

BOX REAL ESTATE DEVELOPMENT OFFICE

GENERAL NOTES

- GENERAL CONTRACTOR AND ALL OTHER CONTRACTORS WORKING ON THIS CONSTRUCTION PROJECT SHALL MEET ALL APPLICABLE CODE REQUIREMENTS. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH ANY AND ALL APPLICABLE CODES, REGULATIONS, DIRECTIVES AND LAWS. CONTRACTOR SHALL BE KNOWLEDGEABLE OF ALL CITY REGULATIONS AND CODE ISSUES AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT UPON DISCOVERY OF ANY DISCREPANCIES ON THE DOCUMENTS OR CONDITIONS OF THE PROJECT SITE.
- SUBSTANTIAL COMPLETION SHALL BE ESTABLISHED ON DELIVERY OF OCCUPANCY PERMIT. FINAL COMPLETION SHALL BE DEEMED COMPLETED WHEN ALL PUNCH LIST ITEMS ARE COMPLETED AND APPROVED, ALL SUPPORT EQUIPMENT INSTALLED AND COMPLETE. OWNER WILL DETERMINE FINAL COMPLETION.
- THE RESPONSIBILITIES CONCERNING THE PREPARATION AND REVIEW OF THE APPLICATION FOR PAYMENT AND PAYMENT SCHEDULE SHALL BE ADDRESSED IN THE AGREEMENTS BETWEEN THE OWNER, ARCHITECT, AND CONTRACTOR.
- THE ARCHITECT WILL BE AVAILABLE TO THE OWNER AND CONTRACTOR DURING CONSTRUCTION. THE ARCHITECT WILL ASSIST THE OWNER AND/OR CONTRACTOR IN OBTAINING A BUILDING PERMIT.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CONSTRUCTION PROCESS, MATERIAL VERIFICATION, AND WORKER SAFETY.
- THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR DETAILS AND ACCURACY, FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, AND FOR TECHNIQUES OF ASSEMBLY.
- ALL CUTTING AND PATCHING SHALL BE PERFORMED IN A NEAT AND WORKMAN LIKE MANNER. ANY EXISTING FINISHES DISTURBED OR DAMAGED BY THE CONTRACTOR OR TRADES UNDER CONTRACT DURING THE COURSE OF THE WORK SHALL BE REPAIRED TO MATCH EXISTING.
- NO SUBSTITUTES OF SPECIFIED CONSTRUCTION ITEMS, EQUIPMENT AND FINISHES WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND ARCHITECT.
- ALL BIDDING CONTRACTOR(S) SHALL VISIT THE SITE OF THE PROPOSED WORK AND FULLY ACQUAINT THEMSELVES WITH THE EXISTING CONDITIONS OF THE PROJECT SITE, AS THEY CURRENTLY EXIST, SO THEY MAY FULLY UNDERSTAND THE FACILITIES, DIFFICULTIES AND RESTRICTIONS PRIOR TO SUBMITTING ANY BIDS.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH SCHEDULING INFORMATION PRIOR TO CONSTRUCTION, WHICH WILL BE UPDATED IF THERE ARE ANY CHANGES.
- ALL REQUIRED COMMUNICATION SHALL BE THROUGH THE ARCHITECT AND OWNER.
- DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOBSITE. INFORMATION CONTAINED IN THESE DRAWINGS IS GENERAL AND NOT BASED ON EXISTING DOCUMENTS AND FIELD MEASUREMENTS. THE INFORMATION CONTAINED HEREIN MAY REQUIRE ADJUSTMENTS OR MODIFICATIONS TO CONFORM TO EXISTING CONDITIONS AND DESIGN INTENT OF DOCUMENTS. THE CONTRACTOR MUST NOTIFY ARCHITECT OF ANY CONFLICTS AND/OR VARIATIONS.
- CONTRACTOR SHALL FURNISH & INSTALL ALL ITEMS SHOWN ON THE DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL CONTRACTORS SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT, BOTH AS TO MATERIAL AND WORKMANSHIP, FOR A PERIOD OF TWELVE MONTHS AFTER DATE OF SUBSTANTIAL COMPLETION. IN ADDITION, ANY DAMAGE TO ADJACENT AREAS/SURFACES CAUSED BY FAULTY MATERIALS OR WORKMANSHIP SHALL ALSO BE REPAIRED TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST.
- CONTRACTOR TO INSTALL ALL MATERIAL PER MANUFACTURERS' REQUIREMENTS, UL RATING REQUIREMENTS, SPECIFIC TRADE GUIDELINES, INDUSTRY STANDARDS, AND BUILDING CODES. ALL NEW FINISHES TO COMPLY WITH IBC CHAPTER 8.
- PROVIDE SIGNAGE MEETING ADA REQUIREMENTS AND LOCATIONS DICTATED BY THE CITY AND LOCAL CODES. DESIGN, CONTENT, AND LOCATIONS SHALL BE PROVIDED TO THE OWNER AND ARCHITECT PRIOR TO INSTALLATION.
- THE CONTRACTOR MUST SUBMIT TO OWNER AN INSURANCE CERTIFICATE WITH MINIMUM COVERAGE OF \$1,000,000 IN GENERAL LIABILITY OR EQUAL. THIS CERTIFICATE MUST NAME THE OWNER AS ADDITIONAL INSURED.
- ALL CHANGES, DEVIATIONS, MODIFICATIONS, ADDITIONS OR DELETIONS FROM THE CONTRACT OF CONSTRUCTION OF APPROVED ARCHITECTURAL PLANS SHALL BE APPROVED BY THE OWNER AND ARCHITECT.
- DIMENSIONS ARE FROM OUTSIDE FACE OF FULL BED MASONRY, OR FROM FACE OF MTL STUD ON ALL OTHER MATERIALS, UNLESS NOTED OTHERWISE. (THIN BRICK & THIN STONE VENEERS ARE DIMENSIONED TO FACE OF STUD).
- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ALL INTERIOR SURFACES AND EXTERIOR DEBRIS SPECIFIC TO CONSTRUCTION ACTIVITIES PRIOR TO OCCUPANCY OF THE SPACES BY THE OWNER. ADDITIONAL CLEANING FOLLOWING THE RECONCILIATION OF PUNCHLIST ITEMS SHALL ALSO BE INCLUDED. FINAL CLEANUP SHALL CONSIST OF THE FOLLOWING:
 - REMOVE ALL CONSTRUCTION DEBRIS, UNUSED MATERIALS, TOOLS, ETC.
 - CLEAN INTERIOR AND EXTERIOR SURFACES OF STOREFRONT GLASS AND FRAMES
 - CLEAN ALL FLOORS
 - REPLACE ALL FILTER MEDIA IN HVAC SYSTEMS

LOCATOR PLAN



SCOPE SUMMARY

INTERIOR RENOVATION OF AN EXISTING OFFICE SPACE (T.1.). SCOPE INCLUDES INSTALLATION OF NEW PARTITIONS, DOORS, AND FINISHES. MEP & FIRE ALARM/SPRINKLER PACKAGES TO BE DESIGN/BUILD AND CONTRACTOR TO COORDINATE IT/AV/SECURITY INSTALLATION IN THE FIELD WITH TENANT VENDOR.

CODE REVIEW

APPLICABLE CODES:
2018 International Existing Building Code
2018 Uniform Plumbing Code
2018 International Energy Conservation Code
2018 International Mechanical Code
2018 International Fuel Gas Code
2018 International Private Sewage Disposal Code
2017 National Electrical Code
ICC/ANSI A117.1-2009, Accessible and Usable Buildings and Facilities

CHAPTER 3 *USE AND OCCUPANCY CLASSIFICATION*

BUSINESS, GROUP B

CHAPTER 5 *GENERAL BUILDING HEIGHTS AND AREAS [TABLE 503]*

THIS SCOPE OF WORK DOES NOT INCREASE THE AREA OF THE EXISTING BUILDING/TENANT SPACE.

TENANT RENOVATION AREA = 1,547 SF

CHAPTER 6 *TYPE OF CONSTRUCTION*

CONSTRUCTION TYPE, IIB
NON SPRINKLED

CHAPTER 9 *FIRE PROTECTION SYSTEMS*

907 - FIRE ALARMS ARE PROVIDED

FIRE EXTINGUISHERS TO BE PROVIDED IN ACCORDANCE WITH THE IBC
NFPA 10 REQUIRED SMOKE DETECTORS TO BE PROVIDED
ALL PROVIDED AND INSTALLED BY GENERAL CONTRACTOR

CHAPTER 10 *MEANS OF EGRESS*

THE EXISTING BUILDING MEETS THE REQUIREMENTS FOR MEANS OF EGRESS.

OCCUPANT LOAD:
BUSINESS (1 PER 150 GSF) = 1,547 SF/150 = 11 OCC

CHAPTER 11 *ACCESSIBILITY*

THE EXISTING BUILDING MEETS THE REQUIREMENTS FOR ACCESSIBLE ENTRIES. THE EXISTING PARKING SPACES MEET THE REQUIREMENTS FOR ACCESSIBLE PARKING.

CHAPTER 29 *PLUMBING SYSTEMS*

TWO NEW RESTROOMS HAVE BEEN PROVIDED

PROJECT TEAM

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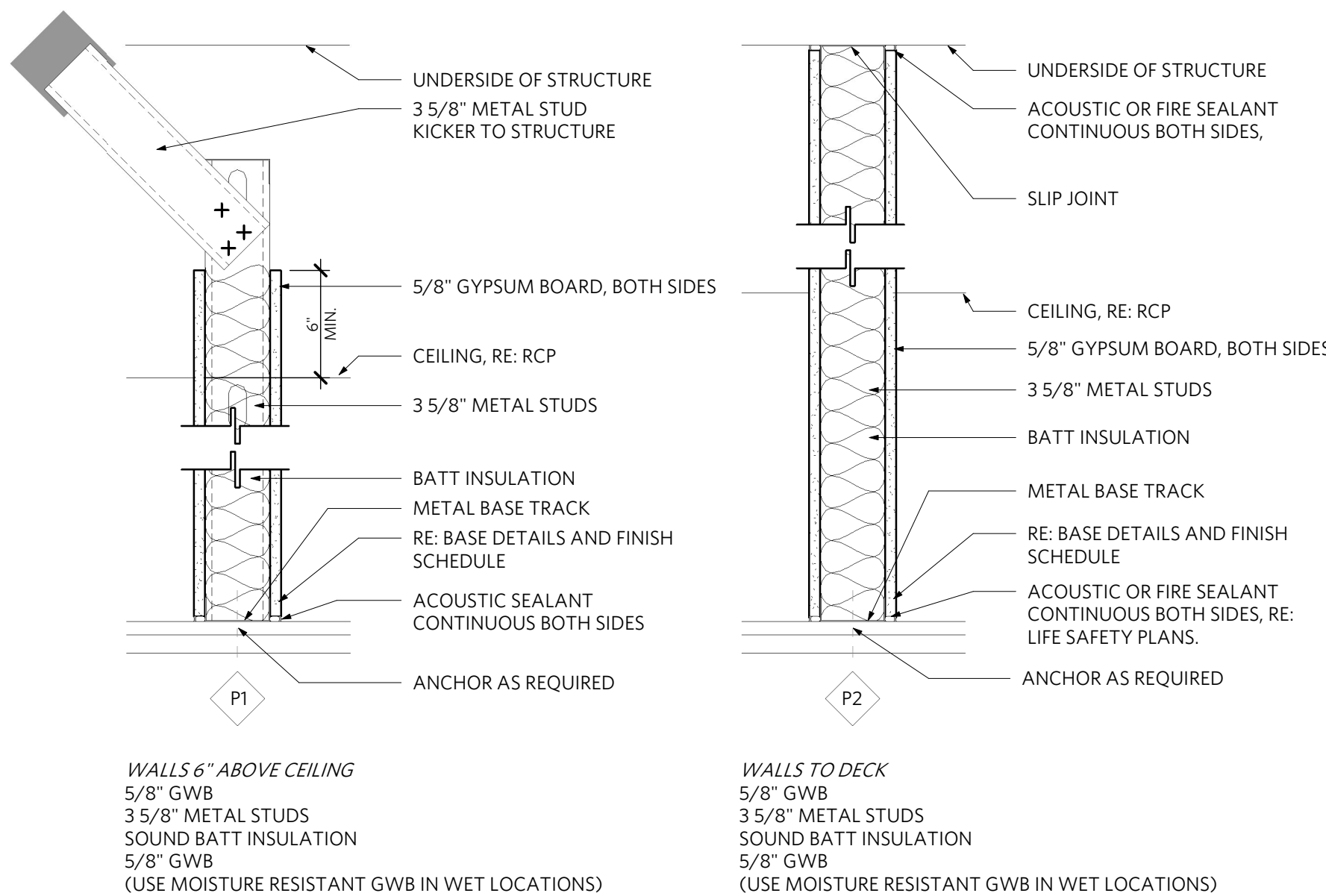
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DRAWING SYMBOLS

WALL SECTION		CONSTRUCTION KEYNOTE	
ELEVATION MARKS (EXTERIOR // INTERIOR)		GLAZING FRAME MARK	
ELEVATION MARKS (EXTERIOR // INTERIOR)		GLAZING MARK	
REVISION MARK + CLOUD		DOOR MARK	
ROOM TAG		WINDOW MARK	
ELEVATION MARK		WALL PARTITION TYPE	
		FLOOR TRANSITION	
		EXISTING PARTITION	
		NEW PARTITION	
		DEMOLITION PARTITION	

WALL TYPES

- GYP. BD. TO BE HELD OFF FINISH FLOOR 1/2" MIN. TYPICAL.
- METAL CORNER BEAD TO BE USED ON ALL OUTSIDE CORNERS OR TOP OF PARTIAL HEIGHT WALLS WHERE GYP. BD. WRAPS.
- ALL BLOCKING SHALL SPAN FULLY BETWEEN BOTH ADJACENT STUDS AT A MINIMUM.
- ALL WALLS TO BE LEVEL 4 FINISH, U.N.O. WALLS TO RECEIVE VINYL GRAPHICS TO BE LEVEL 5 FINISH.
- PROVIDE ACOUSTICAL BATT INSULATION AT ALL RESTROOM WALLS AND ABOVE ALL RESTROOM CEILINGS
- PROVIDE MOISTURE RESISTANT GYP. BD. OR DUROCK IN ALL WET LOCATIONS (I. E. RESTROOMS)



SHEET INDEX

ARCHITECTURAL

A000	TITLE SHEET
A100	FLOOR PLAN
A150	REFLECTED CEILING PLAN & DETAILS
A400	INTERIOR ELEVATIONS
A500	INTERIOR DETAILS
A600	FINISH PLAN & LEGEND
A700	RENDERINGS
A701	RENDERINGS

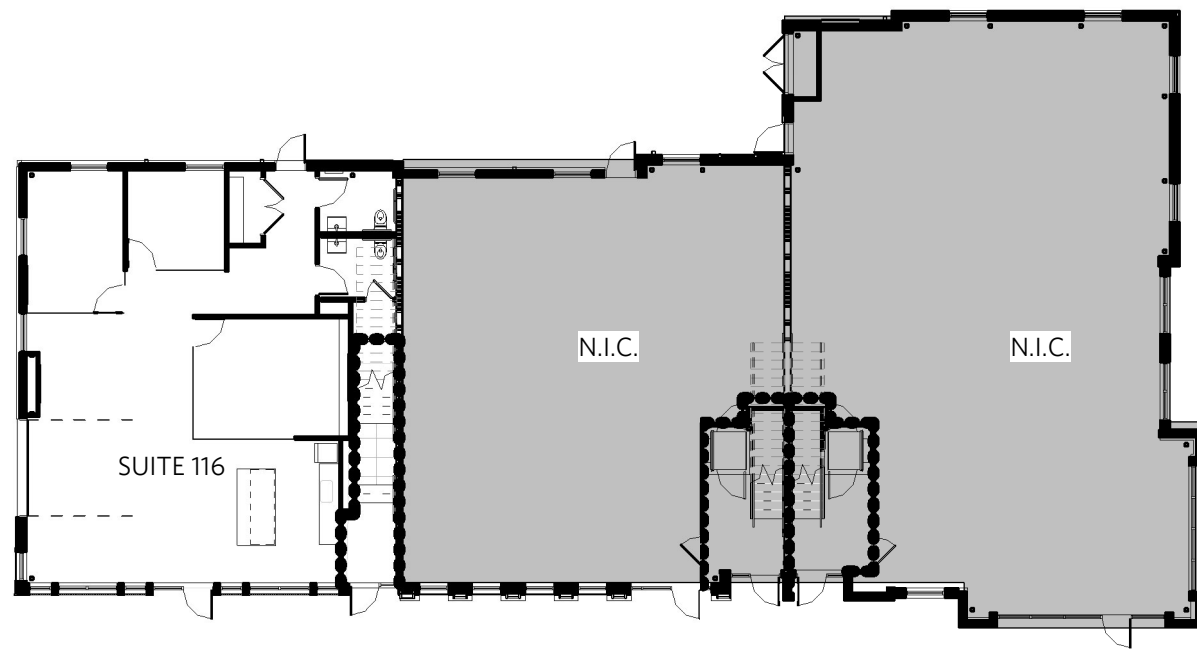
MECH / PLUMB

MP001	MECHANICAL/PLUMBING SYMBOLS, SCHEDULES AND SPECIFICATIONS
MP101	MECHANICAL/PLUMBING PLANS AND DETAILS

ELECTRICAL

E001	ELECTRICAL SYMBOLS AND SPECIFICATIONS
E101	ELECTRICAL PLAN AND SCHEDULES

KEY PLAN



BOX REAL ESTATE DEVELOPMENT OFFICE

420 SW LONGVIEW BLVD SUITE 116
LEE'S SUMMIT, MO, 64081



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TITLE SHEET

A000



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GENERAL FLOOR PLAN NOTES

1. ALL DIMENSIONS TO EXISTING ITEMS ARE +/-
2. DIMENSIONS FOR INTERIOR PARTITIONS, ARE TO OUTSIDE FACE OF WALL FINISH.
3. ALL PARTITIONS TO BE TYPE P1 UNLESS NOTED OTHERWISE.
4. CONTRACTOR TO REFER TO MEP DRAWINGS FOR ALL MEP REQUIREMENTS.
5. CONTRACTOR TO COORDINATE IT/AV/SECURITY SYSTEM WITH TENANTS VENDOR. PROVIDE CONDUIT AND PULL STRING FOR IT/AV/SECURITY WORK. COORDINATE WITH ELECTRICAL & IT/AV/SECURITY.
6. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PROVIDING ALL BLOCKING AS REQUIRED FOR CASEWORK, LIGHT FIXTURES, ACCESSORIES, ETC.
7. CONTRACTOR TO COORDINATE TENANT PROVIDED LCD & MOUNT LOCATIONS. PROVIDE POWER, CABLE AND BLOCKING AS REQUIRED.
8. CONTRACTOR SHALL COORDINATE ALL CORE DRILL LOCATIONS WITH FURNITURE LAYOUT. REFER TO ELECTRICAL FOR PROPOSED CORE DRILL LOCATIONS.
9. ALL CARD READERS, SWITCHES, CONTROLS, ETC TO COMPLY WITH A.B.A.A.S. (ARCHITECTURAL BARRIERS ACT ACCESSIBILITY STANDARD) REQUIREMENTS FOR MOUNTING HEIGHTS.
10. CONTRACTOR TO ENSURE PROJECT SITE IS SECURE WHEN NOT PRESENT.
11. CONTRACTOR TO ENSURE THAT LOUD OR DISRUPTIVE (SMELLY) WORK SHALL BE DONE AFTER BUSINESS HOURS. COORDINATE WITH LANDLORD AND TENANT.
12. ALL APPLIANCES SHALL BE TENANT PROVIDED AND INSTALLED, U.N.O.
13. FURNITURE BY OTHERS. COORDINATE W/ OWNER.
14. COORDINATE ALL FRAMING DIMENSIONS AT RECESSED TV LOCATIONS WITH TENANT AV VENDOR.

FLOOR PLAN KEYNOTES

1. ALIGN FINISHED FACE.
2. NETWORK PRINTER/COPY LOCATION. PROVIDE DEDICATED POWER & DATA AS REQ'D. REFER TO MEP.
3. WALL MOUNTED TV ON BRACKET, TENANT PROVIDED AND INSTALLED. PROVIDE 3/4" FIRE RETARDANT PLYWOOD BLOCKING IN WALL. PROVIDE POWER / DATA / CABLE PER MEP.
4. PROVIDE POWER AND PLUMBING SUPPLY & WASTE LINES FOR KITCHEN EQUIPMENT AS INDICATED ON ELEVATIONS.
5. 1/2" FRAMELESS TEMPERED SWING GLASS DOOR AND 1/2" FRAMELESS TEMPERED GLASS PANELS SET IN 1 1/2" TOP CHANNEL AND 1" BOTTOM CHANNEL IN MATTE BLACK. PROVIDE MINIMUM NUMBER OF PANELS POSSIBLE. HEIGHT SHALL BE 9'-0"H.
6. 1/2" FRAMELESS TEMPERED SWING GLASS DOOR AND 1/2" FRAMELESS TEMPERED GLASS PANELS SET IN 1 1/2" TOP CHANNEL AND 1" BOTTOM CHANNEL IN MATTE BLACK. WEST SIDE OF GLASS TO HAVE A 3M WHITE FILM APPROX 5'X10' 80% OPACITY APPLIED ON CONFERENCE ROOM SIDE OF GLASS. PROVIDE MINIMUM NUMBER OF PANELS POSSIBLE. HEIGHT SHALL BE 9'-0"H. RE ELEVATIONS.
7. 3'0" x 8'0" WHITE OAK DOOR IN HOLLOW METAL FRAME. METAL FRAME TO BE PAINTED TO MATCH ADJACENT WALL PAINT. DOOR TO BE STAINED TO MATCH PL1. PRIVACY LEVER LATCH SET WITH PUSH LOCK. MATTE BLACK FINISH.
8. EXISTING ELECTRICAL PANEL
9. PLANTER BY OWNER
10. NAPOLEON ALLURAVISION SLIMLINE 42" ELECTRIC FIREPLACE RECESSED INTO WALL. RE MEP.
11. 5 WOOD FLOATING SHELVES AT 18" DEEP. CONFIRM WITH OWNER ON MOUNTING HEIGHTS.
12. ENSURE COLUMN IS NOT PROTRUDING INTO OFFICE.
13. GC PROVIDED/INSTALLED RESTROOM ACCESSORIES. PROVIDE BLOCKING IN WALL ADEQUATE TO SUPPORT SINK ASSEMBLY AND ADA GRAB BARS. SEE LIST BELOW AND MEP.
14. EXISTING GARAGE DOOR.
15. SEMI RECESSED WALL MOUNTED FIRE EXTINGUISHER.
16. DOUBLE DOOR 3'0" x 8'0" WHITE OAK DOOR IN HOLLOW METAL FRAME. METAL FRAME TO BE PAINTED TO MATCH ADJACENT WALL PAINT. DOOR TO BE STAINED TO MATCH PL1. PASSAGE LEVER LATCH SET. MATTE BLACK FINISH.
17. 2'6" x 7'0" WHITE OAK DOOR IN HOLLOW METAL FRAME. METAL FRAME TO BE PAINTED TO MATCH ADJACENT WALL PAINT. DOOR TO BE STAINED TO MATCH PL1. PASSAGE LEVER LATCH SET. MATTE BLACK FINISH.
18. CMU WALL WITH 7/8" FURR OUT HAT & GYP BD IN FRONT OF CHANNEL. PREP WALL FOR SCEDUELED FINISHES.

