

**PERMIT SET ISSUED 06/16/2023** 

# **PROJECT INFORMATION**

	AND BUILDI	NG CODE	<u>SUMMA</u>	<u>RY</u>				
JTURE/SEPARATE SUBMITTALS:	EXTERIOR BUILDING SIGNAG HEALTH (CITY)	Е						
APPLICABLE CODES:	BUILDING CODE: MECHANICAL CODE: PLUMBING CODE: ELECTRIC CODE: ENERGY CODE: FIRE CODE: ACCESSIBILITY CODE:	2018 IBC WITH LOCA 2018 IMC WITH LOCA 2018 IPC WITH LOCA 2017 NEC WITH LOCA 2012 IEEC WITH LOC 2018 International Local Amendment ANSI A117:1-2009	AL AMENDMENTS AL AMENDMENTS AL AMENDMENTS AL AMENDMENTS Fire Code with	1				
PROJECT DESCRIPTION:	NEW GROUND UP CONSTRUC WITH A NEW DRIVE-THRU AN			ESTABLISHMENT,				
BUILDING AREA:	ALLOWABLE AREA ALLOWABLE HEIGHT	9000 SF PER TABLE 9	506.2, ACTUAL GRO R TABLE 504.3, ACT					
USE AND OCCUPANCY CLASSIFICATION:	B - BUSINESS - SECTION 304.	1						
TYPE OF CONSTRUCTION:	CONSTRUCTION TYPE(V-B, NOTE: ALL PLYWOOD IN PRO	JECT MUST BE FRT.	1					
INTERIOR FINISHES:	SECTION 803.11, WALL & CEIL	ING FINISHES SHALL BE OI	CLASS C OR BETT	ER.				
FIRE PROTECTION:	HOURLY FIRE-RESISTANCE RATING REQUIREMENT PER TABLE 601							
	STRUCTURAL FRAME ROOF CONSTRUCTION EXTERIOR BEARING WALLS EXTERIOR NONBEARING WALL INTERIOR BEARING WALLS INTERIOR NONBEARING WALL FLOOR CONSTRUCTION		REQUIRED  0 HOURS 0 HOURS 0 HOURS 0 HOURS 0 HOURS 0 HOURS	PROVIDED  0 HOURS				
NUMBER OF EXITS OR EXIT ACCESS DOORS REQUIRED:	THIS BUILDING COMPLIES WI ONE (1) EXIT IS REQUIRED WI ARE LESS THAN 49.			CCUPANCIES				
	ONE (1) EXIT IS PROVIDED.							
EXIT ACCESS TRAVEL DISTANCE:	200' FOR B OCCUPANCY PER MAXIMUM TRAVEL DISTANCE		).					
COMMON PATH OF TRAVEL:	100' FOR B OCCUPANCY (BUS	SINESS) PER IBC TABLE 100	6.2.1 (UNSPRINKLE	RED)				
OCCUPANCY LOAD FACTORS:	B - BUSINESS - KITCHEN AND	STORAGE AREA		100 (GROSS)				
EGRESS WIDTH:	EGRESS WIDTH FACTOR: EXIT WIDTH REQUIRED: EXIT WIDTH PROVIDED:			0.2 INCHES 20 INCHES 34 INCHES				
PLUMBING FIXTURE COUNTS:	TOTAL OCCUPANT LOAD: WATER CLOSETS (1 PER 25 OCC)	PER IBC 2902.2, EXCE REQUIRED FOR A TOTA	PTION 2, SEPARAT					
	LAVATORIES (1 PER 40 OCC)	PER IBC 2902.2, EXCE REQUIRED FOR A TOT.	PTION 2, SEPARAT					
	DRINKING FOUNTAINS (1 PER 100 OCC)		<b>0 REQUI</b> PRINKING FOUNTAII AN OCCUPANT LOA					
		C 2902.1, EXCEPTION E, FO	R BUSINESS OCCU					

#### **PROJECT TEAM**

OCCUPANT LOAD OF 15 OR LESS, SERVICE SINKS ARE NOT REQUIRED.

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**

KITCHEN EQUIPMENT DELIVERIES

BUILDER'S RISK INSURANCE

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	၁၅	OWNE	၁၅	OWNE	REMARKS
EXTERIOR SPECIALTY					
PATIO TABLES & CHAIRS		Χ		Χ	IF SPECIFIED
BUILDING SIGNAGE (A)		Х		Х	ELECTRIC EXTERIOR WALL SIGNS (GC COMPLETES FINAL ELECTRICAL CONNECTION)
BUILDING SIGNAGE (B)	Х		Х		3
MENU BOARDS		Х		Х	QTY = 2
DRIVE-THRU MENU BOARD FRAME		Х		Х	
DRIVE-THRU MENU BOARD FOOTINGS	Х		Х		GC STUBS POWER AND COMPLETES FINAL ELECTRICAL CONNECTION FOR LIGHT FIXTURES
BULK CO2 TANK		Χ		Х	
BULK CO2 STORAGE CABINET		Χ	Х		GC ASSEMBLES, PAINTS, AND ANCHORS TO FLOOR

INTERIOR SPECIALTY		1			
STAINLESS STEEL WALL FLASHING & CORNER GUARDS	Χ		X		INCLUDES ALL MISCELLANEOUS FINISHED STEEL
EPOXY FLOORING	Χ		Х		INCLUDES 6" COVE BASE
CABINETS		Χ		Χ	TOE KICKS AND CASEWORK
STAINLESS STEEL COUNTERTOPS		Χ		Χ	
COUNTERTOP SUBSTRATE		Χ		Χ	
COUNTERTOP HOLE CUTOUTS		Χ		Χ	
COUNTERTOP GROMMETS		Х		Х	
HAND WASH SIGNS			Х		PAPER TOWEL AND SOAP DISPENSERS ARE OWNER SUPPLIED
RESTROOM ACCESSORIES	Χ		Х		GRAB BARS; DISPENSERS - MIRROR AND TOILET TISSUE
GENERAL ACCESSORIES		Χ	Х		DISPENSERS - PAPER TOWEL AND SOAP
OPEN / CLOSED SIGNS		Х		Χ	
MANAGER'S SAFE		Χ	Х		BOLT AND SILICONE TO FLOOR
KITCHEN WALL-HUNG SHELVING		Χ		Χ	INSTALLED BY KES - KITCHEN EQUIPMENT SUPPLIER
KITCHEN FLOOR-STANDING SHELVING		Χ		Χ	INSTALLED BY KES - KITCHEN EQUIPMENT SUPPLIER
CHEMICALS AND PEST CONTROL		Χ		Χ	
FINAL CLEAN	Χ				FINAL CLEAN AND TOUCH-UP CLEAN
		•			

KITCHEN EQUIPMENT CONNECTIONS / TERMINATIONS	Х		Χ		POWER, WATER, DRAINS
ELECTRICAL					
LOW VOLTAGE INFRASTRUCTURE	Х		Х		CONDUIT, BOXES / MUD RINGS
LOW VOLTAGE TERMINATIONS		Χ		Χ	WIRING AND JACKS
DRIVE-THRU VEHICLE SENSOR					NOT APPLICABLE
AUDIO / VIDEO EQUIPMENT RACK		Χ		Χ	
CAMERA SYSTEM		Х		Χ	

X RECEIVE, OFFLOAD, UNCRATE, SET IN PLACE

POINT-OF-SALE SYSTEM		٨		Λ
	•	•		•
MECHANICAL				
ROOFTOP MINI-SPLIT CONDENSER	Х		X	
ROOFTOP MINI-SPLIT CURB	Х		X	
CEILING MOUNTED MINI-SPLIT CASSETTE	Х		Х	
ICE MACHINES		Х		Х
ICE MACHINE REMOTE CONDENSERS AND LINE SETS		Х		Х
ICE MACHINE STARTUP AND COMMISSION		Х		Х
RESTROOM EXHAUST FAN AND CURB	Х		Х	

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

FIRE SUPPRESSION				
FIRE EXTINGUISHER	Χ		Χ	AS SPECIFIED AND REQUIRED BY LOCAL JURISDICTION
TESTING				
MATERIALS / SOILS		Χ		
			•	

CITY / COUNTY DEVELOPMENT, PERMITTING, AND LICENSING FEE



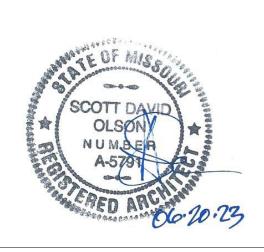
PROJECT LOCATION (WITHIN SUMMIT ORCHARDS)

#### **DRAWING INDEX**

SHEET NUMBER	SHEET NAME
GENERAL	
GI001	COVER SHEET / PROJECT INFO
GI002	ACCESSIBILITY DETAILS
ARCHITECTURE	
AS101	SITE PLAN
AE111	SLAB PLAN
AE112	FLOOR PLAN
AE113	FINISH FLOOR PLAN
AE121	REFLECTED CEILING PLAN
AE131	ROOF PLAN
AE151	SPECIFICATION - RESINOUS FLOOR
AE201	EXTERIOR ELEVATIONS
AE202	EXTERIOR ELEVATIONS
AE301	BUILDING SECTIONS
AE302	BUILDING SECTIONS
AE401	INTERIOR ELEVATIONS (KITCHEN)
AE402	INTERIOR ELEVATIONS (RESTROOM)
AE501	DETAILS
AE611	PARTITION TYPES AND DETAILS
AE621	DOOR AND FRAME TYPES
EQ101	EQUIPMENT PLAN
STRUCTURE	
S.0	GENERAL NOTES AND TYPICAL DETAILS
S.1	FOUNDATION AND ROOF FRAMING PLANS
ELECTRICAL	
E001	GENERAL NOTES AND LEGENDS
E111	POWER PLAN
E112	POWER ROOF PLAN
E121	LIGHTING PLAN
E122	ELECTRICAL LIGHTING ELEVATION
E501	ELECTRICAL DETAILS
E601	ELECTRICAL SCHEDULES AND DIAGRAMS
E701	ELECTRICAL SPECIFICATIONS
E702	ELECTRICAL SPECIFICATIONS
MECHANICAL	
M001	NOTES, LEGENDS, SPECS, SCHEDULES, AND DETAILS
M111	MECHANICAL PLAN
M112	MECHANICAL ROOF PLAN
PLUMBING	
P001	GENERAL NOTES AND LEGENDS
P002	PLUMBING SCHEDULES
P111	PLUMBING WASTE AND VENT PLANS
P112	PLUMBING WATER PLANS
P501	PLUMBING DETAILS
P502	PLUMBING DETAILS
	1



E'S SUMMIT, MO 64086



400



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

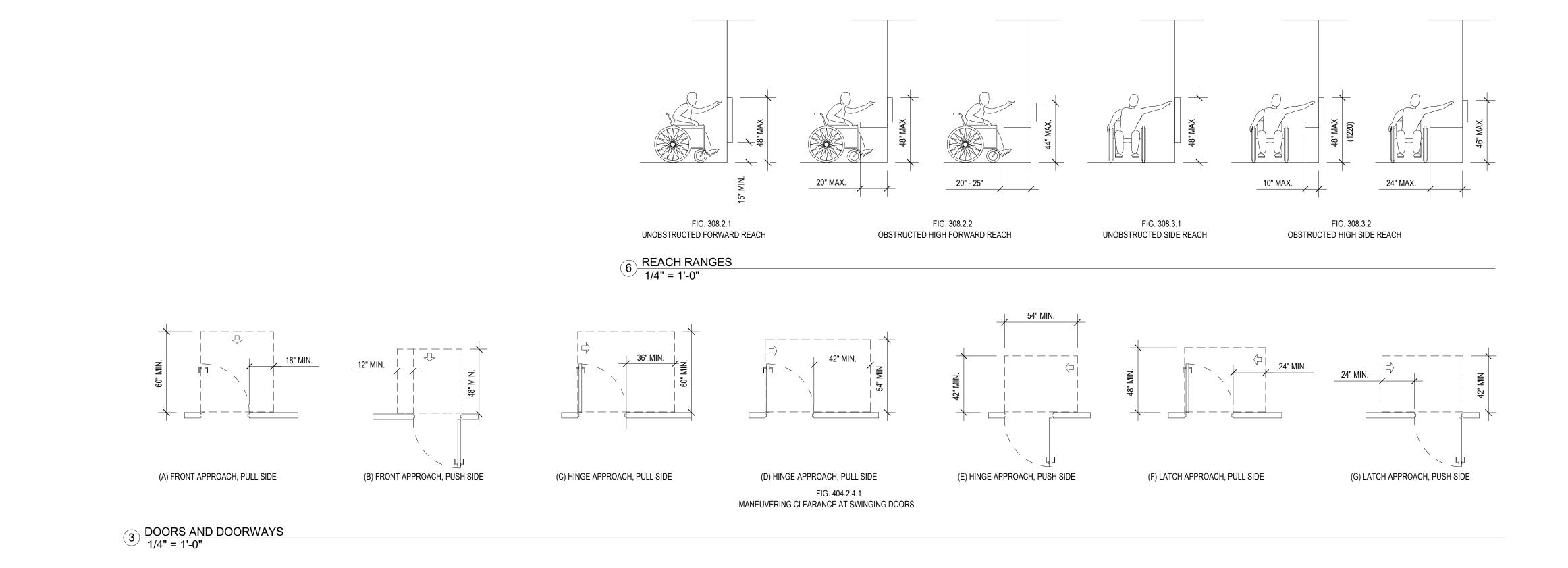
No.	Description	Date
1	City Comments	09/12/23

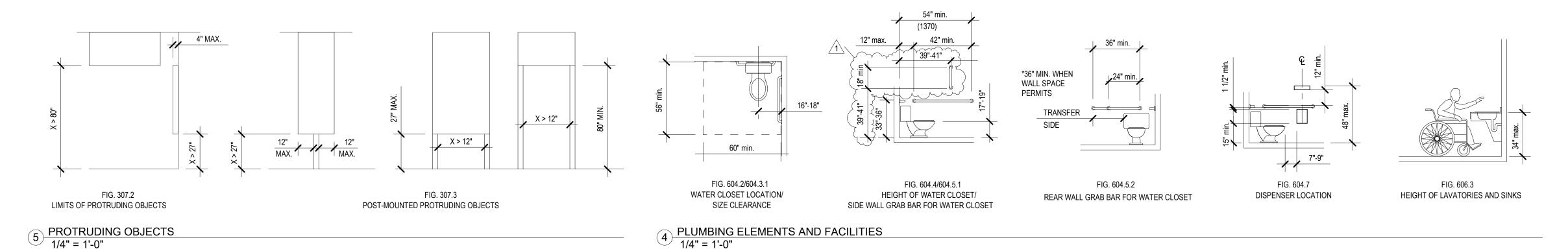
COVER SHEET / PROJECT INFO

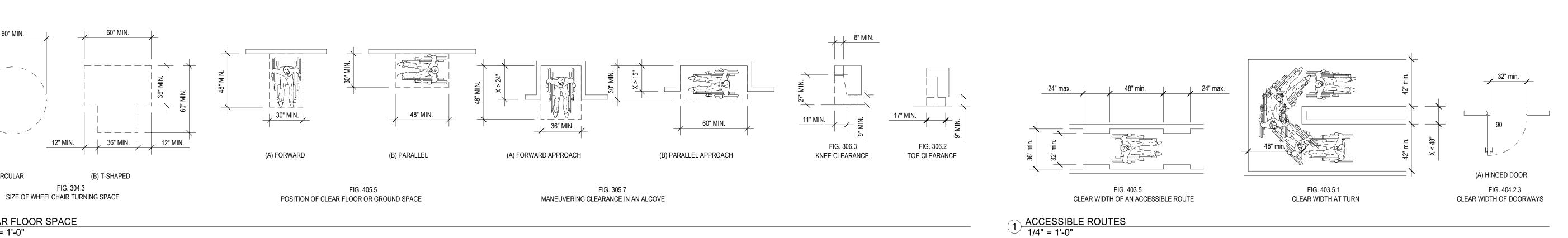
PROJECT NUMBER	210
DATE	06/16/202
DRAWN BY	PJS
CHECKED BY	SDC
SCALE	As indicate

GI001

400







(A) CIRCULAR

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

GI002

OLSON ARCHITECTURAL GROUP 1916 NW 79TH TERRACE

No.	Description	Date		
1	CITY COMMENTS	9/14/23		

SHEET NAME	
ACCESSIBILIT'	Y DETAILS
PROJECT NUMBER	210
DATE	06/16/202
DRAWN BY	P.

SDO CHECKED BY SCALE 1/4" = 1'-0"

SITE PLAN GENERAL NOTES

1. COORDINATE SITE PLAN WITH LANDSCAPE, ARCHITECTURAL, CIVIL, MECHANICAL,

3. DRIVE-THRU EQUIPMENT INCLUDING WIRELESS COMMUNICATION AND MONITORS

5. PROVIDE DETECTABLE WARNING (IF APPLICABLE PER LOCAL CODE) AT TRANSITION

6. ACCESSIBLE PARKING SPACE AND ACCESS AISLE SHALL HAVE SURFACE SLOPE

8. 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.

9. GC TO VERIFY THAT ALL FLOOR AND GROUND SURFACES ARE STABLE, FIRM, AND

10. GC TO BEVEL ANY VERTICAL FLOORING TRANSITIONS BETWEEN 1/4"-1/2" HIGH WITH

11. GC TO ENSURE OBJECTS DO NOT PROTRUDE MORE THAN 4" INTO AN ACCESSIBLE

12. ACCESSIBLE PATHS SHALL HAVE A SURFACE SLOPE NOT TO EXCEED 2% IN ALL

7. REFER TO ELECTRICAL DRAWINGS FOR SITE RELATED ELECTRICAL WORK.

2. REFER TO EXTERIOR ELEVATIONS ON SHEET A201 FOR BUILDING SIGNAGE LOCATION. REFER TO ELECTRICAL PLANS FOR ELECTRICAL REQUIREMENTS.

SHALL BE COORDINATED BY GENERAL CONTRACTOR. REFER TO ELECTRICALDRAWINGS FOR ADDITIONAL REQUIREMENTS.

CONCRETE PATIO AND WALKWAY SURFACES.

A SLOPE NOT STEEPER THAN 1:2. CONTRACTOR TO

REPORT ANY FLOORING TRANSITIONS GREATER THAN 1/2" HIGH.

FROM SIDEWALK TO DRIVE AISLE.

SLIP RESISTANT.

PATH OF TRAVEL.

DIRECTIONS.

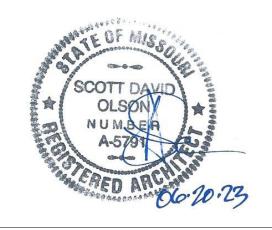
NOT TO EXCEED 2% IN ALL DIRECTIONS.

4. GENERAL CONTRACTOR TO APPLY CONCRETE SEALER TO ALL EXTERIOR

AND ELECTRICAL SITE PLAN, REPORT ANY DISCREPANCIES TO THE ARCHITECT.



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





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

No.	Description	Date

### SITE PLAN

 PROJECT NUMBER
 2102

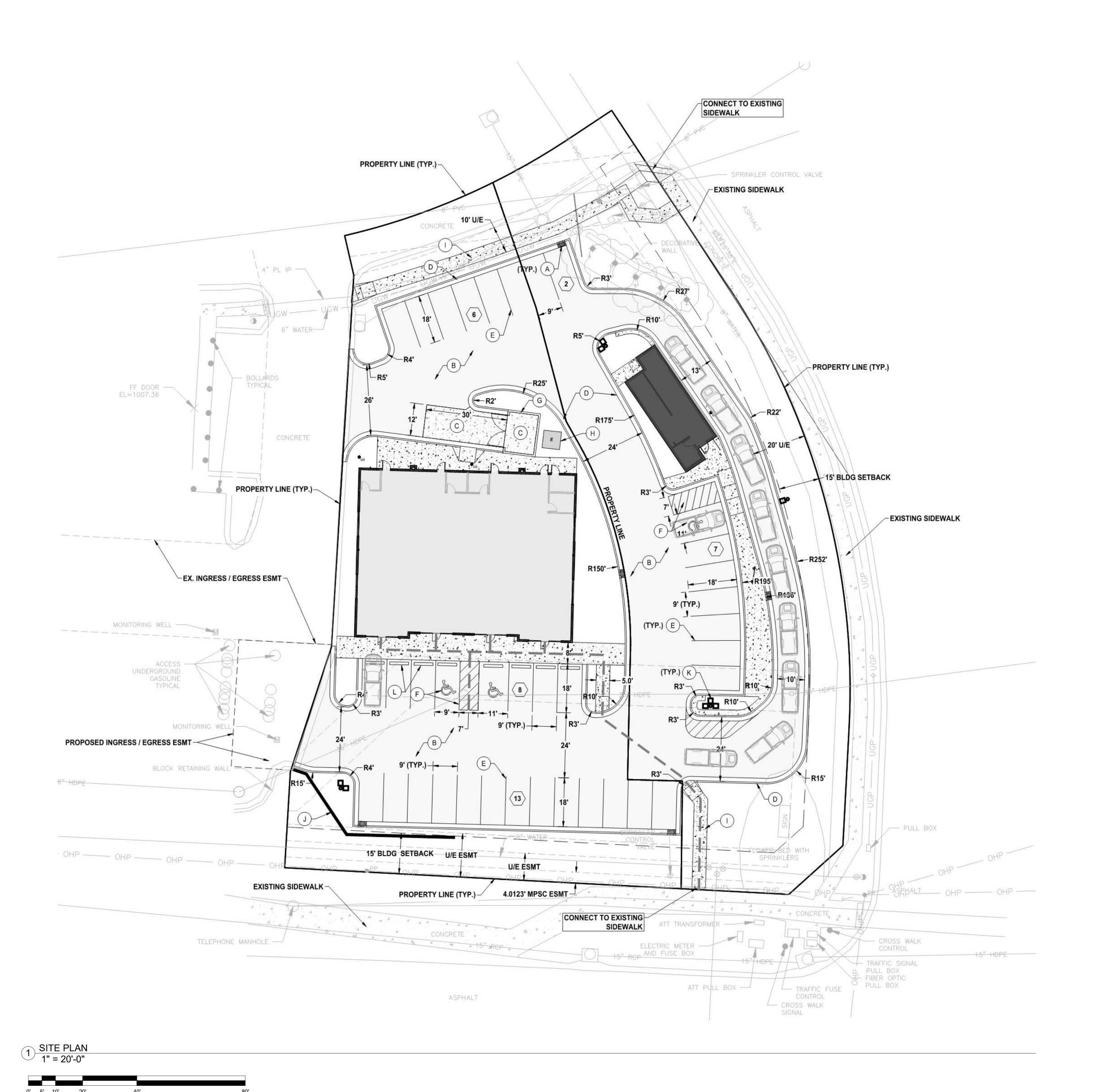
 DATE
 06/16/2023

 DRAWN BY
 PJS

 CHECKED BY
 SDO

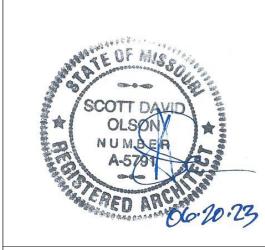
AS101

1" = 20'-0"









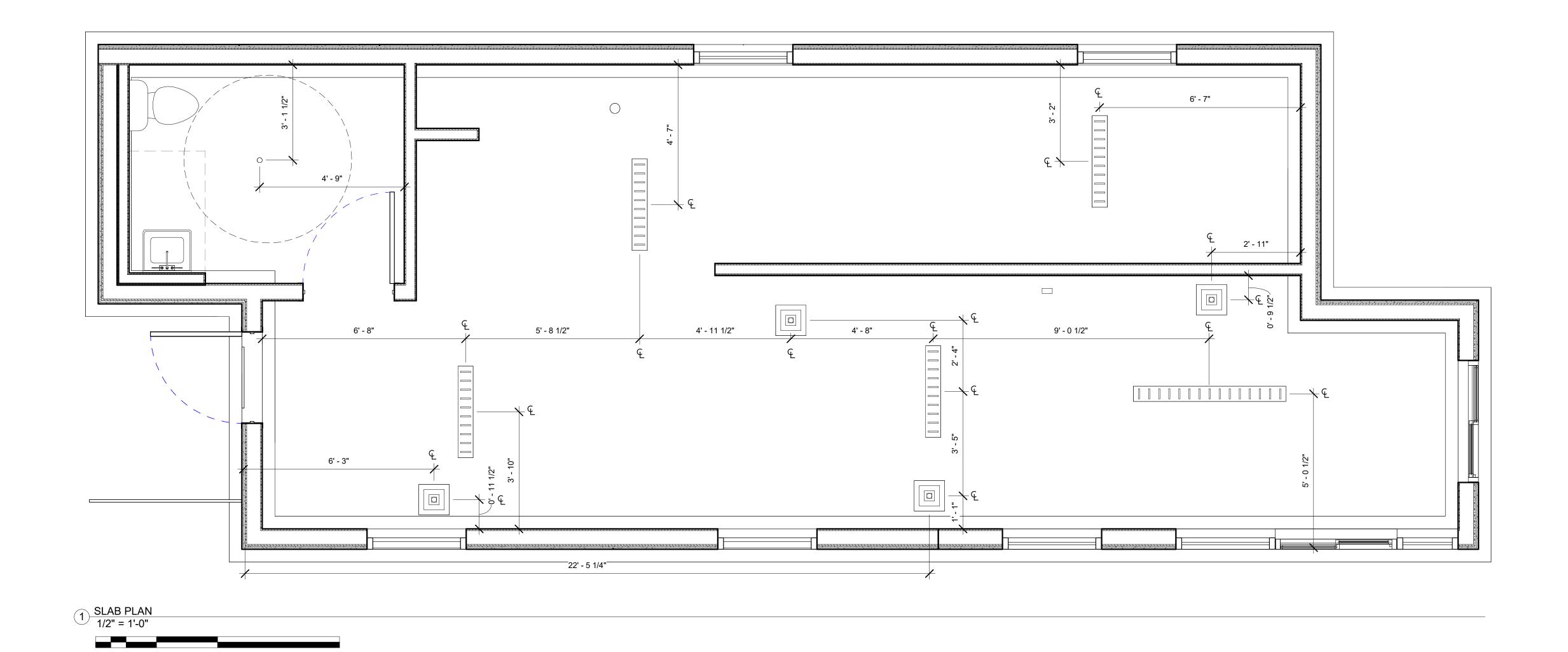


No.	Description	Da

# SLAB PLAN

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

AE111



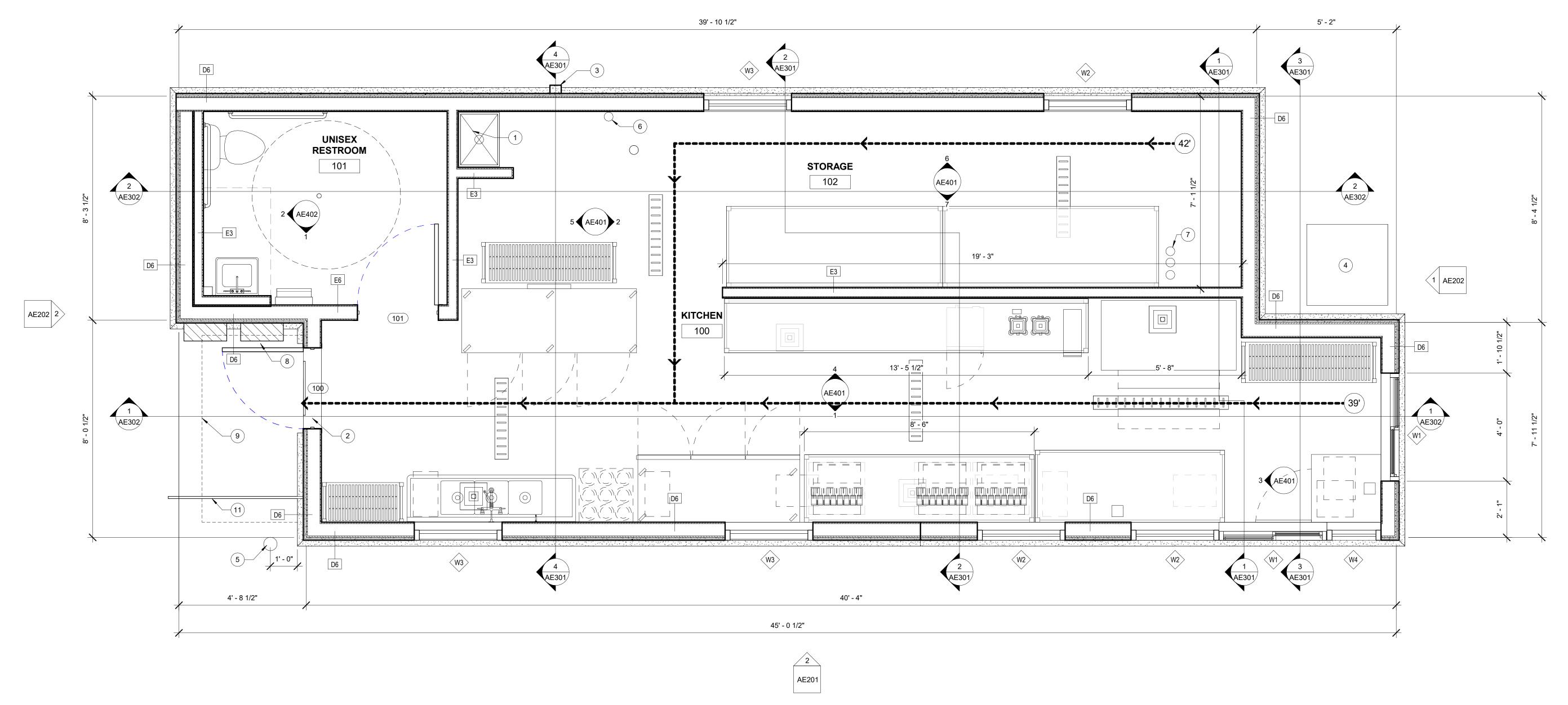
#### **SLAB PLAN GENERAL NOTES**

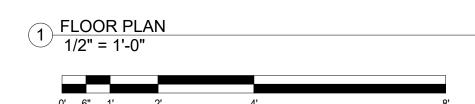
- A. CONTRACTOR TO COORDINATE THE LOCATION OF ALL FLOOR DRAINS AND FLOOR SINKS WITH 1 APPROXIMATE LOCATION OF FLOOR SINK; COORDINATE WITH PLUMBING PLUMBING DRAWINGS AND KITCHEN DRAWINGS.
- B. CONTRACTOR TO COORDINATE THE LOCATION OF ALL FLOOR OUTLETS WITH OWNER, ARCHITECT AND ELECTRICAL DRAWINGS.

