

DRAWING INDEX	
SHEET	TITLE
COVER	APPENDIX B AND DRAWING INDEX
A0.0	GENERAL NOTES, SCHEDULES, AND UL DETAILS
A0.1	ADA DETAILS
A1.0	KEY PLAN, FLOOR PLAN, REFLECTED CEILING PLAN
A2.0	ENLARGED TOILET PLAN, LIFE SAFETY PLAN, DETAILS, AND CABINETS
P1	PLUMBING NOTES AND SCHEDULES
P2	WASTE AND SUPPLY PLANS
P3	WASTE AND SUPPLY RISERS
M1	MECHANICAL PLAN
E1	ELECTRICAL NOTES AND SCHEDULES
E2	POWER AND LIGHTING PLANS
E3	PANEL SCHEDULE AND ELECTRICAL RISER

2018 APPENDIX B - BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

NAME OF PROJECT: BILINGUAL THERAPY SERVICES
 BUILDING ADDRESS: 2263 NC HIGHWAY 24-87 ZIP CODE: 28226
 PROPOSED USE: THERAPY OFFICE
 OWNER OR AUTHORIZED AGENT: BRYANT DICKINSON PHONE: (919) 868-1427 EMAIL: BRYANT@HMDEVELOPMENT.COM
 CITY: CAMERON COUNTY STATE: NC

CONTACT:
 DESIGNER: REDFOOT STUDIO COMPANY NAME: RICHARD REDFOOT LICENSE# 9231 TELEPHONE# (919) 931-7134 EMAIL: RICHARD@REDFOOTSTUDIO.COM
 ARCHITECTURAL: NA CIVIL: NA ELECTRICAL: NA FIRE ALARM: NA PLUMBING: NA MECHANICAL: NA SPRINKLER-STANDPIPE: NA STRUCTURAL: NA RETAINING WALLS > 5' HIGH: NA OTHER: NA

2018 NC BUILDING CODE: NEW BUILDING ADDITION RENOVATION
 1ST TIME INTERIOR COMPLETION
 SHELLCORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS
 PHASED CONSTRUCTION - SHELLCORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS

2018 NC EXISTING BUILDING CODE: PRESCRIPTIVE REPAIR CHAPTER 14
 LEVEL I LEVEL II LEVEL III
 HISTORIC PROPERTY CHANGE OF USE

CONSTRUCTED (date): 2022 CURRENT OCCUPANCY(S) (Ch. 3): NA
 RENOVATED (date): NA PROPOSED OCCUPANCY(S) (Ch. 3): B

RISK CATEGORY (TABLE 1604.5): CURRENT: I II III IV
 PROPOSED: I II III IV

BUILDING DATA:
 CONSTRUCTION TYPE: I-A I-B I-B I-B I-B I-B I-B I-B
 SPRINKLERS: NO PARTIAL YES NFPA 13 NFPA 13R NFPA 13R
 STANDPIPES: NO YES CLASS I II III WET DRY
 FIRE DISTRICT: NO YES (Primary) FLOOD HAZARD AREA: NO YES
 SPECIAL INSPECTIONS REQUIRED: NO YES (contact the local inspection jurisdiction for additional procedures and requirements.)

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3RD FLOOR	NA	NA	NA
2ND FLOOR	NA	NA	NA
MEZZANINE	NA	NA	NA
1ST FLOOR	17,178	2,906 (AREA OF WORK)	17,178 (2,906)
BASEMENT	NA	NA	NA
TOTAL	17,178	2,906 (AREA OF WORK)	17,178 (2,906)

ALLOWABLE AREA OCCUPANCY:
 ASSEMBLY A-1 A-2 A-3 A-4 A-5
 BUSINESS B-1 B-2 B-3
 EDUCATIONAL E-1 E-2
 FACTORY/INDUSTRIAL F-1 MODERATE F-2 LOW
 HAZARDOUS H-1 DETONATE H-2 DEFLAGRATE H-3 COMBUST H-4 HEALTH H-5 HPM
 INSTITUTIONAL I-1 CONDITION I-2 I-3 I-4
 MERCANTILE M-1 M-2
 RESIDENTIAL R-1 R-2 R-3 R-4
 STORAGE S-1 MODERATE S-2 LOW HIGH PILED
 PARKING GARAGE OPEN ENCLOSED REPAIR GARAGE
 UTILITY AND MISCELLANEOUS

ACCESSORY OCCUPANCY CLASSIFICATIONS: NA
 INCIDENTAL USES (TABLE 509): NA
 SPECIAL USES (CHAPTER 4 - LIST CODE SECTIONS): NA
 SPECIAL PROVISIONS (CHAPTER 5 - LIST CODE SECTIONS): NA
 MIXED OCCUPANCY: NO YES SEPARATION: NA HR EXCEPTION: NA
 NON-SEPARATED USE (508.3) - THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.
 SEPARATED USE (508.4) - SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY. THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG. AREA PER STORY (ACTUAL)	(B) TABLE 508.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE ⁵	(E) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
1	B	17,178	69,000	NOT USED	69,000

¹ FRONTAGE AREA INCREASES FROM SECTION 508.2 ARE COMPLETED THIS:
 A. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = --- (F)
 B. TOTAL BUILDING PERIMETER = --- (P)
 C. RATIO (FR) = --- (F/P)
 D. W = MINIMUM WIDTH OF PUBLIC WAY = --- (W)
 E. PERCENT OF FRONTAGE INCREASE $I_f = 100 \left[\frac{FR - W}{W} \right] \times W(30) = --- (\%)$
² UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507
³ MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x D (MAXIMUM 3 STORIES) (508.2)
⁴ THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH 406.5.4. THE MAXIMUM AREA OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH 412.3.1.
⁵ FRONTAGE INCREASE BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 508.2

ALLOWABLE HEIGHT	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
BUILDING HEIGHT IN FEET (TABLE 504.3)	NA - EXISTING TO REMAIN		
BUILDING HEIGHT IN STORES (TABLE 504.4)	NA - EXISTING TO REMAIN		

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING PROVIDED (W/ NA * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES	NA	0	0	NA	NA	NA
BEARING WALLS						
EXTERIOR						
NORTH	NA	NA	NA	NA	NA	NA
EAST	NA	NA	NA	NA	NA	NA
WEST	NA	NA	NA	NA	NA	NA
SOUTH	NA	NA	NA	NA	NA	NA
INTERIOR	NA	NA	NA	NA	NA	NA
NON-BEARING WALLS AND PARTITIONS						
EXTERIOR WALLS						
NORTH	30+	0	NA	NA	NA	NA
EAST	30+	0	NA	NA	NA	NA
WEST	30+	0	NA	NA	NA	NA
SOUTH	30+	0	NA	NA	NA	NA
INTERIOR WALLS AND PARTITIONS	NA	0	0	NA	NA	NA
FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS	NA	0	0	NA	NA	NA
FLOOR CEILING ASSEMBLY	NA	NA	NA	NA	NA	NA
COLUMNS SUPPORTING FLOORS	NA	0	NA	NA	NA	NA
ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS	NA	0	0	NA	NA	NA
ROOF CEILING ASSEMBLY	NA	0	0	NA	NA	NA
COLUMNS SUPPORTING ROOF	NA	0	0	NA	NA	NA
SHAFT ENCLOSURES - EXIT	NA	NA	NA	NA	NA	NA
SHAFT ENCLOSURES - STAIR	NA	NA	NA	NA	NA	NA
CORRIDOR SEPARATION	NA	0	0	NA	NA	NA
OCCUPANCY / FIRE BARRIER SEPARATION	NA	2	2-EXISTING	1A0.0	UL L419	WL 1001
PARTY FIRE WALL SEPARATION	NA	NA	NA	NA	NA	NA
SMOKE BARRIER SEPARATION	NA	NA	NA	NA	NA	NA
SMOKE PARTITION	NA	NA	NA	NA	NA	NA
TENANT DWELLING UNIT / SLEEPING UNIT SEPARATION	NA	1	1	1A0.0	UL L419	WL 1001
INCIDENTAL USE SEPARATION	NA	NA	NA	NA	NA	NA
MEDICAL GAS CLOSET	NA	NA	NA	NA	NA	NA

* INDICATES SECTION NUMBER PERMITTING REDUCTION.

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINE	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
NA - EXISTING BUILDING			

LIFE SAFETY SYSTEM REQUIREMENTS

EMERGENCY LIGHTING: YES NO PARTIAL
 EXIT SIGNS: YES NO PARTIAL
 FIRE ALARM: YES NO PARTIAL
 SMOKE DETECTION SYSTEMS: YES NO PARTIAL
 CARBON MONOXIDE DETECTION: YES NO PARTIAL

LIFE SAFETY PLAN REQUIREMENTS
 LIFE SAFETY PLAN SHEET # 3A/2

FIRE AND SMOKE RATED WALL LOCATIONS (Chapter 7)
 ASSUMED AND REAL PROPERTY LINE LOCATIONS (IF NOT ON THE SITE PLAN)
 EXTERIOR WALL OPENINGS WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8)
 OCCUPANCY USE FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)
 OCCUPANT LOADS FOR EACH AREA
 EXIT ACCESS TRAVEL DISTANCE (1017)
 COMMON PATHS OF TRAVEL DISTANCES (TABLES 1006.2.1 & 1006.3.2 (1))
 DEAD END LENGTHS (1020.4)
 CLEAR EXIT WIDTHS FOR EACH EXIT DOOR
 MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3)
 ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR
 A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION
 LOCATION OF DOORS WITH PANIC HARDWARE (1010.1.10)
 LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1010.1.8.7)
 LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES
 LOCATION OF EMERGENCY ESCAPE WINDOWS (1030)
 THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT FOR OCCUPANCY CLASSIFICATION I-2 (407.5)
 NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

ACCESSIBLE DWELLING UNITS (SECTION 1107) NA - NO DWELLING UNITS

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE 'A' UNITS REQUIRED	TYPE 'A' UNITS PROVIDED	TYPE 'B' UNITS REQUIRED	TYPE 'B' UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING NA - EXISTING BUILDING AND PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 13' ACCESS AISLE	8' ACCESS AISLE	
USE 1						
USE 2						
USE 3						
TOTAL						

STRUCTURAL DESIGN NA - EXISTING BUILDING

DESIGN LOADS

IMPORTANCE FACTORS: SNOW (S) _____
 SEISMIC (S) _____
 LIVE LOADS: ROOF _____ psf
 MEZZANINE _____ psf
 FLOOR _____ psf
 GROUND SNOW LOAD _____ psf
 WIND LOAD: BASIC WIND SPEED _____ mph (ASCE-7)
 EXPOSURE CATEGORY _____

SEISMIC DESIGN CATEGORY A B C D

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

RISK CATEGORY (Table 1604.5) I II III IV
 SPECTRAL RESPONSE ACCELERATION S_s _____ %g S_1 _____ %g
 SITE CLASSIFICATION (ASCE 7) A B C D E F
 DATA SOURCE: FIELD TEST PRESUMPTIVE HISTORICAL DATA

BASIC STRUCTURAL SYSTEM (CHECK ONE)
 BEARING WALL DUAL W/ SPECIAL MOMENT FRAME
 BUILDING FRAME DUAL W/ INTERMEDIATE R/C OR SPECIAL STEEL
 MOMENT FRAME INVERTED PENDULUM

ANALYSIS PROCEDURE SIMPLIFIED EQUIVALENT LATERAL FORCE DYNAMIC
 ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? YES NO

LATERAL DESIGN CONTROL: EARTHQUAKE WIND

SOIL BEARING CAPACITY:
 FIELD TEST (PROVIDE COPY OF TEST REPORT) _____ psf
 PRESUMPTIVE BEARING CAPACITY _____ psf
 PILE SIZE, TYPE, AND CAPACITY _____ psf

PLUMBING REQUIREMENTS

SPACE	EXISTING	WATER CLOSET		URINALS	LAVATORIES		SHOWERS & TUBS	DRINKING FOUNTAINS
		MALE	FEMALE		MALE	FEMALE		
		0	0	0	0	0	0	0
	NEW	1	1	0	1	1	0	1
	REQUIRED	1	1	0	1	1	0	1

SPECIAL APPROVALS (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ETC., DESCRIBE BELOW)
 NA

ENERGY REQUIREMENTS

THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY COST BUDGET FOR THE STANDARD REFERENCE DESIGN VERSUS ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.

