



Augment Spa

Jacksonville, NC

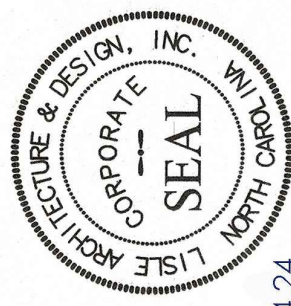
Onslow County

Lisle Architecture & Design, Inc.
614 Market Street
Wilmington, North Carolina 28401
(910) 763-6053

OT Engineering, PLLC
8208 Masonboro Sound Rd.
Wilmington, North Carolina 28409
(910) 617.0641

PROJECT NO: 23068
RELEASE 01.10.24

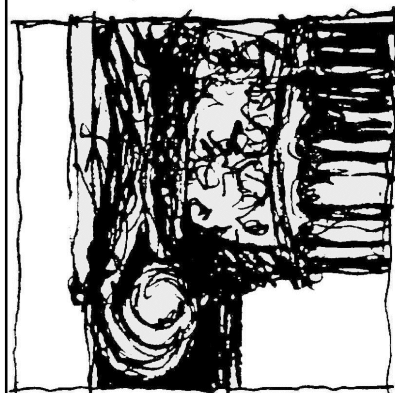
NO.	REV./SUB.	DATE



AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

Lisle Architecture
& Design, Inc.

614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



SHEET TITLE - NUMBER

Cover Sheet

CR

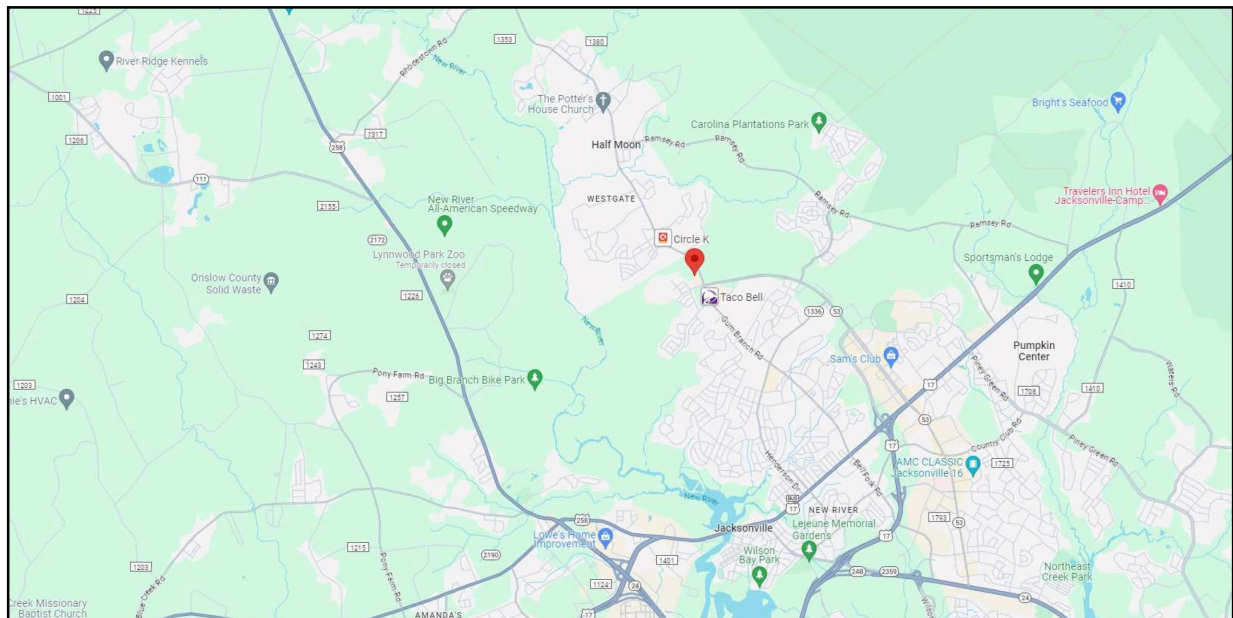
Abbreviations

A.C.T.	ACOUSTICAL CEILING TILE	INSUL.	INSULATION
ADJ.	ADJUSTABLE	JST.BRG.	JOIST BEARING
A.F.F.	ABOVE FINISHED FLOOR	LAV.	LAVATORY
ALUM.	ALUMINUM	MAX.	MAXIMUM
ALT.	ALTERNATE	M.B.S.	METAL BUILDING SUPPLIER
ANOD.	ANODIZED	MECH.	MECHANICAL
BD.	BOARD	MIN.	MINIMUM
BLDG.	BUILDING	MISC.	MISCELLANEOUS
BM.	BEAM	M.O.	MASONRY OPENING
BOT.	BOTTOM	MTD.	MOUNTED
BRG. HT.	BEARING HEIGHT	MTL.	METAL
CL	CENTER LINE	O.C.	ON CENTER
CLG.	CEILING	O.H.	OPPOSITE HAND
CLR.	CLEAR	PLYWD.	PLYWOOD
C.J.	CONTROL JOINT	P.T.	PRESSURE TREATED
C.M.U.	CONCRETE MASONRY UNIT	PT (D)	PAINT (ED)
COL.	COLUMN	REF.	REFER, REFERENCE
CONC.	CONCRETE	REINF.	REINFORCING
CONT.	CONTINUOUS	RM.	ROOM
DBL.	DOUBLE	ROT.	ROTATED
DET.	DETAIL	S.C.	SOLID CORE
DR.	DOWNSPOUT	SCHED.	SCHEDULE (ED)
D.S.	DRAWING	SHT.	SHEET
DWG.	DRAWING	SIM.	SIMILAR
E.J.	EXPANSION JOINT	SPEC.	SPECIFICATION (S)
ELEV.	ELEVATION	STD.	STANDARD
ELEC.	ELECTRICAL	STL.	STEEL
EQ.	EQUAL	STRUCT.	STRUCTURE (AL)
E.W.C.	ELECTRIC WATER COOLER	TEMP.	TEMPERED
EXP.	EXPANSION	T.O.M.	TOP OF MASONRY
EXT.	EXTERIOR	T.O.P.	TOP OF PARAPET
F.F.	FINISH FLOOR	T.O.S.	TOP OF STEEL
FIN.	FINISH (ED)	T.O.W.	TOP OF WALL
FLR.	FLOOR	T.S.	TUBULAR STEEL
F.O.C.	FACE OF CONCRETE	TYP.	TYPICAL
F.O.G.B.	FACE OF GRADE BEAM	U.N.O	UNLESS NOTED OTHERWISE
F.O.M.	FACE OF MASONRY	V.C.T.	VINYL COMPOSITION TILE
F.O.S.	FACE OF STUD	VERT.	VERTICAL
F.R.P.	FIBERGLASS REINFORCED PANEL	W.C.	WATER CLOSET
GA.	GAUGE, OR GAGE	WD.	WOOD
GL.	GLASS	W.H.	WATER HEATER
GYP. BD.	GYPSUM BOARD	W/	WITH
H.B.	HOSE BIB		
H.C.	HOLLOW CORE		
HDWR.	HARDWARE		
HT.	HEIGHT		
H.V.A.C.	HEATING/VENTILATING/ AIR CONDITIONING		

Legend

	COLUMN CENTERLINE
	DIMENSION TO CENTERLINE
	DIMENSION TO FACE OF MATERIAL
	ROOM NAME & NUMBER
	DOOR NUMBER
	WINDOW NUMBER
	INTERIOR WALL PARTITION TYPE
	SPOT ELEVATION OR HEIGHT ABOVE FINISHED FLOOR
	BUILDING OR INTERIOR ELEVATION
	WALL SECTION
	BUILDING SECTION
	ENLARGED DETAIL
	REF. DETAIL A/A5.1 - SHEET
	REVISION AND REVISION NUMBER

Vicinity Map



Index of Drawings

CR	Cover Sheet
CD1	Code Summary
LS1	Life Safety Plan
SP-1	ADA Notes and Details

ARCHITECTURAL

A1.1	Floor Plans
A6.1	Finish Plan
A6.2	Interior Elevations
A7.1	Reflected Ceiling Plan
A8.1	Schedules

PLUMBING

P0.1	Plumbing Schedules & Specifications
P1.1	Plumbing Piping Plans

MECHANICAL

M0.1	Mechanical Schedules & Specifications
M1.1	Mechanical Plans

ELECTRICAL

E0.1	Electrical Legend, Schedules and Specifications
E0.2	Panel Schedules and Electrical Riser
E1.1	Lighting Plans
E2.1	Power Plans

Name of Project: Augment Spa				Zip Code: 28540	
Address: 2457 Gum Branch Rd, Suite 1700					
Owner/Authorized Agent: _____		Phone # (____) _____		E-Mail: _____	
<input type="checkbox"/> City/County		<input checked="" type="checkbox"/> Private		<input type="checkbox"/> State	
Owned By: _____		<input checked="" type="checkbox"/> County: Jacksonville		<input type="checkbox"/> State	
Code Enforcement Jurisdiction: <input type="checkbox"/> City _____					
CONTACT: David Lisle					
DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	Lisle Architecture & Design	David Lisle	7903	(910) 763.6053	awilson@lislearchitect.com
Civil				()	
Electrical	OT MEP	Chris Lippincott	026003	(910) 617.0641	chris@otmep.com
Fire Alarm				()	
Plumbing	OT MEP	Chris Lippincott	026003	(910) 617.0641	chris@otmep.com
Mechanical	OT MEP	Chris Lippincott	026003	(910) 617.0641	chris@otmep.com
Sprinkler-Standpipe				()	
Structural				()	
Retaining Walls > 5 feet High				()	
Other				()	
("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)					

2018 NC BUILDING CODE: <input type="checkbox"/> New Building		<input type="checkbox"/> Shell/Core		<input checked="" type="checkbox"/> 1 st Time Interior Completions	
<input type="checkbox"/> Addition		<input type="checkbox"/> Phased Construction—Shell Core			
2018 NC EXISTING BUILDING CODE:		<input type="checkbox"/> Prescriptive		<input type="checkbox"/> Alteration Level I <input type="checkbox"/> Historic Property	
(check all that apply)		<input type="checkbox"/> Repair		<input type="checkbox"/> Alteration Level II <input type="checkbox"/> Change of Use	
		<input type="checkbox"/> Chapter 14		<input type="checkbox"/> Alteration Level III	
CONSTRUCTED: (date) _____		CURRENT USE(S) (Ch. 3): _____			
RENOVATED: (date) _____		PROPOSED USE(S) (Ch. 3): _____			
OCCUPANCY CATEGORY (Table 1604.5):		Current: _____		Proposed: _____	
BASIC BUILDING DATA					
Construction Type:		<input type="checkbox"/> I-A	<input type="checkbox"/> II-A	<input type="checkbox"/> III-A	<input type="checkbox"/> IV
(check all that apply)		<input type="checkbox"/> I-B	<input checked="" type="checkbox"/> II-B	<input type="checkbox"/> III-B	<input type="checkbox"/> V-A
Sprinklers: <input checked="" type="checkbox"/> No		<input type="checkbox"/> NFPA 13	<input type="checkbox"/> NFPA 13R	<input type="checkbox"/> NFPA 13D	<input type="checkbox"/> V-B
Standpipes: <input checked="" type="checkbox"/> No		<input type="checkbox"/> Class <input type="checkbox"/> I	<input type="checkbox"/> II	<input type="checkbox"/> III	<input type="checkbox"/> Wet <input type="checkbox"/> Dry
Primary Fire District:		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		Flood Hazard Area: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Special Inspections Required:		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			
GROSS BUILDING AREA TABLE					
Floor	Existing (sq ft)	New (sq ft)	Subtotal		
3rd Floor					
2nd Floor					
Mezzanine					
1st Floor	1750	1750			
Basement					
TOTAL	0	1750	1750		

ALLOWABLE HEIGHT INTERIOR UPFIT ONLY			
	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 504.4)			

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (w/ REDUCTION)				
Structural Frame Including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing walls and partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures—Exit							
Shaft Enclosures—Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

* Indicate section number permitting reduction.

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

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	VAN SPACES WITH			
			REGULAR WITH 5' ACCESS AISLE	132' ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE	EXIST'G		1			1				
	NEW							1	1	
	REQ'D		1			1		1	1	

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

Primary Occupancy Classification(s):		ALLOWABLE AREA				
Assembly	<input type="checkbox"/> A-1	<input type="checkbox"/> A-2	<input type="checkbox"/> A-3	<input type="checkbox"/> A-4	<input type="checkbox"/> A-5	
Business	<input checked="" type="checkbox"/>					
Educational	<input type="checkbox"/>					
Factory	<input type="checkbox"/> F-1 Moderate	<input type="checkbox"/> F-2 Low				
Hazardous	<input type="checkbox"/> H-1 Detonate	<input type="checkbox"/> H-2 Deflagrate	<input type="checkbox"/> H-3 Combust	<input type="checkbox"/> H-4 Health	<input type="checkbox"/> H-5 HPM	
Institutional	<input type="checkbox"/> I-1	<input type="checkbox"/> I-2	<input type="checkbox"/> I-3	<input type="checkbox"/> I-4		
I-3 Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2				
I-2 Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2				
I-3 Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
Mercantile	<input type="checkbox"/>					
Residential	<input type="checkbox"/> R-1	<input type="checkbox"/> R-2	<input type="checkbox"/> R-3	<input type="checkbox"/> R-4		
Storage	<input type="checkbox"/> S-1 Moderate	<input type="checkbox"/> S-2 Low		<input type="checkbox"/> High-piled		
	<input type="checkbox"/> Parking Garage	<input type="checkbox"/> Open	<input type="checkbox"/> Enclosed	<input type="checkbox"/> Repair Garage		
Utility and Miscellaneous	<input type="checkbox"/>					

Accessory Occupancy Classification(s): _____

Incidental Uses (Table 509): _____
This separation is not exempt as a Nonseparated Use (see exceptions).

Special Uses (Chapter 4 – List Code Sections): _____

Special Provisions: (Chapter 5 – List Code Sections): _____

Mixed Occupancy: ☐ No ☐ Yes Separation: _____ Hr. Exception: _____
☐ Non-separated Use (508.3)

□ 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.

Select one

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 ⁴ AREA	(C) AREA FOR FRONTAGE INCREASE ^{1, 5}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2, 3}

1. Frontage area increases from Section 506.2 are computed thus:
 - a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
 - b. Total Building Perimeter = _____ (P)
 - c. Ratio $(F/P) = \frac{\text{_____}}{\text{_____}}$ (F/P)
 - d. W = Minimum width of public way = _____ (W)
2. Unlimited area applicable under conditions of Section 507.
3. Maximum Building Area = total number of stories in the building $\times D$ (maximum 3 stories) (506.2).
4. The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
5. Frontage increase is based on the unsprinklered area value in Table 506.2.

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

Emergency Lighting: ☒ Yes ☐ No
Exit Signs: ☒ Yes ☐ No
Fire Alarm: ☐ Yes ☒ No
Smoke Detection Systems: ☐ Yes ☒ No
Carbon Monoxide Detection: ☐ Yes ☒ No

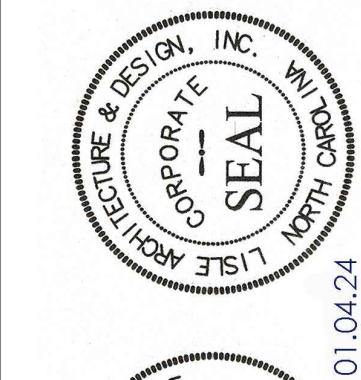
- ☐ Life Safety Plan Sheet #: L51
- ☐ Fire and/or smoke rated wall locations (Chapter 7)
- ☐ Assumed and real property line locations (if not on the site plan)
- ☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
- ☐ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- ☐ Occupant loads for each area
- ☐ Exit access travel distances (1017)
- ☐ Common path 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 (1010.1.9.7)
- ☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
- ☐ Location of doors equipped with hold-open devices
- ☐ Location of emergency escape windows (1030)
- ☐ The square footage of each fire area (202)
- ☐ 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

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

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	VAN SPACES WITH			
			REGULAR WITH 5' ACCESS AISLE	132' ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE	EXIST'G		1			1				
	NEW							1	1	
	REQ'D		1			1		1	1	

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)



AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

**Lisle Architecture
& Design, Inc.**

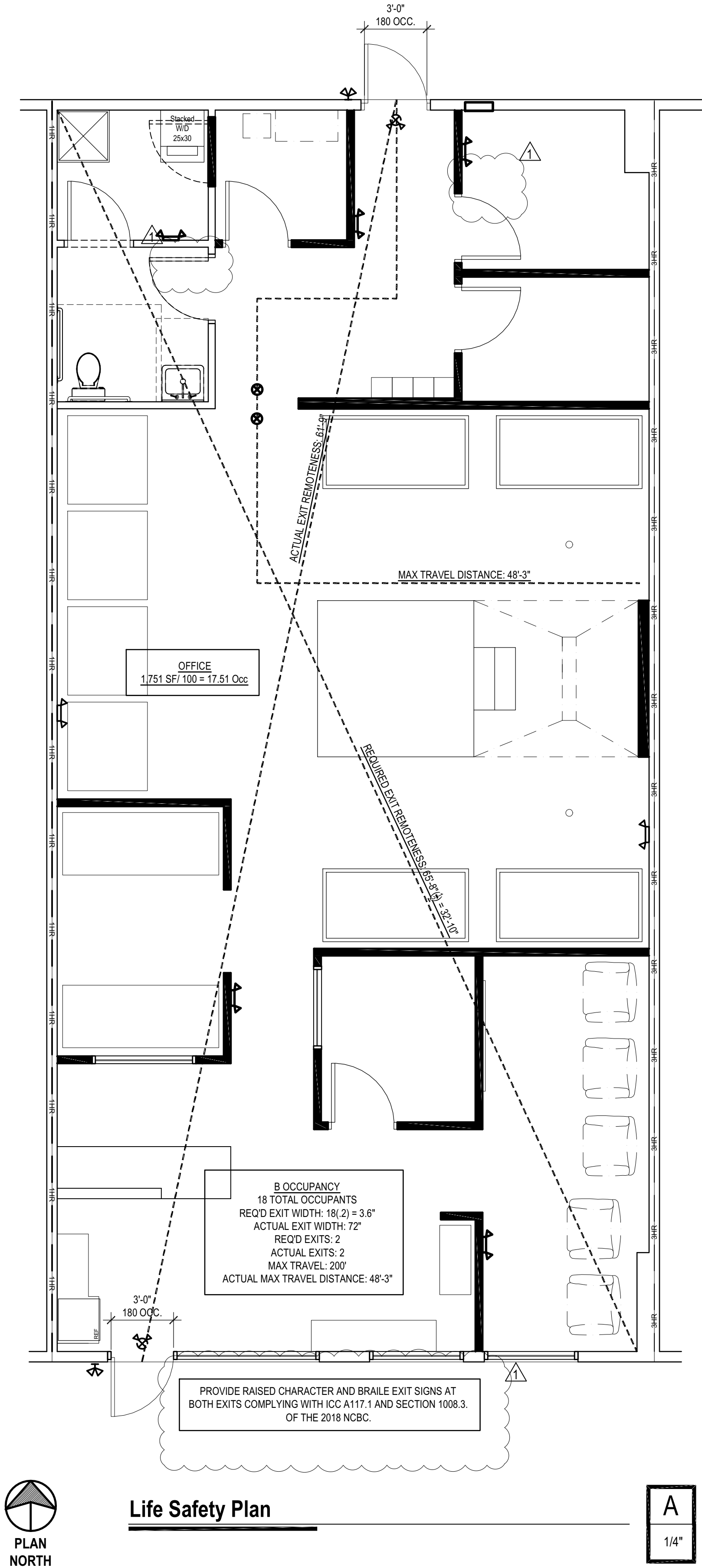
614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



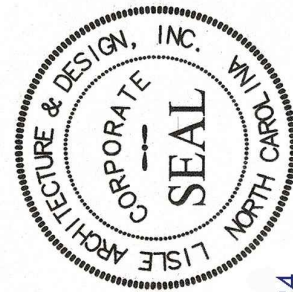
SHEET TITLE - NUMBER

Building Code Data Summary

CD1

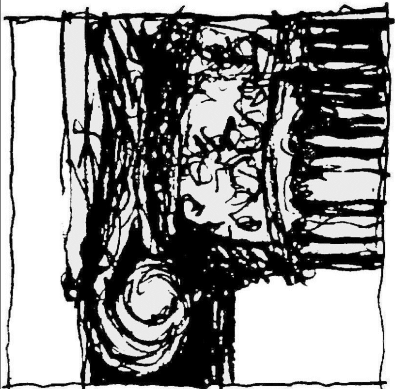


PROJECT NO: 23068	DATE	01.25.24
RELEASE 01.10.24	NO. REV./SUB.	PERMIT COMM.



