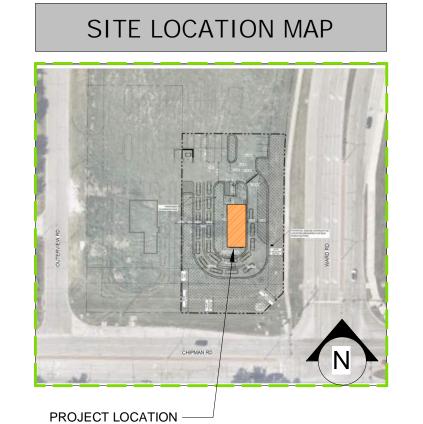
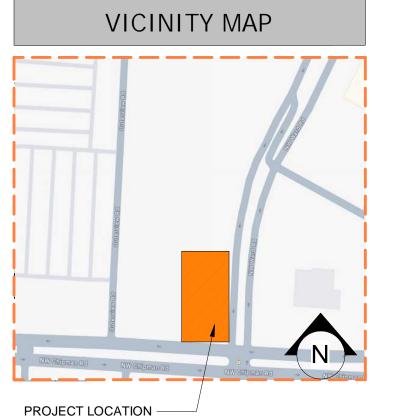


#2001

610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3 PERMIT SET: 04/12/2024





PLUMBING ANALYSIS (IBC TABLE 2902.1 & IPC TABLE 403.1)								
USE GROUP:	OCC. LOAD:	OCCUPANCY:	REQUIRED:	PROVIDED:				
		WC - MALE	1 EA 25	1 ²				
		WC - FEMALE	1 EA 25	1 ²				
В	14	LAV - MALE	1 EA 40	1 ²				
		LAV - FEMALE	1 EA 40	1 ²				
		DRINKING FOUNTAIN	1 EA 100	0*				
		SERVICE SINK	1	1				

* PER IBC 2902.6 DRINKING FOUNTAINS SHALL NOT BE REQUIRED FOR AN OCCUPANT LOAD OF 15 OR LESS. ² PER IBC 2902.2 EXCEPTION #4 SEPARATE FACILITIES SHALL NOT BE REQUIRED IN STRUCTURES WITH A TOTAL OCCUPANT LOAD, BOTH CUSTOMERS ³ PER IBC 2902.1 EXEPTION (e) FOR BUSINESS AND MERCANTILE OCCUPANCYS WITH AN OCCUPANT LOAD OF 15 OR FEWER, SERVICE SINKS ARE

GC TO LEAVE A COPY OF AS-BUILT DRAWINGS IN MANAGER'S OFFICE AT TURN OVER.

SUBMITTAL SCHEDULE

GC TO LEAVE A COPY OF AS-BUILT DRAWINGS IN MANAGER'S OFFICE AT TURN OVER.

STATUS	ITEM	SPECIFICATION	TIMING	29	ARCHI	SAG P
DIGITAL SAMPLES		SEND (1) PHYSICAL COPY TO ARCHITECT AND SAG PM				
SHOP DRAWINGS AND S	SPECIFICATIONS	EMAIL PDF TO ARCHITECT AND SAG PM				
ARCHITECTURAL					T	
	CANOPY SHOP DRAWINGS		COORDINATE WITH LEAD TIME AND APPROVAL TIME	Х	Х	Х
	STOREFRONT FIXED WINDOWS (if not installing specified window per drawings)		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD			
STRUCTURAL						
	STEEL PACKAGE		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	Х	
	TRUSSES		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	Х	Х	
	CONCRETE FOUNDATION AND REBAR		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	Х	Х	Х
MEP					+	+
	ELECTRICAL SWITCHGEAR/PANELS		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	Х	X	Х
,	HVAC EQUIPMENT (RTUs and Controls)		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	Х	Х	X
14	LIGHT FIXTURES (including Site Lighting)		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	Х	Х	Х
MISCELLANEOUS					+	
	DOOR HARDWARE		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	Х	Х	Х
MOCKUPS	· · · · · · · · · · · · · · · · · · ·	COORDINATE WITH PM	**			
FINISHES						
	MOCKUP AREA OF EXTERIOR FINISHES FOR SAG/PM APPROVAL	SITE/AREA OF MOCKUP TO BE DETERMINE BY SAG PM	PRIOR TO PROCEEDING WITH INSTALLATION			X

ALL SUBMITTALS ARE TO BE CLEARLY MARKED TO INCLUDE THE PROJECT NAME, GENERAL CONTRACTOR NAME AND SUBCONTRACTOR INFORMATION. SAMPLES TO BE CLEARLY LABELLED TO REFERENCE THE MATERIAL CALLOUT FROM THE FINISH SCHEDULE OR APPLICABLE SPECIFICATION SECTION.

NOTE: GC MUST REVIEW AND SIGN SUBMITTALS PRIOR TO SENDING TO ARCHITECT/ENGINEER FOR REVIEW. UNSIGNED SUBMITTALS WILL BE AUTOMATICALLY REJECTED. GC TO INCLUDE PRICES.

SITE ANALYSIS & DATA

ZONING: SITE AREA: MAX BUILDING HEIGHT: CONSTRUCTION TYPE: OCCUPANCY TYPE: FIRE SPRINKLER: FIRE ALARM:	C4 .7 ACRES 20' - 2" FT V-B BUSINESS 'B' NOT REQUIRED NOT REQUIRED
BUILDING AREA: AWNING AREA: DRIVE THRU CANOPY AREA: TOTAL COVERED AREA:	1000 SQFT 80 SQFT 60 SQFT 1140 SQFT
DDGDGGED GT GGV/ED GE	

PROPOSED LOT COVERAGE: 30.7% TOTAL PARKING: BUSINESS / RESTAURANT $(14 \text{ SPACE}/ 1000 \text{ SQFT}^*) = 14$ 14 SPACES

*EXCLUDING COOLER & RESTROOMS ACCESSIBLE SPACES: **REQ: 1 SPACE** 1 SPACES

NOTE: THERE IS NO OUTDOOR / INDOOR DINING AREA AVAILABLE AT THIS FACILITY

PROJECT DESCRIPTION

NEW CONSTRUCTION OF A DRIVE-THRU ONLY RESTAURANT (NO DINING SEATING)

ILDING DATA		CALCULATED
UPANT LOAD BUSINESS AREAS (GROSS)		
OTAL OCCUPANT LOAD =	(1000 SF / 150) =	6

*PER IBC 2018 1004.5 USABLE AREA FOOD PREP AREA (NET) 530 SF

DEFERRED SUBMITTALS

• IRRIGATION SIGNAGE

APPROVALS

OFFICE (NET)

TOTAL USABLE AREA =

 SPRINKLER • TRUSS DRAWINGS

BID ALTERNATES

ROOF: 5" RIGID INSULATION ABOVE DECK WITH MEMBRANE. ALTERNATE: SPRAY FOAM WITH BATT INSULATION BELOW DECK BETWEEN JOISTS. BOTH VERSIONS SHOULD ACHIEVE THE SAME R-VALUE.

DECORATIVE SIGNAGE: DECORATIVE CUTLERY ON FACADE ARE TO BE BID SEPERATE. REF: A201.

CLEARANCE BARS: FOR DRIVE THRU AND MOBILE PICK-UP ARE TO BE BID SEPERATE. REF: AS004

APPLICABLE CODES

BUILDING CODE:	2018 International Building Code
PLUMBING CODE:	2018 International Plumbing Code
MECHANICAL CODE:	2018 International Mechanical Code
ELECTRICAL CODE:	2017 National Electric Code
ENERGY CODE:	2018 International Energy Code
FIRE CODE:	2018 International Fire Code
FUEL GAS CODE:	2018 International Fuel Gas Code
ACCESSIBILITY CODE	2009 ICC/ANSI A117.1 Accessible and Usuable Buildings and Facilities

NOTE: ALL CODES WITH LOCAL AMENDMENTS AND SPECIAL INSPECTIONS FLAME SPREAD CLASSIFICATION

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

NON SPRINKLERED

GROUP	EXIT ENCLOSURE	N/A	ROOMS AND
B	AND PASSAGE WAY		ENCLOSED SPACES

PER IBC SECTION 803.1.2

CLASS A: FLAME SPREAD 0-25; SMOKE DEVELOPED 0-450 CLASS B: FLAME SPREAD 26-75; SMOKE DEVELOPED 0-450 CLASS C: FLAME SPREAD 76-200; SMOKE DEVELOPED 0-450

PROJECT DIRECTORY

WNER	SALAD AND GO 5555 EAST VAN BUREN STREET, SUITE 215 PHOENIX, AZ 85008 CONTACT: ANDY HULSEY T: 410.371.1563 ANDY@SALADANDGO.COM
0\	SA AD GO

AND GO CONCEPTS, LLC dba SALAD AND GO 5555 EAST VAN BUREN STREET, SUITE 215 PHOENIX, AZ 85008 CONTACT: ANDY HULSEY T: 410.371.1563

ANDY@SALADANDGO.COM

ARCHITECT ON RECORD STEVEN COX. ARCHITECT 513 MAIN STREET, STE 300 FORT WORTH, TX 76102 **CONTACT: JOSEPH JEFFERY** T: 817.820.0433

GEMINI ENGINEERING GROUP 101 NIGHTLINGER LN MILSAP, TX 76066 **EOR: CLAYTON LUCAS**

T: 817.901.5191

GEMINI ENGINEERING GROUP 101 NIGHTLINGER LN MILSAP, TX 76066 EOR: CLAYTON LUCAS

T: 817.901.5191

@ GEMINI ELLIS<u>ON GAGE & ASSOCIATES, PLLC</u>

5068 W PLANO PARKWAY SUITE 200 PLANO, TX 75093 EOR: BRIAN KIRK ELLISON, PE, SE T: 972.354.8858



ANDREW GRIBBLE KIMLEY-HORN & ASSOCIATES, INC. 805 PENNSYLVANIA AVE, SUITE 150 KANSAS CITY, MO 64105 (816) 652-2333 ANDREW.GRIBBLE@KIMLEY-HORN.COM

KIMLEY-HORN

Kimley » Horn



#200

DRAWING INDEX

SHEET NAME

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G005 COMCHECK

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AS004 SITE DETAILS

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04 ARCHITECTURAL

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A131 ROOF PLAN

S201 ROOF FRAMING PLAN

S301 FOUNDATION DETAILS

S401 ROOF FRAMING DETAILS

S402 ROOF FRAMING DETAILS

A101 DIMENSION FLOOR PLANS

A121 REFLECTED CEILING PLAN

A201 EXTERIOR ELEVATIONS

A301 BUILDING SECTIONS

A302 WALL SECTIONS

A303 WALL SECTIONS

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SPECIFICATIONS A807 SPECIFICATIONS

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M105 MECHANICAL SPECIFICATIONS

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M107 MECHANICAL ENERGY FORMS

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E110 ELECTRICAL ONE LINE DIAGRAM E111 LIGHTING ENERGY FORMS E112 LIGHTING ENERGY FORMS E113 LIGHTING ENERGY FORMS

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G003 OCCUPANCY & LIFE SAFETY PLAN G004 SYMBOL, LEGENDS, & GENERAL NOTES REVISION

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FORT WORTH TX 76102

STEVEN COX A-2023017238

REVISION 1: 06/06/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION 06/06/2024 CITY COMMENTS

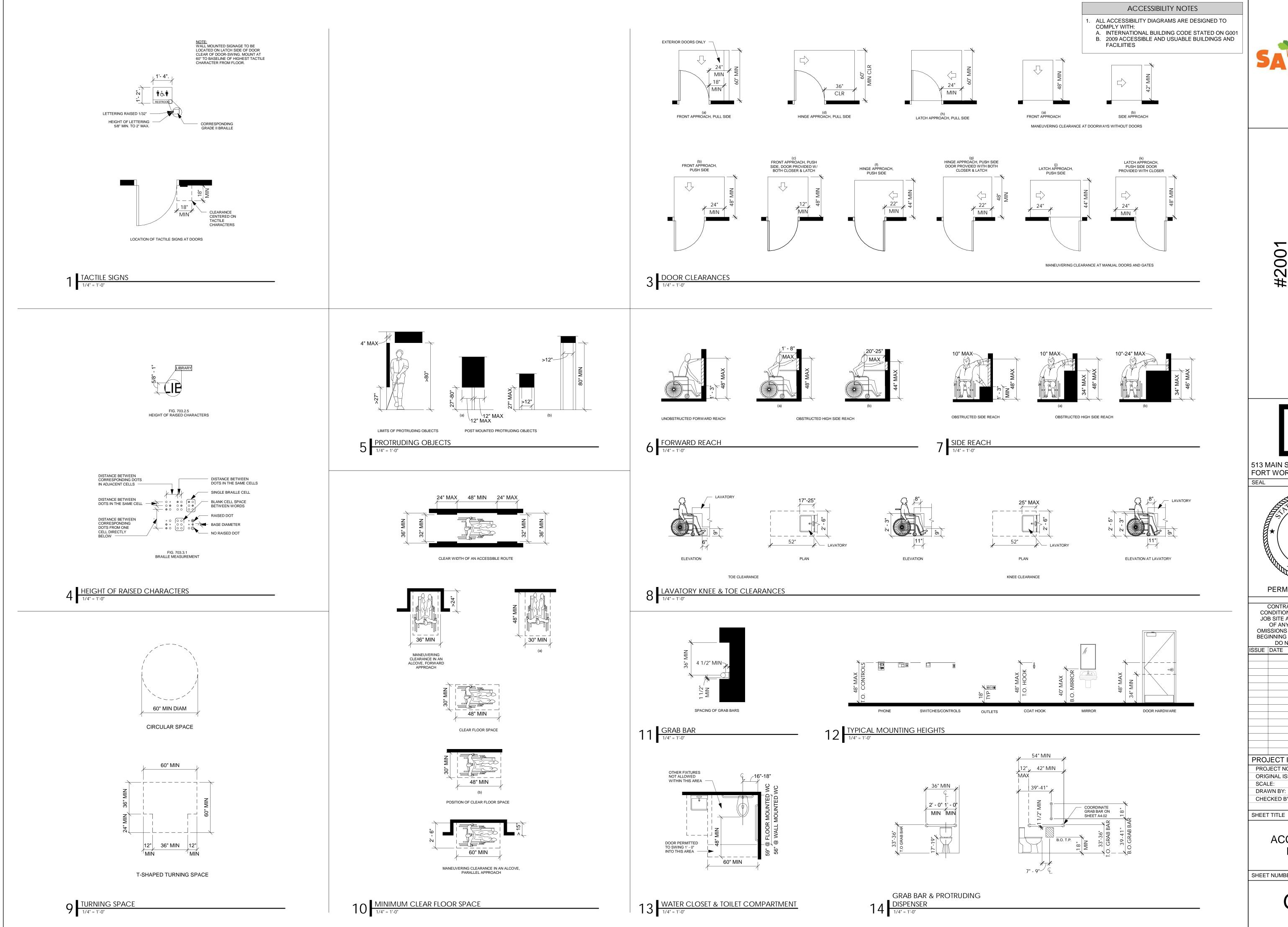
PROJECT INFORMATION

PROJECT NO: ORIGINAL ISSUE: 04/12/2024 SCALE: AS NOTED DRAWN BY: V. PEREZ J. JEFFERY

CHECKED BY: SHEET TITLE

COVER SHEET

SHEET NUMBER





PROTOTYPE VERSION 2.00

HIPMAN RO 610

#2001

513 MAIN STREET #300 FORT WORTH

TX 76102

NUMBER A-2023017238

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE:

CHECKED BY:

ACCESSIBLITY DETAILS

24-0087

06/01/2023 AS NOTED

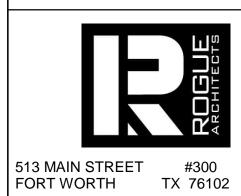
J. JEFFERY

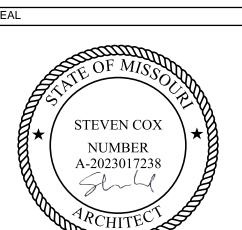
SHEET NUMBER

G002



610 NW CHIPMAN ROAD





REVISION 1: 06/06/2024

CONTRACTOR SHALL VERIFY ALL
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JOB SITE AND NOTIFY THE ARCHITECT
OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION 06/06/2024 CITY COMMENTS

PROJECT INFORMATION

PROJECT NO: 24-0087 ORIGINAL ISSUE: 06/01/2023 AS NOTED SCALE: DRAWN BY:

J. JEFFERY

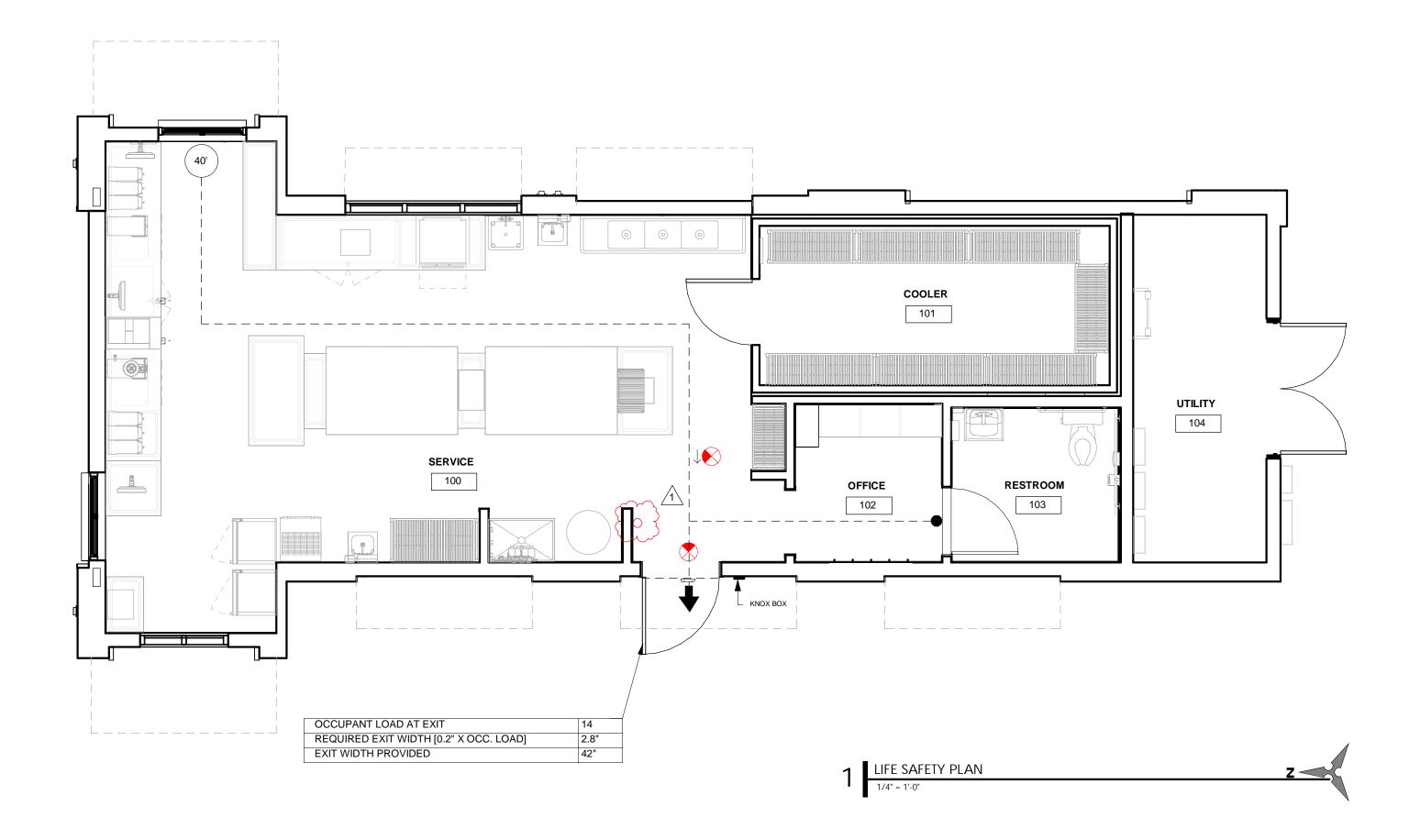
SHEET TITLE

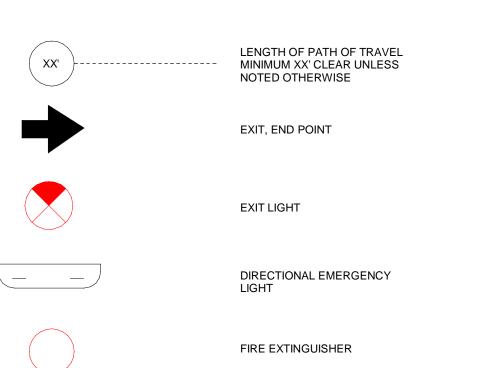
CHECKED BY:

OCCUPANCY & LIFE SAFETY PLAN

SHEET NUMBER

G003





LEGEND

A. GENERAL CONTRACTOR TO PROVIDE INTERNATIONAL ACCESSIBILITY SYMBOL ON ALL ACCESSIBLE ENTRANCES

B. GENERAL CONTRACTOR TO PROVIDE TACTILE EXIT SIGNAGE, PER CODE

C. APPROVED FIRE EXTINGUISHERS SHALL BE LOCATED WITHIN 75 FT OF ANY INTERIOR LOCATION. FINAL LOCATION SHALL BE VERIFIED PER FIRE MARSHAL.

LIFE SAFETY GENERAL NOTES

LIFE SAFETY

EXIT WIDTH REQUIRED = 14 OCC X 0.2 = 2.8 IN. EXIT WIDTH PROVIDED = 42 IN. **EGRESS CALCULATION:**

MAXIMUM ALLOWABLE TRAVEL DISTANCE = 75 FT MAXIMUM PROVIDED TRAVEL DISTANCE = 40 FT *NON-SPRINKLERED

FLAME SPREAD RATING:

1. FLAME SPREAD RATING FOR ALL PROPOSED INTERIOR FINISHES SHALL COMPLY WITH LOCAL BUILDING CODE.

INTERIOR FINISH NOTES:

1. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASS C WITH FLAME SPREAD RATING LESS THAN 200 AND SMOKE DEVELOPED LESS THAN 450.

FLOOR COVERINGS INT HE EXIT PATH OF ALL COMMON AREAS SHALL MEET CLASS A REQUIREMENTS

FURNISHING NOTES:

1. HEIGHT OF COUNTERS SHALL BE 28" MINIMUM - 34" MAXIMUM AFF.

2. MANEUVERING CLEARANCE SHALL BE 30" X 52"

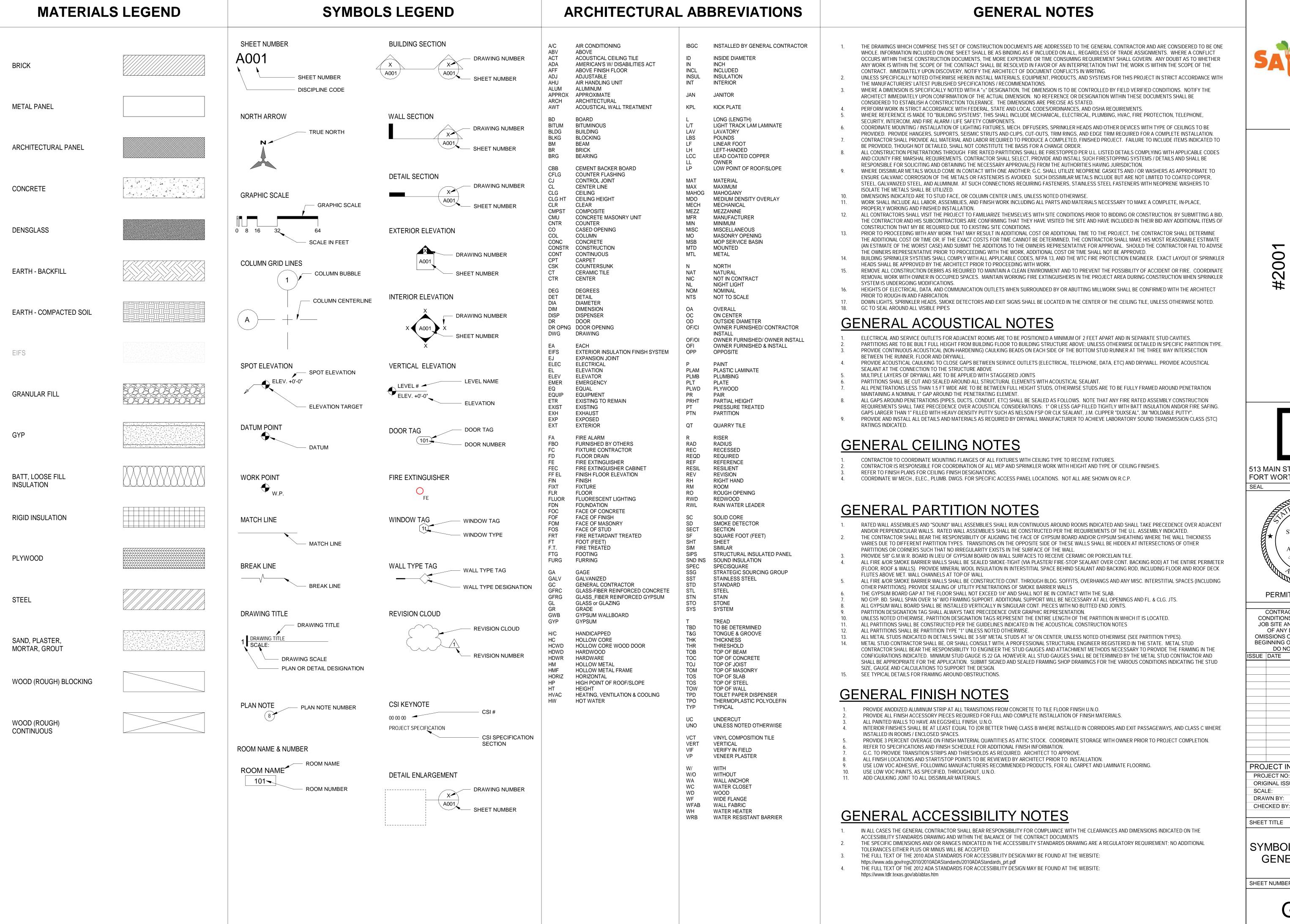
3. KNEE CLEARANCE SHALL BE 27" HIGH, 17" DEEP, AND 30"

GENERAL NOTES, WHEN APPLICABLE:

1. 67" DIAMETER CLEARANCE FOR WHEELCHAIR ACCESSIBILITY

FIRE EXTINGUISHER PLACED PER FIRE INSPECTOR'S REQUIREMENTS

RECESSED KNOX BOX



 Δ HIPM, #200

513 MAIN STREET

0

FORT WORTH TX 76102

NUMBER A-2023017238

PERMIT SET: 04/12/2024

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SHEET TITLE

SYMBOL, LEGENDS, & **GENERAL NOTES**

24-0087

06/01/2023

J. JEFFERY

SHEET NUMBER

PROJECT R-VALUES						
COMPONENT	R-VALUE					
ROOF INSUL.	30					
WALLS CAVITY	21					
WALLS CONT. INSUL.	4.5					
FLOOR	N/A					



Project Information

Energy Code:

2018 IECC 2001 Chipman and NW Ward - Lee's Summit MO Project Title: Lees Summit, Missouri Location: Climate Zone:

New Construction Project Type: 6% Vertical Glazing / Wall Area:

Construction Site: NW Chipman and NW Ward Lee's Summit, Missouri

Designer/Contractor: Owner/Agent: Andy Hulsey Salad and Go 5555 East Van Buren Street Phoenix, Arizona 85008 410-371-1563 Andy@SaladandGo.com

Steven Cox Rogue Architects 513 Main Street Fort Worth, Texas 76102 817-820-0433 Joseph@Roguearchitects.com

Additional Efficiency Package(s)
Credits: 1.0 Required 1.0 Proposed

Enhanced Interior Lighting Controls, 1.0 credit

Building Area Floor Area 1-Dining: Cafeteria/Fast Food : Nonresidential

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U Factor _(a)
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	900		30.0	0.032	0.032
Floor: Unheated Slab-On-Grade, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (c)	130			0.730	0.540
NORTH Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining:	355	21.0	4.5	0.046	0.064
Cafeteria/Fast Food] Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.48, PF 0.13, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	65			0.380	0.380
Window: Metal Frame: Operable, Perf. Specs.: Product ID N/A, SHGC 0.48, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15			0.450	0.450
EAST					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	687	21.0	4.5	0.046	0.064
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.36, PF 1.33, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15			0.380	0.380
Window: Metal Frame: Operable, Perf. Specs.: Product ID N/A, SHGC 0.36, PF 0.60, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15			0.450	0.450
<u>SOUTH</u> Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	256	21.0	4.5	0.046	0.064

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor _(a)
WEST					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	698	21.0	4.5	0.046	0.064
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.36, PF 0.64, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15			0.380	0.380
Door: Uninsulated Single-Layer Metal, Swinging, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	28			0.610	0.610

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation. (c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 3% better than code

Project Title: 2001 Chipman and NW Ward - Lee's Summit MO

Data filename:

Envelope Compliance Statement

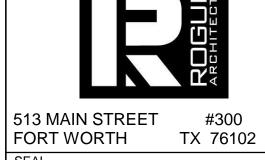
Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

04.10.24 Steven Cox - Senior Project Manager Name - Title



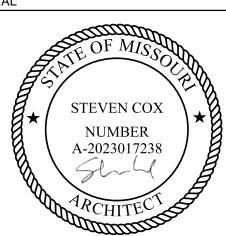
HIPMAN ROA #2001

PROTOTYPE VERSION 2.00 \geq 610



Report date: 03/27/24

Page 1 of 9



PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY:

J. JEFFERY

SHEET TITLE

CHECKED BY:

COMCHECK

SHEET NUMBER

Project Title: 2001 Chipman and NW Ward - Lee's Summit MO Data filename:

Report date: 03/27/24 Page 2 of 9

DESDO	MCIBII	ITY MATRIX	
KESPU	INOIDIL		

GENERAL CONTRACTOR C	JRNIS	HED					CONFLICTS BETWEEN THIS SCHEDULE AND THE REST OF TH							
GENERAL	5 8	arrange to the second	IN:	STAL	LED	REMARKS	DESCRIPTION	FUF	RNISI	HED	INS	TAL		REMARKS
	OWNER	LANDLORD	GENERAL	OWNER	LANDLORD		2016 A. 2016 C.	GENERAL	OWNER	LANDLORD	GENERAL	OWNER	LANDLORD	
	5		ğ				DIVISION 11: EQUIPMENT	8) ö	10		
	•			•		GENERAL CONTRACTOR TO PULL PERMITS FOR THE BUILDING, DEMO, MECHANICAL, ELECTRICAL, PLUMBING, HEALTH, AND/OR ENVIRONMENT AS REQUIRED BY AHJ - GC TO COORDINATE WITH SALAD AND GO PRECONSTRUCTION MANAGER	11.1 FOOD SERVICE EQUIPMENT 11.2 FOOD SERVICE EQUIPMENT STARTUP	•	•//		•	•		SUPPLIED BY VENDOR NO. 17 GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE FINAL UTILITY CONNECTIONS, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION, FINAL CONNECTION, AND STARTUP OF ALL KITCHEN EQUIPMENT WITH THE EXCEPTION OF WIB AND STOETLING, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION
•			•			GENERAL CONTRACTOR TO SECURE AND PAY FOR OTHER REQUIRED PERMITS AND FEES NOT NOTED IN LINE ITEM 1.1.1 E.G. DUST CONTROL	11.3 STAINLESS STEEL FABRICATED COUNTERS AND SHELVING		•		•	•		SUPPLIED BY VENDOR NO. 17, GENERAL CONTRACTOR TO COORDINATE DELIVERY AND INSTALL, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION
•			•				11.4 STORAGE RACKS AND SHELVING		•		•			GENERAL CONTRACTOR TO COORDINATE WITH VENDOR NO. 17 FOR ADDITIONAL SCOPE OF WORK (E.G. PROVIDING BLOCKING), REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION
•			•			SALAD AND GO TO PROVIDE SALAD AND GO BRANDED	DIVISION 12: FURNISHINGS 12.1 NON-PERISHABLE DELIVERY #1			<u> </u>				INCLUDING BUT NOT LIMITED TO: HAIR NET HOLDER, MAGNETIC KNIFE HOLDER, SOAP DISPENSERS, CLEAR FILE HOLDER, FIRST AID KIT, ICE
						GRAPHICS/SIGNAGE (OFCI) - GC TO PROVIDE AHJ REQUIRED SIGNAGE GENERAL CONTRACTOR TO COORDINATE WITH LANDLORD, WASTE	12.1.1 PAPER TOWEL DISPENSERS							SCOOPS, ETC GC TO PROCURE AND INSTALL ALL PAPER TOWEL DISPENSERS. ONE PEF HANDWASH SINK. CONFIRM QUANTITY WITH SAG PM. SPEC FROM
 •			<u>.</u>		,	MANAGEMENT, CITY AND COUNTY SITE TO BE PROFRESSIONALLY CLEANED PRIOR TO STOCKING, TRAINING	12.2 OFFICE SUPPLIES				3			AMAZON: SAN JAMAR T1190TBK, OCEANS, BLACK PEARL, 12 15/16 x 9 1/4 x 16 1/2 VENDOR NO. 25
•			•			AND OPENING TO INCLUDE BUILDING, FIRE AND HEALTH INSPECTIONS - ALL REQUIRED BY AHJ	12.3 WALL MOUNT COAT RACK 12.4 INTERIOR TRASH RECEPTACLES		•		•			GENERAL CONTRACTOR TO INSTALL OFCI, PROVIDED WITH OFFICE SUPPLIES VENDOR NO. 25 SUPPLIED AND INSTALLED BY VENDOR NO. 17
1 •	1			1			12.5 EMPLOYEE STORAGE		•			•		SOFFLIED AND INSTALLED BY VENDOR NO. 17
•							DIVISION 13: SPECIAL CONSTRUCTION 13.1 WALK-IN COOLER		•				Ĭ.	GENERAL CONTRACTOR TO COORDINATE INSTALLATION DETAILS WITH VENDOR NO. 17 AND PM
•			•			REFER TO STRUCTUAL DRAWINGS AND ARCHITECTURALS FOR ADDITIONAL INFORMATION	DIVISION 21: FIRE SUPPRESSION					1		T. T. AND TW
•			•				21.1 FIRE SUPPRESSION IDENTIFICATION							
1 •				Î			21.1.1 PIPING SYSTEM IDENTIFICATION 21.1.2 VALVE TAGS	•			•		Se .	
1 •	1					SCOPE OF WORK INCLUDES ROOF AND WALL PENETRATIONS	21.2 SPRINKLER STANDPIPE 21.2.1 BACKFLOW PREVENTER	•			•			AS REQUIRED BY AHJ AS REQUIRED BY AHJ
•	_		•			VENDOR NO. 22	21.2.2 ISOLATION VALVE 21.3 AUTOMATIC SPRINKLER SYSTEM	•			•			AS REQUIRED BY AHJ
•							21.3.1 SYSTEM ENGINEERING (E.G. STAMPED PLANS AND CALUCATIONS) 21.3.2 SPRINKLER COVERAGE	•			•		V	AS REQUIRED BY AHJ AS REQUIRED BY AHJ
•			•				21.3.3 SPRINKLER GRID APPURTENANCES (E.G. AIR VALVES AND DRAINS) DIVISION 22: PLUMBING	•			•	5		AS REQUIRED BY AHJ
+ •	-		•			SCOPE OF WORK TO INCLUDE REINFORCEMENT IN ROOF PENETRATIONS	22.1 PLUMBING IDENTIFICATION	Т			Т			
							22.1.1 PIPING SYSTEM IDENTIFICATION	•			*			MATERIAL TO CONSIST OF 2" VINYL LETTERING, UNLESS OTHERWISE NOTED IN SPECIFICATIONS
•	_		•				22.1.2 UTILITY SHUT OFF IDENTIFICATION IN KITCHEN 22.1.3 VALVE TAGS AND CHART	•			•		0	MATERIAL TO CONSIST OF 2" VINYL RED LETTERING, UNLESS OTHERWISE NOTED IN SPECIFICATIONS
3			•				22.2 DRAINS AND CLEANOUTS	•			•		2	
•			•				22.2.1 DRAINS AND FLOOR SINKS 22.2.2 THROUGH DRAIN FOR ICE MACHINE	•			•			REFER TO KITCHEN AND PLUMBING SHEET FOR SPECIFICATIONS
ION							22.3 PIPING SYSTEMS AND SPECIALTIES 22.3.1 STORM DRAINAGE				•			
			•				22.3.2 STORM DETENTION SYSTEM	•			•			REFER TO CONTRACT; PURCHASED BY GC UNLESS LEAD TIME PROHIBITS IN WHICH SALAD AND GO PURCHASES DIRECTLY FROM VENDOR NO. 6
•			•				22.3.3 DOMESTIC WATER 22.3.4 GREASE WASTE	•			•			
•							22.3.5 CONDENSATE 22.3.6 VENT	•			•			
			•			INCLUDES PEEPHOLES	22.3.7 SANITARY WASTE 22.3.8 PIPING FITTINGS				•			
•	_		•			CENEDAL CONTRACTOR TO DI IDCHASE EDOM VENDOR NO 0	22.3.9 VALVES AND SHUT OFF VALVES	•			•			AS DECUMED BY ALL
		1			1 1	GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 9	22.3.10 WATER BOOSTER PUMP 22.3.11 GREASE INTERCEPTOR	•			•			AS REQUIRED BY AHJ
•			•				22.4 INCOMING WATER FILTER SYSTEM	•			•			GENERAL CONTRACTOR TO FURNISH AND INSTALL 1 4"X10" CANISTER FILTER HOUSING WITH 30 MICRON SEDIMENT FILTER. SPEC: HOUSING: GXWH35F, FILTER: FXHSC, COORDINATE WITH PLANS AND SAG PM FOR LOCATION
•			•				22.5 WATER HEATER 22.6 MOP SINK	•			•			GENERAL CONTRACTOR TO PURCHASE FROM NATIONAL ACCOUNT VENDOR NO. 13
•	-		•				22.6.1 FLOOR MOUNTED MOP SINK 22.6.2 SERVICE FAUCET FOR MOP SINK	•			•			REFER TO KITCHEN AND PLUMBING SHEET FOR SPECIFICATION
•			•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 4 VENDOR SUBSTITUTION IS NOT PERMITTED	22.7 PLUMBING FIXTURES 22.7.1 TOILETS, URINAL, AND LAVATORIES 22.7.2 KITCHEN FAUCETS	•	• 1		•			GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE ALL NECESSARY FITTINGS (E.G. FLUSH VALVES, FAUCETS, AND FITTINGS) GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE FINAL UTILITY CONNECTIONS
•			•			ALL TILE TO BE INSTALLED PRIOR TO INSTALLATION OF COOLER, GC TO	22.8 WATER SOFTENER DIVISION 23: HEATING, VENTILATING, AND AIR COI	NDITIC	NING		•	id.		IF CALLED OUT IN DRAWINGS
•	÷		•			MAKE FINAL ELECTRICAL CONNECTION GENERAL CONTRACTOR TO UTILIZE NATIONAL ACCOUNT VENDOR NO. 23	23.1 HVAC DUCTWORK AND PIPING IDENTIFICATION 23.2 ROOF CURBS				•			
	Ŧ.			Τ.		GENERAL CONTRACTOR TO COORDINATE AND REVIEW SIGN PACKAGE WITH VENDOR NO. 20 (A OR B DEPENDING ON MARKET) FOR ADDITIONAL	23.3 HVAC DUCTWORK SYSTEM COMPONENTS 23.4 MECHANICAL PIPING SYSTEM COMPONENTS	•		7	•			
•	0015		•			SCOPE OF WORK (E.G. PROVIDING POWER AND BLOCKING)	23.4.1 WALK-IN COOLER REFRIGERATION					•		WALK-IN COOLER SUPPLIED BY VENDOR NO. 17 GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE PIPING AND FINAL CONNECTION
•			•				23.4.2 WIB CONDENSATION LINE 23.4.3 REFRIGERATION FOR OTHER HVAC EQUIPMENT	•			•			
	•				,	GENERAL CONTRACTOR TO COORDINATE AND REVIEW SIGN PACKAGE WITH VENDOR NO. 20 (A OR B DEPENDING ON MARKET) FOR ADDITIONAL SCOPE OF WORK (E.G. PROVIDING POWER, BLOCKING, AND SUPPORT) GENERAL CONTRACTOR TO COORDINATE WITH VENDOR NO. 15 FOR	23.4.4 WIB FINAL ELECTRICAL CONNECTION	•			•			
	•		•			ADDITIONAL SCOPE OF WORK (E.G. PROVIDING BLOCKING), POWER, DATA CONDUIT GENERAL CONTRACTOR TO INSTALL PER DRAWINGS AND CONFIRM	23.4.5 WIB PENETRATIONS AND FINAL SEALING	•			•			
•			•		1	GENERAL CONTRACTOR TO INSTALL PER DRAWINGS AND CONFIRM LOCATION WITH SAG PM AND CONFIRM BOLT SIZE AND PATTERN NEEDED, ANCHOR BOLTS ARE OFCI GENERAL CONTRACTOR TO INSTALL PER DRAWINGS AND CONFIRM LOCATION WITH SAG PM AND CONFIRM BOLT SIZE AND PATTERN NEEDED, ANCHOR BOLTS ARE OFCI	23.5 HVAC EQUIPMENT 23.5.1 SUPPLY FAN	•			•			GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE RIGGING FOR ALL ROOFTOP EQUIPMENT
٠.						GENERAL CONTRACTOR TO COORDINATE WITH THE FIRE DEPARTMENT,	23.5.2 TOILET EXHAUST FAN 23.5.3 KITCHEN EXHAUST FAN	•			•			
•			•			NO CABINET GENERAL CONTRACTOR TO COORDINATE WITH THE FIRE DEPARTMENT	23.5.4 DUCTED AND NON-DUCTED HEATING AND COOLING UNITS				•		52	
•			•			GENERAL CONTRACTOR TO COORDINATE WITH THE FIRE DEPARTMENT	23.5.5 HVAC CONDENSING UNITS	•	1e4177		•			
						REFER TO RR ACCESSORIES SCHEDULE FOR OFCI ITEMS	23.5.6 REFRIGERATION CONDENSING UNITS 23.6 COMMISSIONING ACTIVITIES		•			•		
•			•			SUPPLIED BY VENDOR NO. 18	23.6.1 TESTING AIR BALANCE (TAB) REPORT 23.7 AIR CURTAINS	•			•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 3
	† ·			•		VENDOR NO. 14	23.8 DEHUMIDIFIER				•			*ONLY FOR HOUSTON AREA STORES.
		1			1			J				l		GC TO PROVIDE AND INSTALL DRAIN LINE RAN TO FLOOR SINK

						NISH	HED		STALI	LED	
	DESCRIF	РΤΙ	ON	GENERAL		OWNER	LANDLORD	GENERAL	OWNER	LANDLORD	REMARKS
	DIVISION 26: ELECTRICAL										
	26.1 ELECTRICAL IDENTIFICATION			•				•			
1	26.2 POWER DISTRIBUTION SYSTEM										
	20.2 FOWER DIOTRIBOTION OF OTEN										
2	26.2.1 MAIN SERVICE GEAR AND TRANSF	ORME	RS	•				•			
	26.2.2 MAIN SERVICE CONDUIT			•				•			
	26.2.3 MAIN SERVICE WIRING			•				•			
R	26.2.4 MAIN SERVICE FUSES			•	_			•			
	26.2.5 TRANSFORMER			•				•			TYPICALLY PROVIDED BY UTILITY PROVIDER. GENERAL CONTRACTOR VERIFY. IF NOT PROVIDED BY UTILITY GENERAL CONTRACTOR TO PROVIDE AND INSTALL.
	26.2.6 TENANT DISTRIBUTION PANELS AN	ID BR	EAKERS	•	-			•			PROVIDE AND INSTALL.
	26.2.7 CONDUIT, WIRE, OUTLETS, AND SV	VITCH	IES	•				•			
+	26.2.8 KITCHEN EQUIPMENT FINAL CONN 26.2.9 SIGNAGE CONDUIT AND WIRING	ECTIC	DN	•				•			
	26.3 LIGHTING DEVICES 26.3.1 PARKING LOT LIGHTING				-			•			GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE POWER TO
	26.3.2 INTERIOR AND EXTERIOR LIGHTING	G		-				•			LIGHTING FIXTURES GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 1 VENDOR SUBSTITUTION IS NOT PERMITTED
	26.3.3 EMERGENCY LIGHTING			•				•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 1 VENDOR SUBSTITUTION IS NOT PERMITTED
	26.4 LOW VOLTAGE										SCOPE OF WORK TO INCLUDE INTERIOR AND EXTERIOR
	26.4.1 CONDUIT AND WIRING 26.4.2 DEVICES AND COVERPLATES			•				•	1		INCLUDE CAMERA CONDUIT
-	26.5 CAMERA WIRING DIVISION 27: COMMUNICAT	ION	S			•			•		
]	27.1 TELECOMMUNICATIONS IDENTIFICATION 27.2 TELECOMMUNICATIONS				F	•			•		
-	27.2.1 DATA TERMINATIONS 27.2.2 WIFI EXTENDER (EXTERIOR MOUNT	ΓED)		•		•		•	•		IF REQUIRED
	27.2.3 LOW VOLTAGE WIP FOR WIFI EXTE	ENDER	₹	•	\perp			•			ROOF PENETRATION WITH CONDUIT PER DETAIL SPEC: TRIPP LITE 24-PORT 1U RACKMOUNT CAT6 110 PATCH PANEL 5
-	27.2.4 DATA PATCH PANEL			•	-	•		•	•		RJ45 ETHERNET (N252-024) SPEC FOR RACK: NAVEPOINT 15U WALL MOUNT IT OPEN FRAME 19 IN
	27.2.5 IT RACK AND SHELVES								•		RACK WITH SWING OUT HINGED GATE BLACK SPEC FOR SHELVES 3 MIN: STARTECH CABSHELF116V (REQUIRED 3 TOTAL)
											GENERAL CONTRACTOR TO COORDINATE WITH SALAD AND GO PM FI EXACT FIELD INSTALLATION LOCATION
E	27.3 MONITORS										
-0	27.3.1 CONDUIT AND WIRING 27.3.2 MOUNTS			•		•		•	•		
-	27.3.3 DEVICES 27.4 DRIVE THRU LOOPS			+	-	•		•	•		GENERAL CONTRACTOR TO COORDINATE WITH SALAD AND GO PM F EXACT INSTALLATION LOCATION
1	DIVISION 28: ELECTRONIC S	SAF	ETY AND SECURITY	1							EXACT INSTALLATION LOCATION
3	28.1.1 CONDUIT								6		
_	28.1.2 WIRING AND DEVICES					•			•		
=	28.2 SECURITY CAMERAS 28.2.1 WIRING					•			•		
	28.2.2 DEVICES 28.3 MENU SPEAKERS					•			•		
	28.3.1 CONDUIT			•				•			GENERAL CONTRACTOR TO FURNISH AND INSTALL 1 POWER AND 2 DE CONDUIT TO EACH MENU BOARD. EACH CONDUIT TO BE DEDICATED BACK TO BUILDING. DATA CONDUIT TO BE STUBBED FROM MENU BOATO ABOVE CEILING IN BUILDING. CLARIFY WITH SAG PM PRIOR TO INSTALLATION
=	28.3.2 WIRING 28.3.3 DEVICES			•		•		•	•		
7	28.3.4 MENU SPEAKER FOUNDATION			•				•			
	28.4 FIRE ALARM SYSTEM			800				50000			AS REQUIRED BY AHJ
	28.4.1 SYSTEM ENGINEER 28.4.2 CONNECTION TO BASE BUILDING S	SYSTE	M	•				•			AS NEEDED
1	28.4.3 DEVICES DIVISION 32: EXTERIOR IMF	RO	VEMENTS	• 2				•			
1	32.1 IRRIGATION SYSTEM 32.2 PARKING LOT PATCH SEAL, AND STRIF)F		•	+			•			
	32.3 RAMPS			+							
	32.4 PAVING AND HARDSCAPE			•				•			
	32.5 CONCRETE CURBS 32.6 TRASH ENCLOSURE			•				•			
-	32.7 LANDSCAPE PLANT MATERIAL			•				•			
	REVISION DATE: 2024.03.25	N	IATIONAL ACCOUN	T AND	0	WNE	R-VEI	NDOR	LIST		
	NOTE TO DESIGN CONSULTANTS: If a Item category has multiple options noted as a, b, c, etc. only on	e vendor	will be selected.								
	1 Lighting	8	Keying & Locks				Boards			21	Decorative Wall Panels
	Consolidated Electrical Distributors (CED) David Rash P 817-480-1171	3	[Company] [Contact Name]			Grant 0	d Company Gutske 853-6600	10		_	Nichiha Ben Dalziel P 404-432-5866
+	E david.rash@ced.com		E			-	@howardco	mpany.com		_	E bdalziel@nichiha.com
\perp	2 HVAC Units Trane	_ 9	Operable (Drive-Thru) Windows QuikServ			ref.h.h	om Systen st Systems	n			Clearance Bars Unistructures
	Cameron Peck P 623-980-5012		Brian McCloskey P 832-792-2646				626-3104				Shannon Holcomb P 678-974-1780
	E cameron.peck@trane.com	- 4	E bmccloskey@quikserv.com	10	N. PERSON	reservoires.	ske@midsys	y,		_	E s.holcomb@unistructures.com
7	Air Curtains Mars Air Systems Frank Cuaderno	10	Awnings (Prefabricated) TBD [Contact Name]			Conce	n Equipmen pt Services Richardson				Paint Sherwin-Williams Michael Barden
1	P 310-532-1555 Ext. 1221 E frankc@marsair.com		P E			P 281-	761-4099 nardson@co	nceptserv.c	om		P 480-244-0949 E michael.p.barden@sherwin.com
	4 Tile	11	Electrical Switchgear	re	18	Restro	om Fixtures			24	FRP Wall Panels
+	DalTile David Santibañez		Consolidated Electrical Distributor (CED) David Rash	rs		Bobric [Contact	k ct Name]			_	TBD [Contact Name]
+	P 562-644-4360 E david.santibanez@daltile.com		P 817-480-1171 E david.rash@ced.com			P E		_	_	_	P E
+	5 Door Hardware	12	Roofing Membrane System				ty System			25	Office Supplies TBD
	Allegion Brands Earl Thompson P 480-340-1829		[Company] [Contact Name] P			Camer	n Alarm on Brown 734-8340			_	[Contact Name]
	E earl.thompson@allegion.com		E			E came	eron@liberty		n	_	E
	6 Stormwater Management Contech Engineered Systems	13	Water Heaters AO Smith Chris Murphy		5000	69K)	e Contracto		agie-	25	Grease Interceptor Schier Sean Molen - National Accounts
	Mitchell Begg P 470-599-9065 E mitchell.begg@conteches.com		P 615-305-7074 E cmurphy@hotwater.com		3	Atlas S Lori Wa		- vvest R	-yiuii	_	P 913-951-3300 E nationalaccounts@schierproducts.com
	7 Chemical Dispenssing	14	Safe			P 561-	301-2516 @atlasbtw.c	com			
	EcoLab Patrick Aiello	2	Ashley Bynum		_		ge Contracto		Region	_	
	P 480-226-9252	20	P			SSC S	igns & Ligh	ung		_	

E telledge@sscsigns.com

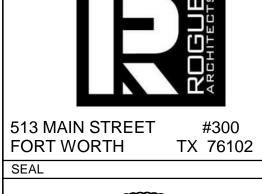
E patrick.aiello@ecolab.com



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#200



NUMBER A-2023017238

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION	
PROJECT NO:	24-0
ORIGINAL ISSUE:	06/01/2
SCALE:	AS NO
DRAWN BY:	ı
CHECKED BY:	J. JEFFE

SHEET TITLE

RESPONSIBILITY MATRIX

SHEET NUMBER

REVISION DATE: 2024.03.25

1.1 PERMITS AND FEES

1.1.1 PERMIT FEES

1.1.2 OTHER PERMITS AND FEES

1.3 TEMPORARY BARRICADES OR SITE FENCING

1.4 CONSTRUCTION DUMPSTERS AND TRASH BINS

DIVISION 02: EXISTING CONDITIONS

1.2 TEMPORARY UTILITIES

1.3.1 BARRICADE GRAPHICS

1.6 CERTIFICATE OF OCCUPANCY

1.7 SITE PREPERATION FOR NEW PAD

DIVISION 03: CONCRETE

3.1 CONCRETE SLAB AND FOUNDATION

3.2 CONCRETE CUTTING AND CORING

DIVISION 04: MASONRY

4.1 MASONRY AND STUCCO **DIVISION 05: METALS** 5.1 STRUCTURAL STEEL 5.2 CLEARANCE BARS

5.3 ROOF LADDER AND HATCH

5.5 REVEALS AND TRIMS 5.6 UNISTRUT, THREADED ROD

5.8 STRUCTURAL FRAMING

5.9 CANOPIES AND AWNINGS

5.9.1 DRIVE THRU CANOPY

6.1.1 MANAGER'S DESK & LAMINATE

7.3 PRE-FINISHED PARAPET COPING 7.4 SEALANTS AND CAULKING

DIVISION 08: OPENINGS

9.1 GYPSUM WALLBOARD AND ACCESSORIES

9.3 CEMENT BOARD 9.4 SUSPENDED 'T' BAR LAY-IN CEILING

9.6.1 TILE FLOORING AND COVE BASE

9.6.4 WALK-IN COOLER AND FREEZER TILE

10.1.1 EXTERIOR MOUNTED BUILDING SIGNAGE

10.1.4 ACCESSIBILITY AND MISCELLANEOUS RESTROOM SIGNAGE

10.1.7 MENU BOARD PAD/ISLAND & FOOTING W/ ANCHOR BOLTS

10.6 FIBERGLASS REINFORCED PLASTIC (FRP) PANELS AND ACCESSORIES 0.7 STAINLESS STEEL KITCHEN CORNER GUARDS AND END CAPS

10.2.1 FIRE EXTINGUISHERS AND HANGING HARDWARE

DIVISION 10: SPECIALTIES

10.1.3 SERVICE DOOR IDENTIFICATION

10.1.5 BAND LETTERS (CANOPY)

10.1 IDENTIFICATION DEVICES

10.1.2 TACTILE SIGNAGE

10.1.6 MENU BOARD

10.1.8 CLEARANCE BARS 10.2 FIRE PROTECTION DEVICES

10.2.3 KNOX BOX

10.3 TOILET ROOMS

10.5 OFFICE SAFE

10.8 CHEMICAL DISPENSING

10.2.2 RISER ROOM IDENTIFICATION

10.3.1 TOILET ROOM ACCESSORIES

10.3.2 TOILET ROOM HARDWARE 10.4 KITCHEN DISPLAY SYSTEM (KDS) MOUNTS

7.5 EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

6.1 FINISH CARPENTRY

7.2 ROOF PENETRATIONS

8.2 STOREFRONT SYSTEMS

8.3 DOOR HARDWARE 8.4 DRIVE THRU WINDOWS DIVISION 09: FINISHES

9.2 PLYWOOD WALLBOARD

9.5 EXTERIOR CLADDING

9.6.2 THRESHOLDS

9.6.3 REDUCERS

9.6 FLOORING

DIVISION 06: WOOD, PLASTICS AND COMPOSITES

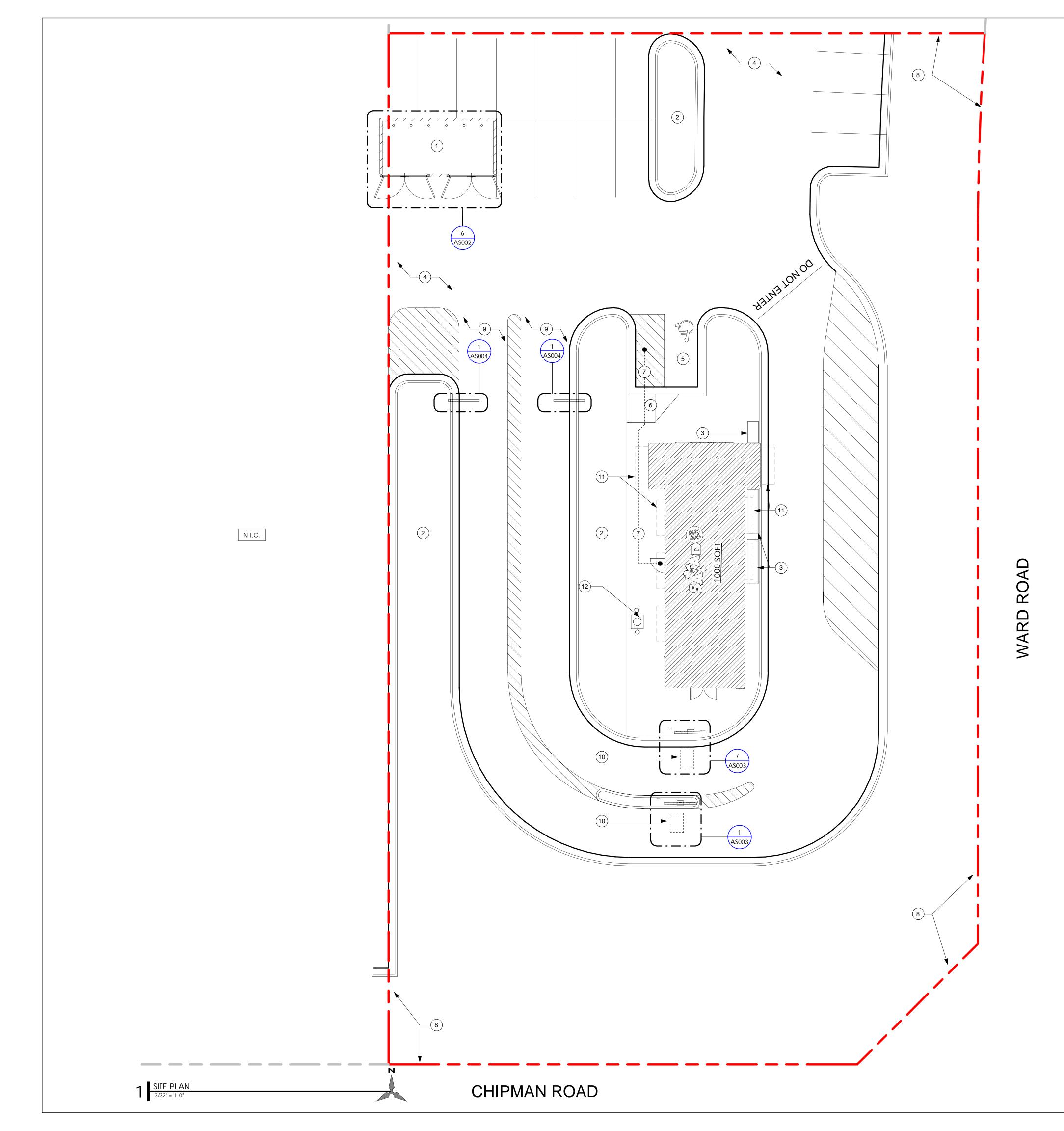
DIVISION 07: THERMAL AND MOISTURE PROTECTION

5.7 RAILINGS

1.5 FINAL CLEANING

DESCRIPTION

DIVISION 01: GENERAL REQUIREMENTS



SITE PLAN GENERAL NOTES

- A. COORDINATE SITE PLAN WITH LANDSCAPE, ARCHITECTURAL, CIVIL, MECHANICAL, AND ELECTRICAL SITE PLAN. REPORT ANY DISCREPANCIES TO THE ARCHITECT.
- B. SIGNAGE TO BE DIFFERED SUBMITTAL. REF: TO SHEET A201 FOR BUILDING MOUNTED SIGNAGE LOCATIONS. REF: ELEC FOR
- ELECTRICAL INFORMATION.C. DRIVE-THRU EQUIPMENT INCLUDING WIRELESS COMMUNICATION AND MONITORS SHALL BE COORDINATED BY GENERAL CONTRACTOR.
- D. GENERAL CONTRACTOR TO APPLY CONCRETE SEALER TO ALL EXTERIOR CONCRETE PATIO AND WALKWAY SURFACES.

REF: ELEC FOR ELECTRICAL INFORMATION.

- E. PROVIDE DETECTABLE WARNING (IF APPLICABLE PER LOCAL CODE) AT TRANSITION FROM SIDEWALK TO DRIVE AISLE.
- F. ACCESSIBLE PARKING SPACE AND ACCESS AISLE SHALL HAVE SURFACE SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS.
- G. REFER TO ELECTRICAL DRAWINGS FOR SITE RELATED ELECTRICAL
- H. 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
- I. REFERENCE LANDSCAPE DRAWNINGS IN CIVIL SET FOR LANDSCAPING DESIGN.

WALLS WITH UTILITY COMPANY APPROVALS

REF: CIVIL FOR LEGAL DESCRIPTION, DIMENSIONS AND UTILITY LOCATIONS.

ARCHITECTURAL SITE PLAN KEYNOTES

- 1. TRASH ENCLOSURE, REF: DETAILS ON SHEET AS002
- 2. LANDSCAPING, REF: CIVIL.
- 3. PLANTER BOXES: OLD TOWN FIBERGLASS, STANDARD RECTANGLE, FINISH: FLAME 28 (SAND), 18" HIGH, REF: LANDSCAPING.
- 4. SITE ACCESS, REF: CIVIL.
- 5. ACCESSIBLE PARKING, REF: CIVIL.
- 6. ACCESSIBLE PARKING RAMP, REF: CIVIL.
- 7. 36" WIDE MINIMUM ACCESSIBLE PATH OF TRAVEL TO ACCESSIBLE PARKING. NO ABRUPT CHANGES IN ELEVATION ALONG THE PATH OF TRAVEL SHOWN. THE SLOPE AND CROSS SLOPE ALONG THE PATH OF TRAVEL SHALL NOT EXCEED 5% AND 2% RESPECTIVELY, REF: CIVIL.
- 8. PROPERTY LINE.
- 9. DRIVE THRU LANE.
- 10. CONDUIT STUB UNDER CURB TO LOOP VERTICAL DETECTION BY GC. REF: ELEC
- 11. OUTLINE OF CANOPY ABOVE.
- 12. GREASE TRAP, REF: CIVIL AND PLUMBING



AD ED LOT 3

CHIPMAN RC, MO 64086 PROPOSE

#200

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513 MAIN STREET FORT WORTH

TH TX 76102

ORTH

STEVEN COX
NUMBER
A-2023017238

PERMIT SET: 04/12/2024

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION

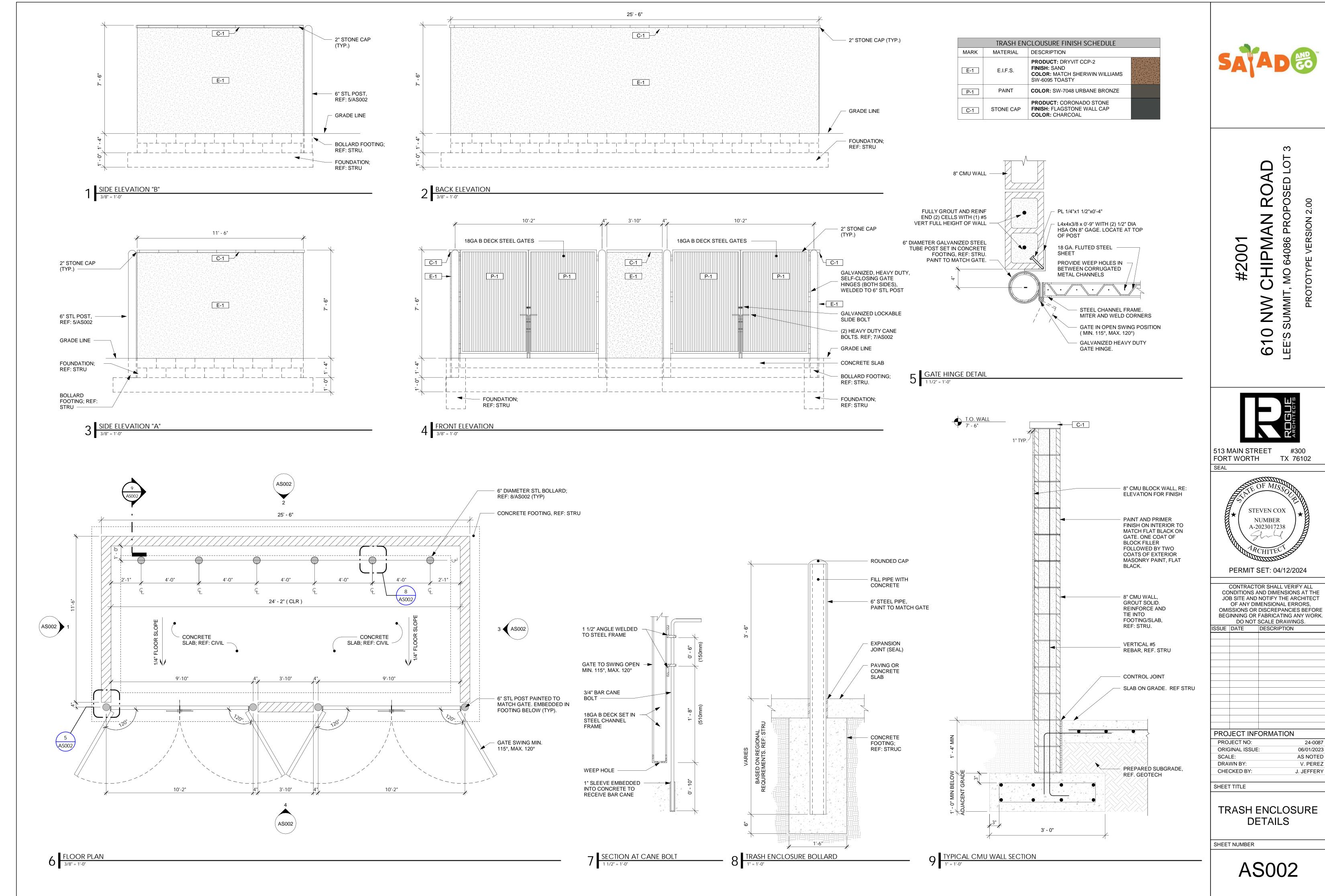
PROJECT NO: 24-0087
ORIGINAL ISSUE: 06/01/2023
SCALE: AS NOTED
DRAWN BY: P. C
CHECKED BY: J. JEFFERY

SHEET TITLE

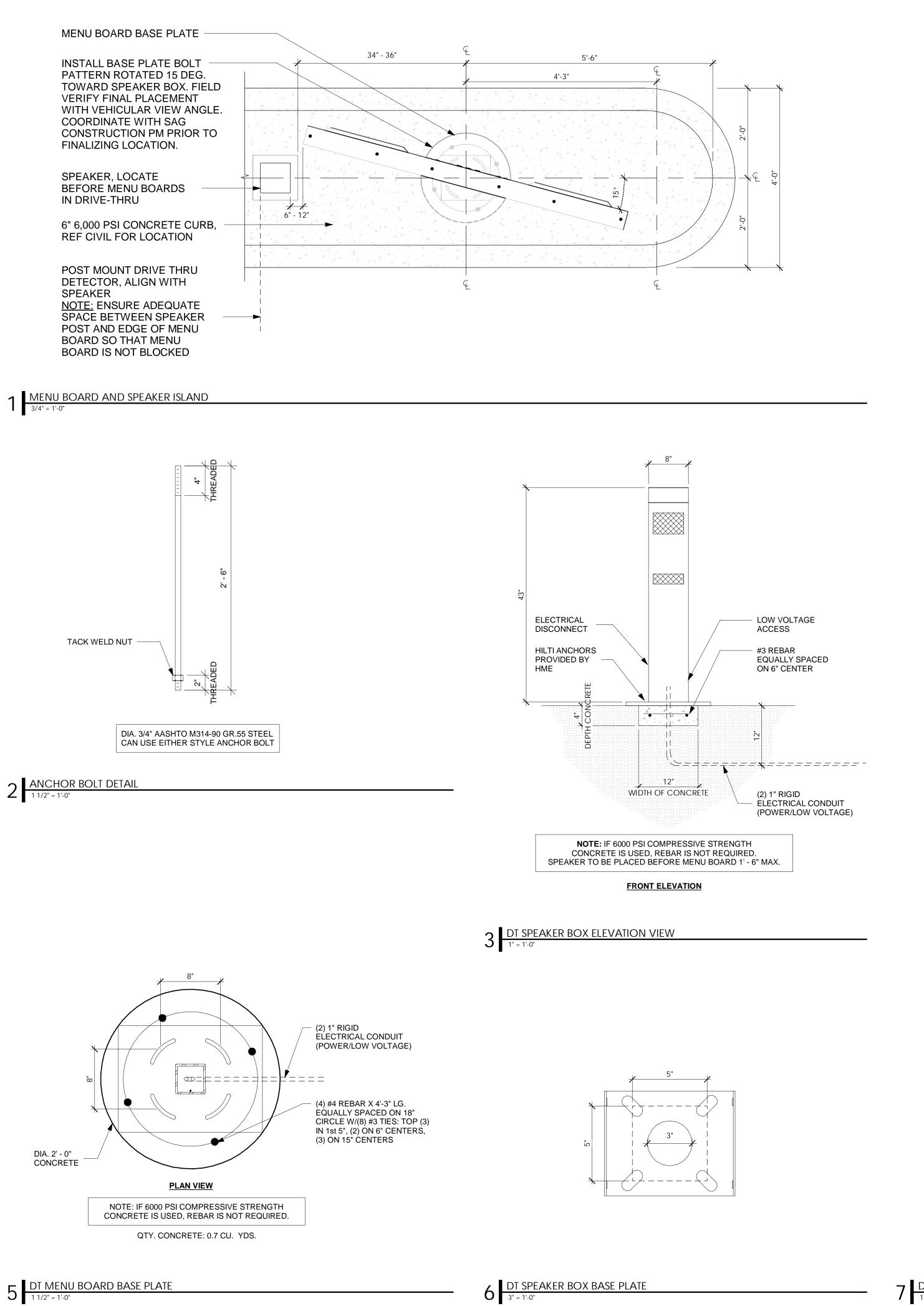
ARCHITECTURAL SITE PLAN

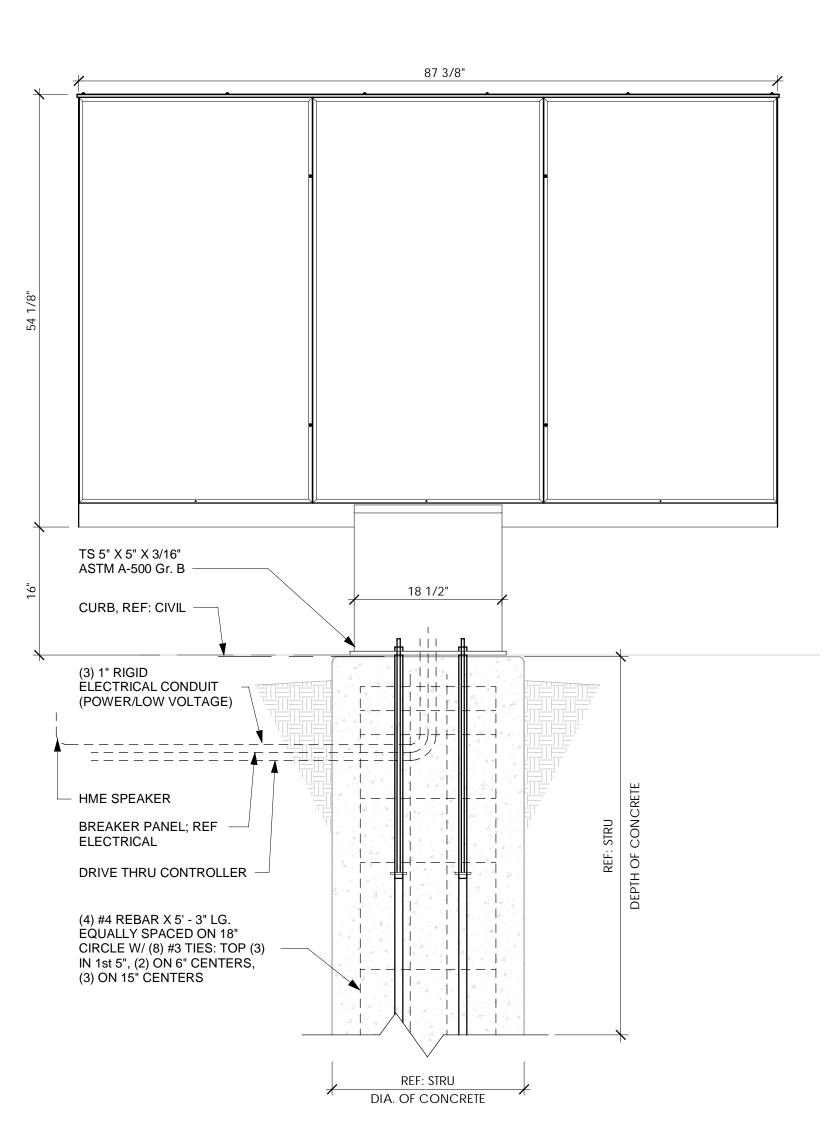
SHEET NUMBER

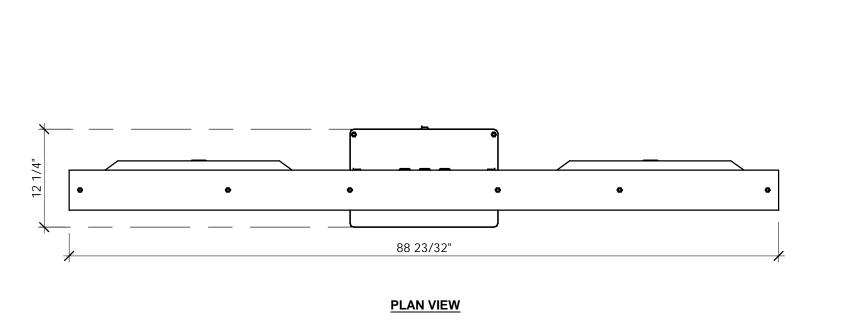
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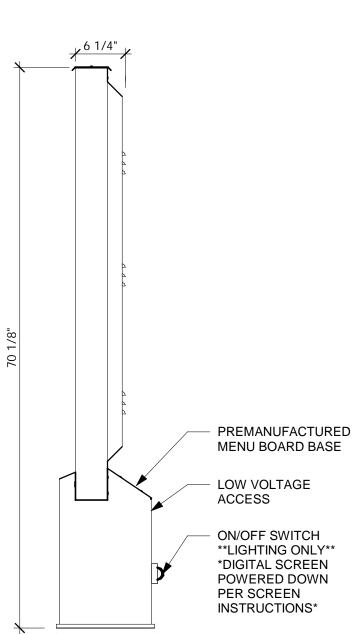




FRONT ELEVATION

7 DT MENU BOARD ELEVATION

1" = 1'-0"



GENERAL NOTES:

1. REFERENCE STRUCTURAL DRAWINGS FOR FOOTING SIZING AND

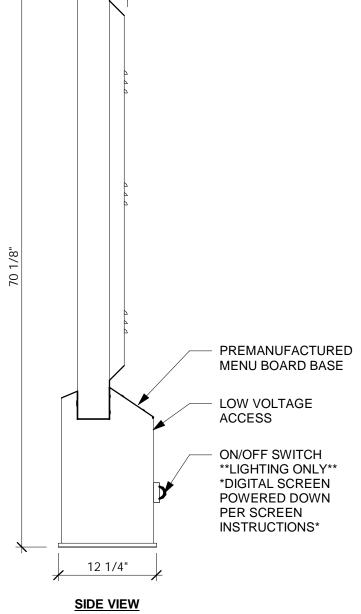
2. GC TO FOLLOW MANUFACTURERS WRITTEN INSTRUCTIONS FOR

INSTALLATION OF ALL EQUIPMENT, FIXTURES, FURNISHINGS,

3. GC TO COORDINATE ALL SITE WORK WITH CIVIL DRAWINGS.

4. FINISH TO BE PAINTED BLACK. MATCH SW 6991 BLACK MAGIC.

FINISHES, ETC.



DT MENU BOARD SIDE ELEVATION

18 1/2"

8 DT MENU BASE PLATE
1 1/2" = 1'-0"



RO HIPM, #200

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513 MAIN STREET #300 FORT WORTH TX 76102

A-2023017238

PERMIT SET: 04/12/2024

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DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE:

DRAWN BY: V. PEREZ CHECKED BY: J. JEFFERY

SHEET TITLE

SITE DETAILS

SHEET NUMBER

AS003

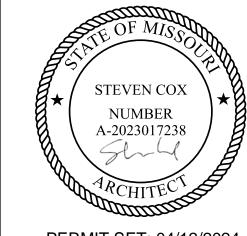
- REFERENCE STRUCTURAL DRAWINGS FOR FOOTING SIZING AND DETAILS.
- GC TO FOLLOW MANUFACTURERS WRITTEN INSTRUCTIONS FOR INSTALLATION OF ALL EQUIPMENT, FIXTURES, FURNISHINGS,
- 3. GC TO COORDINATE ALL SITE WORK WITH CIVIL DRAWINGS.
- 4. FINISH TO BE PAINTED BLACK. MATCH SW 6991 BLACK MAGIC.



HIPMAN RO #2001 610

513 MAIN STREET

FORT WORTH TX 76102



PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS,
OMISSIONS OR DISCREPANCIES BEFORE
BEGINNING OR FABRICATING ANY WORK.
DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 06/01/2023 AS NOTED ORIGINAL ISSUE: SCALE: DRAWN BY: V. PEREZ

J. JEFFERY

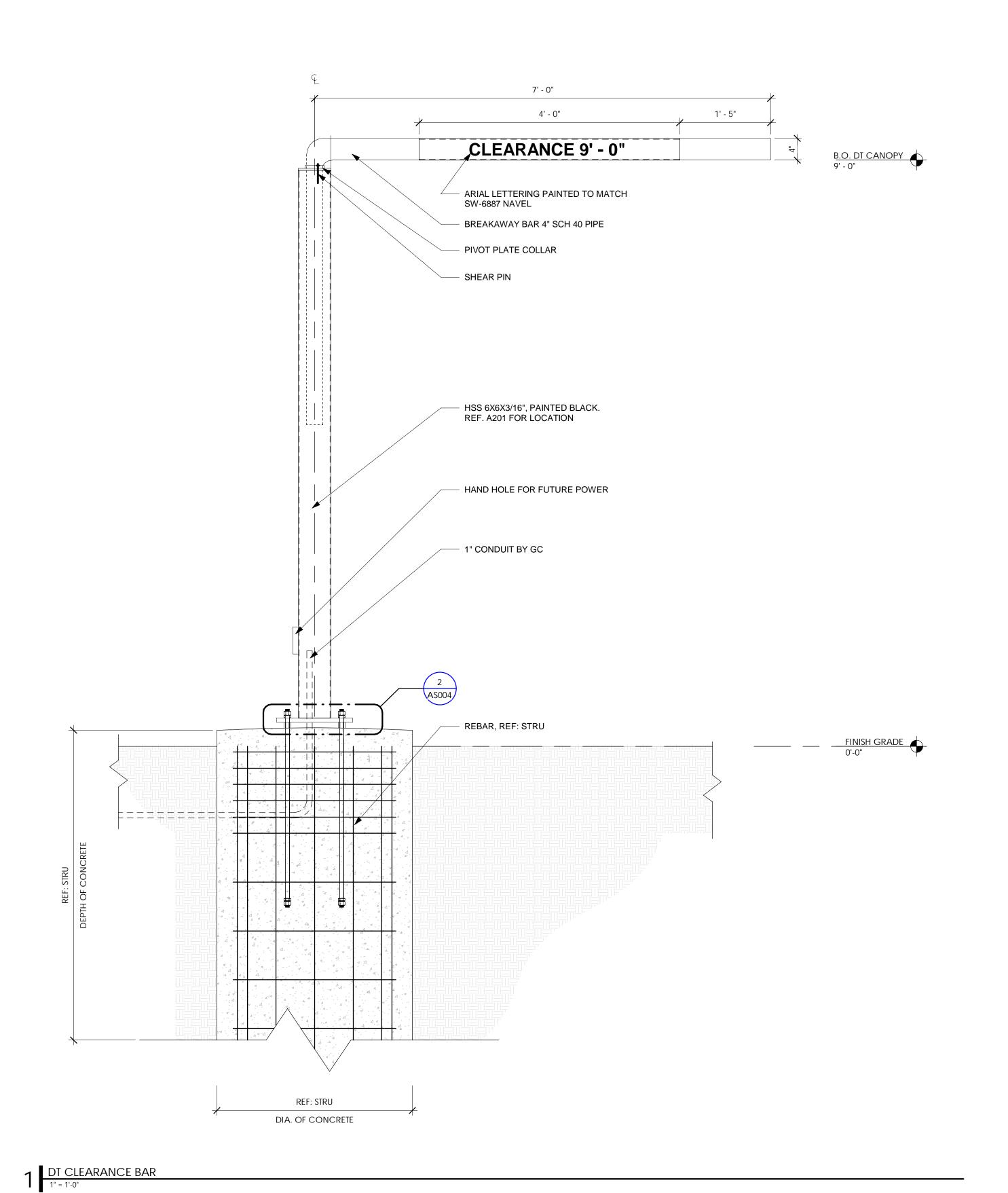
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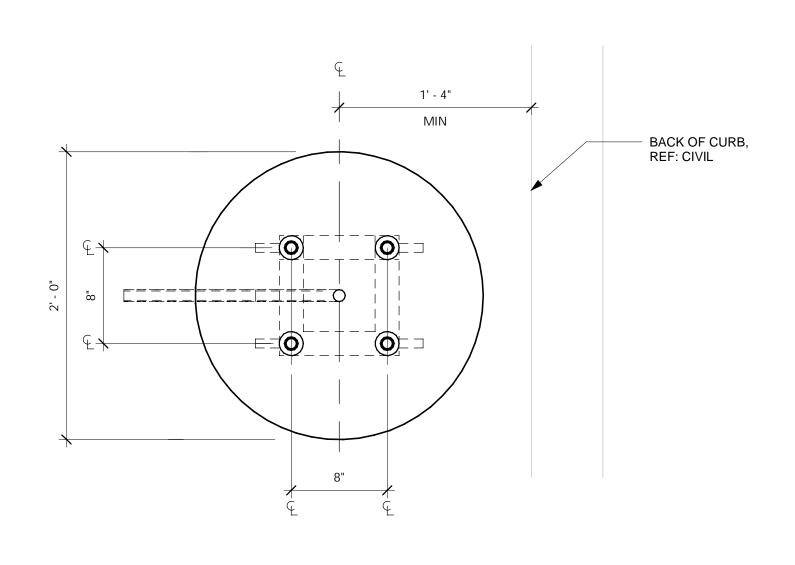
CHECKED BY:

SHEET NUMBER

AS004

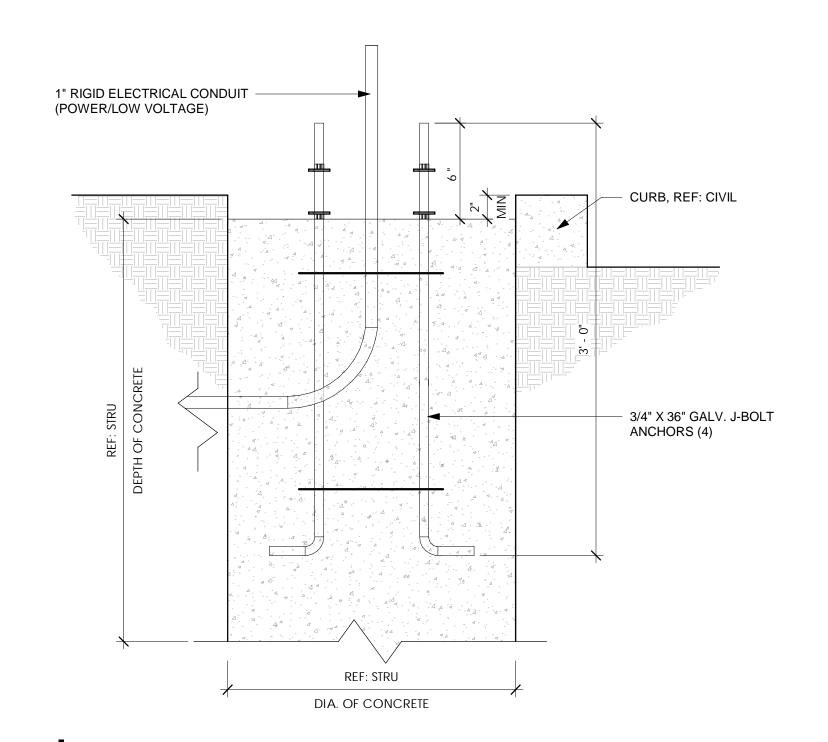
SITE DETAILS





NOTE: SET ANCHOR BOLTS PARALLEL TO BACK OF CURB

2 DT CLEARANCE BAR BASE PLATE



3 DT CLEARANCE BAR BASE PLATE - ELEVATION
1 1/2" = 1'-0"

GENERAL NOTES

- GENERAL

- CODE: ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PROVISIONS OF THE APPLICABLE BUILDING CODE OF LATEST ADOPTION AND THE STANDARDS REFERENCED THEREIN.
- GENERAL DETAILS: ALL NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS. ALL WORK OR CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES. REGULATIONS AND SAFETY REQUIREMENTS
- DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ENGINEER WILL SEND WRITTEN INSTRUCTIONS TO ALL CONCERNED. ANY SUCH DISCREPANCY, OMISSION, OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND WORK SHALL BE PERFORMED IN A MANNER AS DIRECTED BY THE ENGINEER.
- SHORING: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING ADEQUATE SHORING, BRACING, AND FORMWORK. PROPERLY DESIGNED UNDER THE SUPERVISION OF A LICENSED STRUCTURAL ENGINEER, AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING ALL PHASES OF CONSTRUCTION.
- BRACING: THESE DRAWINGS ILLUSTRATE THE PRIMARY STRUCTURAL SYSTEM IN ITS COMPLETED FORM. TEMPORARY BRACING PROPERLY DESIGNED UNDER THE SUPERVISION OF A LICENSED STRUCTURAL ENGINEER, SHALL BE PROVIDED AS REQUIRED TO HOLD ALL COMPONENTS OF THE STRUCTURE IN-PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED EXCAVATION: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES. INCLUDING LAGGING.
- SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT AND OSHA. OTHER TRADES: SEE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPE, VENT, DUCT AND OTHER OPENINGS AND DETAILS NOT SHOWN ON THESE STRUCTURAL DRAWINGS. ALL DIMENSIONS ARE TO BE CHECKED
- AND VERIFIED WITH THE ARCHITECTURAL DRAWINGS. WELDING: ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED FOR THE WELDS TO BE MADE. WELDING OF REINFORCING STEEL FOR USE IN STRUCTURAL CONCRETE OR STRUCTURAL MASONRY SHALL BE PERMITTED ONLY WHERE
- SPECIFICALLY DESIGNATED ON THESE PLANS OR WHERE SPECIFICALLY APPROVED BY THE ENGINEER. SAFETY: THE CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY, AND THE PUBLIC, AND BE
- RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLIGENCE. INSPECTIONS: ANY INSPECTIONS, SPECIAL OR OTHERWISE, THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS. OR THESE PLANS. SHALL BE PERFORMED BY AN INDEPENDENT INSPECTION COMPANY. JOB SITE VISITS BY THE
- ENGINEER DO NOT CONSTITUTE OR SUBSTITUTE FOR THESE INSPECTIONS. SHOP DRAWINGS: SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT, AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN
- FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS. SHOP DRAWING CHECK: THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH CHECKED SHOP DRAWINGS BEARING THE CONTRACTOR'S STAMP OF APPROVAL A MINIMUM OF THREE WEEKS PRIOR TO FABRICATION. THE REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS ONLY FOR GENERAL COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THIS REVIEW DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT, COMPLETE, NOR DOES IT INFER THAT THEY SUPERSEDE THE STRUCTURAL DRAWINGS.
- PRINCIPAL OPENINGS ARE SHOWN ON THE DRAWINGS. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND OTHER OPENINGS NOT SHOWN. THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT. SIZE AND LOCATION OF ALL OPENINGS SHALL BE VERIFIED WITH THE MECHANICAL CONTRACTOR. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.
- LOADINGS FOR MECHANICAL EQUIPMENT ARE BASED ON THE UNITS SHOWN ON THE STRUCTURAL DRAWINGS. ANY CHANGES IN TYPE, SIZE, OR NUMBER OF PIECES OF EQUIPMENT SHALL BE REPORTED TO THE ARCHITECT FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS PRIOR TO THE PLACEMENT OF SUCH EQUIPMENT.
- THE CONTRACTOR SHALL ENSURE THAT CONSTRUCTION MATERIALS WHOSE WEIGHT EXCEEDS THE DESIGN LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS ARE NOT STORED ON STRUCTURALLY SUPPORTED FLOOR OR ROOF FRAMING.
- CONTRACTOR SHALL COORDINATE GRADES WITH CIVIL ENGINEER'S GRADING PLANS AND ARCHITECT'S PLANS.

- FOUNDATION

- FOUNDATION DESIGNS ARE BASED ON A NET ALLOWABLE BEARING PRESSURE OF 2.100 PSF FOR CONTINUOUS FOOTINGS BEARING ON PROPERLY COMPACTED STRUCTURAL FILL OR PROPERLY PREPARED EXISTING CLAY SOILS IN ACCORDANCE WITH SOILS REPORT NO. 24-28620 DATED APRIL 11, 2024, PREPARED BY RONE ENGINEERING. CAPACITY SHALL BE VERIFIED BY AN INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT.
- THE CONTRACTOR MUST READ THE SOILS REPORT AND BE THOROUGHLY FAMILIAR WITH SITE AND SUBGRADE INFORMATION GIVEN THEREIN. ALL SUBGRADE PREPARATION, FILL, FILL PLACEMENT, AND FOUNDATION CONSTRUCTION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE STRUCTURAL DOCUMENTS AND THE SOILS REPORT, AND SHALL BE OBSERVED, TESTED, AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING.
- ALL FILL PLACEMENT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS REPORT. PRIOR TO FILL PLACEMENT, SCARIFY, MOISTURE-CONDITION, AND COMPACT THE EXPOSED GRADE AS DETAILED IN THE SOILS REPORT. THE FLOOR SLAB SHALL SUPPORTED BY 24 INCHES MINIMUM OF LOW VOLUME CHANGE STRUCTURAL FILL MEETING THE
- REQUIREMENTS OF THE SOILS REPORT IF EXISTING STRUCTURES, FOUNDATIONS, UTILITIES, UNDOCUMENTED FILL, ETC. ARE ENCOUNTERED, THEY SHALL BE REMOVED AND THE RESULTING EXCAVATION DEEPENED AND WIDENED AS NECESSARY TO REMOVE UNSUITABLE MATERIALS.
- FOOTINGS SHALL BEAR AT OR BELOW MINIMUM BEARING DEPTH. MINIMUM BEARING DEPTH IS AT LEAST 12" BELOW ADJACENT EXTERIOR FINISHED GRADE AND/OR FINISHED FLOOR ELEVATION, WHICHEVER IS LOWER. FOOTINGS SHALL NOT BEAR ON EXISTING FILL MATERIAL
- FOOTING DIMENSIONS AND/OR LOCATIONS MAY NOT BE ALTERED WITHOUT APPROVAL OF THE ENGINEER OF RECORD. ALL FOOTING EXCAVATIONS SHALL BE NEAT, CLEAN AND SQUARE. IF EARTH-FORMING OF FOOTINGS CANNOT BE PERFORMED IN THIS MANNER AND TO THE SATISFACTION OF THE AOR/EOR, CONVENTIONAL WOOD/STEEL FORMS SHALL BE PROVIDED AT NO
- ADDITIONAL COST TO THE OWNER. THE FINAL BUILDING PAD SHALL BE APPROVED BY THE OWNERS' GEOTECHNICAL REPRESENTATIVE PRIOR TO POURING CONCRETE.
- HORIZONTAL BARS IN FOOTINGS AND STEM WALLS SHALL BE CONTINUOUS. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS. REFERENCE TYPICAL CORNER BAR DETAIL STANDARD PROCEDURES OF FROST PROTECTION FOR FOUNDATIONS AND EXCAVATIONS SHALL BE EMPLOYED FOR WINTER
- CONSTRUCTION. BACKFILLING OF EXCAVATIONS SHALL BE PERFORMED AS SOON AS POSSIBLE TO PROTECT FOUNDATIONS FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER.

- SLAB-ON-GRADE SOG1. SLABS-ON-GRADE ARE REINFORCED CONCRETE. REFERENCE FOUNDATION PLAN FOR SIZE AND SPACING OF REINFORCEMENT. SOG2. SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 'GUIDE FOR CONCRETE FLOOR AND SLAB
- CONSTRUCTION', ACI 302.1. SOG3. THE FLOOR SLAB SHALL BEAR ON A 4-INCH THICK COMPACTED LAYER OF 3/4" CLEAN LIMESTONE OR AB-3, WITH VAPOR RETARDER, OVER PROPERLY PREPARED AND COMPACTED LOW VOLUME CHANGE (LVC) MATERIAL. THE 4" LAYER MAY BE COUNTED AS PART OF THE LVC ZONE. REFER TO THE SOILS REPORT FOR ALL BUILDING PAD PREPARATION REQUIREMENTS. SOG4. THE FINAL BUILDING PAD SHALL BE APPROVED BY THE OWNERS' GEOTECHNICAL REPRESENTATIVE PRIOR TO POURING
- CONCRETE. SOG5. A VAPOR RETARDER MEETING THE REQUIREMENTS OF ASTM E-1745 CLASS A SHALLBE PLACED BELOW THE FLOOR SLAB. REFER TO THE FOUNDATION PLAN FOR RETARDER THICKNESS AND THE SOILS REPORT FOR LOCATION OF THE RETARDER BELOW THE
- SOG6. ANY STANDING WATER ON THE SURFACE OF THE VAPOR RETARDER SHALL BE REMOVED PRIOR TO CONCRETE PLACEMENT. SOG7. INSTALL AND INSPECT VAPOR RETARDER IN ACCORDANCE WITH ASTM E-1643 AND MANUFACTURER'S RECOMMENDATIONS. JOIN SECTIONS OF VAPOR RETARDER AND SEAL PENETRATIONS WITH MASTIC TAPE, LAPPING JOINTS A MINIMUM OF 6". SEAL ALL PUNCTURES AND TEARS IN MEMBRANE AND SEAL AROUND ALL PIPE PENETRATIONS. TURN VAPOR RETARDER DOWN AT PERIMETER WALLS AND SEAL TO WALL. ENSURE ALL SURFACES TO RECEIVE MASTIC OR MASTIC TAPE ARE CLEAN AND DRY.
- SOG8. PROVIDE SAW CUT JOINTS AT A MAXIMUM SPACING OF 12'-0" OC EACH WAY UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS. S0G9. PROVIDE (2) #4 x 2'-0" BARS PLACED 1 1/2" BELOW TOP OF SLAB AND LOCATED DIAGONALLY AT SLAB RE-ENTRANT CORNERS.
- REFERENCE TYPICAL RE-ENTRANT CORNER BAR DETAIL SOG10 INTERIOR FLOOR SLABS-ON-GRADE SHALL BE CONSTRUCTED WITH AN OVERALL FLATNESS AND LEVELNESS VALUE OF FF=35

- CONCRETE AND REINFORCING STEEL

- ALL CONCRETE SHALL BE LABORATORY TESTED AND CONTROLLED AND MEET THE REQUIREMENTS OF ACI 318. UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS: INTERIOR SLABS-ON-GRADE AND FOOTINGS - 28 DAY STRENGTH = 4,000 PSI, SLUMP = 3" - 5", MAX W/C RATIO = 0.50, MAX
- AGGREGATE SIZE = 3/4", ACI EXPOSURE CLASS = F0.

AND FL=25, AND A MINIMUM LOCAL VALUE OF FF=24 AND LL=17. REFER TO ACI 117 AND ASTM E-1155.

- PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR II.
- AGGREGATE SHALL CONFORM TO ASTM C-33 H.R. AND BE FROM A SINGLE SOURCE. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR REVIEW A MINIMUM OF TWO WEEKS PRIOR THE FIRST CONCRETE
- REFER TO ACI 318 FOR CONCRETE COVER, ACI 315 FOR DETAILING PRACTICES AND FABRICATION, AND ACI 301 FOR STANDARD PRACTICE FOR MIXING AND PLACING CONCRETE.
- REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A-615, LATEST REVISION. BARS SHALL BE GRADE 60. DETAILING OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL CONFORM TO ACI 315.
- SPLICE REINFORCING BARS AS INDICATED ON DRAWINGS. PROVIDE STANDARD ACI HOOK FOR CONTINUOUS BARS AT DISCONTINUOUS ENDS.

- CONCRETE MASONRY UNITS

- ALL MASONRY WORK SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6).
- CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C 90. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (fm) SHALL BE 1,500 PSI AND A 2,000 PSI NET AREA COMPRESSIVE STRENGTH CONCRETE MASONRY UNIT. MORTAR SHALL MEET THE PROPERTY SPECIFICATIONS OF ASTM C 270 TYPE "S" MORTAR. MASONRY CEMENT SHALL NOT BE
- USED FOR MORTAR. GROUT SHALL MEET ASTM SPECIFICATION C 476 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,000 PSI.
- GROUT SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4" DIAMETER HEAD.
- CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.
- ALL HORIZONTAL JOINT REINFORCEMENT SHALL BE HOT-DIPPED GALVANIZED 9 GAGE WIRE REINFORCEMENT (LADDER TYPE) EMBEDDED IN MORTAR JOINTS AT 16" O.C. JOINT REINFORCEMENT SHALL COMPLY WITH ASTM A 951 AND SHALL BE LAPPED 6" WITH AT LEAST ONE CROSS WIRE WITHIN LAP. USE OPEN KNOCK OUT BOND BEAM BLOCK. DO NOT USE TROUGH TYPE BLOCKS FOR BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS, UNO.

GENERAL NOTES

- STRUCTURAL STEEL

WASHERS, HARDENED, F436

STRUCTURAL STEEL SHALL BE NEW AND CONFORM TO AISC 'SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS', LATEST APPROVED EDITION.

- ALL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRENGTHS AND SPECIFICATIONS: WIDE FLANGE STEEL SHAPES, A992---------50 KSI
- HOLLOW STRUCTURAL SECTIONS (HSS), SQUARE AND RECTANGULAR, A500 GRADE C-----50 KSI HOLLOW STRUCTURAL SECTIONS (HSS), ROUND, A500 GRADE C------CHANNELS, ANGLES, BARS AND PLATES, A36-----HEADED STUD ANCHORS (HSA), A108 GRADE DESIGNATIONS 1010 TO 1020 INCLUSIVE-----50 KSI
- BOLTS (HEAVY-HEX), A325---NUTS (HEAVY-HEX), A563
- WASHERS, PLAIN, F844 ANCHOR BOLTS AND RODS, F1554, GRADE 36-----
- BOLTS FOR STEEL BEAM AND COLUMN CONNECTIONS SHALL BE 3/4" DIAMETER ASTM A 325-N HIGH-STRENGTH BOLTS, UNO. ALL BOLTED CONNECTIONS ARE BEARING TYPE. ALL BOLTS SHALL BE TIGHTENED SNUG TIGHT, UNO.
- PROVIDE HARDENED WASHERS FOR ALL HIGH STRENGTH BOLTS, UNO. PROVIDE DOUBLE NUTS AND DOUBLE WASHERS FOR STEEL COLUMN ANCHOR BOLTS TO ALLOW FOR ADJUSTMENT IN BASE
- PLATE ELEVATION. PROVIDE HIGH STRENGTH, NON-SHRINK, NON-METALLIC GROUT BELOW BASE PLATES. THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ADEQUACY OF CONNECTIONS THAT ARE NOT DESIGNED OR FULLY DETAILED ON THE CONTRACT DOCUMENTS.
- STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT WHERE SHOWN ON THE DRAWINGS, UNLESS APPROVED BY THE ENGINEER. WELDING SHALL MEET ANSI/AWS D1.1 STRUCTURAL WELDING CODE. ELECTRODES SHALL BE 70 KSI LOW HYDROGEN. HOT DIP GALVANIZE ALL STRUCTURAL STEEL EXPOSED TO WEATHER.
- ALL STRUCTURAL STEEL, EXCEPT EMBEDDED OR GALVANIZED ITEMS, SHALL BE PAINTED WITH ONE SHOP COAT OF RUST INHIBITIVE PAINT.

- WOOD SHEATHING

- ROOF SHEATHING SHALL BE 19/32" THICK EXPOSURE I RATED PANEL (PLYWOOD OR OSB) WITH MINIMUM SPAN INDEX 40/20. BLOCKING OF UNSUPPORTED EDGES SHALL NOT BE REQUIRED, UNO. H-CLIPS SHALL BE USED TO SUPPORT EDGES OF THE PLYWOOD SHEATHING BETWEEN THE JOISTS.
- MINIMUM ROOF DIAPHRAGM NAILING SHALL BE AS INDICATED IN THE TYPICAL ROOF SHEATHING FASTENING DIAGRAM. LAY ROOF PANELS WITH FACE GRAIN PERPENDICULAR TO FRAMING AS INDICATED IN THE PLANS.
- EXTERIOR WALL SHEATHING SHALL BE MINIMUM 15/32" THICK EXPOSURE I RATED PANEL (PLYWOOD OR OSB) WITH MINIMUM SPAN RATING OF 32/16. WOOD PANELS SHALL CONFORM TO DOC PS-1 AND PS-2. EXTERIOR SHEAR WALL SHEATHING SHALL BE AS INDICATED IN THE SHEAR WALL SCHEDULE. REF ARCH FOR ALL OTHER WALL
- ALL SHEATHING PANEL EDGES AT SHEAR WALL LOCATIONS SHALL BE BLOCKED AS INDICATED IN THE SHEAR WALL SCHEDULE. REFER TO THE SHEAR WALL SCHEDULE FOR REQUIRED ATTACHMENT AT EXTERIOR SHEAR WALLS. WHERE EXTERIOR WALLS
- ARE NOT CLASSIFIED AS SHEAR WALLS, MINIMUM EXTERIOR WALL SHEATHING ATTACHMENT SHALL BE 8d NAILS SPACED AT 6" ALONG PANEL EDGES AND AT 12" IN THE FIELD.

- WOOD FRAMING

- ALL ROUGH CARPENTRY SHALL PRODUCE JOINTS TRUE AND TIGHT AND WELL NAILED WITH MEMBERS ASSEMBLED IN ACCORDANCE WITH THE DRAWINGS AND WITH ALL PERTINENT BUILDING CODES. THE SHIMMING OF SILLS, JOISTS, SHORT STUDS, TRIMMERS, HEADERS, OR OTHER FRAMING MEMBERS SHALL NOT BE PERMITTED. ALL WALLS AND PARTITIONS SHALL BE STRAIGHT, PLUMB, AND ACCURATELY LOCATED. CAREFULLY SELECT ALL STRUCTURAL MEMBERS. INDIVIDUAL PIECES SHALL BE SELECTED SO THAT KNOTS AND OBVIOUS MINOR DEFECTS WILL NOT BE INTERFERE WITH THE PLACING OF BOLTS. OR PROPER NAILING, OR THE MAKING OF THE SOUND CONNECTION. LUMBER MAY BE REJECTED BY THE ENGINEER OR ARCHITECT FOR EXCESSIVE WARP, TWIST, BOW OR CROOK, MILDEW, FUNGUS OR MOLD AS WELL AS IMPROPER GRADE MARKING. DEFECTS WHICH RENDER A PIECE UNABLE TO SERVE ITS INTENDED FUNCTION SHALL BE DISCARDED
- EACH PIECE OF STRUCTURAL LUMBER, SHEATHING, AND TIMBER SHALL BE RATED AND MARKED WITH THE GRADE BY SUCH COMPETENT AND RELIABLE ORGANIZATION WHOSE REGULAR BUSINESS IS TO ESTABLISH LUMBER GRADES. THE ORGANIZATION, GRADING AND MARKING SUBJECTED TO APPROVAL BY THE ENGINEER.
- ALL LUMBER, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, SHALL BE MILL SIZED AND SURFACED ON 4 SIDES. ALL SHALL BE STRAIGHT STOCK, FREE FROM WARP OR CUP, AND SINGLE LENGTH PIECES. BUILDING PAPER: SHALL BE THE STANDARD PRODUCT OF A MAJOR MANUFACTURER, SUITABLE FOR THE USES INTENDED, AND
- WEIGHING AT LEAST 14 POUNDS PER 100 SQUARE FEET. ROUGH HARDWARE: JOIST HANGERS, STRAPS, HOLD DOWNS, ETC., SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUIVALENT. THE MAXIMUM SIZE AND NUMBER OF FASTENERS SPECIFIED BY THE MANUFACTURER SHALL BE USED
- INSTALL ALL BLOCKING AS REQUIRED TO SUPPORT ALL ITEMS OF FINISH SUCH AS BULK HEADS AND DOOR BUCKS. PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS. BOTH VERTICAL AND HORIZONTAL BETWEEN CEILING AND FLOOR
- AREAS. VERIFY ALL REQUIRED BLOCKING WITH LOCAL BUILDING OFFICIAL. BOLTS SHALL BE INSTALLED IN HOLES BORED WITH A BIT 1/16" LARGER THAN THE DIAMETER OF THE BOLT, BOLTS AND NUTS SEATING ON WOOD SHALL HAVE CUT STEEL WASHERS UNDER HEADS AND NUTS. NUTS SHALL BE PULLED TIGHT AND AGAIN CHECKED TIGHTENED JUST PRIOR TO ENCLOSING BOLTED MEMBERS. COUNTER BORE FOR BOLTED HEADS OR NUTS ONLY WHERE SO INDICATED ON THE DRAWINGS. AND THEN ONLY TO SUFFICIENT DEPTH TO HOUSE THE BOLT OR HEAD OR NUT AND WASHER. CUT OFF EXCESSIVE PROJECTIONS WHERE NECESSARY. NICK THREADS TO PREVENT LOOSENING
- LAG SCREWS SHALL BE SCREWED AND NOT DRIVEN INTO PLACED. LAG SCREWS FASTENING ONE WOOD MEMBER TO ANOTHER SHALL HAVE A PENETRATION INTO FAR MEMBER OF NOT LESS THAN 2/3 OF THE LENGTH OF THE LAG SCREW MEASURED UNDER THE HEAD. IN PLACING LAG SCREWS IN WOOD, A HOLE SHALL FIRST BE BORED OF THE SAME DIAMETER AND DEPTH OF THE SHANK OF THE SCREW. AFTER WHICH THE HOLE SHALL BE CONTINUED TO A DEPTH EQUAL TO THE LENGTH OF THE LAG SCREW WITH A DIAMETER EQUAL TO THE DIAMETER OF THE SCREW AT THE ROOT OF THE THREAD.
- COMMON NAILS SHALL BE USED WHEN NAILING IS SPECIFIED ON THESE PLANS, SUCH AS AT SHEAR WALLS AND DIAPHRAGMS. ALL OTHER NAILING SHALL BE SUBMITTED TO THE ENGINEER WITH APPROPRIATE TESTING CERTIFICATION PRIOR TO CONSTRUCTION FOR APPROVAL. COMMON NAIL SIZES ARE AS FOLLOWS:
- 6d 2" x 0.113" DIAMETER - 8d - 2 1/2" x 0.131" DIAMETER
- 10d 3" x 0.148" DIAMETER - 12d - 3 1/4" x 0.148" DIAMETER
- 16d 3 1/2" x 0.162" DIAMETER
- 20d 4" x 0.192" DIAMETER
- W10. ALL MEMBER SIZES GIVEN IN THE DRAWINGS ARE NOMINAL DIMENSIONS.
- HEADERS SHALL BEAR FULLY ON JACK STUDS.
- W12. WOOD JOISTS SHALL BEAR ON THE FULL WIDTH OF SUPPORTING MEMBERS (STUD WALLS, BEAMS, ETC.) UNLESS OTHERWISE
- W13. BOTTOM PLATES OF ALL GROUND FLOOR STUD WALLS IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED IMPREGNATED WITH WATERBORNE PRESERVATIVE IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVATIVE BUREAU (AWPB) STANDARD LP-2, OF LATEST ADOPTION. W14. BOTTOM PLATES AT CONCRETE SLABS SHALL BE ATTACHED WITH GALV 1/2" DIA SIMPSON TITEN HD (Hnom=5") AT 24" OC, REFER
- TO SHEAR WALL AND TYPICAL DETAILS. ALL LUMBER SHALL BE SEASONED TO A MOISTURE CONTENT OF 19 PERCENT OR LESS, WITH THE INDICATION OF 'S-DRY' ON THE
- W16. LUMBER SHALL BE PROTECTED FROM THE ELEMENTS UNTIL SUCH TIME IT IS USED IN CONSTRUCTION.
- W17. ALL BOLTS AND LAG BOLTS SHALL BE FITTED WITH GALVANIZED, MALLEABLE IRON OR STEEL PLATE WASHERS. W18. AT ALL LOCATIONS, WALL STUDS, JAMB STUDS AND BEAM SUPPORT STUDS SHALL HAVE ADEQUATE SOLID MEMBERS PLACED BELOW TO CARRY ALL VERTICAL LOADS. W19. INSTALL ROUGH CARPENTRY WORK TO COMPLY WITH APPLICABLE CODE STANDARDS UNLESS OTHERWISE INDICATED. FOR
- OF MANUFACTURER OF PRODUCT INVOLVED FOR USE INTENDED. SET CARPENTRY WORK TO REQUIRED LEVELS AND LINES, WITH MEMBERS PLUMB AND TRUE AND CUT TO FIT. SECURELY ATTACH CARPENTRY WORK TO SUBSTRATES AND SUPPORTING MEMBERS USING FASTENERS OF SIZE THAT WILL NOT

SHEATHING, UNDERLAYMENT AND OTHER PRODUCTS NOT COVERED IN ABOVE STANDARDS. COMPLY WITH RECOMMENDATIONS

- PENETRATE MEMBERS WHERE OPPOSITE SIDE WILL BE EXPOSED TO VIEW OR RECEIVE FINISH MATERIALS. INSTALL FASTENERS WITHOUT SPLITTING WOOD; FASTEN PANEL PRODUCTS TO ALLOW FOR EXPANSION AT JOINTS UNLESS OTHERWISE INDICATED. PROVIDE WOOD FRAMING MEMBERS OF SIZE AND SPACING INDICATED. DO NOT SPLICE STRUCTURAL MEMBERS BETWEEN
- FASTEN 2-PLY AND 3-PLY DIMENSION LUMBER BEAMS TOGETHER USING 2 ROWS OF 10d NAILS STAGGERED AT 6" O.C. WOOD
- HEADERS OR POSTS MADE UP OF 2 OR MORE 2x's SHALL BE SPIKED TOGETHER. PROVIDE A SINGLE PLATE AT THE BOTTOM AND A DOUBLE PLATE AT THE TOP OF ALL STUD WALLS. 9 - PREFABRICATED WOOD TRUSSES
- WT1. ALL PREFABRICATED WOOD TRUSSES SHALL BE FURNISHED IN ACCORDANCE WITH DESIGNS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT, USING THE DESIGN LOADS AND SPAN CONSIDERATION INDICATED ON THE CONTRACT DOCUMENTS. NO DEVIATION OF TRUSS SHAPE, MEMBER SIZE, BEARING POINT LOCATIONS, OR SUPERIMPOSED LOADS FROM THE CONTRACT DOCUMENTS SHALL BE PERMITTED WITHOUT APPROVAL OF THE ARCHITECT AND/OR ENGINEER.

CERTIFIED CALCULATIONS SHALL BE PROVIDED FOR EACH TRUSS DESIGN. ALL WET STAMPED CALCULATIONS AND SHOP

- SHOP DRAWINGS, INCLUDING AN OVERALL ERECTION PLAN, INDICATING EACH TYPE OF TRUSS, TRUSS BEARING POINT LOCATIONS AND REACTIONS, REQUIRED LATERAL BRACING, EACH TRUSS MEMBER'S SIZE AND STRESS, AND CONNECTION DETAILS SHALL BE SUBMITTED FOR PRIOR APPROVAL TO THE CONTRACTOR.
- DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND DESIGN ENGINEER FOR REVIEW AND BUILDING DEPARTMENT APPROVAL PRIOR TO FABRICATION. WT4. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROPERLY BRACE TRUSSES DURING LIFTING AND ERECTION.
- WT5. OVERALL TRUSS DIMENSIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS PRIOR TO FABRICATION. WT6. THE MOISTURE CONTENT OF ALL LUMBER SHALL BE WITHIN PROPER LIMITS. AS STATED IN THE REFERENCE SPECIFICATIONS. BUT SHALL NOT IN ANY CASE, EXCEED 19 PERCENT NOR BE LESS THAN 7 PERCENT AT THE TIME OF FABRICATION. WT7. ALL TRUSS MEMBERS SHALL BE ACCURATELY CUT TO LENGTH, ANGLE, AND TRUE LINE TO ASSURE TIGHT JOINTS FOR FINISHED
- WT8. DEAD KNOTS AND WANES ON LUMBER SHALL NOT BE PRESENT UNDER THE CONNECTION PLATES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE COVER AND PROTECTION FROM WEATHER, CORROSION, BENDING, DAMAGE, AND DETERIORATION WHEN STORED ON THE JOBSITE.

WT10. WT10.THE SIZE AND CONFIGURATION OF THE TRUSS WEB AND CHORD MEMBERS SHALL BE DETERMINED BY THE TRUSS

WT11. TRUSSES SHALL BE DESIGNED FOR THE LOADING AS NOTED ON THESE PLANS.

GENERAL NOTES

- WT12. MAXIMUM LIVE LOAD DEFLECTIONS SHALL BE SPAN LENGTH/240 FOR THE ROOF TRUSSES AND SPAN LENGTH/360 FOR FLOOR, BALCONY, AND BREEZEWAY/CORRIDOR TRUSSES. THE MAXIMUM DEFLECTION SHALL NOT EXCEED 1 INCH.
- WT13. THE TRUSS MANUFACTURER SHALL DESIGN ALL TRUSS HEADERS, CONTINUOUS BEARING MEMBERS, AND SHEAR PANELS FOR
- ALL GRAVITY, WIND LOADS NOTED ON THESE PLANS.
- WT14. ALL TRUSS-TO-TRUSS AND TRUSS-TO-BEAM CONNECTIONS SHALL BE DESIGNED AND SUPPLIED BY THE TRUSS MANUFACTUREF WT15. ALL TRUSS REPAIRS MADE IN THE FIELD SHALL BE DOCUMENTED BY THE CONTRACTOR. A SIGNED AND SEALED ENGINEERED
- REPAIR SHALL BE REQUIRED IN ALL CASES. WT16. ALL MULTI-PLY TRUSSES SHALL BE ATTACHED TOGETHER WITH A-307 BOLTS AT A SPACING OF 12 INCHES OR AS PER THE
- RECOMMENDATIONS OF THE TRUSS MANUFACTURER.
- WT17. FIELD NOTCHING OR CUTTING OF TRUSSES IS PROHIBITED. ANY MODIFICATIONS, IF REQUIRED, SHALL BE MADE UNDER THE DIRECTION OF THE TRUSS ENGINEER.
- WT18. PROVIDE A MINIMUM OF ONE STUD UNDER EACH TRUSS PLY AT GIRDERS UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS.
- WT19. REFER TO STANDARD PERMANENT BRACING SHEET FOR ATTACHMENT OF ALL REQUIRED PERMANENT BRACING FOR TRUSSES. WT20. FINGER JOINTED MATERIAL SHALL NOT BE USED AS PERMANENT WEB OR DIAGONAL BRACES.
- WT21. THE DESIGN, MATERIAL AND FABRICATION CRITERIA OF PREFABRICATED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE STRICTER OF THE FOLLOWING DESIGN STANDARDS:
 - A. TRUSS PLATE INSTITUTE, TPI-14, "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES". B. THE REFERENCE BUILDING CODE.

10 - WOOD PROPERTIES

- ALL DIMENSIONAL LUMBER SHALL BE EITHER SOUTHERN YELLOW PINE OR DOUGLAS FIR-LARCH. ALL 2x12 MEMBERS SHALL BE
- GRADE NO. 1 OR SELECT STRUCTURAL. ALL OTHER LUMBER SHALL BE GRADE NO 2.
- DIMENSIONAL LUMBER: SPECIES SURFACE DRY DOUGLAS FIR-LARCH (DFL) A. BASE DESIGN VALUES:
- 1. DFL NO. 2 BEAMS, JOISTS, WALLS AND COLUMNS 2" TO 4" WIDE Fb = 900 psi
- Fv = 180 psi E = 1,600,000 psi
- Fc parallel = 1,350 psi Fc perp = 625 psi Ft = 575 psi
- 2. SYP NO. 2 BEAMS, JOISTS, WALLS AND COLUMNS 2" TO 4" WIDE
- Fb = 1,100 psiFv = 175 psi E = 1,400,000 psi
- Fc parallel = 1,450 psi Fc perp = 565 psi

A ZINC COATING.

Ft = 675 psi

- 11 POWDER ACTUATED FASTENER (PAF)
- PAF1. POWDER ACTUATED FASTENERS SHALL BE OF TYPE SUITABLE FOR THE APPLICATION INDICATED. FABRICATED FROM CORROSION-RESISTANT MATERIALS, WITH ALLOWABLE LOAD CAPACITIES CALCULATED ACCORDING TO THE PHYSICAL AND PERFORMANCE CRITERIA OF ICC-ES AC70, GREATER THAN OR EQUAL TO THE DESIGN LOAD IN ACCORDANCE WITH ASTM E 1190. PAF2. FASTENERS SHALL BE MADE FROM HARDENED STEEL COMPLYING WITH THE MANUFACTURER'S QUALITY DOCUMENTATION WITH
- PAF3. POWDER ACTUATED FASTENERS ANCHORS SHALL BE OF THE SIZE AND QUANTITY NOTED ON THE DETAILS, AS MANUFACTURED BY HILTI, SIMPSON STRONG-TIE ANCHOR SYSTEMS, OR DEWALT/POWERS. NO OTHER MANUFACTURER IS PERMITTED. ANCHORS FROM ONLY ONE MANUFACTURER SHALL BE UTILIZED ON THE PROJECT.
- ALL POWDER ACTUATED FASTENERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- POWDER ACTUATED FASTENERS INTO CONCRETE: A. POWDER ACTUATED FASTENERS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED POWDER ACTUATED FASTENERS INCLUDE:
 - HILTI UNIVERSAL SHANK X-U (ICC-ES ESR-2269) 2. HILTI SMOOTH SHANK X-P (ICC-ES ESR-2269).
 - 3. SIMPSON STRONG-TIE PDPA (ICC-ES ESR-2138).
- 4. DEWALT/POWERS SPIRAL CSI (ICC-ES ESR-2024). B. UNLESS NOTED ON THE DRAWINGS OTHERWISE. ALL FASTENERS INTO CONCRETE SHALL HAVE A MINIMUM SHANK DIAMETER OF 0.157" AND BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM CONCRETE EMBEDMENT DEPTH OF 1".
- POWDER ACTUATED FASTENERS INTO STEEL: A. POWDER ACTUATED FASTENERS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70.
 - PRE-APPROVED POWDER ACTUATED FASTENERS INCLUDE:
 - HILTI UNIVERSAL SHANK X-U (ICC-ES ESR-2269) 2. HILTI UNIVERSAL SHANK X-U 15 (ICC-ES ESR-2269).
 - 3. SIMPSON STRONG-TIE PDPA (ICC-ES ESR-2138).
 - 4. DEWALT/POWERS SPIRAL CSI (ICC-ES ESR-2024).
 - B. UNLESS NOTED ON THE DRAWINGS OTHERWISE, ALL FASTENERS INTO STEEL SHALL HAVE A MINIMUM SHANK DIAMETER OF 0.157" AND BE OF SUFFICIENT LENGTH TO PENETRATE THROUGH THE STEEL SUBSTRATE.

12 - POST-INSTALLED ANCHORS

- POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW, SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE BUILDING CODE. CONTACT MANUFACTURE'S REPRESENTATIVE FOR THE INITIAL TRAINING AND INSTALLATION OF ANCHORS AND FOR PRODUCT RELATED
- QUESTIONS AND AVAILABILITY. POST-INSTALLED CONCRETE ANCHORS SHALL BE OF SIZE, TYPE, AND QUANTITY AS NOTED ON DETAILS, AS MANUFACTURED BY HILTI, SIMPSON STRONG-TIE ANCHOR SYSTEMS OR POWERS/DEWALT FASTENERS, NO OTHER MANUFACTURER PERMITTED.
- ANCHORS FROM ONLY ONE MANUFACTURER SHALL BE UTILIZED ON THE PROJECT. ALL POST-INSTALLED BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS CONSTRUCTION OF POST-INSTALLED ANCHORS REQUIRES SPECIAL INSPECTION BY THE TESTING LAB TO ENSURE PROPER
- A. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:
- 1. SCREW ANCHOR(S):
- a. SIMPSON STRONG-TIE TITEN-HD (ICC-ES ESR-2713).
- b. HILTI KH-EZ (ICC-ES ESR-3027).

EMBEDMENT AND INSTALLATION PER MANUFACTURER'S SPECIFICATIONS.

- c. DEWALT SCREW-BOLT+ (ICC-ES ESR-3889 AND 4042). B. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
 - EPOXY ANCHOR(S): a. SIMPSON STRONG-TIE SET-3G (ICC-ES ESR-4057).
- b. HILTI HIT-RE 500 V3 (ICC-ES ESR-3814)
- c. HILTI HIT-HY 200 (ICC-ES ESR-3187). d. DEWALT PURE 200+ (ICC-ES ESR-5144)
- e. DEWALT AC200+ (ICC-ES ESR-4027).

D. STRUCTURAL STEEL.

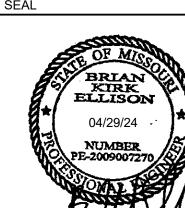
- 13 SHOP DRAWINGS
- SD1. SHOP DRAWING SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY. SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTING TO THE ARCHITECT AND/OR
- ENGINEER OF RECORD. THE FOLLOWING STRUCTURAL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER OF RECORD:
- A. CONCRETE MIX DESIGN.
- B. FOUNDATION REINFORCING STEEL C. WOOD TRUSS DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE IN WHICH THE PROJECT IS LOCATED.

O

CERTIFICATE OF AUTHORITY E-2012009242 Brian Kirk Ellison, P.E.

ENGINEER OF RECORD

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PERMIT SET: 04/12/24

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

04/12/2024

AS NOTED

PROJECT NO ORIGINAL ISSUE SCALE:

PROJECT INFORMATION

CHECKED BY

SHEET TITLE

DRAWN BY

GENERAL

INFORMATION

SHEET NUMBER

SPECIAL INSPECTIONS AND TESTING IBC SECTION 1705.2, AISC 360 CHAPTER N THE OWNER SHALL EMPLOY QUALIFIED SPECIAL INSPECTORS TO PERFORM INSPECTIONS IN ACCORDANCE WITH THE BUILDING CODE. INSPECTORS SHALL PERFORM ALL DUTIES AND RESPONSIBILITIES AS REQUIRED BY THE BUILDING CODE. JOB SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AND REQUIRED SPECIAL INSPECTIONS AND TESTS OF STEEL CONSTRUCTION ARE NOT A SUBSTITUTE FOR SPECIAL INSPECTIONS. THE FOLLOWING SCHEDULE CONTAINS A LIST OF THE SPECIAL INSPECTION ACTIVITIES RELATED TO THE QUALITY ASSURANCE PLAN REQUIRED BY IBC CHAPTER 17 FOR THE FABRICATION, ERECTION AND CONSTRUCTION OF THE STRUCTURAL SYSTEMS AS DESCRIBED IN THE SPECIFICATION AND DRAWINGS FOR THE QC INSPECTION STEEL - WELDING REFERENCED STANDARD PROJECT. ALL INSPECTORS SHALL BE QUALIFIED BY TRAINING AND EXPERIENCE FOR THE REQUIRED INSPECTIONS AND TEST PROCEDURES. REFER TO IBC CHAPTER 17 AND THE PROJECT SPECIFICATIONS FOR SPECIFIC TEST PROCEDURES. TESTING AND INSPECTION REPORTS SHALL BE PREPARED FOR EACH INSPECTION ITEM ON A DAILY BASIS WHENEVER INSPECTIONS ARE MADE ON THAT ITEM. NSPECTION TASKS PRIOR TO WELDING AISC 360, TABLE N5.4-1 REPORTS SHALL BE DISTRIBUTED TO THE OWNER, CONTRACTOR, ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING OFFICIAL (IF REQUESTED), FOR THEIR AWS D1.1-6.3 PERFORM <u>WELDING PROCEDURE SPECIFICATIONS (WPSS) AVAILABLE</u> MANUFACTURER CERTIFICATION FOR WELDING CONSUMABLES AVAILABLE REVIEW, COMMENT, AND ACTION, AS NECESSARY. PERFORM AWS D1.1-6.2 ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS REQUIRING SPECIAL INSPECTIONS PER SECTION 1705 OF THE IBC HAVE NOT BEEN LISTED HERE. REFER TO THE ARCHITECT AND MECHANICAL ENGINEER FOR SPECIAL INSPECTION REQUIREMENTS FOR THESE COMPONENTS. OBSERVE AWS D1.1-6.2 IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THESE TESTS AND INSPECTIONS ARE PERFORMED. OBSERVE AWS D1.1-6.4 REFER TO THE PROJECT SPECIFICATIONS FOR MORE SPECIFIC INSPECTION AND TESTING INFORMATION AWS D1.1-6.5.2 JOINT PREPARATION AWS D1.1-5.22 IBC 1704.2.5 DIMENSIONS (ALIGNMENT, ROOD OPENING, ROOT FACE, BEVEL) OBSERVE AWS D1.1-5.15 CLEANLINESS (CONDITION OF STEEL SURFACES) REQUIRED FABRICATOR APPROVAL AWS D1.1-5.18 TACKING (TACK WELD QUALITY AND LOCATION) AWS D1.1-5.10, 5.22.1. BACKING TYPE AND FIT (IF APPLICABLE) CONFIGURATION AND FINISH OF ACCESS HOLES OBSERVE AWS D1.1-6.5.2, 5.17 WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE IT UP OF FILLET WELDS PREMISES OF A FABRICATOR'S SHOP. SPECIAL INSPECTIONS OF THE FABRICATED ITEMS SHALL BE PERFORMED DURING FABRICATION. EXCEPT AWS D1.1-5.22.1 DIMENSIONS (ALIGNMENT, GAPS AT ROOT) OBSERVE WHERE THE FABRICATOR HAS BEEN APPROVED TO PERFORM WORK WITHOUT SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704.2.5.1. AWS D1.1-5.15 CLEANLINESS (CONDITION OF STEEL SURFACES) AWS D1.1-5.18 TACKING (TACK WELD QUALITY AND LOCATION) CHECK WELDING EQUIPMENT EXCEPTION: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR APPROVED TO OBSERVE AWS D1.1-6.2, 5.11 PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED ON REVIEW OF THE FABRICATOR'S WRITTEN FABRICATION AISC 360, TABLE N5.4-2 PROCEDURES AND QUALITY CONTROL MANUALS THAT PROVIDE A BASIS FOR CONTROL OF MATERIALS AND WORKMANSHIP, WITH PERIODIC INSPECTION TASKS DURING WELDING AUDITING OF FABRICATION AND CONTROL PRACTICES BY AN APPROVED AGENCY OR THE BUILDING OFFICIAL. AT COMPLETION OF FABRICATION. ISE OF QUALIFIED WELDERS OBSERVE AWS D1.1-6.4 THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER OR THE OWNER'S AUTHORIZED AGENT FOR CONTROL AND HANDLING OF WELDING CONSUMABLES AWS D1.1-6.2 SUBMITTAL TO THE BUILDING OFFICIAL AS SPECIFIED IN SECTION 1704.5 STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE AWS D1.1-5.3.1 PACKING OBSERVE APPROVED CONSTRUCTION DOCUMENTS. EXPOSURE CONTROL AWS D1.1-5.3.2, 5.3.3 WELDING OVER CRACKED TACK WELDS OBSERVE AWS D1.1-5.18 **ENVIRONMENTAL CONDITIONS IBC TABLE 1705.6** WIND SPEED WITHIN LIMITS OBSERVE AWS D1.1-5.12.1 **REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS** PRECIPITATION AND TEMPERATURE AWS D1.1-5.12.2 AWS D1.1-6.3.3,6.5.2, 5.5, 5.21 'PS FOLLOWED SETTINGS ON WELDING EQUIPMENT TYPE CONTINUOUS **PERIODIC** TRAVEL SPEED SELECTED WELDING MATERIALS VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING OBSERVE Χ SHIELDING GAS TYPE/FLOW RATE PREHEAT APPLIED AWS D1.1-5.6, 5.7 VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL INTERPASS TEMPERATURE MAINTAINED (MIN/MAX) PROPER POSITION (F,V,H,OH) VELDING TECHNIQUES 3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS. AWS D1.1-6.5.2, 6.5.3, 5.24 INTERPASS AND FINAL CLEANING VERIFY USE OF PROPER MATERIALS. DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND AWS D1.1-5.30.1 OBSERVE COMPACTION OF COMPACTED FILL AND OTHER GRADING ACTIVITIES REQUIRING SPECIAL INSPECTION. EACH PASS WITHIN PROFILE LIMITATIONS EACH PASS MEETS QUALITY REQUIREMENTS A. ALL SOILS NOT MEETING THE REQUIREMENTS OF CATEGORY B. AISC 360, TABLE N5.4-3 NSPECTION TASKS AFTER WELDING MODERATELY, HIGHLY OR CRITICALLY EXPANSIVE SOILS, HYDROCOLLAPSIBLE SOILS, SOLUBLE SOILS, WELDS CLEANED AWS D1.1-5.30.1 OBSERVE AND/OR SOILS REQUIRING CHEMICAL OR MECHANICAL (GEOSYNTHETICS) STABILIZATION ARE SIZE, LENGTH, AND LOCATION OF WELDS PERFORM AWS D1.1-6.5.1 ENCOUNTERED. CONSTRUCTION OR STABILIZATION OF CUT OR FILL SLOPES EXCEEDING 5 FEET IN WELDS MEET VISUAL ACCEPTANCE CRITERIA AWS D1.1-6.5.3 HEIGHT, OR ANY SITE REQUIRING THAT FILL BE PLACED ON A NATURAL SLOPE, AN EXISTING CUT **CRACK PROHIBITION** TABLE 6.1 (1) SLOPE, OR AN EXISTING FILL SLOPE STEEPER THAN 5:1. WELD/BASE-METAL FUSION TABLE 6.1 (2) PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN CRATER CROSS SECTION TABLE 6.1 (3) PERFORM PREPARED PROPERLY. WELD PROFILES TABLE 6.1 (4), 5.24 WELD SIZE TABLE 6.1 (6) **IBC TABLE 1705.3** UNDERCUT TABLE 6.1 (7) POROSITY TABLE 6.1 (8) AWS D1.1-5.29 REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION PERFORM ARC STRIKES K-AREA – WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORM REFERENCED PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS CONTINUOUS PERIODIC STANDARD REFERENCE PERFORM AWS D1.1-5.10, 5.31 BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED) PERFORM AWS D1.1-6.5.3, 5.26 ACI 318: CH. 20, 25.2 1908.4 INSPECT REINFORCEMENT AND VERIFY PLACEMENT OCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER PERFORM AWS D1.1-6.5.4, 6.5.5 25.3, 26.6.1-26.6.3 REINFORCING BAR WELDING: QC INSPECTION STEEL - BOLTING REFERENCED STANDARD VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM TYPE AWS D1.4 ACI 318: 26.6.4 INSPECTION TASKS PRIOR TO BOLTING AISC 360, TABLE N5.6-1 B. INSPECT SINGLE-PASS FILLET WELDS NO LARGER THAN 5/16". **OBSERVE** MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS RSCS 2.1, 9.1 . INSPECT ANCHORS CAST IN CONCRETE. ACI 318: 17.8.2 RSCS 2.1, 9.1, ASTM **OBSERVE** FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. STANDARDS REFER TO THE RESEARCH REPORT LISTED IN THE GENERAL NOTES FOR PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS OBSERVE RSCS 2.3.2, 2.7.2, 9.1 SPECIFIC REQUIREMENTS OF SPECIAL INSPECTION FOR EACH PRODUCT. ARE TO BE EXCLUDED FROM SHEAR PLANE) ADHESIVE ANCHORS INSTALLED HORIZONTALLY OR LIPWARDLY PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL OBSERVE RCSC 4, 8 INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. CONNECTING ELEMENTS INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE OBSERVE RCSC 3, 9.1, 9.3 PREPARATIONS, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS MECHANICAL OR ADHESIVE ANCHORS NOT DEFINED IN 4A. ACI 318: 17.8.2 RE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND PERFORM RCSC 7, 9.3 ACI 318: CH. 19, 1904.1, 1904.2, DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED . VERIFY USE OF REQUIRED DESIGN MIX. 26.4.3, 26.4.4 1908.2, 1908.3 PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS OBSERVE RCSC 2.2, 8, 9.1 PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH ASTM C172 INSPECTION TASKS DURING BOLTING AISC 360, TABLE N5.6-2 TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE ASTM C31 TEMPERATURE OF CONCRETE. ACI 318: 26.4, 26.12 FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF OBSERVE RCSC 8.1, 9.1 1908.6, 1908.7. 7. INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES. REQUIRED) ARE POSITIONED AS REQUIRED JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION ACI 318: 26.5 1908.8 OBSERVE RCSC 8.1, 9.1 VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING OBSERVE RCSC 8.2, 9.2 ACI 318: 26.5.3, 26.5.5 1908.9 FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING OBSERVE RCSC 8.2, 9.2 NOT APPLICABLE SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARDS THE FREE EDGES 0. NOT APPLICABLE NSPECTION TASKS AFTER BOLTING AISC 360, TABLE N5.6-3 VERIFY IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL OF SHORES ACI 318: 26.11.2 DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS PERFORM AND FORMS FOR BEAMS AND STRUCTURAL SLABS. QC INSPECTION REFERENCED STANDARD STEEL - GENERAL INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE TYPE ACI 318: 26.11.1.2 (b) CONCRETE MEMBER BEING FORMED. STEEL AND OTHER STEEL VERIFICATIONS AND INSPECTIONS AISC 360: N5.7, AISC 341 MATERIAL VERIFICATION OF STRUCTURAL STEEL IBC 1704.2.5 -IDENTIFICATION MARKINGS TO CONFORM TO AISC 360 OBSERVE REQUIRED WOOD TRUSS FABRICATOR APPROVAL -MANUFACTURER'S CERTIFIED MILL REPORTS RUCTURAL STEEL DETAILS ALL FABRICATED STEEL OR STEEL FRAMES SHALL BE INSPECTED TO VERIFY COMPLIANCE WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE WITH THE DETAILS SHOWN IN THE CONSTRUCTION DOCUMENTS, SUCH AS BRACES, OBSERVE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS OF THE FABRICATED ITEMS SHALL BE PERFORMED DURING FABRICATION. SPECIAL STIFFENERS, MEMBER LOCATIONS, AND PROPER APPLICATION OF JOINT DETAILS AT EACH INSPECTIONS DURING FABRICATION ARE NOT REQUIRED WHERE THE FABRICATOR MAINTAINS APPROVED DETAILED FABRICATION AND QUALITY CONNECTION CONTROL PROCEDURES THAT PROVIDE A BASIS FOR CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO THE

APPROVED CONSTRUCTION DOCUMENTS AND BUILDING CODE. APPROVAL SHALL BE BASED UPON REVIEW OF FABRICATION AND QUALITY

PROCEDURAL AND QUALITY CONTROL MANUALS AND PERIODIC AUDITING OF FABRICATION PRACTICES BY AN APPROVED AGENCY. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER OR OWNER'S

AUTHORIZED AGENT FOR SUBMITTAL TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE

IBC SECTION 1705.11

REQUIRED SPECIAL INSPECTIONS FOR WIND RESISTANCE

EXCEPTION: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND

APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN

CONTROL PROCEDURES AND PERIODIC INSPECTION OF FABRICATION PRACTICES BY THE BUILDING OFFICIAL.