EXISTING BUILDING ENVELOPE COMPLIES WITH CODE: NO YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE) NA

EXEMPT BUILDING: NO YES (PROVIDE CODE OR STATUTORY REFERENCE) NA

CLIMATE ZONE: 3A 4A 5A

METHOD OF COMPLIANCE:
 ENERGY CODE PERFORMANCE PRESCRIPTIVE
 ASHRAE 90.1 PERFORMANCE PRESCRIPTIVE
 (IF OTHER SPECIFY SOURCE HERE)

THERMAL ENVELOPE (PRESCRIPTIVE METHOD ONLY)

ROOF/CEILING ASSEMBLY (each assembly):
 DESCRIPTION OF ASSEMBLY: NA
 U-VALUE OF TOTAL ASSEMBLY: NA
 R-VALUE OF INSULATION: NA
 SKYLIGHTS IN EACH ASSEMBLY:
 U-VALUE OF SKYLIGHT: _____
 TOTAL SQ FT OF SKYLIGHTS IN EACH ASSEMBLY: _____

EXTERIOR WALLS (each assembly):
 DESCRIPTION OF ASSEMBLY: NA
 U-VALUE OF TOTAL ASSEMBLY: NA
 R-VALUE OF INSULATION: NA
 OPENINGS (WINDOWS OR DOORS WITH GLAZING)
 U-VALUE OF ASSEMBLY: _____
 SOLAR HEAT GAIN COEFFICIENT: _____
 PROTECTION FACTOR: _____
 DOOR R-VALUES: _____

WALLS BELOW GRADE (each assembly):
 DESCRIPTION OF ASSEMBLY: NA
 U-VALUE OF TOTAL ASSEMBLY: NA
 R-VALUE OF INSULATION: NA

FLOORS OVER UNCONDITIONED SPACE (each assembly):
 DESCRIPTION OF ASSEMBLY: NA
 U-VALUE OF TOTAL ASSEMBLY: NA
 R-VALUE OF INSULATION: NA
 HORIZONTAL VERTICAL REQUIREMENT: _____
 SLAB HEATED: _____

FLOORS SLAB ON GRADE:
 DESCRIPTION OF ASSEMBLY: NA
 U-VALUE OF TOTAL ASSEMBLY: NA
 R-VALUE OF INSULATION: NA
 HORIZONTAL VERTICAL REQUIREMENT: _____
 SLAB HEATED: _____

MECHANICAL SUMMARY SEE MECHANICAL DRAWINGS

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

THERMAL ZONE: WINTER DRY BALLB SUMMER DRY BALLB
 INTERIOR DESIGN CONDITIONS: WINTER DRY BALLB SUMMER DRY BALLB RELATIVE HUMIDITY _____
 BUILDING HEATING LOAD _____
 BUILDING COOLING LOAD _____
 MECHANICAL SPACING CONDITIONING SYSTEM UNITARY
 DESCRIPTION OF UNIT: _____
 HEATING EFFICIENCY: _____
 COOLING EFFICIENCY: _____
 SIZE CATEGORY OF UNIT: _____
 BOILER: SIZE CATEGORY: IF OVERSIZED, STATE REASON: _____
 CHILLER: SIZE CATEGORY: IF OVERSIZED, STATE REASON: _____
 LIST EQUIPMENT EFFICIENCIES: _____

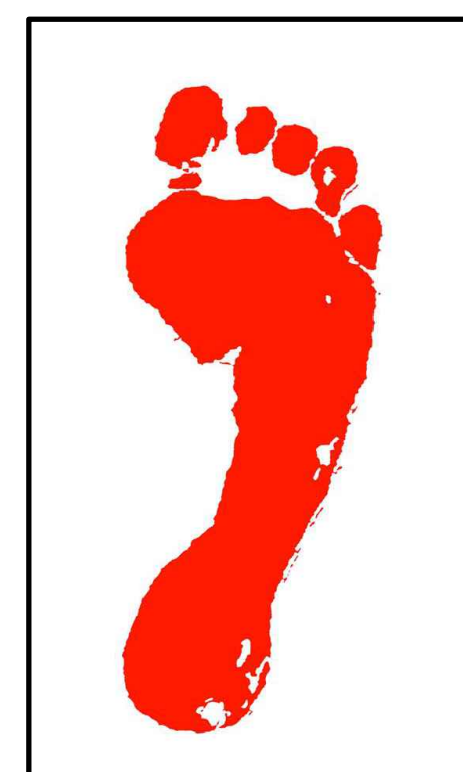
ELECTRICAL SUMMARY SEE ELECTRICAL DRAWINGS

ELECTRICAL SYSTEM AND EQUIPMENT

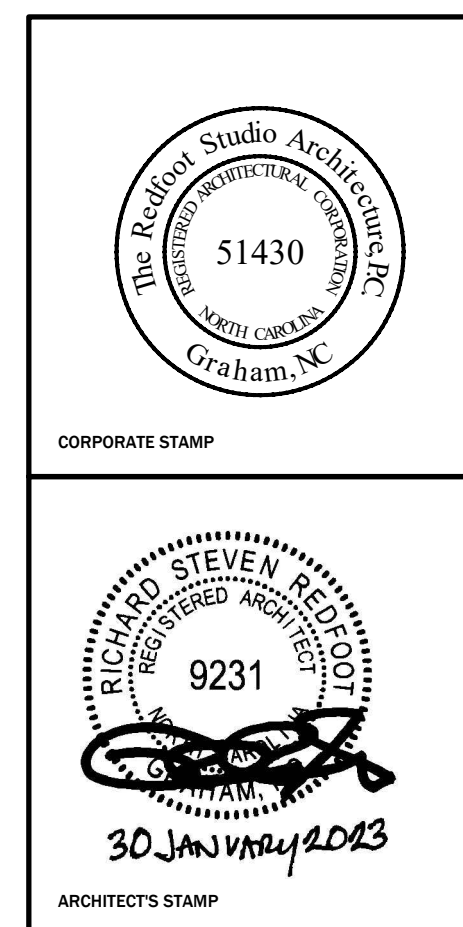
METHOD OF COMPLIANCE: ENERGY CODE PRESCRIPTIVE PERFORMANCE
 ASHRAE 90.1 PRESCRIPTIVE PERFORMANCE

LIGHTING SCHEDULE (each fixture type)
 LAMP TYPE REQUIRED IN FIXTURE _____
 NUMBER OF LAMPS IN FIXTURE _____
 BALLAST TYPE USED IN FIXTURE _____
 NUMBER OF BALLASTS IN FIXTURE _____
 TOTAL WATTAGE PER FIXTURE _____
 TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED (whole building or space by space) _____
 TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED _____

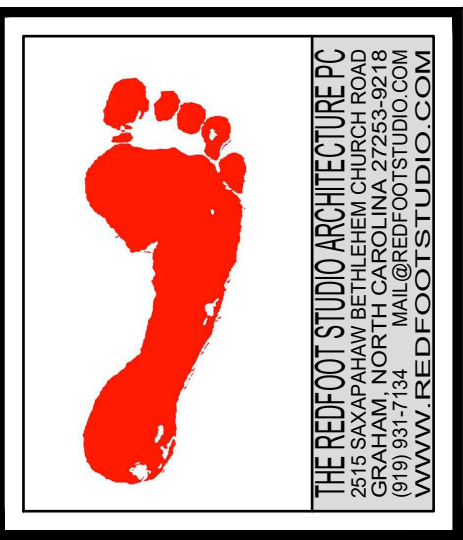
ADDITIONAL EFFICIENCY PACKAGE OPTIONS (WHEN USING THE 2018 NCECC, NOT REQUIRED FOR ASHRAE 90.1)
 C406.2 MORE EFFICIENT MECHANICAL EQUIPMENT
 C406.3 REDUCED LIGHTING POWER DENSITY
 C406.4 ENHANCED DIGITAL LIGHTING CONTROLS
 C406.5 ON-SITE RENEWABLE ENERGY
 C406.6 DEDICATED OUTDOOR AIR SYSTEM
 C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING



THE REDFOOT STUDIO ARCHITECTURE PC
 2515 SAXAPAHAW-BETHEHEM CHURCH ROAD
 GRAHAM NORTH CAROLINA 27253-9218
 (919) 931-7134 MAIL@REDFOOTSTUDIO.COM
 WWW.REDFOOTSTUDIO.COM



BILINGUAL THERAPY SERVICES

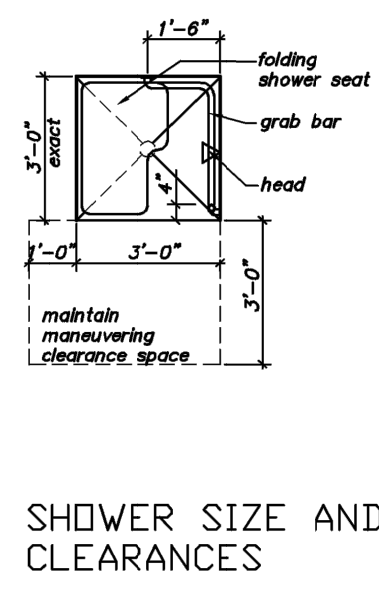
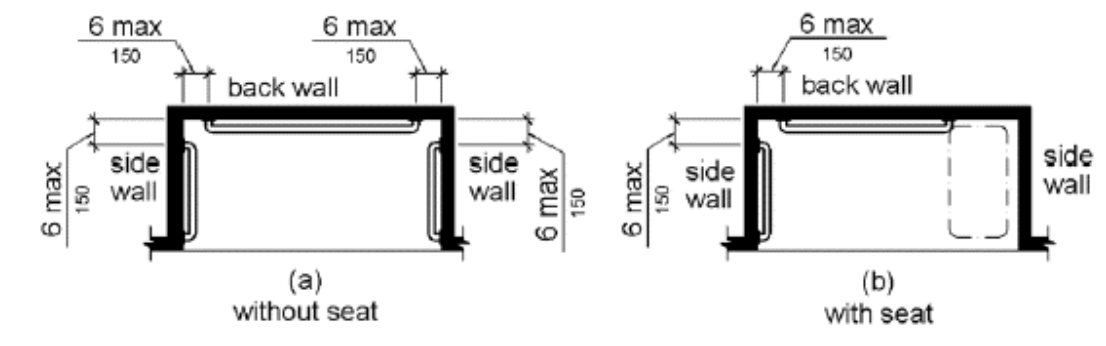


BILINGUAL THERAPY SERVICES
 2293 NC HIGHWAY 24-87
 CAMERON, NORTH CAROLINA

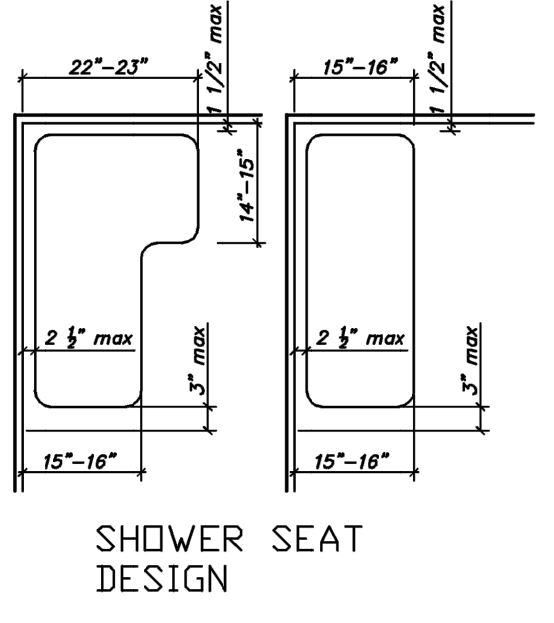


No	Rev./Submissions	Date
	PERMIT	01/30/23
SCALE	PROJECT NO	
AS NOTED	221104	
DESIGNED	DATE	
RSR	30 JAN 23	
DRAWN	CHECKED	
RSR	RSR	

