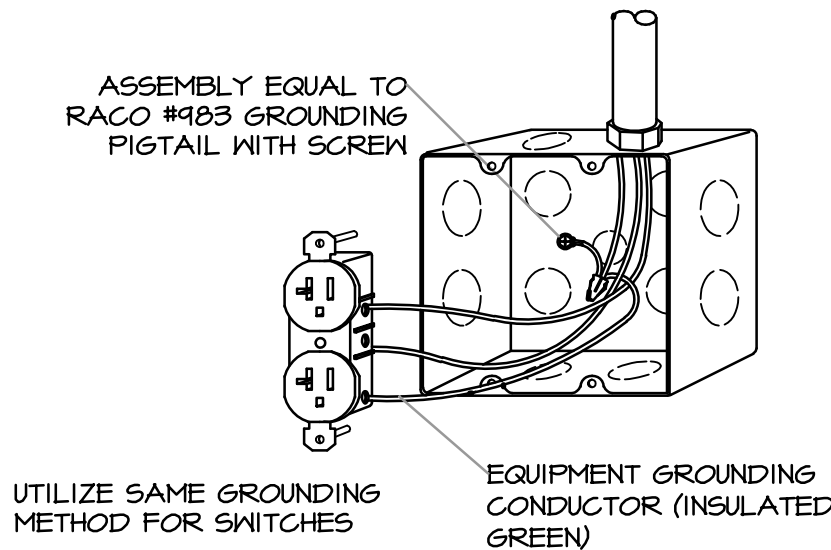




LEGEND

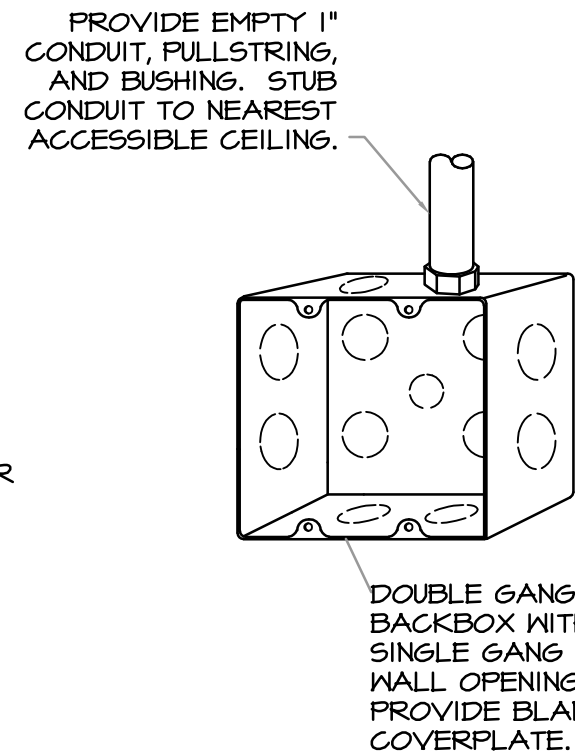
- DUPLEX RECEPTACLE (TYPE 5362TR) OR-DOUBLE DUPLEX. TAMPER RESISTANT
- 220 VOLT RECEPTACLE (NUMBER DENOTES AMPS)
- DUPLEX RECEPTACLE GROUND FAULT TYPE GF5362TR.
- TELEVISION CABLE OUTLET. VERIFY EXACT LOCATION WITH THE OWNER PRIOR TO ROUGH-IN. MOUNT 4'-6" AFF. REQUIRES DUPLEX RECEPTACLE ONLY. PROVIDE TWO GANG FLUSH BACKBOX WITH SINGLE GANG FLUSH WALL OPENING.
- DATA: REQUIRES 4" SQUARE OUTLET BOX, APPROPRIATE PLASTER RING, AND 1" C. STUBBED TO AN ACCESSIBLE LOCATION ABOVE A REMOVABLE CEILING TILE.
- FLUSH MOUNTED JUNCTION BOX. VERIFY MOUNTING HEIGHT WITH MILLWOK DETAILS AND/OR THE OWNER'S REPRESENTATIVE. AT EQUIPMENT LOCATIONS VERIFY THE EXACT LOCATION WITH THE EQUIPMENT INSTALLER PRIOR TO ROUGH-IN.
- FUSED/NON-FUSED DISCONNECT-FUSE ALL EQUIPMENT PER MANUFACTURER RECOMMENDATION FOR THE ACTUAL EQUIPMENT FURNISHED. FURNISH NEMA-4X IN THE KITCHEN. MOUNT DISCONNECT FOR HVAC CONDENSER UNITS WITH TOP OF SWITCH AT 36" A.F.F.
- MOTOR - VERIFY THE SIZE WITH ACTUAL EQUIPMENT FURNISHED. NUMBER REPRESENTS HORSE POWER RATING.
- MOTOR RATED SWITCH USED FOR EQUIPMENT DISCONNECTING MEANS. SINGLE PHASE. PROVIDE WITH THERMAL OVERLOAD SIZED PER MOTOR LOAD.
- SWITCH TYPE 1221 ("3" INDICATES 3-WAY SWITCH, "D" INDICATES DIMMER). COORDINATE WITH FIXTURE/LAMP TYPE AND CIRCUIT WATTAGE.
- WALL MOUNTED DUAL TECHNOLOGY MOTION SENSOR SWITCH WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE CONTACTORS TO CONTROL EXHAUST FAN WITH LIGHTS.
- "OS" - CEILING MOUNTED DUAL TECHNOLOGY MOTION SENSOR PROVIDE AND INSTALL THE APPROPRIATE POWER PACK. COORDINATE SWITCHING WITH ACTUAL MOTION SENSOR USED. COORDINATE LOCATION AND NUMBER WITH ACTUAL MOTION SENSOR USED. WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE OCCUPANCY SENSOR WHICH IS THE CORRECT TYPE FOR THE SPACE. PROVIDE CONTACTORS TO CONTROL EXHAUST FAN WITH LIGHTS.
- "OS" - WALL MOUNTED DUAL TECHNOLOGY MOTION SENSOR PROVIDE AND INSTALL THE APPROPRIATE POWER PACK. COORDINATE SWITCHING WITH ACTUAL MOTION SENSOR USED. COORDINATE LOCATION AND NUMBER WITH ACTUAL MOTION SENSOR USED. WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE OCCUPANCY SENSOR WHICH IS THE CORRECT TYPE FOR THE SPACE.
- EXIT LIGHT - ARROW DENOTES INCLUSION OF ARROW ON LENS. CONTRACTOR TO COORDINATE PROPER MOUNTING DETAILS.
- LIGHTING CONTACTOR-SQUARE D #8403.
- PHOTO-ELECTRIC CELL: EQUAL TO INTERMATIC NO. K412IM.
- F-12 THERMOSTAT. MOUNT. 48" A.F.F. TO CENTER OF BOX (NUMBER DENOTES HVAC UNIT).
- SENSOR, MOUNT 54" TO CENTER IN SEPARATE SINGLE GANG BOX.
- ELECTRICAL PANEL.
- BRANCH CIRCUIT HOMERUN. PANEL AND CIRCUIT NUMBER INDICATED.
- DUCT DETECTOR-FURNISHED AND INSTALLED BY THE FIRE ALARM CONTRACTOR. COORDINATE QUANTITY AND LOCATION WITH MECHANICAL PLANS.
- MANUAL PULL STATION MOUNTED MINIMUM OF 42"; MAXIMUM OF 48" A.F.F.
- PHOTOELECTRIC SMOKE DETECTOR. WALL MOUNTED
- WALL MOUNTED HEAT DETECTOR. WALL MOUNTED
- PHOTOELECTRIC SMOKE DETECTOR. CEILING MOUNTED
- WALL MOUNTED HEAT DETECTOR. CEILING MOUNTED
- # CEILING FIRE ALARM VISUAL STROBE LIGHT-WP DENOTES WEATHER RESISTANT. REQUIRES 4" SQUARE BOX WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING. NUMBER DENOTES CANDELA RATING.
- # WALL MOUNT FIRE ALARM VISUAL STROBE LIGHT-WP DENOTES WEATHER RESISTANT. REQUIRES 4" SQUARE BOX WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING. NUMBER DENOTES CANDELA RATING.
- # WALL MOUNT FIRE ALARM HORN/STROBE LIGHT-WP DENOTES WEATHER RESISTANT. REQUIRES 4" SQUARE BOX WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING. NUMBER DENOTES CANDELA RATING.
- # CEILING FIRE ALARM HORN/STROBE LIGHT-WP DENOTES WEATHER RESISTANT. REQUIRES 4" SQUARE BOX WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING. NUMBER DENOTES CANDELA RATING.
- SLEEVES THROUGH FIRE WALLS - FURNISH 3-2" CONDUITS AS NOTED ON THE PLANS. SEAL PER RATING OF THE WALL.

- SUBSCRIPTS:
- C = COORDINATE LOCATION WITH MILLWOK-MOUNTING HEIGHTS VARY. REFER TO THE ARCHITECTURAL MILLWOK DRAWINGS.
  - N = WALL MOUNTED 48" A.F.F.-OR AS SHOWN.
  - GFI= GROUND FAULT CIRCUIT INTERRUPTER.
  - WP = WEATHER RESISTANT RECEPTACLES ARE "GFI", WITH METAL WEATHER RESISTANT "WHILE-IN-USE" COVERS.
  - MM = MICROWAVE OVEN.
  - GD = GARBAGE DISPOSER.
  - EM = FIXTURE CONTAINS EMERGENCY BATTERY PACK.
  - NL = UNSWITCHED EMERGENCY FIXTURE.
  - H = MOUNT HORIZONTALLY IN MILLWOK.
  - EC = ELECTRICAL CONTRACTOR
  - AFF= ABOVE FINISHED FLOOR
  - AFG= ABOVE FINISHED GRADE
  - EWG= ELECTRIC WATER COOLER
  - EWH= ELECTRIC WATER HEATER
  - NTS= NOT TO SCALE
  - FVNR= FULL VOLTAGE NONREVERSING STARTER



2 DEVICE/JUNCTION BOX GROUNDING DETAIL

N.T.S.



- NOTE:
- FIELD VERIFY EXACT LOCATION OF ALL TELE/DATA JUNCTION BOXES WITH THE OWNER AND ARCHITECT PRIOR TO THE START OF WORK.
  - OWNER SHALL PROVIDE ALL CABLING, JACKS, ETC.

3 TEL/DATA JUNCTION BOX DETAIL

N.T.S.

GENERAL ELECTRICAL NOTES-ALL SHEETS

THESE NOTES ARE ONLY A SUPPLEMENT TO THE SPECIFICATIONS

- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR A COMPLETE WORKING INSTALLATION.
- THIS CONTRACTOR IS TO COMPLY WITH THE STATE OF ARKANSAS ADOPTED ADA ACCESSIBLE GUIDELINES IN REGARD TO ACCESSIBLE FEATURES.
- AT ALL MILLWOK LOCATIONS COORDINATE THE ELECTRICAL INSTALLATION WITH THE ARCHITECTURAL DRAWINGS.
- PROVIDE FIRE RATED CAULKING WHERE CONDUIT OR OTHER ELECTRICAL ITEMS PASS THOUGH FIRE-RATED WALLS, CEILINGS AND FLOORS.
- INSTALL ALL CONDUIT STRAIGHT AND PARALLEL WITH THE BUILDING LINES. ALL CONDUIT IS CONCEALED IN PUBLIC PLACES.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL PERMIT AND FEE COSTS AND SHALL INCLUDE THESE COSTS IN THE BID PRICE FOR THIS PROJECT.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES AND ORDINANCES. IF A CONFLICT IS FOUND BETWEEN APPLICABLE CODES, THE MORE STRINGENT SHALL APPLY. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL APPLICABLE MUNICIPAL CODES AND ORDINANCES.
- THE SUBMISSION OF A PROPOSAL WILL BE CONSIDERED EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED THEMSELVES WITH THE DRAWINGS, SPECIFICATION BOOK, THE BUILDING SITE AND OTHER INFORMATION PRESENTED FOR THE CONSTRUCTION OF THIS PROJECT. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORESEEN HAD A COMPLETE AND THOROUGH EXAMINATION BEEN MADE.
- DO NOT SCALE DIRECTLY FROM THE ELECTRICAL DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONAL INFORMATION.
- THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR WHICH MATERIALS ARE FURNISHED, FABRICATED OR FIELD ERECTED. THIS CONTRACTOR GUARANTEE SHALL EXIST FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL OWNER ACCEPTANCE OF THE WORK AND SHALL APPLY TO ALL DEFECTS IN MATERIALS AND/OR WORKMANSHIP OF ANY KIND.
- WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OR NATURE OF THE WORK REQUIRED, THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES WILL BE MADE WITH OUT THE EXPRESSED WRITTEN CONSENT OF THE OWNER.
- IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES TO ENSURE THAT ALL CIRCUITS AND DEVICES ARE OF A PROPER SIZE FOR ACTUAL EQUIPMENT FURNISHED. THE ENGINEER SHALL BE NOTIFIED OF ANY CONFLICT WHICH CAUSES CHANGES TO ANY SYSTEM AS DESIGNED ON THESE DRAWINGS. FAILURE ON THE PART OF THE CONTRACTOR TO NOTIFY THE ENGINEER OR ARCHITECT OF SUCH CONFLICTS PLACES THE SUBSEQUENT CHANGES UPON THE CONTRACTOR.
- THE ELECTRICAL CONTRACTOR IS TO PROVIDE, AT YET TO BE DECIDED LOCATIONS, TEN (10) CONDUIT STUB-UPS, WHICH ARE TO INCLUDE 4" OUTLET BOXES, PLASTER RINGS, COVER PLATES, AND CONDUIT TO ABOVE THE CEILING, FIVE ONE GANG AND FIVE TWO GANG. IN ADDITION, PROVIDE TEN (10) SINGLE GANG STUB-UPS WHICH ARE TO INCLUDE 4" OUTLET BOXES, PLASTER RINGS, COVER PLATES, INCLUDING ONE RECEPTACLE OR SWITCH WITH 50 FEET OF CIRCUIT WIRING PER SINGLE GANG STUB-UP. COMBINED TOTAL NUMBER OF STUB-UPS REQUIRED IS TWENTY (20).
- ALLOW FOR THE ADDITION OF THREE (3) NEW EXIT LIGHTS WITH WIRING TO UNSWITCHED LIGHTING CIRCUIT.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING SYSTEMS:

(A). POWER AND LIGHTING:

- ALL DEVICE PLATES ARE STAINLESS NYLON. COORDINATE COLOR OF DEVICES WITH THE ARCHITECT.
- ALL 20A 120V AND 250V NON-LOCKING TYPE RECEPTACLES, UNLESS OTHERWISE NOTED, SHALL BE TAMPER RESISTANT TYPE PER NEC 406.12.
- WHERE DEVICES ARE SHOWN NEXT TO EACH OTHER, THEY ARE INTENDED TO BE GANGED. FIELD VERIFY ACTUAL SPACE AVAILABLE AND NOTIFY THE ARCHITECT WHERE THERE ARE SPACE CONFLICTS.
- LOW VOLTAGE WIRING IS TO BE ENCASED IN CONDUIT IN AREAS WITH NO CEILING.
- RECEPTACLES FOR EQUIPMENT SUCH AS ELECTRIC WATER COOLERS SHALL BE LOCATED IN THE WALL AT A LOCATION WHICH IS CONCEALED BY THE EQUIPMENT CABINET.
- ALL EMPTY CONDUITS ARE TO CONTAIN A NYLON FULL STRING. EMPTY CONDUITS 2" AND LARGER ARE TO BE SHABBED OUT AND LET WITH A NYLON FULL STRING FOR THE USE OF THE OWNER.
- COVER PLATES FOR EXTERIOR RECEPTACLES ARE TO BE METAL, WEATHER RESISTANT WHILE IN USE.
- ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL DRIVER AND LAMP COMBINATIONS THAT WILL PROVIDE THE OWNER WITH A FIVE YEAR WARRANTY ON THE DRIVER.
- COORDINATE WITH THE GENERAL CONTRACTOR AND THE INSULATION CONTRACTOR TO HOLD THE BATT INSULATION AWAY FROM ALL LAY-IN FIXTURES. CLEARANCE SHOULD BE 3" ON ALL SIDES, AND TOTALLY CLEAR ON THE TOP.
- ROOM NUMBERS USED IN THE PANEL SCHEDULES ARE TO REFLECT ROOM NUMBERS BY THE OWNER. ARCHITECT WILL PROVIDE CROSS OVER LIST DURING THE PROJECT.
- OCCUPANCY SENSORS ARE TO BE LAID OUT BY THE LIGHTING REPRESENTATIVE FURNISHING THE EQUIPMENT HSA WILL PROVIDE AUTO CAD DRAWINGS AS NECESSARY. ELECTRICAL CONTRACTOR RESPONSIBLE FOR LOCATION DETAILS AND MOUNTING. SENSORS SHOWN ARE FOR REFERENCE ONLY.
- FURNISH 2-1" CONDUIT SLEEVES THROUGH FIRE WALLS UNLESS OTHERWISE NOTED. SEAL PER RATING OF THE WALL.
- WHERE INDIRECT (SUSPENDED) LIGHTING IS USED, THE ELECTRICAL CONTRACTOR SHALL CONTRACT WITH THE CEILING CONTRACTOR TO PROVIDE THE NECESSARY TIES TO THE STRUCTURE ABOVE AT EACH POINT OF ATTACHMENT OF THE FIXTURE HANGERS.

17. WIRE SIZES:

- WIRE SIZE 120V
- A. #12 LESS THAN 75 FEET
  - B. #10 BETWEEN 75-150 FEET
  - C. #8 BETWEEN 150-250 FEET
  - D. #6 BETWEEN 250-375 FEET

(B). FIRE ALARM

- ALL FIRE ALARM OUTLET BOXES ARE TO BE PAINTED RED.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE NEW DEVICES THAT ARE COMPATIBLE WITH AND CONNECT TO THE EXISTING FIRE ALARM SYSTEM. FIELD VERIFY EXISTING MANUFACTURER AND LOCATION PRIOR TO SUBMITTING BID.
- INSTALL FIRE ALARM DEVICES PER N.F.P.A. AND ALL STATE AND LOCAL ORDINANCES.
- COORDINATE THE OVERALL FIRE ALARM SYSTEM WITH THE FIRE MARSHAL, FURNISHING ALL DEVICES AND SYSTEMS NECESSARY FOR A COMPLETE ACCEPTABLE SYSTEM. NO EXTRA CHARGES WILL BE ALLOWED, OUTSIDE OF THE CONTRACT PRICE. THE FIRE ALARM CONTRACTOR IS TO SUBMIT PLANS TO THE FIRE MARSHALL FOR FINAL APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
- DUCT DETECTORS ARE SUPPLIED AND INSTALLED BY THE FIRE ALARM CONTRACTOR. IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO FURNISH ALL WIRING NECESSARY TO CONNECT THESE DEVICES TO THE FIRE ALARM SYSTEM. PROVIDE WITH REMOTE INDICATOR OR SEPARATELY ZONED. COORDINATE QUANTITY AND LOCATION WITH THE MECHANICAL DRAWINGS.

(C). CONDUIT AND CABLE SYSTEM FOR DATA AND TELEPHONE WIRING.

- CONDUIT FOR DATA AND TELEPHONE SYSTEM, TO INCLUDE SLEEVES IN FIRE WALLS.
- CABLE IS NOT TO BE INSTALLED EXPOSED. VERIFY WITH MECHANICAL PLANS FOR PLENUM SPACES CABLE IN THESE AREAS IS PLENUM RATED.
- ELECTRICAL CONTRACTOR SHALL PROVIDE JUNCTION BOXES, EMPTY CONDUIT WITH PULLSTRINGS AND BUSHINGS. OWNER SHALL PROVIDE AND INSTALL TELEPHONE/DATA CABLING.
- PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR UNUSED DATA OUTLETS.

(E). UNDERGROUND CONDUITS AND SLEEVES AS NECESSARY FOR DISTRIBUTION:

- DO NOT ROUTE GROUPS OF CONDUITS OR SLEEVES ABOVE FOOTINGS UNLESS NOTED TO DO SO. IF CONFLICT OCCURS, CONSULT ARCHITECT AND ENGINEER.
- DO NOT ROUTE CONDUIT OR SLEEVES BELOW BEARING WALLS WHEN RUNNING PARALLEL WITH WALLS.
- LIMIT WIDTH OF CONDUIT AND SLEEVES NOT TO EXCEED 3'-0" IN WIDTH AS IT PASSES UNDER WALL FOOTING. ALIGN ITEMS PERPENDICULAR TO THE FOOTINGS AS IT PASSES BELOW THE FOOTING.
- PROVIDE A MINIMUM SPACING OF 2'-0" BETWEEN CONDUIT GROUPS AS THEY PASS UNDER FOOTINGS.
- DO NOT ROUTE CONDUITS OR SLEEVES UNDER COLUMN FOOTINGS OR PAD FOOTINGS.

GENERAL ELECTRICAL NOTES (CONTINUED.)

(F). GROUNDING SYSTEM

- ALL CONDUITS ARE TO CONTAIN A GREEN GROUNDING CONDUCTOR, SIZED PER THE N.E.C.
- GROUND BUILDING STEEL AS INDICATED ON DRAWINGS.

(G). EQUIPMENT REQUIREMENTS:

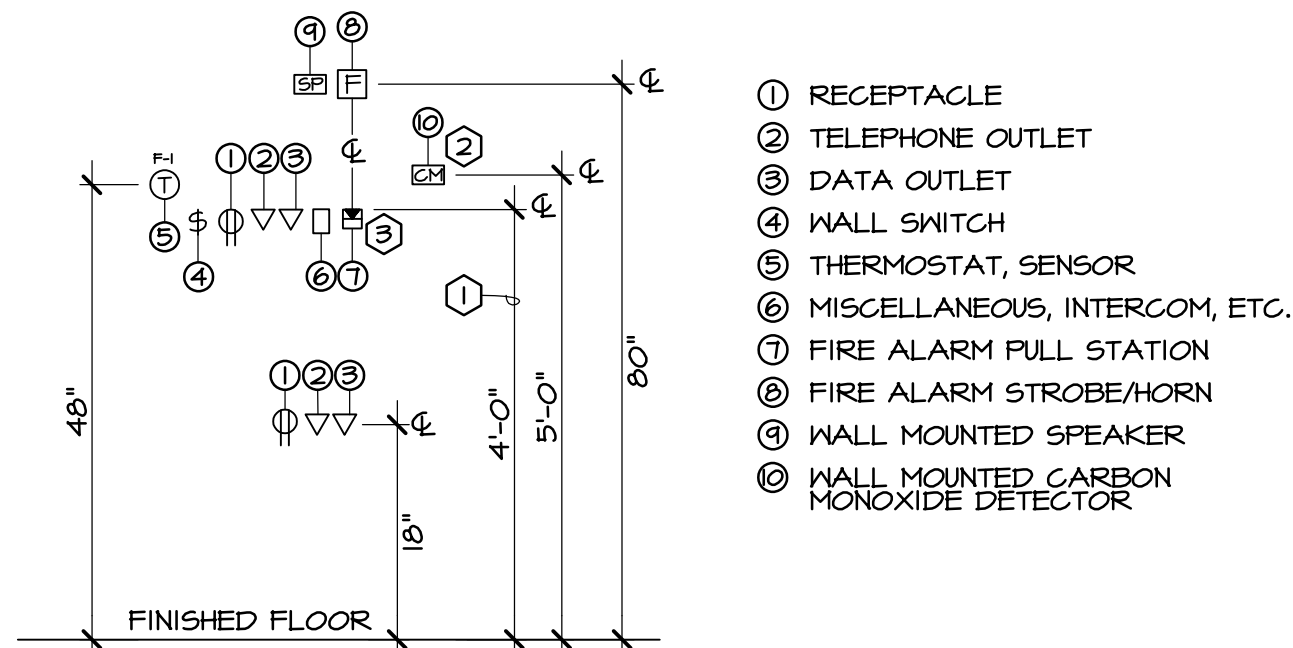
- VERIFY EXACT FUSE SIZE AND EQUIPMENT REQUIREMENTS WITH THE ACTUAL EQUIPMENT FURNISHED BY THE OTHER CONTRACTORS.
- ALL HOT WATER CIRCULATION PUMPS ARE TO BE CONTROLLED VIA 7 DAY TIME CLOCKS PROVIDED BY THE MECHANICAL CONTRACTOR.
- FINAL EQUIPMENT CONNECTIONS: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS REQUIRED TO MAKE FINAL ELECTRICAL CONNECTIONS TO ALL EQUIPMENT FURNISHED ON THIS PROJECT. VERIFY ALL REQUIREMENTS, CONDUCTOR SIZES, OVERCURRENT PROTECTION, PHASES, VOLTAGES, MOTOR ROTATION, ETC., WITH THE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE FUSED DISCONNECT IF REQUIRED BY MANUFACTURER. FURNISH HARD WIRING FOR ALL WATER HEATERS AND CIRCULATION PUMPS.
- THE ELECTRICAL CONTRACTOR IS TO PROVIDE ALL CONTACTORS, MAGNETIC STARTERS, AND MISCELLANEOUS WIRING NECESSARY TO CONTROL EXHAUST FAN AND OTHER AUTOMATICALLY OPERATED EQUIPMENT. THE CONTRACTOR IS TO FURNISH ONE RELAY PER ITEM AS COMPATIBLE WITH THEIR CONTROL SYSTEM.