TYPE

WIND-RESISTING COMPONENTS: INSPECTION OF FASTENING OF ROOF COVERING, ROOF DECK, AND ROOF

FRAMING CONNECTIONS, AND EXTERIOR WALL COVERING AND WALL CONNECTIONS TO ROOF AND FLOOR

WOOD CONSTRUCTION: INSPECTION OF SCREW ATTACHMENTS, BOLTING, ANCHORING AND OTHER

FASTENING OF ELEMENTS OF THE MAIN WINDFORCE RESISTING SYSTEM, INCLUDING SHEAR WALLS.

BRACES, DIAPHRAGMS, COLLECTORS (DRAG STRUTS) AND HOLD-DOWNS

APPROVED CONSTRUCTION DOCUMENTS.

DIAGPHRAGMS AND FRAMING

ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL

DELAYED PENDING THESE INSPECTIONS AT CONTRACTOR'S RISK.

DEFINITIONS:

CONTINUOUS

PERIODIC

SHALL BE ON THE PREMISES DURING THE PLACEMENT OF ANCHOR RODS AND OTHER

EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH CONSTRUCTION

DOCUMENTS; VERIFY THE DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR ROD OR

EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF

PERFORM: PERFORM THESE TASKS FOR EACH WELD, FASTENER OR BOLTED CONNECTION, AND REQUIRED VERIFICATION

OBSERVE: OBSERVE THESE ITEMS ON A RANDOM SAMPLING BASIS TO INSURE THE APPLICABLE REQUIREMENTS ARE MET. OPERATIONS NEED NOT BE

REFER TO AISC 360 FOR MORE SPECIFIC INFORMATION REGARDING QUALITY CONTROL AND QUALITY ASSURANCE FOR STRUCTURAL STEEL.

OBSERVE

ABBR	BBREVIATIONS LEGEND DEFINITION	ABBR	BBREVIATIONS LEGEND DEFINITION
AB ACI	ANCHOR BOLT AMERICAN CONCRETE INSTITUTE	LLH LLV	LONG LEG HORIZONTAL LONG LEG VERTICAL
AFF AISC	ABOVE FINISHED FLOOR AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LONG LSH	LONGITUDINAL LONG SIDE HORIZONTAL
AISI ARCH	AMERICAN IRON AND STEEL INSTITUTE ARCHITECTURAL	LSV MAX	LONG SIDE VERTICAL MAXIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MECH	MECHANICAL
AWS BFF	AMERICAN WELDING SOCIETY BELOW FINISHED FLOOR	MFR MIN	MANUFACTURER MINIMUM
BO BOS	BOTTOM OF BOTTOM OF STEEL	MISC MTL	MISCELLANOUS METAL
BOT BRG	BOTTOM BEARING	NIC NO	NOT IN CONTRACT NUMBER
BTWN	BETWEEN	NS	NEAR SIDE
CL CL	CONTRACTION JOINT CENTER LINE	NTS OC	NOT TO SCALE ON CENTER
CLR CMU	CLEAR CONCRETE MASONRY UNIT	OH PAF	OPPOSITE HAND POWER ACTUATED FASTENER
COL	COLUMN CONCRETE	PCF PL	POUNDS PER CUBIC FOOT PLATE
CONN	CONNECTION	PLF	POUNDS PER LINEAR FOOT
CONST	CONSTRUCTION CONTINUOUS	PMEJ PSF	PREMOLDED EXPANSION JOINT POUNDS PER SQUARE FOOT
DIA EA	DIAMETER EACH	PSI REF	POUNDS PER SQUARE INCH REFER TO
EF EIFS	EACH FACE -or- EXHAUST FAN EXTERIOR INSULATION AND FINISH SYSTEM	REINF RO	REINFORCING ROUGH OPENING
EJ	EXPANSION JOINT	RTU	ROOF TOP UNIT
ELEC	ELEVATION ELECTRICAL	SCHED SDI	SCHEDULE STEEL DECK INSTITUTE
EQ EW	EQUAL EACH WAY	SIM SJI	SIMILAR STEEL JOIST INSTITUTE
FDN	FOUNDATION	SPECS	SPECIFICATIONS
FF FS	FINISHED FLOOR FAR SIDE	STL STRUC	STEEL STRUCTURAL
FTG FV	FOOTING FIELD VERIFY	T&B THK	TOP AND BOTTOM THICKNESS
GA	GAUGE	TO	TOP OF
GC H	GENERAL CONTRACTOR HEIGHT	TOC TOF	TOP OF CONCRETE TOP OF FOOTING
HORIZ HSA	HORIZONTAL HEADED STUD ANCHOR	TOGB TOM	TOP OF GRADE BEAM TOP OF MASONRY
HSS	HOLLOW STRUCTURAL SHAPE	TOS	TOP OF STEEL
JBE JST	JOIST BEARING ELEVATION JOIST	TOW TRANS	TOP OF WALL TRANSVERSE
JT KSI	JOINT KIPS PER SQUARE INCH	TYP UNO	TYPICAL UNLESS NOTED OTHERWISE
L LB	LENGTH POUNDS	VERT	VERTICAL WIDTH
LOOR LIVI OOF LOAI OOF DEAI RUSS TOP	DS D LOAD CHORD		15 P:
LOOR LIVE OOF LOAI OOF DEAI RUSS TOP RUSS BOT OOF LIVE NOW LOA	E LOAD DS D LOAD CHORD TOM CHORD LOAD		15 PS 10 PS 20 PS
LOOR LIVE OOF LOAI OOF DEAL RUSS TOP RUSS BOT OOF LIVE NOW LOA IPORTANG	E LOAD DS D LOAD CHORD TOM CHORD LOAD ADS CE FACTOR (I) OSURE FACTOR (Ce)		15 PS 10 PS 20 PS
LOOR LIVE OOF LOAD OOF DEAL RUSS TOP RUSS BOT OOF LIVE NOW LOAD PORTANG NOW EXP OOF THEE ROUND S	E LOAD DS D LOAD CHORD TOM CHORD LOAD ADS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg)		15 PS 10 PS 20 PS 1 1 1 20 PS
LOOR LIVE OOF LOAD OOF DEAL RUSS TOP RUSS BOT OOF LIVE NOW LOAD IPORTANG NOW EXP OOF THEE ROUND S LAT ROOF	E LOAD DS D LOAD CHORD TOM CHORD LOAD ADS CE FACTOR (I) OSURE FACTOR (Ct)		15 P3 10 P3 20 P3 20 P3 14 P3
LOOR LIVE DOF LOAD DOF DEAL SUSS BOT DOF LIVE NOW LOAD PORTANI NOW EXP DOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S	E LOAD DS D LOAD CHORD TOM CHORD LOAD DS CE FACTOR (I) COSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf)		15 P3 10 P3 20 P3 20 P3 14 P3 5 P3 20 P3
LOOR LIVE DOF LOAD DOF DEAL SUSS TOP SUSS BOT DOF LIVE NOW LOAD IPORTANG NOW EXP DOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S IGN ROOF	E LOAD DS D LOAD CHORD TOM CHORD LOAD ADS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) E SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD		15 P3 10 P3 20 P3 20 P3 14 P3 5 P3 20 P3
LOOR LIVE OOF LOAD OOF DEAL RUSS TOP RUSS BOT OOF LIVE NOW LOAD IPORTANG NOW EXP OOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S IGN ROOF RAL LOAD D LOAD C	E LOAD DS D LOAD CHORD TOM CHORD LOAD ADS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD		15 PS 10 PS 20 PS 1 1 1 20 PS 14 PS 5 PS 20 PS
LOOR LIVE DOF LOAD DOF DEAL RUSS TOP RUSS BOT DOF LIVE NOW LOAD IPORTANG NOW EXPE DOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S IGN ROOI RAL LOAD D LOAD C LTIMATE I	E LOAD DS D LOAD CHORD TOM CHORD LOAD ADS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD DS CRITERIA DESIGN WIND SPEED (Vult, 3-SECOND GUST) DESIGN WIND SPEED (Vasd)		15 PS 10 PS 20 PS 1 1 20 PS 14 PS 5 PS 20 PS 20 PS
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LOOR LIVE OOF LOAD OOF DEAD RUSS TOP RUSS BOT OOF LIVE NOW LOAD IPORTANG NOW EXP OOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S IGN ROOF INIMUM S IGN ROOF CALLOAD C LOAD C	E LOAD DS D LOAD CHORD TOM CHORD LOAD DS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD DESIGN WIND SPEED (Vuit, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE		15 PS 10 PS 20 PS 11 12 PS 14 PS 5 PS 20 P
LOOR LIVE DOF LOAD DOF DEAL SUSS TOP SUSS BOT DOF LIVE NOW LOA IPORTANI NOW EXP DOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S IGN ROOI RAL LOAD D LOAD C LTIMATE I DMINAL D SK CATEG (POSURE TERNAL F IPONENT (TERIOR AI RAPETS	E LOAD DS D LOAD CHORD TOM CHORD LOAD DS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) S SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD DS CRITERIA DESIGN WIND SPEED (Vult, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE		150 PS 15 PS 10 PS 20 PS 1 1 1 20 PS 14 PS 5 PS 20 PS 20 PS 20 PS 20 PS 31.2 PS 31.2 PS
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COOR LIVE DOF LOAD DOF LOAD DOF LIVE NOW LOAD PORTANIA NOW EXPO DOF THEF ROUND S AT ROOF AIN-ON-SI NIMUM S IGN ROOF COURT TERNAL F IPONENT CTERIOR AI RAPETS ALL OPEN DO 19 SQ F TO 199 SQ TO 199 SQ	E LOAD DS D LOAD CHORD TOM CHORD LOAD LOAD LOAD LOAD LOS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD DESIGN WIND SPEED (Vult, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE WINGS (ULTIMATE) FT FT FT FT FT FGQ FT FAN 500 SQ FT		15 PS 10 PS 20 PS 21 PS 21 PS 21 PS 22 PS 21 PS 22 PS 23 PS 24.3 PS 26.3 PS 26
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LOOR LIVI DOF LOAD DOF LOAD CUSS TOP CUSS BOT DOF LIVE NOW LOAD PORTANIA NOW EXP DOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S IGN ROOF CALLOAD D LOAD C LIMATE I DMINAL D SK CATEG (POSURE TERNAL F IPONENT (TERIOR AI RAPETS ALL OPEN O 19 SQ F TO 49 SQ TO 40	E LOAD DS D LOAD CHORD TOM CHORD LOAD LOAD LOAD LOB CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD DESIGN WIND SPEED (Vult, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE NINGS (ULTIMATE) FT FT FT FT FT FGQ FT FAN 500 SQ FT EMBLY UPLIFT (ULTIMATE)		15 PS 10 PS 20 PS 21 PS 22 PS 23 PS 24.3 PS 26.3 PS 26.3 PS 26.3 PS 26.3 PS 26.3 PS 26.3 PS 26.3 PS 29.1 PS 29.1 PS 20.2 PS 20.2 PS 20.2 PS 20.2 PS 20.3 PS 20.4 P
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LOOR LIVI DOF LOAI DOF DEAI LUSS TOP LUSS BOT DOF LIVE NOW LOA IPORTANI NOW EXP DOF THEF ROUND S LAT ROOF AIN-ON-SI INIMUM S IGN ROOI D LOAD C LTIMATE I DOMINAL D SK CATE(POSURE TERNAL F IPONENT (TERIOR AI RAPETS ALL OPEN O 19 SQ F TO 49 SQ T TO 199 SQ O TO 190 SQ O TO	E LOAD DS D LOAD DS D LOAD D CHORD TOM CHORD TOM CHORD LOAD DS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD DESIGN WIND SPEED (Vult, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY F CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE NINGS (ULTIMATE) FT FT FT GQ FT HAN 500 SQ FT EMBLY UPLIFT (ULTIMATE) CCE 7-16, FIGURE 30.3-2A, 0.6h=9.0' ROOF TRUSSES SS UPLIFT (ULTIMATE) UPLIFT SATISFYING EQUATION 0.6D + 0.6W (ASD) DS		15 PS 10 PS 20 PS 20 PS 14 PS 5 PS 20 PS 20 PS 20 PS 20 PS 20 PS 20 PS 21 PS 26.3 PS 26.3 PS 26.3 PS 24.3 PS 22.2 PS 19.5 PS 23.4 PS 40.7 PS 53.7 PS 53.7 PS
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COOR LIVI COOR LIVI COOR LOAD COOR LOAD COOR DEAD CUSS BOT COOR LIVE NOW LOAD COOR THEF COOR THEF CO	E LOAD DS D LOAD CHORD TOM CHORD TOM CHORD LOAD LOAD LOAD LOAD LOAD LOAD LOAD LOA		15 PS 10 PS 20 PS 20 PS 14 PS 5 PS 20 PS 20 PS 20 PS 20 PS 20 PS 20 PS 20 PS 20 PS 21 PS 22 PS 29.1 PS 22.2 PS 19.5 PS 23.4 PS 40.7 PS 53.7 PS 54.7 PS
LOOR LIVI OOF LOAI OOF DEAI CUSS TOP CUSS BOT OOF LIVE NOW LOAI POOF THEF ROUND S AIN-ON-SI INIMUM S INIMUM S INIM	E LOAD DS D LOAD DS D LOAD CHORD TOM CHORD TOM CHORD LOAD DS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD S RITERIA DESIGN WIND SPEED (Vult, 3-SECOND GUST) SEGIGN WIND SPEED (Vasd) GORY CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE NINGS (ULTIMATE) FT FT FT FT FT FT SQ FT BAN 500 SQ FT EMBLY UPLIFT (ULTIMATE) SCE 7-16, FIGURE 30.3-2A, 0.6h=9.0' ROOF TRUSSES SS UPLIFT (ULTIMATE) UPLIFT SATISFYING EQUATION 0.6D + 0.6W (ASD) DS GORY PORTANCE FACTOR (Ie) APPED ACCELERATION PARAMETER (SS) PPED ACCELERATION PARAMETER (SDS) IGN ACCELERATION PARAMETER (SDT) BASIC SEISMIC FORCE-RESISTING SYSTEM		15 PE 10 PE 20 PE 20 PE 14 PE 20 PE 21 PE 22 PE 23 PE 24 A PE 24 A PE 24 A PE 25 A PE 26 A PE 27 A PE 28 A PE 29 A PE 29 A PE 20 A PE 20 A PE 21 A PE 22 A PE 23 A PE 24 A PE 25 A PE 26 A PE 27 A PE 28 A PE 29 A PE 40 A PE 53 A PE 53 A PE 53 A PE 53 A PE 54 A PE 56 A PE 57 A PE 57 A PE 58 A PE
COOR LIVIDOOF LOAD LOOF LOAD LOOF LOAD LOOF DEAD LOOF THE PROPERTY OF THE PROPERTY	E LOAD DS D LOAD DS D LOAD D CHORD TOM CHORD TOM CHORD LOAD LOAD LOAD DS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) E SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD SE RITERIA DESIGN WIND SPEED (Vuit, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE NINGS (ULTIMATE) ET FT FT FGQ FT SQ		15 PE 10 PE 20 PE 20 PE 21 PE 20 PE 20 PE 20 PE 20 PE 20 PE 20 PE 20 PE 20 PE 20 PE 21 PE 22 PE 23 PE 24 A PE 24 A PE 24 A PE 25 A PE 26 A PE 27 A PE 28 A PE 29 A PE 29 A PE 20 A PE 20 A PE 21 A PE 22 A PE 23 A PE 40 A PE 53 A PE 53 A PE 53 A PE 53 A PE 53 A PE 54 A PE 55 A PE 56 A PE 56 A PE 57 A PE 58 A PE 5
LOOR LIVIDOOF LOAD LOOF LOAD LOOF DEAD LOOF DE	E LOAD DS D LOAD DS D LOAD D CHORD TOM CHORD TOM CHORD LOAD LOAD LOAD LOAD LOAD LOAD LOAD CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) E SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD S RITERIA DESIGN WIND SPEED (Vult, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY E CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) NO EXTERIOR ZONE NINGS (ULTIMATE) ET FT FT SQ FT SAND SQ FT EMBLY UPLIFT (ULTIMATE) DEC 7-16, FIGURE 30.3-2A, 0.6h=9.0' ROOF TRUSSES SS UPLIFT (ULTIMATE) UPLIFT SATISFYING EQUATION 0.6D + 0.6W (ASD) DS GORY PORTANCE FACTOR (Ie) APPED ACCELERATION PARAMETER (SS) PPED ACCELERATION PARAMETER (SD) DISIGN ACCELERATION PARAMETER (SDS) BIGN ACCELERATION PARAMETER (SDS)		15 PS 10 PS 20 PS 11 PS 20 PS 14 PS 5 PS 20 PS 2
COOR LIVIDOF LOAD LOOF LOAD LOOF DEAL LOOF DEA	E LOAD DS D LOAD DS D LOAD DO LOAD DO LOAD TOM CHORD TOM CHORD TOM CHORD LOAD DS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) F SNOW LOAD (Pf) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD S RITTERIA DESIGN WIND SPEED (Vuit, 3-SECOND GUST) DESIGN WIND SPEED (Vasd) GORY FRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE NINGS (ULTIMATE) FT FT FT FT FT FGQ FT GOFT HAN 500 SQ FT EMBLY UPLIFT (ULTIMATE) EMBLY UPLIFT (ULTIMATE) DS GORY PORTANCE FACTOR (Ie) APPED ACCELERATION PARAMETER (Ss) PPED ACCELERATION PARAMETER (SD) DS GORY BORN CACELERATION PARAMETER (SD) DS SIGN ACCELERATION PARAMETER (SD) DS S		15 PS 10 PS 20 PS 20 PS 21 PS 21 PS 22 PS 23 PS 24 PS 24 PS 25 PS 26 PS 26 PS 27 PS 28 PS 28 PS 29 PS 29 PS 20 PS
COOR LIVIDOG LOAD LOOF LOAD LOOF DEAL COOR LIVID COOP LOAD LOOF DEAL COOP LOOF DEAL COOP LOOF DEAL COOP LOOF LOOF LOOF LOOF LOOF LOOF LOOF L	E LOAD DS DLOAD DS DLOAD DS DLOAD DCHORD TOM CHORD TOM CHORD LOAD DS CE FACTOR (I) OSURE FACTOR (Ce) RMAL FACTOR (Ct) NOW LOAD (Pg) SONOW LOAD (Pg) NOW SURCHARGE NOW LOAD (Pmin) F SNOW LOAD SERITERIA DESIGN WIND SPEED (Vuit, 3-SECOND GUST) SESIGN WIND SPEED (Vasd) GORY CATEGORY PRESSURE COEFFICIENT S AND CLADDING DESIGN WIND PRESSURES WALLS (ULTIMATE, BASED ON 50 SQ FT) ND EXTERIOR ZONE NINGS (ULTIMATE) T FT FT FT FGQ FT SOFT HAN 500 SQ FT SOB F	O (IA)	15 PS 10 PS 20 PS 21 PS 21 PS 22 PS 14 PS 5 PS 20 PS 2
COOR LIVIDOOF LOAD LOOF LOAD TO LOOF LOAD LOOF DEAL LOOF	E LOAD DS D LOAD DS D LOAD D L	CIENT (R)	15 PS 10 PS 20 PS 20 PS 21 11 20 PS 14 PS 5 PS 20 PS 2



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& ASSOCIATES, LLC CERTIFICATE OF AUTHORITY E-2012009242

Brian Kirk Ellison, P.E.

ENGINEER OF RECORD

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PERMIT SET: 04/12/24

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE 04/12/2024 AS NOTED SCALE: DRAWN BY:

CHECKED BY

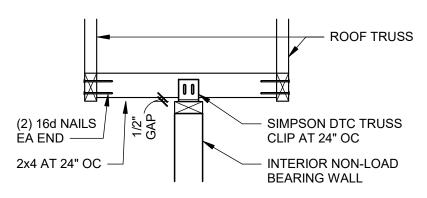
SHEET TITLE

GENERAL

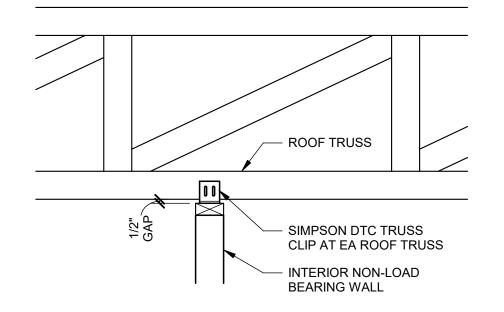
INFORMATION

EGA

SHEET NUMBER



TRUSSES PARALLEL TO WALL



TRUSSES PERPENDICULAR TO WALL

NOTE(S):

1. ATTACH EACH TRUSS CLIP WITH (4) 8d NAILS AT BASE AND (1) 8d NAIL IN EACH VERTICAL SLOT.

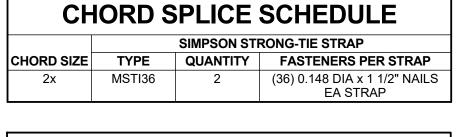
2. NAILS SHALL NOT BE DRIVEN COMPLETLY FLUSH AGAINST THE SLOTTED CONNECTOR TO ALLOW FOR VERTICAL MOVEMENT.

3. ALLOW 1/16" GAP BETWEEN NAIL HEAD AND TRUSS CLIP SLOTTED HOLE.

4. CENTER NAILS IN VERTICALLY SLOTTED HOLE.

TYPICAL PARTITION WALL CONNECTION 1" = 1'-0"

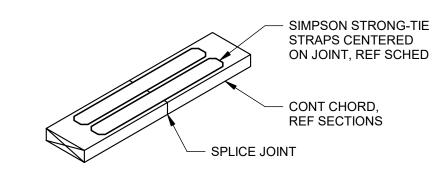
. ATTACH ROOF SHEATHING TO SUPPORTS WITH



NOTE(S):

1. WHEN DOUBLE STRAPS ARE INDICATED IN SCHEDULE, POSITION STRAPS ADJACENT TO EACH OTHER. DO NOT OVERLAP STRAPS.

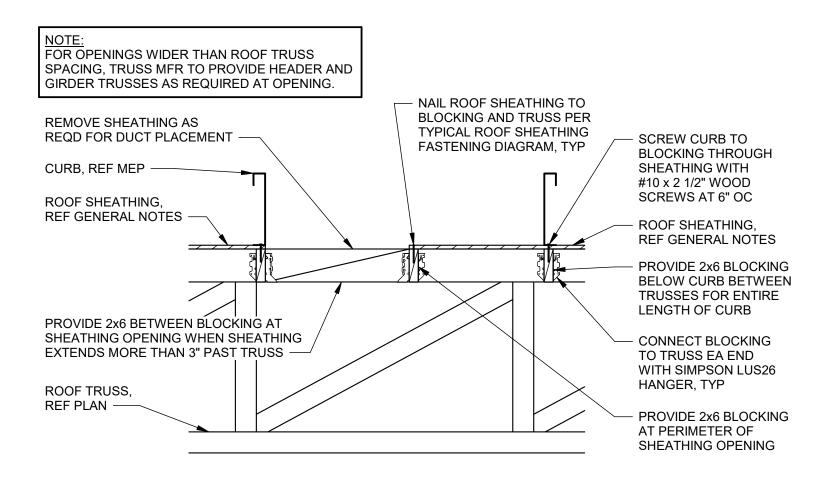
2. REFER TO SIMPSON STRONG-TIE FOR ALTERNATE FASTENERS MEETING OR EXCEEDING ALLOWABLE LOADS OF FASTENERS NOTED. ALTERNATE FASTENERS WITH A REDUCED ALLOWABLE LOAD ARE NOT ALLOWED.



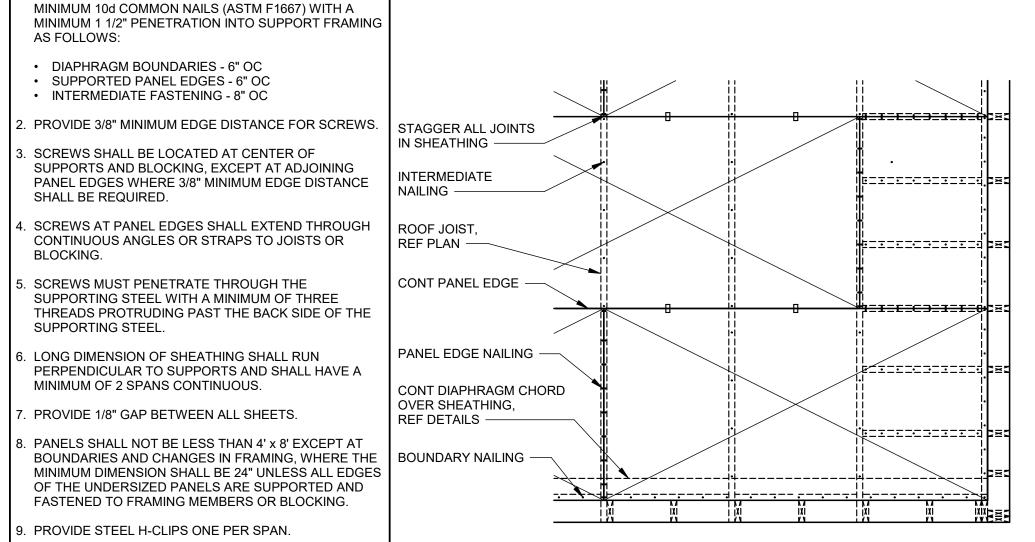
TYPICAL CHORD SPLICE

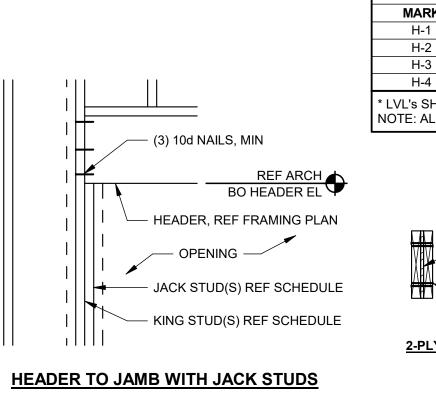
DIAGRAM AND SCHEDULE

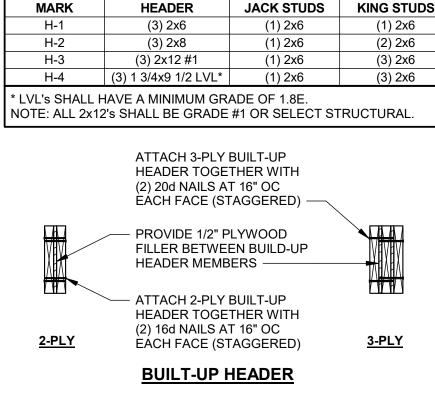
1" = 1'-0"



8 ROOF EQUIPMENT SUPPORT FRAMING





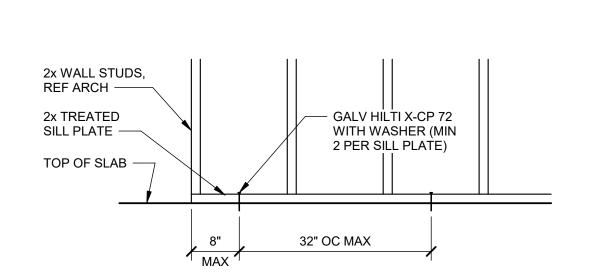


LOAD-BEARING HEADER AND

JAMB SCHEDULE

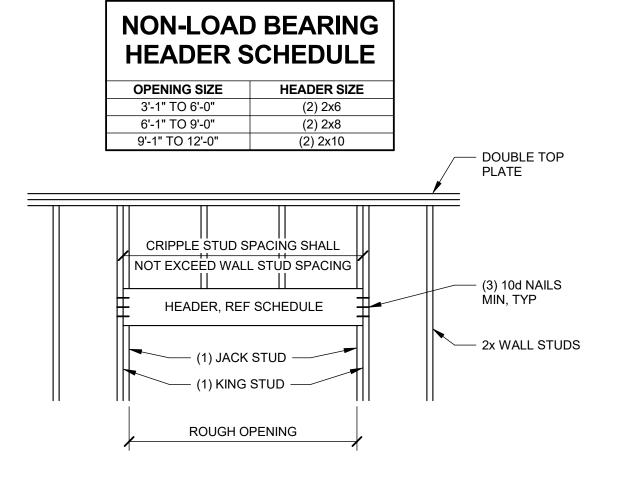
TYPICAL ROOF SHEATHING FASTENING DIAGRAM 1/2" = 1'-0"





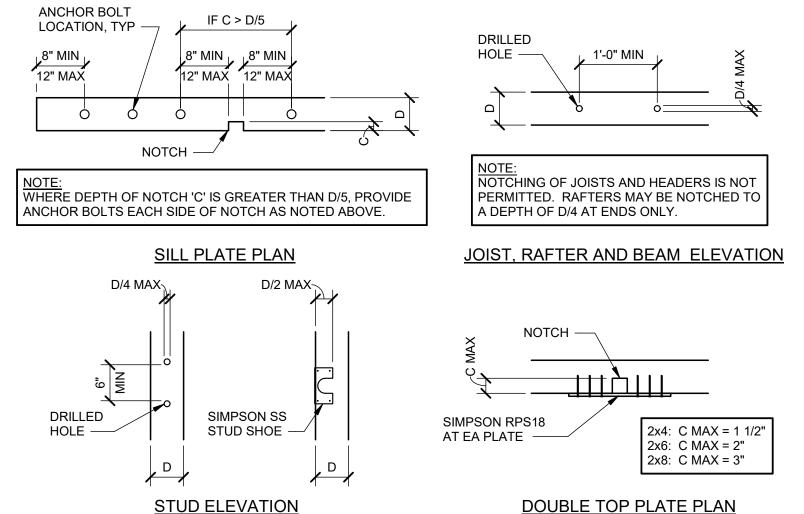
TYPICAL INTERIOR
NON-STRUCTURAL PARTITION
SILL PLATE CONNECTION

3/4" = 1'-0"



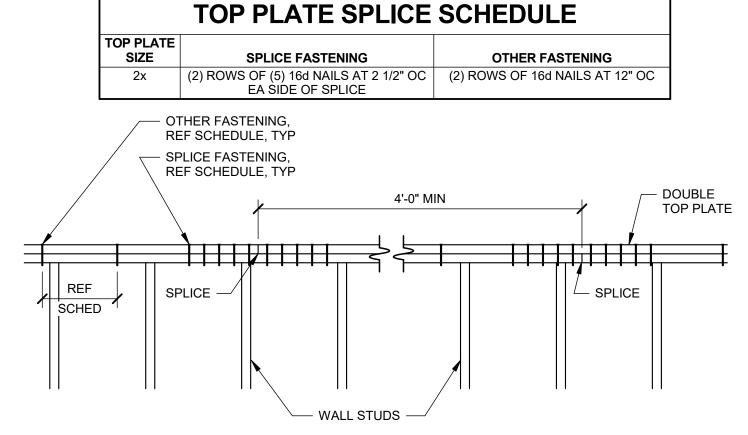
TYPICAL NON-LOAD BEARING

HEADER DIAGRAM AND SCHEDU



(3) HEADER DIAGRAM AND SCHEDULE 2 HOLES AND NOTCHES IN WOOD FRAMING

3/4" = 1'-0"



TYPICAL TOP PLATE SPLICE DIAGRAM AND SCHEDULE 3/4" = 1'-0"

FASTE	NING SCHEDUL	E	
DESCRIPTION OF BUILDING ELEMENTS FLOOR	NUMBER AND TYPE OF FASTENER	SPACING AN	ND LOCATION
JOIST TO SILL, TOP PLATE, OR GIRDER	(3) 8d COMMON		ENAIL
RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON	6" OC, ⁻	ΓΟΕΝΑΙL
1"x6" SUBFLOOR OR LESS TO EA JOIST	(2) 8d COMMON	FACE	E NAIL
2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d COMMON		NAIL
2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	(2) 16d COMMON		G, FACE NAIL
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON AND:		AT TOP AND BOTTOM OPPOSITE SIDES
	(2) 20d COMMON		SPLICE, FACE NAIL
BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS JOIST TO BAND JOIST OR RIM JOIST	(2) 8d COMMON (3) 16d COMMON	· · · · · · · · · · · · · · · · · · ·	TOENAIL NAIL
LEDGER STRIP SUPPORTING JOIST OR RAFTERS	(3) 16d COMMON		FTER, FACE NAIL
ROOF	(-,		, -
BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	(3) 8d COMMON	EACH ENI	D, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT WALL	(2) 8d COMMON	EACH ENI	D, TOENAIL
TOP PLATE, TO RAFTER OR TRUSS	OR (2) 16d COMMON	END	NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON AT 6" OC		E NAIL
CEILING JOISTS TO TOP PLATE	(3) 8d COMMON		ST, TOENAIL
CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)	(3) 16d COMMON	FACE	NAIL
CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	SEE SECTIONS / DETAILS		E NAIL
COLLAR TIE TO RAFTER RAFTER OR ROOF TRUSS TO TOP PLATE	(3) 10d COMMON (3) 10d COMMON		ENAIL ENAIL
ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR	(2) 16d COMMON		NAIL
ROOF RAFTER TO 2-INCH RIDGE BEAM	OR		
WALL	(3) 10d COMMON	I OE	ENAIL
STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON	24" OC F	ACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON	16" OC F	ACE NAIL
BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON		GE, FACE NAIL
CONTINUOUS HEADER TO STUD TOP PLATE TO TOP PLATE	(4) 8d COMMON 16d COMMON		NAIL ACE NAIL
TOP PLATE TO TOP PLATE, AT END JOINTS	(8) 16d COMMON	EA SIDE OF END JOIN	NT, FACE NAIL (MIN 24" EA SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON		ACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING AT BRACED WALL PANELS	(2) 16d COMMON		ACE NAIL
STUD TO TOP OR BOTTOM PLATE	(4) 8d COMMON OR		ENAIL
TOD BUATES LADS AT CODUEDS AND INTERCENTIONS	(2) 16d COMMON		NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS 1" BRACE TO EA STUD AND PLATE	(2) 16d COMMON (2) 8d COMMON		E NAIL E NAIL
1"x6" SHEATHING TO EA BEARING	(2) 8d COMMON		E NAIL
1"x8" AND WIDER SHEATHING TO EA BEARING	(3) 8d COMMON		E NAIL
	NUMBER AND TYPE OF		INTERMEDIATE
DESCRIPTION OF BUILDING ELEMENTS OTHER EXTERIOR WALL SHEATHING	FASTENER	EDGES (INCHES)	SUPPORTS (INCHES)
1/2" FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL	3	6
	(7/16" DIAMETER HEAD)	_	_
25/32" FIBERBOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL (7/16" DIAMETER HEAD)	3	6
PANEL SIDING TO FRAMING			
1/2" OR LESS	6d CORROSION-RESISTANT SIDING	6	12
	(1 7/8" x 0.106"); OR 6d CORROSION-RESISTANT		
	CASING (2" x 0.099")		
5/8"	8d CORROSION-RESISTANT	6	12
	SIDING (2 3/8" x 0.128"); OR 8d CORROSION-RESISTANT		
	CASING (2 1/2" x 0.133")		
WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, ROOF AN	ND INTERIOR WALL SHEATHING	TO FRAMING AND PAR	TICLEBOARD WALL
SHEATHING TO FRAMING 3/8" TO 1/2"	6d COMMON (SUBFLOOR AND WALL)	6	12
19/32" TO 3/4"	8d COMMON	6	12
7/8" TO 1 1/4"	10d COMMON	6	12
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR L		6	12
1 1/8" TO 1 1/4" 3/4" AND LESS	10d COMMON 8d COMMON	6	12
5.1 / 11.12 12.30	1 35		12

THIS SCHEDULE INDICATES THE MINIMUM FASTENING REQUIREMENTS. FASTENER SIZES AND QUANTITIES NOTED IN SECTIONS AND DETAILS SHALL TAKE PRECEDENCE OVER THIS FASTENING SCHEDULE.
 COMMON NAILS SHALL BE USED EXCEPT WHERE OTHERWISE INDICATED. REFER TO GENERAL NOTES FOR COMMON NAIL LENGTHS AND DIAMETERS.

8d COMMON

1) TYPICAL FASTENING SCHEDULE

7/8" TO 1"



#2001
CHIPMAN ROAD, MO 64086 PROPOSED LOT 3

O

ELLISON GAGE

& ASSOCIATES, LLC
Consulting Structural Engineers
5068 W. Plano Pkwy.
Suite 200
Plano, TX 75093

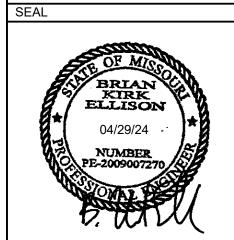
CERTIFICATE OF AUTHORITY
E-2012009242

Brian Kirk Ellison, P.E.
License No. 2009007270

ENGINEER OF RECORD

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION

PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 04/12/2024

SCALE: AS NOTED

DRAWN BY: EGA

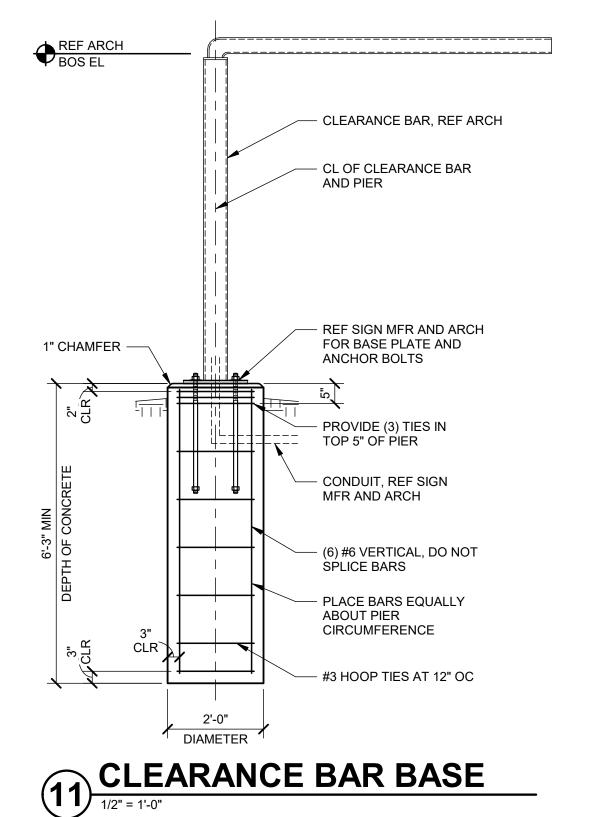
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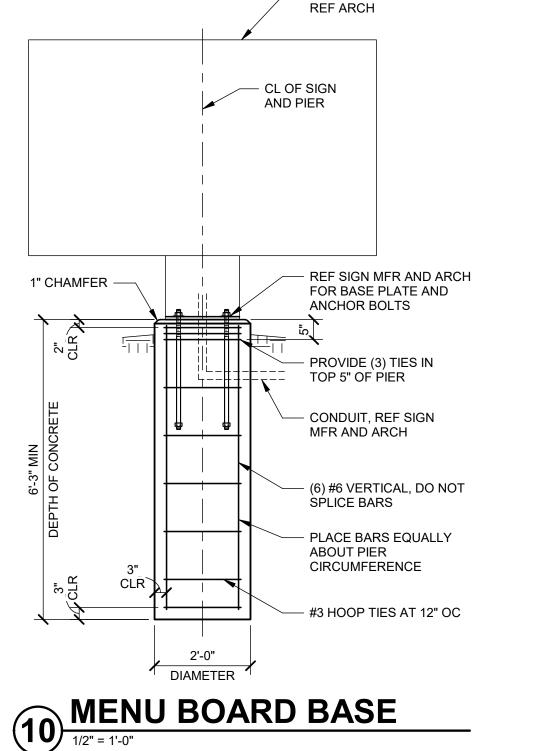
SHEET TITLE

TYPICAL DETAILS AND SCHEDULES

SHEET NUMBER

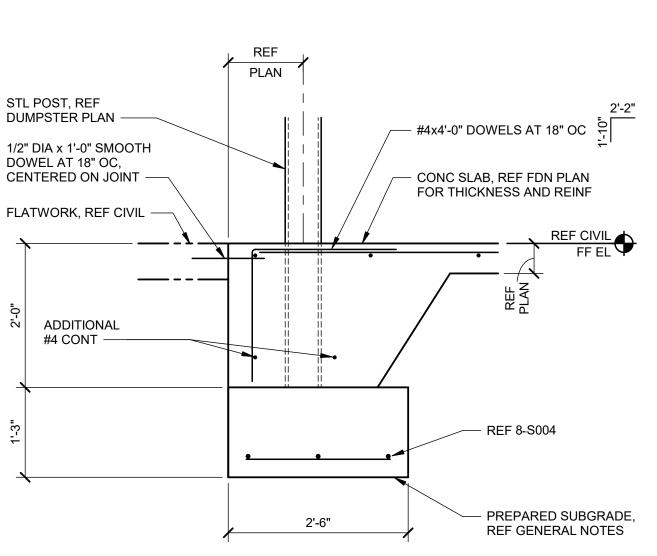
S003





- 8" CMU WALL

- MENU BOARD



REF ARCH

7" THICK CONC SLAB REINF

WITH #3 AT 18" OC EW

PLACED 2" BELOW TOP OF SLAB OVER PROPERLY

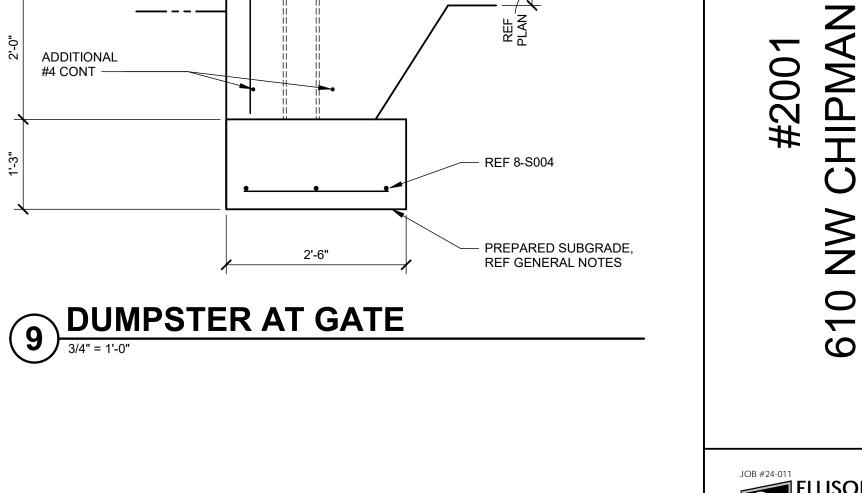
PREPARED SUBGRADE, REF GENERAL NOTES.

<u>NOTES:</u>
1. PREPARE SOIL BELOW DUMPSTER SLAB AND FOOTINGS AS INDICATED IN THE SOILS REPORT

. BOTTOM OF FOUNDATION SHALL BEAR A MINIMUM OF 24" BELOW FINISH GRADE, REF CIVIL.

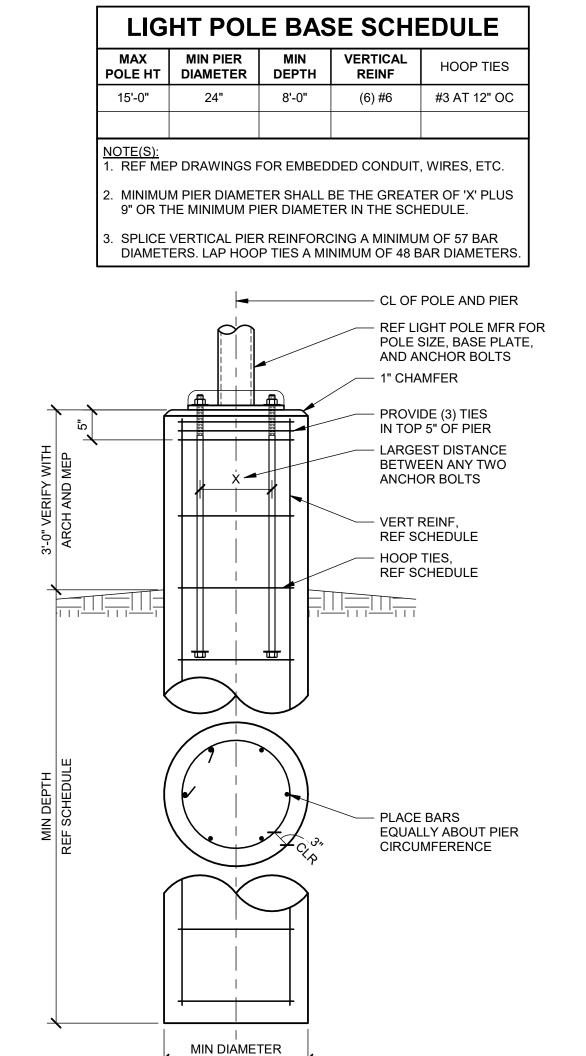
6 DUMPSTER ENCLOSURE PLAN
3/16" = 1'-0"

REF ARCH FOR SLOPE OF DUMPSTER ENCLOSURE SLAB.



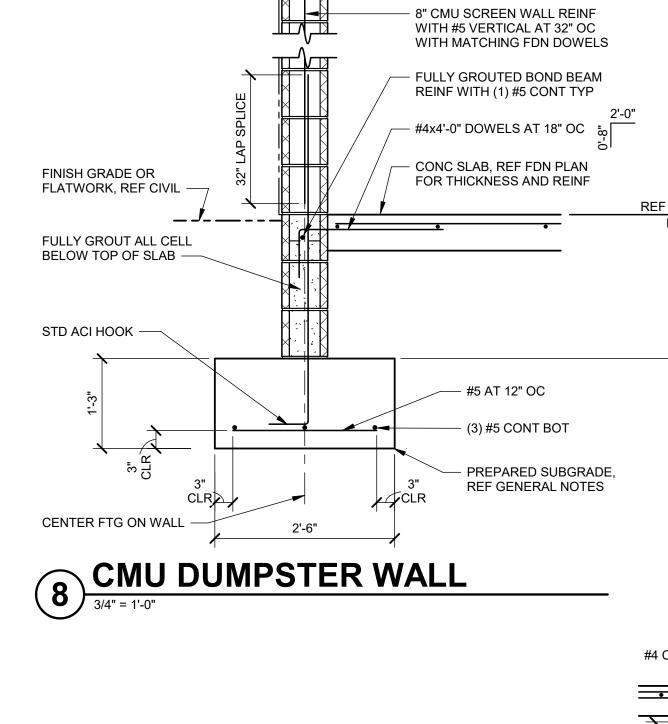
- 8" CMU

WALL, TYP



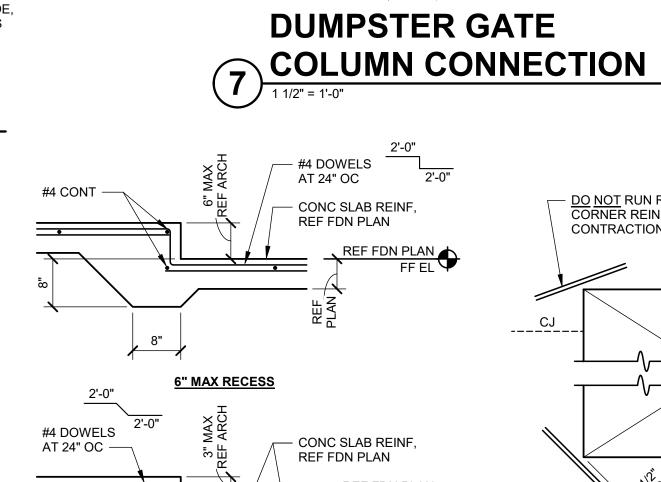
REF SCHEDULE

5 TYPICAL LIGHT POLE BASE



- FULLY GROUTED BOND BEAM

REINF WITH (1) #5 CONT TYP



NOTE: PROVIDE 3/16" CLOSURE PL AT

TOP OF POST WITH SEAL WELD.

L4x4x3/8 x 0'-10" WITH (2) 1/2" DIA

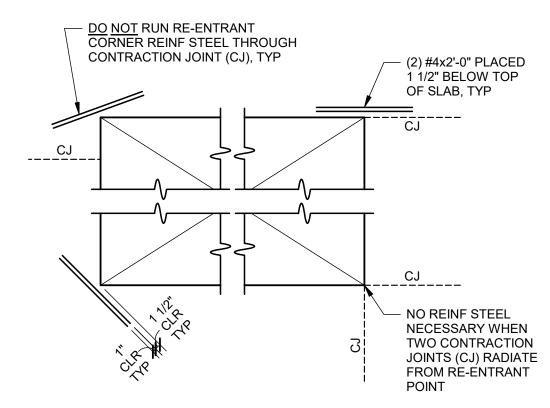
x 5" HSA ON 8" GAGE, LÓCATE

3/16 / 3

AT TOP OF POST

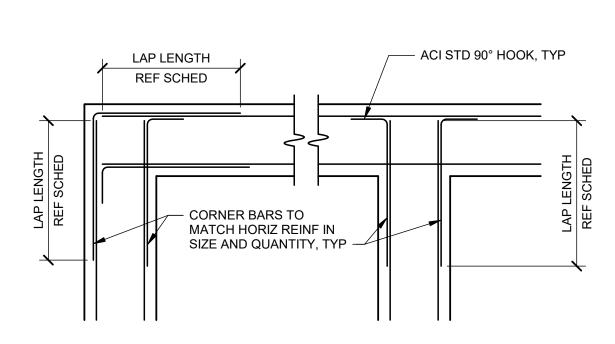
PL 1/4"x1 1/2"x0'-4" -

6" DIA PIPE POST



- FULLY GROUT AND REINF END (2) CELLS WITH (1) #5 VERT FULL HEIGHT OF WALL

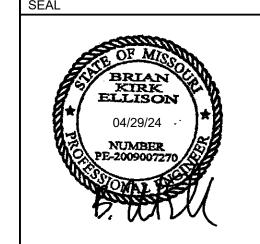




TYPICAL CORNER BAR 1 REINFORCING DIAGRAM



OT



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PROJECT NO: ORIGINAL ISSUE 04/12/2024 SCALE: AS NOTED DRAWN BY CHECKED BY

SHEET TITLE

TYPICAL DETAILS

AND SCHEDULES

SHEET NUMBER

STEEL REINF LAP SCHEDULE								
		CMU						
BAR SIZE	f'c = 3,000psi	f'c = 3,500psi	f'c = 4,000psi	f'c = 4,500psi	f'c = 5,000psi	LAP SPLICE (IN)		
3	17	16	15	14	13	20		
4	23	21	20	19	18	26		
5	28	26	25	23	22	32		
6	34	31	29	28	26	39		
7	49	45	43	40	38	45		
8	56	52	49	46	44	52		

REINFORCING LAP SCHEDULE

3 TYPICAL SLAB RECESS

CORNER REINFORCING

S004





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ELLISON GAGE & ASSOCIATES, LLC ulting Structural Engineers **CERTIFICATE OF AUTHORITY** E-2012009242 Brian Kirk Ellison, P.E.

ENGINEER OF RECORD

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ELLISON 04/29/24

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE

AS NOTED SCALE: DRAWN BY

CHECKED BY: SHEET TITLE

TYPICAL DETAILS

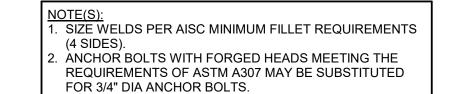
AND SCHEDULES

04/12/2024

RBG

SHEET NUMBER

S005

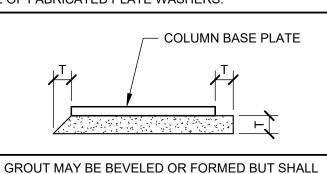


ANCHOR BOLT HOLE AND WASHER SCHEDULE

		PLATE WASHER						
ANCHOR BOLT DIA	MAX BASE PL HOLE DIA	MIN SIZE	MIN THICKNESS	HOLE DIA				
3/4"	1 5/16"	2"	1/4"	13/16"				
7/8"	1 9/16"	2 1/2"	5/16"	15/16"				
1"	1 13/16"	3"	3/8"	1 1/16"				
1 1/4"	2 1/16"	3"	1/2"	1 5/16"				
1 1/2"	2 5/16"	3 1/2"	1/2"	1 9/16"				
1 3/4"	2 3/4"	4"	5/8"	1 13/16"				
2"	3 1/4"	5"	3/4"	2 1/16"				

<u>NOTE(S):</u> 1. CIRCULAR OR SQUARE WASHERS MEETING THE SIZE SHOWN

ARE ACCEPTABLE. . WHEN BASE PLATES ARE LESS THAN 1 1/4" THICK, PUNCHING OF HOLES MAY BE AN ECONOMICAL OPTION. IN THIS CASE, 3/4' ANCHOR RODS AND 1 1/16" DIAMETER PUNCHED HOLES MAY BE USED WITH ASTM F844 (USS STANDARD) WASHERS IN PLACE OF FABRICATED PLATE WASHERS.



GROUT PLACEMENT

EXTEND A MIN OF "T" BEYOND FACE OF BASE

PLATE. "T" = 1 1/2" FOR ANCHOR BOLT DIA UP TO 1" AND 2 1/2" FOR 1 1/4" DIA ANCHOR BOLT.

BASE PLATE AND ANCHOR BOLT DIAGRAMS

WASHER

(TO BASE

PL, TYP

COL TO

BASE PL 1"x14"x1'-7"

- HSS COLUMN

HEAVY HEX NUTS (ASTM

- WASHER, REF WASHER

A565 GRADE A), TYP

SCHEDULE FOR SIZE

BASE PLATE

TOP OF CONC

BEARING SURFACE

HEADED BOLTS MAY

BE SUBSTITUTED UNO

TACK HEAD OR

DAMAGE

THREADS

REF PLAN

WITH (6) 1" DIA F1554

GR36 ANCHOR BOLTS

PLATE WASHER,

REF SCHED

7 1/2"

PROJECTION

SHALL ALLOW FOR

1/2" ABOVE NUT

LADDER, REF ARCH

DOUBLE 2x4 BLOCKING AT

EA LADDER CONNECTION

1/2" DIA A307 BOLT WITH

STD WASHER, TYP —

CONNECT LADDER TO FLOOR WITH 1/2" DIA

SIMPSON TITEN HD

(hnom=3.5") EA SIDE

LADDER ATTACHMENT

INTERIOR WALL

REF 6-S301 —

POINT, REF 1-S003

PROVIDE CONNECTIONS

MIN (4) CONNECTIONS EA

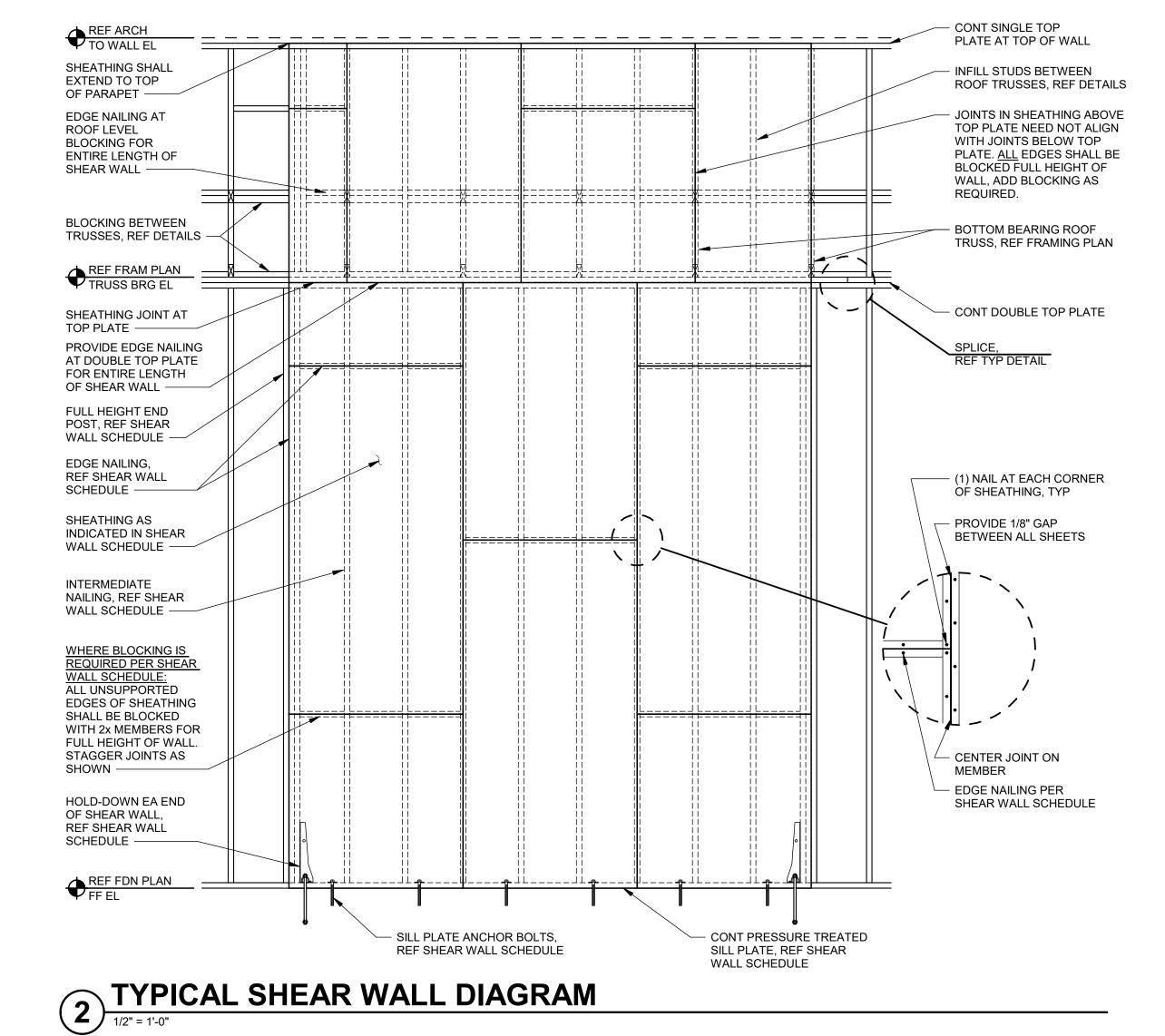
SIDE OF LADDER

BRACKETS AT MAX 48" OC,

7 1/2"

ANCHOR BOLT DIAGRAM

BASE PLATE



PROVIDE SUFFICIENT AB PROJECTION TO CONNECT TO HOLD-DOWN -CL OF WALL REF FDN PLAN FF EL SHEAR WALL END POST, REF SHEAR WALL SCHED HOLD-DOWN ANCHOR **BOLT, REF SHEAR WALL** SCHED FOR SIZE AND ── HOLD-DOWN MAY NOT REF SHEAR WALL **EMBEDMENT** OCCUR AT ALL WALL SCHEDULE FOR 1'-0" MAX CORNERS, REF PLAN FOR ANCHOR BOLT **HOLD-DOWN LOCATIONS** SPACING TYPICAL HOLD-DOWN DIAGRAM

1 1/2" = 1'-0"

DIA, REF SHEAR

WALL SCHEDULE

SHEAR WALL HOLD-DOWN ANCHOR BOLT

CL OF

WALL

ANCHOR BOLTS WITH FORGED HEADS MEETING THE

SUBSTITUTED FOR THREADED ROD ANCHOR BOLTS.

- 1/2" DIA GALV SIMPSON TITEN HD, REF SHEAR WALL SCHEDULE AND

GENERAL NOTES

- GALV 1/4"x3"x4 1/2" MIN PLATE WASHER SHALL BE

SILL ANCHOR BOLTS

SILL ANCHOR BOLT

CL OF WALL, HOLD-DOWN

SIMPSON HOLD-DOWN

ATTACH HOLD-DOWN TO

POST AS INDICATED IN

SHEAR WALL SCHED -

EA END OF SHEAR

WALL, REF SHEAR

WALL SCHED -

AND ANCHOR -

PROVIDED AT SHEAR WALL

REQUIREMENTS OF ASTM A307 MAY BE

REF FDN PLAN

TACK WELD OR

DAMAGE THREADS

TYPICAL SHEAR WALL ATTACHMENT

SHEATHING, REF

GENERAL NOTES

EA END OF SHEAR

WALL, REF SHEAR

WALL SCHED

SIMPSON HOLD-DOWN

- GALV F1554 (GRADE 36)

THREADED ROD, REF NOTE

	WOOD SHEAR WALL SCHEDULE												
		MIN NOMINAL	MIN NOMINAL		NAIL SP	ACING (INCHES)	S	SILL PLATE		НС	OLD-DOWNS AT ENDS OF REF 3-S005		1
MARK	SHEAR WALL TYPE	PANEL THICKNESS (INCHES)	PENETRATION IN FRAMING (INCHES)	NAIL SIZE	PANEL EDGES	INTERMEDIATE FRAMING	SIZE	ANCHOR BOLT, REF 4-S005	END POST SIZE	TYPE	CONNECTION TO END POST	ANCHOR BOLT	ANCHOR BOLT EMBEDMENT
SW-1	BLOCKED	15/32	1 1/2	10d	4	12	2x TREATED SILL	1/2" DIA SIMPSON TITEN HD (hnom=5.5") AT 24" OC	(2) 2x6	SIMSPON HDU8-SDS2.5	(20) SIMPSON 1/4"x2.5" SDS SCREWS	7/8" DIA GALV	18"
SW-2	BLOCKED	15/32	1 1/2	10d	6	12	2x TREATED SILL	1/2" DIA SIMPSON TITEN HD (hnom=5.5") AT 24" OC	(2) 2x6	SIMSPON HDU8-SDS2.5	(20) SIMPSON 1/4"x2.5" SDS SCREWS	7/8" DIA GALV	18"

. REF SHEAR WALL DIAGRAM AND TYPICAL SHEAR WALL HOLD-DOWN DIAGRAM.

WALL STUDS, REF SHT S301

SHEAR WALL SILL PLATE

1/4"x3"x4 1/2" MIN GALV PL

REF SHEAR WALL SCHED

ANCHOR BOLT WITH

CONT TREATED SILL PLATE, TYP

- ALL SHEAR WALL SHEATHING SHALL BE C-D APA RATED STRUCTURAL SHEATHING.
- 3. PANELS SHALL NOT BE LESS THAN 4' x 8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING, WHERE MINIMUM PANEL SHALL BE 24" IN ALL DIRECTIONS (24"x24"). WHERE "BLOCKED" SHEAR WALL TYPE IS INDICATED, ALL EDGES OF ALL PANELS SHALL BE SUPPORTED BY AND FASTENED TO FRAMING MEMBERS OR BLOCKING.
- NAILS SHALL BE LOCATED AT CENTER OF SUPPORTS AND BLOCKING, EXCEPT AT ADJOINING PANEL EDGES WHERE 3/8" MINIMUM EDGE DISTANCE SHALL BE REQUIRED.
- . THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS AND BLOCKING SHALL BE 2" NOMINAL OR GREATER.
- 6. ALL SHEATHING NAILING SHALL BE COMMON NAILS WITH MINIMUM PENETRATION INTO FRAMING AS INDICATED IN THE SHEAR WALL SCHEDULE.
- NAILING SHALL NOT RUPTURE OUTER VENEER OF SHEATHING.
- . PROVIDE 1/8" GAP BETWEEN ALL SHEETS.
- WHERE PANELS ARE APPLIED ON BOTH FACES OF SHEAR WALL AND NAIL SPACING IS LESS THAN 6 INCHES ON CENTER ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. ALTERNATIVELY, THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS SHALL BE 3 INCHES NOMINAL OR GREATER AT ADJOINING PANEL EDGES AND NAILS AT ALL PANEL EDGES SHALL BE STAGGERED.
- 10. IN ADDITION TO THE ON CENTER SPACING OF SILL ANCHOR BOLTS, THERE SHALL BE AT LEAST (2) ANCHOR BOLTS PER PIECE OF SILL PLATE WITH A MINIMUM OF (1) ANCHOR BOLT LOCATED NOT GREATER THAN 12 INCHES, AND NOT LESS THAN 4 INCHES FROM EACH PIECE END.
- 1. HOLD-DOWNS SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 2. HOLES ARE NOT ALLOWED IN SHEAR WALLS, UNLESS APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION. IF A HOLE IS APPROVED, IT IS TO BE ENTIRELY WITHIN ONE SHEET. PROVIDE BLOCKING AND EDGE NAILING AROUND OPENING.

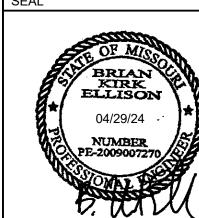




610

Plano, TX 75093 www.ellisongage.com
CERTIFICATE OF AUTHORITY
E-2012009242 Brian Kirk Ellison, P.E.

License No. 2009007270 ENGINEER OF RECORD



PERMIT SET: 04/12/24

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

04/12/2024

AS NOTED

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE:

CHECKED BY: SHEET TITLE

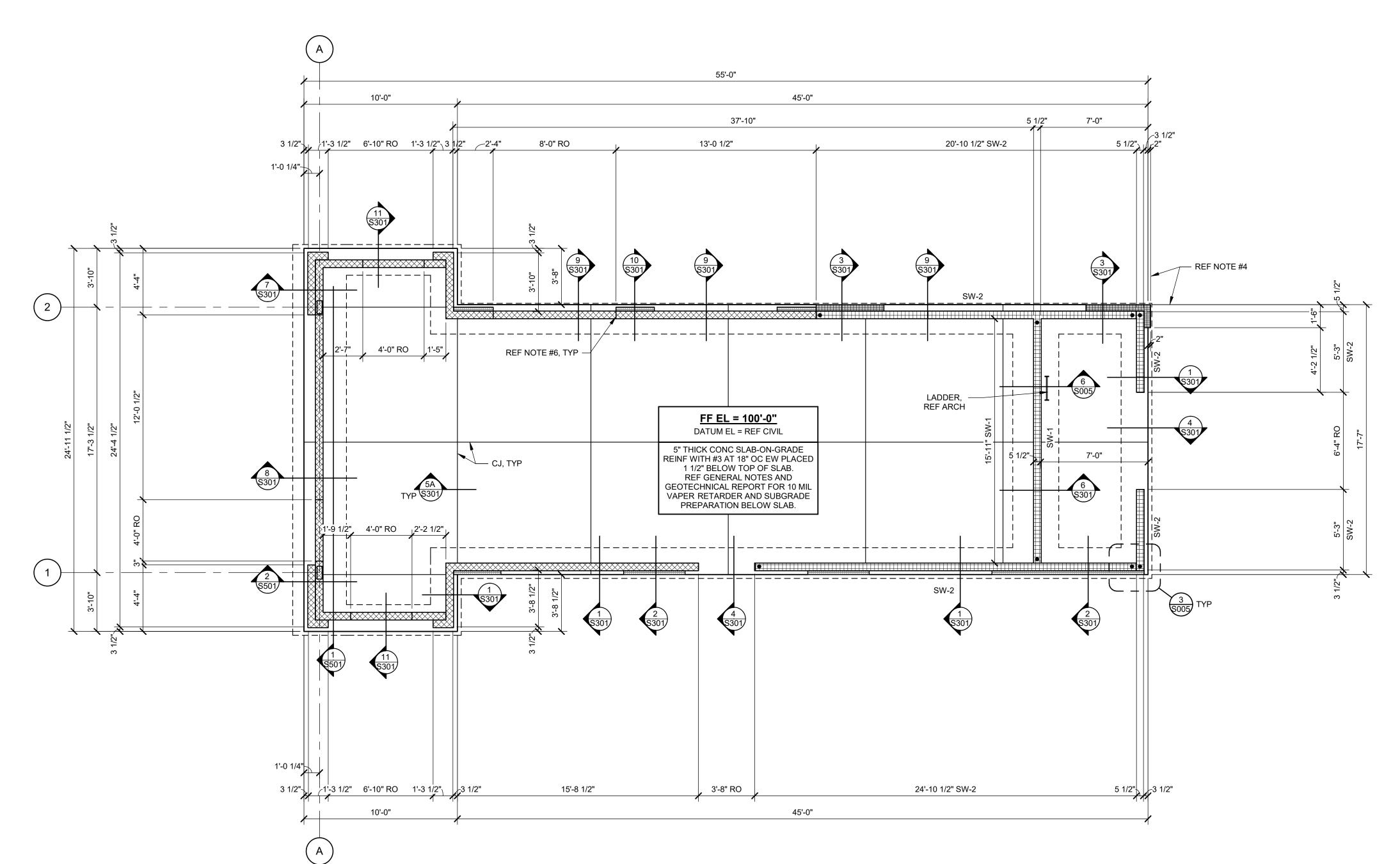
SCALE:

DRAWN BY:

FOUNDATION PLAN

SHEET NUMBER

S101



FOUNDATION PLAN NOTES

NOTES, DESIGN CRITERIA, AND SPECIAL INSPECTIONS.

REFER TO SHEETS S003, S004, AND S005 FOR TYPICAL DETAILS AND SCHEDULES.

REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.

DIMENSIONS ARE TO EXTERIOR FACE OF CONCRETE SLAB AND FACE OF STUD, REFER TO DETAILS.

VERIFY ALL WALL OPENING DIMENSIONS AND LOCATIONS WITH ARCHITECTURAL DRAWINGS. REFER TO 5-S003 FOR JAMB EACH SIDE OF OPENING

AT LOAD BEARING WALLS. REFER TO ARCH SLAB PLAN AND PLUMBING DRAWINGS FOR DRAIN LOCATIONS AND SLAB

DEPRESSIONS AT DRAINS.

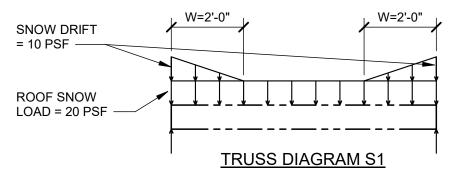
REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR SIZE AND LOCATION OF ALL EXTERIOR PADS, IF APPLICABLE.

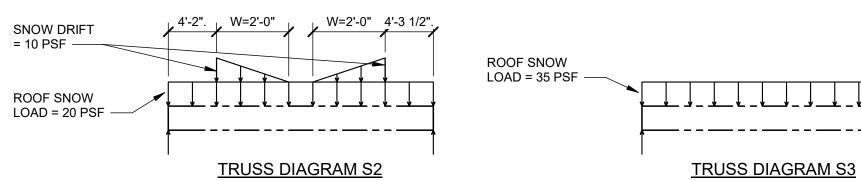
LEGEND INDICATES 2x6 WOOD SHEAR WALLS, REF SHEAR WALL SCHEDULE ON SHEET S005. INDICATES 2x6 LOAD BEARING WALLS. DENOTES HOLD-DOWN LOCATION, REF SHEAR WALL SCHEDULE ON SHEET S005. INDICATES WALL FURRING SHEAR WALL MARK —— - END POST **END POST** PER SCHED PER SCHED -**HOLD-DOWN** HOLD-DOWN PER SCHED — PER SCHED

SHEAR WALL LEGEND

1 FOUNDATION PLAN

1/4" = 1'-0"





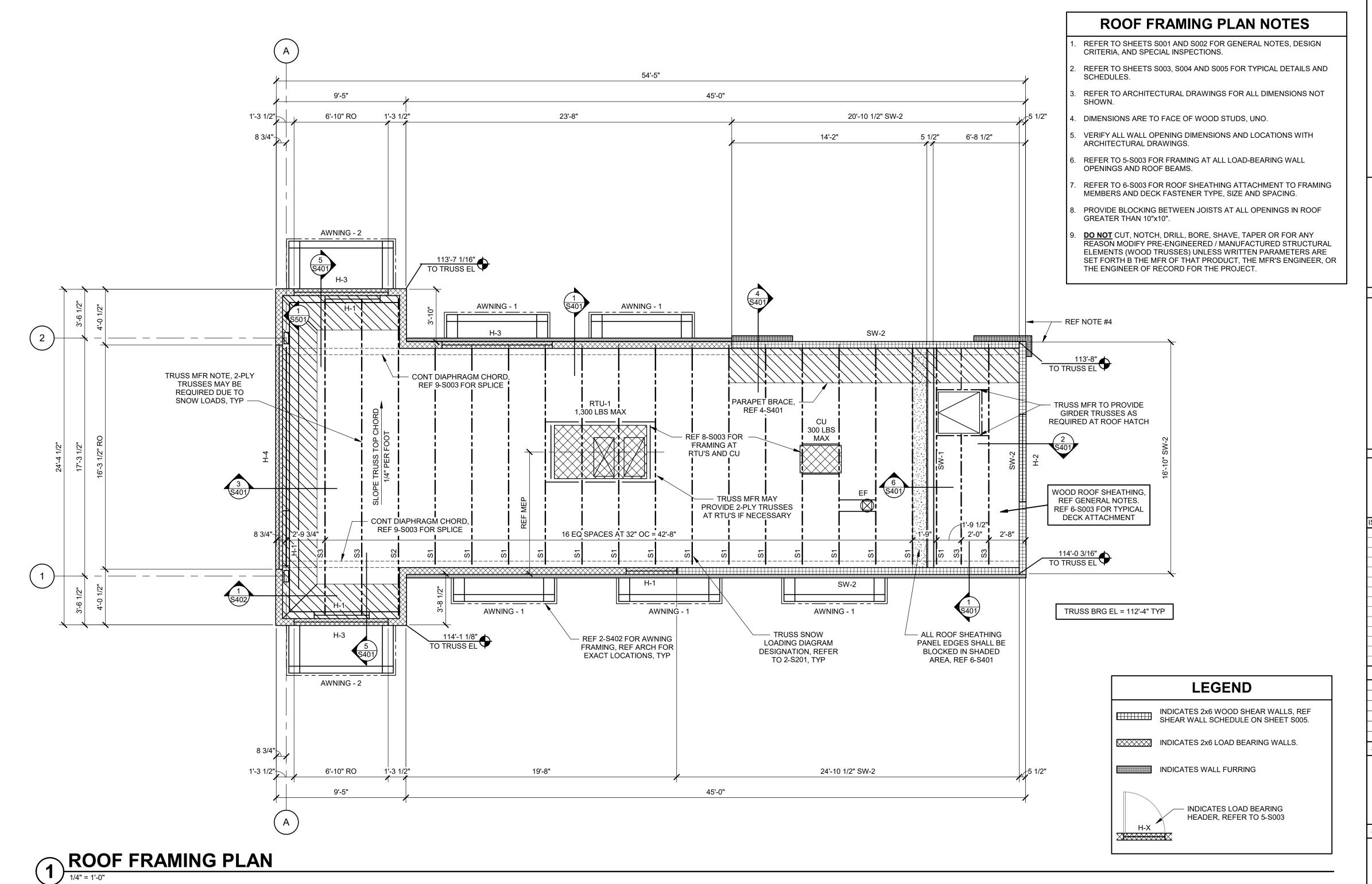
NOTES:

1. LOADS SHOWN ARE SNOW LOADS ONLY. REFER TO THE DESIGN LOADS TABLE ON SHEET S002, FRAMING PLAN, AND DETAILS FOR ALL OTHER LOADS.

2. TRUSSES SHALL RESIST THE MOST CRITICAL EFFECTS FROM THE LOAD COMBINATIONS LISTED IN THE APPLICABLE BUILDING CODE.

3. PROVIDE TWO-PLY TRUSSES AS NECESSARY BASED ON THE GOVERNING LOAD COMBINATION.

TRUSS SNOW LOAD DIAGRAMS 3/4" = 1'-0"





#2001

WW CHIPMAN ROAD

MMIT, MO 64086 PROPOSED LOT 3

0

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OT

ELLISON GAGE

& ASSOCIATES, LLC
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CERTIFICATE OF AUTHORITY
E-2012009242

Brian Kirk Ellison, P.E.
License No. 2009007270
ENGINEER OF RECORD

BRIAN KIRK ELLISON

04/29/24

NUMBER

OF MICE OF MICE

PERMIT SET: 04/12/24

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 04/12/2024

SCALE: AS NOTED

DRAWN BY: EGA

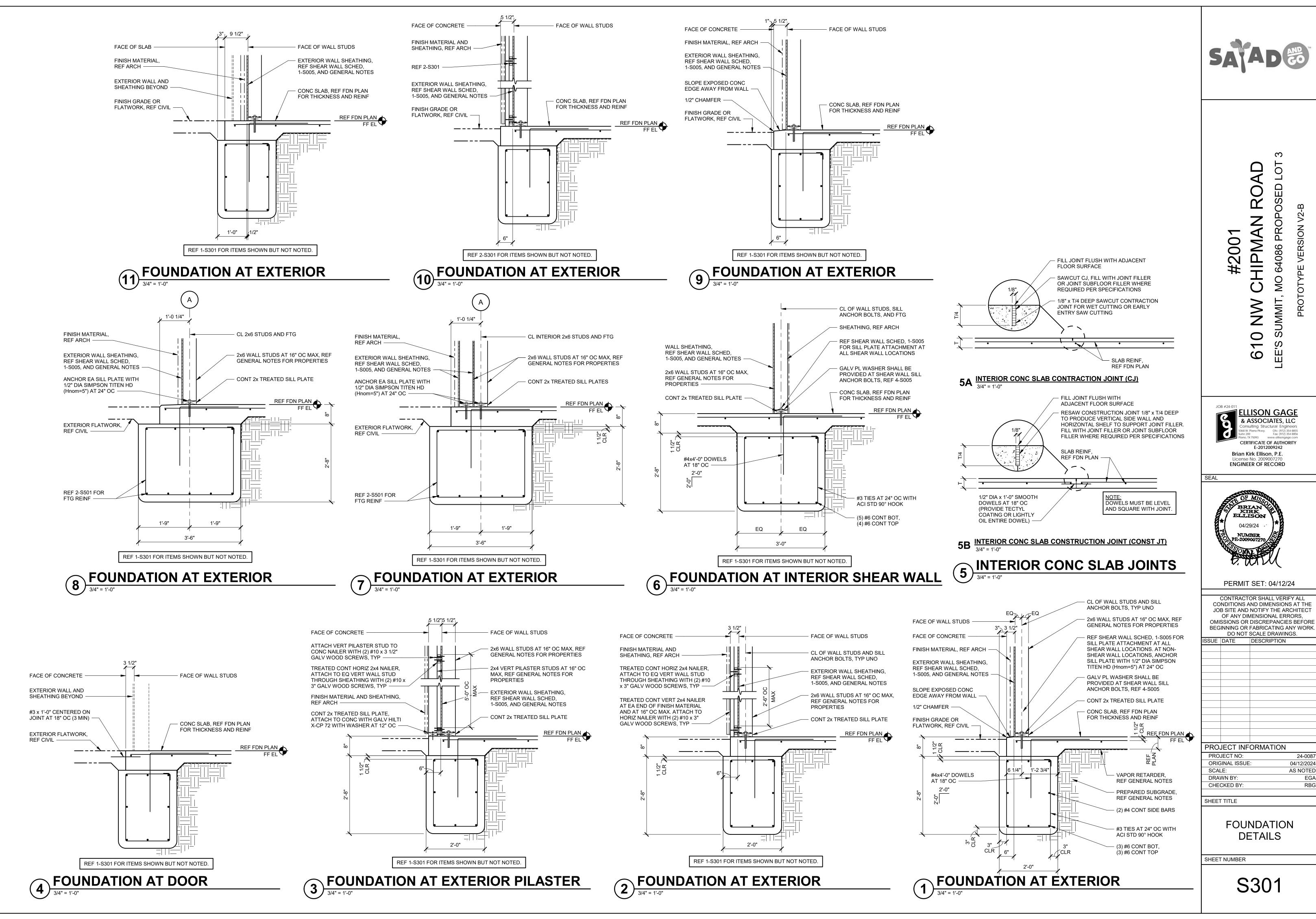
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CHECKED BY:
SHEET TITLE

ROOF FRAMING PLAN

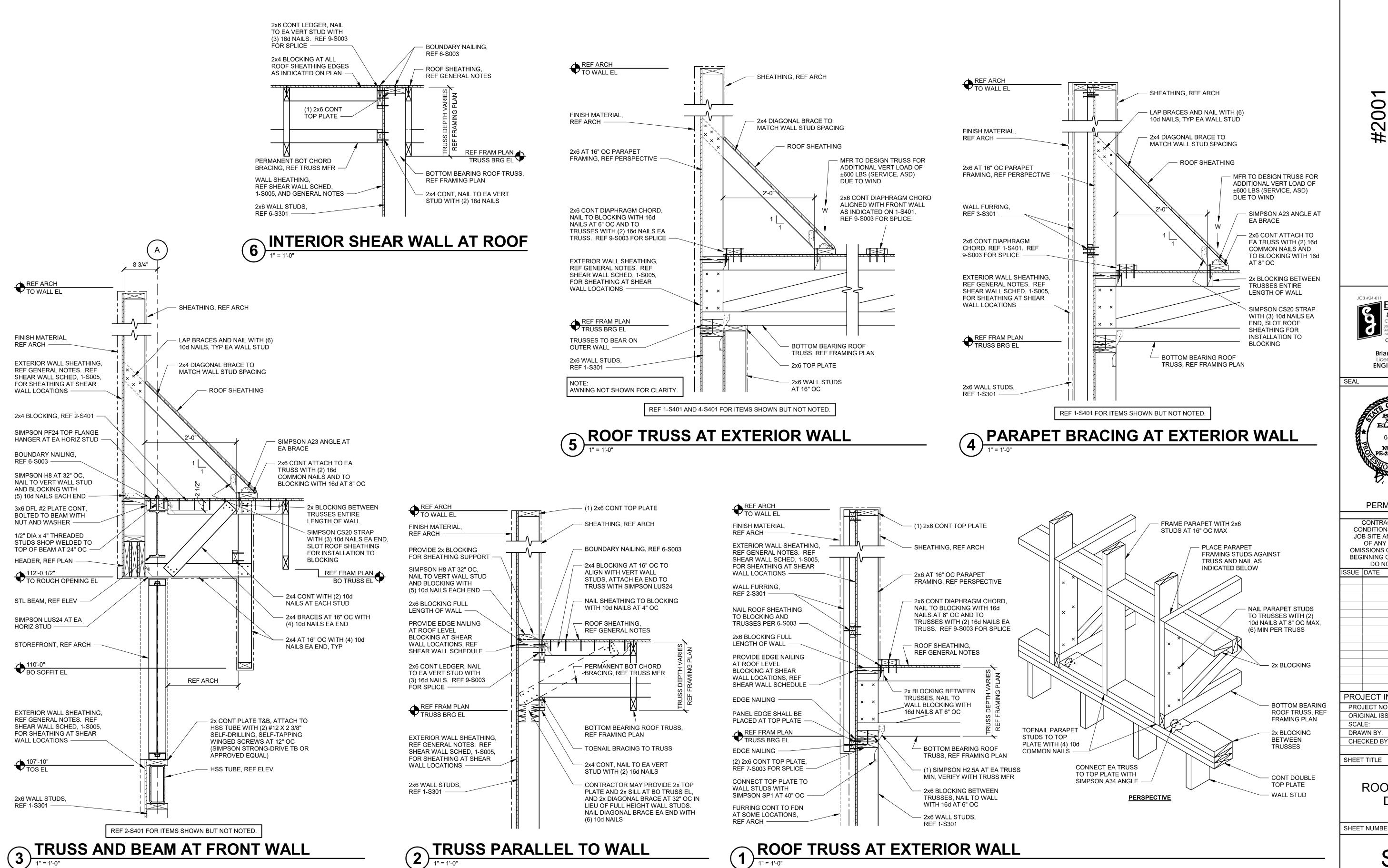
SHEET NUMBER

S201



CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT DMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK





HPM,

OT

#200

ELLISON GAGE & ASSOCIATES, LLC sulting Structural Engineers ano Pkwy. Ofc: (972) 354-8855 Fax: (972) 354-8856 **CERTIFICATE OF AUTHORITY** E-2012009242 Brian Kirk Ellison, P.E. ENGINEER OF RECORD

0

9

BRIAN KIRK ELLISON 04/29/24 NUMBER

PERMIT SET: 04/12/24

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ISSUE DATE DESCRIPTION PROJECT INFORMATION **PROJECT NO** 24-0087

ORIGINAL ISSUE 04/12/2024 SCALE: AS NOTED DRAWN BY

SHEET TITLE

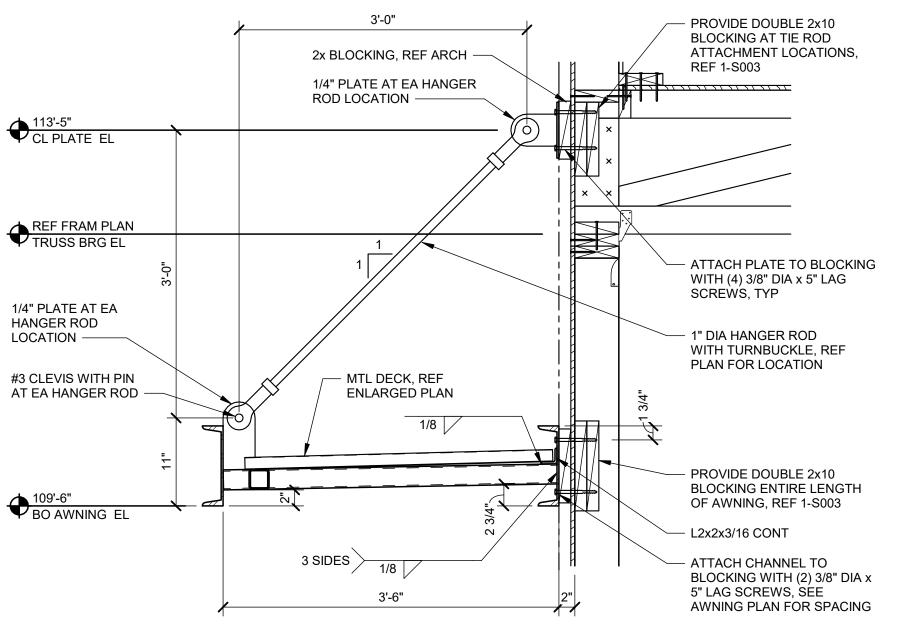
ROOF FRAMING DETAILS

RBG

SHEET NUMBER

S401

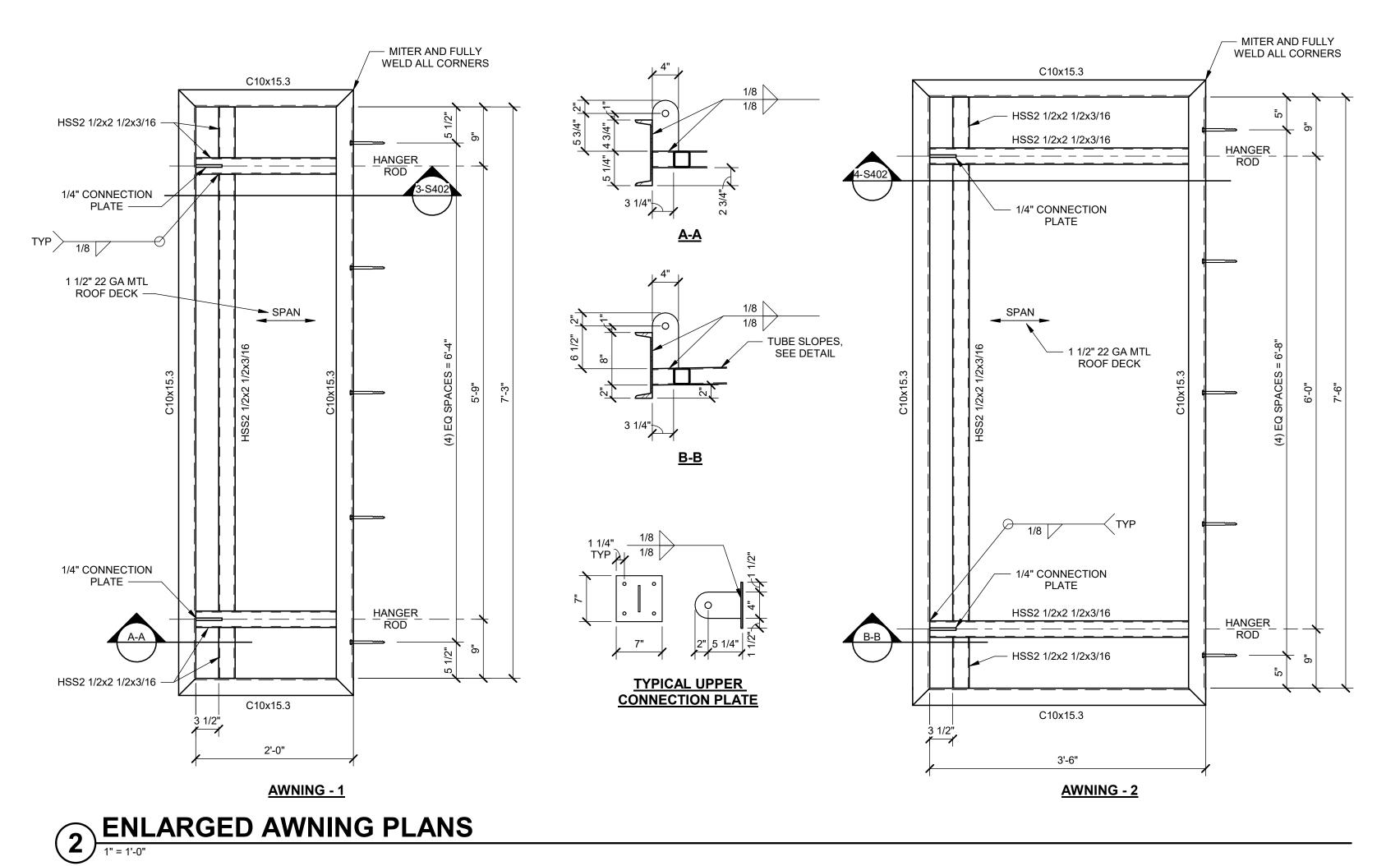


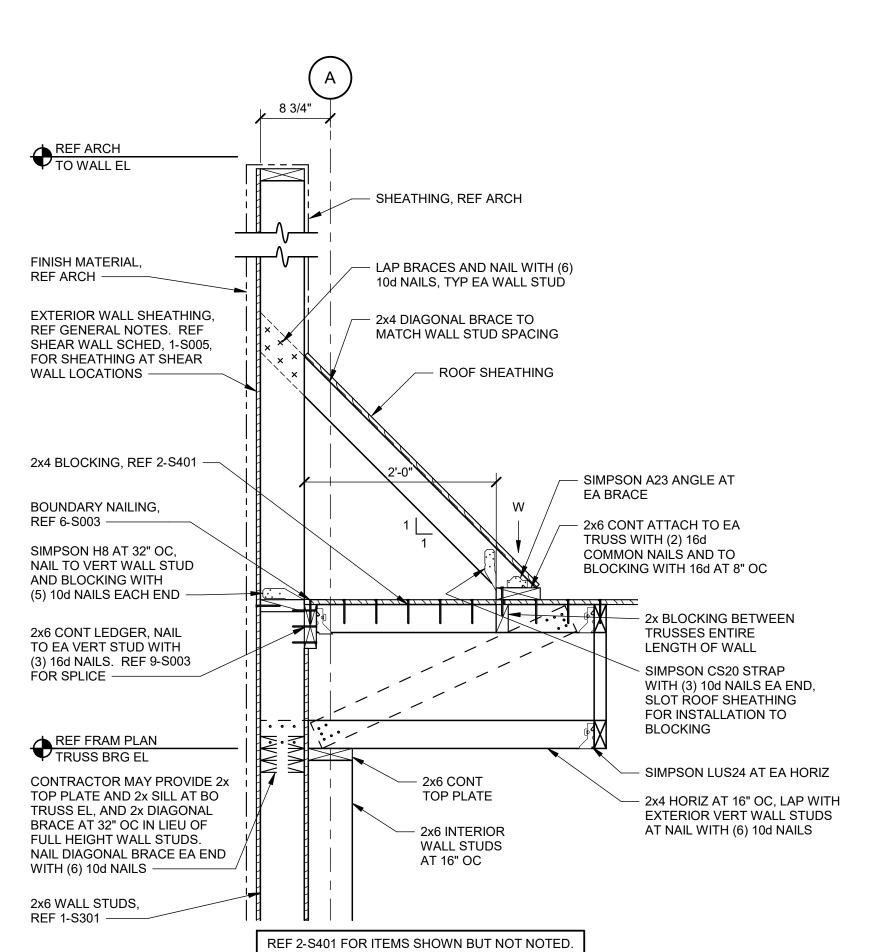


2x BLOCKING, REF ARCH -PROVIDE DOUBLE 2x10 BLOCKING AT TIE ROD 1'-6" ATTACHMENT LOCATIONS, 1/4" PLATE AT EA HANGER ROD LOCATION — REF 1-S003 ATTACH PLATE TO BLOCKING 110'-5" CL PLATE EL WITH (4) 3/8" DIA x 5" LAG SCREWS, TYP - 1" DIA HANGER ROD WITH TURNBUCKLE, REF PLAN FOR LOCATION #3 CLEVIS WITH PIN AT EA HANGER ROD -PROVIDE DOUBLE 2x10 BLOCKING ENTIRE LENGTH OF AWNING, REF 1-S003 108'-0"
BO AWNING EL - L2x2x3/16 CONT ATTACH CHANNEL TO 3 SIDES BLOCKING WITH (2) 3/8" DIA x 5" LAG SCREWS, SEE AWNING PLAN FOR SPACING 2'-0"

4 SECTION AT AWNING







1 TRUSS AT FRONT WALL

#2001 610 NW CHIPMAN F LEE'S SUMMIT, MO 64086 PROPO

VERSION V2

YPE

PROTOT

ELLISON GAGE

& ASSOCIATES, LLC
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License No. 2009007270
ENGINEER OF RECORD

SEAL

OF MICS

BRIAN

KIRK

ELLISON

04/29/24

NUMBER
PE-2009007270

PERMIT SET: 04/12/24

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PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 04/12/2024

AS NOTED

CHECKED BY:
SHEET TITLE

SCALE:

DRAWN BY:

ROOF FRAMING DETAILS

SHEET NUMBER

S402

CHIPMAN ROAD 64086 PROP #2001 610 NW

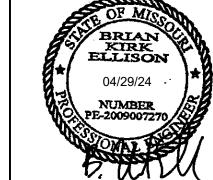
VERSION V2-B

PROTOTYPE

ELLISON GAGE

& ASSOCIATES, LLC
Consulting Structural Engineers Consulting Structural Engineers
5068 W. Plano Pkwy. Ofc: (972) 354-8855
Suite 200 Fax: (972) 354-8856
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CERTIFICATE OF AUTHORITY
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PERMIT SET: 04/12/24

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PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE:

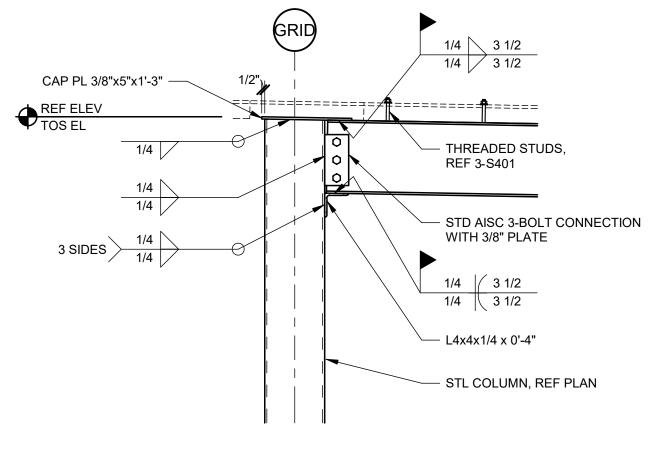
04/12/2024 SCALE: AS NOTED DRAWN BY: CHECKED BY:

SHEET TITLE

FRAMING **ELEVATIONS AND DETAILS**

SHEET NUMBER

S501



4 HSS CONNECTION 3/4" = 1'-0"

17'-3 1/2"

W12X22

HSS10X4X1/4

MOMENT FRAME ELEVATION - GRID A

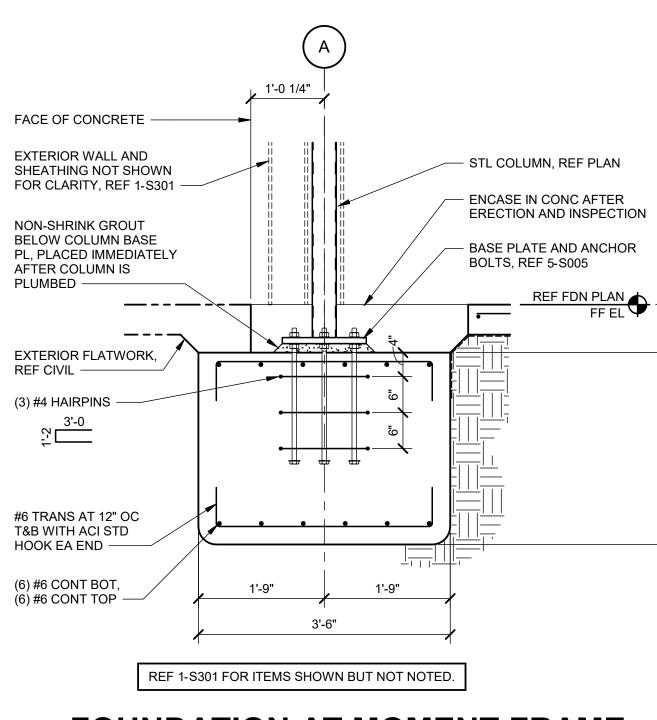
1/4" = 1'-0"

4 \$501 EA END

3 S501 EA END

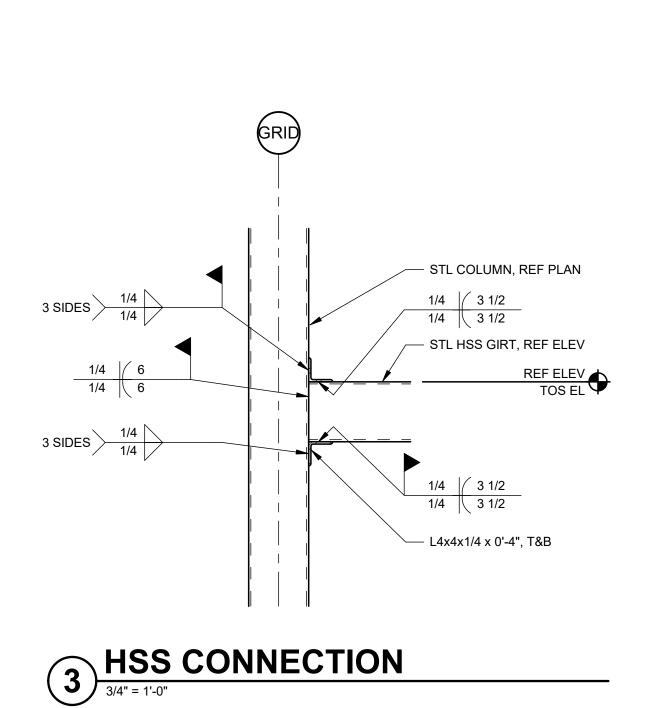
— TOS EL = 113'-6"

TOS EL = -\ 113'-10 3/8"



FOUNDATION AT MOMENT FRAME

3/4" = 1'-0"



SLAB PLAN GENERAL NOTES

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

SLAB PLAN KEYNOTES

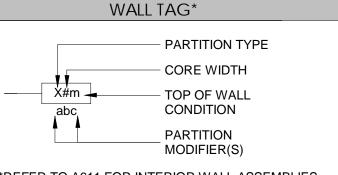
- 1. SLAB EDGE DIMENSION START POINT.
- 2. FLOOR DRAIN, REF: PLUMBING.
- 3. PRE-MANUFACTURED WALK IN COOLER BY OWNER.
- 4. MOP SINK PENETRATION LOCATION, INSTALL PER MANUFACTURER SPECIFICATIONS.
- 5. FLOOR SINK TYP, REF: PLUMBING. ALIGN TO FINISH FLOOR.
- 6. WASTELINE IN CENTER OF WALL FOR SINK, REF: PLUMBING.
- 7. TOILET PENETRATION, REF: PLUMBING.
- 8. 1" HME CONDUIT STUBBED THROUGH SLAB INTO WALL
- 9. COLUMN EMBEDDED IN WALL, REF. STRU. DIMENSIONED TO CENTER.
- 10. FLOOR CLEAN OUT, TYP. REF: PLUMBING

DIMENSION NOTES

- ALL PLAN DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO:
- A. FACE OF STUDB. CENTERLINE OF DOOR OR WINDOW
- C. EDGE OF SLAB EDGE
- 2. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS; DETAILS OVER SMALLER SCALE DRAWINGS.
- 3. "FINISH FLOOR" REFERS TO TOP OF SLAB.
- 4. VERIFY ALL ROUGH-IN, CONCRETE PAD, OR PLATFORM DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS PROJECT OR BY OTHERS.
- 5. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS NOTED OTHERWISE.

FLOOR PLAN GENERAL NOTES:

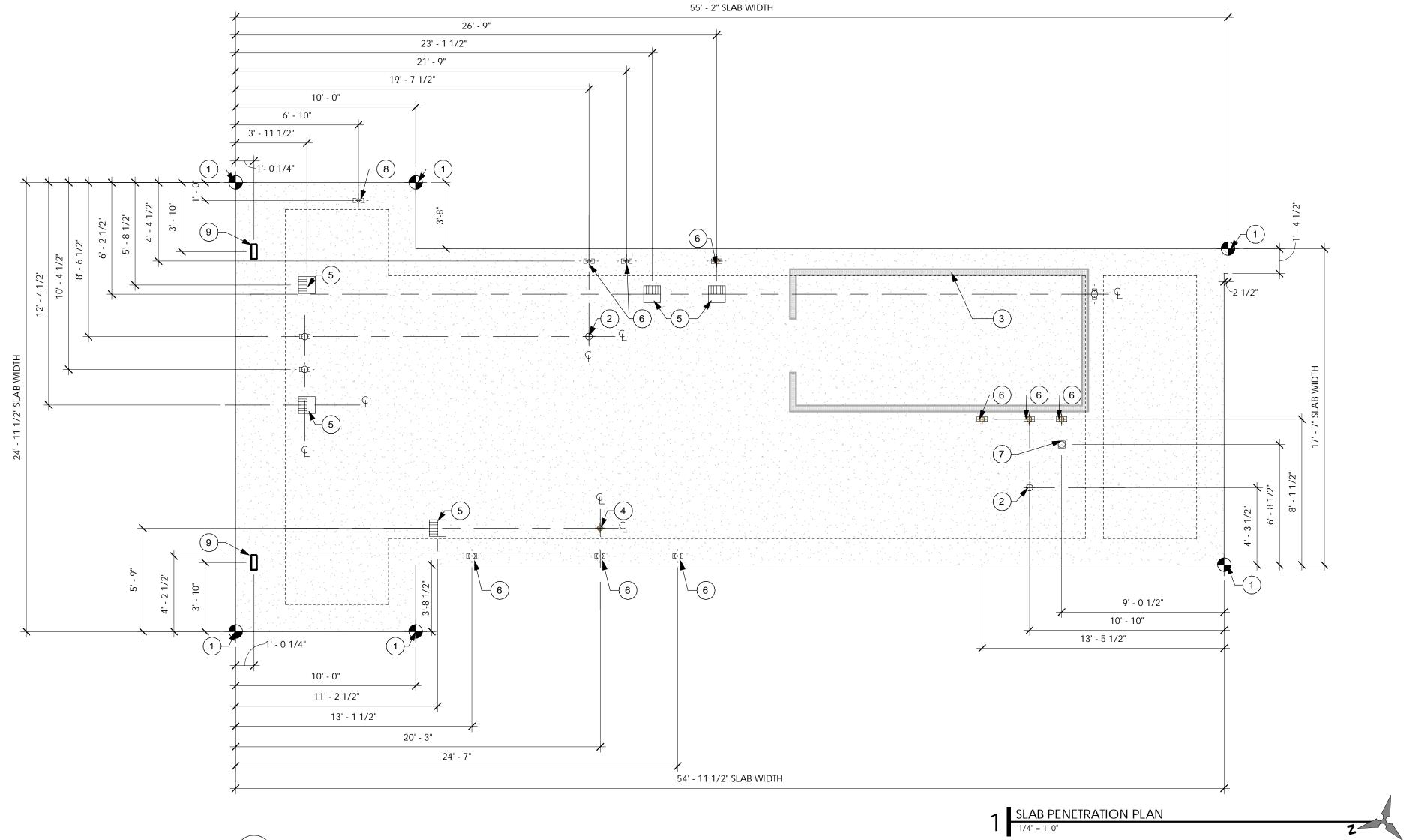
- A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
- B. APPROVED SIGN INDICATING MAXIMUM OCCUPANCY FOR THE ROOM SHALL BE LOCATED NEAR MAIN EXIT. FINAL LOCATION SHALL BE VERIFIED BY FIRE MARSHAL.
- C. DO NOT SCALE DRAWINGS.
- D. PROVIDE BLOCKING IN WALLS FOR WALL MOUNTED EQUIPMENT/ACCESSORIES PER PLAN.
- E. REFER TO EQUIPMENT PLAN SHEET FOR ALL EQUIPMENT SCHEDULE INFORMATION AND LAYOUT.
- F. DIMENSION SHOWN ON THIS PLAN IS FROM FACE OF STUD TO FACE OF STUD AT INTERIOR, UNO.
- G. GENERAL CONTRACTOR TO COORDINATE ALL FLOOR SINKS AND FLOOR DRAINS WITH EQUIPMENT PLAN PRIOR TO PLACEMENT
- H. PROVIDE INTERNAL WALL BLOCKING FOR LADDERS, GRAB BARS, MIRRORS, COUNTERTOPS, CEILING FANS, AND OVERHEAD
- I. COORDINATE WITH STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, CIVIL DRAWINGS AND SOIL REPORTS.
- J. WALL DIMENSIONS SHOWN FROM FACE OF STUD TO FACE OF STUD, UNO.
- K. WALLS SHOWN ON ALIGNMENT ARE IN ALIGNMENT WITH FINISH SURFACE
- L. FLOOR LEVEL 0'-0" IS TOP OF SLAB PER ARCHITECTURAL PLAN AND ELEVATION. THIS DOES NOT INCLUDE FLOOR FINISH. REFER TO CIVIL DRAWINGS FOR ACTUAL GRADE LEVEL.

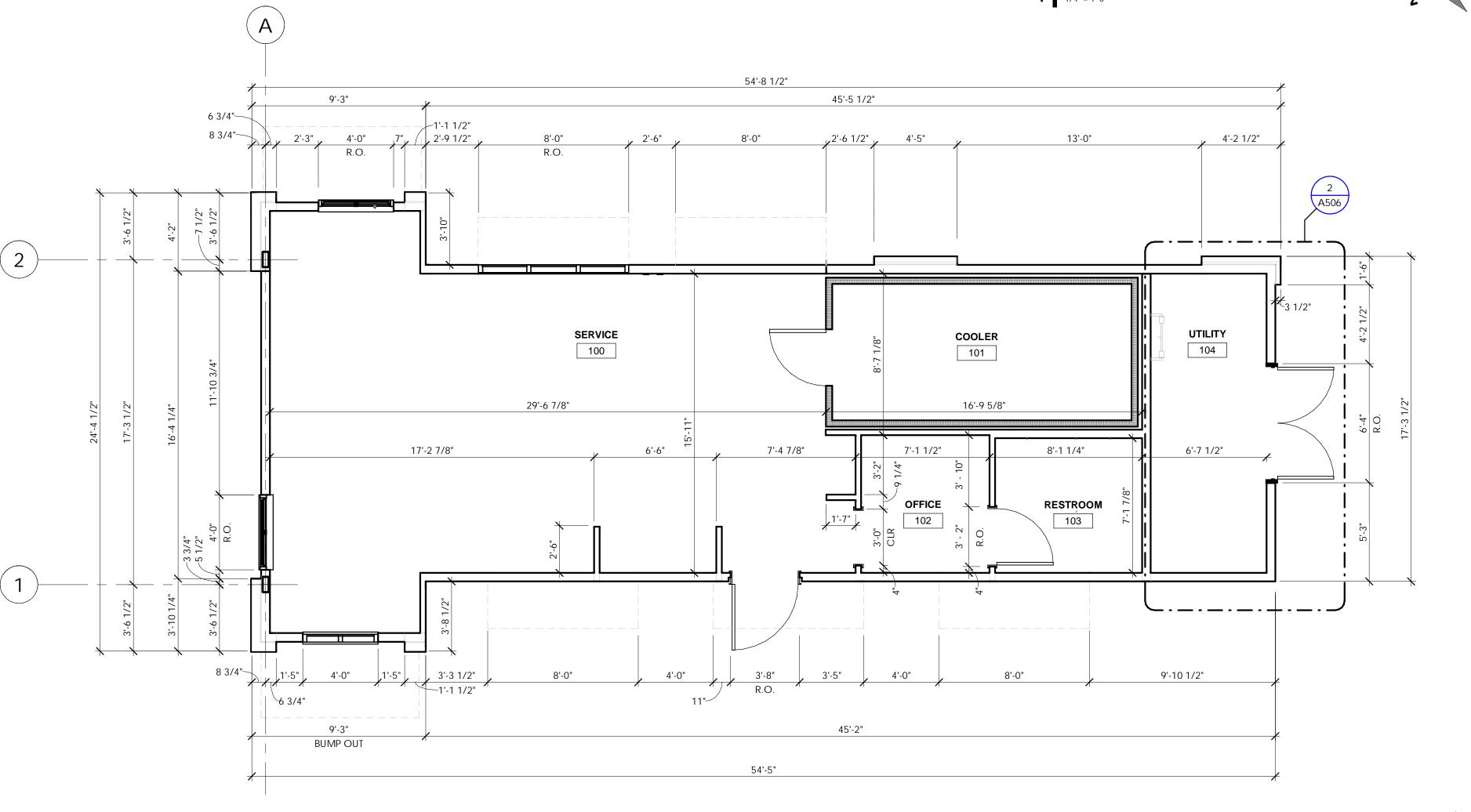


*REFER TO A611 FOR INTERIOR WALL ASSEMBLIES
*REFER TO A621 FOR EXTERIOR WALL ASSEMBLIES

DOOR & WINDOW TAGS, REFER TO A631& A641







2 DIMENSION FLOOR PLAN

1/4" = 1'-0"



#2001
SHIPMAN ROAD
MO 64086 PROPOSED LOT

AIN STREET #300 WORTH TX 76102

0

513 MAIN STREET FORT WORTH

STEVEN COX
NUMBER
A-2023017238

CONTRACTOR SHALL VERIFY ALL
CONDITIONS AND DIMENSIONS AT THE
JOB SITE AND NOTIFY THE ARCHITECT
OF ANY DIMENSIONAL ERRORS,
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PERMIT SET: 04/12/2024

DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 06/01/2023

SCALE: AS NOTED

SHEET TITLE

DRAWN BY:

CHECKED BY:

DIMENSION FLOOR PLANS

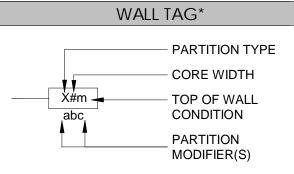
V. PEREZ J. JEFFERY

SHEET NUMBER

A101

FLOOR PLAN GENERAL NOTES:

- A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
- B. APPROVED SIGN INDICATING MAXIMUM OCCUPANCY FOR THE ROOM SHALL BE LOCATED NEAR MAIN EXIT. FINAL LOCATION SHALL BE VERIFIED BY FIRE MARSHAL
- C. DO NOT SCALE DRAWINGS.
- D. PROVIDE BLOCKING IN WALLS FOR WALL MOUNTED EQUIPMENT/ACCESSORIES PER PLAN.
- E. REFER TO EQUIPMENT PLAN SHEET FOR ALL EQUIPMENT SCHEDULE INFORMATION AND LAYOUT.
- F. DIMENSION SHOWN ON THIS PLAN IS FROM FACE OF STUD TO FACE OF STUD AT INTERIOR, UNO.
- G. GENERAL CONTRACTOR TO COORDINATE ALL FLOOR SINKS AND FLOOR DRAINS WITH EQUIPMENT PLAN PRIOR TO PLACEMENT
- H. PROVIDE INTERNAL WALL BLOCKING FOR LADDERS, GRAB BARS, MIRRORS, COUNTERTOPS, CEILING FANS, AND OVERHEAD
- I. COORDINATE WITH STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, CIVIL DRAWINGS AND SOIL REPORTS.
- J. WALL DIMENSIONS SHOWN FROM FACE OF STUD TO FACE OF STUD, UNO.
- K. WALLS SHOWN ON ALIGNMENT ARE IN ALIGNMENT WITH FINISH SURFACE
- L. FLOOR LEVEL 0'-0" IS TOP OF SLAB PER ARCHITECTURAL PLAN AND ELEVATION. THIS DOES NOT INCLUDE FLOOR FINISH. REFER TO CIVIL DRAWINGS FOR ACTUAL GRADE LEVEL.



*REFER TO A611 FOR INTERIOR WALL ASSEMBLIES *REFER TO A621 FOR EXTERIOR WALL ASSEMBLIES

DOOR & WINDOW TAGS, REFER TO A631& A641



DIMENSION NOTES

- 1. ALL PLAN DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO: A. FACE OF STUD
 - B. CENTERLINE OF DOOR ON CENTERLINE OF ROOM OR CORRIDOR.

2. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS; DETAILS

OVER SMALLER SCALE DRAWINGS. 3. "T.O.SLAB" REFERS TO TOP OF SLAB

UNLESS NOTED OTHERWISE.

- 4. VERIFY ALL ROUGH-IN, CONCRETE PAD, OR PLATFORM DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS PROJECT, OR BY OTHERS.
- 5. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES,

FLOOR PLAN KEYNOTES

- SERVICE WINDOW.
- ADA COMPLIANT THRESHOLD, REF: A631.
- 3. PRE-MANUFACTURED WALK IN COOLER BY OWNER.
- 4. CONCRETE SLAB WITH BROOM FINISH.
- 5. DASHED LINE INDICATES CANOPY ABOVE.
- 6. MOP SINK PENETRATION LOCATION, INSTALL PER MANUFACTURER SPECIFICATIONS.
- 7. SERVICE WINDOW W/ 4" DEEP SOLID SURFACE SHELF. REF: 11/A503
- 8. PROVIDE IN-WALL BLOCKING TO INSTALL COUNTERTOP SUPPORTS. REFER TO A400
- 9. ELECTRICAL SERVICE ENTRY AND TELEPHONE SERVICE LOCATION, REF: ELEC.
- 10. 3200 SERIES RECESSED KNOXBOX AT 60" AFF
- 11. WATER HEATER WITH MOP SINK BELOW
- 12. "NO SMOKING" SIGN LOCATION
- 13. ROOF ACCESS LADDER; REF: A506
- 14. ROOF DRAIN LEADERS
- 15. RECESSED COVERED HOSE BIB, ZURN WALL HYDRANT Z1350. REF: PLUMB, REF: 9/A504
- 16. POS MONITOR MOUNTED ON STAINLESS STEEL SHELVES BY OWNER. REF: EQUIPMENT PLAN, TYP





FINISH FLOOR 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 MANUFACTURERS PUBLISHED REQUIREMENTS AND FASTENED AND ADHERED ACCORDING TO APPROVED METHODS.
- C. ALL EXPOSED SURFACES ARE TO BE PREPARED TO RECEIVE NEW FINISHES.
- D. ALL WIRE FRAMES, CONDUIT, ACCESS PANELS, GILLES, FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS AND MECHANICAL DEVICES SHALL BE FINISHED TO MATCH THE ADJACENT SURFACE UNLESS NOTED OTHERWISE.
- E. CONTRACTOR TO REPORT ANY DISCREPANCIES IN PRODUCT QUALITY TO ARCHITECT FOR
- F. COMMENCEMENT OF WORK ON ANY SURFACE BY THE CONTRACTOR MEANS ACCEPTANCE OF THOSE SURFACES.
- G. FLOOR TRANSITION HEIGHTS NOT TO EXCEED 1/4" MAXIMUM. PROVIDE APPROPRIATE TRANSITION AT EACH LOCATION WHERE FLOOR MATERIAL CHANGES.
- H. RUN FLOORING UP TO MILLWORK AND UNDER OPEN COUNTERTOPS.
- I. COORDINATE COUNTERTOP FINISHES WITH OWNER
- J. THE PAINT COATING SYSTEM SHALL INCLUDE A PRIMER THAT SHALL CONTRAST WITH THE WHITE OR SPECIAL COLOR SELECTED FOR THE INTERMEDIATE AND FINISH COATS TO ALLOW OWNER AND CONTRACTOR TO VERIFY EACH COAT OF PAINT HAS BEEN INSTALLED
- K. COMPLY WITH REQUIREMENTS OF IBC SECTION 803.1.2, TABLE 805.13 FOR INTERIOR FINISH FLAME SPREAD CLASSIFICATION. CLASS C RATING FOR NON-SPRINKLERED SPACES.
- WALK IN COOLER SHALL COMPLY WITH IBC SECTION 2603 CENTER AND FREEZER WALLS. FOAM PLASTIC INSTALLED IN A MAXIMUM THICKNESS OF 10 INCHES IN COOLER AND FREEZER WALL a. HAVE FLAME SPREAD INDEX OF 25 OR LESS AND SMOKE DEVELOPED INDEX OF NOT MORE
- THAN 450, WHERE TESTED IN 4 INCHES (102mm) THICKNESS b. HAVE FLASH IGNITION AND SELF-IGNITION TEMPERATURES OF NOT LESS THAN 600 DEG F
- c. HAVE A COVERING OF NOT LESS THAN 0.032 INCH ALUMINUM OR CORROSION RESISTANT STEEL HAVE A BASE METAL THICKNESS NOT LESS THAN 0.0160 INCH (0.4mm) AT ANY POINT.

	FLOOR FINISH SCHEDULE						
MARK	IARK MATERIAL DESCRIPTION						
QT-1	QUARRY TILE	DALTILE - HARVEST RED BLEND 0Q70(1) 6x6 SMOOTH MATTE FINISH					
GROUT - MAPEI KERACOLOR GROUT 10 BL/ 3/8" GROUT LINE							
	BA	ASE FINISH SCHEDULE					
MARK	MATERIAL	DESCRIPTION					
QT-B	QUARRY TILE	DALTILE - HARVEST RED BLEND 5x6 COVE BASE Q-3565					
	FIN	IISH SYMBOL LEGEND					
FLOOR FINISH, REFER TO "FLOOR FINISH SCHEDULE"							
XXX	¥ ■ BASE FINIS	H, REFER TO "BASE FINISH SCHEDULE"					

- WALL FINISH, REFER TO "INTERIOR WALL FINISH SCHEDULE"

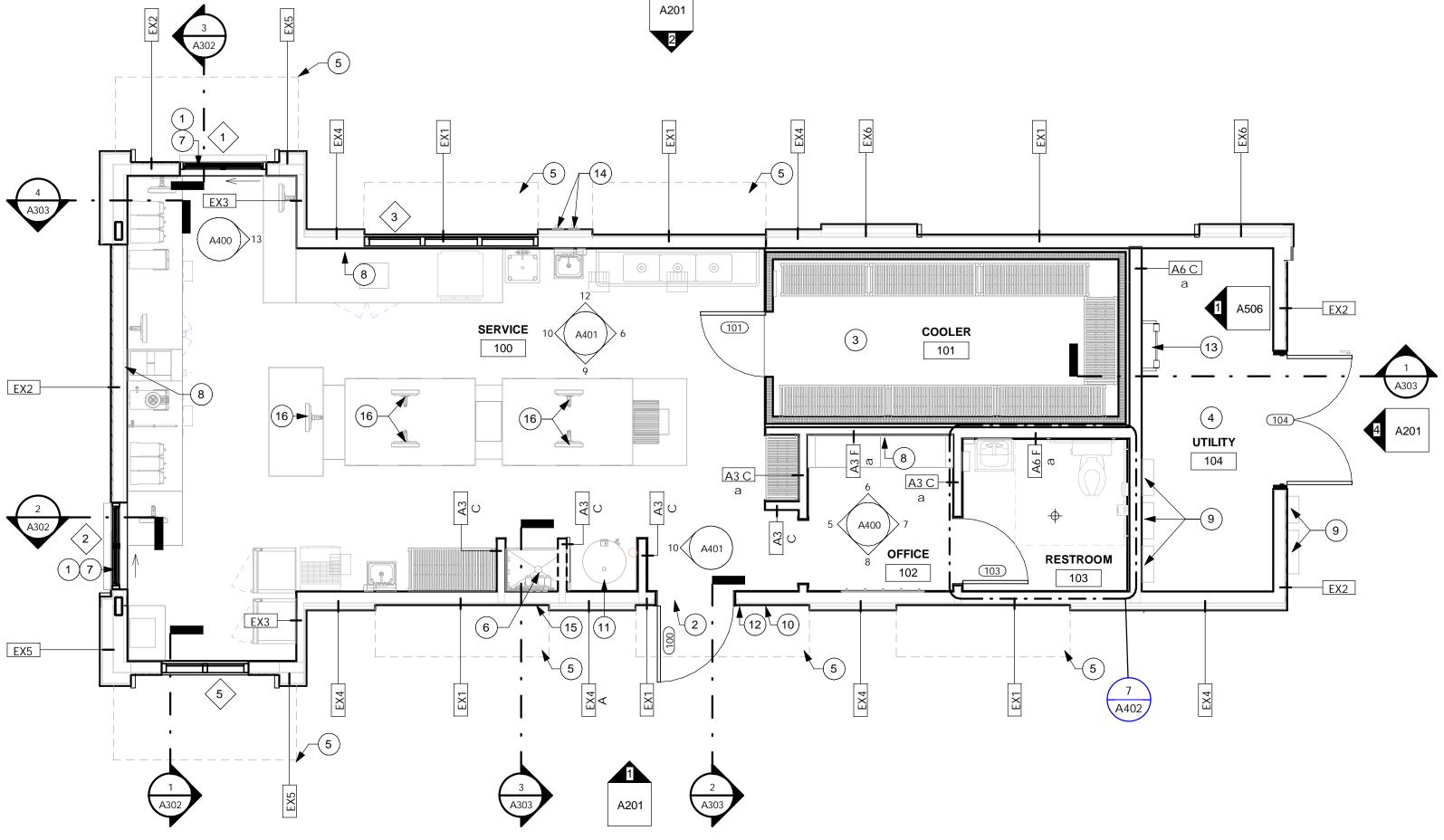
HEALTH DEPARTMENT NOTES

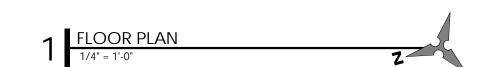
- A. WALK IN COOLER WALLS, CEILINGS, AND FLOOR / WALL JUNCTURES SHALL BE METAL OR EQUAL AND PROPERLY COVED.
- B. PROVIDE 2/3" RADIUS QUARRY TILE COVE BASE.
- C. GROUT AND MORTAR SHALL BE SEALED, SMOOTH AND FINISHED FLUSH WITH THE SURFACE OF ALL TILES, BRICK, STONE, AND OTHER SIMILAR SURFACES. IF EPOXY GROUT NOT USED, GROUT NEEDS TO BE SEALED.

FINISH FLOOR PLAN KEYNOTES

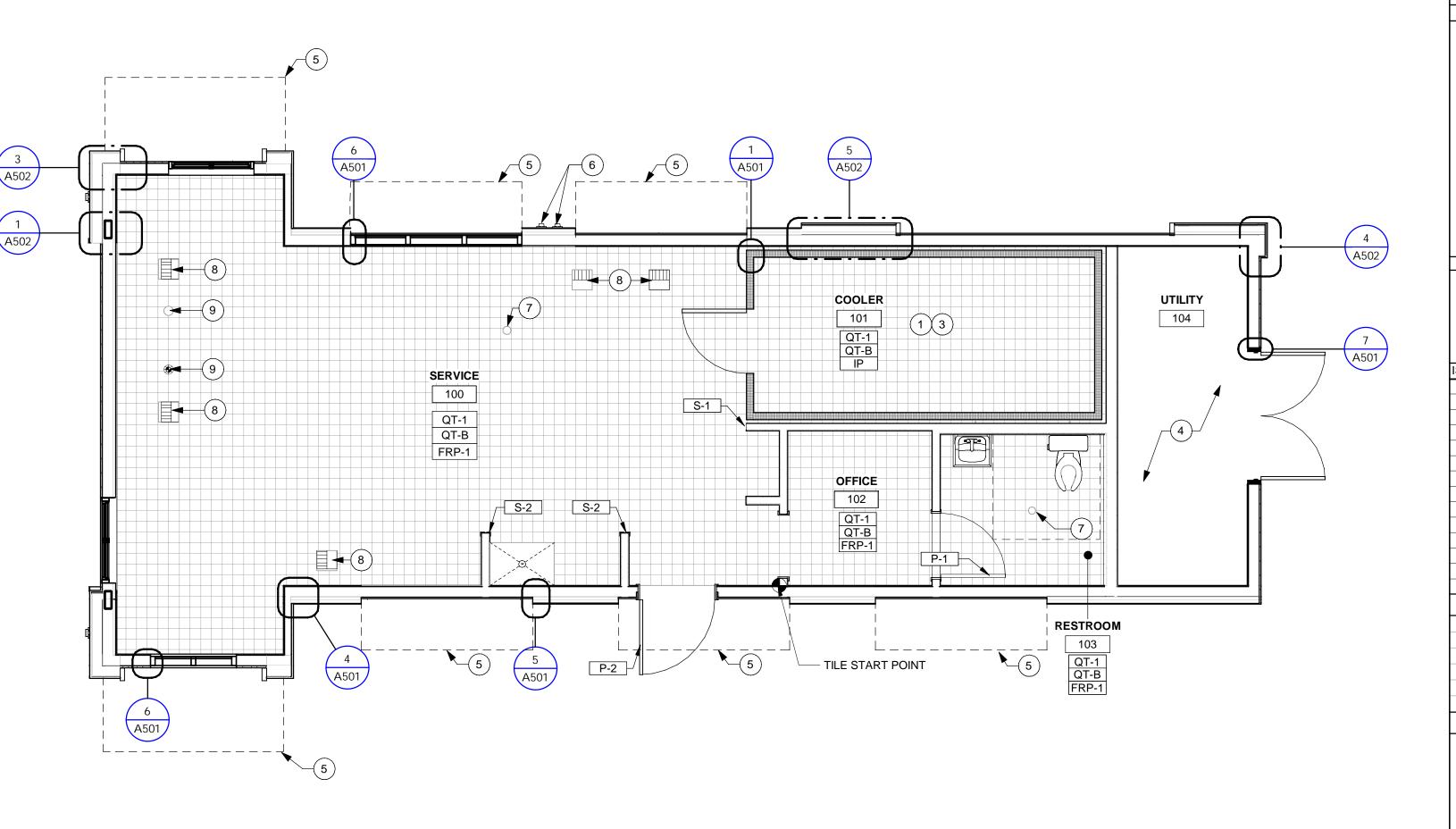
- 1. TILE TO CONTINUE UNDER COOLER WALLS.
- 2. ADA COMPLIANT THRESHOLD, REF: A631.
- 3. PRE-MANUFACTURED WALK IN COOLER BY OWNER.
- 4. CONCRETE SLAB WITH BROOM FINISH.
- 5. DASHED LINE INDICATES CANOPY ABOVE.
- 6. ROOF DRAIN LEADERS.
- 7. FLOOR DRAIN, REF: PLUMBING.
- 8. FLOOR SINK TYP, REF: PLUMBING.
- 9. FLOOR CLEAN OUT, TYP. REF: PLUMBING

	INTERIOR WALL FINISH SCHEDULE						
MARK	MATERIAL	DESCRIPTION					
FRP-1	FRP (WHITE)	MARLITE S100G WHITE SMOOTH SURFACE, CLASS C					
P-1	PAINT	DOORS; 1 COAT PRIMER WITH 2 COATS SEMI GLOSS LATEX. SHERWIN WILLIAMS SW-7004 SNOWBOUND WHITE					
P-2	PAINT	STEEL; GLOSS LATEX. DOORS; 1 COAT EXTERIOR PRIMER, 2 COATS EXTERIOR SEMI GLOSS. SHERWIN WILLIAMS SW-7048 URBANE BRONZE					
IP	INSULATED PANELS	INSULATED WALL PANELS BY COOLER MANUFACTURER					
S-1	SS U-CHANNEL	FULL HEIGHT STAINLESS STEEL U-CHANNEL WITH 2" WING SIZE; 18 GAUGE; #4 SATIN FINISH; 90° ANGLES					
S-2	SS CORNER GUARD	4' - 0" HEIGHT STAINLESS STEEL CORNER GUARD WITH 2" WING SIZE; 18 GAUGE; #4 SATIN (BRUSHED) FINISH; 90° ANGLE. TYPE 304					





7 FINISH FLOOR PLAN

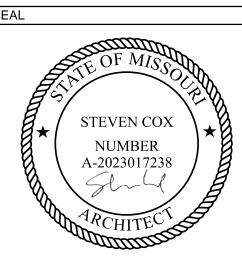




#200

FORT WORTH TX 76102

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PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY: V. PEREZ CHECKED BY: J. JEFFERY

SHEET TITLE

FLOOR PLANS

SHEET NUMBER

#2001 610

513 MAIN STREET FORT WORTH TX 76102

A-2023017238 PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO:

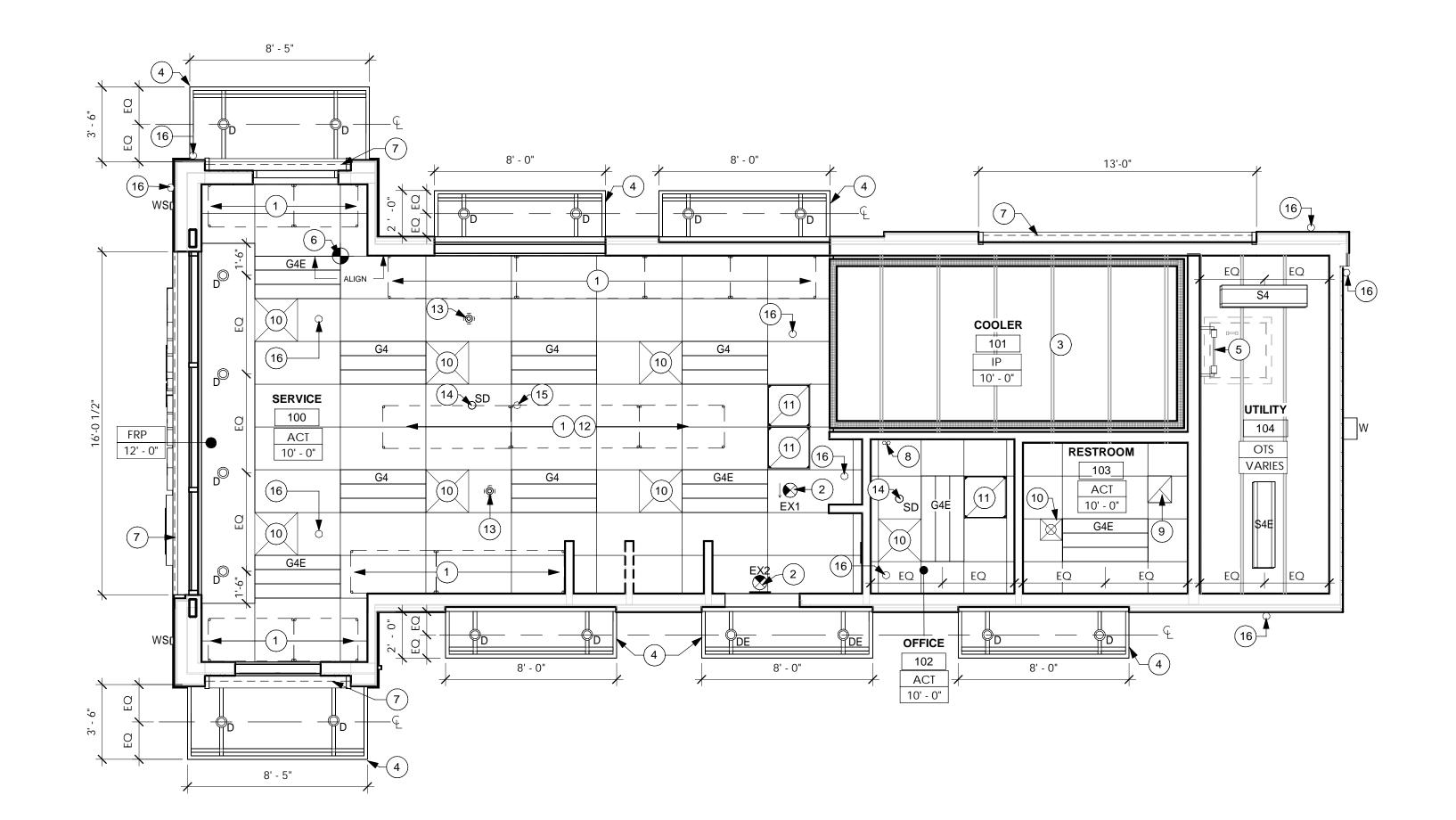
ORIGINAL ISSUE: 06/01/2023 SCALE: AS NOTED DRAWN BY:

CHECKED BY: SHEET TITLE

J. JEFFERY

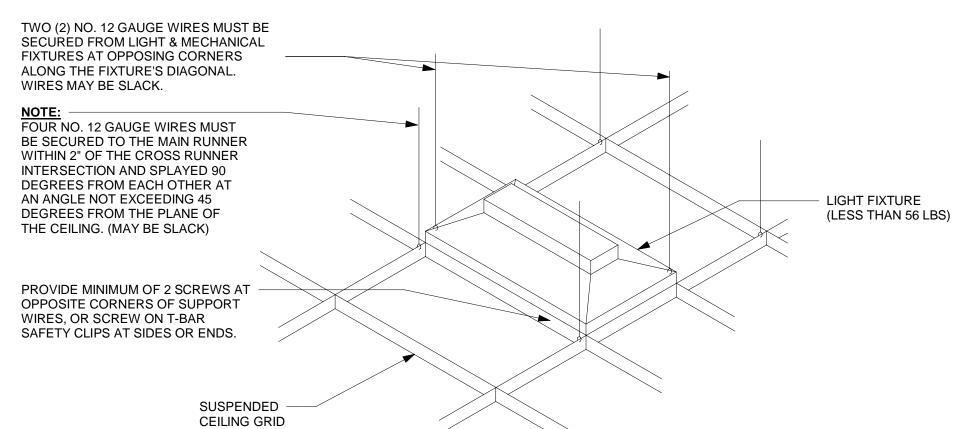
REFLECTED CEILING PLAN

SHEET NUMBER



PIPING OR DUCT WORK THAT IS NOT PROVIDED W/ BRACING RESTRAINTS FOR HORIZ FORCES. BRACING WIRES MUST BE ATTACHED TO THE GRID & TO THE STRUCTURE IN SUCH A MANNER THAT THEY CAN SUPPORT A DESIGN LOAD OF NOT LESS THAN 200 POUNDS OR THE ACTUAL LOAD, WHICHEVER IS GREATER, WITH A SAFETY FACTOR OF 2.