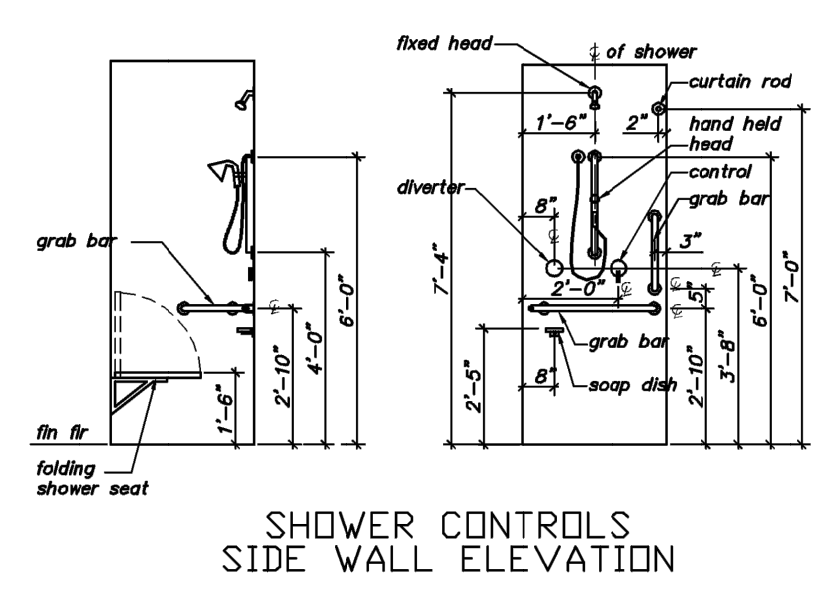
ACCESSIBILITY DETAILS
 DRAWING NO
A0.1



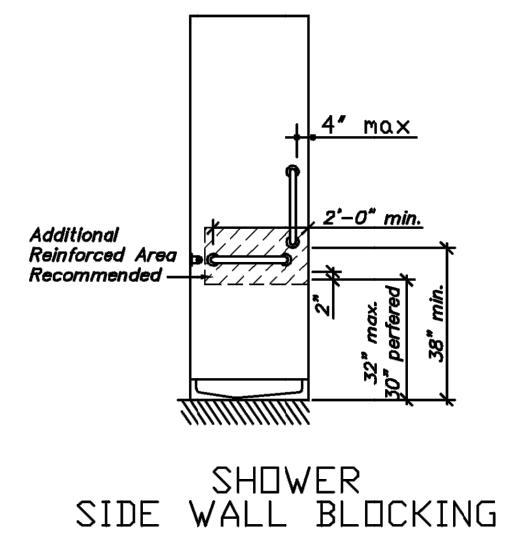
SHOWER SIZE AND CLEARANCES



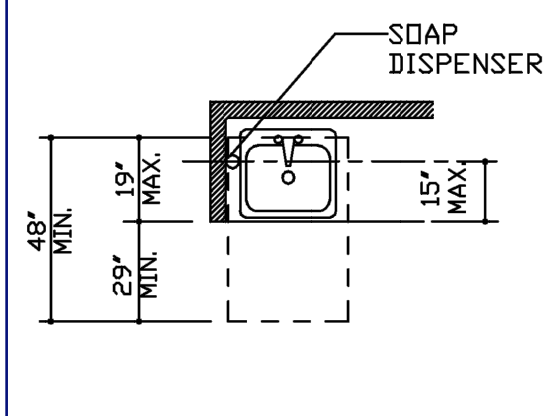
SHOWER SEAT DESIGN



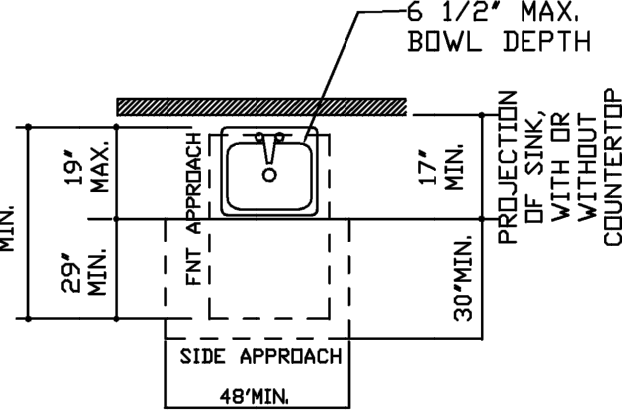
SHOWER CONTROLS SIDE WALL ELEVATION



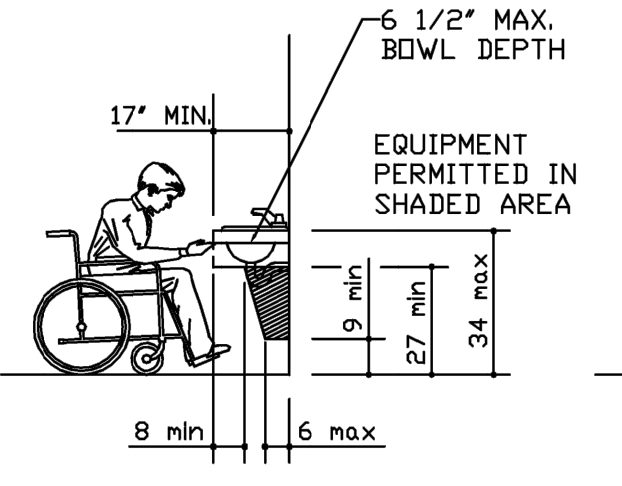
SHOWER SIDE WALL BLOCKING



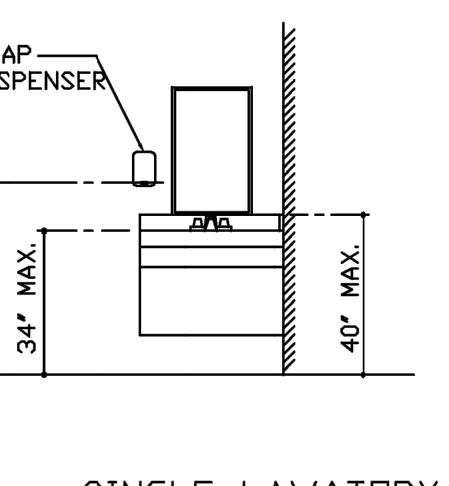
ACCESSIBLE SINK FLOOR CLEARANCE



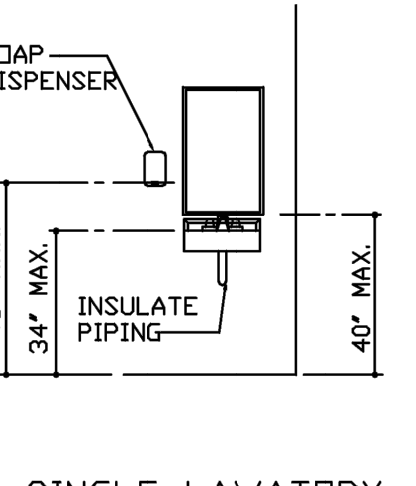
ACCESSIBLE SINK FLOOR CLEARANCE



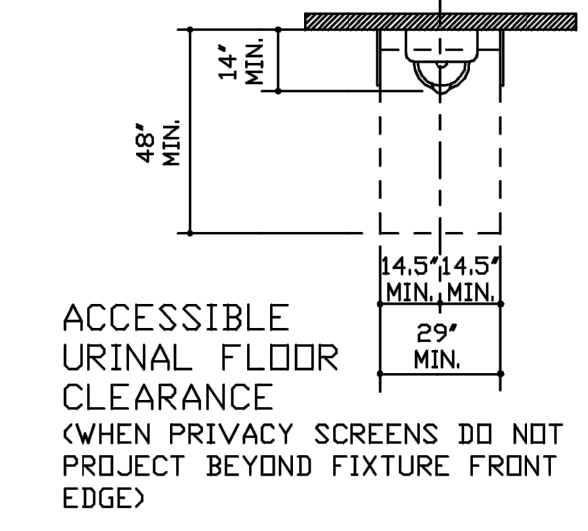
ACCESSIBLE SINK COUNTER HEIGHT AND KNEE CLEARANCE



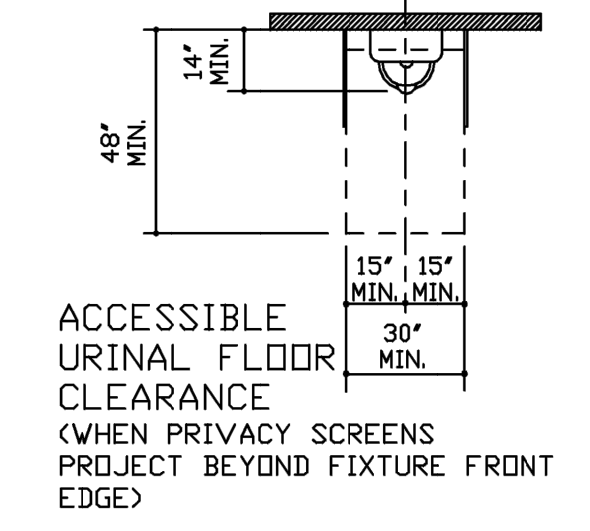
SINGLE LAVATORY COUNTER W/MIRROR



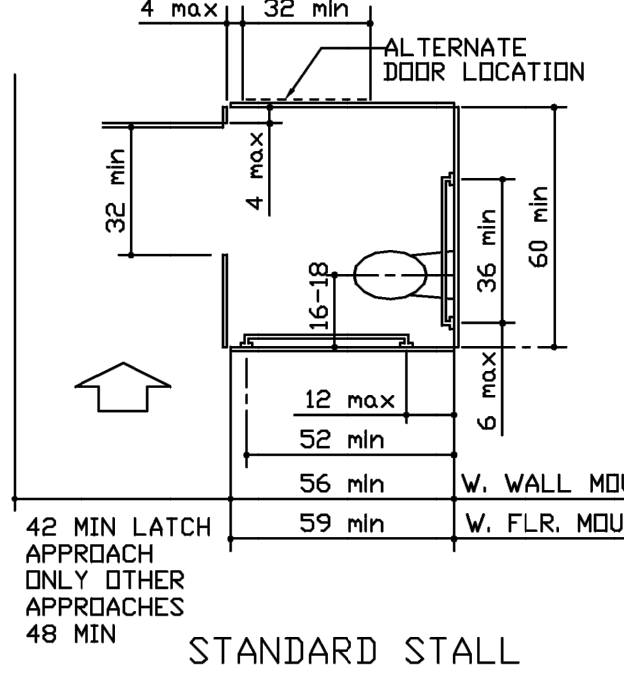
SINGLE LAVATORY WALLHUNG W/MIRROR



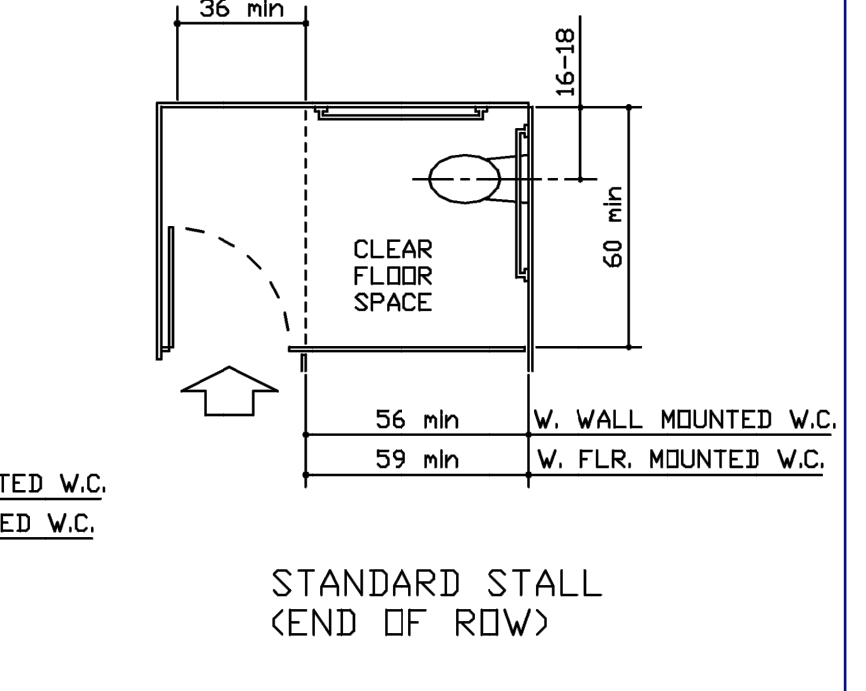
ACCESSIBLE URINAL FLOOR CLEARANCE (WHEN PRIVACY SCREENS DO NOT PROJECT BEYOND FIXTURE FRONT EDGE)