(H). HVAC CONTROL:

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT FROM EACH HVAC UNIT TO ITS RESPECTIVE THERMOSTAT, HUMIDISTAT, AND/OR SENSOR, AS REQUIRED. COORDINATE EXACT LOCATIONS WITH MECHANICAL CONTRACTOR AND ARCHITECT PRIOR TO ROUGH-IN.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND WIRING NECESSARY FOR LINE VOLTAGE CONTROL SYSTEMS.
- ALL LOW VOLTAGE CONTROL WIRING SHALL BE ENCLOSED IN CONDUIT IN SPACES WITH NO CEILING
- COORDINATE ALL HVAC WIRING WITH THE MECHANICAL DRAWINGS AND THE MECHANICAL CONTRACTOR.
- THE ELECTRICAL CONTRACTOR IS TO PROVIDE A MAGNETIC STARTER FOR EACH EXHAUST FAN. THIS STARTER IS CONTROLLED BY THE LIGHTING/MOTION SENSOR SYSTEM.
- THE ELECTRICAL CONTRACTOR IS TO PROVIDE AND INSTALL ALL LINE VOLTAGE THERMOSTATS.

(I). SEISMIC BRACING FOR ELECTRICAL INSTALLATION

- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL SEISMIC BRACING REQUIREMENTS OF ELECTRICAL EQUIPMENT CALLED OUT IN SPECIFICATION SECTION 26 00 15.



MOUNTING HEIGHT KEYED NOTE:

- 4'-0" MAXIMUM TO TOP OF DEVICE UNLESS LOCATED ABOVE OBSTRUCTION (OR NOTED OTHERWISE) THEN MAXIMUM 4" ABOVE THE OBSTRUCTION. COORDINATE WITH MILLWOK.
- MOUNT NEAR RETURN AIR GRILLE.
- THE HEIGHT OF THE MANUAL FIRE ALARM BOXES SHALL BE A MINIMUM OF 42" AND A MAXIMUM OF 48" MEASURED VERTICALLY, FROM THE FLOOR LEVEL TO THE ACTIVATING HANDLE OR LEVER OF THE BOX.

NOTE:

ALL DEVICES SHOWN MAY NOT BE USED. DETAIL INDICATES TYPICAL MOUNTING HEIGHTS ONLY. COORDINATE ALL MOUNTING HEIGHTS WITH ARCHITECT.

1 MOUNTING HEIGHT DETAIL

N.T.S.



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GENERAL	
A.	ALL WORK SHALL BE DONE IN A GOOD WORKMANLIKE MANNER. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE LOCAL STATE AND FEDERAL CODES INCLUDING BUT NOT LIMITED TO: 1. NATIONAL ELECTRICAL CODE, LATEST EDITION 2. UNDERWRITERS' LABORATORIES, INC. 3. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS 4. INSULATED POWER CABLE ENGINEERS' ASSOCIATION 5. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION 6. AMERICAN STANDARDS ASSOCIATION 7. AMERICAN SOCIETY FOR TESTING MATERIALS 8. STATE FIRE PREVENTION CODE, LATEST EDITION 9. OCCUPATIONAL SAFETY AND HEALTH ACT 10. NATIONAL FIRE CODE II. INTERNATIONAL BUILDING CODE  THE LATEST SPECIFICATIONS AND STANDARDS AVAILABLE SHALL BE USED FOR THE ABOVE.
B.	IN CASE OF DISCREPANCY BETWEEN THE APPLICABLE CODES, PLANS, AND SPECIFICATIONS THE MOST STRINGENT SHALL GOVERN.
C.	SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH REQUIREMENTS OF THE APPLICABLE AUTHORITIES, THEY SHALL BEAR ALL COSTS ARISING IN CORRECTING THE DEFICIENCIES, FEES, PERMITS AND INSPECTIONS  FEES, PERMITS AND INSPECTIONS
A.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL FEES AND OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.
B.	UNDER THIS SECTION OF WORK THE CONTRACTOR SHALL, UPON COMPLETION OF THE WORK, FURNISH A CERTIFICATE OF FINAL INSPECTION TO THE ENGINEER FROM THE INSPECTION DEPARTMENT HAVING JURISDICTION.
C.	THE CONTRACTOR SHALL PAY ALL CHARGES BY THE LOCAL ELECTRIC UTILITY FOR SERVICE TO THE BUILDING.
DRAWINGS AND PLANS	
A.	THE ELECTRICAL PLANS ARE A GUIDE TO THE CONTRACTOR TO SHOW GENERAL ARRANGEMENT OF CONDUIT AND WIRING AND EQUIPMENT REQUIRED. IF ANY ERROR OMISSIONS OR OBSERVATIONS APPEAR THEREIN, WHICH ARE QUESTIONABLE, DO NOT CONFORM TO GOOD PRACTICE OR APPEAR CONTRARY TO THE PURPOSE AND INTENT OF THE WORK THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER AND APPLY FOR DIRECTIONS BEFORE CONSTRUCTION. THE EXACT LOCATION OF CONDUIT RUNS AND LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
B.	THE DRAWINGS MAY BE SUPERSEDED BY LATER REVISED OR DETAILED DRAWINGS OR SPECIFICATION ADDENDA PREPARED BY THE ENGINEER. THE CONTRACTOR SHALL CONFORM TO ALL REASONABLE CHANGES WITHOUT EXTRA COST TO THE OWNER. ALL ITEMS NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS OR NOTED ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.
RECORD DRAWINGS	
A.	THE CONTRACTOR SHALL KEEP A NEAT AND ACCURATE RECORD OF FIELD CHANGES MADE DURING CONSTRUCTION. CHANGES SHALL BE PENCILED IN ON A SEPARATE SET OF DRAWINGS USED ONLY FOR RECORDING CHANGES. AT COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL DELIVER THIS SET TO THE ENGINEER FOR PREPARATION OF RECORD DRAWINGS.
STATEMENT OF WORK	
A.	THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR, TOOLS AND MATERIALS TO COMPLETE THE WORK AS PER THESE SPECIFICATIONS AND THE ASSOCIATED PLANS. THE WORK SHALL INCLUDE BUT NOT NECESSARILY BE LIMITED TO:  (1) SYSTEM OF LIGHTING CIRCUITS. (2) SYSTEM OF POWER CIRCUITS. (3) EMPTY CONDUIT SYSTEMS AS REQUIRED. (4) LIGHTING FIXTURES, LAMPS AND MOUNTING EQUIPMENT. (5) CONTROL WIRING. (6) ELECTRICAL SERVICE. (7) TELEPHONE, TELEVISION CABLE AND COMPUTER RACEWAYS.
WORK SPECIFIED ELSEWHERE:	
(1) TEMPORARY SERVICES. (2) HEATING, COOLING & VENTILATING POWER AND THERMOSTAT RACEWAYS (SEE MECHANICAL PLANS AND COORDINATE WITH MECHANICAL CONTRACTOR.) (3) PAINTING.	
INSTALL WIRING, CONDUIT AND EQUIPMENT TO PROVIDE ALL ELECTRICAL SYSTEMS AS DESCRIBED HEREIN AND ON THE PLANS. THIS SHALL INCLUDE PROVIDING TEMPORARY SERVICE FOR CONSTRUCTION AND ALL CONDUIT AND WIRING SYSTEMS AND POWER FOR MECHANICAL SYSTEMS AS DESCRIBED IN DIVISION IS AND NECESSARY CONDUIT AND ENCLOSURES FOR TELEPHONE AND CABLE SERVICES AND DATA COMMUNICATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INCIDENTAL WORK REQUIRED TO ACCOMPLISH THIS WORK INCLUDING BUT NOT LIMITED TO TRENCHING AND BACKFILLING OF TRENCHES, AND ALL NECESSARY PENETRATIONS.	
SUBMITTALS	
A.	PRIOR TO ORDERING EQUIPMENT, THE CONTRACTOR SHALL MAKE SUBMITTALS (IN PDF FORMAT) FOR APPROVAL. THE SUBMITTALS SHALL INCLUDE DESCRIPTIVE DATA INCLUDING DIMENSIONS, VOLTAGE RATINGS, CURRENT RATING, HEIGHT, CAPACITY, DELIVERY TIME AND OTHER PERTINENT DATA.
B.	THE CONTRACTOR SHALL SUBMIT TWO SETS IN LOOSE LEAF BINDERS OF A COMPILATION OF CATALOG DATA OF EACH ITEM OF EQUIPMENT IN THE ELECTRICAL WORK TO THE ENGINEER, BEFORE FINAL PAYMENT IS MADE. THIS DATA SHALL INCLUDE OPERATING, MAINTENANCE AND SPARE PARTS INFORMATION.
COORDINATION OF WORK	
A.	THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND REVIEW DRAWINGS AND SPECIFICATIONS FOR ALL DISCIPLINES TO PROVIDE PROPER COORDINATION AND AVERT POSSIBLE INSTALLATION CONFLICTS. SHOULD DRASTIC CHANGES FROM ORIGINAL DRAWINGS BE NECESSARY, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SECURE WRITTEN APPROVAL AND AGREEMENT FROM THE ENGINEER ON NECESSARY ADJUSTMENTS.
B.	THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES WHERE NECESSARY TO ASSURE PROPER INTERFACE BETWEEN ELECTRICAL, MECHANICAL, STRUCTURAL, AND ARCHITECTURAL SYSTEMS AND CONSTRUCTION.
EQUIPMENT AND MATERIALS	
A.	EQUIPMENT AND MATERIALS SHALL BE NEW AND SHALL BEAR THE MANUFACTURER'S NAME, TRADE NAME AND THE UL LABEL IN EVERY CASE WHERE A STANDARD HAS BEEN ESTABLISHED FOR THE PARTICULAR MATERIAL. EQUIPMENT SHALL BE THE STANDARD PRODUCT OF A MANUFACTURER REGULARLY ENGAGED IN THE PRODUCTION OF THE REQUIRED TYPE OF EQUIPMENT, AND SHALL BE THE MANUFACTURER'S LATEST APPROVED DESIGN.
B.	EQUIPMENT AND MATERIALS OF THE SAME GENERAL TYPE SHALL BE OF THE SAME MAKE THROUGHOUT THE WORK TO PROVIDE UNIFORM APPEARANCE, OPERATION AND MAINTENANCE.
C.	DELIVERY AND STORAGE: EQUIPMENT AND MATERIALS SHALL BE DELIVERED TO THE SITE AND STORED IN ORIGINAL CONTAINERS, SUITABLY SHELTERED FROM THE ELEMENTS, BUT READILY ACCESSIBLE FOR INSPECTION BY THE ENGINEER UNTIL INSTALLED. ALL ITEMS SUBJECT TO MOISTURE DAMAGE (SUCH AS CONTROLS) SHALL BE STORED IN DRY, HEATED SPACES.

EQUIPMENT AND MATERIALS (CONT.)	
D.	PROTECTION: EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT, WATER AND CHEMICAL OR MECHANICAL INJURY AND THEFT. AT COMPLETION OF THE WORK, FIXTURES, EQUIPMENT AND MATERIALS SHALL BE FREE FROM DEFECTS AND DAMAGE AND SHALL BE CLEANED AND POLISHED AND TURNED OVER TO THE OWNER IN FIRST CLASS CONDITION. DAMAGE OR DEFECTS DEVELOPING BEFORE ACCEPTANCE OF THE WORK SHALL BE MADE GOOD AT THE CONTRACTOR'S EXPENSE.
E.	DIMENSIONS: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ITEMS FURNISHED FIT THE SPACE AVAILABLE. THE CONTRACTOR SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS, AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT THE FINAL INSTALLATION SHALL SUIT THE TRUE INTENT AND MEANING OF THE DRAWINGS AND SPECIFICATIONS.
F.	MANUFACTURER'S DIRECTIONS SHALL BE FOLLOWED COMPLETELY IN THE DELIVERY, STORAGE, PROTECTION AND INSTALLATION OF EQUIPMENT AND MATERIALS. NOTIFY THE ENGINEER OF ANY CONFLICT BETWEEN ANY REQUIREMENT OF THE CONTRACT DOCUMENTS AND THE MANUFACTURER'S DIRECTIONS AND OBTAIN THE ENGINEER'S WRITTEN INSTRUCTION BEFORE PRECEDING WITH THE WORK. SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE MANUFACTURER'S DIRECTIONS OR SUCH WRITTEN INSTRUCTIONS FROM THE ENGINEER, THE CONTRACTOR SHALL BEAR ALL COSTS ARISING IN CORRECTING THE DEFICIENCIES.
G.	THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES, AND INCIDENTAL ITEMS TO COMPLETE THE WORK, READY TO USE AND FULLY OPERATIONAL.
H.	EQUIPMENT AND MATERIALS SPECIFIED HEREIN ARE NAMED TO ESTABLISH A STANDARD OF QUALITY. OTHER MATERIAL OF EQUAL QUALITY MAY BE SUBSTITUTED WITH APPROVAL BY THE ENGINEER.
RACEWAYS	
A.	ALL WIRING SYSTEMS SHALL BE INSTALLED IN RACEWAYS CONSISTING OF GALVANIZED STEEL TUBING, RIGID GALVANIZED STEEL, PVC, FLEXIBLE STEEL CONDUIT OR NEOPRENE COVERED FLEXIBLE STEEL CONDUIT.
B.	ALL CONDUIT SYSTEMS SHALL BE INSTALLED COMPLETE BEFORE PULLING WIRES.
C.	WATER TIGHT JUNCTION BOXES, FITTINGS, EXPANSION JOINTS, COMPRESSIONS FITTINGS, CONDUIT HUBS, ETC., SHALL BE PROVIDED, FOR ALL ELECTRICAL SYSTEMS WHEREVER CONSTRUCTION DICTATES INCLUDING OUTDOOR LOCATIONS.
D.	METALLIC TUBING SHALL ONLY BE USED IN AREAS NOT SUBJECT TO MECHANICAL ABUSE. RIGID GALVANIZED CONDUIT SHALL BE USED IN AREAS WHERE CONDUIT SHALL BE SUSCEPTIBLE TO SUCH ABUSE.
E.	FLEXIBLE CONDUIT USED IN OUTDOOR LOCATIONS OR INDOOR LOCATIONS WHERE EXPOSED TO CONTINUOUS OR INTERMITTENT MOISTURE SHALL BE LIQUID TIGHT, NEOPRENE COVERED AND UL LISTED. ALL FITTINGS FOR SUCH APPLICATIONS SHALL BE LIQUID TIGHT, NYLON INSULATED THROUGH TYPE AS MANUFACTURED BY THOMAS AND BETTS, SERIES 5531 OR APPROVED EQUAL.
F.	SUFFICIENT SLACK SHALL BE PROVIDED IN ALL FLEXIBLE CONDUIT CONNECTIONS TO REDUCE THE EFFECTS OF VIBRATION.
G.	INSULATED BUSHINGS SHALL BE USED ON ALL CONDUITS 1½" AND LARGER.
H.	ALL CONDUIT BENDS SHALL HAVE A RADIUS GREATER THAN OR EQUAL TO THAT STIPULATED BY THE NEC. STANDARD FACTORY ELBOWS SHALL BE USED, FOR BENDS IN ALL 1½" AND LARGER CONDUITS.
I.	PVC IS NOT TO BE INSTALLED EXPOSED.
J.	E.M.T. FITTINGS SHALL BE COMPRESSION TYPE.
K.	"MC" CABLE IS ALLOWED FOR FIXTURE "WHIPS" ONLY. NO DAISY CHAINING OF FIXTURES IS ALLOWED.
L.	ALL LOW VOLTAGE CONDUIT (TEMPERATURE CONTROL, LIGHTING CONTROL, TELEPHONE/DATA ETC.) SHALL BE BLUE
M.	ALL FIRE ALARM CONDUIT SHALL BE RED.
HANGERS AND SUPPORTS	
A.	THE CONTRACTOR SHALL PROVIDE ADEQUATE SUPPORT FOR ALL RACEWAYS IN COMPLIANCE WITH THE NEC TO PREVENT APPRECIABLE SAGGING OF CONDUIT.
B.	MULTIPLE CONDUITS RUNNING HORIZONTALLY AT THE SAME GRADE AND ELEVATION MAY BE SUPPORTED BY TRAPEZES OF CHANNELS SUSPENDED ON RODS. ALL SUPPORT COMPONENTS SHALL BE OF ADEQUATE SIZE FOR LOADED WEIGHTS BEING SUPPORTED.
C.	PERFORATED STRAP IRON OR WIRE SHALL NOT BE USED FOR SUPPORTING CONDUITS OR EQUIPMENT.
D.	WHERE LARGE CONDUITS ARE SUPPORTED BENEATH BAR JOIST, HANGER RODS SHALL BE SECURED TO ANGLE IRONS OF ADEQUATE SIZE. EACH ANGLE SHALL BE WELDED TO THE JOIST AND SHALL SPAN TWO OR MORE JOIST TO DISTRIBUTE THE WEIGHT PROPERLY.
E.	SUPPORTS SHALL BE INSTALLED WITHIN THREE FEET OF EACH COUPLING OR CONNECTOR.
JUNCTION, OUTLET AND PULL BOXES	
A.	JUNCTION AND PULL BOXES SHALL BE INSTALLED WHERE SHOWN ON THE PLANS AND WHERE REQUIRED TO OVERCOME MECHANICAL DIFFICULTIES DUE TO ARRANGEMENT OF RUNS. NO RUNS OVER 100' SHALL BE MADE WITHOUT THE USE OF A PULL BOX.
B.	ALL DEVICES SHALL BE SUPPORTED BY TWO STUDS.
C.	ALL BOXES SHALL BE GALVANIZED METAL INSIDE AND OUTSIDE AND SHALL BE PROVIDED WITH GALVANIZED COVERS. NO PLASTIC ENCLOSURES OR BOXES SHALL BE ACCEPTED, EXCEPT WHERE NOTED ON THE PLANS.
WALL PENETRATIONS	
A.	ALL WALL PENETRATIONS SHALL BE CAULKED AND SEALED.
B.	THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY SLEEVES AND CHASES FOR ALL WORK PASSING THROUGH AND ATTACHING TO WALLS, FLOORS, CEILINGS OR THE ROOF.
WIRE AND CABLES	
A.	ALL WIRE AND CABLE SHALL BE SOFT DRAWN COPPER WITH INSULATION CONFORMING TO REQUIREMENTS OF THE NEC AND ALL RELEVANT ASTM SPECIFICATIONS.
B.	WIRE AND CABLE SHALL BE NEW, SHALL HAVE SIZE, GRADE OF INSULATION, VOLTAGE AND MANUFACTURER NAME, PERMANENTLY MARKED ON OUTER COVERING AT REGULAR INTERVALS.
C.	WIRE SHALL BE COLOR CODED WITH A SEPARATE COLOR FOR EACH PHASE AND NEUTRAL AND THE COLOR CODE SHALL BE CONSISTENT THROUGHOUT INSTALLATION.
D.	ALL WIRE NO. 8 AND LARGER SHALL BE STRANDED, WHERE NO. 12 OR 10 STRANDED IS USED, TERMINATE WITH INSULATED COMPRESSION LUG OF THE PROPER SIZE.
E.	ALL WIRE SHALL HAVE 600 VOLT TYPE THIN INSULATION, UNLESS SPECIFIED OTHERWISE ON THE PLANS.

GROUNDING	
A.	ALL ELECTRICAL EQUIPMENT AND ASSOCIATED SYSTEMS SHALL BE GROUNDED IN STRICT COMPLIANCE WITH ARTICLE 250 OF THE NEC.
B.	ALL CIRCUITS SHALL HAVE A GREEN COVERED GROUND WIRE SIZED PER NEC REQUIREMENTS OR AS PER THE PLANS. GROUND WIRES SHALL BE BONDED TO ALL PANELS, ENCLOSURES, MOTOR FRAMES, EQUIPMENT FRAMES, OUTLET, JUNCTION AND PULL BOXES.
WIRING DEVICES	
A.	ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE.
B.	DISTRIBUTION PANELS SHALL BE SQUARE D, GENERAL ELECTRIC, CUTLER HAMMER OR APPROVED EQUAL AS SCHEDULED ON PLANS.
C.	RECEPTACLES SHALL BE 20 AMP, 3 WIRE GROUNDING TYPE 5562 OR EQUAL. TAMPER RESISTANT.
D.	LIGHT SWITCHES SHALL BE 20 AMP 125/271 VOLT TYPE 1221 OR EQUAL.
E.	PROVIDE HIGH IMPACT NYLON COVERS FOR ALL INTERIOR DEVICES. COLOR TO BE COORDINATED WITH THE ARCHITECT AND OWNER.
F.	EXTERIOR WEATHER RESISTANT DEVICES SHALL BE METAL NEMA 3R RATED, WHILE IN USE.
LIGHTING FIXTURES	
A.	PROVIDE FIXTURES OF THE TYPE SHOWN ON THE DRAWINGS AND WITH THE FOLLOWING ACCESSORIES AS APPLICABLE.  1. RECESSED FIXTURES: A. PROVIDE HOUSING NEC AND UL LISTED FOR DIRECT CONTACT WITH INSULATION. B. PROVIDE FRAME OF TYPE REQUIRED FOR THAT PARTICULAR CEILING CONSTRUCTION AND FINISH. C. HOLD ALL INSULATION AWAY FROM FIXTURES BY 3". 2. FLUORESCENT FIXTURES: A. PROVIDE BALLASTS AS PER THE FIXTURE SCHEDULE. B. PROVIDE LOW TEMPERATURE TYPE BALLAST FOR FIXTURES IN LOW TEMPERATURE INDOOR AREAS AND AT ALL OUTDOOR AREAS. C. PROVIDE LAMPS AT ALL FLUORESCENT FIXTURES PER FIXTURE SCHEDULE. 3. LED LAMPS: A. LED LAMP MANUFACTURERS MUST HAVE ENERGY STAR/DLC RATINGS OR SHALL OFFER LH-90, TM-21 TEST RESULTS. B. NOTE LAMP COLOR ON THE FIXTURE SCHEDULE, MINIMUM SHALL BE 80.
MOTOR STARTERS	
A.	PROVIDE SQUARE D, G.E., CUTLER HAMMER OR EQUAL STARTING SWITCHES, PROTECTIVE DEVICES AND OTHER ITEMS REQUIRED BY THE MANUFACTURER AND THE NEC.  1. VERIFY HORSEPOWER RATINGS AND VOLTAGES. 2. PROVIDE AUTOMATIC OR REMOTE CONTROL AND ACCESSORIES AS REQUIRED FOR PROPER OPERATION AND AS SHOWN ON DRAWINGS.
B. CONDUIT CONNECTIONS:	
1. INSTALL 24" MAX. OF FLEXIBLE CONDUIT BETWEEN EQUIPMENT AND MOTORS THAT ARE ATTACHED TO BUILDINGS. 2. AT EXTERIOR AND DAMP INTERIOR LOCATIONS USE POLYVINYL CHLORIDE JACKETED FLEXIBLE CONDUIT.	

ELECTRICAL WORK	
A.	WHEREVER EQUIPMENT REQUIRING ELECTRICAL CONNECTION IS SPECIFIED, ALL WIRING SHALL BE FURNISHED AND INSTALLED UNDER THE ELECTRICAL SECTION OF THE SPECIFICATIONS. STARTING SWITCHES, PROTECTIVE DEVICES AND OTHER MEANS FOR THE OPERATION AND CONTROL OF EQUIPMENT SHALL BE FURNISHED AND ELECTRICALLY CONNECTED COMPLETE UNDER THE ELECTRICAL SECTION, UNLESS OTHERWISE SPECIFICALLY NOTED. ADDITIONAL DISCONNECTS REQUIRED BY THE NATIONAL ELECTRICAL CODE SHALL BE FURNISHED, INSTALLED AND CONNECTED.
IDENTIFICATION	
A.	THE ELECTRICAL CONTRACTOR SHALL PROVIDE NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT, IDENTIFYING EACH ITEM BY NAME. THE CONTRACTOR SHALL PROVIDE NAMEPLATES ON ALL PANELS, STARTERS, DISCONNECT SWITCHES, ETC.
B.	THE NAMEPLATES SHALL BE CONSTRUCTED OF LAMINATED BAKELITE AND BE SECURELY FASTENED TO THE EQUIPMENT BY AN APPROVED MEANS (NO STICK-ON TAPE WILL BE ALLOWED). THE NAMEPLATES SHALL BE WHITE IN COLOR WITH ENGRAVED UPPER CASE LETTERS BLACK IN COLOR. THE LETTERS SHALL BE A MINIMUM OF 3/8" IN HEIGHT.
C.	PROVIDE TYPED PANEL SCHEDULES FOR ALL PANEL BOARDS ADDED OR CHANGED.
D.	ALL JUNCTION BOXES SHALL BE HAND LABELED WITH A PERMANENT BLACK MARKER INDICATING PANEL AND CIRCUIT FEEDS CONTAINED.
E.	PROVIDE LABELS ON EACH PANEL DESCRIBING VOLTAGE AND PHASE, AND COLOR CODE OF THE CABLE WITHIN.
TELEPHONE, CABLE TV, AND DATA SYSTEM	
A.	TELEPHONE, CABLE TV AND DATA SYSTEMS SHALL CONSIST OF A METAL RACEWAY, AND CONDUITS. COORDINATE EFFORTS WITH RESPECTIVE TELEPHONE AND THE OWNER.
B.	PROVIDE CONDUIT TO ALL TELEPHONE, TELEVISION AND DATA OUTLETS AS SHOWN ON DRAWINGS, MINIMUM SIZE SHALL BE 1". TERMINATE CONDUIT 6" ABOVE CEILING WITH BUSHING AND PULL STRING.
C.	TELEVISION AND TELEPHONE OUTLET BOXES TO BE STANDARD 4" SQUARE ELECTRIC BOXES WITH EXTENSION PLATE FLUSH WITH FINISH. PROVIDE CONDUIT TO 6" ABOVE CEILING WITH BUSHING AND PULL STRINGS.
D.	ALL RACEWAYS SHALL BE PROVIDED WITH A SUITABLE PULL WIRE IN EACH RUN TO FACILITATE THE INSTALLATION OF TELEPHONE, TELEVISION AND DATA CABLES.

