

HOOK FARMS

SW 26TH TERRACE & SW PRYOR RD
LEE'S SUMMIT, MO

PERMIT SET

18 OCTOBER 2021

COLLINS WEBB #: 20032

307B SW Market Street Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com



PROJECT LOCATION

GENERAL

SHEET NUMBER	SHEET NAME
CS	COVER SHEET
G001	GENERAL INFORMATION
G002	ACCESSIBILITY GUIDELINES
G500	GENERAL PROJECT SPECIFICATIONS
G501	GENERAL PROJECT SPECIFICATIONS

CIVIL

SHEET NUMBER	SHEET NAME
C01	TITLE SHEET
C02	GENERAL NOTES
C03	GENERAL NOTES
C04	EXISTING CONDITIONS
C05	SITE PLAN
C06	GRADING PLAN
C07	SPOT ELEVATIONS
C08	SPOT ELEVATIONS
C09	EROSION CONTROL PLAN
C09A	STORM SEWER 1
C09B	STORM SEWER 2
C09C	SANITARY SEWER
C09D	UTILITY PLAN
C10	EROSION CONTROL PLAN
C11	EROSION CONTROL PLAN - FINAL PLACEMENT
C12	DETAIL SHEET
C13	DETAIL SHEET
C14	DETAIL SHEET
C15	STORM SEWER CALCULATIONS
E01	SITE LIGHTING PHOTOMETRICS PLAN
E02	SITE LIGHTING POWER PLAN
E03	SITE LIGHTING DETAILS
E04	SITE LIGHTING SPECIFICATIONS
L1+L3	LANDSCAPE PLANS

STRUCTURAL

SHEET NUMBER	SHEET NAME
S101	PLANS
S102	SECTIONS
S103	ELEVATIONS

ARCHITECTURAL

SHEET NO.	SHEET NAME
AS101	ARCHITECTURAL SITE PLAN
A101	1ST FLOOR PLANS
A201	EXTERIOR ELEVATIONS
A325	SECTIONS, DETAILS & SCHEDULES

MEP

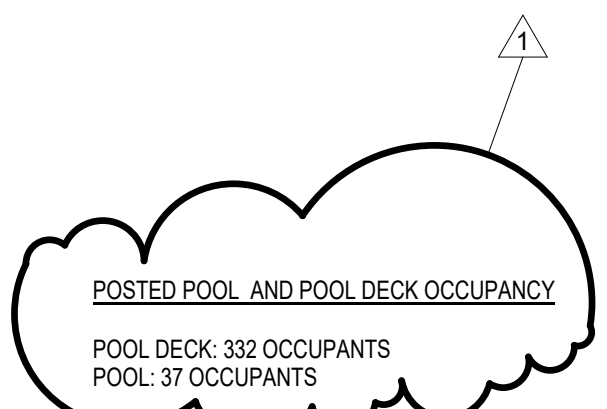
SHEET NUMBER	SHEET NAME
ME001	COVER SHEET
ME002	SPECIFICATIONS
ME101	SITE PLAN
M101	MECHANICAL PLAN
M201	MECHANICAL SCHEDULES & DETAILS
E101	ELECTRICAL PLAN
E201	ELECTRICAL SCHEDULE & DETAILS

GENERAL DESCRIPTION

PROJECT NAME: HOOK FARMS POOL HOUSE
PROJECT LOCATION: SW 26TH TERRACE & SW PRYOR RD, LEE'S SUMMIT, MO

COLLINS WEBB ARCHITECTURE
13A SW 3RD STREET
LEE'S SUMMIT, MISSOURI 64063

APPLICABLE CODES:
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL FIRE CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL PLUMBING CODE
2017 NATIONAL ELECTRICAL CODE
2012 ENERGY CONSERVATION CODE
ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES



CODE INFORMATION

	TABLE/SECTION/REFERENCE
BUILDING/PROJECT USE:	POOL HOUSE - NON CONDITIONED SPACE IBC SECTION 312
CONSTRUCTION TYPE:	TYPE IV (NON-SPRINKLERED) IBC TABLE 601
OCCUPANCY CLASSIFICATION:	GROUP "U" UTILITY IBC SECTION 312
BUILDING FRAME:	WOOD FRAME
BASE ALLOWABLE AREA "U":	5,500 SQ. FT. IBC TABLE 506.2
ACTUAL AREA (GROSS):	534 SQ. FT.
ALLOWABLE STORES:	1 STORY IBC TABLE 504.4
ACTUAL NUMBER OF STORES:	1 STORY
ALLOWABLE HEIGHT:	40'-0" IBC TABLE 504.3
ACTUAL HEIGHT IN FEET:	15'-0"

FIRE RESISTIVE REQUIREMENTS

	TABLE/SECTION/REFERENCE
PRIMARY FRAME:	0 HRS IBC TABLE 601
NON-BEARING WALLS:	0 HRS IBC TABLE 601
BEARING WALLS INT./EXT.:	0 HRS IBC TABLE 601
FLOOR CONSTRUCTION:	0 HRS IBC TABLE 601
CEILING/ROOF:	0 HRS IBC TABLE 601
CORRIDORS (NOT APPLICABLE):	0 HRS OCC. < 30 OCCUPANTS IBC TABLE 1020.1

CEILING HEIGHT NOTES: (IBC 1207)

- ALL MEANS OF EGRESS TO HAVE A MINIMUM CEILING HEIGHT OF 7'-6" A.F.F., NOR SHALL HAVE ANY PROJECTION FROM THE CEILING BE LESS THAN 7'-0" A.F.F.
- OCCUPIED SPACES, HABITABLE SPACES AND CORRIDORS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-6" A.F.F.
- BATHROOMS, TOILET ROOMS, STORAGE ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0" A.F.F.

INTERIOR FINISHES

GROUP U	MAX. FLAME SPREAD	
EXIT ENCLOSURES	NO RESTRICTIONS	IBC TABLE 803.13
LOBBIES & CORRIDORS	NO RESTRICTIONS	IBC TABLE 803.13
ALL OTHER SPACES	NO RESTRICTIONS	IBC TABLE 803.13
TEXTILES	CLASS A (0-25)	IBC 803.5.2
SMOKE DEVELOPED	0-450	TABLE/SECTION/REFERENCE

OWNER

HUNT MIDWEST
8300 NE UNDERGROUND DR.
KANSAS CITY, MO 64161
P: 816.455.2500

ARCHITECT

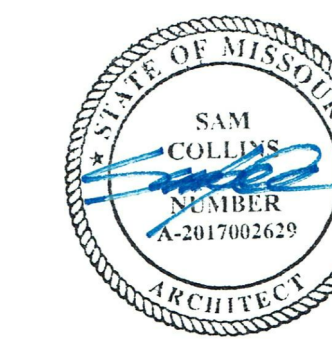
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STRUCTURAL ENGINEER

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MEP ENGINEER

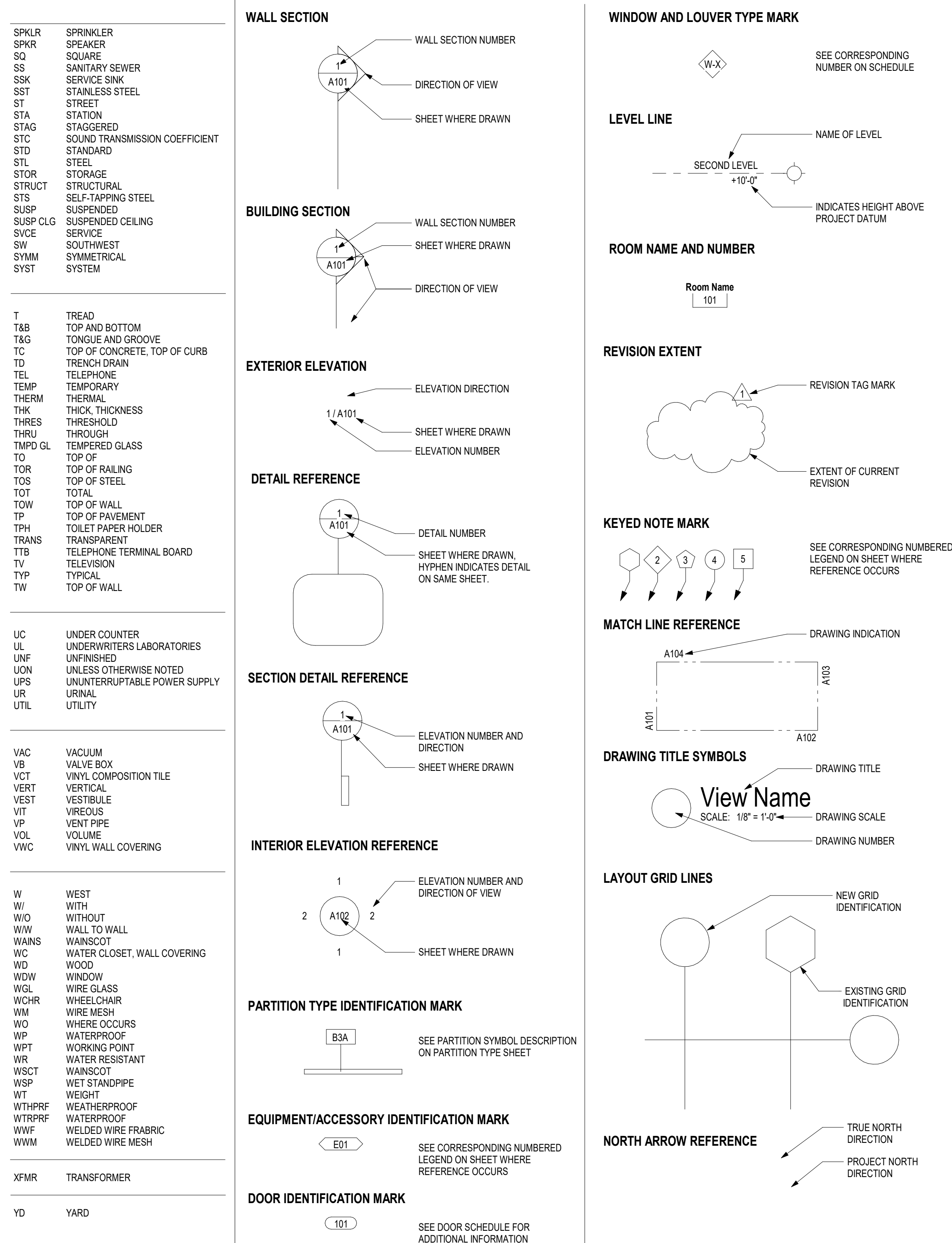
PKMR
13300 W. 98TH ST.
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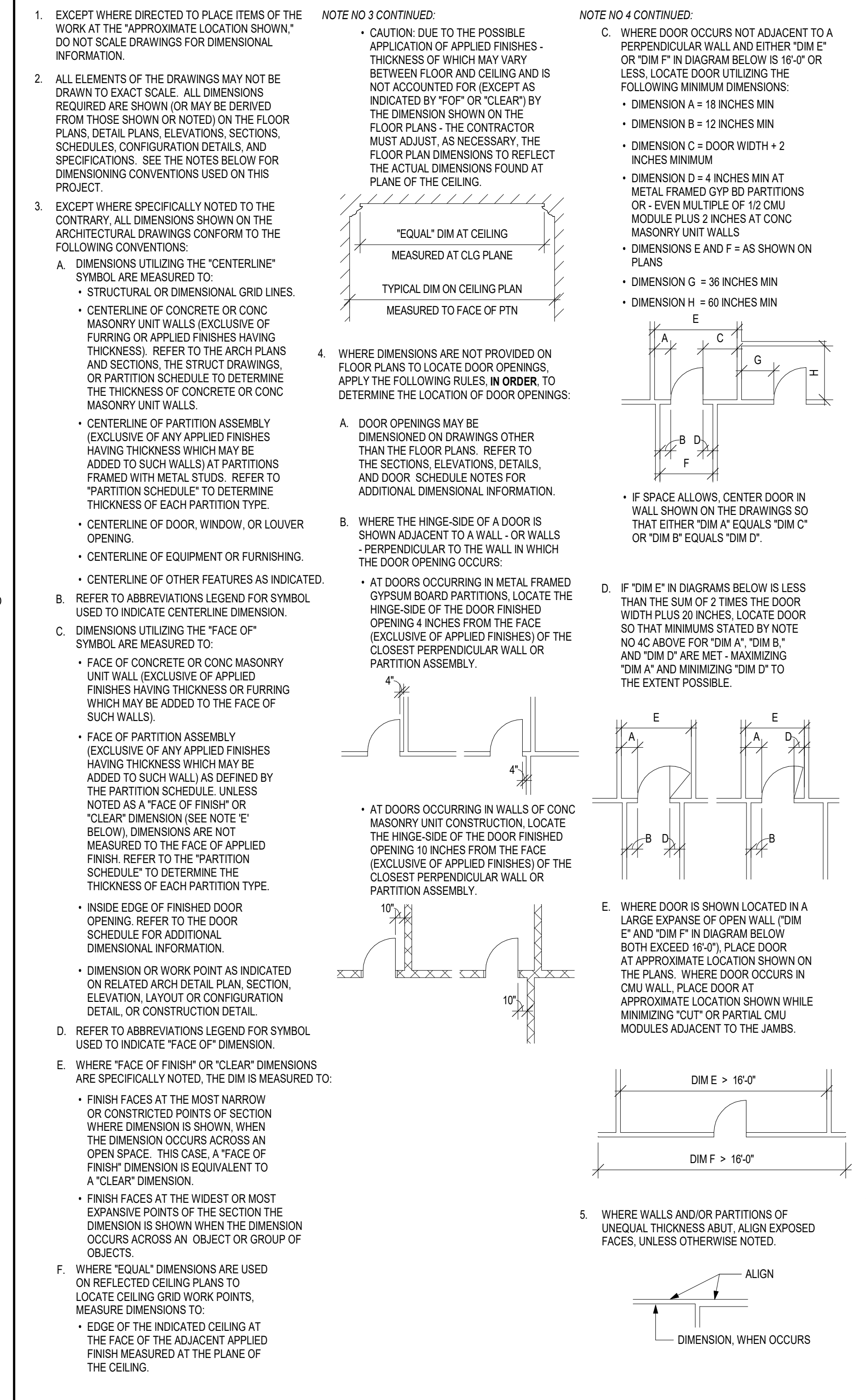
ARCHITECTURAL ABBREVIATIONS

A	AND	E	EAST	ID	INSIDE DIAMETER	PA	PUBLIC ADDRESS	SPKLR	SPRINKLER
AC	ACCUSTIC	EA	EACH	IN	INCH	PB	PART	SPKR	SPEAKER
ACT	ACTUAL	EDR	EXTERIOR DRAWING	INCL	INCLUDE	PBD	PARTICULAR BOARD	SS	SANITARY SEWER
ACP	ACoustical CEILING PANEL	EG	EDGE GUARD	INCLD	INCLUDE INCLUDING	PBX	PRIVATE TELEPHONE EXCHANGE	SSK	SERVICE SINK
ACS PNL	ACCESS PANEL	EFS	EXTERIOR FINISH SYSTEM	INSL	INSULATION	PCF	POUNDS PER CUBIC FOOT	ST	STREET
AD	AREA DRAIN	EL	ELEVATION	INT	INTERIOR	PERF	PERFORATED	STA	STATION
ADL	ADHESIVE	EQ	EQUIPMENT	INTL	INTERIOR TRACK	PERM	PERMITTER	STG	STAIR
ADJ	ADJUSTABLE	EQV	EQUAL	IT	INTRAVENOUS TRACK	PERP	PERPENDICULAR	STD	STANDARD
ADU	ADJUSTMENT	EP	ELECTRICAL PANEL			PI	POINT OF INTERSECTION	STL	STEEL
AF	ABOVE FINISH FLOOR	EPB	ELECTRICAL PANEL BOARD			PLM	PLASTER PLASTIC	STOR	STORAGE
AFG	ABOVE FINISH GRADE	EPDM	ETHYLENE PROPYLENE DIENE MONOMER			PLS	PLASTER	STRCT	STRUCTURAL
AGR	AGGREGATE	EQSP	EQUALLY SPACED			PLF	POUNDERS PER LINEAR FOOT	STL	STEEL
ALUM AL	ALUMINUM ALTERNATE	EQS	EQUIPMENT			PLYWD	PLYWOOD	SUSP	SUSPENDED
ANOD	ANODIZED	ESC	ESCALATOR			PNL	PANEL	SUSP CLG	SUSPENDED CEILING
APPROX	APPROXIMATELY	EST	ESTIMATED			PNL BD	PANEL BOARD	SWC	SOUTHWEST
ARCH	ARCHITECTURAL	EW	ELECTRIC WATER COOLER			PR	PREFABRICATION	SYM	SYMMETRIC
ASPH	ASPHALT	EXH	EXHAUST			PRCST	PRECAST	SYST	SYSTEM
AVG	AVERAGE	EXP	EXPANSION			PRF	PREFABRICATION		
BB	BULLETIN BOARD	EXJ	EXPANSION JOINT			PRK	PARKING		
BD	BOARD	EXR	EXISTING BRICK			PROP	PROPERTY		
BTWN	BETWEEN	EXB	EXISTING BRICK			PSF	POUNDS PER SQUARE FOOT		
BTM	BOTTOM	EXK	EXISTING KICK PLATE			PT	POINT PAINT / PAINTED		
BLK / BKG	BLOCK / BLOCKING	EXM	EXISTING MASONRY			PT / PTD	POINT PAINT / PAINTED		
BMD	BOTTOM OF METAL DECK	FF	FACE TO FACE			PTN	PARTITION		
BO	BOTTOM OF / BY OTHERS	FA	FIRE ALARM			PT	POINT PAINT / PAINTED		
BS	BOTTOM	FAS	FIRE ALARM STATION			PVC	POLYVINYL CHLORIDE		
BOS	BOTTOM OF STEEL	FBS	FIRE HOSE CABINET			PVDF	POLYVINYLIDENE FLUORIDE		
BRG	BEARING	FCU	FAN COIL UNIT			PWG	PAVING		
BSMT	BASEMENT	FD	FLOOR DRAIN			PWT	POWER		
BUR	BUILT UP ROOFING SYSTEM	FDC	FIRE DEPARTMENT CONNECTION			QTY	QUANTITY		
C	CHANNEL	FDN	FOUNDATION			QT	QUARTY TILE		
CAB	CABINET	FE	FIRE EXTINGUISHER			QTR	QUARTER		
CB	CATCH BASIN	FF	FIRE HOSE CABINET			QTY	QUANTITY		
CCR	CARBON CONTROL READER	FFHC	FIRE HOSE / EXTINGUISHER CABINET			R	RISER		
CNSK	CASEWORK	FFHS	FLAT HEAD WOOD SCREW			RA	RESILIENT AIR		
CSP	CUBICLE CURTAIN TRACK	FFM	FIRE FIGHTER MOUNTING			RB	RESILIENT BASE		
CTN	COMBINATION STAND PIPE	FFN	FIRE FIGHTER NOZZLE			RC	REFLECTED CEILING PANEL		
CG	CORNER GUARD	FFR	FIRE RETARDANT TREATMENT			RD	ROOF DRAIN		
CSM	CEMENTitious	FR	FACE OF			REC	RECTANGULAR		
CER	CERAMIC	FRF	FIRE RETARDANT TREATMENT			REFR	REFRIGERATOR		
CT	CERAMIC TILE	FRZ	FREEZER			REG	REGISTER		
CHBD	CHALKBOARD	FSB	FOLDING SHOWER BENCH			RES	RESILIENT		
CL	CENTER LINE	FTN	FOOT, FEET			REQD	REQUIRED		
CLG	CEILING	FTG	FURNITURE			RET	RETURN		
CLR	CLEAR	FXTR	FUTURE			REV	REVISION		
CLC	CLOSET					RF	RESILIENT FLOORING		
CMU	CONCRETE MASONRY UNIT					RH	RIGHT HAND		
CRSC	CORNER GUARD CHANNEL					RHS	ROUND HEAD MACHINE SCREW		
CW	COLD WATER					RHS	ROUND HEAD WOOD SCREW		
COL	COLUMN					RM	ROOM		
CONTR	CONTRACTOR					RND	ROUND		
CONSTR	CONSTRUCTION					RO	ROUGH OPENING		
CONTR	CONTRACTOR					ROW	RIGHT OF WAY		
CJ	CORNER JOINT					RWL	RAIN WATER LEADER		
CORR	CORRUGATED, CORRIDOR								
CU	CUBIC								
D	DEPTH								
DBL	DOUBLE ACTING								
DEG	DEGREE								
DEMD	DEMOLISH								
DEPT	DEPARTMENT								
DET	DETAIL								
DF	DRINKING FOUNTAIN								
DIA	DIAMETER								
DIAG	DIAGONAL								
DIF	DIFFUSER								
DIM	DIMENSION								
DIM FT	DIMENSION POINT								
DIST	DISTANCE								
DK	DECK								
DN	DOWN								
DR	DRAIN, DOOR								
DS	DOWNSPOUT								
DSP	DRY STANDPIPE								
DT	DRAPERY TRACK								
DWG	DRAWING								
DWG / DWGS	DRAWING / DRAWINGS								

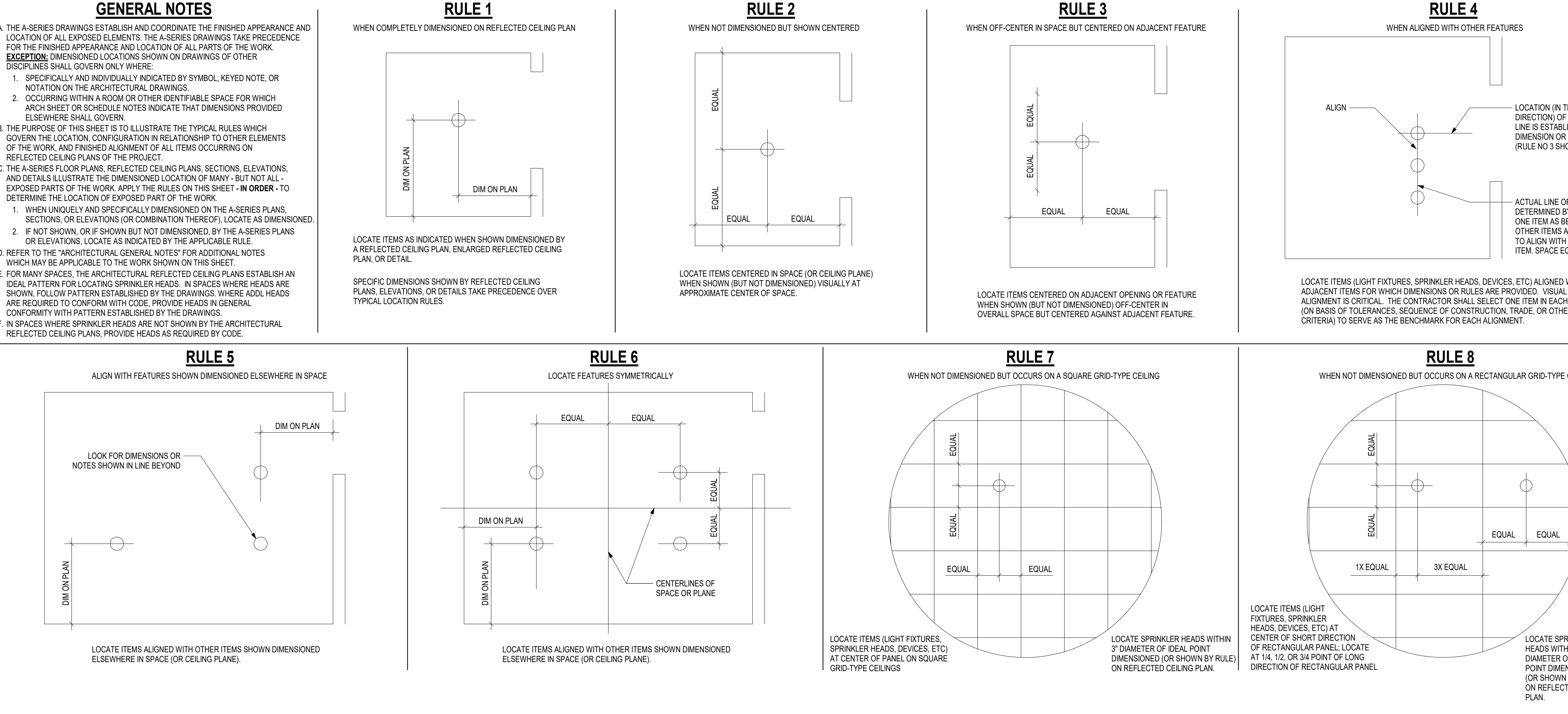
TYPICAL ARCHITECTURAL REFERENCE SYMBOLS



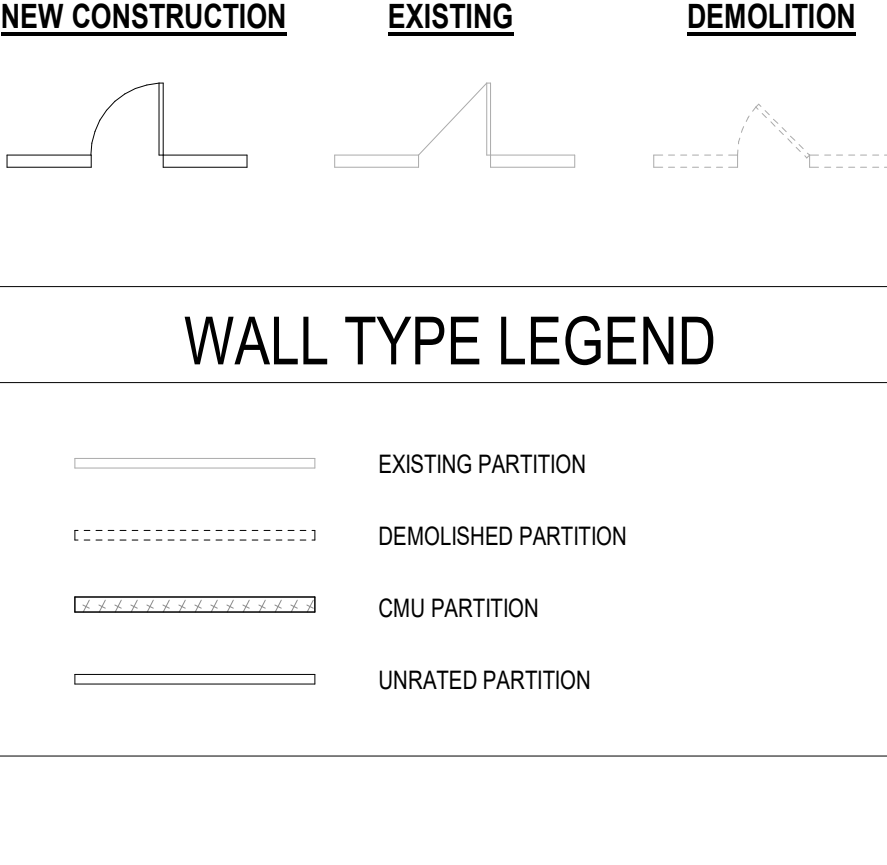
ARCHITECTURAL DIMENSIONING CONVENTIONS



TYPICAL RULES FOR DETERMINING REFLECTED CEILING PLAN LOCATIONS, DIMENSIONS, AND CONFIGURATIONS



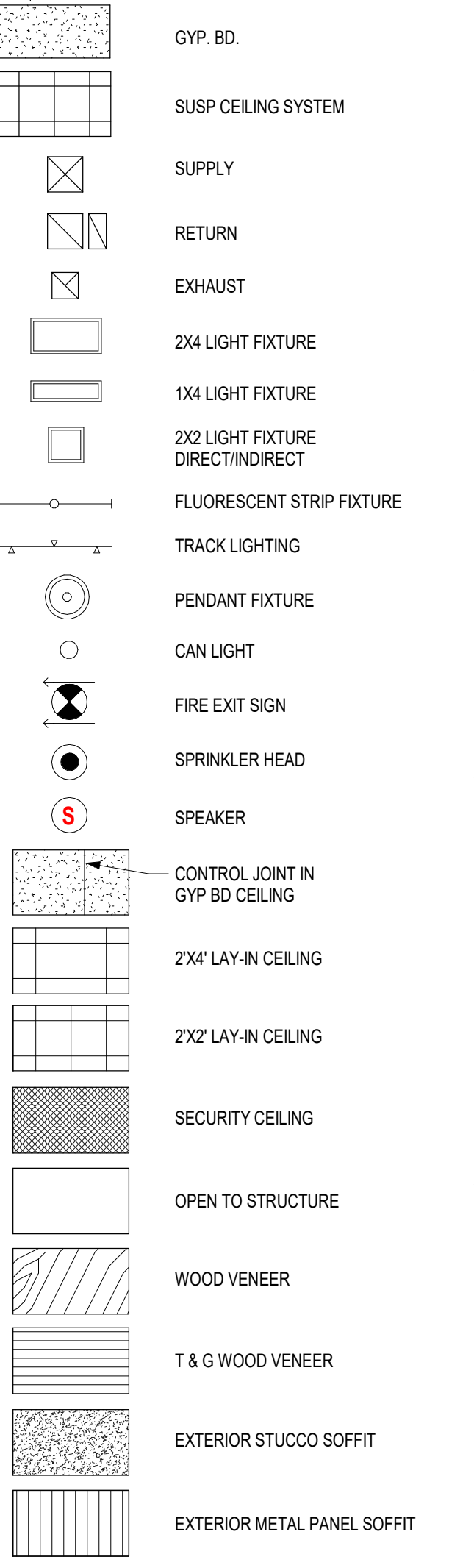
TYP DOOR LEGEND



WALL TYPE LEGEND



REFLECTED CEILING PLAN SYMBOLS



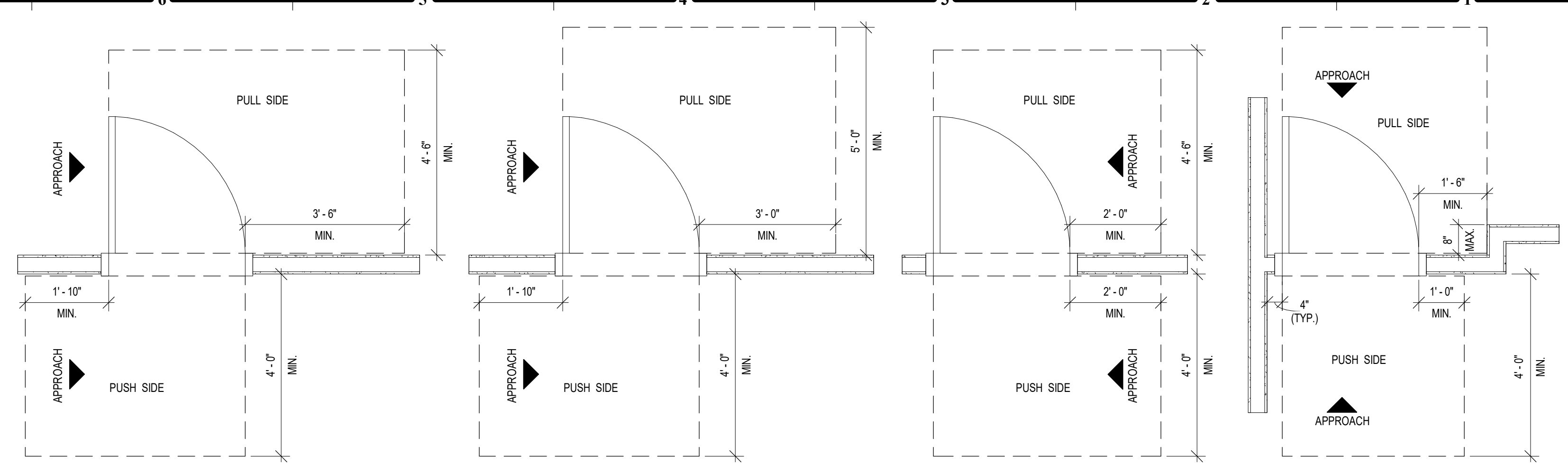
GENERAL INFORMATION NOTES:

- ALL CONTRACTORS AND THEIR SUPERVISORY PERSONNEL SHALL REVIEW THE GENERAL AND SUPPLEMENTARY CONDITIONS TO THE CONTRACT.
- ALL WORK SHALL CONFORM WITH APPLICABLE BUILDING CODES, REGULATIONS AND ORDINANCES.
- CONTRACTOR AND/OR OWNER SHALL OBTAIN ALL REQUIRED BUILDING AND OCCUPANCY PERMITS.
- CONTRACTOR SHALL BECOME FULLY ACQUAINTED WITH ALL CONDITIONS RELATED TO THE WORK.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCES OF CONSTRUCTION AND THE SAFETY OF ALL CONSTRUCTION PERSONNEL AND VISITORS.
- DRAWINGS CONTAINED IN THIS SET SHALL NOT BE REPRODUCED FOR SHOP DRAWINGS. COPIES OF THESE DRAWINGS SUBMITTED AS SHOP DRAWINGS WILL BE REJECTED AND RETURNED TO THE CONTRACTOR.
- EACH INSTALLER MUST READ AND UNDERSTAND ALL CONDITIONS UNDER WHICH THE WORK WILL BE INSTALLED AND REPORT TO THE CONTRACTOR IN WRITING ANY CONDITIONS DEVIATING FROM THE PROPER AND TIMELY EXECUTION OF THAT INSTALLER'S WORK. DO NOT PROCEED UNLESS UNSATISFACTORY CONDITIONS ARE CORRECTED.
- CONTRACTOR SHALL VERIFY

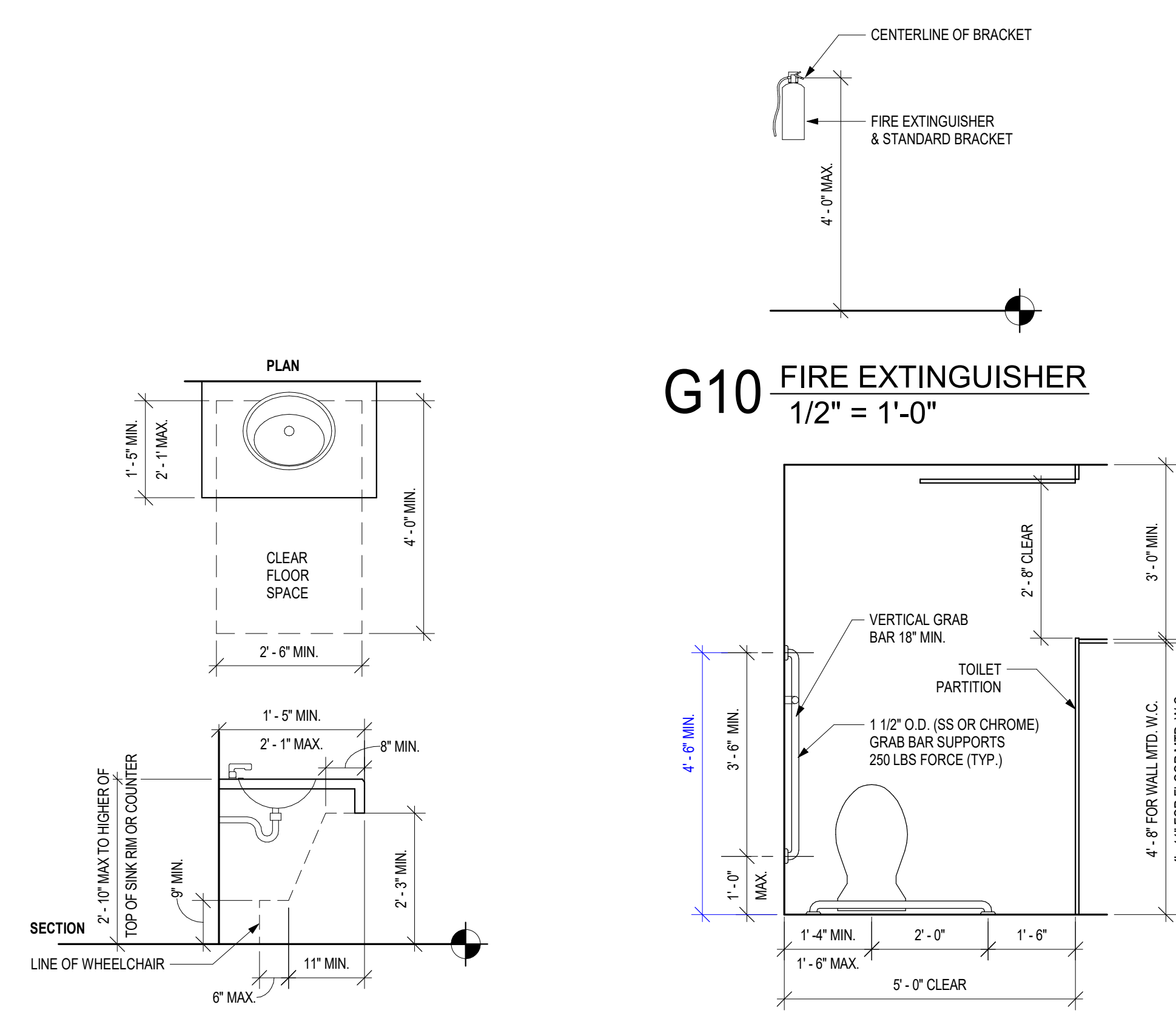
**GENERAL NOTES:
 ACCESSIBILITY GUIDELINES**

- NOTE: ALL DIMENSIONS ARE MEASURED FROM FLOOR, UNLESS NOTED OR SHOWN OTHERWISE.
- ADA UNOBSTRUCTED REACH RANGES: ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- DOOR HARDWARE (TO CENTER OF HARDWARE): STANDARD MOUNTING HEIGHTS: PUSH PLATES = 42"; PULL HANDLES = 42"; KNOBS/LEVERS = 40"; PANIC EXIT = 42" CENTERLINE OF BAR. KICKPLATES: WIDTH = DOOR WIDTH MINUS 2"; CENTER HEIGHT = 16" FROM B.O. DOOR. THRESHOLDS: STANDARD = 1/2" MAX. AT EXT. SLIDING DOORS = 3/4" MAX. ADA HARDWARE = 34" MIN. TO 48" MAX.
- DRINKING FOUNTAINS & EVCS (TO SPOUT): STANDARD = 40" TYP. 42" MAX. ADA = 36" MAX. (27" MIN. CLEAR KNEE SPACE).
- COUNTERTOPS (TO SINK RIM COUNTERTOP): ADA = 26" MIN. TO 34" MAX.
- WATER CLOSETS (TO TOP OF SEAT): STANDARD = 14" TO 15". ADA (TO TOP OF SEAT) = 17" TO 19". ADA FLUSH CONTROLS = 44" MAX.
- URINALS (TO RIM): STANDARD = 24" MAX. ADA = 17" MAX. ADA FLUSH CONTROLS = 44" MAX.
- LAVATORIES (TO SINK RIM COUNTERTOP): STANDARD = 36" MAX. ADA = 34" MAX. (29" MIN. CLEAR KNEE SPACE).
- MIRRORS (TO B.O. REFLECTIVE SURFACE): STANDARD = VARIES. ADA = 40" MAX.
- GRAB BARS - ADA (TO TOP OF BAR): WATER CLOSETS = 33" MIN. TO 38" MAX. SHOWERS = 33" MIN. TO 38" MAX. FROM B.O. SHOWER. BATH/TUBS: TOP BAR = 33" MIN. TO 38" MAX. BOT. BAR = 9" ABOVE T.O. TUB.
- SHOWER HEADS (FROM FLOOR TO HEAD): STANDARD = 72" TO 84". ADA = SPRAY UNIT W/ HOSE 60" LONG MIN. ADA = FIXED SHOWER HEAD = 48" AFF.
- SHOWER CONTROLS (TO CONTROL AREA): STANDARD = 48" MAX. (TO TOP). ADA = 38" MIN. TO 48" MAX.
- SHOWER ROD (FROM FLOOR TO C.L.): STANDARD = 78" MAX. ADA = 78" MIN. TO 84" MAX. (TO BOT. & 70" TO TOP. URINALS = 18" TO BOT. & 60" TO TOP).
- TOILET PAPER DISPENSERS (TO C.L. OF OUTLET): STANDARD = 24". ADA = 18" MIN. TO 24" MAX.
- WALL MOUNTED SOAP DISPENSERS (TO C.L. OF PUSH BUTTON): STANDARD = 40". ADA = VARIES. RE-OBSTRUCTED AND UNOBSTRUCTED REACH RANGES: ADA SIDE REACH = 46" MAX. ABOVE SINK IN COUNTER.
- PAPER TOWEL DISPENSER/WASTE RECEPTACLE (TO TOWEL SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- WARM AIR HAND DRYER (TO PUSH SWITCH): STANDARD = 44" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- SANITARY NAPKIN DISPENSER (TO C.L. OF COIN SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- SANITARY NAPKIN DISPOSAL (TO TOP OF UNIT): STANDARD = 28" MAX. ADA = 19" MIN. TO 24" MAX. (TO OPEN).
- TOILET SEAT COVER DISPENSERS (TO OPEN): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
- SHelves: ADA = 48" MAX.
- COAT HOOKS: STANDARD = 68". ADA = 48" MAX.
- CHALKBOARDS, FACKBOARDS & MARKERBOARDS: STANDARD = 32" TO 38" (TO B.O. BOARD OR CHALKTRAY). STANDARD = 80" (RECOMMENDED). (TO T.O. BOARD).
- THERMOSTATS & CONTROL DEVICES (TO TOP): ADA FORWARD REACH = 48" MAX. ADA SIDE REACH = 48" MAX.
- LIGHT SWITCHES & CARD READERS (TO C.L.): LOCATE 6" FROM DOOR JAMB. ADA = 48" MAX.
- CONVENIENCE RECEPTACLES - ELECTRICAL/ TELEPHONE/ DATA (TO C.L.): STANDARD = 18". ADA = 15" MIN.
- EXIT LIGHTS: WALL MOUNTED 2" MIN. BELOW CEILING 2" MIN. ABOVE DOOR FRAME. EQUAL SPACE FROM CEILING TO TOP OF FRAME.
- FIRE EXTINGUISHERS (TO TOP U.N.O.): GROSS WT. 40 LBS. OR LESS = 60" MAX. GROSS WT. MORE THAN 40 LBS. = 42" MAX. ADA = 40" MAX. (B.O. CABINET).
- FIRE ALARM PULL STATIONS (TO LEVER): STANDARD = 48" MAX. ADA FORWARD REACH = 48" MAX. ADA SIDE REACH = 48" MAX. HEIGHT.
- SMOKE AND/OR HEAT DETECTORS: STANDARD = CEILING.
- HORN/ SPEAKER VISUAL SIGNALS: STANDARD = 80" AFF. OR 6" BELOW CEILING - WHICHEVER IS LOWER.
- ROOM SIGNAGE (TO C.L.): STANDARD = 60" HIGH AFF. & WITHIN 18" OF LATCH SIDE OF DOOR.

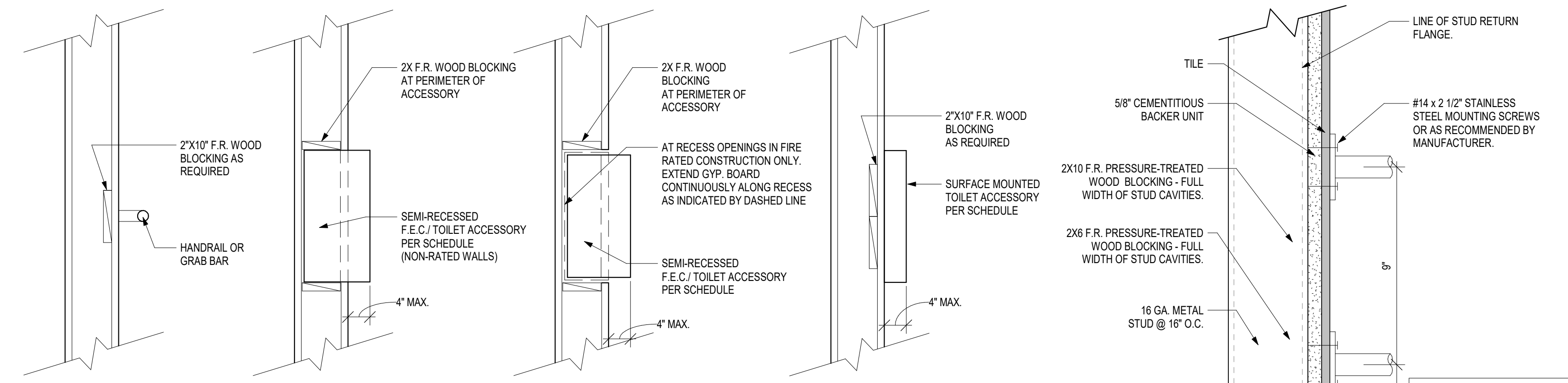
J6 TYP. DOOR APPROACH CLEARANCES
 1/2" = 1'-0"



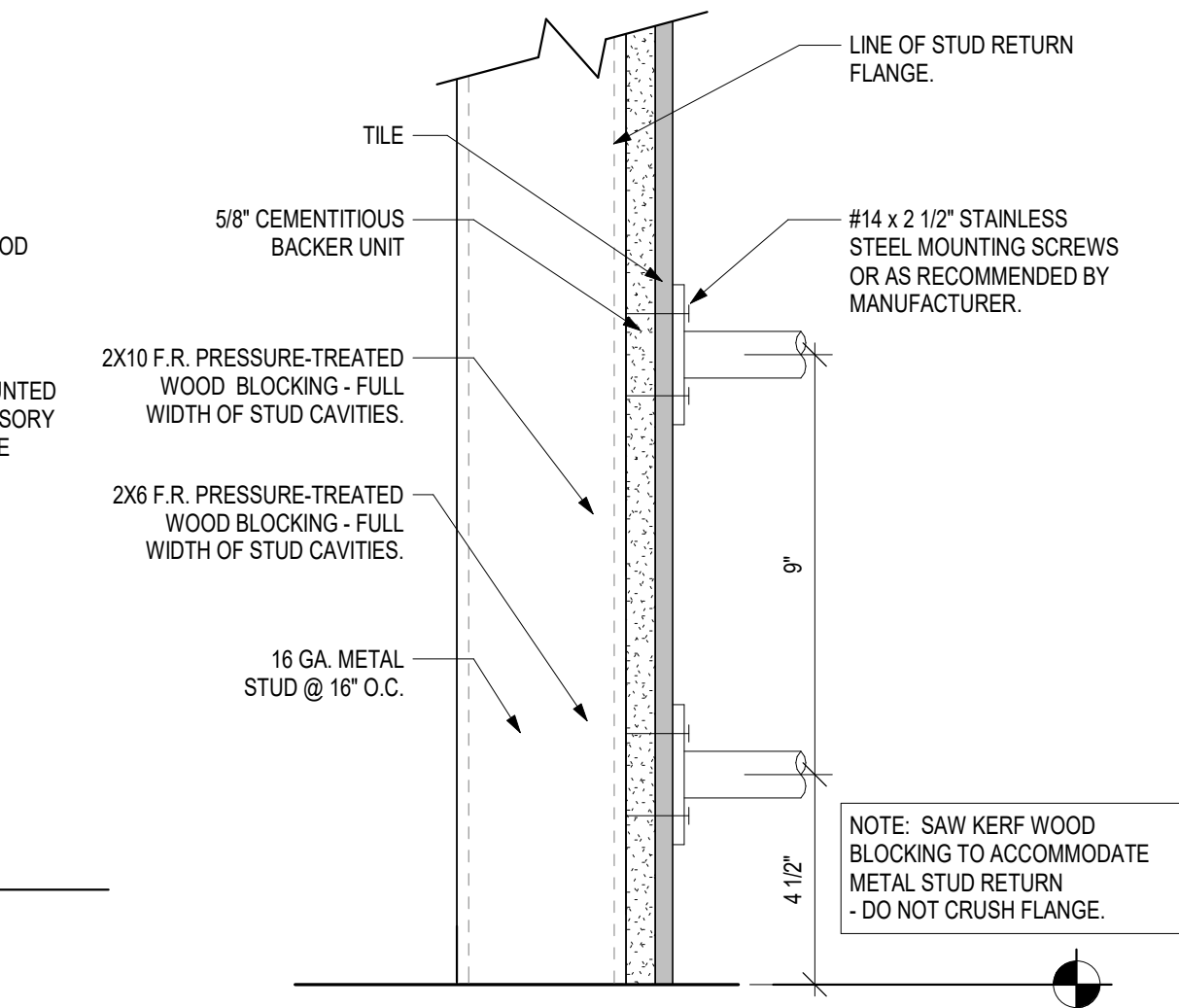
G10 FIRE EXTINGUISHER
 1/2" = 1'-0"



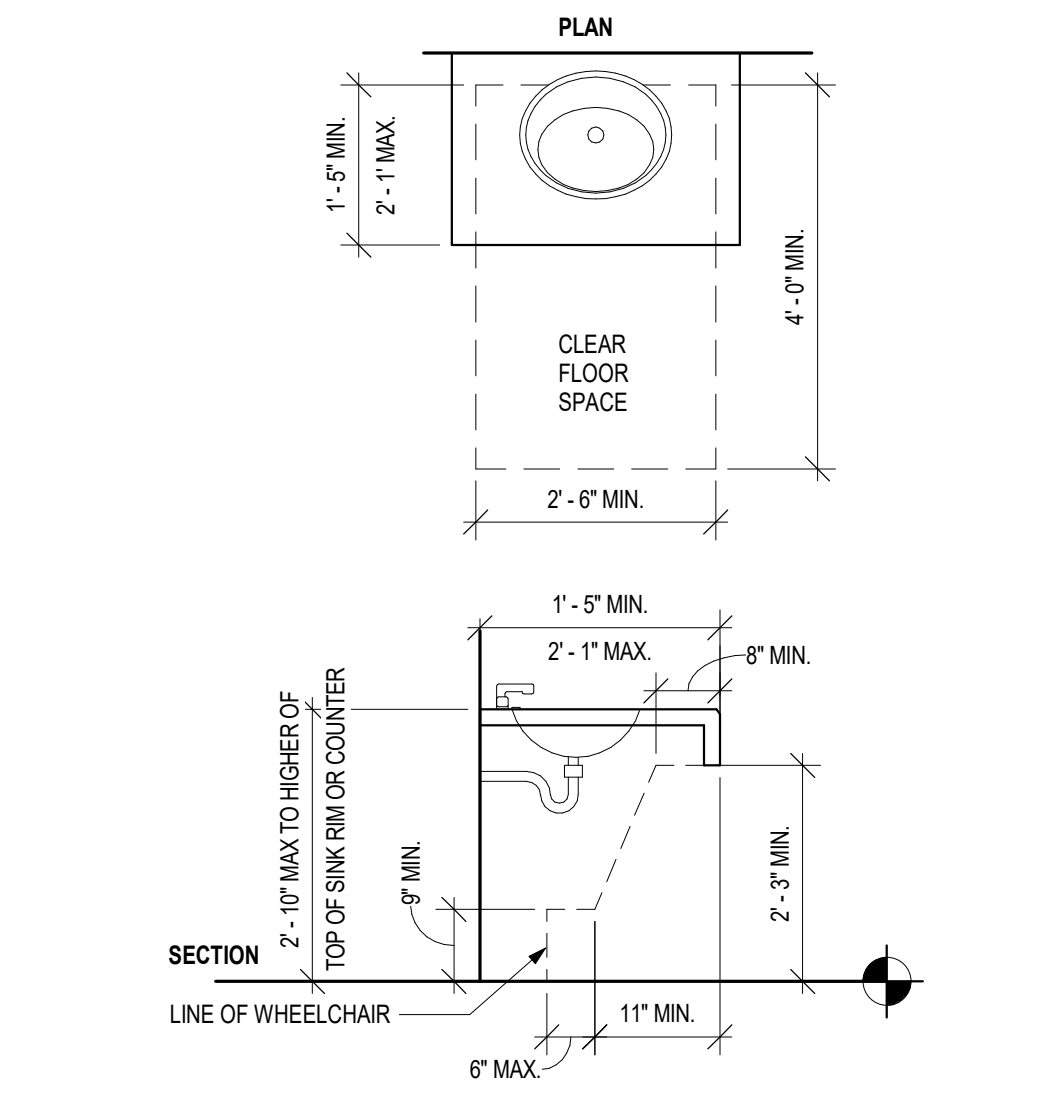
G6 TYP. BLOCKING DETAILS
 3/4" = 1'-0"