#### SLAB PLAN KEYNOTES 1

- - 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







#### **DIMENSION NOTES**

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

#### FLOOR PLAN KEYNOTES 1

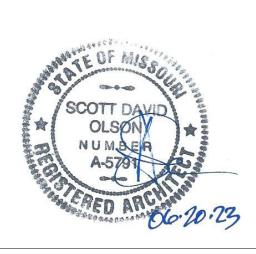
- MOP SINK; COORDINATE WITH PLUMBING DRAWINGS.
- ADA COMPLIANT THRESHOLD, SEE SHEET DOWNSPOUT TO DRAIN ON SPLASH BLOCK BELOW.
- CO2 TANK STORAGE CABINET; COORDINATE WITH EQUIPMENT SHEETS AND PLUMBING.
- BOLLARD, REF: CIVIL DRAWINGS. BRACKET MOUNTED 2A10BC FIRE EXTINGUISHER.
- 4" SODA LINE CONDUITS STUBBED UP THROUGH FLOOR.
- ELECTRICAL PANEL OR EQUIPMENT; EXTERIOR-RATED ENCLOSURE WITH SECURITY LOCKING SYSTEM, COORDINATE WITH ELECTRICAL.
- EXTERIOR CANOPY ABOVE.
- 10 5'-0" CLEAR TURNING FLOOR SPACE 11 FENCING, REF: CIVIL DRAWINGS.

#### FLOOR PLAN GENERAL NOTES

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

# SAVORY

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



400



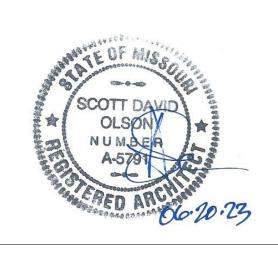
No.	Description	Date

FLOOR PLAN

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

AE112





400



No.	Description	Date

**FINISH PLAN KEYNOTES** 

FLOOR DRAIN / TRENCH DRAIN / FLOOR SINK; COORDINATE WITH PLUMBING

APPROXIMATE LOCATIONS OF SODA LINES; COORDINATE WITH PLUMBING.

CABINETS SHALL BE WHITE MELAMINE OPEN SHELVING; COORDINATE WITH

MILLWORK AND STAINLESS STEEL COUNTER W/ 6" BACKSPLASH; BASE

CUTOUTS IN COUNTERTOP FOR DROP-IN SINKS. SEE EQUIPMENT

COVED EPOXY BASE FINISH AT BASE CABINET TOE KICK

MOP SINK, COORDINATE WITH PLUMBING DRAWINGS

SCHEDULE FOR SINK CUTOUT DIMENSIONS.

2"x4" HOLE IN COUNTER

AND AE111 SLAB PLAN

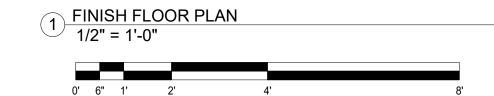
8 2" HOLE IN COUNTER FOR POS

FINISH FLOOR PLAN

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

**AE113** 

UNISEX RESTROOM  $\bigcirc$ 101 STORAGE KITCHEN 8 8



#### 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 SURACES ARE TO BE PREPARED TO RECEIVE NEW FINISHES.
- D. ALL WIRE FRAMES, CONDUIT, ACCESS PANELS, GRILLES, FIRE EXSTINGUISHER 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
- 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

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 STAINLES STEEL U-CHANNEL WITH 2" WING SIZE, 18

GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES S-2 SS CORNER FULL HEIGHT STAINLES STEEL CORNER GUARD WITH 2" WING SIZE, MARK MATERIAL

18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

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

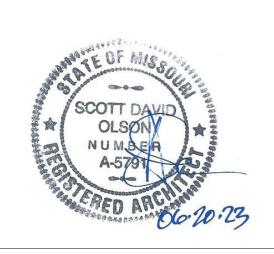
### BASE FINISH SCHEDULE

FLOOR FINISH SCHEDULE

## DESCRIPTION

EB-1 EPOXY BASE 6" HIGH BASE, MATCH FLOOR, SEE SPEC. S	EE DETAIL 6/A631







No.	Description	Date

# REFLECTED CEILING PLAN

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

AE121

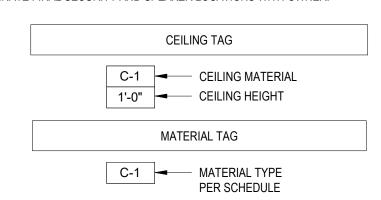
STORAGE 102 8 UNISEX RESTROOM 101 9' - 0" **KITCHEN** 100 1 14' - 3 1/2" 4' - 0"

#### 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.

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

- 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**

RECESSED LIGHT

SECURITY CAMERA, CEILING MOUNTED, NOT SHOWN.

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

#### INTERIOR FINISH SCHEDULE

1) COORDINATE WITH ELECTRICAL AND MECHANICAL DRAWINGS

SURFACE MOUNTED LIGHT

FAN COIL UNIT

EXHAUST FAN

COORDINATE WITH ELECTRICAL.

CEILING MOUNTED SPEAKER, NOT SHOWN. COORDINATE WITH ELECTRICAL.

#### MARK MATERIAL

FRP-1 FRP (WHITE) WHITE, SMOOTH, 10' HIGH SHEETS, SEE DETAIL 1/A501

S-1 SS U-CHANNEL FULL HEIGHT STAINLES STEEL U-CHANNEL WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

P-1 PAINT (WHITE) HIGH PERFORMANCE EPOXY

FULL HEIGHT STAINLES STEEL CORNER GUARD WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

GUARD

DESCRIPTION INTERIOR LIGHTING - REFER TO ELECTRICAL EXTERIOR CORNICE PER ELEVATIONS EXTERIOR CANOPY

WATER HEATER SHELF WALL PACK LIGHTING - REFER TO ELECTRICAL WEATHER LOOP CONDUIT TO ROOF FOR ACCESS POINTS -REFER TO ELECTRICAL

RCP KEYNOTES

EMERGENCY LIGHTING - REFER TO ELECTRICAL

MECHANICAL SOFFIT - REFER TO MECHANICAL

EXTERIOR LIGHTING - REFER TO ELECTRICAL

10 I.T. RACK - REFER TO ELECTRICAL PREFINISHED METAL DOWNSPOUT

12 AIR CURTAIN - REFER TO MECHANICAL





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

No.	Description	Date
1	CITY COMMENTS	9/14/23

**ROOF PLAN KEYNOTES** 

PENETRATIONS PER MANUFACTURER'S RECOMMENDATIONS FOR MECHANICALLY

2 NEW MECHANICAL EQUIPMENT. SECURE TO TOP OF DECK PER STRUCTURAL AND

PER MANUFACTURER'S REQUIREMENTS. PROVIDE CURB AND CRICKET AS

7 DRAINAGE-OPENING. LOCATE OVER DRAINAGE VALLEY. REFERENCE DETAIL.

REQUIRED FOR PROPER DRAINAGE. REFERENCE MECHANICAL.

4 PROVIDE TAPERED INSULATION TO SLOPE ROOF AS SHOWN.

6 EXHAUST FAN VENT - REFERENCE MECHANICAL DRAWINGS.

( 8 ROOF LÅDDER WITH SIDE RAIL 30" ÅBOVE TOP OF PARAPET.

3 PREFINISHED METAL GUTTER AND DOWNSPOUT.

1 SINGLE-PLY MEMBRANE ROOFING OVER RIGID ROOF INSULATION AND ROOF

SHEATHING; PROVIDE FLASHING AND COUNTERFLASHING AT ALL NEW

FASTENED SYSTEM.

5 24"x36" OPENING

PROJECT NUMBER

**ROOF PLAN** 

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

**AE131** 

1/4" : 12" SLOPE 5 3 \_\_\_ D3 1/4" : 12" 5 SLOPE 5 X-7 X-7 X2 3 Х3 X2

#### **ROOF PLAN GENERAL NOTES**

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

- 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'-0" RAILS TO BE 31" APART AT COOLER/FREEZER CONDENSERS AND 5'-0" RAILS W/ SUPPORTS TO BE 24" APART AT ICE MACHINE CONDENSERS. STANDS SHALL PROVIDE 18" MINIMUM CLEARANCE (48" O.C. AT ICE MAKER CONDENSERS) AND SHALL BE SIZED INSTALLED ACCORDING TO THE MANUFACTURER'S LOAD CHARTS AND PRINTED INSTALLATION DETAILS. CONTACT: 800-266-7212.

MATERIAL DESCRIPTION

CONCRETE STONE VENEER TEXAS STONE DESIGN INC X-1 THIN BRICK WAINSCOT PALO PINTO COBBLE EXTERIOR GRADE - SW #6993 "BLACK OF NIGHT"

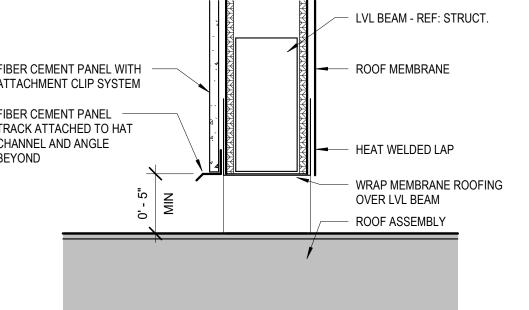
BASE BID: NICHIHA, VINTAGE WOOD, BARK, 17-7/8"x5/8" THICK, HORIZ. INSTALL. BID ALTERNATE: JAMES HARDIE, SIERRA 8, TIMBER BARK, 5/16" THICK, HORIZONTAL INSTALL.

X-4 STONE SILL
X-5 STOREFRONT
X-6 PAINT CHISELED STONE SILL, LIGHT GRAY - CORONADO STONE DARK BRONZE SHER-COLOR CUSTOM MATCH, EXTERIOR ULTRADEEP SATIN.

COLOR CAST FORMULA:

R4 NEW RED: COLORANT 0Z=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 BRIK - COLOR AUTUMN BLEND W/ FLASH - 4"

W1 WHITE: COLORANT 0Z=2, COLORANT 32=2



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

#### **EXTERIOR FINISH SCHEDULE**

### FIBER CEMENT PANEL WITH -ATTACHMENT CLIP SYSTEM FIBER CEMENT PANEL TRACK ATTACHED TO HAT CHANNEL AND ANGLE BEYOND

#### DURA-FLEX MUST BE USED (NO SUBSTITUTIONS)

**DURA-FLEX CONTACT:** MARCUS GRAY REGIONAL MANAGER

860-380-777

SECTION 09 67 23-RESINOUS FLOORING

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

#### 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:

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

#### B. Related sections include the following:

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

SECTION 09 67 23-RESINOUS FLOORING

A. Packing and Shipping

B. Storage and Protection

C. Waste Disposal

1.7 PROJECT CONDITIONS

A. Site Requirements

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

identified with the product type and batch number.

relevant health and safety regulations.

Engineer or other personnel.

during installation of the system.

- 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.
- 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.

1. All components of the system shall be delivered to the site in the Manufacturer's packaging, clearly

The Applicator shall be provided with a dry storage area for all components. The area shall be between 60

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

The Applicator shall be provided with adequate disposal facilities for non-hazardous waste generated

Application may proceed while air, material and substrate temperatures are between 55 F and 85 F

2. The relative humidity in the specific location of the application shall be less than 85 % and the surface

providing the substrate temperature is above the dew point. Outside of this range, the Manufacturer shall

F and 85 F, dry, out of direct sunlight and in accordance with the Manufacturer's recommendations and

STANDARD SPECIFICATION

Page 2 of 5

Page 1 of 5

Date:06/14

#### SECTION 09 67 23-RESINOUS FLOORING

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 is 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.

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

2. Immediately prior to the application of any component of the system, the surface shall be dry and any

3. The handling, mixing and addition of components shall be performed in a safe manner to achieve the

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

The topping shall be applied as a self-leveling system as specified by the Architect. The topping shall be

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

4. The topping shall be applied over horizontal surfaces using ½ inch "v" notched squeegee, trowels or other

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

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

remaining dust or loose particles shall be removed using a vacuum or clean, dry, oil-free compressed air.

#### patch per manufactures recommendations.

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

applied in one lift with a nominal thickness of 1/8 inch.

systems approved by the Manufacturer.

Topping/overlay application with quartz aggregate broadcast.

desired results in accordance with the Manufacturer's recommendations.

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

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.

#### 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.

temperature shall be at least 5 F above the dew point.

- 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).
- 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

 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 FLOORING Page 3 of 5

#### 2.1 FLOORING

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

160 inch lbs

#### 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.

#### Patch Materials

 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

. To		Topping Poly-Crete SL	
	1.	Percent Reactive	100 %
	2.	VOC	0 g/L
	3.	Bond Strength to Concrete ASTM D 4541	400 psi, substrates fails
	4.	Compressive Strength, ASTM C 579	9,000 psi
	5.	Tensile Strength, ASTM D 638	2,175 psi
	6.	Flexural Strength, ASTM D 790	5,076 psi

#### Poly-Crete Color-Fast B. Topcoat

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

No visible damage or deterioration

. 10		ocoat	Poly-Crete Color-Fast	
	1.	Percent Solids	100%	
	2.	VOC	0 g/L	
	3.	Compressive Strength, ASTM C 579	7,800 psi	
	4.	Tensile Strength, ASTM D 638	4,200 psi	
	5.	Flexural Strength, ASTM D 790	1,000 psi	
	6.	Abrasion Resistance, ASTM D 4060 CS-17 wheel, 1,000gm load, 1,000 cycles	30 mg loss	
	7.	Impact Resistance, ASTM D 1709	160 in.lbs	
	8.	Shore D Hardness, ASTM D 2240	65	
	9.	Gloss, ASTM D 523, 600	Semi-gloss Appearance	

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- 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
- 3.2 PREPARATION

A. General

3.3 APPLICATION

A. General

B. Topping

Substrate preparation

Topcoat application

STANDARD SPECIFICATION

Page 4 of 5

STANDARD SPECIFICATION

#### SECTION 09 67 23-RESINOUS FLOORING

#### C. Topcoat

- 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
- The topcoat will be applied at the rate of 100 sf per kit (1.1 gal).
- Non-Skid if required is broadcast at the rate of 1 lb per 100 sf and back rolled into the coating. The finish floor will have a nominal thickness of 3/16 inch.

#### 3.4 FIELD QUALITY CONTROL

#### A. Tests, Inspection

- The following tests shall be conducted by the Applicator:
  - 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

#### 3.5 CLEANING AND PROTECTION

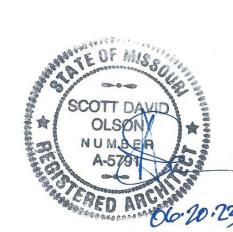
- A. Cure flooring material in compliance with manufacturer's directions, taking care to prevent their contamination during stages of application and prior to completion of the curing process.
- B. Remove masking. Perform detail cleaning at floor termination, to leave cleanable surface for subsequent work of other sections.

STANDARD SPECIFICATION

Page 5 of 5



 $\frac{0}{2}$ SUMMIT, I S III RD CHIPMAN M € 400





1916 NW 79TH TERRACE

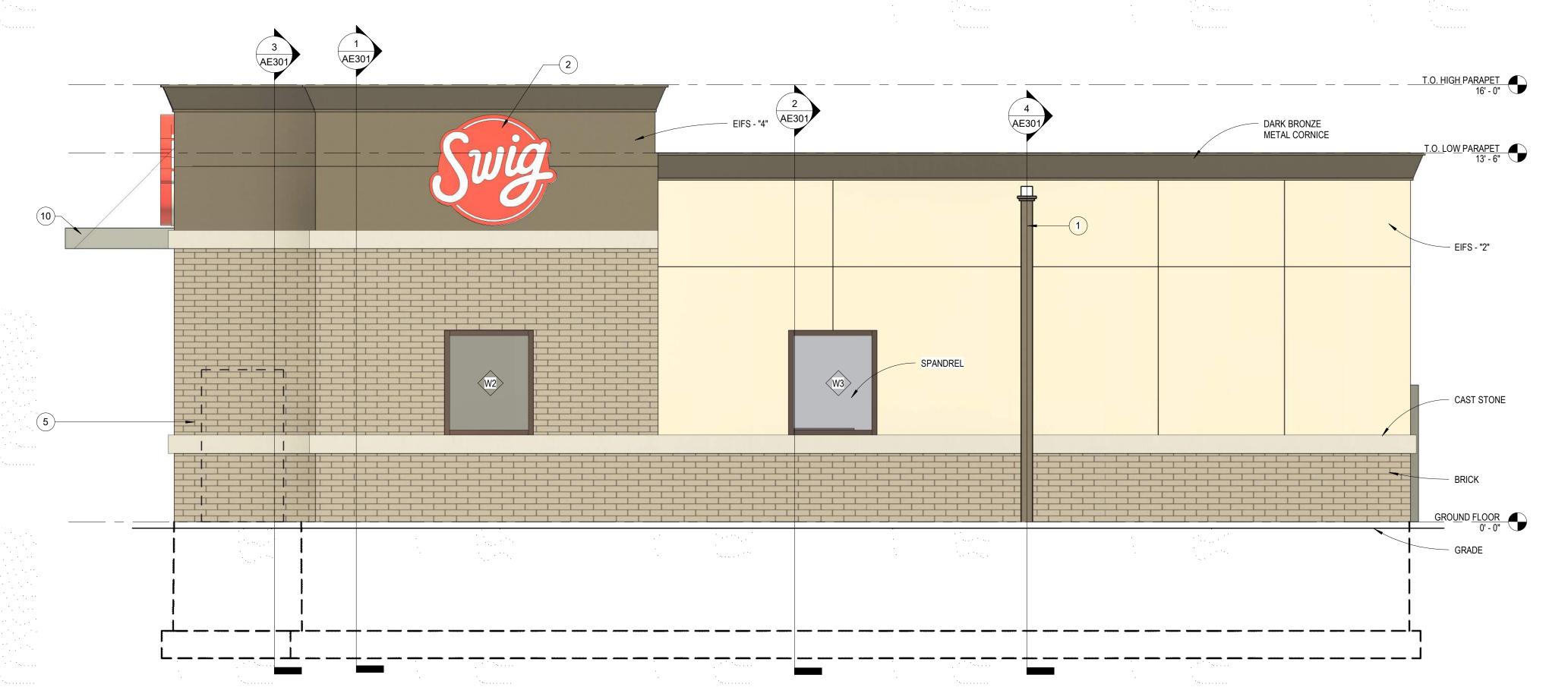
KANSAS CITY, MO 64151 REVISION SCHEDULE

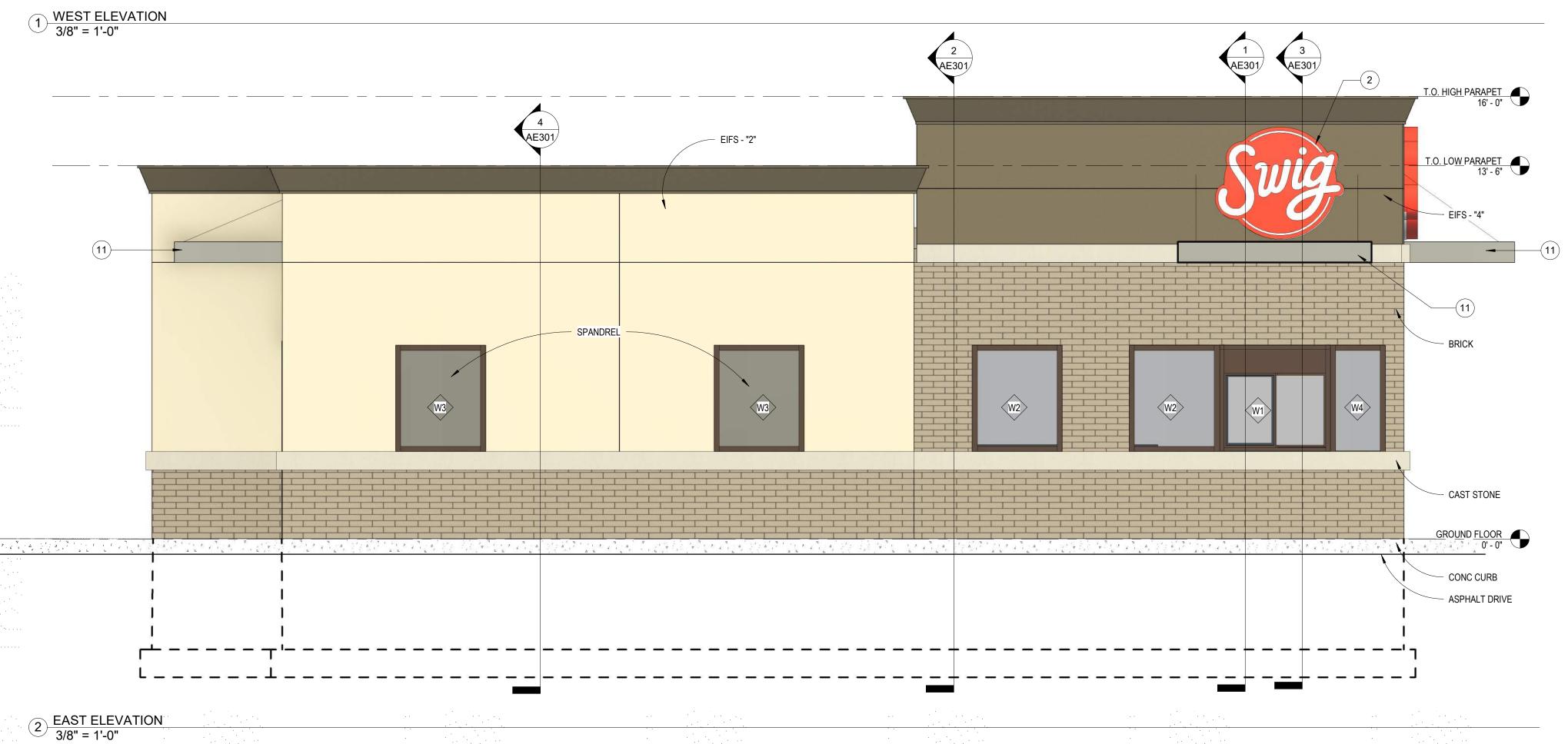
No.	Description	Date

SHEET NAME

SPECIFICATION - RESINOUS **FLOOR** 

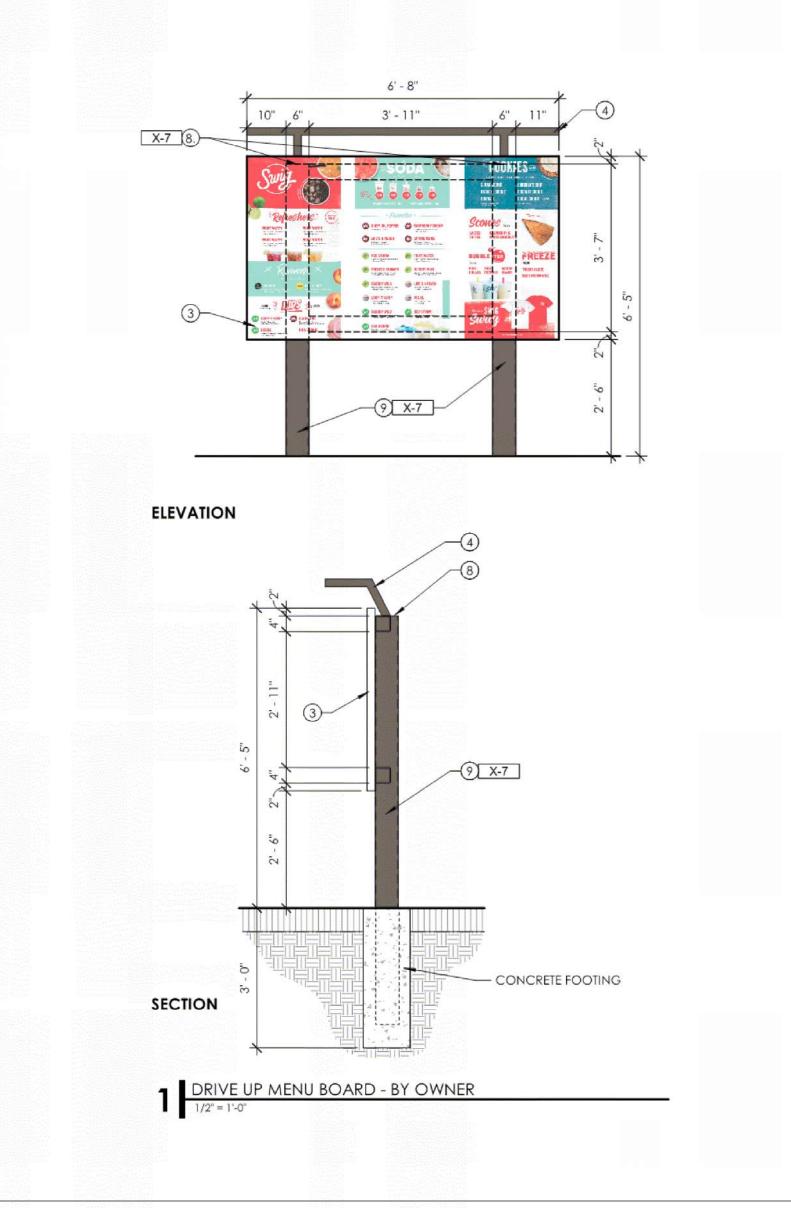
PROJECT NUMBER	2102
DATE	06/16/2023
DRAWN BY	PJS
CHECKED BY	SDO
SCALE	





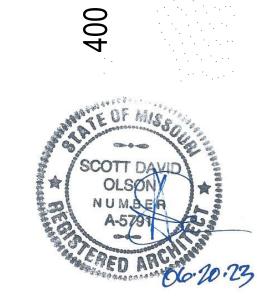
FA	CADE MATER	RIAL PERCENTA	GES - STUCCO		
	_EAST_	_WEST_	_NORTH_	_SOUTH_	PREFINISHED METAL DOWNSPOUT
X-1 - THIN BRICK WAINSCOT					② BUILDING SIGNAGE BY OWNER
	17 %	17 %	19 %	19 %	(3) MENU BOARD AND FOOTINGS BY SEPARATE SIGN PERMIT
WEEKEN TO THE PERSON OF THE PE	37.35 SF	46.75 SF	128 SF	128 SF	DARK BRONZE LIGHT FIXTURE; COORDINATE WITH ELECTRICAL
X-2 - CORNICE	1				
	16%	10 %	10 %	10 %	(5) CO2 ENCLOSURE - SEE EQUIPMENT PLAN
	36 SF	25.5 SF	69 SF	69 SF	(6) ELECTRICAL PANEL OR EQUIPMENT; COORDINATE WITH ELECTRICA
X-3 - SIMULATED WOOD					(7) CONTROL JOINT
	7 %	30 %	14 %	16 %	(8) STEEL CAP AT TOP OF POSTS
THE THE	16 SF	82.5 SF	91.5 SF	91.2 SF	
X-4 - STONE SILL					9 POWDER COATED STEEL TUBE FRAME, TYP.
The state of the s	1 %	1 %	1 %	1 %	(10) 24" X 36" OPENING
	2.5 SF	3 SF	8.5 SF	8.5 SF	(9 24 X 30 OF ENING
X-5 - STOREFRONT					(1) EXTERIOR CANOPY
	0	6%	6%	7 %	MANUFACTURER - ARCHITECTURAL CANOPIES;
	O SF	15 SF	39.8 SF	6 SF	EXTRUDECK
X-8 - STUCCO					(2) ROOF PROFILE
transfer federal	57 %	33 %	49 %	47 %	
	128 SF	89.5 SF	321.25	355 SF	(13) RTU BEYOND
EXTERIOR CANOPY					(C) TO A CILIFACIO COURS
North-Control	2 %	3 %	1 %	0 %	(14) TRASH ENCLOSURE
	715	715	715	IO I E	