RESTROOM SINK:
NAMEEK'S - SHARP, CERA STYLE 037100-U WALL MOUNTED SINGLE HOLE, WHITE FINISH

RESTROOM FAUCET:
MOEN RINZA, SINGLE- HANDLE LAVATORY FAUCET. MODEL 84627 SERIES. BLACK FINISH

TOILET PAPER HOLDER:
DELTA - TRINSIC SINGLE POST TOILET PAPER HOLDER IN MATTE BLACK. MODEL#: 75950-BL

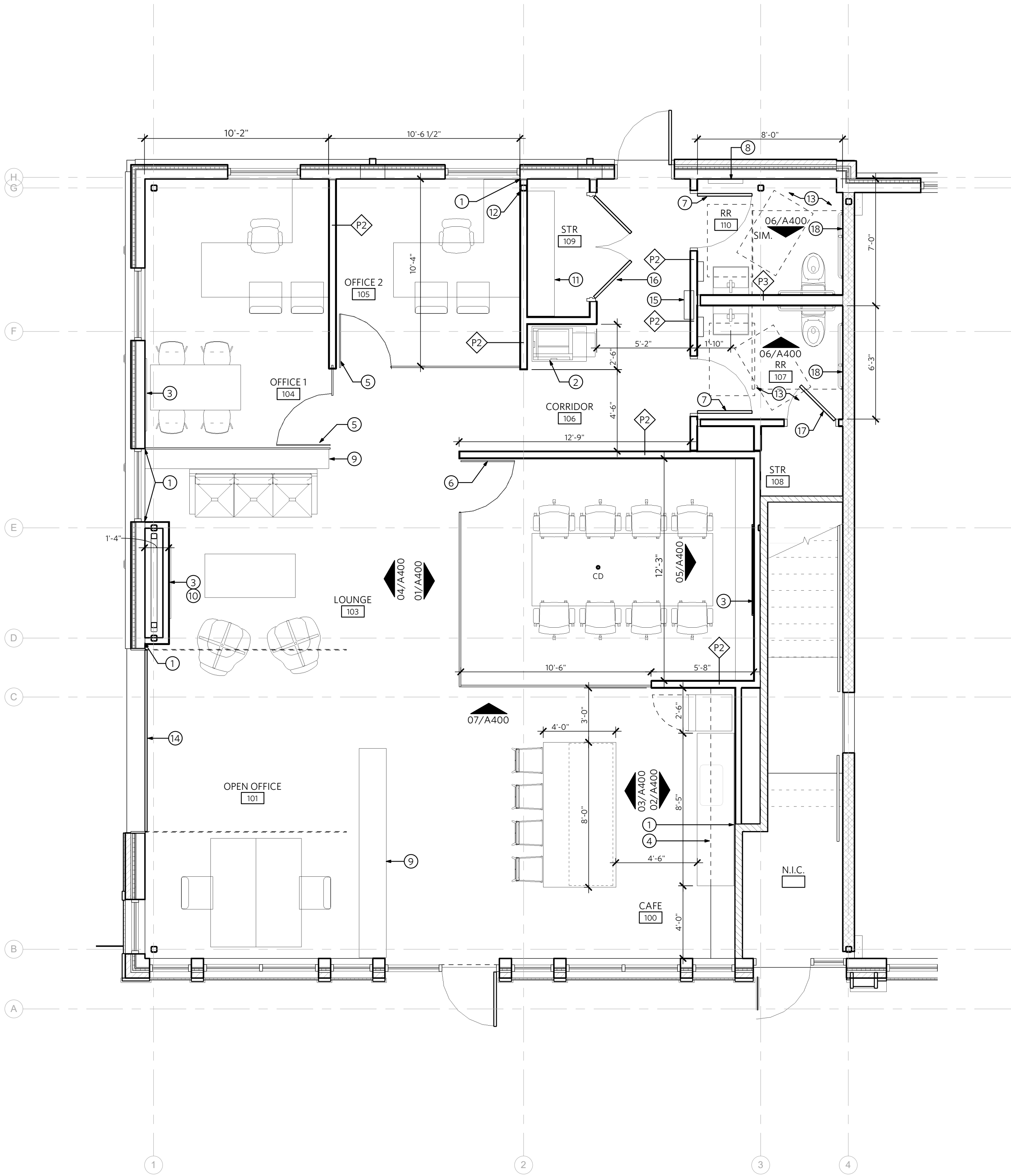
PAPER TOWEL DISPENSER:
TOTAL RESTROOM - ASI 0210-41 TRADITIONAL - PAPER TOWEL DISPENSER - MULTI, C-FOLD - SURFACE MOUNTED - BLACK

GRAB BARS:
ADA WALL MOUNTED GRAB BARS:
KOHLER KUMIN MATTE BLACK SERIES OR APPROVED EQ.

VANITY MIRROR:
POTTERY BARN - MORITZ ROUND MIRROR, BLACK, 36"

CAFE SINK:
MOEN - 1800 SERIES STAINLESS STEEL 31" X 18" 18 GAUGE SINGLE BOWL SINK CENTER DRAIN. UNDERMOUNT

CAFE FAUCET:
KOHLER CRUE PULL-DOWN SINGLE-HANDLE KITCHEN SINK FAUCET, MATTE BLACK, K-22972-BL



01 | FLOOR PLAN
1/4" = 1'-0"



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REFLECTED CEILING
PLAN & DETAILS

A150

GENERAL CEILING PLAN NOTES

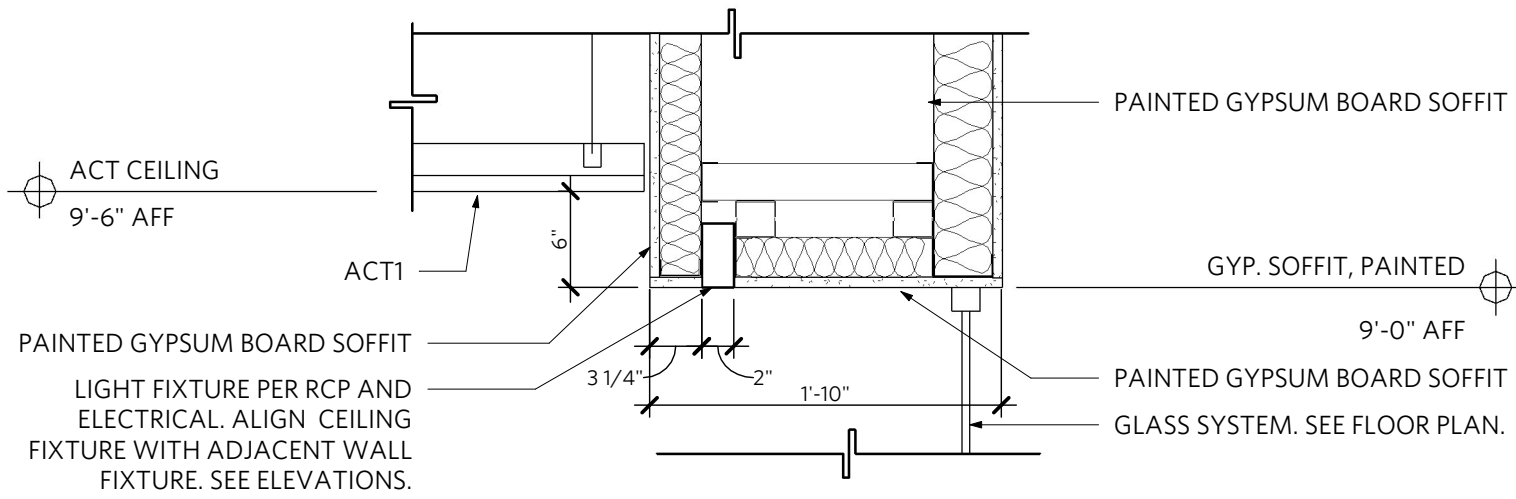
- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT BACK TO ARCHITECT ANY CONFLICTS THAT MAY AFFECT DESIGN INTENTIONS SHOWN ON PROJECT DOCUMENTS.
- REFER TO MEP DRAWINGS FOR ALL EMERGENCY AND EXIT LIGHTING REQUIREMENTS.
- CONCEAL ALL CONDUIT TO LIGHT FIXTURES, EXIT DEVICES AND EMERGENCY LIGHTING IN WALL OR IN HARD PIPE CONDUIT.
- CEILINGS TO (PT2) UNLESS NOTED OTHERWISE.
- PROVIDE ACOUSTICAL BATT INSULATION ABOVE ALL OFFICES AND MEETING ROOM CEILINGS PER WALL TYPES ON SHEET A000.
- ALL WIRING AND CABLING TO BE IN HARD PIPE CONDUIT IN AREAS EXPOSED TO STRUCTURE, MC CABLING NOT ACCEPTABLE.
- ALL NEW GYP. CEILINGS TO BE PAINTED (PT2) UNLESS NOTED OTHERWISE.
- ALL EXPOSED TO STRUCTURE CEILINGS TO BE PAINTED (PT2) UNLESS NOTED OTHERWISE.
- CENTER LIGHTS WITHIN SOFFIT U.N.O.
- COORDINATE MOUNTING HEIGHTS OF ALL PENDANT LIGHTS IN FIELD WITH ARCHITECT U.N.O.
- PROVIDE NEW CLEAR, EDGE LIT EXIT SIGNS U.N.O. REFER TO ELECTRICAL DRAWINGS FOR SPECIFICATION
- HEADERS AND SOFFITS TO EXTEND TO DECK @ ALL AREAS WITHOUT CEILINGS.

REFLECTED CEILING PLAN KEYNOTES

- FIXTURE E TO TO RUN DOWN THE WALL. RE ELVATIONS.
- FIXTURE J TO BE HUNG IN FIELD WITH ARCHITECT. FIXTURE IS TO BE HUNG AT ANGLES. TPY.
- RECESSED COVE LIGHT. RE MEP.
- GC TO ENSURE EXISTING STAIR ABOVE IS NOT PROTRUDING INTO RESTROOM CEILING/WALL.
- HVAC, RE: MEP

LIGHT FIXTURE SCHEDULE

TAG	FIXTURE DESCRIPTION
A	6" LED CYLINDER PENDANT, WHITE FINISH
B	6" LED CYLINDER FLUSH MOUNT, WHITE FINISH
C	FOCAL POINT SEEM 4-LP LED RECESSED 48" OR APPROVED EQ.
D	FOCAL POINT SEEM 4-LP LED RECESSED 72" OR APPROVED EQ.
F	TAPE LIGHT - DIODE LED - DI-12V-BLSC2-30-016-IES W/ DIMMING POWER SUPPLY, PROVIDE INSTALLATION CHANNEL OR APPROVED EQ.
G	4" LED CAN LIGHT, WHITE
H	MUUTO, UNFOLD PENDANT LAMP, WHITE
J	SONNEMAN LIGHTING - THIN-LINE LED PENDANT LIGHT, 6" SATIN BLACK, ONE SIDED



02 | CEILING DETAIL
1" = 1'-0"

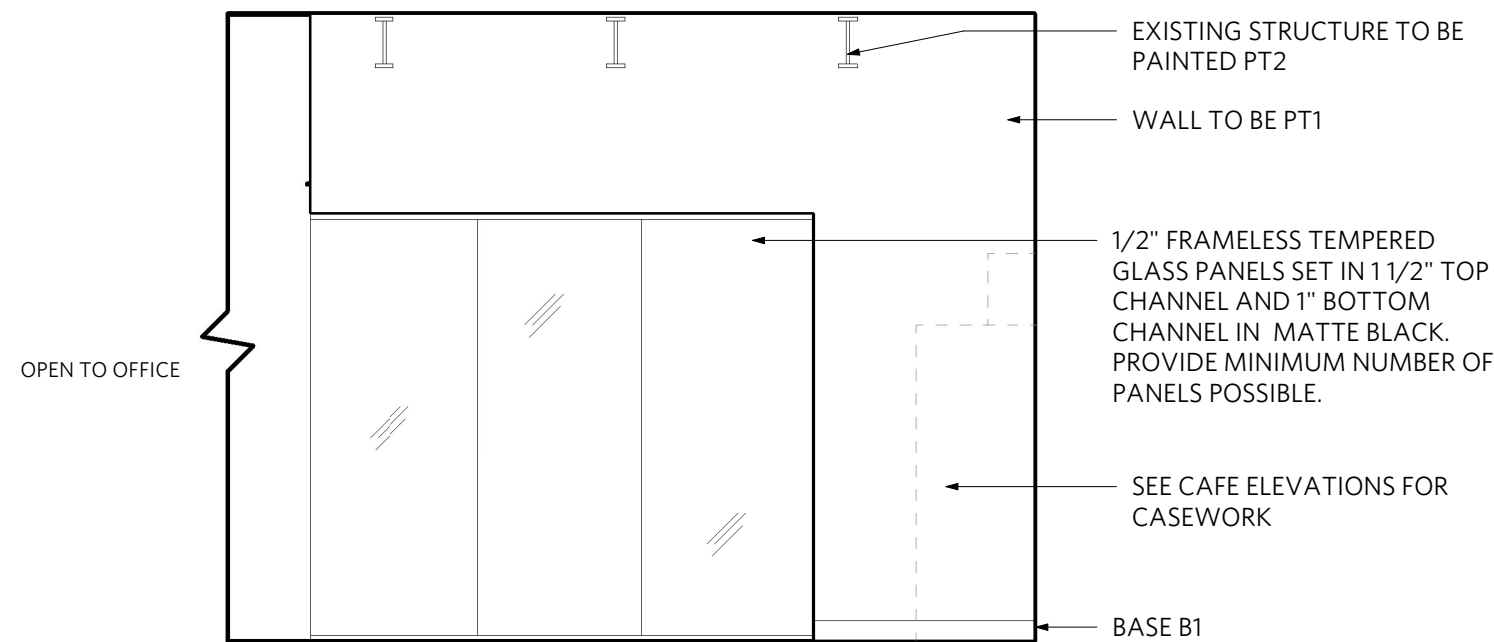
01 | REFLECTED CEILING PLAN
1/4" = 1'-0"



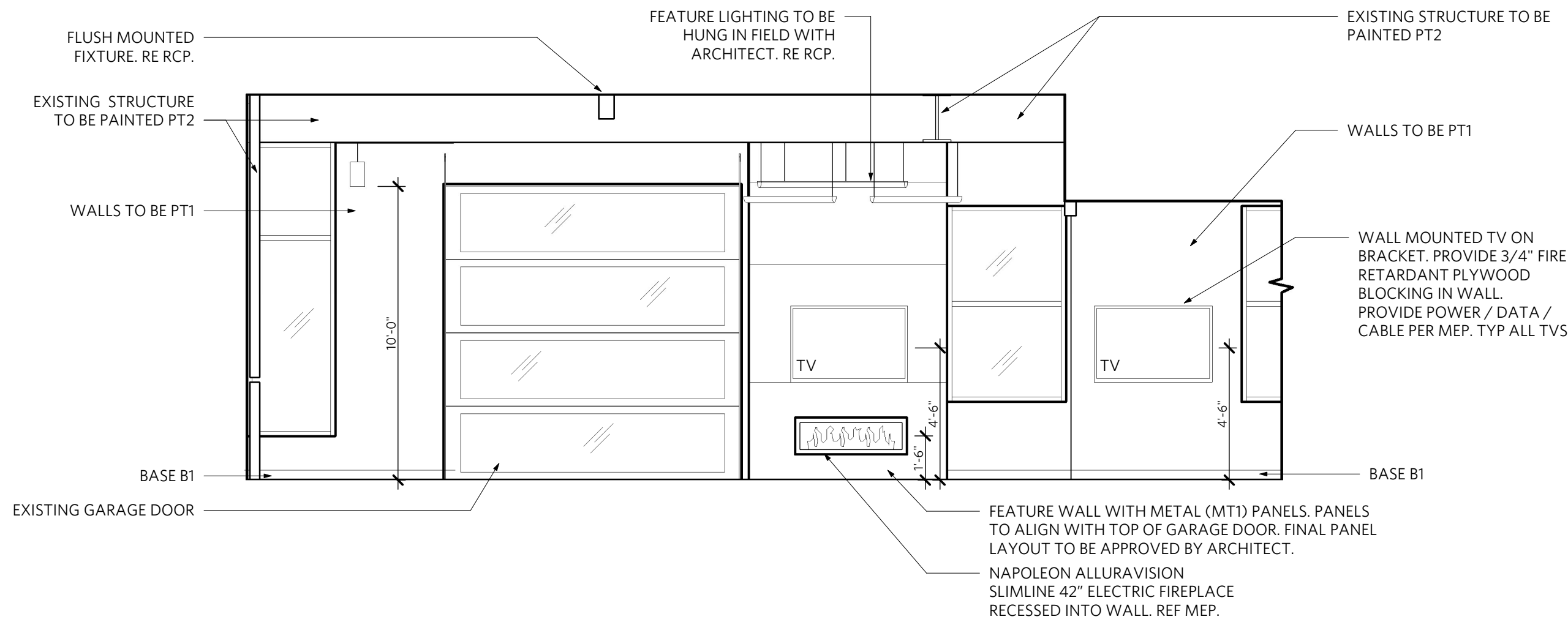
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INTERIOR
ELEVATIONS

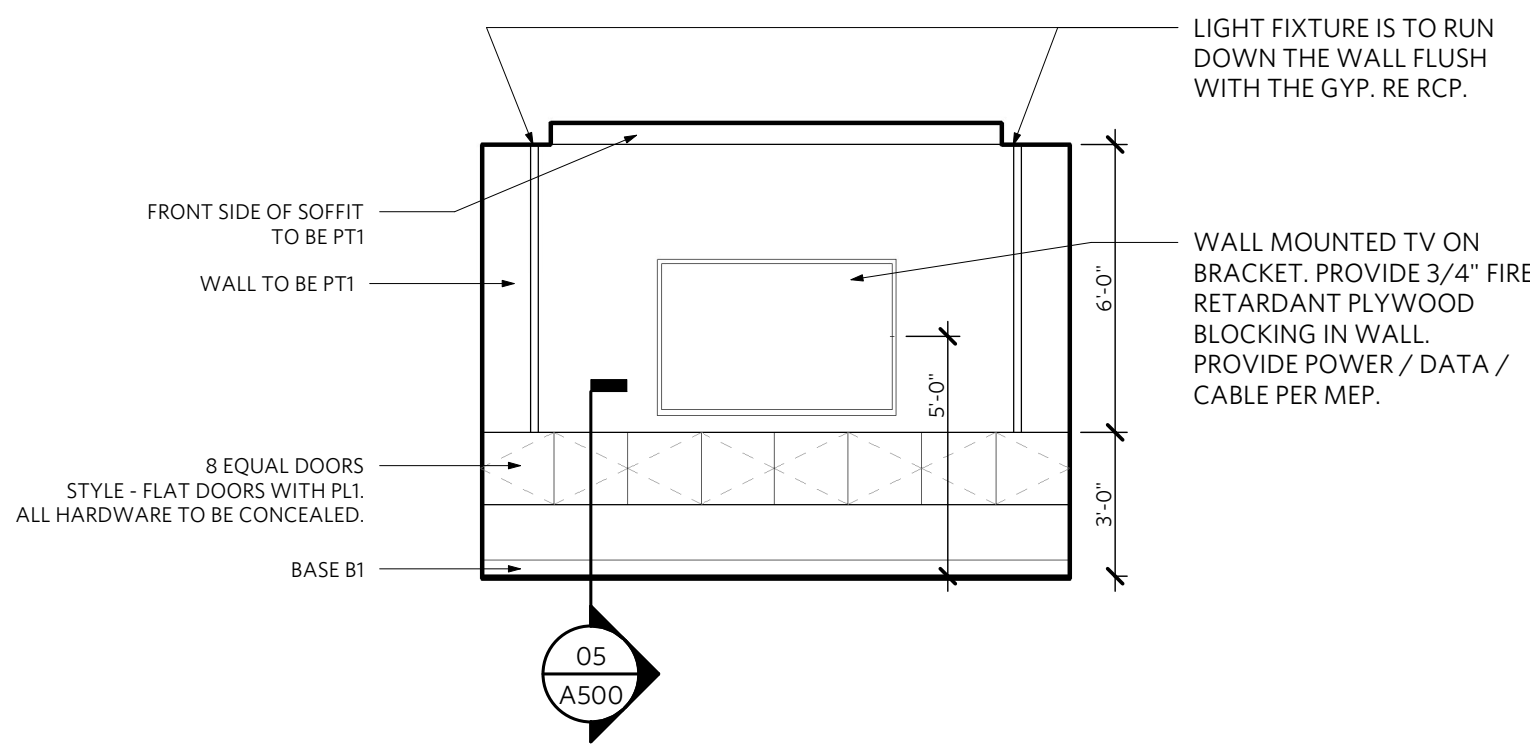
A400



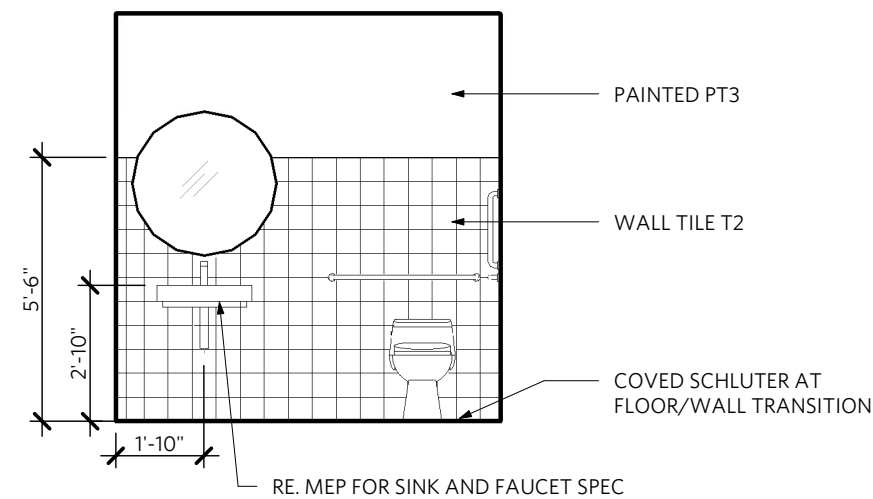
07 | INTERIOR ELEVATION - CONF GLASS
1/4" = 1'-0"



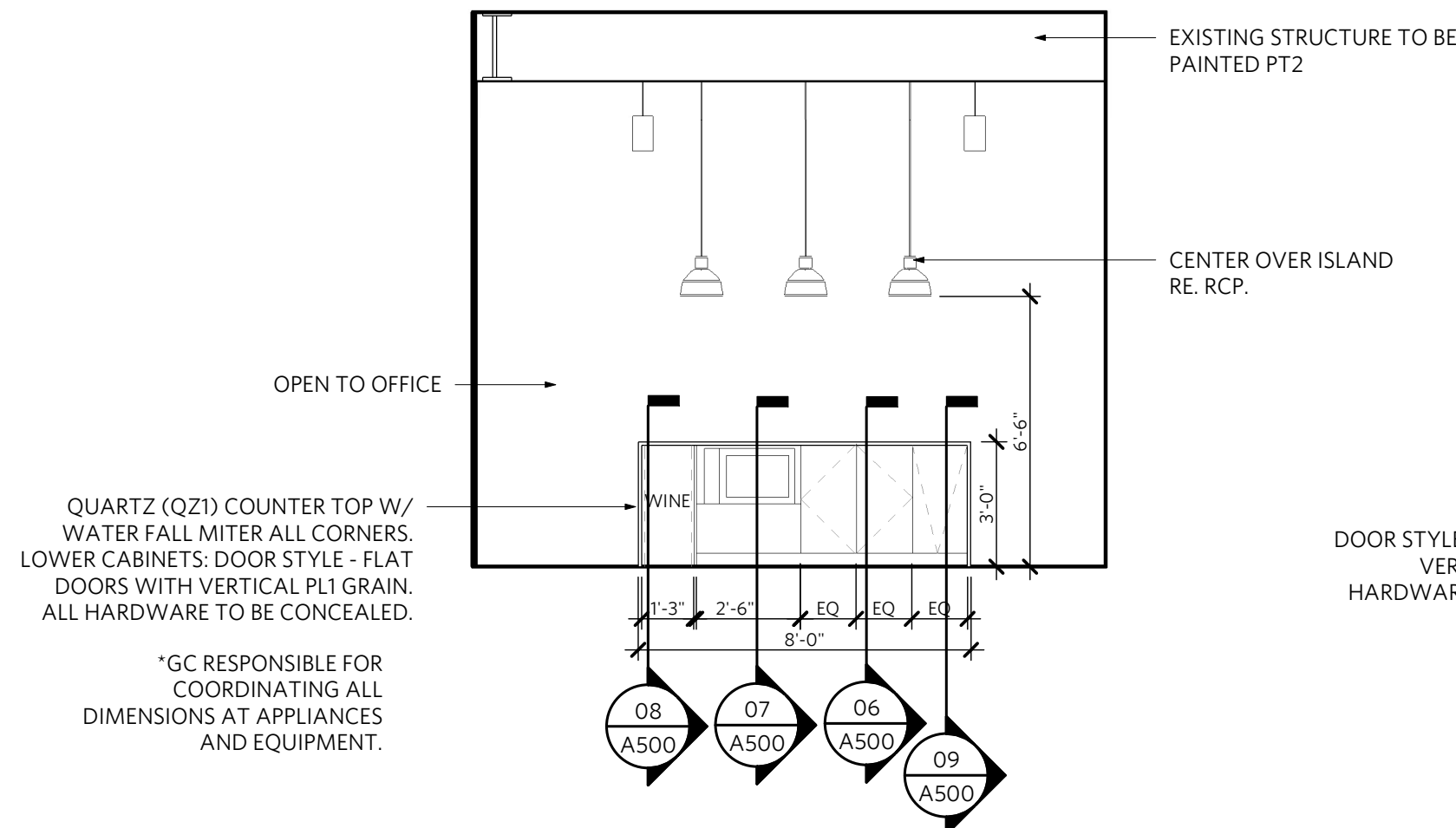
04 | INTERIOR ELEVATION - LOUNGE
1/4" = 1'-0"



