

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



HOOK FARMS

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

PERMIT SET

18 OCTOBER 2021

COLLINS WEBB #: 20032



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
A101	ARCHITECTURAL SITE PLAN
A101	1ST FLOOR PLANS
A201	EXTERIOR ELEVATIONS
A325	SECTIONS, DETAILS & SCHEDULES

MEP

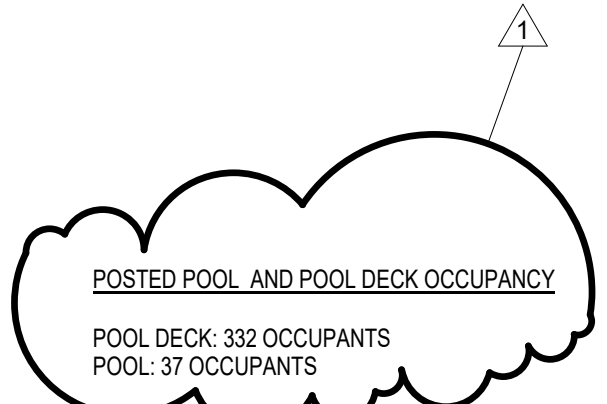
SHEET NUMBER	SHEET NAME
ME001	COVER SHEET
ME002	SPECIFICATIONS
ME101	SITE PLAN
M101	MECHANICAL PLAN
M201	MECHANICAL SCHEDULES & DETAILS
E101	ELECTRICAL PLAN
E201	ELECTRICAL SCHEDULE & DETAILS

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
LEES 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

BUILDING/PROJECT USE: CONSTRUCTION TYPE OCCUPANCY CLASSIFICATION BUILDING FRAME	POOL HOUSE - NON CONDITIONED SPACE TYPE VB (NON-SPRINKLERED) GROUP "U" UTILITY WOOD FRAME	IBC SECTION 312 IBC TABLE 601 IBC SECTION 312
BASE ALLOWABLE AREA "U" ACTUAL AREA (GROSS)	5,800 SQ. FT. 534 SQ. FT.	IBC TABLE 506.2
ALLOWABLE STORIES ACTUAL NUMBER OF STORIES	1 STORY 1 STORY	IBC TABLE 504.4
ALLOWABLE HEIGHT ACTUAL HEIGHT IN FEET	40'-0" 15'-6"	IBC TABLE 504.3

FIRE RESISTIVE REQUIREMENTS

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)

1. 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.
2. OCCUPIED SPACES, HABITABLE SPACES AND CORRIDORS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-6" A.F.F.
3. 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

COLLINS | WEBB ARCHITECTURE
307B SW MARKET STREET
LEE'S SUMMIT, MISSOURI 64063
P: 816.249.2270
www.collinsandwebb.com

STRUCTURAL ENGINEER

LEIGH + O'KANE
250 NE MULBERRY, SUITE 201
LEE'S SUMMIT, MO 64086
P: 816.444.3144

MEP ENGINEER

PKMR
13300 W. 98TH ST.
LENEXA, KS 66215
P: 913.492.2400



1. NOTE: ALL DIMENSIONS ARE MEASURED FROM FLOOR, UNLESS NOTED OR SHOWN OTHERWISE.

2. ADA UNOBSTRUCTED REACH RANGES: ADA FORWARD REACH = 48" MAX, & 15" ADA REVERSE REACH = 48" MAX, & 15" MIN.

3. DOOR HARDWARE (TO CENTER OF HARDWARE): STANDARD MOUNTING HEIGHTS: PUSH PLATES = 42", PULL HANDLES = 42", KNOBS/LEVERS = 40"; PANIC EXIT = 42" CENTERLINE OF BAR.

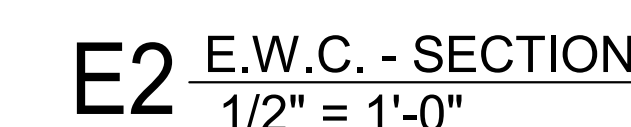
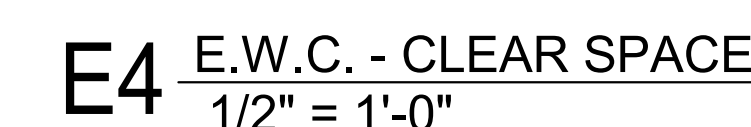
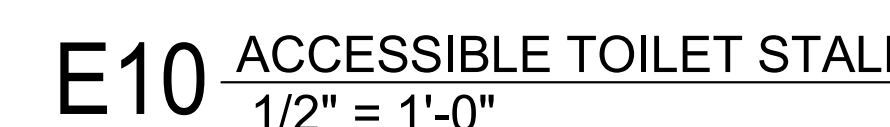
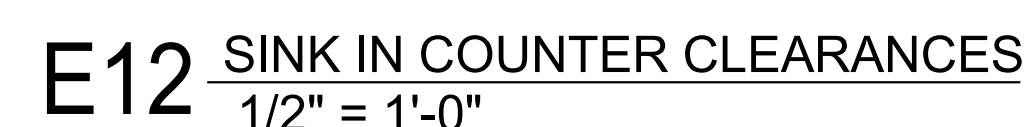
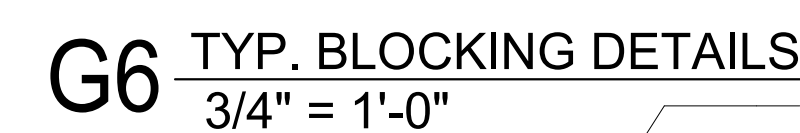
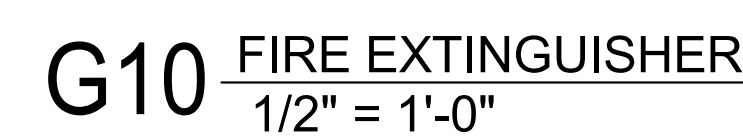
4. KICKPLATES: WIDTH = DOOR WIDTH MINUS 2" CENTER, HEIGHT = 1" MIN. TO DOOR THRESHOLD; MIN. THICKNESS = 1/8" MIN. EXIT SLIDING DOORS = 3/4" MAX, ADA HARDWARE = 32" MAX. TO 48" MAX.

5. DRINKING FOUNTAINS & SCS'S (TO SPOUT): STANDARD = 40" MIN. TO 48" MAX, ADA = 36" MAX. STANDARD SINKS = 34" MAX.

6. COUNTERTOPS (TO SINK RIM COUNTERTOP): ADA = 38" MIN. TO 34" MAX.

7. WATER CLOSETS (TO TOP OF SEAT): STANDARD = 14" TO 15". ADA (TO TOP OF SEAT) = 17" TO 19". ADA FLUSH CONTROLS = 44" MAX.

- [illegible]



MISCELLANEOUS ACCESSORY TYPICAL MOUNTING HEIGHTS

TOILET ACCESSORY TYPICAL MOUNTING HEIGHTS

		NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT													
FINISH FLOOR															
ACCESSORY TYPE	FIRE EXTINGUISHER CABINET	MANUAL FIRE PULL	FIRE STROBE/LIGHT/ AUDIBLE ALARM	WALL MOUNTED EXIT SIGN	WALL MOUNTED HANDRAIL	WALL CLOCK	FABRIC COVERED TACK BOARD	MARKER BOARD	MOP & BROOM HOLDER	ROBE HOOK	ELAPSED TIME CLOCK	SOAP DISPENSER	PAPER TOWEL DISPENSER	ALCOHOL DISPENSER	
COMMENTS	SEMI RECESSED	SURFACE MOUNTED	SURFACE MOUNTED	WALL MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	

		NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT												
FINISH FLOOR														
ACCESSORY TYPE	PAPER TOWEL DISPENSER	POWER HAND DRYER	PAPER TOWEL DISPENSER & TRASH RECEPTACLE	TOILET TISSUE DISPENSER	SANITARY NAPKIN DISPOSAL	SANITARY NAPKIN DISPOSAL	VANITY SOAP DISPENSER	FRAMED VANITY MIRROR	DIAPER CHANGING STATION	SOAP DISPENSER	FOLDING SHOWER SEAT	TOILET PARTITION	URINAL SCREEN	
COMMENTS	SURFACE MOUNTED	SURFACE MOUNTED	SEMI RECESSED	SURFACE MOUNTED	SURFACE MOUNTED	RECESSED & SURFACE	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	COUNTERTOP MOUNTED	SURFACE MOUNTED	WALL MOUNTED	WALL MOUNTED	

MISCELLANEOUS ACCESSORY TYPICAL MOUNTING HEIGHTS

PLUMBING FIXTURE TYPICAL MOUNTING HEIGHTS

		NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT															
FINISH FLOOR																	
ACCESSORY TYPE	CLOSET HANGAR ROD & SHELF	WALL PHONE	TELEPHONE HOUSING	CUP DISPENSER	WALL SWITCH	TELEPHONE OUTLET	RECEPTACLE/ TELEPHONE/ DATA	RECEPTACLE/ TELEPHONE/ DATA	SPECIALTY EQUIP (IE. THERMOSTAT/CARD READER,INTERCOM)	ELEVATOR CALL BUTTON	ELEVATOR VISIBLE SIGNAL INDICATOR	TACTILE CHARACTER INDICATOR	PANIC BAR	DOOR PULL	DOOR LATCH	ADA DOOR OPERATOR	
COMMENTS	WALL MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	VARIES	

		NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT									
FINISH FLOOR											
ACCESSORY TYPE	SHOWER MIXING VALVE	SHOWER HEAD	HAND HELD SHOWER	LAVATORY	LAVATORY	CHILDREN'S DRINKING FOUNTAIN	SINGLE DRINKING FOUNTAIN	DOUBLE DRINKING FOUNTAIN	TOILET	URINAL	
COMMENTS	WALL MOUNTED	WALL MOUNTED	WALL MOUNTED	WALL MOUNTED	COUNTER MOUNTED	WALL MOUNTED	WALL MOUNTED	WALL MOUNTED	WALL/FLOOR MOUNTED	WALL MOUNTED	

HEALTHCARE ACCESSORY TYPICAL MOUNTING HEIGHTS

GRAB BAR TYPICAL MOUNTING HEIGHTS & TOILET ACCESSORY PLANS

		NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT								
FINISH FLOOR										
ACCESSORY TYPE	CLINIC SINK	SHARPS CONTAINER	FILM ILLUMINATOR	SPECIMEN PASS-THRU	OTOSCOPE	SPHYGMOMANOMETER	GLOVE BOX	MED-GAS SHUT OFF	WALL HUNG COMPUTER	
COMMENTS	WALL MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	THRU-WALL MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	

		NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT				
FINISH FLOOR						
ACCESSORY TYPE	ADA TOILET GRAB BAR	SHOWER STALL GRAB BAR	ROLL-IN SHOWER STALL GRAB BAR	TYPICAL ACCESSORIES AT ACCESSIBLE TOILET	TYPICAL ADA SINK ENCLOSURE PANEL CLEARANCE	
COMMENTS	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	NOTE: SANITARY NAPKIN DISPOSAL AT WOMEN'S & UNISEX ONLY		

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

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 INCLUDED 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 DO OR PROPOSED 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 POLICES. 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 WITHOUT 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 SO CONDUCT ITS OPERATIONS AS NOT TO UNREASONABLY INTERFERE WITH TRAFFIC ON PUBLIC THOROUGHFARES 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. LAPTOP 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 REQUIRED TO PROVIDE PHOTOGRAPHS (VIA EMAIL USING A DIGITAL CAMERA) OF THE OWNER A 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 PARTAIN PROOF OF CONSTRUCTION PROGRESS, RECORD CONDITION AND AMOUNTS OF VENDOR GOODS UNDER RECEIPT, AND RECORD 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 OR THE PROJECT.

2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE AND SCHEDULE ALL AGENCIES HAVING JURISDICTION (AHJ) INSPECTIONS NECESSARY TO OBTAIN THE CERTIFICATE OF OCCUPANCY (C/O). THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DATE OF THE AGENCY INSPECTION. THE GENERAL CONTRACTOR SHOULD INSPECT THE PROJECT TO INSURE THAT CONSTRUCTION COMPLES 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 PUNCH LIST
 - 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 AND ARCHITECT SHALL NOTIFY OWNER AND 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 IMPERATIVE THAT ALL PARTIES MAINTAIN ACCURATE INFORMATION REGARDING THE ACTUAL CONSTRUCTION OF THE PROJECT.

2. 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, RVS, CHANGE ORDERS AND ALL ADDENDA 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 MS 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.
- I. 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/AIA 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. 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: SHOP DRAWINGS AND CALCULATIONS INDICATING PRODUCTS TYPES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS AND CONNECTION DETAILS TO SUBSTRATES. PROVIDE GROUT TYPES AND COLOR SAMPLES.

B. BASIS OF DESIGN: DUTCH QUALITY STONE; FALLBROOK STACK LEUGE

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 12 GALVANIZED WALLS. GALVANIZED FLASHING MAY ALSO BE USED.
- 3. IN WALL AND CAP FLASHING SHALL BE CARLUSLE "PRE-KLEENED" EPDM OR COMPARABLE PRODUCTS MANUFACTURED BY W.R. GRACE OR ALCO.
- 4. RETAINMENT 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 MASON'S 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-DECEA 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 AIAA STANDARD 5.
- 3. PLYWOOD SHALL BE CD GRADE APA PR OR YELLOW PINE.
- 4. BLOCKING SHALL BE CLOSELY FITTED, ACCURATELY SET TO REQUIRED LINES & LEVELS, SECURELY CONNECTED TO RIGID FIBER 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 6 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 MATERIAL: SOFTWOOD PLYWOOD, EXPOSED TO VIEW, FACE SPECIES AS INDICATED; PLYAN SAWN, MEDIUM DENSITY FIBERBOARD CORE, PS 1 GRADE A-B, GLUE TYPE A 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 8 TOLERANCE OF 1/16" AND TO COMPLY WITH REFERENCE QUALITY STANDARD FOR GRADE SPECIFIED.
- 3. SCRIE AND CUT WOODWORK TO FIT ADJOINING WORK, SEAL CUT SURFACES, AND REPAIR DAMAGED FINISH.
- 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 FOR 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 GLUED-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 JOINTS OR OPTIMAL JOINTING ARRANGEMENTS, OR WHICH ARE DEFECTIVELY MANUFACTURED WITH RESPECT TO SURFACES, SIZES OR PATTERNS.
- 8. INSTALL THE WORK PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS. SHIM AS REQUIRED USING CONCEALED SHIMS.
- 9. SCRIE AND CUT WORK TO FIT ADJOINING WORK, AND REFINISH CUT SURFACES OR REPAIR DAMAGED FINISH AT CUTS.
- 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 AHB 865.

E. ACCESSORIES

- 1. SEALANTS, TAPES, AND ACCESSORIES FOR SEALING WEATHER BARRIER AND SEALING WEATHER BARRIER TO ADJACENT 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, TROWELABLE 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. USE 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 6 INCHES WIDE, COVERING ENTIRE DEPTH OF FRAMING.
- 9. AT HEAD OF OPENINGS, WEATHER 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 WEATHERTIGHTNESS 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 (80) (275) COATING DESIGNATION, OR ALUMINUM-ZINC ALLOY-COATED STEEL SHEET COMPLYING WITH ASTM A 792A 792M, CLASS AZ50 (CLASS AZM160) COATING DESIGNATION; STRUCTURAL QUALITY, PREPARED BY THE COIL-COATING PROCESS TO COMPLY WITH ASTM A 755A 755M.
- 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 RELEASED PAPER BACKING; 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 TYPE REQUIRED FOR APPLICATION.
- 4. MISCELLANEOUS METAL SUBFRAMING AND FURRING: ASTM C 845, COLD-FORMED, METALLIC-COATED STEEL SHEET, ASTM A 653A 653M (80) (275) HOT-DIP GALVANIZED COATING DESIGNATION OR ASTM A 792A 792M, CLASS AZ50 (CLASS AZM15) COATING DESIGNATION UNLESS OTHERWISE INDICATED. PROVIDE MANUFACTURER'S STANDARD SECTIONS 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, MILLWORK, SILLS, CORNER UNITS, CLIPS, FLASHINGS, SEALANTS, GASKETS, FILLERS, CLOSURE STRIPS, AND SIMILAR ITEMS. MATCH MATERIAL AND FINISH OF METAL PANELS UNLESS OTHERWISE INDICATED.
- 2. CLOSURES: PROVIDE CLOSURES AT EAVES AND RIDGES, FABRICATED OF SAME METAL AS METAL PANELS.
- 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.
- 7. 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.
- 8. JOINT SEALANT: ASTM C 820, AS RECOMMENDED IN WRITING BY METAL PANEL MANUFACTURER.
- 9. 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 LP SIDING, CEDAR TEXTURE LAP AT CUTS.
- 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 NOTED ON THE DRAWINGS.
- 2. CELLULAR PVC TRIM SHALL BE AS MANUFACTURED BY AZEK BUILDING PRODUCTS OR APPROVED EQUAL. GLUED-UP MEMBERS SHALL BE GLUED 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 (4.4 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 FUNGICIDE.
- 2. EXTERIOR JOINTS AROUND PERIMETERS OF DOORS AND FRAMES: LATEX SEALANT, SINGLE COMPONENT, NONSAG, MILDEW-RESISTANT, PAINTABLE, ACRYLIC EMULSION SEALANT COMPLYING WITH ASTM C 834.
- 3. 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, INFLEXIBLE 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 AGAINST 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 0611 - DOOR HARDWARE

A. SUBMITTALS: SHOP DRAWINGS AND CALCULATIONS 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 UP EXTENDED TO PROTECT FRAME. FINISH TO MATCH HARDWARE SET. PROVIDE STANDARD (OPEN) STRIKE PLATES FOR INTERIOR 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