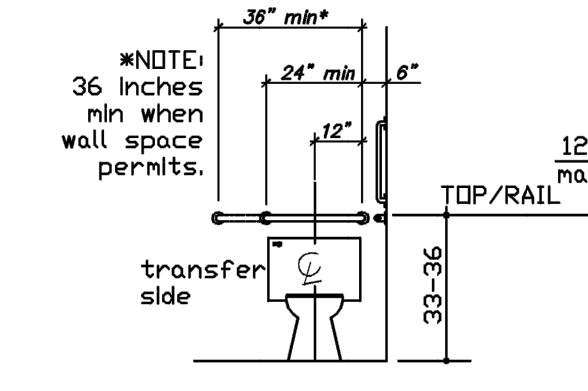
ACCESSIBLE URINAL FLOOR CLEARANCE (WHEN PRIVACY SCREENS PROJECT BEYOND FIXTURE FRONT EDGE)



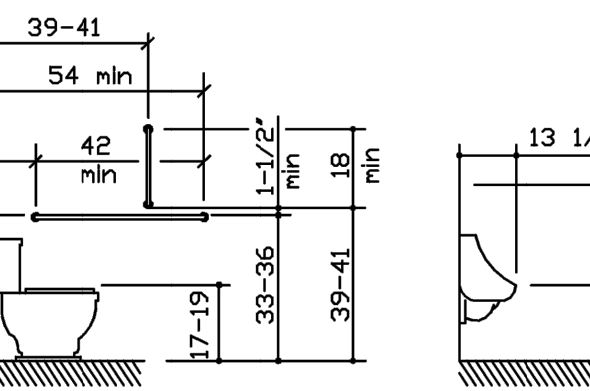
STANDARD STALL



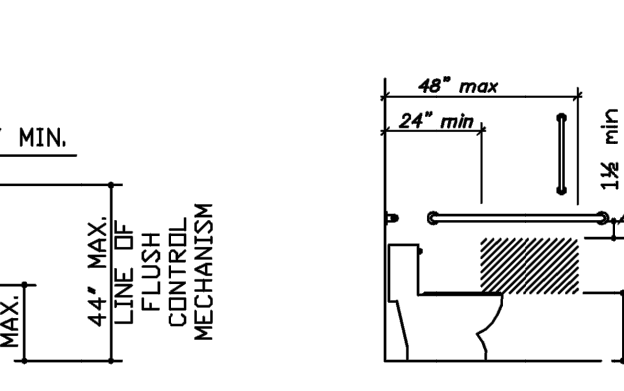
STANDARD STALL (END OF ROW)



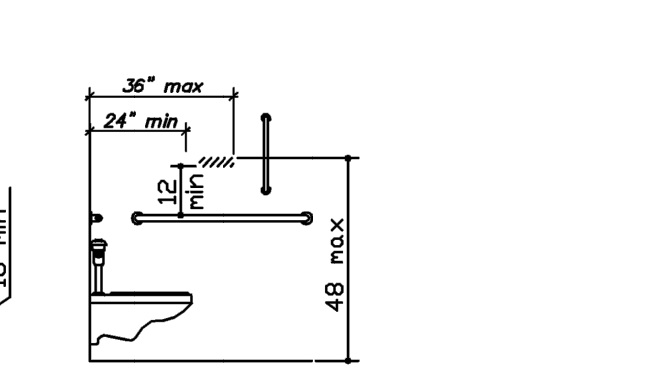
BACK WALL GRAB BARS AT WATER CLOSETS



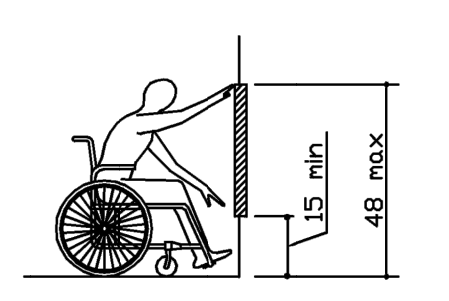
SIDE WALL GRAB BARS AT WATER CLOSETS



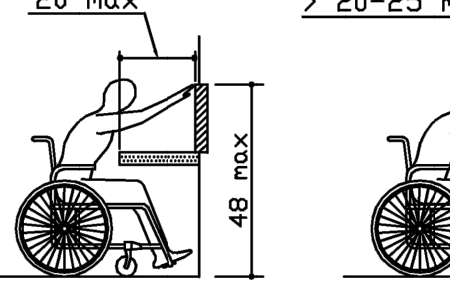
SIDE WALL ACCESSIBLE WALL HUNG URINAL



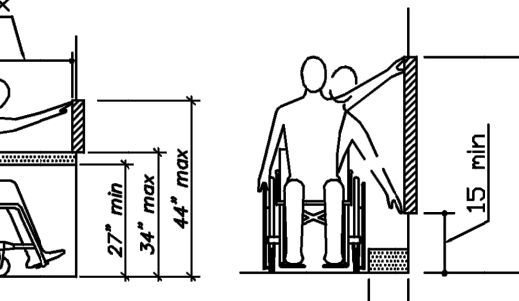
below grab bar above grab bar TOILET PAPER DISPENSER LOCATION



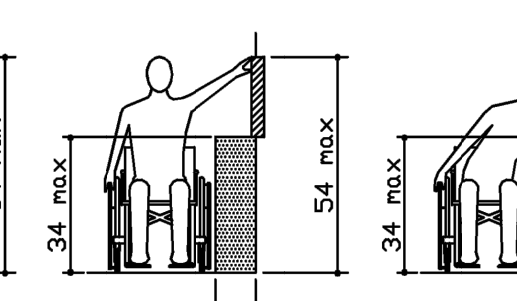
UNOBSTRUCTED FORWARD REACH



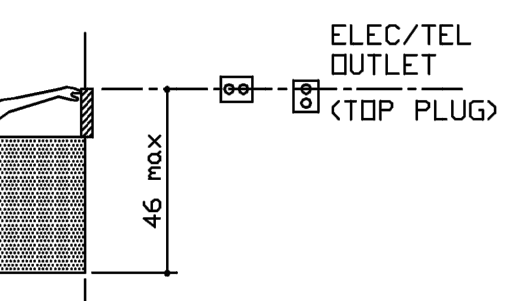
OBSTRUCTED HIGH FORWARD REACH



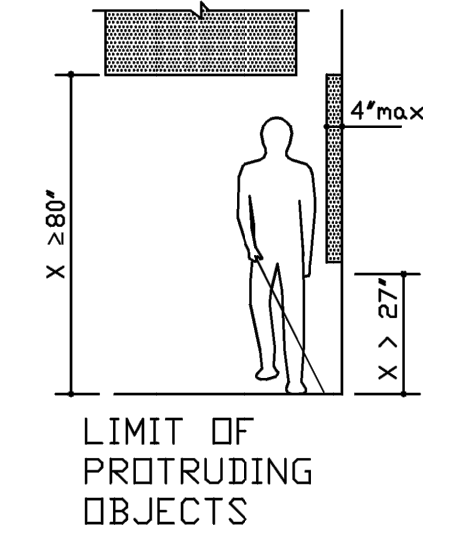
UNOBSTRUCTED SIDE REACH



OBSTRUCTED HIGH SIDE REACH



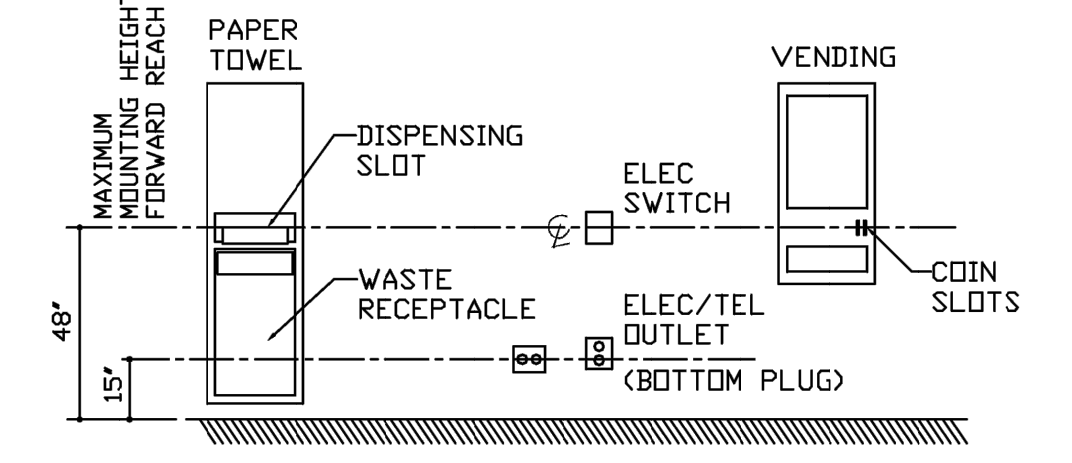
ELEC/TEL OUTLET (TOP PLUG)



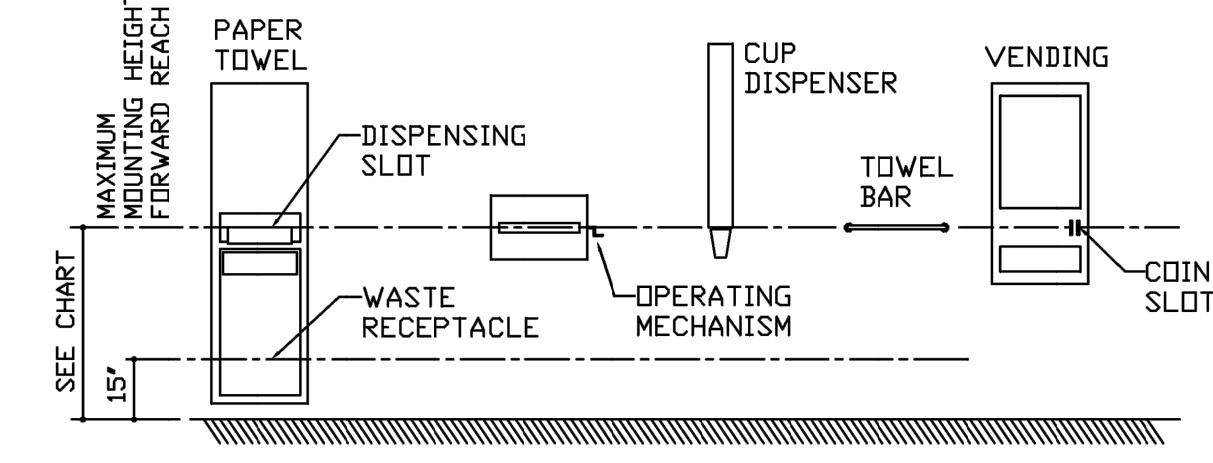
LIMIT OF PROTRUDING OBJECTS

SURFACE MOUNTED ACCESSORIES
 MAXIMUM REACH DEPTH AND HEIGHT (FORWARD APPROACH)