		EXTERIOR F	NISH SCI	HEDULE	
MARK	MATERIAL	DESCRIPTION	X-6	SWIG RED	'SHER-COLOR' CUSTOM MATCH, EXTERIOR
X-1	THIN BRICK (WAINSCOT)	THIN BRICK GLEN-GERY; STONE GRAY GROUT GLEN GERY; G-601	X-0	SWIG KED	ULTRADEEP SATIN. COLOR CAST FORMULA: W1 WHITE>>> COLORANT 0Z= 2 COLORANT 32 = 2 R4 NEW RED>>>
X-2	CORNICE (BLACK)	EXTERIOR GRADE - SW# 6993 "BLACK OF NIGHT"			COLORANT 0Z = 8, COLORANT 32 = 61 COLORANT 64 = 1
X-3	SIMULATED WOOD SIDING	FIBER CEMENT PANELS  BASE BID: NICHIHA; VINTAGE WOOD; BARK;  17-7/8" x 5/8" THICK; HORIZONTAL INSTALL	X-7	PAINT (LIGHT GRAY)	EXTERIOR GRADE - SW# 7019 "GAUNTLET GRAY" (POWDER COAT STEEL IF POSSIBLE)
		BID ALTERNATE: JAMES HARDIE; SIERRA 8; TIMBER BARK; 5/16" THICK; HORIZONTAL INSTALL	X-8	STUCCO	NAVAJO WHITE LA HABRA
X-4	STONE SILL	CHISELED STONE SILL - LIGHT GRAY CORONADO STONE			
X-5	STOREFRONT	DARK BRONZE			





SAVORY



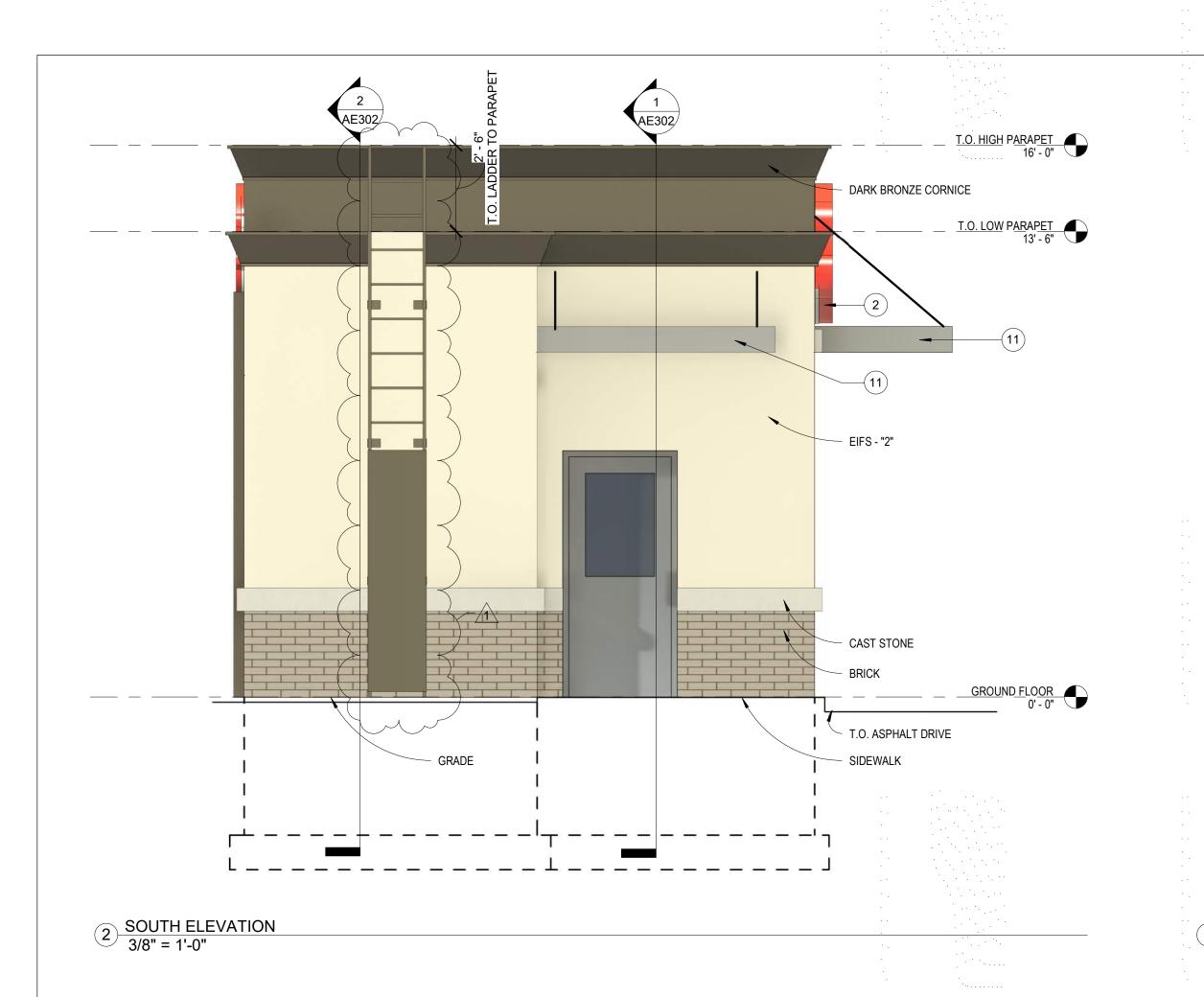
SWIG - LEE'S SUMMIT, MO 64086 NW CHIPMAN RD, LEE'S SUMMIT, MO 64086

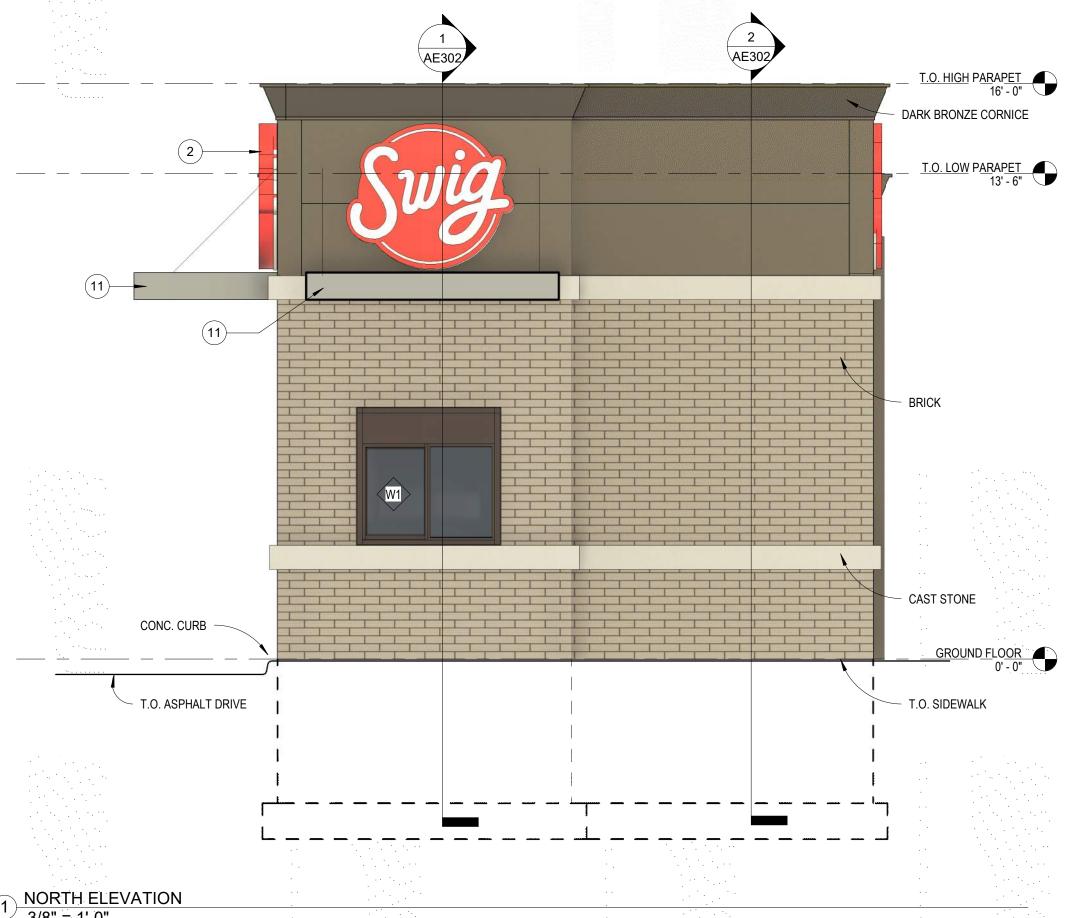
	OLSON ARCHITECT 1916 NW 79TH KANSAS CITY,	TERRA	CE
ISIC	N SCHEDULE		
٥.	Description		Date
		· . · .	
	. •		

SHEET NAME EXTERIOR ELEVATIONS

PROJECT NUMB	ER	2102
DATE		06/16/2023
DRAWN BY		PJS
CHECKED BY		SDC
SCALE		3/8" = 1'-0'

AE201







OAG

OLSON ARCHITECTURAL GROUP

1916 NW 79TH TERRACE KANSAS CITY, MO 64151

No.	Description		Date
1	CITY COMMENTS		9/14/23
		· · · .	
		• • • •	

SHEET NAME

PROJECT NUMBER 210

 PROJECT NUMBER
 2102

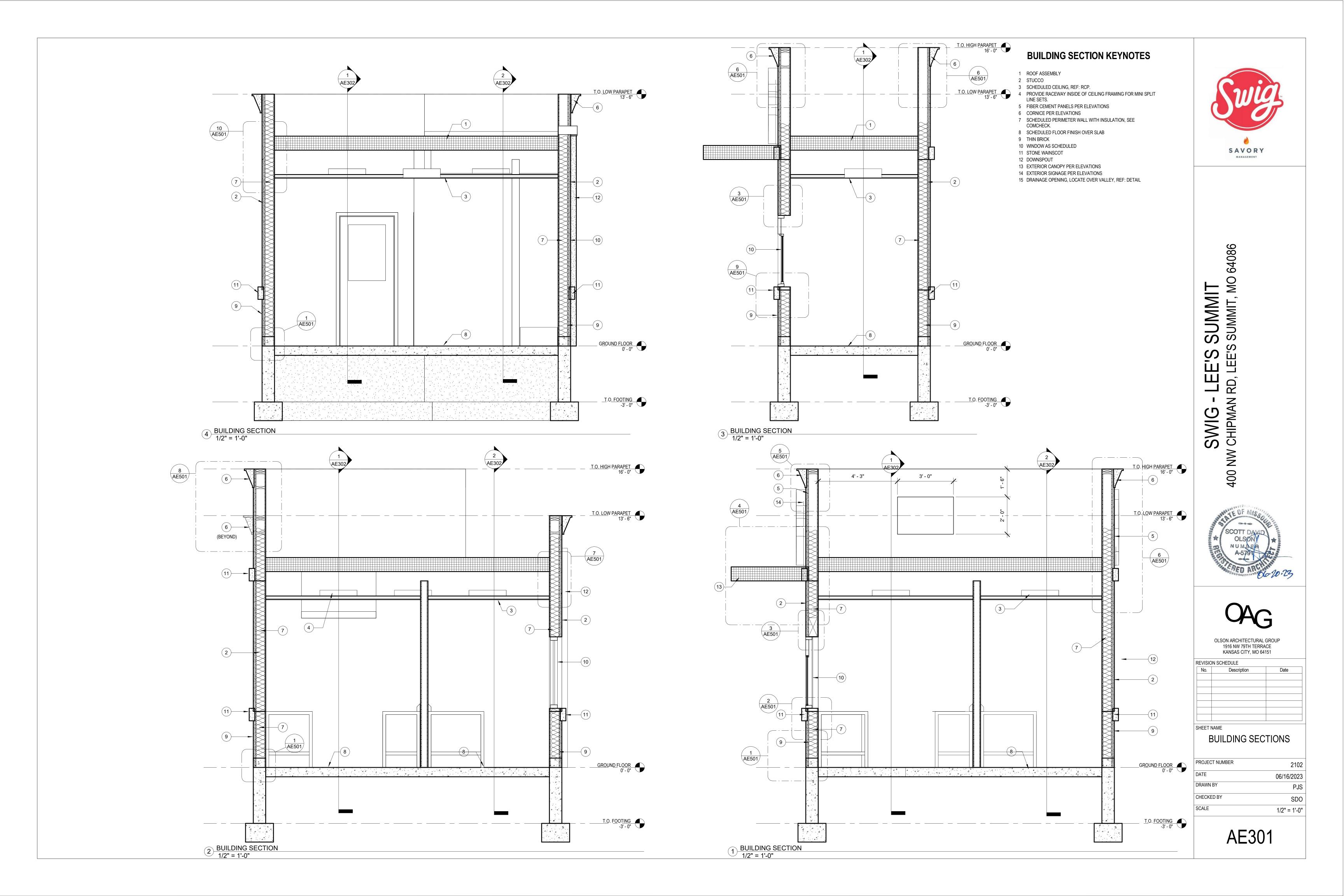
 DATE
 06/16/2023

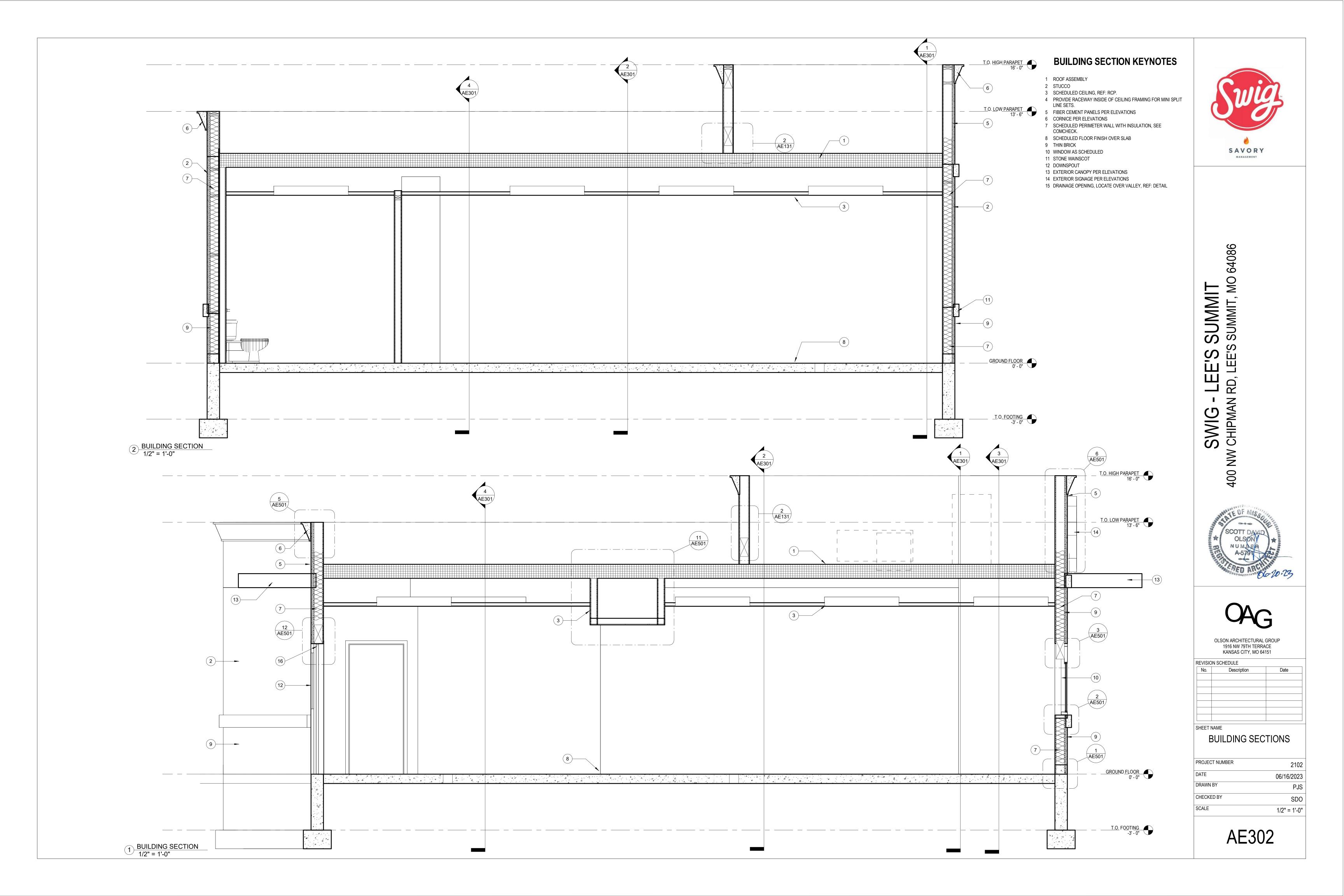
 DRAWN BY
 PJS

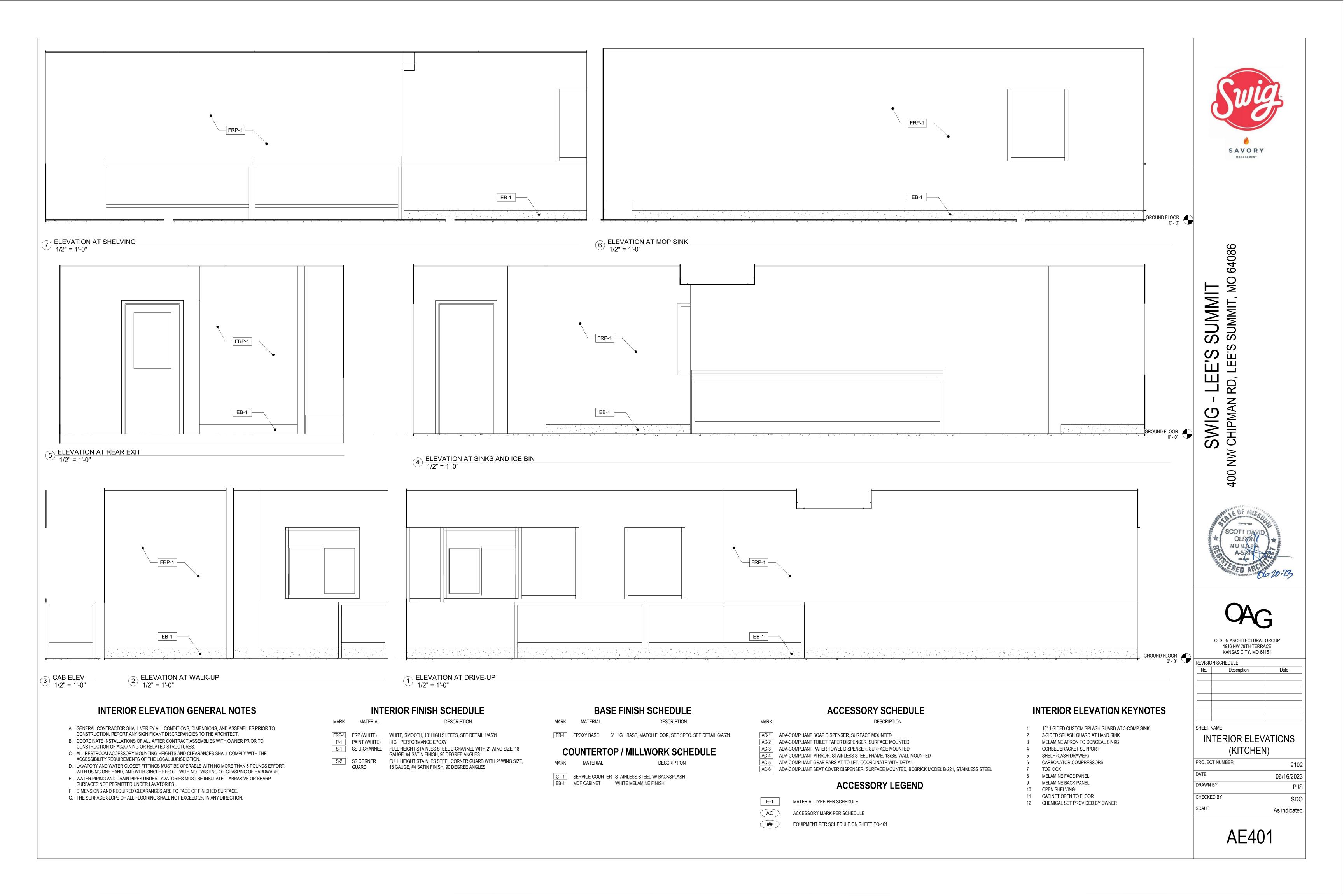
 CHECKED BY
 SDO

 SCALE
 3/8" = 1'-0"

AE202



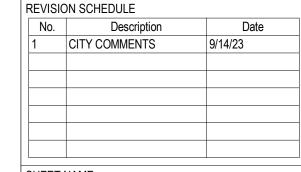








OLSON ARCHITECTURAL GROUP 1916 NW 79TH TERRACE KANSAS CITY, MO 64151



SHEET NAME

SCALE

AC-4

AC-3

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

CARBONATOR COMPRESSORS

SHELF (CASH DRAWER)

MELAMINE FACE PANEL

MELAMINE BACK PANEL

CABINET OPEN TO FLOOR

12 CHEMICAL SET PROVIDED BY OWNER

OPEN SHELVING

TOE KICK

EB-1

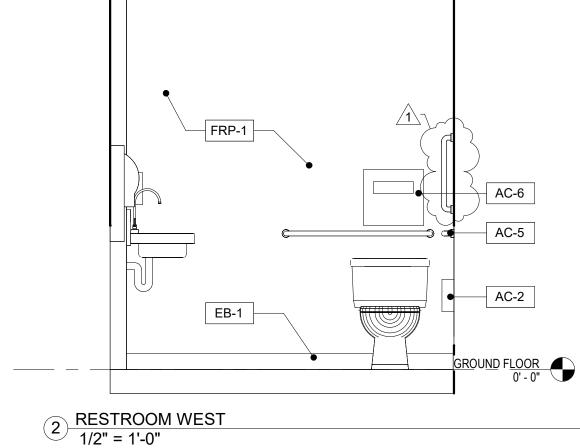
#### INTERIOR ELEVATIONS (RESTROOM)

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

As indicated

AE402

AC-6 AC-5 AC-2 GROUND FLOOR 0' - 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

GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES S-2 SS CORNER GUARD

S-1 SS U-CHANNEL FULL HEIGHT STAINLES STEEL U-CHANNEL WITH 2" WING SIZE, 18

FULL HEIGHT STAINLES STEEL CORNER GUARD WITH 2" WING SIZE, 18 GAUGE, #4 SATIN FINISH, 90 DEGREE ANGLES

#### **BASE FINISH SCHEDULE**

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

#### ACCESSORY SCHEDULE

DESCRIPTION

1 RESTROOM SOUTH 1/2" = 1'-0"

AC-1	ADA-COMPLIANT SOAP DISPENSER, SURFACE MOUNTED
AC-2	ADA-COMPLIANT TOILET PAPER DISPENSER, SURFACE MOUNTE
AC-3	ADA-COMPLIANT PAPER TOWEL DISPENSER, SURFACE MOUNTE

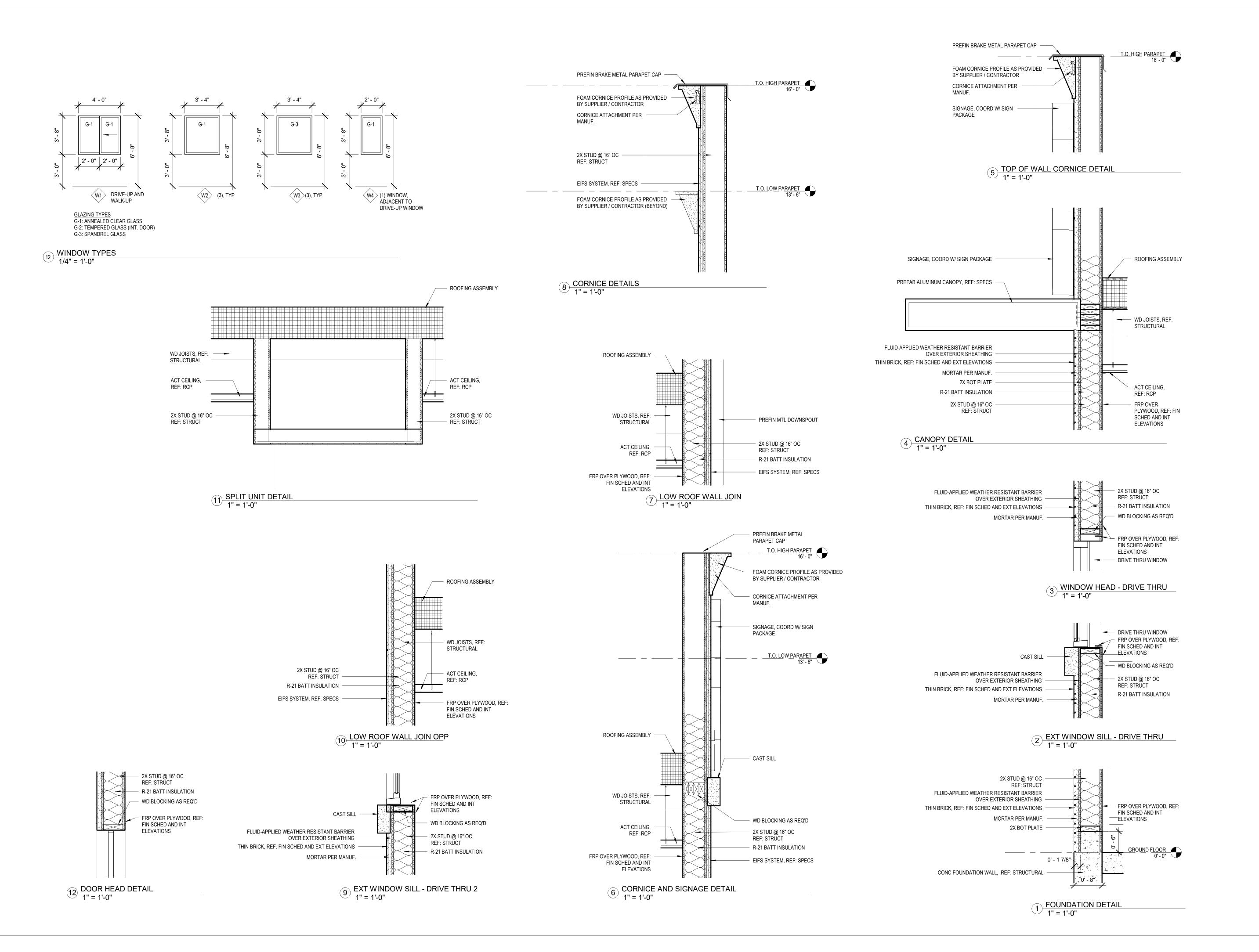
AC-4 ADA-COMPLIANT MIRROR, STAINLESS STEEL FRAME, 18x36, WALL MOUNTED ADA-COMPLIANT GRAB BARS AT TOILET, COORDINATE WITH DETAIL

AC-6 ADA-COMPLIANT SEAT COVER DISPENSER, SURFACE MOUNTED, BOBRICK MODEL B-221, STAINLESS STEEL

ACCESSORY LEGEND

E-1 MATERIAL TYPE PER SCHEDULE ACCESSORY MARK PER SCHEDULE

EQUIPMENT PER SCHEDULE ON SHEET EQ-101





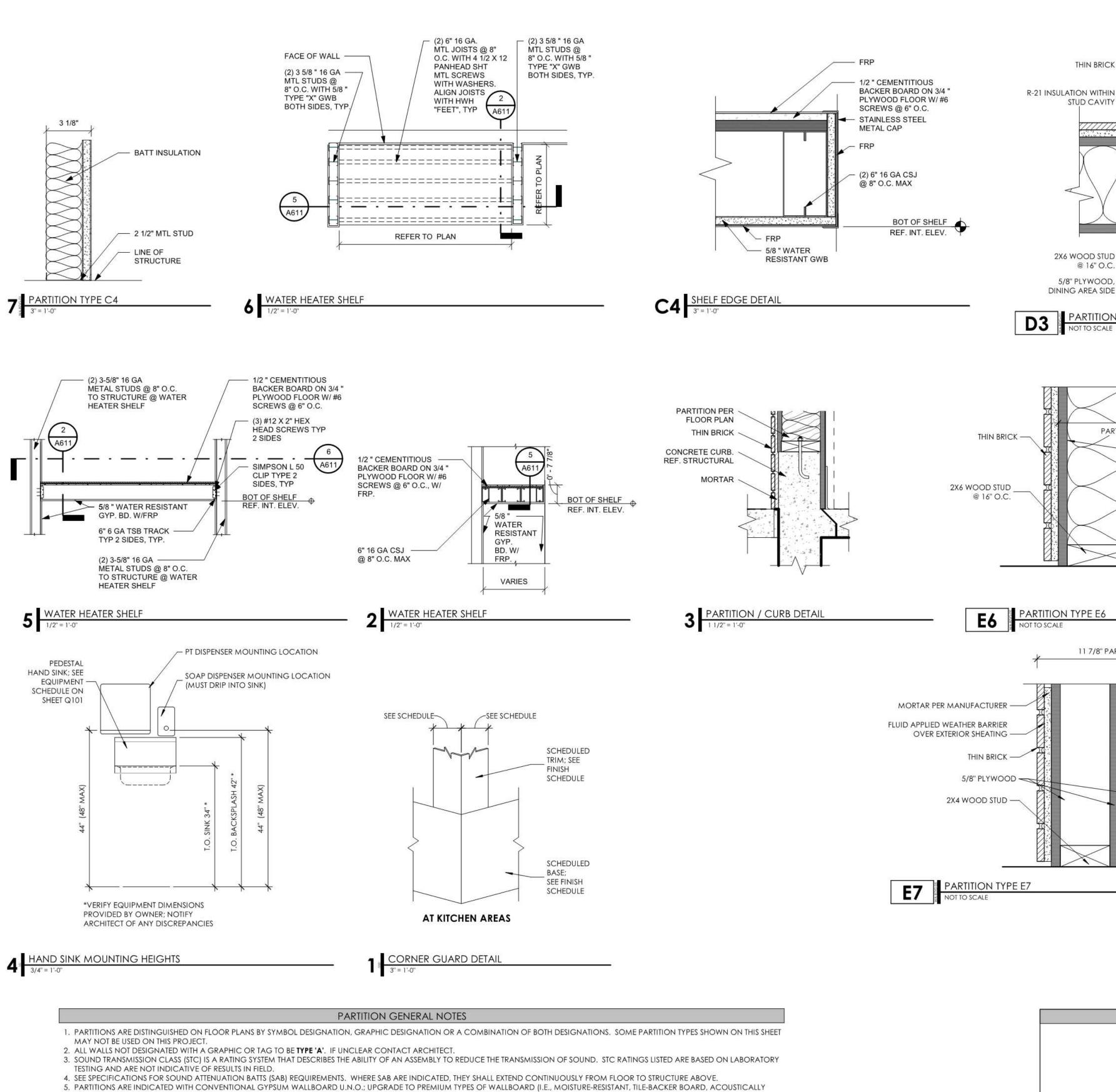
SCALE

SAVORY

SUMMIT, MO 64086

EE'S S

RD,



#### WALL TAG LEGEND TOP OF WALL CONDITION ALL WALL ASSEMBLIES EXTEND TO DECK UNLESS NOTED OTHERWISE PARTITION TYPE SEE DETAILS ON SHEET A612 (SEE DETAILS) STUD WIDTH (SEE CHART BELOW) B PARTITION EXTENDS TO BOTTOM OF CEILING TOP OF WALL CONDITION C NOT USED (SEE CHART BELOW) P PARTIAL HEIGHT WALL D PARTITION EXTENSION BOTTOM OF DECK PARTITION MODIFIER PARTITION MODIFIER (SEE CHART BELOW) PROVIDE SOUND ATTENUATION BATTS TO FILL STUD CAVITY TO TOP OF ADJACENT CEILING STUD WIDTH † PROVIDE R-21 THERMAL BATTS TO FILL STUD CAVITY WOOD STUD

R-21 INSULATION WITHIN

STUD CAVITY

2X6 WOOD STUD @ 16" O.C.