AUGMENT SPA
 2457 Gum Branch Rd.
 Suite 1700
 Jacksonville, NC 28540

Lisle Architecture & Design, Inc.
 614 Market Street
 Wilmington, NC 28401
 (910) 763.6053
 Raleigh, NC (919) 980.0283
 www.LisleArchitecture.com



SHEET TITLE - NUMBER

Life Safety Plan

LS1

ADA Notes **

<p>1. Ramps used as a part of a means of egress shall have a running slope not steeper than one unit vertical in 12 units horizontal (8-percent slope). (2018 NCSCB 1012.2, ANSI-2009 405)</p> <p>2. A least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site. (2018 NCSCB 1104.2, ANSI-2009 4)</p> <p>Directional Signage indicating the route to the nearest like accessible element shall be provided at the following locations. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1</p> <p>1. Inaccessible building entrances; 2. Inaccessible public toilets and bathing facilities; 3. Elevator not serving an accessible route. ; 4. At each separate-sect toilet and bathing room indicating the location of the nearest family/assisted toilet or bathing room where provided in accordance with Section 1109.2.1.; 5. At exits and exit stairways serving a required accessible space, but not providing an approved accessible means or egress, signage shall be provided in accordance with Section 1009.10; 6. Where drinking fountains for persons using wheel chairs and drinking fountains for standing persons are not located adjacent to each other, directional signage shall be provided indicating the location of the other drinking fountain. (2018 NCSCB 1111.2, ANSI-2009 703)</p> <p>3. The required capacity of each door opening shall be sufficient for the occupant load thereof and shall provide a minimum clear width of 32 inches. Clear opening of doorways with swinging doors shall be measured between the face of the door and the stop with the door open 90 degrees. The height of the door openings shall be not less than 80 inches. (2018 NCSCB 1010.1.1, ANSI-2009 404.2.2.)</p> <p>4. Hand activated door opening hardware shall be centered between 34" to 48" above the floor. Latching and locking doors that are hand activated and which are in the path of travel, shall be operable with a single effort by lever type hardware, by panic bars, push-pull activating bars, or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. Locked exit doors shall operate as above in egress direction. Handles, pulls, latches, locks, and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever operated mechanism, push-type mechanism, and U-shape handles are acceptable designs. When sliding door are fully open, operating hardware shall be exposed and usable from both sides. (2018 NCSCB 1010.1, ANSI-2009 404.2.6)</p> <p>5. The width of the level and clear area on the side to which the door swings shall extend 24" past the strike edge of the door for exterior doors and 18" past the strike edge for interior doors. (ANSI-2009 404.2.3.2). Refer to Door Clearances this Sheet.</p> <p>6. Thresholds at doorways shall not exceed $\frac{1}{2}$ inches in height above the finished floor or landing for sliding door serving dwelling units or $\frac{1}{2}$ inch above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than $\frac{1}{2}$ inch at doorways shall be beveled with a slope not greater than one vertical unit to two units horizontal. (2018 NCSCB 1010.1.7, ANSI-2009 404.2.4.)</p> <p>7. The force for pushing or pulling open interior swinging doors, other than fire doors, shall not exceed 5 pounds. These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. For other swinging doors, as well as sliding and folding doors, the door latch shall release when subjected to a 15-pound force. The door shall be set in motion when subjected to a 30-pound force. The door shall swing to a full-open position when subjected to a 15-pound force. (2018 NCSCB 1010.1.3, ANSI-2009 404.2.8).</p> <p>8. Walks and sidewalks shall have a continuous slip resistant surface that shall not be interrupted by steps or abrupt changes in level greater than 1/4". If walks cross driveways or parking lots, then they shall blend to a common level by means of curb cuts, curb ramps or sloped areas whose gradient shall not exceed 1:12. Walks shall maintain a minimum of 48" in width. (2018 NCSCB 11104)</p> <p>9. Abrupt changes in level along any of accessible route shall not exceed 1/2". When changes in level do occur, they shall be beveled with a slope no greater than 1:2. (ANSI-2009 303).</p> <p>10. If a public walk has less than 60 inches clear width, then a 60 inches by 60 inches minimum clear passing space shall be provided at intervals not greater than 200 feet. The T-intersection of two walks is an acceptable passing space. (ANSI-2009 403.5.2).</p> <p>11. All public walks that terminate at accessible entrances shall have a clear floor area at the door(s) in compliance with the applicable requirements of ANSI-2009 Table 404.2.3.</p> <p>12. Circular handrail gripping surfaces shall be between 1-1/4" min. and 2" max. width or outside diameter. Noncircular handrail cross sections shall have a perimeter dimension of 4 inches minimum and 6 $\frac{1}{2}$ inches maximum, and a cross section dimension of 2 $\frac{1}{4}$ inches maximum. The shape shall provide an equivalent gripping surface. Handrail surfaces shall be smooth with no sharp edges. (2018 NCSCB 1014.3, ANSI-2009 505.7)</p> <p>13. Clear space between a handrail and a wall or other surface shall be not less than 1-1/2 inches. A handrail and a wall other surface adjacent to the handrail shall be free of any sharp or abrasive objects. (2018 NCSCB 1014.7, ANSI-2009 505.5).</p> <p>14. Handrail end shall return to a wall, guard or the walking surface or shall be continuous to the handrail of an adjacent flight of stairs or ramp run. (2018 NCSCB 1014.6, ANSI-2009 505.10)</p> <p>15. If alarm indicating appliances are provided, then audible and visual appliances complying with ANSI-2009 702 shall be provided.</p> <p>16. The mounting height for controls and operating mechanisms in accessible spaces, along accessible routes, or part of accessible elements (e.g. a light switch, dispenser control, or Automatic Teller Machine) shall comply with ANSI-2009 Chapter 3.</p> <p>Forward Reach: (ANSI-2009 308.2)</p> <p>For an <i>unobstructed</i> forward reach, controls and operating mechanisms shall be located between 15 inches minimum to 48 inches maximum above the finished floor or ground level.</p> <p>For a forward reach over an <i>obstruction</i> the maximum height of any control or operating mechanism above the finished floor or ground level shall be:</p> <p>(1) 48" if the depth of the obstruction is less than 20 inches; or</p> <p>(2) 44" if the depth of the obstruction is 20 inches to 25 inches</p> <p>Parallel Reach: (ANSI-2009 308.3)</p> <p>For an <i>unobstructed</i> 10 inches maximum side reach, controls and operating mechanisms shall be located 9 inches minimum to 54 inches maximum above the finished floor or ground level.</p> <p>For a side reach over an <i>obstruction</i>, the obstruction shall have a 34 inches maximum height and a 24 inches maximum depth. Controls and operating mechanisms shall be located 46 inches maximum above the finished floor or ground level.</p> <p>17. Electrical and communications system receptacles mounted on, or built in to, walls or partitions shall be located 15 inches minimum above the finished floor or ground level. (ANSI-2009 308).</p> <p>18. The international symbol of accessibility shall be the standard used to identify facilities that are accessible to, and usable by, physically disabled persons as set forth in these building standards and ADA. The symbol specified above shall consist of a white figure on a blue background. The blue shall be equal to color number 15090 in federal standard 595A. All Signage shall comply with Chapter 11 of the 2018 NC State Building Code (2018 NCSCB 1111.1).</p> <p>19. At kitchen sinks, faucet controls, and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5lbs. Lever-operated, push-type, and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds. Sinks shall be mounted on counter surface no higher than 34" above finish floor and shall provide knee clearance of 27" high (min.) x 30" wide (min.) x 19": deep (min.) underneath sink. (ANSI-2009 309.4).</p> <p>20. Toilet flush controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. Controls for the flush valves shall be mounted on the wide side of the toilet areas, no more than 44" above the floor. The force required to activate controls shall be no greater than 5 lbs. (ANSI-2009 604.6).</p>	<p>21. Toilet Accessories: (ANSI-2009 606)</p> <p>A. A clear floor space of 30" x 48" complying with Section 305 shall be provided in front of a lavatory to allow a forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend into knee and toe space underneath the lavatory.</p> <p>B. Mirrors shall be mounted with the bottom edge no higher than 40" from the floor. Towel, Sanitary Napkins, Waste Receptacles. Where towel, sanitary napkins, waste receptacles, and other similar dispensing and disposal fixtures are provided, at least one of each type shall be located with all operable parts, including coin slots, within 40" from the finished floor.</p> <p>C. Toilet Tissue Dispensers. Toilet tissue dispensers shall be located on the wall within 12" of the front edge of the toilet seat.</p> <p>22. Height and Clearances. Lavatories shall be mounted with the rim or counter surface no higher than 34"(865mm) above the finished floor. Provide a clearance of at least 29"(735mm) from the floor to the bottom of the apron. Knee and toe clearance shall comply with Restroom Details this sheet. Lavatories shall be mounted with a minimum distance of 18" to the centerline of the fixture. (ANSI-2009 606.3)</p> <p>23. Clear Floor Space. A clear floor space of 30" x 48" (760mm x 1220mm) complying with ADA 11.6 shall be provided in front of a lavatory to allow forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend a maximum of 19"(485mm) underneath the lavatory. See Restroom Details this sheet. (ANSI-2009 606.2)</p> <p>24. Exposed Pipes and Surfaces. Hot water and drain pipes under lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories. (ANSI-2009 606.6)</p> <p>25. Faucets shall comply with ANSI-2009 606.4. Lever-operated, push-type, and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.</p> <p>26. Grab bars, tub and shower seats, fasteners and mounting devices shall be designed for 250 lbs. per linear foot load. (ANSI-2009 610.4)</p> <p>27. Grab bars shall be located on each side, or one side and the back of the physically disabled toilet stall or compartment and shall be securely attached 33" minimum and 36" maximum above and parallel to the floor. (ANSI-2009 609.4.1).</p> <p>28. The diameter or width of the gripping surface of the grab bar shall be 1 1/4" to 1 1/2" or the shape shall provide an equivalent gripping surface. (ANSI-2009 609.2).</p> <p>29. Alcoves. For Parallel approach where the clear floor space is positioned for parallel approach, the alcove shall be 60 inches minimum in width where the depth exceeds 15 inches. For Forward Approach where the clear floor space is positioned for a forward approach, the alcove shall be a minimum of 36 inches minimum where the depth exceed 24 inches. (ANSI-2009 305.7)</p> <p>30. Water closet compartments shall be equipped with a door that has an automatic closing device, and shall have a clear unobstructed opening width of 32" when located at the end and 34" when located at the side with the door positioned at an angle of 90 degrees from its closed position. Except for door opening widths and door swings, a clear unobstructed access not less than 44" shall be provided to water closet compartments designed for use for the handicapped/people with disabilities and the space immediately in front of a water closet compartment shall be not less than 48" as measured at right angles to compartment door in it's closed position. (ANSI-2009 604.9)</p> <p>31. Dining & Work Surfaces shall have a min width of 36" and a max height of 36" (ANSI-2009 902) and shall have a 30"Wx48"L minimum clear floor space.</p> <p>32. Elevator operation shall be automatic with each car equipped with a self-leveling device that will automatically bring the car to the floor landings with a tolerance of 1/2 inch under rated loading to zero loading conditions. Self-leveling shall be automatic and independent of the elevator operating mechanism and shall correct for over-travel and under-travel. (ANSI-2009 407.4.4).</p> <p>33. Automatic, power operated, horizontal sliding car and hoistway doors shall be provided. (ANSI-2009 407.3).</p> <p>34. Cabs with center opening doors shall have an 80 inches minimum width and a 51 inches minimum depth. The depth of the cab from the inside face of the cab doors to the wall opposite shall be 54 inches minimum. (ANSI-2009 407.4.1).</p> <p>35. Cabs with side-slide doors shall have a 68 inches minimum width and 51 inches minimum depth. The depth of the cab from the inside face of the cab floor(s) to the wall opposite shall be 54 inches minimum. (ANSI-2009 407.4.1)</p> <p>WARNING: Other codes, including but not limited to : Fire Code, Building Code, Elevator Code and Regulations adopted by the State Fire Marshall may contain more restrictive provisions regarding elevator cab size. Check with the appropriate enforcing officials for details.</p> <p>36. Regardless of the door position, the clear opening shall be 36 inches minimum. (ANSI-2009 407.4.1).</p> <p>37. A 1-1/4" maximum gap shall be permitted between the car platform sill and the edge of any hoistway landing. (ANSI-2009 407.4.3)</p> <p>38. Call buttons: The common horizontal centerline shall be a nominal 42 inches above the finished floor (36" min. and 48" max. height), except for the photo electric tube by-pass switch, emergency controls shall be grouped in one location in or adjacent to the bottom of the panel and no lower than 2-1/1" from the floor. For multiple controls, one set must comply with the height requirements. The emergency telephone shall be positioned at 4'-0" maximum above the floor with a 2'-5" minimum cord. (ANS</p>
--	--

Door Clearances

(A) Latch Side Approach—Sliding Doors and Folding Doors

(B) Slide Side Approach—Sliding Doors and Folding Doors

(C) Front Approach—Sliding Doors and Folding Doors

NOTE: All alcoves shall comply with the clearances for front approaches

(D) Front Approaches—Swinging Doors

(E) Two Hinged Doors in Series

(F) Latch Side Approach — Swinging Doors

NOTE: All doors in alcoves shall comply with the clearances for front approaches.

(G) Hinge Side Approaches—Swinging Doors

Toilet Stalls - Plans

(B) Clear Floor Space At Water Closet

(A) Clear Floor Space at Lavatories

Restroom Signage

PROPORTIONS INTERNATIONAL SYMBOL OF ACCESSIBILITY

RESTROOM SIGNAGE 1" THICK TEXT & GRAPHIC TO BE CONTRASTING COLOR TO BLUE BACKGROUND (MOUNT AT 60" A.F.F.)

Restroom Details

The image contains three architectural drawings. The leftmost drawing is a side elevation of a toilet, showing a 3'-5" width, a 12" minimum height to the top of the bowl, a 42" minimum height to the top of the pedestal, and a 12" maximum height to the top of the pedestal. It also shows a 1'-1/2" wide stall door and a 12" maximum height to the top of the door. The middle drawing is a side elevation of a sink with a mirror, showing a 36" minimum width, a 16" height to the top of the sink, and a 17" minimum height to the top of the mirror. The rightmost drawing is a side elevation of a wheelchair accessible stall, showing a 27" minimum width, a 27" minimum height to the top of the stall, a 27" minimum height to the top of the door, a 34" maximum height to the top of the door, and a 40" maximum height to the top of the door. It also shows a 12" minimum height to the top of the bowl, a 12" minimum height to the top of the pedestal, and a 12" maximum height to the top of the pedestal. The drawings are labeled with dimensions and components such as 'TOILET', 'SINK', 'MIRROR', 'LEVER VALVE', 'PROTECTED PIPING', and '1'-1/2" W RAIL (SS OR CHROME)'.

