JONATHAN MASSEY **BULL STREET TACO** 1608 BULL STREET SAVANNAH, GA 31401 (912) 660-5411 JON@BULLSTREETTACO.COM

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PROJECT TEAM

ARCHITECT

ROSE ARCHITECTS 311 MAUPAS AVE SAVANNAH, GA 31401 KEVIN ROSE PHONE: 912 484 5967 EMAIL: KEVIN@ROSEARCH.CO

GENERAL CONTRACTOR

JTVS BUILDERS 7 EAST CONGRESS STREET, SUITE 309 SAVANNAH, GA 31401 PHONE: 912 233 1717 FAX: 912 662 5227

MECHANICAL, ELECTRICAL, PLUMBING

METHOD ENGINEERING GROUP 2 EAST BRYAN STREET, SUITE 1500C SAVANNAH, GA, 31401 PHONE: 912 963 1611 INFO@METHODEG.COM

STRUCTURAL

SAPP STRUCTURAL 226 KENSINGTON DRIVE SAVANNAH, GA 31405 PHONE: 912 704 2170 EMAIL:

SYMBOLS

Area Tag	Room name 150 SF
Callout Head	1 A101 SIM
Centerline	Ę
Door Tag	<u> 101</u>)
	0
	?
Level Head	Name Elevation
	_1
	Room name
	101
	Room name
	101
	150 SF
	150 SF
tructural Beam	+
System Tag	Beam Type @ Spacing
System Tag	+
System Tag	Beam Type @ Spacing
System Tag liew Reference	Beam Type @ Spacing
System Tag View Reference Window Tag	Beam Type @ Spacing 1 / A101
System Tag /iew Reference Window Tag	Beam Type @ Spacing 1 / A101 1t 1i Indicates direction of drawing Indicates drawing
System Tag /iew Reference Window Tag	Beam Type @ Spacing 1 / A101 1i Indicates direction of drawing Indicates drawing number on sheet
View Reference Window Tag Wall Tag	Beam Type @ Spacing 1 / A101 1i Indicates direction of drawing Indicates drawing number on sheet Indicates sheet number where drawn
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COVER SHEET

Proposed Use:

PROJECT INFORMATION **Bull Street Taco Bar Expansion**

1608 Bull Street Savannah, GA 31401 Restaurant Expansion Owner/Authorized Agent: Jonathan Massey

> Phone: 912 660 5411 Email: jon@bullstreettaco.com City Savannah County

PROJECT SUMMARY **Building Description:**

Improvements and retrofit of existing street-level retail space on Bull Street in Savannah Georgia. The space will serve as a bar expansion to the adjacent

3 DESIG	GN CONSULTANTS		
CONSULTANT	FIRM	CONTACT / LICENSE #	EMAIL / PHONE
Architectural	Rose Architects	Kevin Rose	kevin@rosearch.co
		GA# 012436	912 308 4622
Civil	n/a	n/a	n/a
Electrical	Method Engineering	Chris Schaffer	cshaffer@MethodEG.com
		GA - PEQ 41545	912 963 1611
Fire Alarm	Method Engineering	Chris Schaffer	cshaffer@MethodEG.com
		GA - PEQ 41545	912 963 1611
Plumbing	Method Engineering	Andrew Mckeever	amckeever@MethodEG.com
		GA# 40556	912 963 1611
Mechanical	Method Engineering	Andrew Mckeever	amckeever@MethodEG.com
		GA# 40556	912 963 1611
Structural	Sapp Structural	Brian Sapp	bsapp@sappstructural.com
		GA - SE000802	912 963 1611
Landscaping	n/a	n/a	n/a

TYPE OF WORK BEING PERFORMED

New Construction: (A project from the site work through the completion of work required for tenant occupancy) This includes Shell buildings.) Addition: (An Existing Building that is adding heated or unheated space. This could be in addition to the footprint or a vertical expansion) Upfit: (First Time Interior Completition) (The first time interior completion of a never occupied shell space in a new building.)

Alteration/Renovation: (Previously Occupied Space)

APPLICABLE CODES

Building Code:

- 2018 International Building Code (IBC) 2020 National Electrical Code 20015 International Energy Conservation Code 2018 Life Saftey Code (LSC) - NFPA 101
- 2018 International Mechanical Code 2018 International Plumbing Code
- 2012 International Fire Code 2010 ADA Standards for Accessible Design

New Building: New Building

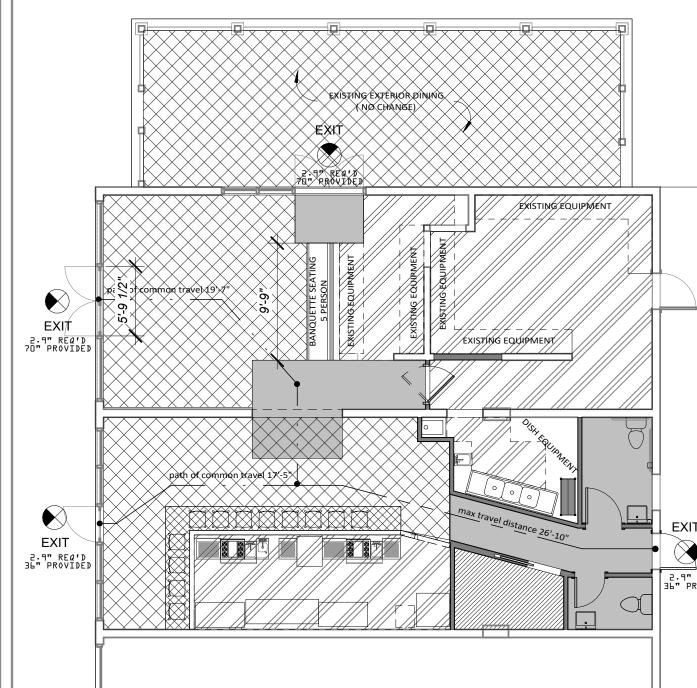
Shell Building

BASIC BUILDING

1 \ 1ST FLOOR LIFE SAFETY

 \backslash G1.0 / 1/8" = 1'-0"

○ NFPA 13-07 ○ NFPA 13R-07 ○ NFPA 13D-07 ○ No ○ Yes Class: ○ I ○ II ○ III ○ Wet ○ Dry



Gross Building Area:

FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	SUBTOTAL (SQ. FT.)
EVEL 01	807	815	1622

7	ALLC	OWABLE AREA	OCCUPANC	CY CLASSIFICA	TION * G	ROSS SF - 2076 SF
Occupancy:						
Assembly	(303)	O A-1	A-2	○ A-3	O A-4	○ A-5
Business	(304)	Ов				
Educational	(305)	○ E				
Factory	(306)	F-1 Moderate	F-2 Low			
Hazardous	(307)	H-1 Detonate	H-2 Deflagrate	H-3 Combust	H-4 Health	○ H-5 HPM
Institutional	(308)	○ I-1	○ I-2	○ I-3	◯ I-4	
I-3 Con	dition	○ ι	O 2	<u></u> 3	O 4	O 5
Mercantile	(309)	Ом				
Residential	(310)	O R-1	○ R-2	○ R-3	O R-4	
Storage	(311)	S-1 Moderate	S-2 Low			High-piled
		O Parking Garage	Open	○ Enclosed	Repair Garage	
Util. & Misc.	(312)	Ου				

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS (NFPA 101 7.4 & 7.5)

FLOOR, ROOM OR SPACE DESIGNATION		MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE		ENT MEANS OF ESS
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE BETWEEN EXIT DOORS
ASSEMBLY (A-2)	2	4	200'	26'-10"	N/A	N/A

	,		
USE GROUP OR SPACE	(a)	(b)	
DESCRIPTION	AREA sq. ft	AREA	CAI

USE GROUP OR SPACE	(a) (b) (c			(c) EXIT WIDTH (IN)						
DESCRIPTION	AREA sq. ft.	AREA per occupant			PER OCCUPANT		REQUIRED WIDTH (SECTION 1005.1) (a/b) x c		ACTUAL WIDTH SHOWN ON PLANS	
			, , ,	Stair	Level	Stair	Level	Stair	Level	
BUSINESS	51 SF	100 GROSS	1 PERSON	N/A	0.2"	N/A	.2"	N/A	138"	
CONCENTRATED SEATING	56 SF	7 NET	8 PEOPLE	N/A	0.2"	N/A	1.6"	N/A	138"	
KITCHEN	600 SF	200 GROSS	3 PEOPLE	N/A	0.2"	N/A	.6"	N/A	138"	
SEATING (less concentrated) + BANQUETTE SEATING	605 SF	15 SF NET	41 PEOPLE + 5 PEOPLE	N/A	0.2"	N/A	9.2"	N/A	138"	
TOTAL REQ'D WIDTH						N/A	11.6"	N/A	138"	
			58 PEOPLE					'/4 EXITS		
EXTERIOR DINING	517 SF	15 SF NET	35 PEOPLE			=	2.9	REQ'D @ E	ACH EXII	

2. Minimum stairway width (Section 7.2.2.2); min. door width (Section 7.2.1.2)

PLUMBING FIXTURE REQUIREMENTS If using fixtures one floor above or one floor below, show calculations to justify the count (TABLE 2902.1)

OCCUPANCY USE GROUP	WATERCLOSETS		URINALS	LAVA	TORIES	SHOWERS /	
AND/OR SPACE DESIGNATION	MALE	FEMALE		MALE	FEMALE	TUBS	DRINKING FOUNTAIN
ASSEMBLY A-2	1 PER 75	1 PER 75	0	1 PER	200	N/A	N/A

PARKING REQUIREMENTS

	Total # of P	Parking Spaces	# of Accessible Spaces Provided Regular w/ 5' Access Aisle Regular w/ 5' Access Aisle			
Lot or Parking Area	Required	Provided	Regular w/5'	DEMENT	- 2195 Sr	Total # Accessible Provided
	Required	Tiovided	SPACE REC	Access Aisle	8' Access Aisle	
	CTF	REET PARKIN				
MINING	JM OFF-511					
MO M						

LIFE SAFETY NOTES

- SEE ELECTRICAL PLANS FOR EMERGENCY LIGHTING LOCATIONS.
- PROVIDE DOOR CLOSER AND EGRESS PANIC HARDWARE FOR ALL EGRESS DOORS AS SPECIFIED.
- CONTRACTOR SHALL COORDINATE ALL EXIT LIGHTS AND EMERGENCY LIGHTING WITH E3.1

LIFE SAFETY KEY

XX WIDTH REQ'D XX WIDTH PROVIDED

 PATH OF COMMON TRAVEL
 MAX TRAVEL DISTANCE
EXIT DESIGNATION AND

LIFE CAFETY LEGENID

LIFE	SAFELL LEGEND	,
	OFFICE - 51SF / 100gross = .51	1 PERSON
	CIRCULATION/RESTROOMS - 259 - n/a	
	KITCHEN / WORK AREA 600sf / 200gross OLF = 3	3 PEOPLE
	LINICONICENITRATED SEATING	

REQ'D EGRESS WIDTH

UNCONCENTRATED SEATING - 605 SF / 15net OLF = 40.3 41 PEOPLE + 5 BOOTH

CONCENTRATED SEATING - 56 / 7net OLF = 8

TOTAL OCCUPANT LOAD 58 PEOPLE +35 PEOPLE EXTERIOR DINING 93 PEOPLE

8 PEOPLE

PROJECT DESCRIPTION

BUILDING IMPROVEMENTS:

THIS PROJECT CONSIST OF AN EXPANSION OF AN EXISTING COMMERCIAL SPACE. THE SPACE WILL BE USED AS A BAR COMPONENT TO A PREVIOUSLY EXISTING RESTAURANT. RENOVATIONS INCLUDE THE ADDITION OF A BATHROOM DISH AREA, OFFICE AND MODERATE RECONFIGURATION OF EXISTING SPACE.

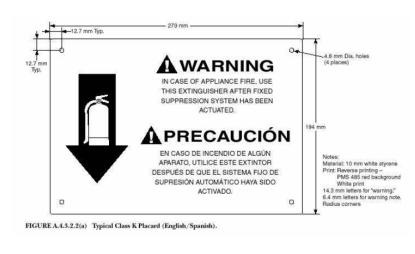
VICINITY MAP: NTS



EXTINGUISHERS

PORTABLE FIRE EXTINGUISHER REQUIREMENTS

- 1. ALL PORTABLE FIRE EXTINGUISHERS SHALL COMPLY WITH THE LOCAL FIRE DEPARTMENT AND THE NFPA 10 STANDARD FOR PORTABLE FIRE EXTINGUISHERS.
- 2. FIRE EXTINGUISHER SIZE AND PLACEMENT SHALL COMPLY WITH TABLE 5.2.1. OF NFPA 10 UNDER ORDINARY HAZARD. 3. PROVIDE CLASS A MULTIPURPOSE DRY-CHEMICAL TYPE IN STEEL
- CONTAINER: UL-RATED 4-A:60-B:C, 10-LB NOMINAL CAPACITY, WITH MONOAMMONIUM PHOSPHATE-BASED DRY CHEMICAL IN ENAMELED-STEEL CONTAINER.
- 4. FIRE EXTINGUISHERS SHALL BE CONSPICUOUSLY LOCATED WHERE THEY WILL BE READILY ACCESSIBLE AND IMMEDIATELY AVAILABLE
- 6. ALL FIRE EXTINGUISHERS SHALL BE TESTED AND OPERATIONAL PRIOR TO PROJECT COMPLETION.

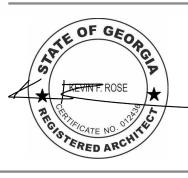


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PROJECT INFORMATION

FOR CONSTRUCTION

ADA CLEARANCES:

60 min

60 in (1525 mm) Diameter Space

48 min

Clear Floor Space

NOTE: X < 24 in

NOTE: If X > 24 in (610 mm) then an

(150 mm) shall be provided as shown

additional maneuvering clearance of 6 in

Fig 3 Wheelchair Turning Space

30 min

Forward Approach

Clear Floor Space in Alcoves

Additional Maneuvering Clearances in Alcoves

Fig 4

Minimum Clear Floor Space for Wheelchairs

Fig 24

Clear Doorway Width and Depth

- - - - - - - - - -

Parallel Approach

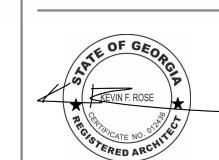
NOTE: X < 15 in (380 mm)

NOTE: If X > 15 in (380 mm) then an

(305 mm) shall be provided as shown

additional maneuvering clearance of 12 in

ARCHITECTS



GENERAL ADA NOTES:

1. ALL PROPOSED WORK TO COMPLY WITH APPLICABLE REQUIREMENTS OF ADA FOR HANDICAPPED ACCESSIBILITY.

2. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST, AS PER RS 4-6, 4.25.4.

3. ACCESSIBLE ROUTES TO BE PROVIDED BETWEEN FACILITIES ON THE GROUND FLOOR, PROVIDING A MINIMUM OF 36 INCHES OF WIDTH ALONG THE ACCESSIBLE ROUTE AS PER RS 4-6, 4.3.1 AND A MINIMUM OF 32 INCHES OF WIDTH AT DOORWAYS, AS PER 4-6, 4.13.5.

4.2 SPACE ALLOWANCES AND REACH RANGES

a. A CLEAR FLOOR SPACE OF 30"X48" SHALL BE PROVIDED FOR FORWARD AND PARALLEL APPROACHES SEE FIG. 4.

60" DIAMETER SPACE SHALL BE PROVIDED FOR WHEELCHAIR TURNING SEE

<u>4.8 RAMPS</u>

THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION SHALL BE 1:12

MAXIMUM RISE OF ANY SLOPE SHALL BE 30" THE CLEAR WIDTH (BETWEEN HANDRAILS) SHALL BE 36"

LANDINGS LOCATED AT THE BOTTOM AND TOP OF EACH RUN SHALL BE AT LEAST AS WIDE AS THE WIDEST PART OF THE RAMP AND THE LENGTH SHALL BE 60" CLEAR.

DIRECTION CHANGES AT LANDINGS SHALL HAVE A MINIMUM SIZE OF 60"X60"

IF A DOORWAY IS LOCATED AT A LANDING, THEN THE AREA IN FRONT OF THE DOORWAY SHALL COMPLY WITH 4.13.6.

4.8.5. HANDRAILS

PROVIDE HANDRAILS ON BOTH SIDES OF RAMP SEGMENTS. THE CLEAR SPACE BETWEEN HANDRAIL AND THE WALL SHALL BE 1-1/2".

THE GRIPPING SURFACE SHALL BE 1-1/4" OR 1-1/2" DIAMETER. THE TOP OF THE GRIPPING SURFACE SHALL BE MOUNTED BETWEEN 30"

AND 34" ABOVE THE RAMP SURFACE.

4.13 DOORS

DOORWAYS SHALL HAVE A MINIMUM CLEAR OPENING OF 32" WITH THE DOOR OPEN 90 DEGREES MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP. FOR CLEARWAY WIDTH AND DEPTH SEE FIG. 24.

4.15 DRINKING FOUNTAINS

a. THE SPOUT HEIGHT SHALL BE NO HIGHER THAN 36" ABOVE THE FLOOR.

FOR MANEUVERING CLEARANCES AT DOORS SEE FIG. 25.

4.16 WATER CLOSETS

THE HEIGHT OF WATER CLOSETS SHALL BE 17" TO 19" ABOVE THE FLOOR THE TOP OF THE TOILET SEAT. FOR HEIGHTS AND CONFIGURATIONS OF GRAB BARS SEE FIG. 29 AND FOR STALLS SEE FIG. 30.

4.19 LAVATORIES AND SINKS

LAVATORIES SHALL BE MOUNTED WITH A CLEARANCE OF 29" FROM THE FLOOR TO THE BOTTOM OF THE APRON. KNEE AND TOE CLEARANCES TO COMPLY WITH FIG 31.

SINKS SHALL BE MOUNTED WITH THE COUNTER OR RIM NO HIGHER THAN

FROM THE FLOOR. A CLEAR FLOOR SPACE OF 30"X48" SHALL BE PROVIDED IN FRONT OF A LAVATORY OR SINK TO ALLOW A FORWARD APPROACH AND TO COMPLY

WITH FIG. 32. HOT WATER AND DRAIN PIPES UNDER LAVATORIES OR SINKS SHALL BE

4.21 SHOWER STALLS

INSULATED.

SHOWER STALL SIZE AND CLEAR FLOOR SPACE IN FRONT SHALL COMPLY

WITH FIG. 35. A SHOWER SEAT SHALL BE PROVIDED IN A STALL 36"X36".

GRAB BARS SHALL BE PROVIDED AND COMPLY WITH FIG 37.

Fig 28 **Clear Floor Space at Water Closets**

ADA RESTROOM REQUIREMENTS:

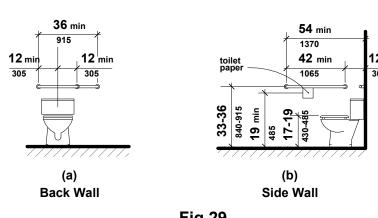
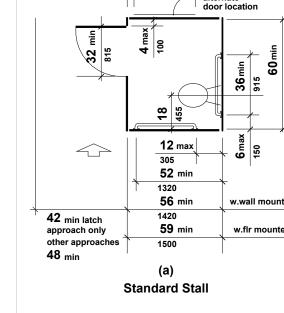
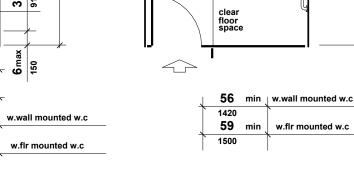
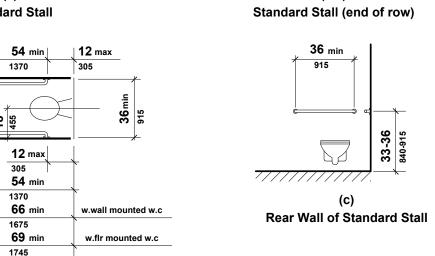
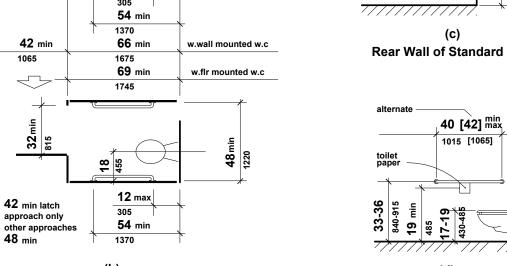


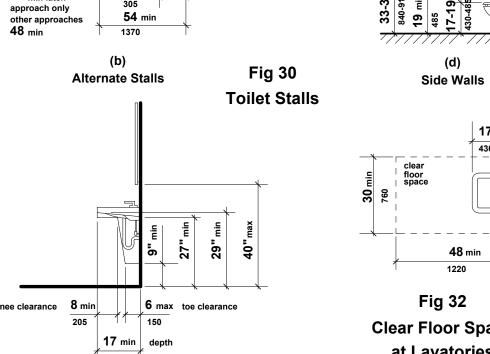
Fig 29 **Grab Bars at Water Closets**

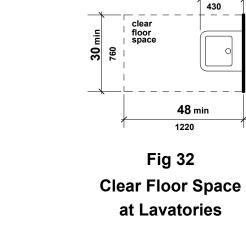




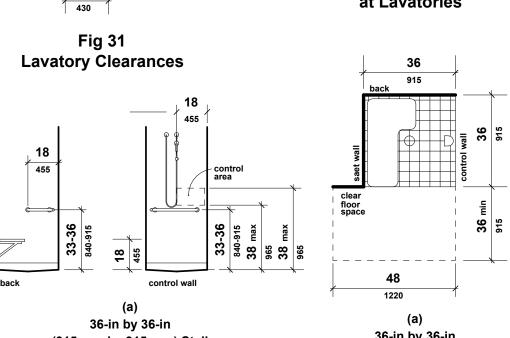


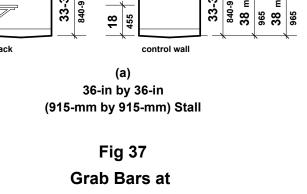






17 min





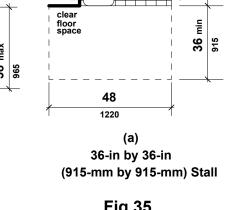
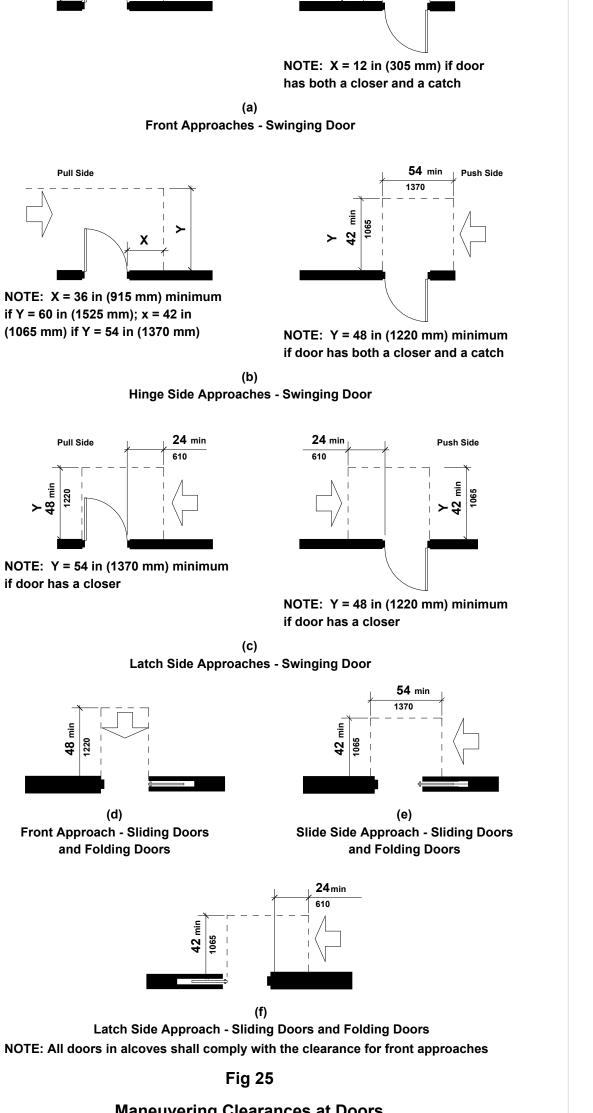


Fig 35 **Shower Size** and Clearances



Front Approaches - Swinging Door

Hinge Side Approaches - Swinging Door

Latch Side Approaches - Swinging Door

Fig 25

Maneuvering Clearances at Doors

if door has a closer

Pull Side

NOTE: X = 36 in (915 mm) minimum

NOTE: Y = 54 in (1370 mm) minimum

Front Approach - Sliding Doors

and Folding Doors

if door has a closer

if Y = 60 in (1525 mm); x = 42 in

(1065 mm) if Y = 54 in (1370 mm)

Fig 23 **Car Controls** railing with extended platform

Fig 17

ADA VERTICAL CIRCULATION:

Minimum Dimensions of Elevator Cars

octagon symbol

shall be tactual,

Control Height

Alternate Locations of Panel

with Side Opening Door

door open NN O

Alternate Locations of Panel

with Center Opening Door

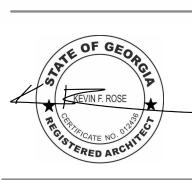
Panel Detail

Examples of Edge Protection and Handrail Extensions

Shower Stalls

ADA DIAGRAMS





ILL STREET TACO EXPANSIC & 1609 BULL STREET, SAVANNAH, GA

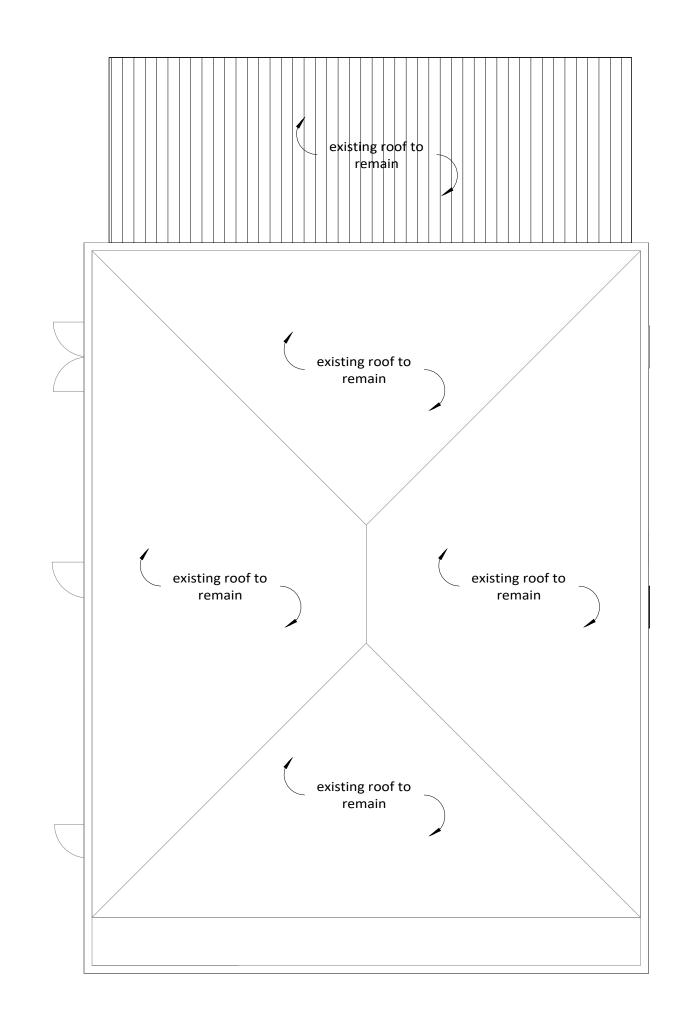
SITE 2102

2102 JK 12 15 22

40.0

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ROOF NOTE: NO CHANGE TO EXISTING ROOF

3 ROOF PLAN A1.0 1/8" = 1'-0"



ROSE



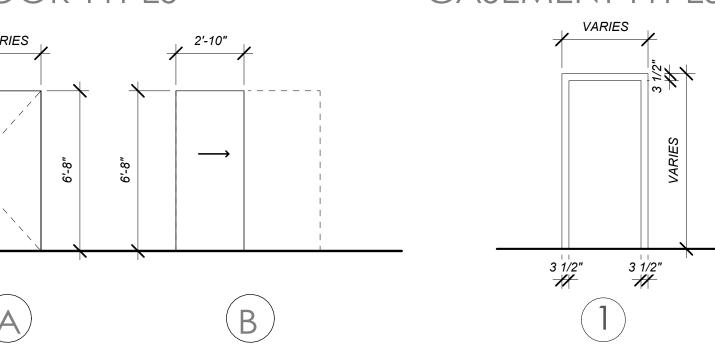
FIRST FLOOR / ROOF
PLAN
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IK

A1.0

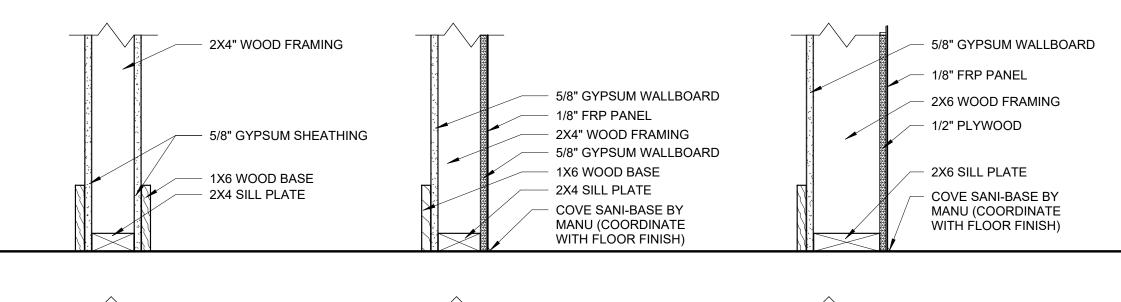
DOOR TYPES

ONSTRU





WALL TYPES



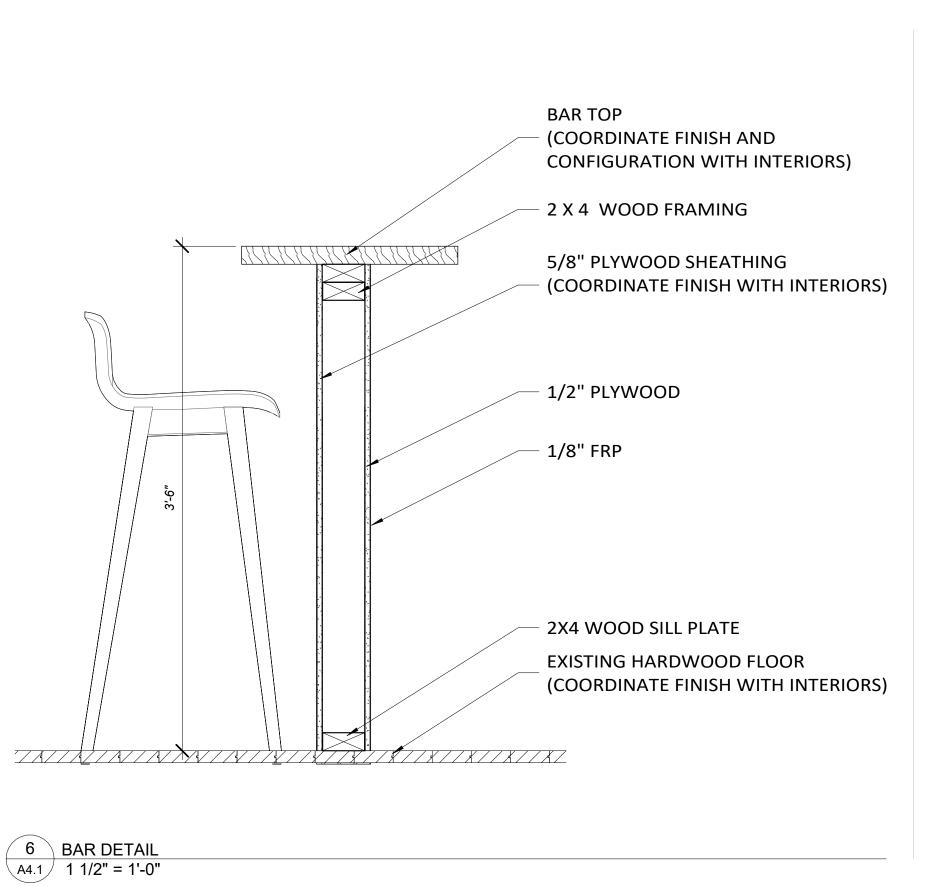


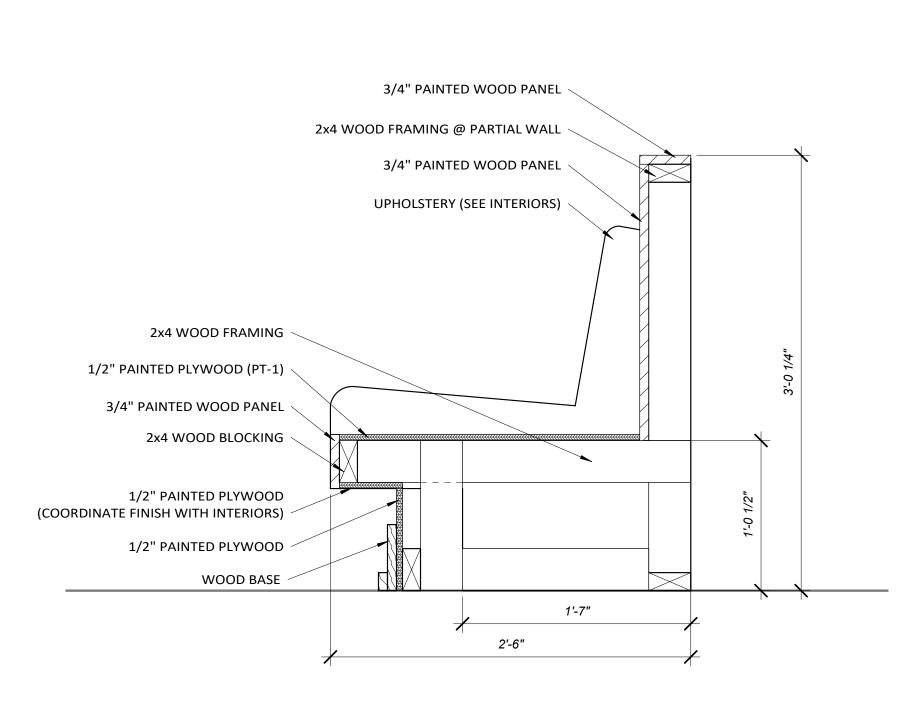


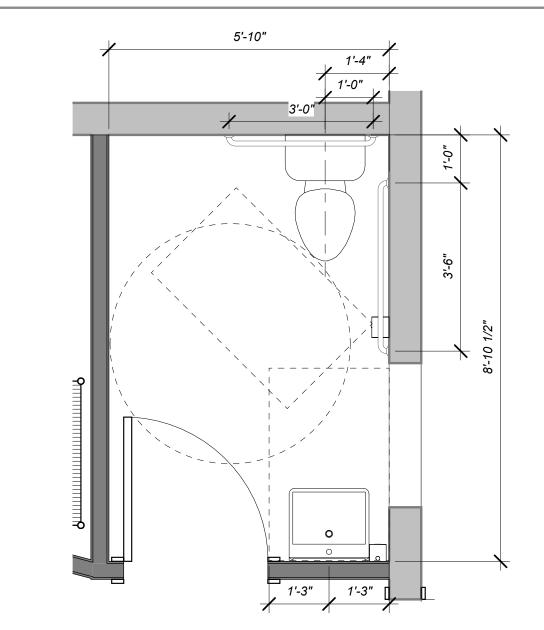


5.5" WOOD STUD WALL 5/8" GYP ONE SIDE FRP OVER 1/2" PLYWD ONE SIDE

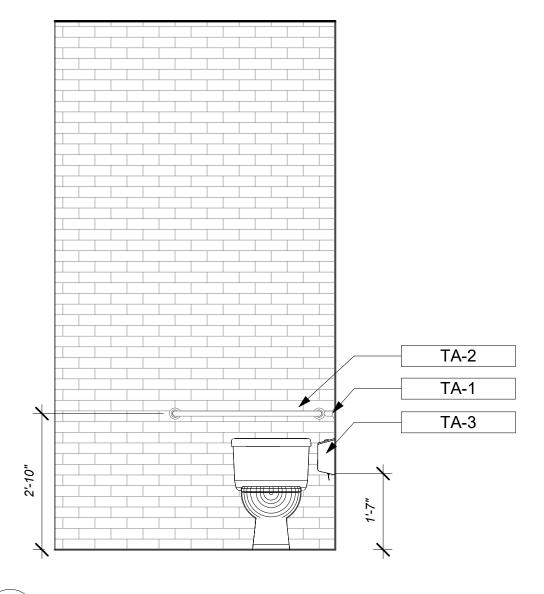
> 7 BOOTH DETAIL 1 1/2" = 1'-0"

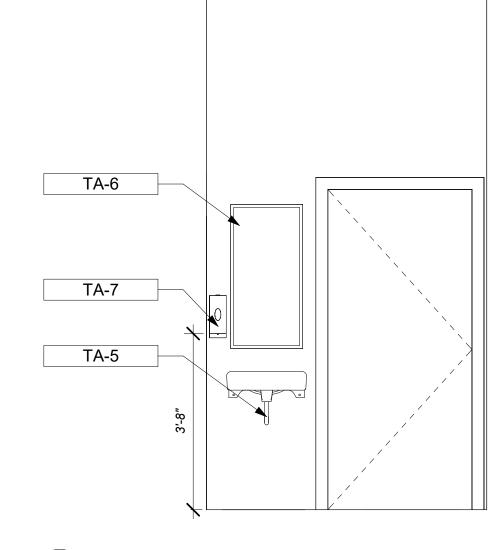


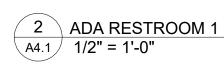




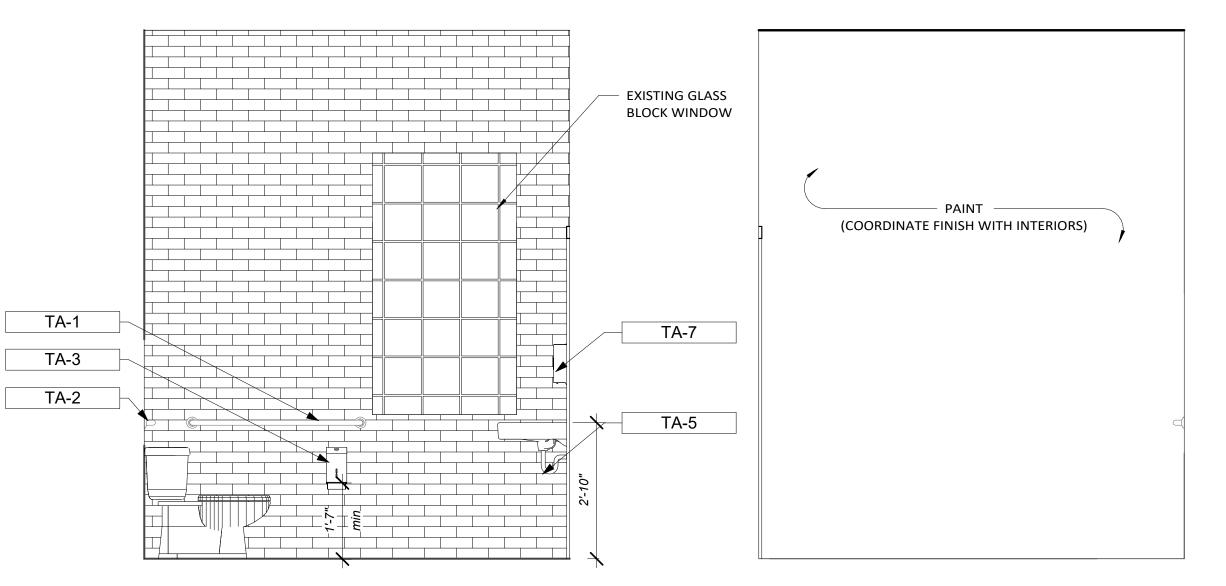




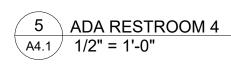




3 ADA RESTROOM 2 A4.1 1/2" = 1'-0"



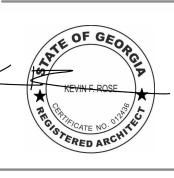
4 ADA RESTROOM 3 A4.1 1/2" = 1'-0"



DECTONM	ACCESSORIES
NE3 I NOUN	ACCESSORIES

Keynote	Description	Model	Comments
TA-1	Traditional 42in ADA compliant grab bar	10545-BS	
TA-2	Traditional 24in ADA compliant grab bar	10544-BS	
TA-3	Bobrick Surface Mounted Toilet Tissue Cabinet - ClassicSeries B-2721	B-2721	
TA-4	NA	NA	
TA-5	ADA UNDERSINK WRAP	TYPICAL	
TA-6	MIRROR W/ ANGLE FRAME	BOBRICK B-290	
TA-7	Bobrick Automatic Wall Mounted Liquid Soap Dispenser - B-2012	B-2012	



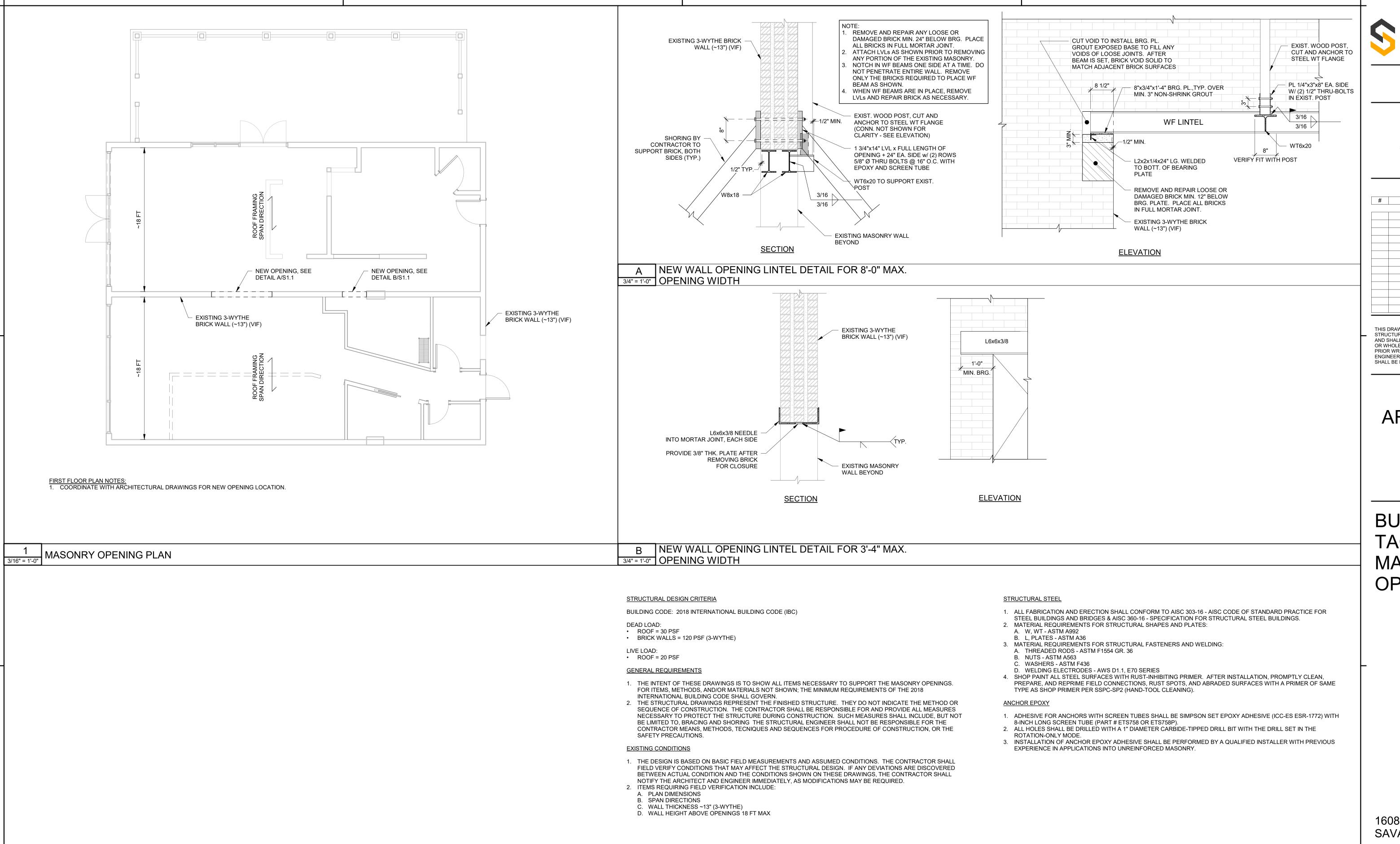


BULL STREET TACO

DOORS / WALL TYPES

2102
JK
12 15 22

A4.1



SAPP STRUCTURAL ENGINEERING INSPECTION

226 KENSINGTON DRIVE SAVANNAH, GA 31405 912.704.2170



	REVISIONS	
#	DESCRIPTION	DATE
	_	

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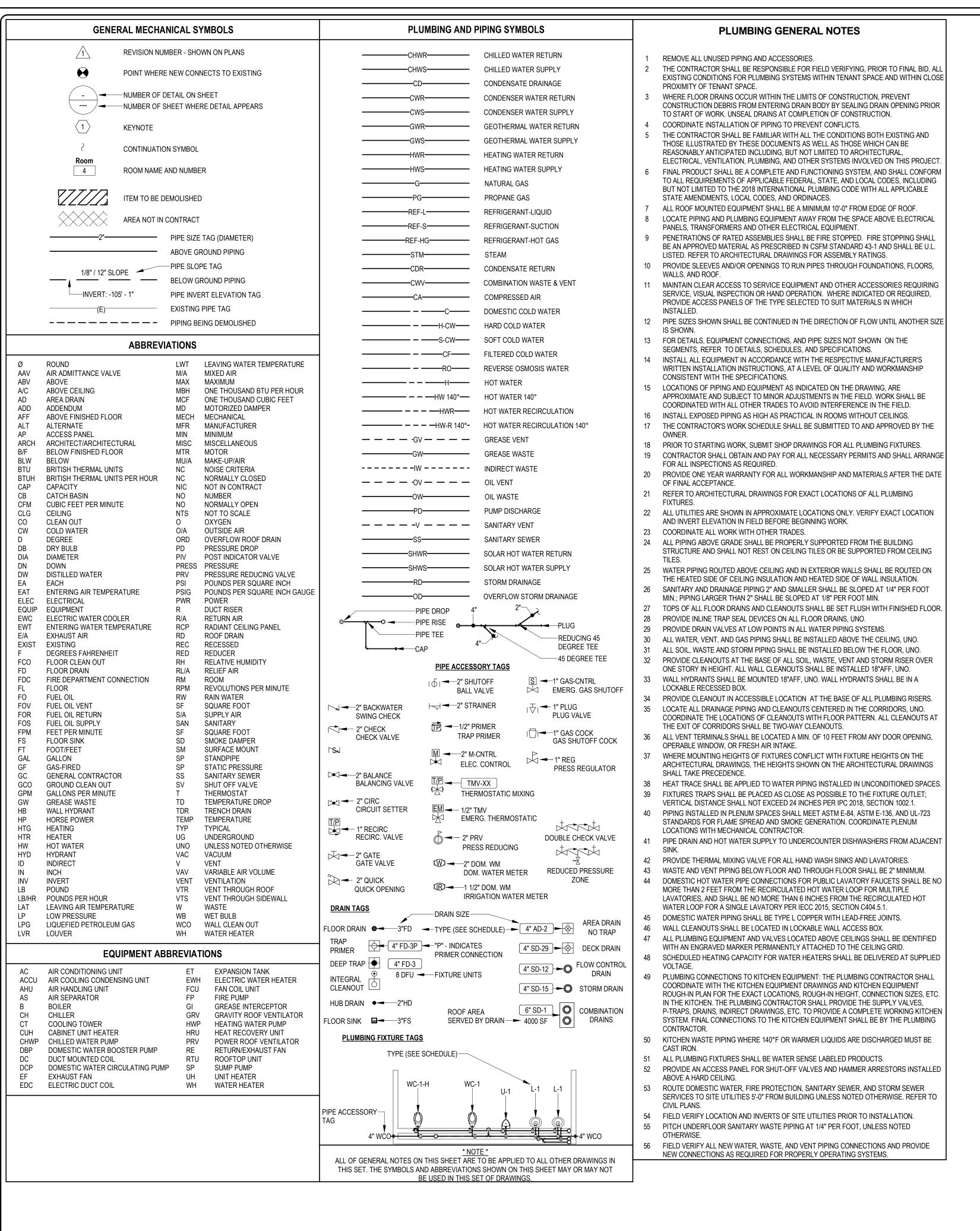
ROSE ARCHITECTS

BULL STREET TACO -MASONRY OPENINGS

1608 BULL STREET, SAVANNAH, GA 31401

MASONRY OP	ENINGS
CHECKED BY	BKS
DRAWN BY	RP
DATE	10/31/22
PROJECT NO.	22.250

S₁



PLUMBING SHEET INDEX

P0.0 PLUMBING TITLE SHEET

P1.1 PLUMBING PLANS

P0.1 PLUMBING SPECS & DETAILS P2.1 PLUMBING RISER DIAGRAMS

						I	DOMESTIC FIXT	TURE SC	HEDULE	Ē	
						TRIM			COLD	НОТ	
ID	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL DESCRIPTION	MANUFACTURER	MODEL	TYPE	WASTE ROUGH-IN PIPE SIZE	WATER ROUGH-IN PIPE SIZE	WATER ROUGH-IN PIPE SIZE	
L-1	LAVATORY	AMERICAN STANDARD	LUCERNE	WHITE VITREOUS CHINA	ZURN	Z81000-XL	SINGLE HANDLE FAUCET, 4" CENTERS, CHROME PLATED	2"	1/2"	1/2"	WALL HUNG WITH BACKSPLASH, VITREOUS CHINA, NOMINAL 20-1/2"x18-1/4", FAUCET HOLES ON 4" CENTERS. FIXTURE EQUALS BY KOHLER, SLOAN & ZURN. FAUCET EQUALS BY CHICAGO & T&S BRASS. DRAIN & P-TRAP BY MCGUIRE, ZURN OR WATTS. SUPPLIES BY MCGUIRE, BRASS CRAFT OR WATTS. INSULATION KIT BY MCGUIRE, TRUEBRO OR SKAL-GUARD. CARRIER BY J.R. SMITH, JOSAM OR ZURN.
WC-1	WATER CLOSET - FLOOR - TANK TYPE	AMERICAN STANDARD	CADET	WHITE VITREOUS CHINA	TANK TYPE			3"	1/2"		ELONGATED BOWL WATER CLOSET. 15"RIM HT. FIXTURE EQUALS BY KOHLER, SLOAN & ZURN. SEAT BY PLUMBTECH, BEMIS OR CENTOCO. SUPPLY BY MCGUIRE, ZURN OR WATTS.
WC-1-H	WATER CLOSET - FLOOR - TANK TYPE - ADA	AMERICAN STANDARD	CADET	WHITE VITREOUS CHINA	TANK TYPE			3"	1/2"		ELONGATED BOWL WATER CLOSET. 18"RIM HT. FIXTURE EQUALS BY KOHLER, SLOAN & ZURN. SEAT BY PLUMBTECH, BEMIS OR CENTOCO. SUPPLY BY MCGUIRE, ZURN OR WATTS.