EXCAVATION AND TRENCHING FOR ELECTRICAL CONDUIT	
A.	PROTECTION OF EXISTING UTILITIES: EXISTING UTILITY LINES TO BE RETAINED THAT ARE SHOWN ON THE DRAWINGS OR THE LOCATIONS OF WHICH ARE MADE KNOWN TO THE CONTRACTOR PRIOR TO EXCAVATION, AS WELL AS ALL UTILITY LINES UNCOVERED DURING EXCAVATION OPERATIONS, SHALL BE PROTECTED FROM DAMAGE DURING EXCAVATION AND BACKFILLING, AND IF DAMAGED, SHALL BE REPAIRED BY THE CONTRACTOR, AT HIS EXPENSE.
FIRE ALARM	
A.	THE BIDDING CONTRACTOR IS TO DESIGN THE NEW PLAN TO MEET ALL NATIONAL AND LOCAL CODES AS WELL AS THE NFPA. ALL COSTS NECESSARY FOR A COMPLETE SYSTEM ARE TO BE INCLUDED IN THE BID PRICE. NO EXTRAS WILL BE CONSIDERED. THE SYSTEM IS TO BE COMPLETE AND FUNCTIONAL.
B.	ALL EQUIPMENT IS TO BE NEW AND OF THE MOST MODERN DESIGN. ALL DEVICES SHALL BE LISTED FOR THE PURPOSE FOR WHICH THEY ARE USED AND SHALL BE INSTALLED IN COMPLIANCE WITH ALL CODES AND STANDARDS. COORDINATE THE INSTALLATION WITH THE AUTHORITY HAVING JURISDICTION, PROVIDE PLANS AND CALCULATIONS TO THE FIRE MARSHALL AND ENGINEER PRIOR TO THE START OF CONSTRUCTION. PROVIDE FULL SUBMITTALS AS PER THIS SPECIFICATION.
C.	THE BIDDING CONTRACTOR SHALL PROVIDE ALL COSTS FOR ANY REQUIRED HARDWARE AND SHALL COORDINATE THE INSTALLATION WITH THE AUTHORITY HAVING JURISDICTION PRIOR TO SUBMITTING BID.
D.	THE INSTALLATION ORGANIZATION SHALL BE A COMPANY SPECIALIZING IN THE INSTALLATION OF DETECTION AND ALARM SYSTEM. THE ORGANIZATION SHALL HAVE A MINIMUM OF 10 YEARS EXPERIENCE IN THIS FIELD. THIS ORGANIZATION SHALL HAVE AN EMPLOYEE WHO IS NICET LEVEL III OR HIGHER. ALL SUBMITTALS SHALL INCLUDE A FULL DISCLOSURE OF INSTALLER QUALIFICATIONS.
TEST	
A.	AFTER INSTALLATION IS COMPLETE, THE CONTRACTOR SHALL CONDUCT OPERATING TEST FOR APPROVAL BY THE ENGINEER. TEST SHALL INCLUDE VERIFICATION OF DIRECTION OF ROTATION FOR ALL MOTORS. THE EQUIPMENT SHALL BE DEMONSTRATED TO OPERATE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. THE TEST SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.
GUARANTEE	
A.	THE WORK HEREIN SPECIFIED SHALL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIAL UNDER NORMAL USE AND SERVICE. IF WITHIN TWELVE (12) MONTHS FROM DATE OF SUBSTANTIAL COMPLETION OF THE WORK HEREIN DESCRIBED, ANY OF THE EQUIPMENT OR MATERIALS, OR THE INSTALLATION THEREOF, IS FOUND TO BE DEFECTIVE IN WORKMANSHIP OR MATERIALS, IT SHALL BE REPLACED OR REPAIRED FREE OF CHARGE.
FINALLY	
A.	IT IS THE INTENTION THAT THIS SPECIFICATION SHALL PROVIDE A COMPLETE INSTALLATION. ALL ACCESSORIES AND APPARATUS NECESSARY FOR A COMPLETE OPERATIONAL SYSTEM SHALL BE INCLUDED. THE OMISSION OF SPECIFIC REFERENCE TO ANY PART OF THE WORK NECESSARY FOR SUCH COMPLETE INSTALLATION SHALL NOT BE INTERPRETED AS RELIEVING THIS CONTRACTOR FROM FURNISHING AND INSTALLING SUCH PARTS.



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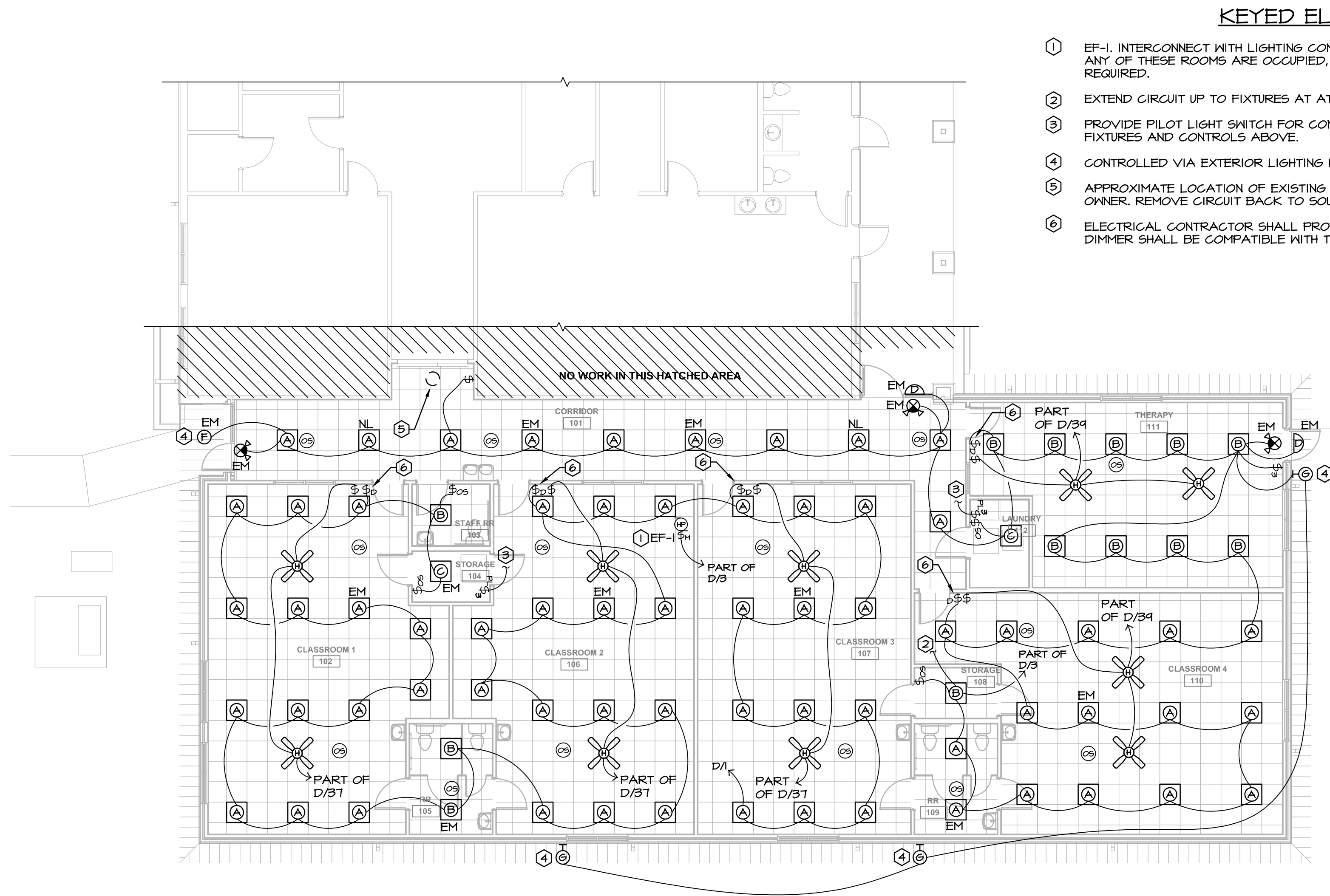
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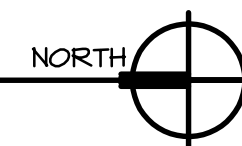



### KEYED ELECTRICAL NOTES

- ① EF-1. INTERCONNECT WITH LIGHTING CONTROLS AT STAFF RR 103, RR 105, RR 109, LAUNDRY 112. IF ANY OF THESE ROOMS ARE OCCUPIED, FAN SHALL BE ON. PROVIDE QUANTITY OF RELAYS AS REQUIRED.
- ② EXTEND CIRCUIT UP TO FIXTURES AT ATTIC.
- ③ PROVIDE PILOT LIGHT SWITCH FOR CONTROL OF NEW ATTIC LIGHTS. EXTEND CIRCUIT UP TO FIXTURES AND CONTROLS ABOVE.
- ④ CONTROLLED VIA EXTERIOR LIGHTING PHOTOCELL. PHOTOCELL ON/PHOTOCELL OFF.
- ⑤ APPROXIMATE LOCATION OF EXISTING DOWNLIGHT TO BE REMOVED AND RETURNED TO OWNER. REMOVE CIRCUIT BACK TO SOURCE OR NEXT DEVICE TO REMAIN.
- ⑥ ELECTRICAL CONTRACTOR SHALL PROVIDE A SINGLE POLE WALLBOX PRESET SLIDE DIMMER. DIMMER SHALL BE COMPATIBLE WITH THE ACTUAL FIXTURES USED. TYPICAL OF ALL.

### 1 LIGHTING PLAN

1/8"=1'-0"





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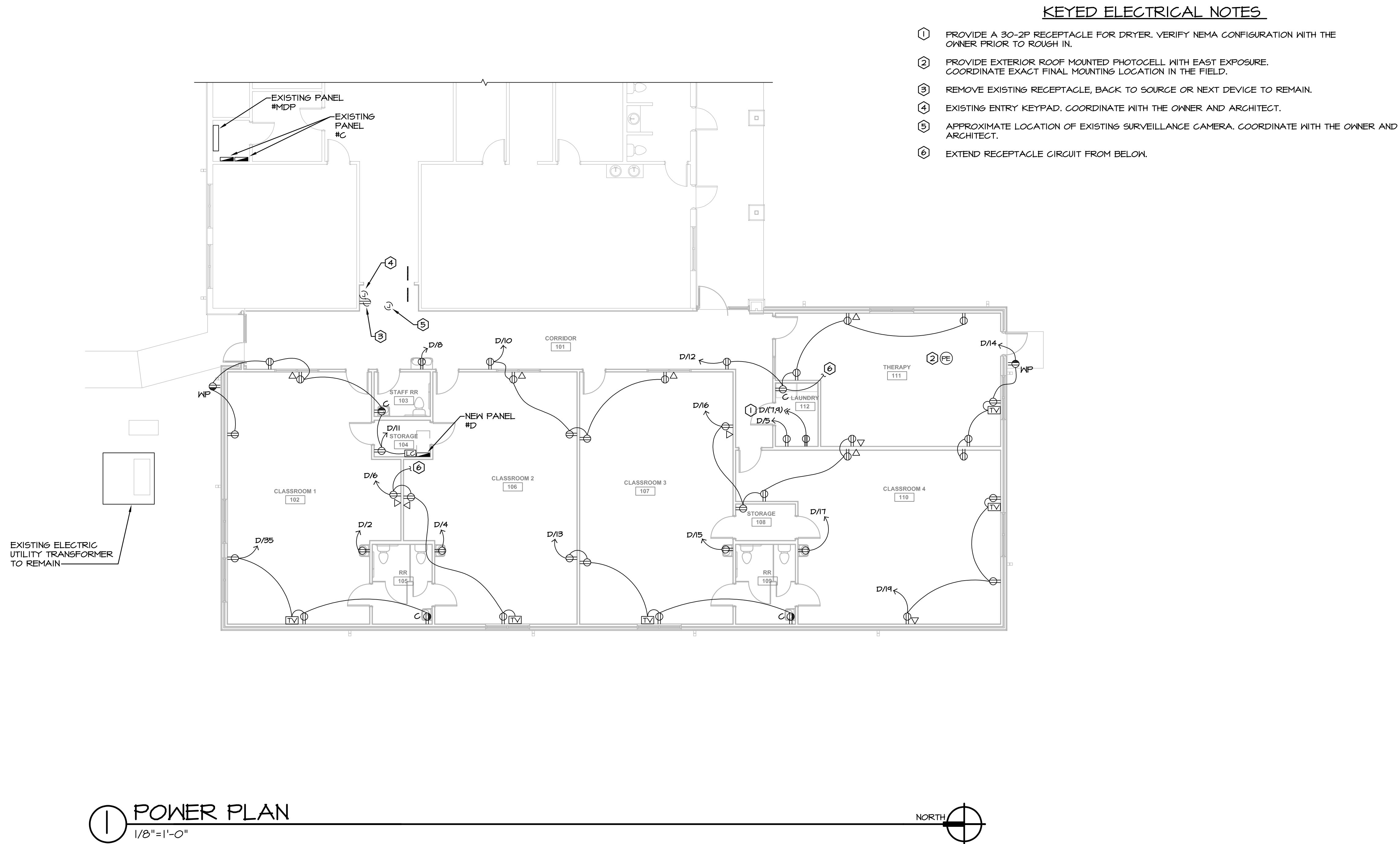
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LIGHTING PLAN



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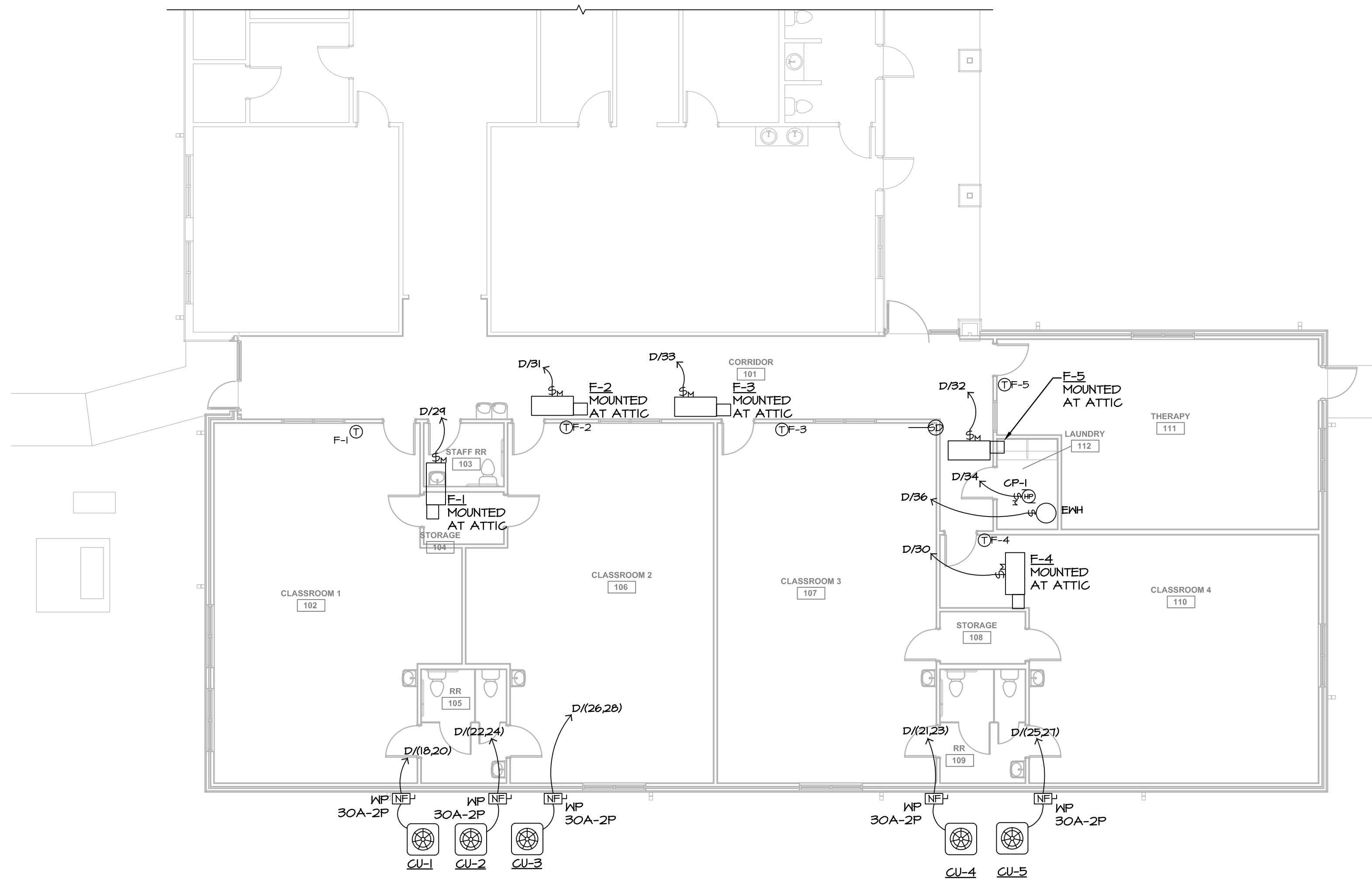
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① MECHANICAL POWER PLAN  
1/8" = 1'-0"





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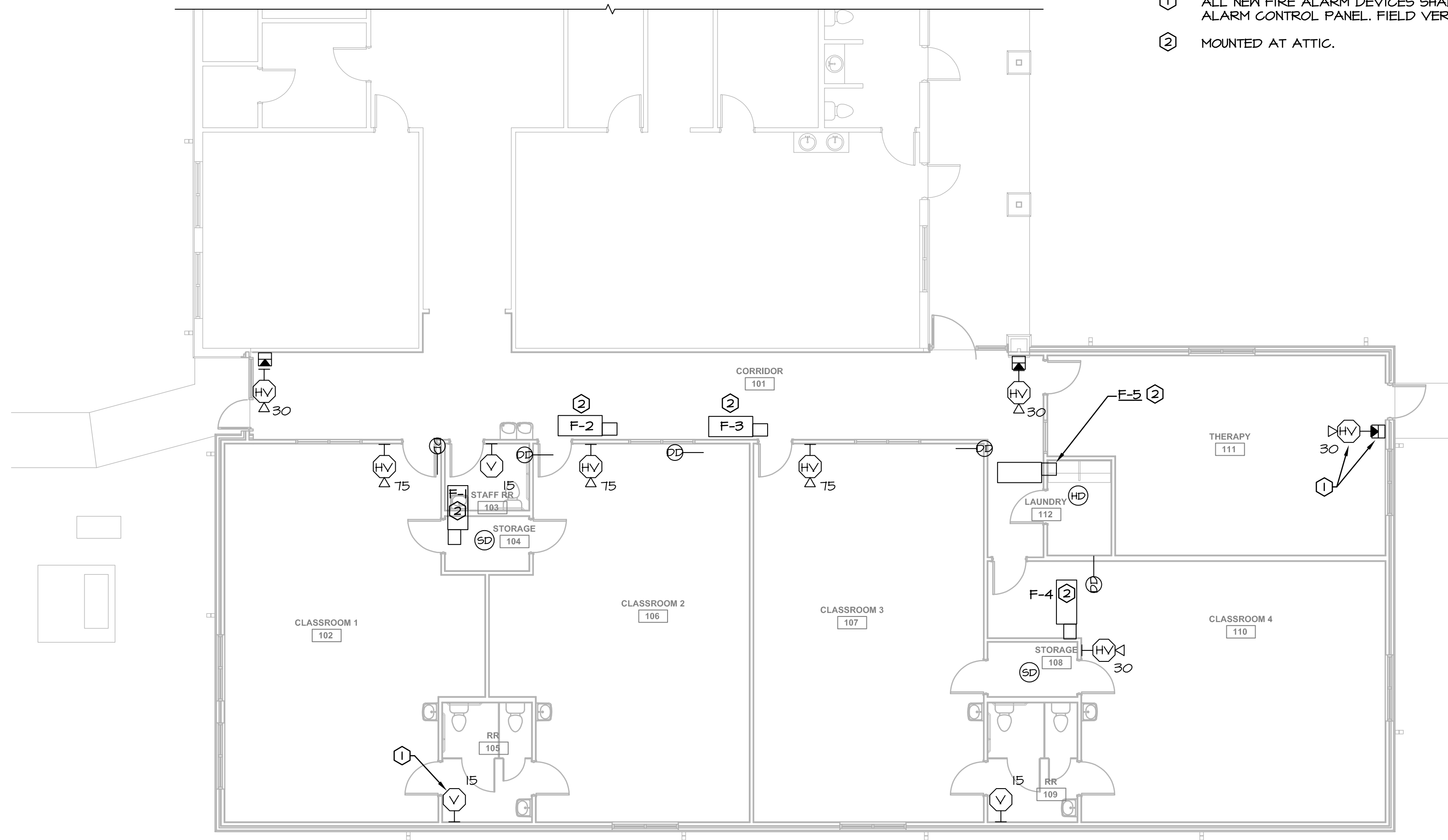


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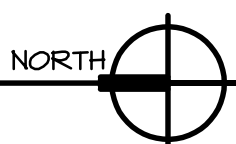
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1 SPECIAL SYSTEMS PLAN  
1/8" = 1'-0"



### GENERAL ELECTRICAL NOTES

1. FIELD VERIFY MANUFACTURER AND LOCATION OF FIRE ALARM CONTROL PANEL.

### KEYED ELECTRICAL NOTES

1. ALL NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH AND CONNECT TO THE EXISTING FIRE ALARM CONTROL PANEL. FIELD VERIFY MANUFACTURER AND LOCATION. TYPICAL OF ALL.
2. MOUNTED AT ATTIC.



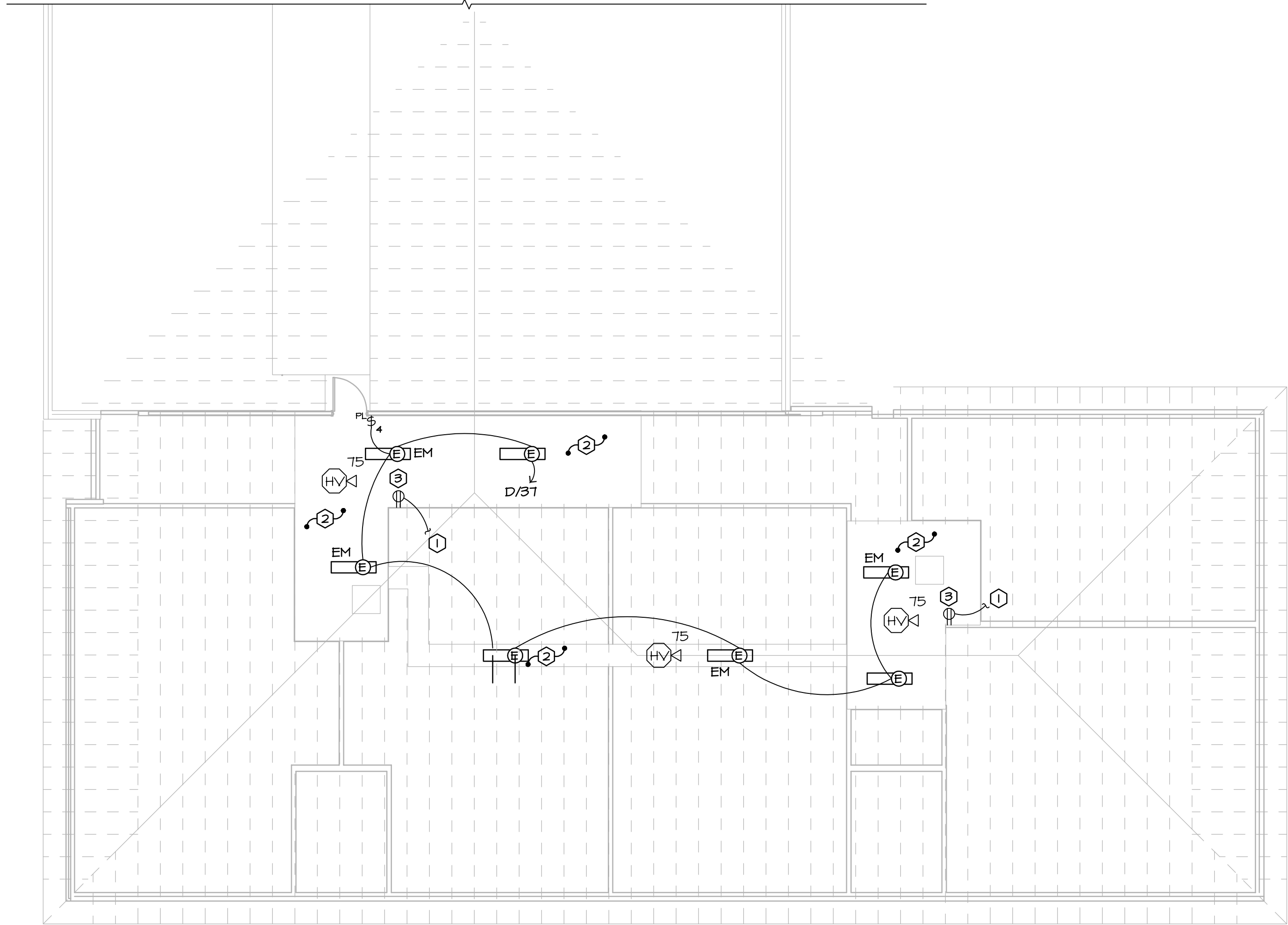
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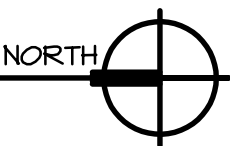
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① ELECTRICAL ATTIC PLAN  
1/8"=1'-0"



GENERAL ELECTRICAL NOTES

- ① EXTEND RECEPTACLE CIRCUIT FROM BELOW.
- ② APPROXIMATE LOCATION OF SURFACE MOUNT LIGHT FIXTURES. ADJUST FINAL LOCATION TO AVOID CONFLICTS WITH DUCTWORK, PIPING, ETC. PROVIDE ALL REQUIRED HARDWARE.
- ③ COORDINATE IN THE FIELD EXACT FINAL MOUNTING LOCATION FOR MAINTENANCE RECEPTACLE.