SPECIFICATIONS - PRODUCT & INSTALLATION GENERAL REQUIREMENTS

08 3100 - ACCESS DOORS AND PANELS

- A. SUBMITTALS: PRODUCT DATA.
- B. BASIS OF DESIGN: JLI INDUSTRIES, TM MULTI-PURPOSE FLUSH STEEL ACCESS PANEL.
- C. PRODUCTS: PRIME-PAINTED FLUSH, UNINSULATED ACCESS DOORS FOR WALLS WITH TRIMLESS FRAME AND KEY 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 INFLD. 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 OWNERS 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, INCLUDE 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 INFLD. AND RELATED FLASHINGS, ANCHORAGE AND ATTACHMENT DEVICES.
2. ALUMINUM FRAMING MEMBERS: TUBULAR ALUMINUM SECTIONS, DRAINAGE HOLES AND INTERNAL WEEP DRAINAGE SYSTEM.
3. EXTRUDED ALUMINUM:
5. FASTENERS: STAINLESS STEEL.
6. 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 ENDS AND EDGES, SEAL TO ADJACENT WORK TO FORM WATER TIGHT DAM.
8. WHERE FASTENERS PENETRATE SILL FLASHINGS, MAKE WATERTIGHT BY SEATING AND SEALING FASTENER HEADS TO SILL FLASHING.
9. PACK FERROUS INSULATION IN SHM SPACES AT PERIMETER OF ASSEMBLY TO MAINTAIN CONTINUITY OF THERMAL BARRIER.
10. SET THRESHOLDS IN BED OF SEALANT 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 CLOTHS, AND TAKE CARE TO REMOVE DIRT FROM CORNERS AND TO WIPE SURFACES CLEAN.
13. PROTECT INSTALLED PRODUCTS FROM 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 C645 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 36, TYPE 'X' WITH TAPERED EDGES, SAC-RESISTANT TYPE FOR CEILING SURFACES.
2. WATER-RESISTANT GYPSUM BACKING BOARD: ASTM C 630, 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'-0" 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 GA-216. ISOLATE GYPSUM BOARD ASSEMBLIES FROM ABUTTING STRUCTURAL AND MASONRY WORK AND FINISH AS FOLLOWS:
- A. LEVEL 1 (EMBED TAPE AT JOINTS): AT CONCEALED AREAS UNLESS A HIGHER FOLLOW 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 4 (EMBED TAPE AND APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES AND SAND SMOOTH AFTER EACH COAT) AT ALL WALLS RECEIVING FLAT, EGGSHELL, OR SATIN SHEEN PAINT OR WALLCOVERINGS.
- D. LEVEL 5 (CURD 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. ATTC 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 (OPAQUE) FINISHES: COMPLETELY COVER SURFACES TO PROVIDE A SMOOTH, OPAQUE SURFACE OF UNIFORM APPEARANCE. PROVIDE A FINISH FREE OF CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, SAGS, ROPIKNES, 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 FLASHINGS, CONNECTORS, ETC. ONE COAT COMMERCIAL METAL ETC. 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, CONDUTIS, 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 UNSEED 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.) ONE WALL IN EACH APARTMENT UNIT LIVING SPACE AND EACH BEDROOM SHALL BE PAINTED ACCENT COLORS.
2. GYPSUM BOARD WALLS IN KITCHENS, BATHROOMS AND LAUNDRIES UNLESS SCHEDULED FOR WALLCOVERING OR TILE. ONE COAT OF EPOXY COMPATABLE 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 SCRUBABLE 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. 781-018380
- E. BRADLEY SEMI-RECESSED WASTE RECEPTACLE 12 GALLON - MODEL NO. 346-10
- F. BRADLEY PAPER TOWEL DISP. SURFACE MOUNTED - MODEL NO. 250-15000
- G. BRADLEY SURFACE MOUNTED FOAM SOAP DISP, 40 OZ. - MODEL NO. 6562-730000
- H. BRADLEY HAT & COAT HOOKS, POLISHED STAINLESS STEEL - MODEL NO. 9135-000000
- I. PROVIDE (6) HOOKS PER RESTROOM
- J. BRADLEY RECTANGULAR BABY CHANGING STATION, LIGHT GRAY - MODEL NO. 8631-000000
- 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. BASIS OF DESIGN: ASI - ACCURATE TOILET PARTITIONS
- a. STYLE: FLOOR MOUNTED OVERHEAD-BRACED TOILET COMPARTMENTS.
2. DOORS AND PANELS: HIGH DENSITY POLYETHYLENE (HDPE), FABRICATED FROM SEO CHAPTER 1. EXTRUDED POLYMER RESINS, 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 MM).
- C. EDGES: SHIPLAP.
3. PANEL COLOR: CHARCOAL 9237.
4. DOORS AND PANELS: HIGH PRIVACY; HEIGHT: 82 INCHES (1575 MM) HIGH AND MOUNTED AT 8 TO 14 INCHES (203 TO 355 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: 32.75 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 4000 - 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:
- PRODUCT DATA: FOR EACH TYPE OF TERMITE CONTROL PRODUCT.
1. INCLUDE THE EPA-REGISTERED LABEL FOR TERMITICIDE PRODUCTS.
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 OWNERS 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 FL, TALSTAR, OR PREVAL.
- D. TERMITICIDE PRELAP, OR DRAGONFLY TCO.
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 PREPARATION INSTRUCTIONS FOR PREPARATION BEFORE BEGINNING APPLICATION OF TERMITE CONTROL 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. LOOSEN, 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, BUILDING SLABS, AND ATTACHED SLABS AS AN 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 OF INTERIOR PARTITION WALLS, AROUND PLUMBING PIPES AND ELECTRIC 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 AND FOOTING VOID.
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. POST WARNING SIGNS 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 1113 - 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 INCLUDED: PROVIDE PRODUCT DATA IN THE FORM OF MANUFACTURER'S TECHNICAL DATA, SPECIFICATIONS, 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 13434B.
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-SIDE 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 ABRAISIVE 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.



10/19/2021
PROFESSIONAL SEAL

G501

ISSUE DATE: 18 OCTOBER 2021
COLLINS WEBB #: 20032

GENERAL PROJECT
SPECIFICATIONS

PERMIT SET

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

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ARCHITECTURE, LLC

REVISION DATES:



RELEASED FOR
CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
03/24/2022

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



NOTE: ALL BOLTS TO BE 3/4" Ø THRU BOLTS
w/ WASHERS



NOTE: ALL BOLTS TO BE 3/4" Ø THRU BOLTS
w/ WASHERS



NOTE: ALL BOLTS TO BE 3/4" Ø THRU BOLTS
w/ WASHERS

10 TRUSS PLATE F
3" = 1'-0"



5 TRUSS PLATE A
3" = 1'-0"



6 TRUSS PLATE B
3" = 1'-0"



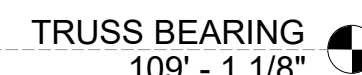
BOTTOM OF
 HEADER
 107' - 2"

NOTE: ALL TRUSS PLATES INDICATED ARE
MIRRORED ABOUT TRUSS CENTERLINE. ALL
PLATES ARE 1/4" THICKNESS A36 MATERIAL. ALL
PLATE TO PLATE WELDS TO BE CJP WELDS
GROUND SMOOTH



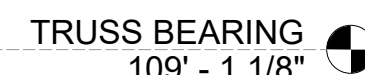
NOTE: TRUSS FRAMING FOR REPRESENTATION ONLY.
ACTUAL TRUSS MEMBER LAYOUT AND MEMBER SIZES
PER TRUSS MANUF.

TYPE C



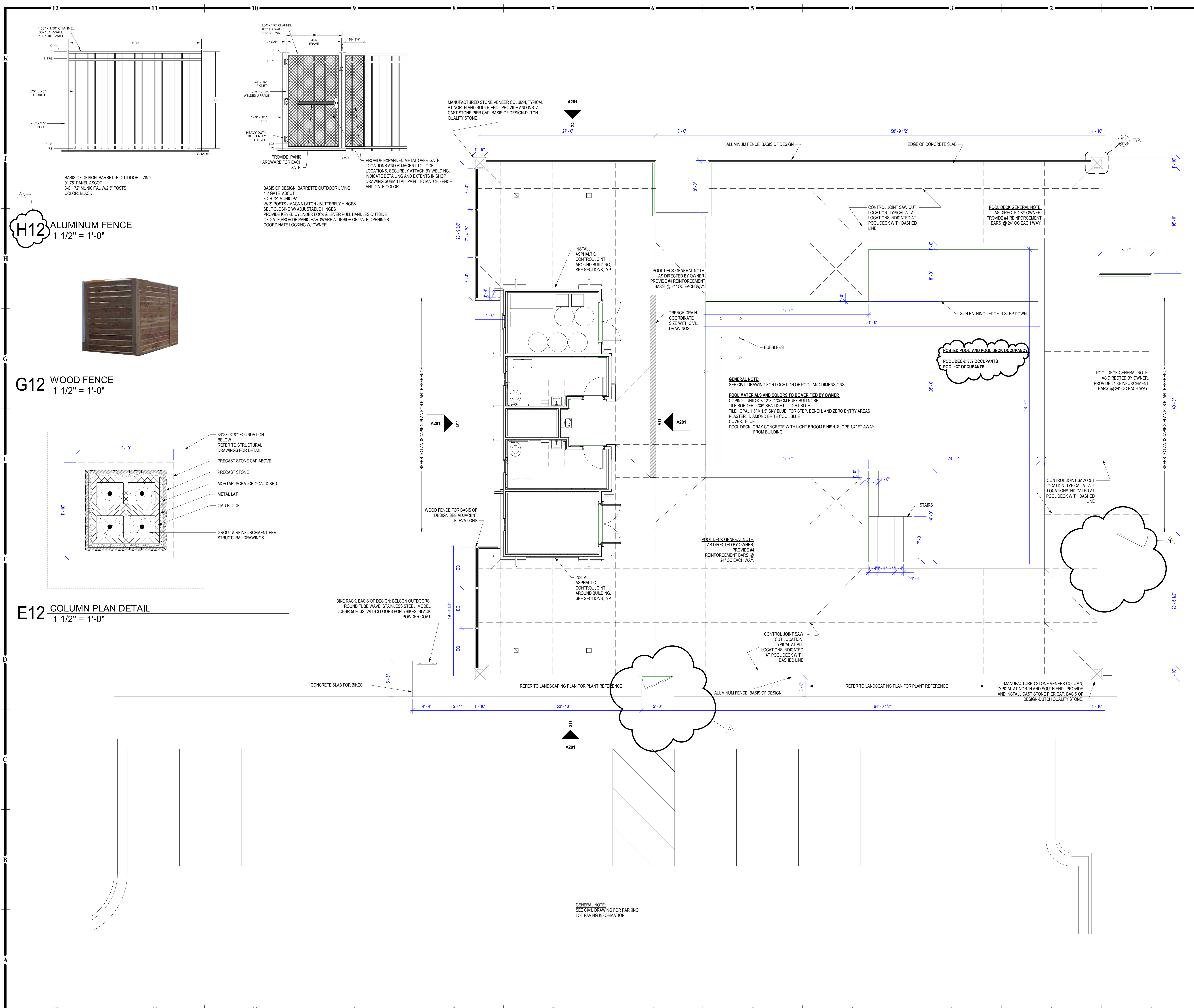
NOTE: TRUSS FRAMING FOR REPRESENTATION ONLY.
ACTUAL TRUSS MEMBER LAYOUT AND MEMBER SIZES
PER TRUSS MANUF.

1 TRUSS TYPE A
1/2" = 1'-0"



NOTE: TRUSS FRAMING FOR REPRESENTATION ONLY.
ACTUAL TRUSS MEMBER LAYOUT AND MEMBER SIZES
PER TRUSS MANUF.

TYPE A

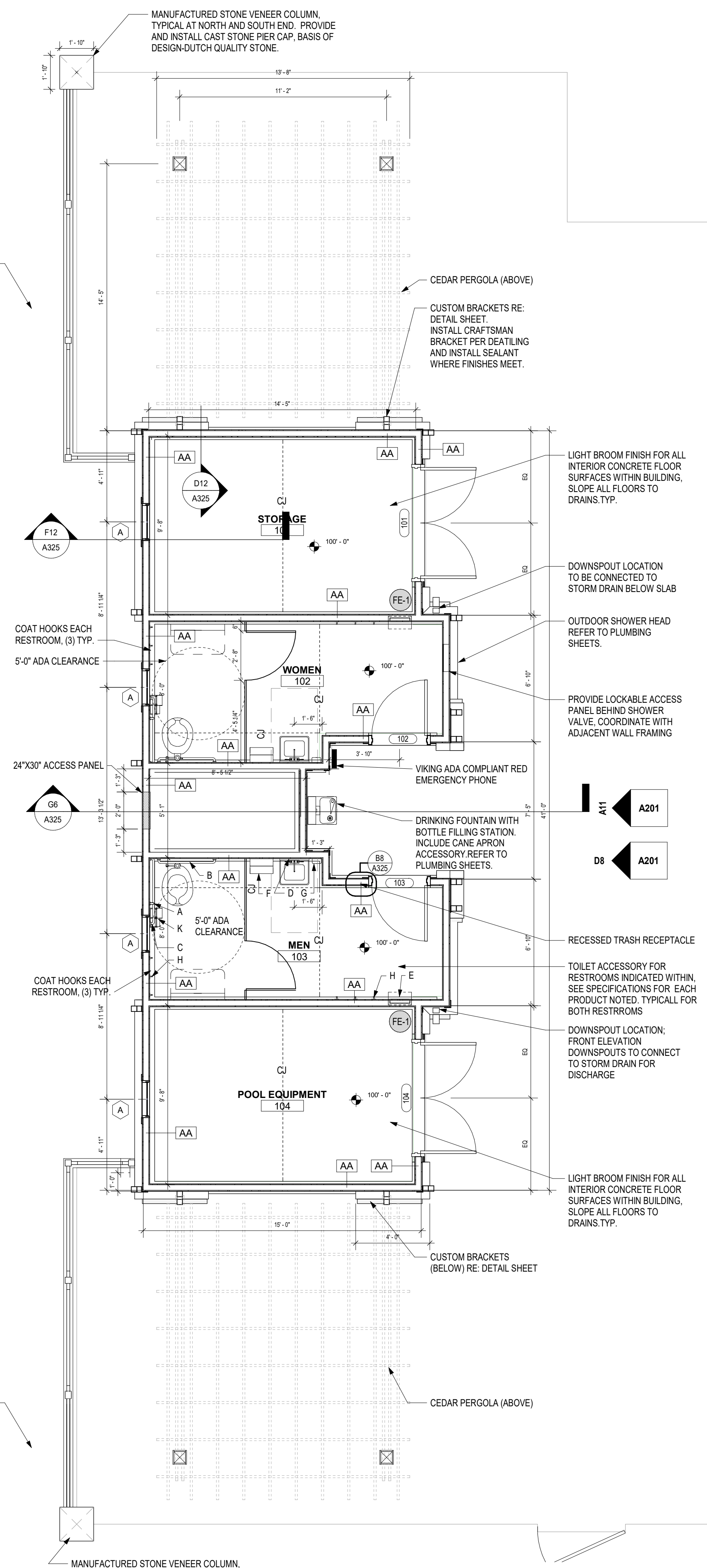
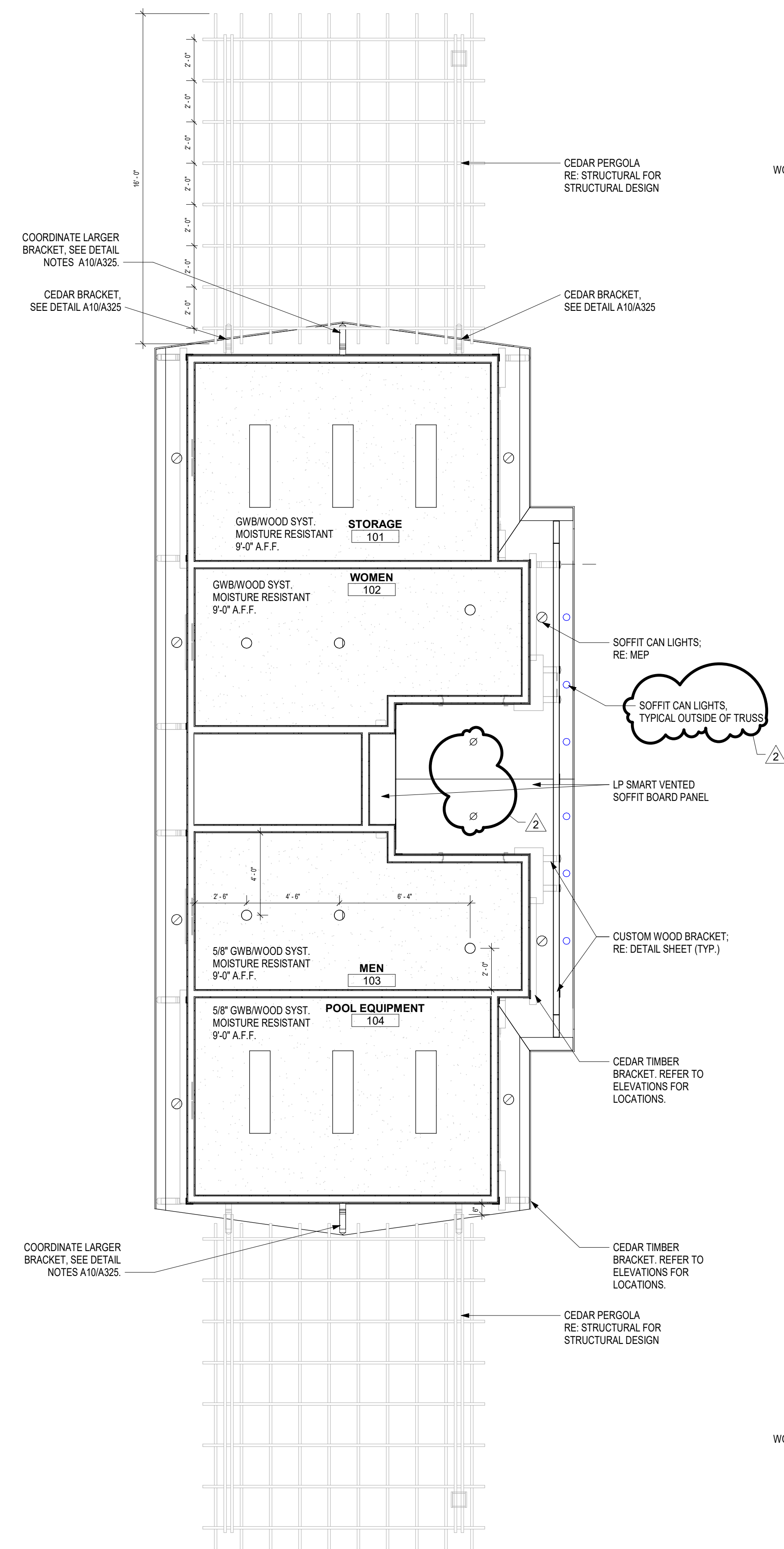
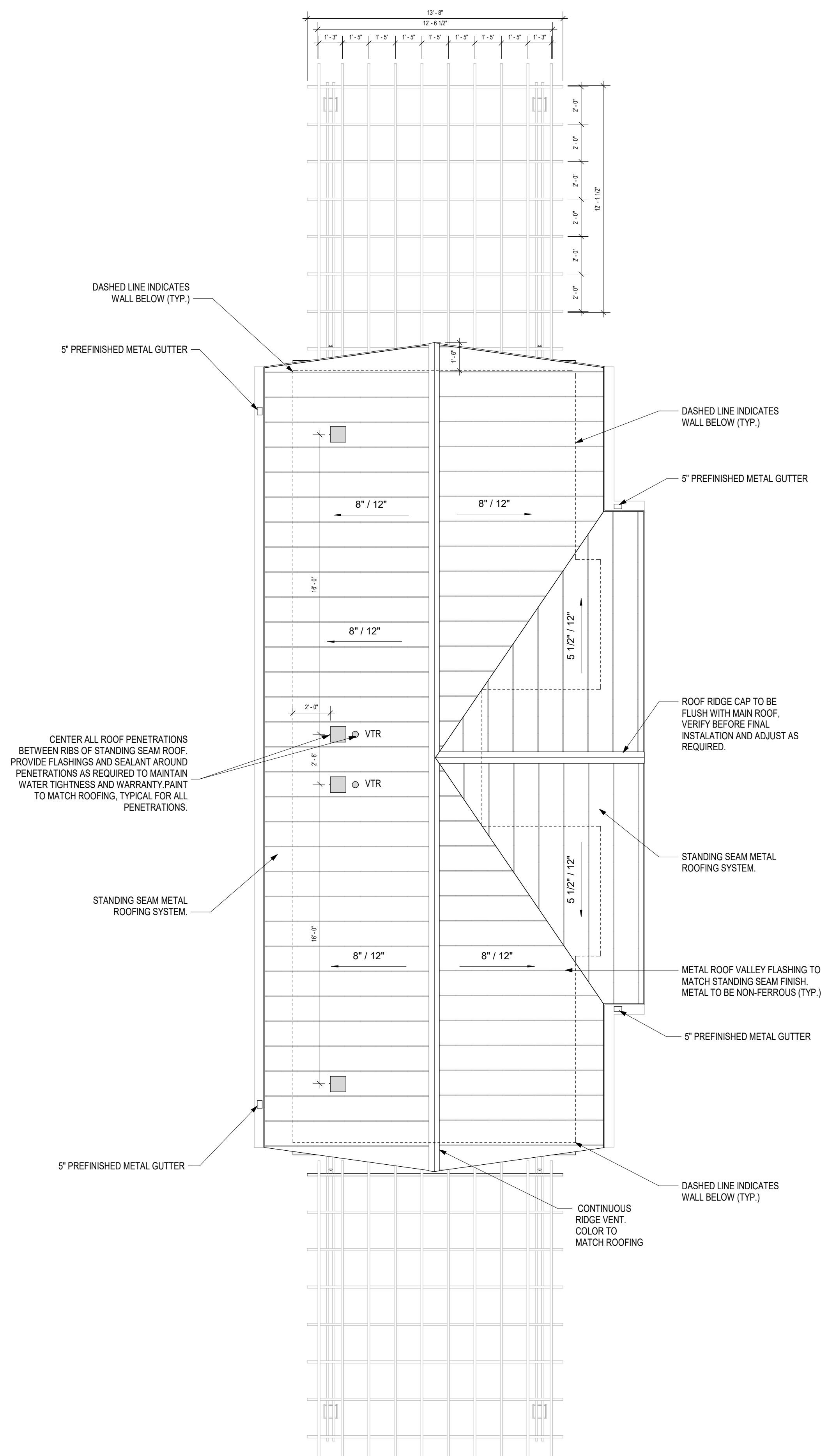