	DRAIN SCHEDULE										
ID	DESCRIPTION	MANUFACTURER	MODEL	DRAIN BODY	STRAINER	PIPE SIZE	SPECIFICATION				
3"FD	FLOOR DRAIN	WATTS	FD-100-A	EPOXY COATED CAST IRON	NICKEL BRONZE	3"	EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, NO HUB OUTLET.				
3"FS	FLOOR SINK	WATTS	FS-710	EPOXY COATED CAST IRON		3"	8" SQUARE X 6" DEEP SANITARY FLOOR SINK WITH WHITE ACID RESISTANT PORCELAIN ENAMEL COATED INTERIOR, LOOSE SET PORCELAIN ENAMEL COATED CAST IRON 1/2 GRATE, ALUMINUM DOME BOTTOM STRAINER, AND NO HUB OUTLET.				

MANUFACTURER

		GREA	SE INTERCEPTOR SCHEDULE
ID TYPE	MANUFACTURER	MODEL	SPECIFICATION
GI-1	ZURN	GT-2700-35	35 GPM, 70 LB GREASE CAPACITY, CORROSION-RESISTANT COATED FABRICATED STEEL, VENTED INLET FLOW CONTROL DEVICE
GI-2	ZURN	GT-2700-25	25 GPM, 50 LB GREASE CAPACITY, CORROSION-RESISTANT COATED FABRICATED STEEL, VENTED INLET FLOW CONTROL DEVICE

WEIGHT

64 lb

GAS-FIRED WATER HEATER SCHEDULE

GAS-FIRED HEAT

EXCHANGER

GAS BURNER

INPUT

199900 Btu/h

MODEL NO.

CU199eN

HAMMER ARRESTOR SCHEDULE									
TYPE ID	DESCRIPTION								
HA-A	FIXTURE UNIT CAPACITY: 1-11								

TANKLESS, 1-UNIT, EXTERIOR WALL MOUNTED. WH EQUALS

BY RHEEM, A.O. SMITH, NAVIEN & INTELLIHOT.







PLUMBING TITLE Author 11/08/22



GENERAL PROVISIONS

IMPOSED REGULATIONS: APPLICABLE PROVISIONS OF THE STATE AND LOCAL CODES AND OF THE FOLLOWING CODES AND STANDARDS, IN ADDITION TO THOSE LISTED ELSEWHERE IN THE SPECIFICATIONS, ARE HEREBY IMPOSED ON A GENERAL BASIS FOR PLUMBING WORK:

INTERNATIONAL PLUMBING CODE - 2018 EDITION INTERNATIONAL FUEL GAS CODE - 2018 EDITION

SCOPE OF WORK: PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SUPERVISION TO CONSTRUCT COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. ALL MATERIALS AND EQUIPMENT USED SHALL BE NEW, UNDAMAGED AND FREE FROM ANY DEFECTS.

PRODUCT WARRANTIES: PROVIDE MANUFACTURER'S STANDARD PRINTED COMMITMENT IN REFERENCE TO A SPECIFIC PRODUCT AND NORMAL APPLICATION, STATING THAT CERTAIN ACTS OF RESTITUTION WILL BE PERFORMED FOR THE PURCHASER OR OWNER BY THE MANUFACTURER, WHEN AND IF THE PRODUCT FAILS WITHIN CERTAIN OPERATIONAL CONDITIONS AND TIME LIMITS. WHERE THE WARRANTY REQUIREMENTS OF A SPECIFIC SPECIFICATION SECTION EXCEEDS THE MANUFACTURER'S STANDARD WARRANTY, THE MORE STRINGENT REQUIREMENTS WILL APPLY AND MODIFIED MANUFACTURER'S WARRANTY SHALL BE PROVIDED. IN NO CASE SHALL THE MANUFACTURER'S WARRANTY BE LESS THAN ONE (1) YEAR.

ELECTRICAL WORK: COORDINATE THE PLUMBING AND FIRE PROTECTION WORK WITH ELECTRICAL WORK, AND PROPERLY INTERFACE WITH THE ELECTRICAL SERVICE. IN GENERAL, AND EXCEPT AS OTHERWISE INDICATED, INSTALL MECHANICAL EQUIPMENT READY FOR ELECTRICAL CONNECTION. REFER TO ELECTRICAL SECTIONS OF THE SPECIFICATIONS FOR ELECTRICAL CONNECTION OF MECHANICAL EQUIPMENT.

UTILITY CONNECTIONS: COORDINATE THE CONNECTION OF MECHANICAL SYSTEMS WITH EXTERIOR UNDERGROUND UTILITIES AND SERVICES. COMPLY WITH THE REQUIREMENTS OF GOVERNING REGULATIONS, FRANCHISED SERVICE COMPANIES AND CONTROLLING AGENCIES. PROVIDE A SINGLE CONNECTION FOR EACH SERVICE EXCEPT WHERE MULTIPLE CONNECTION ARE INDICATED.

PLUMBING IDENTIFICATION MATERIALS:

PLASTIC PIPE MARKERS: PROJECT MANUFACTURER'S STANDARD PRE-PRINTED, FLEXIBLE OR SEMI-RIGID, PERMANENT, COLOR-CODED, PLASTIC-SHEET PIPE MARKERS, COMPLYING WITH ANSI

PROVIDE FULL BAND PIPE MARKERS, EXTENDING 360 DEGREES AROUND PIPE AT EACH LOCATION, FASTENED BY SNAP-ON APPLICATION OF PRE-TENSIONED SEMI-RIGID PLASTIC PIPE MARKER.

IDENTIFYING SYSTEMS: INSTALL PIPE MARKER ON PIPING OF THE FOLLOWING PIPING SYSTEMS:

DOMESTIC COLD WATER, HOT WATER, AND HOT WATER RETURN PIPING

LOCATE PIPE MARKERS WHEREVER PIPING IS EXPOSED TO VIEW IN MECHANICAL ROOMS, ACCESSIBLE MAINTENANCE SPACES (INCLUDING ACCESSIBLE AREAS ABOVE CEILINGS), NEAR EACH VALVE AND CONTROL DEVICES, NEAR MAJOR EQUIPMENT ITEMS AND OTHER POINTS OF ORIGINATION AND TERMINATION AND SPACED INTERMEDIATELY AT MAXIMUM SPACING OF 25 FEET ALONG EACH PIPING RUN.

DOMESTIC WATER PIPING SYSTEM

WATER DISTRIBUTION PIPING 4" AND SMALLER SHALL BE TYPE L HARD DRAWN COPPER TUBE, ASTM B88-83 WITH WROUGHT COPPER-SOLDER JOINT FITTINGS. CPVC OR PEX IS ALLOWED AT OWNER'S OPTION.

HANDLES SHALL BE MALLEABLE IRON WITH BRONZE STEM. VALVES SHALL BE BY MILWAUKEE, NIBCO, WATTS OR RED-WHITE.

WATER HAMMER ARRESTERS SHALL BE BELLOWS TYPE; PRECHARGED COMPRESSOR CHAMBER; STAINLESS STEEL CASING AND BELLOWS. PROVIDE SIZES COMPLYING WITH PDI STANDARD WH-201. JOSAM 75000 SERIES, JAY R. SMITH FIG 5000, OR ZURN 1700 SERIES.

BALL VALVES: BALL VALVES SHALL HAVE TWO-PIECE BRONZE OR BRASS BODY, MEETING MSS-SP110, FULL OR STANDARD PORT, BLOWOUT-PROOF STEM AND ADJUSTABLE PACKING NUT INDEPENDENT OF HANDLE. VALVES SHALL BE RATED FOR 150 SWP, 600 WOG OR 300 CWP. VALVES SHALL BE BY APOLLO, MILWAUKEE, NIBCO, VICTAULIC, WATTS OR RED-WHITE.

GATE VALVES: VALVES 3 INCHES AND SMALLER SHALL BE ALL BRONZE, MEETING MSS-SP80, INSERTED BONNET, SOLID WEDGE, NON-RISING STEM TYPE AND RATED AT 125 SWP, 200 WOG.

GLOBE VALVES: VALVES 3 INCHES AND SMALLER SHALL BE ALL BRONZE, MEETING MSS-SP80, INSERTED BONNET WITH INTEGRAL SEAT AND RENEWABLE DISC. VALVES SHALL BE RATED AT 125

SWP, 200 WOG. HANDLES SHALL BE MALLEABLE IRON WITH BRONZE STEM. VALVES SHALL BE BY MILWAUKEE, NIBCO, WATTS OR RED-WHITE.

CHECK VALVES: VALVES 2 INCHES AND SMALLER SHALL BE BRONZE BODY WITH BRONZE SEAT AND DISC AND SHALL BE RATED AT 125 SWP, 200 WOG. VALVES SHALL BE BY MILWAUKEE, NIBCO,

WATTS OR RED-WHITE.

FLOW CONTROL VALVES: VALVES FOR DOMESTIC HOT WATER RETURN SHALL HAVE BRASS AND STAINLESS STEEL BODIES, WITH INTEGRAL BALL VALVE, GROUND JOINT UNION, AND SOLDER

ENDS. VALVE SHALL BE RATED FOR 600 PSIG AND FLOW RATE, AS SHOWN ON DRAWINGS. FLOW CONTROL VALVES SHALL BE AUTOFLOW MODEL FU-050, HAYES 2500 OR EQUIVALENT BY

SOIL, WASTE AND VENT PIPING SYSTEM

GRISWOLD.

SOIL, WASTE AND VENT PIPING SHALL BE SCHEDULE 40 ABS-DWV (ASTM D2661-82) OR PVC-DWV (ASTM D2665-82) PIPE AND FITTINGS. JOINTS SHALL BE SOLVENT CEMENT SOCKET TYPE. SERVICE WEIGHT HUBLESS CAST IRON PIPE AND FITTINGS, ASTM A74. JOINTS IN UNDERGROUND CAST IRON PIPING SHALL BE MADE USING AN ASTM-C564 NEOPRENE ELASTOMERIC COMPRESSION GASKET CONFORMING TO THE REQUIREMENTS OF ASTM C 1563. DRAINAGE PIPING SUBJECT TO CARRYING WATER IN EXCESS OF 140°F SHALL BE CAST IRON.

GREASE WASTE SHALL BE HUBLESS CAST IRON. HUBLESS CAST IRON PIPE AND FITTINGS SHALL BE MANUFACTURED FROM GRAY CAST IRON AND SHALL CONFORM TO ASTM A 888 AND CISPI STANDARD 301. HUBLESS COUPLINGS SHALL CONFORM TO CISPI STANDARD 310. GASKETS SHALL CONFORM TO ASTM C 564. HEAVY DUTY AND MEDIUM DUTY COUPLINGS SHALL CONFORM TO ASTM C 1540.

FLOOR DRAIN FD: PROVIDE COATED CAST IRON FLOOR DRAINS WITH INTEGAL PIPE STOPS, FLASHING COLLAR, SEEPAGE FLANGE, 6 INCH DIAMETER ROUND NIKALOY STRAINER. FLOOR DRAINS SHALL BE BY: WADE, JOSAM, ZURN, J.R. SMITH & WATTS.

TESTING: THE PIPING OF THE SOIL, WASTE AND VENT SYSTEM SHALL BE TESTED WITH WATER BEFORE INSTALLING FIXTURES. WATER TEST SHALL BE APPLIED TO THE SOIL, WASTE AND VENTING SYSTEM EITHER IN ITS ENTIRETY OR IN SECTIONS. IF THE TEST IS APPLIED TO THE ENTIRE SYSTEM, ALL OPENINGS IN THE PIPING SHALL BE CLOSED EXCEPT THE HIGHEST OPENING, AND THE SYSTEM SHALL BE FILLED WITH WATER TO THE POINT OF OVERFLOW. IF THE SYSTEM IS TESTED IN SECTIONS, EACH OPENING OF THE SECTION UNDER TEST SHALL BE PLUGGED AND EACH SECTION SHALL BE FILLED WITH WATER AND TESTED WITH AT LEAST A 10 FOOT HEAD OF WATER. IN TESTING SUCCESSIVE SECTIONS, AT LEAST THE UPPER 10 FEET OF THE NEXT PRECEDING SECTION SHALL BE TESTED SO THAT EACH JOINT OR PIPE IN THE BUILDING EXCEPT THE UPPER MOST 10 FEET OF THE SYSTEM HAS BEEN SUBMITTED TO A TEST OF AT LEAST 10 FOOT HEAD OF WATER. THE WATER SHALL BE KEPT IN THE SYSTEM, OR IN THE PORTION UNDER TEST, FOR AT LEAST 30 MINUTES BEFORE THE INSPECTION STARTS; THE SYSTEM SHALL BE TIGHT AT ALL JOINTS. JOINTS THAT FAIL THE TEST SHALL BE REMADE AND RETESTED.

GAS PIPING SYSTEMS

ABOVE GROUND GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE OF THE SIZE INDICATED WITH CLASS 150 MALLEABLE IRON THREADED FITTINGS.

GAS PRESSURE REGULATORS SHALL BE DIAGHRAGM ACTUATED WITH CAST IRON BODY, ALUMINUM DIAPHRAGM CHAMBER, AND ALL INTERNAL PARTS DESIGNED FOR USE WITH NATURAL GAS. REGULATORS SHALL BE ADJUSTABLE, WITH AUTOMATIC LOADING, AUTOMATIC LOW PRESSURE CUT-OFF, AND FULL INTERNAL RELIEF. THE REGULATOR SHALL BE ADJUSTED FOR OUTLET PRESSURE INDICATED ON THE DRAWINGS. THE OUTLET PRESSURE SHALL NOT VARY MORE THAN 1 INCH W.C. FROM THE SET POINT AT SPECIFIED CAPACITY. THE REGULATOR SHALL BE CAPABLE OF COMPLETE SHUT-OFF IN THE EVENT THE SUPPLY PRESSURE IS INTERRUPTED OR THE GAS DEMAND EXCEEDS THE REGULATOR CAPACITY AND SHALL REMAIN OFF UNTIL THE REGULATOR IS MANUALLY RESET. THE REGULATOR SHALL HAVE A WEATHERPROOF, BUG PROOF, SCREENED VENT CAP INSTALLED IN THE VENT TAPPING. REGULATORS SHALL BE BY SENSUS (ROCKWELL), FISHER, OR SINGER.

GAS SOLENOID VALVES 3 INCHES IN SIZE AND SMALLER SHALL BE 2-WAY, NORMALLY CLOSED TYPE WITH MANUAL RESET FOR LOW PRESSURE SERVICE. THE VALVE SHALL HAVE AN ALUMINUM BODY, BUNA N SEAT, AND BUNA N DISC. MAXIMUM PRESSURE DROP SHALL NOT EXCEED 1" W.C. AT SYSTEM CAPACITY. THE SOLENOID ENCLOSURE SHALL BE NEMA 1 AND HAVE ELECTRICAL CHARACTERISTICS AS SHOWN ON THE DRAWINGS. VALVE SHALL BE UNDERWRITERS LABORATORIES LABELED. VALVES SHALL BE ASCO 8044 COMBUSTION VALVE SERIES OR EQUIVALENT BY SINGER OR FISHER.

PLUG VALVES SHALL HAVE IRON BODY (SEMI-STEEL) LUBRICATED TYPE CAST BRONZE PLUG, AND THREADED ENDS RATED FOR 175 PSIG W.O.G. WORKING PRESSURE. PLUG VALVES SHALL BE ROCKWELL 142, WALWORTH 655, OR POWELL 2200.

SHUTOFF VALVES 2 INCHES AND SMALLER SHALL BE BALL VALVES. VALVES SHALL HAVE THREADED INLET AND OUTLET CONNECTIONS, TWO-PIECE BRASS BODY, MEETING MSS-SP110, FULL OR STANDARD PORT, BLOWOUT-PROOFSTEM AND ADJUSTABLE PACKING NUT INDEPENDENT OF HANDLE. VALVES SHALL BE ASME B16.44 AND UL LISTED FOR USE WITH NATURAL GAS. VALVE SHALL BE RATED FOR 250 PSI, 600 CWP. VALVES SHALL BE BY MAXITROL, APOLLO, HAYS, MILWAUKEE, NIBCO, OR WATTS.

WATER HEATERS

WATER HEATERS SHALL BE CONFIGURED TO OPERATE WITH NATURAL GAS AND A 120 VOLT/60 HZ AC POWER SOURCE. UNITS SHALL HAVE A BTU INPUT RANGE OF 15,000 BTU/HR TO 199,500 BTU/HR, A MINIMUM RECOVERY EFFICIENCY RATING OF 82%, A MINIMUM HOT WATER OUTLET CAPACITY OF 6.3 GALLONS PER MINUTE (WITH A 60 °F TEMPERATURE RISE), AND A MINIMUM OPERATING FLOW RATE OF 0.6 GALLON PER MINUTE (WITH A 60 °F TEMPERATURE RISE). WATER HEATERS SHALL BE MICROPROCESSOR CONTROLLED AND UTILIZE A DIRECT ELECTRONIC IGNITION SYSTEM (WITH NO STANDING PILOT), FULLY MODULATING GAS CONTROL VALVE, TURBINE FLOW METER, AUTOMATIC ELECTRO-MECHANICAL WATER FLOW CONTROL VALVE, AND WATER TEMPERATURE THERMISTORS TO MAINTAIN OUTLET WATER TEMPERATURE BETWEEN ± 2 °F OF SET POINT TEMPERATURE. UNITS SHALL INCORPORATE THE FOLLOWING INTERNAL SAFETY DEVICES: FLAME FAILURE LOCKOUT, BOILING PROTECTION LOCKOUT, THERMAL OVERHEAT PROTECTION, INTERNAL FREEZE PROTECTION FOR AMBIENT TEMPERATURES AS LOW AS –30 °F, AND LOCKOUT PROTECTION IN THE EVENT OF A BLOCKED FLUE. WATER HEATERS SHALL UTILIZE A REMOTE TEMPERATURE THERMOSTAT CONTROLLER TO PROVIDE AN ADJUSTABLE SET POINT RANGE OF 96 °F TO 180 °F. UNITS SHALL ALSO BE CAPABLE OF STORING AND DISPLAYING UP TO 9 DIAGNOSTIC MAINTENANCE CODES, VIA THE DISPLAY ON THE REMOTE TEMPERATURE THERMOSTAT CONTROLLER. WATER HEATERS SHALL BE SUITABLE FOR EXTERIOR INSTALLATION.

WATER HEATERS SHALL HAVE AN INTERNALLY COATED COPPER HEAT EXCHANGER. UNITS SHALL HAVE STAINLESS STEEL BURNERS, SOLID BRASS WATER FLOW CONTROL VALVE, AND SOLID BRASS INLET AND OUTLET WATER CONNECTIONS. THESE AND ALL OTHER PARTS SHALL BE WARRANTED AGAINST MATERIAL DEFECTS OR WORKMANSHIP FOR A MINIMUM PERIOD OF 5 YEARS FROM THE DATE OF PURCHASE. WATER HEATERS SHALL BE BY A.O. SMITH, RINNAI, NAVIEN, INTELLIHOT OR HTP.

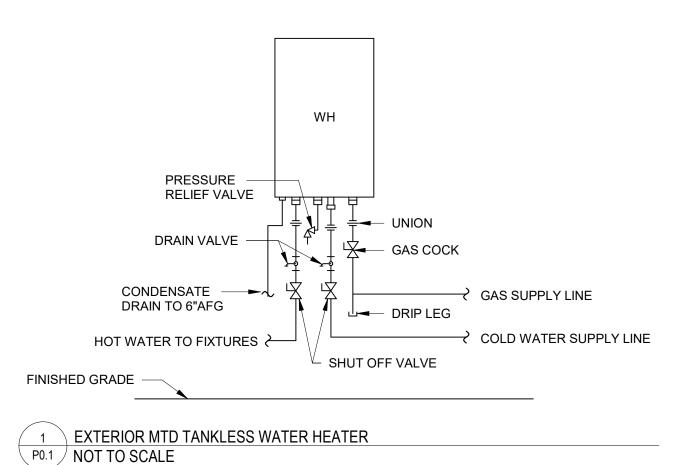
PIPE INSULATION: INSULATION SHALL BE PREFORMED, TWO-PIECE, HEAVY DENSITY FIBERGLASS WITH SELF SEALING ASJ JACKET CONFORMING TO FS HH-I-558 FORM D OR CELLULAR FOAM. TYPE III, CLASS 12. VALVES AND FITTINGS SHALL BE INSULATED WITH FIBERGLASS INSULATION OF THE SAME MATERIAL THICKNESS AS INSULATION ON ADJACENT PIPE AND HAVING A MOLDED PVC JACKET. JACKETS SHALL BE CERTAINTEED SNAP-FORM OR ZESTON PVC. INSULATION THICKNESS SHALL BE 1 INCH THICK FOR ALL SIZES OF COLD WATER AND HOT WATER SUPPLY AND RETURN.

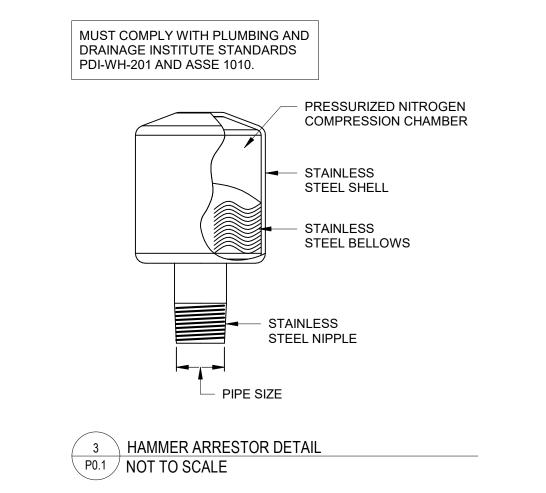
STERILIZATION: THE ENTIRE WATER DISTRIBUTION SYSTEM SHALL BE THOROUGHLY STERILIZED WITH A SOLUTION CONTAINING NOT LESS THAN 50 PARTS PER MILLION OF AVAILABLE CHLORINE. THE CHLORINATING MATERIAL SHALL BE LIQUID CHLORINE CONFORMING TO FEDERAL SPECIFICATION BB-C-120. THE STERILIZATION SOLUTION SHALL BE ALLOWED TO REMAIN IN THE SYSTEM FOR A PERIOD OF 6 HOURS, DURING WHICH TIME ALL VALVES AND FAUCETS SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER STERILIZATION, THE SOLUTION SHALL BE FLUSHED FROM THE SYSTEM WITH CLEAN WATER UNTIL THE RESIDUAL CHLORINE CONTENT IS NOT GREATER THAN 0.2 PARTS PER MILLION.