R-21 INSULATION WITHIN

R-21 INSULATION WITHIN

2X6 WOOD STUD

@ 16" O.C.

- SEALANT

STUD CAVITY

STUD CAVITY

5/8" PLY WOOD

**BOTH SIDES** 

— 2X4 WOOD STUD

— SEALANT

P.T. BOTTOM PLATE

2X4 WOOD STUD

@ 16" O.C.

P.T. BOTTOM

2X6 WOOD STUD

@ 16" O.C.

P.T. BOTTOM PLATE

PLATE

PARTITION TYPE E3

PARTITION TYPE E4

THIN BRICK -

THIN BRICK ----

STUD CAVITY

2X6 WOOD STUD

5/8" PLYWOOD, DINING AREA SIDE

@ 16" O.C.

PARTITION TYPE D3

11 7/8" PARTITION WIDTH



5/8" PLYWOOD,

SEALANT, BOTH

PARTITION WIDTH

5/8" PLY WOOD

SEALANT, BOTH

PARTITION WIDTH

5/8" PLY WOOD

SEALANT, BOTH

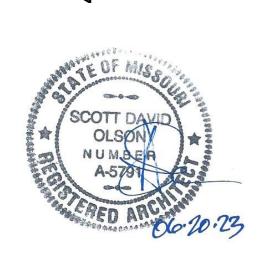
SIDES

BOTH SIDES

**BOTH SIDES** 

DINING AREA SIDE

# SUMMIT, MO 64086 S S W Ш RD, SWIG -400





1916 NW 79TH TERRACE KANSAS CITY, MO 64151

REVISION SCHEDULE Description Date

SHEET NAME	
OTILL I TO WIL	
PARTITION TYP	E2 AND
DETAILS	3
DLIAIL	)

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

AE611

- ENHANCED, ETC.) BASED ON THEIR LOCATION AND ACCORDING TO REQUIREMENTS LISTED IN THE SPECIFICATIONS.
- 6. 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.
- 7. ALL DIMENSIONS ARE TO COLUMN CENTERLINES OR TO FACE OF FRAMING, U.N.O. CLEAR DIMENSIONS INDICATE DIMENSION BETWEEN FINISHES.
- 8. FIRE RESISTANT AND FIRE RESISTANT SMOKE BARRIER RATINGS ARE TO CONTINUE THROUGH ALL OPENINGS IN RATED PARTITIONS. 9. SMOKE RESISTANT, FIRE RESISTANT, AND FIRE RESISTANT SMOKE BARRIER PARTITIONS SHALL EXTEND AND SEAL TO INSIDE FACE OF EXTERIOR SHEATHING, INCLUDING EXTENSIONS THROUGH SOFFITS. 10. REFER TO THE TOILET ACCESSORIES SHEET AND CASEWORK SHEET FOR MOUNTING DETAIL INFORMATION.
- 11. PARTITIONS REQUIRED TO BE SMOKE RESISTANT, FIRE RESISTANT, OR BOTH FIRE AND SMOKE RESISTANT ARE SHOWN GRAPHICALLY ON PLANS WITH HATCH PATTERNS.
- 12. 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.
- 13. ALL PARTITIONS EXTEND TO DECK UNLESS NOTED OTHERWISE.
- 14. ALL DRYWALL LEVEL 5 FINISH. 15. ALL WALLS THAT EXTEND TO ROOF DECK SHALL BE INSTALLED WITH A SLIP JOINT AT THE TOP OF WALL TO ROOF DECK CONNECTION.

#### 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

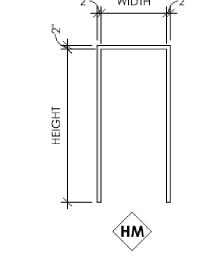
NOTE: SEE DOOR SCHEDULE TO MATCH APPROPRIATE FRAME TYPE WITH DOOR TYPES.

a. CENTER STOP ON THE DOOR LEAF WHEN OPENED

#### b. ONLY ALLOW FOR 90 DEGREE OPEN.

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

SCHEDULE SCHEDULE KEYNOTES 1) TEMPERED GLAZING AS SCHEDULED (2) SCHEDULED KICK PLATE BOTH SIDES



HOLLOW METAL FRAME

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

FLUSH

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

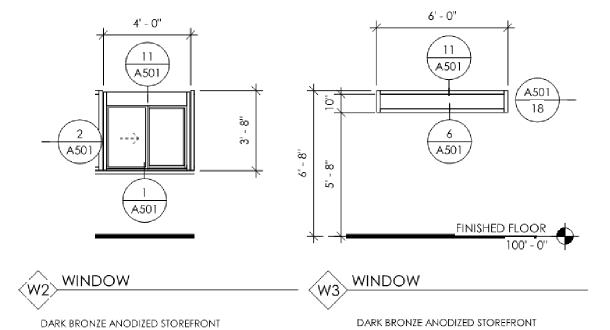
DOOR TYPE - GRAPHICAL SCHEDULE

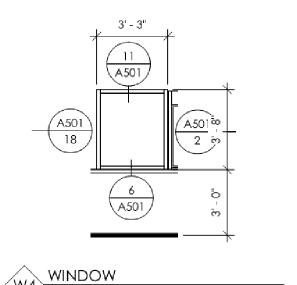
FLUSH

OPERABLE SLIDER

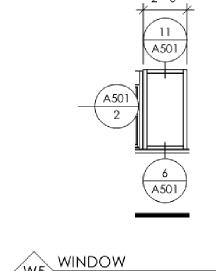
NOTE: SLIDE DIRECTION IS AS VIEWED FROM THE EXTERIOR

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





DARK BRONZE ANODIZED STOREFRONT



DARK BRONZE ANODIZED STOREFRONT



OPERABLE SLIDER

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 10" 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 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
- 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						
HARI	DWARE GROUP - 01 KITCHEN	FINISH	MANF				
1 SET	CONT. HINGE - 112HD	626	DON				
1 EA	ENTRANCE LOCK - ND53PD 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 FINISH				
3 EA	HW HINGES - 5BB1HW 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	

ICC/ANSI FIG 303.2 CHANGES IN LEVEL

ICC/ANSI FIG 303.3 BEVELED CHANGES IN LEVEL

2 GROUND AND FLOOR

PLYWOOD AT BOTH

CONT. SEALANT AT BOTH SIDES

HOLLOW METAL Door frame as —

DOOR AS SCHEDULED -

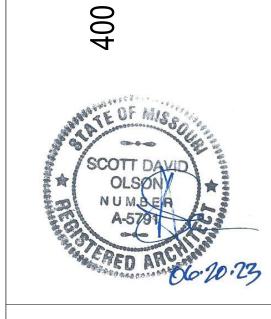
SCHEDULED

SIDES



64086

SUMMIT, MO ( S III RD **CHIPMAN** 





No.	Description	Date

SCHEDULED FRP

OVER

PLYWOOD,

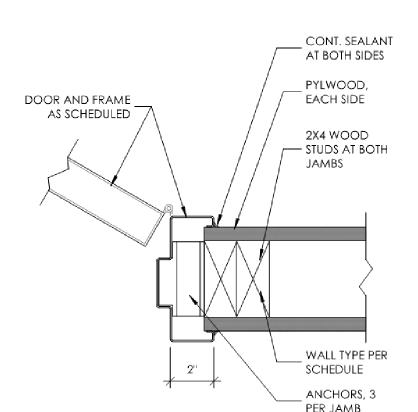
BOTH SIDES

SHEET NAME				
DOOR	AND	FRAM	ΕТ	YPE

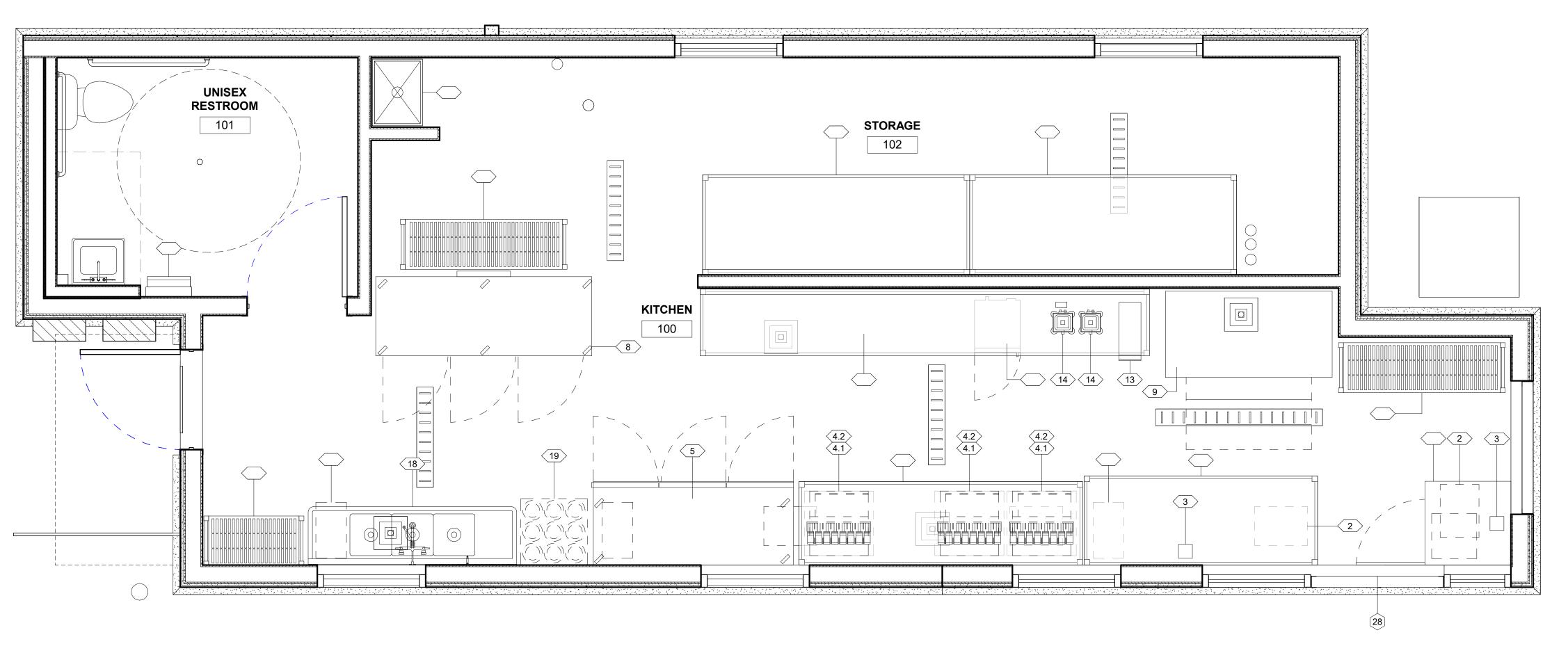
PROJECT NUMBER	210
DATE	06/16/202
DRAWN BY	PJ
CHECKED BY	SDO
SCALE	

AE621

— DOOR PER SCHEDULE R-21 BATT INSULATION — PLYWOOD SHIM AS REQ. THIN BRICK SCHEDULED WALL FINISH PER FINISH PLAN - R-21 BATT INSULATION ■— 5/8" PLYWOOD SCHEDULED FRP OVER PLYWOOD COVE STRIP — 5 1/4" x 9 1/2" LVL (ZINC OR PLASTIC) — CONT. SEALANT - 5/8" CEMENT BOARD HM FRAME, PAINTED SCHEDULED COVE EPOXY BASE CONT. SEALANT AND SCHEDULED FRP OVER BACKER ROD PLYWOOD ANCHORS, 3 DOOR PER SCHEDULE — PER JAMB CONT. SEALANT RESINOUS FLOORING; — HM FRAME, PAINTED RUN UP WALL 4 EXTERIOR DOOR JAMB



PER JAMB



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

" A	QTY	ITEM DESCRIPTION	MAKE	MODEL#	DIMENSIONS	ELECTRICAL DATA	PLUG (NEMA)	WATER	DRAIN	GAS	NOTES	ITE
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	CASH REGISTER (POINT OF SALE)	APG	VASARIO	16.2"W x 16.2"D x 4.3"H							
	2	RECEIPT PRINTER (POINT OF SALE)	EPSON	TM-M30	5"x5"x5"							$\neg$
	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	$\exists$
	1	DISPENSER TABLE	сиѕтом		96"L x 30"D x 30.63"H						6" ADJUSTABLE LEGS, STAINLESS STEEL	$\exists$
	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	П
	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	
	1	BULK CO2 TANK			46"W (DIA) x 55.6"H						STAINLESS STEEL, 450 LB. CAPACITY	
	1	BULK CO2 TANK STORAGE CABINET	CHART		32.6"W x 32.6"D x 76.5"H						LOUVERED PANELS, PRIMED PAINT-READY FINISH, REQUIRES ASSEMBLY, BOLT TO FLOO	OR
	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	
	1	ICE STORAGE BIN	FOLLETT	SG1650S-60	60"W x 31"D x 65"H						1660 LB. CAPACITY, 6" HIGH CUSTOM STEEL RISERS	_
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	
	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"	1	1466 LB/24-HOUR ICE PRODUCTION, REMOTE CONDENSER	_
	1	DROP-IN HAND SINK	ADVANCE TABCO	DI-1-25-1X	12"W x 14"D x 5"H				1-1/2" IPS		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.	_
	1	DROP-IN PREP SINK	ADVANCE TABCO	DI-1-168-1X	16"W x 14"D x 8"H				1-1/2" IPS		DECK MOUNTED FAUCET, STAINLESS STEEL BOWL, RECESSED IN COUNTERTOP.  CUTOUT SIZE = 18-1/4"W x 18-1/4"L x 1-1/4" RADIUS CORNERS.	
	1	HOT CHOCOLATE DISPENSER	CECILWARE	GB1HC-CP	7.75"W x 19"D x 26"H	120V/60HZ/1PH/15A	5-15P					
	2	BLENDER	BLENDTEC	E600A0801-A1GA1A	7"W x 8"D x 15"H	120V/50HZ/1PH/13A, 3HP, 1600W	5-15P					_
Г	1	FLOOR STANDING SHELVING	CAMBRO		36"W x 18"D x 96"H							7
	1	FLOOR STANDING SHELVING	CAMBRO		36"W x 24"D x 96"H							_
3	1	FLOOR STANDING SHELVING	CAMBRO		60"W x 12"D x 96"H							_
1	1	SYRUP RACK (BAG-IN-BOX)	U-LINE		96"W x 36"D x 84"H						14 GA. STEEL RACK	
2	1	CUP RACK	U-LINE		96"W x 36"D x 84"H						14 GA. STEEL RACK	_
	1	2A10BC FIRE EXTINGUISHER									PROVIDE WALL MOUNT BRACKET	_
	1	3-COMPARTMENT SINK	ELKAY	сиѕтом	76"L x 26"W x 44-3/4"H			1/2" HOT/COLD	(3) 1-1/2"	1	12" DRAIN BOARDS L & R, BACKSPLASH, BOWL SIZE 20"L X 16"W X 12"D	-
	1	PRE-RINSE FAUCET (3-COMP SINK)	T&S BRASS	MPY-8WLN-12-4C				1/2" NPT MALE INLETS			24" HOSE, 12" FAUCET, SPRING ACTION, SPLASH MOUNT	_
	3.5	STAINLESS STEEL WORK TABLE			24"W x 24"D x 30"H						16 GA. STAINLESS STEEL, UNDERSHELF, INTEGRATED CUP RISERS	_
	-	MOP SINK	JOHN BOOS	PBMS24X24-6-X	24"W x 24"D x 6"H				3-1/2"		16 GA. STAINLESS STEEL	_
		FAUCET (MOP SINK)	T&S BRASS	B-0665-BSTP				1/2" IPS MALE INLET			VACUUM BREAKER, 3/4" HOSE THREAD	_
		MOP RACK	RUBBERMAID	FASTTRACK							RAIL, HOOKS	_
		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	_
		WATER FILTRATION SYSTEM	ECOLAB					201 1111			3 CARTRIDGES, WALL MOUNTED	_
		KITCHEN DISPLAY SCREEN (KDS)			23.6"W x 14.9"H							_
		TRASH RECEPTACLE	RUBBERMAID	-	11"W x 20"D x 30"H					-	PLASTIC	-
		A/V RACK	HOFFMAN	EWMW242418	23.60"H x 23.60"W x 18.20"D						Cardine.	-
		SECURITY SAFE	SENTRY SAFE	DH-134E	14"W x 15.6"D x 27"H					1	DIGITAL LOCK, RELOCKING, TIME DELAY	-
		LID HOLDER	CUSTOM	D11 1342	96"L x 6"D x 6"H					-	STAINLESS STEEL	_
		WALL HUNG SHELVING	36"W x 14"D x 6"H		20 200 000 11					-	USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	_
		WALL HUNG SHELVING	36"W x 18"D x 6"H			1					USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	_
	_	WALL HUNG SHELVING	48"W x 18"D x 6"H								USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	-
		WALL HUNG SHELVING	30"W x 18"D x 6"H	1		1				_	USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	-
	_	WALL HUNG SHELVING WALL HUNG SHELVING	60"W x 18"D x 6"H							_		_
			A STATE OF THE STA	-		1				_	USE STAINLESS STEEL SCREWS & DOUBLE TRACK BRACKETS (WHERE APPLICABLE)	_
		COAT RACK CHEMICAL STATION	48"W x 18"D x 6"H ECOLAB			1			-		WALL MOUNTED  WALL MOUNTED	_

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

SAVORY

SCOTT DAVID
OLSONY
NUMBER
A-5791
ED ARC
OC. 20:23

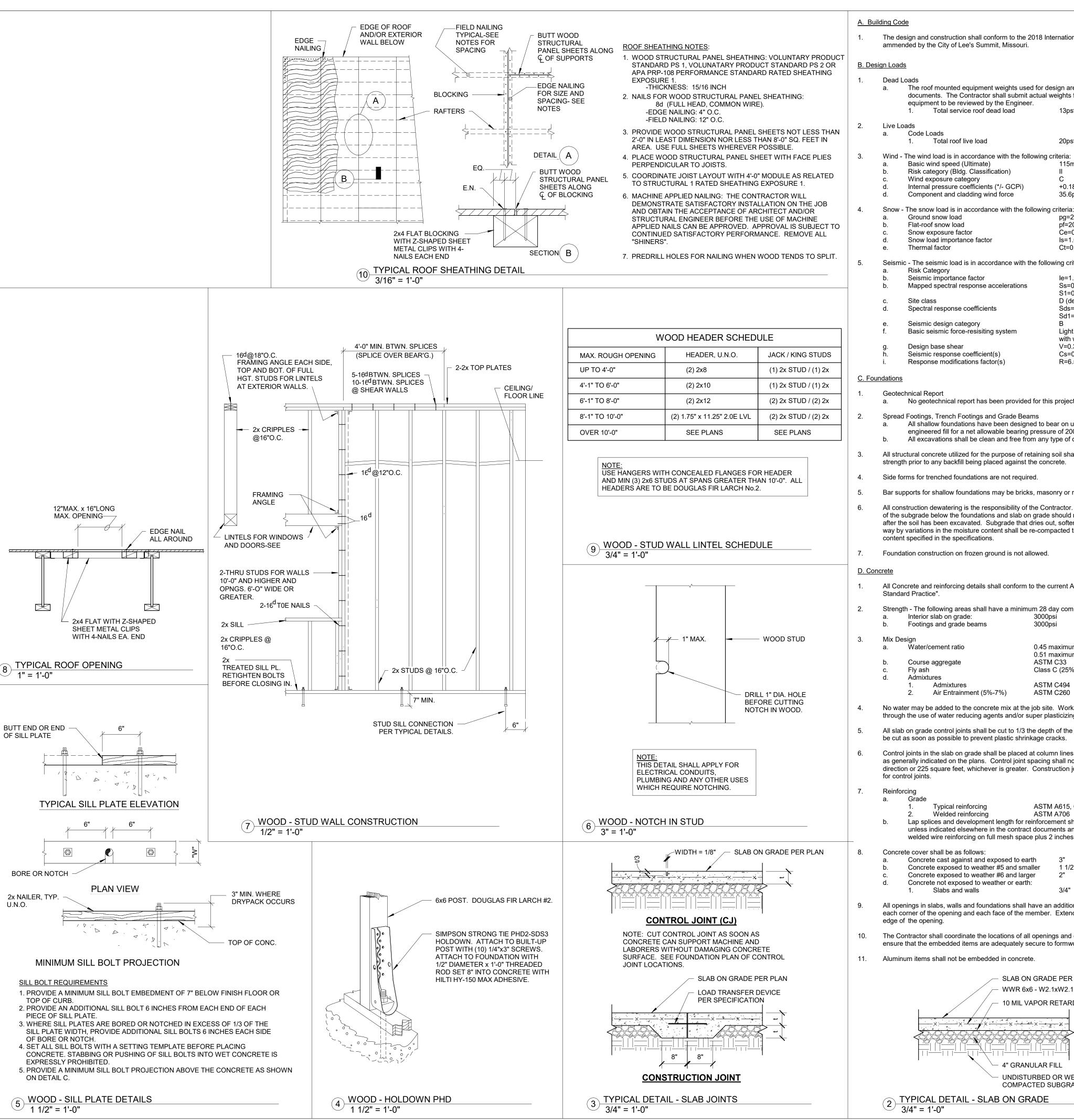


RE	VISIO	N SCHEDULE	
	No.	Description	Date
011		LANAT	
SH	EEIſ	NAME	

EQUIPMENT	PLAN
PROJECT NUMBER	21
DATE	06/16/20
DRAWN BY	P

PROJECT NUMBER	210
DATE	06/16/202
DRAWN BY	PJS
CHECKED BY	SDO
SCALE	1/2" = 1'-0

EQ101



#### A. Building Code

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

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. Total service roof dead load

+0.18/-.018

35.6psf

pg=20psf

pf=20psf

Ce=0.9

ls=1.0

Live Loads

Basic wind speed (Ultimate)

Wind exposure category

Ground snow load

Flat-roof snow load

Snow exposure factor

Snow load importance factor

Risk category (Bldg. Classification)

Internal pressure coefficients (\*/- GCPi)

Component and cladding wind force

Code Loads Total roof live load Wind - The wind load is in accordance with the following criteria:

Thermal factor Ct=0.9

Seismic - The seismic load is in accordance with the following criteria: Risk Category Seismic importance factor Mapped spectral response accelerations Ss=0.094 S1=0.069 Site class D (default) Spectral response coefficients Sds=0.100 Sd1=0.110 Seismic design category Light Framed Walls Sheathed Basic seismic force-resisiting system with wood structural panels.

V=0.37k Design base shear Seismic response coefficient(s) Cs=0.015 Response modifications factor(s) R=6.5

#### C. Foundations

a. No geotechnical report has been provided for this project.

Spread Footings, Trench Footings and Grade Beams

All shallow foundations have been designed to bear on undisturbed soil or engineered fill for a net allowable bearing pressure of 2000psf. All excavations shall be clean and free from any type of debris

All structural concrete utilized for the purpose of retaining soil shall attain full design strength prior to any backfill being placed against the concrete.

Side forms for trenched foundations are not required.

Bar supports for shallow foundations may be bricks, masonry or rock

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.

Foundation construction on frozen ground is not allowed.

All Concrete and reinforcing details shall conform to the current ACI 318 and CRSI "Manual of Standard Practice".

Strength - The following areas shall have a minimum 28 day compressive strength: Interior slab on grade: 3000psi Footings and grade beams 3000psi

Mix Design Water/cement ratio

0.45 maximum for slab on grade 0.51 maximum for all other concrete Course aggregate ASTM C33 Class C (25%) Fly ash

Admixtures ASTM C494 Admixtures Air Entrainment (5%-7%) ASTM C260

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.

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.

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.

Reinforcing a.

ASTM A615, Grade 60 Typical reinforcing ASTM A706 Welded reinforcing 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.

Concrete cover shall be as follows: Concrete cast against and exposed to earth Concrete exposed to weather #5 and smaller Concrete exposed to weather #6 and larger Concrete not exposed to weather or earth: Slabs and walls

All openings in slabs, walls and foundations shall have an additional 2-#5s on each side, in each corner of the opening and each face of the member. Extend reinforcing 2'-6" beyond the edge of the opening.

The Contractor shall coordinate the locations of all openings and embedded items and ensure that the embedded items are adequately secure to formwork before placing concrete.

Aluminum items shall not be embedded in concrete.

SLAB ON GRADE PER PLAN WWR 6x6 - W2.1xW2.1 10 MIL VAPOR RETARDER 4" GRANULAR FILL UNDISTURBED OR WELL COMPACTED SUBGRADE

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.

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.

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.

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.

Typical details are intended to represent typical conditions for the entire project.

All existing field and building conditions shall be verified by the Contractor before any other

Shop Drawings

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). 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. 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.

Provide the following submittals for review: Concrete Mix Design and Materials

Concrete Reinforcing Embedded items such as plates and angles

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

E. Miscellaneous

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.

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.

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

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.