GENERAL NOTES:
FLOOR PLANS

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&I) 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 ACTIVITIES. BUILDING IS WINTERIZED DURING OFF PEAK TIMES PER NOTES WITHIN DRAWINGS.



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

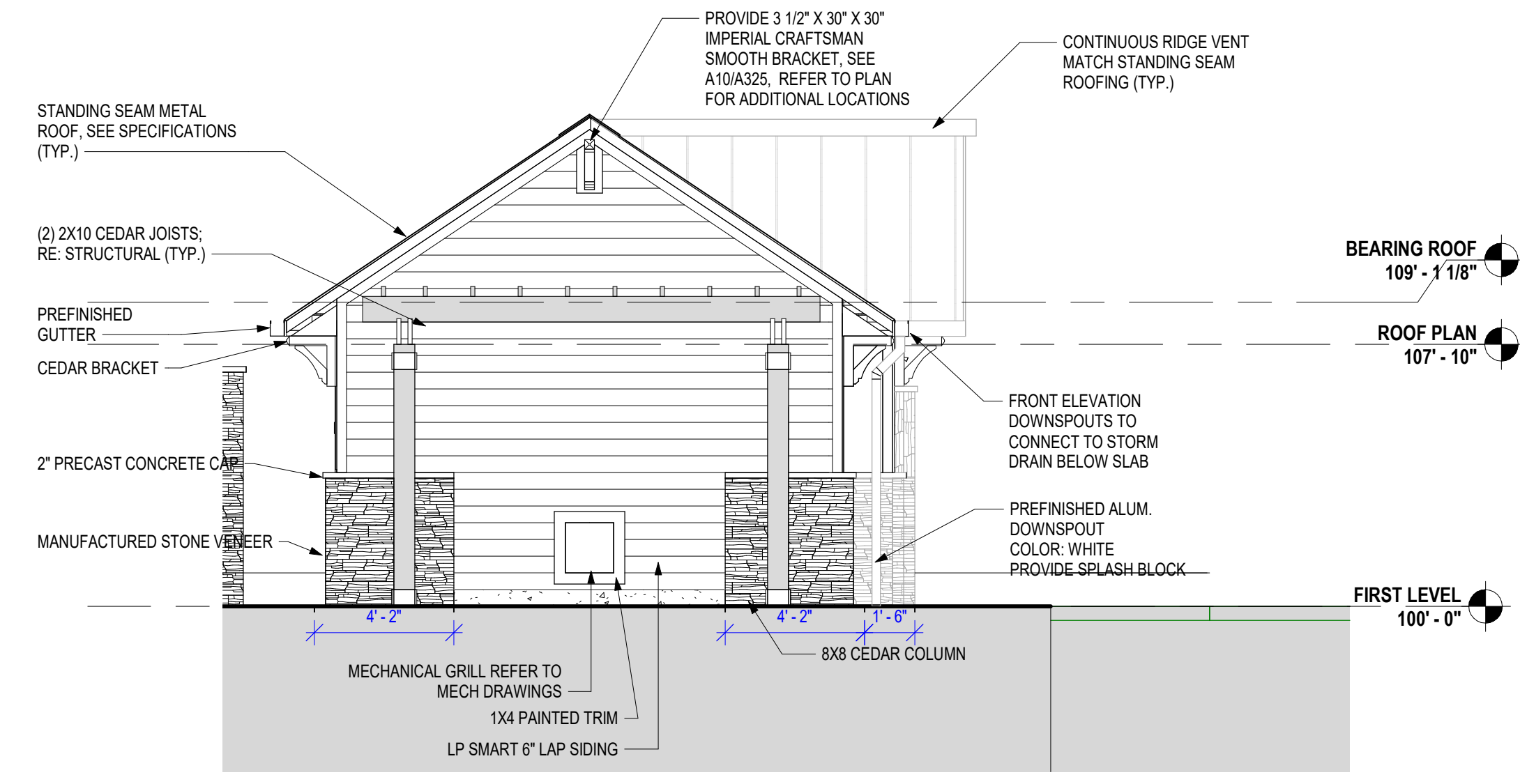
A7 1ST FLOOR REFLECTED CEILING PLAN
1/4" = 1'-0"

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

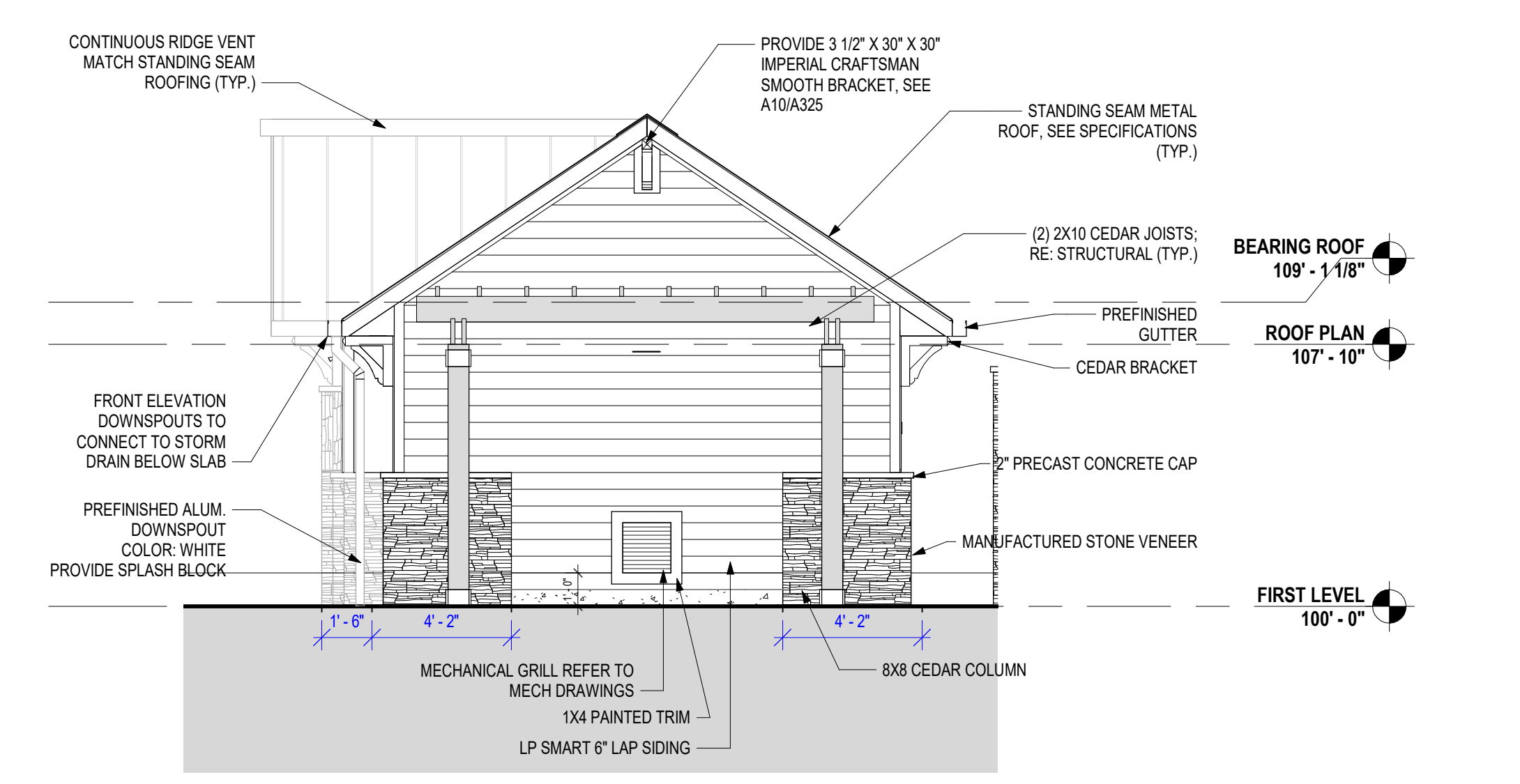
GENERAL NOTES
EXTERIOR ELEVATIONS:

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 BLOCKING AND POWER AS REQUIRED FOR EXTERIOR SIGNAGE AND LIGHTING.

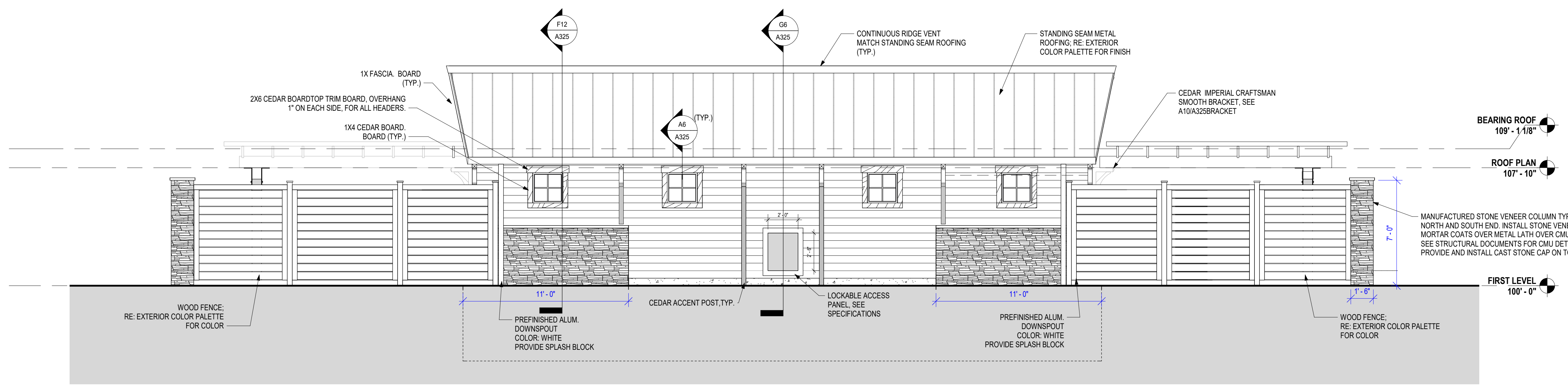
- EXTERIOR ELEVATION MATERIALS
- MANUFACTURED STONE VENEER, BASIS OF DESIGN: DUTCH QUALITY STONE, FALLBROOK DRY STACK
 - LP SIDING LAP, FIELD COLOR - SHERWIN WILLIAMS (SW 7005) PURE WHITE
 - LP VERTICAL BOARD SIDING AND BATTEN, FIELD COLOR - SHERWIN WILLIAMS (SW 7005) PURE WHITE
 - LP TRIM BOARDS - SHERWIN 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.



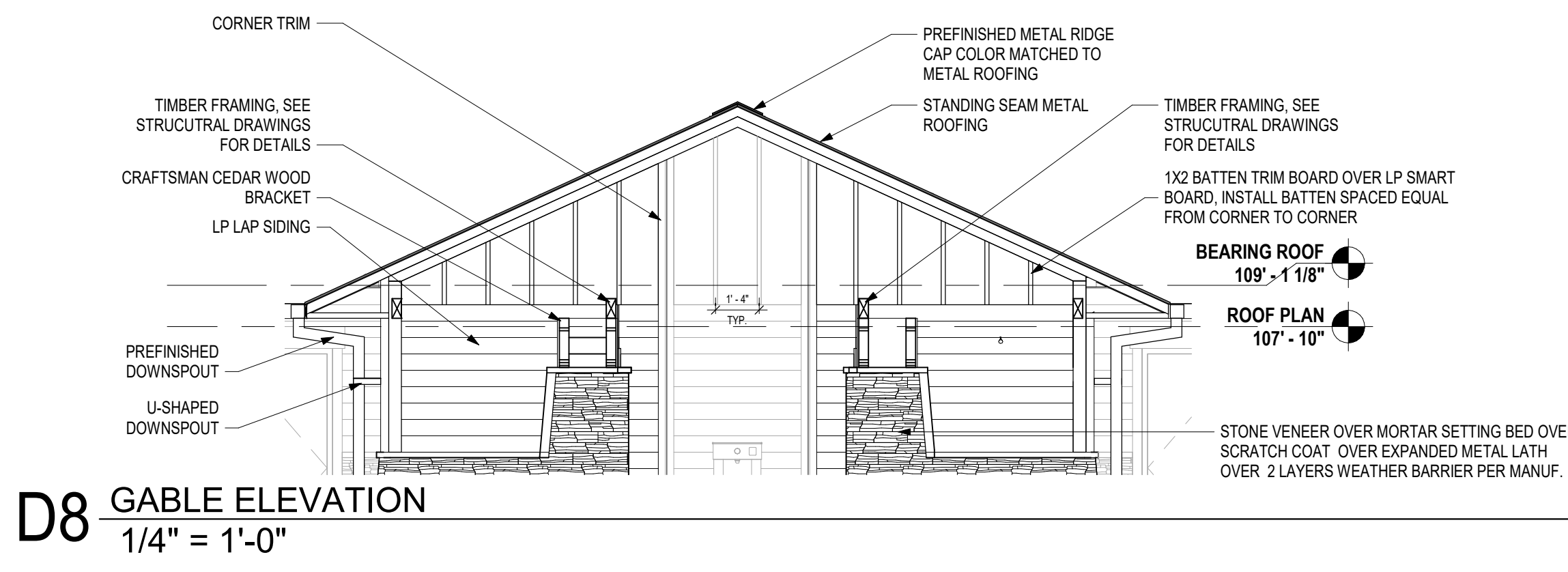
G11 SOUTH ELEVATION
1/4" = 1'-0"



