



PERMIT SET  
ISSUED 06/16/2023

PROJECT INFORMATION  
AND BUILDING CODE SUMMARY

FUTURE/SEPARATE SUBMITTALS:	EXTERIOR BUILDING SIGNAGE HEALTH (CITY)		
APPLICABLE CODES:	BUILDING CODE:	2018 IBC WITH LOCAL AMENDMENTS	
	MECHANICAL CODE:	2018 IMC WITH LOCAL AMENDMENTS	
	PLUMBING CODE:	2018 IPC WITH LOCAL AMENDMENTS	
	ELECTRIC CODE:	2017 NEC WITH LOCAL AMENDMENTS	
	ENERGY CODE:	2012 IECC WITH LOCAL AMENDMENTS	
	FIRE CODE:	2017 IFC WITH LOCAL AMENDMENTS NFPA 101	
	ACCESSIBILITY CODE:	ANSI A117.1-2009	
PROJECT DESCRIPTION:	NEW GROUND UP CONSTRUCTION OF A QUICK SERVICE GOURMET SODA ESTABLISHMENT, WITH A NEW DRIVE-THRU AND WALK-UP ORDERING ON AN EXISTING SITE.		
BUILDING AREA:	ALLOWABLE AREA	9000 SF PER TABLE 506.2, ACTUAL GROSS AREA:	573 SF
	ALLOWABLE HEIGHT	40' PER TABLE 504.3, ACTUAL HEIGHT:	16'
USE AND OCCUPANCY CLASSIFICATION:	B - BUSINESS - SECTION 304.1		
TYPE OF CONSTRUCTION:	CONSTRUCTION TYPE V-B, FULLY SPRINKLERED NOTE: ALL PLYWOOD IN PROJECT MUST BE FRT.		
INTERIOR FINISHES:	SECTION 803.11, WALL & CEILING FINISHES SHALL BE OF CLASS C OR BETTER.		
FIRE PROTECTION:	HOURLY FIRE-RESISTANCE RATING REQUIREMENT PER TABLE 601		
		REQUIRED	PROVIDED
	STRUCTURAL FRAME	0 HOURS	0 HOURS
	ROOF CONSTRUCTION	0 HOURS	0 HOURS
	EXTERIOR BEARING WALLS	0 HOURS	0 HOURS
	EXTERIOR NONBEARING WALLS	0 HOURS	0 HOURS
	INTERIOR BEARING WALLS	0 HOURS	0 HOURS
	INTERIOR NONBEARING WALLS AND PARTITIONS	0 HOURS	0 HOURS
	FLOOR CONSTRUCTION	0 HOURS	0 HOURS
NUMBER OF EXITS OR EXIT ACCESS DOORS REQUIRED:	THIS BUILDING COMPLIES WITH TABLE 1006.2.1 (2018 IBC) ONE (1) EXIT IS REQUIRED WHEN THE OCCUPANT LOADS FOR BUSINESS OCCUPANCIES ARE LESS THAN 49.  ONE (1) EXIT IS PROVIDED.		
EXIT ACCESS TRAVEL DISTANCE:	200' FOR B OCCUPANCY PER TABLE 1017.2 IS REQUIRED. MAXIMUM TRAVEL DISTANCE IS 42'.		
COMMON PATH OF TRAVEL:	100' FOR B OCCUPANCY (BUSINESS) PER IBC TABLE 1006.2.1 (UNSPRINKLERED)		
OCCUPANCY LOAD FACTORS:	B - BUSINESS - KITCHEN AND STORAGE AREA	100 (GROSS)	
EGRESS WIDTH:	EGRESS WIDTH FACTOR:	0.2 INCHES	
	EXIT WIDTH REQUIRED:	20 INCHES	
	EXIT WIDTH PROVIDED:	34 INCHES	
PLUMBING FIXTURE COUNTS:	TOTAL OCCUPANT LOAD:	4	
	WATER CLOSETS (1 PER 25 OCC)	1 REQUIRED, 1 PROVIDED PER IBC 2902.2, EXCEPTION 2, SEPARATE FACILITIES NOT REQUIRED FOR A TOTAL OCCUPANT LOAD OF 15 OR LESS.	
	LAVATORIES (1 PER 40 OCC)	1 REQUIRED, 1 PROVIDED PER IBC 2902.2, EXCEPTION 2, SEPARATE FACILITIES NOT REQUIRED FOR A TOTAL OCCUPANT LOAD OF 15 OR LESS.	
	DRINKING FOUNTAINS (1 PER 100 OCC)	0 REQUIRED, 0 PROVIDED PER IBC 2902.6, DRINKING FOUNTAINS SHALL NOT BE REQUIRED FOR AN OCCUPANT LOAD OF 15 OR LESS.	
	SERVICE SINK	0 REQUIRED, 0 PROVIDED PER IBC 2902.1, EXCEPTION E, FOR BUSINESS OCCUPANCIES WITH AN OCCUPANT LOAD OF 15 OR LESS, SERVICE SINKS ARE NOT REQUIRED.	

PROJECT TEAM

OWNER  
SAVORY RESTAURANT FUND  
1557 W. INNOVATION WAY, SUITE 150  
LEHI, UT 84043  
(801) 642-3800

ARCHITECT  
OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO. 64151  
(816) 225-2660  
CONTACT: SCOTT OLSON  
EMAIL: OLSONAGKC@GMAIL.COM

CIVIL ENGINEER  
AGC ENGINEERS, INC  
405 SOUTH LEONARDT STREET, SUITE 5  
LIBERTY, MISSOURI  
(816) 781-4200

STRUCTURAL ENGINEER  
AGILMORE SERVICES, LLC  
5722 CONSTANCE  
SHAWNEE, KS 66216  
(913) 660-3778

MECH, ELEC, PLUMBING ENGINEER  
DIALECTIC  
310 W. 20th ST., SUITE 100  
KANSAS CITY, MO 64108  
(816) 997-9601

RESPONSIBILITY MATRIX

NOTE: ITEMS LISTED BELOW ARE NOT ALL INCLUSIVE AND DO NOT REPRESENT THE ENTIRE SCOPE OF THE PROJECT. IT IS THE GENERAL CONTRACTOR'S SOLE RESPONSIBILITY TO CONSULT WITH THE OWNER REGARDING ANY DISCREPENCIES BETWEEN THE CONSTRUCTION DRAWINGS AND THIS SCHEDULE.

ITEM	FURNISHED		INSTALLED		REMARKS
	GC	OWNER	GC	OWNER	
EXTERIOR SPECIALTY					
PATIO TABLES & CHAIRS		X		X	IF SPECIFIED
BUILDING SIGNAGE (A)		X		X	ELECTRIC EXTERIOR WALL SIGNS (GC COMPLETES FINAL ELECTRICAL CONNECTION)
BUILDING SIGNAGE (B)	X		X		3
MENU BOARDS		X		X	QTY = 2
DRIVE-THRU MENU BOARD FRAME		X		X	
DRIVE-THRU MENU BOARD FOOTINGS	X		X		GC STUBS POWER AND COMPLETES FINAL ELECTRICAL CONNECTION FOR LIGHT FIXTURES
BULK CO2 TANK		X		X	
BULK CO2 STORAGE CABINET		X	X		GC ASSEMBLES, PAINTS, AND ANCHORS TO FLOOR

INTERIOR SPECIALTY					
STAINLESS STEEL WALL FLASHING & CORNER GUARDS	X		X		INCLUDES ALL MISCELLANEOUS FINISHED STEEL
EPOXY FLOORING	X		X		INCLUDES 6" COVE BASE
CABINETS		X		X	TOE KICKS AND CASEWORK
STAINLESS STEEL COUNTERTOPS		X		X	
COUNTERTOP SUBSTRATE		X		X	
COUNTERTOP HOLE CUTOUTS		X		X	
COUNTERTOP GROMMETS		X		X	
HAND WASH SIGNS			X		PAPER TOWEL AND SOAP DISPENSERS ARE OWNER SUPPLIED
RESTROOM ACCESSORIES	X		X		GRAB BARS; DISPENSERS - MIRROR AND TOILET TISSUE
GENERAL ACCESSORIES		X		X	DISPENSERS - PAPER TOWEL AND SOAP
OPEN / CLOSED SIGNS		X		X	
MANAGER'S SAFE		X	X		BOLT AND SILICONE TO FLOOR
KITCHEN WALL-HUNG SHELVEING		X		X	INSTALLED BY KES - KITCHEN EQUIPMENT SUPPLIER
KITCHEN FLOOR-STANDING SHELVEING		X		X	INSTALLED BY KES - KITCHEN EQUIPMENT SUPPLIER
CHEMICALS AND PEST CONTROL		X		X	
FINAL CLEAN	X				FINAL CLEAN AND TOUCH-UP CLEAN

EQUIPMENT					
KITCHEN EQUIPMENT		X			
KITCHEN EQUIPMENT DELIVERIES		X		X	RECEIVE, OFFLOAD, UNCRATE, SET IN PLACE
KITCHEN EQUIPMENT CONNECTIONS / TERMINATIONS	X		X		POWER, WATER, DRAINS

ELECTRICAL					
LOW VOLTAGE INFRASTRUCTURE	X		X		CONDUIT, BOXES / MUD RINGS
LOW VOLTAGE TERMINATIONS		X		X	WIRING AND JACKS
DRIVE-THRU VEHICLE SENSOR					NOT APPLICABLE
AUDIO / VIDEO EQUIPMENT RACK		X		X	
CAMERA SYSTEM		X		X	
ALARM SYSTEM		X		X	
POINT-OF-SALE SYSTEM		X		X	

MECHANICAL					
ROOFTOP MINI-SPLIT CONDENSER	X		X		
ROOFTOP MINI-SPLIT CURB	X		X		
CEILING MOUNTED MINI-SPLIT CASSETTE	X		X		
ICE MACHINES		X		X	
ICE MACHINE REMOTE CONDENSERS AND LINE SETS		X		X	
ICE MACHINE STARTUP AND COMMISSION		X		X	
RESTROOM EXHAUST FAN AND CURB	X		X		

PLUMBING					
BACKFLOW PREVENTERS	X		X		AS SPECIFIED
PRESSURE REDUCING VALVES	X		X		AS SPECIFIED
MIXING VALVES	X		X		AS SPECIFIED
BEVERAGE LINE CHASES	X		X		SUB-ROUGH
BEVERAGE LINE TUBING		X		X	SODA-ROUGH
BEVERAGE DISPENSERS		X		X	INCLUDES FINAL CONNECTIONS, DRAINS, AND STARTUP
BEVERAGE DISPENSERS BACKFLOW PREVENTION	X		X		WHERE REQUIRED BY LOCAL JURISDICTION
WATER HEATER	X		X		
WATER SOFTENER AND FILTRATION SYSTEM	X		X		
KITCHEN HAND SINK AND FAUCET		X			
KITCHEN COMPARTMENT SINK AND FAUCET		X	X		
RESTROOM TOILET AND SINK	X		X		

FIRE SUPPRESSION					
FIRE EXTINGUISHER	X		X		AS SPECIFIED AND REQUIRED BY LOCAL JURISDICTION

TESTING					
MATERIALS / SOILS		X			

FEES					
MUNICIPAL		X			CITY / COUNTY DEVELOPMENT, PERMITTING, AND LICENSING FEE
BUILDERS RISK INSURANCE	X				

VICINITY MAP



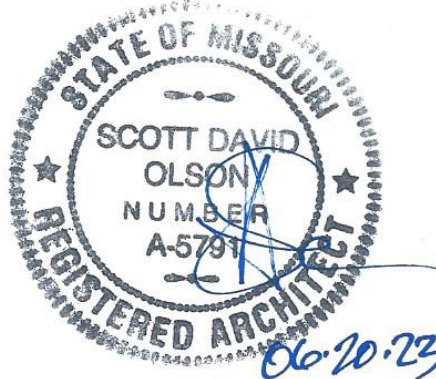
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KANSAS CITY, MO 64151

REVISION SCHEDULE

No.	Description	Date

SHEET NAME

COVER SHEET / PROJECT  
INFO

PROJECT NUMBER 2102

DATE 06/16/2023

DRAWN BY PJS

CHECKED BY SDO

SCALE As indicated

GI001

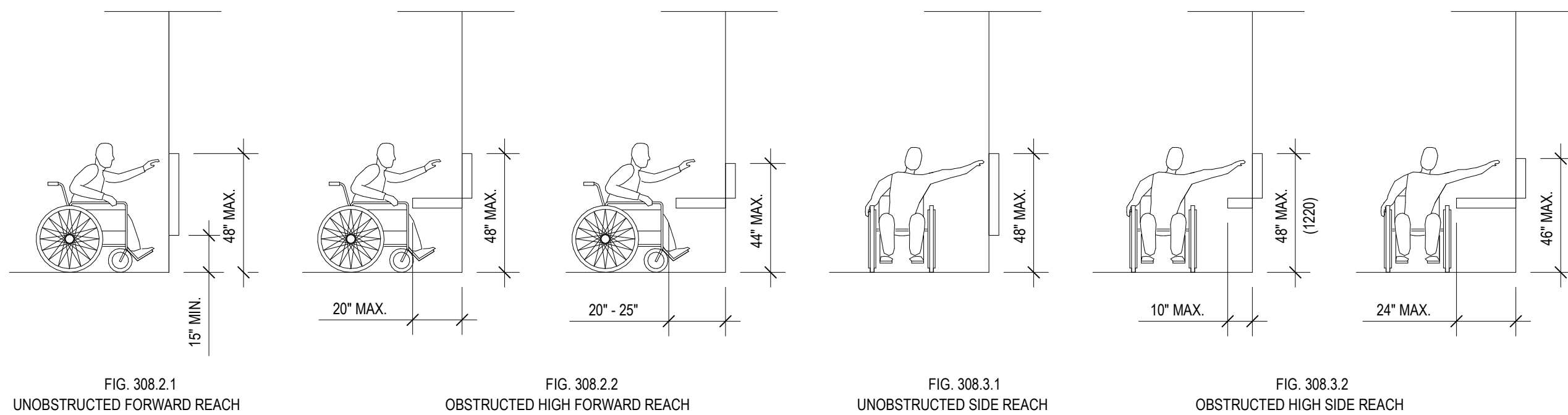


REVISION SCHEDULE		
No.	Description	Date

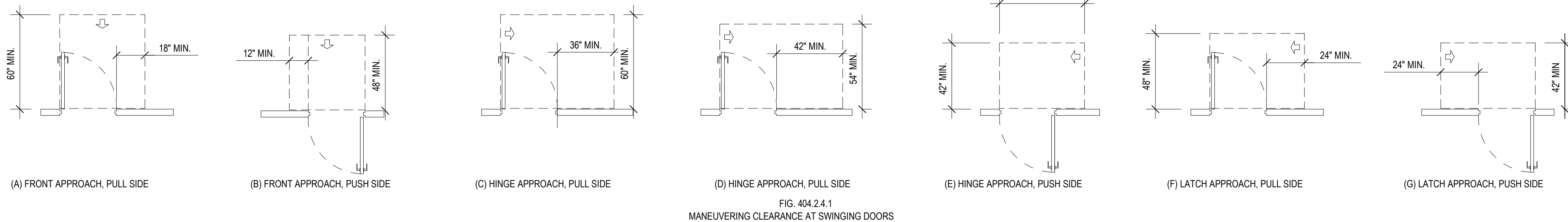
SHEET NAME  
ACCESSIBILITY DETAILS

PROJECT NUMBER 2102  
DATE 06/16/2023  
DRAWN BY PJS  
CHECKED BY SDO  
SCALE 1/4" = 1'-0"

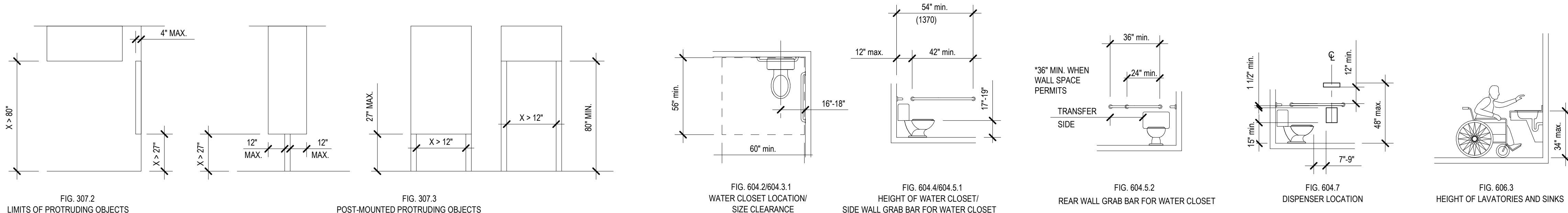
G1002



6 REACH RANGES  
1/4" = 1'-0"

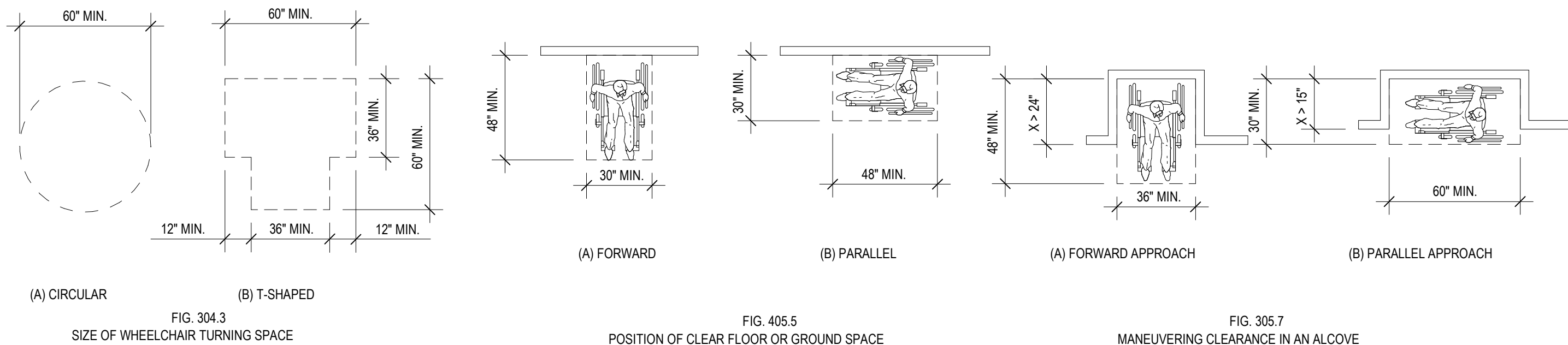


3 DOORS AND DOORWAYS  
1/4" = 1'-0"



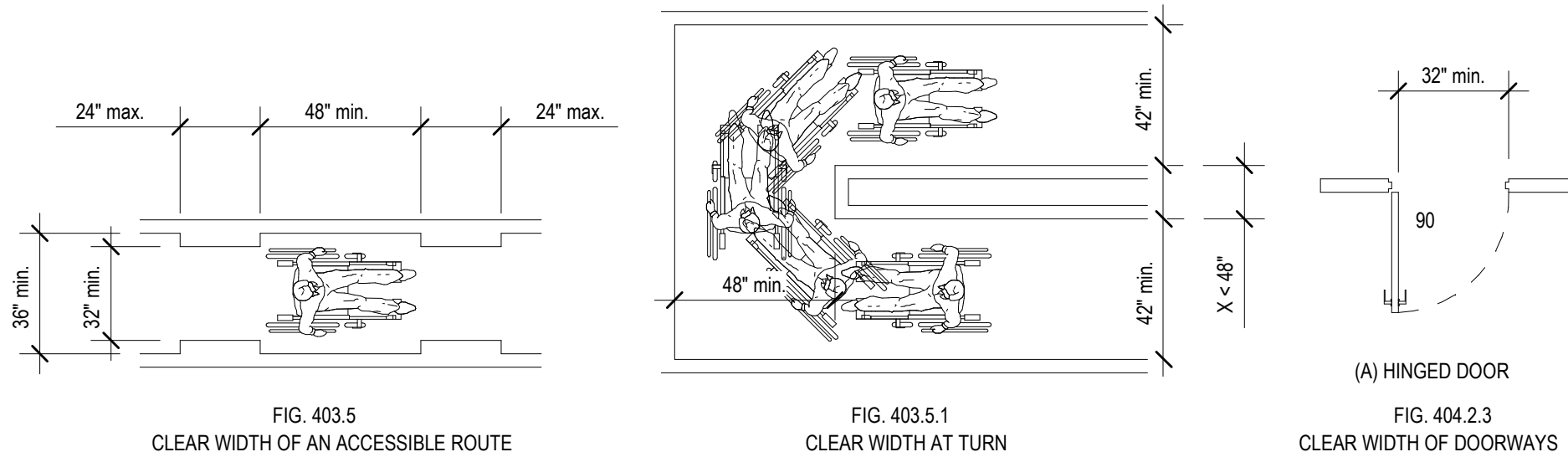
5 PROTRUDING OBJECTS  
1/4" = 1'-0"

4 PLUMBING ELEMENTS AND FACILITIES  
1/4" = 1'-0"

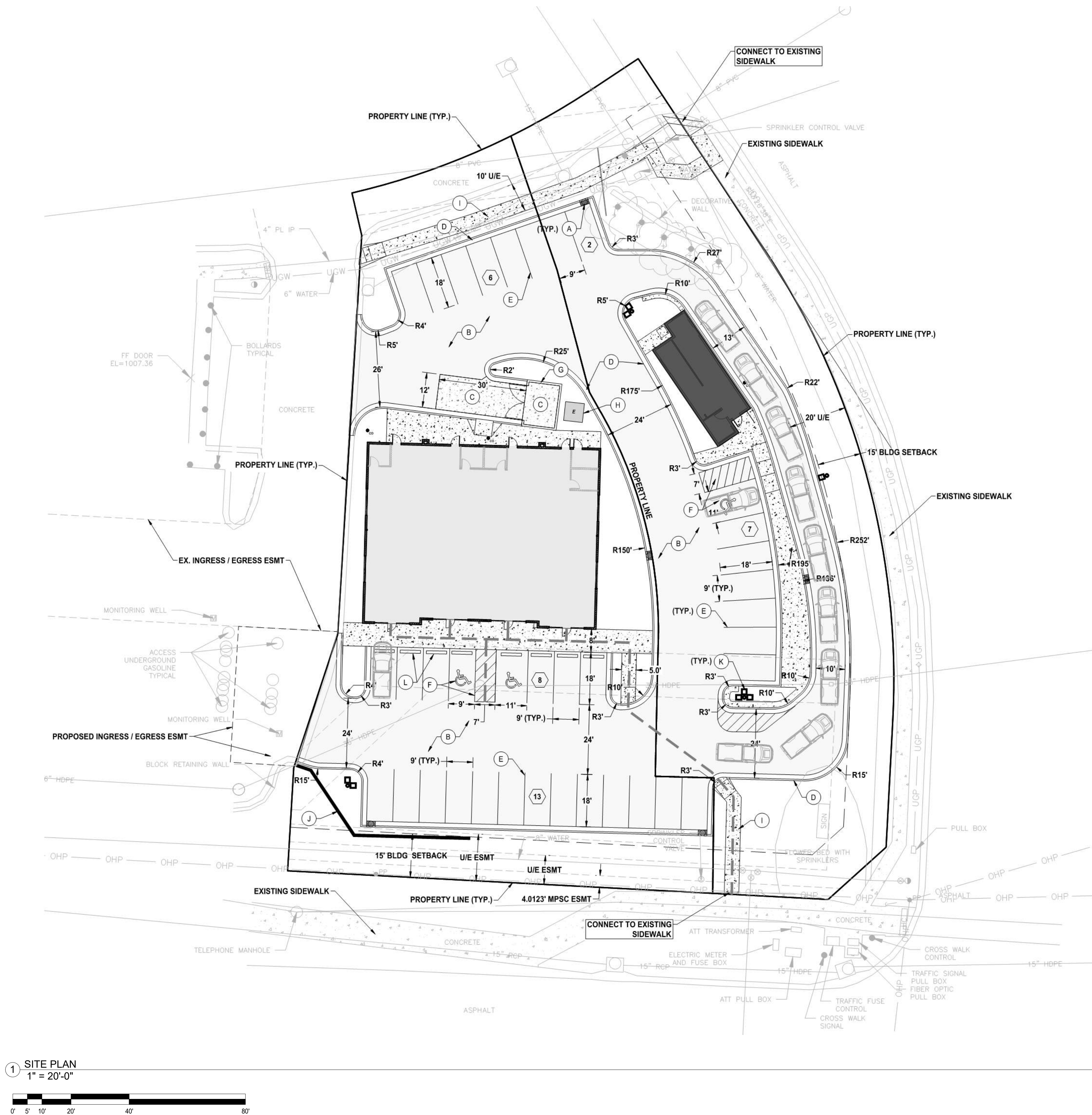


2 CLEAR FLOOR SPACE  
1/4" = 1'-0"

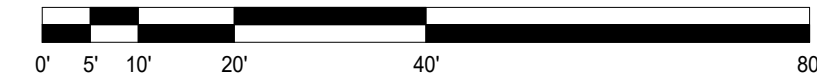
1 ACCESSIBLE ROUTES  
1/4" = 1'-0"







1 SITE PLAN  
1" = 20'-0"



SITE PLAN GENERAL NOTES

- COORDINATE SITE PLAN WITH LANDSCAPE, ARCHITECTURAL, CIVIL, MECHANICAL, AND ELECTRICAL SITE PLAN. REPORT ANY DISCREPANCIES TO THE ARCHITECT.
- REFER TO EXTERIOR ELEVATIONS ON SHEET A201 FOR BUILDING SIGNAGE LOCATION. REFER TO ELECTRICAL PLANS FOR ELECTRICAL REQUIREMENTS.
- DRIVE-THRU EQUIPMENT INCLUDING WIRELESS COMMUNICATION AND MONITORS SHALL BE COORDINATED BY GENERAL CONTRACTOR. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- GENERAL CONTRACTOR TO APPLY CONCRETE SEALER TO ALL EXTERIOR CONCRETE PATIO AND WALKWAY SURFACES.
- PROVIDE DETECTABLE WARNING (IF APPLICABLE PER LOCAL CODE) AT TRANSITION FROM SIDEWALK TO DRIVE AISLE.
- ACCESSIBLE PARKING SPACE AND ACCESS AISLE SHALL HAVE SURFACE SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS.
- REFER TO ELECTRICAL DRAWINGS FOR SITE RELATED ELECTRICAL WORK.
- UTILITY BOXES, PEDESTALS AND METER PANELS SHALL BE PAINTED TO BLEND IN WITH SURROUNDINGS. ALL UTILITY BOXES AND METER PANELS ON WALLS SHALL BE PAINTED TO MATCH THE BUILDING WALLS WITH UTILITY COMPANY APPROVALS.
- GC TO VERIFY THAT ALL FLOOR AND GROUND SURFACES ARE STABLE, FIRM, AND SLIP RESISTANT.
- GC TO BEVEL ANY VERTICAL FLOORING TRANSITIONS BETWEEN 1/4"-1/2" HIGH WITH A SLOPE NOT STEEPER THAN 1:2. CONTRACTOR TO REPORT ANY FLOORING TRANSITIONS GREATER THAN 1/2" HIGH.
- GC TO ENSURE OBJECTS DO NOT PROTRUDE MORE THAN 4" INTO AN ACCESSIBLE PATH OF TRAVEL.
- ACCESSIBLE PATHS SHALL HAVE A SURFACE SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS.



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No.	Description	Date

SHEET NAME

SITE PLAN

PROJECT NUMBER 2102

DATE 06/16/2023

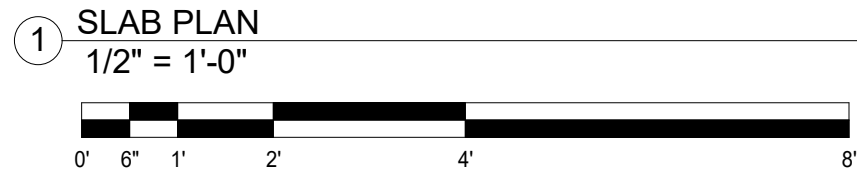
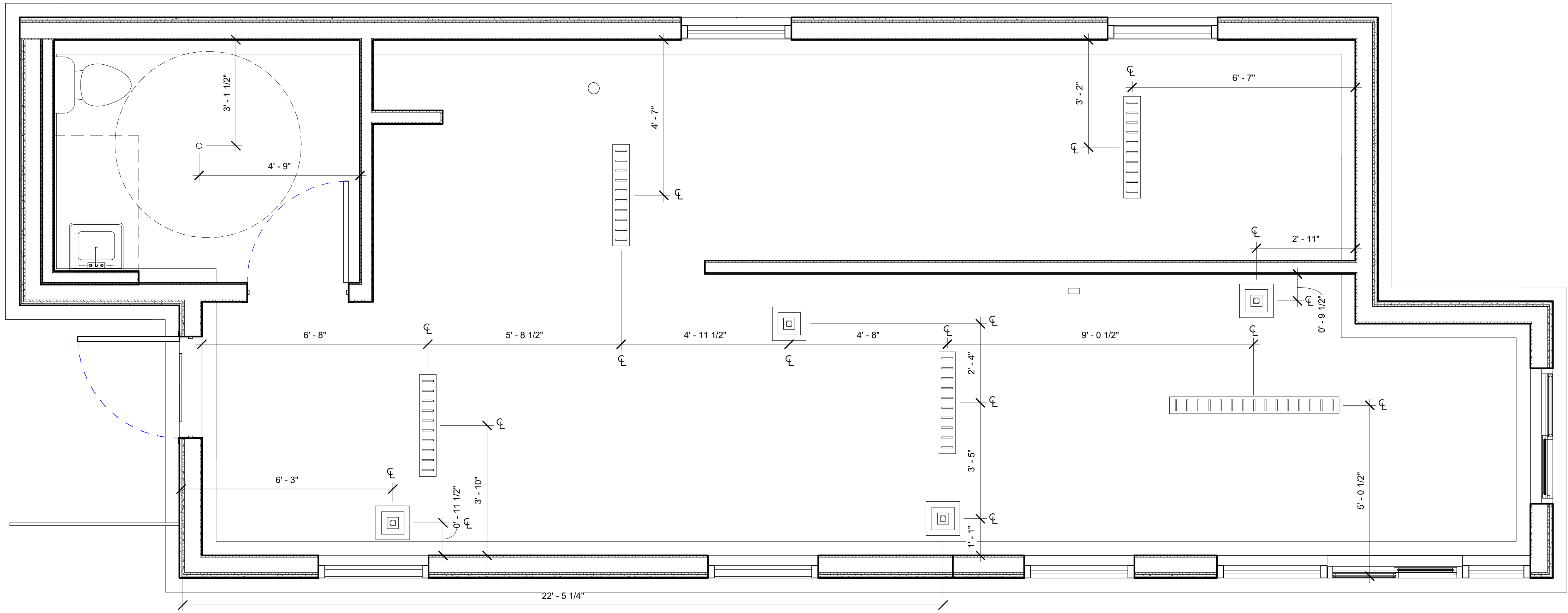
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CHECKED BY SDO

SCALE 1" = 20'-0"

AS101





SLAB PLAN GENERAL NOTES

- A. CONTRACTOR TO COORDINATE THE LOCATION OF ALL FLOOR DRAINS AND FLOOR SINKS WITH PLUMBING DRAWINGS AND KITCHEN DRAWINGS.  
B. CONTRACTOR TO COORDINATE THE LOCATION OF ALL FLOOR OUTLETS WITH OWNER, ARCHITECT AND ELECTRICAL DRAWINGS.

SLAB PLAN KEYNOTES 1

1. APPROXIMATE LOCATION OF FLOOR SINK, COORDINATE WITH PLUMBING  
2. APPROXIMATE LOCATION OF FLOOR DRAIN, COORDINATE WITH PLUMBING  
3. APPROXIMATE LOCATION OF CLEANOUT, COORDINATE WITH PLUMBING  
4. APPROXIMATE LOCATION OF TRENCH DRAIN, COORDINATE WITH PLUMBING  
5. APPROXIMATE LOCATION OF SODA LINES, COORDINATE WITH PLUMBING  
6. GREASE INTERCEPTOR



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SLAB PLAN

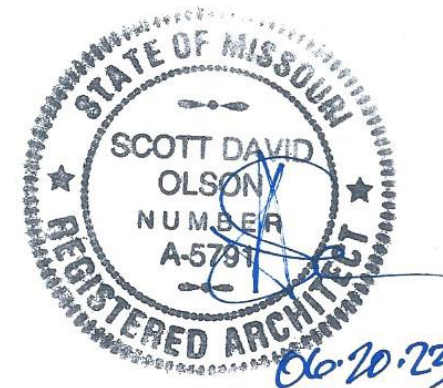
PROJECT NUMBER	2102
DATE	06/16/2023
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SCALE	1/2" = 1'-0"

AE111





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No.	Description	Date

SHEET NAME

FLOOR PLAN

PROJECT NUMBER 2102

DATE 06/16/2023

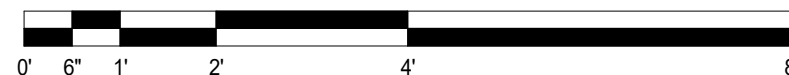
DRAWN BY PJS

CHECKED BY SDO

SCALE 1/2" = 1'-0"

AE112

1 FLOOR PLAN  
1/2" = 1'-0"



DIMENSION NOTES

- ALL PLAN DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO FACE OF GYP. BD. OR SHEATHING, OR CENTERLINE OF DOOR / CENTERLINE OF ROOM / CORRIDOR.
- NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS; DETAILS OVER SMALLER SCALE DRAWINGS.
- "FINISH FLOOR" REFERS TO TOP OF SLAB.
- VERIFY ALL ROUGH-IN, CONCRETE PAD, OR PLATFORM DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS PROJECT, OR BY OTHERS.
- CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS NOTED OTHERWISE.

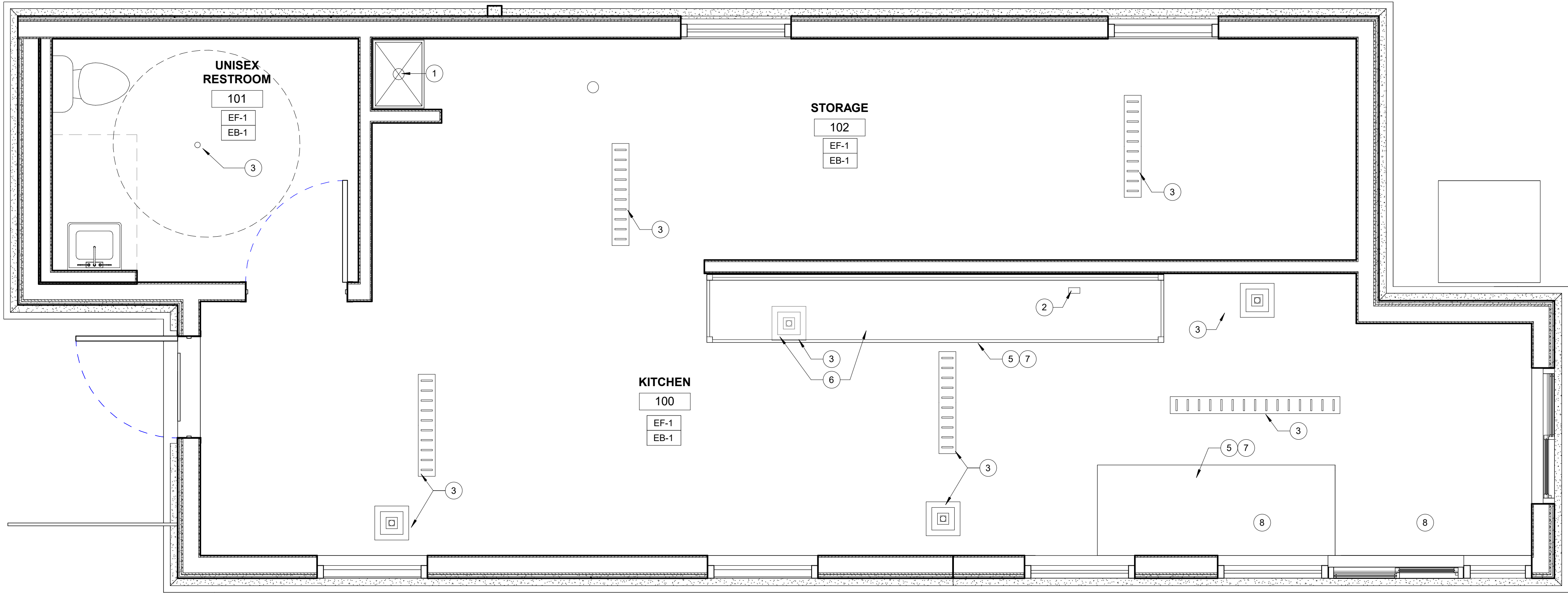
FLOOR PLAN KEYNOTES 1

- MOP SINK; COORDINATE WITH PLUMBING DRAWINGS.
- ADA COMPLIANT THRESHOLD, SEE SHEET.
- DOWNSPOUT TO DRAIN ON SPLASH BLOCK BELOW.
- CO2 TANK STORAGE CABINET; COORDINATE WITH EQUIPMENT SHEETS AND PLUMBING.
- BOLLARD, REF: CIVIL DRAWINGS.
- BRAKNET MOUNTED 2A10BC FIRE EXTINGUISHER.
- 4" SODA LINE CONDUITS STUBBED UP THROUGH FLOOR.
- ELECTRICAL PANEL OR EQUIPMENT; EXTERIOR-RATED ENCLOSURE WITH SECURITY LOCKING SYSTEM, COORDINATE WITH ELECTRICAL.
- EXTERIOR CANOPY ABOVE.
- 5'-0" CLEAR TURNING FLOOR SPACE.
- FENCING, REF: CIVIL DRAWINGS.

FLOOR PLAN GENERAL NOTES

- GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
- SEE MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.
- ALL COLOR SELECTIONS AND FINISH MATERIALS AND STYLES SHALL BE COORDINATED WITH OWNER.
- DO NOT SCALE DRAWINGS.
- SEE SHEET A611 FOR WALL TYPES.
- FURNITURE AND KITCHEN EQUIPMENT SHOWN DASHED.
- PROVIDE BLOCKING IN WALLS FOR WALL-MOUNTED EQUIPMENT / ACCESSORIES PER PLAN.





1 FINISH FLOOR PLAN  
1/2" = 1'-0"



#### FINISH PLAN GENERAL NOTES

- A. FLOOR FINISHES ARE CONTINUOUS. ALL FLOORING IS TO CONTINUE BENEATH ALL ELEMENTS IN CONTACT WITH THE FLOOR. CONTRACTOR TO COORDINATE OPENINGS AND PROVIDE FLOORING WITHIN OPENINGS NOT SPECIFICALLY IDENTIFIED.
- B. ALL PRODUCTS ARE TO BE PROVIDED AND INSTALLED PER MANUFACTURER'S PUBLISHED REQUIREMENTS AND FASTENED AND ADHERED ACCORDING TO APPROVED METHODS.
- C. ALL EXPOSED SURFACES ARE TO BE PREPARED TO RECEIVE NEW FINISHES.
- D. ALL WIRE FRAMES, CONDUIT, ACCESS PANELS, GRILLES, FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS, AND MECHANICAL DEVICES SHALL BE FINISHED TO MATCH THE ADJACENT SURFACE UNLESS NOTED OTHERWISE.
- E. CONTRACTOR TO REPORT ANY DISCREPANCIES IN PRODUCT QUALITY TO ARCHITECT FOR REVIEW AND APPROVAL.
- F. COMMENCEMENT OF WORK ON ANY SURFACE BY THE CONTRACTOR MEANS ACCEPTANCE OF THOSE SURFACES.
- G. FLOOR TRANSITION HEIGHTS NOT TO EXCEED 1/4" MAXIMUM. PROVIDE APPROPRIATE TRANSITION AT EACH LOCATION WHERE FLOOR MATERIAL CHANGES.
- H. RUN FLOORING UP TO MILLWORK AND UNDER OPEN COUNTERTOPS.
- I. COORDINATE COUNTERTOP FINISHES WITH OWNER.
- J. THE PAINT COATING SYSTEM SHALL INCLUDE A PRIMER THAT SHALL CONTRAST WITH THE WHITE OR SPECIAL COLOR SELECTED FOR THE INTERMEDIATE AND FINISH COATS TO ALLOW OWNER AND CONTRACTOR TO VERIFY EACH COAT OF PAINT HAS BEEN INSTALLED.
- K. GC TO VERIFY THAT ALL FLOOR AND GROUND SURFACES ARE STABLE FIRM, AND SLIP RESISTANT.
- L. THE SURFACE SLOPE OF ALL FLOORING SHALL NOT EXCEED 2% IN ANY DIRECTION.

#### INTERIOR FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
FRP-1	FRP (WHITE)	WHITE, SMOOTH, 10' HIGH SHEETS, SEE DETAIL 1/A501
P-1	PAINT (WHITE)	HIGH PERFORMANCE EPOXY
S-1	SS U-CHANNEL	FULL HEIGHT STAINLESS STEEL U-CHANNEL WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES
S-2	SS CORNER GUARD	FULL HEIGHT STAINLESS STEEL CORNER GUARD WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

#### FLOOR FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
EF-1	EPOXY FLOOR	EPOXY FLOOR, SEE SPEC ON SHEET A151.

#### BASE FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
EB-1	EPOXY BASE	6" HIGH BASE, MATCH FLOOR, SEE SPEC. SEE DETAIL 6/A631

#### FINISH PLAN KEYNOTES

- MOP SINK, COORDINATE WITH PLUMBING DRAWINGS
- 2"x4" HOLE IN COUNTER
- FLOOR DRAIN / TRENCH DRAIN / FLOOR SINK, COORDINATE WITH PLUMBING AND AE111 SLAB PLAN
- APPROXIMATE LOCATIONS OF SODA LINES, COORDINATE WITH PLUMBING.
- MILLWORK AND STAINLESS STEEL COUNTER W/ 6" BACKSPLASH; BASE CABINETS SHALL BE WHITE MELAMINE OPEN SHELVING, COORDINATE WITH OWNER.
- CUTOUTS IN COUNTERTOP FOR DROP-IN SINKS. SEE EQUIPMENT SCHEDULE FOR SINK CUTOUT DIMENSIONS.
- COVERED EPOXY BASE FINISH AT BASE CABINET TOE KICK
- 2" HOLE IN COUNTER FOR POS



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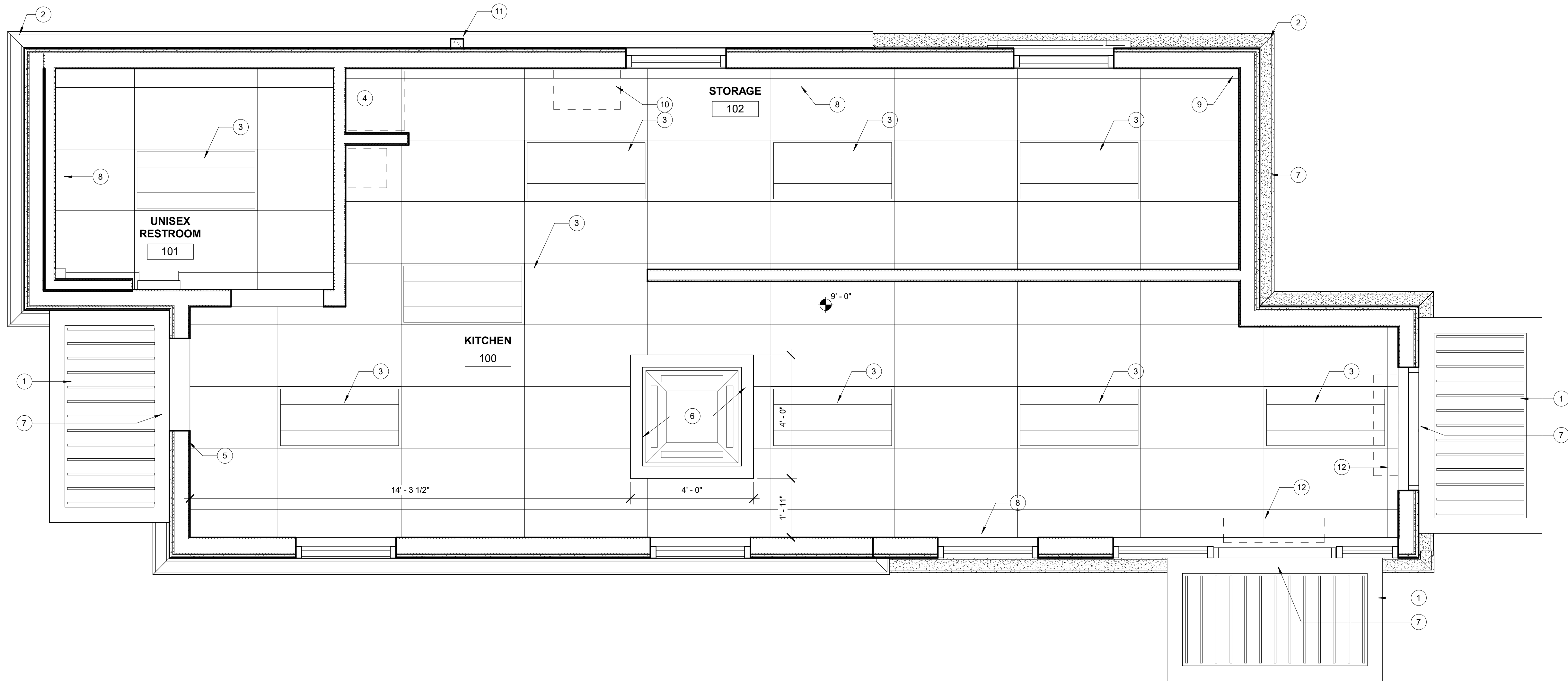
#### SHEET NAME

FINISH FLOOR PLAN

PROJECT NUMBER	2102
DATE	06/16/2023
DRAWN BY	PJS
CHECKED BY	SDO
SCALE	1/2" = 1'-0"

AE113



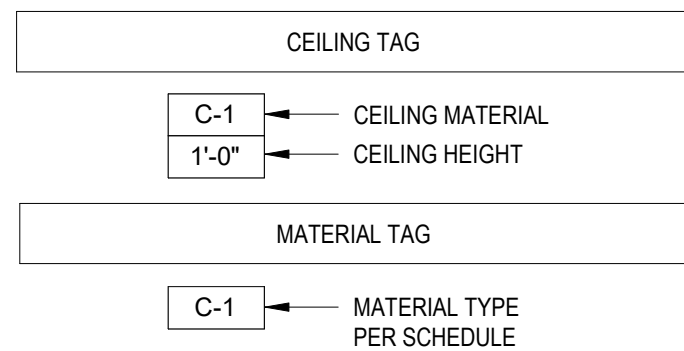


1 REFLECTED CEILING PLAN  
1/2" = 1'-0"



#### REFLECTED CEILING PLAN GENERAL NOTES

- A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ASSEMBLIES PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE OWNER AND ARCHITECT.
- B. MECHANICAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND CEILING SUBCONTRACTORS SHALL COORDINATE THEIR WORK. IN CASE OF CONFLICT, THE REFLECTED CEILING PLAN SHALL TAKE PRECEDENCE.
- C. COORDINATE WITH MECHANICAL AND ELECTRICAL FOR ADDITIONAL REQUIREMENTS.
- D. CEILING HEIGHTS SHOWN ARE ABOVE FINISH FLOOR.
- E. DO NOT SCALE DRAWINGS.
- F. ALL ELECTRICAL EQUIPMENT SHALL BE NEW. SUB-CONTRACTOR TO PROVIDE COPY OF DATED SALES RECEIPT IF REQUIRED BY THE OWNER.
- G. GENERAL CONTRACTOR SHALL PROVIDE THREADED RECESSED FIRE SPRINKLER ESCUTCHEONS AT ALL LOCATIONS, COORDINATE WITH PLUMBING.
- H. COORDINATE FINAL SECURITY AND SPEAKER LOCATIONS WITH OWNER.



#### REFLECTED CEILING PLAN MATERIAL LEGEND

ACT-1	5/8" GYP. BD. OVER 3 5/8" METAL STUDS, PAINTED P-1
GB-1	2 x 4 ACOUSTIC CEILING TILE IN SURFACE MOUNTED GRID. GRID TO BE MOUNTED TO BOTTOM OF JOISTS.

AT WALKING SURFACE OR CIRCULATION ROUTE, NO SUSPENDED LIGHT FIXTURE, DECORATIVE ITEM, OR SIMILAR DECORATIVE ITEM SHALL BE INSTALLED LOWER THAN 80" AFF.

NO DEVICE OR DECORATIVE OBJECT LESS THAN 80" AFF SHALL PROJECT MORE THAN 4" FROM ANY WALL IN ANY CIRCULATION PATH OR ACCESSIBLE ROUTE.

#### ELECTRICAL / MECHANICAL LEGEND

##### NOTE:

- 1) COORDINATE WITH ELECTRICAL AND MECHANICAL DRAWINGS

SURFACE MOUNTED LIGHT

RECESSED LIGHT

FAN COIL UNIT

EXHAUST FAN

SECURITY CAMERA, CEILING MOUNTED, NOT SHOWN. COORDINATE WITH ELECTRICAL.

SECURITY CAMERA, WALL MOUNTED, NOT SHOWN. COORDINATE WITH ELECTRICAL.

CEILING MOUNTED SPEAKER, NOT SHOWN. COORDINATE WITH ELECTRICAL.

#### INTERIOR FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
FRP-1	FRP (WHITE)	WHITE, SMOOTH, 10' HIGH SHEETS, SEE DETAIL 1/A501
P-1	PAINT (WHITE)	HIGH PERFORMANCE EPOXY
S-1	SS U-CHANNEL	FULL HEIGHT STAINLESS STEEL U-CHANNEL WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES
S-2	SS CORNER GUARD	FULL HEIGHT STAINLESS STEEL CORNER GUARD WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

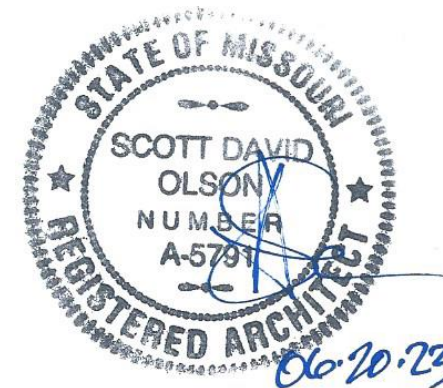
#### RCP KEYNOTES

- 1 INTERIOR LIGHTING - REFER TO ELECTRICAL
- 2 EXTERIOR CORNICE PER ELEVATIONS
- 3 EXTERIOR CANOPY
- 4 EMERGENCY LIGHTING - REFER TO ELECTRICAL
- 5 MECHANICAL SOFFIT - REFER TO MECHANICAL
- 6 EXTERIOR LIGHTING - REFER TO ELECTRICAL
- 7 WATER HEATER SHELF
- 8 WALL PACK LIGHTING - REFER TO ELECTRICAL
- 9 WEATHER LOOP CONDUIT TO ROOF FOR ACCESS POINTS - REFER TO ELECTRICAL
- 10 I.T. RACK - REFER TO ELECTRICAL
- 11 PREFINISHED METAL DOWNSPOUT
- 12 AIR CURTAIN - REFER TO MECHANICAL

1



SWIG - LEE'S SUMMIT  
400 NW CHIPMAN RD, LEE'S SUMMIT, MO 64086



OAG

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME

REFLECTED CEILING PLAN

PROJECT NUMBER 2102

DATE 06/16/2023

DRAWN BY PJS

CHECKED BY SDO

SCALE As indicated

AE121





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KANSAS CITY, MO 64151

[illegible]

SHEET NAME

ROOF PLAN

PROJECT NUMBER	2102
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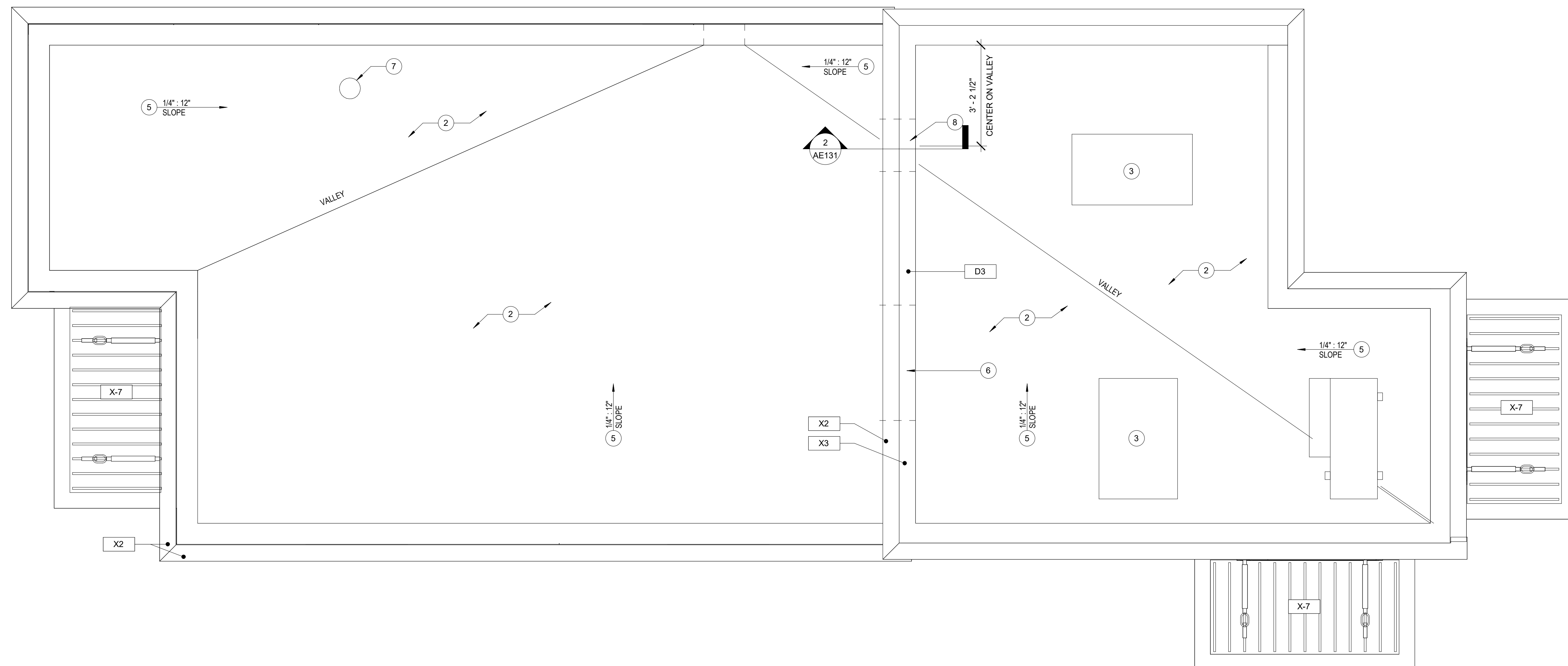
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DRAWN BY	PJS
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SCALE	As indicated
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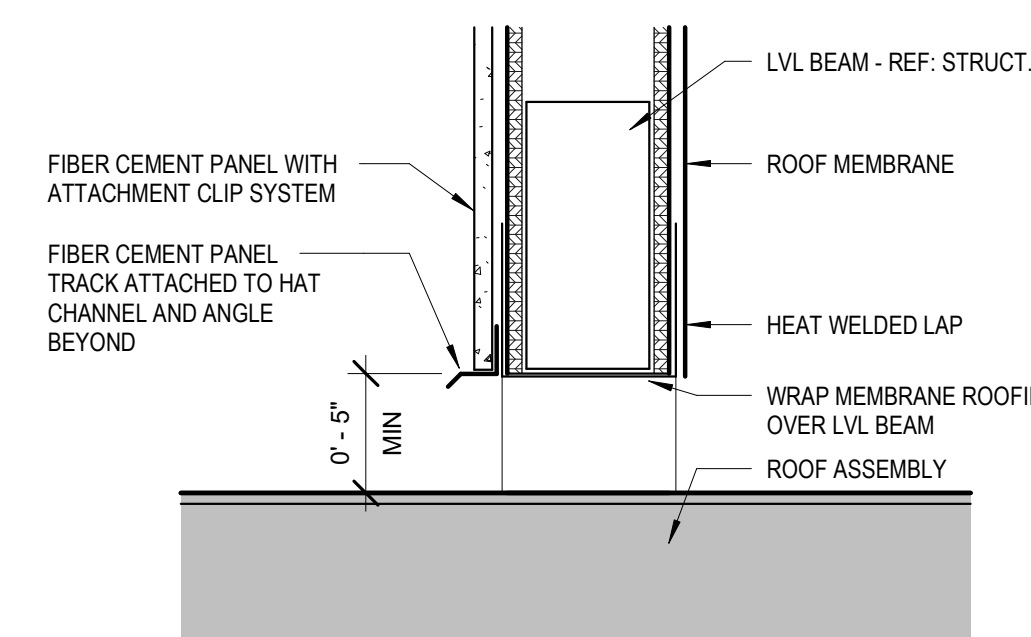


① ROOF PLAN  
1/2" = 1'-0"

### ROOF PLAN GENERAL NOTES

- A. REFER TO SHELL STRUCTURAL DRAWINGS FOR ROOF FRAMING AND DETAILS FOR ROOF PENETRATIONS AND LOADING.
- B. ROOF TOP HVAC UNITS AND CURBS ARE PROVIDED AS PART OF SHELL.
- C. ALUMINUM EQUIPMENT STAND SUPPORTS MANUFACTURED BY AVCOA CORPORATION OF FORT LAUDERDALE, FLORIDA OR APPROVED EQUAL. 4 RAILS AT 5'-0" EACH AND 5'-0" EACH WITH 2 SUPPORTS EACH RAIL. 5/40 RAILS TO BE 31" APART AT COOLER/FREEZER CONDENSERS AND 5/40 RAILS W/ SUPPORTS TO BE 24" APART AT ICE MACHINE CONDENSERS. STANDS SHALL PROVIDE 18" MINIMUM CLEARANCE TO ALL CURBS. ALL CURBS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S LOAD CHARTS AND PRINTED INSTALLATION DETAILS. CONTACT: 800-266-2762.

MARK	MATERIAL	DESCRIPTION
X-1	THIN BRICK WAINSCOT	CONCRETE STONE VENEER TEXAS STONE DESIGN INC PALO PINTO COBBLE
X-2	CORNICE	EXTERIOR GRADE - SW #6693 "BLACK OF NIGHT"
X-3	SIMULATED WOOD SIDING	FIBER CEMENT PANELS BASE BID: NICHIA, VINTAGE WOOD, BARK, 17-7/8"x5/8" THICK, HORIZ. INSTALL. BID ALTERNATE: JAMES HARDIE, SIERRA 8, TIMBER BARK, 5/16" THICK, HORIZONTAL INSTALL.
X-4	STONE SILL	CHISELED STONE SILL, LIGHT GRAY - CORONADO STONE
X-5	STOREFRONT	DARK BRONZE
X-6	PAINT	SHER-COLOR CUSTOM MATCH; EXTERIOR ULTRADEEP SATIN. COLOR CAST FORMULA: W1 WHITE: COLORANT 02=2, COLORANT 32=2 R4 NEW RED: COLORANT 02=8, COLORANT 32=61, COLORANT 64=1
X-7	PAINT	EXTERIOR GRADE - SW #7019 "GAUNTLET GRAY" (POWDER COAT STEEL IF POSSIBLE)
X-8	THIN BRICK	ARCHITECTURAL CONCRETE BLOCK, THIN BRICK SERIES, OLDCASTLE QUIK BRICK - COLOR AUTUMN BLEND W/ FLASH - 41



② ROOF SCREENING DRAINAGE DETAIL  
1 1/2" = 1'-0"

## ROOF PLAN KEYNOTES

- 1 SINGLE-PLY MEMBRANE ROOFING OVER RIGID ROOF INSULATION AND ROOF SHEATHING. PROVIDE FLASHING AND COUNTERFLASHING AT ALL NEW PENETRATIONS PER MANUFACTURER'S RECOMMENDATIONS FOR MECHANICALLY FASTENED SYSTEM.
- 2 NEW MECHANICAL EQUIPMENT. SECURE TO TOP OF DECK PER STRUCTURAL AND PER MANUFACTURER'S REQUIREMENTS. PROVIDE CURB AND CRICKET AS REQUIRED FOR PROPER DRAINAGE. REFERENCE MECHANICAL.
- 3 PREFINISHED METAL GUTTER AND DOWNSPOUT.
- 4 PROVIDE TAPERED INSULATION TO SLOPE ROOF AS SHOWN.
- 5 24"x36" SLOPE.
- 6 EXHAUST FAN VENT. REFERENCE MECHANICAL DRAWINGS.
- 7 DRAINAGE OPENING. LOCATE OVER DRAINAGE VALLEY. REFERENCE DETAIL.



DURA-FLEX MUST BE USED  
(NO SUBSTITUTIONS)

DURA-FLEX CONTACT:  
MARCUS GRAY  
REGIONAL MANAGER  
860-380-777

SECTION 09 67 23-RESINOUS FLOORINGPage 1 of 5

SECTION 09 67 23-RESINOUS FLOORING  
POLY-CRETE SLB AND POLY-CRETE COLOR-FAST TOPCOAT (Flintshot)

Date:06/14

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section includes the following:

1. Resinous flooring system as shown on the drawings and in schedules.

B. Related sections include the following:

1. Cast-in-Place Concrete, section 03 30 00

2. Concrete Curing, section 03 39 00

1.3 SYSTEM DESCRIPTION

A. The work shall consist of preparation of the substrate, the furnishing and application of a cementitious urethane based self-leveling seamless flooring system with flintshot quartz aggregate broadcast and urethane topcoat.

B. The system shall have the color and texture as specified by the Owner with a nominal thickness of 3/16 inch. It shall be applied to the prepared area(s) as defined in the plans strictly in accordance with the Manufacturer's recommendations.

C. Cove base (if required) to be applied where noted on plans and per manufacturers standard details unless otherwise noted

1.4 SUBMITTALS

A. Product Data: Latest edition of Manufacturer's literature including performance data and installation procedures.

B. Manufacturer's Material Safety Data Sheet (MSDS) for each product being used.

C. Samples: A 3 x 3 inch square sample of the proposed system. Color, texture, and thickness shall be representative of overall appearance of finished system subject to normal tolerances.

1.5 QUALITY ASSURANCE

A. The Manufacturer shall have a minimum of 10 years experience in the production, sales, and technical support of epoxy and urethane industrial flooring and related materials.

B. The Applicator shall have experience in installation of the flooring system as confirmed by the manufacturer in all phases of surface preparation and application of the product specified.

C. No requests for substitutions shall be considered that would change the generic type of the specified System.

D. System shall be in compliance with requirements of United States Department of Agriculture (USDA), Food, Drug Administration (FDA), and local Health Department.

E. System shall be in compliance with the Indoor Air Quality requirements of California section 01350 as verified by a qualified independent testing laboratory.

F. A pre-installation conference shall be held between Applicator, General Contractor and the Owner to review and clarification of this specification, application procedure, quality control, inspection and acceptance criteria and production schedule.

STANDARD SPECIFICATION

SECTION 09 67 23-RESINOUS FLOORINGPage 2 of 5

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Packing and Shipping

1. All components of the system shall be delivered to the site in the Manufacturer's packaging, clearly identified with the product type and batch number.

B. Storage and Protection

1. The Applicator shall be provided with a dry storage area for all components. The area shall be between 60 F and 85 F, dry, out of direct sunlight and in accordance with the Manufacturer's recommendations and relevant health and safety regulations.

2. Copies of Material Safety Data Sheets (MSDS) for all components shall be kept on site for review by the Engineer or other personnel.

C. Waste Disposal

1. The Applicator shall be provided with adequate disposal facilities for non-hazardous waste generated during installation of the system.

1.7 PROJECT CONDITIONS

A. Site Requirements

1. Application may proceed while air, material and substrate temperatures are between 55 F and 85 F providing the substrate temperature is above the dew point. Outside of this range, the Manufacturer shall be consulted.

2. The relative humidity in the specific location of the application shall be less than 85 % and the surface temperature shall be at least 5 F above the dew point.

3. The Applicator shall be supplied with adequate lighting equal to the final lighting level during the preparation and installation of the system.

B. Conditions of new concrete to be coated with cementitious urethane material.

1. Concrete shall be moisture cured for a minimum of 7 days and have fully cured a minimum of 14 days in accordance with ACI-308 prior to the application of the coating system pending moisture tests.

2. Concrete shall have a flat rubbed finish, float or light steel trowel finish (a hard steel trowel finish is neither necessary or desirable).

3. Sealers and curing agents should not to be used.

4. Concrete surfaces on grade shall have been constructed with a vapor barrier to protect against the effects of vapor transmission and possible delamination of the system.

C. Safety Requirements

1. The Owner shall be responsible for the removal of foodstuffs from the work area.

2. Non-related personnel in the work area shall be kept to a minimum.

1.8 WARRANTY

A. Dur-A-Flex, Inc. warrants that material shipped to buyers at the time of shipment substantially free from material defects and will perform substantially to Dur-A-Flex, Inc. published literature if used in accordance with the latest prescribed procedures and prior to the expiration date.

B. Dur-A-Flex, Inc. liability with respect to this warranty is strictly limited to the value of the material purchase.

PART 2 – PRODUCTS

STANDARD SPECIFICATION

SECTION 09 67 23-RESINOUS FLOORINGPage 3 of 5

2.1 FLOORING

A. Dur-A-Flex, Inc, Poly-Crete SLB (self leveling broadcast quartz), urethane topcoat seamless flooring system.

1. System Materials:

a. Topping: Dur-A-Flex, Inc, Poly-Crete SL resin, hardener and SL aggregate.

b. The aggregate shall be Dur-A-Flex, Inc. Flintshot quartz aggregate.

d. Topcoat: Dur-A-Flex, Inc. Poly-Crete Color-Fast resin, hardener and powdered aggregate.

2. Patch Materials

a. Shallow Fill and Patching: Use Dur-A-Flex, Inc. Poly-Crete MD (up to ¼ inch).

b. Deep Fill and Sloping Material (over ¼ inch): Use Dur-A-Flex, Inc. Poly-Crete WR.

2.2 MANUFACTURER

A. Dur-A-Flex, Inc., 95 Goodwin Street, East Hartford, CT 06108, Phone: (860) 528-9838, Fax: (860) 528-2802

B. Manufacturer of Approved System shall be single source and made in the USA.

2.3 PRODUCT REQUIREMENTS

A. ToppingPoly-Crete SL

1. Percent Reactive100 %

2. VOC0 g/L

3. Bond Strength to Concrete ASTM D 4541400 psi, substrates fails

4. Compressive Strength, ASTM C 5799,000 psi

5. Tensile Strength, ASTM D 6382,175 psi

6. Flexural Strength, ASTM D 7905,076 psi

7. Impact Resistance @ 125 mils, MIL D-3134,160 inch lbs

No visible damage or deterioration

B. TopcoatPoly-Crete Color-Fast

1. Percent Solids100%

2. VOC0 g/L

3. Compressive Strength, ASTM C 5797,800 psi

4. Tensile Strength, ASTM D 6384,200 psi

5. Flexural Strength, ASTM D 7901,000 psi

6. Abrasion Resistance, ASTM D 406030 mg loss

CS-17 wheel, 1,000gm load, 1,000 cycles

7. Impact Resistance, ASTM D 1709160 in. lbs

8. Shore D Hardness, ASTM D 224065

9. Gloss, ASTM D 523, 60°Semi-gloss Appearance

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas and conditions, with Applicator present, for compliance with requirements for maximum moisture content, installation tolerances and other conditions affecting flooring performance.

1. Verify that substrates and conditions are satisfactory for flooring installation and comply with requirements specified.

3.2 PREPARATION

A. General

STANDARD SPECIFICATION

SECTION 09 67 23-RESINOUS FLOORINGPage 4 of 5

1. New and existing concrete surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae growth, laitance, friable matter, dirt, and bituminous products.

2. Moisture Testing: Perform tests recommended by manufacturer and as follows.

a. Perform relative humidity test using in situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 99% relative humidity level measurement.

b. If the relative humidity exceeds 99% then the Owner and/or Engineer shall be notified and advised of additional cost for the possible installation of a vapor mitigation system that has been approved by the manufacturer or other means to lower the value to the acceptable limit.

c. If the vapor drive exceeds 99% relative humidity or 20 lbs/1,000 sf/24 hrs then the Owner and/or Engineer shall be notified and advised of additional cost for the possible installation of a vapor mitigation system that has been approved by the manufacturer or other means to lower the value to the acceptable limit.

3. Mechanical surface preparation

a. Shot blast all surfaces to receive flooring system with a mobile steel shot, dust recycling machine (Blastrac or equal). All surface and embedded accumulations of paint, toppings hardened concrete layers, laitance, power trowel finishes and other similar surface characteristics shall be completely removed leaving a bare concrete surface having a minimum profile of CSP 4-5 as described by the International Concrete Repair Institute.

b. Floor areas inaccessible to the mobile blast machines shall be mechanically abraded to the same degree of cleanliness, soundness and profile using diamond grinders, needle guns, bush hammers, or other suitable equipment.

c. Where the perimeter of the substrate to be coated is not adjacent to a wall or curb, a minimum 1/4 inch key cut shall be made to properly seat the system, providing a smooth transition between areas. The detail cut shall also apply to drain perimeters and expansion joint edges.

d. Cracks and joints (non-moving) greater than 1/8 inch wide are to be chiseled or chipped-out and repaired per manufacturer's recommendations.

4. At spalled or worn areas, mechanically remove loose or delaminated concrete to a sound concrete and patch per manufactures recommendations.

3.3 APPLICATION

A. General

1. The system shall be applied in three distinct steps as listed below:

a. Substrate preparation

b. Topping/overlay application with quartz aggregate broadcast.

c. Topcoat application

2. Immediately prior to the application of any component of the system, the surface shall be dry and any remaining dust or loose particles shall be removed using a vacuum or clean, dry, oil-free compressed air.

3. The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results in accordance with the Manufacturer's recommendations.