Special Inspection Services required: a. Foundations

Bearing capacity Bearing elevation

Inspector shall notify the Architect and Engineer.

b. Concrete Reinforcing steel placement

Embedded items in concrete Concrete placement technique Sampling of fresh concrete

#### G. Wood

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

All wood framing shall be Douglas Fir-Larch #2 or better.

BRG

CL

FF

F.J

Material shall conform to PS 1. Stagger Panel ends of plywood decking. Panel clips shall be used for all roof sheathing.

All Engineered Lumber shall have the following minimum material properties Fb = 2600 psi

Fv = 285 psi

E = 1,900,000 psi

Fc (parallel) = 2510 psi Fc (perpendicular) = 750 psi

G = 125,000 psi

All Dimesion Lumber shall have the following minimum material properties

Fb = 900 psi Fv = 180 psi

E = 1,600,000 psi Fc (parallel) = 1,350 psi

Fc (perpendicular) = 625 psi

Any wood member that rests on or is in contact with concrete, earth or masonry shall be ACQ pressure treated.

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.

AFF ABOVE FINISH FLOOR K KIP (1000 POUNDS) ALT ALTERNATE KSF KIPS PER SQUARÉ FOOT ARCH ARCHITECT LONG LEG HORIZONTAL AR ANCHOR ROD BOT BOTTOM MAX MAXIMUM BEARING MECH MECHANICAL CENTER LINE MIN MINIMUM CONTRACTION JOINT MISC MISCELLANEOUS COL COLUMN NTS NOT TO SCALE CMU CONCRETE MASONRY UNIT OC ON CENTER CONC CONCRETE CONT CONTINUOUS DBA DEFORMED BAR ANCHOR REINF REINFORCING EACH FACE EXPANSION JOINT RTU ROOF TOP UNIT ELEV ELEVATION SLIP CRITICAL SIM EQ EQUAL SIMILAR EW EACH WAY STD STANDARD EXIST EXISTING TO TOP OF TOS TOP OF STEEL TYP TYPICAL UNO UNLESS NOTED OTHERWISE

FND FOUNDATION FLR FLOOR FTG FOOTING FV FIELD VERIFY GALV GALVANIZED HORZ HORIZONTAL

HSA HEADED STUD ANCHOR HSS HOLLOW STRUCTURAL SECTION INSIDE FACE

LLV LONG LEG VERTICAL POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH

VERT VERTICAL w/ WITH WP WORK POINT

GENERAL NOTES & ABBREVIATIONS

WWR WELDED WIRE REINFORCING

<sup>/</sup> 1 1/2" = 1'-0"

RD 64086

SAVORY

MANAGEMENT

OF MISSO

---

K. ANDREW

NUMBER

. PE-2006015942 : Ц

GILMORE :★

MAN MO 00 S-13 SWIG

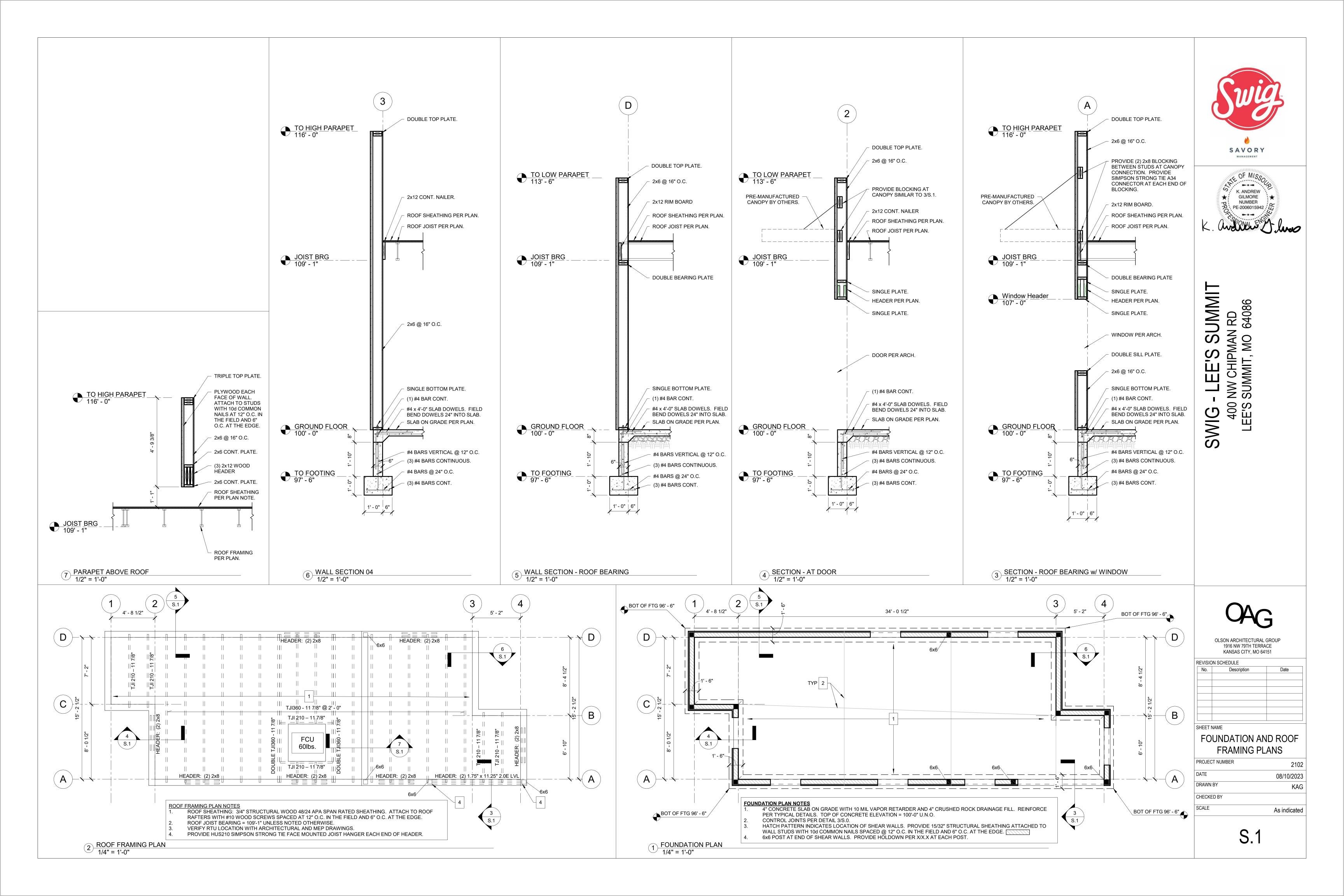


1916 NW 79TH TERRACE KANSAS CITY, MO 64151

No.	Description	Date
	<u>'</u>	

**GENERAL NOTES AND** TYPICAL DETAILS

PROJECT NUMBER 08/10/2023 DRAWN BY KAG CHECKED BY As indicated



#### **ELECTRICAL SYMBOLS LEGEND GENERAL REFERENCES/NOTATIONS:** HOME RUN TO PANEL. CIRCUIT NUMBERS, PHASE, NEUTRAL, AND GROUND CONDUCTORS INDICATED ALONG WITH ISOLATED GROUND CONDUCTOR IF APPLICABLE. MOUNT DEVICE +6" ABOVE TOP OF COUNTER TO BOTTOM OF DEVICE PARTIAL CIRCUIT MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTERLINE OF DEVICE CONDUIT INSTALLED CONCEALED ABOVE CEILING OR IN WALL DETAIL OR SECTION REFERENCE CONDUIT INSTALLED CONCEALED BELOW FLOOR SLAB OR UNDERGROUND FOODSERVICE EQUIPMENT DESIGNATION — -DC- — CONDUIT INSTALLED WITH DIRECT CURRENT POWER WIRING REVISION DESIGNATION CONDUIT TURNED UP OR DOWN AS NOTED EQUIPMENT DESIGNATION. FLEXIBLE CONDUIT FOR FINAL CONNECTION TO EQUIPMENT GROUND CONNECTION ABBREVIATIONS: SINGLE POLE SWITCH, +3'-10" OR AS NOTED THREE-WAY SWITCH, +3'-10" OR AS NOTED AFF/AFG ABOVE FINISHED FLOOR/GRADE NFPA NATIONAL FIRE PROTECTION ASSOCIATION KEY OPERATED SWITCH, +3'-10" OR AS NOTED NIGHT LIGHT **AUTHORITY HAVING JURISDICTION** WEATHERPROOF TOGGLE SWITCH, +3'-10" OR AS NOTED NON-FUSED BUILDING AUTOMATION SYSTEM NF WALL MOUNTED OCCUPANCY SENSOR, +3'-10" OR AS NOTED ELECTRICAL CONTRACTOR PLUMBING CONTRACTOR CEILING MOUNTED OCCUPANCY SENSOR **EMERGENCY** SPD SURGE PROTECTION DEVICE SIMPLEX RECEPTACLE, +18" OR AS NOTED ETR EXISTING TO REMAIN TYP TYPICAL ISOLATED GROUND SIMPLEX RECEPTACLE, +18" OR AS NOTED FIRE ALARM UNDERWRITERS LABORATORIES $\Rightarrow$ DUPLEX RECEPTACLE, +18" OR AS NOTED GENERAL CONTRACTOR UNLESS NOTED OTHERWISE # QUADRUPLEX RECEPTACLE, +18" OR AS NOTED MECHANICAL CONTRACTOR UNINTERRUPTIBLE POWER SUPPLY **€** GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED WEATHERPROOF NATIONAL ELECTRICAL CODE TR TR TR TAMPER RESISTANT RECEPTACLE, +18" OR AS NOTED WPWPWP H 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 PHOTOCELL, INSTALLED ON ROOF FACING NORTH 0 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 FCP FIRE ALARM CONTROL PANEL, FLUSH MOUNTED, TOP AT +6'-0" FSA 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 TS 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:** 

REFER TO LIGHT FIXTURE SCHEDULE FOR SPECIFICATION AND INFORMATION ON ALL LUMINAIRES.

REFER TO SPECIFICATIONS AND PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE, PROVIDED BY CONTRACTOR.

MOUNTING HEIGHTS INDICATED ARE MEASURED FROM FINISHED FLOOR TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE.

#### LIGHTING GENERAL NOTES

- CONNECT EXIT SIGNS, EMERGENCY AND NIGHT LIGHTS TO UNSWITCHED LIGHTING CIRCUIT, NOT CONTROLLED BY OCCUPANCY SENSORS, SWITCHES OR CONTACTORS.
- PROVIDE DEDICATED NEUTRAL WITH ALL DIMMING SYSTEM CIRCUITS. NO COMMON NEUTRALS SHALL BE ALLOWED.
- REFER TO "RECESSED LIGHTING FIXTURE SUPPORT DETAIL" FOR INFORMATION ON SUPPORT OF ALL RECESSED LIGHT FIXTURES.
- 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.
- REFER TO POWER PLANS FOR LOCATIONS OF ELECTRICAL EQUIPMENT.
- PROVIDE (2) ADDITIONAL #12 CONDUCTORS FOR ALL 0-10V DIMMING

#### POWER GENERAL NOTES

- VERIFY EXACT LOCATIONS OF HVAC AND PLUMBING EQUIPMENT. CONDUIT STUB-UPS AND POWER CONNECTIONS PRIOR TO ROUGH-IN.
- VERIFY EXACT LOCATION, MOUNTING HEIGHTS AND CONDUIT ROUTING FOR ALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS AND CO<sub>2</sub> SENSORS PRIOR TO ROUGH-IN.
- 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.
- MOUNT DEVICES INSTALLED ON EQUIPMENT, ON NON-REMOVABLE PANEL. COORDINATE LOCATION PRIOR TO COMMENCING ROUGH-IN

#### GENERAL ELECTRICAL NOTES

- 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.
- SWITCHBOARDS, PANELBOARDS, DISCONNECT SWITCHES, TRANSFORMERS AND CONTACTORS SHALL BE "LISTED" AND "IDENTIFIED" AS RATED FOR MINIMUM OF 75°C CONDUCTOR
- 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 (60°C) OR NO RATING SHOWN SHALL HAVE CONDUCTOR SIZE INCREASED TO CONFORM TO ADOPTED ELECTRICAL CODE AND UL/CUL NO. 489 REQUIREMENTS.
- CONDUIT INSTALLED INDOORS SHALL BE ELECTRICAL METALLIC TUBING (EMT), MINIMUM 3/4" OR AS NOTED.
- 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.
- 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.

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.
- DIRECT CURRENT WIRING SHALL BE (2) #10 IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.
- CONTROL VOLTAGE WIRING SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT.
- 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.
- 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.
- ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.
- . ALL RACEWAYS SHALL CONTAIN A GROUNDING ELECTRODE SIZED PER THE ADOPTED ELECTRICAL CODE.
- COORDINATE WORK ABOVE THE CEILING WITH OTHER TRADES TO PROVIDE THE GREATEST POSSIBLE CLEARANCE. CONDUIT RUNS SHALL BE RUN THROUGH TRUSSES WHERE POSSIBLE.
- VERIFY EXACT PLACEMENT OF ALL DEVICES SHOWN ON CONSTRUCTION DOCUMENTS PRIOR TO FINAL PLACEMENT.
- ALL RECESSED PANELBOARDS SHALL BE INSTALLED WITH MINIMUM OF (3) 3/4" CONDUITS STUBBED UP TO ACCESSIBLE CEILING SPACE FOR FUTURE USE.
- 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.
- 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.
- 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.



# **∑** S MAN $\bigcirc$





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

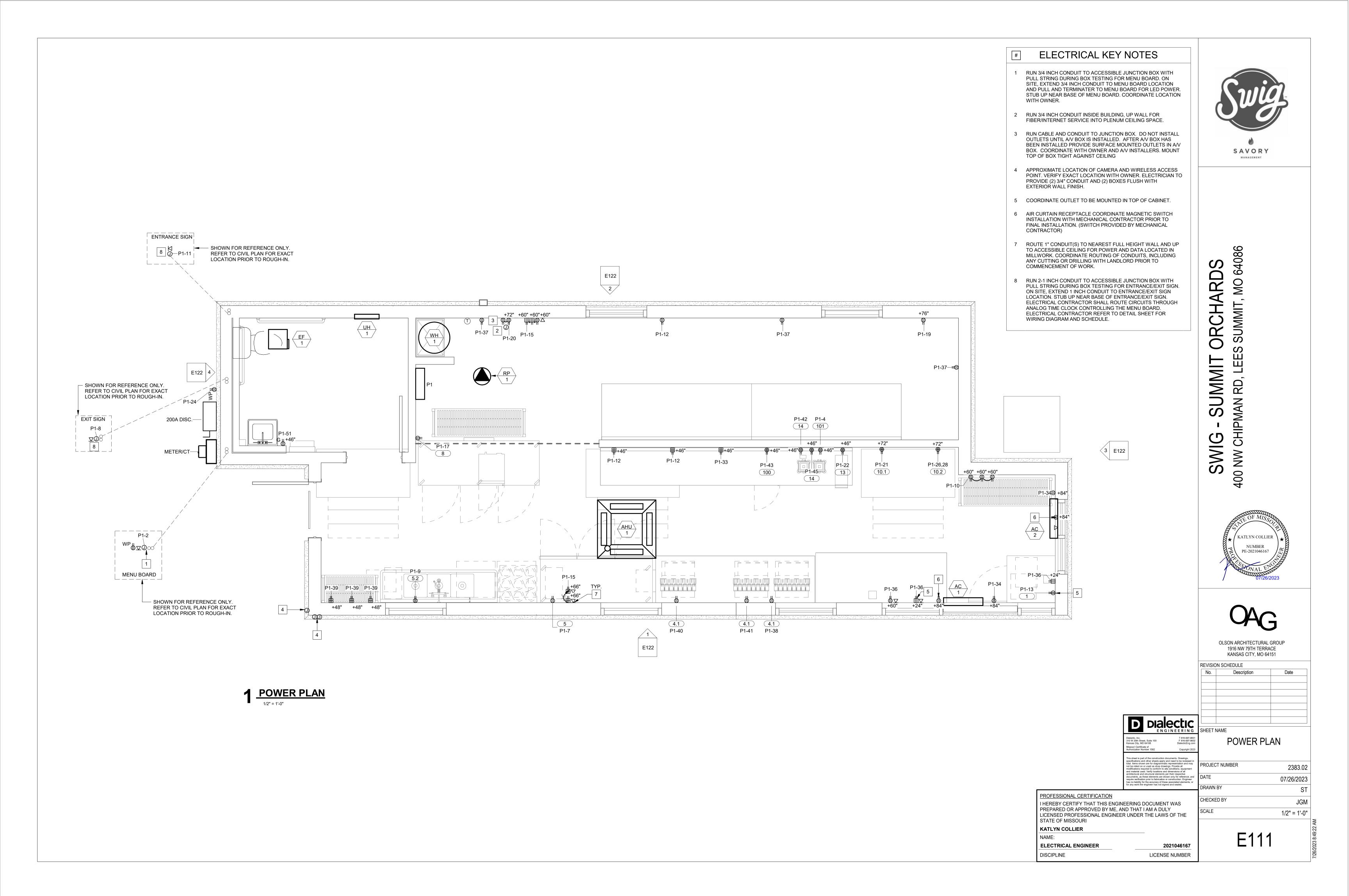
	REVISIC	ON SCHEDULE	
	No.	Description	Date
L			
ectic			
INEERING	SHEET	NAME	
T 816-997-9601 F 816-997-9602 DialecticEng.com	G	ENERAL NOTE	ES AND

**LEGENDS** 

2021046167 DISCIPLINE LICENSE NUMBER

PROFESSIONAL CERTIFICATION STATE OF MISSOURI **KATLYN COLLIER** 

is sneet is part of the construction documents. Drawings, cellifications and other sheets apply and need to be reviewed in tal. Items shown are for diagrammatic representation and may be relied no rused as shop drawings. Provide all odifications required to conform to site conditions, equipment of material used. Verify locations and dimensions of all chilectural and structural elements per their respective comments, as these elements are shown only for reference, and quire verification prior to fabrication or construction. Engineer is no liability for the accuracy of these associated elements, or rany work the engineer has not signed and sealed. PROJECT NUMBER 2383.02 07/26/2023 RAWN BY CHECKED BY JGM HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY SCALE LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE E001 **ELECTRICAL ENGINEER** 





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





Date

Checker

1/2" = 1'-0"

alectic		
ENGINEERING	SHEET NAME	
T 816-997-9601 100 F 816-997-9602 DialecticEng.com	POWER ROO	F PLAN
82 Copyright 2023		
construction documents. Drawings, sheets apply and need to be reviewed in		
diagrammatic representation and may as shop drawings. Provide all conform to site conditions, equipment locations and dimensions of all	PROJECT NUMBER	2383.0
al elements per their respective ments are shown only for reference, and of fabrication or construction. Engineer suracy of these associated elements, or	DATE	07/26/202
r has not signed and sealed.	DRAWN BY	Auth

REVISION SCHEDULE

E112

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

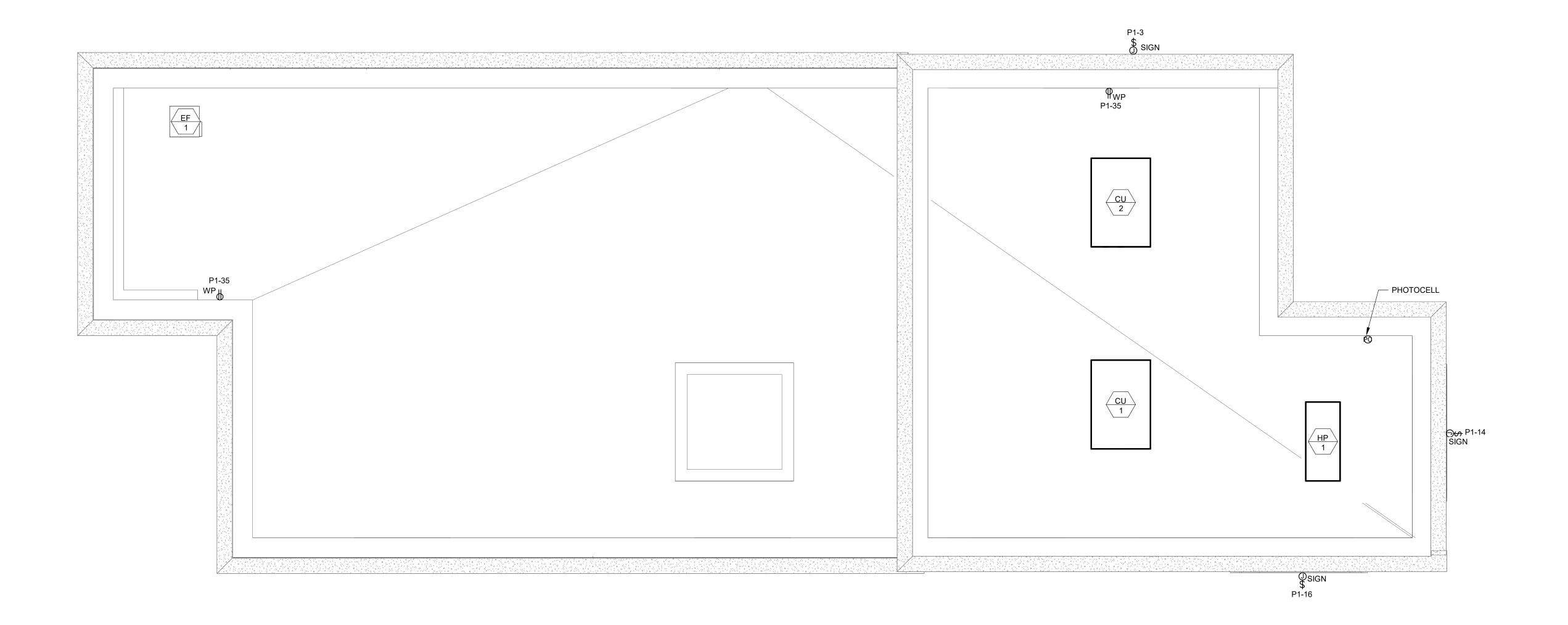
NAME:

ELECTRICAL ENGINEER

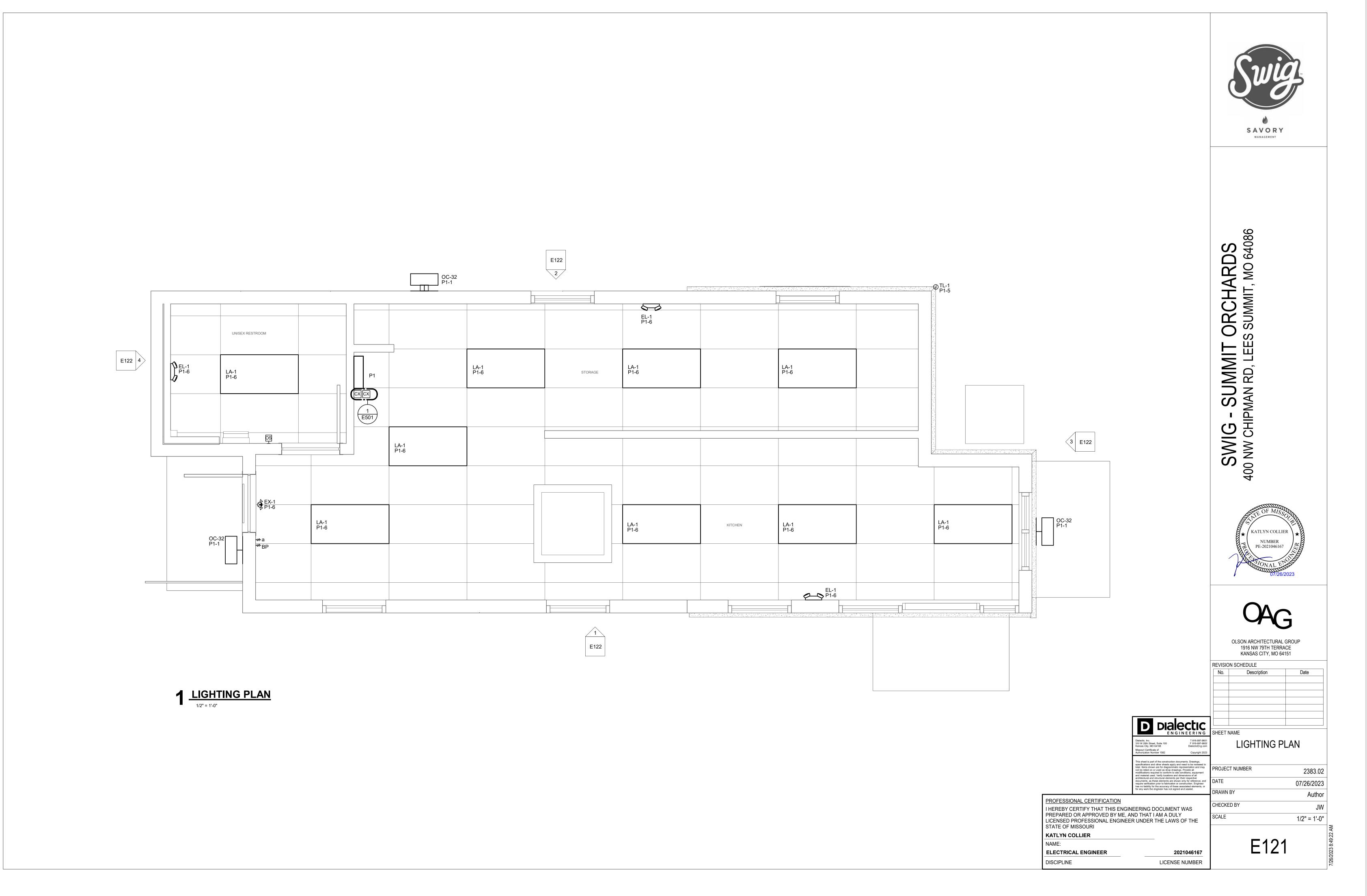
2021046167

LICENSE NUMBER

DISCIPLINE



# 1 POWER ROOF PLAN 1/2" = 1'-0"





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



Description

Date

2383.02

Author

JGM

07/26/2023

1/4" = 1'-0"

REVISION SCHEDULE

D Dialectic ELECTRICAL LIGHTING **ELEVATION** PROJECT NUMBER

CHECKED BY

2021046167

LICENSE NUMBER

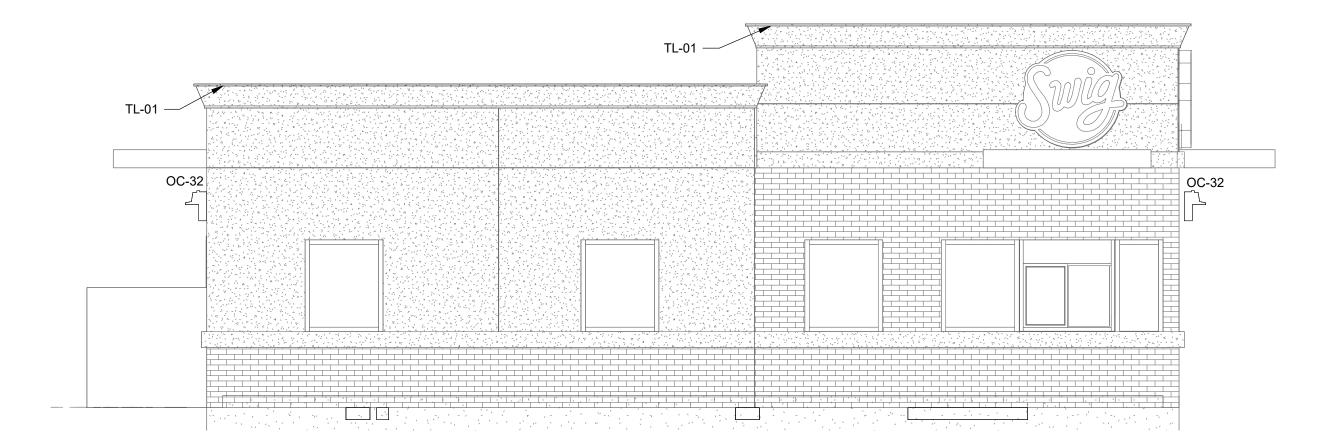
PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI KATLYN COLLIER