General Notes

1. THESE GENERAL NOTES SHALL APPLY TO ALL WORK AND ALL DRAWINGS IN THIS SET AND SHALL EXTEND TO ANY CHANGES, EXTRAS, OR ADDITIONS AGREED TO DURING THE COURSE OF THE WORK.
2. DURING BIDDING OR PLACING THE CONTRACTOR MAKE KNOWN TO ARCHITECT ANY LIMITATIONS, EXCLUSIONS, OR MODIFICATIONS TO THE PROJECT DURING THE BIDDING PHASE OF THE PROJECT. UNLESS NOTED THEY WILL BE PRESUMED INCLUDED.
3. ALL CONTRACTORS TO BE INVOLVED IN THIS WORK SHALL CARRY PROPERTY DAMAGE AND PUBLIC LIABILITY INSURANCE AS REQUIRED BY GOVERNMENTAL AGENCIES HAVING JURISDICTION AND COMPLY WITH STATUTORY REQUIREMENTS FOR DISABILITY AND WORKMENS COMPENSATION. THEY WILL COMPLY WITH ALL RULES AND REGULATIONS DICTATED BY THE OWNER AND THE CONDITIONS OF THE JOB. INSURANCE SHALL PROTECT THE OWNER AND ANY OTHER GROUP TO BE NAMED FROM LIABILITY DUE TO THE CONTRACTORS NEGLIGENCE. A PROPERLY EXECUTED CERTIFICATE OF INSURANCE, AIA DOCUMENT G705, SHALL BE SUBMITTED TO THE ARCHITECT FACILITIES DEPARTMENT PRIOR TO THE COMMENCEMENT OF ANY WORK.
4. DO NOT SCALE DRAWINGS; DIMENSIONS SHALL GOVERN. DETAILS SHALL GOVERN OVER PLANS AND ELEVATIONS, LARGE SCALE DETAILS SHALL GOVERN OVER SMALL SCALE DETAILS.
5. THERE SHALL BE NO SUBSTITUTION OF MATERIALS WHERE A MANUFACTURER IS SPECIFIED. WHERE THE TERM "OR APPROVED EQUIV" IS USED THE ARCHITECT ALONE SHALL DETERMINE THE EQUALITY BASED UPON THE INFORMATION SUBMITTED BY THE CONTRACTOR.
6. THE GENERAL CONTRACTOR SHALL REVIEW ALL PLANS AND SPECIFICATIONS AND VERIFY ALL GOVERNING DIMENSIONS OF THE BUILDING PRIOR TO THE COMMENCEMENT OF WORK. HE SHALL EXAMINE ALL ADJOINING WORK OR AREAS UPON WHICH THE PERFORMANCE OF HIS WORK IS IN ANY WAY DEPENDENT. ANY VARIATIONS OR DISCREPANCIES SHALL BE REPORTED WITH ALL DUE EXPEDIENCY TO THE ARCHITECT PRIOR TO THE FABRICATION OR ERECTION OF THE WORK IN QUESTION. THE REPRESENTATIVE TO CONTACT IS DAVID LISLE - 910-763-6053
7. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISTRIBUTION OF DRAWINGS TO ALL TRADES UNDER HIS JURISDICTION.
8. ANY INFORMATION REQUIRED BY THE CONTRACTORS THAT IS NOT SHOWN ON DRAWINGS OR OTHER CONTRACT DOCUMENTS SHALL BE REQUESTED BY THE GENERAL CONTRACTOR FROM THE ARCHITECT.
9. THE CONTRACTOR SHALL BE ANSWERABLE TO THE ARCHITECT FOR HIS WORK AND SHALL NOT ACCEPT INSTRUCTION WITHOUT VERIFICATION FROM THE ARCHITECT. CONTRACTOR WILL BE LIABLE FOR ANY EXPENSE CAUSED BY THE EXECUTION OF SUCH WORK WITHOUT SUCH VERIFICATION AND FOR THE EXPENSES CAUSED BY ITS REMOVAL OR CORRECTION.
10. A REPRESENTATIVE OF THE GENERAL CONTRACTOR AUTHORIZED TO DISCUSS THE WORK AND RECEIVE INSTRUCTIONS SHALL BE AT THE JOB SITE AT ALL TIMES THAT WORK IS IN PROGRESS.
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR MISCELLANEOUS STEEL WORK, MOVABLE PARTITION WORK, ALL WOODWORK, DOORS, FRAMES, HARDWARE, FINISHES AND SUCH WORK AS MAY BE SPECIFICALLY REQUESTED IN THE CONTRACT DOCUMENTS TO THE ARCHITECT FOR WRITTEN APPROVAL. SHOP DRAWINGS SHALL SHOW ALL DIMENSIONS AND CONDITIONS AND SHALL BE SUBMITTED IN TRIPLICATE. WHEN THE ARCHITECT REQUIRES THE REVISION AND RESUBMITTAL OF SHOP DRAWINGS, SUCH RESUBMITTAL SHALL OCCUR WITHIN ONE (1) WEEK OF NOTIFICATION OF SUCH REQUIREMENT.
12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXTENT, NATURE, AND SCOPE OF WORK DESCRIBED IN THE CONTRACT DOCUMENTS AND WILL COORDINATE WITH THE ARCHITECT, OR THE ARCHITECTS REPRESENTATIVE. THE GENERAL CONTRACTOR IS TO PROVIDE ALL LABOR AND MATERIALS NECESSARY TO EXECUTE ALL WORK AS SHOWN ON THESE DRAWINGS WITH THE EXCEPTION OF THOSE ITEMS NOTED AS SEPARATE CONTRACTS OR "N.I.C." HE SHALL BE RESPONSIBLE FOR COORDINATING THIS WORK WITH THAT OF ALL OTHER TRADES INCLUDING THOSE OPERATING UNDER SEPARATE CONTRACT WITH THE LANDLORD AND/OR MSOW
13. ALL WORK SHALL BE PERFORMED BY SKILLED AND QUALIFIED WORKMEN AND IN ACCORDANCE WITH THE BEST PRACTICES OF THE TRADES INVOLVED. CARE SHALL BE TAKEN TO ENSURE COMPLIANCE WITH BUILDING REGULATIONS AND/OR GOVERNMENTAL LAWS, STATUTES, OR ORDINANCES CONCERNING THE USE OF UNION LABOR.
14. ALL MATERIALS SHALL BE NEW, UNUSED, AND OF THE HIGHEST QUALITY IN EVERY RESPECT UNLESS OTHERWISE NOTED.
15. ALL WORK SHALL BE ERECTED AND INSTALLED PLUMB, LEVEL, SQUARE AND TRUE AND IN PROPER ALIGNMENT.
16. MANUFACTURED MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS UNLESS OTHERWISE NOTED.
17. WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF GOVERNMENTAL AGENCIES HAVING JURISDICTION AND SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL CONSTRUCTION, SAFETY, AND SANITARY LAWS, CODES, STATUTES, AND ORDINANCES. ANY DISCREPANCIES, VARIATIONS, OR OMISSIONS IN THE CONTRACT DOCUMENTS SHALL BE REPORTED PROMPTLY TO THE ARCHITECT.
18. ALL FEES, TAXES, PERMITS, APPLICATIONS, AND CERTIFICATES OF INSPECTION AND THE FILING OF ALL WORK WITH GOVERNMENTAL AGENCIES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
19. TIME IS OF THE ESSENCE AND THE GENERAL CONTRACTOR SHALL KEEP SUFFICIENT WORKMEN ON THE JOB SITE AT ALL TIMES TO PERFORM THE WORK IN THE MOST EXPEDITIOUS MANNER CONSISTENT WITH GOOD WORKMANSHIP, SOUND BUSINESS PRACTICE, AND THE BEST INTERESTS OF THE OWNER.
20. SHOULD OWNER REQUIRE WORK TO BE PERFORMED ON PREMIUM TIME ABOVE AND BEYOND THAT IMPLIED BY THE CONTRACT DOCUMENTS, THE ARCHITECT SHALL GIVE WRITTEN NOTICE AND THE CONTRACTOR SHALL COMPLY THEREWITH.
21. EACH TRADE WILL BE EXPECTED TO PROCEED IN A FASHION THAT WILL NOT DELAY OR DETAIN THE TRADE FOLLOWING THEM.
22. ALL WORK SHALL BE COMPLETED FOR THE AGREED CONTRACT PRICE WITHOUT RECOURSE TO LABOR STOPPAGES OR REVISIONS OF GOVERNING REGULATIONS, LAWS AND CODES ABOUT WHICH THE CONTRACTOR COULD HAVE REASONABLY BEEN EXPECTED TO HAVE HAD FOREWARNING AND TO HAVE MADE APPROPRIATE CONTINGENCY PLANS PRIOR TO THE SIGNING OF THE CONTRACT.
23. THE CONTRACTOR SHALL NOT PROCEED WITH ANY ADDITIONAL WORK OR CHANGES FOR WHICH HE EXPECTS ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT. FAILURE TO OBTAIN SUCH AUTHORIZATION SHALL INVALIDATE ANY CLAIM FOR SUCH EXTRA COMPENSATION.
24. ALL INSTALLED PLUMBING, MECHANICAL, AND ELECTRICAL EQUIPMENT SHALL OPERATE AS QUIETLY AND AS FREE OF VIBRATION AS POSSIBLE.
25. ALL WORK AND MATERIALS SHALL BE GUARANTEED AGAINST DEFECTS IN DESIGN, WORKMANSHIP, AND MATERIALS FOR A PERIOD OF AT LEAST ONE (1) YEAR FROM THE ARCHITECTS APPROVAL FOR FINAL PAYMENT.
26. CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE OF ACCUMULATIONS OF WASTE MATERIALS OR RUBBISH CAUSED BY HIS OPERATIONS CONTRACTOR SHALL CONFINE HIS OPERATIONS FOR REMOVAL TO SUCH METHODS AS MAY BE AGREEABLE TO THE OWNER. PREMISES TO BE SWPT CLEAN OF RELATED CONSTRUCTION DEBRIS DAILY.
- 27.

27. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL NOTIFY THE ARCHITECT WHICH SHALL COMPILE A "PUNCH LIST" OF CORRECTIONS AND UNSATISFACTORY AND/OR INCOMPLETE WORK. FINAL PAYMENT WILL BE CONTINGENT ON THE COMPLETION OF THESE ITEMS UNDER THE TERMS OF THE CONTRACT.
28. DURING THE COURSE OF CONSTRUCTION, ACTUAL LOCATIONS SHALL BE INDICATED TO SCALE IN CONTRASTING INK ON THE DRAWINGS FOR ALL RUNS OF MECHANICAL AND ELECTRICAL WORK INCLUDING SITE UTILITIES AND CONCEALED DEVIATIONS FROM THE DRAWINGS. UPON COMPLETION OF THE PROJECT, INCLUDING THE PUNCH LIST, THIS INFORMATION SHALL BE TRANSFERRED TO A SET OF PDF DRAWINGS. THIS SET SHALL BE CONSPICUOUSLY MARKED "AS BUILT SET" AND RETURNED TO THE ARCHITECT WITH ONE (1) COPY TO THE OWNER.
29. DRAWINGS IN THIS SET AND THE DESIGNS THEREON ARE THE PROPERTY OF LISLE ARCHITECTURE & DESIGN INC.
30. IT IS INTENDED THAT THE GENERAL CONTRACTOR PROVIDE A COMPLETE JOB AND ANY OMISSIONS IN THESE NOTES OR IN THE OUTLINE OF WORK SHALL NOT BE CONSTRUED AS RELIEVING THE GENERAL CONTRACTOR OF SUCH RESPONSIBILITIES AS ARE IMPLIED BY THE SCOPE OF THE WORK EXCEPT FOR ITEMS SPECIFICALLY NOTED.
31. SHOULD ANY PORTION OF THE CONTRACT DOCUMENTS PROVE TO BE, FOR WHATEVER REASONS, UNENFORCEABLE, SUCH UNENFORCEABILITY SHALL NOT EXTEND TO THE REMAINDER OF THE CONTRACT NOR SHALL IT VOID ANY OTHER PROVISION OF THE CONTRACT UNLESS IT BE SHOWN THAT THE CONTRACT OR THE PROVISIONS THEREOF ARE DEPENDENT UPON THE UNENFORCEABLE PARTS FOR THEIR MEANING.
32. THROUGHOUT THE DURATION OF THE PROJECT THE GENERAL CONTRACTOR SHALL REFRAIN FROM ACTIONS THAT COULD LEAD TO THE FILING OF A CLAIM OF LIEN AGAINST OWNER BY SUBCONTRACTORS OR SUPPLIERS OF LABOR, MATERIALS, SERVICES, OR EQUIPMENT OR ANY OTHER INDIVIDUAL, COMPANY, OR ENTITY SO ENTITLED UNDER GOVERNING LAWS AND REGULATIONS UNLESS HE CAN SHOW REASONABLE AND JUSTIFIABLE CASE. APPROVAL FOR FINAL PAYMENT SHALL BE CONTINGENT UPON THE GENERAL CONTRACTORS OBTAINING AND FURNISHING TO THE ARCHITECT SIGNED RELEASES FROM SUCH INDIVIDUALS, COMPANIES, OR ENTITIES.
33. THE CONTRACTOR SHALL MAKE KNOWN TO THE ARCHITECT ANY DISCREPANCIES THROUGHOUT THE DRAWINGS PRIOR TO CONSTRUCTION. IF THE CONTRACTOR DOES NOT MAKE THEM KNOWN, HE SHALL TAKE RESPONSIBILITY AND LIABILITY FOR THE MOST EXPENSIVE OR HIGHEST QUALITY ITEM.

Upfit Notes

1. BEFORE COMMENCING WORK THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY AREAS THAT HAVE NOT BEEN SATISFACTORILY COMPLETED BY THE LANDLORD AND/OR THE PREVIOUS TENANT TO MEET THE BASE BUILDING REQUIREMENTS (FIREPROOFING, DUCTWORK, CONDITION OF SLAB, CONDITION OF CORE AND DEMISING WALLS, UTILITY HOOKUPS, ELECTRICAL PANELS, ETC.).
2. GREAT CARE SHALL BE EXERCISED TO ASSURE THAT THE BUILDING SHALL BE PROTECTED FROM DAMAGE THAT COULD OCCUR BECAUSE OF THIS WORK AND CONTRACTORS SHALL PROVIDE PROTECTION FOR EXISTING AREAS AND NEW WORK AREAS. ANY DAMAGES DUE TO THIS WORK, OR ACCIDENTS SHALL BE REPAIRED, REPLACED, OR PATCHED AT THE DISCRETION OF THE ARCHITECT. THE CONTRACTOR SHALL BEAR FINANCIAL RESPONSIBILITY FOR SUCH DAMAGE AND ANY WORK UNDERTAKEN TO CORRECT IT.
3. THE CONTRACTOR SHALL EXERCISE GREAT CARE IN PROTECTING ALL MATERIALS EXISTING ON THE JOB FROM DAMAGE AND SHALL MAINTAIN PROTECTION FOR ALL TRAFFIC AREAS OF THE BUILDING TO BE USED DURING THE EXECUTION OF WORK RELATING TO THIS EQUIPMENT WITH THE UNDERSTANDING THAT THE CONTRACTOR WILL RECTIFY ANY DAMAGE ATTRIBUTABLE TO HIS OPERATIONS.
4. IT IS EXPECTED THAT SUFFICIENT LABOR WILL BE PROVIDED SO THAT ACTIVITY FOR ANY GIVEN TRADE WILL NOT BE LIMITED TO ONLY ONE PART OF THE TOTAL WORK AREA.
5. EXISTING CONVECTOR/RADIATOR/PERIMETER ENCLOSURES ARE TO BE COVERED DURING THE WORK AND PROPERLY CLEANED AND VACUUMED PRIOR TO REINSTALLATION AND/OR THE COMPLETION OF CONSTRUCTION.
6. THE GENERAL CONTRACTOR SHALL NOT PLACE CEILING HVAC REGISTERS OR DIFFUSERS WHEREVER SHELVING, FILES, OR OVER FILE UNITS ARE INDICATED ON THE DRAWINGS.
7. THE GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL EXIT SIGNS AS REQUIRED BY LOCAL CODES UPON APPROVAL OF SIGN LOCATIONS AND STYLES BY THE ARCHITECT AND BUILDING OFFICIALS HAVING JURISDICTION.