03/03/2021

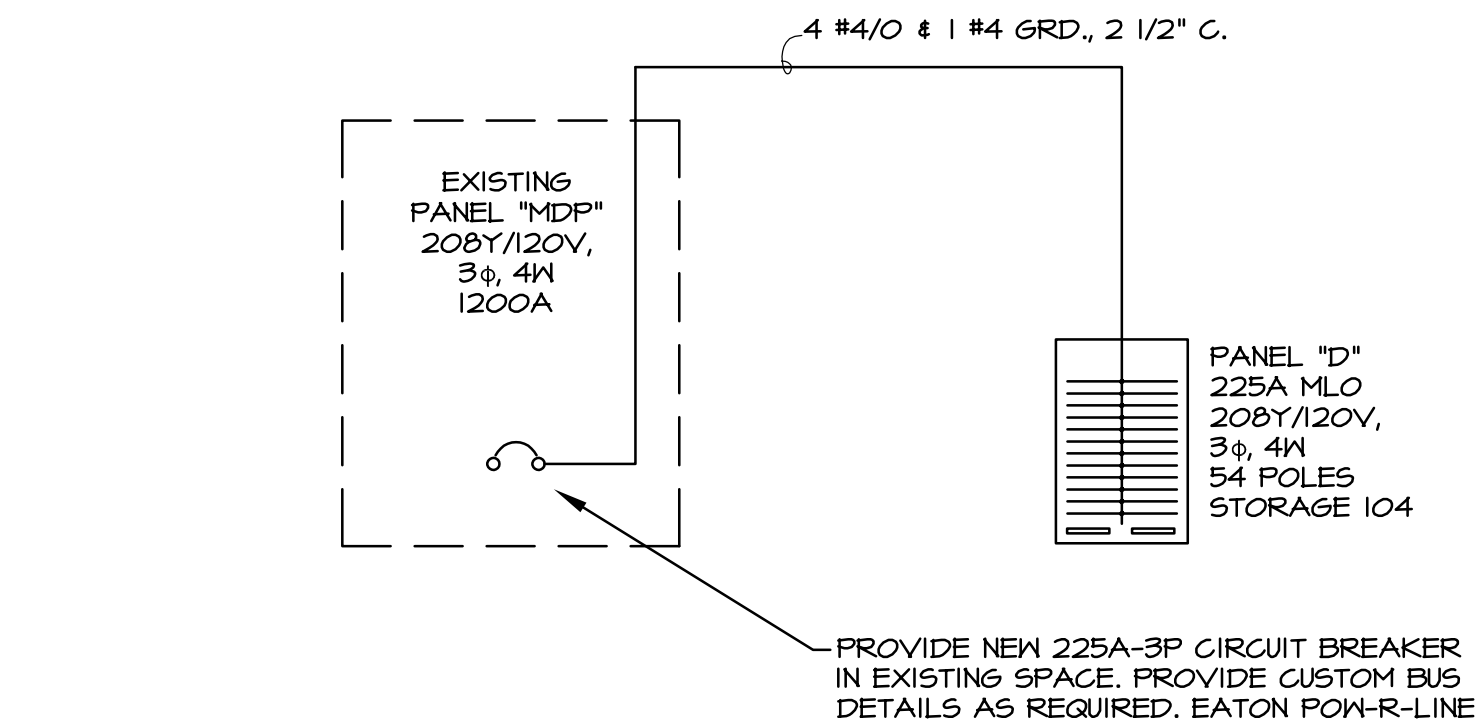
Project number:	20100
Date:	03/03/2021
Revisions:	



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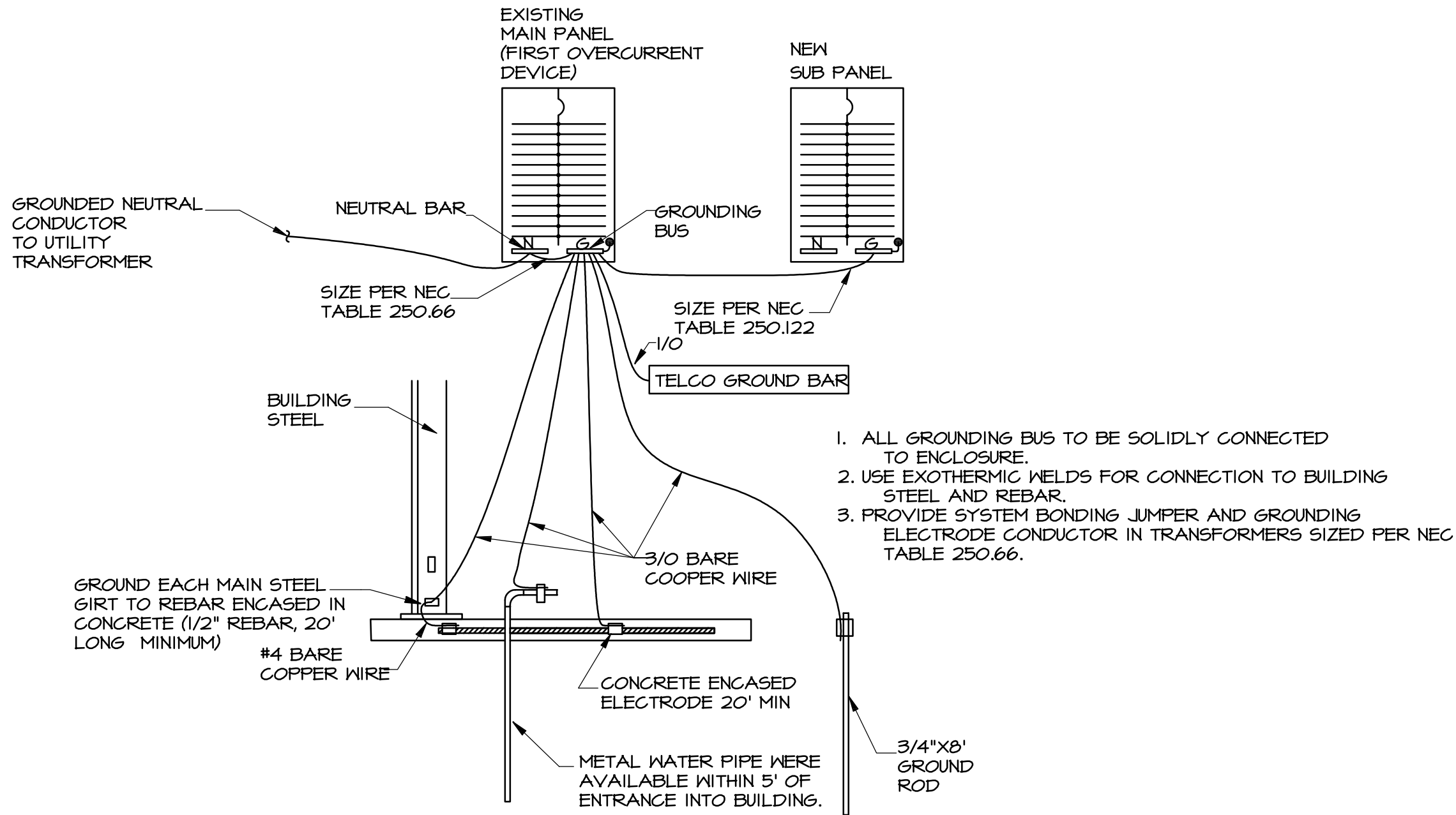
HSA JOB # 21-014





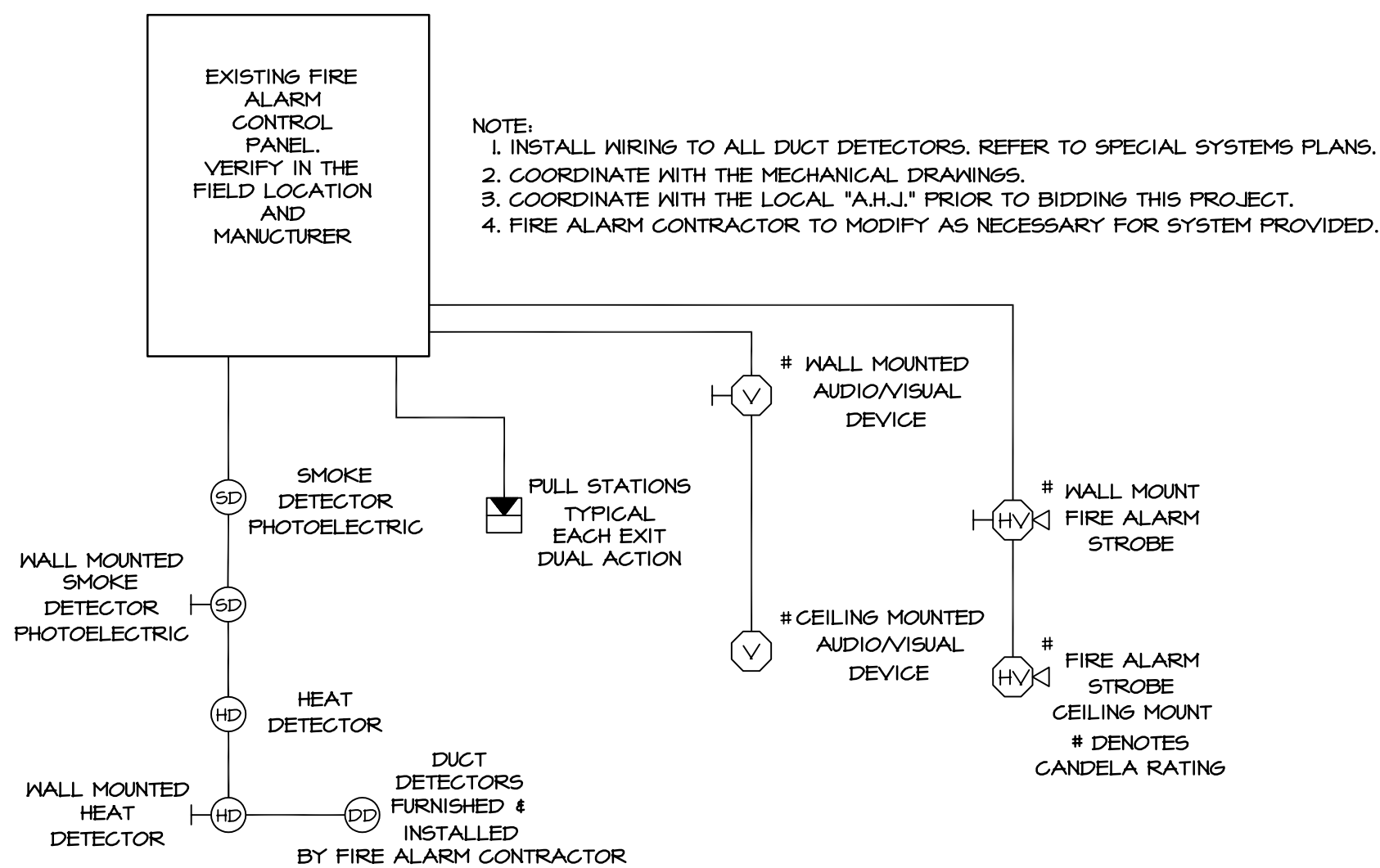
## 1 ELECTRICAL RISER

N.T.S.



## 2 GROUNDING DIAGRAM

N.T.S.



## 3 FIRE ALARM SYSTEM RISER DIAGRAM

N.T.S.

LIGHTING FIXTURE SCHEDULE												
MARK	VOLT	WATT	NO.	LAMP		MOUNTING			MANUFACTURER	CATALOG NO.	REMARKS	
				TYPE	BRKT	PEND	REC	SURF				
A	UNV	24	-	LED W/ UNIT			X		COLUMBIA WILLIAMS	LCAT22-2TML6-R-EDIU AT3-22-L40/B21-P-DIMI-UNV	2X2 CENTER BASKET TYPE TROFFER. 3400 LUMENS, 2700K. RECTANGULAR PERFORATED SHIELD. RECESS LAY IN CEILING. 0-10V TO 1% DIMMABLE DRIVER.	
B	UNV	32	-	LED W/ UNIT			X		COLUMBIA WILLIAMS	LCAT22-2THL6-R-EDIU AT3-22-L40/B21-P-DIMI-UNV	2X2 CENTER BASKET TYPE TROFFER. 3700 LUMENS, 2700K. RECTANGULAR PERFORATED SHIELD. RECESS LAY IN CEILING. 0-10V TO 1% DIMMABLE DRIVER.	
C	UNV	32	-	LED W/ UNIT				X	COLUMBIA WILLIAMS	LCAT22-4OHL-SM-R-EDIU AT53-22-L40/B40-P-DIMI-UNV	2X2 CENTER BASKET TYPE TROFFER. 3700 LUMENS, 4000K. RECTANGULAR PERFORATED SHIELD. RECESS LAY IN CEILING. 0-10V TO 1% DIMMABLE DRIVER.	
D	UNV	10	-	LED W/ UNIT				X	ISOLATE WILLIAMS	ELED-EM-BZ EMER/DECO-DEBR-LT-D	EXTERIOR EMERGENCY LIGHT. NICAD BATTERY RATED MINIMUM 1 1/2 HOURS. NET LABEL. ARCHITECT SHALL SELECT STANDARD FINISH. SELF DIAGNOSTICS AND HIGH CHARGE INDICATOR.	
E	UNV	30	-	LED W/ UNIT				X	COLUMBIA WILLIAMS	MPS4-40MM-CWEU TSR-4-L50/B40-DIM-UNV	4' LENS STRIP. 3800 LUMENS, 4000K. CURVED FROSTED ACRYLIC LENS. WIDE DISTRIBUTION. PROVIDE ALL REQUIRED MOUNTING HARDWARE FOR SURFACE MOUNTING.	
F	UNV	23	-	LED W/ UNIT			X		PRESCOLITE WILLIAMS	LTR-6RD-H-ML20L-LTR-6RDTL-40K8-MD-S-WT 6DR-TL-L20/B40-DIM-UNV-OM-OF-CS-MNT-N-FI	6" APERTURE LED DOWNLIGHT. 2000 LUMENS, 4000K. MEDIUM DISTRIBUTION. SPECULAR REFLECTOR. DAMP LABEL.	
G	UNV	20	-	LED W/ UNIT				X	PRESCOLITE WILLIAMS	WPAD520U-40-B MLS-G-X-L22-B40-X-DIM-UNV	EXTERIOR LED WALL PACK. 2100 LUMENS, 4000K. NET LABEL. BRONZE FINISH. MOUNT AS HIGH AS POSSIBLE ON WALL.	
H	UNV	50	-	LED W/ UNIT				X	QUORUM	CUSTOM HUGGER II425-6 OR APPROVED EQUAL	42" - 5 BLADE CL6 FAN. ADJUSTABLE SPEED. SURFACE MOUNT. WITHOUT LIGHT KIT. PROVIDE FAN SPEED CONTROLLER. WHITE	
⊗	120	5	NA	LED W/ UNIT				X	COMPASS WILLIAMS	CE SERIES EXIT-R-EM-WHT-120V	THERMOPLASTIC LED EXIT. NICAD BATTERY RATED MINIMUM 1 1/2 HOURS. RED ON WHITE. PROVIDE DIRECTIONAL INDICATORS AS REQUIRED. TEST SWITCH AND HIGH CHARGE INDICATOR.	
⊗	120	11	NA	W/ UNIT				X	COMPASS WILLIAMS	CC SERIES EXIT/EM/LED-R-WHT-120V	COMBINATION EXIT/EMERGENCY UNIT. NICAD BATTERY RATED MINIMUM 1 1/2 HOURS. PROVIDE DIRECTIONAL INDICATORS AS REQUIRED. RED ON WHITE. TEST SWITCH AND HIGH CHARGE INDICATOR.	

### GENERAL NOTES:

- NOTE : HOLD ALL INSULATION OFF RECESSED FIXTURES AND A MINIMUM OF 3" TO THE SIDE.
- NOTE : EXIT LIGHTS AND EMERGENCY LIGHTS REQUIRES UNSWITCHED HOT WIRE PER MANUFACTURER RECOMMENDATION.
- NOTE : EM DENOTES EMERGENCY BATTERY PACK GOOD FOR MINIMUM OF 15 HOURS.
- NOTE : ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL DRIVER AND LEDS THAT WILL PROVIDE THE OWNER WITH A FIVE YEAR WARRANTY.
- NOTE : FIXTURES DENOTED AS NIGHT LIGHTS (NL) SHALL BE WIRED AHEAD OF LOCAL CONTROLS.

PANEL SCHEDULE																							
PANEL MARK: D				MANUFACTURER: EATON				TYPE: PR				FAULT RATING: 12KAIC											
MAIN BRKR AMPS: NA				MLO SIZE: 225				FEED: .				WIRE: REFER TO RISER											
VOLTAGE: 208Y/120V				PHASE: 3Ø, 4W				MOUNTING: SURFACE				REMARKS: CU BUS											
DESCRIPTION	LOAD			CONC SIZE	WIRE SIZE	GRD SIZE	# OF WIRES	POLE	TRIP	CIRC.	CIRC.	TRIP	POLE	# OF WIRES	GRD SIZE	WIRE SIZE	CIRC.	LOAD			DESCRIPTION		
	ΦA	ΦB	ΦC															ΦA	ΦB	ΦC			
LT6	1170			3/4	10	10	3	1	20	1	2	20	1	3	12	12	3/4	600			ENC		
LT6		1300		3/4	10	10	3	1	20	3	4							600			ENC		
WASHER			1500	3/4	10	10	3	1	20	5	6									720	REC		
DRYER	2250			3/4	10	10	4	2	30	7	8							600			ENC		
		2250								9	10								900		REC		
REC			1080		12	12	3	1	20	11	12									900	REC		
REC	900									13	14							900			REC		
ENC		600								15	16	↓	↓	↓	↓	↓	↓		1080		REC		
ENC			600							17	18									1770	CU-1		
REC	720			↓	↓	↓	↓	↓	↓	19	20	25	2	4	10	10	3/4	1770					
CU-4		1770		3/4	10	10	4	2	25	21	22	25	2	4	10	10	3/4		1770		CU-2		
		1770								23	24									1770			
CU-5	1250			3/4	12	12	4	2	20	25	26	25	2	4	10	10	3/4	1770			CU-3		
		1250								27	28								1770				
F-1			780	3/4	12	12	3	1		29	30	20	1	3	12	12	3/4			780	F-4		
F-2	780			3/4	12	12	3	1		31	32			3	12	12	3/4	780			F-5		
F-3		780		3/4	12	12	3			33	34			3	12	12	3/4		530		CP-1		
REC			720	3/4	12	12	3			35	36			3	12	12	3/4			1500	EMH		
CL6 FANS	300			3/4	12	12	3			37	38										SPARE		
CL6 FANS		200		3/4	12	12	3			39	40												
SPARE										41	42												
										43	44												
										45	46												
										47	48												
										49	50												
										51	52												
										53	54	↓	↓								↓		
TOTAL WATTS: 40550				PHASE A: 13080				PHASE B: 14300				PHASE C: 13170				DIVERSITY: TOTAL AMP DIV:							
TOTAL AMPS (3Ø): 113A CONNECTED				PHASE A:				PHASE B:				PHASE C:											

### NOTES:

- \* DENOTES GROUND FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKER



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03/03/2021



GENERAL NOTES

1. COORDINATE GRILLE LOCATIONS WITH LIGHT FIXTURES, SPRINKLERS AND CEILING GRID.
2. INDICATED DUCT SIZES ARE NET FREE AREA.
3. ADJUST ALL AIR QUANTITIES AS SHOWN ON THE PLANS AFTER COMPLETION OF THE JOB.
4. INSULATE THE SUPPLY GRILLE TOPS, RETURN AIR GRILLE PLENUMS AND EXHAUST AIR PLENUMS WITH R-6 FOIL BACKED INSULATION.
5. EXTERNALLY INSULATE ALL ROUND SUPPLY AND RETURN DUCT WITH R-6 FOIL BACKED INSULATION. INTERNALLY INSULATE ALL RECTANGULAR SUPPLY AND RETURN DUCT WITH R-6 INSULATION PER ARKANSAS MECHANICAL CODE. ATTACH THE INTERNAL INSULATION TO THE DUCT WITH APPROVED ADHESIVE AND WELDED FASTENERS.
6. MECHANICAL CONTRACTOR SHALL COORDINATE ALL DUCTWORK WITH FIELD CONDITIONS AND PROVIDE ALL OFFSETS, BENDS, TRANSITIONS AND SPECIAL FITTINGS FOR A COMPLETE INSTALLATION OF THE SYSTEMS.
7. INTERIOR OF ALL DUCT PLENUMS VISIBLE THROUGH GRILLE SHALL BE PAINTED MATTE BLACK PRIOR TO INSTALLATION.
8. PAINT ALL SUPPLY AND RETURN AIR GRILLES NOT SPECIFIED AS PRE-FINISHED, TO ARCHITECT'S SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.
9. MAINTAIN 10 FT. MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES AND ALL EXHAUST OUTLETS, GAS FLUES AND PLUMBING VENTS.
10. INSTALL VOLUME CONTROL DAMPERS IN SUPPLY, RETURN, EXHAUST AND FRESH AIR BRANCH DUCT RUNS.
11. ALL MECHANICAL INSTALLATIONS SHALL CONFORM TO THE LATEST ACCEPTABLE ARKANSAS MECHANICAL CODE.
12. SEAL ALL DUCT SEAMS WITH HARDCAST IRON GRIP 601 SEALANT SYSTEM OR AN APPROVED EQUAL. DUCT TAPE, WHETHER LISTED OR NOT, WILL NOT BE ACCEPTED.
13. FABRICATE AND INSTALL AUXILIARY CONDENSATE DRAIN PAN UNDER ENTIRE AIR HANDLER WITH CONDENSATE PAN SWITCH INTERLOCKED WITH AIR HANDLER FOR SHUT DOWN WHEN CONDENSATE OVER FLOW IS SENSED.
14. EVERY ATTIC OR FURRED SPACE IN WHICH MECHANICAL EQUIPMENT IS INSTALLED SHALL BE ACCESSIBLE BY AN OPENING AND PASSAGEWAY AS LARGE AS THE LARGEST PIECE OF THE EQUIPMENT AND IN NO CASE LESS THAN 22 X 36 INCHES CONTINUOUS FROM THE OPENING TO THE EQUIPMENT AND ITS CONTROLS. THE OPENING TO THE PASSAGEWAY SHALL BE LOCATED NOT MORE THAN 20 FT. FROM THE EQUIPMENT MEASURED ALONG THE CENTER LINE OF SUCH PASSAGEWAY. EVERY PASSAGEWAY SHALL BE UNOBSTRUCTED AND SHALL HAVE SOLID CONTINUOUS FLOORING NOT LESS THAN 24 IN. WIDE FROM THE EQUIPMENT. ON THE CONTROL SIDE AND OTHER SIDES WHERE ACCESS IS NECESSARY FOR SERVICING THE EQUIPMENT, A LEVEL PLATFORM EXTENDING A MINIMUM 30 IN. FROM THE EDGE OF THE EQUIPMENT WITH A 36 IN. HIGH CLEAR WORKING SPACE SHALL BE PROVIDED. TOP OR BOTTOM SERVICE EQUIPMENT SHALL HAVE A FULL CLEARANCE ABOVE OR BELOW THE UNIT FOR COMPONENT REMOVAL.
15. SMOKE DETECTOR PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.
16. SUPPLY AIR SYSTEMS AND RETURN AIR SYSTEMS INSTALLED IN AN ATTIC, VENTILATED CRAWL SPACE OR OTHER NON-CONDITIONED AREA SHALL BE INSULATED.
17. SPRINKLER CONTRACTOR TO BE RESPONSIBLE FOR ROUTING ALL SPRINKLER PIPING TO AVOID ALL UNCONDITIONED SPACES.
18. DO NOT SCALE DIRECTLY FROM THE HVAC DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL INFORMATION.