ELECTRICAL ENGINEER

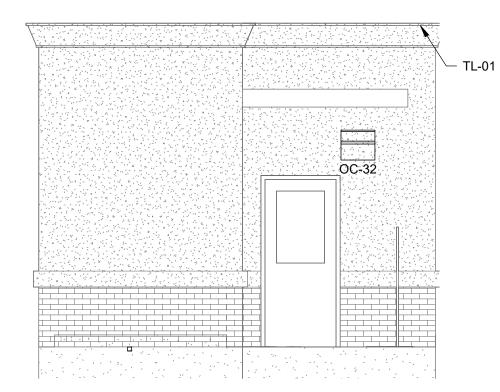
DISCIPLINE

E122

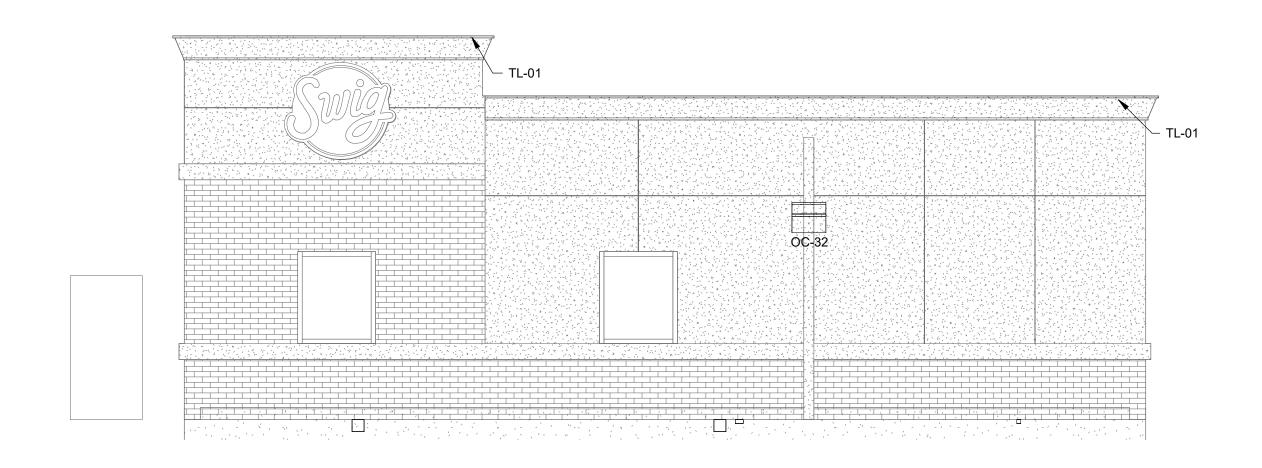
North Elevation 1 - a



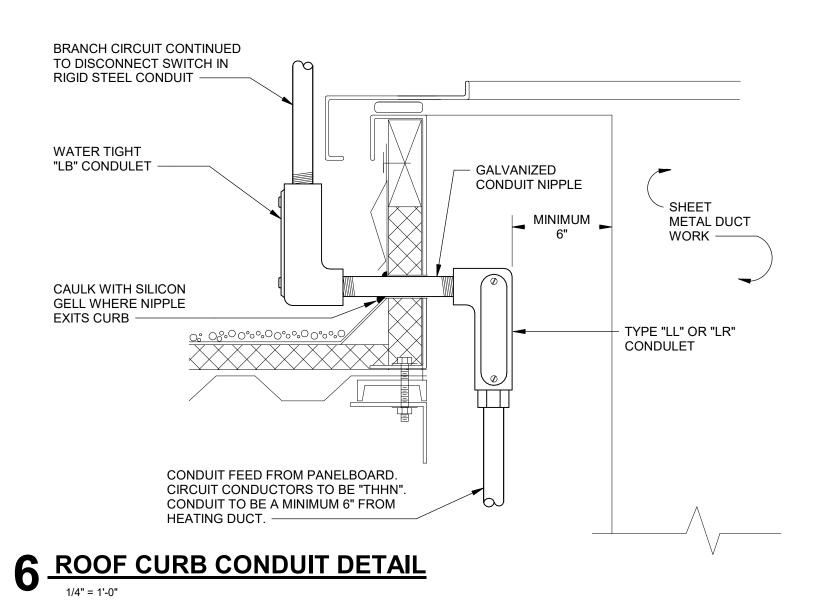
**East Elevation 1 - b**1/4" = 1'-0"

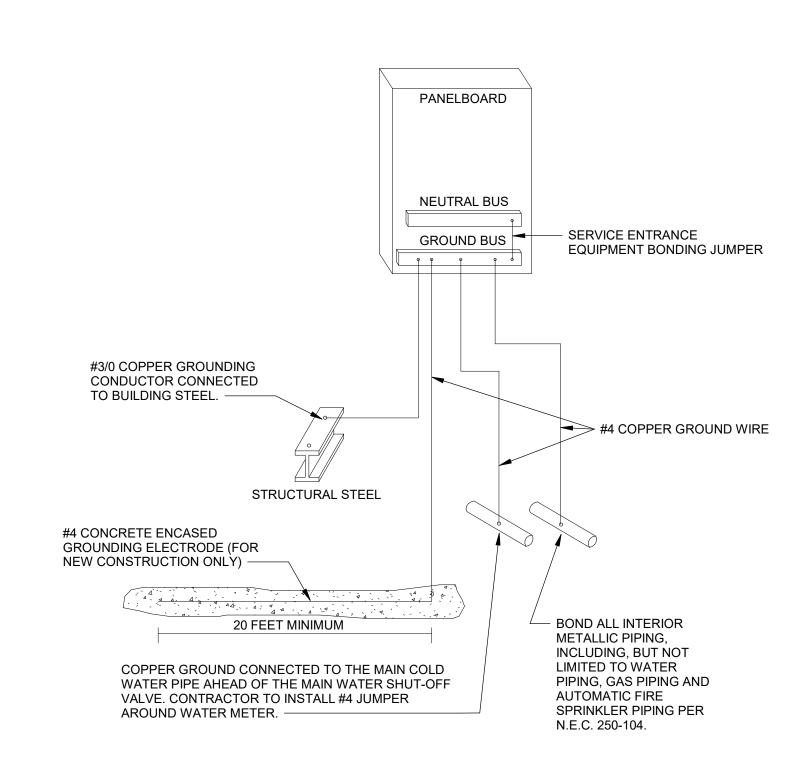


**South Elevation 1 - c** 

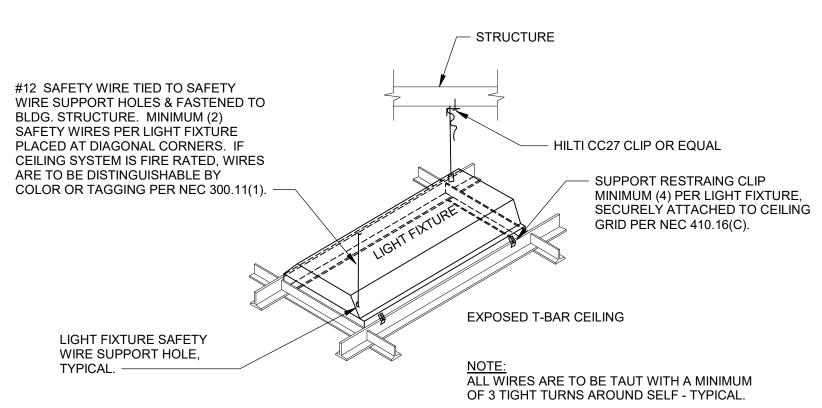


**2** West Elevation 1 - d

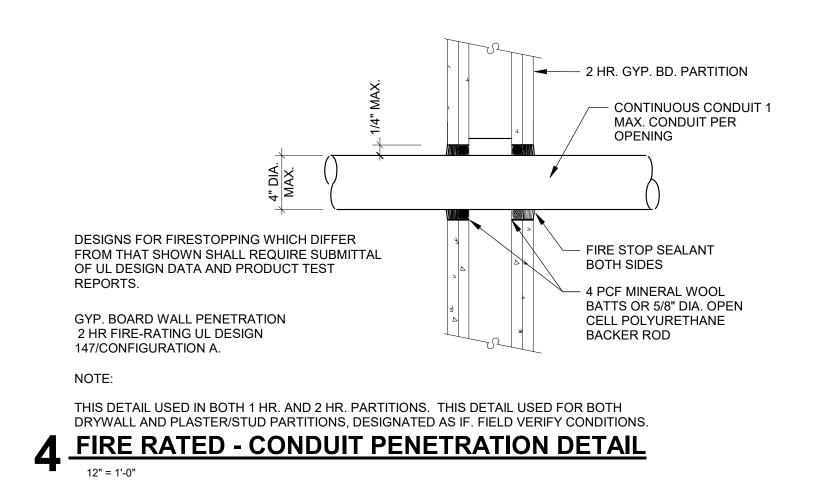


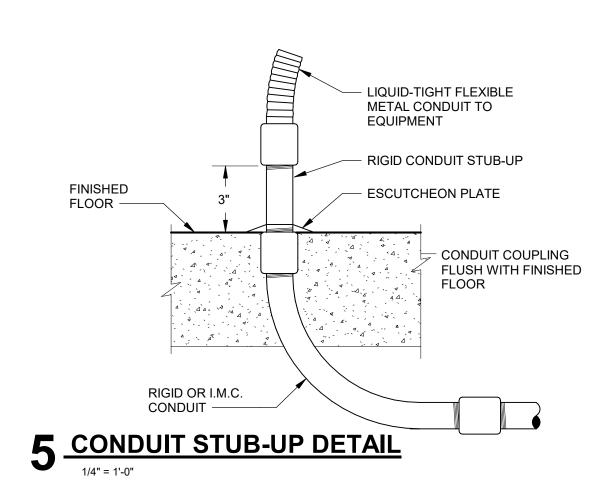


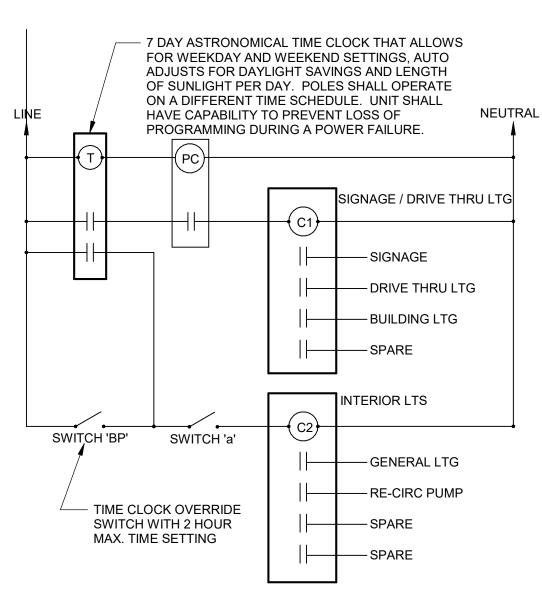
### SERVICE ENTRANCE GROUNDING



# 3 RECESSED LIGHTING FIXTURE SUPPORT DETAIL

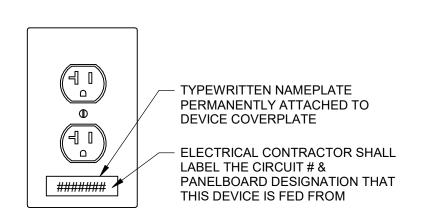






COORDINATE NUMBER OF POLES REQUIRED ON EACH CONTACTOR WITH PANEL SCHEDULES. MINIMUM INTERRUPTING RATING FOR ALL RELAYS AND CONTACTORS SHALL BE 10,000 A.I.C.

### LIGHTING CONTROL DIAGRAM



NOTE: THIS DETAIL SHALL APPLY TO ALL RECEPTACLES.

# 2 RECEPTACLE LABELING DETAIL



SAVORY MANAGEMENT



KANSAS CITY, MO 64151 REVISION SCHEDULE Description Date

D Diale	ectic INEERING	SHEET NAME	
Dialectic, Inc. 310 W 20th Street, Suite 100 Kansas City, MO 64108 Missouri Certificate of Authorization Number 1582  This sheet is part of the construction do		ELECTRIC	CAL DETAILS
specifications and other sheets apply an total. Items shown are for diagrammatic not be relied on or used as shop drawin modifications required to conform to site and material used. Verify locations and or	representation and may gs. Provide all conditions, equipment dimensions of all	PROJECT NUMBER	2383.
architectural and structural elements pe documents, as these elements are show require verification prior to fabrication or has no liability for the accuracy of these	n only for reference, and construction. Engineer associated elements, or	DATE	07/26/20
for any work the engineer has not signer	d and sealed.	DRAWN BY	Ç

CHECKED BY

SCALE

2021046167

LICENSE NUMBER

PROFESSIONAL CERTIFICATION 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

E501

2383.02

JGM

07/26/2023

As indicated

	LIGHTING FIXTURE SCHEDULE								
Туре	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 WALL PACK LED WITH INTEGRAL	LED	120 V	29 VA			
OC-32	LSI	XWM-3-LED-4L-40-UE-BLK-BB	90-MINUTE EMERGENCY BATTERY  BACKUP  BACKUP	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

- 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.
- 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								DISCONNECT						
EQUIPMENT TYPE	#	VOLTAGE PHASE	PANEL	CIRCUIT	MOCP	FEEDER	PROVIDER	SIZE-POLES	FUSES	NEMA	REMARKS			
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			CIRCU	JIT NAME									
OL	EQUIPMENT DESCRIPTION	VOLTAGE	PANEL	CIRCUIT	LOAD	MOCP	CONNECTION	FEEDER	NOTES				
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

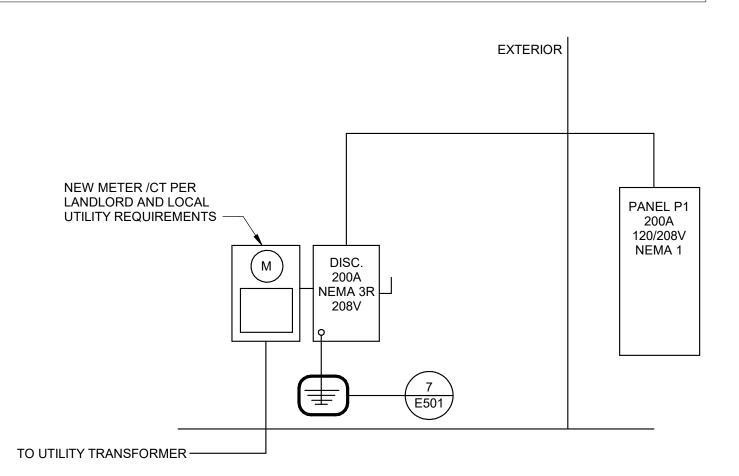
- 1 MAKE FINAL CONNECTIONS TO KITCHEN EQUIPMENT.
- 4 HARDWIRED CONNECTIONS SHALL BE MADE WITH SEAL TIGHT FLEXIBLE METAL CONDUIT WITH INSULTED GROUND WIRE INSTALLED WITH PHASE AND NEUTRAL CONDUCTORS. GROUND WIRE SHALL BE BONDED AT BOTH ENDS
- 3 VERIFY ALL EQUIPMENT REQUIREMENTS (INCLUDING THOSE SCHEDULED AND OWNER PROVIDED) PRIOR TO ROUGH-IN
- 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 SYSTEM: 120/208V - 3P FEEDER: SEE RISER DIAGR. OPTIONS:	Ι	I	B! M.		BUS 200 A MAINS: 200 A - MCB					CABINET MOUNTING: Surface LUGS: AIC RATING:						
LOAD DESCRIPTION	BKR SIZE	BKR POLE	NOTE	CKT NO.		A	E	3	(		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 U/C 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 - U/C FRDIGE	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	
СО	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 SIGN	
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		.1 - BEVERAGE DISPEN	
RCPT - LINE BUSTER	20 A	1		39			540	636			40	G	1	20 A 4	.1 - BEVERAGE DISPEN	
4.1 - BEVERAGE DISPENSER	20 A	1	G	41			0.0		636	1560	42	G	1	20 A	14 - BLENDER	
100 - MICROWAVE	20 A	1	G	43	1560	6000			- 000	1000	44		3	60 A	WH-1 (WATER HEATE	
14 - BLENDER	20 A	1	G	45	1000	0000	1560	6000			46					
UH-1	20 A	1		47			1000	0000	1500	6000	48					
EOD	20 A	1		49	0	200			1300	0000	50		1		TIMECLOCK / CONTACT	
TOILET RECEPTACLE	20 A	1		51	U	200	180				52		1		SPACE	
RE-CIRC PUMP -1	15 A	1	C2	53			100		60		54		1		SPACE	
SPACE		1	02	55					- 00		56		1		SPACE	
SPACE		1		57							58		1		SPACE	
SPACE		1		59							60		1		SPACE	
		I	I	I	PHA	ASE A: ASE B: ASE C:	1925 2029 2057	6 W		I		601	<b>ECTED</b> 32 W 7 A		<b>DEMAND</b> 55900 W 155 A	
LOAD CLASSIFICATION		CC	ONNECTE	ED LOA	D D	EMAND	FACTOR	R ES	STIMATE	D DEMA	ND			PANEL	TOTALS	
HVAC			16292	. VA		100.0	00%		1629	2 VA						
Lighting			4046	VA		125.0	00%		5058	3 VA			TOTAL (	CONN. LOA	<b>AD</b> : 60132 VA	
Lighting - Exterior			90 V	/A		125.0	00%		113	VA		Т	OTAL E	ST. DEMAN	<b>ID</b> : 55900 VA	
Motor			60 V	/A		100.	00%		60	VA		TOT	AL CON	N. CURRE	<b>NT</b> : 167 A	
Receptacle			5400	VA		100.0	00%		5400	) VA		TOTAL	DEMAN	ID CURREN	<b>NT</b> : 155 A	
Water Heater			18000	VA		100.0	00%		1800	0 VA						
Miscellaneous			1200	VA		100.0	00%		1200	) VA						
KITCHEN EQUIPMENT			15044	· VA		65.0	0%		9779	9 VA						

G - PROVIDE WITH GROUND FAULT CIRCUIT INTERRUPTER
C# - ROUTE CIRCUIT TO LIGHTING CONTACTOR INDICATED REFER TO LIGHTING CONTROL DIAGRAM ON DETAILS SHEET.

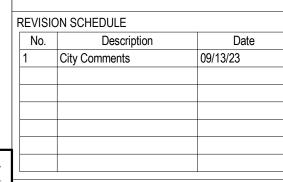
PANEL SCHEDULE NOTES:

LOC - HAND LOCK-OFF FOR 'OFF' POSITION



# 1 ELECTRICAL RISER DIAGRAM 1/2" = 1'-0"

	FEEDER SCHEDULE												
EQUIPMENT		ER											
MARK	RATING	PHASE	WIRE-CONDUIT SIZE	NOTES									
P1	200 A	120/208V - 3P	(4)#3/0 & (1)#6 G, 2-1/2"										



KATLYN COLLIER

NUMBER

PE-2021046167 09/13/2023

SAVORY

	ectic	SHEET
Dialectic, Inc. 310 W 20th Street, Suite 100 Kansas City, MO 64108 Missouri Certificate of Authorization Number 1582	T 816-997-9601 F 816-997-9602 DialecticEng.com Copyright 2023	EL
This sheet is part of the construction dos specifications and other sheets apply an		
total. Items shown are for diagrammatic not be relied on or used as shop drawing modifications required to conform to site and material used. Verify locations and of	representation and may gs. Provide all conditions, equipment dimensions of all	PROJE
architectural and structural elements per documents, as these elements are show require verification prior to fabrication or has no liability for the accuracy of these	n only for reference, and construction. Engineer associated elements, or	DATE
for any work the engineer has not signed	d and sealed.	DRAWN

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:

NAME:
ELECTRICAL ENGINEER 2021046167
DISCIPLINE LICENSE NUMBER

SHEET NAME

ELECTRICAL SCHEDULES

AND DIAGRAMS

PROJECT NUMBER 2383.02

DATE 07/26/2023

DRAWN BY JGM

CHECKED BY JW

SCALE 1/2" = 1'-0"

1/2" = 1'-E601

#### 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. FLECTRICAL 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
- 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 PRODUCTS WHICH COMPLY WITH BUILDING CODES. UL. AND IEEE 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
- 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 INTO 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, EMERGENCY 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
- 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 CABLING 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 COMMUNICATION/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
- REMOTE POWER PANELS 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-

ADOPTED ELECTRICAL CODE. EXACT WORDING TO BE VERIFIED WITH LOCAL

CONDITIONING DISCONNECTING MEANS. SIGN(S) TO BE IN CONFORMANCE WITH THE

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
- 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 CABLING 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/FT4 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	<u>PHASE</u>	
BLACK	Α	
RED	В	
BLUE	С	
WHITE	NEUTRAL	
GREEN	GROUND	
GREEN W/ YELLOW STRIP	ISOLATED GROUND	
<u>208Y/120V - UPS</u>	<u>PHASE</u>	
BLACK W/ ORANGE STRIP	Α	
RED W/ ORANGE STRIP	В	
BLUE W/ ORANGE STRIP	С	
WHITE W/ ORANGE STRIP	NEUTRAL	
GREEN W/ ORANGE STRIP	GROUND	
GREEN W/ YELLOW STRIP	ISOLATED GROUND	
IF THE SERVICE VOLTAGE I "C" COLOR CODING SHALL		E HI-LEG, THEN THE PHASE

#### 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.
- 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.
- 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 VOLTMETER AND AMMETER SHALL BE KEPT AVAILABLE AT ALL TIMES AND THIS CONTRACTOR SHALL PROVIDE SERVICE FOR TEST READINGS WHEN AND AS REQUIRED.
- 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)
- FLEXIBLE METAL CONDUIT
- LIQUID-TIGHT FLEXIBLE CONDUIT
- RIGID METAL CONDUIT RIGID NONMETALLIC CONDUIT (PVC)
- G. SURFACE RACEWAYS H. WIREWAY
- I. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLE

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.

#### 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.

#### WIRING METHOD:

- A. OUTDOORS: USE THE FOLLOWING WIRING METHODS: EXPOSED: INTERMEDIATE METAL CONDUIT.
- CONCEALED: INTERMEDIATE METAL CONDUIT
- 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.
- INDOORS OR OUTDOORS: CONNECTION TO VIBRATING EQUIPMENT AND HYDRAULIC, PNEUMATIC, OR ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT IN MOIST OR HUMID LOCATION 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. EXPOSED: ELECTRICAL METALLIC TUBING
- CONCEALED: ELECTRICAL METALLIC TUBING. CONCEALED, IN CONCRETE EMBEDDED, STRUCTURAL INTERIOR WALLS, OR
- ROOF DECK PENETRATIONS: INTERMEDIATE METAL OR RIGID METAL CONDUIT 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 USED 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 <u>CONSTRUCTION SCHEDULE.</u>
- 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. 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. 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.
- 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 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 **ELECTRICAL ENGINEER** 2021046167

DISCIPLINE



SAVORY

LIMMU3 S RD,





1916 NW 79TH TERRACE KANSAS CITY, MO 64151 **REVISION SCHEDULE** Description Date

OLSON ARCHITECTURAL GROUP

**D** Dialectic coffications and other sheets apply and need to be review it. Items shown are for diagrammatic representation and or be relied on or used as shop drawings. Provide auil pim diffications required to conform to site conditions, equip m thaterial used. Verify locations and dimensions of all hitectural and structural elements per their respective runnents, as these elements are shown only for reference, urie verification prior to fabrication or construction. Engine to no liability for the accuracy of these associated elements

LICENSE NUMBER

ELECTRICAL **SPECIFICATIONS** PROJECT NUMBER RAWN BY

CHECKED BY

SCALE

2383.02

JGM

07/26/2023

#### 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
- 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

#### 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
- B. STEEL BOXES: SHEET STEEL WITH WELDED SEAMS. WHERE NECESSARY TO PROVIDE A RIGID ASSEMBLY, CONSTRUCT WITH INTERNAL STRUCTURAL STEEL
- 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 RABBET 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 WIDTH SHALL 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
- 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
- . OCCUPANCY SENSORS F. MANUAL DIMMERS
- 2. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- A. WIRING DEVICES & ACCESSORIES:
- . COPPER WIRING DEVICES
- . CROUSE-HINDS CO. . HUBBELL INC.
- 4. LEVITON PASS AND SEYMOUR INC.

#### B. DIMMERS

- HUBBELL INC. LEVITON LIGHTING CONTROLS 3. LUTRON LIGHTING
- C. OCCUPANCY SENSOR LIGHTING CONTROL
- HUBBELL INC. LEVITON MANUFACTURING INC.
- . WATT STOPPER INC. 4. SENSOR SWITCH GREENGATE
- D. NETWORK LIGHTING CONTROLS:
- 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.
- . BLACK WHERE INSTALLED IN DARK CEILINGS
- 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

R. ORANGE - WHERE SUPPLYING A UPS CIRCUIT. (DEVICE ONLY, COVERPLATE

- 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
- 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
- 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 #CKSUV 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:

- . 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-

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 MATE 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).
  - 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:

- PROVIDE AC DIMMER CONTROLS FOR LIGHTING FIXTURES, 120 VOLT, 60 HERTZ, WITH PRESET SLIDE CONTROLS AND PUSHBUTTON FOR ON/OFF CONTROLS, SINGLE-POLE. WATTAGE SHALL BE AS INDICATED BELOW:
- a. ID1 = 1000 WATTS, LEVITON #IPI10-1LX (120/277V INCANDESCENT) b. D1 = 1200/1500 VA, LEVITON #IP710-LFZ (120/277V LED)
- c. LD2 = 400 VA, LEVITON #IPE04-1LX (ELECTRONIC LOW VOLTAGE)
- d. LD3 = 1000 VA, LEVITON #IPM10-1LX (MAGNETIC LOW VOLTAGE) e. FD1 = 1200/1500 VA, LEVITON #IP710-DLX (120/277V FLUORESCENT 0-10V)
- f. FD2 = 1000 VA, LEVITON #IPX10-10 (120V FLUORESCENT LINE VOLTAGE) g. FD3 = 1200 VA, LEVITON #IPX12-70 (277V FLUORESCENT LINE VOLTAGE)
- NETWORK CONTROLS 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 LMRC-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, BI-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 LMDC-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, FULL-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, AL/CU RATED. ALL BREAKERS SHALL BE BOLT-IN TYPE CONSTRUCTION. ALL BREAKERS SHALL BE UL489
- 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 SWITCH 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 AT 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 LOAD 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.
- 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:
  - 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 (BI-METAL AND METAL
  - MELTING ALLOY NOT ACCEPTABLE).
- INTERLOCKS CONTACTS AND SIMILAR DEVICES AS REQUIRED. 4. BUILT-IN 120 VOLT CONTROL CIRCUIT TRANSFORMER, FUSED FROM LINE
- 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:

PANELS AND EQUIPMENT NAME PLATE.

- 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

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 GROUNDED AS COMMON UNIT, AND SO CONSTRUCTED AS TO DAMPEN BALLAST GENERATED NOISE
- 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.



**∑** S RD, JAN

> KATLYN COLLIER NUMBER PE-2021046167



1916 NW 79TH TERRACE

KANSAS CITY, MO 64151

**REVISION SCHEDULE** Description Date

ELECTRICAL

**SPECIFICATIONS** 

2383.02

JGM

07/26/2023

PROJECT NUMBER

RAWN BY

CHECKED BY

SCALE

**D** Dialectic coffications and other sheets apply and need to be review it. Items shown are for diagrammatic representation and re-be relied on or used as shop drawings. Provide aguipm if material used. Verify locations and dimensions of all hitectural and structural elements per their respective unments, as these elements are shown only for reference, uire verification prior to fabrication or construction. Engine in on liability for the accuracy of these associated elements

2021046167

LICENSE NUMBER

PROFESSIONAL CERTIFICATION 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

**ELECTRICAL ENGINEER** 

DISCIPLINE

NC	OTES:
1.	PROVIDE WITH DISCONNECT P
^	

PROVIDE WITH DOOR MICROSWITCH

					AIR	HAND	DLING	UNIT	SCHED	ULE						
						DX (	COOLING C	OIL	HEAT PUMP	HEATING		ELECTRIC	CAL			
			AIR	OA					OUTPUT AT	OUTPUT					APPROX.	
MARK					EXT. S.P.		TOTAL	SENSIBLE	47°FDB	AT 10°FDB			MCA	MOCP	WEIGHT	
(AHU-#)	MANUFACTURER	MODEL	(CFM)	(CFM)	(IN. W.C.)	(°FDB/WB)	(BTU/HR)	(BTU/HR)	(BTU/HR)	(BTU/HR)	VOLTAGE	PHASE	(AMPS)	(AMPS)	(LBS)	NOTES
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

PROVIDE WITH CONDENSATE PUMP.

INDOOR UNIT POWERED FROM OUTDOOR UNIT. PROVIDE WITH MANAUFACTURER PROGRAMMABLE THERMOSTAT WITH INTEGRAL TEMPERATURE SENSOR.

PROVIDE FACTORY AUTHORIZED STARTUP OF EQUIPMENT INCLUDING STARTUP OF ANY FACTORY CONTROLS TO ENSURE PROPER SEQUENCING.

DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR. ACCEPTABLE ALTERNATES: LG. FUJITSU. DAIKIN.

	HEAT PUMP CONDENSING UNIT															
						COOLING	HEAT F HEAT		PHYSIC	AL DATA		ELECTRI	CAL		APPROX.	
MARK (HP-#)	MANUFACTURER	MODEL	EER	SEER	AMBIENT OAT (°FDB)	TOTAL (BTU/HR)	OUTPUT @ 47°F	HSPF	NO OF FANS	NO. OF COMP.	VOLTAGE	PHASE	MCA (AMPS)	MOCP (AMPS)	WEIGHT (LBS)	NOTES
1	MITSUBISHI	PUZ-A36NKA7	11.2	21.8	100	32,070	42,000	10.4	1	1	208	1	25	30	220	1-6
NOTES:																

INDOOR UNIT POWERED FROM OUTDOOR UNIT.