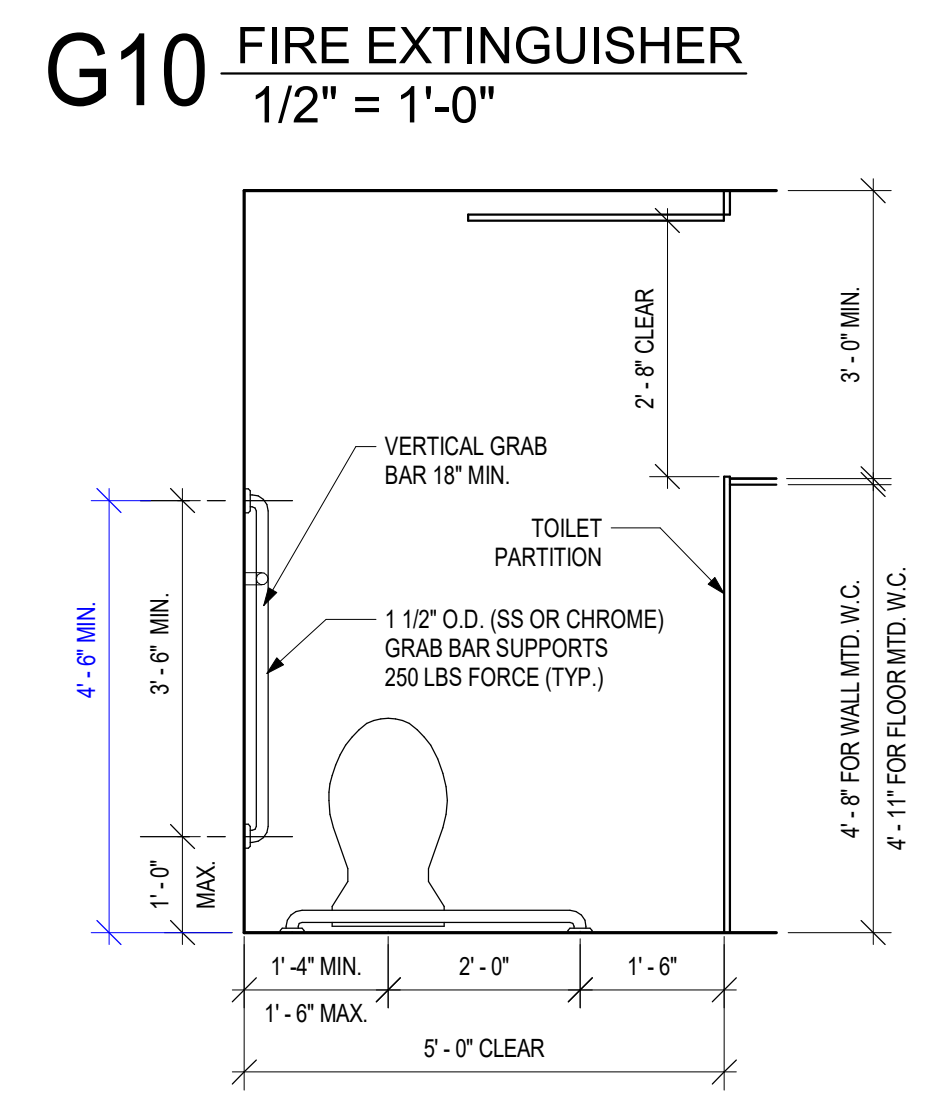
G2 BLOCKING SECTION
 3" = 1'-0"



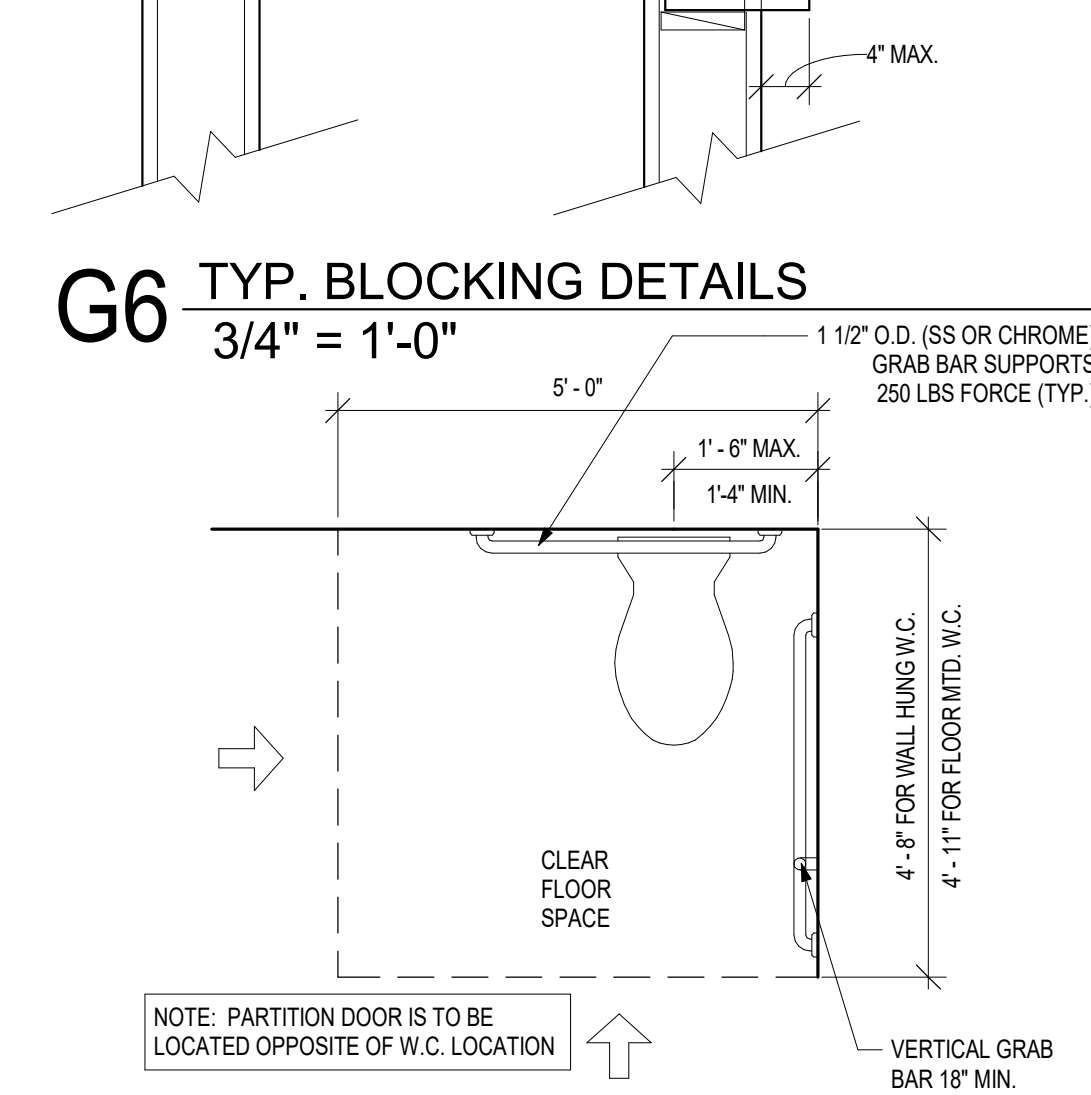
E12 SINK IN COUNTER CLEARANCES
 1/2" = 1'-0"



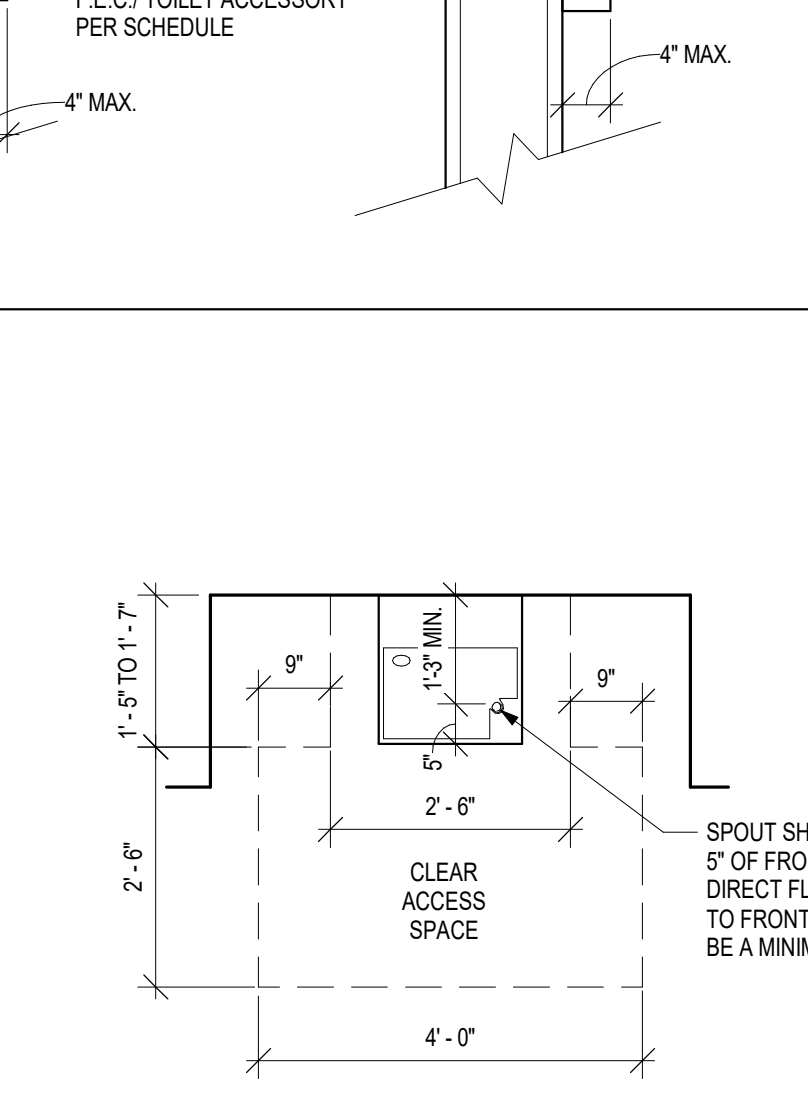
E10 ACCESSIBLE TOILET STALL
 1/2" = 1'-0"



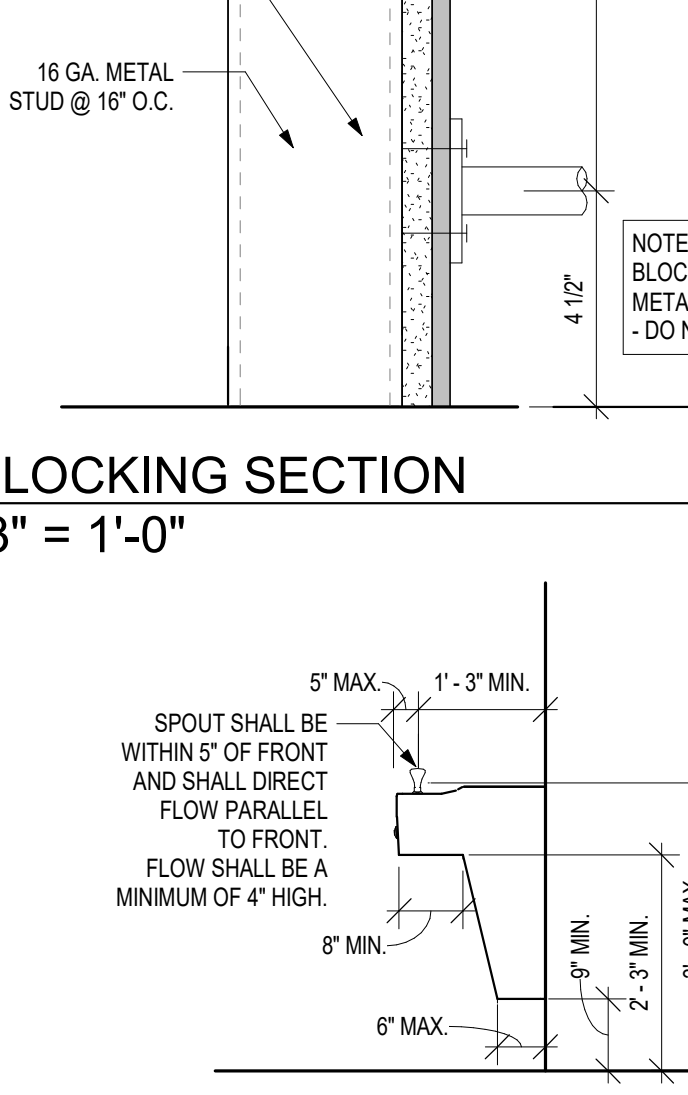
E8 ACCESSIBLE CLEAR FLOOR SPACE
 1/2" = 1'-0"



E4 E.W.C. - CLEAR SPACE
 1/2" = 1'-0"



E2 E.W.C. - SECTION
 1/2" = 1'-0"



MISCELLANEOUS ACCESSORY TYPICAL MOUNTING HEIGHTS

ACCESSORY TYPE	FINISH FLOOR	COMMENTS
FIRE EXTINGUISHER CABINET	5'-0" TO TOP OF CABINET INTERIOR	SEMI RECESSED
MANUAL FIRE PULL	4'-0" MAX TO TOP	SURFACE MOUNTED
FIRE STROBE/LIGHT/AUDIBLE ALARM	7'-0" MIN TO LINE OF CEILING	SURFACE MOUNTED
WALL MOUNTED EXIT SIGN	CENTER 2" ABOVE DOOR FRAME WHEN DIM ABOVE DOOR HEAD IS >= 12"	WALL MOUNTED
WALL MOUNTED HANDRAIL	SEE PLAN OR ELEV	SURFACE MOUNTED
WALL CLOCK	SEE PLAN OR ELEV	SURFACE MOUNTED
FABRIC COVERED TACK BOARD	SEE PLAN OR ELEV	SURFACE MOUNTED
MARKER BOARD	SEE PLAN OR ELEV	SURFACE MOUNTED
MOP & BROOM HOLDER	4'-0" U.N.O.	SURFACE MOUNTED
ROBE HOOK	4'-0" U.N.O.	SURFACE MOUNTED
ELAPSED TIME CLOCK	4'-0" U.N.O.	SURFACE MOUNTED
SOAP DISPENSER	48" AFF ACCESSIBLE TO TOP OF COUNTER	SURFACE MOUNTED
PAPER TOWEL DISPENSER	SEE W/ ELEV TO SPOUT	SURFACE MOUNTED
ALCOHOL DISPENSER	4'-0" U.N.O.	SURFACE MOUNTED

TOILET ACCESSORY TYPICAL MOUNTING HEIGHTS

ACCESSORY TYPE	FINISH FLOOR	COMMENTS
PAPER TOWEL DISPENSER	4'-0" U.N.O. TO DISP/SLOT	SURFACE MOUNTED
POWER HAND DRYER	4'-0" U.N.O. TO BOTTOM	SURFACE MOUNTED
PAPER TOWEL DISPENSER & TRASH RECEPTACLE	3'-6" U.N.O. TO DISP/SLOT	SEMI RECESSED
TOILET TISSUE DISPENSER	4'-0" U.N.O. TO SPOUT	SURFACE MOUNTED
SANITARY NAPKIN DISPOSAL	3'-4" U.N.O.	SURFACE MOUNTED
SANITARY NAPKIN DISPENSER	3'-4" U.N.O.	RECESSED & SURFACE MOUNTED
FRAMED VANITY MIRROR	3'-4" U.N.O. TO SPOUT	SURFACE MOUNTED
DIAPER CHANGING STATION	2'-0" U.N.O. TO SPOUT	SURFACE MOUNTED
SOAP DISPENSER	4'-0" U.N.O. TO SPOUT	COUNTERTOP MOUNTED
FOLDING SHOWER SEAT	4'-0" U.N.O. TO SPOUT	SURFACE MOUNTED
TOILET PARTITION	4'-0" U.N.O. TO SPOUT	WALL MOUNTED
URINAL SCREEN	4'-0" U.N.O. TO SPOUT	WALL MOUNTED

MISCELLANEOUS ACCESSORY TYPICAL MOUNTING HEIGHTS

ACCESSORY TYPE	FINISH FLOOR	COMMENTS
CLOSET HANGAR ROD & SHELF	8'-0" U.N.O.	WALL MOUNTED
WALL PHONE	4'-0" U.N.O.	SURFACE MOUNTED
TELEPHONE HUSING	4'-0" U.N.O. TO COUNTER	SURFACE MOUNTED
CUP DISPENSER	4'-0" U.N.O.	SURFACE MOUNTED
WALL SWITCH	4'-0" U.N.O.	SURFACE MOUNTED
TELEPHONE OUTLET	4'-0" U.N.O.	SURFACE MOUNTED
RECEPTACLE/ TELEPHONE/ DATA	4'-0" U.N.O.	SURFACE MOUNTED
RECEPTACLE/ TELEPHONE/ DATA	4'-0" U.N.O.	SURFACE MOUNTED
SPECIALTY EQUIP (IE, THERMOSTAT CARD READER, INTERCOM)	35"-48"	SURFACE MOUNTED
ELEVATOR CALL BUTTON	5'-0"	SURFACE MOUNTED
ELEVATOR VISIBLE SIGNAL INDICATOR	5'-0"	SURFACE MOUNTED
TACTILE CHARACTER INDICATOR	3'-4"	SURFACE MOUNTED
PANIC BAR	3'-4"	SURFACE MOUNTED
DOOR PULL	3'-4" U.N.O.	SURFACE MOUNTED
DOOR LATCH	3'-4"	SURFACE MOUNTED
ADA DOOR OPERATOR	3'-4"	VARIES

PLUMBING FIXTURE TYPICAL MOUNTING HEIGHTS

ACCESSORY TYPE	FINISH FLOOR	COMMENTS
SHOWER MIXING VALVE	3'-4" U.N.O.	WALL MOUNTED
SHOWER HEAD	6'-0" U.N.O.	WALL MOUNTED
HAND HELD SHOWER	6'-0" U.N.O.	WALL MOUNTED
LAVATORY	2'-10"	WALL MOUNTED
LAVATORY	2'-10"	COUNTER MOUNTED
CHILDREN'S DRINKING FOUNTAIN	2'-0" MAX TO SPOUT	WALL MOUNTED
SINGLE DRINKING FOUNTAIN	3'-0" TO SPOUT	WALL MOUNTED
DOUBLE DRINKING FOUNTAIN	3'-0" TO SPOUT	WALL MOUNTED
TOILET	17" MAX AT ACCESSIBLE	WALL/FLOOR MOUNTED
URINAL	2'-0" TYP	WALL MOUNTED

HEALTHCARE ACCESSORY TYPICAL MOUNTING HEIGHTS

ACCESSORY TYPE	FINISH FLOOR	COMMENTS
CLINIC SINK	2'-0" U.N.O.	WALL MOUNTED
SHARPS CONTAINER	4'-0" U.N.O.	SURFACE MOUNTED
FILM ILLUMINATOR	5'-0" U.N.O.	SURFACE MOUNTED
SPECIMEN PASS-THRU	3'-4" U.N.O.	THRU-WALL MOUNTED
OTOSCOPE	4'-0" U.N.O.	SURFACE MOUNTED
SPHYGMOMAN-METER	4'-0" U.N.O.	SURFACE MOUNTED
GLOVE BOX	4'-0" U.N.O. TO OPENING	SURFACE MOUNTED
MED-GAS SHUT-OFF	4'-0" U.N.O.	SURFACE MOUNTED
WALL HUNG COMPUTER	2'-0" U.N.O.	SURFACE MOUNTED

GRAB BAR TYPICAL MOUNTING HEIGHTS & TOILET ACCESSORY PLANS

ACCESSORY TYPE	FINISH FLOOR	COMMENTS
ADA TOILET GRAB BAR	38"	SURFACE MOUNTED
SHOWER STALL GRAB BAR	38"	SURFACE MOUNTED
ROLL-IN SHOWER GRAB BAR	38"	SURFACE MOUNTED
TYPICAL ACCESSORIES AT ACCESSIBLE TOILET	38"	NOTE: SANITARY NAPKIN DISPOSAL AT WOMEN'S & UNISEX ONLY
TYPICAL ADA SINK ENCLOSURE PANEL CLEARANCE	2'-0"	

A11 TYP. MOUNTING HEIGHTS
 1/4" = 1'-0"

HOOK FARMS
 SW 26TH TERRACE & SW PRYOR RD
 LEES SUMMIT, MO

PERMIT SET

REVISION DATES:

10/19/2021
 PROFESSIONAL SEAL

G002
 ISSUE DATE: 18 OCTOBER 2021
 COLLINS WEBB #: 20032

ACCESSIBILITY GUIDELINES

SPECIFICATIONS - PRODUCT & INSTALLATION GENERAL REQUIREMENTS

GENERAL REQUIREMENTS APPLICABLE TO ALL MATERIALS FOR THE PROJECT.

1. NO SUBSTITUTIONS OF MATERIALS WITHOUT COMPLETION OF A SUBSTITUTION REQUEST FORM & APPROVAL OF SUBSTITUTION BY BOTH ARCHITECT & OWNER PROJECT MANAGER. FORM CAN BE REQUESTED FROM ARCHITECT.
2. A CONDENSED SET OF SPECIFICATIONS ARE PROVIDED FOR THE PROJECT. STRICT ADHERANCE TO MANUFACTURER REQUIREMENTS AND INSTALLATION ARE REQUIRED TO BE FOLLOWED WITH SECTIONS PROVIDED WITHIN. IF REQUIRED THE ARCHITECT WILL ISSUE ADDITIONAL SECTIONS TO PROVIDE CLARITY TO PRODUCTS OR INSTALLATION REQUIREMENTS.

DIVISION 1 - GENERAL REQUIREMENTS

1. SEE ADMINISTRATIVE SPECIFICATION FOR GENERAL REQUIREMENTS RELATED TO ADMINISTRATION OF THIS CONTRACT.

A. CONTRACTOR LICENSES

1. THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED IN THE PROJECT SHALL BE REQUIRED TO OBTAIN AND PAY FOR ALL NECESSARY LICENSES AS REQUIRED BY ANY LAW OR AGENCIES HAVING JURISDICTION (AHJ) OVER THE PROJECT.

B. BUILDING PERMITS

1. THE GENERAL CONTRACTOR WILL PAY FOR ALL PERMITS REQUIRED BY ANY AGENCY HAVING JURISDICTION (AHJ) OVER THE PROJECT FOR ALL WORK TO BE PERFORMED BY THE GENERAL CONTRACTOR.

C. UTILITY FEES

1. THE CONTRACTOR SHALL PAY THE NECESSARY FEES TO CONNECT TO EXISTING UTILITIES AT THE PROPERTY LINE OR IN ADJACENT STREETS AND RIGHT OF WAY AS SPECIFIED, NECESSARY, AND/OR INCURRED IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL PAY ALL UTILITY COSTS (BILLS) DURING CONSTRUCTION UNTIL OWNER TAKES POSSESSION OF THE FACILITY OR THE FACILITY IS CERTIFIED AS SUBSTANTIALLY COMPLETE.

D. PROTECTION OF FINISHED WORK

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT FINISHED SURFACES. PROTECTION FOR FINISHES SUCH AS DOORS, WALLS AND FLOORS SHOULD BE PROVIDED AS REQUIRED. ANY DAMAGES TO THESE AREAS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE.

E. GENERAL CONDITIONS

1. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN DRAWINGS AND ANY DISCREPANCY OR CONFLICT BETWEEN ANY DRAWING AND ANY SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. NOTWITHSTANDING, DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ARCHITECT'S AND OWNERS ATTENTION AND CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROCESSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF THE WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH ARCHITECT'S INTERPRETATION.
2. THE GENERAL CONTRACTOR SHALL KEEP A COMPLETE PROTOTYPE SET OF DOCUMENTS ON THE PROJECT SITE AT ALL TIMES FOR REFERENCE DURING CONSTRUCTION.
3. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE CONTRACTOR'S BEST SKILLS AND ATTENTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
4. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER ALL JOB SITE SAFETY PROCEDURES AND POLICIES. THE GENERAL CONTRACTOR SHALL HAVE A SAFETY COORDINATOR AND BE RESPONSIBLE TO HOLD REGULARLY SCHEDULED SAFETY TRAINING WITH ALL JOB SITE PERSONNEL, INCLUDING ALL SUB CONTRACTOR PERSONNEL.
5. NEITHER THE ARCHITECTS OR THE OWNERS INSPECTION NOR FAILURE TO INSPECT SHALL RELIEVE THE CONTRACTOR OF ANY OBLIGATION HEREUNDER. IF ANY WORK FAILS TO CONFORM TO THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY REMEDY AND/OR REPLACE THE SAME AT THE CONTRACTOR'S EXPENSE AND ACCEPTANCE OR PAYMENT BY THE OWNER OR ARCHITECT SHALL CONSTITUTE A WAIVER OF THE FOREGOING AND NOTHING HEREIN SHALL EXCLUDE OR LIMIT ANY WARRANTIES IMPLIED BY LAW.
6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND NOT UNREASONABLY INTERFERE WITH TRAFFIC ON PUBLIC THROUGHFARES ADJACENT OR NEAR TO THE PROJECT SITE.
7. DO NOT SCALE DRAWINGS.

F. PROJECT REQUIREMENTS

1. THE GENERAL CONTRACTOR REPRESENTS THAT IT POSSESSES THE SKILLS REQUIRED FOR THE WORK, ASSUMES THE RESPONSIBILITIES OF AN EMPLOYER FOR PERFORMANCE OF THE WORK, AND ACTS AS AN EMPLOYER OF ONE OR MORE EMPLOYEES BY PAYING WAGES, DIRECTING ACTIVITIES AND PERFORMING OTHER SIMILAR FUNCTIONS. THE GENERAL CONTRACTOR IS AN INDEPENDENT CONTRACTOR, FREE TO DETERMINE THE MANNER IN WHICH THE WORK IS PERFORMED.
2. THE GENERAL CONTRACTOR SHALL PROVIDE, AND MAINTAIN IN GOOD WORKING ORDER, THE FOLLOWING ITEMS FOR USE BY THE PROJECT SUPERINTENDENT DAILY DURING THE ENTIRE DURATION OF THE PROJECT:
 - A. LADDER WITH INTERNET ACCESS.
 - B. EMAIL ACCESS.
 - C. A PRINTER/SCANNER.
 - D. CELL PHONE.
3. THE GENERAL CONTRACTOR SHALL HAVE A CONSTRUCTION SUPERINTENDENT ASSIGNED TO THIS PROJECT, AND THIS SUPERINTENDENT SHALL BE ON SITE EVERY DAY THERE IS ANY CONSTRUCTION ON THIS PROJECT. THE SUPERINTENDENT SHALL BE REACHABLE BY PHONE DURING NORMAL BUSINESS HOURS. ONCE ASSIGNED, THE SUPERINTENDENT SHALL NOT BE REMOVED OR REPLACED WITHOUT WRITTEN APPROVAL FROM OWNER & ARCHITECT, UNLESS SPECIFICALLY REQUESTED TO BE REPLACED BY OWNER.
4. THE SUPERINTENDENT WILL BE REACHABLE BY VIDEO (VIA EMAIL USING A DIGITAL CAMERA) TO THE OWNER & ARCHITECT EACH FRIDAY BY NOON CST, SHOWING THE PROGRESS OF CONSTRUCTION. THE GENERAL CONTRACTOR IS ENCOURAGED TO TAKE PHOTOS SEVERAL TIMES EACH WEEK TO KEEP PART OF AN INSTANT PROOF OF CONSTRUCTION PROGRESS, CONDITIONS, RECORD CONDITION AND AMOUNTS OF MATERIALS USED. PHOTOS SHOULD BE KEPT IN A SEPARATE FOLDER ON A USB DRIVE AND RECORDED CONSTRUCTION THAT VARIES FROM THE CDS (AS PART OF THE AS-BUILTS). ALL PHOTOS WILL HAVE A DATE STAMP.

G. INSPECTIONS/OBSERVATIONS

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OVERSEE CONSTRUCTION OF THE PROJECT, CONTINUALLY INSPECTING THE WORK, MATERIALS, AND WORKMANSHIP PROVIDED BY ALL OF HIS TRADESMEN, SUBCONTRACTORS, AND SUPPLIERS. EXCELLENCE IN QUALITY OF CONSTRUCTION CAN ONLY BE ACHIEVED IF THE CONTRACTOR ENFORCES HIGH STANDARDS OF ACCEPTABILITY. THE GENERAL CONTRACTOR CANNOT DELEGATE HIS RESPONSIBILITY TO THE SUBCONTRACTORS, BUT MUST CONTINUALLY MONITOR THE WORK OF EACH TRADE OF THE PROJECT.
2. IF IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE AND SCHEDULE ALL AGENCIES HAVING JURISDICTION (AHJ) INSPECTIONS NECESSARY TO OBTAIN CERTIFICATE OF OCCUPANCY (CERTIFICATE OF COMPLIANCE). THE DATE OF THE AGENCY INSPECTION, THE GENERAL CONTRACTOR SHOULD INSPECT THE PROJECT TO INSURE THAT CONSTRUCTION COMPLETES WITH THE AGENCY REQUIREMENTS. SCHEDULING FINAL INSPECTIONS WITH AGENCY REPRESENTATIVES WHEN THE PROJECT IS NOT COMPLETE MUST BE AVOIDED. COPIES OF FINAL INSPECTIONS MUST BE PROVIDED TO OWNER & ARCHITECT AS THEY ARE AVAILABLE.
3. PRIOR TO REQUESTING THE SUBSTANTIAL COMPLETION INSPECTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OWN PRE-SUBSTANTIAL COMPLETION INSPECTION OF THE CONSTRUCTION FOR QUALITY OF CONSTRUCTION AND COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.
4. THE FOLLOWING PEOPLE SHOULD BE IN ATTENDANCE FOR THE SUBSTANTIAL COMPLETION INSPECTION:
 - A. GENERAL CONTRACTOR
 - B. GENERAL CONTRACTOR SUPERINTENDENT
 - C. MECHANICAL CONTRACTOR
 - D. ELECTRICAL CONTRACTOR
 - E. PLUMBING CONTRACTOR
 - F. PAINTING CONTRACTOR
 - G. FLOORING CONTRACTOR
5. ITEMS TO BE SUBMITTED AS A PREREQUISITE TO THE REQUEST FOR THE CERTIFICATE OF SUBSTANTIAL COMPLETION AND OWNER ARCHITECT OBSERVATION OF ITEMS TO BE COMPLETED AND CORRECTED.
 - A. GENERAL CONTRACTOR CLOSE-OUT SUBMITS
 - B. HVAC TEST AND BALANCE REPORT
 - C. SPRINKLER SYSTEM ACCEPTANCE INSPECTION REPORT
 - D. COPY OF VIDEO OF COMPLETED SENIOR SYSTEM
6. THE REVIEW TEAM SHOULD PROCEED IN AN ORGANIZED MANNER THROUGHOUT THE BUILDING INSPECTING EACH SPACE OR ROOM. THE PUNCH LIST GENERATED BY THE SUBSTANTIAL COMPLETION INSPECTION TOUR IS TO BE PREPARED BY THE CONTRACTOR, ALONG WITH THE PUNCH LIST, THE ARCHITECT SHALL PREPARE THE CERTIFICATE OF SUBSTANTIAL COMPLETION.
7. IMMEDIATELY AFTER RECEIPT OF THE PUNCH LIST, THE GENERAL CONTRACTOR AND SUBCONTRACTORS ARE EXPECTED TO BEGIN CORRECTING ITEMS. AFTER COMPLETION OF PUNCH LIST, THE CONTRACTOR SHALL SUBMIT A CORRECTED PUNCH LIST TO THE ARCHITECT. THE ARCHITECT WILL REVIEW THE CORRECTED PUNCH LIST AND IF NECESSARY, THE ARCHITECT SHALL NOTIFY OWNER & ARCHITECT IN WRITING THAT FULL LIST OF ITEMS TO BE COMPLETED AND OR CORRECT IS FINALIZED.

H. RECORD/CLOSE-OUT DOCUMENTS

1. THE OWNER REQUESTS THE GENERAL CONTRACTOR AND SUBCONTRACTORS TO MAINTAIN AN ACCURATE, CURRENT SET OF RECORD DOCUMENTS (AS-BUILTS) AS CONSTRUCTION PROGRESSES. ALL PERTINENT INFORMATION RELATING TO THE PROJECT MUST BE TIMELY MAINTAINED ON THE AS-BUILTS. THE AS-BUILTS MUST BE MAINTAINED ON-SITE IN THE GENERAL CONTRACTOR'S OFFICE AND WILL NOT BE USED FOR ANY OTHER PURPOSE. SINCE THE OWNER WILL OWN AND OPERATE THE FACILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ALL PARTIES MAINTAIN ACCURATE INFORMATION REGARDING THE ACTUAL CONSTRUCTION OF THE PROJECT. ALL DEVIATIONS FROM THE CONTRACT SET OF DRAWINGS MUST BE NOTED ON THE AS-BUILTS IN RED WITH CLOUDS FOR CLEAR IDENTIFICATION. THE OWNER WILL REVIEW THE AS-BUILTS FOR ACCURACY AND COMPLETENESS MONTHLY, DURING THE PAYMENT APPLICATION REVIEW PROCESS. FAILURE TO POST CHANGES TO THE PROJECT ON THE AS-BUILTS AS IDENTIFIED DURING THE ON-SITE MONTHLY REVIEW WILL BE CAUSE TO SUSPEND PAYMENT UNTIL RECTIFIED. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENFORCE THE TIMELY POSTING OF AS-BUILT CHANGES WITH THE SUBCONTRACTORS.

I. FINAL CLOSE-OUT OF THE PROJECT

1. WITHIN THIRTY (30) CALENDAR DAYS AFTER THE FINAL PROJECT SUBSTANTIAL COMPLETION, THE GENERAL CONTRACTOR SHALL COMPLETE ALL CLOSE-OUT DOCUMENTS AND SUBMIT THEM TO THE OWNER FOR REVIEW. IF THE CONTRACTOR FAILS TO COMPLETE ITS REQUIREMENTS WITHIN THIS TIMELINE NOTED ABOVE, THE CONTRACTOR MAY BE SUBJECT TO ADDITIONAL ADMINISTRATION FEES.
- J. CLOSE-OUT DOCUMENTS**
1. THE CATEGORIES LISTED BELOW SHOULD BE SUBMITTED AT THE SAME TIME.
 - A. A FLASH DRIVE WITH ALL PHOTOS TAKEN DURING CONSTRUCTION.
 - B. ASIS, RIFS, CHANGE ORDERS AND ALL ADDENDUM ATTACHED AND POSTED TO THE AS-BUILT DRAWINGS.
 - C. AS-BUILT DRAWINGS, ONE HARD COPY TO REMAIN ON SITE AND IN PLAN TUBE, ONE ELECTRONIC COPY TO BE SENT WITH CLOSE-OUT PAPERWORK.
 - D. PROVIDE ALL APPROVED SUBMITTALS.
 - E. OPERATION AND MAINTENANCE MANUALS (OMM) - PROVIDE OMM MANUALS BOXED AND BOUND. THIS ITEM IS OF SIGNIFICANT IMPORTANCE TO MSF FUTURE MAINTENANCE ACTIVITIES.
 - F. ALL HVAC TEST AND BALANCE REPORTS.
 - G. RELEASE OF LIEN (AIA FORM 709A), PAYMENT OF DEBT (AIA FORM 706).
 - H. WARRANTIES, CERTIFICATES, AFFIDAVITS.
 2. ALL INFORMATION INCLUDED IN THIS CATEGORY WILL BE FURNISHED IN ONE (1) COPY AND BOUND IN A STURDY THREE-RING BINDER WITH A LABEL ON THE OUTSIDE READING "GENERAL CLOSE-OUT DOCUMENTS" TO INCLUDE AN INDEX OF THE CONTENTS. ALL AIA DOCUMENTS WILL BE ORIGINAL, WITH RED LETTERING ON THE BOTTOM OF THE FORM AND NOTARIZED. IF THE ELECTRONIC VERSION IS USED, A COPY WITH ORIGINAL SIGNATURES WILL BE SUBMITTED. THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR WILL HAVE SEPARATE TABS IDENTIFYING EACH BY NAME. THE GENERAL CONTRACTOR WILL LIST EACH SUBCONTRACTOR ALPHABETICALLY AND WILL CHECK TO INSURE THAT A "RELEASE OF LIEN - AIA FORM 709A" AND A "PAYMENT OF DEBT" FORM (706) IS INCLUDED FOR HIMSELF AND EACH SUBCONTRACTOR. THE GENERAL CONTRACTOR WILL INCLUDE A "CONSENT OF SURETY" - AIA FORM 707. IN ADDITION, THE GENERAL CONTRACTOR WILL INCLUDE BEHIND HIS TAB THE FOLLOWING INFORMATION:
 - A. LIST OF NAMES, BUSINESS ADDRESSES, PHONE NUMBERS AND EMAIL ADDRESSES FOR THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR.
 - B. AN ANNOTATED COPY OF THE SUBSTANTIAL COMPLETION PUNCH LIST INDICATING ACTION TAKEN ON EACH ITEM.
 - C. WARRANTIES, CERTIFICATES AND AFFIDAVITS SHALL BE INCLUDED FOR ANY EQUIPMENT, MATERIALS OR SYSTEMS COMBINED WITH ALL OF THE ABOVE INFORMATION AND PLACED BEHIND THE TAB OF THE CONTRACTOR THAT ISSUED IT.

DIVISION 4 - MASONRY

4.1 MASONRY VENEERS & SIMULATED STONES

- A. SUBMITTALS: PRODUCT DATA, AND SAMPLES INDICATING PRODUCTS TYPES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS AND CONNECTION DETAILS TO SUBSTRATES. PROVIDE GROUT TYPES AND COLOR OR SAMPLES.

B. BASIS OF DESIGN: DUTCH QUALITY STONE, FALLBROOK STACK LEDGE

C. MATERIALS

1. MORTAR: TYPE "N" TINTED TO A COLOR SELECTED BY OWNER.
2. METAL LATH SHALL BE MINIMUM 2.5 LB. PAPER BACKED GALVANIZED METAL LATH (DIAMOND MESH) ATTACHED WITH TYPE 2-12 GALVANIZED NAILS. GALVANIZED FLASHING MAY ALSO BE USED.
3. IN WALL AND CAP FLASHING SHALL BE CARLISLE "PRE-KLEENED" EPDM OR COMPARABLE PRODUCTS MANUFACTURED BY W. R. GRACE OR ALCO.
4. BUILDING FELT SHALL BE 15# ASPHALT IMPREGNATED BUILDING FELT OVER WEATHER BARRIER OVER WALL SHEATHING.

C. FABRICATIONS: FABRICATE ITEMS IN LARGEST PRACTICAL SECTIONS FOR DELIVERY TO SITE.

F. INSTALLATION

1. FOLLOW MANUFACTURER RECOMMENDED INSTALLATION INSTRUCTIONS TO MAINTAIN WARRANTY.
2. APPLY MORTAR 1/2" TO 3/4" THICK TO PREPARED SURFACE AREA USING A PLASTERER'S OR MASONS TROWEL AND LAY SIMULATED STONE UNITS LEVEL AND TRUE TO LINE IN FULL BEDS OF MORTAR. ALL JOINTS MUST BE COMPLETELY FILLED. APPLY ONLY ENOUGH MORTAR TO ALLOW STONES TO BE SET BEFORE MORTAR BEGINS TO HARDEN.
3. ALL JOINTS IN SIMULATED STONE WORK SHALL NOT EXCEED AN AVERAGE OF 1/2" IN WIDTH.
4. RETAIN 1/2" DEEP X 1/4" WIDE SEALANT JOINTS AT PERIMETER OF EXTERIOR DOORS, WINDOW FRAMES AND OTHER WALL OPENINGS.
5. DO NOT ALLOW MORTAR DROPPINGS TO HARDEN ON EXPOSED SURFACES.
6. WALLS SHALL BE COVERED WITH 15 LB. BUILDING FELT AND GALVANIZED METAL LATH SHALL BE INSTALLED PRIOR TO APPLICATION OF THE MORTAR BASE. MORTAR BASE MAY BE APPLIED DIRECTLY TO MASONRY BACK-UP.
7. UPON FINAL COMPLETION OF STONE PRODUCT INSTALLATION, APPLY W. R. MEADOWS-DEGRA SEAL NATURAL PRODUCT. CONSULT WITH REP CONCERNING PROPER APPLICATION.

DIVISION 5 - WOOD AND PLASTICS

06 1000-ROUGH CARPENTRY

1. PROVIDE SUFFICIENT BLOCKING AS REQUIRED TO SECURE ITEMS WITHOUT COMPROMISE TO INTEGRITY.
2. PRESERVATIVE TREATED LUMBER IS REQUIRED FOR ALL ITEMS TO REMAIN IN CONTACT WITH CONCRETE OR MASONRY TO CONFORM TO AIA/SP STANDARD 5.
3. PLYWOOD SHALL BE CD GRADE APA PR OR YELLOW PINE.
4. BLOCKING SHALL BE CLOSELY FITTED, ACCURATELY SET TO REQUIRED LISTS & LEVELS. SECURELY CONNECTED & RIGIDLY FIXED IN PLACE, USING NAILS, SCREWS, AND BOLTS AS INDICATED OR REQUIRED BY GOOD PRACTICE AND MANUFACTURER'S RECOMMENDATIONS.
5. COMPLETE FINAL INSPECTIONS OF CONCEALED BLOCKING IN COORDINATION WITH CONTRACT DOCUMENTS PRIOR TO FINISH INSTALLATIONS.

06 2000 - FINISH CARPENTRY

- A. SUBMITTALS: SAMPLES OF FINISH MATERIALS, CATALOG CUTS OF HARDWARE, AND SHOP DRAWINGS INCLUDING DIMENSIONED PLANS, ELEVATIONS, AND SECTIONS.

B. QUALITY STANDARD: ARCHITECTURAL WOODWORK INSTITUTES' ARCHITECTURAL WOODWORK QUALITY STANDARDS"

C. MATERIALS

1. SOFTWOOD LUMBER: MAXIMUM MOISTURE CONTENT OF 8 PERCENT, WITH VERTICAL GRAIN, OF QUALITY SUITABLE FOR SCHEDULED FINISH.
2. HARDWOOD LUMBER: MAXIMUM MOISTURE CONTENT OF 6 PERCENT, WITH VERTICAL GRAIN, OF QUALITY SUITABLE FOR SCHEDULED FINISH.
3. SHEET MATERIALS: SOFTWOOD PLYWOOD: EXPONED TO VIEW: FACE SPECIES AS INDICATED, PLYAN SAUN, MEDIUM DENSITY FIBERBOARD CORE, PS 1 GRADE A-8, GLEU TYPE AS RECOMMENDED FOR APPLICATION.

D. INSTALLATION:

1. DO NOT DELIVER OR INSTALL WOODWORK UNTIL BUILDING IS ENCLOSED AND WOODWORK IS CONDITIONED TO PREVAILING CONDITIONS.
2. INSTALL WOODWORK LEVEL AND PLUMB AND SHIM AS REQUIRED WITH CONCEALED SHIMS TO 2 TOLERANCE OF 1/8" AND TO COMPLY WITH REFERENCE QUALITY STANDARD FOR GRADE SPECIFIED.
3. SCRIBE AND CUT WOODWORK TO FIT ADJOINING WORK, SEAL CUT SURFACES, AND REPAIR DAMAGED FINISH AT CUTS.
4. INSTALL TRIM WITH MINIMUM NUMBER OF JOINTS POSSIBLE USING FULL-LENGTH PIECES TO GREATEST EXTENT POSSIBLE. STAGGER JOINTS IN ADJACENT AND RELATED MEMBERS.
5. LUMBER OR TRANSPARENT FINISH (STAINED OR CLEAR): USE PIECES MADE OF SOLID LUMBER STOCK.
6. LUMBER FOR PAINTED FINISH: AT CONTRACTOR'S OPTION, USE PIECES WHICH ARE EITHER GLEU-UP OR MADE OF SOLID LUMBER STOCK.
7. DISCARD UNITS OF MATERIAL WHICH ARE UNSOUND, WARPED, BOWED, TWISTED, IMPROPERLY TREATED, NOT ADEQUATELY SEASONED OR TOO SMALL TO FABRICATE WORK WITH MINIMUM OF APPLICABLE REQUIREMENTS OF ICC-ES AC408.
8. LIQUID FLASHING: ONE-PART, FAST CURING, NON-SAG, ELASTOMERIC, GUN GRADE, TROUBLEABLE LIQUID FLASHING.
9. INSTALL THE WORK PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS. SHIM AS REQUIRED.
10. SAND WORK SMOOTH AND SET EXPOSED NAILS AND SCREWS.
11. APPLY WOOD FILLER IN EXPOSED NAIL AND SCREW INDENTATIONS.
12. FINISH WORK SHALL BE SMOOTH, FREE FROM ABRASION, TOOL MARKS, RAISED GRAIN MARKINGS, OR SIMILAR DEFECTS ON EXPOSED SURFACES.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

07 2500 - WEATHER BARRIERS

- A. SUBMITTALS: PRODUCT DATA; PROVIDE DATA ON MATERIAL CHARACTERISTICS, SHOP DRAWINGS; PROVIDE DRAWINGS OF SPECIAL JOINT CONDITIONS.

B. MOCK-UP: INSTALL AIR BARRIER, VAPOR RETARDER, AND WATER-RESISTIVE BARRIER MATERIALS IN MOCK-UP.

C. PRODUCTS: AIR BARRIER, FLUID APPLIED; VAPOR PERMEABLE, ELASTOMERIC WATERPROOFING.

D. BASIS OF DESIGN: BASF CORPORATION, MASTERSEAL AWB 866.

E. ACCESSORIES:

1. SEALANTS, TAPES, AND ACCESSORIES FOR SEALING WEATHER BARRIER AND SEALING WEATHER BARRIER TO SUBSTRATE SUBSTRATES: AS SPECIFIED OR AS RECOMMENDED BY WEATHER BARRIER MANUFACTURER.
2. FLEXIBLE FLASHING: SHEATHING FABRIC SATURATED WITH AIR BARRIER COATING AND COMPLYING WITH THE APPLICABLE REQUIREMENTS OF ICC-ES AC408.
3. LIQUID FLASHING: ONE-PART, FAST CURING, NON-SAG, ELASTOMERIC, GUN GRADE, TROUBLEABLE LIQUID FLASHING.

F. PREPARATION:

1. VERIFY THAT SURFACES AND CONDITIONS ARE READY TO ACCEPT THE WORK OF THIS SECTION.
2. REMOVE PROJECTIONS, PROTRUDING FASTENERS, AND LOOSE OR FOREIGN MATTER THAT MIGHT INTERFERE WITH PROPER INSTALLATION.
3. CLEAN AND PRIME SUBSTRATE SURFACES TO RECEIVE ADHESIVES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

G. INSTALLATION:

1. INSTALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. AIR BARRIERS: INSTALL CONTINUOUS AIR TIGHT BARRIER OVER SURFACES INDICATED, WITH SEALED SEAMS AND WITH SEALED JOINTS TO ADJACENT SURFACES.
3. PREPARE SUBSTRATE IN MANNER RECOMMENDED BY COATING MANUFACTURER; TREAT JOINTS IN SUBSTRATE AND BETWEEN DISSIMILAR MATERIALS AS RECOMMENDED BY MANUFACTURER.
4. MASTIC COATING: INSTALL BY TROWEL OR ROLLER TO MINIMUM THICKNESS OF 1/4 INCH; USE SHEET SEAL TO JOIN TO ADJACENT CONSTRUCTION; SEAL AIR TIGHT WITH SEALANT.
5. USING FLASHING TO SEAL TO ADJACENT CONSTRUCTION AND TO BRIDGE JOINTS.
6. INSTALL FLASHING OVER SILLS, COVERING ENTIRE SILL FRAME MEMBER, EXTENDING AT LEAST 5 INCHES ONTO WEATHER BARRIER AND AT LEAST 6 INCHES UP JAMBS; MECHANICALLY FASTEN STRETCHED EDGES.
7. AT OPENINGS TO BE FILLED WITH FRAMES HAVING NAILING FLANGES, SEAL HEAD AND JAMB FLANGES USING A CONTINUOUS BEAD OF SEALANT COMPRESSED BY FLANGE AND COVER FLANGES WITH SEALING TAPE AT LEAST 4 INCHES WIDE; DO NOT SEAL SILL FLANGE.
8. AT OPENINGS TO BE FILLED WITH NON-FLANGED FRAMES, SEAL WEATHER BARRIER TO EACH SIDE OF OPENING FRAMING, USING FLASHING AT LEAST 3 INCHES WIDE, COVERING ENTIRE DEPTH OF FRAMING.
9. AT HEAD OF OPENINGS, INSTALL FLASHING UNDER WEATHER BARRIER EXTENDING AT LEAST 2 INCHES BEYOND FACE OF JAMBS; SEAL WEATHER BARRIER TO FLASHING.
10. AT INTERIOR FACE OF OPENINGS, SEAL GAP BETWEEN WINDOW/DOOR FRAME AND ROUGH FRAMING, USING JOINT SEALANT OVER BACKER ROD.

07 4113 - METAL ROOFING & ACCESSORIES

A. SUBMITTALS: PRODUCT DATA, AND SAMPLES OF EACH PRODUCT AND COLOR OPTIONS.

- B. WARRANTY: SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF METAL PANEL SYSTEMS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.

1. WARRANTY PERIOD: TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

SPECIAL WARRANTY ON PANEL FINISHES: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR FINISH OR REPLACE METAL PANELS THAT SHOW EVIDENCE OF DETERIORATION OF FACTORY-APPLIED FINISHES WITHIN SPECIFIED WARRANTY PERIOD.

1. FINISH WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

SPECIAL WEATHERIGHTNESS WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE STANDING-SEAL METAL ROOF PANEL ASSEMBLIES THAT FAIL TO REMAIN WEATHERTIGHT, INCLUDING LEAKS, WITHIN SPECIFIED WARRANTY PERIOD.

1. WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

- C. BASIS OF DESIGN: DREXEL METALS
1. METALLIC-COATED STEEL SHEET: ZINC-COATED (GALVANIZED) STEEL SHEET COMPLYING WITH ASTM A 653A 653M (90) (275) COATING DESIGNATION, OR ALUMINUM-ZINC ALLOY-COATED STEEL SHEET COMPLYING WITH ASTM A 792A 792M, CLASS AZ50 (CLASS AZM150) COATING DESIGNATION; STRUCTURAL QUALITY, PREPARED BY THE COIL-COATING PROCESS TO COMPLY WITH ASTM A 792A 792M.
2. NOMINAL THICKNESS: 0.054 INCH, 22 GA.
3. EXTERIOR FINISH: TWO-COAT FLUOROPOLYMER.
4. COLOR: AS SELECTED BY ARCHITECT & OWNER.
5. PANEL COVERAGE: NOMINAL 18 INCHES.
6. PANEL HEIGHT: 1.0 INCH.

D. MATERIALS:

1. SELF-ADHERING, HIGH-TEMPERATURE UNDERLAYMENT: PROVIDE SELF-ADHERING, COLD-APPLIED, SHEET UNDERLAYMENT, A MINIMUM OF 30 MILS THICK, CONSISTING OF SLIP-RESISTANT, POLYETHYLENE-FILM TOP SURFACE, LAMINATED TO A LAYER OF BUTYL OR SBS-MODIFIED ASPHALT ADHESIVE, WITH RELEASE-PAPER BACKING, PROVIDE PRIMER WHEN RECOMMENDED BY UNDERLAYMENT MANUFACTURER.
2. FELT UNDERLAYMENT: ASTM D 2260 22M, TYPE (NO. 30), ASPHALT-SATURATED ORGANIC FELTS.
3. SLIP SHEET: MANUFACTURER'S RECOMMENDED SLIP SHEET, OF THE REQUIRED APPLICATION.
4. MISCELLANEOUS METAL SUBFRAMING AND FURRING: ASTM C 845, COLD-FORMED, METALLIC-COATED STEEL SHEET, ASTM A 653A 653M, (90) (275) HOT-DIP GALVANIZED COATING DESIGNATION OR ASTM A 792A 792M, CLASS AZ50 (CLASS AZM150) COATING DESIGNATION UNLESS OTHERWISE INDICATED. PROVIDE MANUFACTURER'S STANDARD SPECIFICATIONS AS REQUIRED FOR SUPPORT AND ALIGNMENT OF METAL PANEL SYSTEM.

E. ACCESSORIES:

1. PANEL ACCESSORIES: PROVIDE COMPONENTS REQUIRED FOR A COMPLETE, WEATHERTIGHT PANEL SYSTEM INCLUDING TRIM CORNICES, MULLIONS, SILLS, CORNER UNITS, CUTS, FLASHINGS, SEALANTS, GASKETS, FILLERS, CLOSURE STRIPS, AND SIMILAR ITEMS. MATCH MATERIAL AND FINISH OF METAL PANELS UNLESS OTHERWISE INDICATED.
2. SLIP SHEET: MANUFACTURER'S RECOMMENDED SLIP SHEET, OF THE REQUIRED APPLICATION.
3. BACKING PLATES: PROVIDE METAL BACKING PLATES AT PANEL END SPLICES, FABRICATED FROM MATERIAL RECOMMENDED BY MANUFACTURER.
4. FLASHING AND TRIM: PROVIDE FLASHING AND TRIM FORMED FROM SAME MATERIAL AS METAL PANELS AS REQUIRED TO SEAL AGAINST WEATHER AND TO PROVIDE FINISHED APPEARANCE. LOCATIONS INCLUDE, BUT ARE NOT LIMITED TO, EAVES, RAKES, CORNERS, BASES, FRAMED OPENINGS, RIDGES, FASCIAE, AND FILLERS. FINISH FLASHING AND TRIM WITH SAME FINISH SYSTEM AS ADJACENT METAL PANELS.
5. PANEL FASTENERS: SELF-TAPPING SCREWS DESIGNED TO WITHSTAND DESIGN LOADS.
6. PANEL SEALANTS: PROVIDE SEALANT TYPE RECOMMENDED BY MANUFACTURER THAT ARE COMPATIBLE WITH PANEL MATERIALS, ARE NON-STAINING, AND DO NOT DAMAGE PANEL FINISH.
1. SEALANT TAPE: PRESSURE-SENSITIVE, 100 PERCENT SOLIDS, GRAY POLYISOBUTYLENE COMPOUND SEALANT TAPE WITH RELEASE-PAPER BACKING, 1/2 INCH WIDE AND 1/8 INCH THICK.
2. JOINT SEALANT: ASTM C 820, AS RECOMMENDED IN WRITING BY METAL PANEL MANUFACTURER.
3. BUTYL-RUBBER-BASED, SOLVENT-RELEASE SEALANT: ASTM C 1311.

F. INSTALLATION:

1. INSTALL ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

07 4643 - ENGINEERED SIDING

A. SUBMITTALS: PRODUCT DATA, AND SAMPLES OF LOCATIONS FOR EACH TYPE OF SIDING

B. BASIS OF DESIGN:

1. VERTICAL SIDING: LP SMARTSIDE PANEL SIDING, CEDAR TEXTURE PANEL.
2. HORIZONTAL SIDING: LP SMARTSIDE PANEL SIDING, CEDAR TEXTURE PANEL.
3. SOFFIT, VENTED/ NONVENTED: LP SMARTSIDE SOFFIT, CEDAR TEXTURE.

C. ACCESSORY MATERIALS

1. EXTERIOR TRIM SHALL BE LOUISIANA-PACIFIC SMARTSIDE TRIM-FASCIA TREATED ENGINEERED WOOD TRIM OR APPROVED EQUAL, UNLESS OTHERWISE INDICATED, IN SIZES INDICATED ON THE DRAWINGS.
2. CELLULAR PVC TRIM SHALL BE AS MANUFACTURED BY AZEK BUILDING PRODUCTS OR APPROVED EQUAL. GLEU-UP MEMBERS SHALL BE GLEUED WITH MANUFACTURER'S STANDARD ADHESIVE TO CREATE A CHEMICAL BOND AND CUT TO SHAPES INDICATED.

D. INSTALLATION:

1. GENERAL: INSTALL PRODUCTS IN ACCORDANCE WITH THE LATEST INSTALLATION GUIDELINES OF THE MANUFACTURER AND ALL APPLICABLE BUILDING CODES AND OTHER LAWS, RULES, REGULATIONS AND ORDINANCES. REVIEW ALL MANUFACTURER INSTALLATION, MAINTENANCE INSTRUCTIONS, AND OTHER APPLICABLE DOCUMENTS BEFORE INSTALLATION.

07 9200 - JOINT SEALANTS

A. SUBMITTALS: PRODUCT DATA, AND SCHEDULE OF LOCATIONS FOR EACH TYPE OF SEALANT SUBMITTED.

B. ENVIRONMENTAL LIMITATIONS: DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR ARE BELOW 40 deg F (4 deg C).

C. COMPATIBILITY: PROVIDE JOINT SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER SERVICE AND APPLICATION CONDITIONS.

D. JOINT SEALANTS:

1. INTERIOR TOILET ROOMS, AND AROUND PLUMBING FIXTURES: SINGLE COMPONENT, MILDEW-RESISTANT SILICONE SEALANT, ASTM C 920, TYPE S, GRADE NS, CLASS 25; USES NT, G, A, AND D; FORMULATED WITH NONSIC, MILDEW-RESISTANT, PAINTABLE, ACRYLIC EMULSION SEALANT COMPLYING WITH ASTM C 834.
2. EXTERIOR SEALANTS: AROUND FINISHED TRIM, WINDOWS AND DOORS SHALL BE PAINTABLE SILICONE SEALANT.

E. JOINT SEALANT BACKING: CYLINDRICAL CLOSED CELL PVC ROD COMPLYING WITH ASTM C430; SIZE 30% TO 50% LARGER THAN JOINT WIDTH.

F. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY JOINT MFR. FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLUXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT.

G. INSTALLATION: COMPLY WITH ASTM C 1193, ASTM C 919 FOR ACoustICAL JOINTS, AND AS FOLLOWS:

1. REMOVE ALL LOOSE MATERIAL, CLEAN AND PRIME JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, AND PROTECT ADJACENT SURFACES.
2. INSTALL BOND-BREAKER TAPE WHERE JOINT BACKINGS ARE NOT USED.
3. INSTALL SEALANT TOOLED CONCAVE, FREE OF AIR POCKETS, FOREIGN EMBEDDED MATTER, RIDGES, AND SAGS, AND PROTECT UNTIL FULLY CURED; SEALANT WITH DUST AND DEBRIS EMBEDDED IN SURFACE SHALL BE CAUSE FOR REJECTION.

DIVISION 8 - OPENINGS

08 0671 - DOOR HARDWARE

- A. SUBMITTALS: PRODUCT DATA AND HARDWARE SCHEDULE INDICATING HARDWARE ITEM, FINISH, AND QUANTITY LOCATED ON EACH DOOR WITH DOOR AND HARDWARE SET NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS. REFER TO ARCHITECTURAL PLANS AND HARDWARE SCHEDULES PROVIDED.

1. HARDWARE SUPPLIER SHALL SUBMIT FOUR COPIES OF FINAL HARDWARE SCHEDULE AT EARLIEST POSSIBLE DATE PARTICULARLY WHERE ACCEPTANCE OF HARDWARE SCHEDULE MUST PRECEDE FABRICATION OF OTHER WORK WHICH IS CRITICAL IN THE PROJECT CONSTRUCTION SCHEDULE. INCLUDE WITH SCHEDULE SHOP DRAWINGS OF OTHER WORK AFFECTED BY BUILDERS HARDWARE, AND OTHER INFORMATION ESSENTIAL TO THE COORDINATE REVIEW OF HARDWARE SCHEDULE.

2. KEYING SCHEDULE: SUBMIT SEPARATE DETAILED SCHEDULE INDICATING CLEARLY HOW THE OWNERS FINAL INSTRUCTIONS ON KEYING OF LOCKS HAS BEEN FULFILLED, ALL KEYING SHALL BE COORDINATED WITH THE OWNER.

B. PRODUCTS: REFER TO HARDWARE SCHEDULE AND ARCHITECTURAL DRAWINGS.

1. STRIKES: PROVIDE MANUFACTURER'S STANDARD WROUGHT BOX STRIKE FOR EACH LATCH OR LOCK BOLT, WITH CURVED LIP EXTENDED TO PROTECT FRAME. FINISH TO MATCH HARDWARE SET. PROVIDE STANDARD (OPEN) STRIKE PLATES FOR EXTERIOR DOORS WHERE WOOD DOOR FRAMES ARE USED.
2. IN GENERAL, HARDWARE FINISH SHALL BE (BLACK) UNLESS SPECIFIED DIFFERENTLY ON HARDWARE SCHEDULE.
3. SUPPLY/OUT SWINGING EXTERIOR DOORS WITH NON REMOVABLE PINS.
4. PROVIDE 2 KEY SYSTEM, NO DEADBOLT, A SEPARATE MASTER KEY TO ALL SPACES, COORDINATE LOCKING WITH OWNER.
5. HOME OWNERS TO HAVE KEY ACCESS TO GATES AND BATHROOMS.
6. HOA MANAGEMENT (MASTER KEY) - FRONT GATE, BATHROOMS, STORAGE ROOM, POOL EQUIPMENT.

C. INSTALLATION:

1. MOUNT HARDWARE UNITS AT HEIGHTS INDICATED IN RECOMMENDED LOCATIONS FOR BUILDERS HARDWARE FOR STANDARD STEEL DOORS AND FRAMES BY THE DOOR AND HARDWARE INSTITUTE, EXCEPT AS SPECIFICALLY INDICATED OR REQUIRED TO COMPLY WITH GOVERNING REGULATIONS, AND EXCEPT AS MAY BE OTHERWISE DIRECTED BY ARCHITECT. MOUNT HARDWARE IN UNITS DESIGNATED FOR USE BY THE HANDICAPPED AT HEIGHTS RECOMMENDED FOR USE BY THE HANDICAPPED.
2. INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. PROVIDER CUTTING AND FITTING IS REQUIRED TO INSTALL HARDWARE ONTO DR OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, COORDINATE REMOVAL, STORAGE AND REINSTALLATION OR APPLICATION OF SURFACE PROTECTIONS WITH FINISHING WORK SPECIFIED IN THE DIVISION 9 SECTIONS. DO NOT INSTALL SURFACE MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE.
3. SET UNITS LEVEL, PLUMB AND TRUE TO LINE AND LOCATION. ADJUST AND REINFORCE THE ATTACHMENT SUBSTRATE AS NECESSARY FOR PROPER INSTALLATION AND OPERATION.
4. DRILL AND COUNTERSINK UNITS WHICH ARE NOT FACTORY PREPARED FOR ANCHORAGE FAST

SPECIFICATIONS - PRODUCT & INSTALLATION GENERAL REQUIREMENTS

08 3100 - ACCESS DOORS AND PANELS
A. SUBMITTALS: PRODUCT DATA.

- B. BASIS OF DESIGN: J.L. INDUSTRIES, TM MULTI-PURPOSE FLUSH STEEL ACCESS PANEL.
- C. PRODUCTS: PRIME-PAINTED FLUSH, UNINSULATED ACCESS DOORS FOR WALLS WITH TRIMLESS FRAME AND OPERATED LOCK FLUSH WITH FINISHED SURFACE.
- D. INSTALLATION: INSTALL FLUSH TO FINISHED DRYWALL SURFACE WITH FRAME TAPED AND SANDED FLUSH WITH WALL OR CEILING SURFACE AND FINISH TO MATCH ADJACENT SURFACE.

08 8113 - ALUMINUM WINDOWS

- A. SUBMITTALS: PRODUCT DATA: PROVIDE COMPONENT DIMENSIONS, DESCRIBE COMPONENTS WITHIN ASSEMBLY, ANCHORAGE AND FASTENERS, GLASS AND INFLU. DOOR HARDWARE, INTERNAL DRAINAGE DETAILS.
- 1. SHOP DRAWINGS: INDICATE SYSTEM DIMENSIONS, FRAMED OPENING REQUIREMENTS AND TOLERANCES, AFFECTED RELATED WORK, EXPANSION AND CONTRACTION JOINT LOCATION AND DETAILS, AND FIELD WELDING REQUIRED.
- B. WARRANTY: WARRANTY: SUBMIT MANUFACTURER WARRANTY AND ENSURE FORMS HAVE BEEN COMPLETED IN OWNER'S NAME AND REGISTERED WITH MANUFACTURER.
- 1. CORRECT DEFECTIVE WORK WITHIN A FIVE YEAR PERIOD AFTER DATE OF SUBSTANTIAL COMPLETION.
- 2. PROVIDE FIVE YEAR MANUFACTURER WARRANTY AGAINST FAILURE OF GLASS SEAL, ON INSULATING GLASS UNITS, INCLUDING INTERPANE DUSTING OR MISTING, INCLUDE PROVISION FOR REPLACEMENT OF FAILED UNITS.
- 3. PROVIDE FIVE YEAR MANUFACTURER WARRANTY AGAINST EXCESSIVE DEGRADATION OF EXTERIOR FINISH, INCLUDING PROVISION FOR REPLACEMENT OF UNITS WITH EXCESSIVE FADING, CHALKING, OR FLAKING.
- C. BASIS OF DESIGN: COLUMBIA WINDOWS, 3100 SERIES, ALUMINUM BLACK FRAME, FROSTED GLASS.

- D. MATERIALS:
 - 1. ALUMINUM-FRAMED STOREFRONT: FACTORY FABRICATED, FACTORY FINISHED ALUMINUM FRAMING MEMBERS WITH INFLU. AND RELATED FLASHINGS, ANCHORAGE AND ATTACHMENT DEVICES.
 - 2. ALUMINUM FRAMING MEMBERS: TUBULAR ALUMINUM SECTIONS, DRAINAGE HOLES AND INTERNAL WEEP DRAINAGE SYSTEM.
 - 3. EXTRUDED ALUMINUM.
 - 4. FASTENERS: STAINLESS STEEL.
 - 5. CONCEALED FLASHINGS: STAINLESS STEEL, 26 GAGE, 0.0187 INCH MINIMUM THICKNESS.
 - 7. SEALANT AS RECOMMEND BY MANUFACTURER.
 - 8. GLAZING GASKETS: TYPE TO SUIT APPLICATION TO ACHIEVE WEATHER, MOISTURE, AND AIR INFILTRATION REQUIREMENTS.
- E. FINISHES:
 - 1. BLACK ALUMINUM.
- F. HARDWARE:
 - 1. STANDARD TYPE TO SUIT APPLICATION.

- G. INSTALLATION:
 - 1. VERIFY DIMENSIONS, TOLERANCES, AND METHOD OF ATTACHMENT WITH OTHER WORK.
 - 2. VERIFY THAT WALL OPENINGS AND ADJOINING AIR AND VAPOR SEAL MATERIALS ARE READY TO RECEIVE WORK OF THIS SECTION.
 - 3. INSTALL WALL SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - 4. ATTACH TO STRUCTURE TO PERMIT SUFFICIENT ADJUSTMENT TO ACCOMMODATE CONSTRUCTION TOLERANCES AND OTHER IRREGULARITIES.
 - 5. ALIGN ASSEMBLY PLUMB AND LEVEL, FREE OF WARP OR TWIST, MAINTAIN ASSEMBLY DIMENSIONAL TOLERANCES, ALIGNING WITH ADJACENT WORK.
 - 6. PROVIDE THERMAL ISOLATION WHERE COMPONENTS PENETRATE OR DISRUPT BUILDING INSULATION.
 - 7. INSTALL SILL FLASHINGS, TURN UP EDGES AND EDGES, SEAL TO ADJACENT WORK TO FORM WATER TIGHT DAM.
 - 8. WHERE FASTENERS PENETRATE SILL FLASHINGS, MAKE WATER TIGHT BY SEATING AND SEALING FASTENER HEADS TO SILL FLASHING.
 - 9. PACK FERROUS INSULATION IN SHIM SPACES AT PERIMETER OF ASSEMBLY TO MAINTAIN CONTINUITY OF THERMAL BARRIER.
 - 10. SET THRESHOLDS IN BED OF SAND AND SECURE.
 - 11. INSTALL HARDWARE USING TEMPLATES PROVIDED, ADJUST OPERATING HARDWARE AND SASH FOR SMOOTH OPERATION.
 - 12. WASH-DOWN SURFACES WITH A SOLUTION OF MILD DETERGENT IN WARM WATER, APPLIED WITH SOFT, CLEAN WIPING CLOTH, AND TAKE CARE TO REMOVE DIRT FROM CORNERS AND TO WIPE SURFACES CLEAN.
 - 13. PROTECT INSTALLED PRODUCTS TO AVOID DAMAGE UNTIL DATE OF SUBSTANTIAL COMPLETION.

DIVISION 9 - FINISHES

- 09 2116 - GYPSUM BOARD ASSEMBLIES**
A. STEEL FRAMING MEMBERS: COMPLY WITH ASTM C754 IN DEPTHS AND GAGES AS INDICATED IN THE CONSTRUCTION DRAWINGS AND AS FOLLOWS:
 - 1. STEEL SHEET COMPONENTS: COMPLY WITH ASTM C646 WITH MANUFACTURER'S STANDARD CORROSION-RESISTANT ZINC COATING.
 - 2. THE WIRE: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER, .0625" DIAMETER OR DOUBLE STRAND OF .0475" DIAMETER WIRE.
 - 3. WIRE HANGERS: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER, .0162" DIAMETER.
- B. PANEL PRODUCTS: PROVIDE 5/8 THICKNESS AND TYPE INDICATED IN THE CONSTRUCTION DRAWINGS IN MAXIMUM LENGTHS AVAILABLE TO MINIMIZE END-TO-END BUTT JOINTS AND AS FOLLOWS:
 - 1. GYPSUM WALLBOARD: ASTM C 38, TYPE 'X' WITH TAPERED EDGES, SAC-RESISTANT TYPE FOR CEILING SURFACES.
 - 2. WATER-RESISTANT GYPSUM BACKING BOARD: ASTM C 830, TYPE 'X' ON ALL TOILET ROOM AND STORAGE ROOM, EQUIPMENT ROOM WALLS AS WELL AS BEHIND ALL PLUMBING FIXTURES, AND AS INDICATED.
- C. ACCESSORIES:
 - 1. TRIM: ASTM 1047, FORMED FROM GALVANIZED OR ALUMINUM COATED STEEL SHEET, ROLLED ZINC, OR PLASTIC.
 - a. OUTSIDE CORNERS: PROVIDE CORNER BEAD UNLESS NOTED OTHERWISE.
 - b. EXPOSED PANEL EDGES: PROVIDE LC-BEAD (J-BEAD) UNLESS NOTED OTHERWISE; USE TEAR-AWAY BEAD WHERE GYP. BD. MEETS WINDOW FRAMES OR CEILING GRID.
 - c. CONTROL JOINTS: PROVIDE WHERE INDICATED OR APPROXIMATELY 30" MAX. CONTACT ARCHITECT FOR LOCATIONS IF NOT INDICATED.
 - 2. SOUND-ATTENUATION BLANKETS: ASTM C 685, TYPE 1 (UNFACED).
 - 3. ACOUSTICAL SEALANT: COMPLY WITH ASTM C 934, NONSAG, PAINTABLE, NONSTAINING LATEX.
- D. INSTALLATION:
 - 1. FRAMING: COMPLY WITH ASTM C 754 AND ASTM C 840 AND WITH U.S. GYPSUM'S "GYPSUM CONSTRUCTION HANDBOOK" ISOLATE FRAMING FROM BUILDING STRUCTURE TO PREVENT TRANSFER OF LOADING IMPOSED BY STRUCTURAL MOVEMENT AND PROVIDE BRACING AS NECESSARY FOR PROPER SUPPORT WHETHER INDICATED OR NOT.
 - 2. GYPSUM PANELS AND FINISH: COMPLY WITH ASTM C 840 AND G2-216. ISOLATE GYPSUM BOARD ASSEMBLIES FROM ADJUTING STRUCTURAL AND MASONRY WORK AND FINISH AS FOLLOWS:
 - A. LEVEL 1 (EMBED TAPE AT JOINTS): AT CONCEALED AREAS UNLESS A HIGHER LEVEL IS INDICATED OR REQUIRED FOR FIRE-RESISTANCE-RATED ASSEMBLY.
 - B. LEVEL 2 (EMBED TAPE AND APPLY SEPARATE FIRST COAT OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES AND SAND SMOOTH AFTER EACH COAT) AT SUBSTRATES BEHIND TILE.
 - C. LEVEL 3 (EMBED TAPE AND APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES, AND APPLY THIN SKIM COAT OF JOINT COMPOUND OVER ENTIRE SURFACE AND SAND SMOOTH AFTER EACH COAT) AT ALL WALLS RECEIVING SEMI-GLOSS OR GLOSS SHEEN PAINT, AND ALL GYPSUM BOARD CEILINGS).
 - D. LEVEL 5 (EMBED TAPE, APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES, AND APPLY THIN SKIM COAT OF JOINT COMPOUND OVER ENTIRE SURFACE AND SAND SMOOTH AFTER EACH COAT) AT ALL WALLS RECEIVING SEMI-GLOSS OR GLOSS SHEEN PAINT, AND ALL GYPSUM BOARD CEILINGS).

- 09 9000 - PAINTING AND COATING**
A. SUBMITTALS: PRODUCT DATA AND THREE (3) DRAW-DOWN SAMPLES OF EACH COLOR AND SHEEN SPECIFIED.
- B. AT TIC STOCK: FURNISH ONE (1) GALLON OF EACH PAINT COLOR AND SHEEN, IN CONTAINERS, PROPERLY LABELED AND SEALED.
- C. PRODUCTS: PROVIDE MANUFACTURER'S BEST QUALITY PAINTS OF COLOR AND SHEEN AS INDICATED IN THE CONSTRUCTION DOCUMENTS THAT ARE FORMULATED AND RECOMMENDED BY MANUFACTURER FOR APPLICATION INDICATED. PROVIDE MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH SUBSTRATES.
- D. PAINT SYSTEMS:
 - 1. ALL PAINT, STAIN, AND VARNISH SHALL BE PRODUCTS OF DEVCO, KVAL, SHERWIN WILLIAMS, PPG INDUSTRIES, PRATT & LAMBERT OR APPROVED EQUAL.
 - 2. ALL MATERIAL SHALL BE OF THE STANDARD RESIDENTIAL GRADE OF THE TYPES DESIGNATED.
 - 3. ALL MATERIAL SHALL BE DELIVERED TO THE JOB SITE IN THE ORIGINAL, UNOPENED, LABELED CONTAINERS. COLORS NOT SPECIFICALLY CALLED FOR IN THE PAINT SCHEDULE WILL BE SELECTED BY THE ARCHITECT.
- E. APPLICATION / INSTALLATION:
 - 1. EQUIPMENT: APPLY COATINGS BY BRUSH, ROLLER, SPRAY, OR OTHER APPLICATORS ACCORDING TO COATING MANUFACTURER'S WRITTEN INSTRUCTIONS. WHEN SPRAYED, EXTERIOR COATINGS SHALL BE BACK-ROLLED FOLLOWING SPRAY APPLICATION. USE ROLLERS FOR FINISH COAT ON INTERIOR WALLS AND CEILING.
 - 2. PIGMENTED (OPACUE) FINISHES: COMPLETELY COVER SURFACES TO PROVIDE A SMOOTH, OPQUE SURFACE OF UNIFORM APPEARANCE. PROVIDE A FINISH FREE OF CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, SAGS, ROUGHNESS, OR OTHER SURFACE IMPERFECTIONS.
 - 3. APPLY PRODUCTS PER MANUFACTURER RECOMMENDED GUIDELINES. PRODUCT COVERAGE MINIMUM ONE COAT OF PRIMER AND TWO FINAL COATS ON MATERIALS APPLY PRODUCTS TO MATERIALS APPROVED BY MANUFACTURER PRODUCT DATA SHEETS.

- A. EXTERIOR WORK:
 - 1. ALL EXTERIOR GALVANIZED METAL. ONE COAT EXTERIOR METAL PRIMER. TWO COATS EXTERIOR SEMI-GLOSS METAL PAINT.
 - 2. ALL EXPOSED STEEL FRAMES, ANGLES, STEEL BRACKETS ETC. TWO COATS SEMI-GLOSS METAL PAINT. (PRIME COAT CHANNELS, POSTS, RAILINGS, BEAMS, ETC. SURFACES THAT ARE NOT PRIMED.)
 - 3. ALL EXPOSED MISC. FERROUS METAL ITEMS INCLUDING RAILS, PLATES, ANGLES, BOLTS, GRATES, CONDUCITS, POSTS, PIPING, ETC. TWO COATS SEMI-GLOSS METAL PAINT. (PRIME COAT SURFACES THAT ARE NOT PRIMED.)
 - 4. ALL UNPRIMED EXTERIOR MILLWORK, TRIM, SMOOTH WOOD MATERIALS, ETC. PRIME AND BACK LATEX PRIMER. TWO COATS OF EXTERIOR LATEX SATIN OR SEMI-GLOSS PAINT.
- 5. PRIMED MILLWORK AND TRIM. TOUCH-UP PRIME, TWO COATS OF EXTERIOR 100% SATIN OR SEMI-GLOSS ACRYLIC LATEX PAINT.
- 6. CEDAR TRIM, BEAMS, COLUMNS, ETC. TWO COATS LINED OIL. APPLY WITH SMALL ROLLER. APPLY FIRST COAT 6 WEEKS AFTER INSTALL AND 5 DAYS AFTER RAIN EVENT. MINIMUM 7 DAYS BETWEEN COATS.
- 7. PRIMED METAL ENTRY DOORS, FRENCH DOORS AND METAL FRAMES, GARAGE DOORS. PATCH DENTS, TOUCH UP PRIMER. TWO COATS OF OIL BASE SEMI-GLOSS PAINT INSIDE AND OUTSIDE.
- 8. ANY OTHER PAINTING REQUIRED BY THE DRAWINGS. TWO COATS TO MATCH ADJACENT SURFACES.

- B. INTERIOR WORK:
 - 1. GYPSUM BOARD WALLS EXCEPT IN KITCHENS, BATHROOMS, LAUNDRIES AND COMMON AREA CORRIDORS, UNLESS SCHEDULED FOR WALLCOVERING. ONE COAT OF PRIME LATEX PAINT AND ONE FINISH COAT OF LATEX EGGSHELL WALL PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.)
 - 2. GYPSUM BOARD WALLS IN KITCHENS, BATHROOMS AND LAUNDRIES UNLESS SCHEDULED FOR WALLCOVERING OR TILE. ONE COAT OF EPOXY COMPATIBLE PRIMER PAINT AND ONE FINISH COAT OF EPOXY EGGSHELL WALL PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.)
 - 3. GYPSUM BOARD WALLS IN COMMON AREA CORRIDORS. ONE COAT OF PRIME LATEX PAINT AND ONE FINISH COAT OF SCRUBBABLE LATEX FLAT WALL PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.)
 - 4. GYPSUM BOARD CEILING. TWO COATS OF LATEX FLAT PAINT. TWO COATS OF CLASS II VAPOR RETARDER PAINT AT CEILING ADJACENT TO ATTIC.
- 5. DOOR CASINGS, BASE, WOOD, MILL, WORK, ETC. (PRE-PRIMED.) ONE PRIME COAT OF LATEX PAINT, ONE COAT LATEX PAINT AND ONE FINISH COAT OF LATEX SEMI-GLOSS PAINT.
- 6. PRIMED HARDWOOD DOORS. ONE COAT OF LATEX PAINT AND ONE FINISH COAT OF LATEX SEMI-GLOSS PAINT.
- 7. ALL MISCELLANEOUS FERROUS METAL INCLUDING GRILLES, REGISTERS, ETC. TWO COATS METAL PAINT TO MATCH ADJACENT SURFACES UNLESS FACTORY PREFINISHED WHITE.
- 8. ANY OTHER PAINTING WORK REQUIRED BY THE DRAWINGS. FINISH TO MATCH SIMILAR CONDITIONS.

DIVISION 10 - SPECIALTIES

- 10 2800 TOILET AND BATH ACCESSORIES**
A. REFERENCE CONSTRUCTION DRAWINGS & SCHEDULES FOR TYPE, QUANTITY, AND LOCATIONS OF TOILET AND BATH ACCESSORIES.
- B. SUBMITTALS:
 - 1. PRODUCT DATA, MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING:
 - 2. PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.
 - 3. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS.
 - 4. INSTALLATION METHODS.
- C. PRODUCTS:
 - 1. PROVIDE & INSTALL (1) OF EACH ITEM BELOW FOR EACH RESTROOM, UNLESS NOTED OTHERWISE:
 - A. BRADLEY GRAB BAR, CONCEALED MOUNTING - MODEL NO. 8129-001180
 - B. BRADLEY GRAB BAR, CONCEALED MOUNTING - MODEL NO. 8129-001360
 - C. BRADLEY GRAB BAR, CONCEALED MOUNTING - MODEL NO. 8129-001420
 - D. BRADLEY MIRROR, CHANNEL FRAME, 18X36 - MODEL NO. 781-019380
 - E. BRADLEY SEMI-RECESSED WASTE RECEPTACLE 12 GALLON - MODEL NO. 346-10
 - F. BRADLEY PAPER TOWEL DISP. SURFACE MOUNTED - MODEL NO. 260-150000
 - G. BRADLEY HAT & COAT HOOKS, POLISHED STAINLESS STEEL - MODEL NO. 8633-000000
 - H. BRADLEY RECTANGULAR BABY CHANGING STATION, LIGHT GRAY - MODEL NO. 9631-000000
 - K. BRADLEY SURFACE MOUNTED DUAL ROLL TOILET PAPER DISPENSER - MODEL NO. 5126-000000
- D. INSTALLATION:
 - 1. INSTALLER MUST EXAMINE SUBSTRATES, PREVIOUSLY INSTALLED INSERTS AND ANCHORAGES NECESSARY FOR MOUNTING OF TOILET ACCESSORIES, AND OTHER CONDITIONS UNDER WHICH INSTALLATION IS TO OCCUR, AND MUST NOTIFY CONTRACTOR IN WRITING OF CONDITIONS DETRIMENTAL TO PROPER AND TIMELY COMPLETION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO INSTALLER.
 - 2. INSTALL ACCESSORIES ACCORDING TO RESPECTIVE MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.
 - ADHESIVE INSTALLATIONS ARE NOT PERMITTED.
 - 3. MOUNTING HEIGHTS SHALL BE AS RECOMMENDED BY THE ACCESSORY MANUFACTURER AND AT HEIGHTS RECOMMENDED BY USE FOR PHYSICALLY HANDICAPPED TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT.
 - 4. GRAB BARS: INSTALL TO WITHSTAND A DOWNWARD LOAD OF AT LEAST 250 LBF, WHEN TESTED ACCORDING TO ASTM F 446.
 - 5. ADJUST ACCESSORIES FOR PROPER OPERATION AND VERIFY THAT MECHANISMS FUNCTION SMOOTHLY.
 - 6. CLEAN AND POLISH ALL EXPOSED SURFACES AFTER REMOVING PROTECTIVE COATINGS.

- 10 3000 SOLID PLASTIC TOILET COMPARTMENTS**
A. REFERENCE CONSTRUCTION DRAWINGS & SCHEDULES FOR TYPE, QUANTITY, AND LOCATIONS OF TOILET AND BATH ACCESSORIES.
- B. PRODUCTS:
 - 1. STYLE: FLOOR MOUNTED OVERHEAD-BRACED TOILET COMPARTMENTS.
 - 2. DOORS AND PANELS: HIGH DENSITY POLYETHYLENE (HDPE), FABRICATED FROM SEO CHAPTER 1 EXTRUDED POLYMER RESIN, FORMING SINGLE THICKNESS PANEL.
 - A. WATERPROOF AND NONABSORBENT, WITH SELF-LUBRICATING SURFACE, RESISTANT TO MARKS BY PENS, PENCILS, MARKERS, AND OTHER WRITING INSTRUMENTS.
 - B. THICKNESS: 1 INCH (25.4MM).
 - C. EDGES: SHIPLAP.
 - 3. PANEL COLOR: CHARCOAL 9237.
 - 4. DOORS AND PANELS: HIGH PRIVACY: HEIGHT: 62 INCHES (1575 MM) HIGH AND MOUNTED AT 8 TO 14 INCHES (203 TO 356 MM) ABOVE THE FINISHED FLOOR.
- C. SUBMITTALS:
 - 1. PRODUCT DATA, MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING:
 - 2. PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.
 - 3. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS.
 - 4. INSTALLATION METHODS.
 - 5. SHOP DRAWINGS: PROVIDE LAYOUT DRAWINGS AND INSTALLATION DETAILS WITH LOCATION AND TYPE OF HARDWARE REQUIRED.
 - 6. SELECTION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO COMPLETE SETS OF COLOR CHIPS REPRESENTING MANUFACTURER'S FULL RANGE OF AVAILABLE COLORS AND PATTERNS.
- D. POSTS, RAILS AND HARDWARE:
 - 1. METAL POSTS: 3/275 INCHES (2102 MM) HIGH, HEAVY DUTY EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH, FASTENED TO FOOT WITH STAINLESS STEEL TAMPER RESISTANT SCREW.
 - 2. HIDDEN SHOE (FOOT): ONE-PIECE MOLDED POLYETHYLENE INVISIBLE SHOE INSERTED INTO METAL POST AND SECURED TO METAL POST WITH STAINLESS STEEL TAMPER RESISTANT SCREW.
 - 3. HEADRAIL CAP AND CORNER CAP: ONE-PIECE MOLDED POLYETHYLENE SECURED TO METAL POST WITH STAINLESS STEEL TAMPER RESISTANT SCREW, ADJUSTABLE TO LEVEL HEADRAIL TO FINISHED FLOOR.
 - 4. WALL BRACKETS: CONTINUOUS HEAVY DUTY EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH, INSERTED INTO SLOTTED PANEL AND FASTENED TO PANELS WITH STAINLESS STEEL TAMPER RESISTANT SCREWS.
 - 5. HEADRAIL: HEAVY DUTY EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH, SECURED TO WALL WITH STAINLESS STEEL TAMPER SCREWS.
 - 6. DOOR HARDWARE:
 - A. HINGES: EDGE MOUNTED HELIX STYLE STAINLESS STEEL CONTINUOUS HINGE, CLOSING DEGREE: 5 DEGREES. COMES TO A FULL CLOSE ON ITS OWN WEIGHT.
 - B. OCCUPANCY INDICATOR LATCH AND HOUSING MATERIAL: SATIN STAINLESS STEEL, OCCUPANCY INDICATORS: GREEN FOR OCCUPIED AND RED NOT OCCUPIED, SLIDE BOLT AND BUTTON.
 - C. COAT HOOK AND DOOR BUMPER COMBINATION MATERIAL: CHROME PLATED ZAMAK, HANDICAP DOOR EQUIP WITH SECOND DOOR PULL AND DOOR STOP.
 - D. DOOR PULLS: CHROME PLATED ZAMAK.
- E. INSTALLATION:
 - 1. CLEAN SURFACES THOROUGHLY PRIOR TO INSTALLATION.
 - 2. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SHOP DRAWINGS.
 - 3. INSTALL PARTITIONS RIGID, STRAIGHT, PLUMB, AND LEVEL.
 - 4. LOCATE BOTTOM EDGE OF DOORS AND PANELS _____ INCHES ABOVE FINISHED FLOOR.
 - 5. CLEARANCE AT VERTICAL EDGES OF DOORS SHALL BE UNIFORM TOP TO BOTTOM AND SHALL NOT EXCEED 3/8 INCH (9.5 MM).
 - 6. NO EVIDENCE OF CUTTING, DRILLING, AND/OR PATCHING SHALL BE VISIBLE ON THE FINISHED WORK.
 - 7. FINISHED SURFACES SHALL BE CLEANED AFTER INSTALLATION AND BE LEFT FREE OF IMPERFECTIONS.
 - 8. ADJUST DOORS AND LATCHES TO OPERATE CORRECTLY.
 - 9. PROTECT INSTALLED PRODUCTS UNTIL COMPLETION OF PROJECT.
 - 10. TOUCH-UP, REPAIR OR REPLACE DAMAGED PRODUCTS BEFORE SUBSTANTIAL COMPLETION.

- 10 4400 - FIRE PROTECTION SPECIALTIES**
A. REFERENCE CONSTRUCTION DRAWINGS FOR LOCATIONS OF FIRE EXTINGUISHERS AND CABINETS.
- B. TYPE: ABC DRY CHEMICAL - 5 LBS CAPACITY
- C. INSTALLATION: HANGING - NO CABINET REQUIRED

DIVISION 31 - EARTHWORK

- 31 3116 - TERMITE CONTROL**
A. SOIL TREATMENT WITH TERMITICIDE FOR THE BUILDING
B. SUBMITTALS:
 - 1. PRODUCT DATA FOR EACH TYPE OF TERMITE CONTROL PRODUCT.
 - 2. QUALIFICATION DATA, FOR QUALIFIED INSTALLER.
- B. PRODUCT CERTIFICATES: FOR TERMITE CONTROL PRODUCTS, FROM MANUFACTURER.
- C. SOIL TREATMENT APPLICATION REPORT: AFTER APPLICATION OF TERMITICIDE IS COMPLETED, SUBMIT REPORT FOR OWNER'S RECORDS AND INCLUDE THE FOLLOWING:
 - 1. DATE AND TIME OF APPLICATION.
 - 2. MOISTURE CONTENT OF SOIL BEFORE APPLICATION.
 - 3. TERMITICIDE BRAND NAME AND MANUFACTURER.
 - 4. QUANTITY OF UNDILUTED TERMITICIDE USED.
 - 5. DILUTIONS, METHODS, VOLUMES USED, AND RATES OF APPLICATION.
 - 6. AREAS OF APPLICATION.
 - 7. WATER SOURCE FOR APPLICATION.

- C. WARRANTY: SOIL TREATMENT SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM, SIGNED BY APPLICATOR AND CONTRACTOR, CERTIFYING THAT TERMITE CONTROL WORK, CONSISTING OF APPLIED SOIL TERMITICIDE TREATMENT, WILL PREVENT INFESTATION OF SUBTERRANEAN TERMITES, IF SUBTERRANEAN TERMITE ACTIVITY OR DAMAGE IS DISCOVERED DURING WARRANTY PERIOD, RE-TREAT SOIL AND REPAIR OR REPLACE DAMAGE CAUSED BY TERMITE INFESTATION.
- 1. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
- D. SOIL TREATMENT:
 - A. TERMITICIDE: PROVIDE AN EPA-REGISTERED TERMITICIDE, COMPLYING WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, IN AN AQUEOUS SOLUTION FORMULATED TO PREVENT TERMITE INFESTATION. PROVIDE QUANTITY REQUIRED FOR APPLICATION AT THE LABEL VOLUME AND RATE FOR THE MAXIMUM TERMITICIDE CONCENTRATION ALLOWED FOR EACH SPECIFIC USE, ACCORDING TO PRODUCT'S EPA-REGISTERED LABEL.
 - 1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
 - A. BASF CORPORATION, AGRICULTURAL PRODUCTS, TERMITOR.
 - B. BAYER ENVIRONMENTAL SCIENCE, PREMISE 75.
 - C. FMC CORPORATION, AGRICULTURAL PRODUCTS GROUP, DRAGNET F, TALSTAR, OR PREVAL.
 - D. SYNGENTA, PRELURE, OR PRELURE 2.
 - 2. SERVICE LIFE OF TREATMENT: SOIL TREATMENT TERMITICIDE THAT IS EFFECTIVE FOR NOT LESS THAN FIVE YEARS AGAINST INFESTATION OF SUBTERRANEAN TERMITES.

- E. PREPARATION:
 - A. GENERAL: COMPLY WITH THE MOST STRINGENT REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PREPARATION BEFORE BEGINNING APPLICATION OF TERMITICIDE TREATMENT. REMOVE ALL EXTRANEOUS SOURCES OF WOOD CELLULOSE AND OTHER EDIBLE MATERIALS SUCH AS WOOD DEBRIS, TREE STUMPS AND ROOTS, STAKES, FORMWORK, AND CONSTRUCTION WASTE WOOD FROM SOIL WITHIN AND AROUND FOUNDATION.
 - B. SOIL TREATMENT PREPARATION: REMOVE FOREIGN MATTER AND IMPERMEABLE SOIL MATERIALS THAT COULD DECREASE TREATMENT EFFECTIVENESS ON AREAS TO BE TREATED. LOCATE, RAKE, AND LEVEL SOIL TO BE TREATED EXCEPT PREVIOUSLY COMPACTED AREAS UNDER SLABS AND FOOTINGS. TERMITICIDES MAY BE APPLIED BEFORE PLACING COMPACTED FILL UNDER SLABS IF RECOMMENDED IN WRITING BY TERMITICIDE MANUFACTURER.
 - 1. FIT FILLING HOSE CONNECTED TO WATER SOURCE AT THE SITE WITH A BACKFLOW PREVENTER, COMPLYING WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
 - C. COMPLY WITH ALL MANUFACTURER GUIDELINES.
- F. APPLICATION GENERAL:
 - A. COMPLY WITH THE MOST STRINGENT REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND WITH MANUFACTURER'S EPA-REGISTERED LABEL FOR PRODUCTS.
 - B. GENERAL: COMPLY WITH ALL MANUFACTURER GUIDELINES.
 - C. APPLICATION: MIX SOIL TREATMENT TERMITICIDE SOLUTION TO A UNIFORM CONSISTENCY.
 - 1. SLABS ON GRADE AND BASEMENT SLABS: UNDER GRADE-SUPPORTED SLAB CONSTRUCTION, INCLUDING FOOTINGS, RILLING SLABS, AND AT EXPOSED SLABS, AND AT OVERALL TREATMENT, TREAT SOIL MATERIALS BEFORE CONCRETE FOOTINGS AND SLABS ARE PLACED.
 - 2. FOUNDATIONS: ADJACENT SOIL, INCLUDING SOIL ALONG THE ENTIRE INSIDE PERIMETER OF FOUNDATION WALLS, ALONG BOTH SIDES, AND AT INTERIOR PARTITION WALLS, AROUND PLUMBING AND ELECTRICAL CONDUIT PENETRATING THE SLAB, AROUND INTERIOR COLUMN FOOTERS, PIERS, AND CHIMNEY BASES, AND ALONG THE ENTIRE OUTSIDE PERIMETER, FROM GRADE TO BOTTOM OF FOOTING, AVOID SOIL WASHOUT CAP AND FOOTING.
 - 3. MASONRY: TREAT VOIDS.
 - 4. PENETRATIONS: AT EXPANSION JOINTS, CONTROL JOINTS, AND AREAS WHERE SLABS WILL BE PENETRATED.
 - D. AVOID DISTURBANCE OF TREATED SOIL AFTER APPLICATION. KEEP OFF TREATED AREAS UNTIL COMPLETELY DRY.
 - E. PROTECT TERMITICIDE SOLUTION, DISPERSED IN TREATED SOILS AND FILLS, FROM BEING DILUTED UNTIL GROUND-SUPPORTED SLABS ARE INSTALLED. USE WATERPROOF BARRIER ACCORDING TO EPA-REGISTERED LABEL INSTRUCTIONS.
 - F. RESTRAIN WORKERS IN AREAS OF APPLICATION.
 - G. REAPPLY SOIL TREATMENT SOLUTION TO AREAS DISTURBED BY SUBSEQUENT EXCAVATION, GRADING, LANDSCAPING, OR OTHER CONSTRUCTION ACTIVITIES FOLLOWING APPLICATION.

DIVISION 32 - EXTERIOR IMPROVEMENTS

- 32 3113 - FENCES, GATES & HARDWARE**
A. REFERENCE CONSTRUCTION DRAWINGS FOR QUANTITY, AND LOCATIONS
- B. SUBMITTALS: THE CONTRACTOR SHALL PREPARE, AND SUBMIT TO THE ARCHITECT FOR APPROVAL, COMPLETE SHOP DRAWINGS FOR ALL WORK INCLUDING: PROVIDE PRODUCT DATA IN THE FORM OF MANUFACTURER'S TECHNICAL DATA, DRAWINGS, AND INSTALLATIONS FOR FENCE, POSTS, GATE UPRIGHTS, POST CAPS, GATES, GATE HARDWARE AND ACCESSORIES. VERIFY LAYOUT INFORMATION FOR FENCES AND GATES SHOWN ON THE DRAWINGS IN RELATION TO THE PROPERTY SURVEY AND EXISTING STRUCTURES. VERIFY DIMENSIONS BY FIELD MEASUREMENTS. PROVIDE SAMPLES IN THE FORM OF 2' LENGTHS OF ACTUAL PRODUCT USED.
- C. WARRANTY: LIFETIME NON-PRORATED LIMITED TRANSFERABLE WARRANTY APPLIES TO ORIGINAL HOMEOWNER/CONSUMER, OR 30 YEAR NON-PRORATED LIMITED WARRANTY APPLIES TO COMMERCIAL APPLICATIONS.
- D. BASIS OF DESIGN: 6'-0"
- E. MATERIALS:
 - 1. POSTS, RAILS, PICKETS, GATE UPRIGHTS, POST CAPS, AND ACCESSORIES SHALL BE OF HIGH IMPACT, ULTRA VIOLET (UV) RESISTANT, RIGID PVC AND SHALL COMPLY WITH ASTM D 1784, CLASS 13484B.
 - 2. FENCE POSTS: ONE PIECE EXTRUDED, OF LENGTHS INDICATED AND PRE-ROUTED TO RECEIVE RAILS AT SPACING INDICATED. PROVIDE CROSS SECTION, WALL THICKNESS AND CORNER RADIUS MINIMUM TOLERANCES.
 - 3. RAILS: ONE PIECE EXTRUDED, OF LENGTHS INDICATED, PRE-ROUTED TO RECEIVE PICKETS AT SPACING INDICATED. PROVIDE CROSS SECTION, WALL THICKNESS AND CORNER RADIUS MINIMUM TOLERANCES.
 - 4. PICKETS: ONE PIECE EXTRUDED, OF LENGTHS INDICATED. PROVIDE CROSS SECTION, WALL THICKNESS AND CORNER RADIUS MINIMUM TOLERANCES. PICKET SPACING FULL PRIVACY.
 - 5. GATE UPRIGHTS: ONE PIECE EXTRUDED, OF LENGTHS INDICATED WITH ALUMINUM U CHANNEL INSERT. PROVIDE CROSS SECTION, WALL THICKNESS AND CORNER RADIUS MINIMUM TOLERANCES.
 - 6. POST CAPS: MOLDED, ONE PIECE, CROSS SECTION TO MATCH POST OR GATE SECTION. PROVIDE MINIMUM THICKNESS REQUIREMENTS. CONFIGURATION: FLAT OR FOUR-SIDED AS REQUIRED FOR INSTALLATION TO TOP OF POSTS AND GATE. ACCESSORIES: MANUFACTURER'S STANDARD GATE BRACE, SCREW CAPS, RAIL END REINFORCERS, AND OTHER ACCESSORIES AS REQUIRED.
 - 7. STIFFENER CHANNELS, GALVANIZED STEEL STRUCTURAL CHANNEL, CONFIGURE CHANNELS FOR CONCEALED INSTALLATION WITHIN PVC RAILS WITH PRE-DRILLED HOLES FOR DRAINAGE. ALUMINUM EXTRUDED CHANNEL AVAILABLE UPON REQUEST. CROSS SECTION: 1.775 X 1.700 GALVANIZED STEEL CHANNEL, THICKNESS: 0.040 GAUGE (MINIMUM).
 - 8. FASTENERS AND ANCHORAGE: STAINLESS STEEL. ALL FASTENERS TO BE CONCEALED OR COLORED HEADS TO MATCH. PROVIDE SIZES AS RECOMMENDED BY FENCE MANUFACTURER.
 - 9. PVC CEMENT: AS RECOMMENDED BY FENCE MANUFACTURER.
- F. HARDWARE:
 - 1. GENERAL: PROVIDE HARDWARE AND ACCESSORIES FOR EACH GATE ACCORDING TO THE FOLLOWING REQUIREMENTS:
 - 2. HINGES: COLOR, BLACK. SIZE AND MATERIAL TO SUIT GATE SIZE. NON LIFT OFF TYPE, SELF CLOSING, GLASS FILLED NYLON WITH ADJUSTER PLATE, OFFSET TO PERMIT 120 DEGREE. GATE OPENING. PROVIDE ONE PAIR OF HINGES FOR EACH GATE.
 - 3. LATCH: FINISH TO MATCH HINGE. MANUFACTURER'S STANDARD SELF LATCHING, GLASS FILLED NYLON AND STAINLESS STEEL COMPOSITION SINGLE OR DUAL ACCESS GRAVITY LATCH. PROVIDE ONE LATCH PER GATE.
 - 4. HARDWARE: FINISH TO MATCH HINGE STAINLESS STEEL. PROVIDE SIZES AS RECOMMENDED BY FENCE MANUFACTURER. STOREROOM LOCK, LEVER & PANIC HARDWARE TO MEET ADA REQUIREMENTS.