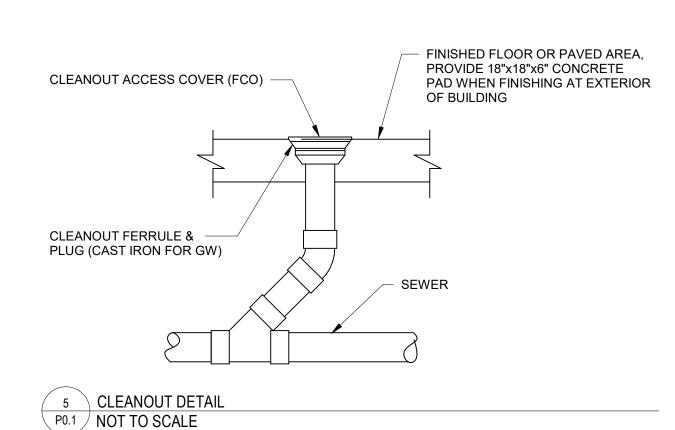
TESTING: THE HYDROSTATIC TEST SHALL BE MADE UPON COMPLETION OF THE ROUGHING-IN AND BEFORE SETTING FIXTURES. THE ENTIRE DOMESTIC COLD WATER AND HOT WATER, AND HOT WATER CIRCULATION PIPING SYSTEM SHALL BE TESTED AT A HYDROSTATIC PRESSURE OF 100 PSIG AND PROVIDE TIGHT AT THIS PRESSURE FOR A PERIOD OF NOT LESS THAN 2 HOURS IN ORDER TO PERMIT INSPECTION OF ALL JOINTS. WHERE A PORTION OF THE WATER PIPING SYSTEM IS TO BE CONCEALED BEFORE COMPLETION, THIS PORTION SHALL BE TESTED SEPARATELY IN A MANNER DESCRIBED FOR THE ENTIRE SYSTEM.

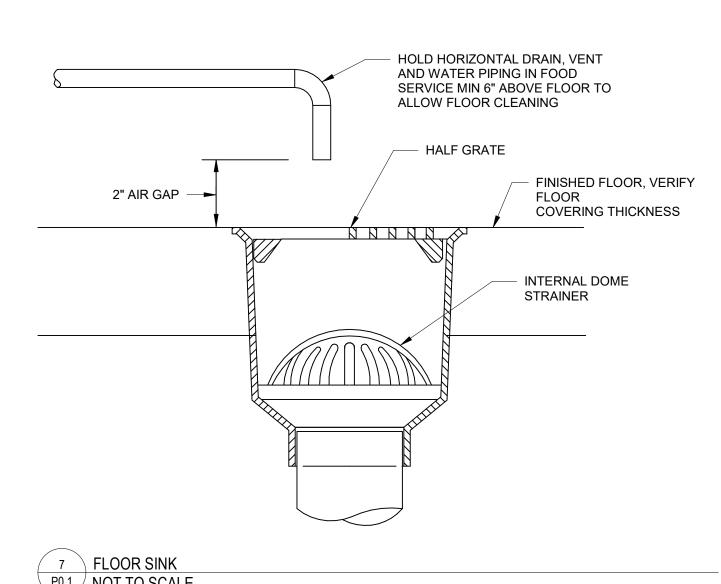
GREASE INTERCEPTOR

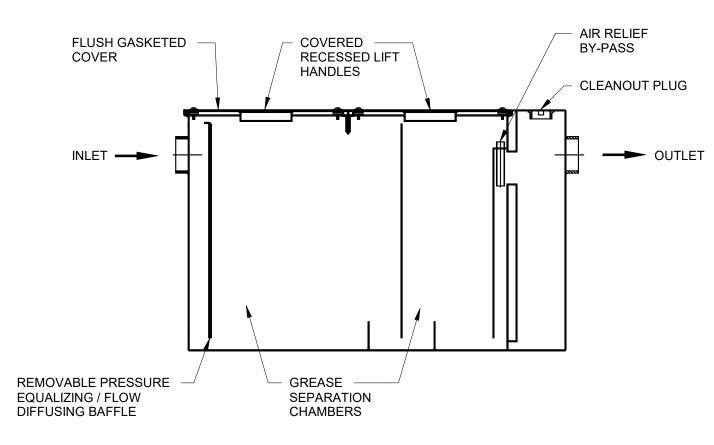
ACID RESISTANT COATED INTERIOR AND EXTERIOR FABRICATED STEEL LOW PROFILE, PDI RATE AT: GI-1: 35 GPM AND 70 LBS AND GI-2: 25 GPM AND 50 LBS. GREASE CAPACITY, WITH INTERNAL AIR RELIEF BY-PASS, BRONZE CLEANOUT PLUG AND VISIBLE DOUBLE WALL TRAP SEAL WITH REMOVABLE PRESSURE EQUALIZING/FLOW DIFFUSING INLET BAFFLE, FIXED BOTTOM OUTLET BAFFLE, AND VISIBLE DOUBLE WALL TRAP SEAL. GASKETED NON-SKID SECURED COVER WITH CENTER TIE DOWN ASSEMBLY, COMPLETE WITH EXTERNAL FLOW CONTROL FITTING. FURNISH WITH LOW INLET AND OUTLET, AS NECESSARY. GREASE INTERCEPTOR SHALL BE BY ZURN OR EQUAL.



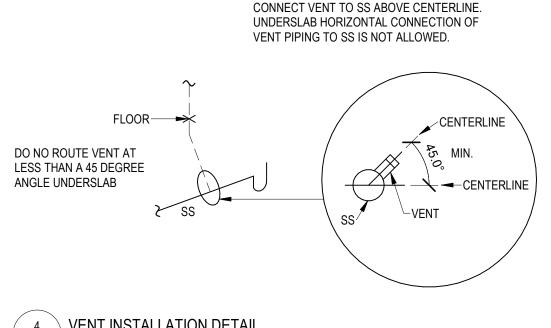




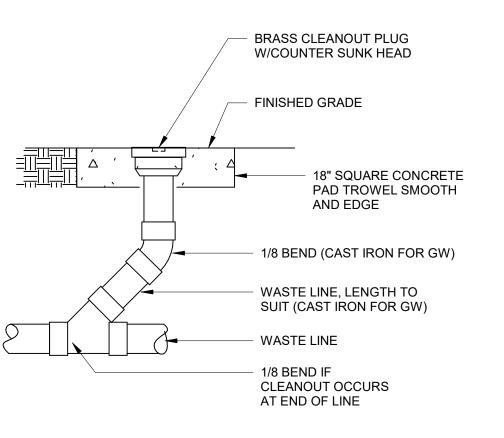




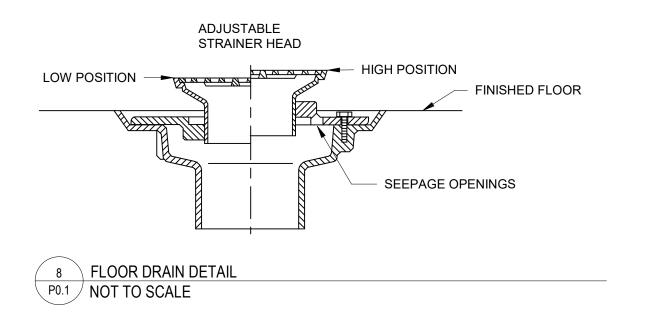
GREASE INTERCEPTOR DETAIL P0.1 NOT TO SCALE



4 VENT INSTALLATION DETAIL
P0.1 NOT TO SCALE



6 CLEANOUT TO GRADE
P0.1 NOT TO SCALE





ROSE



ULL STREET TACO EXPANSION

PLUMBING SPECS & 2102-AILS Author 11/08/22

PO.1

C CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW AND EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE APPROVAL THE CITY INSPECTOR.

B CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE LOCATION OF EXISTING BELOW GRADE WASTE PIPING AND REFLECT ANY DEVIATION GREATER THAN 1'-0"

PLUMBING SHEET NOTES

D REPAIR WALL SURFACE AFTER INSTALLATION AND INSPECTION OF EACH

PLUMBING FIXTURE AND PIPING INSTALLED. E ALL WALL-MOUNTED ACCESS PANELS SHALL BE LOCKABLE TYPE.

F ABOVE-GRADE WASTE PIPE SHALL BE RUN AT 2% GRADE. BELOW-GRADE WASTE PIPE SHALL BE RUN AT 1% GRADE.

G ALL CONDENSATE DRAIN PIPE SHALL BE RUN AT 1% GRADE.

FROM THIS PLAN ON THE AS-BUILT DRAWINGS.

H MAINTAIN MINIMUM 10-0" SEPARATION BETWEEN FLUE AND PLUMBING VENT OUTLETS AND ANY FRESH AIR INTAKE. COORDINATE WITH HVAC CONTRACTOR.

I FLOORS SHALL SLOPE TO DRAINS AT 1% MINIMUM SLOPE. SEE ARCHITECTURAL PLANS FOR MORE INFORMATION.

J PROVIDE ALL FLOOR DRAINS, FLOOR SINKS, TRENCH DRAINS, ETC. WITH TRAP GUARD DEVICES (ASSE 1072 COMPLIANT).

K PROVIDE WALL CLEAN OUTS IN ALL VENT RISERS ON BRANCHES LONGER THAN 5'-0" AND ON BRANCHES SERVING SINKS OR URINALS.



1 DEMOLISH EXISTING FIXTURES. CAP SS BELOW FLOOR & VENT A/C.

HEATER.

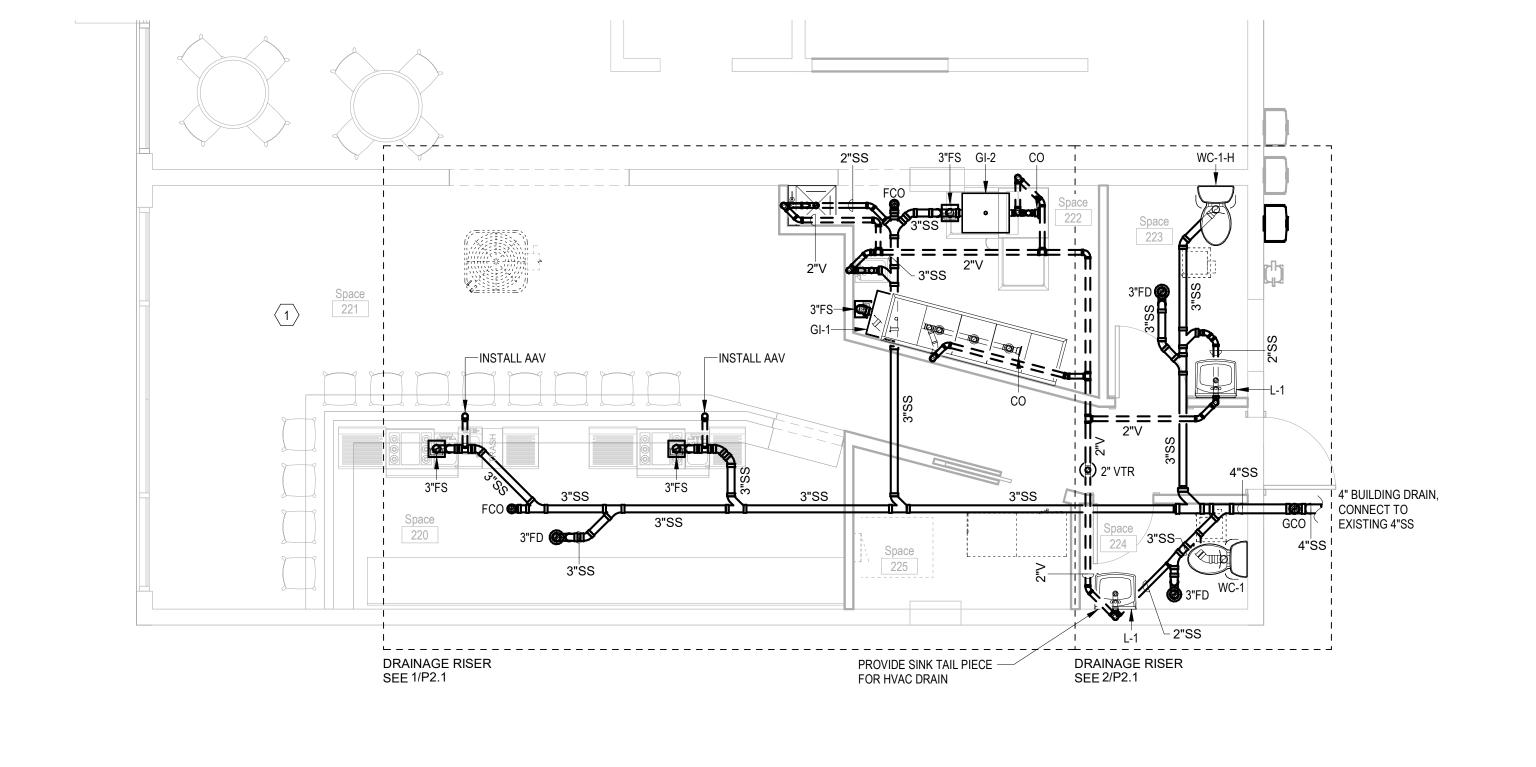


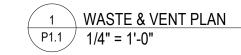
2 DEMOLISH EXISTING FIXTURES, WATER PIPING & ELECTRIC TANKLESS WATER

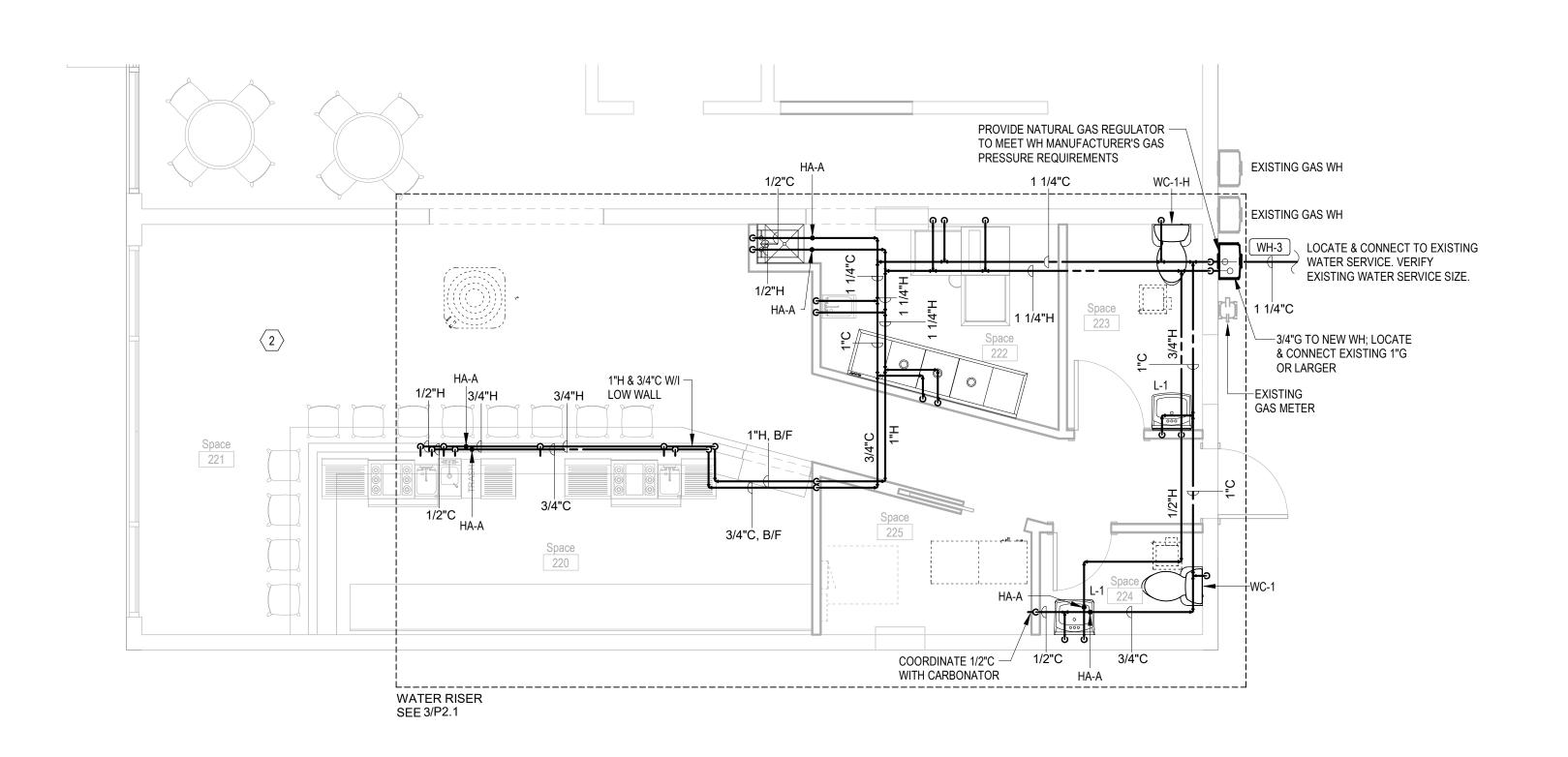


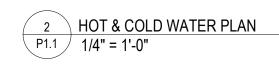
PLUMBING PLANS Author











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STREET TACO EXPANSION

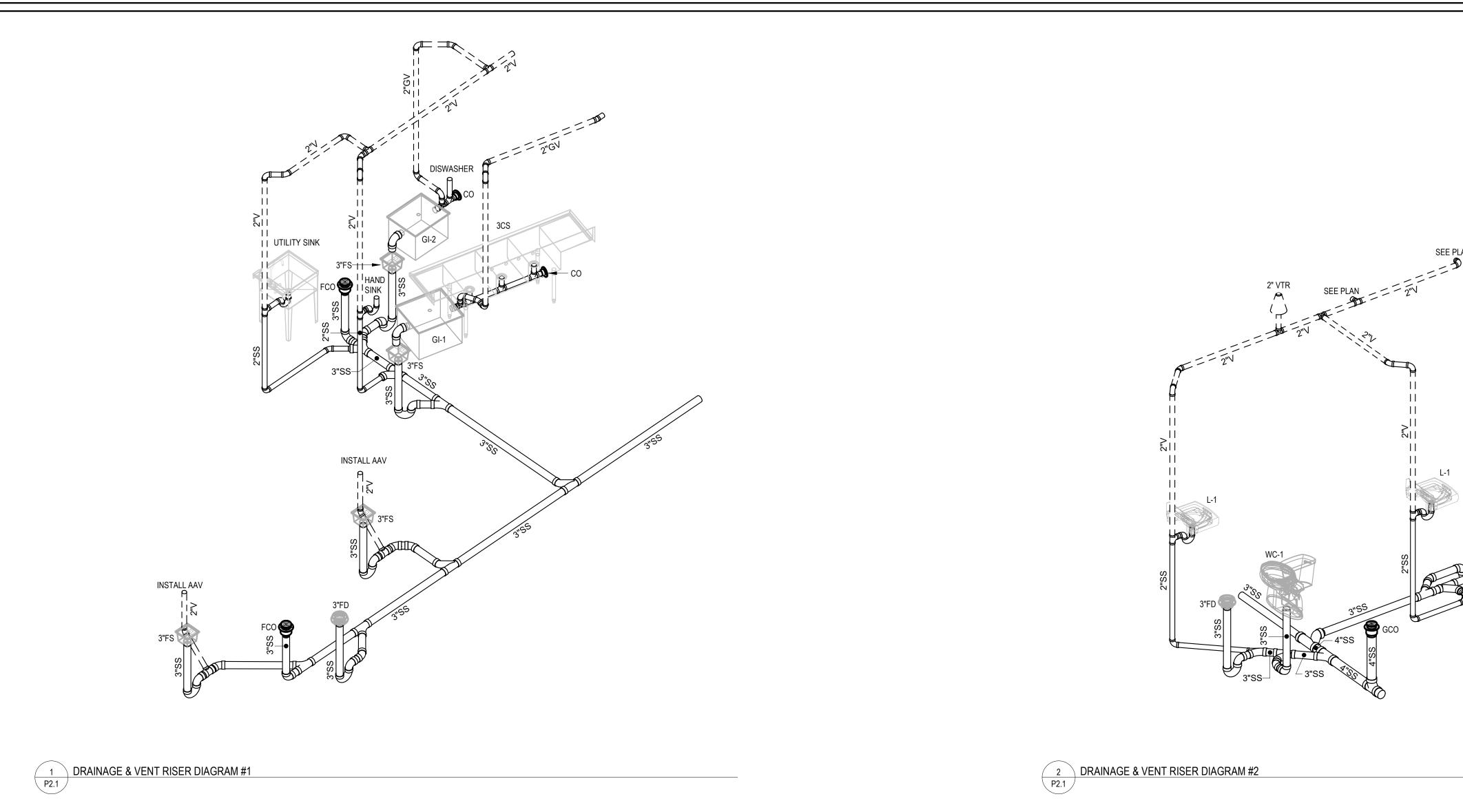
PLUMBING RISER

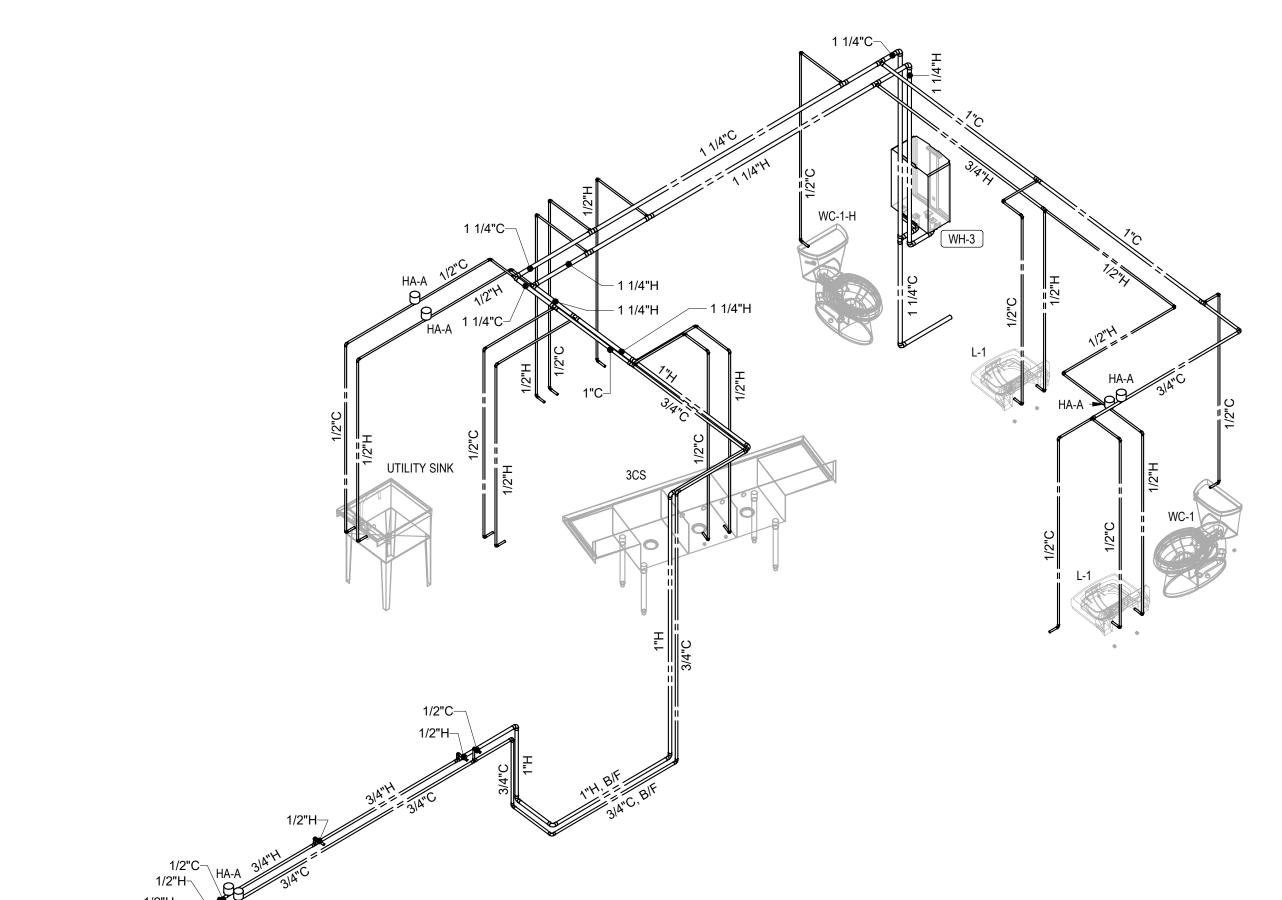
2102 GRAMS
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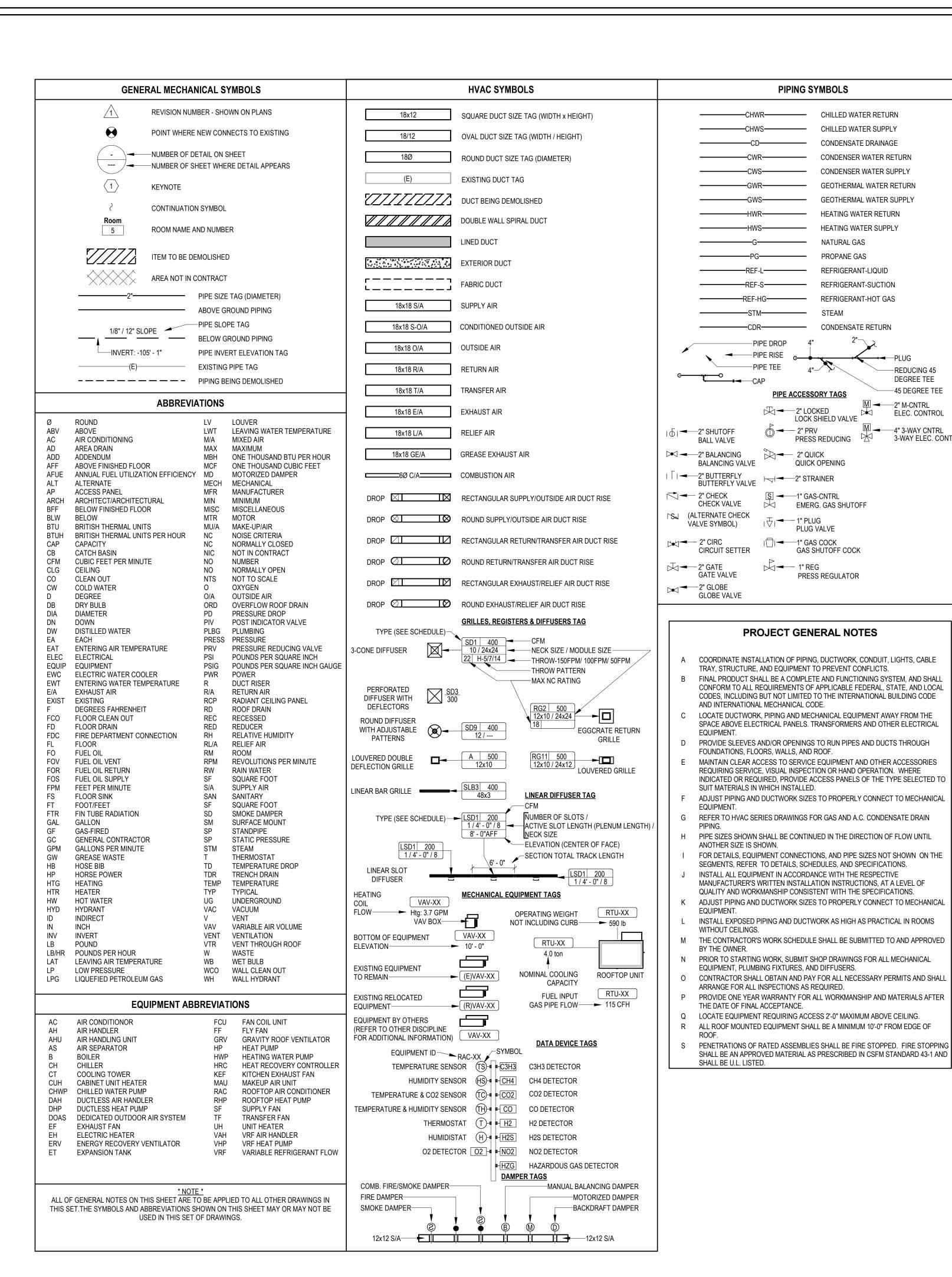
METHOD ENGINEERING GROUP 912-963-1611