- PROVIDE FACTORY AUTHORIZED STARTUP OF EQUIPMENT INCLUDING STARTUP OF ANY FACTORY CONTROLS TO ENSURE PROPER SEQUENCING. ACCEPTABLE ALTERNATES: LG, FUJITSU, DAIKIN.
- PROVIDE WITH NEOPRENE PADS AT SUPPORT ATTACHMENTS.
- PROVIDE WITH DRAIN PAN HEATER

J.	I NOVIDE WITH DIVAINT ANTICATEN.
6.	DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR.

EXHAUST AND VENTILATION FAN SCHEDULE														
					PE	RFORMAN	CE		ELECTRIC	CAL		APPROX.		
MARK				DRIVE	AIR FLOW	EXT. S.P.	<b>FAN SPEED</b>				]	WEIGHT		
(EF <b>-</b> #)	MANUFACTURER	MODEL	TYPE	TYPE	(CFM)	(IN. W.C.)	(RPM)	VOLTAGE	PHASE	MOTOR WATTS	SERVES	(LBS)	ACCESSORIES	NOTES
1	GREENHECK	SP-A125	CEILING MOUNTED	DIRECT	70	0.35	1,100	120	1	20	RESTROOM	20	BD,DS,FSC	1,2

ACCESSORIES: BD-BACKDRAFT DAMPER, DS-DISCONNECT SWITCH, FSC-FACTORY MOUNTED AND WIRE SPEED CONTROLLER.

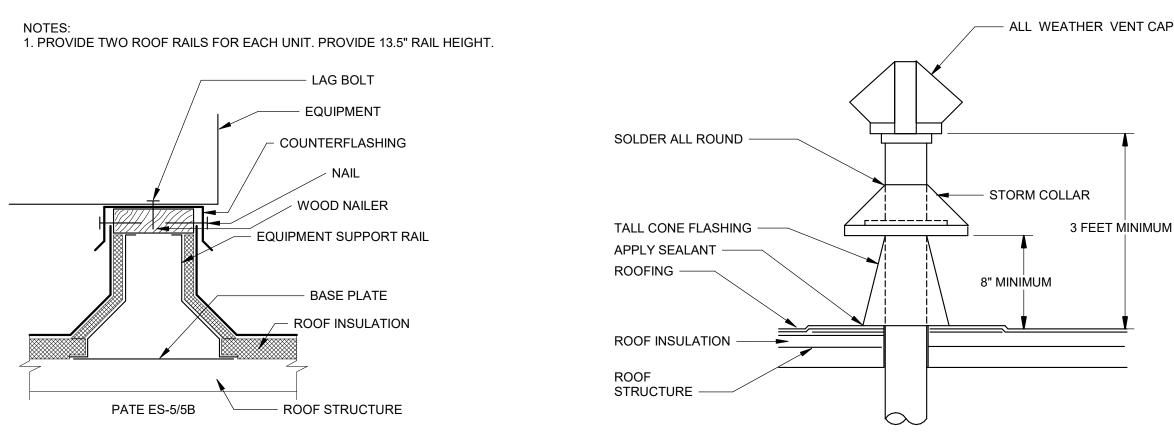
#### NOTES:

INTERLOCK FAN WITH RESTROOM LIGHTS. ACCEPTABLE ALTERNATES: COOK, PENNBARRY

UNIT HEATER SCHEDULE - ELECTRIC HEAT														
				ELECTR	IC HEAT		ELECTR	RICAL		APPROX.				
MARK				INPUT	OUTPUT			MCA	MOCP	WEIGHT				
(UH-#)	MANUFACTURER	MODEL	TYPE	(WATTS)	(BTU/HR)	VOLTAGE	PHASE	(AMPS)	(AMPS)	(LBS)	NOTES			
1	QMARK	AWH315	WALL MOUNTED	1500	5118	120	1	13	20	25	1,2			

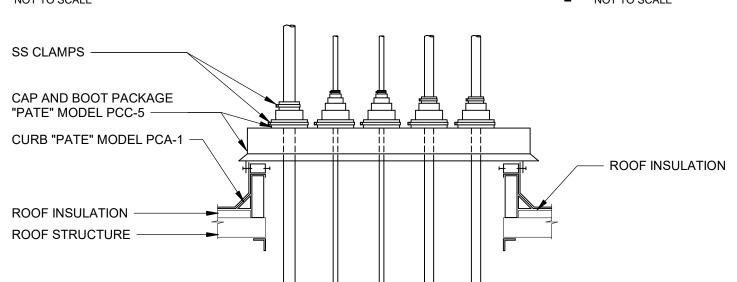
#### PROVIDE WITH INTEGRAL THERMOSTAT

DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR.



**DUCT THROUGH ROOF DETAIL** 

## 2 EQUIPMENT SUPPORT RAIL DETAIL NOT TO SCALE



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

#### 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. <u>INSTALL</u> 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 (GALVANNEALED) 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 723 CLASSIFIED. INSTALL PER MANUFACTURER INSTRUCTIONS. SEALANT SHALL BE APPROVED FOR PLENUM INSTALLATIONS AND MEET FLAME SPREAD AND SMOKE DEVELOPED RATINGS FOR PLENUM

DUCT INSULATION (ALL OUTSIDE AIR DUCTWORK): PROVIDE BLANKET TYPE FIBERGLASS INSULATION COMPLYING WITH ASTM C-553, 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:** CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW CONSTRUCTION DOCUMENTS. INFORMATION REGARDING COMPLETE WORK IS DISPERSED THROUGHOUT DOCUMENT SET AND CANNOT BE SUPPLY DIFFUSER ACCURATELY DETERMINED WITHOUT REFEERENCE TO COMPLETE DOCUMENT SET.

**RETURN GRILLE** 

EXHAUST GRILLE

EXHAUST AIR DUCT

**DUCTWORK TRANSITION** 

**DUCTWORK TRANSITION -**

RECTANGULAR TO ROUND

INCLINED RISE IN DUCTWORK

INCLINED DROP IN DUCTWORK

DUCT BRANCH TAKE-OFF

ROUND SPIN-IN WITH DAMPER

FLEXIBLE DUCT CONNECTION

CEILING MOUNTED EXHAUST FAN

HEAT PUMP CONDENSING UNIT

**THERMOSTAT** 

CONNECT TO EXISTING

REVISION DESIGNATION

NOTE DESIGNATION

**GENERAL REFERENCES/NOTATIONS:** 

CFM

THIS LEGEND.

SYMBOLS LEGEND NOTES

CEILING MOUNTED AIR HANDLING UNIT

MECHANICAL EQUIPMENT DESIGNATION

DIFFUSER DESIGNATION AND CFM

REFER TO PLANS AND SPECIFICATIONS FOR DETAILED DESCRIPTION

PROJECT MAY NOT USE ALL SYMBOLS OR DEVICES INDICATED ON

OF ALL DEVICES SHOWN, PROVIDED BY THIS CONTRACTOR.

**VOLUME DAMPER** 

FLEXIBLE DUCTWORK

SUPPLY DUCT ELBOW UP OR DOWN

RETURN DUCT ELBOW UP OR DOWN

EXHAUST DUCT ELBOW UP OR DOWN

DUCT ELBOW WITH FIXED TURNING VANES

SQUARE TO ROUND TAP WITH DAMPER

NEW SHEET METAL DUCTWORK

SUPPLY OR OUTSIDE AIR DUCT

DUCT SYMBOLS:

**EQUIPMENT:** 

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 RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION, NOTIFY ARCHITECT OF DISCREPANCIES BEFORE STARTING WORK.

MECHANICAL GENERAL NOTES

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.

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..

INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE.

CONTRACT LANDLORD APPROVED ROOFING CONTRACTOR TO FLASH AND SEAL RELATED ROOF PENETRATIONS TO MAINTAIN ROOFING

. 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.



SAVORY

SUMMIT S  $\sum_{}$ RD, **CHIPMAN** 





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

	REVISIO	ON SCHEDULE					
	No.	Description	Date				
•							
ì	SHEET	SHEET NAME					

invalues required to conform size convolutions, equipmaterial used. Verify locations and dimensions of all itectural and structural elements per their respective mments, as these elements are shown only for reference ire verification prior to fabrication or construction. Engine is liability for the necessary of these exceeded allowers.

PROFESSIONAL CERTIFICATION 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

2007025514 **MECHANICAL ENGINEER** DISCIPLINE LICENSE NUMBER

T816-997-9901 | NOTES, LEGENDS, SPECS

SCHEDULES, & DETAILS PROJECT NUMBER 07/26/2023

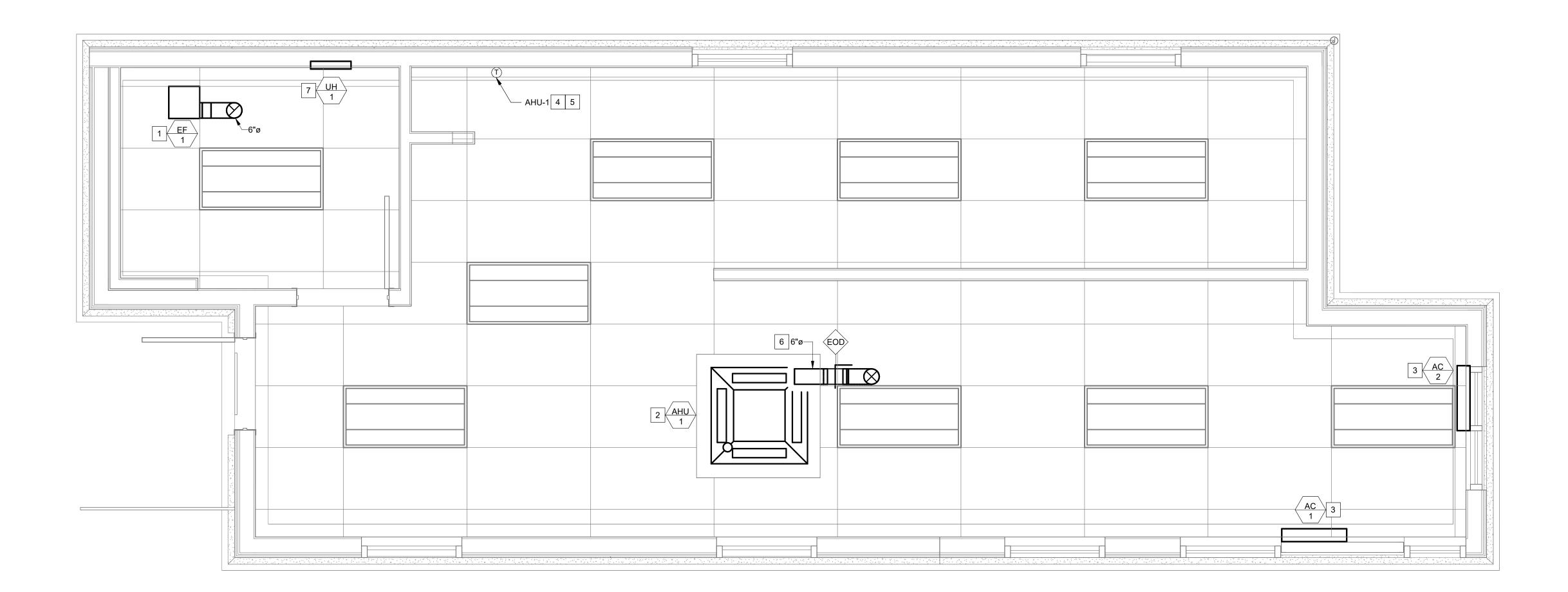
CHECKED BY SCALE As indicated

M001

3 PIPE ROOF PENETRATION DETAIL

NOT TO SCALE

- 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.
- PROVIDE RECESSED WALL MOUNTED UNIT HEATER. MOUNT HEATER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS 18" ABOVE FINISHED FLOOR.



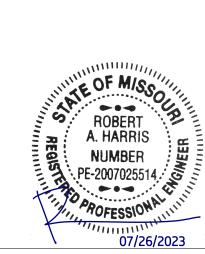
1 MECHANICAL PLAN

1/2" = 1'-0"

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

SAVORY

MANAGEMENT





	REVISION SCHEDULE								
	No.	Description	Date						
atia									
ctic									
EERING	SHEET NAME								
T 816-997-9601 F 816-997-9602 DialecticEng.com	MECHANICAL PLAN								

	electic
Dialectic, Inc. 310 W 20th Street, Suite 100 Kansas City, MO 64108 Missouri Certificate of Authorization Number 1582	T 816-997-960 F 816-997-960 DialecticEng.co Copyright 202
This sheet is part of the construc specifications and other sheets a	pply and need to be reviewed in
total. Items shown are for diagrar not be relied on or used as shop modifications required to conform and material used. Verify locatior architectural and structural elem documents, as these elements as require verification prior to fabrica has no liability for the accuracy o for any work the engineer has no	drawings. Provide all to site conditions, equipment is and dimensions of all ents per their respective re shown only for reference, and tition or construction. Engineer If these associated elements, or

PROJECT NUMBER

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

07/26/2023 CHECKED BY 1/2" = 1'-0"

M111

2383.02

AMA

EKE

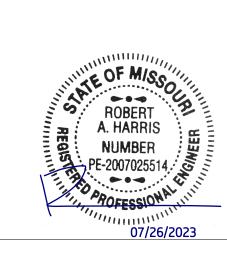
#### # MECHANICAL KEY NOTES

- 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.
- 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.



MANAGEMENT

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





2383.02

AMA

07/26/2023

1/2" = 1'-0"

REVISION SCHEDULE  No. Description Date  Placetic ENGINEERING SHEET NAME  T 816-997-9802 Delecticeng-own MECHANICAL ROOF PLAN								
PIAIECTIC SHEET NAME		REVISIO	REVISION SCHEDULE					
ENGINEERING SHEET NAME		No.	Description	Date				
ENGINEERING SHEET NAME								
ENGINEERING SHEET NAME								
ENGINEERING SHEET NAME								
ENGINEERING SHEET NAME								
ENGINEERING SHEET NAME								
ENGINEERING SHEET NAME		1						
ENGINEERING SHEET NAME	Dialectic							
T 816-997-9601 RECHANICAL ROOF PLAN		SHEET	NAME					
	Suite 100 F 816-997-9602	ME	CHANICAL RO	OF PLAN				

Dialectic, Inc.

T 816-997-9601

T 816-997-9601

F 816-997-9601

F 816-997-9601

F 816-997-9601

F 816-997-9602

DialecticEng.com

Missouri Certificate of
Authorization Number 1582

Copyright 2023

This sheet is part of the construction documents. Drawings, specifications and other sheets apply and need to be reviewed in total. Items shown are for diagrammatic representation and may not be relied on or used as shop drawings. Provide all modifications required to conform to site conditions, equipment and material used. Verify locations and dimensions of all

productions and other sheets apply and need to be reviewed in al. Items show are for diagrammatic representation and may be relied on or used as shop drawings. Provide all diffications required to conform to site conditions, equipment In material used. Verify locations and dimensions of all hitectural and structural elements per their respective ruments, as these elements are shown only for reference, and urine verification prior to fabrication or construction. Engineer in the liability for the accuracy of these associated elements, or any work the engineer has not signed and sealed.

DRAWN BY

CHECKED BY

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

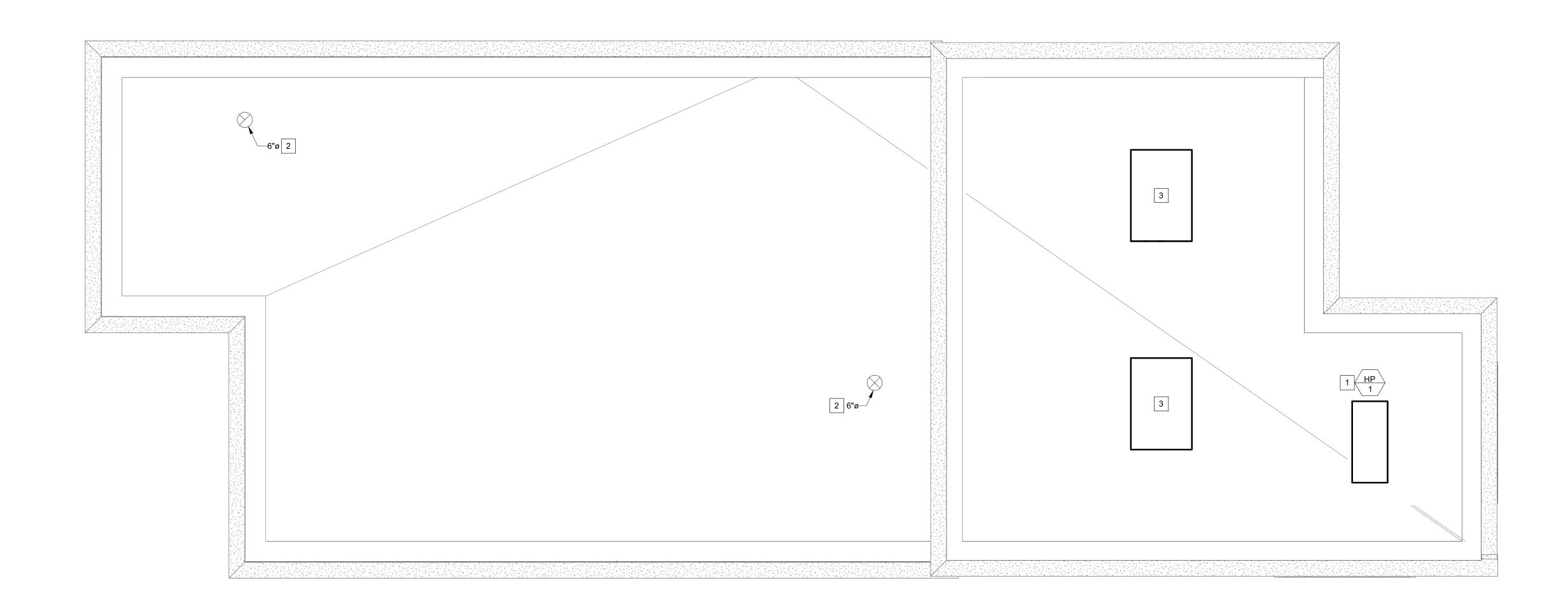
NAME:

MECHANICAL ENGINEER

DISCIPLINE

LICENSE NUMBER

M112



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

#### 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 FUNCTIONIONG PLUMBING SYSTEM ARE INCLUDED AS A

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 OBSCURE 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

- REFER TO PLUMBING SPECIFICATION ELSEWHERE IN DRAWINGS FOR FURTHER INFORMATION AND REQUIREMENTS FOR PLUMBING CONTRACTOR.
- 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.
- 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.
- 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.
- 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.
- PROVIDE WATER HAMMER ARRESTORS THROUGHOUT WATER SYSTEMS AS REQUIRED PER "WATER HAMMER ARRESTERS" DETAIL.
- 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.
- 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.
- 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.
- VERIFY SERVICE CONNECTION POINTS, SIZES, ELEVATIONS AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITY COMPANIES AND/OR CIVIL ENGINEER, AS APPLICABLE.
- 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.
- 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 PLUMBING CONTRACTOR RI **ROUGH-IN** TYP **TYPICAL UNLESS NOTED OTHERWISE** UNO VTR VENT THRU ROOF WALL CLEANOUT WCO CVICTIMO

(⊨)	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/STANDPIP
	HOT WATER (HW)
	HOT WATER RETURN (HWR)
——D——	CONDENSATE LINE (D)
	PLUMBING VENT (V)
	PLUMBING VENT (V) - BELOW SLAB/GRADE
	SANITARY WASTE (SAN) - BELOW SLAB/GRAD
<del></del>	GREASE WASTE (GW) - BELOW SLAB/GRADE

#### GENERAL REFERENCES/NOTATIONS:

#

CONNECT TO EXISTING PLAN NOTE DESIGNATION

STORM LINE (ST) - ABOVE SLAB/GRADE

— ST — STORM LINE (ST) - BELOW SLAB/GRADE

XX FIXTURE/EQUIPMENT NOTE DESIGNATION # FIRE SPRINKLER NOTE DESIGNATION

FOODSERVICE EQUIPMENT DESIGNATION

# REVISION DESIGNATION

HVAC EQUIPMENT DESIGNATION PIPE SYMBOLS:

→ PIPE TURNING UP/DOWN <del>COLOR OF</del> TEE TURNING UP/DOWN → IDIT SHUTOFF VALVE (BALL TYPE) **├** 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.



SAVORY

RD,





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

	REVISIO	IN SCHEDULE	
	No.	Description	Date
RING	SHEET	NAME	
16-997-9601 16-997-9602 cticEng.com	G	<b>ENERAL NOTE</b>	ES AND

**LEGENDS** 

RAWN BY

SCALE

electrications and other sheets apply and need to be reviewed in lat. Items shown are for diagrammatic representation and may be relied on or used as shop drawings. Provide all publications required to conform to site conditions, equipment of material used. Verify locations and dimensions of all chitectural and structural elements per their respective courants, as these elements are shown only for reference, and quire verification prior to fabrication or construction. Engineer is no liability for the accuracy of these associated elements, or PROJECT NUMBER liability for the accuracy of these associated elen y work the engineer has not signed and sealed.

LICENSE NUMBER

PROFESSIONAL CERTIFICATION 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

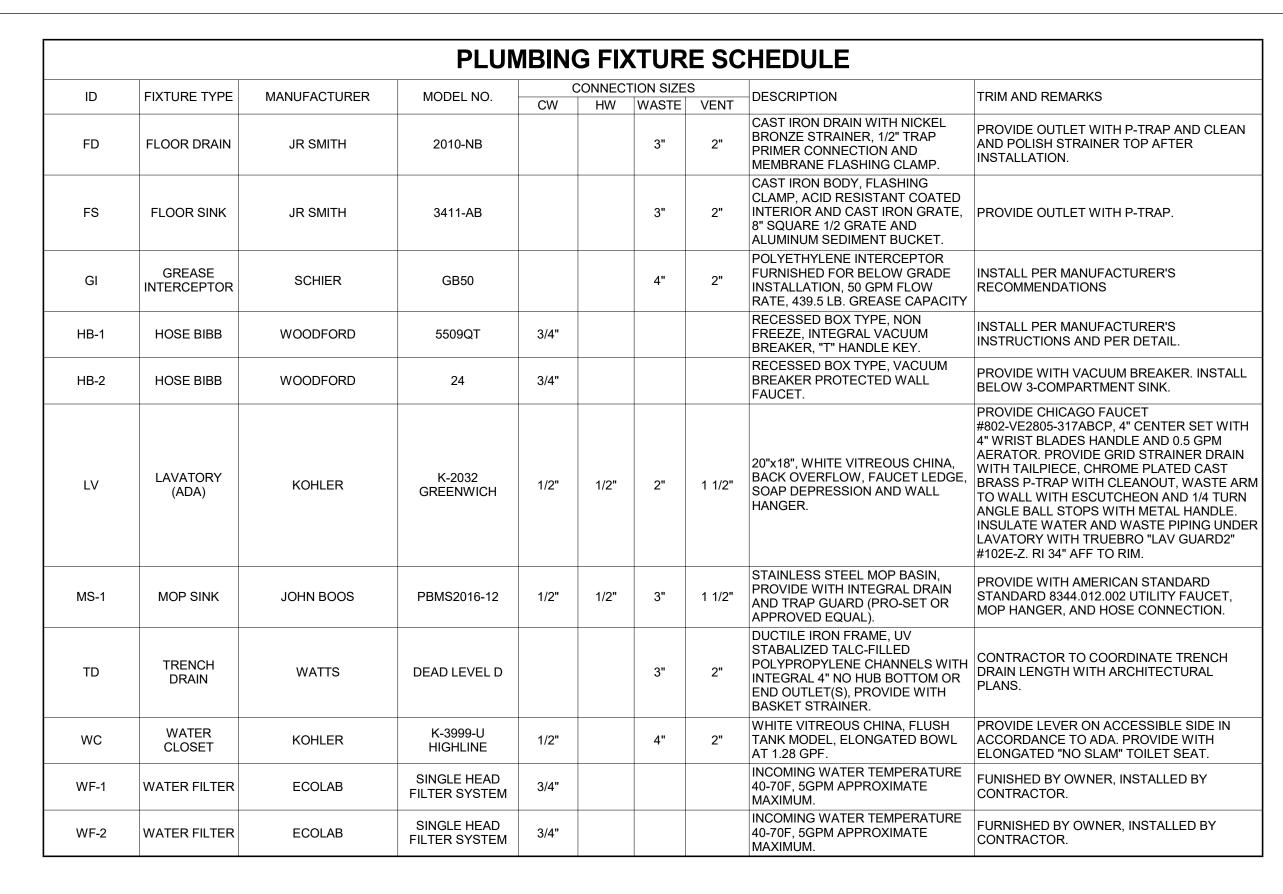
NAME:

DISCIPLINE

ROBERT HARRIS **MECHANICAL ENGINEER** 2007025514 CHECKED BY P001

2383.02

07/26/2023



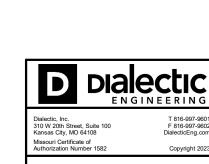
	PLUMBING EQUIPMENT SCHEDULE								
TYPE FIXTURE TYPE MANUFACTURER MODEL ELECTRICAL DATA DESCRIPTION TRIM									
ITPE	FIXTURE TYPE	MANUFACTURER	IVIODEL	VOLT	PHASE	WATT	DESCRIPTION	TRIM AND REMARKS	
RP	RECIRCULATION PUMP	BELL AND GOSSETT	ECORCIRC 19-16	120 V	1	60 W	0.5 GPM, 6 FT CORD WITH PLUG	PROVIDE 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									
			WATER		WASTE				
ITEM	DESCRIPTION	CW	HW	FW	IW	DIRECT	VENT	NOTES	
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"	-	-	-	-		

WATER TO SODA DISPENSERS PROVIDED BY VENDOR FROM BELOW GRADE CONDUITS.
 ROUTE WASTE TO INDIRECT DRAIN TO FLOOR SINK PER "INDIRECT DRAIN" DETAIL.

5. CONNECT WASTE TO 3-COMPARTMENT SINK PER "UTILITY SINK" DETAIL.

PROVIDE WATTS #SD-2 OR APPROVED EQUAL, BACKFLOW PREVENTER MEETING ASSE 1032.
 PROVIDE WATTS #LF007 OR APPROVED EQUAL, BACKFLOW PREVENTER MEETING ASSE 1015.