- G. CONCRETE:
 - 1. CONCRETE: PROVIDE CONCRETE CONSISTING OF PORTLAND CEMENT PER ASTM C 150, AGGREGATES PER ASTM C 33, AND POTABLE WATER. MIX MATERIALS TO OBTAIN CONCRETE WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2000 PSI. USE AT LEAST FOUR BAGS OF CEMENT PER CUBIC YARD, 1-INCH MAXIMUM SIZE AGGREGATE, 3-INCH MAXIMUM SLUMP. USE 1/2 INCH MAXIMUM SIZE AGGREGATE IN POST WHERE REQUIRED.
 - 2. PACKAGES CONCRETE MIX: MIX DRY-PACKAGED NORMAL-WEIGHT CONCRETE CONFORMING TO ASTM C 387 WITH CLEAN WATER TO OBTAIN A 2 TO 3 INCH SLUMP.
- H. INSTALLATION:
 - 1. INSTALL FENCE IN COMPLIANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. DURING INSTALLATION, PVC COMPONENTS SHALL BE CAREFULLY HANDLED AND STORED TO AVOID CONTACT WITH ABRASIVE SURFACES. INSTALL COMPONENTS IN SEQUENCE AS RECOMMENDED BY FENCE MANUFACTURER.
 - A. INSTALL FENCING AS INDICATED ON THE DRAWINGS PROVIDED.
 - B. VARIATIONS FROM THE INSTALLATION INDICATED MUST BE APPROVED.
 - C. VARIATIONS FROM THE FENCE AND GATE INSTALLATION INDICATED AND ALL COSTS FOR REMOVAL AND REPLACEMENT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - D. ALLOW MINIMUM 72 HOURS TO LET CONCRETE SET UP BEFORE OPENING GATES.
 - E. CLEANING: REMOVE ALL TRACES OF DIRT AND SOILED AREAS.



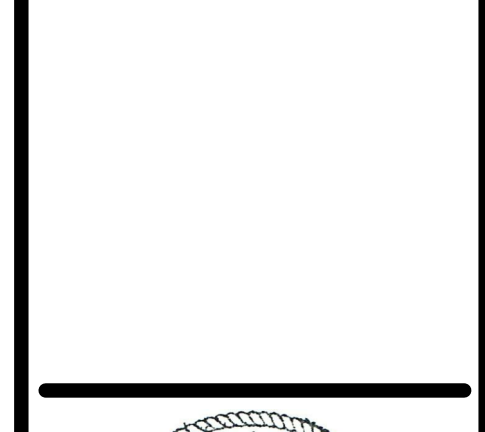
PERMIT SET

HOOK FARMS

SW 26TH TERRACE & SW PRYOR RD
LEE'S SUMMIT, MO

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REVISION DATES:



10/19/2021
PROFESSIONAL SEAL

G501
ISSUE DATE: 18 OCTOBER 2021
COLLINS WEBB #: 20032

GENERAL PROJECT SPECIFICATIONS

FOUNDATION PLAN NOTES:

- TOP OF CONCRETE SLAB ELEVATION = 99'-0".
- 4" SLAB ON GRADE REINFORCED WITH #4@16" O.C. EA. WAY OVER 4" GRANULAR FILL AND 15 MIL VAPOR BARRIER, UNLESS NOTED OTHERWISE.
- SLAB CONTROL AND CONSTRUCTION JOINTS PER DETAIL S102. CONSTRUCTION JOINTS MAY BE SUBSTITUTED FOR CONTROL JOINTS AT THE CONTRACTOR'S DISCRETION.
- DURING INSTALLATION OF ALL POST CONSTRUCTION ANCHORS, CARE MUST BE TAKEN TO AVOID ALL REINFORCING.
- #4x8'-0" LONG AT ALL RE-ENTRANT CORNERS.
- CONTRACTOR TO COORDINATE ALL FLOOR AND SLAB PENETRATIONS WITH ALL OTHER DISCIPLINES.
- ALL JACK STUDS TO BE CARRIED DOWN TO FOUNDATION LEVEL.
- REFER TO ARCHITECTURAL FOR NON-LOAD BEARING WALL LOCATIONS.
- REFER TO ARCHITECTURAL FOR ALL DIMENSIONS NOT SHOWN ON THESE DRAWINGS.
10. SHEAR WALL HOLDDOWN PER DETAIL S102.
11. REFER TO SHEET S102 FOR SHEAR WALL INFORMATION.
12. ALL SILL ANCHORS TO BE 1/2" DIA. SIMPSON TITEN HD @36" WITH 3 1/2" EMBEDMENT.
13. ALL WALLS TO BE 2X4 @16" O.C. WITH SINGLE 2X4 BOTTOM PLATE AND DOUBLE 2X4 TOP PLATE. GRADE AND SPECIES PER GENERAL NOTES

ROOF FRAMING PLAN NOTES:

- ROOF DECK TO BE 1/2" PLYWOOD.
- OPENINGS IN THE ROOF DECK AND WALLS TO BE COORDINATED WITH ALL OTHER DISCIPLINES.
- REFER TO ARCHITECTURAL FOR ALL DIMENSIONS NOT SHOWN ON THESE PLANS.
- ALL HEADER SIZES PER PLAN. GRADE AND SPECIES PER GENERAL NOTES
- PROVIDE (2) JACK STUDS UNDER ALL HEADERS UNLESS NOTED OTHERWISE ON PLANS OR SCHEDULES.
- ALL JACK STUDS TO BE CARRIED DOWN TO FOUNDATION LEVEL.
- NON-LOAD BEARING STUD WALLS SHALL HAVE 1" GAP BETWEEN TOP OF STUD AND BOTTOM OF ROOF FRAMING
- REFER TO SHEET S102 FOR SHEAR WALL INFORMATION.
- ALL PERGOLA FRAMING TO BE WESTERN CEDAR #2 GRADE UNLESS NOTED OTHERWISE

- ALL WORK SHALL CONFORM TO 2018 INTERNATIONAL BUILDING CODE AS ADOPTED AND AMENDED BY THE CITY OF LEE'S SUMMIT, MISSOURI.
- DESIGN LOADS
 - A. ROOF LOAD (S PSF NET UPLIFT)
 - 1. DEAD LOAD TOP CHORD 20 PSF
 - 2. DEAD LOAD BOT. CHORD 5 PSF
 - 3. LIVE LOAD TOP CHORD 25 PSF
 - 4. LIVE LOAD BOT. CHORD 0 PSF (U.N.O.)
 - B. ROOF SNOW LOAD
 - 1. SLOPED ROOF SNOW LOAD, P_s 13 PSF
 - 2. DESIGN SNOW LOAD FOR ROOF TRUSSES (MIN.) 20 PSF
 - 3. SNOW EXPOSURE FACTOR, C_e 1.0
 - 4. SNOW LOAD IMPORTANCE FACTOR, I_s 1.0
 - 5. THERMAL FACTOR, C_t 1.1
 - 6. DRIFTING PER CODE
 - C. WIND LOADS
 - 1. BASIC WIND SPEED (3 SECOND GUST) 105 MPH
 - 2. WIND IMPORTANCE FACTOR, I 1.0
 - 3. BUILDING CATEGORY II
 - 4. WIND EXPOSURE B
 - 5. INTERNAL PRESSURE COEFF. 0.15
 - 6. COMPONENTS AND CLADDING DESIGN VALUE (U.N.O.) 25 PSF
 - D. SEISMIC LOADS
 - 1. CATEGORY II
 - 2. S_p 0.109
 - 3. S_s 0.062
 - 4. SEISMIC IMPORTANCE FACTOR, I 1.0
 - 5. S_{ps} 0.116
 - 6. S_{ps} 0.099
 - 7. SITE CLASS D
 - 8. SEISMIC DESIGN CATEGORY B
 - 9. SEISMIC FORCE-RESISTING SYSTEM LIGHT-FRAME WOOD SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE
 - 10. DESIGN BASE SHEAR, V 0.4 KIPS
 - 11. C_u 0.0179
 - 12. R_w 6.5
 - 13. ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE

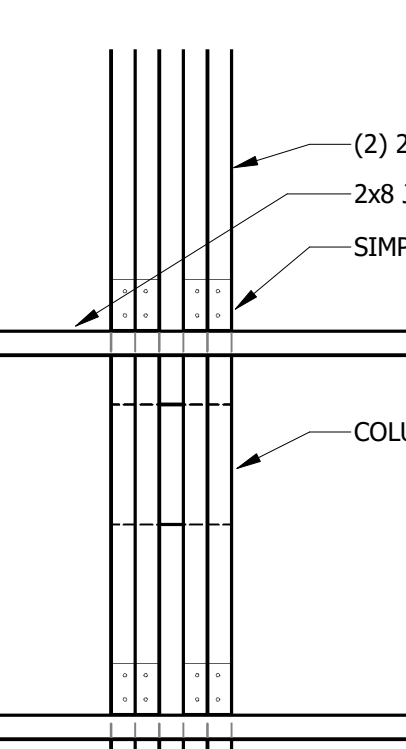
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS PRIOR TO FABRICATION.
- IF DISCREPANCIES EXIST BETWEEN SPECIFICATIONS, CONTRACT DRAWINGS, AND/OR SHOP DRAWINGS NOTIFY THE ENGINEER OF RECORD.
- THE CONTRACTOR SHALL REVIEW DRAWINGS FROM ALL OTHER DISCIPLINES FOR PERTINENT MISC. ITEMS OR INFORMATION RELATED TO THE STRUCTURAL WORK AND COORDINATE AS REQUIRED.
- THE BUILDING IS NOT STRUCTURALLY STABLE UNTIL ALL CONNECTIONS, FRAMING, SHEAR WALLS, PERMANENT BRACING, AND EXTERIOR LOAD-BEARING WALLS ARE COMPLETE AND HAVE ACHIEVED THEIR RESPECTIVE DESIGN STRENGTHS. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING STRUCTURAL STABILITY DURING ERECTION AND CONSTRUCTION. TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURE IS COMPLETE.
- PROVIDE ADEQUATE SHORING DURING CONSTRUCTION TO RESIST FORCES SUCH AS WIND AND UNBALANCED LOADS DUE TO CONSTRUCTION. DO NOT BACKFILL UNTIL CONCRETE HAS CURED 14 DAYS.

- FOUNDATIONS
 - A. FOUNDATIONS ARE DESIGNED TO BEAR ON 1500 PSF FOR STRIP FOOTINGS ON SOIL AND 1500 PSF FOR SPREAD FOOTINGS ON SOIL.
 - B. CONTRACTOR SHALL REMOVE EXISTING FOOTINGS AND FOUNDATIONS THAT ARE LOCATED WITHIN THE FOOTPRINT OF THE NEW BUILDING.

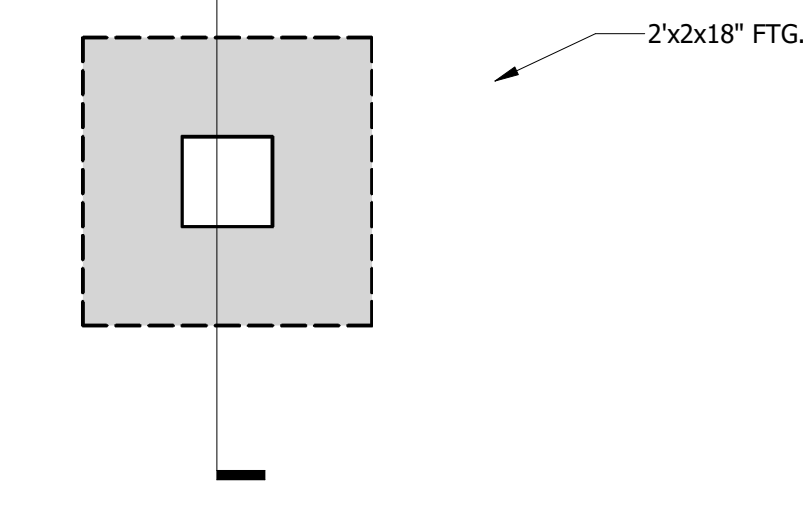
- CONCRETE
 - A. CAST-IN-PLACE CONCRETE CONSTRUCTION SHALL CONFORM TO LATEST APPLICABLE AMERICAN CONCRETE INSTITUTE DOCUMENTS, ACI-301, 305, 306, 315, 318, AND 347 UNLESS NOTED OTHERWISE IN THESE CONTRACT DOCUMENTS.
 - B. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL DEVELOP A 28 DAY COMPRESSIVE STRENGTH AND HAVE MAXIMUM WATER/CEMENT RATIOS AS FOLLOWS:
 - 1. FOOTINGS, GRADE BEAMS, WALLS, BEAMS, COLUMNS: 4000 PSI (w/c MAX 0.45)
 - 2. SLAB ON GRADE: 4000 PSI (w/c MAX 0.42)
 - 3. ELEVATED COMPOSITE SLAB: 4000 PSI (w/c MAX 0.42)
 - 4. PROVIDE 6% AIR ENTRAINMENT IN ALL CONCRETE MIX DESIGNS
 - C. SLABS-ON-GRADE SHALL DEVELOP A 90 DAY COMPRESSIVE STRENGTH.
 - D. IT IS THE INTENT OF THESE CONCRETE SPECIFICATIONS THAT THE CONTRACTOR SUPPLY CONCRETE MIXES WITH A MINIMUM AMOUNT OF WATER IN ORDER TO LIMIT PLASTIC SHRINKAGE CRACKING IN FRESHLY PLACED CONCRETE. IT IS EXPECTED THAT PRODUCING WORKABILITY FOR CONCRETE MIXES WILL REQUIRE THE ADDITION OF WATER-REDUCING CHEMICAL ADMIXTURES.
 - E. CONCRETE MIX DESIGNS SHALL INCLUDE ALL APPLICABLE ADMIXTURES.
 - F. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- 1" (ASTM C-143) AS DELIVERED IN THE FIELD. CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY IF ADMIXTURE IS TO BE ADDED IN THE FIELD IS SHALL BE ADDED THROUGH THE USE OF AN EXTERNAL MEASURING DEVICE (I.E. 5 GALLON BUCKET).
 - G. CONCRETE EXPOSED TO WEATHER, PARKED VEHICLES, AND/OR DECIDING CHEMICAL SHALL CONTAIN 6% (+/- 1%) ENTRAINED AIR BY VOLUME.
 - H. CHAMFER ALL EXPOSED CORNERS OF CONCRETE WALLS, 3/4" UNLESS NOTED OTHERWISE.
 - I. ALL CONTROL JOINTS IN CONCRETE SLABS-ON-GRADE SHALL BE CUT TO 1/3 OF DEPTH WHEN USING WET-CUTTING PROCESS AND 1/4 OF DEPTH WHEN USING EARLY-ENTRY DRY-CUT PROCESS. CUT JOINTS AS SOON AS APPLICABLE PER PROCESS USED AFTER CONCRETE HAS BEEN PLACED WITHOUT DISLUDGING AGGREGATE, OR USE A KEVED COLD JOINT.
 - J. CUT SUBS-ON-GRADE INTO AREAS OF APPROXIMATELY 225 SQUARE FEET MAINTAINING AS CLOSE TO SQUARE AREAS AS POSSIBLE. LENGTH TO WIDTH RATIOS OF JOINTED PANELS SHALL NOT EXCEED 1.5:1. COORDINATE LOCATIONS OF CONTROL JOINTS WITH ARCHITECT.
 - K. CONTROL JOINTS IN WALLS SHALL BE PLACED AT 20'-0" O.C. MAXIMUM UNLESS NOTED OTHERWISE. LOCATE JOINTS BESIDE PIERS INTEGRAL WITH WALLS, NEAR CORNERS, AND IN CONCEALED LOCATIONS WHERE POSSIBLE. CONSTRUCTION JOINTS MAY BE PLACED IN LIEU OF CONTROL JOINTS AT CONTRACTOR'S DISCRETION. COORDINATE LOCATION OF CONTROL JOINTS WITH ARCHITECT.
 - L. PRIOR TO PLACING CONCRETE IN ANY LOCATION, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO HAVE THOROUGHLY CHECKED AND COORDINATED ALL DIMENSIONS, ELEVATIONS, OPENINGS, RECESS, AND BLOCKOUTS AS SHOWN ON ANY CONTRACT DRAWINGS. IN THE EVENT ERRORS, CONFLICTS, OR OMISSIONS EXIST, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE ARCHITECT OR ENGINEER FOR NECESSARY CORRECTIVE ACTION.
 - M. EMBEDDED ITEMS ARE TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR PRIOR TO PLACING CONCRETE.
 - N. ANCHOR RODS AND ANCHOR BOLTS SHALL BE HELD IN PLACE WITH A RIGID TEMPLATE HORIZONTAL JOINTS BEYOND THOSE SHOWN IN THE CONTRACT DOCUMENTS SHALL NOT BE CONSTRUCTED WITHOUT THE APPROVAL OF THE ARCHITECT AND ENGINEER.

- REINFORCING STEEL
 - A. ALL REINFORCING SHALL BE ASTM A615 GRADE 60, EXCEPT WELDED REINFORCING WHICH SHALL BE ASTM A706 GRADE 60.
 - B. ALL WELDED WIRE FABRIC SHALL BE ASTM A82 COLD DRAWN WIRE.
 - C. ALL ACCESSORIES FOR SUPPORTING REINFORCING SHALL BE GALVANIZED OR HAVE PLASTIC-COATED FEET.
 - D. PROVIDE CORNER BARS AT THE EXTERIOR FACE OF ALL WALL AND FOOTING CORNERS EQUAL TO HORIZONTAL BARS.
 - E. REINFORCING SHALL BE DETAILED, FABRICATED, PLACED, AND SUPPORTED IN ACCORDANCE WITH ACI 315, LATEST APPLICABLE EDITION.
 - F. STANDARD COVERAGE OF REINFORCING SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE.
 - 1. PERMANENTLY EXPOSED TO WEATHER
 - A. CAST AGAINST EARTH 3"
 - B. IN CONTACT WITH WATER 3"
 - C. FORMED 2"
 - 2. NOT EXPOSED TO EARTH OR WEATHER
 - A. SLABS AND WALLS 3/4"
 - B. BEAMS AND COLUMNS 1 1/2"
 - G. SPLICE LENGTH
 - 1. 3000 PSI CONCRETE
 - A. NON-COATED 55 db (BAR DIAMETER)
 - B. EPOXY COATED 83 db
 - 2. 4000 PSI CONCRETE
 - A. NON-COATED 48 db
 - B. EPOXY COATED 72 db
 - 3. 5000 PSI CONCRETE
 - A. NON-COATED 43 db
 - B. EPOXY COATED 64 db
 - H. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, EXCEPT AS SHOWN AND NOTED ON THE CONTRACT DRAWINGS OR PERMITTED BY THE ENGINEER OF RECORD.
 - I. ALL REINFORCEMENT AND EMBEDDED ITEMS INCLUDING PLATES AND ANCHOR RODS SHALL BE ACCURATELY PLACED, ADEQUATELY SUPPORTED, AND SECURED AGAINST DISPLACEMENT BEFORE CONCRETE IS PLACED. NEITHER REINFORCEMENT NOR EMBEDDED ITEMS SHALL BE PLACED INTO FRESHLY PLACED CONCRETE UNLESS APPROVED BY THE ENGINEER OF RECORD.
 - J. PREFABRICATED WOOD TRUSSES
 - A. TRUSS SPACING TO BE AS SHOWN ON DRAWINGS.
 - B. LOADS SHOWN IN SECTION 2 "DESIGN LOADS" ARE A MINIMUM. TRUSS DESIGNER IS RESPONSIBLE FOR ESTABLISHING FINAL LOADS USED FOR DESIGN, INCLUDING LIVE, DEAD, SNOW (WITH DRIFTS), WIND, AND SEISMIC LOADS. TRUSS FABRICATOR IS TO SUPPLY SEALED TRUSS SHOP DRAWINGS AND SEALED PLAN PLACEMENT DRAWINGS PREPARED UNDER THE SUPERVISION OF THE SAME LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MISSOURI.
 - C. TRUSS MANUFACTURER IS RESPONSIBLE FOR DESIGNING, DETAILING, AND PROVIDING ALL TRUSS-TO-TRUSS, TRUSS-TO-WALL, AND TRUSS-TO-BEAM CONNECTIONS, UNLESS NOTED OTHERWISE.
 - D. ROOF SHOP DRAWINGS SHALL INCLUDE DETAILED ERECTION DRAWINGS, AS WELL AS DESIGN INFORMATION FOR EACH TRUSS. PROVIDE ALL INFORMATION AS REQUIRED IN THE INTERNATIONAL BUILDING CODE SECTION 2303.4 "TRUSSES", INCLUDING CONNECTION DESIGN.
 - E. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED, OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN CONCURRENCE AND APPROVAL OF THE LICENSED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE TRUSS DESIGN AND THE ENGINEER OF RECORD.
 - F. REFERENCE SECTION 22 "SUBMITTALS" AND SEE SPECIFICATIONS FOR MORE INFORMATION.

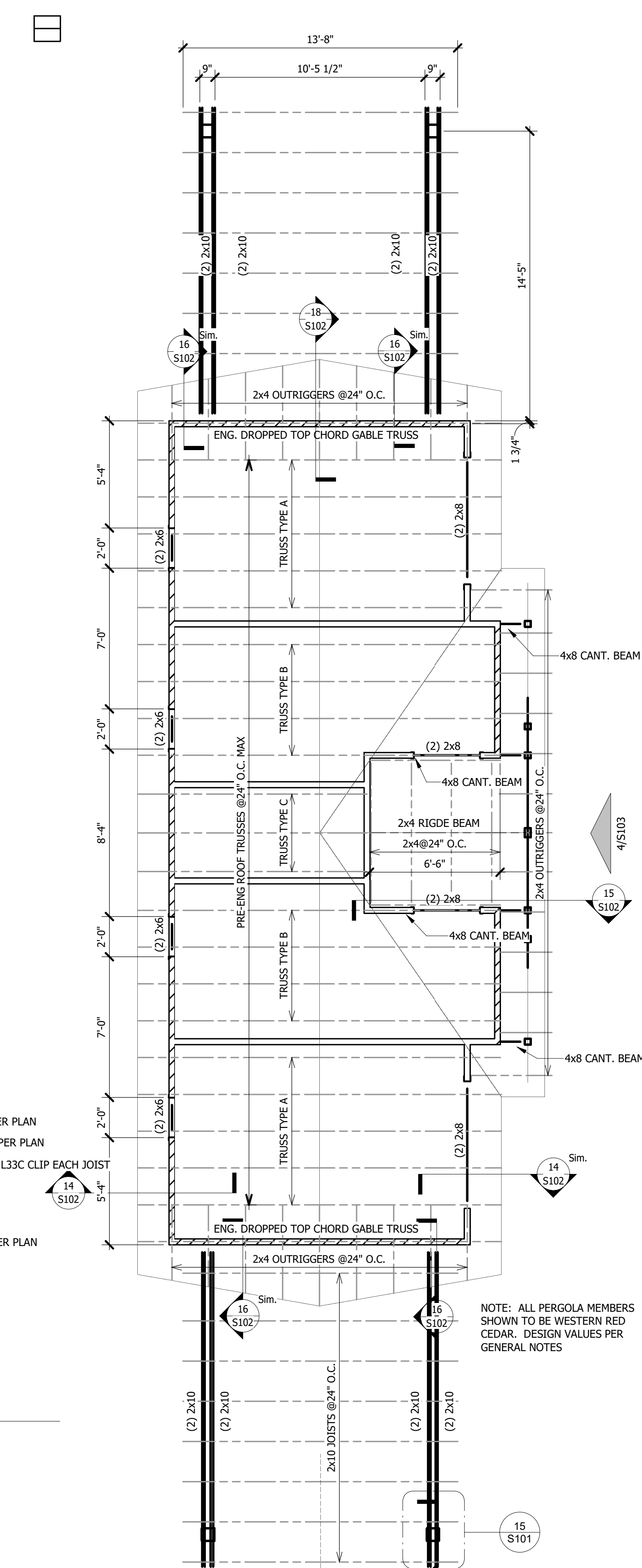
- ROUGH CARPENTRY
 - A. HEADERS, JOISTS, AND RAFTERS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REQUIREMENTS. (EXAMPLE SPECIES: #2 SPRUCE PINE FIR)
 - 1. F_b 875 PSI
 - 2. F_v 135 PSI
 - 3. F_c 1150 PSI
 - 4. E 1400 KSI
 - B. INTERIOR WALLS AND EXTERIOR WALLS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REQUIREMENTS. (EXAMPLE SPECIES: #2 SPRUCE PINE FIR)
 - 1. F_b 875 PSI
 - 2. F_v 135 PSI
 - 3. F_c 1150 PSI
 - 4. E 1400 KSI
 - C. PERGOLA MEMBERS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REQUIREMENTS. (EXAMPLE SPECIES: #2 WESTERN CEDAR)
 - 1. F_b 700 PSI
 - 2. F_v 155 PSI
 - 3. F_c 650 PSI
 - 4. E 1000 KSI
 - D. ALL WOOD FRAMING MEMBERS INDICATED ARE NOMINAL SIZES. PROVIDE ACTUAL DRESSED SIZES, KILN-DRIED, WITH MAXIMUM IN-PLACE MOISTURE CONTENT OF 19%.
 - E. ALL BOLTS ARE A36 OR A307, GRADE 1, AND ALL NAILS ARE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.
 - F. LAY ALL STRUCTURAL PANELS WITH FACE GRAIN PERPENDICULAR TO SUPPORTING MEMBERS AND OFFSET END JOINTS 4'-0". PANELS TO BE APPLIED AND STAMPED FOR THE LOADING SHOWN IN SECTION 2 "DESIGN" AND SHOULD MATCH THE SUPPORT SPACING SHOWN ON THE PLANS.
 - G. ROOF DECKING SHALL BE 1/2" THICK APA RATED EXTERIOR GRADE SHEATHING FASTENED WITH 10d NAILS AT 6" O.C. ON EDGES AND 12" O.C. IN FIELD UNLESS NOTED OTHERWISE.
 - H. FASTENER QUALITY, QUANTITY, SIZE, AND SPACING SHALL COMPLY WITH IBC FASTENING SCHEDULE (TABLE 2304.9) UNLESS NOTED OTHERWISE.
 - I. ALL WOOD IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED.
- POST CONSTRUCTION ANCHORS
 - A. POST INSTALLED ANCHORS ARE NOT TO BE SUBSTITUTED FOR ANCHORS SHOWN ON THE DRAWINGS. IF CAST IN PLACE ANCHORS IS DETERMINED TO BE OUT OF TOLERANCE OR OMITTED, CONTRACTOR MUST GENERATE A REQUEST FOR INFORMATION IN REGARDS TO THE SOLUTION. THIS SECTION IS NOT MEANT AS A DIRECT SUBSTITUTION FOR CAST IN PLACE ANCHORS.
 - B. EMBEDMENT DEPTH SHALL BE DEFINED AS THE DISTANCE FROM THE SURFACE OF THE LOAD-BEARING BASE MATERIAL TO THE DEEPEST PART OF THE ANCHOR AFTER THE ANCHOR HAS BEEN DRIVEN INTO THE HOLE.
 - C. OBSERVATION AND VERIFICATION OF EMBEDMENT HOLE CLEANING, DEPTH, AND ANCHOR INSTALLATION IS REQUIRED FOR ALL EPOXY ANCHORS.
 - D. EQUIVALENT ANCHORS MAY BE SUBMITTED FOR THE ENGINEER'S APPROVAL. SUBMITTALS ARE THE CONTRACTOR'S RESPONSIBILITY AND MUST INCLUDE EVALUATION REPORTS FROM AN INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS, CURRENT WITH THE REQUIREMENTS OF THE PROJECT.
- STRUCTURAL ENGINEER SITE OBSERVATIONS
 - A. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCES.
 - B. THE ENGINEER SHALL NOT HAVE CONTROL NOR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR AN OTHER PERSONS PERFORMING ANY OF THE WORK, OR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - C. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF LEIGH & OKANE L.L.C. IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS AND DEFICIENCIES IN THE WORK OF THE CONTRACTOR.
- SUBMITTALS
 - A. ALL SHOP DRAWINGS AND SUBMITTALS MUST BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL. ENGINEER'S REVIEW OF SHOP DRAWINGS IS LIMITED TO CHECKING FOR GENERAL CONFORMANCE WITH DESIGN DRAWINGS AND STRENGTH OF COMPONENTS AND MATERIALS. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES FROM THE DESIGN DRAWINGS, QUANTITIES, DIMENSIONAL ERRORS, OR OMISSIONS IN THE SHOP DRAWINGS.
 - B. ALL SHOP DRAWINGS MUST BE ORIGINAL DOCUMENTS AND SHALL NOT BE REPRODUCTIONS OF THESE CONTRACT DOCUMENTS.
 - C. SUBMIT SHOP DRAWINGS DETAILING FABRICATION OF EACH MEMBER AND ITS CONNECTIONS. DETAIL DRAWINGS ARE TO BE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MISSOURI FOR THE FOLLOWING ITEMS.
 - 1. PREFABRICATED WOOD TRUSSES
 - 2. CONCRETE REINFORCING STEEL
 - D. CONTRACTOR SHALL SUBMIT STRUCTURAL SHOP DRAWINGS FOR THE FOLLOWING ITEMS.
 - 1. CONCRETE MIX DESIGN AND MATERIALS
 - 2. CONCRETE REINFORCING STEEL
 - E. PROVIDE A FINAL "FOR CONSTRUCTION" SET OF ALL SHOP DRAWINGS TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OR CONSTRUCTION OF THOSE ITEMS.
- SPECIAL INSPECTIONS
 - A. THE FOLLOWING MINIMUM ITEMS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH THE BUILDING CODE. LOCAL CITY MAY REQUIRE ADDITIONAL SPECIAL INSPECTIONS.
 - 1. CONCRETE PLACING
 - 2. CONCRETE REINFORCING
 - 3. BOLTS EMBEDDED IN CONCRETE / POST-INSTALLED ANCHORS
 - 4. ANCHOR RODS
 - 5. ROOF DIAPHRAGM ATTACHMENT
 - 6. SOIL VERIFICATION
 - B. THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE ITEMS LISTED ABOVE PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF THE WORK.



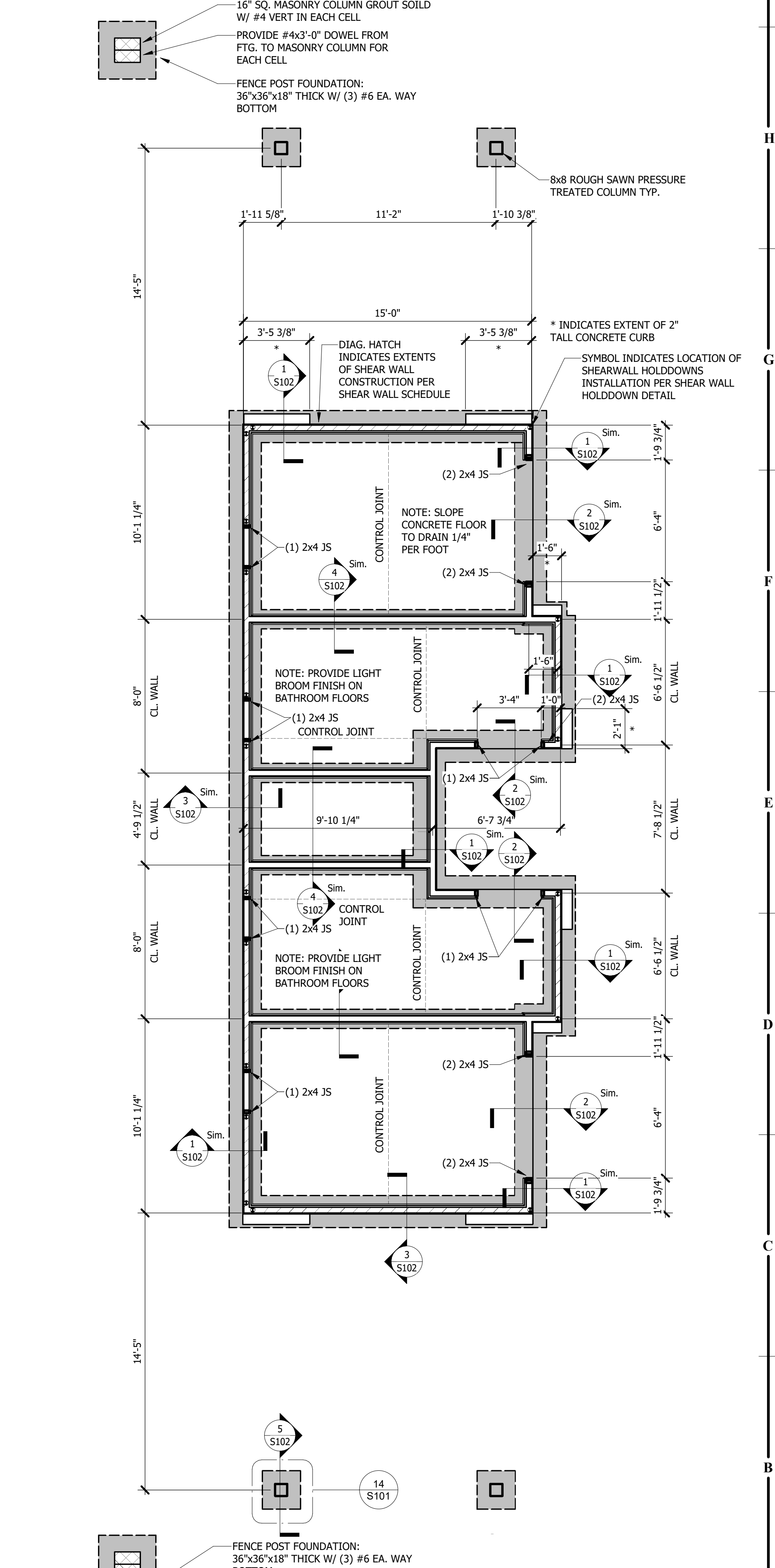
15 PERGOLA GIRDER FRAMING
1" = 1'-0"



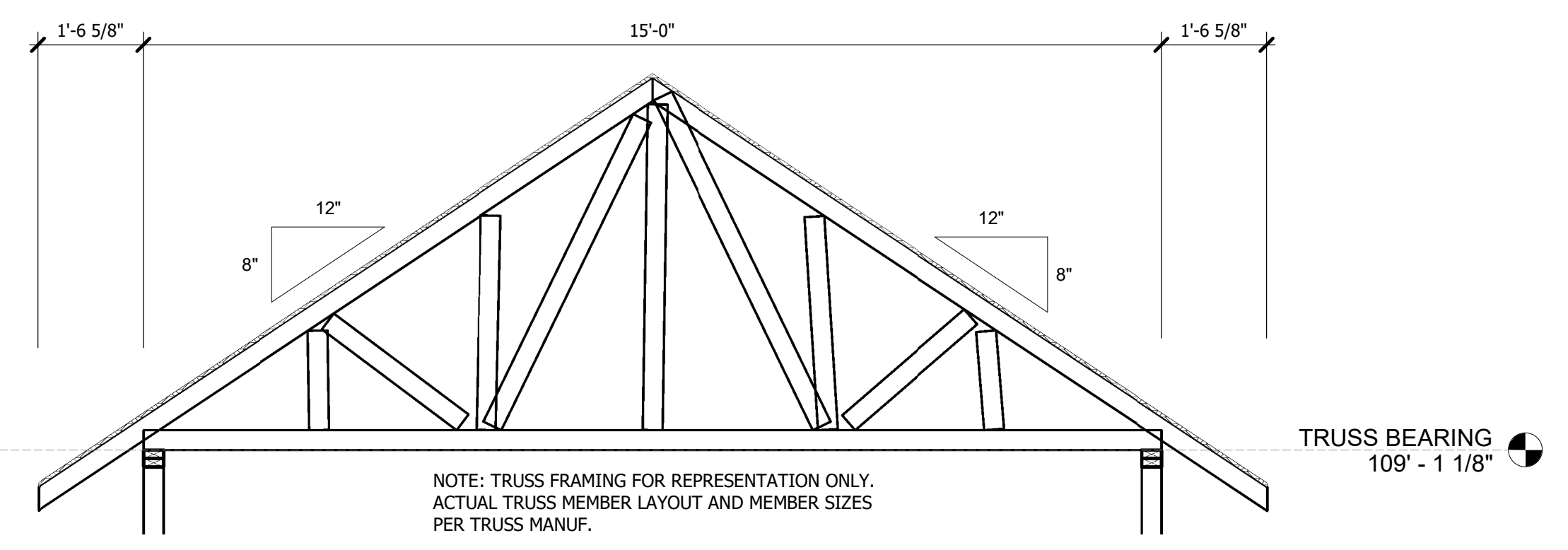
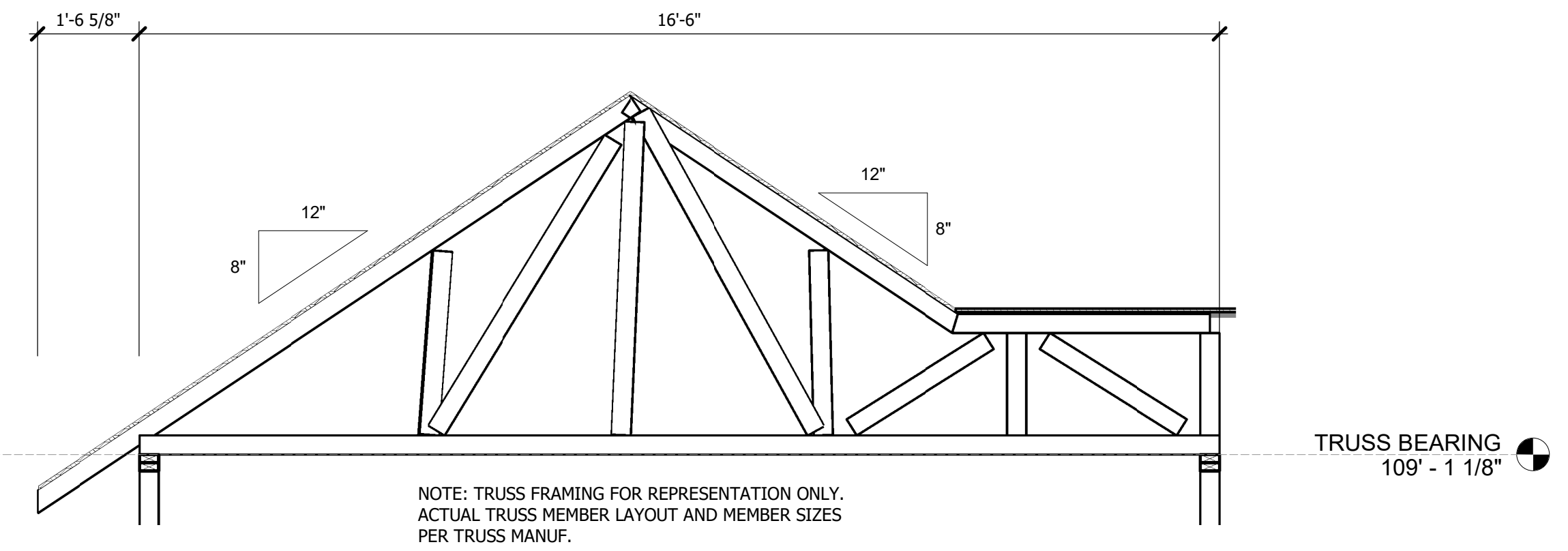
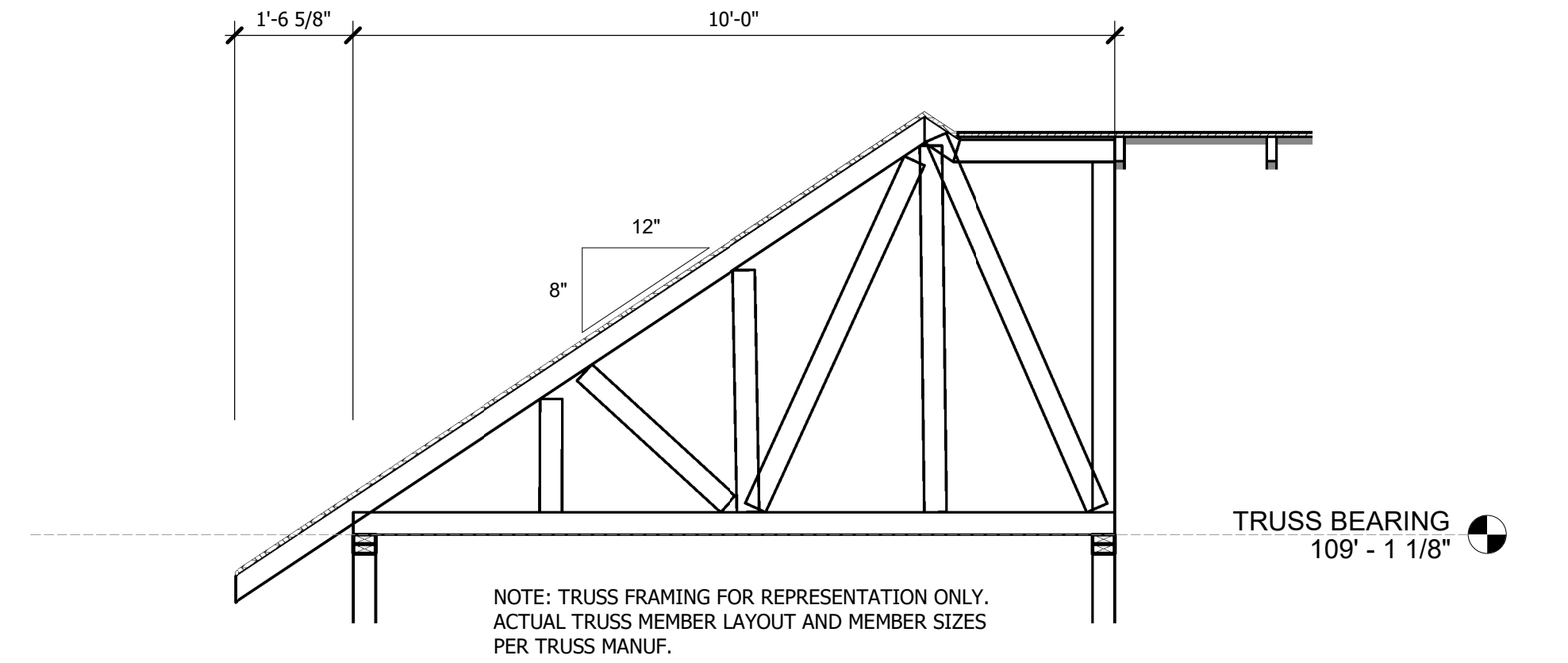
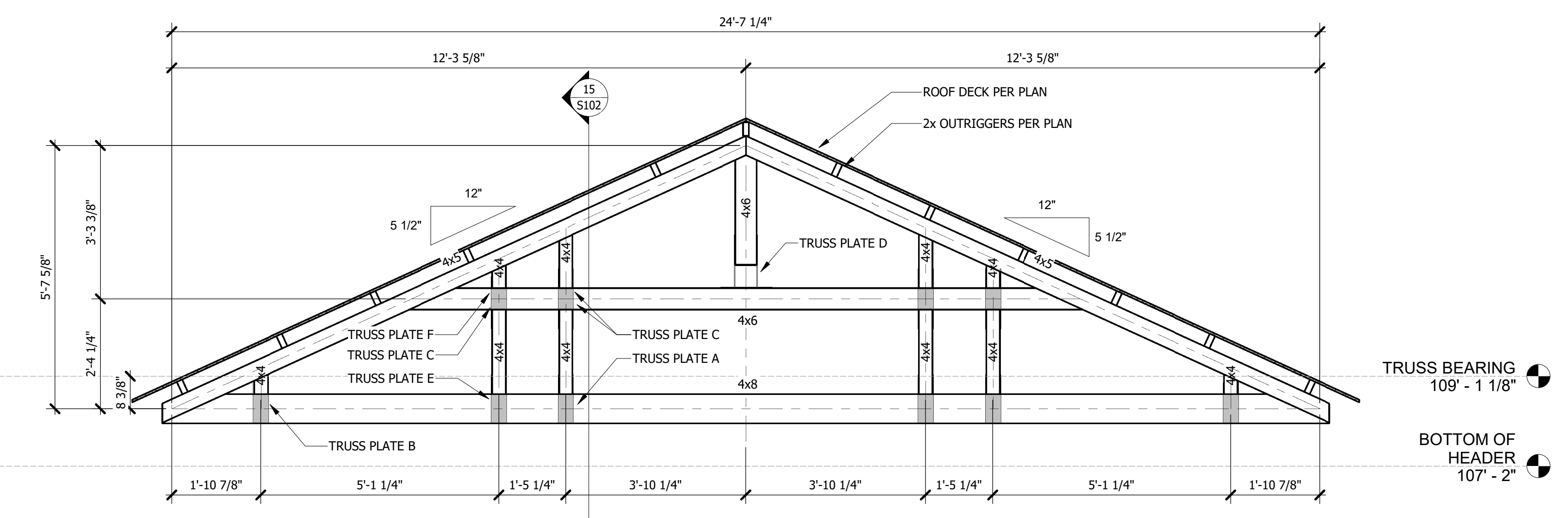
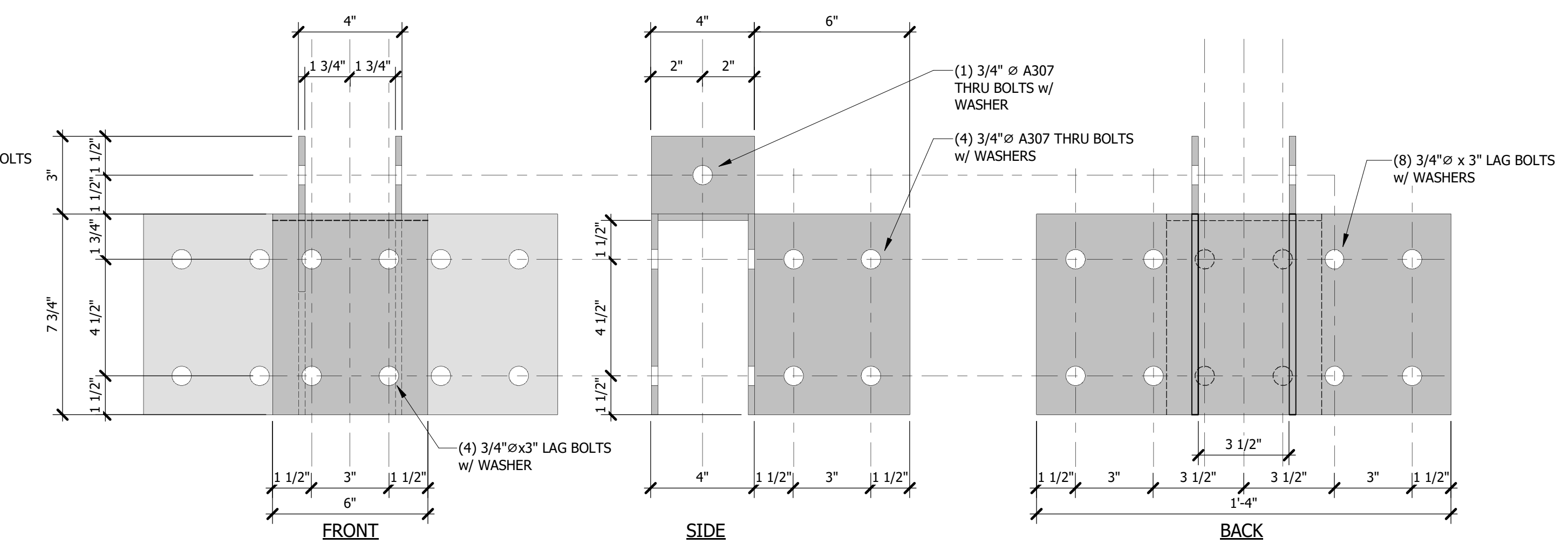
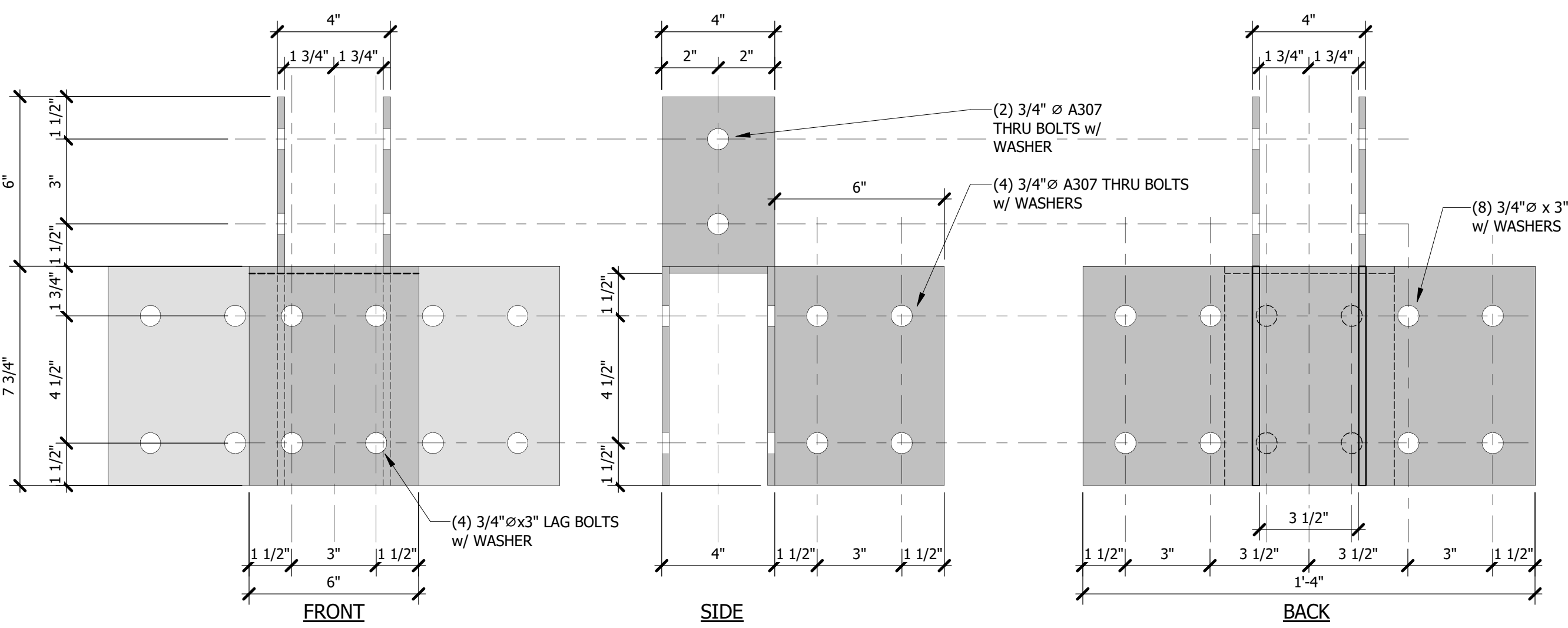
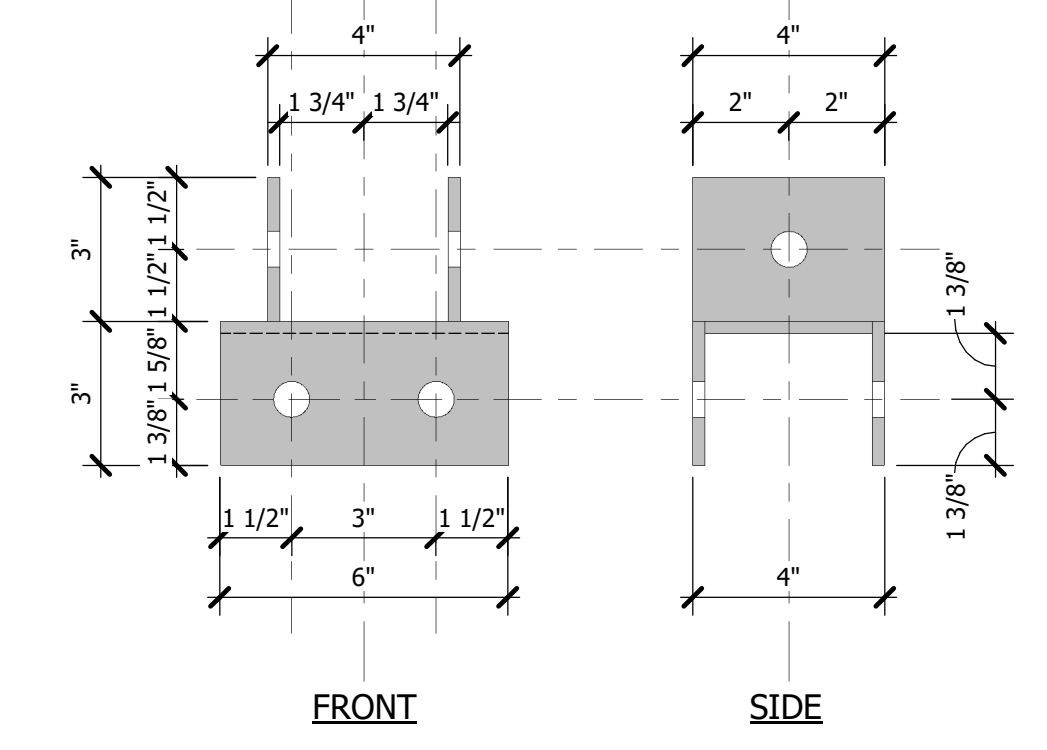
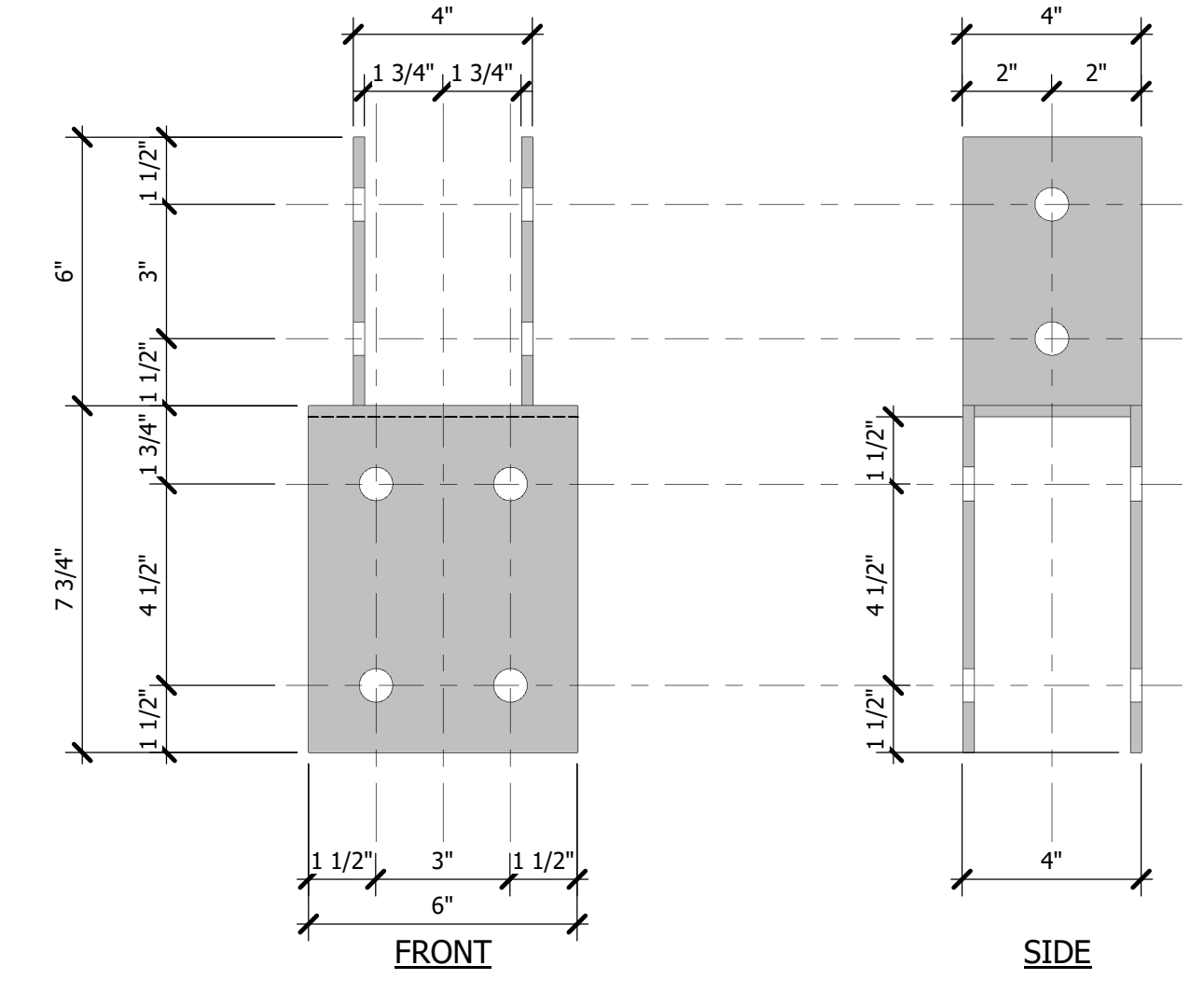
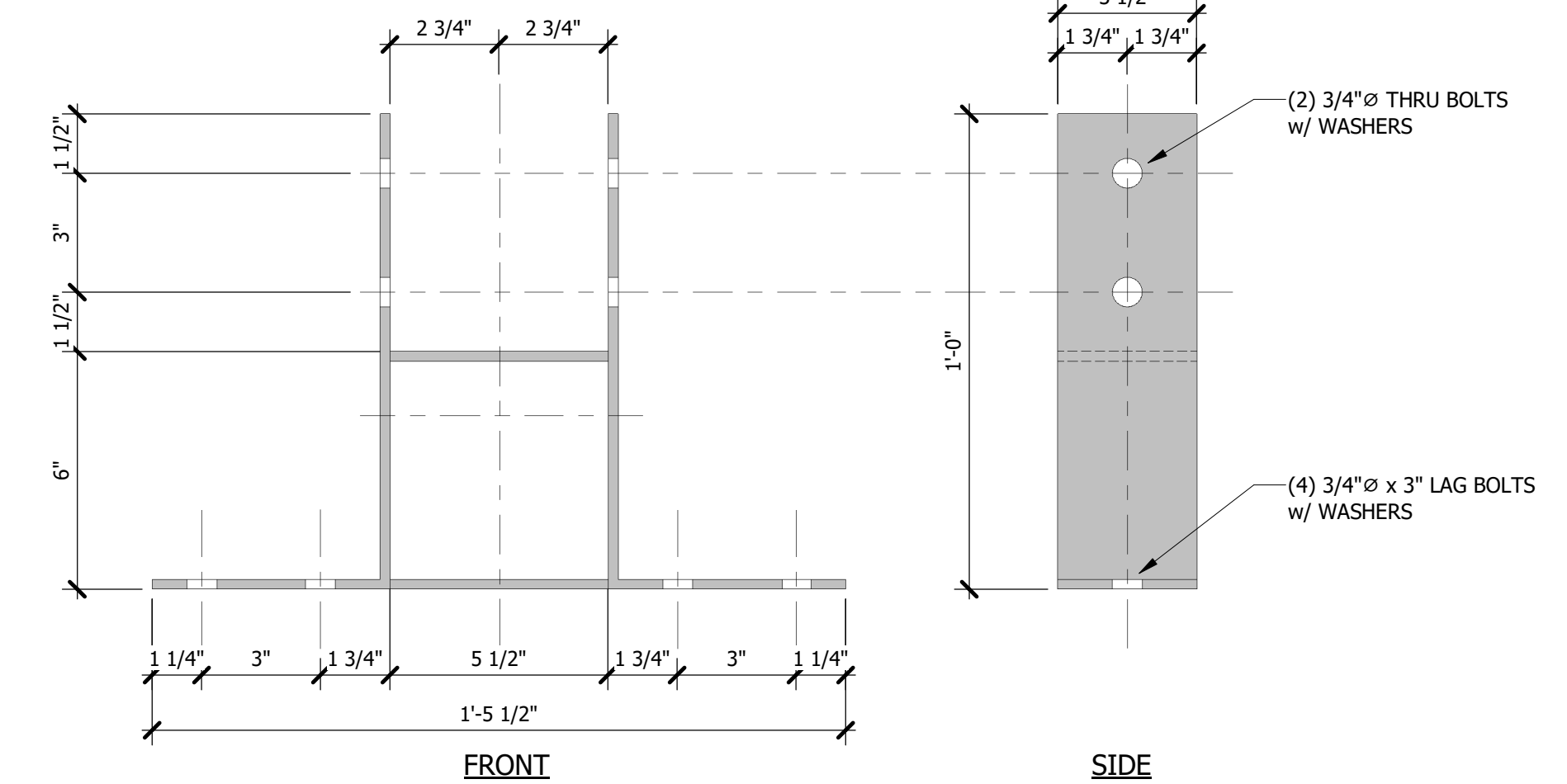
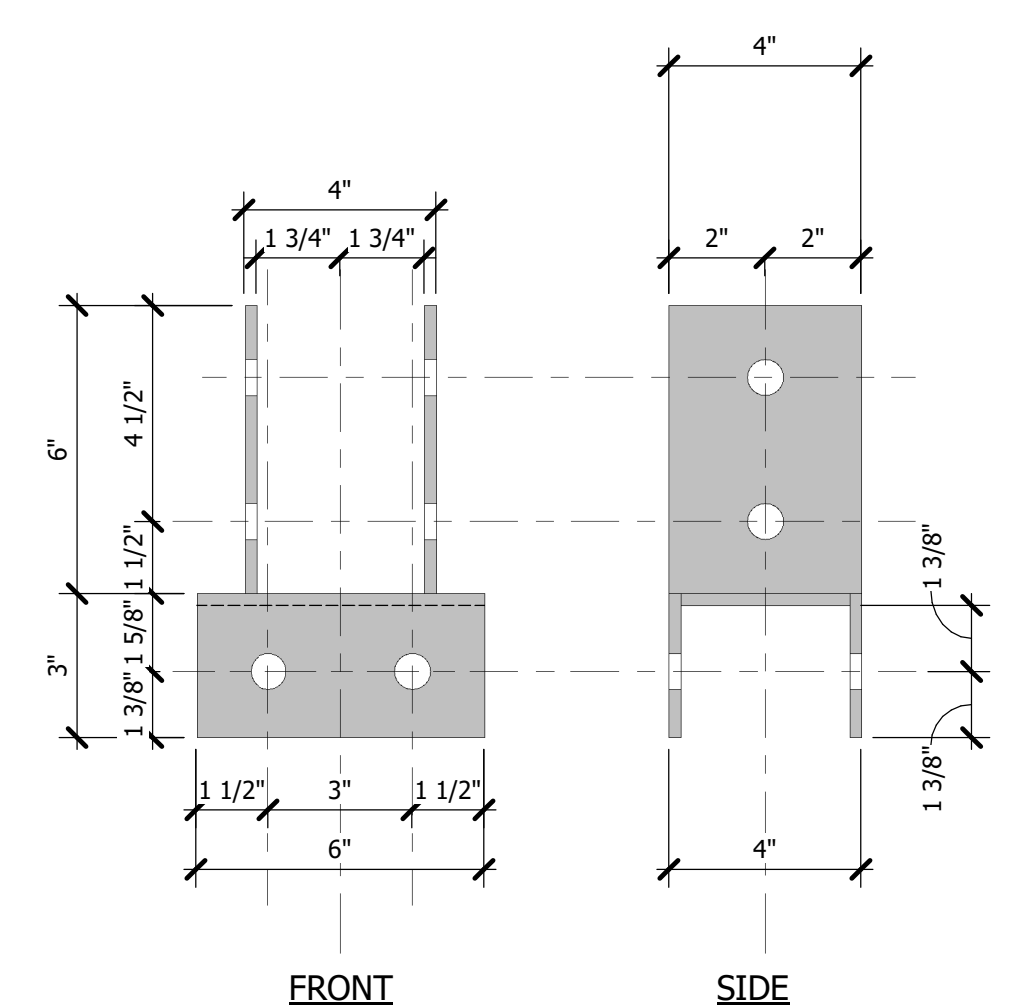
14 PERGOLA FOUNDATION
3/4\"/>