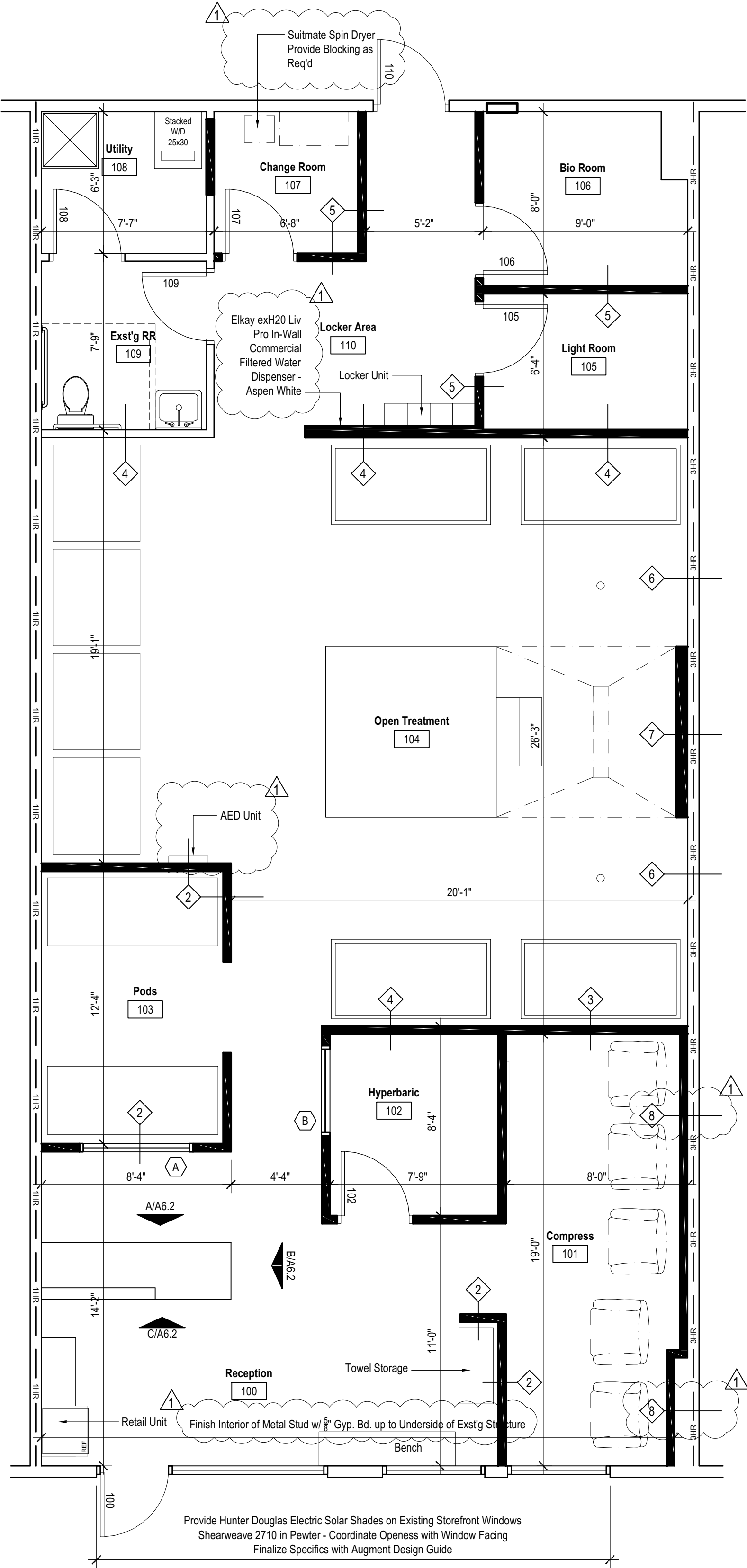
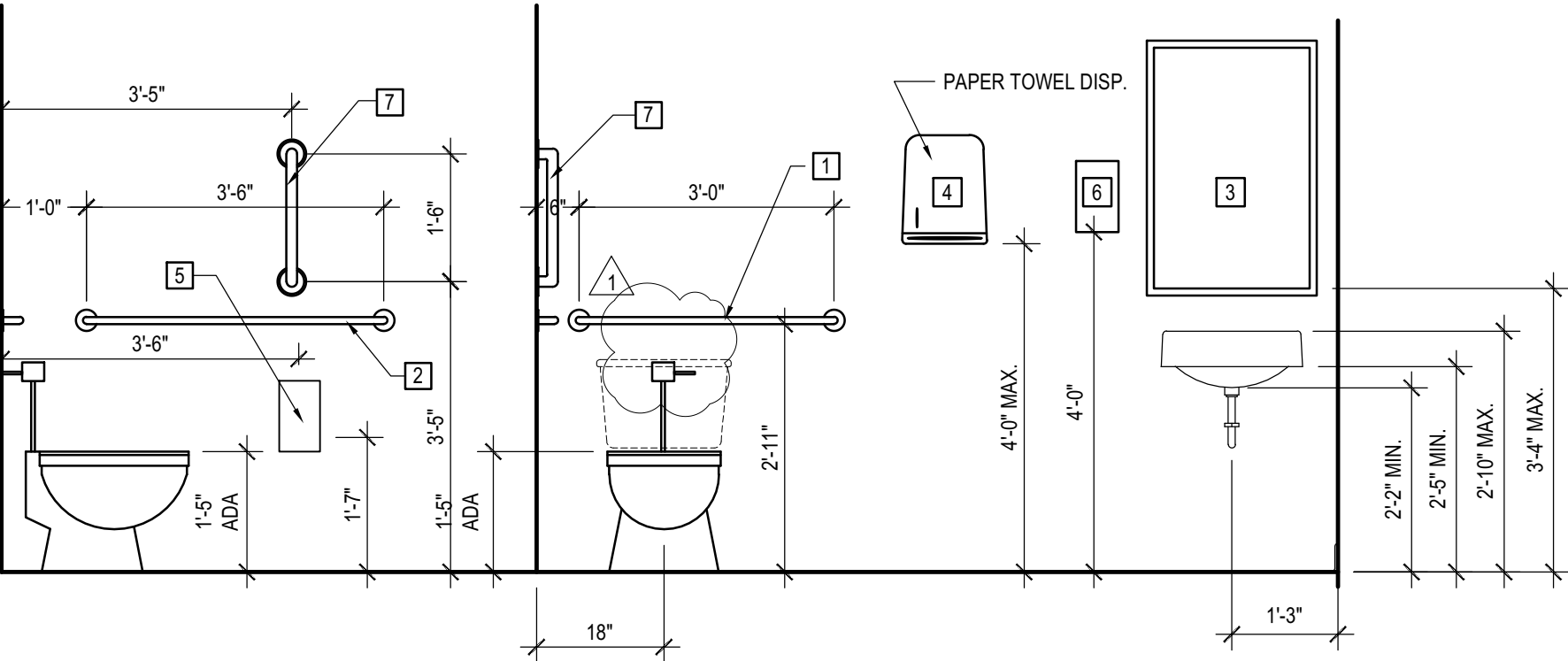
Wall Type Schedule	
1	3-5/8" 20 GA Mtl. Studs up to Underside of Exst'g Structure w/ 5/8" Gyp. Bd. Each Side (Green Board in Wet Areas) And Finish as Scheduled
2	3-5/8" 20 GA Mtl. Studs up to 10' AFF w/ 5/8" Gyp. Bd. Each Side (Green Board in Wet Areas) And Finish as Scheduled
3	3-5/8" 20 GA Mtl. Studs up to 10' AFF w/ 5/8" Cementitious Board on Open Treatment Side and 5/8" Gyp. Bd. Opp Side And Finish as Scheduled
4	3-5/8" 20 GA Mtl. Studs up to Underside of Exst'g Structure w/ 5/8" Cementitious Board on Open Treatment Side and 5/8" Gyp. Bd. Opp Side And Finish as Scheduled
5	3-5/8" 20 GA Mtl. Studs up to 6" Above Lay-In Ceiling w/ 5/8" Gyp. Bd. Each Side (Green Board in Wet Areas) And Finish as Scheduled
6	Existing Tenant Demising Wall - Provide 5/8" Cementitious Board Behind New Tile
7	8" 20 GA Mtl. Studs up to 10' AFF w/ 5/8" Cementitious Board And Finish as Scheduled.
8	Furr out Exst'g Demising Wall with 3-5/8" 20 GA Mtl. Studs up to Underside of Exst'g Structure w/ 5/8" Gyp. Bd. Each Side And Finish as Scheduled

NOTE: All Walls are Type 1 Unless Otherwise Noted

- GENERAL NOTES:
- Towel Storage/ Retail Unit/ Lockers by California Closets. Coordinate with Owner/ Augment Design Guidelines
 - Coordinate Bench with Augment Design Guidelines
 - Refer to Augment Design Guidelines for all Furniture Selections
 - Refer to Augment Design Guidelines for Window/ Wall Graphics
 - Refer to Augment Design Guidelines for all Equipment Specifications

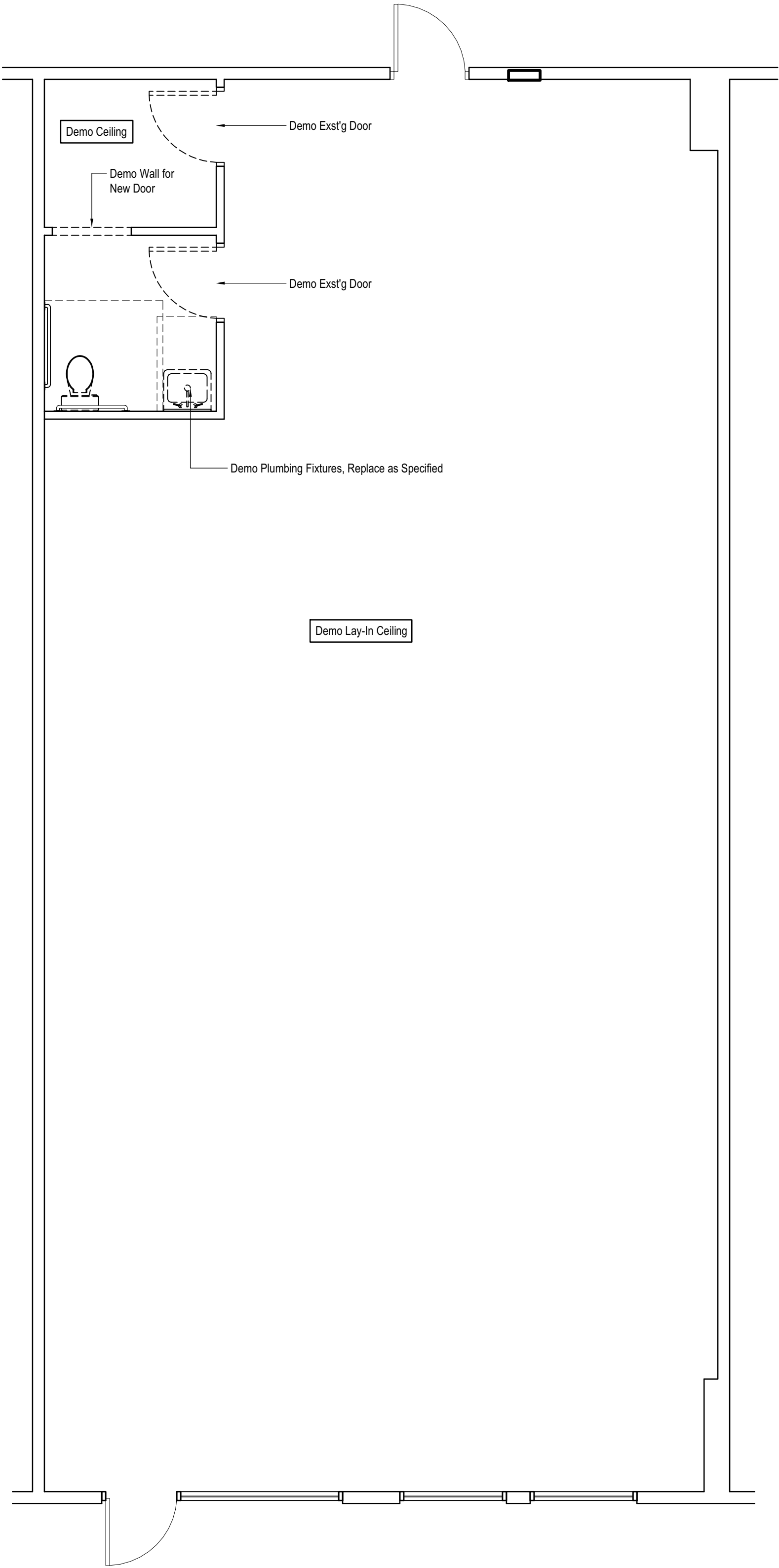
TOILET ACCESSORIES SCHEDULE	
ITEM	MANUFACTURER
1	36" GRAB BAR
2	42" GRAB BAR
3	FRAMED MIRROR
4	HAND DRYER
5	TOILET PAPER DISPENSER
6	SOAP DISPENSER
7	18" GRAB BAR
8	HAND TOWEL DISPENSER
9	TRASH RECEPTACLE
10	AIR FRESHENER DISPENSER

Note:
Substitutions Acceptable per Owner and Architects Approval.
Verify All Selections with Augment Design Guidelines/ Owner Prior to Purchasing



New Floor Plan

B
1/4"

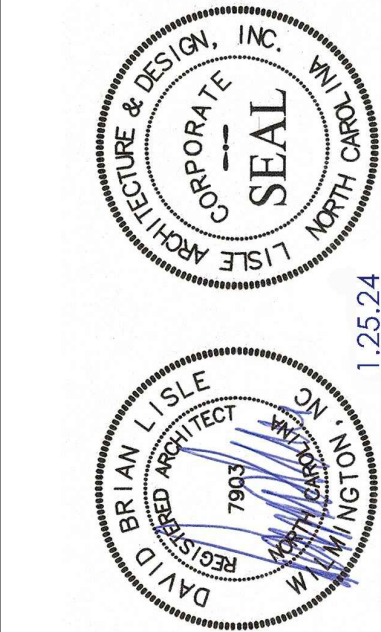


Demo Floor Plan

A
1/4"

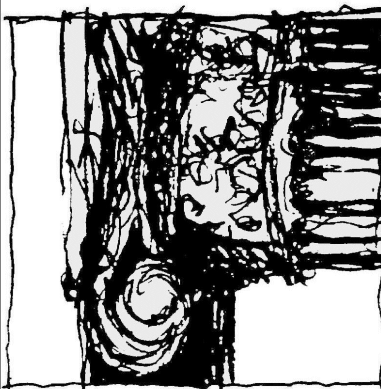


PROJECT NO: 23068	DATE
RELEASE 01.10.24	01.25.24
NO. REV./SUB.	PERMIT COMM.
1	



AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

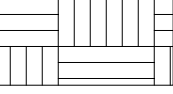
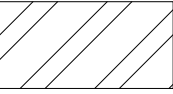
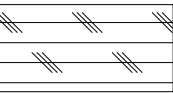
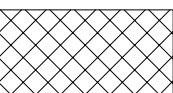

Lise Architecture
& Design, Inc.
614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LiseArchitecture.com

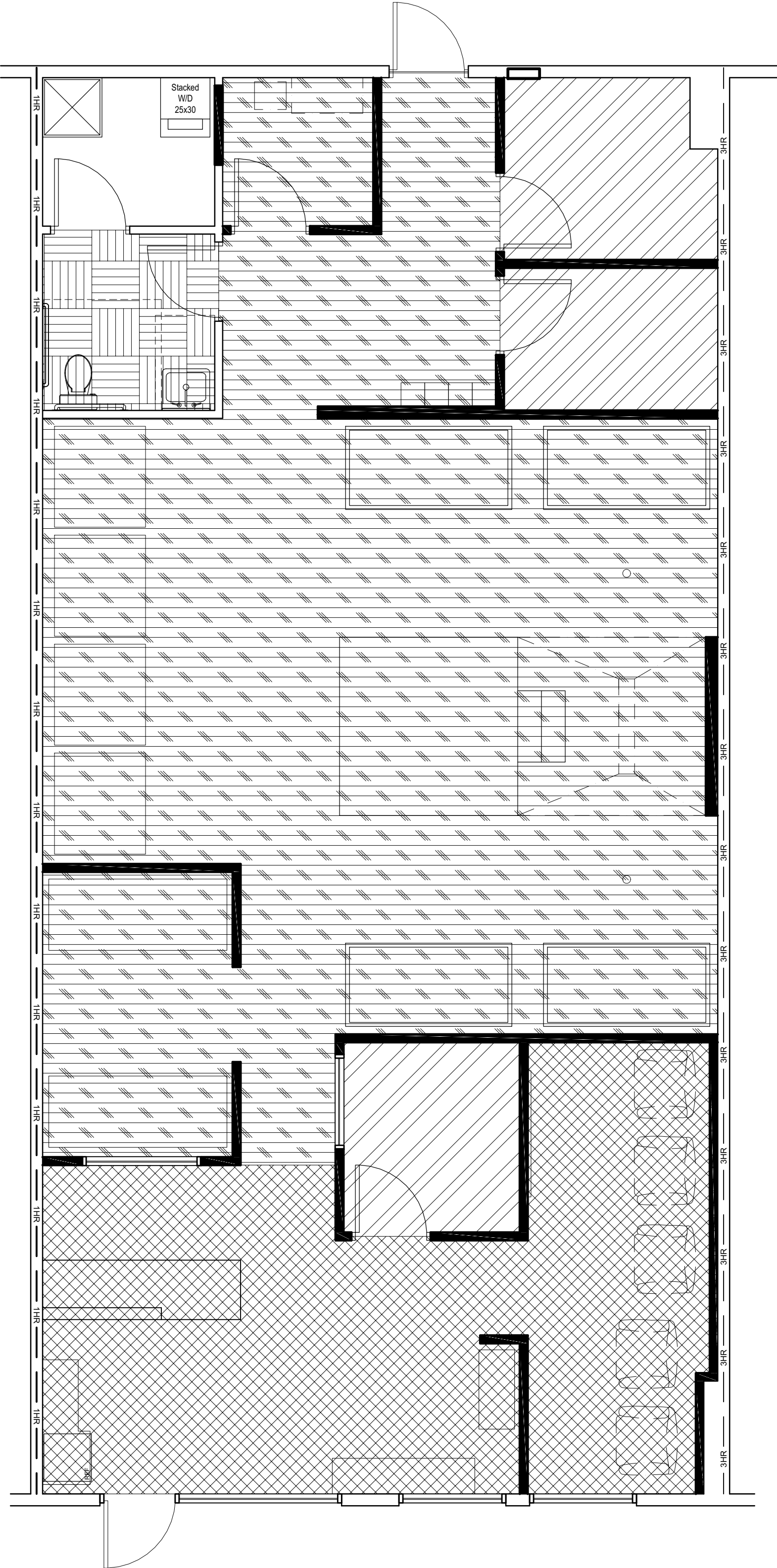


SHEET TITLE - NUMBER

Floor Plan

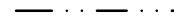
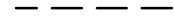


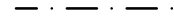
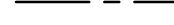


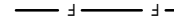

A1.1

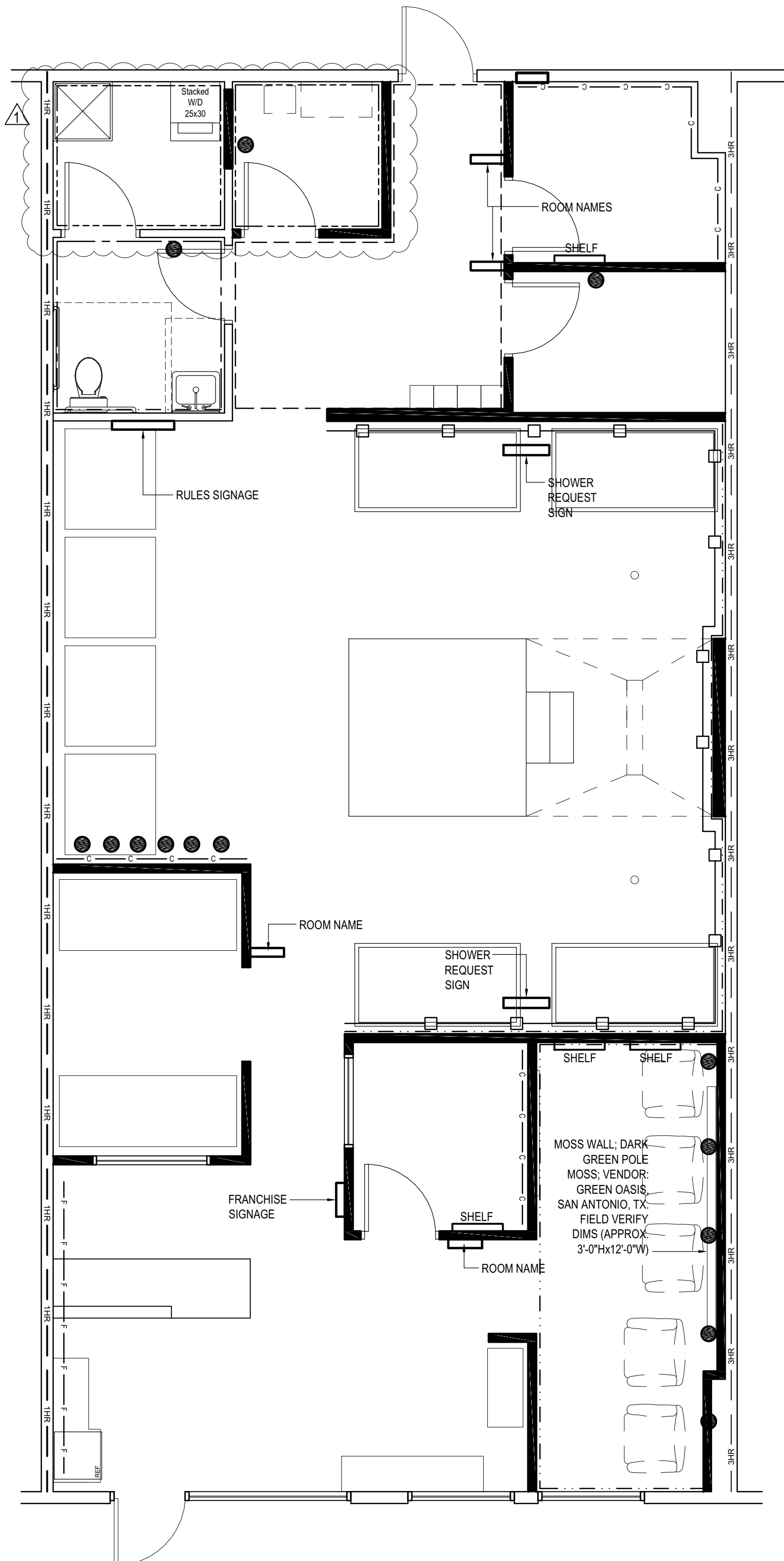
FLOOR FINISH SCHEDULE	
	TL-1
	TL-2
	TL-3
	TL-4
	CONC
REFER TO AUGMENT DESIGN GUIDELINES	



Floor Finish Plan


B
1/4"

WALL FINISH SCHEDULE	
	PT-1
	PT-2
	PT-3
	PT-5
	TL-5
	TL-6
	TL-7 UP TO 10'-0" AFF
	GRAPHICS
	AUGMENT LOGO
	HOOK
REFER TO AUGMENT DESIGN GUIDELINES	



Wall Finish Plan

A
1/4"





Approved
JACKSONVILLE, NC
File Number: BP24-00000072
Approval Date: 02/15/24

PROJECT NO: 23068

RELEASE 01.10.24

NO. REV./SUB.	DATE
1	01.25.24
PERMIT COMM.	