3 HOT & COLD WATER RISER DIAGRAM
P2.1

P2



HVAC GENERAL NOTES

- A CONTRACTOR SHALL LOCATE THERMOSTATS AND TEMPERATURE SENSORS AT 4'-0"
- AFF, A MINIMUM OF 8" FROM LIGHT SWITCH. REFER TO HVAC DRAWINGS FOR THERMOSTAT AND TEMPERATURE SENSOR

PIPING SYMBOLS

—CHWR———— CHILLED WATER RETURN

—CHWS———— CHILLED WATER SUPPLY

CONDENSATE DRAINAGE

CONDENSER WATER SUPPLY

HEATING WATER RETURN

---- NATURAL GAS

REFRIGERANT-LIQUID

REF-HG REFRIGERANT-HOT GAS

PIPE ACCESSORY TAGS

→ 2" PRV

LOCK SHIELD VALVE

QUICK OPENING

S - 1" GAS-CNTRL

ı ₹ı PLUG

EMERG. GAS SHUTOFF

PLUG VALVE

PROJECT GENERAL NOTES

GAS SHUTOFF COCK

PRESS REGULATOR

→ PIPE RISE

-PIPE TEE

—— HEATING WATER SUPPLY

PROPANE GAS

REFRIGERANT-SUCTION

CONDENSATE RETURN

-REDUCING 45 DEGREE TEE

—45 DEGREE TEE

M → 2" M-CNTRL

ELEC. CONTROL

M → 4" 3-WAY CNTRL

PRESS REDUCING 3-WAY ELEC. CONTROL

GEOTHERMAL WATER RETURN

GEOTHERMAL WATER SUPPLY

—— CONDENSER WATER RETURN

- CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR SHALL ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES. CONDENSATE PIPING SHALL BE SCH40
- D ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE RATED FOR PRESSURE CLASS OF 2" W.G. UNLESS NOTED OTHERWISE.
- COORDINATE THE EXACT LOCATION OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH NEW AND EXISTING LIGHTING.
- PROVIDE DIFFUSERS AND REGISTERS WITH 4-WAY BLOW PATTERN UNLESS OTHERWISE NOTED. PROVIDE A 4" HOUSEKEEPING PAD FOR EACH PIECE OF MECHANICAL EQUIPMENT.
- COORDINATE SIZES WITH MECHANICAL EQUIPMENT SELECTED.
- THIS CONTRACTOR SHALL BE REQUIRED TO REPLACE FILTERS ON HVAC EQUIPMENT AFTER ALL DUST PRODUCING CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO THE FINAL PUNCH.
- INSTALL, SUPPORT, AND BRACE ALL HVAC DUCTWORK AND ACCESSORIES PER "HVAC DUCT CONSTRUCTION STANDARDS" BY SMACNA, ANSI/SMACNA 006-2006 AND LOCAL SEISMIC AND WIND REQUIREMENTS

HVAC SHEET INDEX

M0.0 HVAC TITLE SHEET M0.1 HVAC SPECIFICATIONS M1.1 HVAC PLAN

M2.1 HVAC DETAILS





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HVAC TITLE SHEET BCB 11/08/22



MECHANICAL SPECIFICATIONS

GENERAL PROVISIONS

IMPOSED REGULATIONS: APPLICABLE PROVISIONS OF THE STATE AND LOCAL CODES AND OF THE FOLLOWING CODES AND STANDARDS, IN ADDITION TO THOSE LISTED ELSEWHERE IN THE SPECIFICATIONS, ARE HEREBY IMPOSED ON A GENERAL BASIS FOR MECHANICAL WORK:

INTERNATIONAL MECHANICAL CODE - 2018 EDITION INTERNATIONAL ENERGY CONSERVATION CODE - 2015 EDITION INTERNATIONAL FUEL GAS CODE - 2018 EDITION

SCOPE OF WORK: PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SUPERVISION TO CONSTRUCT COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. ALL MATERIALS AND EQUIPMENT USED SHALL BE NEW, UNDAMAGED AND FREE FROM ANY DEFECTS.

PRODUCT WARRANTIES: PROVIDE MANUFACTURER'S STANDARD PRINTED COMMITMENT IN REFERENCE TO A SPECIFIC PRODUCT AND NORMAL APPLICATION, STATING THAT CERTAIN ACTS OF RESTITUTION WILL BE PERFORMED FOR THE PURCHASER OR OWNER BY THE MANUFACTURER, WHEN AND IF THE PRODUCT FAILS WITHIN CERTAIN OPERATIONAL CONDITIONS AND TIME LIMITS. WHERE THE WARRANTY REQUIREMENTS OF A SPECIFIC SPECIFICATION SECTION EXCEEDS THE MANUFACTURER'S STANDARD WARRANTY, THE MORE STRINGENT REQUIREMENTS WILL APPLY AND MODIFIED MANUFACTURER'S WARRANTY SHALL BE PROVIDED. IN NO CASE SHALL THE MANUFACTURER'S WARRANTY BE LESS THAN ONE (1) YEAR.

ELECTRICAL WORK: COORDINATE THE MECHANICAL WORK WITH ELECTRICAL WORK, AND PROPERLY INTERFACE WITH THE ELECTRICAL SERVICE. IN GENERAL, AND EXCEPT AS OTHERWISE INDICATED, INSTALL MECHANICAL EQUIPMENT READY FOR ELECTRICAL CONNECTION. REFER TO ELECTRICAL SECTIONS OF THE SPECIFICATIONS FOR ELECTRICAL CONNECTION OF MECHANICAL EQUIPMENT.

THE PLANS SHOW THE GENERAL ARRANGEMENT AND LOCATIONS OF MECHANICAL WORK. THE CONTRACTOR SHALL COORDINATE THE MECHANICAL INSTALLATION WITH THE STRUCTURE AND ALL OTHER TRADES. PERFORM ALL WORK IN ACCORDANCE WITH CURRENT STATE AND LOCAL CODES. SUBMIT PDF FILES OF MANUFACTURER'S DATA PRIOR TO EQUIPMENT PURCHASES.

COORDINATE THE ACTUAL LOCATION OF ALL MECHANICAL WORK VISIBLE IN FINISHED SPACES WITH THE ARCHITECT. THIS INCLUDES AIR DISTRIBUTION DEVICES, EXPOSED DUCTWORK, THERMOSTATS, HUMIDISTATS, SWITCHES, SENSORS, ETC. ALL THERMOSTATS AND WALL-MOUNTED SENSORS SHALL BE INSTALLED A MAXIMUM OF

THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS OF ALL FIRESTOPPING DETAILS TO BE USED FOR BOTH PIPING AND DUCTWORK. ALL FIRESTOPPING DETAILS SHALL BE U.L. LISTED AND SUBJECT TO APPROVAL BY THE AUTHORITY HAVING JURISDICTION.

WIND ANCHORAGE REQUIREMENTS SHALL BE SUBMITTED FOR ALL CURB MOUNTED EQUIPMENT AND ROOF MOUNTED EQUIPMENT. FASTENERS SHALL BE SELECTED AND DETAILED ON A PROJECT-SPECIFIC BASIS BY A REGISTERED DESIGN PROFESSIONAL. PROVIDE CALCULATIONS FOR UNIT CONNECTIONS TO SUPPORT/CURB, AND FOR SUPPORT/CURB TO STRUCTURE. THE DESIGN WIND SPEED IS 148 MPH.

PROVIDE A TEST AND BALANCE REPORT BY A NEBB CERTIFIED TAB FIRM.

SUBMIT O&M MANUAL AND EQUIPMENT WARRANTIES UPON COMPLETION OF WORK.

MECHANICAL IDENTIFICATION MATERIALS:

ENGRAVED PLASTIC-LAMINATE LABELS: PROVIDE ENGRAVING STOCK MELAMINE PLASTIC LABELS FOR PERMENANT MOUNTING ON MECHANICAL EQUIPMENT. INDICATE UNIT NAME, NUMBER, AND ELECTRICAL PANEL SERVING THE EQUIPMENT.

PROVIDE PIPING, FITTINGS, HANGERS, AND SUPPORTS AS REQUIRED, AS INDICATED ON DESIGN DOCUMENTS, AND AS FOLLOWS:

REFRIGERANT PIPING: REFRIGERANT PIPING SHALL BE SEAMLESS COPPER SUITABLE FOR A WORKING PRESSURE OF 300 PSIG. FITTINGS SHALL BE WROUGHT COPPER OR BRASS SUITABLE FOR USE WITH HIGH TEMPERATURE SOLDER AND DESIGNED FOR 300 PSIG WORKING PRESSURE. REFRIGERANT PIPING INSULATION SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER, WITH MINIMUM THICKNESSES AS REQUIRED BY IECC TABLE 403.2.10. PIPE INSULATION EXPOSED OUTDOORS SHALL BE COVERED WITH ALUMINUM METAL JACKETS. SUSPEND REFRIGERANT PIPING ON COPPER CLEVIS HANGERS WITH INSULATION SHIELDS. TRAPEZE-MOUNTED PIPING SHALL USE METAL STRUT CLAMPS THAT PROVIDE A CONTINUOUS INSULATION BARRIER AND/OR CUSH-A-CLAMP OR EQUAL. PLASTIC STRUT CLAMPS ARE NOT ACCEPTABLE.

HVAC DRAIN PIPING: HVAC DRAIN LINES SHALL BE SCHEDULE 40 PVC WITH SOCKET TYPE FITTINGS AND SOLVENT CEMENT. INDOOR HVAC DRAIN LINES INDOORS SHALL HAVE 1" FIBERGLASS PIPE INSULATION WITH VAPOR BARRIER. SUSPEND INDOOR HVAC DRAIN PIPING ON CLEVIS HANGERS WITH INSULATION SHIELDS. SUPPORT OUTDOOR HVAC DRAIN PIPING ON NON-PENETRATING PIPE PEDESTALS. LOCATE EQUIPMENT AND ASSOCIATED DUCTWORK AND PIPING TO PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES. PVC HVAC DRAIN LINES OUTDOORS SHALL RECEIVE 2 COATS OF WHITE LATEX PAINT TO PREVENT UV DEGRADATION.

DUCTWORK AND ACCESSORIES:

DUCTWORK SHOWN ON THE PLANS IS SIZED AND ROUTED BASED ON INFORMATION AVAILABLE DURING THE DESIGN PHASE FOR CEILING HEIGHTS, STRUCTURAL MEMBERS, ETC. ALL DUCT SIZES AND ROUTINGS MUST BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO FABRICATION AND INSTALLATION. WHERE CONFLICTS ARISE, REFER TO THE ENGINEER.

SUPPLY AIR DUCTS AND RETURN AIR DUCTS SHALL BE G90 GALVANIZED STEEL AND INSULATED WITH 2" THICK R-6.7 FIBERGLASS DUCT WRAP WITH VAPOR BARRIER WHERE INDICATED ON PLANS, DUCTWORK SHALL ALSO BE LINED WITH 1" FIBERGLASS DUCT LINER FOR NOISE REDUCTION, BASIS OF DESIGN JOHNS MANVILLE LINACOUSTIC. EXTERIOR DUCTWORK SHALL BE INSULATED WITH 1.5" THICK POLYISOCYANURATE FOAM BOARD WITH MINIMUM R-8.0 VALUE, BASIS OF DESIGN JOHNS MANVILLE XSPECT ISOFOAM APF BOARD. ALL EXTERIOR DUCTWORK SHALL BE JACKETED WITH .016" ALUMINUM FOR WEATHERPROOFING, OR ALTERNATIVELY WITH ALUMAGUARD ALL WEATHER FLEXIBLE JACKET. PROVIDE FLEXIBLE CONNECTIONS AT ALL UNIT SUPPLY AIR AND RETURN AIR TRUNK DUCTS. ALL DUCTS SHALL BE FABRICATED AND INSTALLED PER SMACNA STANDARDS FOR 2" STATIC PRESSURE RATING.

HVAC DUCT SMOKE DETECTORS SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR. ALL DUCT SMOKE DETECTORS MUST BE COMPATIBLE WITH THE FIRE ALARM SYSTEM AND MUST BE CONNECTED TO THE FIRE ALARM SYSTEM FOR NOTIFICATION. ALL FIRE ALARM WIRING AND ASSOCIATED DEVICES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. EACH SMOKE DETECTOR SHALL BE WIRED BY MECHANICAL CONTRACTOR INTO THE RESPECTIVE FAN CONTROL CIRCUIT TO AUTOMATICALLY SHUT DOWN THE FAN UPON SENSING PRODUCTS OF COMBUSTION.

AIR DISTRIBUTION DEVICES:

AIR DISTRIBUTION DEVICES SHALL BE ALUMINUM BY TITUS, KRUEGER, METALAIRE OR PRICE AND SHALL BE SUBMITTED FOR APPROVAL BEFORE ORDERING. ARCHITECT SHALL APPROVE COLOR AND FINISH OF ALL AIR DISTRIBUTION DEVICES. ALL DEVICES SHALL BE SELECTED FOR NC-20 MAXIMUM NOISE CRITERIA.

AUTOMATIC BALANCING DAMPERS (ABD):

AUTOMATIC BALANCING DAMPERS SHALL BE SUPPLIED FOR LOW AIRFLOW DIFFUSERS WHERE INDICATED ON PLANS. DEVICES SHALL BE CAPABLE OF ADJUSTING AIRFLOW WITH ADJUSTABLE COLLAR IN PLENUM BOX BEHIND DIFFUSER. PROVIDE ABD FROM GREENHECK, RUSKIN, OR EQUAL SUBJECT TO APPROVAL.

EXHAUST FANS SHALL BE BY GREENHECK, COOK OR PENN. PROVIDE DISCONNECT SWITCH, ROOF CURB, AND BACKDRAFT DAMPER. ALL CURB MOUNTED EQUIPMENT SHALL BE INSTALLED TO MEET SPECIFIED WIND RATING.

AIR TREATMENT SYSTEMS:

ALL AIR HANDLERS AND ROOFTOP UNITS SHALL BE EQUIPPED WITH BIPOLAR IONIZATION AIR TREATMENT DEVICES INSTALLED AT THE SUPPLY FAN INLET. AIR TREATMENT DEVICES SHALL BE BY GLOBAL PLASMA SOLUTIONS, PLASMA AIR OR BIOCLIMATIC. DEVICES SHALL BE 24 VAC AND BE CONNECTED TO THE EQUIPMENT CONTROL CIRCUIT.

<u>HEAT PUMPS:</u>

SPLIT SYSTEM HEAT PUMPS SHALL BE BY CARRIER, TRANE OR DAIKIN. REFER TO THE EQUIPMENT SCHEDULE FOR CAPACITIES. PROVIDE PROGRAMMABLE THERMOSTATS, BUILT-IN ELECTRIC HEATER, AND SINGLE POINT POWER SUPPLY. PROVIDE 4-YEAR EXTENDED WARRANTY ON COMPRESSOR PARTS. PROVIDE CONTROLS AND ALL ACCESSORIES NEEDED FOR COMPLETE, OPERABLE SYSTEMS.

OUTDOOR HP UNITS ON GRADE SHALL BE MOUNTED TO 4" THICK REINFORCED HOUSEKEEPING PADS. HP UNITS ON ROOFS SHALL BE ANCHORED TO WELDED ALUMINUM EQUIMPENT STANDS, BASIS OF DESIGN PRECISION ALUMINUM PRODUCTS. PROVIDE 1" THICK NEOPRENE VIBRATION ISOLATION PADS FOR ALL OUTDOOR HP UNITS. REFRIGERANT LINE ROOF PENETRATIONS SHALL BE MADE THROUGH PREFABRICATED PIPE PORTALS. EXTEND COPPER REFRIGERANT LINES FROM OUTDOOR UNITS TO INDOOR UNITS.

INDOOR AH UNITS LOCATED ABOVE THE CEILING SHALL BE SUSPENDED ON THREADED HANGER RODS HVAC WITH VIBRATION ISOLATORS. FLOOR MOUNTED INDOOR UNITS SHALL BE MOUNTED ON WELDED EQUIMPENT STANDS WITH NEOPRENE PAD ISOLATION. SUSPEND A 3" DEEP WATERTIGHT EMERGENCY DRAIN PAN BENEATH EACH UNIT. DRAIN PANS SHALL BE SLIGHTLY SLOPED TO DRAIN WITH 1" EMERGENCY DRAIN LINES. PRIMARY DRAINS SHALL BE FULL SIZE WITH A HVAC DRAIN TRAPS. SECONDARY HVAC DRAIN OPENINGS SHALL BE PLUGGED. ALL AIR HANDLERS SHALL BE PROVIDED WITH RETURN FILTER RACK FOR 2" PLEATED FILTER WITH FILTER DRAWER OR HINGED FILTER DOOR.

	SPLIT SYSTEM AIR SOURCE HEAT PUMP													
UNIT ID	OUTSIDE	FAN DESIGN	FAN DESIGN FOR		EVAPORATOR COOLING O		COOL @ 95°F O.A. ENTERING AIR		VOLT	PH	HSPF	SEER	SEACOAST	DACIC OF DECICAL
UNITID	AIRFLOW (CFM)	AIRFLOW (CFM)	ESP (IN. WG)	TOTAL (MBH)	SENSIBLE (MBH)	DB (°F)	WB (°F)	HEATER (KW)	VOLI	LI PH	поег	SEEK	PROTECTION	BASIS OF DESIGN
AH-1 HP-1	120	1200	1.00	34	26	80	67	4.0	208	1	8.5	15	Yes	CARRIER FX4D / 25HCE

- REFER TO ELECTRICAL PLANS FOR POWER INFORMATION. PROVIDE AIR TREATMENT DEVICES FOR EACH AH UNIT.
- MOUNT HEAT PUMP ON WIND RATED EQUIPMENT STAND WITH NEOPRENE PAD ISOLATION.
- 4. SUSPEND AIR HANDLING UNIT WITH SPRING ISOLATORS.

5.	PROVIDE AIR HANDLING UNIT	WITH AUXILIARY PAN WITH FLOAT SWITCH.

	FAN SCHEDULE									
UNIT ID UNIT TYPE DESIGN AIRFLOW (CFM) CFM) DRIVE TYPE RPM POWER (HP) INLET SONE VOLT PH BASIS OF DESIGN								BASIS OF DESIGN		
EF-A	CEILING	70	0.25	DIRECT	700	0.1	2	120	1	SP-B

- 1. REFER TO ELECTRICAL PLANS FOR POWER INFORMATION.
- 2. EF-A SHALL INTERLOCK WITH ASSOCIATED WALL SWITCH IN TOILET ROOM.