4. The system shall follow the contour of the substrate unless pitching or other leveling work has been specified by the Architect.

5. A neat finish with well-defined boundaries and straight edges shall be provided by the Applicator.

B. Topping

1. The topping shall be applied as a self-leveling system as specified by the Architect. The topping shall be applied in one lift with a nominal thickness of 1/8 inch.

2. The topping shall be comprised of three components, a resin, hardener and filler as supplied by the Manufacturer.

3. The hardener shall be added to the resin and thoroughly dispersed by suitably approved mechanical means. SL Aggregate shall then be added to the catalyzed mixture and mixed in a manner to achieve a homogenous blend.

4. The topping shall be applied over horizontal surfaces using ½ inch “v” notched squeegee, trowels or other systems approved by the Manufacturer.

5. Immediately upon placing, the topping shall be degassed with a loop roller.

6. Quartz aggregate shall be broadcast to excess into the wet material at the rate of 1 lbs/sf.

7. Allow material to fully cure. Vacuum, sweep and/or blow to remove all loose aggregate.

STANDARD SPECIFICATION

SECTION 09 67 23-RESINOUS FLOORINGPage 5 of 5

C. Topcoat

1. The topcoat shall be mixed and applied per manufacturer recommended procedure.

2. The topcoat shall be comprised of three components, a resin, hardener and filler as supplied by the manufacturer.

3. The topcoat will be applied at the rate of 100 sf per kit (1.1 gal).

4. Non-Skid if required is broadcast at the rate of 1 lb per 100 sf and back rolled into the coating.

5. The finish floor will have a nominal thickness of 3/16 inch.

3.4 FIELD QUALITY CONTROL

A. Tests, Inspection

1. The following tests shall be conducted by the Applicator:

a. Temperature

1. Air, substrate temperatures and, if applicable, dew point.

b. Coverage Rates


1. Rates for all layers shall be monitored by checking quantity of material used against the area covered.

3.5 CLEANING AND PROTECTION


A. Cure flooring material in compliance with manufacturer's directions, taking care to prevent their contamination during stages of application and prior to completion of the curing process.


B. Remove masking. Perform detail cleaning at floor termination, to leave cleanable surface for subsequent work of other sections.

STANDARD SPECIFICATION



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KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

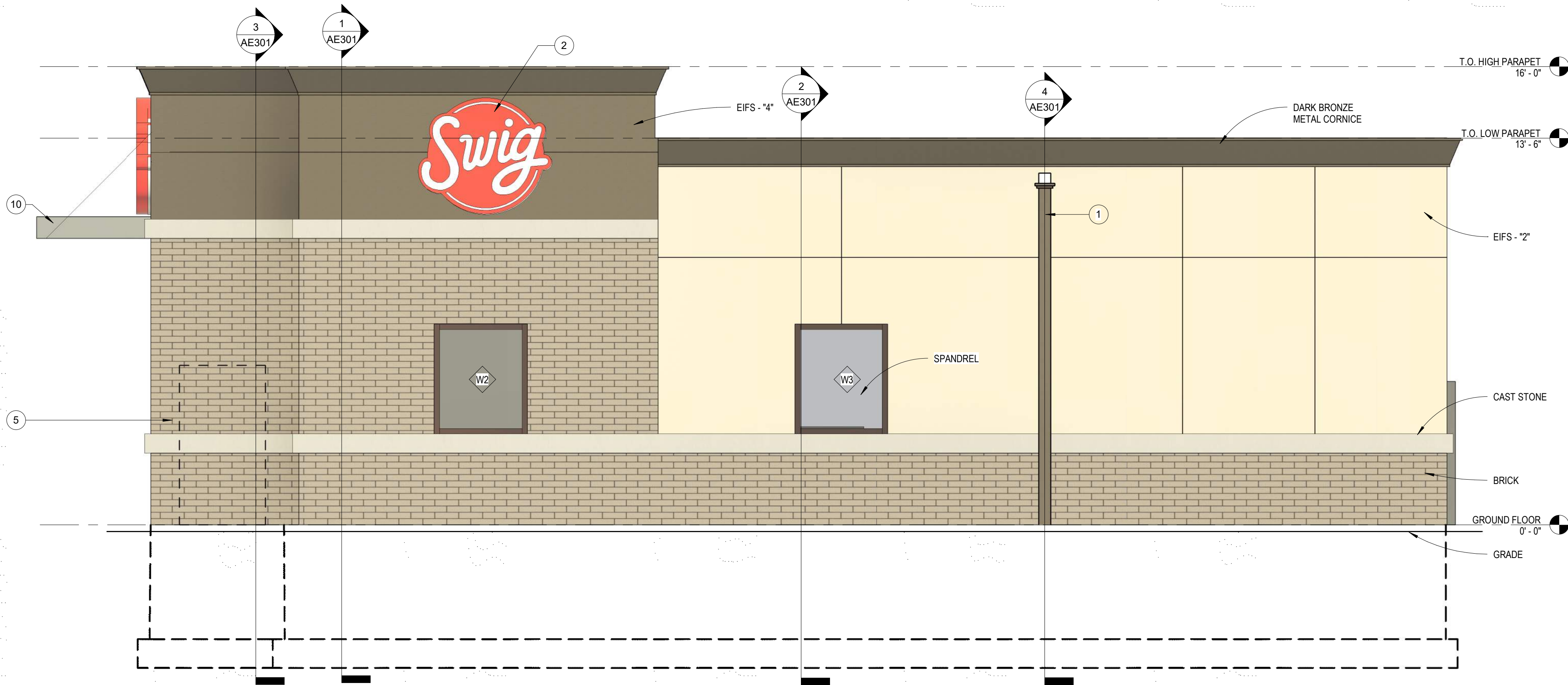
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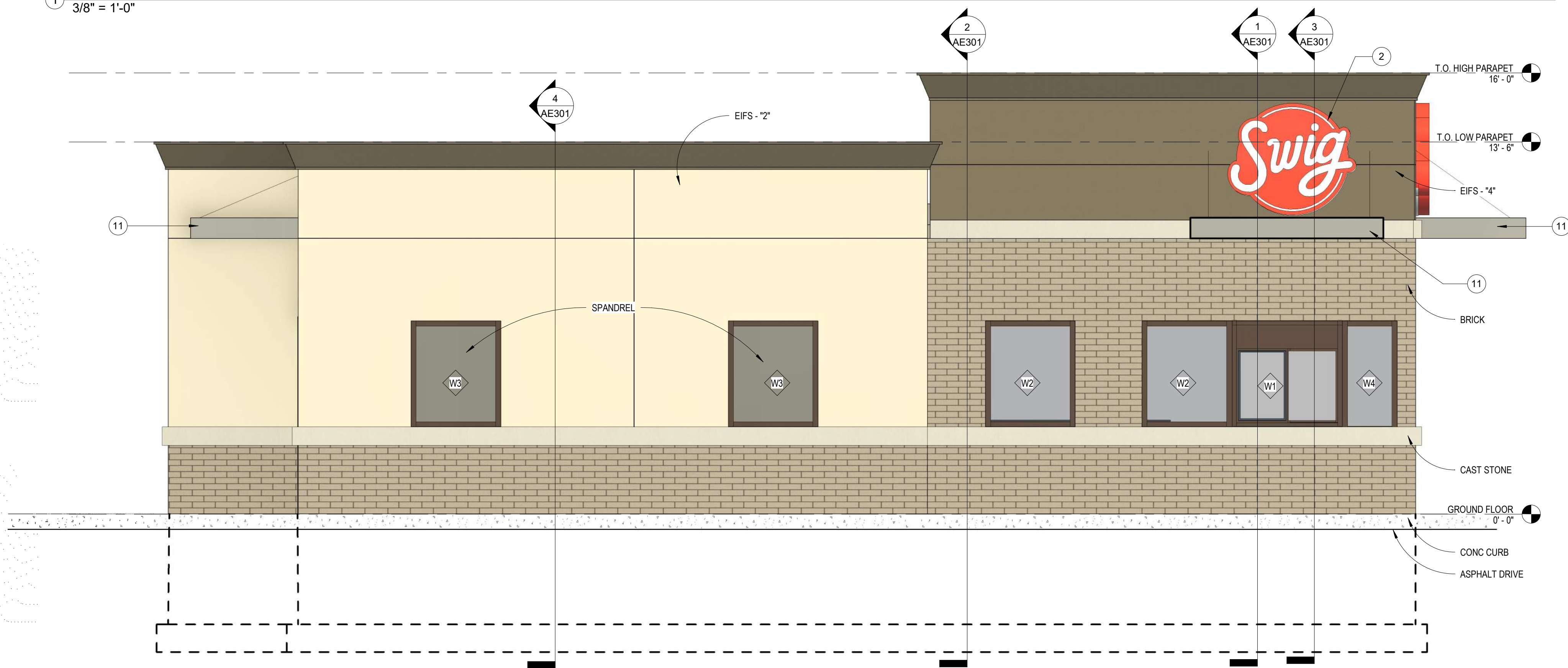
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DATE	06/16/2023
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CHECKED BY	SDO
SCALE	

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1 WEST ELEVATION  
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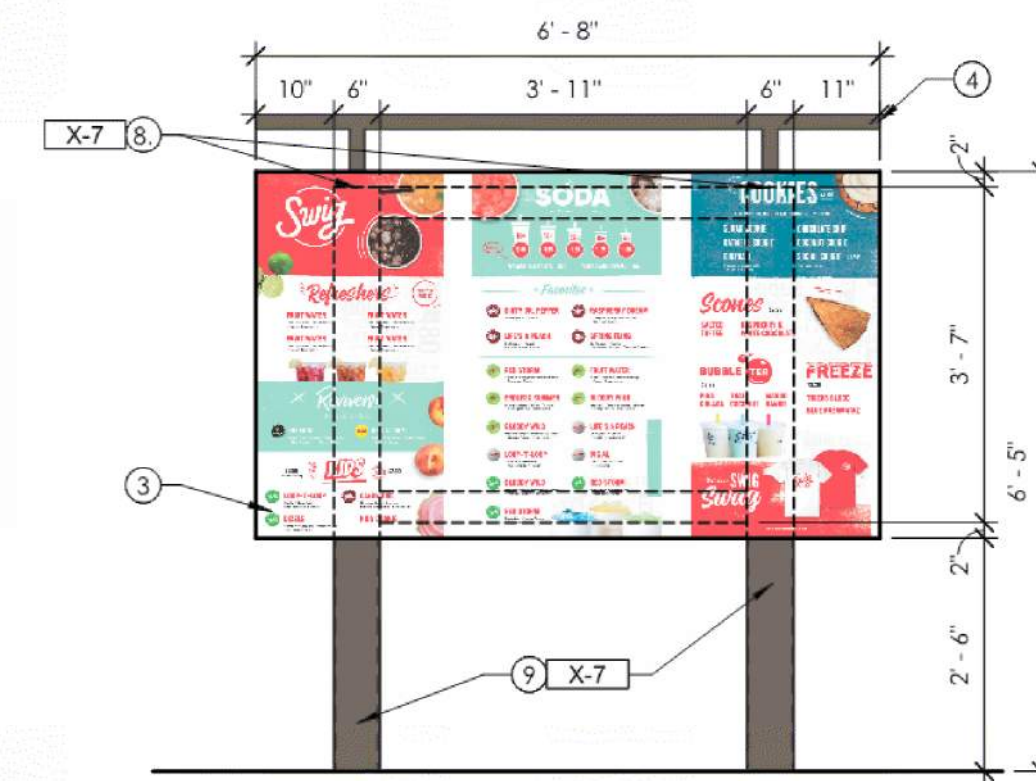


2 EAST ELEVATION  
3/8" = 1'-0"

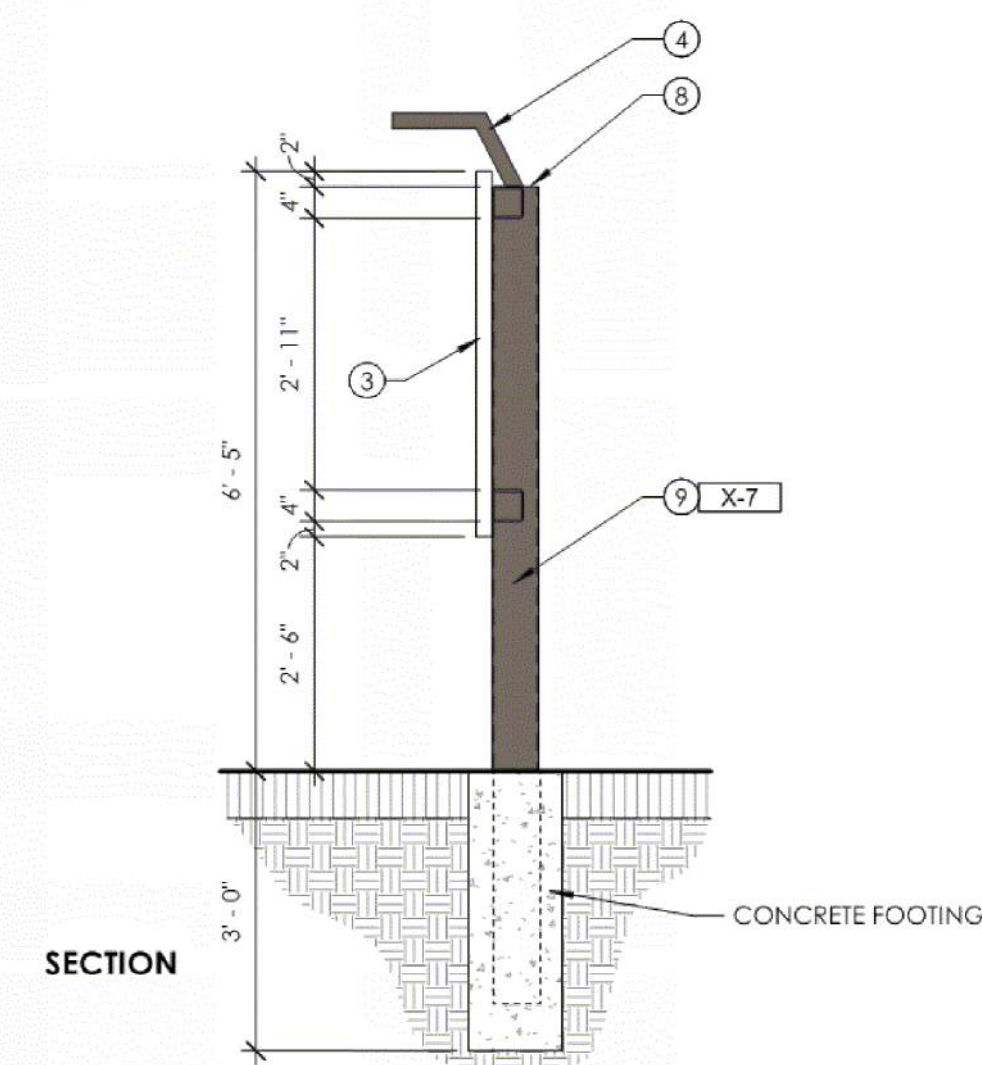
FACADE MATERIAL PERCENTAGES - STUCCO				
	_EAST_	_WEST_	_NORTH_	_SOUTH_
X-1 - THIN BRICK WAINSCOT	17 %	17 %	19 %	19 %
	37.35 SF	46.75 SF	128 SF	128 SF
X-2 - CORNICE	16 %	10 %	10 %	10 %
	36 SF	25.5 SF	69 SF	69 SF
X-3 - SIMULATED WOOD	7 %	30 %	14 %	16 %
	16 SF	82.5 SF	91.5 SF	91.2 SF
X-4 - STONE SILL	1 %	1 %	1 %	1 %
	2.5 SF	3 SF	8.5 SF	8.5 SF
X-5 - STOREFRONT	0	6 %	6 %	7 %
	0 SF	15 SF	39.8 SF	63 SF
X-8 - STUCCO	57 %	33 %	49 %	47 %
	128 SF	89.5 SF	321.25	355 SF
EXTERIOR CANOPY	2 %	3 %	1 %	0 %
	7 LF	7 LF	7 LF	0 LF

- 1 KEYNOTES
- 1 PREFINISHED METAL DOWNSPOUT
  - 2 BUILDING SIGNAGE BY OWNER
  - 3 MENU BOARD AND FOOTINGS BY SEPARATE SIGN PERMIT
  - 4 DARK BRONZE LIGHT FIXTURE: COORDINATE WITH ELECTRICAL
  - 5 CO2 ENCLOSURE - SEE EQUIPMENT PLAN
  - 6 ELECTRICAL PANEL OR EQUIPMENT: COORDINATE WITH ELECTRICAL
  - 7 CONTROL JOINT
  - 8 STEEL CAP AT TOP OF POSTS
  - 9 POWDER COATED STEEL TUBE FRAME, TYP.
  - 10 24" X 36" OPENING
  - 11 EXTERIOR CANOPY MANUFACTURER - ARCHITECTURAL CANOPIES: EXTRUDECK
  - 12 ROOF PROFILE
  - 13 RTU BEYOND
  - 14 TRASH ENCLOSURE

EXTERIOR FINISH SCHEDULE				
MARK	MATERIAL	DESCRIPTION		
X-1	THIN BRICK (WAINSCOT)	THIN BRICK GLEN-GERY: STONE GRAY GROUT GLEN GERY: G-601	X-6	SWIG #RED 'SHER-COLOR' CUSTOM MATCH, EXTERIOR ULTRADEEP SATIN. COLOR CAST FORMULA: W1 WHITE >>> COLORANT 02= 2 COLORANT 32= 2 R4 NEW RED >>> COLORANT 02 = 8, COLORANT 32 = 61 COLORANT 64 = 1
X-2	CORNICE (BLACK)	EXTERIOR GRADE - SW# 6993 'BLACK OF NIGHT'	X-7	PAINT (LIGHT GRAY)
X-3	SIMULATED WOOD SIDING	FIBER CEMENT PANELS <u>BASE BID</u> : NICHHA; VINTAGE WOOD; BARK; 17-7/8" x 5/8" THICK; HORIZONTAL INSTALL <u>BID ALTERNATE</u> : JAMES HANDIE; SIERRA B; TIMBER BARK; 5/16" THICK; HORIZONTAL INSTALL	X-8	STUCCO
X-4	STONE SILL	CHISELED STONE SILL - LIGHT GRAY CORONADO STONE		
X-5	STOREFRONT	DARK BRONZE		



ELEVATION



SECTION

1 DRIVE UP MENU BOARD - BY OWNER  
1/2" = 1'-0"



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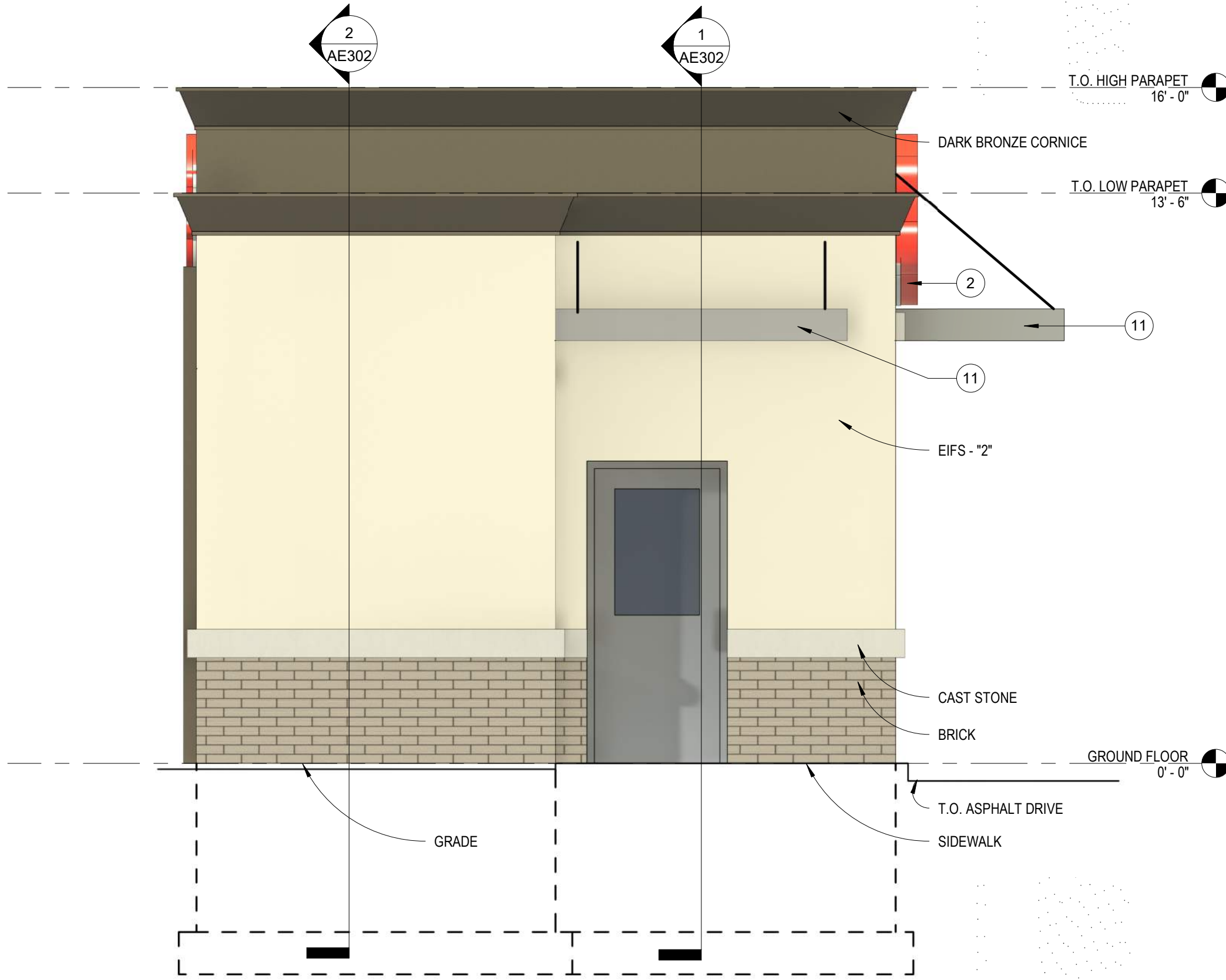
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No.	Description	Date

SHEET NAME  
EXTERIOR ELEVATIONS

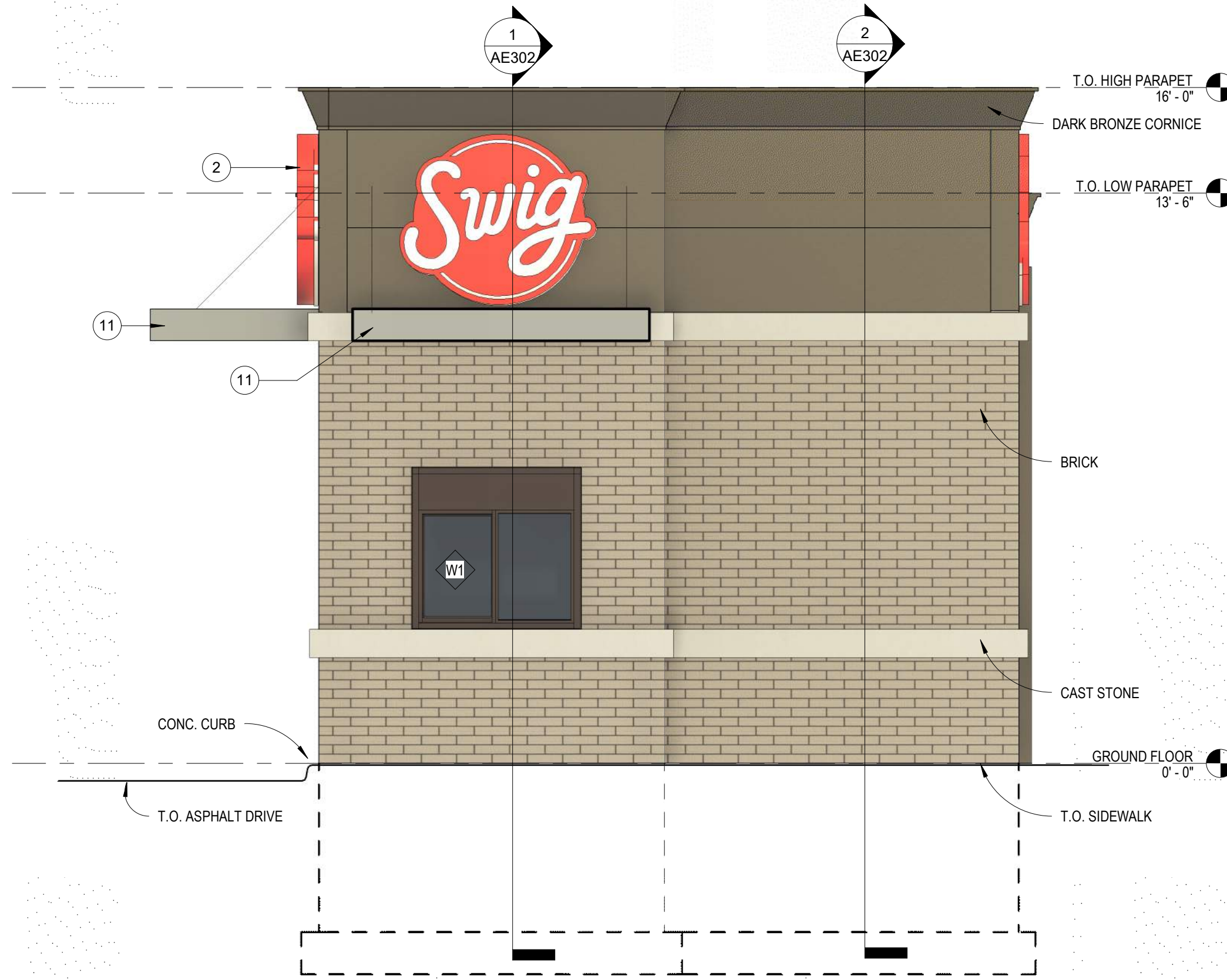
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DATE	06/16/2023
DRAWN BY	PJS
CHECKED BY	SDO
SCALE	3/8" = 1'-0"

AE201





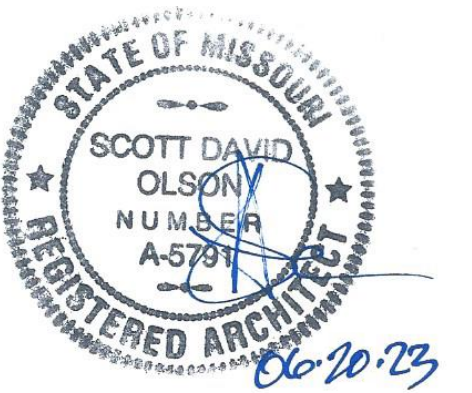
2 SOUTH ELEVATION  
3/8" = 1'-0"



1 NORTH ELEVATION  
3/8" = 1'-0"



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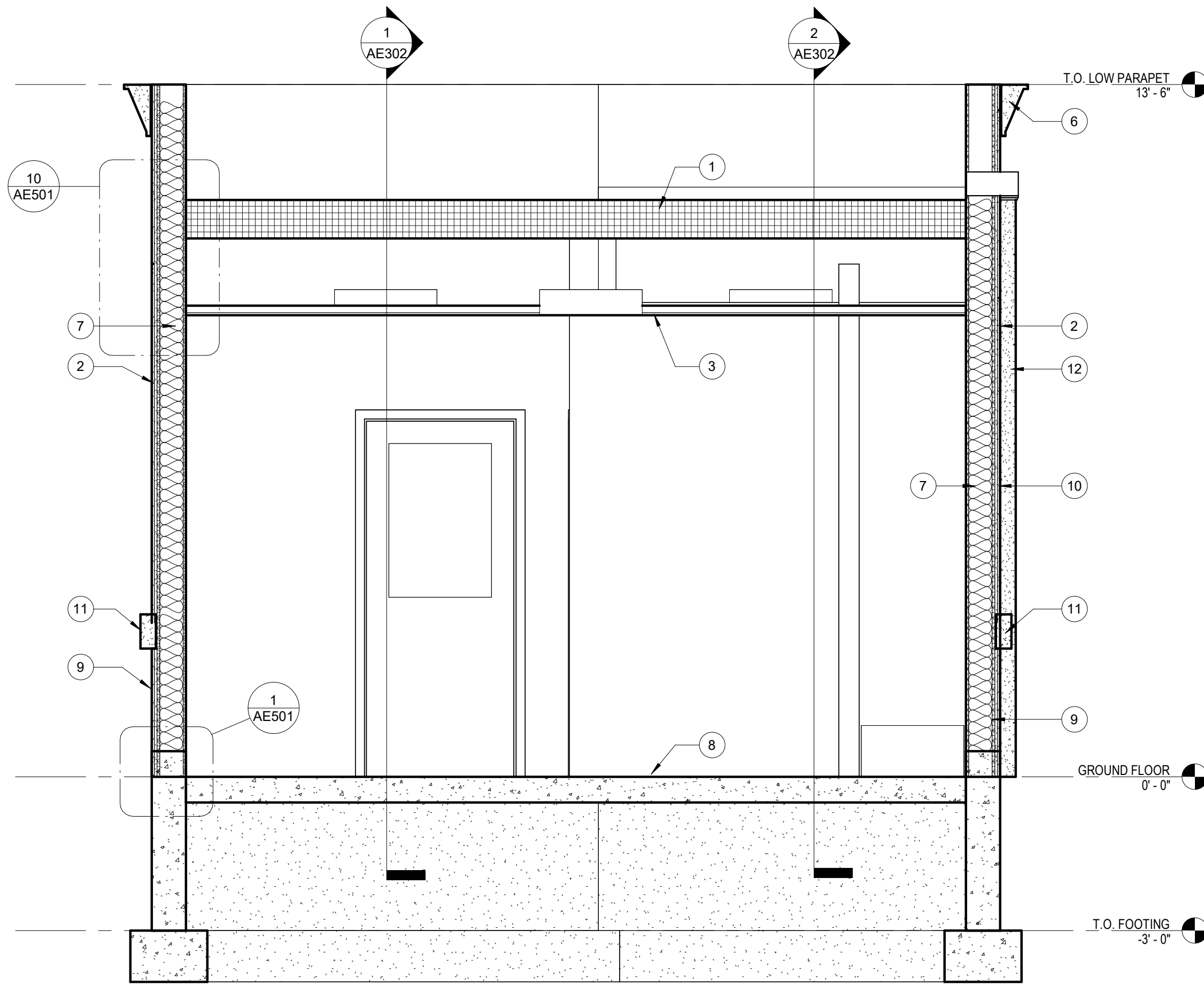
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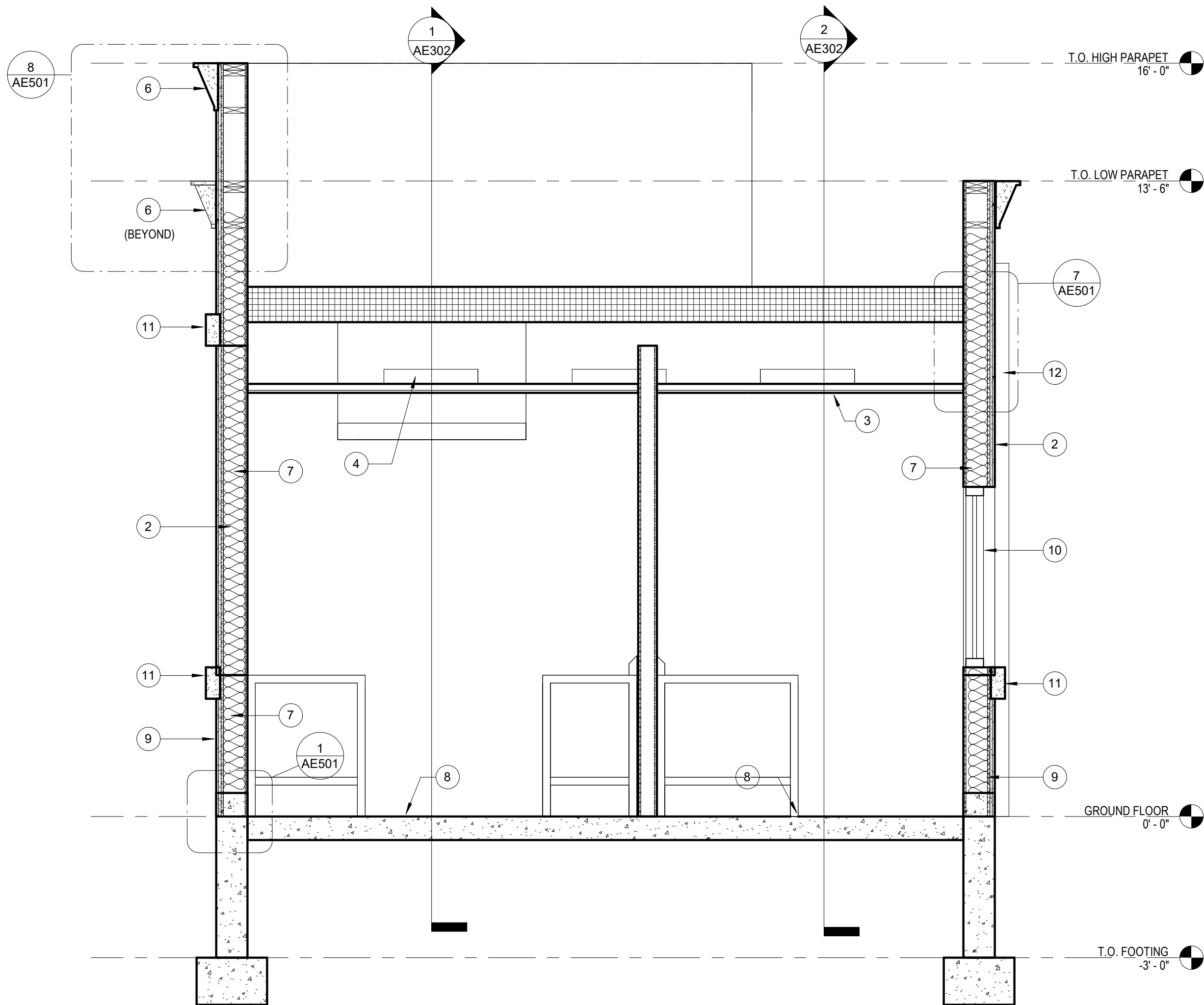
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CHECKED BY SDO  
SCALE 3/8" = 1'-0"

AE202

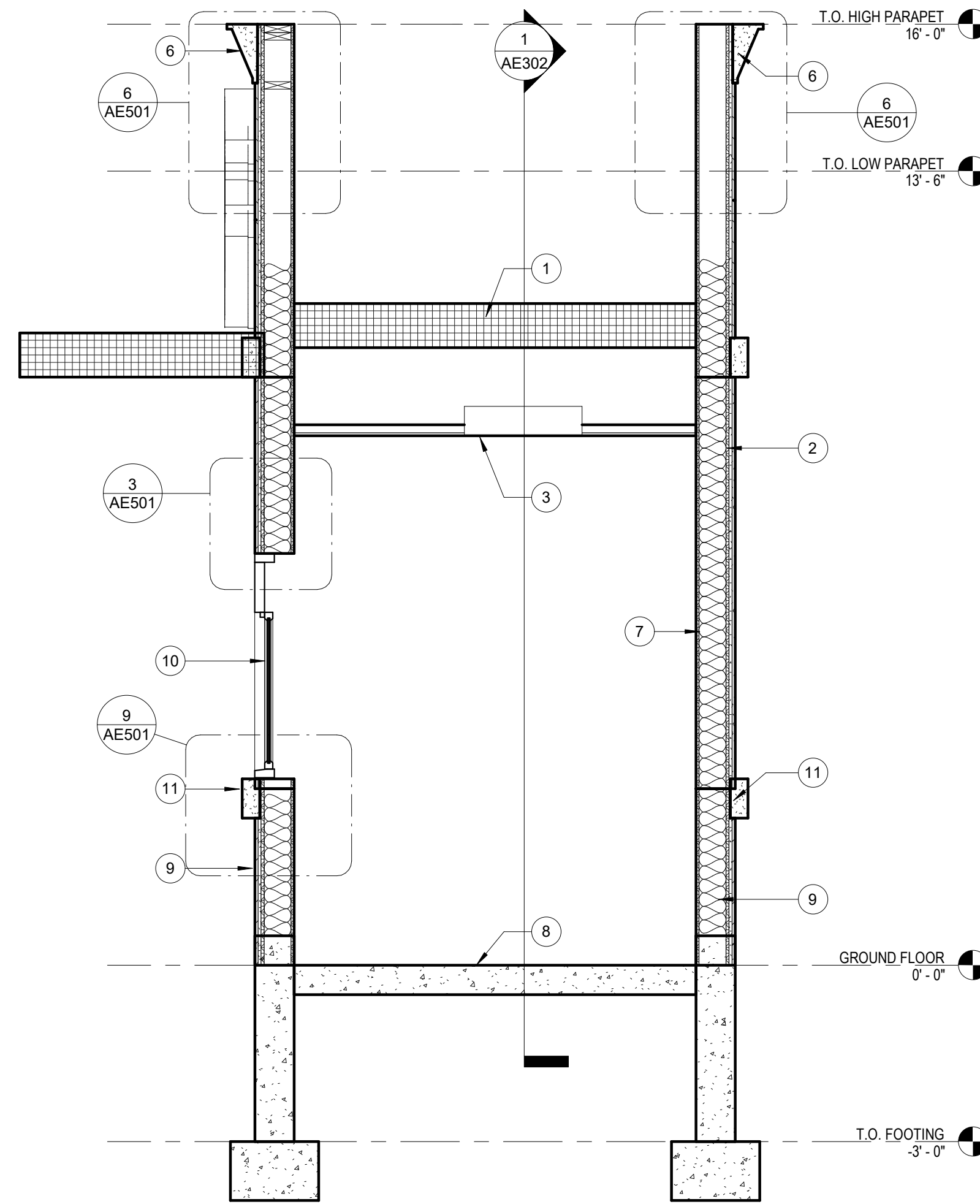




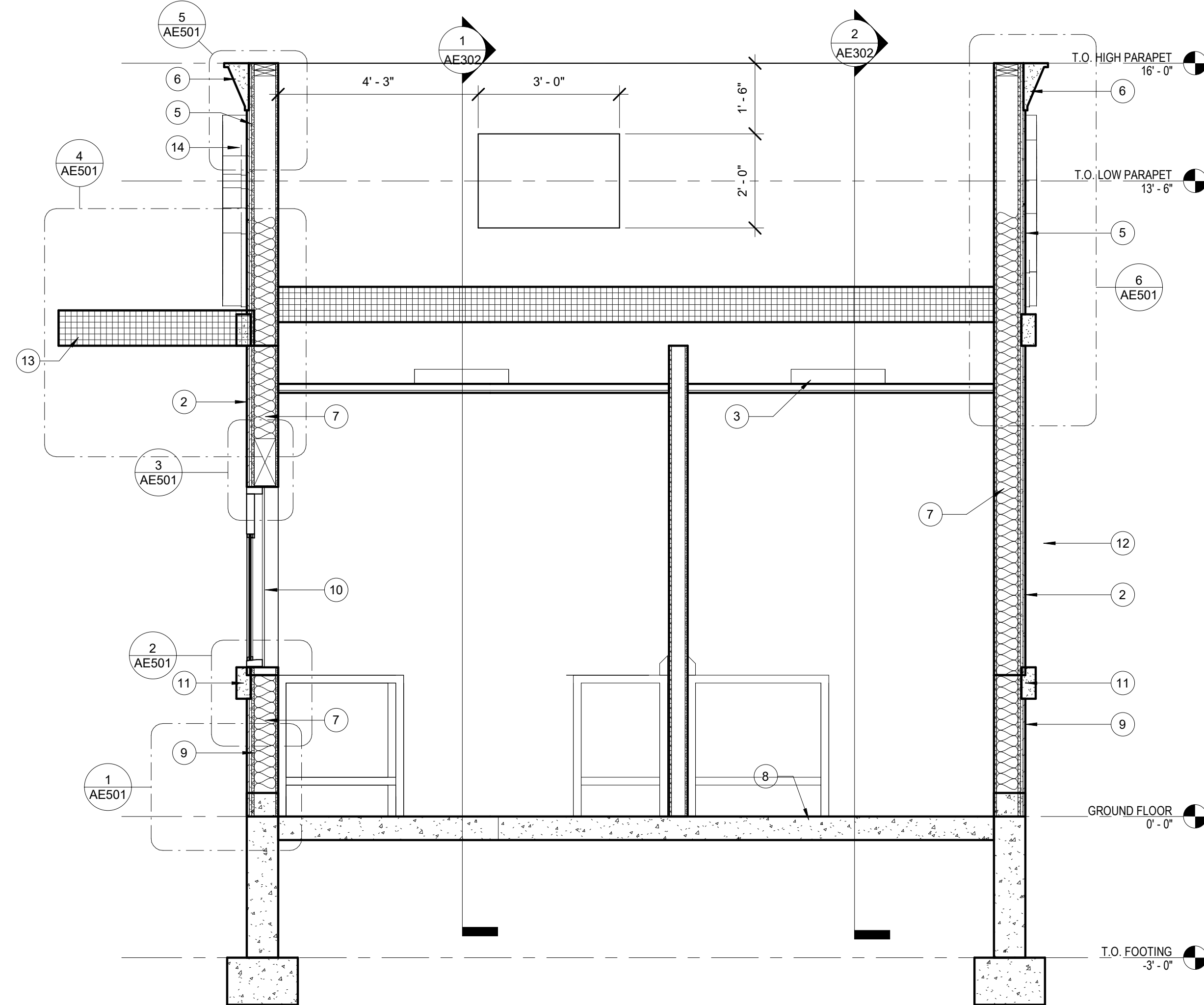
④ BUILDING SECTION  
1/2" = 1'-0"



② BUILDING SECTION  
1/2" = 1'-0"



③ BUILDING SECTION  
1/2" = 1'-0"



① BUILDING SECTION  
1/2" = 1'-0"

#### BUILDING SECTION KEYNOTES

- 1 ROOF ASSEMBLY
- 2 STUCCO
- 3 SCHEDULED CEILING, REF: RCP.
- 4 PROVIDE RACEWAY INSIDE OF CEILING FRAMING FOR MINI SPLIT LINE SETS.
- 5 FIBER CEMENT PANELS PER ELEVATIONS
- 6 CORNICE PER ELEVATIONS
- 7 SCHEDULED PERIMETER WALL WITH INSULATION. SEE COMCHECK.
- 8 SCHEDULED FLOOR FINISH OVER SLAB
- 9 THIN BRICK
- 10 WINDOW AS SCHEDULED
- 11 STONE WAINSCOT
- 12 DOWNSPOUT
- 13 EXTERIOR CANOPY PER ELEVATIONS
- 14 EXTERIOR SIGNAGE PER ELEVATIONS
- 15 DRAINAGE OPENING, LOCATE OVER VALLEY, REF: DETAIL



SWIG - LEE'S SUMMIT  
400 NW CHIPMAN RD, LEE'S SUMMIT, MO 64086



OAG

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

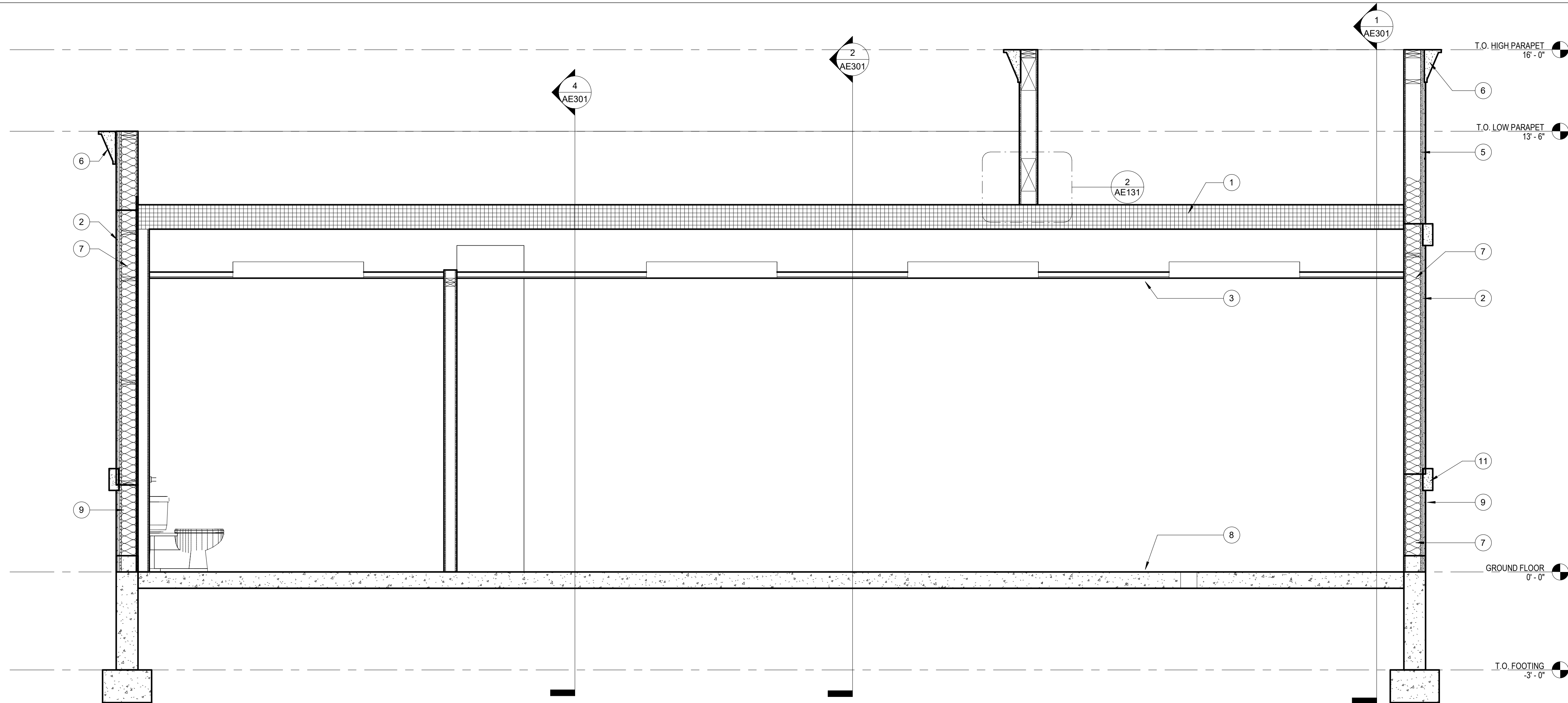
REVISION SCHEDULE		
No.	Description	Date

SHEET NAME  
**BUILDING SECTIONS**

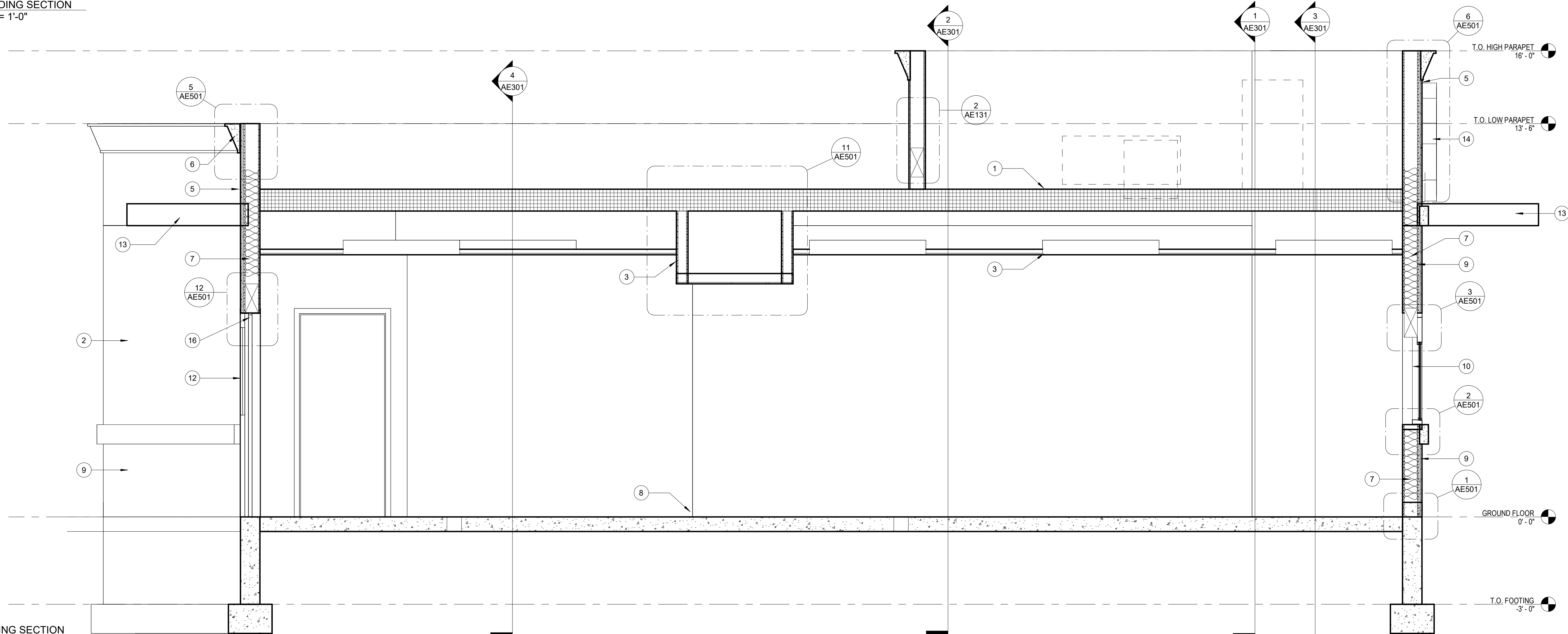
PROJECT NUMBER 2102  
DATE 06/16/2023  
DRAWN BY PJS  
CHECKED BY SDO  
SCALE 1/2" = 1'-0"

AE301





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



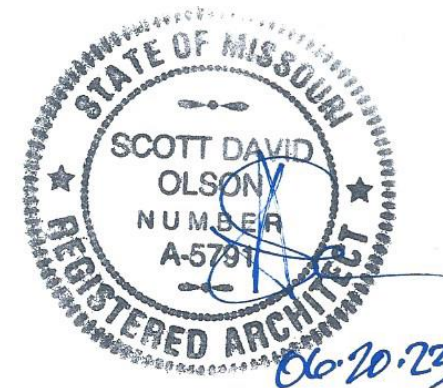
1 BUILDING SECTION  
1/2" = 1'-0"

#### BUILDING SECTION KEYNOTES

- 1 ROOF ASSEMBLY
- 2 STUCCO
- 3 SCHEDULED CEILING, REF. RCP.
- 4 PROVIDE RACEWAY INSIDE OF CEILING FRAMING FOR MINI SPLIT LINE SETS
- 5 FIBER CEMENT PANELS PER ELEVATIONS
- 6 CORNICE PER ELEVATIONS
- 7 SCHEDULED PERIMETER WALL WITH INSULATION, SEE COMCHECK
- 8 SCHEDULED FLOOR FINISH OVER SLAB
- 9 THIN BRICK
- 10 WINDOW AS SCHEDULED
- 11 STONE WAINSCOT
- 12 DOWNSPOUT
- 13 EXTERIOR CANOPY PER ELEVATIONS
- 14 EXTERIOR SIGNAGE PER ELEVATIONS
- 15 DRAINAGE OPENING, LOCATE OVER VALLEY, REF. DETAIL



SWIG - LEE'S SUMMIT  
400 NW CHIPMAN RD, LEE'S SUMMIT, MO 64086



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OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

#### REVISION SCHEDULE

No.	Description	Date

#### SHEET NAME

BUILDING SECTIONS

PROJECT NUMBER

2102

DATE

06/16/2023

DRAWN BY

PJS

CHECKED BY

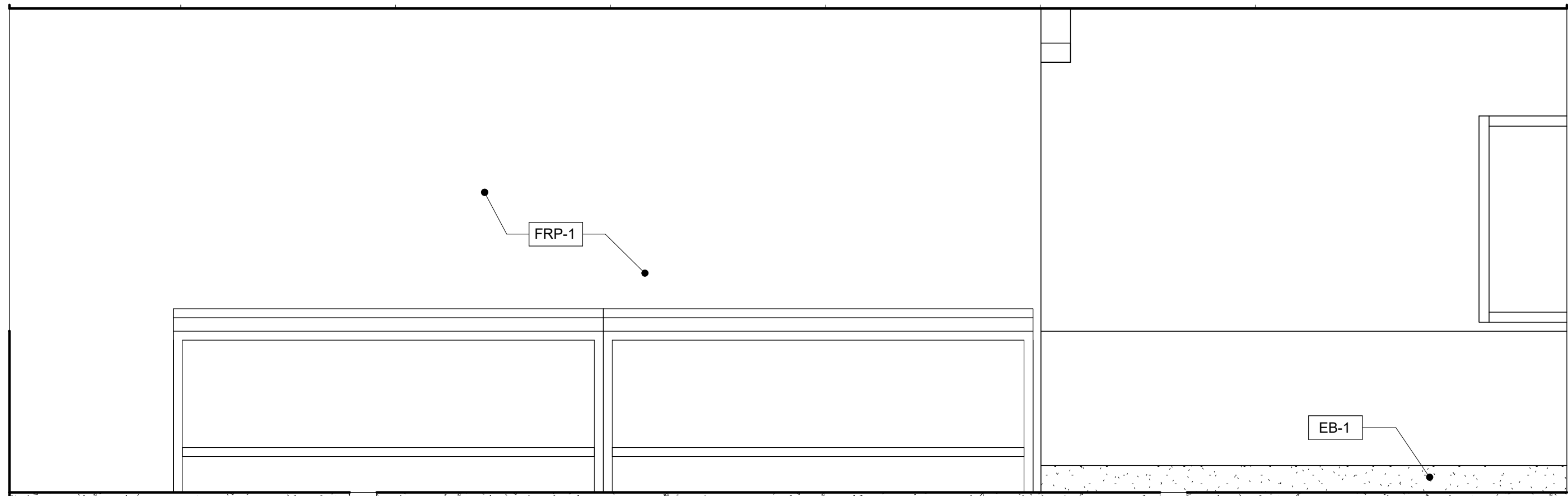
SDO

SCALE

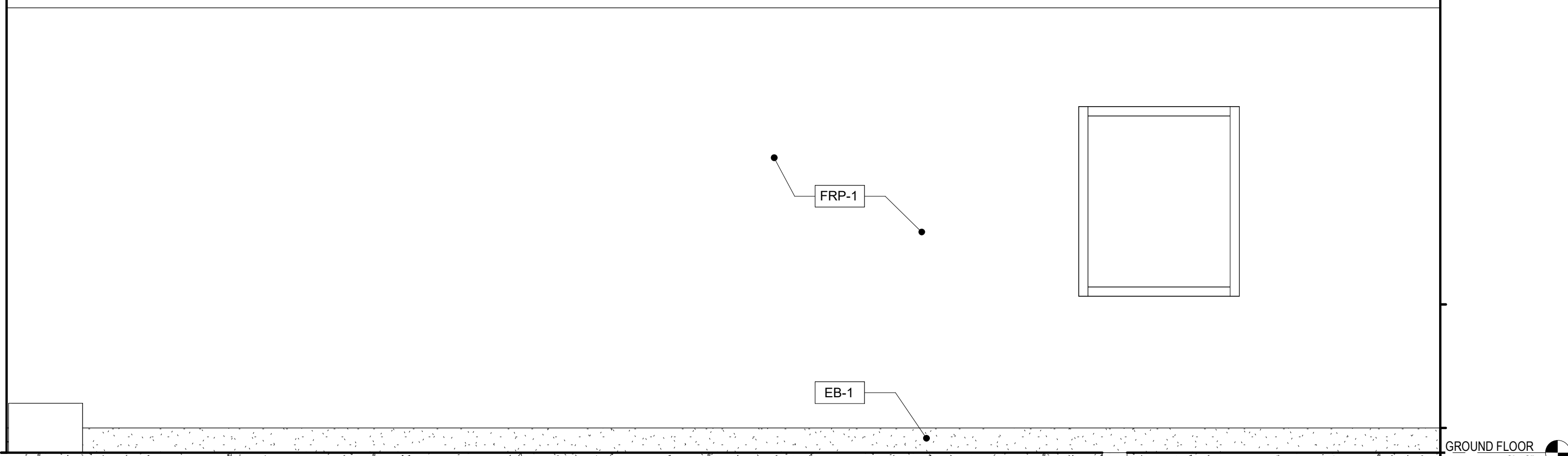
1/2" = 1'-0"

AE302

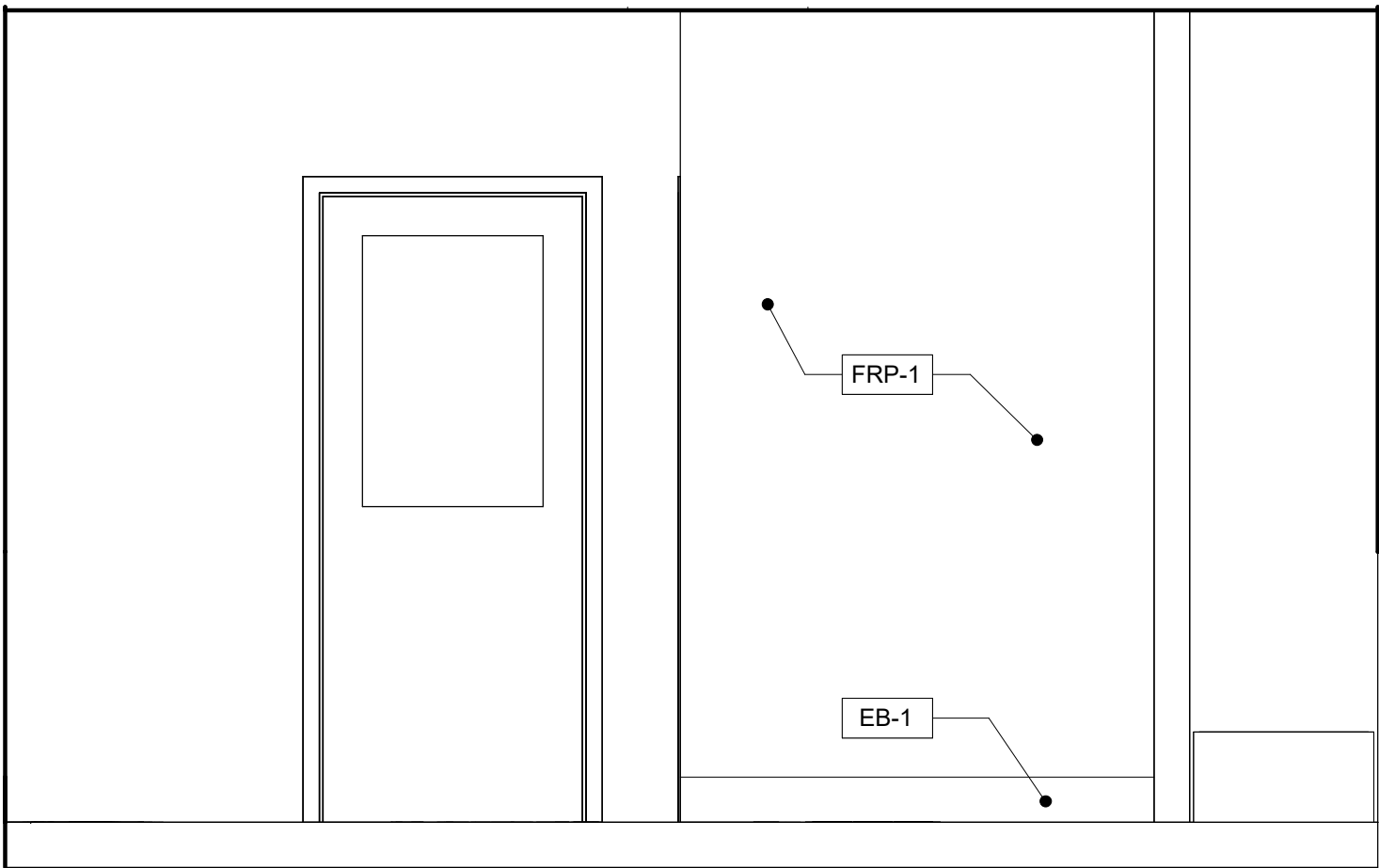




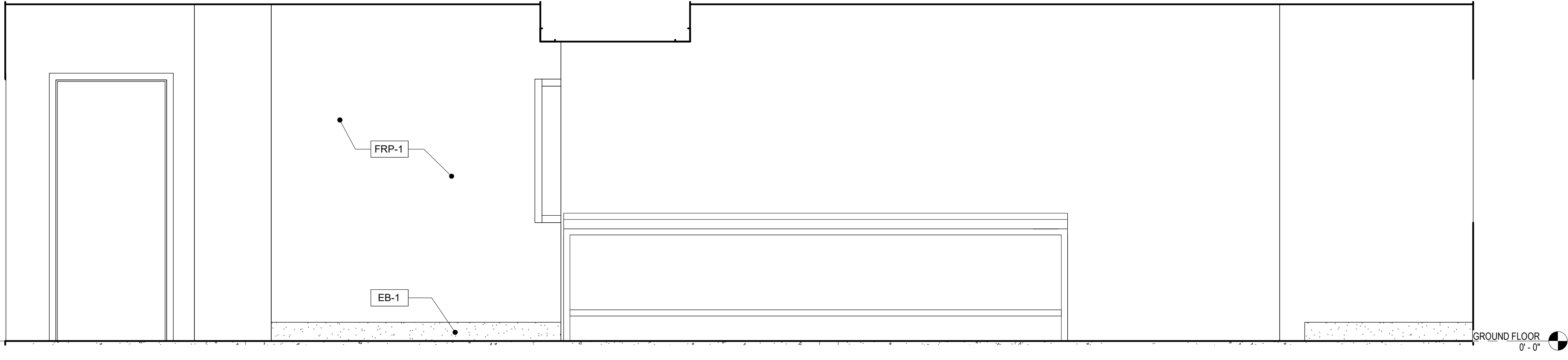
7 ELEVATION AT SHELVING  
1/2" = 1'-0"



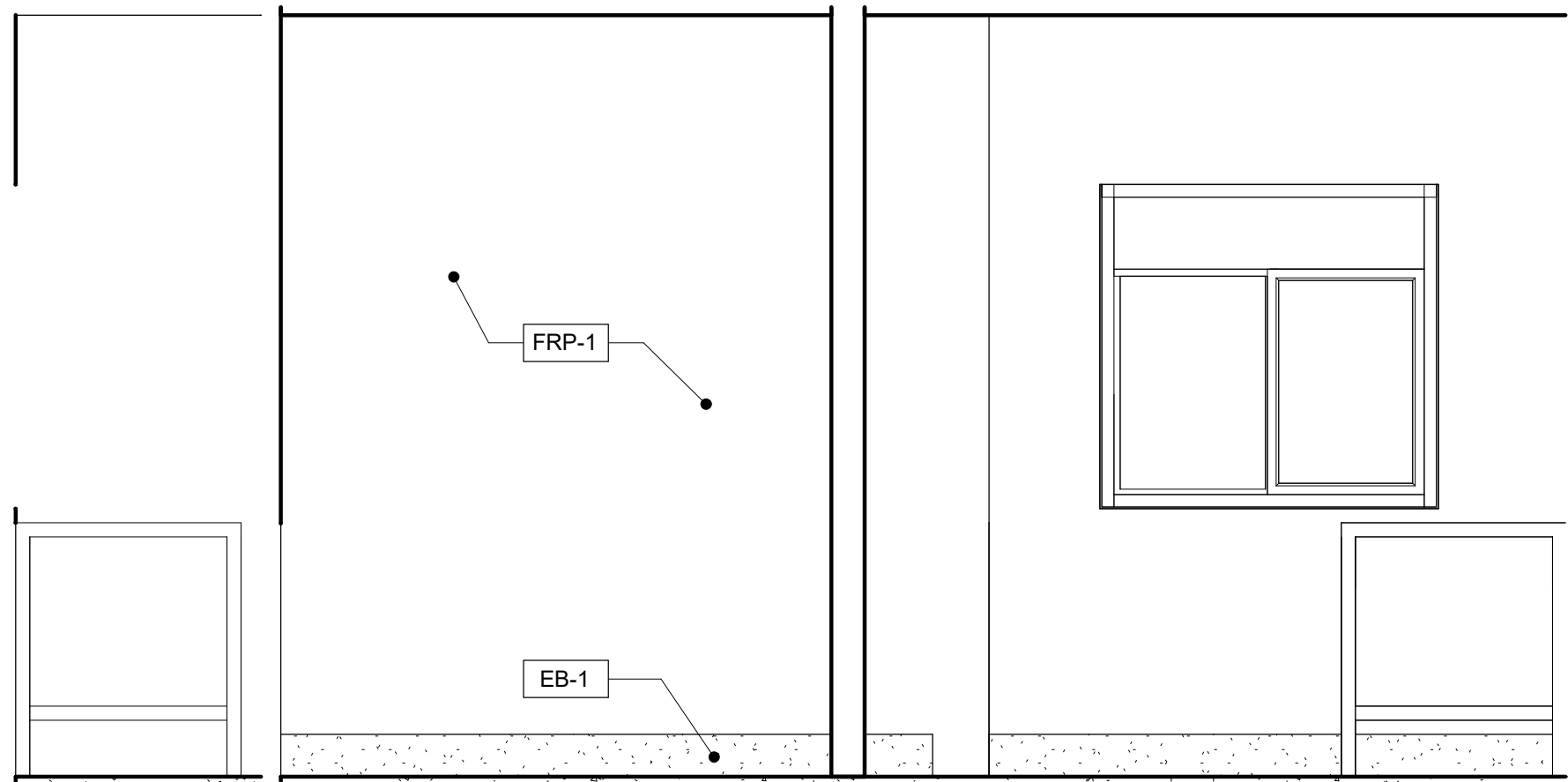
6 ELEVATION AT MOP SINK  
1/2" = 1'-0"



5 ELEVATION AT REAR EXIT  
1/2" = 1'-0"

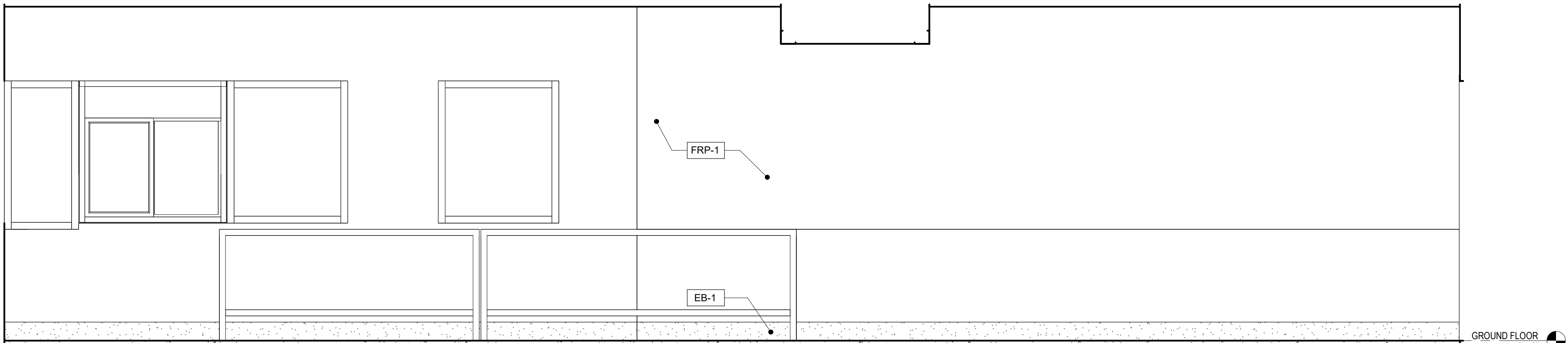


4 ELEVATION AT SINKS AND ICE BIN  
1/2" = 1'-0"



3 CAB ELEV  
1/2" = 1'-0"

2 ELEVATION AT WALK-UP  
1/2" = 1'-0"



1 ELEVATION AT DRIVE-UP  
1/2" = 1'-0"

#### INTERIOR ELEVATION GENERAL NOTES

- A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ASSEMBLIES PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
- B. COORDINATE INSTALLATIONS OF ALL AFTER CONTRACT ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.
- C. ALL RESTROOM ACCESSORY MOUNTING HEIGHTS AND CLEARANCES SHALL COMPLY WITH THE ACCESSIBILITY REQUIREMENTS OF THE LOCAL JURISDICTION.
- D. LAVATORY AND WATER CLOSET FITTINGS MUST BE OPERABLE WITH NO MORE THAN 5 POUNDS EFFORT, WITH USING ONE HAND, AND WITH SINGLE EFFORT WITH NO TWISTING OR GRASPING OF HARDWARE.
- E. WATER PIPING AND DRAIN PIPES UNDER LAVATORIES MUST BE INSULATED, ABRASIVE OR SHARP SURFACES NOT PERMITTED UNDER LAVATORIES.
- F. DIMENSIONS AND REQUIRED CLEARANCES ARE TO FACE OF FINISHED SURFACE.
- G. THE SURFACE SLOPE OF ALL FLOORING SHALL NOT EXCEED 2% IN ANY DIRECTION.