AIR DISTRIBUTION SCHEDULE								
MARK	CFM	NECK SIZE	MFG.	MODEL	TYPE	FINISH	FRAME	REMARKS/ ACCESSORIES
A	0-100	6"φ(12X12)	TITUS	TMS	SUPPLY	WHITE	T-BAR LAY-IN	1, 3
B	0-100	6"φ	TITUS	TMS	SUPPLY	WHITE	T-BAR LAY-IN	1
C	100-200	8"φ	TITUS	TMS	SUPPLY	WHITE	T-BAR LAY-IN	1
D	200-325	10"φ	TITUS	TMS	SUPPLY	WHITE	T-BAR LAY-IN	1
E	0-1000	22X22	TITUS	355RL	RETURN	WHITE	T-BAR LAY-IN	1
F	0-500	12X12	TITUS	50F	EXHAUST	WHITE	T-BAR LAY-IN	2, 3
G	0-1000	24X24	TITUS	50F	EXHAUST	WHITE	T-BAR LAY-IN	2
6V-1	600	12"φ	GREENHECK	GRS1	INTAKE GRAVITY VENTILATOR	-	ROOF MOUNTED	2, 4
6V-2	320	10"φ	GREENHECK	GRS1	INTAKE GRAVITY VENTILATOR	-	ROOF MOUNTED	2, 4

REMARKS/ACCESSORIES

1. STEEL CONSTRUCTION
2. ALUMINUM CONSTRUCTION
3. 12X12 GRILLE IN A 24X24 T-BAR LAY-IN FRAME
4. PROVIDE STEEL INSECT SCREEN

KEYED NOTES

- ① SMOKE DETECTORS TO BE INSTALLED IN THE SUPPLY AND RETURN AIR DUCTS AND INTERLOCKED WITH AIR HANDLER FAN FOR SHUT-OFF PER N.F.P.A. 90 A & B ON ALL AIR HANDLERS GREATER THAN 2000 C.F.M. SUPPLY AIR DUCT SMOKE DETECTOR SHALL BE INSTALLED ON SUPPLY SIDE OF AIR HANDLING SYSTEM DOWN STREAM OF ANY AIR FILTERS AND PRIOR TO ANY BRANCH DUCT CONNECTIONS. EXCEPTION: THE SMOKE DETECTOR IN THE SUPPLY AIR STREAM MAY BE OMITTED IN SYSTEMS 2000 C.F.M. OR LESS. CAPACITY. RECIRCULATING AIR SYSTEMS WITH FAN CAPACITY LESS THAN 2000 C.F.M., BUT SERVING AREAS USED FOR EGRESS SHALL HAVE AUTOMATIC SMOKE DETECTION SHUTDOWN. SMOKE DETECTORS SHALL BE PROVIDED, INSTALLED AND WIRED BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL WIRE SMOKE DETECTOR TO THE FAN SHUT OFF CONTACTS. MECHANICAL CONTRACTOR SHALL PROVIDE ALL ACCESSORIES REQUIRED TO MAKE THE FAN SHUT OFF CONNECTION. LOCATE SMOKE DETECTORS IN RETURN AIR DUCT PRIOR TO THE INTRODUCTION OF THE OUTSIDE AIR. MECHANICAL CONTRACTOR SHALL PROVIDE SMOKE DETECTORS COMPATIBLE WITH THE BUILDING'S EXISTING FIRE ALARM SYSTEM.
- ② MAINTAIN 10 FT. CLEARANCE BETWEEN ALL EXHAUST OR ROOF VENT OPENINGS AND ANY FRESH AIR INTAKE. IF 10 FT. CLEARANCE CANNOT BE MAINTAINED, EXHAUST OR ROOF VENT SHALL BE RAISED TO AT LEAST 36 INCHES ABOVE HIGHEST FRESH AIR INTAKE WITHIN 10 FT. OF INTAKE PER 2010 ARKANSAS MECHANICAL CODE.
- ③ LOCATE THERMOSTAT, CO2 SENSOR OR HUMIDISTAT AS INDICATED WITH THE CENTER OF THE THERMOSTAT AT 48 IN. ABOVE FINISHED FLOOR. SEAL ALL THERMOSTAT CONDUITS AT TOP AND BOTTOM OF CONDUIT. PROVIDE INSULATED BACKING FOR MOUNTING THERMOSTATS.
- ④ MECHANICAL CONTRACTOR SHALL INSTALL ALL EQUIPMENT, FANS AND APPLIANCES A MINIMUM OF 10 FEET FROM A ROOF EDGE OR OPEN SIDE WHERE SUCH EDGE OR OPEN SIDE IS GREATER THAN 30 INCHES ABOVE A FLOOR, ROOF OR GRADE BELOW. GUARD RAILS A MINIMUM OF 42 INCHES THE ELEVATED SURFACE SHALL BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR AND EXTENDED A MINIMUM OF 30 INCHES BEYOND EACH END OF SUCH EQUIPMENT, FAN OR APPLIANCE WHERE APPLIANCES, EQUIPMENT, FANS OR OTHER COMPONENTS ARE LOCATED WITHIN THE REQUIRED 10 FOOT CLEARANCE REQUIREMENT. THE GUARD SHALL BE CONSTRUCTED SO AS TO PREVENT THE PASSAGE OF A 21 INCH DIAMETER SPHERE AND COMPLY WITH THE LOADING REQUIREMENTS FOR GUARDS SPECIFIED IN THE LATEST ACCEPTED INTERNATIONAL BUILDING CODE.

MECHANICAL LEGEND

▣

RETURN AIR DUCT SECTION

⊠

SUPPLY DUCT SECTION

▣

EXHAUST DUCT SECTION

⊠

CEILING SUPPLY AIR GRILLE

▣

CEILING RETURN AIR GRILLE

▣

EXHAUST GRILLE

⑦ F-1

THERMOSTAT, MOUNT AT 48" A.F.F. (NUMBER DENOTES FURNACE)

NEW DUCT

⊠ OR ▣

VOLUME DAMPER

①

SEE KEYED NOTES

50

SMOKE DETECTOR, REFER TO KEYED NOTE 1.

CONDENSING UNIT SCHEDULE								
MARK	MFG.	MODEL	TMBH/SMBH	MIN. CIRC. AMPS	MAX. FUSE SIZE	UNIT WT (LBS)	VOLT/PH/HZ	REMARKS/ ACCESSORIES
CU-1	DAIKIN	DX145A30	28.6/21.2	17	25	200	208/1/60	1, 2, 3, 4, 5, 6
CU-2	DAIKIN	DX145A30	28.6/21.2	17	25	200	208/1/60	1, 2, 3, 4, 5, 6
CU-3	DAIKIN	DX145A30	28.6/21.2	17	25	200	208/1/60	1, 2, 3, 4, 5, 6
CU-4	DAIKIN	DX145A30	28.6/21.2	17	25	200	208/1/60	1, 2, 3, 4, 5, 6
CU-5	DAIKIN	DX145A18	18.0/13.0	12	20	200	208/1/60	1, 2, 3, 4, 5, 6

REMARKS/ACCESSORIES

1. MINIMUM 14.0 SEER CONDENSER
2. PROVIDE LOW AMBIENT TO 0 F CONTROL WITH TXV CRANK CASE HEATERS
3. PROVIDE LIQUID LINE SIGHT GLASS.
4. PROVIDE LIQUID LINE FILTER DRYER.
5. PROVIDE HAIL GUARD.
6. SIZE AND INSTALL REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS

FURNACE SCHEDULE												
MARK	MFG	MODEL	ESP IN. WC	CFM	HEATING			O.A. CFM	MTR HP	VOLT / PH / HZ	UNIT WEIGHT LBS.	REMARKS/ ACCESSORIES
					INPUT MBH	OUTPUT MBH	TYPE OF FUEL					
F-1	DAIKIN	DM92550603BN	.6	1000	60	55	GAS	200	1/3	120 / 1 / 60	135	1, 2, 3, 4, 5, 6, 7, 8
F-2	DAIKIN	DM92550603BN	.6	1000	60	55	GAS	200	1/3	120 / 1 / 60	135	1, 2, 3, 4, 5, 6, 7, 8
F-3	DAIKIN	DM92550603BN	.6	1000	60	55	GAS	200	1/3	120 / 1 / 60	135	1, 2, 3, 4, 5, 6, 7, 8
F-4	DAIKIN	DM92550603BN	.6	1000	60	55	GAS	200	1/3	120 / 1 / 60	135	1, 2, 3, 4, 5, 6, 7, 8
F-5	DAIKIN	DM92550402BN	.6	1000	40	36	GAS	120	1/3	120 / 1 / 60	120	1, 2, 3, 4, 5, 6, 7, 8

REMARKS/ACCESSORIES

1. 92% MIN. AFUE UPFLOW GAS FURNACE
2. ELECTRONIC SPARK IGNITION
3. PROVIDE FACTORY VERTICAL CONCENTRIC VENT TERMINATION KIT. RE: 5/M3.1 FOR DETAIL
4. 10 YEAR MIN. NON-PRORATED HEAT EXCHANGER
5. HORIZONTAL FURNACE. PROVIDE MEZZANINE STAND. RE: 9/M3.1 FOR DETAIL
6. PROVIDE 2" FARR 30/80 FILTERS
7. PROVIDE MULTI-POSITION GASED "A" TYPE COIL WITH TXV REFRIGERANT CONTROL
8. PROVIDE T-DAY PROGRAMMABLE THERMOSTAT.

EXHAUST FAN SCHEDULE										
MARK	MFG.	MODEL	CFM	E.S.P. IN. WC	H.P.	VLT / PH / HZ	SONE	RPM	UNIT WEIGHT LBS.	ACCESSORIES
EF-1	GREENHECK	G-090-D	450	0.5	1/15	115/1/60	7.2	1524	50	1, 2, 3

ACCESSORIES

1. PROVIDE FACTORY BACK DRAFT DAMPER.
2. PROVIDE FACTORY PITCHED 14 INCH ROOF CURB. FIELD VERIFY ROOF PITCH
3. INTERLOCK EXHAUST FAN WITH LIGHT SWITCH IN ROOMS 103, 105, 104 & 112 BY ELECTRICAL CONTRACTOR



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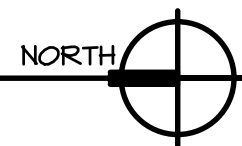
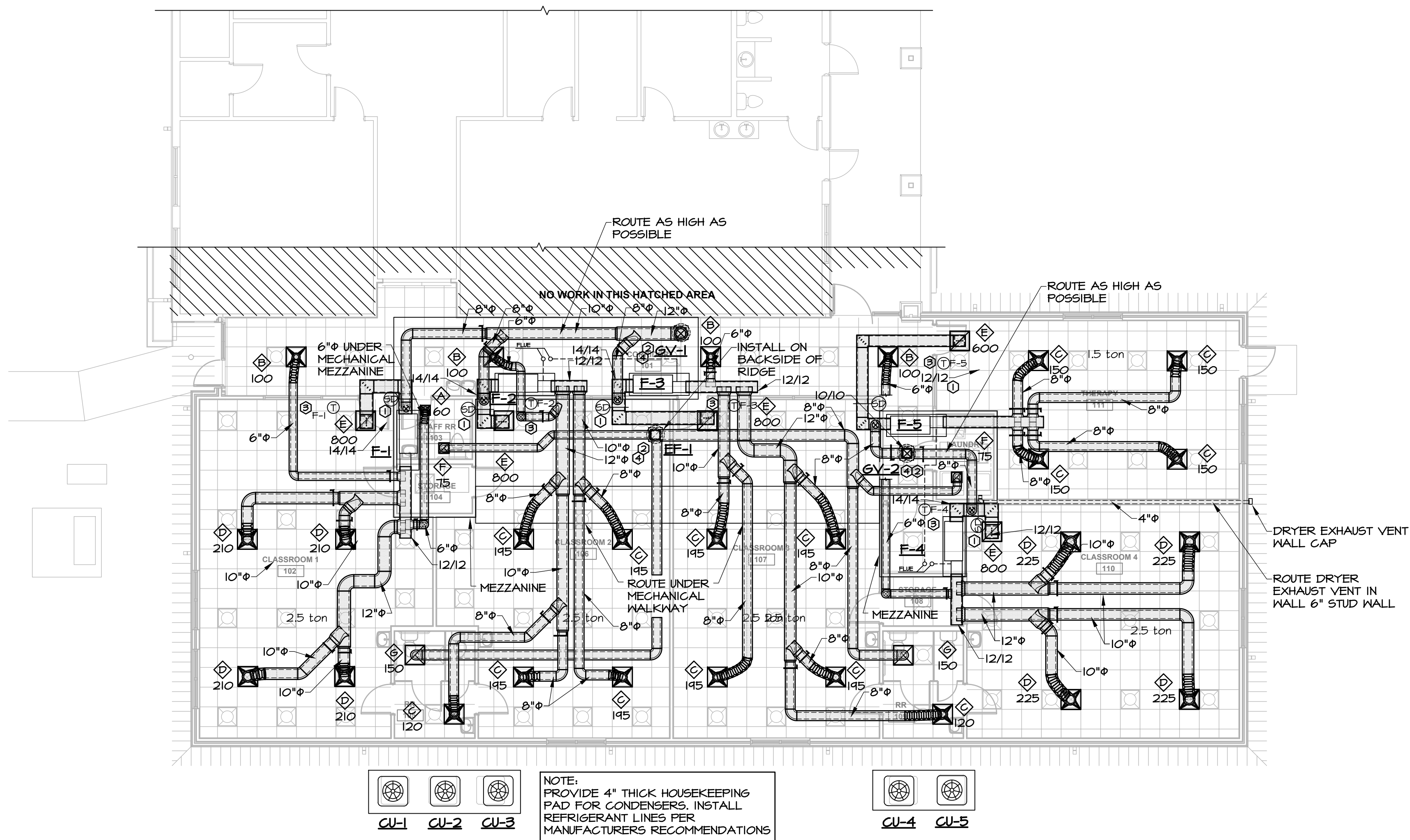
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1 HYAC PLAN  
1/8"=1'-0"



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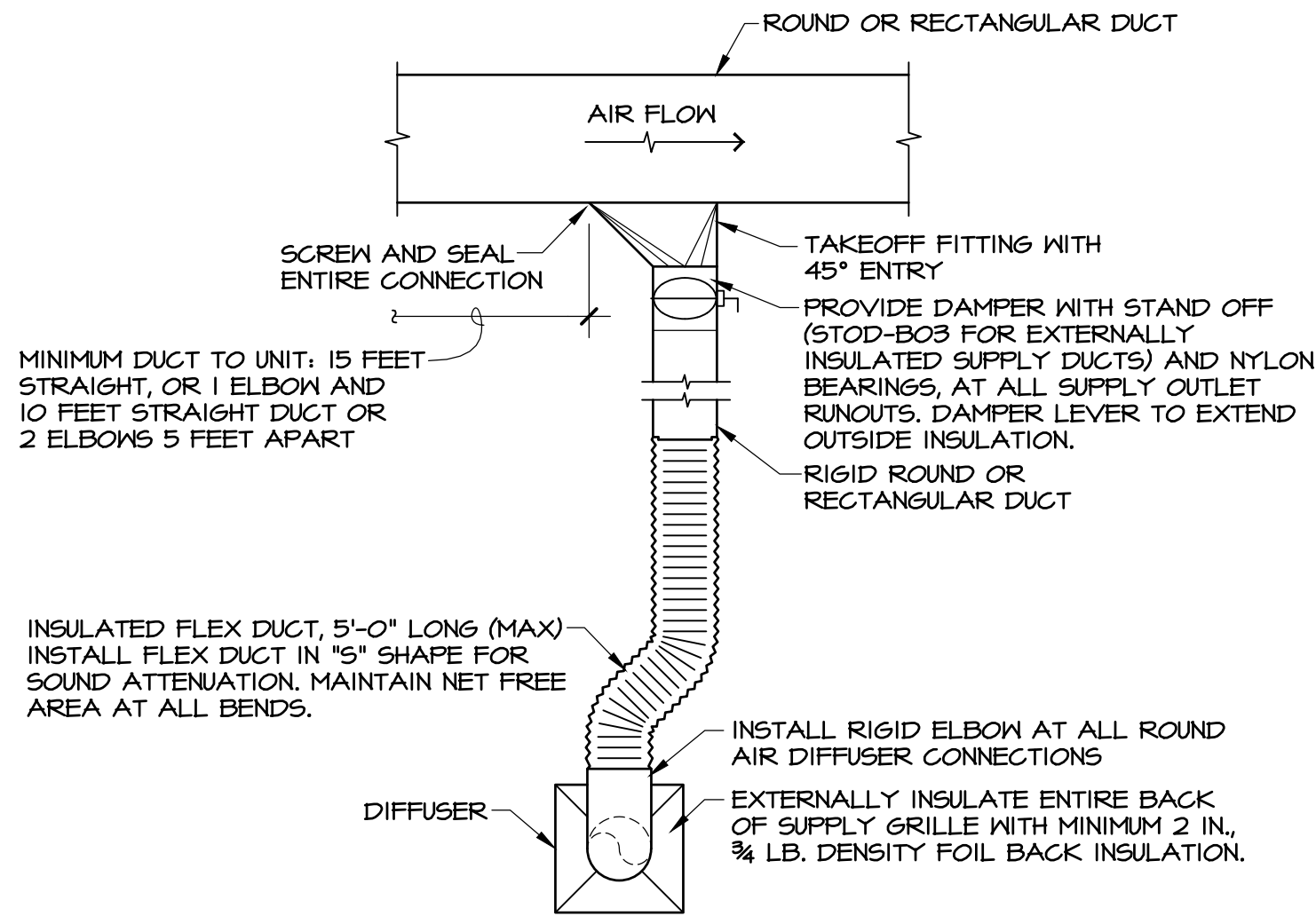
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Date: 03/03/2021  
Revisions:

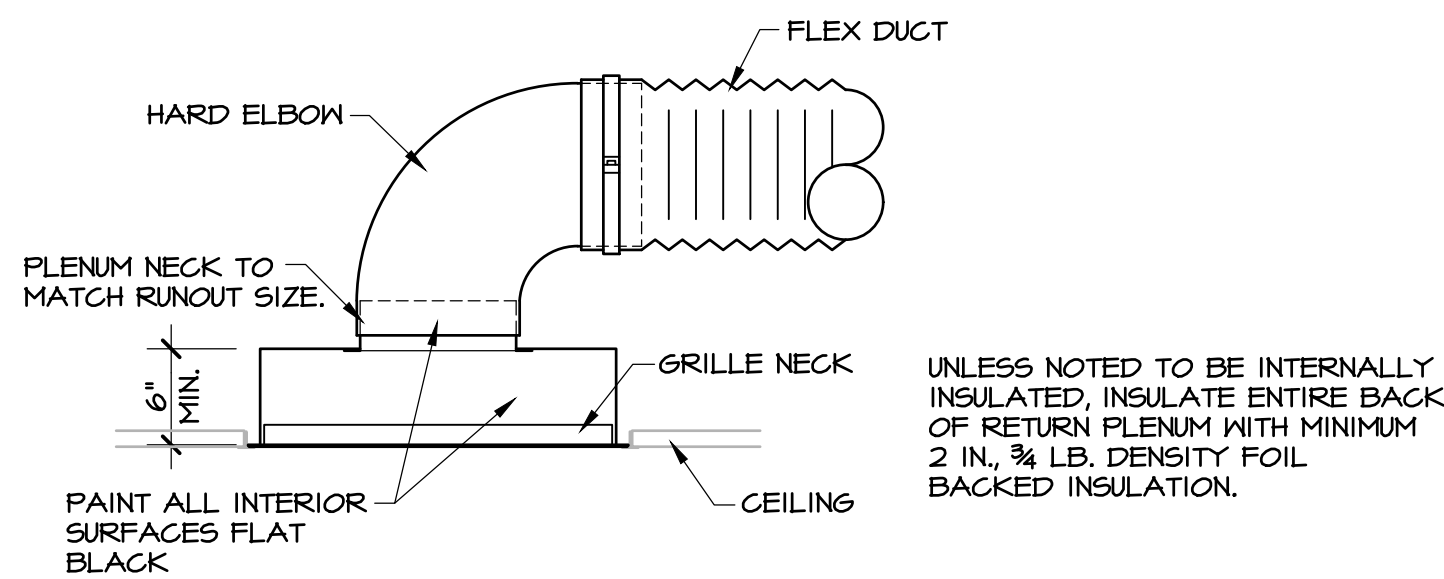
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M2.1

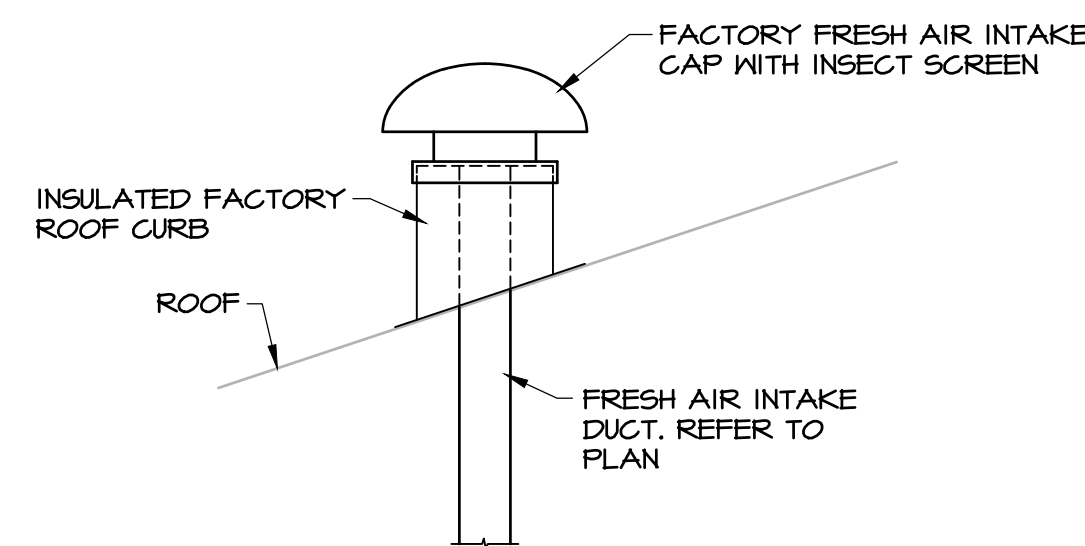




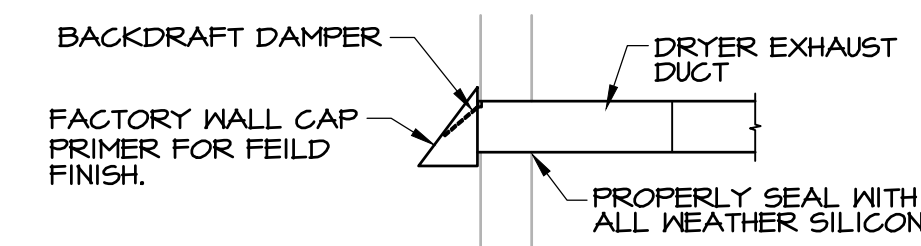
① LOW PRESSURE SUPPLY DUCT DETAIL  
N.T.S.



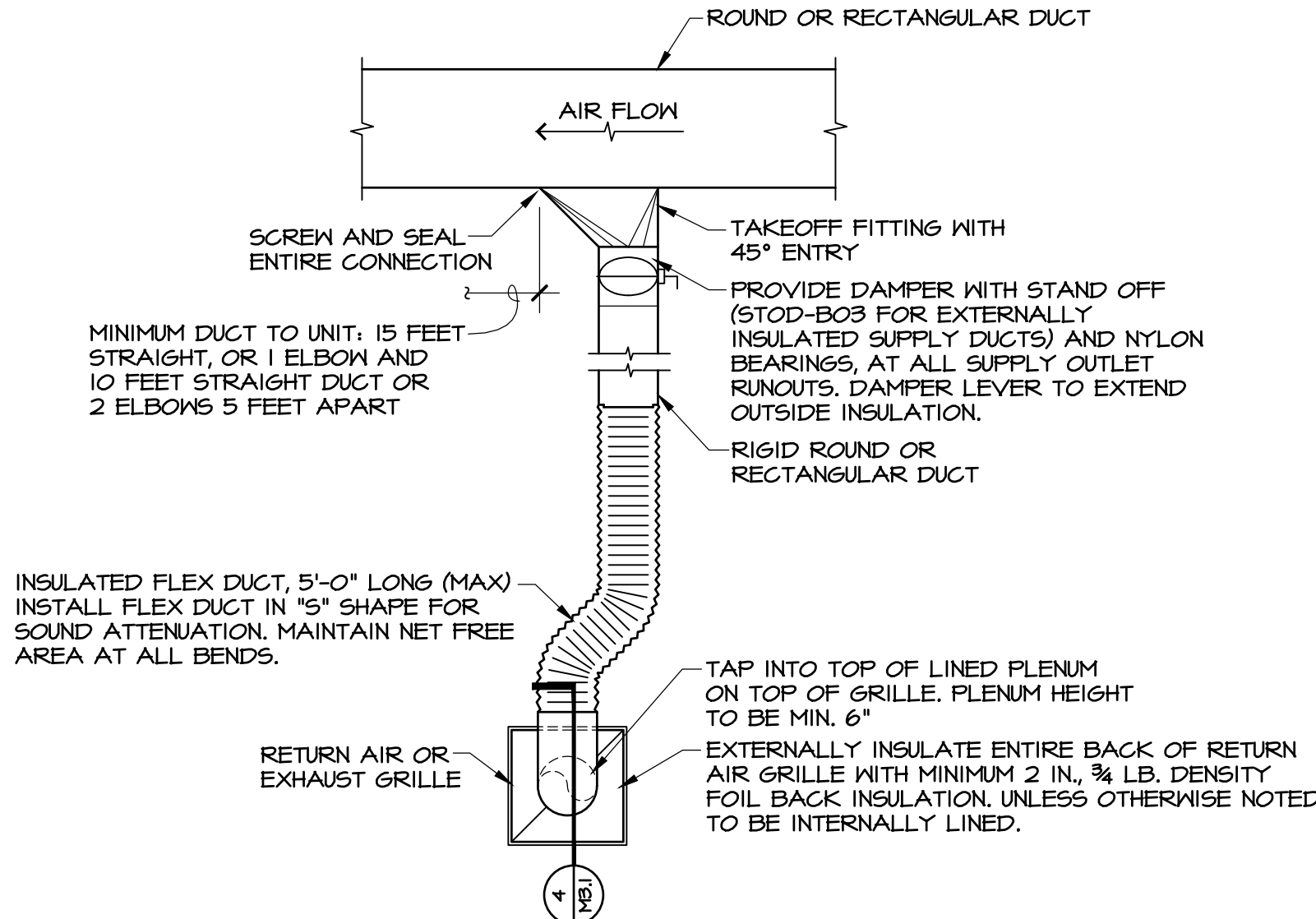
④ RETURN AIR CONNECTION SECTION  
N.T.S.