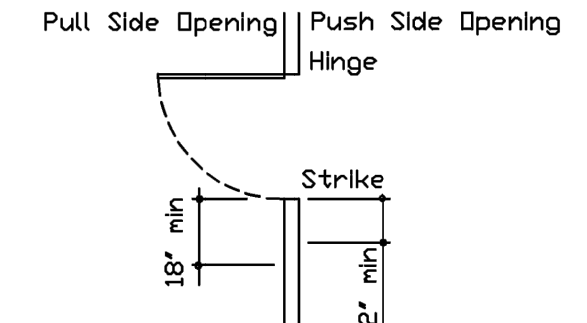
PROJECTED DIM FROM WALL FACE	.5 INCH	2 INCHES	5 INCHES	6 INCHES	9 INCHES	11 INCHES
MAXIMUM MOUNTING HEIGHT	48 INCH	46 INCH	42 INCH	40 INCH	36 INCH	34 INCH



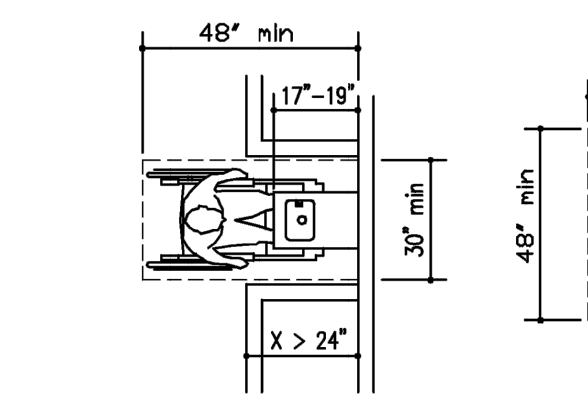
FLUSH MOUNTED EQUIPMENT (LESS THAN 1/2" PROJECTION FROM WALL FACE)



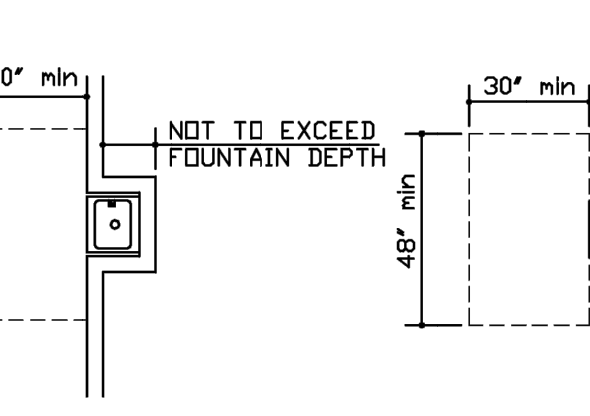
SURFACE MOUNTED EQUIPMENT (GREATER THAN 1/2" PROJECTION FROM WALL FACE)



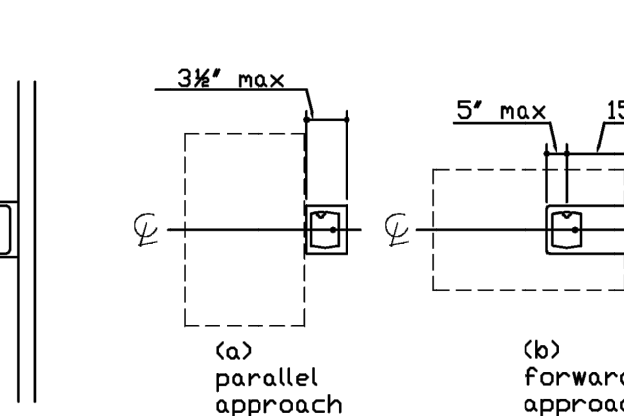
CLEAR AREA OF ACCESSIBILITY FORWARD APPROACH TO ACCESS WAY



WATER COOLER CLEAR FLOOR SPACE



BUILT-IN FOUNTAIN OR COOLER

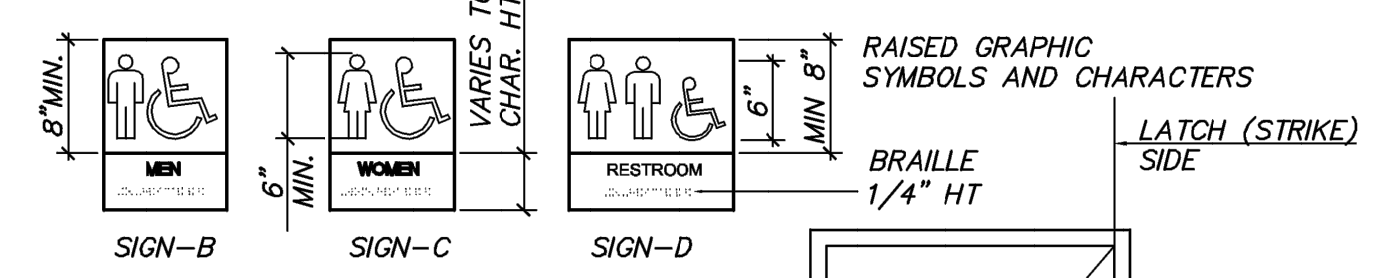


FREESTANDING FOUNTAIN OR COOLER



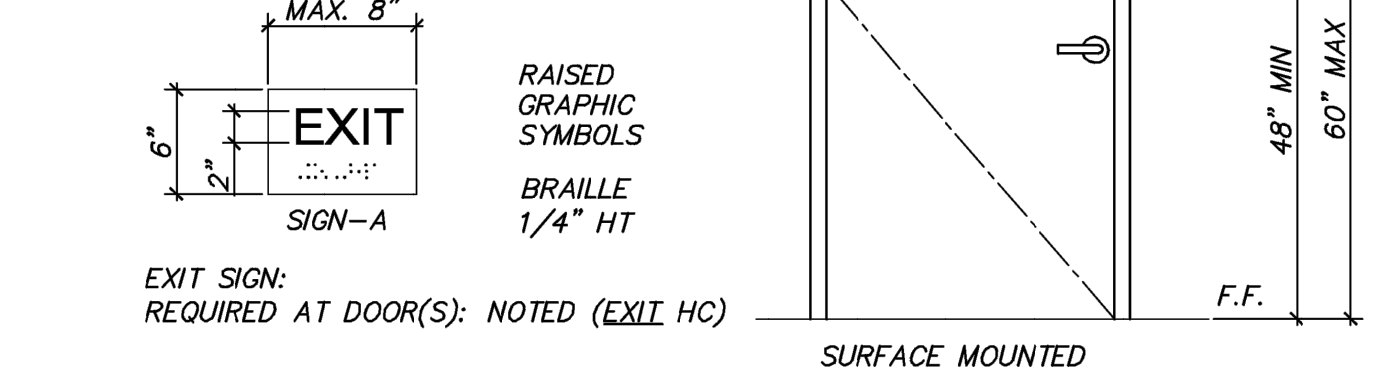
DRINKING FOUNTAIN SPOUT LOCATION

IDENTIFICATION SIGNAGE AT 60" A.F.F., ARE TO BE DISTINCTLY DIFFERENT FROM THE DOOR OR WALL IN COLOR AND CONTRAST.



ONLY IF ADJACENT WALL SPACE CANNOT ACCOMMODATE, THEN SIGN(S) SHALL BE CENTERED PLACE ON THE DOOR.

IF NO WALL SPACE AVAILABLE ADJACENT TO THE STRIKE JAMB/LATCH SIDE OF DOOR, THEN THE SIGN(S) SHALL BE PLACED ON THE NEAREST ADJACENT WALL.



EXIT SIGN: REQUIRED AT DOOR(S): NOTED (EXIT HC) SURFACE MOUNTED

1 Accessibility Details and Requirements
 SCALE 1 1/2"=1'-0"

THESE DRAWINGS ARE THE COPYRIGHT OF THE REDFOOT STUDIO ARCHITECTURE PC. THESE DOCUMENTS HAVE BEEN PREPARED SPECIFICALLY FOR THE PROJECT DESCRIBED IN THE ADDRESS BAR AND ARE NOT SUITABLE FOR USE ON OTHER PROJECTS OR IN OTHER LOCATIONS WITHOUT WRITTEN APPROVAL OF THE ARCHITECT. REPRODUCTIONS ARE NOT PERMITTED.

GENERAL MECHANICAL NOTES

- ADMINISTRATIVE:
- THE FOLLOWING ABBREVIATIONS SHALL APPLY TO NOTES AND PLANS:
PC - PLUMBING CONTRACTOR, EC - ELECTRICAL CONTRACTOR,
MC - MECHANICAL CONTRACTOR, GC - GENERAL CONTRACTOR,
FASC - FIRE ALARM SYSTEM CONTRACTOR.
 - "PROVIDE" MEANS TO FURNISH AND INSTALL. MC SHALL ALSO INSTALL MATERIALS FURNISHED BY OTHERS AND GENERAL CONTRACTOR AS SHOWN ON THE PLANS OR NECESSARY FOR A COMPLETE INSTALLATION.
 - THE MC SHALL BE RESPONSIBLE FOR A COMPLETE AND OPERATING SYSTEM AS DESCRIBED BY THESE PLANS AND SPECIFICATIONS.
 - ALL MATERIALS AND EQUIPMENT SHALL BE DELIVERED TO THE SITE AND UNLOADED BY THE CONTRACTOR AT AN APPROVED LOCATION. THE MC SHALL PROTECT ALL MATERIALS AND EQUIPMENT FROM BREAKAGE, THEFT, AND THE ELEMENTS. ALL MATERIALS AND EQUIPMENT SHALL REMAIN THE PROPERTY OF THE MC UNTIL THE PROJECT HAS BEEN COMPLETED AND TURNED OVER TO THE OWNER.
 - THE MC SHALL INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH THE 2018 NORTH CAROLINA MECHANICAL AND BUILDING CODES AND ANY APPLICABLE LOCAL CODES. WHERE A CONFLICT EXISTS BETWEEN THE ABOVE REQUIREMENTS, THE MC SHALL OBTAIN CLARIFICATION FROM THE ENGINEER OR IN THE EVENT ANY PART OF THESE PLANS CONFLICTS WITH THE ABOVE REQUIREMENTS.
 - THE MC SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY FOR THE COMPLETION OF THE WORK UNDER THIS CONTRACT. DO NOT SCALE THESE DRAWINGS-REFER TO ARCHITECTURAL SHEETS FOR DIMENSIONS.
 - IT IS THE MC'S RESPONSIBILITY TO VERIFY THAT ITEMS FURNISHED FOR THIS CONTRACT WILL FIT IN THE SPACE AVAILABLE. THE MC SHALL MAKE FIELD MEASUREMENTS AS NECESSARY TO VERIFY SPACE REQUIREMENTS. IF THE MC MUST ALTER EQUIPMENT DUE TO SPACE CONSIDERATIONS, THE MC SHALL PROVIDE SIZES AND SHAPES THAT FIT THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS.
 - MC SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR REGARDING THE ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT BEING PROVIDED.
 - MAINTAIN CLEARANCES FOR ALL EQUIPMENT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SERVICEMANUAL. ALL ROOFTOP EQUIPMENT MUST BE A MINIMUM OF 10 FEET FROM ROOF EDGE.
 - MC SHALL FURNISH A BOUND SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT TO THE OWNER UPON COMPLETION OF THE PROJECT. MC SHALL PROVIDE ALL DOCUMENTATION TO THE OWNER AS NECESSARY TO SUBMIT FOR FACTORY WARRANTIES.
 - CONTRACTOR SHALL PROTECT ALL HVAC EQUIPMENT FROM CONSTRUCTION AND SHEET ROCK DUST DURING CONSTRUCTION. ALL FILTERS SHALL BE REPLACED WITH NEW AT THE COMPLETION OF THE PROJECT.
 - ALL EQUIPMENT INSTALLED ON ROOF MUST BE WITHIN THE ROOF SCREEN.
 - IF A ROOF PENETRATION IS REQUIRED AND THE ROOF IS UNDER WARRANTY, USE THE AUTHORIZED ROOFER. PROVIDE DOCUMENTATION.
 - ALL PIPING, WIRING, CONDUIT, INSULATION, EQUIPMENT, SUPPORTS, ETC. SHALL BE SUITABLE FOR INSTALLATION IN A RETURN PLENUM AS NECESSARY. COORDINATE WITH OTHER TRADES ON LOCATIONS OF ALL PLENUMS.
 - MC SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO ENSURE ALL APPLICABLE CONSTRUCTION WASTE IS RECYCLED DURING THE CONSTRUCTION PHASE OF THE PROJECT.