#### INTERIOR FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
FRP-1	FRP (WHITE)	WHITE, SMOOTH, 10' HIGH SHEETS, SEE DETAIL 1/A501
P-1	PAINT (WHITE)	HIGH PERFORMANCE EPOXY
S-1	SS U-CHANNEL	FULL HEIGHT STAINLESS STEEL U-CHANNEL WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES
S-2	SS CORNER GUARD	FULL HEIGHT STAINLESS STEEL CORNER GUARD WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

#### BASE FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
EB-1	EPOXY BASE	6" HIGH BASE, MATCH FLOOR, SEE SPEC. SEE DETAIL 6/A631

#### COUNTERTOP / MILLWORK SCHEDULE

MARK	MATERIAL	DESCRIPTION
CT-1	SERVICE COUNTER	STAINLESS STEEL W/ BACKSPLASH
EB-1	MDF CABINET	WHITE MELAMINE FINISH

#### ACCESSORY SCHEDULE

MARK	DESCRIPTION
AC-1	ADA-COMPLIANT SOAP DISPENSER, SURFACE MOUNTED
AC-2	ADA-COMPLIANT TOILET PAPER DISPENSER, SURFACE MOUNTED
AC-3	ADA-COMPLIANT PAPER TOWEL DISPENSER, SURFACE MOUNTED
AC-4	ADA-COMPLIANT MIRROR, STAINLESS STEEL FRAME, 18x36, WALL MOUNTED
AC-5	ADA-COMPLIANT GRAB BARS AT TOILET, COORDINATE WITH DETAIL
AC-6	ADA-COMPLIANT SEAT COVER DISPENSER, SURFACE MOUNTED, BOBRICK MODEL B-221, STAINLESS STEEL

#### ACCESSORY LEGEND

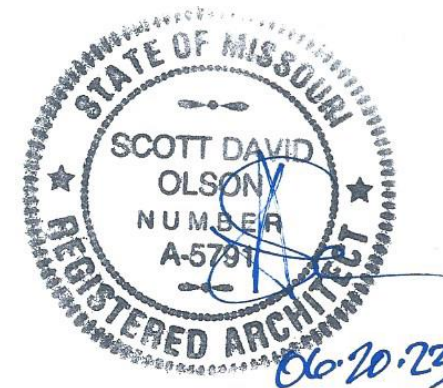
E-1	MATERIAL TYPE PER SCHEDULE
AC	ACCESSORY MARK PER SCHEDULE
##	EQUIPMENT PER SCHEDULE ON SHEET EQ-101

#### INTERIOR ELEVATION KEYNOTES

- 18" 1-SIDED CUSTOM SPLASH GUARD AT 3-COMP SINK
- 3-SIDED SPLASH GUARD AT HAND SINK
- MELAMINE APRON TO CONCEAL SINKS
- CORBEL BRACKET SUPPORT
- SHELF (CASH DRAWER)
- CARBONATOR COMPRESSORS
- TOE KICK
- MELAMINE FACE PANEL
- MELAMINE BACK PANEL
- OPEN SHELVING
- CABINET OPEN TO FLOOR
- CHEMICAL SET PROVIDED BY OWNER



SWIG - LEE'S SUMMIT  
400 NW CHIPMAN RD, LEE'S SUMMIT, MO 64086



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1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

#### REVISION SCHEDULE

No.	Description	Date

#### SHEET NAME

INTERIOR ELEVATIONS  
(KITCHEN)

PROJECT NUMBER 2102

DATE 06/16/2023

DRAWN BY PJS

CHECKED BY SDO

SCALE As indicated

AE401





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400 NW CHIPMAN RD, LEE'S SUMMIT, MO 64086



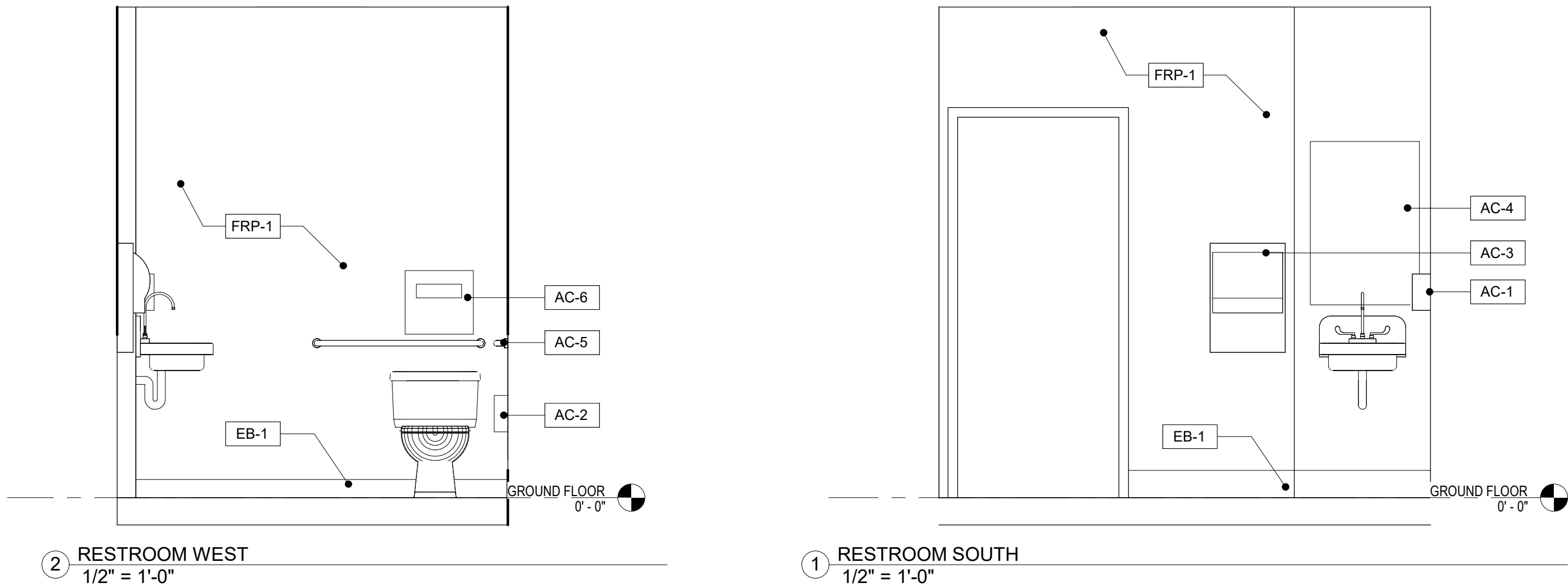
OAG

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1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME	
INTERIOR ELEVATIONS (RESTROOM)	
PROJECT NUMBER	2102
DATE	06/16/2023
DRAWN BY	PJS
CHECKED BY	SDO
SCALE	As indicated

AE402



INTERIOR ELEVATION GENERAL NOTES

- A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ASSEMBLIES PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
- B. COORDINATE INSTALLATIONS OF ALL AFTER CONTRACT ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.
- C. ALL RESTROOM ACCESSORY MOUNTING HEIGHTS AND CLEARANCES SHALL COMPLY WITH THE ACCESSIBILITY REQUIREMENTS OF THE LOCAL JURISDICTION.
- D. LAVATORY AND WATER CLOSET FITTINGS MUST BE OPERABLE WITH NO MORE THAN 5 POUNDS EFFORT, WITH USING ONE HAND, AND WITH SINGLE EFFORT WITH NO TWISTING OR GRASPING OF HARDWARE.
- E. WATER PIPING AND DRAIN PIPES UNDER LAVATORIES MUST BE INSULATED. ABRASIVE OR SHARP SURFACES NOT PERMITTED UNDER LAVATORIES.
- F. DIMENSIONS AND REQUIRED CLEARANCES ARE TO FACE OF FINISHED SURFACE.
- G. THE SURFACE SLOPE OF ALL FLOORING SHALL NOT EXCEED 2% IN ANY DIRECTION.

INTERIOR FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
FRP-1	FRP (WHITE)	WHITE, SMOOTH, 10' HIGH SHEETS, SEE DETAIL 1/A501
P-1	PAINT (WHITE)	HIGH PERFORMANCE EPOXY
S-1	SS U-CHANNEL	FULL HEIGHT STAINLESS STEEL U-CHANNEL WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES
S-2	SS CORNER GUARD	FULL HEIGHT STAINLESS STEEL CORNER GUARD WITH 2" WING SIZE, 16 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

BASE FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
EB-1	EPOXY BASE	6" HIGH BASE, MATCH FLOOR, SEE SPEC. SEE DETAIL 6/A631

ACCESSORY SCHEDULE

MARK	DESCRIPTION
AC-1	ADA-COMPLIANT SOAP DISPENSER, SURFACE MOUNTED
AC-2	ADA-COMPLIANT TOILET PAPER DISPENSER, SURFACE MOUNTED
AC-3	ADA-COMPLIANT PAPER TOWEL DISPENSER, SURFACE MOUNTED
AC-4	ADA-COMPLIANT MIRROR, STAINLESS STEEL FRAME, 18x36, WALL MOUNTED
AC-5	ADA-COMPLIANT GRAB BARS AT TOILET, COORDINATE WITH DETAIL
AC-6	ADA-COMPLIANT SEAT COVER DISPENSER, SURFACE MOUNTED, BOBRICK MODEL B-221, STAINLESS STEEL

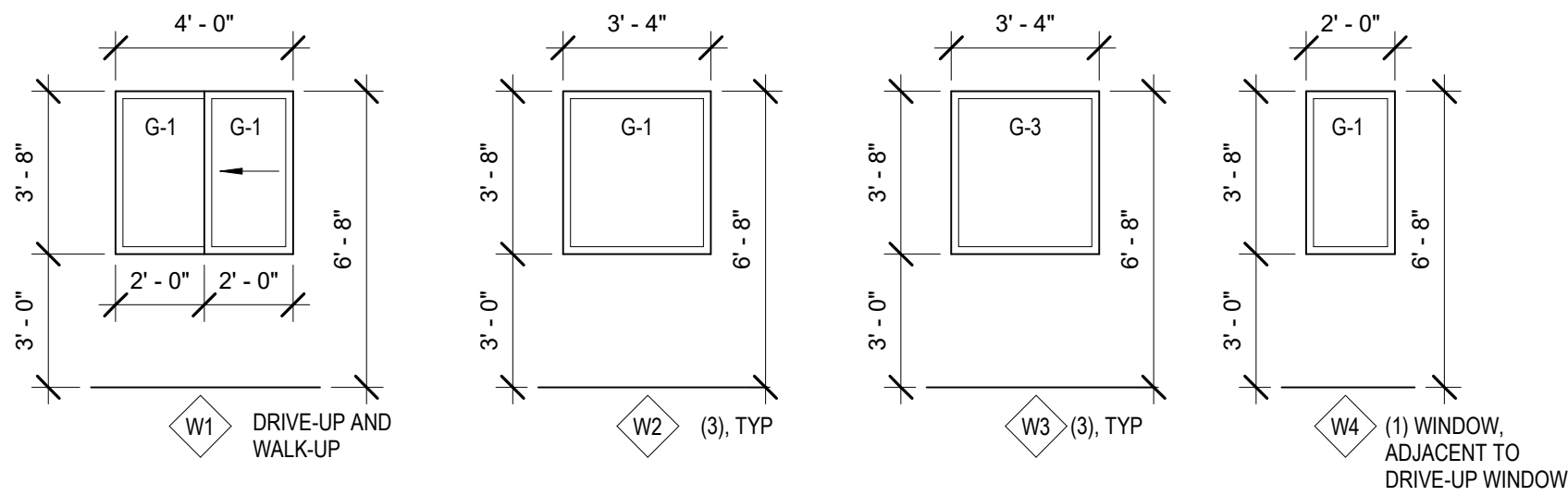
ACCESSORY LEGEND

E-1	MATERIAL TYPE PER SCHEDULE
AC	ACCESSORY MARK PER SCHEDULE
##	EQUIPMENT PER SCHEDULE ON SHEET EQ-101

INTERIOR ELEVATION KEYNOTES

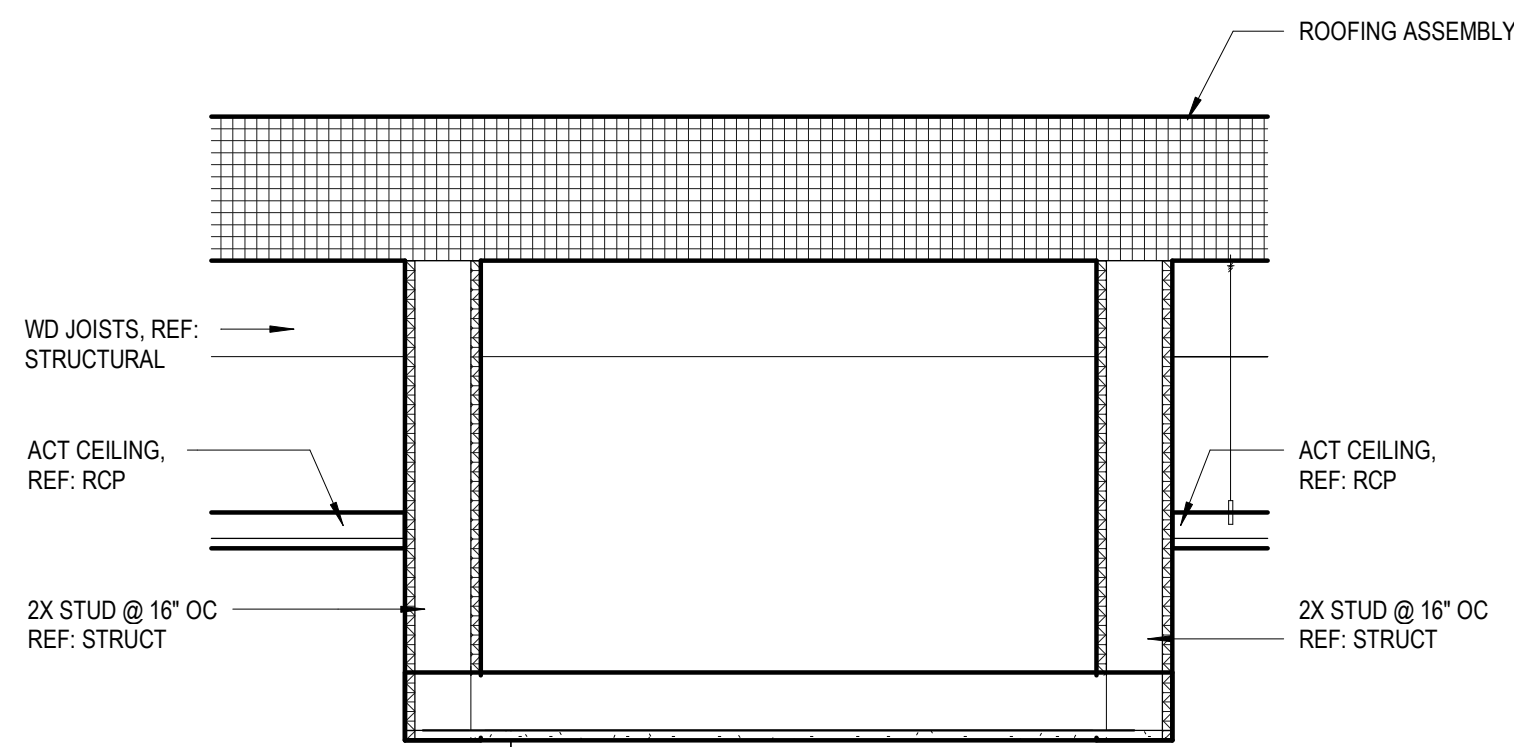
- 18" 1-SIDED CUSTOM SPLASH GUARD AT 3-COMP SINK
- 3-SIDED SPLASH GUARD AT HAND SINK
- MELAMINE APRON TO CONCEAL SINKS
- CORBEL BRACKET SUPPORT
- SHELF (CASH DRAWER)
- CARBONATOR COMPRESSORS
- TOE KICK
- MELAMINE FACE PANEL
- MELAMINE BACK PANEL
- OPEN SHELVING
- CABINET OPEN TO FLOOR
- CHEMICAL SET PROVIDED BY OWNER



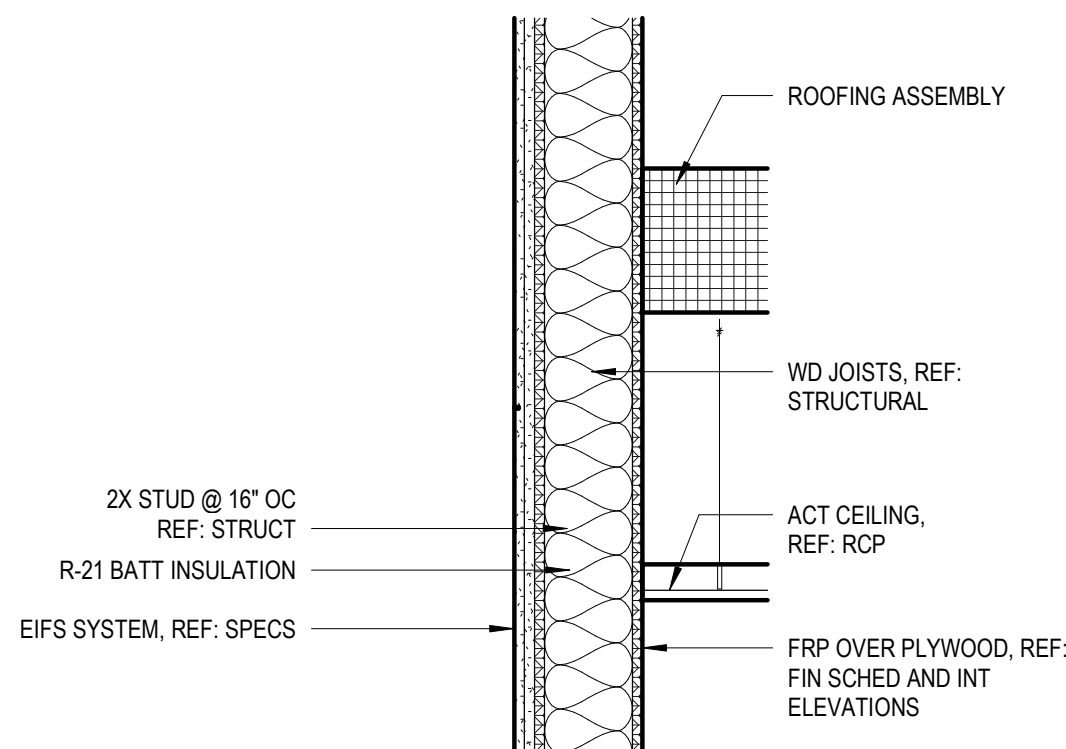


GLAZING TYPES  
G-1: ANNEALED CLEAR GLASS  
G-2: TEMPERED GLASS (INT. DOOR)  
G-3: SPANDREL GLASS

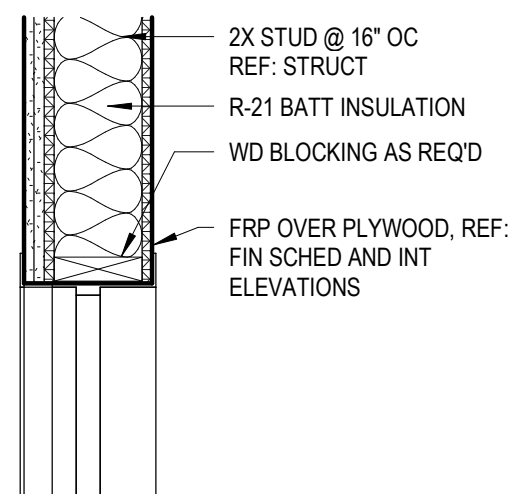
12 WINDOW TYPES  
1/4" = 1'-0"



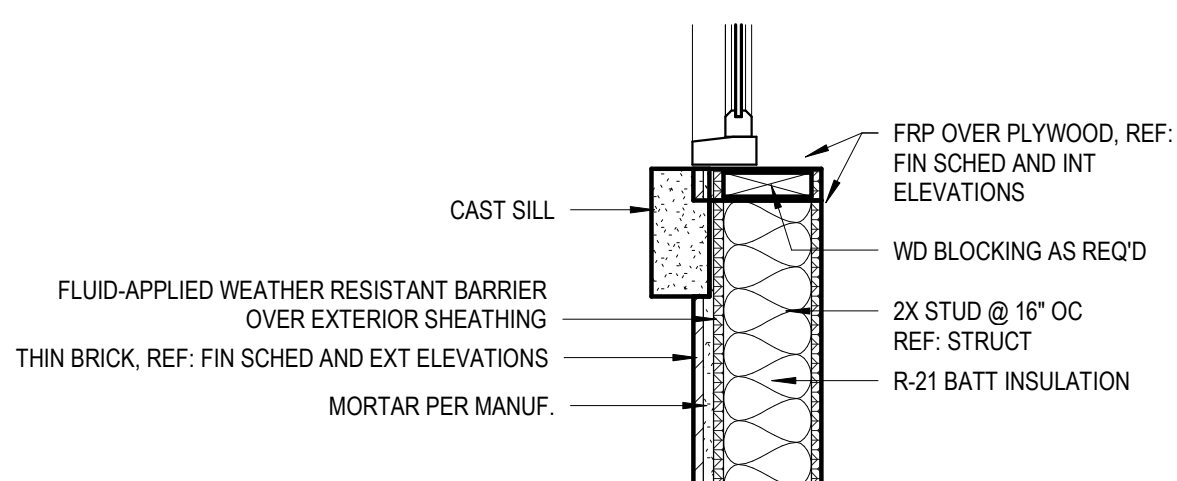
11 SPLIT UNIT DETAIL  
1" = 1'-0"



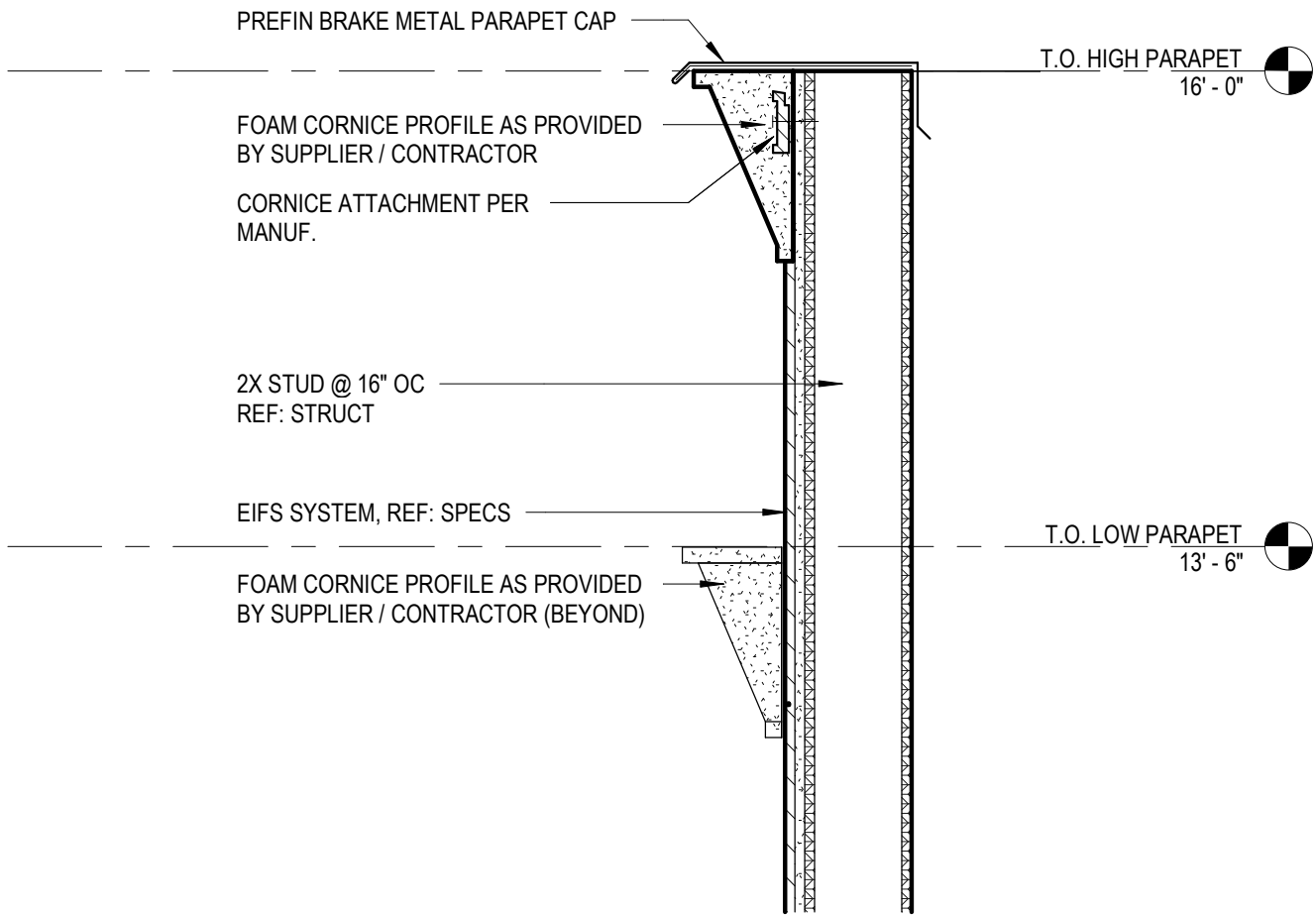
10 LOW ROOF WALL JOIN OPP  
1" = 1'-0"



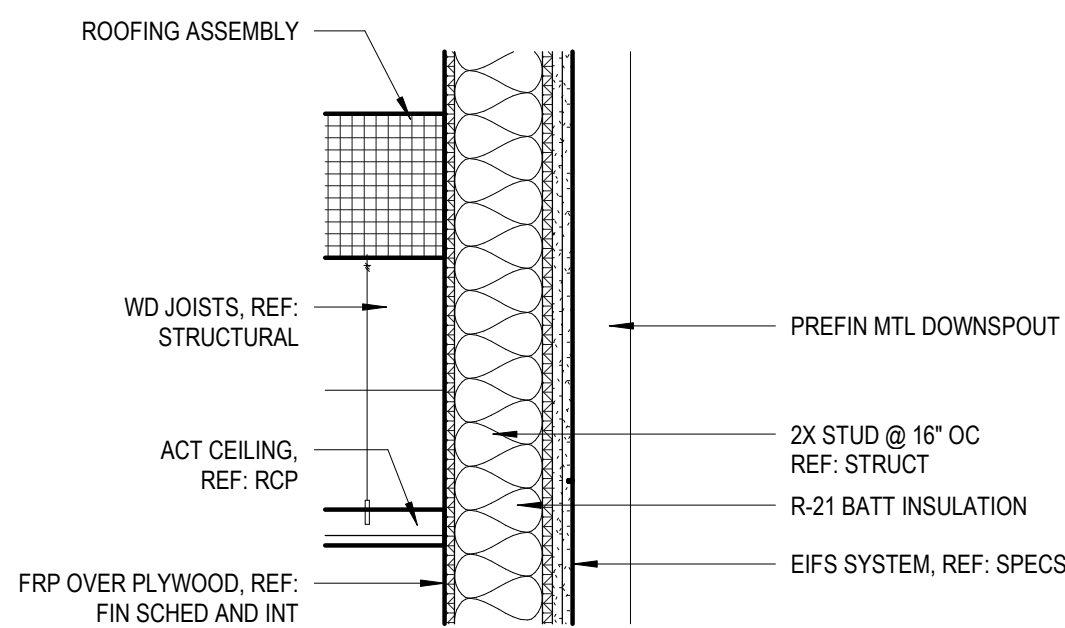
12 DOOR HEAD DETAIL  
1" = 1'-0"



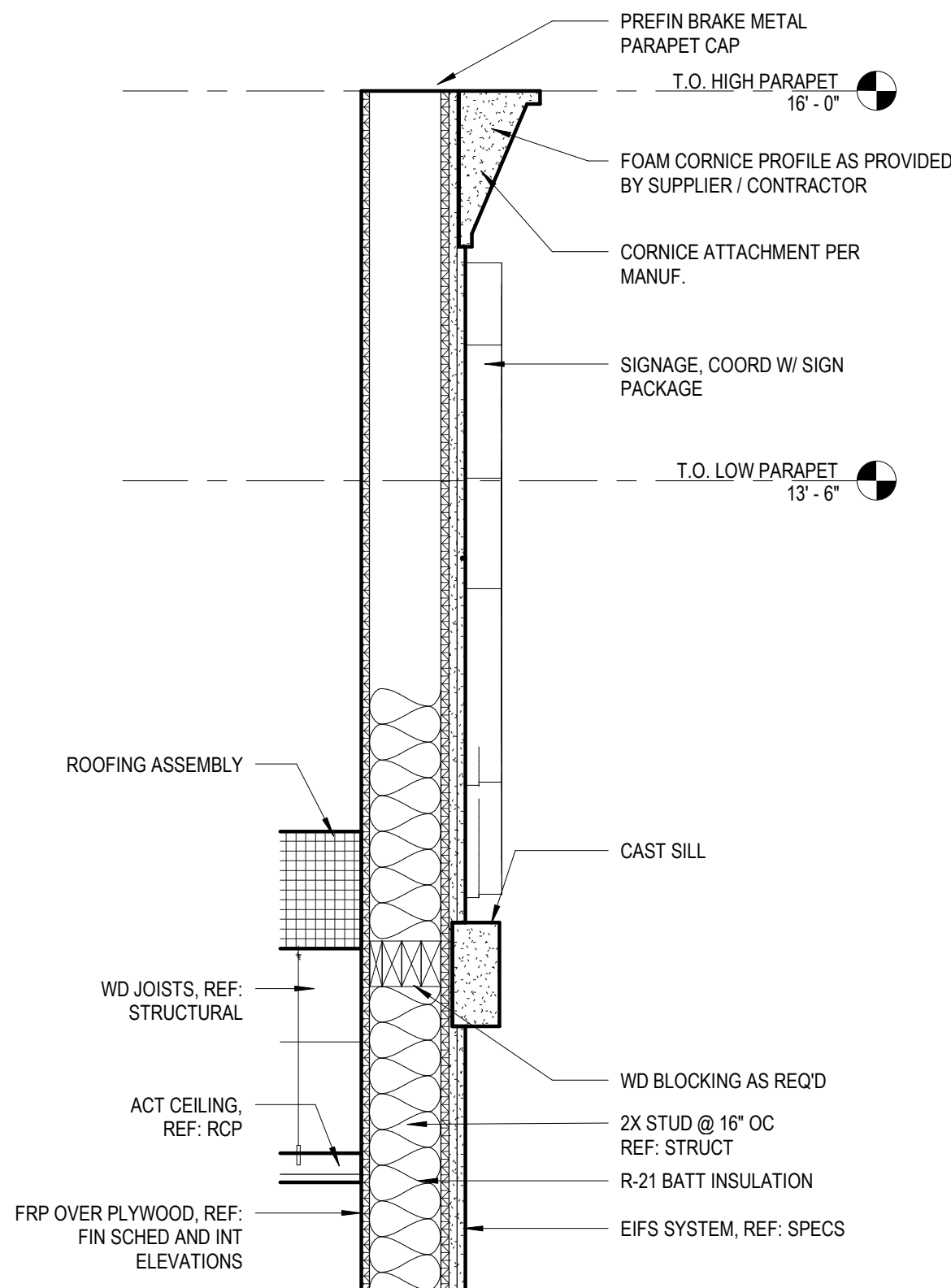
9 EXT WINDOW SILL - DRIVE THRU 2  
1" = 1'-0"



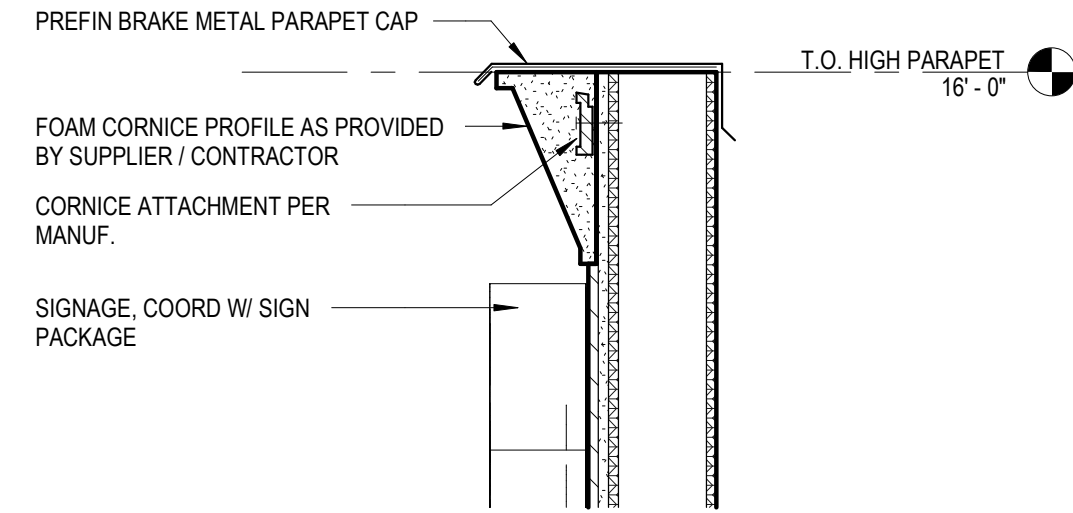
8 CORNICE DETAILS  
1" = 1'-0"



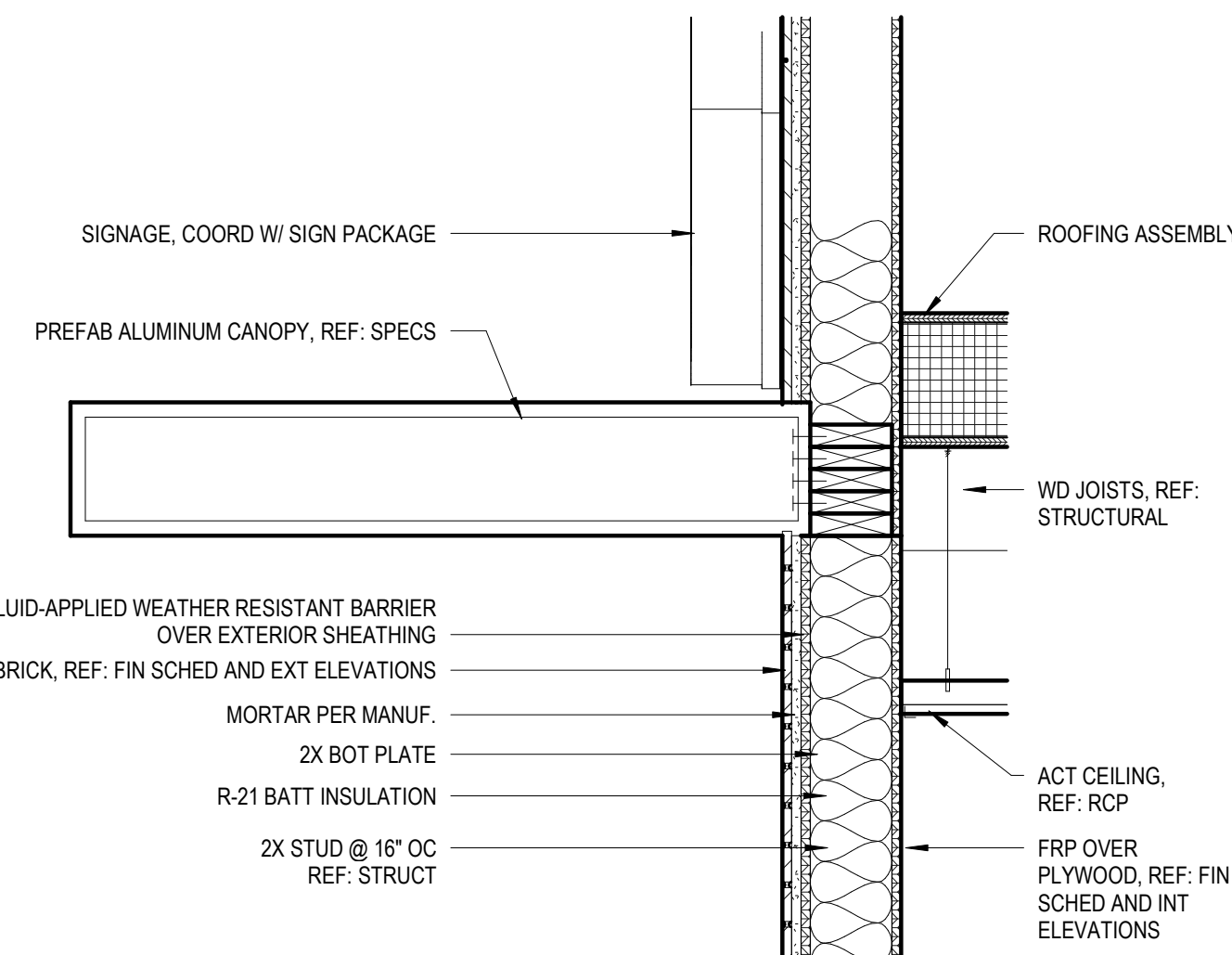
7 LOW ROOF WALL JOIN  
1" = 1'-0"



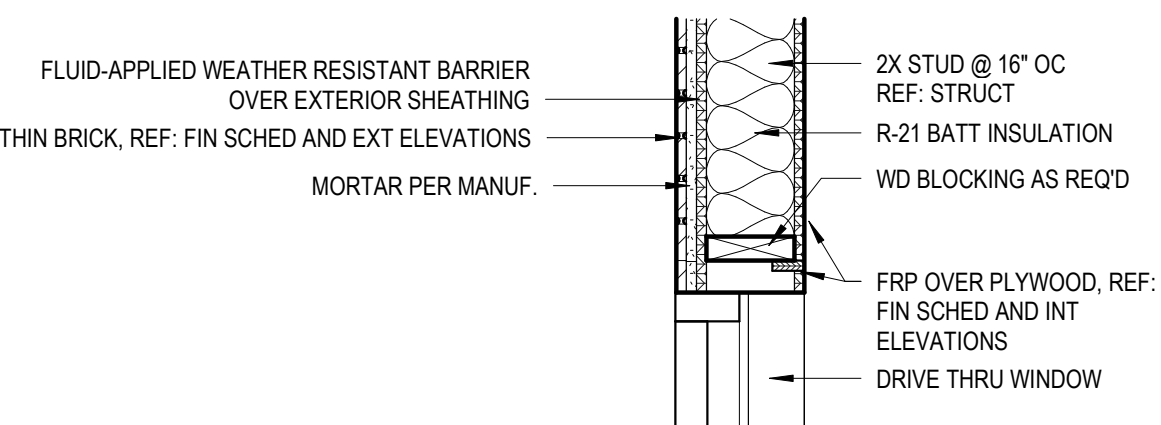
6 CORNICE AND SIGNAGE DETAIL  
1" = 1'-0"



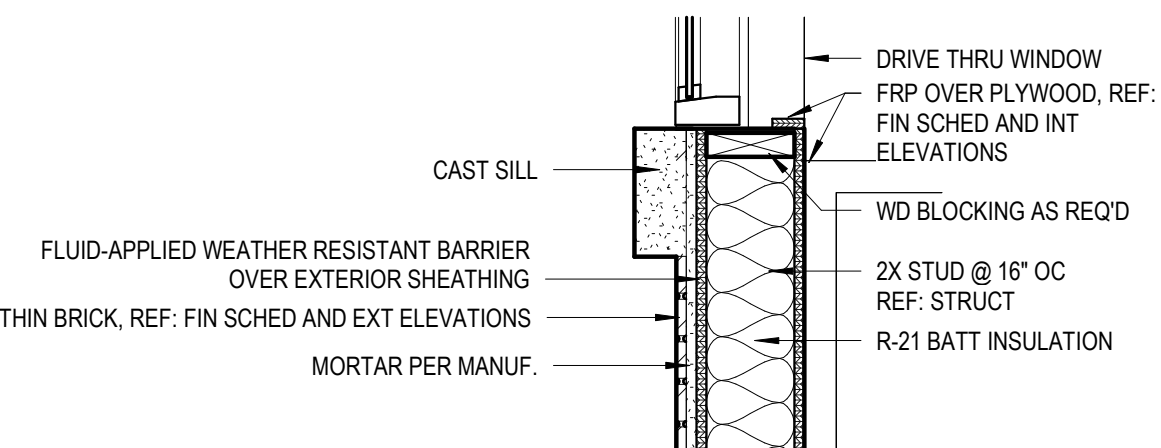
5 TOP OF WALL CORNICE DETAIL  
1" = 1'-0"



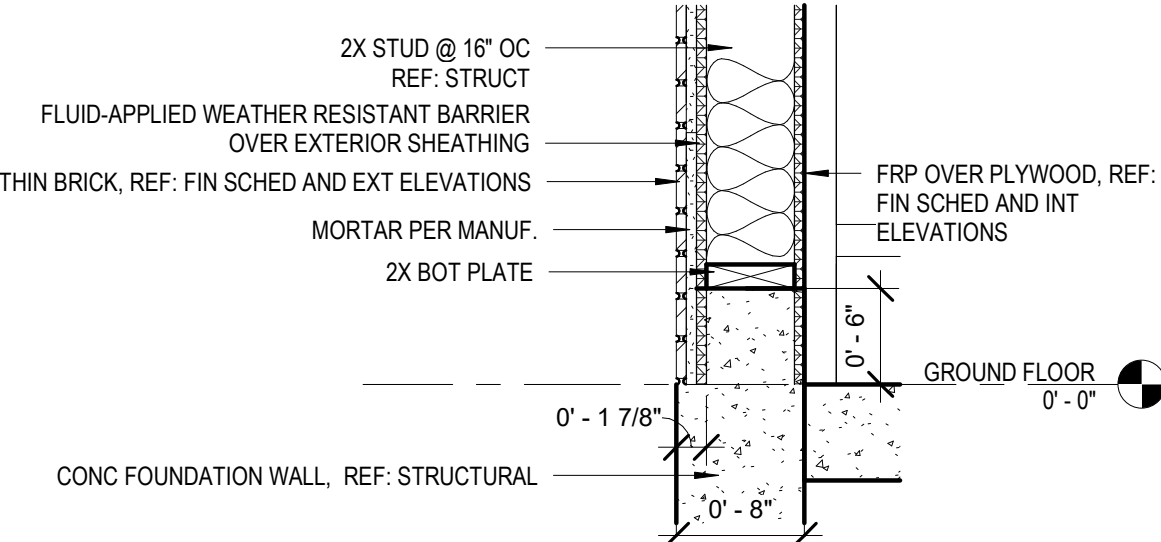
4 CANOPY DETAIL  
1" = 1'-0"



3 WINDOW HEAD - DRIVE THRU  
1" = 1'-0"



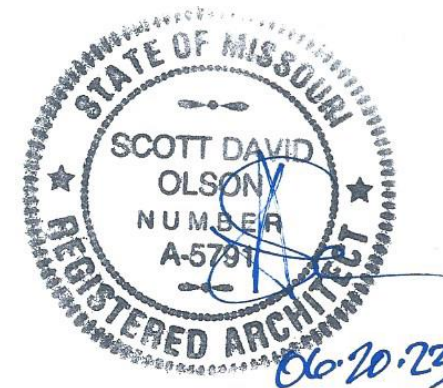
2 EXT WINDOW SILL - DRIVE THRU  
1" = 1'-0"



1 FOUNDATION DETAIL  
1" = 1'-0"



SWIG - LEE'S SUMMIT  
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OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

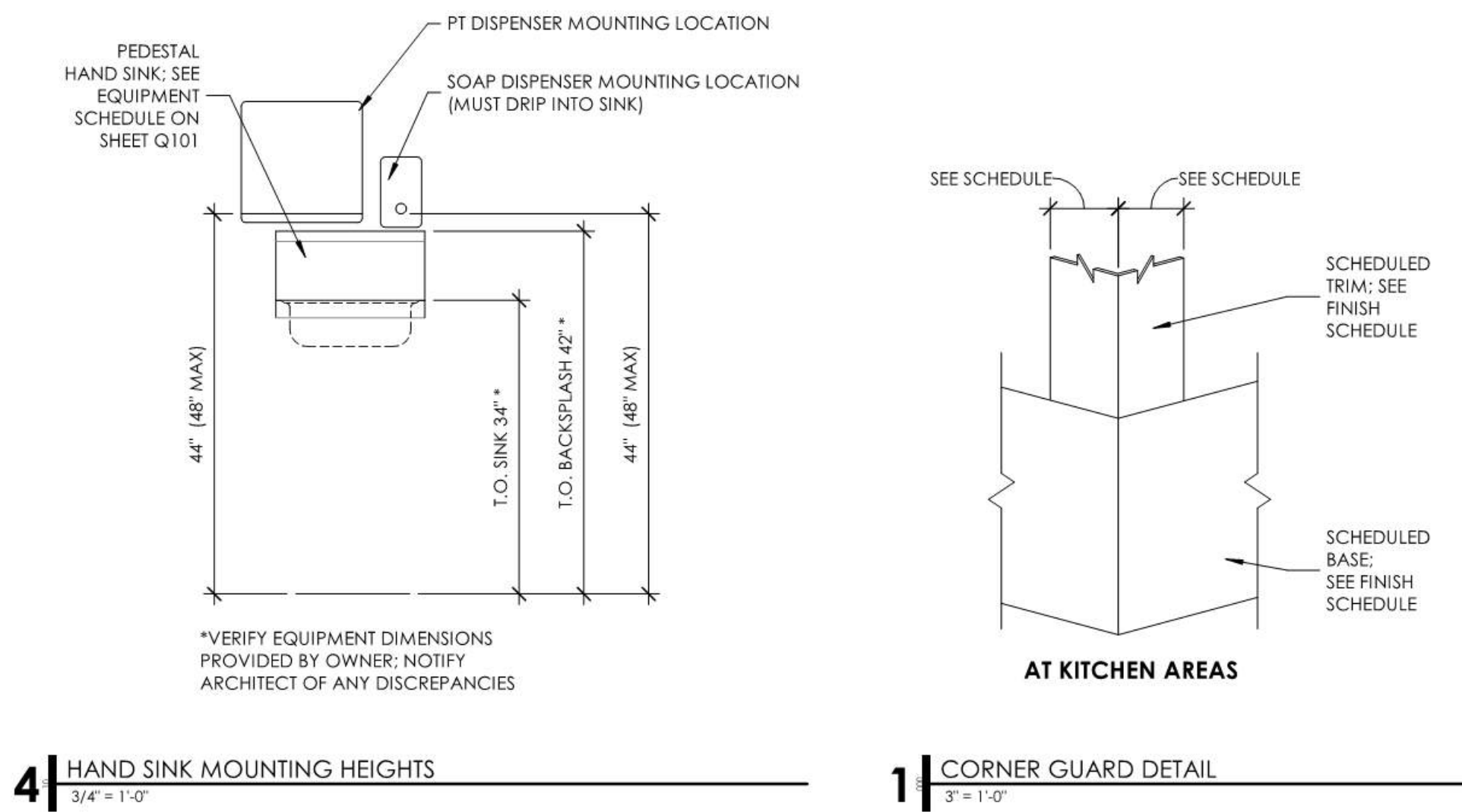
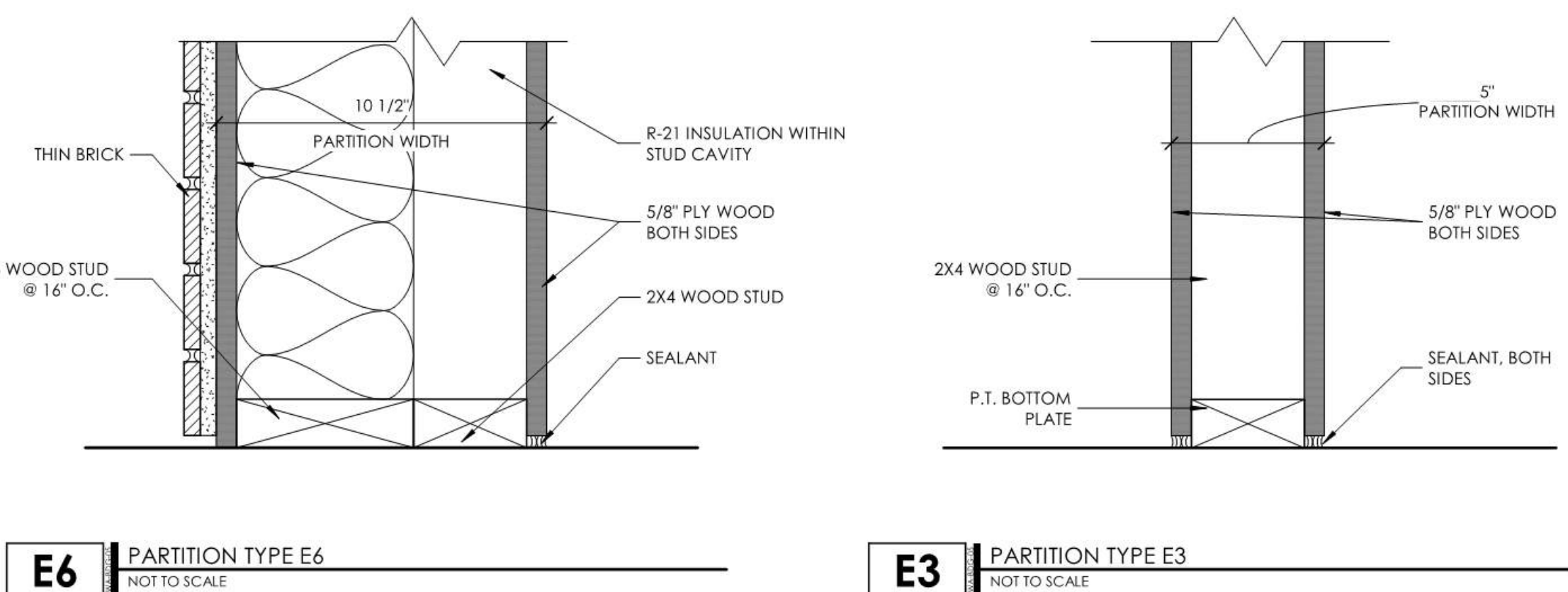
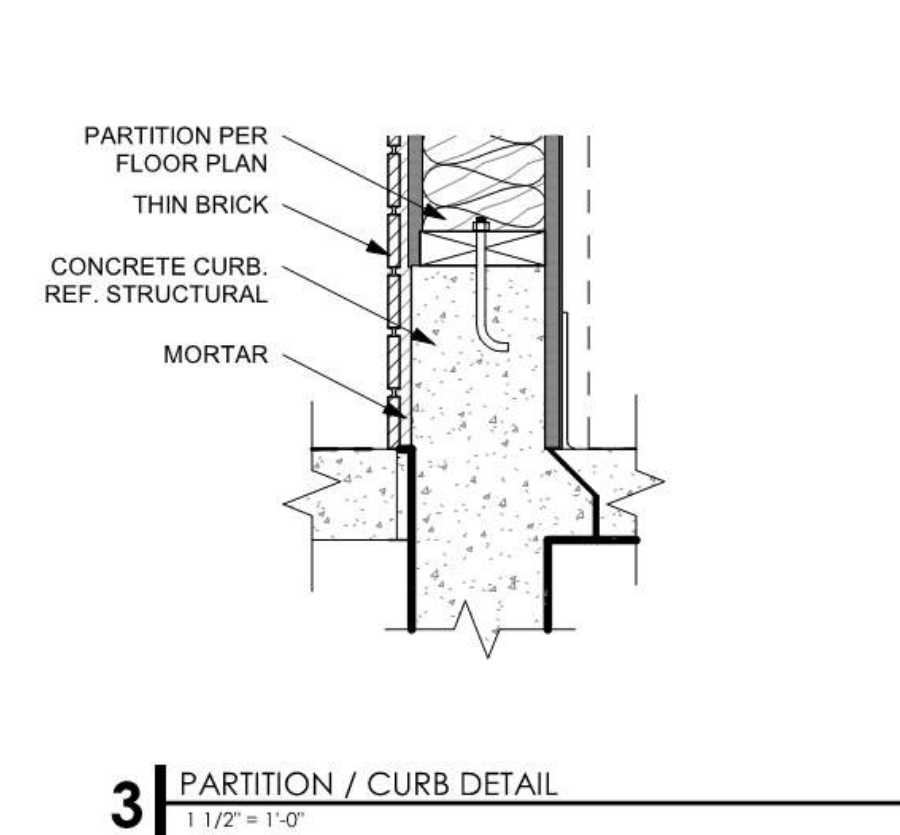
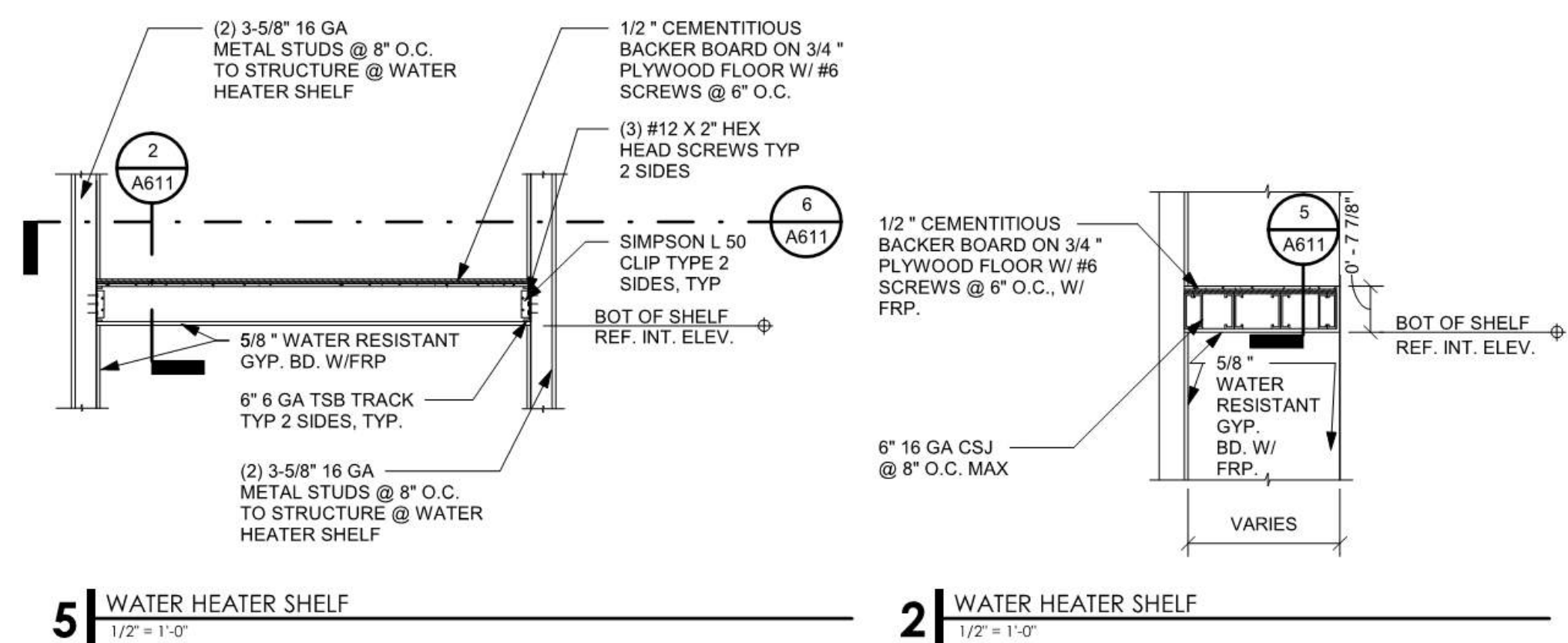
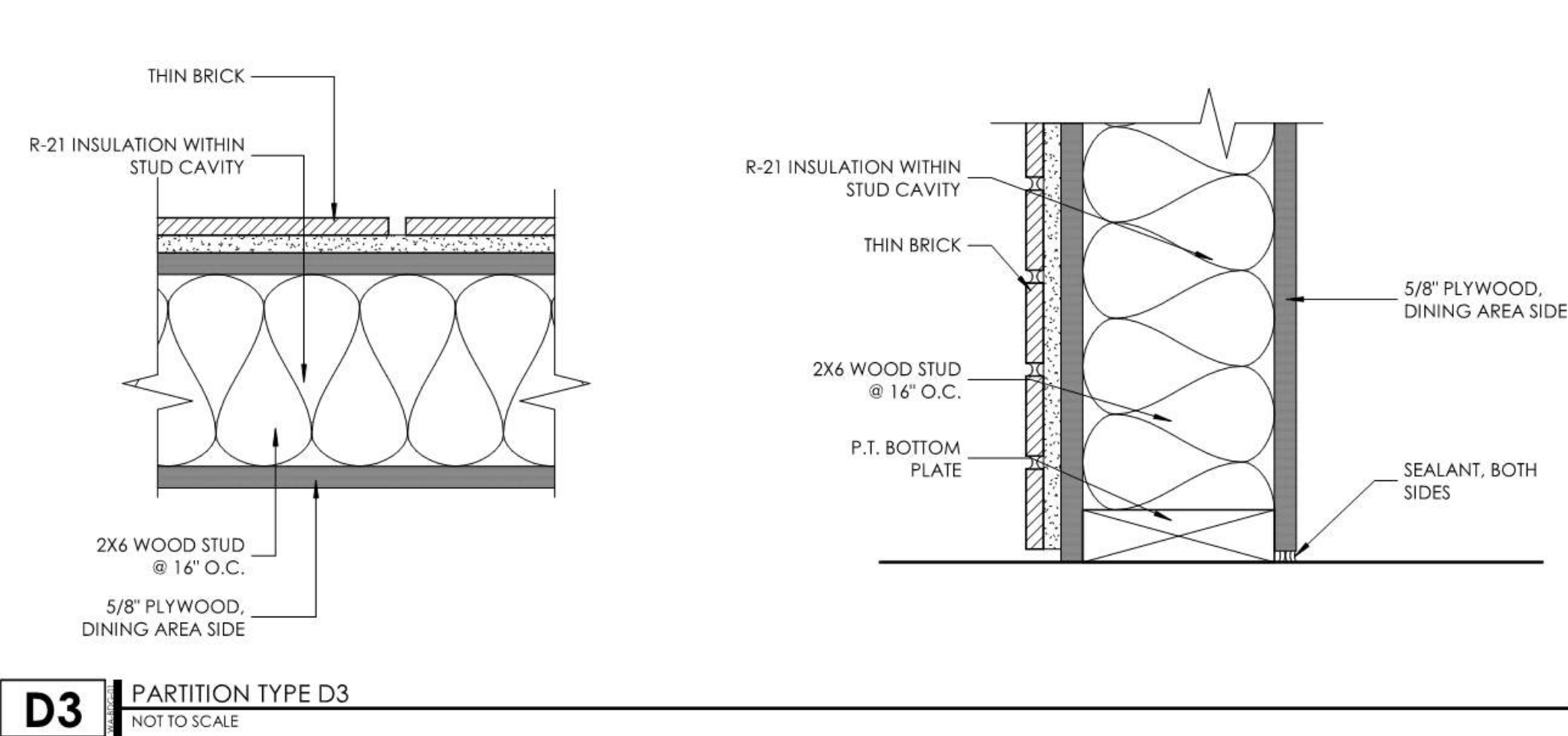
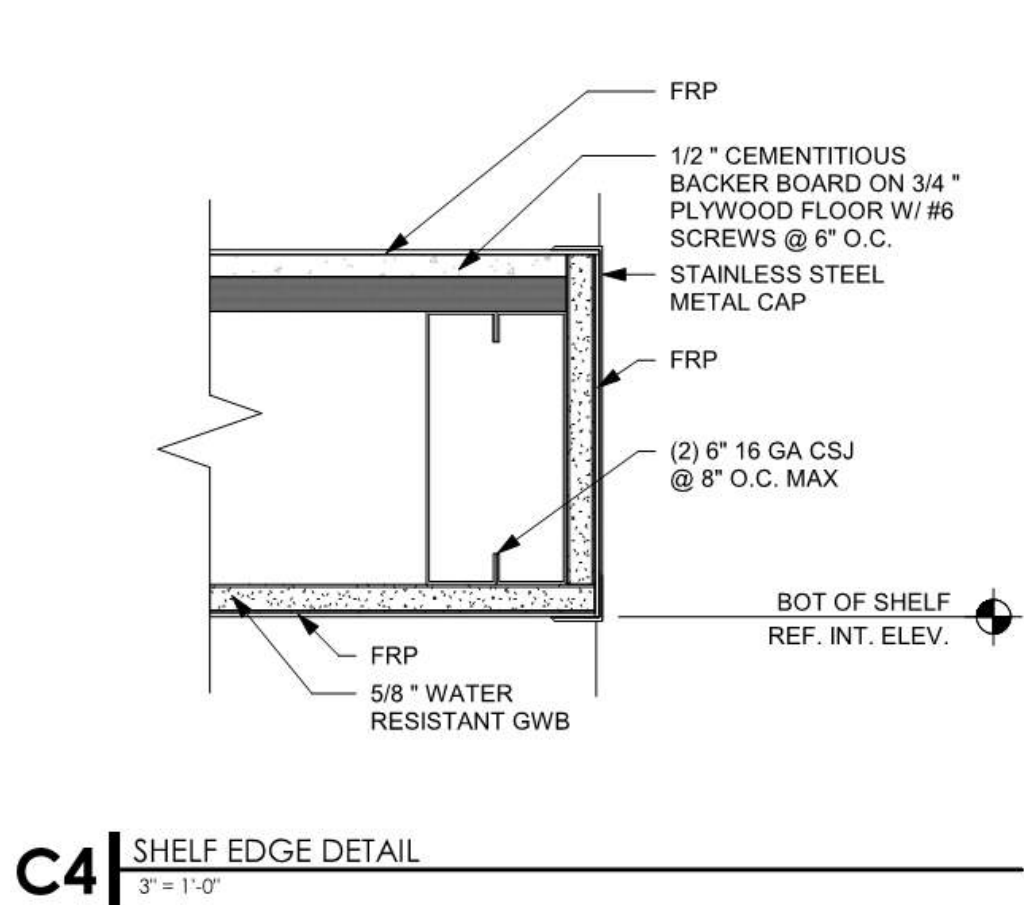
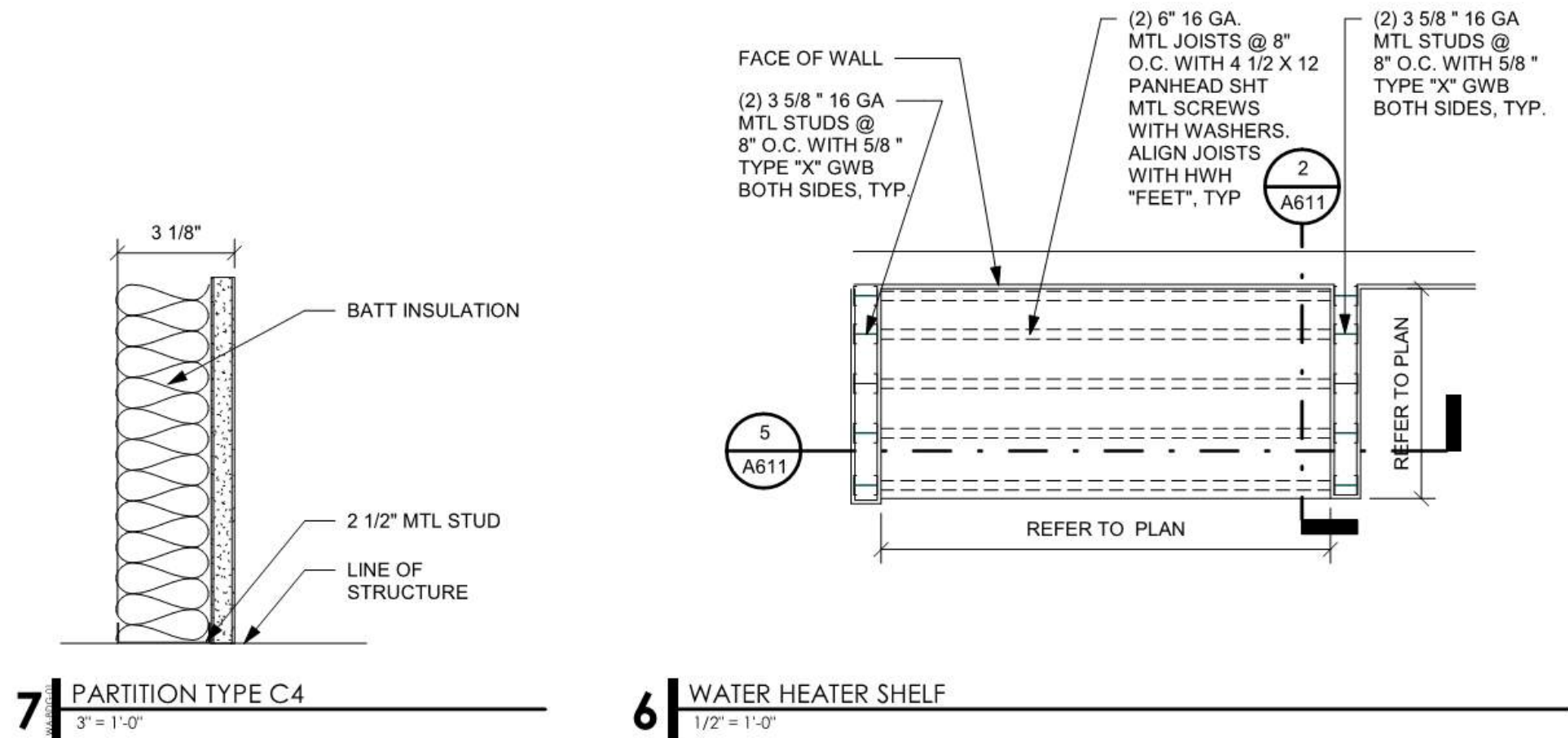
SHEET NAME

DETAILS

PROJECT NUMBER	2102
DATE	06/16/2023
DRAWN BY	PJS
CHECKED BY	SDO
SCALE	As indicated

AE501



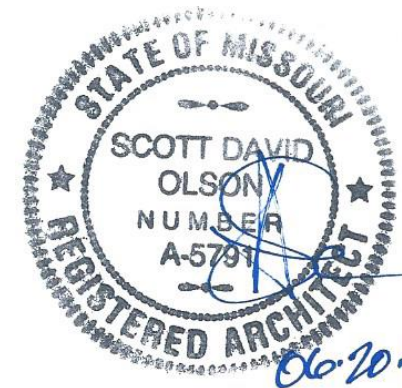


- PARTITION GENERAL NOTES**
- PARTITIONS ARE DISTINGUISHED ON FLOOR PLANS BY SYMBOL DESIGNATION, GRAPHIC DESIGNATION OR A COMBINATION OF BOTH DESIGNATIONS. SOME PARTITION TYPES SHOWN ON THIS SHEET MAY NOT BE USED ON THIS PROJECT.
  - ALL WALLS NOT DESIGNATED WITH A GRAPHIC OR TAG TO BE TYPE 'A'. IF UNCLEAR CONTACT ARCHITECT.
  - SOUND TRANSMISSION CLASS (STC) IS A RATING SYSTEM THAT DESCRIBES THE ABILITY OF AN ASSEMBLY TO REDUCE THE TRANSMISSION OF SOUND. STC RATINGS LISTED ARE BASED ON LABORATORY TESTING AND ARE NOT INDICATIVE OF RESULTS IN FIELD.
  - SEE SPECIFICATIONS FOR SOUND ATTENUATION BATTS (SAB) REQUIREMENTS. WHERE SAB ARE INDICATED, THEY SHALL EXTEND CONTINUOUSLY FROM FLOOR TO STRUCTURE ABOVE.
  - PARTITIONS ARE INDICATED WITH CONVENTIONAL GYPSUM WALLBOARD U.N.O.; UPGRADE TO PREMIUM TYPES OF WALLBOARD (I.E., MOISTURE-RESISTANT, TILE-BACKER BOARD, ACOUSTICALLY ENHANCED, ETC.) BASED ON THEIR LOCATION AND ACCORDING TO REQUIREMENTS LISTED IN THE SPECIFICATIONS.
  - SEALANTS INDICATED MAY BE FOR FIRE RATING, SMOKE RATING, AIR PRESSURE CONTAINMENT, ACOUSTIC RATING, VERMIN CONTROL, MOVEMENT (CRACK) CONTROL AND/OR BIOLOGICAL CONTAINMENT. SEALANT JOINTS ARE TO BE SIZED FOR EXPECTED MOVEMENT OF JOINT WITH EXPANSION/CONTRACTION CAPACITY OF SEALANT MATERIAL TO MAINTAIN THE INTEGRITY OF THE SEAL FOR THESE APPLICABLE PARAMETERS - SEE SPECIFICATIONS.
  - ALL DIMENSIONS ARE TO COLUMN CENTERLINES OR TO FACE OF FRAMING, U.N.O. CLEAR DIMENSIONS INDICATE DIMENSION BETWEEN FINISHES.
  - FIRE RESISTANT AND FIRE RESISTANT SMOKE BARRIER PARTITIONS ARE TO CONTINUE THROUGH ALL OPENINGS IN RATED PARTITIONS.
  - SMOKE RESISTANT, FIRE RESISTANT, AND FIRE RESISTANT SMOKE BARRIER PARTITIONS SHALL EXTEND AND SEAL TO INSIDE FACE OF EXTERIOR SHEATHING, INCLUDING EXTENSIONS THROUGH SOFFITS.
  - REFER TO THE TOILET ACCESSORIES SHEET AND CASEWORK SHEET FOR MOUNTING DETAIL INFORMATION.
  - PARTITIONS REQUIRED TO BE SMOKE RESISTANT, FIRE RESISTANT, OR BOTH FIRE AND SMOKE RESISTANT ARE SHOWN GRAPHICALLY ON PLANS WITH HATCH PATTERNS.
  - THE TYPICAL PARTITION TAG SYMBOL DESIGNATION HAS THREE CHARACTERS. THE FIRST CHARACTER IS A LETTER INDICATING THE PARTITION TYPE, THE SECOND CHARACTER IS A NUMERIC INDICATION OF THE STUD WIDTH. IN SOME INSTANCES, ADDITIONAL CHARACTERS OR 'MODIFIER' MAY BE ADDED TO THE END TO INDICATE ADDITIONAL CHARACTERISTICS WITHIN THE WALL. REFER TO CHART BELOW FOR MODIFIER DEFINITIONS. IF NO PARTITION TAG OR NUMERIC SECOND CHARACTER EXISTS, THE STUD SIZE WILL BE 2X6 FOR WOOD CONSTRUCTION TYPICAL, U.N.O.
  - ALL PARTITIONS EXTEND TO DECK UNLESS NOTED OTHERWISE.
  - ALL DRYWALL LEVEL - 5 FINISH.
  - ALL WALLS THAT EXTEND TO ROOF DECK SHALL BE INSTALLED WITH A SLIP JOINT AT THE TOP OF WALL TO ROOF DECK CONNECTION.