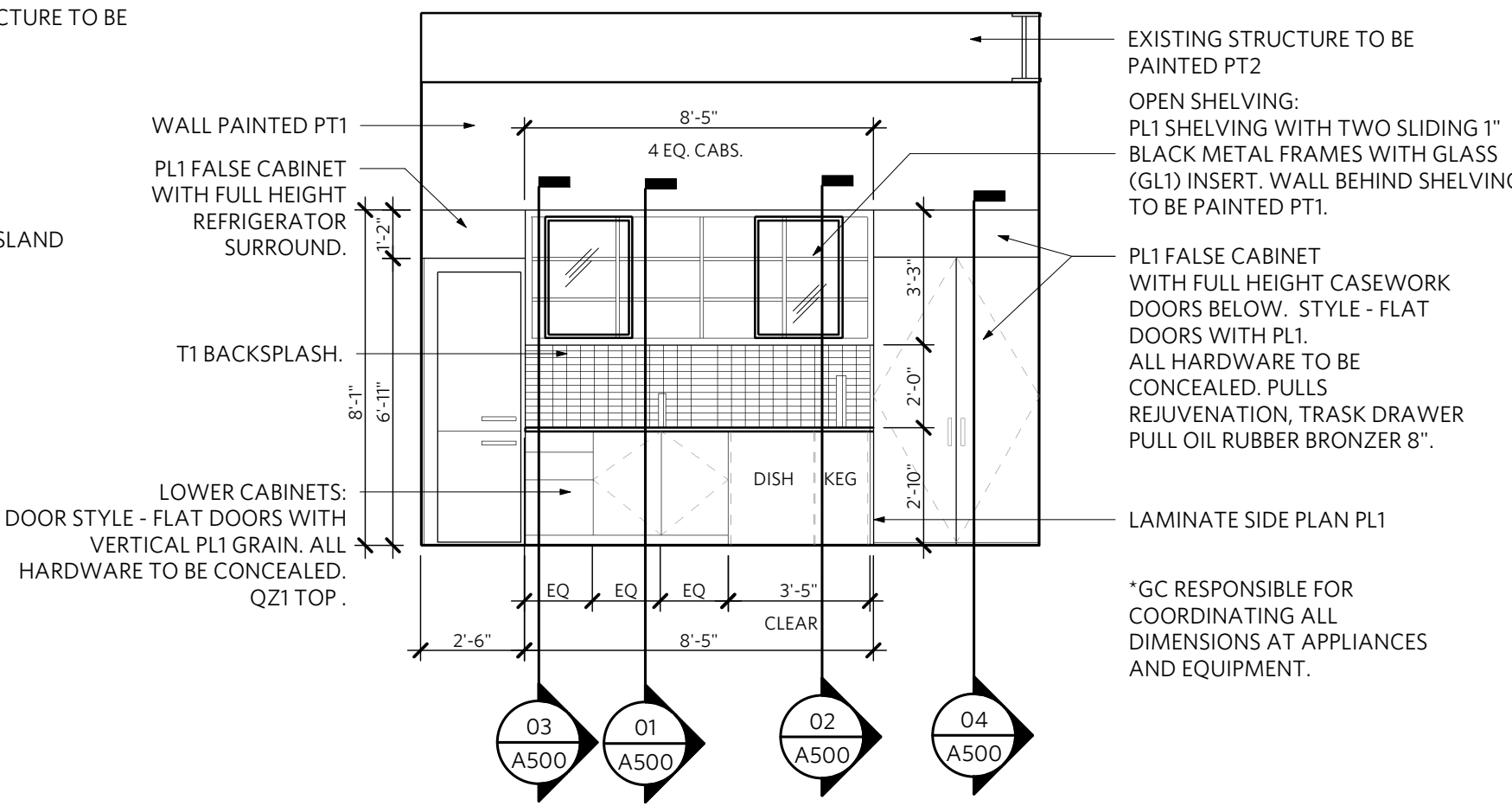
05 | INTERIOR ELEVATION - CONF
1/4" = 1'-0"



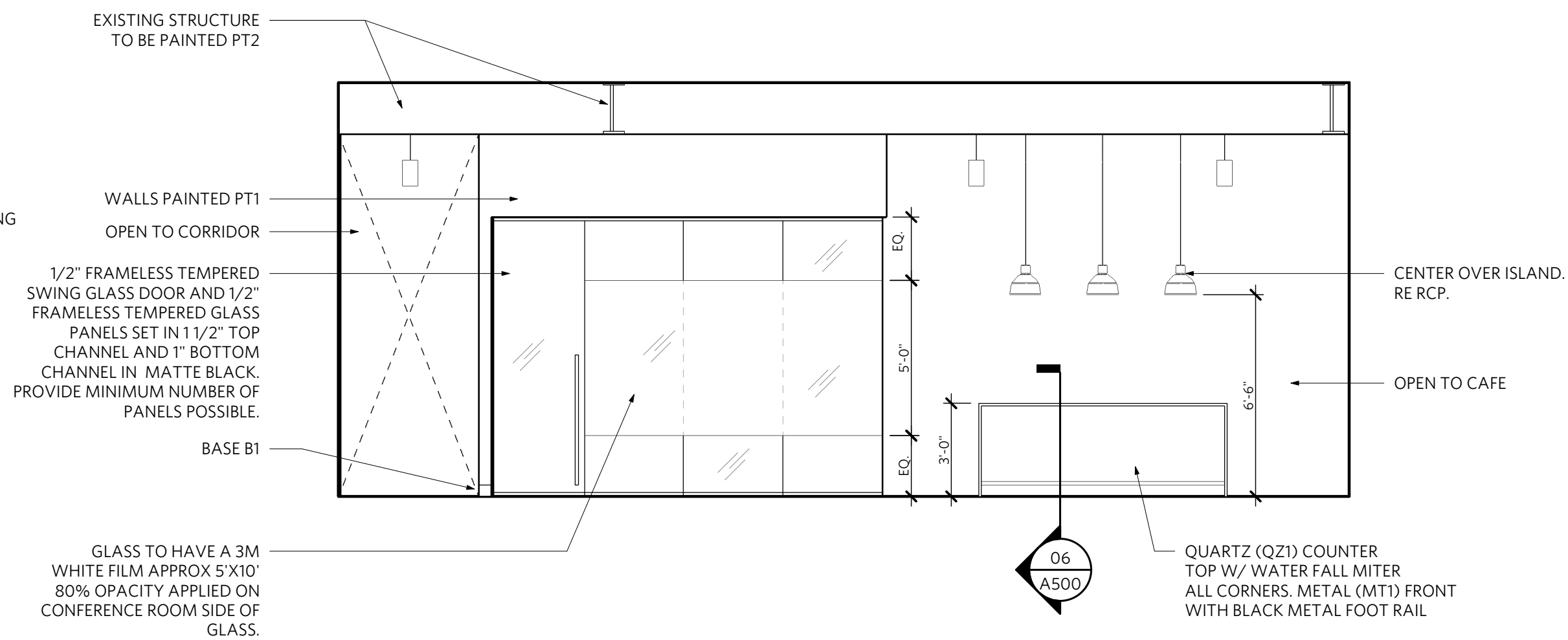
06 | INTERIOR ELEVATION - RESTROOM
1/4" = 1'-0"



03 | INTERIOR ELEVATION - CAFE ISLAND
1/4" = 1'-0"



02 | INTERIOR ELEVATION - CAFE
1/4" = 1'-0"



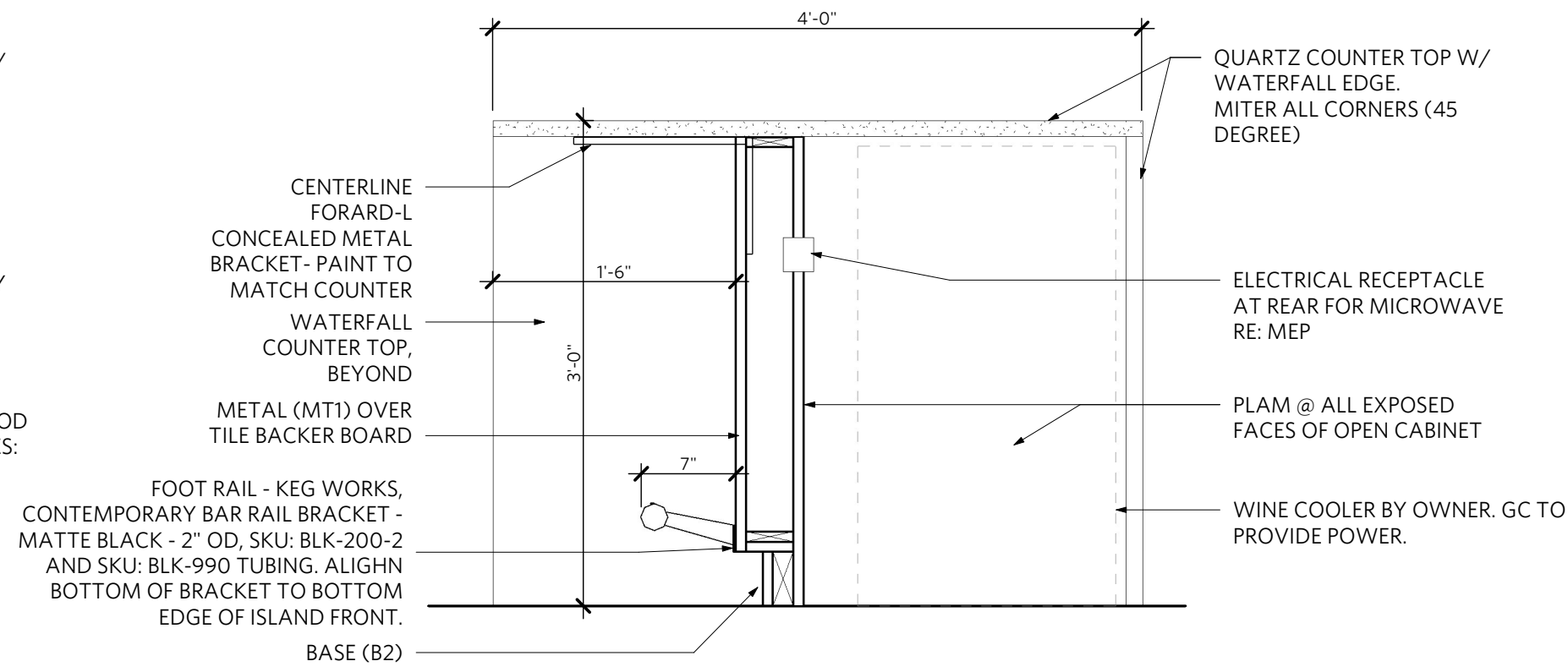
01 | INTERIOR ELEVATION - CAFE & CONF
1/4" = 1'-0"



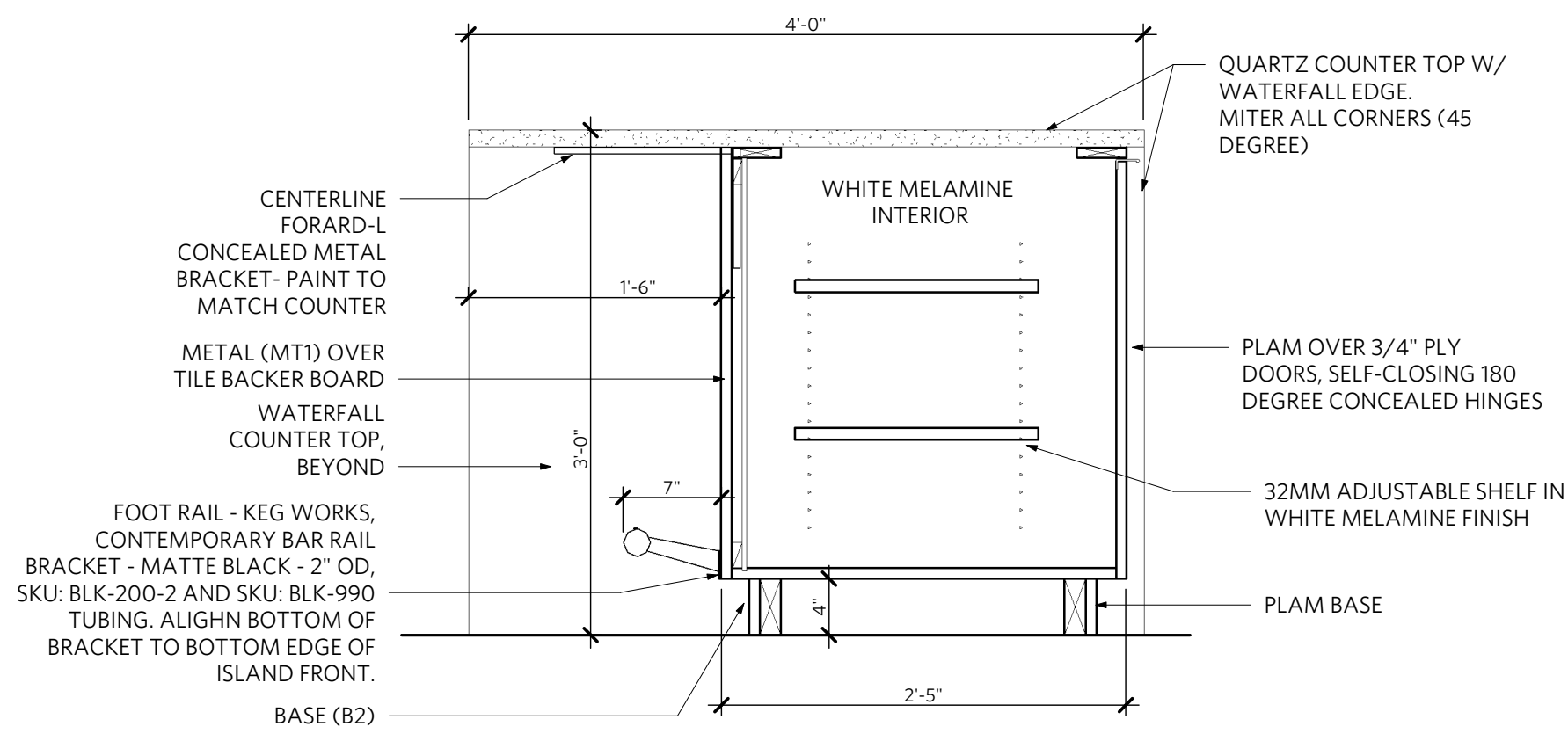
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GENERAL CASEWORK NOTES

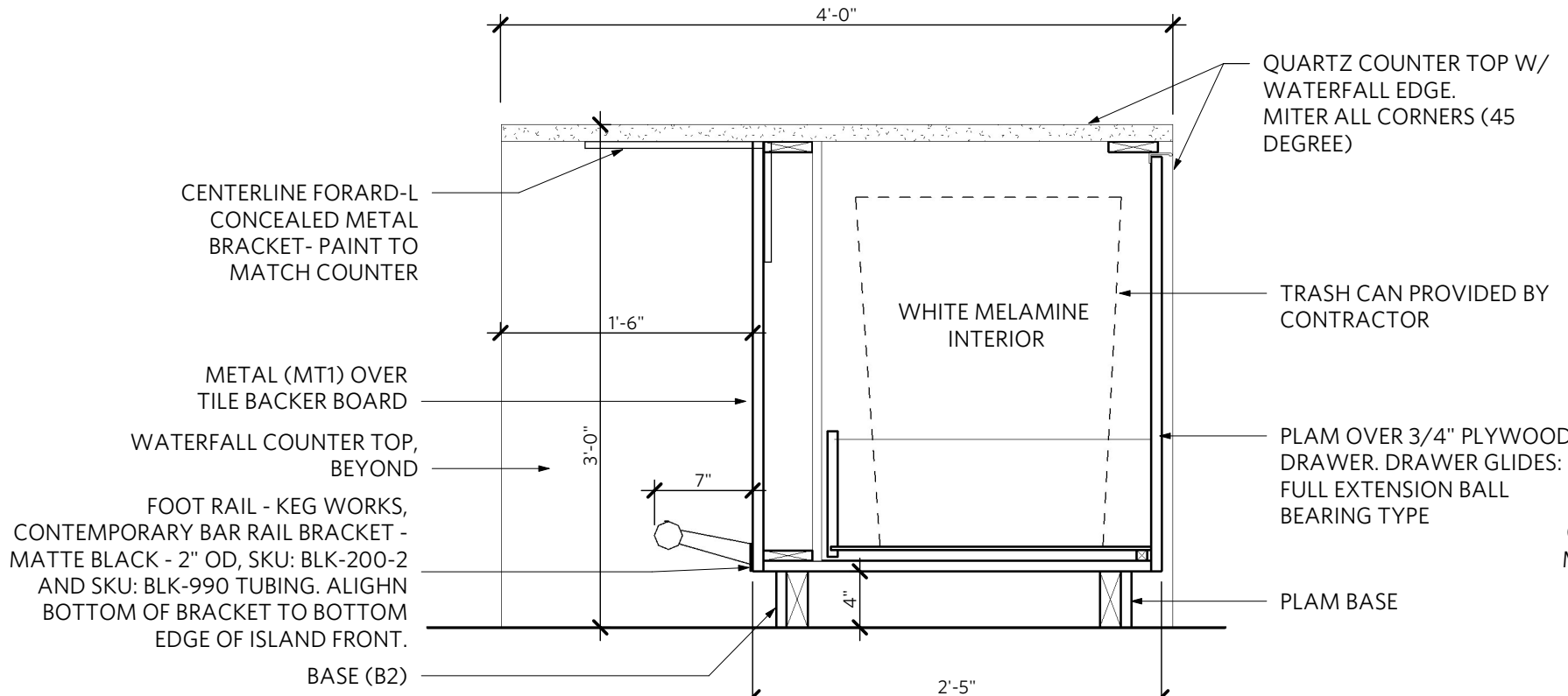
1. ALL HARDWARE PULLS TO BE MOCKETT DP3A - 3" TAB DRAWER PULL, MATTE BLACK 90, FLUSH MOUNT INSTALL. U.N.O.
2. USE BALL-BEARING HINGES ON ALL DRAWERS
3. USE SELF-CLOSING 180 DEGREE CONCEALED HINGES ON ALL CABINET DOORS.



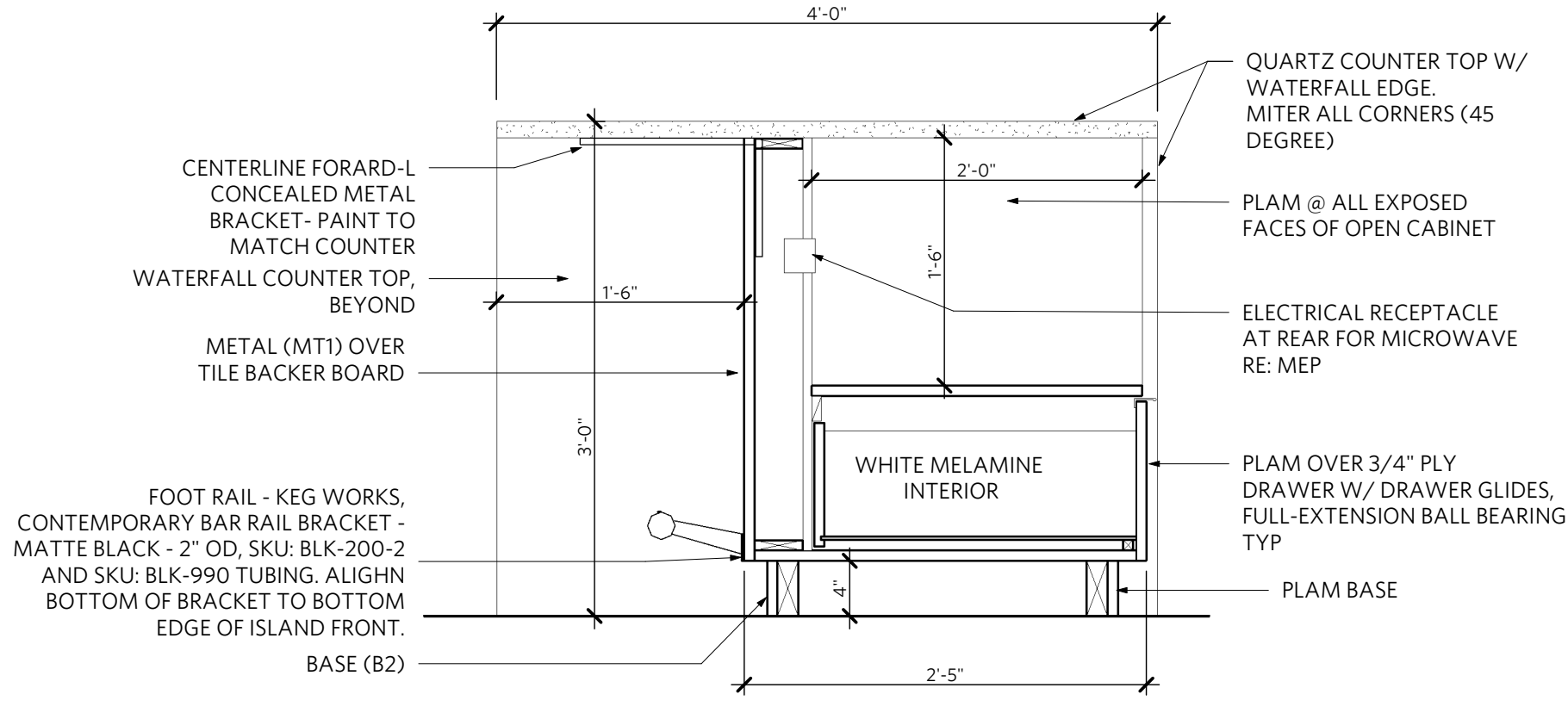
08 ISLAND COOLER SECTION
1" = 1'-0"