- MATERIALS:
- THE MC SHALL PROVIDE ALL DX UNITARY HEATING AND COOLING EQUIPMENT AS SCHEDULED ON THE DRAWINGS. AIR-COOLED SPLIT SYSTEM HEAT PUMPS AND AIR-CONDITIONERS SHALL BE BY FRAME, CARRIER, OR YORK. AIR-COOLED THE MC SHALL PROVIDE FACTORY AND FIELD INSTALLED ACCESSORIES AS SCHEDULED OR AS NECESSARY FOR A COMPLETE AND OPERATIONAL HVAC SYSTEM.
 - THE MC SHALL PROVIDE ALL EXHAUST AND SUPPLY FANS AS SCHEDULED. FANS SHALL BE BY GREENHECK, LOREN COOK, TWIN CITY, OR PENNBARRY.
 - DUCTWORK IS SHOWN WITH FREE AREA DIMENSIONS. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT STANDARD, 2 INCH S.P.
 - EXTERNAL DUCT INSULATION AND FACTORY-INSULATED FLEXIBLE DUCT SHALL BE LEGIBLY PRINTED OR IDENTIFIED AT INTERVALS NOT GREATER THAN 36 INCHES WITH THE NAME OF THE MANUFACTURER, THE THERMAL RESISTANCE R-VALUE AT THE SPECIFIED INSTALLED THICKNESS AND THE FLAME SPREAD AND SMOKE-DEVELOPED INDEXES OF THE COMPOSITE MATERIALS. ALL DUCT INSULATION PRODUCT R-VALUES SHALL BE BASED ON INSULATION ONLY, EXCLUDING AIR FILMS, VAPOR RETARDERS OR OTHER DUCT COMPONENTS, AND SHALL BE BASED ON TESTED C-VALUES AT 75°F MEAN TEMPERATURE AT THE INSTALLED THICKNESS, IN ACCORDANCE WITH RECOGNIZED INDUSTRY PROCEDURES. THE INSTALLED THICKNESS OF DUCT INSULATION USED TO DETERMINE ITS R-VALUES SHALL BE DETERMINED AS FOLLOWS:
4.1. FOR DUCT BOARD, DUCT LINER AND FACTORY-MADE RIGID DUCTS NOT NORMALLY SUBJECTED TO COMPRESSION, THE NOMINAL INSULATION THICKNESS SHALL BE USED.
4.2. FOR DUCT WRAP, THE INSTALLED THICKNESS SHALL BE ASSUMED TO BE 75 PERCENT (25-PERCENT COMPRESSION) OF NOMINAL THICKNESS.
4.3. FOR FACTORY-MADE FLEXIBLE AIR DUCTS, THE INSTALLED THICKNESS SHALL BE DETERMINED BY DIVIDING THE DIFFERENCE BETWEEN THE ACTUAL OUTSIDE DIAMETER AND NOMINAL INSIDE DIAMETER BY TWO.
5. ALL INSULATION CONTAINING FIBROUS MATERIALS EXPOSED TO AIRFLOW SHALL BE RATED FOR THAT EXPOSURE OR SHALL BE ENCAPSULATED. INSULATING PROPERTIES FOR ALL MATERIALS SHALL MEET OR EXCEED INDUSTRY STANDARDS. POLYSTYRENE PRODUCTS SHALL MEET ASTM C578. ALL INSULATION SHALL HAVE FORMALDEHYDE EMISSIONS NOT GREATER THAN 0.05 PPM. THE MAXIMUM FLAME SPREAD AND SMOKE DEVELOPED INDEX FOR INSULATION SHALL MEET THE REQUIREMENTS OF THE LOCAL CODES AND ORDINANCES ADOPTED BY THE JURISDICTION IN WHICH THE BUILDING IS LOCATED.
 - MASTIC USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A-95 OR UL 181B-98. MAINTAIN AMBIENT TEMPERATURES AND CONDITIONS REQUIRED BY MANUFACTURER OF ADHESIVES, MASTICS, AND INSULATION CEMENTS. DO NOT INSTALL DUCT SEALANT WHEN TEMPERATURES ARE LESS THAN THOSE RECOMMENDED BY THE SEALANT MANUFACTURER.
 - ALL ADHESIVES AND SEALANTS SHALL HAVE VOC CONTENT BELOW 20 GRAMS PER LITER AND WHICH MEET THE REQUIREMENTS OF THE MANUFACTURER OF THE PRODUCTS BEING ADHERED OR INVOLVED. ADHESIVES AND SEALANTS SHALL CONTAIN NO HEAVY METALS OR FORMALDEHYDE.
 - FACTORY-MADE AIR DUCTS AND CONNECTORS SHALL COMPLY WITH UL 181-96.
 - FLEXIBLE DUCT SHALL BE UL LISTED CLASS 0 OR CLASS 1, INSULATED, AND COMPLY WITH UL 181. FLEXIBLE DUCT SHALL BE FACTORY FORMED, COMPOSED OF SPIRAL WOUND CORROSION RESISTANT WIRE BONDED TO AN INNER FABRIC LINER. DUCT SHALL BE FACTORY INSULATED WITH A FOIL VAPOR BARRIER JACKET. CONNECT TO RIGID DUCT WITH SPW-N FITTINGS AND DAMPER. FLEXIBLE DUCTS AND AIR CONNECTORS SHALL NOT PASS THROUGH ANY FIRE RESISTANCE RATED ASSEMBLY.
 - THE MC SHALL PROVIDE ALL DIFFUSERS, GRILLES, LOUVERS, AND OTHER AIR DISTRIBUTION OUTLETS AND INLETS. LOUVERS, GRILLES, AND DIFFUSERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR LAY-IN CEILING, INSTALL SUPPORT FROM THE STRUCTURE

- FOR EACH DIFFUSER OR DAMPER, AIR DISTRIBUTION OUTLETS AND INLETS SHALL BE BY HART & COOLEY, PRICE, METAL-ARE, NALLOR, OR CARNES.
- AR FILTERS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 605 OF THE 2018 NC MECHANICAL CODE.
- THE MC SHALL PROVIDE ALL REFRIGERATION PIPING, ALL PIPE AND FITTINGS SHALL BE TYPE ACR HARD COPPER TUBING WITH SWEAT FITTINGS. REFRIGERATION LINES SHALL BE RUN NEATLY, WHERE A GROUP OF LINES ARE RUN, TRAPEZE HANGERS MAY BE USED. DO NOT USE CHAIN OR WIRE HANGERS. WRAP TUBING WITH RUBBER TAPE AT EACH CLAMP OR HANGER. FOR COVERED PIPES, HANGERS SHALL FIT AROUND THE OUTSIDE OF THE COVERING WITH 1/2 GAUGE GALVANIZED STEEL SHEETS OF A LENGTH EQUAL TO THE OUTSIDE DIAMETER OF THE INSULATION AND COVERING 3/4 OF THE CIRCUMFERENCE OF THE INSULATION. SAGS SHALL NOT BE PERMISSIBLE. HORIZONTAL LINES SHALL PITCH DOWN NOT LESS THAN 1 INCH IN 40 FEET. INSULATE WITH 1 INCH CLOSED CELL ARMAFLEX TYPE INSULATION WITH A FLAME DENSITY RATING LESS THAN 25 AND A SMOKE DENSITY RATING LESS THAN 50. ALL JOINTS AND SPLICES IN INSULATION SHALL BE TAPED AND AIR TIGHT. SOLDER REFRIGERATION LINES USING 15 PERCENT SILVER SOLDER AND EVALUATE LINES TO 300 MICRONS. PROVIDE MOISTURE INDICATING SIGHT GLASS AND FILTER DRYER IN LIQUID LINE. PROVIDE OIL TRAPS AND DOUBLE RISERS IN REFRIGERANT SUCTION AND HOT GAS LINES WHERE REQUIRED TO PREVENT OIL SLUGGING AT THE COMPRESSOR AND INSURE PROPER LUBRICATION. MC SHALL BE RESPONSIBLE FOR SEALING LINE SET PENETRATIONS OF ANY RATED ASSEMBLY IN ACCORDANCE WITH A SYSTEM LISTED IN THE UL DIRECTORY FOR THE SPECIFIC ASSEMBLY BEING PENETRATED. SEE ARCHITECTURAL PLANS FOR A LIST OF ALL UL FIRE RATED ASSEMBLIES.