WALL TAG LEGEND																											
	PARTITION TYPE (SEE DETAILS) STUD WIDTH (SEE CHART BELOW) TOP OF WALL CONDITION (SEE CHART BELOW)																										
	PARTITION MODIFIER (SEE CHART BELOW)																										
STUD WIDTH																											
<table><tr><th>#</th><th>WOOD STUD WIDTH</th></tr><tr><td>1</td><td></td></tr><tr><td>2</td><td></td></tr><tr><td>3</td><td>3 1/2"</td></tr><tr><td>4</td><td>5 1/2"</td></tr><tr><td>5</td><td>7 1/4"</td></tr><tr><td>6</td><td></td></tr><tr><td>7</td><td></td></tr><tr><td>8</td><td></td></tr><tr><td>9</td><td></td></tr><tr><td>10</td><td></td></tr><tr><td>11</td><td></td></tr><tr><td>12</td><td></td></tr></table>		#	WOOD STUD WIDTH	1		2		3	3 1/2"	4	5 1/2"	5	7 1/4"	6		7		8		9		10		11		12	
#	WOOD STUD WIDTH																										
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TOP OF WALL CONDITION																											
ALL WALL ASSEMBLIES EXTEND TO DECK UNLESS NOTED OTHERWISE SEE DETAILS ON SHEET A612																											
B	PARTITION EXTENDS TO BOTTOM OF CEILING																										
C	NOT USED																										
P	PARTIAL HEIGHT WALL																										
D	PARTITION EXTENSION BOTTOM OF DECK																										
PARTITION MODIFIER																											
a	PROVIDE SOUND ATTENUATION BATTS TO FILL STUD CAVITY TO TOP OF ADJACENT CEILING																										
f	PROVIDE R-21 THERMAL BATTS TO FILL STUD CAVITY																										



SWIG - LEE'S SUMMIT  
400 NW CHIPMAN RD, LEE'S SUMMIT, MO 64086



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OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME

## PARTITION TYPES AND DETAILS

PROJECT NUMBER	2102
DATE	06/16/2023
DRAWN BY	PJS
CHECKED BY	SDO
SCALE	

AE611

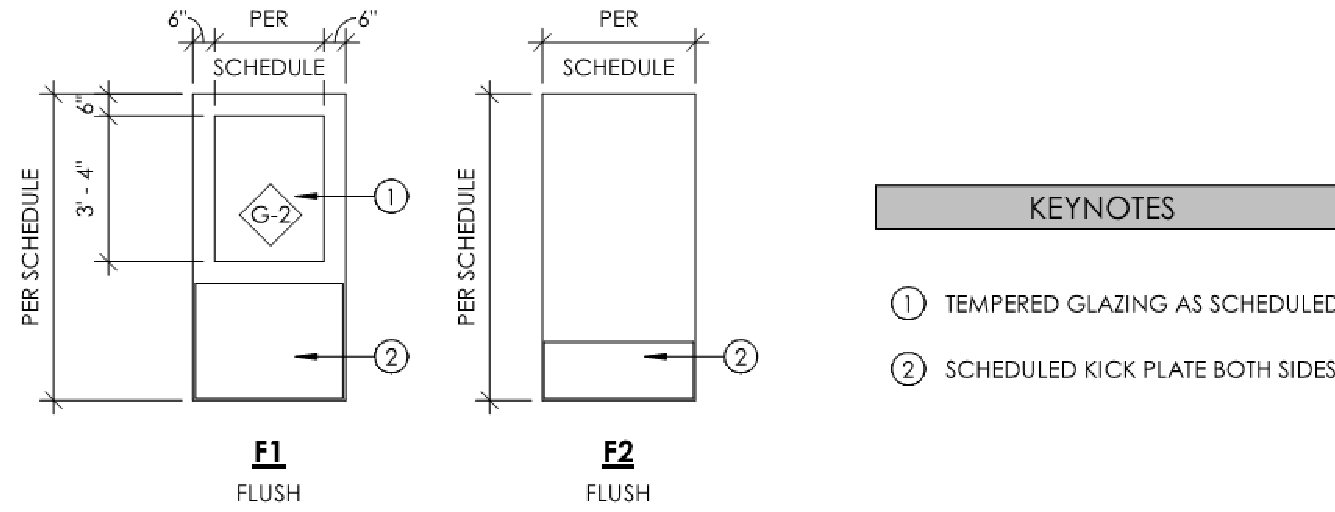


DOOR AND FRAME SCHEDULE																	
DOOR #	ROOM NAME	DIMENSIONS			NO. OF PANELS	TYPE	MATERIAL	FINISH	GLAZING	FRAME				FIRE RATING	HARDWARE SET	COMMENTS	DOOR #
		W	H	T						TYPE	MATERIAL	FINISH	HEAD				
FINISHED FLOOR																	
1																1	
100		3'-0"	7'-0"	0'-1 3/4"	1	F1	HM	P-2	TEMPERED	HM	HM	P-2	5/A631	4/A631	----	GROUP 01	
101	KITCHEN	3'-0"	7'-0"	0'-1 3/4"	1	F2	HM	P-2		HM	HM	P-2	1/A631	3/A631		GROUP 02	

- DOOR STOP NOTES:
- A. FLOOR STOPS AT EXTERIOR DOORS
- a. CENTER STOP ON THE DOOR LEAF WHEN OPENED
- b. ALLOW FOR 90 DEGREE OPEN WHEN ADJACENT TO AN OBSTRUCTION
- c. ALLOW FOR 100 DEGREE OPEN WHERE NOT ADJACENT TO OBSTRUCTION
- B. FLOOR STOPS AT INTERIOR DOORS
- a. CENTER STOP ON THE DOOR LEAF WHEN OPENED
- b. ONLY ALLOW FOR 90 DEGREE OPEN.

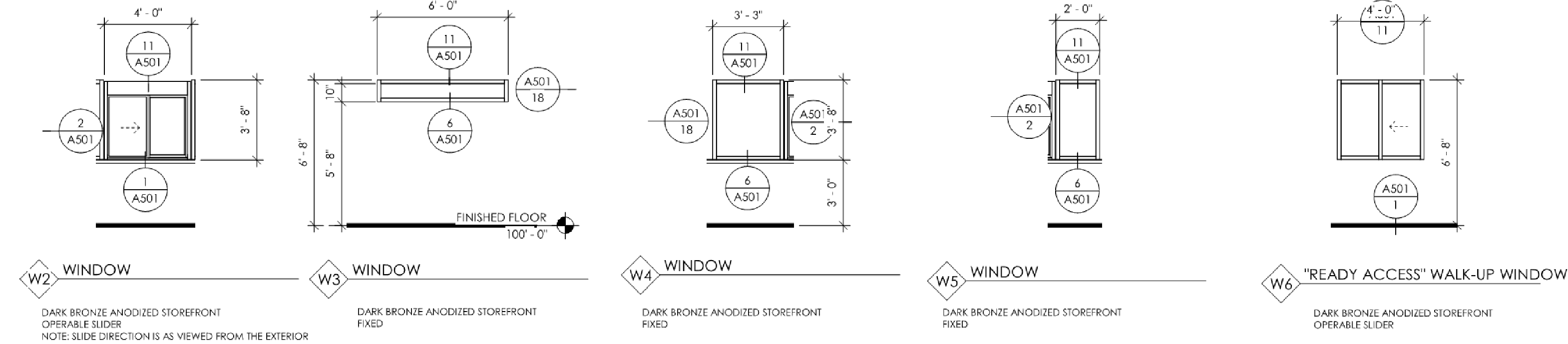
DOOR TYPE - GRAPHICAL SCHEDULE SCALE: 1/4" = 1'-0"

NOTE: SEE DOOR SCHEDULE TO MATCH APPROPRIATE FRAME TYPE WITH DOOR TYPES.

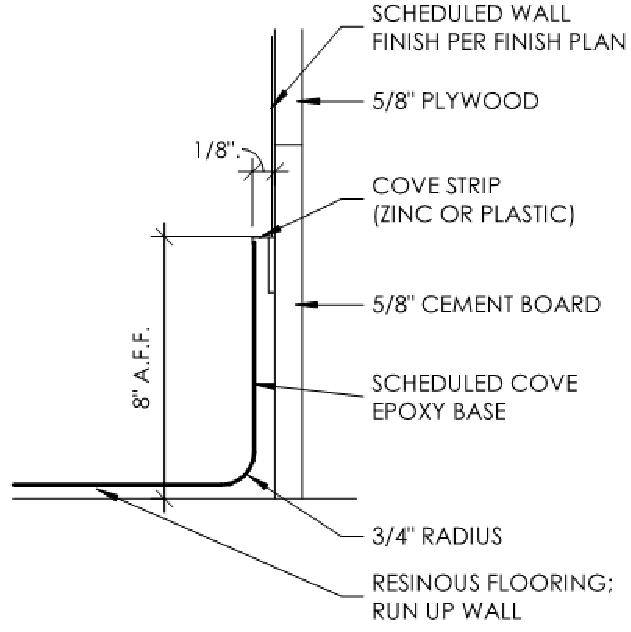


WINDOW & FRAME TYPE - GRAPHICAL SCHEDULE SCALE: 1/4" = 1'-0"

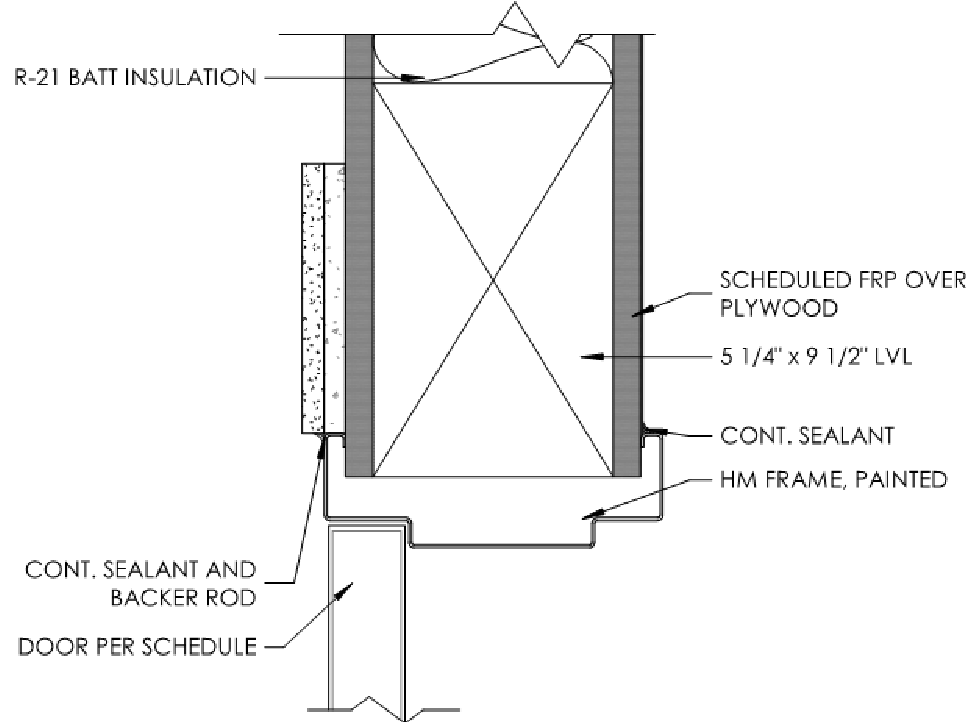
NOTE: SEE DOOR SCHEDULE AND DOOR TAGS TO MATCH APPROPRIATE FRAME TYPE WITH DOOR TYPES.



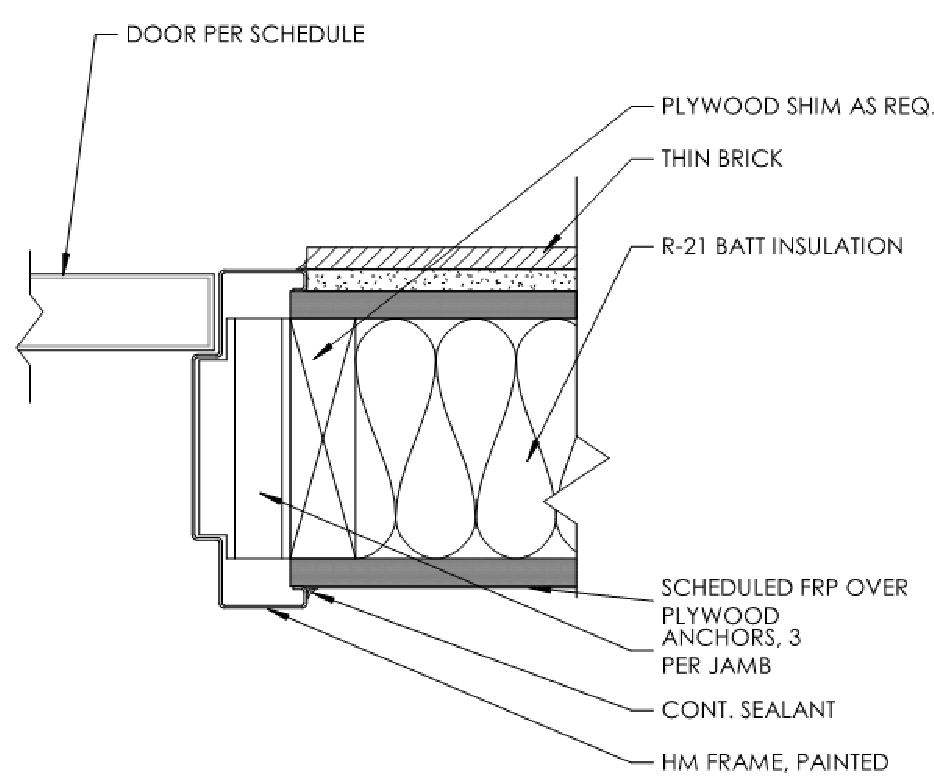
6 FLOOR - BASE DETAIL 3" = 1'-0"



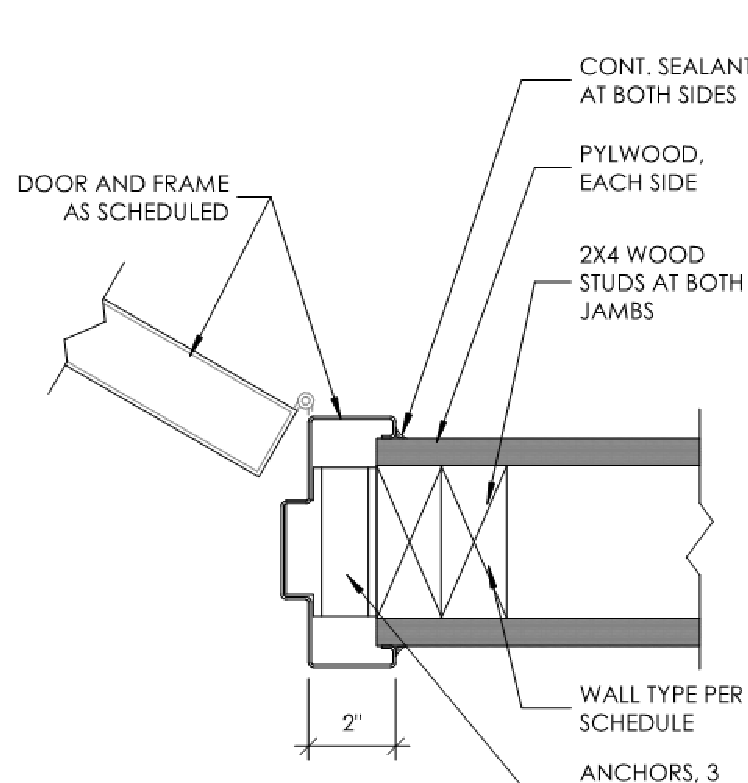
5 EXTERIOR DOOR HEAD 3" = 1'-0"



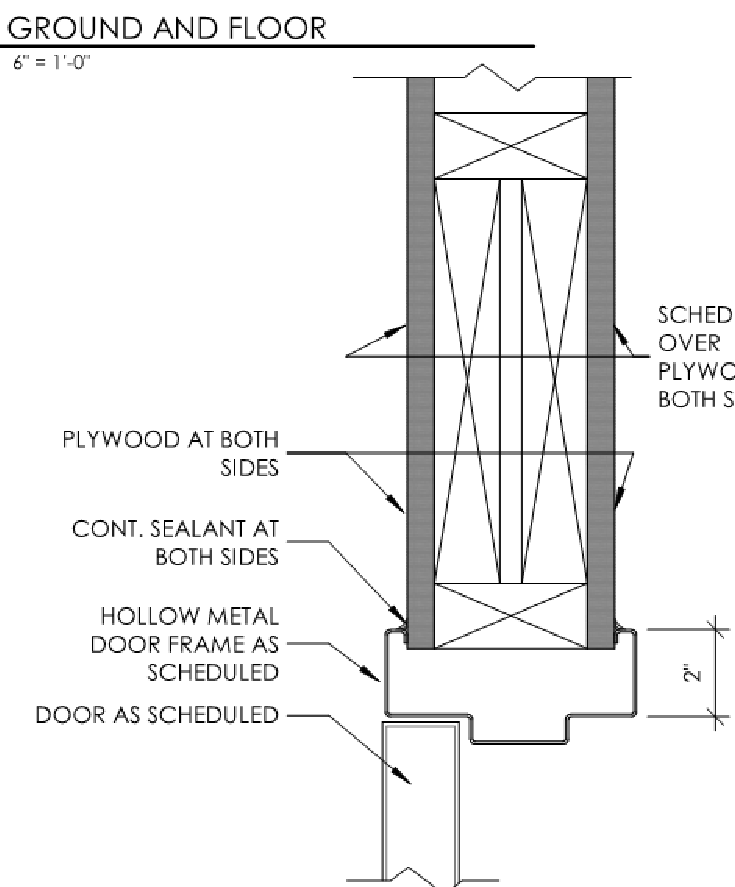
4 EXTERIOR DOOR JAMB 3" = 1'-0"



3 INTERIOR HM JAMB @ GYP. BD. 3" = 1'-0"



1 INTR. HOLLOW METAL HEAD @ GYP. BD. 3" = 1'-0"



DOOR AND WINDOW FINISH LEGEND	
P-1	WHITE HIGH PERFORMANCE EPOXY
PT	PAINTED TO MATCH ADJACENT FINISH COLOR
PT2	PAINTED SHERWIN WILLIAMS - SW7045 "INTELLECTUAL GRAY"

GLAZING SCHEDULE	
G-1	CLEAR 1" THICK INSULATED LOW-E - ANNEALED
G-2	CLEAR 1" THICK INSULATED LOW-E - TEMPERED

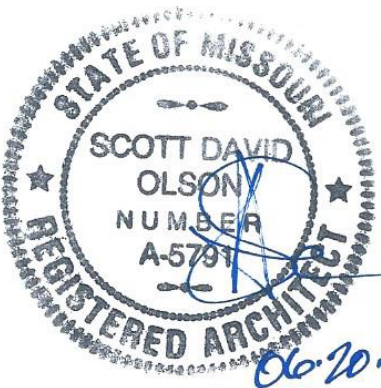
- DOOR AND WINDOW GENERAL NOTES:
- A. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS OF ALL OPENINGS PRIOR TO THE FABRICATION OF ALL DOORS AND FRAMES.
- B. DUE TO MULTIPLE USE, SOME OF THE DETAILS REFERRED TO ON THE DOOR SCHEDULE ARE REVERSED OR TURNED FROM THE DIRECTION SHOWN ON THE FLOOR PLANS. THE INTENT OF THE DETAILS IS TO BE FOLLOWED. CONSULT THE ARCHITECT WHEN QUESTIONS ARISE.
- C. ALL EXIT ACCESS DOORS AND EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT. USE OF MANUAL FLUSH BOLTS, EDGE BOLTS, TOP OR BOTTOM BOLTS, ETC., IS PROHIBITED.
- D. DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES WILL BE 5 SECONDS MINIMUM.
- E. FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. THE REQUIRED FORCE FOR PUSHING OPEN OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL BE 5 POUNDS. THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION.
- F. THE BOTTOM 12" OF ALL DOORS EXCEPT AUTOMATIC DOORS, POWER ASSISTED DOORS, AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHEN NARROW STILE AND RAIL DOORS ARE USED, A 10" MINIMUM, SMOOTH PANEL, EXTENDING THE FULL WIDTH OF THE DOOR, SHALL BE INSTALLED ON THE PUSH SIDE(S) OF THE DOOR WHICH ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. CAVITIES CREATED BY KICK PLATES SHALL BE CAPPED.
- G. ALL DOOR LOCKSETS AND PANIC DEVICES SHALL BE ADA COMPLIANT.
- H. CAULK HEAD, JAMBS, AND SILLS OF ALL DOORS AND WINDOWS WITH SEALANT CONTINUOUSLY APPLIED TO BOTH SIDES OF THE FRAMES.
- I. ALL DOOR CLOSURES TO BE SET IN ACCORDANCE WITH THE ADA REDUCED OPENING FORCE REQUIREMENTS.
- J. DOOR HARDWARE SUBSTITUTIONS SHALL BE PERMITTED, (MANUFACTURER ONLY) WITH OWNER'S WRITTEN APPROVAL.
- K. KEYING FOR ALL SCHEDULED LOCKSETS SHALL BE PROVIDED BY OWNER.
- L. PROVIDE SOLID BACK FRAMES FOR ALL STOREFRONT SYSTEMS.
- M. PROVIDE END DAMS AT BOTTOM OUTSIDE CORNERS OF ALUMINUM STOREFRONT SYSTEMS. INSTALL PER MANUFACTURERS STANDARDS AND REQUIREMENTS.
- N. FRAME DIMENSIONS SHOWN ARE NOMINAL. ACTUAL DIMENSIONS MAY VARY DEPENDING ON WINDOW MANUFACTURER AND SYSTEM.
- O. ALL THRESHOLDS SHALL BE ACCESSIBLE.
- P. ALL DOORS ON THE ACCESSIBLE ROUTE OR CIRCULATION PATH SHALL HAVE A MAX. OPENING FORCE OF 5 LBS.

DOOR HARDWARE		
HARDWARE GROUP - 01 KITCHEN		FINISH MANF
1 SET	CONT. HINGE - 112HD	626 DON
1 EA	ENTRANCE LOCK - NDS3PD RHO	626 SCH
1 EA	INTERCHANGEABLE CORE - 23-030 "C" KEYWAY	US26D SCH
1 EA	THRESHOLD - 171 A 1/2X5X72	AL COR
1 EA	DOOR SWEEP UNDERMOUNT - 315 CN 36	AL PEMKO
1 SET	WEATHERSTRIP - 303 A 7236	628 PEMKO
1 EA	FLOOR STOP - 1462	BLACK DON
	NO PANIC ON THIS DOOR	
2 EA	ARMOR PLATE (18 GAUGE) 90 30X34	628 DON
1 EA	DOOR CLOSER	

HARDWARE GROUP - 02 RESTROOM		
3 EA	HW HINGES - 5B81HW 4.5 X 4.5 NRP	652 IVE
2 EA	KICK PLATE (18 GAUGE - 90 10' X 34"	628 DON
1 EA	FLOOR STOP - 1462	BLACK DON
1 EA	PRIVACY LOCK - ND40S OME	626 SCH



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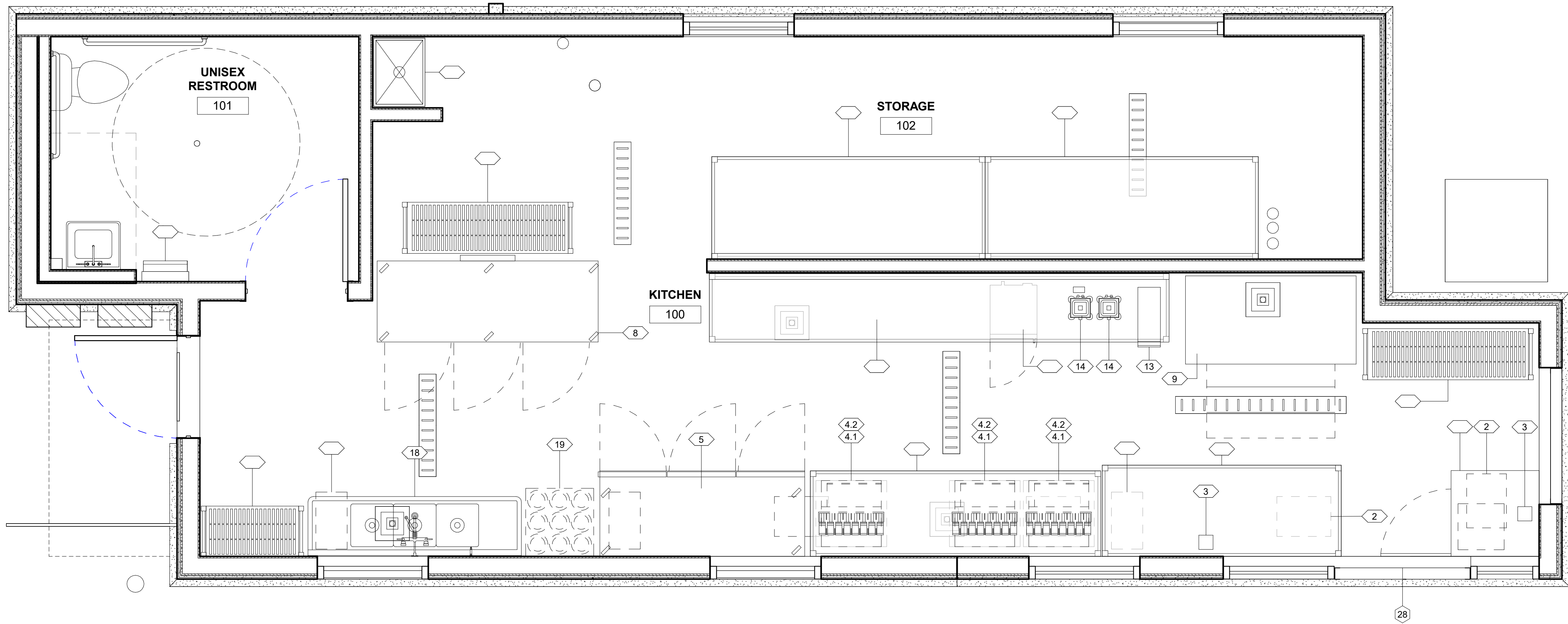
SHEET NAME  
DOOR AND FRAME TYPES

PROJECT NUMBER 2102  
DATE 06/16/2023  
DRAWN BY PJS  
CHECKED BY SDO

SCALE

AE621





1 EQUIPMENT PLAN  
1/2" = 1'-0"

Swig Equipment Schedule

ITEM #	QTY	ITEM DESCRIPTION	MAKE	MODEL #	DIMENSIONS	ELECTRICAL DATA	PLUG (NEMA)	WATER	DRAIN	GAS	NOTES	ITEM #
1	2	UNDERCOUNTER REFRIGERATOR	SUMMIT	AL57G	23.63"W x 22.63"D x 32"H	115V/60HZ/1PH/1A	5-15P				REVERSIBLE SS GLASS DOOR, ETL-SANITATION NSF-7	1
2	1	CASH REGISTER (POINT OF SALE)	APG	VASARIO	16.2"W x 16.2"D x 4.3"H							2
3	2	RECEIPT PRINTER (POINT OF SALE)	EPSON	TM-M30	5"x5"x5"							3
4.1	3	8-VALVE BEVERAGE DISPENSER	LANCER	ICD-2300	23"W x 23"D x 18.25"H	24V/60HZ		BY BEVERAGE VENDOR	BY BEVERAGE VENDOR		3/4" DRAIN, 3/8" MALE BARB INLET FITTINGS	4.1
4.2	1	DISPENSER TABLE	CUSTOM		96"L x 30"D x 30.63"H						6" ADJUSTABLE LEGS, STAINLESS STEEL	4.2
5	1	3-DOOR UNDERCOUNTER REFRIGERATOR	TURBO AIR	MUR-72-N	72.63"W x 30"D x 30.63"H	115V/60HZ/1PH/2.5A, 1/6HP	5-15P				STAINLESS STEEL WORK TOP, 4" CASTERS, STANDARD HINGED	5
6	1	STAINLESS STEEL SHELF	ADVANCE TABCO	WS-15-84	84"L x 15"D x 13.5"H						1-1/2" SIDES & REAR UPTURN, 1-5/8" FRONT EDGE	6
7	1	BULK CO2 TANK			46"W (DIA) x 55.6"H						STAINLESS STEEL, 450 LB. CAPACITY	7
7.1	1	BULK CO2 TANK STORAGE CABINET	CHART		32.6"W x 30.75"D x 76.5"H						LOUVERED PANELS, PRIMED PAINT-READY FINISH, REQUIRES ASSEMBLY, BOLT TO FLOOR	7.1
8	1	3-DOOR REACH IN FREEZER	TURBO AIR	M3F72-3-N	77.75"W x 30.75"D x 78"H	115V/60HZ/1PH/7.9A, 1HP	5-15P				4" CASTERS, STANDARD HINGED	8
9	1	ICE STORAGE BIN	POLLETT	SG18505-60	60"W x 31"D x 65"H						3660 LB. CAPACITY, 6" HIGH CUSTOM STEEL RISERS	9
10.1	1	ICE MAKER	FOLLETT	HCC710ABT	22.7"W x 24.5"D x 21.25"H	115V/60Hz/1Ph/11.3A (15A SERVICE REQUIRED)	5-15P	3/8" OD INLET	3/4" MPT, 1"		759 LB/24-HOUR ICE PRODUCTION, REMOTE CONDENSER	10.1
10.2	1	ICE MAKER	FOLLETT	HCC1410ABT	29.15"W x 25.15"D x 22.50"H	208V/60Hz/1Ph/14A (20A SERVICE REQUIRED)	6-20P	3/8" OD INLET	3/4" MPT, 1"		1466 LB/24-HOUR ICE PRODUCTION, REMOTE CONDENSER	10.2
11	1	DROP-IN HAND SINK	ADVANCE TABCO	DI-1-25-1X	12"W x 14"D x 5"H						DECK MOUNTED FAUCET, STAINLESS STEEL BOWL, RECESSED IN COUNTERTOP, 12" 3-SIDED SPLASH. CUTOUT SIZE = 11-1/4"W x 13-1/4"L x 1-1/4" RADIUS CORNERS.	11
12	1	DROP-IN PREP SINK	ADVANCE TABCO	DI-1-168-1X	16"W x 14"D x 8"H						DECK MOUNTED FAUCET, STAINLESS STEEL BOWL, RECESSED IN COUNTERTOP. CUTOUT SIZE = 18-3/4"W x 18-1/4"L x 1-1/4" RADIUS CORNERS.	12
13	1	HOT CHOCOLATE DISPENSER	CECILWARE	GB1HC-CP	7.75"W x 19"D x 26"H	120V/60HZ/1PH/15A	5-15P					13
14	2	BLENDER	BLENDTEC	E600A0801-A1GA1A	7"W x 8"D x 15"H	120V/50HZ/1PH/13A, 3HP, 1600W	5-15P					14
15.1	1	FLOOR STANDING SHELVING	CAMBRO		36"W x 18"D x 96"H							15.1
15.2	1	FLOOR STANDING SHELVING	CAMBRO		36"W x 24"D x 96"H							15.2
15.3	1	FLOOR STANDING SHELVING	CAMBRO		60"W x 12"D x 96"H							15.3
16.1	1	SYRUP RACK (BAG-IN-BOX)	U-LINE		96"W x 36"D x 84"H						14 GA. STEEL RACK	16.1
16.2	1	CUP RACK	U-LINE		96"W x 36"D x 84"H						14 GA. STEEL RACK	16.2
17	1	2A10BC FIRE EXTINGUISHER									PROVIDE WALL MOUNT BRACKET	17
18	1	3-COMPARTMENT SINK	ELKAY	CUSTOM	76"L x 26"W x 44-3/4"H			1/2" HOT/COLD	(3) 1-1/2"		12" DRAIN BOARDS L & R, BACKSPLASH, BOWL SIZE 20"L X 16"W X 12"D	18
18.1	1	PRE-RINSE FAUCET (3-COMP SINK)	T&S BRASS	MPT-8WLN-12-4C				1/2" NPT MALE INLETS			24" HOSE, 12" FAUCET, SPRING ACTION, SPLASH MOUNT	18.1
19	1	STAINLESS STEEL WORK TABLE			24"W x 24"D x 30"H						16 GA. STAINLESS STEEL, UNDERSHELF, INTEGRATED CUP RISERS	19
20.1	1	MOP SINK	JOHN BOOS	PBMS24X24-6-X	24"W x 24"D x 6"H				3-1/2"		16 GA. STAINLESS STEEL	20.1
20.2	1	FAUCET (MOP SINK)	T&S BRASS	B-0665-BSTP				1/2" IPS MALE INLET			VACUUM BREAKER, 3/4" HOSE THREAD	20.2
20.3	1	MOP RACK	RUBBERMAID	FASTTRACK							RAIL, HOOKS	20.3
21	1	WATER HEATER	AO SMITH	DSE-20A	22"DIA x 31.75"H	208V/18KW/1PH OR 3PH "VERIFY"		3/4" NPT			20 GALLONS, 61,434 BTU/HR	21
22	1	WATER FILTRATION SYSTEM	ECOLAB								3 CARTRIDGES, WALL MOUNTED	22
23	1	KITCHEN DISPLAY SCREEN (KDS)			23.6"W x 14.9"H							23
24	3	TRASH RECEPTACLE	RUBBERMAID		11"W x 20"D x 30"H						PLASTIC	24
25	1	A/V RACK	HOFPMAN	EWMM242418	23.60"H x 23.60"W x 18.20"D							25
26	1	SECURITY SAFE	SENTRY SAFE	DH-134E	14"W x 15.6"D x 27"H						DIGITAL LOCK, RELOCKING, TIME DELAY	26
27	1	LID HOLDER	CUSTOM		96"L x 6"D x 6"H						STAINLESS STEEL	27
28.1	2	WALL HUNG SHELVING			36"W x 14"D x 6"H						USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	28.1
28.2	8	WALL HUNG SHELVING			36"W x 18"D x 6"H						USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	28.2
28.3	4	WALL HUNG SHELVING			48"W x 18"D x 6"H						USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	28.3
28.4	1	WALL HUNG SHELVING			30"W x 18"D x 6"H						USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	28.4
28.5	1	WALL HUNG SHELVING			60"W x 18"D x 6"H						USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	28.5
29	1	COAT RACK			48"W x 18"D x 6"H						WALL MOUNTED	29
30	1	CHEMICAL STATION	ECOLAB								WALL MOUNTED	30



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REVISION SCHEDULE

No.	Description	Date

SHEET NAME

EQUIPMENT PLAN

PROJECT NUMBER

2102

DATE

06/16/2023

DRAWN BY

PJS

CHECKED BY

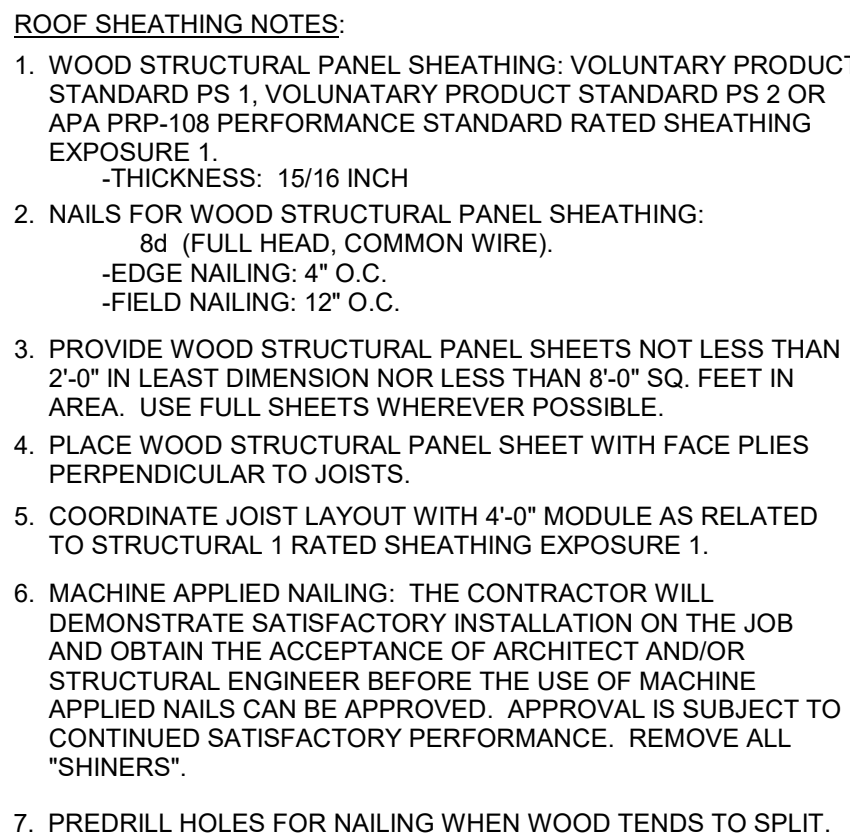
SDO

SCALE

1/2" = 1'-0"

EQ101



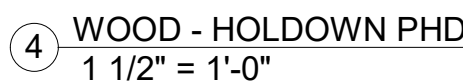


10 TYPICAL RC  
3/16" = 1'-0"



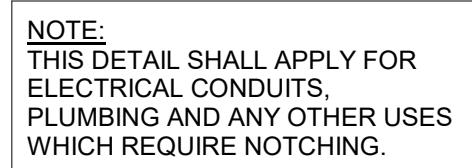
1. PROVIDE A MINIMUM SILL BOLT EMBEDMENT OF 7" BELOW FINISH FLOOR OR TOP OF CURB.
2. PROVIDE AN ADDITIONAL SILL BOLT 6 INCHES FROM EACH END OF EACH PIECE OF SILL PLATE.
3. WHERE SILL PLATES ARE BORED OR NOTCHED IN EXCESS OF 1/3 OF THE SILL PLATE WIDTH, PROVIDE ADDITIONAL SILL BOLTS 6 INCHES EACH SIDE OF BORE OR NOTCH.
4. SET ALL SILL BOLTS WITH A SETTING TEMPLATE BEFORE PLACING CONCRETE, STABBING OR PUSHING OF SILL BOLTS INTO WET CONCRETE IS EXPRESSLY PROHIBITED.
5. PROVIDE A MINIMUM SILL BOLT PROJECTION ABOVE THE CONCRETE AS SHOWN ON DETAIL C.

5 WOOD - SILL PLATE DETAILS  
1 1/2" = 1'-0"



**NOTE:**  
USE HANGERS WITH CONCEALED FLANGES FOR HEADER  
AND MIN (3) 2x6 STUDS AT SPANS GREATER THAN 10'-0". ALL  
HEADERS ARE TO BE DOUGLAS FIR LARCH No.2.

9 WOOD - STUD WALL LINTEL SCHEDULE  
3/4" = 1'-0"



6 WOOD - NOTCH IN STUD  
3" = 1'-0"



NOTE: CUT CONTROL JOINT AS SOON AS CONCRETE CAN SUPPORT MACHINE AND LABORERS WITHOUT DAMAGING CONCRETE SURFACE. SEE FOUNDATION PLAN OF CONTROL JOINT LOCATIONS.



3 TYPICAL DETAIL - SLAB JOINTS  
3/4" = 1'-0"

### A. Building Code

1. The design and construction shall conform to the 2018 International Building Code as ammended by the City of Lee's Summit, Missouri.

### B. Design Loads

- |    |   |   |
|----|---|---|
| 1. | Dead Loads  |   |
| a. | The roof mounted equipment weights used for design are indicated on the contract documents. The Contractor shall submit actual weights for all roof mounted equipment to be reviewed by the Engineer. |   |
| 1. | Total service roof dead load  | 13psf   |
| 2. | Live Loads  |   |
| a. | Code Loads  |   |
| 1. | Total roof live load  | 20psf   |
| 3. | Wind - The wind load is in accordance with the following criteria:  |   |
| a. | Basic wind speed (Ultimate)   | 115mph  |
| b. | Risk category (Bldg. Classification)  | II  |
| c. | Wind exposure category  | C   |
| d. | Internal pressure coefficients (%- GCPI)  | +0.18/-0.18   |
| d. | Component and cladding wind force   | 35.6psf   |
| 4. | Snow - The snow load is in accordance with the following criteria:  |   |
| a. | Ground snow load  | pg=20psf  |
| b. | Flat-roof snow load   | pf=20psf  |
| c. | Snow exposure factor  | Ce=0.9  |
| d. | Snow load importance factor   | Is=1.0  |
| e. | Thermal factor  | Ct=0.9  |
| 5. | Seismic - The seismic load is in accordance with the following criteria:  |   |
| a. | Risk Category   | Ie=1.0  |
| b. | Seismic importance factor   | Ss=0.094  |
| b. | Mapped spectral response accelerations  | St=0.069  |
| c. | Site class  | D (default)   |
| d. | Spectral response coefficients  | Sds=0.100   |
|    |   | Sd1=0.110   |
| e. | Seismic design category   | B   |
| f. | Basic seismic force-resisting system  | Light Framed Walls Sheathed with brd structural panels. |
|    |   | V=0.37k   |
| g. | Design base shear   | Ce=0.015  |
| h. | Seismic response coefficient(s)   | R=6.5   |
| i. | Response modifications factor(s)  | R=6.5   |

### C. Foundations

1. Geotechnical Report  
a. No geotechnical report has been provided for this project.
2. Spread Footings, Trench Footings and Grade Beams  
a. All shallow foundations have been designed to bear on undisturbed soil or engineered fill for a net allowable bearing pressure of 2000psf.  
b. All excavations shall be clean and free from any type of debris.
3. All structural concrete utilized for the purpose of retaining soil shall attain full design strength prior to any backfill being placed against the concrete.
4. Side forms for trench foundations are not required.
5. Bar supports for shallow foundations may be bricks, masonry or rock.
6. All construction dewatering is the responsibility of the Contractor. The moisture content of the subgrade below the foundations and slab on grade should not be allowed to change after the soil has been excavated. Subgrade that dries out, softens or is damaged in any way by variations in the moisture content shall be re-compacted to the density and water content specified in the specifications.
7. Foundation construction on frozen ground is not allowed.

#### D. Concrete

1. All Concrete and reinforcing details shall conform to the current ACI 318 and CRSI "Manual of Standard Practice".
2. Strength - The following areas shall have a minimum 28 day compressive strength:
  - a. Interior slab on grade: 3000psi
  - b. Footings and grade beams 3000psi
3. Mix Design
  - a. Water/cement ratio 0.45 maximum for slab on grade  
0.51 maximum for all other concrete
  - b. Course aggregate ASTM C33
  - c. Fly ash Class C (25%)
  - d. Admixtures
    1. Admixtures ASTM C494
    2. Air Entrainment (5%-7%) ASTM C260
4. No water may be added to the concrete mix at the job site. Workability should be attained through the use of water reducing agents and/or super plasticizing chemical admixtures.
5. All slab on grade control joints shall be cut to 1/3 the depth of the slab. The joints should be cut as soon as possible to prevent plastic shrinkage cracks.
6. Control joints in the slab on grade shall be placed at column lines and at uniform spacing as generally indicated on the plans. Control joint spacing shall not exceed 15 feet in any direction or 225 square feet, whichever is greater. Construction joints may be substituted for control joints.
7. Reinforcing
  - a. Grade
    1. Typical reinforcing ASTM A615, Grade 60
    2. Welded reinforcing ASTM A706
  - b. Lap splices and development length for reinforcement shall be 48 bar diameters unless indicated elsewhere in the contract documents and specifications. Lap welded wire reinforcing on full mesh space plus 2 inches.

- ### E. Miscellaneous

1. Site visits will be made by the Engineer of Record in order to establish the general conformance of the construction to the Contract Documents. Observations by the Engineer shall not be considered Inspections and in not way relieves the Contractor of any requirements of the Contract Documents.
2. Stability of the structure during construction, including load bearing and non-load bearing masonry walls, is the responsibility of the Contractor. The Engineer is responsible for the stability of the completed structure only.
3. Conflicts between the Architectural and Structural Drawings shall be brought to the attention of the Architect and Engineer immediately. When conflicts occur between the drawings and the specifications, the strictest interpretation shall govern.
4. The Engineer shall not be in control of, have charge of, or be responsible for the construction means and methods. The Contractor is solely responsible for all construction means, methods, procedures, techniques and job sequences.
5. Typical details are intended to represent typical conditions for the entire project.
6. All existing field and building conditions shall be verified by the Contractor before any other work.
7. Shop Drawings
  - a. Shop drawings are to be based upon the latest submitted contract documents. This includes all addendums, Architectural Supplemental Instructions (ASIs) and Structural Supplemental Drawings (SSDs) and Requests For Information (RFIs).
  - b. Shop drawings shall be original documents. Shop drawing shall not be a duplication, in any way, of the contract documents. This includes, but is not limited to, photocopies, electronic drawing copying or electronic scanning. Any submitted shop drawings that are not original will be rejected and returned without review.
  - c. Prior to submission of the shop drawings to the Architect, the Contractor, shall review the shop drawings for conformance to the means, methods, techniques, sequences and operations of construction. The Contractor's review stamp shall be affixed to all shop drawings prior to the Architect or Structural Engineer's review. Shop drawings not bearing the Contractor's review stamp will be returned without review.
- d. Provide the following submittals for review:
  1. Concrete Mix Design and Materials
  2. Concrete Reinforcing
  3. Embedded items such as plates and angles
- e. Substitutions are allowed prior to bids only. All substitution requests shall be made to the Architect no later than 2 weeks prior to bid.

### F. Special Inspections

1. The Owner shall retain special inspection services for the items listed below. The Contractor shall provide light general labor as required to assist with special inspections.
2. Special Inspection reports shall be submitted to the Building Official, Owner, Architect, Engineer, Contractor, Sub-Contractor and any other pertinent entities in a timely manner.
3. All discrepancies found by the Special Inspector shall immediately be brought to the attention of the Contractor and corrected. If the Contractor is unable to correct the discrepancy, the Special Inspector shall notify the Architect and Engineer.
4. Upon completion of the project, the Special Inspector shall submit a final report delineating that the work was to the best of the Inspector's knowledge and completed in conformance with the approved contract documents and applicable building code.
5. Special Inspection Services required:
  - a. Foundations
    - i. Bearing capacity
    - ii. Bearing elevation
  - b. Concrete
    - i. Reinforcing steel placement
    - ii. Embedded items in concrete
    - iii. Concrete placement technique
    - iv. Sampling of fresh concrete

G. Wood

1. All wood framing shall be designed and erected in accordance with the recommendations of the latest editions of the National Design Specification (NDS) for Wood Construction Manuals.
2. All wood framing shall be Douglas Fir-Larch #2 or better.
3. Plywood
  - a. Material shall conform to PS 1.
  - b. Stagger Panel ends of plywood decking.
  - c. Panel clips shall be used for all roof sheathing.
4. All Engineered Lumber shall have the following minimum material properties
  - a. Fb = 2600 psi
  - b. Fv = 285 psi
  - c. E = 1,900,000 psi
  - d. Fc (parallel) = 2510 psi
  - e. Fc (perpendicular) = 750 psi
  - f. G = 125,000 psi
5. All Dimension Lumber shall have the following minimum material properties
  - a. Fb = 900 psi
  - b. Fv = 180 psi
  - c. E = 1,600,000 psi
  - d. Fc (parallel) = 1,350 psi
  - e. Fc (perpendicular) = 625 psi
6. Any wood member that rests on or is in contact with concrete, earth or masonry shall be ACQ pressure treated.
7. All metal wood connectors shall perform to a minimum load capacity of the Simpson Strong-Tie products. All connectors shall be capable of resisting the corrosive effects of the ACQ pressure treatment and shall be completely installed prior to loading the connections.

AFB	ABOVE FINISH FLOOR	K	KIP (1000 POUNDS)
ALT	ALTERNATE	KSF	KIPS PER SQUARE FOOT
ARCH	ARCHITECT	LLH	LONG LEG HORIZONTAL
AR	ANCHOR ROD	LLV	LONG LEG VERTICAL
BOT	BOTTOM	MAX	MAXIMUM
BRG	BEARING	MECH	MECHANICAL
CL	CENTER LINE	MIN	MINIMUM
CJ	CONTRACTION JOINT	MISC	MISCELLANEOUS
COL	COLUMN	NTS	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT	OC	ON CENTER
CONC	CONCRETE	PLF	POUNDS PER LINEAR FOOT
CONT	CONTINUOUS	PSF	POUNDS PER SQUARE FOOT
DBA	DEFORMED BAR ANCHOR	PSI	POUNDS PER SQUARE INCH
EF	EACH FACE	REINF	REINFORCING
EJ	EXPANSION JOINT	RTU	ROOF TOP UNIT
ELEV	ELEVATION	SC	SLIP CRITICAL
EQ	EQUAL	SIM	SIMILAR
EW	EACH WAY	STD	STANDARD
EXIST	EXISTING	TO	TOP OF
FND	FOUNDATION	TOS	TOP OF STEEL
FTG	FLOOR	TYP	TYPICAL
FTG	FOOTING	UNO	UNLESS NOTED OTHERWISE
FV	FIELD VERIFY	VERT	VERTICAL
GALV	GALVANIZED	w/	WITH
HORIZ	HORIZONTAL	WP	WORK POINT
HSA	HEADED STUD ANCHOR	WWR	WELDED WIRE REINFORCING
HSS	HOLLOW STRUCTURAL SECTION		
IF	INSIDE FACE		

1 GENERAL NOTES & ABBREVIATIONS  
1 1/2" = 1'-0"



# SWIG - LEE'S SUMMIT

400 NW CHIPMAN RD  
LEE'S SUMMIT, MO 64086

OAG

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

[illegible]

SHEET NAME

## GENERAL NOTES AND TYPICAL DETAILS

PROJECT NUMBER	2102
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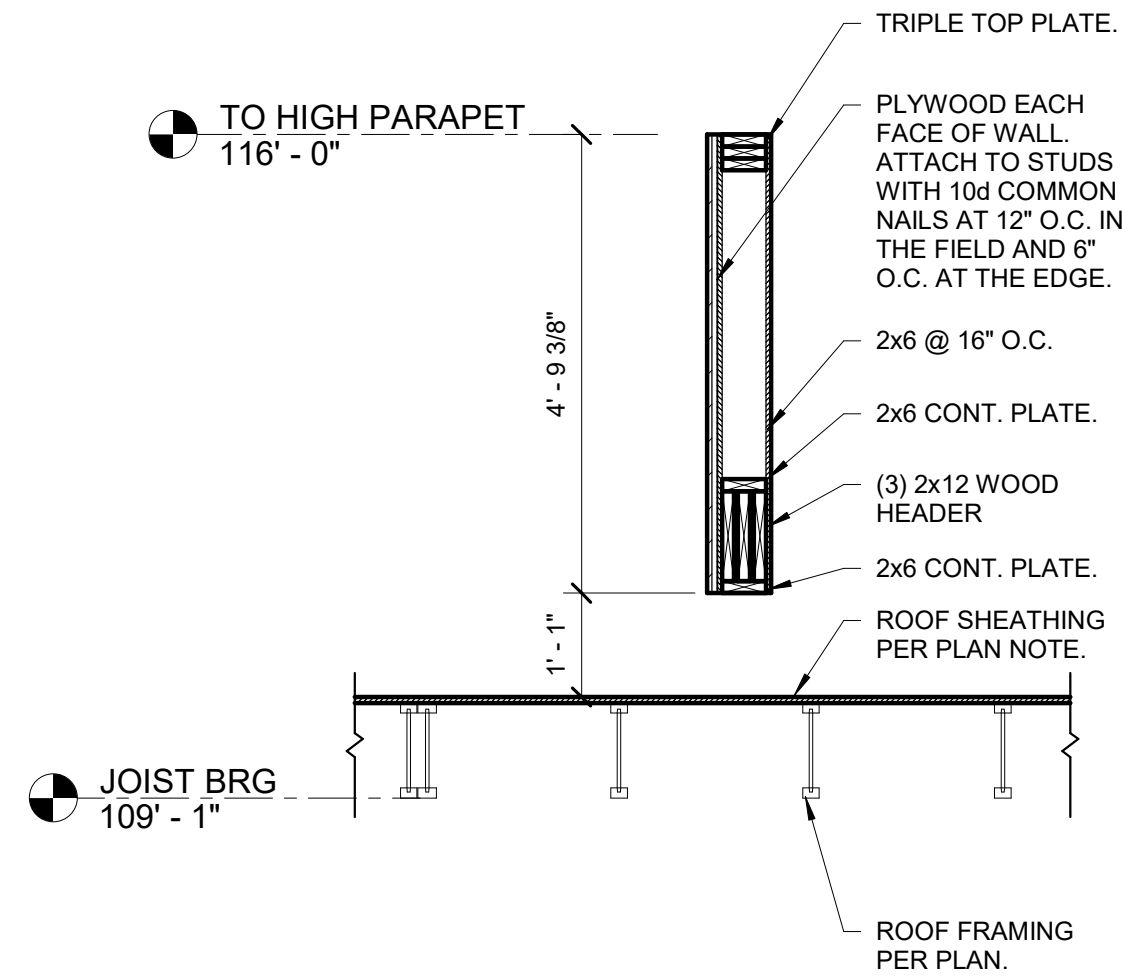
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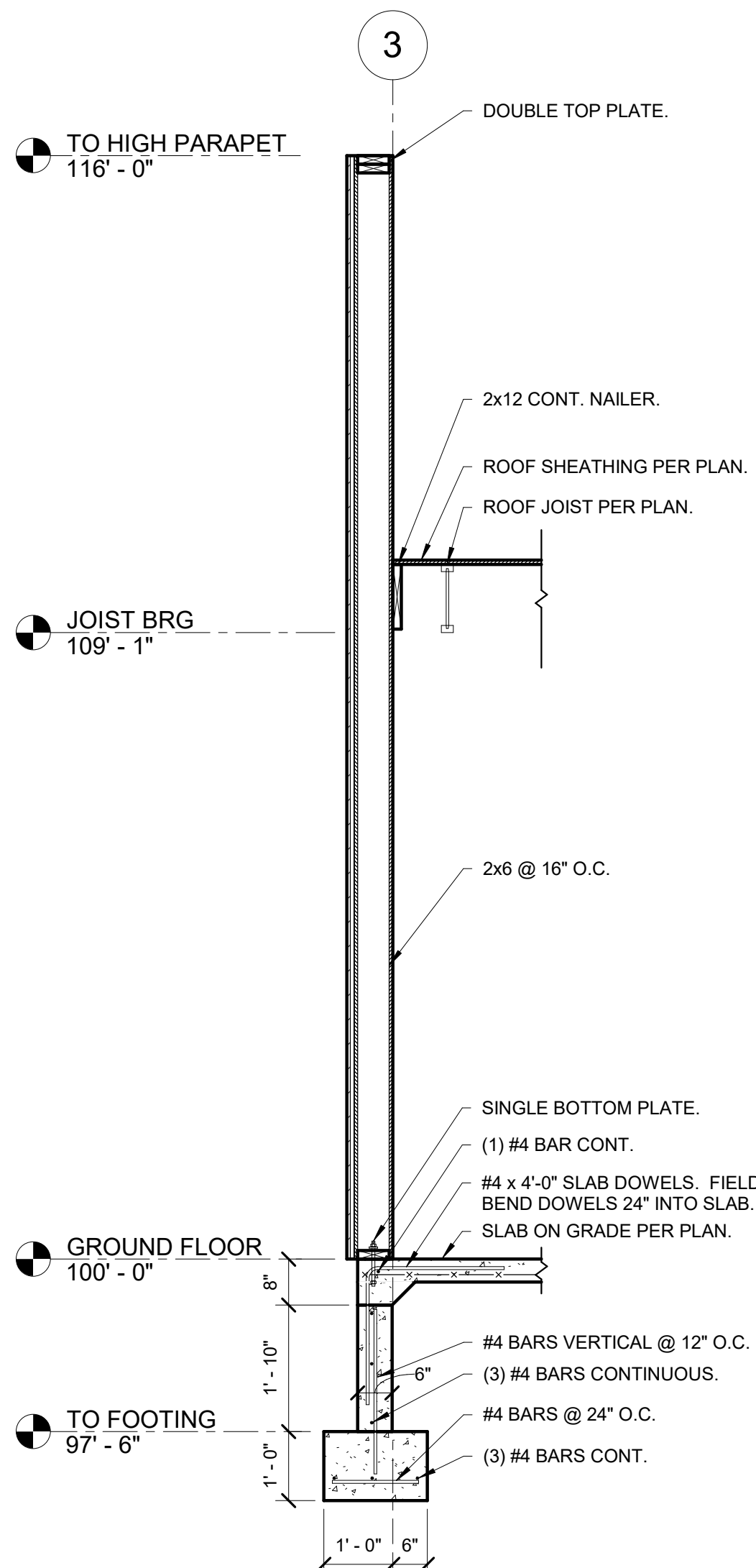
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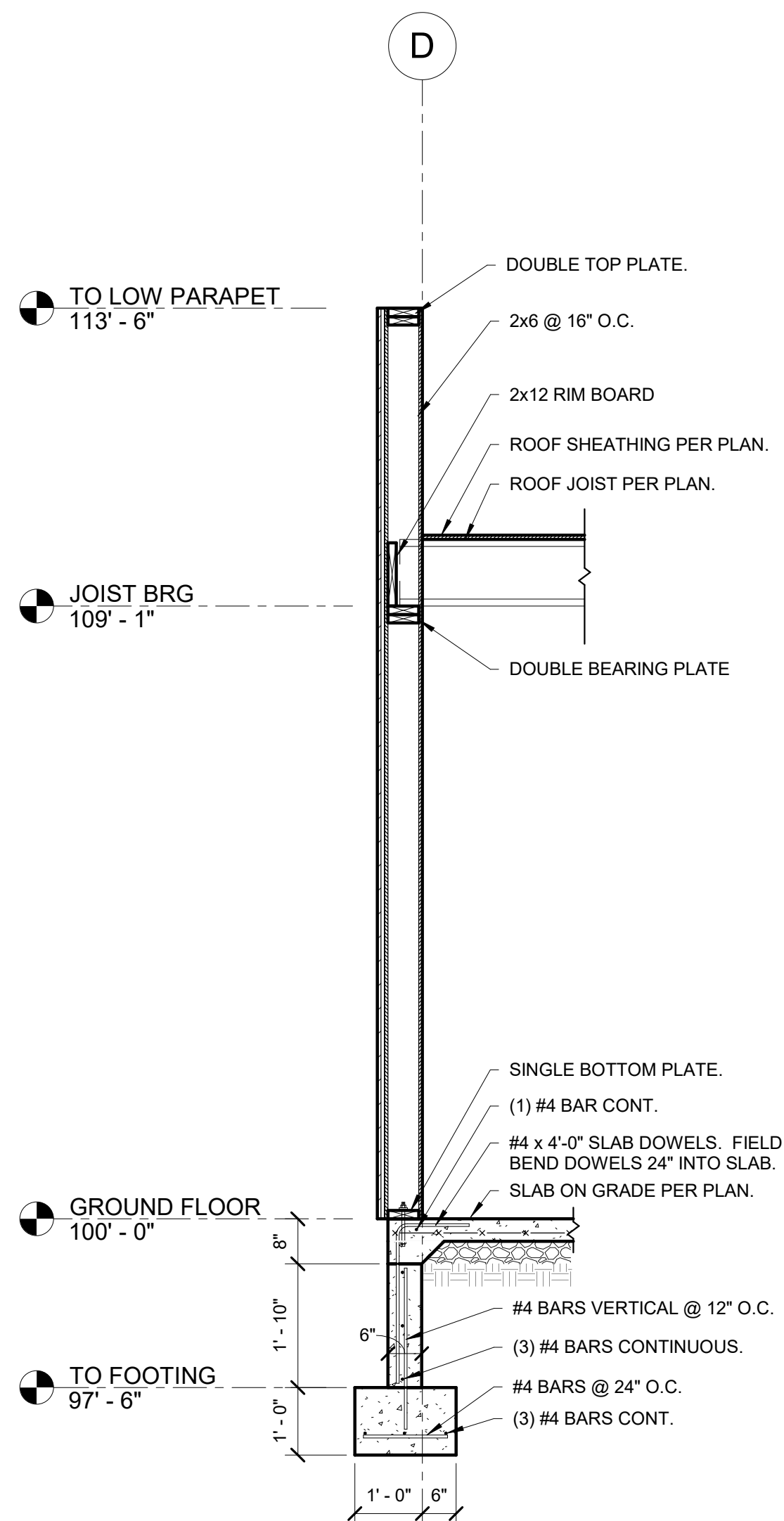




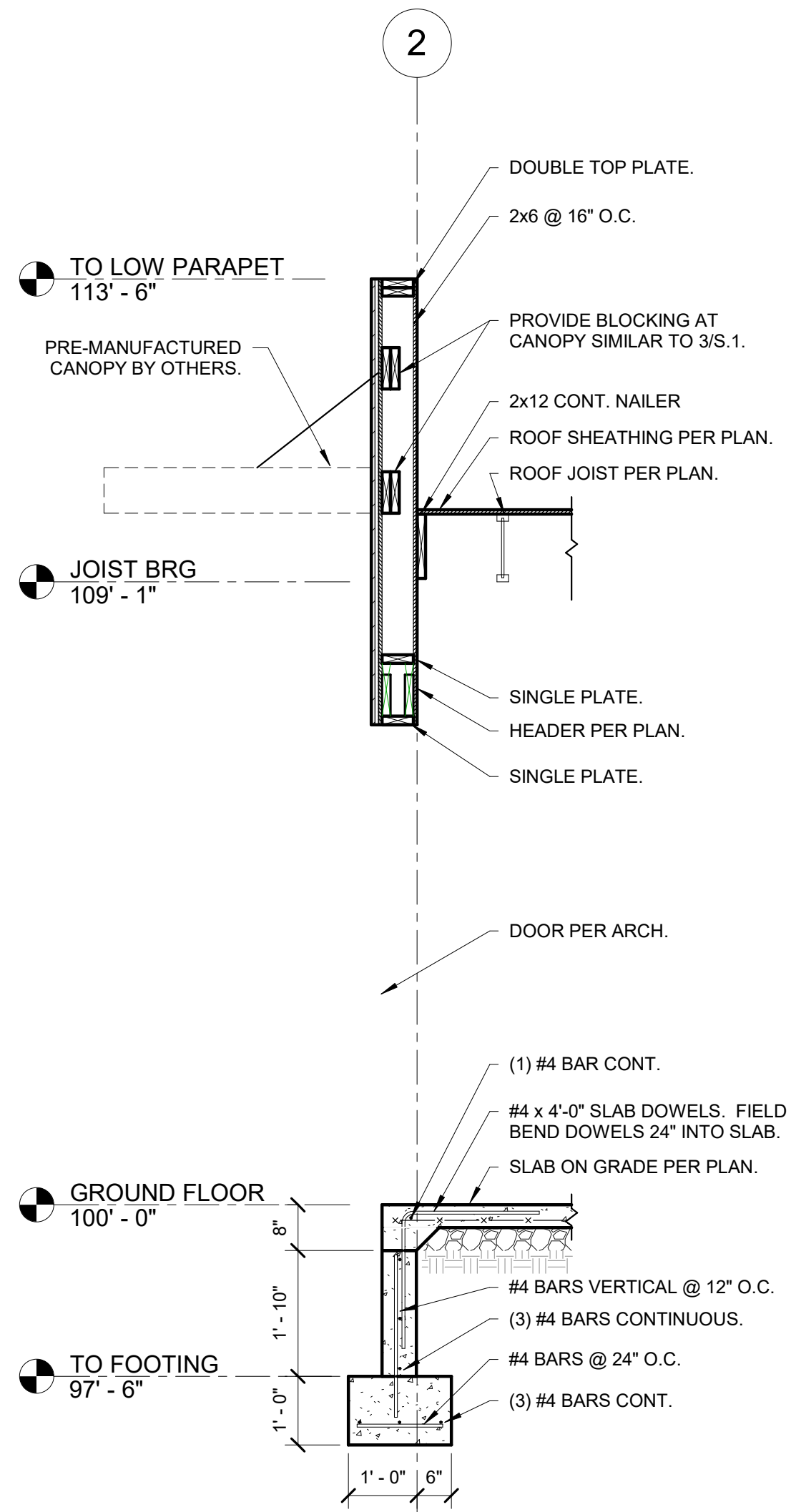
7 PARAPET ABOVE ROOF  
1/2" = 1'-0"



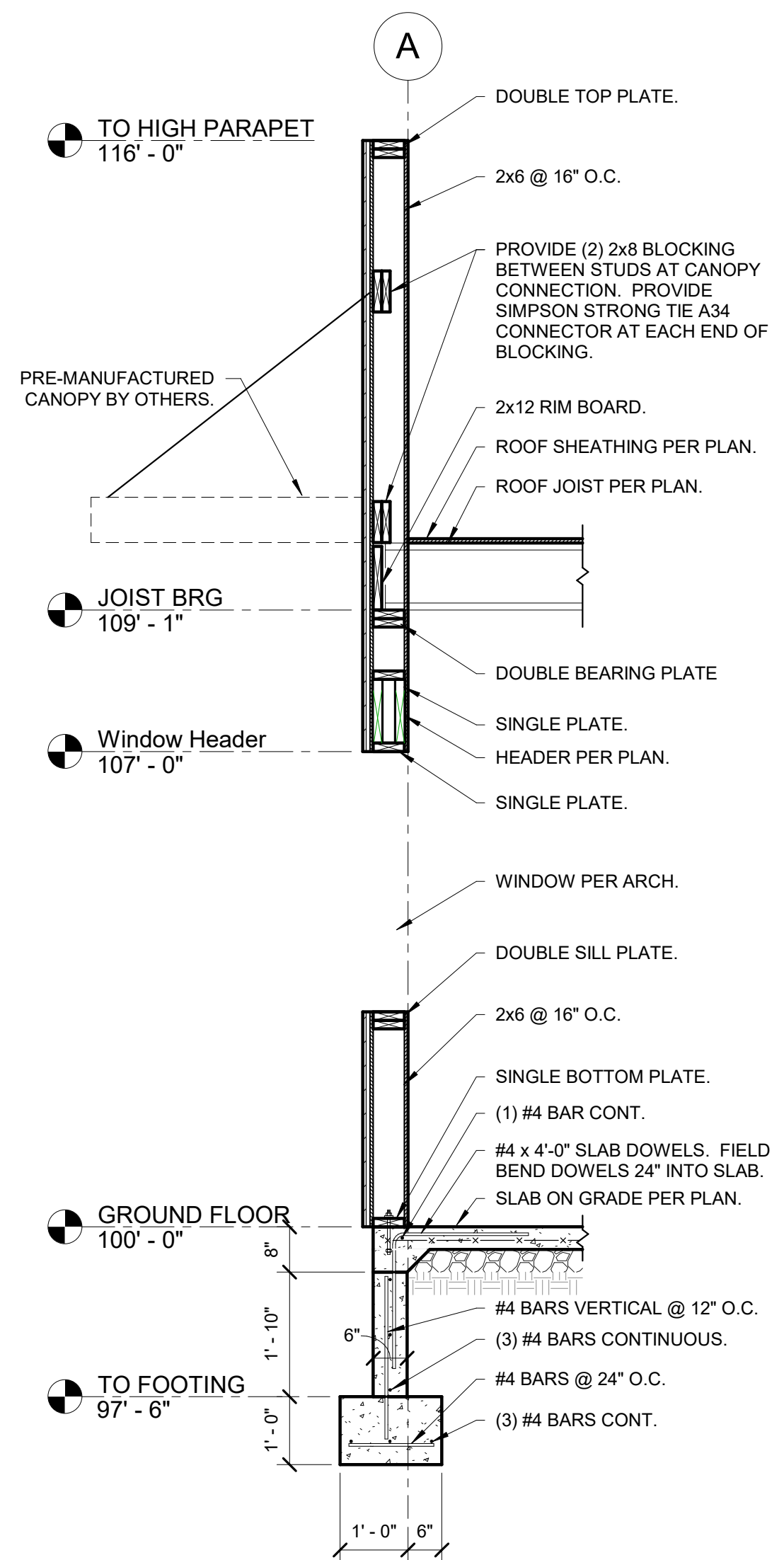
6 WALL SECTION 04  
1/2" = 1'-0"



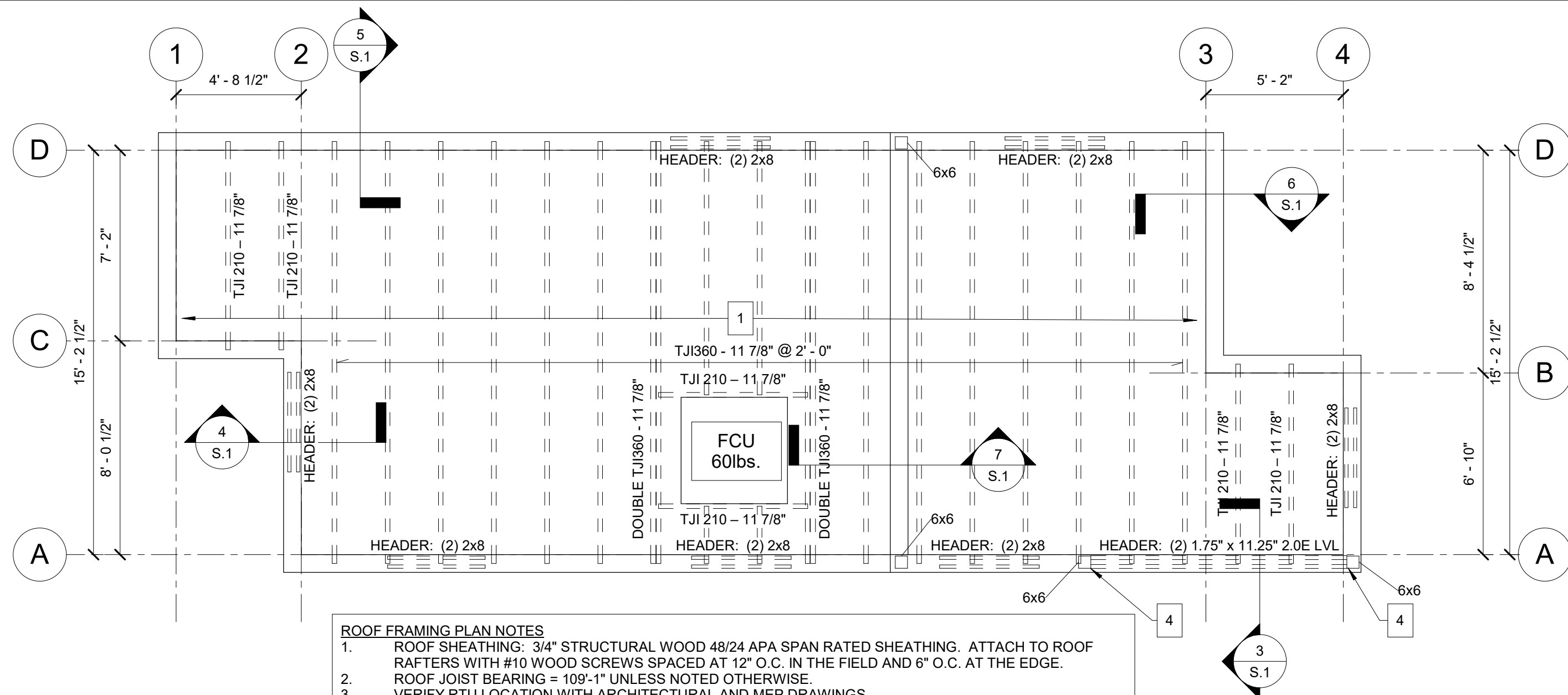
5 WALL SECTION - ROOF BEARING  
1/2" = 1'-0"