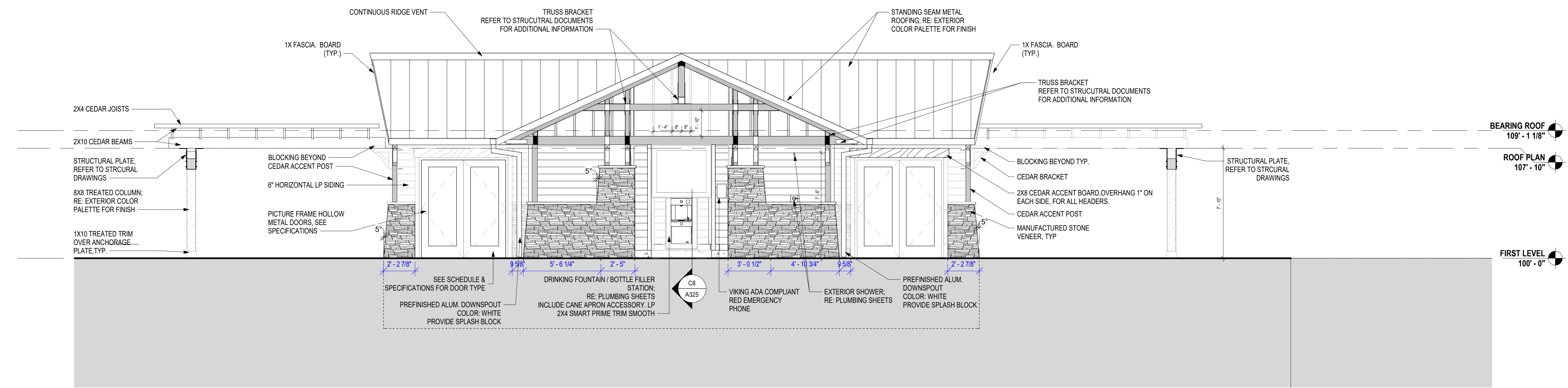
G4 NORTH ELEVATION
1/4" = 1'-0"



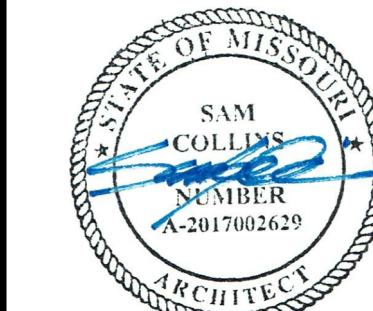
D11 WEST ELEVATION
1/4" = 1'-0"



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



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



ELECTRICAL SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

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

UTILITIES
--- UGE --- UNDERGROUND ELECTRICAL
--- OHE --- OVERHEAD ELECTRICAL
--- TELE --- TELECOMMUNICATIONS CONDUIT
--- UST --- 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

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

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

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

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
BO-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
THERMOSTAT
TEMPERATURE SENSOR
HUMIDISTAT
CONTROL WIRING

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 PIPING
DOMESTIC COLD WATER
DOMESTIC HOT WATER
RECIRCULATING DOMESTIC HOT WATER
SAW WASTE ABOVE GRADE OR FLOOR
SW WASTE BELOW GRADE OR FLOOR
V PLUMBING VENT
W WATER SERVICE
G GAS (NATURAL)

PIPING SPECIALTIES
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
CAP
PIPE FLEX
STRAINER
CHECK VALVE
INLINE STRAINER
TEST PLUG
GUIDE
ANCHOR
TRIPLE DUTY VALVE
AUTOMATIC 2-WAY CONTROL VALVE
AUTOMATIC 3-WAY CONTROL VALVE
SOLENOID VALVE

PLUMBING FIXTURES/EQUIPMENT
HOSE BIBB
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

GEN. MECHANICAL NOTES

1. 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.
2. 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.
3. ALL EQUIPMENT SHALL BE ADEQUATELY AND PROPERLY SUPPORTED AND FASTENED FROM STRUCTURE.
4. ALL EQUIPMENT AND ACCESSORIES INSTALLED IN CONCEALED SPACES REQUIRING ACCESS SHALL BE PROVIDED WITH ACCESS DOORS MEETING ANY FIRE REQUIREMENTS OF THE WALL/CEILING THEY ARE INSTALLED.
5. 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.
6. START UP AND ADJUST ALL EQUIPMENT AND VERIFY ALL MECHANICAL SYSTEMS IN OPERATION IN ACCORDANCE WITH THEIR INTENDED PURPOSES. SUBMIT BALANCE AND START UP REPORTS TO THE A/E. REFER TO SPECIFICATIONS FOR ANY ADDITIONAL REQUIREMENTS.

GENERAL PLUMBING NOTES

1. 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.
2. 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.
3. PROVIDE CLEANSOUTS IN THE FOLLOWING LOCATIONS:
 - 3.1. IN ALL HORIZONTAL DRAINS (WITHIN THE BUILDING) NOT MORE THAN 100 FEET APART.
 - 3.2. IN BUILDING SEWERS LOCATED NO MORE THAN 100 FEET APART MEASURED FROM THE UPSTREAM ENTRANCE OF THE CLEANSOUT.
 - 3.3. 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.
 - 3.4. AT THE BASE OF EACH WASTE OR SOIL STACK.
 - 3.5. NEAR THE JUNCTION OF THE BUILDING DRAIN AND BUILDING SEWER.

GENERAL ELECTRICAL NOTES

1. 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.
2. COORDINATE LOCATIONS OF RECEPTACLES, SWITCHES, ETC. WITH ARCHITECTURAL CASEWORK AND ELEVATIONS.
3. REFER TO MOUNTING HEIGHTS DETAIL FOR MOUNTING HEIGHTS OF ALL DEVICES NOT INDICATED OTHERWISE.
4. PROVIDE ALL EMPTY CONDUITS WITH PULL STRINGS AND BUSHED ENDS.
5. CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE REASONABLY POSSIBLE.

SHEET INDEX

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

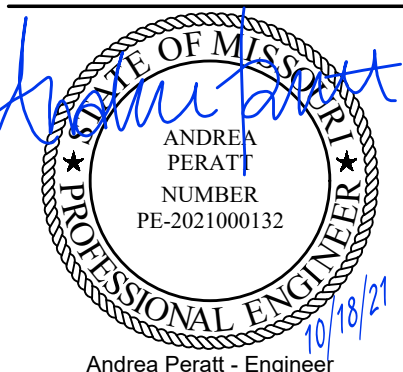
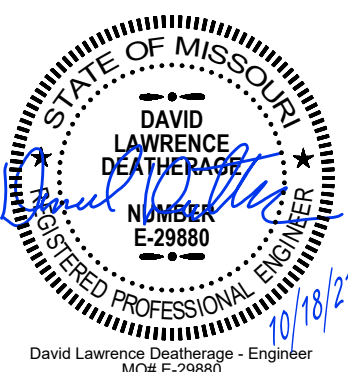
GENERAL NOTES

1. SOME ROOM NAMES MAY NOT BE SHOWN FOR PURPOSE OF CLARIFYING PLAN. REFER TO ARCHITECTURAL PLANS FOR REFERENCE TO ROOM NAMES NOT SHOWN.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP AT THE JOB SITE AN UP TO DATE SET OF "RECORD DRAWINGS" SHOWING ALL CHANGES FROM THE ORIGINAL PLANS. THE CONTRACTOR SHALL DELIVER THE "RECORD DRAWINGS" TO THE ENGINEER AT THE CONCLUSION OF THE PROJECT ELECTRONICALLY.
3. THESE DRAWINGS ARE DIAGNOSTIC. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS (NEW AND EXISTING) DIMENSIONS, AND CLEARANCES PRIOR TO THE COMMENCEMENT OF WORK AND SHALL INCLUDE ALL COSTS, EQUIPMENT, MATERIAL, ACCESSORIES, ETC. REQUIRED FOR A FULLY COMPLETE, FUNCTIONAL AND CODE COMPLIANT INSTALLATION.
4. FINAL LOCATIONS OF ALL DEVICES, LIGHT FIXTURES, EQUIPMENT ETC SHALL BE INDICATED ON THE ARCHITECTURAL DRAWINGS. ALL DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM ARCHITECTURAL PLANS. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM MEP DRAWINGS.
5. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES, ETC. AS NEEDED FOR THE COMPLETE INSTALLATION AND PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ALL FEES AND DATA NEEDED FOR THIS.

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

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COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:



Andrew Peratt - Engineer
MOR PE-2021000132
PROFESSIONAL SEAL

ME001

ISSUE DATE: 18 OCT 2021
COLLINS WEBB #: 20032

COVER SHEET



21443

GENERAL MECHANICAL/ELECTRICAL SPECIFICATIONS/ DIVISION 220000 - 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 their scope and scope of work.

2. GENERAL REQUIREMENTS

A. Furnish & install all labor & materials required for complete, functioning, mechanical & plumbing systems w/ all associated connections & appurtenances as shown on plans.

B. Obtain & pay for all permits required for execution of this work & shall make arrangements for modifications to water, gas & sewer connections to building as required for construction purposes.

C. All materials shall be new & shall have UL label where applicable.

D. Visit site & observe conditions under which work will be done. Any discrepancies shall be called to architect's attention. No subsequent allowance will be made in contract for any error or negligence on contractor's part.

E. Final acceptance of work shall be subject to condition that all systems, equipment, apparatus & appliances operate satisfactorily as designed & intended. Work shall include routine adjustment of systems & control equipment installed under these specifications.

F. Warranty to owner quality of materials, equipment, workmanship & operation of equipment provided under these specifications for one year from & after completion of building & acceptance of mechanical systems by owner.

G. All materials installed in plenums shall be noncombustible or have flame/smoke index of not more than 2550 in accordance w/ ASTM E-84.

H. Requirements under Division one & general & supplementary conditions of these specifications shall be part of this section. Contractor shall become thoroughly acquainted w/ its contents with Division one & general & supplementary conditions under this section includes material, Equipment, Appliances, Transportation, Services & Labor required to complete entire system as required by drawings & specifications.

I. The specifications & drawings for project are complementary, & portions of work described in one shall be provided as described in both. In event of discrepancies, notify engineer & request clarification prior to proceeding w/ work involved.

3. EXTENT OF CONTRACT WORK

A. Provide MEP systems indicated on drawings, specify or reasonably imply, in addition to component equipment called out in plans and specifications, provide every device, component, programming, interlocking and accessories necessary for proper operation and completion of totally functional MEP systems.

B. In no case will claims for "Extra Work" be allowed for work which Contractor could have been informed before bids were taken.

C. Contractor shall become familiar with equipment provided by other contractors that it requires plumbing connections and controls.

D. Electrical work required to install and control plumbing equipment, which is not shown on plans or specified under Division 26, shall be included in Contractor's base bid and proposed.

E. All automatic temperature control devices shall be mounted as indicated in automatic temperature control section of specifications.

F. The cost of larger wiring, conduit, control and protective devices resulting from installation of equipment which was not used for basis of design as outlined in specifications shall be paid for by the supplying Contractor at not at Owner or Architect Engineer.

G. Contractor shall be responsible for providing supervision to other Trade Contractors to insure that required connections, interlocking and interconnection of MEP equipment is made to attain intended control sequences and system operation.

H. Contractor shall obtain complete MEP data on shop drawings and shall list this data on an approved form that shall be presented on request, to other Trade Contractors. Data shall be complete with wiring diagrams, performance specifications, and information on electrical components of plumbing equipment such as HP, voltage, amperes, watts, locked rotor current to allow other Trade Contractors to order support or other equipment coordinated as required in his contract.

4. 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, Placement, Anchoring, Applying, setting, fastening, installation, Finishing, curing, protecting, cleaning, & similar operations."

D. Provide: term "Provide" means "to Furnish & Install. Complete & ready for intended use." Furnished by owner or furnished by other contractor or owner's representative. It is to be installed & connected under requirements of this Division, completely & ready for operation, including items incidental to work, including services necessary for proper installation & operation. Installation shall be included under guarantee required by this Division.

E. Engineer: where referenced in this Division, "Engineer" is engineer of record & design professional for work under this Division, & a consultant to & an authorized representative of architect. As defined in general &/or supplementary conditions. When used in this Division, it means the individual designated by a delegation to, engineer, in addition to involvement by a delegation to, "Architect."

F. AHJ: local code &/or inspection agency (authority) having jurisdiction over work.

G. The terms "Approved equal," "Equivalent," or "Equal" are used synonymously & shall mean "acceptable by or acceptable to engineer as equivalent to item or manufacturer specified."

H. The term "approved" shall mean labeled, listed, or both. By nationally recognized testing laboratory (e.g. UL, ETL, CSA), & acceptable to AHJ over this project.

5. 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 to request or obtain extra compensation over & above contract price.

6. MATERIAL WORKMANSHIP

A. Provide new material, 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 firm, written descriptions of firm given 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.

C. Abnormal noise caused by rattling equipment, piping, ducts, air devices & squeaks in casing equipment will be acceptable if material materials & equipment are of commercial specification grade in light. Quality of residential equipment is not acceptable.

D. Remove from premises waste material present from work, including cartons, crating, paper, stickers, &/or excavation material not used.

E. Clean equipment installed under this contract to present neat & clean installation after work.

F. Repair or replace public & private property damaged as result of work performed under this contract to satisfaction of authorities & regulations having jurisdiction.

7. COORDINATION

A. Coordinate work w/ other trades so various components of systems will be installed at proper time w/ full available space & will allow proper service access for maintenance. Components which are installed without approval 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 where chase & openings are required.

C. Keep information 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.

D. Contractor shall take his own measurements at building, as variations may appear. Contractor will be held responsible for errors that could have been avoided by proper checking & inspection.

E. Provide materials w/ firm that will properly fit types of ceiling, wall, or floor finishes actually installed. Model numbers listed in specifications or shown on drawings are not necessarily intended to designate required firm.

F. Obtain equipment submittal information for all pieces of equipment to be connected to from other trades that clearly indicates all connection requirements, locations, sizes, and similar requirements. Obtain this information in ample time to coordinate other trade submittals and equipment coordination. Where requirements differ from that on plans or from provisions made in the work, immediately notify the architect/engineer. Do not proceed with work that is incompatible with equipment provided.

G. Coordinate construction operations included in different sections of the specifications to ensure efficient and orderly installation of each part of the work. Coordinate construction operations, included in different sections, that depend on each other for proper installation, connection, and operation.

H. Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the work. Each contractor shall coordinate its operations with operations, included in different sections, that depend on each other for proper installation, connection, and operation.

I. Schedule construction operations in sequence required to obtain the best results where installation of one part of the work depends on installation of other components, before or after its own installation.

J. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

K. Prepare coordination drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities. Content: project-specific information drawn accurately to scale. Do not base coordination drawings on reproductions of the contract documents or standard printed data. Include the following information, as applicable:

- 1) Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
- 2) Indicate required installation sequences.
- 3) Indicate dimensions shown on the contract drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to architect for resolution of such conflicts. Minor dimension changes and off-limit installations will not be considered changes to the contract.

3) Combined contractor's construction schedule: review progress since the last coordination meeting. Determine whether each contractor is on time, ahead or behind schedule, in relation to construction schedule. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the contract time. Discuss impact of various contractor schedules upon other contractors and how to coordinate impacts.

4) Review present and future needs of each contractor present

A. After shop drawings have been reviewed and approved by all parties, transmit a set of submittals to each other contractor in ample time to coordinate other trade submittals that will interface with installation. Each other contractor shall review the submittal for coordination and return a stamped submittal indicating they have reviewed the submittal for coordination purposes.

8. ARCHITECTURAL VERIFICATION AND RELATED DOCUMENTS

A. Contractor shall consult all Architectural Drawings and specifications in their entirety incorporating and certifying all work, materials, and equipment required for the utility as indicated on drawings. Check for consistency of pipe sizes, duct sizes, including height, location and orientation, phase, drawings incorporating these requirements shall be submitted to the architect for approval prior to approval in writing or rough in.

9. ORDINANCES & CODES

A. Work performed under this contract shall, at a minimum, be in conformance w/ applicable national, state & local codes having jurisdiction.

B. Installation 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 Plumbering Engineers (AIP), American Society of Testing Materials (ASTM) & other national standards & codes where applicable.

C. Where contract documents exceed requirements of referenced codes, Standards, etc., Contractor shall comply with the more restrictive code, Standard, etc.

D. Procure & pay for permits & licenses required for accomplishment of work herein described. Where required, obtain. Pay for & furnish certificates of inspection to owner. Contractor will be held responsible for violations of law.

10. STANDARDS

A. Drawings and specifications indicate minimum construction standard. Should any work indicated be sub standard to any ordinances, laws, codes, rules or regulations bearing with work, Contractor shall promptly notify architect & engineer in writing of such conditions with work so that necessary changes can be made. However, if the Contractor proceeds with work knowing it to be contrary to any ordinances, laws, rules, and regulations, Contractor shall thereby assume full responsibility for and shall bear all costs required to correct non-complying work.

11. PROTECTION OF EQUIPMENT & MATERIALS

A. Store & protect from damage equipment & materials delivered to job site. Cover as required to protect from dirt & damage. Plug or cap open ends of ductwork & piping systems well stored & installed during construction when not in use to prevent entrance of dirt into systems. Equipment & materials shall be protected by construction activities will be stored, & Contractor is obligated to furnish new equipment & material of like kind. Keep premises free from debris at all times. Contractor shall be responsible for work performed under this contract. Piping, equipment, etc. shall have neat & clean appearance at completion.

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 for receipt of bids. Request shall include name of material or equipment for substitution & complete description of proposed substitute including but not limited to, performance, specifications, and information on electrical components of plumbing equipment such as HP, voltage, amperes, watts, locked rotor current to allow other Trade Contractors to order support or other equipment coordinated as required in his contract.

B. 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 for receipt of bids. Request shall include name of material or equipment for substitution & complete description of proposed substitute including but not limited to, performance, specifications, and information on electrical components of plumbing equipment such as HP, voltage, amperes, watts, locked rotor current to allow other Trade Contractors to order support or other equipment coordinated as required in his contract.

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20. EXCAVATION AND BACKFILL

A. Perform necessary excavation to receive work. Provide necessary shoring, cribbing, bracing, etc. For this operation, and remove it at completion of work. Perform work in accordance with specifications for this section of these specifications, and in compliance with OSHA safety standards.

B. Excavate trenches of sufficient width to allow ample working space, and no deeper than necessary for installation work.

C. Conduct excavations so no walls or footings are disturbed or injured. Backfill excavations made under or adjacent to footing with selected earth or sand and tamped to compaction required by architect's engineer. Mechanically tamped backfill under concrete and pavings in six inch layers to 95% standard density, reference Division 22.

D. Backfill trenches and excavations to required heights with allowance made for settlement. Tamp fill material in layers as required for compaction. Backfill trenches and excavations to required heights with allowance made for settlement. Tamp fill material in layers as required for compaction. Backfill trenches and excavations to required heights with allowance made for settlement. Tamp fill material in layers as required for compaction.