LATERAL FORCE BRACING MEMBERS MUST BE SPACED A MIN OF 6" FROM ALL HORIZONTAL



CEILING LIGHT DETAIL

REFLECTED CEILING PLAN GENERAL NOTES

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

REFLECTED CEILING PLAN GENERAL NOTES FRP FIBER REINFORCED PANELS - MARLITE S100G, SMOOTH WHITE WHITE CEILING TILE - 2X4 VINYL WASHABLE TILE IN SURFACE MOUNTED GRID. GRID TO BE SUSPENDED. USG OR APPROVED EQUIVALENT INSULATED PANELS: INSULATED PANEL BY COOLER MANUFACTURER OTS OPEN TO STRUCTURE. PAINT AND PRIME EXPOSED SURFACES WHITE **CEILING TAG** - CEILING MATERIAL — CEILING HEIGHT 1'-0" — CEILING HEIGHT

MATERIAL TAG MATERIAL TYPE ● E-1 PER SCHEDULE

NO SUSPENDED LIGHT FIXTURE, DECORATIVE ITEM OR SIMILAR DECORATIVE ITEMS SHALL BE INSTALLED LOWER THAN 80" A.F.F. AT ANY CIRCULATION PATH OR ACCESSIBLE ROUTE

NO DEVICE OR DECORATIVE OBJECT LESS THAN 80" A.F.F. SHALL PROJECT MORE THAN 4" FROM ANY WALL IN ANY

ELECTRICAL/MECHANICAL LEGEND NOTE: COORDINATE WITH ELECTRICAL AND MECHANICAL DRAWINGS

2x4 LED BACKLIT FLAT PANEL G4 MODEL # NUVO 65-572 1x4 LED BACKLIT FLAT PANEL S4 MODEL # NUVO 65-573

LED WALL PACK MODEL # SLIM18N

WALL SCONCE - CAMMAN MODEL # W425 | LANE, TO BE MOUNTED 5' - 0" AFF _____ 24VDC HIGH DENSITY LED: NF-PRO-O-60-24V-4100K

CIRCULATION PATH OR ACCESSIBLE ROUTE

6" ROUND DIRECT MOUNT RECESSED LED MODEL # SMD6R129SWHE /SMD6RTRMWH

TAPE LIGHT - NOVA FLEX - WET LOCATION

AIR SUPPLY DIFFUSER

AIR RETURN REGISTER

EXHAUST FAN SMOKE DETETCTOR REFLECTED CEILING PLAN KEYNOTES

1. STAINLESS STEEL SHELVES SUSPENDED FROM TRUSSES. SEE EQUIPMENT PLAN.

2. WALL/CEILING MOUNTED EMERGENCY/EXIT SIGN. 3. PRE-MANUFACTURED WALK IN COOLER WITH INTEGRAL CEILING.

CANOPY ABOVE. 5. ROOF ACCESS LADDER.

6. ACT START POINT.

7. TAPE LIGHT ON ALL THREE SIDES.

REFLECTED CEILING PLAN
1/4" = 1'-0"

8. ELECTRICAL CONDUIT THROUGH CEILING, TYP. REFER TO LOW VOLTAGE PLAN.

9. EXHAUST FAN, REF: MECHANICAL.

10. AIR SUPPLY, REF: MECHANICAL.

11. AIR RETURN, REF: MECHANICAL.

12. ISO CORD FASTENED TO VERTICAL, FED FROM OVERHEAD, HANGING 4" AFF.

13. CEILING MOUNTED OCCUPANCY SENSOR.

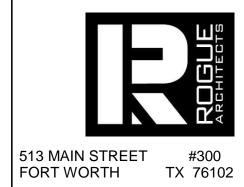
14. SMOKE DETECTOR

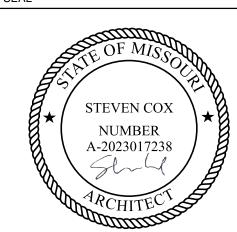
15. THERMOSTAT SENSOR

16. CONDUIT FOR SECURITY CAMERA



610 NW





CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS,

REVISION 1: 06/06/2024

OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION 06/06/2024 CITY COMMENTS

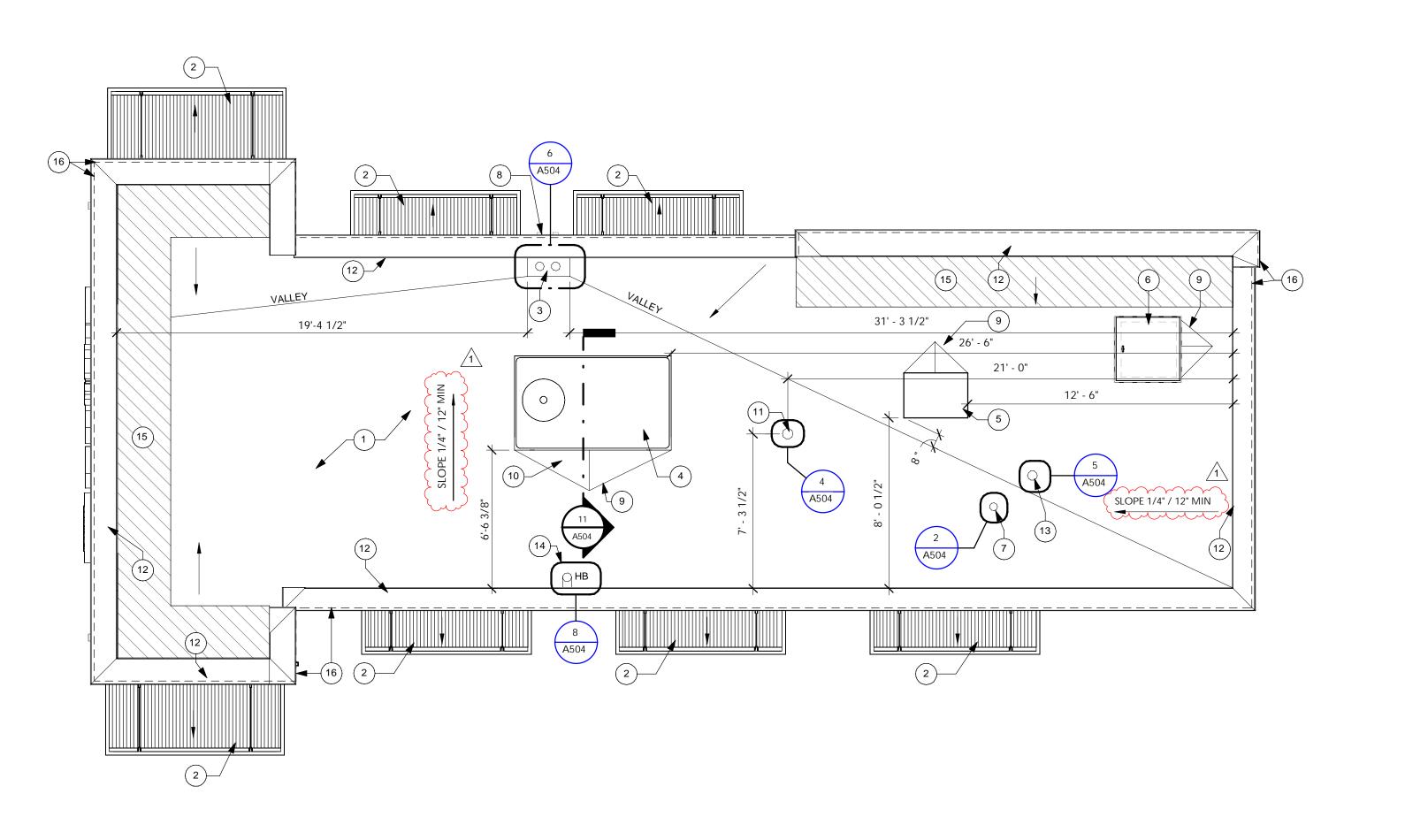
PROJECT INFORMATION

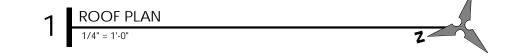
PROJECT NO: ORIGINAL ISSUE: 06/01/2023 AS NOTED DRAWN BY: CHECKED BY: J. JEFFERY

SHEET TITLE

ROOF PLAN

SHEET NUMBER





ROOF PLAN GENERAL NOTES

- A. REFER TO ELECTRICAL, MECHANICAL, PLUMBING, AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL
- B. RIDGE AND VALLEY OF ROOF SLOPES OCCUR BY SLOPING ROOF FRAMING AND WARPED DECK (TYPICAL), EXCEPT WHERE TAPERED INSULATION IN INDICATED. PROVIDE CRICKETS OF TAPERED INSULATION AT EQUIPMENT CURBS, ROOF DRAINS, SCUPPERS OR ANY OTHER INTERRUPTIONS IN THE SLOPE OF THE ROOF TO MAINTAIN 1/4" SLOPE PER FOOT.
- C. REFER TO PLUMBING DRAWINGS FOR ROOF DRAIN/LEADER
- D. CONTRACTOR WILL ENSURE POSITIVE DRAINAGE OF THE ROOF DRAINS AND SCUPPERS WITHOUT PONDING.
- E. INSTALLATION OF ROOFING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND PER THE DETAILS ON THE ROOF PLAN.
- F. FLASHING TO BE 24 GAUGE GALVANIZED STEEL

ROOF PLAN KEYNOTES

- 1. TPO ROOFING SYSTEM INSTALLED PER MANUFACTURERS INSTRUCTIONS. JOHNS MANVILLE ST6RM-S/I, 60 MIL MEMBRANE (OR EQUAL) OVER RIGID INSULATION BOARD, MIN R-25 INSULATION VALUE WITH 20 YEAR
- 2. 22 GA MIN THICKNESS CORROSION RESISTANT METAL ROOF DECK, REF:
- 3. ROOF DRAIN AND OVERFLOW DRAIN.
- 4. RTU, REF: MECH.
- 5. WALK-IN COOLER CONDENSING UNIT ON 6" CURB, REF: MECH & 1/A504 6. ROOF ACCESS HATCH.
- 7. EXHAUST VENT, WATER-PROOF AROUND PENETRATION.
- 8. ROOF DRAIN LEADER. DRAINS TO DAYLIGHT. ROOF CRICKETS, TYP.
- 10. MECHANICAL UNIT CURB. PROVIDE CRICKET AT BASE.
- 11. CELL BOOSTER.
- 12. METAL COPING AT PARAPET, TYP.
- 13. EXHAUST FAN. WATER-PROOF AROUND PENETRATION.
- 14. HOSE BIB THROUGH PARAPET: ZURN WALL HYDRANT Z1350. WATER-PROOF AROUND PENETRATION.
- 15. AREA OF PARAPET BRACING, REF: STRU
- 16. TAPE LIGHT UNDER COPING, REF: ELEC AND WALL SECTIONS.



GENERAL NOTES

- A. CONSIDERATION WILL NOT BE GRANTED FOR ANY ALLEGED MISUNDERSTANDINGS OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF PROPOSAL SHALL CONVEY FULL AGREEMENT TO THE ITEMS AND CONDITIONS INDICATED ON THE DRAWINGS. SHOULD THE CONTRACTOR FIND DISCREPANCIES OR OMISSIONS IN THE CONTRACT DOCUMENT OR BE IN DOUBT AS TO THE INTENT THEREOF. THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE PRIOR TO SUBMITTING A PROPOSAL FOR WORK.
- B. WATERPROOFING MEMBRANE TO BE TWO LAYERS TYVEK COMMERCIAL WRAP WITH TAPED SEAMS, INSTALLED PER MANUFACTURER SPECIFICATIONS. SPECIAL INSPECTION NEEDED FOR WRB.
- C. FLASHING TO BE 24 GA GALVANIZED STEEL, UNO.

ELEVATION KEYNOTES

- 1. METAL PARAPET CAP, PAINTED. TAPE LIGHTS UNDER COPING, REF: ELEC.
- 2. ARCHITECTURAL PANELS. REF: A501, A502, A503, A504.
- THIN BRICK
- 4. STUCCO, REF: TO A501 & A502
- 5. CONTROL JOINTS, REF: A501.
- 6. OPERABLE WINDOW, REF: A641 FOR WINDOW SCHEDULE.
- 7. FIXED WINDOW, REF: A641 FOR WINDOW SCHEDULE.
- 8. BUILDING SIGNAGE SHOWN FOR PLACEMENT AND SCALE ONLY. SIGNAGE UNDER SEPARATE PERMIT. GC TO PROVIDE BLOCKING AS REQUIRED.
- 9. 6" TALL BUILDING NUMBER WITH 0.5" STROKE WIDTH. ARIAL FONT,
 CONTRASTING COLOR. COORDINATE LOCATION WITH FIRE MARSHALL. (2018 IFC 505.1)
- 10. DECORATIVE METAL CUTOUTS. REF: SEPARATE SIGNAGE PERMIT FOR
- DETAILS. 11. TAPE LIGHT UNDER COPING, REF: ELEC
- 12. BUILDING ACCESS KEYPAD
- 13. C-CHANNEL AWNING, ALL EXPOSED STEEL TO BE FIELD-PAINTED.
- 14. RECESSED COVERED HOSE BIB, REF: A503.
- 15. ROOF LINE, BEHIND.
- ROOF DRAIN.

2' - 5"

1' - 4" | 1' - 4 1/2" |

5' - 1"

- 17. RTU, REF: ELEC & MECH.
- 18. METAL ACCENT FRAME WITH TAPE LIGHT. REF: ELEC.
- 19. WALL PACK LIGHTS, REF: ELEC.
- 20. WALL SCONCE, TO BE MOUNTED 40" AFF. REF: ELEC.
- 21. FIRE DEPARTMENT RECESSED KNOX BOX 3200. MOUNTED 60" AFF. 22. S.S CORNER GUARDS. PAINTED SW 7048 URBANE BRONZE
- 23. ELECTRICAL PANELS, COLOR MATCH TO BUILDING. REF: ELEC
- 24. CONDUIT FOR SECURITY CAMERA. REF: ELEC
- 25. WIRELESS DOORBELL. AVANTEK, LD-DB-21-A



CHIPMAN ROAD

 \geq 610

#200





REVISION 1: 06/06/2024

CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION 06/06/2024 CITY COMMENTS

PROJECT INFORMATION

PROJECT NO: 24-0087 ORIGINAL ISSUE: 06/01/2023 SCALE: AS NOTED DRAWN BY: CHECKED BY: J. JEFFERY

SHEET TITLE

EXTERIOR ELEVATIONS

SHEET NUMBER

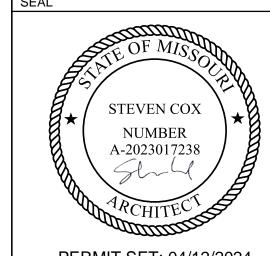
A201



#2001 610 NW

513 MAIN STREET FORT WORTH

TX 76102



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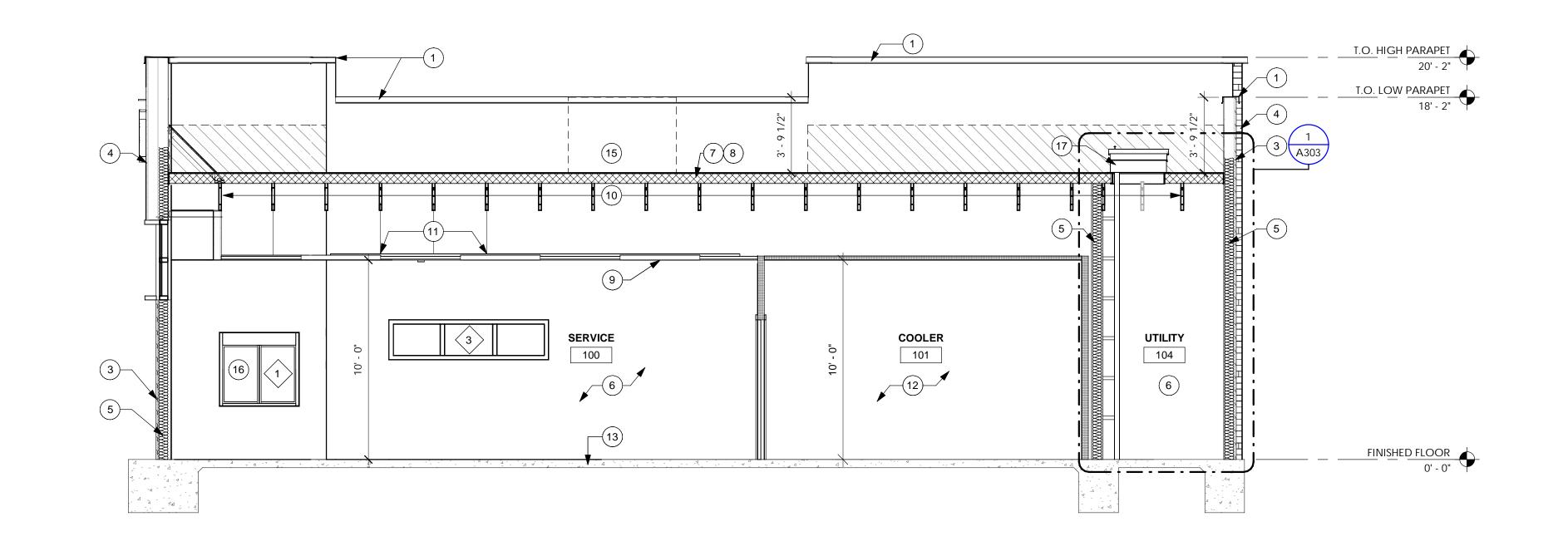
ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY: CHECKED BY: J. JEFFERY

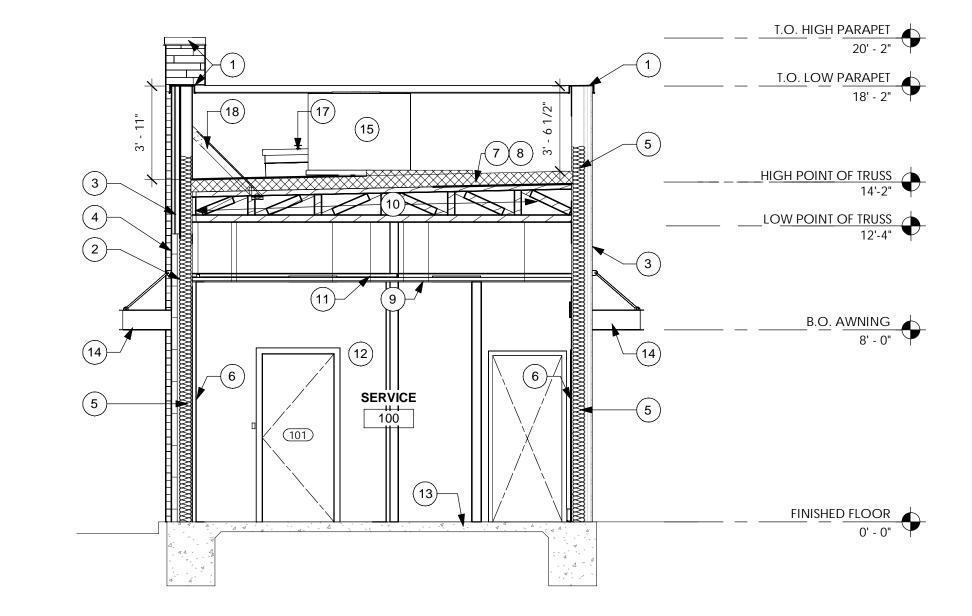
SHEET TITLE

BUILDING SECTIONS

SHEET NUMBER

A301





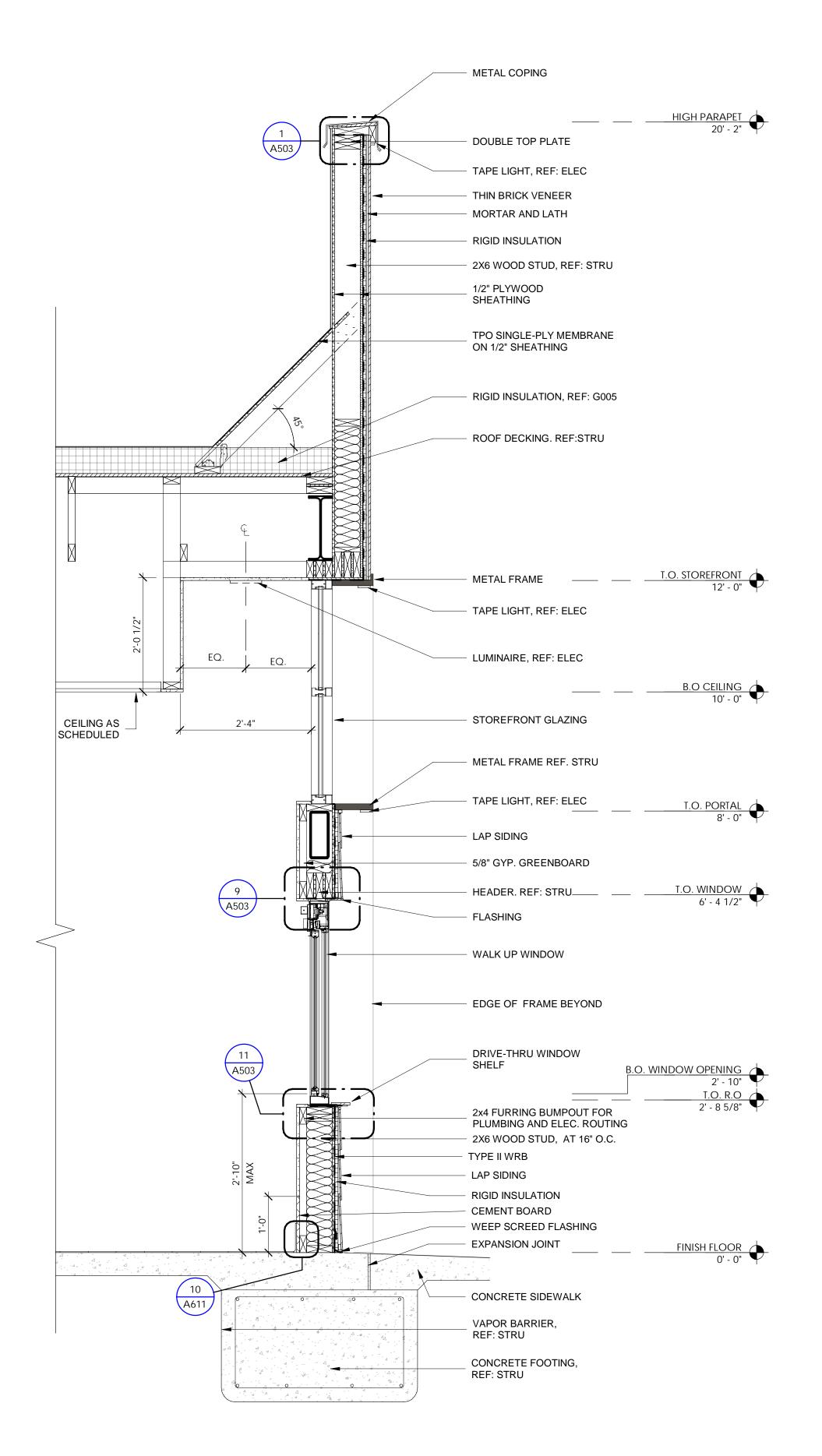
GENERAL NOTES

- A. ALL DIMENSIONS ARE SHOWN TO FINISH FACE OF WALLS UNLESS NOTED OTHERWISE
- B. GC TO COORDINATE AND PROVIDE ALL BLOCKING FOR EQUIPMENT, MILLWORK, AND FIXTURES.
- C. WALLS TO STRUCTURAL DECK MUST BE THOROUGHLY SEALED AROUND PENETRATIONS
- D. REFER TO WALL TYPE LEGEND FOR ALL NEW WALLS.
- E. ALL INSTALLED INTERIOR FINISHES SHALL COMPLY WITH THE
- FLAME SPREAD REQUIREMENTS OF ADOPTED IBC, CHAPTER 8.
- F. GC TO PROVIDE MOISTURE RESISTANT GYPSUM BOARD AT ALL LOCATIONS WHERE WALL TILE IS PRESENT.

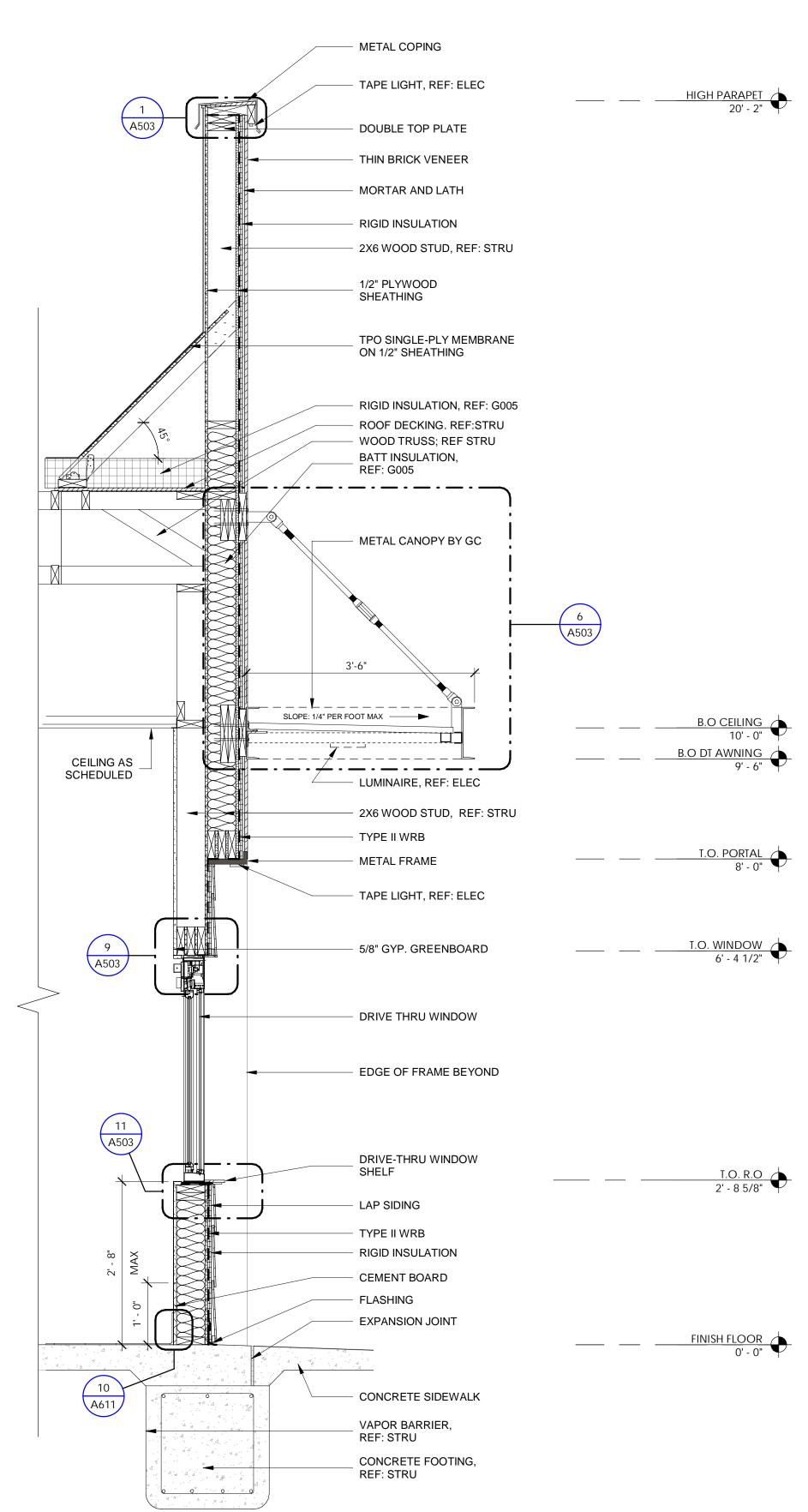
BUILDING SECTION KEYNOTES

- 1. METAL PARAPET CAP PER WALL PANEL MANUFACTURER.
- 2. STUCCO ON WATER RESISTIVE BARRIER.
- 3. LAP SIDING.
- 4. THIN BRICK.
- 5. INSULATION AT WALL CAVITY; REF: G005.
- 6. FRP ON INTERIOR SHEATHING.
- 7. TPO ROOFING SYSTEM. SINGLE PLY WATERPROOF MEMBRANE.
- 8. ROOF INSULATION TO BE RIGID INSULATION OR APPROVED EQUAL SPRAY FOAM INSULATION. REF: G005
- 9. ACOUSTICAL CEILING TILE SUSPENDED FROM STRUCTURE.
- 10. WOOD TRUSS, REF: STRU.
- 11. SHELVING SUSPENDED FROM UNISTRUT AND THREADED RODS FROM STRUCTURE.
- 12. INSULATED WALL & CEILING BY COOLER MANUFACTURER.
- 13. CONCRETE FLOOR SLAB, REF: STRU.
- 14. 22 GA. MIN. THICKNESS CORROSION RESISTANT METAL DECK ON 2X STEEL TUBES AT 6'-0" OC. SLOPE DECK TO DRAIN, REF: STRU
- 15. MECHANICAL UNITS ON 8" MAX CURBS, REF: MECH.
- 16. SERVICE WINDOW.
- 17. ROOF ACCESS HATCH
- 18. PARAPET BRACE, REF: STRU

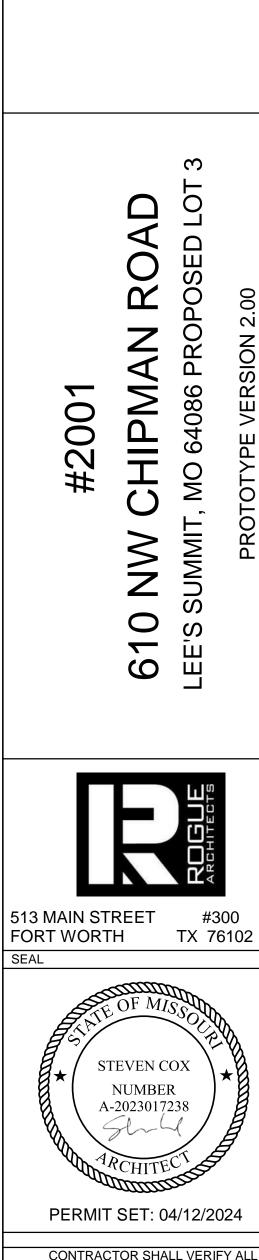
METAL COPING TAPE LIGHT, REF: ELECT DOUBLE TOP PLATE THIN BRICK VENEER MORTAR AND LATH RIGID INSULATION 2X6 WOOD STUD, REF: STRU 1/2" PLYWOOD SHEATHING TPO SINGLE-PLY MEMBRANE ON 1/2" SHEATHING RIGID INSULATION, REF: G005 ROOF DECKING. REF:STRU WOOD TRUSS; REF STRU BATT INSULATION, REF: G005 METAL CANOPY BY GC 3'-6" SLOPE: 1/4" PER FOOT MAX — B.O DT AWNING CEILING AS SCHEDULED LUMINAIRE, REF: ELEC TYPE II WRB 2X6 WOOD STUD, REF: STRU THIN BRICK VENEER FLASHING T.O. PORTAL 8' - 0" METAL FRAME TAPE LIGHT, REF: ELEC RIGID INSULATION 5/8" GYP. GREENBOARD T.O. WINDOW 6' - 4 1/2" 9 A503 FIXED WINDOW EDGE OF FRAME BEYOND FLASHING WITH SEALANT A503 T.O. R.O 2' - 8 5/8" LAP SIDING TYPE II WRB 5/8" TYP "X" GYP BOARD RIGID INSULATION CEMENT BOARD STARTER STRIP FLASHING EXPANSION JOINT FINISH FLOOR 10 A611 CONCRETE SIDEWALK, REF: CIVIL VAPOR BARRIER, REF: STRU CONCRETE FOOTING, REF: STRU



2 WALL SECTION AT WALK UP WINDOW 3/4" = 1'-0"



3 WALL SECTION AT DRIVE THRU WINDOW 3/4" = 1'-0"



PERMIT SET: 04/12/2024 CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: V. PEREZ DRAWN BY: CHECKED BY: J. JEFFERY

SHEET TITLE

WALL SECTIONS

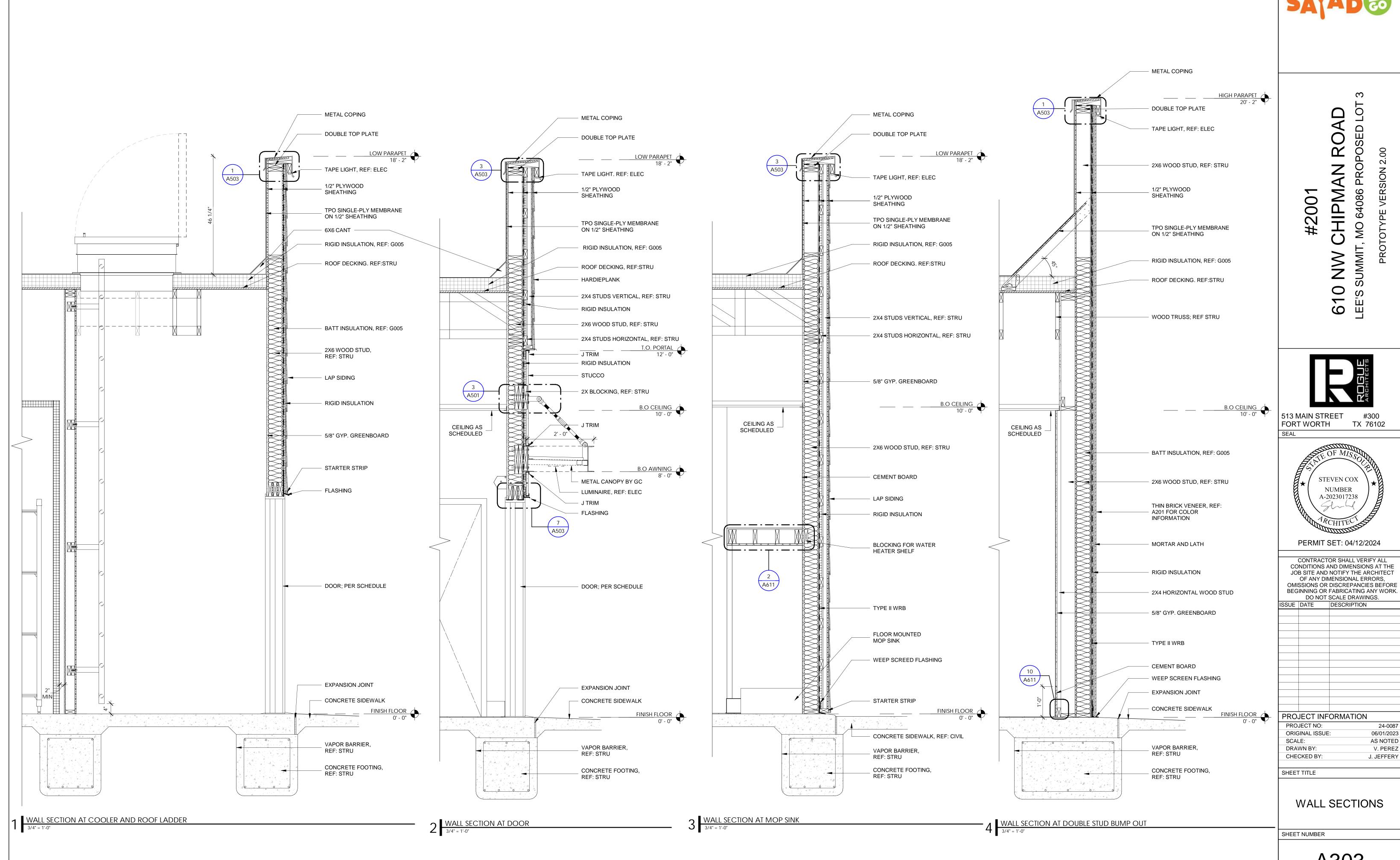
SHEET NUMBER

A302

WALL SECTION AT WINDOW

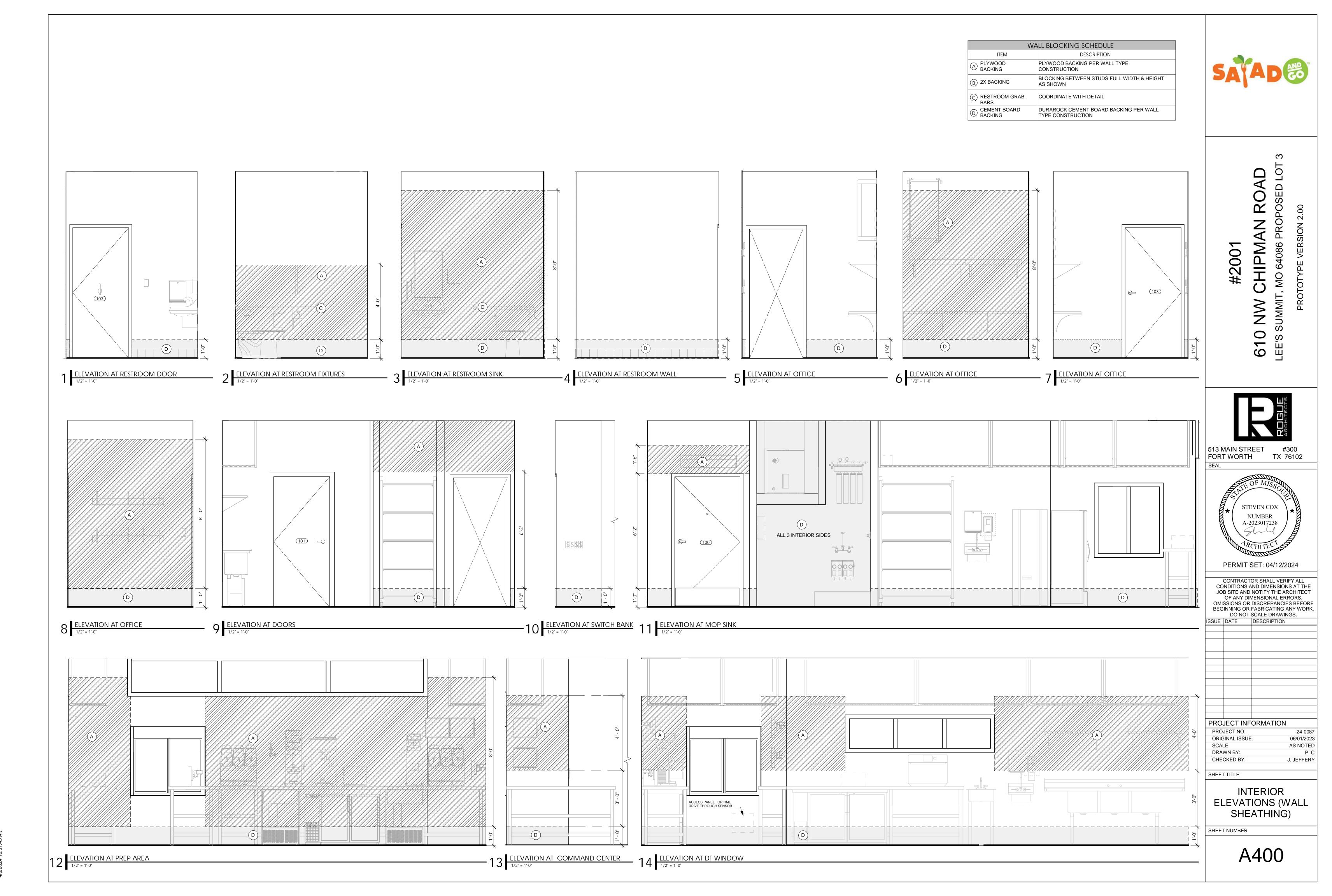
3/4" = 1'-0"



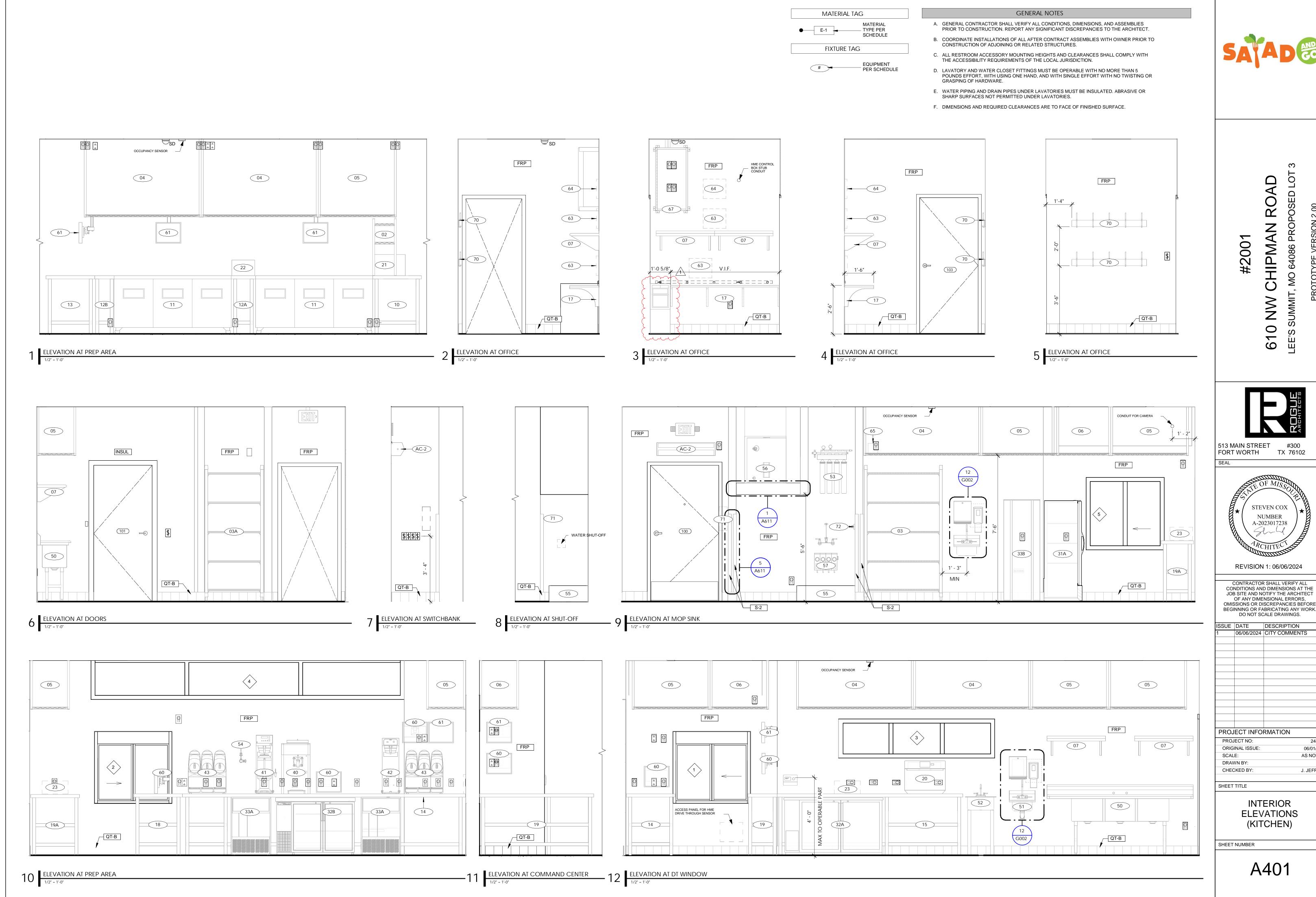


CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT

A303



70007 10.E4.4E AM



513 MAIN STREET #300 TX 76102



OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

06/06/2024 CITY COMMENTS

06/01/2023 AS NOTED J. JEFFERY

24-0087

ELEVATIONS

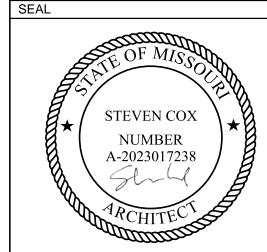




610 NW

513 MAIN STREET FORT WORTH

#300 TX 76102



CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

PERMIT SET: 04/12/2024

DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

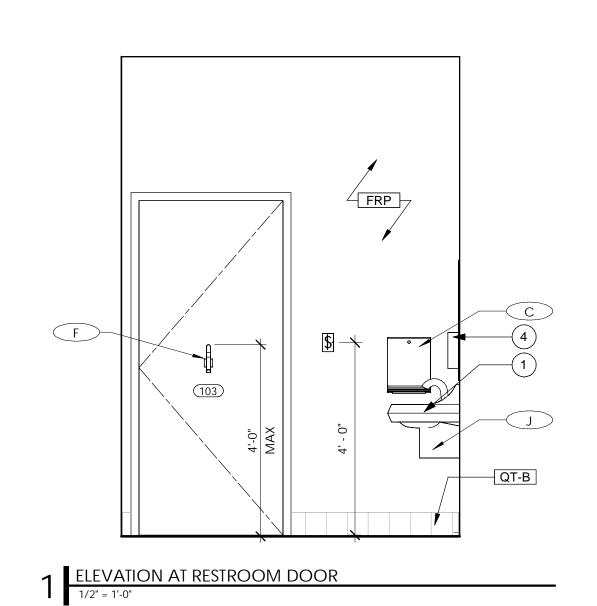
PROJECT INFORMATION PROJECT NO:

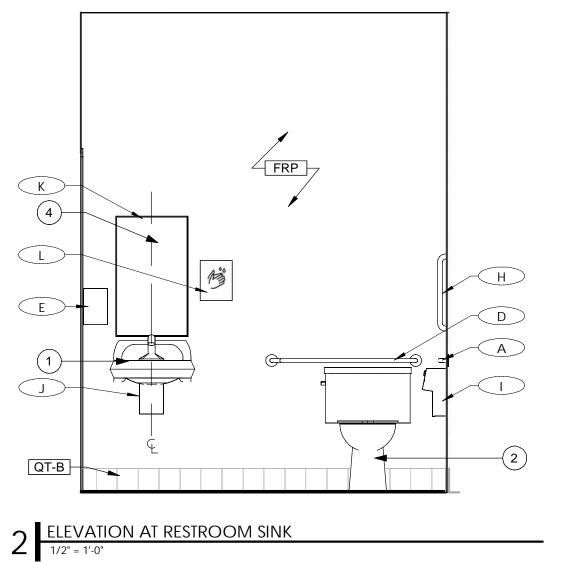
06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY: CHECKED BY: J. JEFFERY

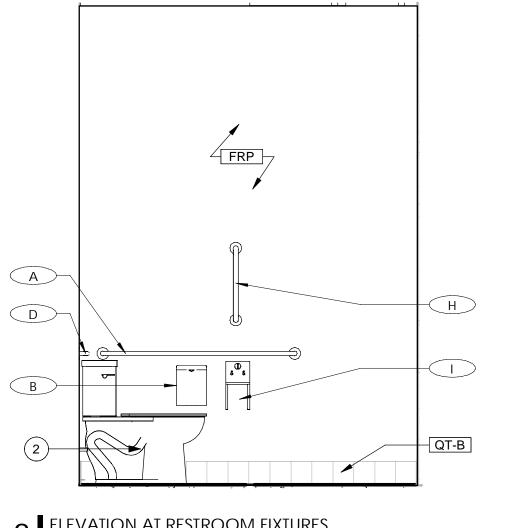
SHEET TITLE

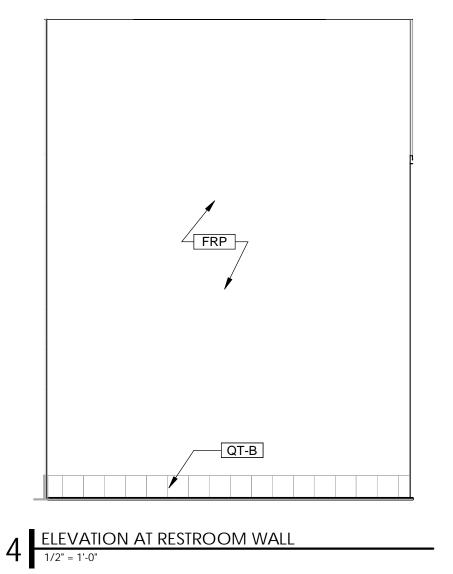
INTERIOR **ELEVATIONS** (RESTROOM)

SHEET NUMBER









3 ELEVATION AT RESTROOM FIXTURES

1/2" = 1'-0"

GRAB BARS

(A) CIRCULAR

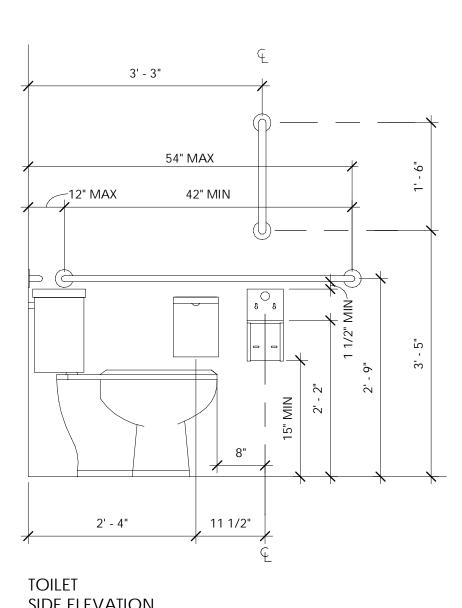
3' - 0"

TOILET

FRONT ELEVATION

1'-0" 6"

1-1/4" - 2"



MATERIAL TAG

FIXTURE TAG

€ E-1 **←**

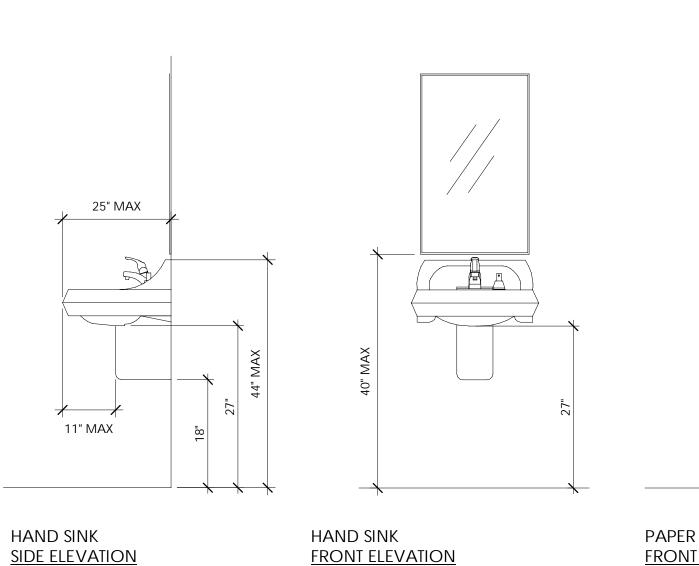
MATERIAL

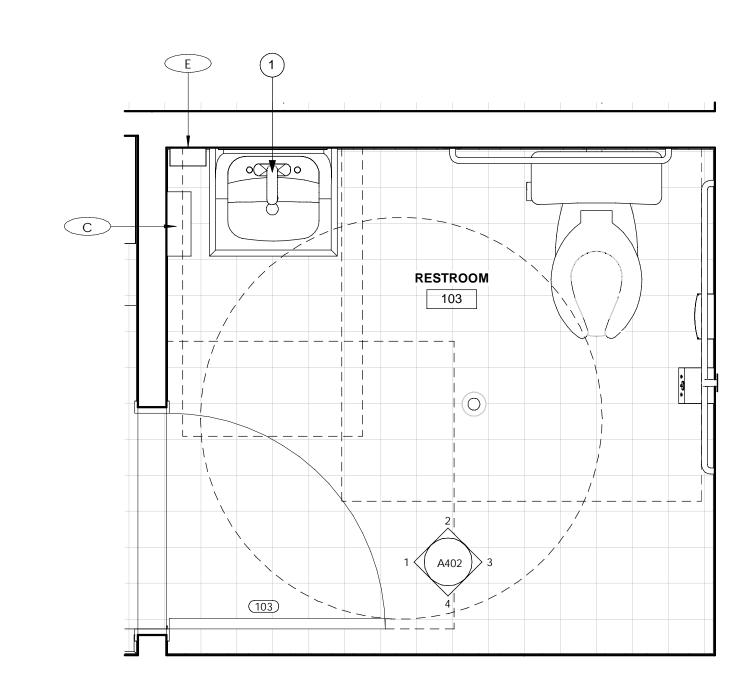
- TYPE PER

SCHEDULE

EQUIPMENT

PER SCHEDULE





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.

TAG	Count	DESCRIPTION	MANUFACTURER	MODEL NUMBER
A	1	42" GRAB BAR	BOBRICK WASHROOM EQUIPMENT, INC	B-6806 x 42
В	1	SANITARY NAPKIN DISPOSAL BIN	BOBRICK WASHROOM EQUIPMENT, INC	B-270
С	1	PAPER TOWEL DISPENSER	EMPRESS	EMP7400
D	1	36" GRAB BAR	BOBRICK WASHROOM EQUIPMENT, INC	B-6806 x 36
E	1	WALL MOUNTED SOAP DISPENSER	BY OWNER	BY OWNER
F	1	COAT HOOK	BOBRICK WASHROOM EQUIPMENT, INC	B-233
Н	1	18" VERTICAL GRAB BAR	BOBRICK WASHROOM EQUIPMENT, INC	B-6806 x 18
I	1	TOILET PAPER DISPENSER	SAN JAMER	R-1200XC
J	1	PIPE INSULATION BOOT	-	-
K	1	SURFACE MOUNTED MIRROR WITH FRAME	BOBRICK WASHROOM EQUIPMENT, INC	B-165 1836
L	1	WALL MOUNTED HAND WASH SIGNAGE	SETON	L-0715GGVPLYVAD

RESTROOM FIXTURE SCHEDULE

TOILET ACCESSORY NOTES
LL REFERENCE DIMENSIONS ARE TO FACE OF WALL FINISH

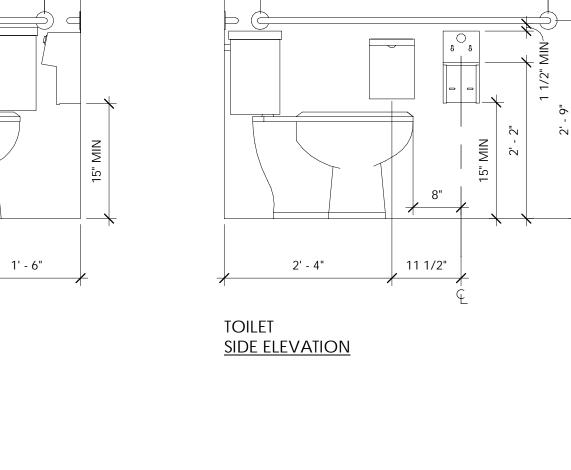
B. ALL APPLICABLE ACCESSORIES SHALL COMPLY WITH AMERICAN

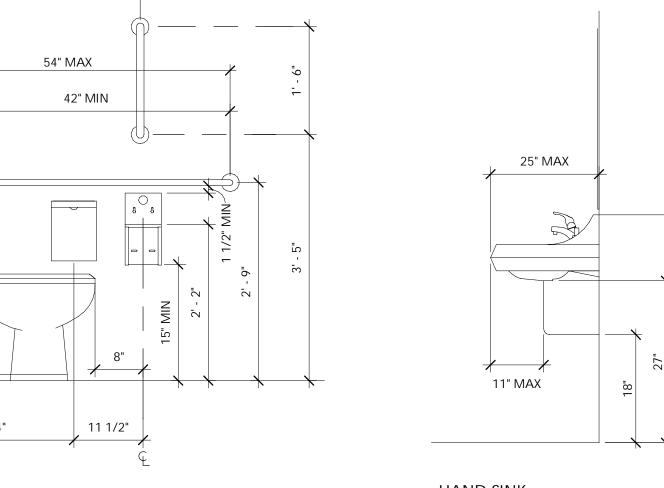
DISABILITIES STANDARDS ACT (ADA) OF 2012

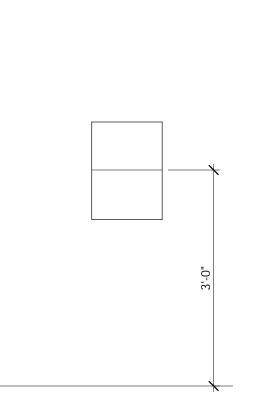
- C. EXAMINE ROUGH OPENINGS FOR CORRECT DIMENSIONS, PLUMBING, AND FOR DEFECTS THAT WOULD PREVENT PROPER INSTALLATION OF ACCESSORIES. DO NOT PROCEED WITH INSTALLATION UNTIL DEFECTS ARE CORRECTED.
- D. EACH ITEM SHALL BE INSTALLED PLUMB, LEVEL, SECURE, AND IN PROPER RELATION TO FLOORS, PARTITIONS, AND OTHER FIXTURES.

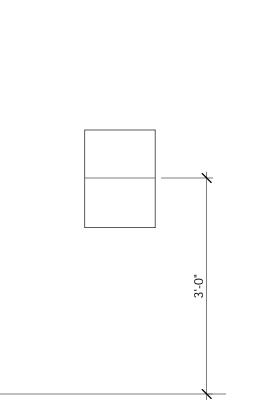
RESTROOM KEYNOTES

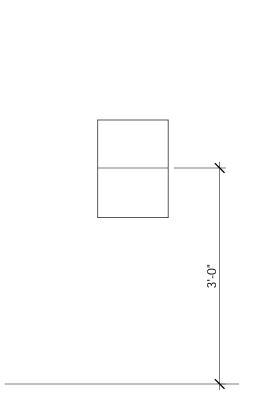
- 1. ADA COMPLIANT SINK & FAUCET, REFER TO PLUMBING
- 2. ADA COMPLIANT TOILET, REFER TO PLUMBING
- 3. 67" CLEAR FLOOR SPACE
- 4. CENTER MIRROR OVER SINK











PAPER TOWEL DISPENSER

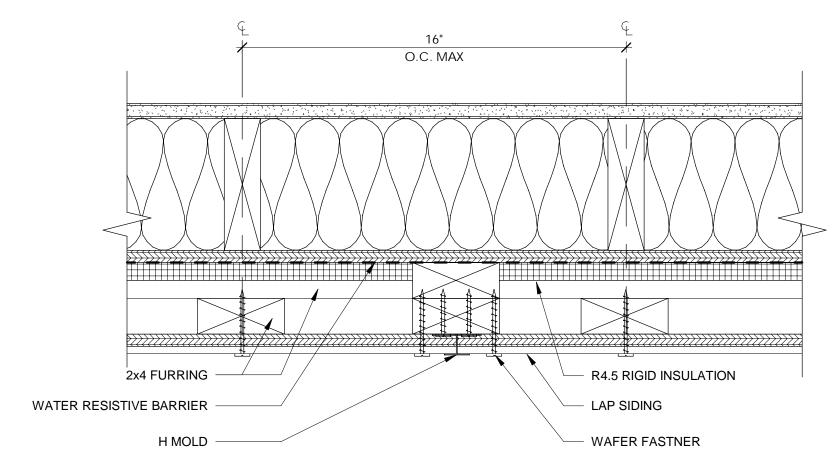
FRONT ELEVATION FRONT ELEVATION

6 HAND SINK MOUNTING LOCATIONS

3/4" = 1'-0"

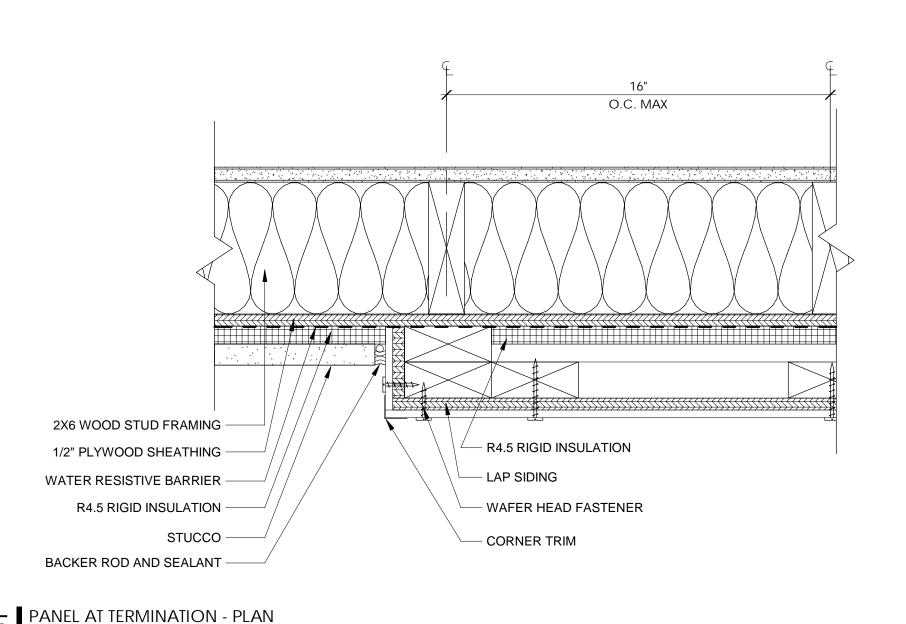
EXTERIOR FINISH, REF A201 TYPE 11 WRB 1/2" PLYWOOD MTL. CLOSURE PIECE BY K.E.S. COOLER WALLS, SEE SPECS FOR MANUFACTURER CLEARANCES

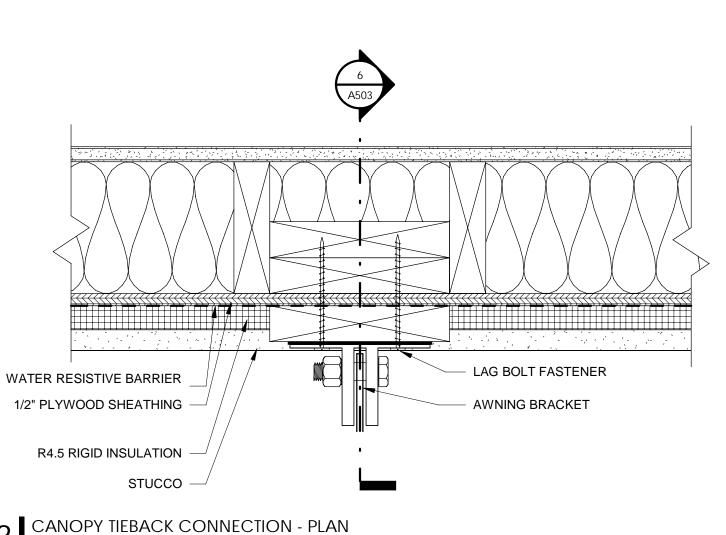
CLOSURE DETAIL AT COOLER



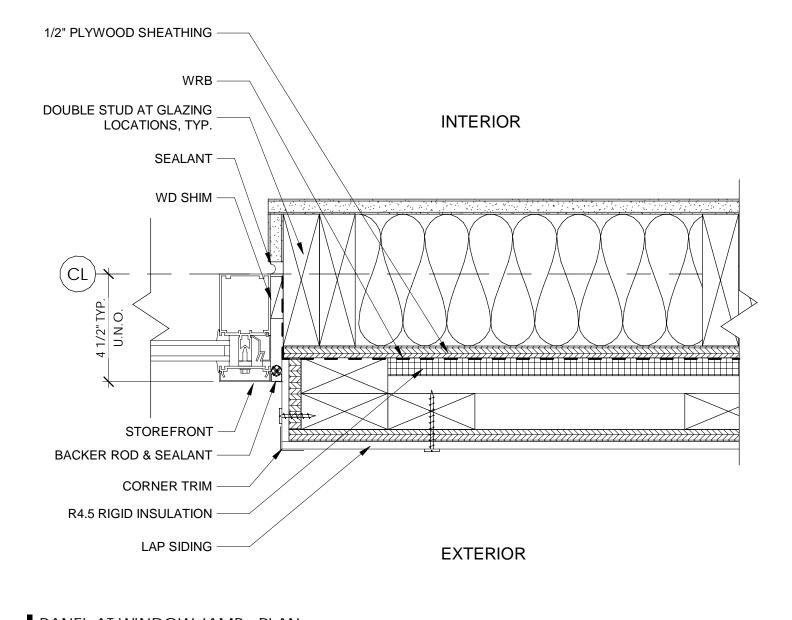
2 TYP. PANEL AT VERTICAL JOINT - PLAN

3" = 1'-0"





3 CANOPY TIEBACK CONNECTION - PLAN
3" = 1'-0"



PANEL AT WINDOW JAMB - PLAN

GENERAL NOTES

1. GC TO SUBMIT SEALANT SAMPLE TO CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO PURCHASE & INSTALLATION.

2. ALL COMPONENTS, PRODUCTS, EQUIPMENT, FASTENERS, FINISHES, ETC TO BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS.

3. ANY DIMENSIONAL IRREGULARITIES OR CONFLICTS ARE TO BE BROUGHT TO THE ARCHITECTS ATTENTION IMMEDIATELY & PRIOR TO COMMENCEMENT OF WORK.

4. GC TO COORDINATE WORK WITH SPECIFICATIONS FOR PROPER INSTALLATION & ADDITIONAL REQUIREMENTS.

5. COLOR OF TRIM PIECES SPECIFIED WITHIN THE DETAILS ON THIS SHEET TO MATCH COLOR OF ADJACENT WALL.



#2001

513 MAIN STREET

0

FORT WORTH TX 76102

A-2023017238

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE: 06/01/2023 AS NOTED SCALE: DRAWN BY: V. PEREZ

J. JEFFERY

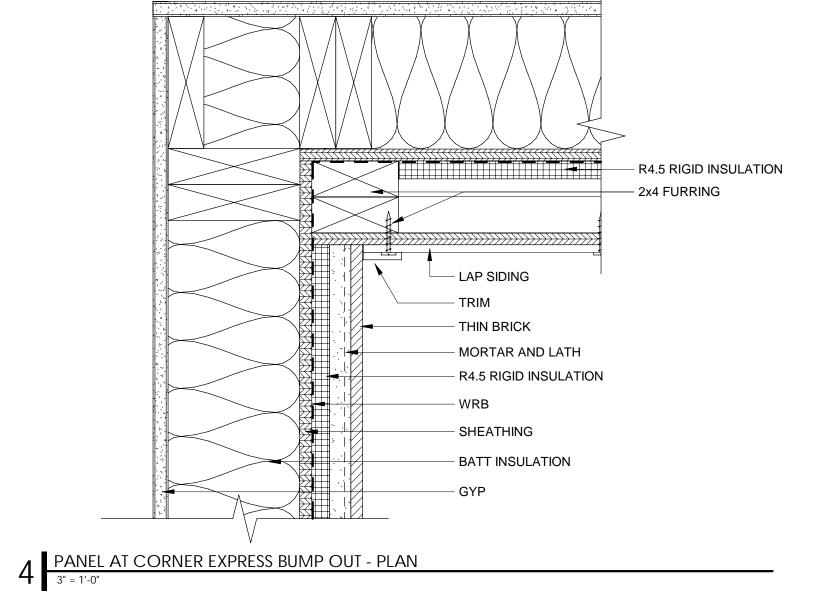
SHEET TITLE

CHECKED BY:

PLAN DETAILS

SHEET NUMBER

A501



INTERIOR

EXTERIOR

— 1/2" PLYWOOD SHEATHING

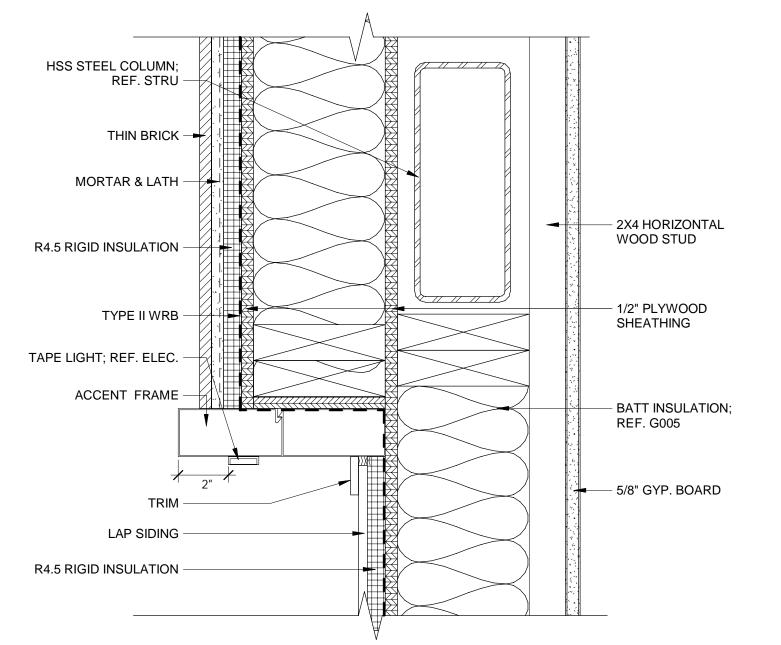
DOOR & FRAME -

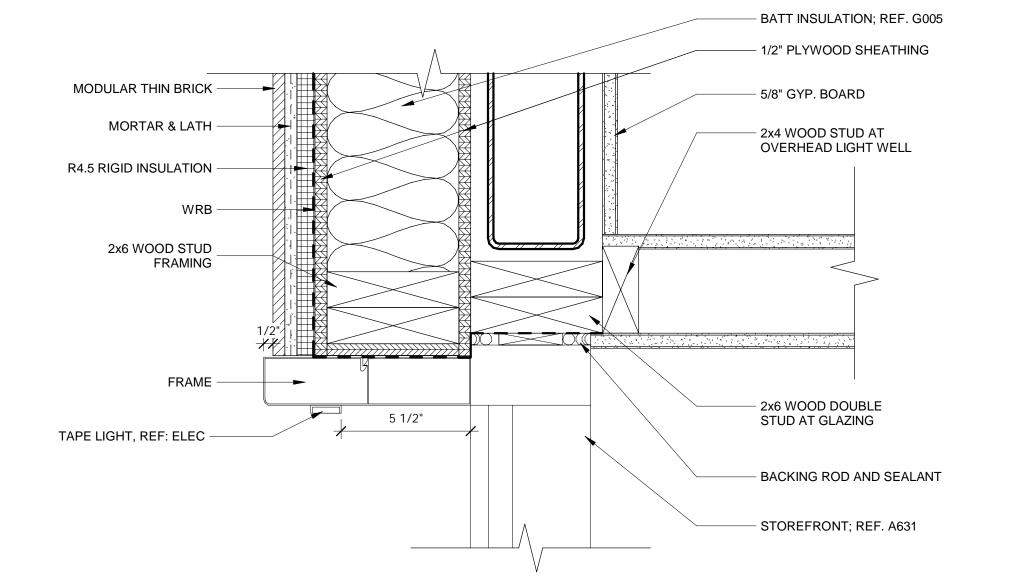
SEALANT -

LAP SIDING -

SEALANT -

DOUBLE STUD AT DOOR LOCATIONS, TYP.

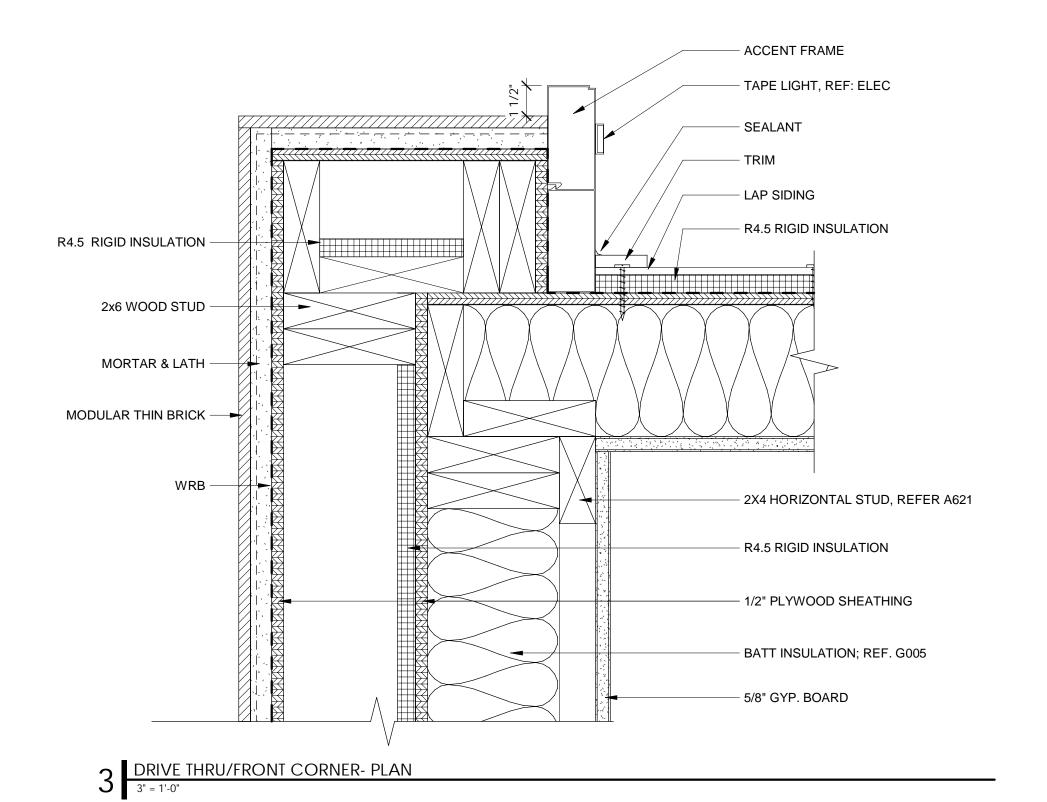


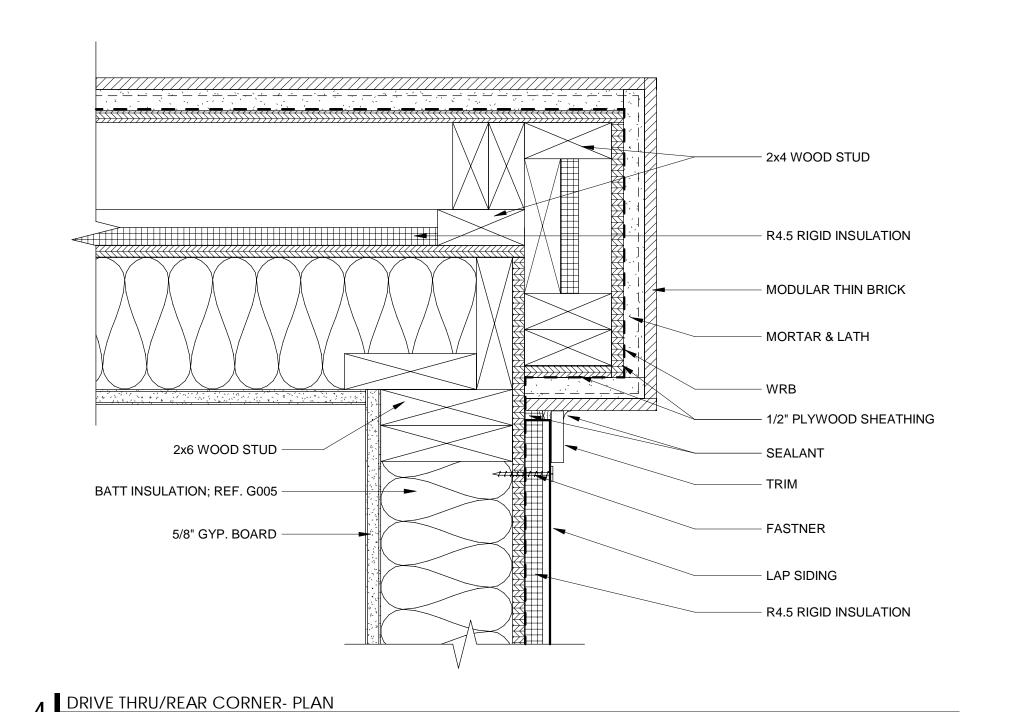


1 EMBEDDED COLUMN AT FRONT FACADE - PLAN
3" = 1'-0"

2 LIGHT WELL AT STOREFRONT - PLAN

3" = 1'-0"





R4.5 RIGID INSULATION THIN BRICK – 2x4 WOOD STUD - MORTAR & LATH FRAMING AT 16" O.C. SEALANT — STEEL FRAME - 5/8 SUBSTRATE TRIM -- TAPE LIGHT, REF: ELEC LAP SIDING -- SEALANT | PLYWOOD — - TRIM - STUCCO - R4.5 RIGID INSULATION BATT INSULATION, REF: G005 - 2X6 WOOD STUD

CONTRACTOR SHALL VERIFY ALL
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JOB SITE AND NOTIFY THE ARCHITECT
OF ANY DIMENSIONAL ERRORS,
OMISSIONS OR DISCREPANCIES BEFORE

BEGINNING OR FABRICATING ANY WORK.

A-2023017238

AN RO

610

TX 76102

#2001

513 MAIN STREET

FORT WORTH

PROTOTYPE VERSION 2.00

DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 06/01/2023

SCALE: AS NOTED

DRAWN BY: V. PEREZ

J. JEFFERY

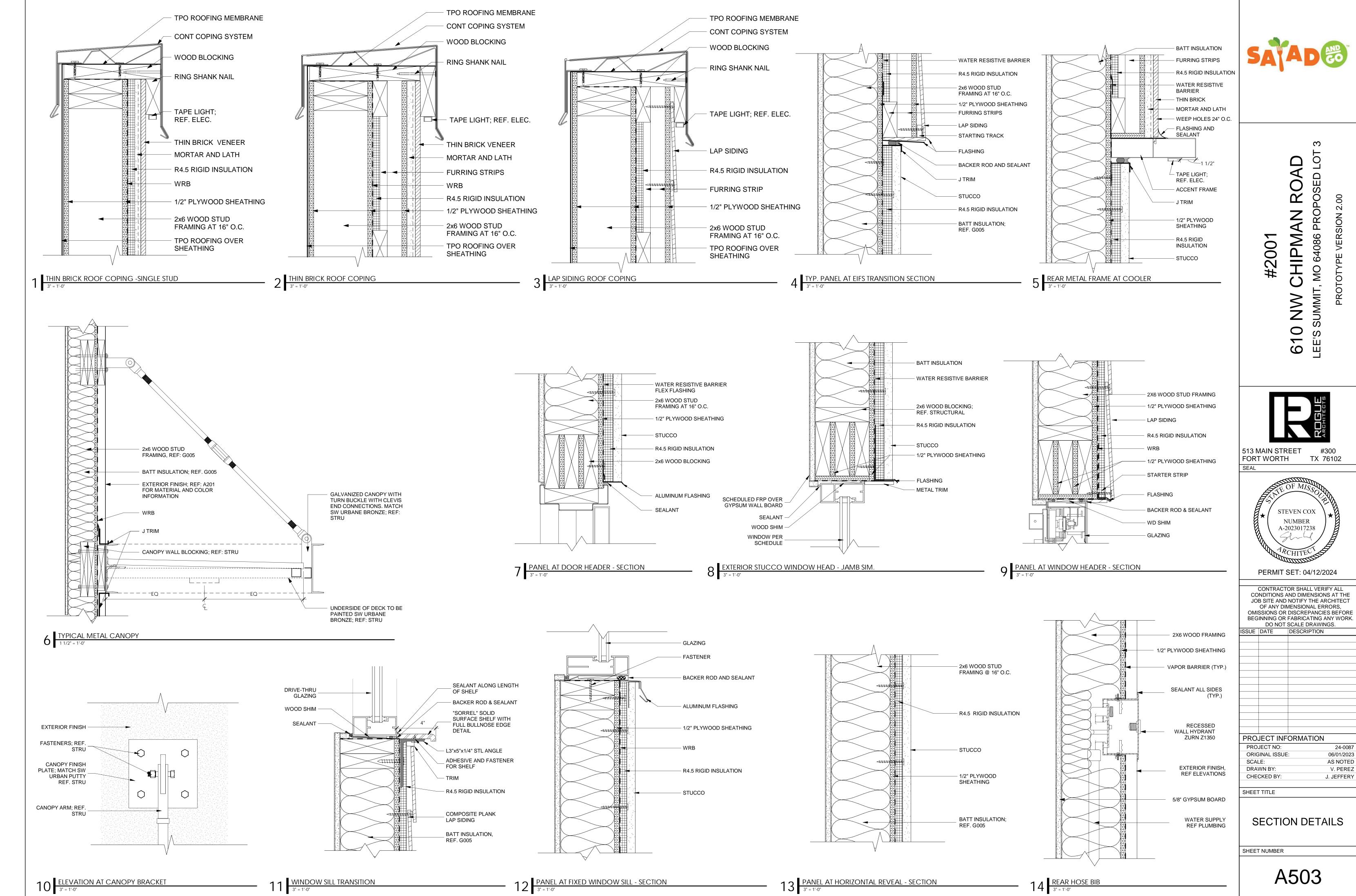
SHEET TITLE

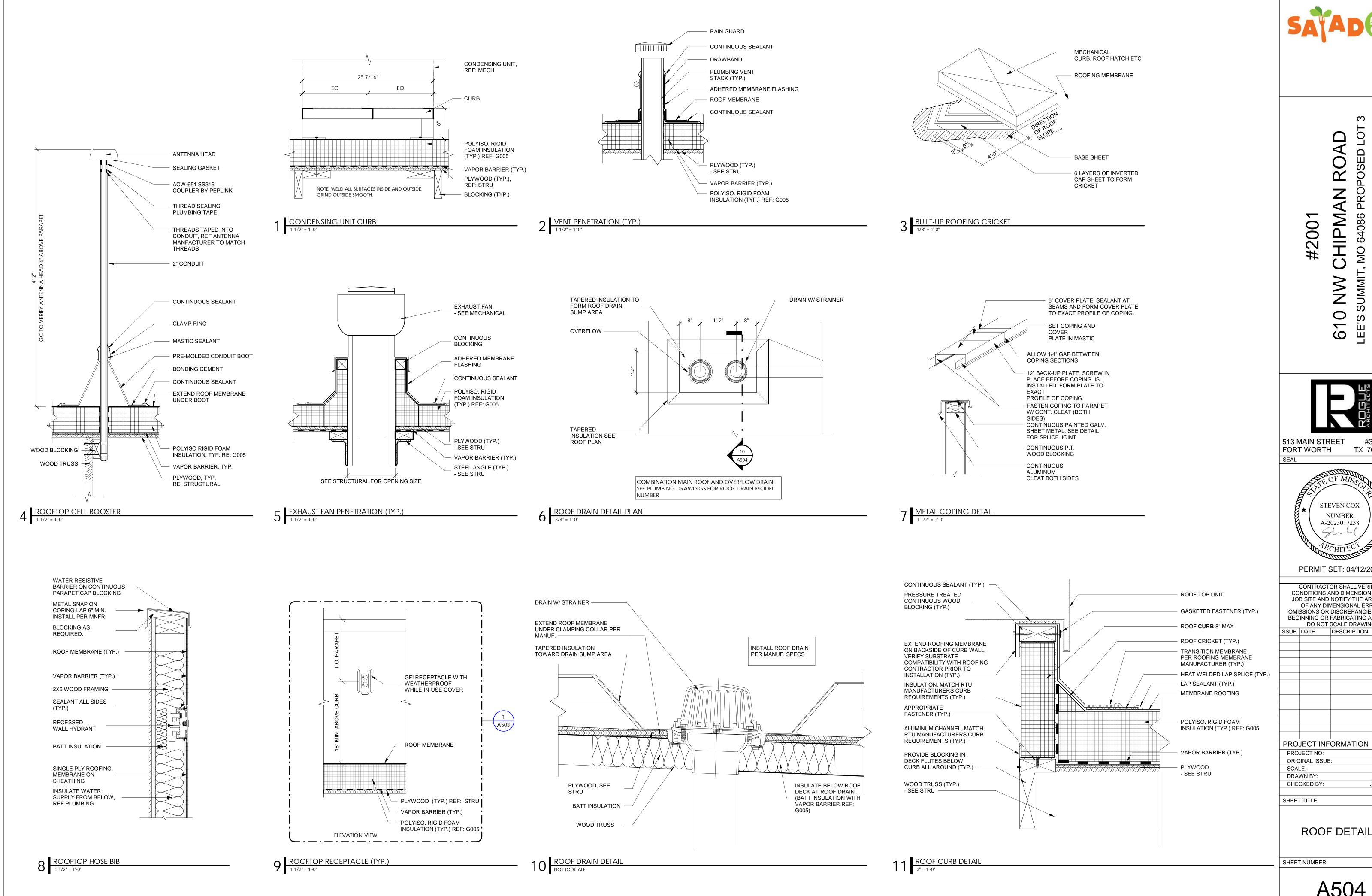
CHECKED BY:

PLAN DETAILS

SHEET NUMBER

A502





TX 76102

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

06/01/2023 AS NOTED

24-0087

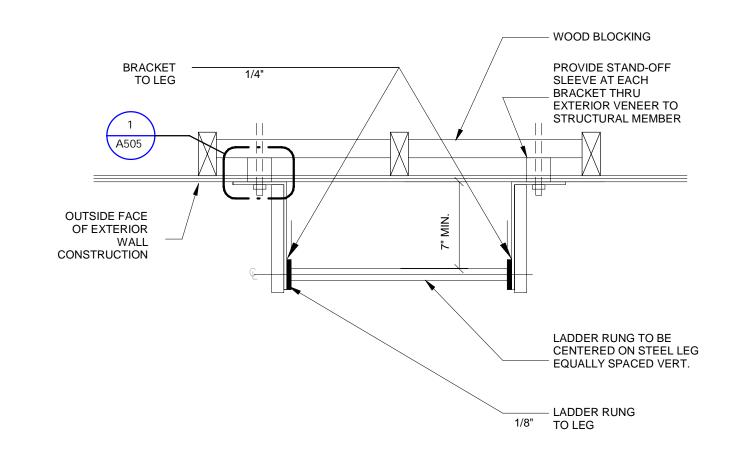
J. JEFFERY

ROOF DETAILS

A504

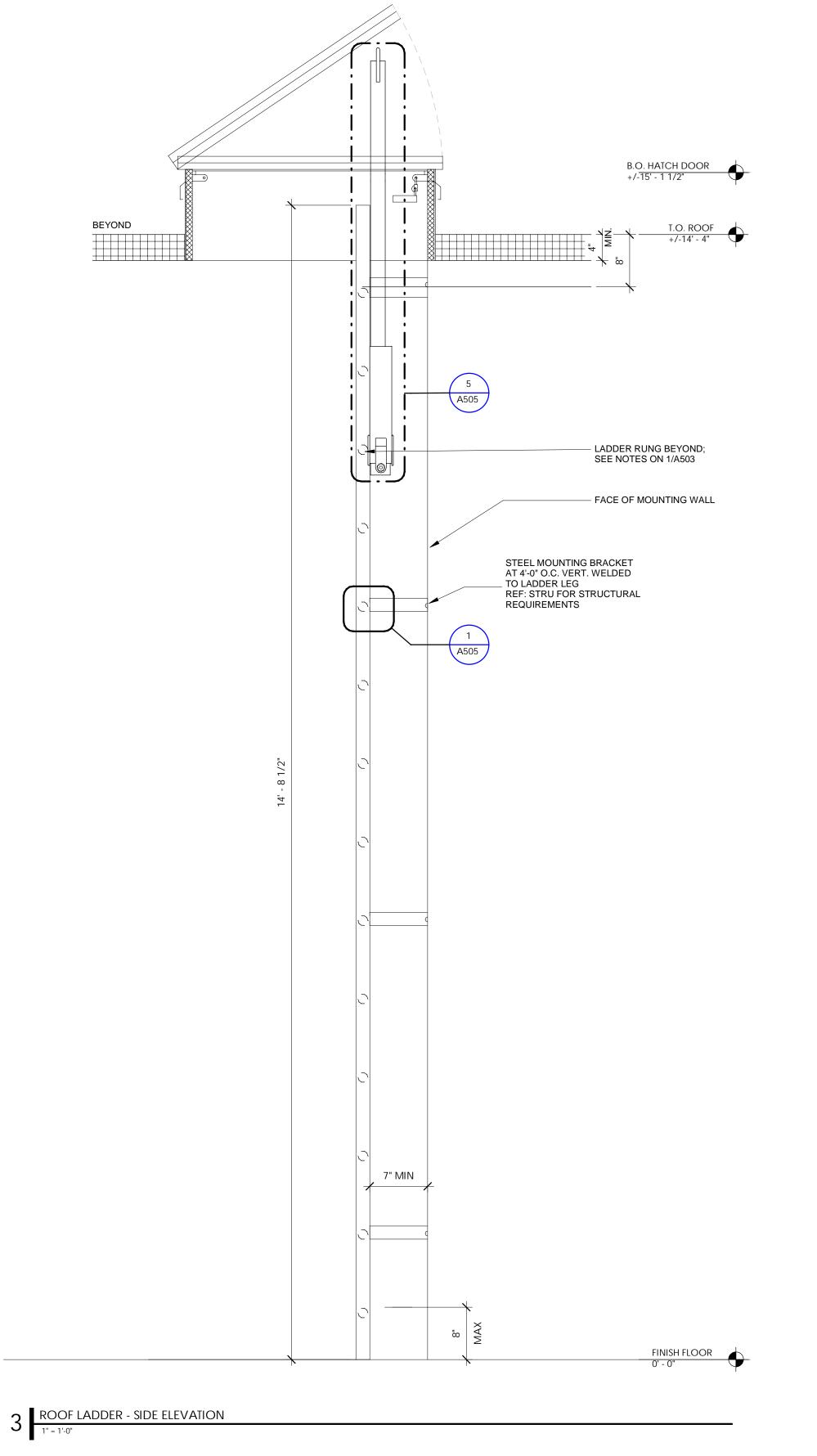
CONT. LADDER LEG (TYP.) 2 1/8° 9/16' DIA HOLE BRACKET TO LEG BRACKET TO LE

1 ■ ROOF LADDER - "L" BRACKET DETAIL



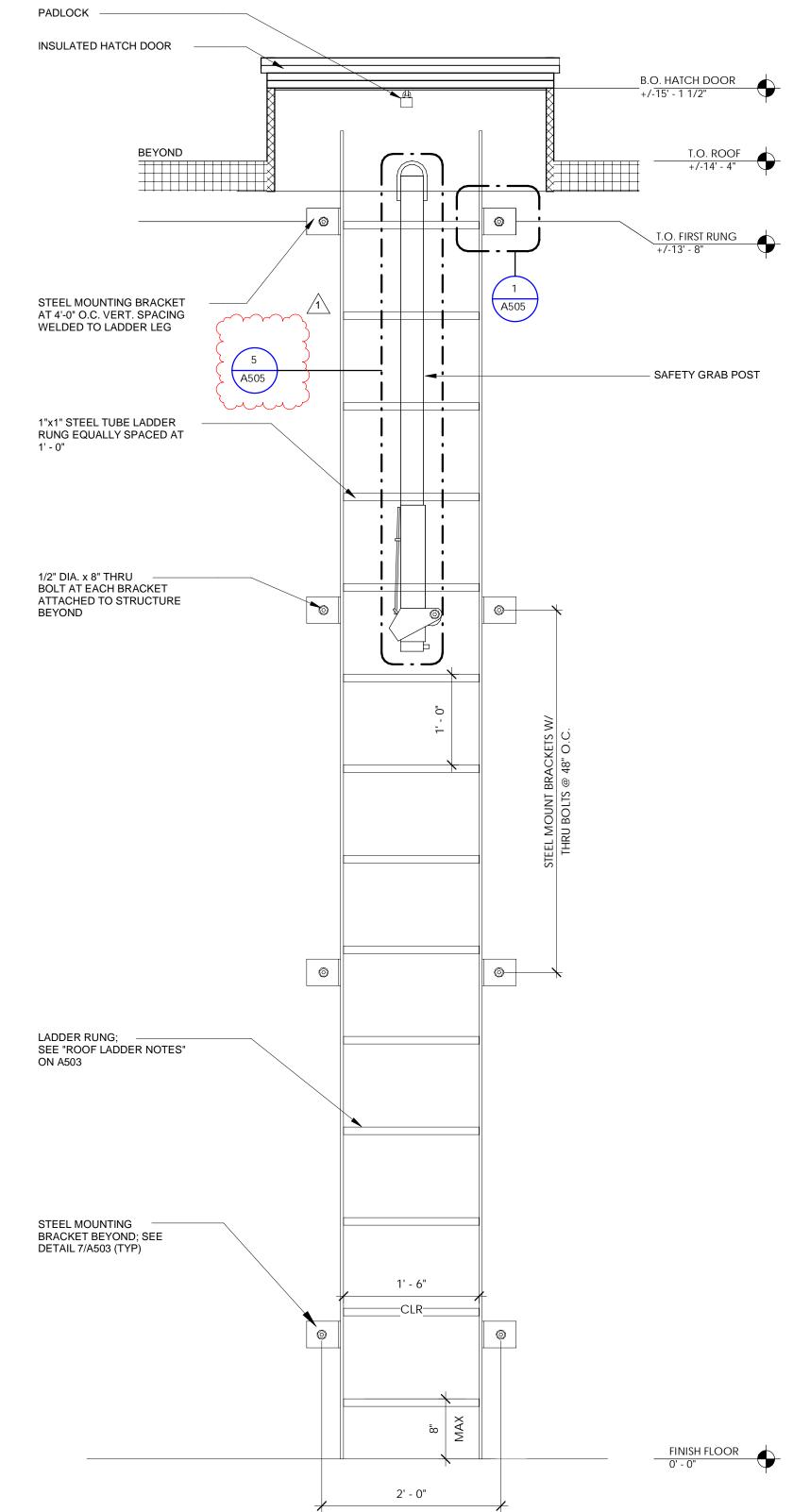
2 ROOF LADDER - SECTION STEEL LADDER SAFETY POST MODEL NUMBER: T9F713158 5 ROOF LADDER - PULL BAR 11/2-1-07

munimunimunimunimunimi



GENERAL NOTES

- LADDER CONSTRUCTION IS TO MEET ALL REQUIREMENTS ACCORDING TO SECTION 1923.1053 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION GUIDELINES
- 2. THE LADDER RUNGS SHALL BE CORRUGATED, KNURLED, DIMPLED, COATED WITH SKID-RESISTAND MATERIAL, OR OTHERWISE TREATED TO MINIMIZE SUPPLIED.
- 3. ALL WELDS ARE TO BE 3/16" FILLET WELDS U.N.O.
- 4. ALL STEEL TO BE GALVANIZED
- GC TO VERIFY EXISTING CONDITIONS & NOTIFY ARCHITECT IF THERE ARE ANY CONFLICTS WITH THE DRAWINGS
- 6. GC TO PROVIDE "SELF RETRACTING LIFELINE" FOR ALL LADDER HEIGHTS THAT EXCEED 24FT.

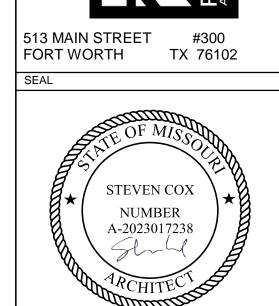


ROOF LADDER - FRONT ELEVATION



CHIPMAN ROAD , MO 64086 PROPOSED LOT 3

610 NW CHIPN LEE'S SUMMIT, MO 6408



REVISION 1: 06/06/2024

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DO NOT SCALE DRAWINGS.

ISSUE		DESCRIPTION
1	06/06/2024	CITY COMMENTS

ROJ	ROJECT INFORMATION					
ROJ	ECT NO:	24-0087				
RIG	INAL ISSUE:		06/01/2023			
CAL	E:		AS NOTED			

DRAWN BY: P. C
CHECKED BY: J. JEFFERY

SHEET TITLE

ROOF LADDER DETAILS

SHEET NUMBER

REAR ELEVATION INSIDE UTILITY ROOM 1/2" = 1'-0"

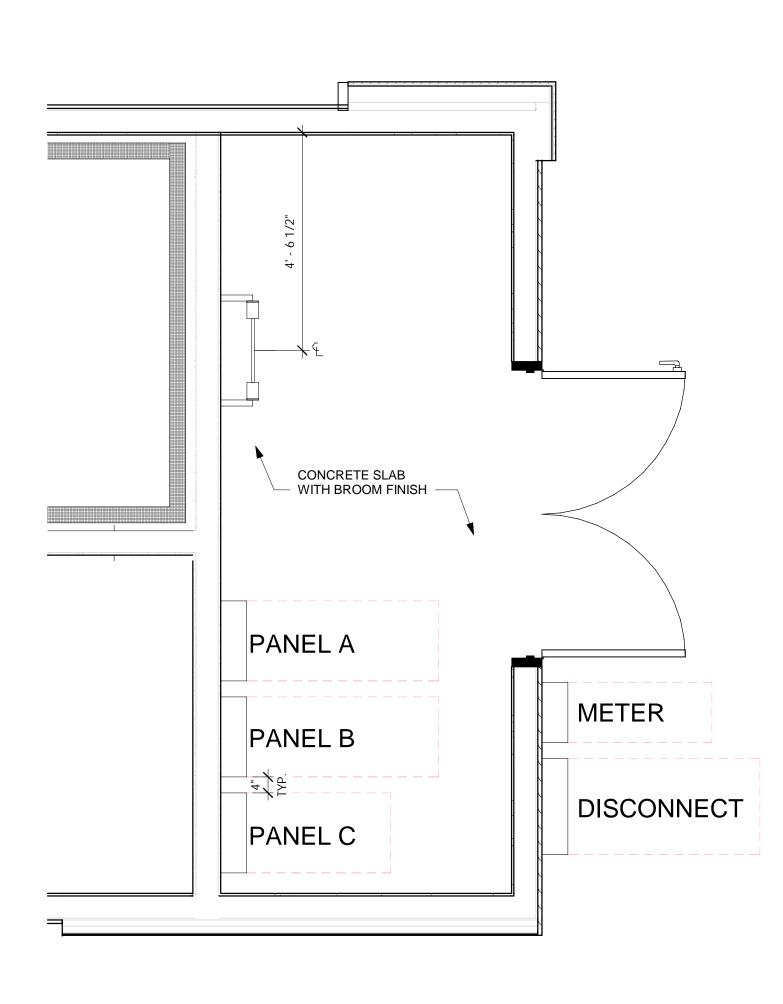
GENERAL NOTES

- A. CONSIDERATION WILL NOT BE GRANTED FOR ANY ALLEGED MISUNDERSTANDINGS OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF PROPOSAL SHALL CONVEY FULL AGREEMENT TO THE ITEMS AND 2. THIN BRICK. CONDITIONS INDICATED ON THE DRAWINGS. SHOULD THE CONTRACTOR FIND DISCREPANCIES OR OMISSIONS IN THE CONTRACT DOCUMENT OR BE IN DOUBT AS TO THE INTENT THEREOF, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE PRIOR TO SUBMITTING A PROPOSAL FOR WORK.
- B. WATERPROOFING MEMBRANE TO BE TWO LAYERS TYVEK COMMERCIAL WRAP WITH TAPED SEAMS, INSTALLED PER MANUFACTURER SPECIFICATIONS. SPECIAL INSPECTION NEEDED FOR WRB.
- C. FLASHING TO BE 24 GA GALVANIZED STEEL, UNO.
- D. REFER TO A201 EXTERIOR ELEVATIONS FOR MATERIAL INFORMATION.

- 1. METAL PARAPET CAP, PAINTED. WITH TAPE LIGHT UNDER COPING. REF: ELEC.
- NOT USED.
 - 4. BUILDING SIGNAGE SHOWN FOR PLACEMENT AND SCALE ONLY. SIGNAGE UNDER SEPARATE PERMIT. GC TO PROVIDE BLOCKING AS REQUIRED.

ELEVATION KEYNOTES

- 5. POP-OUT.
- 6. ROOF LINE, BEHIND.
- 7. PAINTED AWNING.
- 8. STEEL FRAME WITH TAPE LIGHTS, REF: ELEC
- ROOF DRAIN.
- 10. RTU, REF: ELEC.
- 11. LADDER
- 12. ROOF HATCH
- 13. WOOD TRUSS
- 14. CONDENSING UNIT
- 15. UTILITY ROOM LIGHTING; REF: ELEC.
- 16. ELECTRICAL PANELS; REF: ELEC.



2 UTILITY ROOM PLAN

1/2" = 1'-0"



#200

0

513 MAIN STREET FORT WORTH

TX 76102 A-2023017238

PERMIT SET: 04/12/2024

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 06/01/2023 AS NOTED ORIGINAL ISSUE: SCALE: DRAWN BY:

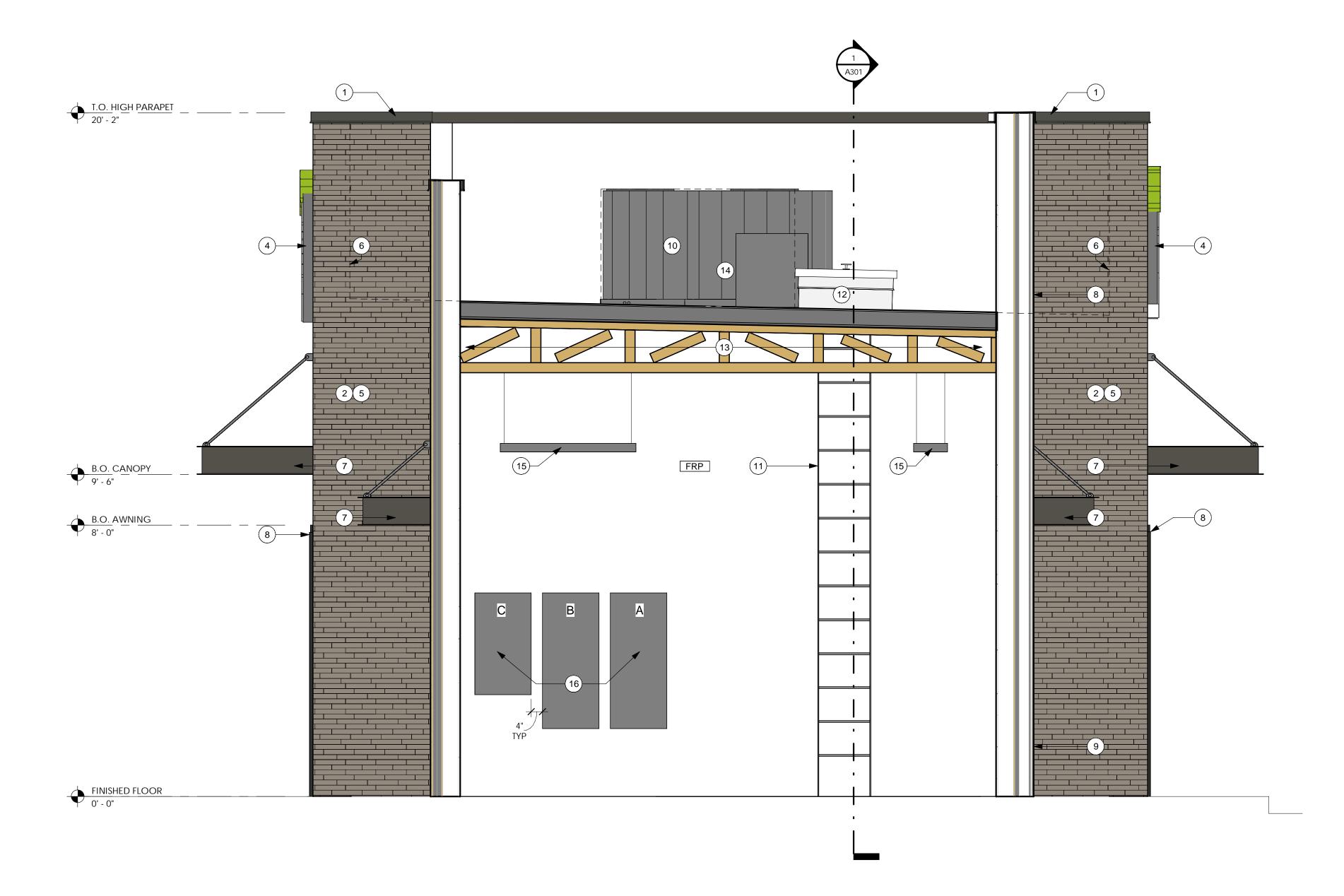
J. JEFFERY

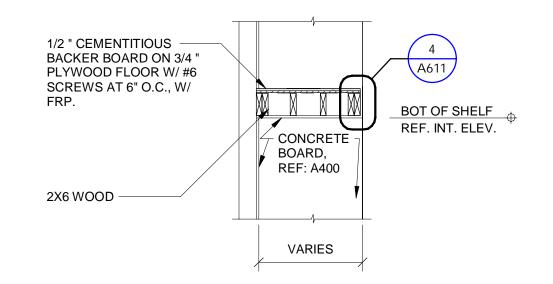
SHEET TITLE

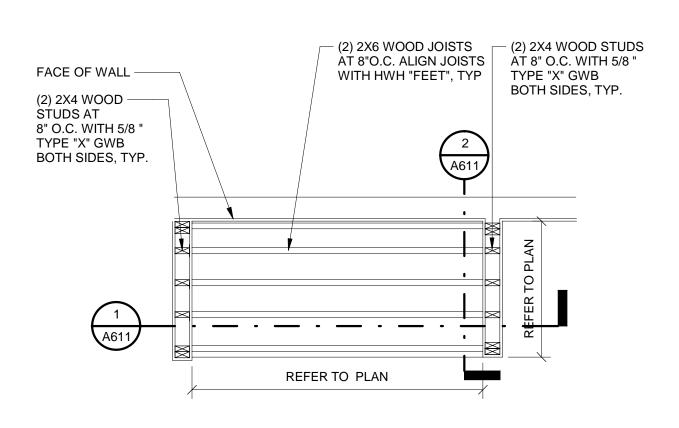
CHECKED BY:

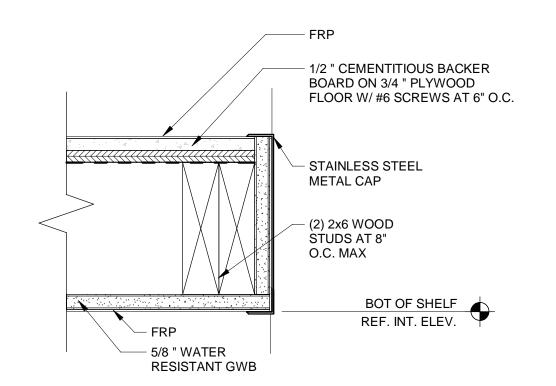
ELECTRIC PANEL **DETAILS**

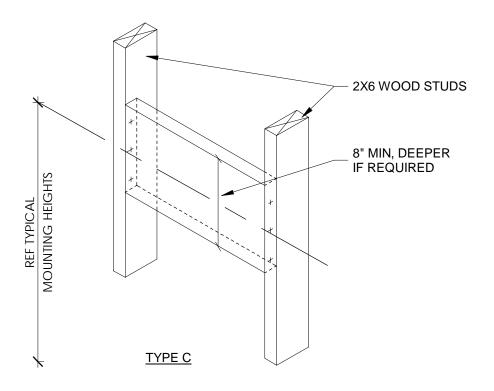
SHEET NUMBER

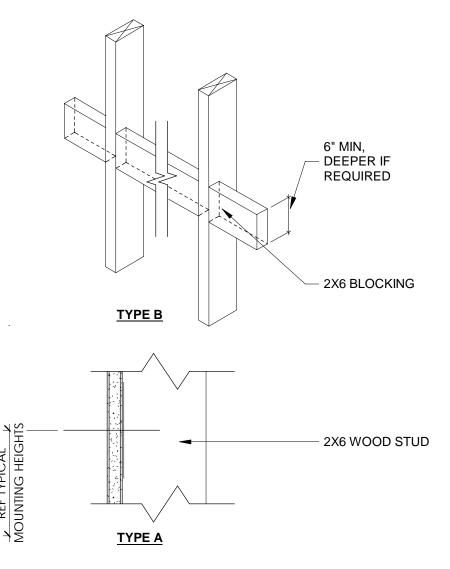












BLOCKING DETAILS FOR ACCESSORIES & EQUIPMENT

WALL FINISH,

REF: A111

GROUT

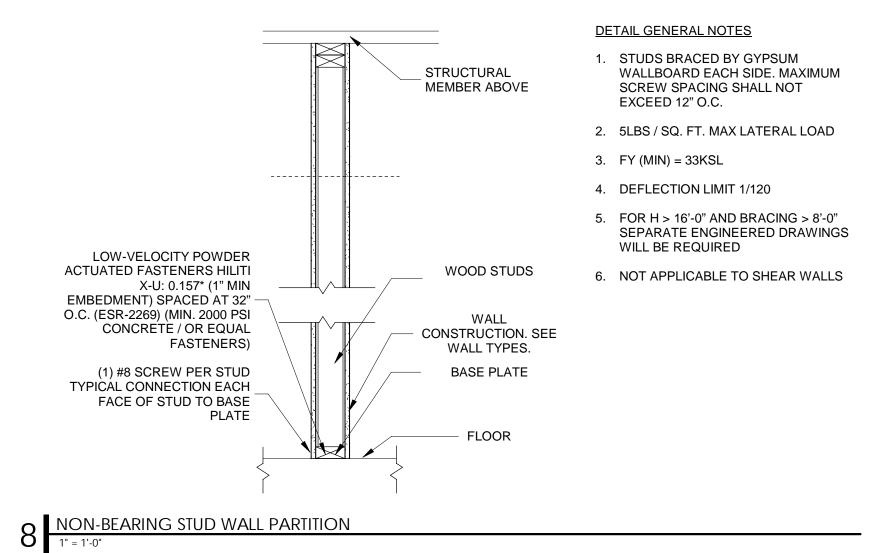
10 FLOOR TILE INSTALLATION DETAIL

3" = 1'-0"

4 4 4

COVE BASE

6X6 FLOOR TILE



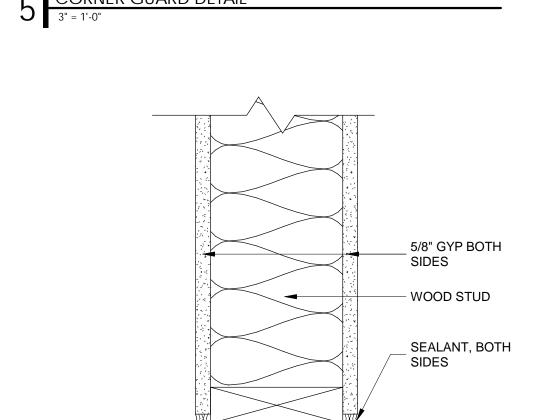
SCHEDULE SCHEDULED BASE; SEE FINISH SCHEDULE AT KITCHEN AREAS

SEE SCHEDULE

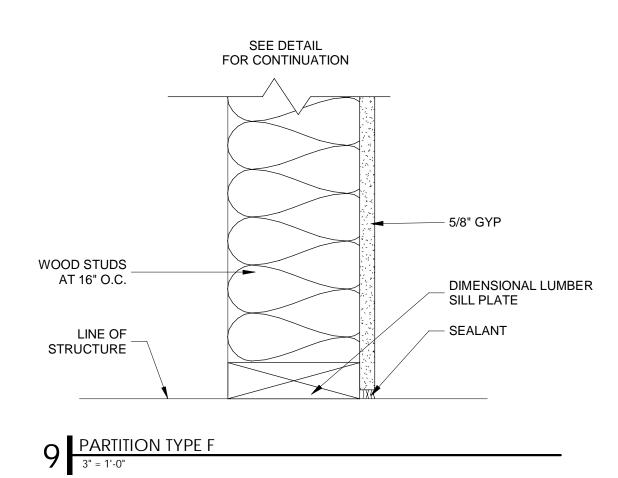
SCHEDULED

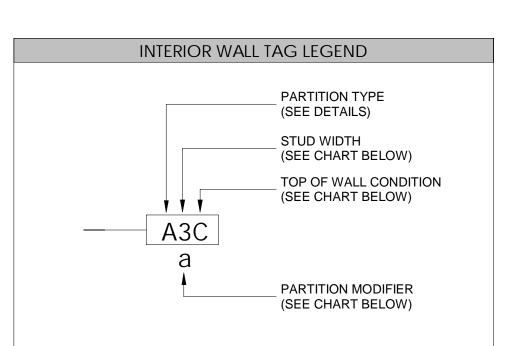
TRIM; SEE

SEE SCHEDULE









	STUD WIDTH	
#	WOOD STUD WIDTH	WOOD STUD WIDTH
1 —	1 5/8"	
2 ——	2 1/2"	
3	3 5/8" ——	3 1/2"
6	6"	5 1/2"
8 ——	8"	7 1/4"
10	10"	
12	12"	

TOP OF WALL CONDITION

ALL WALL ASSEMBLIES EXTEND TO DECK UNLESS NOTED OTHERWISE

- **B** PARTITION EXTENDS TO BOTTOM OF CEILING
- C PARTITION EXTENDS TO A MINIMUM OF 6" ABOVE CEILING
- P PARTIAL HEIGHT WALL

PARTITION MODIFIER

- PROVIDE SOUND ATTENUATION BATTS TO FILL STUD CAVITY TO TOP OF ADJACENT CEILING
- PROVIDE 5/8" CEMENT BOARD ON WET SIDE AND 5/8" GWB ON OTHER SIDE.
- PROVIDE R-19 THERMAL BATTS TO FILL STUD CAVITY

PARTITION GENERAL NOTES

- 1. PARTITIONS ARE DISTINGUISHED ON FLOOR PLANS BY SYMBOL DESIGNATION, GRAPHIC DESIGNATION OR A COMBINATION OF BOTH DESIGNATIONS. SOME PARTITION TYPES SHOWN ON THIS SHEET MAY NOT BE USED ON THIS PROJECT.
- 2. ALL WALLS NOT DESIGNATED WITH A GRAPHIC OR TAG TO BE TYPE 'A'. IF UNCLEAR CONTACT ARCHITECT.
- 3. SOUND TRANSMISSION CLASS (STC) IS A RATING SYSTEM THAT DESCRIBES THE ABILITY OF AN ASSEMBLY TO REDUCE THE TRANSMISSION OF SOUND. STC RATINGS LISTED ARE BASED ON LABORATORY TESTING AND ARE NOT INDICATIVE OF RESULTS IN FIELD.
- 4. SEE SPECIFICATIONS FOR SOUND ATTENUATION BATTS (SAB) REQUIREMENTS. WHERE SAB ARE INDICATED, THEY SHALL EXTEND CONTINUOUSLY FROM FLOOR TO STRUCTURE ABOVE.
- 5. PARTITIONS ARE INDICATED WITH CONVENTIONAL GYPSUM WALLBOARD U.N.O.; UPGRADE TO PREMIUM TYPES OF WALLBOARD (I.E., MOISTURE-RESISTANT, TILE-BACKER BOARD, ACOUSTICALLY ENHANCED, ETC.) BASED ON THEIR LOCATION AND ACCORDING TO REQUIREMENTS LISTED IN THE SPECIFICATIONS.
- 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. ALL PARTITIONS EXTEND TO DECK UNLESS NOTED OTHERWISE.



AN RO HIPM/ #2001

VERSION

513 MAIN STREET

610

FORT WORTH TX 76102 A-2023017238

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY: CHECKED BY: J. JEFFERY

SHEET TITLE

INTERIOR PARTITION TYPES AND DETAILS

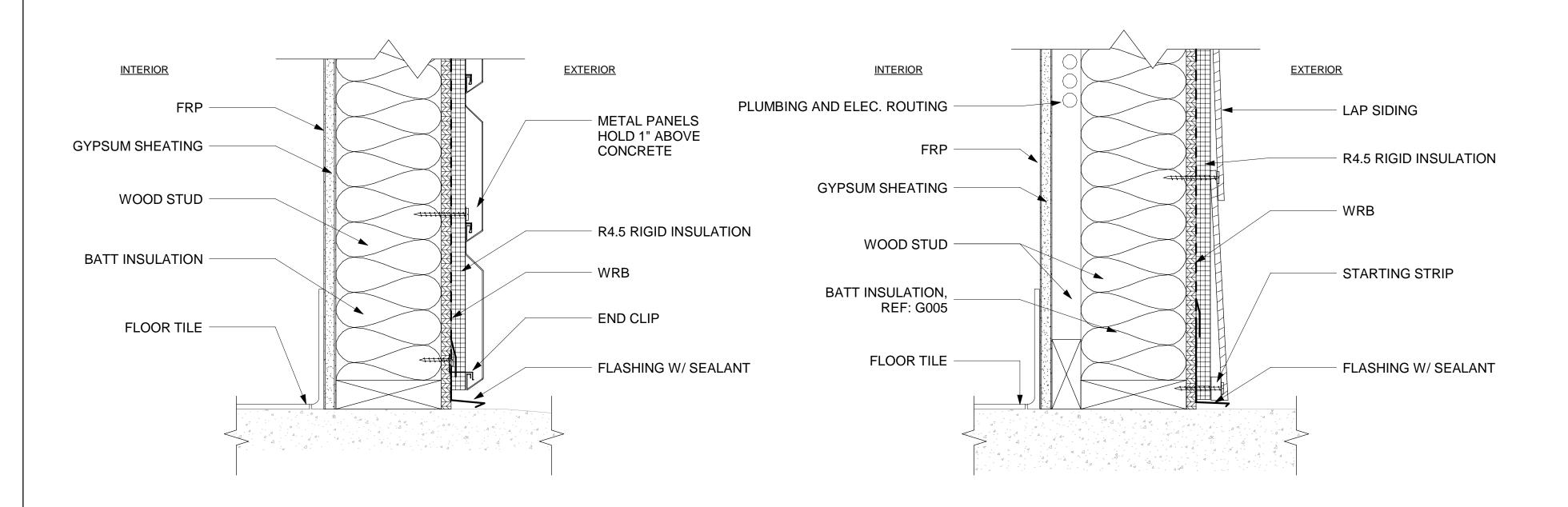
SHEET NUMBER



CHIPMAN ROAD

610 NW

#2001



FRP

THIN BRICK

GYPSUM SHEATING

WOOD STUD

BATT INSULATION

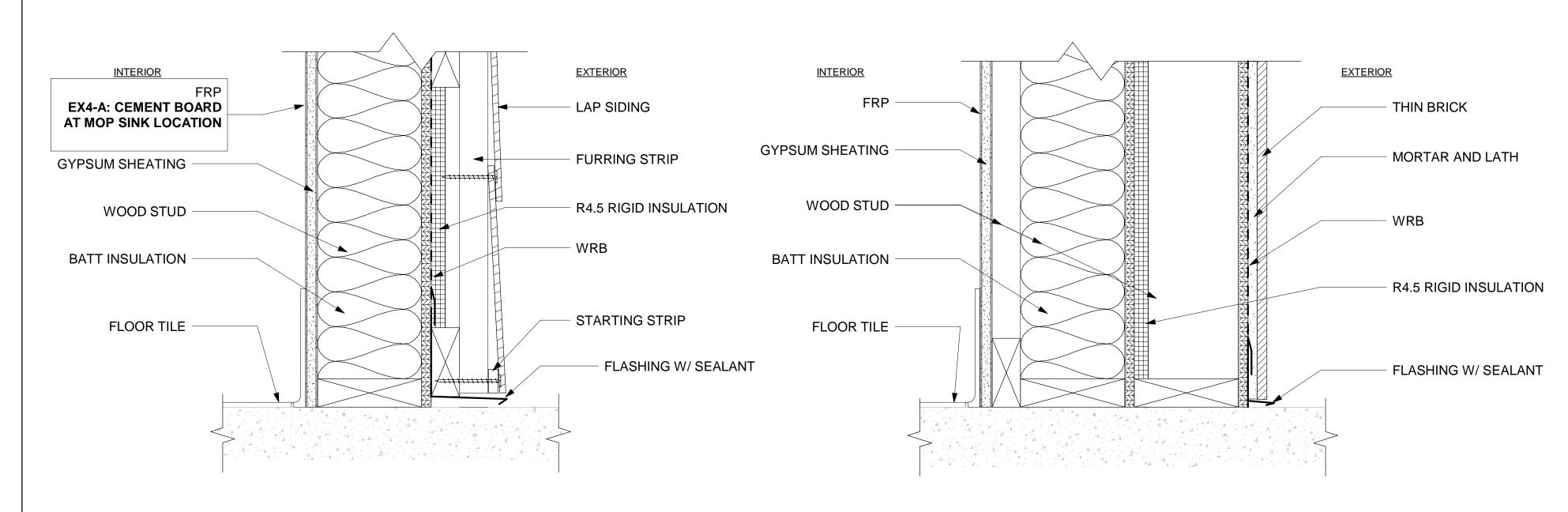
FLOOR TILE

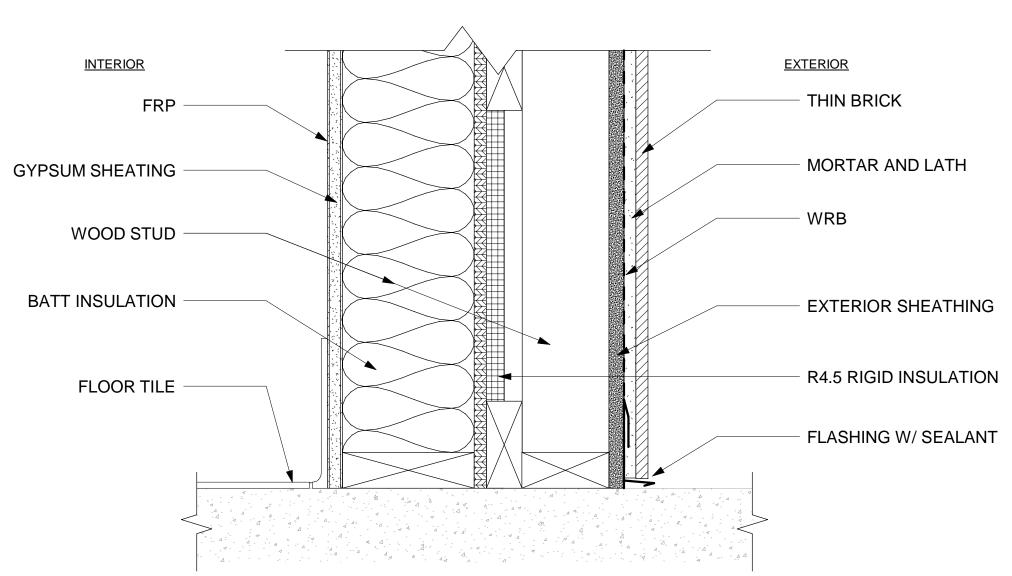
FLASHING W/ SEALANT

1 EXTERIOR FINISH 1 - METAL PANELS ON SHEATHING - EX1

2 EXTERIOR FINISH 2 - ARCH. PANEL ON SHEATHING - EX2

3 EXTERIOR FINISH 3 - BRICK ON SHEATHING - EX3





EXTERIOR FINISH 4 - ARCH.PANEL BUMP OUT - EX4

5 EXTERIOR FINISH 5 - BRICK ON DOUBLE STUD - EX5

6 EXTERIOR FINISH 6 - BRICK ON DOUBLE STUD AT REAR - EX6

513 MAIN STREET #300 FORT WORTH TX 76102

513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STEVEN COX
NUMBER
A-2023017238

PERMIT SET: 04/12/2024

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ISSUE DATE DESCRIPTION

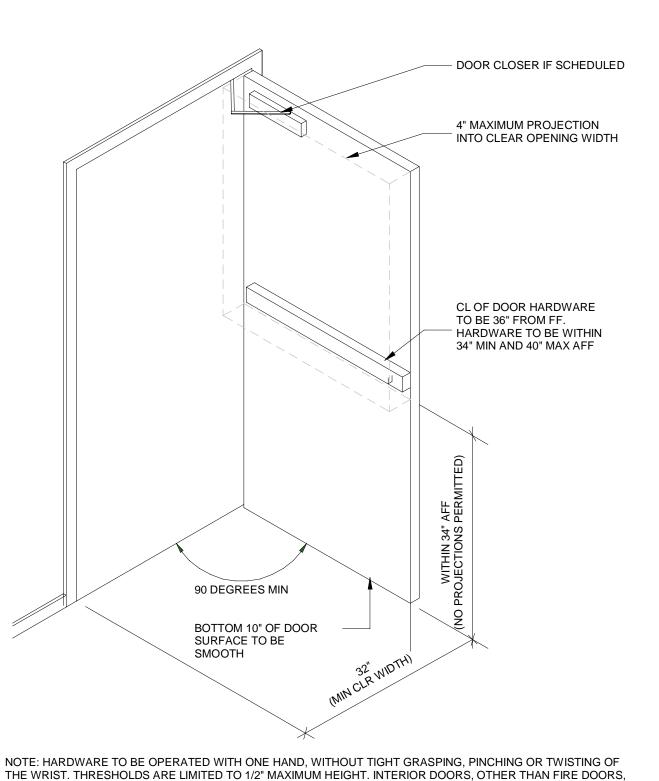
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	PRO	JECT INF	ORMATION	
	PRO.	JECT NO:		24-008
	ORIG	SINAL ISSUE	:	09/20/2
	SCAL	_E:		AS NOTE

PROJECT NO: 24-0087
ORIGINAL ISSUE: 09/20/23
SCALE: AS NOTED
DRAWN BY: Author
CHECKED BY: Checker

SHEET TITLE

EXTERIOR PARTITION TYPES

SHEET NUMBER



SHOULD BE ABLE TO BE OPERATED WITH 5 POUNDS OF FORCE. EXTERIOR DOOR AND FIRE DOORS ARE REGULATED BY THE AUTHORITY HAVING JURISDICTION. REFER TO ICC A117.1 FOR APPROACH REQUIREMENTS. DOOR GENERAL NOTES:

THE DOOR TO AN OPEN POSITION OF 12 DEGREES WILL BE 5 SECONDS MINIMUM.

- A. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS OF ALL OPENINGS PRIOR TO THE FABRICATION OF ALL DOORS AND
- 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
- 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 COMPLIANT.
- H. CAULK HEAD, JAMBS, AND SILLS OF ALL DOORS AND WINDOWS WITH SEALANT CONTINUOUSLY APPLIED TO BOTH SIDES
- I. ALL DOOR CLOSURES TO BE SET IN ACCORDANCE WITH THE ADA REDUCED OPENING FORCE REQUIREMENTS.
- J. DOOR HARDWARE SUBSTITUTIONS SHALL BE PERMITTED. (MANUFACTURER ONLY) WITH OWNER'S WRITTEN APPROVAL.
- K. KEYING FOR ALL SCHEDULED LOCKSETS SHALL BE PROVIDED BY OWNER.
- L. PROVIDE SOLID BACK FRAMES FOR ALL STOREFRONT SYSTEMS.
- M. FRAME DIMENSIONS SHOWN ARE NOMINAL. ACTUAL DIMENSIONS MAY VARY DEPENDING ON WINDOW MANUFACTURER AND SYSTEM.
- N. ALL THRESHOLDS SHALL BE ACCESSIBLE.
- O. ALL DOORS ON THE ACCESSIBLE ROUTE OR CIRCULATION PATH SHALL HAVE A MAX. OPENING FORCE OF 5 LBS.
- P. REFER TO AS002 FOR TRASH ENCLOSURE DOOR SPECIFICATION.