AUGMENT SPA

2457 Gum Branch Rd.

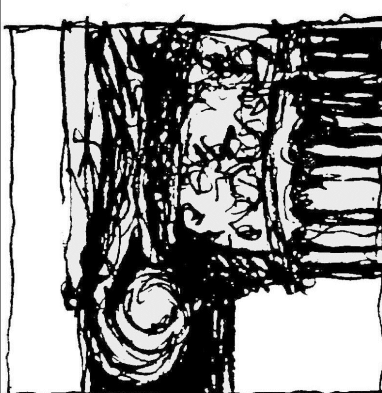
Suite 1700

Jacksonville, NC 28540

Lisle Architecture & Design, Inc.

614 Market Street
Wilmington, NC 28401
(910) 763.6053

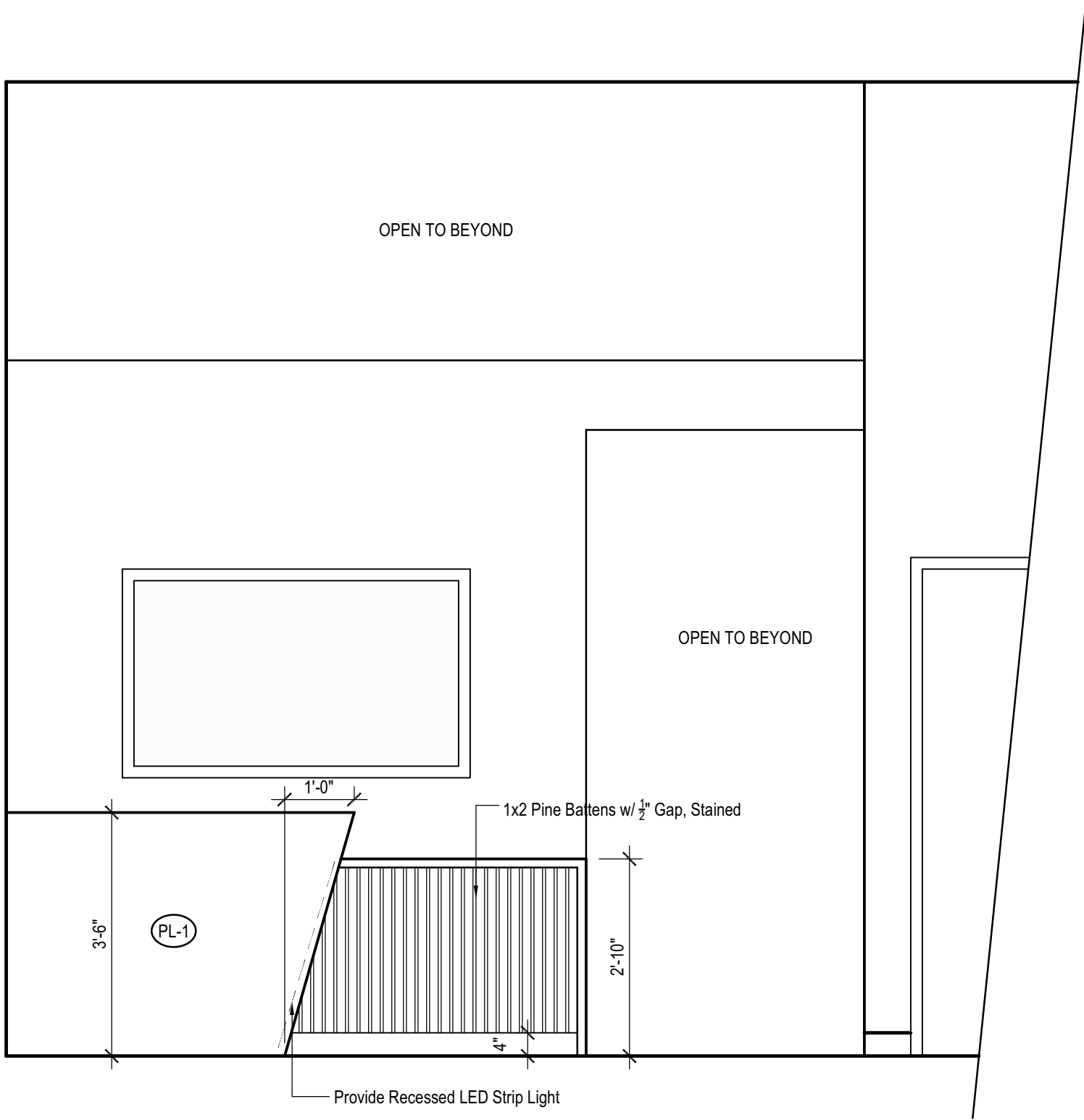
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



SHEET TITLE - NUMBER

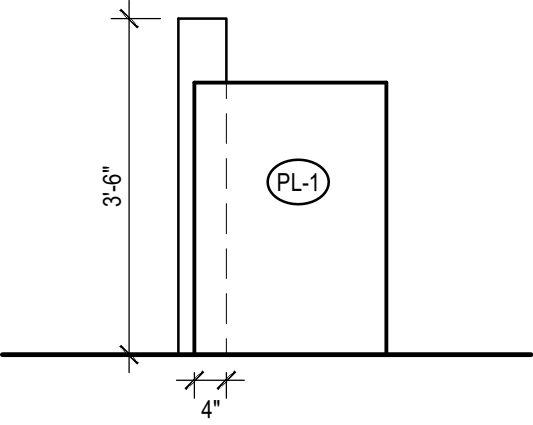
Finish Plans

A6.1



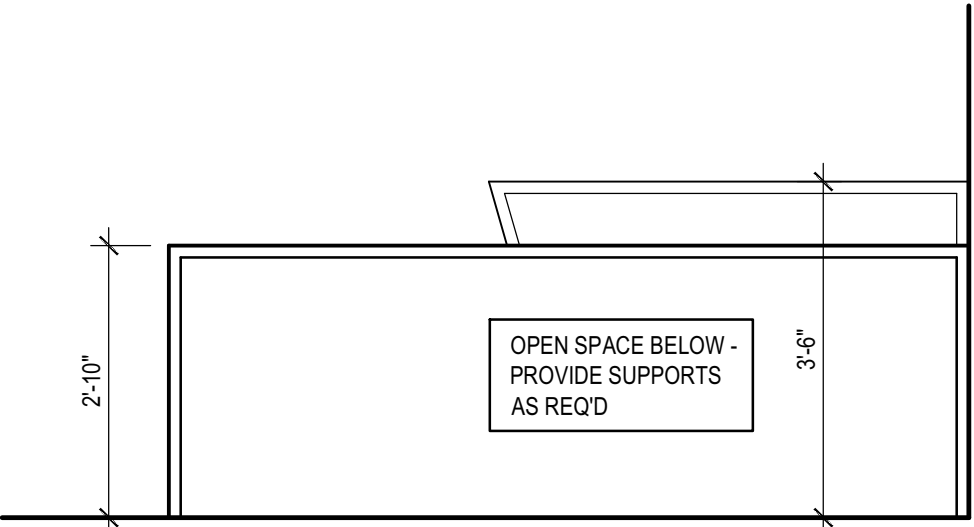
Front Desk Elevation

C
1/4"



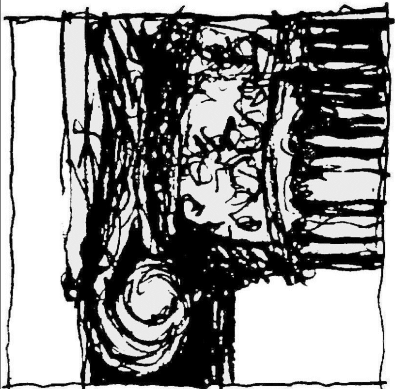
Front Desk Elevation

B
1/4"



Front Desk Elevation

A
1/4"



SHEET TITLE - NUMBER

Interior
Elevation

A6.2

Lisle Architecture
 & Design, Inc.
 614 Market Street
 Wilmington, NC 28401
 (910) 763.6053
 Raleigh, NC (919) 980.0283
 www.LisleArchitecture.com

AUGMENT SPA
 2457 Gum Branch Rd.
 Suite 1700
 Jacksonville, NC 28540

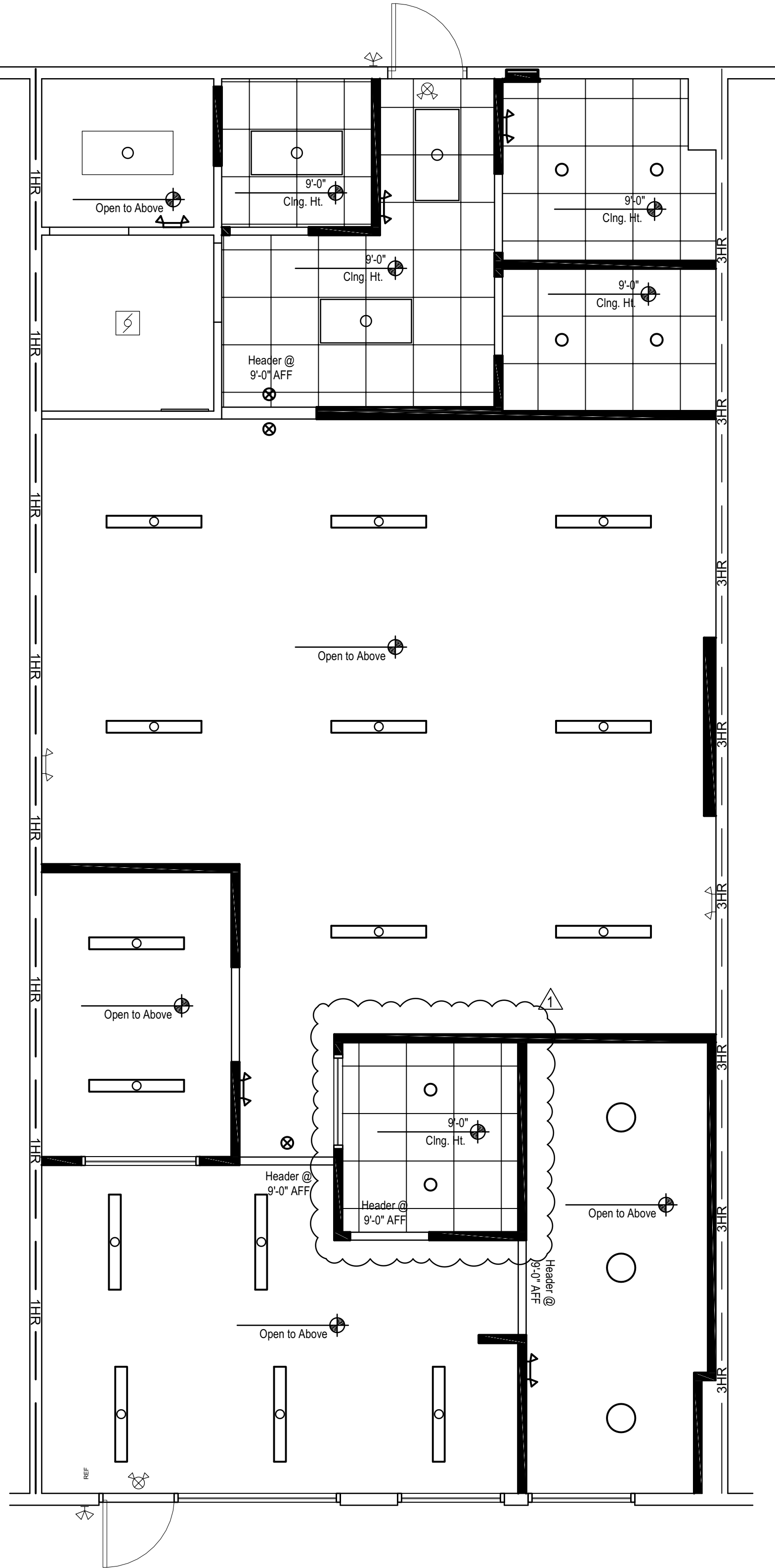


PROJECT NO: 23068

RELEASE 01.10.24

NO.	REV./SUB.	DATE





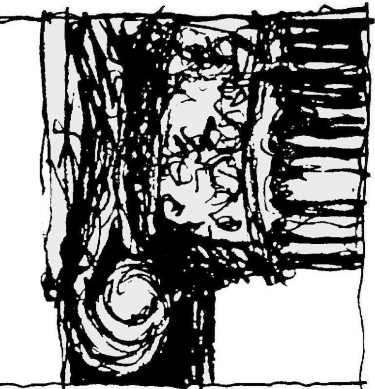
Reflected Ceiling Plan

A
1/4"

SHEET TITLE - NUMBER

Reflected Ceiling Plan

A7.1



Lisle Architecture & Design, Inc.

614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com

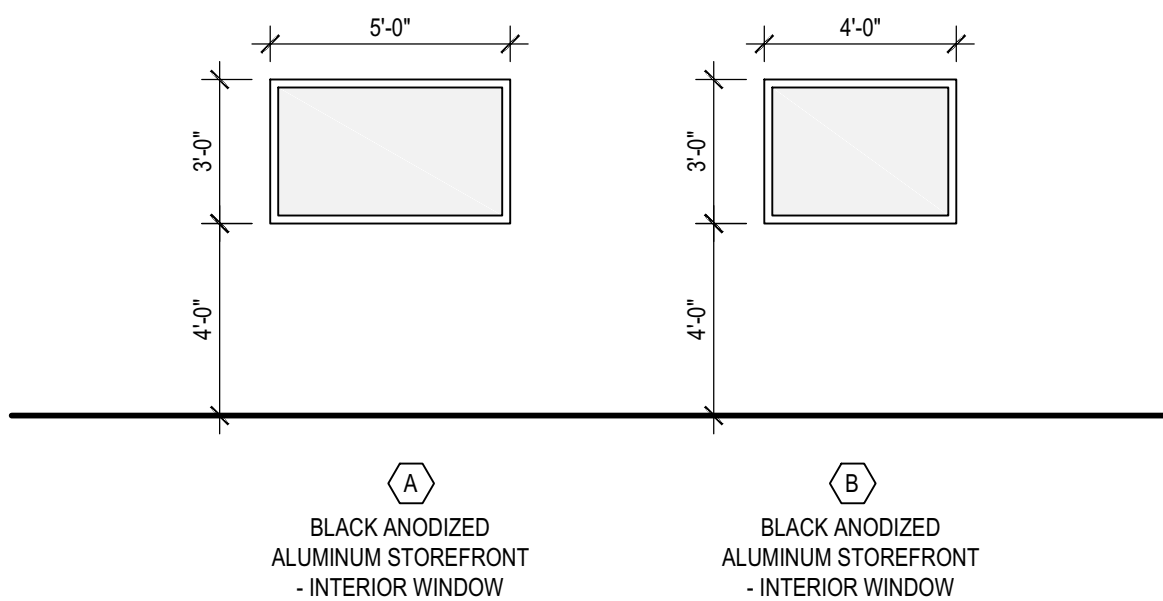
AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540



PROJECT NO: 23068	DATE	01/25/24
RELEASE 01.10.24	NO. REV./SUB.	PERMIT COMM.