	GRILLES, REGISTERS AND DIFFUSERS SCHEDULE										
ID	DESCRIPTION	FACE		NECK		INSTALLATION TYPE	MATERIAL	DACIC OF DECICAL			
טו	DESCRIPTION	SIZE	SIZE	WIDTH	HEIGHT	INSTALLATION TIPE	WATERIAL	BASIS OF DESIGN			
Α	LOUVERED DOUBLE DEFLECTION GRILLE			6	6	SURFACE MOUNT INSTALLATION	ALUMINUM	TITUS 300FL			
Α	LOUVERED DOUBLE DEFLECTION GRILLE			12	6	SURFACE MOUNT INSTALLATION	ALUMINUM	TITUS 300FL			
В	PLAQUE FACE DIFFUSER	24x24	6			LAY-IN INSTALLATION	ALUMINUM	TITUS OMNI-AA			
С	LOUVERED DOUBLE DEFLECTION GRILLE	24x24		6	6	LAY-IN INSTALLATION	ALUMINUM	TITUS 300FL			
R	LOUVERED FILTER GRILLE			24	14	SURFACE MOUNT INSTALLATION	ALUMINUM	TITUS 350FSF			







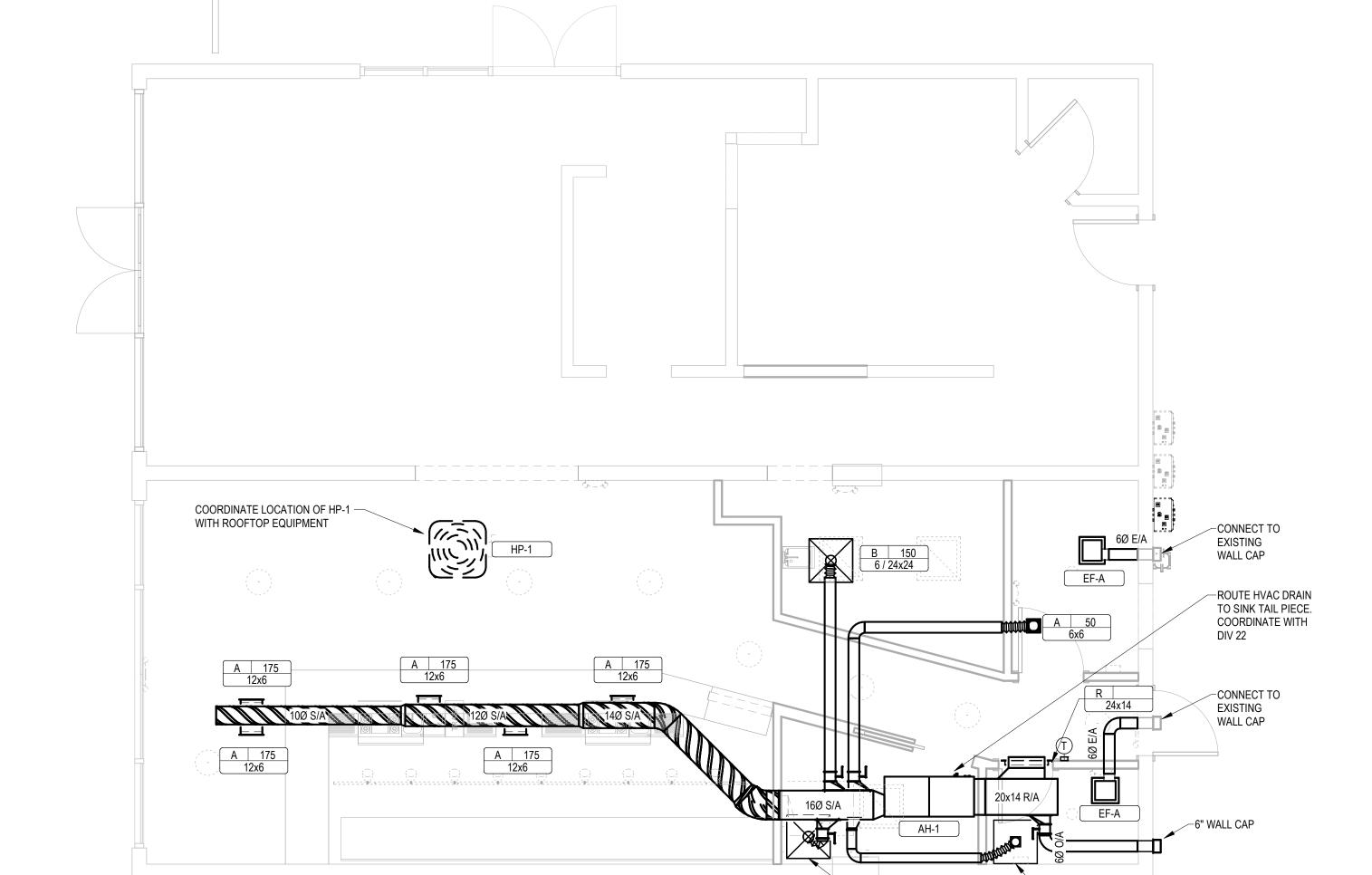
HVAC SPECIFICATIONS BCB 11/08/22

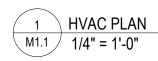




HVAC SHEET NOTES

- A CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A COMPLETE AND WORKING SYSTEM.
- B INSTALL, SUPPORT, & BRACE NEW DUCTWORK AND ACCESSORIES PER SMACNA GUIDELINES.
- C DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS. CONTRACTOR SHALL MAKE ALLOWANCE FOR ANY INTERIOR LINING, INSULATION, ETC.
- D ALL NEW DUCT ELBOWS SHALL BE RADIUS TYPE. WHERE NECESSARY, CONTRACTOR MAY SUBSTITUTE MITERED ELBOWS WITH TURNING VANES.
- E PROVIDE FLAT BLADE MANUAL VOLUME DAMPERS AT ALL TERMINAL DUCT BRANCHES AND AS INDICATED.
- F INSTALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. ROOFTOP EQUIPMENT SHALL BE LOCATED NO CLOSER THAN 10'-0" FROM THE ROOF EDGE.
- G ALL PRIMARY CONDENSATE DRAIN PIPING SHALL BE INSULATED TO A MINIMUM THICKNESS OF 1/2" AND SHALL INCLUDE A VAPOR RETARDANT OUTSIDE THE INSULATION. SEAL ALL JOINTS AND PENETRATIONS.
- H COORDINATE ALL EXTERIOR PENETRATIONS INCLUDING ROOF PENETRATIONS WITH OTHER TRADES TO PROVIDE A COMPLETE AND
- FULLY WEATHER-PROOF INSTALLATION. I ALL TRANSFER DUCTWORK SHALL BE INTERNALLY LINED WITH MINIMUM 1/2" ACOUSTIC LINING.
- J CONTRACTOR SHALL ENGAGE A TESTING AND BALANCE FIRM CERTIFIED BY AABC TO PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM ACCORDING TO THE PROCEDURES CONTAINED IN AABC'S "NATIONAL STANDARDS FOR TESTING AND BALANCING HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS" AND PROVIDE TWO COPIES OF THE CERTIFIED TAB REPORTS.



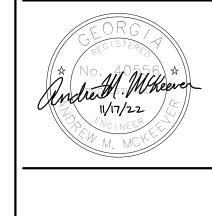




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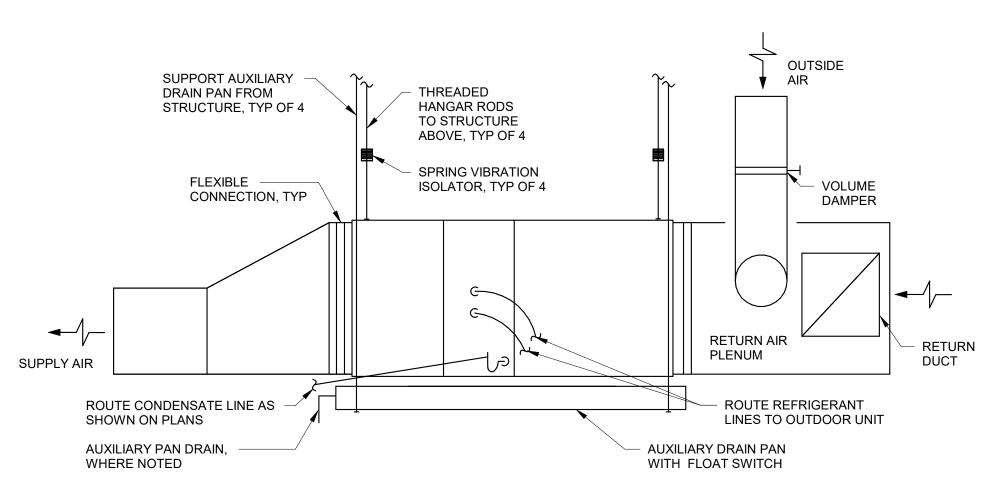
HVAC DETAILS 11/08/22

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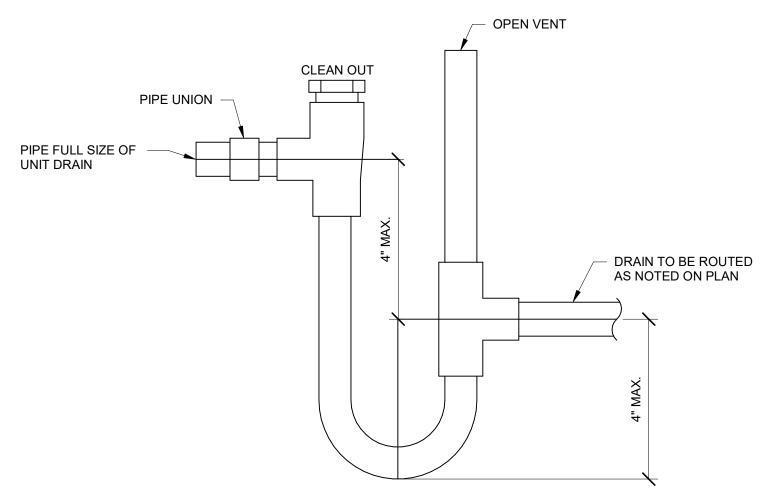








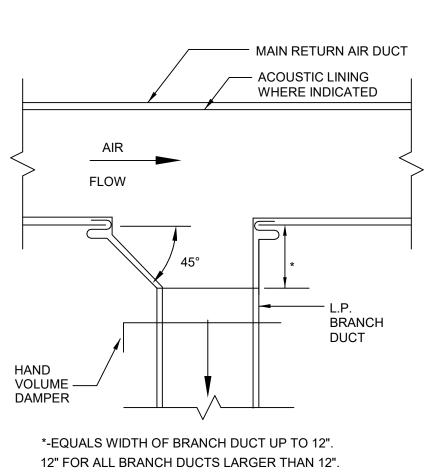




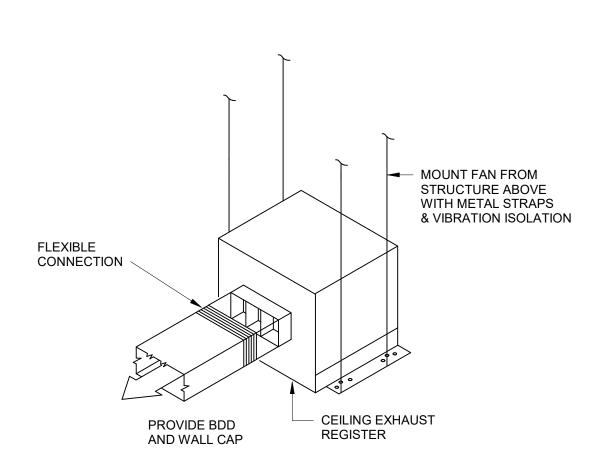
- NOTES:

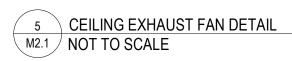
 1. PIPING SHALL MAINTAIN A MINIMUM SLOPE OF 1/8" PER FOOT IN THE DIRECTION OF DISCHARGE.

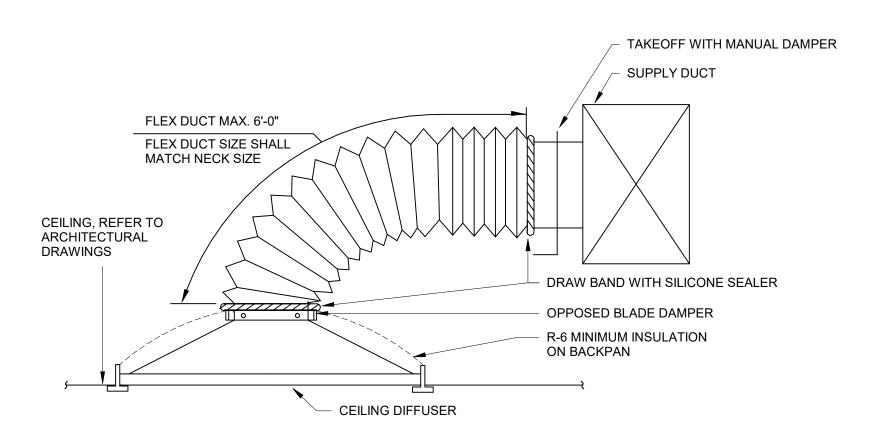
 2. LOCATE TRAPS SO AS TO BE ACCESSIBLE FOR CLEANING.
- 4 HVAC HVAC DRAIN DETAIL NOT TO SCALE











HEAT PUMP ANCHORED TO STAND WITH NEOPRENE PAD ISOLATION.

WELDED ALUMINUM EQUIPMENT STAND, EXTEND MIN. 12" ABOVE FINISHED ROOF.

(4) BASEPLATES ANCHORED TO STRUCTURE, ROOF FLASHING BY OTHERS.

6 TYPICAL DIFFUSER CONNECTION (SIDE)
M2.1 NOT TO SCALE

HEAT PUMP EQUIPMENT STAND
NOT TO SCALE

ELECTRICAL ABBREVIATIONS LIST ELECTRICAL SYMBOL LEGEND POWER SYMBOLS 1P 1 POLE (2P, 3P, 4P, ETC.) MCB MAIN CIRCUIT BREAKER LIGHTING SYMBOLS A, AMP AMPERE MOTOR CONTROL CENTER AC ABOVE COUNTER MDC MAIN DISTRIBUTION CENTER LIGHTING FIXTURES, TYPICAL, RECTANGULAR MDP ACLG ABOVE CEILING MAIN DISTRIBUTION PANEL (VARIOUS SYMBOLS) ADO AUTOMATIC DOOR OPENER MFR MANUFACTURER FILLED CIRCLES INDICATE RECESSED, MAIN FUSED DISCONNECT SW AMP FRAME MFS OPEN CIRCLES INDICATE SURFACE-MOUNTED AFF ABOVE FINISHED FLOOR MANHOLE DIAGONAL LINE INDICATES LENSED ABOVE FINISHED GRADE MICROPHONE OUTER DOTS INDICATE SUSPENDED ARC FAULT CIRCUIT AFI MINIMUM INTERRUPTER MISC MISCELLANEOUS AIR HANDLING UNIT MAIN LUGS ONLY LIGHTING FIXTURES, TYPICAL, ROUND MANUAL MOTOR STARTER ALUMINUM MMS CENTER DOT INDICATES PENDANT ALT ALTERNATE MULTIOUTLET ASSEMBLY DIAGONAL LINE INDICATES LENSED MOTOR STARTER PANELBOARD AMP AMPERE CHEVRON INDICATES WALL WASH AMPL AMPLIFIER MSBD MAIN SWITCHBOARD U U JUNCTION BOX ANNUN ANNUNCIATOR MOUNT WALL-MOUNTED FIXTURES, TYPICAL APPROX APPROXIMATELY MT.C EMPTY CONDUIT AQ-STAT AQUASTAT MTS MANUAL TRANSFER SWITCH ARCH ARCHITECT, ARCHITECTURAL MTR MOTOR, MOTORIZED AS AMP SWITCH NORMALLY CLOSED ⊢ STRIP FIXTURE AT AMP TRIP NATIONAL ELECTRICAL CODE □→ DIRECTIONAL LIGHT, TRACK, FLOOD NEMA NATIONAL ELECTRICAL ATS AUTOMATIC TRANSFER SWITCH AUTO AUTOMATIC MANUFACTURER'S ASSOCIATION ---- LINEAR LIGHT. TAPE LIGHT AUX AUXILIARY NFDS NON-FUSED SAFETY DISCONNECT AV AUDIO VISUAL EMERGENCY LIGHTING UNIT, CEILING-MOUNTED, AWG AMERICAN WIRE GAUGE NIC NOT IN CONTRACT INTEGRAL BATTERY BATT BATTERY NIGHT LIGHT EMERGENCY LIGHTING UNIT. CEILING-BD BOARD NORMALLY OPEN BLDG BUILDING NORMAL POWER FACTOR MOUNTED, REMOTE BATTERY BUILDING MANAGEMENT SYSTEM NTS NOT TO SCALE CONDUIT OVERHEAD EMERGENCY LIGHTING UNIT, WALL-CAB CABINET OVERLOADS MOUNTED, INTEGRAL BATTERY CAT CATALOG PUBLIC ADDRESS CATV CABLE TELEVISION PULL BOX OR PUSHBUTTON EMERGENCY LIGHTING UNIT, WALL-PNEUMATIC ELECTRIC CB CIRCUIT BREAKER MOUNTED, REMOTE BATTERY CCTV CLOSED CIRCUIT TELEVISION PED PEDESTAL CKT CIRCUIT POWER FACTOR CLG CEILING EXIT LIGHT, CEILING-MOUNTED, SHADING COMB COMBINATION POST INDICATING VALVE AND ARROWS INDICATE FACES AND CMPR COMPRESSOR CONN CONNECTION POWER POLE EXIT LIGHT, WALL-MOUNTED, SHADING CONST CONSTRUCTION PAIR AND ARROWS INDICATE FACES AND CONT CONTINUATION OR CONTINUOUS PRI PRIMARY DIRECTION PROJECTION CONTR CONTRACTOR CONV CONVECTOR POWER ROOF VENTILATOR CP CIRCULATING PUMP POTENTIAL TRANSFORMER EXIT/ELU COMBO POLYVINYL CHLORIDE (CONDUIT) CRT CATHODE-RAY TUBE CURRENT TRANSFORMER PWR POWER CTR CENTER QUAN QUANTITY POLE/AREA LIGHTS COPPER RCPT RECEPTACLE CU DCP DOMESTIC WATER CIRCULATING PUMP REQD REQUIRED DEPT DEPARTMENT ROOM MOTOR STARTER POST-TOP AREA LIGHT DET DETAIL RIGID STEEL CONDUIT **ROOF TOP UNIT BOLLARD LIGHT** DIA DIAMETER RTU DISC DISCONNECT SURFACE CONDUIT DIAGONAL HATCH INDICATES $\vdash \circ \bullet$ PUSHBUTTON SEC DIST DISTRIBUTION SECONDARY EMERGENCY LIGHT DN DOWN SHFFT **(•)** DPR DAMPER SIMILAR SAFETY DISCONNECT SWITCH S/N SOLID NEUTRAL **GROUND BAR** SINGLE POLE SWITCH DOUBLE THROW SPEC SPECIFICATION DWG DRAWING SPKR SPEAKER 3-WAY SWITCH ELECTRICAL CONTRACTOR 4-WAY SWITCH ELEC ELECTRIC, ELECTRICAL SURGE PROTECTION DEVICE [↔] ĸ KEYED SWITCH ELEV ELEVATOR SURFACE RACEWAY ELU EMERGENCY LIGHTING UNIT STAINLESS STEEL LOW VOLTAGE MOMENTARY PUSHBUTTON OR SELECTOR SWITCH EMERGENCY SSW **DECORATOR SWITCH** STOP/START PUSHBUTTONS EMS ENERGY MANAGEMENT SYSTEM S/S SWITCH W/PILOT STA EMT ELECTRICAL METALLIC TUBING STATION DIMMER SWITCH EP ELECTRIC PNEUMATIC STANDARD SURF SURFACE MOUNTED FOUIP FOUIPMENT OCCUPANCY SENSOR W/ MANUAL SWITCH EWC ELECTRIC WATER COOLER SWITCH ⊢(VS) VACANCY SENSOR W/ MANUAL SWITCH EXIST EXISTING SWBD SWITCHBOARD OCCUPANCY SENSOR W/ 0-10V DIMMER EXH EXHAUST SYM SYMMETRICAL EXPLOSION PROOF SYS SYSTEM VACANCY SENSOR W/ 0-10V DIMMER FIRE ALARM TEL TELEPHONE © OCCUPANCY SENSOR, CEILING MOUNTED FABP FIRE ALARM BOOSTER POWER TEL/DATA TELEPHONE/DATA SUPPLY PANEL TERM TERMINAL VACANCY SENSOR, CEILING MOUNTED FACP FIRE ALARM CONTROL PANEL TWIST LOCK POWER DISTRIBUTION EQUIPMENT FCU FAN COIL UNIT TAMPER RESISTANT CORRIDOR OCCUPANCY SENSOR, CEILING FIXT FIXTURE T-STAT THERMOSTAT TELEPHONE TERMINAL CABINET FLR FLOOR TIMER SWITCH FLUOR FLUORESCENT TELEVISION TVTC TELEVISION TERMINAL CABINET FU FUSE TIME DELAY SWITCH FUDS FUSED SAFETY DISCONNECT SWITCH TYPICAL TIME CONTROL SWITCH GA GAUGE UNDER COUNTER SWITCHBOARD. GAL GALLON UNDERGROUND ELECTRICAL GALV GALVANIZED UNDERGROUND LIGHTING TAGS GENERAL CONTRACTOR UNIT HEATER UNDERGROUND TELEPHONE TOP VALUE: FIXTURE TYPE ID GEN GENERATOR GROUND FAULT CIRCUIT INTERRUPTER UTIL UTILITY GROUND FAULT PROTECTOR ULTRAVIOLET VOLT GND GROUND GRS GALVANIZED RIGID STEEL (CONDUIT) **VOLT-AMPERES** VA BOTTOM VALUE: LOWERCASE LETTER: SWITCH ID GYP BD GYPSUM BOARD VDT VIDEO DISPLAY TERMINAL -BOTTOM VALUE: NUMBER(S): CIRCUIT NUMBER HOA HANDS-OFF-AUTOMATIC SWITCH VERT VERTICAL VARIABLE FREQUENCY DRIVE HORIZ HORIZONTAL ABSENCE OF A SWITCH ID INDICATES FIXTURE IS CONTROLLED BY THE HP HORSEPOWER VOLUME ONLY SWITCH IN THE SPACE.AN "x" IN PLACE OF THE SWITCH ID HIGH POWER FACTOR WATT INDICATES NIGHT LIGHT (UNSWITCHED). HEIGHT WITH HTG HEATING WIRE GUARD SWITCH ID INDICATED BY A LOWERCASE LETTER. SWITCH HTR HEATER WATER HEATER IDS ARE UNIQUE PER SPACE. A SWITCH WITH AN ID "a" HV HIGH VOLTAGE WITHOUT CONTROLS ALL DEVICES WITHIN THE SPACE IN WHICH IT HVAC HEATING, VENTILATING AND AIR WEATHERPROOF IS LOCATED TAGGED WITH "a". A SWITCH WITHOUT A SHOWN ADJACENT. XFMR TRANSFORMER CONDITIONING TAGGED ID CONTROLS ALL LIGHTING FIXTURES WITHIN A XFR TRANSFER INTERRUPTING CAPACITY SPACE. ID TAGS MAY BE USED ON CONTROL DEVICES ISOLATED GROUND OTHER THAN SWITCHES, SUCH AS OCCUPANCY SENSORS IMC INTERMEDIATE METAL CONDUIT INCAND INCANDESCENT

IR INFRARED

KV KILOVOLT

KW KII OWATT

LTG LIGHTING

LTNG LIGHTNING

MAX MAXIMUM

I/W INTERLOCK WITH

J-BOX JUNCTION BOX

KVA KILOVOLT-AMPERE

KWH KILOWATT HOUR

LIGHT

LV LOW VOLTAGE

LOC LOCATE OR LOCATION

MAG.S MAGNETIC STARTER

M/C MOMENTARY CONTACT

MECHANICAL CONTRACTOR

KVAR KILOVOLT-AMPERE REACTIVE

ANGLE

FEET

INCHES

NUMBER

CENTER LINE

PHASE

AT

▲ DELTA

P PLATE

→ ⊕ ⊞ QUADRUPLEX RECEPTACLE SPECIAL RECEPTACLE, TYPE AS INDICATED RECEPTACLE MODIFIERS: ##": HEIGHT AFF OC AC: ABOVE COUNTER WP: WEATHERPOOF IN-USE COVER IG: ISOLATED GROUND CENTER SHADING INDICATES GFI # P HALF SHADING INDICATES SPLIT (TYPICALLY SWITCHED) • OUTER SHADING INDICATES EMERGENCY MULTIOUTI ET ASSEMBLY. FILLED SQUARES INDICATED 120V OUTLETS RANGE RECEPTACLE. NEMA 14-50R CORD REEL, DEVICE VARIES DROP CORD, DEVICE VARIES FLOORBOX, TYPE AS INDICATED **EMERGENCY POWER OFF SWITCH** SAFETY SWITCH, NON-FUSED SAFETY SWITCH, FUSED COMBINATION STARTER/DISCONNECT POWER DEVICE AND EQUIPMENT TAGS

EQUIPMENT TAGS: EQUIPMENT ID IS INDICATED BY AN UNDERLINED TAG ADJACENT TO THE EQUIPMENT. SEE THE EQUIPMENT CONNECTION SCHEDULE FOR DESCRIPTION. ELECTRICAL REQUIREMENTS. AND PANEL AND CIRCUIT NUMBER SYMBOLS/GRAPHIC APPEARANCE OF EQUIPMENT VARIES. MDP HP1A LP1A

HATCHED FILL INDICATES DISTRIBUTION PANEL OR SOLID FILL INDICATES BRANCH PANEL OR LOAD CENTER. DASHED BOX INDICATES CODE-REQUIRED CLEARANCE (WIDTH AND DEPTH). DOOR INDICATES FRONT OF RECESSED PANEL.

T1 TRANSFORMER: TYPICALLY TRANSFORMER NAMES BEGIN WITH OR CONTAIN THE LETTER "T". SEE SINGLE-LINE DIAGRAM FOR DESCRIPTION AND REQUIREMENTS.

> CONTAIN 1 # 12 CONDUCTOR PER PHASE, NEUTRAL, AND GROUND IN 1/2" CONDUIT UNLESS SPECIFIC EQUIPMENT REQUIRES A DIFFERENT SIZE.



HOME RUN TO BRANCH CIRCUIT PANELBOARD. THE CIRCUIT DESIGNATION IS SHOWN AS THE DENOMINATOR. CIRCUIT BREAKER SIZES (AMPS/NUMBER OF POLES) ARE SHOWN IN THE PANELBOARD SCHEDULE WITH THE CORRESPONDING PANELBOARD AND CIRCUIT NUMBER OF PHASE CONDUCTORS. SHORT TICK MARKS IS NOT INDICATED BUT SHALL BE INSTALLED. NUMBER OF ARROWHEADS INDICATE NUMBER OF CIRCUITS.