E. When available, refer to test hole information on architectural or civil drawings or other drawings for types of soil to be encountered in excavations.

21. ROUGH-IN

A. Coordinate rough-in w/ general construction & other trades. Conceal piping & conduit rough-in except in unfinished areas & where otherwise shown.

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. 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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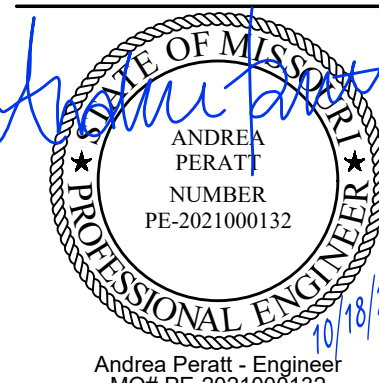
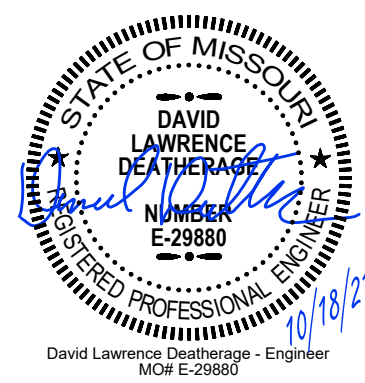


PERMIT SET

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

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COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:



PROFESSIONAL SEAL

ME101

ISSUE DATE: 18 OCT 2021
COLLINS WEBB #: 20032

SITE PLAN

GENERAL SITE PLAN NOTES

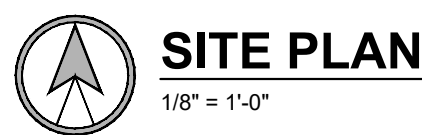
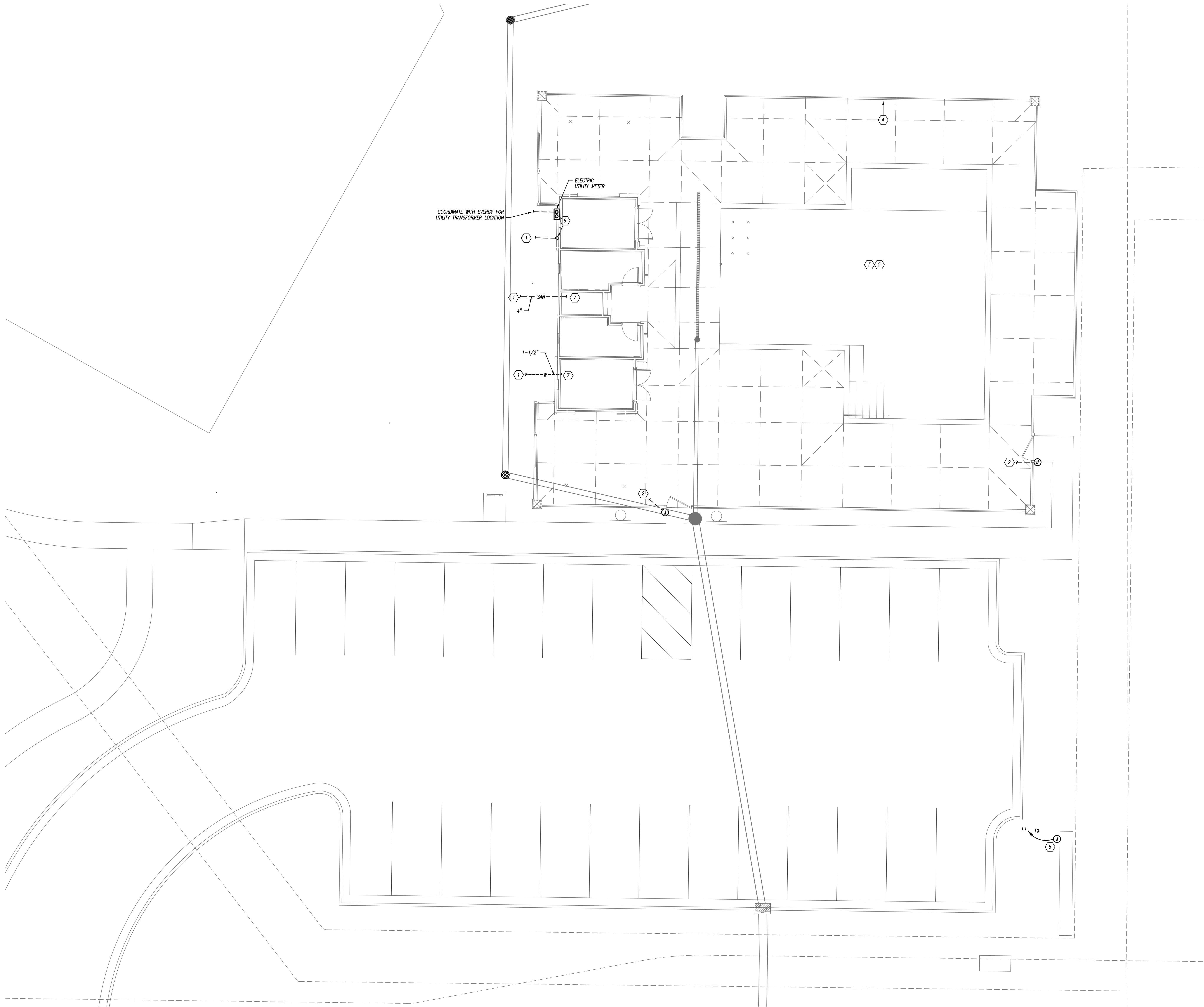
1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. REFER TO CIVIL PLANS FOR CONTINUATION OF SERVICES BEYOND 5'-0" FROM BUILDING UNLESS OTHERWISE SHOWN.
3. REFER TO RESPECTIVE FLOOR PLANS FOR CONTINUATION OF SERVICES INSIDE BUILDING AND/OR EXACT LOCATIONS OF EQUIPMENT.
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 CARD 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.



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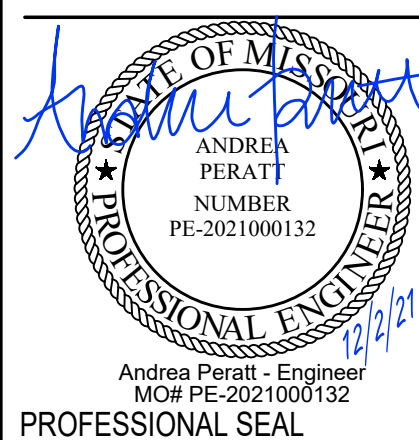


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CITY COMMENTS 10/26/2021
REVISION 2 12/02/2021



M101

ISSUE DATE: 18 OCT 2021
COLLINS WEBB #: 20032

MECHANICAL PLAN

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

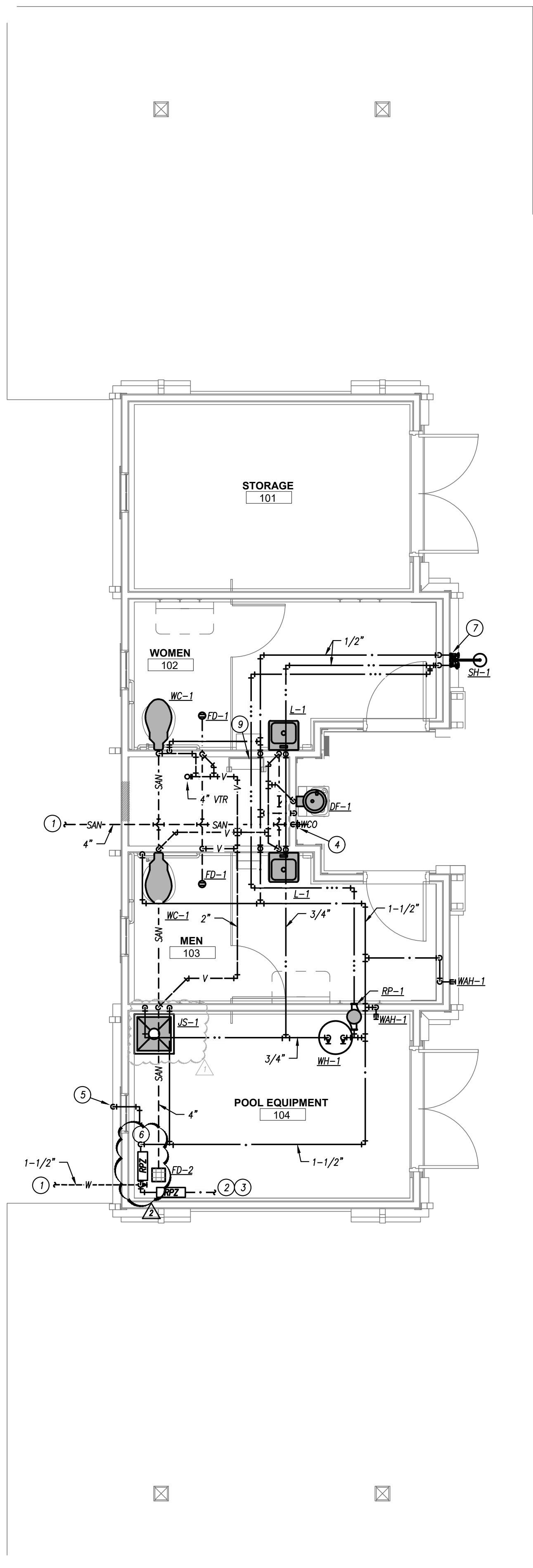
1. TERMINATE EXHAUST DUCT WITH 6" ROOF VENT CAP. ROOF CAP TO BE PAINTED TO MATCH ROOF. COORDINATE WITH ARCHITECT FOR COLOR/FINISH. REFER TO ARCHITECTURAL DIMENSIONAL PLANS FOR ROOF VENT LOCATION.
2. TERMINATE EXHAUST DUCT WITH 10" ROOF VENT CAP. ROOF CAP TO BE PAINTED TO MATCH ROOF. COORDINATE WITH ARCHITECT 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.

GENERAL PLUMBING NOTES

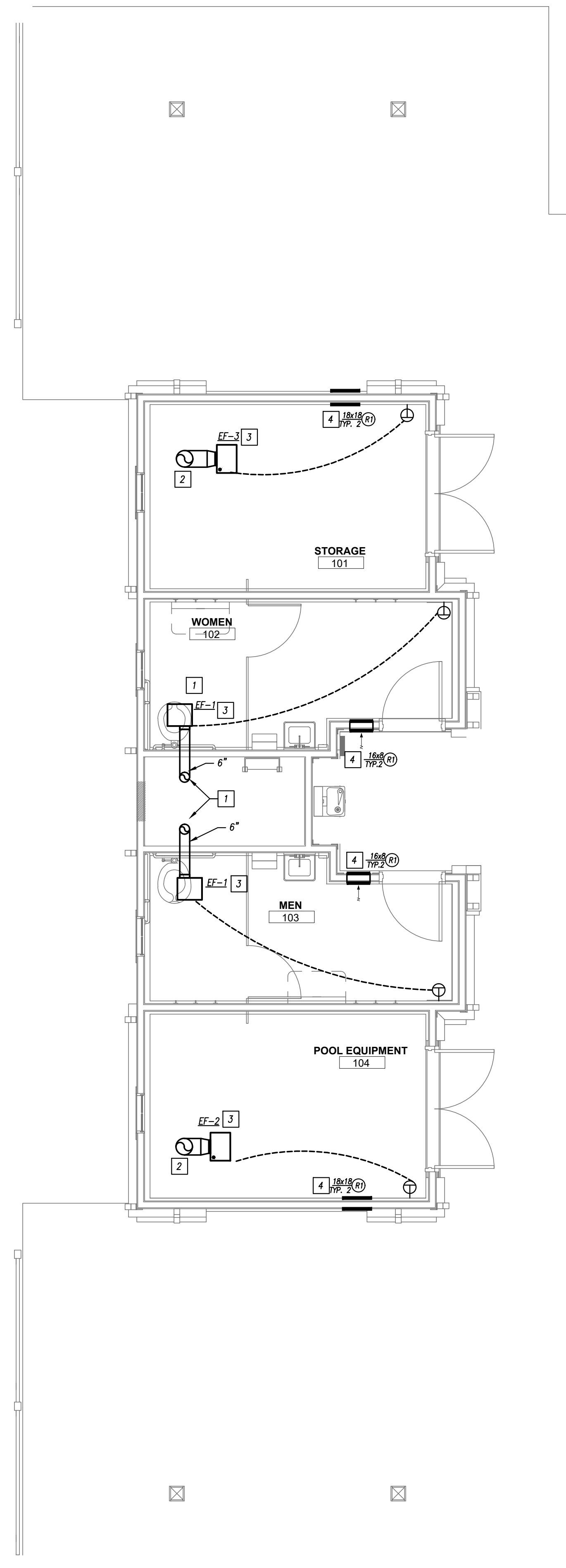
1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. REFER TO PLUMBING FIXTURE / DRAIN SCHEDULES FOR PIPING SIZES FOR INDIVIDUAL CONNECTIONS TO FIXTURES AND RISERS NOT SHOWN ON PLANS.
3. NO SANITARY OR VENT PIPING BELOW GRADE SHALL BE LESS THAN 2".
4. NO DOMESTIC WATER PIPING SHALL BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.
5. ALL VENT PIPING SHOWN IS DIAGRAMMATIC. 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 (PER GENERAL NOTES ON COVER SHEET). COORDINATE EXACT LOCATIONS OF CLEANOUTS WITH ARCHITECT.

PLUMBING PLAN KEYED NOTES

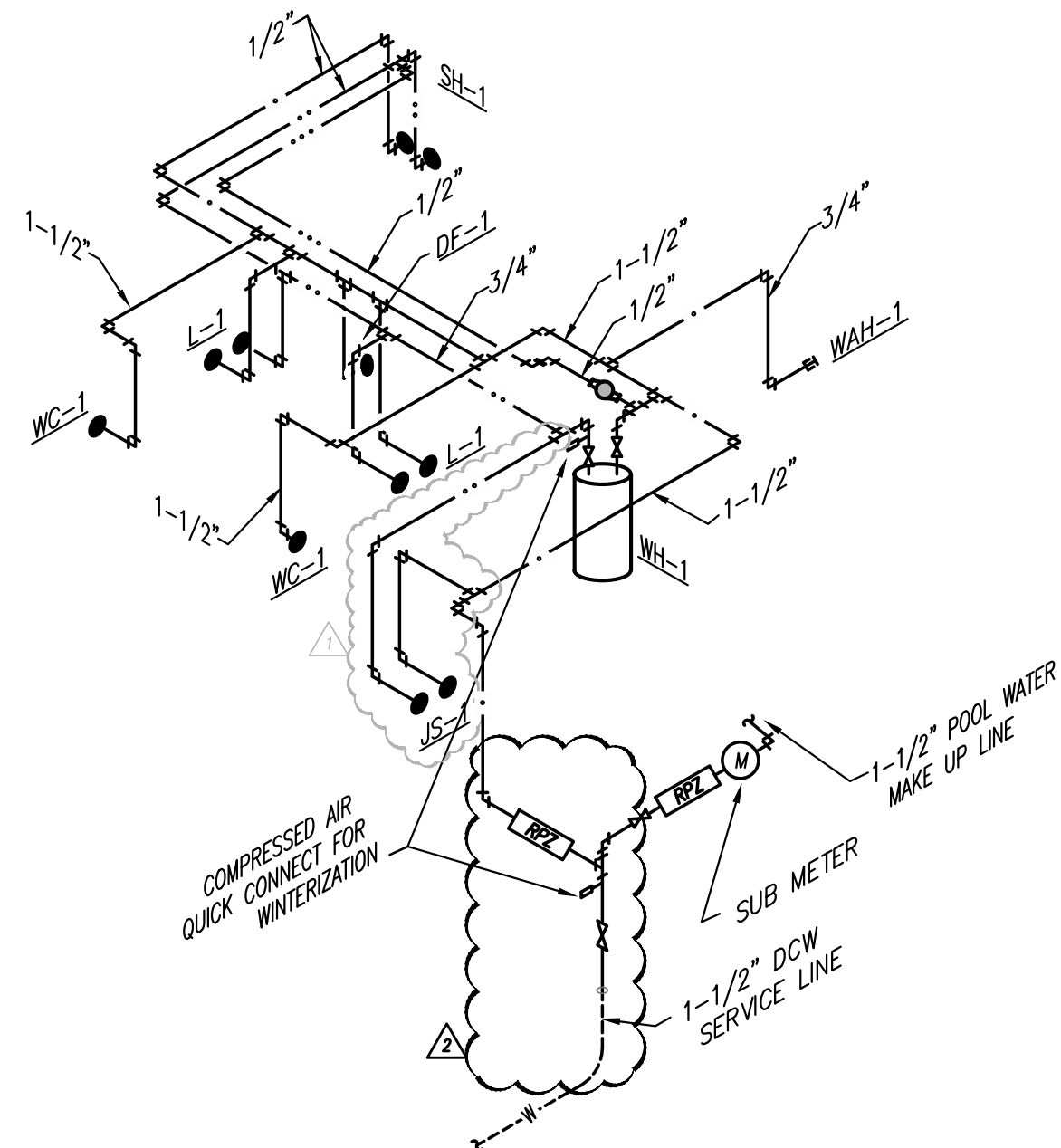
1. REFER TO CIVIL PLANS FOR CONTINUATION. COORDINATE EXACT LOCATION WITH CIVIL.
2. 1-1/2" POOL WATER MAKE-UP LINE. REFER TO POOL PLANS FOR CONNECTION.
3. COORDINATE EXACT LOCATION WITH POOL EQUIPMENT.
4. REFER TO RISER DIAGRAM ON THIS SHEET FOR PIPE ROUTING.
5. 2" PVC POOL DRAIN LINE SECURED TO THE WALL. 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 DIAGRAMMATIC FOR CLARITY ON PLANS.