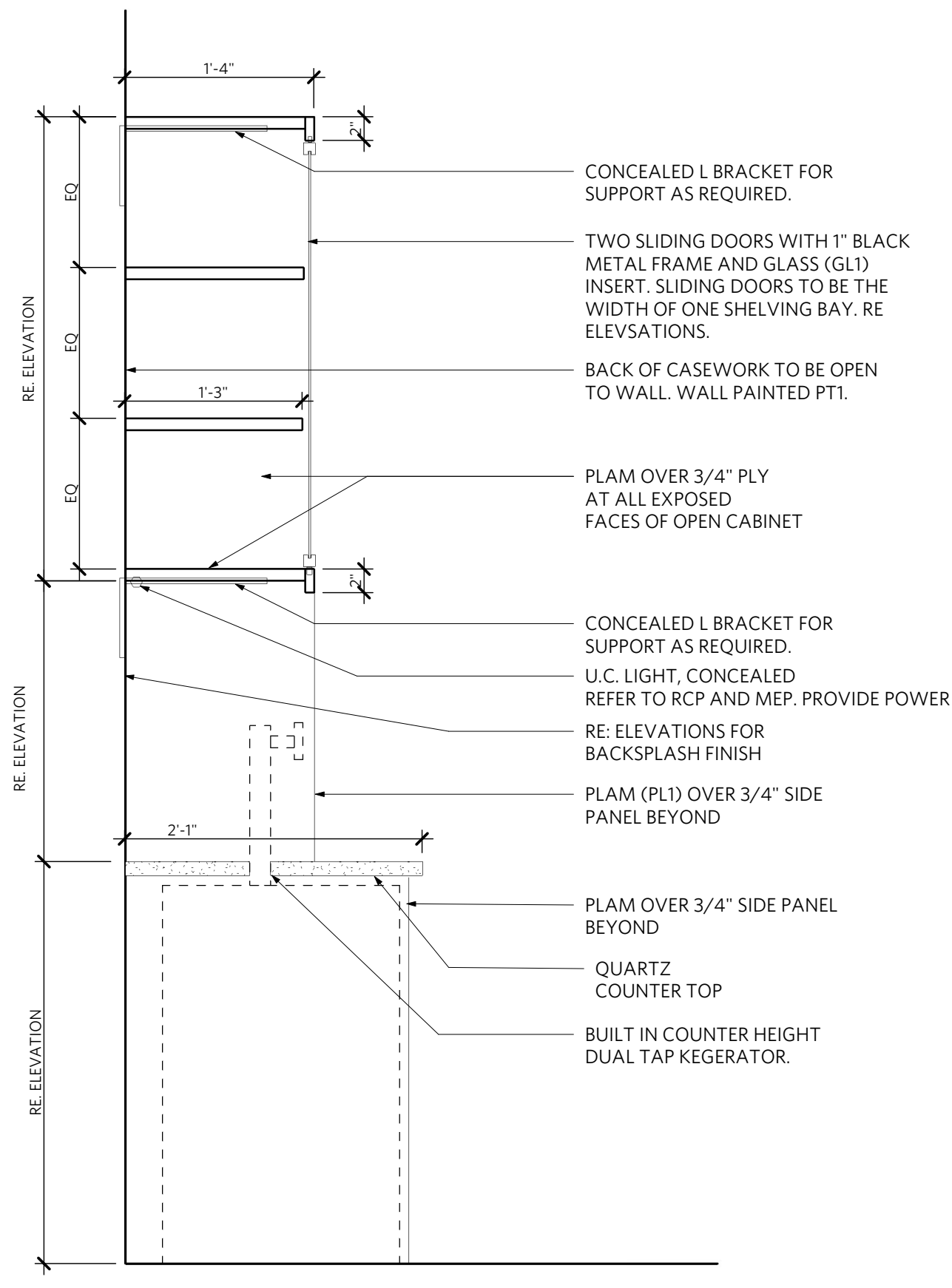
06 ISLAND SECTION
1" = 1'-0"



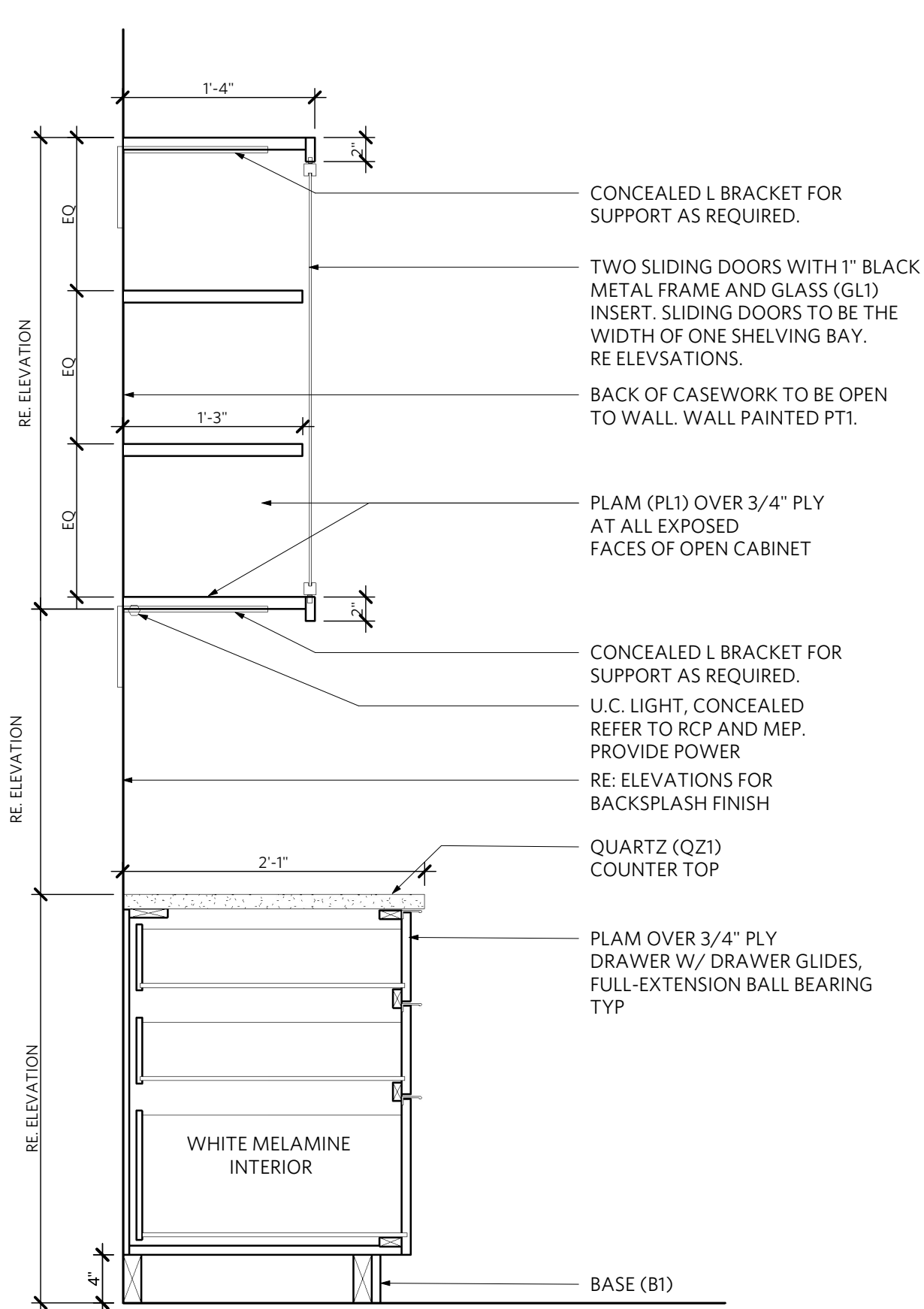
09 ISLAND TRASH SECTION
1" = 1'-0"



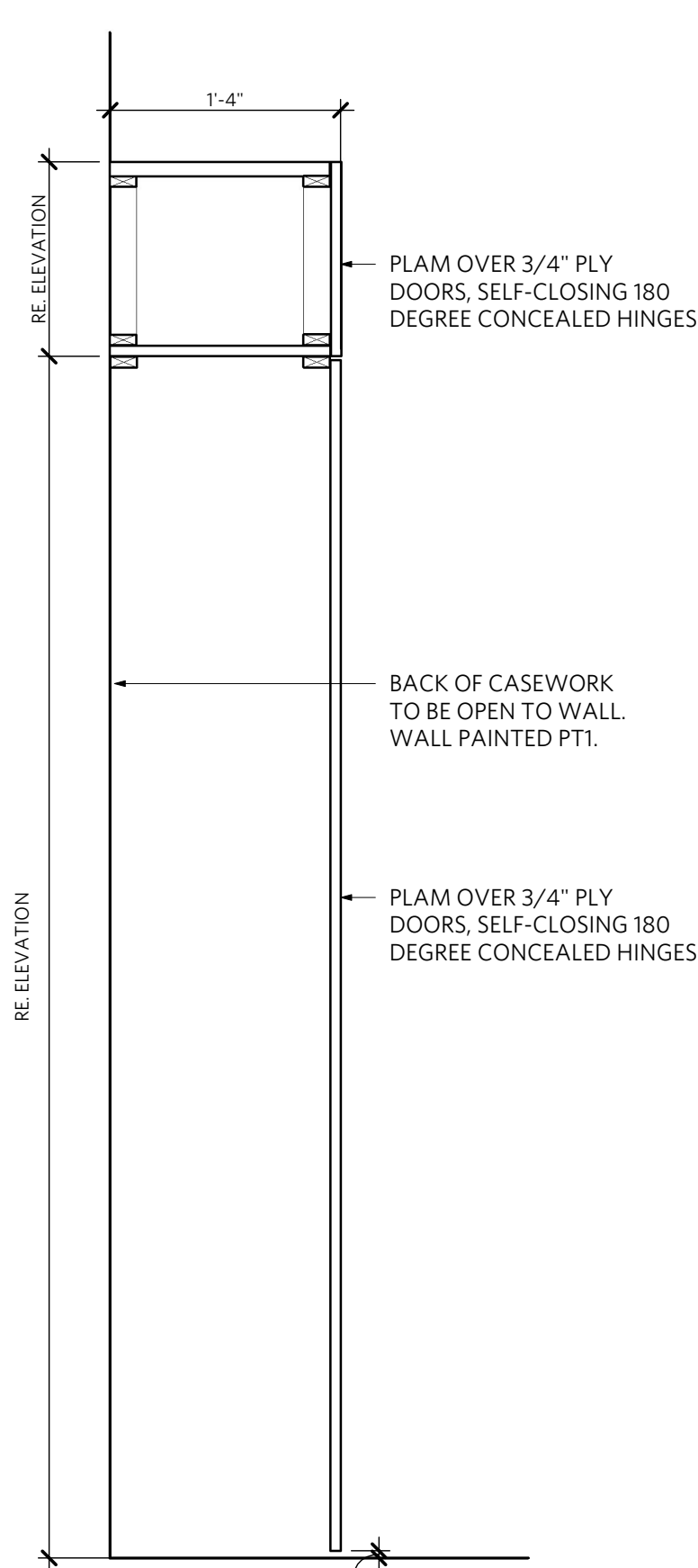
07 ISLAND MIC SECTION
1" = 1'-0"



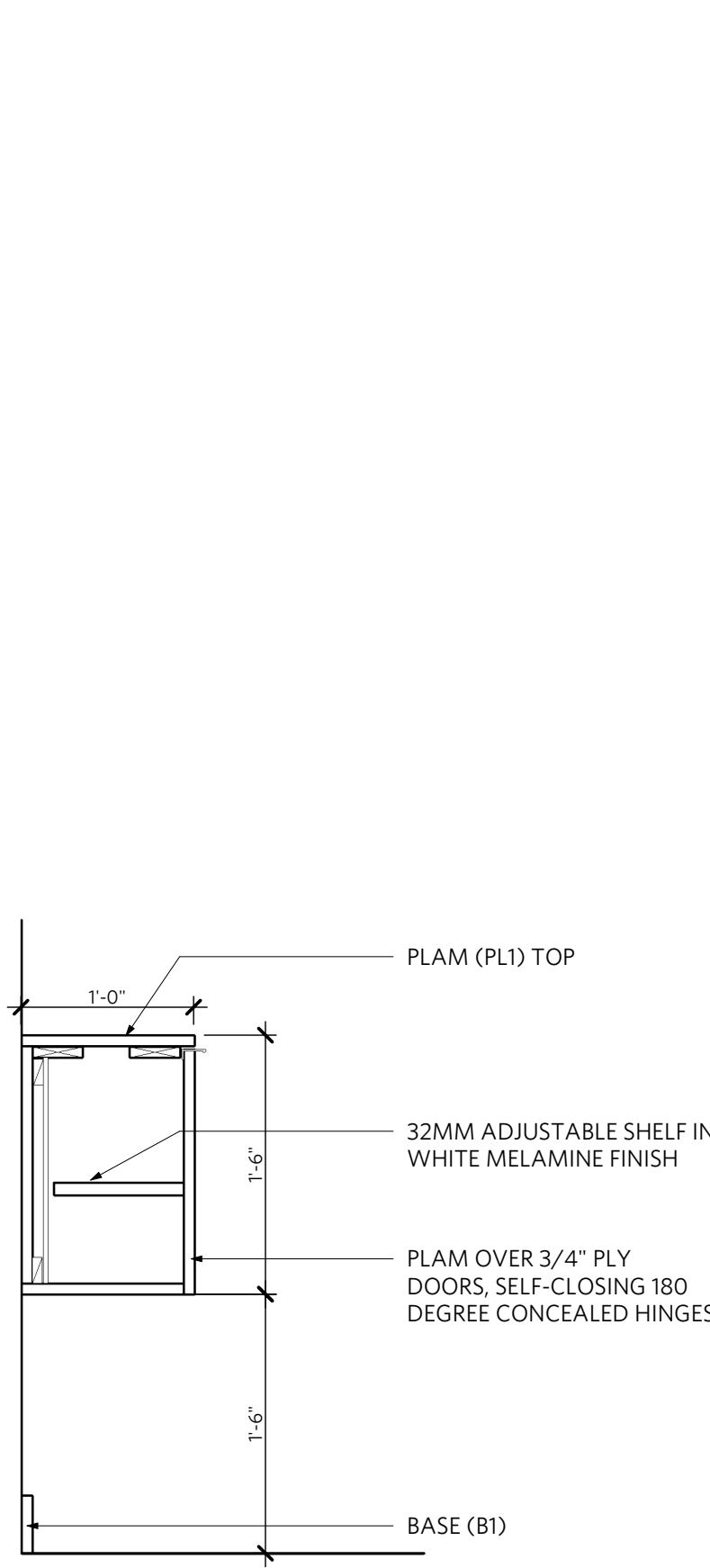
02 CAFE KEG SECTION
1" = 1'-0"



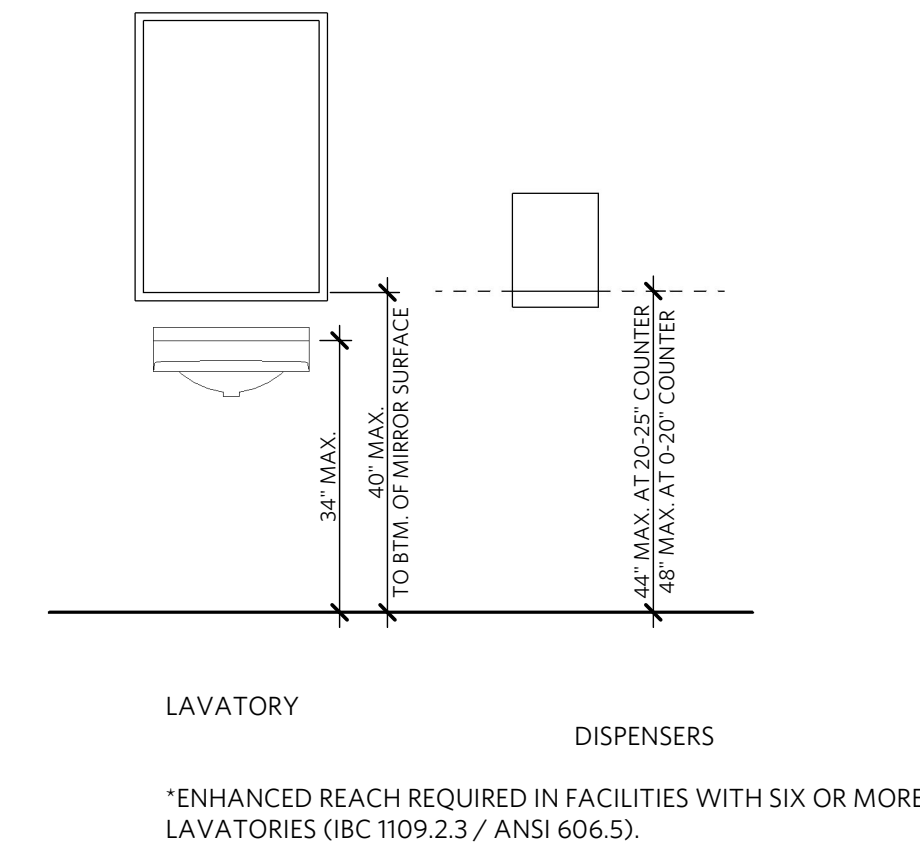
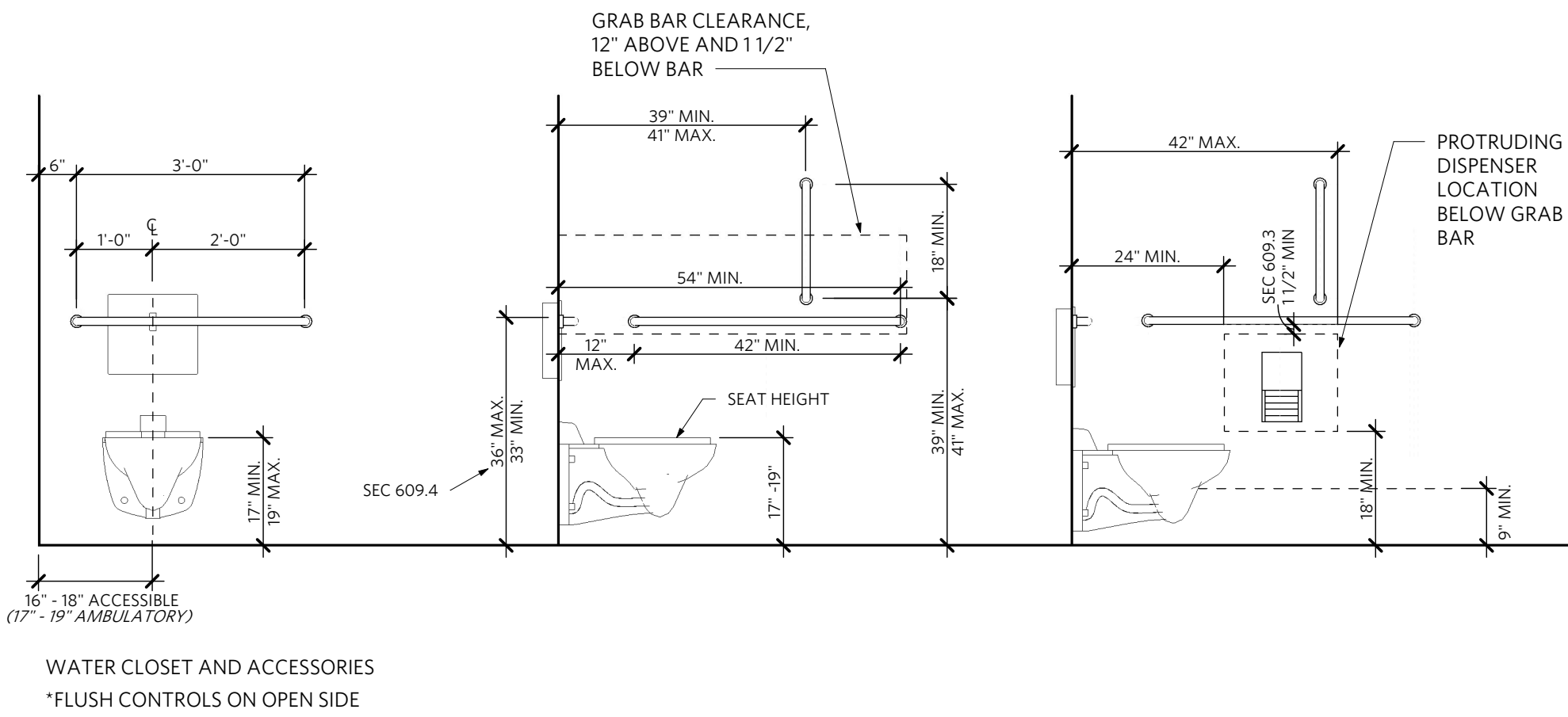
03 CAFE SECTION
1" = 1'-0"



04 CAFE STORAGE SECTION
1" = 1'-0"



05 CREDENZA SECTION
1" = 1'-0"



TYPICAL ADA MOUNTING HEIGHTS

1/2" = 1'-0"



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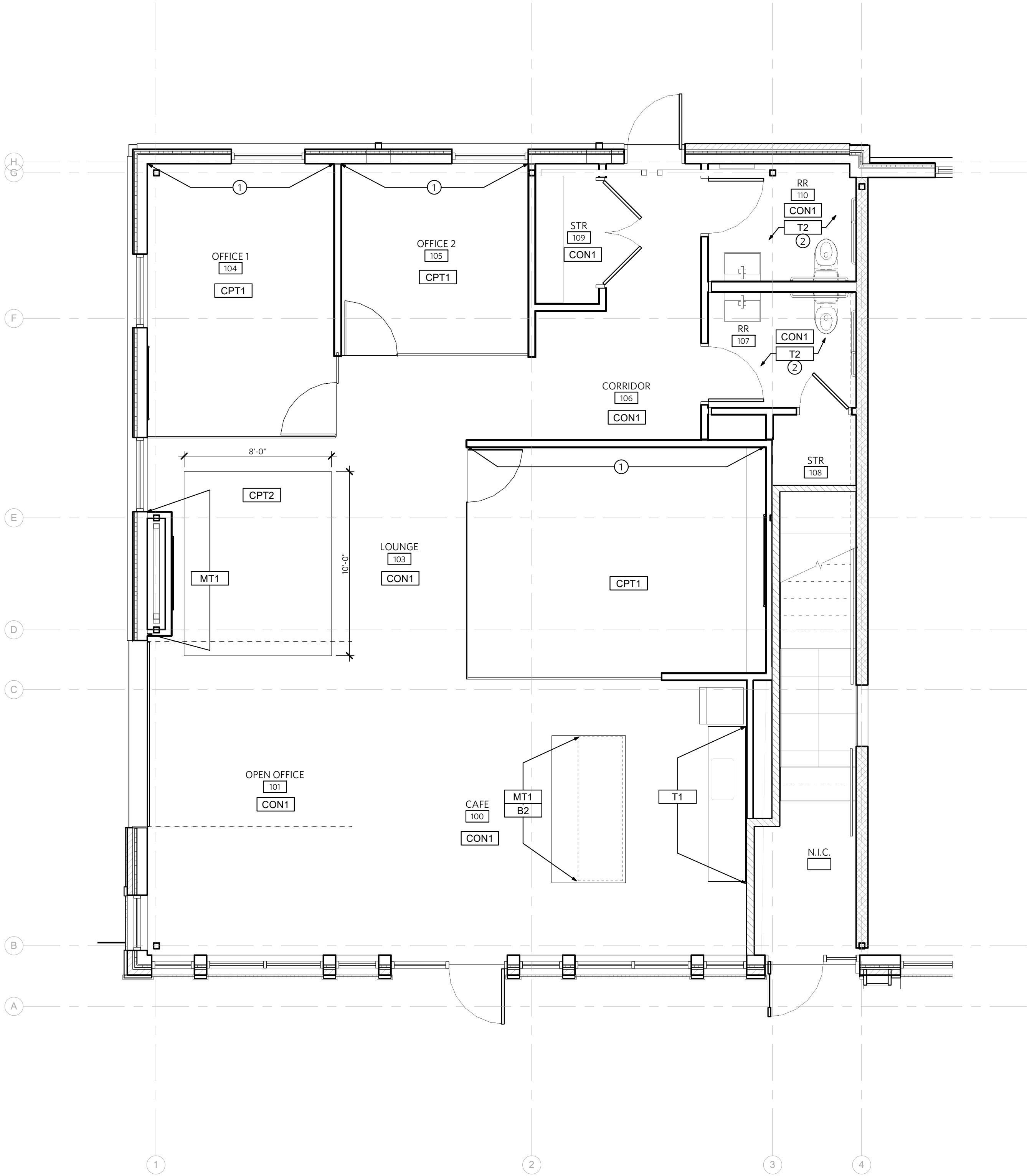
GENERAL FINISH PLAN NOTES

- ALL GYP BD WALLS SHALL BE PAINTED PT1, U.N.O. ON SCHEDULE.
- ALL RECEPTACLES SHALL BE WHITE, U.N.O.
- CONTRACTOR TO PROVIDE 4'X4' PAINT SWATCH OF EACH COLOR SCHEDULED FOR APPROVAL BY OWNER.
- PAINT HM FRAMES TO MATCH ADJACENT WALLS (SEMI-GLOSS), U.N.O.
- ALL GYP WALLS TO BE PAINTED IN RESTROOMS OR OTHER WET LOCATIONS SHALL USE EPOXY TYPE PAINT.
- USE SCHLUTER PROFILE 'SCHIENE' IN FINISH AE- ANODIZED ALUMINUM, AT ALL TRANSITIONS BETWEEN FLOORING MATERIALS AND AT EXPOSED FLOORING EDGES, U.N.O. AT EXPOSED WALL LOCATIONS USE SCHLUTER JOLLY IN FINISH AE- ANODIZED ALUMINUM
- ALL PAINT TO BE EGGSHELL U.N.O.
- SEMI-GLOSS PAINT ON WOOD AND METAL APPLICATIONS
- FLAT PAINT ON CEILINGS.
- ALL CARPET TO BE INSTALLED PER SPECIFICATION.