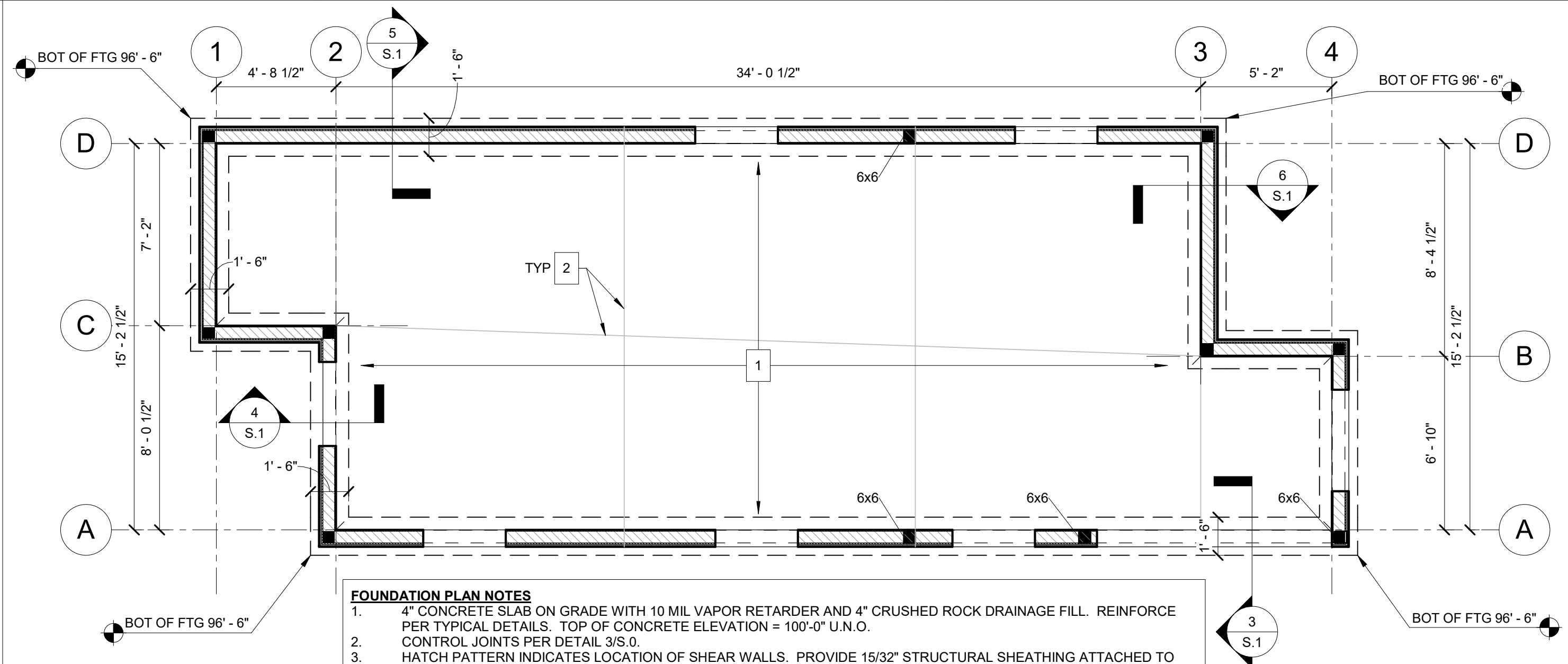
4 SECTION - AT DOOR  
1/2" = 1'-0"



3 SECTION - ROOF BEARING w/ WINDOW  
1/2" = 1'-0"



2 ROOF FRAMING PLAN  
1/4" = 1'-0"



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



SAVORY  
MANAGEMENT



K. Andrew Gilmore

SWIG - LEE'S SUMMIT  
400 NW CHIPMAN RD  
LEE'S SUMMIT, MO 64086



OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME  
**FOUNDATION AND ROOF FRAMING PLANS**

PROJECT NUMBER 2102

DATE 08/10/2023

DRAWN BY KAG

CHECKED BY

SCALE As indicated

S.1



ELECTRICAL SYMBOLS LEGEND

	HOME RUN TO PANEL. CIRCUIT NUMBERS, PHASE, NEUTRAL, AND GROUND CONDUCTORS INDICATED ALONG WITH ISOLATED GROUND CONDUCTOR IF APPLICABLE.
	PARTIAL CIRCUIT
	CONDUIT INSTALLED CONCEALED ABOVE CEILING OR IN WALL
	CONDUIT INSTALLED CONCEALED BELOW FLOOR SLAB OR UNDERGROUND
	CONDUIT INSTALLED WITH DIRECT CURRENT POWER WIRING
	CONDUIT TURNED UP OR DOWN AS NOTED
	FLEXIBLE CONDUIT FOR FINAL CONNECTION TO EQUIPMENT
	GROUND CONNECTION
	SINGLE POLE SWITCH, +3'-10" OR AS NOTED
	THREE-WAY SWITCH, +3'-10" OR AS NOTED
	KEY OPERATED SWITCH, +3'-10" OR AS NOTED
	WEATHERPROOF TOGGLE SWITCH, +3'-10" OR AS NOTED
	WALL MOUNTED OCCUPANCY SENSOR, +3'-10" OR AS NOTED
	CEILING MOUNTED OCCUPANCY SENSOR
	SIMPLEX RECEPTACLE, +18" OR AS NOTED
	ISOLATED GROUND SIMPLEX RECEPTACLE, +18" OR AS NOTED
	DUPLEX RECEPTACLE, +18" OR AS NOTED
	QUADRUPLEX RECEPTACLE, +18" OR AS NOTED
	GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED
	TAMPER RESISTANT RECEPTACLE, +18" OR AS NOTED
	WEATHERPROOF GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED
	RECEPTACLE INSTALLED HORIZONTALLY, BOTTOM AT +6" ABOVE COUNTER TOP
	RECEPTACLE INSTALLED FLUSH IN CEILING, # INDICATES NUMBER OF GANGS
	ISOLATED GROUND RECEPTACLE INSTALLED FLUSH IN CEILING, # INDICATES NUMBER OF GANGS
	JUNCTION BOX
	DISCONNECT SWITCH, TOP AT +6'-0" OR AS NOTED
	DISCONNECT SWITCH PROVIDED WITH EQUIPMENT
	EXTERIOR PHOTOCCELL, INSTALLED ON ROOF FACING NORTH
	MOTOR CONNECTION
	LIGHTING CONTACTOR, INSTALLED AS NOTED
	TIME CLOCK, +6'-2" OR AS NOTED
	CONTROL OR POWER RELAY, INSTALLED AS NOTED
	PUSHBUTTON, TOP AT +4'-6" OR AS NOTED
	DOOR BELL CHIME, +8'-0" OR AS NOTED
	CONTROL TRANSFORMER, INSTALLED AS NOTED
	THERMOSTAT, TEMPERATURE SENSOR, CARBON DIOXIDE SENSOR AND HUMIDISTAT PROVIDED BY MECHANICAL CONTRACTOR, +3'-10" OR AS NOTED
	ELECTRICALLY OPERATED DAMPER, PROVIDED BY MECHANICAL CONTRACTOR
	POWER COMPANY METER, TOP AT +6'-10" AFG OR AS NOTED
	TRANSFORMER, FLOOR MOUNTED OR SUSPENDED FROM STRUCTURE AS NOTED
	BRANCH CIRCUIT PANELBOARD, TOP AT +6'-0" OR AS NOTED
	DISTRIBUTION PANEL, TOP AT +6'-0" OR AS NOTED
	PLYWOOD PHONEBOARD, INSTALLED AS NOTED
	DATA OUTLET, +18" WITH 3/4" CONDUIT TO ABOVE CEILING
	DATA OUTLET, +6" ABOVE COUNTER WITH 3/4" CONDUIT TO ABOVE CEILING
	FIRE ALARM CONTROL PANEL, FLUSH MOUNTED, TOP AT +6'-0"
	FIRE ALARM SYSTEM REMOTE ANNUNCIATOR, TOP AT +6'-0"
	MANUAL FIRE ALARM PULL STATION, +3'-10" PER ADA
	FIRE ALARM HORN AND 75cd STROBE +80" TO BOTTOM OF DEVICE PER ADA
	STROBE ONLY (75cd UNO), +80" TO BOTTOM OF DEVICE PER ADA
	FIRE ALARM HORN AND 115cd STROBE, CEILING MOUNTED
	FIRE ALARM 115cd STROBE, CEILING MOUNTED
	120 VOLT DUCT TYPE SMOKE DETECTOR, PROVIDED BY MECHANICAL CONTRACTOR
	AREA TYPE PHOTOELETRIC SMOKE DETECTOR, CEILING MOUNTED, OR AS NOTED
	FIRE ALARM SYSTEM RELAY
	SPRINKLER FLOW SWITCH, PROVIDED BY PLUMBING CONTRACTOR
	SPRINKLER TAMPER SWITCH, PROVIDED BY PLUMBING CONTRACTOR
	FIRE SPRINKLER SYSTEM BELL (GONG), +10'-0" AFG
	COMBINATION FIRE/SMOKE DAMPER PROVIDED BY MECHANICAL CONTRACTOR

SYMBOLS LEGEND NOTES:  
1. REFER TO LIGHT FIXTURE SCHEDULE FOR SPECIFICATION AND INFORMATION ON ALL LUMINAIRES.  
2. REFER TO SPECIFICATIONS AND PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE, PROVIDED BY CONTRACTOR.  
3. MOUNTING HEIGHTS INDICATED ARE MEASURED FROM FINISHED FLOOR TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE.

GENERAL REFERENCES/NOTATIONS:

AC	MOUNT DEVICE +6" ABOVE TOP OF COUNTER TO BOTTOM OF DEVICE
+48"	MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTERLINE OF DEVICE
03/E5	DETAIL OR SECTION REFERENCE
???	FOODSERVICE EQUIPMENT DESIGNATION
#	REVISION DESIGNATION
TYPE ?	EQUIPMENT DESIGNATION.

ABBREVIATIONS:

AFF/AFG	ABOVE FINISHED FLOOR/GRADE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
AHJ	AUTHORITY HAVING JURISDICTION	NL	NIGHT LIGHT
BAS	BUILDING AUTOMATION SYSTEM	NF	NON-FUSED
EC	ELECTRICAL CONTRACTOR	PC	PLUMBING CONTRACTOR
EM	EMERGENCY	SPD	SURGE PROTECTION DEVICE
ETR	EXISTING TO REMAIN	TYP	TYPICAL
FA	FIRE ALARM	UL	UNDERWRITERS LABORATORIES
GC	GENERAL CONTRACTOR	UNO	UNLESS NOTED OTHERWISE
MC	MECHANICAL CONTRACTOR	UPS	UNINTERRUPTIBLE POWER SUPPLY
NEC	NATIONAL ELECTRICAL CODE	WP	WEATHERPROOF

LIGHTING GENERAL NOTES

- A. CONNECT EXIT SIGNS, EMERGENCY AND NIGHT LIGHTS TO UNSWITCHED LIGHTING CIRCUIT, NOT CONTROLLED BY OCCUPANCY SENSORS, SWITCHES OR CONTACTORS.
- B. PROVIDE DEDICATED NEUTRAL WITH ALL DIMMING SYSTEM CIRCUITS. NO COMMON NEUTRALS SHALL BE ALLOWED.
- C. REFER TO "RECESSED LIGHTING FIXTURE SUPPORT DETAIL" FOR INFORMATION ON SUPPORT OF ALL RECESSED LIGHT FIXTURES.
- D. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND DETAILS FOR LOCATION OF ALL LIGHTING FIXTURES AND ALL OTHER EQUIPMENT INSTALLED IN THE CEILING SYSTEM. VERIFY MOUNTING HEIGHTS AND FINISHES WITH ARCHITECT PRIOR TO ROUGH-IN.
- E. REFER TO POWER PLANS FOR LOCATIONS OF ELECTRICAL EQUIPMENT.
- F. PROVIDE (2) ADDITIONAL #12 CONDUCTORS FOR ALL 0-10V DIMMING CIRCUITS.

POWER GENERAL NOTES

- A. VERIFY EXACT LOCATIONS OF HVAC AND PLUMBING EQUIPMENT, CONDUIT STUB-UPS AND POWER CONNECTIONS PRIOR TO ROUGH-IN.
- B. VERIFY EXACT LOCATION, MOUNTING HEIGHTS AND CONDUIT ROUTING FOR ALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS AND CO<sub>2</sub> SENSORS PRIOR TO ROUGH-IN.
- C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. COORDINATE PROVISIONS FOR CONTROL CONDUIT AND WIRING AS REQUIRED FOR INTERLOCKING OF FANS, MOTORS, ETC. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- D. MOUNT DEVICES INSTALLED ON EQUIPMENT, ON NON-REMOVABLE PANEL. COORDINATE LOCATION PRIOR TO COMMENCING ROUGH-IN WORK.

GENERAL ELECTRICAL NOTES

- A. INCLUDE ALLOWANCE FOR UNFORESEEN CONDITIONS THAT MAY AFFECT THE SCOPE OF WORK. MINOR DEVIATIONS REQUIRED FOR ACCOMPLISHING THE INTENT OF THIS DESIGN SHALL BE INCLUDED IN THE ALLOWANCE.
- B. SWITCHBOARDS, PANELBOARDS, DISCONNECT SWITCHES, TRANSFORMERS AND CONTACTORS SHALL BE "LISTED" AND "IDENTIFIED" AS RATED FOR MINIMUM OF 75°C CONDUCTOR TERMINATION.
- C. ELECTRICAL DESIGN IS BASED ON INSTALLATION OF 75°C CONDUCTORS CONNECTED TO TERMINAL LUGS AND EQUIPMENT U.L. LISTED FOR MINIMUM 75°C. CONDUCTORS TERMINATED ON EQUIPMENT WITH LOWER RATING (80°C) OR NO RATING SHOWN SHALL HAVE CONDUCTOR SIZE INCREASED TO CONFORM TO ADOPTED ELECTRICAL CODE AND UL/CUL NO. 489 REQUIREMENTS.
- D. CONDUIT INSTALLED INDOORS SHALL BE ELECTRICAL METALLIC TUBING (EMT), MINIMUM 3/4" OR AS NOTED.
- E. CONDUIT INSTALLED BELOW SLAB SHALL BE RIGID STEEL, IMC, PVC OR HDPE, MINIMUM 3/4". IF PVC OR HDPE IS USED, TRANSITION TO RIGID STEEL BEFORE TURNING UP AND PENETRATING FLOOR SLAB.
- F. CONDUCTORS SHALL BE MINIMUM #12 THHN/THWN COPPER UNLESS NOTED OTHERWISE ON PLANS OR IN SPECIFICATIONS. BRANCH CIRCUITS SHALL BE PROVIDED WITH (2) #12 CONDUCTORS AND (1) #12 EQUIPMENT GROUND CONDUCTOR UNLESS NOTED OTHERWISE.
- G. BRANCH CIRCUITS SHOWN WITH TWO GROUNDING CONDUCTORS SHALL HAVE ONE EQUIPMENT GROUND CONDUCTOR (GREEN) AND ONE ISOLATED GROUND CONDUCTOR (GREEN W/YELLOW STRIP) INSTALLED IN RACEWAY.
- H. DIRECT CURRENT WIRING SHALL BE (2) #10 IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.
- I. CONTROL VOLTAGE WIRING SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT.
- J. THERMOSTATS, TEMPERATURE SENSORS, CARBON DIOXIDE SENSORS AND HUMIDISTATS: UNLESS NOTED OTHERWISE, PROVIDE WALL BOX AT +3'-10" AFF WITH 3/4" CONDUIT STUBBED OUT TO ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS AND PULLSTRING.
- K. PROVIDE FLEXIBLE CONNECTIONS ONLY FOR FINAL CONNECTION TO EQUIPMENT, 6'-0" MAXIMUM LENGTH. PROVIDE LIQUID TIGHT FLEXIBLE CONNECTION AT EXTERIOR LOCATIONS AND WHERE EXPOSURE TO MOISTURE IS POSSIBLE.
- L. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.
- M. ALL RACEWAYS SHALL CONTAIN A GROUNDING ELECTRODE SIZED PER THE ADOPTED ELECTRICAL CODE.
- N. COORDINATE WORK ABOVE THE CEILING WITH OTHER TRADES TO PROVIDE THE GREATEST POSSIBLE CLEARANCE. CONDUIT RUNS SHALL BE RUN THROUGH TRUSSES WHERE POSSIBLE.
- O. VERIFY EXACT PLACEMENT OF ALL DEVICES SHOWN ON CONSTRUCTION DOCUMENTS PRIOR TO FINAL PLACEMENT.
- P. ALL RECESSED PANELBOARDS SHALL BE INSTALLED WITH MINIMUM OF (3) 3/4" CONDUITS STUBBED UP TO ACCESSIBLE CEILING SPACE FOR FUTURE USE.
- Q. ALL PANELBOARDS, SWITCHBOARDS AND LINE VOLTAGE CONTROL EQUIPMENT SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTING, SERVICING OR MAINTENANCE OF EQUIPMENT. MARKING SHALL BE SELF ADHESIVE, COMMERCIAL LABEL CONFORMING TO ADOPTED CODES.
- R. LIGHT SWITCHES, ELECTRICAL OUTLETS, THERMOSTATS AND OTHER ENVIRONMENTAL CONTROLS SHALL HAVE OPERABLE PARTS OF THE CONTROLS LOCATED NO HIGHER THAN 48" AND NO LOWER THAN 15" ABOVE THE FLOOR. IF THE REACH IS OVER AN OBSTRUCTION BETWEEN 20" AND 25" IN DEPTH, THE MAXIMUM HEIGHT IS REDUCED TO 44" FOR FORWARD APPROACH OR 46" FOR SIDE APPROACH, PROVIDED THE OBSTRUCTION IS NO MORE THAN 24" IN DEPTH. OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25" FROM THE WALL BENEATH A CONTROL.
- S. TERMS:  
  
SHALL - ACTION THAT IS REQUIRED WITHOUT OPTION OR QUALIFICATION.  
  
FURNISH - CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING.  
  
INSTALL - CONTRACTOR SHALL BE RESPONSIBLE FOR LABOR AND CONSTRUCTION EQUIPMENT NECESSARY TO SET IN PLACE, CONNECT, CALIBRATE AND/OR TEST EQUIPMENT FURNISHED BY HIM OR OTHERS.  
  
PROVIDE - CONTRACTOR SHALL FURNISH AND INSTALL.



SWIG - SUMMIT ORCHARDS  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



OAG

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE

No.	Description	Date

SHEET NAME

GENERAL NOTES AND LEGENDS

PROJECT NUMBER 2383.02

DATE 07/26/2023

DRAWN BY ST

CHECKED BY JGM

SCALE

E001



Dialectic, Inc.  
310 W 23rd Street, Suite 100  
Kansas City, MO 64108  
Professional Engineer  
Missouri Certificate of Authorization Number 1052  
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This sheet is part of the construction documents. Drawings, specifications and other sheets apply and must be followed in full. When sheets are for architectural representation and they are not to be used as a basis for construction, provide all modifications may need to conform to site conditions, equipment and material used. Void for location and representation of architectural and structural elements per their respective documents. All these elements are shown and the engineer has no liability for the accuracy of these associated elements, or the any work the engineer has not signed and sealed.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI

KATLYN COLLIER

NAME:

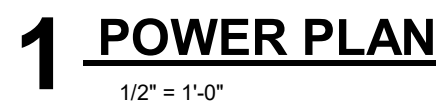
ELECTRICAL ENGINEER

DISCIPLINE

2021046167

LICENSE NUMBER





- 
- The logo for Swig Savory Management. It features the word "Swig" in a large, white, cursive script font inside a dark circular background. Below the circle is a small, dark, flame-like icon. Underneath the icon, the words "SAVORY" and "MANAGEMENT" are written in a clean, white, sans-serif, all-caps font, stacked vertically.

STATE OF MISSOURI  
KATLYN COLLIER  
NUMBER  
PE-2021046167  
PROFESSIONAL ENGINEER  
07/26/2023

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

SHEET NAME

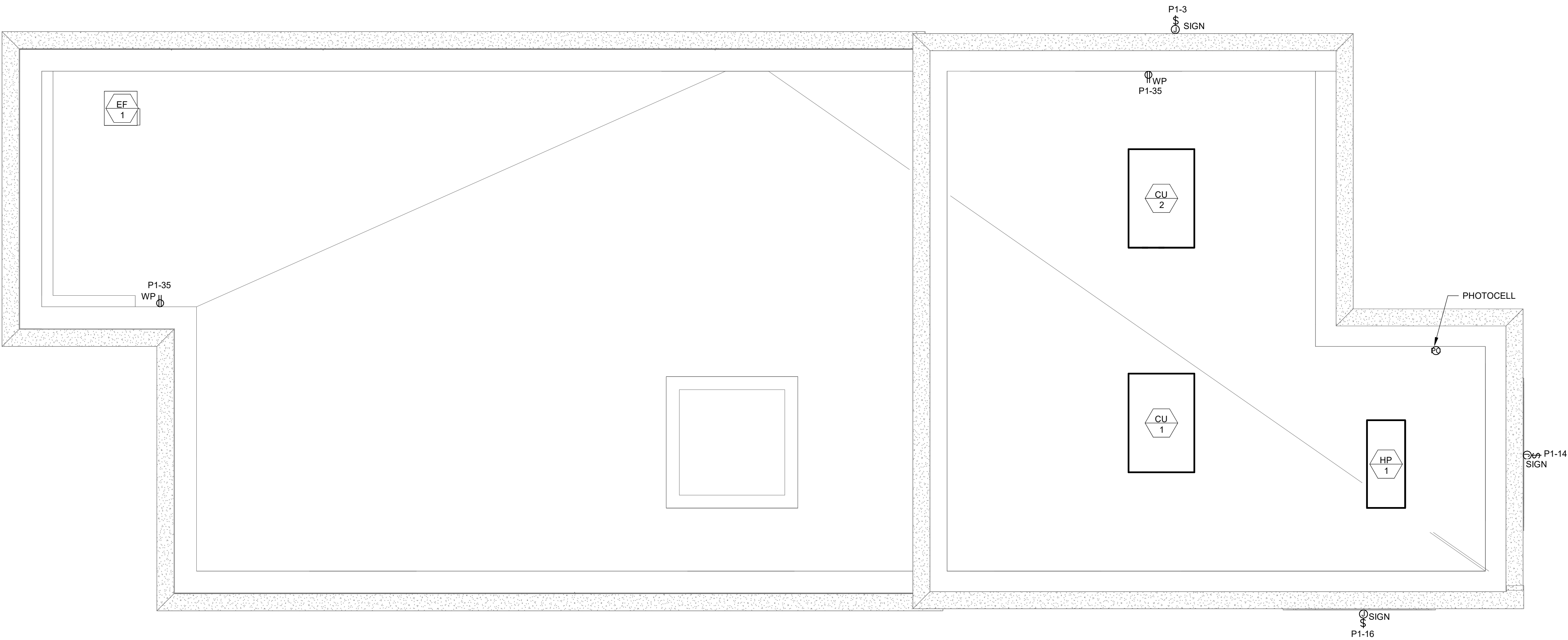
POWER PLAN

SCALE  $1/2" = 1'-0"$

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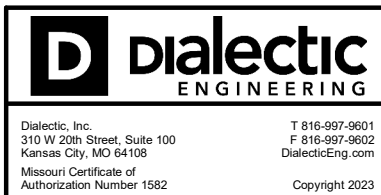
**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY  
LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE  
STATE OF MISSOURI  
**KATLYN COLLIER**  
\_\_\_\_\_  
NAME: \_\_\_\_\_  
**ELECTRICAL ENGINEER** **2021046167**  
\_\_\_\_\_  
DISCIPLINE LICENSE NUMBER \_\_\_\_\_





**1 POWER ROOF PLAN**

1/2" = 1'-0"



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.  
**KATLYN COLLIER**  
NAME: \_\_\_\_\_  
**ELECTRICAL ENGINEER** \_\_\_\_\_ 2021046167  
DISCIPLINE LICENSE NUMBER



**SWIG - SUMMIT ORCHARDS**  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

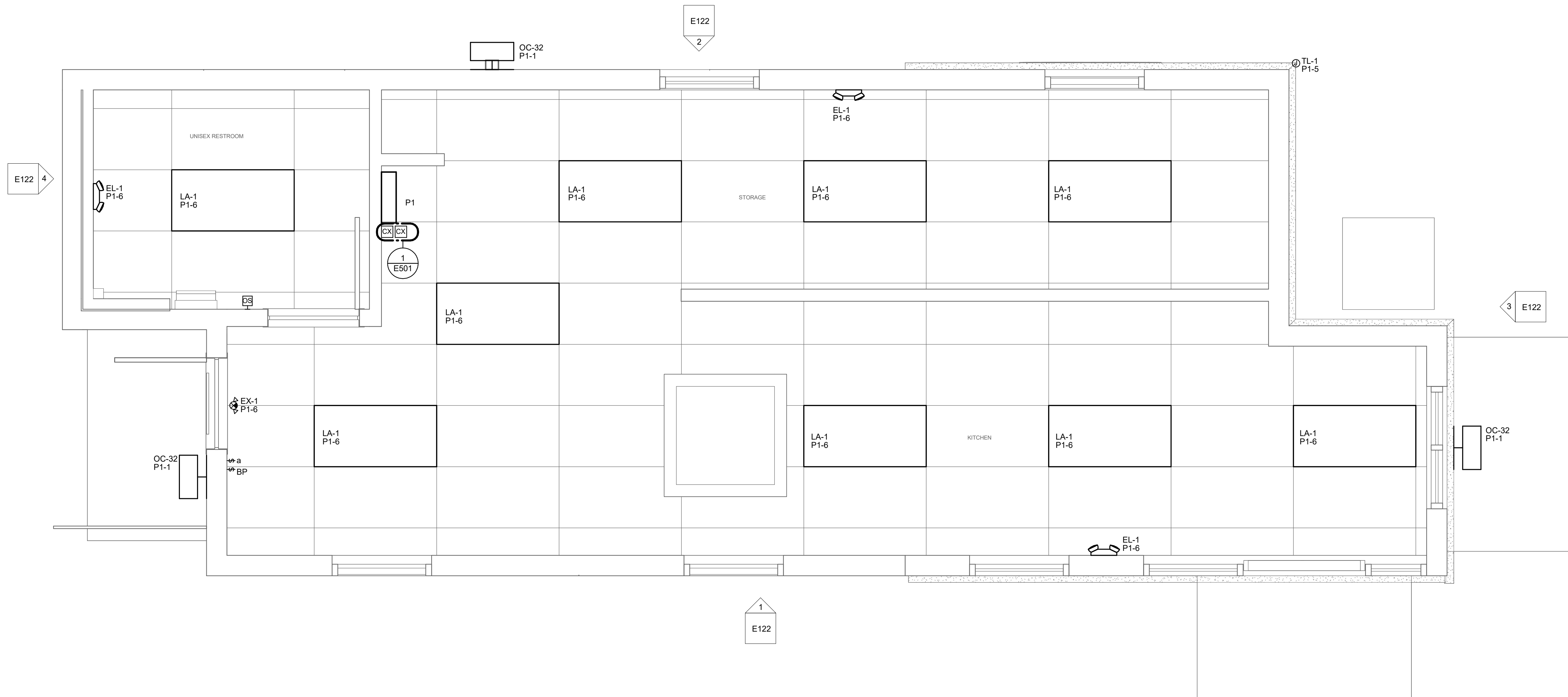
REVISION SCHEDULE		
No.	Description	Date

SHEET NAME	
POWER ROOF PLAN	
PROJECT NUMBER	2383.02
DATE	07/26/2023
DRAWN BY	Author
CHECKED BY	Checker
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**E112**

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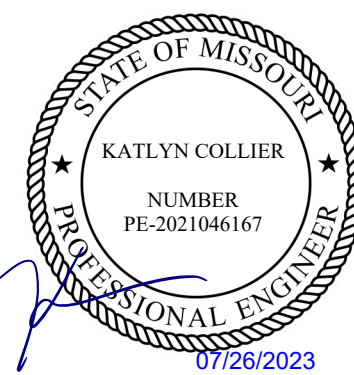




**1 LIGHTING PLAN**  
1/2" = 1'-0"



**SWIG - SUMMIT ORCHARDS**  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME  
**LIGHTING PLAN**

PROJECT NUMBER 2383.02

DATE 07/26/2023

DRAWN BY Author

CHECKED BY JW

SCALE 1/2" = 1'-0"

**E121**

**D** **dialectic**  
ENGINEERING

Dialectic, Inc.  
370 W 23rd Street, Suite 100  
Pleasant Hill, MO 64081  
Missouri Certificate of  
Authorization Number 1062

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This sheet is part of the construction documents. Drawings, specifications and other sheets apply and must be followed in full. When shown on the drawings, representation and this sheet shall be used as a guide only. The Engineer shall be responsible for the design and construction of the project. The Engineer shall be responsible for the design and construction of the project. The Engineer shall be responsible for the design and construction of the project.

**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.

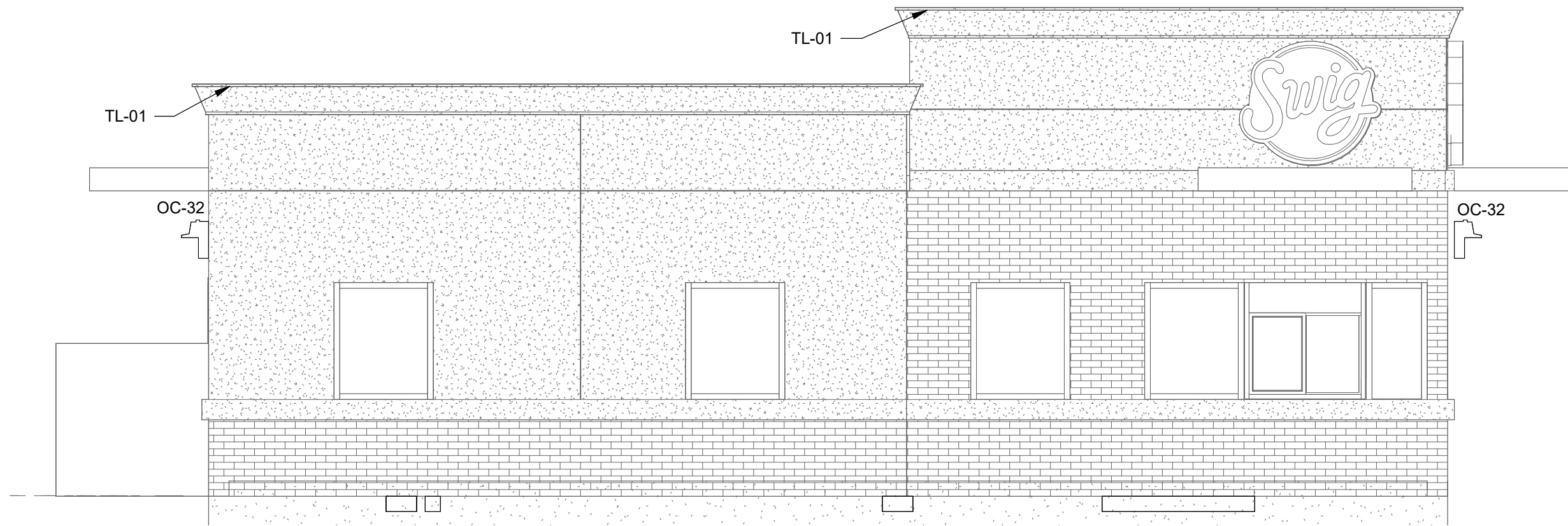
**KATLYN COLLIER**  
NAME: \_\_\_\_\_  
**ELECTRICAL ENGINEER** 2021046167  
DISCIPLINE LICENSE NUMBER

7/26/2023 8:49:22 AM

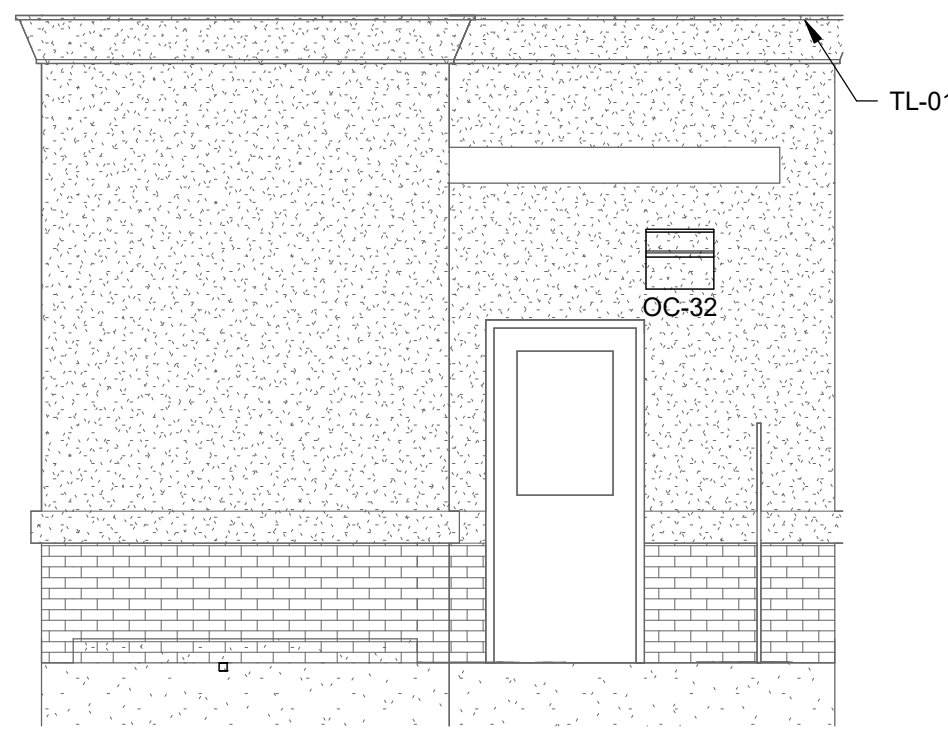




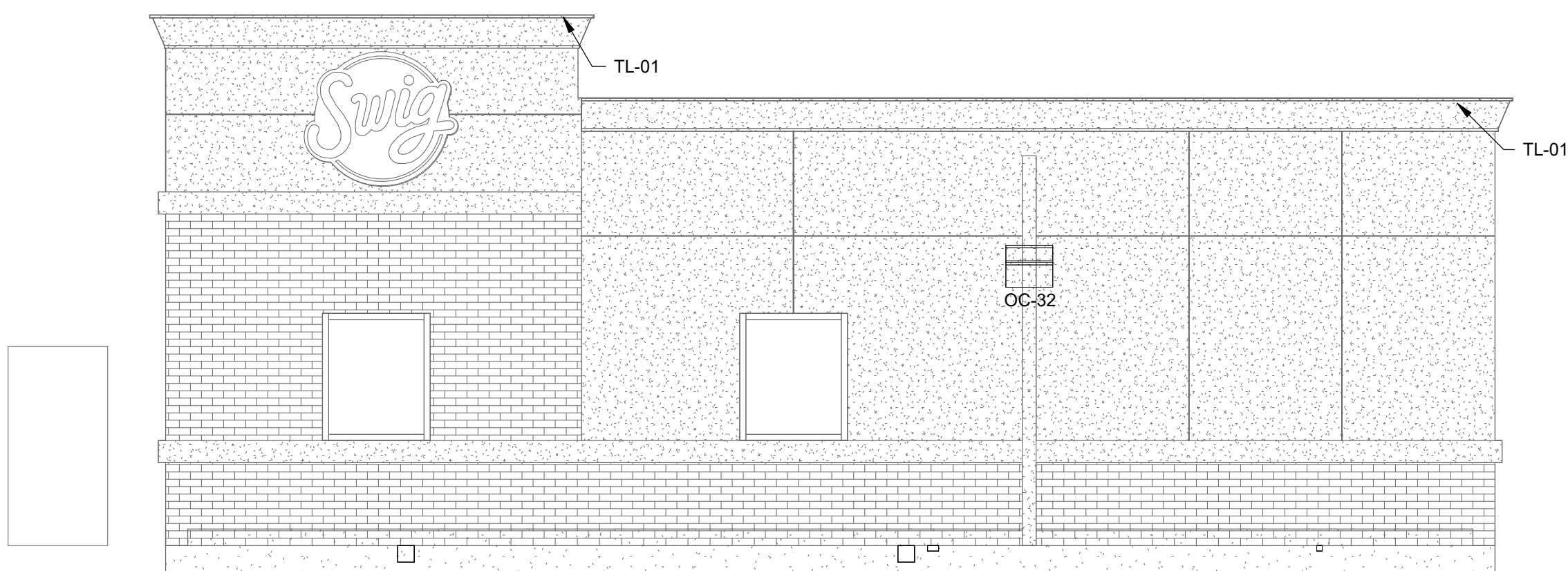
**3** North Elevation 1 - a  
1/4" = 1'-0"



**1** East Elevation 1 - b  
1/4" = 1'-0"



**4** South Elevation 1 - c  
1/4" = 1'-0"



**2** West Elevation 1 - d  
1/4" = 1'-0"



**SWIG - SUMMIT ORCHARDS**  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



**OAG**

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE

No.	Description	Date

SHEET NAME

**ELECTRICAL LIGHTING  
ELEVATION**

PROJECT NUMBER 2383.02

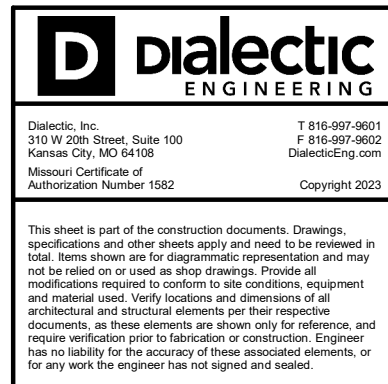
DATE 07/26/2023

DRAWN BY Author

CHECKED BY JGM

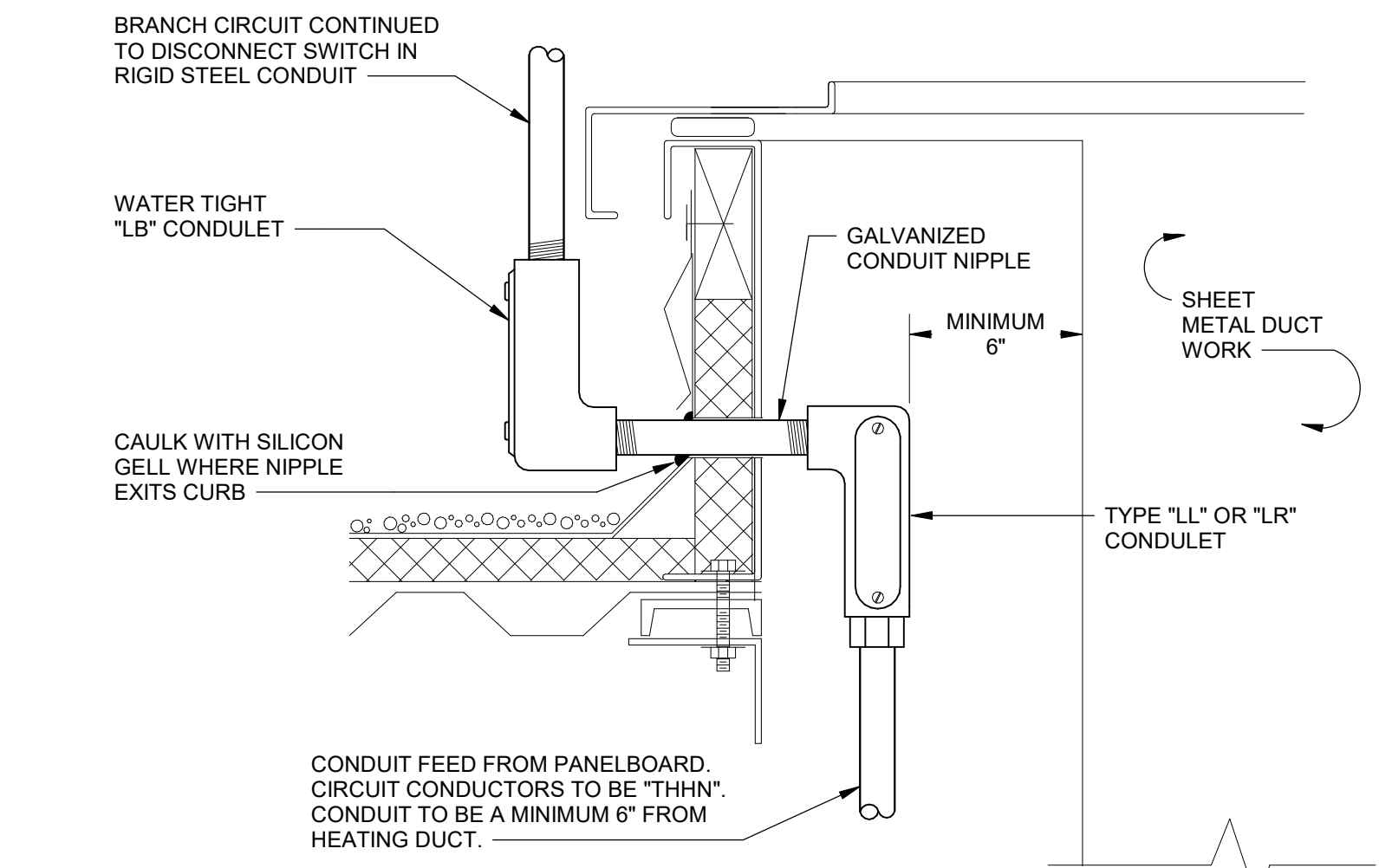
SCALE 1/4" = 1'-0"

**E122**

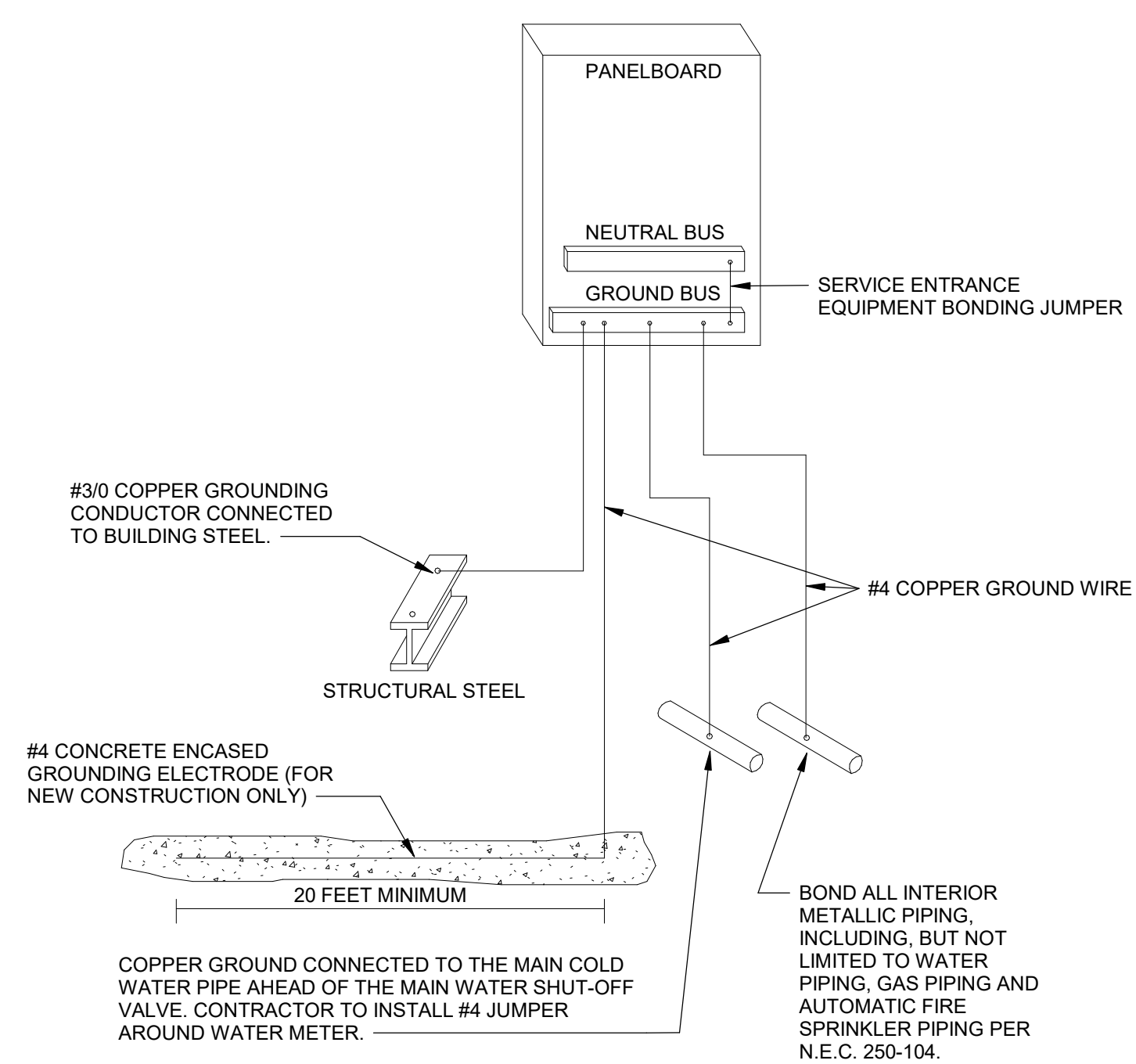


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**KATLYN COLLIER**  
NAME: \_\_\_\_\_  
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DISCIPLINE LICENSE NUMBER

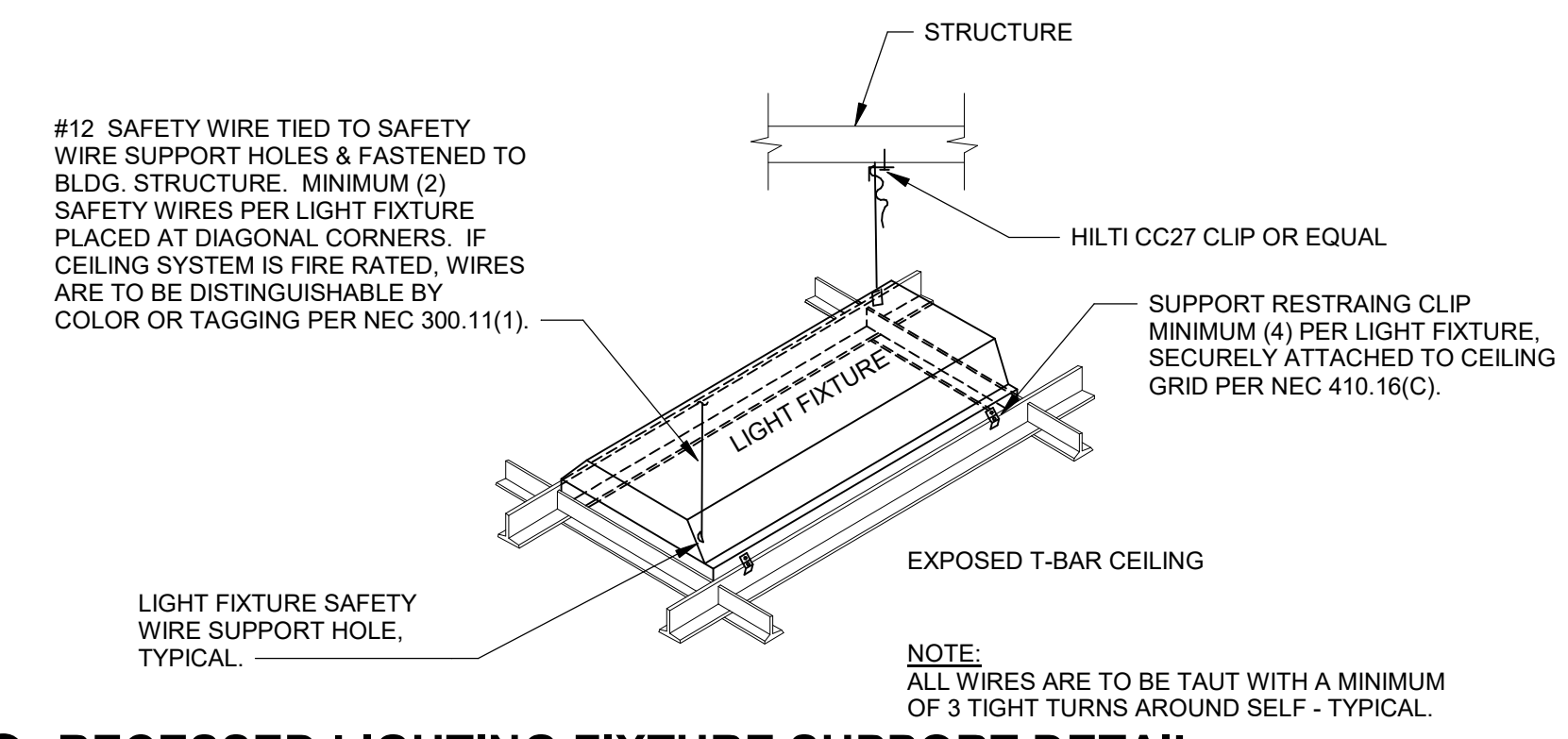




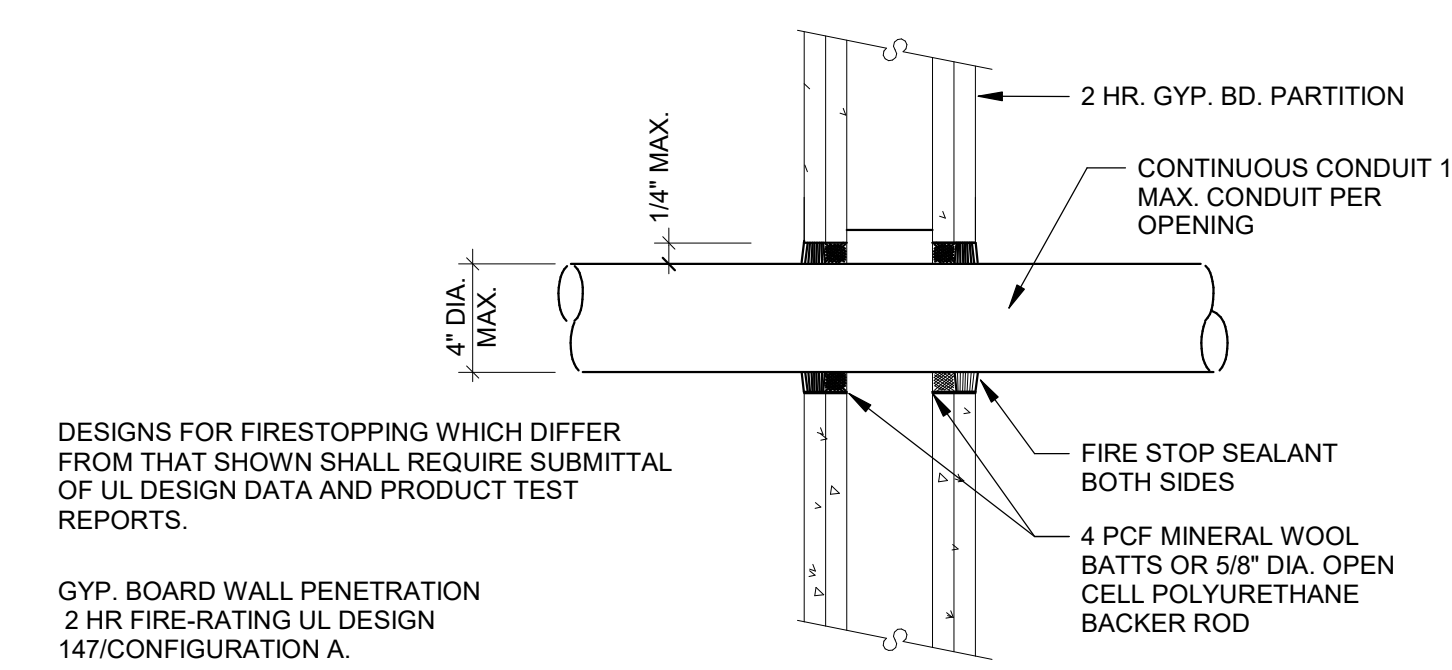
**6 ROOF CURB CONDUIT DETAIL**  
1/4" = 1'-0"



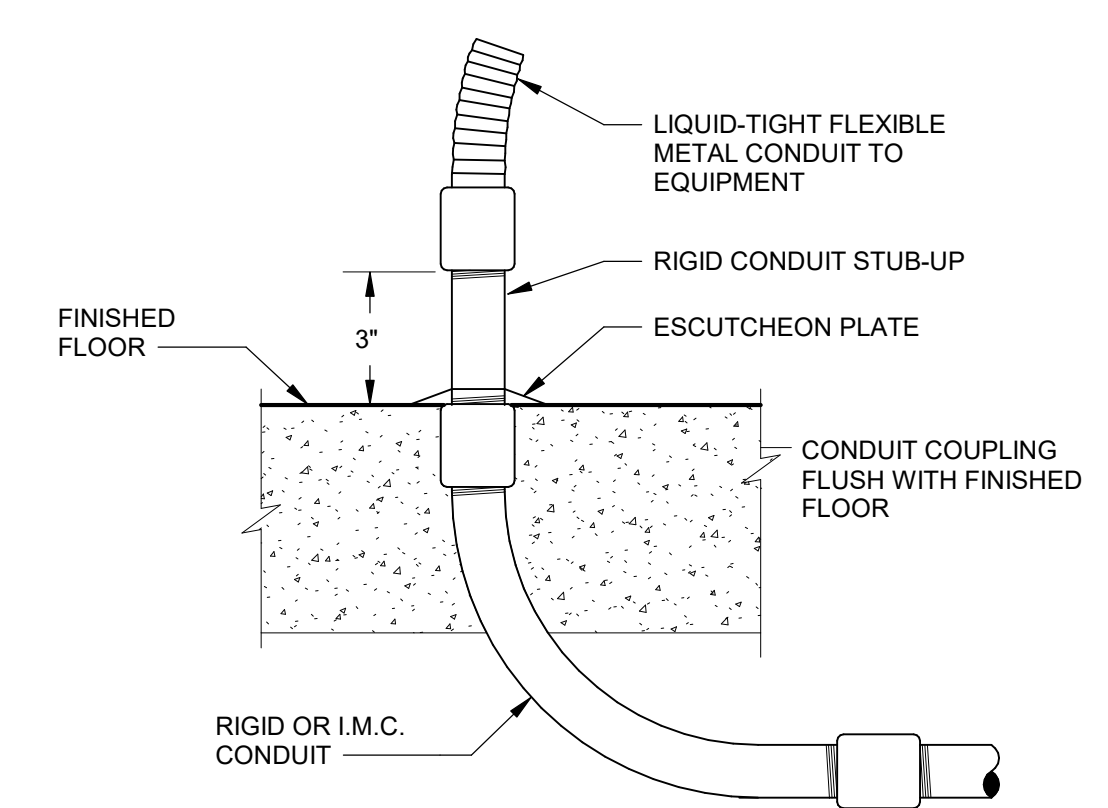
**7 SERVICE ENTRANCE GROUNDING**  
12" = 1'-0"



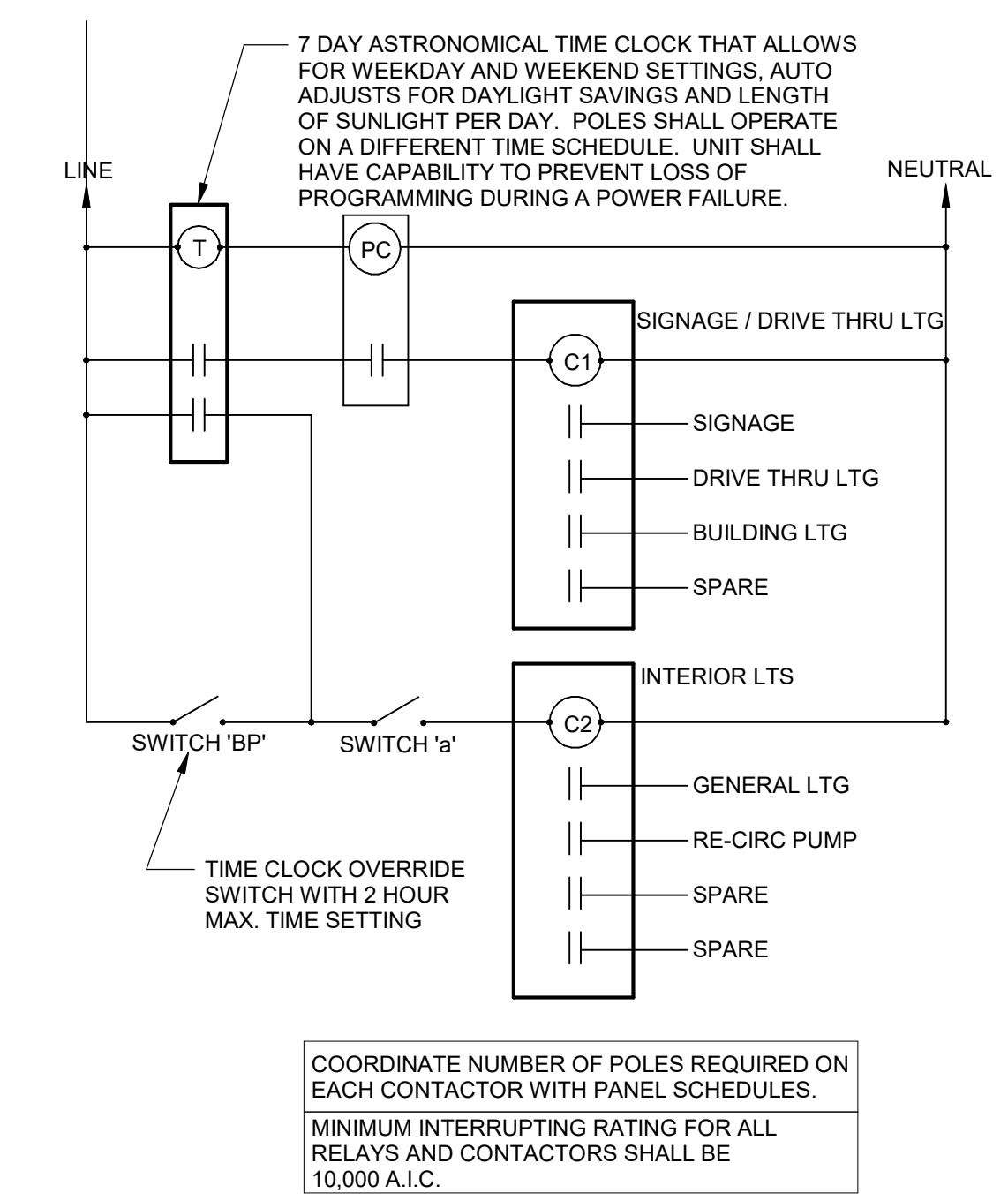
**3 RECESSED LIGHTING FIXTURE SUPPORT DETAIL**  
1/4" = 1'-0"



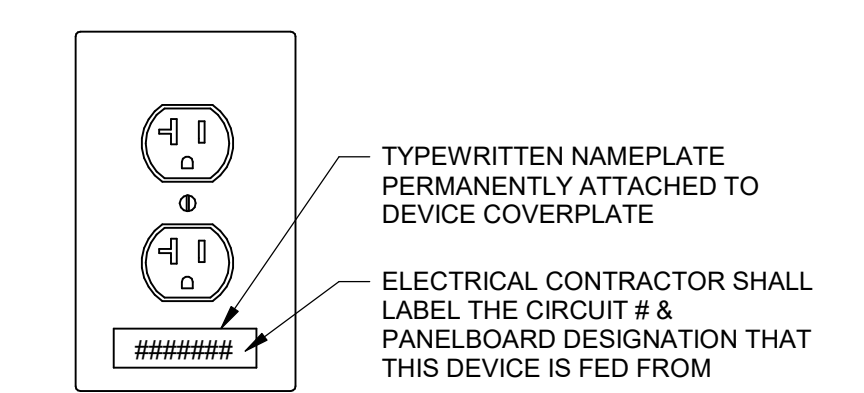
**4 FIRE RATED - CONDUIT PENETRATION DETAIL**  
12" = 1'-0"



**5 CONDUIT STUB-UP DETAIL**  
1/4" = 1'-0"



**1 LIGHTING CONTROL DIAGRAM**  
NOT TO SCALE



**2 RECEPTACLE LABELING DETAIL**  
1/4" = 1'-0"



**SWIG - SUMMIT ORCHARDS**  
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**OLSON ARCHITECTURAL GROUP**  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME  
**ELECTRICAL DETAILS**

PROJECT NUMBER 2383.02  
DATE 07/26/2023  
DRAWN BY ST  
CHECKED BY JGM  
SCALE As indicated

**E501**



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**KATLYN COLLIER**  
NAME: \_\_\_\_\_  
ELECTRICAL ENGINEER 2021046167  
DISCIPLINE LICENSE NUMBER



LIGHTING FIXTURE SCHEDULE							
Type	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS	VOLTS	FIXTURE WATTS	REMARKS
EL-1	LSI	EAR-R-U-WH-LD11-SD2	EMERGENCY LIGHTING UNIT, 2 LAMP, MAINTENANCE FREE LEAD-CALCIUM BATTERY, COLOR BY ARCHITECT.	LED	120 V	5 VA	
EX-1	LSI	LPRX-R-U-WH-LD11-SD2	COMBO EMERGENCY DIE-CAST ALUMINUM LED EXIT SIGN, WITH 2 LED LAMPS, SINGLE FACE GREEN LETTERS, WHITE BACKGROUND BRUSHED ALUMINUM FINISHED, NICKEL-CDMIUM BATTERY, CEILING/BACK MOUNTING.	LED	120 V	2 VA	
LA-1	LSI	SFP24-LED-50-UE-DIM-35	2x4 LED EDGE LIT FLAT PANEL LED TROFFER	LED	120 V	29 VA	
OC-32	LSI	XWM-3-LED-4L-40-UE-BLK-BB	WALL PACK LED	LED	120 V	30 VA	
TL-1	STREET WRAP GEN 2	B-SR2-S00-09663	BUILDING WRAP LIGHT	4.5W/FT LED			
LIGHTING FIXTURE SCHEDULE NOTES							
1 INSTALL LIGHT FIXTURES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODE REQUIREMENTS.							
2 VERIFY EXACT MOUNTING HEIGHT AND FINISH OF LIGHTING FIXTURES WITH ARCHITECT PRIOR TO PLACING ORDER OR COMMENCING ROUGH-IN.							
3 WIRING CONNECTIONS TO EXTERIOR WALL MOUNTED FIXTURES SHALL BE WEATHER TIGHT. USE WEATHERPROOF JUNCTION BOXES, FITTINGS, COVERPLATES, ETC. AS REQUIRED TO PREVENT ENTRY OF WATER INTO WIRING BOXES. (EXTERIOR ONLY)							
4 ALL POLES SHALL INCLUDE AN INTERNALLY MOUNTED, FACTORY INSTALLED PENDULUM VIBRATION DAMPENER, WITH FLUSH STAINLESS STEEL SOCKET HEAD FASTENERS FINISHED TO MATCH POLE. (EXTERIOR ONLY)							
5 PROVIDE UN-SWITCH 'HOT' TO ALL EXIT SIGNS, EMERGENCY LIGHTS, AND INTEGRAL EMERGENCY BATTERY BACK-UP DRIVERS.							

EQUIPMENT FEEDER SCHEDULE												
MARK	#	VOLTAGE PHASE	PANEL	CIRCUIT	MOCP	FEEDER	DISCONNECT				REMARKS	
EQUIPMENT TYPE							PROVIDER	SIZE-POLES	FUSES	NEMA		
AC	1	120V - 1P	P1	27	20 A	(2)#12 & (1)#12 G, 1/2"	INTEGRAL					
AC	2	120V - 1P	P1	18	20 A	(2)#12 & (1)#12 G, 1/2"	INTEGRAL					
AHU	1	208V - 1P	P1	30,32	15 A	(2)#12 & (1)#12 G, 1/2"	CONTRACTOR	30A - 2P	NF			INDOOR UNIT POWERED FROM OUTDOOR UNIT
CU	1	208V - 1P	P1	29,31	30 A	(2)#10 & (1)#10 G, 1/2"	CONTRACTOR	30A - 2P	NF			
CU	2	208V - 1P	P1	23,25	15 A	(2)#12 & (1)#12 G, 1/2"	CONTRACTOR	30A - 2P	NF			
EF	1	120V - 1P	P1	6	20 A	(2)#12 & (1)#12 G, 1/2"	INTEGRAL					FAN TO BE CONTROLLED WITH LIGHTING CONTROLS
HP	1	208V - 1P	P1	30,32	30 A	(2)#10 & (1)#10 G, 1/2"	CONTRACTOR	30A - 2P	NF			
RP	1	120V - 1P	P1	53	15 A	(2)#12 & (1)#12 G, 1/2"	CONTRACTOR	20A - 1P	NF			ROUTE EQUIPMENT THRU TIMECLOCK
UH	1	120V - 1P	P1	47	20 A	(2)#12 & (1)#12 G, 1/2"	CONTRACTOR	20A - 1P	NF			
WH	1	208V - 3P	P1	44,46,48	60 A	(3)#6 & (1)#10 G, 1"	CONTRACTOR	60A - 3P	NF			
ELECTRICAL FEEDER GENERAL NOTES												
1 DISCONNECT SWITCHES FOR 120V OR 277V EQUIPMENT UNDER 30 AMPS SHALL BE MOTOR RATED TOGGLE SWITCHES.												
2 CONTRACTOR IS RESPONSIBLE FOR ALL FINAL CONNECTIONS TO EQUIPMENT.												
3 COORDINATE EXACT ROUGH-IN LOCATIONS PRIOR TO START OF CONSTRUCTION.												
4 ALL MULTI-VOLT DISCONNECT SWITCHES PROVIDED BY THIS CONTRACTOR SHALL COME WITH A NEUTRAL AND GROUND LUG KIT.												

KITCHEN EQUIPMENT SCHEDULE									
SYMB OL	EQUIPMENT DESCRIPTION	VOLTAGE	CIRCUIT NAME		LOAD	MOCP	CONNECTION	FEEDER	NOTES
			PANEL	CIRCUIT					
1	UNDERCOUNTER REFRIGERATOR	120V - 1P	P1	13	636 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
4.1	BEVERAGE DISPENSER	120V - 1P	P1	40	636 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
4.1	BEVERAGE DISPENSER	120V - 1P	P1	41	636 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
4.1	BEVERAGE DISPENSER	120V - 1P	P1	38	636 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
5	3-DOOR UNDERCOUNTER REFRIGERATOR	120V - 1P	P1	7	300 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
5.2	GREASE INTERCEPTOR	120V - 1P	P1	9	300 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
8	3-DOOR REACH-IN FREEZER	120V - 1P	P1	17	948 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
10.1	ICE MACHINE	120V - 1P	P1	21	1356 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
10.2	ICE MACHINE	208V - 1P	P1	26,28	2912 VA	20 A	NEMA 6-20R	(2)#12 & (1)#12 G, 1/2"	
13	HOT CHOCOLATE DISPENSER	120V - 1P	P1	22	1800 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
14	BLENDER	120V - 1P	P1	45	1560 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
14	BLENDER	120V - 1P	P1	42	1560 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
100	MICROWAVE	120V - 1P	P1	43	1560 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
101	NACHO CHEESE WARMER	120V - 1P	P1	4	204 VA	20 A	NEMA 5-20R	(2)#12 & (1)#12 G, 1/2"	
KITCHEN EQUIPMENT GENERAL NOTES									
1 MAKE FINAL CONNECTIONS TO KITCHEN EQUIPMENT.									
2 HARDWIRED CONNECTIONS SHALL BE MADE WITH SEAL TIGHT FLEXIBLE METAL CONDUIT WITH INSULATED GROUND WIRE INSTALLED WITH PHASE AND NEUTRAL CONDUCTORS. GROUND WIRE SHALL BE BONDED AT BOTH ENDS.									
3 VERIFY ALL EQUIPMENT REQUIREMENTS (INCLUDING THOSE SCHEDULED AND OWNER PROVIDED) PRIOR TO ROUGH-IN									
4 THE FOLLOWING KITCHEN RECEPTACLES SHALL HAVE GFI PROTECTION BY MEANS OF BREAKERS OR SEPARATE UL 943C DEVICES. ALL 125V THROUGH 250V RECEPTACLES SUPPLIED BY SINGLE PHASE BRANCH CIRCUITS RATED 150V OR LESS TI GROUND-50A OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150V TO GROUND-100A OR LESS.									