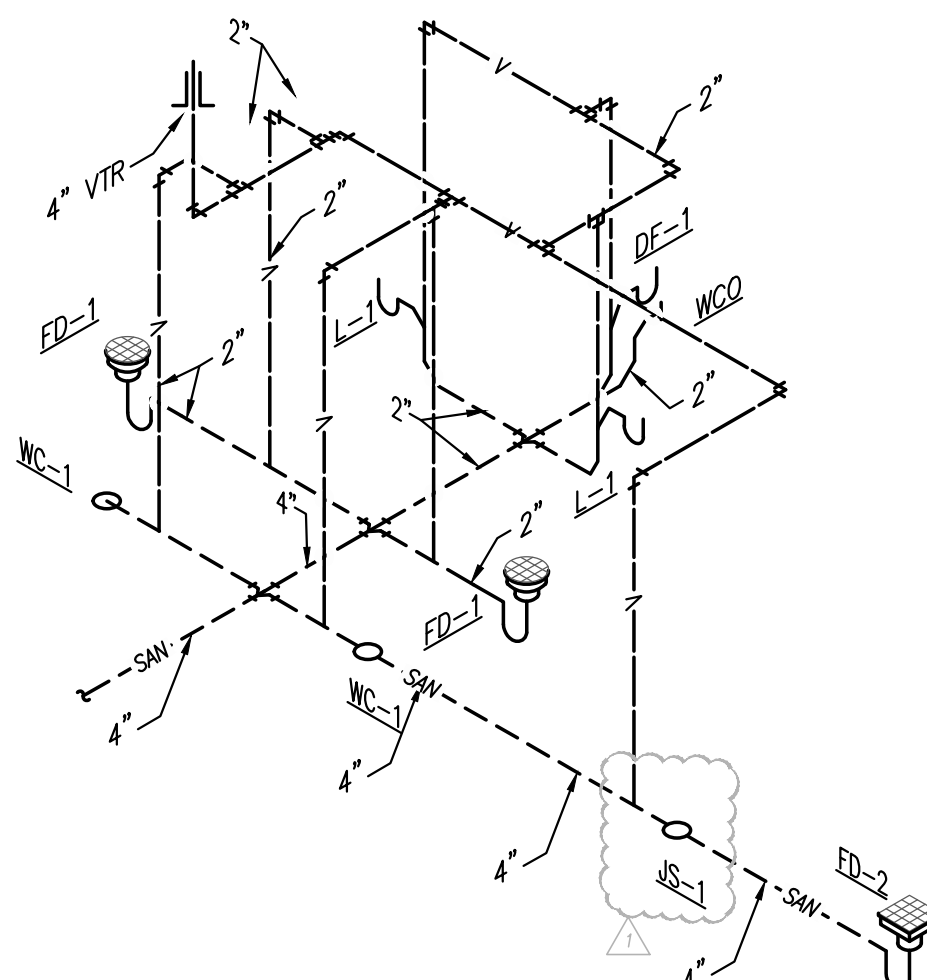
FLOOR PLAN - PLUMBING
1/4" = 1'-0"



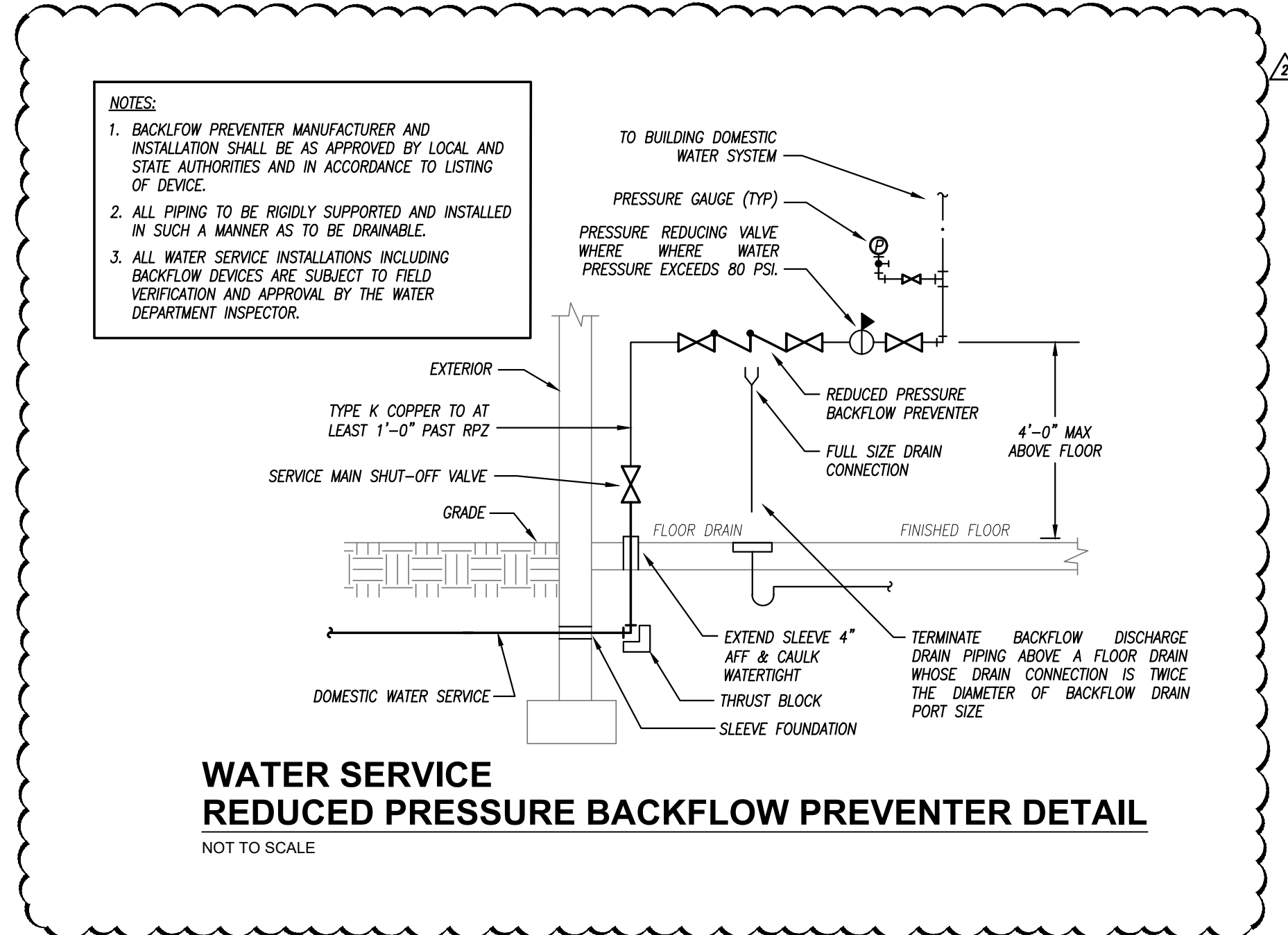
FLOOR PLAN - MECHANICAL
1/4" = 1'-0"



PLUMBING RISER - DOMESTIC WATER
NO SCALE



PLUMBING RISER - WASTE & VENT
NO SCALE



**WATER SERVICE
REDUCED PRESSURE BACKFLOW PREVENTER DETAIL**
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE											
MARK	FIXTURE MODEL	FIXTURE DESCRIPTION	FITTINGS MODEL	FITTINGS AND TRIM		REMARKS	PLUMBING FIXTURE PIPE SIZES				
				FITTINGS AND DESCRIPTION			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: CHROM 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 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 BRACK-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 HOMOGENOUS 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 887-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 GE SILICONE SEALANT. 3" C.I. 7" TRAP.		----	3"	2"	1/2"	1/2"	
DP-1	ELC VR28WSK	ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION. POWDER COATED IN COLOR SELECTED BY ARCHITECT. 18GA STAINLESS STEEL. PROVIDE WITH CARRIER FOR WALL MOUNTING. MOUNT TRAP INSIDE OF BUILDING.					2"			1/2"	
SH-1	----	----	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"	
REMARKS: 1. PROVIDE CHROME-PLATED BRASS TAILPIECE AND GRID DRAIN. 2. PROVIDE CHROME-PLATED BRASS P-TRAP. 3. PROVIDE LOOSE KEY STOPS AND FLEXIBLE RISERS. 4. PROVIDE CONCEALED ARM TYPE CARRIER WITH SQUARE, TUBULAR STEEL UP-RIGHTS AND BLOCK TYPE BASES. 5. INSULATE EXPOSED TAILPIECE, P-TRAP, AND WATER RISERS. REFER TO SPECIFICATIONS FOR INSULATION METHODS. 6. PROVIDE FLUSH VALVE HANDLE ON WIDE SIDE OF STALL.											
GENERAL NOTES (APPLICABLE TO ALL FIXTURES): 1) ALL PUBLIC LAVATORIES AND SINKS SHALL BE PROVIDED WITH ANTI-SCALD ASSE 1070 LISTED VALVE ON HOT WATER SUPPLY.											

PIPING MATERIAL & INSULATION SCHEDULE

SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION	
							TYPE	THICKNESS
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2"
DOMESTIC HOT WATER & HW RETURN	1/2"-1-1/4"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1"
SOIL & WASTE ABOVE GRADE	1-1/2"-8"	NO HUB / SERVICE WT.	CAST IRON		10 FT - 1/2HR	YES	----	----
SOIL & WASTE ABOVE GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----
SOIL & 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"	DR 9	HDFE	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 ADOPTED IECC AND ASHRAE 90.1 - 2016 REQUIREMENTS AT A MINIMUM.
3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

GRILLE, REGISTER & DIFFUSER SCHEDULE

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
R1	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 GRD WITH ALL NECESSARY MOUNTING HARDWARE. 2. PROVIDE GRD WITHOUT SCREWHOLE WHEN INSTALLED IN LAY-IN CEILINGS.								NOTES: 1. PRIME AND PAINT TO MATCH WALL COLORS.					

EXHAUST FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	TYPE	SERVICE	FAN DATA					ELECTRICAL	CONTROL	REMARKS
					CFM	I.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.

WATER HEATER SCHEDULE - ELECTRIC

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.										

DOMESTIC RECIRCULATION PUMP SCHEDULE

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, AQUASTAT AND TIMER FOR OPERATION OF PUMP
3. MOUNT PUMP AND ACCESSORIES NEAR WATER HEATER AND NO HIGHER THAN 6' AFF.

FLOOR / ROOF DRAIN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	TOP/GRATE SIZE	WASTE SIZE	REMARKS
FD-1	WATTS	FD-100L-6-2	FLOOR DRAIN	6"	2"	1
FD-2	WATTS	FD-100L-8-4	FLOOR DRAIN	8"	4"	1

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

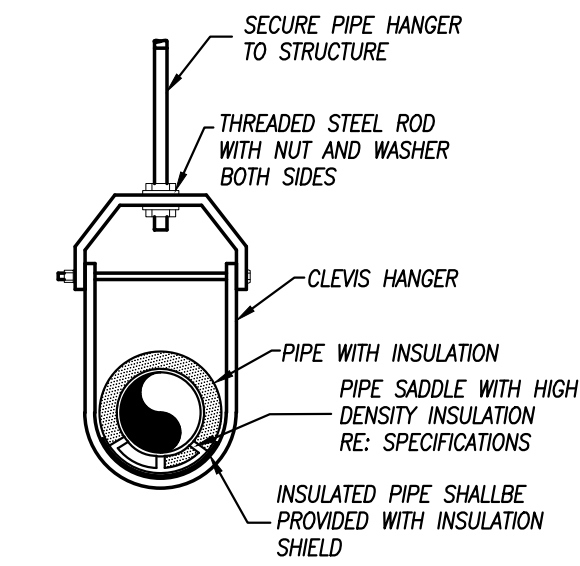
WATER HAMMER ARRESTERS:

PROVIDE WATER HAMMER ARRESTORS FOR ALL PLUMBING BANKS WITH FIXTURES UTILIZING FLUSH VALVES IN ANY CAPACITY. LOCATE ARRESTER BETWEEN THE LAST TWO FIXTURES SERVED ON THE BRANCH LINE.

FIXTURE UNITS (FU)	UNIT SIZE
1-11	A
12-32	B
33-60	C
61-113	D
114-154	E
155-330	F

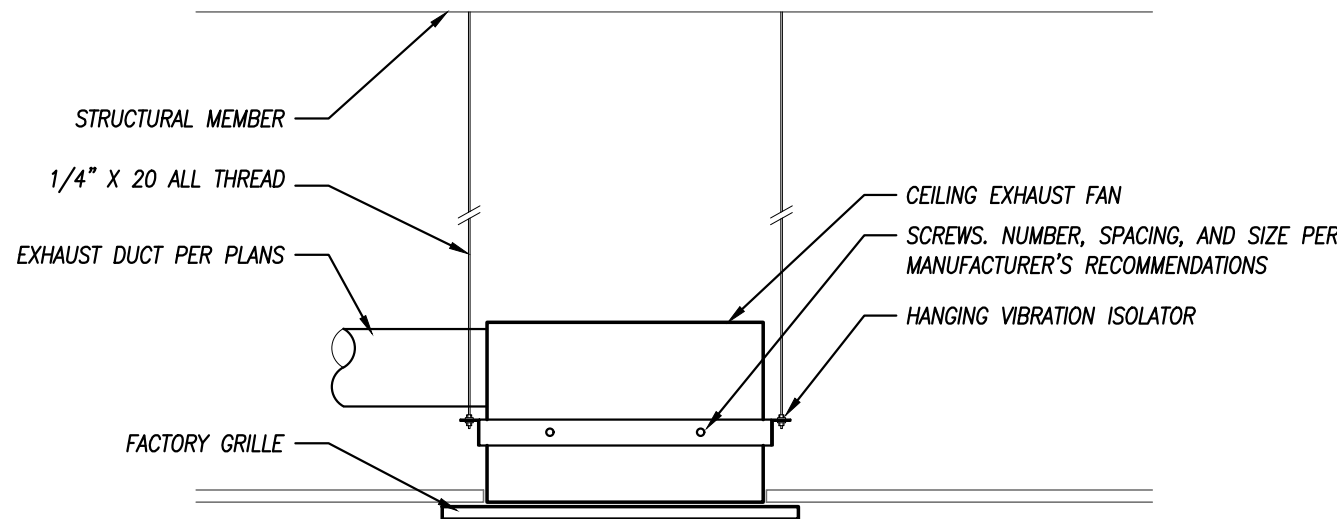
ASSE 1010 OR PDI-WH 201, PISTON TYPE WITH PRESSURIZED METAL-TUBE CUSHIONING CHAMBER. SIZES INDICATED ARE BASED ON ASSE 1010, SIZES AA AND A THROUGH F OR PDI-WH 201, SIZES A THROUGH F. MANUFACTURERS: AMTROL, JOSAM, SIOUX CHEF, WATTS, ZURN.
WATER CLOSET=10FU, URINALS=5FU, LAVATORIES=1.5FU.

WHEN NO FLUSH VALVES ARE INSTALLED ON A BRANCH OF PIPING PROVIDE 3/4"x12" AIR CHAMBERS AT EACH HOT AND COLD WATER SUPPLY CONNECTION TO A PLUMBING FIXTURE. CONTRACTOR MAY PROVIDE WATER HAMMER ARRESTERS ABOVE THE CEILING BEFORE DROPPING 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.