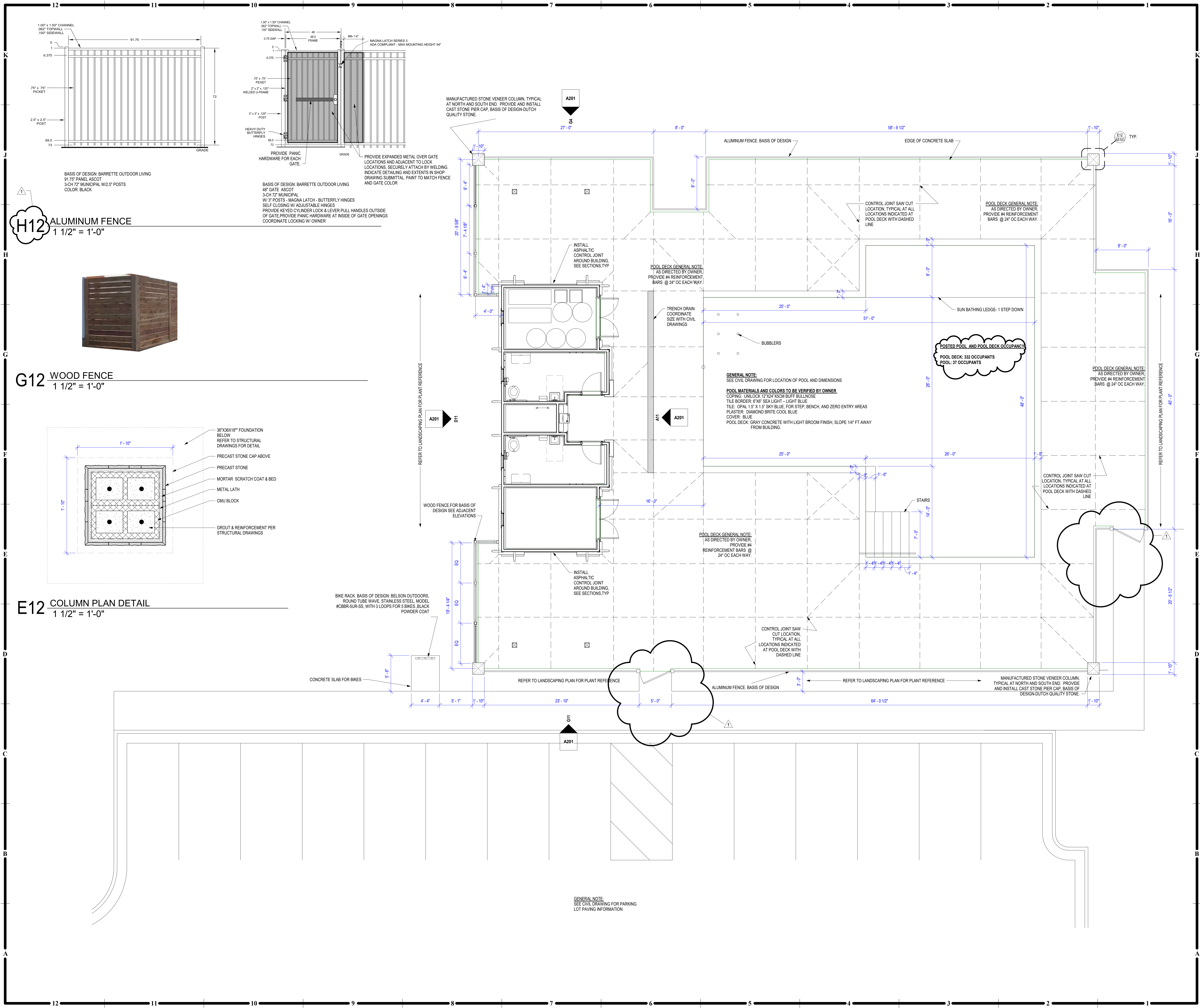


2 ROOF FRAMING PLAN
1/4\"/>



1 FOUNDATION PLAN
1/4\"/>





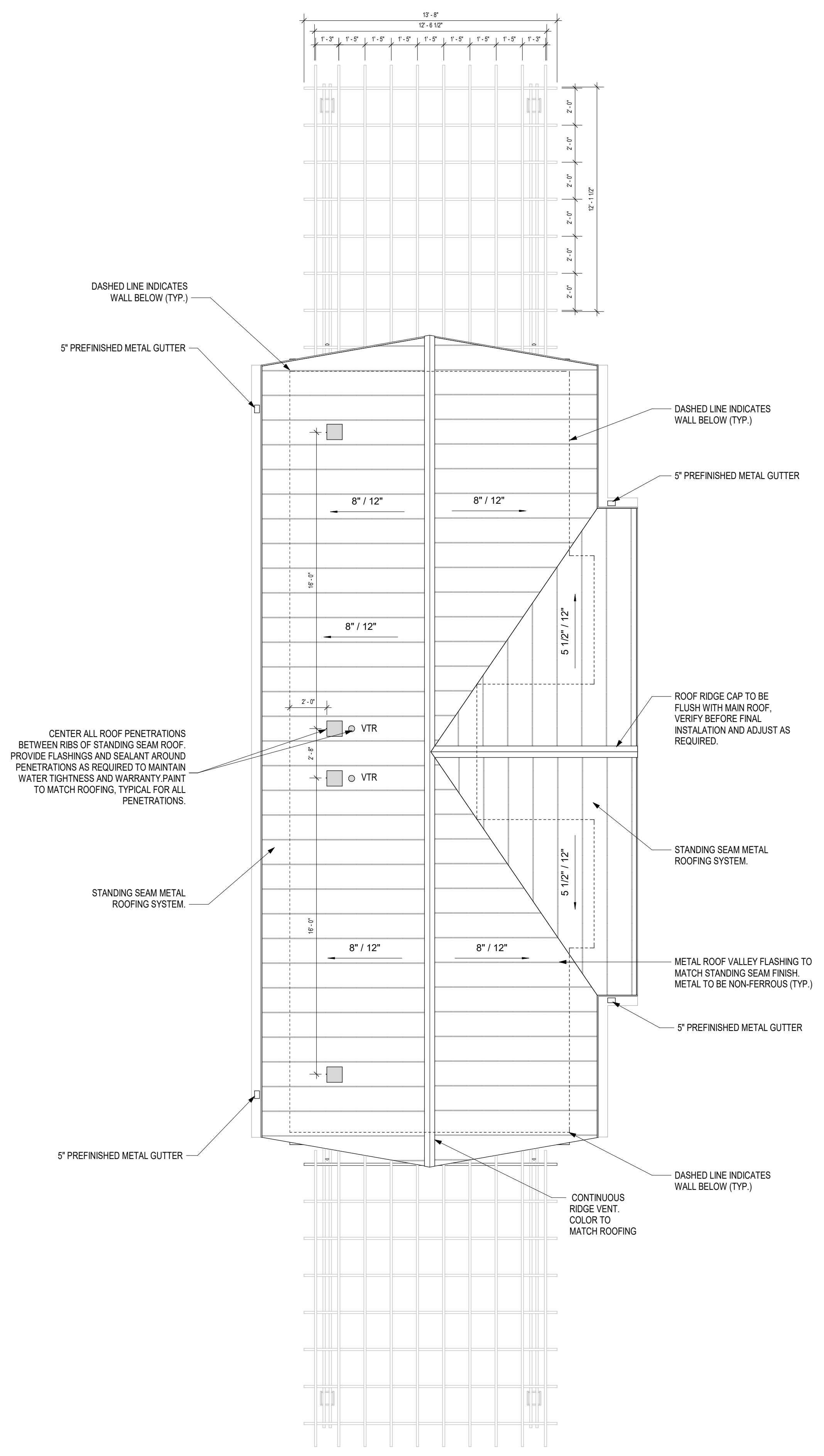
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**GENERAL NOTES:
 FLOOR PLANS**

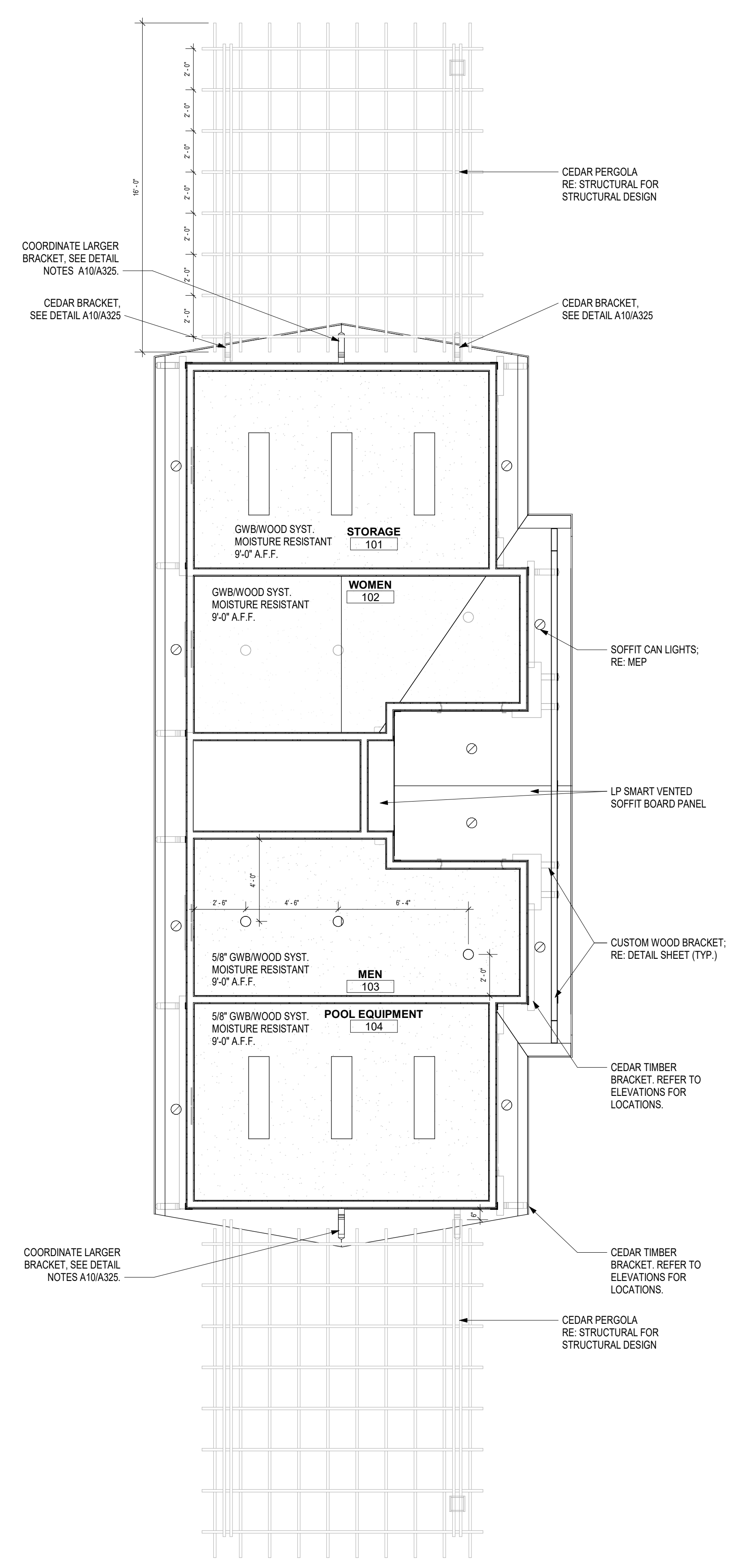
1. SEE GENERAL ARCHITECTURAL SHEETS FOR ADDITIONAL NOTES AND DETAILS THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0".
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD WALL (FG) AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS AND PER WALL TYPES SEE GENERAL SHEETS.
5. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO HINGE SIDE OF THE DOOR, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL OR OTHER PROTRUDING OBJECTS.
6. RE: FINISH LEGEND, FINISH SCHEDULE AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
7. ALL POOL HOUSE SLABS TO SLOPE TO DRAINS AT 1/4" PER 1'-0".

FE-1 INDICATES FIRE EXTINGUISHER CABINET (FE) LOCATION WITH 75'-0" RADIUS COVERAGE AREA.

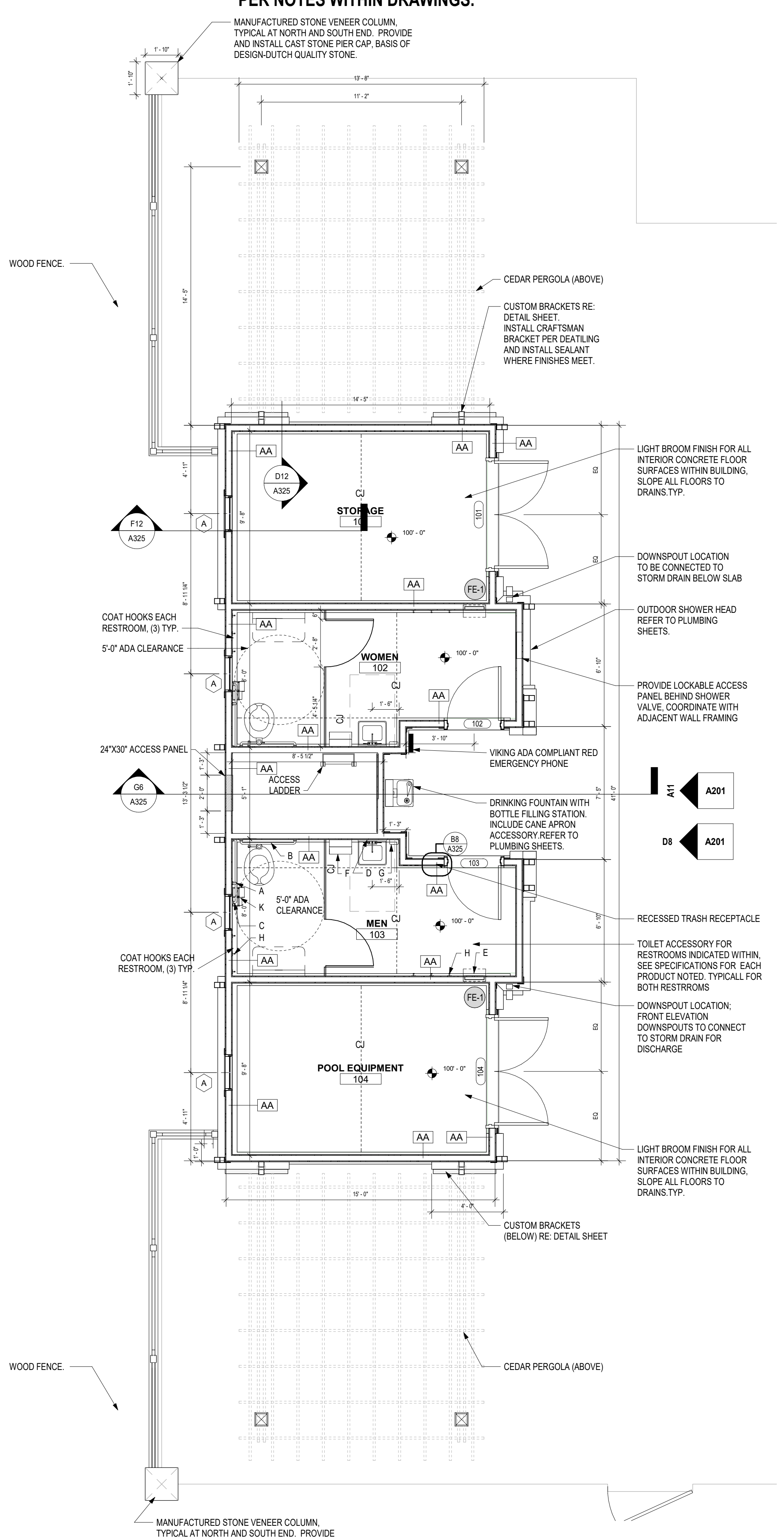
**GENERAL NOTE:
 ENTIRE BUILDING IS A NON CONDITIONED SPACE AND ONLY UTILIZED DURING SEASONAL TIMES OF THE YEAR FOR POOL ACTIVITES. BUILDING IS WINTERIZED DURING OFF PEAK TIMES PER NOTES WITHIN DRAWINGS.**



A12 ROOF PLAN
 1/4" = 1'-0"



A7 1ST FLOOR REFLECTED CEILING PLAN
 1/4" = 1'-0"

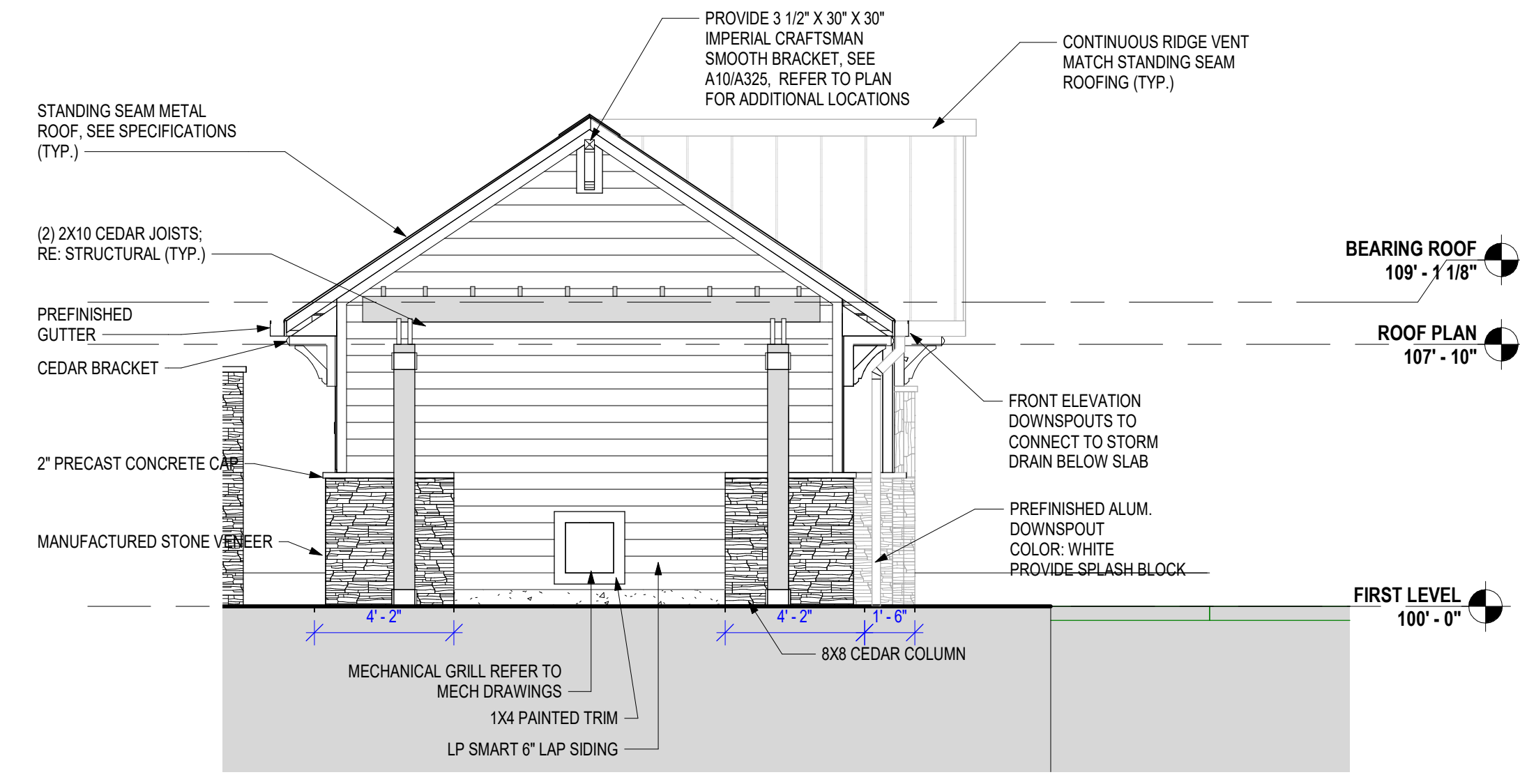


A4 1ST FLOOR PLAN
 1/4" = 1'-0"

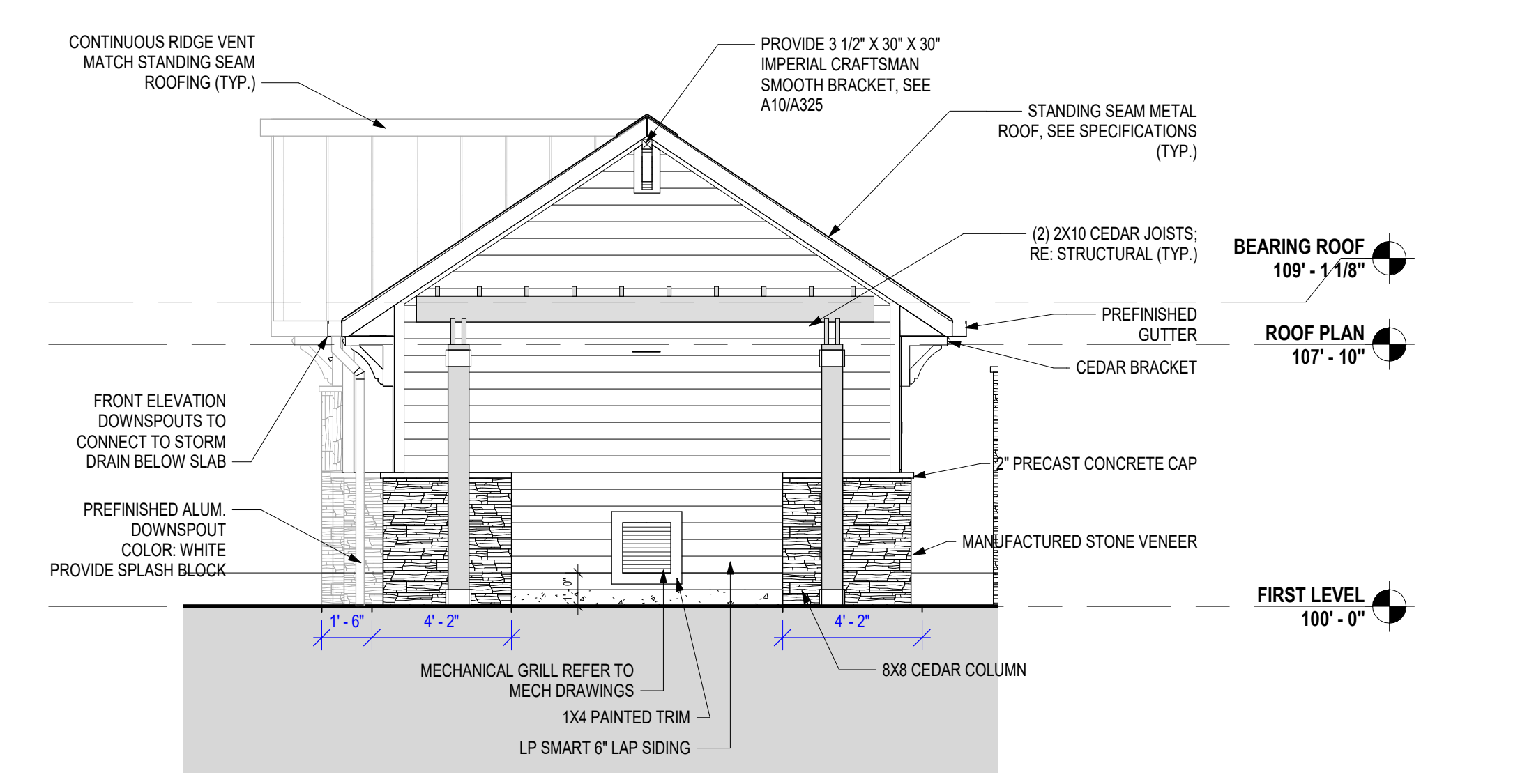
GENERAL NOTES
EXTERIOR ELEVATIONS:

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF STUD, AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
3. RE: THE WINDOW TYPES SHEET FOR ALL EXTERIOR WINDOW TYPES AND GLASS TYPES.
4. PROVIDE ALL BLOWING AND POWER AS REQUIRED FOR EXTERIOR SIGNAGE AND LIGHTING.

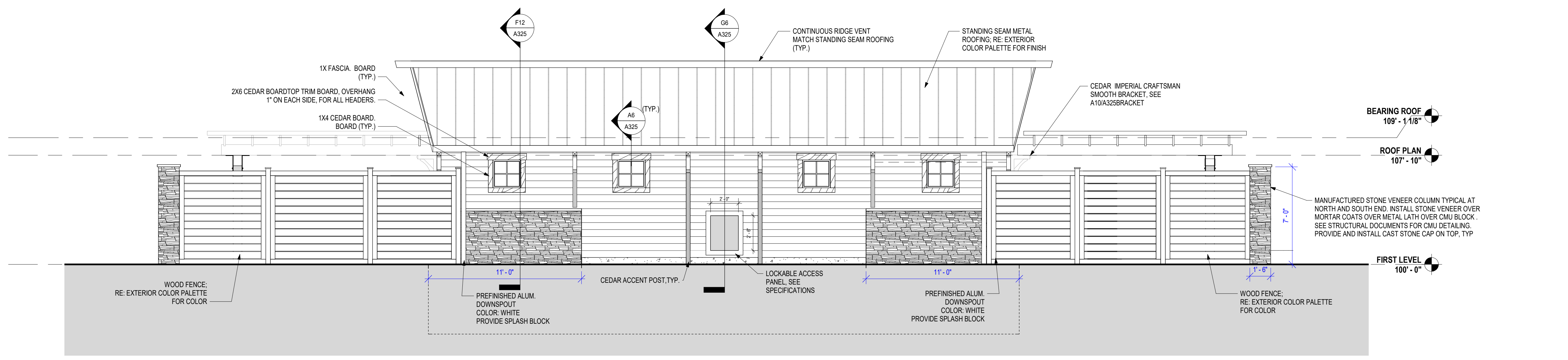
- EXTERIOR ELEVATION MATERIALS**
- MANUFACTURED STONE VENEER, BASIS OF DESIGN: DUTCH QUALITY STONE, FALLBROOK DRY STACK
 - LP SIDING LAP
 FIELD COLOR - SHERWIN WILLIAMS (SW 7005) PURE WHITE
 - LP VERTICAL BOARD SIDING AND BATTEN, FIELD COLOR - SHERWIN WILLIAMS (SW 7005) PURE WHITE
 - LP TRIM BOARDS - SHERWIN WILLIAMS (SW 7005) PURE WHITE
 - BLACK ALUMINUM WINDOWS - COLUMBIA WINDOWS - C3100 SERIES
 - PREFINISHED GUTTERS AND DOWNSPOUTS TO MATCH SHERWIN WILLIAMS (SW 7005) PURE WHITE
 - STEM WALL - NATURAL FINISH
 - PERGOLA JOISTS - WESTERN RED CEDAR, COAT WITH 2 COATS LINSEED OIL, SEE SPECIFICATIONS.
 - PERGOLA WOOD COLUMNS - WESTERN RED CEDAR, COAT WITH 2 COATS LINSEED OIL, SEE SPECIFICATIONS.
 - STANDING SEAM METAL ROOF - DREXEL METALS BLACK - 2020.



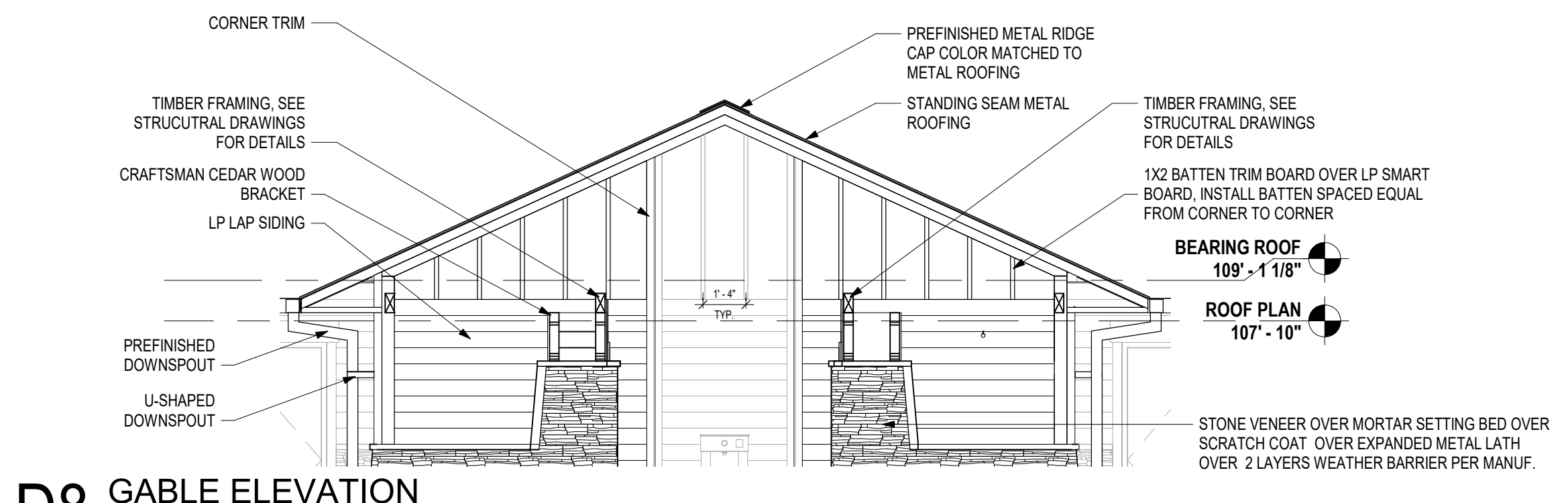
G11 SOUTH ELEVATION
 1/4" = 1'-0"



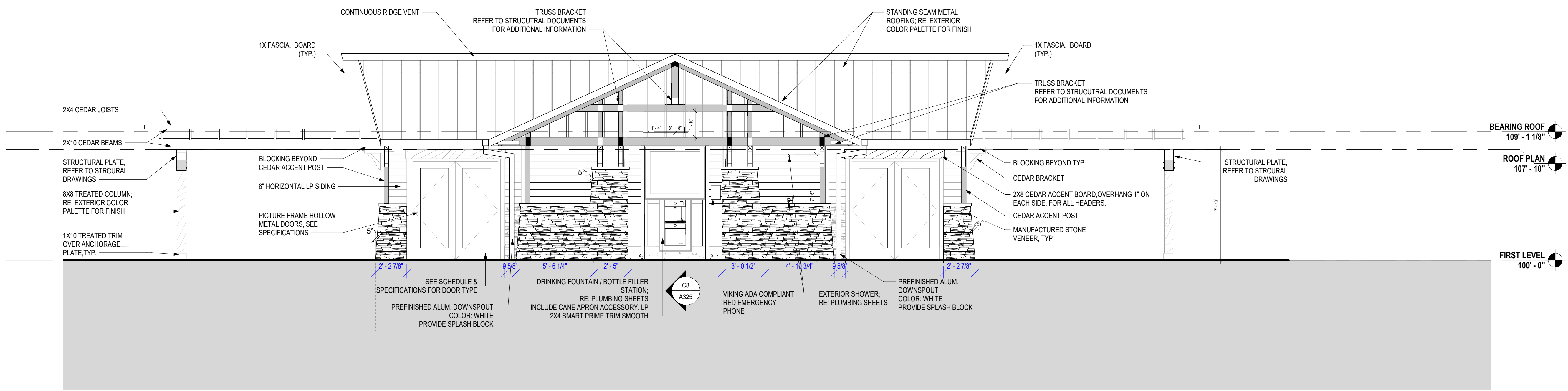
G4 NORTH ELEVATION
 1/4" = 1'-0"



D11 WEST ELEVATION
 1/4" = 1'-0"



D8 GABLE ELEVATION
 1/4" = 1'-0"



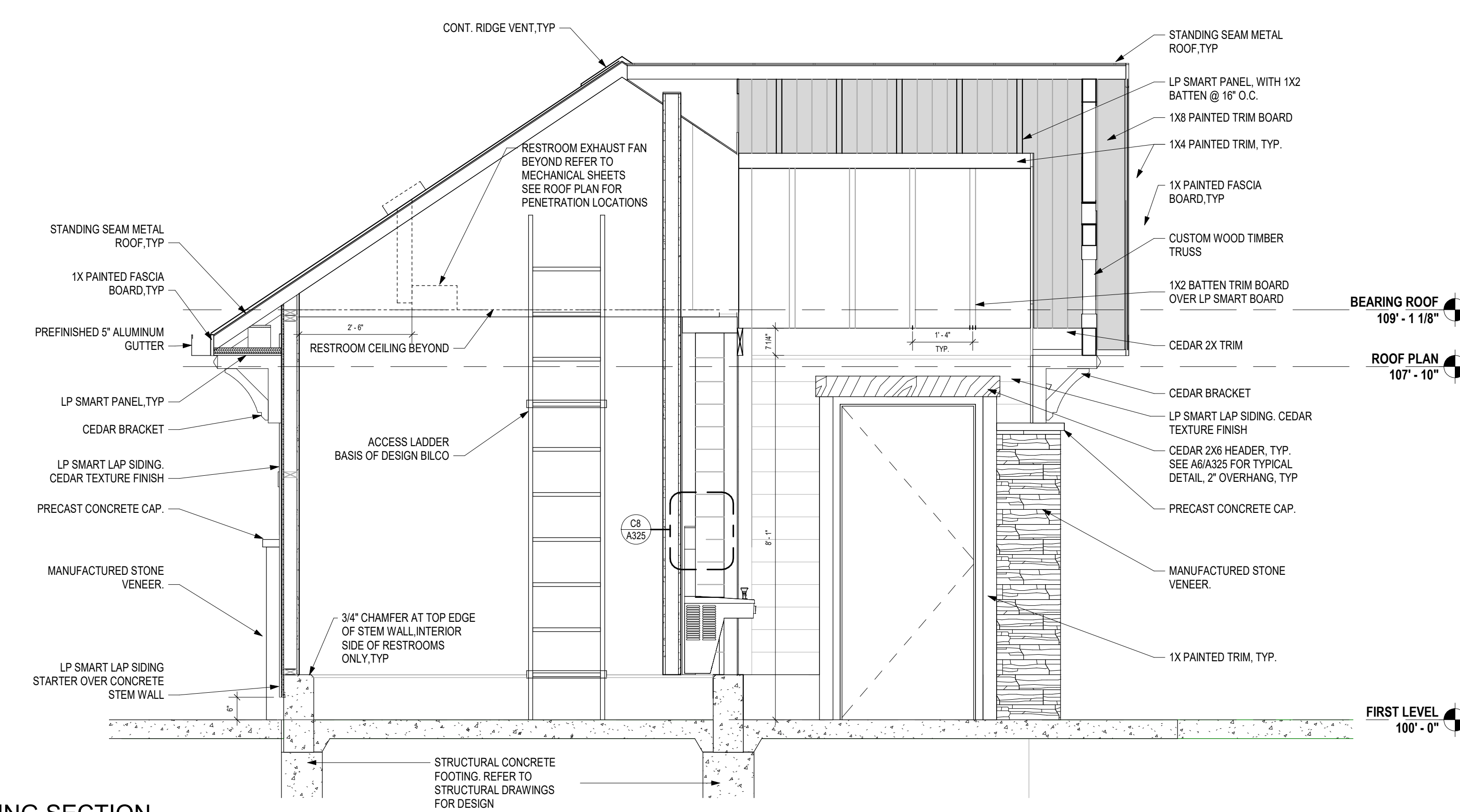
A11 EAST ELEVATION
 1/4" = 1'-0"

**GENERAL NOTES:
 EXTERIOR WALL SECTIONS/
 DETAILS**

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.

**GENERAL NOTES:
 DOOR SCHEDULE**

1. HM REFERS TO HOLLOW METAL
2. AL REFERS TO ALUMINUM
3. WD REFERS TO WOOD
4. SCWD REFERS TO SOLID CORE WOOD
5. FOR FINISH COLOR DESIGNATION FOR INTERIOR DOOR AND FRAMES, REFER TO FINISH LEGEND.
6. PROTECT ALL DOORS & FRAMES FROM DAMAGE THROUGHOUT CONSTRUCTION PHASES.