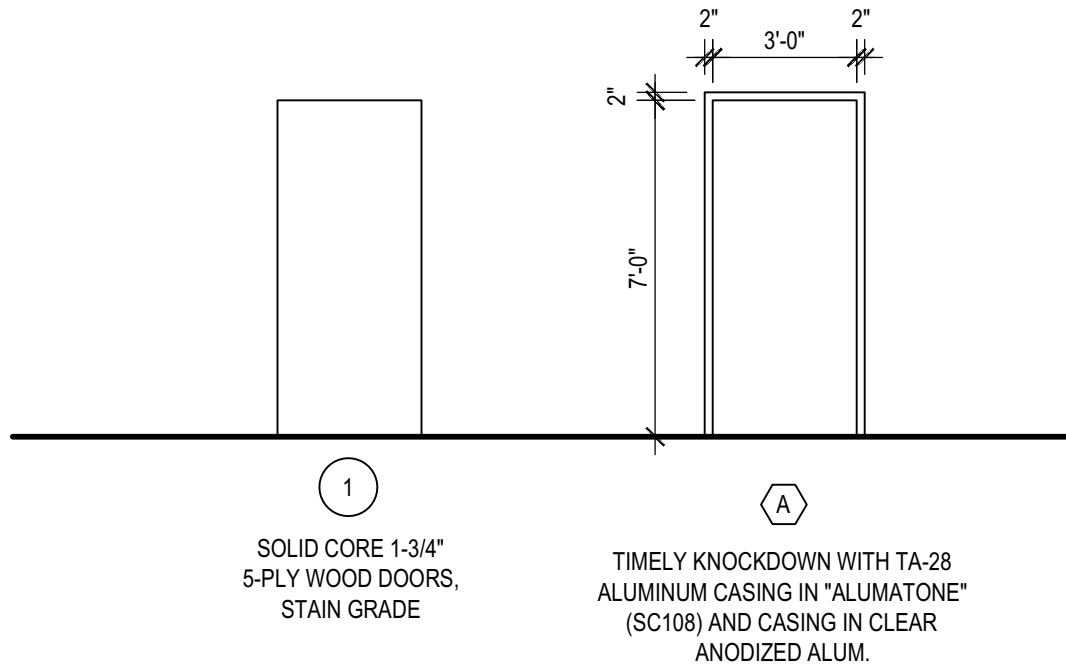


Window Elevations



C
1/4"

Door Elevations



E
1/4"

Finish Schedule

FINISH SCHEDULE									
NO.	NAME	FLOOR		WALL		CEILING		HEIGHT	REMARKS
		MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH		
100	RECEPTION	TL-4	TL-4	GYP. BD.	PT-3	EXPOSED	PT-4		
101	COMPRESS	TL-4	TL-4	GYP. BD.	PT-1	EXPOSED	PT-4		
102	HYPERBARIC	TL-2	RB-1	GYP. BD.	PT-3	ACT-1	9'-0"		
103	PODS	TL-3	RB-1	GYP. BD.	PT-1	EXPOSED	PT-4		
104	OPEN TREATMENT	TL-3	CB-1		TL-7/PT-1/PT-3	EXPOSED	PT-4		
105	LIGHT ROOM	TL-2	RB-1	GYP. BD.	PT-3	ACT-1	9'-0"		
106	BIO ROOM	TL-2	RB-1	GYP. BD.	PT-3	ACT-1	9'-0"		
107	CHANGE ROOM	TL-3	RB-1	GYP. BD.	PT-2/PT-5	ACT-1	9'-0"		PT-5 BEHIND SUIT DRYER PT-5 WITHIN 2' OF MOP SINK
108	UTILITY	CONC.		GYP. BD.	PT-5	EXPOSED			
109	EXISTING RESTROOM	TL-1		WALL	TL-5/TL-6	GYP. BD.	EXST'G		
110	LOCKER AREA	TL-3	RB-1	GYP. BD.	PT-2	ACT-1	9'-0"		

- NOTES
- FINISHES SHALL BE LEVEL 4 SMOOTH AT ALL OCCUPIED ROOMS
 - WALLS TO RECEIVE CONTINUIOUS LAYER OF WALLPAPER OR VINYL GRAPHICS SHALL BE LEVEL 5 FINISH
 - STORAGE CLOSETS AND MECHANICAL/ ELECTRICAL CLOSETS MAY BE LEVEL 3, PRIMED AND PAINTED TO MATCH ADJACENT ROOM
 - AT WET WALL LOCATIONS WITH TILE, PROVIDE CEMENTITIOUS TILE BACKER BOARD. WET LOCATION "GREEN BOARD" IS ACCEPTABLE AT WALLS THAT DO NOT HAVE FIXTURES ON OR ADJACENT TO THE WALL

B

Material Schedule

MATERIAL SCHEDULE					
LABEL	LOCATION	MANUFACTURER	MATERIAL	COLOR	NOTES
PAINT					
PT-1	AS NOTED	SHERWIN WILLIAMS		MINK SW 6004	
PT-2	AS NOTED	SHERWIN WILLIAMS		PEWTER CAST SW 7673	
PT-3	AS NOTED	SHERWIN WILLIAMS		SNOWBOUND SW 7004	
PT-4	CEILINGS	SHERWIN WILLIAMS	DRY FOG	BLACK	
PT-5	AS NOTED	SHERWIN WILLIAMS	EPOXY PAINT	PEWTER CAST SW 7673	MUST MEET 1210.2.2
WALL BASE					
RB-1	AS NOTED	JOHNSONITE	4" RUBBER BASE	BLACK	
CB-1	AS NOTED	ECORE	SANITARY BASE	DEEP LAKE	
FLOORING					
TL-1	BATHROOMS	LIVINGSTONE	PORCELAIN	NERO 24X24	
TL-2	AS NOTED	ECORE	EBB MOTIVATE	320 ONYX	
TL-3	AS NOTED	ECORE	HYDROGRIP	DEEP LAKE	
TL-4	AS NOTED	WALDEN STONE			
GROUT					
GR-1	WITH TL-5	HOME DEPOT TILE BASE GROUT		WALNUT #541	
GR-2	WITH TL-6	HOME DEPOT TILE BASE GROUT		ARCTIC WHITE #640	
GR-3	WITH TL-7	HOME DEPOT TILE BASE GROUT		DOVE GREY #370	
GR-4	WITH TL-1	HOME DEPOT TILE BASE GROUT		CHARCOAL #60	
GR-5	WITH TL-4	HOME DEPOT TILE BASE GROUT		CAPE GREY #546	
CEILINGS					
GYP. BD	AS NOTED		5/8" ANTI-SAG GYPSUM BOARD		
ACT-1	AS NOTED	ARMSTRONG	24X24 DUNE	WHITE	
WALLS					
TL-5	BATHROOM	SENSORIAL	CERAMIC TILE 13X39	TARTAN MATTE	STACKED BOND
TL-6	BATHROOM	CRISTALO	AC CERAMIC		STACKED BOND
TL-7	WET ROOM	IONIC STEEL	18X36 PORCELAIN		STACKED BOND
CASEWORK					
PL-1	COUNTERTOPS	WILSONART		BLACK 1595-60	
WD-1	CASEWORK ACCENT			1x4 PINE BATTENS W/ CLEAR COAT STAIN	
NOTES					
1. REFER TO AUGMENT DESIGN GUIDELINES FOR ADDITIONAL INFORMATION					

A

DOOR SCHEDULE												
DOOR	SIZE (WxH)	GLAZING	MATERIAL				HEAD	JAMB	HARDWARE	FIRE RATING	REMARK	
			DOOR	ELEV	FRAME	ELEV						
100	EXISTING DOOR TO REMAIN											
102	3'-0" X 7'-0"	N	SCWD	1	HM	A			II			
105	3'-0" X 7'-0"	N	SCWD	1	HM	A			I			
106	3'-0" X 7'-0"	N	SCWD	1	HM	A			II			
107	3'-0" X 7'-0"	N	SCWD	1	HM	A			I			
108	3'-0" X 7'-0"	N	SCWD	1	HM	A			I			
109	3'-0" X 7'-0"	N	SCWD	1	HM	A			I			
110	EXISTING DOOR TO REMAIN											
NOTES												
1. LOCKS AND LATCHES SHALL COMPLY WITH SECTION 1008 OF 2018 NCBC AND ICC/ANSI A117.1 FOR GRASPABILITY REQUIREMENTS												
2. CONTRACTOR SHALL COORDINATE FINAL KEYING WITH TENANT												
3. DOOR HANDLES, LOCKS, PULLS AND OTHER OPERATING DEVICES SHALL BE INSTALLED 34" MINIMUM AND 48" MAXIMUM ABOVE FINISH FLOOR												
4. DOOR OPENING FORCE SHALL NOTE EXCEED 5 POUNDS FOR INTERIOR DOORS												
5. SEE MEHCANICAL DRAWINGS FOR DOOR UNDERCUTS (IF ANY)												
HARDWARE GROUPS												
HARDWARE GROUP I						HARDWARE GROUP II						
3 EA. HINGES	5000 450	BOMMER	FINISH: T.B.D.	3 EA. HINGES	5000 450	BOMMER	FINISH: T.B.D.	3 EA. HINGES	5000 450	BOMMER	FINISH: T.B.D.	
1 EA. HANDLES	RM3301 BTB	ROCKWOOD	FINISH: BLACK	1 EA. HANDLES	RM3301 BTB	ROCKWOOD	FINISH: BLACK	1 EA. HANDLES	RM3301 BTB	ROCKWOOD	FINISH: BLACK	
1 EA. BOLT LOCK	PRIVACY LOCK		FINISH: T.B.D.	1 EA. WALL STOP	409	ROCKWOOD	FINISH: T.B.D.	1 EA. WALL STOP	409	ROCKWOOD	FINISH: T.B.D.	
1 EA. WALL STOP	409	ROCKWOOD	FINISH: T.B.D.	3 EA. MUTES	608	ROCKWOOD	FINISH: GREY	3 EA. MUTES	608	ROCKWOOD	FINISH: GREY	
3 EA. MUTES	608	ROCKWOOD	FINISH: GREY	1 EA. CLOSER	8616	DORMA	FINISH: T.B.D.	1 EA. CLOSER	8616	DORMA	FINISH: T.B.D.	
1 EA. CLOSER	8616	DORMA	FINISH: T.B.D.									
GLASS SCHEDULE & LEGEND												
1. ALL INTERIOR GLASS TO BE 1/4" CLEAR, WHERE APPLICABLE.												
2. ALL EXTERIOR GLASS TO BE 1" INSULATED CLEAR GLASS, LOW E, U = 0.31, COEFFICIENT = 0.59, UNLESS OTHERWISE NOTED												
3. USE TEMPERED GLASS IN ALL DOORS AND WINDOWS LOCATED WITHIN 24 INCHES OF A DOOR.												
4. USE TEMPERED GLASS WHERE EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.												
5. ALL DOOR AND WINDOW ASSEMBLIES LOCATED IN 1 HR. RATED WALL SHALL BE 45 MIN. RATED ASSEMBLIES												
6. ALL DOOR AND WINDOW ASSEMBLIES LOCATED IN 2 HR. RATED WALL SHALL BE 1 1/2 HR. RATED ASSEMBLIES												
T = TEMPERED GLASS												

D

Door Schedule

PROJECT NO: 23068

RELEASE 01.10.24

DATE

01/25/24

NO. REV./SUB.

PERMIT COMM.

AUGMENT SPA

2457 Gum Branch Rd.

Suite 1700

Jacksonville, NC 28540

Lisle Architecture & Design, Inc.

614 Arched Street

Wilmington, NC 28401

(910) 763.6053

Raleigh, NC (919) 980.0283

www.LisleArchitecture.com

SHEET TITLE - NUMBER

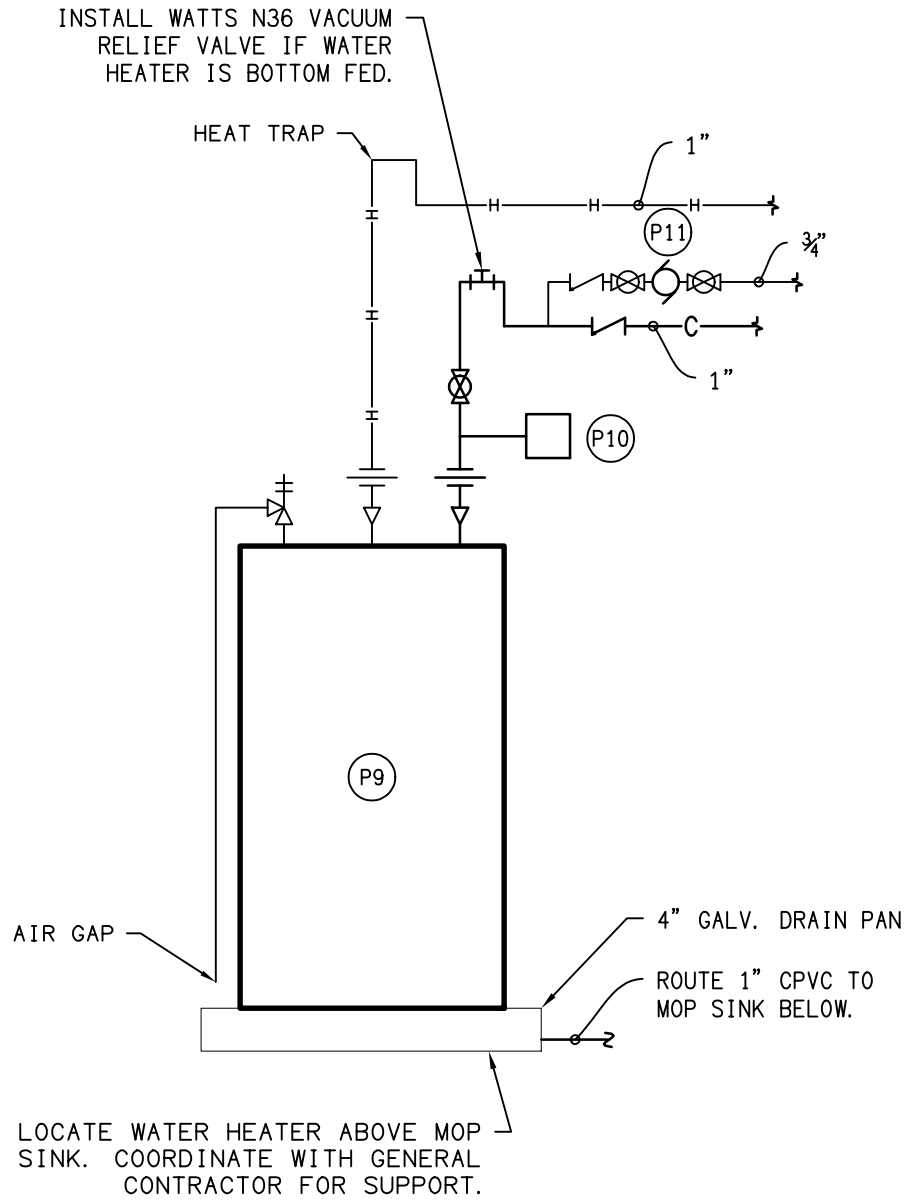
Schedules

A8.1

PLUMBING SPECIFICATIONS:

1. GENERAL:
- 1.1. CODES, REGULATIONS AND STANDARD INSTALLATIONS ARE TO COMPLY WITH THE LATEST EDITION OF THE STATE BUILDING AND PLUMBING CODES AND ALL OTHER APPLICABLE LOCAL AND NATIONAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE CODE AND THE DRAWINGS AND SPECIFICATIONS OR BETWEEN VARIOUS CODES, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
- 1.2. FEES AND PERMITS: PROVIDE ALL LICENSES, FEES, PERMITS, HEALTH DEPARTMENT FEES, INSURANCE, ETC., REQUIRED FOR EXECUTION OF THIS WORK.
- 1.3. CONTRACT DRAWINGS ARE SCHEMATIC ONLY AND ARE NOT INTENDED TO SHOW ALL FITTINGS, BOLTS, CONNECTIONS, OFFSETS, ETC., UNLESS SPECIFICALLY DIMENSIONED. THE PLUMBING CONTRACTOR SHALL FOLLOW THE DRAWING AS CLOSELY AS POSSIBLE; HOWEVER, NECESSARY ADJUSTMENTS SHALL BE MADE AS REQUIRED TO CONFORM TO STRUCTURAL CONDITIONS, WORK OF OTHER CONTRACTORS AND THE INTENT OF THE DRAWINGS WITHOUT ADDITIONAL COST TO THE OWNER. THE DRAWINGS SHALL NOT BE SCALED. SECURE DIMENSIONS FROM ARCHITECTURAL DRAWINGS FOR FIXTURE LOCATIONS.
- 1.4. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL MATERIALS, PERFORM ALL WORK AND TEST AND PAY ALL THE FEES NECESSARY TO MAKE THE PLUMBING SYSTEM OPERABLE AND READY FOR USE BY THE OWNER.
- 1.5. GUARANTEE: ALL NEW EQUIPMENT, NEW MATERIALS AND INSTALLATION SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF WORK OR IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD GUARANTEE, IF LONGER.
- 1.6. PLUMBING CONTRACTORS SHALL BE RESPONSIBLE FOR HIS OWN CLEAN UP AND REMOVAL OF SCRAP FROM JOB SITE. PLUMBING CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE WORK AREA.
- 1.7. IN CASE OF ANY CONFLICT BETWEEN INFORMATION FOUND IN THE PLANS, OR IN THE SPECIFICATIONS, THE MOST RESTRICTIVE INTERPRETATION SHALL TAKE PRECEDENT.
- 1.8. THE PLUMBING DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE DESIGN FOR ROOF GUTTER SYSTEMS OR ROOF DRAIN SYSTEMS.
- 1.9. ALL PLUMBING COMPONENTS SHALL BE INSTALLED, SUPPORTED, AND RESTRAINED IN ACCORDANCE WITH THE STATE BUILDING CODE REQUIREMENTS FOR SEISMIC DESIGN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RETAIN A PROFESSIONAL ENGINEER COMPETENT IN THIS FIELD FOR THIS DESIGN. FOR ONE POSSIBLE SOURCE FOR THIS SERVICE: CONTACT SEISMIC CONTROL AND ISOLATIONS, INC. PHONE: 910 799-5204. ALL REQUIRED INSPECTIONS FOR THESE DESIGNS SHALL BE PERFORMED BY APPROVED INSPECTORS AND AGENCIES PROVIDED BY THE OWNER OR OWNER'S AGENT.
- 1.10. ALL ROOF MOUNTED MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS SHALL BE INSTALLED, SUPPORTED, AND RESTRAINED IN ACCORDANCE WITH THE STATE BUILDING CODE REQUIREMENTS FOR WIND DESIGN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RETAIN A PROFESSIONAL ENGINEER COMPETENT IN THIS FIELD FOR THIS DESIGN. FOR ONE POSSIBLE SOURCE FOR THIS SERVICE, CONTACT SEISMIC CONTROL AND ISOLATION, INC. PHONE: 910-799-5204. ALL REQUIRED INSPECTIONS FOR THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED INSPECTORS AND AGENCIES HIRED BY THE OWNER OR OWNER'S AGENT AS REQUIRED BY THE BUILDING CODE.
- 1.11. THE ENGINEER IS NOT RESPONSIBLE FOR JOB SITE SAFETY.
2. SCOPE:
- 2.1. WORK SHALL INCLUDE BUT IS NOT LIMITED TO:
- 2.1.1. PROVIDE FIXTURES AND INSTALL AND CONNECT WASTE AND WATER PIPE AS SHOWN ON DRAWINGS.
- 2.1.2. ROUTE WASTE AND WATER TO TIE INTO EXISTING WASTE AND WATER LINES AS SHOWN ON DRAWINGS.
- 2.1.3. CHLORINATE WATER SYSTEM.
- 2.1.4. COORDINATE WITH LOCAL AUTHORITIES ON PURCHASE AND INSTALLATION OF BACKFLOW PREVENTERS.
- 2.1.5. PERFORM REQUIRED DEMOLITION AS INDICATED ON DRAWINGS AND/OR IN THESE SPECIFICATIONS.
3. MATERIALS:
- 3.1. SITE WATER PIPING SHALL BE SCH 40 CPVC PRESSURE PIPE WITH SOLVENT WELD JOINTS. USE INDUSTRIAL GRADE GLUE ONLY. ALL NSF APPROVED PIPING FROM TAP TO METER AND PIPING INSIDE ROAD RIGHT OF WAY SHALL BE AS PER THE REQUIREMENTS OF THE LOCAL WATER AUTHORITY AND THE DEPARTMENT OF TRANSPORTATION.
- 3.1.1. WATER SERVICE PIPE OR TUBING, INSTALLED UNDERGROUND AND OUTSIDE OF STRUCTURE, SHALL HAVE A MINIMUM WORKING PRESSURE OF 160 PSI AT 73.4 DEG. F. WHERE THE WATER MAIN OR INCOMING WATER SOURCE PRESSURE EXCEEDS 160 PSI, PIPING MATERIAL SHALL HAVE A WORKING PRESSURE NOT LESS THAN THE HIGHEST AVAILABLE INCOMING WATER PRESSURE.
- 3.2. HANGERS:
- 3.2.1. SPACING FOR COPPER PIPE SHALL BE AS FOLLOWS:
- 3.2.1.1. UP TO 1": 6"-0" O.C.
- 3.2.1.2. 1-1/4" & 1-1/2": 8"-0" O.C.
- 3.2.1.3. 2" & LARGER: 12"-0" O.C.
- 3.2.2. SPACING FOR CARBON STEEL AND CAST IRON PIPING SHALL BE AS FOLLOWS:
- 3.2.2.1. UP TO 1": 7"-0" O.C.
- 3.2.2.2. 1-1/2" & 2": 10"-0" O.C.
- 3.2.2.3. 2-1/2" TO 4": 12"-0" O.C.
- 3.2.3. SPACING FOR PVC PIPE SHALL BE AS FOLLOWS:
- 3.2.3.1. UP TO 1-1/2": 2'-0" O.C.
- 3.2.3.2. 2": 3'-0" O.C.
- 3.2.3.3. 2-1/2" TO 4": 5'-0" O.C.
- 3.2.4. SPACING FOR CPVC PIPE SHALL BE AS FOLLOWS:
- 3.2.4.1. UP TO 1": 3'-0" O.C.
- 3.2.4.2. 1-1/4" TO 2": 4'-0" O.C.
- 3.2.5. HANGERS FOR HORIZONTAL PIPING SHALL BE THE CLEVIS TYPE.
- 3.2.6. HANGERS FOR BARE COPPER PIPING SHALL BE COPPER PLATED.
- 3.2.7. HANGERS FOR INSULATED PIPING SHALL EXTEND AROUND THE INSULATION. PROVIDE 16 GAUGE GALVANIZED STEEL INSULATION PROTECTION SADDLES 12" LONG AT EACH HANGER ON ALL INSULATED LINES AND HARD INSULATION INSERTS AT SADDLES.
- 3.2.8. A HANGER SHALL BE FASTENED BY MEANS OF THREADED RODS TO BUILDING STRUCTURE. ALL HANGERS SHALL PERMIT ADEQUATE ADJUSTMENT AFTER ERECTION WHILE STILL SUPPORTING THE LOAD.
- 3.2.9. A HANGER SHALL BE PROVIDED WITHIN ONE FOOT OF EACH BEND IN HORIZONTAL PIPING.
- 3.2.10. SUPPORT MATERIAL SHALL BE PROPERLY CHOSEN TO AVOID ATMOSPHERIC CORROSION AND TO AVOID GALVANIC CORROSION DUE TO CONTACT OF SUPPORT AND ADJACENT MATERIALS.
- 3.3. HOT AND COLD WATER PIPES BEGINNING 5' FROM BUILDING WALL:
- 3.3.1. PIPE SHALL BE TYPE L COPPER TUBING ABOVE GRADE AND TYPE K BELOW GRADE.
- 3.3.2. FITTINGS SHALL BE MADE USING SOLDER AS PER THE STATE PLUMBING CODE FOR POTABLE WATER.
- 3.4. HOT AND COLD WATER PIPES INSIDE OF BUILDING:
- 3.4.1. PIPE AND PIPE FITTINGS SHALL BE MADE OF MATERIALS AND JOINED TOGETHER AS PER THE STATE PLUMBING CODE FOR POTABLE WATER
- 3.4.2. PIPE MATERIAL SHALL BE TYPE L COPPER TUBING ABOVE GRADE AND TYPE K BELOW GRADE. PIPE SIZING AS BASED ON THIS MATERIAL
- 3.4.3. ACCEPTABLE ALTERNATE:
- 3.4.3.1. PEK OR CPVC PIPING IS AN ACCEPTABLE ALTERNATE FOR ALL WATER PIPING. IF THESE MATERIALS ARE USED, CONTRACTOR IS RESPONSIBLE FOR RE-SIZING THE PIPE FOR THE MATERIAL CHOSEN.
- 3.4.3.2. PIPE AND FITTINGS SHALL BE SPECIFICALLY DESIGNED FOR INTENDED SERVICE.
- 3.4.3.3. FITTINGS SHALL BE MADE AS PER PIPE MANUFACTURER'S RECOMMENDATIONS AND AS PER THE STATE PLUMBING CODE FOR POTABLE WATER.
- 3.5. VENT AND WASTE PIPE:
- 3.5.1. WASTE AND VENT PIPE SHALL BE SCH 40 PVC-DWV AS PER ASTM 2865 D WITH SOLVENT WELD JOINTS EXCEPT AS NOTED BELOW.
- 3.5.2. PVC SHALL NOT BE USED IN A RETURN AIR PLENUM. FOR RETURN AIR PLENUMS CAST IRON SHALL BE USED. TRANSITION FROM PVC TO CAST IRON SHALL BE MADE WITH CODE APPROVED TRANSITION FITTINGS DESIGNED EXPRESSLY FOR THAT PURPOSE.
- 3.5.3. ALL FITTINGS SHAL BE SANITARY DRAINAGE PATTERN.
- 3.5.4. ALL WASTE AND SOIL STACKS SHALL BE PACKED WITH FIBERGLASS INSULATION FOR NOISE SUPPRESSION.
- 3.6. VALVES:
- 3.6.1. WATER GATE VALVES SHALL BE OF BRASS CONSTRUCTION WITH SOLDER JOINT FITTINGS.
- 3.6.2. ALL VALVES SHALL BE AS PER PLUMBING CODE.
- 3.7. TEMPERED WATER CONTROL:
- 3.7.1. TEMPERED WATER SHALL BE SUPPLIED THROUGH A WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 AND SHALL LIMIT THE TEMPERED WATER TO A MAXIMUM TEMPERATURE AS SPECIFIED ON THE DRAWINGS.
- 3.7.2. A THERMOSTAT CONTROL FOR A WATER HEATER SHALL NOT SERVE AS THE TEMPERATURE LIMITING DEVICE FOR MAXIMUM ALLOWABLE HOT OR TEMPERED WATER DELIVERY AT FIXTURES.
- 3.8. INSULATION:
- 3.8.1. WATER PIPING IN UNCONDITIONED UTILITY ROOM, ATTIC SPACE OR INSTALLED OUTSIDE BUILDING INSULATION SHALL BE INSULATED WITH 2" THICK FIBERGLASS WITH VAPOR BARRIER JACKET. UTILITY ROOM INSULATION SHALL ALSO HAVE A PVC JACKET, STAPLED AND TAPED.
- 3.8.2. EXPOSED HOT AND COLD WATER LINES AND WASTE LINES UNDER HANDICAP LAVATORIES AND SINKS SHALL BE INSULATED WITH FULLY MOLDED, TRUEBORE, OR HANDI-LAV GUARD INSULATION KIT.
- 3.8.3. UNDERGROUND LINES BELOW FROST LINE SHALL NOT BE INSULATED.
- 3.8.4. ALL OTHER WATER PIPING SHALL BE INSULATED AS FOLLOWS:
- 3.8.4.1. COLD WATER PIPING: COVER WITH 1/2" ARAMFLEX INSULATION.
- 3.8.4.2. NON-RECIRCULATING SYSTEM HOT WATER PIPING: COVER WITH 1" ARAMFLEX INSULATION (THE THERMAL CONDUCTIVITY OF THE INSULATION SHALL NOT BE LESS THAN 0.27 BTU·IN/(HR·FT²·°F)) FOR FIRST 8' OF PIPE FROM WATER HEATER AND 1/2" ARAMFLEX INSULATION EVERYWHERE ELSE.
- 3.8.4.3. RECIRCULATING SYSTEM HOT WATER SUPPLY, RETURN LINES, AND IN THE LOOP: COVER WITH 1" ARAMFLEX INSULATION (THE THERMAL CONDUCTIVITY OF THE INSULATION SHALL NOT BE LESS THAN 0.27 BTU·IN/(HR·FT²·°F))
- 3.8.5. WASTE TRAPS LOCATED WITHIN A CRAWL SPACE SHALL BE INSULATED WITH A MINIMUM 2" THICK FIBERGLASS INSULATION.
- 3.8.6. ALL ABOVE GROUND STORM DRAIN PIPING SHALL BE INSULATED WITH A FIBERGLASS INSULATION JACKET.
- 3.9. CLEANOUTS:
- 3.9.1. INTERIOR CLEANOUTS SHALL BE CAST IRON BODY WITH A BRONZE OR NICKEL ALLOY TOP, JOSAM OR EQUAL.
- 3.9.2. EXTERIOR CLEANOUTS SHALL BE CAST IRON WITH IRON TOPS. CLEANOUTS IN TRAFFIC AREAS SHALL BE TRAFFIC RATED, ZURN OR EQUAL. INSTALL CLEANOUTS IN 6" THICK 24" DIAMETER CONCRETE CORES.
- 3.9.3. WALL CLEANOUTS SHALL BE INSTALLED BEHIND STAINLESS STEEL COVER PLATES.
- 3.10. VENTS:
- 3.10.1. VENTS SHALL PENETRATE ROOF WITH FLEXIBLE BOOTS WITH FLASHING FLANGE.
- 3.11. GAS PIPING:
- 3.11.1. ALL GAS SYSTEM MATERIALS AND INSTALLATION SHALL BE AS PER THE STATE BUILDING CODE, VOLUME VI, AND NFPA-54.
- 3.11.2. GAS VALVES SHALL BE GAS COOKS RATED FOR GAS SERVICE.
- 3.11.3. GAS PIPE SHALL BE SCH 40 CARBON STEEL PIPE GRADE A53. JOINT CONNECTIONS SHALL BE RATED FOR GAS SERVICE AND SHALL BE AS FOLLOWS:
- 3.11.3.1. FOR PIPE UP TO 62": THREADED JOINTS
- 3.11.3.2. FOR PIPE OVER 62": WELDED JOINTS
- 3.11.4. CONNECTIONS TO GAS APPLIANCES SHALL BE MADE WITH FLEX PIPE, UL RATED FOR THE SPECIFIC APPLICATION. PROVIDE CONNECTOR RESTRAINT IF REQUIRED BY CODE.
- 3.11.5. TRANSITION FROM CARBON STEEL TO COPPER SHALL BE MADE USING DIELECTRIC UNION.
4. EXECUTION
- 4.1. ALL HOLES THROUGH WALLS, FLOORS AND CEILINGS ARE TO BE DRILLED, NOT BROKEN. ROUND ALL SHARP EDGES TO DRILLED HOLES.
- 4.2. LINES ARE NOT TO BE COVERED UNTIL INSPECTED BY THE ARCHITECT.
- 4.3. WRAP COPPER PIPE WITH DUCT TAPE WHERE IT PENETRATES THE FLOOR.
- 4.4. DO NOT MAKE A WATER LINE JOINT UNDER THE SLAB.
- 4.5. WATER HAMMER ARRESTORS SHALL COMPLY WITH ASSE 1010. WATER HAMMER ARRESTORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- 4.5.1. A WATER HAMMER ARRESTOR SHALL BE INSTALLED AT FIXTURES THAT HAVE QUICK CLOSING VALVES WHEN METALLIC PIPE IS INSTALLED.
- 4.6. WASTE PIPES PASSING UNDER OR THROUGH FOUNDATIONS OR THROUGH LOAD BEARING SECTIONS OF A WALL SHALL BE ROUTED THROUGH D. I. SLEEVES AT LEAST TWO PIPE SIZES LARGER THAN THE WASTE PIPE.
- 4.7. SUFFICIENT HANGERS, SUPPORTS, CLAMPS, CLIPS, INSERTS AND MAINTAINING DEVICES SHALL BE PROVIDED TO SUPPORT ALL PIPING AS PER GOOD PIPING PRACTICE AND TO MAINTAIN PROPER DRAINAGE.
- 4.8. ALL EQUIPMENT SHALL BE INSTALL AS PER THE MANUFACTURER'S INSTRUCTIONS AND PERTINENT INFORMATION.
- 4.9. UNDERGROUND PIPING SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.
- 4.9.1. ALL TRENCHES UNDERGROUND PIPING IS INSTALLED IN SHALL BE CLEAR OF ALL ROCKS AND OTHER ABRASIVE MATERIALS.
- 4.9.2. TRENCH BOTTOMS SHALL BE FULLY COMPACTED AND FULLY SUPPORT THE PIPE.
- 4.9.3. FILL DIRT TO 6" ABOVE TOP OF PIPE TO BE CLEAN AND FREE OF ABRASIVE MATERIALS. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR PIPE BEDDING GIVEN SOIL CONDITIONS.
- 4.10. PLUMBING CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR TO ASSURE THAT ALL PIPE INTERFERENCES (FOUNDATIONS, CABLES, OTHER PIPING, ETC.) ARE AVOIDED BY UNDERGROUND PLUMBING.
- 4.11. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT PLUMBING WALLS ARE CONSTRUCTED TO ALLOW INSTALLATION OF FIXTURE CARRIERS. PLUMBING CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR PRIOR TO WALL CONSTRUCTION.
- 4.12. CONTRACTOR SHALL SUPPLY AND INSTALL FIXTURE HANGER AS REQUIRED FOR PROPER INSTALLATION.
- 4.13. WATER PIPE ROUTED THROUGH STUDS SHALL BE PROTECTED BY METAL STUD GUARDS.
- 4.14. INSTALL ALL WATER PIPING INSIDE OF BUILDING INSULATION IF POSSIBLE. WATER PIPING INSTALLED IN ATTIC SPACE MUST BE UNDER BATT INSULATION. IF BLOWN INSULATION IS USED IN ATTIC SPACE WATER PIPE SHALL BE INSULATED AS IF WERE IN AND UNCONDITIONED SPACE.
- 4.15. VENT TERMINALS SHALL NOT BE LOCATED WITHIN 10' OF ANY AIR INTAKE OPENING.
- 4.16. PROVIDE A CARBON STEEL DIRT LEG IN SUPPLY LINE TO EACH GAS USER.
- 4.17. INSTALLATION OF PEK WATER PIPE SHALL BE STRICTLY AS PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. ALL PIPE EXPANSION PROVISIONS SHALL BE ADDED TO WATER PIPING LAYOUT AS RECOMMENDED BY MANUFACTURER.
- 4.18. NATURAL GAS PIPE SUPPORT SPACING SHALL BE AS PER N. C. STATE CODE, VOLUME VI.
- 4.19. UNDERGROUND GAS PIPING PENETRATING ASPHALT OR A CONCRETE PAD, SHALL DO SO THROUGH A CARBON STEEL SLEEVE.