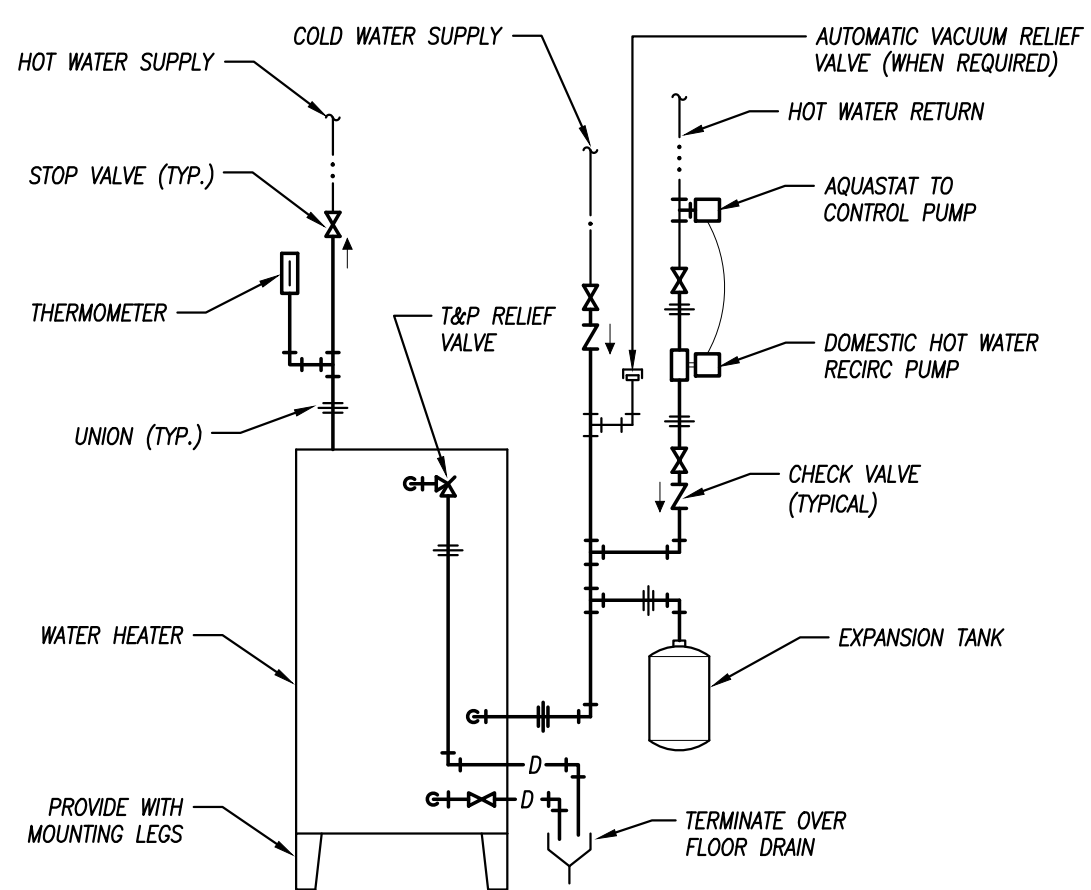
PIPE HANGER DETAIL

NOT TO SCALE



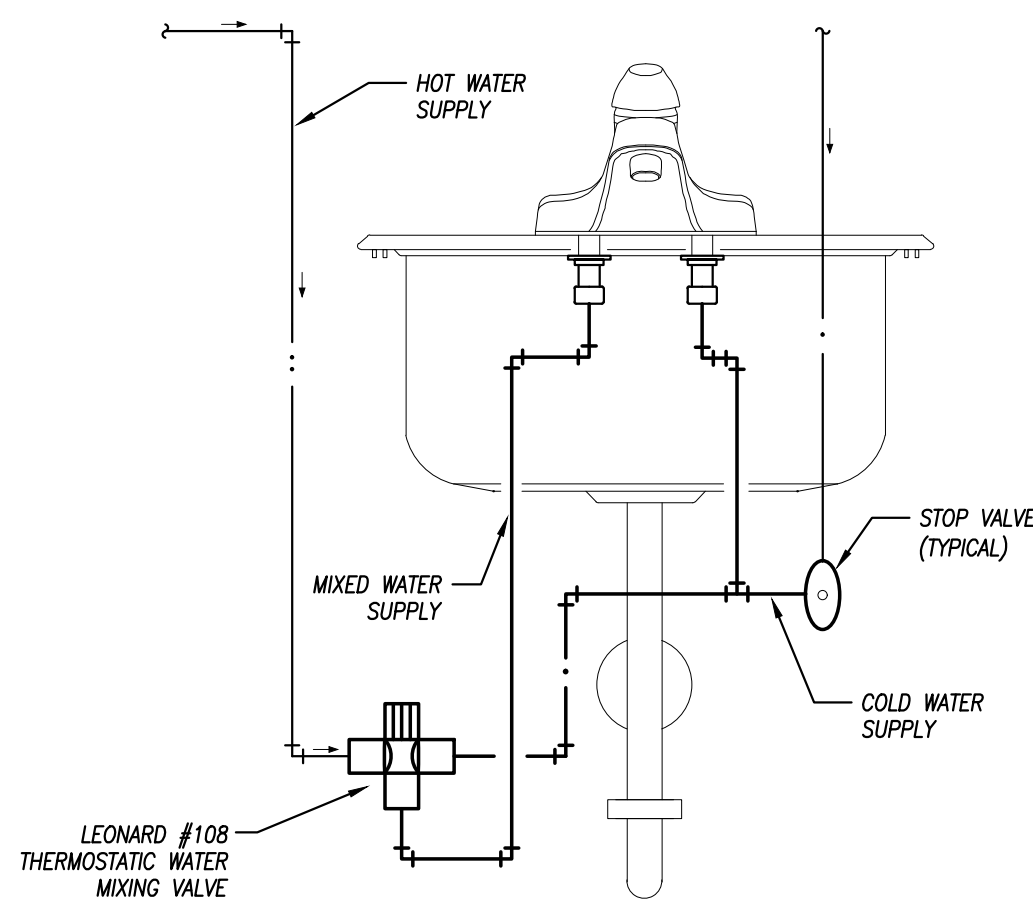
CABINET EXHAUST FAN MOUNTING DETAIL

NOT TO SCALE



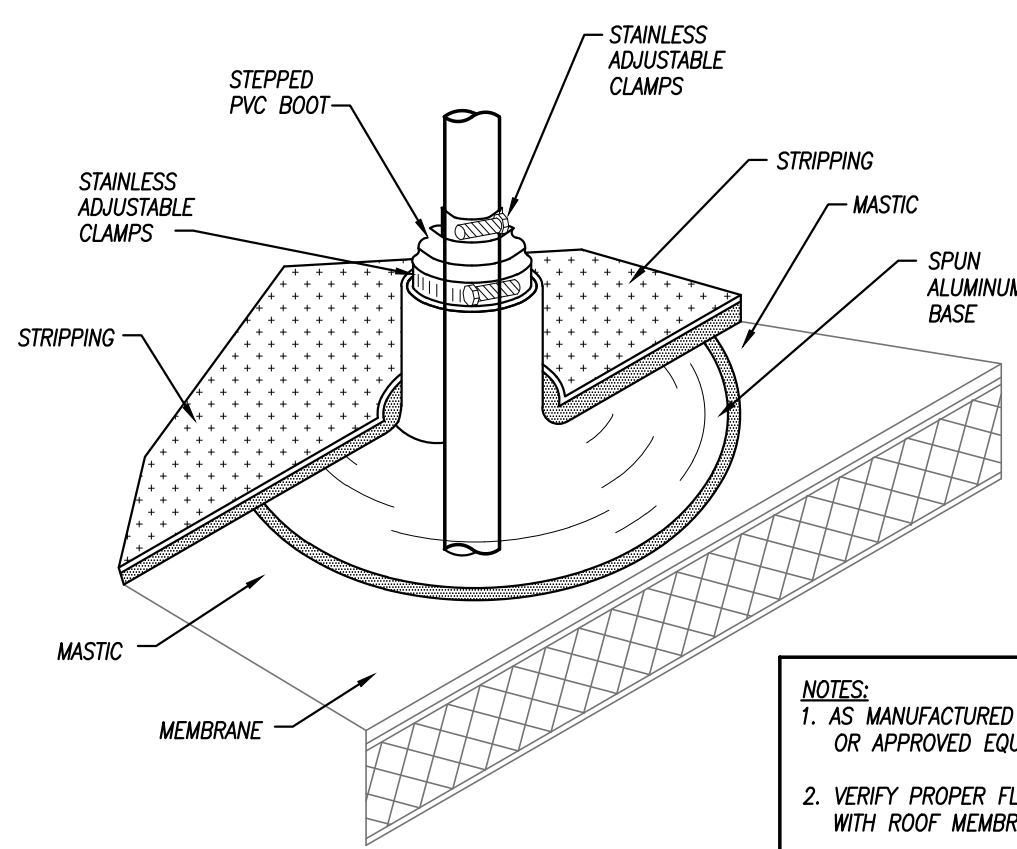
ELECTRIC WATER HEATER

NOT TO SCALE



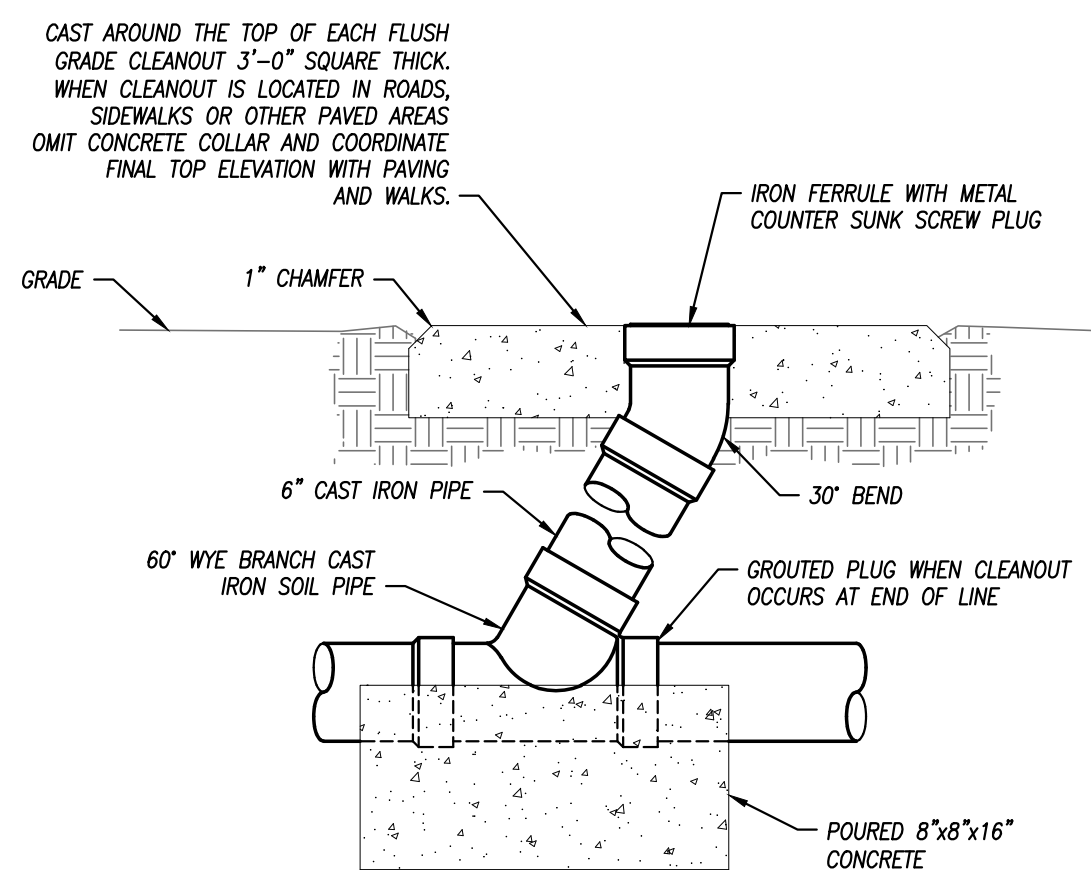
HAND WASHING SINK/LAVATORY TEMPERED WATER SCHEMATIC

NOT TO SCALE



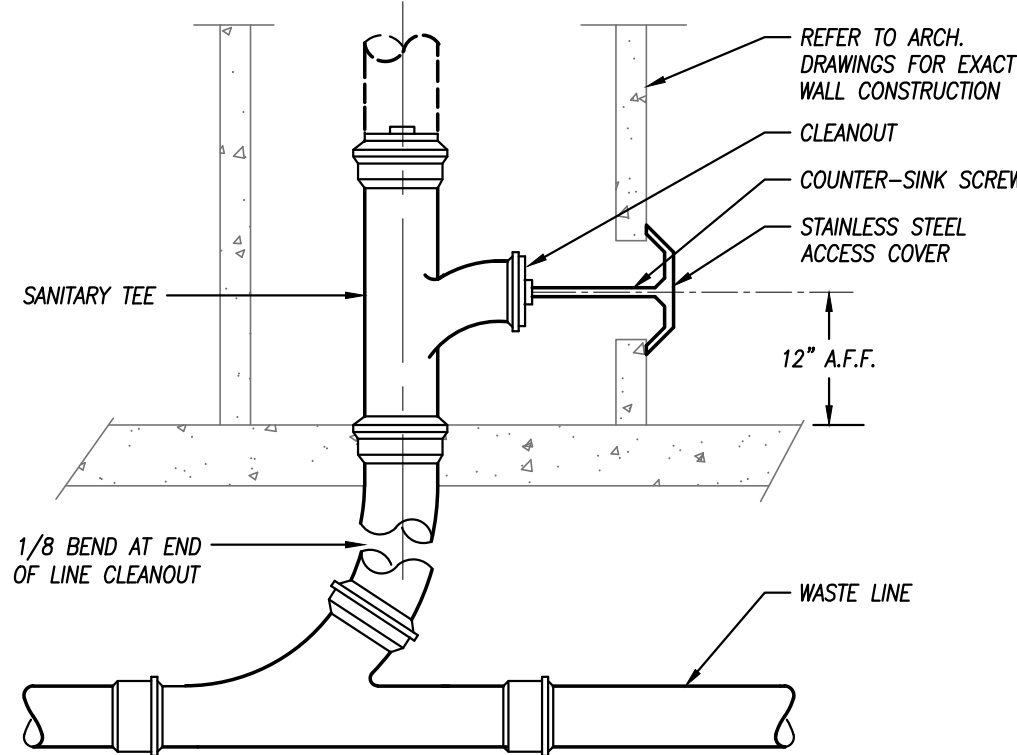
ROOF PLUMBING VENT

NOT TO SCALE



FLUSH GRADE CLEANOUT DETAIL

NOT TO SCALE



WALL CLEANOUT DETAIL

NOT TO SCALE

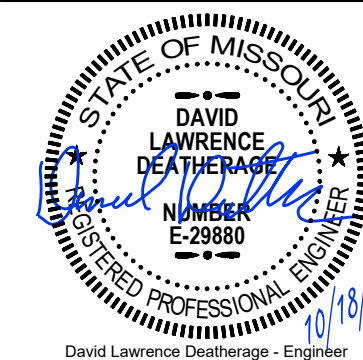


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ELECTRICAL PLAN

GENERAL LIGHTING NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. LIGHT FIXTURES INDICATED AS EMERGENCY FIXTURES ARE TO FUNCTION AS NIGHT LIGHTS UNLESS SPECIFICALLY SHOWN SWITCHED.
3. ALL CIRCUITING SHOWN ON THIS PLAN IS DIAGRAMMATIC:
 - 3.1. ALL FIXTURES SHALL BE TIED FROM JUNCTION BOXES WITH LIGHT FIXTURE WHIPS (<6'). DAISSY-CHAINING OF FIXTURES IS NOT ALLOWED.
 - 3.2. 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.
 - 3.3. WALL SWITCHES FOR SEPARATE LOAD TYPES (DM/NORMAL, 120/277V, ETC.) SHALL NOT BE IN A SINGLE BOX.
 - 3.4. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

LIGHTING PLAN KEYED NOTES

- ① ROUTE HOMERUN TO PANEL VIA PHOTOCELL.
- ② TO EXHAUST FAN.
- ③ PHOTOCELL (T0RK 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

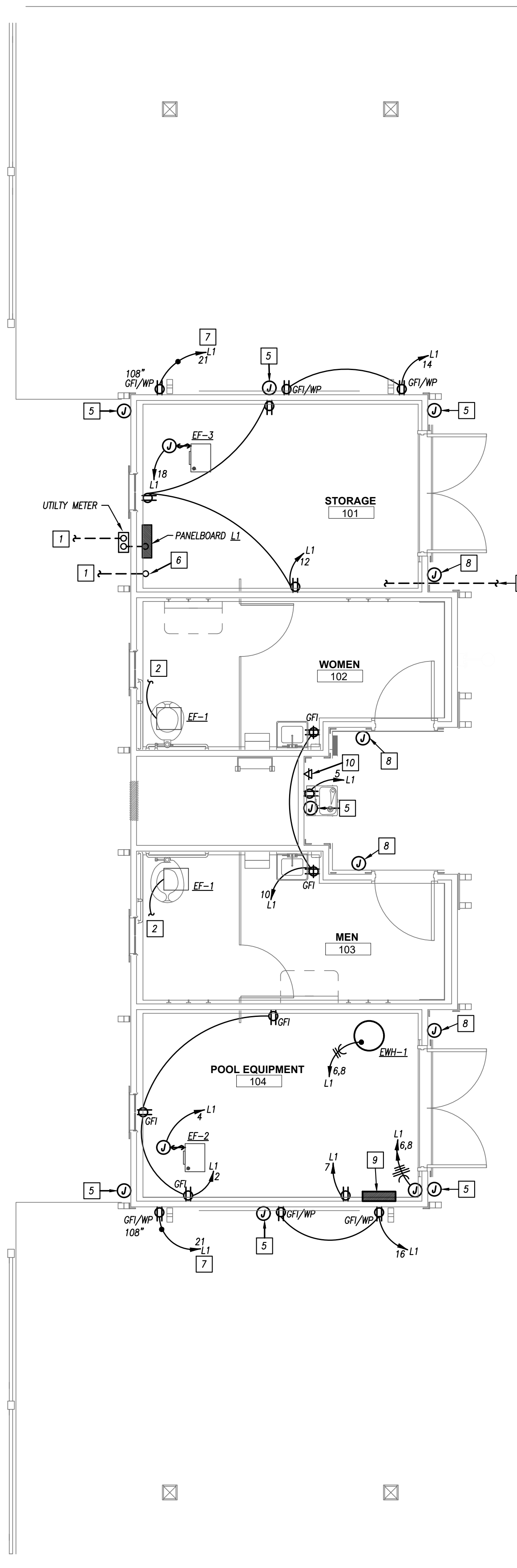
- OWNER TRAINING:**
 - PROVIDE FACTORY REPRESENTATIVE TRAINING TO OWNER FOR EACH LIGHTING CONTROL SYSTEM UTILIZED, INCLUDING PROGRAMMING FOR SCHEDULING AND OPERATION OF EACH ROOM PER OWNER DIRECTION.
 - PROVIDE RECORD OF TIME DELAY SETTINGS ON ALL SENSOR DEVICES FOR OWNER USE.
- SENSOR ADJUSTMENTS AND SETTINGS:**
 - SYSTEMS SHALL BE SET/PROGRAMMED TO OPERATE TYPICALLY IN MANUAL ON/AUTO OFF MODE.
 1. SET WALL MOUNTED MOTION SENSOR TO MANUAL ON MODE.
 2. 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