G6 BUILDING SECTION
 1/2" = 1'-0"

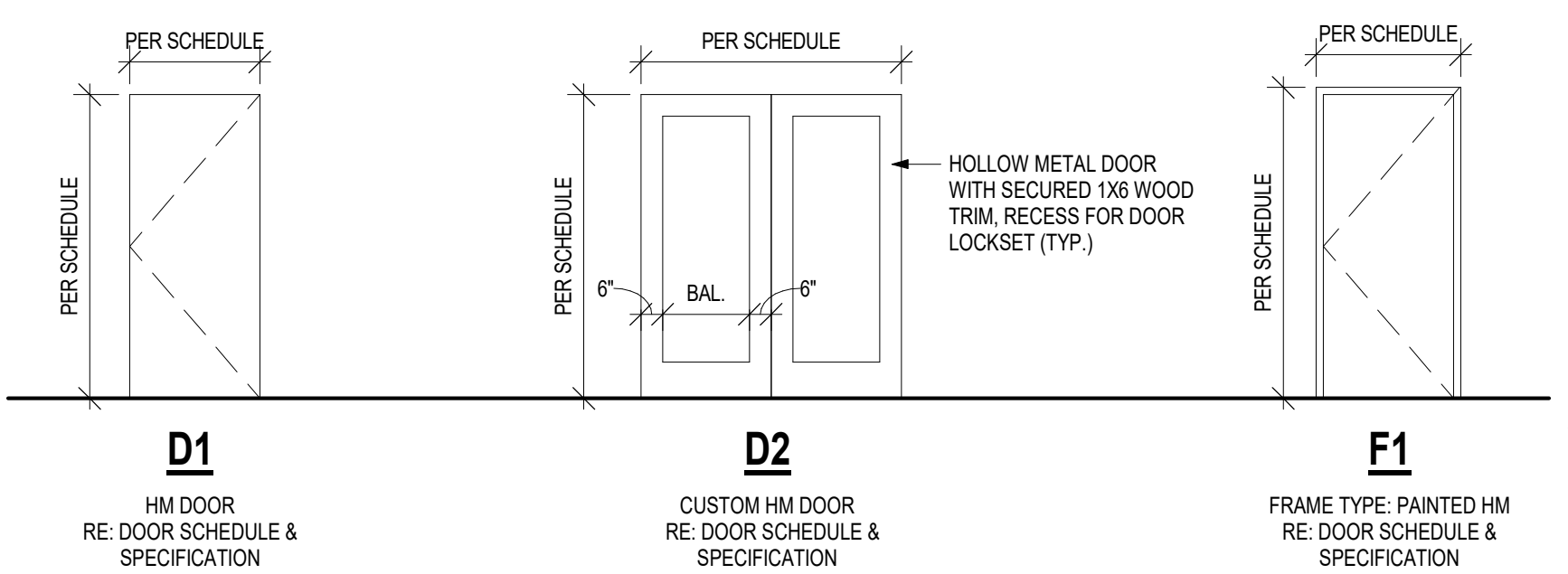
FINISH LEGEND						
SYMBOL	MATERIAL	MANUFACTURER	TYPE	COLOR	TYP. AREA / REMARKS	
TOILET PARTITIONS	SOLID PLASTIC	ACCURATE	HDPE	TBD	TOILET PARTITION, CEILING MOUNTED	
FLOOR FINISH	WC1	WATERPROOF CONCRETE	SPECIALTY PRODUCTS GROUP	VAPOR LOCK 2021	GRAY / NATURAL FINISH	POOL HOUSE
WALL FINISH	P1	PAINT	SHERWIN WILLIAMS	EPOXY	SW 7029 AGREEABLE GRAY	GYP CEILING / SOFFIT

ROOM FINISH SCHEDULE						
RM. NO.	ROOM NAME	FLOORS	WALL FINISH			CEILING FINISH
			NORTH WALL	EAST WALL	SOUTH WALL	
101	STORAGE	WC1	P1	P1	P1	P1
102	WOMEN	WC1	P1	P1	P1	P1
103	MEN	WC1	P1	P1	P1	P1
104	POOL EQUIPMENT	WC1	P1	P1	P1	P1

DOOR SCHEDULE									
DOOR NO.	ROOM NAME	WIDTH	HEIGHT	DOOR TYPE	DOOR IMAT.	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	REMARKS
101	STORAGE	6'-0"	7'-0"	D2	HM	PAINT	F1	HM	1,2,3,4
102	WOMEN	3'-0"	7'-0"	D1	HM	PAINT	F1	HM	1,2,3,4
103	MEN	3'-0"	7'-0"	D1	HM	PAINT	F1	HM	1,2,3,4
104	POOL EQUIPMENT	6'-0"	7'-0"	D2	HM	PAINT	F1	HM	1,2,3,4

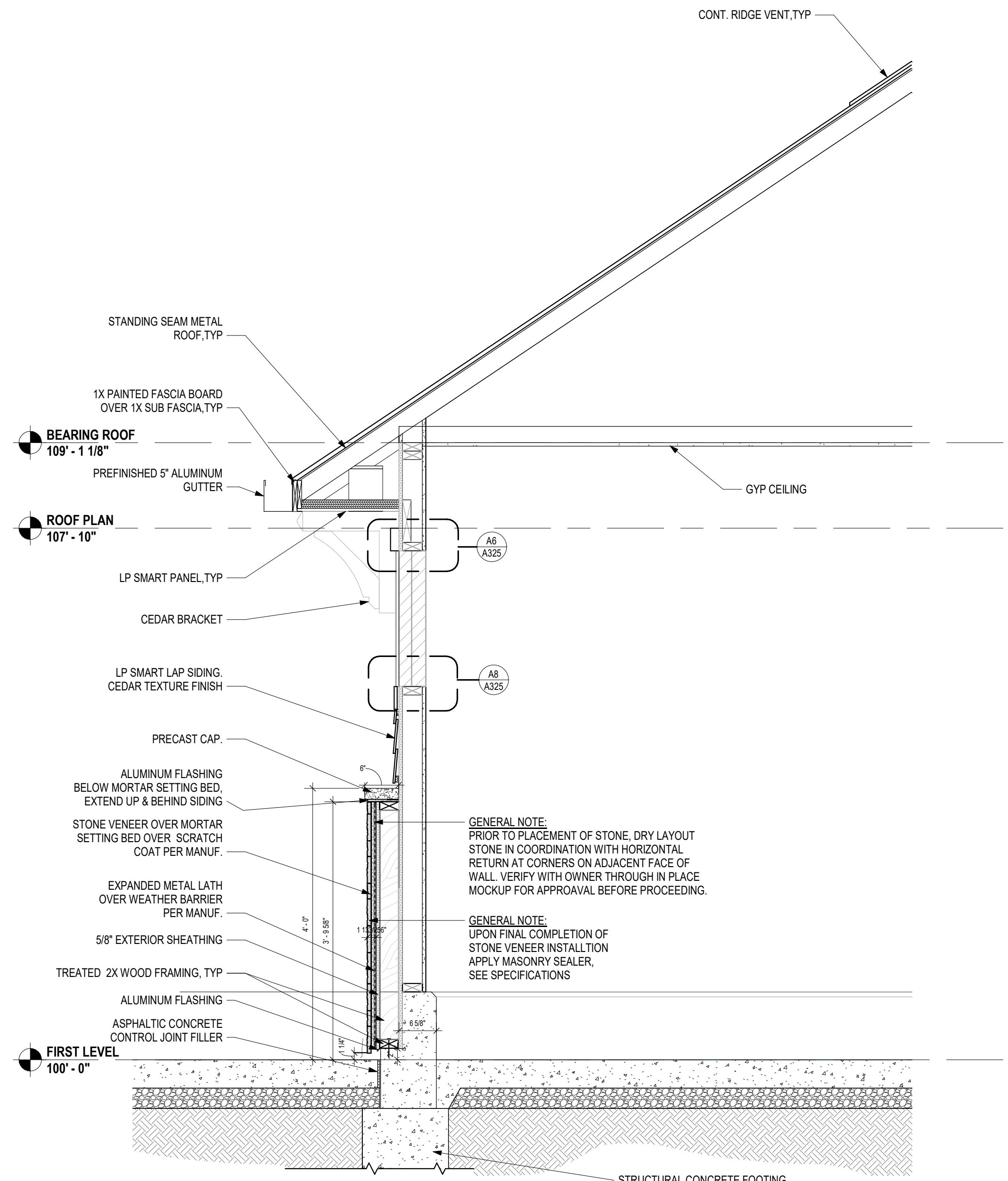
DOOR SCHEDULE REMARKS:

1. PROTECT DOOR AND FRAME FROM DAMAGE THROUGHOUT CONSTRUCTION. ANY DAMAGE TO BE REPAIRED/REPLACED PER OWNER DISCRETION.
2. PROVIDE DOOR STOPS AND HOLD OPEN HARDWARE.
3. DOOR AND FRAME TO BE PAINTED. REFER TO FINISH SCHEDULE FOR COLOR.
4. SEE SPECIFICATION SHEETS FOR DOOR HARDWARE REQUIREMENTS.

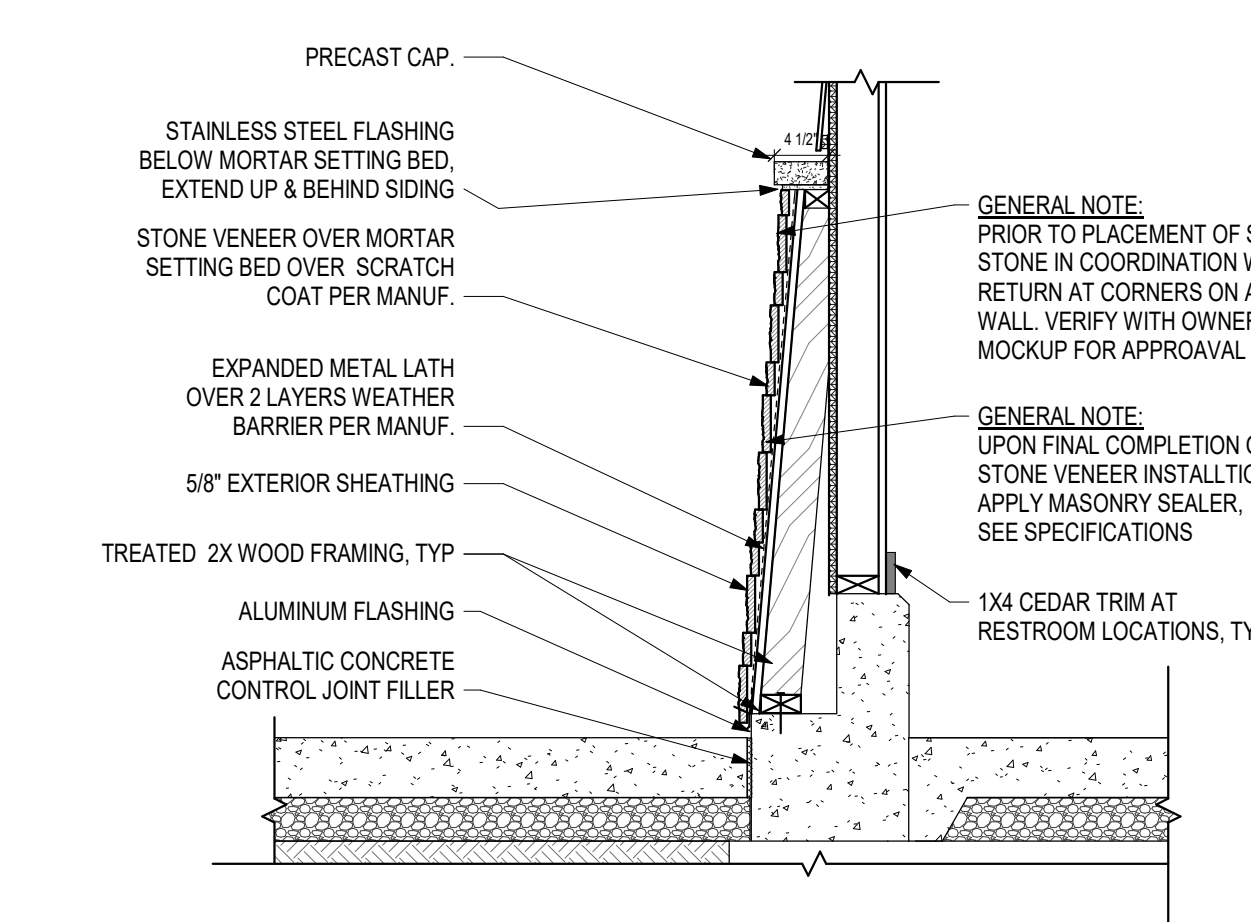


NOTE:
 1. DOORS TO BE 1-3/4" THICK, UNLESS NOTED OTHERWISE ON DOOR SCHEDULE.

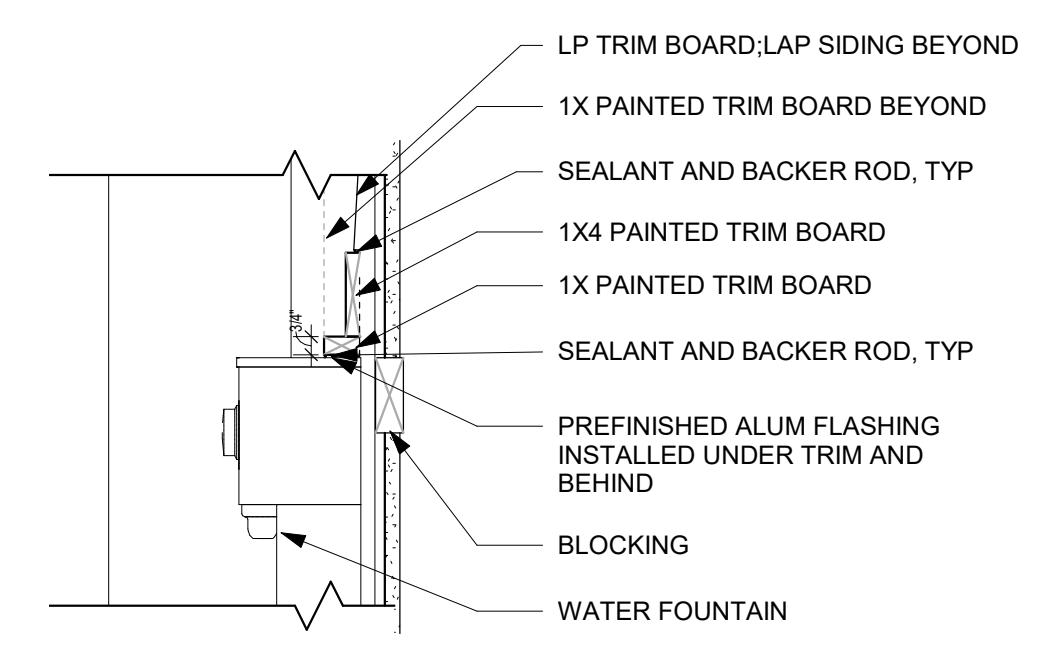
ALTERNATE DOOR TYPE:
 FIBERGLASS WITH WOOD GRAIN FINISH. STAIN WITH GEL TYPE. COLOR TO BE VERIFIED WITH ARCHITECT.



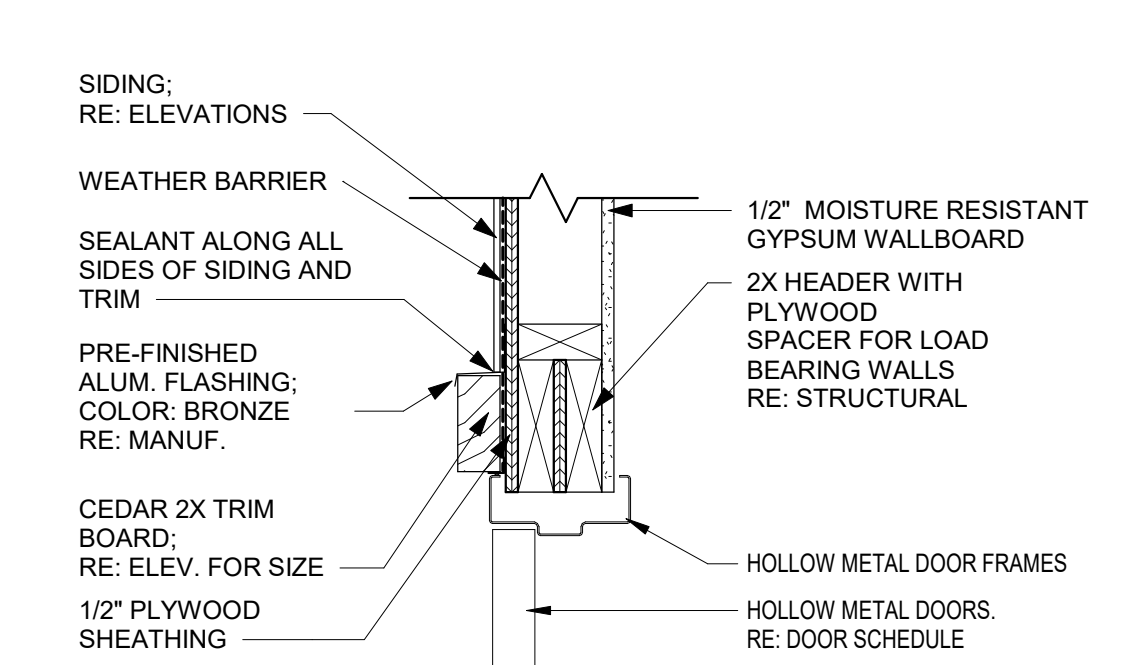
F12 BUILDING WALL SECTION
 3/4" = 1'-0"



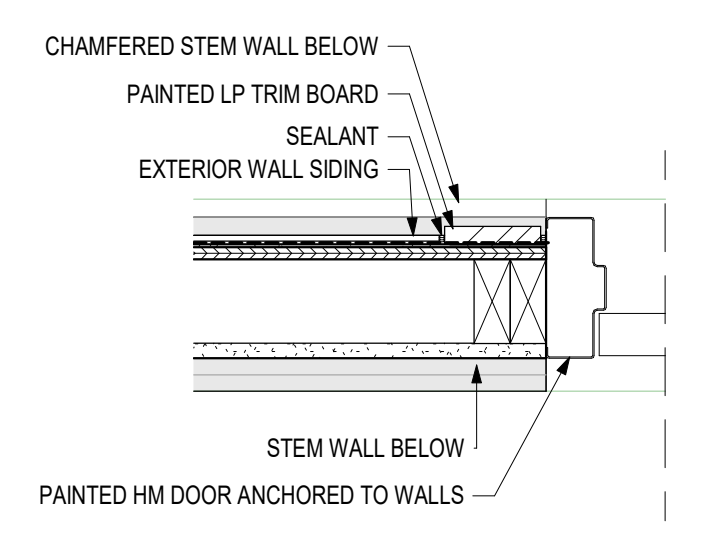
D12 BUILDING SLOPED WALL CONDITION
 3/4" = 1'-0"



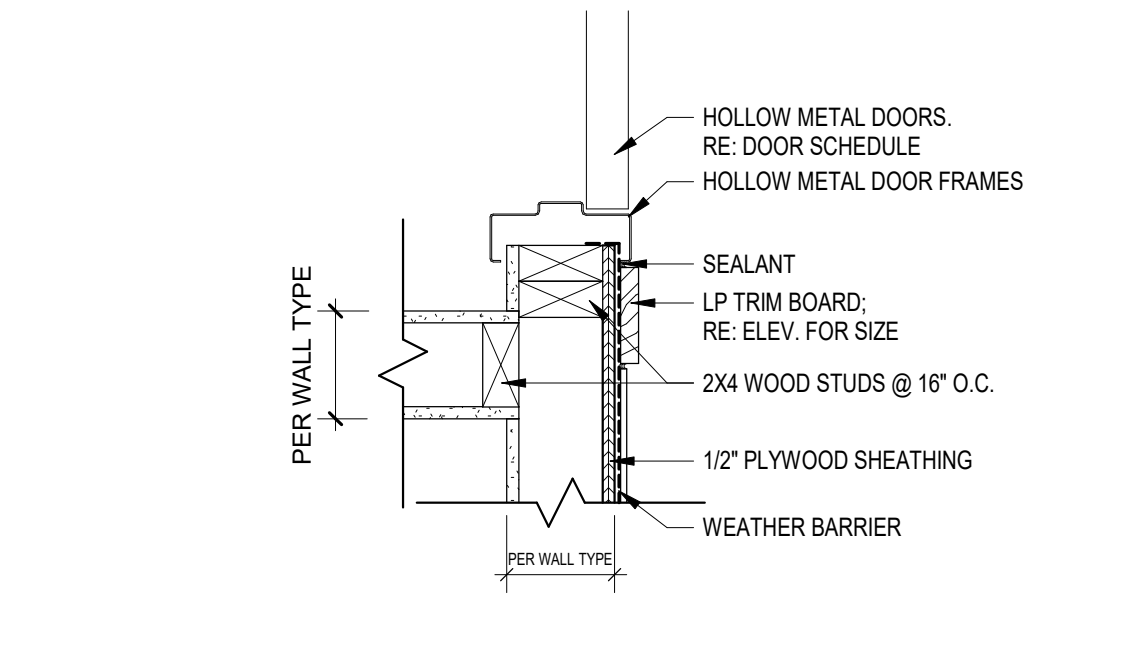
C8 WATER FOUNTAIN TRIM DETAILS
 1 1/2" = 1'-0"



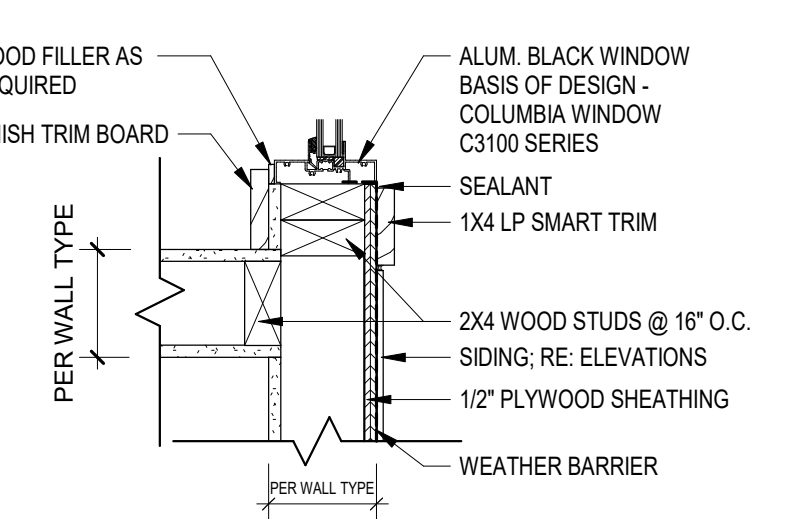
D6 DETAIL - WD HEAD (TYP.)
 1 1/2" = 1'-0"



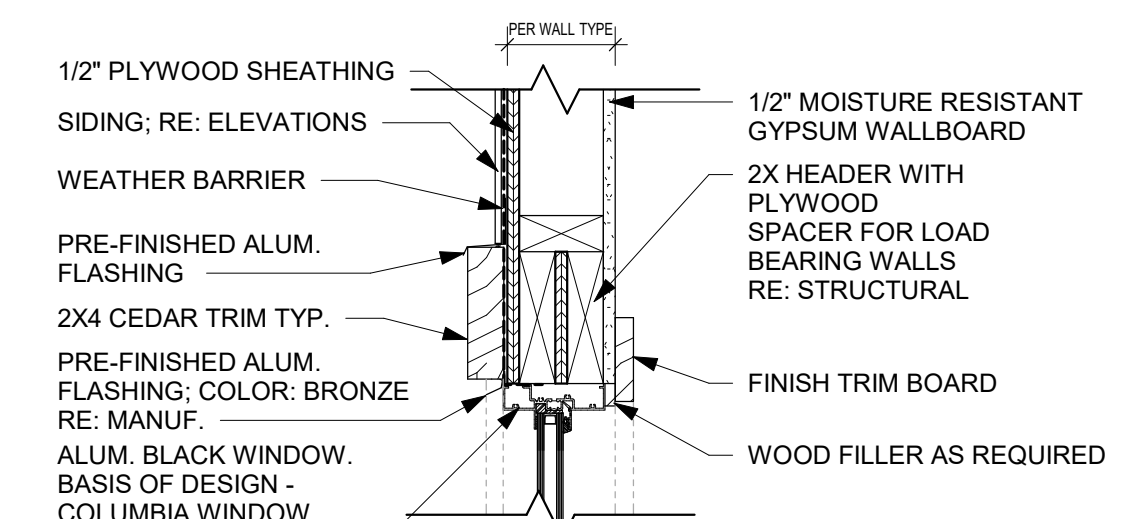
B8 DOOR FRAME @ STEM WALL
 1 1/2" = 1'-0"



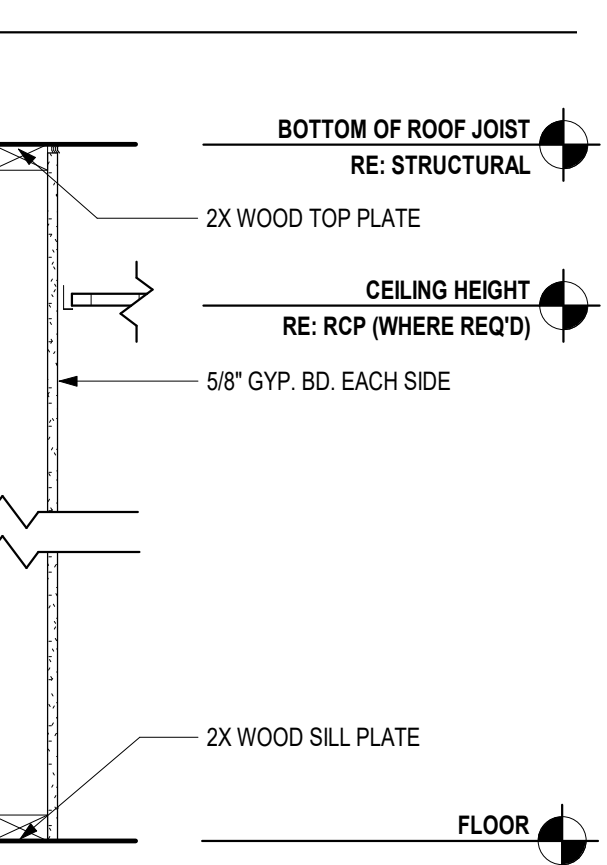
B6 DETAIL - WD JAMB (TYP.)
 1 1/2" = 1'-0"



A8 DETAIL - WINDOW JAMB (TYP.)
 1 1/2" = 1'-0"

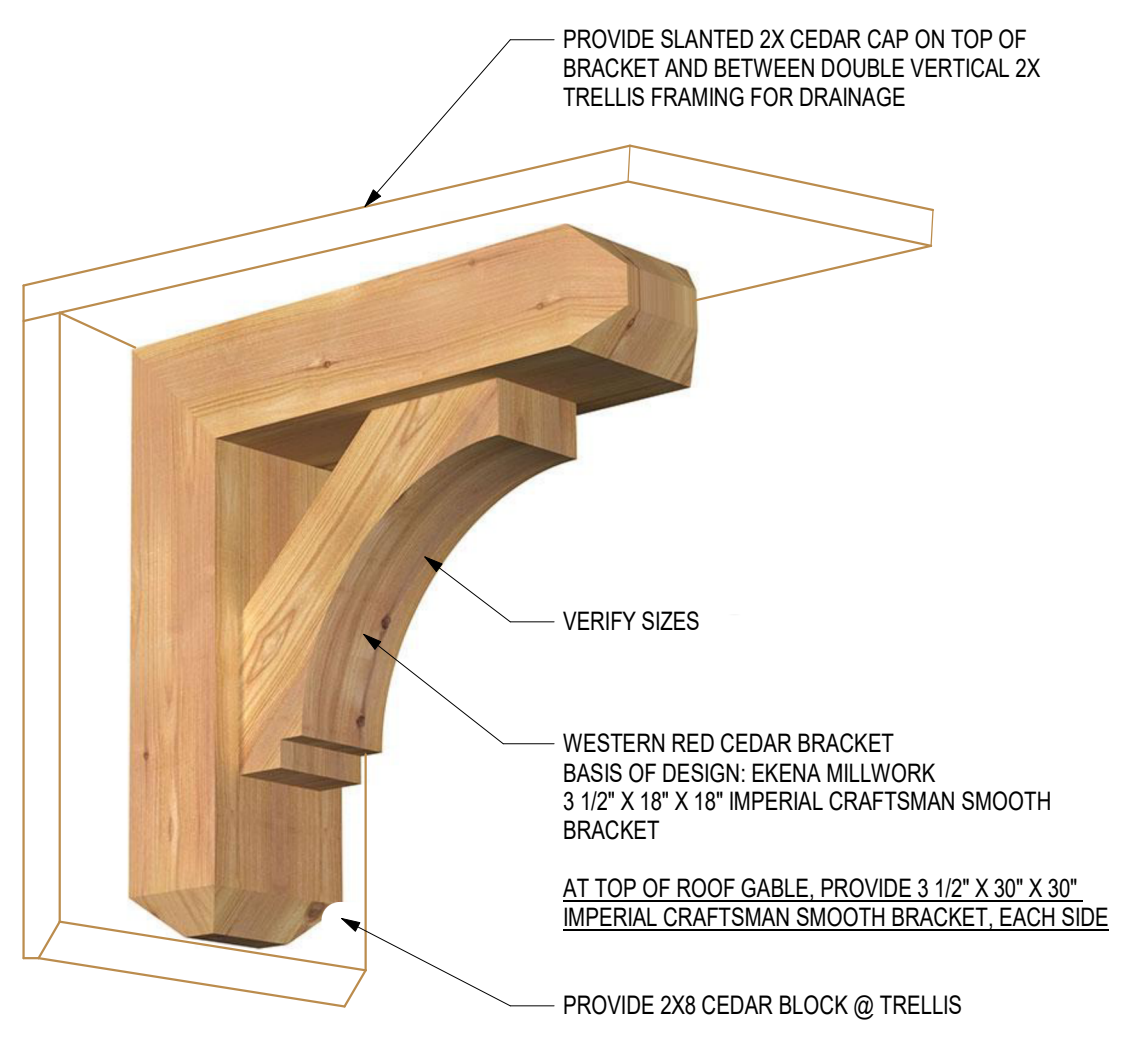


A6 DETAIL - WINDOW HEAD (TYP.)
 1 1/2" = 1'-0"

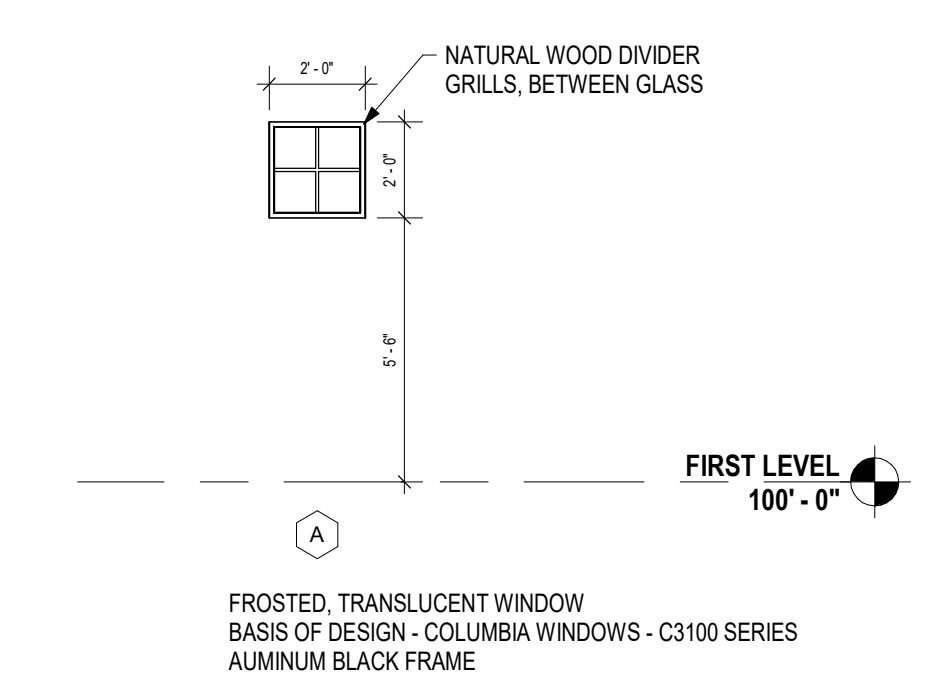


TYPE	WALL DESCRIPTION
AA	2X4 WOOD STUD @ 16" O.C. 1/2" GYP. BD. EACH SIDE - MOISTURE RESISTANT NO SOUND BATT INSUL. NON RATED 1/2" TYPE GYP. BD. ONE SIDE AT WET WALL IN BATHROOM

A12 WALL TYPE AA
 1" = 1'-0"



A10 BRACKET DETAIL
 1 1/2" = 1'-0"



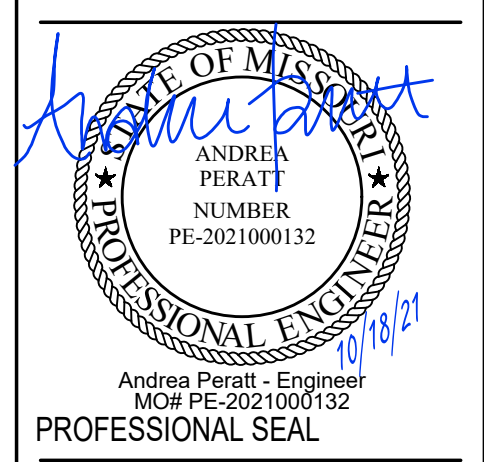
A4 WINDOW - A
 1/4" = 1'-0"



HOOK FARMS
SW 26TH TERRACE & SW PRYOR RD
LEE'S SUMMIT, MO

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REVISION DATES:



Andrius Peratt
Professional Engineer
No. 2021000132
Professional Seal

ME001
ISSUE DATE: 18 OCT 2021
COLLINS WEBB #: 20032

COVER SHEET

SHEET INDEX

ME001	COVER SHEET
ME002	SPECIFICATIONS
ME101	SITE PLAN
M101	MECHANICAL PLAN
M201	MECHANICAL SCHEDULES & DETAILS
E101	ELECTRICAL PLAN
E201	ELECTRICAL SCHEDULES & DETAILS

MECHANICAL AND PLUMBING SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

SHEET METAL

- HIGH EFFICIENCY ROUND DUCT TAKEOFF (WITH & WITHOUT MANUAL DAMPER)
- SPIN-IN ROUND DUCT TAKEOFF (WITH & WITHOUT MANUAL DAMPER)
- CONICAL BELLMOUTH ROUND TAKEOFF
- ROUND DUCT RUNOUT WITH FLEX DUCT
- DUCTWORK ELBOW (WITH & WITHOUT TURNING VANES)
- FD: FIRE DAMPER SD: SMOKE DAMPER BD: BACKDRAFT DAMPER (GRAVITY)
- AUTOMATIC MOTORIZED DAMPER
- SUPPLY DIFFUSER AND DIFFUSER CALLOUT (NECK SIZE, TYPE AND CFM)
- LINEAR/SLOT DIFFUSER
- RETURN GRILLE OR EXHAUST REGISTER
- SUPPLY AIR FLOW INDICATOR
- RETURN AND EXHAUST AIR FLOW INDICATOR
- THERMISTAT
- TEMPERATURE SENSOR
- HUMIDISTAT
- CONTROL WIRING

PIPING SYMBOLS

- SHUTOFF VALVE
- SHUTOFF VALVE IN RISER
- BALANCING VALVE
- PLUG VALVE
- AUTO FLOW CONTROL VALVE
- PIPING ELBOW UP
- PIPING ELBOW DOWN
- PIPING TEE
- PIPING ELBOW
- PIPING TEE UP
- PIPING TEE DOWN
- INCREASER / REDUCER
- UNION
- COP
- PIPE FLEX
- STRAINER
- CHECK VALVE
- MILNE STRAINER
- TEST PLUG
- GLIDE
- ANCHOR
- TRIPLE DUTY VALVE
- AUTOMATIC 2-WAY CONTROL VALVE
- AUTOMATIC 3-WAY CONTROL VALVE
- SOLENOID VALVE

PLUMBING PIPING

- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- RECORCULATING DOMESTIC HOT WATER
- WASTE ABOVE GRADE OR FLOOR
- WASTE BELOW GRADE OR FLOOR
- PLUMBING VENT
- WATER SERVICE
- GAS (NATURAL)

PLUMBING FIXTURES/EQUIPMENT

- HOSE BRB
- WALL HYDRANT
- CLEAN OUT
- REDUCED PRESSURE BACKFLOW PREVENTER
- DOUBLE CHECK BACKFLOW PREVENTER
- PLUMBING FIXTURE AND CALLOUT
- FD: FLOOR DRAIN, AD: AREA DRAIN, FS: FLOOR SINK, RD: ROOF DRAIN, ORD: OVERFLOW ROOF DRAIN

GENERAL SYMBOLS

- INDICATES CONNECT TO EXISTING
- INDICATES ELEVATION
- EQUIPMENT TAG. REFER TO CONNECTIONS SCHEDULE FOR MECHANICAL CONNECTIONS AND LOAD INFO FOR KITCHEN, SHOP, ETC. EQUIPMENT

PLUMBING SPECIALTIES

- PRESS/TEMP GAUGE WITH COCK
- THERMOMETER
- PRESSURE REDUCING VALVE
- RELIEF VALVE
- WATER HAMMER ARRESTER

GEN. MECHANICAL NOTES

- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE INTERNATIONAL MECHANICAL CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
- ANY POWER FOR CONTROL SYSTEMS TO BE PROVIDED BY E/C IS INDICATED ON ELECTRICAL PLANS. ANY ADDITIONAL LINE VOLTAGE OR LOW VOLTAGE POWER REQUIRED BY THE M/C OR SUBCONTRACTORS TO HAVE A FULLY FUNCTIONING SYSTEM SHALL BE PROVIDED BY THE M/C CONTRACTOR OR SUBS.
- ALL EQUIPMENT SHALL BE ADEQUATELY AND PROPERLY SUPPORTED AND FASTENED FROM STRUCTURE.
- ALL EQUIPMENT AND ACCESSORIES INSTALLED IN CONCEALED SPACES REQUIRING ACCESS SHALL BE PROVIDED WITH ACCESS DOORS MEETING ANY FIRE REQUIREMENTS OF THE WALL/CILING THEY ARE INSTALLED.
- EACH AIR HANDLING UNIT OVER 2000CFM SHALL BE PROVIDED WITH A SMOKE DETECTOR TO SHUT DOWN THE UNIT PER IMC 606 AS REQUIRED BY AHJ. COORDINATE WITH OTHER TRADES.
- START UP AND ADJUST ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR INSTALLATION.
- WHENEVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO ENSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT. IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT THE CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND PANELS.

COORDINATION NOTES

- COORDINATE REQUIREMENTS FOR INSTALLATION OF SYSTEMS AND EQUIPMENT WITH ALL OTHER TRADES.
- THE CONTRACTOR SHALL COORDINATE THE ROUTING AND PATH OF ALL SYSTEMS, CONDUITS, PIPES, DUCTS, ETC. WITH THE POSITION AND LAYOUT OF THE STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY OFFSETS, TURNS, RISERS AND DROPS FOR SYSTEMS AND COMPONENTS AS NEEDED TO INSTALL THE MEP SYSTEMS TO CLEAR STRUCTURE, CEILINGS, ETC. AND OTHER SYSTEMS IN POTENTIAL CONFLICT WITH ROUTING.
- COORDINATE WORK WITH OTHER TRADES TO INSTALL SYSTEMS ABOVE CEILING HEIGHTS INDICATED ON ARCHITECTURAL PLANS.
- CHECK SPACE REQUIREMENTS WITH OTHER TRADES AND STRUCTURE/CONSTRUCTION TO ENSURE THAT ALL MATERIALS AND EQUIPMENT CAN BE INSTALLED IN THE SPACE ALLOTTED INCLUDING FINISHED, SUSPENDED CEILINGS AND OTHER SPACES, CHASES, ETC. WITHIN THE BUILDING. MAKE MODIFICATIONS THEREAS AS REQUIRED AND APPROVED.
- TRANSMIT TO OTHER TRADES ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR INSTALLATION.
- WHENEVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO ENSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT. IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT THE CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND PANELS.
- COORDINATE, PROJECT AND SCHEDULE WORK WITH OTHER TRADES IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE.
- DRAWINGS SHOW THE GENERAL RUNS OF CONDUITS, PIPING AND DUCTWORK AND APPROXIMATE LOCATION OF OUTLETS. ANY SIGNIFICANT CHANGES IN LOCATION OF ITEMS NECESSARY IN ORDER TO MEET FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER AND RECEIVE HIS APPROVAL BEFORE SUCH ALTERATIONS ARE MADE. ALL SUCH MODIFICATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR OF SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- ADJUST LOCATION OF PIPING, DUCTWORK, ETC. TO PREVENT INTERFERENCES, BOTH ANTICIPATED AND UNENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH ITEM PRIOR TO FABRICATION. MAKE OFFSETS, TRANSITIONS AND CHANGES IN DIRECTION IN SYSTEMS AS REQUIRED TO MAINTAIN ADEQUATE CLEARANCES AND HEADROOM.
- WHENEVER THE WORK IS OF SUFFICIENT COMPLEXITY, PREPARE ADDITIONAL COORDINATION DRAWINGS AND ORGANIZE ON-SITE MEETINGS WITH ALL RELATED SUBCONTRACTORS TO COORDINATE THE WORK BETWEEN TRADES. DRAWINGS SHALL CLEARLY SHOW THE WORK AND ITS RELATION TO THE WORK OF OTHER TRADES, AND BE SUBMITTED FOR REVIEW PRIOR TO COMMENCING SHOP FABRICATION OR ERECTION IN THE FIELD.
- COORDINATE WITH LOCAL UTILITY PROVIDERS FOR THEIR REQUIREMENTS FOR SERVICE CONNECTIONS AND PROVIDE ALL NECESSARY PERMITS, MATERIALS, LABOR AND TESTING TO ACCOMPLISH THE WORK.
- COORDINATE THE MOUNTING OF SUSPENDED LIGHT FIXTURES UTILIZING HANGERS LIGHT SO THAT CONDUIT, DUCTWORK, STRUCTURAL MEMBERS, ETC. ARE NOT LOCATED DIRECTLY ABOVE THE LIGHT FIXTURE. MAINTAIN A MINIMUM OF 24" CLEARANCE FROM THESE ITEMS WHENEVER POSSIBLE.

GENERAL PLUMBING NOTES

- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
- NO PIPING SHALL BE INSTALLED WHERE IT WILL SUBJECT TO FREEZING TEMPERATURES. PIPING IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF BUILDING INSULATION, INSULATED AND THE CHASE SHALL BE VENTILATED WITH GRILLES ALLOWING INDOOR AMBIENT CONDITIONS TO CIRCULATE THROUGH THE CHASE.
- PROVIDE CLEANSOUTS IN THE FOLLOWING LOCATIONS:
 1. IN ALL HORIZONTAL DRAINS (WITHIN THE BUILDING) NOT MORE THAN 100 FEET APART.
 2. IN BUILDING SEWERS LOCATED NO MORE THAN 100 FEET APART MEASURED FROM THE UPSTREAM ENTRANCE OF THE CLEANSOUT.
 3. EACH CHANGE OF DIRECTION OF THE BUILDING DRAIN OR HORIZONTAL WASTE OR SOIL LINES GREATER THAN 45 DEGREES. WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE CLEANSOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH OF THE DRAINAGE PIPING.
 4. AT THE BASE OF EACH WASTE OR SOIL STACK.
 5. NEAR THE JUNCTION OF THE BUILDING DRAIN AND BUILDING SEWER.

GENERAL ELECTRICAL NOTES

- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
- COORDINATE LOCATIONS OF RECEPTACLES, SWITCHES, ETC. WITH ARCHITECTURAL CASEWORK AND ELEVATIONS.
- REFER TO MOUNTING HEIGHTS DETAIL FOR MOUNTING HEIGHTS OF ALL DEVICES NOT INDICATED OTHERWISE.
- PROVIDE ALL EMPTY CONDUITS WITH PULL STRINGS AND BUSHED ENDS.
- CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE REASONABLY POSSIBLE.

ELECTRICAL SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

CIRCUITING

- HOME RUN (2#12 1#12G UNG)
- INDICATES 2 PHASE, 1 N, & 1 GND CONDUCTOR
- HOME RUN: INDICATES SHARED CIRCUIT
- HOME RUN: INDICATES #10 CONDUCTORS ENTIRELY

UTILITIES

- UNDERGROUND ELECTRICAL
- OVERHEAD ELECTRICAL
- TELECOMMUNICATIONS CONDUIT
- UNDERGROUND TELECOMMUNICATIONS CONDUIT

LIGHTING

- GRID-MOUNTED TROFFER LIGHT FIXTURE
- STRIP LIGHT FIXTURE
- SURFACE/RECESSED LIGHT FIXTURE
- WALL-MOUNTED LIGHT FIXTURE
- POLE-MOUNTED LIGHT FIXTURE
- EXIT LIGHT
- BATTERY-OPERATED EMERGENCY LIGHT (WALL MTD)
- BATTERY-OPERATED EMERGENCY LIGHT (CEILING MTD)
- WALL-MOUNTED COMBINATION EXIT LIGHT / BATTERY-OPERATED EMERGENCY LIGHT
- LIGHT SWITCH - SINGLE POLE
- LIGHT SWITCH - 3-WAY
- LIGHT SWITCH - 4-WAY
- LIGHT SWITCH - KEY
- LIGHT SWITCH - DIMMER
- LIGHT SWITCH - PILOT LIGHT
- LIGHT SWITCH - 2 POLE
- LIGHT SWITCH - 3-WAY DIMMER
- WALL-MOUNTED MOTION SWITCH
- CEILING-MOUNTED MOTION SWITCH
- SWITCHBANK - REFER TO DETAILS
- DIMMER BOARD
- REMOTE CONTROL SWITCH AS SCHEDULED
- TIMELOCK - REFER TO PLANS / DETAILS

POWER DEVICES

- DUPLEX RECEPTACLE
- LINE THRU DEVICE INDICATES ABOVE COUNTER
- SPECIAL DUPLEX RECEPTACLE (GFCI, ISOLATED GROUND, ETC.)
- QUADPLEX RECEPTACLE
- SIMPLEX RECEPTACLE W/NEMA CONFIG AS NOTED
- MULTI-POLE RECEPTACLE W/NEMA CONFIG AS NOTED
- CEILING MOUNTED RECEPTACLE
- RECEPTACLE/DEVICE MOUNTED IN "TOMBSTONE"
- POKE-THRU WITH POWER
- POKE-THRU WITH TELECOMMUNICATIONS
- POKE-THRU W/POWER AND TELECOM
- SINGLE GANG FLOOR BOX (2, 3, 4 GANG SIMILAR)
- CLOCK RECEPTACLE
- PLUG MOLD / WIRE MOLD AS SPECIFIED
- JUNCTION BOX
- PUSH BUTTON
- MOTOR

EQUIPMENT

- DISCONNECT SWITCH. RE: PLANS FOR INFORMATION
- MAGNETIC MOTOR STARTER
- COMBINATION DISCONNECT SWITCH / MOTOR STARTER
- TOGGLE-TYPE DISCONNECT. FURNISH WITH THERMAL MOTOR PROTECTION WHERE SERVING FANS/PUMPS.
- SURFACE PANELBOARD
- RECESSED PANELBOARD
- DISTRIBUTION PANELBOARD
- SWITCHBOARD, FEEDER/MAIN CIRCUIT BREAKER SECTION AND DISTRIBUTION SECTION

GENERAL SYMBOLS

- INDICATES CONNECT TO EXISTING
- INDICATES ELEVATION
- EQUIPMENT TAG. REFER TO CONNECTIONS SCHEDULE FOR ELECTRICAL CONNECTIONS AND LOAD INFO FOR KITCHEN, SHOP, ETC. EQUIPMENT

ABBREVIATIONS

A/E	ARCHITECT / ENGINEER	ELEV	ELEVATION	MH	MANHOLE
AFF	ABOVE FINISHED FLOOR	EM	EMERGENCY FIXTURE/DEVICE	MLO	MAIN LOSS ONLY
AFG	ABOVE FINISHED GRADE	ENT	ENTERING WATER TEMPERATURE	NEA	NET FREE AREA
AG	ABOVE GRADE	EX	EXISTING ITEM	NL	NIGHT LIGHT
AHJ	AUTHORITY HAVING JURISDICTION	FFA	FROM FLOOR ABOVE	CA	OUTSIDE AIR
AHU	AIR HANDLING UNIT	FTB	FROM FLOOR BELOW	ORD	OVERFLOW ROOF DRAIN
ARCH	ARCHITECT	FFCO	FINISHED FLOOR CLEAN OUT	P/C	PLUMBING CONTRACTOR
BFP	BACKFLOW PREVENTER	FFCD	FLUSH GRADE CLEAN OUT	PSI	POUNDS PER SQUARE INCH
BG	BELOW GRADE	FL	FLOOR LINE	PVC	POLYVINYLCHLORIDE
BLDG	BUILDING	FLR	FLOOR	RA	RETURN AIR
BMS	BUILDING MANAGEMENT SYSTEM	FP	FIRE PROTECTION	RE/REF	REFER / REFERENCE
C	CONDUIT	FFM	FEET PER MINUTE	RF	RELIEF FAN
CD	CANDELA	FWCO	FLUSH WALL CLEAN OUT	RL	RELOCATED ITEM
CO	COLD DECK	G	GROUND / GANG	RPZ	REDUCED PRESSURE ZONE
COG	COOLING	G/C	GENERAL CONTRACTOR	RR	RESTROOM
CM	COORDINATE MOUNTING HEIGHT	GFI	GROUND FAULT CIRCUIT INTERRUPTER	SA	SUPPLY AIR
CL	CLEAN OUT	GFP	GFI-PROTECTED DEVICE	SPD	SURGE PROTECTIVE DEVICE
CTE	CONNECT TO EXISTING	GPM	GALLONS PER MINUTE	ST	SHUNT TRIP
DCW	DOUBLE CHECK VALVE ASSEMBLY	HD	HOT DECK	TA	TRANSFER AIR
DW	DOMESTIC COLD WATER	HTG	HEATING	TFA	TO FLOOR ABOVE
DDC	DIRECT DIGITAL CONTROLS	IG	ISOLATED GROUND	TFB	TO FLOOR BELOW
DF	DRINKING FOUNTAIN	JB	JUNCTION BOX	TP	TAMPERSHOOF
DHW	DOMESTIC HOT WATER	LED	LIGHT EMITTING DIODE	TP	TYPICAL
DHWR	DOMESTIC HOT WATER RETURN	LWT	LEAVING WATER TEMPERATURE	UNO	UNLESS NOTED OTHERWISE
DN	DRAIN	M/C	MECHANICAL CONTRACTOR	VRF	VARIABLE REFRIGERANT FLOW
DN	DOWN	MA	MIXED AIR	VTR	VENT THROUGH ROOF
E/C	ELECTRICAL CONTRACTOR	MAU	MAKE UP AIR UNIT	WCO	WALL CLEANOUT
EA	EXHAUST AIR	MCB	MAIN CIRCUIT BREAKER	WG	WIRE GUARD
EDF	ELECTRIC DRINKING FOUNTAIN	MCH	MECHANICAL	WP	WEATHERPROOF



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MO State Certificate of Authority PE-000002089

GENERAL MECHANICAL/ELECTRICAL SPECIFICATIONS/ DIVISION 22000 - PLUMBING/ DIVISION 230000 - MECHANICAL/ DIVISION 26000 - ELECTRICAL

GENERAL MECHANICAL, ELECTRICAL AND PLUMBING REQUIREMENTS

- 1. APPLICABILITY
A. These general requirements apply to all divisions (21, 22, 23, 26, 27, 28). Refer to individual divisions as included for specific information regarding each trade or scope of work.
2. GENERAL REQUIREMENTS
A. Furnish & install all labor & materials required for complete, functioning, mechanical & plumbing systems w/ all associated components & accessories on all plans.

- 3) Combined construction schedule: review progress since the last coordination meeting. Determine whether each contractor is on time, ahead or behind schedule.
4) Review present and future needs of each contractor present
5) After shop drawings have been reviewed and approved by all parties, transmit a set of submittals to each other contractor for review & approval.
6. ARCHITECTURAL VERIFICATION AND RELATED DOCUMENTS
A. Contractor shall consult all Architectural Drawings and Specifications in their entirety

- 7. WARRANTY OF QUALITY
A. Contractor shall warrant work performed under this contract shall be in strict compliance w/ current applicable codes adopted by local AHJ including any amendments & standards as set forth by National Fire Protection Association (NFPA), Underwriters Laboratories (UL), Occupational Safety & Health Administration (OSHA), American Society of Mechanical Engineers (ASME), American Society of Heating, Refrigeration, & Air Conditioning Engineers (ASHRAE), American Institute of Standards & Standards (ANSI), American Institute of Testing Materials (ASTM) & other national standards & codes where applicable.
8. CONTRACT DOCUMENTS
A. Where contract documents exceed requirements of referenced codes, Standards, etc., the contract documents shall prevail.

- 20. EXCAVATION AND BACKFILL
A. Perform necessary excavation to receive work. Provide necessary shoring, shoring, cribbing, bracing, etc. For this operation, and remove it at completion of work. Perform backfill in accordance with section of these specifications, and in compliance with OSHA safety standards.
21. ACCESS DOORS
A. Excavate trenches of sufficient width to allow ample working space, and no deeper than 4 feet.

- 9. ORDINANCES & CODES
A. Work performed under this contract shall, at a minimum, be in conformance w/ applicable national, state & local codes having jurisdiction.
10. STANDARDS
A. Work performed under this contract shall be in strict compliance w/ current applicable codes adopted by local AHJ including any amendments & standards as set forth by National Fire Protection Association (NFPA), Underwriters Laboratories (UL), Occupational Safety & Health Administration (OSHA), American Society of Mechanical Engineers (ASME), American Society of Heating, Refrigeration, & Air Conditioning Engineers (ASHRAE), American Institute of Standards & Standards (ANSI), American Institute of Testing Materials (ASTM) & other national standards & codes where applicable.