	DOOR SCHEDULE										
DOOR						DOOR				FRAME	
NO.	ROOM NAME	WIDTH	HEIGHT	TYPE	THICKNESS	MATERIAL	FINISH	HARDWARE	FRAME MATERIAL	FINISH	COMMENTS
				_							
100	SERVICE	3' - 6"	7' - 0"	F1	0' - 1 3/4"	HOLLOW METAL	P-2	01	HOLLOW METAL - COLD ROLLED STEEL	PAINT	PROVIDE AVANTEK LD-DB-21-A, VIEWER 60" AFF MOUNTING HEIGHT, SEE DOOR NOTES
101	COOLER	3' - 0"	7' - 0"	N/A	0' - 2"	STAINLESS STEEL	BY MFG.	-	STAINLESS STEEL	-	COOLER DOOR PER MANUFACTURER
103	RESTROOM	3' - 0"	7' - 0"	F3	0' - 1 3/4"	SOLID WOOD CORE	PL-1	02	HOLLOW METAL - COLD ROLLED STEEL	PAINT	ADA SIGNAGE REQUIRED
104	UTILITY	6' - 0""	7' - 0"	F2	0' - 1 3/4"	HOLLOW METAL	P-2	03	HOLLOW METAL - COLD ROLLED STEEL	PAINT	

DOOR HARDWARE

NO PANIC ON THIS DOOR

FINISH MANF

628 IVE

626 SCH

SCH

IVE

LCN

IVE

ZER

ZER

ZER

ZER

IVE

626

630

689

630

AA

AA

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626

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FINISH MANF

630 IVE

626 SCH

626 IVE

BK ZER

FINISH MANF 630 IVE

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LCN

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ZER

ZER

ZER

ZER

689

630

626

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AA

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626

HARDWARE GROUP - 01 SERVICE

3 EA CONTINUOUS HINGE - IVES 112HD

1 EA ENTRANCE LOCK - ND53PD RHO

1 EA PERM CORE - 23-030 "C" KEYWAY

1 EA SURFACE CLOSER - LCN 4040XP

1 EA KICK PLATE - 8400 12" X 2" LDW B-CS

HARDWARE GROUP - 02 RESTROOM

3 EA HW HINGES - 5BB1 4.5 X 4.5 NRP

1 EA SURFACE CLOSER - 1461 REG

1 EA WALL STOP - WS401/402CCV

HARDWARE GROUP - 03 UTILITY

1 EA ENTRANCE LOCK - ND53PD RHO

1 EA PERM CORE - 23-030 "C" KEYWAY

1 EA SURFACE CLOSER - 1461 SHCUSH TBWNS

1 EA KICK PLATE - 8400 12" X 2" LDW B-CS

6 EA HINGE - 5BB1HW 5 X 4.5 NRP

1 EA LOCK GUARD - LG12

1 EA RAIN DRIP - 142AA

1 EA DOOR SWEEP - 39A

1 EA VIEWER - 698

1 EA WEATHERSTRIP - 8303AA

1 EA THRESHOLD - 8655A 223

1 EA KICK DOWN DOOR STOP

1 EA PRIVACY - ND40S RHO

1 EA 8400 10" X 2" LDW B-CS

1 EA DOOR SEAL - 188S

1 EA LOCK GUARD - LG12

1 EA RAIN DRIP - 142AA

1 EA DOOR SWEEP - 39A

1 EA WEATHERSTRIP - 8303AA

1 EA THRESHOLD - 8655A 223

1 EA KICK DOWN DOOR STOP

ICC/ANSI FIG 303.2 CHANGES IN LEVEL

ICC/ANSI FIG 303.3 BEVELED CHANGES IN LEVEL



HIPMAN 200 0

513 MAIN STREET #300 FORT WORTH TX 76102

STEVEN COX A-2023017238 REVISION 1: 06/06/2024

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06/06/2024 CITY COMMENTS

ISSUE DATE DESCRIPTION

PROJECT INFORMATION

PROJECT NO: 24-0087 ORIGINAL ISSUE: 06/01/2023 AS NOTED SCALE: DRAWN BY: CHECKED BY: J. JEFFERY

SHEET TITLE

DOOR SCHEDULE

SHEET NUMBER

A631

A. FLOOR STOPS AT EXTERIOR DOORS a. CENTER STOP ON THE DOOR LEAF WHEN OPENED

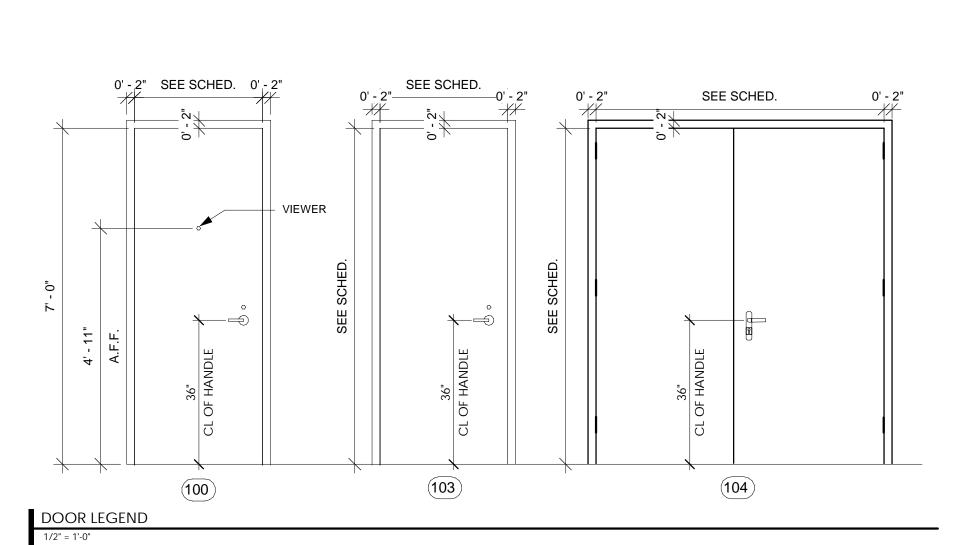
b. ALLOW FOR 90 DEGREE OPEN WHEN ADJACENT TO AN OBSTRUCTION

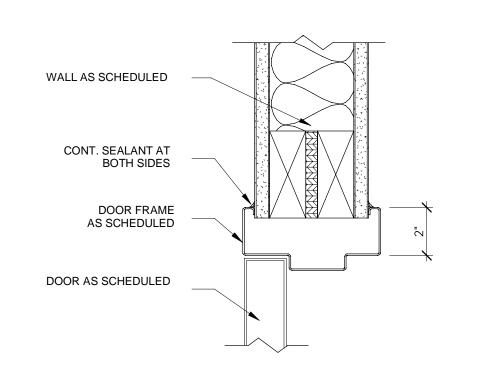
DOOR STOP NOTES:

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

	DOOR FINISH LEGEND	
PL-1	PLASTIC LAMINATE - MATCH SHERWIN WILLIAMS SW7004 "SNOWBOUND"	
P-2	PAINTED SHERWIN WILLIAMS - SW7048 "URBANE BRONZE"	

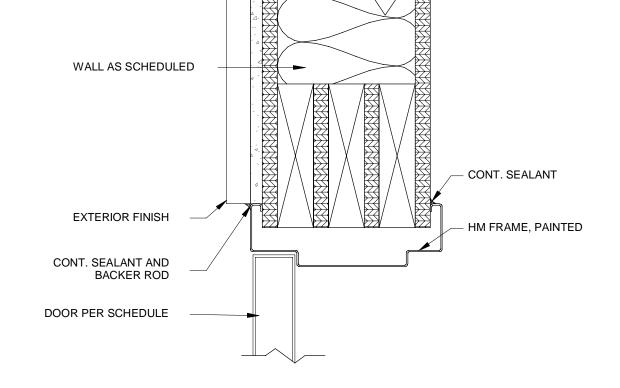
	DOOR TYPE LEGEND
F1	HOLLOW METAL SINGLE 18 GAUGE
F2	HOLLOW METAL DOUBLE 18 GAUGE
F3	SOLID WOOD CORE WITH LAMINATE FINISH

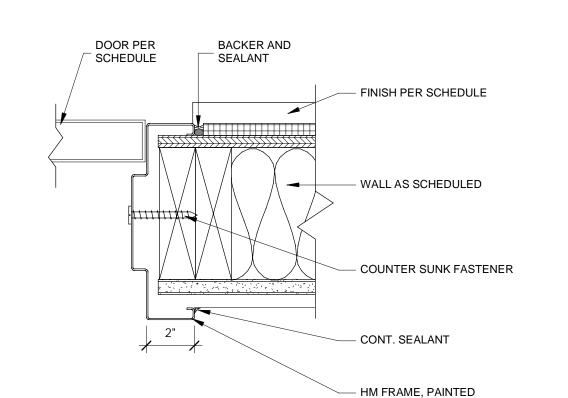


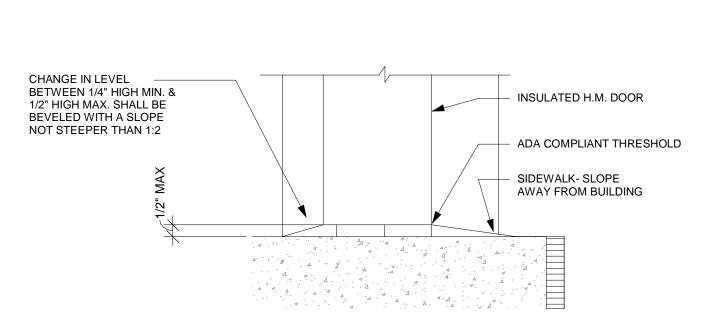


2 INTR. HOLLOW METAL HEAD @ GYP. BD.

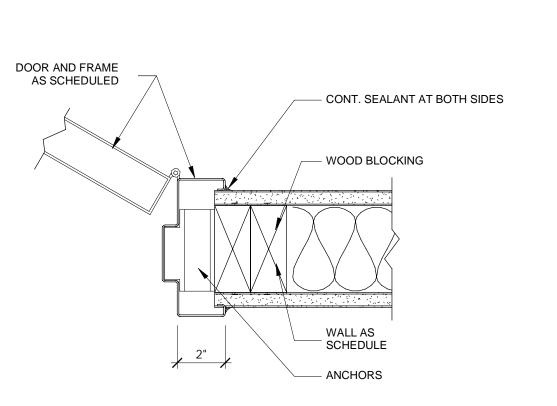
TYPICAL ACCESSIBLE DOOR DETAIL







7 GROUND AND FLOOR
6" = 1'-0"



HIPMAN RO

#2001 610 LEE'S S

513 MAIN STREET FORT WORTH TX 76102

A-2023017238

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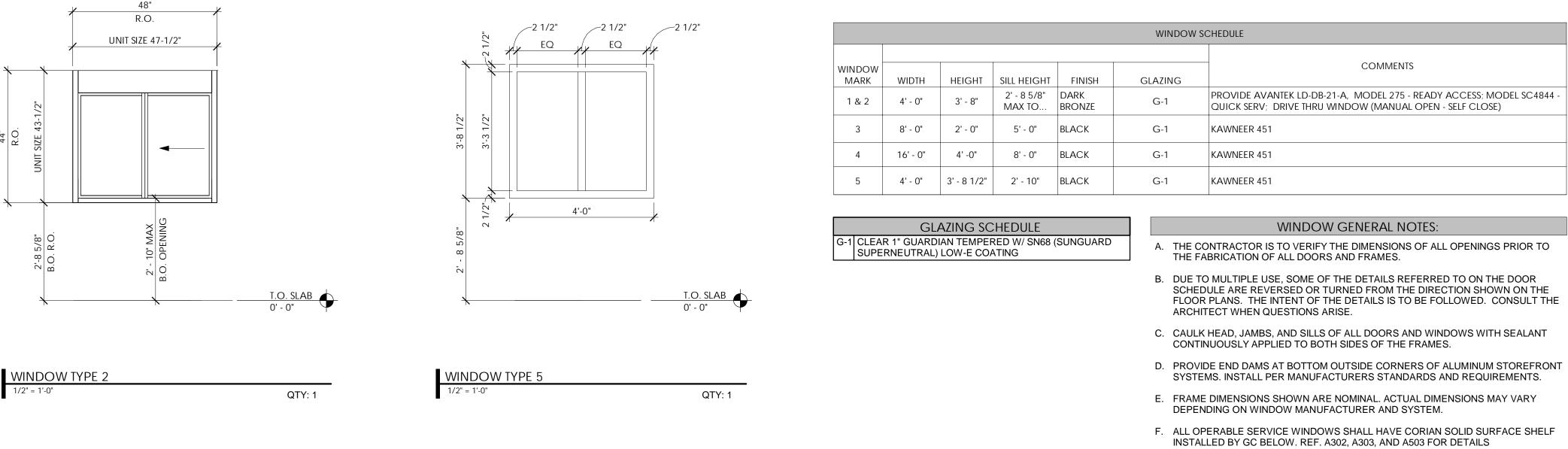
24-0087 09/28/23 AS NOTED ORIGINAL ISSUE: SCALE: DRAWN BY: CHECKED BY: J. JEFFERY

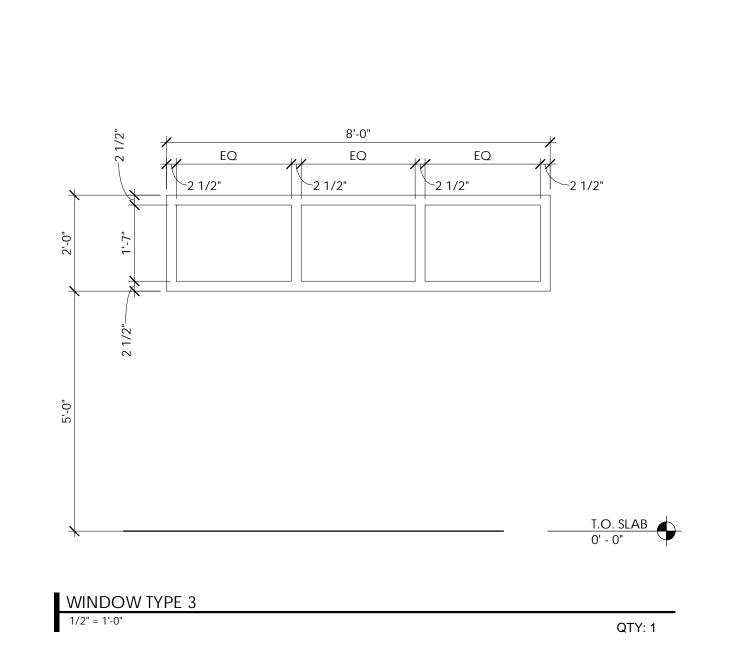
SHEET TITLE

WINDOW SCHEDULE

SHEET NUMBER

A641





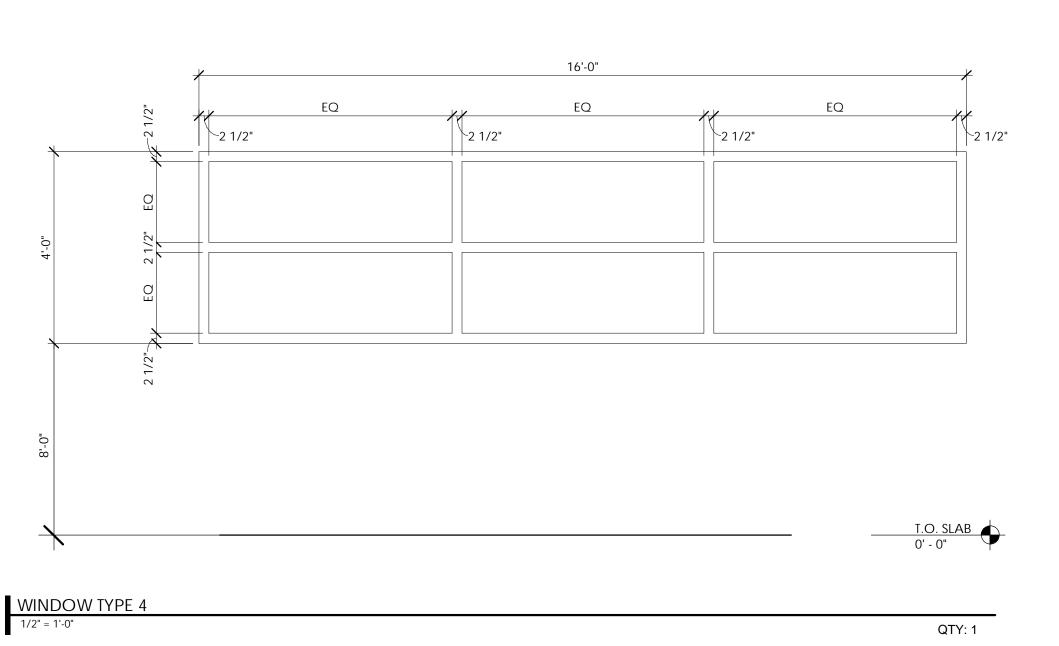
T.O. SLAB 0' - 0"

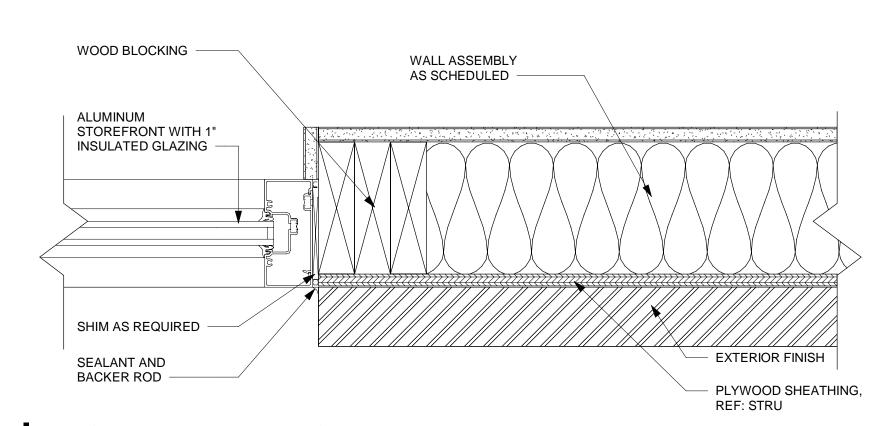
QTY: 1

R.O.

UNIT SIZE 47-1/2"

WINDOW TYPE 1 1/2" = 1'-0"





1 ENLARGED PLAN @ JAMB AT STEEL CHANNEL AND STOREFRONT

DIVISION 1 - GENERAL REQUIREMENTS

- MULTIPLE CONTRACTS 01 12 00
- 01 32 00 SUBMITTALS
- 01 33 00 01 43 00 TESTING AND SPECIAL INSPECTIONS CONSTRUCTION FACILITIES 01 50 00

CONTRACT CLOSE OUT

01 73 00 DEMOLITION 01 74 00 CONSTRUCTION WASTE

01 77 00

CAST IN PLACE CONCRETE (REFER TO STRUCTURAL SET)

<u>DIVISION 4 – MASONRY</u> 04 21 50 THIN BRICK VENEER

DIVISION 5 - METALS 05 58 00 METALS FABRICATION (REFER TO STRUCTURAL SET)

- DIVISION 6 WOOD, PLASTIC AND COMPOSITES
- FINISH CARPENTRY 06 20 00 ARCHITECTURAL WOODWORK 06 40 00

06 42 19 THERMALLY FUSED LAMINATE PANELS

- **DIVISION 7 THERMAL AND MOISTURE PROTECTION**
- FLUID APPLIED WATERPROOFING 07 21 00 THERMAL INSULATION
- 07 24 00 EXTERIOR INSULATION AND FINISH SYSTEM
- SOUND ATTENUATION BATTS 07 25 00 07 42 43 COMPOSITE PANELS
- CEMENT PANELS 07 46 46
- **TPO ROOFING** 07 54 23 07 65 00 FLASHING
- 07 72 00 ROOF ACCESSORIES 07 92 00 JOINT SEALANTS

METAL DOORS AND FRAMES 08 71 00 DOOR HARDWARE

GLASS GLAZING

DIVISION 9 – FINISHES

08 81 00

- DRYVIT SYSTEMS 09 29 00 GYPSUM BOARD
- 09 30 00
- ACOUSTICAL TILE CEILING 09 51 00 **PAINTING**
- PRE-FINISH PANEL (FRP) 09 73 00

DIVISION 10 – SPECIALTIES

METAL CANOPIES

TERMITE TREATMENT

GENERAL CONDITIONS

THE FOLLOWING SUPPLEMENTS MODIFY THE AIA DOCUMENT A201 - 2007 AIA GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION WHICH IS MADE A PART OF THESE CONTRACT DOCUMENTS. WHERE AN ARTICLE, SECTION OR SUBSECTION IN THE GENERAL CONDITIONS IS AMENDED, VOIDED OR SUPERSEDED BY THE FOLLOWING PARAGRAPHS, THE PROVISIONS OF SUCH ARTICLE, SECTION OR SUBSECTION NOT SO AMENDED, VOIDED OR SUPERSEDED SHALL REMAIN IN EFFECT.

CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT AND NECESSARY ASSISTANTS WHO SHALL ATTEND AT THE PROJECT SITE ON A FULL TIME BASIS DURING THE PERFORMANCE OF THE WORK. THE SUPERINTENDENT SHALL NOT DIVIDE THEIR DUTIES OR RESPONSIBILITIES AMONG OTHER PROJECTS THAT ARE NOT A SPECIFIC

CONTRACTOR SHALL PROVIDE FOR THE COORDINATION OF THE WORK OF OWNERS FORCES AND OF EACH SEPARATE CONTRACTOR WITH THE WORK OF CONTRACTOR.

DEFECTIVE WORK NOT REMEDIED, OR FAILURE TO BEGIN REMEDIAL ACTION WITHIN 5 DAYS FOLLOWING WRITTEN NOTIFICATION.

REFER TO SUBMITTAL SCHEDULE AND RESPONSIBILITY MATRIX ON SHEETS G001 AND G006.

SECTION 01 50 00 / SUMMARY

- THE WORK INCLUDES WORK INDICATED OR SPECIFIED WITHIN THE CONTRACT LIMIT LINES UNLESS THE WORK IS INDICATED AS NIC (NOT IN CONTRACT.) ALSO INCLUDED IS WORK NECESSARY TO PROVIDE WATER, GAS, SEWER, TELEPHONE, CABLE AND ELECTRICAL SERVICE TO THE SITE, INCLUDING REPLACEMENT OF PAVING TO MEET THE REQUIREMENTS OF GOVERNING MUNICIPAL AUTHORITIES.
- 1.2 PROVIDE COORDINATION FOR UTILITIES INCLUDING APPLICATIONS, NOTICES, MEETINGS, SCHEDULING, FINAL CONNECTIONS, AND OTHER TASKS NECESSARY TO PROVIDE UTILITIES TO THE PROJECT. A. INCLUDE COORDINATION BETWEEN UTILITIES AND TENANTS AS WELL AS OTHERS ON THE PROJECT
 - B. WORK SHALL BE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. C. SEND PROPER NOTICES, MAKE NECESSARY ARRANGEMENTS AND PERFORM SERVICES REQUIRED IN THE CARE AND MAINTENANCE OF PUBLIC UTILITIES DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER.
- LIMIT THE STORAGE OF MATERIALS AND EQUIPMENT TO AREAS INDICATED BY OWNER. NO MATERIAL OR EQUIPMENT SHALL BE PLACED AT LOCATIONS THAT WOULD IMPEDE ACCESS TO, OR FROM, EXISTING FACILITIES FOR CUSTOMERS, EMPLOYEES, OR DELIVERIES. COOPERATE WITH OWNER IN PROVIDING TRAFFIC CONTROL DURING THE COURSE OF CONSTRUCTION TO ENSURE MINIMUM INCONVENIENCE TO OWNER'S CUSTOMERS.
- IN GENERAL, THE DRAWINGS INDICATE DIMENSIONS, POSITIONS AND DETAILS OF CONSTRUCTION; THE SPECIFICATIONS DESCRIBE QUALITIES OF MATERIAL AND METHODS OF WORKMANSHIP. WORK DESCRIBED IN THE SPECIFICATIONS, SHOWN ON THE DRAWINGS, OR NECESSARY FOR PROPER COMPLETION OF THE WORK, SHALL BE EXEMUTED IN A COMPETENT MANNER AND SHALL BE OF THE MATERIALS BEST ADAPTED TO THE PURPOSE WHERE SUCH WORK OR MATERIALS ARE NOT SPECIFICALLY MENTIONED.
- SHOULD CONFLICTS OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS, CONTRACTOR IS DEEMED TO HAVE ESTIMATED ON THE MORE EXPENSIVE PRODUCT, METHOD, AND MATERIAL.

WORK AND MATERIALS SHALL BE THE BEST OF THE KINDS SPECIFIED AND INDICATED. SHOULD WORK OR

- MATERIALS BE REQUIRED WHICH ARE NOT DIRECTLY OR INDIRECTLY CALLED FOR IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT WHICH ARE NECESSARY FOR PROPER FULFILLMENT OF THE OBVIOUS INTENT, SAID WORK OR MATERIALS SHALL BE THE SAME AS SIMILAR PARTS THAT ARE DETAILED, INDICATED OR SPECIFIED. AND CONTRACTOR SHALL UNDERSTAND THE SAME TO BE IMPLIED AND PROVIDE FOR IT IN THEIR PROPOSAL AS FULLY AS IF IT WERE PARTICULARLY DESCRIBED OR DELINEATED.
- EXECUTE WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS. MAKE NO CHANGES WITHOUT HAVING FIRST RECEIVED WRITTEN PERMISSION. WHERE DETAILED INFORMATION IS LACKING, BEFORE PROCEEDING WITH WORK, REFER MATTER TO ARCHITECT FOR SUPPLEMENTAL INSTRUCTIONS.
- IF CONTRACTOR OBSERVES ERRORS, DISCREPANCIES OR OMISSIONS IN CONTRACT DOCUMENTS, CONTRACTOR SHALL PROMPTLY NOTIFY ARCHITECT, REQUESTING CLARIFICATION. IF CONTRACTOR PROCEEDS WITH WORK AFFECTED BY SUCH ERRORS, DISCREPANCIES OR OMISSIONS WITHOUT RECEIVING SUCH CLARIFICATION, THEY DO SO AT THEIR OWN RISK. ADJUSTMENTS INVOLVING SUCH CIRCUMSTANCES MADE BY CONTRACTOR, PRIOR TO APPROVAL BY ARCHITECT, SHALL BE AT CONTRACTOR'S RISK AND THE SETTLEMENT OF COMPLICATIONS OR DISPUTES SHALL BE AT CONTRACTOR'S SOLE EXPENSE.
- 1.9 NEITHER OWNER NOR ARCHITECT ASSUME RESPONSIBILITY FOR AN UNDERSTANDING OR REPRESENTATION MADE BY THEIR AGENTS OR REPRESENTATIVES PRIOR TO THE EXECUTION OF THE AGREEMENT UNLESS SUCH UNDERSTANDINGS OR REPRESENTATIONS ARE EXPRESSLY STATED IN THE AGREEMENT, AND THE AGREEMENT EXPRESSLY PROVIDES THAT RESPONSIBILITY IS ASSUMED BY OWNER.
- 1.10 FAILURE OF CONTRACTOR TO ACQUAINT THEMSELVES WITH AVAILABLE INFORMATION CONCERNING THE

- WORK SHALL NOT RELIEVE CONTRACTOR FROM THE RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK.
- 1.11 NEITHER THE PRESENCE NOR ABSENCE OF OWNER OR ARCHITECT, NOR THEIR AUTHORIZED REPRESENTATIVES, SHALL RELIEVE CONTRACTOR FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- WHEN REQUESTED BY ARCHITECT, CONTRACTOR SHALL DELIVER TO ARCHITECT (PRIOR TO FINAL ACCEPTANCE OF THE WORK AS A WHOLE) SIGNED CERTIFICATES FROM SUPPLIERS OF MATERIALS AND MANUFACTURED ITEMS STATING THAT SUCH ITEMS CONFORM TO CONTRACT DOCUMENTS.
- 1.13 CONTRACTOR, UPON AWARD OF THE CONTRACT, OR WHERE SHOP DRAWINGS, PRODUCT DATA OR SAMPLES ARE REQUIRED, UPON RECEIPT OF THEIR APPROVAL) SHALL PLACE ORDERS FOR MATERIALS, WORK, FABRICATION AND EQUIPMENT TO BE INCORPORATED IN THE WORK. CONTRACTOR SHALL KEEP ARCHITECT INFORMED AS TO THE AVAILABILITY OF MATERIALS, WORK, FABRICATIONS AND EQUIPMENT SPEGIFIED AND TO ADVISE ARCHITECT, IN WRITING, OF ORDERS PLACED AND OF SUCH MATERIAL, WORK, FABRICATION AND EQUIPMENT, WHICH MAY NOT BE AVAILABLE FOR THE PURPOSES OF THE CONTRACT.
- 1.14 LABOR SHALL BE PERFORMED IN THE BEST MOST COMPETENT MANNER, BY MECHANICS SKILLED IN THEIR RESPECTIVE TRADES. STANDARDS FOR WORK REQUIRED THROUGHOUT SHALL BE OF SUCH GRADE AS WILL RESULT IN FIRST CLASS WORK.
- 1.15 REPLACING, PATCHING AND REPAIRING OF MATERIALS AND SURFACES CUT OR DAMAGED IN THE EXECUTION OF THE WORK SHALL BE PERFORMED BY EXPERIENCED MECHANICS. SUCH REPLACING, REPAIRING AND PATCHING SHALL BE DONE WITH THE APPLICABLE MATERIALS, IN SUCH A MANNER THAT SURFACES SO REPLACED WILL MATCH THE SURROUNDING SIMILAR SURFACES.
- 1.16 CONTRACTOR AGREES THAT EACH SUBCONTRACT SHALL CONTAIN AN EXPRESS PROVISION SATISFACTORY IN FORM AND CONTENT TO OWNER WHEREBY SUCH SUBCONTRACTOR OR MATERIAL SUPPLIER EXPRESSLY AGREES THAT FOR THE BENEFITS OF OWNER, IT WAIVES RIGHTS TO FILE MECHANICS LIENS WITH RESPECT TO UNPAID SERVICES OR MATERIALS PROVIDED BY IT AS SPECIFIED BY CURRENT STATE STATUTES.
- 1.17 IN THE EVENT THAT THE BUILDING INSPECTOR OR OTHER PUBLIC OFFICIAL REQUIRES THAT ADDITIONAL WORK BE DONE OR THAT THE WORK UNDER CONTRACT DOCUMENTS BE MODIFIED, CONTRACTOR SHALL NOTIFY ARCHITECT IN WRITING OF THE REQUESTED CHANGE. ARCHITEIT WILL REVIEW THE REQUESTED CHANGE AND ADVISE CONTRACTOR IN WRITING. THE WORK PERFORMED WITHOUT WRITTEN PERMISSION SHALL BE AT THE EXPENSE OF CONTRACTOR.

SECTION 01 12 00 / MULTIPLE CONTRACTS

- 1.1 CONSTRUCTION ACTIVITIES, UNDER DIRECT SUPERVISION OF OWNER, ARE CONTEMPLATED IN THE SAME AREA OF WORK DURING THE CONSTRUCTION PERIOD. OTHER CONTRACTORS BEGINNING PROGRESS DURING THE SAME PERIOD SHALL HAVE EQUAL RIGHTS TO USE THE ROADS, GROUNDS, AND AREAS.
- 1.2 OWNER WILL REQUIRE THE OCCUPANCY OF VARIOUS PORTIONS OF THE BUILDING IN ADVANCE OF THE DATE ESTABLISHED IN THE CONTRACT DOCUMENTS FOR THE COMPLETION OF WORK. THE SCHEDULE OF DATES REQUIRED BY OWNER FOR USES OF THE VARIOUS AREAS PRIOR TO THE COMPLETION OF THE WORK SHALL BE PROVIDED BY OWNER. OWNER SHALL HAVE THE RIGHT TO OCCUPY PORTIONS OF THE BUILDING THAT ARE COMPLETED ON OR AFTER THE SPECIFIED COMPLETION DATE. SUCH OCCUPANCY BY OWNER WILL NOT RELEASE CONTRACTOR OR THEIR BONDING AGENCY FROM WARRANTIES OR GUARANTEES AND COMPLETION OF WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS AND THE CERTIFICATE OF OCCUPANCY OR EOUIVALENT HAVE BEEN ISSUED BY THE APPLICABLE GOVERNMENTAL OWNER'S FORCES MAY BE EITHER UNION OR NON-UNION

SECTION 01 32 00 / SURVEY

- VERIFY LAYOUT INFORMATION SHOWN ON DRAWINGS IN RELATION TO PROPERTY SURVEY AND EXISTING BENCHMARKS BEFORE PROCEEDING WITH LAYOUT OF WORK. RECORD DEVIATIONS FROM REQUIRED LINES AND LEVELS AND ADVISE OWNER PROMPTLY UPON DETECTION OF DEVIATIONS.
- 1.2 IMMEDIATELY AFTER THE INSTALLATION OF THE BUILDING FOUNDATIONS, PREPARE A SURVEY SHOWING THE ACTUAL LOCATION OF PERIMETER FOUNDATIONS WITH RESPECT TO PROPERTY LINES. ALSO INCLUDE THE SQUARE FOOTAGE OF THE BUILDING BASED ON THE FOUNDATION. SUBMIT ONE COPY OF SURVEY TO
- 1.3 CONTRACTOR SHALL COMPARE CONDITIONS AT THE SITE WITH CONTRACT DOCUMENTS. CONTRACTOR SHALL NOTIFY ARCHITECT OR OWNER, IN WRITING, AT OR BEFORE SUBMITTING THEIR BID, OF DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS AT THE SITE
- 1.4 MAPS, SOIL INVESTIGATION REPORTS AND SIMILAR REFERENCE DATA MADE AVAILABLE TO CONTRACTOR ARE GIVEN FOR CONTRACTOR'S INFORMATION ONLY, AND NEITHER OWNER NOR ARCHITECT ASSUME RESPONSIBILITY FOR CONCLUSIONS CONTRACTOR MAY DRAW.

SECTION 01 33 00 / SUBMITTALS

SCHEDULES AND COST BREAKDOWN

- 1.1 DELIVER TO OWNER A CONSTRUCTION SCHEDULE, SHOWING THE DATES OF COMMENCEMENT AND COMPLETION OF EACH OF THE VARIOUS SUBDIVISIONS OF THE WORK REQUIRED UNDER THE CONTRACT DOCUMENTS
- SUBMIT MONTHLY: AN UPDATED PROGRESS REPORT INDICATING WORK COMPLETED DURING THE PRECEDING MONTH AND INDICATE REVISIONS TO THE CONSTRUCTION SCHEDULE.
- SUBMIT A SCHEDULE OF THE ANTICIPATED MONTHLY PAYMENTS THAT WILL BECOME DUE IN ACCORDANCE WITH THE PROGRESS SCHEDULE. ALSO, SUBMIT AN ITEMIZED BREAKDOWN OF THE COSTS OF THE VARIOUS SUBDIVISIONS OF THE WORK. THE FIGURES USED IN MAKING THESE SCHEDULES WILL BE USED FOR DETERMINING THE BASIS OF PARTIAL PAYMENTS AND WILL NOT BE CONSIDERED AS FIXING A BASIS FOR ADDITIONS OR DEDUCTIONS THE CONTRACT PRICE. THE PROVISIONS OF THIS SUBPARAGRAPH PROVIDING FOR ADJUSTMENT OF PRICE SHALL NOT
 - APPLY IF CONTRACTOR HAS PROPOSED A SUBCONTRACTOR UNQUALIFIED UNDER APPLICABLE
- 1.4 3 APPLICATION FOR PAYMENT SHALL BE MADE ON AIA FORM G-702 AND G-703. APPLICATION AND CERTIFICATE FOR PAYMENT, (4 COPIES) UTILIZING COMPLET E PROVISIONS PROVIDED BY THE FORM. PROVIDE SIGNATURE SPACE FOR OWNERS APPROVAL.
- 1.5 CONTRACTOR AGREES TO ACCOMPANY PAYMENT REQUESTS. EXCEPT THE FIRST, WITH LIEN WAIVERS PERTAINING TO THE WORK PERFORMED AND MATERIALS PROVIDED BY CONTRACTOR, SUBCONTRACTORS AND MATERIAL SUPPLIER: AND FURTHER AGREE THAT OWNER SHALL HAVE THE RIGHT TO ISSUE CHECKS MADE JOINTLY PAYABLE TO CONTRACTOR AND SUCH SUBCONTRACTOR OR MATERIAL SUPPLIER. SUCH SUBCONTRACTOR OR MATERIAL SUPPLIER SHALL AGREE TO GIVE WRITTEN NOTICE TO OWNER OF NONPAYMENT FOR MATERIALS AND SERVICES, WHICH NOTIBE SHALL INCLUDE A SPECIFIC DETAIL LISTING OF THE SERVICES AND MATERIALS WITH RESPEIT TO WHICH PAYMENT HAS NOT BEEN MADE. IF LIENS ARE FILED AGAINST OWNER'S PROPERTY, OWNER MAY, AT THEIR OPTION, REQUIRE GONTRAGTOR TO PROVIDE A BOND IN ACCORDANCE WITH STATE STATUTES. FINAL LIEN WAIVERS SHALL ACCOMPANY THE FINAL PAYMENT REQUEST. LIEN WAIVERS SHALL BE ON AIA DOCUMENT G-Z06A.
- 1.6 CONTRACTOR SHALL REIMBURSE OWNER BY DEDUCTIVE CHANGE ORDER, FOR ARCHITECT'S ADDITIONAL SERVICES MADE NECESSARY BY CONTRACTOR'S FAILURE TO COMPLETE THE WORK WITHIN FIFTEEN DAYS FROM SUBSTANTIAL COMPLETION.
- NEITHER THE FINAL PAYMENT NOR THE REMAINING RETAINED PERCENTAGE SHALL BECOME DUE UNTIL REQUIREMENTS LISTED IN SECTION 01 77 00 CONTRACT CLOSEOUT ARE COMPLETED.
- BONDS SHALL BE IN ACCORDANCE WITH STATE LAWS WITH AMOUNT SHOWN EQUAL TO 100% OF THE TOTAL AMOUNT PAYABLE BY TERMS OF THE CONTRACT. SURELY SHALL BE COMPANY LICENSED TO DO BUSINESS IN THE STATE IN WHICH WORK IS LOCATED AND SHALL BE ACCEPTABLE TO OWNER. BOND AMOUNT SHALL BE INCREASED TO INCLUDE CHANGE ORDER ADDED

SHOP DRAWINGS, DATA AND SAMPLES

- SUBMIT SHOP DRAWINGS, MATERIAL LISTS, MANUFACTURER'S LITERATURE, SAMPLES AND OTHER INFORMATION IN SUFFICIENT TIME TO PERMIT PROPER CONSIDERATION AND ACTION ON SAME BEFORE MATERIALS OR ITEMS ARE ORDERED.
- FURNISH TO ARCHITECT FOR REVIEW, 1 DIGITAL SET OF EACH SHOP DRAWING AND SCHEDULES FOR PARTS OF THE WORK AS SPECIFIED. ARCHITECT WILL CHECK FOR CONFORMANCE WITH CONTRACT DOCUMENTS. DO NOT EXECUTE WORK UNTIL CONFIRMATION OF REVIEW IS OBTAINED. AFTER THE SUBMITTAL HAS BEEN REVIEWED IT IS CONTRACTOR'S RESPONSIBILITY TO RETRIEVE THE SHOP DRAWINGS FROM ARCHITECT.
- 2.3 BEFORE SUBMITTING SHOP DRAWINGS FOR REVIEW, CHECK SHOP DRAWINGS FOR ACCURACY, ASCERTAIN THAT WORK CONTIGUOUS WITH AND HAVING BEARING ON OTHER WORK SHOWN ON SHOP DRAWINGS IS ACCURATELY DRAWN, AND THAT WORK SHOWN IS IN CONFORMITY WITH CONTRACT REQUIREMENTS. SHOP DRAWINGS, WHEN SUBMITTED, MUST BEAR A STAMP OF APPROVAL FROM CONTRACTOR. DRAWINGS

- SUBMITTED WITHOUT SUCH EXECUTED STAMP OF APPROVAL. OR WHENEVER IT IS EVIDENT THAT THE DRAWINGS HAVE NOT BEEN CHECKED, WILL BE RETURNED FOR RESUBMISSION.
- PREPARE COMPOSITE DRAWINGS AND INSTALLATION LAYOUTS, WHEN REQUIRED TO SOLVE TIGHT FIELD CONDITIONS. SUCH DRAWINGS SHALL CONSIST OF DIMENSIONED PLANS AND ELEVATIONS AND MUST GIVE INFORMATION PARTICULARLY AS TO SIZE AND LOCATION OF SLEEVES, INSERTS, ATTACHMENTS, OPENINGS, CONDUITS, DUCTS OR STRUCTURAL INTERFERENCES.
- WHEN PRODUCT DATA, CONSISTING OF MANUFACTURER'S PRINTED LITERATURE IS REQUIRED TO BE SUBMITTED TO ARCHITECT, IT SHALL BE SUBMITTED IN ORIGINAL FORM, IN DIGITAL (PDF, DWF, ETC) SUBMISSION OR A MINIMUM OF 3 EACH IS REQUIRED; 2 FOR ARCHITECT AND ONE TO BE RETURNED TO

EQUIPMENT LISTS

- SUBMIT 3 COPIES OF A COMPLETE LIST OF MAJOR ITEMS OF MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND MATERIALS WITHIN 30 DAYS AFTER AWARD OF CONTRACT.
- SUBMITTALS SHALL INCLUDE THE MANUFACTURER'S SPECIFICATIONS, PHYSICAL DIMENSIONS AND RATINGS OF EQUIPMENT. FURNISH PERFORMANCE CURVES FOR PUMPS AND FANS. WHERE SUBMITTAL SHEET DESCRIBES ITEMS IN ADDITION TO THAT ITEM BEING SUBMITTED, THE SUBMITTED ITEM SHALL BE CLEARLY MARKED ON THE SHEET AND SUPERFLUOUS INFORMATION SHALL BE CROSSED OUT.
- EQUIPMENT SUBMITTALS SHALL BE COMPLETE INCLUDING SPACE REQUIREMENTS, WEIGHT, ELECTRICAL AND MECHANICAL REQUIREMENTS, PERFORMANCE DATA AND SUPPLEMENTAL INFORMATION REQUESTED BY ARCHITECT

SECTION 01 43 00 / TESTING AND SPECIAL INSPECTION

- THE RESPECTIVE SECTIONS OF THESE SPECIFICATIONS CONTAIN REQUIREMENTS FOR MATERIALS TESTING AND INSPECTIONS. COSTS INCURRED FOR INSPECTION, SPECIAL INSPECTION AND TESTING LABORATORY SERVICES SHALL BE PAID FOR BY CONTRACTOR. SPECIAL INSPECTION SHALL BE PERFORMED BY A LICENSED STRUCTURAL ENGINEER.
- PROVIDE THE SERVICES OF A TESTING LABORATORY APPROVED BY ARCHITECT. TESTING LABORATORY SHALL REPORT THE RESULTS OF TESTS, IN WRITING, SIMULTANEOUSLY TO THE FOLLOWING: ARCHITECT 1 COPY, STRUCTURAL ENGINEER 1 COPY, CONTRACTOR 2 COPIES.

SECTION 01 50 00 / CONSTRUCTION FACILITIES

- 1.1 UTILITIES: PROVIDE TEMPORARY ADEQUATE LIGHT AND POWER AND WATER SUPPLY FOR CONSTRUCTION, MAKING NECESSARY ARRANGEMENTS WITH SERVING UTILITY. RECEIPTS STATING THAT CHARGES HAVE BEEN PAID SHALL ACCOMPANY APPLICATION FOR FINAL PAYMENT.
- FIRE PROTECTION: PROVIDE ADEQUATE FIRE EXTINGUISHERS, OF THE TYPE AND SIZES RECOMMENDED BY THE NFPA, ON THE PREMISES DURING THE COURSE OF CONSTRUCTION. IN THE USE OF HAZARDOUS TYPES OF EQUIPMENT, NO WORK SHALL BE COMMENCED OR EQUIPMENT USED UNLESS FIRE EXTINGUISHERS OF AN APPROVED TYPE AND CAPACITY ARE PLACED IN THE WORK AREA.
- TEMPORARY ENCLOSURES, BARRIERS, AND FENCES: PROVIDE AND MAINTAIN FENCES, BARRICADES, LIGHTS, SHORING AND OTHER PROTECTIVE STRUCTURES OR DEVICES NECESSARY FOR THE SAFETY OF WORKERS, EQUIPMENT, THE PUBLIC AND PROPERTY. ABIDE BY STATE OR MUNICIPAL LAWS AND REGULATIONS, AND LOCAL ORDINANCES, LAWS AND OTHER REOUIREMENTS OF THE COUNTY AND OTHER AUTHORITIES HAVING JURISDICTION WITH REGARD TO SAFETY PRECAUTIONS, OPERATION AND FIRE
- SECURITY: ARCHITECT AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE PROTECTION OF THE BUILDING AND PREMISES OR FOR LOSS OF MATERIALS, FROM THE TIME THAT THE CONTRACT OPERATIONS HAVE COMMENCED UNTIL THE FINAL ACCEPTANCE OF THE WORK BY OWNER. IF WATCHMAN SERVICE IS DEEMED NECESSARY BY CONTRACTOR, SUCH PROTECTION SHALL BE PROVIDED BY CONTRACTOR.
- FACILITY AND EQUIPMENT: PROVIDE, INSTALL, MAINTAIN AND OPERATE A COMPLETE AND ADEQUATE FACILITY FOR THE HANDLING, EXECUTION, DISPOSAL AND DISTRIBUTION OF MATERIAL AND EQUIPMENT REQUIRED FOR THE PROPER AND TIMELY PERFORMANCE OF WORK CONNECTED WITH THE CONTRACT.
- TOILET FACILITIES: PROVIDE PROPER SANITARY AND ADEQUATE TOILET FACILITIES, LOCATED WHERE DIRECTED, FOR THE USE OF WORKERS ON THE PROJECT AND ENFORCE THEIR USE BY PERSONNEL ON THE
- HEATING: SHOULD IT BECOME NECESSARY TO DO WORK IN THE BUILDING, SUCH AS PLASTERING, CEMENT WORK OR PAINTING, AT TIMES WHEN THE TEMPERATURE IS BELOW 40 DEGREES F CONTRACTOR SHALL PROVIDE TEMPORARY HEAT FOR SUCH LENGTH OF TIME AS NECESSARY FOR THE PROTECTION OF THE
- SCAFFOLD: THE WORK SHALL INCLUDE PROVIDING, INSTALLING AND MAINTAINING SCAFFOLD NECESSARY FOR THE WORK IN CONFORMITY WITH APPLICABLE LAWS AND ORDINANCES.
- PROJECT IDENTIFICATION: FURNISH AND ERECT A PROJECT SIGN GIVING THE NAME OF THE PROJECT. OWNER, ARCHITECTS, ENGINEERS, AND CONTRACTOR. SIGN SHALL MEET LOCAL ORDINANCE
- 1.10 VISIT THE SITE AND REVIEW THE NATURE OF WORK UNDER THIS SECTION PRIOR TO SUBMITTING THE BID. NOTIFY ARCHITECT OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
- 1.11 MATERIALS LISTED FOR REUSE OR SALVAGE, WHICH IS DAMAGED TO THE EXTENT THAT THEY CANNOT BE REUSED, SHALL BE REPLACED BY CONTRACTOR WITH EQUAL QUALITY MATERIAL. COORDINATE WITH OWNER ON DISPOSITION OF SALVAGE ITEMS.
- REBUILD EXISTING WORK THAT HAS TO BE REMOVED TO ALLOW FOR THE INSTALLATION OF NEW WORK. REPAIR DAMAGE TO THE ROOF, OTHER SURFACES, AND ITEMS.
- 1.13 THE INSURANCE REQUIRED BY SUBSECTION 11.1.1 SHALL BE WRITTEN FOR NOT LESS THAN THE FOLLOWING, OR GREATER IF REQUIRED BY LAW: WORKER'S COMPENSATION INSURANCE:
 - STATE, TO BE STATUTORY, APPLICABLE FEDERAL, TO BE STATUTORY, EMPLOYER'S LIABILITY \$100,000 COMPREHENSIVE GENERAL LIABILITY INSURANCE (INCLUDING PREMISES-OPERATION; INDEPENDENT CONTRACTOR'S PROTECTION; PRODUCTS AND COMPLETED OPERATIONS): BODILY INJURY: \$1,000,000 EACH OCCURRENCE, \$2,000,000 ANNUAL AGGREGATE PROPERTY
 - DAMAGE: \$1,000,000 EACH OCCURRENCE, \$2,000,000 ANNUAL AGGREGATE PRODUCTS AND COMPLETED OPERATIONS INSURANCE TO BE MAINTAINED INSURED FOR ONE YEAR AFTER FINAL PAYMENT. PROPERTY DAMAGE LIABILITY INSURANCE WILL PROVIDE U GOVERAGE
 - CONTRACTUAL LIABILITY INSURANGE BODILY INJURY: \$1,000,000 EACH OCCURRENCE PROPERTY DAMAGE: \$1,000,000 EACH OCCURRENCE, \$2,000,000 ANNUAL AGGREGATE
 - PERSONAL INJURY INSURANCE, WITH EMPLOYMENT EXCLUSION DELETED: \$2,000,000 ANNUAL AGGREGATE COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE:
 - BODILY INJURY: \$1,000,000 EACH PERSON, \$2,000,000 EACH OCGURRENCE PROPERTY DAMAGE: \$1,000,000 EACH OCCURRENCE CONTRACTOR SHALL PROVIDE THE LIMITS OF LIABILITY BY A COMBINATION OF THE ABOVE-
 - DESCRIBED POLICY FORMS AND AN UMBRELLA EXCESS LIABILITY POLICY. CONTRACTOR'S EXCESS LIABILITY, UMBRELLA FORM, BODILY INJURY AND PROPERTY DAMAGE COMBINED:
 - \$2,000,000 EACH OCCURRENCE, \$10,000,000 AGGREGATE

BUILDING DEMOLITION

- CONTRACTOR SHALL, BEFORE COMMENCING WORK, VERIFY GRADES, LINES, LEVELS AND DIMENSIONS 2.1 SHOWN ON THE DRAWINGS AND SHALL REPORT ERRORS OR INCONSISTENCIES TO ARCHITECT. CONTRACTOR SHALL NOT PROCEED UNTIL SUCH ERRORS OR INCONSISTENCIES ARE CORRECTED
- CONTRACTOR SHALL ESTABLISH AND MAINTAIN BUILDINGS AND CONSTRUCTION GRADES, LINES, LEVELS AND BENCHMARKS AND SHALL BE RESPONSIBLE FOR THEIR ACCURACY AND PROTECTION. THIS WORK SHALL BE PERFORMED BY A LICENSED SURVEYOR.
- CONTRACTOR SHALL PROTECT TEMPORARY BENCHMARKS AND MAINTAIN THEM IN PLACE FOR THE DURATION OF THE CONTRACT OR UNTIL SUCH TIME AS THEIR REMOVAL DOES NOT AFFECT COMPLETION OF THE PROJECT.
- CONTRACTOR SHALL NOT REMOVE PROPERTY LINE MARKERS OR MONUMENTS OR DATA ESTABLISHED BY OWNER. IF SUCH ARE DAMAGED OR REMOVED CONTRACTOR SHALL BEAR COST OF REPLACEMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXISTING STRUCTURE AND IMPROVEMENTS, BOTH ABOVEGROUND AND UNDERGROUND, INCLUDING THE FINISHES WITHIN THE ADJOINING WORKING AREAS, AND SHALL PROVIDE ADEQUATE PROTECTION, EITHER BY BARRICADES, COVERING OR TEMPORARY REMOVAL. EXISTING STRUCTURES OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND REPLACED WITH MATERIALS, WORKMANSHIP, FIXTURES OR EQUIPMENT OF THE SAME

- QUALITY AND SIZE AS REQUIRED BY CONTRACT DOCUMENTS.
- DEBRIS FROM THE DEMOLITION SHALL NOT BE ALLOWED TO ACCUMULATE WITHIN THE BUILDING OR ON THE SITE. UNLESS LISTED FOR REUSE OR SALVAGE, DEMOLISHED MATERIALS SHALL BECOME THE PROPERTY OF CONTRACTOR, AND SHALL BE REMOVED FROM THE SITE. SPRINKLE DEBRIS, AND USE TEMPORARY ENCLOSURES, AS NECESSARY, TO LIMIT DUST. DO NOT USE WATER TO THE EXTENT OF CAUSING FLOODING, CONTAMINATION OR RUNOFF.
- 2.5 BREAK CONCRETE AND MASONRY INTO SECTIONS LESS THAN 3 FEET IN DIMENSION. LOWER STRUCTURA FRAMING MEMBERS TO GROUND BY HOIST OR CRANE.
- 2.6 REMOVE FLOORS OVER BASEMENT CONSTRUCTION AND REMOVE ON GRADE SLABS. REMOVE EXTERIOR BASEMENT WALLS AND FOOTINGS IN TOTAL. REMOVE BELOW GRADE WOOD AND METAL FROM BUILDING
- 2.7 PERFORM THE REMOVAL, CUTTING AND DRILLING OF EXISTING WORK WITH CARE, AND USING SMALL TOOLS IN ORDER NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. STORE EXISTING CONSTRUCTION WHEN EXISTING SUPPORTS ARE REMOVED, TO ALLOW FOR THE INSTALLATION OF NEW WORK. PERFORM CUTTING OF EXISTING GONCRETE AND MASONRY WITH SAWS AND CORE DRILLS; DO NOT
- 2.8 CONTRACTOR SHALL BE LIABLE FOR DAMAGE CAUSED BY CONTRACTOR TO OWNER'S PREMISES. CONTRACTOR SHALL HOLD AND SAVE OWNER AND THEIR AGENTS, FREE AND HARMLESS FROM LIABILITY OF ANY KIND ARISING FROM THE USE, TRESPASS OR DAMAGE OCCASIONED BY THEIR OPERATIONS ON

PROTECTION OF EXISTING ROOFING

- PROVIDE PROTECTION FROM WEATHER WHERE OPENINGS IN EXISTING ROOF ARE CUT FOR NEW WORK, OR WHERE EXISTING ROOFING IS REMOVED TO ALLOW NEW CONSTRUCTION TO JOIN EXISTING.
- PROVIDE WORKING DECK OF EXTERIOR GRADE PLYWOOD AND WOOD SKIDS, OR OTHER APPROVED MATERIAL, OVER EXISTING ROOFING WHEN ADJOINING NEW WORK.

SECTION OF 01 74 00 / CONSTRUCTION WASTE

- CONDUCT CLEANUP AND DISPOSAL OPERATIONS TO COMPLY WITH LOCAL ORDINANCES AND ANTIPOLLUTION LAWS. ONLY USE CLEANING MATERIALS RECOMMENDED BY THE MANUFACTURER FOR THE
- 1.2 DURING THE CONSTRUCTION PERIOD, THE MATERIALS TO BE USED IN THE WORK SHALL BE KEPT IN AN ORDERLY MANNER, NEATLY STACKED OR PILED. CLEAN UP FREQUENTLY (AT LEAST WEEKLY) SCRAP MATERIALS, AND DEBRIS CAUSED BY OPERATIONS, TO THE END. THE SITE OF THE WORK SHALL PRESENT A CLEAN AND ORDERLY APPEARANCE AT ALL TIMES.
- 1.3 PROVIDE FOR THE DISPOSAL OF SCRAP MATERIALS, AND DEBRIS; MAKE NECESSARY ARRANGEMENTS FOR LEGAL DISPOSAL OF SAME OFF THE SITE. PROVIDE TRASH CONTAINERS FOR USE BY TRADES.

SECTION 01 77 00 / CONTRACT CLOSEOUT

RECORD DRAWINGS

1.3

- PROVIDE RECORD DRAWINGS WHICH SHALL CLEARLY SHOW DIFFERENCES BETWEEN THE CONTRACT WORK AS DRAWN AND INSTALLED, AS WELL AS WORK ADDED TO THE CONTRACT WHICH IS NOT SHOWN ON THE CONTRACT DRAWINGS. MAINTAIN A SET OF RECORD DRAWINGS AT THE JOB SITE. THESE SHALL BE KEPT CURRENT AND SHALL BE AVAILABLE FOR INSPECTION.
- 1.2 IN SHOWING CHANGES IN THE WORK, USE THE SAME LEGENDS AS WERE USED ON THE CONTRACT DRAWINGS. INDICATE EXACT LOCATIONS BY DIMENSIONS AND EXACT ELEVATIONS GIVEN IN JOB DATUM, BY DEPTH. GIVE DIMENSIONS FROM A PERMANENT POINT. GIVE ELEVATIONS TO SEWER AND STORM DRAINAGE LINES TO THE INVERT ELEVATION.
- POWER, CONTROL WIRING, LOCATION, AND FUNCTION OF CONTROLS AND WHETHER MANUAL OR AUTOMATIC AND NORMAL AMPERAGE READINGS FOR MOTORS TAKEN AT THE EQUIPMENT UNDER NORMAL

MECHANICAL AND ELECTRICAL RECORD DRAWINGS SHALL INDICATE ROUTING OF PIPING, DUCT WORK,

STRUCTURAL CALCULATIONS. RECORD DRAWINGS SHALL CONTAIN THE NAMES, ADDRESSES AND PHONE

NUMBER OF THE SUBCONTRACTORS. UPON SUBSTANTIAL COMPLETION OF THE WORK, SUBMIT ONE SET OF RECORD DRAWINGS AND OTHER CLOSE-OUT DOCUMENTS TO ARCHITECT FOR REVIEW. UPON RECEIPT OF NOTICE OF COMPLETION OF REVIEW OF THE RECORD DRAWINGS AND DOCUMENTS DELIVER 3 SETS OF RECORD DOCUMENTS TO

RECORD DRAWINGS PACKAGE SHALL INCLUDE ONE SET OF FINAL TRUSS SHOP DRAWINGS AND

WARRANTY, MAINTENANCE MANUAL AND OPERATING INSTRUCTIONS

- UPON COMPLETION OF THE INSTALLATION OF WORK, FURNISH ONE BOUND COPY OF WARRANTIES, OPERATING AND MAINTENANCE INSTRUCTIONS AND SPARE PARTS LISTS FOR MATERIALS AND EQUIPMENT,
- INCLUDING ELECTRICAL AND CONTROL ITEMS. 2.2 OPERATING INSTRUCTIONS SHALL INCLUDE COMPLETE OPERATING SEQUENCE, CONTROL DIAGRAMS, DESCRIPTION OF METHOD OF OPERATING MACHINERY, MACHINE SERIAL NUMBERS, FACTORY ORDER NUMBERS, PARTS LISTS, INSTRUCTION BOOKS, SUPPLIER'S PHONE NUMBERS AND ADDRESSES AND INDIVIDUAL EQUIPMENT GUARANTEES. PARTS LISTS SHALL BE COMPLETE, SHOWING PARTS AND PART NUMBERS FOR READY REFERENCE.
- 2.3 ASSEMBLE WARRANTY, MAINTENANCE MANUAL AND OPERATING INSTRUCTIONS IN 3-RING BINDERS, LABEL AND INDEX MATERIAL CONTAINED FOR READY REFERENCE, USING THE SECTION NUMBERS LISTED IN THE PROJECT MANUAL. UPON SUBSTANTIAL COMPLETION OF THE WORK, SUBMIT ONE COPY OF THE WARRANTY, MAINTENANCE MANUAL AND OPERATING INSTRUCTIONS TO ARCHITECT.
- SUBMIT REQUIRED GUARANTEES IN WRITING. GUARANTEE PERIODS SHALL BE IN ACCORDANCE WITH THE 2.4 GENERAL CONDITIONS. IN ADDITION, PROVIDE WRITTEN GUARANTEES OR CERTIFICATES REQUIRED AS SPECIFIED IN THIS SECTION AND THE PROJECT MANUAL

SECTION 03 30 00 / CAST IN PLACE CONCRETE (REFER TO STRUCTURAL SET)

SECTION 04 21 50 / ADHERED THIN BRICK VENEER UNITES

PART 1 - GENERAL QUALITY ASSURANCE

- 1.1 CONTINUOUS INSPECTION: EMPLOY A QUALIFIED MASONRY INSPECTOR FOR CONTINUOUS INSPECTION OF THE MASONRY WORK. ACCEPTANCE BY A STATE OR MUNICIPALITY HAVING A PROGRAM OF EXAMINING AND CERTIFYING MASONRY INSPECTORS WILL BE CONSIDERED ADEQUATE QUALIFICATIONS. THE MASONRY INSPECTOR SHALL BE AT THE SITE DURING ALL MASONRY CONSTRUCTION AND PERFORM THE FOLLOWING DUTIES:
- REVIEW DRAWINGS AND SPECIFICATIONS AND MEET WITH THE CONTRACTOR TO DISCUSS REQUIREMENTS BEFORE WORK COMMENCES.
- BEFORE MASONRY WORK COMMENCES, CONTRACTOR AND THE CONTRACTOR'S QUALITY CONTROL REPRESENTATIVE SHALL ATTEND MEETING WITH ENGINEER TO REVIEW THE REQUIREMENTS FOR SURVEILLANCE AND QUALITY CONTROL OF THE MASONRY WORK. CHECK BRAND AND TYPE OF CEMENT, LIME (IF USED), AND SOURCE OF SAND.
- ENSURE THAT THE BACKING IS CONTINUOUS, ROUGH, AND MOISTURE RESISTANT TO RECEIVE UNITS. OBSERVE FIELD PROPORTIONING OF MORTAR. VISUALLY CHECK AGGREGATE TO DETERMINE UNIFORMITY OF GRADING, CLEANLINESS, AND MOISTURE.
- ENSURE THAT JOINTS ARE FULL OF MORTAR AND KEPT TIGHT DURING WORK. CONTINUOUSLY OBSERVE PLACING OF GROUT. PERFORM OR SUPERVISE PERFORMANCE OF REQUIRED SAMPLING AND TESTING.
- 1.2 KEEP COMPLETE RECORD OF INSPECTIONS. REPORT DAILY TO THE CONTRACTOR'S QUALITY CONTROL REPRESENTATIVE THE PROGRESS OF THE MASONRY INSPECTION.
- PRIOR TO STARTING CONSTRUCTION OF MASONRY, CONSTRUCT MINIMUM 4 FOOT SQUARE MOCK-
- USE ACCEPTED MATERIALS, CONTAINING EACH DIFFERENT KIND AND COLOR OF BRICK MASONRY
 - UNITS TO ILLUSTRATE WALL DESIGN. SHOW COLOR RANGE, TEXTURE RANGE, BOND, MORTAR COLOR, JOINT TOOLING, CRITICAL DESIGN

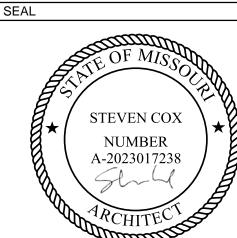
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PERMIT SET: 04/12/2024 CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE

BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY:

J. JEFFERY

SPECIFICATIONS

SHEET NUMBER

CHECKED BY

SHEET TITLE

OR EXCEED THE REQUIREMENTS OF THIS SPECIFICATION.

- MASONRY CONSTRUCTION MAY NOT PROCEED UNTIL THE ARCHITECT./ ENGINEER APPROVES
- WHEN NOT ACCEPTED, CONSTRUCT ANOTHER MOCK-UP.
- WHEN ACCEPTED, MOCK-UP WILL REMAIN INTACT DURING CONSTRUCTION, WILL BE THE STANDARD OF COMPARISON FOR THE REMAINDER OF MASONRY WORK.
- UPON COMPLETION AND ACCEPTANCE OF PROJECT, DISPOSE OF MOCK-UPS IN LEGAL MANNER AT OFFSITE LOCATION.
- CERTIFICATION: FURNISH MANUFACTURER'S CERTIFICATION THAT CLAY THIN BRICK UNITS PROVIDED MEET

DELIVERY, STORAGE, AND HANDLING

- STORE MASONRY UNITS ABOVE GROUND TO PREVENT CONTAMINATION BY MUD, DUST OR OTHER
- MATERIALS LIKELY TO CAUSE STAINING OR OTHER DEFECTS. COVER AND PROTECT MASONRY UNITS FROM INCLEMENT WEATHER TO MAINTAIN QUALITY CONTROL AND
- TRANSPORT AND HANDLE BRICK MASONRY UNITS AS REQUIRED TO PREVENT DISCOLORATION, CHIPPING,

REMOVE CHIPPED, CRACKED, AND OTHERWISE DEFECTIVE UNITS FROM JOBSITE UPON DISCOVERY.

LOCATE STORAGE PILES, STACKS, AND BINS TO PROTECT MATERIALS FROM HEAVY TRAFFIC.

PROJECT CONDITIONS

- 1.10 COLD WEATHER REQUIREMENTS
- IN ACCORDANCE IBC SECTION 2104.3.
- PROVIDE ADEQUATE EQUIPMENT FOR HEATING MASONRY MATERIALS WHEN AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT (4 DEGREES CELSIUS).
- 1.11 HOT WEATHER REQUIREMENTS

 - IN ACCORDANCE WITH IBC SECTION 2104.4. WHEN AMBIENT AIR TEMPERATURE EXCEEDS 100 DEGREES FAHRENHEIT (38 DEGREES CELSIUS), OR WHEN AMBIENT AIR TEMPERATURE EXCEEDS 90 DEGREES FAHRENHEIT (32 DEGREES

CELSIUS)AND WIND VELOCITY IS GREATER THAN 8 MILES PER HOUR, IMPLEMENT HOT WEATHER

- PROTECTION PROCEDURES. WET MORTAR BOARD BEFORE LOADING AND COVER MORTAR TO RETARD DRYING WHEN NOT **BEING USED**
- DO NOT SPREAD MORTAR BEDS MORE THAN 48 INCHES (1.22 M) AHEAD OF PLACING MASONRY
- PLACE MASONRY UNITS WITHIN ONE MINUTE OF SPREADING MORTAR.
- 1.12 WETTING OF BRICK: SHALL BE REQUIRED AT THE TIME OF LAYING IF THE UNIT'S INITIAL RATE OF ABSORPTION (IRA) EXCEEDS 30 GRAMS PER 30 SQUARE INCHES PER MINUTE OR 1 G/ 645MM2.

PART 2 – PRODUCTS

- TYPE: ASTM C 1088, GRADE EXTERIOR, TYPE TBS OR TBX THIN VENEER BRICK.
- SURFACE TEXTURE: TO BE SELECTED BY ARCHITECT/ENGINEER FROM MANUFACTURER'S FULL RANGE OF AVAILABLE TEXTURES.
- COLORS: COLOR AS SELECTED BY ARCHITECT/ENGINEER FROM STANDARD COLORS.
- SIZE: 9/16 IN. THICK X 2 1/4 IN. HIGH X 8 IN. LONG, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- SPECIAL SIZES AND SHAPES: AS REQUIRED FOR WINDOW AND DOOR LOCATIONS AND CUSTOM SILLS WHERE INDICATED, CORNERS, AND OTHER SPECIAL APPLICATIONS TO MINIMIZE CUTTING.

BOND COAT MORTAR

- SITE MIXED MORTAR: MEET REQUIREMENTS OF ANSI A118.4 OR A118.15.
- PREBLENDED: MEET REQUIREMENTS OF ANSI A118.4 OR A118.15.
- MORTAR FOR USE WITH CEMENT BACKER BOARD SUBSTRATE: COMPLY WITH ANSI A118.4 OR A118.15

POINTING MORTAR

- MORTAR USED TO GROUT OR TUCK-POINT MORTAR JOINTS (SOMETIMES CALLED GROUTING MORTARS) BETWEEN THIN BRICK UNITS AFTER THEY ARE ADHERED TO THE SUBSTRATE WALL. MIX BY PROPORTION: 1 PART PORTLAND CEMENT (ASTM C150); 1 PART HYDRATED LIME (ASTM C207); 6 PARTS SAND (ASTM C144), OR MODIFIED EPOXY EMULSION MORTAR/GROUT CONFORMING TO ANSI 118.07.
- SITE MIXED: MEET REQUIREMENTS OF ASTM C270 TYPE N OR TYPE S. PREBLENDED: MEET REQUIREMENTS OF ASTM C1714/C1714M TYPE N OR TYPE S.

WEATHER-RESISTIVE BARRIER (WRB) SEE SECTION 071000 FOR ADDITIONAL INFORMATION

- SHEET GOODS: FOR EXTERIOR WALL (NOT ROOF) APPLICATIONS. COMPATIBLE WITH CEMENTITIOUS PLASTER AND MORTAR CAPABLE OF BOND CAPACITIES OF 50 PSI (0.34 MPA) SHEAR AND TENSION BOND
- ELASTOMERIC LIQUID/FLUID APPLIED: COMPATIBLE WITH CEMENTITIOUS PLASTER AND MORTAR CAPABLE OF BOND CAPACITIES OF 150 PSI (1.03 MPA) SHEAR AND TENSION BOND.

DRAINAGE LAYER

- SHEET OR ROLL GOODS COMPRISED OF WOVEN PLASTIC STRANDS, PLASTIC STRAND MESH, PROFILED (RIBBED, OR DIMPLED) PLASTIC SHEETING, ALL FACED WITH FILTER FABRIC. ALTERNATIVELY, THE DRAINAGE LAYER MAY BE CREATED WITH A FILTER MEMBRANE WITH DIMPLES. OR "BUTTONS". OTHER PROTRUSIONS BONDED TO THE SURFACE WHICH CREATE A 3/16" (5 MM) (MINIMUM) AIR SPACE, OR OTHER SUITABLE MATERIAL TO PROVIDE A SEPARATION THAT ALLOWS WATER TO DRAIN OUT OF THE WALL
 - HYDROGAP® BY BENJAMIN OBDYKE, OR EQUIVALENT
 - MORTAIRVENT® BY ADVANCED BUILDING PRODUCTS, OR EQUIVALENT SURE CAVITY™ BY MTI, OR EQUIVALENT

RIGID EXTERIOR INSULATION SEE SECTION 072113 FOR ADDITIONAL INFORMATION

- 2.8 TYPE AND THICKNESS AS DEFINED IN THE DRAWINGS
- 2.9 TO BE INSTALLED AS PART OF THE EXTERIOR ADHERED THIN BRICK WALL SYSTEM OUTBOARD OF THE WRB

LATH (FURRED)

- 3/8" (9.5MM) DIMPLES OR RIBS, 3.4 LB./YD2 (1.9KG/M2) SELF-FURRING EXPANDED GALVANIZED METAL LATH -ASTM C847
- 1/4" (6.3MM) DIMPLES OR RIBS, 2.5 LB/YD2 (1.4KG/M2) (OR HEAVIER) SELF-FURRING METAL LATH ASTM C874
- WELDED WIRE LATH ASTM C933
- PROPRIETARY INTEGRAL WOVEN FIBERGLASS LATH AND PROFILED DRAINAGE MEMBRANE SEE 2.09-F. **FLASHING**

2.10 CORROSION RESISTANT PLASTIC, COPPER, STAINLESS STEEL, PAINTED METAL, COATED METAL AS SHOWN

ON THE DRAWINGS. SEE SECTION 076000 FOR ADDITIONAL INFORMATION.

ACCESSORIES

- 2.11 WEEP SCREEDS: CORROSION RESISTANT WITH 3.5" (89MM) (MINIMUM) VERTICAL ATTACHMENT FLANGE (THAT TERMINATES BEHIND WRB)
 - METAL WEEP SCREED: NOT LESS THAN 26 GAGE; .0179 INCHES (0.45MM) PLASTIC WEEP SCREED: NOT LESS THAN 0.05 INCHES (1.3MM)
- 2.12 CASING BEADS: CORROSION RESISTANT
- METAL WEEP SCREED: NOT LESS THAN 26 GAGE; .0179 INCHES (0.45MM) PLASTIC WEEP SCREED: NOT LESS THAN 0.05 INCHES (1.3MM)
- 2.13 ELASTOMERIC SEALANTS. SIZED FOR CALCULATED MOVEMENT. SECTION 079200
- 2.14 FASTENERS: ASTM C1063
 - FOR STEEL STUDS: CORROSION RESISTANT SCREWS; COATED OR BI-METALLIC (MILD [DRILL] TIP WITH STAINLESS THREADED SHANK), FOR FASTENING DRAINAGE PLANE MATERIAL AND LATH MATERIAL TO SUBSTRATE WALL; RATED FOR RESISTANCE TO MOIST ENVIRONMENTS. PENETRATE STUD TO EXPOSE 3 FULL THREADS THROUGH STEEL STUDS
 - FOR WOOD STUDS: CORROSION RESISTANT STAPLES, CORROSION RESISTANT ROOFING NAILS, OR CORROSION RESISTANT SCREWS AND WASHERS, ALL OF SUFFICIENT LENGTH TO PENETRATE A MINIMUM OF 3/4" INTO WALL FRAMING MEMBERS

- FOR CONCRETE OR CMU: CORROSION RESISTANT CONCRETE SCREWS (WITH 11/4" MINIMUM PENETRATION INTO SOUND SUBSTRATE) OR CORROSION RESISTANT POWDER ACTUATED FASTENERS (WITH 1" MINIMUM PENETRATION INTO SOUND SUBSTRATE)
- FOLLOW FASTENER MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION INTO CMU FASTENERS INTENDED TO SECURE LATH SHALL HAVE SUFFICIENTLY LARGE HEADS OR ADDED CORROSION RESISTANT WASHERS LARGE ENOUGH TO NOT PULL THROUGH THE LATH.
- 2.15 FLUID APPLIED BOND COAT USED ON THE FACE OF RIGID INSULATION
- 2.16 PROPRIETARY LATH SYSTEMS FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION

PROFILED EXPANDED RIGID FOAM: BRICKWEBB BY OLD MILL OR EQUIVALENT

- PUNCHED GALVANIZED SHEET METAL: TABS II OR EQUIVALENT
- THERMOSET REINFORCED PLASTIC: SPEEDYMASON OR EQUIVALENT
- MORTAR SET PEEL N' STICK

FIBERGLASS WOVEN LATH BY SPIDERLATH, OR EQUIVALENT. [FOR NON-FIRE-RATED TYPE V

- FIBERGLASS WOVEN LATH BONDED TO PROFILED PLASTIC DRAINAGE MEMBRANE DELTA-DRY AND LATH, BY DORKEN, OR EQUIVALENT. [FOR NON-FIRE-RATED TYPE V
- 2.17 PROPRIETARY MVIS SYSTEMS: EXTERIOR WALL ASSEMBLY SYSTEM APPLIED TO CLEAN AND SOUND EXTERIOR SUBSTRATE SURFACES THAT HAS COMPATIBLE COMPONENTS COMPRISED OF: LIQUID/FLUID ELASTOMERIC WRB MEMBRANE, CEMENTITIOUS PLASTER SUBSTRATE, SETTING/BONDING MORTAR, AND POINTING MORTAR (GROUT) SYSTEMS DESIGNED SPECIFICALLY FOR ADHERED EXTERIOR MASONRY VENEERS, INCLUDING THIN BRICK. NOT APPLICABLE WHERE IT WOULD BE APPLIED DIRECTLY TO A
 - DRAINAGE LAYER LATICRETE MVIS OR EQUIVALENT.

CONSTRUCTION]

- 3-PART SYSTEM: FLUID WRB + MASONRY VENEER MORTAR + POINTING MORTAR. USED FOR THIN OR THICK SET APPLICATIONS
- 4-PART SYSTEM: FLUID WRB + PREMIUM MORTAR BED + MASONRY VENEER MORTAR + POINTING MORTAR. USED IN LIEU OF STUCCO SUBSTRATES

CEMENT BACKER (CB) OR CEMENT BACKER BOARD (CBB)

2.18 SPECIALTY CEMENT BACKER BOARDS ARE AVAILABLE THAT COME WITH RIGID POLYSTYRENE FOAM AND/OR MINERAL WOOL OF VARIOUS THICKNESSES BONDED TO THE CEMENT BACKER BOARD AS AN OPTION TO PROVIDE EXTERIOR INSULATION.

PART 3 – EXECUTION

VENEER SUBSTRATE SURVEY

SURVEY CONDITION OF SUBSTRATE WALL OR BACKING TO RECEIVE THIN BRICK AND REPORT ALL NON-CONFORMANCE ISSUES, INCLUDING BUT NOT LIMITED TO: OUT OF TOLERANCE FLATNESS, PLUMBNESS, ALIGNMENT, AND LOCATION. REPORT ALL PERTINENT ISSUES TO THE GENERAL CONTRACTOR PRIOR TO INITIATING ANY WORK.

VENEER SUBSTRATE PREPARATION

- CONCRETE, CMU, CEMENT BACKER BOARD, AND STUCCO
- REMOVE ALL DELETERIOUS SUBSTANCES (FORM RELEASE, CURING COMPOUNDS, PAINT, GRAFFITI,
- WASH SURFACE TO REMOVE DUST AND LAITANCE, AND ALLOW TO DRY
- CLEANING MAY BE WAIVED/ELIMINATED WHERE NEW CONSTRUCTION MAKES IN UNNECESSARY, AND WHEN PROPRIETARY LATH SYSTEMS ARE USED, PENDING ACCEPTANCE OF ARCHITECT AND LATH SYSTEM MANUFACTURER.

- WOOD SHEATHING PREPARE TO RECEIVE VENEER ASSEMBLY BY PROPERLY SETTING ALL PROTRUDING FASTENERS AND FIXING FASTENERS THAT HAVE PUNCHED THROUGH THE EXTERIOR SURFACE OF THE
- REMOVE ALL DELETERIOUS MATERIALS FROM THE SURFACE OF THE SHEATHING.
- PREPARE SUBSTRATE SURFACE TO RECEIVE ADHERED THIN BRICK AS NOTED ABOVE OR BY ANY OTHER SUITABLE AND APPROVED MEANS AND METHODS THAT WILL ENSURE ADEQUATE BOND AND DURABILITY IF THE THIN BRICK INSTALLATION. SUBMIT PROPOSED MEANS AND METHODS FOR REVIEW AND RECEIVE APPROVAL PRIOR TO INITIATING ANY WORK...

CONFIRMATION OF MASONRY LAYOUT

- 3.4 PRIOR TO INSTALLATION OF THIN BRICK, LAYOUT (DRY) COURSING TO FILL SURFACE AND NOTE ANY ADJUSTMENTS THAT ARE NECESSARY TO PRODUCE THE DESIRED LOOK, ELIMINATING UNITS THAT ARE LESS THAN 1/2 OF THE FULL UNIT WIDTH. THIS MAY REQUIRE ADJUSTING THE LOCATION OF HEAD JOINTS AND USING 3/4 LENGTH (APPROX.) UNITS TO MAINTAIN THE DESIRED BONDING PATTERN.
- LAYOUT TOLERANCES.
- 3.6 ADJUSTMENTS TO LAYOUT, INCLUDING BUT NOT LIMITED TO PARTIAL BRICK UNITS AND JOINT SIZES MUST BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION

ADJUST JOINT WIDTHS WITHIN ESTABLISHED TOLERANCES TO ACCOMMODATE BRICK TOLERANCES AND

EXTERIOR THICK SET APPLICATION FOR UNEVEN SUBSTRATES

THE FOLLOWING GUIDELINES ARE INTENDED FOR EXTERIOR APPLICATION OVER SOMEWHAT UNEVEN SUBSTRATES OR WHEN USING THIN BRICK WITH UNDULATING/UNEVEN BACK SURFACES OR THIN BRICKS THAT VARY IN THICKNESS.

- 3.7 PROTECT ADJACENT CONSTRUCTION WITH APPROPRIATE MEANS FROM MORTAR DROPPINGS AND OTHER EFFECTS OF LAYING OF BRICK MASONRY UNITS.
- INSTALL FLASHING AT THE PERIMETER OF THIN BRICK VENEER WALL ASSEMBLY, AROUND OPENINGS, AND AT BASE OF VENEER, INTEGRATED WITH THE WRB TO PREVENT THE MOISTURE FROM ENTERING THE BUILDING AND TO TRANSMIT THE MOISTURE TO THE OUTSIDE OF THE WALL. INSTALL WEEPS (WEEP SCREEDS) AT THE BOTTOM OF THE WALLS. INTEGRATED WITH THE WRB TO TRANSMIT THE MOISTURE TO THE OUTSIDE FACE OF THE WALL. SECURE FLASHINGS WITH FASTENERS.
- INSTALL TWO LAYERS OF WRB SHEET OR ROLL GOODS OVER THE SUBSTRATE WALL, IN SHINGLE FASHION, STARTING AT THE BOTTOM OF THE WALL. EACH LAYER MUST PROVIDE A COMPLETE, INDEPENDENT, UNINTERRUPTED DRAINAGE PATH. THE LAPS SHOULD BE 2 IN. (51 MM) MINIMUM FOR HORIZONTAL LAPS AND 6 IN. (152 MM) MINIMUM FOR VERTICAL LAPS. STAGGER LAPS IN EACH LAYER, IN SHINGLE FASHION. SECURE IN PLACE WITH MASTIC, ADHESIVE OR FASTENERS. WRB MAY BE REDUCED TO A SINGLE LAYER WHERE DRAINAGE LAYER IS USED; INCREASE HORIZONTAL LAPS TO 3" (76 MM) FOR SINGLE LAYER WRB SHEET GOODS.
 - ALTERNATIVELY, APPLY LIQUID OR FLUID WRB TO CLEAN, SOUND SUBSTRATE MATERIALS.
- 3.10 INSTALL OPTIONAL (RECOMMENDED) DRAINAGE LAYER OVER WRB. AVOID CREATING DAMS OR TERMINATIONS THAT WOULD IMPEDE THE FLOW OF WATER AND MOISTURE OUT OF THE WALL, DIRECTING IT TO THE EXTERIOR SURFACE. SECURE DRAINAGE LAYER WITH FASTENERS. SEE 3.04-F-1 FOR ALTERNATIVE.
- WHERE EXTERIOR INSULATION IS INTENDED, RIGID INSULATION SHOULD BE CHOSEN, AND IT SHOULD BE INSTALLED OVER THE OPTIONAL BUT RECOMMENDED DRAINAGE LAYER, SECURED IN PLACE WITH APPROPRIATE FASTENERS.
- 3.12 INSTALL METAL LATH COMPLYING WITH ASTM C847 ON THE SUBSTRATE MATERIAL, FURRED A MINIMUM OF 1/2" (6 MM) OFF THE FACE OF THE SUBSTRATE MATERIAL. SELF-FURRING LATH MAY BE USED (RECOMMENDED). REFER TO ASTM C1063 FOR INSTALLATION OF METAL LATH FOR PORTLAND CEMENT PLASTERING APPLICATIONS. SECURE LATH WITH FASTENERS. THE MAXIMUM HORIZONTAL SPACING FOR THE FASTENERS IS 16 IN. (406 MM) O.C. AND MAXIMUM VERTICAL SPACING FOR FASTENERS IS 6 IN. (152 MM) ALTERNATIVE: DRAINAGE LAYER AND LATH CAN BE PROVIDED BY PROPRIETARY SYSTEM OF LATH
 - COMBINED WITH A DRAINAGE LAYER AS NOTED IN 2.07-E.4.
- APPLY 1/2" TO 1" (13 MM TO 25 MM) THICK CEMENTITIOUS PLASTER (STUCCO) SCRATCH COAT ON CLEAN AND DUST-FREE SUBSTRATE, USING TYPE S MORTAR, WORKING INTO LATH TO COMPLETELY EMBED LATH INTO CEMENTITIOUS PLASTER WITH AT LEAST 1/2" COVERAGE ON THE BACK OF THE LATH. MORTAR 2.02-D -1 ABOVE. SCARIFY SURFACE WHILE MOIST. APPLY 3/4" TO 11/4" (19 MM TO 32 MM) THICK CEMENTITIOUS PLASTER (STUCCO) OVER RIGID INSULATION, WHERE OCCURS.
 - CÓNTIGUOUS AREAS OF CEMENTITIOUS PLASTER (STUCCO) BOUNDED BY JOINTS OR EDGES OF THE PLASTER SHOULD NOT EXCEED 144 SQ FT (13.4 SQ. M), WITH JOINT SPACING NOT TO EXCEED 18 FEET (5.5 M), AND WITH THE ASPECT RATIO OF AREAS BOUNDED BY JOINTS OR EDGES OF THE PLASTER SHOULD NOT EXCEED 1.5:1.0.
- SURFACE DRY, PRE-WET SURFACE PRIOR TO APPLYING THE SETTING (BONDING) MORTAR. SEE SECTION 092400 FOR ADDITIONAL INFORMATION. SPREAD BRICK SETTING (BONDING) MORTAR BED ONTO THE CLEAN AND DUST-FREE SUBSTRATE USING

THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (3/16" TO 1/4" [5 MM TO 6 MM] DEEP

NOTCHES) TO OBTAIN AN EVEN SETTING BED. USE TYPE S POLYMER MODIFIED MORTAR (LATEX-PORTLAND

3.14 CURE SCRATCH COAT AT LEAST 24 HOURS PRIOR TO THE APPLICATION OF SUBSEQUENT COATS, IF

CEMENT MORTAR, PER 2.02-D-2, ABOVE).

- 3.16 APPLY BRICK SETTING BED MORTAR TO THE BACK OF THE VENEER UNITS, WORKING INTO THE BACK OF THE BRICK UNIT USING THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (AS ABOVE) AND PLACE THE UNIT INTO THE SETTING BED ON THE SUBSTRATE WALL. WORK THE THIN BRICK UNIT INTO PLACE BY TAPPING, OR SLIDING SLIGHTLY BACK-AND-FORTH, OR UP-AND-DOWN, OR ROTATING SLIGHTLY UNTIL EXCESS MORTAR IS SQUEEZED OUT AT THE EDGES OF THE VENEER UNIT, COMPLETELY FILLING THE SPACE BETWEEN UNIT AND BONDING MORTAR. THE THICKNESS OF THE SETTING/BONDING MORTAR BED SHALL BE BETWEEN 3/8 IN. AND 3/4" IN (10 MM AND 19 MM) TO ACCOMMODATE VARIATIONS IN THE SUBSTRATE SURFACE, VARIATIONS IN THE BRICK, AND TO ADJUST FOR PLUMBNESS AND FLATNESS OF THE WALL. USE OF A 48-INCH-LONG STRAIGHT EDGE IS RECOMMENDED TO ENSURE A PLANAR INSTALLATION, SWEEPING OVER THE SURFACE AND HUMORING (ADJUSTING) THE BRICK AS NEEDED TO CORRECT FOR
- 3.17. LAY UNITS TO DESIRED HEIGHT WITH JOINTS OF UNIFORM THICKNESS. GROUT THE JOINTS USING TYPE N MORTAR MIX PER 2.03 ABOVE. TOOL THE JOINT WHEN THEY ARE THUMB PRINT HARD.
- 3.18 BOND SHALL BE PLUMB THROUGHOUT.
- 3.19 LAY UNITS TO AVOID FORMATION OF CRACKS WHEN UNITS ARE PLACED.
- 3.20 LAY MASONRY PLUMB, TRUE TO LINE, WITH COURSES LEVEL. KEEP BOND PATTERN PLUMB THROUGHOUT CARE SHOULD BE TAKEN TO PRODUCE A FLAT FINISHED SURFACE WHERE UNEVEN SUBSTRATES EXIST OR WHERE THIN BRICK THICKNESSES VARY. LAY MASONRY WITHIN THE TOLERANCES OF ACI 530.1 SECTION
- WHEN POSITIONS OF UNITS SHIFT AFTER MORTAR HAS STIFFENED, BOND IS BROKEN, OR CRACKS ARE FORMED, REMOVE AND REINSTALL UNITS IN NEW MORTAR.
- AVOID LAYING UNITS WHERE THEY WOULD BRIDGE ACTIVE CRACKS OR ESTABLISHED MOVEMENT JOINTS IN SUBSTRATE MATERIALS. CUT WHERE NECESSARY TO RESPECT JOINTING IN SUBSTRATE.
- AVOID MORTAR STAINING ON THE UNITS DURING INSTALLATION. CLEAN ANY MORTAR SMEARING OR STAINING PROMPTLY TO REDUCE FINAL CLEANING.
- 3.24 ALTERNATE 1: USE A PROPRIETARY 4-PART MVIS SYSTEM (2.09-G-1-B) APPLIED TO CLEAN, SOUND CONCRETE OR CMU SUBSTRATES, WHERE NO DRAINAGE LAYER IS REQUIRED.

EXTERIOR THIN SET APPLICATION TO FLAT CEMENTITIOUS SUBSTRATE

THE FOLLOWING GUIDELINES ARE INTENDED FOR EXTERIOR APPLICATION OVER REASONABLY FLAT SUBSTRATES WHEN USING THIN BRICK WITH UNIFORM THICKNESS.

- 3.25 PROTECT ADJACENT CONSTRUCTION WITH APPROPRIATE MEANS FROM MORTAR DROPPINGS AND OTHER EFFECTS OF LAYING OF BRICK MASONRY UNITS. INSTALL FLASHING AT THE PERIMETER OF THIN BRICK VENEER WALL ASSEMBLY, AROUND OPENINGS, AND
- AT BASE OF VENEER. INTEGRATED WITH THE WRB TO PREVENT THE MOISTURE FROM ENTERING THE BUILDING AND TO TRANSMIT THE MOISTURE TO THE OUTSIDE OF THE WALL. INSTALL WEEPS (WEEP SCREEDS) AT THE BOTTOM OF THE WALLS, INTEGRATED WITH THE WRB TO TRANSMIT THE MOISTURE TO THE OUTSIDE FACE OF THE WALL. SECURE FLASHINGS WITH FASTENERS.
- APPLY LIQUID/FLUID WRB MEMBRANE TO CLEAN CONCRETE SUBSTRATE SURFACES A. IF DRAINAGE LAYER IS USED, WRB MAY BE SINGLE LAYER OF SHEET OR ROLL GOODS. LAP SHEET
- INSTALL OPTIONAL (RECOMMENDED) DRAINAGE LAYER OVER SHEET OR ROLL GOODS WRB OR LIQUID/FLUID ELASTOMERIC WRB. AVOID CREATING DAMS OR TERMINATIONS THAT WOULD IMPEDE THE FLOW OF WATER AND MOISTURE OUT OF THE WALL, DIRECTING IT TO THE EXTERIOR SURFACE. SECURE IN PLACE WITH FASTENERS.
- WHERE EXTERIOR INSULATION IS INTENDED, RIGID INSULATION SHOULD BE CHOSEN, AND IT SHOULD BE INSTALLED OVER THE OPTIONAL BUT RECOMMENDED DRAINAGE LAYER, SECURED IN PLACE WITH
- APPLY CBB OVER WRB SHEET OR ROLL GOODS (OR LIQUID/FLUID WRB) AND OVER OPTIONAL (RECOMMENDED) DRAINAGE LAYER, AND OVER EXTERIOR RIGID INSULATION, WHERE USED. SECURE CEMENT BACKER BOARD IN PLACE WITH APPROPRIATE FASTENERS. TAPE JOINTS.
- SPREAD BRICK SETTING (BONDING) MORTAR BED ONTO THE CLEAN AND DUST-FREE SUBSTRATE OF CONCRETE OR CMU WITH COMPATIBLE ELASTOMERIC LIQUID/FLUID WRB, OR ONTO CBB OVER WRB AND/OR OPTIONAL (RECOMMENDED) DRAINAGE LAYER, USING THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (3/16" TO 1/4" [5 MM TO 6 MM] DEEP NOTCHES) TO OBTAIN AN EVEN SETTING BED. USE TYPE S POLYMER MODIFIED MORTAR (LATEX-PORTLAND CEMENT MORTAR, PER 2.02-D-2, ABOVE).
- APPLY BRICK SETTING BED (BONDING) MORTAR TO THE BACK OF THE VENEER UNITS, WORKING INTO THE BACK OF THE BRICK UNIT USING THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (AS ABOVE) AND PLACE THE UNIT INTO THE SETTING BED ON THE SUBSTRATE WALL. WORK THE THIN BRICK UNIT INTO PLACE BY TAPPING, OR SLIDING SLIGHTLY BACK-AND-FORTH, OR UP-AND-DOWN, OR ROTATING SLIGHTLY, UNTIL EXCESS MORTAR IS SQUEEZED OUT AT THE EDGES OF THE VENEER UNIT, COMPLETELY FILLING THE SPACE BETWEEN UNIT AND BONDING MORTAR: 100% COVERAGE ON THE THIN BRICK UNITS. FHE THICKNESS OF THE SETTING/BONDING MORTAR BED SHALL BE BETWEEN 3/8 IN. AND $3\!\!/\!\!4$ " IN (10 MM AND 19 MM) TO ACCOMMODATE VARIATIONS IN THE SUBSTRATE SURFACE, VARIATIONS IN THE BRICK, AND TO ADJUST FOR PLUMBNESS AND FLATNESS OF THE WALL. USE OF A 48-INCH-LONG STRAIGHT EDGE IS RECOMMENDED TO ENSURE A PLANAR INSTALLATION, SWEEPING OVER THE SURFACE AND HUMORING (ADJUSTING) THE BRICK AS NEEDED TO CORRECT FOR ANOMALIES.
- 3.23 LAY UNITS TO DESIRED HEIGHT WITH JOINTS OF UNIFORM THICKNESS, GROUT THE JOINTS USING TYPE N MORTAR MIX PER 2.03 ABOVE. TOOL THE JOINT WHEN THEY ARE THUMB PRINT HARD.
- 3.24 BOND SHALL BE PLUMB THROUGHOUT.
- 3.25 LAY UNITS TO AVOID FORMATION OF CRACKS WHEN UNITS ARE PLACED.
- 3.26 LAY MASONRY PLUMB, TRUE TO LINE, WITH COURSES LEVEL. KEEP BOND PATTERN PLUMB THROUGHOUT LAY MASONRY WITHIN THE TOLERANCES OF ACI 530.1 SECTION 3.3 G.
- WHEN POSITIONS OF UNITS SHIFT AFTER MORTAR HAS STIFFENED, WHEN BOND IS BROKEN, OR WHEN CRACKS ARE FORMED, REMOVE AND REINSTALL UNITS IN NEW MORTAR.
- AVOID LAYING UNITS WHERE THEY WOULD BRIDGE ACTIVE CRACKS OR ESTABLISHED MOVEMENT JOINTS IN SUBSTRATE MATERIALS. CUT WHERE NECESSARY TO RESPECT JOINTING IN SUBSTRATE. 3.29 AVOID MORTAR STAINING ON THE UNITS DURING INSTALLATION. CLEAN ANY MORTAR SMEARING OR
- STAINING PROMPTLY TO REDUCE FINAL CLEANING. ALTERNATE 1: PROPRIETARY LATH SYSTEMS (2.09-F) ARE SUITABLE FOR THIS APPLICATION IN LIEU OF THE SETTING/BONDING MORTAR APPLICATION NOTED ABOVE. APPLY OVER WRB AND OPTIONAL (RECOMMENDED) DRAINAGE LAYER, AND OVER OPTIONAL INSULATION. WHERE PROPRIETARY LATH SYSTEM HAS AN INTEGRAL DRAINAGE LAYER, ADDITIONAL DRAINAGE LAYER IS NOT NEEDED. WHERE
- ALTERNATE 2: PROPRIETARY 3-PART MVIS SYSTEMS (2.09-G-1-A) MAY BE USED WHERE NO DRAINAGE LAYER IS REQUIRED, APPLIED OVER CONCRETE, CMU, OR OVER CBB THAT IS INSTALLED OVER (OPTIONAL) DRAINAGE AND INSULATION LAYERS.

PROPRIETARY LATH SYSTEM HAS INTEGRAL INSULATION, ADDITIONAL INSULATION MAY NOT BE

MORTAR JOINTS

- MAKE JOINTS STRAIGHT, CLEAN, SMOOTH, AND UNIFORM IN THICKNESS.
- POINTING: TOOL EXPOSED JOINTS, SLIGHTLY CONCAVE. STRIKE CONCEALED JOINTS FLUSH. TOOL JOINTS WHILE SLIGHTLY MOIST AND THUMBPRINT HARD.
- JOINT THICKNESS: MAKE VERTICAL AND HORIZONTAL JOINTS AS REQUIRED TO ACHIEVE NOMINAL
- DIMENSIONS ON DRAWINGS AND WITHIN TOLERANCES LISTED IN ACI 530.1 SECTION 3.3 G. WHERE FRESH MASONRY JOINS TOTALLY OR PARTIALLY SET MASONRY, CLEAN AND ROUGHEN SET MASONRY BEFORE LAYING NEW UNITS.

BOND PATTERN

3.32 INSTALL BRICK MASONRY UNITS IN RUNNING BOND PATTERN, UNLESS OTHERWISE INDICATED ON THE

CUTTING BRICK MASONRY UNITS

3.32 WHEN POSSIBLE, USE FULL UNITS OF THE PROPER SIZE IN LIEU OF CUT UNITS. CUT UNITS AS REQUIRED TO FORM CHASES, OPENINGS, FOR ANCHORAGE, AND FOR OTHER APPURTENANCES, AND AT ALL MOVEMENT JOINTS AND TERMINATIONS, AS REQUIRED, SO AS TO

ELIMINATE UNITS BRIDGING ACROSS MOVEMENT JOINTS (OR CRACKS) IN SUBSTRATE.

- 3.33 CUT AND FIT UNITS WITH POWER-DRIVEN CARBORUNDUM OR DIAMOND DISC BLADE SAW.
- 3.34 CLEAN BACK OF UNITS AFTER CUTTING TO REMOVE DUST AND OTHER DELETERIOUS MATERIAL(S).
- 3.35 DISCARD UNITS THAT ARE DAMAGED DURING THE CUTTING PROCESS, WHICH DO NOT MEET THE APPEARANCE STANDARD OF ASTM C1088.

CONTROL JOINTS / EXPANSION JOINTS

- SIZE JOINTS TO ACCOMMODATE ANTICIPATED MOVEMENTS WITH RESPECT TO MOISTURE AND THERMAL GRADIENTS IN ADDITION TO BUILDING MOVEMENTS COMMENSURATE WITH THE MOVEMENT POTENTIAL OF THE JOINT MATERIAL(S).
- PROVIDE IN MASONRY WALLS WHERE INDICATED ON THE DRAWINGS.
 - MAKE FULL HEIGHT AND CONTINUOUS IN APPEARANCE.
- CONTROL AND EXPANSION JOINTS MUST BE CONTINUOUS THROUGH THE BACKING, UNLESS DETAILED
- INSERT CONTROL JOINT FILLER IN JOINTS AS WALL IS CONSTRUCTED.
- INSERT 50% COMPRESSIBLE ELASTOMERIC (NEOPRENE OR EQUIVALENT) EXPANSION JOINT MATERIAL IN PROPERLY SIZED EXPANSION JOINTS.
- G. APPLY SEALANT AS SPECIFIED.

- 3.36 FLASHING MUST BE INSTALLED AT ALL THROUGH WALL PENETRATIONS AND AT LOWER BOUNDARIES OF THE ADHERED THIN BRICK VENEER INSTALLATIONS.
- 3.37 FLASHINGS WILL BE INTEGRATED WITH THE WRB MATERIALS TO PROVIDE EFFECTIVE CONTROL OF MOISTURE EXITING THE WALL ASSEMBLY, WITH SEALED CORNERS, END DAMS AND OTHER ACCESSORIES

AS NEEDED.

3.38 PATCH EXPOSED BRICK MASONRY UNITS AT COMPLETION OF THE WORK AND IN SUCH MANNER THAT PATCHING WILL BE INDISTINGUISHABLE FROM SIMILAR SURROUNDINGS AND ADJOINING CONSTRUCTION.

3.39 BUILD IN REQUIRED ITEMS, SUCH AS ANCHORS, FLASHINGS, WEEP SCREEDS, SLEEVES, ELECTRICAL BOXES, FRAMES, STRUCTURAL STEEL, LINTELS, ANCHOR BOLTS, AND METAL FABRICATIONS, AS REQUIRED FOR COMPLETE INSTALLATION.

WATER REPELLENT

FIELD QUALITY CONTROL

3.40 APPLY WATER REPELLENT AS SPECIFIED, WHERE DIRECTED OR SPECIFIED ON DRAWINGS.

3.41 HAVE MINIMUM 3 MASONRY UNITS OF EACH TYPE PROPOSED FOR PROJECT TESTED IN ACCORDANCE WITH

C 1088 FOR CHIPPAGE AND TOLERANCES.

- ASTM C 67 TO VERIFY CONFORMANCE TO SPECIFICATIONS.
- 3.43 EMPLOY AND PAY ACCEPTABLE INDEPENDENT TESTING LABORATORY TO PERFORM TESTING 3.44 PER ASTM C 1088, AFTER BRICK ARE PLACED IN USAGE, THE MANUFACTURER OR THE MANUFACTURER'S AGENT SHALL NOT BE HELD RESPONSIBLE FOR COMPLIANCE OF BRICK WITH THE REQUIREMENTS OF ASTM

- 3.45 EXERCISE EXTREME CARE TO PREVENT MORTAR SPLOTCHES
- 3.46 DO NOT ATTACH CONSTRUCTION SUPPORTS TO MASONRY WALLS.

3.42 TESTS SHALL INCLUDE ABSORPTION, INITIAL RATE OF ABSORPTION AND UNIT WEIGHT.

- 3.47 USE ONLY NEW CLEANING PRODUCTS FROM PREVIOUSLY UNOPENED AND UNTAMPERED CONTAINERS. DO NOT MIX, OR CONCOCT, OR BLEND CLEANING MATERIALS UNLESS SPECIFICALLY INSTRUCTED TO DO SO BY THE CLEANING MATERIAL MANUFACTURER, AND THEN ONLY UPON APPROVAL BY THE GENERAL CONTRACTOR, ARCHITECT, AND OWNER.
- 3.48 IDENTIFY A SUITABLE, NON-CRITICAL LOCATION, MUTUALLY ACCEPTABLE TO THE GENERAL CONTRACTOR ARCHITECT AND OWNER, TO TEST CLEANING METHODS FOR APPROVAL PRIOR TO MASS CLEANING OF THE
- 3.50 REMOVE GROUT STAINS FROM WALLS USING CLEANING AGENT AND METHODS RECOMMENDED BY BRICK

3.49 WASH OFF BRICK SCUM AND GROUT SPILLS BEFORE SCUM AND GROUT SET.

- 3.51 TEST CLEAN MASONRY IN SELECTED AREA WITH THE LEAST AGGRESSIVE METHOD POSSIBLE THAT WILL ATTAIN THE DESIRED EFFECT STARTING WITH "BUCKET AND BRUSH" METHOD. APPLY CLEANING SOLUTION RECOMMENDED BY BRICK MANUFACTURER IN ACCORDANCE WITH CLEANING SOLUTION MANUFACTURER'S
- PRINTED INSTRUCTIONS AND BRICK MANUFACTURER'S RECOMMENDATIONS. 3.52 ONCE THE CLEANING METHOD IS ESTABLISHED AND APPROVED, PROCEED TO CLEAN THE BUILDING IN
- 3.53 REMOVE SCAFFOLDING AND EQUIPMENT. DISPOSE OF DEBRIS, REFUSE, AND SURPLUS MATERIAL OFFSITE
- 3.54 CORRECT EFFLORESCENCE ON EXPOSED SURFACES WITH COMMERCIALLY PREPARED CLEANING MATERIALS ACCEPTABLE TO MASONRY UNIT MANUFACTURER.
- 3.55 DO NOT USE MURIATIC OR HYDROCHLORIC ACID AS CLEANING SOLUTIONS.

TOTAL FOLLOWING ESTABLISHED PROCEDURES.

3.56 DO NOT USE ABRASIVE CLEANING EQUIPMENT OR METHODS

- PROTECTION 3.57 PROVIDE TEMPORARY PROTECTION FOR EXPOSED MASONRY CORNERS SUBJECT TO DAMAGE.
- 3.58. BRACING: ADEQUATELY BRACE MASONRY WALLS OVER 8 FEET IN HEIGHT TO PREVENT OVERTURNING AND TO

PREVENT COLLAPSE UNLESS WALL IS ADEQUATELY SUPPORTED BY PERMANENT SUPPORTING

- ELEMENTS SO WALL WILL NOT OVERTURN OR COLLAPSE. KEEP BRACING IN PLACE UNTIL PERMANENT SUPPORTING ELEMENTS OF STRUCTURE ARE IN
- 3.59 LIMITED ACCESS ZONE: ESTABLISH LIMITED ACCESS ZONE PRIOR TO START OF MASONRY WALL CONSTRUCTION.

SUPPORTING ELEMENTS TO PREVENT OVERTURNING AND COLLAPSE.

LIMIT ACCESS TO ZONE TO WORKERS ACTIVELY ENGAGED IN CONSTRUCTING WALL. DO NOT PERMIT OTHER PERSONS TO ENTER ZONE. KEEP ZONE IN PLACE UNTIL WALL IS ADEQUATELY SUPPORTED OR BRACED BY PERMANENT

ZONE SHALL BE IMMEDIATELY ADJACENT TO WALL AND EQUAL TO HEIGHT OF WALL TO BE

CONSTRUCTED PLUS 4 FEET BY ENTIRE LENGTH OF WALL ON UN-SCAFFOLDED SIDE OF WALL

ARE NOT A PART OF THE STRUCTURAL STEEL OR OTHER METAL SYSTEMS.

SECTION 05 58 00 / METAL FABRICATION (REFER TO STRUCTURAL SET) 1.1 SUBMIT SHOP DRAWINGS COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION. SUBMIT SHOP DRAWINGS FOR THE FABRICATION AND ERECTION OF ASSEMBLIES OF METALWORK,

WHICH ARE NOT COMPLETELY SHOWN BY THE MANUFACTURER'S DATA SHEETS.

INCLUDE PLANS, ELEVATIONS. AND DETAILS OF SECTIONS AND CONNECTIONS.

- SHOW ANCHORAGE AND ACCESSORY ITEMS. 1.2 THE EXTENT OF MISCELLANEOUS METALWORK IS SHOWN ON THE DRAWINGS AND INCLU DES ITEMS FABRICATED FROM IRON AND STEEL SHAPES, PLATES, BARS, STRIPS, TUBES, PIPES AND CACTINGS WHICH
- 1.3 COMPLY WITH THE PROVISIONS OF THE FOLLOWING: AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, INCLUDING COMMENTARY OF THE AISC SPECIFICATIONS
 - AISC SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS AWS STRUCTURAL WELDING CODE—STEEL ASTM A 6 GENERAL REQUIREMENTS FOR DELIVERY OF ROLLED STEEL PLATES, SHAPES. SHEET

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STEVEN COX

NUMBER

A-2023017238

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE

DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

BEGINNING OR FABRICATING ANY WORK.

06/01/2023

AS NOTED

J. JEFFERY

PROJECT INFORMATION

SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

SHEET NUMBER

ORIGINAL ISSUE:

PROJECT NO:

SPECIFICATIONS

1.4 THE TYPES OF ITEMS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

CARPENTER'S IRONWORK

PIPE GUARDS

LOOSE BEARING PLATES

MISCELLANEOUS FRAMING AND SUPPORTS

MISCELLANEOUS TRIM

FENCING AND GATES

ANGLE CORNER GUARDS

CHANNEL DOOR FRAMES ANGLE JAMBS

PLATES FOR DOORS TRELLIS

FURNISH INSERTS AND ANCHORING DEVICES WHICH MUST BE SET IN CONCRETE OR BUILT INTO MASONRY FOR THE INSTALLATION OF THE WORK. PROVIDE SETTING DRAWINGS, TEMPLATES, INSTRUCTIONS AND DIRECTIONS FOR INSTALLATION OF AND HORAGE DEVICES.

PREASSEMBLE ITEMS IN THE SHOP TO THE GREATEST EXTENT POSSIBLE, SO AS TO MINIMIZE FIELD SPLICING AND ASSEMBLY OF UNITS AT THE PROJECT SITE. DISASSEMBLE UNITS ONLY TO THE EXTENT NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. CLEARLY MARK UNITS FOR REASSEMBLY.

MATERIALS

STEEL PLATES, SHAPES, BARS AND BAR-SIZE SHAPES: ASTM A 36.

STEEL TUBING: (HOT FORMED, WELDED OR SEAMLESS): ASTM A 501.

HOT ROLLED CARBON STEEL BARS: ASTM A 575, GRADE AS SELECTED BY FABRIC ATOR. COLD FINISHED STEEL BARS: ASTM A 108, GRADE AS SELECTED BY FABRICATOR.

HOT ROLLED CARBON STEEL SHEETS AND STRIPS: ASTM A_566 AND ASTM A_569; PICKLED AND OILED.

COLD ROLLED CARBON STEEL SHEETS: ASTM A 336. GALVANIZED CARBON STEEL SHEETS: ASTM A 526, WITH ASTM A 525, G90 ZINC COATING.

COLD DRAWN STEEL TUBING: ASTM A_512 SUNK DRAWN, BUTT-WELDED. COLD FINISHED AND STRESS

STEEL PIPE: ASTM A 53, TYPE AS SELECTED; GRADE A. BLACK FINISH UNLESS GALVAN IZING IS REQUI RED. STANDARD WEIGHT, SOHEDULE 40, UNLESS OTHERWISE SHOWN OR SPEC IFIED.

THREADED TYPE CONCRETE INSERTS: GALVANIZED FERROUS (CASTINGS, INTERNALLY THREADED TO RECEIVE 3/4" DIAMETER MACHINE BOLTS; EITHER MALLEABLE IRON (COMPLYING WITH ASTM A 47 OR CAST STEEL COMPLYING W

SECTION 06 42 19 / THERMALLY FUSED LAMINATE PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. THERMALLY FUSED LAMINATE (TFL) PANELS

B. DECORATIVE EDGEBANDING.

1.02 RELATED REQUIREMENTS

A. SECTION 01 3000 - SUBMITTALS.

B. SECTION 06 0620 - DECORATIVE PLASTIC LAMINATE.

PART 2 - PRODUCTS

WILSONART CONTACT INFORMATION: WILSONART, 2501 WILSON CENTER, TEMPLE, TX 76503-6110. TEL. 254.207.7000, TOLL-FREE 800.433.3222, FAX 254.207.3209. WEBSITE: WWW.WILSONART.CO

2.01 MANUFACTURER

A. BASIS OF DESIGN: WILSONART.

2.02 TFL PANEL PROPERTIES

A. LAMINATE COMPOSITION: MELAMINE SATURATED DECORATIVE LAYERS THERMALLY FUSED TO BOTH CORE FACE SURFACES WITH HEAT AND PRESSURE. STAIN RESISTANT SURFACE WITH WEAR AND SCRATCH RESISTANCE.

B. PANEL CORE MATERIAL: COMPOSITE PANEL PRODUCT COMPOSED PRIMARILY OF CELLULOSIC MATERIALS AND A BONDING SYSTEM. RESULTING IN A DURABLE AND DIMENSIONALLY STABLE SUBSTRATE SUITABLE FOR DECORATIVE LAMINATE OVERLAYS.

C. SUSTAINABLE DESIGN CONFORMANCE STANDARDS: a. CPA: ECO-CERTIFIED COMPOSITE (ECC) SUSTAINABILITY STANDARD.

b. CPA: FORMALDEHYDE EMISSIONS GRADEMARK CERTIFICATION PROGRAM. CERTIFICATION ATTESTS COMPLIANCE WITH APPLICABLE CARB ATCM LIMITATIONS.

2.03 TFL PANELS

A. PRODUCT: WILSONART® THERMALLY FUSED LAMINATE PANELS.

B. LAMINATE COMPONENT:

a. LAMINATE CONFORMANCE STANDARD: ANSI/NEMA LD 3, GRADE VGL, AND ISO 4586. b. COLOR, PATTERN, AND FINISH: D354 DESIGNER WHITE, 60 MATTE.

C. PANEL CORE MATERIAL: MEDIUM DENSITY FIBERBOARD. CONFORMANCE STANDARD: ANSI 208.2. GRADE [130, MINIMUM 45 LB. DENSITY].

[COMPLIANT WITH CARB ATCM.]

b. PRODUCT TYPE AND THICKNESS: [TYPE 845 - 3/4 INCH]. + 0.008 INCH DIMENSIONAL

c. PANEL WIDTH: SEE DRAWINGS FOR DIMENSIONS. + 0.036 INCH DIMENSIONAL TOLERANCE.

d. PANEL LENGTH: SEE DRAWINGS FOR DIMENSIONS. + 0.080 INCH DIMENSIONAL TOI FRANCE

2.06 DECORATIVE EDGEBANDS

A. EDGEBAND PRODUCTS: "WILSONART® EDGEBAND.

B. COMPOSITION: ABS/PVC EXTRUDED FABRICATION. C. WIDTH: EQUAL TO OR GREATER THAN PANEL THICKNESS.

D. FINISH: 60 MATTE E. COLOR AND PATTERN: D354 DESIGNER WHITE

2.08 FABRICATION

A. FABRICATE TFL PANELS IN SHOP, TO GREATEST EXTENT PRACTICABLE, IN SIZES AND SHAPES INDICATED ACCORDING TO DRAWINGS AND MANUFACTURER'S PUBLISHED FABRICATION REQUIREMENTS.

B. COMPLETE BY SANDING ALL EDGES SMOOTH.

PART 3 - EXECUTION

3.01 EXAMINATION

A. EXAMINE SUBSTRATES AND CONDITIONS THAT COULD ADVERSELY AFFECT THE WORK OF THIS SECTION

B. SUBSTRATES MUST BE SOUND, FLAT, SMOOTH, AND FREE FROM DUST OR OTHER SURFACE CONTAMINANTS.

C. COMMENCEMENT OF WORK WILL CONSTITUTE ACCEPTANCE OF EXISTING CONDITIONS AND SUBSTRATES TO RECEIVE THE WORK.

3.02 INSTALLATION

A. CONFORMANCE STANDARD: COMPLY WITH [AWI/AWMAC/WI AWS] [AND] [KCMA A161.1] AS

APPLICABLE TO PROJECT. INSTALL TFL PANEL COMPONENTS PLUMB, LEVEL, AND TRUE ACCORDING TO APPROVED SHOP DRAWINGS AND MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. SHIM AS REQUIRED DURING INSTALLATION PROCESS.

C. ATTACH TFL PANEL COMPONENTS TO SUBSTRATES AS INDICATED ON DRAWINGS AND APPROVED SHOP DRAWINGS.

3.03 CLEANING AND PROTECTION

A. CLEAN TFL PANELS ACCORDING TO MANUFACTURER'S PUBLISHED CARE AND MAINTENANCE

INSTRUCTIONS. COMPLETELY REMOVE DELETERIOUS SUBSTANCES FROM FINISHED SURFACES REPAIR DAMAGED AND DEFECTIVE TFL PANEL COMPONENTS, WHERE POSSIBLE, TO ELIMINATE DEFECTS, INCLUDING VISUAL. WHERE NOT POSSIBLE TO REPAIR, REPLACE AFFECT TFL PANEL COMPONENTS. PROTECT COMPLETED TFL PANELS WORK FROM DAMAGE FOR REMAINDER OF CONSTRUCTION PERIOD.

SECTION 07 21 00 / THERMAL INSULATION

1.1 INSULATION MATERIALS SHALL BE REINFORCED FOIL LAMINATE FACED FLEXIBLE FIBERGLASS BATTS OR BLANKETS CONFORMING TO ASTM C665, TYPE III, CLASS A. MATERIALS SHALL HAVE A MINIMUM THERMAL RESISTANCE (R RATING) OF 30 MINIMUM FOR ROOFS AND 21 FOR WALLS, AS SHOWN ON DRAWING. INSULATION MATERIALS SHALL BE LABELED WITH R VALUE AND MANUFACTURER'S NAME.

1.2 ADHESIVES SHALL BE OF THE TYPE RECOMMENDED BY THE INSULATION MANUFACTURER AND COMPLYING WITH FIRE RESISTANCE REQUIREMENTS.

1.3 MAINTAIN VAPOR BARRIER CONTINUOUS OVER INSULATED SURFACE. PATCH TEARS IN VAPOR BARRIER IN AN APPROVED MANNER.

1.4 CUT AND FIT INSULATION MATERIALS AROUND PIPES, CONDUITS, OUTLET BOXES, ETC., AS NECESSARY TO MAINTAIN THE INTEGRITY OF THE INSULATION. WHERE PIPES ARE INSTALLED IN SPACES TO RECEIVE INSULATION, PLACE INSULATION BETWEEN EXTERIOR WALL AND THE PIPE, COMPRESSING INSULATION AS NECESSARY. FULLY INSULATE SMALL AREAS BETWEEN CLOSELY SPACED FRAMING MEMBERS.

1.5 AT ROOF AND WALL AREAS INSTALL INSULATION BETWEEN FRAMING MEMBERS WITH VAPOR BARRIER TOWARD BUILDING INTERIOR AND FLANGES CONTINUOUSLY TIGHT AGAINST INSIDE OF FRAMING MEMBERS. SECURE INSULATION FLANGE TO FRAMING MEMBERS TO RETAIN IT IN POSITION USING STAPLES OR NAILS OR OTHER APPROVED METHODS.

1.6 AT WALL AREAS INSTALL INSULATION BETWEEN FURRING STRIPS WITH FLANGES.

1.7 AT JOIST AREAS PROVIDE WIRES AT BOTTOM CHORD TO SUPPORT INSULATION. PLACE WIRES NOT TO EXCEED 16" OC. STAPLE WIRES TO WOOD CHORD.

METHODS OF SECURING INSULATION IN POSITION SHALL BE THE RESPONSIBILITY OF CONTRACTOR. INSTALLATION SHALL BE PERFORMED SO THAT INSULATION WILL NOT BE DISPLACED.

SECTION 07 24 00 / EXTERIOR INSULATION AND FINISH SYSTEMS

DELIVERY, STORAGE, AND HANDLING

1.1 STORE AND HANDLE PRODUCTS PER MANUFACTURER'S INSTRUCTIONS UNTIL READY FOR INSTALLATION.

ENSURE THAT LOCATING TEMPLATES AND OTHER INFORMATION REQUIRED FOR INSTALLATION OF PRODUCTS OF THIS SECTION ARE FURNISHED TO AFFECTED TRADES IN TIME TO PREVENT INTERRUPTION OF CONSTRUCTION PROGRESS.

ENSURE THAT PRODUCTS OF THIS SECTION ARE SUPPLIED TO AFFECTED TRADES IN TIME TO PREVENT INTERRUPTION OF CONSTRUCTION PROGRESS.

PROJECT CONDITIONS

MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, AND VENTILATION) WITHIN LIMITS RECOMMENDED BY MANUFACTURER FOR OPTIMUM RESULTS. DO NOT INSTALL PRODUCTS UNDER ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S RECOMMENDED LIMITS.

INSULATION WARRANTY: AT PROJECT CLOSEOUT, PROVIDE TO OWNER AN EXECUTED COPY OF THE MANUFACTURER'S STANDARD LIMITED WARRANTY AGAINST MANUFACTURING DEFECT, OUTLINING ITS TERMS, CONDITIONS, AND EXCLUSIONS FROM COVERAGE.

ALUMINUM-FACED AND COATED GLASS MAT FACED INSULATION

1.6 ALUMINUM-FACED, POLYISOCYANURATE-FOAM INSULATING SHEATHING: ASTM C1289, TYPE I, CLASS 1 OR CLASS 2, RIGID, CELLULAR, POLYISOCYANURATE THERMAL INSULATION, BONDED TO REINFORCED ALUMINUM FACERS ON BOTH SIDES.

BASIS OF DESIGN: THERMASHEATH FROM RMAX. FLAME SPREAD INDEX AND SMOKE CONTRIBUTION PER ASTM E84:

FLAME: 75 OR LESS.

SMOKE: 450 OR LESS. WATER VAPOR PERMEABILITY PER ASTM E96 DESICCANT METHOD: 0.03 PERM OR LESS.

AIR PERMEABILITY PER ASTM E2178: 0.004 CFM PER SQ FT (1.2192 L PER MIN PER SQ M) OR

COMPRESSIVE STRENGTH PER ASTM D1621: 20 PSI (138 KPA).

25 PSI (172 KPA)

R-VALUE PER ASTM C518: R-6.0 MINIMUM AT THICKNESS OF 1 INCH (25 MM), R-10.0 MINIMUM A THICKNESS OF 1.55 INCHES (39 MM) AND R-13.1 MINIMUM AT THICKNESS OF 2 INCHES (51 MM).

REQUIRED INSULATION THICKNESS AND R-VALUE: AS INDICATED ON THE DRAWINGS.

INSULATION SHALL BE SUITABLE AS CONTINUOUS EXTERIOR WALL INSULATION. EXTERIOR USAGE IN NFPA 285 WALL ASSEMBLIES:

ACCEPTABLE FOR INCLUSION IN NFPA 285 EXTERIOR WALL ASSEMBLIES THAT INCLUDE EXTERIOR GYPSUM SHEATHING.

SECTION 07 25 00 / SOUND ATTENUATION BATTS

1.1 PRODUCTS AS MANUFACTURED BY OWENS CORNING OR JOHNS MANVILLE, BUILDING INSULATION.

SOUND ATTENUATION BATTS: NOISE BARRIER BATTS, TYPE 1, UN-FACED 3-1/2" THICK, 4" THICK OR 6" THICK

TO MATCH WALL STUD WIDTH. 1.3 ACOUSTICAL SEALANT: EQUAL TO USG ACOUSTICAL SEALANT INSTALLATION.

PLACE SEALANT UNDER STUD TRACKS. INSTALL ACOUSTICAL INSULATION IN BETWEEN STUDS. WHERE

STAPLES AND METHOD OF INSTALLATION SHALL BE IN ACCORDANCE

INDICATED ON THE DRAWINGS, PROVIDE LOOSE-LAID SOUND BATTS ABOVE CEILING TILES. LAY BATTS HORIZONTALLY WITH A SNUG FIT. SOUND BATTS SHALL BE PRESSED FIRMLY IN PLACE AGAINST BACK OF GYPSUM BOARD AND STAPLED.

BATTS AND BACK SURFACE OF ONE PARTITION FACE. CONTINUITY OF BATTS SHALL BE MAINTAINED. USE FULL-LENGTH STRIPS WHERE POSSIBLE.

SECTION 07 46 46 / CEMENT PANELS

PART 1 – GENERAL

SECTION INCLUDES

FIBER CEMENT LAP SIDING, PANELS, SHINGLE, TRIM, FASCIA, MOULDING, AND ACCESSORIES; JAMES HARDIE HZ10 ENGINEERED FOR CLIMATE SIDING AND HARDIE ARCHITECTURAL PANELS.

FACTORY-FINISHED FIBER CEMENT LAP SIDING, PANELS, SHINGLE, TRIM, FASCIA, MOULDING, AND ACCESSORIES; JAMES HARDIE HZ10 ENGINEERED FOR CLIMATE SIDING.

RELATED SECTIONS

SECTION 05 40 00 - COLD-FORMED METAL FRAMING SECTION 06 10 00 - ROUGH CARPENTRY. SECTION 06 10 00 - ROUGH CARPENTRY. SECTION 07 21 19 - FOAMED-IN-PLACE INSULATION.

INSTALLATION METHODS.

ASTM D3359 - STANDARD TEST METHOD FOR MEASURING ADHESION BY TAPE TEST, TOOL AND TAPE.

ASTM E136 - STANDARD TEST METHOD FOR BEHAVIOR OF MATERIALS IN A VERTICAL TUBE FURNACE AT 750 DEGREES C.

SUBMITTALS

SUBMIT UNDER PROVISIONS OF SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS. PRODUCT DATA: MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING: PREPARATION INSTRUCTIONS AND RECOMMENDATIONS. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS.

SHOP DRAWINGS: PROVIDE DETAILED DRAWINGS OF ATYPICAL NON-STANDARD APPLICATIONS OF CEMENTITIOUS SIDING MATERIALS WHICH ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS AND SPECIFICATIONS PROVIDED BY THE MANUFACTURER

SELECTION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO COMPLETE SETS OF COLOR CHIPS REPRESENTING MANUFACTURER'S FULL RANGE OF AVAILABLE COLORS AND PATTERNS.

VERIFICATION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO SAMPLES, MINIMUM SIZE 4 BY 6 INCHES (100 BY 150 MM), REPRESENTING ACTUAL PRODUCT, COLOR, AND PATTERNS.

QUALITY ASSURANCE

INSTALLER QUALIFICATIONS: MINIMUM OF 2 YEARS' EXPERIENCE WITH INSTALLATION OF SIMILAR

MOCK-UP: PROVIDE A MOCK-UP FOR EVALUATION OF SURFACE PREPARATION TECHNIQUES AND APPLICATION WORKMANSHIP FINISH AREAS DESIGNATED BY ARCHITECT. DO NOT PROCEED WITH REMAINING WORK UNTIL WORKMANSHIP, COLOR, AND SHEEN ARE APPROVED BY

DELIVERY, STORAGE, AND HANDLING

1.7 STORE PRODUCTS IN MANUFACTURER'S UNOPENED PACKAGING UNTIL READY FOR INSTALLATION.

REMODEL MOCK-UP AREA AS REQUIRED TO PRODUCE ACCEPTABLE WORK.

STORE SIDING ON EDGE OR LAY FLAT ON A SMOOTH LEVEL SURFACE. PROTECT EDGES AND CORNERS FROM CHIPPING. STORE SHEETS UNDER COVER AND KEEP DRY PRIOR TO INSTALLING.

1.9 STORE AND DISPOSE OF SOLVENT-BASED MATERIALS, AND MATERIALS USED WITH SOLVENT-BASED MATERIALS, IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES HAVING JURISDICTION.

1.10 MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, AND VENTILATION) WITHIN LIMITS RECOMMENDED BY MANUFACTURER FOR OPTIMUM RESULTS. DO NOT INSTALL PRODUCTS UNDER ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S ABSOLUTE LIMITS.

1.11 PRODUCT WARRANTY: LIMITED, NON-PRO-RATED PRODUCT WARRANTY. HARDIEPLANK HZ10 LAP SIDING FOR 30 YEARS.

1.12 FINISH WARRANTY: LIMITED PRODUCT WARRANTY AGAINST MANUFACTURING FINISH DEFECTS. WHEN USED FOR ITS INTENDED PURPOSE, PROPERLY INSTALLED AND MAINTAINED ACCORDING TO HARDIE'S PUBLISHED INSTALLATION INSTRUCTIONS, JAMES HARDIE'S COLORPLUS FINISH WITH COLORPLUS TECHNOLOGY, FOR A PERIOD OF 15 YEARS FROM THE DATE OF PURCHASE: WILL NOT PEEL; WILL NOT CRACK; AND WILL NOT CHIP. FINISH WARRANTY INCLUDES THE COVERAGE FOR LABOR AND MATERIAL

1.13 WORKMANSHIP WARRANTY: APPLICATION LIMITED WARRANTY FOR 2 YEARS

PART 2 – PRODUCTS

HARDIEPLANK HZ10 LAP SIDING, HARDIEPANEL HZ10 VERTICAL SIDING, HARDIESOFFIT HZ10 PANELS AND HARDIESHINGLE HZ10 SIDING REQUIREMENT FOR MATERIALS: FIBER-CEMENT SIDING - COMPLIES WITH ASTM C 1186 TYPE A GRADE II. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 136 AS A NONCOMBUSTIBLE MATERIAL

FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED CAL-FIRE, FIRE ENGINEERING DIVISION BUILDING MATERIALS LISTING - WILDLAND URBAN INTERFACE (WUI) LISTED PRODUCT.

ICC-ES EVALUATION REPORTS ESR-2290, ESR-1844, AND ESR-2273 (IBC, IRC, CBC, CRC). CITY OF LOS ANGELES, RESEARCH REPORT NO. 24862. MIAMI DADE COUNTY, -NOTICE OF ACCEPTANCE -20-070.06

US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT MATERIALS RELEASE -1263. CALIFORNIA DSA PA-019. CITY OF NEW YORK M EA 223-93-M.

FLORIDA STATE PRODUCT APPROVAL -FL13192, FL13223, AND FL13265.

TEXAS DEPARTMENT OF INSURANCE PRODUCT EVALUATION EC-23. 2.2 ARTISAN HZ10 LAP SIDING REQUIREMENT FOR MATERIALS: FIBER-CEMENT SIDING - COMPLIES WITH ASTM C 1186 TYPE A GRADE II. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 136 AS A NONCOMBUSTIBLE MATERIAL FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED

ICC-ES EVALUATION REPORT ESR-2290. INTERTEK PRODUCT LISTING. CAL-FIRE, FIRE ENGINEERING DIVISION BUILDING MATERIALS LISTING - WILDLAND URBAN INTERFACE (WUI) LISTED PRODUCT.

FLORIDA STATE PRODUCT APPROVAL FL-13192. MIAMI DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE -20-0730.07 TEXAS DEPARTMENT OF INSURANCE PRODUCT EVALUATION EC-55. MANUFACTURER'S TECHNICAL DATA SHEET.

LAP SIDING: HARDIEPLANK HZ10 LAP AS MANUFACTURED BY JAMES HARDIE BUILDING PRODUCTS, INC.

TYPE: SELECT CEDARMILL 12 INCHES (305 MM) WITH 10-3/4 INCHES (273 MM) EXPOSURE

2.5 TRIM

PRODUCT: BATTEN BOARDS, 2-1/2 INCH (63 MM) WIDTH. PRODUCT: 4/4 BOARDS, 3-1/2 INCH (89 MM) WIDTH. PRODUCT: 4/4 BOARDS, 5-1/2 INCH (140 MM) WIDTH. PRODUCT: 4/4 BOARDS, 7-1/4 INCH (184 MM) WIDTH. PRODUCT: 4/4 BOARDS, 9-1/4 INCH (235 MM) WIDTH. PRODUCT: 4/4 BOARDS, 11-1/4 INCH (286 MM) WIDTH PRODUCT: 4/4 NT3 BOARDS, 3-1/2 INCH (89 MM) WIDTH PRODUCT: 4/4 NT3 BOARDS, 5-1/2 INCH (140 MM) WIDTH. PRODUCT: 4/4 NT3 BOARDS, 7-1/4 INCH (184 MM) WIDTH. PRODUCT: 4/4 NT3 BOARDS, 9-1/4 INCH (235 MM) WIDTH. PRODUCT: 4/4 NT3 BOARDS, 11-1/4 INCH (286 MM) WIDTH. PRODUCT: 5/4 BOARDS, 3-1/2 INCH (89 MM) WIDTH. PRODUCT: 5/4 BOARDS, 5-1/2 INCH (140 MM) WIDTH. PRODUCT: 5/4 BOARDS, 7-1/4 INCH (184 MM) WIDTH. PRODUCT: 5/4 BOARDS, 9-1/4 INCH (235 MM) WIDTH. PRODUCT: 5/4 BOARDS, 11-1/4 INCH (286 MM) WIDTH PRODUCT: 5/4 NT3 BOARDS, 3-1/2 INCH (89 MM) WIDTH PRODUCT: 5/4 NT3 BOARDS, 4-1/2 INCH (114 MM) WIDTH. PRODUCT: 5/4 NT3 BOARDS, 5-1/2 INCH (140 MM) WIDTH. PRODUCT: 5/4 NT3 BOARDS, 7-1/4 INCH (184 MM) WIDTH. PRODUCT: 5/4 NT3 BOARDS, 11-1/4 INCH (286 MM) WIDTH

THICKNESS: 1 INCH (24 MM). FIBER-CEMENT TRIM - COMPLIES WITH ASTM C 1186 TYPE A GRADE II. FIBER-CEMENT TRIM - COMPLIES WITH ASTM E 136 AS A NONCOMBUSTIBLE MATERIAL FIBER-CEMENT TRIM - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED INDEX = 5.

FASTNERS

2.6 WOOD FRAMING FASTENERS: WOOD FRAMING: 4D COMMON CORROSION RESISTANT NAILS.

CORROSION RESISTANT SIDING NAILS.

TEXTURE: WOOD GRAINED.

LENGTH: 12 FEET (3658 MM).

WOOD FRAMING: 6D COMMON CORROSION RESISTANT NAILS. WOOD FRAMING: 8D BOX RING COMMON CORROSION RESISTANT NAILS. WOOD FRAMING: 0.089 INCH (2.2 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 2 INCHES (51 MM) CORROSION RESISTANT SIDING NAILS.

CORROSION RESISTANT SIDING NAILS. WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY 0.222 INCH (5.6 MM) HEAD BY 2-1/2 INCHES (64 MM) CORROSION RESISTANT SIDING NAILS. WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 1-1/2 INCHES (38 MM)

WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY 0.222 INCH (5.6 MM) HEAD BY 2 INCHES (51 MM)

WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY 0.225 INCH (5.7 MM) HEAD BY 1-1/2 INCHES (38 MM) CORROSION RESISTANT SIDING NAILS. WOOD FRAMING: 0.121 INCH (3 MM) SHANK BY 0.371 INCH (9.4 MM) HEAD BY 1-1/4 INCHES (32 MM)

CORROSION RESISTANT ROOFING NAILS. WOOD FRAMING: NO. 11 GAUGE 1-1/4 INCHES (32 MM) CORROSION RESISTANT ROOFING NAILS. WOOD FRAMING: NO. 11 GAUGE 1-1/2 INCHES (38 MM) CORROSION RESISTANT ROOFING NAILS. WOOD FRAMING: NO. 11 GAUGE 1-3/4 INCHES (44 MM) CORROSION RESISTANT ROOFING NAILS. WOOD FRAMING: 16 GAUGE 1-1/2 INCHES (38 MM) STAINLESS FINISH NAILS

MASONRY WALLS: AERICO STUD NAIL, ET&F ASM NO.-144-125, 0.14 INCH (3.6 MM) SHANK BY 0.30

INCH (7.6 MM) HEAD BY 2 INCHES (51 MM) LONG CORROSION RESISTANT NAILS.

2.9 FACTORY PRIMER: PROVIDE FACTORY APPLIED UNIVERSAL PRIMER. PRIMER: FACTORY PRIMED BY JAMES HARDIE TOPCOAT: REFER TO SECTION 09 90 00 - PAINTING AND COATING AND EXTERIOR FINISH SCHEDULE.

2.11 PROCESS FACTORY APPLIED FINISH BY FIBER CEMENT MANUFACTURER IN A CONTROLLED ENVIRONMENT WITHIN THE FIBER CEMENT MANUFACTURER'S OWN FACILITY UTILIZING A MULTI-COAT, HEAT CURED

EACH FINISH COLOR MUST HAVE DOCUMENTED COLOR MATCH TO DELTA E OF 0.5 OR BETTER

BETWEEN PRODUCT LINES, MANUFACTURING LOTS OR PRODUCTION RUNS AS MEASURED BY PHOTOSPECTROMETER AND VERIFIED BY THIRD PARTY. 2.12 PROTECTION: FACTORY APPLIED FINISH PROTECTION SUCH AS PLASTIC LAMINATE THAT IS REMOVED ONCE

2.13 ACCESSORIES: COMPLETE FINISHING SYSTEM INCLUDES PRE-PACKAGED TOUCH-UP KIT PROVIDED BY

FIBER CEMENT MANUFACTURER. PROVIDE QUANTITIES AS RECOMMENDED BY MANUFACTURER. 2.14 FACTORY FINISH COLOR FOR TRIM, SOFFIT AND SIDING COLORS:

FINISH WITHIN ONE MANUFACTURING PROCESS

2.10 FACTORY FINISH: REFER TO EXTERIOR FINISH SCHEDULE.

CHESTNUT BROWN JH80-30.

KHAKI BROWN JH20-30.

TIMBER BARK JH40-30.

WOODSTOCK BROWN JH30-30.

PART 3 - EXECUTION

EXAMINATION

3.1 DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED.

3.2 IF FRAMING PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING. NOMINAL 2 INCH BY 4 INCH (51 M BY 102 MM) WOOD FRAMING SELECTED FOR MINIMAL SHRINKAGE AND

COMPLYING WITH LOCAL BUILDING CODES, INCLUDING THE USE OF WATER-RESISTIVE BARRIERS OR VAPOR BARRIERS WHERE REQUIRED. MINIMUM 1-1/2 INCHES (38 MM) FACE AND STRAIGHT, TRUE, OF UNIFORM DIMENSIONS AND PROPERLY ALIGNED. INSTALL WATER-RESISTIVE BARRIERS AND CLADDINGS TO DRY SURFACES.

REPAIR ANY PUNCTURES OR TEARS IN THE WATER-RESISTIVE BARRIER PRIOR TO THE

HPM. 00 S

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FORT WORTH

TX 76102

STEVEN COX NUMBER A-2023017238

PERMIT SET: 04/12/2024 CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE

OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

JOB SITE AND NOTIFY THE ARCHITECT

OF ANY DIMENSIONAL ERRORS.

PROJECT INFORMATION PROJECT NO: 24-0087 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY: CHECKED BY J. JEFFERY

SPECIFICATIONS

SHEET NUMBER

SHEET TITLE

- 3.4 MINIMUM 20 GAUGE (1 MM) 3-5/8 INCH (92 MM) C-STUD 16 INCHES MAXIMUM ON CENTER OR 16 GAUGE (1.6 MM) 3-5/8 INCHES (92 MM) C-STUD 24 INCHES (610 MM) MAXIMUM ON CENTER METAL FRAMING COMPLYING WITH LOCAL BUILDING CODES, INCLUDING THE USE OF WATER-RESISTIVE BARRIERS AND/OR VAPOR BARRIERS WHERE REQUIRED. MINIMUM 1-1/2 INCHES (38 MM) FACE AND STRAIGHT, TRUE, OF UNIFORM DIMENSIONS AND PROPERLY ALIGNED.
 - A. INSTALL WATER-RESISTIVE BARRIERS AND CLADDINGS TO DRY SURFACES.
 - REPAIR ANY PUNCTURES OR TEARS IN THE WATER-RESISTIVE BARRIER PRIOR TO THE
 - INSTALLATION OF THE SIDING.
 C. PROTECT SIDING FROM OTHER TRADES.

PREPARATION

- 3.5 CLEAN SURFACES THOROUGHLY PRIOR TO INSTALLATION.
- PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.
- 3.7 INSTALL A WATER-RESISTIVE BARRIER IS REQUIRED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.
- 3.8 THE WATER-RESISTIVE BARRIER MUST BE APPROPRIATELY INSTALLED WITH PENETRATION AND JUNCTION FLASHING IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.
- 3.9 INSTALL ENGINEERED FOR CLIMATE HARDIEWRAP WEATHER BARRIER IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.
- 3.10 USE HARDIEWRAP SEAM TAPE AND JOINT AND LAPS.
- 3.11 INSTALL AND HARDIEWRAP FLASHING, HARDIEWRAP FLEX FLASHING.

INSTALLATION - HARDIEPLANK HZ10 LAP SIDING, ARTISAN HZ10 LAP SIDING, AND ARTISAN HZ10 LAP SIDING WITH LOCK JOINT SYSTEM

- 3.12 INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 3.13 STARTING: INSTALL A MINIMUM 1/4 INCH (6 MM) THICK LATH STARTER STRIP AT THE BOTTOM COURSE OF THE WALL. APPLY PLANKS HORIZONTALLY WITH MINIMUM 1-1/4 INCHES (32 MM) WIDE LAPS AT THE TOP. THE BOTTOM EDGE OF THE FIRST PLANK OVERLAPS THE STARTER STRIP.
- 3.14 ALLOW MINIMUM VERTICAL CLEARANCE BETWEEN THE EDGE OF SIDING AND ANY OTHER MATERIAL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 3.15 ALIGN VERTICAL JOINTS OF THE PLANKS OVER FRAMING MEMBERS.
- 3.16 BUTT JOINTS MUST NOT FALL WITHIN 4 INCHES (102 MM) OF A STUD. DO NOT NAIL WITHIN 2 INCHES (51 MM) OF THE END OF PLANKS.
- 3.17 MAINTAIN CLEARANCE BETWEEN SIDING AND ADJACENT FINISHED GRADE.
- 3.18 LOCATE SPLICES AT LEAST ONE STUD CAVITY AWAY FROM WINDOW AND DOOR OPENINGS.
- 3.19 FOR PROPER FASTENER SELECTION AND FASTENING SCHEDULES FOR VARIOUS WIND LOAD REQUIREMENTS AND FRAMING OPTIONS, REFER TO THE TECHNICAL DATA SHEET AT WWW.ASPYREDESIGN.COM.
- 3.20 FACE NAIL TO SHEATHING.
- 3.21 LOCATE SPLICES AT LEAST 12 INCHES (305 MM) AWAY FROM WINDOW AND DOOR OPENINGS.