FINISH PLAN KEYNOTES

- CUSTOM WALLCOVERING PROVIDED BY OWNER, GC TO ENSURE LEVEL 5 WALL FINISH.
- ALL WALLS TO HAVE TILE. RE ELEVATIONS FOR HEIGHTS.

FINISH LEGEND		
Finish Type	Finish Code	Description
ACT - ACOUSTICAL CEILING TILE	ACT1	ARMSTRONG OPTIMA SQUARE EDGE TEGULAR 24" X 24" ON SUPRAFINE 9/16" GRID, COLOR: WHITE
B - BASE	B1	4" PAINT GRADE WOOD BASE, PAINT TO MATCH ADJACENT WALL.
	B2	WOOD BASE PAINTED BLACK
CON - SEALED CONCRETE	CON1	SEALED CONCRETE WITH CLEAR TOP COAT
CPT - CARPET TILE	CPT1	SHAW CONTRACT - FLAT WEAVE TILE, 5T321, SILVER 01535, MONOLITHIC INSTALL
	CPT2	FLOR - KNIT WIT, CHALK/SILVER 21-1528-01 - MONOLITHIC INSTALL
GL - GLASS	GL1	OMNI DECOR GLASS DESIGN, DECOROPAL COLOR COLLECTION, SLATE, ETCHED FINISH
MT - METAL	MT1	HOT ROLLED STEEL - SECURED WITH EXPOSED FASTENERS. COORDINATE WITH ARCHITECT ON EXACT FASTENERS PRIOR TO INSTALLATION.
PL - PLASTIC LAMINATE	PL1	WILSONART - WHITE RIVER FOREST 8227K-79
PT - PAINT	PT1	SW7006 EXTRA WHITE (FIELD PAINT - EGGSHELL)
	PT2	SW7006 EXTRA WHITE (CEILING PAINT FLAT)
	PT3	SW6761 THERMAL SPRING
QZ - QUARTZ	QZ1	WILSONART - NORTH CASCADES Q4035
T - TILE	T1	NEMO TILE - STACKED COLOR WHITE, GLOSS FINISH - GROUT - MAPEI 103 COBBLESTONE
	T2	VIRGINA TILE, WOW USE - DUO, TUEQUES 6X6-DUO, INSTALL STACK BOND RANDOM. GROUT - MAPEI 103 COBBLESTONE
WC - WALLCOVERING	WC1	KOROSEAL - TIMBERLINE MAPLE T12214
WT - WINDOW TREATMENT	WT1	ROLLER SHADE, MECO SOHO 1900 SERIES 5%, 1919 SILVER BIRCH, MANUAL



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EXHAUST FAN SCHEDULE											
MARK	AREA SERVED	MANUFACTURER	MODEL	MOUNTING	CFM	ESP (IN)	DRIVE	ELECTRICAL		WEIGHT	NOTES
								VOLTS	PHASE	AMPS	
EF-1	RESTROOM 107	PANASONIC	FV-10NLF1E	INLINE	110	0.2	DIRECT	120	1	0.25	A,B
EF-2	RESTROOM 108	PANASONIC	FV-10NLF1E	INLINE	110	0.2	DIRECT	120	1	0.25	A,B
NOTES: A. PROVIDE INTERNAL CABINET BACKDRAFT DAMPER, ALL THREED RODS AND VIBRATION ISOLATORS. B. INTERLOCK FAN OPERATION WITH LIGHT SWITCH.											

MINI-SPLIT EQUIPMENT SCHEDULE												
OUTDOOR UNIT												
MARK	SYSTEM#	DESCRIPTION	MANUFACTURER	MODEL	NOMINAL CAPACITY (BTU/H)		ELECTRICAL			WEIGHT	SIZE (IN)	NOTES
					COOLING	HEATING @ 0°F	V/PH	MCA	MOCF	LBS.	WxHxD	
HP-1	1	HEAT PUMP UNIT	LENNOX	MLB04854M-1P	48,000	47,180	208V / 1Ø	35	50	239	41.75x52.5x16.375	C,D
INDOOR UNIT												
MARK	SYSTEM#	DESCRIPTION	MANUFACTURER	MODEL	NOMINAL CAPACITY (BTU/H)		ELECTRICAL			WEIGHT	MAX CFM	NOTES
					COOLING	HEATING	V/PH	MCA	MOCF	LBS.		
MS-1	1	CEILING CASSETTE	LENNOX	M33A024S4-2P	20,000	21,000	208V / 1Ø	1.5	SEE ELECT.	47	700	A,B
MS-2	1	CEILING CASSETTE	LENNOX	M22A009S4-2P	8,000	8,500	208V / 1Ø	0.9	SEE ELECT.	32	375	A,B
MS-3	1	DUCTED	LENNOX	MMD08024S4-2P	20,000	21,000	208V / 1Ø	1.5	SEE ELECT.	87	735	A,B
NOTES:												
A. PROVIDE PROGRAMMABLE THERMOSTAT.												
B. PROVIDE 208V/1PH CONDENSATE PUMP AND INSTALL CONDENSATE DRAIN.												
C. DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR.												
D. HEAT PUMP SHALL BE LOW-AMBIENT TYPE RATED FOR -22°F.												

GRILLE, REGISTER AND DIFFUSER SCHEDULE						
MARK	MANUFACTURER	MODEL	FACE TYPE	MOUNTING LOCATION	FACE SIZE (IN.)	MAX NC
SUPPLY						
CSD-1	PRICE	TBD4150	1-SLOT LINEAR, 1"	LAY-IN	48" LONG	25
CSD-2	PRICE	TBD4150	1-SLOT LINEAR, 1"	SURFACE	24" LONG	25
DSD-1	PRICE	RPD	ROUND PLAQUE FACE	DUCT	18" DIA.	25
RETURN/EXHAUST						
RG-1	PRICE	LBP	LINEAR BAR GRILLE	SURFACE	12" X 6"	25
EG-1	PRICE	TBR	1-SLOT LINEAR, 1-1/2"	SURFACE	24" LONG	25
NOTES: A. NECK SIZE SHOWN ON DRAWINGS. TRANSITION DUCT AS REQUIRED. B. FRAME TYPE TO MATCH CEILING/WALL CONSTRUCTION, COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN. C. BRANCH DUCT SIZE SHALL BE SAME AS NECK SIZE UNLESS OTHERWISE SHOWN ON DRAWINGS. D. COORDINATE COLOR WITH ARCHITECT.						

PLUMBING FIXTURE SCHEDULE	
CONFIRM ALL SELECTIONS WITH OWNER AND ARCHITECT PRIOR TO PURCHASE.	
FD1	FLOOR DRAIN: SIOUX CHIEF 832-3PNN, FLOOR DRAIN, PVC BODY AND CLAMPING COLLAR, ADJUSTABLE 5-1/2" ROUND NICKEL BRONZE STRAINER. PROVIDE WITH PROSET SYSTEMS "TRAP GUARD" INSERT FOR ACTUAL FLOOR DRAIN MODEL AND SIZE PROVIDED.
FD2	FLOOR DRAIN: SIOUX CHIEF 832-3PNN, FLOOR DRAIN, PVC BODY AND CLAMPING COLLAR, ADJUSTABLE 5-1/2" ROUND NICKEL BRONZE STRAINER, TRAP PRIMER CONNECTION. PROVIDE TRAP PRIMER ZURN Z1022-DU.
LAV	WALL-MOUNT LAVATORY: SEE ARCHITECTURAL DRAWING FOR FIXTURE SPECIFICATIONS. PROVIDE FLEXIBLE SS RISERS WITH CHROME PLATED STOP VALVES, P-TRAP WITH CLEANOUT AND ESCUTCHEONS.
SINK	UNDERMOUNT KITCHEN SINK: SEE ARCHITECTURAL DRAWING FOR FIXTURE SPECIFICATIONS. PROVIDE GARBAGE DISPOSAL (INSINKERATOR BADGER 5, 120V, 1/2HP), FLEXIBLE SS RISERS WITH CHROME PLATED STOP VALVES, P-TRAP WITH CLEANOUT AND ESCUTCHEONS.
IMB	ICE MAKER OUTLET BOX: WATER TITE AB9702 OUTLET BOX WITH QUARTER TURN VALVES, 1/2" CW CONNECTION AND WATER HAMMER ARRESTOR.
WC	FLOOR-MOUNTED ADA WATER CLOSET: KOHLER K-5310-B, HANDICAP ACCESSIBLE, VITREOUS CHINA, 1.28 GPF, ELONGATED BOWL, FLOOR MOUNTED W/ 16.5" BOWL HEIGHT, WHITE, VITREOUS CHINA TANK AND COVER CONTAINING FLUSH VALVE. PROVIDE WHITE OPEN-FRONT SEAT, CHROME STOPS, C.P. FLEXIBLE RISER TUBE, BOLT CAPS, AND ESCUTCHEON.
WH	ELECTRIC WATER HEATER: AO SMITH DEL-15, 15 GALLON, 3/4" CONNECTIONS, 20 GPH @ 90°F RISE, 240V/1PH, SINGLE 4500W ELEMENT.

FIXTURE BRANCH CONNECTION SCHEDULE				
FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
FLOOR DRAIN	-	-	3"	1-1/2"
ICE MAKER BOX	1/2"	-	-	-
LAVATORY/SINK	1/2"	1/2"	1-1/2"	1-1/2"
WATER CLOSET (FLUSH TANK)	1/2"	-	4"	2"
WATER HEATER	3/4"	3/4"	-	-
NOTE: PIPE SIZES SHOWN ARE MINIMUM. MINIMUM SANITARY SIZE UNDERGROUND IS 2".				

MECHANICAL & PLUMBING SPECIFICATIONS

- GENERAL PROVISIONS:
 - PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE PLUMBING AND MECHANICAL SYSTEMS OUTLINED.
 - OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR APPROVAL AS REQUIRED BY AUTHORITIES.
 - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
 - ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.
 - DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, PIPE, DUCT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.
 - PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILING, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED.
 - CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECT FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
 - INSPECTION OF THE SITE: THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MEP DRAWINGS, SPECIFICATIONS, DETAIL, AND THE SITE. THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SPECIAL OR UNUSUAL PROBLEMS, CONFLICTS, OR OBSTRUCTIONS THAT AFFECT HIS BID.
 - FOR THE PURPOSE OF CLARITY AND LEGIBILITY, THE MECHANICAL AND PLUMBING DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES.
 - IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS OR WITH CODE REQUIREMENTS, THE NOTE OR CODE WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR HIGHER STANDARD SHALL PREVAIL.
 - INSTALL MATERIALS AND SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SUBMITTALS. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH UNIFORM APPEARANCE FOR EXPOSED WORK. COORDINATE WITH WORK OF OTHER SECTIONS. COMPLY WITH APPLICABLE REGULATIONS AND CODE REQUIREMENTS. PROVIDE PROPER CLEARANCES FOR SERVING.
 - INCLUDE ALL BASIC MATERIALS AND CONSTRUCTION METHODS INCLUDING: PIPES, PIPE FITTINGS, AND SPECIALTIES AND SUPPORTING DEVICES, VALVES, PIPE AND VALVE IDENTIFICATION, PUMPS, VIBRATION ISOLATION, ETC.
 - FURNISH ADEQUATE ACCESS PANELS AND DOORS TO ALLOW FOR FUTURE PIPING ALTERATIONS, REPLACEMENT, AND MAINTENANCE OF PIPING. PROPERLY IDENTIFY ALL ACCESS PANELS AND DOORS.
 - OPERATION AND MAINTENANCE MANUALS:
 - DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.
 - ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION IN THE OPERATING AND MAINTENANCE MANUALS.
 - ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A 3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER AND CONTRACTORS.
 - MANUFACTURERS:
 - MANUFACTURERS, MODEL NUMBERS, ETC. INDICATED OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION, ARTICLES, FIXTURES, ETC. OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN.
 - THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
 - MOTORS:
 - PROVIDE THERMAL OVERLOAD PROTECTION FOR EACH MOTOR PROVIDED BY THIS WORK.
 - PLUMBING:
 - PROVIDE AN APPROVED WATER HAMMER ARRESTOR FOR EACH PLUMBING FIXTURE SUPPLY AS REQUIRED BY FIXTURE MANUFACTURER.
 - ALL EXPOSED PIPE IN FINISHED AREAS SHALL BE CHROME PLATED BRASS PIPE, NO FERROUS PIPE.
 - PROVIDE CLEANOUTS AT EACH CHANGE IN DIRECTION AND AT 100 FOOT INTERVALS IN STRAIGHT RUNS.
 - PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND TRAPS.
 - CLEANOUTS:
 - VINYL TILE FLOOR (FCO): JR SMITH #4140, OR EQUAL.
 - QUARRY TILE FLOOR (FCO): JR SMITH #4200, OR EQUAL.
 - CARPETED FLOOR (FCO): JR SMITH #4020-Y, OR EQUAL.
 - UNFINISHED FLOOR (FCO): JR SMITH #4020, OR EQUAL.
 - WALL (WCO): JR SMITH #4472, OR EQUAL, 24" ABOVE THE FLOOR.
 - GRADE (GCO): JR SMITH #4256, OR EQUAL, WITH HEAVY DUTY CAST IRON BODY AND COVER.
 - ALL SEWER PIPING LOCATED INSIDE THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES.
 - INSTALL 2-1/2" AND SMALLER PIPE AT 1/4" PER FOOT FALL.
 - INSTALL 3" AND LARGER PIPE AT 1/8" PER FOOT FALL.
 - CONDENSATE DRAIN SHALL BE INSTALLED AT 1/8" PER FOOT FALL.
 - PROVIDE DELECTRIC UNIONS WITH APPROPRIATE END CONNECTION TO MATCH THE PIPE SYSTEM IN WHICH INSTALLED (SCREWED, SOLDERED, OR FLANGED). PROVIDE DIELECTRIC UNIONS ON ALL PIPING CONNECTIONS TO HOT WATER HEATERS AND EXPANSION JOINTS.
 - PIPING:
 - DOMESTIC COLD AND HOT WATER (ABOVEGROUND).
 - TYPE L HARD DRAWN COPPER TUBING, ASTM B-88 WITH WROUGHT BRONZE SOLDERED FITTINGS.
 - GATE VALVE: CRANE #428 OR EQUAL.
 - GLOBE VALVE: CRANE #7 OR EQUAL.
 - BALL VALVE: CRANE #932 OR EQUAL.
 - SANITARY SEWER AND VENTS (UNDERGROUND, INTERIOR TO BUILDING).
 - ASTM D2688 POLYVINYL CHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT.
 - SEWER LINES SHALERE LOCATED IN GENERAL AS SHOWN ON THE DRAWINGS. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN SUCH A MANNER AS TO MAINTAIN PROPER CLEARANCES AND SUFFICIENT SLOPE TO ENSURE DRAINAGE.
 - VENT STACKS SHALL BE EXTENDED FULL SIZE THROUGH THE ROOF AND FLASHED WITH 4 POUND LEAD SHEETS TURNED DOWN INTO THE STACK AT LEAST 2" AND EXTENDED 12" IN ALL DIRECTIONS FROM THE PIPE AT THE ROOF LINE. VENTS THROUGH ROOF SHALL NOT BE LESS THAN 3". PVC PIPING SHALL NOT BE USED FOR VENT PIPING THROUGH THE ROOF, WHERE APPLICABLE FOR ROOFING SYSTEM USED. PROVIDE FLASHING VIA PLEATED EPDM CONE IN LIEU OF LEAD. ALL VENT STACKS IN OR AT OUTSIDE WALLS SHALL BE OFFSET 1'-6" MINIMUM FROM OUTSIDE WALLS BEFORE GOING THROUGH THE ROOF, TO FACILITATE FLASHING.
 - CONDENSATE DRAIN AND INDIRECT WASTE (ABOVEGROUND)
 - DWV WROUGHT COPPER, ANSI B-16.29.
 - PVC DWV PIPE, SCHEDULE 40, SOLVENT JOINT.
 - REFRIGERANT
 - ASTM B 280, TYPE ACR, HARD DRAWN STRAIGHT LENGTHS, AND SOFT-ANNEALED COILS, SEAMLESS COPPER TUBING.
 - WROUGHT COPPER, ANSI B16.22, STREAMLINED PATTERN, FITTINGS, BRAZED JOINTS, AWS A 5.8 CLASSIFICATION BAC-1 (SILVER).
 - TUBING TO BE FACTORY CLEANED, READY FOR INSTALLATION, AND HAVE ENDS CAPPED TO PROTECT CLEANLINESS OF PIPE INTERIORS PRIOR TO SHIPPING.
 - SIZE AND INSTALLATION OF PIPING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - ALL PIPE HANGERS AND SUPPORTS SHALL BE STANDARD PRODUCTS OF GRINNELL, FEE AND MASON, OR ANVIL HANGER SPACING SHALL BE IN ACCORDANCE WITH MSS-SP-69.
 - SLEEVES
 - PROVIDE SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK. ALL SLEEVES SHALL BE OF SUFFICIENT SIZE TO PERMIT PIPE MOVEMENT DUE TO EXPANSION AND CONTRACTION AND TO ACCOMMODATE PIPE INSULATION.
 - INTERIOR PARTITIONS: 16 GAUGE GALVANIZED STEEL, PACK BETWEEN PIPE AND SLEEVE WITH FIRE SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT.
 - ROOF: PROSET OR EQUAL MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH WATERPROOF SEAL. COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY.
 - PLUMBING VENTS: FLASH ROOF VENT INTO ROOFING SYSTEM AS REQUIRED BY THE ROOFING CONTRACTOR TO MAINTAIN THE EXISTING ROOF WARRANTY. ALL PLUMBING VENT TERMINALS SHALL TERMINATE A MINIMUM OF 12" ABOVE ROOF OR EQUAL TO HEIGHT OF PARAPET, WHICHEVER IS GREATER.
 - PROVIDE CHROME PLATED ESCUTCHEONS ON ALL PIPE ENTERING FINISHED AREAS.
 - INSULATION AND DUCT LINING:
 - ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A FLAME SPREAD RATING OF NOT OVER 25, A FUEL CONTRIBUTION RATING OF NOT OVER 50, AND A SMOKE DEVELOPMENT RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA.
 - PIPE INSULATION (ABOVE GRADE):
 - THE PIPE INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 BTU PER IN./HR*50-FT*F OR LESS.
 - FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER, ASJ JACKET, FACTORY APPLIED PRESSURE SEALING LONGTARE LAP JOINT, NO STAPLES, ZESTON PREMOULDED PVC FITTING COVERS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - FOR NON CIRCULATING SYSTEMS THE FIRST 8 FEET OF INLET AND OUTLET PIPING BETWEEN THE TANK AND HEAT TRAP (INCLUDING THE HEAT TRAP) MUST BE INSULATED.
 - INSULATION SCHEDULE:
 - DOMESTIC COLD WATER: 1/2"
 - DOMESTIC HOT WATER: 1"
 - REFRIGERANT SUCTION: 1-1/2" FOR PIPING UP TO 1-1/2", 2" FOR PIPING 1-1/2" AND LARGER.
 - TESTING, BALANCING AND CLEANING:
 - ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR COVERED WITH INSULATION.
 - SEWER AND VENT PIPING SHALL BE HYDROSTATICALLY TESTED WITH NO LESS THAN 10 FEET OF HEAD FOR A PERIOD OF NOT LESS THAN 15 MINUTES, PER THE LOCAL PLUMBING CODE, WITH NO LEAKS.
 - DOMESTIC WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 60 PSI, FOR A PERIOD OF NOT LESS THAN 2 HOURS, WITH NO LEAKS.
 - THE INSPECTION AUTHORITY HAVING JURISDICTION SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO PERFORMANCE OF ALL TESTS SO THAT THEY TESTS MAY BE WITNESSED IF DEEMED NECESSARY.
 - DUCTWORK AND PIPING SHALL BE BALANCED BY QUALIFIED BALANCING PERSONNEL WHO HAVE PREVIOUS EXPERIENCE WITH BALANCING PROCEDURES AND ARE FAMILIAR WITH TESTING AND BALANCING PROCEDURES OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB).
 - BALANCING SHALL INCLUDE THE BALANCING OF THE EQUIPMENT AND AIR DISTRIBUTION SYSTEMS TO PROVIDE DESIGN QUANTITIES INDICATED AND VERIFICATION PERFORMANCE OF ALL EQUIPMENT AND AUTOMATIC CONTROLS.
 - WITH IN 30 DAYS OF THE COMPLETION OF THE TESTING AND BALANCING WORK, SUBMIT THE TEST AND BALANCING REPORT BEARING THE SIGNATURE OF THE TEST AND BALANCE ENGINEER. THE REPORTS SHALL BE CERTIFIED PROOF THAT THE SYSTEMS HAVE BEEN TESTED, ADJUSTED, AND BALANCED IN ACCORDANCE WITH THE REFERENCED STANDARDS; ARE AN ACCURATE REPRESENTATION OF HOW THE SYSTEMS HAVE BEEN INSTALLED AND ARE OPERATING. REPORTS SHALL BE BOUND IN A VINYL BINDER AND THE BINDER LABELED OR MAY BE AN ELECTRONIC PDF SUBMITAL.
 - DUCTWORK:
 - ALL DUCTWORK UNLESS OTHERWISE INDICATED SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL, COMPLYING WITH ASTM A 527, LOCKFORMING QUALITY, WITH G60 ZINC COATING IN ACCORDANCE WITH ASTM A 525, AND MILL PHOSPHATIZED FOR EXPOSED LOCATIONS.
 - DUCTWORK METAL GAUGES, REINFORCING, ETC. SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION FOR A 2" WATER GAUGE STATIC PRESSURE.
 - ALL FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION.
 - RECTANGULAR DUCT:
 - ELBOWS, UNLESS INDICATED OTHERWISE, SHALL BE CONSTRUCTED WITH CENTERLINE RADIUS OF NOT LESS THAN 1.5 DUCT WIDTH OR SQUARE ELBOWS WITH DOUBLE WALL STREAMLINE ELBOWS.
 - TAKE-OFF FITTINGS: BRANCH DUCT TAKE-OFF FITTINGS FOR SUPPLY AND EXHAUST DIFFUSER/REGISTERS SHALL INCLUDE AN INTEGRAL MANUAL VOLUME DAMPER WITH LOCKING QUADRANT, DAMPER NOT REQUIRED ON RETURN AIR. FOR RECTANGULAR TO ROUND TAKE-OFFS, UTILIZE A "BUCKLEIT" MODEL 3300 X 3300 OR EQUAL.
 - RETURN AIR ACOUSTIC ELBOWS AND SOUND BOOTS SHALL BE A SQUARE ELBOW WITH NO TURNING VANES.
 - SLOPES FOR TRANSITIONS OR OTHER CHANGES IN DIMENSIONS SHALL BE A MINIMUM 1 TO 3.
 - ROUND AND OVAL SPIRAL SEAM DUCT:
 - PROVIDE RADIUS TYPE FITTINGS FABRICATED OF MULTIPLE SECTIONS WITH MAXIMUM 15 DEGREE CHANGE OF DIRECTION PER SECTION. UNLESS SPECIFICALLY DETAILED OTHERWISE, USE 45 DEGREE LATERALS FOR BRANCH TAKEOFF CONNECTIONS. WHERE 90 DEGREE BRANCHES ARE INDICATED PROVIDE CONICAL TYPE TEES.
 - SLOPES FOR TRANSITIONS OR OTHER CHANGES IN DIMENSIONS SHALL BE MINIMUM 1 TO 3.
 - ROUND LONGITUDINAL SEAM DUCT: USE FOR RIGID METAL DUCT ON LEAVING SIDE OF DUCT IN CONCEALED LOCATIONS FOR EXTENSION TO FLEX FOR DIFFUSERS.
 - SEAL ALL CONCEALED DUCTWORK JOINTS WITH NON-HARDENING, NON-MIGRATING MASTIC SEALANT, AS RECOMMENDED FOR SEALING SEAMS AND JOINTS IN DUCTWORK. OIL BASED CAULKING AND GLAZING COMPOUNDS SHALL NOT BE ACCEPTABLE. DUCTS SHALL BE SEALED TO THE CLASS LEVEL LISTED BELOW:

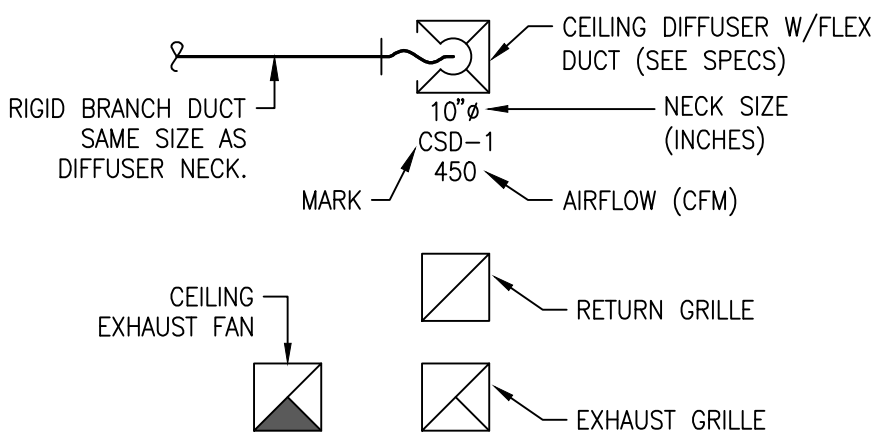
(1) UNCONDITIONED SPACES:	CLASS B	CLASS C	CLASS B
(2) CONDITIONED SPACES (PLENUM):	CLASS C	CLASS B	CLASS C
	SUPPLY 2"WC OR LESS	EXHAUST	RETURN
 - DUCT SIZES SHOWN ON THE DRAWINGS ARE SHEET METAL SIZES. INCREASE SHEET METAL SIZES ACCORDINGLY TO ACCOUNT FOR THICKNESS OF DUCT LINER.
 - WHETHER SHOWN ON PLANS OR NOT, PROVIDE MANUAL VOLUME DAMPERS IN EACH RUNOUT TO EACH SUPPLY DIFFUSER OR REGISTER. PROVIDE ACCESS PANELS TO DAMPERS LOCATED ABOVE HARD CEILING.
 - PROVIDE AUXILIARY STEEL AS REQUIRED TO ADEQUATELY SUPPORT DUCTWORK.
 - WHERE DUCTS PASS THROUGH FIRE-RATED WALLS, FLOORS, OR PARTITIONS, PROVIDE FIRESTOPPING BETWEEN DUCT AND WALL.
 - WHERE DUCTS PASS THROUGH INTERIOR PARTITIONS OR EXTERIOR WALLS, AND ARE EXPOSED TO VIEW, CONCEAL SPACE BETWEEN OPENING AND DUCT OR DUCT INSULATION WITH SHEET METAL FLANGES OF SAME GAUGE AS DUCT. OVERLAP OPENING ON 4 SIDES BY AT LEAST 1-1/2". FASTER TO DUCT AND WALL.
- FLEXIBLE DUCT:
 - ATCO JOBB (R-6), OR EQUAL.
 - FACTORY APPLIED INSULATION AND VAPOR BARRIER, 1-1/2" THICK.
 - MAXIMUM LENGTH OF 6'-0".
- EXPANSION TANK:
 - DIAPHRAGM-TYPE EXPANSION TANK: SIZE AS INDICATED ON THE DRAWINGS, CONSTRUCTED OF CARBON STEEL FOR 125 PSIG WORKING PRESSURE, 375°F MAXIMUM OPERATING TEMPERATURE. SEPARATE AIR CHARGE FROM THE WATER BY A FLEXIBLE DIAPHRAGM SECURELY SEALED INTO THE TANK. PROVIDE TAPS FOR PRESSURE GAGE AND AIR CHARGING FITTING, AND A DRAIN VALVE. SUPPORT TANK FROM WALL WITH STRUCTURAL STEEL FRAME ADEQUATELY SIZED TO SUPPORT THE WEIGHT. TANK SHALL BE CONSTRUCTED IN ACCORDANCE WITH, TESTED, AND LABELED ASME PRESSURE CODE, SECTION VIII, DIVISION I.
- REMODELING WORK:
 - THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR INFERRED INFERABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING CONDITIONS.
 - CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON THE WORK POTENTIAL. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN THE BID ALL COSTS REQUIRED TO MAKE THE WORK MEET EXISTING CONDITIONS.
 - DEMOLITION: DISCONNECT, DEMOLISH, AND REMOVE ABANDONED MECHANICAL AND PLUMBING MATERIALS AND EQUIPMENT INDICATED TO BE REMOVED AND NOT INDICATED TO BE SALVAGED OR REMAIN.
 - DISPOSAL AND CLEANUP: REMOVE FROM THE SITE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS AND EQUIPMENT NOT INDICATED TO BE SALVAGED.
 - PROTECT ADJACENT MATERIALS INDICATED TO REMAIN. INSTALL AND MAINTAIN DUST AND NOISE BARRIERS TO KEEP DIRT, DUST, AND NOISE FROM BEING TRANSMITTED TO ADJACENT AREAS. REMOVE PROTECTION AND BARRIERS AFTER REMODELING OPERATIONS ARE COMPLETE.
 - REMOVE ALL PIPING TO BE DEMOLISHED BACK TO PIPE MAIN OR EDGE OF PROJECT AREA AND CAP PIPE.
 - PIPING AND DUCTS EMBEDDED IN FLOORS, WALLS, AND CEILING MAY REMAIN IF SUCH MATERIALS DO NOT INTERFERE WITH NEW INSTALLATIONS. PIPING AND DUCTS TO REMAIN SHALL BE APPROVED BY THE ARCHITECT. REMOVE MATERIALS ABOVE ACCESSIBLE CEILING, DRAIN AND CAP PIPING AND DUCTS ALLOWED TO REMAIN ABOVE CEILING OR BELOW FLOOR, CONCEALED FROM VIEW, EXCEPT AS OTHERWISE NOTED. PATCH FLOOR TO MATCH EXISTING.
 - PIPE AND DUCT SHALL BE CONCEALED WITH NEW OR EXISTING CONSTRUCTION WHENEVER POSSIBLE, UNLESS INDICATED OTHERWISE.

M&P SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC. ARE NECESSARILY USED ON THE DRAWINGS.

HVAC EQUIPMENT & DUCTWORK

- SPIN-IN FITTING WITH MANUAL VOLUME DAMPER
- BRANCH DUCT WITH 45° RECTANGLE-ROUND BRANCH FITTING AND MANUAL VOLUME DAMPER
- ELBOW WITH TURNING VANES
- RETURN, EXHAUST, OR OUTSIDE AIR DUCT UP
- RETURN, EXHAUST, OR OUTSIDE AIR DUCT DOWN
- SUPPLY AIR DUCT UP
- SUPPLY AIR DUCT DOWN
- EQUIPMENT WITH FLEXIBLE DUCT CONNECTION
- MANUAL VOLUME DAMPER
- SQUARE TO ROUND TRANSITION
- DUCT TRANSITION
- ZONE SENSOR, THERMOSTAT, HUMIDISTAT
- MOTORIZED DAMPER

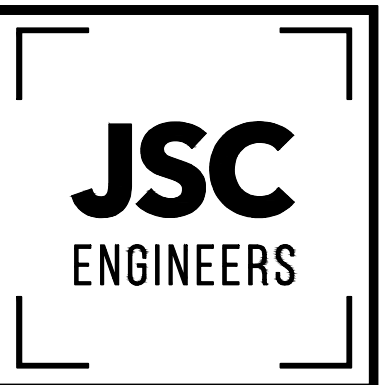


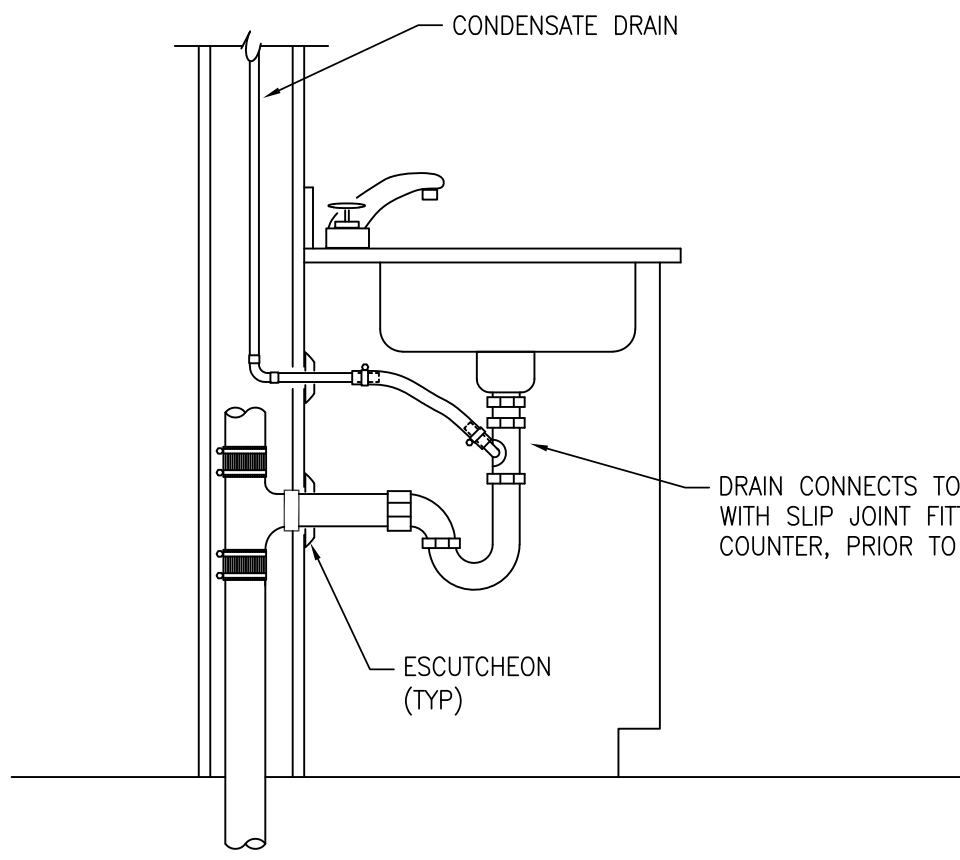
HVAC EQUIPMENT & DUCTWORK

SYMBOL	DESCRIPTION
SS	SANITARY SEWER (ABOVE GRADE)
SS	SANITARY SEWER (BELOW GRADE)
CD	CONDENSATE DRAIN
V	VENT PIPING
G	G = GAS PIPING LESS THAN 2 PSI
G	GAS PIPING ON ROOF
CW	COLD WATER PIPING
HW	HOT WATER PIPING
HR	REDUCULATING HOT WATER
CA	COMPRESSED AIR
PE	PIPE ELBOW DOWN
PE	PIPE ELBOW UP
GV	GATE VALVE
BVP	BACKFLOW PREVENTER
BLV	BALL VALVE
PLV	PLUG VALVE
FCO	FLOOR CLEANOUT (FCO)
WCO	WALL CLEANOUT (WCO)
FD	FLOOR DRAIN
FS	FLOOR SINK
HOB	HOSE BIB

ANNOTATION

- PLAN WORK NOTE
- MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- PLUMBING FIXTURE DESIGNATION
- CONNECTION POINT OF NEW WORK TO EXISTING
- DETAIL REFERENCE UPPER NUMBER INDICATED DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- EXISTING TO REMAIN

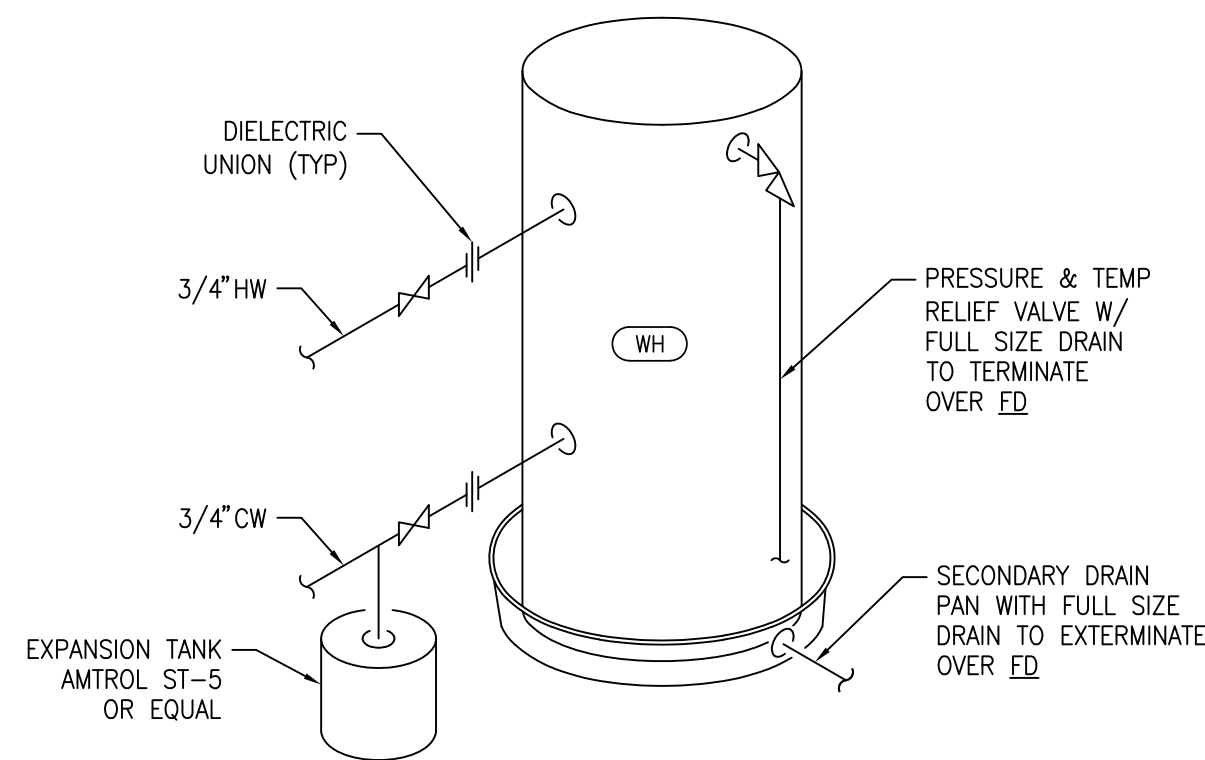




DRAIN TO TAIL PIECE

SCALE : NO SCALE

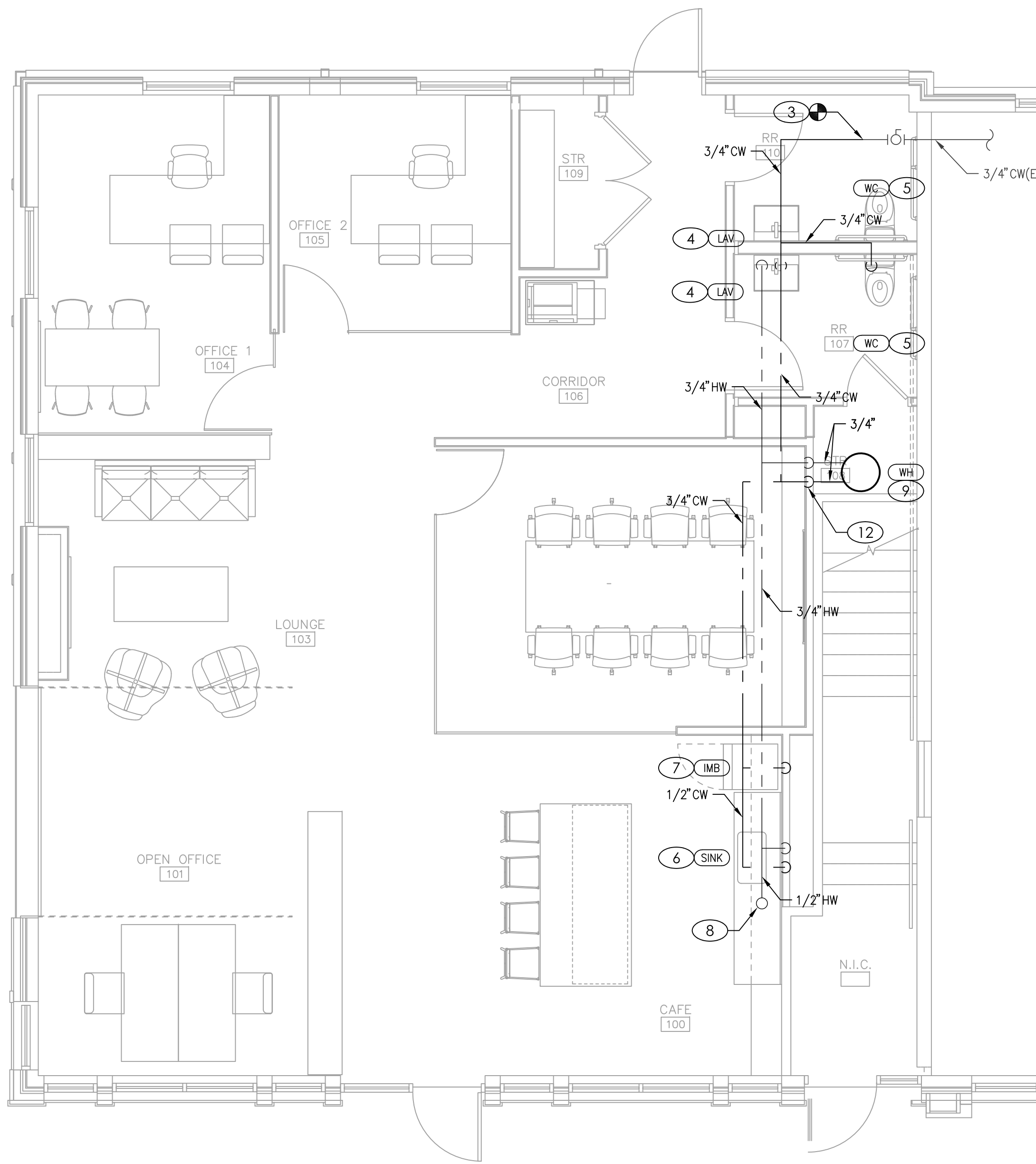
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ELECTRIC WATER HEATER DETAIL

SCALE : NO SCALE

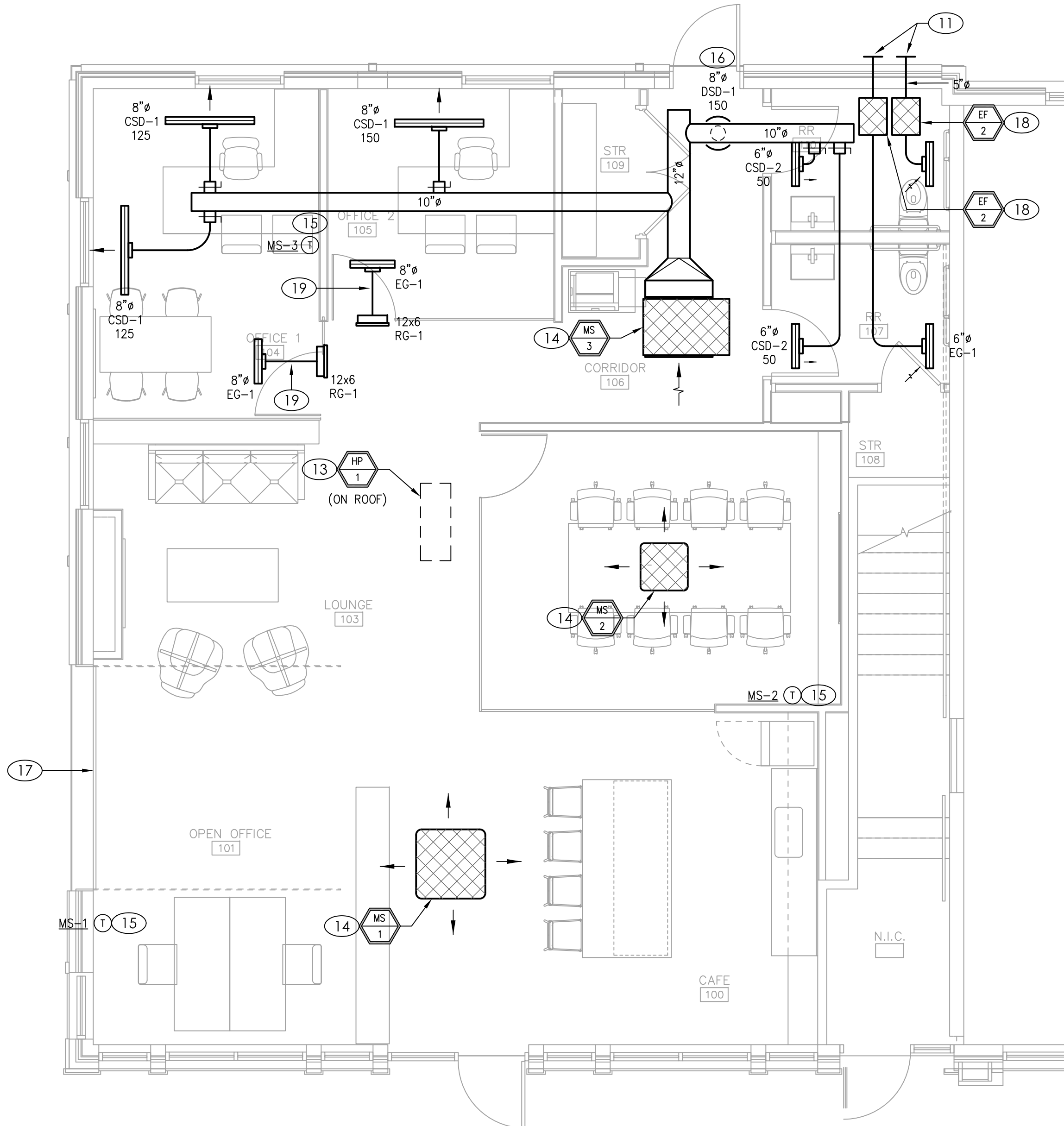
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WATER PLAN

SCALE : 1/4" = 1'-0"

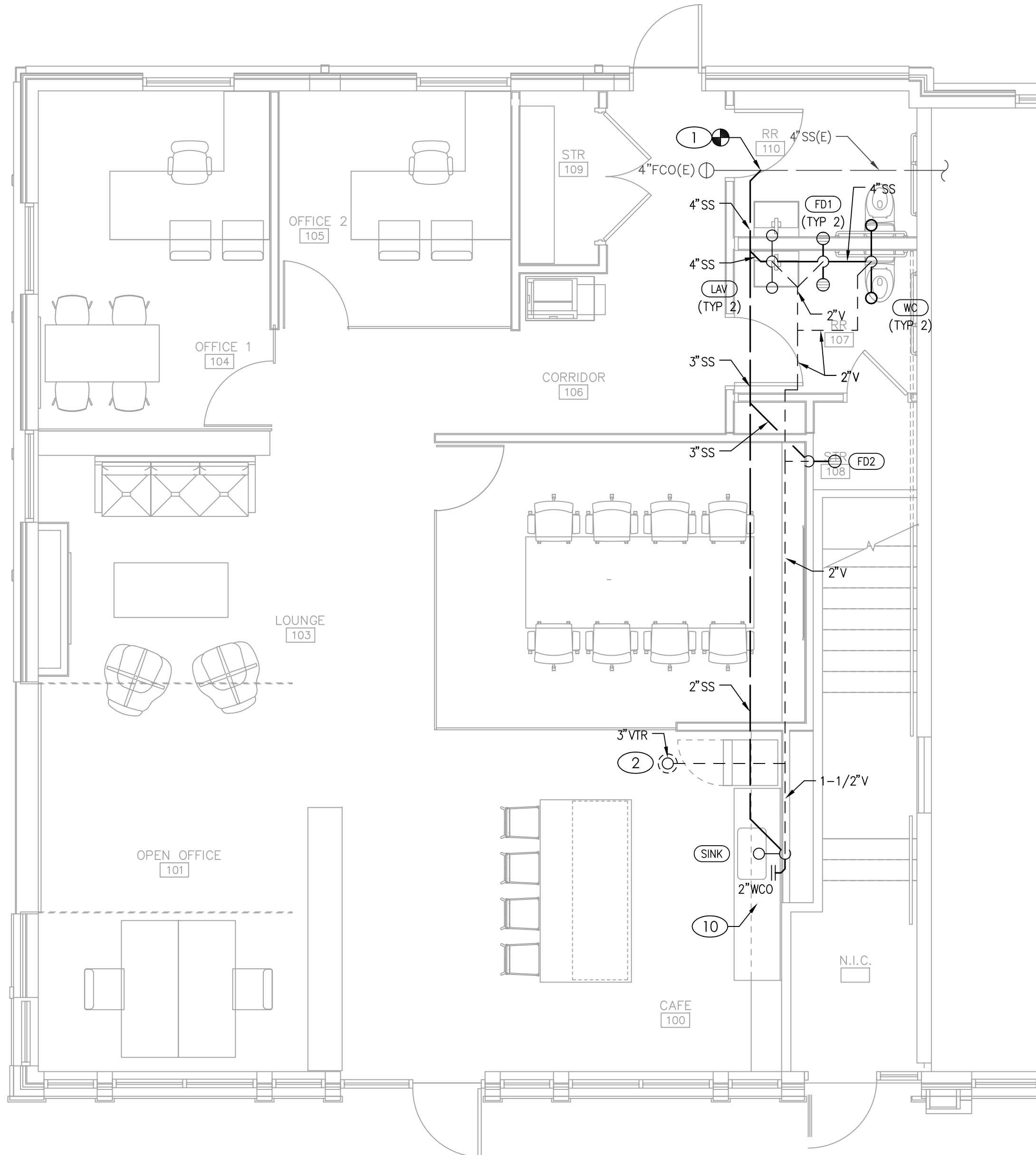
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MECHANICAL PLAN