CONDUIT IN CEILING, FLOOR OR WALL AS REQUIRED BY FIELD CONDITIONS

FIRE ALARM SYMBOLS MANUAL PULL STATION HORN/STROBE, WALL $\boxtimes \bowtie$ HORN/STROBE, CEILING

STROBE, WALL

STROBE, CEILING

SPEAKER/STROBE, CEILING

FIRE ALARM BELL

HEAT DETECTOR

SMOKE DETECTOR

S DUCT SMOKE DETECTOR

□//// SMOKE DAMPER

⊢**⊙**⊐ DOOR HOLDER

⊢**●**✓ DOOR CLOSER

FIRE SERVICE PHONE

CARBON MONOXIDE DETECTOR

CONTROL MODULE AT FLOW SWITCH

MONITOR MODULE AT TAMPER SWITCH

MONITOR MODULE AT POST INDICATOR VALVE

 \bowtie

щO

lacksquare

 \mathbb{A}

DATA OUTLET ▼ VOICE OUTLET

CATV OUTLET

DATA/VOICE OUTLET WIRELESS ACCESS POINT

SECURITY SYMBOLS

⊢MD →

 $\vdash ::$

SOUND SYSTEM SYMBOLS

CONSTRUCTION PHASING

 \Rightarrow

MISCELLANEOUS

(TYPICAL ALL SYMBOLS AND EQUIPMENT)

NEW

XXX AREA NOT IN CONTRACT

TELECOM SYMBOLS

CEILING MOUNTED SECURITY CAMERA

⊢CR CARD READER CARD READER W/ KEYPAD ⊢CK DOOR CONTACT

MOTION DETECTOR

VOLUME CONTROL

EXISTING TO REMAIN

EXISTING TO BE REMOVED

EXISTING TO BE DEMOLISHED

KEY NOTE (SEE SCHEDULE)

ROOM NAME AND NUMBER

NUMBER OF DETAIL ON SHEET

NUMBER OF SHEET WHERE DETAIL APPEARS

REVISION NUMBER - SHOWN ON PLANS

SECURITY SYSTEM KEYPAD

WALL MOUNTED SPEAKER

CEILING MOUNTED SPEAKER

ES ELECTRIC STRIKE ML MAGNETIC LOCK COMBINATION LOCK \vdash \square REQUEST TO EXIT BUTTON

POKE THRU DEVICE, TYPE AS INDICATED

1d ELECTRICAL DEVICE TAGS: THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER (WHERE APPLICABLE) EXAMPLE: SPLIT DUPLEX RECEPTACLE IS CONNECTED TO CIRCUIT 1 AND ONE RECEPTACLE OUTLET IS CONTROLLED BY

CONDUIT SHOWN WITHOUT SLASH MARKS SHALL

CONDUIT SHOWN SHALL CONTAIN 1 # 10 CONDUCTOR PER PHASE IN ELECTRICAL CODE SIZED MINIMUM CONDUIT UNLESS A CONDUCTOR AND CONDUIT SIZE IS

PANELBOARD DESIGNATION IS SHOWN ADJACENT TO THE HOME RUN ARROW AS A NUMERATOR AND THE DESIGNATION. EXAMPLE: HOME RUN TO PANELBOARD P4N-102; CIRCUITS 1, 3, 5. LONG TICKMARKS INDICATE INDICATE NUMBER OF GROUNDED CONDUCTORS (NEUTRALS). AN EQUIPMENT GROUNDING CONDUCTOR

— — CONDUIT IN FLOOR

ELECTRICAL SHEET INDEX

PANELBOARD IDENTIFICATION

01 = PANELBOARD #1

02 = PANELBOARD #2

03 = PANELBOARD #3

-4. FLOOR DESIGNATION:

B = BASEMENT

1 = FIRST FLOOR

2 = SECOND FLOOR

ETC.

1. EQUIPMENT DESIGNATION:

M = MOTOR CONTROL CENTER

2. VOLTAGE DESIGNATION:

3. SYSTEM DESIGNATION:

C = POWER CONDITIONED

U = UNINTERRUPTIBLE POWER

L = LIGHTING

D = DISTRIBUTION

S = SWITCHBOARD

R = RELAY PANEL

1 = 120/240V - 1PH

3 = 208Y/120V - 3PH

4 = 480Y/277V - 3PH

5 = 120/208 - 1PH

6 = SPECIAL

N = NORMAL

SOURCE

E = EMERGENCY

2 = 240V - 3PH

P = POWER

SHEET DESCRIPTION E0.0 ELECTRICAL TITLE SHEET E0.1 ELECTRICAL SPECIFICATIONS ELECTRICAL DEMOLITION PLAN E2.1 ELECTRICAL PLANS E3.1 ELECTRICAL DETAILS

3/4"C FIRE ALARM DEVICES

ACCESSIBLE CEILINGS.

ASSOCIATED WITH THIS WORK.

LABORATORY UNO.

OTHERWISE:

1"C TV OUTLETS

1/2"C VOLUME CONTROLS

1"C TELEPHONE OUTLETS

AND NEW CONSTRUCTION.

1"C INFORMATION OUTLETS

A BRANCH CIRCUITING INDICATED ON PLANS AND SCHEDULES IS BASED UPON EXISTING PLANS AND SITE OBSERVATION, CONTRACTOR TO FIELD VERIFY.

ELECTRICAL REMODEL NOTES

WORKMANSHIP PUBLISHED BY NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION

FIELD COORDINATE FINAL MECHANICAL AND EQUIPMENT LOCATIONS ALONG WITH

CONNECTION REQUIREMENTS AND CONTROL WIRING PRIOR TO ROUGH-IN. ADJUST

C ELECTRICAL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED

MATERIALS FURNISHED FOR THIS PROJECT SHALL BE NEW, COMMERCIAL GRADE,

M PROVIDE COMPLETE OPERATION & MAINTENANCE MANUAL INCLUDING APPROVED

SUBMITTAL DRAWINGS, WARRANTY INFORMATION FOR PRODUCT SUPPLIED, AND

THE CONTRACTOR IS RESPONSIBLE FOR MAKING FINAL WIRING TERMINATIONS TO

RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE CONDUIT PROVISIONS, BACK

BOXES, ROUGH-INS, SLEEVES AND POWER TO HEAD END EQUIPMENT FOR EXACT

CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ELECTRICAL ITEMS SHOWN ON

TV OUTLETS, VOLUME CONTROLS, TELEPHONE OUTLETS, DATA OUTLETS, AND FIRE

ACCESSIBLE CEILING, SEE STUB UP DETAIL. VERIFY SIZE OF BACK BOX REQUIRED

FURNISH AND INSTALL CONDUIT FROM BACK BOXES FOR THE FOLLOWING DEVICES

INTO THE ACCESSIBLE CEILING SPACE IN THE CORRIDOR. UNLESS NOTED

3/4"C DOOR SECURITY DEVICES (CARD READERS, DOOR STRIKES ETC..)

WITH DEVICE TO BE INSTALLED. LOCATE BACK BOXES 6" FROM ADJACENT POWER

ALARM DEVICES SHALL CONSIST OF A BACK BOX WITH CONDUIT STUBBED ABOVE THE

FOR WIRING AND INSTALLING VOICE/DATA DEVICES IN OFFICE FURNITURE.

SECURITY SYSTEM TO BE PROVIDED UNDER SEPARATE CONTRACT. IT IS THE

CONDUIT AND WIRE SHALL NOT BE INSTALLED BELOW FLOOR SLAB UNLESS

PRE-INSTALLED RECEPTACLES IN OFFICE FURNITURE. CONTRACTOR IS RESPONSIBLE

(NECA). COMPLY WITH THE LATEST ENFORCED EDITION OF THE NATIONAL

ELECTRICAL CODE (NEC), LOCAL CODES, AMENDMENTS, AND ORDINANCES

CORRESPONDING CIRCUIT BREAKER RATINGS AND BRANCH CIRCUITING

MASTER ELECTRICIAN. PROCURE PERMITS AND LICENSES AND PAY FEES

FREE OF DEFECTS, AND LISTED BY A NATIONALLY RECOGNIZED TESTING

MANUFACTURER'S OPERATION AND MAINTENANCE INSTRUCTIONS

COORDINATE PLACEMENT OF DEVICES WITH FURNITURE LAY-OUT

DRAWINGS EXCEPT FOR ITEMS LISTED IN NOTE 'R' BELOW.

REQUIREMENTS PRIOR TO START OF WORK.

RECEPTACLE INTENDED FOR COMPUTER USE.

INDICATED ON PLAN BY DASHED CONDUIT

- B PROVIDE TYPED CIRCUIT BOARD DIRECTORIES TO REFLECT AS-CONSTRUCTED CONDITIONS. FIELD VERIFY DURING CONSTRUCTION AND REVISE ACCORDINGLY. PROVIDE NECESSARY DEMOLITION TO FACILITATE NEW CONSTRUCTION WORK
- ASSOCIATED WITH THIS PROJECT, COORDINATE OUTAGES WITH OWNER MINIMUM 72 HOURS IN ADVANCE. OWNER RETAINS RIGHT TO FIRST SALVAGE. PROVIDE DISPOSAL OF REMOVED MATERIAL. MAINTAIN CIRCUIT CONTINUITY AS REQUIRED. IT IS THE INTENT OF THESE DIAGRAMMATIC DRAWINGS TO PROVIDE THE PROJECT SCOPE INCLUDING, BUT NOT LIMITED TO PHASED DEMOLITION AND NEW
- CONSTRUCTION. EXISTING INFORMATION INDICATED ON THESE PLANS DOES NOT REPRESENT ALL EXISTING CONDITIONS. THIS CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS, SCOPE OF PHASING, AND PROJECT INTENT PRIOR TO BID PROVIDE CUTTING, PATCHING, AND RESTORATION OF FINISHES NECESSARY FOR
- WORK SURFACES DAMAGED BY THIS WORK. SPACES AROUND CONDUITS PASSING THROUGH FLOORS AND WALLS SHALL BE NEATLY PATCHED AND FINISHED TO MATCH NEW/EXISTING. STRUCTURAL MEMBERS SHALL NOT BE CUT OR PENETRATED IN ANY MANNER. THE SPACES AROUND THE CONDUITS SHALL BE SEALED TO PREVENT ENTRANCE OF MOISTURE. PROVIDE FIRE STOPPING PER UL APPROVED METHODS. REMOVE ABANDONED WIRING COMPLETE. AT CONTRACTORS OPTION, UTILIZE
- EXISTING ABANDONED RACEWAY TO EXTENT AVAILABLE. EXPOSED ABANDONED RACEWAY SHALL BE REMOVED. COORDINATE WORK IN PHASES WITH GENERAL CONTRACTOR AND OWNER TO
- FACILITATE DEMOLITION AND NEW CONSTRUCTION. REMOVE ELECTRICAL RELATED EQUIPMENT (I.E JUNCTION BOXES, RECEPTACLES. SWITCHES, DEVICES, ETC...) AFFECTED/ABANDONED AS A RESULT OF DEMOLITION

ELECTRICAL TITLE 2102 **ET** Author 11/08/22



 $\mathbf{\Omega}$

							LIGHTI	NG F	IXTURE SCH	HEDULE									
		CONSTRUCTION							LIGHT SOURCE					ELECTRICAL					
TYPE	DESCRIPTION	FINISH	LENS/LOUVER	MOUNTING	LAMP	LUMENS DOWN	ССТ	CRI	PROJECTED LIFE	BALLAST/DRIVER	VOLT	WATTS	W/ft	EMERGENCY COMPONENT	MFR	MODEL	NOTE		
A	2X2 RECESSED BACK-LIT FLAT PANEL	WHITE	FROSTED ACRYLIC	LAY-IN	LED	3300 lm	3500 K	80	60,000 HOURS	LED DRIVER, 0-10V DIMMING, 1%	120 V	35 W			ELITE LIGHTING METALUX LITHONIA	FPL-BL SERIES FPS SERIES CPANL LED SERIES			
В	6" DOWNLIGHT	CLEAR	-	RECESSED	LED	1500 lm	3500 K	80	60,000 HOURS	LED DRIVER, 0-10V DIMMING, 1%	120 V	20 W			LITHONIA	LDN6 SERIES			
С	DECORATIVE PENDANT	SELECTED BY INTERIOR DESIGNER	DECORATIVE	SURFACE	LED	1920 lm	3500 K	90	60,000 HOURS	LED DRIVER, 0-10V DIMMABLE, 0%	120 V	25 W			MILLENNIUM LIGHTING	RLED24W	-		
D	DECORATIVE SCONCE	SELECTED BY INTERIOR DESIGNER	DECORATIVE	SURFACE WALL	LED	1935 lm	3500 K	80	50,000 HOURS	LED DRIVER, 0-10V DIMMABLE, 10%	120 V	25 W			SELECTED BY INTERIOR DESIGN	PROVIDE \$300 ALLOWANCE PER FIXTURE	-		
EW1	ELU INDOOR, TWO HEAD			SURFACE WALL	LED	270 lm	5000 K	80			120 V	4 W		BATTERY	DUAL-LITE SURE-LITE LITHONIA	EZ-2 SERIES SEL25 SERIES ELM2L SERIES			
T	TRACK HEAD, FLOOD	SELECTED BY INTERIOR DESIGNER		TRACK	LED	2878 lm	3500 K	90	50,000 HOURS	LED DRIVER, ELV DIMMABLE, 2%	120 V	34 W			JUNO	T265L SERIES			
TS1	LIGHTING TRACK, SINGLE-CIRCUI	SELECTED BY INTERIOR DESIGNER		CEILING SURFACE	LED	0 lm	0 K	0			120 V	540 W	27		JUNO	T SERIES			

										ELECTRICAL EQUIPMENT SC	HEDULI	E				
	EQUIPMENT INFORMATION					CIRCUIT II	NFORMATION	CONTROL			DISCONNECT					
ID	WATTAGE	FLA	MCA	MOCP	VOLT	PH	PANEL	NO.	WIRE & CONDUIT SIZE	DESCRIPTION	FURNISH	INSTALL	DESCRIPTION	FURNISH	INSTALL	NOTES
Air Handler														·		
AH-1	8582 W	36 A	45 A	45 A	240 V	1	Α	29,31	2#8,#10G,3/4"C	DIV. 23 - THERMOSTAT	DIV. 23	DIV. 23	DIV. 26 - NON-FUSED SWITCH NEMA 1	DIV. 26	DIV. 26	
Exhaust Fa	n								-			•		•		
EF-A	156 W	1 A	2 A	15 A	120 V	1	А	5		DIV. 26 - OCCUPANCY SENSOR (CONTROLLED WITH LIGHTS)	DIV. 26	DIV. 26	DIV. 26 - MOTOR RATED SWITCH	DIV. 26	DIV. 26	
EF-A	156 W	1 A	2 A	15 A	120 V	1	А	5		DIV. 26 - OCCUPANCY SENSOR (CONTROLLED WITH LIGHTS)	DIV. 26	DIV. 26	DIV. 26 - MOTOR RATED SWITCH	DIV. 26	DIV. 26	
HP-1				•	•							•		•		
HP-1	3744 W	16 A	20 A	30 A	240 V	1	Α	25,27	2#12,#10G,3/4"C	DIV. 23 - THERMOSTAT	DIV. 23	DIV. 23	DIV. 26 - NON-FUSED SWITCH NEMA 3R	DIV. 26	DIV. 26	
Water Heat	er			!		•	'		•			'				
WH-3	480 W	4 A	5 A	15 A	120 V	1	Α	12	2#12,#12G,1/2"C	DIV. 23 - AQUASTAT	DIV. 23	DIV. 23	DIV. 26 - MOTOR RATED SWITCH	DIV. 26	DIV. 26	

					KITCHEN EQ	UIPMENT	SCHEE	ULE			
			LOAD						DISCONNECT		MTG
NO.	DESCRIPTION	WATTS	FLA	MCA	MOCP	VOLT	PHASE	CONDUIT & WIRE SIZE	COMPONENT	CONNECTION	HT NOTES
#1	24" BACK BAR COOLER - TBB-24-48G-HC-LD	252 VA	2 A	3 A	20 A	120 V	1	2#12,#12G,1/2C	NEMA 5-20	CORD AND PLUG	18"
#1	24" BACK BAR COOLER - TBB-24-48G-HC-LD	252 VA	2 A	3 A	20 A	120 V	1	2#12,#12G,1/2C	NEMA 5-20	CORD AND PLUG	18"
#2	DOUBLE TAP KEG DISPENSER - Avantco UDD-72-HC	240 VA	2 A	3 A	20 A	120 V	1	2#12,#12G,1/2C	NEMA 5-20	CORD AND PLUG	18"
#3	UNDERCOUNTER RECEPTACLE	180 VA	2 A	2 A	15 A	120 V	1	2#12,#12G,1/2C	NEMA 5-20	CORD AND PLUG	18"
#4	JUICER - VERSATILE PRO	324 VA	3 A	3 A	15 A	120 V	1	2#12,#12G,1/2C	NEMA 5-20	CORD AND PLUG	18"
#5	RETRO COOLER - 21TF	1800 VA	15 A	19 A	20 A	120 V	1	2#12,#12G,1/2C	NEMA 5-20	CORD AND PLUG	18"
#7	PASS THROUGH DISHWASHER - CMA	900 VA	8 A	9 A	15 A	120 V	1	2#12,#12G,1/2C	MOTOR RATED SWITCH		

Location: Space 225 Supply From: Mounting: SURFACE Enclosure: NEMA 1						Volts Phases Wires			A.I.C. Rating: 10,000 AMPS Mains Type: MLO Mains Rating: 200 A Ground Bus: Yes					
CCT	Circuit Description	Bkr Type	Rating	Poles	Å	A	E	3	Poles	Rating	Bkr Type	Circuit Description	сст	
1	DINING ROOM LIGHTS		20 A	1	254	0			1	20 A		DINING RCPTS	2	
3	BAR TRACK LIGHTS		20 A	1			600	900	1	20 A		BAR - GLASS WASHER	4	
5	KITCHEN/BATHROOM LIGHTS		20 A	1	546	180			1	20 A		ROOFTOP RCPT	6	
7	BAR - #1- #4		20 A	1			1068	900	1	20 A		PASS THROUGH DISHWASHER	8	
9	BAR - RETRO COOLER		20 A	1	1800	720			1	20 A		DINING/BATHROOM	10	
11	BAR - POS		20 A	1			1200	480	1	15 A		WH-3	12	
13	RCPT		20 A	1	540				1			SPACE	14	
15	SPARE		20 A	1			0	-	1			SPACE	16	
17	SPARE		20 A	1	0				1			SPACE	18	
19	SPARE		20 A	1			0		1			SPACE	20	
21	SPARE		20 A	1	0				1			SPACE	22	
23	SPARE		20 A	1			0		1			SPACE	24	
25	LID 4		00.4		1872				1			SPACE	26	
27	HP-1		30 A	2			1872		1			SPACE	28	
29			4- 4		4291				1			SPACE	30	
31	AH-1		45 A	2			4291		1			SPACE	32	
				Tota	1020	4 VA	1131	1 VA						
				Tota	85	A	94	A						

ELECTRICAL SPECIFICATIONS

WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.

- A. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT TO COMPLETE ALL WORK OF THIS SECTION. ALL MATERIALS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW, UNDAMAGED AND FREE FROM ANY DEFECTS AND SHALL BE UL LISTED..
- B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH THE NATIONAL ELECTRIC CODE (NEC 2020 EDITION), STATE LAWS AND ALL OTHER REGULATIONS GOVERNING WORK OF THIS NATURE.
- C. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIAL, AND LABOR TO SATISFY A COMPLETE AND
- D. ALL ELECTRICAL JUNCTION BOXES, PANELBOARDS, CABLING, RECEPTACLES SHALL BE LABELED WITH PANEL AND CIRCUIT NUMBER.
- E. THE CONTRACTOR SHALL GIVE ALL NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENT TAXES, FEES, DEPOSITS AND OTHER COSTS IN CONNECTION WITH HIS WORK; FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS AND OBTAIN NECESSARY APPROVALS OF ALL AGENCIES HAVING JURISDICTION. OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION AND APPROVALS FOR WORK.
- F. STORE MATERIALS AND EQUIPMENT ON PREMISES WHERE DIRECTED BY THE OWNER.
- G. THE CONTRACTOR SHALL COOPERATE TO THE FULLEST WITH ALL OTHER TRADES. THE CONTRACTOR SHALL PLAN HIS WORK IN SUCH A WAY, AND FURNISH ALL NECESSARY EQUIPMENT AND INFORMATION TO THE OTHER TRADES SO AS NOT TO DELAY ANY OTHER TRADE OR HINDER THE PROGRESS OF WORK.
- H. ANY CONTRADICTIONS BETWEEN THE WRITTEN SPECIFICATIONS AND DRAWINGS SHALL BE CONSIDERED AMBIGUOUS, AND WILL BE THE RESPONSIBILITY OF THE BIDDER TO SECURE CLARIFICATION PRIOR TO

I. SUBMITTALS

- a. SUBMIT MANUFACTURERS TECHNICAL PRODUCT DATA AND LITERATURE FOR ALL MATERIALS SPECIFIED HEREIN. INDICATE AND HIGH LIGHT ON THE SUBMITTALS DETAILS OF ALL ITEMS TO INDICATE CORRECT INTERPRETATION OF THE CONTRACT DOCUMENTS.
- b. SUBMITTALS SHALL BE SUBMITTED VIA ELECTRONIC FORMAT (PDF).

PRODUCTS:

A. ALL MATERIALS SHALL CONFORM TO U.L. & NEMA REQUIREMENTS AND SHALL BE AS SPECIFIED OR "PRIOR APPROVED EQUAL" BY THE ENGINEER.

- B. RACEWAY SYSTEM a. ALL CONDUITS AND RACEWAYS SHALL BE INSTALLED CONCEALED IN FINISHED SPACES. CONCEALED
- CONDUITS SHALL BE EMT, IMC OR RGS. ROUTE ALL CONDUITS AND RACEWAYS PARALLEL AND PERPENDICULAR TO THE STRUCTURE AND SUPPORT AS REQUIRED BY THE NEC. b. ALL RACEWAYS SHALL BE RGS OR IMC WHERE EXPOSED TO DAMAGE AND PUBLIC IN UNFINISHED SPACES. RACEWAYS SHALL BE SURFACE METAL RACEWAY (WIREMOLD) WHERE EXPOSED TO DAMAGE
- AND PUBLIC IN FINISHED SPACES. c. ALL EXPOSED EXTERIOR OR WET LOCATED BRANCH CIRCUIT OR FEEDER RACEWAYS SHALL BE RGS
- d. ALL RACEWAYS SHALL BE 1/2" MINIMUM SIZE. e. ALL UNDERGROUND BRANCH CIRCUIT OR FEEDER RACEWAYS SHALL BE PVC CONDUIT.
- f. CONNECTORS/COUPLINGS FOR USE WITH EMT CONDUIT SHALL BE STEEL COMPRESSION TYPE, EXCEPT THAT STEEL, SET SCREW TYPE WILL BE ACCEPTABLE FOR EMT CONDUIT SIZES 2-1/2" AND
- g. RACEWAY PENETRATIONS THROUGH FLOOR SLABS AND FIRE-RATED WALLS SHALL BE FILLED WITH
- FIRE RATED CAULK TO PREVENT TRANSFER OF SMOKE, WATER AND DUST. h. FLEXIBLE METAL CONDUIT WITH APPROVED TYPE FITTINGS MAY BE USED IN LIMITED LENGTHS FOR
- CONNECTIONS TO MOTORS AND RECESSED FIXTURES WHERE IT IS NECESSARY TO PROVIDE FLEXIBLE CONNECTIONS. i. METAL-CLAD CABLE IS PERMITTED WHERE PERMITTED IN NEC. HOMERUNS TO PANEL SHALL BE IN
- PROVIDE 200# NYLON PULLSTRING IN ALL EMPTY RACEWAY.

C. BOXES

- a. PROVIDE GALVANIZED STEEL OUTLET BOXES WITH STAMPED KNOCKOUTS FOR INTERIOR DRY LOCATIONS.
- b. PROVIDE CAST ALUMINUM BOX FOR ALL EXTERIOR WET LOCATIONS. c. INTERIOR FLUSH BOXES SHALL BE 4" SQUARE BY 1-1/4" DEEP. INTERIOR FLUSH BOXES FOR
- COMMUNICATION OUTLETS AND GFCI OUTLETS SHALL BE 4-11/16" SQUARE BY 2-1/8" DEEP.
- d. PROVIDE SINGLE GANG TILE COVERS UNLESS REQUIRED OTHERWISE. e. BOXES SHALL NOT BE MOUNTED BACK TO BACK IN COMMON WALLS.
- f. ATTACH EMT CONDUIT WITH CONNECTORS WITH INSULATED THROATS.

- D. WIRE AND CABLES
- a. PROVIDE AND INSTALL ALL WIRING AND CABLE AS REQUIRED TO CONNECT ALL ELECTRICAL EQUIPMENT AND DEVICES INDICATED ON THE PLANS.
- b. ALL CONDUCTORS #10 GAUGE AND SMALLER SHALL BE SOLID COPPER, 75°C TYPE THHN OR THWN, 600V
- c. ALL CONDUCTORS #8 GAUGE AND LARGER SHALL BE STRANDED COPPER, 75°C TYPE THHN OR THWN, 600V INSULATION.
- d. BRANCH CIRCUITS SHALL NOT BE SMALLER THAN #12 AWG. e. CONDUCTORS SHALL BE COLOR CODED BLACK/RED FOR 120/240 VOLT SYSTEMS FOR A AND B PHASES.
- NEUTRAL SHALL BE WHITE FOR 120/240V. GROUND CONDUCTOR SHALL BE GREEN.