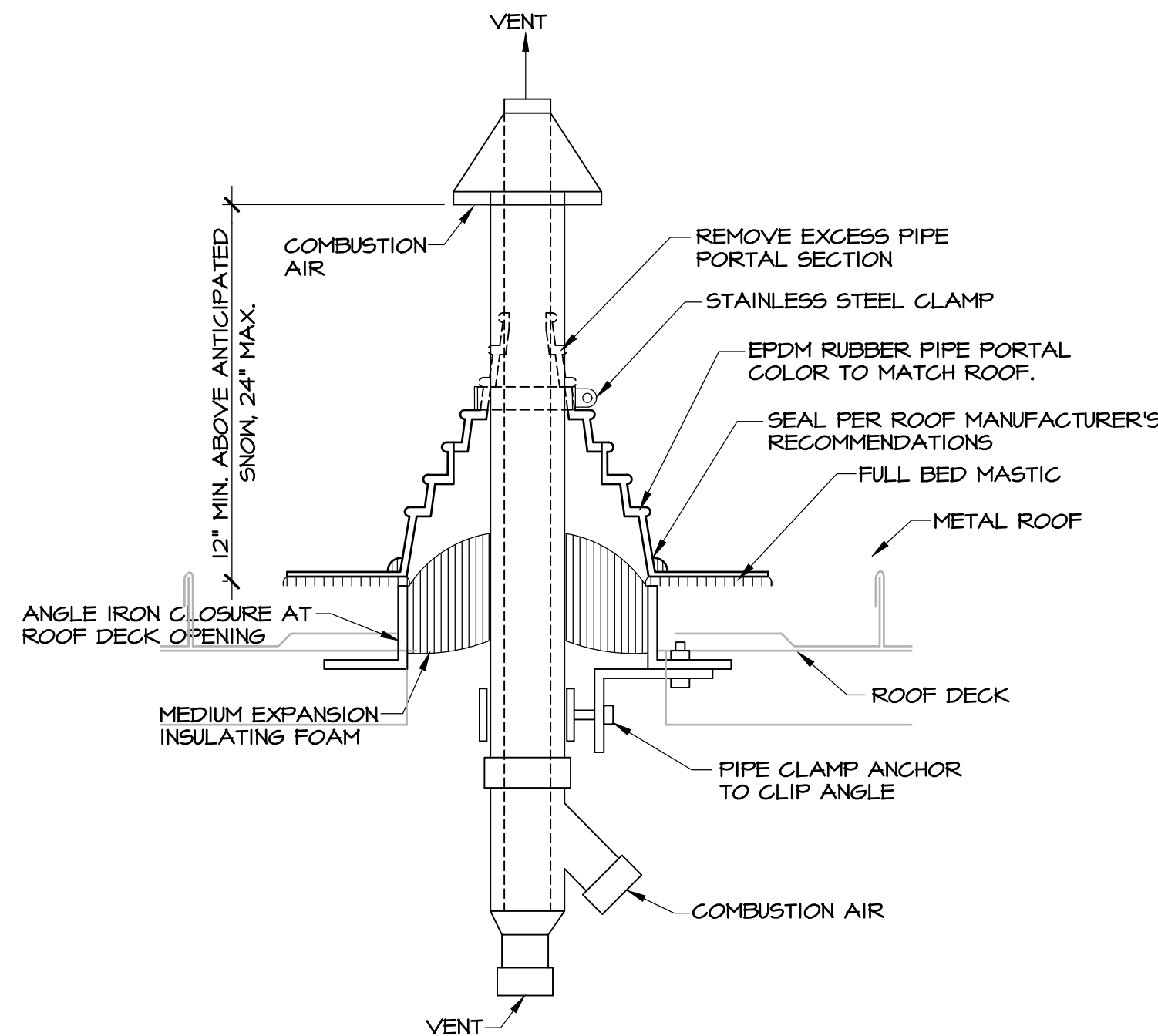
⑦ ROOF MOUNTED GRAVITY VENTILATOR DETAIL  
N.T.S.



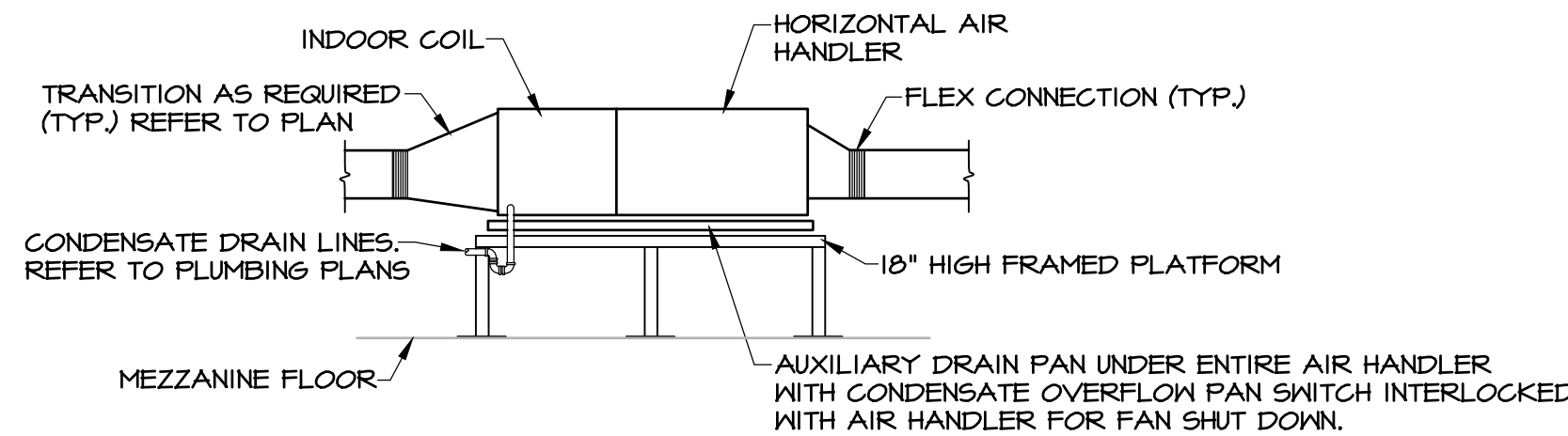
⑧ DRYER WALL VENT DETAIL  
N.T.S.



② LOW PRESSURE RETURN DUCT DETAIL  
N.T.S.

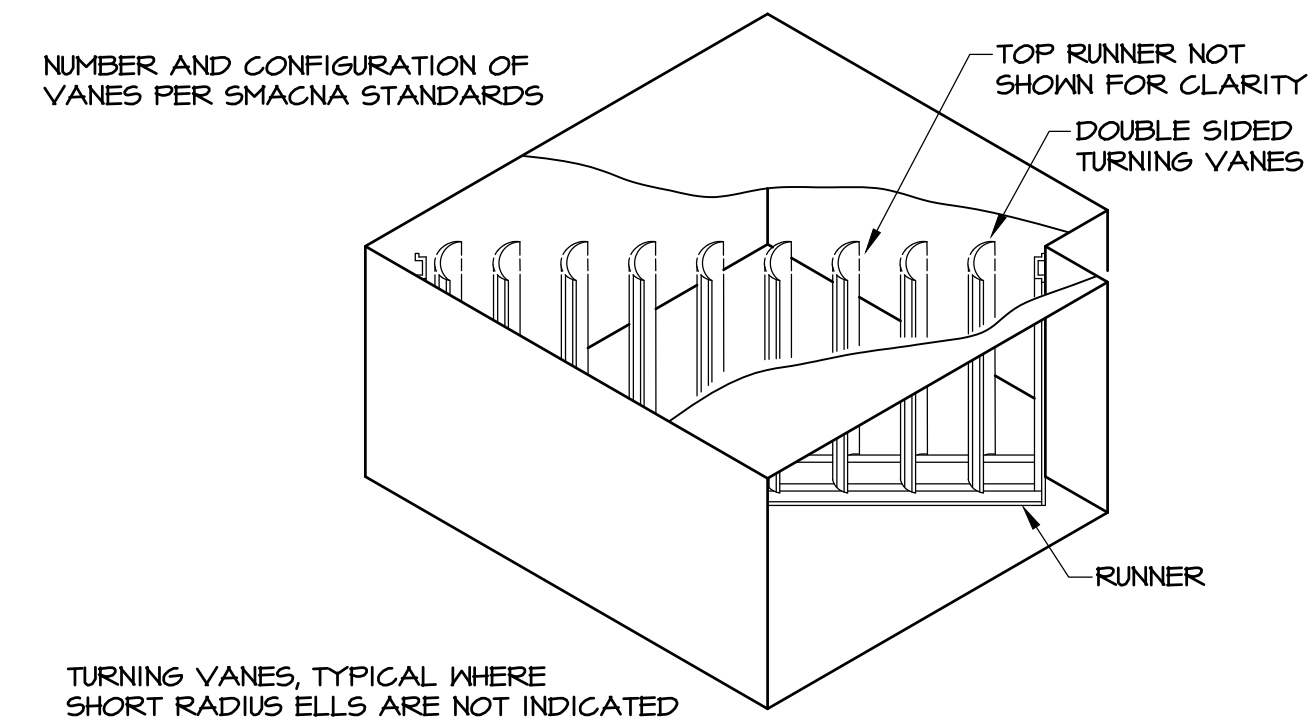


⑤ FURNACE VENT DETAIL  
N.T.S.



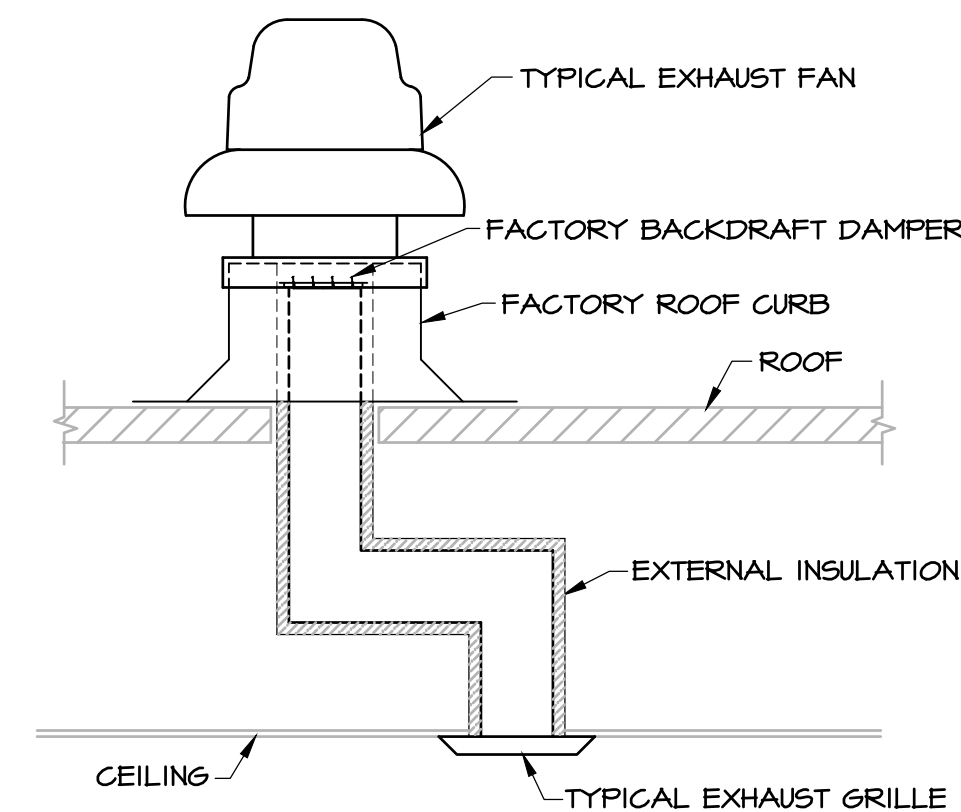
NOTE:  
MECHANICAL CONTRACTOR SHALL INSTALL HORIZONTAL FURNACE ON 18" HIGH PLATFORM WITH ISOLATION PADS.

⑨ HORIZONTAL FURNACE PLATFORM DETAIL  
N.T.S.



TURNING VANES, TYPICAL WHERE SHORT RADIUS ELLS ARE NOT INDICATED

③ TURNING VANE DETAIL  
N.T.S.



NOTE: INSTALL MINIMUM TWO ELBOWS FOR SOUND ATTENUATION.

(TYPICAL FOR ROOF MOUNTED EXHAUST FANS)

⑥ ROOF MOUNTED EXHAUST FAN DETAIL  
N.T.S.







GENERAL PLUMBING NOTES

1. ALL PLUMBING MATERIALS AND INSTALLATION SHALL COMPLY WITH THE ARKANSAS STATE PLUMBING CODE, LATEST EDITION.
2. INSTALL ALL DOMESTIC HOT AND COLD WATER PIPING AS PER STATE AND LOCAL CODES.
3. INSULATE ABOVE GRADE CONCEALED DOMESTIC HOT, COLD AND CONDENSATE WATER LINES PER SPECIFICATIONS.
4. INSTALL DEEP SEAL TRAPS AT ALL DRAIN CONNECTIONS.
5. COORDINATE UNDER SLAB PIPING WITH COLUMNS AND FOOTINGS. REFER TO STRUCTURAL DRAWINGS.
6. BURY YELLOW #10 THIN COPPER TRACER WIRE IN TRENCH WITH ALL UNDER GROUND PLASTIC SERVICES. LEAVE ENDS EXPOSED FOR FUTURE LOCATION.
7. VERIFY LOCATION AND SIZE OF EXISTING SITE UTILITIES WITH UTILITY AUTHORITIES PRIOR TO CONSTRUCTION.
8. ALL IMPROVEMENTS (PAVEMENTS, CURB AND GUTTER, SOD, ETC.) SHALL BE REPLACED BY GENERAL CONTRACTOR TO PRECONSTRUCTION CONDITION.
9. WHERE FIRE RATED PARTITIONS OR FLOORS OCCUR, ALL FLOOR TO FLOOR AND ROOM TO ROOM PENETRATIONS SHALL BE PROPERLY FIRE SEALED WITH U.L. LISTED AND CLASSIFIED FIRE CAULK OR FIRE SEALED BY USING AN APPROVED FIRE SEAL SLEEVE METHOD WHICH MEETS U.L. REQUIREMENTS. ALL OTHER PENETRATIONS OF RATED CHASES OR WALLS SHALL BE PROPERLY FIRE SEALED AND WHERE EXTENDING THROUGH SUCH RATED SURFACE SHALL BE A RATED FIRE STOP PENETRATION. ALL FIRE STOPPING, FIRE CAULKING AND FIRE SLEEVING OR OTHER FIRE SEALING SHALL BE ACCEPTABLE BY THE LOCAL AUTHORITIES AND SHALL BEAR THE U.L. SEAL.
10. VERIFY LOCATION, INVERT AND SIZE OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
11. PROVIDE CITY APPROVED REDUCED PRESSURE BACKFLOW PREVENTERS ON ALL DOMESTIC SERVICE LINES CONNECTED TO ALL DEVICES, APPLIANCES, APPLIANCES AND APPARATUS INTENDED TO SERVE SOME SPECIAL FUNCTION, SUCH AS STERILIZATION, DISTILLATION, PROCESSING, COOLING OR STORAGE OF FOODS OR ICE. WATER PUMPS, FILTERS, SOFTENERS, TANKS AND ALL OTHER APPLIANCES AND DEVICES THAT HANDLE OR TREAT POTABLE WATER SHALL BE PROTECTED AGAINST CONTAMINATION WITH SIMILAR BACKFLOW PREVENTER.
12. ALL MECHANICAL INSTALLATIONS SHALL CONFORM TO THE LATEST ACCEPTABLE ARKANSAS STATE MECHANICAL CODE.
13. ALL WATER AND SEWER LINE MATERIALS AND INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH THE CITY OF AUGUSTA STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION AS WELL AS THE ARKANSAS STATE PLUMBING CODE.
14. CONTRACTOR SHALL PROVIDE "AS BUILT" DRAWINGS OF ALL PLUMBING AND PIPING SYSTEMS UPON COMPLETION OF THE PROJECT.
15. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE DRAWINGS, THE BUILDING SITE, AND OTHER INFORMATION PRESENTED FOR THE CONSTRUCTION OF THIS PROJECT. IF CONTRACTOR HAS QUESTIONS REGARDING ASSEMBLIES OR LAYOUTS WITH THE PROJECT HE SHALL MAKE THEM KNOWN TO THE ENGINEER IN WRITING PRIOR TO BIDDING THE PROJECT. CLAIMS MADE SUBSEQUENT TO THE BID WILL NOT BE ACCEPTED IF IT IS DETERMINED THAT PROPER FAMILIARIZATION COULD HAVE AVOIDED SUCH CLAIM.
16. MECHANICAL CONTRACTOR SHALL COORDINATE INSTALLATION PLUMBING SITE UTILITIES WITH SITE WORK OF OTHER TRADES. IN INSTANCES WHERE COORDINATION REQUIRES DEVIATION FROM PLANS MECHANICAL CONTRACTOR SHALL NOTIFY ENGINEER OF PROPOSED CHANGES.
17. COMPLY WITH STATE OF ARKANSAS ADOPTED ADA ACCESSIBLE GUIDELINES IN REGARD TO ACCESSIBLE FEATURES.
18. PROVIDE DRIP PAN FOR ENTIRE LENGTH OF PIPE WHERE PIPE MUST BE INSTALLED ABOVE ELECTRICAL EQUIPMENT.
19. DO NOT ROUTE GROUPS OF CONDUIT, PIPES, AND SLEEVES ABOVE FOOTINGS UNLESS NOTED TO DO SO. IF CONFLICT OCCURS, CONSULT ARCHITECT/ENGINEER.
20. LIMIT WIDTH OF CONDUIT, PIPES AND SLEEVES NOT TO EXCEED 3 FEET IN WIDTH AS IT PASSES UNDER WALL FOOTING. AS MUCH AS POSSIBLE, ALIGN THE ITEMS PERPENDICULAR TO THE FOOTING AS IT PASSES BELOW FOOTING.
21. PROVIDE A MINIMUM SPACING OF 2 FEET BETWEEN CONDUIT OR PIPE GROUPS AS ITEMS PASS UNDER FOOTINGS.
22. DO NOT ROUTE CONDUITS, PIPE OR SLEEVES UNDER COLUMN FOOTINGS OR PAD FOOTINGS.
23. MECHANICAL CONTRACTOR MUST REVIEW ALL ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES AND FLOOR DRAINS. IF PLUMBING FIXTURES OR DRAINS ARE SHOWN ON THE ARCHITECTURAL DRAWINGS THEY MUST BE INCLUDED IN THE CONTRACT EVEN IF NOT SHOWN ON THE MECHANICAL DRAWINGS.
24. DO NOT SCALE DIRECTLY FROM THE PLUMBING DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL INFORMATION.
25. PROVIDE AND INSTALL 6 IN. DIRT LEG AND GAS STOP (BALL VALVE ONLY) AT ALL EQUIPMENT GAS CONNECTIONS.
26. ALL GAS PIPING SYSTEMS WITHIN A BUILDING AND OTHER ABOVE GROUND GAS PIPING SHALL BE ELECTRICALLY CONTINUOUS AND BONDED TO A GROUNDED ELECTRODE AS DEFINED IN N.F.P.A. TO.

PLUMBING LEGEND

	SANITARY WASTE PIPING
	EXISTING SANITARY WASTE PIPING
	VENT PIPING
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER RETURN PIPING
	LOW PRESSURE GAS PIPING (11 IN. W.C.)
	MEDIUM PRESSURE GAS PIPING (5 PSIG)
	CONDENSATE DRAIN PIPING
	BALL VALVE
	CHECK VALVE
	GAS BALL VALVE
	GAS REGULATOR EQUAL TO EQUIMETER MODEL 243. INLET PRESSURE @ 5 PSI, SET OUTLET PRESSURE @ 11 IN. W.C.
	CONNECTION POINT
	REFER TO KEYED NOTES
	PLUMBING FIXTURE NUMBER (RE: TO PLBG FIXTURE SCHEDULE, P.11)
	CLEAN OUT TO GRADE
	HUB DRAIN
	FREEZE PROOF HOSE BIB
	ACCESSIBLE
	WALL CLEAN OUT
	WATER HEATER

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	MFG./MODEL	MOUNT	CONNECTION IN INCHES			REMARKS / ACCESSORIES
				CW	HW	SS	
P-1	ACCESSIBLE WATER CLOSET	AMERICAN STD. 2461.016	FLOOR	1/2	-	4	WHITE VITREOUS CHINA, LOW CONSUMPTION, PRESSURE ASSISTED, ELONGATED BOWL, TANK TYPE TOILET. PROVIDE ANGLE SHUT-OFF, OLSONITE #10 SCC OPEN SEAT AND BOLT CAPS. INSTALL IT IN. FROM TOP OF SEAT TO FLOOR. 1.6 GPF.
P-2	WATER CLOSET	AMERICAN STD. 2462.016	FLOOR	1/2	-	4	WHITE VITREOUS CHINA, LOW CONSUMPTION, PRESSURE ASSISTED, ELONGATED BOWL, TANK TYPE TOILET. PROVIDE ANGLE SHUT-OFF, OLSONITE #10 SCC OPEN SEAT AND BOLT CAPS. 1.6 GPF. MOUNT FIXTURE 15 IN. A.F.F. TO RIM.
P-3	ACCESSIBLE LAVATORY	AMERICAN STD. 0355.012	WALL	1/2	1/2	1 1/4	WHITE VITREOUS CHINA LAVATORY WITH FAUCET LEDGE AND BACKSPLASH. PROVIDE AMERICAN STANDARD RELIANT T385.050 SINGLE LEVER, 0.5 GPM FAUCET WITH EXTRA LONG HANDLE, BASE PLATE AND GRID DRAIN. WADE #520 WALL CARRIER, HANDILAV MOLDED DRAIN & SUPPLY INSULATION KIT. MOUNT 34 IN. A.F.F. TO TOP OF RIM. PROVIDE WATTS LFMMV UNDER COUNTER THERMOSTATIC MIXING VALVE. SET WATER TEMPERATURE AT 105° F.
P-4	LAVATORY	AMERICAN STD. 0355.012	WALL	1/2	1/2	1 1/4	WHITE VITREOUS CHINA LAVATORY WITH FAUCET LEDGE AND BACKSPLASH. PROVIDE AMERICAN STANDARD RELIANT T385.050 SINGLE LEVER, 0.5 GPM FAUCET WITH EXTRA LONG HANDLE, BASE PLATE AND GRID DRAIN. WADE #520 WALL CARRIER, HANDILAV MOLDED DRAIN & SUPPLY INSULATION KIT. PROVIDE WATTS LFMMV UNDER COUNTER THERMOSTATIC MIXING VALVE. SET WATER TEMPERATURE AT 105° F. COORDINATE MOUNTING HEIGHT WITH ARCH/OWNER.
P-5	BARRIER FREE HI-LO ELECTRIC WATER COOLER	OASIS P68ACSL	WALL	3/8	-	1 1/4	WALL MOUNTED, HI-LO SPLIT LEVEL, BARRIER FREE ELECTRIC WATER COOLER, 8.0 GPH AT ARI STANDARDS, 115 VOLT, SINGLE PHASE, 1/4 HP, 4.6 FULL LOAD AMPS. COORDINATE LOCATION OF ELECTRICAL OUTLET WITH ELECTRICAL CONTRACTOR. MOUNT LOW SPOUT 36 IN. A.F.F. TO TOP OF SPOUT. MOUNT HIGH SPOUT 40 IN. A.F.F TO TOP OF SPOUT.
P-6	LAUNDRY WALL BOX	GUY GRAY BB200TS	WALL	1/2	1/2	2	WASHING MACHINE WALL BOX WITH TOP SUPPLY AND 2 IN. DRAIN. MOUNT BOTTOM OF BOX MINIMUM 36 IN. A.F.F.
P-7	FREEZE PROOF HOSE BIB	WOODFORD MODEL B67	WALL	3/4	-	-	FREEZE PROOF HOSE BIB IN LOCKING BOX. PROVIDE VACUUM BREAKER AND BACKFLOW PREVENTION.
P-8	ELECTRIC WATER HEATER	RHEEM E6SP30	FLOOR	3/4	3/4	-	ELECTRIC WATER HEATER, 30 GALLON TANK CAPACITY, 120V 1 PHASE, 1500 WATTS, SET TEMPERATURE AT 115 °F. MOUNT WATER HEATER ABOVE DRYER. MOUNT AS HIGH AS POSSIBLE.
P-9	HUB DRAIN	PVC REDUCER	ABOVE FLOOR	-	-	2	PVC REDUCER WITH TRAP. PROVIDE TRAP GUARD PROTECTION. REDUCER SHALL BE WITHIN TWO PIPE SIZES OF CONNECTED SANITARY PIPING.
P-10	WALL CLEANOUT	WADE MODEL 6550-R	WALL	-	-	*	*SIZE TO MATCH WASTE LINE, MAXIMUM TO 4 INCHES. PROVIDE WADE 8480-R STAINLESS STEEL WALL ACCESS COVER.
P-11	CLEAN OUT TO GRADE	WADE MODEL 6000	TO GRADE	-	-	*	*SIZE TO MATCH WASTE LINE MAXIMUM TO 4 INCHES. PROVIDE HEAVY DUTY TRACTOR TYPE COVER.
P-12	FLOOR CLEANOUT	WADE MODEL 6000	FLOOR	-	-	*	*SIZE TO MATCH WASTE LINE, MAXIMUM TO 4 INCHES. PROVIDE OPTIONAL TOP TO MATCH FLOOR FINISH. REFER TO ARCHITECTURAL PLANS FOR FINISH SCHEDULE.

NOTES:

1. INSTALL ACCESSIBLE FLUSH VALVE TO THE ACCESSIBLE SIDE.

CIRCULATING PUMP SCHEDULE

MARK	MFG.	MODEL	GPM	HEAD (FT)	VLT/PH/HZ	WATTS	REMARKS/ACCESS.
CP-1	BELL & GOSSETT	PL-36	5.0	8	115 / 1 / 60	1/6	1, 2, 3

ACCESSORIES

1. BRONZE CONSTRUCTION FOR HOT WATER RECIRCULATION.  
2. PROVIDE AQUASTAT.  
3. PLUMBING CONTRACTOR TO PROVIDE TC-1 AUTOMATIC TIMER.