SCALE : 1/4" = 1'-0"

2



WASTE & VENT PLAN

SCALE : 1/4" = 1'-0"

1

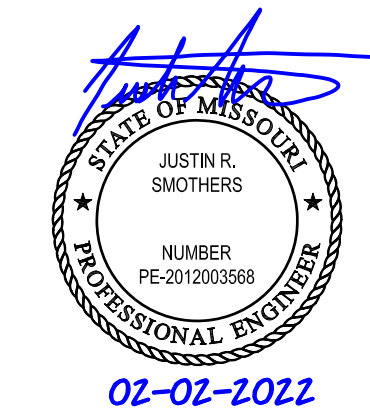
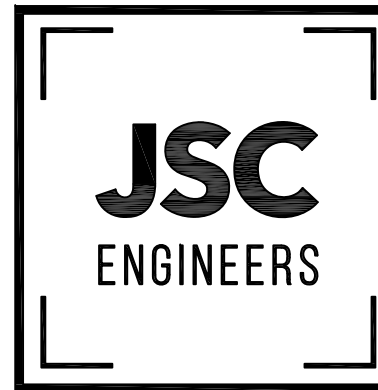


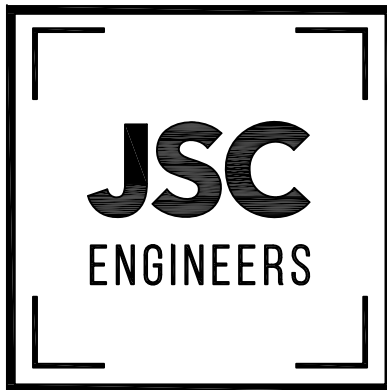
GENERAL NOTES

- DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- COORDINATE INSTALLATION OF MECHANICAL AND PLUMBING SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. VERIFY DUCT SPACE AVAILABLE ABOVE ALL CEILINGS PRIOR TO ANY FABRICATION OF INSTALLATION.
- OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF.
- ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE HVAC EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE THE ARCHITECT AND OWNER WITH A COPY OF THE INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.
- REFER TO PLUMBING FIXTURE SCHEDULE FOR MINIMUM BRANCH WASTE AND VENT PIPE SIZING.
- EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO ANY INSTALLATION OR CONNECTIONS THEREOF. ALL CONNECTIONS TO EXISTING UTILITIES (IE. WATER, SEWER & GAS) SHALL BE MADE WITH APPROVAL OF THE ADMINISTRATIVE AUTHORITY AND THE RESPECTIVE UTILITY COMPANY.
- SAFETY EXISTING FLOOR AS REQUIRED FOR INSTALLATION OF NEW UNDERFLOOR PIPING. PATCH FLOOR TO MATCH EXISTING.
- EXISTING SANITARY SEWER SHOWN AT APPROXIMATE LOCATION FROM BEST AVAILABLE INFORMATION. PLUMBING CONTRACTOR SHALL INCLUDE WORK REQUIRED TO CAMERA AND LOCATE SEWER LINES PRIOR TO START OF WORK. FIELD VERIFY EXACT LOCATION AND ADEQUATE INVERT ELEVATION FOR CONNECTION OF NEW SEWER LINES.

KEYED PLAN NOTES

- CONNECT NEW 4" SANITARY SEWER TO EXISTING 4" SANITARY SEWER. FIELD VERIFY EXACT LOCATION, FLOW DIRECTION AND ADEQUATE INVERT ELEVATION OF CONNECTION POINT PRIOR TO START OF WORK.
- VENT STACK UP TO 3" VTR. LOCATE MINIMUM 3'-0" FROM EDGE OF ROOF AND 10'-0" FROM ANY OUTSIDE AIR INTAKE. COORDINATE PIPE PENETRATION WITH ROOFING CONTRACTOR SO NOT TO VOID ROOF WARRANTY. SEAL ROOF PENETRATION WEATHER TIGHT.
- CONNECT NEW 3/4" CW PIPING TO EXISTING 3/4" DOMESTIC WATER TAP IN TENANT SPACE. FIELD VERIFY EXACT LOCATION AND SIZE PRIOR TO START OF WORK.
- PROVIDE 3/4" CW AND 3/4" HW DOWN IN WALL TO BACK-TO-BACK FIXTURES. PROVIDE 1/2" CW AND 1/2" HW TO EACH LAVATORY. PROVIDE THERMOSTATIC MIXING VALVE FOR FIXTURE EQUAL TO LEONARD MODEL 170. SET HW SUPPLY WATER TEMPERATURE TO 110°F.
- PROVIDE 3/4" CW DOWN IN WALL TO BACK-TO-BACK FIXTURES. PROVIDE 1/2" CW TO EACH WATER CLOSET.
- PROVIDE 1/2" CW AND 1/2" HW DOWN IN WALL TO SINK.
- PROVIDE 1/2" CW DOWN IN WALL TO ICE MAKER BOX.
- PROVIDE 1/2" HW TO DISHWASHER.
- MOUNT WATER HEATER LOW IN STORAGE CLOSET. CONNECT 3/4" CW AND 3/4" HW TO WATER HEATER. ROUTE 3/4" T&P RELIEF FROM WATER HEATER TO FLOOR DRAIN.
- PROVIDE DISHWASHER DRAIN TO CONNECTION AT GARBAGE DISPOSAL. ROUTE TO UNDERSIDE OF COUNTERTOP TO CREATE HIGH LOOP THEN BACK DOWN TO GARBAGE DISPOSAL CONNECTION.
- ROUTE 5" DUCT TO WALL CAP. LOCATE A MINIMUM OF 5'-0" FROM EXIST. DOOR. SEAL WALL PENETRATION WEATHER TIGHT. PAINT WALL CAP COLOR AS DIRECTED BY ARCHITECT.
- 3/4" HW AND CW DOWN IN WALL. ROUTE BELOW 24" AFF THEN EXIT WALL TO CONNECT TO SIDE OF WATER HEATER. AT BOTTOM OF CW LINE PROVIDE TRAP PRIMER EQUAL TO ZURN Z1022-DU. CONTINUE WITH 3/8" CW UNDERGROUND TO FLOOR DRAIN TRAP PRIMER CONNECTION.
- SET CONDENSING UNIT/HEAT PUMP LEVEL ON ROOF ON PRE-MANUFACTURED PAD. INSTALL PER MANUFACTURER'S INSTRUCTIONS MAINTAINING RECOMMENDED SERVICE CLEARANCES. ROUTE REFRIGERANT LINES THROUGH ROOF AND WEATHER SEAL PENETRATIONS OF BUILDING. PROVIDE ALL RECOMMENDED VALVES, FILTERS, FITTINGS, ETC. AND MAKE ALL NECESSARY CONNECTIONS TO INDOOR UNITS. COORDINATE EXACT LOCATION WITH BUILDING OWNER PRIOR TO INSTALLATION.
- SUPPORT UNIT FROM OVERHEAD STRUCTURE AS REQUIRED. ROUTE 3/4" CONDENSATE DRAIN FROM UNIT TO TAILPIECE OF NEAREST SINK/LAVATORY. COORDINATE INSTALLATION OF SLIP FITTING WITH PLUMBING CONTRACTOR. SEE DETAIL 5 ON THIS SHEET.
- MOUNT THERMOSTAT AT 54" AFF. COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION. PROVIDE INSULATED BASE IF ON EXTERIOR WALL.
- MOUNT DIFFUSER ON BOTTOM SIDE OF SPIRAL DUCT. PROVIDE VOLUME DAMPER AT TAKE-OFF.
- AREA OF ROLL-UP DOOR EXCEEDS 4% OF INTERIOR FLOOR AREA. SATISFYING IMC SECTION 402.2. INTERIOR DOORS TO OFFICE/CONF. SATISFY SECTION IMC 402.3.
- MOUNT INLINE EXHAUST FAN ABOVE CEILING WITH VIBRATION ISOLATION. INTERLOCK WITH LIGHT SWITCH FOR RESTROOM FAN SERVES.
- PROVIDE 8" FLEX DUCT BETWEEN LAY-IN CEILING GRILLE (EG-1) AND WALL. MOUNT GRILLE (RG-1) TO LOCATE WALL MOUNT GRILLE (RG-1) ABOVE DOOR, HIGH ON WALL, IN TRUSS AREA. TRANSITION TO GRILLE AS REQUIRED.





ELECTRICAL SPECIFICATIONS

PART I – GENERAL

A. CONDITIONS

- FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO, THESE MAJOR ITEMS.
A. LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON THE PLANS.
B. ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC. FOR ALL OUTLETS AND EQUIPMENT.
C. TELEPHONE, TELEVISION, AND FIRE ALARM, OUTLETS AND CONDUIT AS INDICATED.
- OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFLECTED CEILING PLAN, INTERIOR AND EXTERIOR ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAWINGS. COORDINATE INSTALLATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN.
- OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRADES AND EQUIPMENT TO COORDINATE INSTALLATION ACCORDINGLY.
- INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND GOVERNING AGENCIES HAVING JURISDICTION.
- FIRE ALARM SYSTEM, IF REQUIRED PER IBC, SHALL BE DESIGN-BUILD BY OWNER'S/OC'S FIRE ALARM CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFPA 72. FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDIBILITY OF THE FIRE ALARM SYSTEM MEETS A MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD HORNS WHERE REQUIRED TO MAINTAIN MINIMUM LEVELS.

B. RELATED WORK BY OTHERS

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR ELECTRICAL SERVICE ENTRANCE FROM THE MAIN SERVICE TO UTILITY POINT OF ELECTRICAL SERVICE. ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE WITH SERVING UTILITY COMPANY.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR PRIMARY PHONE AND CATV SERVICE FROM THE TELEPHONE TERMINAL BOARD OR CABINET TO THE PHONE COMPANY AND CATV COMPANY POINT OF SERVICE COORDINATE WITH LOCAL UTILITY COMPANIES.

C. CODES, REGULATIONS, AND STANDARDS

- THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS INSTALLATION.
- THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE MINIMUM REQUIREMENTS:
A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS.
B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS.
C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS.
D. AMERICAN NATIONAL STANDARDS INSTITUTE.
E. INTERNATIONAL BUILDING CODE.

D. INSPECTION OF SITE

- PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES, AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE WITH THIS CONDITION AFTER BIDDING.
- ELECTRICAL INSTALLATION SHALL MEET THE EXISTING CONDITIONS.

E. STORAGE AND HANDLING OF MATERIAL

- DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN THE MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMPERING, OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR ANY DAMAGE TO WORK OR MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND SHALL MAKE GOOD WITHOUT COST TO THE OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING THIS PERIOD.
- ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPMENT TO THE JOB SITE IN ORDER TO MINIMIZE THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION.
- COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFECTED BY THE WEATHER WHILE IN TRANSIT OR STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEFECTIVE OR NOT INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY THE ENGINEER.

F. CLEANUP

- KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. AT THE COMPLETION OF THE WORK REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES BROOM-CLEAN.

G. EXCAVATION, CUTTING, AND FITTING

- PERFORM ALL EXCAVATION AND BACK FILLING REQUIRED FOR WORK PERFORMED UNDER THIS DIVISION OF THE SPECIFICATIONS. USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OFF SITE MATERIALS ARE DEEMED NECESSARY.
- PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT.

H. DRAWINGS

- THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS.

I. COOPERATION WITH OTHER CONTRACTORS

- COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, LIGHTING FIXTURES, AND OTHER EQUIPMENT LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL, BEAMS, OR OTHER OBSTRUCTIONS.
- CAREFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT BEEN DISTURBED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES.
- COORDINATE THE LOCATION OF THE TRENCHES AND CONDUITS FOR ELECTRICAL AND TELEPHONE UTILITY SERVICES WITH THE GENERAL CONTRACTOR.
- COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING CONTRACTORS.

J. RECORD DRAWINGS

- THE ELECTRICAL CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE JOB SITE FOR THE EXCLUSIVE PURPOSE OF MAINTAINING A RECORD OF ALL WORK INSTALLED AND TO SHOW ANY DEVIATIONS FROM THE WORK INDICATED ON THE DRAWINGS.
- AT THE COMPLETION OF THE PROJECT, ONE SET OF REPRODUCIBLE DRAWINGS, SHOWING ALL RECORD CONDITIONS, SHALL BE DELIVERED TO THE OWNER FOR ACCEPTANCE PRIOR TO FINAL PAYMENT.

PART II – PRODUCTS AND EXECUTION

A. MATERIALS

- ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.
- SHOP DRAWINGS AND APPROVALS
A. THE ITEMS SPECIFIED HEREIN AND ON DRAWINGS ARE USED AS A STANDARD OF QUALITY. ANY MATERIALS OF EQUAL QUALITY AND AESTHETIC VALUE WILL BE GIVEN CONSIDERATION AS A SUBSTITUTE FOR THE MATERIALS SPECIFIED. NO APPROVAL WILL BE GIVEN TO A SPECIFIC CATALOG NUMBER, MODEL, OR TYPE OF EQUIPMENT, PRIOR TO BIDDING. AFTER BIDDING, THE DECISION OF THE ARCHITECT AND/OR ENGINEER DETERMINING EQUAL MATERIALS WILL BE FINAL.
B. THE CONTRACTOR SHALL SUBMIT SEVEN (7) IDENTICAL BOUND SETS OF SHOP DRAWINGS ON THE FOLLOWING ITEMS:
A. LIGHTING FIXTURE CUTS AND PERFORMANCE DATA.
B. OUTLINE DRAWINGS AND DATA SHEETS OF EACH PANELBOARD, LOAD CENTERS, AND DISTRIBUTION PANELS.
C. OUTLINE DRAWINGS OF ALL SWITCH GEAR COMPONENTS.
D. WIRING DEVICES AND COVERPLATES.
E. ALL CIRCUIT BREAKERS INSTALLED IN PANELBOARDS, LOAD CENTERS, AND DISTRIBUTION PANELS.
SUBMIT ITEMS AT ONE TIME IN A NEAT AND ORDERLY MANNER WITHIN 15 DAYS OF AWARD OF CONTRACT. PARTIAL SUBMITTALS WILL NOT BE ACCEPTABLE.

C. SYSTEM GROUNDING

- GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, AND GROUNDING CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.
- GROUNDING CONDUCTOR (NEUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM GROUNDING CONDUCTOR AT A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ACCORDING TO THE APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE. THE GROUNDED CONDUCTOR (NEUTRAL) TO THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE ENCLOSURE FOR THE SYSTEM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.
- A GROUND BUS SEPARATE FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL DISTRIBUTION PANELS AND PANELBOARDS. PROPER TORQUE ON GROUND BUS SHALL BE VERIFIED, PER MANUFACTURER'S RECOMMENDATIONS, PRIOR TO ENERGIZING EQUIPMENT.
- GROUND BUSES AND NEUTRAL BUSES IN ALL DISTRIBUTION PANELS, LOAD CENTERS, PANELBOARDS, AND GROUND BUSES IN ANY EQUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED AS SPECIFIED ABOVE FOR THE SERVICE ENTRANCE.
- WHEN INDICATED ON THE DRAWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM THE GROUND BUS IN THE DISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE THEY ARE PROVIDED. WHERE LUGS ARE NOT PROVIDED, EQUIPMENT GROUNDING CONDUCTORS SHALL BE CONNECTED TO EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT REMOVAL OF THE RECEPTACLE, EQUIPMENT GROUND CONDUCTORS, OR GROUND JUMPERS FROM GROUND BUSING SHALL NOT AFFECT THE GROUND SYSTEM.
- RACEWAYS MAY NOT BE USED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. ALL CONDUIT SHALL HAVE SEPARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO INSURE A CONTINUOUS GROUNDING PATH.
- IN INACCESSIBLE LOCATIONS, MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS.
- IN ACCESSIBLE LOCATIONS, CONNECTIONS SHALL BE MADE WITH BOLTED THROUGH, APPROVED SOLDERLESS BRONZE GROUNDING DEVICES.

D. WIRE

- CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4 AWG, TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER.
- ALUMINUM CONDUCTORS MAY BE UTILIZED FOR SERVICE ENTRANCE AND PANEL FEEDERS. CONDUCTORS SHALL BE ALUMINUM ALLOW AA-8000 SERIES.
- THE WIRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE 120V-WHITE, AND LIVE WIRES 208Y/120V AND 120/240 SHALL BE BLACK (PHASE A), RED (PHASE B), AND BLUE (PHASE C). CIRCUIT SHALL BE LABELED IN EACH J-BOX.
- ALL CONDUCTORS SHALL BE RATED 600 VOLT.
- SPLICES IN EXTERIOR PULL BOXES AND MANHOLES SHALL BE WEATHERPROOF USING "SCOTCHCAST" SPLICER KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCTSEAL" OR APPROVED EQUAL.
- PROVIDE SOLID CONDUCTOR FOR 12 AWG AND SMALLER.
- ALL WIRING WITHIN RESIDENTIAL UNITS ONLY MAY BE TYPE NM CABLE.
- NO WIRE SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE MINERALAC 150 OR EQUIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM.
- MC CABLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

E. CONDUIT

- ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER SECTIONS. RGS, WITH A 20 MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH, NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE USED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR INDOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED 72". LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED 48".
- WHERE CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, COMPRESSION CONNECTORS, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS OR INSULATED THROAT CONNECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, T & B OR APLETION, OR EQUAL).
- COVER METALLIC CONDUIT IN CONTACT WITH EARTH WITH POLYETHYLENE TAPED SPIRAL WRAPPED, 1/2 LAPPED TO PROVIDE 20 MIL THICKNESS. TAPE SHALL BE SCOTCH NO. 50 TAPE. CONDUIT AND DUCTS NOT UNDER BUILDINGS AND FEEDER DUCTS SHALL BE INSTALLED PER N.E.C. 300-5. MAKE JOINTS WITH COMPOUND TO BE WATERTIGHT.
- SCHEDULE 40 PVC CONDUIT SHALL BE PERMITTED UNDERGROUND WITH PROPER FITTINGS, ALL UL APPROVED AND CEMENTED JOINTS. PENETRATIONS THROUGH FLOOR SLABS AND BENOS GREATER THAN 22" SHALL BE WRAPPED RIGID GALVANIZED STEEL ELBOWS.
- FITTINGS AND CONDUIT BODIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE.
- CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED.
- ALL EMPTY CONDUIT SYSTEMS SHALL HAVE A 200 LB. TEST NYLON PULL STRING TO FACILITATE INSTALLATION OF FUTURE WIRE.
- WIRING, CONDUITS, AND OUTLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTOR AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED ON THE DRAWINGS.
- CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT.
- CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

F. OUTLET, PULL, AND JUNCTION BOXES

- EACH SWITCH, LIGHT, RECEPTACLE OR OTHER OUTLET, INSTALLED IN RESIDENTIAL UNITS, SHALL BE PROVIDED WITH A CODE SIZED, PLASTIC OUTLET BOX. JUNCTION AND PULL BOXES SHALL BE CODE SIZED, PLASTIC OR METAL OUTLET BOX. ALL OTHER OUTLET BOXES SHALL BE STEEL.
- BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH WATERTIGHT GASKETED COVERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.
- BOXES INSTALLED FOR THE ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVER PLATES.
- BOXES FOR TELEPHONE, COMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE MINIMUM 2-1/8" DEEP.

G. WIRING DEVICES

- WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT.
- RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE, NEMA5-20R, 20 AMPERE, 120VOLT GROUNDED TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE GROUND DOWN.
- DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.
- RECEPTACLES IN OUTDOOR AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, EQUAL TO TAYMAC SPECIFICATION GRADE.

J. PANEL BOARDS

- CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS, UNLESS INDICATED OTHERWISE, ALL PANELS SHALL HAVE PANEL HAVE PANEL BOARD TYPE CONSTRUCTION WITH BOLT-ON CIRCUIT BREAKERS FOR 3A PANELS.
- MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SIEMENS, CUTLER-HAMMER WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
- THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE, DOUBLE-POLE, AND THREE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS SHALL BE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.

L. LIGHTING FIXTURES

- FURNISH AND INSTALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR EACH LOCATION. PROVIDE LAMPS FOR ALL FIXTURES. THE LAMPS SHALL BE BY THE SAME MANUFACTURER. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS. PROVIDE PLASTER FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE, AND BALLASTS TO MEET THE EXISTING CEILING CONDITION.

M. LIGHTING CONTROL

- FURNISH AND INSTALL TIME SWITCHES, PHOTOCELLS, CONTRACTORS AND FULL LIGHTING CONTROL SYSTEMS AS REQUIRED FOR LIGHTING CONTROLS INDICATED ON THE DRAWINGS.
- TIME SWITCHES SHALL BE EQUAL TO PARAGON, GENERAL ELECTRIC, TORK, OR INTERMATIC AND SHALL HAVE SIZE AND NUMBER OF POLES AS REQUIRED.
- PHOTOCELLS SHALL BE EQUAL TO TORK OR INTERMATIC WITH VOLTAGE AS INDICATED.

N. TELEPHONE AND CABLE TELEVISION SYSTEMS

- TELEPHONE WALL OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.
- CABLE TELEVISION OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.

O. GUARANTEE

- GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

P. REMODELING WORK

- THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERRABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING CONDITIONS.
- CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON THE WORK POTENTIAL. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN THE BID ALL COSTS REQUIRED TO MAKE THE WORK MEET EXISTING CONDITIONS.
- DEMOLITION: DISCONNECT, DEMOLISH, AND REMOVE ABANDONED MATERIALS AND EQUIPMENT INDICATED TO BE REMOVED AND NOT INDICATED TO BE SALVAGED OR REMAIN.
- DISPOSAL AND CLEANUP: REMOVE FROM THE SITE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS AND EQUIPMENT NOT INDICATED TO BE SALVAGED.
- PROTECT MATERIALS INDICATED TO BE SALVAGED.

Q. FIRE SEALING NOTES

- COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT THROUGH-PENETRATION FIRESTOP SYSTEMS ARE INSTALLED ACCORDING TO SPECIFIED AND APPLICABLE UL REQUIREMENTS.
- COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE THROUGH-PENETRATION FIRESTOP SYSTEMS.
- DO NOT COVER UP THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLATIONS UNTIL EXAMINED BY INSPECTOR, IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- COMPATIBILITY: PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS THAT ARE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS, AND WITH THE ITEMS, IF ANY, PENETRATING THROUGH-PENETRATION FIRESTOP SYSTEMS, UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
- PROVIDE COMPONENTS FOR EACH THROUGH-PENETRATION FIRESTOP SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS. USE ONLY COMPONENTS SPECIFIED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOP SYSTEMS INDICATED.
- PROVIDE SLEEVES THROUGH ALL FIRE-RATED WALLS AND FILL VOIDS SURROUNDING SLEEVES AND INTERIOR TO SLEEVES AROUND PIPING WITH FIRE STOP PUTTY WITH U.L. LISTED 3 HOUR RATING INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
- FIRE SEAL ALL PIPING, CONDUIT, CABLE, ETC PENETRATIONS ROUTED THROUGH FIRE RATED WALLS.
- PROVIDE FIRE RATED ENCLOSURES OR WRAPS ON LIGHT FIXTURES AND OTHER ITEMS PENETRATING FIRE RATED CEILING, FLOOR/CEILING/ CEILING/ROOF ASSEMBLIES TO MAINTAIN UL LISTING FOR CONSTRUCTION.