E. WIRING DEVICES

- a. PROVIDE WIRING DEVICES PRODUCED BY ONE OF THE FOLLOWING MANUFACTURERS: HUBBELL, LEVITON, LEGRAND, LUTRON OR EATON.
- b. RECEPTACLES SHALL BE SPECIFICATION GRADE HEAVY-DUTY TYPE RECEPTACLES 2-POLE, 3-WIRE
- GROUNDING, SIDE WIRING, NEMA 5-20R, 20-AMP, 125 VOLTS, UNLESS SHOWN OTHERWISE. c. WEATHERPROOF COVERS SHALL BE "WHILE-IN-USE" COVERS.
- d. LIGHT SWITCHES SHALL BE RATED 20 AMPS, 120V AC RATED.
- e. ADJACENT DEVICES SHALL HAVE A COMMON FACEPLATE. f. OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY TYPE. SENSORS SHALL BE MANUFACTURER'S RECOMMENDED SIZE AND MODEL FOR EACH SPACE. EXACT LOCATION OF SENSORS SHALL BE AS DETERMINED BY MANUFACTURER IN SHOP DRAWING. ACCEPTABLE SENSOR MANUFACTURERS: HUBBELL
- BUILDING AUTOMATION, WATTSTOPPER, COOPER, AND ACUITY. g. FINISH OF ALL WIRING DEVICES SHALL BE COORDINATED WITH ARCHITECT WITH MID-SIZE 302 STAINLESS STEEL COVERS.

- F. LIGHTING FIXTURES a. CONTRACTOR SHALL PROVIDE ALL LIGHTING FIXTURES AS INDICATED ON THE FIXTURE SCHEDULE. SERIES NUMBERS ARE FOR GENERAL IDENTIFICATION OF FIXTURES ONLY. ALL RELATED ITEMS FOR A
 - COMPLETE SYSTEM SHALL BE INCLUDED.
- b. LED FIXTURES SHALL HAVE A L70 RATING OF AT LEAST 50,000 HOURS. c. LED FIXTURES AND DRIVERS SHALL HAVE A 5 YEAR WARRANTY.
- e. EMERGENCY FIXTURES SHALL BE PROVIDED WITH FACTORY INSTALLED WITH 1000 LUMEN EMERGENCY BATTERY PACKS, UNO.

d. PROVIDE FIXTURES WITH PROPER FRAMES FOR CEILING TYPES INDICATED ON THE REFLECTED CEILING

G. PANELBOARDS

- a. CIRCUIT BREAKERS TO BE INSTALLED IN EXISTING PANELBOARDS SHALL MATCH EXISTING TYPE CIRCUIT
- b. PROVIDE NEW/UPDATED TYPED SCHEDULES FOR ALL PANELBOARDS. SPARE CIRCUIT BREAKERS SHALL BE LABELED SPARE AND IN THE OFF POSITION.

H. GROUNDING

- a. THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY THE NATIONAL ELECTRIC CODE. ALL GROUND SYSTEMS AND CONNECTIONS SHALL BE MECHANICALLY SECURE AND ELECTRICALLY CONTINUOUS.
- b. BOND EQUIPMENT GROUNDING CONDUCTORS TO ALL OUTLET BOXES WITH A SCREW USED FOR NO
- c. CONNECT EQUIPMENT GROUNDING CONDUCTOR TO DEVICE GROUNDING TERMINALS. d. PROVIDE BARE OR GREEN INSULATED STRANDED COPPER SIZED ACCORDING TO NEC OR AS SHOWN.

DISCONNECT SWITCHES

- a. ACCEPTABLE MANUFACTURERS ARE GE, SIEMENS, SQUARE D, OR EATON. b. PROVIDE HEAVY DUTY TYPE, SHEET STEEL ENCLOSED SAFETY SWITCHES, INCORPORATING QUICK-
- BREAK TYPE SWITCHES. c. ALL SWITCHES SHALL BE UL LISTED.
- d. DISCONNECTS SHALL BE NON-FUSED TYPE, UNO.

EXECUTION

a. ALL WORK SHALL BE INSTALLED IN A NEAT WORKMANLIKE MANNER AND IN STRICT ACCORDANCE WITH CODE REQUIREMENTS AND THE RESPECTIVE MANUFACTURER'S INSTRUCTIONS.

B. TEMPORARY POWER

a. FURNISH AND INSTALL TEMPORARY LIGHT AND POWER AS MAY BE REQUIRED BY ALL TRADES.

a. PROVIDE ALL MATERIALS AND LABOR REQUIRED TO ADEQUATELY SUPPORT, BRACE AND STRENGTHEN

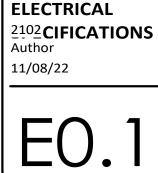
EQUIPMENT AND MATERIALS FURNISHED AS PART OF THIS WORK. b. ALL RACEWAYS, BOXES, ETC., SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE, INDEPENDENT OF DUCT, PIPING OR OTHER WORK.

D. BRANCH CIRCUITS

- a. PROVIDE ALL CONDUITS, OUTLETS, BOXES, WIRES, SWITCHES, RECEPTACLES, ETC., FOR A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS.
- b. CONTRACTOR SHALL CAREFULLY CHECK MECHANICAL DRAWINGS AND SPECIFICATIONS TO ESTABLISH EXTENT OF POWER TO BE PROVIDED.

- a. CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE OF ALL WASTE, SURPLUS MATERIALS, OR DEBRIS WHICH IS CAUSED BY HIS EMPLOYEES OR RESULTING FROM HIS WORK.
- b. AFTER ALL EQUIPMENT AND DEVICES HAVE BEEN INSTALLED, REMOVE ALL LABELS, STICKERS, STAINS,
- TEMPORARY COVERS, ETC. c. PROVIDE IDENTIFICATION PLATES ON ALL EQUIPMENT.









DEMOLITION SHEET NOTES

- A SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASES OF DEMOLITION AND CONSTRUCTION. COORDINATE WITH GENERAL CONSTRUCTION.
- B DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AND LIGHTING FIXTURES IN DEMOLITION AREAS UNLESS NOTED OTHERWISE.
- C DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED. WALLS TO BE DEMOLISHED ARE SHOWN DASHED. DISCONNECT AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO LAST REMAINING DEVICE. FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF CIRCUIT(S) TO ANY EXISTING DEVICES TO REMAIN. COORDINATE AND VERIFY REQUIREMENTS WITH NEW WORK IN AREA.
- D FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
- E FURNISH AND INSTALL CONDUIT AND/OR COMMUNICATIONS/DATA WIRING AS NECESSARY FOR CONTINUITY OF ANY WIRING ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY COMMUNICATIONS/DATA EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
- F DISCONNECT AND REMOVE LIGHT SWITCHES IN DEMOLITION AREAS AS NECESSARY TO ACCOMMODATE NEW DOOR CONFIGURATIONS.
- G DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES AND BACK BOXES AS NECESSARY WHERE NEW WALL CONSTRUCTION WILL INTERSECT AN EXISTING WALL. FURNISH AND INSTALL CONDUIT AND WIRE AS REQUIRED FOR CONTINUITY OF CIRCUIT(S).
- H FURNISH AND INSTALL BLANK COVER PLATES OVER ALL EXISTING UNUSED OPENINGS.

KEYNOTES

1 EXISTING PANEL TO BE RELOCATED AS SHOWN ON NEW PLAN. PROVIDE NEW BREAKERS AS SHOWN IN NEW PANEL SCHEDULE.





ELECTRICAL

2102/OCLITION PLAN
Author

11/08/22

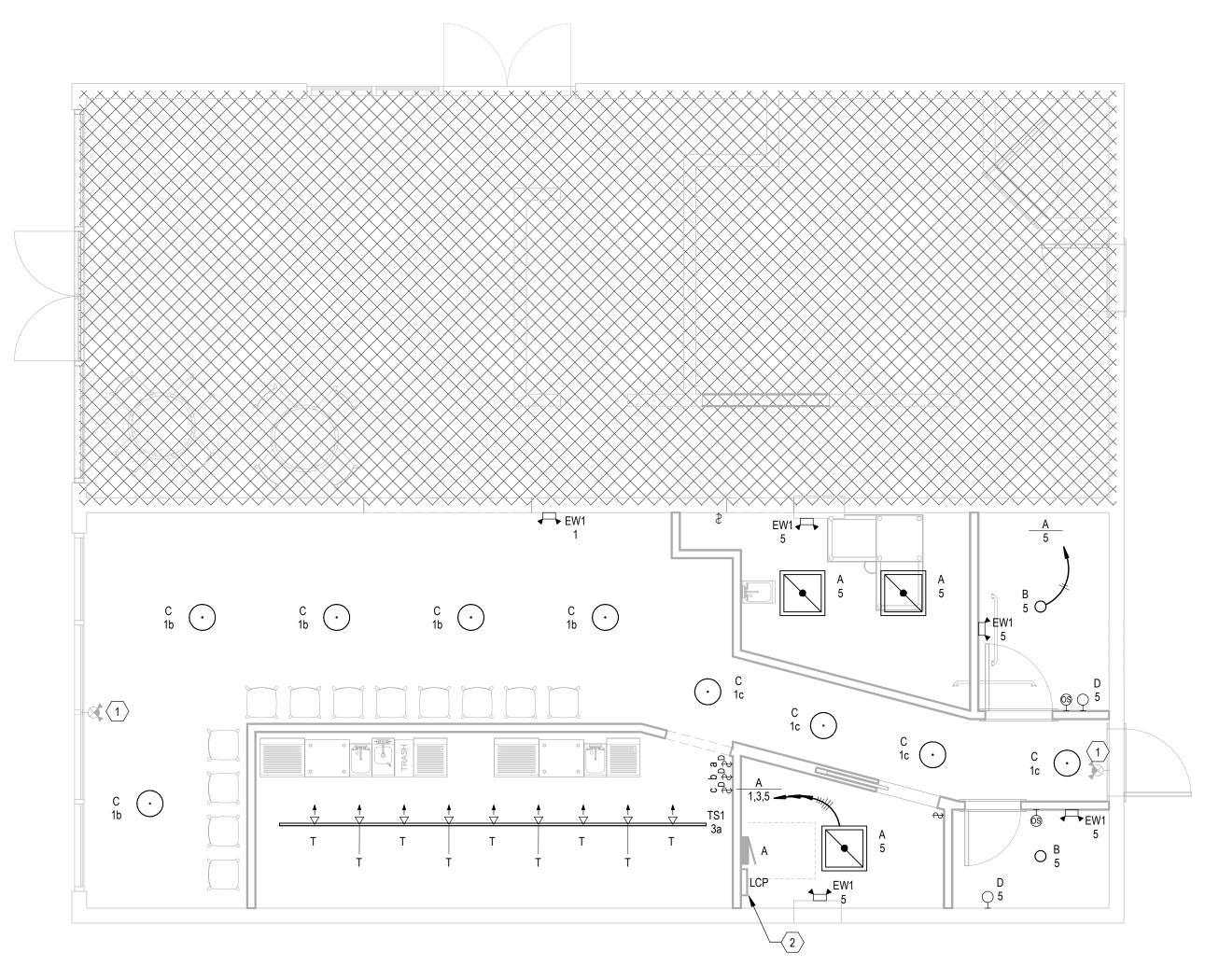


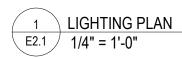
LIGHTING SHEET NOTES

- A ALL RECESSED LIGHTING FIXTURES IN LAY-IN CEILINGS SHALL BE INSTALLED WITH
- 6' LONG FLEXIBLE METAL CONDUIT. B ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE
- FIXTURES UNLESS INDICATED OTHERWISE. C SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF
- EXTERIOR LIGHTING FIXTURES.
- D CIRCUIT WIRING IS NOT SHOWN, PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.
- CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS INDICATED OTHERWISE ON THE
- ELECTRICAL EQUIPMENT SCHEDULE.
- WHERE WALL MOUNTED FIXTURES REQUIRE A LARGER BACKBOX FOR ELECTRONIC ITEMS SUCH AS AN EMERGENCY BATTERY, PROVIDE THE SAME LARGER SIZE BACKBOX FOR ALL FIXTURES OF THE SAME TYPE IN THE SPACE.

KEYNOTES

- EXISTING EXIT SIGN TO REMAIN, RECIRCUIT TO LIGHTING CIRCUIT IN SAME SPACE. 2 4 POLE LIGHTING CONTACTOR PANEL WITH ASTRONIMICAL TIMECLOCK FOR AUTO
- SHUT OFF OF INTERIOR FIXTURES TO COMPLY WITH ENERGY CODE.





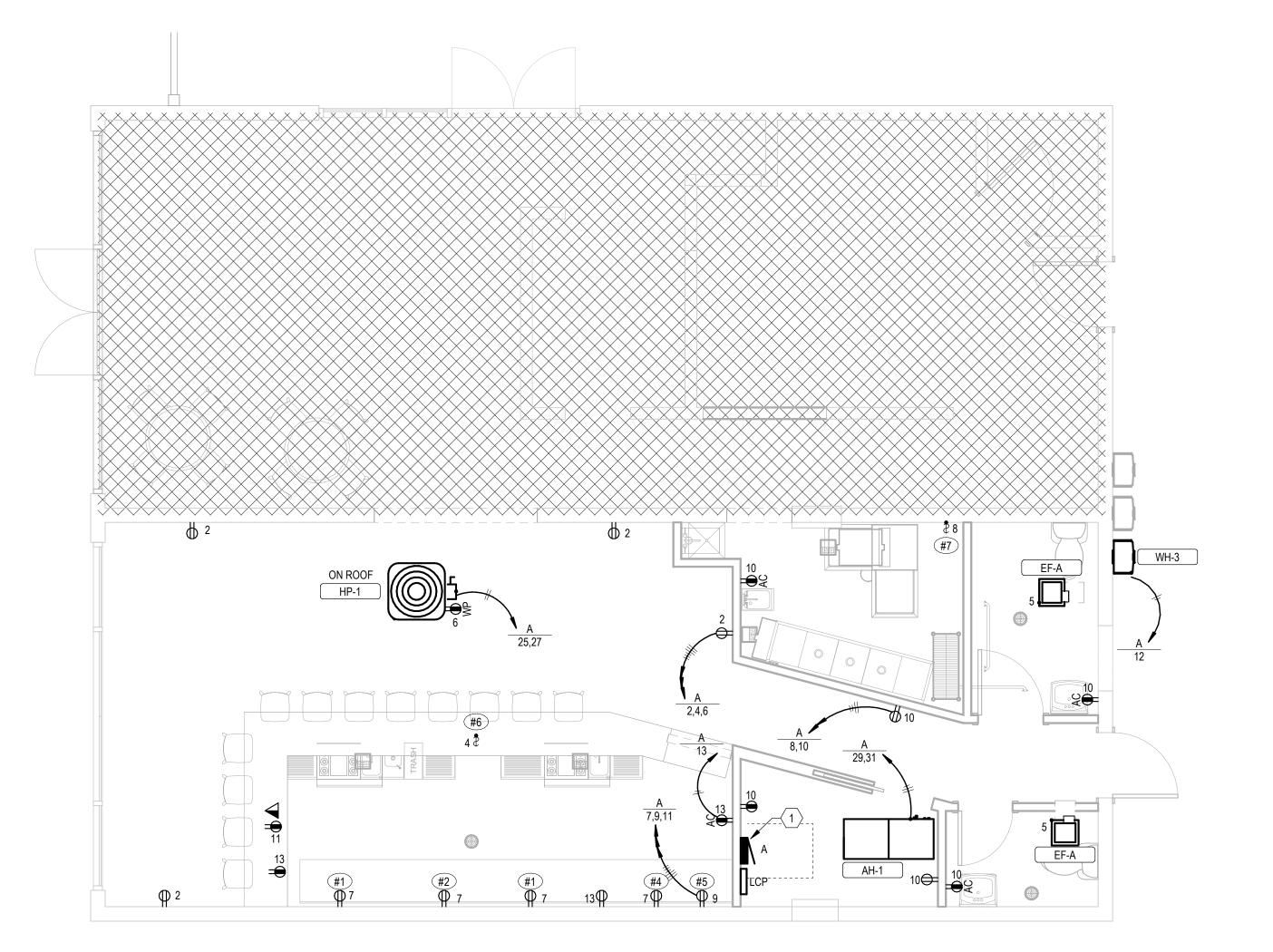
POWER SHEET NOTES

- A WHERE CONNECTED TO A 20A. BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL
- RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED AT 20A. B CIRCUIT WIRING IS NOT SHOWN, PROVIDE PROPER NUMBER OF CONDUCTORS TO
- ACHIEVE CIRCUITING AND SWITCHING SHOWN. C CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS INDICATED OTHERWISE ON THE
- ELECTRICAL EQUIPMENT SCHEDULE. D PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT. MINIMUM REQUIREMENTS: 4" HIGH, 4% AIR ENTRAINED, POLYFIBER REINFORCED CONCRETE, 4" WIDER AND 4" LONGER THAN EQUIPMENT

TO BE PLACED ON IT. REFER TO ELECTRICAL DETAIL DRAWINGS FOR TRANSFORMER, GENERATOR, OR SWITCHGEAR PADS THAT MAY EXCEED THESE REQUIREMENTS.

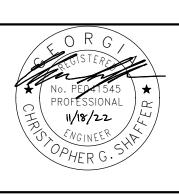
KEYNOTES

1 RELOCATED EXISTING LOAD CENTER.



2 POWER PLAN E2.1 1/4" = 1'-0"





BUL

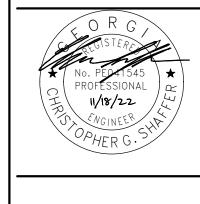
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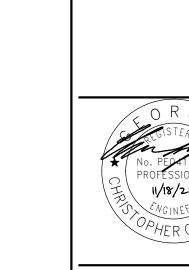


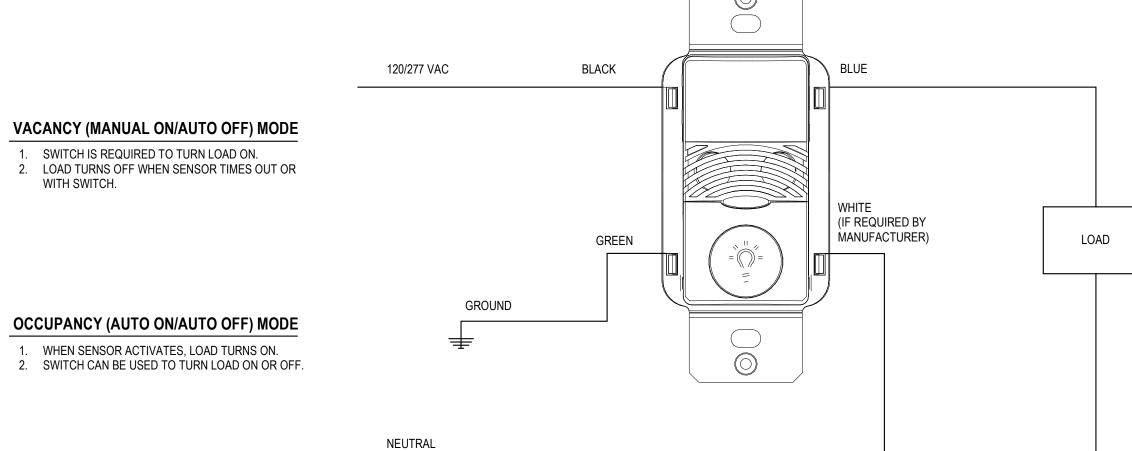
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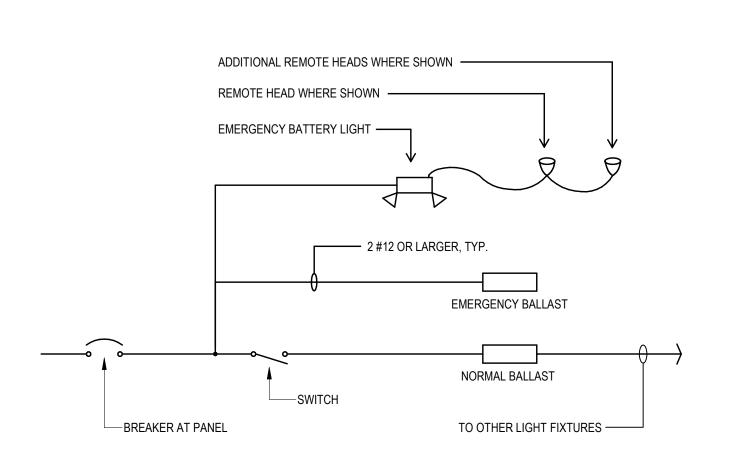






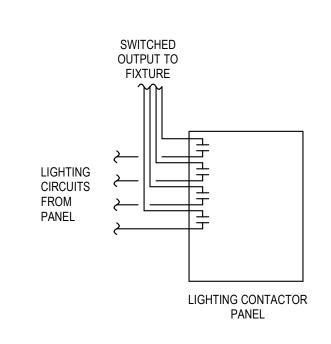
4 WALL MOUNTED OCCUPANCY/VACANCY SENSOR

E3.1 NOT TO SCALE





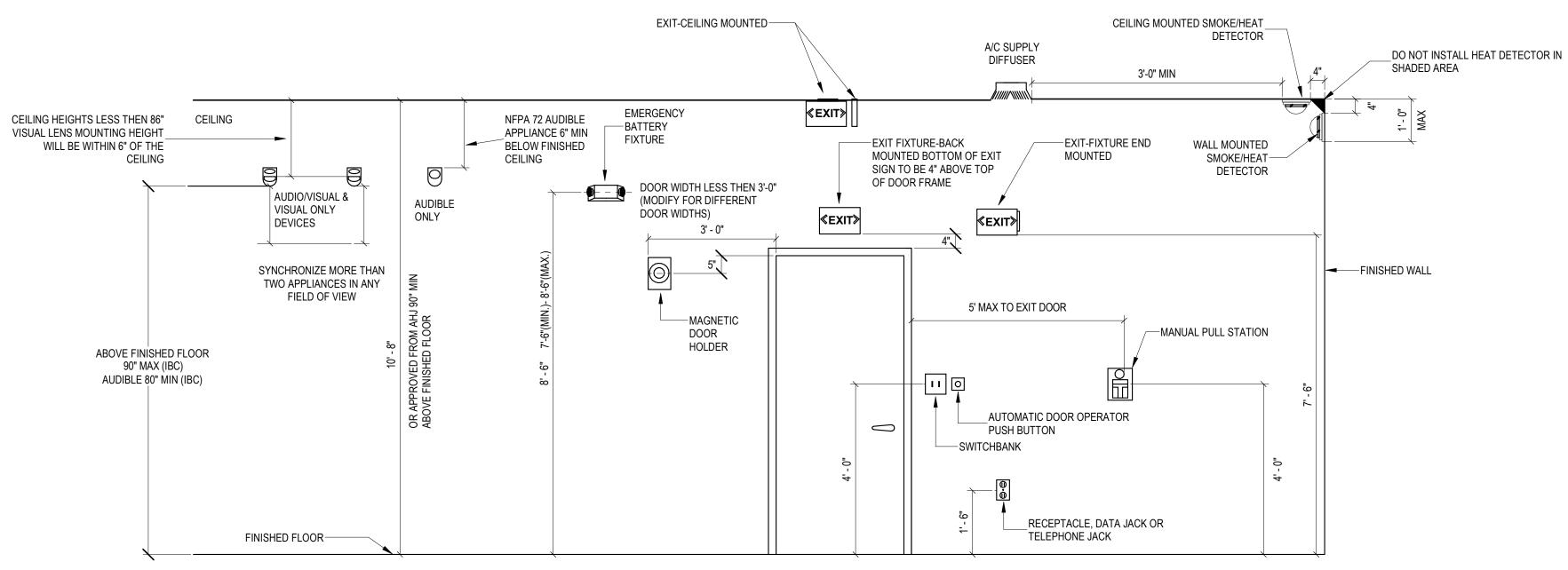
LIGHTING CONTROL SCHEDULE													
ZONE	DESCRIPTION	CIRCUIT	CONTROL TYPE	NOTES									
1	INTERIOR LIGHTING	A-1	TIME-ON / TIME-OFF										
2	INTERIOR LIGHTING	A-3	TIME-ON / TIME-OFF										
3	INTERIOR LIGHTING	A-5	TIME-ON / TIME-OFF										
4	SPARE												



NOTES

LIGHTING CONTROL PANEL SHALL HAVE ASTRONOMICAL TIMECLOCK. COORDINATE PROGRAMMING OF TIME-ON/TIME-OFF WITH OWNER PRIOR TO	
TURN OVER.	

5 LIGHTING CONTROL DETAIL E3.1 NOT TO SCALE



3 TYPICAL MOUNTING HEIGHTS
E3.1 1/2" = 1'-0"

MINIMUM OF (2) 12 G.A. HANGER WIRES TO STRUCTURE ABOVE. (MAY BE SLACK)

SUSPENDEDCEILING GRID

LIGHT FIXTURE -

NOTE: TYPICAL FOR 2'X4' LUMINARIES.

E3.1 NOT TO SCALE

2 LIGHT SUPPORT DETAIL