- 22. PLUMBING EXECUTION
A. Provide unions or flanged joints in each pipe line preceding connections to equipment to allow removal for repair or replacement. Provide all screwed & union valves w/ unions adjacent to each connection. Provide screwed end valves w/ union adjacent to valve unless valve can be removed easily.
23. ACCESS DOORS
A. Provide access doors in ceilings, walls, etc. Where indicated or required for access or maintenance to concealed valves & equipment installed under this section.

- 11. PROTECTION OF EQUIPMENT & MATERIALS
A. Store & protect from weather all materials, equipment, tools, etc. delivered to job site. Cover as required to protect from dirt & damage. Plug or cap open ends of ductwork & piping systems while stored & installed during construction when not in use to prevent entrance of dirt, moisture, or unapproved equal.
12. SUBSTITUTIONS
A. The base bid shall include only products from manufacturers specifically named in drawings & specifications. No substitution will be considered prior to receipt of bids unless written request for approval to bid has been received by engineer at least ten calendar days prior to date of receipt of bids.

- 24. PENETRATIONS
A. Seal mechanical floor, exterior wall & roof penetrations waterproofed & weathertight. Seal all mechanical penetrations w/ 2" x 2" fire barrier caulks. (Thickness as required & recommended by manufacturer) to maintain resistance rating of fire-rated assemblies.
25. MOTORS & STARTERS
A. Provide motors & starting equipment where not furnished w/ equipment package. Motors shall have copper windings, class B insulation, & standard squirrel cage w/ starting torque characteristics suitable for the application.

- 13. DEFINITIONS
A. Whenever used in these specifications or drawings, following terms shall have indicated meanings.
B. Furnish: term "Furnish" is used to mean "supply & deliver to project site. Ready for unloading, unpacking, assembly, installation & similar operations."
C. Install: term "install" is used to describe operations at project site including actual unloading, unpacking, Assembly, Erection, Placement, Anchoring, Applying, working in dimension, Finishing, curing, protecting, cleaning & similar activities.

- 26. ELECTRICAL WIRING
A. Refer to GENERAL MECHANICAL, ELECTRICAL & PLUMBING requirements.
27. DISCONNECT SWITCHES
A. Provide heavy-duty horsepower rated safety switches rated in accordance with NEMA enclosed switch standard 3C, 1-1999 and 816 standard.

- 14. MATERIAL WORKMANSHIP
A. Provide new materials, equipment & apparatus under this contract unless otherwise stated herein. Of best quality normally used for purposes in good commercial practice & free from defects. Model numbers listed in specifications or shown on drawings are not necessarily intended to designate required, written descriptions of firm govern model numbers.
B. Pipe, fittings, specialties & valves shall be manufactured in USA. Work performed under this contract shall provide neat & "workmanlike" appearance when completed to satisfaction of architect & engineer. Workmanship shall be finest possible by experienced mechanics. Installations shall comply w/ applicable codes & laws. Complete installation shall function as designed & intended w/ efficiency, capacity, noise level, etc.

- 28. REFRIGERANT & OIL
A. Provide full refrigerant & oil charge in refrigeration systems. Maintain for full term of warranty.
29. FINAL TESTING & ADJUSTMENTS
A. Final system testing, balancing & adjustments shall be performed by contractor certified by NABE, ABB, or other approved agency. Perform test readings on gases, units, coils, bearings & replace bearings that have excessive wear in them w/ new bearings.

- 15. PREBID SITE VISIT
A. Prior to submitting bid, visit site of proposed work & become fully informed as to conditions under which work is to be done. Failure to do so will not be considered sufficient justification for request or claim upon extra compensation or a above contract price.
16. MATERIAL WORKMANSHIP
A. Provide new materials, equipment & apparatus under this contract unless otherwise stated herein. Of best quality normally used for purposes in good commercial practice & free from defects. Model numbers listed in specifications or shown on drawings are not necessarily intended to designate required, written descriptions of firm govern model numbers.

- 30. EQUIPMENT SUBMITTALS
A. Provide necessary equipment & accessories that are not provided by equipment supplier or owner to complete installation of cooling equipment, washing equipment, etc. as indicated by others. In locations as indicated on drawings & equipment as indicated in general notes to this contractor. Equipment & accessories not provided by equipment supplier may include fans, vents, intakes, associated roof jacks & caps to outdoors, dampers, in-line fans, roof fans, control interlocks, etc. As required for proper operation of complete system in accordance w/ manufacturer's instructions. Contractor shall be responsible for correct installation & maintenance, & shall verify same w/ architect &/or equipment supplier prior to service installations.
31. SETTING, ADJUSTMENT AND EQUIPMENT SUPPORTS
A. Work shall include mounting, alignment and adjustment of systems and equipment. Set equipment level on adequate foundation and provide proper anchor bolts and isolation as shown, specified or required by manufacturers in installation instructions. Level, shim and adjust all equipment bases as recommended by manufacturer. Mount motors, align and adjust drive shafts and belts according to manufacturer's instructions.

- 17. SHOP DRAWINGS
A. Equipment to be furnished under this contract, items requiring coordination between contractors & sheet metal fabricators, including but not limited to: ductwork, sheet metal equipment, and sheet metal equipment shall be clearly identified. Labels shall include data w/ firm name, dimensions, details, size of members, quantities, omissions of components or fittings, coordination of electrical requirements, or for coordinating items w/ actual building conditions. Provide shop drawings & elevations from specified equipment provider shop drawings relative to each item.
B. Submit data that be neatly organized, identified & indexed. Each item or model number shall be clearly identified. Labels shall include data w/ firm name, equipment identification acronym or number as used on drawings & include performance curves, capacities, sizes, materials & equipment identification. Equipment identification or materials. Mark out inapplicable items. Shop drawings will be returned without review if above mentioned requirements are not met.

- 32. FIRE BARRIERS
A. General: for penetrations through fire-resistance-rated constructions, including both open fire and openings containing penetrating items, provide fire-rated penetrations, fire-rated openings and related to resist spread of fire according to requirements indicated, resist passage of smoke and other gases, and maintain original fire-resistance rating of construction penetrated.
33. OPERATION & MAINTENANCE INSTRUCTIONS
A. Collect & compile complete set of operation & maintenance instructions for all equipment installed under this contract. Include operation & maintenance instructions, manufacturer's catalog sheets, wiring diagrams, parts lists, approved shop drawings, test & balance reports, & descriptive literature as furnished by equipment manufacturer. Include an inside cover sheet that lists project name, date, owner, architect, consulting engineer, general contractor, sub-contractor, & an index of contents. Submit these instructions in a binder bound in binding w/ index & tabs separating equipment types to architect at time of work. Final approval of plumbing systems will be withheld until manual is received & deemed satisfactory. Provide instructions in form of "as-shown" drawings (see Division 1 & general conditions).

- 18. COORDINATION
A. Coordinate work w/ other trades so various components of systems will be installed at proper time w/ fit available space & will allow proper service access for maintenance. Components which are installed without review to above shall be relocated at no additional cost to owner.
B. Unless otherwise indicated, general contractor will provide chase & openings in building construction required for installation of systems specified herein. Contractor shall furnish general contractor w/ information who will be responsible for providing chase & openings.
C. Keep informed as to work of other trades engaged in construction of project & execute work in manner as to not interfere w/ or delay work of other trades. Figure dimensions shall be taken in preference to scale dimensions.

- 34. FIRE BARRIERS
A. General: for penetrations through fire-resistance-rated constructions, including both open fire and openings containing penetrating items, provide fire-rated penetrations, fire-rated openings and related to resist spread of fire according to requirements indicated, resist passage of smoke and other gases, and maintain original fire-resistance rating of construction penetrated.
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- 19. SPARE PARTS
A. Furnish to owner, w/ receipt one set of spare parts of each type required for each unit in addition to spare set of filters, install spare parts prior to testing, adjusting, a balancing work & before turning system over to owner.
B. Furnish one complete set of belts for each fan.
19. EQUIPMENT LABELS
A. Material and thickness: multilayer, multicolor, plastic laminate for mechanical engineering, 1/16 inch thick, and having predrilled holes for attachment hardware. Black letters on white background.
B. Minimum letter size: length and width vary for required label content, but not less than 2-1/2 by 3/4 inch.
C. Minimum letter size: 1/4" for name of unit if viewing distance is less than 24 inches, 1/8" for viewing distance of 24 to 48 inches, and 1/16" for viewing distance of 48 to 150 degrees distances. Include secondary viewing two-thirds to three-fourths the size of primary lettering.

- 36. PLUMBING EXECUTION
A. Provide unions or flanged joints in each pipe line preceding connections to equipment to allow removal for repair or replacement. Provide all screwed & union valves w/ unions adjacent to each connection. Provide screwed end valves w/ union adjacent to valve unless valve can be removed easily.
37. ACCESS DOORS
A. Provide access doors in ceilings, walls, etc. Where indicated or required for access or maintenance to concealed valves & equipment installed under this section.

- 20. EXCAVATION AND BACKFILL
A. Perform necessary excavation to receive work. Provide necessary shoring, shoring, cribbing, bracing, etc. For this operation, and remove it at completion of work. Perform backfill in accordance with section of these specifications, and in compliance with OSHA safety standards.
21. ACCESS DOORS
A. Excavate trenches of sufficient width to allow ample working space, and no deeper than 4 feet.

- 38. PLUMBING EXECUTION
A. Provide unions or flanged joints in each pipe line preceding connections to equipment to allow removal for repair or replacement. Provide all screwed & union valves w/ unions adjacent to each connection. Provide screwed end valves w/ union adjacent to valve unless valve can be removed easily.
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- 41. ACCESS DOORS
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- 24. PENETRATIONS
A. Seal mechanical floor, exterior wall & roof penetrations waterproofed & weathertight. Seal all mechanical penetrations w/ 2" x 2" fire barrier caulks. (Thickness as required & recommended by manufacturer) to maintain resistance rating of fire-rated assemblies.
25. MOTORS & STARTERS
A. Provide motors & starting equipment where not furnished w/ equipment package. Motors shall have copper windings, class B insulation, & standard squirrel cage w/ starting torque characteristics suitable for the application.

- 42. PLUMBING EXECUTION
A. Provide unions or flanged joints in each pipe line preceding connections to equipment to allow removal for repair or replacement. Provide all screwed & union valves w/ unions adjacent to each connection. Provide screwed end valves w/ union adjacent to valve unless valve can be removed easily.

- 26. ELECTRICAL WIRING
A. Refer to GENERAL MECHANICAL, ELECTRICAL & PLUMBING requirements.
27. DISCONNECT SWITCHES
A. Provide heavy-duty horsepower rated safety switches rated in accordance with NEMA enclosed switch standard 3C, 1-1999 and 816 standard.

- 43. ACCESS DOORS
A. Provide access doors in ceilings, walls, etc. Where indicated or required for access or maintenance to concealed valves & equipment installed under this section.

- 28. REFRIGERANT & OIL
A. Provide full refrigerant & oil charge in refrigeration systems. Maintain for full term of warranty.
29. FINAL TESTING & ADJUSTMENTS
A. Final system testing, balancing & adjustments shall be performed by contractor certified by NABE, ABB, or other approved agency. Perform test readings on gases, units, coils, bearings & replace bearings that have excessive wear in them w/ new bearings.

- 44. ACCESS DOORS
A. Provide access doors in ceilings, walls, etc. Where indicated or required for access or maintenance to concealed valves & equipment installed under this section.

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- 30. EQUIPMENT SUBMITTALS
A. Provide necessary equipment & accessories that are not provided by equipment supplier or owner to complete installation of cooling equipment, washing equipment, etc. as indicated by others. In locations as indicated on drawings & equipment as indicated in general notes to this contractor. Equipment & accessories not provided by equipment supplier may include fans, vents, intakes, associated roof jacks & caps to outdoors, dampers, in-line fans, roof fans, control interlocks, etc. As required for proper operation of complete system in accordance w/ manufacturer's instructions. Contractor shall be responsible for correct installation & maintenance, & shall verify same w/ architect &/or equipment supplier prior to service installations.
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- 28. REFRIGERANT & OIL
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- 3. GROUNDING
A. Supplement grounded neutral of secondary distribution system w/ equipment grounding system, installed so that metallic structures, enclosures, raceways, junction boxes, outlet boxes, cabinets, metal enclosures, and equipment are electrically bonded to ground continuously at ground potential (5' plus low impedance path from ground fault currents.
B. System shall comply w/ national electrical code, drawings & as specified.
C. Provide equipment ground bus in base of low voltage, switchgear breaker or otherwise bonded to each other conductor to provide a continuous ground path.
D. Provide in conduit green insulated copper conductor to main metallic water service entrance & insulate by means of adequate ground clamps.
E. Equipment grounding conductors for branch circuit runs shown on drawings shall be terminated at branch circuit panelboard, switchboard, or other distribution equipment.
F. Provide low voltage distribution system w/ separate green insulated equipment grounding conductor for each single or three-phase feeder. Single phase 120 volt branch circuits shall be provided w/ a power source of phase & neutral conductors & green ground. Grounding conductors shall be installed in common conduit which shall serve as grounding conductor.
G. Conductor installed shall be as shown on plans or if not specifically shown shall be no smaller than that required by NEC.

- 4. RACEWAY INSTALLATION
A. Install all conductors & cable in raceways continuous without taps or splices. Splice or tap only in approved boxes & enclosures w/ approved solderless connectors, or crimp connectors & terminal blocks for control wiring, & keep to minimum required. Insulate all splices, taps, & joints as required by codes.
B. Install all circular raceways concealed above suspended ceilings or concealed in walls or floors wherever possible except where otherwise indicated.
1) All conduit, junction boxes, etc. Above ceilings shall be supported from structure. Pipe sleeves, hangers & supports shall be furnished & set & contractor shall be responsible for proper permanent location.
2) Support all conductors & cables in vertical installations, as required by NFPA 70, by installing cable supports or plug-type conduit riser supports, or wire-mesh safety grids.
C. Provide GRS for all conductors run underground, exposed to weather, or exposed to other hazardous conditions. Provide GRS installed below grade w/ corrosion resistant bonded-plastic or approved masthead tubing. This shall include 90 degree elbow below grade & entire vertical section to above grade.
D. Provide interlocking spacers for multiple runs of UG conduits in same trench.
E. All other raceway may be ENT unless approved by local code. Use compression type fittings for EMT, w/ all fittings UG listed for environment in which they are used.
F. Use FMC for final connection to each motor & transformer, & for any device that would create a spark, motion, vibration, or noise. Use LFMC where exposed to liquids, vapors or sunlight.
1) Provide all FMC & LFMC w/ an insulated bonding conductor.
G. Install raceways parallel & perpendicular to building lines.

- 5. DISCONNECT (SAFETY SWITCHES)
A. Disconnect (safety) switches: Square D, Siemens, Cutler Hammer, or General Electric listed or non-listed as indicated on drawings or required NEMA 3B, heavy duty, externally operated, visible-blade safety switches. NEMA enclosure type indicated on drawings or suitable for environment in which installed. Based on handle switch & fuse indicated and include class R, J, or L. Use provisions as applicable.
B. Where indicated, provide fusible switches permanently labeled as suitable for use as service entrance equipment. w/ integral & separate neutral & ground assemblies, suitable for size of service entrance. Provide all disconnects with locking lug terminations not specifically listed as suitable for more than one conductor.
C. Provide switches where not furnished w/ starting equipment, at all other points required by drawings & as indicated on drawings.
1) DISCONNECT (SAFETY SWITCHES)
A. Disconnect (safety) switches: Square D, Siemens, Cutler Hammer, or General Electric listed or non-listed as indicated on drawings or required NEMA 3B, heavy duty, externally operated, visible-blade safety switches. NEMA enclosure type indicated on drawings or suitable for environment in which installed. Based on handle switch & fuse indicated and include class R, J, or L. Use provisions as applicable.
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PERMIT SET

GENERAL SITE PLAN NOTES

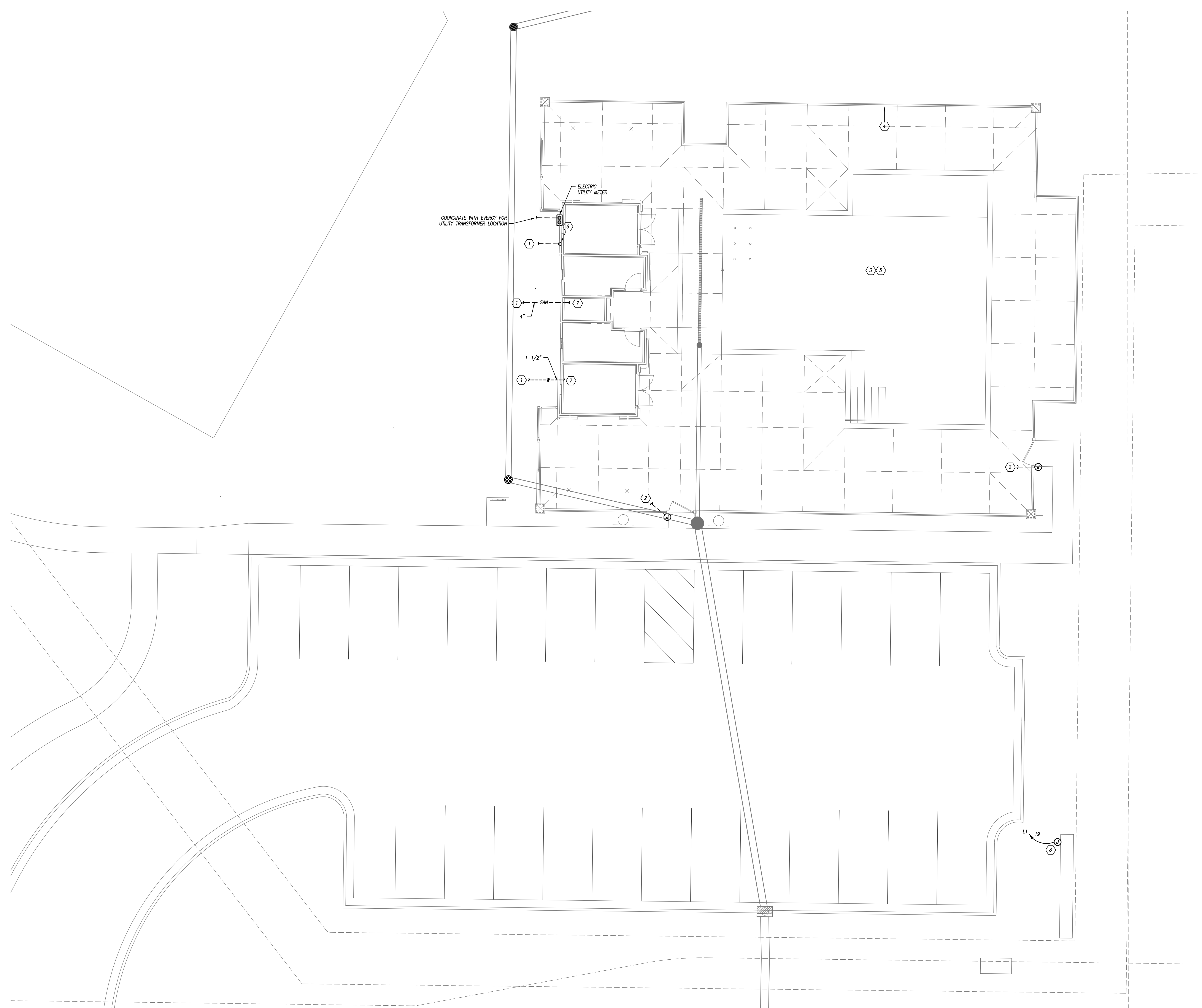
1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. REFER TO CIVIL PLANS FOR CONTINUATION OF SERVICES BEYOND 5'-0" FROM BUILDING UNLESS OTHERWISE SHOWN.
3. REFER TO RESPECTIVE FLOOR PLANS FOR CONTINUATION OF SERVICES INSIDE BUILDING AND/OR EXACT LOCATIONS OF EQUIPMENT.
4. CONTACT UTILITY LOCATING SERVICE TO LOCATE EXACT LOCATION OF ALL EXISTING UTILITIES BELOW GRADE.

SITE PLAN KEYED NOTES

- ① REFER TO CIVIL PLAN FOR CONTINUATION.
- ② PROVIDE ROUGH-IN AND (2) 1" CONDUIT BACK TO STORAGE ROOM FOR FUTURE GARD READERS.
- ③ ALL IN POOL LIGHTING AND ROUGH-IN BY OTHERS.
- ④ ALL POOL DECK LIGHTING AND ROUGH-IN BY OTHERS.
- ⑤ ALL POOL GROUNDING BY OTHERS.
- ⑥ 2" CONDUIT FOR COMMUNICATION SERVICE.
- ⑦ REFER TO PLUMBING PLAN FOR CONTINUATION.
- ⑧ PROVIDE POWER TO MONUMENT SIGN. COORDINATE WITH SIGN MANUFACTURER FOR POWER REQUIREMENT.

GENERAL NOTE:

THERE ARE NO GROUND MOUNTED HVAC EQUIPMENT. ENTIRE BUILDING IS NON CONDITIONED SPACE AND ONLY UTILIZED DURING SEASONAL TIMES OF THE YEAR FOR POOL ACTIVITIES. BUILDING IS WINTERIZED DURING OFF PEAK TIMES PER NOTES WITHIN DRAWINGS.

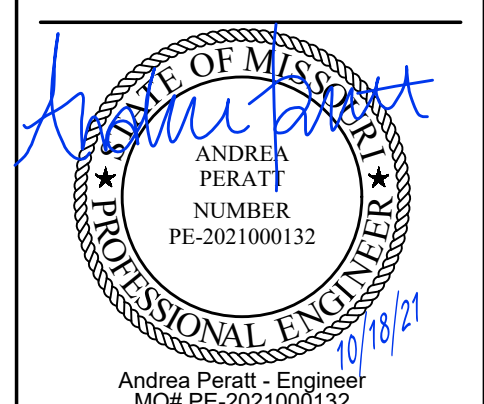
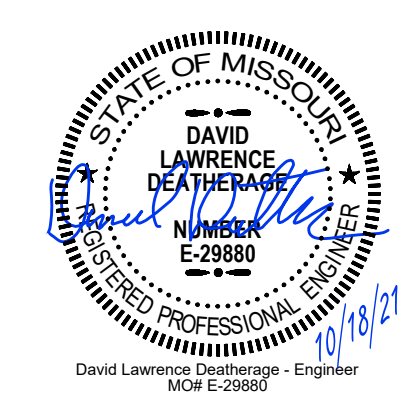


SITE PLAN
1/8" = 1'-0"

HOOK FARMS
SW 26TH TERRACE & SW PRYOR RD
LEE'S SUMMIT, MO

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REVISION DATES:



Andrew Peratt - Engineer
MICH PE-2021000132
PROFESSIONAL SEAL

ME101

ISSUE DATE: 18 OCT 2021
COLLINS WEBB #: 20032

SITE PLAN



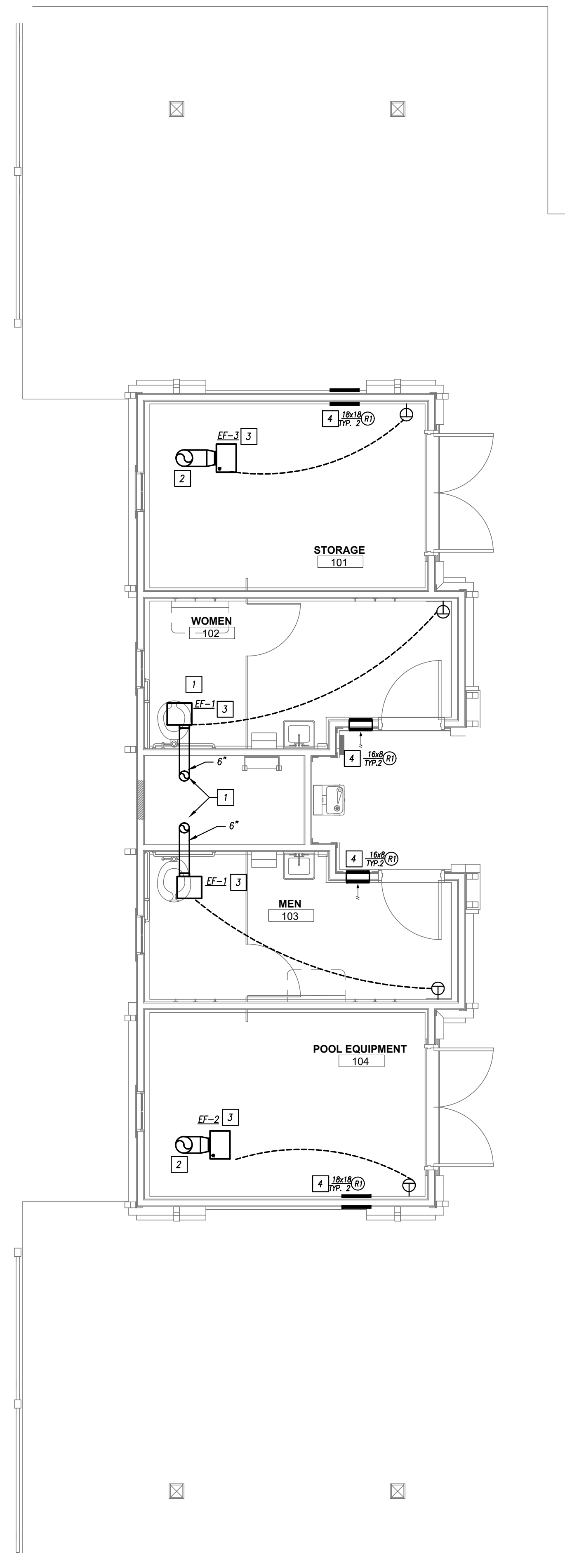
PEARSON KENT MCKINLEY RAUF ENGINEERS LLC
1300 W 96TH STREET
LENEA, KS 66215
913.482.2400 WWW.PKMRENG.COM
MO State Certificate of Authority PE-0000020889

GENERAL HVAC NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. ROUND BRANCH DUCT RUNOUTS AND FLEXIBLE DUCT SHALL BE THE SAME SIZE AS THE DIFFUSER NECK UNLESS NOTED OTHERWISE.
3. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".
4. ALL AIR DISTRIBUTION DEVICES SHALL HAVE LOCKABLE VOLUME CONTROL DEVICES.
5. ALL 90 DEGREE TURNING ELBOWS SHALL BE SMOOTH ROUND OR SQUARE WITH TURNING VANES.
6. DUCT SIZES SHOWN ON PLANS ARE INSIDE FREE AREA.

HVAC PLAN KEYED NOTES

1. TERMINATE EXHAUST DUCT WITH 6" ROOF VENT CAP. ROOF CAP TO BE PAINTED TO MATCH ROOF. COORDINATE WITH ARCHITECT FOR COLOR/FINISH. REFER TO ARCHITECTURAL DIMENSIONAL PLANS FOR ROOF VENT LOCATION.
2. TERMINATE EXHAUST DUCT WITH 10" ROOF VENT CAP. ROOF CAP TO BE PAINTED TO MATCH ROOF. COORDINATE WITH ARCHITECT FOR COLOR/FINISH. REFER TO ARCHITECTURAL DIMENSIONAL PLANS FOR ROOF VENT LOCATION.
3. INSTALL EXHAUST FAN IN ATTIC WITH GRILLE FLUSH TO CEILING.
4. INSTALL RETURN GRILLES LOW ON WALL 12" A.F.F. WITH INSECT SCREEN BETWEEN GRILLES. SEAL AROUND GRILLE FRAME. PAINT GRILLE TO MATCH WALL. COORDINATE WITH ARCHITECTURAL PLANS FOR WALL COLOR AND FINISH.



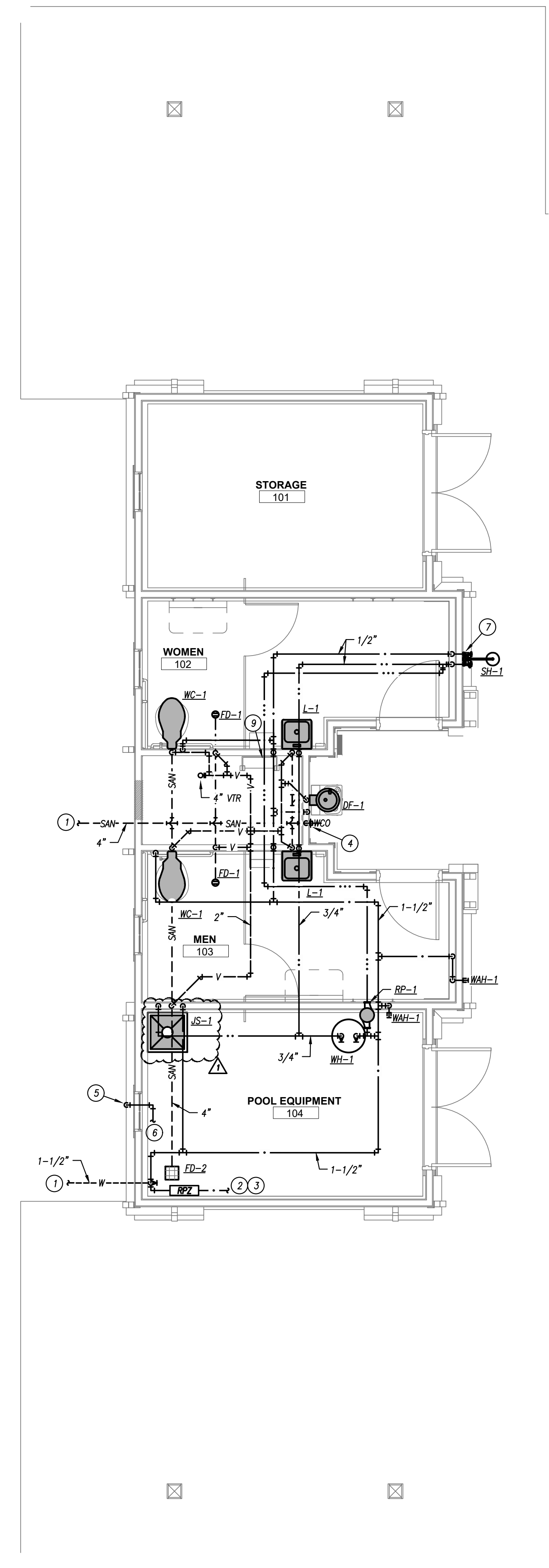
FLOOR PLAN - MECHANICAL
1/4" = 1'-0"

GENERAL PLUMBING NOTES

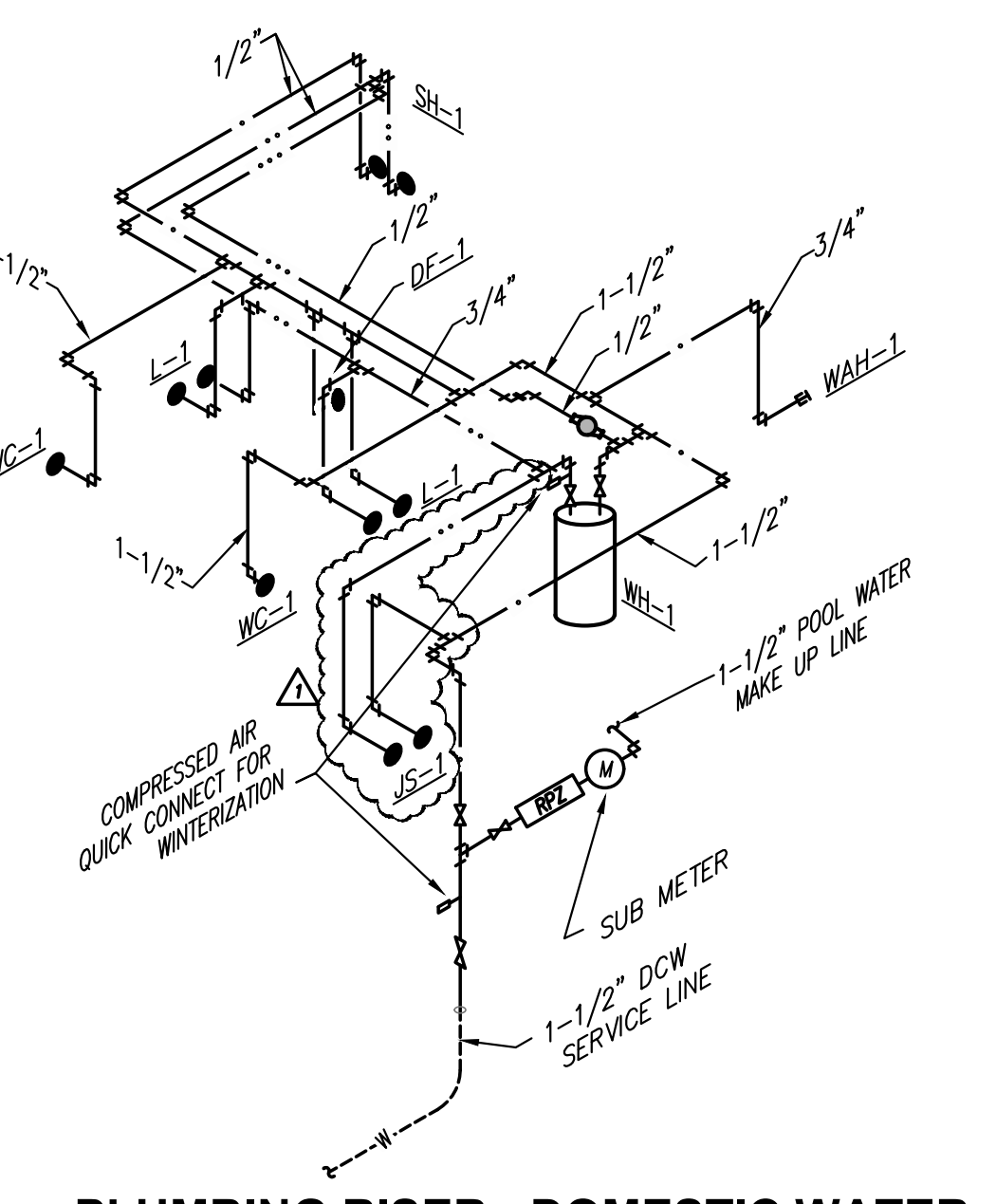
1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. REFER TO PLUMBING FIXTURE / DRAIN SCHEDULES FOR PIPING SIZES FOR INDIVIDUAL CONNECTIONS TO FIXTURES AND RISERS NOT SHOWN ON PLANS.
3. NO SANITARY OR VENT PIPING BELOW GRADE SHALL BE LESS THAN 2".
4. NO DOMESTIC WATER PIPING SHALL BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.
5. ALL VENT PIPING SHOWN IS DIAGNOMATIC. USE APPROPRIATE FITTINGS FOR VENT PIPING BELOW FLOOD RIM OF FIXTURE.
6. NOT ALL INTERIOR CLEANOUTS ARE SHOWN FOR DRAWING CLARITY. CONTRACTOR SHALL INSTALL ALL CODE-REQUIRED CLEANOUTS (SEE GENERAL NOTES ON COVER SHEET). COORDINATE EXACT LOCATIONS OF CLEANOUTS WITH ARCHITECT.

PLUMBING PLAN KEYED NOTES

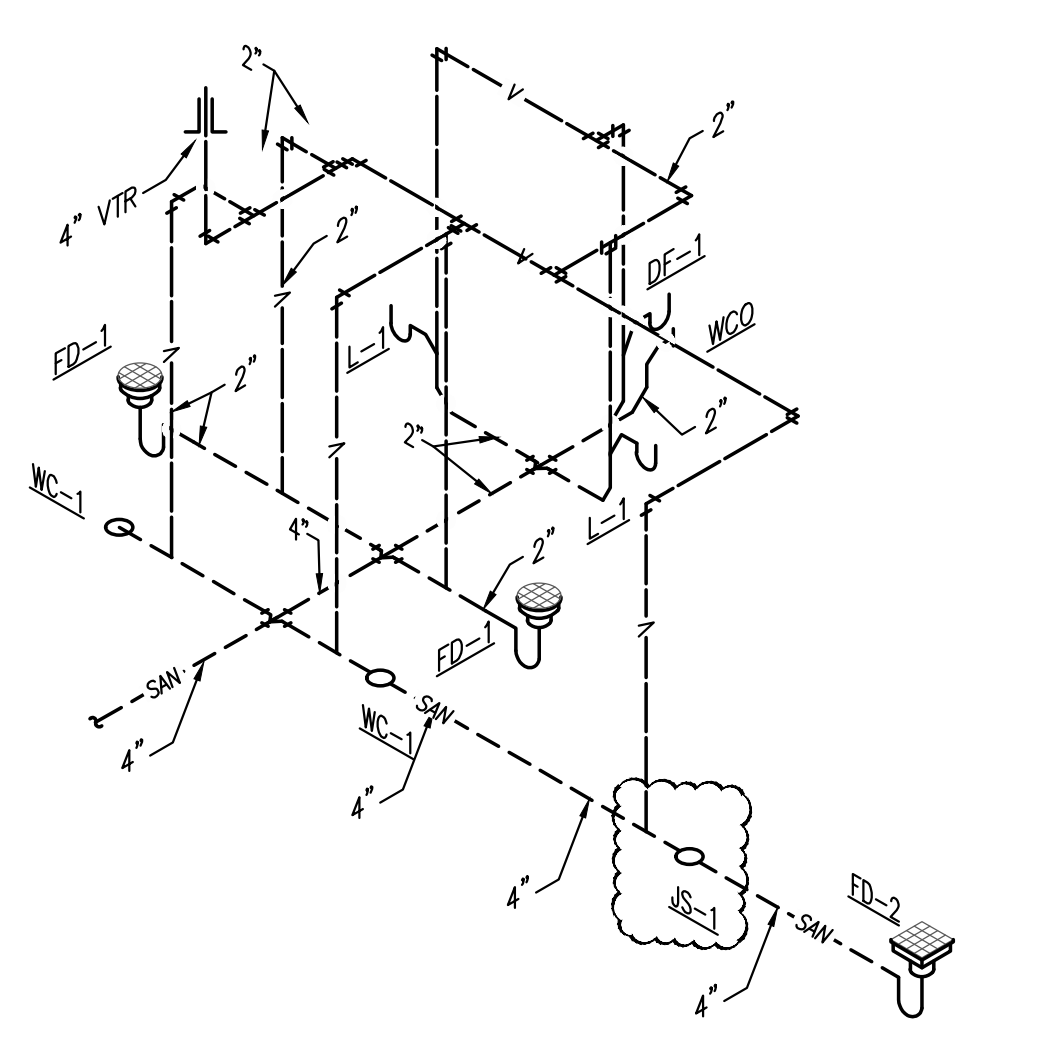
1. REFER TO CIVIL PLANS FOR CONTINUATION. COORDINATE EXACT LOCATION WITH CIVIL.
2. 1-1/2" POOL WATER MAKE-UP LINE. REFER TO POOL PLANS FOR CONNECTION.
3. COORDINATE EXACT LOCATION WITH POOL EQUIPMENT.
4. REFER TO RISER DIAGRAM ON THIS SHEET FOR PIPE ROUTING.
5. 2" PVC POOL DRAIN LINE SECURED TO THE WALL. TURN DRAIN LINE DOWN AT EXTERIOR WALL 12" ABOVE GRADE AT DRAIN INLET, AS SHOWN ON CIVIL PLANS. PROVIDE INSECT SCREEN OR CAP TO PREVENT INSECTS AND ANIMALS IN THE DRAIN LINE.
6. DRAIN LINE SHALL CONNECT TO OWNER PROVIDED POOL EQUIPMENT. CONTRACTOR SHALL COORDINATE POOL DRAIN CONNECTION WITH OWNER.
7. SHOWER HEAD SHALL BE INSTALLED AT 7'-6" AFF.
8. 4" VENT THROUGH ROOF SHALL BE INSTALLED LOW ON SLOPPED ROOF. EXTERIOR VENT PIPING SHALL BE PAINTED TO MATCH ROOF. COORDINATE WITH ARCHITECT FOR COLOR AND FINISH. REFER TO ARCHITECTURAL DIMENSIONAL PLANS FOR VENT LOCATION.
9. PIPING SHALL NOT BE INSTALLED OVER ATTIC HATCH. PIPING SHOWN DIAGNOMATIC FOR CLARITY ON PLANS.



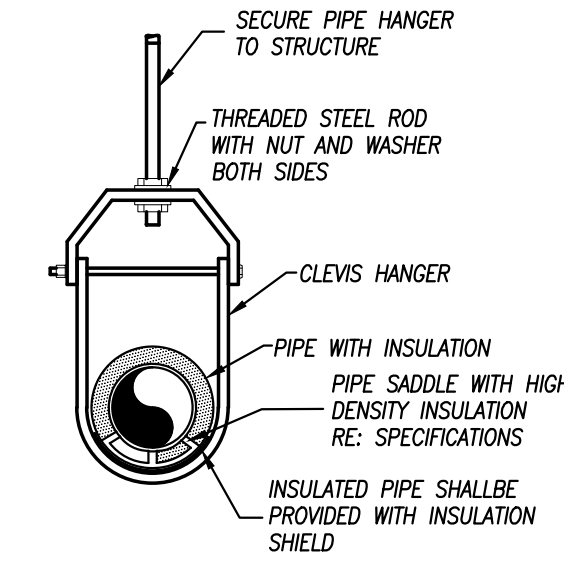
FLOOR PLAN - PLUMBING
1/4" = 1'-0"



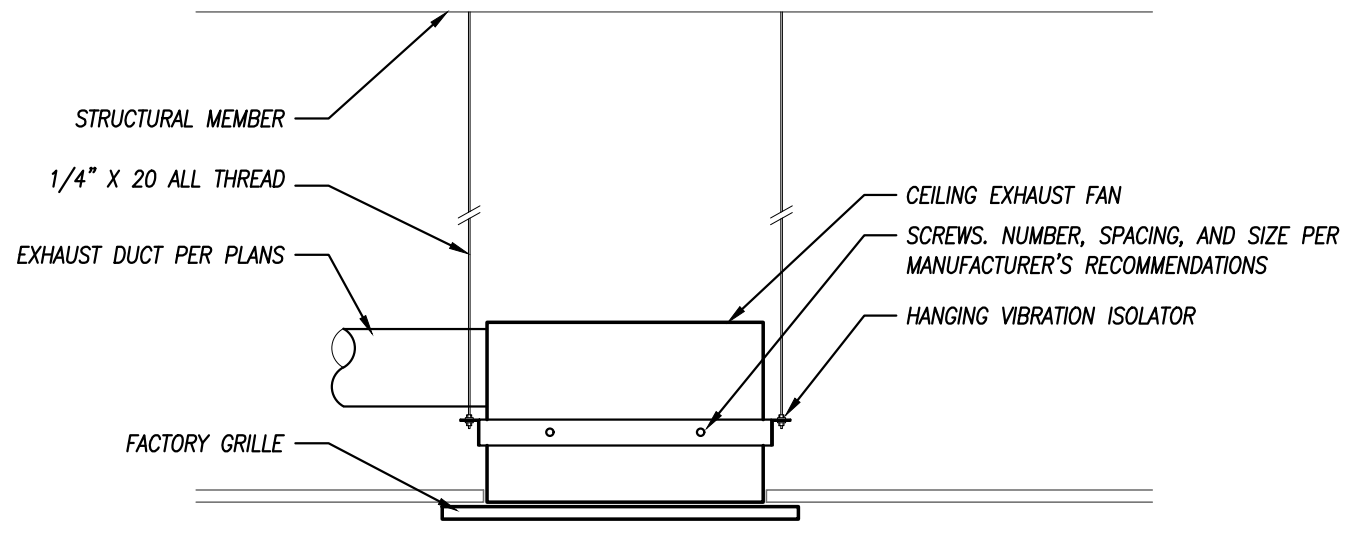
PLUMBING RISER - DOMESTIC WATER
NO SCALE



PLUMBING RISER - WASTE & VENT
NO SCALE



PIPE HANGER DETAIL
NOT TO SCALE



CABINET EXHAUST FAN MOUNTING DETAIL
NOT TO SCALE

MARK		FIXTURE MODEL	FIXTURE DESCRIPTION	FITTINGS MODEL	FITTINGS AND TRIM	REMARKS	PLUMBING FIXTURE PIPE SIZES					
							WASTE	VENT	DCW	DHW		
L-1	AMERICAN STANDARD	0355.012	ADA-COMPLIANT WALL-HUNG LAVATORY. 20"x18" WHITE VITREOUS CHINA BOWL WITH 4" BACK FOR USE WITH CONCEALED ARM HANGER. FAUCET HOLES COORDINATED WITH FAUCET AND TRIM. PROVIDE CONCEALED ARM CARRIER. MOUNT TOP OF RIM AT 34" A.F.F.	MOEN WS84503	FAUCET: CHROME PLATED CAST BRASS, 4" CENTERS, 4-1/2" SPOUT, 0.5 GPM, SINGLE HANDLE	1,2,3,4,5	2"	1-1/2"	1/2"	1/2"		
WC-1	AMERICAN STANDARD	MADERA 3043.001	ADA-COMPLIANT, 1.6 GALLON, FLOOR-MOUNTED FLUSH VALVE WATER CLOSET. TOP SPUD AND FLAT BOLT COVERS. WHITE VITREOUS CHINA ELONGATED BOWL. 16-1/2" HIGH.	SLOAN ROYAL 111	EXPOSED WATER CLOSET FLUSH VALVE. CHROME-PLATED, METAL OSCILLATING NON-HOLD-OPEN HANDLE. 1" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 1.6 GPM, VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 1-1/2" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. HANDLE HEIGHT PER MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH ADA GUIDELINES.	6	4"	2"	1-1/4"	----		
WH-1	WATTS	HT-440	EXPOSED, ANTI-SIPHON WALL HYDRANT. BRASS CASING, ALL-BRONZE INTERIOR PARTS. REPLACABLE BRONZE SEAT AND SEAT WASHER. COMBINATION 3/4" FEMALE AND 1" MALE IP INLET CONNECTION STANDARD. INCLUDES OPERATING KEY.	----	----	----	----	----	----	----	3/4"	----
JS-1	FBI	MSB-2424	JANITORS SINK: 24"x24"x10", WHITE, ONE-PIECE MOLDED STONE MOP BASIN. UNIT SHALL BE ONE HOMOGENEOUS PIECE. STAINLESS STEEL INTEGRAL DRAIN BODY WITH CALKED CONNECTION FOR 3" PIPE. PROVIDE STAINLESS STEEL BUMPER AND WALL GUARDS, MOP BRACKETS, HOSE RACK.	CHICAGO FAUCET 897-CP	C.P. SERVICE SINK FITTING WITH VACUUM BREAKER, 3/4" HOSE THREAD ON SPOUT, ADJUSTABLE WALL BRACE, PAL HOOK, AND 1/2" FLANGED FEMALE ADJUSTABLE ARMS WITH INTEGRAL STOPS. CAULK BETWEEN WALL AND FLANGE WITH GEL SILICONE SEALANT. 3" C.L. 7" TRAP.	----	3"	2"	1/2"	1/2"		
SH-1	----	----	EXPOSED, ANTI-SIPHON WALL HYDRANT. BRASS CASING, ALL-BRONZE INTERIOR PARTS. REPLACABLE BRONZE SEAT AND SEAT WASHER. COMBINATION 3/4" FEMALE AND 1" MALE IP INLET CONNECTION STANDARD. INCLUDES OPERATING KEY.	SYMONS S-6601	SHOWER VALVE WITH PRESSURE BALANCING MIXING VALVE AND INTEGRAL VOLUME CONTROL ONE-MODE SHOWER HEAD WITH BALL JOINT. PROVIDE POLISHED CHROME FINISH.	----	----	----	1/2"	1/2"		

PIPING		SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION	
SYSTEM							TYPE	THICKNESS	
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASI	1/2"	
DOMESTIC HOT WATER & HW RETURN	1/2"-1-1/4"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASI	1"	
SOL & WASTE ABOVE GRADE	1-1/2"-6"	NO HUB / SERVICE WT.	CAST IRON	NO HUB	10 FT - 1/2HR	NO	----	----	
SOL & WASTE ABOVE GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----	
SOL & WASTE BELOW GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----	
DOM. WATER SERVICE BELOW GRADE	1"-3"	K	COPPER	CONTINUOUS TUBING, BRAZED	130 PSI - 1/2HR	YES	----	----	
DOM. WATER SERVICE BELOW GRADE	1"-3"	HDPE	HDPE	CONTINUOUS TUBING, FUSED	130 PSI - 1/2HR	NO	----	----	

NOTES:
1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
2. ALL INSULATION THICKNESSES SHALL MEET IECQ AND ASHRAE 90.1 - 2016 REQUIREMENTS AT A MINIMUM.
3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

PLAN MARK	MANUFACTURER	MODEL NUMBER	MATERIAL	STYLE	DESCRIPTION	MOUNT TYPE	FACE SIZE (IN)	NECK SIZE (IN)	VOLUME DAMPER	MAX APD (IN. WG.)	MAX NC	FINISH COLOR	NOTES
RT	TITUS	JDR1	STEEL	SQUARE WALL	HEAVY DUTY GRILLE WITH 3/8" SPACING AND 0" DEFLECTION	WALL	AS INDICATED	AS INDICATED	NO	0.08	25	PAINTABLE	1

GENERAL REMARKS:
1. PROVIDE ALL GRID WITH ALL NECESSARY MOUNTING HARDWARE.
2. PROVIDE GRID WITHOUT SCREWS WHEN INSTALLED IN LAY-IN CEILINGS.

NOTES:
1. PRIME AND PAINT TO MATCH WALL COLORS.

PLAN MARK	MANUFACTURER	MODEL NUMBER	TYPE	SERVICE	FAN DATA				ELECTRICAL	CONTROL	REMARKS		
					CFM	E.S.P. (IN)	HP	DRIVE				SONES	RPM
EF-1	COOK	GC-148	CEILING CABINET	BATHROOM	125	0.250	48W	DIRECT	2.5	1,075	120V / 1PH	THERMOSTAT	1,2
EF-2	COOK	GC-342	CEILING CABINET	POOL EQUIP.	325	0.375	131W	DIRECT	5.5	1,600	120V / 1PH	THERMOSTAT	1,2
EF-3	COOK	GC-422	CEILING CABINET	STORAGE	250	0.375	107W	DIRECT	4.5	1,500	120V / 1PH	THERMOSTAT	1,2

REMARKS:
1. PROVIDE WITH LINE VOLTAGE THERMOSTAT.
2. PROVIDE WITH SPEED CONTROLLER.

PLAN MARK	MANUFACTURER	MODEL NUMBER	GALLONS	STYLE	HEIGHT (IN)	# HTG. ELEMENTS	WATTS	RECOVERY @ 80°F RISE	VOLTAGE/ PHASE	REMARKS
WH-1	STATE	ENG	30	TALL	47	2	4,500	21	240V / 1PH	1,2

REMARKS:
1. GLASS LINED TANK.
2. PROVIDE WITH TAMPER RESISTANT DRAIN VALVE.