SYMBOLS LEGEND

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC., ARE NECESSARILY USED ON THE DRAWINGS.

LIGHTING FIXTURES – SYMBOL/LETTER INDICATES LIGHT FIXTURE AS INDICATED ON FIXTURE SCHEDULE

- LED FIXTURE (SEE LIGHTING FIXTURE SCHEDULE)
- FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- TRACK LIGHT
- DOWNLIGHT FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- PENDANT MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- DOWNLIGHT FIXTURE
- WALL MOUNTED FIXTURE
- PENDANT MOUNTED FIXTURE
- WALL WASHER
- SINGLE FACE EXIT SIGN – UNIVERSAL MOUNTED
- SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DUAL HEADED EMERGENCY UNIT
- COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT

LIGHTING CONTROLS

- S SINGLE POLE SWITCH @ +48" UNLESS NOTED
- Sobc SWITCH BANK @ +48" UNLESS NOTED, LOWER CASE LETTER INDICATES FIXTURE CONTROLLED.
- S3 3-WAY SWITCH @ +48" UNLESS NOTED
- S4 4-WAY SWITCH @ +48" UNLESS NOTED
- SD DIMMER SWITCH – SIZE AS REQUIRED @ +48" UNLESS NOTED
- Sm MANUAL MOTOR STARTER
- Sos WALL SWITCH WITH OCCUPANCY SENSOR. DIGITAL LOW VOLTAGE WALL SWITCH. SWITCH @ +48" UNLESS NOTED.
- Sd TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH @ +48" UNLESS NOTED. PROVIDE EXTRA CONTROL CABLES NEEDED TO FIXTURE CONTROLLED.
- Lighting Controls Ceiling Mount Occupancy Sensor
- Lighting Controls Power Pack
- Photocell
- Timeclock

POWER DISTRIBUTION

- SWITCHBOARD, MOTOR CONTROL CENTER OR DISTRIBUTION BOARD
- 277/480V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/208V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/240V, 1 PHASE, 3 WIRE PANELBOARD, UNO
- TRANSFORMER

POWER DEVICES

- SPECIAL HEAVY DUTY RECEPTACLE – SIZE AS NOTED. @ +18" UNLESS NOTED
- 1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED
- FIRE RATED POKE THRU WITH TYPE INDICATED
- FLUSH FLOOR BOX WITH TYPE INDICATED
- SINGLE RECEPTACLE @ +18" UNLESS NOTED
- DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DOUBLE DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP
- GFCI-RATED DUPLEX RECEPTACLE
- ARC FAULT RATED DUPLEX RECEPTACLE
- TAMPER RESISTANT RATED DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE @ 18" UNLESS NOTED
- JUNCTION BOX
- DISCONNECT SWITCH – SIZE AND TYPE NOTED
- COMBINATION FUSED STARTER DISCONNECT SWITCH FUSE SIZE AS INDICATED, STARTER SIZE 'I'

AUXILIARY SYSTEMS

- MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN
- TELEPHONE OUTLET @ +18" UNLESS NOTED
- DATA OUTLET @ +18" UNLESS NOTED
- COMBINATION TELEPHONE/DATA OUTLET @ +18" UNLESS NOTED
- TELEVISION OUTLET @ +60" UNLESS NOTED
- SMOKE DETECTOR
- HEAT DETECTOR
- REMOTE TEST STATION WITH INDICATING LIGHT. MOUNT AT 48" AFF UNO.
- AUXILIARY SYSTEM TERMINAL CABINET

GENERAL

- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING
- CONDUIT RUN BELOW FLOOR OR GRADE

P1-3,5,7 HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION. REFER TO ASSOCIATED NOTE FOR BRANCH CIRCUIT CONDUCTOR SIZES.

INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS, (1) PHASE, (1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE.

(E) ETR: DENOTES EXISTING ITEM/EQUIPMENT TO REMAIN

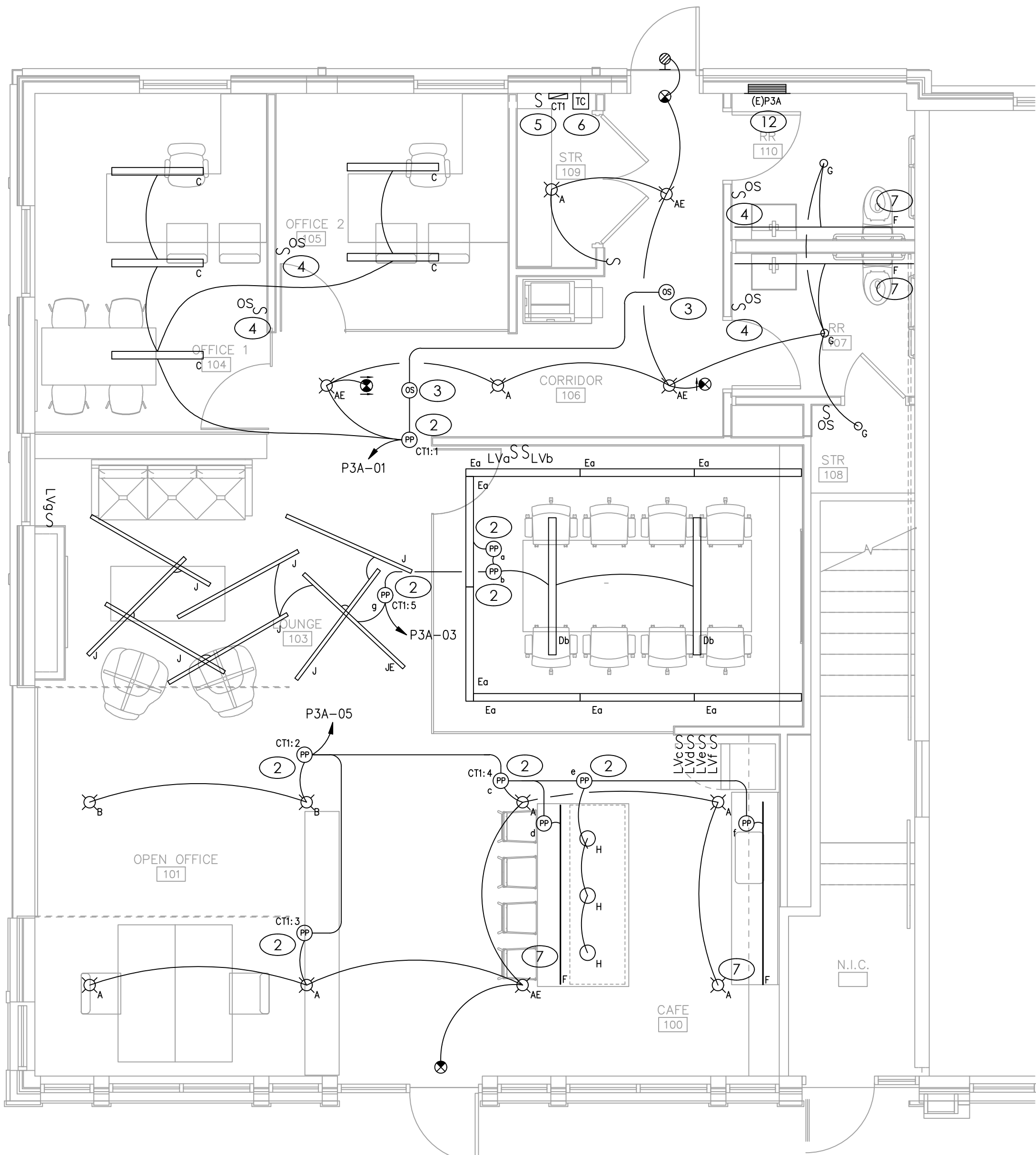
TV: DENOTES DEVICE FOR CONNECTION TO TELEVISION – COORDINATE LOCATION/MOUNTING HEIGHT

PANELBOARD: P3A (EXISTING)				FED FROM: MDP				LINE-SIDE LUGS: MECHANICAL EQUIPMENT GROUND BUS						
BUS AMPS: 225A				AIC RATING: FCA +10% MINIMUM FULLY RATED										
MAIN SIZE/TYPE: 200A MCB				SERVES: P3A										
VOLT/SPHASE: 208V120V, 3PH, 4W				MOUNTING: RECESSED										
SECTION: 1				LOCATION: BACK OF HOUSE										
CKT NO.	DESCRIPTION	VOLT/AMPS/PHASE			WIRE NO.	BKR	P	BKR	WIRE NO.	VOLT/AMPS/PHASE			DESCRIPTION	CKT NO.
		A	B	C						A	B	C		
1	LTG - OFFICES/CORRIDORRR	500			12	20	1	1	20	12	180		RCPT - BY PANEL	2
3	LTG - LOUNGE/CONF		500		12	20	1	1	20	12	1,200		PWR - SIGNAGE 1	4
5	LTG - OPEN OFFICE/KITCHEN			500	12	20	1	1	20	12		500	PWR - SIGNAGE 2	6
7	PWR - FIREPLACE	800			12	20	1	1	20	12	500		PWR - SIGNAGE 3	8
9	RCPT - OPEN OFFICE FB		720		12	20	1	1	20	12		500	PWR - SIGNAGE 4	10
11	RCPT - OFFICES DESK QUAD			720	12	20	1	1	20	12		1,200	PWR - HEAT TRACE	12
13	RCPT - OFFICES GEN	1,080			12	20	1	1	20	12	720		RCPT - CONF FLOOR BOX	14
15	RCPT - CONV LOUNGE TV		900		12	20	1	1	20	12	720		RCPT - CONVENIENCE	16
17	RCPT - CONF RM GEN			720	12	20	1	1	20	12		540	RCPT - RESTROOMS/STR	18
19	RCPT - REFRIGERATOR	127			12	20	1	1	20				SPARE	20
21	RCPT - KITCHEN AC GEN		540		12	20	1	1					PROVISIONAL SPACE	22
23	RCPT - DISHWASHER			1,200	12	20	1	1					PROVISIONAL SPACE	24
25	RCPT - WINE COOLER	800			12	20	1	1					PROVISIONAL SPACE	26
27	RCPT - KEG		600		12	20	1	2	20	12		1,500	PWR - MS-1,2,3,4 (HACR)	28
29	RCPT - MICROWAVE			1,350	12	20	1	1				1,500		30
31	RCPT - PRINTER DED	1,500			12	20	1	2	20	12	250		PWR - CONDENSATE PUMP	32
33	RCPT - CARTRIDGE DISPOSAL		450		12	20	1	1			250			34
35	RCPT - CAFE BAR UNDERCOUN			360	12	20	1	2	30	10	2,250		PWR - VMH	36
37	PROVISIONAL SPACE						1	2			2,250			38
39	PROVISIONAL SPACE						1	2	50	6	3,640		PWR - HP-1 (HACR)	40
41	PROVISIONAL SPACE										3,640			42
SUBTOTAL		4,807	3,710	4,850						3,900	7,810	9,630	SUBTOTAL	
TOTAL PHASE A - VA		6,707			LOAD			CONN. VA	DF					
AMPS		73	COOLING	10,280	1.00	REFRIG				1.00				
TOTAL PHASE B - VA		0				SIGN/DSPL				1.25				
AMPS		96	LIGHTING	1,500	1.25	KITCHEN				1.00				
TOTAL PHASE C - VA		14,480	RECEPTACLES	13,227	1.0/5	EXISTING				1.00				
AMPS		121	MOTORS	500	1.00	LRG MOTOR				1.25			TOTAL DEMAND	
TOTAL PHASE - VA		34,707	SUPP HEAT	5,300	1.00	SHOW WNDW				1.25			34,144 VA	
AMPS		96	MISC EQUIP	1,200	1.00	LTG TRACK				1.00			95A	
PANELBOARD NOTES														
SIGN/DISPLAY - SIGNAGE & DISPLAY CASE														

PANELBOARD SCHEDULE

SCALE : NO SCALE

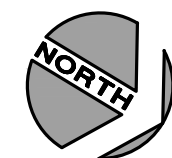
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LIGHTING PLAN

SCALE : 1/4" = 1'-0"

2



ELECTRICAL LIGHTING SCHEDULE

(OR EQUAL, VERIFY ALL SELECTIONS AND FINISHES WITH OWNER AND ARCHITECT PRIOR TO ORDERING).

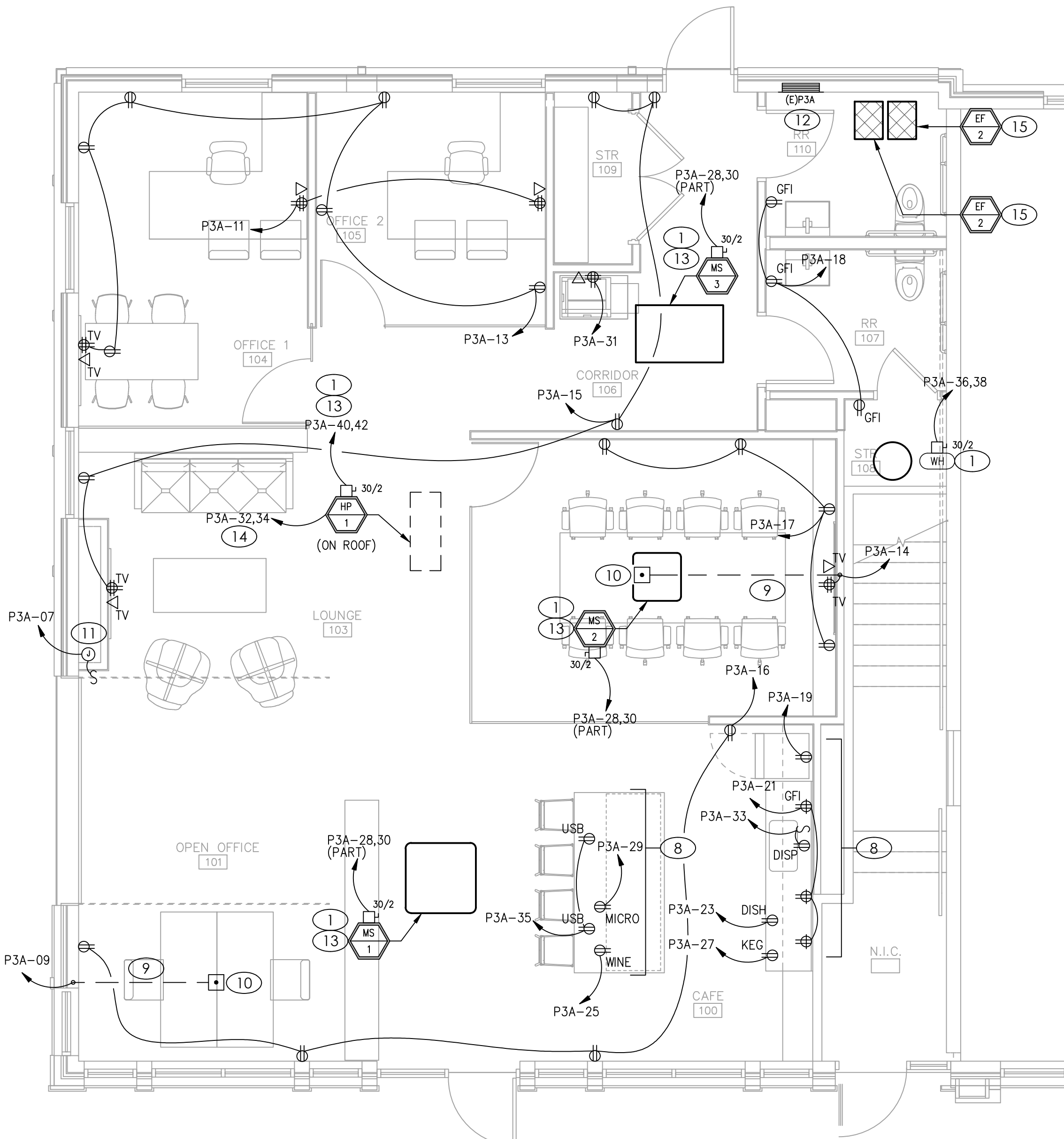
FIXTURE TYPE	MANUFACTURER		VOLT AMPS	MOUNTING	LAMP TYPE	REMARKS	VOLT
	NAME	SERIES					
A	ACUITY	LDN6CYL 35/30 L06AR LSS MVOLT G210 FCM DWHG	17.7	PENDANT	INCLUDED 3500K LED	PENDANT CYLINDER LED - PROVIDE WITH 'CYS 48IN DWHG' 'AE' = PROVIDE WITH MEANWELL OR EQUAL EMERGENCY BATTERY PACK FOR 90MIN OF FULL OUTPUT	MVOLT
B	ACUITY	LDN6CYL 35/30 L06AR LSS MVOLT G210 FCM DWHG	17.7	SURFACE	INCLUDED 3500K LED	PENDANT CYLINDER LED	MVOLT
C	FOCAL POINT	FSM4LP-FL-875LF-35K-1C-UNV-LD1-G1-WH-4'	34	RECESSED	INCLUDED 3500K LED	RECESSED LINEAR LED - 4FT	MVOLT
D	FOCAL POINT	FSM4LP-FL-875LF-35K-1C-UNV-LD1-G1-WH-6FT	51	RECESSED	INCLUDED 3500K LED	RECESSED LINEAR LED - 6FT	MVOLT
F	GM LIGHTING	LTR-P-12V-3.0W-35K-16	3W/FT	TAPE	INCLUDED 3500K LED	LED TAPE LIGHT - PROVIDE LENGTH TO FILL CAVITY PER INSTANCE - PROVIDE WITH 'LED-CHIL' 'LED-CHL-EC' 'LD-MD-UNV48', AND OTHER ACCESSORIES AS NECESSARY TO MAKE FULLY OPERABLE SYSTEM	MVOLT
G	ACUITY	LDN4 35/20 L04AR LSS MVOLT G210	3W/FT	RECESSED	INCLUDED 3500K LED	4' LED DOWNLIGHT	MVOLT
H	MUTO	UNFOLD PENDANT	100 MAX	PENDANT	E26 TYPE A BULB PROVIDE LED EQUIVALENT	ARCHITECTURAL PENDANT - WHITE FINISH - PROVIDE WITH LED EQUIVALENT BULB.	MVOLT
J	SONNEMAN	THIN-LINE LED PENDANT LIGHT	21	PENDANT	INCLUDED 3000K LED	ARCHITECTURAL PENDANT LINEAR LED 'JE' = PROVIDE WITH MEANWELL OR EQUAL EMERGENCY BATTERY PACK FOR 90MIN OF FULL OUTPUT	MVOLT
K	LITHONIA	EDG(R)	5	SURFACE	INCLUDED LED	EDGE-LIT EXIT SIGN	120
L	LITHONIA	ELA-B-I-QWP-L0309-SD	5	SURFACE	INCLUDED LED	OUTDOOR EMERGENCY REMOTE EGRESS LIGHTING UNIT	120

ELECTRIC SERVICE SINGLE LINE DIAGRAM IS EXISTING TO REMAIN, NO MODIFICATIONS ARE BEING MADE TO THE ELECTRICAL SERVICE DISTRIBUTION EQUIPMENT IN THIS SCOPE.

SINGLE LINE DIAGRAM

SCALE : NO SCALE

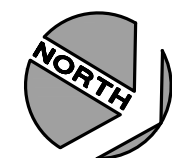
3



POWER PLAN

SCALE : 1/4" = 1'-0"

1



GENERAL NOTES

- REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES.
- REFER TO LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES AND REQUIREMENTS.
- CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT COORDINATION AND CONFLICT ISSUES BE RESOLVED PRIOR TO INSTALLATION OF LIGHT FIXTURES.
- ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.
- THROUGH WIRING OF RECESSED LIGHT FIXTURES, IN SUSPENDED CEILINGS, IS NOT PERMITTED. CONNECT EACH LIGHT FIXTURE BY A WHIP TO A JUNCTION BOX. PROVIDE CABLE WHIPS OF SUFFICIENT LENGTH TO ALLOW FOR RELOCATING EACH LIGHT FIXTURE WITHIN A 5-FOOT RADIUS OF ITS INSTALLED LOCATION, BUT NOT EXCEEDING 6 FEET IN UNSUPPORTED LENGTH.
- ALL INTERNALLY ILLUMINATED SIGNS SHALL BE PROVIDED WITH AN ACCESSIBLE DISCONNECTION MEANS. VERIFY EACH SIGN IS FURNISHED WITH AN INTEGRAL DISCONNECT SWITCH. PROVIDE WEATHERPROOF DISCONNECT SWITCHES WITHIN SIGHT OF ALL SIGNS AS REQUIRED. MAKE FINAL CONNECTION AS REQUIRED.
- PROVIDE FUNCTIONAL TESTING OF OCCUPANCY SENSING LIGHTING CONTROL DEVICES WITH IECC C408.
- LIGHTING SHALL HAVE LIGHTING CONTROLS TO MEET IECC 2012.
- REFER TO SHEETS MEP001 AND MEP002 FOR FIRE STOP WALL AND FLOOR PENETRATION DETAILS.

KEYED PLAN NOTES

- MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE CONNECTION WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION.
- LIGHTING CONTROLS POWER PACK. SENSORWORK SWX-900 SERIES OR PRE-BID APPROVED EQUAL. INSTALL AND MAKE ALL CONNECTIONS ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS.
- LIGHTING CONTROLS CEILING MOUNT OCCUPANCY SENSOR. SENSORWORK SWX-200 SERIES OR PRE-BID APPROVED EQUAL. INSTALL AND MAKE ALL CONNECTIONS ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS.
- LIGHTING CONTROLS WALL SWITCH OCCUPANCY SENSOR. SENSORWORK SWX-100 SERIES OR PRE-BID APPROVED EQUAL. INSTALL AND MAKE ALL CONNECTIONS ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS.
- PROVIDE 8-POLE LIGHTING CONTACTOR WITH ASTRONOMICAL TIMECLOCK OVERRIDE. INSTALL AND MAKE ALL CONNECTIONS ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS. ROUTE CIRCUITS LABELED FOR CONNECTION THROUGH CONTACTOR PANEL 'CTC-1'.
- PROVIDE DIGITAL ASTRONOMICAL TIMECLOCK FOR OVERRIDE CONTROL OF CIRCUITS ROUTED THROUGH CONTACTOR PANEL ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS.
- COORDINATE EXACT LENGTH OF FIXTURE WITH ARCHITECTURAL COVE DETAIL. PROVIDE LENGTH OF FIXTURE TO FILL COVE.
- COORDINATE EXACT RECEPTACLE LOCATION WITH ARCHITECTURAL ELEVATIONS PRIOR TO CONSTRUCTION.
- COORDINATE CUTTING AND TRENCHING OF FLOOR SLAB FOR ROUTING OF POWER AND DATA CONDUITS UNDERFLOOR OVER TO ROUTE THROUGH WALL CAVITY UP TO ABOVE ACCESSIBLE CEILING.
- FLOOR BOX WITH MINIMUM (2) DUPLEX RECEPTACLES AND (4) DATA OUTLETS. BASIS OF DESIGN: HUBBELL SYSTEMONE FLOOR BOX. PROVIDE 3/4" CONDUIT FOR POWER AND 1-1/4" CONDUIT FOR DATA.
- JUNCTION BOX AND SWITCH FOR CONNECTION TO FIREPLACE INSERT BY OTHERS. COORDINATE EXACT CONNECTION REQUIREMENTS AND SWITCHING EQUIPMENT WITH MANUFACTURER'S LITERATURE PRIOR TO CONSTRUCTION.
- EXISTING PANELBOARD TO REMAIN. REFER TO PANELBOARD SCHEDULE ON SHEET E-201 FOR MORE INFORMATION.
- COORDINATE ALL CONNECTIONS BETWEEN INDOOR AND OUTDOOR UNIT WITH MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS. PRIOR TO CONSTRUCTION, COORDINATE WORK WITH DIVISION 23 CONTRACTOR.
- CIRCUIT FOR CONNECTION TO CONDENSATE PUMP PROVIDED BY DIVISION 23 CONTRACTOR MAKE CONNECTION TO EQUIPMENT ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 23 CONTRACTOR PRIOR TO CONSTRUCTION.
- DERIVE POWER FROM CIRCUIT SERVING LIGHTING IN ROOM. WIRE SO THAT ON/OFF OPERATION OF EXHAUST FAN COORDINATES WITH LIGHT FIXTURES.