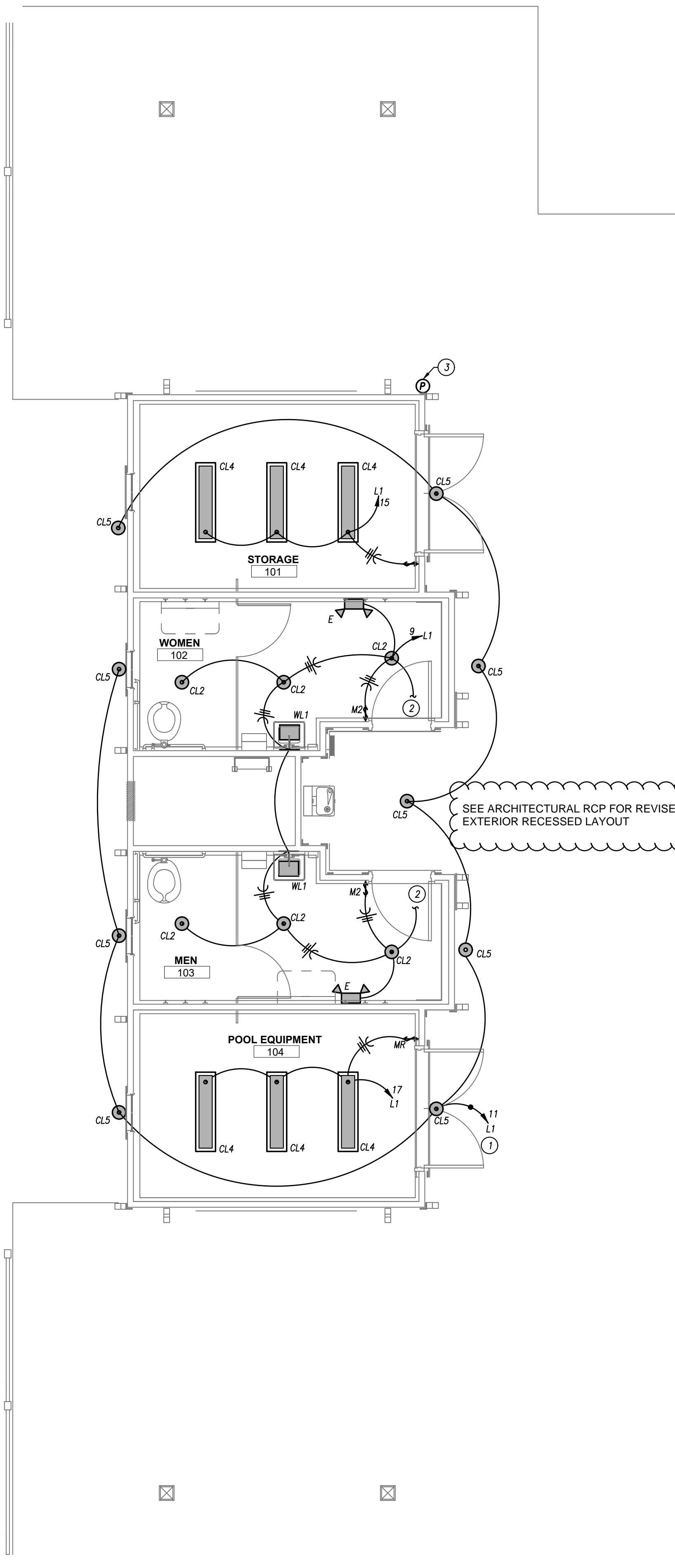
1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. COORDINATE EXACT NEMA CONFIGURATIONS OF RECEPTACLES SERVING EQUIPMENT WITH EXACT EQUIPMENT BEING FURNISHED.
3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL LOCATIONS/REQUIREMENTS FOR RECEPTACLES, INCLUDING GFCI, WEATHER-RESISTANT, HOSPITAL-GRADE, AND TAMPER-RESISTANT RECEPTACLES.
4. 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.
5. COORDINATE EXACT LOCATIONS OF SMOKE DETECTORS WITH CEILING FANS, HVAC DIFFUSERS, SPRINKLER HEADS, ETC. PER NFPA REQUIREMENTS.
6. 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

- ① REFER TO SITE PLAN FOR CONTINUATION.
- ② CONNECT TO LIGHTING CIRCUIT IN ROOM. FANS TO BE CONTROLLED BY THERMOSTAT.
- ③ EXTEND POOL BONDING GRID TO CIRCULATION PUMP ENCLOSURE PER NEC, POOL BONDING BY OTHERS.
- ④ PROVIDE ELECTRICAL CONNECTION TO POOL PUMPS AND STARTERS BY POOL EQUIPMENT PROVIDER.
- ⑤ PROVIDE ROUGH-IN AND (2) 1" CONDUIT WITH PULL STRINGS BACK TO STORAGE ROOM FOR FUTURE CAMERA. INSTALL JUNCTION BOX UNDER SHUTTER/STRELLIS. COORDINATE ROUGH-IN WITH ARCHITECT/OWNER.
- ⑥ 2" CONDUIT FOR COMMUNICATION SERVICES.
- ⑦ ROUTE TO HOMERUN PANEL VIA PHOTOCELL.
- ⑧ PROVIDE ROUGH-IN AND (2) 1" CONDUIT BACK TO STORAGE ROOM FOR FUTURE CARD READER.
- ⑨ 100A, 120/240 POOL LOAD CENTER PROVIDED BY POOL CONTRACTOR.
- ⑩ 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"

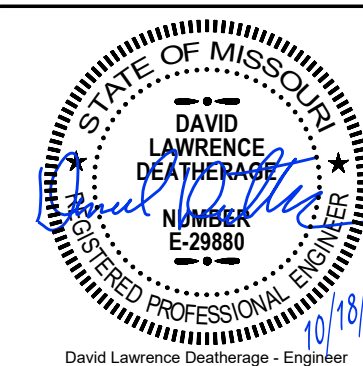


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ARCHITECTURE, LLC

REVISION DATES:



PROFESSIONAL SEAL

E201

ISSUE DATE: 18 OCT 2021
COLLINS WEBB #: 20032

ELECTRICAL SCHEDULES & DETAILS



PEARSON KENT MCKINLEY RAAP ENGINEERS LLC
13300 W 96TH STREET
LENEKA, KS 66215
913.482.2400
WWW.PKMRENGINEERS.COM
MO State Certificate of Authority: E-0000020886

LIGHT FIXTURE SCHEDULE

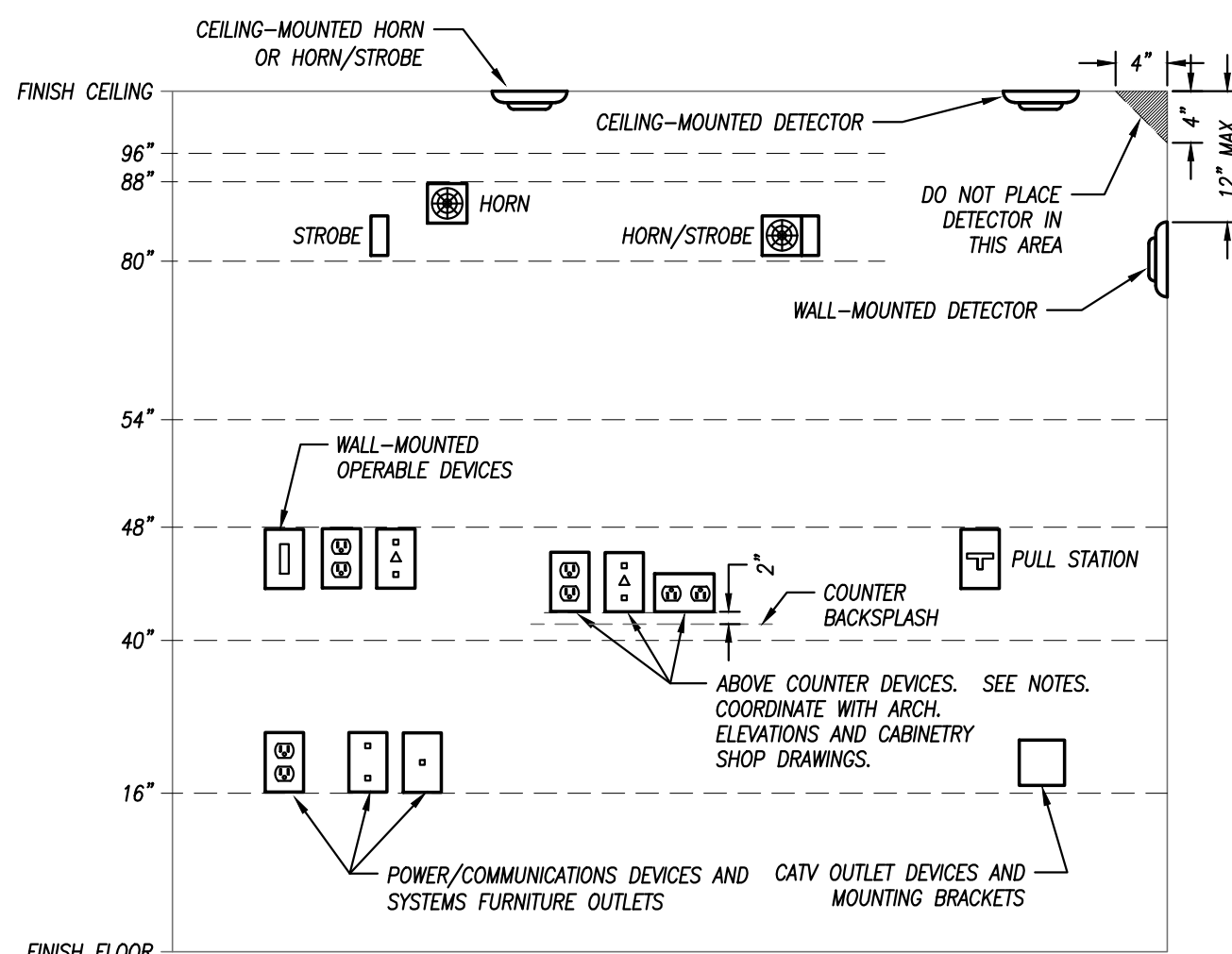
FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP NUMBER / DESCRIPTION	VOLTAGE	REMARKS
CL2	LIGHTOLIER	SSR	5" SURFACE MOUNTED LED DOWNLIGHT WITH WHITE TRIM RING.	ONE (1) 9.5 WATT, 1500 LUMEN, LED MODULE. 3000K CCT.	120	I
CL4	WILLIAMS	SERIES 75R	4"-0" LONG STRIP FIXTURE, SURFACE MOUNT. FINISH WITH ROUNDED ACRYLIC LENS. ALL PARTS PAINTED WHITE AFTER FABRICATION. ELECTRONIC DIMMER PRE-WIRED FOR NON-DIMMING APPLICATIONS.	ONE (1) 23 WATT, 3200 LUMEN, LED MODULE. 3000K CCT.	120	I
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	I
E	DUAL-LITE	LZ SERIES LZR REMOTE HEAD	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. FURNISH WITH REMOTE CAPACITY WHERE INDICATED. WITH REMOTE HEAD.	TWO (2) 1 WATT LED	120	I
WL1	DESIGNER'S FOUNTAIN	33121-WP	EXTERIOR WALL-MOUNTED INCANDESCENT LAMP. RATED FOR WET LOCATION, FINISH BY ARCHITECT.	100 WATT, 3000K	120	I
REMARKS: 1. FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.						

SINGLE-SECTION PANELBOARD SCHEDULE

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

PANELBOARD SIZING LOAD				CONNECTED PHASE LOADS			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN (VA)	PHASE	VA	AMPS	
LIGHTS	2,510	1.25	3,138	A	16,227	135.2	
RECEPTACLES	2,520	10kVA + 50% REST	2,520	B	16,345	136.2	
MOTORS	3,842	1.25 LARGEST + SUM OF REST	4,142	TOTALS	32,572	135.7	
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			

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 (STROBES)
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 UNIT IS NOT MORE THAN 90" 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).

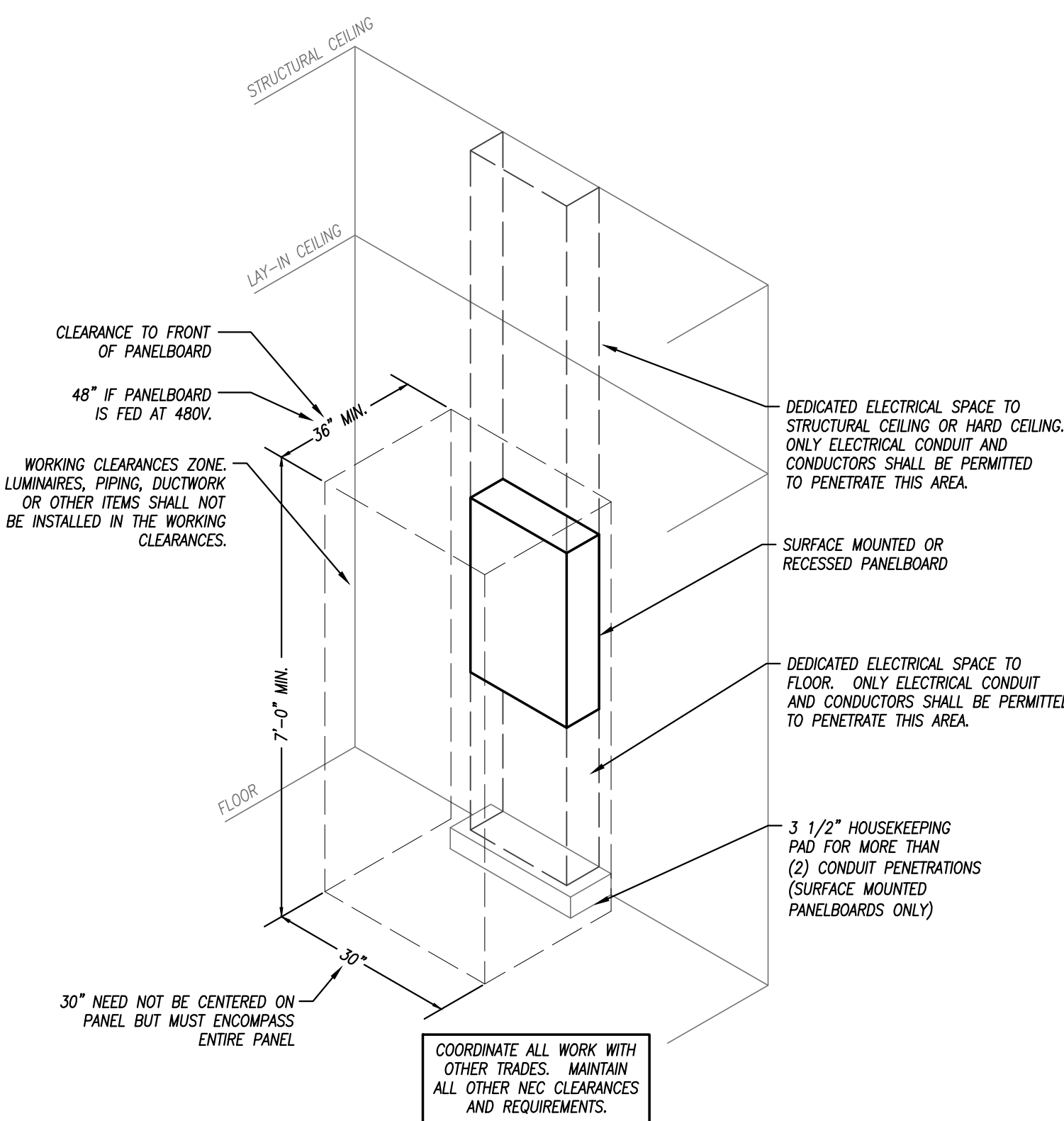
POWER/COMMUNICATION DEVICES:
OUTLETS SHALL BE LOCATED AT 18" A.F.F. TO THE BOTTOM OF THE BOX. ABOVE COUNTER DEVICES SHALL BE LOCATED AT 2" ABOVE THE BACKSPASH OF THE COUNTER TO THE BOTTOM OF THE DEVICES. VERIFY WITH ARCHITECTURAL DETAILS.

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

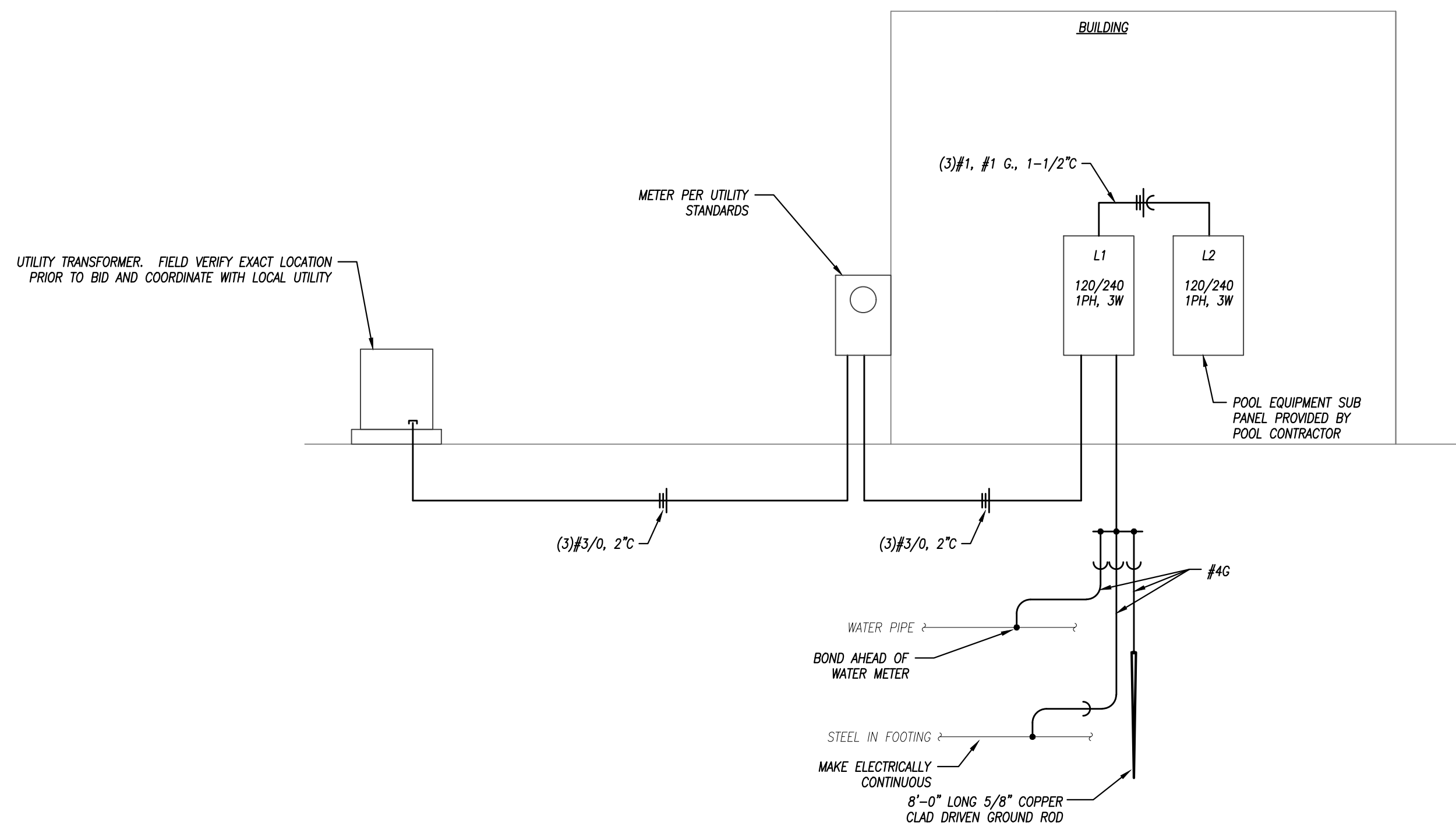
MOUNTING HEIGHTS FOR WALL-MOUNTED DEVICES

NOT TO SCALE



TYPICAL PANELBOARD INSTALLATION DETAIL

NOT TO SCALE



ELECTRICAL RISER DIAGRAM

NOT TO SCALE