INSTALLATION - HARDIE ARCHITECTURAL PANELS

- 3.22 INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUC
- 3.23 INSTALL OVER BRACED WOOD, SEE GENERAL FASTENING REQUIREMENTS, IRREGULARITIES IN FRAMING AND SHEATHING CAN MIRROR THROUGH THE FINISHED APPLICATION, CORRECT IRREGULARITIES BEFORE INSTALLING SIDING
- 3.24 A WATER-RESISTIVE BARRIER (WRB) IS REQUIRED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS. THE WATER-RESISTIVE BARRIER MUST BE APPROPRIATELY INSTALLED WITH PENETRATION AND JUNCTION FLASHING IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS. JAMES HARDIE WILL ASSUME NO RESPONSIBILITY FOR WATER INFILTRATION. JAMES HARDIE DOES MANUFACTURE HARDIEWRAP WEATHER BARRIER, A NON-WOVEN NON-PERFORATED HOUSEWRAP, WHIC COMPLIES WITH BUILDING CODE REQUIREMENTS.
- 3.25 WHEN INSTALLING HORIZONTALLY, A WRB WITH MIN. 90 PERCENT DRAINAGE EFFICIENCY SHALL BE USED.
- 3.26 ADJACENT FINISHED GRADE MUST SLOPE AWAY FROM THE BUILDING IN ACCORDANCE WITH LOCAL
- 3.27 DO NOT USE HARDIE ARCHITECTURAL PANELS IN FASCIA OR TRIM APPLICATIONS.
- 3.28 DO NOT INSTALL THAT PRODUCT REMAINS IN CONTACT WITH STANDING WATER
- 3.30 INSTALLED ON FLAT VERTICAL WALL APPLICATIONS ONLY
- 3.31 FOR LARGER PROJECTS WHERE THE SPAN OF THE WALL IS SIGNIFICANT IN LENGTH, THE DESIGNER AND/OR ARCHITECT SHOULD TAKE INTO CONSIDERATION THE COEFFICIENT OF THERMAL EXPANSION AND MOISTURE MOVEMENT OF THE PRODUCT IN THEIR DESIGN. THESE VALUES CAN BE FOUND IN THE TECHNICAL BULLETIN "EXPANSION CHARACTERISTICS OF JAMES HARDIE SIDING PRODUCTS" AT WWW. JAMESHARDIE COM.
- JAMES HARDIE BUILDING PRODUCTS PROVIDES INSTALLATION WIND LOAD INFORMATION FOR BUILDINGS WITH A MAXIMUM MEAN ROOF HEIGHT OF 85 FEET. FOR INFORMATION ON INSTALLATIONS ABOVE 60 FEET,
- 3.33 MINIMUM STANDARD PANEL DESIGN SIZE IS 12 X 16 INCHES (). PANELS MAY BE NOTCHED AND CUT TO SIZE

INSTALLATION - HARDIETRIM HZ10 BOARDS

- 3.34 INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL FLASHING AROUND ALL WALL OPENINGS.
- 3.35 FASTEN THROUGH TRIM INTO STRUCTURAL FRAMING OR CODE COMPLYING SHEATHING. FASTENERS MUST PENETRATE MINIMUM 3/4 INCH (19 MM) OR FULL THICKNESS OF SHEATHING. ADDITIONAL FASTENERS MAY BE REQUIRED TO ENSURE ADEQUATE SECURITY.
- 3.36 PLACE FASTENERS NO CLOSER THAN 3/4 INCH (19 MM) AND NO FURTHER THAN 2 INCHES (51 MM) FROM SIDE EDGE OF TRIM BOARD AND NO CLOSER THAN 1 INCH (25 MM) FROM END. FASTEN MAXIMUM 16 INCHES (406 MM) ON CENTER.
- 3.37 MAINTAIN CLEARANCE BETWEEN TRIM AND ADJACENT FINISHED GRADE.
- 3.38 TRIM INSIDE CORNER WITH A SINGLE BOARD TRIM BOTH SIDE OF CORNER.
- 3.39 OUTSIDE CORNER BOARD ATTACH TRIM ON BOTH SIDES OF CORNER WITH 16 GAGE CORROSION RESISTANT FINISH NAIL 1/2 INCH (13 MM) FROM EDGE SPACED 16 INCHES (406 MM) APART, WEATHER CUT EACH END SPACED MINIMUM 12 INCHES (305 MM) APART.
- 3.40 ALLOW 1/8 INCH GAP BETWEEN TRIM AND SIDING.
- 3.41 SEAL GAP WITH HIGH QUALITY, PAINT-ABLE CAULK.
- 3.42 SHIM FRIEZE BOARD AS REQUIRED TO ALIGN WITH CORNER TRIM.
- 3.43 FASTEN THROUGH OVERLAPPING BOARDS. DO NOT NAIL BETWEEN LAP JOINTS.
- OVERLAY SIDING WITH SINGLE BOARD OF OUTSIDE CORNER BOARD THEN ALIGN SECOND CORNER BOARD TO OUTSIDE EDGE OF FIRST CORNER BOARD. DO NOT FASTEN HARDIETRIM BOARDS TO HARDIETRIM
- 3.45 SHIM FRIEZE BOARD AS REQUIRED TO ALIGN WITH CORNER TRIM.
- 3.46 INSTALL HARDIETRIM FASCIA BOARDS TO RAFTER TAILS OR TO SUB FASCIA.

FINISHING

3.47 FINISH UNPRIMED SIDING WITH A MINIMUM ONE COAT HIGH QUALITY, ALKALI RESISTANT PRIMER AND ONE COAT OF EITHER, 100 PERCENT ACRYLIC OR LATEX OR OIL BASED, EXTERIOR GRADE TOPCOATS OR TWO

- COATS HIGH QUALITY ALKALI RESISTANT 100 PERCENT ACRYLIC OR LATEX, EXTERIOR GRADE TOPCOAT WITHIN 90 DAYS OF INSTALLATION. FOLLOW PAINT MANUFACTURER'S WRITTEN PRODUCT RECOMMENDATION AND WRITTEN APPLICATION INSTRUCTIONS.
- 3.48 FINISH FACTORY PRIMED SIDING WITH A MINIMUM OF ONE COAT OF HIGH QUALITY 100 PERCENT ACRYLIC OR LATEX OR OIL BASED EXTERIOR GRADE PAINT WITHIN 180 DAYS OF INSTALLATION. FOLLOW PAINT MANUFACTURER'S WRITTEN PRODUCT RECOMMENDATION AND WRITTEN APPLICATION INSTRUCTIONS.

PROTECTION

- 3.49 PROTECT INSTALLED PRODUCTS UNTIL COMPLETION OF PROJECT.
- 3.50 TOUCH-UP, REPAIR OR REPLACE DAMAGED PRODUCTS BEFORE SUBSTANTIAL COMPLETION.

SECTION 07 54 23 / THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING

REFERENCES

PART 1 – GENERAL

- 1.1 ROOFING TERMINOLOGY: REFER TO THE FOLLOWING PUBLICATIONS FOR DEFINITIONS OF ROOFING WORK RELATED TERMS IN THIS SECTION:
 - A ASTM D 1079 "STANDARD TERMINOLOGY RELATING TO ROOFING AND WATERPROOFING."

 B GLOSSARY OF NRCA'S "THE NRCA ROOFING AND WATERPROOFING MANUAL."

 C ROOF CONSULTANTS INSTITUTE "GLOSSARY OF BUILDING ENVELOPE TERMS."
- 1.2 SHEET METAL TERMINOLOGY AND TECHNIQUES: SMACNA "ARCHITECTURAL SHEET METAL MANUAL."

DESIGN CRITERIA

- 1.3 GENERAL: INSTALLED ROOFING MEMBRANE SYSTEM SHALL REMAIN WATERTIGHT; AND RESIST SPECIFIED WIND UPLIFT PRESSURES, THERMALLY INDUCED MOVEMENT, AND EXPOSURE TO WEATHER WITHOUT
- 1.4 MATERIAL COMPATIBILITY: ROOFING MATERIALS SHALL BE COMPATIBLE WITH ONE ANOTHER UNDER CONDITIONS OF SERVICE AND APPLICATION REQUIRED, AS DEMONSTRATED BY ROOFING SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
- 1.5 INSTALLER SHALL COMPLY WITH CURRENT CODE REQUIREMENTS BASED ON AUTHORITY HAVING JURISDICTION.
- 1.6 WIND UPLIFT PERFORMANCE: ROOFING SYSTEM SHALL MEET THE INTENT OF SYSTEMS THAT HAVE BEEN SUCCESSFULLY TESTED BY A QUALIFIED TESTING AND INSPECTING AGENCY TO RESIST WIND UPLIFT PRESSURE CALCULATED IN ACCORDANCE WITH ASCE 7.
- 1.7 FMG LISTING: ROOFING MEMBRANE, BASE FLASHINGS, AND COMPONENT MATERIALS SHALL COMPLY WITH REQUIREMENTS IN FMG 4450 AND FMG 4470 AS PART OF A ROOFING SYSTEM AND THAT ARE LISTED IN FMG'S "ROOFNAV" FOR CLASS 1 OR NONCOMBUSTIBLE CONSTRUCTION, AS APPLICABLE. IDENTIFY MATERIALS WITH FMG MARKINGS.
 - A. ROOFING SYSTEM SHALL COMPLY WITH ROOFNAV #:B. FIRE/WINDSTORM CLASSIFICATION: CLASS [1][NC]A-INSERT NUMBER

HAIL RESISTANCE: [MH] [SH][VSH].

- 1.8 FIRE-TEST-RESPONSE CHARACTERISTICS: PROVIDE ROOFING MATERIALS WITH THE FIRE-TEST-RESPONSE CHARACTERISTICS INDICATED AS DETERMINED BY TESTING IDENTICAL PRODUCTS PER TEST METHOD BELOW BY UL, FMG, OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. MATERIALS SHALL BE IDENTIFIED WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AND INSPECTING AGENCY.
 - EXTERIOR FIRE-TEST EXPOSURE: CLASS [A] [B] [C]; UL 790, FOR APPLICATION AND ROOF SLOPES INDICATED.

QUALITY ASSURANCE

- 1.9 INSTALLER QUALIFICATIONS: QUALIFIED FIRM THAT IS APPROVED, AUTHORIZED, OR LICENSED BY ROOFING SYSTEM MANUFACTURER TO INSTALL MANUFACTURER'S PRODUCT AND WHO IS ELIGIBLE TO RECEIVE THE SPECIFIED MANUFACTURER'S GUARANTEE.
- 1.10 MANUFACTURER QUALIFICATIONS: QUALIFIED DOMESTIC U.S. OWNED AND BASED MANUFACTURER THAT HAS [UL LISTING] OR ACCREDITED TESTING AGENCY LISTING FOR ROOFING SYSTEM IDENTICAL TO THAT USED FOR THIS PROJECT.
- 1.11 TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT TESTING AGENCY WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE TESTING INDICATED, AS DOCUMENTED ACCORDING TO ASTM E 329.
 - TEST REPORTS:
 - A. ROOF DRAIN AND LEADER TEST OR SUBMIT PLUMBER'S VERIFICATION.
 B. CORE CUT, IF REQUIRED.
 - C. ROOF DECK FASTENER PULLOUT TEST, IF REQUIRED.

INFRARED THERMOGRAPHY

NUCLEAR BACKSCATTER

- 1.13 MOISTURE SURVEY, IF REQUIRED:

 A. SUBMIT PRIOR TO INSTALLATION, RESULTS OF A NON-DESTRUCTIVE MOISTURE TEST OF ROOF SYSTEM COMPLETED BY APPROVED THIRD PARTY. UTILIZE ONE OF THE APPROVED METHODS:
- 1.14 SOURCE LIMITATIONS: OBTAIN ALL COMPONENTS FROM THE SINGLE SOURCE ROOFING MANUFACTURER GUARANTEEING THE ROOFING SYSTEM. ALL PRODUCTS USED IN THE SYSTEM SHALL BE LABELED BY THE SINGLE SOURCE ROOFING MANUFACTURER ISSUING THE GUARANTEE

DELIVERY, STORAGE, AND HANDLING

- 1.15 DELIVER ROOFING MATERIALS IN ORIGINAL CONTAINERS WITH SEALS UNBROKEN AND LABELED WITH MANUFACTURER'S NAME, PRODUCT BRAND NAME AND TYPE, DATE OF MANUFACTURE, AND DIRECTIONS FOR STORAGE.
- 1.16 STORE LIQUID MATERIALS IN THEIR ORIGINAL UNDAMAGED CONTAINERS IN A CLEAN, DRY, PROTECTED LOCATION AND WITHIN THE TEMPERATURE RANGE REQUIRED BY ROOFING SYSTEM MANUFACTURER.
- 1.17 PROTECT ROOF INSULATION MATERIALS FROM PHYSICAL DAMAGE AND FROM DETERIORATION BY SUNLIGHT, MOISTURE, SOILING, AND OTHER SOURCES. COMPLY WITH INSULATION MANUFACTURER'S WRITTEN INSTRUCTIONS FOR HANDLING, STORING, AND PROTECTING DURING INSTALLATION.
- 1.18 HANDLE AND STORE ROOFING MATERIALS AND PLACE EQUIPMENT IN A MANNER TO AVOID PERMANENT DEFLECTION OF DECK.

PROJECT CONDITIONS

1.19 WEATHER LIMITATIONS: PROCEED WITH INSTALLATION ONLY WHEN CURRENT AND FORECASTED WEATHER CONDITIONS PERMIT ROOFING SYSTEM TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND GUARANTEE REQUIREMENTS.

PART 2 – PRODUCTS

THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE - TPO

- 2.1 FABRIC-REINFORCED THERMOPLASTIC POLYOLEFIN SHEET: ASTM D 6878, UNIFORM, FLEXIBLE SHEET FORMED FROM A THERMOPLASTIC POLYOLEFIN, INTERNALLY FABRIC OR SCRIM REINFORCED. BASIS OF DESIGN: JM TPO
 - A. MEMBRANE THICKNESS: 60MILSB. 3EXPOSED FACE COLOR: [WHITE]
- 2.2 SELF-ADHERED MEMBRANE THICKNESS: 60 MILS (1.52 MM), NOMINAL
 - A. EXPOSED FACE COLOR: WHITE
 B. SERVICEABLE INSTALLATION TEMPERATURE: 20°F (-7°C) AND ABOVE.

AUXILIARY ROOFING MATERIALS - SINGLE PLY

- USE AND COMPATIBLE WITH MEMBRANE ROOFING.

 A. LIQUID-TYPE AUXILIARY MATERIALS SHALL MEET VOC LIMITS OF AUTHORITIES HAVING JURISDICTION.
- SHEET FLASHING: MANUFACTURER'S INTERNALLY REINFORCED OR SCRIM REINFORCED. BASIS OF DESIGN: JIM TPO 60 MIL
- 2.5 SHEET FLASHING (SELF-ADHERED): 60 MIL (1.5 MM) THICK, MANUFACTURER'S INTERNALLY REINFORCED OR

- AND SELF-ADHERING CAPABILITIES IN A WIDE INSTALLATION TEMPERATURE RANGE. BASIS OF DESIGN: JM TPO SA FLASHING MEMBRANE
- BONDING ADHESIVE: MANUFACTURER'S STANDARD [SOLVENT] [WATER]-BASED BONDING ADHESIVE FOR MEMBRANE, AND [SOLVENT] [WATER]-BASED BONDING ADHESIVE FOR BASE FLASHINGS. BASIS OF DESIGN: [JM MEMBRANE BONDING ADHESIVE (TPO&EPDM)] [JM LVOC MEMBRANE ADHESIVE (TPO & EPDM)] [JM TPO WATER BASED MEMBRANE ADHESIVE] [JM TPO 1168 MEMBRANE ADHESIVE] [JM ALL SEASON SPRAYABLE BONDING ADHESIVE]
- FLASHING ADHESIVE: MANUFACTURER'S STANDARD-[SOLVENT] [WATER] BASED BONDING ADHESIVE FOR BASE FLASHINGS. BASIS OF DESIGN: [JM MEMBRANE BONDING ADHESIVE (TPO&EPDM)] [JM LVOC MEMBRANE ADHESIVE (TPO & EPDM)] [JM TPO WATER BASED MEMBRANE ADHESIVE] [JM TPO 1168 MEMBRANE ADHESIVE] [JM ALL SEASON SPRAYABLE BONDING ADHESIVE]
- URETHANE ADHESIVE: MANUFACTURER'S TWO COMPONENT NO VOC URETHANE ADHESIVE FORMULATED TO ADHERE FLEECE-BACKED MEMBRANE TO SUBSTRATE. BASIS OF DESIGN: ROOFING SYSTEMS
- URETHANE ADHESIVE: MANUFACTURER'S SELF-CONTAINED TWO-PART, LOW-RISE FOAM ADHESIVE FORMULATED TO ADHERE FLEECE-BACKED MEMBRANES TO SUBSTRATE. BASIS OF DESIGN: JM TWO-PART LIRETHANE INSULATION ADHESIVE CANISTER
- 2.10 SELF-ADHERED PRIMER: ONE-PART PENETRATING PRIMER SOLUTION TO ENHANCE THE ADHESION OF SELF-ADHERING MEMBRANES. BASIS OF DESIGN: [SA PRIMER] [SA PRIMER LOW VOC]
- 11 ROOFING ASPHALT: ASTM D 312-15, TYPE IV
- 2.12 LIQUID APPLIED FLASHING: MANUFACTURER'S SINGLE PLY LIQUID AND FABRIC REINFORCED FLASHING SYSTEM CREATED WITH A FLEECE POLYESTER SCRIM AND A TWO-COMPONENT POLYURETHANE-BASED LIQUID APPLIED FLASHING MATERIAL, CONSISTING OF A LIQUID RESIN AND A CURING AGENT. BASIS OF DESIGN: IM-SP LIQUID FLASHING RESIN AND JIM-SP LIQUID FLASHING SCRIM
- 2.13 LIQUID APPLIED FLASHING PRIMER: MANUFACTURER'S SINGLE PLY LIQUID FLASHING PRIMER. BASIS OF DESIGN: JM SP LIQUID FLASHING TPO AND PVC PRIMER, JM SP LIQUID FLASHING CONCRETE PRIMER, OR JN SP LIQUID FLASHING METAL AND WOOD PRIMER
- OF DESIGN: [JM 3 –OZ POLYESTER SLIPSHEET] [JM POLYESTER MAT PROTECTION SLIPSHEET]
- BARS, WITH ANCHORS. BASIS OF DESIGN: JM TERMINATION SYSTEMS

 2.16 FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL PLATES MEETING CORROSION-RESISTANCE
- [EXTRA HIGH LOAD FASTENERS AND PLATES] [JM PURLIN FASTENERS] [ALL PURPOSE FASTENERS AND HIGH LOAD PLATES]

 2.17 POLYMER FASTENERS: GLASS-REINFORCED NYLON FASTENERS WITH 1/4" SQUARE DRIVE AND 1" HEAD WITH GALVALUME®*-COATED 2" METAL STRESS PLATES, DESIGNED TO LOCK INTO THE FASTENER HEAD.
- 18 INDUCTION WELDING PLATE: A ROUND SPECIALLY COATED GALVALUME® PLATE WITH A RECESSED CENTER
- BASIS OF DESIGN: JM TPO RHINOPLATES

WALKWAYS AND SAFETY STRIPS

- 2.20 FLEXIBLE WALKWAYS: FACTORY-FORMED, NONPOROUS, HEAVY-DUTY, SLIP-RESISTING, SURFACE-TEXTURED WALKWAY PADS SOURCED FROM MEMBRANE ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: [JM TPO WALKPAD] [JM TPO SAFETY WALKPAD]
- SAFETY STRIPS: MANUFACTURER'S MINIMUM 65 MILS TOTAL THICKNESS, COMPRISE OF 30 MIL YELLOW NON-REINFORCED TPO MEMBRANE LAMINATED TO 35 MIL WHITE CURED SEAMING TAPE. BASIS OF DESIGN: JM SINGLE PLY SAFETY STRIP
 EXPOSED FACE COLOR: YELLOW

COVER BOARD

- POLYISOCYANURATE BOARD: ASTM C 1289, TYPE II, CLASS [1] [2], GRADE [2 (20 PSI)] [3 (25 PSI)], POLYISOCYANURATE BONDED IN-LINE TO [FIBER GLASS REINFORCED] [INORGANIC COATED GLASS] FACER.
- PERLITE BOARD: ASTM C 728, TYPE 3; COMPOSED OF EXPANDED PERLITE, CELLULOSIC FIBERS, BINDERS

 AND WATERPROOFING ACENTS WITH TOP SUPERACE SEAL COATER, PASIS OF DESIGN: BETPORT US POOF
- 2.24 HIGH-DENSITY POLYISOCYANURATE: ASTM C 1289, TYPE II, CLASS 4, GRADE 1, HIGH-DENSITY POLYISOCYANURATE TECHNOLOGY BONDED IN-LINE TO INORGANIC COATED GLASS FACERS WIT GREATER THAN 80 LBS OF COMPRESSIVE STRENGTH. BASIS OF DESIGN: PROTECTOR HD
- GYPSUM BOARD: ASTM C 1177, COATED GLASS-MAT FACER, WATER-RESISTANT GYPSUM SUBSTRATE FOR MECHANICALLY ATTACHED ROOF APPLICATIONS, [1/4 INCH (6 MM)] [1/2 INCH (13 MM)] [5/8 INCH (16 MM)] THICK BLASS OF DESIGN: ESCURDOCK ULTRALIGHT GLASS-MAT ROOF BOARD] [DEXCELL GLASS MAT ROOF BOARD]
- 2.26 GYPSUM BOARD: ASTM C 1177, HEAVY DUTY COATED GLASS-MAT FACER [WITH EONIC PRIMED FACE], WATER-RESISTANT GYPSUM SUBSTRATE FOR ADHERED ROOF APPLICATIONS, [1/4 INCH (6 MM)] [1/2 INCH (MM)] [5/8 INCH (16 MM)] THICK. BASIS OF DESIGN: [DEXCELL FA GLASS MAT ROOF BOARD] [DENS DECK PRIME ROOF BOARD]
- 2.27 GYPSUM FIBER BOARD: ASTM C 1278, NON-FACED, GYPSUM AND CELLULOSE FIBER SUBSTRATE, [1/4 INCH (6 MM)] [3/8 INCH (9.5 MM)] [1/2 INCH (13 MM)] [5/8 INCH (16 MM)] THICK. BASIS OF DESIGN: SECUROCK GYPSUM-FIBER ROOF BOARD

ROOF INSULATION - FLUTE FILLER

- REFERENCED STANDARDS, SELECTED FROM MANUFACTURER'S STANDARD SIZES AND OF THICKNESSES
- 29 POLYISOCYANURATE BOARD INSULATION: ASTM C 1289, TYPE II, CLASS 1, GRADE 2, PRODUCT: ENRGY 3 A. PROVIDE METAL ROOF FLUTE FILLER INSULATION PACKAGE WITH THICKNESS TO FILL FLUTES THE HEIGHT OF THE STANDING SEAM.

ROOF INSULATION

- 2.30 GENERAL: PREFORMED ROOF INSULATION BOARDS THAT COMPLY WITH REQUIREMENTS AND REFERENCED STANDARDS, SELECTED FROM MANUFACTURER'S STANDARD SIZES AND OF THICKNESSES INDICATED.
- 2.31 POLYISOCYANURATE BOARD INSULATION: ASTM C 1289, TYPE II, CLASS [1] [2], GRADE [3 (25 PSI)], BASIS OF DESIGN: ENRGY 3 25 PSI CGF
 A. PROVIDE INSULATION PACKAGE WITH MINIMUM R VALUE: [SEE SHEET G005] [MINIMUM REQUIRED BY
 - APPLICABLE CODE].

 B. PROVIDE INSULATION PACKAGE WITH MINIMUM THICKNESS: [60MIL].
 - C. PROVIDE INSULATION PACKAGE IN MULTIPLE LAYERS.

 D. MINIMUM LONG-TERM THERMAL RESISTANCE (LTTR): 5.7 PER INCH.

TAPERED INSULATION

2.32 TAPERED INSULATION: ASTM C 1289, TYPE II, CLASS [1] [2], GRADE [2 (20 PSI)] [3 (25 PSI)], PROVIDE FACTOR TAPERED INSULATION BOARDS FABRICATED TO SLOPE OF 1/4 INCH PER 12 INCHES (1:48), UNLESS OTHERWISE INDICATED. BASIS OF DESIGN: [TAPERED ENRGY 3] [TAPERED ENRGY 3 25 PSI] [TAPERED

DETERMINED IN ACCORDANCE WITH CAN/ULC S770 AT 75°F (24°C)

INSULATION ACCESSORIES

- 2.33 GENERAL: ROOF INSULATION ACCESSORIES RECOMMENDED BY INSULATION MANUFACTURER FOR INTENDED USE AND COMPATIBLE WITH MEMBRANE ROOFING.
- 2.34 PROVIDE SADDLES, CRICKETS, TAPERED EDGE STRIPS, AND OTHER INSULATIONS SHAPES WHERE

- INDICATED FOR SLOPING TO DRAIN. FABRICATE TO SLOPES INDICATED. BASIS OF DESIGN: TAPERED FESCO
- 2.35 FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL OR PLASTIC PLATES MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED FOR FASTENING ROOF INSULATION TO SUBSTRATE, AND FURNISHED BY ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: [ULTRAFAST FASTENERS AND ULTRAFAST PLATES] [ALL PURPOSE FASTENERS AND ULTRAFAST PLATES] [LITE-DECK FASTENERS AND
- 2.36 POLYMER FASTENERS: GLASS-REINFORCED NYLON FASTENERS WITH 1/4" SQUARE DRIVE AND 1" HEAD WITH GALVALUME®*-COATED 3" METAL STRESS PLATES, DESIGNED TO LOCK INTO THE FASTENER HEAD. FASTENERS DESIGNED FOR FASTENING ROOF INSULATION TO SUBSTRATE AND FURNISHED BY ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: POLYMER AUGER FASTENERS AND PLATES
- 2.37 URETHANE ADHESIVE: MANUFACTURER'S TWO COMPONENT POLYURETHANE ADHESIVE FORMULATED TO ADHERE INSULATION TO SUBSTRATE. BASIS OF DESIGN: [JM TWO-PART URETHANE INSULATION ADHESIVE (UIA)] [JM ONE-STEP FOAMABLE ADHESIVE] [ROOFING SYSTEMS URETHANE ADHESIVE (RSUA)] [JM TWO-PART URETHANE INSULATION ADHESIVE CANISTER]
- 2.38 WOOD NAILER STRIPS: COMPLY WITH REQUIREMENTS IN DIVISION 06 SECTION "MISCELLANEOUS ROUGH CARPENTRY."

VAPOR RETARDER

- 2.39 GLASS-FIBER FELTS: ASTM D 2178, TYPE IV, ASPHALT-IMPREGNATED, GLASS-FIBER FELT. BASIS OF DESIGN: GLASPLY IV.
- 2.40 TORCH APPLIED SBS VAPOR RETARDER: [ASTM D 6163, GRADE S, TYPE I, GLASS-FIBER-REINFORCED] [ASTM D 6164, GRADE S, TYPE I, POLYESTER-REINFORCED], SBS-MODIFIED ASPHALT SHEET; SMOOTH SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED. BASIS OF DESIGN: [DYNAWELD BASE] [DYNABASE HW] [DYNAWELD 180 S].
- 2.41 SELF-ADHERED SBS VAPOR RETARDER: [ASTM D 6163, GRADE S, TYPE I, GLASS-FIBER-REINFORCED], SBS-MODIFIED ASPHALT SHEET; SAND SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED. BASIS OF DESIGN: DYNAGRIP BASE SD/SA.
- 2.42 ASPHALT PRIMER: ASTM D 41. BASIS OF DESIGN: JM ASPHALT PRIMER
- 2.43 SELF-ADHERED SBS VAPOR RETARDER: TRI-LAMINATE WOVEN POLYETHYLENE, NONSLIP UV PROTECTED TOP SURFACE; SUITABLE FOR APPLICATION METHOD SPECIFIED. BASIS OF DESIGN: [JM VAPOR BARRIER SAPI
- 2.44 SELF-ADHERED PRIMER: [ONE-PART] [LOW VOC AEROSOL] PENETRATING PRIMER SOLUTION TO ENHANCE THE ADHESION OF SELF-ADHERING MEMBRANES. BASIS OF DESIGN: [SA PRIMER] [SA PRIMER LOW VOC] [JM
- ALL SEASON SPRAYABLE BONDING ADHESIVE].

 2.45 POLYETHYLENE VAPOR RETARDER: ASTM D 4397, [6 MILS (0.15 MM)] [10 MILS (0.25 MM)] THICK, MINIMUM, WITH MAXIMUM PERMEANCE RATING OF 0.13 PERM (7.5 NG/PA X S X SQ. M).

BASE-SHEET MATERIALS

- 2.46 BASE SHEET: ASTM D 4601, TYPE II NON-PERFORATED, ASPHALT-IMPREGNATED AND -COATED, GLASS-FIBER SHEET, DUSTED WITH FINE MINERAL SURFACING ON BOTH SIDES. BASIS OF DESIGN: [PERMAPLY 28] [GLASBASE PLUS]
- 2.47 BASE SHEET: ASTM D 4897, TYPE II, VENTING, NON-PERFORATED, HEAVYWEIGHT, ASPHALT-IMPREGNATED AND -COATED, GLASS-FIBER BASE SHEET WITH COARSE GRANULAR SURFACING OR EMBOSSED VENTING CHANNELS ON BOTTOM SURFACE. BASIS OF DESIGN: VENTSULATION FELT

2.48 BASE-SHEET FASTENERS: TWIN LEGGED FACTORY-COATED STEEL FASTENERS AND GALVALUME METAL

PLATES MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED FOR FASTENING BASE-

- SHEET TO SUBSTRATE, TESTED BY MANUFACTURER FOR REQUIRED PULLOUT STRENGTH, AND PROVIDED BY THE ROOFING SYSTEM MANUFACTURER. PRODUCT: LIGHTWEIGHT CONCRETE (LWC) BASE SHEET FASTENERS

 2.49 BASE-SHEET FASTENERS: TUBE, DISK AND LOCKING STAPLE DESIGN, FACTORY-COATED STEEL FASTENERS AND GALVALUME METAL BATTENS MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED
- 2.50 BASE SHEET FASTENERS: 32 GAUGE, 1-5/8" DIAMETER TIN CAPS WITH 11-GAUGE ANNULAR RING SHANK

FOR FASTENING BASE-SHEET TO SUBSTRATE, TESTED BY MANUFACTURER FOR REQUIRED PULLOUT

STRENGTH, AND PROVIDED BY THE ROOFING SYSTEM MANUFACTURER. PRODUCT: ULTRALOK LOCKING

SUBSTRATE BOARD

- 2.51 GYPSUM BOARD: ASTM C 1177, COATED GLASS-MAT FACER, WATER-RESISTANT GYPSUM SUBSTRATE FOR MECHANICALLY ATTACHED ROOF APPLICATIONS, [1/4 INCH (6 MM)] [1/2 INCH (13 MM)] [5/8 INCH (16 MM)] THICK. BASIS OF DESIGN: [SECUROCK ULTRALIGHT GLASS-MAT ROOF BOARD] [DEXCELL GLASS MAT ROOF BOARD] [DENS DECK ROOF BOARD]
- 2.52 GYPSUM BOARD: ASTM C 1177, HEAVY DUTY COATED GLASS-MAT FACER, WATER-RESISTANT GYPSUM SUBSTRATE FOR ADHERED ROOF APPLICATIONS, 5/8 INCH (16 MM) THICK. BASIS OF DESIGN: [DEXCELL FA GLASS MAT ROOF BOARD] [DENS DECK PRIME ROOF BOARD]
- 2.53 GYPSUM FIBER BOARD: ASTM C 1278, NON-FACED, GYPSUM AND CELLULOSE FIBER SUBSTRATE, [1/4 INCH (6 MM)] [3/8 INCH (9.5 MM)] [1/2 INCH (13 MM)] [5/8 INCH (16 MM)] THICK. BASIS OF DESIGN: SECUROCK GYPSUM-FIBER ROOF BOARD
- 2.54 HIGH-DENSITY POLYISOCYANURATE: ASTM C 1289, TYPE II, CLASS 4, GRADE 1, HIGH-DENSITY POLYISOCYANURATE TECHNOLOGY BONDED IN-LINE TO INORGANIC COATED GLASS FACERS WITH GREATER THAN 80 LBS OF COMPRESSIVE STRENGTH. BASIS OF DESIGN: PROTECTOR HD 1. THICKNESS: 1/2 INCH (13 MM) 2. R-VALUE: 2.5

DGE METAL COMPONENTS

- 2.55 EXPANSION JOINTS: PROVIDE FACTORY FABRICATED WEATHERPROOF, EXTERIOR COVERS FOR EXPANSION JOINT OPENINGS CONSISTING OF FLEXIBLE RUBBER MEMBRANE, SUPPORTED BY A CLOSED CELL FOAM TO FORM FLEXIBLE BELLOWS, WITH TWO METAL FLANGES, ADHESIVELY AND MECHANICALLY COMBINED TO THE BELLOWS BY A BIFURCATION PROCESS. PROVIDE PRODUCT FROM SINGLE-SOURCE ROOFING SYSTEM SUPPLIED THAT IS INCLUDED IN THE NIO DOLLAR LIMIT GUARANTEE. BASIS OF DESIGN, 15 YEARING, OF LASHI
- 2.56 COPING SYSTEM: MANUFACTURER'S FACTORY FABRICATED COPING CONSISTING OF A BASE PIECE AND A SNAP-ON CAP. PROVIDE PRODUCT FROM SINGLE-SOURCE ROOFING SYSTEM SUPPLIER THAT IS INCLUDE IN THE NO DOLLAR LIMIT GUARANTEE. BASIS OF DESIGN: [PRESTO-LOCK COPING] [PRESTO-LOCK GOLD
- 2.57 FASCIA SYSTEM: MANUFACTURER'S FACTORY FABRICATED FASCIA CONSISTING OF A BASE PIECE AND A SNAP-ON COVER. PROVIDE PRODUCT FROM SINGLE-SOURCE ROOFING SYSTEM SUPPLIER THAT IS INCLUDED IN THE NO DOLLAR LIMIT GUARANTEE. BASIS OF DESIGN: [PRESTO-TITE FASCIA] [PRESTO-TITE EDGE ONE FASCIA]
- A SO METAL ELABULING QUEET, METAL ELAQUING QUEET IS OBSCISION IN DIVISION OF SECTION INCHEST METAL

PART 3 – EXCECUTION

EXAMINATION

3.1 EXAMINE SUBSTRATES, AREAS, AND CONDITIONS FOR COMPLIANCE WITH THE REQUIREMENTS AFFECTING PERFORMANCE OF ROOFING SYSTEM.

GENERAL:

- 3.2 VERIFY THAT ROOF OPENINGS AND PENETRATIONS ARE IN PLACE AND SET AND BRACED AND THAT ROOF DRAINS ARE SECURELY CLAMPED IN PLACE.
- 3.3 VERIFY THAT WOOD CANTS, BLOCKING, CURBS, AND NAILERS ARE SECURELY ANCHORED TO ROOF DECK AT PENETRATIONS AND TERMINATIONS AND THAT NAILERS MATCH THICKNESSES OF INSULATION.

STEEL DECKS:

VERMIT HIM GON MOET EMILE EMINESO AND PHOTENING OF STEEL ROOF DESK GOMEBES WITH



2001 IIPMAN ROAD

> 610 唱

513 MAIN STREET #300 FORT WORTH TX 76102

SEAL

STEVEN COX

NUMBER

A-2023017238

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL
CONDITIONS AND DIMENSIONS AT THE
JOB SITE AND NOTIFY THE ARCHITECT
OF ANY DIMENSIONAL ERRORS,
OMISSIONS OR DISCREPANCIES BEFORE

BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 06/01/2023

SCALE: AS NOTED

J. JEFFERY

CHECKED BY:

DRAWN BY:

SHEET TITLE

SHEET NUMBER

SPECIFICATIONS

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4803

WOOD DECKS:

- 3.10 VERIFY THAT WOOD DECKING IS VISIBLY DRY AND FREE OF MOISTURE.
- VERIFY THAT WOOD HAS ABILITY TO PROVIDE MINIMUM FASTENER PULL-OUT RESISTANCE PROVIDE DOCUMENTATION OF PULL-OUT RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI FX-1 2016.

GYPSUM DECK:

- 3.18 VERIFY THAT GYPSUM IS VISIBLY DRY, FREE OF MOISTURE, AND THAT THERE ARE NO SIGNS OF STAINING.
- 3.19 INSPECT DECK FOR CRACKING AND DEFLECTION OF BULB TEES.
- VERIFY THAT GYPSUM HAS ABILITY TO PROVIDE MINIMUM FASTENER PULL-OUT RESISTANCE. PROVIDE DOCUMENTATION OF PULL-OUT RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI
- 3.21 PROVIDE DOCUMENTATION OF ADHESION RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI 1A-1 2015
- 3.22 ENSURE GENERAL RIGIDITY AND PROPER SLOPE FOR DRAINAGE.
- 3.23 VERIFY THAT DECK IS SECURELY FASTENED WITH NO PROJECTING FASTENERS AND WITH NO ADJACENT UNITS MORE THAN 1/16 INCH (1.6 MM) OUT OF PLANE RELATIVE TO ADJOINING DECK.

UNACCEPTABLE PANELS SHOULD BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND PROJECT

OWNER'S REPRESENTATIVE AND SHALL BE CORRECTED PRIOR TO INSTALLATION OF ROOFING SYSTEM. PREPARATION

- 3.24 CLEAN AND REMOVE FROM SUBSTRATE SHARP PROJECTIONS, DUST, DEBRIS, MOISTURE, AND OTHER SUBSTANCES DETRIMENTAL TO ROOFING INSTALLATION IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
- PREVENT MATERIALS FROM ENTERING AND CLOGGING ROOF DRAINS AND CONDUCTORS AND FROM SPILLING OR MIGRATING ONTO SURFACES OF OTHER CONSTRUCTION.
- 3.26 IF APPLICABLE, PRIME SURFACE OF DECK AT A RATE RECOMMENDED BY ROOFING MANUFACTURER AND ALLOW PRIMER TO DRY.
- 3.27 PROCEED WITH EACH STEP OF INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED

RE-ROOF PREPARATION

- 3.28 REMOVE ALL ROOFING MEMBRANE, SURFACING, COVERBOARDS, INSULATION, FASTENERS, ASPHALT, PITCH, ADHESIVES, ETC.
- REMOVE AN AREA NO LARGER THAN CAN BE RE-ROOFED IN ONE DAY.
- TEAR OUT ALL BASE FLASHINGS. COUNTERFLASHINGS, PITCH PANS, PIPE FLASHINGS, VENTS, SUMPS AND LIKE COMPONENTS NECESSARY FOR APPLICATION OF NEW MEMBRANE
- 3.30 REMOVE ABANDONED EQUIPMENT CURBS, SKYLIGHTS, SMOKE HATCHES, AND PENETRATIONS. INSTALL DECKING TO MATCH EXISTING AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 3.31 RAISE (DISCONNECT BY LICENSED CRAFTSMEN, IF NECESSARY) ALL HVAC UNITS AND OTHER EQUIPMENT
 - SUPPORTED BY CURBS TO CONFORM WITH THE FOLLOWING: MODIFY CURBS AS REQUIRED TO PROVIDE A MINIMUM 8" BASE FLASHING HEIGHT MEASURED FROM
- THE SURFACE OF THE NEW MEMBRANE TO THE TOP OF THE FLASHING MEMBRANE. SECURE OF FLASHING AND INSTALL NEW METAL COUNTERFLASHING PRIOR TO RE-INSTALLATION
- PERIMETER NAILERS SHALL BE ELEVATED TO MATCH ELEVATION OF NEW ROOF INSULATION.
- 3.32 IMMEDIATELY REMOVE ALL DEBRIS FROM ROOF SURFACE. DEMOLISHED ROOF SYSTEM MAY NOT BE STORED ON THE ROOF SURFACE.

RE-COVER PREPARATION

- PREPARE EXISTING ROOF ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS. APPLICABLE RECOMMENDATIONS OF THE ROOFING MANUFACTURER, AND REQUIREMENTS IN THIS
- TEAR OUT ALL BASE FLASHINGS, COUNTERFLASHINGS, PITCH PANS, PIPE FLASHINGS, VENTS, SUMPS AND LIKE COMPONENTS NECESSARY FOR APPLICATION OF NEW MEMBRANE
- 3.35 DISABLE EXISTING ROOF MEMBRANE PER MANUFACTURER'S WRITTEN INSTRUCTION.
- 3.36 REMOVE EXISTING MEMBRANE PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- REMOVE AND REPLACE WET, DETERIORATED OR DAMAGED ROOF INSULATION AND DECKING AS IDENTIFIED IN MOISTURE SURVEY.
- REMOVE ABANDONED EQUIPMENT CURBS, SKYLIGHTS, SMOKE HATCHES, AND PENETRATIONS. INSTALL DECKING TO MATCH EXISTING AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 3.39 RAISE, (DISCONNECT BY LICENSED CRAFTSMEN, IF NECESSARY) ALL HVAC UNITS AND OTHER EQUIPMENT SUPPORTED BY CURBS TO CONFORM WITH THE FOLLOWING: MODIFY CURBS AS REQUIRED TO PROVIDE A MINIMUM 8-INCH BASE FLASHING HEIGHT MEASURED
- SECURE TOP OF FLASHING AND INSTALL NEW METAL COUNTERFLASHING PRIOR TO RE-INSTALLATION OF UNIT.

FROM THE SURFACE OF THE NEW MEMBRANE TO THE TOP OF THE FLASHING MEMBRANE.

- PERIMETER NAILERS SHALL BE ELEVATED TO MATCH ELEVATION OF NEW ROOF INSULATION.
- IMMEDIATELY REMOVE ALL DEBRIS FROM ROOF SURFACE. DEMOLISHED ROOF SYSTEM MAY NOT BE STORED ON THE ROOF SURFACE.
- INSTALL POLYESTER SLIP SHEET AS A LOOSELY LAID SINGLE LAYER BENEATH NEW SINGLE PLY MEMBRANE, SIDE AND END LAPPING EACH SHEET A MINIMUM OF 3 INCHES (76.2 MM) AND 6 INCHES (150 MM), RESPECTIVELY. SHEET MAY BE TACKED INTO PLACE AS DEEMED NECESSARY.

SUBSTRATE BOARD INSTALLATION

3.42 INSTALL SUBSTRATE BOARD WITH LONG JOINTS IN CONTINUOUS STRAIGHT LINES. PERPENDICULAR TO ROOF SLOPES WITH END JOINTS STAGGERED BETWEEN ROWS. TIGHTLY BUTT SUBSTRATE BOARDS

FASTEN SUBSTRATE BOARD TO [TOP FLANGES OF STEEL DECK] [WOOD DECK] TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF PER ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.

BASE-SHEET INSTALLATION

- 3.43 INSTALL ONE LAPPED BASE SHEET COURSE AND MECHANICALLY FASTEN TO SUBSTRATE PER ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - ENHANCE FASTENING RATE IN PERIMETER AND CORNER ZONES PER CODE REQUIREMENTS, WIND UPLIFT SYSTEM APPROVALS OR MANUFACTURER'S GUARANTEE REQUIREMENTS, WHICHEVER IS
- 3.44 COMPLY WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ROOF

VAPOR-RETARDER INSTALLATION

- 3.45 INSTALL POLYETHYLENE-SHEET VAPOR RETARDER AS A LOOSELY LAID SINGLE LAYER OVER AREA TO RECEIVE VAPOR RETARDER, SIDE AND END LAPPING EACH SHEET A MINIMUM OF 2 INCHES (50 MM) AND 6 INCHES (150 MM), RESPECTIVELY. SEAL SIDE AND END LAPS.
- 3.46 INSTALL 2 GLASS-FIBER FELT PLIES LAPPING EACH SHEET 19 INCHES (483 MM) OVER PRECEDING SHEET. EMBED EACH SHEET IN A SOLID MOPPING OF HOT ROOFING ASPHALT PER MANUFACTURER'S WRITTEN
- 3.47 INSTALL MODIFIED BITUMINOUS VAPOR RETARDER SHEET PER ROOFING MANUFACTURER'S WRITTEN INSTRUCTIONS, STARTING AT LOW POINT OF ROOFING SYSTEM. EXTEND ROOFING MEMBRANE SHEETS OVER AND TERMINATE BEYOND CANTS, INSTALLING AS FOLLOWS:
 - UNROLL ROOFING MEMBRANE SHEETS AND ALLOW THEM TO RELAX FOR MINIMUM TIME REQUIRED BY MANUFACTURER. HEAT WELD VAPOR RETARDER TO SUBSTRATE PER ROOFING SYSTEM MANUFACTURER'S WRITTEN
 - INSTRUCTIONS ADHERE VAPOR RETARDER IN A FULL MOPPING OF HOT ASPHALT TO SUBSTRATE PER ROOFING
 - SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS. SELF-ADHERE VAPOR RETARDER TO SUBSTRATE PER ROOFING SYSTEM MANUFACTURER'S
- 3.48 LAPS: ACCURATELY ALIGN ROOFING MEMBRANE SHEETS, WITHOUT STRETCHING, AND MAINTAIN UNIFORM SIDE AND END LAPS. STAGGER END LAPS. COMPLETELY BOND AND SEAL LAPS, LEAVING NO VOIDS. REPAIR TEARS AND VOIDS IN LAPS AND LAPPED SEAMS NOT COMPLETELY SEALED.
- 3.49 COMPLETELY SEAL VAPOR RETARDER AT TERMINATIONS, OBSTRUCTIONS, AND PENETRATIONS TO PREVENT AIR MOVEMENT INTO MEMBRANE ROOFING SYSTEM.

FLUTE FILLER INSULATION INSTALLATION

- 3.50 COORDINATE INSTALLATION OF ROOF SYSTEM COMPONENTS SO INSULATION IS NOT EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT THE END OF THE WORKDAY.
- 3.51 COMPLY WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ROOF
- INSULATION. 3.52 LOOSE LAY POLYISOCYANURATE FLUTE FILLER INSULATION BETWEEN THE METAL ROOF STANDING SEAMS.
- INSULATION INSTALLATION 3.53 COORDINATE INSTALLATION OF ROOF SYSTEM COMPONENTS SO INSULATION AND COVER BOARD ARE NOT
- EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT THE END OF THE WORKDAY.
- 3.54 COMPLY WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLATION OF ROOF INSULATION AND COVER BOARD.
- 3.55 INSTALL TAPERED INSULATION UNDER AREA OF ROOFING TO CONFORM TO SLOPES INDICATED.

INSTRUCTIONS. FILL GAPS EXCEEDING 1/4 INCH (6 MM) WITH LIKE MATERIAL.

- 3.56 INSTALL INSULATION BOARDS WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE. JOINTS SHOULD BE STAGGERED BETWEEN ROWS, ABUTTING EDGES AND ENDS PER MANUFACTURER'S WRITTEN
- 3.57 INSTALL 2 OR MORE LAYERS WITH JOINTS OF EACH SUCCEEDING LAYER STAGGERED FROM JOINTS OF PREVIOUS LAYER A MINIMUM OF 6 INCHES (150 MM) IN EACH DIRECTION.
- 3.58 TRIM SURFACE OF INSULATION BOARDS WHERE NECESSARY AT ROOF DRAINS SO COMPLETED SURFACE IS FLUSH AND DOES NOT RESTRICT FLOW OF WATER.
- 3.59 INSTALL TAPERED EDGE STRIPS AT PERIMETER EDGES OF ROOF THAT DO NOT TERMINATE AT VERTICAL
- 3 60 PRELIMINARILY FASTENED INSULATION IFOR MECHANICALLY FASTENED MEMBRANE SYSTEMS]: INSTALL INSULATION WITH FASTENERS AT RATE REQUIRED BY ROOFING SYSTEM MANUFACTURER. FASTEN TOP LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.
- 3.61 ADHERED INSULATION: ADHERE INSULATION TO SUBSTRATE AS FOLLOWS: INSTALL EACH LAYER IN A TWO-PART URETHANE ADHESIVE ACCORDING TO ROOFING SYSTEM
 - MANUFACTURER'S INSTRUCTION. INSTALL EACH LAYER IN A SOLID MOPPING OF HOT ROOFING ASPHALT ACCORDING TO ROOFING
 - SYSTEM MANUFACTURER'S INSTRUCTION. INSTALL EACH LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.
- 3.62 LOOSE LAID INSULATION WITH TOP INSULATION LAYER MECHANICALLY FASTENED: LOOSE LAY INSULATION WITH STAGGERED JOINTS AND SECURE TOP LAYER OF INSULATION TO DECK USING MECHANICAL FASTENERS DESIGNED AND SIZED FOR FASTENING SPECIFIED BOARD-TYPE TO DECK TYPE.
 - FASTEN TOP LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

3.63 LOOSE LAID INSULATION: LOOSE LAY ALL LAYERS OF INSULATION WITH STAGGERED JOINTS.

- 3.64 MECHANICALLY FASTENED WITH SUBSEQUENT LAYERS ADHERED INSULATION: SECURE FIRST LAYER OF INSULATION TO DECK USING MECHANICAL FASTENERS DESIGNED AND SIZED FOR FASTENING SPECIFIED BOARD-TYPE TO DECK TYPE. FASTEN FIRST LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.
 - INSTALL SUBSEQUENT LAYERS IN A TWO-PART URETHANE ADHESIVE ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION
 - INSTALL SUBSEQUENT LAYERS IN A SOLID MOPPING OF HOT ROOFING ASPHALT ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION.
 - INSTALL EACH LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF. COVER BOARD INSTALLATION
- 3.65 COORDINATE INSTALLING MEMBRANE ROOFING SYSTEM COMPONENTS SO COVER BOARD IS NOT EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT THE END OF THE WORKDAY.
- 3.66 COMPLY WITH MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ROOF COVER BOARD.
- INSTALL COVER BOARD WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE. JOINTS SHOULD BE STAGGERED BETWEEN ROWS, ABUTTING EDGES AND ENDS PER MANUFACTURER'S WRITTEN INSTRUCTIONS. FILL GAPS EXCEEDING 1/4 INCH (6 MM) WITH COVER BOARD.
- CUT AND FIT COVER BOARD WITHIN 1/4 INCH (6 MM) OF NAILERS, PROJECTIONS, AND PENETRATIONS. 3.68 TRIM SURFACE OF COVER BOARD WHERE NECESSARY AT ROOF DRAINS SO COMPLETED SURFACE IS
- INSTALL TAPERED EDGE STRIPS AT PERIMETER EDGES OF ROOF THAT DO NOT TERMINATE AT VERTICAL SURFACES. 3.69 PRELIMINARILY FASTENED COVER BOARD FOR MECHANICALLY FASTENED SYSTEMS: INSTALL COVER
- BOARD WITH FASTENERS AT RATE REQUIRED BY ROOFING SYSTEM MANUFACTURER OR APPLICABLE AUTHORITY, WHICHEVER IS MORE STRINGENT.
- INSTALL IN A TWO-PART URETHANE ADHESIVE ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION INSTALL TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

3.70 ADHERED COVER BOARD: ADHERE COVER BOARD TO SUBSTRATE AS FOLLOWS:

- 3.71 MECHANICALLY FASTENED COVER BOARD: INSTALL COVER BOARD AND SECURE TO DECK USING
- MECHANICAL FASTENERS DESIGNED AND SIZED FOR FASTENING SPECIFIED COVER BOARD TO DECK TYPE. FASTEN TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

ROOFING MEMBRANE INSTALLATION, GENERAL

FLUSH AND DOES NOT RESTRICT FLOW OF WATER.

INSTALL ROOFING MEMBRANE IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE RECOMMENDATIONS OF THE ROOFING MANUFACTURER AND REQUIREMENTS IN THIS SECTION.

- 3.73 COOPERATE WITH TESTING AND INSPECTING AGENCIES ENGAGED OR REQUIRED TO PERFORM SERVICES
- FOR INSTALLING ROOFING SYSTEM. 3.74 COORDINATE INSTALLING ROOFING SYSTEM SO INSULATION AND OTHER COMPONENTS OF THE ROOFING MEMBRANE SYSTEM NOT PERMANENTLY EXPOSED ARE NOT SUBJECTED TO PRECIPITATION OR LEFT
 - UNCOVERED AT THE END OF THE WORKDAY OR WHEN RAIN IS IMMINENT. PROVIDE TIE-OFFS AT END OF EACH DAY'S WORK TO COVER EXPOSED ROOFING MEMBRANE SHEETS AND INSULATION.
 - COMPLETE TERMINATIONS AND BASE FLASHINGS AND PROVIDE TEMPORARY SEALS TO PREVENT WATER FROM ENTERING COMPLETED SECTIONS OF ROOFING SYSTEM.
 - REMOVE AND DISCARD TEMPORARY SEALS BEFORE BEGINNING WORK ON ADJOINING ROOFING.
- 3.75 ASPHALT HEATING: HEAT ROOFING ASPHALT TO TEMPERATURE RECOMMENDED BY ROOFING MANUFACTURER TO FLUX MODIFIED MEMBRANE. DO NOT EXCEED ROOFING ASPHALT MANUFACTURER'S RECOMMENDED TEMPERATURE LIMITS DURING ROOFING ASPHALT HEATING. DISCARD ROOFING ASPHALT MAINTAINED AT A TEMPERATURE EXCEEDING FINISHED BLOWING TEMPERATURE FOR MORE THAN 4
- SUBSTRATE-JOINT PENETRATIONS: PREVENT ROOFING ASPHALT FROM PENETRATING SUBSTRATE JOINTS, ENTERING BUILDING, OR DAMAGING ROOFING SYSTEM COMPONENTS OR ADJACENT BUILDING CONSTRUCTION

ADHERED ROOFING MEMBRANE INSTALLATION

- INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING IN ACCORDANCE WITH MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS. UNROLL ROOFING MEMBRANE AND ALLOW TO RELAX BEFORE INSTALLING.
- 3.78 ACCURATELY ALIGN ROOFING MEMBRANE AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.
- SOLVENT BASED BONDING ADHESIVE FOR SMOOTH BACKED MEMBRANES: APPLY SOLVENT-BASED BONDING ADHESIVE TO SUBSTRATE AND UNDERSIDE OF ROOFING MEMBRANE AT RATE REQUIRED BY MANUFACTURER AND ALLOW TO PARTIALLY DRY BEFORE INSTALLING ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.
- WATER BASED BONDING ADHESIVE FOR SMOOTH BACKED MEMBRANES: APPLY WATER-BASED BONDING ADHESIVE TO SUBSTRATE AT RATE REQUIRED BY MANUFACTURER AND IMMEDIATELY INSTALL ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.
- WATER BASED BONDING ADHESIVE FOR FLEECE BACKED MEMBRANES: APPLY WATER-BASED BONDING ADHESIVE TO SUBSTRATE AT RATE REQUIRED BY MANUFACTURER AND IMMEDIATELY INSTALL ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.
- 3.82 URETHANE MEMBRANE ADHESIVE FOR FLEECE BACKED MEMBRANES: APPLY URETHANE ADHESIVE TO SUBSTRATE AT RATE REQUIRED BY MANUFACTURER AND INSTALL FLEECE-BACKED ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.
- 3.83 ASPHALT FOR FLEECE BACKED MEMBRANES: ADHERE TO SUBSTRATE IN A SOLID MOPPING OF HOT ROOFING ASPHALT APPLIED AT TEMPERATURES RECOMMENDED BY ROOFING SYSTEM MANUFACTURER.
- MECHANICALLY FASTEN ROOFING MEMBRANE SECURELY AT TERMINATIONS, PENETRATIONS, AND PERIMETER OF ROOFING.
- 3.85 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE.
- SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE AND END LAPS OF ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION.
 - TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF ROOFING MEMBRANE VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS
 - REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH INSTALLATION. REPAIR TEARS, VOIDS, AND INCORRECTLY LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT
- SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.

MECHANICALLY FASTENED ROOFING MEMBRANE INSTALLATION

MEET REQUIREMENTS.

- INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
- UNROLL ROOFING MEMBRANE AND ALLOW IT TO RELAX BEFORE INSTALLING. INSTALL SHEET IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN
- 3.89 ACCURATELY ALIGN ROOFING MEMBRANES AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.
- 3.90 MECHANICALLY FASTEN ROOFING MEMBRANE SECURELY AT TERMINATIONS, PENETRATIONS, AND PERIMETER OF ROOFING.
- INSTALLATION METHOD IS NOT PERMITTED.
- 3.92 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE. SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE AND END LAPS OF

ALWAYS INSTALL MEMBRANE LAPS PERPENDICULAR TO THE STEEL DECK FLUTES. "PICTURE FRAME"

- ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL
- CUT EDGES OF ROOFING MEMBRANE. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS

REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH WORK.

- REPAIR TEARS, VOIDS, AND LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT MEET REQUIREMENTS
- SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.
- IN-SPLICE ATTACHMENT: SECURE ONE EDGE OF ROOFING MEMBRANE USING FASTENING PLATES OR METAL BATTENS CENTERED WITHIN MEMBRANE SPLICE AND MECHANICALLY FASTEN ROOFING MEMBRANE TO ROOF DECK. FIELD-SPLICE SEAM.
- 3.96 INSTALL ROOFING MEMBRANE AND AUXILIARY MATERIALS TO TIE INTO EXISTING ROOFING.

INDUCTION WELDED ROOFING MEMBRANE INSTALLATION

INSTALLING.

- INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS. UNROLL ROOFING MEMBRANE AND ALLOW TO RELAX BEFORE
- 3.98 ACCURATELY ALIGN ROOFING MEMBRANES AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.
- 3.99 ALWAYS INSTALL MEMBRANE LAPS PERPENDICULAR TO THE STEEL DECK FLUTES. "PICTURE FRAME" INSTALLATION METHOD IS NOT PERMITTED.
- 3.100 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE.
- 3.101 SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE AND END LAPS OF ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL
 - CUT EDGES OF ROOFING MEMBRANE VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS. REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH WORK.
 - REPAIR TEARS, VOIDS, AND LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT MEET REQUIREMENTS.

3.102 SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL

ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.

CORRECTIVE ACTION.

3.103 INDUCTION WELDING INSTALLATION: PERFORM CALIBRATION AND SET-UP AS DETAILED BY THE INDUCTION WELDER OWNER'S MANUAL CENTER THE INDUCTION WELDER OVER THE FIRST PLATE IN PATTERN AND ACTIVATE THE WELD. INDUCTION WELDER SHALL BE CENTERED OVER THE PLATE TO CREATE A 100% BOND. IF AN ERROR OCCURS DURING ACTIVATION, REFER TO THE INDUCTION WELDER OWNER'S MANUAL FOR

- PRIOR TO EVERY USE, CLEAN FACE OF HEAT SINK MAGNET.
- PLACE HEAT SINK MAGNET OVER THE WELDED PLATE.
- KEEP HEAT SINK MAGNET IN PLACE AT LEAST 45 SECONDS WHILE THE ASSEMBLY COOLS. REPEAT PROCESS FOR EACH PLATE.

SELF-ADHERED ROOFING MEMBRANE INSTALLATION

STANDARD PRACTICES.

INSTRUCTIONS

- 3.104 INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING IN ACCORDANCE WITH MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - UNROLL ROOFING MEMBRANE AND ALLOW TO RELAX BEFORE INSTALLING (MINIMUM 15-30 MINUTES COLDER TEMPERATURES MIGHT REQUIRE LONGER RELAXATION TIMES). INSTALL SHEET IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN
- 3.105 ACCURATELY ALIGN ROOFING MEMBRANE AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER.
- 3.106 ALIGN SHEET END LAPS OF CONSECUTIVE MEMBRANES. THE END LAPS WILL BE STRIPPED IN WITH MINIMUM 8-INCH JM TPO REINFORCED COVER STRIP PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 3.107 SELF-ADHERE MEMBRANE TO APPROVED SUBSTRATE PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- KEEP ALL FLAMMABLE MATERIALS AWAY WHILE PEELING THE RELEASE LINER.
- ADJUST SPEED AND TENSION ON MEMBRANE TO AVOID WINKLES IN THE MATERIAL BROOM MEMBRANE IN ONCE BOTH SIDES ARE DOWN TO PROMOTE ADHESION AND ASSIST IN
- REMOVING AIR POCKETS. ROLL-IN ADHERED MEMBRANE WITH 100LB SPLIT ROLLER COMPLETELY.
- 3.108 MECHANICALLY FASTEN ROOFING MEMBRANE SECURELY AT TERMINATIONS, PENETRATIONS, AND PERIMETER OF ROOFING.
- 3.109 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE.
- 3.110 SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE LAPS OF ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM
 - TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF ROOFING MEMBRANE. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS.
 - REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH INSTALLATION END LAPS ARE SEAMED BY STRIPPING WITH 8-INCH REINFORCED COVER STRIP FOLLOWING
- REPAIR TEARS, VOIDS, AND INCORRECTLY LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT
- 3.111 SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.

3.112 INSTALL ROOFING MEMBRANE AND AUXILIARY MATERIALS TO TIE INTO EXISTING ROOFING.

BASE FLASHING INSTALLATION 3.113 INSTALL SHEET FLASHINGS AND PREFORMED FLASHING ACCESSORIES AND ADHERE TO SUBSTRATES PER

- MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS. 3.114 APPLY SOLVENT-BASED BONDING ADHESIVE AT REQUIRED RATE AND ALLOW TO PARTIALLY DRY. DO NOT APPLY BONDING ADHESIVE TO SEAM AREA OF FLASHING.
- 3.115 APPLY WATER-BASED BONDING ADHESIVE IN TWO-SIDED APPLICATION, AT REQUIRED RATE, AND ALLOW TO PARTIALLY DRY. DO NOT APPLY BONDING ADHESIVE TO SEAM AREA OF FLASHING.
- 3.116 SELF-ADHERE MEMBRANE TO SMOOTH APPROVED SUBSTRATES, WHEN SUBSTRATE TEMPERATURES ARE THE USE OF SA PRIMER OR SA LVOC PRIMER IS REQUIRED FOR FLASHING APPLICATIONS ON CURBS
- THE USE OF SA PRIMER OR SA LVOC PRIMER IS REQUIRED FOR FLASHING APPLICATIONS OVER APPROVED SUBSTRATES WITH A POROUS OR ROUGH SURFACE, INCLUDING: DENS DECK PRIME, DENS DECK, DEXCELL, CONCRETE AND SMOOTH FACES CMU.

AND PARAPET WALLS FOR TEMPERATURES BETWEEN 40°F (4.5°C) AND 20°F (-7°C).

3.117 APPLY SINGLE PLY LIQUID APPLIED FLASHING SYSTEM PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.118 FLASH PENETRATIONS AND FIELD-FORMED INSIDE AND OUTSIDE CORNERS PER MANUFACTURER'S

UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL."

3.119 CLEAN SEAM AREAS AND OVERLAP AND FIRMLY ROLL SHEET FLASHINGS INTO THE ADHESIVE. WELD SIDE AND END LAPS TO ENSURE A WATERTIGHT SEAM INSTALLATION.

3.120 TERMINATE AND SEAL TOP OF SHEET FLASHINGS AND MECHANICALLY ANCHOR TO SUBSTRATE THROUGH

INSTALLATION INSTRUCTIONS.

- EDGE METAL INSTALLATION 3.121 EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH SHEET METAL FLASHING AND TRIM ARE TO BE INSTALLED AND VERIFY THAT WORK MAY PROPERLY COMMENCE. DO NOT PROCEED WITH INSTALLATION
- 3.122 PROVIDE EDGE DETAILS AS INDICATED ON THE DRAWINGS. INSTALL IN ACCORDANCE WITH THE MEMBRANE MANUFACTURER'S REQUIREMENTS AND SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL."
- 3.123 JOIN INDIVIDUAL SECTIONS IN ACCORDANCE WITH THE MEMBRANE MANUFACTURER'S REQUIREMENTS AND

SLIP SHEET INSTALLATION

WALKWAY INSTALLATION

3.124 INSTALL POLYESTER SLIP SHEET AS A LOOSELY LAID SINGLE LAYER ABOVE SINGLE PLY MEMBRANE, PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.125 FLEXIBLE WALKWAYS: INSTALL WALKWAY PRODUCTS IN LOCATIONS INDICATED. HEAT WELD AND ADHERE

WALKWAY PRODUCTS TO SUBSTRATE ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS

3.126 ROOF-PAVER WALKWAYS: INSTALL WALKWAY ROOF PAVERS WITH APPLICABLE SLIP SHEET PER MANUFACTURER'S WRITTEN INSTRUCTIONS IN LOCATIONS INDICATED, TO FORM WALKWAYS.

- FIELD QUALITY CONTROL 3.127 OWNER OR DESIGNATED REPRESENTATIVE WILL PROVIDE ON-SITE OBSERVATION AND INSPECTION DURING
- 3.128 OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM ROOF
- TESTS AND INSPECTIONS AND TO PREPARE TEST REPORTS. 3.129 FINAL ROOF INSPECTION: ARRANGE FOR ROOFING SYSTEM MANUFACTURER'S TECHNICAL REPRESENTATIVE TO INSPECT ROOFING INSTALLATION ON COMPLETION AND SUBMIT REPORT TO
- 3.130 REPAIR OR REMOVE AND REPLACE COMPONENTS OF ROOFING SYSTEM WHERE TEST RESULTS OR INSPECTIONS INDICATE THAT THEY DO NOT COMPLY WITH SPECIFIED REQUIREMENTS.

3.131 ADDITIONAL TESTING AND INSPECTING, AT CONTRACTOR'S EXPENSE, WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.

REQUIREMENTS.

- PROTECTION AND CLEANING
- 3.132 PROTECT ROOFING SYSTEM FROM DAMAGE AND WEAR DURING REMAINDER OF CONSTRUCTION PERIOD. 3.133 CORRECT DEFICIENCIES IN OR REMOVE ROOFING SYSTEM THAT DOES NOT COMPLY WITH REQUIREMENTS, REPAIR SUBSTRATES, AND REPAIR OR REINSTALL ROOFING SYSTEM TO A CONDITION FREE OF DAMAGE AND DETERIORATION AT TIME OF SUBSTANTIAL COMPLETION AND ACCORDING TO WARRANTY
- 3.134 CLEAN OVERSPRAY AND SPILLAGE FROM ADJACENT CONSTRUCTION USING CLEANING AGENTS AND PROCEDURES RECOMMENDED BY MANUFACTURER OF AFFECTED CONSTRUCTION.

END OF SECTION 075423

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PERMIT SET: 04/12/2024 CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE

ISSUE DATE DESCRIPTION

BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS.

PROJECT INFORMATION PROJECT NO: 06/01/2023 ORIGINAL ISSUE: AS NOTED

J. JEFFERY

SCALE:

DRAWN BY:

SHEET TITLE

CHECKED BY

SHEET NUMBER

SPECIFICATIONS

SECTION 07 65 00 / FLASHING

SUBMIT SHOP DRAWINGS COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION DRAWINGS SHALL INDICATE TYPE OF MATERIAL, GAUGE, DIMENSIONS, FASTENING AND ANCHORING METHODS, JOINTS, AND PROVISIONS OF EXPANSION AND CONTRACTION

- 1.1 STANDARDS: QUALITY, PROCEDURES AND METHODS RECOMMENDED BY SMACNA ARCHITECTURAL SHEET METAL MANUAL
- COORDINATE TRADE JURISDICTION WITH RESPECT TO INSTALLING SHEET METAL ITEMS IN CONJUNCTION WITH THE ROOFING. REFER TO MEMBRANE ROOFING SECTION OR ROOFING MATERIAL SECTIONS FOR INSTALLATION PROCEDURES FOR ROOFING RELATED ITEMS.
- 1.3 PROVIDE THE SHEET METAL ITEMS IN SUFFICIENT TIME TO AVOID DELAYS TO THE CONSTRUCTION
- INVESTIGATE THE REQUIREMENTS OF THE ROOFING MANUFACTURER AS RELATED TO SHEET METAL ITEMS. QUALITY AND INSTALLATION SHALL CONFORM TO THE ROOFING MANUFACTURER'S REQUIREMENTS, TO PERMIT THE ISSUANCE OF THE REQUIRED GUARANTEES.
- 1.5 TO BE PAINTED IN FIELD.

MATERIALS

- GALVANIZED SHEET METAL: ASTM A 525, GAUGES AS INDICATED (24-GAUGE MINIMUM). SOLDER: ASTM B 32, 50% TIN AND 50% LEAD, USED WITH ROSIN FLUX.
- 2.2 PLASTIC CEMENT: FS SS C 153, TYPE 1
- SEALANT: ASTM C 920 TYPE M, GRADE NS, CLASS 25, USE NT,M,A,O.
- REGLETS 8 GOUNTERFLASHING: AS MANUFACTURED BY FRY REGLET CORPORATION, TYPE ST, MA, CO, SM.
- SOFFIT LOUVER STRIPS: AS MANUFACTURED BY AMPCOR, ANDERSON METAL PRODUCTS, INC.
- TAYLORSVILLE, MISSISSIPPI, TYPE SAL 8, 2 3/4" WIDTH.
- NAILS, SCREWS, RIVETS: SAME MATERIAL AS FLASHING SHEET, OR AS RECOMMENDED BY MANUFACTURER OF FLASHING SHEET.
- 2.7 CLEATS: METAL AND GAUGE AS SHEETS BEING ANCHORED, 2" WIDE, PUNCHED FOR 2 ANCHORS.
- ROOFING FELT: ASTM D 226, 15 POUND TYPE OR 30 POUND TYPE.
- 2.9 BITUMINOUS COATING: FS TT C 494 OR SSPC PAINT 12, DRY FILM 15 MILS PER COAT.

- SURFACES TO RECEIVE SHEET METAL SHALL BE SOUND, CLEAN, DRY, AND FREE FROM PROJECTIONS OR OTHER DEFECTS THAT WOULD AFFECT THE APPLICATION. REPORT ANY UNSATISFACTORY SURFACES TO
- WHERE DISSIMILAR MATERIALS ABUT, PROVIDE PROPER SEPARATION OR PROTECTION TO MINIMIZE THE POSSIBILITY OF GALVANIC ACTION.
- PROVIDE FOR THERMAL EXPANSION OF RUNNING TRIM, FLASHING, EXPANSION JOINTS, AND OTHER ITEMS EXPOSED FOR MORE THAN 15 FEET CONTINUOUS LENGTH. MAINTAIN A WATERTIGHT INSTALLATION AT EXPANSION SEAMS. LOCATE EXPANSION SEAMS AS SHOWN, OR IF NOT SHOWN, AT THE FOLLOWING MAXIMUM SPACING FOR EACH GENERAL FLASHING USE:
- FLASHING, EXPANSION JOINTS, GRAVEL STOPS, AND TRIM: AT 10 FOOT INTERVALS, AND 24" ON EACH SIDE OF GORNERS AND INTERSECTIONS.
- 3.5 SEALANT TYPE EXPANSION JOINTS: WHERE SEALANT FILLED EXPANSION JOINTS ARE USED, EMBED THE HOOKED FLANGES OF THE JOINT MEMBERS NOT LESS THAN 1" INTO THE SEALANT. FORM JOINTS TO COMPLETELY CONCEAL THE SEALANT. WHEN AMBIENT TEMPERATURE IS MODERATE AT THE TIME OF INSTALLATION (400 TO TOO F.), SET JOINT MEMBERS FOR 50% MOVEMENT EITHER WAY. ADJUST SETTING PROPORTIONATELY FOR INSTALLATION AT HIGHER AMBIENT TEMPERATURES. DO NOT INSTALL SEALANT TYPE JOINTS AT TEMPERATURES BELOW 400 F. INSTALLATION OF SEALANT IS SPECIFIED IN SECTION 07900.
- FABRICATE AND INSTALL SHEET METAL WITH LINES, ARISE, AND ANGLES SHARP AND TRIM, AND PLANE SURFACES FREE FROM OBJECTIONAL WAVE, WARP OR BUCKLE. HEM EXPOSED EDGES TO FORM A 1/2" WIDE HEM ON THE SIDE CONCEALED FROM VIEW.
- FORMING, ANGHORING, EXPANSION AND CONTRACTION DETAILS, SHALL CONFORM TO THE GURRENT EDITION OF THE SMACNA MANUAL.

- 4.1 EXGEPT WHERE OTHER METHODS OF JOINING ARE INDICATED OR SPECIFIED, SOLDER JOINTS, AND CONNECTIONS OF SHEET METAL WORK
- 4.2 REMOVE GREASE AND DIRT FROM METAL SURFACES TO BE JOINED.
- REMOVE FLUX RESIDUE BY SCRUBBING, NEUTRALIZING WITH AMMONIA OR A 5 10% SOLUTION OF WASHING SODA AND FOLLOWED BY A GLEAR WATER RINSE.
- ASSEMBLE PARTS AND SOLDER USING REGULAR NON-CORROSIVE ROSIN FLUX. HEAT METAL THOROUGHLY. TO COMPLETELY SWEAT SOLDER THROUGH FULL CONTACT AREA.

REGLETS

5.1 PROVIDE WATERTIGHT REGLETS IN MASONRY, CONCRETE OR STUCCO TO REGEIVE CAP FLASHINGS.

COUNTERFLASHING

- 6.1 PROVIDE METAL COUNTERFLASHING AT TOP EDGES OF BUILT-UP BASE FLASHINGS AND AT OTHER
- FORM FLASHING IN 8 OR 10 FOOT LENGTHS, EXCEPT WHERE SHORTER PIECES ARE REQUIRED; LAP END JOINTS A MINIMUM OF 3". DO NOT SOLDER OR WELD JOINTS. MAKE FLASHING CONTINUOUS AT ANGLES. COUNTERFLASHING SHALL OVERLAP BASE FLASHING A MINIMUM OF 4", UNLESS OTHERWISE INDICATED.
- WHERE COUNTERF LASHING TERMINATES IN REGLETS, FASTEN FLASHING WITH LEAD WEDGES EVERY 12". FILL REGL ETS CONTINUOUSLY WITH SEALING COMPOUND AS HEREINBEFORE SPECIFIED.WH ERE PREFABRICATED COUNTERF LASHING AND REGLET SYSTEM IS USED, FORM THE UPPER EDGE OF COUNTERFLASHING WITH AN APPROVED SNAP LOCK FLANGE TO ENGAGE THE REGLET RECEIVER AND TO PROVIDE A SPRING ACTION AT BOTTOM EDGE AGAINST THE BUILT-UP FLASHING.

COPINGS AND METAL CAP FLASHING

- 7.1 COVER TOP OF PARAPET WALLS WHERE INDICATED WITH 24 GAUGE GALVANIZED METAL COPING FORMED TO DESIGN SHOWN. BEFORE APPLYING METAL, COVER TOP OF WALL OR WOOD BLOCKING WITH ASPHALT FELT. FABRICATE THE CROSS-JOINTS BETWEEN COPING SHEETS WITH A 3/16" EXPANSION JOINT BETWEEN SHEETS AND A 6" WIDE BACK UP PLATE OR COVER PLATE FORMED TO PROFILE OF COPING. FILL SPACE BETWEEN COPING AND PLATES WITH SYNTHETIC RUBBER SEALANT. THE METHOD OF FORMING CROSS-JOINTS IN COPING SHALL BE IN ACCORDANCE WITH DETAILS ON PLATE 76, CHART 12, J2, J4, J5 OF THE SMACNA ARCHITECTURAL SHEET METAL MANUAL.
- EXTEND FRONT EDGE OF COPING COVERING DOWN OVER THE LOCK INTO A PREVIOUSLY PLACED CONTINUOUS EDGE STRIP. SECURE EDGE STRIPS WITH NAILS SPACED 12" APART. JOIN REAR EDGE OF GOPING COVERING TO ADJACENT FLASHINGS AS INDICATED. MITER CORNERS OF COPING, SEAM AND SEAL WITH SOLDER.

SECTION 07 72 00 / ROOF ACCESSORIES

- 1.1 SPECIFICATION IS BASED ON PRODUCTS MANUFACTURED BY ROOF PRODUCTS, INC.
- COMPARABLE PRODUCTS MEETING OR EXCEEDING SPECIFICATION REQUIREMENTS AS MANUFACTURED BY THYBAR CORP OR ROOF PRODUCTS AND SYSTEMS CORP, ARE ACCEPTABLE.

ROOF CURBS (STRUCTURAL)

- CURBS SHALL BE MODEL RPC-1 OF BOX SE ATION DESIGN, 18-GAUGE GALVANIZED STEEL CONSTRUCTION, CONTINUOUS MITERED AND WELDED CORNER SEAMS, INTEGRAL BASE PLATE, FACTORY INSTALLED WOOD NAILER, INSULATED WITH 1 1/2" THICK RIGID FIBERGLASS BOARD INSULATION. EQUIPMENT SUPPORTS.
- EQUIPMENT SUPPORTS SHALL BE MODEL RPES-1 OF MONOLITHIC CONSTRUCTION, 18-GAUG E GALVANIZED STEEL, CONTINUOUS MITERED AND WELDED CORNER SEAMS, INTEGRAL BASE PLATE, AND FACTORY INSTALLED 2 X 4 WOOD NAILER, AND 18-GAUGE GALVANIZED STEEL COUNTER FLASHING.

EXPANSION JOINT CURBS (SINGLE SIDE)

CURBS SHALL BE MODEL RPEJ-1 10" HIGH, MONOLITHIC CONSTRUCTED OF 20-GAUGE GALVANIZED STEEL 3.1 WITH WELDED COMPONENTS, FULL MITERED CORNERS, FACTORY INSTALLED 1/2" THICK RIGID FIBERGLASS BOARD INSULATION, ATTACH ED PRESSURE-TREATED WOOD 2X2 NAILER AND 2" MOUNTING FLANGE.

PIPE SEAL

PIPE SEALS SHALL BE 3" OR 6" CONSISTING OF A SPUN ALUMINUM BASE HAVING A MINIMUM 5" ROOF SURFAGE FLANGE, A STEPPED PVC BOOT TO BE SECURED TO THE BASE AND THE PIPE WITH ADJUSTABLE STAINLESS-STEEL CLAMPS AS FURNISHED. USE AT ROOF PIPE PENETRATIONS UP TO 6" OD, EXCEPT

PIPE CURB ASSEMBLIES (VERTICAL)

PIPE CURB ASSEMBLIES SHALL BE MODEL RPVP-3 WITH CURB CONSTRUGTED OF 18-GAUGE GALVANIZED STEEL WITH CONTINUOUS WELDED CORNER SEAMS, FACTORY INSTALLED 2X2 PRESSURE-TREATED WOOD NAILER AND SHALL BE INSULATED WITH 1 1/2" THICK RIGID FIBERGLASS BOARD INSULATION. COUNTER FLASHING CAP SHALL BE 20-GAUGE GALVANIZED STEEL INCLUDING GRADUATED STEP PVC BOOTS, ADJUSTABLE STAINLESS STEEL CLAM PS AND CAP FASTENING SCREWS. EACH ASSEMBLY TO INCLUDE CURB, CAP, BOOTS AND CLAMP.

SECTION 07 92 00 / JOINT SEALANTS

GUARANTEE

1.1 CAULKING AND SEALANT SHALL RECEIVE A WRITTEN 5 YEAR GUARANTEE.

JOB CONDITIONS

2.1 DO NOT APPLY SEALANTS IN TEMPERATURES OR ON MATERIALS BELOW 40° F. DO NOT APPLY SEALANTS TO SURFACES THAT ARE WET. CAULK JOINTS BEFORE FINAL COAT OF PAINT OR BEFORE APPLICATION OF COLOR OR STAIN WATERPROOFING COMPOUNDS.

- SEALANT SHALL BE SILICONE BASE CONFORMING TO FS TT S 001543, TYPE II, AND CLASS A, AS MANUFACTURED BY DOW CORNING CORPORATION OR GENERAL ELECTRIC COMPANY. COLOR OF SEALANT SHALL BE AS SELECTED. SEALANTS SHALL CONFORM TO THE FOLLOWING: TRAFFIC JOINTS AND HORIZONTAL JOINTS: ASTM TYPE S GRADE P, CLASS 25, USE T
- 3.2 OTHER JOINTS: ASTM TYPE S, GRADE NS, CLASS 25, USE NT, M, A, O
- 3.3 SEALANT SHALL BE ACRYLIC LATEX BASE CONFORMING TO ASTM C834. COLORS SHALL BE AS SELECTED
- 3.4 SEALANTS USED ON EXTERIOR OF PROJECT ARE TO BE SINGLE COMPONENT POLYURETHANE BASE, INCLUDING INSIDE SURFACE OF EXTERIOR JOINTS.
- 3.5 SEALANTS USED ON INTERIOR OF PROJECT ARE TO BE ACRYLIC LATEX BASE.
- SEALANTS IN FOOD SERVICE, FOOD PREPARATION AND FOOD STORAGE AREAS ARE TO BE SILICONE OR POLYURETHANE BASE.
- PRIMER: OF A TYPE COMPATIBLE WITH EACH SPECIFIC SEALANT AS RECOMMENDED BY THE SEALANT MANUFACTURER. THE PRIMER SHALL HAVE BEEN TESTED FOR NON-STAINING CHARACTERISTICS.
- BACK UP MATERIALS AND PREFORMED JOINT FILLERS SHALL BE NON-STAINING, COMPATIBLE WITH SEALANT AND PRIMER, AND OF A RESILIENT NATURE, SUCH AS CLOSED CELL POLYETHYLENE ROD, GLOSED CELL URETHANE OR NEOPRENE ROD, OR ELASTOMERIC TUBING OR ROD (NEOPRENE, BUTYL, OR EPDM). MATERIALS IMPREGNATED WITH OIL, BITUMEN OR SIMILAR MATERIALS SHALL NOT BE USED. SIZE AND SHAPE SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER. SEALANT SHALL NOT ADHERE TO BACK
- BOND BREAKERS (WHERE REQUIRED:) SHALL BE POLYETHYLENE TAPE AS RECOMMENDED BY MANUFACTURER OF SEALANT.
- 3.10 SOLVENTS, CLEANING AGENTS AND ACCESSORY MATERIALS SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER.

APPLY SEALANT UNDER PRESSURE WITH HAND OR POWER ACTUATED GUN. GUN SHALL HAVE NOZZLE OF PROPER SIZE AND PROVIDE SUFFICIENT PRESSURE TO COMPLETELY FILL JOINTS AS DESIGNED. JOINT SURFACES SHALL BE TOOLED TO PROVIDE THE CONTOUR AS INDICATED.

PREPARATION:

- THOROUGHLY CLEAN JOINTS, REMOVING FOREIGN MATTER SUCH AS DUST, OIL, GREASE, WATER, SURFACE DIRT AND FROST. SEALANT MUST BE APPLIED TO THE BASE SURFACE. PREVIOUSLY APPLIED PAINT OR PRIMER MUST BE ENTIRELY REMOVED.
- POROUS MATERIALS SUCH AS CONCRETE OR MASONRY SHALL BE CLEANED WHERE NECESSARY BY GRINDING, BLAST CLEANING, MECHANICAL ABRADING, ACID WASHING OR COMBINATION OF THESE METHODS TO PROVIDE A CLEAN, SOUND BASE SURFACE FOR SEALANT ADHESION. LAITANCE SHALL BE REMOVED BY ACID WASHING, GRINDING OR MECHANICAL ABRADING. FORM OILS SHALL BE REMOVED BY BLAST GLEANING.
- LOOSE PARTICLES PRESENT OR RESULTING FROM GRINDING, ABRADING OR BLAST CLEANING SHALL BE REMOVED BY BLOWING OUT JOINTS WITH OIL FREE COMPRESSED AIR OR VACUUMING PRIOR TO APPLICATION OF PRIMER OR SEALANT.
- NON-POROUS SURFAGES. SUCH AS METAL AND GLASS. SHALL BE CLEANED EITHER MECHANICALLY OR CHEMICALLY. PROTECTIVE COATINGS ON METALLIC SURFACES SHALL BE REMOVED BY A SOLVENT THAT LEAVES NO RESIDUE. SOLVENT SHALL BE USED WITH CLEAN CLOTHS. DO NOT ALLOW SOLVENT TO AIR DRY
- 5.5 FOR JOINTS IN CONCRETE OR MASONRY: DEPTH OF THE SEALANT MAY BE EOUAL TO THE WIDTH IN JOINTS UP TO 1/4" WIDE. FOR JOINTS 1/2" TO 1" WIDE: DEPTH SHALL BE 1/2". FOR EXPANSION AND OTHER JOINTS 1" TO 2" WIDE, DEPTH SHALL NOT BE GREATER THAN 1/2 THE APPLIED SEALANT WIDTH. FOR JOINTS EXCEEDING 2" IN WIDTH, DEPTH SHALL BE AS DIRECTED BY SEALANT MANUFACTURER.
- FOR JOINTS IN METAL, GLASS, AND OTHER NON-POROUS SURFACES: SEALANT DEPTH SHALL BE A MINIMUM OF 1/2 THE APPLIED SEALANT WIDTH AND SHALL NOT EXCEED THE SEALANT WIDTH
- JOINTS TO RECEIVE SEALANT, BACK UP MATERIAL OR PRE-FORMED JOINT FILLER SHALL BE CLEANED, RAKED TO FULL WIDTH AND DEPTH AS REQUIRED. JOINTS SHALL BE OF SUFFICIENT WIDTH AND DEPTH TO ACCOMMODATE SPECIFIED BACK UP MATERIAL OR PREFORMED JOINT FILLER AND SEALANT.
- APPLICATION: INSTALL BACK UP MATERIAL OR JOINT FILLER, OF TYPE AND SIZE SPECIFIED, AT PROPER DEPTH TO PROVIDE SEALANT DIMENSIONS. BACK UP MATERIAL SHALL BE OF SUITABLE SIZE AND SHAPE: AND COMPRESSED 25% TO 50% TO FIT JOINTS AS REQUIRED. SEALANT SHALL NOT BE APPLIED WITHOUT BACK UP MATERIAL OR BOND BREAKER STRIP. WHEN USING BACK UP TUBE AVOID LENGTHWISE
- 5.9 APPLY MASKING TAPE, WHERE REQUIRED, IN CONTINUOUS STRIPS IN ALIGNMENT WITH JOINT EDGE.
- 5.10 PRIME SURFACES WITH PRIMER WHERE RECOMMENDED BY MANUFACTURER. FOLLOW MANUFACTURER'S INSTRUCTIONS REGARDING MIXING, SURFACE PREPARATION, PRIMING, APPLICATION LIFE, AND APPLICATION PROCEDURE.
- CLEAN ADJACENT SURFACES OF SEALANT AS WORK PROGRESSES. USE SOLVENT OR CLEANING AGENT AS RECOMMENDED BY MANUFACTURER.

SCHEDULE

- PROVIDE CAULKING AT FOLLOWING LOCATIONS INTERIOR AND EXTERIOR: (THIS SGHEDULE IS NOT TO BE CONSTRUED TO BE COMPLETE. PROVIDE CAULKING AT OTHER AREAS AS REQUIRED.) CONTROL JOINTS IN MASONRY AND CONCRETE SURFACES.
 - PERIMETER OF WINDOW AND DOOR FRAMES. PERIMETER OF LOUVERS AND GRILLES.

WHERE THE JOINT WIDTH EXCEEDS 1/16".

- PERIMETER OF ALUMINUM SECTIONS AND BELOW SILL MEMBERS. TOP EDGE OF REGLET AND COUNTER FLASHING ASSEMBLIES.
- TOP OF EDGE OF ELASTOMERIC FLOOR FINISH AND CONCRETE CURBS. AT INTERIOR PARTITIONS BAULKING IS REQUIRED AT JOINTS BETWEEN DISSIMILAR MATERIALS

SANITARY CAULKING

7.1 TYPICAL JOINTS TO BE CAULKED ARE AS FOLLOWS: JUNCTURE OF WALL PANELS WITH FLOOR OR BASE:

- JUNCTURE OF EXHAUST HOODS WITH WALLS; JUNCTURE OF DOOR JAMBS OR JAMB COVERS WITH WALLS; JUNCTURE OF FIXTURE AND EQUIPMENT BASES AND LEGS WITH FLOOR AND WALL; JUNCTURE OF CONCRETE CURBS TO WALLS; AROUND PLUMBING FIXTURES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ACCEPTANCE OF CAULKING UNDER THIS DIVISION BY THE HEALTH DEPARTMENT.

SECTION 08 71 00 / DOOR HARDWARE

PART 1 GENERAL

SECTION INCLUDES: HARDWARE AND RELATED ITEMS FOR INTERIOR AND EXTERIOR DOORS, OTHER THAN SPECIFIED IN SPECIFIC DOOR SECTIONS.

SYSTEM DESCRIPTION

- PERFORMANCE REQUIREMENTS: THE MANUFACTURER OR AUTHORIZED DISTRIBUTOR SHALL CONFIRM THAT THERE IS AN ESTABLISHED LOCAL AGENCY WHICH STOCKS A FULL COMPLEMENT OF PARTS AND OFFERS SERVICE DURING NORMAL WORKING HOURS FOR THE FINISH HARDWARE TO BE FURNISHED AND THAT THE AGENCY WILL SUPPLY PARTS WITHOUT DELAY AND AT REASONABLE COST.
- FURNISH HARDWARE ITEMS OF PROPER DESIGN FOR USE IN DOORS AND FRAMES OF THE THICKNESSES, PROFILE, SECURITY AND SIMILAR REQUIREMENTS INDICATED, AS NECESSARY FOR PROPER INSTALLATION AND FUNCTION, REGARDLESS OF OMISSIONS OR CONFLICTS IN THE INFORMATION IN THE CONTRACT DOCUMENTS.

SUBMITTALS

- SUBMIT SHOP DRAWINGS AND PRODUCT DATA OF EACH TYPE OF HARDWARE REQUIRED FOR PROJECT, IN ACCORDANCE WITH SECTION 01 33 00. INDICATE THE FOLLOWING: STYLE AND FINISH.
 - LOCATIONS AND MOUNTING HEIGHTS OF EACH ITEM OF HARDWARE. USE ESTABLISHED NUMBERING
- INCLUDE A COMPLETE LISTING OF EQUIPMENT AND MATERIALS INCLUDING MANUFACTURER CATALOG NUMBER, FINISH, DIAGRAMS, (INCLUDING CUT-SHEETS), SCHEMATICS AND ALL OTHER PERTINENT DATA.
- TEMPLATES: SUPPLY TO DOOR AND FRAME MANUFACTURER(S) TO ENABLE PROPER AND ACCURATE SIZING AND LOCATIONS OF CUTOUTS FOR HARDWARE.

- AT THE COMPLETION OF INSTALLATION, CERTIFY THAT MATERIAL IS PROPERLY INSTALLED ACCORDING TO MANUFACTURERS PRINTED INSTRUCTIONS.
- SUBMIT CERTIFICATION THAT HARDWARE FOR FIRE RATED DOORS (INCLUDING DOORS AND FRAMES AS A UNIT) WILL COMPLY WITH UL 10C (POSITIVE PRESSURE TESTING.
- OPERATING AND MAINTENANCE DATA: SUBMIT IN ACCORDANCE WITH SECTION 01 77 00. PROVIDE OWNER WITH MANUFACTURER'S PARTS LIST AND MAINTENANCE INSTRUCTIONS FOR EACH TYPE OF HARDWARE SUPPLIED AND NECESSARY WRENCHES AND TOOLS REQUIRED FOR PROPER MAINTENANCE OF HARDWARE.

QUALITY ASSURANCE

- STANDARDS: COMPLY WITH THE FOLLOWING: ANSI/NFPA 80 - FIRE DOORS AND WINDOWS. UL STANDARD 305 - PANIC HARDWARE.
- REGULATORY REQUIREMENTS:
 - COMPLY WITH THE FOLLOWING:
 - ANSI A117.1, 2003 "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES." PUBLIC LAW 101-336 "THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA).
 - ADA ACCESSIBILITY GUIDELINES (ADAAG)
 - THE ARIZONANS WITH DISABILITIES ACT OF 1992 ADMINISTRATIVE RULES (AZDAAG)
- 1.10 HARDWARE LISTED OR FURNISHED SHALL MEET REQUIREMENTS OF FEDERAL, STATE AND LOCAL CODES HAVING JURISDICTION.
- 1.11 ANY ITEM FURNISHED OR INSTALLED THAT DOES NOT MEET CODE REQUIREMENTS SHALL BE REMOVED AND PROPER ITEMS SUBSTITUTED AT NO ADDITIONAL COST OR EXPENSE TO THE OWNER.
- PROVIDE HARDWARE FOR FIRE-RATED OPENINGS IN COMPLIANCE WITH A.I.A. (NBFU) PAMPHLET NO. 80 AND NFPA STANDARDS NO. 80 AND NO. 101 AND UL 10(C) (POSITIVE PRESSURE TESTING). THIS REQUIREMENT SHALL TAKE PRECEDENCE OVER OTHER REQUIREMENTS FOR SUCH HARDWARE.
- 1.13 PROVIDE HARDWARE WHICH HAS BEEN TESTED AND LISTED BY U.L. FOR THE TYPES AND SIZES OF DOORS
- 1.14 PROVIDE 3-POINT LATCHES AT ALUMINUM DOUBLE DOORS USED AS ENTRANCE, NOT EGRESS EXIT.
- 1.15 HARDWARE ON ALL DOORS LEADING TO OR FROM ELECTRICAL ROOMS, MECHANICAL ROOMS, SERVICE STAIRS, DOCK AREAS AND THE LIKE WHICH REPRESENT A HAZARD TO THE BLIND, SHALL HAVE KNURLING OR ABRASIVE COATING ON THE DOOR LEVER, HANDLE, OR BAR WHICH WILL ALERT THE USER TO POTENTIAL PERILS PRESENT. THE HARDWARE PRODUCT AND INSTALLATION SHALL SATISFY ALL GOVERNING HANDICAPPED CODES.
- 1.16 SUPPLIER QUALIFICATIONS:
 - EMPLOY AN AHC MEMBER OF THE DHI.
 - FACTORY AUTHORIZED STOCKING DISTRIBUTOR OF THE APPROVED ITEMS. HOLDER OF LEGALLY REQUIRED LICENSES.
- 1.17 MANUFACTURER QUALIFICATIONS: 5 YEARS' EXPERIENCE IN MANUFACTURE OF COMPARABLE SYSTEMS. DELIVERY, STORAGE AND HANDLING
- 1.18 PACKING AND SHIPPING: PACKAGE EACH ITEM OF HARDWARE IN ORIGINAL AND INDIVIDUAL CONTAINERS. COMPLETE WITH ALL NECESSARY FASTENINGS, KEYS, INSTRUCTIONS, AND TEMPLATES FOR SPOTTING
 - MARK EACH CONTAINER WITH ITS ITEM NUMBER CORRESPONDING TO THE ITEM NUMBER ON THE FINISH HARDWARE SCHEDULE. CONTAINERS HOLDING LOCKS SHALL SHOW THE FOLLOWING CORRESPONDING TO THAT SHOWN ON
 - THE FINISH HARDWARE SCHEDULE: HEADING NUMBER
 - DOOR NUMBER iii. HAND OF DOOR (WHEN REQUIRED)

SHIPPING REQUIREMENT SHALL BE BORNE BY THE HARDWARE SUPPLIER.

iv. KEYING SYMBOL (DEVELOPED BY OWNER) v. A TYPEWRITTEN SCHEDULE IN DHI FORMAT CONFORMING WITH THE APPROVED SCHEDULE

NEEDED ITEMS TO THE RESPECTIVE SUPPLIER FOR THEIR USE IN INSTALLATION. THE COST OF THIS

- SHALL ACCOMPANY EACH SHIPMENT. 1.19 WHEN HARDWARE MUST BE INSTALLED AT THE FACTORY, THE HARDWARE SUPPLIER SHALL SEND ALL SUCH
- 1.20 ACCEPTANCE AT SITE: UPON DELIVERY OF THE FINISH HARDWARE TO THE JOB SITE, CHECK IN AND SIGN
- FOR ALL MATERIAL DELIVERED AND THEREAFTER BE RESPONSIBLE FOR SAME. 1.21 STORAGE AND PROTECTION: PROVIDE A SECURED AREA WITH SUFFICIENT SPACE AND SHELVING IN WHICH TO STORE AND INVENTORY ALL MATERIALS UNDER LOCK AND KEY. PROTECT HARDWARE FROM DAMAGE AT

WARRANTY

ALL TIMES.

- WARRANTY HARDWARE AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP.REPAIR, REPLACE OR
- OTHERWISE CORRECT DEFICIENT MATERIALS AT NO ADDITIONAL COST TO OWNER. LOCKSETS: TEN-YEAR WARRANTY. CLOSERS: THIRTY-YEAR WARRANTY
- EXIT DEVICE THREE-YEAR WARRANTY

PART 2 PRODUCTS **MANUFACTURERS**

- PRODUCT REQUIREMENTS OF THE SPECIFIED PRODUCT AS MANUFACTURED BY THE FOLLOWING.
- BUTT HINGES: IVES (IVE) NO SUBSTITUTION. EXIT DEVICES: VON DUPRIN (VON) NO SUBSTITUTION.
- LOCKSETS: SCHLAGE (SCH) NO SUBSTITUTION. CORE/CYLINDER: SCHLAGE (SCH) NO SUBSTITUTION.
- DOOR CLOSERS: LCN (LCN) NO SUBSTITUTION.
- THRESHOLDS, DOOR BOTTOMS, WEATHERSTRIPPING: ZERO (ZER) NO SUBSTITUTION. STOPS, KICKPLATES, PULLS, PUSH PLATES: IVES (IVE) NO SUBSTITUTION.

OVERHEAD STOPS: GLYNN JOHNSON (GJ) NO SUBSTITUTION. POCKET DOOR SYSTEM: CAVITY SLIDERS (CS) NO SUBSTITUTION.

2.2 OBTAIN ALL SWINGING DOOR FINISHED HARDWARE FROM ALLEGION MANUFACTURES LISTED ABOVE.

- PROVIDE ITEMS AS LISTED IN SCHEDULE COMPLETE TO FUNCTION AS INTENDED. MANUFACTURE HARDWARE SUPPLIED FOR METAL DOORS OR JAMBS TO TEMPLATE AND SECURE
- WITH MACHINE SCREWS. WHERE CYLINDRICAL LOCKS ARE USED IN HOLLOW METAL DOORS, FURNISH LOCK REINFORCING IN
- THE DOOR AT THE TIME OF MANUFACTURE. FURNISH FINISH HARDWARE WITH ALL NECESSARY SCREWS, BOLTS, OR OTHER FASTENINGS OF
- SUITABLE: SIZE AND TYPE TO ANCHOR THE HARDWARE IN POSITION FOR HEAVY USE AND LONG LIFE, AND OF COMPATIBLE MATERIAL AND FINISH
- FURNISH FASTENINGS WITH ANCHORS ACCORDING TO THE MATERIAL TO WHICH IT IS APPLIED, AND AS RECOMMENDED BY THE MANUFACTURER.
- FURNISH HARDWARE FASTENED TO CONCRETE WITH MACHINE SCREWS AND TAMPINS FASTEN CLOSERS ON WOOD OR MINERAL CORE DOORS WITH FASTENERS RECOMMENDED BY THE CLOSER MANUFACTURER FOR THE APPARENT INTENDED USE OF THE DEVICE, UNLESS THE NSTALLATION IS IN AN OPENING REQUIRING UL-RATED HARDWARE IN WHICH CASE SEX NUTS AND
- BUTT HINGES:
 - DETERMINE CORRECT CLEARANCE FROM THE DRAWINGS

BOLTS (APPROVED BY UL) ARE REQUIRED BY UL.

- PROVIDE NON-REMOVABLE PINS AT OUT SWINGING DOORS DOORS WITH CLOSERS SHALL HAVE BALL BEARING BUTTS. FLAT BUTTON, TOP AND BOTTOM TIPS REQUIRED.
- BUTT HINGE LENGTH: AS RECOMMENDED BY MANUFACTURER NUMBER OF BUTT HINGES REQUIRED: AS RECOMMENDED BY MANUFACTURER.
- DOOR LOCKS: LEVER AS LISTED IN HARDWARE SETS.
- DESIGN SHALL PERMIT REMOVAL OF CYLINDER WITHOUT REMOVING LOCK FROM DOOR. PROVIDE LOCKS AND LATCHES WITH 2-3/4 INCH (70MM) BACKSET UNLESS OTHERWISE NOTED. PROVIDE STRIKES WITH EXTENDED LIP WHERE REQUIRED TO PROTECT TRIM FROM BEING MARRED
- ANSI 156.2 SERIES 4000 & 1000 GRADE 1.
- 2.6 DOOR CLOSERS: SERIES
- SURFACE MOUNTED WITHOUT COVERS, FINISH SPRAYED TO MATCH OTHER HARDWARE BODIES TO BE CLOSE GRAINED MALLEABLE IRON, WITH 3 SEPARATE CONTROL VALVES (INCLUDING BACKCHECK) ANSI GRADE 1
- CLOSER TO BE EQUIPPED WITH SIZE ADJUSTMENT (1 THROUGH 6) IN THE FIELD BY THE INSTALLER. EQUIP CLOSERS MOUNTED ON WOOD OR MINERAL CORE DOORS WITH CONVENTIONAL FASTENERS UNLESS THE MANUFACTURER OF THE CLOSER RECOMMENDS SEX NUTS AND BOLT BECAUSE OF THE APPARENT FREQUENCY USE OF THE CLOSER. IN THE EVENT THE DOOR IS INDICATED TO BE UL-
- RATED, THE SEX NUTS AND BOLTS SHALL BE UL APPROVED. PROVIDE TYPE AS LISTED IN HARDWARE SETS.
- 2.7 EXIT DEVICES: SERIES
- U.L. APPROVED FOR CASUALTY. PROVIDE CYLINDERS AS REQUIRED FOR EXIT DEVICE AND PROPER OPERATION LEVER DESIGN TO MATCH LOCKSETS, TYPES FUNCTIONS AS LISTED IN HARDWARE SETS
- 2.8 KICK PLATES: SIZE AS LISTED IN HARDWARE STES..050 (3MM) STAINLESS STEEL WITH NO. 4 FINISH, B4E, CS

JAMB OF CORRIDOR DOORS.

NOT REQUIRED ON DOORS HAVING WEATHERSTRIP OR SEALS.

2.9 OVERHEAD HOLDERS OR STOPS: AS LISTED IN HARDWARE SETS.

2.10 STOPS: WALL STOPS SHALL BE USED WHEREVER POSSIBLE. USE OVERHEAD STOPS WHERE WALL STOPS CANNOT BE USED OR AS LISTED IN HARDWARE SETS. WALLS TO RECEIVE PROPER BACKING FOR WALL BUMPERS AS SPECIFIED IN SECTION 06100 - ROUGH CARPENTRY.

2.11 SILENCERS: AT METAL FRAMES; 3 AT EACH JAMB OF SINGLE DOORS, 2 AT EACH JAMB OF DOUBLE DOORS.

- 2.12 WEATHERPROOFING, SMOKE SEALS AND DOOR BOTTOMS: CONTINUOUS AT HEAD AND JAMB OF EXTERIOR DOORS; CONTINUOUS SMOKE SEALS AT HEAD AND
- 2.13 THRESHOLDS: SIZED FOR OPENING; TO MEET HANDICAPPED CONDITIONS. AS LISTED IN HARDWARE SETS.
- 2.15 SUPPLY 2 KEYS FOR EACH LOCK.
- 2.16 SUPPLY ADDITIONAL KEYS IN FOLLOWING QUANTITIES: A. 5 - MASTER KEYS

3 - CONSTRUCTION KEYS

C. 2 - CONTROL KEYS

SUBCONTRACTOR OR SUPPLIER UNDER ANY CIRCUMSTANCES.

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2.17 PERMANENT KEYS WILL NOT BE MADE AVAILABLE TO THE GENERAL CONTRACTOR OR ANY

2.14 DOOR LOCKS: KEY ALL LOCKS INTO NEW KEY SYSTEM IN ACCORDANCE WITH OWNER'S

- **FINISHES**
- 2.18 PROVIDE MATCHING FINISHES FOR HARDWARE ITEMS AT EACH DOOR OPENING TO THE GREATEST EXTENT POSSIBLE, EXCEPT AS OTHERWISE INDICATED.
- PROVIDE FINISHES WHICH COMPLY WITH THOSE ESTABLISHED BY BHMA LISTED IN "MATERIALS AND FINISHES STANDARD 1301".
 - FINISHES FOR THIS PROJECT ARE AS FOLLOWS; i. HINGES ii. LOCKSETS 626
- iii. EXIT DEVICES 626 iv. FLAT GOODS 630

v. STOPS vi. CLOSERS

PART 3 EXECUTION

- VERIFICATION OF CONDITIONS: EXAMINE CONDITIONS UNDER WHICH FINISH HARDWARE WILL BE
- INSTALLED. REPORT DEFICIENCIES TO THE ARCHITECT.
- 3.2 INSTALLATION INSTALL HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, USING PROPER
- MAINTAIN ANSI STANDARD MOUNTING HEIGHTS FOR DOORS, FROM FINISHED FLOOR TO CENTER LINE OF HARDWARE ITEM. KNOX BOX: RECESSED INTO WALL CONSTRUCTION AND RIGIDLY ANCHORED IN PLACE AT LOCATIONS INDICATED ON DRAWINGS IN ACCORDANCE WITH REQUIREMENTS FOR FIRE DEPARTMENT ACCESS.
- 3.3 CLEANING DURING THE COURSE OF THE WORK AND ON COMPLETION, REMOVE AND DISPOSE OF EXCESS
- MATERIALS, EQUIPMENT AND DEBRIS AWAY FROM PREMISES. LEAVE WORK IN CLEAN CONDITION. 3.4 PROJECT INFORMATION

A. OPT0255205, V1, 03.29.2022

3.5 HARWARE WHILE THE FOLLOWING HARDWARE SETS ARE INTENDED TO COVER ALL DOORS, AND ESTABLISH A TYPE AND STANDARD OF QUALITY, IT IS THE RESPONSIBILITY OF THE HARDWARE SUPPLIER TO EXAMINE THE PLANS AND SPECIFICATIONS AND FURNISH PROPER HARDWARE FOR ALL OPENINGS. THE HARDWARE SUPPLIER SHALL REVIEW THE ENTIRE SPECIFICATION VERSUS THE DOOR SCHEDULE AND NOTIFY THE ARCHITECT OF ANY ERRORS, INCONSISTENCIES, OR OMISSIONS

3.6 ELECTRICAL DRAWINGS

DURING THE BID PERIOD.

ELEVATION RISER DIAGRAMS INCLUDED IN THIS SECTION AND/OR SECTION 28 1300 ARE BASED ON THE ELECTRIFIED PRODUCTS LISTED IN THE HARDWARE SETS. ANY DEVIATION FROM SPECIFIED HARDWARE PRODUCTS SHALL MAKE THE ELEVATION RISER DIAGRAMS NULL AND VOID. IF NON-SPECIFIED



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NUMBER

A-2023017238

PERMIT SET: 04/12/2024 CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS.

ISSUE DATE DESCRIPTION

OMISSIONS OR DISCREPANCIES BEFORE

BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS.

PROJECT INFORMATION PROJECT NO: 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE:

J. JEFFERY

SPECIFICATIONS

SHEET NUMBER

DRAWN BY:

SHEET TITLE

CHECKED BY

SECTION 08 11 00 / METAL DOORS AND FRAMES

- 1.1 SUBMIT SHOP DRAWINGS COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.
- EXERCISE CARE IN CUTTING OPERATIONS AND PERFORM SUCH OPERATIONS UNDER ADEQUATE SUPERVISION BY COMPETENT MECHANICS SKILLED IN THE APPLICABLE TRADE. OPENINGS SHALL BE NEATLY CUT AND SHALL BE KEPT AS SMALL AS POSSIBLE TO AVOID UNNECESSARY DAMAGE.

HOLLOW METAL FRAMES

- FRAMES SHALL MEET SPECIFIED REQUIREMENTS AND SDI 100 FOR UNIT WELDED FRAMES, AND THE NAMM HOLLOW METAL TECHNICAL AND DESIGN MANUAL.
- FRAMES TO BE PRESSED STEEL TO PROFILE INDICATED, 16-GAUGE (UNLESS OTHERWISE NOTED) COLD ROLLED, PICKLED, ANNEALED STEEL, UNIT TYPE WELDED CONSTRUCTION, WITH ANGLES, MOLDS, RETURNS AND MITERS NEATLY WELDED AND WELD BEADS GROUND SMOOTH. PREPARE FRAMES TO RECEIVE MORTISED TYPE HARDWARE. SPOT WELD REINFORCING PLATES TO INNER SURFACE OF JAMBS AT HINGE, LOCK, LATCH, AND OTHER HARDWARE LOCATIONS.
- HINGE REINFORCEMENTS SHALL BE 10-GAUGE STEEL FOR LIGHTWEIGHT CORE DOORS, 7-GAUGE STEEL FOR OTHERS. OTHER HARDWARE REINFORCEMENTS SHALL CONFORM TO TABLE IV, SDI 100. SPOT WELD 24-GAUGE GALVANIZED STEEL PLASTER GUARDS OVER HARDWARE FROM TEMPLATES FURNISHED TO FRAME MANUFACTURER BY HARDWARE SUPPLIER. PROVIDE REINFORCEMENTS FOR SURFACE APPLIED HARDWARE. PUNCH DOORSTOPS TO RECEIVE RUBBER SILENCERS.
- PROVIDE FRAMES WITH FIXED INSERT ANCHORS WELDED TO FACE AND FLANGE RETURNS 12" DOWN FROM TOP, THEN 24" ON CENTER. PROVIDE FRAMES WITH MINIMUM 18-GAUGE FLOOR CLIPS WELDED TO EACH JAMB, FACE AND FLANGES PUNCHED FOR ANCHORING TO FLOOR. AT DOOR OPENINGS WIDER THAN 42" AND AT MULTIPLE OPENINGS, REINFORCE HEAD MEMBERS FULL LENGTH WITH 12-GAUGE STEEL CHAN NEL BRACE DOORFRAMES WITH TEMPORARY WOOD OR METAL SPREADERS TO INSURE MAINTAINING SQUARE AND TRUE SHAPES IN SHIPPING.
- 2.5 PROVIDE FRAMES WITH UL LABELS AS REQUIRED OR AS INDICATED.
- PROVIDE FRAMES WITH LOOSE GLAZING BEADS WITH SCREWS FOR FLUSH COUNTERSUNK INSTALLATION TO RECEIVE GLASS PER SDI 100.
- PRIMING: FRAMES SHALL RECEIVE ONE SHOP COAT OF RUST INHIBITIVE PRIMER. PRIMER SHALL BE SMOOTH SURFACE, READY TO RECEIVE FINISH COATS WHEN INSTALLED. NO RUNS, OVERSPRAY, DUST OR OTHER DEFECTS WILL BE ALLOWED. PRIMER SHALL BE BONDED TO THE METAL SUFFICIENTLY THAT UPON AGING IT WILL NOT CHIP OR FLAKE WHEN SCRAPED THROUGH. WIPE COAT GALVANIZED STEEL IS AN ACCEPTABLE SUBSTITUTION FOR THE SHOP COAT OF PRIMER.

INTERIOR PRE-FINISHED STEEL DOOR FRAMES

- FRAMES SHALL BE OF 18-GAUGE STEEL AS MANUFACTURED BY TIMELY INDUSTRIES, (818-492-3500) WITH ALUMINUM CASINGS #TA-23. PROVIDE FRAMES AND CASINGS WITH FACTORY-FINISHED COLOR AS
- PRE-FINISHED STEEL DOOR FRAMES SHALL BE FORMED FROM COLD ROLLED SHEET STEEL CONFORMING TO ASTM-A 336. PREPARE FRAMES FOR HEAT-TREATED ZINC-PLATED CASING RETAINER CLIPS MECHANICALLY FASTENED FOR SECURE, PROPERLY ALIGNED INSTALLATION OF CASINGS.
- FRAMES SHALL HAVE 14-GAUGE HINGE-REIN FORCEMENT PLATES WITH EXTRUDED TAPPED HOLES, FOR A MINIMUM OF 3/16" THREAD PENETRATION DEPTH.
- STRIKES: PROVIDE FOR 2-3/4" ADJUSTABLE T. PROVIDE STANDARD FIELD-APPLIED REINFORCEMENT FOR SURFACE MOUNTED HARDWARE. PROVIDE UL FIRE RATED FRAMES WHERE SHOWN ON THE DRAWINGS.
- FACTORY FINISH: STEEL SHALL BE CHEMICALLY CLEANED, BONDERIZED, PRIMED AND PAINTED WITH IMPACT-RESISTANT, POLYESTER BAKED ENAMEL. PROVIDE AEROSOL TOUGH-UP PAINT FOR AFTER INSTALLATION, ON-SITE REPAIR AS RECOMMENDED BY MANUFACTURER.

HOLLOW METAL DOORS

- DOORS SHALL MEET SPECIFIED REQUIREMENTS AND SDI 100, AND THE NAAMM HOLLOW METAL TECHNICAL
- CONSTRUCT DOORS, FLUSH TYPE, 1 3/4" THICK, WITH A FINEST GRADE 18-GAUGE COLD ROLLED STEEL SHEET ON THE INTERIOR FACE AND A 16-GAUGE COLD ROLLED STEEL SHEET ON THE EXTERIOR FACE OF THE DOOR. VERTICAL STIFFENERS SHALL BE 22-GAUGE STEEL "U" FORMS, SPOT-WELDED TO EACH INSIDE FACE OF THE DOOR FULL HEIGHT AND NOT MORE THAN 6" APART.
- TO EACH FACE AT LEAST 6" ON CENTER. JOINTS AT THE EDGES OF DOORS SHALL BE CONTINUOUSLY WELDED, AUTOMATICALLY BY THE GAS SHIELDED METHOD ARC PROCESS.
- DOORS SHALL HAVE SOUND DEADENING MATERIAL OF AN APPROVED TYPE APPLIED TO THE INTERIOR SURFACE OF PANELS. SOUND DEADENER SHALL ELIMINATE METALLIC REVERBERATIONS INCIDENTAL TO
- NORMAL DOOR OPERATION.
- PROVIDE DOUBLE DOORS WITH ONE-PIECE ASTRAGALS OF 12-GAUGE STEEL.
- MORTISE DOORS FOR LOCKS AND HINGES. PROVIDE REINFORCEMENT IN ACCORDANCE WITH TABLE IV SDI
- 100, AND NAAMM CHM 1. PROVIDE DOORS WITH UL LABELS AS REQUIRED OR INDICATED. PROVIDE LOUVER DOORS AS SCHEDULED. PROVIDE SIGHT-PROOF LOUVERS EITHER PIERCED INTO THE PANELS OF THE DOOR OR INSERTED INTO THE PANELS. FORM LOUVER FRAMES OF MINIMUM 20-GAUGE

STEEL. WELD MINIMUM 24-GAUGE BLADES TO FRAME AND FASTEN THE ENTIRE ASSEMBLY TO THE DOOR

PROVIDE FOR GLAZING IN DOORS AS SCHEDULED. NON-REMOVABLE MINIMUM 20-GAUGE GLAZING STOPS SHALL OCCUR ON THE OUTSIDE OF EXTERIOR DOORS AND ON THE REVERSE SIDE OF INTERIOR DOORS. GLAZING BEADS ON THE INSIDE OF GLASS PANELS SHALL BE REMOVABLE.

WITH MOLDINGS. THE MOLDINGS, WHEN USED, SHALL BE AN INTEGRAL PART OF THE LOUVER.

PRIMING

- DOORS AND FRAMES TO BE CLEANED, BONDERIZED AND PRIMED WITH SHOP COAT OF LIGHT GRAY ZINC CHROMATE RUST INHIBITIVE PRIMER.
- PRIMER SHALL BE SMOOTH SURFACE, READY TO RECEIVE FINISH COATS WHEN INSTALLED. NO RUNS. OVERSPRAY, DUST OR OTHER DEFECTS WILL BE ALLOWED. PRIMER SHALL BE BONDED TO THE METAL SUFFICIENTLY THAT UPON AGING IT WILL NOT CHIP OR FLAKE WHEN SCRAPED THROUGH. WIPE COAT GALVANIZED STEEL IS AN ACCEPTABLE SUBSTITUTION FOR THE SHOP COAT OF PRIMER.

INSTALLATION

INSTALL DOORS COMPLETELY AND ACCURATELY, COMPLETE WITH FINISH HARDWARE. INSTALL FINISH HARDWARE IN A NEAT WORKMAN LIKE MANNER IN ACCORDANCE WITH THE HARDWARE SCHEDULE USING ONLY MECHANICS SKILLED IN THIS TYPE OF WORK.

SECTION 08 41 13 / ALUMINUM-FRAMED STOREFRONTS

PART 1 – GENERAL

- INSTALLER QUALIFICATIONS: AN ENTITY THAT EMPLOYS INSTALLERS AND SUPERVISORS WHO ARE TRAINED AND APPROVED BY MANUFACTURER.
- TESTING AGENCY QUALIFICATIONS: QUALIFIED ACCORDING TO ASTM E 699 FOR TESTING INDICATED AND ACCREDITED BY IAS OR ILAC MUTUAL RECOGNITION ARRANGEMENT AS COMPLYING WITH ISO/IEC 17025.
- PRODUCT OPTIONS: INFORMATION ON DRAWINGS AND IN SPECIFICATIONS ESTABLISHES REQUIREMENTS FOR AESTHETIC EFFECTS AND PERFORMANCE CHARACTERISTICS OF ASSEMBLIES. AESTHETIC EFFECTS ARE INDICATED BY DIMENSIONS, ARRANGEMENTS, ALIGNMENT, AND PROFILES OF COMPONENTS AND ASSEMBLIES AS THEY RELATE TO SIGHTLINES, TO ONE ANOTHER, AND TO ADJOINING CONSTRUCTION.
- DO NOT CHANGE INTENDED AESTHETIC EFFECTS, AS JUDGED SOLELY BY ARCHITECT, EXCEPT WITH ARCHITECT'S REVIEW.

DELIVERY, STORAGE, AND HANDLING

- DELIVER ALUMINUM WORK PALLETIZED, PACKAGED, OR CRATED TO PROVIDE PROTECTION DURING TRANSIT AND PROJECT-SITE STORAGE. DO NOT USE NON-VENTED PLASTIC. PROVIDE ADDITIONAL
 - PROTECTION TO PREVENT DAMAGE TO FACTORY-FINISHED UNITS. STORE ALUMINUM WORK VERTICALLY UNDER COVER AT PROJECT SITE WITH HEAD UP. PLACE ON

MINIMUM 4- INCH- (102-MM-) HIGH WOOD BLOCKING. PROVIDE MINIMUM 1/4-INCH (6-MM) SPACE BETWEEN EACH STACK TO PERMIT AIR CIRCULATION.

- 1.2 SPECIAL WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF ALUMINUM-FRAMED STOREFRONTS THAT DO NOT COMPLY WITH REQUIREMENTS OR THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
 - WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION. SPECIAL FINISH WARRANTY: STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR FINISHES OR REPLACE ALUMINUM THAT SHOWS EVIDENCE OF DETERIORATION OF FACTORY-APPLIED FINISHES WITHIN SPECIFIED WARRANTY PERIOD.
 - i. WARRANTY PERIOD: 10 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 - PRODUCTS

PERFORMANCE REQUIREMENTS

- 2.1 GENERAL PERFORMANCE: COMPLY WITH PERFORMANCE REQUIREMENTS SPECIFIED. AS DETERMINED BY TESTING OF ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS REPRESENTING THOSE INDICATED FOR THIS PROJECT WITHOUT FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION.
 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS SHALL WITHSTAND MOVEMENTS OF SUPPORTING STRUCTURE INCLUDING, BUT NOT LIMITED TO, STORY DRIFT, TWIST, COLUMN SHORTENING, LONG-TERM CREEP, AND DEFLECTION FROM UNIFORMLY DISTRIBUTED AND CONCENTRATED LIVE LOADS.
 - FAILURE ALSO INCLUDES THE FOLLOWING: THERMAL STRESSES TRANSFERRING TO BUILDING STRUCTURE.
 - GLASS BREAKAGE. iii. LOOSENING OR WEAKENING OF FASTENERS, ATTACHMENTS, AND OTHER COMPONENTS.
- 2.2 FAILURE OF OPERATING UNITS
 - STRUCTURAL LOADS: WIND LOADS: AS INDICATED ON DRAWINGS. OTHER DESIGN LOADS: AS INDICATED ON DRAWINGS.
- 2.3 DEFLECTION OF FRAMING MEMBERS: AT DESIGN WIND PRESSURE, AS FOLLOWS: DEFLECTION NORMAL TO WALL PLANE: LIMITED TO EDGE OF GLASS IN A DIRECTION PERPENDICULAR TO GLASS PLANE NOT EXCEEDING 1/175 OF THE GLASS EDGE LENGTH FOR EACH INDIVIDUAL GLAZING LITE OR AN AMOUNT THAT RESTRICTS EDGE DEFLECTION OF INDIVIDUAL GLAZING LITES TO 3/4 INCH (19.1 MM), WHICHEVER IS LESS.
 - DEFLECTION PARALLEL TO GLAZING PLANE: LIMITED TO AMOUNT NOT EXCEEDING THAT WHICH REDUCES GLAZING BITE TO LESS THAN 75 PERCENT OF DESIGN DIMENSION AND THAT WHICH REDUCES EDGE CLEARANCE BETWEEN FRAMING MEMBERS AND GLAZING OR OTHER FIXED COMPONENTS TO LESS THAN 1/8 INCH (3.2 MM).
- 2.4 STRUCTURAL: TEST ACCORDING TO ASTM E 330 AS FOLLOWS:

ACCORDING TO NFRC 100.

- WHEN TESTED AT POSITIVE AND NEGATIVE WIND-LOAD DESIGN PRESSURES, ASSEMBLIES DO NOT EVIDENCE DEFLECTION EXCEEDING SPECIFIED LIMITS. WHEN TESTED AT 150 PERCENT OF POSITIVE AND NEGATIVE WIND-LOAD DESIGN PRESSURES, ASSEMBLIES, INCLUDING ANCHORAGE, DO NOT EVIDENCE MATERIAL FAILURES, STRUCTURAL DISTRESS, OR PERMANENT DEFORMATION OF MAIN FRAMING MEMBERS EXCEEDING 0.2 PERCENT
- TEST DURATIONS: AS REQUIRED BY DESIGN WIND VELOCITY, BUT NOT LESS THAN 10 SECONDS.
- 2.5 AIR INFILTRATION: TEST ACCORDING TO ASTM E 283 FOR INFILTRATION AS FOLLOWS FIXED FRAMING AND GLASS AREA: MAXIMUM AIR LEAKAGE OF 0.06 CFM/SQ. FT. (0.30 L/S PER SQ. M) AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 6.24 LBF/SQ. FT. (300 PA).
- 2.6 WATER PENETRATION UNDER STATIC PRESSURE: TEST ACCORDING TO ASTM E 331 AS FOLLOWS: NO EVIDENCE OF WATER PENETRATION THROUGH FIXED GLAZING AND FRAMING AREAS WHEN TESTED ACCORDING TO A MINIMUM STATIC-AIR-PRESSURE DIFFERENTIAL OF 20 PERCENT OF POSITIVE WIND-LOAD DESIGN PRESSURE, BUT NOT LESS THAN 10 LBF/SQ. FT. (500 PA).
- 2.7 ENERGY PERFORMANCE: CERTIFIED AND LABELED BY MANUFACTURER FOR ENERGY PERFORMANCE AS **FOLLOWS** THERMAL TRANSMITTANCE (U-FACTOR): FIXED GLAZING AND FRAMING AREAS: U-FACTOR FOR THE SYSTEM OF NOT MORE THAN 0.41 BTU/SQ. FT. X H X DEG F (2.33 W/SQ. M X K) AS DETERMINED
- SOLAR HEAT-GAIN COEFFICIENT (SHGC): FIXED GLAZING AND FRAMING AREAS: SHGC FOR THE SYSTEM OF NOT MORE THAN 0.40 AS DETERMINED ACCORDING TO NFRC 200.
- 2.9 AIR LEAKAGE FIXED GLAZING AND FRAMING AREAS: AIR LEAKAGE FOR THE SYSTEM OF NOT MORE THAN 0.06 CFM/SQ. FT. (0.30 L/S PER SQ. M) AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 6.24 LBF/SQ. FT. (300
- REINFORCE TOP AND BOTTOM OF DOORS HORIZONTALLY BY STEEL CHANNELS, FULL WIDTH, SPOT-WELDED 2.10 CONDENSATION RESISTANCE FACTOR (CRF): FIXED GLAZING AND FRAMING AREAS: CRF FOR THE SYSTEM OF NOT LESS THAN 25 AS DETERMINED ACCORDING TO AAMA 1503.
 - 2.11 THERMAL MOVEMENTS: ALLOW FOR THERMAL MOVEMENTS RESULTING FROM AMBIENT AND SURFACE TEMPERATURE CHANGES TEMPERATURE CHANGE: 120 DEG F (67 DEG C), AMBIENT; 180 DEG F (100 DEG C), MATERIAL

MANUFACTURERS

SURFACES.

BASIS OF DESIGN: MANUFACTURER: KAWNEER, AN ARCONIC COMPANY; HYPERLINK http://www.kawneer.com/"WWW.KAWNEER.COM.

PA) WHEN TESTED ACCORDING TO ASTM E283.

PRODUCTS: EXTERIOR: TRIFAB 451T FRAMING SYSTEM (THERMAL)

FRAMING

- 2.12 FRAMING MEMBERS: MANUFACTURER'S EXTRUDED- OR FORMED-ALUMINUM FRAMING MEMBERS OF THICKNESS REQUIRED AND REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS. CONSTRUCTION: THERMALLY BROKEN FOR ALL EXTERIOR FRAMING AND NONTHERMAL FOR
 - INTERIOR FRAMING. SILL AND HEAD MEMBERS ARE CONTINUOUS. SYSTEM DIMENSIONS: 2 BY 4.5 INCHES (50.8 BY 114.3 MM) NOMINAL
 - GLAZING SYSTEM: RETAINED MECHANICALLY WITH GASKETS ON FOUR SIDES.
 - GLAZING PLANE: FRONT SET OF FRAME. FINISH: ANODIZED ALUMINUM
- 2.13 FABRICATION METHOD: SHOP-FABRICATED CREW SPLINE OR SHEAR BLOCK. BACKER PLATES: MANUFACTURER'S STANDARD, CONTINUOUS BACKER PLATES FOR FRAMING
 - MEMBERS. IF NOT INTEGRAL, WHERE FRAMING ABUTS ADJACENT CONSTRUCTION. BRACKETS AND REINFORCEMENTS: MANUFACTURER'S STANDARD HIGH-STRENGTH ALUMINUM
 - WITH NONSTAINING, NONFERROUS SHIMS FOR ALIGNING SYSTEM COMPONENTS. FASTENERS AND ACCESSORIES: MANUFACTURER'S STANDARD CORROSION-RESISTANT NONSTAINING, NONBLEEDING FASTENERS AND ACCESSORIES COMPATIBLE WITH ADJACENT
 - MATERIALS. WHERE EXPOSES SHALL BE STAINLESS STEEL. PERIMETER ANCHORS: WHEN STEEL ANCHORS ARE USED, PROVIDE INSULATION BETWEEN STEEL MATERIAL AND ALUMINUM MATERIAL TO PREVENT GALVANIC ACTION.
- 2.14 MATERIALS: ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND FINISH
- INDICATED.
- SHEET AND PLATE: ASTM B 209 (ASTM B 209M). EXTRUDED BARS, RODS, PROFILES, AND TUBES: ASTM B 221 (ASTM B 221M).
- 2.15 EXTRUDED STRUCTURAL PIPE AND TUBES: ASTM B 429/B 429M.

<u>GLAZING</u>

- 2.16 GLAZING: COMPLY WITH SECTION 088000 "GLAZING."
- 2.17 GLAZING GASKETS: MANUFACTURER'S STANDARD COMPRESSION TYPES; REPLACEABLE, EXTRUDED EPDM
- 2.18 SPACERS AND SETTING BLOCKS: MANUFACTURER'S STANDARD ELASTOMERIC TYPE.
- 2.19 GLAZING SEALANTS: AS RECOMMENDED BY MANUFACTURER.
- 2.20 WEATHERSEAL SEALANT: ASTM C 920 FOR TYPE S, GRADE NS, CLASS 25, USES NT, G, A, AND O; SINGLE-COMPONENT NEUTRAL-CURING FORMULATION THAT IS COMPATIBLE WITH STRUCTURAL SEALANT AND OTHER SYSTEM COMPONENTS WITH WHICH IT COMES IN CONTACT; RECOMMENDED BY STRUCTURAL-SEALANT, WEATHERSEAL-SEALANT, AND ALUMINUM-FRAMED-SYSTEM MANUFACTURERS FOR THIS USE.
- 2.21 VOC CONTENT: GLAZING SEALANTS APPLIED INSIDE THE WEATHERPROOFING SYSTEM OF THE BUILDING SHALL HAVE A VOC CONTENT OF 250 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

ACCESSORY MATERIALS

- 2.22 JOINT SEALANTS: FOR INSTALLATION AT PERIMETER OF ALUMINUM-FRAMED SYSTEMS, AS SPECIFIED IN DIVISION 07 SECTION "JOINT SEALANTS".
- BITUMINOUS PAINT: COLD-APPLIED, ASPHALT-MASTIC PAINT COMPLYING WITH SSPC-PAINT 12 REQUIREMENTS EXCEPT CONTAINING NO ASBESTOS; FORMULATED FOR 30 MIL (0.762 MM) THICKNESS PER

FABRICATION

- 2.24 FORM OR EXTRUDE ALUMINUM SHAPES BEFORE FINISHING
- 2.25 WELD IN CONCEALED LOCATIONS TO GREATEST EXTENT POSSIBLE TO MINIMIZE DISTORTION OR DISCOLORATION OF FINISH. REMOVE WELD SPATTER AND WELDING OXIDES FROM EXPOSED SURFACES BY DESCALING OR GRINDING.
- 2.26 FABRICATE COMPONENTS THAT, WHEN ASSEMBLED, HAVE THE FOLLOWING CHARACTERISTICS: PROFILES THAT ARE SHARP, STRAIGHT, AND FREE OF DEFECTS OR DEFORMATIONS.
 - ACCURATELY FITTED JOINTS WITH ENDS COPED OR MITERED. PHYSICAL AND THERMAL ISOLATION OF GLAZING FROM FRAMING MEMBERS. ACCOMMODATIONS FOR THERMAL AND MECHANICAL MOVEMENTS OF GLAZING AND FRAMING TO
 - MAINTAIN REQUIRED GLAZING EDGE CLEARANCES. PROVISIONS FOR FIELD REPLACEMENT OF GLAZING FROM INTERIOR FASTENERS, ANCHORS, AND CONNECTION DEVICES THAT ARE CONCEALED FROM VIEW TO GREATEST EXTENT POSSIBLE.
- 2.27 MECHANICALLY GLAZED FRAMING MEMBERS: FABRICATE FOR FLUSH GLAZING WITHOUT PROJECTING
- 2.28 STOREFRONT FRAMING: FABRICATE COMPONENTS FOR ASSEMBLY USING MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS.
- 2.29 AFTER FABRICATION, CLEARLY MARK COMPONENTS TO IDENTIFY THEIR LOCATIONS IN PROJECT ACCORDING TO SHOP DRAWINGS.

PART 3 – EXECUTION

EXAMINE OPENINGS, SUBSTRATES, STRUCTURAL SUPPORT, ANCHORAGE, AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF WORK. VERIFY ROUGH OPENING DIMENSIONS, LEVELNESS OF SILL PLATE AND OPERATIONAL CLEARANCES. EXAMINE WALL FLASHINGS, VAPOR RETARDERS, WATER AND WEATHER BARRIERS, AND OTHER BUILT-IN COMPONENTS TO ENSURE A COORDINATED, WEATHER TIGHT FRAMED ALUMINUM- STOREFRONT SYSTEM INSTALLATION.

CORRECTED.

- - COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. DO NOT INSTALL DAMAGED COMPONENTS.

BY PAINTING CONTACT SURFACES WITH BITUMINOUS PAINT.

- FIT JOINTS TO PRODUCE HAIRLINE JOINTS FREE OF BURRS AND DISTORTION. RIGIDLY SECURE NONMOVEMENT JOINTS.
- INSTALL ANCHORS WITH SEPARATORS AND ISOLATORS TO PREVENT METAL CORROSION AND ELECTROLYTIC DETERIORATION AND TO PREVENT IMPEDING MOVEMENT OF MOVING JOINTS. SEAL PERIMETER AND OTHER JOINTS WATERTIGHT UNLESS OTHERWISE INDICATED.

PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN

- 3.3 METAL PROTECTION
- WHERE ALUMINUM IS IN CONTACT WITH DISSIMILAR METALS, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH MATERIALS RECOMMENDED BY MANUFACTURER FOR THIS PURPOSE OR BY INSTALLING NONCONDUCTIVE SPACERS. WHERE ALUMINUM IS IN CONTACT WITH CONCRETE OR MASONRY, PROTECT AGAINST CORROSION
- SET CONTINUOUS SILL MEMBERS AND FLASHING IN FULL SEALANT BED AS SPECIFIED IN SECTION 079200 "JOINT SEALANTS" TO PRODUCE WEATHERTIGHT INSTALLATION.
- INSTALL ALUMINUM-FRAMED STOREFRONT SYSTEM LEVEL, PLUMB, SQUARE, TRUE TO LINE, WITHOUT DISTORTION OR IMPEDING THERMAL MOVEMENT, ANCHORED SECURELY IN PLACE TO STRUCTURAL SUPPORT, AND IN PROPER RELATION TO WALL FLASHING AND OTHER ADJACENT CONSTRUCTION.
- INSTALL ALUMINUM-FRAMED STOREFRONT SYSTEM AND COMPONENTS TO DRAIN CONDENSATION, WATER PENETRATING JOINTS, AND MOISTURE MIGRATING WITHIN ALUMINUM-FRAMED STOREFRONT SYSTEM TO
- 3.7 INSTALL GLAZING AS SPECIFIED IN SECTION 088000 "GLAZING."

ADJUSTING, CLEANING AND PROTECTION

- CLEAN ALUMINUM SURFACES IMMEDIATELY AFTER INSTALLING ALUMINUM-FRAMED STOREFRONTS. AVOID DAMAGING PROTECTIVE COATINGS AND FINISHES. REMOVE EXCESS SEALANTS, GLAZING MATERIALS, DIRT, AND OTHER SUBSTANCES.
- CLEAN GLASS IMMEDIATELY AFTER INSTALLATION. COMPLY WITH GLASS MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR FINAL CLEANING AND MAINTENANCE. REMOVE NONPERMANENT LABELS, AND
- REMOVE AND REPLACE GLASS THAT HAS BEEN BROKEN, CHIPPED, CRACKED, ABRADED, OR DAMAGED DURING CONSTRUCTION PERIOD.

SECTION 08 81 00 / GLAZING

1.1 SUBMIT SAMPLES COMPLYING WITH SECTION 01 SB 00 FOR WORK IN THIS SECTION.

REVIEW OF SAMPLES WILL BE FOR COLOR ONLY.

- PROVIDE MATERIAL AND INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS FOR MATERIALS SPECIFIED.
- WATERTIGHT AND AIRTIGHT INSTALLATION OF EACH PIECE OF GLASS IS REOUIRED. EACH INSTALLATION MUST WITHSTAND NORMAL TEMPERATURE CHANGES, WIND LOADING, IMPACT LOADING (FOR OPERATING DOORS) WITHOUT FAILURE INCLUDING LOSS OR BREAKAGE OF GLASS, FAILURE OF SEALANTS OR GASKETS TO REMAIN WATERTIGHT AND AIRTIGHT, DETERIORATION OF GLAZING MATERIALS AND OTHER DEFECTS IN THE WORK.
- PROTECT GLASS FROM EDGE DAMAGE DURING HANDLING, INSTALLATION AND OPERATION OF THE BUILDING. GLASS BREAKAGE DURING THE GUARANTEE PERIOD WILL BE GONSIDERED A FORM OF FAULTY INSTALLATION (RESULTING FROM EDGE DAMAGE) UNLESS KNOWN TO RESULT FROM VANDALISM OR OTHER CAUSES NOT RELATED TO MATERIALS AND INSTALLATION.
- GLAZING CHAN NEL DIMENSIONS AS SHOWN ARE INTENDED TO PROVIDE FOR NECESSARY MINIMUM BITE ON THE GLASS, MINIMUM EDGE GLEARANGE AND ADEQUATE SEALANT THICKNESSES, WITH REASONABLE TOLERANCES.

PRODUCTS

GLASS AND GLAZING PRODUCTS SHALL BE AS MANUFACTURED BY: GUARDIAN SUNGUARD ADVANCED ARCHITECTURAL GLASS. FLEETWOOD AND WESTERN INSULATED GLASS

MATERIALS

- REGULAR GLASS: 1/4" THINK COMPLYING WITH FS DD G 451, TYPE I, CLASS I, QUALITY Q 3 PLATE OR FLOAT
- 3.2 SHEET GLASS: 1/8" THICK COMPLYING WITH FS DD G 451, TYPE II, CLASS 1, QUALITY Q 5. GLEAR.
- TEMPERED GLASS: 1/4" THICK FULLY TEMPERED PLATE GLASS. PERMANENTLY ETCH EACH LIGHT WITH MANUFACTURER'S NAME AND COMPLIANCE WITH ANSI Z 97.1, CLEAR OR TINTED AS INDICATED ON THE DRAWINGS.
- CLEAR WIRE GLASS: 1/4" THICK POLISHED WIRE GLASS; SUPERLITE I-W AS MANUFAGTURED BY SAFTI OF O'KEEFFE'S, INC.. DIAMOND PATTEN WITH 20 / 45 / 60 OR 90 MINUTE RATING AS INDICATED ON THE
- 3.5 INSULATING GLASS: "THICK SOLARBAN 6 OR GUARDIAN SUNGUARD.
- 3.6 INTERIOR GLAZING COMPOUND: POLYMERIZE D BUTYL RUBBER AND INERT FILLERS (PIGMENTS), SOLVENT

- BASED WITH MINIMUM 75% SOLIDS, NON-SAG CONSISTENCY, TACK FREE TIME OF 24 HOURS OR LESS, PAINTABLE AND NON_STAINING.
- 3.7 SETTING BLOCKS: NEOPRE NE, EPDM, MIN. LENGTH 4".
- 3.8 EXTERIOR GLAZING COMPOUND: CONFORMING TO ASTM 0920, TYPE S, GRADE NS USE G.