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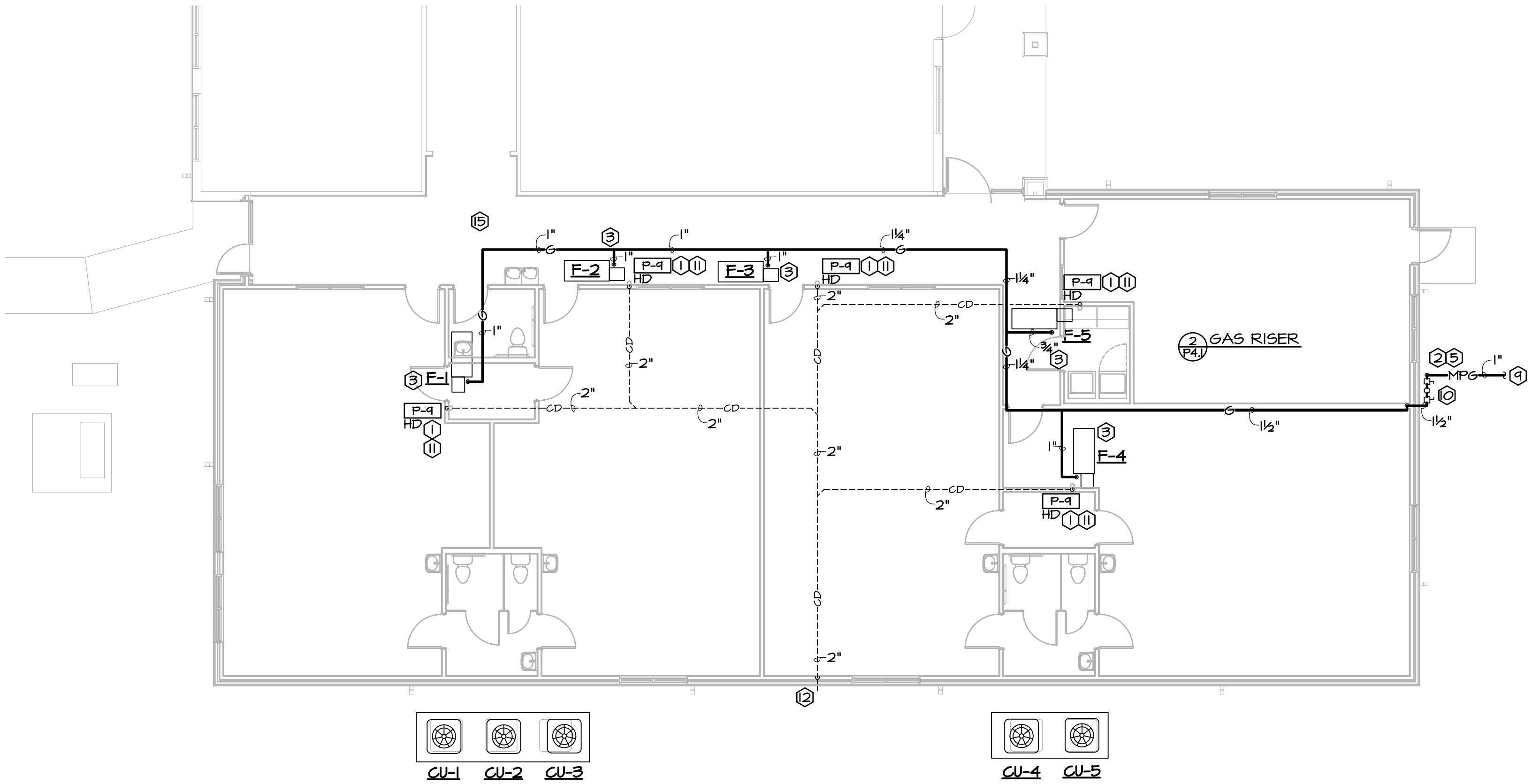
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Conway, Arkansas 72032

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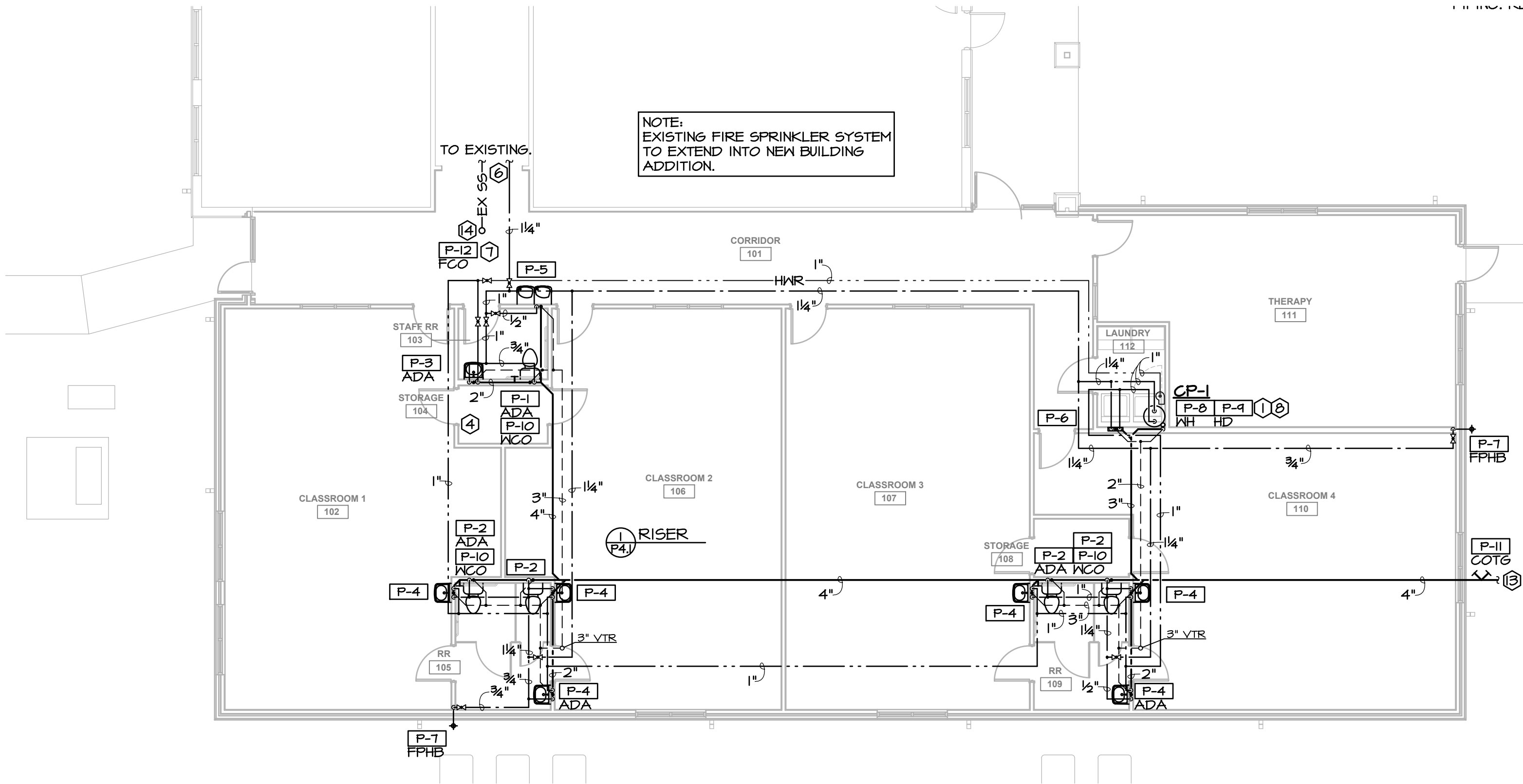


PLUMBING KEYED NOTES


1. INSTALL AN APPROVED TRAP GUARD PRODUCT THAT CONFORMS TO NSF-14, CSA B602-49 AND CSA B71-44.
2. COORDINATE UNDERSLAB PIPING WITH STRUCTURAL FOOTINGS. REFER TO STRUCTURAL PLANS FOR LOCATIONS AND SIZES OF FOOTINGS.
3. PROVIDE AND INSTALL 6 INCH DIRT LEG AND GAS STOP (BALL VALVE ONLY) AT ALL EQUIPMENT GAS CONNECTIONS. REFER TO DETAIL 5/P3.1.
4. MECHANICAL CONTRACTOR SHALL NOT INSTALL ANY WATER LINES ABOVE ELECTRICAL PANELS. REFER TO ELECTRICAL PLANS FOR PANEL LOCATIONS.
5. IDENTIFY OUTDOOR UNDERGROUND LINES WITH CONTINUOUS STRIP OF PLASTIC UTILITY MARKER. TAPE SHOULD STATE AT REGULAR INTERVALS: "CAUTION (STATE UTILITY) PIPE BELOW". INSTALL TAPE ONE FOOT DIRECTLY ABOVE PIPE BEFORE BACKFILLING TO GRADE.
6. ROUTE 1/4" COLD WATER LINE TO THE NEAREST EXISTING 1/4" OR LARGER COLD WATER LINE. ESTIMATED LENGTH TO EXISTING WATER LINE IS +/-25 FEET.
7. EXTEND EXISTING COTG TO NEW FLOOR AND ADD A FLOOR CLEANOUT.
8. MOUNT HUB DRAIN UNDERNEATH WATER HEATER, FOR SAFE PAN AND RELIEF VALVE DRAIN LINES.
9. ROUTE NEW MEDIUM PRESSURE GAS LINE TO EXISTING GAS LINE COMING FROM EXISTING GAS METER. PROVIDE GAS REGULATOR EQUAL TO EQUIMETER MODEL 243, INLET PRESSURE @ 2 PSI. FOR EXISTING GAS LOAD. COORDINATE WITH GAS COMPANY, DWIGHT PEEBLES (870-914-6396) FOR REMORK OF EXISTING GAS METER TO ACCOMMODATE NEW GAS INLET PRESSURE OF 5 PSI. AND ADDED ESTIMATED GAS CONNECTED LOAD OF 280 MBH IF NEEDED, ESTIMATED Le = +/- 500 FEET. FIELD VERIFY EXACT LOCATION AND DISTANCE PRIOR TO BID.
10. PROVIDE GAS REGULATOR EQUAL TO EQUIMETER MODEL 243, INLET PRESSURE @ 5 PSI. SET OUTLET PRESSURE @ 11 IN. WG. ESTIMATED CONNECTED LOAD = 280 MBH. ESTIMATED Le = +/- 150 FEET.
11. ROUTE 2" VENT PIPING FROM HUB DRAIN TO THE NEAREST VENT PIPING.
12. DAYLIGHT CONDENSATE PIPING 12 IN. A.F.F.
13. ROUTE 4" SANITARY SEWER TO EXISTING MANHOLE TO THE SOUTH. ESTIMATED DISTANCE TO EXISTING MANHOLE +/-200 FEET. FIELD VERIFY EXACT LOCATION, DISTANCE AND INVERT PRIOR TO BID.
14. PROVIDE DEDUCTIVE ALTERNATE PRICE TO ATTACH NEW SANITARY SEWER TO EXISTING CLEANOUT IF INVERT IS FOUND TO BE A ACCEPTABLE DEPTH AND MEETS CODE AT TIME OF INSTALLATION, FIELD VERIFY.
15. PROVIDE ALTERNATE PRICE TO ROUTE NEW 1 1/2" GAS PIPING THROUGH ATTIC TO EXISTING 1 1/2" 2 PSI MEDIUM PRESSURE GAS PIPING. FIELD VERIFY. PROVIDE REGULATOR WITH VENT FOR NEW 1 1/2" GAS PIPING. RESIZE NEW GAS PIPING TO ACCOMMODATE NEW ROUTING IF NEEDED.



2 GAS AND CONDENSATE PLUMBING PLAN  
1/8"=1'-0"



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



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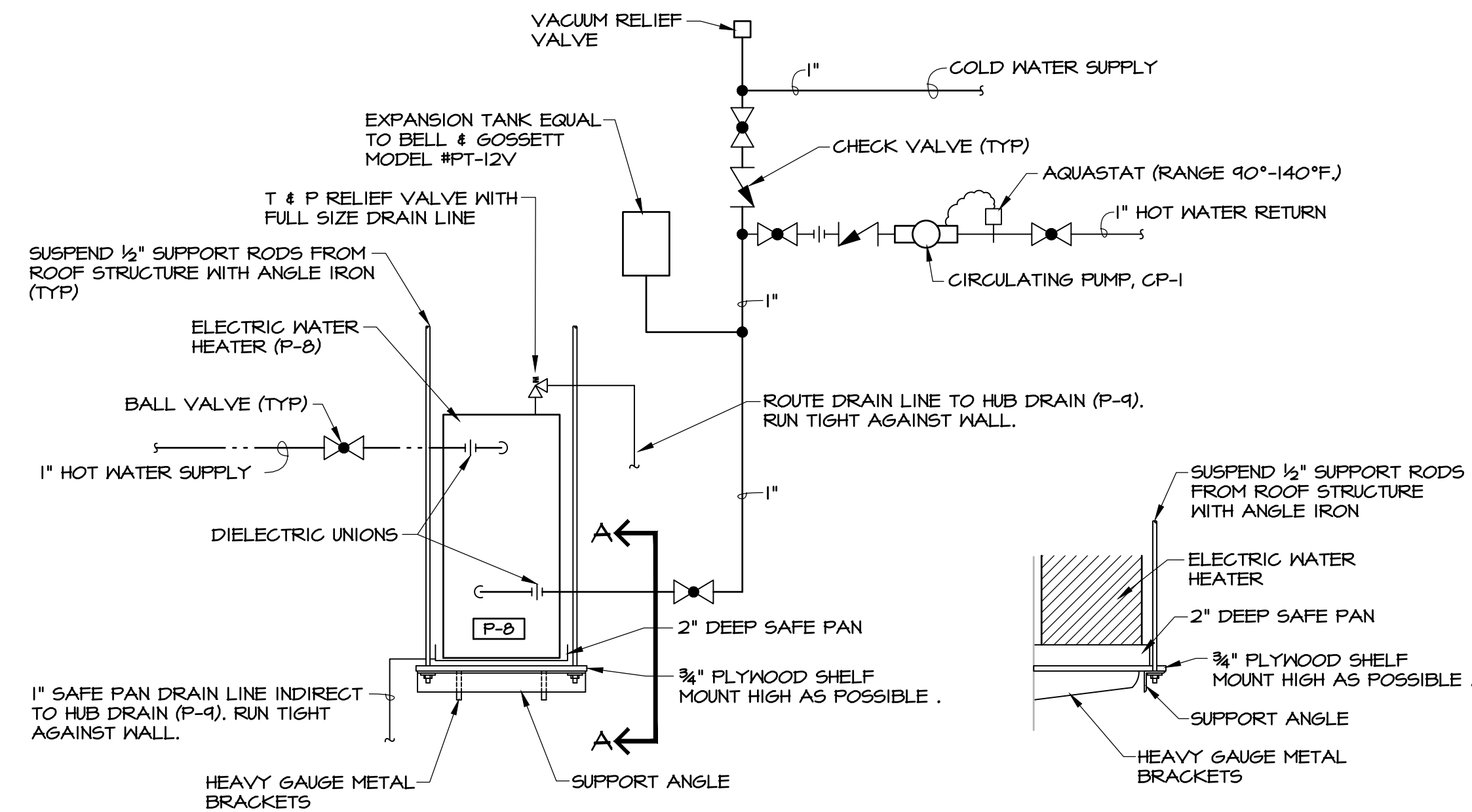
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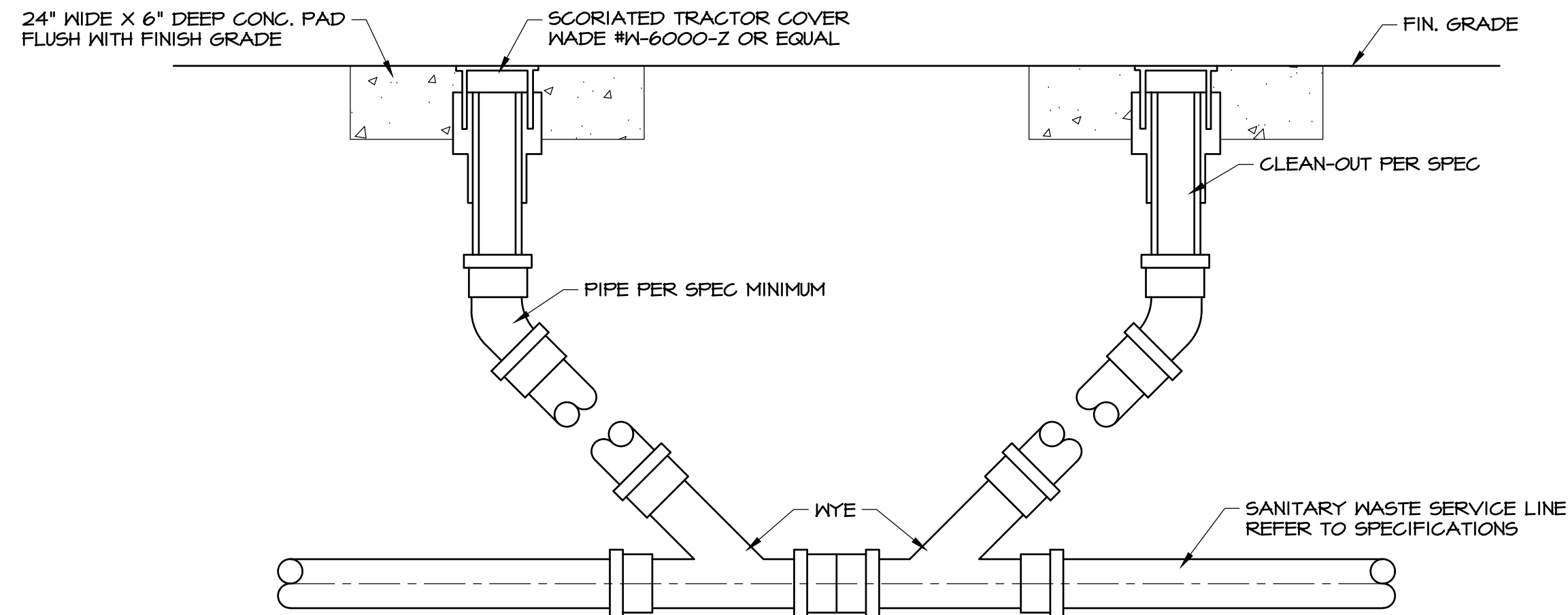
Project number: 20100  
Date: 03/03/2021  
Revisions:

PLUMBING  
PLANS &  
KEYED NOTES

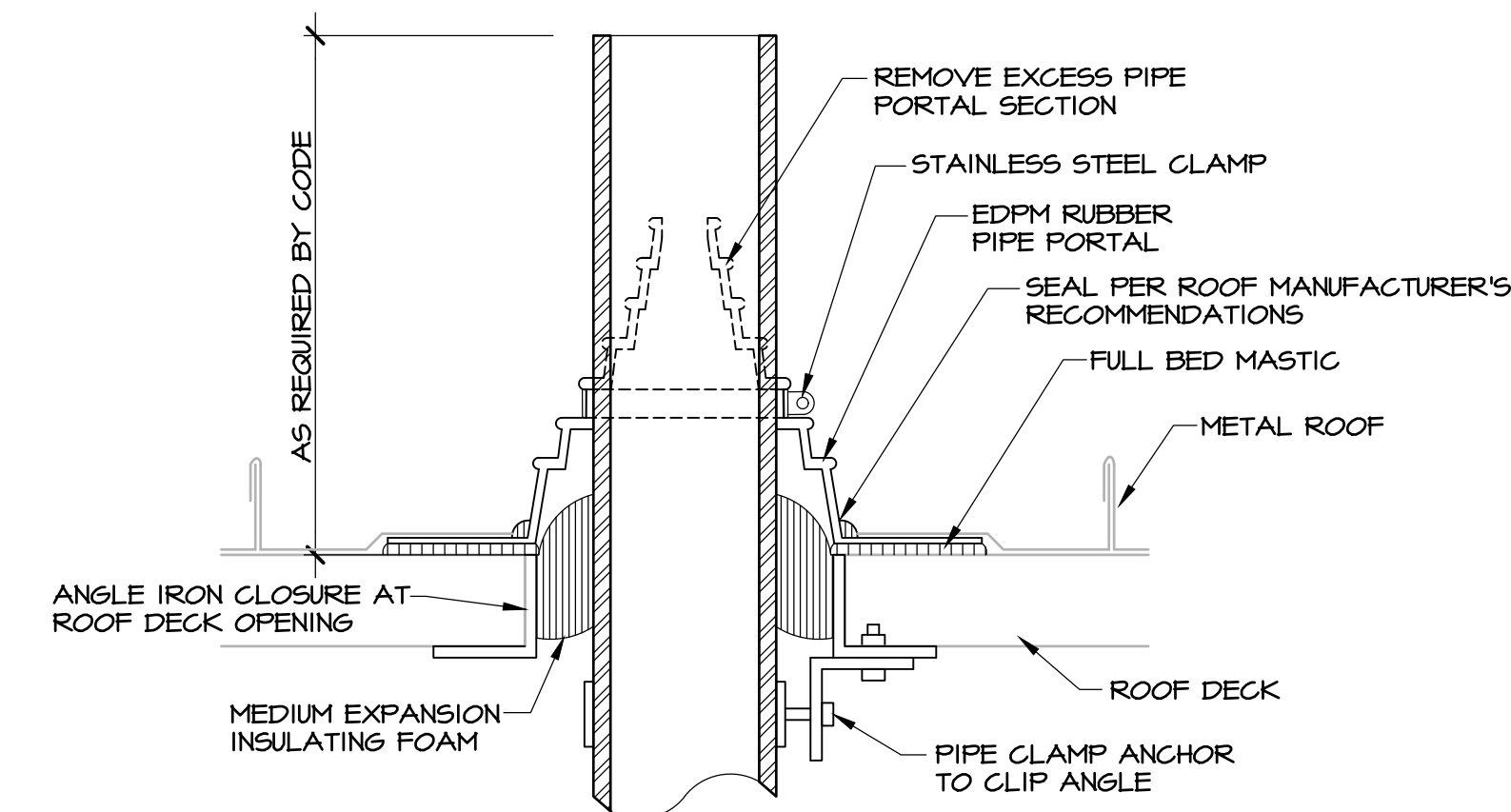




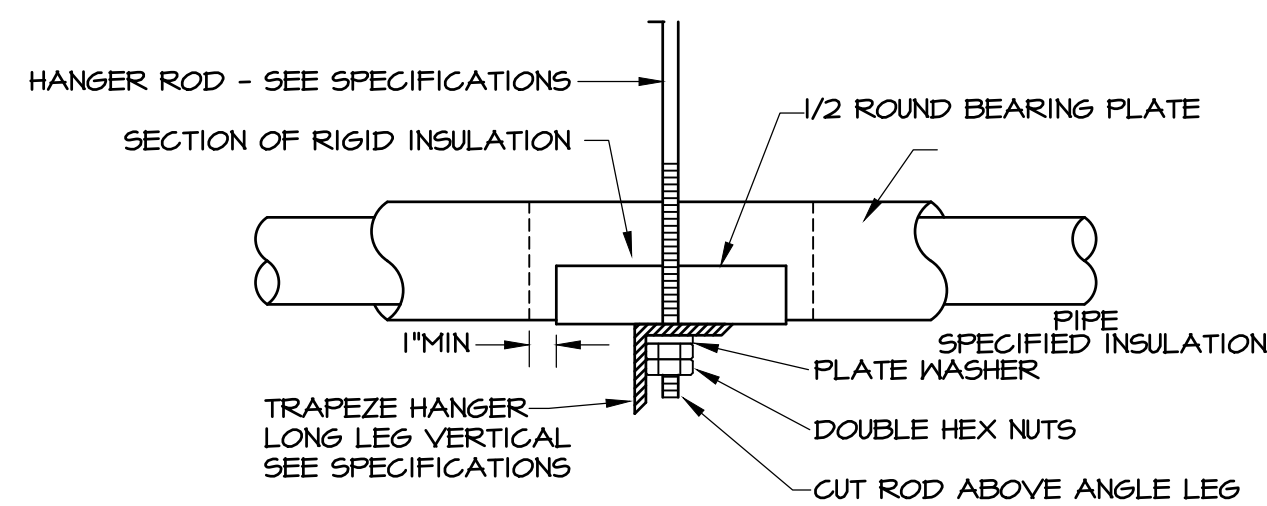
① ELECTRIC WATER HEATER DETAIL  
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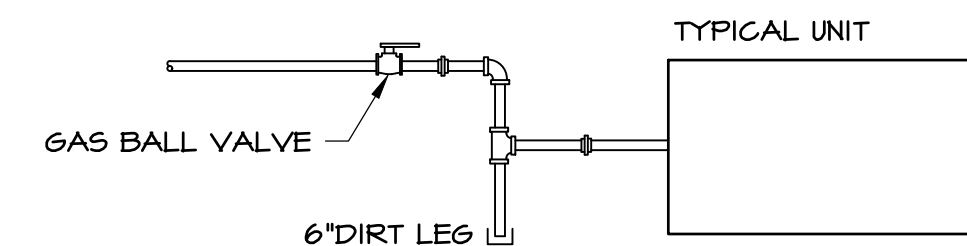
② DOUBLE CLEAN OUT TO GRADE DETAIL  
N.T.S.



③ VENT THRU ROOF DETAIL  
N.T.S.