PLAN MARK	MANUFACTURER	MODEL NUMBER	GPM	HEAD (FT. WC)	WATTS	MAX. RPM	ELECTRICAL	NOTES
RP-1	BELL & GOSSETT	NBP-12	3.0	7.0	55	2,800	120V / 1 PH	1,2,3

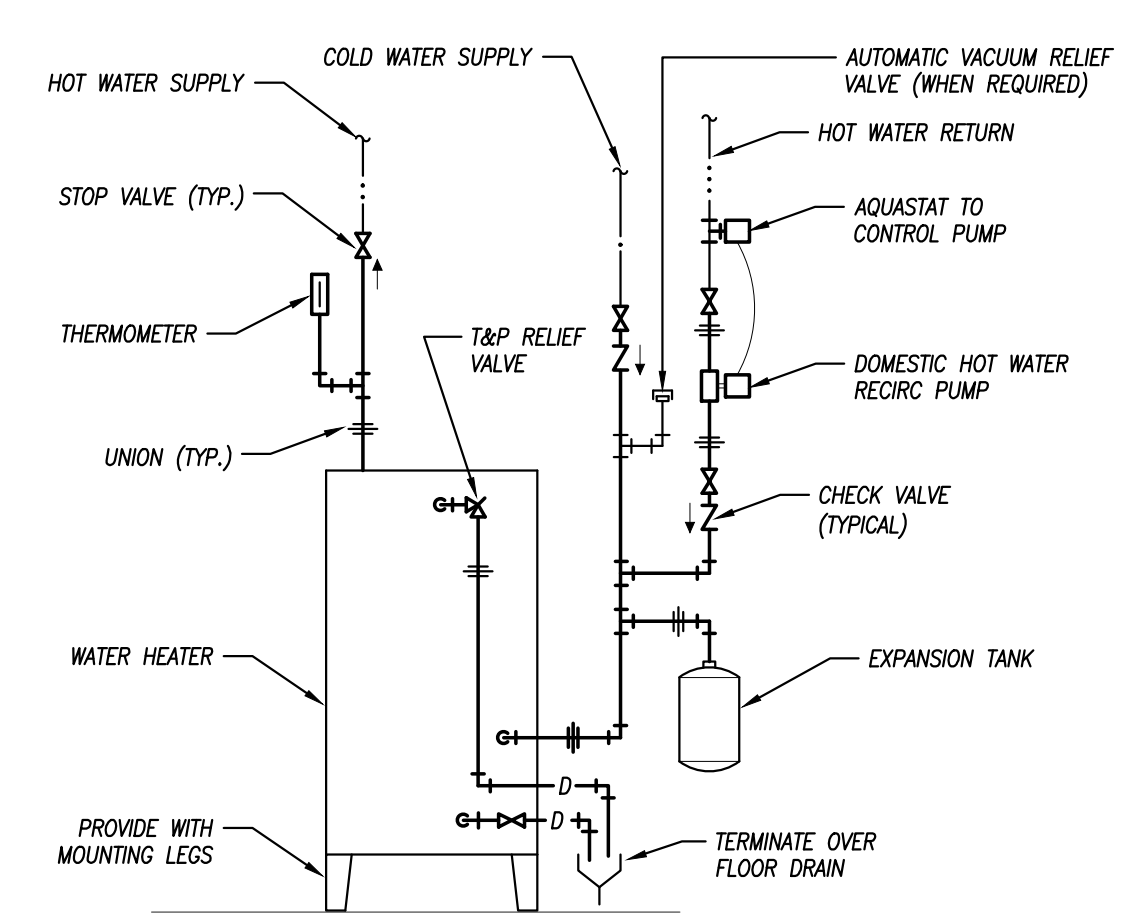
REMARKS:
1. ALL BRONZE CONSTRUCTION.
2. PROVIDE WITH MOTOR RATED DISCONNECT, ADJUSTAT AND TIMER FOR OPERATION OF PUMP
3. MOUNT PUMP AND ACCESSORIES NEAR WATER HEATER AND NO HIGHER THAN 6' AFF.

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	TOP/GRADE SIZE	WASTE SIZE	REMARKS
FD-1	WATTS	FD-100L-6-2	FLOOR DRAIN	6"	2"	1
FD-2	WATTS	FD-100L-6-4	FLOOR DRAIN	6"	4"	1

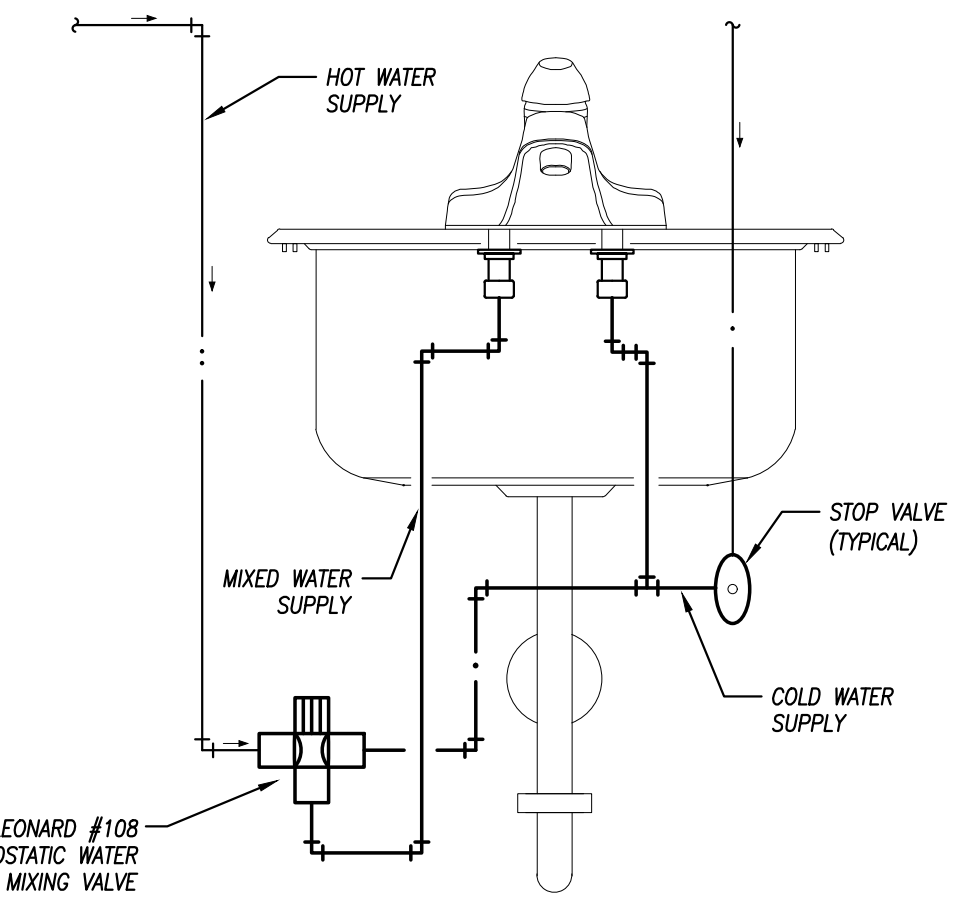
REMARKS:
1. PROVIDE WITH NICKEL BRONZE TOP AND TRAP SEAL.

FIXTURE UNITS (FU)	UNIT SIZE	ASSE 1010 OR PDI-WH 201, PISTON TYPE WITH PRESSURIZED METAL-TUBE CUSHIONING CHAMBER. SIZES INDICATED ARE BASED ON
1-11	A	ASSE 1010, SIZES AA AND A THROUGH F OR PDI-WH 201, SIZES A THROUGH F. MANUFACTURERS: AMTROL, VOSM, SUDOL CHEF, WATTS, ZURN.
12-32	B	
33-60	C	
61-113	D	
114-154	E	
155-330	F	WATER CLOSET=10FU, URINALS=5FU, LAVATORIES=1.5FU.

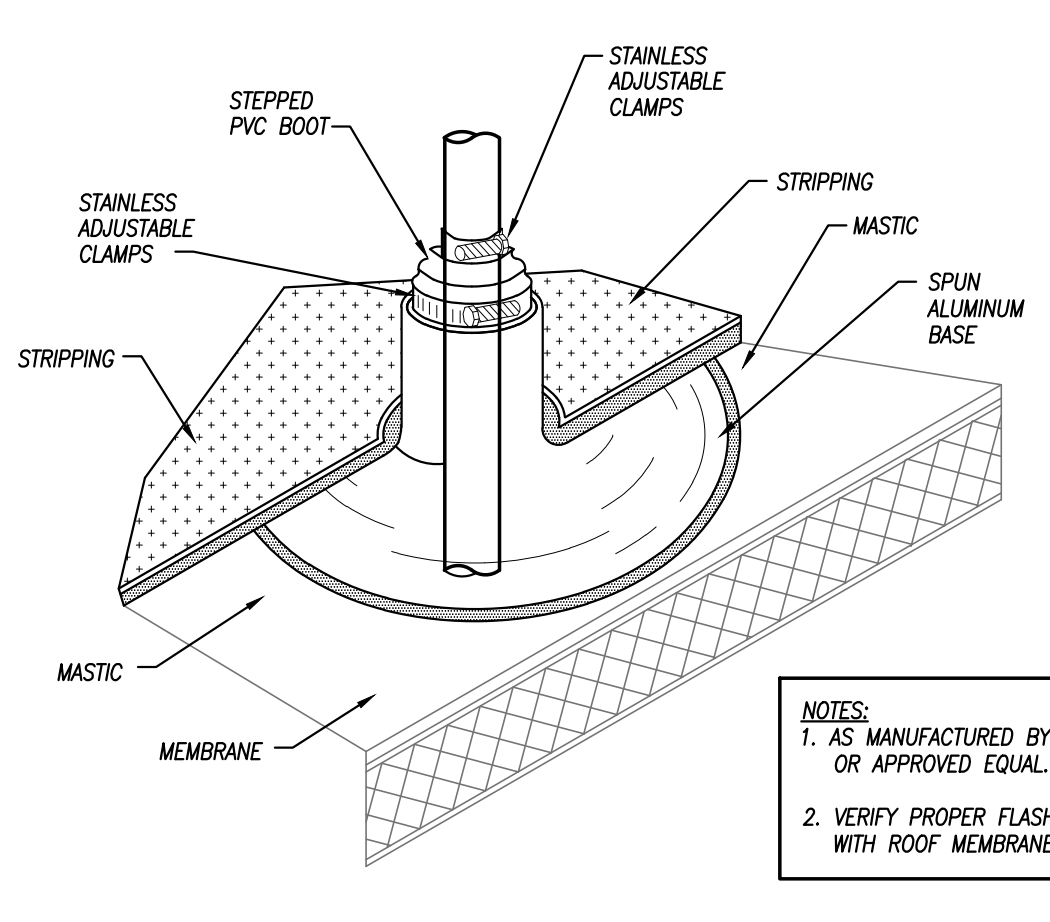
WHEN NO FLUSH VALVES ARE INSTALLED ON A BRANCH OF PIPING PROVIDE 3/4"x1/2" AIR CHAMBERS AT EACH HOT AND COLD WATER SUPPLY CONNECTION TO A PLUMBING FIXTURE. CONTRACTOR MAY PROVIDE WATER HAMMER ARRESTERS ABOVE THE CEILING BEFORE GROUPING INTO MASONRY CONSTRUCTION IN LIEU OF AIR CHAMBERS. CONNECTIONS TO OTHER ITEMS SUCH AS WASHERS, ICE MAKERS, OR OTHER EQUIPMENT SHALL BE PROVIDED WITH AN APPROPRIATELY SIZED WATER HAMMER ARRESTER FOR EACH WATER CONNECTION.



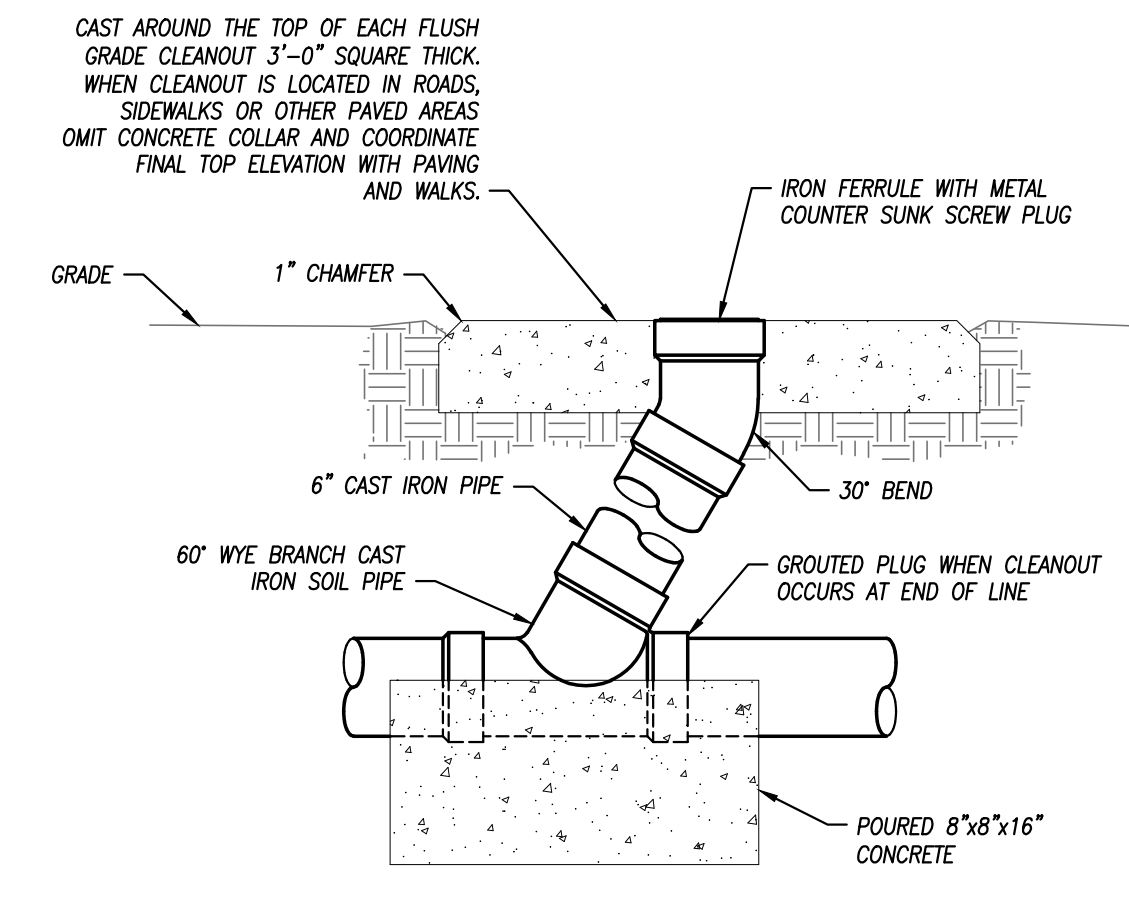
ELECTRIC WATER HEATER
NOT TO SCALE



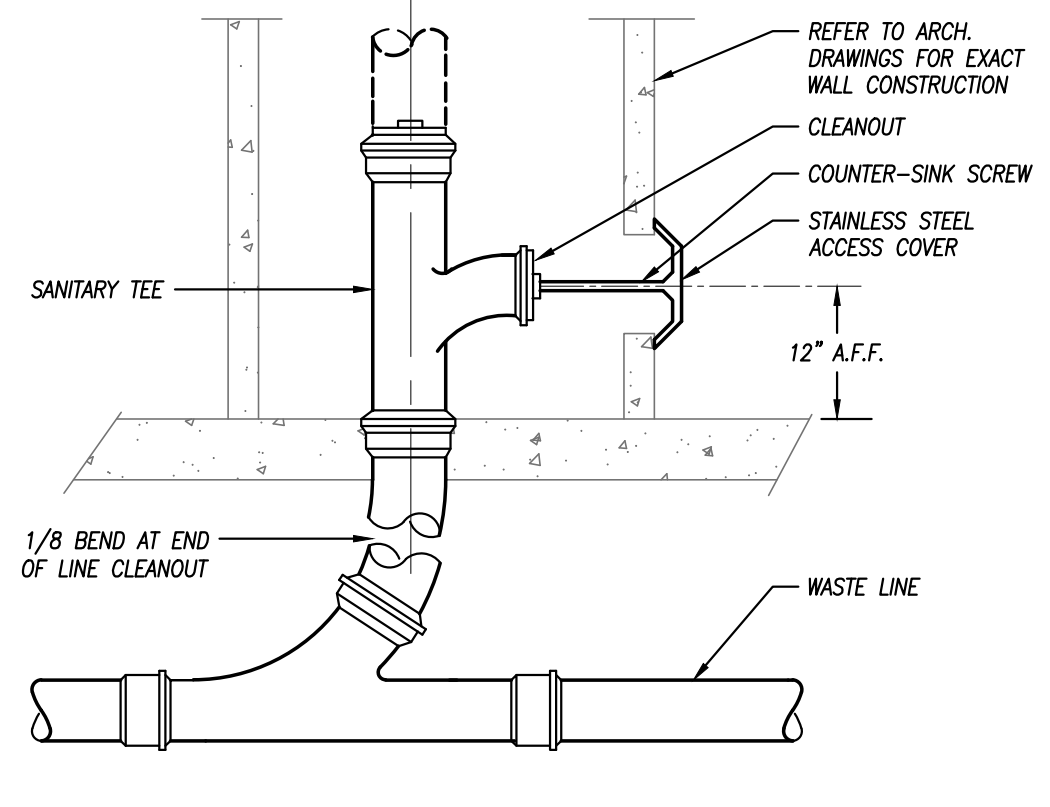
HAND WASHING SINK/LAVATORY TEMPERED WATER SCHEMATIC
NOT TO SCALE



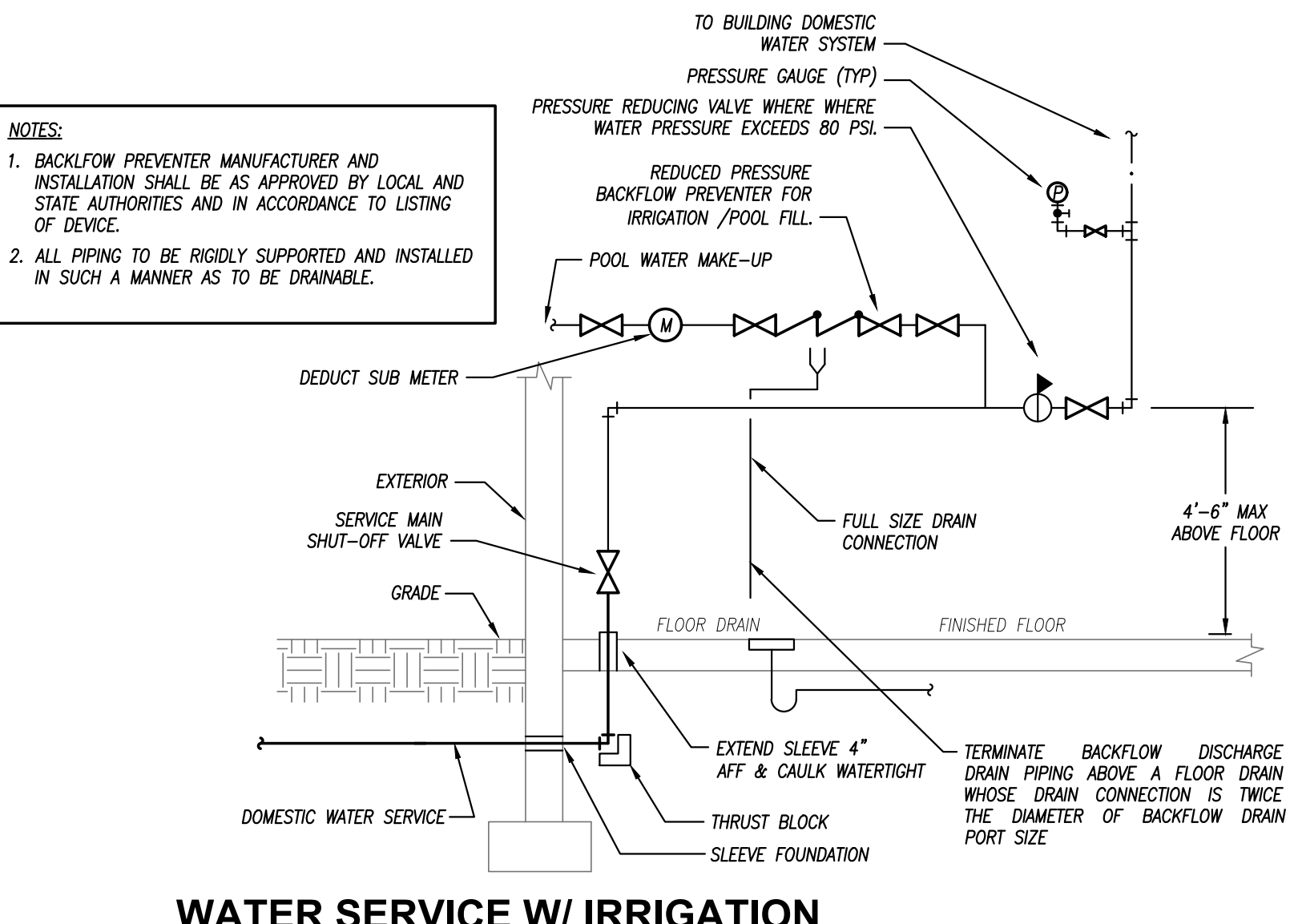
ROOF PLUMBING VENT
NOT TO SCALE



FLUSH GRADE CLEANOUT DETAIL
NOT TO SCALE



WALL CLEANOUT DETAIL
NOT TO SCALE



WATER SERVICE W/ IRRIGATION REDUCED PRESSURE BACKFLOW PREVENTER DETAIL
NOT TO SCALE

GENERAL LIGHTING NOTES

- REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
- LIGHT FIXTURES INDICATED AS EMERGENCY FIXTURES ARE TO FUNCTION AS NIGHT LIGHTS UNLESS SPECIFICALLY SHOWN SWITCHED.
- ALL CIRCUITING SHOWN ON THIS PLAN IS DIAGRAMMATIC.
 - ALL FIXTURES SHALL BE FED FROM JUNCTION BOXES WITH LIGHT FIXTURE WHIPS (<8'). DASHY-CHAINING OF FIXTURES IS NOT ALLOWED.
 - SWITCH BOX LOCATIONS SHALL BE WIRED SO THAT A NEUTRAL WIRE IS AVAILABLE AT THE SWITCH BOX LOCATION, EITHER IN THE BOX OR AVAILABLE TO BE ADDED VIA RACEWAY OR AN ACCESSIBLE WALL CAVITY.
 - WALL SWITCHES FOR SEPARATE LOAD TYPES (E/W/NORMAL, 120/277V, ETC.) SHALL NOT BE IN A SINGLE BOX.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

LIGHTING PLAN KEYED NOTES

- ROUTE HOMERUN TO PANEL VIA PHOTOCELL.
- TO EXHAUST FAN.
- PHOTOCELL (709K 2001 SERIES) ORIENT TO NORTH.

LIGHTING CONTROLS

- SYMBOLS**
- WALL SWITCH VACANCY SENSOR: PASSIVE INFRARED, 120/277V, WALL SWITCH DECORA STYLE SENSOR. (WAITSTOPPER PW-101, OR EQUAL.)
 - WALL SWITCH MOTION SENSOR (DUAL TECHNOLOGY): PASSIVE INFRARED AND ULTRASONIC, 120/277V, DECORA STYLE SENSOR. (WAITSTOPPER DSW-100, OR EQUAL.)
 - WALL SWITCH MOTION SENSOR (DUAL RELAY): PASSIVE INFRARED, DUAL RELAY, 120V, DECORA STYLE SENSOR. (WAITSTOPPER PW-201, OR EQUAL.)

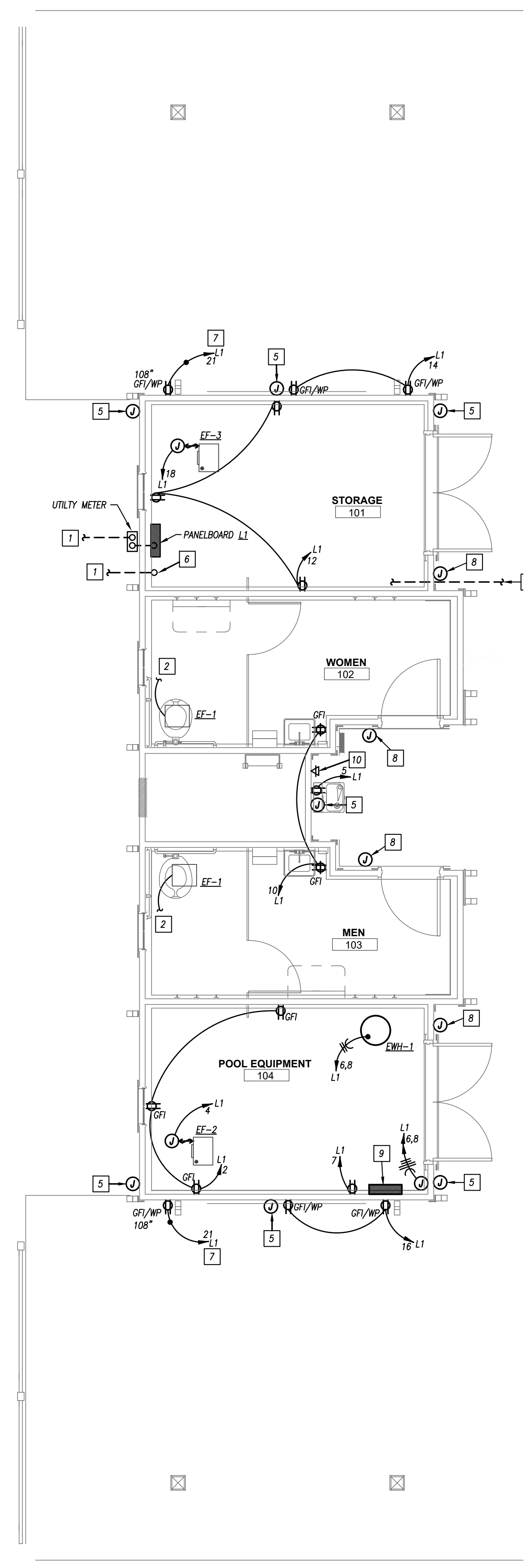
- TRAINING AND PROGRAMMING**
- OWNER TRAINING**
- PROVIDE FACTORY REPRESENTATIVE TRAINING TO OWNER FOR EACH LIGHTING CONTROL SYSTEM UTILIZED, INCLUDING PROGRAMMING FOR SCHEDULING AND OPERATION OF EACH ROOM PER OWNER DIRECTION.
 - PROVIDE RECORD OF TIME DELAY SETTINGS ON ALL SENSOR DEVICES FOR OWNER USE.
- SENSOR ADJUSTMENTS AND SETTINGS**
- SYSTEMS SHALL BE SET/PROGRAMMED TO OPERATE TYPICALLY IN MANUAL ON/AUTO OFF MODE.
 - SET WALL MOUNTED MOTION SENSOR TO MANUAL ON MODE.
 - SET POWER PACKS AND ROOM CONTROLLERS CONTROLLED BY MOTION SENSORS TO MANUAL ON AND CONTROL WITH MOMENTARY WALL SWITCH.
 - PROVIDE FINAL SETTINGS/ADJUSTMENTS PER OWNER'S DIRECTION.

GENERAL POWER NOTES

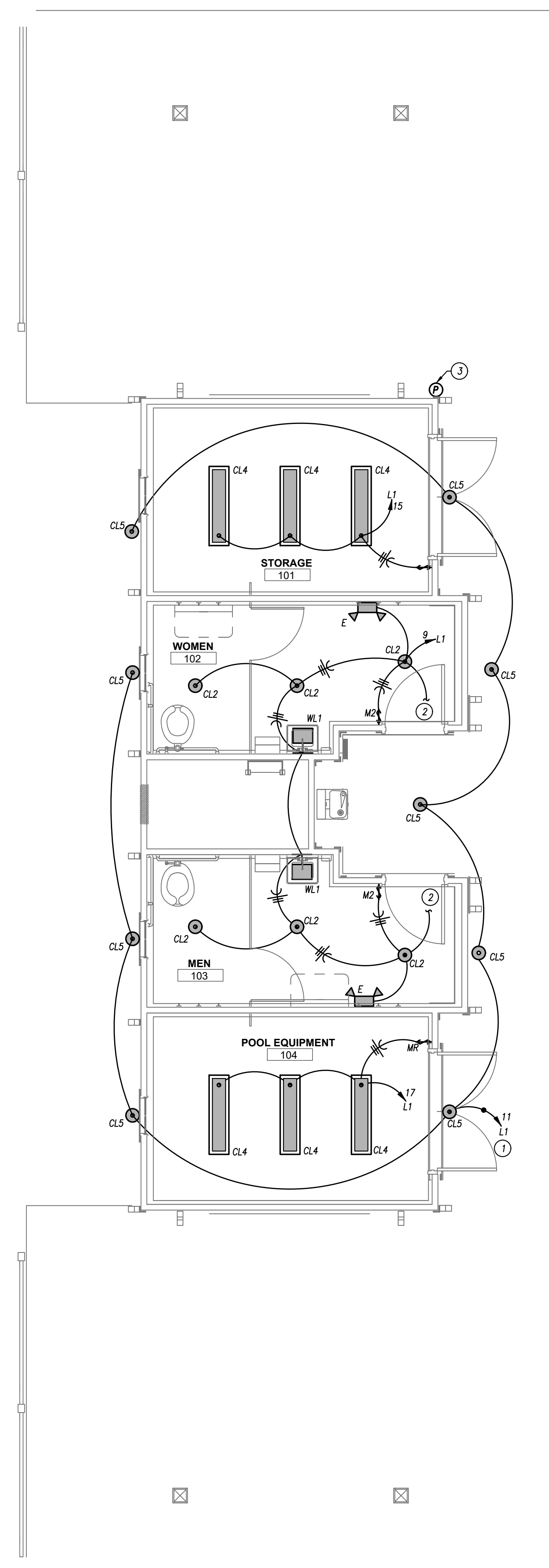
- REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
- COORDINATE EXACT NEMA CONFIGURATIONS OF RECEPTACLES SERVING EQUIPMENT WITH EXACT EQUIPMENT BEING FURNISHED.
- REFER TO THE SPECIFICATIONS FOR ADDITIONAL LOCATIONS/REQUIREMENTS FOR RECEPTACLES, INCLUDING GFCI, WEATHER-RESISTANT, HOSPITAL-GRADE, AND TAMPER-RESISTANT RECEPTACLES.
- EXACT MECHANICAL EQUIPMENT LOCATIONS MAY NOT BE SHOWN FOR CLARITY. COORDINATE EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT, DUCT DETECTORS, ETC. WITH MECHANICAL DRAWINGS AND CONTRACTOR.
- COORDINATE EXACT LOCATIONS OF SMOKE DETECTORS WITH CEILING FANS, HAND DIFFUSERS, SPRINKLER HEADS, ETC. PER NFPA REQUIREMENTS.
- ROMEX WIRE IS ACCEPTABLE WHERE IT MEETS NEC AND LOCAL CODES. NOTE THAT IT CANNOT BE INSTALLED IN EXPOSED LOCATIONS SUBJECT TO DAMAGE OR IN LAY-IN CEILINGS.

POWER PLAN KEYED NOTES

- REFER TO SITE PLAN FOR CONTINUATION.
- CONNECT TO LIGHTING CIRCUIT IN ROOM. FANS TO BE CONTROLLED BY THERMOSTAT.
- EXTEND POOL BONDING GRID TO CIRCULATION PUMP ENCLOSURE PER NEC, POOL BONDING BY OTHERS.
- PROVIDE ELECTRICAL CONNECTION TO POOL PUMPS AND STARTERS BY POOL EQUIPMENT PROVIDER.
- PROVIDE ROUGH-IN AND (2) 1" CONDUIT WITH PULL STRINGS BACK TO STORAGE ROOM FOR FUTURE CAMERA. INSTALL JUNCTION BOX UNDER SANG/TRELLIS. COORDINATE ROUGH-IN WITH ARCHITECT/OWNER.
- 2" CONDUIT FOR COMMUNICATION SERVICES.
- ROUTE TO HOMERUN PANEL VIA PHOTOCELL.
- PROVIDE ROUGH-IN AND (2) 1" CONDUIT BACK TO STORAGE ROOM FOR FUTURE CARD READER.
- 100A, 120/240 POOL LOAD CENTER PROVIDED BY POOL CONTRACTOR.
- EMERGENCY PHONE LINE SHALL BE ROUGH-IN A 48" AFF. CONTRACTOR TO FURNISH, ROUGH-IN WIRE AND PROGRAM MODEL TYPE: VIKING ADA COMPLIANT RED EMERGENCY PHONE.



FLOOR PLAN - POWER
 1/4" = 1'-0"



FLOOR PLAN - LIGHTING
 1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE						
FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP NUMBER / DESCRIPTION	VOLTAGE	REMARKS
CL2	LIGHTOLIER	SSR	5" SURFACE MOUNTED LED DOWNLIGHT WITH WHITE TRIM RING.	ONE (1) 9.5 WATT, 1500 LUMEN, LED MODULE. 3000K CCT.	120	1
CL4	WILLIAMS	SERIES 75R	4"-3" LONG STRIP FIXTURE, SURFACE MOUNT, FINISH WITH ROUNDED ACRYLIC LENS. ALL PARTS PAINTED WHITE AFTER FABRICATION. ELECTRONIC DRIVER. PRE-WIRED FOR NON-DIMMING APPLICATIONS.	ONE (1) 23 WATT, 3000 LUMEN, LED MODULE. 3000K CCT.	120	1
CL5	LIGHTOLIER	SSR	SAME AS FIXTURE TYPE "CL2" EXCEPT INSTALL PER WET LOCATION.	ONE (1) 9.5 WATT, 1500 LUMEN, LED MODULE. 3000K CCT.	120	1
E	DUAL-LITE	LZ SERIES	LOW-PROFILE EMERGENCY LIGHTING UNIT. FLAME-RATED, UV-STABLE THERMOPLASTIC HOUSING. TWO (2) SEMI-RECESSED, ADJUSTABLE "EYEBALL" HEADS WITH GLASS LENS. WHITE FINISH. MAINTENANCE-FREE BATTERY FOR 90 MINUTE OPERATION OF LAMPS. INTEGRAL TEST SWITCH AND AC-ON INDICATOR. FINISH WITH REMOTE CAPACITY WHERE INDICATED. WITH REMOTE HEAD.	TWO (2) 1 WATT LED	120	1
WL1	DESIGNER'S FOUNTAIN	33121-WP	EXTERIOR WALL-MOUNTED INCANDESCENT LAMP. RATED FOR WET LOCATION, FINISH BY ARCHITECT.	100 WATT, 3000K	120	1

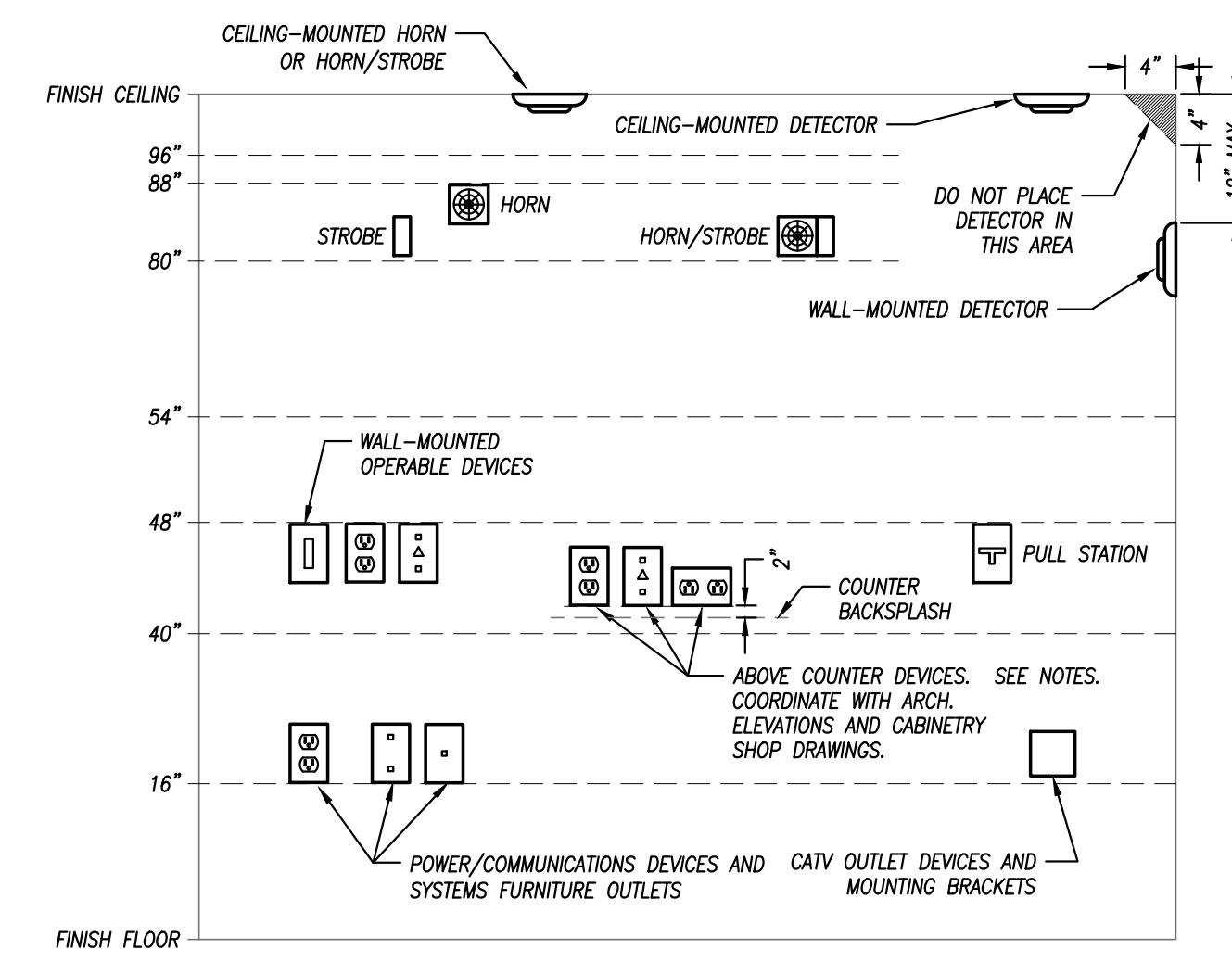
REMARKS:
1. FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.

SINGLE-SECTION PANELBOARD SCHEDULE									
PANEL DESIGNATION: L1		MOUNTING SURFACE LOCATION: STORAGE ROOM		CIRCUIT #		MAIN LUG AMPS: 225		MAIN BREAKER: 200	
						VOLTAGE: 240/120		PHASE/WIRE: 1Ø, 3Ø	
DESCRIPTION	PHASE	TRIP	POLE	C/B		PHASE		DESCRIPTION	REMARKS
				A	B	A	B		
POOL SUB PANEL		9600	100	2	1 2	1 2	540	135	REC POOL EQUIP ROOM
DRINKING FOUNTAIN		1200	30	1	5 8	3 4	15	2250	EF-2
IRRIGATION CONTROLLER		1200	30	1	7 8	2 3	30	2250	WH-1
LITG BATHROOM		360	20	1	9 10	1 2	360	2250	REC RESTROOM
LITG EXTERIOR		90	20	1	11 12	1 2	540	2250	REC STORAGE ROOM
POOL EQUIPMENT		1200	20	1	13 14	1 2	540	2250	REC COVERED AREA
LITG STORAGE ROOM		70	20	1	15 16	1 2	540	2250	REC COVERED AREA
LITG EQUIPMENT ROOM		70	20	1	17 18	1 2	107	2250	EF-1
MONUMENT SIGNAGE		1920	20	1	19 20	1 2	20	2250	SPACE
SPARE		20	1	21 22	1 2	20	2250	SPACE	
SPARE		20	1	23 24	1 2	20	2250	SPACE	
SPARE		20	1	25 26	1 2	20	2250	SPACE	
SPARE		20	1	27 28	1 2	20	2250	SPACE	
SPARE		20	1	29 30	1 2	20	2250	SPACE	
SPARE		20	1	31 32	1 2	20	2250	SPACE	
SPARE		20	1	33 34	1 2	20	2250	SPACE	
SPARE		20	1	35 36	1 2	20	2250	SPACE	
SPARE		20	1	37 38	1 2	20	2250	SPACE	
SPARE		20	1	39 40	1 2	20	2250	SPACE	
SPARE		20	1	41 42	1 2	20	2250	SPACE	
TOTALS		12430	12880				3787	3465	TOTALS

PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN (VA)
LIGHTS	2,510	1.25	3,138
RECEPTACLES	2,520	10kVA + 50% REST	2,520
MOTORS	3,842	1.25 x LARGEST + SUM OF REST	4,142
AIR CONDITIONING	0	1.00	0
SPACE HEATING	0	0.00	0
CONTINUOUS	1,200	1.25	1,500
NON-CONTINUOUS	19,200	1.00	19,200
MISC. LOADS 1	4,500	1.00	4,500
MISC. LOADS 2	0	1.00	0
SIZING LOAD			35,000
SIZING LOAD (AMPS)			146

CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	16,227	135.2
B	16,345	136.2
TOTALS	32,572	135.7

REMARKS:
1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL.
2. PROVIDE SHUNT TRIP BREAKER WITH ACTUATION BY MUSHROOM PUSHBUTTON ON OUTSIDE WALL.
3. 'U' = GFCI TYPE BREAKER



GENERAL NOTES:
1. MOUNTING HEIGHTS SHOWN IN THIS DETAIL ARE TYPICAL UNLESS OTHERWISE NOTED ON THE PLANS.
2. SEE ARCHITECTURAL ELEVATIONS FOR SPECIAL CONDITIONS. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS.
3. ALL INSTALLATIONS SHALL COMPLY WITH ADA.

VISUAL FIRE ALARM NOTIFICATION DEVICES (STROBE)
LOCATE DEVICE SO THE BOTTOM OF THE DEVICE IS BETWEEN 80" AND 96" A.F.F. (NFPA) OR 6" BELOW CEILING, WHICHEVER IS LOWER (ADA 2010).

AUDIBLE FIRE ALARM NOTIFICATION DEVICES (HORN)
LOCATE DEVICE SO THAT THE TOP OF HORN IS NOT MORE THAN 30" A.F.F. AND NOT LESS THAN 6" BELOW CEILING (NFPA).

FIRE ALARM ACTIVATION DEVICES (PULL STATION)
LOCATE FRONT-APPROACH DEVICES SO THAT THE HIGHEST OPERABLE PORTION OF THE DEVICE IS NOT MORE THAN 48" A.F.F. (ADA 2010) AND NOT LESS THAN 42" A.F.F. (NFPA).

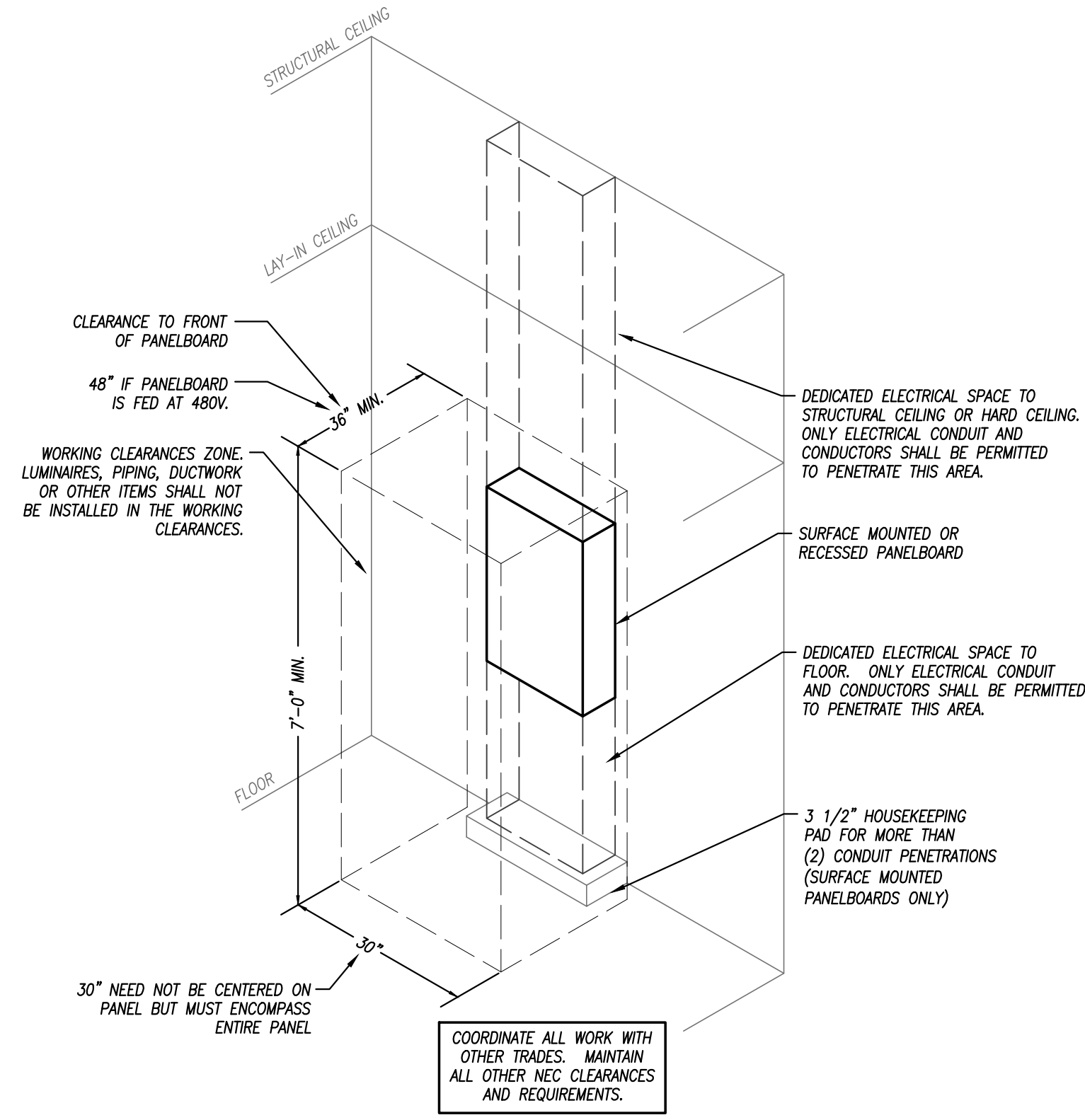
POWER/COMMUNICATION DEVICES:
OUTLETS SHALL BE LOCATED AT 18" A.F.F. TO THE BOTTOM OF THE BOX. ABOVE COUNTER DEVICES SHALL BE LOCATED AT 2" ABOVE THE BACKSLASH OF THE COUNTER TO THE BOTTOM OF THE DEVICES. VERIFY WITH ARCHITECTURAL DETAILS.

WALL-MOUNTED OPERABLE DEVICES:
OPERABLE DEVICES SHALL BE LOCATED AT 48" A.F.F. TO THE TOP OF THE OPERABLE PORTION OF THE DEVICE.

WALL-MOUNTED OPERABLE DEVICES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
LIGHT SWITCHES, DIMMERS, CONTROLS, ETC.
PUSH BUTTONS
NURSE/PATIENT CALL DEVICES (INCLUDING THOSE FOR STAFF USE)
OTHER CONTROL OR "CALL" DEVICES

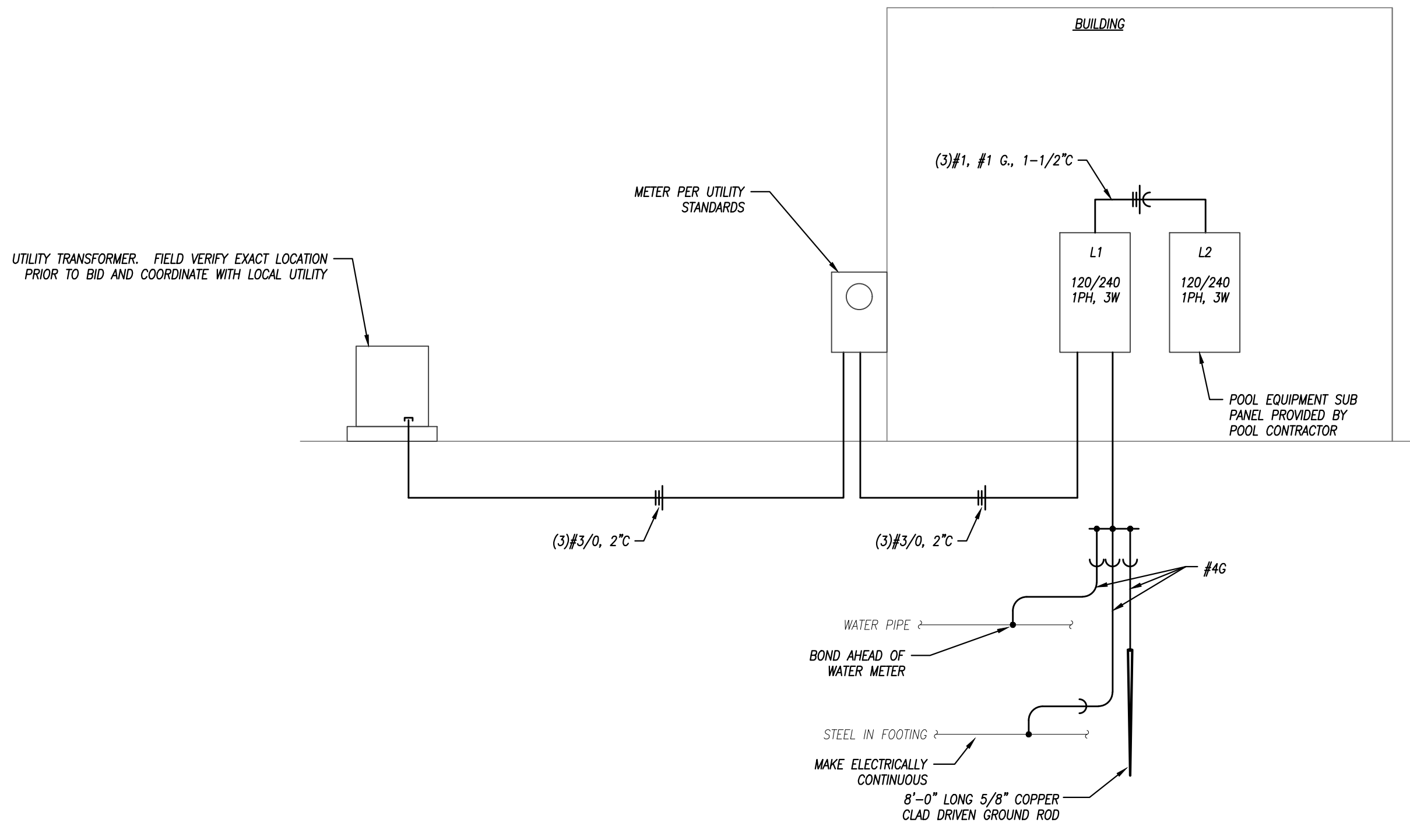
MOUNTING HEIGHTS FOR WALL-MOUNTED DEVICES

NOT TO SCALE



TYPICAL PANELBOARD INSTALLATION DETAIL

NOT TO SCALE



ELECTRICAL RISER DIAGRAM

NOT TO SCALE