INSTALLATION

- 4.1 COMPLY WITH COMBINED RECOMMENDATIONS OF GLASS MANUFACTURER AND MANUFACTURER OF SEALANTS AND OTHER MATERIALS USED IN GLAZING, EXCEPT WHERE MANUFACTURER'S TECHNICAL REPRESENTATIVES DIRECT OTHERWISE. COMPLY WITH GLAZING MANUAL BY FLAT GLASS MANUFACTURER'S ASSOC IATION, AND EXCEPT AS SPECIFINALLY RECOMMENDED OTHERWISE BY THE MANUFACTURERS OF THE GLASS AND GLAZING MATERIALS.
- 4.2 CLEAN THE GLAZING, CHANNEL OR OTHER FRAMING MEMBERS TO RECEIVE GLASS, IMMEDIATELY BEFORE GLAZING. REMOVE COATINGS THAT ARE NOT FIRMLY BONDED TO THE SUBSTRATE. DO NOT ATTEM PT TO CUT, SEAM, NIP OR ABRADE GLASS THAT IS TEMPERED OR HEAT STRENGTHENED.
- 4.3 INSPECT EACH PIECE OF GLASS IMMEDIATELY BEFORE INSTALLATION AND ELIMINATE ANY THAT HAVE OBSERVABLE EDGE DAMAGE OR FACE IMPERFECTIONS. INSTALL SETTING BLOCKS OF PROPER SIZE AT QUARTER POINTS OF MILL RABBET. SET BLOCKS IN THIS COURSE OF THE HEEL_HEAD COMPOUND.
- 4.4 PROVIDE SPACERS INSIDE AND OUT. AND OF PROPER SIZE AND SPACING, FOR GLASS SIZES LARGER THAN 50 UNITED INCHES. PROVIDE 1/8" MINIMUM BITE OF SPACERS ON GLASS, AND USE THICKNESS EQUAL TO SEALANT WIDTH. UNIFY APPEARANCE OF EACH SERIES OF LIGHTS BY SETTING EACH PIECE TO MATCH OTHERS AS NEARLY AS POSSIBLE. INSPECT EACH PIECE AND SET WITH PATTERN, DRAW AND BOW ORIENTED IN THE NAME DIRECTION AS OTHER PIECES.
- 4.5 MITER CUT AND BOND ENDS TOGETHER AT CORNERS WHERE GASKETS ARE USED FOR CHANNEL GLAZING, SO THAT GASKETS WILL NOT PULL AWAY FROM CORNERS AND RESULT IN VOIDS OR LEAKS.

PART I - GENERAL



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513 MAIN STREET

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FORT WORTH TX 76102

STEVEN COX

NUMBER

A-2023017238

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE

BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 06/01/2023 ORIGINAL ISSUE:

AS NOTED

J. JEFFERY

CHECKED BY SHEET TITLE

SCALE:

DRAWN BY:

SHEET NUMBER

SPECIFICATIONS

SECTION 09 29 00 / GYPSUM BOARD

- 1.1 ASTM C-840 AND C-754, AND GA-216, ARE HEREBY MADE A DIRECT PART OF THIS SPECIFICATION.
- SUBMIT INFORMATION COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.
- FURNISH MANUFACTURER'S CERTIFICATION THAT MATERIAL MEET SPECIFICATION REQUIREMENT FURNISH MANUFACTURER'S PRINTED INSTRUCTIONS FOR INSTALLATION OF ASSEMBLIES.

JOB CONDITIONS

- TEMPERATURE AND HUMIDITY CONDITIONS: DO NOT INSTALL WALLBOARDUNLESS INSTALLATION AREAS COMPLY WITH THE MINIMUM TEMPERATURE AND VENTILATION REQUIREMENTS RECOMMENDED BY THE
- PROTECTION: PROVIDE CLOSURES FOR EXTERIOR OPENINGS, WHERE REQUIRED. ROOM TEMPERATURE DURING INSTALLATION OF WALLBOARD SHALL NOT BE LESS THAN 50° F, WITH ADEQUATE VENTILATION MAINTAINED TO ELIMINATE EXCESSIVE MOISTURE UNTIL JOINT COMPOUND IS DRY.
- PROVIDE VENTILATION DURING AND FOLLOWING ADHESIVES AND JOINT TREATMENT APPLICATIONS. USE TEMPORARY AIR CIRCULATORY IN ENCLOSED AREAS LACKING NATURAL VENTILATION. UNDER SLOW DRYING CONDITIONS, ALLOW ADDITIONAL DRYING TIME BETWEEN COATS OF JOINT TREATMENT. PROTECT INSTALLED MATERIALS FROM DRAFTS DURING HOT, DRY WEATH ER.

MANUFACTURERS

GYPSUM WALLBOARD COMPONENTS SHALL BE AS MANUFACTURED BY NATIONAL GYPSUM COMPANY PRODUCTS FROM US GYPSUM COMPANY, GEORGIA PACIFIC, OR FLINTKOTE BLUE DIAMON D ARE ACCEPTABLE. IT IS INTENDED THAT MATERIALS FURNISHED BE A PART OF A SINGLE SYSTEM, WHETHER IT BE SUPPLIED BY ONE OR SEVERAL MANUFACTURES.

PRODUCTS

- REGULAR WALLBOARD: ASTM C 36; OR FS SS L 30, TYPE III, GRADE R, CLASS I; 5/8" THICKNESS,
- FIRE RATED WALLB OARD: ASTM C 36, TYPE X: OR FS SS L 30, TYPE III, GRADE X, CLASS I, 5/8" THICK NESS, TAPERED EDGE.
- WATER—RESISTANT WALLBOARD: ASTM C 630, 5/8" THICKNESS, TAPERED EDGE, AS INDICATED ON
- EXTERIOR WALLBOARD: NATIONAL GYPSUM COMPANY EXTERIOR SOFFIT BOARD, 5/8" THICKNESS, OR CONFORMING TO ASTM C 931.
- WALLBOARD ACCESSORIES:
- CORNER BEAD REINFORCEMENT: KAL-KORNER BEAD
- METAL EDGE REINFORCEMENT: J-TRIM CASING BEAD CONTROL JOINTS: E-Z STRIP OR .093 ZINC CONTROL JOINT
- SCREWS: PROVIDE SELF-DRILLING, SELF-TAPPING, BUGLE HEAD, FOR USE WITH POWER DRIVEN TOOL TYPE S FOR APPLICATION TO LIGHT-GAUGE METAL FRAMING, MINIMUM 1", TYPE S 12 FOR APPLICATION TO HEAVY-GAUGE METAL FRAMING (ASTM C 646); TYPE W FOR APPLICATION TO WOOD FRAMING, MINIMUM 1/2" (SINGLE LAYER) 1 5/8" (DOUBLE LATER) (ASTM C 894); TYPE G FOR WALLBOARD-TO-WALLBOARD APPLICATION, MINIMUM 1 1/2", (ASTM C 893).
- LAMINATIN ADHESIVES

STM C-475.

- WALLBOARD TO WOOD OR METAL FRAMING: US GYPSUM DURABOND 200 OR 300; OR CONFORMING
- WALLBOARD TO WALLBOARD: US GYPSUM DURABOND 600.
- WALLBOARD TO CORE BOARD OR SOUND DEADENING BOARD: US GYPSUM DURABOND 500. WALLBOARD TO CONCRETE OR MASONRY: US GYPSUM DURABOND 500.
- FINISHING MATERIALS: JOINT TREATMENT SYSTEM SHALL BE PROFORM JOINT SYSTEM CONSISTING OF: 4.5
- PROFORM PAPER JOINT REINFORCING TAPE CONFORM ING TO ASTM C-475. PROFORM PURPOSE JOINT COMPOUND FOR EMBEDDING, FILL AND FINISHING CONFORMING TO A
- 4.6 TEXTURE FINISH: WALL TEXTU RE MATERIAL SHALL BE REGULAR WALL TEXTURE AS MANUFACTURED BY HAMILTON
- MATERIALS. CEILING TEXTU RE MATERIAL SHALL BE PAS TEX PREMIUM CEILING TEXTU RE, MANUFACTURED BY
- HAMILTON MATERIALS. WALL TEXTURE MATERIAL SHALL BE V 1200 WALL TEXTURE AS MANUFACTURED BY LAHABRA
- SEALANTS: ACOUSTICAL SEALANT FOR SOUND CONTROL WALLS SHALL BE PRESSTITE NO 579.64 AS MANUFACTURED BY PRESSTITE PRODUCTS. TREMCO ACOUSTICAL SEALANT BY TREMCO, OR USG

INSTALLATION – WALLS

- APPLY WALLBOARD WITH LONG DIMENSION AT RIGHT ANGLES TO FRAMING OR FURRING MEMBERS WITH ABUTTING ENDS AND EDGES OCCURRING OVER STUD FLANGES. USE WALLBOARD OF THE MAXIMUM PRACTICAL LENGTH TO MINIMIZE END JOINTS. NEATLY FIT AND STAGGER END JOINTS. ARRANGE JOINTS ON OPPOSITE SIDES OF THE PARTITION AS TO OCCU R ON DIFFERENT STUDS. CUT WALLB OARD NEATLY TO FIT AROU ND OPENINGS. WALLBOARD SHALL EXTEND TO WITHIN 1/2" OF THE FLOOR.
- WHEREVER WALLBOARD TERMINATES AGAINST DISSIM ILAR MATERIALS OR WHERE EDGES OF WALLBOARD ARE EXPOSED, INSTALL METAL EDGE REINFORCEMENT AS SPECIFIED. AT OUTSIDE CORNERS INSTALL METAL CORNER BEAD REINFORCEMENT AS SPECIFIED.
- AT LOCATIONS INDICAT ED INSTALL CONTROL JOINT OVER FACE OF WALLBOARD PANELS. CUT END JOINTS SQUARE, BUTT TOGETHER AND ALIGN TO PROVIDE NEAT FIT. ATTACH CONTROL JOINT TO WALLBOARD WITH BOSTITCH 1/2" TYPE G STAPLES SPACED NOT OVER 6" ON CENTER IN EACH FLANGE.
- AT METAL STUDS APPLY WALLB OARD USING SCREWS SPACED A MAXIMUM OF 12" OC IN THE FIELD OF THE BOARD AND 12" OC ALONG THE ABUTTING END JOINTS; 8" OC AT RATED WALLS.
- AT WOOD FRAMING APPLY WALLBOARD WITH DOUBLE NAILING METHOD.APPLY FIRST NAILS SPACED 12" OC WITH THE SECON D NAIL IN CLOSE PROXIMITY, INSTALLED AFTER FIRST NAILS ARE IN PLACE. NAILS SHALL NOT BE STAGGERED ON ADJOIN ING EDGES OR ENDS. NAILS SHALL BE DRIVEN WITH THE HEADS SLIGHTLY BELOW THE SURFACE OF THE WALLBOARD, IN A DIMPLE FORMED BY THE DRIVING TOOL. A NAIL SET SHALL NOT BE USED AND CARE SHALL BE TAKEN TO AVOID BREAKING THE PAPER FACE
- WHERE WR OR WX WALLBOARD IS USED, COAT CUT EDGES AND FASTENER HEADS WITH USG SHEETROCK WR SEALANT. TREAT CUT EDGES, UTILITY HOLES, AND JOINTS, INCLUDING THOSE AT ANGLE INTERSECTIONS PRIOR TO INSTALLATION. TREAT FASTENER HEADS AFTER INSTALLATION.
- 5.7 AT SOUND CONTROL PARTITIONS INSTALL WALLBOARD OVER SOUND DEADENING BOARD. INSTALL HORIZONTALLY STAGGERING JOINTS BETWEEN LAYERS AND ON OPPOSITE SIDES AS FAR AS IS PRACTICAL. PROVIDE FULL RUNNING BEADS OF ACOUSTICAL SEALANT AT PERIMETER OF SUCH WALLS, BOTH SIDES. ALSO, PROVIDE AT SOUND CONTROL WALLS CONTINUOUS CAULKING BEAD WHERE WALLB OARD FORMS A JUNCTURE WITH OTHER WALLS OR SURFACES.
- APPLY ACOUSTICAL SEALANT USING AIR OPERATED EQUIPMENT. INSPECT JOINTS TO RECEIVE SEALANT TO BE SURE THEY ARE CLEAN, DRY AND FREE OF DUST AND DIRT. SEAL AROU ND LIGHT BOXES, OUTLETS AND SWITCHES, WITH A CONTINUOUS BEAD OF SEALANT. REMOVE EXCESS OF SEALANT OR SMEARS AS WORK PROGRESSES.
- AT DOUBLE-STU D PARTITIONS, SUCH AS CHASES, INSTALL STRIPS OF WALLB OARD 12" WIDE AND OF LENGTHS TO SPAN THE PARTITION DEPTH BY STREWING TO THE WEBS OF OPPOSING STUDS. SPAOE

- STRIPS APPROXIMATELY 42" OF.
- 5.10 AT DOUBLE LAYER WALLS INSTALL BASE LAYER AS SPECIFIED ABOVE EXCEPT INSTALL VERTICALLY OVER FRAMING MEMBERS. INSTALL FACE LAYER WITH ADHESIVE VERTICALLY AND PROVIDE FASTENERS UNTIL ADHESIVE SETS. STAGGER JOINTS IN FACE LAYER AT LEAST 10" FROM JOINTS IN BASE LAYER. AT VERTICAL CORNERS PROVIDE "FLOATING" CORNER INSTALLATION PER THE USG DRYWALL CONSTRUCTION
- 5.11 PROVIDE PERIMETER RELIEF WHERE NONLOAD BEARING WALLBOARD PARTITIONS ABUT STRUCTURAL DECKS OR CEILINGS OR VERTICAL STRUCTURAL ELEMENTS. ALLOW NOT LESS THAN 1/4", OR MORE THAN 1/2" GAP BETWEEN WALLBOARD AND STRUCTURE. FINISH EDGES OF WALLBOARD FACE LATER WITH SQUARE NOSE METAL CASING HEAD AND CAULK SPACE BETWEEN CASING BEAD AND STRUCTURE WITH CONTINUOUS SEALANT BEAD. ATTACH WALLBOARD TO STUDS NOT LESS THAN 1/2" BELOW BOTTOM EDGE OF CEILING TRACK FLANGES AND TO FIRST STUD ADJACENT TO VERTICAL TRACKS. DO NOT ATTACH WALLBOARD DIRECTLY TO TRACKS.
- 5.12 WHERE WALLBOARD PARTITIONS INTERSECT MASONRY WALLS, PROVIDE CONTROL JOINT NO LESS THAN 1/4"; OR MORE THAN 3/8" WIDE BETWEEN WALLB OARD AND MASONRY. FINISH EXPOSED EDGES OF WALLBOARD WITH SQUARE NOSE METAL CASING BEAD AND CAULK SPACE BETWEEN CASING BEAD AND MASONRR WITH CONTINUOUS SEALANT BEAD.

- REINFORCE WALL AND CEILING ANGLES AND INSIDE VERTICAL CORNER ANGLES WITH TAPE FOLDED TO CONFORM TO THE ADJOINING SURFACE AND TO FORM A STRAIGHT, TRUE ANGLE. APPLY A THIN LAYER OF COMPOUND, APPROXIMATELY 3" WIDE, UNDER AND OVER THE TAPE IN THE ANGLE JOINT TO BE REINFORCED. CENTER TAPE OVER JOINTS TO BE REINFORCED AND SEAL INTO THE COMPOUND, LEAVING SUFFICIENT COMPOUND UNDER THE TAPE TO PROVIDE PROPER BOND. APPLY A SKIM COAT OF COMPOUND IMMEDIATELY AFTER EMBEDDING TAPE AND CLEAN EXCESS COMPOUND FROM THE WALLBOARD SURFACE. AFTER DRYING, COVER EMBEDDING COMPOUNDS WITH AN ADDITIONAL COAT OF COMPOUND. ALLOW JOINTS TO DRY THOROUGHLY (MINIMUM OF 24 HOURS) BETWEEN EACH APPLICATION OF
- COVER FILL COAT WITH COMPOUND SPREAD EVENLY OVER AND SLIGHTLY BEYOND THE TAPERED EDGE OF THE BOARD, FEATH ERED AT THE EDGES, WITH A SMOOTH UNIFORM SLIGHT CROWN OVER THE JOINT. DIMPLES AT FASTENER HEADS SHALL RECEIVE 3 COATS OF COMPOUND IN SUCCESSION AS USED IN
- CONCEAL FLANGES OF METAL OORNER AND EDGE REINFORCING BE AT LEAST 2 COATS OF COMPOUND. WHEN COMPLETED, THE COMPOUND SHALL EXTEND APPROXIMATELY 8" TO 10" ON EITHER SIDE OF THE
- SAND COATS AS NECESSARY AFTER EACH APPLICATION OF COMPOUND HAS DRIED. THE FINAL COAT AND SUBSEQUENT SANDING SHALL LEAVE WALLB OARD AND TREATED AREAS UNIFORMLY SMOOTH AND READY TO RECEIVE DECORATION, TO THE EXTENT THAT AFTER PAINTING OF WALLB OARD THERE SHALL BE NO DISTINGUISHABLE DIFFERENCE IN APPEARANCE BETWEEN TAPED AND UN-TAPED SURFACES.
- APPLY WALL TEXTURE TO EXPOSED WALLS (EXCEPT TOILETS) (AND WALLS TO RECEIVE WALL (COVERING) UPON COMPLETION OF FINISHING SPEC IFIED ABOVE. SURFACES SHALL BE FREE OF DUST, DIRT AND OIL BEFORE APPLICATION. USE AS HEAVY A MIXTURE AS PRACTICAL AND AVOID OVER THINNING OF THE MATERIAL. APPLY MATERIAL USING SPRAY EQUIPMENT CAPABLE OF DEVELOPING SUFFICIENT PRESSURE TO PRODUCE A LIGHT ORANGE PEEL TEXTURE FINISH.

CEMENT BOARD

- BASIS OF DESIGN: SUBJECT TO COMPLIANCE WITH PROJECT REQUIREMENTS, THE DESIGN IS BASED ON THE FOLLOWING: USG CORPORATION, LLC, "USG DUROCK CEMENT BOARD"
- 7.2 CLASSIFICATION: CEMENTITIOUS BACKER UNITS: ANSI A118.9, ASTM A108.11 AND ASTM C 1325 PROVIDE
- WITH MANUFACTURER'S STANDARD EDGES. THICKNESS: [1/4 INCH (6.4 MM)] [1/2 INCH (12.7 MM)] [5/8 INCH (15.9 MM)] [AS INDICATED].
- BOARD LENGTH: [5 FEET (1524 MM)] [8 FEET (2438 MM)] [AS INDICATED]
- BOARD WIDTH: [32 INCHES (813 MM)] [36 INCHES (914 MM)] [48 INCHES (1219 MM)] [AS INDICATED]. MOLD RESISTANCE: ASTM D 3273, SCORE OF 10 AS RATED ACCORDING TO ASTM D 3274.
- 7.3 MINIMUM BENDING RADIUS: 6 FEET (1830 MM).
- FASTENER REQUIREMENTS: PROVIDE FASTENERS OF SIZE AND TYPE INDICATED THAT COMPLY WITH REQUIREMENTS SPECIFIED IN THIS ARTICLE FOR MATERIAL AND APPLICATION.
- SCREWS FOR FASTENING GYPSUM SHEATHING TO COLD-FORMED METAL FRAMING: DUROCK BRAND STEEL OR USG SHEATHING SF STEEL DRILL SCREWS [1-1/4 INCH] [1-5/8 INCH] [2-1/4 INCH]
- WITH CORROSION-RESISTANT COATING. WOOD SCREWS: DUROCK BRAND WOOD OR USG SHEATHING WF SCREWS [1-1/4 INCH] [1-5/8 INCH] [2-1/4 INCH] WITH CORROSION-RESISTANT COATING.
- NAILS: 11-GAUGE HOT-DIPPED GALVANIZED ROOFING NAILS [1-1/2 INCH (38 MM)] [1-3/4 INCH (44 MM)], 7/16 11 MM INCH DIAMETER HEAD.
- 7.5 INSTALLATION REQUIREMENTS:
- FOR STEEL FRAMING LESS THAN 0.0329 INCH THICK, ATTACH SHEATHING TO COMPLY WITH ASTM C
- FOR STEEL FRAMING FROM 0.033 TO 0.112 INCH THICK, ATTACH SHEATHING TO COMPLY WITH ASTM

SECTION 09 30 00 / TILE

QUARRY TILE

- 1.1 SUBMIT SAMPLES COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.
- 1.2 FURNISH MASTER GRADE CERTIFICATE FOR TILES, BEFORE INSTALLATION, BEARING THE CERTIFICATION MARK OF THE TCA, SIGNED BY THE MANUFACTURER STATING THE TYPE AND QUANTITY OF THE MATERIAL.
- 1.3 FURNISH MANUFACTURER'S PRINTED INSTRUCTIONS FOR USE OF LATEX PORTLAND CEMENT AND MORTAR.
- 1.4 PROVI DE CARTON OF EACH OOLOR AND PATTERN OF QUARRY TILE FOR OWNERS' FUTURE USE.
- MATERIALS, PREPARATION, AND INSTALLATION SHALL CONFORM TO ANSI STANDARDS AS LISTED AND THE DETAILED INSTALLATION INSTRUCTIONS OF THE MATERIAL MANUFACTURER INSOFAR AS APPLICABLE.
- 1.6 INSTALLATION OF QUARRY TILE WITH WATER RESISTANT ORGANIC ADHESIVE: ANSI A _108.4.
- REFERENCED SPECIFIXATIONS, INSOFAR AS ANY PORTIONS ARE APPLICABLE, ARE HEREBY MADE A DIRECT PART OF THIS SPECIFICATION AS THOUGH REPEATED HEREIN.

JOB CONDITIONS

SET AND GROUT TILE IN EPOXY OR CEMENT MORTAR WHEN SURFACE TEMPERATURE IS AT LEAST 50 DEGREES F AND RISING. COMPLY WITH MINIMUM TEMPERATURE RECOMMENDATIONS OF MANUFACTURER'S FOR BONDING AND GROUTING MATERIALS IN OTHER THAN PORTLAND CEMENT MORTAR. PROTECT ADJOINING WORK SURFACES BEFORE TILE WORK BEGINS.

PRODUCTS

3.1 QUARRY TILE PRODUCTS AS MANUFACTURED BY DALTILE.

MATERIALS

- TILES SHALL BE OF DOMESTIC MANUFACTURE, STANDARD GRADE. MEETING THE REQUIREMENTS OF SPR R 61 OF THE U.S. DEPARTMENT OF COMMERCE AND SHALL COMPLY WITH ANS A 137.1. TCA CERTIFICATION MARK SHALL APPEAR ON EACH CARTON LABEL.
- 4.2 FLOOR QUARRY TILE SHALL BE STANDARD GRADE, UNGLAZE CERAMIC TYPE, NOT LESS THAN 3/8".
- 4.3 WALL QUARRY BASE TILE SHALL BE STANDARD GRADE UNGLAZED TILE NOT LESS THAN 5/16" THICK, IN NOMINAL FACE SIZES OF 5" X 6". PROVIDE SPACER LUGS OR OTHER SIMILAR FEATURES ON EDGES OF TILE TILE SHALL COMPLY WITH SECTION 6.1 OF ANSI A 137.1. PROVIDE A 3401 BASE MEMBER AT JUNCTION OF FLOOR AND AT INTERNAL CORNERS: ABL/R 3401 AND ACL/4 3401 AS APPLICABLE.
- 4.4 QUARRY TILE COLORS SHALL BE AS INDICATED ON THE DRAWINGS.
- 4.5 PORTLAND CEMENT SHALL CONFORM TO ASTM C 150, TYPE I.
- 4.6 SAND SHALL CONFORM TO ASTM C_144.
- 4.7 MORTAR SHALL BE ONE PART PORTLAND CEMENT, 6 PARTS DAMP SAND BY VOLUME.
- BOND COAT SHALL BE PORTLAND CEMENT PASTE ON A PLASTIC BED. OR DRY—SET MORTAR ON A CURED BED OR LATEX PORTLAN D CEMENT MORTAR ON A CURED BED.
- 4.9 LATEX PORTLAND CEMENT MORTAR SHALL CONFORM TO ANSI A 118.4.

- 4.10 DRY SET MORTAR SHALL CONFORM TO ANSI A 118.1.
- 4.11 ORGANIC ADHESIVE SHALL BE FLOOR TYPE CONFORMING TO ANSI A 136.1.
- 4.12 SEALANT: TWO COMPONENTS COMPLYING WITH ASTM C 920, TYPE M, CLASS 25, GRADE NS FOR JOINTS IN VERTICAL SURFACES; GRADE P, USE T FOR JOINTS IN HORIZONTAL SURFACES. BACK UP: FLEXIBLE AND COMPRESS IBLE TYPE OF CLOSED CELL FOAM POLYETHYLENE OR BUTYL RUBBER, ROUNDED AT SURFACE TO CONTACT SEALANT, AS SHOWN IN TCA DETAILS, AND AS RECOMMENDED BY SEALANT MANUFACTURER. IT SHALL FIT NEATLY INTO THE JOINT WITH 1/8" COMPACTION AND TO SUCH A HEIGHT TO ALLOW A SEALANT DEPTH OF 1/2 THE WIDTH OF THE JOINT. SEALANT SHALL NOT BOND TO THE BACK UP MATERIAL

- 5.1 INSTALL OUARRY TILE USING WATER RESISTANT ORGANIC ADHESIVES IN ACCORDANCE WITH ANS A-108.4
- 5.2 LAY OUT FLOORS SO THAT NO TILE LESS THAN ONE—HALF SIZE OCCURS. ALIGN JOINTS IN BOTH
- 5.3 GROUT TILE JOINTS FLUSH WITH FACE OF TILES MAKING A NEATLY FINISHED SMOOTH SURFACE.
- 5.4 INSTALL SPECIFIED GROUT IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS

EXPANSION JOINTS

- PROVIDE EXPANSION JOINTS IN QUARRY TILE SURFACES IN ACOORDANCE WITH TCA METHOD EJ-411-84. EXPANSION JOINT WIDTH SHALL BE 1/4" MINIMUM. JOINTS THROUGH TILE AND MORTAR DIRECTLY OVER STRUCTURAL JOINTS IN THE BACKING MUST BE AT LEAST THE WIDTH OF THE STRUCTURAL JOINT.
- INSTALLATION: SET BACK UP WHEN MORTAR IS PLACED OR UTILIZE REMOVABLE WOOD STRIP TO PROVIDE SPACE FOR BACK UP AFTER MORTAR HAS CURED. INSTALL SEALANT AFTER TILE WORK AND GROUT ARE DRY. FOLLOW SEALANT MANUFACTURER'S RECOMMENDATION.

7.1 CLEAN TILE AFTER GROUTING AND PROTECT FROM OTHER TRADES. CURE QUARRY TILE FLOORS FOR A MINIMU M OF 72 HOURS.

SECTION 09 51 00 / ACOUSTICAL TILE CEILING

- SUBMIT SAMPLES COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION. SUBMIT SHOP DRAWINGS IN FORM OF REFLECTED CEILING PLAN SHOWING AREAS TO RECEIVE ACOUSTICAL TILE AND DETAILS OF INSTALLATION.
- SUBMIT SAMPLES OF EACH TYPE OF PANEL AND SUSPENSION SYSTEMS SPECIFIED.
- PROVIDE OWNER WITH EXTRA STOCK EQUAL TO A MINIMUM OF ONE FULL, UNOPENED CARTON OF EACH

MANUFACTURERS

- 2.1 PRODUCTS SHALL BE AS MANUFACTURED BY ARMSTRONG OR VSG.
- ACOUSTICAL PANELS (ACT-1)
- ACOUSTICAL PANELS SHALL CONFORM TO ASTM E 1477-98 AND ASTM D 3273.
 - PATTERN: "DUNE" BEV ELED TEGULAR FINISH: WHITE FINE TEXTURE
- SIZE: 24" X 48" X 5/8" AND 24" X 24" X 5/8"
- LIGHT REFLECTANCE: LR 0.83 OR GREATER
- 2.3 WASHABLE ACOUSTICAL PANELS (ACT-2)

SECTION 09 73 00 / PREFINISHED PANELS (FRP)

- 1.1 SUBMIT SAMPLES COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION
- 1.2 PRE-FIN ISHED PANEL PRODUCTS SHALL BE AS MANUFACTURED BY MARLITE. MATERIALS
- 1.3 FIBER REINFORCED POLYESTER (FRP) PANELS: MARLITE FRP PANELS, FACTORY PRE-FINISH ED. SIZE: 4' X 10' X 3/32" THICK.
- COLOR: SMOOTH BRIGHT WHITE
- FURNISH PANELS COMPLETE WITH MANUFACTURERS PVC MOLDING SYSTEM CONSISTING OF ONE_PIECE TOP AND EDGE CAPS, DIVISION BARS, INSIDE AND OUTSIDE CORN ER MOLDINGS. AND BASE MOLDINGS. COLOR SHALL MATCH PANEL COLOR.
- SEALANT SHALL BE SILICONE BASED CONSTRUCTION GRADE GENERAL ELECTRIC 1200 SEALANT. COLOR TO
- 1.7 ADHESIVE SHALL BE AS RECOMMENDED BY THE MANU FACTURER FOR FIRE RESISTANT CONSTRUCTION.

INSTALLATION

APPLY PANELS WITH THE LONG DIMENSION VERTICALLY. CUT AND FIT NEATLY AROUND OUTLETS AND SWITCHEX. CAULK SEAMS, CURB JUNCTURES AND CORNERS. INSTALLATION TECHNIQUES SHALL RESULT IN PLUMB AND STRAIGHT SURFACES WITHOUT WAVES OR BUCKLES, FREE OF UNEVENNESS AT JOINTS.

SECTION 09 91 00 / PAINTING

ENVIRONMENTAL CONDITIONS

DO NOT APPLY EXTERIOR PAINT IN DAMP, RAINY WEATH ER OR UNTIL THE SURFACE HAS DRIED THOROUGHLY FROM THE EFFECTS OF SUCH WEATHER. DO NOT APPLY VARNISH OR PAINT WHEN TEMPERATURE IS BELOW TOO F. AVOID PAINTING SURFACES WHEN EXPOSED TO HOT SUNLIGHT.

PROTECTION

- 2.1 BEFORE PAINTING, REMOVE HARDWARE, ACCESSORIES, PLATES, LIGHTING FIXTURES AND SIMILAR ITEMS OR PROVIDE AMPLE PROTECTION OF SUCH ITEMS. ON COMPLETION OF EACH SPACE, REPLACE ABOVE ITEMS. PROTECT ADJACENT SURFACES AS REQUIRED. A SUFFICIENT SUPPLY OF CLEAN DROP CLOTHS AND OTHER PROTECTIVE COVERING SHALL BE MAINTAINED.
- FINISHING OF THE FOLLOWING LISTED ITEMS AND MATERIALS WILL NOT BE REQUIRED AND THEY SHALL BE PROTECTED: STAINLESS STEEL, BRASS, BRONZE, COPPER, MONEL, CHROMIUM, ANODIZED ALUMINUM; SPECIALLY FINISHED ARTICLES SUCH AS PORCELAIN ENAMEL, PLASTIC COATED FABRICS, AND BAKED ENAMEL.

PREPARATION OF SURFACES

INSPECTION OF SURFACES: DO NOT BEGIN PAINTING ON SURFACES UNTIL IT HAS BEEN INSPECTED AND IS IN PROPER CONDITION TO RECEIVE THE PAINT AS SPECIFIED. APPLY NO MATERIAL UNTIL THE UNSUITABLE SURFACES HAVE BEEN MADE SATISFACTORY. AFTER ACCEPTANCES OF SURFACE, BY APPLICATION OF

FIRST COAT OF PAINT, ASSUME RESPONSIBILITY FOR UNSATISFACTORY FINISH RESULTING.

- 3.2 IF, AFTER TREATMENT, THE COMPLETED FINISH (OR PORTION THEREOF) BLISTERS, CHECKS, PEELS, OR OTHERWISE SHOWS INDICATION OF DAMPNESS OR OTHER IRREGULAR CONDITION OF SURFACE, REMOVE THE APPLIED TREATMENT AND REFINISH THE PART AFFECTED TO THE SATISFACTION OF ARCHITECT. DETERMINE DRYNESS OF MOISTU RE_HOLDING MATERIALS BY USE OF A RELIABLE ELECTRONIC MOISTURE
- 3.3 WOOD: SANDPAPER TO SMOOTH AND EVEN SURFACE. AFTER PRIMING OR STAIN COAT HAS BEEN APPLIED, FILL NAIL HOLES AND OTHER SURFACE IMPERFECTIONS WITH PUTTY TINTED WITH PRIMER OR STAIN TO MATCH WOOD COLOR. SAND WOODWORK BETWEEN COATS TO A SMOOTH SURFACE. COVER KNOTS AND SAP STREAKS WITH A THIN COAT OF SHELLAC.
- STEEL AND IRON: REMOVE GREASE, RUST AND RUST SCALE AND TOUCH UP ANY CHIPPED OR ABRADE D PLACES ON ITEMS THAT HAVE BEEN SHOP COATED. WHERE STEEL OR IRON HAVE A HEAVY COATING OF SCALE, REMOVE BY DESCALING. OR WIRE BRUSH ING, AS NECESSARY. WHEN AREA WILL BE EXPOSED TO VIEW, SANDPAPER THE AREA SMOOTH, FEATHER THE EDGE OF SURROUNDING UNDAMAGED PRIME COAT AND SPOT PRIME IN A MANNER TO ELIMINATE EVIDENCE OF REPAIR.
- GALVANIZED METAL: CLEAN BY WIPING SURFACES WITH SURFACE CONDITION ER AND PRIME WITH GALVANIZED IRON PRIM MER AS RECOMMENDED BY PAINT MANUFACTU RER.
- 3.6 CONCRETE AND CONCRETE MASONRY: PREPARE SURFACES TO BE PAINTED BY REMOVING DIRT, DUST, OIL

AND GREASE STAINS AND EFFLORESCENC E. THE METHOD OF SURFACE PREPARATION SHALL BE LEFT TO THE DISCRETION OF CONTRACTOR. BEFORE FIRST PAINT COAT IS APPLIED, SPOT PRIME NAILS AND OTHER EXPOSED METAL OCCURRING IN THE SURFACES WITH AN OIL BASE MASONRR PRIMER AS RECOMMENDED BY PAINT MANUFACTURER.

3.7 PLASTER SURFACES: FILL CRACKS, HOLES, OR IMPERFECTIONS IN PLASTER WITH PATCHING PLASTER AND SMOOTH OFF TO MATCH ADJOINING SURFACES. BEFORE PAINTING PLASTER, SURFACES SHALL BE FIRST TESTED FOR DRYNESS WITH MOISTURE TESTING DEVICE. APPLY NO PAINT OR SEALER ON PLASTER WHEN THE MOISTURE CONTENT EXCEEDS 12% AS DETERMINED BY THE TESTING DEVICE. TEST SUFFICIENT AREAS IN EACH SPACE AND AS OFTEN AS NECESSARY TO DETERMINE THE PROPER MOISTURE CONTENT FOR PAINTING. IF THE MOISTURE CONTENT IS BETWEEN 8% AND 12%, PRIME WITH ALKALI RESISTANT PRIMER. IF 6% OR LESS, PRIME WITH SPECIFIED PRIMER. REMOVE THE DRY SALT DEPOSITS FROM PLASTER SURFACES BY BRUSH ING WITH STIFF BRUSH.

- 4.1 PERFORM WORK USING ONLY EXPERIENCED, PAINTERS IN ACCORDANCE WITH THE STANDARDS OF PRACTICE IN THE TRADE. HAND BRUSH OR ROLL WORK EXCEPT WHERE OTHERWISE PERM ITTED, OLYMPIC PRODUCTS ARE TO BE BRUSH APPLIED. WHEN COMPLETED, THE PAINTING SHALL REPRESENT A FIRST-CLASS APPEARANCE. APPLY PAINT MATERIALS UNDER ADEQUATE ILLUMINATION.
- 4.2 TINT PRIMERS AND UNDERCOATS TO APPROXIMATELY THE COLOR OF THE FINISH COAT. EACH COAT SHELL BE SUFFICIENTLY DIFFERENT FROM THE WORK IN PLACE TO PERM IT EAST IDENTIFICATION.
- 4.3 FINISH EDGES, TOPS AND BOTTOMS OF DOORS THE SAME AS DOOR FACES.
- 4.4 EXPOSED WATER, GAS, WASTE PIPING, EXPOSED CONDUIT, LIGHTING PANELS, TELEPHONE TERMINAL BOXES AND GALVANIZED OR INSULATED DUCTS, SHALL BE PAINTED IN AREAS OTHER THAN MECHANICAL ROOMS. PAINT PORTIONS OF EQUIPMENT EXPOSED TO VIEW FROM GROUND LEVEL AT ANY POINT ON THE
- 4.5 GRILLES AND REGISTERS SHALL BE SPRAY PAINTED WITH ENAMEL OR LACQUER TO MATCH WALLS AND CEILINGS. PAINT MATERIALS SHALL NOT SAG, RUN OR BIND MOVABLE PARTS OF GRILLES OR REGISTERS.
- 4.6 DUCT THROATS BEHIND GRILLES, REGISTERS, LOUVERS, BAFFLES, ETC. SHALL BE GIVEN ONE COAT OF FLAT BLACK OIL PAINT, WHEREVER VISIBILITY OF THE INTERIOR OF THE DUCT IS ALLOWED.
- 4.7 EXAMINE THE MECHANICAL AND ELECTRICAL DRAWINGS TO DETERMINE THE AMOUNT OF EXPOSED WORK
- 4.8 REFER TO THE EXTERIOR ELEVATIONS, ROOM FINISH AND DOOR SCHEDULES ON THE DRAWINGS.
- 4.9 REFER TO THE "FINISH SCHEDULE" ON THE DRAWING FOR DESIGNATED FINISHES OF AREAS, WHICH ARE LISTED IN ACCORDANCE WITH FOLLOWING SCHEDULE.
- 4.10 ITEMS LISTED ARE ACCEPTABLE PRODUCTS OF DUNN EDWARDS PAINTS, FRAZEE PAINTS, AND ICI PAINTS. RESPONSIBILITY FOR RECOMMENDING, SCHEDULING AND USING THE PROPER PAINT FOR THE JOB CONDITIONS RESTS WITH THE MANUFACTURER AND CONTRACTOR.

SECTION 09 90 00 / INTERIOR, EXTERIOR AND HIGH-PERFORMANCE PAINTS AND COATINGS

RELATED SECTIONS SECTION 04 20 00 - UNIT MASONRY: CONCRETE MASONRY UNITS (CMU) AND BRICK.

SECTION 05 50 00 - METAL FABRICATIONS. SECTION 08 11 13.16 - CUSTOM HOLLOW METAL DOORS AND FRAMES.

SECTION 23 05 00 - COMMON WORK RESULTS FOR HVAC. SECTION 26 05 00 - COMMON WORK RESULTS FOR ELECTRICAL.

REFERENCES

STEEL STRUCTURES PAINTING COUNCIL (SSPC):

PRIOR TO RECOATING.

- SSPC-SP 1 SOLVENT CLEANING.
- SSPC-SP 2 HAND TOOL CLEANING. SSPC-SP 3 - POWER TOOL CLEANING. SSPC-SP5/NACE NO. 1, WHITE METAL BLAST CLEANING
- SSPC-SP6/NACE NO. 3, COMMERCIAL BLAST CLEANING SSPC-SP7/NACE NO. 4, BRUSH-OFF BLAST CLEANING.
- SSPC-SP10/NACE NO. 2, NEAR-WHITE BLAST CLEANING. SSPC-SP11, POWER TOOL CLEANING TO BARE METAL. SSPC-SP12/NACE NO. 5, SURFACE PREPARATION AND CLEANING OF METALS BY WATERJETTING

SSPC-SP 13 / NACE NO. 6 SURFACE PREPARATION FOR CONCRETE. MATERIAL SAFETY DATA SHEETS / ENVIRONMENTAL DATA SHEETS: PER MANUFACTURER'S MSDS/EDS FOR

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH): CDPH V1.1-2010 AND V1.2-2017

SPECIFIC VOCS (CALCULATED PER 40 CFR 59.406). VOCS MAY VARY BY BASE AND SHEEN.

SUBMITTALS

- SUBMIT UNDER PROVISIONS OF SECTION 01 30 00 ADMINISTRATIVE REQUIREMENTS.
- 1.1 PRODUCT DATA: FOR EACH PAINT SYSTEM INDICATED, INCLUDING: PRODUCT CHARACTERISTICS. SURFACE PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.

MANUFACTURER'S PRODUCTS, COLORS AND SHEENS AVAILABLE.

- PRIMER REQUIREMENTS AND FINISH SPECIFICATION. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS. APPLICATION METHODS.
- CAUTIONS FOR STORAGE, HANDLING AND INSTALLATION. 1.2 SELECTION SAMPLES: SUBMIT A COMPLETE SET OF COLOR CHIPS THAT REPRESENT THE FULL RANGE OF
- 1.3 VERIFICATION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, SUBMIT SAMPLES THAT REPRESENT ACTUAL PRODUCT, COLOR, AND SHEEN. 1.4 COATING MAINTENANCE MANUAL: UPON CONCLUSION OF PROJECT, THE CONTRACTOR OR PAINT MANUFACTURER/SUPPLIER SHALL FURNISH A COATING MAINTENANCE MANUAL. SUCH AS SHERWIN-WILLIAMS. "CUSTODIAN PROJECT COLOR AND PRODUCT INFORMATION" REPORT OR EQUAL. MANUAL SHALL

PRODUCT/COLOR/FINISH WAS USED, PRODUCT DATA PAGES, MATERIAL SAFETY DATA SHEETS, CARE AND

CLEANING INSTRUCTIONS, TOUCH-UP PROCEDURES, AND COLOR SAMPLES OF EACH COLOR AND FINISH 1.5 ONLY SUBMIT COMPLYING PRODUCTS BASED ON PROJECT REQUIREMENTS (I.E. LEED). ONE MUST ALSO COMPLY WITH THE REGULATIONS REGARDING VOCS (CARB, OTC, SCAQMD, LADCO). TO ENSURE COMPLIANCE WITH DISTRICT REGULATIONS AND OTHER RULES, BUSINESSES THAT PERFORM COATING

INCLUDE AN AREA SUMMARY WITH FINISH SCHEDULE, AREA DETAIL DESIGNATING WHERE EACH

- ACTIVITIES SHOULD CONTACT THE LOCAL DISTRICT IN EACH AREA WHERE THE COATING WILL BE USED. 1.6 USGBC LEED V4 SUBMITTALS: MRC2 ENVIRONMENTAL PRODUCT DECLARATION PRODUCT LANGUAGE: PRODUCTS SHALL BE
 - PRODUCT DECLARATION DOCUMENTATION. EQC2 LOW EMITTING MATERIALS: THE VOC CONTENT OF ALL ADHESIVES, SEALANTS, PAINTS, AND COATINGS IN THIS SECTION SHALL NOT EXCEED THE VOC LIMITS ESTABLISHED IN DIVISION 01 SUSTAINABLE DESIGN SECTIONS.

SELECTED WITH A PREFERENCE TO PRODUCTS THAT HAVE PRODUCT-SPECIFIC ENVIRONMENTAL

QUALITY ASSURANCE

- INSTALLER QUALIFICATIONS: A FIRM OR INDIVIDUAL EXPERIENCED IN APPLYING PAINTS AND COATINGS SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THOSE INDICATED FOR THIS PROJECT, WHOSE WORK HAS RESULTED IN APPLICATIONS WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.
- 2.2 PAINT EXPOSED SURFACES. IF A COLOR OF FINISH, OR A SURFACE IS NOT SPECIFICALLY MENTIONED. ARCHITECT WILL SELECT FROM STANDARD PRODUCTS, COLORS, AND SHEENS AVAILABLE.
- 2.3 DO NOT PAINT PREFINISHED ITEMS, CONCEALED SURFACES, FINISHED METAL SURFACES, OPERATING PARTS, AND LABELS UNLESS INDICATED.
- MOCK-UP: PROVIDE A MOCK-UP FOR EVALUATION OF SURFACE PREPARATION TECHNIQUES AND
- APPLICATION WORKMANSHIP FINISH SURFACES FOR VERIFICATION OF PRODUCTS, COLORS, AND SHEENS.
- FINISH AREA DESIGNATED BY ARCHITECT. PROVIDE SAMPLES THAT DESIGNATE PRIMER AND FINISH COATS. COMPATIBILITY AND ADHESION: CHECK AFTER ONE WEEK OF DRYING AND CURING BY TESTING IN

ADDITIONAL SURFACE PREPARATION UP TO AND INCLUDING COMPLETE REMOVAL MAY BE

ACCORDANCE WITH ASTM D3359; ADHESION BY TAPE TEST. IF COATING SYSTEM IS INCOMPATIBLE

DO NOT PROCEED WITH REMAINING WORK UNTIL THE ARCHITECT APPROVES THE MOCK-UP.



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513 MAIN STREET FORT WORTH TX 76102

STEVEN COX NUMBER A-2023017238

PERMIT SET: 04/12/2024 CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE

BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE 10/23/23 AS NOTED SCALE:

J. JEFFERY

SPECIFICATIONS

DRAWN BY:

SHEET TITLE

CHECKED BY

SHEET NUMBER

DELIVERY, STORAGE, AND HANDLING

- DELIVERY: DELIVER MANUFACTURER'S UNOPENED CONTAINERS TO THE WORK SITE. PACKAGING SHALL BEAR THE MANUFACTURER'S NAME, LABEL, AND THE FOLLOWING LIST OF INFORMATION.
 - PRODUCT NAME, AND TYPE (DESCRIPTION).

MANUFACTURER'S INSTRUCTIONS. PROTECT FROM FREEZING.

- APPLICATION AND USE INSTRUCTIONS.
- SURFACE PREPARATION.
- VOC CONTENT ENVIRONMENTAL HANDLING.
- BATCH DATE. **COLOR NUMBER**
- STORAGE: STORE AND DISPOSE OF SOLVENT-BASED MATERIALS. AND MATERIALS USED WITH SOLVENT-
- BASED MATERIALS, IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES HAVING JURISDICTION. STORE MATERIALS IN AN AREA THAT IS WITHIN THE ACCEPTABLE TEMPERATURE RANGE, PER
- HANDLING: MAINTAIN A CLEAN, DRY STORAGE AREA, TO PREVENT CONTAMINATION OR DAMAGE TO THE COATINGS
- MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, AND VENTILATION) WITHIN LIMITS RECOMMENDED BY MANUFACTURER FOR OPTIMUM RESULTS. DO NOT INSTALL PRODUCTS UNDER

ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S RECOMMENDED LIMITS.

EXTRA MATERIALS

PROJECT CONDITIONS

- FURNISH EXTRA PAINT MATERIALS FROM THE SAME PRODUCTION RUN AS THE MATERIALS APPLIED AND, IN THE QUANTITIES, DESCRIBED BELOW. PACKAGE WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFY WITH LABELS DESCRIBING CONTENTS. DELIVER EXTRA MATERIALS TO OWNER.
- FURNISH OWNER WITH AN ADDITIONAL ONE PERCENT OF EACH MATERIAL AND COLOR, BUT NOT LESS THAN 1 GAL (3.8 L) OR 1 CASE, AS APPROPRIATE.

MANUFACTURERS

- ACCEPTABLE MANUFACTURER: SHERWIN-WILLIAMS, WHICH IS LOCATED AT: 101 PROSPECT AVE.; CLEVELAND, OH 44115; ASD TOLL FREE TEL: 800-524-5979; TEL: 216-566-2000; FAX: 440-826-1989; EMAIL: REQUEST INFOSPECIFICATIONS@SHERWIN.COM; WEB:WWW.SWSPECS.COM.
- REQUESTS FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SECTION 01 60 00 - PRODUCT REQUIREMENTS.

APPLICATIONS/SCOPE

- 7.1 EXTERIOR PAINT AND COATING SYSTEMS:
- 7.2 CONCRETE: NON-VEHICULAR CONCRETE FLOORS, PATIOS, PORCHES, STEPS, AND PLATFORMS.

PAINT MATERIALS - GENERAL

- PAINTS AND COATINGS
- UNLESS OTHERWISE INDICATED, PROVIDE FACTORY-MIXED COATINGS. WHEN REQUIRED, MIX COATINGS TO CORRECT CONSISTENCY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS BEFORE APPLICATION. DO NOT REDUCE, THIN, OR DILUTE COATINGS OR ADD MATERIALS TO COATINGS UNLESS SUCH PROCEDURE IS SPECIFICALLY DESCRIBED IN MANUFACTURER'S PRODUCT INSTRUCTIONS
- FOR OPAQUE FINISHES, TINT EACH COAT INCLUDING PRIMER COAT AND INTERMEDIATE COATS, ONE-HALF SHADE LIGHTER THAN SUCCEEDING COAT, WITH FINAL FINISH COAT AS BASE COLOR. OR FOLLOW MANUFACTURES PRODUCT INSTRUCTIONS FOR OPTIMAL COLOR CONFORMANCE.
- PRIMERS: WHERE THE MANUFACTURER OFFERS OPTIONS ON PRIMERS FOR A PARTICULAR SUBSTRATE, USE PRIMER CATEGORIZED AS "BEST" BY THE MANUFACTURER.
- COATING APPLICATION ACCESSORIES: PROVIDE ALL PRIMERS, SEALERS, CLEANING AGENTS, CLEANING CLOTHS, SANDING MATERIALS, AND CLEAN-UP MATERIALS REQUIRED, PER MANUFACTURER'S
- COLOR: REFER TO FINISH SCHEDULE FOR PAINT COLORS, AND AS SELECTED.
- 8.5 V4 and V4.1 EQ CREDIT: INDOOR ENVIRONMENTAL QUALITY-LOW EMITTING MATERIALS.

EXTERIOR PAINT AND COATING SYSTEMS

CONCRETE: CEMENTITIOUS SIDING, FLEXBOARD, TRANSITE BOARD, NON-ROOF SHINGLES, COMMON BRICK, STUCCO, EIFS, TILT-UP, PRECAST, AND POURED-IN-PLACE CEMENT.

LATEX SYSTEMS:

- 1ST COAT: S-W LOXON CONCRETE AND MASONRY PRIMER SEALER, LX02W50 (5.3-8.0 MILS WET, 2.1-
- 2ND COAT: S-W SUPERPAINT EXTERIOR LATEX FLAT, A80 SERIES. 3RD COAT: S-W SUPERPAINT EXTERIOR LATEX FLAT, A80 SERIES (4.0 MILS WET, 1.4 MILS DRY PER
- 10.2 METAL: MISCELLANEOUS, IRON, ORNAMENTAL IRON, STRUCTURAL IRON AND STEEL, FERROUS METAL. HOLLOW METAL DOORS AND FRAMES, PARAPET COPINGS, CANOPIES/AWNINGS.
- 10.3 ALKYD SYSTEMS; WATERBASED: SEMI-GLOSS FINISH:
 - i. 1ST COAT: S-W PRO INDUSTRIAL PRO-CRYL UNIVERSAL PRIMER, B66-1310 SERIES (5.0 MILS
 - 2ND COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS,
 - B53-1150 SERIES. iii. 3RD COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS,
- B53-1150 SERIES (4.0-5.0 MILS WET, 1.4 1.7 MILS DRY PER COAT).

CURED ASPHALT, CONCRETE, AND BRICK: NON-VEHICULAR FLOORS, PATIOS, PORCHES, STEPS AND PLATFORMS.

- 11.1 ACRYLIC SYSTEM WATER-BASED: CURED ASPHALT:
 - ACRYLIC SYSTEM WATER-BASED: FLOOR FINISH: 1ST COAT: S-W PROPARK WATERBORNE TRAFFIC MARKING PAINT, B97 SERIES (330 LINEAL
 - FEET OF STANDARD 4-INCH STRIPE PER GALLON). 2ND COAT: S-W SHER-CRYL HPA, B66-350 SERIES (6.0 M-10.0 MILS WET, 2.0-3.3 MILS DRY PER
- COAT). *WITH SILICA SAND BROADCAST FOR SLIP RESISTANCE.

#PLEASE NOTE, A MOCK-UP FOR COLOR RETENTION, ADHESION AND HOT TIRE PICK-UP TESTING IS REQUIRED PRIOR TO FULL APPLICATION.

INTERIOR PAINT AND COATING COMMERCIAL SYSTEMS:

ALKYD SYSTEMS; WATERBASED:

- 12.1 SEMI-GLOSS FINISH:
- 1ST COAT: S-W EXTREME BOND PRIMER, B51W01150 (3.1 MILS WET, 1.0 MILS DRY). 2ND COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150
- 3RD COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES (4.0-5.0 MILS WET, 1.4 - 1.7 MILS DRY PER COAT).

METAL: HOLLOW METAL DOORS AND FRAMES.

ALKYD SYSTEMS; WATERBASED:

- 13.1 SEMI-GLOSS FINISH:
- 1ST COAT: S-W PRO INDUSTRIAL PRO-CRYL UNIVERSAL PRIMER, B66-1310 SERIES (5.0 MILS WET, 2.0
- 2ND COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150
- 3RD COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES (4.0-5.0 MILS WET, 1.4 - 1.7 MILS DRY PER COAT).

EXAMINATION

DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED; NOTIFY ARCHITECT OF UNSATISFACTORY CONDITIONS BEFORE PROCEEDING. IF SUBSTRATE PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING.

- 14.2 PROCEED WITH WORK ONLY AFTER CONDITIONS HAVE BEEN CORRECTED AND APPROVED BY ALL PARTIES, OTHERWISE APPLICATION OF COATINGS WILL BE CONSIDERED AS AN ACCEPTANCE OF SURFACE
- 14.3 PREVIOUSLY PAINTED SURFACES: VERIFY THAT EXISTING PAINTED SURFACES DO NOT CONTAIN LEAD-BASED PAINTS, NOTIFY ARCHITECT IMMEDIATELY IF LEAD-BASED PAINTS ARE ENCOUNTERED.

SURFACE PREPARATION

- 15.1 GENERAL: SURFACES SHALL BE DRY AND IN SOUND CONDITION. REMOVE OIL, DUST, DIRT, LOOSE RUST, PEELING PAINT OR OTHER CONTAMINATION TO ENSURE GOOD ADHESION.
- 15.2 PRIOR TO ATTEMPTING TO REMOVE MILDEW, IT IS RECOMMENDED TO TEST ANY CLEANER ON A SMALL INCONSPICUOUS AREA PRIOR TO USE. BLEACH AND BLEACHING TYPE CLEANERS MAY DAMAGE OR DISCOLOR EXISTING PAINT FILMS. BLEACH ALTERNATIVE CLEANING SOLUTIONS ARE ADVISED.
- 15.3 REMOVE MILDEW BEFORE PAINTING BY WASHING WITH A SOLUTION OF 1 PART LIQUID HOUSEHOLD BLEACH AND 3 PARTS OF WARM WATER. APPLY SOLUTION AND SCRUB THE MILDEWED AREA. ALLOW SOLUTION TO REMAIN ON THE SURFACE FOR 10 MINUTES. RINSE THOROUGHLY WITH CLEAN WATER AND ALLOW SURFACE TO DRY BEFORE PAINTING. WEAR PROTECTIVE GLASSES OR GOGGLES, WATERPROOF GLOVES, AND PROTECTIVE CLOTHING. QUICKLY WASH OFF ANY OF THE MIXTURE THAT COMES IN CONTACT WITH YOUR SKIN. DO NOT ADD DETERGENTS OR AMMONIA TO THE BLEACH/WATER SOLUTION.
- 15.4 REMOVE ITEMS INCLUDING BUT NOT LIMITED TO THERMOSTATS, ELECTRICAL OUTLETS, SWITCH COVERS AND SIMILAR ITEMS PRIOR TO PAINTING. AFTER COMPLETING PAINTING OPERATIONS IN EACH SPACE OR AREA, REINSTALL ITEMS REMOVED USING WORKERS SKILLED IN THE TRADES INVOLVED.
- 15.5 NO EXTERIOR PAINTING SHOULD BE DONE IMMEDIATELY AFTER A RAIN, DURING FOGGY WEATHER, WHEN RAIN IS PREDICTED, OR WHEN THE TEMPERATURE IS BELOW 50 DEGREES F (10 DEGREES C), UNLESS PRODUCTS ARE DESIGNED SPECIFICALLY FOR THESE CONDITIONS. ON LARGE EXPANSES OF METAL SIDING, THE AIR, SURFACE AND MATERIAL TEMPERATURES MUST BE 50 DEGREES F (10 DEGREES F) OR HIGHER TO USE LOW TEMPERATURE PRODUCTS.
- ALUMINUM: REMOVE ALL OIL, GREASE, DIRT, OXIDE, AND OTHER FOREIGN MATERIAL BY CLEANING PER SSPC-SP1, SOLVENT CLEANING.
- 15.7 BLOCK (CINDER AND CONCRETE): REMOVE ALL LOOSE MORTAR AND FOREIGN MATERIAL. SURFACE MUST BE FREE OF LAITANCE, CONCRETE DUST, DIRT, FORM RELEASE AGENTS, MOISTURE CURING MEMBRANES, LOOSE CEMENT, AND HARDENERS. CONCRETE AND MORTAR MUST BE CURED AT LEAST 30 DAYS AT 75 DEGREES F (24 DEGREES C). THE PH OF THE SURFACE SHOULD BE BETWEEN 6 AND 9 UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN HIGH PH ENVIRONMENTS. ON TILT-UP AND POURED-IN-PLACE CONCRETE, COMMERCIAL DETERGENTS AND ABRASIVE BLASTING MAY BE NECESSARY TO PREPARE THE SURFACE. FILL BUG HOLES, AIR POCKETS, AND OTHER VOIDS WITH A CEMENT PATCHING COMPOUND.
- 15.8 CONCRETE, SSPC-SP13 OR NACE 6: THIS STANDARD GIVES REQUIREMENTS FOR SURFACE PREPARATION OF CONCRETE BY MECHANICAL, CHEMICAL, OR THERMAL METHODS PRIOR TO THE APPLICATION OF BONDED PROTECTIVE COATING OR LINING SYSTEMS. THE REQUIREMENTS OF THIS STANDARD ARE APPLICABLE TO ALL TYPES OF CEMENTITIOUS SURFACES INCLUDING CAST-IN-PLACE CONCRETE FLOORS AND WALLS, PRECAST SLABS, MASONRY WALLS, AND SHOTCRETE SURFACES. AN ACCEPTABLE PREPARED CONCRETE SURFACE SHOULD BE FREE OF CONTAMINANTS, LAITANCE, LOOSELY ADHERING CONCRETE, AND DUST, AND SHOULD PROVIDE A SOUND, UNIFORM SUBSTRATE SUITABLE FOR THE APPLICATION OF PROTECTIVE COATING OR LINING SYSTEMS.
- 15.9 CEMENT COMPOSITION SIDING/PANELS: REMOVE ALL SURFACE CONTAMINATION BY WASHING WITH AN APPROPRIATE CLEANER, RINSE THOROUGHLY AND ALLOW TO DRY. EXISTING PEELED OR CHECKED PAINT SHOULD BE SCRAPED AND SANDED TO A SOUND SURFACE. PRESSURE CLEAN, IF NEEDED, WITH A MINIMUM OF 2100 PSI PRESSURE TO REMOVE ALL DIRT, DUST, GREASE, OIL, LOOSE PARTICLES, LAITANCE, FOREIGN MATERIAL, AND PEELING OR DEFECTIVE COATINGS. ALLOW THE SURFACE TO DRY THOROUGHLY. THE PH OF THE SURFACE SHOULD BE BETWEEN 6 AND 9 UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN
- 15.10 COPPER AND STAINLESS STEEL: REMOVE ALL OIL, GREASE, DIRT, OXIDE, AND OTHER FOREIGN MATERIAL BY CLEANING PER SSPC-SP 2, HAND TOOL CLEANING.
- 15.11 EXTERIOR COMPOSITION BOARD (HARDBOARD): SOME COMPOSITION BOARDS MAY EXUDE A WAXY MATERIAL THAT MUST BE REMOVED WITH A SOLVENT PRIOR TO COATING. WHETHER FACTORY PRIMED OR UNPRIMED, EXTERIOR COMPOSITION BOARD SIDING (HARDBOARD) MUST BE CLEANED THOROUGHLY AND PRIMED WITH AN ALKYD PRIMER.
- 15.12 DRYWALL EXTERIOR: MUST BE CLEAN AND DRY. ALL NAIL HEADS MUST BE SET AND SPACKLED. JOINTS MUST BE TAPED AND COVERED WITH A JOINT COMPOUND. SPACKLED NAIL HEADS AND TAPE JOINTS MUST BE SANDED SMOOTH, AND ALL DUST REMOVED PRIOR TO PAINTING. EXTERIOR SURFACES MUST BE SPACKLED WITH EXTERIOR GRADE COMPOUNDS.
- 15.13 DRYWALL INTERIOR: MUST BE CLEAN AND DRY. ALL NAIL HEADS MUST BE SET AND SPACKLED. JOINTS MUST BE TAPED AND COVERED WITH A JOINT COMPOUND. SPACKLED NAIL HEADS AND TAPE JOINTS MUST BE SANDED SMOOTH, AND ALL DUST REMOVED PRIOR TO PAINTING.
- 15.14 GALVANIZED METAL: CLEAN PER SSPC-SP1 USING DETERGENT AND WATER OR A DEGREASING CLEANER TO REMOVE GREASES AND OILS. APPLY A TEST AREA, PRIMING AS REQUIRED. ALLOW THE COATING TO DRY AT LEAST ONE WEEK BEFORE TESTING. IF ADHESION IS POOR, BRUSH BLAST PER SSPC-SP16 IS NECESSARY TO REMOVE THESE TREATMENTS.
- 15.15 PLASTER: MUST BE ALLOWED TO DRY THOROUGHLY FOR AT LEAST 30 DAYS BEFORE PAINTING UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN HIGH PH ENVIRONMENTS. ROOM MUST BE VENTILATED WHILE DRYING: IN COLD, DAMP WEATHER, ROOMS MUST BE HEATED, DAMAGED AREAS MUST BE REPAIRED WITH AN APPROPRIATE PATCHING MATERIAL. BARE PLASTER MUST BE CURED AND HARD. TEXTURED, SOFT, POROUS, OR POWDERY PLASTER SHOULD BE TREATED WITH A SOLUTION OF 1 PINT HOUSEHOLD VINEGAR TO 1 GALLON OF WATER. REPEAT UNTIL THE SURFACE IS HARD, RINSE WITH CLEAR WATER AND ALLOW TO
- 15.16 STEEL: STRUCTURAL, PLATE, AND SIMILAR ITEMS: SHOULD BE CLEANED BY ONE OR MORE OF THE SURFACE PREPARATIONS DESCRIBED BELOW. THESE METHODS ARE USED THROUGHOUT THE WORLD FOR DESCRIBING METHODS FOR CLEANING STRUCTURAL STEEL. VISUAL STANDARDS ARE AVAILABLE THROUGH THE SOCIETY OF PROTECTIVE COATINGS. A BRIEF DESCRIPTION OF THESE STANDARDS TOGETHER WITH NUMBERS BY WHICH THEY CAN BE SPECIFIED FOLLOW.
- 15.17 SOLVENT CLEANING, SSPC-SP1: SOLVENT CLEANING IS A METHOD FOR REMOVING ALL VISIBLE OIL GREASE, SOIL, DRAWING AND CUTTING COMPOUNDS, AND OTHER SOLUBLE CONTAMINANTS, SOLVENT CLEANING DOES NOT REMOVE RUST OR MILL SCALE. CHANGE RAGS AND CLEANING SOLUTION FREQUENTLY SO THAT DEPOSITS OF OIL AND GREASE ARE NOT SPREAD OVER ADDITIONAL AREAS IN THE CLEANING PROCESS. BE SURE TO ALLOW ADEQUATE VENTILATION.
- 15.18 HAND TOOL CLEANING, SSPC-SP2: HAND TOOL CLEANING REMOVES ALL LOOSE MILL SCALE, LOOSE RUST, AND OTHER DETRIMENTAL FOREIGN MATTER. IT IS NOT INTENDED THAT ADHERENT MILL SCALE, RUST, AND PAINT BE REMOVED BY THIS PROCESS. BEFOREHAND TOOL CLEANING, REMOVE VISIBLE OIL, GREASE, SOLUBLE WELDING RESIDUES, AND SALTS BY THE METHODS OUTLINED IN SSPC-SP1.
- 15.19 POWER TOOL CLEANING, SSPC-SP3: POWER TOOL CLEANING REMOVES ALL LOOSE MILL SCALE, LOOSE RUST, AND OTHER DETRIMENTAL FOREIGN MATTER. IT IS NOT INTENDED THAT ADHERENT MILL SCALE. RUST, AND PAINT BE REMOVED BY THIS PROCESS. BEFORE POWER TOOL CLEANING, REMOVE VISIBLE OIL, GREASE, SOLUBLE WELDING RESIDUES, AND SALTS BY THE METHODS OUTLINED IN SSPC-SP1.
- 15.20 WHITE METAL BLAST CLEANING, SSPC-SP5 OR NACE 1: A WHITE METAL BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE, RUST, PAINT, OXIDES, CORROSION PRODUCTS, AND OTHER FOREIGN MATTER. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1 OR OTHER AGREED UPON METHODS.
- 15.21 COMMERCIAL BLAST CLEANING, SSPC-SP6 OR NACE 3: A COMMERCIAL BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE, RUST, PAINT, OXIDES, CORROSION PRODUCTS, AND OTHER FOREIGN MATTER, EXCEPT FOR STAINING. STAINING SHALL BE LIMITED TO NO MORE THAN 33 PERCENT OF EACH SQUARE INCH OF SURFACE AREA AND MAY CONSIST OF LIGHT SHADOWS, SLIGHT STREAKS, OR MINOR DISCOLORATION CAUSED BY STAINS OF RUST, STAINS OF MILL SCALE, OR STAINS OF PREVIOUSLY APPLIED PAINT. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1 OR OTHER AGREED UPON METHODS.
- 15.22 BRUSH-OFF BLAST CLEANING, SSPC-SP7 OR NACE 4: A BRUSH-OFF BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, LOOSE MILL SCALE, LOOSE RUST, AND LOOSE PAINT. TIGHTLY ADHERENT MILL SCALE, RUST, AND PAINT MAY REMAIN ON THE SURFACE. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP 1 OR OTHER AGREED UPON METHODS.
- 15.23 POWER TOOL CLEANING TO BARE METAL, SSPC-SP11: METALLIC SURFACES THAT ARE PREPARED ACCORDING TO THIS SPECIFICATION, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE, RUST, PAINT, OXIDE CORROSION PRODUCTS, AND OTHER FOREIGN MATTER. SLIGHT RESIDUES OF RUST AND PAINT MAY BE LEFT IN THE LOWER PORTIONS OF PITS IF THE ORIGINAL SURFACE IS PITTED. PRIOR TO POWER TOOL SURFACE PREPARATION. REMOVE VISIBLE DEPOSITS OF OIL OR GREASE BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1, SOLVENT CLEANING, OR OTHER AGREED UPON METHODS.

- 15.24 NEAR-WHITE BLAST CLEANING, SSPC-SP10 OR NACE 2: A NEAR WHITE BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE RUST, PAINT, OXIDES, CORROSION PRODUCTS, AND OTHER FOREIGN MATTER, EXCEPT FOR STAINING. STAINING SHALL BE LIMITED TO NO MORE THAN 5 PERCENT OF EACH SQUARE INCH OF SURFACE AREA AND MAY CONSIST OF LIGHT SHADOWS, SLIGHT STREAKS, OR MINOR DISCOLORATION CAUSED BY STAINS OF RUST, STAINS OF MILL SCALE, OR STAINS OF PREVIOUSLY APPLIED PAINT. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1 OR OTHER AGREED UPON METHODS.
- 15.25 HIGH- AND ULTRA-HIGH PRESSURE WATER JETTING FOR STEEL AND OTHER HARD MATERIALS: SSPC-SP12 OR NACE 5: THIS STANDARD PROVIDES REQUIREMENTS FOR THE USE OF HIGH- AND ULTRA-HIGH PRESSURE WATER JETTING TO ACHIEVE VARIOUS DEGREES OF SURFACE CLEANLINESS. THIS STANDARD IS LIMITED IN SCOPE TO THE USE OF WATER ONLY WITHOUT THE ADDITION OF SOLID PARTICLES IN THE
- 15.26 WATER BLASTING, SSPC-SP12/NACE NO. 5: REMOVAL OF OIL GREASE DIRT, LOOSE RUST, LOOSE MILL SCALE, AND LOOSE PAINT BY WATER AT PRESSURES OF 2,000 TO 2,500 PSI AT A FLOW OF 4 TO 14 GALLONS
- 15.27 VINYL SIDING, ARCHITECTURAL PLASTICS, EIFS AND FIBERGLASS: CLEAN VINYL SIDING THOROUGHLY BY SCRUBBING WITH A WARM, SOAPY WATER SOLUTION. RINSE THOROUGHLY. DO NOT PAINT VINYL SIDING WITH ANY COLOR DARKER THAN THE ORIGINAL COLOR UNLESS THE PAINT SYSTEM FEATURES SHERWIN-WILLIAMS VINYLSAFE TECHNOLOGY. PAINTING WITH DARKER COLORS THAT ARE NOT SHERWIN-WILLIAMS VINYLSAFE MAY CAUSE SIDING TO WARP. FOLLOW ALL PAINTING GUIDELINES OF THE VINYL MANUFACTURER WHEN PAINTING. ONLY PAINT PROPERLY INSTALLED VINYL SIDING. DEVIATING FROM THE MANUFACTURER'S PAINTING GUIDELINES MAY CAUSE THE WARRANTY TO BE VOIDED.
- STUCCO: MUST BE CLEAN AND FREE OF ANY LOOSE STUCCO. IF RECOMMENDED PROCEDURES FOR APPLYING STUCCO ARE FOLLOWED, AND NORMAL DRYING CONDITIONS PREVAIL, THE SURFACE MAY BE PAINTED IN 30 DAYS. THE PH OF THE SURFACE SHOULD BE BETWEEN 6 AND 9 UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN HIGH PH ENVIRONMENTS SUCH AS LOXON.
- 15.29 WOOD: MUST BE CLEAN AND DRY. PRIME AND PAINT AS SOON AS POSSIBLE. KNOTS AND PITCH STREAKS MUST BE SCRAPED, SANDED, AND SPOT PRIMED BEFORE A FULL PRIMING COAT IS APPLIED. PATCH ALL NAIL HOLES AND IMPERFECTIONS WITH A WOOD FILLER OR PUTTY AND SAND SMOOTH.

- 16.1 APPLY ALL COATINGS AND MATERIALS WITH THE MANUFACTURER'S SPECIFICATIONS IN MIND. MIX AND THIN COATINGS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- 16.2 DO NOT APPLY TO WET OR DAMP SURFACES. WAIT AT LEAST 30 DAYS BEFORE APPLYING TO NEW CONCRETE OR MASONRY. OR FOLLOW MANUFACTURER'S PROCEDURES TO APPLY APPROPRIATE COATINGS PRIOR TO 30 DAYS. TEST NEW CONCRETE FOR MOISTURE CONTENT. WAIT UNTIL WOOD IS FULLY DRY AFTER RAIN OR MORNING FOG OR DEW.
- 16.3 APPLY COATINGS USING METHODS RECOMMENDED BY MANUFACTURER.
- 16.4 UNIFORMLY APPLY COATINGS WITHOUT RUNS, DRIPS, OR SAGS, WITHOUT BRUSH MARKS, AND WITH CONSISTENT SHEEN.
- 16.5 APPLY COATINGS AT SPREADING RATE REQUIRED TO ACHIEVE THE MANUFACTURERS RECOMMENDED DRY
- 16.6 REGARDLESS OF NUMBER OF COATS SPECIFIED, APPLY AS MANY COATS AS NECESSARY FOR COMPLETE HIDE, AND UNIFORM APPEARANCE.
- INSPECTION: THE COATED SURFACE MUST BE INSPECTED AND APPROVED BY THE ARCHITECT JUST PRIOR TO THE APPLICATION OF EACH COAT.

PROTECTION

- 17.1 PROTECT FINISHED COATINGS FROM DAMAGE UNTIL COMPLETION OF PROJECT.
- 17.2 TOUCH-UP DAMAGED COATINGS AFTER SUBSTANTIAL COMPLETION, FOLLOWING MANUFACTURER'S RECOMMENDATION FOR TOUCH UP OR REPAIR OF DAMAGED COATINGS. REPAIR ANY DEFECTS THAT WILL HINDER THE PERFORMANCE OF THE COATINGS.

SECTION 10 73 16 / METAL CANOPIES

PART 1 GENERAL

PART 3: EXECUTION

SECTION 31 31 00 / TERMITE TREATMENT

MARKETING ADMINISTRATION OF THE USDA.

DILUTE MATERIALS AS BEING APPLIED.

PERMETH RIN

CYPERMETH RIN

- 1.1 UPON COMPLETION OF SOIL POISONING, AND AS A CONDITION OF FINAL ACCEPTANCE, SUBMIT TO OWNER A WRITTEN GUARANTEE PROVIDING THAT: A. THE APPLICATION WAS MADE AT THE CONCENTRATION RATES AND METHODS IN COMPLIANCE WITH THE SPEC IFICATION.
 - B. THE EFFECTIVENESS OF THE TREATMENT IS GUARANTEED FOR A TERM OF FIVE YEARS. C. EVIDENCE OF SUBTERRANEAN TERM ITE ACTIVITY OR DAMAGE TO THE STRUCTURE RESULTING FROM SUCH ACTIVITY WITHIN THE GUARANTEE PERIOD WILL BE TREATED AND REPAIRED. D. THE GUARANTEE SHALL BE DRAWN IN FAVOR OF OWNER, SUCCESSOR OR ASSIGNS.
- 1.2 APPLICATOR SHALL BE LII ENSED BY THE STATE PEST CONTROL BOARD.
- CHEMICAL ANALYSIS TESTS SHALL BE MADE OF MATERIALS USED ON THE BASIS OF ONE TEST FOR EACH 10,000 SF OF TREATED AREA. SAMPLES AND TEST MAY BE TAKEN OF BOTH CONCENTRATES AND THE

1.3 THE CHEMICAL BEING USED SHALL BE REGISTERED WITH, AND BE APPROVED BE, THE PRODUCTION AND

CHEMICALS USED SHALL BE THOSE THAT ARE FEDERALLY REGISTERED IN ACCORDANCE WITH FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICI DE ACT, AS AMENDED SEPTEMBER 30, 1978, FOR SOIL

APPLY ONE OF THE FOLLOWING CHEMICALS AS A WATER EMULSION AT NOT LESS THAN THE CONCENTRATIONS AND VOLUMES REQUIRED TO OBTAIN SPECIFIED GUARANTEE.

APPLICATION

- APPLICATION SHALL BE IN ACCORDANCE WITH PUBLIC LAW 94 140 (FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT, AS AMENDED SEPTEMBER 30, 1978) AND THE MANUFACTURER'S PRINTED INSTRUCTIONS FOR THE SPECIFIC PRODUCT APPLIED.
- SUFFICIENT NOTICE SHALL BE GIVEN TO PERMIT APPLICATION TO BE MADE AT LEAST 12 HOURS PRIOR TO CONCRETE PLACEMENT. TO AVOID SURFACE FLOW OF THE TOXICANT FROM THE APPLICATION SITE, TREATMENT SHALL NOT BE MADE WHEN SOIL OR FILL IS EXCESSIVELY WET. APPLY ONLY AFTER PREPARATION FOR SLAB PLACEMENT HAS BEEN COMPLETED. THERE SHALL BE NO DISTURBANCE OF TREATED AREAS.
- 3.3 APPLY NO MATERIAL WITHOUT NOTIFICATION TO OWNER SO HE MAY BE PRESENT DURING APPLICATION. APPLY DURING NORMAL WORKING HOURS IN ORDER TO BE SUBJECT TO INSPECTION. PERM IT INSPECTOR TO SAMPLE AND MATERIAL USED, AND TO VERIFY THE RATE OF APPLICATION AND VOLUMES.

AREAS OF APPLICATION

- 4.1 MAKE APPLICATION IN THE FOLLOWING AREAS:
- UNDER NEW BUILDING FLOOR SLABS ALONG THE INTERIOR SIDE OF FOUNDATION WALLS
- ALONG THE EXTERIOR SIDE OF FOUNDATION WALLS WHERE FLOORS, ENTRANCES, SIDEWALKS. ETC., WILL ABUT THE BUILDINGS
- ALONG EXPANSION OR COLD JOINTS WHEREVER SLAB WILL BE PENETRATED BY CONSTRUCTION FEATURES UNDER NEW EXTERIOR CONCRETE SLABS ABUTTING THE BUILDING FOR AN AREA AT LEAST 3 FEET WIDE ADJACENT TO THE BUILDING WALL. AT VOIDS OF CONCRETE UNIT MASONRY FOUNDATION

WALLS USE EMULSION THAT WILL ADHERE TO SURFACE OF BLOCK CAVITIES.

SECTION 32 31 13 GALVANIZED CHAIN LINK FENCE AND GATES

PART 1 GENERAL

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513 MAIN STREET TX 76102

FORT WORTH STEVEN COX NUMBER A-2023017238

PERMIT SET: 04/12/2024 CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS.

OMISSIONS OR DISCREPANCIES BEFORE

BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087

10/23/23

AS NOTED

J. JEFFERY

CHECKED BY SHEET TITLE

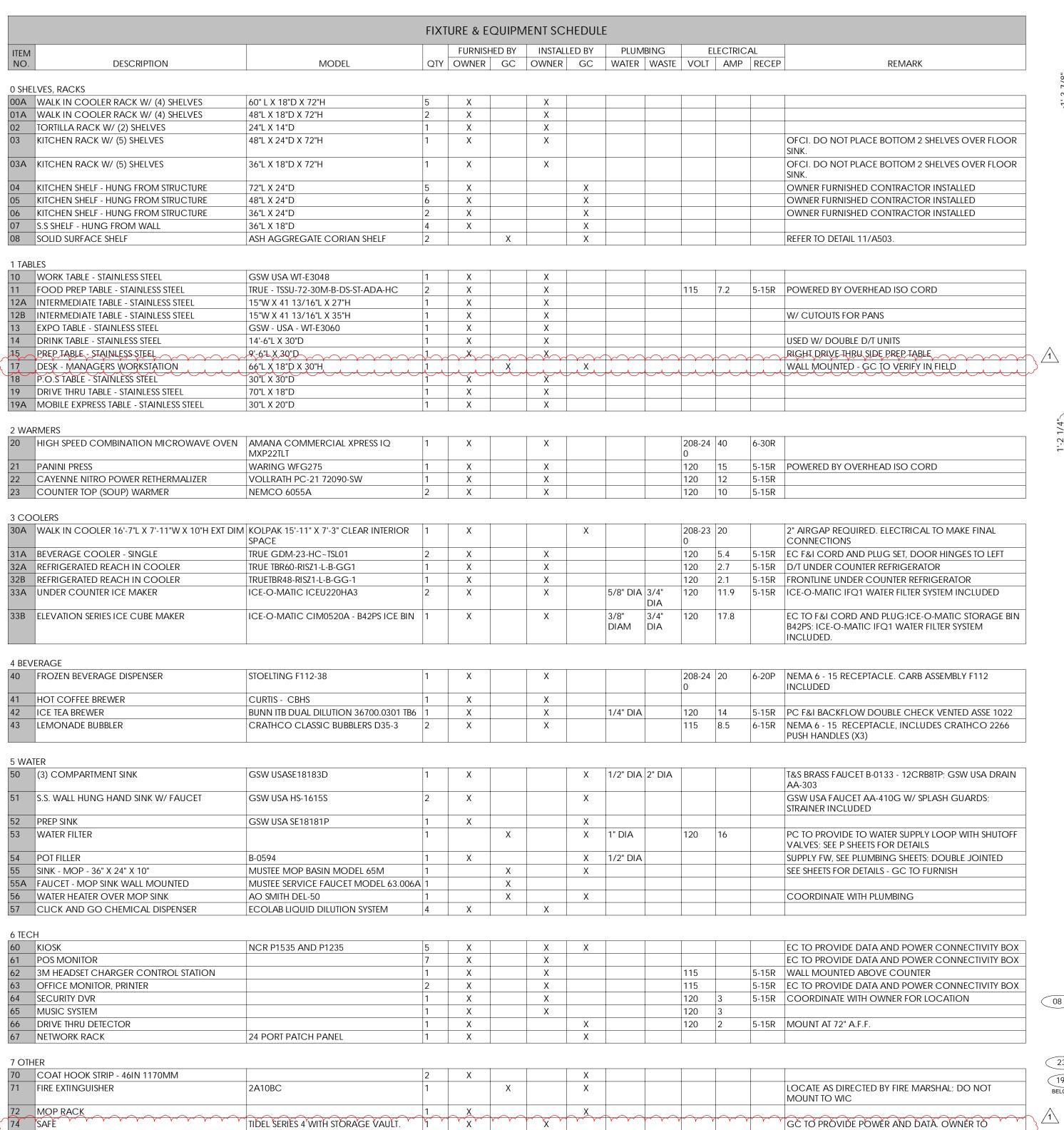
SHEET NUMBER

ORIGINAL ISSUE:

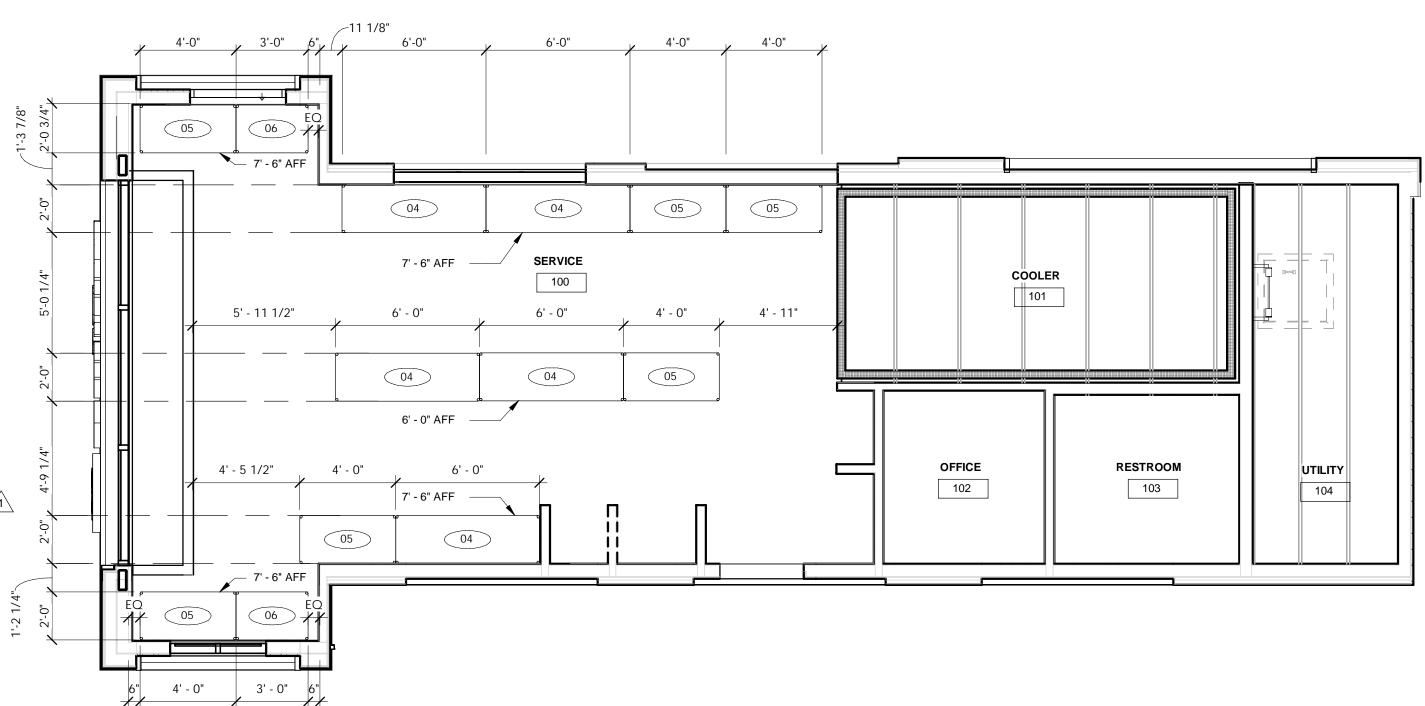
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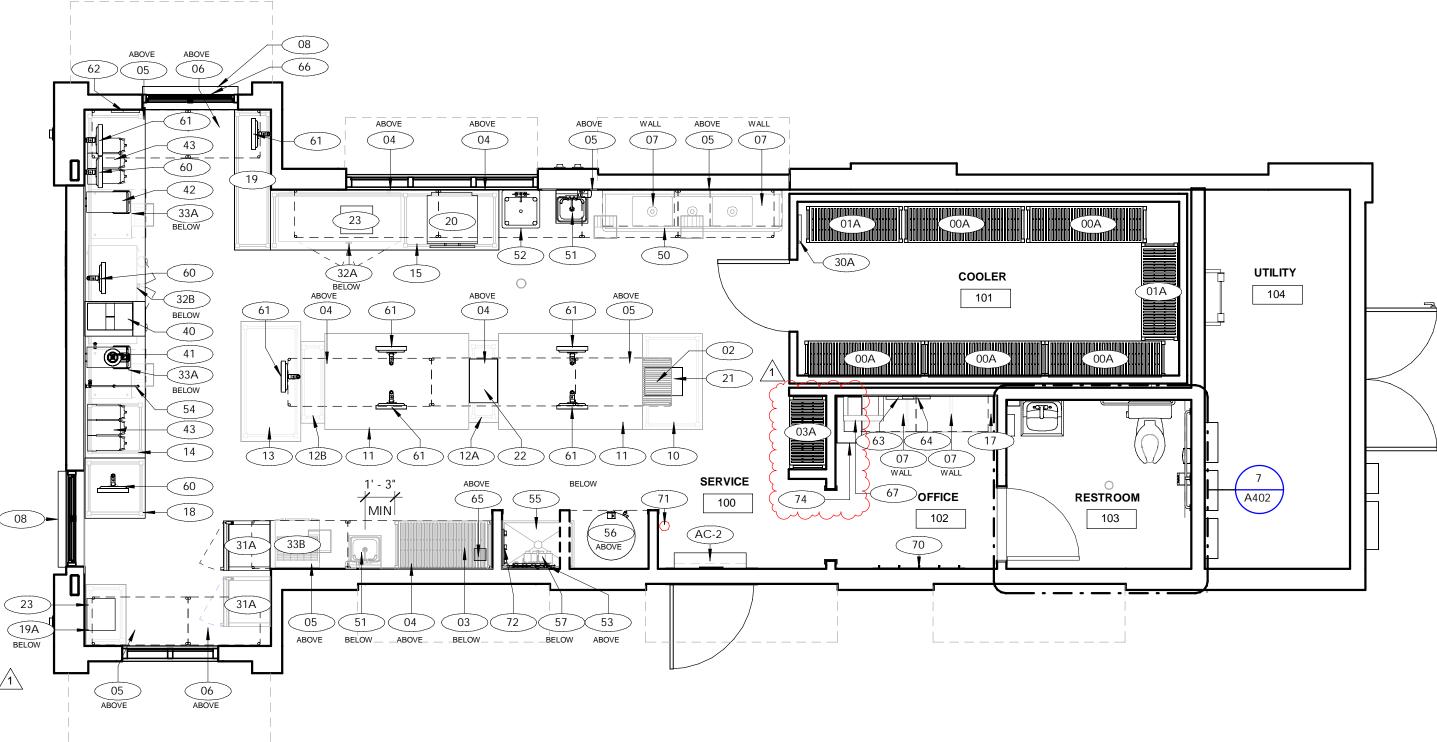
SPECIFICATIONS



harman and the contract of the



EQUIPMENT REFLECTED CEILING PLAN



EQUIPMENT FLOOR PLAN

REFRIGERATION

THE ICE MACHINE MUST BE INSTALLED BY A CERTIFIED REFRIGERATION TECHNICIAN. THE GENERAL CONTRACTOR MUST ACCOUNT FOR THIS IN ITS PROPOSAL, AND SUBMIT THE TECHNICIAN'S QUALIFICATIONS TO THE OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF THE WORK. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR THE EXTENT OF THIS SCOPE OF WORK, AND SHALL COMPLETE IT IN ACCORDANCE WITH THE "RESPONSIBILITY SCHEDULE".

EQUIPMENT GENERAL NOTES:

- A. SEE ELECTRICAL FOR ADDITIONAL EQUIPMENT REQUIREMENTS AND ADDITIONAL INFORMATION.
- B. SEE MECHANICAL AND PLUMBING FOR ADDITIONAL GAS, WATER, AND DRAIN REQUIREMENTS AND INFORMATION.
- C. ELECTRICAL, MECHANICAL, AND PLUMBING INFORMATION SHOWN WITHIN THE EQUIPMENT SCHEDULE IS FOR REFERENCE ONLY. FOR ELECTRICAL,

MECHANICAL, AND PLUMBING INFORMATION SEE CONSULTANT SHEETS AND

D. FOR WALL MOUNTED SHELVING LOCATIONS SEE INTERIOR ELEVATIONS

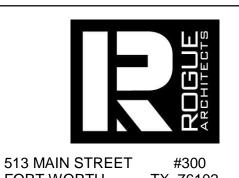
EQUIPMENT SPECIFICATION SHEETS.

- E. PROVIDE AND INSTALL CASEWORK AND SHELVING AS INDICATED ON FLOOR PLANS AND INTERIOR ELEVATIONS. ALL CASEWORK TO BE SOLID CLEAR STAIN GRADE WOOD EXTERIOR SURFACE WITH MELAMINE INTERIOR SURFACES AND SHELVES. ALL DOORS AND DRAWER FRONTS SHALL BE RAISED PANEL.
- F. CONTRACTOR SHALL FIELD MEASURE AND VERIFY DIMENSIONS AT LOCATIONS THAT ARE TO RECEIVE CUSTOM CASEWORK AND PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.



ROAD

CHIPMAN 10



FORT WORTH TX 76102



REVISION 1: 06/06/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. **OMISSIONS OR DISCREPANCIES BEFORE** BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION 06/06/2024 CITY COMMENTS

PROJECT INFORMATION PROJECT NO:

24-0087 06/01/2023 ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY: CHECKED BY: J. JEFFERY

SHEET TITLE

EQUIPMENT PLAN

SHEET NUMBER

GENERAL NOTES

- PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALL PERMITS, INSPECTIONS, LICENSES AND FEES. FURNISH ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS.
- THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPES, FIXTURES, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS. TAKE ALL DIMENSIONS. MEASUREMENTS, EQUIPMENT LOCATIONS, LEVELS, ETC FROM THE ARCHITECTURAL DRAWINGS AND FROM THE EQUIPMENT TO BE FURNISHED. PIPING MAY BE RELOCATED OR OFFSET FOR PROPER CLEARANCES OR TO AVOID CONFLICTS WITH OTHER TRADES. THE DESIGN INTENT (I.E. PITCHES, VELOCITIES, PRESSURE DROPS, VOLTAGE DROPS, ETC) CANNOT BE GREATLY ALTERED WITHOUT THE APPROVAL OF THE ARCHITECT. THE COST OF THESE DEVIATIONS TO AVOID INTERFERENCE'S SHALL BE PART OF THE ORIGINAL CONTRACT
- EACH SUBCONTRACTOR SHALL CONFER AND COOPERATE WITH ALL OTHER TRADES TO COORDINATE THEIR WORK. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO MATERIALS AND EQUIPMENT ROUTED IN CEILING AND WALL CAVITIES, EQUIPMENT ARRANGEMENT IN MECHANICAL SPACES, INCLUDING EQUIPMENT CLEARANCE REQUIREMENTS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS. ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS.
- BASE FINAL INSTALLATION OF MATERIALS AND EQUIPMENT ON ACTUAL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. FIELD MEASURE FOR MATERIALS AND EQUIPMENT REQUIRING EXACT FIT. NO EXTRAS WILL BE GIVEN FOR THE CONTRACTORS FAILURE TO FIELD COORDINATE.
- THE OWNER OR ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.
- THE CONTRACTOR SHALL LOCATE ALL EQUIPMENT THAT MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE (BUT NOT LIMITED TO) VALVES, SHOCK ABSORBERS, TRAPS, CLEANOUTS, MOTORS, CONTROLLERS, SWITCHGEAR, AND DRAIN POINTS IF REQUIRED FOR BETTER ACCESSIBILITY. FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE APPROVED BY THE ARCHITECT AND CONSTRUCTION MANAGER/GENERAL CONTRACTOR PRIOR TO MAKING THE CHANGE.
- THE CONTRACTOR SHALL PROVIDE ACCESS DOORS, WALL OPENINGS, ROOF OPENINGS OR ANY OTHER CONSTRUCTION REQUIREMENT NEEDED TO ACCOMMODATE THE PLUMBING EQUIPMENT. LOCATIONS OF THESE OPENINGS SHALL BE SUBMITTED IN SUFFICIENT TIME TO BE INSTALLED IN THE NORMAL COURSE OF WORK.
- THE CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF PLUMBING EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF ANY ELECTRICAL GEAR OR CONDUIT.
- PROVIDE VIBRATION ISOLATORS FOR MOTOR DRIVEN PLUMBING EQUIPMENT UNLESS NOTED OTHERWISE. PROVIDE ISOLATION AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.
- 10. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL CLEANOUTS, ACCESS DOORS, ETC WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO INSTALLATION. IF A CONFLICT WITH MILLWORK, LIGHT SWITCHES, WINDOWS, ETC EXISTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF THE POTENTIAL INTERFERENCE PRIOR TO INSTALLATION.
- 11. PLUMBING VENTS THROUGH THE ROOF SHALL BE A MINIMUM OF 10 FEET FROM ALL OUTSIDE AIR INTAKES AND A MINIMUM OF 5 FEET FROM EXTERIOR PERIMETER WALLS.
- 12. SOME PIPES SHOWN ON EACH FLOOR PLAN MAY BE SHOWN WITH AN OFFSET FOR CLARITY.
- 13. PLUMBING FIXTURES AND TRIM OF LIKE KIND SHALL BE OF THE SAME MANUFACTURER THROUGHOUT THE PROJECT. TYPICAL CATEGORIES INCLUDE THE FOLLOWING:
 - WATER CLOSETS, LAVATORIES, URINALS
- ELECTRIC WATER COOLERS, DRINKING FOUNTAINS C. FAUCETS, MIXING VALVES
- D. TAIL PIECE, FIXTURE TRAPS, ESCUTCHEONS, ARM EXTENSIONS, STRAINERS E. FIXTURE CARRIERS, FLOOR DRAINS, FLOOR SINKS, ROOF DRAINS, OVERFLOW DRAINS F. COUNTER TOP SINKS
- 14. PROVIDE WATER HAMMER ARRESTERS BETWEEN THE NEXT TO LAST AND LAST FIXTURE AT EACH BATTERY OF PLUMBING FIXTURES IN ACCORDANCE WITH THE WATER HAMMER ARRESTER SCHEDULE AND THE PLUMBING AND DRAINAGE INSTITUTE STANDARD PDI-WH-201.
- 15. ALL SANITARY WASTE PIPING WITHIN THE BUILDING ENVELOPE SHALL HAVE MINIMUM SLOPES AS REQUIRED BY THE LOCAL CODE AUTHORITY. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS INDICATED ON FLOOR PLANS PRIOR TO INSTALLATION OF ANY SITE UTILITIES AND CONNECTION INTO EXISTING SERVICES.
- 16. COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY'S STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH VALVE HANDLES LOCATED ON THE WIDE SIDE OF EACH
- 17. SEAL ALL PIPE PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS WITH AN APPROVED FIRE PROOFING MATERIAL.
- 18. ALL FLOOR DRAIN AND FLOOR SINK TRAPS SHALL USE TRAP PRIMERS.
- 19. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL NATURAL GAS UTILITY COMPANY TO EXTEND NATURAL GAS SERVICE TO LOCATION INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL PAY ALL FEES AND COSTS ASSOCIATED/REQUIRED BY THE LOCAL GAS UTILITY COMPANY FOR THE EXTENSION OF THE GAS SERVICE. THE CONTRACTOR SHALL PROVIDE ALL PIPING, VALVES, ETC THAT ARE NOT PROVIDED BY THE LOCAL GAS UTILITY COMPANY AND THAT ARE REQUIRED FOR CONNECTION OF THE GAS METER AND REGULATOR(S) FOR A COMPLETE OPERATIONAL SYSTEM. THE CONTRACTOR SHALL VERIFY THE NATURAL GAS PRESSURE PROVIDED BY THE NATURAL GAS UTILITY COMPANY AND PROVIDE ADDITIONAL REGULATORS AS REQUIRED BY THE GAS FIRED EQUIPMENT INSTALLED.
- 20. WELDED ALL GAS PIPING. THREADED JOINTS SHALL BE USED ONLY ON VALVES AND REGULATORS.
- CONTRACTOR SHALL INSTALL NEW ISOLATION VALVES AT BRANCH CONNECTION TO EACH RESTROOM ON DOMESTIC HOT AND COLD WATER SUPPLY LINES. ACCESS PANELS TO BALL VALVE SHUT OFF SHALL BE INSTALLED AS REQUIRED BY GENERAL NOTE 7.

PLUMBING SYMBOLS AND ABBREVIATIONS

	ABBREVIATIONS							
A/E	ARCHITECT/ENGINEER	L	LENGTH					
AFF	ABOVE FINISHED FLOOR	LB	POUNDS					
AHU	AIR HANDLING UNIT	LRA	LOCKED ROTOR AMPS					
AV	ACID VENT	MAX	MAXIMUM					
AW	ACID WASTE	MCA	MINIMUM CIRCUIT AMPACITY					
BD	BUILDING DRAIN (BELOW	MIN	MINIMUM					
	FLOOR)	MSB MOP	SINK BASIN					
BEGB	ELOW FINISHED GRADE	N/A	NOT APPLICABLE					
BS	BUILDING SEWER (OUTSIDE	NFPA	NATIONAL FIRE PROTECTION					
	OF BLDG)		ASSOCIATION					
DCW	DOMESTIC COLD WATER	NFWH NOI	N-FREEZE WALL HYDRANT					
DHW	DOMESTIC HOT WATER	N/O,N/C	NORMALLY OPEN, NORMALLY CLOSED					
DHWR	DOMESTIC HOT WATER	O/C	ON CENTER					
	CIRCULATION LOOP	OFD	ROOF OVERFLOW DRAIN					
D	EQUIPMENT DRAIN	PCO PLUG	CLEANOUT					
DI	DEIONIZED WATER	PH	PHASE					
DCO	TWO-WAY GRADE CLEANOUT	PROVIDE	FURNISH AND INSTALL					
DSN	DOWNSPOUT NOZZLE	PSI	POUNDS PER SQUARE INCH					
(E)	EXISTING	RD	ROOF DRAIN					
ÈQUIP	EQUIPMENT	RE:	REFERENCE, REFER					
EWC	ELECTRIC WATER COOLER	RLA	RUNNING LOAD AMPS					
°F	DEGREES FAHRENHEIT	RM	ROOM					
FCO	FLOOR CLEANOUT	RPBFP RE	DUCED PRESSURE PRINCIPLE					
FCU	FAN COIL UNIT		BACKFLOW PREVENTER					
FD	FLOOR DRAIN	RPZ	REDUCED PRESSURE ZONE					
FS	FLOOR SINK	S	SINK					
FT.	FOOT, FEET	SD	STORM DRAIN (BELOW FLOOR)					
FVC	FIRE VALVE CABINET	ST	STORM WATER (ABOVE CEILING)					
G	NATURAL GAS	SSD	SUBSURFACE DRAIN					
GCO	GRADE CLEANOUT	THRU	THROUGH					
GWH	NATURAL GAS WATER HEATER	TP	TRAP PRIMER					
Н	HEIGHT	TYP	TYPICAL					
НВ	HOSE BIBB	U	URINAL					
HP	HORSEPOWER	ÜL	UNDERWRITERS LABORATORIES, INC.					
HWTM	HOT WATER TEMPERATURE	V	SANITARY VENT					
	MAINTENANCE CABLE	VTR	SANITARY VENT THRU ROOF					
HZ	HERTZ	W	SANITARY WASTE (ABOVE FLOOR)					
IE	INVERT ELEVATION	WC WATE						
IN.	INCH, INCHES	WCO	WALL CLEANOUT					
J-BOX	JUNCTION BOX	W/	WITH					

DRAWING/DETAIL REFERENCE

W/O

WITHOUT



77711	1 X 1 1/ (1 V 1					_
P.D.I. SIZE	Α	В	С	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-33
NOTES:						

1. ALL WHA'S SHALL HAVE AN ACCESS PANEL.

kW

KILOWATT

2. SIZE AND LOCATE WATER HAMMER ARRESTERS IN ACCORDANCE WITH PDI PAMPHLET PDI-WH-201

BASIS OF PLUMBING DESIGN

PRIMARY CODES PLUMBING: 2018 INTERNATIONAL DILIMBING CODE

Storm Drain Ca	alculation	Storm Drain Calculati	ion (Per Drain)
Rainfall (in/hr)	6		
Area of Roof (Sqft)	860Area	of Roof (Sqft)	430.00
Gal/min	53.61Gal/	min	26.80
Pipe Size	8"Pip	e Size	4'

Number of Drains

NOTE: ALL SYMBOLS AND ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS

		VALVES AND FITTINGS
	SYMBOL	DESCRIPTION
		SHUT-OFF / ISOLATION VALVE
		BALL VALVE
	_	BUTTERFLY VALVE
	_	GLOBE VALVE
	<u></u> ——▼—	PLUG VALVE / GAS COCK
		CHECK VALVE
		STRAINER
	_ 	CALIBRATED BALANCING VALVE
		GAS PRESSURE REGULATOR
		FLOW SWITCH
		UNION (DIELECTRIC)
	─	VALVE IN RISER
		END RISE (90° ELL)
	— 	END DROP (90° ELL)
	— 	RISE OR DROP
		TEE OUT OF TOP OF PIPE
		TEE OUT OF BOTTOM OF PIPE
		CAP ON END OF PIPE
	————I WCO	WALL CLEANOUT
	——∥PCO	PLUG CLEANOUT
	DCO	TWO WAY CLEANOUT
	—⊚ GCO	GRADE CLEANOUT
	+>+	NON-FREEZE WALL HYDRANT OR HOSE BIBB
	iii FD	FLOOR DRAIN
	⊚ FCO	FLOOR CLEANOUT
]		SHUT-OFF / ISOLATION VALVE
I	I	

LINE TYPES

SYMBOL	DESCRIPTION
SW	SANITARY SEWER (BELOW FLOOR, BUILDING DRAIN)
— GW —	GREASY WASTE (ABOVE CEILING)
——D——	EQUIPMENT DRAIN (ABOVE CEILING)
	SANITARY VENT
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER CIRCULATION

WATER CALCULATIONS

SANITARY SEWER AND WATER SERVICE PLUMBING CALCULATIONS

TOTAL WASTE WATER TOTAL WATER

38

FIXTURE TYPE	QUANTITY	WASTE FIXTURE UNITS PER FIXTURE	FIXTURE UNITS FOR FIXTURE TYPE	FIXTURE UNITS PER FIXTURE	FIXTURE UNITS FOR FIXTURE TYPE
WATER CLOSET < 1.6 GPF	1	4	4	5	5
LAVATORY	1	1	1	2	2
HAND SINK	2	2	4	3	6
SINK (SERVICE/MOP)	1	2	2	3	3
SINK (THREE COMP.)	1	0	0	3	3
PREP SINK	1	0.5	0.5	3	3
HOSE BIBB	2	0	0	2	4
EMERGENCY FLOOR DRAIN	1	0	0	0	0
FLOOR DRAIN	2	2	6	0	0
FLOOR SINK	5	5	20	0	0
	TOTAL	FIXTURE UNITS:	37.5		26
	SER	RVICE PIPE SIZE:	4"		1"
	DISTAN	CE FROM METER T	O MOST REMOTE	FIXTURE (FEET):	50
	EQUI	VALENT LENGTH O	F PIPING = DISTA	NCE x 1.5 (FEET):	75
	WATER PIPE CA	ALCULATION: IPO	APPENDIX E		
	TOTA	AL WATER SERVICE	DEMAND (FLOW): 18	GPM
		EQUIVALENT	LENGTH OF PIPE	E: 75	FEET
		MINIMUM PRE	SSURE AT METER	R: 60.0	PSI
		PRESSURE LOSS	THROUGH METER	R: 3.0	PSI
PRES	SSURE LOSS THROU	GH BACKFLOW PRE	EVENTION DEVICE	E: 10.0	PSI
	HEAD	LOSS (HEAD IN FE	ET x 0.433 PSI/FT): 4.3	PSI
	PRESSU	IRE LOSS THROUGH	H WATER HEATER	R: 0.0	PSI
	PRESSURE LO	OSS THROUGH SPE	CIAL EQUIPMENT	·: 0.0	PSI
	GREATEST	PRESSURE REQUIF	RED FOR FIXTURE	20.0	PSI
		TOTAL	PRESSURE LOSS	S: 37.3	PSI
	TOTAL PRESSI	URE AVAILABLE FO	R FRICTION LOSS	S: 22.7	PSI
	ALLOWABLE FF	RICTION LOSS PER	100 FEET OF PIPE	30.2	PSI
	GREASE INT	ERCEPTOR CAL	CULATION		
	PRO	OJECT: SALAD ANI	O GO		
FIXTURE			SPM .	LBS OF G	REASE

GREASE INTERCEPTOR (GB-75) PER PDI-G101, SECTION 8.0: IT IS RECOMMENDED THAT THE TOTAL CAPACITY IN GALLONS OF FIXTURES BEING SERVED BY AN INTERCEPTOR CONFORMING TO THE ABOVE STANDARD RATINGS, SHALL NOT EXCEED TWO AND ONE-HALF (2-1/2) TIMES THE CERTIFIED GALLONS PER MINUTE FLOW RATING OF THE SUBJECT INTERCEPTOR.

0.5

0.5

THREE COMPARTMENT SINK COMPARTMENT=18"X18"X12" =

3888 CU. IN. X 3 COMPARTMENTS = 11664 CU. IN. TOTAL CU IN = 11664/231X.75= 38 GALLONS. 38 GALLONS AT 2 MINUTE

DRAIN DOWN PERIOD = 38/2 = 19 GPM.

HAND SINK=.5 GALLONS

HAND SINK=.5 GALLONS

TOTAL POUNDS OF GREASE

PREP SINK=1 GALLON

MOP SINK=1 GALLON

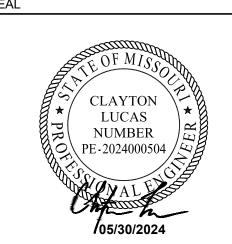
	HOT WATER CALCULATIONS												
FIXTURE TYPE	QUANTITY	HOT WATER FIXTURE UNITS PER FIXTURE	TOTAL HOT WATER FIXTURE UNITS	GALLONS PER HOUR PER FIXTURE	TOTAL GALLONS PER HOUR								
LAVATORY	1	1.5	1.5	5	5								
HAND SINK	2	2.25	4.5	5	10								
SINK (SERVICE/MOP)	1	2.25	2.25	10	10								
SINK (THREE COMP.)	1	2.25	2.25	25	25								
PREP SINK	1	2.25	2.25	5	5								
	'	TOTAL HFU:	12.75	TOTAL GPH:	55								

TOTAL HOT WATER DEMAND (FLOW):	55	GPH
DEMAND FACTOR:	0.8	
ACTUAL HOT WATER DEMAND (FLOW):	44.0	GPH
WATER HEATER RECOVERY RATE:	46.0	GPH



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REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PRO	JECT INF	ORMATION

PROJECT NO: ORIGINAL ISSUE 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

PLUMBING LEGENDS AND NOTES

SHEET NUMBER

P101

	PLUMBING FIXTU	IRE	SC	CHI	ΞDI	JLE		
MARK	DESCRIPTION	R(IN (M			MANUFACTURER AND MODEL NUMBER	AD
WC-1	WATERCLOSET, 1.1 GPF, HIGH PERFORMANCE FLUSHOMETER TANK, ELONGATED BOWL, 3" FLUSH VALVE WITHIN TANK, CLOSE-COUPLED TANK, VITREOUS CHINA, WHITE, 2 1/8" FULLY GLAZED TRAPWAY, 12" ROUGH-IN, ASME A112.19.2M (& 19.6M).	4"	2"	-	-	-	AMERICAN STANDARD, 2467.100	E
	SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVE AND CHROME PLATED COPPER RISER SEAT, EXTRA HEAVY WEIGHT, POSTURE MOLDED SOLID PLASTIC, ELONGATED, OPEN FRONT, LESS COVER, EXTERNAL CHECK HINGES, STAINLESS STEEL HINGE POSTS, WHITE	-	-	1/2"	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT CHURCH; BEMIS	
LAV-1	LAVATORY, 20"X18" VITREOUS CHINA WALL MOUNT, SINGLE CENTER FAUCET HOLE, FRONT OVERFLOW, CONCEALED ARM CARRIER SYSTEM, DECK MOUNTED FAUCET, INTEGRAL 4" BACKSPLASH, ANSI A112.19.2	2"	1 1/2"	-	-	-	AMERICAN STANDARD, 0356.041	Ŀ
	TOUCHLESS METERING FAUCET, DECK MOUNT, SINGLE CENTER HOLE, POLISHED CHROME FINISH, BATTERY-POWERED, 0.35 GPM MAX	-	-	1/2"	1/2"	-	AMERICAN STANDARD; SELECTRONIC	
	SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES, BRAIDED HOSE CONNECTIONS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA.	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS FIXTURE CARRIER, CONCEALED ARMS, LEVELING AND SECURING SCREWS, UPRIGHTS, WELDED FEET THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	-	-	- - 1/2"	- 1/2"	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT JOSAM; WATTS; ZURN; OR JR SMITH WATTS; LEONARD	
HB-1	NARROW WALL HYDRANT, ENCASED, ANTI-SIPHON WITH EXTERNAL VACUUM BREAKER, 3/4" MALE N.H.T OUTLET, CHROME PLATED CAST BRONZE WALL BOX WITH HINGED COVER.	-	-	3/4"	-	-	ZURN Z1350	
	FLOOR DRAIN, CAST IRON BODY, ANCHOR FLANGE, WEEPHOLES FOR DOUBLE DRAINAGE, 6" SQUARE STAINLESS STEEL FLAT STRAINER. ADJUSTABLE DRAIN HEAD W/ MACHINED INTEGRAL BODY THREADS, ASME A112.21.1	-	-	1/2"		-	ZURN Z-415-S6	
	FLOOR SINK, 12"x12"x8", CI BODY, DBL DRAINAGE FLANGE, STAINLESS STEEL DOME STRAINER, 1/2 GRATE, NON-PUNCTURING FLASHING COLLAR, PORCELAIN ENAMEL OR EPOXY COATED INTERIOR	-	-	1/2"	-	-	ZURN Z-1901	
MS-1	MOP SINK BASIN, ONE PIECE-MOLDED STONE 36"x24"x10", COLORFAST MARBLEIZED WHITE FINISH, SELF-DRAINING SHELF WITH REMOVABLE STRAINER, MOLDED-IN DRAIN, STAINLESS STEEL WALL GUARDS, STAINLESS STEEL BUMPER GUARDS, HOSE AND HOSE HOLDER, MOP HANGER, DRAIN SEAL	3"	2"	-	-	-	MUSTEE - 65M	
	FAUCET, HEAVY-DUTY, CHROME PLATED BRASS, DUAL HANDLE, TOP REINFORCING BAR, PAIL HOOK WALL CLEANOUT, CI BODY, RECESSED, THREADED BRASS PLUG, STAINLESS STEEL ACCESS COVER FLOOR CLEANOUT, COATED CAST IRON BODY, COMBINATION ADJUSTABLE ROUND STAINLESS STEEL COVER AND PLUG TOP ASSEMBLY, GASKET SEAL, ASME 112.36.2	-	- - -	3/4"	3/4"	-	MUSTEE - 63.600A ZURN Z-1441 ZURN Z-1400	
GCO	GRADE CLEANOUT, HEAVY DUTY COATED CAST IRON ACCESS BODY WITH ANCHOR FLANGES, HEAVY DUTY DUCTILE IRON ACCESS COVER WITH VANDAL RESISTANT STAINLESS STEEL SCREWS	-	-	-	-	-	ZURN Z-1474-SG-VP	
DCO	2-WAY GRADE CLEANOUT, TWO-RISER CLEANOUT BODY WITH HEAVY DUTY COATED CAST IRON ACCESS BODY WITH ANCHOR FLANGES, HEAVY DUTY DUCTILE IRON ACCESS COVER WITH VANDAL RESISTANT STAINLESS STEEL SCREWS	-	-	-	-	-	ZURN Z-1474-SG-VP	
TP	TRAP PRIMER, DIAPHRAGM OPERATED BASED ON PRESSURE SPIKES OR PRESSURE DROPS, OPERATING RANGE BETWEEN 30 TO 70 PSIG. PROVIDE WITH DISTRIBUTION UNIT SERVING MULTIPLE DRAINS (UP TO 4). PROVIDE ACCESS PANEL FOR TRAP PRIMER MAINTENANCE.	-	-	1/2"	-	-	MIFAB, MI-500; PPP CPO-500 OR EQUAL	
	1" DUAL CHECK VALVE ASSEMBLY, BRONZE VALVE BODY, STAINLESS STEEL SPRINGS, LED FREE, NSF COMPLIANT, ASME B1.20.1	-	-	1"	-	-	WATTS - LF850	
WH-1	ELECTRIC, TANK TYPE WATER HEATER, 50-GALLON, 208V, 1-PH, (2) 4500W SIMULTANEOUS HEATING ELEMENTS, 46-GPH RECOVERY RATE AT 80-DEG F TEMPERATURE RISE, SET TO 140-DEG F VARIABLE SPEED DOMESTIC HOT WATER RE-CIRCULATION PUMP, 120V/1-PH, 5-GPM AT 8-FEET OF HEAD,	-	-	3/4"			A.O. SMITH DEL-50	
	AQUA-STAT, TIME CLOCK SET TO BUSINESS HOURS HYDROMECHANICAL GREASE TRAP, MOLDED POLYETHYLENE, 861 LB GREASE CAPACITY AT 75-GPM FLOW	4"	- -	-	-	YES -	GRUNDFOS - UP SCHIER - GB-75	
SW-1	RATE, INTEGRAL AIR RELIEF AND ANTI-SIPHON, H-20 RATED CAST IRON COVER, ASME A112.14.3 (TYPE D), ACCESS RESISTOR SAMPLING PORT, MOLDED POLYETHYLENE, H-20 CAST IRON COVER, WATER/GAS TIGHT SEAL, ACCESS	4"			_		SCHEIR - SV24	
PS-1	RESTRICTOR ONE COMPARTMENT SINK, 18"x18"x13" BOWL, STAINLESS STEEL LEGS WITH CROSS BRACING, EXTRA	2"	1 1/2"	-	-	-	GSW - SE18181P	
	WELDS UNDER TUBS, STAINLESS STEEL STRAINER DECK MOUNT FAUCET, 8" COMMERCIAL DUTY,10-INCH SWING SPOUT, CHROME PLATED BRASS, SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES, BRAIDED HOSE CONNECTIONS	-	-	1/2"	1/2	-	GSW - AA-710G MCGUIRE; T&S BRASS; OR BRASSCRAFT	
HS-1	1-1/2" COPPER TUBE TO INDIRECTLY DISCHARGE INTO FLOOR SINK BELOW HAND SINK, WALL MOUNTED, STAINLESS STEEL, 12-1/2" x 9-3/4"x 5-5/8" BOWL, WELDED SPLASH GUARDS FAUCET, 4" WRISTBLADE HANDLES, GOOSE NECK SPOUT, CHROME PLATED BRASS, BACKSPLASH	1-1/2"		-	- - 1/2	-	- GSW - HS-1615SSG	
	MOUNTED SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES, BRAIDED HOSE CONNECTIONS	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	FIXTURE CARRIER, CONCEALED ARMS, LEVELING AND SECURING SCREWS, UPRIGHTS, WELDED FEET THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	-	-	1/2"	1/2"	-	JOSAM; WATTS; ZURN; OR JR SMITH WATTS; LEONARD	
3COMP -1	3-COMPARTMENT SCULLERY SINK WITH TWO DRAINBOARDS, THREE-18"x18"x12" BOWLS, 24" DRAINBOARDS, ONE-PIECE DIE FORMED, INTEGRAL 9" HIGH REAR BACK SPLASH, 2"-180° ROLLED EDGES AT FRONT AND ENDS, WELDED CORNERS/EXPOSED CORNERS GROUND AND POLISHED TO BLEND WITH ADJACENT SURFACES, STAINLESS STEEL LEGS WITH ADJUSTABLE BULLET FEET.	2"	-	-	-	-	GSW - SE18183D	
	PULL-DOWN PRE-RINSE UNIT: 8" WALL MOUNT MIXING FAUCET, QUARTER-TURN CERAMA CARTRIDGES W/ CHECK VALVES, LEVER HANDLES, ADD-ON FAUCET W/ 12-INCH SWING NOZZLE, ACCESSORY TEE, 12" RISER, 30" FLEXIBLE STAINLESS STEEL HOSE, 1.07 GPM SPRAYER, 6-INCH WALL BRACKET	-	-		1/2"		T&S BRASS - B-0133-12CRB8TP	
	SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVES AND BRAIDED HOSE CONNECTIONS	-	-	1/2"	1/2		UNIVERSAL STAINLESS, MODEL USF-10-S; T&S BRASS, B-2481-WH4 MCGUIRE, H2167CCLK; OR EQUAL IN T&S BRASS OR BRASSCRAFT	
	TWIST HANDLE LEVER DRAINS MANIFOLD FOR INDIRECT DRAIN, CHROME PLATED CAST BRASS, OUTLET TEE TAILPIECE 2" COPPER TUBE TO INDIRECTLY DISCHARGE INTO FLOOR SINK BELOW	- - 2"	<u>-</u> -	-	-	-	GSW - AA-303 MCGUIRE; OR EQUAL IN T&S BRASS OR BRASSCRAFT	
PF-1	WALL MOUNTED POT FILLER FAUCET, 24" DOUBLE JOINT SWING NOZZLE, CHROME PLATED BRASS, ASME A112.18.1, NSF 61	-	-	1/2"	1/2	-	- T&S BRASS - B-0594	
RD	ROOF DRAIN, LARGE SUMP, CAST IRON BODY, 12"DIA. CAST IRON OR DUCTILE IRON DOME STRAINER, ANCHOR FLANGE AND CLAMP, ADJUSTABLE/INTEGRAL GRAVEL STOP, ASME A112.21.2	-	-	-	-	-	ZURN, ZC-100-G	
OFD	OVERFLOW ROOF DRAIN, LARGE SUMP, ADJUSTABLE INTERNAL STANDPIPE DAM, CAST IRON BODY, 12" DIA. CAST IRON OR DUCTILE IRON DOME STRAINER, ANCHOR FLANGE AND CLAMP, ADJUSTABLE/INTEGRAL GRAVEL STOP, ASME A112.21.2	-	-	-	-	-	ZURN ZC-100-G-W2	
DSN-1	DOWNSPOUT NOZZLE, 2-PIECE, BRONZE, WALL FLANGE AND THREADED INLET. PROVIDE SAMPLES OF MATERIAL AND FINISHES FOR EXTERIOR DOWNSPOUT NOZZLE FOR ARCHITECTURAL SELECTION OF FINISH.	-	-	-	-	-	ZURN Z-199	

- 1. CONTRACTOR SHALL FURNISH AND INSTALL SUPPLIES, STOPS, TRAPS, TAILPIECES AND ALL APPURTENANCES NECESSARY FOR A COMPLETE INSTALLATION OF ALL FIXTURES.
- 2. ALL ADA ACCESSIBLE SINKS AND LAVATORIES SHALL BE EQUIPPED WITH TRUEBRO #103 UNDER SINK PROTECTIVE PIPE COVERS WHERE NOT CONCEALED BY MILLWORK. 3. COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY'S STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH VALVE
- HANDLES LOCATED ON THE WIDE SIDE OF EACH STALL OR ROOM.

 4. FLOOR CLEANOUT ACCESS COVERS IN ALL FINISHED AREAS SHALL BE OF THE RECESSED TYPE TO ALLOW FOR INSERTION OF FINISHED FLOOR TREATMENT. TILE OR CARPET MARKER AS NECESSARY.

 5. ABOVE THE FLOOR P-TRAPS ON LAVATORIES AND SINKS SHALL BE 17 GAUGE, CHROME PLATED BRASS. ACCEPTABLE MANUFACTURERS: MCGUIRE, T&S BRASS, OR BRASSCRAFT.
- 6. CONTRACTOR SHALL VERIFY FIXTURE SUPPLIES AND APPURTENANCES FOR EACH FIXTURE PRIOR TO BIDDING AND PURCHASING.
- 7. ALL FLOOR MOUNTED WATER CLOSETS SHALL HAVE 10" ROUGH-IN UNLESS OTHERWISE NOTED.
- 8. CONTRACTOR SHALL VERIFY PLUMBING FIXTURES PROVIDED COMPLY WITH HANDICAPPED ACCESSIBILITY STANDARDS INCLUDING HEIGHT AND CLEARANCE REQUIREMENTS. 9. ALL WATER CLOSET AND URINAL FLUSH VALVES SHALL INCLUDE CHROME PLATED CAST WALL FLANGE WITH SETSCREW AND COVER TUBE.
- 10. LAVATORIES INDICATED WITH SENSOR OPERATED FAUCETS SHALL BE BATTERY OPERATED AND PROVIDED WITH A OF TEMPERING VALVE SET FOR 85°F.



610 NW CHIPMAN ROAD PROTOTYPE VERSION V2-B

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LUCAS NUMBER PE-2024000504 / 🗢

REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.
DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

PLUMBING SCHEDULES

SHEET NUMBER

P102

NOTES BY SYMBOL

- 1 PROPOSED LOCATION FOR INSTALLATION OF GREASE TRAP AND SAMPLE WELL. COORDINATE EXACT INSTALLATION LOCATION WITH ARCHITECT AND CIVIL PRIOR TO INSTALLATION. INSTALL GREASE TRAP AND SAMPLE WELL PER MANUFACTURER'S PUBLISHED IOM.
- 2 4-INCH VENT THRU ROOF. MAINTAIN 10-FEET OF CLEARANCE BETWEEN VENT AND ALL OUTDOOR AIR INTAKES ON ROOF.
- ROUTE CONDENSATE PIPING FROM WALK-IN COOLER TO FLOOR SINK AS SHOWN. CONDENSATE PIPING IS TO BE 82" AFF BEHIND WALL. PROVIDE 12" STUB-OUT FOR VENDOR TO CONNECT CONDENSATE FROM WALK-IN COOLER.
- 4 REFER TO CIVIL PLANS FOR CONTINUATION OF SANITARY WASTE PIPING.
- 5 CONTRACTOR SHALL COORDINATE EXACT OREINTATION OF GREASE INTERCEPTOR AND SAMPLE WELL WITH CIVIL DRAWINGS. OREINTATION SHOWN IS FOR LAYOUT OF EQUIPMENT AND CLEAN OUTS ONLY. CONTRACTOR SHALL CONFIRM ALL REQUIRED SANITARY DROPS WITH CIVIL PRIOR TO INSTALLATION.



PROTOTYPE VERSION V2-B

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610

LUCAS NUMBER

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

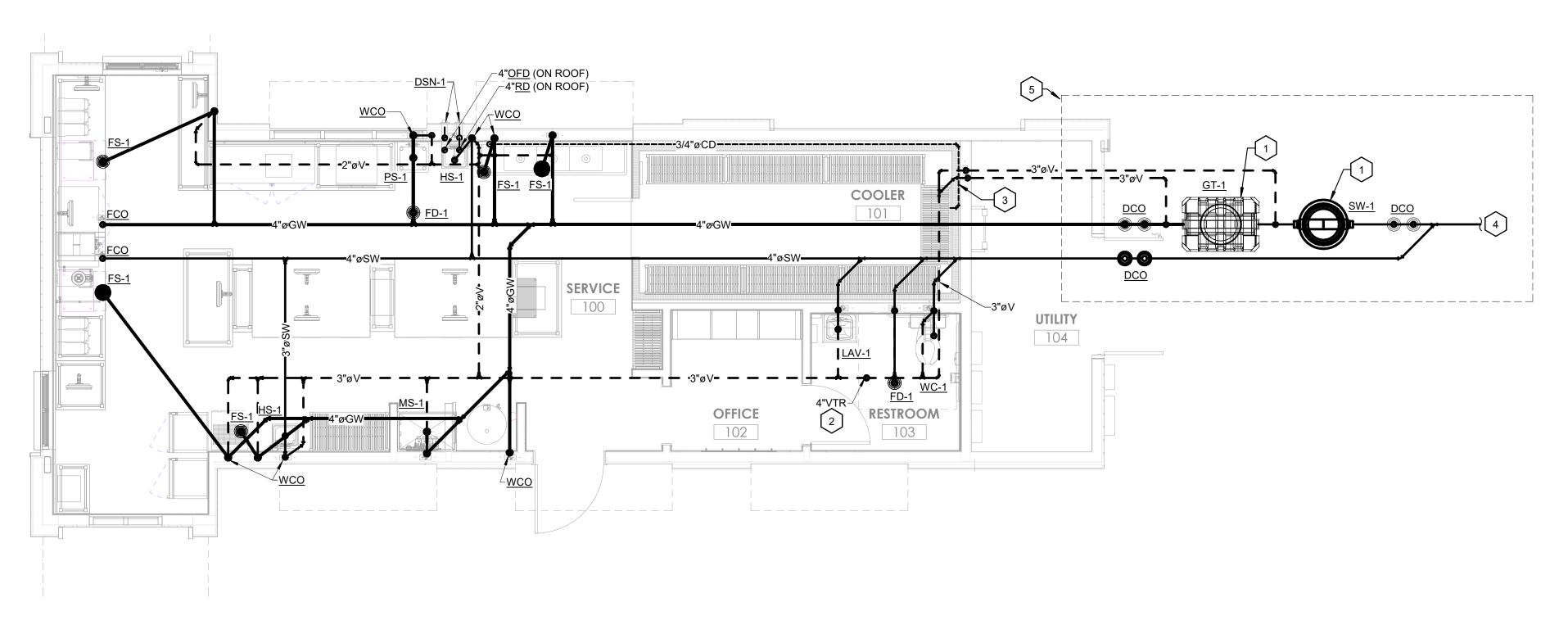
SHEET TITLE

GREASE/SANITARY **WASTE PLAN**

SHEET NUMBER

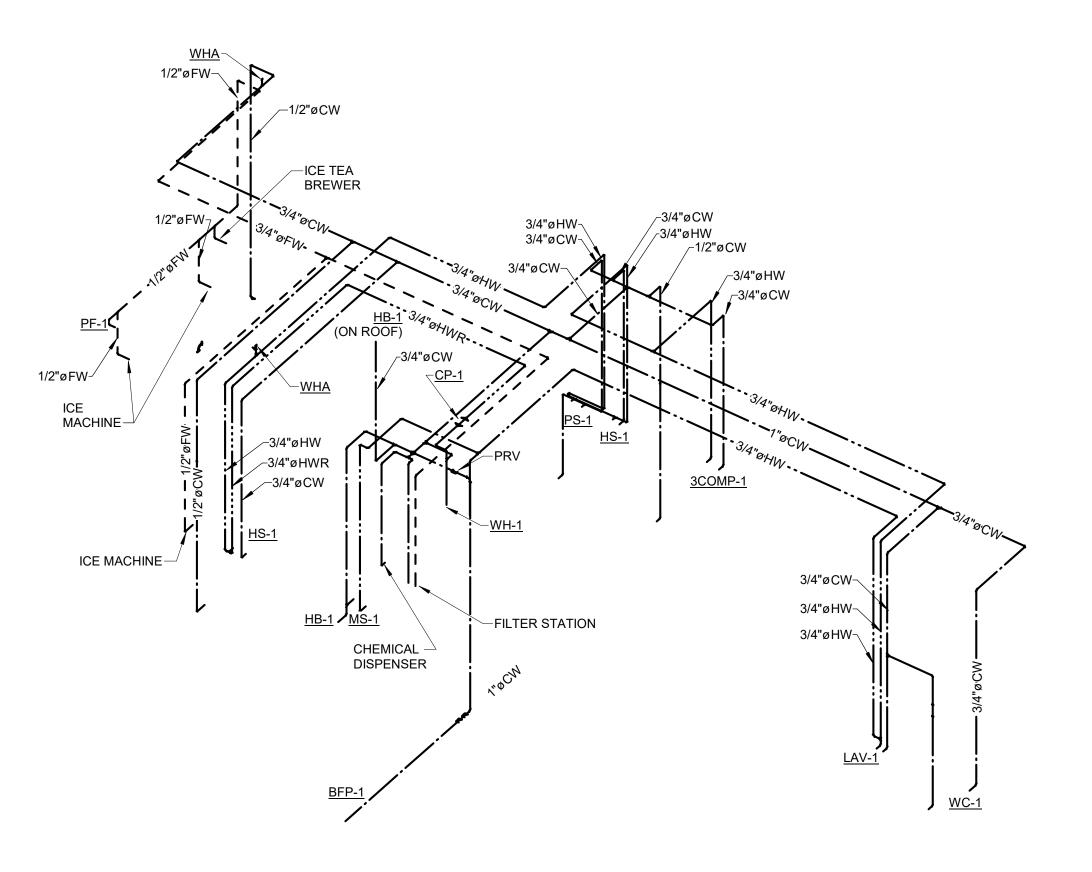
P103

2 GREASE/SANITARY WASTE AND VENT RISER DIAGRAM P103

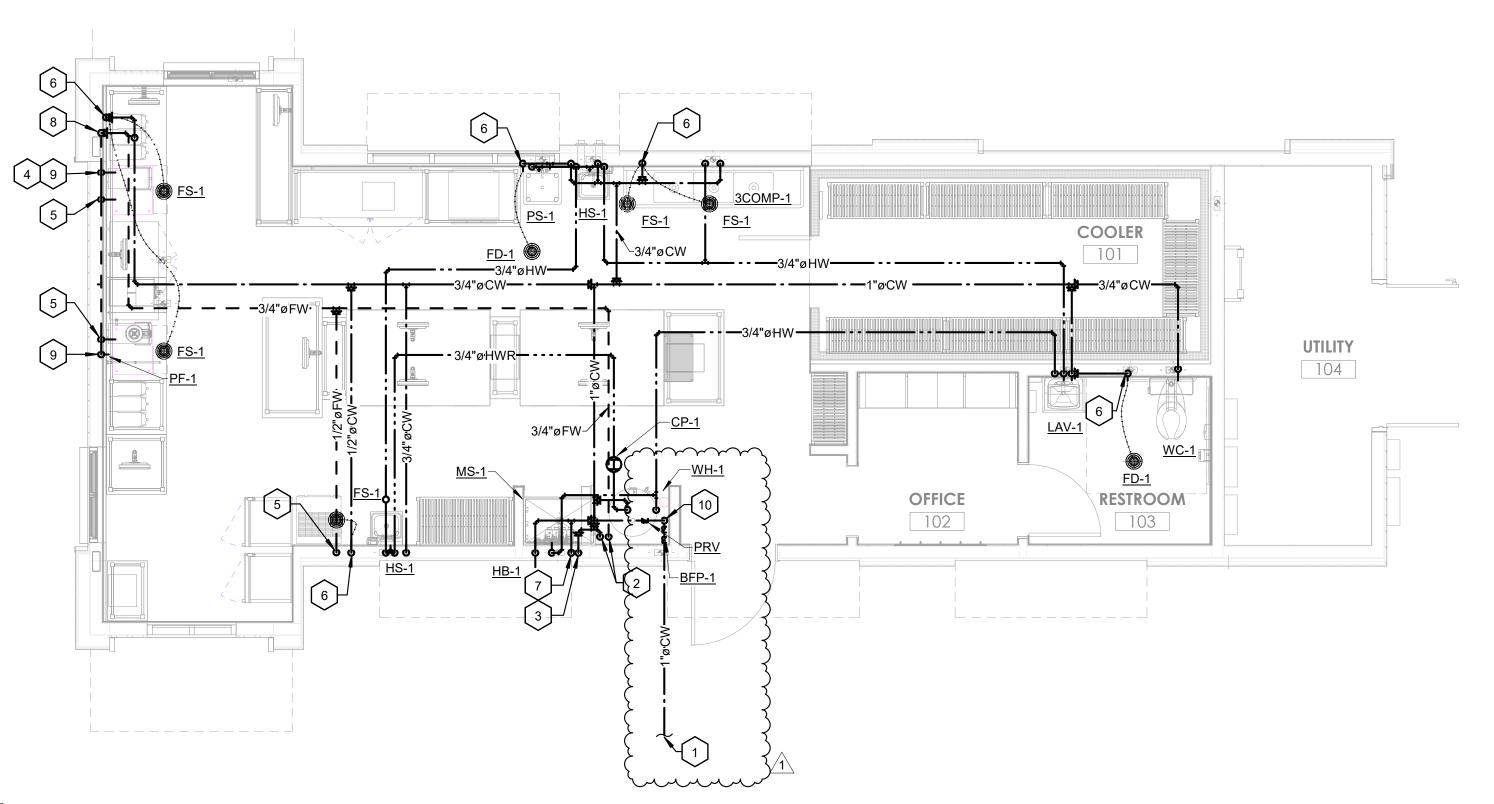


1 GREASE/SANITARY WASTE AND VENT PLAN

P103 1/4" = 1'-0"



2 DOMESTIC WATER RISER DIAGRAM



1 DOMESTIC WATER SUPPLY PLAN

P104 1/4" = 1'-0"

NOTES BY SYMBOL

- 1 REFER TO CIVIL PLANS FOR CONTINUATION OF DOMESTIC WATER SERVICE AND METER TO BUILDING.
- 2 3/4-INCH DOMESTIC/FILTERED WATER CONNECTIONS TO FILTERED WATER STATION (BY OTHERS). REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. PROVIDE AND INSTALL AN IN-LINE RPZ (WATTS LF009-QT) ON SUPPLY SIDE OF FILTERED WATER STATION. RPZ DRAIN LINE SHALL DISHCARGE INTO MOP SINK.
- 3 1/2-INCH DOMESTIC WATER PIPING DOWN TO CHEMICAL DISPENSER (BY OTHERS). PROVIDE AND INSTALL T&S BRASS; B-0205LN FAUCET FOR CONNECTION TO CHEMICAL DISPENSER. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. PROVIDE AND INSTALL AN IN-LINE BACKFLOW PREVENTION DEVICE (WATTS LF009-QT-FS OR EQUAL).
- 4 CONNECT 1/2-INCH FILTERED WATER PIPING INTO ICE TEA BREWER (PROVIDED BY OTHERS). PROVIDE WITH ISOLATION VALVE AND IN-LINE BACKFLOW PREVENTION DEVICE (WATTS SD-3 OR APPROVED EQUAL). REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- 5 CONNECT 1/2-INCH FILTERED WATER PIPING INTO ICE MACHINE (PROVIDED BY OTHERS). PROVIDE WITH ISOLATION VALVE AND IN-LINE BACKFLOW PREVENTION DEVICE (WATTS SD-3 OR APPROVED EQUAL). REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- 1/2-INCH DOMESTIC WATER PIPING SERVING FLOOR DRAIN/FLOOR SINK TRAP PRIMER. INSTALL TRAP PRIMER IN ACCESSIBLE LOCATION OR PROVIDE WALL MOUNTED ACCESS PANEL. COORDINATE LOCATION OF ACCESS PANEL WITH ARCHITECT PRIOR TO INSTALLATION.
- 7 3/4-INCH DOMESTIC WATER UP TO HOSE BIBB (HB-1) ON ROOF PARAPET. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- 8 PROTECT IN-WALL PIPING WITH NAIL PLATES
- 9 FILTERED WATER LINE CONNECTING TO POTFILLER AND TEA BREWER TO BE MADE OF FLEX LINE. 4'-11" MOUNTING HEIGHT.
- 10 PROVIDE DOMESTIC WATER SHUT OFF VALUE.