Kansas City, MO 64108

Missouri Certificate of
Authorization Number 1582

Copyright 2023

This sheet is part of the construction documents. Drawings, specifications and other sheets apply and need to be reviewed in total. Items shown are for diagrammatic representation and may not be relied on or used as shop drawings. Provide all modifications required to conform to site conditions, equipment and material used. Verify locations and dimensions of all architectural and structural elements per their respective documents, as these elements are shown only for reference, and require verification prior to fabrication or construction. Engineer has no liability for the accuracy of these associated elements, or for 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

ROBERT HARRIS

NAME:

NAME:

MECHANICAL ENGINEER

DISCIPLINE

LICENSE NUMBER



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

ROBERT
A. HARRIS
NUMBER
PE-2007025514
07/26/2023



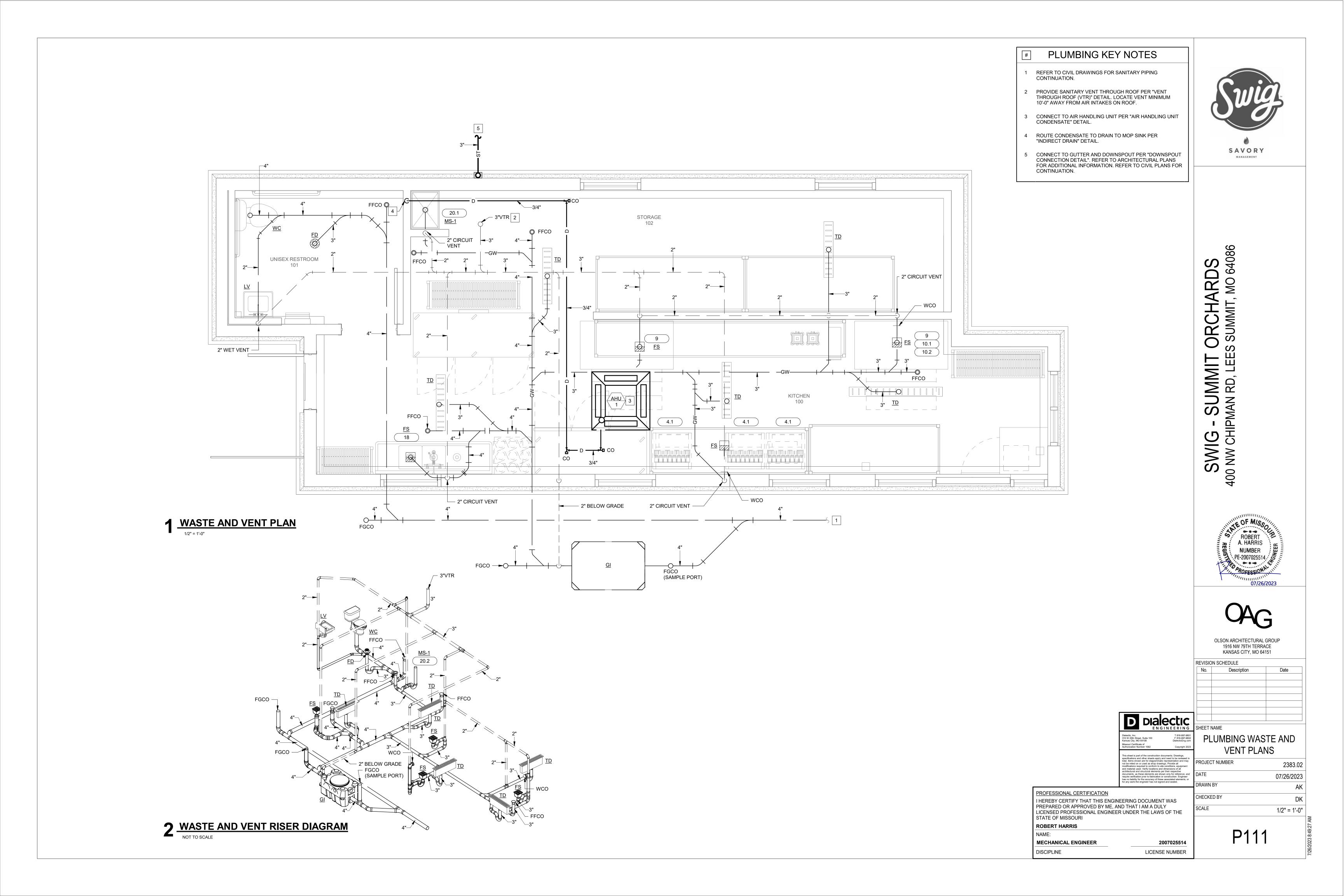
	REVISIO	N SCHEDULE	
	No.	Description	Date
10			
IC ING	SHEET I	NAME	

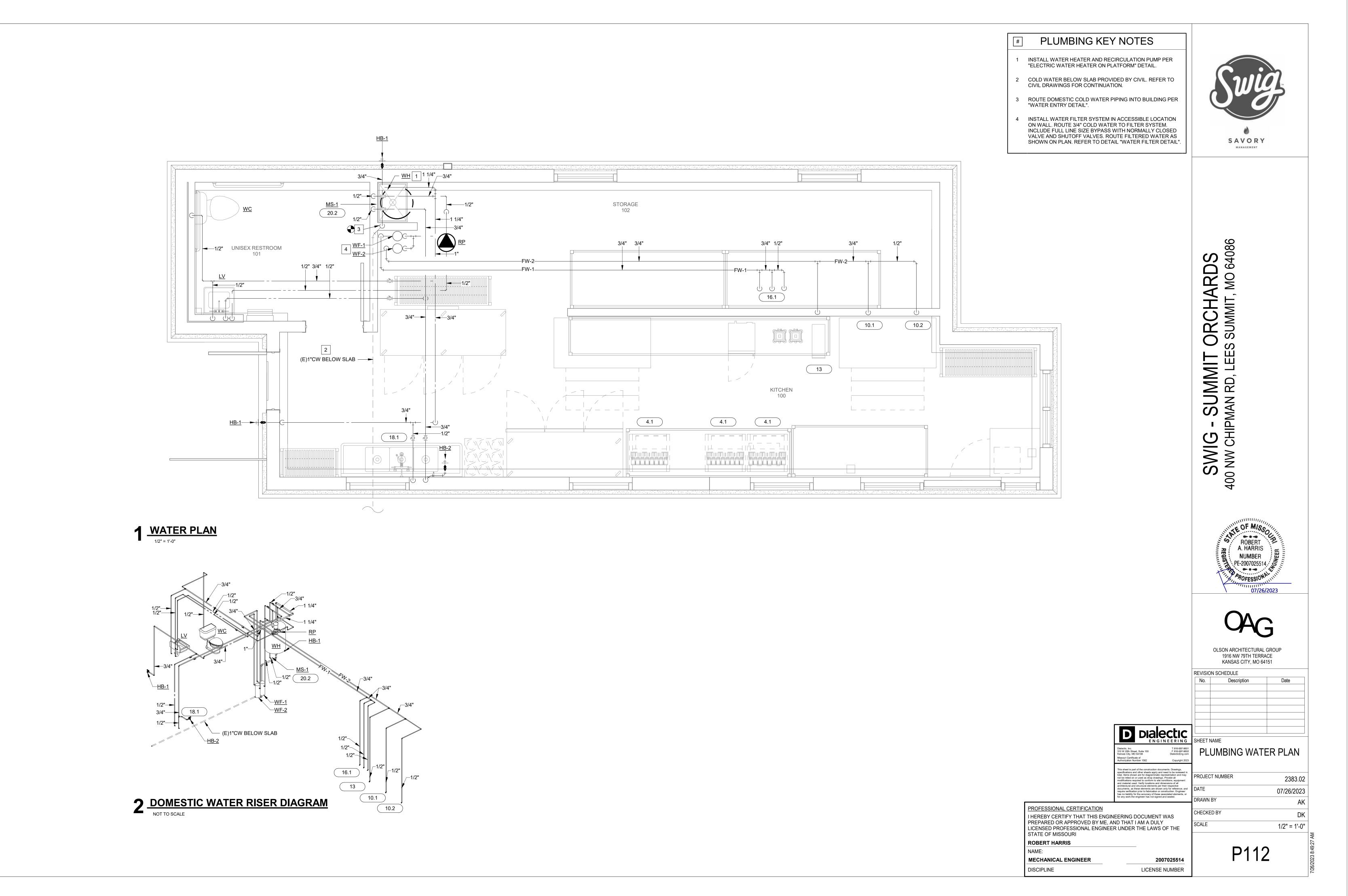
DIAIECTIC
ENGINEERING

Inc.
T. 816-97-9601
This Street, Suite 100
F. 816-97-9602
DialecticEng.com
Certificate of
attion Number 1582
Copyright 2023
Tells part of the construction documents. Drawings,
tions and other sheets apply and need to be reviewed in
shown are for diagrammatic representation and may
fied on or used as shop drawings. Provide all
ions required to conform to site conditions, equipment

PROJECT NUMBER
2383.02

P002



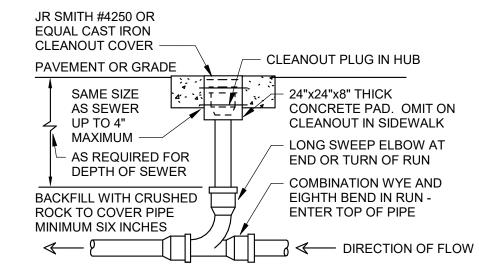


SANITARY OR STORM

SEWER LINE

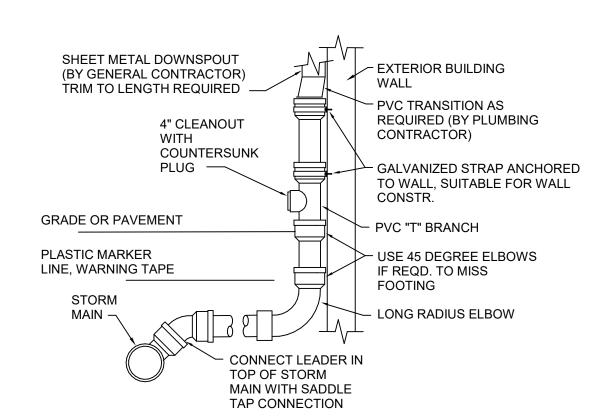
LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT 50' INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE BACKFILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES FOR OTHER FCO REQUIREMENTS.

# 13 FLOOR CLEANOUT NOT TO SCALE



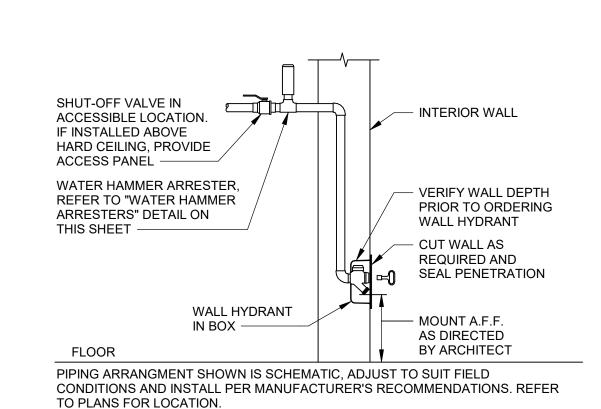
LOCATE EXTERIOR CLEANOUTS AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45°, AT MAXIMUM 100' INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. USE POLYVINYL CHLORIDE (PVC) PIPE WITH BELL AND SPIGOT GASKET JOINTS. VERIFY SOIL/ROCK CONDITIONS WITH GEOTECHNICAL REPORT OR SITE EXAMINATION. USE POLYVINYL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

## **EXTERIOR CLEANOUT**



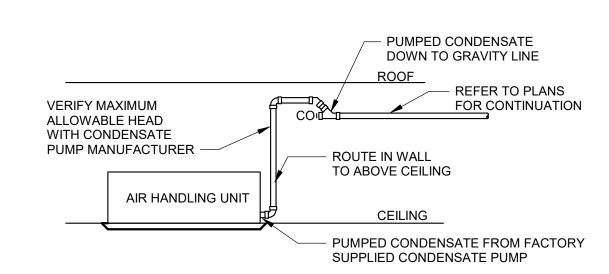
APPROVED PVC PIPE WITH BELL AND SPIGOT GASKET JOINTS WITH MINIMUM TWO FEET OF COVER. SLOPE PIPE AT 2 PERCENT. BACKFILL WITH 6" CRUSHED ROCK.

# 10 DOWNSPOUT CONNECTION DETAIL NOT TO SCALE



11 HOSE BIBB IN BOX

NOT TO SCALE



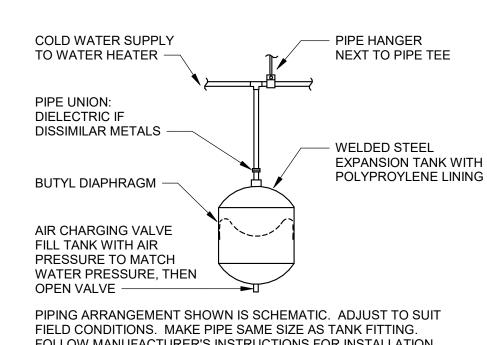
12 AIR HANDLING UNIT CONDENSATE

NOT TO SCALE

#### COLD WATER SUPPLY TO WATER HEATER STRAP-ON AQUASTAT SET 5 DEGREES CHECK VALVE (TYP.) LOWER THAN HEATER SHUT-OFF VALVES (TYP.) -TEMPERATURE **RECIRCULATION PUMP** HOT WATER TO FIXTURES AS TO EXPANSION SHOWN TANK IF REQ'D SEE ON PLANS -DETAIL PROVIDE A 210° F TEMPERATURE AND 150 PSI PRESSURE RELIEF SHUT-OFF VALVES (TYP) VALVE WITH TEST LEVER SIZED WITH AGA/CGA TEMPERATURE PIPE UNIONS. STEAM RATING 10% OVER (DIELECTRIC **HEATER INPUT** REQUIRED FOR DISSIMILAR HARD COPPER RELIEF METALS) -DISCHARGE LINE. FULL SIZE OF VALVE OUTLET TO END OVER **ELECTRIC WATER** FLOOR DRAIN OR JANITOR'S HEATER. REFER TO SINK WITH 6 INCH AIR GAP SPECIFICATIONS AND PLUMBING FIXTURE DRAIN VALVE SCHEDULE -PROVIDE WATER-**TIGHT GALVANIZED** - SET WATER HEATER ON SHEET METAL PAN 2" PLATFORM (PLATFORM IS DEEP WITH 1" DRAIN PIPE TO RECEPTACLE -

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.

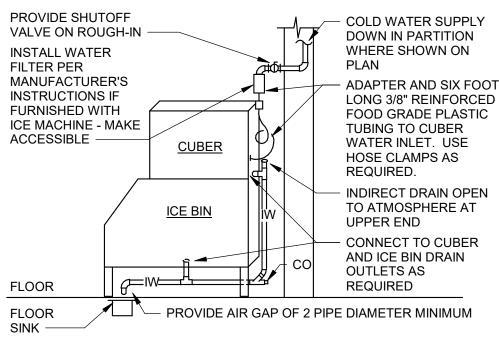
### 7 ELECTRIC WATER HEATER ON PLATFORM



FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY PROPER OPERATION WHEN INSTALLED

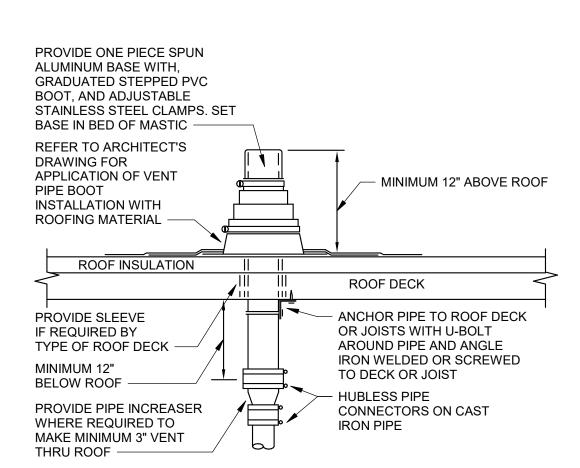
EXPANSION TANK INSTALLATION SHALL OCCUR ONLY WHEN THERE IS A BACKLOW PREVENTION DEVICE INSTALLED WITHIN THE TENANT SPACE WATER SYSTEM OR BUILDING WATER SYSTEM.

### **EXPANSION TANK**



PROVIDE FLOOR SINK AT FRONT EDGE OR SIDE EDGE OF ICE MACHINE, WHERE ACCESSIBLE FOR CLEANING - NOT UNDER ANY EQUIPMENT PROVIDE COLD WATER ROUGH-IN AT TOP OF ICE MACHINE. ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT CONDITIONS. VERIFY CONNECTIONS WITH MANUFACTURER.

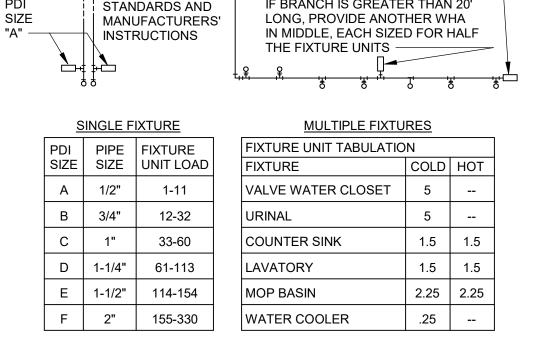
# 9 ICE MACHINE CONNECTIONS



REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR A MINIMUM OF 20 FEET HORIZONTAL (UNLESS APPROVED BY ENGINEER PRIOR TO INSTALLATION) OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. PROVIDE 1" FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN SIX FEET OF VENT THRU ROOF LOCATION. VERIFY FLASHING AND COUNTERFLASHING WITH ROOFING CONTRACTOR.

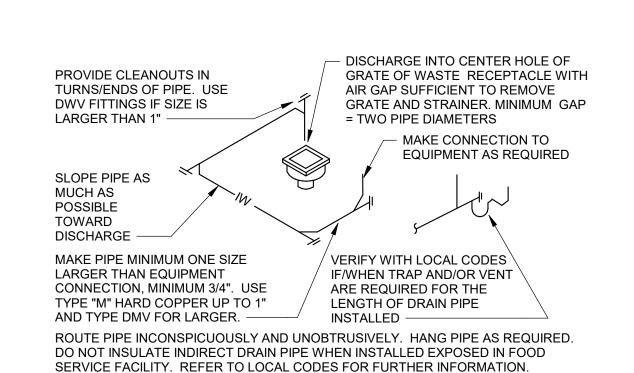
# 4 VENT THROUGH ROOF (VTR)



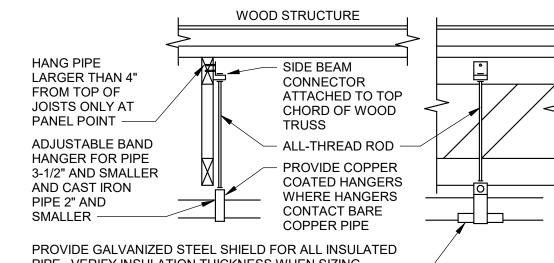


PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUAL WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL INLINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE UNITS PER TABLES ABOVE.

### WATER HAMMER ARRESTORS



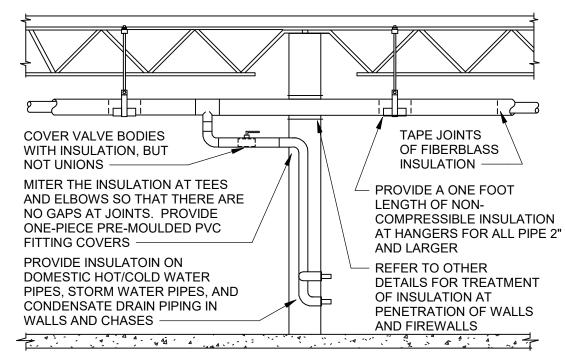
**INDIRECT DRAIN** 



PIPE. VERIFY INSULATION THICKNESS WHEN SIZING HANGERS AND SHIELDS.

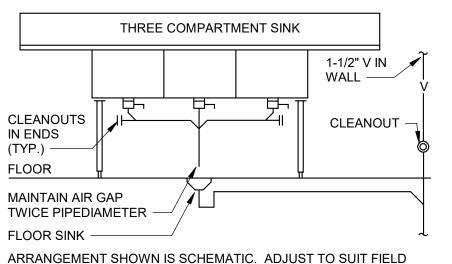
PIPE SIZE	COPPER PIPE HANGER SPACING	STEEL PIPE HANGER SPACING	PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHAS
1/2"	6'-0"	6'-0"	SLOPE ALL WATER PIPING SLIGHTLY TOWARD A DRAINABLI LOCATION. HANGER SPACING FOR PIPE SIZES: AS
3/4"	6'-0"	6'-0"	INDICATED IN TABLE. CAST IRON: 10' WITHIN 1'-0" OF ALL
1"	6'-0"	8'-0"	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"
1-1/2"	6'-0"	10'-0"	VALVES AND FITTINGS. PROVIDE SUPPLEMENTAL STEEL
1-3/4"	6'-0"	10'-0"	STRUTS BETWEEN JOISTS IF REQUIRED. LOCATED HANGE WITHIN 1'-0" OF EQUIPMENT CONNECTIONS. ANCHOR WAT
2"	10'-0"	10'-0"	PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. CHAINS AND PERFORATED STRAP IRON AND
2-1/2"	10'-0"	10'-0"	STEEL ARE NOT ACCEPTABLE. DO NOT SUSPEND PIPE FRO
3"	10'-0"	10'-0"	JOIST BRACING MEMBERS. REFER TO CODES AND SPECIFICATIONS FOR FURTHER INFORMATION. PROVIDE
4"	10'-0"	10'-0"	SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES

NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE NSULATION 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 NDICATED 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 ALVES 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 ELOCITY. CHAINS AND PERFORATED STRAP IRON AND STEEL ARE NOT ACCEPTABLE. DO NOT SUSPEND PIPE FROM OIST BRACING MEMBERS. REFER TO CODES AND SPECIFICATIONS FOR FURTHER INFORMATION. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES.



PROVIDE FIBERGLASS INSULATION WITH ALL-SERVICE JACKET WITH VAPOR BARRIER ON ALL COLD/HOT WATER PIPING AND CONDENSATE DRAIN PIPE. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION REGARDING INSULATION. INSTALL ALL ITEMS PER SPECIFICATIONS AND MANUFACTURERS INSTRUCTIONS. MAINTAIN VAPOR BARRIER ON COLD PIPING BY MEANS OF SEALANT AND TAPE. FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES SHALL NOT EXCEED 25/50. SEAL EXPOSED ENDS OF FIBERGLASS INSULATION WITH

# PIPE INSULATION DETAIL



ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS OR MEET LOCAL CODE REQUIREMENTS. UTILIZE HUBLESS CAST IRON PIPE, FITTINGS AND CONNECTORS FOR SINK

# **3-COMPARTMENT SINK**

	ectic
Dialectic, Inc. 310 W 20th Street, Suite 100 Kansas City, MO 64108 Missouri Certificate of Authorization Number 1582	T 816-997-9601 F 816-997-9602 DialecticEng.com Copyright 2023
This sheet is part of the construction do specifications and other sheets apply ar total. Items shown are for diagrammatic not be relied on or used as shop drawin modifications required to conform to site and material used. Verify locations and architectural and structural elements pe documents, as these elements are show require verification prior to fabrication or has no liability for the accuracy of these for any work the engineer has not signe.	nd need to be reviewed in representation and may gs. Provide all e conditions, equipment dimensions of all er their respective wn only for reference, and construction. Engineer associated elements, or

2007025514

LICENSE NUMBER

PROFESSIONAL CERTIFICATION 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

**MECHANICAL ENGINEER** 

DISCIPLINE

P501

SHEET NAME PLUMBING DETAILS PROJECT NUMBER DATE DRAWN BY

SAVORY

64086

0 W

ORCH/ SUMMIT,

UMMIT AN RD, LEES

**CHIPMAN** 

S 400 N

ATE OF MISSO

ROBERT A. HARRIS NUMBER PE-2007025514

. -0-

OLSON ARCHITECTURAL GROUP

1916 NW 79TH TERRACE

KANSAS CITY, MO 64151

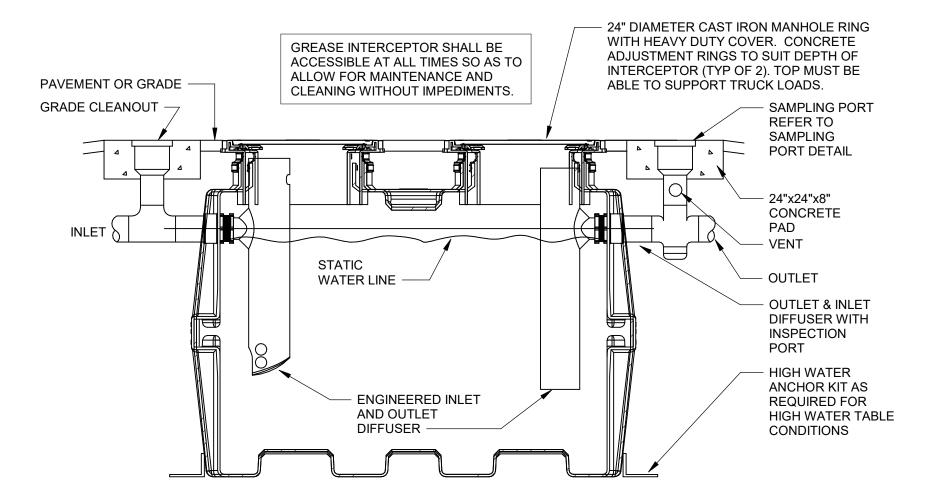
Description

**REVISION SCHEDULE** 

07/26/2023

Date

2383.02 07/26/2023 **CHECKED BY** SCALE As indicated



<u>SPECIFICATIONS FOR GB-250</u> 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.

**GREASE INTERCEPTOR CALCULATIONS** Reviewed by: Andy Project Name: SWIG - Lees Summit Reference No. 55200 **Step 1: Flow rate to grease interceptor** Fixture flow rate: (cu in / 231) =  $gal \times 0.75 / 2 min = 2 min flow rate$ NAME DIMENSIONS QTY CUIN FLOW RATE 3 Compartment Sink 21" x 21" x 14" (3) 1 18,522 18 20.1 24" x 18" x 12" 1 5,184 8.42 GPM Mop Basin Ice Machine (with drain) N/A 1.5 GPM 4.1 N/A Ice Machine (with drain) N/A N/A 1 GPM 1.5 GPM Floor Sink 3 N/A 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

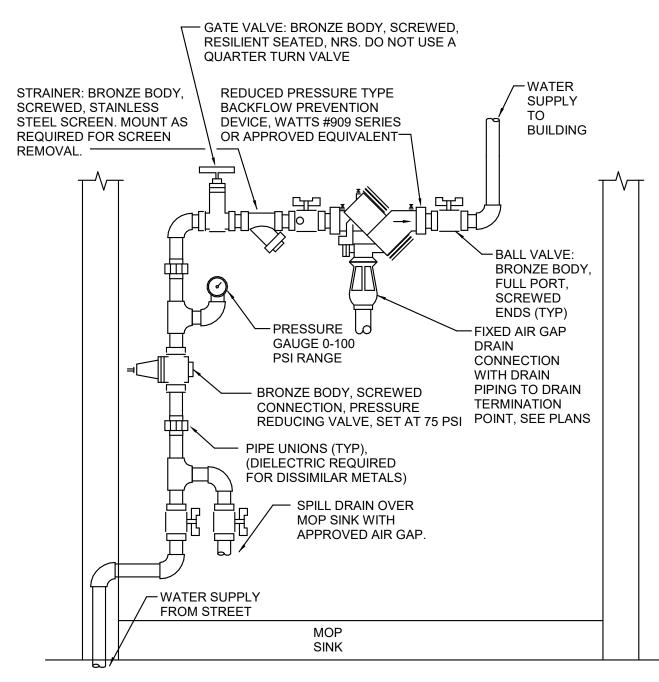
 $(695 \times .6) / 14 \times 4 \times 0.005 \times 90 = 53.614$  lbs of FOG

**SCHIER MODEL** 

**GB-50** 

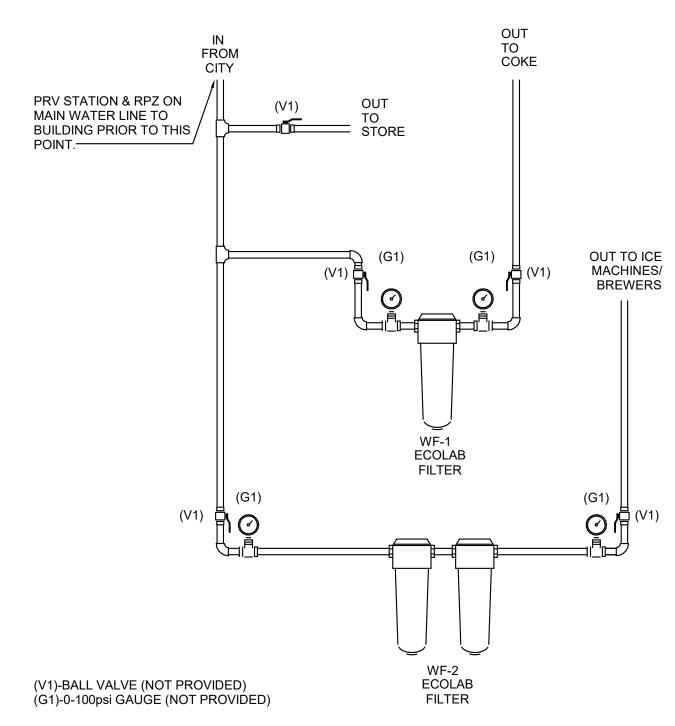
**Description:** Polyethylene Grease Interceptor Dimensions: Length: 37", Width: 32.25", Height: 28.5" Flow Rates/Grease Capacities: 50 GPM / 439.5 lbs Liquid Capacity: 65 gal

# 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



"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.

MECHANICAL ENGINEER

NAME:

DISCIPLINE

# 3 WATER FILTER DETAIL NOT TO SCALE



	AdditionZation Number 1302	Copyright 2023		
	This sheet is part of the construction documents. Drawings, specifications and other sheets apply and need to be reviewed in total. Items shown are for diagrammatic representation and may not be relied on or used as shop drawings. Provide all modifications required to conform to site conditions, equipment and material used. Verify locations and dimensions of all architectural and structural elements per their respective		PROJI	
	architectural and structural elements per their r documents, as these elements are shown only require verification prior to fabrication or constr. has no liability for the accuracy of these associa for any work the engineer has not signed and s	for reference, and action. Engineer ated elements, or	DATE	
DDOEESSIONAL CERTIFICATION				
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				

2007025514

LICENSE NUMBER

P502

SAVORY

ORCHARDS S SUMMIT, MO 64086

SWIG - SUMMIT ( NW CHIPMAN RD, LEES

SWIG 400 NW CHI

ROBERT

A. HARRIS

NUMBER PE-2007025514,

. ---

OLSON ARCHITECTURAL GROUP

1916 NW 79TH TERRACE

KANSAS CITY, MO 64151

Date

Description

MANAGEMENT

CKED BY As indicated

PLUMBING DETAILS DJECT NUMBER 2383.02

REVISION SCHEDULE

07/26/2023