- METHODS:
- INSULATE DUCTWORK WITH FIBERGLASS DUCT WRAP. INSTALLED R-VALUE SHALL BE A MINIMUM R-6. COVERINGS AND LININGS, INCLUDING ADHESIVES WHEN USED, SHALL HAVE A FLAME SPREAD INDEX NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. ALL NEW DUCTWORK SHALL RECEIVE INSULATION ON THE OUTSIDE. INSTALL DUCT WRAP INSULATION WITH FACING OUTSIDE. SO THAT TAPE FLAP OVERLAPS INSULATION AND FACING OF ADJACENT PIECE OF DUCT WRAP INSULATION SHALL BE TIGHTLY BUTTED. FOR RECTANGULAR DUCTS, INSTALL SO INSULATION IS NOT EXCESSIVELY COMPRESSED AT DUCT CORNERS. STAPLE SEALS APPROXIMATELY 6 INCHES ON CENTER WITH OUTWARD CLINCHING STAPLES. SEAL SEAMS WITH PRESSURE SENSITIVE TAPE MATCHING THE FACING. FOR RECTANGULAR DUCTS 24 INCHES IN WIDTH OR GREATER, SECURE DUCT WRAP TO THE BOTTOM INSULATION, OWNERS CORNER COPY, OR CERTAINTED COPPER INSULATION. VERIFY THAT DUCTS HAVE BEEN TESTED BEFORE APPLYING INSULATION MATERIALS. VERIFY THAT DUCT SURFACES ARE CLEAN, DRY AND FREE OF FOREIGN MATERIAL PRIOR TO INSULATING. DUCT COVERINGS SHALL NOT PENETRATE A WALL OR FLOOR REQUIRED TO HAVE A FIRE-RESISTANCE RATING OR REQUIRED TO BE FIRE BLOCKED.
 - WHERE DUCTS ARE CONNECTED TO EXTERIOR WALL LOUVERS AND DUCT OUTLET SMALLER THAN LOUVER FRAME, PROVIDE BLANK-OUT PANELS SLIGHTLY LOWER AREA AROUND DUCT. USE SAME MATERIAL AS DUCT, PAINTED BLACK ON EXTERIOR SIDE. SEAL TO LOUVER FRAME AND DUCT.
 - PROVIDE DUCT ACCESS DOORS FOR INSPECTION AND CLEANING BEFORE AND AFTER FILTERS, COILS, FANS, AUTOMATIC DAMPERS, AT FIRE DAMPERS, COMBINATION FIRE AND SMOKE DAMPERS.
 - CONSTRUCT TS, BONDS, AND FLEWS WITH RADI OF NOT LESS THAN 1-1/2 TIMES THE WIDTH OF THE DUCT ON CENTERLINE. WHERE NOT POSSIBLE AND WHERE RECTANGULAR ELBOWS MUST BE USED, PROVIDE TURNING VANES. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEGREES DIVERGENCE; MAXIMUM OF 30 DEGREES DIVERGENCE UPSTREAM OF EQUIPMENT AND 45 DEGREES CONVERGENCE DOWNSTEAM.
 - IT SHALL BE THE RESPONSIBILITY OF THE MC TO SUSPEND AND SUPPORT ALL EQUIPMENT, DUCTWORK, DIFFUSERS, AND OTHER MATERIALS FOLLOWING RECOGNIZED ENGINEERING PRACTICES AND USING STANDARD, COMMERCIALY ACCEPTED HANGERS AND SUSPENSION EQUIPMENT. ALL HVAC EQUIPMENT SHALL BE SECURELY MOUNTED TO THE BUILDING STRUCTURE AND SHALL NOT RELY ON CEILING OR WALL SURFACES FOR SUPPORT. THE SUPPORT ATTACHMENT SHALL SUPPORT THE WEIGHT OF THE EQUIPMENT PLUS THE WEIGHT OF THE SUPPORT ATTACHMENT ITSELF. SUPPORT FROM THE TOP CHORD OF THE ROOF JOISTS, ORDERS, AND BEAMS. THE BOTTOM CHORD IS NOT TO BE USED FOR EQUIPMENT OR PIPING SUPPORT. HANGERS SHALL NOT BE ATTACHED TO CORRUGATED STEEL DECKING.
 - DUCTS SHALL BE SUPPORTED IN ACCORDANCE WITH SMACNA AT INTERVALS NOT EXCEEDING 10 FEET. DUCTS 36 INCHES OR LARGER SHALL HAVE TRAPEZE TYPE HANGERS SUSPENDED WITH THREADED ROD. SUPPORT DUCTS FROM BAR JOISTS, ORDERS, OR BEAMS.
 - CHECK LOCATIONS OF AIR OUTLETS AND INLETS AND MAKE NECESSARY ADJUSTMENTS IN POSITION TO CONFORM WITH ARCHITECTURAL FEATURES, SYMMETRY, AND LIGHTING ARRANGEMENT. COORDINATE WITH SPRINKLER CONTRACTOR IF APPLICABLE.
 - PROVIDE BALANCING DAMPERS AT POINTS ON SUPPLY WHERE BRANCHES ARE TAKEN FROM LARGER DUCTS AS REQUIRED FOR AIR BALANCING. INSTALL MINIMUM 2 DUCT WIDTHS FROM DUCT TAKE-OFF. PROVIDE BALANCING DAMPERS ON DUCT TAKE-OFFS TO DIFFUSERS, AND REGISTERS, REGARDLESS OF WHETHER DAMPERS ARE SPECIFIED AS PART OF THE DIFFUSER OR REGISTER ASSEMBLY. ADJUST AIR HANDLING AND DISTRIBUTION SYSTEMS TO PROVIDE DESIGN SUPPLY, RETURN, AND EXHAUST AIR QUANTITIES AT SITE ALTITUDE.
 - MC SHALL INSTALL PROGRAMMABLE THERMOSTATS AS SHOWN ON THE PLANS. THERMOSTAT SHALL BE MOUNTED AT 48 INCHES AFF. THERMOSTATS SHALL MEET THE REQUIREMENTS OF SECTION C403.2.4 OF THE 2018 NORTH CAROLINA ENERGY CONSERVATION CODE.
 - FRESH AIR INTAKES SHALL BE INSTALLED ON ALL UNITS AS SHOWN ON DRAWINGS. MAINTAIN 10 FEET OF DISTANCE BETWEEN FRESH AIR INTAKES AND ALL EXHAUST TERMINATIONS AND PLUMBING VENT THRU ROOFS.
 - MC SHALL INSTALL ALL EXHAUST FANS AND VENT TO THE BUILDING'S EXTERIOR. EC SHALL SWITCH FANS WITH LIGHTS OR ON SEPARATE SWITCH AS SHOWN.
 - P-TRAPS MUST BE INSTALLED ON ALL UNITS. MC SHALL INSTALL AUXILIARY DRAIN PANS UNDER OVERHEAD AIR HANDLERS AND AN AUTOMATIC OUT-OFF FLOAT SWITCH FOR EACH. P-TRAPS AND CONDENSATE LINES SHALL BE 1 INCH.
 - P-TRAPS AND CONDENSATE LINES MAY BE PVC WHERE NOT LOCATED IN PLENUMS; OTHERWISE, THEY SHALL BE TYPE M COPPER.
 - INSTALL BACKDRAFT DAMPERS ON FRESH AIR AND EXHAUST DUCTS WHERE THEY PENETRATE THE THERMAL ENVELOPE PER NORTH CAROLINA ENERGY CONSERVATION CODE C402.5.5

MARK	MFG / MODEL #	NOMINAL CAPACITY TONS	REF LINES		MOTORS				ELECTRICAL				WEIGHT LBS	REMARKS
			GAS	LIQ	COMPRESSOR	COND. FAN	SEER	COP @ 17"	HSPF	V/PH	MCA	MDCP		
HP-1,2	YORK / YHE48TR21S	4	7/8"	3/8"	1	1	14.3/10.5	2.41	7.5	208/1	26.1	45	215	1,5,6,8-10

MARK	MFG / MODEL #	NOMINAL CAPACITY TONS	AIR FLOW		FAN MOTORS		HEATING CAPACITY			COOLING CAPACITY		ELECTRICAL			WEIGHT LBS	REMARKS	
			SUPPLY CFM	MIN. OA CFM	SUPPLY	ESP	OUTPUT	AUX ELEC HEAT	EAT VB/DB	TOTAL	SENSIBLE	V/PH	MCA	MDCP			
AHU-1,2	YORK / JHE1C48G3S2N1	4	1600	265	1	0.5	15.0	4.4	1?	65.7/79.1	46.7	34.8	208/1	30.7	30	129	2-5,7-10

MARK	MFG / MODEL #	TYPE	ESP (in WD)	CFM	VOLT/PH	FLA	SDNES	NOTES
EF-1,2	GREENHECK SP-B110	CEILING	0.40	96	120/1	1.14	2.0	1-3
EF-3	GREENHECK SP-A200	CEILING	0.40	179	120/1	0.43	3.0	1-3

- PROVIDE WITH PITCHED ROOF CURB & CAP FOR FLAT OR SLOPED ROOF, OR HODDED WALL WITH BACKDRAFT DAMPER CAP AS APPLICABLE.
- PROVIDE WITH SQUARE TO ROUND DUCT ADAPTER AS NECESSARY.
- DR EQUAL BY LOREN COOK OR PENNBARRY DR TWIN CITY

MARK	MFG	MODEL #	SIZE	MOUNTING	DESCRIPTION	NOTES
A	HART & COOLEY	HVS	24X24	LAY-IN	4-WAY DIFFUSER, BRIGHT WHITE	1,2
B	HART & COOLEY	ARE	24X24	LAY-IN	ALUMINUM, 4 WAY DIFFUSER, BRIGHT WHITE	1,2
R	HART & COOLEY	RH4ST	24X24	LAY-IN	ALUMINUM, LAY IN RETURN GRILLE	1

- DR EQUAL BY PRICE, METAL-ARE, CARNES, TITUS DR NALLOR.
- PROVIDE WITH FOIL LINED, MOLDED INSULATION BLANKET.

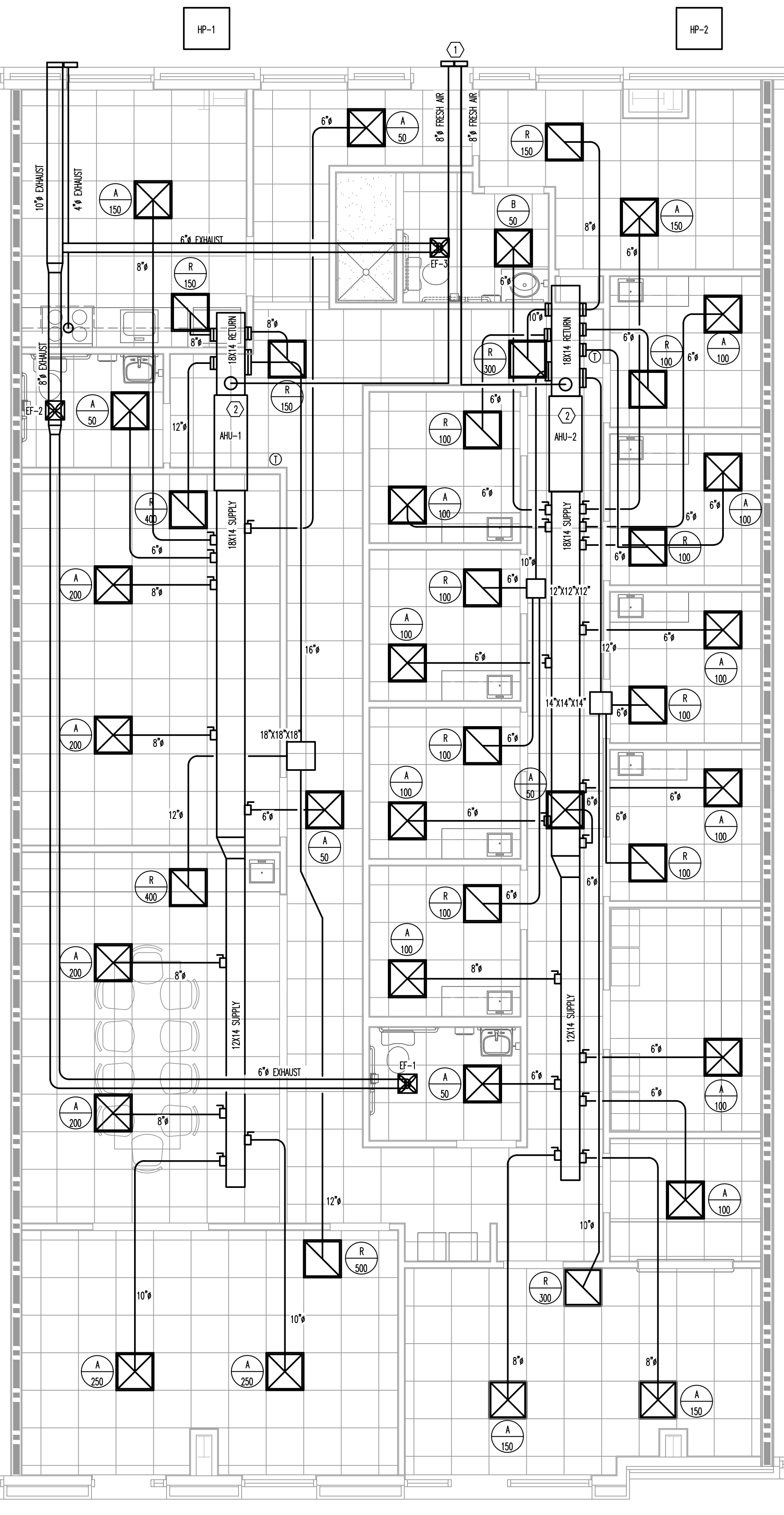
Room Name(s)	Zone Type	Area (sq.ft.)	Rp	Ra	Default Occupancy	Pz	Ez	Airflow to Zone (cfm)
Office Areas	Office Space	2010	5	0.06	5	10.05	0.8	1275
Reception	Reception	52	5	0.06	30	1.56	0.8	250
Storage	Storage	96	0	0.12	0	0.00	0.8	0
Restroom	N/A	166	0	0	0	0.00	0.8	75
	N/A	0	0	0	0	0.00	0.8	0
			Maximum Zp:	0.1675				
			Ev:	0.9				
			Actual System Population:	15				
Uncorrected Intake		210 cfm						
Outdoor Air Intake		234 cfm						
Percent of Unit Air		15%						

MECHANICAL PLAN HEX NOTES

- CONNECT FRESH AIR DUCT TO EXISTING BUILDING FRESH AIR LOUVER WITH INSECT SCREEN.
- ROUTE CONDENSATE TO EXTERIOR OF BUILDING. TERMINATE IN LOCATION THAT WILL NOT PRODUCE SLIPPING HAZARD.