LOT 3

610 NW CHIPMAN ROAI
EE'S SUMMIT, MO 64086 PROPOSED LC
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

CLAYTON
LUCAS
NUMBER
PE-2024000504

REVISION SET

CONTRACTOR SHALL VERIFY ALL
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JOB SITE AND NOTIFY THE ARCHITECT
OF ANY DIMENSIONAL ERRORS,
OMISSIONS OR DISCREPANCIES BEFORE
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ISSUE DATE DESCRIPTION
1 5/30/24 REVISION 1

PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 4/1/2024

SCALE: AS NOTED

DRAWN BY: JB

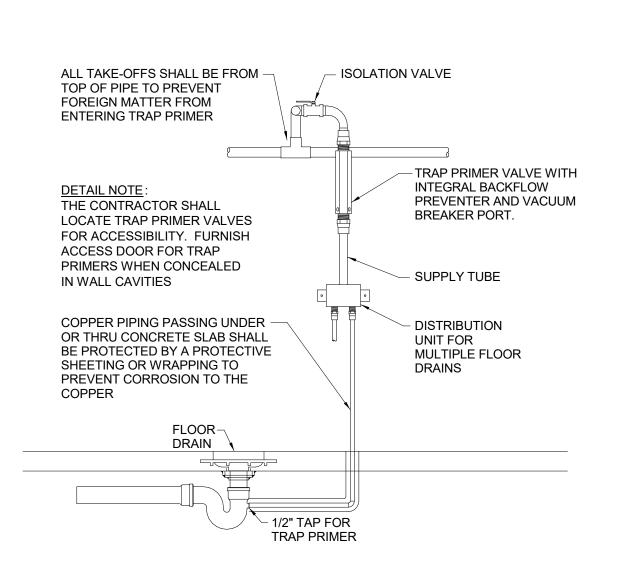
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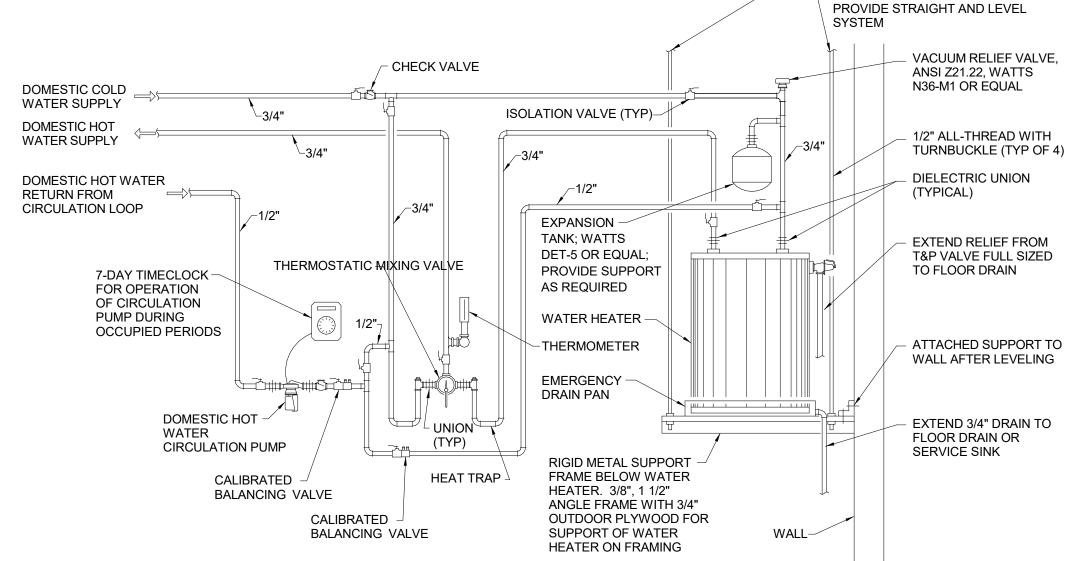
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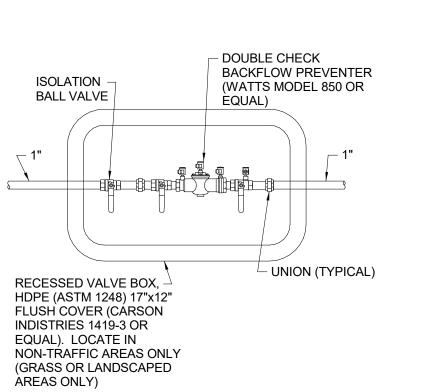
DOMESTIC WATER PLAN

SHEET NUMBER

P104







DOMESTIC WATER SERVICE ENTRANCE

SECURE RIM WITH -

SCORIATED COVER

(INDICATING "CO")

SIZE PER PLANS.

GRADE CLEANOUT

SCALE: NO SCALE

REINFORCEMENT, #4

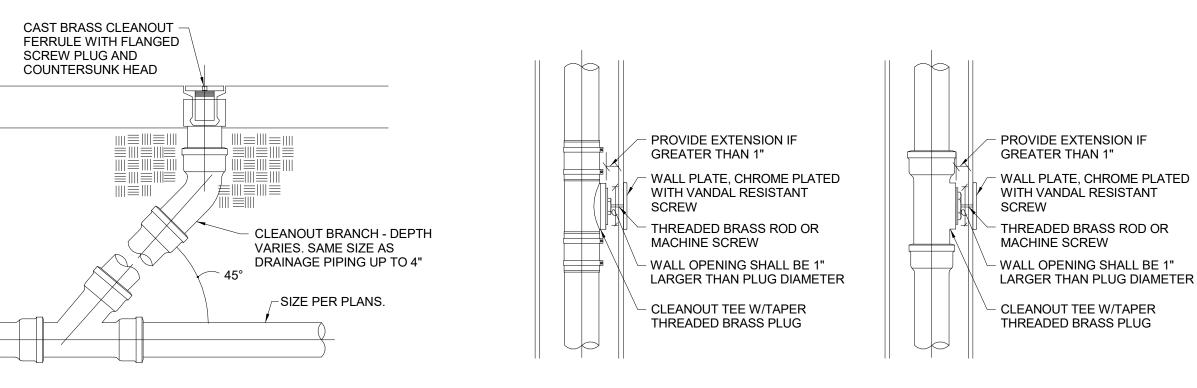
DRAIN IS GREATER THAN 4"

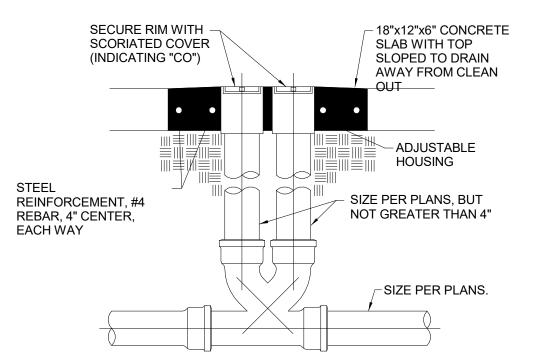
REBAR, 4" CENTER,

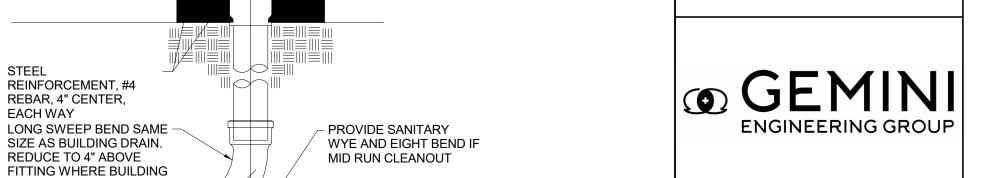
EACH WAY

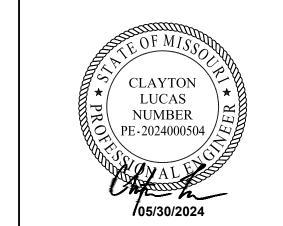


SUSPENDED WATER HEATER SCALE: NO SCALE









HIPMAN

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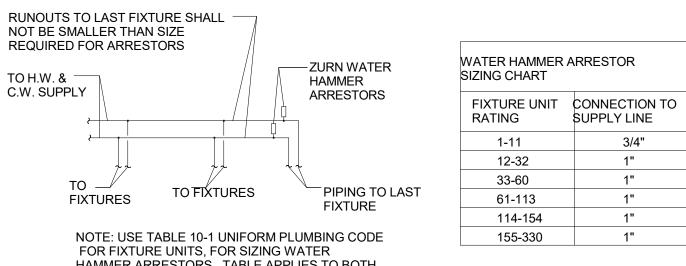
OT

12"x12"x6" CONCRETE SLAB WITH TOP

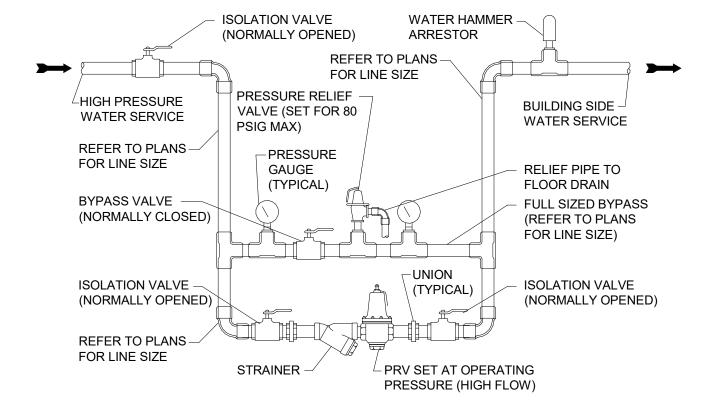
SLOPED TO DRAIN

AWAY FROM CLEAN

FLOOR CLEANOUT
SCALE: NO SCALE WALL CLEANOUT
SCALE: NO SCALE



REVISION SET CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION







PLUMBING DETAILS

24-0087

09/06/2022 AS NOTED

PROJECT INFORMATION

PROJECT NO:

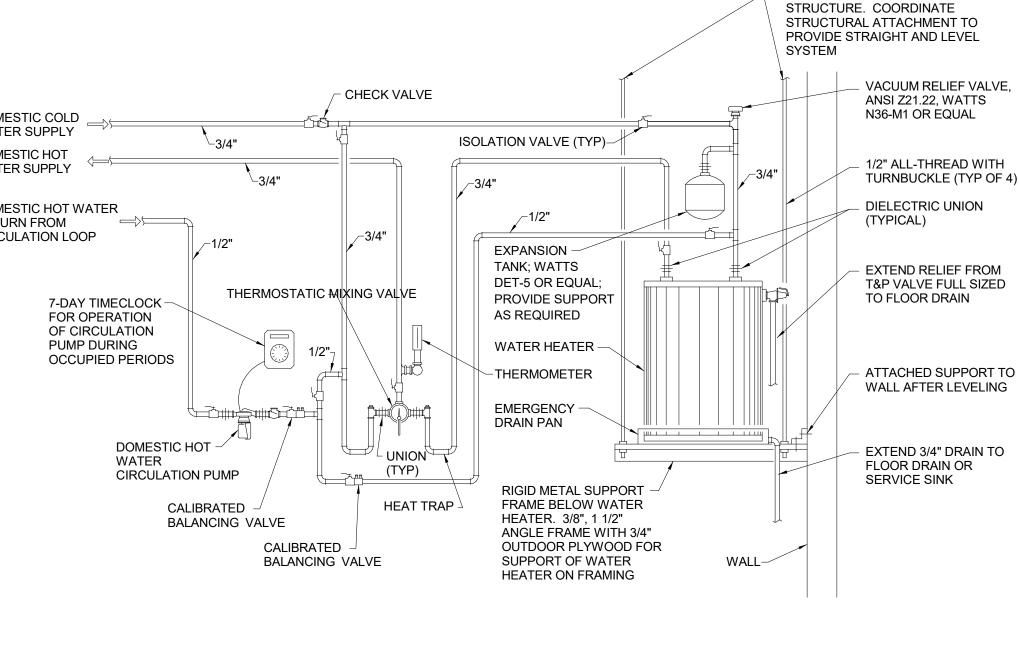
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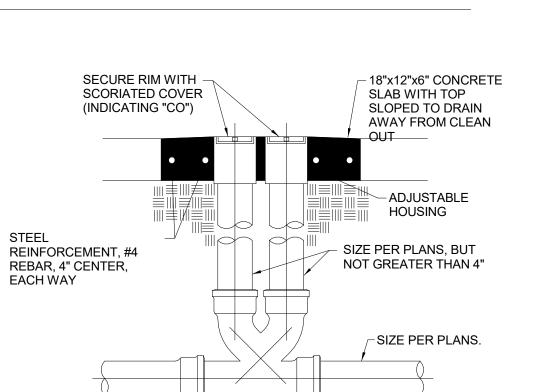
SHEET TITLE

ORIGINAL ISSUE:

SHEET NUMBER

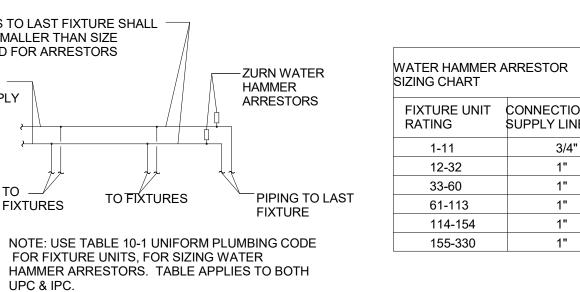
P105





EXTEND AND ATTACH TO





<u>PART I - GENERAL</u>

1.01 DESCRIPTION

- A. THE PLUMBING CONTRACTOR SHALL BE A LICENSED INSTALLER OF PLUMBING SYSTEMS IN THE CITY WHERE WORK IS PERFORMED.
- B. THE CONTRACTOR SHALL BE QUALIFIED WITH AT LEAST 5 YEARS OF SUCCESSFUL INSTALLATION EXPERIENCE ON PROJECTS WITH WORK SIMILAR TO THAT REQUIRED FOR
- C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF APPLICABLE BUILDING CODE OF THE LATEST EDITION.

1.02 VERIFYING CONDITIONS

- A. EXAMINE ALL DRAWINGS COVERING THE WORK OF THIS SECTION AND REFER TO OTHER DRAWINGS, INCLUDING ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS, WHICH MAY AFFECT THE WORK OF THIS SECTION OR REQUIRE COORDINATION BY SAME.
- B. BEFORE STARTING ANY WORK, EXAMINE AND THOROUGHLY CHECK DRAWINGS, DIMENSIONS, SPECIFICATIONS, AND ADJOINING OR UNDERLYING CONDITIONS IN WHICH THE WORK OF THIS SECTION IS TO BE PERFORMED.
- C. REPORT, IN WRITING, TO THE ARCHITECT ANY AND ALL CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK OF THIS SECTION. DO NOT COMMENCE WORK UNTIL ANY AND ALL SUCH CONDITIONS HAVE BEEN CORRECTED BY THE TRADE OR TRADES RESPONSIBLE.
- D. FAILURE TO NOTIFY THE ARCHITECT OF UNSATISFACTORY CONDITIONS WILL BE CONSTRUED AS AN ACCEPTANCE OF ALL CONDITIONS.
- E. THE EXECUTION OF THE WORK OF THIS SECTION CONSTITUTES ACCEPTANCE OF THE BASE OR ADJOINING WORK AND OTHER CONDITIONS AS BEING SATISFACTORY IN EVERY RESPECT AND LATER CLAIMS OF DEFECTS IN SUCH CASES WILL NOT BE ALLOWED.
- F. THE DRAWINGS INDICATE AND THE SPECIFICATIONS DESCRIBE THE GENERAL ARRANGEMENT AND THE APPROXIMATE LOCATION OF EQUIPMENT, FIXTURES, PIPING, ETC. EXACT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT EXISTING CONDITIONS.
- G. THE CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE OWNER, MAKE ALL REASONABLE MODIFICATIONS IN THE WORK AS MAY BE REQUIRED TO PREVENT CONFLICT WITH THE WORK OF OTHER TRADES, OR FOR THE PROPER INSTALLATION OF THE WORK.

1.04 AS-BUILT DRAWINGS

- A. THE CONTRACTOR SHALL KEEP A SET OF PLANS ON THE JOB, NOTING DAILY ALL CHANGES MADE IN CONNECTION WITH THE FINAL INSTALLATION INCLUDING EXACT DIMENSIONED LOCATIONS OF ALL NEW AND UNCOVERED EXISTING UTILITY PIPING OUTSIDE THE BUILDING.
- B. PREPARE AND SUBMIT "AS-BUILT" DRAWINGS AT THE COMPLETION OF THE PROJECT.

- A. ALL PLUMBING SYSTEMS SHALL BE SUBJECT TO AN OPERATING TEST UNDER DESIGN CONDITIONS TO ENSURE PROPER SEQUENCE AND OPERATION THROUGHOUT THE RANGE OF OPERATION REGARDLESS OF THE SEASON.
- B. ALL NEW PLUMBING SYSTEMS SHALL BE OPERATED SEPARATELY AND COINCIDENT WITH OTHER SYSTEMS FOR A PERIOD OF TIME TO DEMONSTRATE TO THE SATISFACTION OF THE OWNER, ENGINEER AND ARCHITECT THE ABILITY OF THE EQUIPMENT TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS WHILE MAINTAINING DESIGN CONDITIONS IN ACCORDANCE WITH THE TRUE INTENT AND PURPOSE OF THESE SPECIFICATIONS
- C. MAKE ADJUSTMENTS AS REQUIRED TO ENSURE PROPER FUNCTIONING OF ALL SYSTEMS.

- A. ALL PIPING, FIXTURES, EQUIPMENT, ETC., INSTALLED UNDER THIS CONTRACT SHALL BE THOROUGHLY CLEANED AND PROTECTED DURING CONSTRUCTION AND PUT INTO FIRST-CLASS OPERATING CONDITION BEFORE BEING OFFERED FOR ACCEPTANCE.
- B. UPON COMPLETION OF ALL WORK, THE PLUMBING CONTRACTOR SHALL THOROUGHLY CLEAN ALL PLUMBING FIXTURES AND LEAVE ALL ITEMS READY FOR USE BY THE OWNER. ALL FLOOR DRAINS SHALL BE CLEANED AND MANUFACTURERS PROTECTIVE COVERINGS SHALL BE REMOVED.

1.07 LAWS, ORDINANCES, ETC.

A. THE WORK OF THIS CONTRACTOR MUST COMPLY WITH ALL LOCAL LAWS, ORDINANCES AND RULES. THIS CONTRACTOR MUST HAVE THE NECESSARY INSPECTIONS MADE BY THESE AUTHORITIES, PAY ALL THE REQUIRED FEES, AND FURNISH THE OWNER WITH CERTIFICATES OF APPROVAL BEFORE FINAL PAYMENT ON THIS CONTRACT IS MADE. HE SHALL APPLY, PAY FOR, AND OBTAIN ALL PERMITS.

1.08 SUPERVISION

- A. THIS CONTRACTOR SHALL HAVE A COMPETENT FOREMAN IN CHARGE OF THE WORK WHO SHALL BE ON THE SITE DURING THE INSTALLATION OF THE MATERIAL FURNISHED UNDER THIS SPECIFICATION UNTIL SAME HAS BEEN PUT IN COMPLETE OPERATIVE CONDITION AND ACCEPTED BY THE OWNER.
- 1.09 CUTTING AND PATCHING
- A. THIS CONTRACTOR SHALL DO ALL CUTTING AND PATCHING FOR PLUMBING WORK AND SHALL COORDINATE SAME WITH ALL OTHER TRADES. ALL CUTTING SHALL BE SUBJECT TO TRADE REGULATIONS. NO CUTTING OF STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE APPROVAL OF THE ARCHITECT.

<u>PART 2 - MATERIAL</u>

2.01 GENERAL

- A. THE PLUMBING SYSTEMS SHALL BE COMPLETE WITH ALL PIPES, FITTINGS, TRAPS, VALVES, HANGERS AND SUPPORTS, INSULATION, ETC. AND ALL OTHER ITEMS NECESSARY FOR COMPLETE AND OPERATING APPROVED TYPE SYSTEM.
- B. MANUFACTURERS: FIRMS REGULARLY ENGAGED IN MANUFACTURE OF PRODUCTS OF THIS TYPE WHOSE PRODUCTS HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR NOT LESS
- C. UL COMPLIANCE: PROVIDE COMPONENTS WITH UL LISTING AND LABELING WHEN THERE IS AN APPLICABLE UL CATEGORY.
- D. PROVIDE MATERIALS, PRODUCTS, AND FABRICATIONS THAT COMPLY WITH ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS AND RECOMMENDATIONS REGARDING LEAD CONTENT AND CONTRIBUTION OF LEAD TO POTABLE WATER, THAT HAVE NO LEAD OR LEAD ALLOYS IN CONTACT WITH POTABLE WATER, AND THAT DO NOT CONTRIBUTE TO OR CAUSE LEAD IN POTABLE WATER.
- PROVIDE MATERIALS, PRODUCTS, AND FABRICATIONS THAT COMPLY WITH ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS AND RECOMMENDATIONS REGARDING LEAD CONTENT AND CONTRIBUTION OF LEAD TO POTABLE WATER, THAT HAVE NO LEAD OR LEAD ALLOYS IN CONTACT WITH POTABLE WATER, AND THAT DO NOT CONTRIBUTE TO OR CAUSE LEAD IN POTABLE WATER.
- 2.02 <u>SANITARY WASTE AND VENT PIPE AND FITTINGS</u>
- A. SANITARY SEWER CAST IRON, DWV COPPER, OR PVC PIPING MAY BE USED EXCEPT THAT ALL PIPING BELOW GRADE SHALL BE PVC OR CAST IRON. RETURN AIR PLENUM RATED PIPING SHALL BE CAST IRON OR DWV COPPER. VENTS TWO (2") INCHES IN SIZE AND SMALLER MAY BE DWV COPPER PIPING.
- 2.03 COLD WATER AND HOT WATER PIPE AND FITTINGS
- A. DOMESTIC COLD AND HOT WATER PIPING SHALL BE COPPER TYPE "L" WITH WROUGHT COPPER FITTINGS OR PVC/CPVC AS REQUIRED BY CODE. PVC AND CPVC SHALL BE SCHEDULE 40 ALL FITTINGS ARE TO MATCH PIPING TYPES. PIPE SHALL BE MANUFACTURED RIGID CPVC COMPOUNDS WITH A CELL CLASS OF 24448 AS IDENTIFIED IN ASTM D 1784. FITTINGS SHALL BE MANUFACTURED FROM RIGID CPVC WITH A CELL CLASS OF 23447 AS IDENTIFIED IN ASTM D 1784.
- B. PEX PIPING IS ALLOWED AS AN ALTERNATE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PIPE SIZES IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND AHJ.

2.06 EXPANSION JOINTS AND ANCHORS

- A. PROPER PROVISIONS SHALL BE MADE FOR EXPANSION AND CONTRACTION OF ALL PIPES AND THE PIPING SHALL BE ARRANGED WITH ALL NECESSARY PIPE EXPANSION LOOPS AND
- B. MAINS AND BRANCHES MUST BE SO INSTALLED WITH SWING CONNECTIONS SO AS TO PERMIT FREE EXPANSION OF PIPING.

2.07 HANGERS AND SUPPORTS

- A. FURNISH ALL NECESSARY HANGERS, SUPPORTS, INSERTS, CLAMPS, ETC. AS REQUIRED. ALL HANGERS AND SUPPORTS SHALL BE OF HEAVY CONSTRUCTION AND SUITABLE FOR THE SIZE OF PIPE TO BE SUPPORTED. ALL INSERTS AND HANGERS SHALL BE INSTALLED TO CLEAR WORK OF
- B. ALL HORIZONTAL CAST IRON PIPING SHALL BE SUPPORTED ON FIVE (5) FOOT CENTERS AND AT ALL JOINTS. ALL HORIZONTAL SCREWED PIPING SHALL BE SUPPORTED BY HANGERS SPACED NOT OVER TEN (10) FEET APART. ALL BRANCHES SHALL HAVE SEPARATE HANGERS. HANGERS SHALL BE CLEVIS TYPE. CONSTRUCTED OF HEAVY BAR STEEL STOCK, WITH PROPER SIZE SUSPENSION ROD AND LOCKNUTS. WHERE PIPING IS SUPPORTED FROM THE FLOOR, PROVIDE ADJUSTABLE PIPE SADDLE SUPPORT WITH U-BOLT.
- C. WHERE PIPES ARE TO BE INSULATED. THE HANGERS SHALL BE OF AMPLE SIZE TO PROVIDE FOR THE COVERING SPECIFIED AND BE PROVIDED WITH GALVANIZED STEEL INSULATION
- D. ALL HANGERS, RODS, BEAM CLAMPS, ETC. SHALL BE SHOP ZINC COATED.
- E. ALL HORIZONTAL COPPER TUBING SHALL BE SUPPORTED BY HANGERS NOT OVER SIX (6) FEET APART FOR PIPING 1-1/4 INCH AND SMALLER AND NOT OVER TEN (10) FEET APART FOR PIPING 1-1/2 INCH AND LARGER. ALLOW BRANCHES SHALL HAVE SEPARATE HANGERS. HANGERS SHALL BE CLEVIS TYPE WITH COPPER BOTTOM SUPPORT. IF CHANNEL OR ANGLE IRON TRAPEZE HANGERS ARE USED, THE SPACE ON HANGERS FOR THE COPPER TUBING SHALL BE WRAPPED WITH LEAD SHIELDS TO ISOLATE TUBING.
- F. IN AREAS OF STEEL CONSTRUCTION, PIPE HANGERS SHALL BE SUPPORTED BY BEAM CLAMPS. COORDINATE WITH ENGINEER FOR MAXIMUM LOADING. BEAM CLAMPS SHALL BE STEEL WITH BOLT, NUT AND SOCKET THREADED FOR ROD CONNECTION AND SHALL BE F & S MANUFACTURING COMPANY FIG. #45, CENTRAL IRON, GRINNELL COMPANY, OR APPROVED

2.08 INSULATION

A. COVER ALL HOT WATER PIPE WITH 1 INCH THICK AND ALL COLD WATER PIPE WITH 1/2 INCH THICK MANVILLE MICRO-LOK AP-T PLUS FIBERGLASS INSULATION. FITTINGS AND VALVES SHALL BE INSULATED WITH MANVILLE ZESTON 2000 PVC INSULATED FITTING COVERS. INSTALL ALL INSULATION AS PER MANUFACTURERS RECOMMENDATIONS. ALL INSULATION MATERIAL SHALL COMPLY WITH THE LOCAL CODE REQUIREMENTS FOR OF A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DEVELOPED RATING NOT TO EXCEED 50.

- A. STOP VALVES, EXCEPT FIXTURE STOPS, ON HOT AND COLD WATER LINES 2 IN. AND SMALLER SHALL BE FULL PORT 400 LB. NON-SHOCK BRONZE BALL VALVES, NIBCO T-595-Y FOR THREADED CONNECTIONS, AND NIBCO S-595-Y FOR COPPER TO COPPER, OR APPROVED OTHER.
- B. GLOBE VALVES UP TO AND INCLUDING 3 IN. SHALL BE SCREW-OVER BONNET, COMPOSITION DISC, BRASS, NIBCO T-211 FOR THREADED CONNECTIONS AND S-211 FO SOLDER CONNECTIONS, OR APPROVED OTHER.
- C. CHECK VALVES SHALL BE OF THE SWING-TYPE, SIZES UP TO AND INCLUDING 3 IN. SHALL BE ALL BRASS, 125 LB. S.W.P., NIBCO T-413 FOR THREADED CONNECTIONS & NIBCO S-413 FOR SOLDER CONNECTIONS OR APPROVED OTHER.

2.10 VALVE TAGS AND CHART

- A. EACH VALVE, EXCEPT VALVES AT FIXTURES, SHALL HAVE A 2 INCH DIAMETER BRASS TAG WITH 1 INCH HIGH NUMERAL STAMPED THEREON, SECURED TO THE VALVE BY MEANS OF BRASS'S HOOK OR BRASS CHAIN. EACH SYSTEM TO HAVE A LETTER DESIGNATION IDENTIFYING
- B. THE CONTRACTOR SHALL FURNISH AN APPROVED, NEATLY DRAWN VALVE CHART, PROPERLY FRAMED, SHOWING THE USE AND LOCATION OF EACH VALVE THAT IS TAGGED.
- 2.11 SHOCK ARRESTORS
- A. SHOCK ARRESTORS SHALL BE JONESPEC MODEL #55000 SERIES OR APPROVED EQUAL

2.12 CONNECTION TO MISC. EQUIPMENT

A. PROVIDE ALL NECESSARY PIPE, FITTINGS, VALVES, ETC. EXCEPT AS OTHERWISE SPECIFIED AND MAKE ALL FINAL PLUMBING PIPING CONNECTIONS, INCLUDING WASTE, VENT, HOT AND COLD WATER, ETC., TO ALL EQUIPMENT REQUIRING SAME, FURNISHED "UNDER ANOTHER SECTION OF THE SPECIFICATIONS"

2.13 CONDENSATE DRAIN PIPING

A. CONDENSATE DRAIN PIPING SHALL BE TYPE "M" COPPER OR SCHEDULE 40 PVC, WHERE PERMITTED BY LOCAL CODE.

2.14 GUARANTEE

- A. THIS CONTRACTOR SHALL GUARANTEE FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY THE OWNERS, ALL MATERIALS, APPARATUS AND WORKMANSHIP WHETHER FURNISHED BY HIMSELF OR BY HIS SUBCONTRACTORS AND HE SHALL REPLACE OR REPAIR IN A MANNER APPROVED BY THE ARCHITECTS, WITHOUT COST TO THE OWNER, ANY PARTS OR PARTS OF THE WORK WHICH MAY PROVE DEFECTIVE OR UNSATISFACTORY WITHIN THE PERIOD OF THE GUARANTEE.
- B. WHERE SPECIAL GUARANTEES COVERING INSTALLATION, OPERATION OR PERFORMANCE OF ANY SYSTEMS OR APPLIANCES FURNISHED UNDER THIS CONTRACTOR ARE REQUIRED, THE FULL RESPONSIBILITY FOR THE FULFILLMENT OF SUCH GUARANTEES MUST BE ASSUMED BY THE CONTRACTOR, WHO SHALL OBTAIN WRITTEN GUARANTEES, IN TRIPLICATE, WHICH SHALL BE FILED WITH THE ARCHITECT BEFORE FINAL ACCEPTANCE.
- C. CONTRACTOR WILL BE RESPONSIBLE FOR ALL LEAKS IN ALL PIPES FOR A PERIOD OF ONE YEAR FROM THE DATE OF COMPLETION OF WORK UNDER THIS CONTRACT. CONTRACTOR SHALL REPAIR AT NO COST TO THE OWNER, ALL SUCH LEAKS WHICH OCCUR AFTER COMPLETION OF THIS CONTRACT UPON 24 HOURS NOTICE THEREOF BY THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR. LEAKS WHICH OCCUR PRIOR TO THE COMPLETION OF THIS CONTRACT SHALL BE REPAIRED AT ONCE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED BY SUCH LEAKS AND THE REPAIR THEREOF AND WILL REIMBURSE THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR FOR ALL EXPENSE INCURRED THEREBY.
- D. DISINFECTION THE POTABLE WATER SYSTEM SHALL BE DISINFECTED PRIOR TO USE BY A PARAGRAPH-10.9. THE POTABLE WATER PURITY TEST RESULT FROM A NEW JERSEY CERTIFIED TESTER SHALL BE SUBMITTED FOR ENGINEER'S REVIEW AND APPROVAL.

2.15 PRESSURE REDUCING VALVE (DOMESTIC WATER)

- A. SIZE 1/2" 2-1/2" THREADED BRONZE BODY CONSTRUCTION RENEWABLE STAINLESS STEEL SEAT. HIGH TEMPERATURE RESISTING DIAPHRAGM, SPRING CAGE CONSTRUCTION AND STRAINER. WATTS NO. 223S OR APPROVED EQUAL. SEE DRAWINGS FOR PSI SETTINGS.
- 2.16 PLUMBING FIXTURES AND EQUIPMENT
- A. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING FIXTURES AND APPLIANCES, UNLESS OTHERWISE NOTED, AND MAKE ALL FINAL CONNECTIONS AS REQUIRED.
- B. REFER TO ARCHITECTURAL PLANS AND/OR SPECIFICATIONS FOR EXACT PLUMBING FIXTURE TYPE, MAKE AND MOUNTING HEIGHTS.

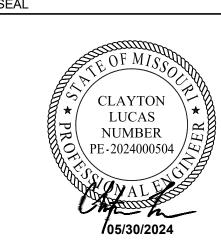
2.17 COMMISSIONING

A. WHEN REQUIRED. IT IS THE OWNER'S RESPONSIBILITY TO CONTRACT WITH A COMMISSIONING AUTHORITY TO COMPLY WITH LOCAL CODES.



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REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

	DO NOT	SCALE DRAWINGS.
ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE 09/06/2022 AS NOTED SCALE: DRAWN BY:

SHEET TITLE

CHECKED BY:

PLUMBING **SPECIFICATIONS**

SHEET NUMBER

P106

MECHANICAL SYMBOLS AND ABBREVIATIONS

GENERAL NOTES PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALL PERMITS, INSPECTIONS, LICENSES AND FEES. FURNISH ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS. THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPES, FIXTURES, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS. TAKE ALL DIMENSIONS. MEASUREMENTS. EQUIPMENT LOCATIONS. LEVELS. ETC FROM THE ARCHITECTURAL DRAWINGS AND FROM THE EQUIPMENT TO BE FURNISHED. PIPING MAY BE RELOCATED OR OFFSET FOR PROPER CLEARANCES OR TO AVOID CONFLICTS WITH OTHER TRADES. THE DESIGN INTENT (I.E. PITCHES, VELOCITIES, PRESSURE DROPS, VOLTAGE DROPS, ETC) CANNOT BE GREATLY ALTERED WITHOUT THE APPROVAL OF THE ARCHITECT. THE COST OF THESE DEVIATIONS TO AVOID INTERFERENCE'S SHALL BE PART OF THE ORIGINAL CONTRACT BID. CONFER AND COOPERATE WITH ALL OTHER TRADES TO COORDINATE THEIR WORK. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO MATERIALS AND EQUIPMENT ROUTED IN CEILING AND WALL CAVITIES, EQUIPMENT ARRANGEMENT IN MECHANICAL SPACES, INCLUDING EQUIPMENT CLEARANCE REQUIREMENTS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS, ETC. NOTIFY THE ARCHITECT OF ANY BASE FINAL INSTALLATION OF MATERIALS AND EQUIPMENT ON ACTUAL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. FIELD MEASURE FOR MATERIALS AND EQUIPMENT REQUIRING EXACT FIT. NO EXTRAS WILL BE GIVEN FOR THE CONTRACTOR'S FAILURE TO FIELD COORDINATE. THE OWNER OR ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE LOCATE ALL EQUIPMENT THAT MUST BE SERVICED. OPERATED. OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE (BUT NOT LIMITED TO) VALVES, MOTORS, CONTROLLERS, SWITCHGEAR, AND DRAIN POINTS IF REQUIRED FOR BETTER ACCESSIBILITY. FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE APPROVED BY THE ARCHITECT AND CONSTRUCTION MANAGER/GENERAL CONTRACTOR PRIOR TO MAKING THE CHANGE. PROVIDE ACCESS DOORS, WALL OPENINGS, ROOF OPENINGS OR ANY OTHER CONSTRUCTION REQUIREMENT NEEDED TO ACCOMMODATE THE MECHANICAL EQUIPMENT. LOCATIONS OF THESE OPENINGS SHALL BE SUBMITTED IN SUFFICIENT TIME TO BE INSTALLED IN THE NORMAL COURSE OF WORK. 8. COORDINATE ELECTRICAL REQUIREMENTS OF APPROVED MECHANICAL EQUIPMENT WITH THE ELECTRICAL SUB-CONTRACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF ANY ELECTRICAL EQUIPMENT, DEVICES, WIRING, OR CONDUIT. PROVIDE GENERAL CONTROL WIRING, THERMOSTATS, MOTORIZED DAMPERS AND CONDUIT ASSOCIATED WITH HVAC EQUIPMENT. COORDINATE THE LOCATION OF ALL THERMOSTATS, ROOM SENSORS, ETC WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO INSTALLATION. IF A CONFLICT WITH MILLWORK, LIGHT SWITCHES, WINDOWS, ETC EXISTS, NOTIFY THE ARCHITECT OF THE POTENTIAL INTERFERENCE PRIOR TO INSTALLATION. INSTALL THERMOSTATS WITH PROTECTIVE LOCKING COVER, CENTERED AT 4'-0" ABOVE FINISHED FLOOR, UNLESS OTHERWISE INDICATED. COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA). 10. ALL DIMENSIONS SHOWN ON THE DRAWINGS FOR DUCTWORK ARE <u>NET INSIDE CLEAR DIMENSIONS</u>. FOR RECTANGULAR DUCT, THE FIRST FIGURE OF THE DUCT SIZE INDICATES THE DIMENSION OF THE FACE SHOWN. VERIFY THAT THE DUCTWORK SPECIFIED WILL FIT IN THE SPACE AVAILABLE USING THE ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS AS REFERENCE PRIOR TO FABRICATION AND INSTALLATION. ROUND DUCT OF EQUAL NET INSIDE CLEAR AREA MAY BE USED IN LIEU OF RECTANGULAR DUCT. 11. PROVIDE TURNING VANES ON ALL RECTANGULAR SUPPLY, OUTDOOR AIR, EXHAUST AND RETURN DUCTWORK INCLUDING THE TOP AND BOTTOM OF VERTICAL DUCTS. 12. PROVIDE A LOCKING QUADRANT VOLUME DAMPER AT THE TAP OF EACH RUN-OUT TO DIFFUSERS FOR BALANCING PURPOSES, UNLESS OTHERWISE INDICATED. THE RUN-OUT DUCT SIZE IS THE SAME SIZE AS THE DIFFUSER OR GRILLE NECK SIZE UNLESS OTHERWISE INDICATED. 13. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF ALL FIRE RATED WALLS AND CEILINGS. PROVIDE FIRE DAMPERS AND/OR COMBINATION FIRE/SMOKE DAMPERS IN DUCTWORK AT ALL LOCATIONS WHERE DUCTS PASS THROUGH FIRE RATED ASSEMBLY. MECHANICAL SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING FIRE AND FIRE/SMOKE DAMPERS. COORDINATE CONSTRUCTION REQUIREMENTS AND PROVISIONS FOR CONNECTIONS TO FIRE ALARM SYSTEM. 14. ALL DUCTWORK SHALL BE SHEET METAL FABRICATED IN ACCORDANCE WITH SMACNA STANDARDS. ALL DUCT WORK ASSOCIATED WITH CONSTANT VOLUME SYSTEMS SHALL BE CONSTRUCTED TO 2" W.G. AND SEALED TO SMACNA CLASS B. SEAL ALL SEAMS WITH MASTIC SEALANT UL 181 LISTED FOR THE APPLICATION USED. SEALANT SHALL BE DESIGNED FOR USE ON METAL DUCT AND FLEXIBLE DUCT. 15. ALL RECTANGULAR AND ROUND SUPPLY AND RETURN DUCTWORK LOCATED IN EXPOSED INTERIOR AREAS SHALL BE INTERNALLY LINED WITH DUCT LINER AND EXTERNALLY PAINTED. REFER TO ARCHITECT FOR COLOR 16. PROVIDE VIBRATION ISOLATORS FOR MOTOR DRIVEN EQUIPMENT UNLESS NOTED OTHERWISE. PROVIDE ISOLATION AS INDICATED OR AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER. 17. SOME DUCTS SHOWN ON EACH FLOOR PLAN MAY BE SHOWN WITH AN OFFSET FOR CLARITY. 18. SEAL ALL DUCT PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS WITH AN APPROVED FIRE PROOFING 19. ALL EQUIPMENT SHALL HAVE IDENTIFICATION TAGS. TAGS SHALL BE PLASTIC LAMINATE, WHITE FACE WITH 1/2" TALL BLACK LETTERS. THE TAG SHALL MATCH THE UNIT DESIGNATIONS SHOWN ON THE SCHEDULES. 20. EXPAND OR REDUCE DUCTS AT EQUIPMENT CONNECTIONS BASED ON THE EQUIPMENT PURCHASED, WITH TRANSITIONS NOT TO EXCEED 30 DEGREES. SIZES SHOWN ON SCHEDULES, ETC. ARE FOR GUIDANCE ONLY. ASPECT RATIO SHALL BE NO GREATER THAN 4:1, PER SMACNA'S GUIDELINES. 21. ALL DUCTS WITH A DIMENSION GREATER THAN 12" PASSING THRU A NON-RATED WALL SHALL HAVE THE OPENING FRAMED IN WITH METAL STUDS. COORDINATE OPENING SIZE AND LOCATION WITH OTHER TRADES. 22. WHERE DAMPERS ARE LOCATED ABOVE HARD CEILINGS PROVIDE CONCEALED YOUNG REGULATORS. REGULATORS SHALL NOT BE LOCATED IN CORRIDORS, PATEINT CARE, OR TREATMENT AREAS. EACH REGULATOR SHALL BE LABLE PER THE SPECIFICATIONS. 23. TEST AND BALANCE SHALL BE PERFORMED BY AN AABC LICENSED FIRM IN THE TESTING, ADJUSTING, AND

BALANCING (TAB) BUSINESS FOR A MINIMUM OF 10 YEARS. AABC FIRM SHALL SUBMIT A REPORT TO THE ENGINEER

OF RECORD INDICATING EQUIPMENT NAMEPLATE DATA, DESIGN PERFORMANCE, INITIAL TESTED PERFORMANCE, AND FINAL ADJUSTED PERFORMANCE. REPORT SHALL BE SUBMITTED IN A TIMELY FASHION PRIOR TO JOB CLOSE-OUT. TAB SHALL BE PERFORMED ON ALL NEW SYSTEMS SPECIFIED AS PART OF THIS CONTRACT. TAB FIRM

SHALL PERFORM A FUNCTIONAL PERFORMANCE TEST OF THE SYSTEM BASED ON THE CONTRACT DOCUMENTS HEREIN SHALL AND RELAY ALL DISCREPANCIES AND OUTSTANDING CONSTRUCTION ITEMS RELATING TO THE

MECHANICAL EQUIPMENT AND PERFORMANCE TO THE ENGINEER OF RECORD.

SYMBOLS SYMBOL DESCRIPTION ACCESS DOOR ACOUSTICAL DUCT LINING (FIGURES SHOWN ARE INSIDE DUCT DIMENSIONS 20/20 AFS AHU 20/20 SUPPLY AIR DUCT UP APPROX APPROXIMATE 20/20 RETURN DUCT UP BTU COOLING COIL 20/20 EXHAUST DUCT UP CFH CFM CLG CEILING 20/20 SUPPLY AIR DUCT DOWN DEG **DEGREES** 20/20 RETURN DUCT DOWN DRY BULB DOWN **EXISTING** 20/20 EXHAUST DUCT DOWN EXHAUST AIR EDH **EXHAUST FAN** 18"□ ROUND/SPIRAL DUCT UP **EQUIP** EQUIPMENT **EWT** 18"1 (\ ROUND/SPIRAL DUCT DOWN FAN COIL UNIT FIRE DAMPER FLR ARROW INDICATES DIRECTION OF AIR FLOW FLOOR **FPVAV** FOOT, FEET CHANGE OF ELEVATION, RISE(UP) OR DROP (DN) IN DIRECTION OF ARROW U.S. GAUGE GPM HEIGHT BOTTOM ACCESS DOOR (UNLESS OTHERWISE NOTED). SIZE AS NOTED OR HORSEPOWER AD \square SPECIFIED. HPS HWS SIDE ACCESS DOOR. SIZE AS NOTED OR SPECIFIED. HERTZ INCH, INCHES IN.WG IOM INSTALLATION/OPERATION MANUAL RECTANGULAR DUCT SQUARE ELBOW WITH TURNING VANES J-BOX JUNCTION BOX DRAWING/DETAIL REFERENCE RECTANGULAR DUCT RADIUS ELBOW ROUND DUCT RADIUS ELBOW, 5 SEAM UNLESS OTHERWISE NOTED R=3D/2 -TRANSITION CONCENTRIC UNLESS TOP LEVEL OR BOTTOM LEVEL IS NOTED > 20/20 TRANSITION, RECTANGULAR TO ROUND CONCENTRIC UNLESS TOP LEVEL OR BOTTOM LEVEL IS NOTED 20/20 16" DUCT FLEXIBLE CONNECTION SOUND ATTENUATOR PRIMARY MECHANICAL CODES SQUARE SUPPLY CEILING DIFFUSER SQUARE RETURN CEILING GRILLE PROJECT DESIGN VALUES: SQUARE EXHAUST CEILING GRILLE (T)(S)(D)THERMOSTAT / TEMP SENSOR / DUCT SMOKE DETECTOR OUTSIDE AIR REQUIREMENTS: SIDEWALL SUPPLY GRILLE W/ FLOW ARROW EXHAUST FAN MANUAL VOLUME DAMPER FD **◀**__ FIRE DAMPER

MISCELLANEOUS

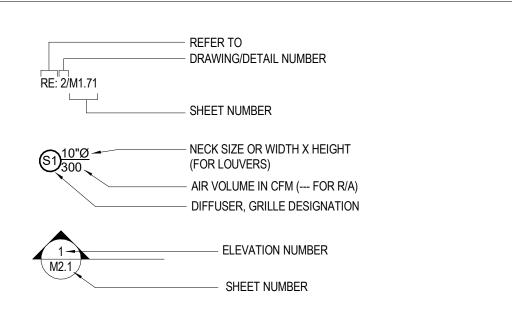
DRAWING NOTE REFERENCE (I.E., NOTES BY SYMBOL)

CONNECTION INTO EXISTING

KILOWATT AIR CONDITIONING UNIT LENGTH ARCHITECT/ENGINEER LEAVING AIR TEMPERATURE ABOVE FINISHED FLOOR LOW PRESSURE CONDENSATE LPC AIR FLOW SWITCH LOW PRESSURE STEAM AIR HANDLING UNIT POUNDS LOCKED ROTOR AMPS BUILDING AUTOMATION SYSTEM LEAVING WATER TEMPERATURE BRAKE HORSE POWER MAXIMUM MAX BRITISH THERMAL UNIT PER HOUR 1000 BRITISH THERMAL UNITS / HOUR COMBUSTION AIR MINIMUM CIRCUIT AMPACITY MFR MANUFACTURER CUBIC FEET PER HOUR MIN MINIMUM **CUBIC FEET PER MINUTE** NOT APPLICABLE NORMALLY OPEN, NORMALLY CLOSED CONDENSING UNIT OUTSIDE AIR/FRESH AIR O/A **EQUIPMENT DRAIN** OPPOSED BLADE DAMPER ON CENTER PURGE EXHAUST FAN PHASE **PROVIDE** FURNISH AND INSTALL **ENTERING AIR TEMPERATURE** PRESSURE REDUCING VALVE POUNDS PER SQUARE INCH ELECTRIC DUCT HEATER RFTURN AIR REFERENCE, REFER REFRIGERANT LIQUID ENTERING WATER TEMPERATURE RLA RUNNING LOAD AMPS **DEGREES FAHRENHEIT** REVOLUTIONS PER MINUTE REFRIGERANT SUCTION FULL LOAD AMPS SUPPLY AIR SMOKE DETECTOR FAN POWERED VAV SQUARE FOOT, SUPPLY FAN FIRE SMOKE DAMPER SPECIFICATIONS T, TSTAT THERMOSTAT. ROOM SENSOR FEET WATER GAUGE TRANSFER AIR THRU THROUGH TOTAL STATIC PRESSURE GALLONS PER MINUTE THERMOSTAT OR ROOM SENSOR TYP UNDERWRITERS LABORATORIES, INC. HIGH PRESSURE CONDENSATE HIGH PRESSURE STEAM UNIT HEATER HEATING WATER RETURN VOLTS VARIABLE AIR VOLUME HEATING WATER SUPPLY VELOCITY VARIABLE FREQUENCY DRIVE VFD **INCHES WATER GAUGE** WET BULB

WB

ABBREVIATIONS



WITHOUT

BASIS OF MECHANICAL DESIGN

MECHANICAL: 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL ENERGY CONSERVATION CODE

OUTDOOR DESIGN TEMPERATURE (SUMMER): AMBIENT TEMPERATURE AT ROOFTOP UNITS: OUTDOOR DESIGN TEMPERATURE (WINTER): INDOOR DESIGN TEMPERATURE (SUMMER): INDOOR DESIGN TEMPERATURE (WINTER):

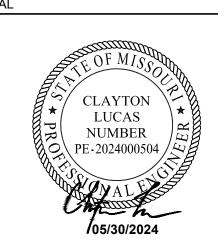
95.5°F (DRYBULB), 75.3°F (WETBULB) 102.35F (DRYBULB, SUMMER) -5.5°F (DRYBULB) 75°F (DRYBULB), 50% (RELATIVE HUMIDITY) 70°F (DRYBULB) PER 2018 IMC TABLE 403.3.1.1



HIPMA

OTYPE

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REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

MECHANICAL LEGEND AND NOTES

SHEET NUMBER

M101

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	1ADK				SUPPL	Y FAN			COMPRE	SSOR		CONDENSE	ER			COC	LING PER	FORMANC	E DATA				HEATING PE	RFORMAN	CE DATA		E	ELECTRICA	L DATA		MANUEACTURER	UNIT	
"	MARK RTU-	ARRANGEMENT	NOM.		O/A	EXT.	MOTOR	NO	R.L.A.	REF.	NO.	AMBIEI	NT TEMP	ENTER	ING AIR	NET	CAPACITY	(MBH)	LEAVI	ING AIR	MIN. SEER /	κw	NO.	AMBIENT	EAT	LAT D.B.	V	Dh	MCA	МОСР	MANUFACTURER MAKE AND MODEL	WEIGHT	NOTES
			TONS	CFM	CFM	S.P.	H.P.	140.	(EACH)	TYPE	FANS	D.B.	W.B.	D.B.	W.B.	SENS	LATENT	TOTAL	D.B.	W.B.	EER	IXVV	STAGES	TEMP	D.B.	LAI D.B.	٧.	F 11.	WICA	WICCI		(LBS)	
	1	DOWNFLOW	5	1750	180	8.0	1.0	2	15.9	R-410A	1	101	75	77	64	43.8	11.1	54.9	55	55	14.2	13.1	2	32	64	90	208	3	51	60	TRANE THJ	1,200	1-21

1. TRANE IS THE BASIS FOR DESIGN. ACCEPTABLE MANUFACTURER'S ARE: AAON, YORK, LENNOX, AND CARRIER. NO EXCEPTIONS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING VARIATIONS IN FIT, WEIGHT, AND ELECTRICAL SERVICE.

2. PROVIDE WITH THE FOLLOWING WARRANTIES: 5-YEAR COMPRESSOR, 10-YEAR HEAT EXHANGER, 1-YEAR ALL PARTS.

3. CONTRACTOR SHALL PROVIDE UNIT START-UP SERVICES.

4. PROVIDE WITH 2-IN. PLEATED MERV 8 FILTER. 5. EQUIPMENT SHALL BE IDENTIFIED BY MEANS OF ENGRAVED LAMINATED PLASTIC OR ETCHED METAL NAMEPLATES PERMANENTLY ATTACHED TO EQUIPMENT.

6. PROVIDE WITH 7-DAY, 24-HR, FULLY PROGRAMMABLE THERMOSTAT LOCATED PER CONSTRUCTION DOCUMENTS.

7. EQUIPMENT SHALL BE SET PLUMB AND LEVEL. PROVIDE WITH 14-IN. TALL GALVANIZED INSULATED FACTORY ROOF CURB TO MATCH ROOF SLOPE.

8. EQUIPMENT SHALL BE INSTALLED BY AUTHORIZED REPRESENTATIVE OF MANUFACTURER OR VERIFIED BY MANUFACTURER'S REPRESENTATIVE.

9. EXTERNAL STATIC PRESSURE (IN. W.G.) INCLUDES DUCTWORK, BALANCING DAMPERS AND AIR DEVICES ONLY. 10. CAPACITIES SHOWN ARE NET FROM UNIT DISCHARGE. UNITS MUST PERFORM TO LISTED CAPACITIES AND SATISFY BOTH SENSIBLE AND LATENT REQUIREMENTS.

11. PROVIDE UNIT WITH SINGLE POINT ELECTRICAL CONNECTION. ELECTRICAL DATA PROVIDED INCLUDES ELECTRIC HEAT.

12. PROVIDE FACTORY COIL PROTECTION PACKAGE INCLUDING CONDENSER HAIL GUARDS.

13. PROVIDE UNIT WITH INTEGRAL DISCONNECT. 14. PROVIDE WITH CORROSION RESISTANT CONDENSATE DRAIN PAIN.

15. PROVIDE WITH DRY BULB ECONOMIZER WITH BAROMETRIC RELIEF WITH FAULT DETECTION DIAGNOSTICS PER IECC.

16. PROVIDE WITH LOW-LEAK ECONOMIZER DAMPERS.

17. PROVIDE UNIT WITH HOT-GAS REHEAT. 18. PROVIDE WITH SPACE MOUNTED RELATIVE HUMIDITY SENSOR LOCATED PER CONSTRUCTION DOCUMENTS.

19. PROVIDE UNIT WITH LOW-AMBIENT KIT SUITABLE DOWN TO 0-DEG. F. AND CRANKCASE HEATER.

20. PROVIDE WITH SMOKE DETECTOR LOCATED IN RETURN DUCT INTERLOCKED TO SUPPLY FAN AS REQUIRED BY CODE. 21. PROVIDE MINIMUM 2-STAGES OF COOLING. SUPPLY FAN SHALL MODULATE TO MATCH COMPRESSOR STAGING. PROVIDE WITH VFD AS REQUIRED.

	•	VENTILATION REG	QUIREMENT	CALCULATIO	N			PER U	MC TABLE	402.1
ROOM	NAME	UNIT SERVICING	PEOPLE	CFM/PERSON	CFM/SF	AREA (SF)	PEOPLE X CFM/PERSON	SF X CFM/SF	REQUIRED O.A. CFM	PROVIDED O.A
OFF	FICE	RTU-1	1	5	0.06	61	5	3.66	8.66	10
KITC	HEN	RTU-1	10	7.5	0.12	495	75	59.4	134.4	140
FIRE RISE	ER ROOM	-	-	-	-	50	-	-	0	0
RESTI	ROOM	-	-	-	-	50	-	-	0	0
MINIMUM FRESH AIR CFI	M REQUIRED PER CODE									143.06
ZONE AIR DISTRIBUTION	I EFFECTIVENESS (TABLE	E 403.3.1.2) = 0.8		•			=			178.825
TOTAL O.A. PROVIDED										180
RESTROOMS	70 CFM / FIXTURE				# FIXTURES=	1	70	CFM EXHAUST REQ'D	75	CFM EXHAUST PROVIDED

NOTES: REPRESENTS CONDITIONS DURING NORMAL OPERATIONS AND NOT CONSIDERING ECONOMIZER OPERATION.

						F#	N SC	HEDULE				
MARK	LOCATION	CFM	EXT. SP		MOTOR DA	ГА		DRIVE	MAX.	MANUFACTURER AND	WEIGHT	REMARKS
EF-	LOCATION	CITIVI	IN. W.G.	H.P. (WATTS)	RPM	VOLTS	PH	DRIVE	SONES	MODEL NUMBER	(LBS.)	KEWAKKS
1	RESTROOM	75	0.25	(8)	950	120	1	DIRECT	4.5	GREENHECK SP-B110	11	1-5
2	ELECTRIC ROOM	50	0.25	(15.6)	790	120	1	DIRECT	0.4	GREENHECK SP-A70	12	1-5

2. PROVIDE A GRAVITY BACKDRAFT DAMPER.

VIBRATION ISOLATION SUPPORT HANGERS. . PROVIDE WEATHERPROOF CAP WITH BIRD SCREEN AT DISCHARGE.

i. INTERLOCK FAN WITH LIGHT SWITCH.

	AIR DEVICE SCHEDULE										
MARK	SERVES	FACE SIZE	MOUNTING	TYPE	MATERIAL	MANUFACTURER MAKE AND MODEL	MAX NC	REMARKS			
S1	SUPPLY	24" X 24"	LAY-IN	PERFORATED	STEEL	TITUS PAR	30	1,2,3			
S2	SUPPLY	12" X 12"	LAY-IN	PERFORATED	STEEL	TITUS PAR	30	1,2,3			
S3	SUPPLY	6" X 6"	SURFACE	PERFORATED	STEEL	TITUS PAR	30	1,2			
R1	RETURN	24" X 24"	LAY-IN	PERFORATED	STEEL	TITUS PAR	30	1,2			

1. UNITS SHALL BE FURNISHED WITH APPROPRIATE FRAMES, ETC. FOR MOUNTING IN RESPECTIVE CEILING/WALL TYPES AND CONDITIONS OR APPROVED

2. FINISH SHALL BE WHITE.

4. PROVIDE WITH LOUVER AND FILTER.

5. PROVIDE WALL MOUNTING BRACKETS.

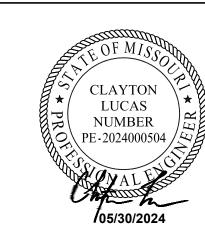
6. PAINT COLOR PER ARCHITECTURAL SPECIFICATIONS.

3. TRANSITION FROM BACK OF AIR DEVICE TO DUCT SIZE SHOWN ON PLANS.

			AIR CURT	AIN SCHEDULE			
MARK	CFM	VOLTAGE/PHASE	FLA	AMPERAGE	MANUFACTURER MAKE AND MODEL	WEIGHT	REMARKS
AC-2	900	120/1	2.4	5	MARS AIR LPV242-1U-OB	35	1-6
1. INSTALL	WITH AUTOMATIC (ON/OFF SWITCH WITH DOOI	R OR WINDOW OPE	RATION.			
2. PROVIDI	E FAN WITH BACKDI	RAFT DAMPER AND FAN SP	EED CONTROLLER				
3. NO ELEC	CTRIC HEAT.						



10



REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

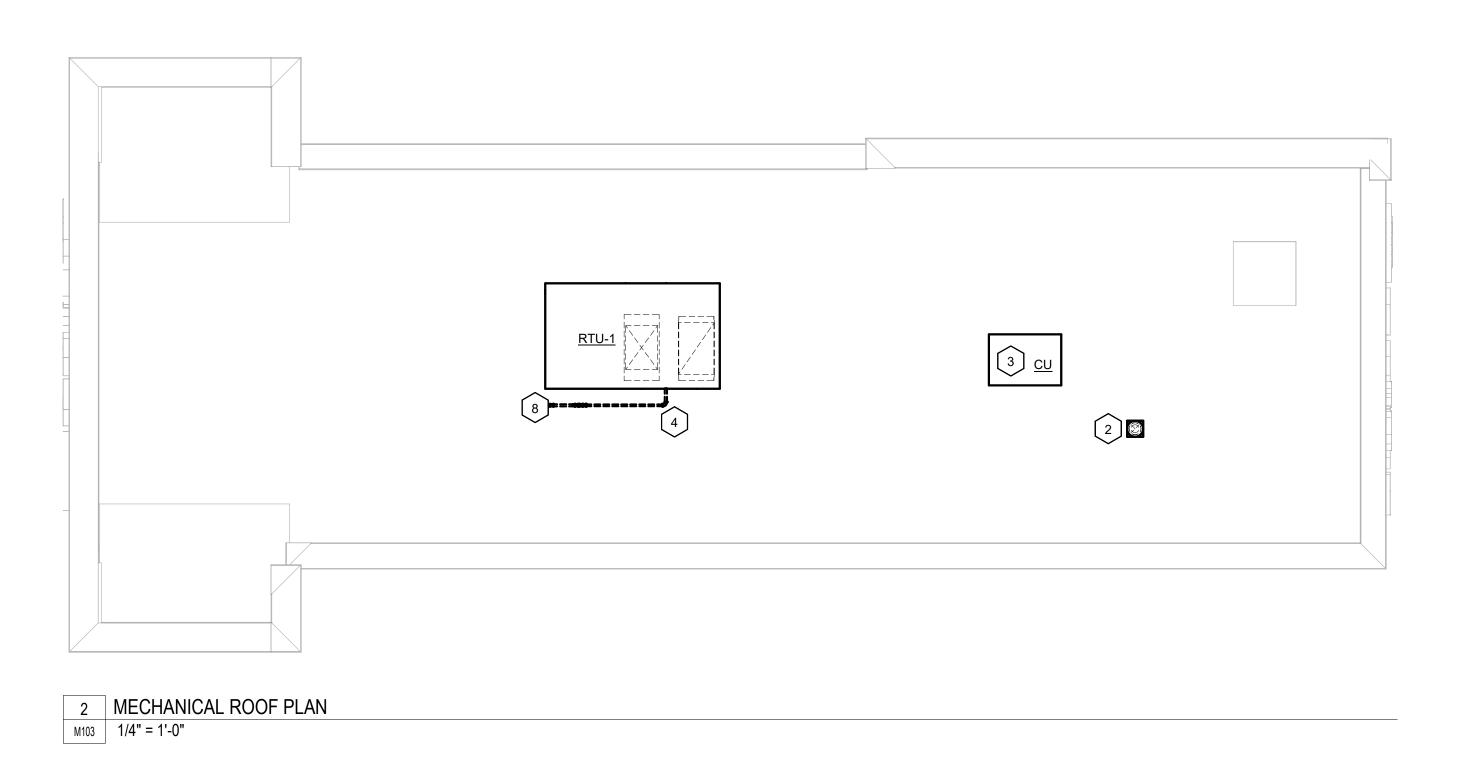
PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

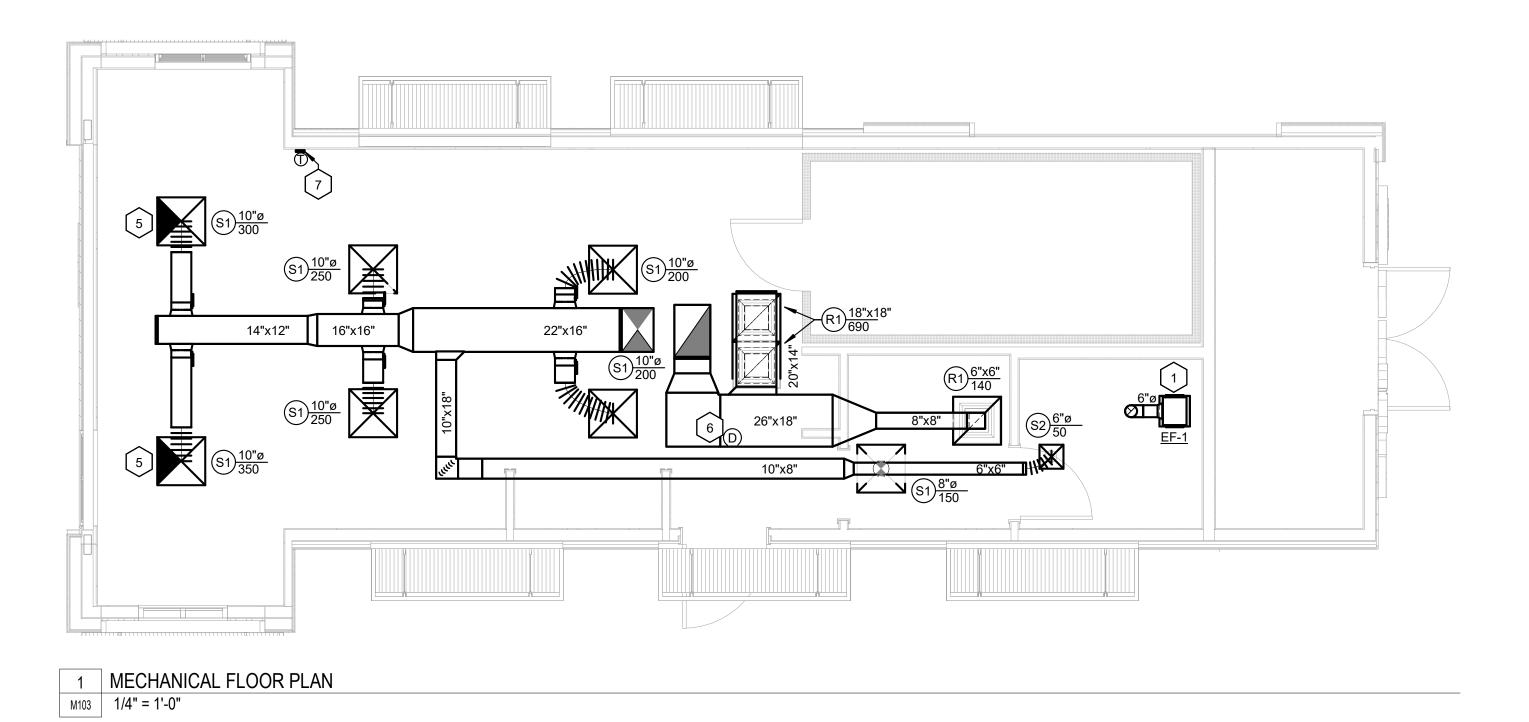
SHEET TITLE

MECHANICAL SCHEDULES

SHEET NUMBER

M102



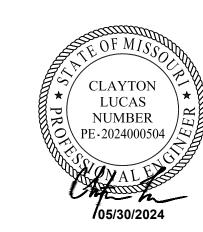


NOTES BY SYMBOL

- 1 PROVIDE NEW EXHAUST FAN PER SCHEDULE ON SHEET M102. SUSPEND FROM STRUCTURE. EXTEND EXHAUST DUCT UP THROUGH ROOF AND TERMINATE WITH GRAVITY VENT WITH BIRD SCREEN. ENSURE MINIMUM 10'-0" FROM ALL FRESH AIR
- 2 EXHAUST DUCT THROUGH ROOF. PROVIDE WEATHERPROOF CAP AND BIRD SCREEN. MAINTAIN MINIMUM 10'-0" FROM FRESH AIR INTAKES.
- 3 CONDENSING UNIT FOR WALK-IN COOLER SHOWN FOR REFERENCE ONLY. COMPLETE SYSTEM TO BE PROVIDED AND INSTALLED BY OWNER'S DESIGNATED CONTRACTOR. CONTRACTOR SHALL PROVIDE CONDENSING UNIT CURB MODEL B-LINE SINGLE TIER, PART # 18334.
- 4 3/4-INCH CONDENSATE CONNECTION TO RTU. REFER TO DETAIL 1/M104 FOR ADDITIONAL INFORMATION.
- 5 PROVIDE 3-WAY DIFFUSER THROW AS INDICATED.
- 6 PROVIDE 120V SMOKE DETECTOR IN RETURN AIR DUCT FOR AUTOMATIC SHUTDOWN OF UNIT. KIDDLE SUPERDUCT MODEL# K-70-160. INSTALL HVAC DUCT DETECTOR AUDIBLE/VISUAL ALARMS AND TROUBLE LIGHTS PER IMC 606.4.
- 7 PROVIDE NEW THERMOSTAT AS INDICATED ON PLAN. MOUNT THERMOSTAT AT 48" AFF VERIFY LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. NOTIFY EOR IF LOCATION IS CHANGED PRIOR TO INSTALL.
- 8 CONDENSATE PIPE DOWN THROUGH ROOF TO MOP SINK. DISCHARGE CONDENSATE AT MOP SINK VIA AIR GAP. SEE MECHANICAL FLOOR PLAN FOR



CHIPMAN ROAD PROTOTYPE VERSION V2-B 610



REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.
DO NOT SCALE DRAWINGS.

DATE	DESCRIPTION
	DATE

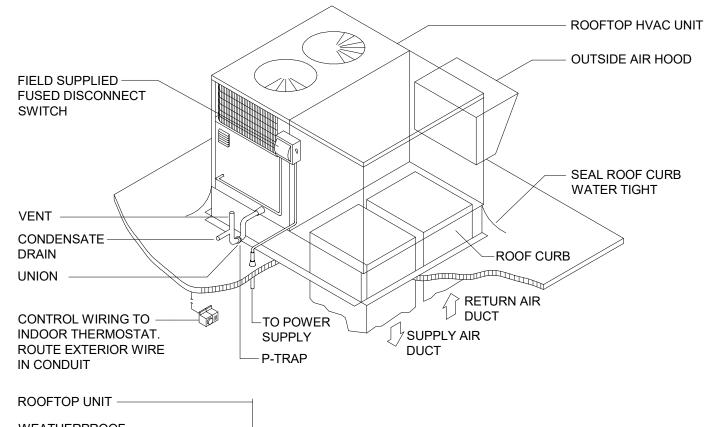
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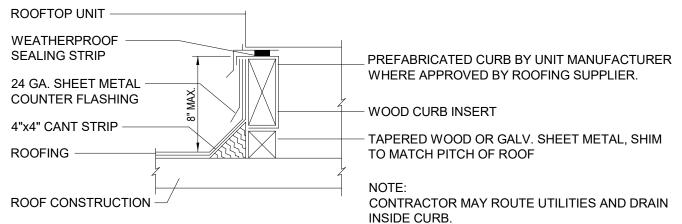
SHEET TITLE

MECHANICAL FLOOR **PLANS**

SHEET NUMBER

M103

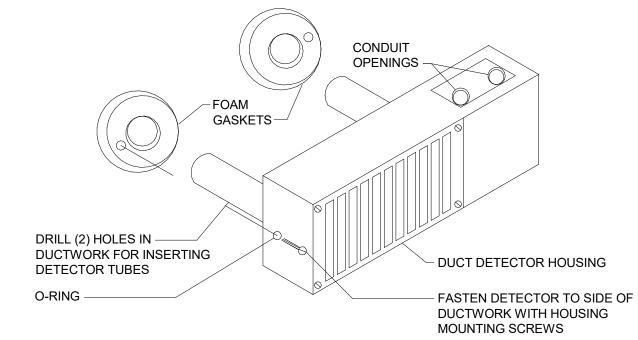




NOTES:

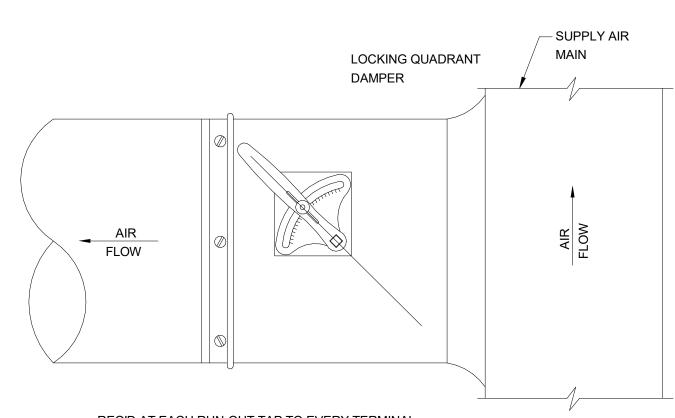
- 1. TOP OF CURB TO BE LEVEL ALL FOUR SIDES. ALL CURBS FURNISHED BY GENERAL CONTRACTOR. CURB SHALL BEAR DIRECTLY ON STRUCTURAL STEEL, NOT ON METAL DECK. MECHANICAL UNIT MUST SIT
- 2. CONTRACTOR MAY ROUTE UTILITIES AND DRAIN INSIDE CURB.
- 3. ALL ROOF CURBS/ PENETRATIONS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S DETAILS. ALL REQUIRED ROOFING SHALL BE BY THE LANDLORD'S DESIGNATED ROOFING CONTRACTOR AS REQUIRED TO MAINTAIN THE WARRANTY AND INTEGRITY OF THE ROOF.





- 1. KIDDLE SUPERDUCT MODEL #K-70-160 UL 268A LISTED OR EQUIVALENT.
- 2. RUGGED NORYL HOUSING WITH STRONG CLEAR POLYCARBONATE INSPECTION COVER.
- 3. ACCOMMODATES ION (IONIZATION) OR PHOTO HEADS (PHOTOELECTRIC). 4. SUITABLE FOR 4 WIRE 14-18 AWG WIRE, 24VAC/DC OR 120/220 VAC OPERATION.
- REMOTE TEST STATION OPTION.
- 6. POWERED OUTPUTS FOR REMOTE LED AND AUDIBLE ALARM.
- AIR VELOCITY RATING FROM 300 TO 4000 FPM. 8. EQUIPPED WITH A DPDT AUXILIARY RELAY.

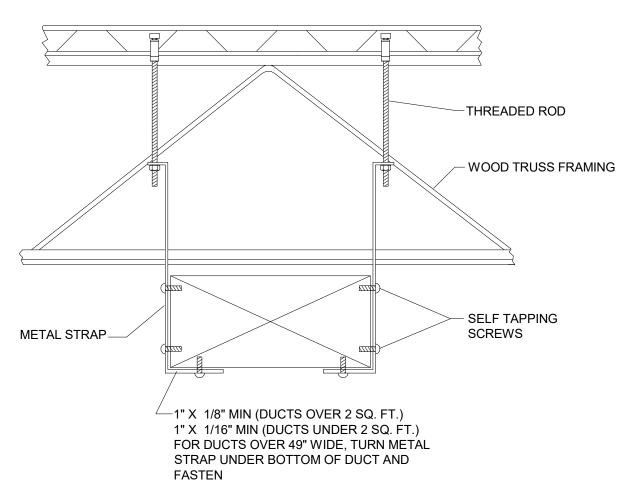
5 DUCT DETECTOR DETAIL SCALE: NO SCALE



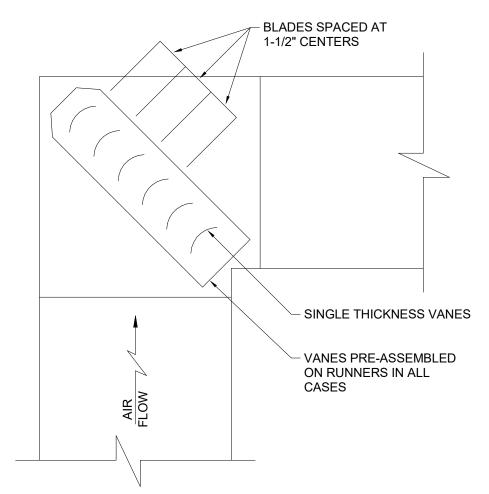
WITH VIBRATION ISOLATORS. STRUCTURE ABOVE EXHAUST FAN WITH FLEX CONNECTION (TYPICAL) INTEGRAL BACKDRAFT DAMPER TO WALL CAP OR ROOF CAP CEILING --EXHAUST GRILLE

HANGER ALL-THREAD RODS

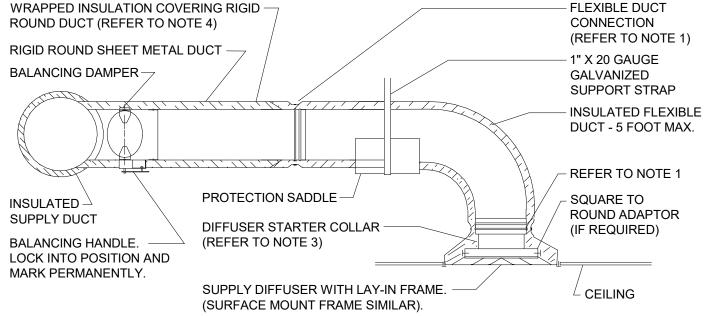
CEILING EXHAUST FAN DETAIL



DUCT SUPPORT DETAIL



TYPICAL SQUARE ELBOW



NOTES: PROVIDE AT FLEXIBLE DUCT CONNECTION METAL OR "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX. SECURE THE INSULATION OVER THE DRAWBAND WITH AN ADDITIONAL DRAWBAND.

PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER. PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO ROUND DUCT. DAMPERS AND DIFFUSERS.

-3/8" THREADED

DISTANCE BETWEEN DUCT

HANGERS SHALL BE IN

HAVING JURISDICTION.

FITTINGS STEEL

26 (0.022 IN.)

24 (0.028 IN.)

22 (0.034 IN.)

20 (0.040 IN.)

18 (0.052 IN.)

GALV. SHT. GAUGE

DUCT SIZE

36" DIA. MAX

ROUND DUCTS LONGITUDINAL SEAM

SPIRAL SEAM DUCT DUCT STEEL MIN.

STEEL MIN. GALV.

SHT. GAUGE

28 (0.019 IN.)

26 (0.022 IN.)

24 (0.028 IN.

22 (0.034 IN.)

20 (0.040 IN.)

ROUND DUCT HANGING DETAIL

GALV. SHT. GAUGE

26 (0.022 IN.)

24 (0.028 IN.)

22 (0.034 IN.)

20 (0.040 IN.)

18 (0.052 IN.)

ACCORDANCE WITH THE RULES OF THE AGENCIES

BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

DIFFUSER CONNECTION DETAIL

2x2x16 GA. ANGLE

3/8" MACHINE BOLT

3/8" MACHINE BOLT -

MAX WEIGHT PER

FOOT = 16 LBS.

DIAMETER INCHES

THROUGH 12

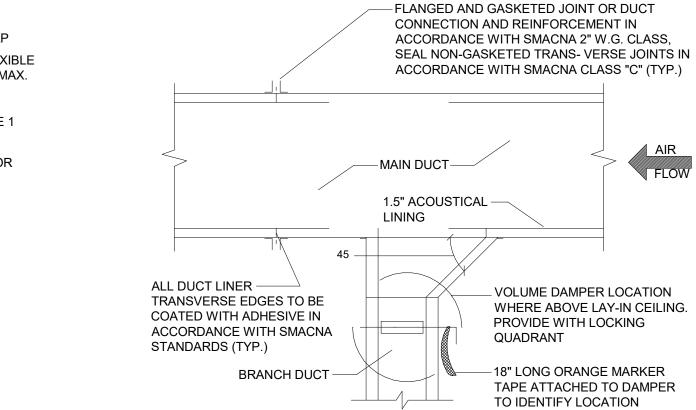
13 THROUGH 18

19 THROUGH 28

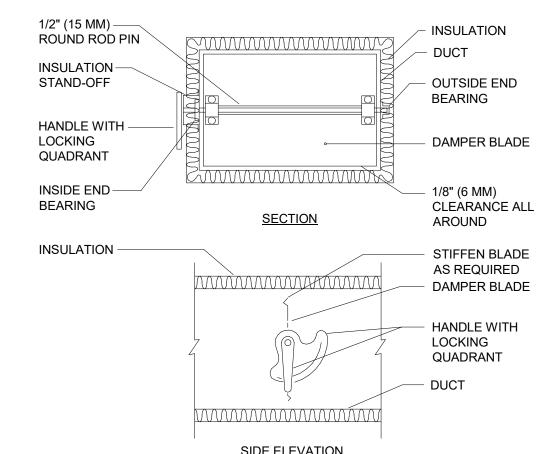
29 THROUGH 36

37 THROUGH 52

WOOD TRUSS FRAMING -

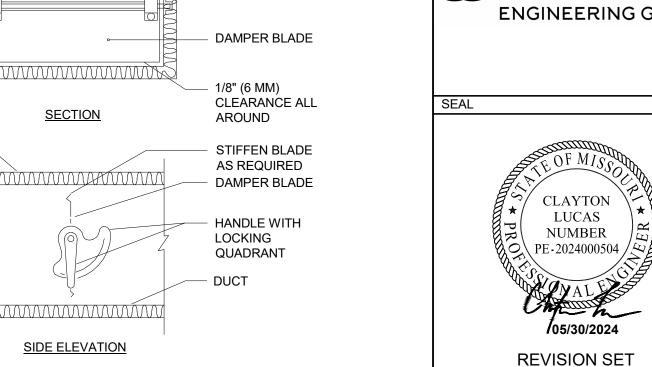






1. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

MANUAL DAMPER DETAIL



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ISSUE	DATE	DESCRIPTION
PRO.	JECT INF	ORMATION
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ORIG	SINAL ISSUE	: 09/06/202
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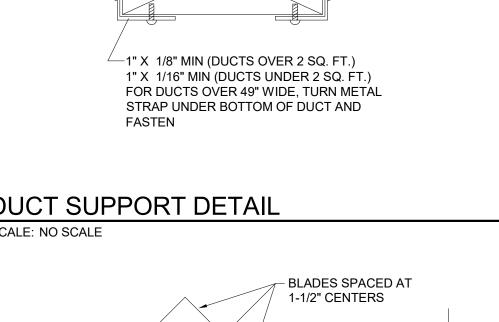
CHECKED BY: SHEET TITLE

> **MECHANICAL DETAILS**

SHEET NUMBER

M104

REQ'D AT EACH RUN-OUT TAP TO EVERY TERMINAL SUPPLY AIR DEVICE, AND OTHERWISE AS INDICATED.



SECTION 1 - SUPPLEMENTARY CONDITIONS FOR MECHANICAL WORK

1.1.1 GENERAL CONDITIONS ALL WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION OF INSTRUCTIONS TO BIDDERS, GENERAL REQUIREMENTS AND THE SUPPLEMENTARY GENERAL CONDITIONS OF THESE SPECIFICATIONS.

B. BIDDERS SHALL DETERMINE THE CONTENTS OF A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS AND BE AWARE THAT THEY MAY BE BIDDING FROM A PARTIAL SET OF DRAWINGS, APPLICABLE ONLY TO THE VARIOUS SEPARATE CONTRACT. SUBCONTRACTS OR TRADES AS MAY BE ISSUED FOR BIDDING PURPOSES ONLY. THE CONTRACT DOCUMENTS ARE THE COMBINED ARCHITECTURAL, STRUCTURAL, PLUMBING, HEATING, VENTILATING AND AIR CONDITIONING AND ELECTRICAL DRAWINGS AND SPECIFICATIONS. ALL DRAWINGS AND SPECIFICATIONS ARE ON FILE IN THE ARCHITECT'S OFFICE, AND EACH BIDDER SHALL THOROUGHLY ACQUAINT HIMSELF WITH ALL OF THE DETAILS OF THE COMPLETE SET OF DRAWINGS AND SPECIFICATIONS BEFORE SUBMITTING HIS BID. ALL DRAWINGS AND SPECIFICATIONS FORM A PART OF THE CONTRACT DOCUMENTS FOR EACH SEPARATE CONTRACT. THEY SHALL BE CONSIDERED AS BOUND THEREWITH IN THE EVENT PARTIAL SETS OF PLANS AND SPECIFICATIONS SHALL BE DEEMED EVIDENCE OF THE REVIEW AND EXAMINATION OF ALL DRAWINGS, SPECIFICATIONS AND ADDENDA ISSUED FOR THIS PROJECT. NO ALLOWANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH ANY PORTION OF THE COMPLETE SET OF DOCUMENTS.

C. ALL EQUIPMENT AND MATERIALS SHALL BE MANUFACTURED IN THE UNITED STATES OF

A. THE WORK INCLUDED UNDER THIS SPECIFICATION CONSISTS OF THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION, SERVICES, ETC. WHICH ARE APPLICABLE AND NECESSARY TO COMPLETE THE INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN; ALL AS DESCRIBED IN THESE SPECIFICATIONS, AS ILLUSTRATED ON THE ACCOMPANYING DRAWINGS, OR AS DIRECTED BY THE ARCHITECT.

B. IN GENERAL, THE VARIOUS LINES AND DUCTS TO BE INSTALLED BY THE VARIOUS TRADES UNDER THIS SPECIFICATION SHALL BE RUN AS INDICATED, AS SPECIFIED HEREIN, AS REQUIRED BY PARTICULAR CONDITIONS AT THE SITE AND AS REQUIRED TO CONFORM TO THE GENERALLY ACCEPTED STANDARDS SO AS TO COMPLETE THE WORK IN A NEAT AND SATISFACTORILY WORKABLE MANNER. RUN WORK PARALLEL OR PERPENDICULAR TO THE LINES OF THE BUILDING UNLESS OTHERWISE NOTED.

C. THE CONSTRUCTION DETAILS FOR THE BUILDING ARE ILLUSTRATED ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE DETAILS BEFORE SUBMITTING HIS BID, AS NO ALLOWANCE WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. PLACE ALL INSERTS TO ACCOMMODATE THE ULTIMATE INSTALLATION OF PIPE HANGERS IN THE FORMS BEFORE CONCRETE IS POURED. SET SLEEVES IN PLACE IN FORMS BEFORE CONCRETE IS POURED, AND IN MASONRY WALLS WHILE THEY ARE UNDER CONSTRUCTION. ALL CONCEALED LINES SHALL BE INSTALLED AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION TO PRECEDE THAT GENERAL CONSTRUCTION.

A. THE CONTRACTORS SHALL VISIT THE SITE, VERIFY ALL EXISTING ITEMS SHOWN ON PLANS OR SPECIFIED HEREIN, AND FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS, HAZARDS, EXISTING GRADES, ACTUAL FORMATIONS, SOIL CONDITIONS, AND LOCAL REQUIREMENTS INVOLVED, AND SUBMISSION OF BIDS SHALL BE DEEMED EVIDENCE OF SUCH VISIT. ALL PROPOSALS SHALL TAKE THE EXISTING CONDITIONS INTO CONSIDERATION, AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY

1.1.4 UTILITIES, LOCATIONS AND ELEVATIONS

A. LOCATIONS AND ELEVATIONS OF THE VARIOUS UTILITIES INCLUDED WITHIN THE SCOPE OF THIS WORK HAVE BEEN OBTAINED FROM CITY AND/OR OTHER SUBSTANTIALLY RELIABLE SOURCES AND ARE OFFERED SEPARATELY FROM THE CONTRACT DOCUMENTS, AS A GENERAL GUIDE ONLY, WITHOUT GUARANTEE AS TO ACCURACY. THE CONTRACTOR SHALL EXAMINE THE SITE, SHALL VERIFY TO THEIR OWN SATISFACTION THE LOCATIONS, ELEVATIONS AND AVAILABILITY OF ALL UTILITIES AND SERVICES REQUIRED AND SHALL ADEQUATELY INFORM THEMSELVES AS TO THEIR RELATION TO THE WORK; THE SUBMISSION OF BIDS SHALL BE DEEMED EVIDENCE THEREOF. 1.1.5 CODE REQUIREMENTS

A. ALL WORK SHALL COMPLY WITH THE PROVISIONS OF THESE SPECIFICATIONS, AS ILLUSTRATED ON THE ACCOMPANYING DRAWINGS, OR AS DIRECTED BY THE ARCHITECT, AND SHALL SATISFY ALL APPLICABLE LOCAL CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, AND ALL AUTHORITIES HAVING JURISDICTION OVER THE WORK. OR SERVICES THERETO. IN ALL CASES WHERE ALTERATIONS TO, OR DEVIATIONS FROM THE DRAWINGS AND SPECIFICATIONS ARE REQUIRED BY THE AUTHORITY HAVING JURISDICTION, THE CONTRACTOR SHALL REPORT SAME IN WRITING TO THE OWNER AND SECURE HIS APPROVAL BEFORE PROCEEDING. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROVIDE COMPLETE UTILITY SERVICE CONNECTIONS, AS DIRECTED, AND SUBMIT, AS REQUIRED, ALL NECESSARY DRAWINGS; HE SHALL SECURE ALL PERMITS AND INSPECTIONS NECESSARY IN CONNECTION WITH HIS WORK AND PAY ALL LEGAL FEES ON ACCOUNT THEREOF. IN THE ABSENCE OF OTHER APPLICABLE LOCAL CODES ACCEPTABLE TO THE ARCHITECT, THE NATIONAL ELECTRICAL CODE AND INTERNATIONAL PLUMBING CODE SHALL APPLY TO THIS WORK.

1.1.6 RECORDS FOR THE OWNER A. THE CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE A COMPLETE, FULL-SIZE SET OF PRINTS ON WHICH HE SHALL KEEP AN ACCURATE RECORD OF THE INSTALLATION OF ALL MATERIALS AND SYSTEMS COVERED BY HIS CONTRACTUAL AGREEMENT. THE RECORD SHALL INDICATE THE LOCATION OF ALL EQUIPMENT AND THE ROUTING OF ALL SYSTEMS. ALL CONDUIT BURIED IN CONCRETE SLABS, WALLS, AND BELOW GRADE SHALL BE LOCATED BY DIMENSION UNLESS A SURFACE MOUNTED DEVICE IN EACH SPACE INDICATES THE EXACT LOCATION. HE SHALL THEN OBTAIN AT HIS EXPENSE ONE COMPLETE REPRODUCIBLE SET OF THE ORIGINAL DRAWINGS ON WHICH HE SHALL NEATLY TRANSFER HIS NOTATIONS AND DELIVER THESE DRAWINGS TO THE ENGINEER AT JOB COMPLETION BEFORE THE FINAL PAYMENT FOR DELIVERY TO THE OWNER. B. IN ADDITION TO THE ABOVE, THE CONTRACTOR SHALL ACCUMULATE DURING THE JOB PROGRESS THE FOLLOWING DATA IN DUPLICATE PREPARED IN A NEAT BROCHURE OR PACKET FOLDER BONDING FOR SUBSEQUENT DELIVERY TO THE OWNER. THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF BINDING INTO A BOOK: ALL WARRANTIES, GUARANTEE, AND MANUFACTURER'S DIRECTIONS ON EQUIPMENT AND MATERIAL COVERED BY THE CONTRACT.

COPIES OF APPROVED SHOP DRAWINGS AND SUBMITTALS. COPIES OF SEQUENCE OF OPERATIONS FOR ALL EQUIPMENT COVERED BY CONTRACT.

1.1.7 MATERIALS AND WORKMANSHIP A. ALL MATERIALS, UNLESS OTHERWISE SPECIFIED, SHALL BE NEW, FREE FROM ANY DEFECTS AND OF THE BEST QUALITY OF THEIR RESPECTIVE KINDS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURER, MODEL AND QUALITY, UNLESS OTHERWISE SPECIFIED. B. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED, ADJUSTED AND CONDITIONED AS RECOMMENDED BY THE MANUFACTURERS, OR ALL INDICATED IN THEIR PUBLISHED LITERATURE, UNLESS SPECIFICALLY HEREIN SPECIFIED TO THE CONTRARY. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER PROVIDING A THOROUGH AND COMPLETE INSTALLATION. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. INCLUDING THE SHIELDING OF SOFT OR FRAGILE MATERIALS AND THE TEMPORARY PLUGGING OF OPEN LINES DURING CONSTRUCTION. AT COMPLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED, AND ALL TOOLS, EQUIPMENT, OBSTRUCTION OR DEBRIS PRESENT AS A RESULT OF THIS CONTRACT SHALL BE REMOVED FROM THE PREMISES. 1.1.8 STORAGE AND PROTECTION

A. PROVIDE ADEQUATE FACILITIES FOR ITEMS FURNISHED UNDER THESE SPECIFICATIONS WHICH ARE SUBJECT TO DAMAGE IF EXPOSED TO ELEMENTS. TAKE SUCH PRECAUTIONS AS NECESSARY TO PROPERLY PROTECT APPARATUS FROM DAMAGE. FAILURE TO COMPLY WITH THIS PROVISION WILL BE SUFFICIENT CAUSE FOR REJECTION OF THE PARTICULAR APPARATUS INVOLVED.

A. ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CONJUNCTION WITH OTHER TRADES ON THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS WORK.

B. MAINTAINING CONTACT AND BEING FAMILIAR WITH THE PROGRESS OF THE GENERAL CONSTRUCTION AND THE TIMELY INSTALLATION OF SLEEVES AND INSERTS, ETC., BEFORE CONCRETE IS PLACED SHALL BE THE RESPONSIBILITY OF THIS TRADE, AS WILL THE INSTALLATION OF THE REQUIRED SYSTEMS IN THEIR SEVERAL STAGES, AT THE PROPER TIME TO EXPEDITE THIS CONTRACT AND AVOID UNNECESSARY DELAYS IN THE PROGRESS OF OTHER CONTRACTS, AND MEET ALL REQUIREMENTS OF PROGRESS SCHEDULES SET UP BY THE ARCHITECT. C. SHOULD ANY QUESTION ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS. FIXTURES OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OR STRENGTH OF THE STRUCTURE, REFERENCE SHALL BE MADE TO THE ARCHITECT FOR INSTRUCTION.

1.1.10 SCHEDULE OF MATERIAL AND EQUIPMENT

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A COMPLETE SCHEDULE OF MATERIAL AND EQUIPMENT WHICH IS TO BE INSTALLED UNDER THE CONTRACT. THE SCHEDULE SHALL BE SUBMITTED WITHIN 30 DAYS AFTER THE AWARD OF THIS CONTRACT AND PRIOR TO THE INSTALLATION OR FABRICATION OF ANY OF THE MATERIAL INVOLVED. THE SCHEDULE SHALL INCLUDE FOR MATERIALS THE MANUFACTURER'S NAME, CATALOG NUMBER, TYPE AND TRADE NAME; IN ADDITION, FOR EQUIPMENT, ATTACH MANUFACTURER'S ENGINEERING DATA AND SPECIFICATION SHEET. 1.1.11 SHOP DRAWINGS AND SUBMITTALS

PROVIDE SUBMITTALS AND SHOP DRAWINGS (3 COPIES MINIMUM) FOR THE FOLLOWING EQUIPMENT AND LAYOUT: DUCTWORK FABRICATION DETAILS AND LAYOUT AT 1/8" = 1'-0" SCALE.

MECHANICAL EQUIPMENT CUT SHEETS INCLUDING ALL PERFORMANCE CHARACTERISTICS, ACCESSORIES, DRAWINGS, WIRING DIAGRAMS, ETC. ACCESSORIES SHALL BE CLEARLY LABELED TO SHOW WHAT IS AND IS NOT PROVIDED. PIPING DETAILS SHOWING MATERIALS USED AND JOINING/SEALING METHODS. PIPING LAYOUT AT 1/8" = 1'-0" SCALE.

EQUIPMENT SHALL NOT BE ORDERED UNTIL APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD. THE CONTRACTOR SHALL ALLOW TWO (2) WEEKS FOR DESIGN TEAM REVIEW OF SUBMITTALS.

1.1.12 DRAWINGS AND SPECIFICATIONS THE DRAWINGS SHOW, DIAGRAMMATICALLY, THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM. THE SYSTEMS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE ITEMS SHOWN ON THE DRAWINGS. EXACT LOCATIONS OF THESE ITEMS SHALL BE DETERMINED BY REFERENCE TO THE GENERAL PLANS AND MEASUREMENTS AT THE BUILDING AND IN COOPERATION WITH OTHER SUB-CONTRACTORS AND, IN ALL CASES, SHALL BE SUBJECT TO THE APPROVAL OF THE CONTRACTOR. THE CONTRACTOR RESERVES THE RIGHT TO MAKE ANY REASONABLE CHANGE IN THE LOCATION OF ANY PART OF THIS WORK WITHOUT ADDITIONAL

COST TO THE OWNER. B. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR IN ITEMS SHOWN ON THE CONTRACT DRAWINGS, SHOP DRAWINGS AND DESCRIPTIONS, THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL C. EXCEPTIONS AND INCONSISTENCIES IN PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE CONTRACTOR'S ATTENTION BEFORE BIDS ARE SUBMITTED; OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ANY AND ALL CHANGES AND ADDITIONS THAT MAY BE

NECESSARY TO ACCOMMODATE HIS PARTICULAR APPARATUS. D. THE CONTRACTOR SHALL LAY OUT HIS WORK MAINTAINING ALL LINES, GRADES AND DIMENSIONS ACCORDING TO THESE DRAWINGS WITH DUE CONSIDERATION FOR OTHER TRADES AND VERIFY ALL DIMENSIONS AT THE SITE PRIOR TO ANY FABRICATION OR INSTALLATION. SHOULD THE LAYOUT BE IMPRACTICAL, THE CONTRACTOR SHALL BE NOTIFIED BEFORE ANY INSTALLATION OR FABRICATION, AND THE EXISTING CONDITIONS SHALL BE INVESTIGATED AND PROPER CHANGES EFFECTED WITHOUT ANY ADDITIONAL COST

E. TITLES OF SECTIONS AND PARAGRAPHS IN THESE SPECIFICATIONS ARE INTRODUCED MERELY FOR CONVENIENCE AND ARE NOT TO BE CONSTRUED AS A CORRECT OR COMPLETE SEGREGATION TO TABULATION OF THE VARIOUS UNITS OF MATERIAL AND/OR WORK. THE ARCHITECT DOES NOT ASSUME ANY RESPONSIBILITY, EITHER DIRECT OR IMPLIED, FOR OMISSIONS OR DUPLICATIONS BY THE CONTRACTOR OR ANY SUB-CONTRACTOR DUE TO REAL OR ALLEGED ERROR IN THE ARRANGEMENT OF MATTER IN THE CONTRACT DOCUMENTS. 1.1.13 ARCHITECT'S APPROVAL

A. IN ANY STATEMENT UNDER THIS CONTRACT WHERE "APPROVAL" IS REQUIRED OR REQUESTED, IT IS UNDERSTOOD THAT SUCH APPROVAL MUST BE OBTAINED FROM THE ARCHITECT IN WRITING BEFORE PROCEEDING WITH THE PROPOSAL, AND AN ADEQUATE NUMBER OF COPIES OF ANY SUCH PROPOSAL SHALL BE SUBMITTED TO THE ARCHITECT. B. THE APPROVAL BY THE ARCHITECT OF ANY MATERIALS, CHANGES, DRAWINGS, ETC. SUBMITTED BY THE CONTRACTOR WILL BE CONSIDERED AS GENERAL ONLY AND TO AID THE CONTRACTOR IN EXPEDITING HIS WORK. SUCH APPROVAL AS MAY BE GIVEN DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM THE NECESSITY OF FURNISHING THE MATERIALS AND PERFORMING ALL WORK AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.

A. THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL RULES AND REGULATIONS OF THE CITY, COUNTY AND STATE, OR ANY OTHER AUTHORITY HAVING JURISDICTION OVER THIS PROJECT. IF IT IS THE CONTRACTOR'S OPINION THAT ANY WORK OR MATERIALS SHOWN ON THE DRAWINGS OR SPECIFICATIONS DO NOT COMPLY WITH THESE RULES AND REGULATIONS AS TO SIZE, TYPE, CAPACITY AND QUALITY, HE MUST MAKE IT KNOWN PRIOR TO THE SUBMISSION OF HIS BID, WHICH SHALL BE DEEMED EVIDENCE OF COMPLIANCE; OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROVAL OF ALL WORK OR MATERIAL AND, IN THE EVENT THAT SUCH AUTHORITY SHOULD INDICATE DISAPPROVAL, HE SHALL CORRECT SAME WITH MATERIALS APPROVED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

A. EXCEPT FOR SUCH ITEMS AS ARE NORMALLY WIRED UP AT THEIR POINT OF MANUFACTURE AND SO DELIVERED, AND UNLESS SPECIFICALLY NOTED TO THE CONTRARY HEREIN, THE ELECTRICAL SUBCONTRACTOR WILL DO ALL ELECTRIC WIRING OF EVERY CHARACTER FOR POWER SUPPLY. THE MECHANICAL SUBCONTRACTOR SHALL ERECT ALL MOTORS IN PLACE READY FOR CONNECTIONS AND SHALL FURNISH WITH EACH SUCH MOTOR A STARTER OF THE TYPE SPECIFIED AND DELIVER IT IN GOOD CONDITION TO THE ELECTRICAL SUBCONTRACTOR AT THE JOB. THE ELECTRICAL SUBCONTRACTOR WILL MOUNT ALL SUCH STARTERS, AS DIRECTED, FURNISHING SUPPORTING STRUCTURES WHERE NECESSARY. THE OWNER AND OTHER SUBCONTRACTORS SHALL FURNISH WITH EACH ITEM REQUIRING ELECTRICAL CONNECTIONS, THE NECESSARY INSTRUCTIONS AND WIRING DIAGRAMS TO THE ELECTRICAL SUBCONTRACTOR. THE ELECTRICAL SUBCONTRACTOR SHALL REFER TO THE SPECIFICATIONS TO DETERMINE THE SCOPE OF THE WORK. 1.1.16 LARGE APPARATUS AND EQUIPMENT

A. ALL LARGE APPARATUS AND EQUIPMENT WHICH IS SPECIFIED OR SHOWN TO BE FURNISHED OR INSTALLED UNDER THIS CONTRACT, AND WHICH MAY BE TOO LARGE TO BE MOVED INTO ITS FINAL POSITION THROUGH THE NORMAL BUILDING OPENINGS PLANNED. SHALL BE PLACED BY THIS SUBCONTRACTOR IN ITS APPROXIMATE FINAL POSITION. THIS SHALL BE ACCOMPLISHED THROUGH COOPERATION AND COORDINATION WITH OTHER SUBCONTRACTORS BEFORE ANY OBSTRUCTING STRUCTURE IS INSTALLED. ALL APPARATUS SHALL BE CRIBBED UP FROM THE FLOOR BY THIS SUBCONTRACTOR AND CARED FOR AS SPECIFIED UNDER "STORAGE AND PROTECTION" OR AS DIRECTED BY THE ARCHITECT.

A. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED. HE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PROVIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED. 1.1.18 CLEAN UP

A. CLEAN UP TRASH AND DEBRIS CAUSED BY THE WORK OF THIS SECTION, KEEPING PREMISES. STREETS, SIDEWALKS AND ADJACENT AREAS CLEAN AND NEAT AT ALL TIMES. B. DISPOSE OF SUCH MATERIALS OUTSIDE THE LIMITS OF THE PROJECT SITE TO APPROVED LOCATIONS.

A. UPON COMPLETION, CLEAN ALL PIPES AND EQUIPMENT BEFORE PAINTING. PAINTING OF MECHANICAL EQUIPMENT AND PIPING IS SPECIFIED IN ARCHITECTURAL PAINTING SECTION. 1.1.20 ACCESS DOORS

A. ACCESS DOORS ARE TO BE PROVIDED BY THE CONTRACTOR. CONTRACTOR WILL CLOSELY COORDINATE LOCATIONS OF VALVES, ETC. IN ORDER TO HAVE ACCESS TO ALL CONCEALED PORTIONS OF THE SYSTEM REQUIRING PERIODIC SERVICE. PREPARE SHOP DRAWINGS FOR COORDINATION OF ALL ACCESS DOORS, LOCATING SAME FOR INSTALLATION BY GENERAL CONTRACTOR. ACCESS DOOR LOCATIONS SHALL BE APPROVED BY ARCHITECT OR OWNER BEFORE INSTALLATION.

1.1.21 EXCAVATION AND BACKFILLING PROVIDE NECESSARY EXCAVATING AND BACKFILLING FOR THE INSTALLATION OF WORK SPECIFIED IN THIS DIVISION. TRENCHES FOR UNDERGROUND PIPING AND CONDUIT SHALL BE EXCAVATED TO REQUIRED DEPTHS WITH BELL HOLES PROVIDED AS NECESSARY TO INSURE UNIFORM BEARING. ARE SHOULD BE TAKEN NOT TO EXCAVATE BELOW DEPTH, AND ANY EXCAVATION BELOW DEPTH SHALL BE REFILLED WITH SAND OR GRAVEL FIRMLY COMPACTED. WHERE ROCK OR HARD OBJECTS ARE ENCOUNTERED, THEY SHALL BE EXCAVATED TO A GRADE SIX INCHES (6") BELOW THE LOWERMOST PART OF THE PIPE AND REFILLED TO THE PIPE GRADE AS SPECIFIED. AFTER THE PIPE HAS BEEN INSTALLED, TESTED AND APPROVED, THE TRENCHES SHALL BE BACKFILLED IN GRADE WITH APPROVED MATERIAL, WELL TAMPED OR PUDDLED COMPACTLY IN PLACE. DO NOT PROCEED WITH BACKFILL OPERATIONS UNTIL THE ARCHITECT OR CONTRACTOR HAS INSPECTED PIPING. ALL PIPING OUTSIDE THE BUILDING SHALL BE INSTALLED BELOW THE FROST LINE. WHERE STREETS, SIDEWALKS, ETC. ARE DISTURBED, CUT OR DAMAGED BY THIS WORK, THE EXPENSE OF REPAIRING SAME IN A MANNER APPROVED BY THE ARCHITECT SHALL BE A PART OF THIS CONTRACT.

1.1.22 SLEEVES AND ESCUTCHEONS

ALL PIPING OTHER THAN SANITARY SEWER LINES AND PVC OR POLYBUTAL PASSING THROUGH CONCRETE FLOOR SLABS SHALL BE COMPLETELY ISOLATED IN 1/2" THICK FLEXIBLE FOAM PLASTIC INSULATION FROM 6" BELOW THE SLAB TO 2" ABOVE THE SLAB. IF PIPES PASS THROUGH GRADE BEAMS, THE INSULATION THICKNESS SHALL BE 3/8". SANITARY SEWER LINES PASSING GRADE BEAMS SHALL BE WRAPPED WITH TWO (2) PLY OF 15#Q FELT TO ISOLATE THE PIPE FROM THE CONCRETE.

ESCUTCHEONS EXCEPT AS SPECIFICALLY NOTED OR SPECIFIED SHALL BE INSTALLED ON ALL PIPES PASSING EXPOSED THROUGH THE FLOORS, WALLS OR CEILINGS. ESCUTCHEONS SHALL BE CHROME PLATED SECTIONAL FLOOR AND CEILING PLATES AND SHALL FIT SNUGLY AND NEATLY AROUND PIPE OR PIPE INSULATION OR INSULATED LINES. SOLID CHROME PLATES WITH SETSCREWS SHALL BE USED IF SECTIONAL PLATES DO NOT FIT PROPERLY OR STAY IN PLACE. <u>1.1.23 FLASHINGS</u>

FLASH AROUND ALL PIPES PASSING THROUGH THE ROOF IN CONNECTION WITH THIS CONTRACT WITH STANDARD MANUFACTURED FLASHINGS. FLASHINGS SHALL BE SHEET METAL WITH RUBBER GASKETS. FLASHINGS SHALL EXTEND INTO ROOFING AND UP PIPE DISTANCES IN ACCORDANCE WITH THE LOCAL CODE.

1.1.24 EXPANSION OF PIPING THIS SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL DEVICES REQUIRED TO PERMIT THE EXPANSION AND CONTRACTION OF ALL PIPE WORK INSTALLED PARTICULARLY IN WATER SUPPLY AND CIRCULATING SYSTEMS. IN THE MAIN WATER AND CIRCULATING LINES, HE SHALL EMPLOY EXPANSION JOINTS AS REQUIRED OR WHERE DIRECTED

SHOULD THE INSTALLATION OF MECHANICAL EXPANSION JOINTS BECOME NECESSARY IN THE OPINION OF THE ARCHITECT, JOINTS 1-1/2" AND SMALLER SHALL BE FULTON SYLPHON NO. 111 PACKLESS EXPANSION JOINTS. JOINTS ON 2" AND LARGER LINES SHALL BE ADSCO, FLEXONES OR TUBE TURN, BELLOWS TYPE EXPANSION JOINTS WITH THE PROPER NUMBER OF BELLOWS SECTIONS OF STAINLESS STEEL

ANCHOR ALL LINES HAVING EXPANSION JOINTS SO THAT EXPANSION AND CONTRACTION EFFECT IS EQUALLY DISTRIBUTED. VERIFY EXACT LOCATIONS OF ANCHORS WITH THE ARCHITECT PRIOR TO MAKING INSTALLATION. THE LINES HAVING EXPANSION JOINTS SHALL BE ACCURATELY GUIDED ON BOTH SIDES OF EACH JOINT. THESE GUIDES SHALL CONSIST OF SADDLES AND "E" CLAMPS PROPERLY ARRANGED AND SUPPORTED. SUBMIT COMPLETE DETAILS FOR APPROVAL 1.1.25 FLAME SPREAD PROPERTIES OF MATERIALS

ALL MATERIALS AND ADHESIVES USED FOR ACOUSTICAL LININGS AND INSULATION, JACKETS, TAPES, ETC. SHALL CONFORM TO INTERIM FEDERAL STANDARD FLAME-SPREAD PROPERTIES OF MATERIALS, INC. FED. STD. NO. 00336A (COMM. NBS). THE CLASSIFICATION SHALL NOT EXCEED NO. 2, WITH THE RANGE OF INDICES BETWEEN 0 AND 25 FOR THESE CLASSIFICATIONS AS LISTED IN THE FEDERAL SPECIFICATIONS FOR THE BASIC MATERIALS, THE FINISHES, ADHESIVES, ETC. SPECIFIED FOR EACH SYSTEM, AND SHALL BE SUCH THAT WHEN COMPLETELY ASSEMBLED THE TOTAL WILL NOT EXCEED AN INDEX OF 50 IN CLASSIFICATION 111 AS LISTED IN THE FEDERAL SPECIFICATIONS. MODIFICATIONS SHALL BE MADE TO INSULATING MATERIALS, ETC. AS REQUIRED TO COMPLY WITH THE FEDERAL SPECIFICATIONS.

THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE IN TRIPLICATE, WARRANTING ALL MATERIALS, EQUIPMENT AND LABOR FURNISHED BY HIM TO BE FREE OF ALL DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER. HE SHALL FURTHER GUARANTEE THAT ALL EQUIPMENT SHALL MEET THE CHARACTERISTICS, CAPACITIES AND WORKMANSHIP SPECIFIED AND WITHIN THE WARRANTY PERIOD, THE DEFECTS AND/OR EQUIPMENT WILL BE REPAIRED OR MADE GOOD WITHOUT COST TO THE OWNER. THE CONTRACTOR FURTHER AGREES TO CORRECT WARRANTY DEFICIENCIES WITHIN 48 HOURS OF NOTIFICATION BY MANAGEMENT

REFERENCE DOCUMENTS: CONDITIONS OF THE CONTRACT AND DIVISION 01 "GENERAL REQUIREMENTS" ARE MADE A PART OF THIS SECTION WHETHER ATTACHED HERETO OR NOT.

SECTION 4 - HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS

PROVIDE COMPLETE AIR SUPPLY, RETURN, OUTSIDE AIR AND EXHAUST SYSTEMS INCLUDING FANS, TERMINAL DEVICES AND OTHER COMPONENTS SPECIFIED HEREIN.

SHOP DRAWINGS: SUBMIT COMPLETE SHOP DRAWINGS, IN ACCORDANCE WITH SECTION 1, INDICATING MATERIALS, QUANTITIES, SIZES AND INSTALLATION DETAILS.

INSTALL MATERIALS AND EQUIPMENT AT PROPER TIME TO KEEP PACE WITH THE GENERAL CONSTRUCTION AND THE WORK OF THE OTHER TRADES INVOLVED.

<u>4.1.4 WARRANTY</u> THE MECHANICAL SUB-CONTRACTOR SHALL WARRANTY ALL MATERIAL, WORKMANSHIP AND EQUIPMENT FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER. THE WARRANTY SPECIFICALLY IMPLIES THAT ANY DEFECTIVE PORTION BECOMING APPARENT DURING THIS PERIOD WILL BE REPAIRED, REPLACED OR OTHERWISE MADE GOOD AT NO ADDITIONAL COST TO THE OWNER. IT SHALL FURTHER INCLUDE REPLACEMENT OR REFRIGERANT LOSS NOT DUE TO OWNER NEGLIGENCE. COMPRESSORS SHALL CONTAIN AN ADDITIONAL FOUR-YEAR WARRANTY.

RIGID DUCTWORK: ALL AIR CONDITIONING AND EXHAUST DUCTWORK, PLENUM, CASINGS AND SHEET METAL, CONNECTIONS SHALL BE FABRICATED OF NEW JOINT-FORMING QUALITY GALVANIZED PRIME GRADE SHEETS. RECTANGULAR LOW PRESSURE DUCTS: CONSTRUCTED OF THE FOLLOWING MINIMUM **GAUGES:**

LARGEST DIMENSION OF DUCT GAUGE OF METAL UP TO 12" NO. 26 U.S. GAUGE 13" TO 30" NO. 24 U.S. GAUGE 31" TO 54" NO. 22 U.S. GAUGE

C. ROUND LOW PRESSURE DUCTS: "SNAP-LOK" AS MANUFACTURED BY UNITED SHEET METAL COMPANY. RECTANGULAR DUCTWORK FITTINGS: FABRICATED PER SMACNA STANDARDS FOR LOW-PRESSURE DUCTWORK(2-INCH PRESSURE CLASS).

ROUND DUCTWORK FITTINGS: AS MANUFACTURED BY UNITED SHEET METAL CO., AND/OR AS DETAILED ON THE DRAWINGS. FLEXIBLE CONNECTIONS: CONNECTIONS TO AIR CONDITIONING UNITS AND FANS SHALL BE FLEXIBLE CONNECTIONS WHICH SHALL BE NEOPRENE COATED GLASS FABRIC WEIGHING NOT LESS THAN 30 OUNCES PER SQUARE YARD AND AT LEAST 1/16" THICK. AT THE CONTRACTOR'S OPTION, 2" INSULATED FLEXIBLE DUCT MAY BE USED FOR FINAL RUN OUT TO AIR DEVICES WHEN INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. FLEXIBLE RUN OUTS SHALL NOT EXCEED 5-FEET EXTENDED LENGTH.

SURFACE-BURNING CHARACTERISTICS FOR SEALANTS AND GASKETS SHALL BE A MAXIMUM FLAME-SPREAD INDEX OF 25 AND A MAXIMUM SMOKE-DEVELOPED INDEX OF 50 WHEN TESTED ACCORDING TO UL 723; CERTIFIED BY AN NRTL ACCESS DOORS SHALL BE PROVIDED FOR ACCESS TO ALL DAMPERS, FUSIBLE LINKS, AND

WHERE REQUIRED FOR MAINTENANCE AND CLEANING OPERATIONS. ACCESS DOORS SERVING INSULATED DUCTS SHALL BE DOUBLE-SKIN DOORS WITH ONE INCH OF INSULATION ON THE DOOR. WHERE DUCT SIZE PERMITS, THE ACCESS DOORS SHALL BE16-INCHES BY 18-INCHES. ACCESS DOORS SHALL BE AS MANUFACTURED BY MILCOR. 4.3.1 INSULATION

A. ALL RECTANGULAR SHEET METAL DUCTS SHALL BE INSULATED WITH 1.5-INCH" THICK, 3/4" LB DENSITY FIBERGLASS-FACED INSULATION, OR AS REQUIRED TO MEET A MINIMUM INSTALLED R-VALUE OF 6.0. INSTALL WITH ALL JOINTS OVERLAPPED AND NEATLY SEALED. ALL ROUND SHEET METAL DUCTS SHALL BE INSULATED WITH 2" THICK, 3/4" LB DENSITY FIBERGLASS-FACED INSULATION, OR AS REQUIRED TO MEET A MINIMUM INSTALLED R-VALUE OF 6.0. INSTALL WITH ALL JOINTS OVERLAPPED AND NEATLY SEALED WITH UL 181 LISTED SEALANT. INSULATE REFRIGERANT PIPING WITH 3/8" THICK ARMAFLEX. APPLY INSULATION WITH ALL JOINTS FIRMLY BUTTED TOGETHER.

4.4.1 FILTERS A. FILTERS SHALL BE 1" THROW AWAY TYPE AND SHALL BE FARR 30-30 FILTER OR EQUAL TYPES BY CAMBRIDGE OR MICROTRON. MAXIMUM VELOCITY THROUGH FILTER MEDIA SHALL BE 500 FPM

4.5.1 AIR DISTRIBUTION DEVICES A. AIR DISTRIBUTION DEVICES SHALL BE FURNISHED WITH FRAME STYLES, DEFLECTING DEVICE, DAMPERS AND OTHER ACCESSORIES AS SHOWN ON THE SCHEDULE, AS MANUFACTURED BY TITUS OR APPROVED EQUAL BY METAL-AIRE, PRICE, OR KRUEGER. B. WALL LOUVERS SHALL BE RECESSED FRAME DOUBLE WEATHER STOP WITH BIRD SCREEN. PROVIDE RUSKIN MODEL L545 OR APPROVED EQUAL BY GREENHECK OR SEMCO. C. FURNISH AND INSTALL SCREENS ON ALL DUCT, FAN OR OTHER MECHANICAL OPENINGS OR EQUIPMENT FURNISHED BY THIS CONTRACTOR, WHICH LEAD TO OR ARE OUTDOORS. SCREENS SHALL BE 16 GAUGE, ONE-HALF INCH MESH IN REMOVABLE GALVANIZED FRAMES.

4.6.6 SYSTEM CHARGING AND STARTUP A. SUPPLY THE INITIAL CHARGE OF REFRIGERANT AS REQUIRED TO COMPLETELY CHARGE THE

SYSTEM. ANY LOSS OF REFRIGERANT OR OIL DURING TESTING PERIOD OR INITIAL RUNS SHALL BE REPLACED BY THE MECHANICAL SUB-CONTRACTOR AT HIS COST. B. THE SYSTEMS SHALL BE CHARGED ONLY AFTER THEY HAVE BEEN TESTED AND RENDERED FREE OF LEAKS AND THOROUGHLY EVACUATED USING A VACUUM PUMP AND A RELIABLE VACUUM DEHYDRATION INDICATOR, FOLLOWING STANDARD RECOMMENDED PROCEDURES. C. MECHANICAL SUB-CONTRACTOR SHALL OPERATE ALL SYSTEMS UNTIL THE SATISFACTORY PERFORMANCE OF SPECIFICATION REQUIREMENTS IS DEMONSTRATED TO THE COMPLETE SATISFACTION OF THE CONTRACTOR. PRIOR TO, AND DURING OPERATION, ALL CONTROLS AND OTHER APPURTENANCES AND DEVICES SHALL BE ADJUSTED AND CALIBRATED. TEST ALL SAFETY DEVICES AND MAKE READY FOR AUTOMATIC OPERATION. ALL SYSTEMS SHALL BE CALIBRATED, AND ALL FANS AND OTHER ROTATING PARTS SHALL BE PROPERLY LUBRICATED AND CHECKED FOR CORRECT ALIGNMENT.

D. THE MECHANICAL SUB-CONTRACTOR, DURING OPERATION AND BALANCING PERIODS, SHALL INSTRUCT THE CONTRACTOR'S AND OWNER'S PERSONNEL IN THE OPERATION AND CONTROL OF THE SYSTEMS AND MAINTENANCE SCHEDULE. 4.7.1 ROOF TOP AIR HANDLING UNITS

GALVANIZED STEEL PAINTED WITH BAKED ENAMEL.

GALVANIZED-STEEL LINER. INSULATED WITH FIBERGLASS. STAINLESS-STEEL OR CORROSION RESISTANT DRAIN PAN.

SUPPLY-AIR FAN: BELT DRIVEN, FORWARD CURVED, CENTRIFUGAL. CONDENSER-COIL FAN: DIRECT-DRIVEN PROPELLER. SUPPLY-AIR REFRIGERANT COIL:

ALUMINUM-PLATE FINS AND SEAMLESS COPPER TUBE. BAKED PHENOLIC COATING.

REFRIGERANT CIRCUIT COMPONENTS: NUMBER OF REFRIGERANT CIRCUITS: ONE. COMPRESSOR: HERMETIC SCROLL

REFRIGERANT CHARGE: R-410A. FILTERS: DISPOSABLE, PLEATED.

ELECTRICAL

SINGLE POINT OF CONNECTION. BASIC UNIT CONTROLS: PROGRAMMABLE WALL-MOUNTED THERMOSTAT ACCESSORIES

DUPLEX ELECTRICAL OUTLET. FILTER DIFFERENTIAL PRESSURE SWITCH. HAIL GUARDS.

ROOF CURB: VIBRATION ISOLATORS.

SECTION 5 - SYSTEM BALANCING

A. TESTING, ADJUSTMENT AND START-UP OF MECHANICAL SYSTEMS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY THE AMERICAN AIR BALANCE COUNCIL OR SIMILAR ORGANIZATION. TESTING, ADJUSTING AND BALANCING SHALL BE PERFORMED BY AN INDEPENDENT 3RD PARTY CONTRACTOR. ALL NECESSARY TEST EQUIPMENT, INSTRUMENTS, MATERIALS AND LABOR REQUIRED FOR PERFORMING ALL THE TESTS DESCRIBED SHALL BE PROVIDED AS PART OF THE WORK OF THIS DIVISION.

B. UPON COMPLETION OF THE INSTALLATION AND START-UP OF THE MECHANICAL EQUIPMENT, CHECK, ADJUST AND BALANCE SYSTEMIC COMPONENTS TO OBTAIN OPTIMUM CONDITIONS IN EACH CONDITIONED SPACE IN THE BUILDING. C. PRIOR TO REQUESTING A FINAL INSPECTION, THIS SUB-CONTRACTOR SHALL PREPARE AND

SUBMIT TO THE ARCHITECT/ENGINEER OF RECORD COMPLETE REPORTS ON THE BALANCE AND OPERATIONS OF THE SYSTEM, BEARING THE SEAL OF A CERTIFIED AIR BALANCE TECHNICIAN. IN THIS REPORT, THE ORIGINAL CONDITIONS MEASURED AT STARTUP AND FINAL CONDITIONS AFTER BALANCING OF ALL EQUIPMENT SHALL BE CLEARLY INDICATED. D. MAKE AN INSPECTION IN THE BUILDING DURING THE OPPOSITE SEASON FROM THAT IN WHICH

THE INITIAL ADJUSTMENTS WERE MADE AND, AT THE TIME, MAKE ANY NECESSARY MODIFICATIONS TO THE INITIAL ADJUSTMENTS REQUIRED TO PRODUCE OPTIMUM OPERATION OF THE SYSTEMIC COMPONENTS TO PRODUCE THE PROPERTY CONDITIONS IN EACH CONDITIONED

A. THE BALANCING TECHNICIAN SHALL BE RESPONSIBLE FOR INSPECTING, ADJUSTING, BALANCING AND LOGGING THE DATA ON THE PERFORMANCE OF FANS, ALL DAMPERS IN THE DUCT SYSTEMS AND ALL AIR DISTRIBUTION DEVICES. THE MECHANICAL CONTRACTOR AND THE SUPPLIERS OF THE EQUIPMENT INSTALLED SHALL ALL COOPERATE WITH THE BALANCING TECHNICIAN TO PROVIDE ALL NECESSARY DATA ON THE DESIGN AND PROPER APPLICATION OF THE SYSTEMATIC COMPONENTS AND SHALL FURNISH ALL LABOR AND MATERIALS REQUIRED TO ELIMINATE ANY DEFICIENCIES OR IMPROPER-PERFORMANCE.

B. DURING THE BALANCING, THE TEMPERATURE REGULATION SHALL BE ADJUSTED FOR PROPER RELATIONSHIP BETWEEN CONTROLLING INSTRUMENTS AND CALIBRATED BY THE TEMPERATURE CONTROLS SUB-CONTRACTOR USING DATA SUBMITTED BY THE BALANCING TECHNICIAN. THE TOTAL VARIATION SHALL NOT EXCEED 3 DEGREES FROM THE PRESENT MEDIAN TEMPERATURE DURING THE ENTIRE TEMPERATURE SURVEY PERIOD. C. IN ALL FAN SYSTEMS, BALANCE THE AIR QUANTITIES TO BE BETWEEN PLUS 10- TO MINUS 5-

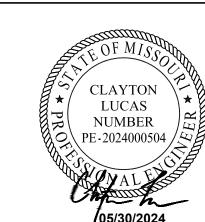
PERCENT OF THE VALUES SHOWN ON THE PLANS. IT SHALL BE THE OBLIGATION OF THE MECHANICAL CONTRACTOR TO FURNISH OR REVISE FAN DRIVES AND/OR MOTORS, IF NECESSARY, WITHOUT COST TO THE CONTRACTOR, TO ATTAIN THE SPECIFIED AIR VOLUME.

A. BEFORE FINAL ACCEPTANCE IS MADE, THE BALANCING TECHNICIAN SHALL PREPARE A DETAILED. WRITTEN REPORT. B. THE DATA SHALL BE NEATLY ENTERED ON APPROPRIATE FORMS TOGETHER WITH ANY TYPED SUPPLEMENTS REQUIRED TO COMPLETELY DOCUMENT ALL RESULTS. C. WRITTEN EXPLANATIONS OF ANY ABNORMAL CONDITIONS SHALL BE INCLUDED. ALL THIS

SHALL BE ASSEMBLED INTO A SUITABLE BROCHURE, AND A TOTAL OF FOUR COPIES SHALL BE

PROVIDED D. THE TYPED TEST DATA SHEETS AND CORRELATION OF THE TEST RESULTS SHALL BE CERTIFIED TO BE TRUE AND CORRECT BY A CERTIFIED AIR BALANCE TECHNICIAN OVER THE SIGNATURE OF THE SUBCONTRACTOR. SUCH SIGNATURE SHALL BE EXECUTED BY AN OFFICER IF THE SUBCONTRACTING FIRM IS A CORPORATION, A PARTNER IF A PARTNERSHIP, OR BY THE OWNER IS A SOLE OWNERSHIP. THIS DATA SHALL BE DELIVERED TO DESIGNATED MEMBERS OF THE BUILDING OPERATING PERSONNEL NOT LESS THAN THREE DAYS AFTER THE TEXTS ARE COMPLETE SETTINGS, READING, ETC. SHALL BE PREPARED AND SUBMITTED IN QUADRUPLICATE.

A. DURING THE TEST PERIODS, THE BALANCING TECHNICIAN SHALL INSTRUCT THE BUILDING MAINTENANCE PERSONNEL IN THE CONSTRUCTION AND OPERATION OF ALL EQUIPMENT.



REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE 09/06/2022 AS NOTED SCALE:

CHECKED BY: SHEET TITLE

DRAWN BY:

MECHANICAL SPECIFICATIONS

SHEET NUMBER

Construction Site: Owner/Agent: Designer/Contractor: 610 NW Chipman Road Gemini Engineering Group 101 Nightlinger Ln Lee's Summit, MO Milsap, TX 76066 Additional Efficiency Package(s) (817) 901-5191

Credits: 1.0 Required 1.0 Proposed

Reduced Lighting Power, 1.0 credit **Mechanical Systems List**

Quantity System Type & Description 1 HVAC System 1 (Single Zone): Single Package Heat Pump

Heating Mode: Capacity = 34 kBtu/h,

Proposed Efficiency = 8.30 HSPF, Required Efficiency = 8.00 HSPF Cooling Mode: Capacity = 52 kBtu/h, Proposed Efficiency = 16.20 SEER, Required Efficiency: 14.00 SEER Fan System: FAN SYSTEM 1 -- Compliance (Motor nameplate HP method): Passes

Electric Storage Water Heater, Capacity: 50 gallons w/ Circulation Pump

FAN 1 Supply, Constant Volume, 1750 CFM, 1.4 motor nameplate hp, 0.0 fan efficiency grade

Proposed Efficiency: 0.84 SL, %/h (if > 12 kW), Required Efficiency: 0.84 SL, %/h (if > 12 kW)

Mechanical Compliance Statement Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

CLAYTON LUCAS, P.E.

05/30/2024

Project Title: Salad & Go Report date: 04/09/24 Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group Page 1 of 10 Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit, MO\Design\6 Energy\Salad&GO Lee's Summit, MO IECC 2018.cck

Additional Comments/Assumptions:

Mechanical Rough-In Inspection Complies?

C402.2.6 Thermally ineffective panel surfaces of Complies

C403.8.4 Motors for fans that are not less than Complies

electronically commutated motors or

have a minimum motor efficiency of

70 percent. These motors have the

[ME143]² and chiller water/evaporative cooling Does Not

detailed requirements of this section.

controlled by an occupancy sensing

C403.12.1 Systems that heat outside the building Complies

system with fans > 1/4 hp are designed to vary the indoor fan airflow

as a function of load and comply with Not Applicable

Chapter 4. Mechanical ventilation has

capability to reduce outdoor air supply

for spaces >500 ft2 and >25
people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside

fans to 50% or less of design capacity. Not Observable

replacement air and conditioned supply air limitations, and satisfy hood sting requirements and maximum

means to adjust motor speed.

C403.8.5 Each DX cooling system > 65 kBtu

[ME71]² envelope are radiant heat systems

C403.2.3 HVAC equipment efficiency verified.

C403.2.2 Natural or mechanical ventilation is

International Mechanical Code

to minimum per IMC Chapter 4.

C403.7.1 Demand control ventilation provided Complies

air damper control, or design airflow

C403.7.2 Enclosed parking garage ventilation Complies

C403.7.6 HVAC systems serving guestrooms in Complies

[ME115]3 has automatic contaminant detection Does Not

and capacity to stage or modulate

guestrooms: Each guestroom is

automatically manage temperature

setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).

[ME57]¹ systems meeting Table C403.7.4(1) Does Not

C403.7.5 Kitchen exhaust systems comply with Complies

provided with controls that

[ME59]¹ provided in accordance with

[ME59]1 for spaces >500 ft2 and >25

[ME141]3 Group R-1 buildings with > 50

C403.7.4 Exhaust air energy recovery on

[ME116]³ replacement air and conditioned

and C403.7.4(2).

[ME41]³ sensible heating panels have insulation >= R-3.5.

[ME142]² 1/12 hp and less than 1 hp are

COM*check* **Software Version 4.1.5.5 Inspection Checklist**

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COMcheck software Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C103.2 [PR3] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: Salad & Go

☐Does Not

☐Does Not

□Complies

☐Not Observable

☐Not Applicable

☐Not Observable

☐Not Applicable

☐Not Observable

☐Not Applicable

☐Not Observable

☐Not Applicable

□Complies

☐Does Not

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□Complies

☐Not Observable

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Requirement will be met.

Requirement will be met.

Exception: Requirement does not apply.

See the Mechanical Systems list for values.

Requirement will be met.

Requirement will be met.

Requirement will be met.

Exception: Requirement does not apply.

Exception: Requirement does not apply.

Exception: Requirement does not apply.

Comments/Assumptions

Exception: Requirement does not apply protection systems have sensors and $\square \mathsf{Does}$ Not C403.12.3 controls configured to limit service for Not Observable pavement temperature and outdoor temperature. future connection to Additional Comments/Assumptions:

Complies?

Comments/Assumptions

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Comments/Assumptions

Requirement will be met.

Footing / Foundation Inspection

& Rea.ID

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Mechanical Rough-In Inspection C403.11.1 HVAC ducts and plenums insulated in Complies accordance with C403.11.1 and ☐Does Not C403.11.2 constructed in accordance with ☐Not Observable [ME60]² C403.11.2, verification may need to ■Not Applicable occur during Foundation Inspection. C403.4.3. Closed-circuit cooling tower within Complies heat pump loop have either automatic Does Not [ME121]³ bypass valve or lower leakage positive Not Observable closure dampers. Open-circuit tower within heat pump loop have automatic Not Applicable valve to bypass all heat pump water flow around the tower. Open- or closed-circuit cooling towers used in conjunction with a separate heat exchanger have heat loss by shutting down the circulation pump on the cooling tower loop. Open- or closed circuit cooling towers have a separate heat exchanger to isolate the cooling tower from the heat pump loop, and heat loss is controlled by shutting down the circulation pump on the cooling tower loop. C403.4.1. Heating for vestibules and air curtains Complies with integral heating include automatic controls that shut off the ☐Not Observable heating system when outdoor air ☐Not Applicable temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F. C408.2.2. Air outlets and zone terminal devices Complies have means for air balancing. ☐Does Not

> C403.5.1 and refrigeration compressor systems that comply with C403.5.2.. Additional Comments/Assumptions:

C403.5, Refrigerated display cases, walk-in

[ME123]3 condensers not located in a

C403.5.1, coolers or walk-in freezers served by Does Not

remote compressors and remote

condensing unit, have fan-powered

condensers that comply with Sections

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

☐Not Observable

■Not Applicable

☐Not Observable

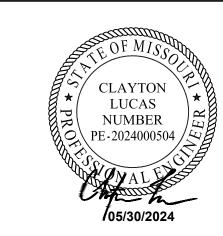
☐Not Applicable

□Complies

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PROTOTYPE



REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. **OMISSIONS OR DISCREPANCIES BEFORE** BEGINNING OR FABRICATING ANY WORK DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

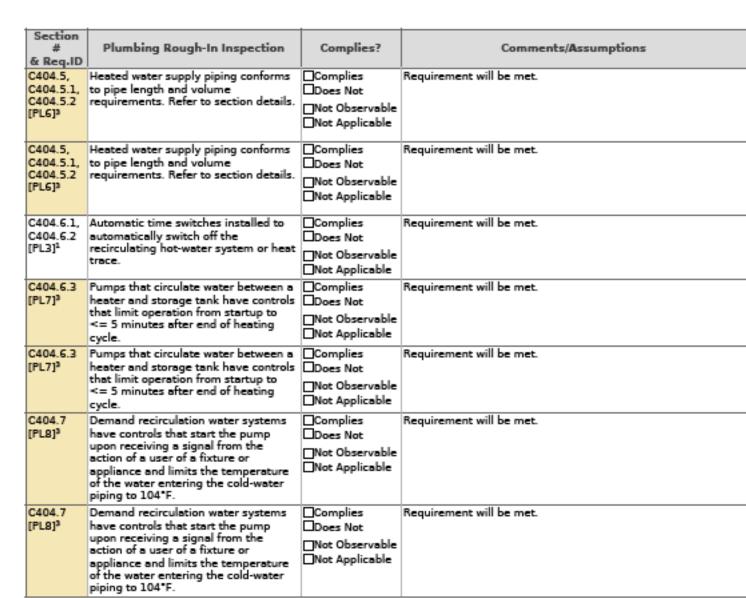
PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

MECHANICAL ENERGY FORMS

SHEET NUMBER

M106



Additional Comments/Assumptions:

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1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.8.2, C405.8.2. 1 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.9 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

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C404.6.1 Controls are installed that limit the Complies Requirement will be met. operation of a recirculation pump Does Not installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water 1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: Salad & Go Report date: 04/09/24 Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit,
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■Not Applicable

Final Inspection

capacity does not exceed calculated Does Not

supplemental electric resistance heat Does Not

controls using automatic time clock or Does Not

C303.3, Furnished O&M manuals for HVAC

C408.2.5. systems within 90 days of system

C403.2.2 HVAC systems and equipment

C403.2.4. Heating and cooling to each zone is

humidification/dehumidification

from coming on when not needed.

acceptance.

per installed

C403.2.4. Heat pump controls prevent

C403.4.1. Thermostatic controls have a 5 °F

C403.2.4. Temperature controls have setpoint

C403.2.4. Each zone equipped with setback

programmable control system.