PANEL: P1		LOCATION: STORAGE 102		NEMA ENCLOSURE: Type 1													
SYSTEM: 120/208V - 3P		BUS...: 200 A		CABINET MOUNTING: Surface													
FEEDER: SEE RISER DIAGRAM		MAINS: 200 A - MCB		LUGS:													
OPTIONS:				AIC RATING:													
LOAD DESCRIPTION	BKR SIZE	BKR POLE	NOTE	CKT NO.	NOTE	BKR POLE	BKR SIZE	LOAD DESCRIPTION									
LTG - EXTERIOR	20 A	1	C1	1	90	200				2	C2	1	20 A	MENU BOARD			
BUILDING SIGN	20 A	1	C1	3			1200	204		4	G	1	20 A	101 - NACHO CHEESE...			
BUILDING WRAP LIGHT	20 A	1	C1	5					168	300	6	C2	1	20 A	LIGHTING		
5 - 3-DOOR UIC FRIDGE	20 A	1	G	7	300	400				8	C1	1	20 A	EXIT SIGN			
5.2 - GREASE INTERCEPTOR	20 A	1	G	9			300	540		10		1	20 A	HEAD SETS			
ENTRANCE SIGN	20 A	1	C1	11					400	540	12		1	20 A	RCPT - GENERAL		
1 - UIC FRIDGE	20 A	1	G	13	636	1200				14	C1	1	20 A	BUILDING SIGN			
RCPT - POS	20 A	1		15			900	1200		16	C1	1	20 A	BUILDING SIGN			
8 - 3-DOOR REACH-IN...	20 A	1	G	17					948	1884	18		1	20 A	AC-2		
CO	20 A	1		19	180	360				20		1	20 A	IT RACK			
10.1 - ICE MACHINE	20 A	1	G	21			1356	1800		22	G	1	20 A	13 - HOT CHOCOLATE...			
CU-2 (ICE MAKER COND.)	15 A	2	LOC	23					1113	180	24		1	20 A	RCPT - IRRIGATION		
--	--	--	--	25	1113	1456				26	G	2	20 A	10.2 - ICE MACHINE			
AC-1	20 A	1		27			1884	1456		28	--	--	--	--	--		
CU-1 (ICE MAKER COND.)	30 A	2	LOC	29					2100	2288	30		2	30 A	HP-1 & AHU-1		
--	--	--	--	31	2100	2288				32	--	--	--	--	--		
RCPT - GENERAL	20 A	1		33			180	360		34	C2	1	20 A	OPEN / CLOSE SIGNS			
RCPT - ROOF	20 A	1		35					360	540	36		1	20 A	RCPT - POS		
RCPT - GENERAL	20 A	1		37	540	636				38	G	1	20 A	4.1 - BEVERAGE DISPENSER			
RCPT - LINE BLUSTER	20 A	1		39			540	636		40	G	1	20 A	4.1 - BEVERAGE DISPENSER			
4.1 - BEVERAGE DISPENSER	20 A	1	G	41					636	1560	42	G	1	20 A	14 - BLENDER		
100 - MICROWAVE	20 A	1	G	43	1560	6000				44		3	60 A	WH-1 (WATER HEATER)			
14 - BLENDER	20 A	1	G	45			1560	6000		46	--	--	--	--	--		
UH-1	20 A	1		47					1500	6000	48	--	--	--	--		
EOD	20 A	1		49	0	200				50		1	20 A	TIMECLOCK / CONTACTOR			
TOILET RECEPTACLE	20 A	1		51			180	--		52		1	--	SPACE			
RE-CIRC PUMP -1	15 A	1	C2	53					60	--	54		1	--	SPACE		
SPACE	--	1		55	--	--				56		1	--	SPACE			
SPACE	--	1		57			--	--		58		1	--	SPACE			
SPACE	--	1		59					--	--	60		1	--	SPACE		
PHASE A: 19299 W						<table><tr><td>CONNECTED</td><td>DEMAND</td></tr><tr><td>60132 W</td><td>55900 W</td></tr><tr><td>167 A</td><td>155 A</td></tr></table>						CONNECTED	DEMAND	60132 W	55900 W	167 A	155 A
CONNECTED	DEMAND																
60132 W	55900 W																
167 A	155 A																
PHASE B: 20296 W																	
PHASE C: 20577 W																	
LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS													
HVAC	16292 VA	100.00%	16292 VA	TOTAL CONN. LOAD: 60132 VA													
Lighting	4046 VA	125.00%	5058 VA	TOTAL EST. DEMAND: 55900 VA													
Lighting - Exterior	90 VA	125.00%	113 VA	TOTAL CONN. CURRENT: 167 A													
Motor	60 VA	100.00%	60 VA	TOTAL DEMAND CURRENT: 155 A													
Receptacle	5400 VA	100.00%	5400 VA														
Water Heater	18000 VA	100.00%	18000 VA														
Miscellaneous	1200 VA	100.00%	1200 VA														
KITCHEN EQUIPMENT	15044 VA	65.00%	9779 VA														
PANEL SCHEDULE NOTES:																	
G - PROVIDE WITH GROUND FAULT CIRCUIT INTERRUPTER																	
C# - ROUTE CIRCUIT TO LIGHTING CONTACTOR INDICATED REFER TO LIGHTING CONTROL DIAGRAM ON DETAILS SHEET.																	
LOC - HAND LOCK-OFF FOR 'OFF' POSITION																	



SECTION 20 00 00 - BASIC ELECTRICAL

1. THE WORK CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, SUPPLIES, AND MATERIALS (EXCEPT AS OTHERWISE SPECIFIED OR SHOWN ON DRAWINGS) REQUIRED TO PERFORM ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF COMPLETE ELECTRICAL SYSTEMS. WORK SHALL BE IN STRICT ACCORDANCE WITH SPECIFICATIONS AND DRAWINGS.
2. COORDINATE WORK WITH OTHER TRADES AND EXISTING CONDITIONS TO PREVENT CONFLICTS CAUSING UNNECESSARY EXPENSE OR DELAYS IN THE INSTALLATION OF WORK. WHEN CONFLICTS ARISE, REMOVE AND RELOCATE ITEMS CAUSING SUCH CONFLICTS AT NO ADDITIONAL COST TO OWNER. REFER TO OTHER DISCIPLINE'S DRAWINGS, RELEVANT EQUIPMENT DRAWINGS, AND SHOP DRAWINGS TO DETERMINE AVAILABLE CLEARANCES AND POSSIBLE OBSTRUCTIONS. MAKE NECESSARY OFFSETS OR TRANSITIONS AS REQUIRED TO CLEAR STRUCTURAL MEMBERS, EXISTING EQUIPMENT, AND TO FACILITATE INSTALLATION OF THE WORK IN THE MANNER INDICATED.
3. ALL WORK SHALL COMPLY WITH THE LOCALLY ADOPTED ELECTRICAL CODE AND ALL APPLICABLE LAWS, CODES, RECOMMENDATIONS, REGULATIONS, AND INTERIM AMENDMENTS, OF THE GOVERNMENTAL BODIES HAVING JURISDICTION INCLUDING ADA COMPLIANCE. ELECTRICAL WORK SHALL BE PERFORMED IN COMPLIANCE WITH APPLICABLE GOVERNING SAFETY REGULATIONS, INCLUDING OSHA REGULATIONS. PROVIDE ALL SAFETY LIGHTS, GUARDS AND SIGNS REQUIRED FOR PERFORMANCE OF ELECTRICAL WORK.
4. DRAWINGS INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC, SHOWING THE LOCATION, TYPE, DEVICES AND EQUIPMENT REQUIRED. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. PROVIDE ALL FIXTURES, DEVICES, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT FURNISHED BY OTHERS.
5. ELECTRICAL DESIGN IS BASED ON FIELD INSPECTIONS AND PREVIOUS DESIGN DRAWINGS FOR THE EXISTING BUILDING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. ALLOWANCES ARE TO BE INCLUDED FOR UNFORESEEN EXISTING CONDITIONS THAT MAY AFFECT THE CONTRACTOR'S SCOPE OF WORK. MINOR DEVIATIONS REQUIRED FOR ACCOMPLISHING THE INTENT OF THE DESIGN SHALL BE INCLUDED IN THIS ALLOWANCE.
6. FIELD VERIFY EXISTING UTILITIES. ITEMS DAMAGED BY THIS CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AND AT NO COST TO OWNER.
7. ROOF PENETRATIONS SHALL COMPLY WITH "SMACNA" AND "NRCA" STANDARDS, AND WITH THE REQUIREMENTS OF THE EXISTING ROOFING WARRANTY, IF APPLICABLE. DO NOT PERFORM ROOFING PENETRATIONS IN A MANNER WHICH WOULD VOID OR OTHERWISE LIMIT THE EXISTING ROOFING WARRANTY.
8. ALL EQUIPMENT AND COMPONENTS FURNISHED AND/OR INSTALLED SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
10. TEMPORARY ELECTRICAL SERVICE:
  - A. PROVIDE TEMPORARY ELECTRICAL SERVICE FOR POWER AND LIGHTING DURING CONSTRUCTION. MAINTAIN DURING CONSTRUCTION AND REMOVE SERVICE AFTER CONSTRUCTION IS COMPLETED. TEMPORARY SYSTEM SHALL CONSIST OF AN ELECTRICAL SERVICE, DISTRIBUTION SYSTEM, LOAD-CENTER PANEL, GROUNDING, 15 AMP AND/OR 20 AMP BRANCH CIRCUITS, GROUNDED TYPE RECEPTACLES AND LIGHTING FIXTURES.
  - B. PROVIDE SUFFICIENT NUMBER OF TEMPORARY LIGHT FIXTURES FOR A SAFE INSTALLATION FOR ALL TRADES THROUGHOUT THE BUILDING. ALL LAMPS FOR GENERAL ILLUMINATION SHALL BE PROTECTED FROM ACCIDENTAL CONTACT OR BREAKAGE BY SUITABLE FIXTURE OR LAMP HOLDER WITH GUARD. (NO EXCEPTIONS.)

11. WARRANTIES:
  - A. CONTRACTOR SHALL WARRANT ALL WORK PERFORMED AND MATERIAL AND LABOR PROVIDED UNDER THE CONTRACT AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR ONE YEAR FROM SUBSTANTIAL COMPLETION. PROVIDE ALL SERVICES AS REQUIRED TO IMMEDIATELY REPAIR OR REPLACE, AT NO ADDITIONAL COST, DEFECTIVE PARTS OF THE INSTALLATION RESULTING FROM THE SUPPLY OF FAULTY WORKMANSHIP OR MATERIAL. LACK OF MAINTENANCE, ACCIDENTS, OR CARELESSNESS ON THE PART OF THE OWNER SHALL NOT BE INCLUDED IN THIS WARRANTY.
  - B. ALL LAMPS SHALL BE WARRANTED ACCORDING TO LAMP MANUFACTURER, WHICH IS ALSO BASED ON AVERAGE LIFE DATA FOR EACH SPECIFIC TYPE OF LAMP. PROVIDE LABOR TO REPLACE DEFECTIVE LAMPS THAT ARE WITHIN LAMP MANUFACTURER'S WARRANTY PERIOD.
  - C. ALL EQUIPMENT, APPARATUS AND APPLIANCES WHICH ARE SPECIFIED AND/OR COME WITH WARRANTIES LONGER THAN ONE YEAR SHALL BE REGISTERED WITH THE MANUFACTURER IN THE OWNER'S NAME.

12. CUTTING AND PATCHING:
  - A. NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED, OR PENETRATED WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.
  - B. PROVIDE CUTTING, PATCHING, AND PATCH PAINTING IN EXISTING STRUCTURES, AS REQUIRED FOR INSTALLATION OF WORK OF THIS SECTION. EXTENT OF CUTTING SHALL BE MINIMIZED. USE CORE DRILLS, POWER SAWS, AND OTHER MACHINES WHICH WILL PROVIDE NEAT, MINIMUM OPENINGS. REFER TO STRUCTURAL DRAWINGS FOR LINTELS AND SUPPORTS TO BE FURNISHED BY OTHERS FOR ELECTRICAL WORK. ALL OTHER LINTELS AND SUPPORTS REQUIRED FOR ELECTRICAL WORK SHALL BE FURNISHED BY DIVISION 16. PATCHING SHALL MATCH AND EQUAL ADJACENT MATERIALS AND SURFACES AND SHALL BE PERFORMED BY CRAFTSMAN SKILLED IN THE RESPECTIVE CRAFT REQUIRED. PATCHED FINISHES SHALL BE APPROVED BY THE ARCHITECT.
  - C. ALL PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT SHALL BE REPAIRED AND REPLACED BY THIS CONTRACTOR, TO THE SATISFACTION OF THE AUTHORITIES HAVING REGULATORY JURISDICTION AND BUILDING OWNER.

SECTION 26 05 26 - GROUNDING

1. EXTENT OF ELECTRICAL GROUNDING AND BONDING WORK IS INDICATED BY DRAWINGS AND AS SPECIFIED HEREIN. GROUNDING AND BONDING WORK IS DEFINED TO ENCOMPASS SYSTEMS, CIRCUITS, AND EQUIPMENT.
2. EXCEPT AS OTHERWISE INDICATED, PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEMS INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING, BUT NOT LIMITED TO, CABLES/WIRES, CONNECTORS, SOLDERLESS LUG TERMINALS, GROUNDING ELECTRODES AND PLATE ELECTRODES, BONDING JUMPER BRAID, AND ADDITIONAL ACCESSORIES NEEDED FOR A COMPLETE INSTALLATION. WHERE MORE THAN ONE TYPE COMPONENT PRODUCT MEETS INDICATED REQUIREMENTS, SELECTION IS INSTALLER'S OPTION. WHERE MATERIALS OR COMPONENTS ARE NOT INDICATED, PROVIDE CLEARANCES AND POSSIBLE OBSTRUCTIONS. MAKE NECESSARY OFFSETS, REQUIREMENTS AND WITH ESTABLISHED INDUSTRY STANDARDS FOR THOSE APPLICATIONS INDICATED.
3. INSTALL ELECTRICAL GROUNDING AND BONDING SYSTEMS AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPLICABLE PORTIONS OF THE BUILDING CODES, NECA'S "STANDARD OF INSTALLATION", AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS.
4. RACEWAY SYSTEMS SHALL NOT BE USED AS GROUNDING METHOD. ALL BRANCH AND FEEDER CONDUITS TO HAVE A GROUNDING CONDUCTOR INSTALLED WITH PHASE AND NEUTRAL CONDUCTORS. SIZE OF GROUND CONDUCTOR TO BE IN ACCORDANCE WITH THE ADOPTED ELECTRICAL CODE. TERMINATE FEEDER AND BRANCH CIRCUIT INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH GROUNDING LUG, BUS, OR BUSHING.
5. INSTALLATION OF ELECTRICAL GROUNDING AND BONDING SYSTEMS:
  - A. GROUNDING ELECTRODE CONDUCTORS, WHERE NOT INSTALLED AS PART OF A BRANCH CIRCUIT OR FEEDER, SHALL BE INSTALLED IN PVC CONDUIT, TO PROTECT THE WIRING FROM PHYSICAL DAMAGE.
  - B. CONNECT GROUNDING ELECTRODE CONDUCTORS TO METAL COLD WATER PIPE AND ALL OTHER TYPES OF METAL PIPING WITHIN THE BUILDING USING A SUITABLY SIZED GROUND CLAMP. PROVIDE CONNECTIONS TO FLANGED PIPING TO STREET SIDE OF FLANGE. PROVIDE BONDING AS DESCRIBED IN ADOPTED ELECTRICAL CODE INCLUDING BONDING JUMPER AROUND WATER METER.
  - C. CONNECT TOGETHER SYSTEM NEUTRAL, SERVICE EQUIPMENT ENCLOSURES, EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT, METAL RACEWAY SYSTEMS, GROUNDING CONDUCTOR IN RACEWAYS AND CABLES, RECEPTACLE GROUND CONNECTORS, AND PLUMBING SYSTEMS.
  - D. THE UTILITY COMPANY METER SOCKET SHALL BE GROUNDED TO A 1/2" X 10" COPPER CLAD STEEL GROUND ROD WITH COPPER WIRE INSTALLED IN P.V.C. CONDUIT. THE GROUND ROD SHALL BE DRIVEN TO THE EARTH WITH THE TOP 1'-0" BELOW GRADE, AS NEAR AS POSSIBLE TO THE LOCATION OF THE METER SOCKET WITH THE TOP 1'-0" BELOW FINISHED GRADE.
  - E. THE NEUTRAL CONDUCTOR OF ALL SEPARATELY DERIVED SYSTEMS TRANSFORMERS, TRANSFORMER GENERATORS, ETC., SHALL BE GROUNDED TO THE NEAREST AVAILABLE GROUNDED STRUCTURE METAL MEMBER OR TO THE NEAREST AVAILABLE GROUNDED METAL WATER PIPE. THE GROUNDING CONDUCTOR SHALL BE SIZED AS SHOWN ON DRAWINGS OR AS REQUIRED BY THE ADOPTED ELECTRICAL CODE.
  - F. RAISED FLOOR GROUNDING: PROVIDE (1) PEDESTAL GROUNDING CONNECTION POINT EVERY 1200 SQUARE FEET. WHERE REQUIRED OR AS INDICATED ON THE PLANS, ROUTE (1) #4 AWG BARE SOLID COPPER FROM THE GROUND BUS IN THE LOCAL DISTRIBUTION PANEL TO THE CLOSEST RAISED FLOOR PEDESTAL CONNECTION POINT AND MAKE THE APPROPRIATE CONNECTIONS. WHEREVER A GROUND WIRE IS REQUIRED TO BE INSTALLED IN CONDUIT THE CONDUIT SHALL BE PVC.

SECTION 26 05 53 - IDENTIFICATION

1. ENGRAVED, PLASTIC-LAMINATED LABELS, SIGNS, AND INSTRUCTION PLATES: ENGRAVING STOCK MELAMINE PLASTIC LAMINATE, 1/16-INCH MINIMUM THICK FOR SIGNS UP TO 20 SQUARE INCHES, OR 8 INCHES IN LENGTH; 1/8-INCH THICK FOR LARGER SIZES. ENGRAVED LEGEND IN WHITE LETTERS ON BLACK FACE AND PUNCHED FOR MECHANICAL FASTENERS.
2. CABLE TIES: FUNGUS-INERT, SELF-EXTINGUISHING, ONE-PIECE, SELF-LOCKING NYLON CABLE TIES, 0.18-INCH MINIMUM WIDTH, 50-LB MINIMUM TENSILE STRENGTH, AND SUITABLE FOR A TEMPERATURE RANGE FROM MINUS 50 F TO 350 F. PROVIDE TIES IN SPECIFIED COLORS WHEN USED FOR COLOR-CODING.
3. SELF ADHESIVE, COMMERCIALLY AVAILABLE ARC FLASH HAZARD LABELS. LABELS TO CONFORM TO THE ADOPTED ELECTRICAL CODE AND A.N.S.I. Z535.4.
4. CONDUCTOR COLOR CODING: PROVIDE COLOR CODING FOR SECONDARY SERVICE, FEEDER, AND BRANCH CIRCUIT CONDUCTORS THROUGHOUT THE PROJECT SECONDARY ELECTRICAL SYSTEM PER WIRES AND CABLEING SECTION.
5. APPLY EQUIPMENT IDENTIFICATION LABELS OF ENGRAVED PLASTIC-LAMINATE ON EACH MAJOR UNIT OF ELECTRICAL EQUIPMENT IN BUILDING, INCLUDING CENTRAL OR MASTER UNIT OF EACH ELECTRICAL SYSTEM. THIS INCLUDES COMMUNICATIONS/SIGNAL/ALARM SYSTEMS, UNLESS UNIT IS SPECIFIED WITH ITS OWN SELF-EXPLANATORY IDENTIFICATION. EXCEPT AS OTHERWISE INDICATED, PROVIDE SINGLE LINE OF TEXT, WITH 1/4-INCH-HIGH LETTERING ON 1-INCH-HIGH LABEL (1-1/2-INCH-HIGH WHERE TWO LINES ARE REQUIRED), WHITE LETTERING IN BLACK FIELD. TEXT SHALL MATCH TERMINOLOGY AND NUMBERING OF THE CONTRACT DOCUMENTS AND SHOP DRAWINGS. APPLY LABELS FOR EACH UNIT OF THE FOLLOWING CATEGORIES OF ELECTRICAL EQUIPMENT.
  - A. PANELBOARDS, ELECTRICAL CABINETS, AND ENCLOSURES
  - B. ELECTRICAL SWITCHGEAR AND SWITCHBOARDS
  - C. MOTOR STARTERS AND/OR VFDs FURNISHED BY THIS CONTRACTOR
  - D. DISCONNECT SWITCHES
  - E. CONTACTORS
  - F. TRANSFORMERS
  - G. UPS UNITS
  - H. POWER DISTRIBUTION UNITS
  - I. REMOTE POWER PANELS
  - J. GENERATORS
  - K. TRANSFER SWITCHES
1. PROVIDE MULTIPLE SIGNS OR ONE CONSOLIDATED SIGN INSIDE ELEVATOR MACHINE ROOMS. SIGN(S) TO IDENTIFY THE EXACT LOCATION OF THE SUPPLY SIDE OVERCURRENT PROTECTIVE DEVICE. SIGN(S) TO BE PROVIDED AT ELEVATOR CONTROLLER DISCONNECT, CAR LIGHTING & CONTROL DISCONNECT, AND HEATING & AIR-CONDITIONING DISCONNECTING MEANS. SIGN(S) TO BE IN CONFORMANCE WITH THE ADOPTED ELECTRICAL CODE. EXACT WORDING TO BE VERIFIED WITH LOCAL JURISDICTION.
2. PROVIDE ENGRAVED SIGN AT THE SERVICE ENTRANCE EQUIPMENT INDICATING TYPE AND LOCATION OF ON-SITE STANDBY OR EMERGENCY POWER SOURCES. SIGNS TO BE IN CONFORMANCE WITH THE ADOPTED ELECTRICAL CODE. EXACT WORDING TO BE VERIFIED WITH LOCAL JURISDICTION. SIGNS SHALL BE RED LETTERING ON WHITE BACKGROUND.

SECTION 26 05 19 - WIRES AND CABLES

1. CONDUCTORS: PROVIDE SOLID CONDUCTORS FOR POWER AND LIGHTING CIRCUITS NO. 10 AWG AND SMALLER. PROVIDE STRANDED CONDUCTORS FOR SIZES NO. 8 AWG AND LARGER.
2. CONDUCTOR MATERIAL: COPPER FOR ALL WIRES AND CABLES.
3. INSULATION: PROVIDE THHN/THWN INSULATION FOR ALL CONDUCTORS NO. 14 AWG THRU NO. 10 AWG. PROVIDE USE-RHH/RHW INSULATION FOR ALL SERVICE ENTRANCE CONDUCTORS. FOR ALL OTHER SIZES PROVIDE THHN/THWN OR XHHW INSULATION AS APPROPRIATE FOR THE LOCATION WHERE INSTALLED.
4. ALUMINUM CONDUCTORS ARE NOT APPROVED OR ACCEPTABLE.
5. VARIABLE FREQUENCY DRIVE CABLES: WHERE A VFD IS INSTALLED, PROVIDE A VFD CABLEING SYSTEM FROM THE VFD TO THE CONTROLLED EQUIPMENT MANUFACTURED MEETING THE FOLLOWING SPECIFICATIONS:
  - A. ASTM B3 AND B8
  - B. UL 44, UL 1277
  - C. COLOR CODE PER ICEA S-58-679 METHOD 4
  - D. IEEE 1202/F4 FLAME TEST
  - E. CONDUCTORS SHALL BE CLASS B STRANDED, UNCOATED ANNEALED COPPER; EACH CONDUCTOR SHALL BE INSULATED WITH BLACK POLYETHYLENE. A 5 MIL UNCOATED COPPER TAPE SHIELD, HELICALLY WRAPPED OVER THE TWISTED ASSEMBLY WITH A 50% OVERLAP AND IN CONTACT WITH THE GROUND WIRE. WITH A FLAME RETARDANT PVC JACKET OUTER JACKET.
6. INSTALLATION OF WIRES AND CABLES:
  - A. ALL BRANCH CIRCUIT WIRES, FEEDER CABLES, ETC., SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. NO JOINTS SHALL BE MADE EXCEPT IN OUTLET, JUNCTION OR PULL BOXES, PANELBOARD AND SWITCHBOARD GUTTERS. FOR THE SPLICING OF EXISTING FEEDER CONDUCTORS, COMPRESSION TYPE BUTT SPLICES WITH COLD SHRINK INSULATION KITS ARE TO BE USED.
  - B. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES. WHERE MANUFACTURER'S TORQUE REQUIREMENTS ARE NOT INDICATED, TIGHTEN CONNECTORS AND TERMINALS TO COMPLY WITH TIGHTENING TORQUE'S SPECIFIED IN UL 486A AND UL 486B.
  - C. TERMINALS ON SWITCHES AND CONVENIENCE OUTLETS SHALL NOT BE USED TO "FEED THROUGH" TO THE NEXT SWITCH OR OUTLET. WHERE MORE THAN ONE GROUND, COMMON NEUTRAL, OR COMMON PHASE CONDUCTOR ENTERS A BOX, ALL LIKE CONDUCTORS SHALL BE IN GOOD ELECTRICAL CONTACT WITH EACH OTHER AND THE ARRANGEMENT SHALL BE SUCH THAT THE DISCONNECTING OR REMOVAL OF A DEVICE FED FROM THE BOX, WILL NOT INTERFERE WITH OR INTERRUPT SERVICE TO THE REMAINDER OF THE BRANCH CIRCUIT WIRING.

208Y/120V NORMAL	PHASE	
BLACK	A	
RED	B	
BLUE	C	
WHITE	NEUTRAL	
GREEN	GROUND	
GREEN W/ YELLOW STRIP	ISOLATED GROUND	
208Y/120V - UPS	PHASE	
BLACK W/ ORANGE STRIP	A	
RED W/ ORANGE STRIP	B	
BLUE W/ ORANGE STRIP	C	
WHITE W/ ORANGE STRIP	NEUTRAL	
GREEN W/ ORANGE STRIP	GROUND	
GREEN W/ YELLOW STRIP	ISOLATED GROUND	
IF THE SERVICE VOLTAGE IS 120/240V, THREE PHASE H-LEG, THEN THE PHASE "C" COLOR CODING SHALL BE "ORANGE"		

SECTION 26 08 00 - TESTING

1. ALL ELECTRICAL EQUIPMENT ON THIS PROJECT PROVIDED UNDER THIS DIVISION AND ALL ELECTRICAL EQUIPMENT FURNISHED BY OTHERS SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE ELECTRICAL CONTRACTOR.
2. MECHANISMS OF ALL ELECTRICAL EQUIPMENT SHALL BE CHECKED, ADJUSTED AND TESTED FOR PROPER OPERATION. MOTORS SHALL BE CHECKED FOR ALIGNMENT WITH DRIVE AND ADJUSTED AS REQUIRED. PROTECTIVE DEVICES AND PARTS SHALL BE CHECKED AND TESTED FOR SPECIFIED AND REQUIRED APPLICATION AND ADJUSTED AS REQUIRED. ADJUSTABLE PARTS OF ALL LIGHTING FIXTURES AND ELECTRICAL EQUIPMENT SHALL BE CHECKED, TESTED AND ADJUSTED AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.
3. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE OPERATION, SERVICE AND MAINTENANCE OF ALL NEW ELECTRICAL EQUIPMENT DURING CONSTRUCTION AND PRIOR TO ACCEPTANCE BY THE OWNER OF THE COMPLETED PROJECT UNDER THIS CONTRACT. ALL ELECTRICAL EQUIPMENT SHALL BE MAINTAINED IN THE BEST OPERATING CONDITION INCLUDING PROPER LUBRICATION. OPERATIONAL FAILURE CAUSED BY DEFECTIVE MATERIAL AND/OR LABOR SHALL BE IMMEDIATELY CORRECTED AND THE ARCHITECT SHALL BE IMMEDIATELY NOTIFIED OF ANY OPERATIONAL FAILURE CAUSED BY DEFECTIVE MATERIAL AND/OR LABOR PROVIDED BY OTHERS.
4. THIS CONTRACTOR SHALL MAINTAIN SERVICE AND EQUIPMENT FOR THE TESTING OF ELECTRICAL EQUIPMENT AND APPARATUS UNTIL ALL WORK IS APPROVED AND ACCEPTED BY THE OWNER. A FIRST CLASS VOLT-METER AND AMMETER SHALL BE KEPT AVAILABLE AT ALL TIMES AND THIS CONTRACTOR SHALL PROVIDE SERVICE FOR TEST READINGS WHEN AND AS REQUIRED.
5. THE ELECTRICAL DISTRIBUTION DESIGN HAS BEEN PROVIDED WITH A LOAD-BALANCED ELECTRICAL SYSTEM. IF MODIFICATIONS, DUE TO CONTRACTORS CONSTRUCTION OR CHANGE-ORDERS HAVE BEEN MADE TO THE DESIGN THEN THIS CONTRACTOR IS TO MEASURE ALL FEEDERS CONDUCTORS CURRENTS AND BALANCE ALL SINGLE PHASE LOADS AT THOSE PANELS. REDISTRIBUTING BRANCH CIRCUIT CONNECTIONS UNTIL A MAXIMUM 10% LOAD BALANCE IS ACHIEVED. DISTRIBUTION SYSTEMS ARE TO BE MEASURED AND BALANCED UNDER FULL-LOAD CONDITIONS.

SECTION 26 05 33 - RACEWAYS

1. THIS SECTION INCLUDES RACEWAYS FOR ELECTRICAL WIRING. TYPES OF RACEWAYS IN THIS SECTION INCLUDE THE FOLLOWING:
  - A. ELECTRICAL METALLIC TUBING (EMT)
  - B. INTERMEDIATE METAL CONDUIT (IMC)
  - C. FLEXIBLE METAL CONDUIT
  - D. LIQUID-TIGHT FLEXIBLE CONDUIT
  - E. RIGID METAL CONDUIT
  - F. RIGID NONMETALLIC CONDUIT (PVC)
  - G. SURFACE RACEWAYS
  - H. WIREWAY
  - I. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLE
2. WIREWAYS:
  - A. ELECTRICAL WIREWAYS SHALL BE OF TYPES, SIZES, AND NUMBER OF CHANNELS AS INDICATED. FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO COUPLINGS, OFFSETS, ELBOWS, EXPANSION JOINTS, ADAPTERS, HOLD-DOWN STRAPS, AND END CAPS SHALL MATCH AND MATE WITH WIREWAY AS REQUIRED FOR A COMPLETE SYSTEM. WHERE FEATURES ARE NOT INDICATED, SELECT TO FULFILL WIRING REQUIREMENTS AND COMPLY WITH APPLICABLE PROVISIONS OF ADOPTED ELECTRICAL CODE.
3. SURFACE RACEWAYS:
  - A. SIZES AND CHANNELS AS INDICATED, MINIMUM SIZE TO BE EQUAL TO WIREMOLD # 500 SERIES. PROVIDE FITTINGS THAT MATCH AND MATE WITH RACEWAY. CONSTRUCT OF GALVANIZED STEEL WITH SNAP-ON COVERS, WITH 1/8-INCH MOUNTING SCREW KNOCKOUTS IN BASE APPROXIMATELY 8 INCHES ON-CENTER. FINISH WITH MANUFACTURER'S STANDARD PRIME COATING SUITABLE FOR PAINTING. PROVIDE RACEWAYS OF TYPE SUITABLE FOR EACH APPLICATION REQUIRED.
4. WIRING METHOD:
  - A. OUTDOORS: USE THE FOLLOWING WIRING METHODS:
    1. EXPOSED: INTERMEDIATE METAL CONDUIT.
    2. CONCEALED: INTERMEDIATE METAL CONDUIT.
    3. UNDERGROUND, RIGID NONMETAL CONDUIT.
    4. CONNECTION TO VIBRATING EQUIPMENT: INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC OR ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT: LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
    5. INDOORS OR OUTDOORS: CONNECTION TO VIBRATING EQUIPMENT AND HYDRAULIC, PNEUMATIC, OR ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT IN MOIST OR HUMID PARTITION OR CORROSIVE ATMOSPHERE, OR WHERE SUBJECT TO WATER SPRAY OR DRIPPING OIL, GREASE, OR WATER: LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
  - B. INDOORS: USE THE FOLLOWING WIRING METHODS:
    1. CONNECTION TO VIBRATING EQUIPMENT: INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC OR ELECTRIC SOLENOID OR MOTOR-OPERATED EQUIPMENT: FLEXIBLE METAL CONDUIT.
    2. EXPOSED: ELECTRICAL METALLIC TUBING.
    3. CONCEALED: ELECTRICAL METALLIC TUBING.
    4. CONCEALED, IN CONCRETE EMBEDDED, STRUCTURAL INTERIOR WALLS, OR ROOF DECK PENETRATIONS: INTERMEDIATE METAL OR RIGID METAL CONDUIT.
    5. UNDER CONCRETE FLOOR (SLAB ON GRADE): INTERMEDIATE METAL OR RIGID METAL CONDUIT.
  - C. PVC CONDUIT CAN BE INSTALLED BELOW FLOOR SLAB INDOORS, ONLY IF RIGID STEEL ELBOWS ARE PASSED WHEN PASSING THRU FLOOR SLAB. MINIMUM SIZE PVC CONDUIT THAT CAN BE INSTALLED IS 3/4" UNLESS NOTED OTHERWISE. ALL PVC CONDUIT JOINTS SHALL BE GLUED AND SEALED TO PREVENT MOISTURE FROM ENTERING RACEWAY SYSTEM. CONDUITS FOUND TO CONTAIN MOISTURE SHALL BE REPAIRED OR REPLACED AS REQUIRED PRIOR TO INSTALLATION OF CONDUCTORS.
  - D. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLE
    1. MC AND AC CABLE MAY BE USED IN LIEU OF EMT CONDUIT IF ACCEPTABLE TO LOCAL AUTHORITIES AND INSTALLED PER ELECTRICAL CODE REGARDING SUPPORT, GROUNDING AND CABLE TERMINATIONS. ALL MC AND AC CABLE NOT INSTALLED PER ADOPTED CODE SHALL BE REMOVED, REINSTALLED AND CORRECTED AT CONTRACTOR'S EXPENSE WITH NO EXTENSION IN CONSTRUCTION SCHEDULE.
    2. MC AND AC CABLE SHALL BE SUPPORTED AND SECURED BY STAPLES, CABLE TIES, STRAPS, HANGERS, OR SIMILAR FITTINGS, DESIGNED AND INSTALLED SO AS NOT TO DAMAGE THE CABLE.
    3. MC AND AC CABLE WITH FOUR OR LESS CONDUCTORS SIZED NO LARGER THAN 10 AWG SHALL BE SECURED WITHIN 12 IN. OF EVERY OUTLET BOX, JUNCTION BOX, CABINET, OR FITTING AND AT INTERVALS NOT EXCEEDING 6 FT.
    4. MC AND AC CABLE SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING 6 FT. CABLES INSTALLED HORIZONTALLY THROUGH WOODEN OR METAL FRAMING MEMBERS ARE CONSIDERED SECURED AND SUPPORTED WHERE SUCH SUPPORT DOES NOT EXCEED 6 FT INTERVALS.
    5. MC AND AC CABLE SHALL NOT BE USED IN EXTERIOR APPLICATIONS
5. CONDUIT SHALL BE INSTALLED AS A COMPLETE SYSTEM, CONTINUOUS FROM OUTLET TO OUTLET, CABINET OR FITTING, AND BE SO MECHANICALLY AND ELECTRICALLY CONNECTED THAT ADEQUATE ELECTRICAL CONTINUITY FROM ONE CONDUIT TO ANOTHER IS SECURED. ENTIRE SYSTEMS SHALL BE SECURELY FASTENED IN PLACE WITHIN 3' OF EACH OUTLET OR JUNCTION BOX, CABINET OR FITTING, AND AT INTERVALS NOT EXCEEDING 10', EXCEPT AS OTHERWISE SPECIFIED OR SHOWN. SINGLE CONDUITS FOR FEEDERS SHALL BE HUNG WITH GRINNEL, CRANE, OR EQUAL, MALLEABLE SPLIT RING HANGERS WITH ROD SUSPENSION SPACED NOT OVER 10' APART FROM CONSTRUCTION ABOVE. GROUPS OF HORIZONTAL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL BE CLAMPED TO UNISTRUT, OR EQUAL, STEEL CHANNELS AND SUSPENDED FROM RODS SUPPORTED FROM STRUCTURE, SPACED NOT OVER 10' APART FROM CONSTRUCTION ABOVE. WHERE POSSIBLE CONDUITS MAY BE CLAMPED DIRECTLY TO STEEL JOISTS.
6. USE RACEWAY FITTINGS THAT ARE OF TYPES COMPATIBLE WITH ASSOCIATED RACEWAY AND SUITABLE FOR USE AND LOCATION. FOR INTERMEDIATE METAL CONDUIT, USE THREADED RIGID STEEL CONDUIT FITTINGS. FOR EMT CONDUITS, FITTINGS SHALL BE COMPRESSION OR SET SCREW TYPE.
7. INSTALL PULL WIRES IN EMPTY RACEWAYS. USE NO. 14 AWG ZINC-COATED STEEL OR MONOFILAMENT PLASTIC LINE HAVING NOT LESS THAN 200-LB TENSILE STRENGTH. LEAVE NOT LESS THAN 12 INCHES OF SLACK AT EACH END OF PULL WIRE.
8. TELEPHONE AND SIGNAL SYSTEM RACEWAYS 2-INCH TRADE SIZE AND SMALLER: IN ADDITION TO ABOVE REQUIREMENTS, INSTALL RACEWAYS IN MAXIMUM LENGTHS OF 150 FEET AND WITH MAXIMUM OF TWO 90 DEGREE BENDS OR EQUIVALENT. INSTALL PULL OR JUNCTION BOXES WHERE NECESSARY TO COMPLY WITH THESE REQUIREMENTS.
9. CONDUITS ABOVE LAY-IN CEILING SYSTEM SHALL NOT BE SUPPORTED FROM CEILING SUSPENSION WIRES.
10. PROVIDE 36" MINIMUM RADIUS RIGID STEEL CONDUIT ELBOWS FOR PRIMARY SERVICE CONDUITS UNDER TRANSFORMER PAD.
11. CONDUITS CAPPED OUTSIDE OF BUILDING FOR FUTURE ADDITION SHALL BE MINIMUM OF 1'-6" BELOW FINISH GRADE, CAPPED AND PAINTED WITH BITUMINOUS PAINT, WHICH SHALL BE THOROUGHLY DRY BEFORE BACKFILL IS INSTALLED.
12. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLES:
  - A. HOMERUNS TO PANELBOARDS SHALL REMAIN IN EMT CONDUIT.
  - B. MC AND AC CABLES SHALL NOT BE USED IN EXPOSED AREAS.
  - C. FITTINGS SHALL BE LISTED FOR USE WITH MC AND AC CABLE USED.
  - D. CONDUCTORS IN MC AND AC CABLE SHALL COMPLY WITH SECTION "WIRES & CABLES".

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI

KATLYN COLLIER

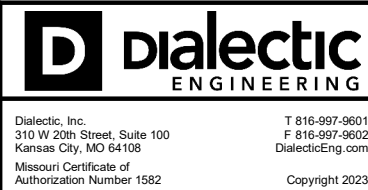
NAME:

ELECTRICAL ENGINEER

2021046167

DISCIPLINE

LICENSE NUMBER



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REVISION SCHEDULE

No.	Description	Date

SHEET NAME

ELECTRICAL  
SPECIFICATIONS

PROJECT NUMBER

2383.02

DATE

07/26/2023

DRAWN BY

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CHECKED BY

JGM

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E701



SECTION 26 05 33 - CABINETS, BOXES, AND FITTINGS

1. THIS SECTION INCLUDES CABINETS, BOXES, AND FITTINGS FOR ELECTRICAL INSTALLATIONS AND CERTAIN TYPES OF ELECTRICAL FITTINGS NOT COVERED IN OTHER SECTIONS
2. METAL OUTLET, DEVICE, AND SMALL WIRING BOXES:
- A. GENERAL: CONFORM TO UL 514A, "METALLIC OUTLET BOXES, ELECTRICAL," AND UL 514B, "FITTINGS FOR CONDUIT AND OUTLET BOXES;" BOXES SHALL BE OF TYPE, SHAPE, SIZE, AND DEPTH TO SUIT EACH LOCATION AND APPLICATION.
- B. STEEL BOXES: CONFORM TO NEMA OS 1, "SHEET STEEL OUTLET BOXES, DEVICE BOXES, COVERS, AND BOX SUPPORTS;" BOXES SHALL BE SHEET STEEL WITH STAMPED KNOCKOUTS, THREADED SCREW HOLES AND ACCESSORIES SUITABLE FOR EACH LOCATION INCLUDING MOUNTING BRACKETS AND STRAPS, CABLE CLAMPS, EXTERIOR RINGS AND FIXTURE STUDS.
- C. CAST-IRON FLOOR BOXES: FULLY ADJUSTABLE, WATERPROOF, WITH THREADED RACEWAY ENTRANCES, RECTANGULAR BOX OPENING, ADJUSTING RINGS, GASKETS, BRASS FLOOR PLATES, AND POLYCARBONATE CARPET FLANGE, WHERE INDICATED, PROVIDE MULTI-SECTION BOXES WITH INDIVIDUAL HINGED SECTION COVERS AND PROVIDE FOR DUPLEX RECEPTACLE UNDER ONE OR MORE OF THE COVERS.
3. PULL AND JUNCTION BOXES:
- A. COMPLY WITH UL 50, "ELECTRICAL CABINETS AND BOXES" FOR BOXES OVER 100 CUBIC INCHES VOLUME. BOXES SHALL HAVE SCREWED OR BOLTED ON COVERS OF MATERIAL SAME AS BOXES AND SHALL BE OF SIZE AND SHAPE TO SUIT APPLICATION.
- B. STEEL BOXES: SHEET STEEL WITH WELDED SEAMS, WHERE NECESSARY TO PROVIDE A RIGID ASSEMBLY, CONSTRUCT WITH INTERNAL STRUCTURAL STEEL BRACING.
- C. HOT-DIPPED GALVANIZED STEEL BOXES: SHEET STEEL WITH WELDED SEAMS, WHERE NECESSARY TO PROVIDE A RIGID ASSEMBLY, CONSTRUCT WITH INTERNAL STRUCTURAL STEEL BRACING. HOT-DIP GALVANIZED AFTER FABRICATION.
4. CABINETS:
- A. COMPLY WITH UL 50, "ELECTRICAL CABINETS AND BOXES," SHEET STEEL, NEMA 1 CLASS EXCEPT AS OTHERWISE INDICATED. CABINET SHALL CONSIST OF BOX AND FRONT CONSISTING OF ONE-PIECE FRAME AND HINGED DOOR. ARRANGE DOOR TO CLOSE AGAINST A RABBIT PLACED ALL AROUND THE INSIDE EDGE OF THE FRAME, WITH UNIFORMLY CLOSE FIT BETWEEN DOOR AND FRAME. PROVIDE CONCEALED FASTENERS, NOT OVER 24-INCHES APART, TO HOLD FRONTS TO CABINET BOXES AND PROVIDE FOR ADJUSTMENT. PROVIDE FLUSH OR CONCEALED DOOR HINGES NOT OVER 24-INCHES APART AND NOT OVER 6-INCHES FROM TOP AND BOTTOM OF DOOR. FOR FLUSH CABINETS, MAKE FRONT APPROXIMATELY 3/4 INCH LARGER THAN BOX ALL AROUND. FOR SURFACE MOUNTED CABINETS MAKE FRONT SAME HEIGHT AND WIDTH AS BOX.
- B. DOORS: DOUBLE DOORS FOR CABINETS WIDER THAN 24-INCHES. TELEPHONE CABINETS WIDER THAN 48-INCHES MAY HAVE SLIDING OR REMOVABLE DOORS.
- C. LOCKS: COMBINATION SPRING CATCH AND KEY LOCK, WITH ALL LOCKS FOR CABINETS OF SAME SYSTEM KEYED ALIKE. LOCKS MAY BE OMITTED ON SIGNAL, POWER, AND LIGHTING CABINETS LOCATED WITHIN WIRE CLOSETS AND MECHANICAL-ELECTRICAL ROOMS. LOCKS SHALL BE OF TYPE TO PERMIT DOORS TO LATCH CLOSED WITHOUT LOCKING.
5. STEEL ENCLOSURES WITH HINGED DOORS:
- A. COMPLY WITH UL 50, "CABINETS AND ENCLOSURES" AND NEMA ICS 6, "ENCLOSURES FOR INDUSTRIAL CONTROLS AND SYSTEMS," SHEET STEEL, 16 GAGE MINIMUM, WITH CONTINUOUS WELDED SEAMS. NEMA CLASS AS INDICATED ARRANGED FOR SURFACE MOUNTING.
- B. DOORS: HINGED DIRECTLY TO CABINET AND REMOVABLE, WITH APPROXIMATELY 3/4-INCH FLANGE AROUND ALL EDGES, SHAPED TO COVER EDGE OF BOX. PROVIDE HANDLE OPERATED, KEY LOCKING LATCH. INDIVIDUAL DOOR WITH SHLL BE NO GREATER THAN 24-INCHES. PROVIDE MULTIPLE DOORS WHERE REQUIRED.
- C. ENCLOSURE: WHERE DOOR GASKETING IS REQUIRED, PROVIDE NEOPRENE GASKET ATTACHED WITH OIL-RESISTANT ADHESIVE, AND HELD IN PLACE WITH STEEL RETAINING STRIPS. FOR ALL ENCLOSURES OF CLASS HIGHER THAN NEMA 1, USE HUBBED RACEWAY ENTRANCES.
6. WEATHERPROOF PULL AND SPLICE BOXES:
- A. BOXES SHALL BE NEMA 12 AND 13 RATED, ALL STEEL CONSTRUCTION CONFORMING TO JIC STANDARD EGP-1-1997, WITH EXTERNAL MOUNTING FEET FOR SURFACE MOUNTING, OIL-RESISTANT GASKET ATTACHED TO INSIDE OF DOOR COVER, AND CONTINUOUS HINGE AND EXTERNAL SCREW CLAMP FOR QUICK OPENING AND CLOSING.
7. FIRESTOP FOR RECESSED WALL BOXES:
- A. INSTALLATIONS OF MULTIPLE BOXES (LESS THAN 24" APART) WITH MAXIMUM 4-11/16" BY 4-11/16" FLUSH DEVICE UL LISTED METAL OUTLET BOXES IN FIRE RATED GYPSUM WALL BOARD WALL ASSEMBLIES FRAMED WITH MINIMUM 3-1/2" WIDE WOOD OR STEEL STUDS AND CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE FIRE RESISTANCE DIRECTORY. 3M #MPP-4S MOLDABLE PUTTY PADS SHALL BE INSTALLED ON EXTERIOR SURFACES OF FLUSH DEVICE BOX IN 1 AND 2 HOUR FIRE RATED WALLS AND PARTITIONS.
8. FLOOR BOXES IN SLABS ON GRADE AND WET LOCATIONS SHALL BE NEMA TYPE 4, CAST-IRON BOXES WITH THREADED HUBS. FLOOR BOXES LOCATED IN SLABS ABOVE GRADE CAN BE STAMPED STEEL. PLASTIC FLOOR BOXES ARE NOT APPROVED.
- A. INSTALL IN CONCRETE FLOOR SLABS SO THEY ARE COMPLETELY ENVELOPED IN CONCRETE EXCEPT FOR THE TOP, WHERE NORMAL SLAB THICKNESS WILL NOT ENVELOP BOX AS SPECIFIED ABOVE, PROVIDE INCREASED THICKNESS OF SLAB, PROVIDE EACH COMPARTMENT OF EACH FLOOR BOX WITH GROUNDING TERMINAL CONSISTING OF A WASHER-IN-HEAD MACHINE SCREW, NOT SMALLER THAN NO. 10-32, SCREWED INTO A TAPPED HOLE IN THE BOX. ADJUST COVERS OF FLOOR BOXES FLUSH WITH FINISHED FLOOR.
9. WHEN TWO OR MORE PHASES OF 277/480 VOLTS SYSTEM ARE CONNECTED TO ADJACENT SWITCHES IN THE SAME BOX, PROVIDE BARRIERS BETWEEN THE SWITCHES. PROVIDE BARRIERS BETWEEN 120 AND 277 VOLTS.
10. PULL AND SPLICE BOXES LOCATED OUTDOORS OR WHERE INDICATED ON DRAWINGS SHALL BE WEATHERPROOF TYPE JIC BOXES. CONDUIT TERMINATIONS SHALL BE ACCOMPLISHED BY USING MEYER HUBS.
11. ELECTRICALLY GROUND METALLIC CABINETS, BOXES, AND ENCLOSURES WHERE WIRING TO ITEM INCLUDES A GROUNDING CONDUCTOR, PROVIDE GROUNDING TERMINAL IN INTERIOR OF CABINET, BOX OR ENCLOSURE.

SECTION 26 27 26 - WIRING DEVICES

1. THIS SECTION INCLUDES THE FOLLOWING:
- A. RECEPTACLES
- B. LIGHTING AND EQUIPMENT SWITCHES
- C. WALL PLATES
- E. OCCUPANCY SENSORS
- F. MANUAL DIMMERS
2. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- A. WIRING DEVICES & ACCESSORIES:
1. COPPER WIRING DEVICES
2. CROUSE-HINDS CO.
3. HUBBELL INC.
4. LEVITON
5. PASS AND SEYMOUR INC.
- B. DIMMERS:
1. HUBBELL INC.
2. LEVITON LIGHTING CONTROLS
3. LUTRON LIGHTING
- C. OCCUPANCY SENSOR LIGHTING CONTROL:
1. HUBBELL INC.
2. LEVITON MANUFACTURING INC.
3. WATT STOPPER INC.
4. SENSOR SWITCH
5. GREENGATE
- D. NETWORK LIGHTING CONTROLS:
1. HUBBELL INC
2. GREENGATE
3. LIGHTING CONTROL AND DESIGN
4. WATT STOPPER INC.
3. WIRING DEVICES:
- A. PROVIDE WIRING DEVICES, IN TYPES, CHARACTERISTICS, GRADES, COLORS, AND ELECTRICAL RATINGS FOR APPLICATIONS INDICATED WHICH ARE UL LISTED AND WHICH COMPLY WITH NEMA WD 1 AND OTHER APPLICABLE UL AND NEMA STANDARDS. ALL DEVICES SHALL BE SPECIFICATION GRADE (HEAVY DUTY UL GRADE), WITH GREEN HEXAGONAL EQUIPMENT GROUND SCREW, METAL PLASTER EARS AND SIDE TERMINAL SCREWS FOR BACK AND SIDE WIRING.
- B. ALL WIRING DEVICES SHALL BE PROVIDED BY SAME MANUFACTURER UNLESS NOTED OTHERWISE.
- C. ALL WIRING DEVICES AND COVERPLATES SHALL BE:
1. WHITE, (CONFIRM REQUIREMENTS WITH ARCHITECT)
2. WHITE - WHERE INSTALLED IN WHITE CEILINGS.
3. BLACK - WHERE INSTALLED IN DARK CEILINGS.
4. ORANGE - WHERE SUPPLYING A UPS CIRCUIT. (DEVICE ONLY, COVERPLATE SHALL BE AS ABOVE).
- D. RECEPTACLES:
1. DUPLEX RECEPTACLE, 15 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-15R, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5252.
2. SINGLE RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5351.
3. DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5352.
4. GROUND FAULT INTERRUPTER RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, UL943 APPROVED, SELF-TESTING, SOLID STATE GROUND FAULT SENSING LEVEL WITH 5 MILLIAMPERES GROUND FAULT TRIP LEVEL. LED INDICATOR LIGHT WITH TEST/RESET BUTTONS THAT MATCH THE COLOR OF THE FACE. LEVITON #G5362-WT".
5. USB RECEPTACLE, 20A, 125V, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, (2) VERTICAL USB PORTS WITH 3.6A CHARGING CAPACITY (MINIMUM), MEETS FEDERAL SPEC. WC-596-F. LEVITON #T5832. WHERE SHOWN AS QUAD RECEPTACLE ON PLANS, PROVIDE (2) USB RECEPTACLES AS SPECIFIED ABOVE.
6. WEATHERPROOF RECEPTACLE SHALL BE GROUND-FAULT INTERRUPTER WITH THOMAS & BETTS #CKSVU DIE-CAST ALUMINUM "SMALL" COVER PLATE. LOCATE BOX VERTICAL IN WALL. PLATE SHALL BE LISTED AND LABELED "SUITABLE FOR WET LOCATIONS WHILE IN USE.
7. ISOLATED GROUND DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, FACE WITH ORANGE TRIANGLE, GROUND SCREW ISOLATED FROM MOUNTING YOKE, NEMA CONFIGURATION 5-20RIG. LEVITON #5362-IG.
8. SURGE PROTECTED, ISOLATED GROUND, DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, FACE WITH ORANGE TRIANGLE; FOUR SERIES-PARALLEL, 130 VOLT 20 MM METAL OXIDE VARISTORS (MOV'S), AND BUILT-IN AUDIBLE AND VISUAL ALARM INDICATORS. DEVICE SHALL BE PROVIDED WITH NORMAL AND COMMON PROTECTION MODES, TRANSIENT SUPPRESSION OF 280 JOULES PEAK ENERGY, CLAMPING VOLTAGE OF 420, AND RESPONSE TIME OF APPROXIMATELY 5 NS. NEMA CONFIGURATION 5-20R. LEVITON #8380-IG.
9. CONTROLLED DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, PERMANENTLY LABELED WITH CONTROLLED SYMBOL, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5362-2. WHERE SHOWN AS QUAD RECEPTACLE ON PLANS, PROVIDE (1) CONTROLLED RECEPTACLE AND (1) DUPLEX RECEPTACLE AS SPECIFIED ABOVE.
10. HEAVY DUTY RECEPTACLES SHALL BE OF THE SAME MANUFACTURER AS THE CONVENIENCE OUTLETS AND HAVE THE RATINGS AND CHARACTERISTICS (VOLTAGE, AMPS, POLES, WIRES) AS SHOWN ON DRAWINGS.
- E. SWITCHES:
1. TOGGLE TYPE SWITCH, 20 AMP, 120/277 VOLT AC SINGLE-POLE, QUIET TYPE, WITH MOUNTING YOKE INSULATED FROM MECHANISM, EQUIPPED WITH PLASTER EARS, SIDE-WIRED SCREW TERMINALS, MEETS FEDERAL SPEC WS-896. LEVITON #1121-2. DOUBLE-POLE, 3-WAY, AND 4-WAY SWITCHES SHALL BE OF SAME MAKE AS FOR SINGLE-POLE.
2. KEY TYPE SWITCH, 20 AMP, 120/277 VOLT AC SINGLE-POLE, WITH MOUNTING YOKE INSULATED FROM MECHANISM, EQUIPPED WITH PLASTER EARS, SIDE-WIRED SCREW TERMINALS, POLISHED METAL TOP AND PROVIDE WITH ONE STEEL KEY. LEVITON #1121-2L. DOUBLE-POLE, 3-WAY, AND 4-WAY SWITCHES SHALL BE OF SAME MAKE AS FOR SINGLE-POLE.
3. WHEN LIGHTED HANDLE IS INDICATED WITH SWITCHING DEVICE, PROVIDE SWITCH DEVICE WITH 1/25 WATT NEON PILOT INTEGRAL WITH TOGGLE HANDLE, RATED 120/277 VOLT. **GLOWS WHEN SWITCH IS "OFF"**. PASS & SEYMOUR #20AC1-CSL.
4. WHEN PILOT LIGHT IS INDICATED WITH SWITCHING DEVICE, PROVIDE SWITCH DEVICE WITH 1/25 WATT NEON PILOT INTEGRAL WITH TOGGLE HANDLE, RATED 120/277 VOLT. **GLOWS WHEN SWITCH IS "ON"**. PASS & SEYMOUR #20AC1-RPL.
- G. WALL PLATES: SINGLE AND COMBINATION, OF TYPES, SIZES, AND WITH GANGING AND CUTOUTS AS INDICATED, PROVIDE PLATES WHICH MATCH WITH WIRING DEVICES TO WHICH ATTACHED. PROVIDE METAL SCREWS FOR SECURING PLATES TO DEVICES WITH SCREW HEADS TO MATCH FINISH OF PLATES. PROVIDE WALL PLATES WITH ENGRAVED LEGEND WHERE INDICATED. CONFORM TO REQUIREMENTS OF SECTION "ELECTRICAL IDENTIFICATION."

SECTION 26 27 26 - WIRING DEVICES (CONT.)

- H. OCCUPANCY SENSOR LIGHTING CONTROL:
1. WALL MOUNTED OCCUPANCY SENSOR SHALL BE PASSIVE INFRARED COVERING 1200 (OR 900) SQUARE FEET, RATED FOR 120/277 VOLT, 1500 WATTS MAXIMUM LOAD OF INCANDESCENT OR FLUORESCENT LIGHT. SENSOR SHALL HAVE 180" FIELD OF VIEW, OFF/AUTO/ON SLIDE SWITCH, ADJUSTABLE TIME-OUT FROM 1 TO 20 MINUTES, AND LED MOVEMENT INDICATOR PILOT. SENSOR SHALL BE MOUNTED IN SINGLE-GANG WALL BOX AT SAME ELEVATION AS STANDARD WALL SWITCHES. WATT STOPPER #PW-100 SINGLE RELAY (OR #PW-200 DUAL RELAY).
- 2.
3. CEILING MOUNTED OCCUPANCY SENSOR SHALL BE DUAL TECHNOLOGY WITH ULTRASONIC & PASSIVE INFRARED TYPE SENSORS. SENSORS SHALL HAVE TWO-WAY OR ONE-WAY DISTRIBUTION DEPENDING ON MOUNTING LOCATION, AND SHALL BE CAPABLE OF ADJUSTING SENSITIVITY AND LENGTH OF OPERATION BASED ON PAST ACTIVITY LEVEL OF AREA'S OCCUPANTS. CUSTOM PERFORMANCE CONTROLS SHALL BE LOCATED BEHIND SENSOR LENS FOR FIELD MODIFICATION OF SENSOR. UNIT SHALL BE MOUNTED TO RECESSED JUNCTION BOX. WATT STOPPER #DT-355, 800W @ 120V (1200W @ 277V).
- I. MANUAL DIMMERS:
1. PROVIDE AC DIMMER CONTROLS FOR LIGHTING FIXTURES, 120 VOLT, 60 HERTZ, WITH PRESET SLIDE CONTROLS AND PUSHBUTTON FOR ON/OFF CONTROL. SINGLE-POLE. WATTAGE SHALL BE AS INDICATED BELOW:
- a. D1 = 1000 WATTS, LEVITON #IP110-1LX (120/277V INCANDESCENT)
- b. D1 = 1200/1500 VA, LEVITON #IP710-LF2 (120/277V LED)
- c. LD2 = 400 VA, LEVITON #PE04-1LX (ELECTRONIC LOW VOLTAGE)
- d. LD3 = 1000 VA, LEVITON #PM10-1LX (MAGNETIC LOW VOLTAGE)
- e. FD1 = 1200/1500 VA, LEVITON #PT10-DLX (120/277V FLUORESCENT 0-10V)
- f. FD2 = 1000 VA, LEVITON #PX10-10 (120V FLUORESCENT LINE VOLTAGE)
- g. FD3 = 1200 VA, LEVITON #PX12-70 (277V FLUORESCENT LINE VOLTAGE)
- L. NETWORK CONTROLS
1. DIGITAL ROOM CONTROLLER, SELF-CONFIGURING, DIGITALLY ADDRESSABLE ONE, TWO OR THREE RELAY PLENUM-RATED CONTROLLERS FOR ON/OFF CONTROL. SELECTED MODELS INCLUDE 0-10 VOLT OR LINE VOLTAGE FORWARD PHASE CONTROL DIMMING OUTPUTS AND INTEGRAL CURRENT MONITORING CAPABILITIES. WATTSTOPPER LLMRC-213.
2. DIGITAL DAYLIGHTING SENSORS - SINGLE-ZONE CLOSED LOOP, MULTI-ZONE OPEN LOOP AND SINGLE-ZONE DUAL-LOOP DAYLIGHTING SENSORS WITH TWO-WAY ACTIVE INFRARED (IR) COMMUNICATIONS CAN PROVIDE SWITCHING, B-LEVEL, TRI-LEVEL OR DIMMING CONTROL FOR DAYLIGHT HARVESTING. WATTSTOPPER LMLS-400.
3. DIGITAL SWITCHES - SELF-CONFIGURING, DIGITALLY ADDRESSABLE PUSHBUTTON ON/OFF, DIMMING, AND SCENE SWITCHES WITH TWO-WAY ACTIVE INFRARED (IR) COMMUNICATIONS. WATTSTOPPER LMDM-101.
4. DIGITAL OCCUPANCY SENSORS - SELF-CONFIGURING, DIGITALLY ADDRESSABLE AND CALIBRATED OCCUPANCY SENSORS WITH LCD DISPLAY AND TWO-WAY ACTIVE INFRARED (IR) COMMUNICATIONS. WATTSTOPPER LMDOC-100
5. RECEPTACLE CONTROLLER. WATTSTOPPER LMPL-101
6. PRE-TERMINATED CABLES FOR CONNECTIONS OF DIGITAL LIGHTING MANAGEMENT. WATTSTOPPER LMRJ SERIES.
4. INSTALLATION OF WIRING DEVICES AND ACCESSORIES:
- A. GROUPS OF SWITCHES OR SWITCH AND OUTLET COMBINATIONS SHALL BE MOUNTED UNDER ONE COVER PLATE. COVER PLATES SHALL FIT DEVICES SECURELY AND SHALL COVER WALL OPENING COMPLETELY TO PROVIDE A NEAT AND FINISHED APPEARANCE FLUSH WITH SURROUNDING SURFACES.
- B. TERMINALS ON ALL WIRING DEVICES SHALL NOT BE USED TO FEED-THROUGH TO THE NEXT DEVICES.
- C. INSTALL WALL-MOUNTED RECEPTACLES WITH GROUND SLOT UP.
- D. RECEPTACLE MOUNTED ABOVE COUNTER-TOP SHALL BE INSTALLED HORIZONTAL, WITH LONG DIMENSION PARALLEL TO FLOOR AND COUNTER-TOP.

SECTION 26 24 16 - PANELBOARDS

1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PANELBOARD PRODUCTS FROM ONE OF THE FOLLOWING (FOR EACH TYPE AND RATING OF PANELBOARD AND ENCLOSURE):
- A. GENERAL ELECTRIC
- B. SQUARE D
- C. EATON
- D. SIEMENS, I.T.E.
2. POWER DISTRIBUTION PANELS: PROVIDE DEAD-FRONT SAFETY-TYPE DISTRIBUTION PANELBOARDS RATED 208/120 OR 480/277 VOLT, 3-PHASE, 4-WIRE, SHORT CIRCUIT RATING OF PANEL AND DEVICES SHALL BE 22,000 RMS MINIMUM UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE PANELBOARD SWITCHING AND PROTECTIVE DEVICES IN QUANTITIES, RATINGS, TYPE AND WITH ARRANGEMENT SHOWN, WITH ANTI-TURN SOLDERLESS PRESSURE-TYPE LINE SIDE CONNECTORS APPROVED FOR COPPER CONDUCTORS.
3. 120/208 VOLT LIGHTING AND APPLIANCE PANELBOARDS: PROVIDE DEAD-FRONT SAFETY TYPE LIGHTING AND APPLIANCE PANELBOARDS AS INDICATED, WITH SWITCHING AND PROTECTIVE DEVICES IN QUANTITIES, RATINGS, TYPES AND ARRANGEMENTS SHOWN, WITH ANTI-TURN SOLDERLESS PRESSURE TYPE LUG CONNECTORS, APPROVED FOR USE WITH COPPER CONDUCTORS. CONSTRUCT UNIT FOR CONNECTING FEEDERS TO PANEL. EQUIP WITH COPPER, COPPER PLATED OR ALUMINUM BUS BARS, 1/2" SIZED NEUTRAL BAR, WITH BOLT-IN TYPE HEAVY-DUTY, QUICK-MAKE, QUICK-BREAK, SINGLE-POLE CIRCUIT-BREAKERS, WITH TOGGLE HANDLES THAT INDICATE WHEN TRIPPED. PROVIDE SUITABLE LUGS ON NEUTRAL BUS FOR EACH OUTGOING FEEDER REQUIRED. PROVIDE BARE UNINSULATED GROUNDING BARS SUITABLE FOR BOLTING TO ENCLOSURES. SELECT ENCLOSURES FABRICATED BY SAME MANUFACTURER AS PANELBOARDS, WHICH MATE AND MATCH PROPERLY WITH PANELBOARDS. MINIMUM INTERRUPTING CAPACITY OF MANUFACTURED PANELBOARDS SHALL BE 10,000 AIC, UNLESS NOTED OTHERWISE ON DRAWINGS.
4. MOLDED-CASE CIRCUIT BREAKERS: PROVIDE FACTORY ASSEMBLED, MOLDED CASE CIRCUIT BREAKERS OF FRAME SIZE INDICATED. PROVIDE BREAKERS WITH PERMANENT THERMAL AND INSTANTANEOUS MAGNETIC TRIPS IN EACH POLE AND AMPERE RATING AS INDICATED. CONSTRUCT WITH OVER CENTER, TRIP-FREE, TOGGLE TYPE OPERATING MECHANISMS WITH QUICK-MAKE, QUICK-BREAK ACTION AND POSITIVE HANDLE INDICATION. CONSTRUCT BREAKERS FOR MOUNTING AND OPERATING IN ANY PHYSICAL POSITION AND OPERATING IN AN AMBIENT TEMPERATURE OF 40°C. PROVIDE BREAKERS WITH MECHANICAL SCREW TYPE REMOVABLE CONNECTOR LUGS, ALCU RATED. ALL BREAKERS SHALL BE BOLT-IN TYPE CONSTRUCTION. ALL BREAKERS SHALL BE UL489 LISTED.
- A. ALL SINGLE POLE BREAKERS SHALL BE RATED FOR "SWITCHING DUTY" (SWD) AND FOR OPERATION ON FLUORESCENT LIGHTING SOURCES.
- B. ALL CIRCUIT BREAKERS PROTECTING HIGH INTENSITY DISCHARGE (HID) LIGHTING SHALL BE RATED AND LABELED "HID" FOR OPERATION ON HID LIGHTING SOURCES.
- C. CIRCUIT BREAKERS USED FOR HEATING, AIR CONDITIONING, OR REFRIGERATION EQUIPMENT SHALL BE TYPE "HACR" AND UL LISTED FOR SUCH USE.