RATED WALL LEGEND

- NO RATED WALLS IN JOB SCOPE AND/OR SHOWN ON PLAN VIEWS.



① THERMOSTAT LOCATION MOUNT AT 48" A.F.F.

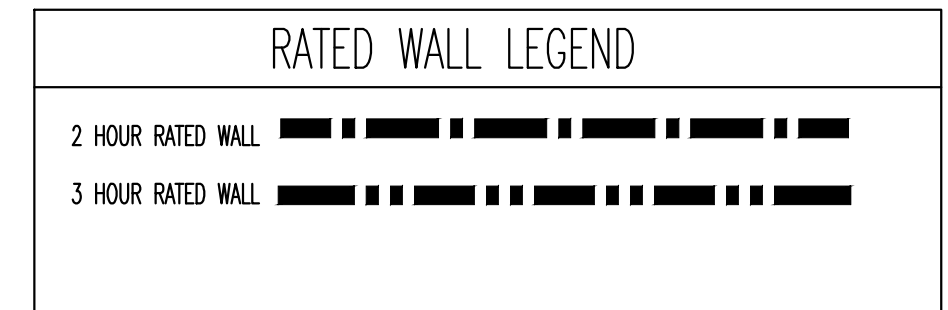
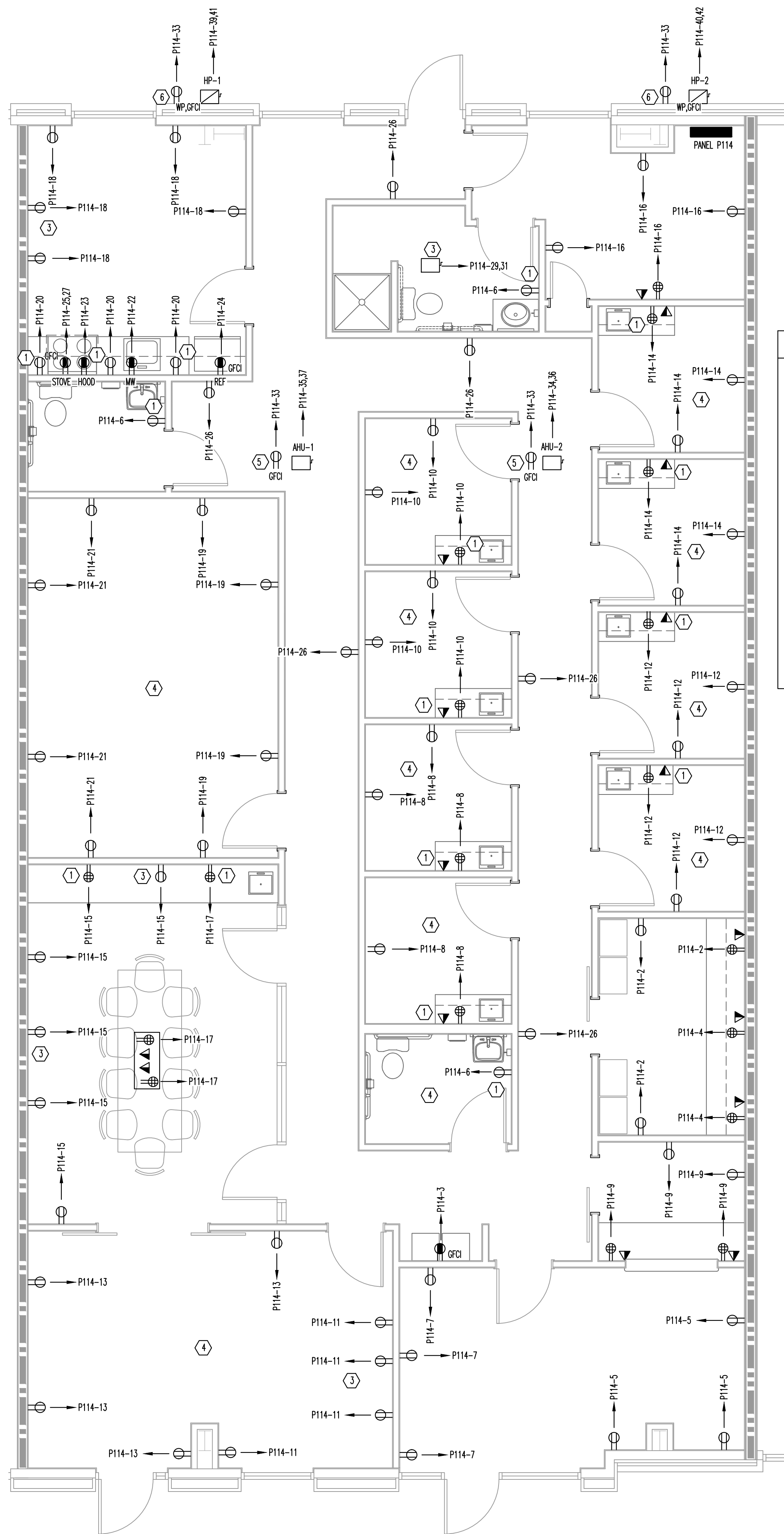
MECHANICAL SYSTEM, SERVICE SYSTEMS, AND EQUIPMENT

- METHOD OF COMPLIANCE: THERMAL ZONE
- PRESCRIPTIVE ZONE 3A
- EXTERIOR DESIGN CONDITIONS:
HEATING DESIGN DRY BULB: 22.9°F
COOLING DESIGN DRY BULB: 91.2°F
COOLING DESIGN WET BULB: 74.7°F
- INTERIOR DESIGN CONDITIONS:
HEATING DESIGN DRY BULB: 70°F
COOLING DESIGN DRY BULB: 75°F
COOLING RELATIVE HUMIDITY: 50%
- HEATING LOAD: 28,770 BTU/H
- SENSIBLE COOLING LOAD: 36,975 BTU/H
LATENT COOLING LOAD: 9,700 BTU/H
- MECHANICAL SPACING CONDITIONING SYSTEM:
UNITARY: AIR COOLED DX
DESCRIPTION OF UNIT(S): SEE SCHEDULES
BOILER: N/A
TOTAL BOILER OUTPUT: N/A
CHILLER: N/A
TOTAL CHILLER CAPACITY: N/A
- EQUIPMENT EFFICIENCIES: SEE SCHEDULES
- EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS): SEE SCHEDULES
- DESIGNER STATEMENT:
TO THE BEST OF MY KNOWLEDGE, THE MECHANICAL DESIGN FOR THIS BUILDING COMPLIES WITH MECHANICAL AND EQUIPMENT REQUIREMENTS OF THE 2018 NORTH CAROLINA STATE BUILDING CODE AND 2018 NORTH CAROLINA ENERGY CONSERVATION CODE.

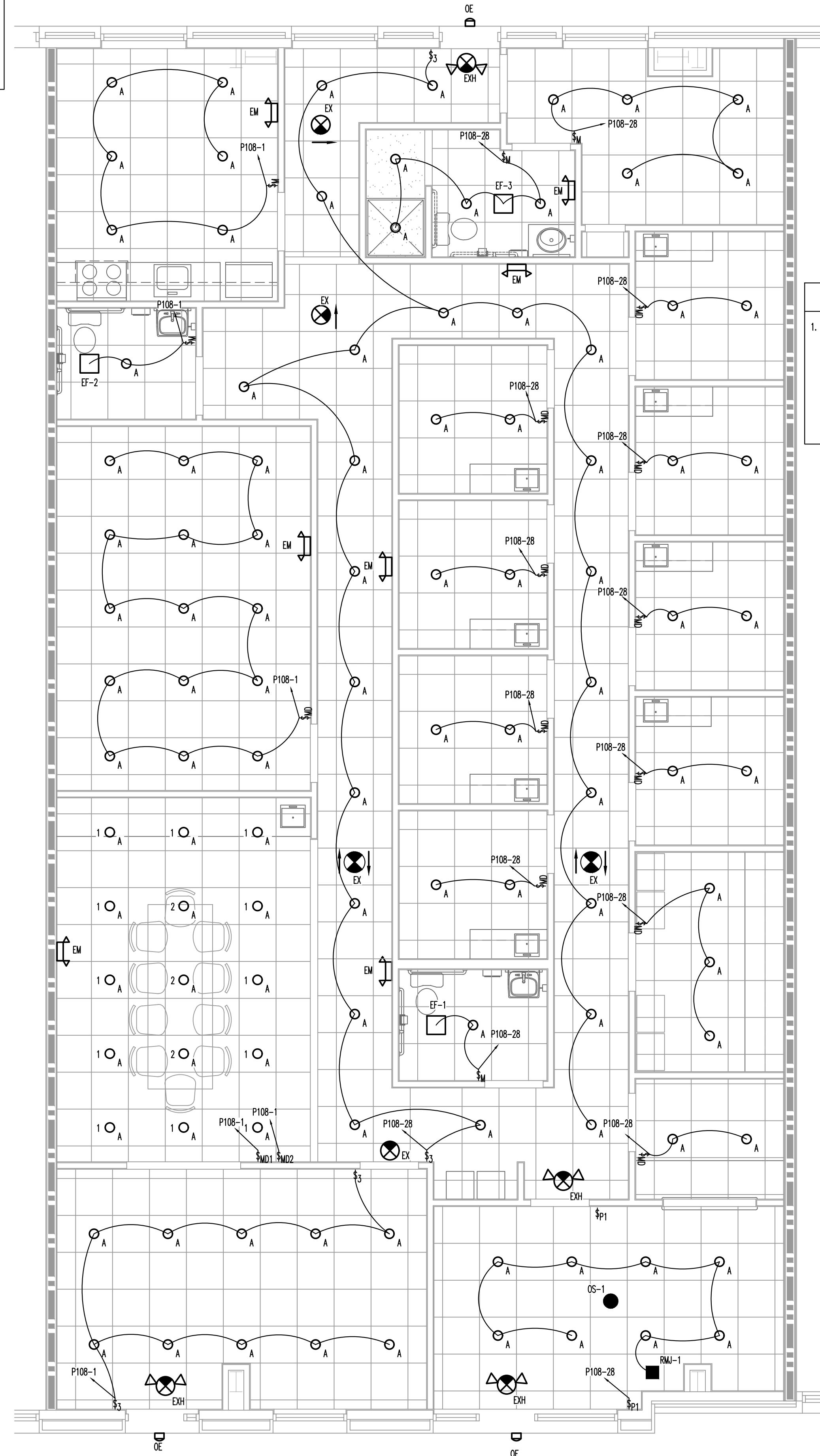
Kilian Engineering, Inc.
Professional Engineer
No. 27366
Seal: 1-30-23

BILINGUAL THERAPY SERVICES
UPFIT FOR
2293 NC HIGHWAY 447, SUITE 100
CAMERON, NORTH CAROLINA

REVISION:
ISSUED:
DRAWN BY: CLS
CHECKED BY: JLM
MECHANICAL PLAN
SHEET NO. **M1**
PROJECT NO: 230047



- POWER PLAN HEX NOTES**
1. MOUNT GFCI RECEPTACLE AT 48" A.F.F.
 2. MOUNT RECEPTACLE AND DATA JACK AT 78" A.F.F. FOR TV.
 3. DISCONNECT FOR TANK TYPE WATER HEATER LOCATED ABOVE CEILING WITH WATER HEATER.
 4. ALL WIRING IN THIS ROOM SHALL COMPLY WITH 2020 NEC 517.13.
 5. DISCONNECT FOR AHU-1 AND GFCI SERVICE RECEPTACLE LOCATED ABOVE CEILING.
 6. DISCONNECT FOR HP-1 AND WP GFCI SERVICE RECEPTACLE AND LOCATION DESIGNATED FOR THIS SUITE'S OUTDOOR UNIT.



- LIGHTING PLAN NOTES**
1. VERIFY SWITCH CONFIGURATION WITH TENANT PRIOR TO ROUGH-IN