2.1, (heat) and 85°F (cool); 7-day clock, 2- Does Not hour occupant override, 10-hour

C404.4 All piping insulated in accordance with Complies

[FI25]² section details and Table C403.11.3. □Does Not

C403.2.4. Automatic Controls: Setback to 55°F

C403.2.4. Systems include optimum start

C404.3 Heat traps installed on supply and

[FI11]3 discharge piping of non-circulating

controls.

overlap restrictions.

system.

deadband.

[FI38]³

2.3 [FI41]³

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& Req.ID

Complies?

☐Not Observable

☐Not Applicable

☐Not Observable

☐Not Applicable

■Not Applicable

□Not Observable

☐Not Applicable

☐Not Observable ☐Not Applicable

☐Not Observable

☐Not Applicable

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□Complies

□Complies

☐Does Not

□Complies

□Does Not ☐Not Observable ☐Not Applicable

□Complies

Does Not

Comments/Assumptions

Requirement will be met.

Complies? Final Inspection Comments/Assumptions □Complies C408.1.1 Building operations and maintenance documents will be provided to the ☐Does Not owner. Documents will cover ☐Not Observable manufacturers' information, ☐Not Applicable specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. C408.2.1 Commissioning plan developed by □Complies Requirement will be met. registered design professional or □Does Not approved agency. ☐Not Observable ☐Not Applicable C408.2.3. HVAC equipment has been tested to Complies Requirement will be met. ensure proper operation. ☐Does Not ☐Not Observable ☐Not Applicable C408.2.3. HVAC control systems have been ☐Complies Requirement will be met. tested to ensure proper operation, calibration and adjustment of controls. Not Observable ☐Not Applicable C408.2.4 Preliminary commissioning report Complies Completed and certified by registered design professional or approved Requirement will be met. ☐Not Observable ☐Not Applicable C408.2.5. Furnished HVAC as-built drawings □Complies Requirement will be met. submitted within 90 days of system acceptance. ☐Not Observable ■Not Applicable C408.2.5. An air and/or hydronic system □Complies Requirement will be met. balancing report is provided for HVAC Does Not systems. ☐Not Observable ☐Not Applicable C408.2.5. Final commissioning report due to □Complies Requirement will be met. building owner within 90 days of [FI30]¹ receipt of certificate of occupancy. ☐Not Observable ☐Not Applicable

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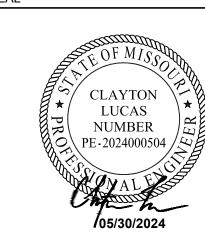
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PROTOTYPE VERSION V2-B

ENGINEERING GROUP



REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY:

SHEET TITLE

CHECKED BY:

MECHANICAL ENERGY FORMS

SHEET NUMBER

M107

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NON-STRUCTURAL ELECTRICAL COMPONENT NOTES

- A. THE FOLLOWING ITEMS ARE TAKEN DIRECTLY FROM THE 2018 INTERNATIONAL BUILDING CODE AND FROM THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD 7. THE CONTRACTOR SHALL REFER TO THE ABOVE FOR ADDITIONAL INFORMATION, EXCEPTIONS, AND FURTHER DESCRIPTIONS. THE CONTRACTOR SHALL ADHERE TO REQUIREMENTS AND AS SUCH, SHALL BE INCLUDED WITHIN BID. ALSO REFER TO SPECIFICATIONS.
- 3. 2018 IBC, 1613.1, SCOPE: ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND NON-STRUCTURAL COMPONENTS THAT ARE PERMANENTLY ATTACHED TO STRUCTURES AND THEIR SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST THE EFFECTS OF EARTHQUAKE MOTIONS IN ACCORDANCE WITH ASCE 7, EXCLUDING CHAPTER 14 AND APPENDIX 11A.
- ASCE 7-02, 11A.1.2.2CONTRACTOR RESPONSIBILITY: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF A SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM, OR COMPONENT LISTED IN THE QUALITY ASSURANCE PLAN SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE AUTHORITY HAVING JURISDICTION AND TO THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE a. CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL INCLUDE THE
- FOLLOWING: b. ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS
- CONTAINED IN THE QUALITY ASSURANCE PLAN; c. ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE **AUTHORITY HAVING JURISDICTION:**
- d. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND THE DISTRIBUTION OF THE REPORTS; AND
- e. IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.
- a. HANGERS AND SEISMIC BRACING FOR ELECTRICAL SYSTEMS SHALL BE DESIGNED AND SPECIFIED BY DIVISION 16. DIVISION 16 SHALL REFER TO THE ELECTRICAL DRAWINGS FOR LOCATIONS OF EQUIPMENT AND ELECTRICAL SYSTEMS AS STRUCTURAL DRAWINGS DO NOT SHOW THE LOCATIONS OF ELECTRICAL EQUIPMENT, RACEWAYS, AND OTHER COMPONENTS.
- b. DIVISION 16 SHALL COORDINATE THE SUPPORT SYSTEMS AND DESIGN LOADS FOR HUNG RACEWAYS AND OTHER ELECTRICAL SYSTEMS (INCLUDING COMBINED MULTIPLE RACEWAY RUNS) WITH THE GENERAL CONTRACTOR AND THE STEEL AND WOOD JOIST MANUFACTURERS IN ADDITION TO OTHER TRADES THAT MAY BE IMPACTED.

ENERGY CODE NOTES

- A. RECORD DRAWINGS: SUBMIT TO THE BUILDING OWNER PER ENERGY CODE ENFORCED BY THE LOCAL AHJ.
- B. OPERATION AND MAINTENANCE MANUALS: SUBMIT TO THE BUILDING OWNER PER ENERGY CODE ENFORCED BY THE LOCAL AHJ.
- C. THIS BUILDING AND ITS ENERGY SYSTEMS HAVE BEEN DESIGNED TO COMPLY WITH ENERGY CODE ENFORCED BY THE LOCAL AHJ. CONTRACTOR IS RESPONSIBLE FOR CORRECT INSTALLATION OF ENERGY CONSERVATION MEASURES.
- LIGHTING CONTROL SYSTEMS COMMISSIONING AND COMPLETION REQUIREMENTS TEST SYSTEMS TO ENSURE THAT BUILDING SYSTEMS HAVE BEEN INSTALLED AND FUNCTION PROPERLY AND EFFICIENTLY, AND CAN BE MAINTAINED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND OPERATIONAL REQUIREMENTS PER ENERGY CODE ENFORCED BY THE AHJ. REFER TO SPECIFICATIONS FOR ADDITIONAL COMMISSIONING REQUIREMENTS.

GENERAL NOTES

- A. PERFORM WORK IN ACCORDANCE WITH APPLICABLE NATIONAL AND STATE CODES AS AMENDED LOCALLY AND ENFORCED BY THE AHJ.
- B. OBTAIN AND PAY FOR PERMITS REQUIRED FOR INSTALLATION OF WORK. ARRANGE AND SCHEDULE REQUIRED INSPECTIONS.
- DRAWINGS ARE DIAGRAMMATIC IN NATURE. PROVIDE COMPONENTS AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS.
- D. DEVICE LOCATIONS ARE APPROXIMATE. COORDINATE DEVICE LOCATIONS AND ELEVATIONS WITH APPROPRIATE DOCUMENTS INCLUDING CASEWORK SHOP DRAWINGS AND ARCHITECT'S INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
- E. COORDINATE ELECTRICAL WORK WITH THAT OF OTHER TRADES. REFER TO MECHANICAL, ARCHITECTURAL, STRUCTURAL, CIVIL, AND LANDSCAPE DRAWINGS AND SPECIFICATIONS. COORDINATION SHALL OCCUR PRIOR TO FABRICATION, PURCHASE, AND INSTALLATION OF WORK.
- COORDINATE LOCATION OF LIGHT FIXTURES AND CEILING-MOUNTED DEVICES WITH ARCHITECTURALREFLECTED CEILING PLANS AND ELEVATIONS.
- G. PROVIDE RATED ENCLOSURES AROUND ALL LIGHT FIXTURES PENETRATING RATED CEILINGS. COORDINATE WITH ARCHITECTURAL.
- H. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS OF EXPANSION/SEISMIC JOINTS. PROVIDE RACEWAY EXPANSION/SEISMIC JOINTS FOR RACEWAYS CROSSING BUILDING EXPANSION/SEISMIC JOINTS.
- DEMOLISH EXISTING SYSTEMS AS INDICATED ON PLANS OR AS REQUIRED FOR INSTALLATION OF NEWWORK. MATERIAL SHALL BE REMOVED FROM SITE ANDLEGALLY DISPOSED OF OFF SITE UNLESS OTHERWISE DIRECTED. RETURN ITEMS TO OWNER IN EXISTING CONDITION WHEN DIRECTED BY OWNER.
- COMPLETION OF WORK SHALL BE EXECUTED INACCORDANCE WITH THE PROJECT SCHEDULE. SCHEDULE INSTALLATION WITH OTHER TRADES TO ENSURE PROJECT MILESTONES ARE MET.
- K. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW EVERY RACEWAY, BOX, CONDUCTOR, OR SIMILAR ITEMS FOR A COMPLETE INSTALLATION. PROVIDE ITEMS NECESSARY FOR COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM.
- BRANCH CIRCUIT HOMERUNS ARE SHOWN TO INDICATE CIRCUIT PROPERTIES AND CONFIGURATION. SINGLE-CIRCUIT HOMERUNS SERVED FROM THE SAME PANELBOARD MAY BE COMBINED IN ACCORDANCE WITH THE DIVISION SPECIFICATIONS, UNLESSINDICATEDOTHERWISE. EXTEND AND CONNECT BRANCH CIRCUIT RACEWAY AND WIRING FROM HOMERUN TO DEVICES AND EQUIPMENT WITH CIRCUIT NUMBERS INDICATED. CONDUCTOR QUANTITIES AND SIZES ARE INDICATED AT HOMERUNS ONLY. SHOW ACTUAL RACEWAY ROUTING AND CIRCUITING ON RECORD DRAWINGS. MINIMUM CONDUCTOR SIZE #12 AWG.
- M. LIGHT FIXTURES MOUNTED IN CONTINUOUS ROWS SHALL BE THROUGH-WIRED VIA FIXTURE INTERNAL WIREWAYS. CIRCUITS AS INDICATED ON DRAWINGS. FIXTURES NOT LISTED FOR THROUGH WIRING SHALL BE WIRED VIA SEPARATE RACEWAY AND WIRING SYSTEM EXTERNAL TO THE FIXTURES. PROVIDE RACEWAYS, WIRING AND CONNECTIONS FOR A COMPLETE AND OPERATIONAL SYSTEM.
- N. PROVIDE BIDDER DESIGN FIRE ALARM SYSTEM MODIFICATIONS AS REQUIRED BY CODES ASSOCIATED WITH THE TENANT IMPROVEMENTS. REFER TO DIVISION 28 SPECIFICATIONS. DEVICES SHOWN ON DRAWINGS ARE FOR COORDINATION PURPOSES ONLY. PROVIDE ADDITIONAL DETECTION, NOTIFICATION AND SUPERVISORY DEVICES AS REQUIRED BY CODES.

LIGHTING CONTROLS SYMBOL LEGEND

SYMBOL*	DESCRIPTION						
\$	SINGLE POLE SWITCH						
* \$	SWITCH - 'X' INDICATES TYPE: 3 3-WAY 4 4-WAY D DIMMER T TIMER M MOTOR RATED MC MOMENTARY CONTACT OC OCCUPANCY SENSOR G GAS SHUT-OFF P PILOT-LIGHTED EPO EMERGENCY POWER OFF						
а \$	SWITCHING CIRCUIT 'a', 'b', etc. REFER TO LIGHTING FIXTURES ON PLANS.						
8	OCCUPANCY SENSOR, CEILING MOUNTED						
8	VACANCY SENSOR, CEILING MOUNTED						
⊗→	OCCUPANCY SENSOR, WALL MOUNTED						
•	DAYLIGHT SENSOR, CEILING MOUNTED						
I							

- 1. NOT ALL SYMBOLS MAY BE USED.
- 2. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT AND
- 3. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

	ELECTRICAL SYMBOLS
SYMBOL*	DESCRIPTION
1	REFER TO 'ELECTRICAL NOTES BY SYMBOL'
1 E201	REFER TO DETAIL/VIEW '1' ON SHEET 'E201'
\otimes	CONNECT TO EXISTING
1-P1 1,3	HOMERUN TO PANELBOARD '1-P1' CIRCUITS 1 & 3
Ф	RECEPTACLE/DUPLEX, +18"AFF (OR AS INDICATED)
#	RECEPTACLE, QUAD, +18"AFF (OR AS INDICATED)
Ф	220V RECEPTACLE +18"AFF (OR AS INDICATED)
Ф	RECEPTACLE FOR SPECIAL EQUIPMENT
GFI	GROUND FAULT INTERRUPT PROTECTED DEVICE
WP	WEATHERPROOF DEVICE
0	FLOOR MOUNTED RECEPTACLE
	LOCATION OF FLOOR MOUNTED RECEPTACLE, COORDINATE DATA REQUIREMENTS WITH TECHNOLOGY DRAWINGS. REFER TO SPECIFICATIONS.
<u></u>	JUNCTION BOX, 4" X 4" MINIMUM, WITH SINGLE GANG PLASTER RING & 1" CONDUIT(S) TURNED HORIZ. TO ABOVE CLG. WITH PROTECTIVE BUSHING AND PULL TAPE
HM	MICROPHONE OUTLET @ 18" AFF.
\Diamond	DEVICE CLUSTER, FLAT SCREEN
	DEVICE CLUSTER, MEDIA CENTER
<u>©</u>	AIR SENSOR REFER TO MECHANICAL PLANS AND/OR ARCHITECTURAL PLANS FOR TYPE, MOUNTING LOCATION AND ANY ADDITIONAL REQUIREMENTS.
(DB)	DOORBELL PUSH BUTTON REFER TO CONSULTANT PLANS AND/OR ARCHITECTURAL PLANS FOR TYPE, MOUNTING LOCATION AND ANY ADDITIONAL REQUIREMENTS.
<u>©</u>	DOORBELL CONTACT/TRANSFORMER REFER TO CONSULTANT PLANS AND/OR ARCHITECTURAL PLANS FOR TYPE, MOUNTING LOCATION AND ANY ADDITIONAL REQUIREMENTS.
	EXHAUST FAN, CEILING MOUNTED
	EXHAUST FAN, INLINE / ABOVE CEILING
	EXHAUST FAN, ROOFTOP
	MECHANICAL EQUIPMENT (REFER TO MECHANICAL SCHEDULE FOR MORE INFORMATION.
	NON-FUSED DISCONNECT NEMA 1 (UNO). FOR AMP RATING, VOLTAGE AND PHASE REFER TO PLANS.

FLECTRICAL SYMBOLS

AUXILIARY SYSTEM SYMBOLS

FACP	FIRE ALARM CONTROL PANEL, COORDINATE EXACT LOCATION WITH LOCAL FIRE AUTHORITY.
FARA	FIRE ALARM REMOTE ANNUNCIATOR, COORDINATE EXACT LOCATION WITH LOCAL FIRE AUTHORITY.

* NOT ALL SYMBOLS MAY BE USED.

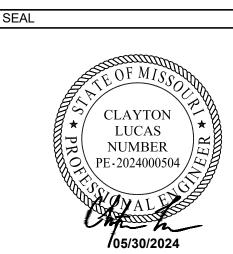
FIRE ALARM SYSTEM NOTES

- A. COORDINATE FINAL LOCATION OF ALL DEVICES WITH LIGHT AND HVAC SYSTEM DEVICES.
- B. MAINTAIN CLEARANCES FROM ALL AIR MOVING DEVICES PER NFPA AND MANUFACTURER REQUIREMENTS.
- C. CENTER DEVICES BETWEEN CEILING ELEMENTS AND CEILING AREAS.
- D. EXACT LOCATION OF FIRE ALARM REMOTE ANNUNCIATOR TO BE APPROVED BY THE LOCAL FIRE MARSHALL.
- E. ALL DEVICES TO BE INSTALLED PER ALL APPLICABLE CODES.



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REVISION SET CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE

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DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE 10/06/2023 SCALE: AS NOTED DRAWN BY:

SHEET TITLE

CHECKED BY:

ELECTRICAL LEGEND AND NOTES

SHEET NUMBER

KITCHEN GENERAL NOTES

- A. FINAL CONNECTION TO ALL HARD-WIRED EQUIPMENT SHALL BE MADE WITH "SEAL-TITE" FLEXIBLE CONDUIT.
- B. THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL ELECTRICAL CONNECTIONS TO ALL RELATED EQUIPMENT.
- C. "CALL OUT" -INDICATES EQUIPMENT IDENTIFICATION NUMBER. REFER TO EQUIPMENT SCHEDULE. COORDINATE WITH EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
- D. THE ELECTRICAL CONTRACTOR SHALL VERIFY ROUGH-IN REQUIREMENTS, LOCATIONS, MOUNTING HEIGHTS, VOLTAGE, PHASE, AMPS, HP, KW, ETC. FOR ALL EQUIPMENT PRIOR TO ROUGH-IN.
- E. PROVIDE SEAL-OFFS FOR ALL CONDUITS ENTERING OR LEAVING WALK-IN BOXES.
- ALL CIRCUIT BREAKERS PROVIDED WITH SHUNT TRIPPING DEVICES SHALL HAVE THE CONTROL CIRCUIT ROUTED THROUGH DRY CONTACTS PROVIDED IN THE FIRE PROTECTION SYSTEM. UPON ACTIVATION OF FIRE PROTECTION SYSTEM THOSE CIRCUIT BREAKERS SHALL BE AUTOMATICALLY TRIPPED.
- G. ALL CIRCUITS SHALL HAVE AN INSULATED GROUND WIRE (BOND) SIZED PER 2020 NEC 250.122, #12 MINIMUM GROUND, WIRE NOT SHOWN ON DRAWINGS.
- H. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCHES, CONDUIT, WIRE AND INSTALL UNDER SUPERVISION OF THE EQUIPMENT
- THE ELECTRICAL CONTRACTOR SHALL VERIFY PLUG CONFIGURATIONS FOR APPLICABLE EQUIPMENT WITH SUPPLIER PRIOR TO ROUGH-IN.
- PROVIDE GFCI PROTECTION FOR ALL EQUIPMENT/KITCHEN RECEPTACLES PER 2017 NEC 210.8 (B)(2).

MECHANICAL GENERAL NOTES

- A. VERIFY ALL MECHANICAL UNIT LOCATIONS WITH MECHANICAL PLANS.
- B. THE ELECTRICAL CONTRACTOR SHALL NOT MOUNT DISCONNECT EQUIPMENT DIRECTLY TO MECHANICAL UNITS FOR DISCONNECTS 200A AND LARGER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A SELF-SUPPORTING SYSTEM FOR DISCONNECT EQUIPMENT.
- PROVIDE WEATHERPROOF, HEAVY DUTY, NEMA 3R FUSIBLE DISCONNECT SWITCHES FOR ALL MECHANICAL UNITS LOCATED OUTSIDE.
- D. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT GFCI (PASS & SEYMOUR 2095DSWRBK OR EQUAL), INTALLED IN A WEATHERPROOF ENCLOSURE WITH A WHILE IN USE COVERPLATE (PASS & SEYMOUR #WIUC10DCL OR EQUAL).
- EXHAUST FANS MOUNTED OUTSIDE SHALL HAVE A WEATHERPROOF DISCONNECT MOUNTED EXTERIOR TO THE UNIT. INTERNAL DISCONNECT SWITCHES SHALL NOT BE ALLOWED.

				1			1
TAG#	DESCRIPTION	VOLTAGE	LOAD	BREAKER SIZE	WIRE SIZE	MOUNTING HEIGHT	NOTES
K7	NITRO WARMER	120 V	12 A	20	3/4"C, 2#12,#12G	42"	-
K8	SOUP WARMER	120 V	10 A	20	3/4"C, 2#12,#12G	42"	
K9	UNDER COUNTER ICE MAKER	120 V	12 A	20	3/4"C, 2#12,#12G	18"	
K10	ICE MAKER	120 V	11 A	20	3/4"C, 2#12,#12G	18"	
K11	PANINI PRESS	120 V	15 A	20	3/4"C, 2#12,#12G	REFER TO PLANS	
K12	LEMONADE DISPENSER	120 V	9 A	20	3/4"C, 2#12,#12G	42"	
K13	DAIRY DISPENSER	120 V	1 A	20	3/4"C, 2#12,#12G	42"	
K14	BEVERAGE COOLER	120 V	5 A	20	3/4"C, 2#12,#12G	18"	
K17	FOOD PREP TABLE	120 V	7 A	20	3/4"C, 2#12,#12G	REFER TO PLANS	
K19	MICROWAVE	208 V	27 A	30	3/4"C, 3#10,#10G	42"	
K21	WALK-IN COOLER	208 V	11 A	20	3/4"C, 2#12,#12G	REFER TO PLANS	PROVIDE 30A/2P NEMA-31 DISCONNECT
K26	42" MARS AIR CURTAIN	120 V	2 A	20	3/4"C, 2#12,#12G	96"	
K29	ICE TEA BREWER	120 V	14 A	20	3/4"C, 2#12,#12G	42"	
K30	FROZEN BEV DISPENSER	208 V	29 A	30	3/4"C, 3#10,#10G	42"	
K31	REACH-IN COOLER	120 V	3 A	20	3/4"C, 2#12,#12G	18"	SIMPLEX RECEPTACLE
K35	WALL FAN	120 V	2 A	20	3/4"C, 2#12,#12G	92"	
K36	WATER FILTER	120 V	16 A	20	3/4"C, 2#12,#12G	84"	PROVIDE 2 WATER LOOP FOR FILTERED WATER AN SOFTWATER
K39	SECURITY VCR	120 V	3 A	20	3/4"C, 2#12,#12G	18"	
K40	MUSIC SYSTEM	120 V	3 A	20	3/4"C, 2#12,#12G	18"	
K41	DRIVE THRU DETECTOR	120 V	2 A	20	3/4"C, 2#12,#12G	18"	
K44	DRIVE THRU WINDOW AND SERVING SHELF	120 V	5 A	20	3/4"C, 2#12,#12G	42"	
K45	BREWER SERVER SOFT HEAT	120 V	3 A	20	3/4"C, 2#12,#12G	42"	
K47	WATER SOFTNER	120 V	16 A	20	3/4"C, 2#12,#12G	18"	PROVIDE POWER FOR FUTURE WATER SOFTNE COORDINATE EXACT LOCATION WITH OWNER, ARCHITECT PRIOR TO INSTALLATION

ELECTRICAL DISCONNECT SCHEDULE											
Mark	Mark Count Panel DISC W. P. WALL CEILING ROOI										
CU-1	1	С	2P/30/20AF	•			•				
RTU-1	1	Α	3P/60A	•			•				

COOLER

102

POWER GENERAL NOTES

- A. ALL EXTERIOR DISCONNECTS SHALL BE WP TYPE.
- B. ALL RECEPTACLES WITHIN 6'-0" OF A SINK TO BE GFCI RATED.
- REFER TO MECHANICAL AND PLUMBING PLANS FOR EXACT SIZE, LOCATION, AND ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL AND PLUMBING EQUIPMENT.
- D. ELECTRICAL CONTRACOTR SHALL FIELD VERIFY ALL CONNECTION REQUIREMENTS (HP, AMPS, VOLTAGE, PHASE, MOUNTING HEIGHT, AND DISCONNECTING MEANS) FOR ALL EQUIPMENT SUPPLIED BY OTHERS BEFORE ROUGH-IN. DISCONNECT SWITCHES SHALL BE LOCATED WITH NEC CODE CLEARANCE OR PROVIDE
- ELECTRICAL CONTRACTOR RESPONSIBLE FOR COORDINATING EXACT LOCATION, QUANTITIES, AND INSTALLATION REQUIREMENTS OF ELECTRICAL EQUIPMENT IN
- F. ALL EXTERIOR RECEPTACLES SHALL BE WP/GFCI TYPE.

LOCKOUT TYPE C/B.

- G. ALL ELECTRICAL PANEL BOARDS SHALL MAINTAIN 3'-0" INFRONT WORKING CLEARANCE. REFER TO ONE-LINE FOR DETAILS.
- H. ELECTRICAL CONTRACTOR SHALL PROVIDE #6 COPPER GROUND TO ANY NEW METAL GAS PIPE SYSTEMS PER NEC 250.
- CONDUIT AND WIRING SHOWN FOR REFERECE ONLY. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE THE NUMBER OF CONDUCTORS REQUIRED FOR HOT-LEGS, NEUTRAL, AND GROUNDING AT EACH DEVICE FOR PROPER BRANCH CIRCUITING SHOWN FOR EACH AREA OR ROOM.

NOTES BY SYMBOL

- 1 PROVIDE DOORBELL SYSTEM (AVANTEK LD-DB-21-A) WITH LOW VOLTAGE TRANSFORMER AND INTERIOR BELL.
- 2 2 WALL FANS TO BE CONTROLLED BY A SINGLE SWITCH AT THE ENTRY DOOR.
- PROVIDE GFCI POWER FOR FIRE BELL. COORDINATE EXACT LOCATION WITH
- OWNER AND ARCHITECT PRIOR TO INSTALLATION.
- PROVIDE POWER DROP FOR POS STATION AND MONITORS COORDINATE OUTLET LOCATIONS & CONDUIT ROUTING WITH SHELFING PRIOR TO INSTALLATION.
- RUN MC CABLE THROUGH CHASE AND UNDER WINDOW FOR RECEPTACLES BETWEEEN COLUMNS.

UTILITY

104

METER

PANEL C

PANEL A

6 WEATHER RATED WATERPROOF RECEPTACLES ALONG DRINK LINE. PROVIDE BUBBLE COVERS FOR ALL RECEPTACLES.



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OTYPE

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REVISION SET

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SUE	DATE	DESCRIPTION

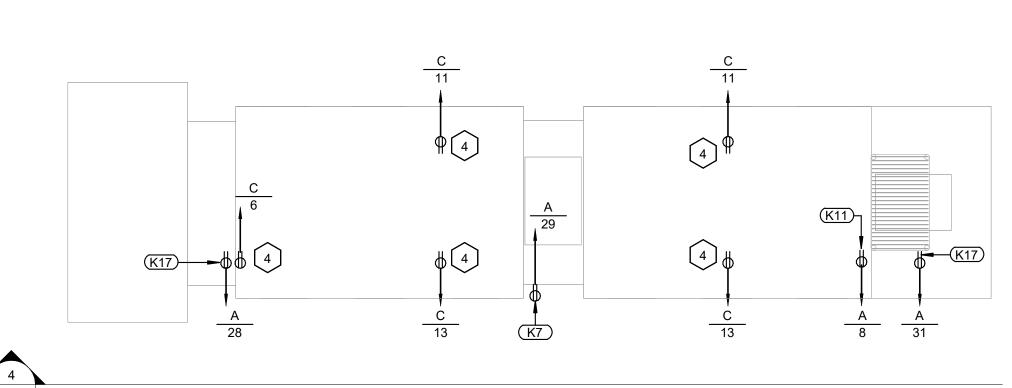
PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

POWER FLOOR PLAN

SHEET NUMBER

E102



2 POWER FLOOR PLAN - ISLAND DETAIL E102 1/2" = 1'-0"

E102 1/4" = 1'-0"

1 POWER FLOOR PLAN

				LIG	HT FIXTURE SCHE	DULE		
ARK	MANUFACTURER	MODEL	VOLTAGE	REF. NOTE	MOUNTING	TOTAL WATTS	LAMP TYPE	REMARKS
D	HALO	SMD6RTRMWH	UNV	1,3,4	SURFACE	13	LED	6" ROUND LED DOWNLIGHT, SURFACE MOUNT, 120V DRIVER, WHITE FINISH - INSTALLED ONTO JUNCTION BOX
DE	HALO	SMD6RTRMWH W/90 MINUTE BODINE BATTERY BACKUP	UNV	1,3,4	SURFACE	13	LED	6" ROUND LED DOWNLIGHT, SURFACE MOUNT, 120V DRIVER, WHITE FINISH - INSTALLED ONTO JUNCTION BOX
EX	EXITRONIX	QCRS U WH	UNV	2	SURFACE	1	LED	COMBO LED EXIT SIGN, WET LOCATION, FIELD SELECTABLE RED/GREEN LEDS, TWO (2) 0.5W FULL' ADJUSTABLE ROUND HEADS WITH HIGH-INTENSITY LED LAMPS, WHITE FINISH
G4	SATCO	NUVO 65-572	UNV	3	RECESSED	50	LED	2X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH
G4E	SATCO	NUVO 65-572 LUMEN BATTERY	UNV	3	RECESSED	50	LED	2X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH
S4	SATCO	NUVO 65-573 + 65-592	UNV	3	PENDENT/SURFACE	40	LED	1X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH + SUSPENSION KIT
64E	SATCO	NUVO 65-573 + 65-592 LUMEN BATTERY	UNV	3	PENDENT/SURFACE	40	LED	1X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH + SUSPENSION KIT, WITH 90 MINUTE BATTERY BACK-UP
T1	NOVA FLEX	NF-PRO-O-60-24V-4100K	UNV	1	SURFACE	135	LED	LED TAPE LIGHT, 4100K, NO DOTTING CHANNEL, WET LOCATION RATED
W	RAB	SLIM 18 N	UNV	1,3	SURFACE	18	LED	WALL PACK, FULL CUTOFF, 4000K (NEUTRAL) COLOR TEMP, 2547LM, BRONZE FINISH W/ 90 MINUTE BATTERY BACK-UP
NS	CAMMAN LIGHTING	W425-24-40K-1-WM-PBR	UNV	1,3	WALL	20	WALL SCONCE	WALL SCONCE, WHITE ACRYLIC FRONT, SHALLOW PROFILE 24", 4000K, 120V, MATTE WHITE ACRYLIC, BRONZE FIXTURE

	LIGHT FIXTURE NOTES
Τ.	

- * NOTE: SALAD AND GO HAS A NATIONAL ELECTRICAL AGREEMENT WITH CONSOLIDATED ELECTRICAL DISTRIBUTORS, INC. (CED). THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING THE LED LIGHTING EQUIPMENT, AND SHOULD PURCHASE FROM CED ACCORDINGLY.
- QUESTIONS CONCERNING QUOTES, PRICING, AND TECHNICAL SPECIFICATIONS SHALL BE DIRECTED TO DAVID RASH, CED NATIONAL ACCOUNTS, VIA EMAIL david.rash@ced.com OR BY TELEPHONE (817) 480-1171 1 VERIFY MOUNTING HEIGHT WITH ARCHITECT AND COORDINATE CORRESPONDING PENDANT MOUNTING HARDWARE LENGTH WITH FIXTURE MANUFACTURER.
- 2 EXIT SIGNS. PROVIDE ALL DIRECTIONAL ARROWS. DOUBLE FACEPLATES. OR BLANK FACEPLATES AS REQUIRED TO CLEARLY IDENTIFY PATH OF EGRESS. COORDINATE MOUNTING TYPE WITH REFLECTED.
- 3 FIXTURE TO HAVE FINISH AS SPECIFIED BY ARCHITECT.

Key Name

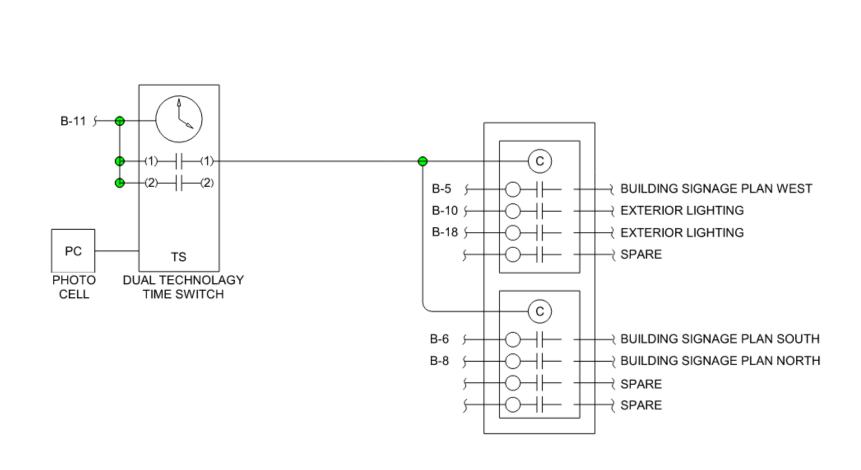
- 4 PROVIDE ALL MOUNTIING CLIPS, JOINTS, AND ANY OTHER NESSARY APPURTENANCES FOR ROW MOUNTING.
- 5 COORDINATE MOUNTING LOCATION OF REMOTE POWER SUPPLY WITH ARCHITECT. LOCATE IN ACCESSIBLE SPACE ABOVE 12"AFF.
- 6 COORDINATE MOUNTING LOCATION OF REMOTE POWER SUPPLY WITH ARCHITECT. LOCATE ON TOP OF REFRIGERATION CASE, NOT VISIBLE FROM BELOW.
- 7 LOCATE FIXTURE WITHIN MOUNTING CHANNEL LOCATED ABOVE REFRIGERATION CASE. CHANNEL FURNISHED BY OTHERS. 8 LIGHT FIXTURE FURNISHED WITH COOLER AND INSTALLED BY CONTRACTOR. COORDINATE INSTALLATION WITH COOLER MANUFACTURER PRIOR TO ROUGH-IN.

LIGHTING GENERAL NOTES

- A. PRIOR TO ROUGH-IN, THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATIONOF ALL LIGHT FIXTURES / EXIT SIGN LOCATION / PLACEMENT WITH LOCAL JURISDICTION PRIOR TO ROUGH INSPECTION APPROVAL: ALL CONFLICTS SHALL BE REPORTED TO THE ENGINEER/ARCHITECT.
- 3. ALL FIXTURES INSTALLED OUTDOORS SHALL BE RATED FOR DAMP/WET LOCATIONS AS REQUIRED. THE CONTRACTOR SHALL COORDINATE DAMP/WET LOCATION RATING PER NEC ARTICLE 410.10(A). ALL INSTALLATIONS SHALL
- CONFORM TO NEC ARTICLE 410, ALL SUB ARTICLES. C. ALL FLUORESCENT FIXTURES THAT UTILIZE DOUBLE ENDED LAMPS AND CONTAIN BALLST(S) THAT CAN BE SERVICED IN PLACE SHALL BE CODE COMPLAINT WITH NEC 40.130(G).
- D. COORDINATE ALL EXTERIOR BUILDING MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL BUILDING ELEVATIONS FOR HEIGHTS AND LOCATIONS. PROVIDE EXIT SIGNS FOR ALL EXITS DESIGNATED BY THE CODE STUDY PLAN. REFER TO ARCHITECTURAL CODE PLANS FOR LOCATIONS AND REQUIREMENTS.
- E. ALL EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO UNSWITCHED CIRCUIT LEG.
- CONDUIT AND WIRING SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE THE NUMBER OF CONDUCTORS REQUIRED FOR HOT-LEGS, NEUTRAL, AND GROUNDING AT EACH DEVICE FOR PROPER BRANCH CIRCUITING SHOWN FOR EACH AREA OR ROOM.

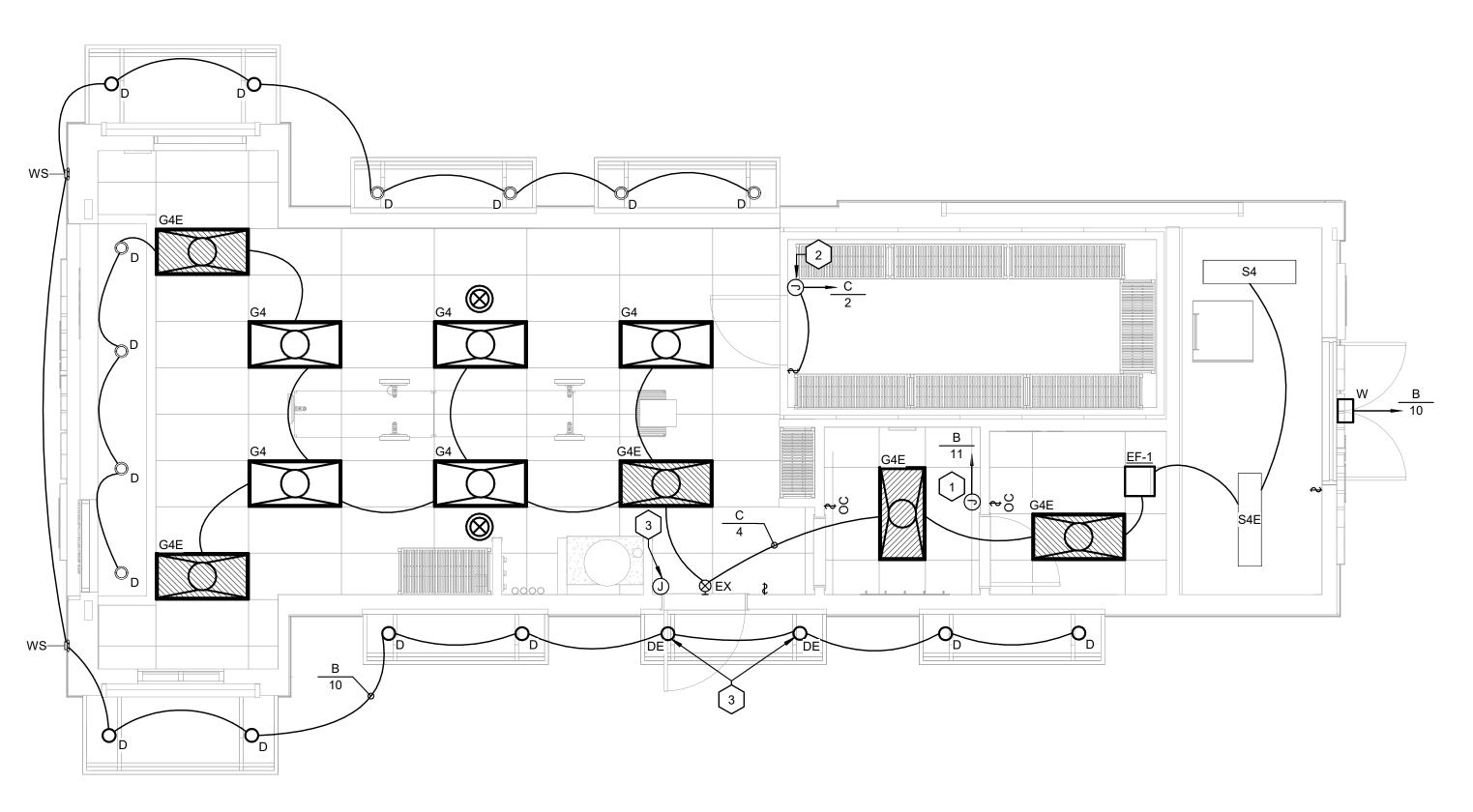
NOTES BY SYMBOL

- 1 REFER TO 2/E103 FOR TIMECLOCK AND LIGHTING CONTRACTOR CIRCUITING INFORMATION.
- 2 REFER TO WALK-IN COOLER MANUFACTURER SPECIFICATIONS FOR LIGHTING POWER AND CONTROLS.
- PROVIDE BODINE BATTERY BACK UP MODEL #BSL20HV ABOVE CEILING FOR EXTERIOR CANOPY LIGHTS. INSTALL PER MANUFACTURERS IOM.



2 LIGHTING CONTROLS

E103 N.T.S.



1 LIGHTING FLOOR PLAN

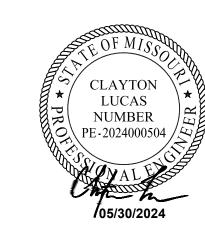
E103 1/4" = 1'-0"



CHIPMAN

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PROTOTYPE



REVISION SET

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SSUE	DATE	DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY:

SHEET TITLE

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LIGHTING FLOOR PLAN

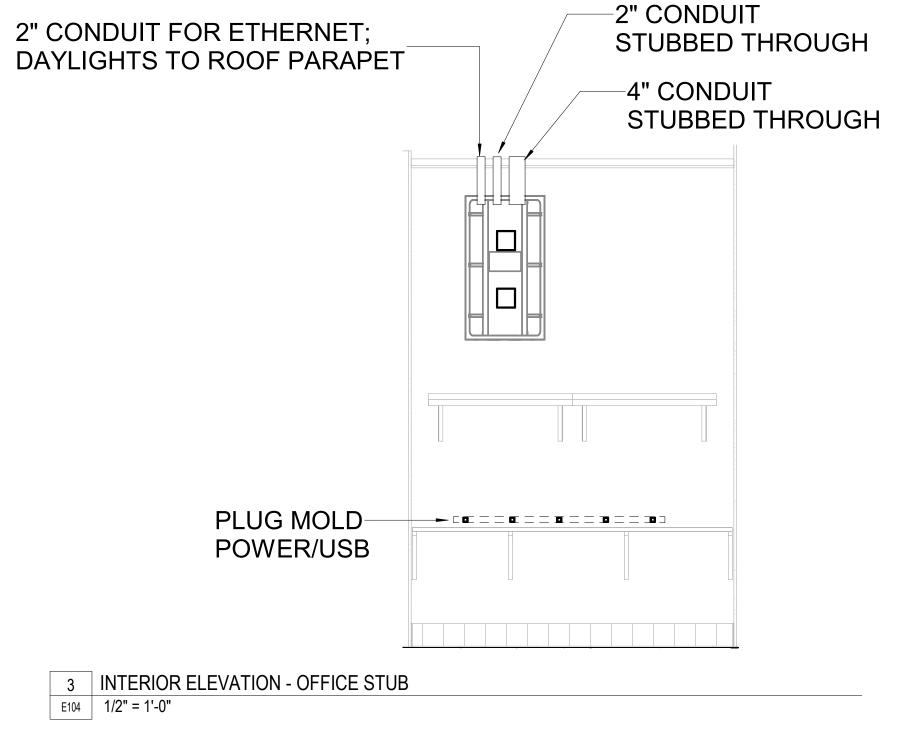
SHEET NUMBER

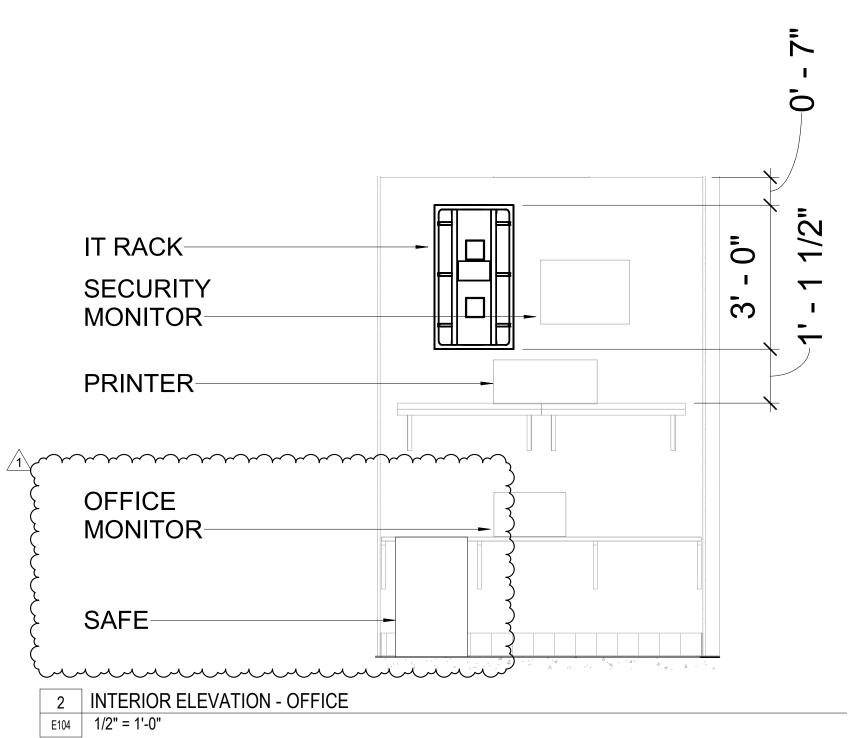
GENERAL NOTES

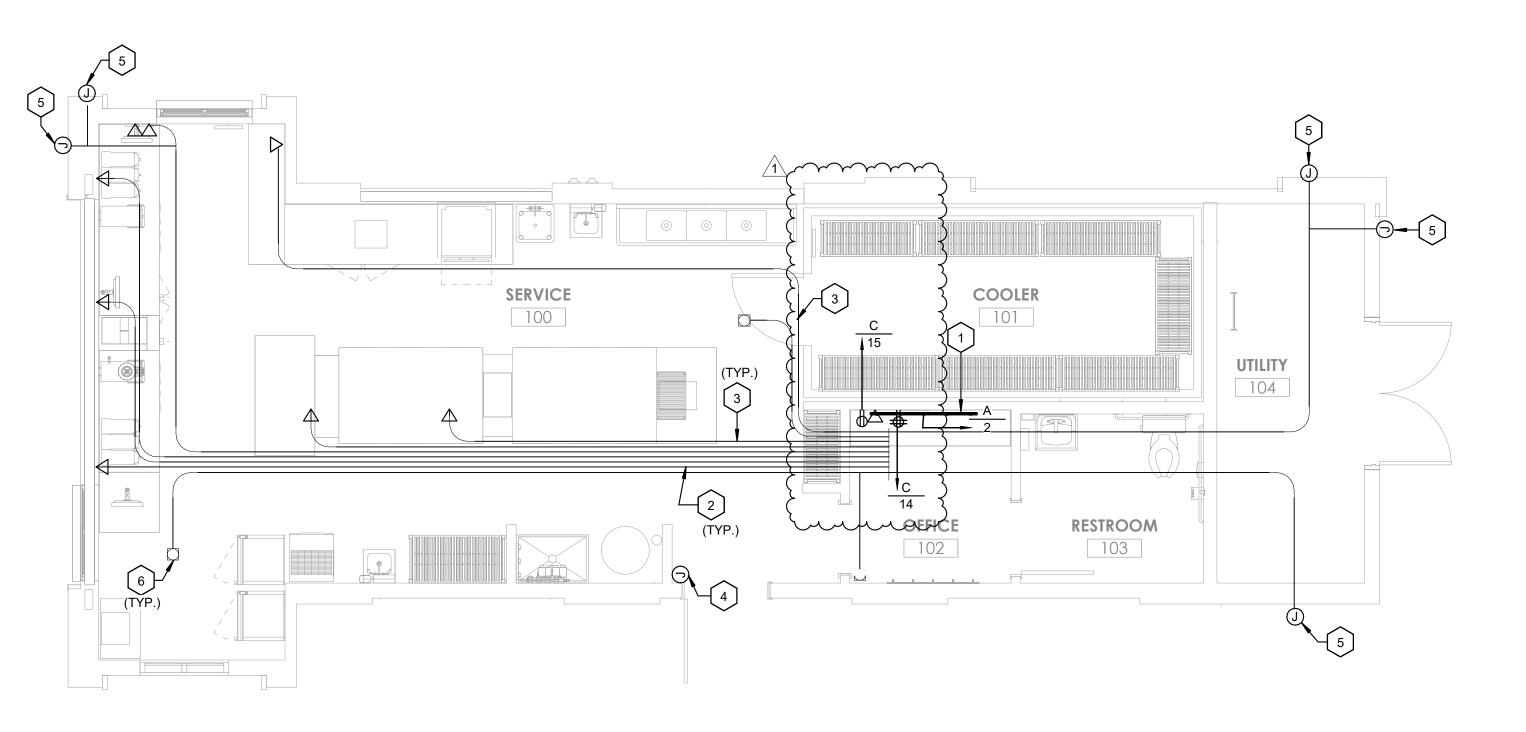
- A. ALL LOW VOLTAGE CABILING TO BE SUSPENDED SECURLY TO STRUCTURE; DO NOT SUSPEND OR ATTACH TO GRID.
- B. ALL RUNS SHOWN AS CAT 5E.
- C. ALL CABLE: EXTRA LENGTH OF CABLE COIL 5' ABOVE CEILING PRIOR TO CONNECTION POINT, BEFORE TURNING DOWN WALL TO MAKE CONNECTION.
- D. ALL DRINK LINE RECEPTACLES TO HAVE WATERPROOF COVERS. GC TO VERIFY AFTER INSTALLATION.

NOTES BY SYMBOL

- 1 PLUGMOLD 2000 SERIES STEEL MULTIOUTLET SYSTEM (OR SIMILAIR). STANDARD RECEPTACLES AND USB; LAYOUT TO BE DETERMINED BY GC.
- 2 1-1/2" CONDUIT FOR DATA CABLING.
- 3 1" CONDUIT FOR DATA CABLING.
- 4 PROVIDE J-BOX WITH CONDUIT STUBBED ABOVE WALL FOR FUTURE ALARM
- 5 PROVIDE J-BOX @ 9'-0" AFF FOR EXTERIOR WALL MOUNTED SECURITY CAMERA.
 ROUTE CONDUIT TO SERVER RACK. COORDINATE LOCATIONS AND HEIGHTS WITH
 EXTERIOR AWNINGS. GC TO VERIFY.
- 6 SECURITY CAMERA MOUNTED FLUSH TO CEILING. ROUTE CONDUIT TO SERVER RACK. GC TO VERIFY.







1 LOW VOLTAGE PLAN

E104 1/4" = 1'-0"



W CHIPMAN ROAD
MIT, MO 64086 PROPOSED LOT 3

GEMINI ENGINEERING GROUP

610

CLAYTON
LUCAS
NUMBER
PE-2024000504

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ISSUE DATE DESCRIPTION

1 5/30/24 REVISION 1

PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 12/06/22

SCALE: AS NOTED

DRAWN BY: JB

CHECKED BY: CL

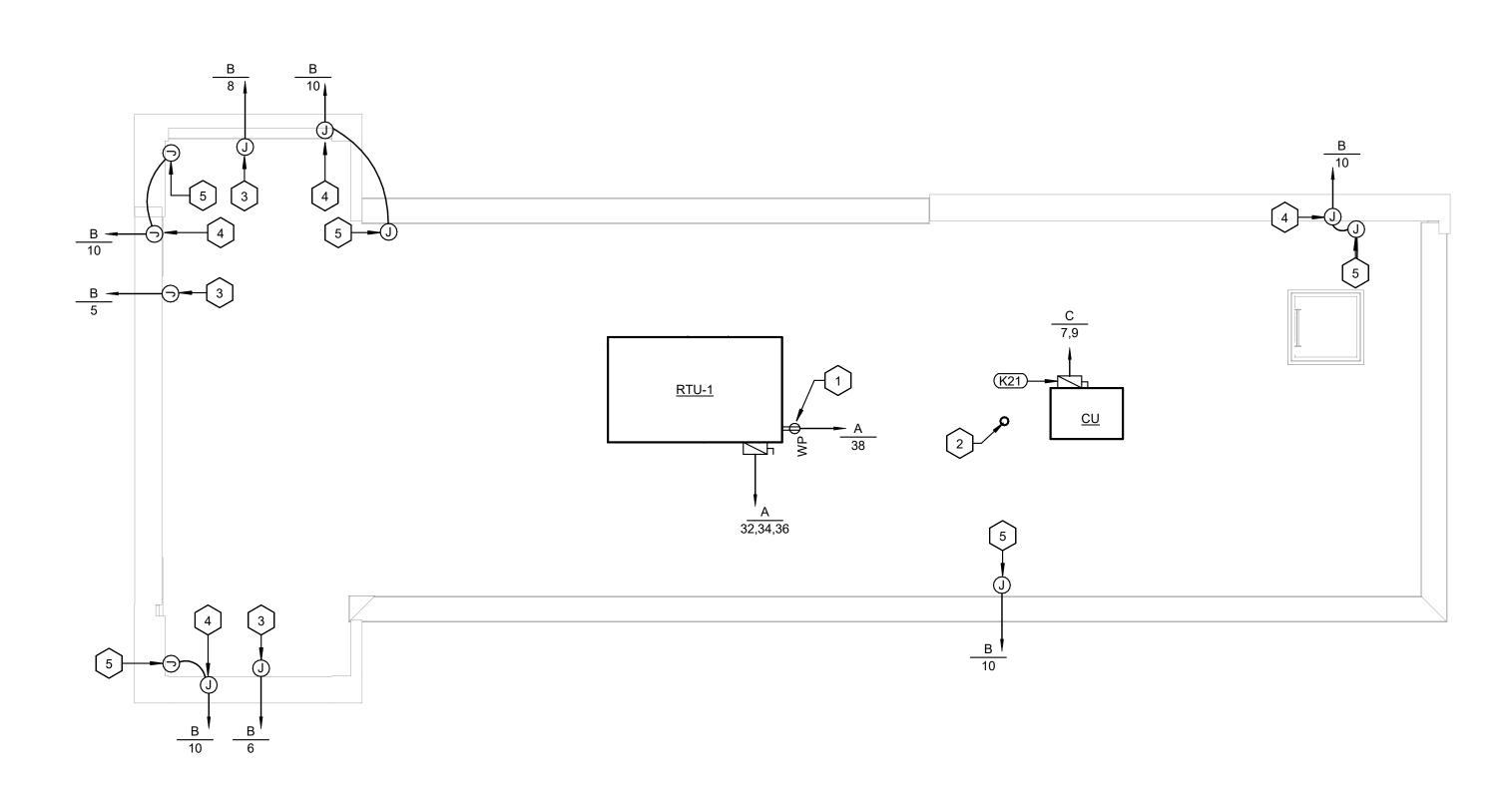
SHEET TITLE

LOW VOLTAGE PLAN

SHEET NUMBER

NOTES BY SYMBOL

- 1 PROVIDE GFCI MAINTENANCE RECEPTACLE WITHIN 25' OF ALL MECHANICAL EQUIPMENT PER NEC 210.63.
- APPROXIMATE LOCATION OF IT STUB OUT. TO BE CAPPED UNTIL EQUIPMENT INSTALLATION. GC TO PROVIDE PULL STRING IN CONDUIT FOR EASE OF INSTALLATION.
- PROVIDE WP J-BOX AND TOGGLE SWITCH LOCATED ON SIGN IN CONCEALED LOCATION FOR EXTERIOR SIGNAGE PER NEC. COORDINATE EXACT LOCATIONS PRIOR TO INSTALLATION, EXTEND CIRCUIT THROUGH PHOTOCELL TIME CLOCK. VERIFY EXACT REQUIREMENTS WITH OWNER.
- 4 (DI-24-VLX5-40-XX-16-BL-MC-O/O) (DRIVER: VLM200W-24-LPL). NO MORE THAN 40 FEET BETWEEN DRIVERS. TAPE TO BE PLACE ON INSIDE PERIMETER OF ALL 3 SIDES OF BOXOUT. REFER TO ARCHITECTURAL SHEET A131. CLASS 3 TAPE LIGHT TO BE ON BETWEEN THE HOURS OF 6 A.M-9 P.M. ONLY.
- 5 PROVIDE JBOX FOR EXTERIOR PERIMETER COPE TAPE LIGHT (DI-24-VLX5-40-XX-16-BL-MC-O/O) (DRIVER: VLM200W-24-LPL). NO MORE THAN 40 FEET BETWEEN DRIVERS. TAPE TO BE PLACE ON INSIDE PÉRIMETER OF ALL 3 SIDES OF BOXOUT. REFER TO ARCHITECTURAL SHEET A201. CLASS 3 TAPE LIGHT TO BE ON BETWEEN THE HOURS OF 6 A.M-9 P.M. ONLY.



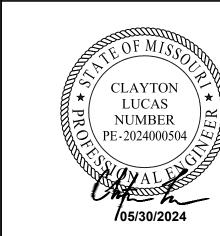
1 MECHANICAL POWER ROOF PLAN

E105 1/4" = 1'-0"

CHIPMAN ROAD

PROTOTYPE VERSION V2-B

610



REVISION SET

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ISSUE	DATE	DESCRIPTION
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SHEET TITLE

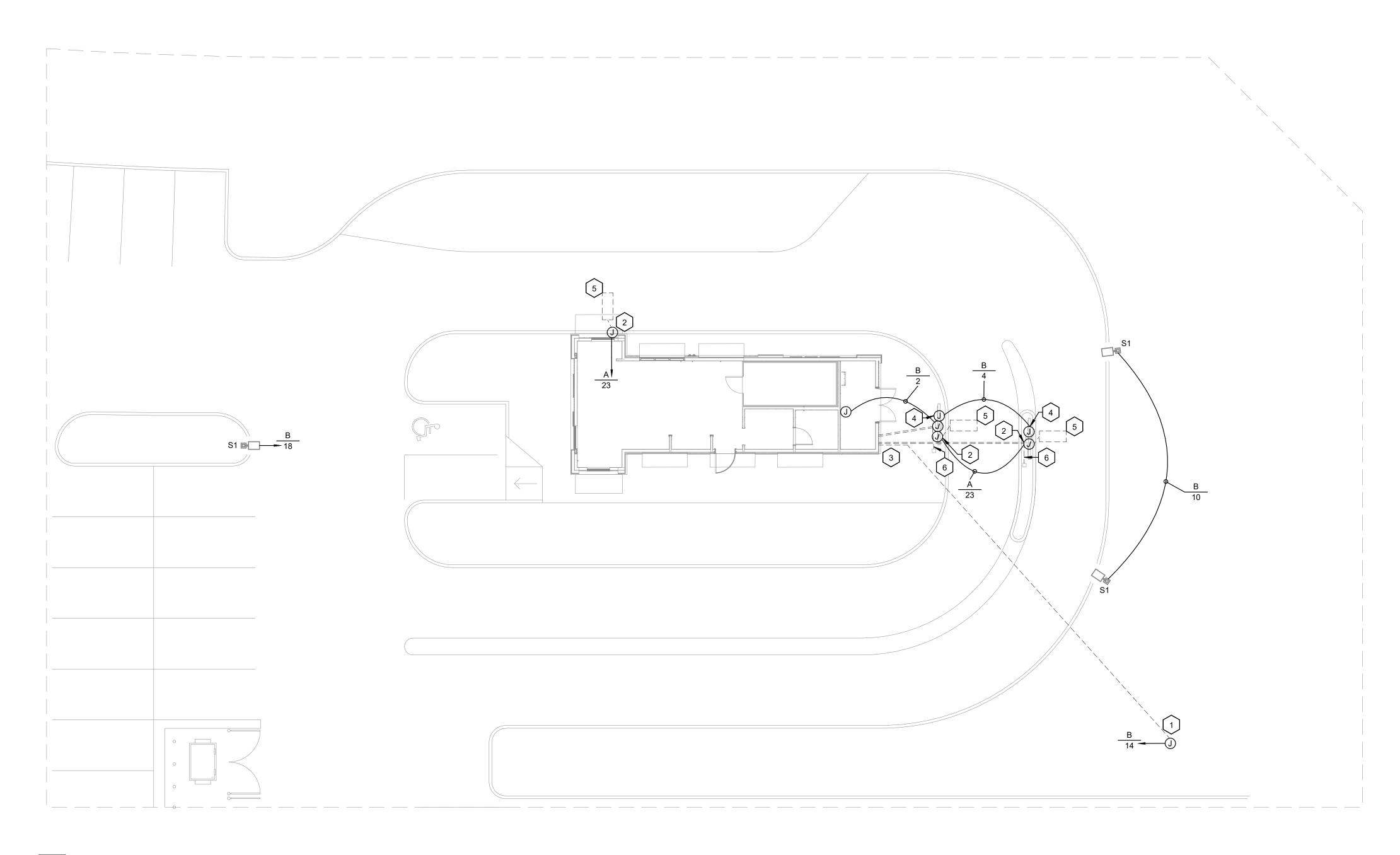
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MECHANICAL POWER **ROOF PLAN**

SHEET NUMBER

NOTES BY SYMBOL

- APPROXIMATE LOCATION OF MARQUEE SIGN. CONTRACTOR TO COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO BID. PROVIDE (1) 1" CONDUIT FROM MARQUEE SIGN BACK TO ELECTRICAL ROOM. VERIFY ROUTING WITH CIVIL PRIOR TO INSTALLATION.
- 2 PROVIDE JBOX FOR DRIVE-THRU DETECTOR. INSTALL PER MANUFACTURER'S SPECIFICATIONS. PROVIDE 1" PVC CONDUIT FOR LOW VOLTAGE RUN TO MANAGER'S OFFICE.
- 3 LOCATION OF MAIN SERVICE DISCONNECT AND PANELS. REFER TO RISER DIAGRAM ON E110 FOR MORE INFORMATION.
- PROVIDE JBOX FOR MENU BOARD. INSTALL PER MANUFACTURER'S SPECIFICATIONS. PROVIDE 1" PVC CONDUIT FOR 120V POWER SUPPLY FROM BUILDING.
- 5 WIRE MAGNETIC LOOP UNDER DRIVE-THRU.
- 6 PROVIDE 1" PVC CONDUIT FOR LOW VOLTAGE RUN BETWEEN SPEAKER POST AND MENU BOARD.



1 ELECTRICAL SITE PLAN
E106 3/32" = 1'-0"

SA A D GO

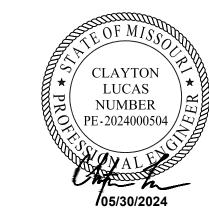
W CHIPMAN ROAD

AMIT, MO 64086 PROPOSED LOT 3

© GEMINI ENGINEERING GROUP

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SEAL



REVISION SET

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ISSUE	DATE	DESCRIPTION						
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PROJECT INFORMATION

PROJECT NO: 24-0087

ORIGINAL ISSUE: 09/06/2022

SCALE: AS NOTED

DRAWN BY: JB

CHECKED BY: CL

SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NUMBER

	SITE LIGHT FIXTURE SCHEDULE												
ИARK	RK MANUFACTURER MODEL VOLTAGE REF. NOTE MOUNTING WATTS LAMP SIZE REMARKS												
S1	RAB A17-5T	70N	UNV	1	POLE	78	LED	LED AREA LIGHT, TYPE V SYMMETRICAL DISTRIBUTION (360*), 4000K, 0-10V DIMMING, WET LISTED, BRONZE FINISH. 15'-0" ALUMINUM POLE RAB MODEL # PS4-11-15D2					
	LIGHT FIXTURE SCHEDULE NOTES												
Key Name					LIGHT FIXTURE	NOTES							
*	THE GENERAL CONTRACTOR IS RE	NAL ELECTRICAL AGREEMENT WITH CONSOLIE SPONSIBLE FOR PROVIDING AND INSTALLING T S, PRICING, AND TECHNICAL SPECIFICATIONS S	HE LED LIGHTING EQUIPM	ENT, AND SHOÙ	LD PURCHASE FRO			OR BY TELEPHONE (817) 480-1171					
1	VERIFY MOUNTING HEIGHT WITH AF	RCHITECT AND COORDINATE CORRESPONDING	PENDANT MOUNTING HAI	RDWARE LENGTI	H WITH FIXTURE MA	NUFACTURE	₹.						
2	EXIT SIGNS. PROVIDE ALL DIRECTION	ONAL ARROWS. DOUBLE FACEPLATES. OR BLAI	NK FACEPLATES AS REQU	RED TO CLEARL	Y IDENTIFY PATH O	F EGRESS. CO	OORDINATE MOUNT	ING TYPE WITH REFLECTED.					
3	FIXTURE TO HAVE FINISH AS SPECI	IFIED BY ARCHITECT.											
4	PROVIDE ALL MOUNTIING CLIPS, JO	DINTS, AND ANY OTHER NESSARY APPURTENAN	ICES FOR ROW MOUNTING) .									
5	COORDINATE MOUNTING LOCATION	N OF REMOTE POWER SUPPLY WITH ARCHITEC	T. LOCATE IN ACCESSIBLE	SPACE ABOVE	12"AFF.								
6	COORDINATE MOUNTING LOCATION	N OF REMOTE POWER SUPPLY WITH ARCHITEC	T. LOCATE ON TOP OF REI	FRIGERATION CA	ASE, NOT VISIBLE FF	ROM BELOW.							

Calculation Summary					
Label	Units	Avg	Max	Min	Max/Min
PERIMETER	Fc	0.23	0.6	0.1	6.00
SITE	Fc	1.14	6.3	0.1	63.00

POLE MOUNTED LIGHT FIXTURE	
	RAB LIGHTING TYPE: S1
SQUARE STRAIGHT POLE 0-191	
	COOPER LIGHTING TYPE: D
3' ROUND CONCRETE POLE BASE	RAB LIGHTING TYPE: W
3 TYPICAL AREA SITE LIGHTING POLE DETAIL E107 N.T.S. ANCHOR BOLTS TO BE PRE- WELDED INTO CAGE BEFORE INSTALLATION IN FOUNDATION. REFER TO MANUFACTURERS INFORMATION FOR BOLT PATTERN	
POLE SHAFT HAND HOLE FILL TOP OF CONDUIT WITH SEALANT TOP OF CONDUIT SHALL BE 1" ABOVE BOTTOM OF HAND HOLE. TECHFLEX FLEXO WIRE PROTECTION ON ALL EXPOSED CONDUCTORS NUT LOCK-WASHER	CAMMAN LIGHTING TYPE: WS
FILL VOID/DEPRESSION IN TOP OF FOOTING AND AROUND ANCHOR BOLTS WITH SELF LEVELING SEALANT. FILL SPACE UNDER BASEPLAT AND ABOVE TOP OF FOOTING WITH STAINLESS STEEL WOOL ACCOUNTY SIZE AS REQUIRED	
GROUND ROD WITH #6 CU GROUND HIGH STRENGTH ANCHOR BOLTS FURNISHED BY POLE MANUFACTURER, EMBEDDED AS REQUIRED TO DEVELOP FULL TENSILE STRENGTH	
NOTE: 1. REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR ADDITIONAL FOOTING INFORM	MATION.

2 TYPICAL AREA SITE LIGHTING POLE FOOTING DETAIL

E107 N.T.S.

7 LOCATE FIXTURE WITHIN MOUNTING CHANNEL LOCATED ABOVE REFRIGERATION CASE. CHANNEL FURNISHED BY OTHERS.
8 LIGHT FIXTURE FURNISHED WITH COOLER AND INSTALLED BY CONTRACTOR. COORDINATE INSTALLATION WITH COOLER MANUFACTURER PRIOR TO ROUGH-IN.

Luminaire Sched	dule						
Symbol	Qty	Label	Description	Tag	Total Watts	Mounting Height	BUG Rating
	1	RAB LIGHTINGS	SLIM18N	W	20.8	12	B1-U0-G0
	14	COOPER LIGHTING	RECESSED CANOPY LIGHTS	D	173.869	12	B1-U1-G0
$\boxed{}$	3	RAB LIGHTING	RECTANGULAR LED SINGLE HEAD POLE MOUNTED LIGHT	S1	212.43	18	B3-U0-G3
	2	CAMMAN LIGHTING	WALL MOUNTED SCONCE	WS	36.28	5	B0-U4-G2

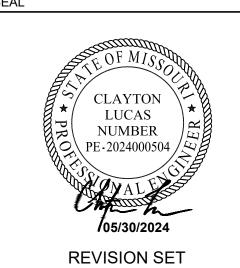
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2		
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	2	
0.1	0.2	0.2	⁺ 0.2	0.2	⁺ 0.2	0.2	0.2	⁺ 0.2	⁺ 0.2	⁺ 0.2	0.2	0.2	⁺ 0.2	0.2	⁺ 0.3	⁺ 0.4	0.5	0.6	⁺ 0.5	0.4	0.3	*
0.2	[†] 0.3	[†] 0.3	0.3	[†] 0.3	0.3	[†] 0.3	[†] 0.3	⁺ 0.4	[†] 0.5	⁺ 0.5	0.4	⁺ 0.4	[†] 0.3	[†] 0.3	⁺ 0.4	⁺ 0.6	₩,9	[†] 1.1	⁺ 1.0	⁺ 0.8	⁺ 0.5	0.3
⁺ 0.3	⁺ 0.4	0.6	0.6	0.5	⁺ 0.4	0.4	⁺ 0.5	⁺ 1.0	⁺ 1.7	⁺ 1.6	⁺ 1.3	[†] 0.8	[†] 0.5	0.4	0.7	⁺ 1.0	+1.6	2.2	⁺ 2.1	⁺ 1.4	⁺ 0.8	⁺ 0.5
0.5	0.7	[†] 1.1	⁺ 1.2	1.0	0.7	0.6	0.8	⁺ 2.9	-D4.7D-	5.5	4.8	2.6	0.8	0.6	⁺ 1.6	1.6	⁺ 2.6	3.9 S1	⁺ 3.7	⁺ 2.2	⁺ 1.1	0.6
0.7	[†] 1.3	⁺ 2.3	⁺ 2.6	⁺ 1.8	†1.1	0.7	[†] 0.9	† 2.4		-D D -	-D D -		P		46	2.5	2.9	4.3	⁺ 4.1	⁺ 2.4	⁺ 1.2	[†] 0.7
0.9	⁺ 1.8	[†] 3.5	4.0	⁺ 2.8	1.4	6.8	0.9	⁺ 1.9		-D D-	DE D	E D	D•		5 ₁ 4	2.6	2.5	[†] 3.2	⁺ 3.1	⁺ 2.0	⁺ 1.1	0.7
0.8	1.7	⁺ 3.2	[†] 3.7	⁺ 2.5	⁺ 1.3	0.8	1.0		• B ₄ B •	⁺ 6.3	6.1	5.7	⁺ 4.3	1.6	2.3	2.0	2.3	3.0	⁺ 2.8	⁺ 1.9	⁺ 1.1	0.7
0.6	1.1	1.8	⁺ 2.1	1.5	0.9	0.6	0.7	⁺ 1.3	⁺ 2.1	⁺ 2.1	1.9	1.7	1.4	[†] 0.9	1.2	1.7	⁺ 2.9	4.1	⁺ 3.7	⁺ 2.1	⁺ 1.1	0.6
0.4	0.6	0.8	[†] 0.9	0.8	0.6	0.4	0.4	[†] 0.5	⁺ 0.6	0.7	0.6	0.6	0.6	[†] 0.6	0.8	1.5	⁺ 3.0	51 4.3	⁺ 3.9	⁺ 2.1	⁺ 1.1	0.6
						0.3										/ //						
0.2	[†] 0.2	[†] 0.3		0.3	[†] 0.2	[†] 0.2	0.2	⁺ 0.2	⁺ 0.2	0.2	⁺ 0.2	⁺ 0.2	0.3	0.3	0.5	[†] 0.8	[†] 1.1	⁺ 1.4	[†] 1.2	0.9	⁺ 0.6	[†] 0.4
⁺ 0.1	0.1	0.2	0.2	⁺ 0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	[†] 0.5	⁺ 0.6	⁺ 0.6	0.6	⁺ 0.5	0.4	⁺ 0.3

1 PHOTOMETRIC PLAN

E107 1/16" = 1'-0"



610 NW



CONTRACTOR SHALL VERIFY ALL
CONDITIONS AND DIMENSIONS AT THE
JOB SITE AND NOTIFY THE ARCHITECT
OF ANY DIMENSIONAL ERRORS,
OMISSIONS OR DISCREPANCIES BEFORE
BEGINNING OR FABRICATING ANY WORK.
DO NOT SCALE DRAWINGS.

	DO NOT	SCALE DRAWING	S.
ISSUE	DATE	DESCRIPTION	
PRO	JECT INF	ORMATION	
DDO	JECT NO:		24.0

24-0087 09/06/2022 AS NOTED PROJECT NO: ORIGINAL ISSUE: SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

PHOTOMETRIC PLAN

SHEET NUMBER

NOTES BY SYMBOL

WEATHER RATED WATERPROOF RECEPTACLES ALONG DRINK LINE. PROVIDE BUBBLE COVERS FOR ALL RECEPTACLES.

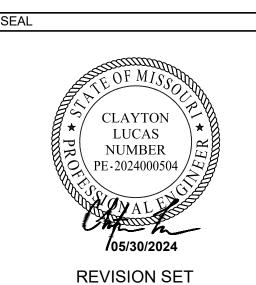


CHIPMAN ROAD \geq

PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

610



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ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE: AS NOTED SCALE: DRAWN BY: CHECKED BY:

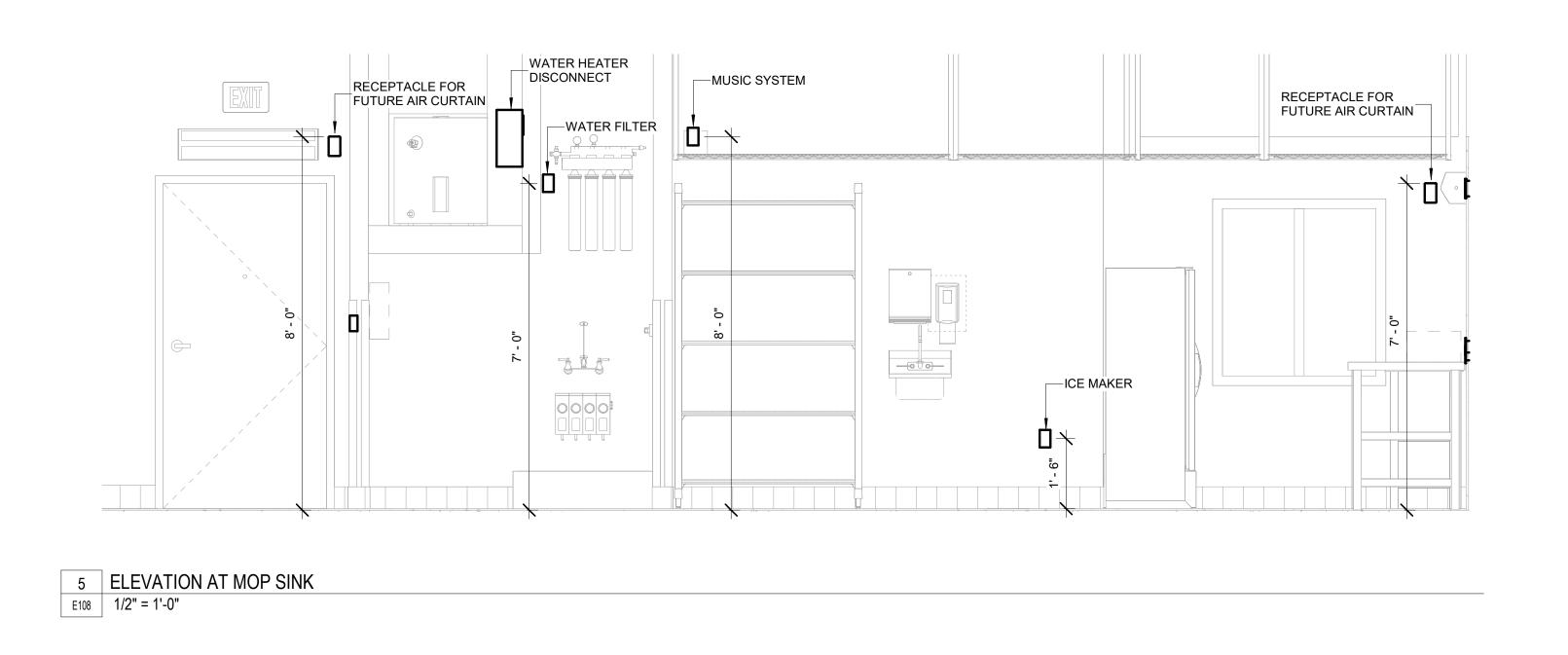
24-0087

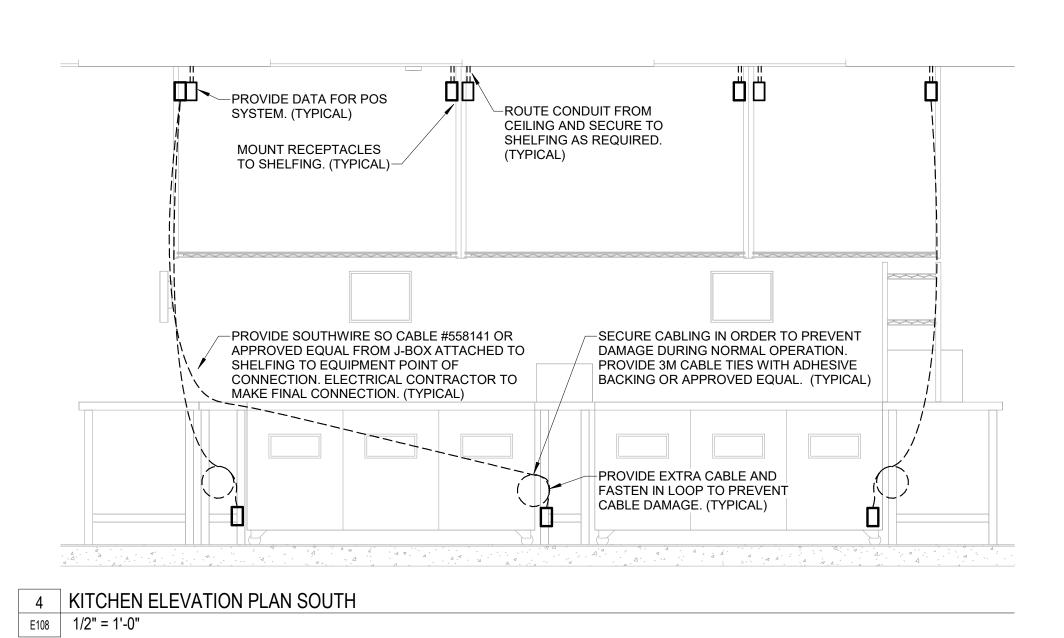
10/12/23

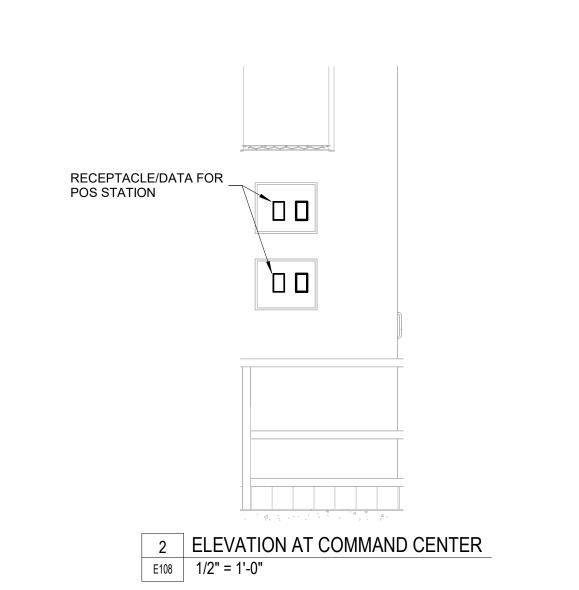
SHEET TITLE

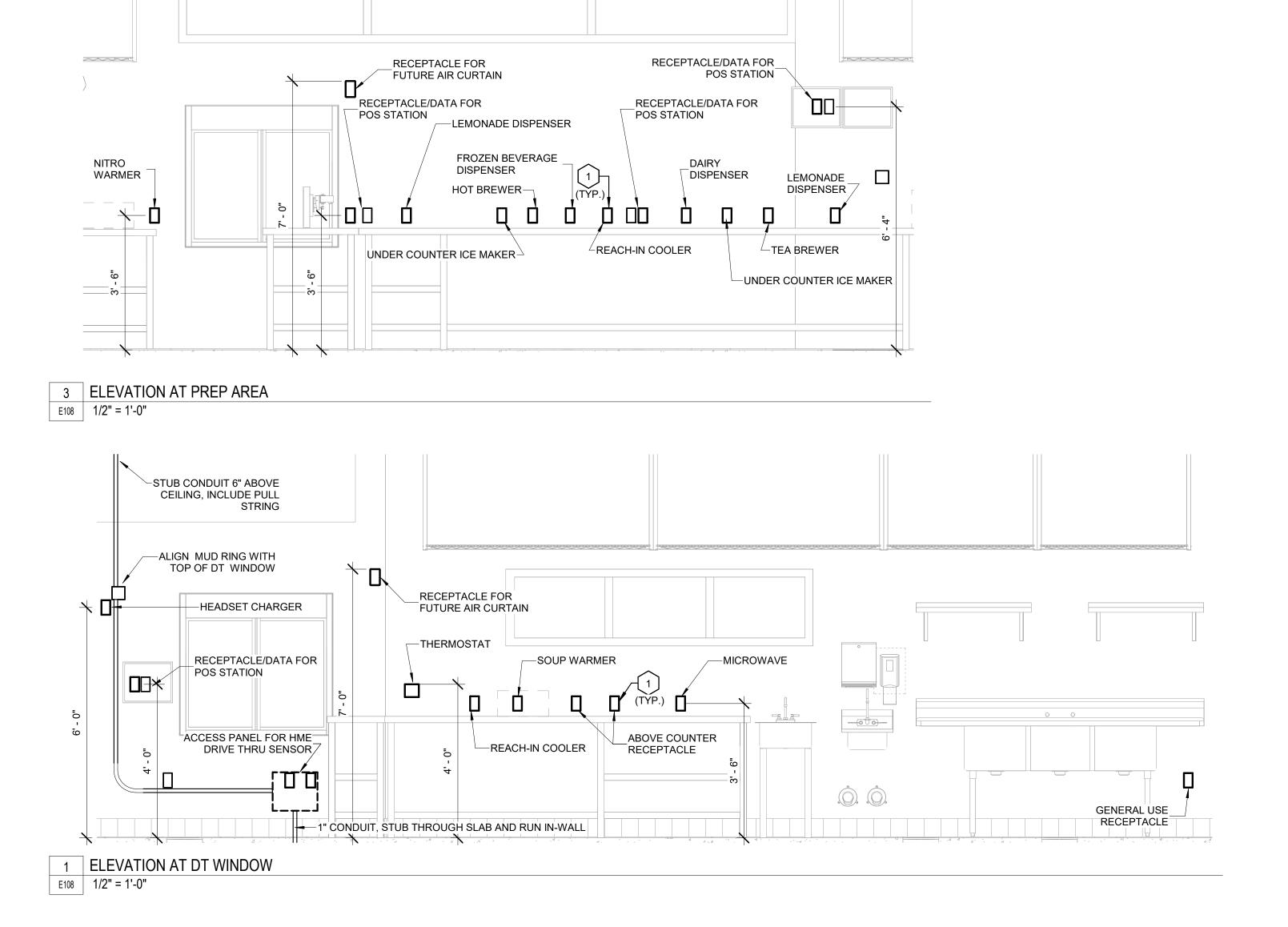
ELECTRICAL **ELEVATIONS**

SHEET NUMBER





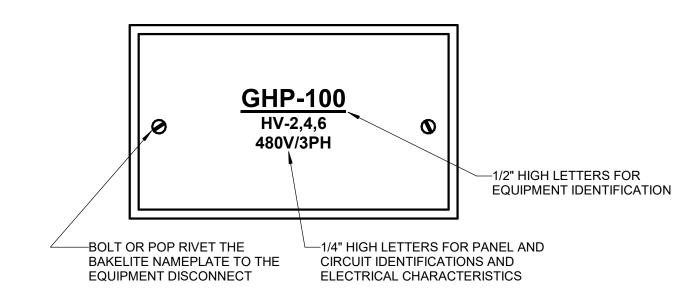




#UTPSP7.

1 TYPICAL DATA JACK DETAIL

E109 N.T.S.



ALL NAMEPLATES SHALL BE CUSTOM ENGRAVED WHITE LETTERING ON BLACK PHENOLIC PLASTIC (BAKELITE).

A101.D002

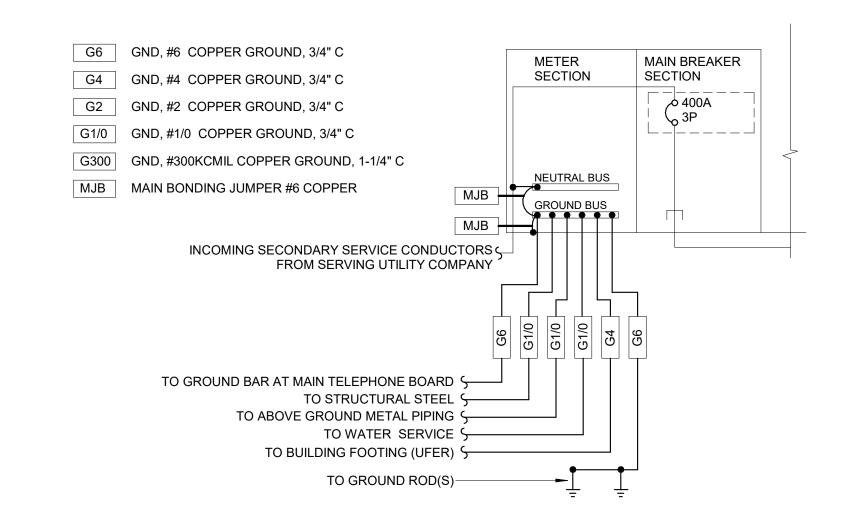
SPECIFICATIONS.

2 TYPICAL EQUIPMENT DISCONNECT NAMEPLATE DETAIL

E109 N.T.S.

GROUNDING ELECTRODE FEEDER SCHEDULE:

SIZES ARE BASED ON COPPER (CU) THHN/THWN-2 INSULATION, UNO. ALL CONDUCTOR SIZES ARE BASED ON 75 DEG C RATED TERMINATIONS, UNO. CONDUIT SIZES SHOWN ARE APPROPRIATE FOR SCHEDULE 40 PVC, EMT, GRS, IMC AND RMC; ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.



4 GROUNDING ELECTRODE SYSTEM DETAIL

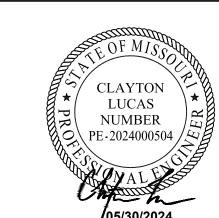
E109 N.T.S.



CHIPMAN RO

PROTOTYPE VERSION V2-B

610



REVISION SET

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		SCALE DRAWINGS.
ISSUE	DATE	DESCRIPTION

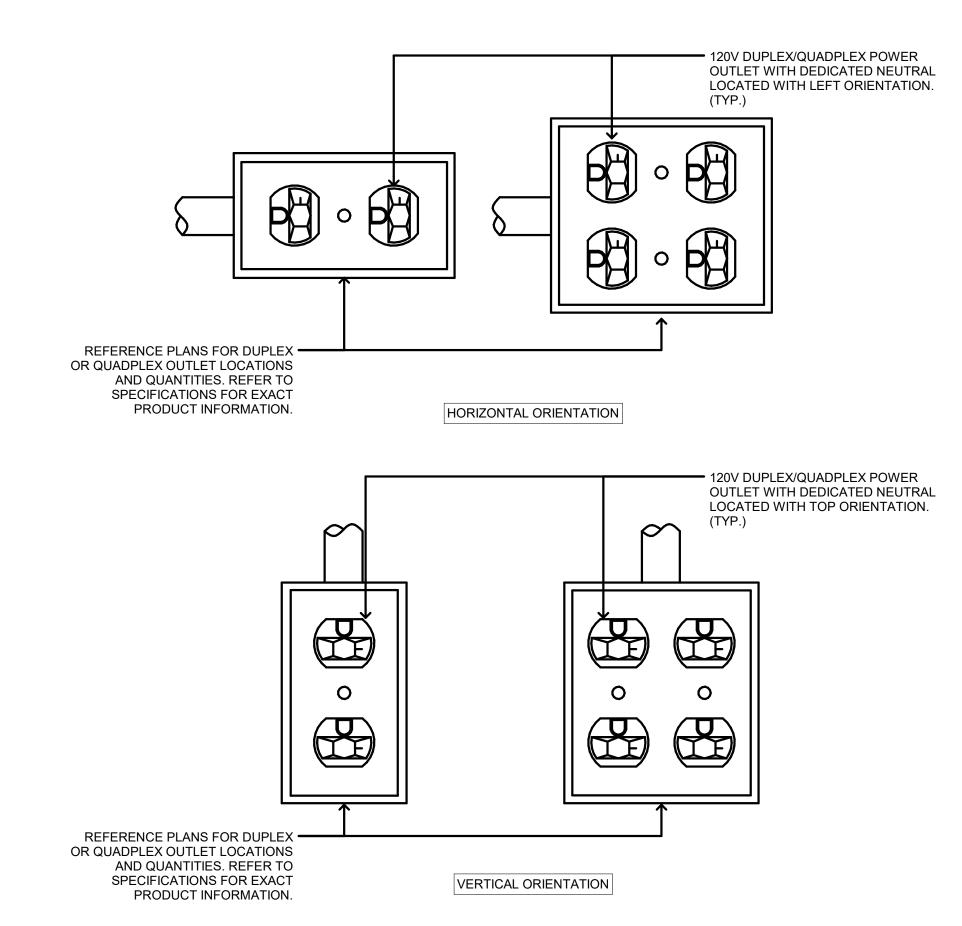
PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E109



3 TYPICAL RECEPTACLE ORIENTATION DETAIL

E109 N.T.S.

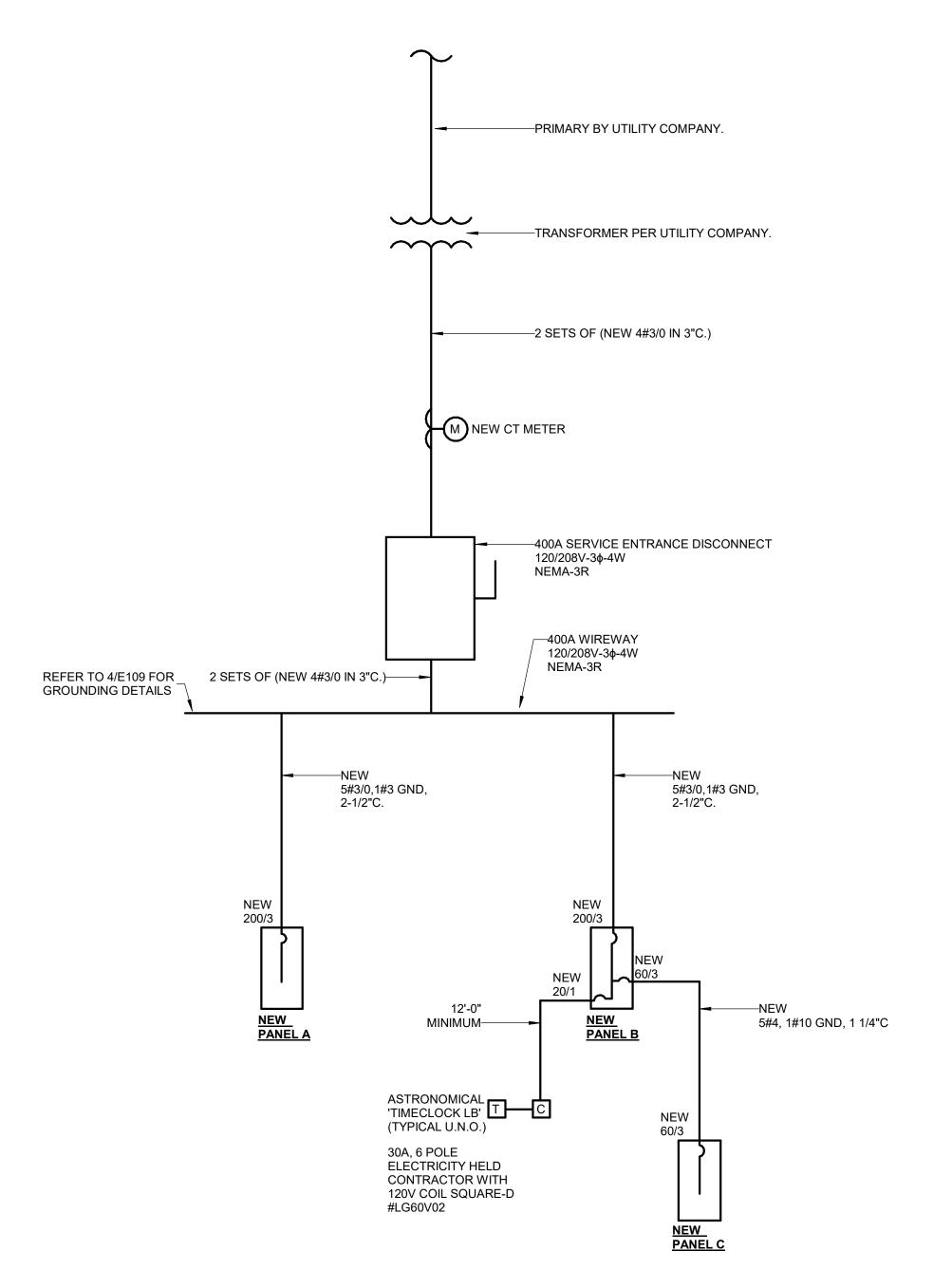
	L	ocation: UTILITY 104				Volts	: 120/2	08 Wye	:				A.I. 0	C. Rati	ng: 22,000		
;	Supp	ly From: WIREWAY		Phas 3								Mains Rating: 200					
	М	ounting: SURFACE	Wires: 4							Mains Type: MCB							
NO	C	CIRCUIT DESCRIPTION	WIRE	BRKR	#	Α	В	С	Α	В	С	#	BRKR	WIRE	CIRCUIT DESCRIPTION	C	NC
	1	FROZEN BEVERAGE	40	-00		3000			540			1	20	12	OFFICE DESK RECEPTACLES	2	
	3	DISPENSER	10	30	2		3000			0		1	20		SPARE	4	
	5	HAND DRYER	12	20	1			180			1920	1	20	12	WATER SOFTNER	6	
	7	BEVERAGE COOLER	12	20	1	600			1800			1	20	12	PANINI PRESS	8	
6	9	REACH-IN COOLER	12	20	1		360			1320		1	20	12	ICE MAKER	10	
	11	SPARE		20	1			0			0	1	20		SPARE	12	
	13	SPARE		20	1	0			600			1	20	12	BEVERAGE COOLER	14	
6	15	WATER FILTRATION SYSTEM	12	20	1		1920			360		1	20	12	REACH-IN COOLER	16	
	17	SPARE		20	1			0			1680	1	20	12	ICE TEA BREWER	18	
	19	DAIRY DISPENSER	12	20	1	120			0			1	20		SPARE	20	
	21	WALL FAN	12	20	1		360			180		1	20	12	3M HEADSET CHARGER	22	
	23	DRIVE THRU DETECTOR	12	20	1			840			1200	1	20	12	SOUP WARMER	24	
_	25		40	-00		2850			540			1	20	12	GENERAL RECEPTACLE	26	6
6	27 MICROWAVE	10	30	2		2850			864		1	20	12	FOOD PREP TABLE	28		
	29	NITRO WARMER	12	20	1			1440			180	1	20	12	RESTROOM RECEPTACLE	30	
	31	FOOD PREP TABLE	12	20	1	864			4896							32	
	33	SPARE		20	1		0			4896		3	60	4	RTU-1	34	4,
	35	READY ACCESS 600-DT	12	20	1			600			4896					36	
	37	SPARE		20	1	0			180			1	20	12	HVAC SERVICE RECEPTACLE	38	
	39	SPARE		20	1		0			0		1	20		SPARE	40	
	41	SPARE		20	1			0			0	1	20		SPARE	42	
			Total	Load:		1599	90 W	161	10 W	1293	36 W						
			Total	Amps:		13	37	1;	38	10	08						
NOT	ES:				-										PANEL TOTALS		
1. P	ovide	e GFCI Breaker															
2. C	rcuit	Via Energy Management Sys	stem											To	tal Conn. Load: 45035		
3. C	rcuit	Via Photo Cell Operation / DI	DC Con	troller										Tota	al Est. Demand: 40990		

6. Provide a Lock on Breaker

	L	ocation: UTILITY 104				Volts	: 120/2	208 Wye	;				A.I.	C. Ratii	ng: 22,000		
9	Supp	ly From: WIREWAY				Phas	has 3 Mains Rating: 200						ng: 200				
	M	ounting: SURFACE				Wires	: 4						Ma	ins Ty	pe: MCB		
١٠	C	CIRCUIT DESCRIPTION	WIRE	BRKR	#	Α	В	С	Α	В	С	#	BRKR	WIRE	CIRCUIT DESCRIPTION	C	NO.
	1	UNDERCOUNTER ICE MAKER	12	20	1	1425			1600			1	20	12	MENUBOARD	2	
	3	SPARE		20	1		0			400		1	20	12	SPEAKER BOX	4	
	5	SIGNAGE	12	20	1			1200			1200	1	20	12	SIGNAGE	6	
	7	SPARE		20	1	0			1200			1	20	12	SIGNAGE	8	
4	9	AC-2	12	20	1		240			1290		1	20	12	EXTERIOR LIGHTING	10	3
	11	TIMECLOCK	12	20	1			180			180	1	20	12	PANEL RECEPTACLE	12	
	13	CP-1	12	20	1	400			800			1	20	12	MARQUEE SIGNS	14	3
	15	NITRO WARMER	12	20	1		1440			1200		1	20	12	DRIVE THRU WINDW & SERVING	16	
	17	UNDERCOUNTER ICE MAKER	12	20	1			1425			78	1	20	12	EXTERIOR LIGHTING	18	
	19	LEMONADE DISPENSER	12	20	1	1080			1080			1	20	12	LEMONADE DISPENSER	20	
	21	MUSIC SYSTEM	12	20	1		360			0		1	20		SPARE	22	
4	23	AC-1	12	20	1			240			0	1	20		SPARE	24	
4	25	AC-1	12	20	1	480			0			1	20		SPARE	26	
4	27	AC-1	12	20	1		240			0		1	20		SPARE	28	
	29	SPARE		20	1			0			0	1	20		SPARE	30	
	31	SPARE		20	1	0			0			1	20		SPARE	32	
	33	SPARE		20	1		0			4493						34	Ī.,
	35	SPARE		20	1			0			4493	2	55	6	WATER HEATER	36	4
	37	SPARE		20	1	0			3106							38	
	39	SPARE		20	1		0			2546		3	60	4	PANEL C	40	
	41	SPARE		20	1			0			3012					42	
			Total	Load:	_	1117	'1 W	1220	9 W	1200	8 W						
			Total	Amps:		9	3	10	03	10)1						
	ovide	e GFCI Breaker			- '					•					PANEL TOTALS		
		Via Energy Management Sys													tal Conn. Load: 35388		
		Via Photo Cell Operation / Di												Tota	al Est. Demand: 35184		
. Pr	ovide	e Breaker and Fuses Per Mar	nufactur	ers Red	com	mendat	ion								Total Conn.: 98		

P	a	nel: C													PROVIDE 200% N	IEUT	RAL
	L	ocation: UTILITY 104				Volts	: 120/2	.08 Wye	;				A.I. 0	C. Ratii	ng: 22,000		
S	upp	ly From: B				Phas	. 3						Mair	ıs Ratiı	ng: 60		
	M	ounting: SURFACE				Wires	: 4						Ma	ins Ty	pe: MCB		
NO	С	CIRCUIT DESCRIPTION	WIRE	BRKR	#	Α	В	С	Α	В	С	#	BRKR	WIRE	CIRCUIT DESCRIPTION	C	NO
	1	FIRE BELL	12	20	1	100			300			1	20	12	WALK IN COOLER LIGHT	2	
6	3	POS RECEPTACLE	12	20	1		180			720		1	20	12	INTERIOR LIGHTING	4	
	5	WALK IN COOLER EVAP COIL	12	20	1			1932			180	1	20	12	POS RECEPTACLE	6	6
4,5	7	WALK IN CONDENSING UNIT	12	20	2	1186			360			1	20	12	POS RECEPTACLE	8	6
4,5	9	WALK IN CONDENSING UNIT	12	20	-		1186			360		1	20	12	SECURITY VCR	10	
6	11	POS RECEPTACLE	12	20	1			360			540	1	20	12	POS RECEPTACLE	12	6
6	13	POS RECEPTACLE	12	20	1	360			800			1	20	12	IT RECEPTS	14	
	15	SAFE	12	20	1		100					1			SPACE	16	
	17	SPACE			1							1			SPACE	18	
			Total	Load:		310	6 W	254	6 W	301	2 W					_	
			Total .	Amps:		2	6	2	:1	2	6						
NOTE	S:									•					PANEL TOTALS		
1. Pro	ovide	e GFCI Breaker															
2. Cir	cuit	Via Energy Management Sys	tem											То	tal Conn. Load: 8664		
Cir	cuit	Via Photo Cell Operation / DI	DC Con	troller										Tota	al Est. Demand: 8576		
4. Pro	ovide	e Breaker and Fuses Per Mar	านfactur	ers Rec	com	mendat	ion								Total Conn.: 24		
5. Pro	ovide	e H.A.C.R. Breaker												Tota	al Est. Demand: 24		
6. Pro	ovide	e a Lock on Breaker															

120/208 3 PH - 4W							
LOAD DESCRIPTION	CONNECTED LOAD	DEMAND	DEMAND LOAD	DEMAND LOAD			
EOAD DESCRIPTION	(WATTS)	FACTOR	(WATTS)	(AMPS)			
LIGHTING	2388	1.25	2985.0	8.3			
RECEPTACLES	47087	NOTE #1	28543.5	79.3			
SIGNAGE	3600	1.25	4500.0	12.5			
WATER HEATER	8986	1.25	11232.5	31.2			
MISCELLANEOUS	0	1.00	0.0	0.0			
HVAC	18260	NOTE #2	21932.0	60.9			
TOTAL	80322	_	69193	192.2			
NOTES:							



1 ELECTRICAL ONE-LINE DIAGRAM E110 N.T.S.

ONE-LINE GENERAL NOTES

- A. SWITCHBOARD COMPONENTS, INCLUDING OVER CURRENT PROTECTIVE DEVICES SHALL BE FULLY RATED TO THE AVAILABLE FAULT CURRENT SHOW.
- B. PROVIDE ARC FLASH AND SHOCK HAZARD WARNING IDENTIFICATION PER NEC ARTICLE 110.16.
- C. "NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT THE PRIOR APPROVAL OF THE DESIGN ENGINEER AND THE ELECTRICAL INSPECTOR"
- D. THE FEEDER LENGTHS SHOWN IN THE INPUT DATA IS FOR CALCULATIONS ONLY. IT IS NOT THE INTENT TO USE THESE ENTERED LENGTHS FOR USAGE OF ACTUAL FIELD FEEDER LENGTH MEASUREMENTS.

PANEL SCHEDULE GENERAL NOTES

- A. A.I.C. RATING SHOWN ON PANEL SCHEDULES ARE THE MINIMUM RATING FOR NEW OVERCURRENT PROTECTIVE DEVICES.
- B. ALL PANEL BOARDS SHALL HAVE A TYPE WRITTEN DIRECTORY IDENTIFYING EACH NUMBERED CIRCUIT PLACED IN A DIRECTORY HOLDER INSIDE THE DOOR.
- C. THE CONTRACTOR SHALL PERMANENTLY MARK WITH PERMANENT MARKER THE CIRCUIT IDENTIFICATIONS ON THE COVERPLATES OF RECEPTACLE, EQUIPMENT, AND LIGHTING JUNCTION BOXES. (STICK LABELS NOT ACCEPTABLE)
- D. PER NEC 210.4(B) ALL MULTIWIRE BRANCH CIRCUITS ARE TO BE PROVIDED WITH A DEVICE THAT WILL DISCONNECT POWER TO ALL UNDERGROUND CONDUCTORS SIMULTANEOUSLY AT THE POINT OF



CHIPMAN RO PROTOTYPE VERSION V2-B

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LUCAS NUMBER PE-2024000504 / 与

REVISION SET

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DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

ELECTRICAL ONE-LINE DIAGRAM

SHEET NUMBER

DIVISION 16010 - BASIC ELECTRICAL REQUIREMENTS

- THE WORK OF EACH OF THE ELECTRICAL SECTIONS INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT, AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED, READY FOR SATISFACTORY SERVICE.
- B. THE WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL FEDERAL (OSHA), STATE, APPLICABLE LOCAL STANDARDS, ALL SPECIFIC SAFETY REQUIREMENTS, THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND THE LATEST ENFORCED EDITION OF THE AMERICANS WITH DISABILITIES ACT.
- C. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES.
- D. THE GENERAL ARRANGEMENT OF CONDUIT, WIRING AND EQUIPMENT SHALL BE AS IDENTIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE SITE, STRUCTURAL, AND FINISH CONDITIONS AFFECTING HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, PROVIDING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
- THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK AND RELATED SYSTEMS AS INDICATED ON THE DRAWINGS OR AS NECESSARY TO PROVIDE A COMPLETE
- F. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY WIRING, LIGHTING AND CONSTRUCTION POWER FOR ALL TRADES AS REQUIRED TO COMPLETE THE PROJECT.
- ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A FIRST CLASS WORKMANLIKE MANNER. ALL MATERIALS SHALL BE NEW AND THE BEST OF THEIR RESPECTIVE KINDS. ALL EQUIPMENT AND SYSTEMS SHALL BE APPROVED BY UL OR SIMILAR NATIONALLY ACCEPTED TESTING AGENCY SUCH AS ETL TESTING LABORATORIES.
- H. THE CONTRACTOR SHALL VISIT THE SITE AND OBSERVE THE CONDITIONS UNDER WHICH THE WORK SHALL BE COMPLETED. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONTRACT FOR ANY ERROR OR NEGLIGENCE ON THE CONTRACTOR'S PART
- THE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED SHOP DRAWINGS, TOGETHER WITH WIRING DIAGRAMS, SPECIFICATIONS, OPERATING DATA, AND/OR CATALOG CUTSHEETS FOR ALL EQUIPMENT.
- A THOROUGH TEST SHALL BE MADE PRIOR TO ENERGIZING THE SYSTEM TO DEMONSTRATE THAT THE SYSTEM IS ENTIRELY FREE FROM GROUND FAULTS, SHORT CIRCUITS, AND OPEN CIRCUITS; THAT THE RESISTANCE TO GROUND ALL NON-GROUNDED CIRCUITS, BEFORE AND AFTER CONNECTION OF EQUIPMENT MEETS THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND IEEE STANDARDS/RECOMMENDATIONS.
- IDENTIFY ALL MOTOR STARTERS, SWITCHES, CONTROLS, PANELBOARDS, SWITCHBOARDS, TERMINAL BOARDS, CONTROL CENTERS AND OTHER EQUIPMENT. PROVIDE BLACK AND WHITE NAMEPLATES CONSTRUCTED FROM LAMINATED PHENOLIC WITH A WHITE CENTER CORE. LETTERS SHALL BE ENGRAVED IN THE PHENOLIC TO FORM WHITE LETTERS 3/8" HIGH. FASTEN THE NAMEPLATES WITH SCREWS AND ADHESIVE FASTENER.
- UPON COMPLETION OF THE ELECTRICAL INSTALLATION. THE CONTRACTOR SHALL DELIVER TO THE OWNER ONE (1) SET OF PRINTS OF ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED PENCIL TO SHOW ALL ADDITIONS, CHANGES AND DEPARTURES OF THE INSTALLATION AS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.
- M. THE CONTRACTOR SHALL GUARANTEE THEIR WORKMANSHIP AND MATERIAL (LAMPS EXCEPTED) FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF BUILDING ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT THE COMPLETION. SHOULD DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD, THE CONTRACTOR SHALL, UPON NOTICE OF THE SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHINGS CAUSED BY THE REPAIRS CORRECTED AT HIS EXPENSE TO THE CONDITION BEFORE SUCH DAMAGE.
- THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A RECORD AND INFORMATION MANUAL. THE MANUAL SHALL BE BOUND IN A THREE-RING LOOSE-LEAF BINDER. PROVIDE THE FOLLOWING DATE IN THE BOOKLET:
- CUTSHEETS OF ALL EQUIPMENT WITH TECHNICAL SPECIFICATIONS. OPERATION AND MAINTENANCE PROCEDURES.
- SERVICING INSTRUCTIONS.
- COPIES OF PANELBOARD DIRECTORIES. COPIES OF WARRANTIES.
- LIST OF LAMPS SHOWING QUANTITY, TYPE, WATTAGE, MANUFACTURER, CATALOG NUMBER, ETC., FOR EACH FIXTURE
- COPIES OF TEST REPORTS.
- EXACT LOCATIONS OF OUTLETS SHALL BE COORDINATED WITH DOOR SWINGS AND VARIOUS PROTRUSIONS. MOUNTING HEIGHTS OF THE VARIOUS **ELECTRICAL DEVICES SHALL BE AS FOLLOWS:**

SWITCHES 48" AFF TO CENTER OF BOX RECEPTACLES 18" AFF TO CENTER OF BOX TELEPHONE OUTLETS 18" AFF TO CENTER OF BOX EXIT LIGHTS CENTERED BETWEEN CEILING AND TOP OF DOOR (UP TO 1'-0" ABOVE DOOR), SURFACE

OR CEILING MOUNTED AS SHOWN.

DISCONNECTING SWITCHES 52" AFF TO CENTER OF SWITCH

- PROVIDE A DISCONNECT SWITCH FOR EACH MOTOR AS SHOWN ON THE DRAWINGS SIZED AS REQUIRED TO MEET THE NATIONAL ELECTRICAL CODE AND PROVIDE ALL WIRING CONNECTIONS FROM SOURCE. PROVIDE REQUIRED VOLTAGE.
- Q. SEAL ALL CONDUIT PENETRATIONS THRU FIRE RATED WALLS AND FLOORS TO MAINTAIN FIRE INTEGRITY. REFER TO ARCHITECTURAL DRAWING FOR FIRE
- R. ELECTRICAL CONTRACTOR SHALL VERIFY ALL VOLTAGES OF MECHANICAL AND PLUMBING EQUIPMENT WITH THE RESPECTIVE CONTRACTOR PRIOR TO
- ALL SURFACE-MOUNTED EQUIPMENT ON BLOCK WALLS SHALL BE MOUNTED ON 3/4" PLYWOOD BACKBOARD. ALL FLOOR-MOUNTED EQUIPMENT SHALL BE INSTALLED ON A 4" HIGH CONCRETE PAD.

<u>DIVISION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS</u>

- INSTALL ALL WIRING IN CONDUIT MINIMUM, U.N.O. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUIT EMBEDDED IN CONCRETE SHALL BE 3/4" MINIMUM. INSTALL ALL CONDUIT CONCEALED UNLESS ON UNFINISHED WALLS, ON UNFURRED CEILINGS OR MECHANICAL EQUIPMENT SPACES. PROVIDE CONDUIT AS FOLLOWS:
 - RIGID STEEL CONDUIT FOR WORK EXPOSED TO WEATHER OR EMBEDDED IN CONCRETE OR MASONRY.

- GALVANIZED ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR EXPOSED WORK, CONCEALED WORK ABOVE SUSPENDED CEILINGS, AND WITHIN INTERIOR PARTITIONS OR NON-MASONRY WALLS.
- FLEXIBLE METAL CONDUIT IN SHORT LENGTHS (6' MAXIMUM) FOR THE CONNECTION OF RECESSED LIGHTING FIXTURES AND MOTORS.
- LIQUID TIGHT FLEXIBLE METAL CONDUIT WHEREVER MOISTURE MAY BE PRESENT AND MOTORS IN MECHANICAL EQUIPMENT SPACES.
- POLYVINYLCHLORIDE (PVC) SCHEDULE 40 AND 80 CONDUIT WITH GROUND CONDUCTOR FOR UNDERGROUND OUTSIDE OF BUILDING (SITE) INSTALLATION AS PERMITTED BY NATIONAL ELECTRICAL CODE (NEC) ARTICLE 352.
- INSTALL CONDUITS PARALLEL AND PERPENDICULAR TO WALLS AND INTERIOR SURFACES. CLEAN AND PLUG AND PROVIDE A PULL LINE IN EACH CONDUIT LEFT EMPTY. USE MANUFACTURED ELBOWS AND SCREW JOINTED CONDUIT FITTINGS. USED CAPPED BUSHINGS OR "PUSH PENNY" PLUGS. ALL FITTINGS SHALL BE STEEL OR MALLEABLE IRON. ALL EMT FITTINGS SHALL BE COMPRESSION TYPE.
- C. ALL OUTLET, SWITCH AND JUNCTION BOXES, SHALL BE SHERARDIZED OR GALVANIZED STAMPED STEEL BY STEEL CITY, RACO, APPLETON, VALEN, OR EQUIVALENT. OUTLET BOXES IN CONCRETE CONSTRUCTION SHALL BE OCTAGONAL. NO "THRU-WALL" BOXES SHALL BE USED IN PARTITIONS. ALL BOXES SHALL BE FURNISHED WITH APPROPRIATE COVERS.
- JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS INDICATED OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. BOXES FOR EXTERIOR WORK SHALL BE CAST ALUMINUM OR GALVANIZED CAST IRON TYPE WITH THREADED HUBS, U.N.O. GASKETED COVER PLATES SHALL BE FURNISHED FOR OUTDOOR INSTALLATIONS.

DIVISION 16060 - GROUNDING AND BONDING

- GROUND ALL EQUIPMENT PER NATIONAL ELECTRICAL CODE (NEC).
- GROUND ALL DRY TYPE TRANSFORMERS AS PER DRAWINGS AND NATIONAL ELECTRICAL CODE (NEC).
- C. ALL CONDUITS SHALL CONTAIN A CODE-SIZED GROUND WIRE SIZE PER NATIONAL ELECTRICAL CODE (NEC) IN ADDITION TO THE CONDUCTORS SHOWN ON THE PLANS. WHERE CIRCUIT CONDUCTORS ARE INCREASED IN SIZE FOR VOLTAGE DROP, THE GROUND WIRE SIZE SHALL BE INCREASE PROPORTIONATELY.
- D. WHERE AN ISOLATED. INSULATED GROUND IS REQUIRED A SEPARATE GREEN GROUND SHALL BE RUN FROM THE PANEL GROUND BUS TO THE ISOLATED GROUND CONNECTION OF THE DEVICE SERVED. IN NO CASE SHALL THE SYSTEM GROUND (WIRE AND ASSOCIATED OUTLET BOXES, CONDUIT AND BUILDING STEEL) BE ALLOWED TO CONTACT THE ISOLATED GROUND (GREEN WIRE AND DEVICE GROUND).

DIVISION 16120 - WIRE AND CABLE

CIRCUIT.

THE COLOR CODING SYSTEM LISTED BELOW SHALL BE USED THROUGHOUT THE BUILDING:

SYSTEM	PHASE A	PHASE B	PHASE C	NEUTRAL/GROUND
208/120V 240/120V 480/277V	BLACK BLACK BROWN	RED RED ORANGE	BLUE BLUE YELLOW	WHITE GREEN WHITE GREEN GRAY GREEN
THE WIRE SIZE	E INDICATED IN	THE HOMERUN	SHALL BE USE	THROUGH THE

BUILDING WIRE, U.N.O., SHALL BE COPPER, 600 VOLT, TYPE THWN/THHN

INSULATION, #12 AWG MINIMUM, FOR INTERIOR AND EXTERIOR APPLICATIONS, TYPE THHN SHALL NOT BE USED IN WET OR DAMP LOCATIONS.

- INSTALL ALL WIRING IN CONDUIT.
- CONTROL CONDUCTORS SHALL BE #14 MINIMUM FOR NATIONAL ELECTRICAL CODE (NEC) CLASS 1 AND #16 FOR NATIONAL ELECTRICAL CODE (NEC) CLASS 2.
- CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED.
- CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID.
- NO SPLICES SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES. WIRES AND CABLES SHALL BE MANUFACTURED BY PIRELLI, ROYAL, TRIANGLE OR
- PULL CONDUCTORS USING RECOGNIZED METHODS AND EQUIPMENT LEAVING AS LEAST 6" WIRE AT ALL JUNCTION BOXES FOR CONNECTIONS.
- CLEAN OUT EACH CONDUIT SYSTEM BEFORE PULLING WIRE.
- FORM AND TIE ALL WIRING IN PANEL BOARDS.

SWITCHBOARDS/PANEL BOARDS.

- THERE SHALL BE NO WIRE NUT JOINTS OR SPLICES MADE INSIDE
- M. BRANCH CIRCUIT WIRE SIZES (AND CONDUITS) SHALL BE INCREASED FROM THOSE INDICATED ON THE PLANS TO PREVENT EXCESSIVE VOLTAGE DROP. BRANCH CIRCUITS SHALL BE INSTALLED WITH WIRES OF SUFFICIENT SIZE SO THAT VOLTAGE DROP BETWEEN THE PANEL AND THE LOADS DOES NOT EXCEED LIMIT OF 3 PERCENT
- N. WIRE SIZES SHALL BE BASED ON THE 60°C. AMPACITIES FOR WIRE SIZES NO. 14-1 AWG. AND 75°C. AMPACITIES FOR WIRE SIZES #1/0 AWG AND LARGER.
- CIRCUITS MAY BE MULTI-PLEXED IN CONDUIT PROVIDED WIRE IS PROPERLY DERATED AND CONDUIT SIZED PER NATIONAL ELECTRICAL CODE. UNDER NO CIRCUMSTANCES SHALL MORE THAN (9) CURRENT CARRYING CONDUCTORS BE RUN IN A SINGLE CONDUIT.
- PROVIDE WIRE AND RACEWAY SYSTEMS AS DESCRIBED HEREIN AND INDICATED ON DRAWINGS. METAL-CLAD (MC), ARMORED CABLE (AC), AND NON-METALLIC SHEATED CABLE (NMC) SHALL NOT BE PERMITTED, U.N.O, AND APPROVED PRIOR TO BIDDING.
- Q. PROVIDE DISCONNECT SWITCHES WHERE INDICATED AND AS REQUIRED. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NONFUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE. ALL SAFETY SWITCHES SHALL BE NEMA I ENCLOSURE "HD" WITH INTERLOCKING COVER AND HANDLE. MANUFACTURED BY SQUARE D OR APPROVED EQUAL. PROVIDE NEMA 3R ENCLOSURES WHERE REQUIRED.
- MOUNT WEATHERPROOF DEVICES IN CAST METAL BOXES WITH GASKETED, SPRING-HINGED LID-TYPE LOCKING COVERS HAVING CORROSION-RESISTANT FINISH.
- THE ENTIRE ELECTRICAL SYSTEM SHALL BE SOLIDLY GROUNDED INCLUDING MAIN SERVICE EQUIPMENT, DISCONNECT SWITCHES, WIRING TROUGHS AND PULL BOXES. CONDUIT SYSTEM, OUTLET BOXES, MOTORS, ELECTRIC HEATING EQUIPMENT, LIGHTING FIXTURES, TRANSFORMERS, EMERGENCY SYSTEMS, UPS SYSTEMS, AND FIRE ALARM SYSTEMS.

- PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN ALL BRANCH CIRCUITS AND FEEDERS SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE
- ALL BRANCH CIRCUITS SHALL BE RUN CONCEALED IN EXISTING AND NEW WALLS. CUT AND PATCH EXISTING WALLS AND SURFACES AS REQUIRED.
- ALL D.C. WIRING SHALL BE #10 AWG MINIMUM.

GROUND, PHASE AND NEUTRAL CONDUCTORS SHALL BE PIG-TAILED IN OUTLET BOXES OR MULTI-OUTLET ASSEMBLY FOR RECEPTACLES SO THAT GROUND AND ELECTRICAL SERVICE WILL NOT BE DISTURBED TO OTHER RECEPTACLES ON THE SAME MULTI-WIRE CIRCUIT IF RECEPTACLE IS REMOVED.

DIVISION 16140 - WIRING DEVICES

WIRING DEVICES SHALL BE ARROW HART, GENERAL ELECTRIC, P & S, LEVITON, HUBBELL, OR APPROVED EQUAL (COORDINATE COLOR SELECTION WITH

1) WALL SWITCHES: THREE AND FOUR-WAY SWITCHES SHALL BE OF THE SAME MANUFACTURER AND GRADE.

- RECEPTACLES: GFCI SHALL BE #GFCS20 RATED 20 AMPERE,
- DIMMERS: 600/1000/1500/2000 WATTS AS REQUIRED BY JOB ONDITIONS. LUTRON 'NOVA' SERIES OR EQUAL.
- DEVICE PLATES: ARROW HART SWITCH PLATES SI-S6 SERIES. ARROW HART RECEPTACLE PLATES S8. ARROW HART TELEPHONE BLANK PLATES S14.
- WIRING DEVICE COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.
- PROVIDE TOTALLY ENCLOSED, 20 AMPERE, 120/277 VOLT, QUIET A/C GENERAL USE SNAP SWITCHES.
- SWITCHES SHALL BE SPECIFICATION GRADE AS MANUFACTURED BY HUBBELL, P&S, LEVITON, OR APPROVED EQUAL.

PROVIDE NEMA CONFIGURATION 5-20R DUPLEX 125 VOLT GROUNDING TYPE RECEPTACLES RATED FOR 20 AMPERES U.N.O. ON THE DRAWINGS.

F. RECEPTACLES SHALL BE SPECIFICATION GRADE AS MANUFACTURED BY HUBBELL, P&S, LEVITON, OR APPROVED EQUAL.

- RECEPTACLES REQUIRING AMPERAGES, VOLTAGES OR CONFIGURATIONS DIFFERENT FROM THE DUPLEX CONVENIENCE RECEPTACLES ABOVE SHALL BE AS INDICATED ON THE DRAWINGS.
- PROVIDE OTHER RECEPTACLES OF A QUALITY, MATERIAL AND WORKMANSHIP EQUAL TO THAT SPECIFIED FOR DUPLEX CONVENIENCE RECEPTACLES.
- PROVIDE COVER OR DEVICE PLATES FOR OUTLET BOXES AS FOLLOWS UNLESS OTHERWISE NOTED:
- 1.8a FINISHED AREAS: THERMOPLASTIC-COLOR TO MATCH

UNFINISHED AREAS: ZINC COATED SHEET METAL, ALUMINUM, OR CAST METAL AS APPROPRIATE FOR THE TYPE OF BOX.

H. EXTERIOR AREAS: COPPER FREE ALUMINUM WITH GRAY, POWDER EPOXY FINISH GASKET WEATHERPROOF CROUSE-HINDS "WLRD" FOR DUPLEX RECEPTACLES AND "WLRS" FOR SINGLE RECEPTACLES OR APPROVED EQUAL.

TELEPHONE COMMUNICATIONS, AND SIGNAL OUTLET PLATES, SHALL MATCH THOSE USED FOR RECEPTACLES AND SWITCHES. ALL OUTLET AND/OR JUNCTION BOXES SHALL BE COMPLETE WITH A COVER PLATE BY THIS

WHERE DEVICES ARE GANGED, THEY SHALL BE INSTALLED UNDER A COMMON COVER PLATE.

K. LOCATE THE SWITCHES APPROXIMATELY 4'-0" ABOVE THE FINISHED FLOOR ELEVATION OR NEAREST BLOCK COURSE (WITHIN A.D.A. REQUIREMENTS), U.N.O. THE LONG DIMENSION OF THE SWITCHES SHALL BE VERTICAL.

LOCATE RECEPTACLES APPROXIMATELY 1'-6" ABOVE THE FINISHED FLOOR ELEVATION OR NEAREST BLOCK COURSE (WITHIN A.D.A. REQUIREMENTS), U.N.O. THE LONG DIMENSION OF RECEPTACLES SHALL BE VERTICAL.

SECTION 16500 - LIGHTING

A. ALL LIGHTING SHALL BE LED TYPE, U.N.O.

PROVIDE A COMPLETE LIGHTING FIXTURE AT EACH LOCATION INDICATED ON THE DRAWINGS. FIXTURES SHALL BE SPECIFIED ON THE LIGHTING FIXTURE SCHEDULE ON THE DRAWINGS.

- EACH FIXTURE SHALL BE COMPLETELY EQUIPPED WITH LAMPS OF THE SIZE, TYPE, WATTAGE AND SHAPE INDICATED AND SPECIFIED. ALL LAMPS SHALL BE MANUFACTURED BY THE GENERAL ELECTRIC CO., PHILIPS LIGHTING CO., VENTURE LIGHTING INTERNATIONAL, SYLVANIA/OSRAM CORPORATION OR APPROVED EQUAL. LUMEN OUTPUT AND LIFE OF LAMPS SHALL BE EQUIVALENT TO THE GENERAL ELECTRIC LAMP OF THAT TYPE AND WATTAGE. EXACT VOLTAGE SHALL BE CHECKED BEFORE ORDERING LAMPS.
- THE CONTRACTOR SHALL CONSULT THE CEILING CONTRACTOR AND ARCHITECT'S DRAWINGS FOR APPROVED REFLECTED CEILING PLANS BEFORE ORDERING FIXTURES TO INSURE THAT ALL ARE COMPATIBLE WITH THE CEILING SYSTEM AND PROPERLY LOCATED. VERIFY THAT ADEQUATE CLEARANCE FOR INSTALLATION, MAINTENANCE, AND HEAT DISSIPATION IS AVAILABLE.

PROVIDE A MINIMUM OF TWO (2) GALVANIZED STEEL #12 GAUGE HANGER WIRES (ALTERNATE CORNERS) ON ALL RECESSED FIXTURES.

CONTRACTOR SHALL PROVIDE ADDITIONAL EXIT LIGHTS AND EMERGENCY BATTERY PACK WITH DUAL HEADS AS NEEDED TO MEET FIRE MARSHAL'S WALK-THROUGH AND ACCEPTANCE.

CONNECT EXIT LIGHTS. EMERGENCY BATTERY UNITS AND NIGHT LIGHTS (NL) TO UNSWITCHED PORTION OF LIGHTING CIRCUIT SERVING RESPECTIVE AREA.

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CLAYTON LUCAS NUMBER ON PE-2024000504 /

REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

DO NOT SCALE DRAWINGS.

ISSUE DATE DESCRIPTION

PRO	JECT INF	ORMATION

DRAWN BY: CHECKED BY: SHEET TITLE

PROJECT NO:

SCALE:

ORIGINAL ISSUE

ELECTRICAL SPECIFICATIONS

24-0087

09/06/2022

AS NOTED

SHEET NUMBER

Project Information

2018 IECC Energy Code: Project Title: Salad & Go Project Type: **New Construction**

Construction Site: Owner/Agent: Designer/Contractor: 610 NW Chipman Road Gemini Engineering Group 101 Nightlinger Ln Milsap, TX 76066 Lee's Summit, MO Additional Efficiency Package(s) (817) 901-5191

Credits: 1.0 Required 1.0 Proposed Reduced Lighting Power 1.0 credit

Reduced Lighting Fower, 1.0 credit	
Allowed Interior Lighting Power	
Α	
Area Category	

50	0.77		38	
61	0.84		51	
486	0.95		462	
99	0.39		39	
Tot	al Allowed W	/atts =	590	
В	С	D	E	
Lamps/	# of	Fixture	(C X D	
Fixture	Fixtures	Watt.		
1	1	36	36	
1	1	36	36	
1	1	36 36		
1	1		36 36	
1 1 1	1 1 8			
	61 486 99 Tot B Lamps/	61 0.84 486 0.95 99 0.39 Total Allowed W	61 0.84 486 0.95 99 0.39 Total Allowed Watts = B C D Lamps/ # of Fixture	

Floor Area

Allowed

Watts / ft2

Allowed Watts

(B X C)

Interior Lighting PASSES: Design 15% better than code

Interior Lighting Compliance Statement

S4/S4E: S4/S4E: PENDANT: Other:

4-SES (Common Space Types:Electrical/Mechanical)

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Project Title:	Salad & Go	Report date:	04/09/24
Data filename:	C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group - Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit, MO\Design\6_Energy\Salad&GO_Lee's Summit, MO_IECC 2018.cck	Page	1 of 10

CLAYTON LUCAS, P.E.

^	COMcheck Software Version 4.1.5.5
	COMcheck Software Version 4.1.5.5 Exterior Lighting Compliance Certificate

Project Information

2018 IECC Energy Code: Salad & Go Project Title: **New Construction** Project Type: Exterior Lighting Zone 3 (Other (LZ3))

Construction Site: Owner/Agent: Designer/Contractor: 610 NW Chipman Road Gemini Engineering Group Lee's Summit, MO 101 Nightlinger Ln Milsap, TX 76066

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
DRIVE THRU (Free standing/attached sales canopy)	145 ft2	0.6	Yes	87
VALK-UP WINDOW (Entry canopy)	174 ft2	0.4	Yes	70
Parking area (Parking area)	30000 ft2	0.06	Yes	1800
	Total Tradable Watts (a) =		1957	
		Total All	owed Watts =	1957
	Total All	owed Supplement	tal Watts (b) =	500

(817) 901-5191

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces. (b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power				
A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	(C X D)
DRIVE THRU (Free standing/attached sales canopy 145 ft2): Tradable Wattage D: D: RECESSED LED: Other:	1	6	16	96
WALK-UP WINDOW (Entry canopy 174 ft2): Tradable Wattage D: D: RECESSED LED: Other: WS: WS: SCONCE: Other:	1 1	8 2	16 20	128 40
Parking area (Parking area 30000 ft2): Tradable Wattage S1: S1: LED POLE LIGHTS: Other:	1 Total Tra	3 dable Propos	70 sed Watts =	210 474

Exterior Lighting PASSES: Design 81% better than code

Exterior Lighting Compliance Statement Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Project Title: Salad & Go Report date: 04/09/24 Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group -Page 3 of 10 Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit,

MO\Design\6_Energy\Salad&GO_Lee's Summit, MO_IECC 2018.cck

Report date: 04/09/24 Page 2 of 10 Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit,

CLAYTON LUCAS, P.E.



05/30/2024

Report date: 04/09/24

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40

Total Proposed Watts =



Project Title: Salad & Go

COMcheck Software Version 4.1.5.5

is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Inspection Checklist Energy Code: 2018 IECC

Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group -

MO\Design\6_Energy\Salad&GO_Lee's Summit, MO_IECC 2018.cck

Requirements: 100.0% were addressed directly in the COMcheck software Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C103.2 [PR8] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

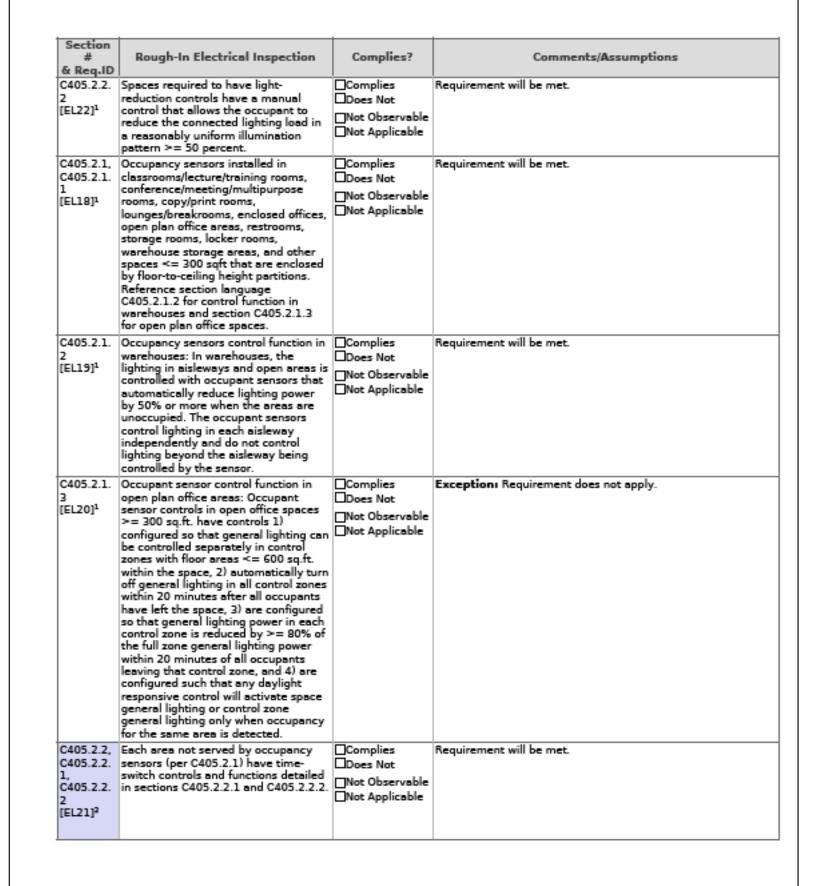
1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group -

Additional Comments/Assumptions:

Project Title: Salad & Go



	1 High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tie
Title:	Salad & Go				

Report date: 04/09/24 Page 5 of 10

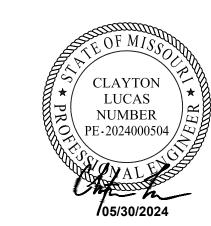
Report date: 04/09/24 Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit,
MO\Design\6_Energy\Salad&GO_Lee's Summit, MO_IECC 2018.cck Page 6 of 10



CHIPMAN RO

PROTOTYPE

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REVISION SET

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS. ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: 24-0087 ORIGINAL ISSUE: 09/06/2022 AS NOTED SCALE: DRAWN BY: CHECKED BY:

SHEET TITLE

LIGHTING ENERGY **FORMS**

SHEET NUMBER

E112

Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group -

Project Title: Salad & Go

Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit,

MO\Design\6_Energy\Salad&GO_Lee's Summit, MO_IECC 2018.cck

Section # & Reg.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3. 1,	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Sidelit zones on first floor in Group A-2 and M occupancies.
C405.2.4 [EL26] ¹	Separate lighting control devices for specific uses installed per approved lighting plans.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.4 [EL27] ¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.5 [EL28] ^{null}	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.6 [EL30] ^{null}	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.3 [EL6] ¹	Exit signs do not exceed 5 watts per face.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.6 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	Complies Does Not Not Observable Not Applicable	Requirement will be met.
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.9 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Report date: 04/09/24

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Project Title: Salad & Go

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: Salad & Go Report date: 04/09/24 Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit,
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Final Inspection Complies? Comments/Assumptions C303.3, Furnished O&M instructions for □Complies Requirement will be met. C408.2.5. systems and equipment to the building owner or designated ☐Does Not □Not Observable □Not Applicable [FI17]3 representative. ☐Complies C405.4.1 Interior installed lamp and fixture See the Interior Lighting fixture schedule for values. [F118]¹ lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed C405.5.1 Exterior lighting power is consistent | Complies | S |

[FI19]¹ With what is shown on the approved | Does Not |

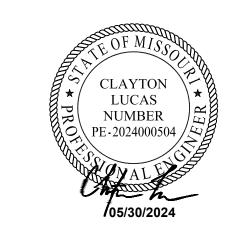
lighting plans, demonstrating | Not Observable |

proposed watts are less than or equal to allowed watts. See the Exterior Lighting fixture schedule for values. C408.1.1 Building operations and maintenance Complies Requirement will be met. [FI57]¹ documents will be provided to the owner. Documents will cover manufacturers' information, ☐Not Observable ☐Not Applicable specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. electric power systems within 90 days of system acceptance. C408.2.5. Furnished as-built drawings for Requirement will be met. ☐Not Applicable C408.3 Lighting systems have been tested to Complies [FI33]¹ ensure proper calibration, adjustment, programming, and operation. Requirement will be met. ☐Not Observable ☐Not Applicable Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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ISSUE DATE DESCRIPTION

PROJECT INFORMATION PROJECT NO: ORIGINAL ISSUE: AS NOTED SCALE:

24-0087

12/13/23

SHEET TITLE

DRAWN BY: CHECKED BY:

LIGHTING ENERGY **FORMS**

SHEET NUMBER

E113

Project Title: Salad & Go Report date: 04/09/24 Data filename: C:\Users\jbour\Gemini Engineering Group\Gemini Engineering Group Documents\Projects\Retail_Commerical\Salad and Go\2024\24-001-05 Lee Summit,
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