SECTION 26 28 16 - DISCONNECTS, CONTACTS, STARTERS

1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- A. GENERAL ELECTRIC CO.
- B. SQUARE D COMPANY.
- C. EATON CORPORATION
- D. SIEMENS, I.T.E.
- E. ALLEN-BRADLEY CO.
- F. FURNAS CO.
2. TEMPERATURE RATINGS: ALL CONDUCTOR TERMINALS AND EQUIPMENT ENCLOSURES SHALL BE UL LISTED FOR USE WITH MINIMUM 75°C RATED CONDUCTORS.
3. DISCONNECT SWITCHES:
- A. PROVIDE CIRCUIT AND MOTOR DISCONNECT SWITCHES OF TYPES, SIZES AND ELECTRICAL CHARACTERISTICS INDICATED ON DRAWING; FUSIBLE OR NON-FUSED TYPE, RATED 250 OR 600 VOLTS, 60 HZ, 2- OR 3-POLES, SOLID NEUTRAL, AND INCORPORATING QUICK-MAKE, QUICK-BREAK TYPE SWITCHES. CONSTRUCT SO THAT SWITCH BLADES ARE VISIBLE IN OFF POSITION WITH DOOR OPEN. SWITCH SHALL HAVE DUAL COVER INTERLOCK TO PREVENT UNAUTHORIZED OPENING OF SWITCH DOOR WHEN HANDLE IS IN "ON" POSITION, AND TO PREVENT CLOSING OF SWITCH MECHANISM WITH DOOR OPEN. EQUIP WITH OPERATING HANDLE WHICH IS INTEGRAL PART OF ENCLOSURE BASE AND WHOSE POSITION IS EASILY RECOGNIZABLE, AND IS PAD-LOCKABLE IN OFF POSITION. CONSTRUCT CURRENT CARRYING PARTS OF HIGH-CONDUCTIVITY COPPER, WITH SILVER-TUNGSTEN TYPE SWITCH CONTACTS, AND POSITIVE PRESSURE TYPE REINFORCED FUSE CLIPS. PROVIDE SWITCHES IN NEMA 1 OR NEMA 3R ENCLOSURE AS INDICATED OR REQUIRED. PROVIDE ENGRAVED PLASTIC PLATE IDENTIFYING WHAT EACH SWITCH CONTROLS.
- B. EQUIPMENT REQUIRING DISCONNECTING MEANS RATED FOR 120 OR 208 VOLT SINGLE PHASE, UP TO 30 AMPERES MAY BE PROVIDED WITH SNAP-SWITCH TYPE TOGGLE DEVICE AND EQUIPMENT. DEVICE SHALL HAVE AMPERE AND VOLTAGE RATING EQUAL TO OR GREATER THAN BRANCH CIRCUIT FEEDING EQUIPMENT. IF EQUIPMENT IS MOTOR RELATED, THEN SWITCH SHALL BE HORSEPOWER RATED. REFER TO SECTION 26 27 26 FOR MINIMUM SPECIFICATIONS FOR TOGGLE SWITCHES. SWITCHES LOCATED OUTDOORS OR IN COOLER/FREEZER APPLICATIONS SHALL BE MOUNTED IN DIE-CAST ALUMINUM DEVICE BOX WITH GASKETED WEATHERPROOF COVER PLATE.
4. RELAYS AND CONTACTORS:
- A. GENERAL POWER PURPOSE RELAYS FOR CONTROL OF MISCELLANEOUS MOTORS, SHALL BE PROVIDED WITH NUMBER OF POLES AND COIL VOLTAGE AS SHOWN ON DRAWINGS. RELAY SHALL BE HORSEPOWER RATED FOR MOTOR LOAD TO WHICH IT CONTROLS. RELAY SHALL BE MOUNTED IN NEMA TYPE 1 ENCLOSURE.
- B. LIGHTING CONTACTORS SHALL BE PROVIDED WITH NUMBER OF POLES, COIL VOLTAGE, AND LCM CONTACT RATINGS AS SHOWN ON DRAWINGS. CONTACTORS SHALL BE PROVIDED WITH SILVER ALLOY DOUBLE BREAK CONTACTS RATED FOR TUNGSTEN AND BALLAST LIGHTING LOADS. CONTACTS SHALL BE CONVERTIBLE WITH NORMALLY OPEN AND NORMALLY CLOSED INDICATORS. RELAY SHALL BE MOUNTED IN A NEMA TYPE 1 ENCLOSURE.
5. MOTOR STARTERS:
- A. MOTOR STARTER CHARACTERISTICS: COMPLY WITH NEMA STANDARDS AND ELECTRICAL CODE. PROVIDE TYPE I GENERAL PURPOSE ENCLOSURES WITH PADLOCK EARS, AND WITH FRAMES AND SUPPORTS FOR MOUNTING ON WALL, FLOOR OR PANEL AS INDICATED. PROVIDE TYPE AND SIZE OF STARTER RECOMMENDED BY MOTOR MANUFACTURER AND EQUIPMENT MANUFACTURER FOR APPLICABLE PROTECTION AND START-UP CONDITION. REFER TO INDIVIDUAL EQUIPMENT SECTIONS FOR BASIC LOAD REQUIREMENTS.
- B. MANUAL MOTOR SWITCHES: PROVIDE MANUAL SWITCH AND GREEN PILOT LIGHT FOR MOTORS 3/4 HP AND SMALLER, EXCEPT WHERE INTERLOCK OR AUTOMATIC OPERATION IS INDICATED. PROVIDE MELTING ALLOY TYPE THERMAL OVERLOAD PROTECTION AS PART OF MANUAL STARTER SWITCH.
- C. MAGNETIC STARTERS: PROVIDE MAGNETIC STARTERS FOR MOTORS INDICATED ON DRAWINGS. ALL STARTERS SHALL BE NEMA RATED. IEC RATED STARTERS ARE NOT ACCEPTABLE. INCLUDE THE FOLLOWING:
1. HAND-OFF-AUTO SELECTOR SWITCH AND RED & GREEN PILOT LIGHTS (OFF - RUN), PROPERLY ARRANGED FOR SINGLE-SPEED OR MULTI-SPEED OPERATION AS INDICATED.
2. SOLID-STATE OVERLOAD RELAY PROTECTION (**B-METAL AND METAL MELTING ALLOY NOT ACCEPTABLE**).
3. INTERLOCKS CONTACTS AND SIMILAR DEVICES AS REQUIRED.
4. BUILT-IN 120 VOLT CONTROL CIRCUIT TRANSFORMER, FUSED FROM LINE AND SIDE, WHERE SERVICE EXCEEDS 240 VOLTS (WHERE REQUIRED).
5. EXTERNALLY OPERATED MANUAL RESET.
6. NEMA 1 OR NEMA 3R ENCLOSURE AS INDICATED ON DRAWINGS.
6. INSTALLATION OF DISCONNECTS AND STARTERS:
- A. SURFACE MOUNT ON WALLS OR COLUMNS APPROXIMATELY 5'-0" TO CENTERLINE ABOVE FLOOR WHERE POSSIBLE.
- B. DISCONNECT SWITCHES MOUNTED ON ROOFTOP AIR CONDITIONING UNITS SHALL BE CAULKED BETWEEN SWITCH AND UNIT TO PROVIDE WEATHERPROOF SEAL. VERIFY EXACT MOUNTING LOCATION ON UNIT SO AS NOT TO COVER UP REMOVABLE PANELS AND EQUIPMENT NAME PLATE.
- C. WHEN RELAYS OR CONTACTORS ARE INDICATED TO BE LOCATED ABOVE CEILING, EQUIPMENT SHALL BE READILY ACCESSIBLE AND SOUND INSULATED FROM THE MOUNTING SUPPORTS.

SECTION 16510 - LIGHTING FIXTURES

1. PROVIDE LIGHTING FIXTURES, OF SIZES, TYPES AND RATINGS INDICATED, COMPLETE WITH, BUT NOT LIMITED TO, HOUSINGS, ENERGY-EFFICIENT LAMPS, LAMP HOLDERS, REFLECTORS, ENERGY EFFICIENT BALLAST, STARTERS AND WIRING. SHIP FIXTURES FACTORY-ASSEMBLED, WITH THOSE COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION. DESIGN FIXTURES WITH CONCEALED HINGES AND CATCHES, WITH METAL PARTS GROUNDOUN AS COMMON UNIT, AND SO CONSTRUCTED AS TO DAMPEN BALLAST GENERATED NOISE
2. LAMPS
- A. ALL LAMPS SHALL BE PROVIDED BY ONE MANUFACTURER UNLESS OTHERWISE DESIGNATED ON THE FIXTURE SCHEDULE.
3. INSTALL LIGHTING FIXTURES AT LOCATIONS AND HEIGHTS AS INDICATED, IN ACCORDANCE WITH FIXTURE MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE REQUIREMENTS OF NEC, NECA'S "STANDARD OF INSTALLATION," NEMA STANDARDS, AND WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT LIGHTING FIXTURES FULFILL REQUIREMENTS.
4. FURNISH STOCK OF SPARE LAMPS AMOUNTING TO 10% (BUT NOT LESS THAN 2 LAMPS) OF EACH TYPE AND SIZE LAMP USED IN EACH TYPE FIXTURE. DELIVER REPLACEMENT STOCK TO SITE OR AS DIRECTED BY OWNER.
5. ALL EXTERIOR POLES SHALL BE PROVIDED WITH VIBRATION ISOLATION DAMPING INTERNAL TO THE POLE.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI

KATLYN COLLIER

NAME:

ELECTRICAL ENGINEER

2021046167

DISCIPLINE

LICENSE NUMBER



SWIG - SUMMIT ORCHARDS  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



OAG

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE

No.	Description	Date

SHEET NAME

ELECTRICAL SPECIFICATIONS

PROJECT NUMBER 2383.02

DATE 07/26/2023

DRAWN BY ST

CHECKED BY JGM

SCALE

E702



AIR CURTAIN SCHEDULE												
MARK (AC-#)	MANUFACTURER	MODEL	AIR FLOW (CFM)	HEATING		ELECTRICAL						
				WATTAGE	OUTPUT (BTU/HR)	VOLTAGE	PHASE	MOTOR HP	MCA (AMPS)	MOCP (AMPS)	APPROX. WEIGHT (LBS)	NOTES
1	BERNER	DTU03-2026E	200	1,700	5,800	120	1	1/12	16.4	20	16	1-3
2	BERNER	DTU03-2026E	200	1,700	5,800	120	1	1/12	16.4	20	16	1-3
NOTES: 1. PROVIDE WITH DISCONNECT PLUG. 2. PROVIDE WITH TIME DELAY RELAY. 3. PROVIDE WITH DOOR MICROSWITCH.												

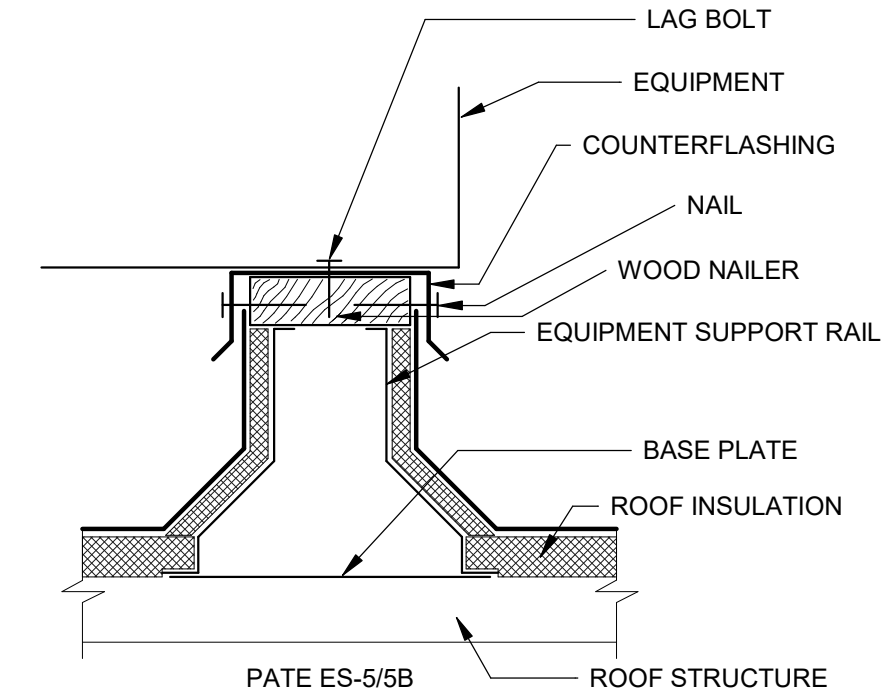
AIR HANDLING UNIT SCHEDULE																
MARK (AHU-#)	MANUFACTURER	MODEL	AIR FLOW (CFM)	OA FLOW (CFM)	EXT. S.P. (IN. W.C.)	DX COOLING COIL			HEAT PUMP HEATING		ELECTRICAL			APPROX. WEIGHT (LBS)	NOTES	
						EAT (°FDB/WB)	TOTAL (BTU/HR)	SENSIBLE (BTU/HR)	OUTPUT AT 47°FDB (BTU/HR)	OUTPUT AT 10°FDB (BTU/HR)	VOLTAGE	PHASE	MCA (AMPS)			MOCP (AMPS)
1	mitsubishi	PLA-A36EA7	1,100	50	0.8	77.2/65.0	32,070	30,700	42,000	22,000	208	1	2.0	15	60	1-6
NOTES: 1. PROVIDE WITH CONDENSATE PUMP. 2. INDOOR UNIT POWERED FROM OUTDOOR UNIT. 3. PROVIDE WITH MANAUFACUTURER PROGRAMMABLE THERMOSTAT WITH INTEGRAL TEMPERATURE SENSOR. 4. PROVIDE FACTORY AUTHORIZED STARTUP OF EQUIPMENT INCLUDING STARTUP OF ANY FACTORY CONTROLS TO ENSURE PROPER SEQUENCING. 5. DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR. 6. ACCEPTABLE ALTERNATES: LG, FUJITSU, DAIKIN.																

HEAT PUMP CONDENSING UNIT												
MARK (HP-#)	MANUFACTURER	MODEL	EER	SEER	AMBIENT OAT ("FDB)	COOLING		HEAT PUMP HEATING		PHYSICAL DATA		
						TOTAL (BTU/HR)	OUTPUT @ 47°F	HSPF	NO. OF FANS	NO. OF COMP.	VOLTAGE	PHASE
1	DAIKIN	PUZ-A36NKA7	11.2	21.8	100	32,070	42,000	10.4	1	1	208	1
NOTES: 1. INDOOR UNIT POWERED FROM OUTDOOR UNIT. 2. PROVIDE FACTORY AUTHORIZED STARTUP OF EQUIPMENT INCLUDING STARTUP OF ANY FACTORY CONTROLS TO ENSURE PROPER SEQUENCING. 3. ACCEPTABLE ALTERNATES: LG, FUJITSU, DAIKIN. 4. PROVIDE WITH NEOPRENE PADS AT SUPPORT ATTACHMENTS. 5. PROVIDE WITH DRAIN PAN HEATER. 6. DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR.												

EXHAUST AND VENTILATION FAN SCHEDULE												
MARK (EF-#)	MANUFACTURER	MODEL	TYPE	DRIVE TYPE	PERFORMANCE			ELECTRICAL			SERVES	APPROX. WEIGHT (LBS)
					AIR FLOW (CFM)	EXT. S.P. (IN. W.C.)	FAN SPEED (RPM)	VOLTAGE	PHASE	MOTOR WATTS		
1	GREENHECK	SP-A125	CEILING MOUNTED	DIRECT	70	0.35	1,100	120	1	20	RESTROOM	20
ACCESSORIES: BD-BACKDRAFT DAMPER, DS-DISCONNECT SWITCH, FSC-FACTORY MOUNTED AND WIRE SPEED CONTROLLER.												
NOTES: 1. INTERLOCK FAN WITH RESTROOM LIGHTS. 2. ACCEPTABLE ALTERNATES: COOK, PENNBARRY.												

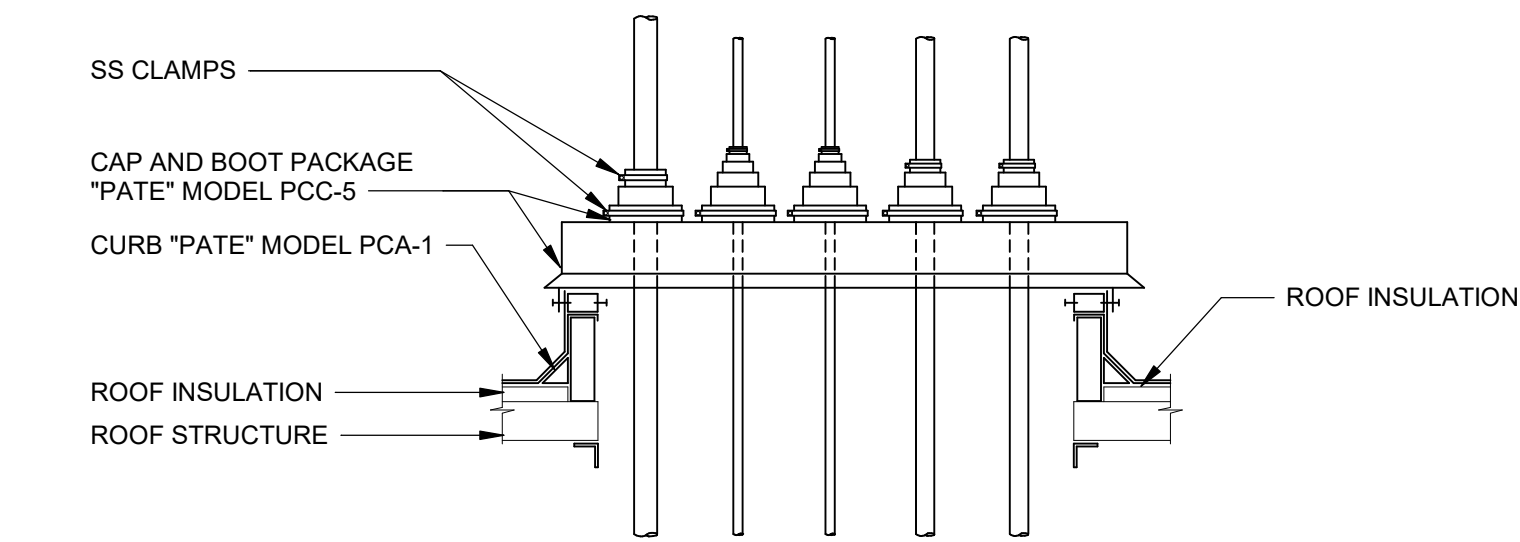
UNIT HEATER SCHEDULE - ELECTRIC HEAT										
MARK (UH-#)	MANUFACTURER	MODEL	TYPE	ELECTRIC HEAT		ELECTRICAL			APPROX. WEIGHT (LBS)	NOTES
				INPUT (WATTS)	OUTPUT (BTU/HR)	VOLTAGE	PHASE	MCA (AMPS)		
1	QMARK	AWH315	WALL MOUNTED	1500	5118	120	1	13	20	1.2
NOTES: 1. PROVIDE WITH INTEGRAL THERMOSTAT. 2. DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR.										

NOTES:  
1. PROVIDE TWO ROOF RAILS FOR EACH UNIT. PROVIDE 13.5" RAIL HEIGHT.



## 2 EQUIPMENT SUPPORT RAIL DETAIL

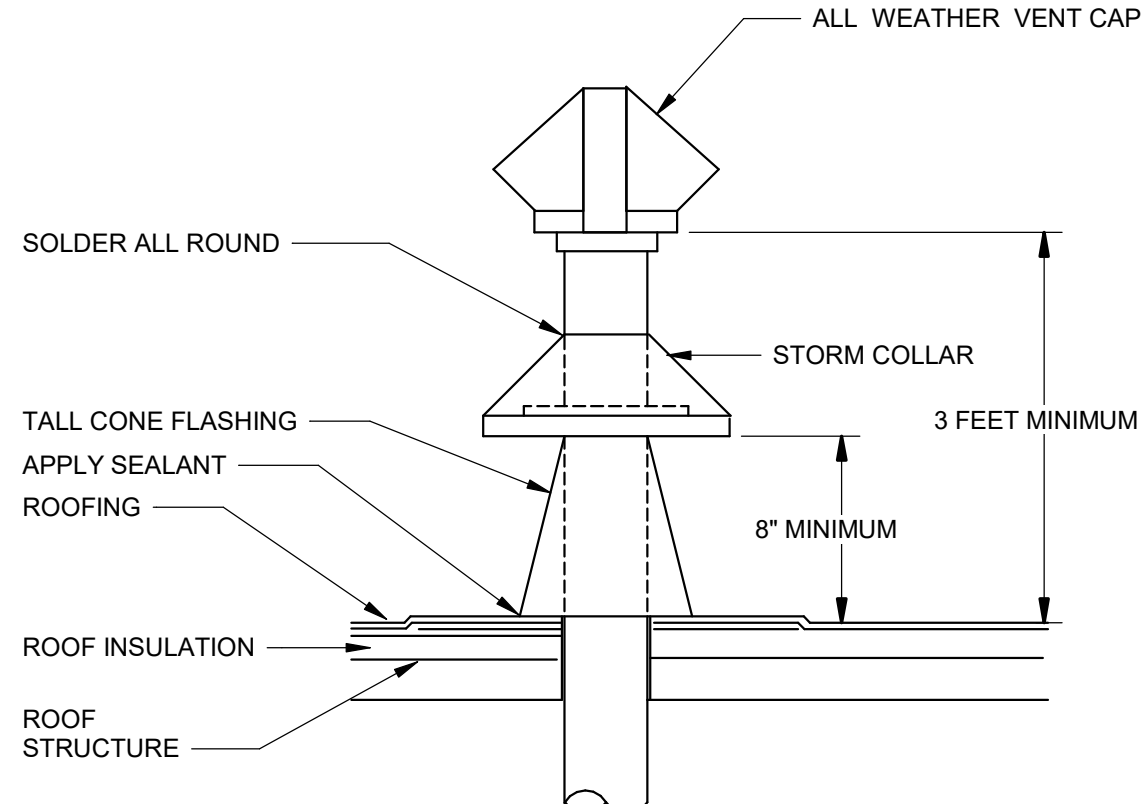
NOT TO SCALE



NOTES:  
1. USE SINGLE ROOF PENETRATION FOR ALL CONTROL WIRING, POWER WIRING, AND REFRIGERANT LINES.  
2. INSULATE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.

## 3 PIPE ROOF PENETRATION DETAIL

NOT TO SCALE



## 1 DUCT THROUGH ROOF DETAIL

NOT TO SCALE

## MECHANICAL SPECIFICATIONS

PROVIDE EQUIPMENT INDICATED ON DRAWINGS, AND AS REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM.

DEFINITIONS: FURNISH MEANS TO SUPPLY AND DELIVER TO PROJECT SITE, READY FOR INSTALLATION. INSTALL MEANS TO PLACE IN POSITION AND MAKE CONNECTIONS FOR SERVICE OR USE. PROVIDE MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF COMPLETED PROJECT. PROVIDE SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT OWNER'S OPTION.

COORDINATION: COORDINATE WITH WORK OF OTHER TRADES. EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF OWNER, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS.

SHEET METAL DUCTWORK: PROVIDE SHEET METAL DUCTWORK FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS, FOR 1" W.G. PRESSURE CLASS, SEAL CLASS "A". SHEET METAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, WITH G90 ZINC COATING. SHEET STEEL SHALL COMPLY WITH ASTM A653 STANDARD SPECIFICATION FOR STEEL SHEET METAL, ZINC COATED (GALVANIZED) OR ZINC-IRON ALLOY-COATED (GALVANNEAL) BY HOT DIP PROCESS, AND A924 STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS FOR SHEET, METALLIC-COATED BY HOT DIP PROCESS. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOOR SHALL BE AIR TIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR TIGHT. PROVIDE TURNING VANES AT ALL 90° ELBOWS.

REFRIGERANT PIPING: TYPE ACR HARD DRAWN COPPER TUBING MEETING THE REQUIREMENTS OF ASTM B280, WITH WROUGHT COPPER FITTINGS MEETING REQUIREMENTS OF ASME B16.22, WITH BRAZED JOINTS MEETING REQUIREMENTS OF AWS A 5.8, USING BAG-1 (SILVER) FILLER MATERIAL. INSULATE PIPING WITH 1" THICK ARMAFLEX TYPE AP. PAINT INSULATION LOCATED OUTDOORS WITH ARMAFLEX WB FINISH.

ROUND SHEET METAL DUCT: PROVIDE SPIRAL SEAM (ALL SIZES) OR SNAP LOCK GALVANIZED STEEL COMPLYING WITH SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE RL-1.

DUCT SEALANT: PROVIDE WATER BASED SYNTHETIC LATEX EMULSION PERMANENTLY FLEXIBLE HIGH VELOCITY DUCT SEALANT, DUCTMATE INDUSTRIES INC., PRO SEAL OR EQUAL. SEALANT TO BE LOW VOC LEED COMPLIANT CAPABLE OF 15" W.G., NFPA 90A AND 90B APPROVED, UL 181B-M LISTED AND UL 721 CLASSIFIED. INSTALL PER MANUFACTURER INSTRUCTIONS. SEALANT SHALL BE APPROVED FOR PLENUM INSTALLATIONS AND MEET FLAME SPREAD AND SMOKE DEVELOPED RATINGS FOR PLENUM APPLICATIONS.

DUCT INSULATION (ALL OUTSIDE AIR DUCTWORK): PROVIDE BLANKET TYPE FIBERGLASS INSULATION COMPLYING WITH ASTM C-563, TYPE II, WITH FACTORY APPLIED KRAFT BONDED TO ALUMINUM FOIL, REINFORCED WITH FIBERGLASS VAPOR BARRIER/JACKET. JACKET SHALL CONFORM TO ASTM C-1136, TYPE II. FOR OUTSIDE AIR DUCT BETWEEN INTAKE AND AUTOMATIC SHUTOFF DAMPER, PROVIDE MINIMUM 3" THICK INSULATION WITH INSTALLED R VALUE OF 8.3 OR HIGHER WITH 0.75 PCF DENSITY. FOR OUTSIDE AIR DUCT BETWEEN AUTOMATIC SHUTOFF DAMPER AND UNIT, PROVIDE MINIMUM 1-1/2" THICK INSULATION WITH INSTALLED R VALUE OF 4.2 OR HIGHER WITH 0.75 PCF DENSITY.

ROUND VOLUME DAMPERS: PROVIDE MINIMUM 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MINIMUM 3/8" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS, WITH LOCKING POSITION REGULATOR. REGULATOR SHALL BE POSITIONED WITH SHEET METAL STAND-OFF BRACKET BEYOND DUCT COVERING, WHERE POSITIONING REGULATOR IS NOT ACCESSIBLE. PROVIDE COUPLING AND EXTENSION ROD WITH REGULATOR FOR CEILING OR WALL INSTALLATION, AS REQUIRED.

FLEXIBLE DUCT CONNECTORS: PROVIDE UL LABELED 30 OUNCE NEOPRENE COATED FIBERGLASS FABRIC DUCT CONNECTORS AT DUCT CONNECTIONS TO VIBRATING EQUIPMENT.

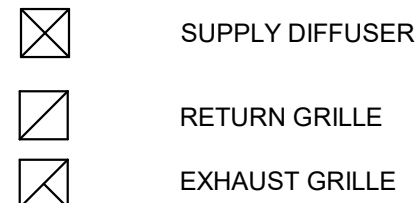
MECHANICAL EQUIPMENT IDENTIFICATION: PROVIDE ENGRAVED PLASTIC LAMINATE LABEL FOR EACH MAJOR ITEM OF MECHANICAL EQUIPMENT AND EACH OPERATIONAL DEVICE. LETTERS SHALL BE MINIMUM OF 1/2" HIGH. PROVIDE SIGNS TO INFORM OPERATOR OF OPERATIONAL REQUIREMENTS, TO INDICATE SAFETY AND EMERGENCY PRECAUTIONS, AND TO WARN OF HAZARDS AND IMPROPER OPERATION.

TESTING AND BALANCING: TEST AND ADJUST ALL MECHANICAL SYSTEMS AND EQUIPMENT TO ASSURE PROPER BALANCE AND OPERATION. PERFORM TESTS IN ACCORDANCE WITH THE MOST CURRENT NEBB OR AABC, AND ASHRAE STANDARDS. ELIMINATE OBJECTIONABLE NOISE AND VIBRATION, AND ASSURE PROPER FUNCTION OF CONTROLS. BALANCING CONTRACTOR SHALL BE AN INDEPENDENT CERTIFIED TEST AND BALANCE CONTRACTOR, WITH NEBB OR AABC CERTIFICATION. SUBMIT COMPLETED AND CERTIFIED TEST AND BALANCE REPORT TO OWNER'S REPRESENTATIVE. BALANCE ALL SYSTEMS TO WITHIN 5% OF AIR FLOWS INDICATED ON THE DRAWINGS, AND REPORT DISCREPANCIES TO HVAC INSTALLER FOR CORRECTION. MARK FINAL BALANCE POSITIONS ON DAMPERS WITH PERMANENT MARKER.

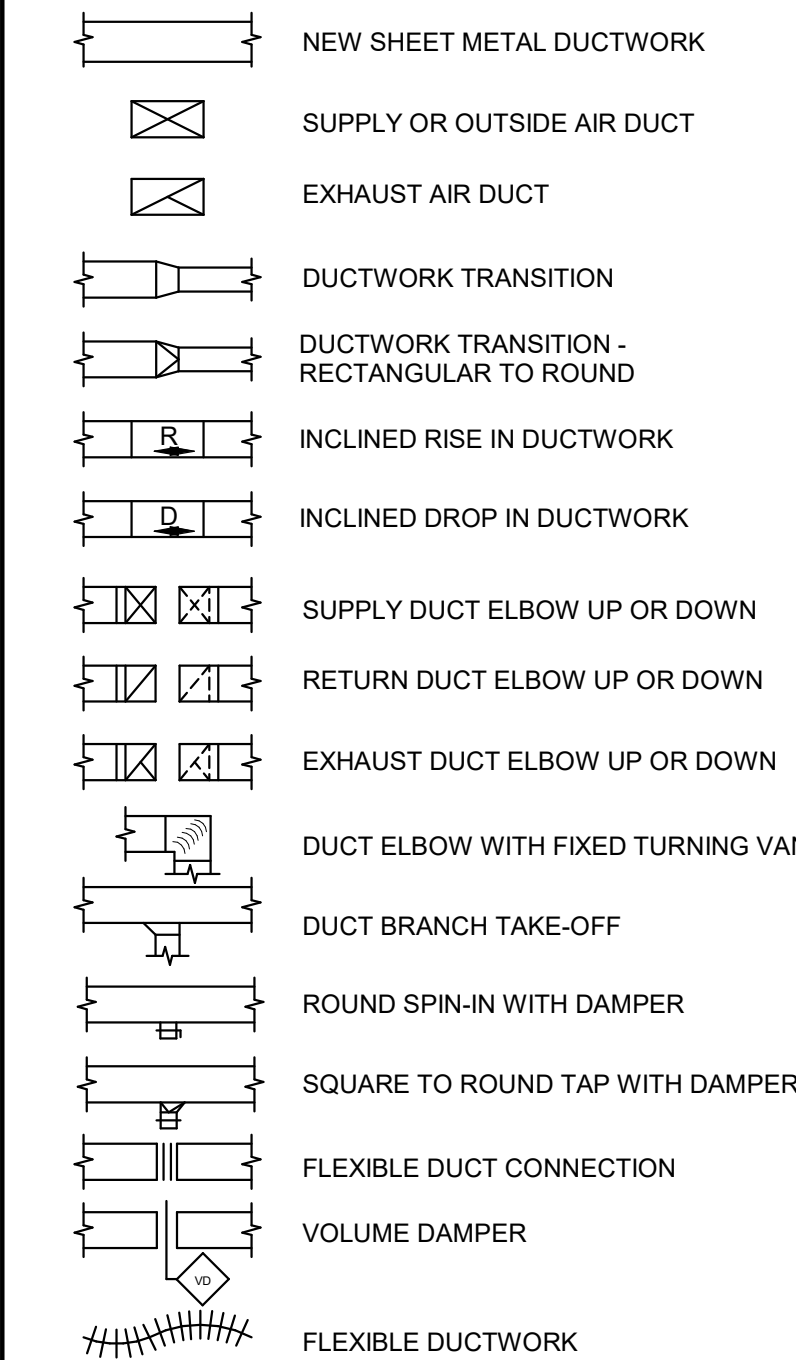
OPERATIONS AND MAINTENANCE MANUALS (O&M): AT COMPLETION OF PROJECT PROVIDE A MINIMUM OF TWO O&M MANUALS IN THREE RING BINDERS TO OWNER/TENANT. MANUALS SHALL HAVE TABS LABELED WITH ALL SECTIONS SEPARATED WITH A CLEAR INDEX AT FRONT. PROVIDE WARRANTY LETTER AT FRONT OF MANUAL STATING DATES OF WARRANTY (START DATE AND END DATE) AND CONTACTS WITH PHONE NUMBERS FOR WARRANTY WORK. PROVIDE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE INCLUDING RECOMMENDED SETPOINTS. MANUALS SHALL INCLUDE SUBMITTALS OF ALL EQUIPMENT, SIZE AND OPTIONS SELECTED. PROVIDE ALL BALANCING REPORTS. PROVIDE MANUFACTURER LITERATURE FOR OPERATIONS AND MAINTENANCE FOR ALL EQUIPMENT ON PROJECT. ALL PERIODIC AND ROUTINE MAINTENANCE SHALL BE CLEARLY IDENTIFIED. PROVIDE CONTROLS SECTION LISTING SYSTEM OPERATING AND CONTROL INSTRUCTIONS, MAINTENANCE, CALIBRATION, WIRING DIAGRAMS, SCHEMATICS AND CONTROL SEQUENCE DESCRIPTIONS.

## MECHANICAL SYMBOLS

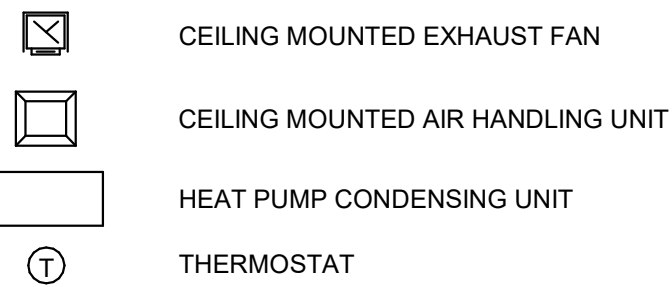
GRILLES/DIFFUSERS:



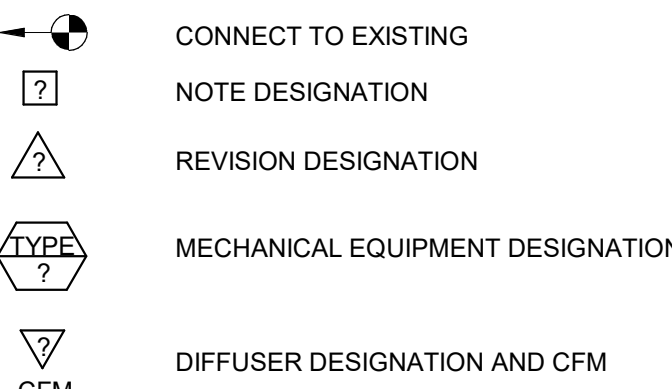
DUCT SYMBOLS:



EQUIPMENT:



GENERAL REFERENCES/NOTATIONS:



SYMBOLS LEGEND NOTES:

1. REFER TO PLANS AND SPECIFICATIONS FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN. PROVIDED BY THIS CONTRACTOR. PROJECT MAY NOT USE ALL SYMBOLS OR DEVICES INDICATED ON THIS LEGEND.

## MECHANICAL GENERAL NOTES

- A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW CONSTRUCTION DOCUMENTS. INFORMATION REGARDING COMPLETE WORK IS DISPERSED THROUGHOUT DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO COMPLETE DOCUMENT SET.
- B. COORDINATE WITH WORK OF OTHER SECTIONS. EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF OWNER, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE. PROVIDE DUCT AND PIPE RISERS AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF DISCREPANCIES BEFORE STARTING WORK.
- C. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- D. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING AUTHORITY. PURCHASE ALL PERMITS ASSOCIATED WITH WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- E. INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE.
- F. CONTRACT LANDLORD APPROVED ROOFING CONTRACTOR TO FLASH AND SEAL RELATED ROOF PENETRATIONS TO MAINTAIN ROOFING WARRANTY.
- G. INSTALL EXHAUST FANS MINIMUM OF 10 FT FROM INTAKE AIR OPENINGS.

## REFRIGERANT PIPING NOTE

REFRIGERANT PIPE(S) SIZES SHALL BE DETERMINED BY THE COMPRESSORIZED EQUIPMENT MANUFACTURER OR THEIR REPRESENTATIVE, WHO SHALL ALSO DETERMINE THE NEED FOR DOUBLE SUCTION PIPE RISERS, ACCUMULATORS AND OTHER APPURTENANCES REQUIRED FOR PROPER LONG TERM OPERATION OF THE EQUIPMENT. REFRIGERANT PIPE(S) SIZING AND ROUTING SHALL MEET ALL SYSTEM OPERATING CONDITIONS. THE CONTRACTOR SHALL PROVIDE TO THE OWNER AND ENGINEER LETTERS AND DRAWINGS THAT ADEQUATELY DEPICT THE REFRIGERANT PIPING AND COMPONENTS, AND INDICATE THE RECOMMENDATIONS PROVIDED TO THEM BY THE MANUFACTURER OR THEIR REPRESENTATIVE.

## KITCHEN VENTILATION NOTE

THE KITCHEN MEETS THE 2018 INTERNATIONAL MECHANICAL CODE CHAPTER 4 SECTION 402 REQUIREMENTS FOR NATURAL VENTILATION BY WAY OF THE ENTRANCE DOOR THAT MEETS THE MINIMUM AREA REQUIREMENT OF 4% OF THE OVERALL FLOOR AREA. IN ADDITION, THE AIR HANDLING UNIT PROVIDES 50 CFM OF MECHANICAL VENTILATION TO THE SPACE.



SWIG - SUMMIT ORCHARDS  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



OAG

OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE

No.	Description	Date

SHEET NAME

NOTES, LEGENDS, SPECS,  
SCHEDULES, & DETAILS

PROJECT NUMBER 2383.02

DATE 07/26/2023

DRAWN BY AMA

CHECKED BY EKE

SCALE As indicated

M001



Dialectic, Inc.  
310 W 25th Street, Suite 100  
Kansas City, MO 64108  
Professional Engineer  
License Number 1002  
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This sheet is part of the construction documents. Drawings, specifications and other sheets apply and must be followed in full. When shown on the drawings, the engineer's seal and signature are required to comply with the conditions, requirements and restrictions of the Missouri Professional Engineer Act. The engineer has no liability for the accuracy of these associated elements, or for any errors the engineer has not signed and sealed.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.

ROBERT HARRIS

NAME:

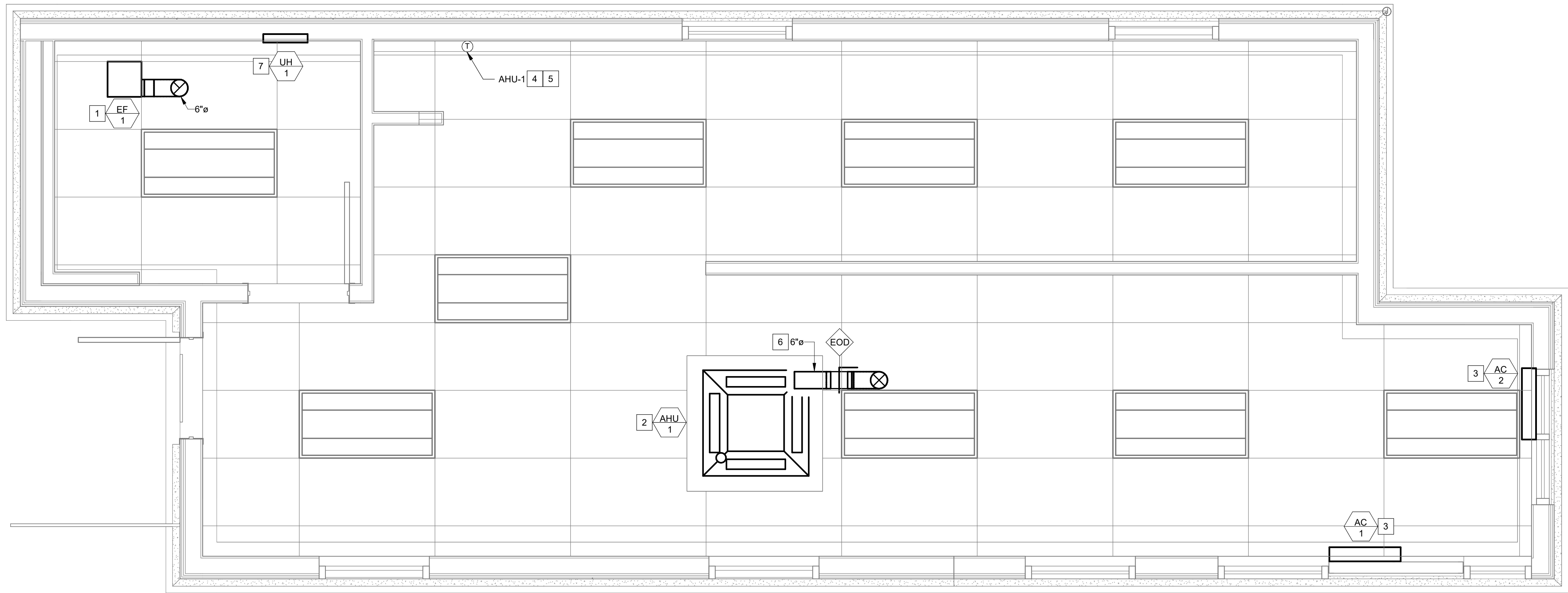
MECHANICAL ENGINEER

DISCIPLINE

2007025514

LICENSE NUMBER





# **1 MECHANICAL PLAN**

1/2" = 1'-0"

- | # | MECHANICAL KEY NOTES   |
|---|--|
| 1 | PROVIDE CEILING MOUNTED EXHAUST FAN. TRANSITION FROM FAN DISCHARGE TO DUCT SIZE SHOWN AND EXTEND UP THROUGH ROOF.  |
| 2 | PROVIDE CEILING MOUNTED DUCTLESS SPLIT SYSTEM AIR CONDITIONING UNIT. INSTALL UNIT LEVEL FOR PROPER CONDENSATE DRAINAGE. SUPPORT UNIT FROM STRUCTURE ABOVE WITH CHANNEL AND ALL-THREAD ROD WITH SPRING VIBRATION ISOLATORS. |
| 3 | PROVIDE AIR CURTAIN. MOUNT UNIT DIRECTLY ABOVE DRIVE THROUGH WINDOW PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.  |
| 4 | PROVIDE WIRED REMOTE CONTROLLER FOR DUCTLESS SPLIT SYSTEM. MOUNT 48" ABOVE FINISHED FLOOR.   |
| 5 | INSULATE EXTERIOR WALL BEHIND THERMOSTAT/SENSOR AND CAULK WIRE PENETRATION THROUGH WALL.   |
| 6 | 6"Ø OUTDOOR AIR DUCT UP THROUGH ROOF. PROVIDE (1) 120 VOLT ELECTRICALLY OPERATED DAMPER (EOD) AS INDICATED. EOD SHALL FULLY OPEN DURING OCCUPIED HOURS AND FULLY CLOSE DURING UNOCCUPIED PERIODS.                          |
| 7 | PROVIDE RECESSED WALL MOUNTED UNIT HEATER. MOUNT HEATER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS 18" ABOVE FINISHED FLOOR.   |



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KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME  
**MECHANICAL PLAN**

PROJECT NUMBER 2383.02

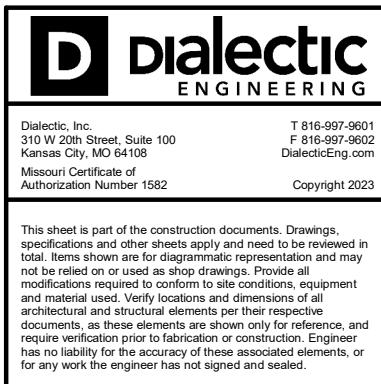
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SCALE 1/2" = 1'-0"

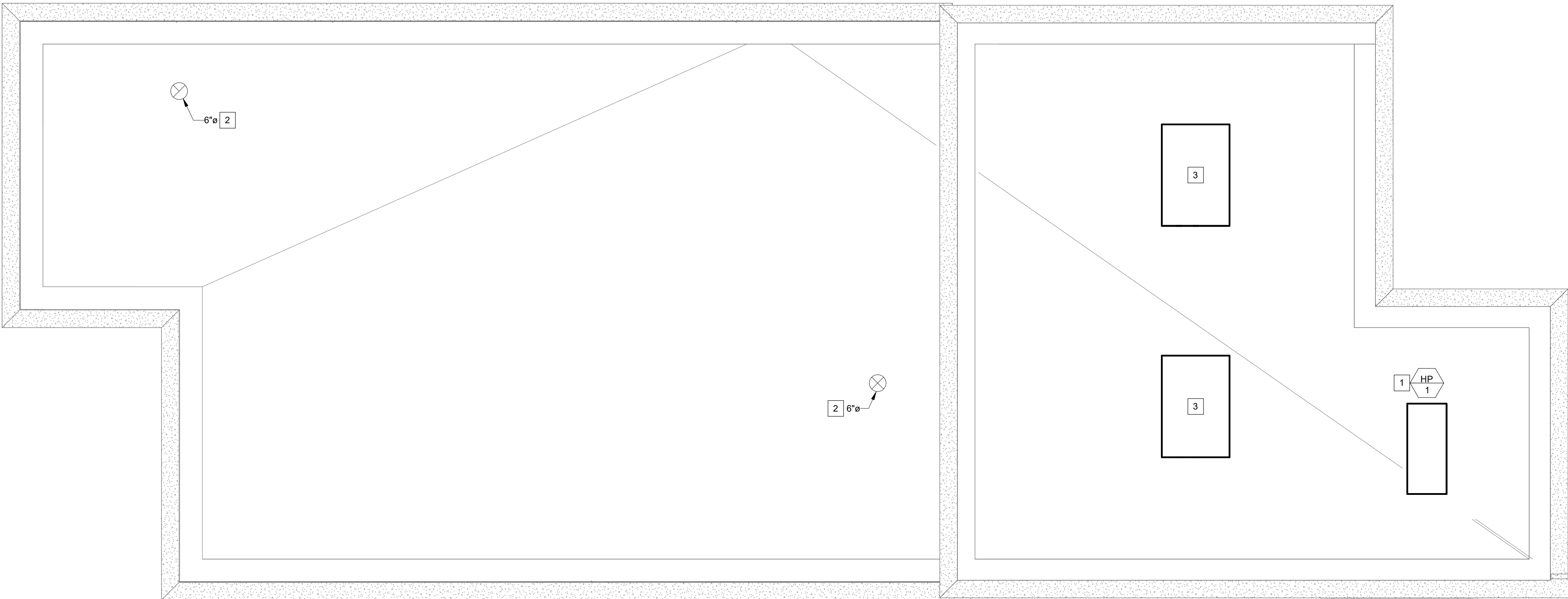
M111



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.  
**ROBERT HARRIS**  
NAME: \_\_\_\_\_  
**MECHANICAL ENGINEER** 2007025514  
DISCIPLINE LICENSE NUMBER

7/26/2023 8:49:25 AM





**1 MECHANICAL ROOF PLAN**  
1/2" = 1'-0"

- | # | MECHANICAL KEY NOTES  |
|---|---|
| 1 | PROVIDE HEAT PUMP CONDENSING UNIT AND EQUIPMENT SUPPORT RAILS FOR MOUNTING ON ROOF. PROVIDE MANUFACTURER'S RECOMMENDED TYPE AND SIZE OF REFRIGERANT PIPING FROM AIR HANDLING UNIT TO HEAT PUMP CONDENSING UNIT. PROVIDE PIPE CURB PENETRATIONS AND SUPPORTS. INSULATE REFRIGERANT PIPING WITH 1" THICK ARMAFLEX AP. PAINT INSULATION LOCATED OUTDOORS WITH ARMAFLEX WB FINISH. TRAP AND SLOPE LINES PER MANUFACTURER'S RECOMMENDATIONS.   |
| 2 | DUCT UP THROUGH ROOF. PROVIDE ROOF JACK, STORM COLLAR, AND ALL-WEATHER CAP.   |
| 3 | PROVIDE ROOF MOUNTED EQUIPMENT RAILS AND INSTALL OWNER FURNISHED REMOTE CONDENSING UNIT FOR FOOD SERVICE EQUIPMENT. COORDINATE FINAL INSTALLATION LOCATION WITH OWNER'S CONSTRUCTION MANAGER PRIOR TO INSTALLATION. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, CRANKCASE HEATER, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE REQUIRED ROOF PENETRATIONS FOR REFRIGERANT PIPING. |



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No.	Description	Date

SHEET NAME  
**MECHANICAL ROOF PLAN**

PROJECT NUMBER 2383.02

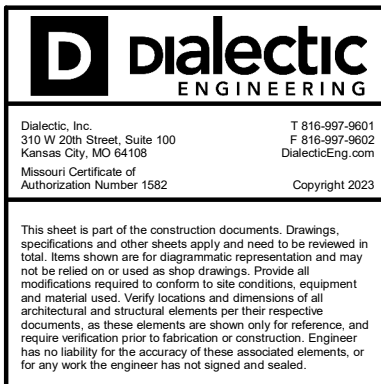
DATE 07/26/2023

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SCALE 1/2" = 1'-0"

**M112**



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.  
**ROBERT HARRIS**  
NAME: \_\_\_\_\_  
**MECHANICAL ENGINEER** 2007025514  
DISCIPLINE LICENSE NUMBER



PLUMBING SPECIFICATION
THE WORK INCLUDES MODIFICATION TO THE EXISTING PLUMBING SYSTEM AND PROVIDING NEW MATERIALS, FITTINGS AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM. THE WORK ALSO INCLUDES ROUGH-IN AND FINAL CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BEVERAGE DISPENSING EQUIPMENT PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION.
HOOK-UP CHARGES, PERMITS AND ALL OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING PLUMBING SYSTEM ARE INCLUDED AS A PART OF THIS SECTION.
THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, FIXTURES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURE INSTALLATION REQUIREMENTS. COMPLY WITH ALL APPLICABLE ADA INSTALLATION REQUIREMENTS.
COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.
PIPING SYSTEMS - GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK SUCH AS DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. ALL HANGERS SHALL BE COMPATIBLE WITH PIPING MATERIAL TO PREVENT CORROSION.F. THE PROJECT SITE.
PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED.
FIXTURES/EQUIPMENT FURNISHED BY OTHERS: PLUMBING CONTRACTOR SHALL PROVIDE UTILITY CONNECTIONS REQUIRED SUCH AS WATER, GAS, AIR, SUPPLIES, WASTE OUTLET, TRAPS, ETCETERAS AT ALL PLUMBING TYPE FIXTURES OR EQUIPMENT FURNISHED BY OWNER, GENERAL CONTRACTOR, FOOD SERVICE CONTRACTOR, EQUIPMENT SUPPLIER, ETCETERA. INCLUDED ARE STOP VALVES, ESCUTCHEONS, AND CHROME PLATED BRASS TUBING WITH COMPRESSION FITTINGS.
SEWER AND WASTE PIPING: PROVIDE ALL DRAINS AND SEWERS WITHIN THE PROJECT SPACE WITH CONNECTION TO THE EXISTING DRAINAGE SYSTEMS ON-SITE. SANITARY WASTE AND GREASE WASTE DRAINAGE PIPING SHALL BE SERVICE-WEIGHT HUB AND SPIGOT TYPE CAST-IRON WITH NEOPRENE GASKET JOINT SYSTEM OR SERVICE-WEIGHT HUBLESS CAST-IRON PIPE AND FITTINGS AND CONNECTIONS. PUMPED WASTE SHALL BE SOLVENT WELDED PVC PIPE FROM THE PUMP TO THE POINT OF CONNECTION WITH THE EXISTING BUILDING DRAIN. ALL GRAVITY DRAINAGE PIPING SHALL BE UNIFORMLY PITCHED, 1/4" PER FOOT FOR PIPE SIZES 3" AND SMALLER, 1/8" PER FOOT FOR PIPE SIZES 4" AND LARGER, UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS, OR INDICATED ON THE DRAWINGS.
VENTS: PROVIDE ALL VENTS WITHIN THE PROJECT SPACE WITH CONNECTION TO THE EXISTING VENT SYSTEMS ON-SITE. VENT PIPING SHALL BE SERVICE-WEIGHT HUB AND SPIGOT TYPE CAST-IRON WITH NEOPRENE GASKET JOINT SYSTEM OR SERVICE-WEIGHT HUBLESS CAST-IRON PIPE AND FITTINGS AND CONNECTIONS.
CONDENSATE AND INDIRECT DRAIN PIPING: TYPE M COPPER TUBING.
CLEANOUTS: PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL WASTE AND DRAIN PIPES. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPES THEY SERVE, CONFORMING TO CODE REQUIREMENTS. PROVIDE SUITABLE WALL OR FLOOR CLEANOUTS WITH ACCESSORIES TO OBSOURE FROM VIEW.
WATER DISTRIBUTION PIPING: LAYOUT WATER PIPING SO THAT THE ENTIRE SYSTEM CAN BE DRAINED. ABOVE GRADE HOT AND COLD WATER PIPING SHALL BE 1/2" MINIMUM TYPE L COPPER TUBING WITH WROUGHT COPPER FITTINGS AND SWEAT CONNECTIONS OR CPVC WHERE ALLOWED BY AHJ. BELOW GRADE HOT AND COLD WATER PIPING SHALL BE 1/2" MINIMUM TYPE K COPPER TUBING WITH WROUGHT COPPER FITTINGS, AND SWEAT CONNECTIONS OR CPVC WHERE ALLOWED BY AHJ. PROVIDE WATER HAMMER ARRESTERS AT EACH FIXTURE OR GROUP OF FIXTURES AS REQUIRED. INSTALL CHROME PLATED BRASS ESCUTCHEON PLATES AT ALL PENETRATIONS THROUGH FINISHED SURFACES (INCLUDING CABINET INTERIORS). USE TIN-ANTIMONY SOLDER, 95/5 FOR ALL SWEAT FITTINGS OF COPPER PIPING.
PIPE INSULATION: RIGID ONE-PIECE FIBERGLASS PIPE INSULATION WITH REQUIREMENTS COMPLYING WITH ASTM C 547, SELF-SEALING ADHESIVE LAP LONGITUDINAL JOINTS AND BUTT STRIPS FOR TRANSVERSE JOINTS. JACKETING SHALL CONFORM TO ASTM C 1136, TYPE I, MAXIMUM VAPOR TRANSMISSION RATING OF 0.02 PERM WHEN TESTED ACCORDING TO ASTM E 96, PROCEDURE A, (K VALUE) 0.25 BTU/IN./HR. * FT2 * °F AT 75°F MEAN TEMPERATURE WITH A R-VALUE OF R4. PROVIDE INSULATION THICKNESS AS INDICATED.
- DOMESTIC COLD WATER PIPING 1" AND SMALLER: 1/2" THICKNESS
- DOMESTIC COLD WATER PIPING 1-1/4" - 2": 3/4" THICKNESS
- DOMESTIC COLD WATER 2-1/2 AND LARGER: 1" THICKNESS
- CONDENSATE PIPING: 1/2" THICKNESS
- DOMESTIC HOT WATER PIPING 2" AND SMALLER: 1" THICKNESS
- DOMESTIC HOT WATER PIPING 2" AND LARGER: 1-1/2" THICKNESS
- HOT WATER AND WASTE PIPING BELOW HANDICAP LAVATORIES/SINKS

PLUMBING SPECIFICATION
PIPE INSULATION: FLEXIBLE, ONE PIECE, EXPANDED CLOSED-CELL ELASTOMERIC PIPE INSULATION WITH REQUIREMENTS COMPLYING WITH ASTM C 518, SELF-SEALING, WITH A MAXIMUM VAPOR TRANSMISSION RATING OF 0.20 PERM WHEN TESTED ACCORDING TO ASTM E 96, THERMAL CONDUCTIVITY (K VALUE) SHALL NOT EXCEED 0.27 BTU/IN./HR. * FT2 * °F AT 75°F MEAN TEMPERATURE, WITH A MINIMUM R-VALUE OF R3.7, AND INSULATION AND JACKET SHALL BE RATED FOR OPERATING TEMPERATURES FROM 40°F TO 180°F. PROVIDE INSULATION THICKNESS AS INDICATED.
- DOMESTIC COLD WATER PIPING 2" AND SMALLER: 1/2" THICKNESS
- CONDENSATE PIPING: 1/2" THICKNESS
- DOMESTIC HOT WATER PIPING 2" AND SMALLER: 1/2" THICKNESS
SHUTOFF VALVES, WITH UNIONS SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE, FOOD SERVICE EQUIPMENT ITEM OR OTHER EQUIPMENT ITEM, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. VALVES SHALL BE EQUAL TO CRANE #9302-9322 BALL VALVE. CONSTRUCTION - TWO PIECE, BRONZE BODY, FULL PORTED, CHROME PLATED BRASS BALL, REPLACEABLE "TEFLON OR TFE" SEATS AND SEALS. RATING - 150 PSI WSP, 600 PSI WOG, CONNECTIONS - SOLDER OR THREADED ENDS TO MATCH PIPING, STANDARDS COMPLIANCE - BRONZE OR BRASS VALVES: MSS-SP-110.
ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES, VALVES, ETCETERA ARE CONCEALED WITHIN WALLS. WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY-IN SUSPENDED CEILINGS, ACCESS PANELS ARE NOT REQUIRED.
INSTALLATION: THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT WITH FIXTURES. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT, AND OMIT ESCUTCHEONS.
REPAIR EXISTING PLUMBING SYSTEM COMPONENTS DAMAGED BY CONSTRUCTION OPERATIONS AND RESTORE TO ORIGINAL CONDITIONS.
TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.
TEST SANITARY DRAINAGE AND VENT SYSTEM BY FILLING WITH WATER, WITH ALL POINTS IN THE SYSTEM BEING SUBJECT TO PRESSURE OF AT LEAST 10' OF WATER. WATER LEVEL SHALL REMAIN STATIONARY FOR A PERIOD OF ONE HOUR, WITHOUT ANY PIPE OR JOINT LEAKAGE. IF TESTING INDICATES DEFICIENTS REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.
PLUMBING CONTRACTOR TO HAVE A MINIMUM OF 5 YEARS EXPERIENCE AND BE LICENSED.
ALL SCHEDULING OF WORK ON SHUT DOWNS SHALL BE COORDINATED WITH THE BUILDING OWNERS/ENGINEER 72 HOURS IN ADVANCE OF ANY WORK BEING DONE.

GENERAL PLUMBING NOTES
A. REFER TO PLUMBING SPECIFICATION ELSEWHERE IN DRAWINGS FOR FURTHER INFORMATION AND REQUIREMENTS FOR PLUMBING CONTRACTOR.
B. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS, INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
C. COORDINATE WITH WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF OWNER, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE. PROVIDE PIPE RISES, DROPS, AND OFFSETS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF DISCREPANCIES BEFORE STARTING WORK.
D. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING GENERAL LOCATION, TYPE, LAYOUT AND EQUIPMENT REQUIRED. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE PIPING, CONNECTIONS, FITTINGS, VALVES, OFFSETS AND ALL MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
E. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING AUTHORITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
F. PROVIDE WATER HAMMER ARRESTORS THROUGHOUT WATER SYSTEMS AS REQUIRED PER "WATER HAMMER ARRESTERS" DETAIL.
G. PROVIDE BACKFLOW PREVENTION DEVICES IN WATER LINES FEEDING PLUMBING FIXTURES AND EQUIPMENT AS SHOWN ON PLANS AND ELSEWHERE AS REQUIRED BY AUTHORITY HAVING JURISDICTION. USE DEVICES OF APPROVED MANUFACTURER AND TYPE IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITY HAVING JURISDICTION.
H. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. IF PRESSURE AT BUILDING ENTRY PRIOR TO ALL LOCALLY REQUIRED DEVICES IS LESS THAN 60 PSIG STATIC, CONTACT OWNER'S REPRESENTATIVE. IF PRESSURE EXCEEDS 80 PSIG, PROVIDE PRESSURE REDUCING VALVE SET AT 80 PSIG.
I. SUSPEND HORIZONTAL SERVICE PIPING FROM UNDERSIDE OF ROOF OR FLOOR STRUCTURE UNLESS OTHERWISE INDICATED. INSTALL PIPING AS HIGH AS POSSIBLE. EXTEND PIPING DOWN IN WALLS, PARTITIONS AND CHASES TO SERVE FIXTURES AND EQUIPMENT.
J. VERIFY SERVICE CONNECTION POINTS, SIZES, ELEVATIONS AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITY COMPANIES AND/OR CIVIL ENGINEER, AS APPLICABLE.
K. USE OF COMBUSTIBLE MATERIALS IS NOT ALLOWED IN RETURN AIR PLENUMS. MATERIALS USED IN PLENUMS SHALL HAVE FLAME SPREAD RATING NOT TO EXCEED 25 AND SMOKE DEVELOPED RATING NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.
L. COMPLY WITH LOCAL HEALTH DEPARTMENT REGULATIONS, OMIT ESCUTCHEONS IN FOOD SERVICE AREAS. SEAL PIPES NEATLY WITH GROUT AT WALL, FLOOR, OR CEILING PENETRATIONS. OMIT INSULATION ON EXPOSED PIPING BEHIND AND UNDER EQUIPMENT. PROVIDE CLEARANCE BEHIND AND UNDER EXPOSED PIPING AS REQUIRED BY THE HEALTH DEPARTMENT. WHEREVER POSSIBLE, INSTALL PIPING IN FOOD SERVICE AREAS CONCEALED, CONFORM TO HEALTH DEPARTMENT REQUIREMENTS FOR LOACTIONS OF FLOOR SINKS.

PLUMBING SYMBOLS LEGEND
ABBREVIATIONS:
AFF/AFG ABOVE FINISHED FLOOR/GRADE
BFP BACKFLOW PREVENTER
CO CLEANOUT
FFCO/FGCO FLUSH FLOOR/GRADE CLEANOUT
FSEC FOOD SERVICE EQUIPMENT CONTRACTOR
IW INDIRECT WASTE
PC PLUMBING CONTRACTOR
RI ROUGH-IN
TYP TYPICAL
UNO UNLESS NOTED OTHERWISE
VTR VENT THRU ROOF
WCO WALL CLEANOUT
(E) EXISTING
LINETYPES:
———— EXISTING PLUMBING LINE - SEE DRAWING
—— - - — COLD WATER (CW)
- - - - - COLD WATER (CW) - BELOW SLAB/GRADE
——FW—— FILTERED WATER SUPPLY (FW)
——SW—— SOFT COLD WATER (SW)
—— F —— FIRE PROTECTION (F) (SPRINKLER/STANDPIPE)
—— - - — HOT WATER (HW)
- - - - - HOT WATER RETURN (HWR)
—— D —— CONDENSATE LINE (D)
—— V —— PLUMBING VENT (V)
- - - - - PLUMBING VENT (V) - BELOW SLAB/GRADE
—— SAN —— SANITARY WASTE (SAN) - BELOW SLAB/GRADE
——GW—— GREASE WASTE (GW) - BELOW SLAB/GRADE
——ST—— STORM LINE (ST) - ABOVE SLAB/GRADE
- - - ST - - - STORM LINE (ST) - BELOW SLAB/GRADE
GENERAL REFERENCES/NOTATIONS:
☉ CONNECT TO EXISTING
# PLAN NOTE DESIGNATION
xx FIXTURE/EQUIPMENT NOTE DESIGNATION
◆ FIRE SPRINKLER NOTE DESIGNATION
# FOODSERVICE EQUIPMENT DESIGNATION
# REVISION DESIGNATION
# HVAC EQUIPMENT DESIGNATION
PIPE SYMBOLS:
↔ ↔ PIPE TURNING UP/DOWN
↔ ↔ TEE TURNING UP/DOWN
↔   ↔ SHUTOFF VALVE (BALL TYPE)
↔   ↔ CHECK VALVE
↔   ↔ BALANCING VALVE
—— ] END CAP
SYMBOLS LEGEND NOTES: REFER TO SPECIFICATIONS AND PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE, PROVIDED BY THIS CONTRACTOR.



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No.	Description	Date

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GENERAL NOTES AND LEGENDS

PROJECT NUMBER 2383.02

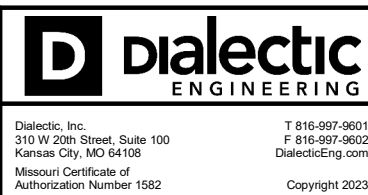
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ROBERT HARRIS

NAME:

MECHANICAL ENGINEER

2007025514

DISCIPLINE

LICENSE NUMBER



PLUMBING FIXTURE SCHEDULE									
ID	FIXTURE TYPE	MANUFACTURER	MODEL NO.	CONNECTION SIZES				DESCRIPTION	TRIM AND REMARKS
				CW	HW	WASTE	VENT		
FD	FLOOR DRAIN	JR SMITH	2010-NB			3"	2"	CAST IRON DRAIN WITH NICKEL BRONZE STRAINER, 1/2" TRAP PRIMER CONNECTION AND MEMBRANE FLASHING CLAMP.	PROVIDE OUTLET WITH P-TRAP AND CLEAN AND POLISH STRAINER TOP AFTER INSTALLATION.
FS	FLOOR SINK	JR SMITH	3411-AB			3"	2"	CAST IRON BODY, FLASHING CLAMP, ACID RESISTANT COATED INTERIOR AND CAST IRON GRATE, 8" SQUARE 1/2 GRATE AND ALUMINUM SEDIMENT BUCKET.	PROVIDE OUTLET WITH P-TRAP.
GI	GREASE INTERCEPTOR	SCHIER	GB50			4"	2"	POLYETHYLENE INTERCEPTOR FURNISHED FOR BELOW GRADE INSTALLATION, 50 GPM FLOW RATE, 439.5 LB. GREASE CAPACITY	INSTALL PER MANUFACTURER'S RECOMMENDATIONS
HB-1	HOSE BIBB	WOODFORD	5509QT	3/4"				RECESSED BOX TYPE, NON FREEZE, INTEGRAL VACUUM BREAKER, "T" HANDLE KEY.	INSTALL PER MANUFACTURER'S INSTRUCTIONS AND PER DETAIL.
HB-2	HOSE BIBB	WOODFORD	24	3/4"				RECESSED BOX TYPE, VACUUM BREAKER PROTECTED WALL FAUCET.	PROVIDE WITH VACUUM BREAKER. INSTALL BELOW 3-COMPARTMENT SINK.
LV	LAVATORY (ADA)	KOHLER	K-2032 GREENWICH	1/2"	1/2"	2"	1 1/2"	20"x18", WHITE VITREOUS CHINA, BACK OVERFLOW, FAUCET LEDGE, SOAP DEPRESSION AND WALL HANGER.	PROVIDE CHICAGO FAUCET #802-VE2805-317ABCP, 4" CENTER SET WITH 4" WRIST BLADES HANDLE AND 0.5 GPM AERATOR, PROVIDE GRID STRAINER DRAIN WITH TAILPIECE, CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT, WASTE ARM TO WALL WITH ESCUTCHEON AND 1/4 TURN ANGLE BALL STOPS WITH METAL HANDLE, INSULATE WATER AND WASTE PIPING UNDER LAVATORY WITH TRUEBRO "LAV GUARD2" #102E-Z, RI 3/4" AFF TO RIM.
MS-1	MOP SINK	JOHN BOOS	PBMS2016-12	1/2"	1/2"	3"	1 1/2"	STAINLESS STEEL MOP BASIN, PROVIDE WITH INTEGRAL DRAIN AND TRAP GUARD (PRO-SET OR APPROVED EQUAL).	PROVIDE WITH AMERICAN STANDARD STANDARD 8344.012.002 UTILITY FAUCET, MOP HANGER, AND HOSE CONNECTION.
TD	TRENCH DRAIN	WATTS	DEAD LEVEL D			3"	2"	DUCTILE IRON FRAME, UV STABILIZED TALC-FILLED POLYPROPYLENE CHANNELS WITH INTEGRAL 4" NO HUB BOTTOM OR END OUTLET(S), PROVIDE WITH BASKET STRAINER.	CONTRACTOR TO COORDINATE TRENCH DRAIN LENGTH WITH ARCHITECTURAL PLANS.
WC	WATER CLOSET	KOHLER	K-3999-U HIGHLINE	1/2"		4"	2"	WHITE VITREOUS CHINA, FLUSH TANK MODEL, ELONGATED BOWL AT 1.28 GPF.	PROVIDE LEVER ON ACCESSIBLE SIDE IN ACCORDANCE TO ADA, PROVIDE WITH ELONGATED "NO SLAM" TOILET SEAT.
WF-1	WATER FILTER	ECOLAB	SINGLE HEAD FILTER SYSTEM	3/4"				INCOMING WATER TEMPERATURE 40-70F, 5GPM APPROXIMATE MAXIMUM.	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR.
WF-2	WATER FILTER	ECOLAB	SINGLE HEAD FILTER SYSTEM	3/4"				INCOMING WATER TEMPERATURE 40-70F, 5GPM APPROXIMATE MAXIMUM.	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR.

PLUMBING EQUIPMENT SCHEDULE								
TYPE	FIXTURE TYPE	MANUFACTURER	MODEL	ELECTRICAL DATA			DESCRIPTION	TRIM AND REMARKS
				VOLT	PHASE	WATT		
RP	RECIRCULATION PUMP	BELL AND GOSSETT	ECORCIRC 19-16	120 V	1	60 W	0.5 GPM, 6 FT CORD WITH PLUG	PROVIDE WITH AQUASTAT AND TIE INTO BUILDING TIMER WITH RUN TIME 1 HOUR BEFORE AND AFTER OCCUPIED SCHEDULE. BALANCE DOMESTIC HOT WATER RECIRCULATING LINE. PROVIDE BALANCING VALVE. PROVIDE P&T PORT ON INLET AND DISCHARGE OF PUMP. PROVIDE BALANCE REPORT TO ENGINEER. PROVIDE WITH BRONZE, PLASTIC, OR STAINLESS STEEL IMPELLER AND STAINLESS STEEL BODY. ACCEPTABLE MANUFACTURERS: BELL & GOSSETT, ARMSTRONG, TACO, GRUNDFOS OR PRIOR APPROVED EQUAL.
WH	ELECTRIC WATER HEATER	AO SMITH	DSE-20A	208 V	3	18000 W	66 GALLONS, 49 GPH RECOVERY @ 100°F	PROVIDE EXPANSION TANK THERM-X-TROL ST-5

KITCHEN EQUIPMENT SCHEDULE								
ITEM	DESCRIPTION	WATER			WASTE			NOTES
		CW	HW	FW	IW	DIRECT	VENT	
4.1	8-VALVE BEVERAGE DISPENSER	-	-	-	3/4"	-	-	1, 2
9	ICE BIN	-	-	-	1"	-	-	2
10.1	ICE MAKER	-	-	1/2"	3/4"	-	-	2, 4
10.2	ICE MAKER	-	-	1/2"	3/4"	-	-	2, 4
13	HOT CHOCOLATE DISPENSER	-	-	1/2"	-	-	-	4
16.1	SYRUP RACK (CARBONATORS)	-	-	1/2"	-	-	-	3
18	3-COMPARTMENT SINK	1/2"	1/2"	-	2"	-	-	2, 5
18.1	PRE-RINSE UNIT, ADD-ON FAUCET	1/2"	1/2"	-	-	-	-	
20.1	MOP SINK	-	-	-	-	3"	2"	
20.2	FAUCET (MOP SINK)	1/2"	1/2"	-	-	-	-	
NOTES: 1. WATER TO SODA DISPENSERS PROVIDED BY VENDOR FROM BELOW GRADE CONDUITS. 2. ROUTE WASTE TO INDIRECT DRAIN TO FLOOR SINK PER "INDIRECT DRAIN" DETAIL. 3. PROVIDE WATTS #SD-2 OR APPROVED EQUAL, BACKFLOW PREVENTER MEETING ASSE 1032. 4. PROVIDE WATTS #LF007 OR APPROVED EQUAL, BACKFLOW PREVENTER MEETING ASSE 1015. 5. CONNECT WASTE TO 3-COMPARTMENT SINK PER "UTILITY SINK" DETAIL.								

D

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ENGINEERING

dialectic, Inc.