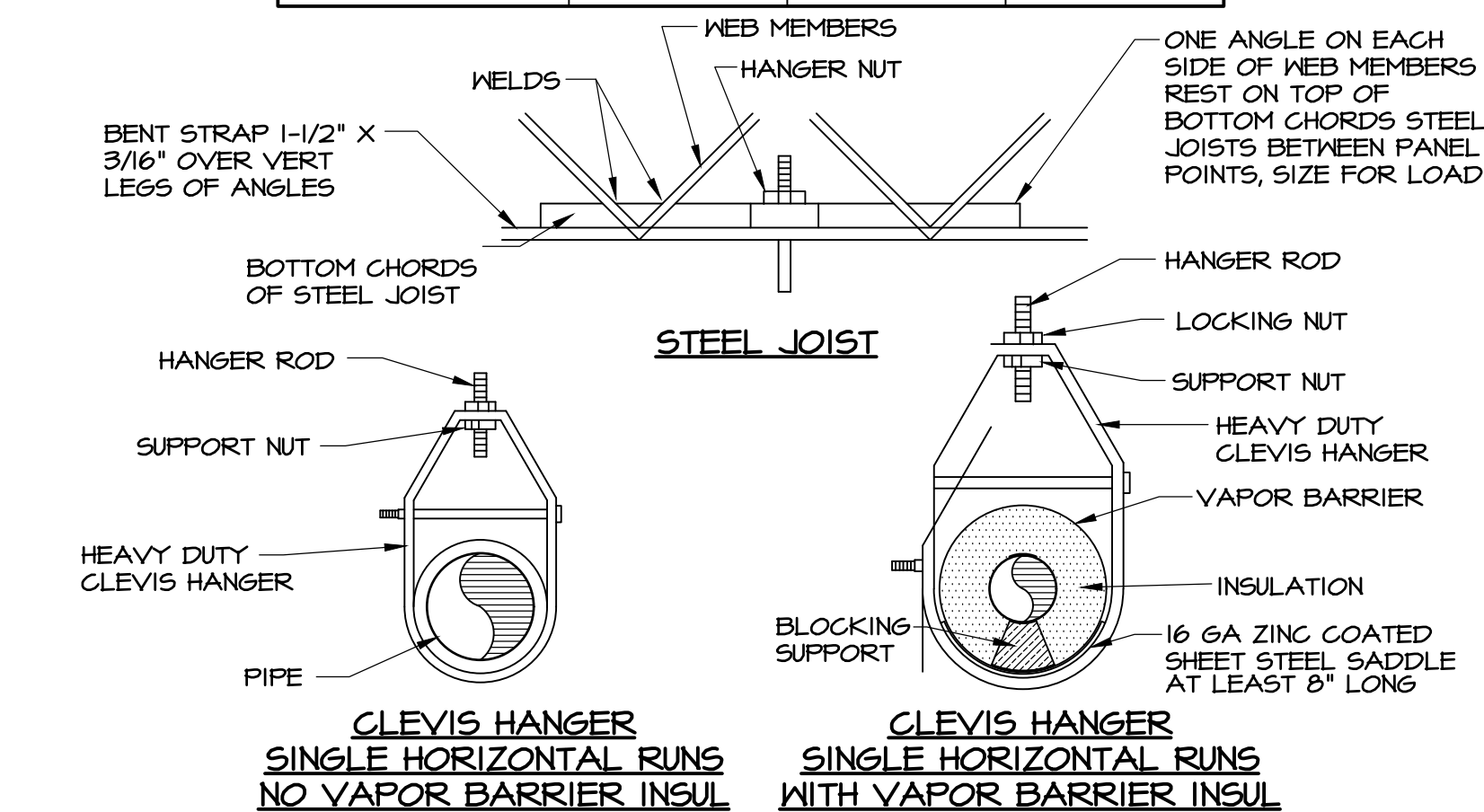


④ TYPICAL PIPE HANGER DETAIL - TRAPEZE  
N.T.S.

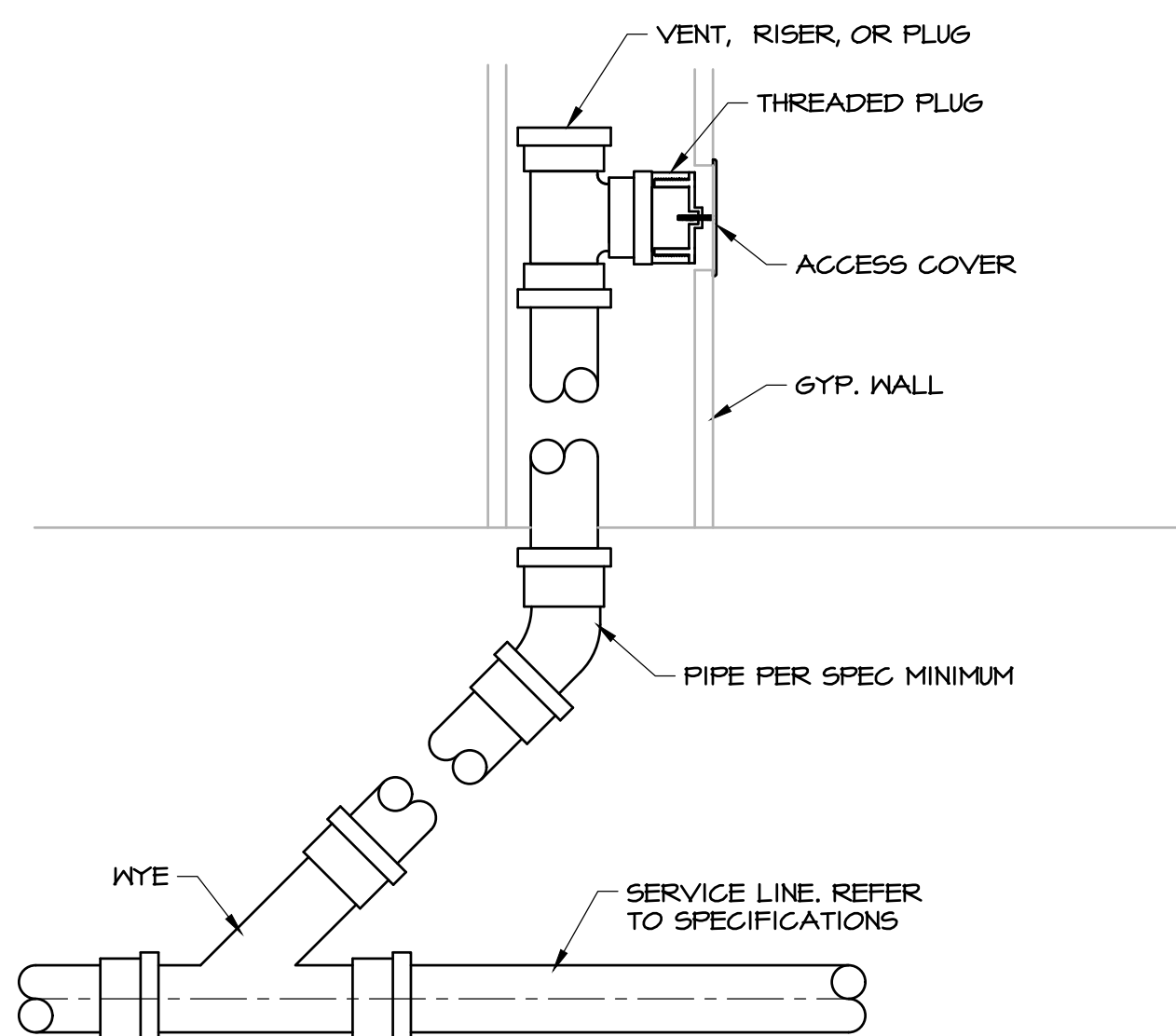


⑤ GAS CONNECTION DETAIL  
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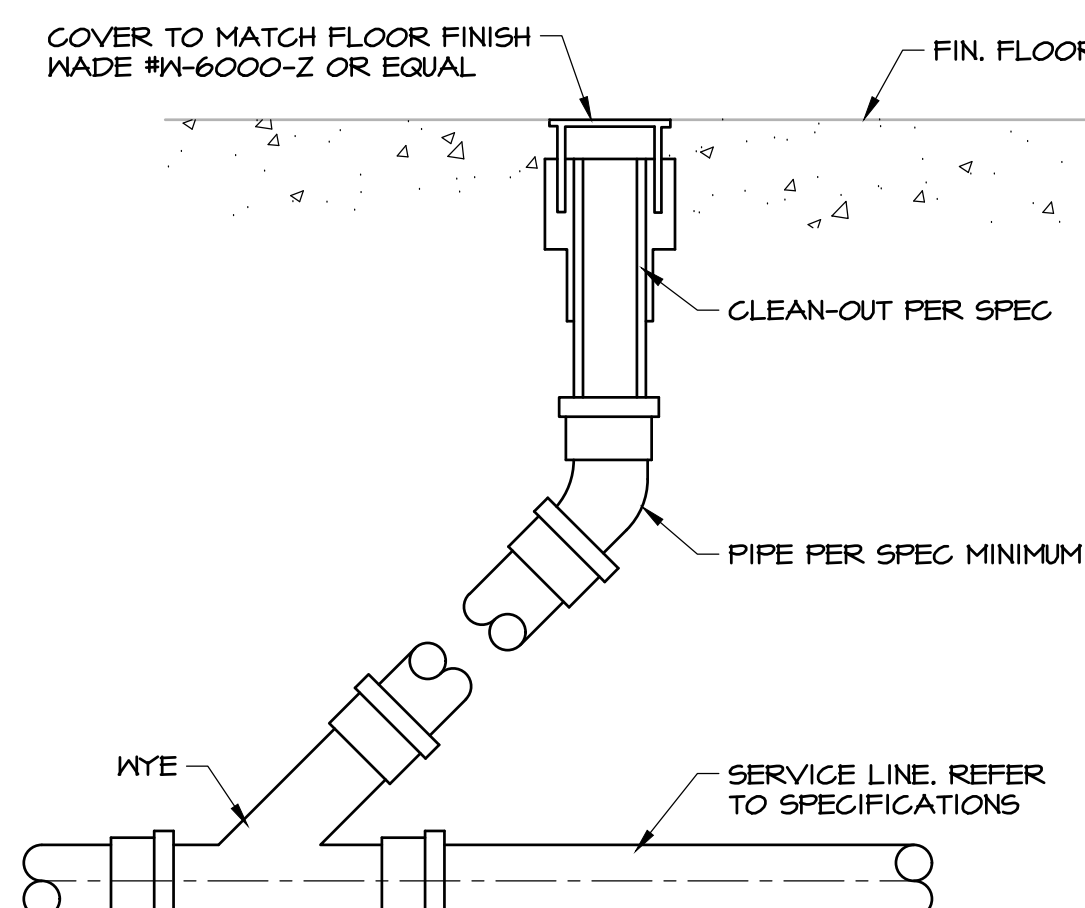
HANGER ROD SCHEDULE			
PIPE SIZE	ROD SIZE	PIPE SIZE	ROD SIZE
UP TO 2"	1/4" DIA	8" THRU 12"	1/2" DIA.
2 1/2" TO 6"	3/8" DIA		



⑥ TYPICAL PIPE HANGER DETAIL - CLEVIS HANGER  
N.T.S.



⑦ WALL CLEANOUT DETAIL  
N.T.S.



⑧ FLOOR CLEANOUT DETAIL  
N.T.S.

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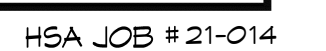
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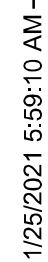
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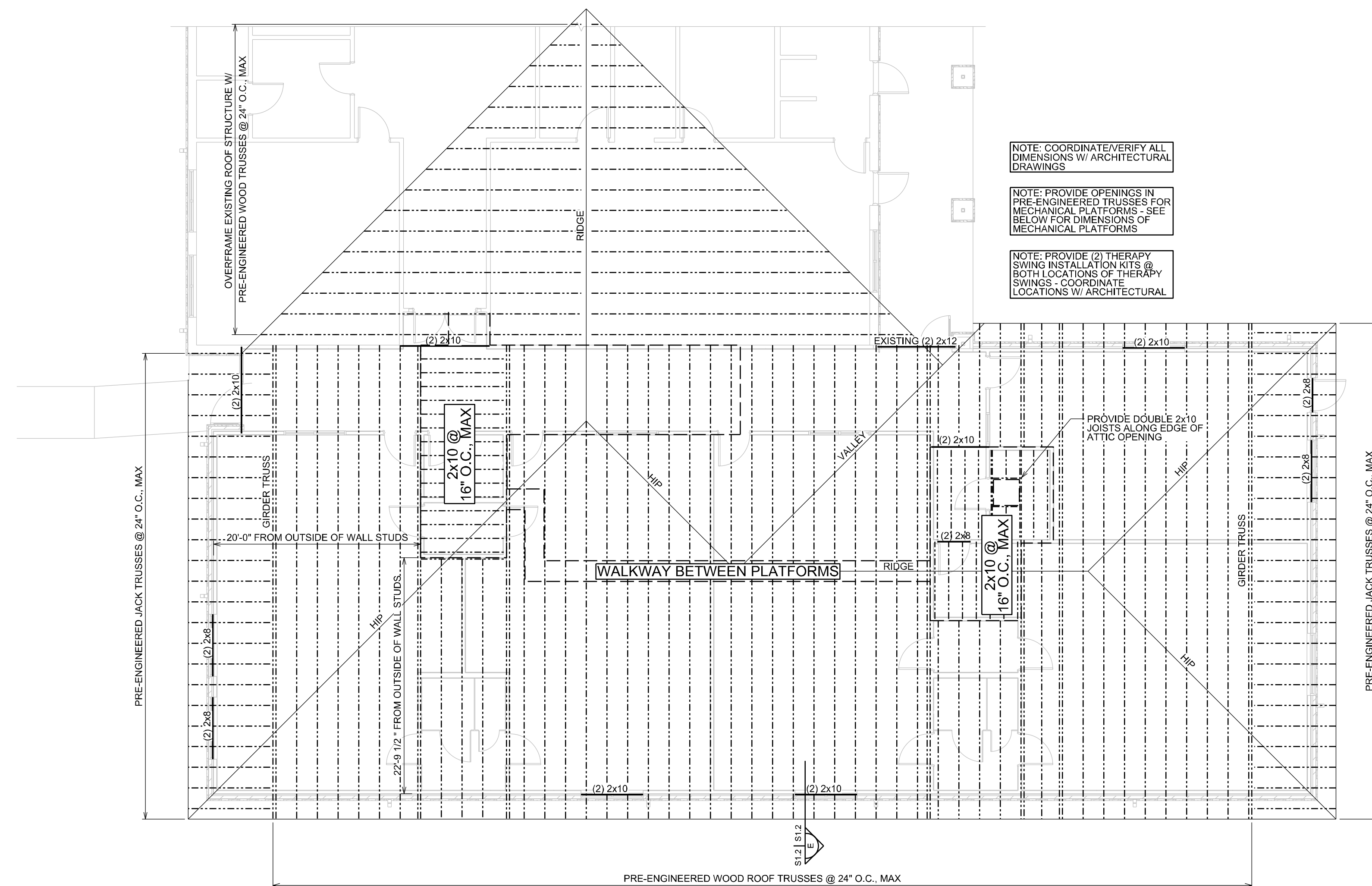








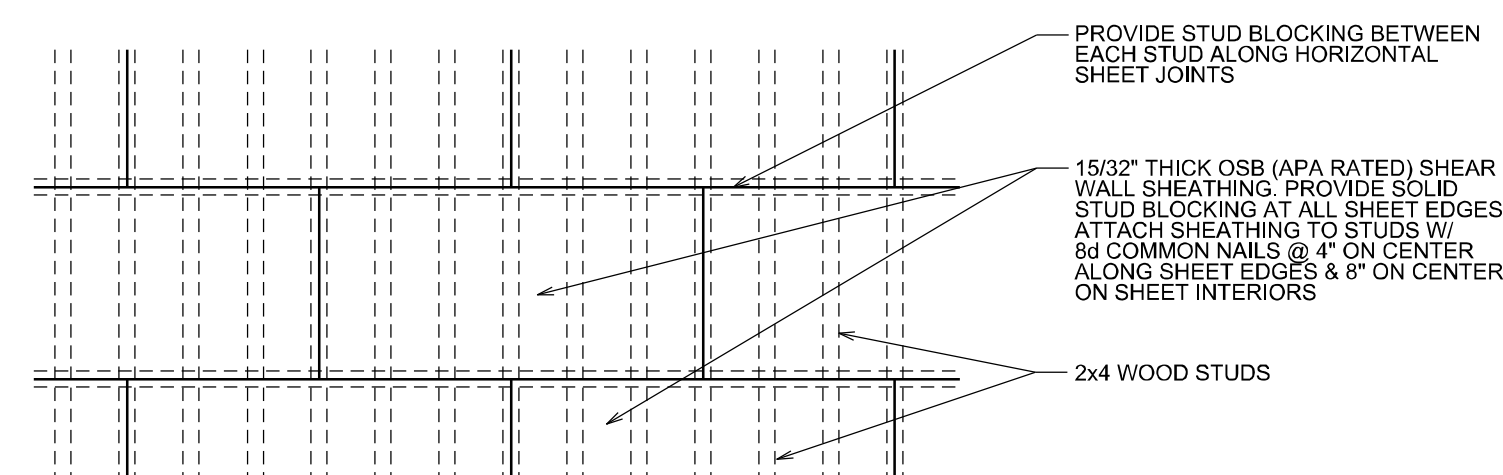




## ROOF FRAMING PLAN

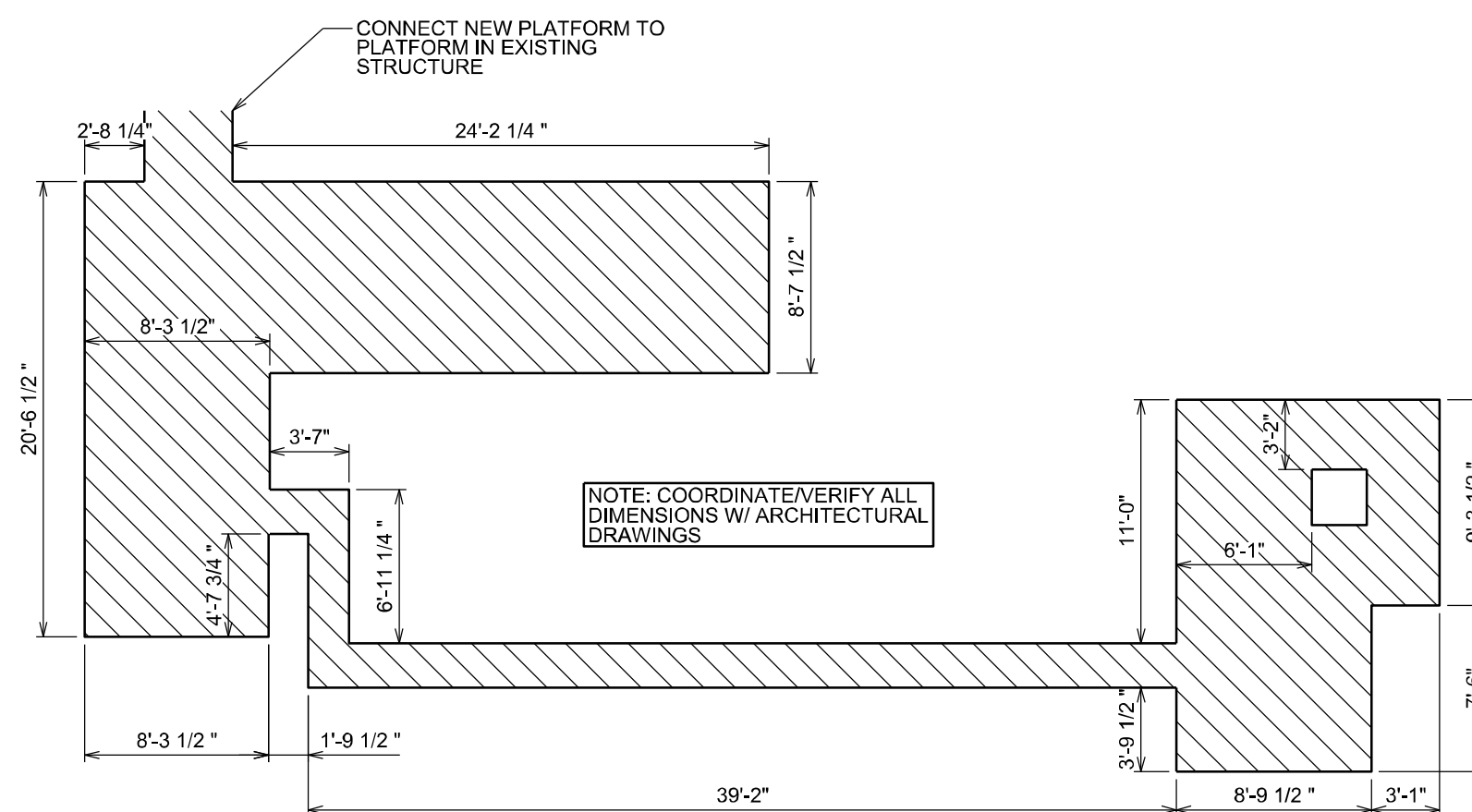
SCALE: 1/8" = 1'-0"

1. WOOD "STICK" ROOF FRAMING AND PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS:
- 20 PSF - DEAD AND COLLATERAL LOADS  
20 PSF - LIVE LOAD
2. ALL DIMENSIONAL LUMBER TO BE NO. 2 GRADE (OR BETTER) SOUTHERN YELLOW PINE OR DOUGLAS FIR-LARCH.



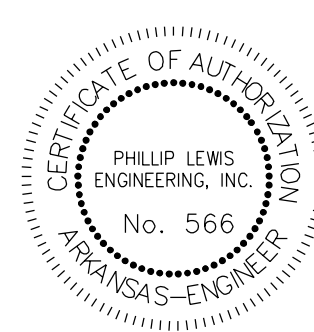
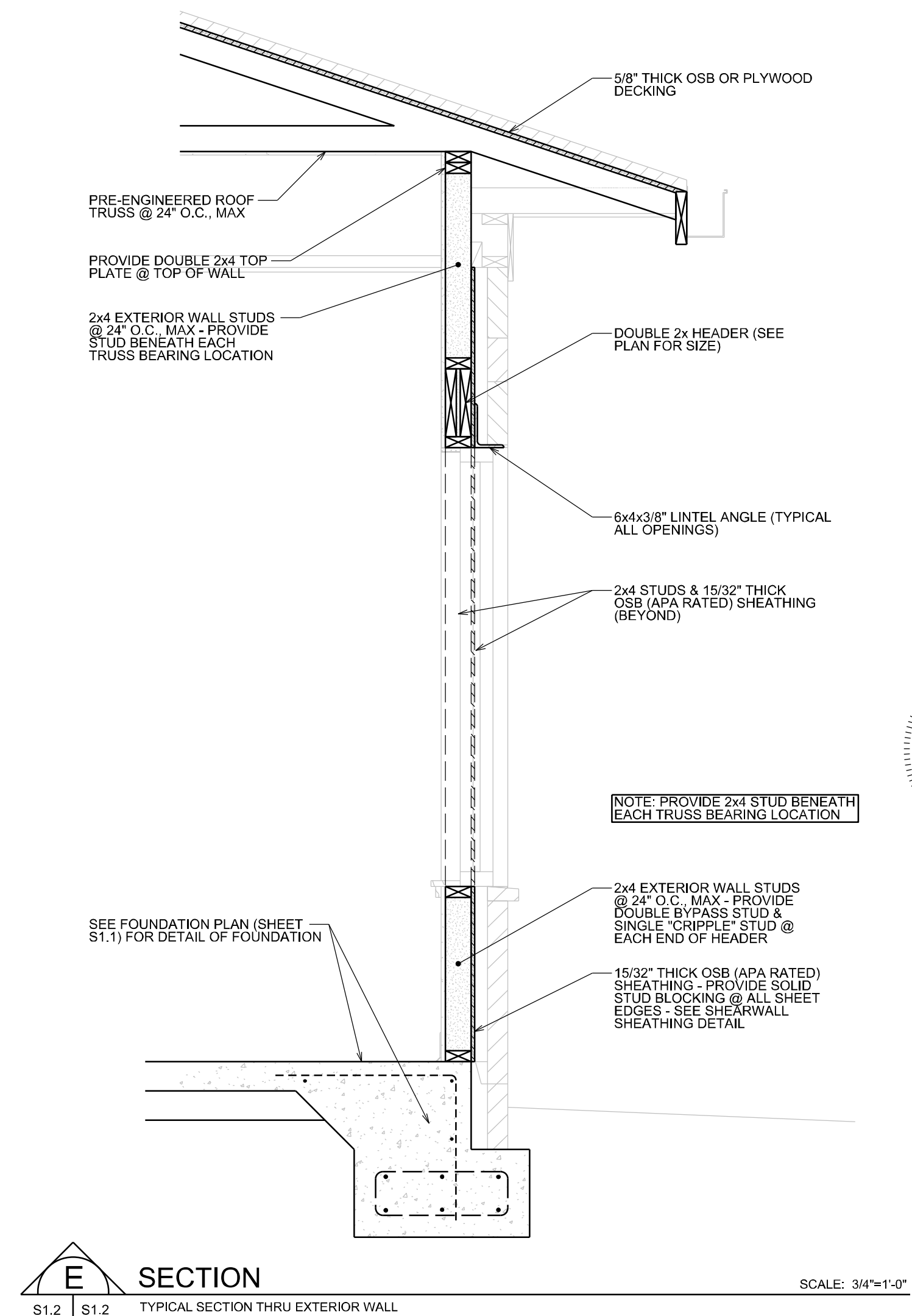
### SHEAR WALL SHEATHING DETAIL

NOT TO SCALE



## MECHANICAL PLATFORM DIMENSIONS

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



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Project number:	20100
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Revisions:	

# ROOF FRAMING PLAN

## S1.2