310 W 25th Street, Suite 100

Lawrence, KS, 66044

Missouri Certificate of Authorization Number 1062

7-16-2018-0001

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ROBERT HARRIS

NAME:

MECHANICAL ENGINEER

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2007025514

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No.	Description	Date

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PLUMBING SCHEDULES

PROJECT NUMBER

2383.02

DATE

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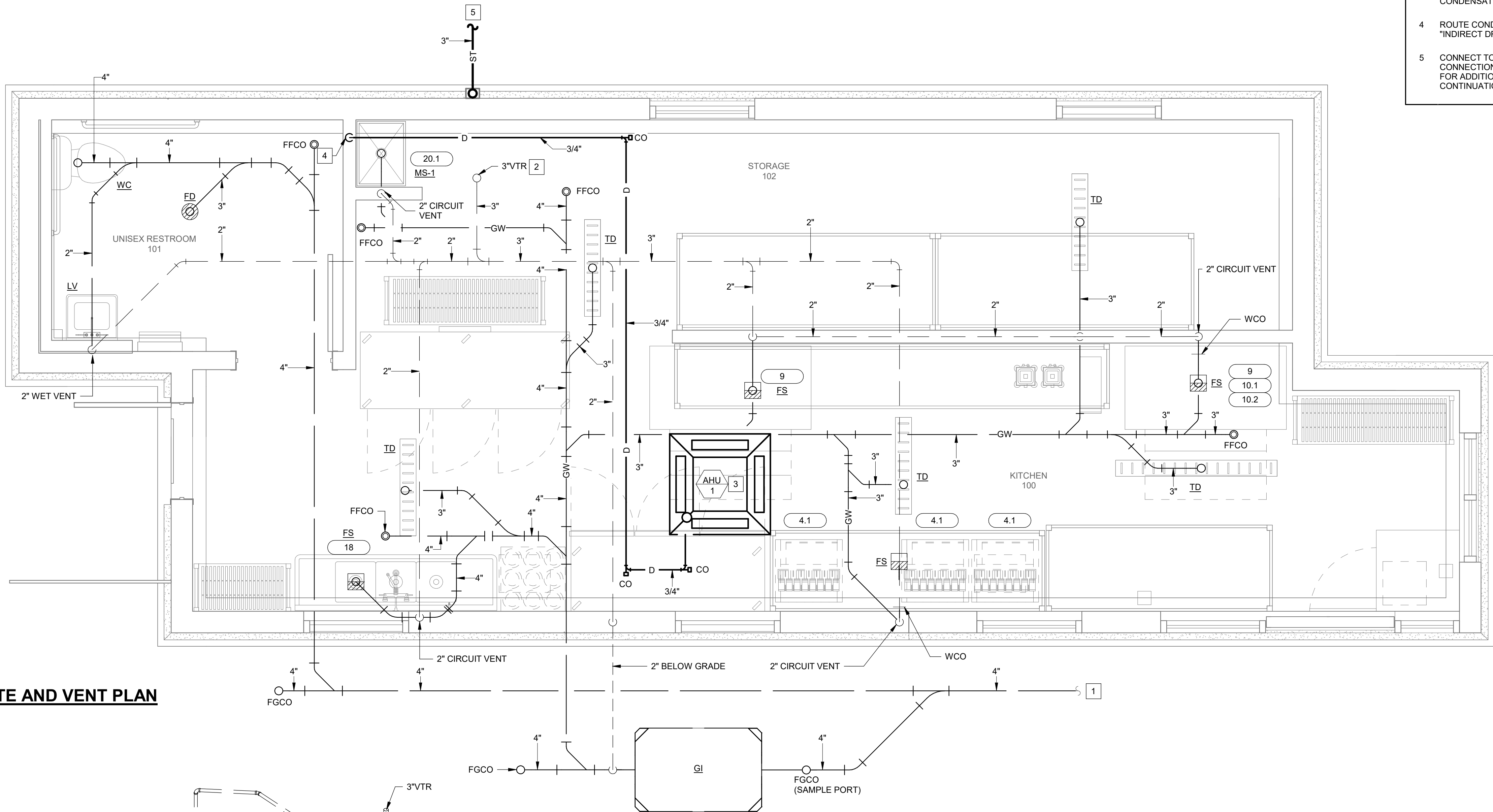
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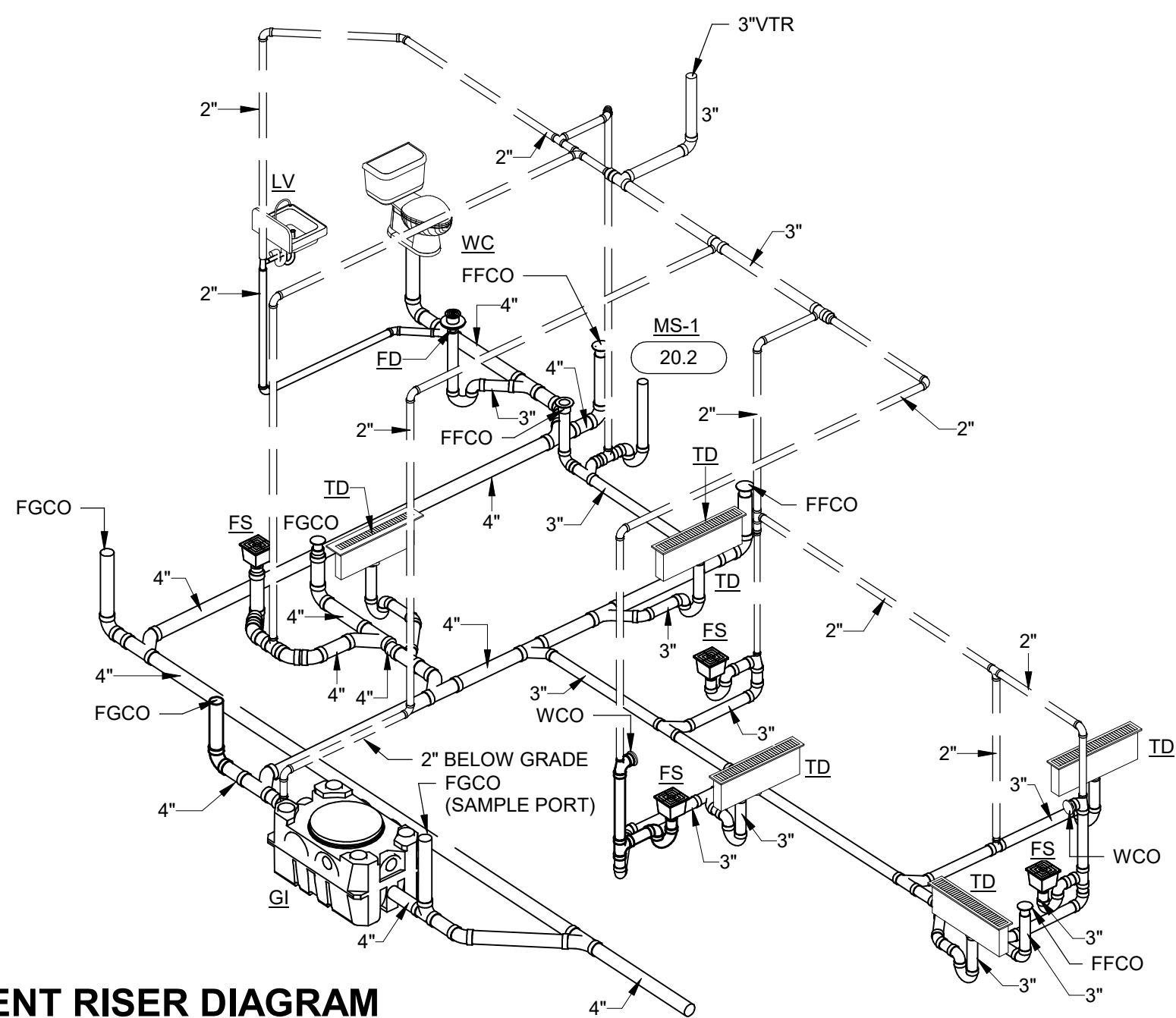
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**1 WASTE AND VENT PLAN**  
1/2" = 1'-0"



**2 WASTE AND VENT RISER DIAGRAM**  
NOT TO SCALE

- # PLUMBING KEY NOTES**
- 1 REFER TO CIVIL DRAWINGS FOR SANITARY PIPING CONTINUATION.
  - 2 PROVIDE SANITARY VENT THROUGH ROOF PER "VENT THROUGH ROOF (VTR)" DETAIL. LOCATE VENT MINIMUM 10'-0" AWAY FROM AIR INTAKES ON ROOF.
  - 3 CONNECT TO AIR HANDLING UNIT PER "AIR HANDLING UNIT CONDENSATE" DETAIL.
  - 4 ROUTE CONDENSATE TO DRAIN TO MOP SINK PER "INDIRECT DRAIN" DETAIL.
  - 5 CONNECT TO GUTTER AND DOWNSPOUT PER "DOWNSPOUT CONNECTION DETAIL". REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. REFER TO CIVIL PLANS FOR CONTINUATION.



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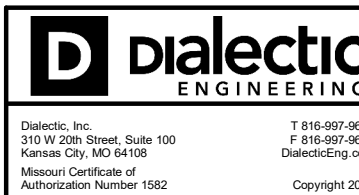
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PLUMBING WASTE AND VENT PLANS	
PROJECT NUMBER	2383.02
DATE	07/26/2023
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SCALE	1/2" = 1'-0"

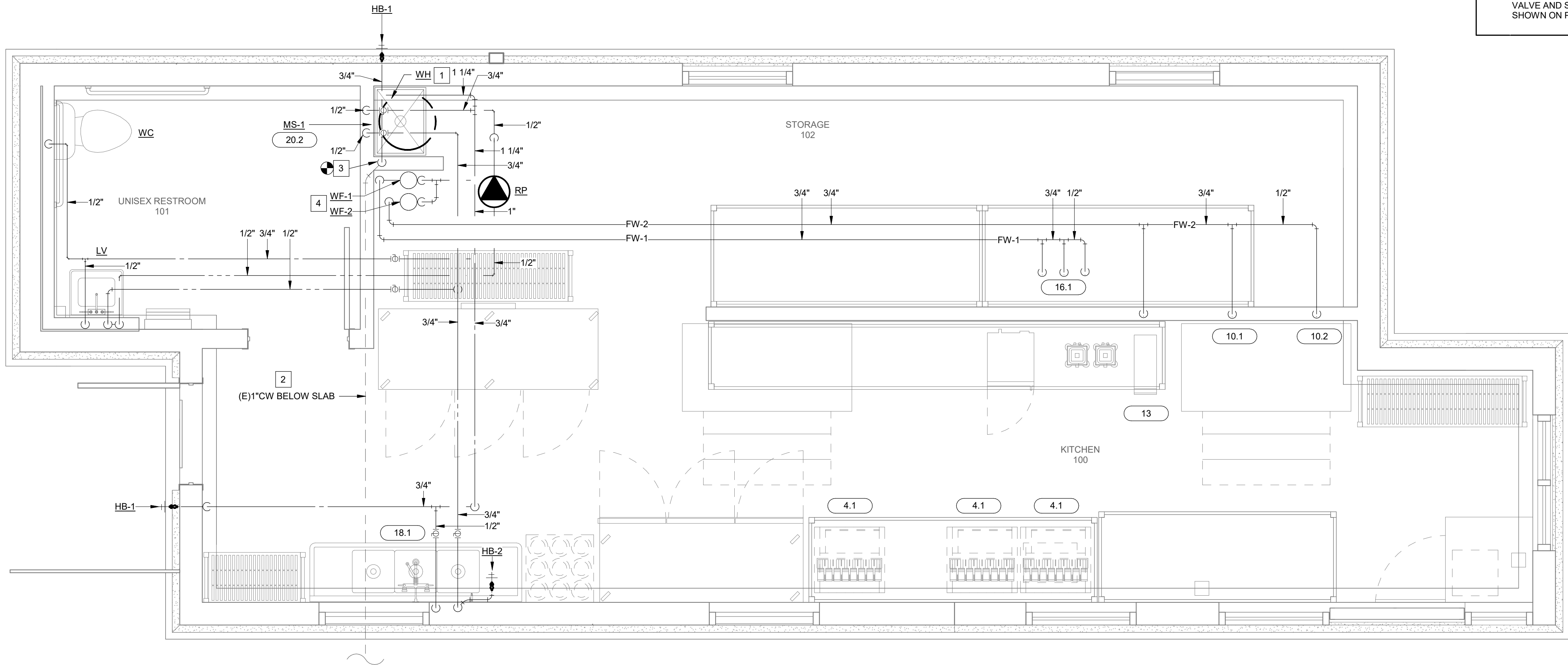
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**ROBERT HARRIS**  
NAME: \_\_\_\_\_  
**MECHANICAL ENGINEER** \_\_\_\_\_  
DISCIPLINE: \_\_\_\_\_  
LICENSE NUMBER: **2007025514**

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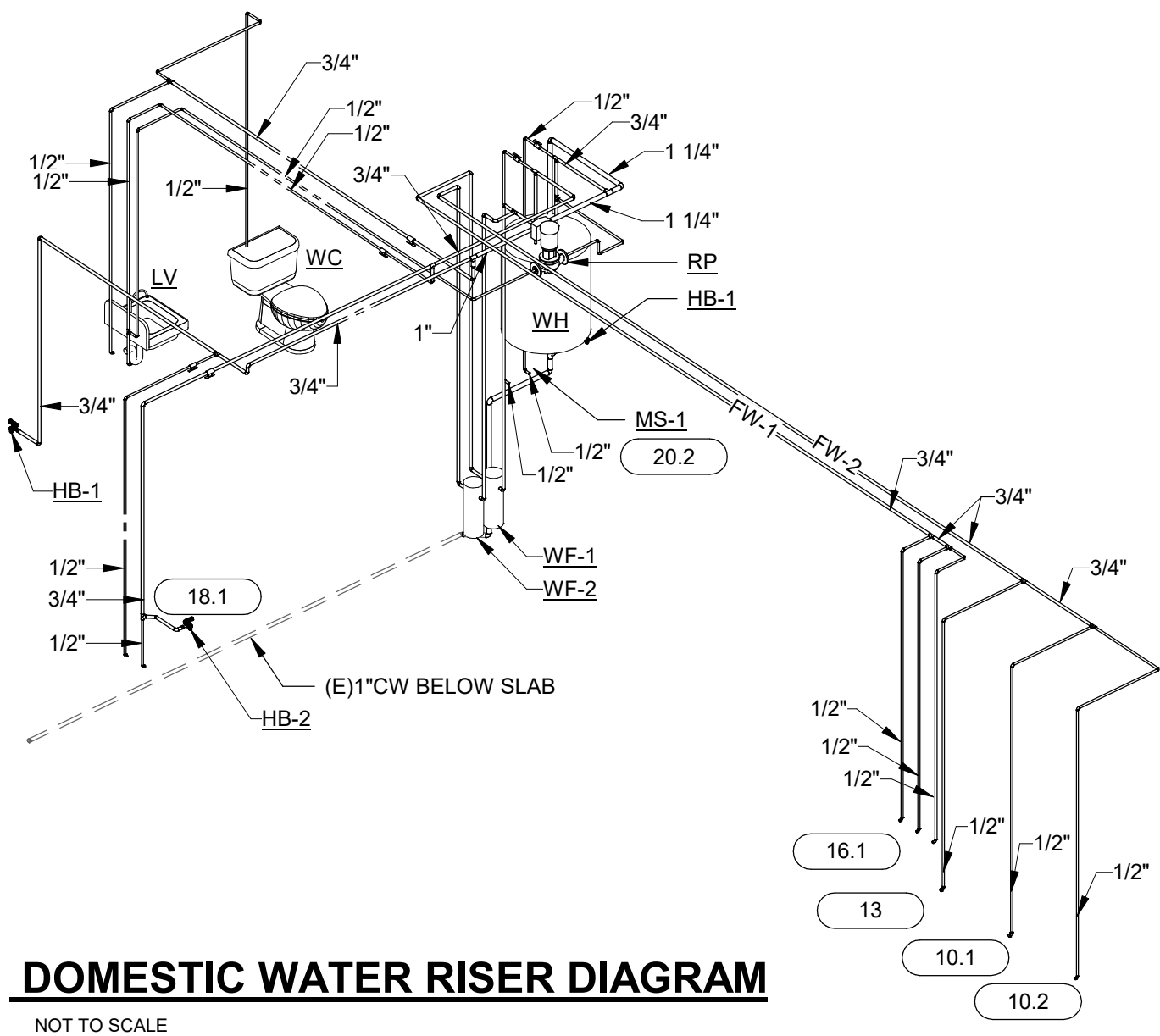




- | # | PLUMBING KEY NOTES   |
|---|--|
| 1 | INSTALL WATER HEATER AND RECIRCULATION PUMP PER "ELECTRIC WATER HEATER ON PLATFORM" DETAIL.  |
| 2 | COLD WATER BELOW SLAB PROVIDED BY CIVIL. REFER TO CIVIL DRAWINGS FOR CONTINUATION.   |
| 3 | ROUTE DOMESTIC COLD WATER PIPING INTO BUILDING PER "WATER ENTRY DETAIL".   |
| 4 | INSTALL WATER FILTER SYSTEM IN ACCESSIBLE LOCATION ON WALL. ROUTE 3/4" COLD WATER TO FILTER SYSTEM. INCLUDE FULL LINE SIZE BYPASS WITH NORMALLY CLOSED VALVE AND SHUTOFF VALVES. ROUTE FILTERED WATER AS SHOWN ON PLAN. REFER TO DETAIL "WATER FILTER DETAIL". |

## 1 WATER PLAN

1/2" = 1'-0"



## 2 DOMESTIC WATER RISER DIAGRAM

NOT TO SCALE



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### REVISION SCHEDULE

No.	Description	Date

### SHEET NAME

PLUMBING WATER PLAN

### PROJECT NUMBER

2383.02

### DATE

07/26/2023

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### SCALE

1/2" = 1'-0"

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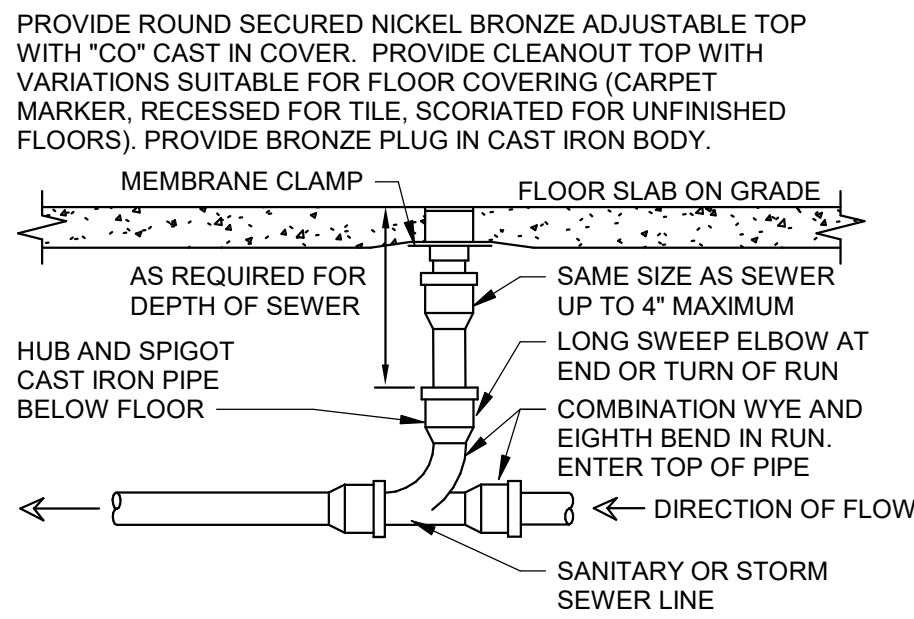
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2007025514

LICENSE NUMBER

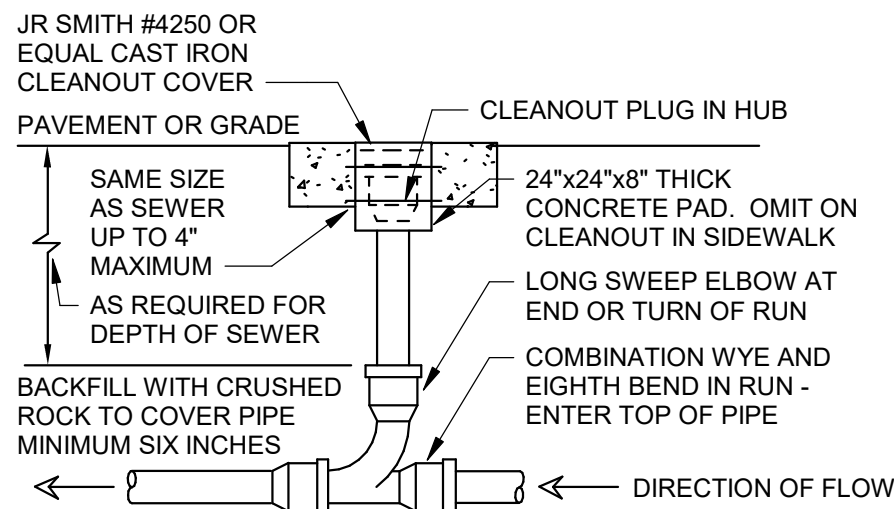




LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT 50' INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE BACKFILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES FOR OTHER FCO REQUIREMENTS.

## 13 FLOOR CLEANOUT

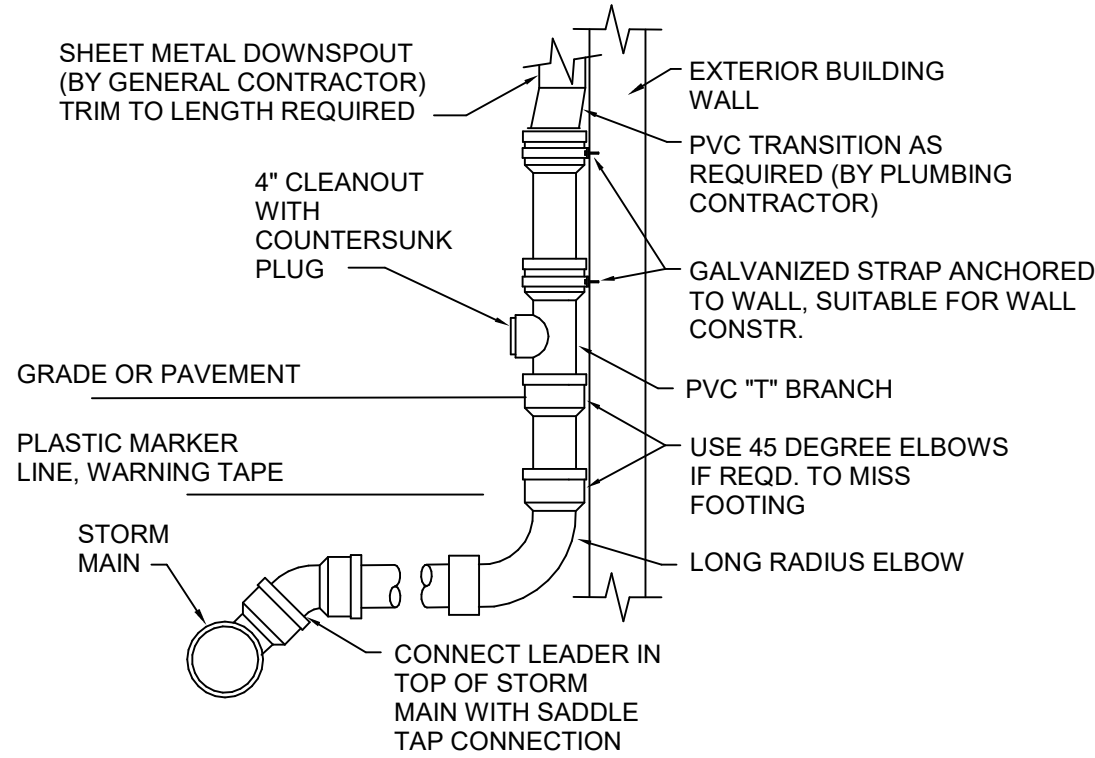
NOT TO SCALE



LOCATE EXTERIOR CLEANOUTS AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45°, AT MAXIMUM 100' INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. USE POLYVINYL CHLORIDE (PVC) PIPE WITH BELL AND SPIGOT GASKET JOINTS. VERIFY SOIL/ROCK CONDITIONS WITH GEOTECHNICAL REPORT OR SITE EXAMINATION. USE POLYVINYL CHLORIDE (PVC) PIPE WITH SOLVENT WELD JOINTS. PROVIDE EARTH BACKFILL AND COMPACTION PER ARCHITECTURAL SPECS. REPAIR ANY SOD AND/OR PAVEMENT TO MATCH EXISTING.

## 14 EXTERIOR CLEANOUT

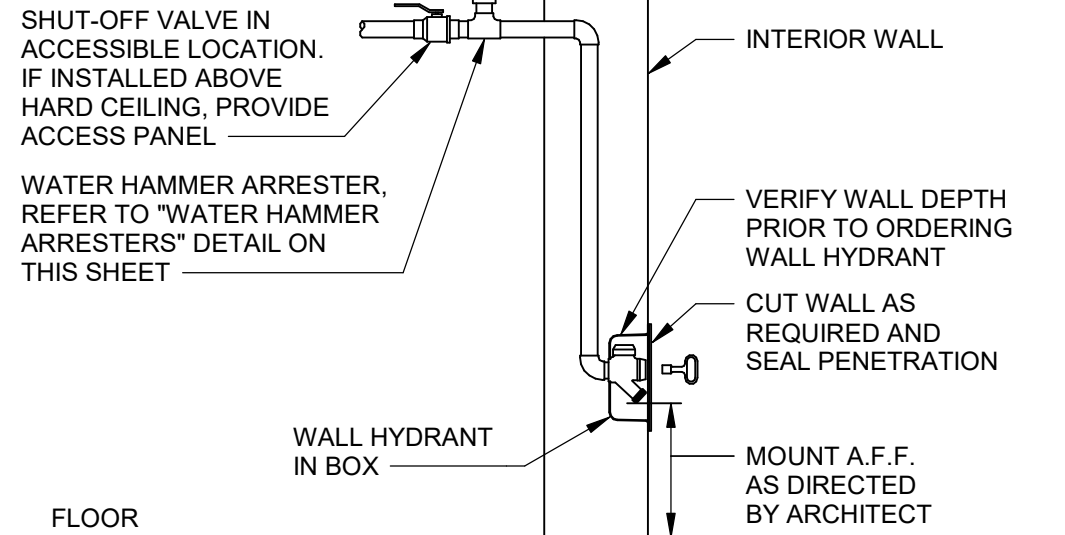
NOT TO SCALE



APPROVED PVC PIPE WITH BELL AND SPIGOT GASKET JOINTS WITH MINIMUM TWO FEET OF COVER. SLOPE PIPE AT 2 PERCENT. BACKFILL WITH 6" CRUSHED ROCK.

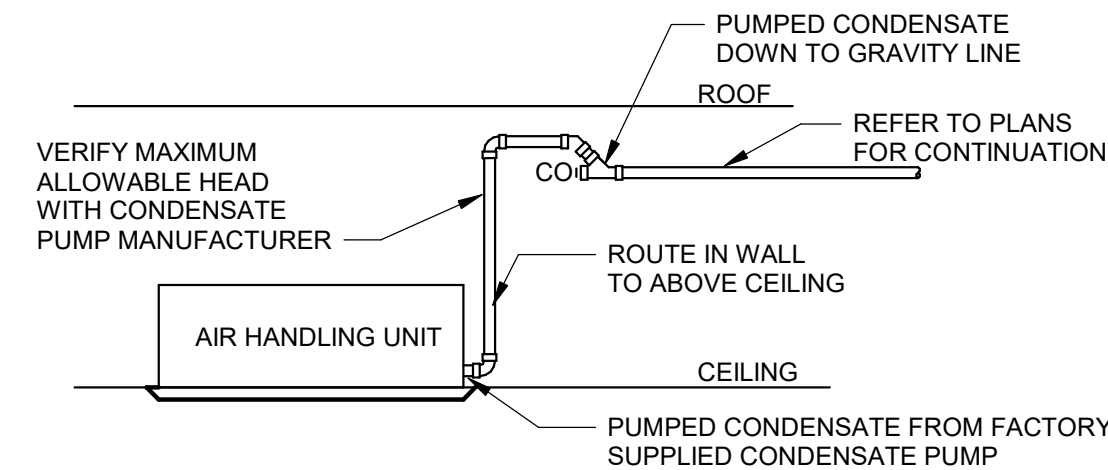
## 10 DOWNSPOUT CONNECTION DETAIL

NOT TO SCALE



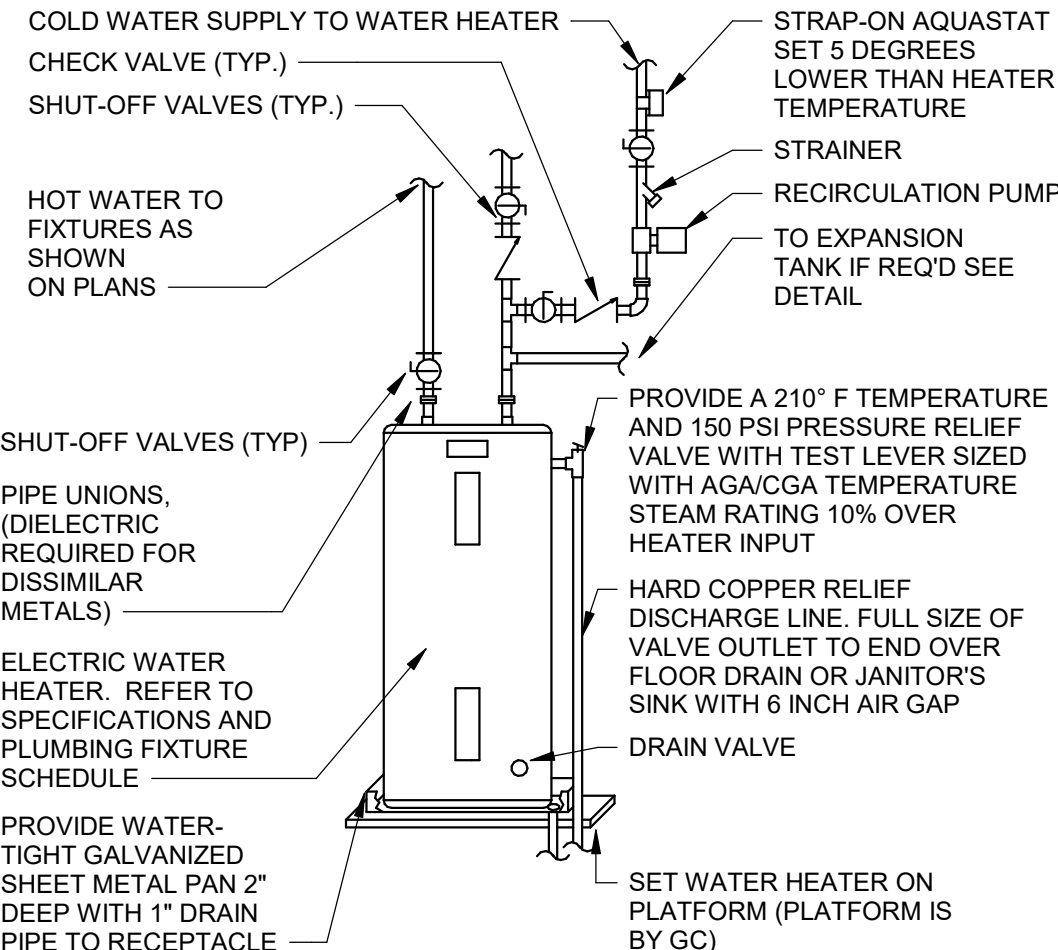
## 11 HOSE BIBB IN BOX

NOT TO SCALE



## 12 AIR HANDLING UNIT CONDENSATE

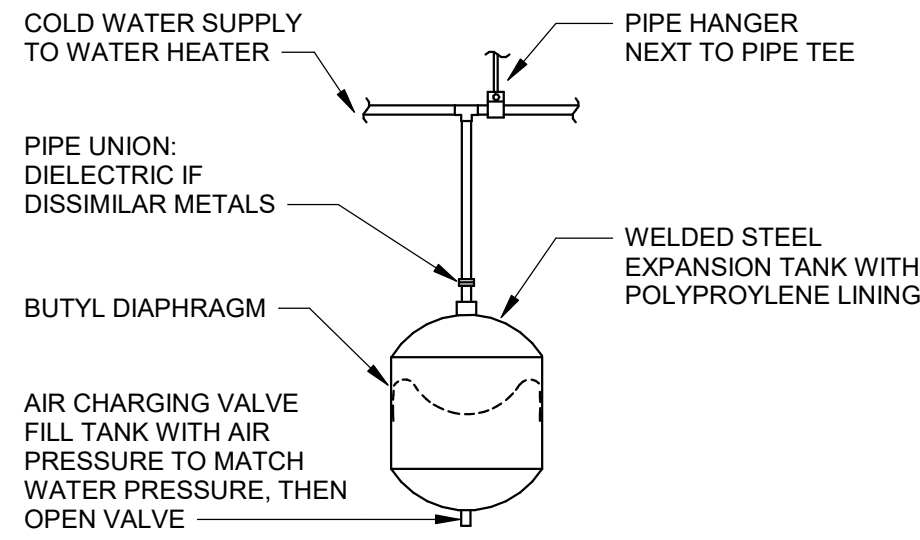
NOT TO SCALE



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO FLOOR PLAN FOR PIPE SIZES. SET WATER HEATER THERMOSTAT AT 120° F. PROVIDE SEISMIC STRAP OR BRACING AND FLEXIBLE CONNECTORS TO WATER CONNECTIONS IF/AS REQUIRED BY LOCAL AUTHORITIES.

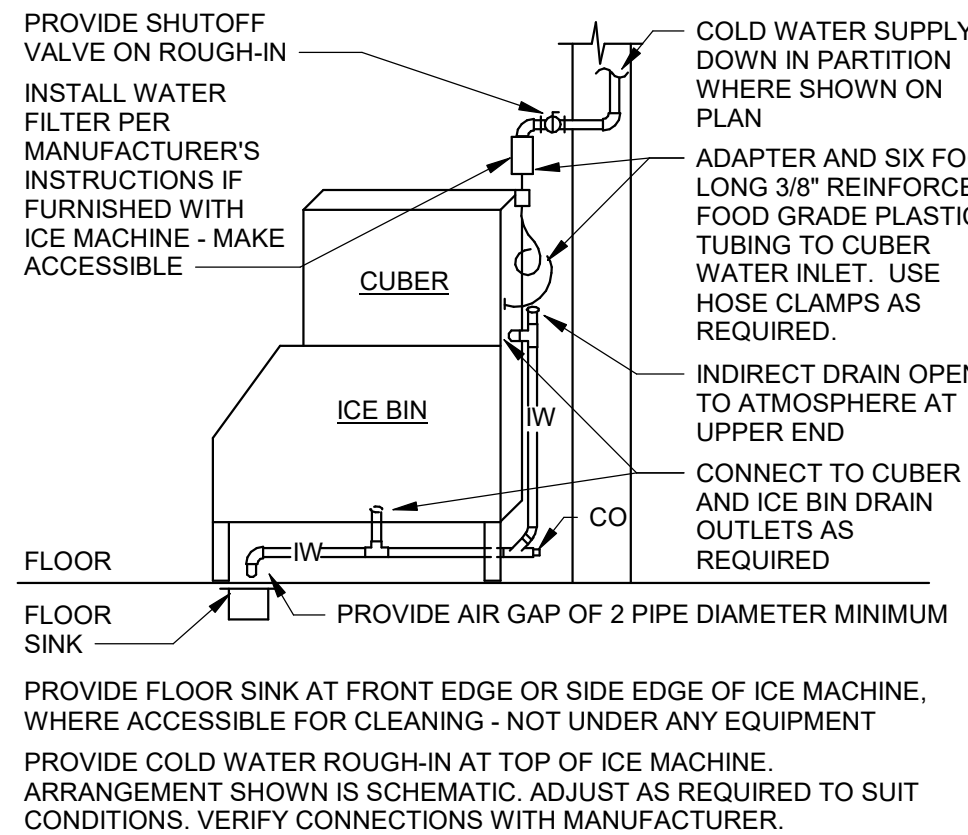
## 7 ELECTRIC WATER HEATER ON PLATFORM

NOT TO SCALE



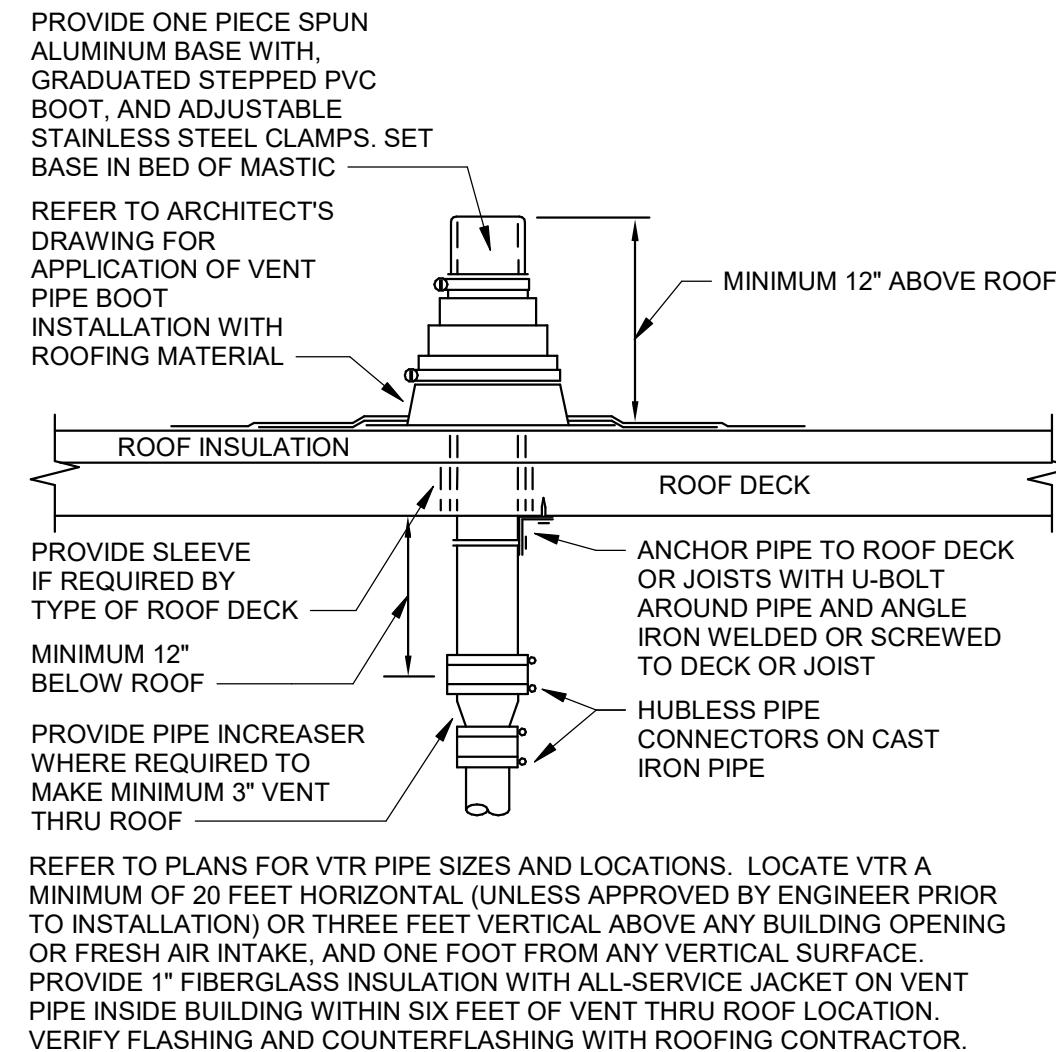
## 8 EXPANSION TANK

NOT TO SCALE



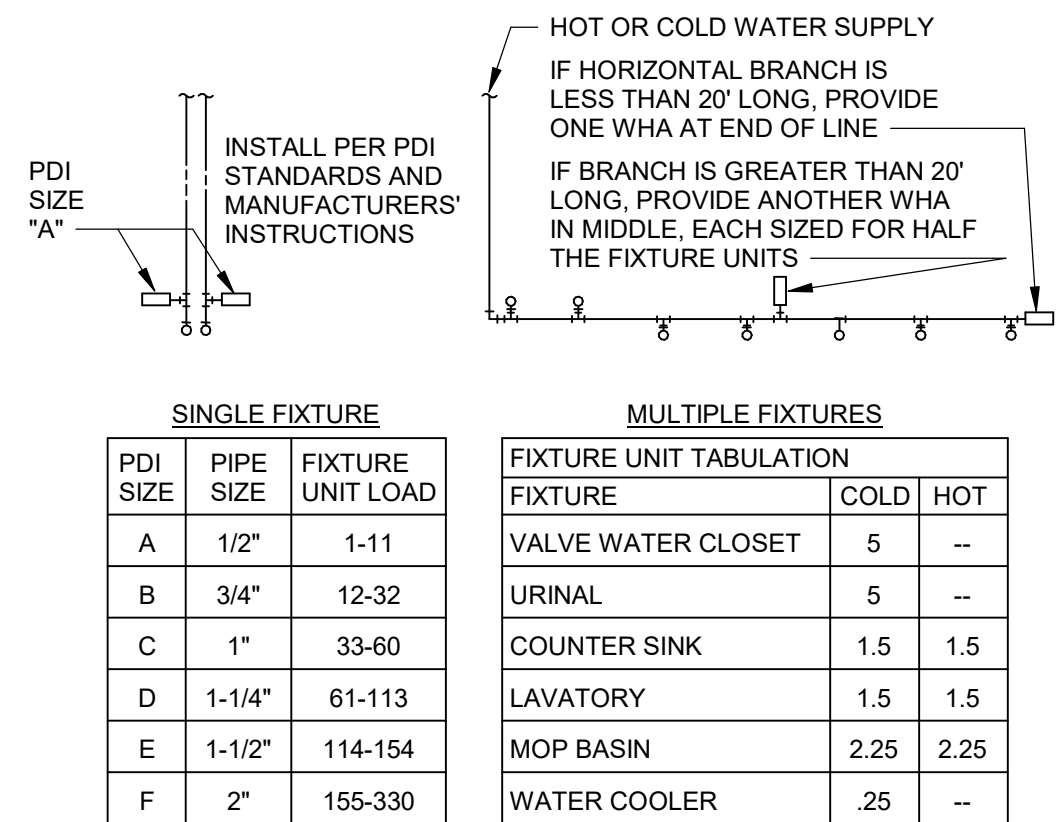
## 9 ICE MACHINE CONNECTIONS

NOT TO SCALE



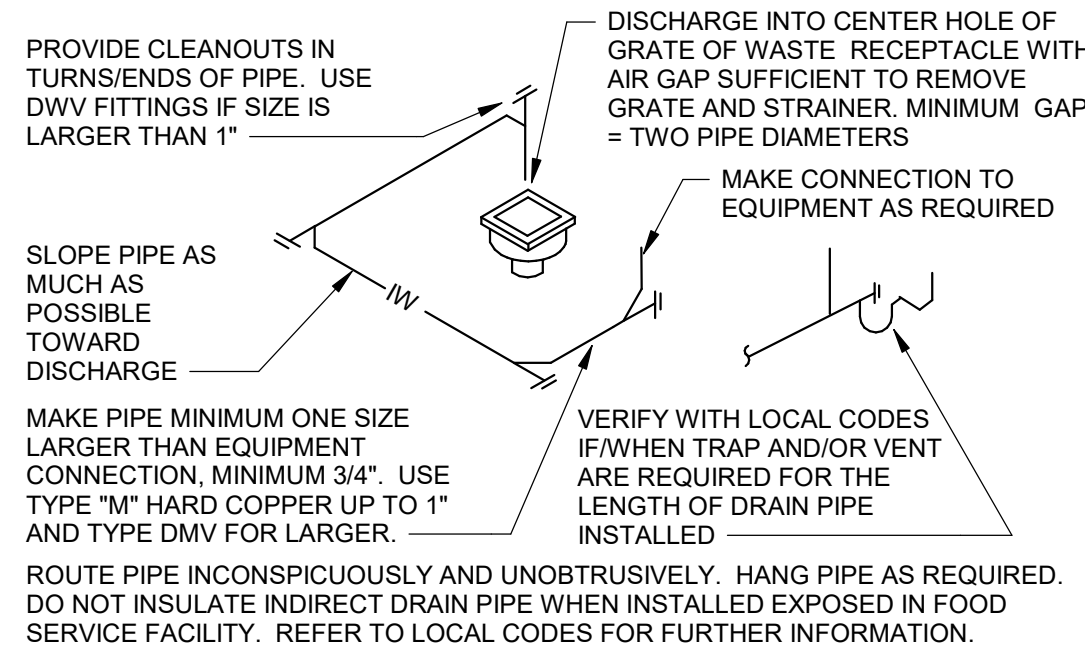
## 4 VENT THROUGH ROOF (VTR)

NOT TO SCALE



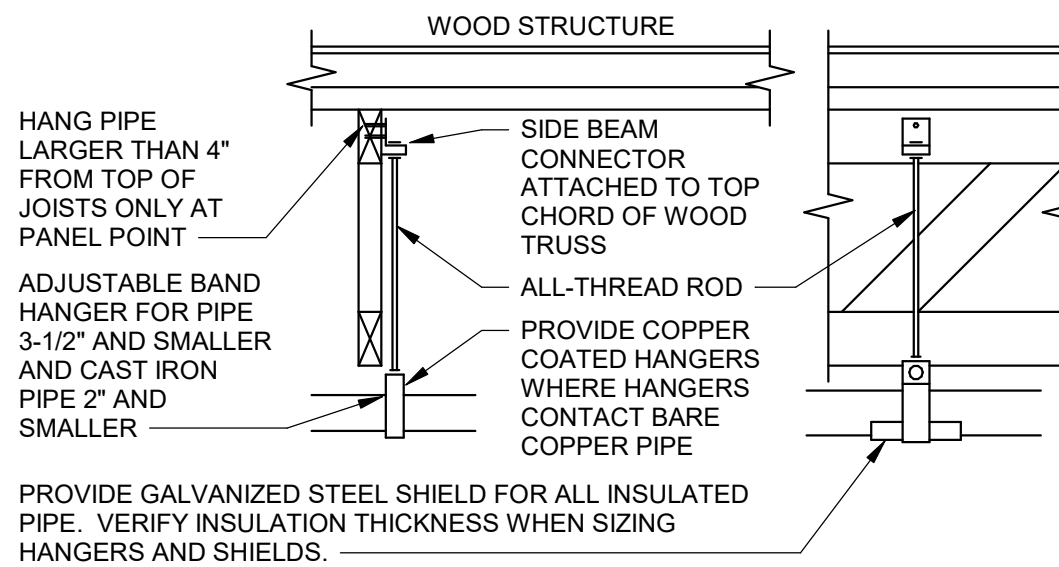
## 5 WATER HAMMER ARRESTORS

NOT TO SCALE



## 6 INDIRECT DRAIN

NOT TO SCALE



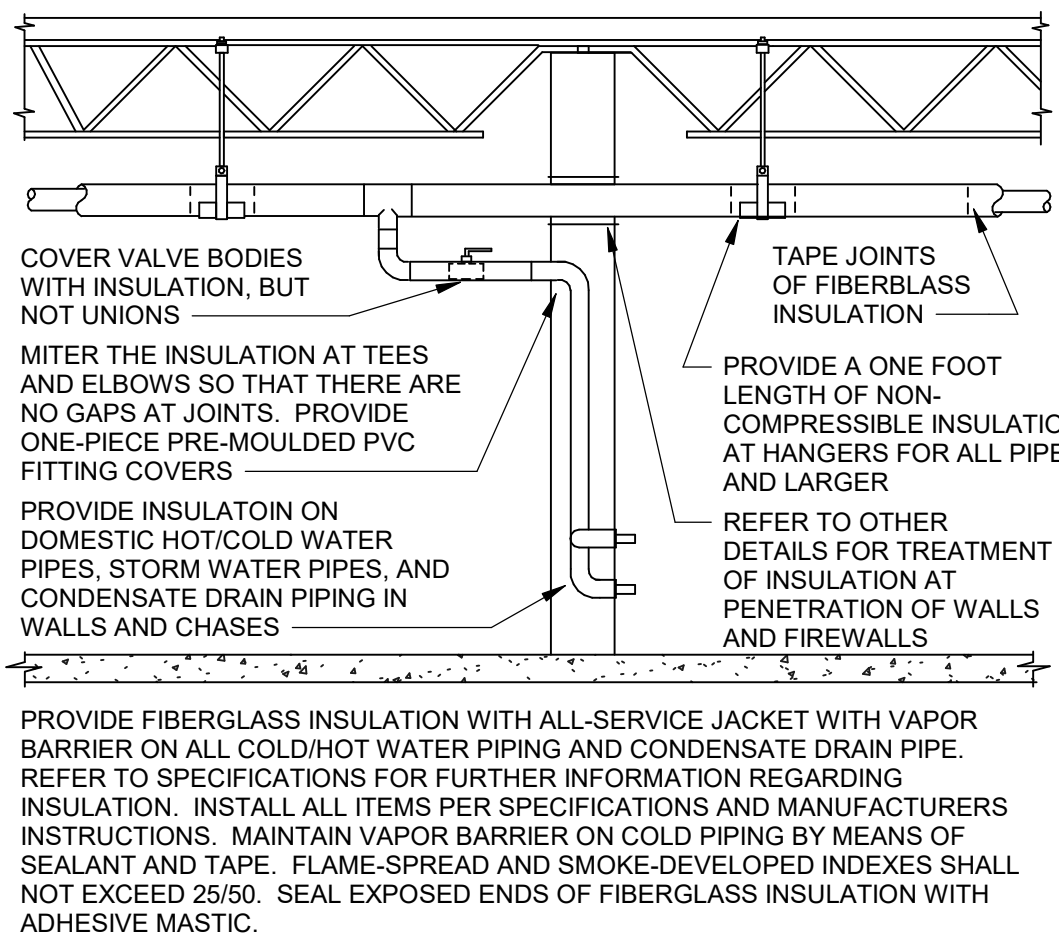
PROVIDE GALVANIZED STEEL SHIELD FOR ALL INSULATED PIPE. VERIFY INSULATION THICKNESS WHEN SIZING HANGERS AND SHIELDS.

PIPE SIZE	COPPER PIPE HANGER SPACING	STEEL PIPE HANGER SPACING
1/2"	6'-0"	6'-0"
3/4"	6'-0"	6'-0"
1"	6'-0"	8'-0"
1-1/2"	6'-0"	10'-0"
1-3/4"	6'-0"	10'-0"
2"	10'-0"	10'-0"
2-1/2"	10'-0"	10'-0"
3"	10'-0"	10'-0"
4"	10'-0"	10'-0"

PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHASES. SLOPE ALL WATER PIPING SLIGHTLY TOWARD A DRAINABLE LOCATION. HANGER SPACING FOR PIPE SIZES: AS INDICATED IN TABLE. CAST IRON: 10' WITHIN 1'-0" OF ALL JOINTS. ROD SIZES FOR PIPE SIZE: 2" AND SMALLER = 3/8", 2-1/2" TO 3" = 1/2", 4" = 5/8". LOCATE HANGERS WITHIN 1'-0" OF VALVES AND FITTINGS. PROVIDE SUPPLEMENTAL STEEL STRUTS BETWEEN JOISTS IF REQUIRED. LOCATED HANGERS WITHIN 1'-0" OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. CHAINS AND PERFORATED STRAP IRON AND STEEL ARE NOT ACCEPTABLE. DO NOT SUSPEND PIPE FROM JOIST BRACING MEMBERS. REFER TO CODES AND SPECIFICATIONS FOR FURTHER INFORMATION. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES.

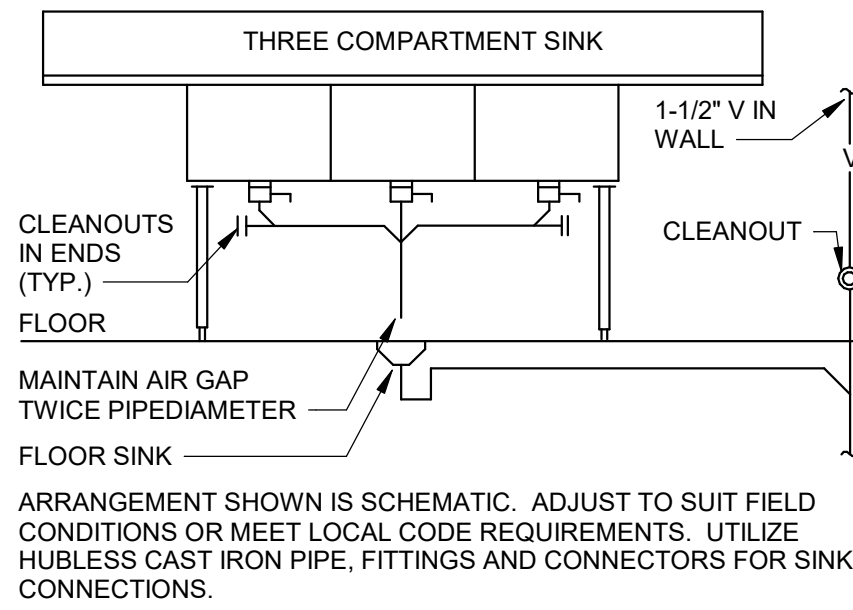
## 1 PIPE HANGERS

NOT TO SCALE



## 2 PIPE INSULATION DETAIL

NOT TO SCALE



## 3 3-COMPARTMENT SINK

NOT TO SCALE



PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.  
NAME: ROBERT HARRIS  
MECHANICAL ENGINEER  
DISCIPLINE: MECHANICAL ENGINEER  
2007025514  
LICENSE NUMBER



SWIG - SUMMIT ORCHARDS  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



OAG

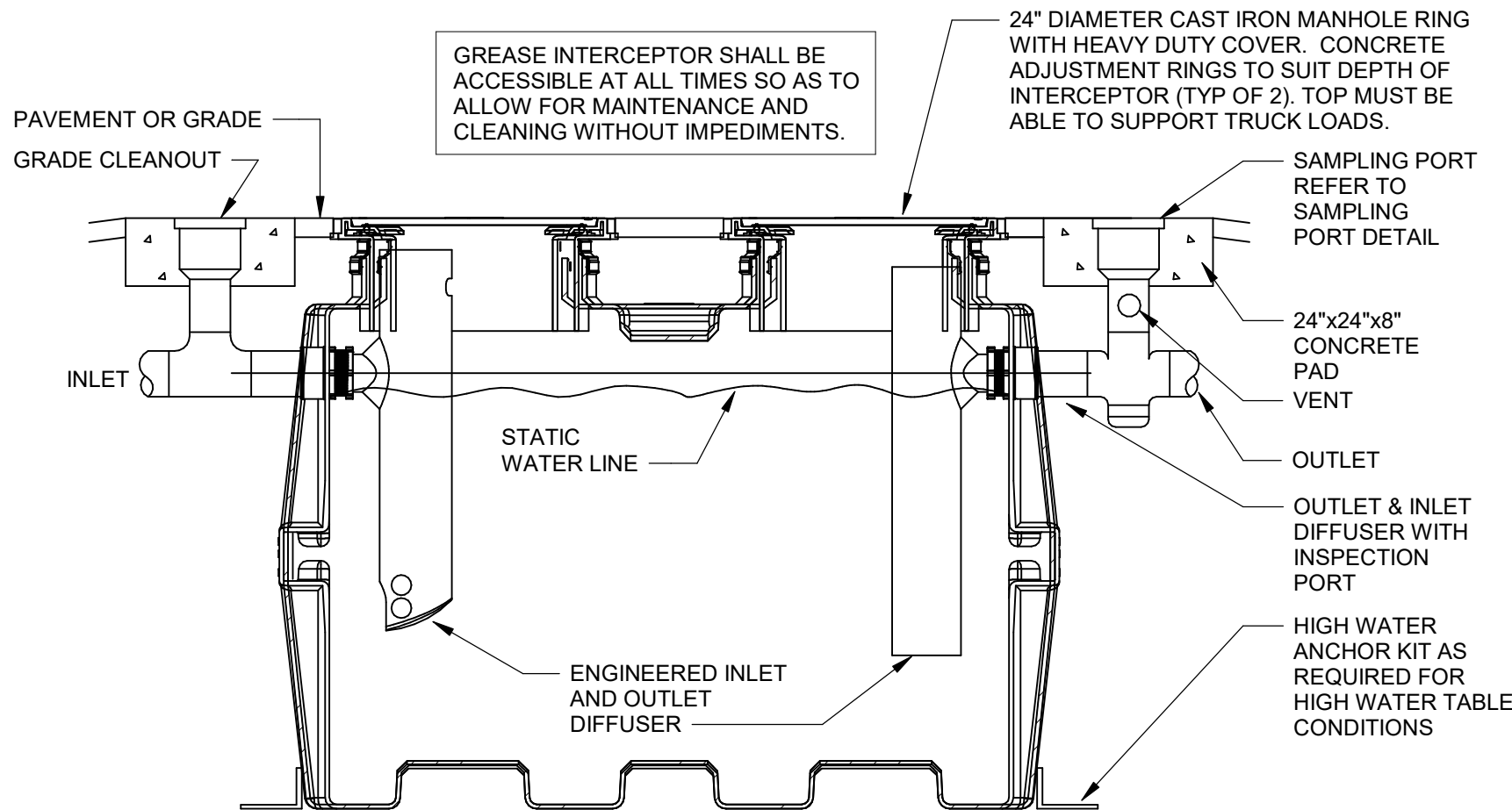
OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME PLUMBING DETAILS	
PROJECT NUMBER	2383.02
DATE	07/26/2023
DRAWN BY	AK
CHECKED BY	DK
SCALE	As indicated

P501





**SPECIFICATIONS FOR GB-250**

1. 4" INLET/OUTLET SCH. 40, PLAIN END (NO-HUB)
2. MAX FLOW RATE: 100 GPM
3. LIQUID CAPACITY: 275 GALLONS
4. MAX GREASE CAPACITY: 1,076 LBS. (147.4 GALLONS)
5. MAX SOLIDS/SEDIMENT CAPACITY: 105 GALLONS
6. UNIT WEIGHT W/STD. COVERS: 230 LBS.
7. MAXIMUM OPERATING TEMPERATURE 190°F
8. SEAMLESS MOLDED POLYETHYLENE TANK.

**NOTES:** DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. CONTRACTOR SHALL SUBMIT PROPOSED GREASE INTERCEPTOR INSTALLATION PLANS AND SPECIFICATIONS TO LOCAL AUTHORITIES FOR THEIR APPROVAL BEFORE ACQUISITION OF INTERCEPTOR. SIZING CALCULATION. INLET PIPE INVERT TO BE SAME AS TOP OF DISCHARGE PIPE. PROVIDE 12" x 12" OPENINGS THROUGH INTERIOR PARTITIONS ON OPPOSITE CORNERS OF INTERIOR WALLS TO INCREASE THE LENGTH OF FLOW PATH. PROVIDE CLEANOUTS AS SHOWN OR AS REQUIRED.

## 2 GREASE INTERCEPTOR

NOT TO SCALE

### GREASE INTERCEPTOR CALCULATIONS

Reviewed by: Andy

Reference No. 55200

Project Name: SWIG - Lees Summit

#### Step 1: Flow rate to grease interceptor

Fixture flow rate: (cu in / 231) = gal x 0.75 / 2 min = 2 min flow rate

NAME	TYPE	DIMENSIONS	QTY	CU IN	FLOW RATE
18	3 Compartment Sink	21" x 21" x 14" (3)	1	18,522	30 GPM
20.1	Mop Basin	24" x 18" x 12"	1	5,184	8.42 GPM
4.1	Ice Machine (with drain)	N/A	3	N/A	1.5 GPM
9	Ice Machine (with drain)	N/A	2	N/A	1 GPM
FS	Floor Sink	N/A	3	N/A	1.5 GPM
TD	Floor Drain Emergency	N/A	5	N/A	0 GPM

**Total 42.42 GPM**

#### Step 2: Grease Production

Total square feet x 60% = Dining area

Dining area / 14 Sq ft per seat x 4 turns per seat per day x [Grease Production Value] x [Days between pump-out] = Grease output

Amount of square feet in facility: 695

Grease production value: 0.005 lbs per serving (Bar - Drinks Only: Low / No flatware)

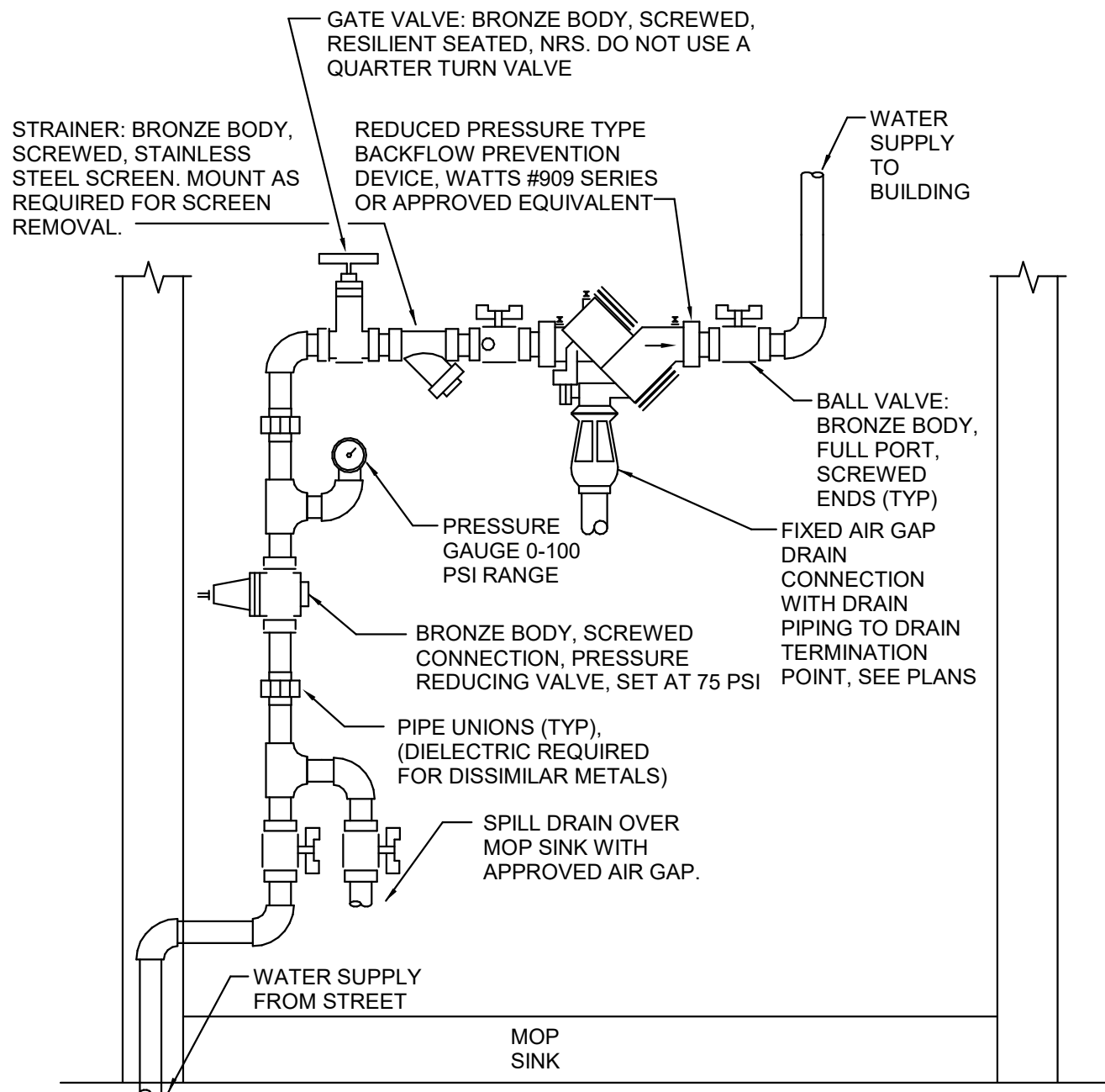
Days between pump-outs: 90 days

(695 x .6) / 14 x 4 x 0.005 x 90 = 53.614 lbs of FOG

SCHIER MODEL	Description: Polyethylene Grease Interceptor
GB-50	Dimensions: Length: 37", Width: 32.25", Height: 28.5"
	Flow Rates/Grease Capacities: 50 GPM / 439.5 lbs Liquid Capacity: 65 gal

## 4 GREASE INTERCEPTOR CALCULATION

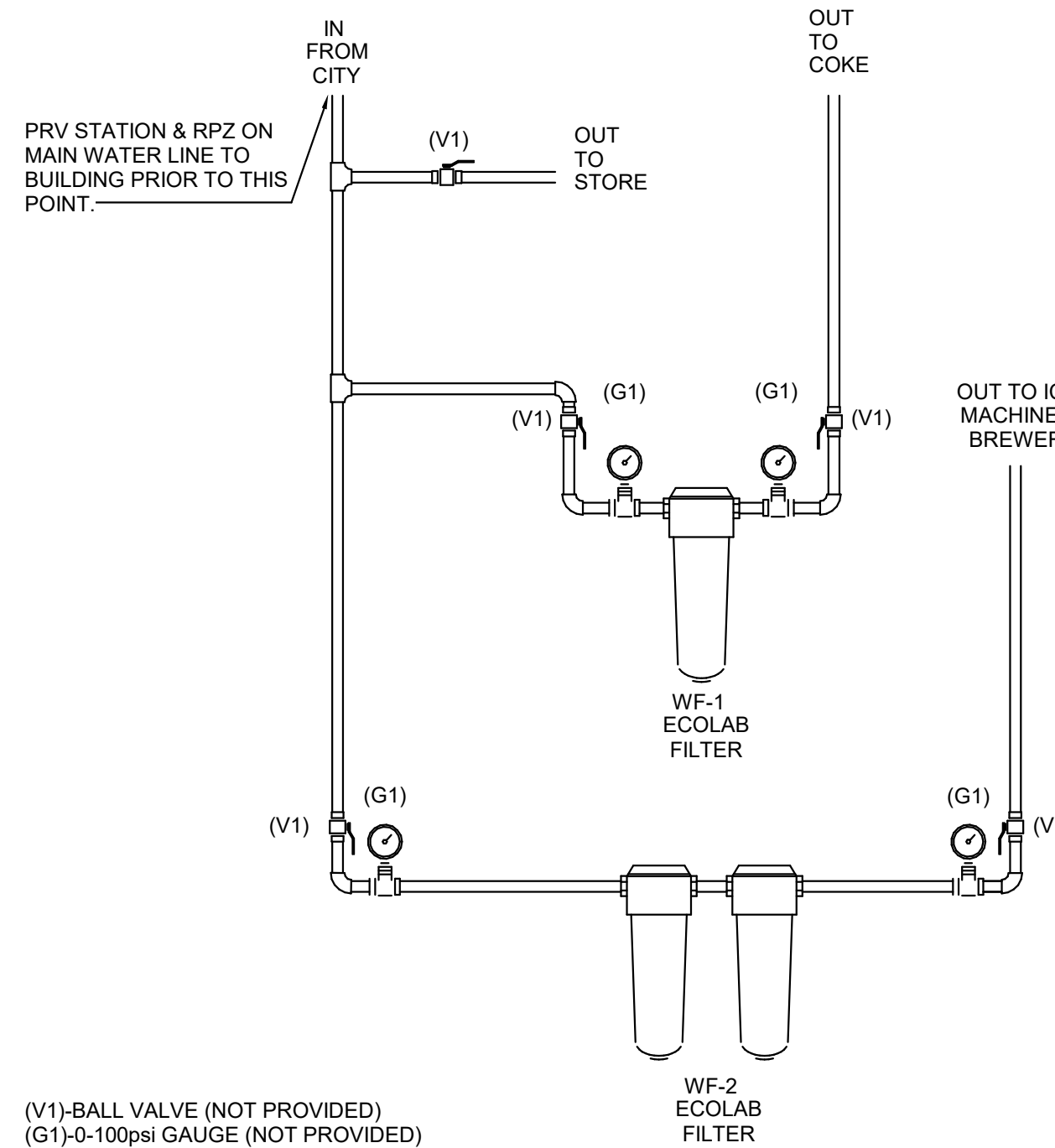
NOT TO SCALE



DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. PROVIDE BACKFLOW PREVENTER OF TYPE AND MANUFACTURER APPROVED BY LOCAL AUTHORITIES. PROVIDE PRESSURE REDUCING VALVE ONLY IF PRESSURE EXCEEDS 80 PSI - VERIFY. STRAINER AND REDUCING VALVE MAY BE INSTALLED IN VERTICAL PIPE IF SPACE LIMITATIONS REQUIRE IT. CLEAN STRAINER BEFORE TURNING BUILDING OVER TO OWNER. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES.

## 1 WATER ENTRY DETAIL

NOT TO SCALE

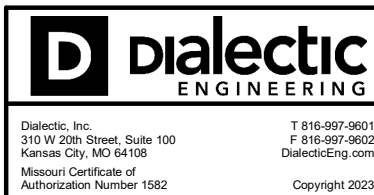


(V1)-BALL VALVE (NOT PROVIDED)  
(G1)-0-100psi GAUGE (NOT PROVIDED)

\*"OUT TO STORE" COVERS EVERYTHING EXCEPT THE COKE, ICE MACHINES AND ANY OUTSIDE TAPS. MAKE SURE TO TIGHTEN THE DRAIN LINES ON THE MIXING HEADS.

## 3 WATER FILTER DETAIL

NOT TO SCALE



**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI

NAME: **ROBERT HARRIS**

DISCIPLINE: **MECHANICAL ENGINEER**

LICENSE NUMBER: **2007025514**



**SWIG - SUMMIT ORCHARDS**  
400 NW CHIPMAN RD, LEES SUMMIT, MO 64086



OLSON ARCHITECTURAL GROUP  
1916 NW 79TH TERRACE  
KANSAS CITY, MO 64151

REVISION SCHEDULE		
No.	Description	Date

SHEET NAME  
**PLUMBING DETAILS**

PROJECT NUMBER: 2383.02

DATE: 07/26/2023

DRAWN BY: AK

CHECKED BY: DK

SCALE: As indicated

**P502**

7/26/2023 8:49:29 AM