- 4.20. ALL GAS PIPING SHALL BE ELECTRICALLY GROUNDDED AS PER NFPA-70.
- 4.21. IF GAS BURNING EQUIPMENT IS ON THIS PROJECT, THE UNITS SHALL NOT BE FIRED OFF UNTIL THE CONTRACTOR HAS VERIFIED THAT THE FUEL AVAILABLE ON SITE IS THE FUEL THE UNITS ARE DESIGNED TO BURN.
- 4.22. ALL PIPING SHALL BE LABELED WITH PLASTIC LABELS INDICATING PIPE TYPE (I.E. GAS, COLD WATER, HOT WATER, ETC.) AND DIRECTION OF FLOW. PLACE LABELS ON 25' CENTERS.
- 4.22.1. WHERE WATER DISTRIBUTION PIPING IS BUNDLED AT INSTALLATION, EACH PIPE IN THE BUNDLE SHALL BE IDENTIFIED USING CONFORMAL PIPE LABELS. THE IDENTIFICATION SHALL INDICATE THE PIPE CONTENTS AND DIRECTION OF FLOW WITHIN THE PIPE. THE INTERVAL OF IDENTIFICATION MARKINGS SHALL BE AS DIRECTED IN 4.22 ABOVE.
- THERE SHALL NOT BE LESS THAN ONE IDENTIFICATION LABEL ON EACH PIPE IN EACH ROOM, SPACE, OR STORY.
5. ELECTRICAL CONNECTIONS:
- 5.1. ELECTRICAL CONTRACTOR SHALL DIRECT WIRE ALL EQUIPMENT REQUIRING POWER.
- 5.2. CONTROL WIRING SHALL BE INSTALLED BY THE PLUMBING CONTRACTOR.
6. TESTING:
- 6.1. HOT AND COLD WATER PIPING:
- 6.1.1. THE HOT AND COLD WATER PIPING SHALL HOLD A HYDROSTATIC TEST PRESSURE OF 100 PSI FOR A PERIOD OF AT LEAST 1-1/2 HOURS. ANY JOINT TO LEAK UNDER TEST SHALL BE BROKEN, REMADE AND RETESTED.
- 6.1.2. ANY EXISTING WATER LINES WHICH ARE TIED TO NEW WATER LINES SHALL MEET THE FOLLOWING:
- 6.1.2.1. VERIFY EXISTING LINES TIE PROPERLY TO EXISTING WATER SYSTEM.
- 6.1.2.2. VERIFY EXISTING WATER LINES ARE IN GOOD CONDITION AND FREE FROM LEAKS.
- 6.1.2.3. ANY REUSED EXISTING PIPE SHALL BE REPLACED AS NEEDED TO PROVIDE A PROPERLY OPERATING WATER SYSTEM.
- 6.2. WASTE PIPING:
- 6.2.1. ALL WASTE PIPING SHALL BE TESTED BY FILLING THE LINES TO OVERFLOWING. ANY JOINT FOUND TO LEAK UNDER TEST SHALL BE BROKEN, REMADE AND RETESTED.
- 6.2.2. ANY EXISTING WASTE LINES WHICH ARE TIED TO NEW LINES SHALL BE VERIFIED THAT:
- 6.2.2.1. EXISTING LINES TIE PROPERLY TO EXISTING WASTE SYSTEM.
- 6.2.2.2. EXISTING LINES ARE IN GOOD CONDITION AND FREE FROM LEAKS.
- 6.2.2.3. ANY REUSED EXISTING PIPE SHALL BE REPLACED AS NEEDED TO PROVIDE A PROPERLY OPERATING WASTE SYSTEM.
- 6.3. GAS PIPING:
- 6.3.1. GAS PIPE SHALL HOLD A 25 PSIG AIR TEST FOR 1-1/2 HOURS. ANY JOINT FOUND TO LEAK SHALL BE BROKE, REMADE AND RETESTED.
7. CHLORINATION:
- 7.1. ALL WATER PIPING SHALL BE CHLORINATED TO 50 PPM RESIDUAL CHLORINE AFTER TWENTY-FOUR HOURS AND TO THE SATISFACTION OF THE LOCAL HEALTH DEPARTMENT OR BUILDING INSPECTION DEPARTMENT.
8. SUBSTITUTION:
- 8.1. ALL MATERIALS AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE SHOWN OR SPECIFIED AND SHALL BE OF THE VERY BEST QUALITY AS SPECIFIED.
- 8.2. REQUESTS TO SUBSTITUTE OTHER MATERIALS OR PRODUCTS FOR THOSE SPECIFIED SHALL BE SENT IN WRITING TO THE OWNER. REQUESTS SHALL BE ACCOMPANIED BY ENGINEERING DATA, SPECIFICATION SHEETS, ETC., AS NECESSARY TO FULLY IDENTIFY AND APPRAISE THE PRODUCTS.
- 12.1. APPROVAL OF EQUIPMENT WILL NOT RELIEVE THE CONTRACTOR OF NONCONFORMANCE WITH THE SPECIFICATIONS EVEN IF SUCH APPROVAL IS MADE IN WRITING, UNLESS THE ENGINEER IS CALLED TO THE NONCONFORMING FEATURES BY LETTER ACCOMPANYING THE SUBMITTAL DATA.
9. PLACING IN SERVICE:
- 9.1. UPON COMPLETION OF THE ENTIRE SYSTEM, THE PLUMBING CONTRACTOR SHALL FLUSH ALL LINES TO INSURE PROPER FLOWS. ALL FIXTURES SHALL BE LEFT CLEAN.
- 9.2. THE PLUMBING CONTRACTOR SHALL DEMONSTRATE THE PROPER FUNCTION OF THE ENTIRE SYSTEM.
- 9.3. THE PLUMBING CONTRACTOR SHALL ACQUAINT THE OWNER'S REPRESENTATIVE WITH THE PROPER OPERATION OF THE PLUMBING SYSTEM.
10. VISIT TO THE SITE:
- 10.1. ALL BIDDERS ON THIS WORK SHALL VISIT THE SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS BEFORE SUBMITTING THEIR BIDS. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.
11. SHOP DRAWINGS:
- 11.1. AS SOON AS POSSIBLE (AND NOT MORE THAN 30 DAYS) AFTER THE CONTRACT IS SIGNED, THE CONTRACTOR SHALL SUBMIT FIVE (5) COPIES OF THE SHOP DRAWINGS COVERING FIXTURES, AND ANY SPECIAL EQUIPMENT WHICH HE INTENDS TO USE. FOUR (4) COPIES OF THIS DATA WILL BE RETURNED BY THE ENGINEER WHO WILL INDICATE APPROVAL OR OTHERWISE.
12. FIRE RATED WALLS, FLOORS, & CEILINGS:
- 12.1. CONTRACTOR SHALL LOCATE THE LOCATION OF ALL FIRE AND SMOKE RATED WALLS, FLOORS AND CEILINGS FROM ARCHITECTURAL DRAWINGS. PIPING PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE AS REQUIRED BY STATE BUILDING CODE, WITH APPROVED AND APPROPRIATELY RATED UL FIRESTOP SYSTEMS AT ALL PENETRATIONS.
- 12.1.1. ALL FIRESTOP SYSTEMS SHALL BE APPROVED FOR THEIR APPLICATION BY LOCAL INSPECTION AUTHORITIES PRIOR TO FIELD INSTALLATION.



A WATER HEATER PIPING
P0.1 Scale: NTS

PLUMBING FIXTURE SCHEDULE

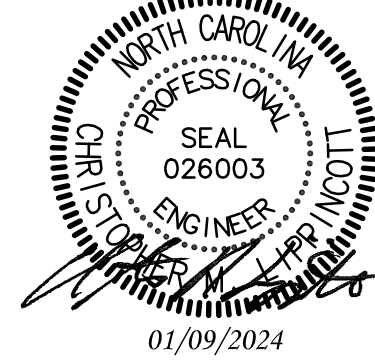
SYM.	FIXTURE	CW	HW	DRAIN	STOPS & VALVES	MFR.	MODEL	REMARKS
P1	WATER CLOSET TANK HANDICAP	1/2"	-	3"	1/2" x 3/8" ANGLE	AMERICAN STANDARD	215FC104.020	INCLUDE SUPPLY VALVE WITH CHROME PLATED RISER AND WALL FLANGE; ADA GRAB BARS; BEMIS CHURCH MODEL 9500SSCT SEAT. SEE NOTES 1, 2, 7, 10
P2	LAVATORY WALL HUNG	1/2"	1/2"	1-1/4"	1/2" X 3/8" ANGLE	NAMEEKS	SCARBEO 5507-49	INCLUDE SUPPLY VALVE WITH CHROME PLATED RISER AND WALL FLANGE & DELTA 567LF-BLMPU W/ POP-UP DRAIN; CONCEALED ARM SUPPORTS & 1-1/4" X 1-1/4" TUBULAR P-TRAP CP; MIX VALVE THAT CONFORMS TO ASSE 1070 AND IS SET FOR A MAXIMUM OUTPUT TEMPERATURE OF 110°F. SEE NOTE 1, 3, 7
P3	SHOWER	1/2"	1/2"	2"	INTERGRAL	DELTA	T14253-WE	INCLUDE MIX VALVE THAT CONFORMS TO ASSE 1070 AND IS SET FOR A MAXIMUM OUTPUT TEMPERATURE OF 110°F; SEE NOTES 4, 7, 9
P4	CLOTHES WASHER CONNECTION	1/2"	1/2"	2"	-	-	-	INCLUDE HOT & COLD WATER SHUTOFF VALVES, INDIRECT DRAIN, AND RECESSED WALL BOX
P5	FLOOR SINK	-	-	3"	-	ZURN	Z1900	12"X12"(TOP)X6"(DEPTH); CAST IRON BODY WITH PORCELAIN ENAMEL INTERIOR AND TOP; ABS DOME STRAINER; VERIFY WITH OWNER IF GRATE IS REQUIRED.
P6	TRENCH DRAIN	-	-	2"	-	ZURN	Z5880	4" LONG BY 6" WIDE; TWO BOTTOM 2" OUTLETS; 304 STAINLESS STEEL CONFORM GRATE DESIGN AND FINISH WITH OWNER BEFORE ORDERING
P7	FLOOR DRAIN	-	-	SEE DRAWING	-	ZURN	ZN-Z415B-P	NIKALOY TOP; DEEP SEAL TRAP; PROVIDE PRIMER TAP; SEE NOTE 5
P8	WALL CLEANOUT COVER PLATE	-	-	-	-	ZURN	Z-1469	STAINLESS STEEL
P9	WATER HEATER	1-1/4"	1-1/4"	-	GATE	STATE WATER HEATER	CSB 52 9 SFE	50 GALLONS; 77 GAL FIRST HOUR RATING; 37 GPH @ 100°F RECOVERY RISE; 9.0KW; 208V 3 PHASE; INCLUDE WATER HEATER PAN; PRESSURE RELIEF VALVE; INSULATED BLANKET IF NOT SUPPLIED WITH WATER HEATER.
P10	DIAPHRAGM TANK	3/4"	-	-	-	STATE WATER HEATER	ETC-5X	SIZED FOR 60 GALLON WATER HEATER; PROVIDE PRESSURE CHARGE AS PER MANUFACTURER INSTRUCTIONS
P11	CIRCULATION PUMP	1/2"	-	-	-	TACO	003	2 GPM @ 4' TDH, 110 VOLT; PROVIDE PROGRAMMABLE TIME CLOCK AND COORDINATE WITH OWNER FOR SCHEDULE.
P12	DRINKING FOUNTAIN	1/2"	-	1-1/4"	-	ELKAY	LBWOODWHC	SEE NOTES 1, 7
P13	HOSE BIBB	3/4"	-	-	-	WOODFORD	B24	ASSE 1011 APPROVED BACKFLOW PREVENTER, VERIFY LOCATION AND FINISH WITH OWNER. VERIFY FIT OF INSTALLATION WITH WALL CONSTRUCTION PRIOR TO ORDERING.
P14	MOP BASIN	1/2"	1/2"	3"	-	FIAT	SB3636	FAUCET: 830AA W/VACUUM BREAKER / HOSE: 832-AA MOP HANGER: 889-CC / STRAINER: E72-DD SEE NOTE 6

- PLUMBING FIXTURE SCHEDULE NOTES:
1. MATERIAL AND INSTALLATION SHALL BE PER STATE HANDICAP CODE REQUIREMENTS AND ADA REQUIREMENTS.
2. TOILETS SHALL FLUSH ON A MAXIMUM OF 1.6 GALLONS PER FLUSH. THE USE OF OFFSET WATER CLOSET FLANGES IS PROHIBITED. MISALIGNED WATER CLOSET FLANGES MUST BE RE-PIPED.
3. LAVATORIES SHALL HAVE 0.5 GPM FLOW AERATORS.
4. BOTH FIXED HEAD AND HAND HELED SHOWER HEAD SHALL HAVE FLOW RESTRICTOR TO PASS A MAXIMUM OF 2.5 GPM.
5. INDICATED FLOOR DRAIN SHALL BE PRIMED WITH 1/2" COPPER LINE FROM NEARBY CLEAR WATER FIXTURE (LAVATORY). TAP CLEAR WATER FIXTURE TAIL PIECE WITH WATER SAVER TRAP PRIMER AND ROUTE COPPER SUPPLY LINE UNDER SLAB TO DRAIN PRIMER CONNECTION. WATER SAVER TRAP PRIMER SHALL BE ACCESSIBLE AND CODE APPROVED.
- 5.1. IF A CLEAR WATER FIXTURE SUCH AS A LAVATORY IS NOT AVAILABLE, TAP NEARBY COLD WATER LINE AND ROUTE 1/2" PRIMER LINE THROUGH PRIMER VALVE CODE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE AND INSTALLED ON WALL ABOVE FLOOR SINK OF CLOSEST PREP SINK.
6. INSTALL CHECK VALVE ON COLD & HOT SUPPLY LINES SERVING MOP SINK.
7. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING FIXTURE INSTALLATION. PROVIDE WASTE AND WATER TRIM AND ACCESSORIES. IF SLIP JOINTS ARE USED FOR WASTE CONNECTION, AN ACCESS PANEL WITH STAINLESS STEEL COVER SHALL BE SUPPLIED TO ACCESS JOINTS.
8. NOT USED.
9. SHOWER VALVES MUST CONFORM TO THE REQUIREMENTS OF ASSE 1016 OR CSA 8125.
10. WATER CLOSET SPECIFIED IS LEFT SIDE FLUSH. PLUMBER SHALL INSTALL COMPARABLE MODEL WITH RIGHT SIDE FLUSH AS REQUIRED SO FLUSH HANDLE IS LOCATED ON OPEN SIDE OF WATER CLOSET IN CONFORMANCE WITH HANDICAP REQUIREMENTS.
11. NOT USED.
12. NOT USED.
13. SINKS SHALL HAVE 2.2 GPM FLOW AERATORS

LEGEND	
	COLD WATER PIPE- ABOVE GRADE
	COLD WATER PIPE- BELOW GRADE
	HOT WATER PIPE- ABOVE GRADE
	HOT WATER RECIRCULATION PIPE- ABOVE GRADE
	GAS PIPE- ABOVE GROUND
	GAS PIPE EXISTING- ABOVE GROUND
	GAS PIPE BELOW GROUND
	GAS PIPE EXISTING- BELOW GROUND
	WASTE PIPE- SOIL
	WASTE PIPE EXISTING- SOIL
	VENT PIPE
	ELBOW DOWN
	ELBOW UP
	WALL CLEANOUT
	FLOOR DRAIN
	TRENCH DRAIN
	FLOOR SINK
	HOSE BIBB
	VENT TO ROOF
	PIPE REDUCER
	UNION
	BALL VALVE
	CHECK VALVE
	GAS PRESSURE REGULATOR VALVE
	GAS SHUTOFF VLAVE
	GATE VALVE
	RELIEF VALVE
	VENT THROUGH ROOF
	AIR ADMITTANCE VALVE
	CLEAN OUT

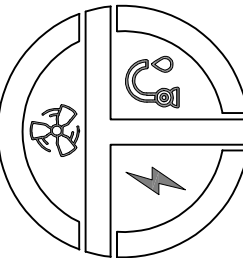


PROJECT NO: 23088	DATE
RELEASE: ?????	
NO. REV./SUB.	



OT ENGINEERING, PLLC
8708 MASONBORO SOUND RD
WILMINGTON, NC 28409
910.617.0641
www.otmefp.com

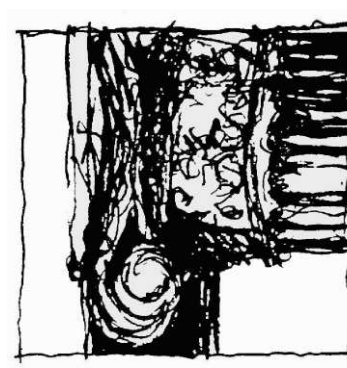
ENGINEERING



AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

Lisle Architecture
& Design, Inc.

614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



SHEET TITLE - NUMBER

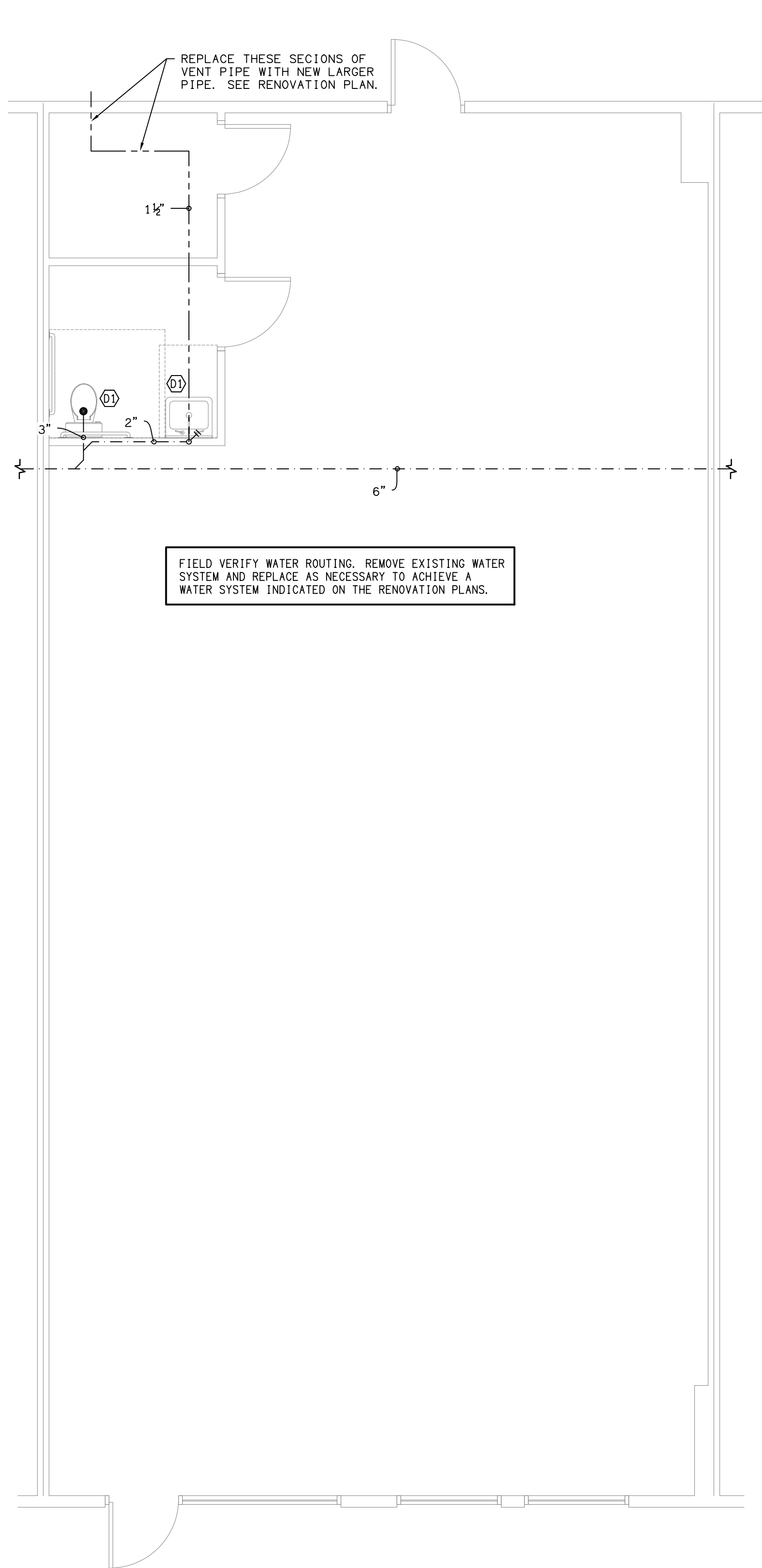
Plumbing
Schedules
& Specifications

P0.1

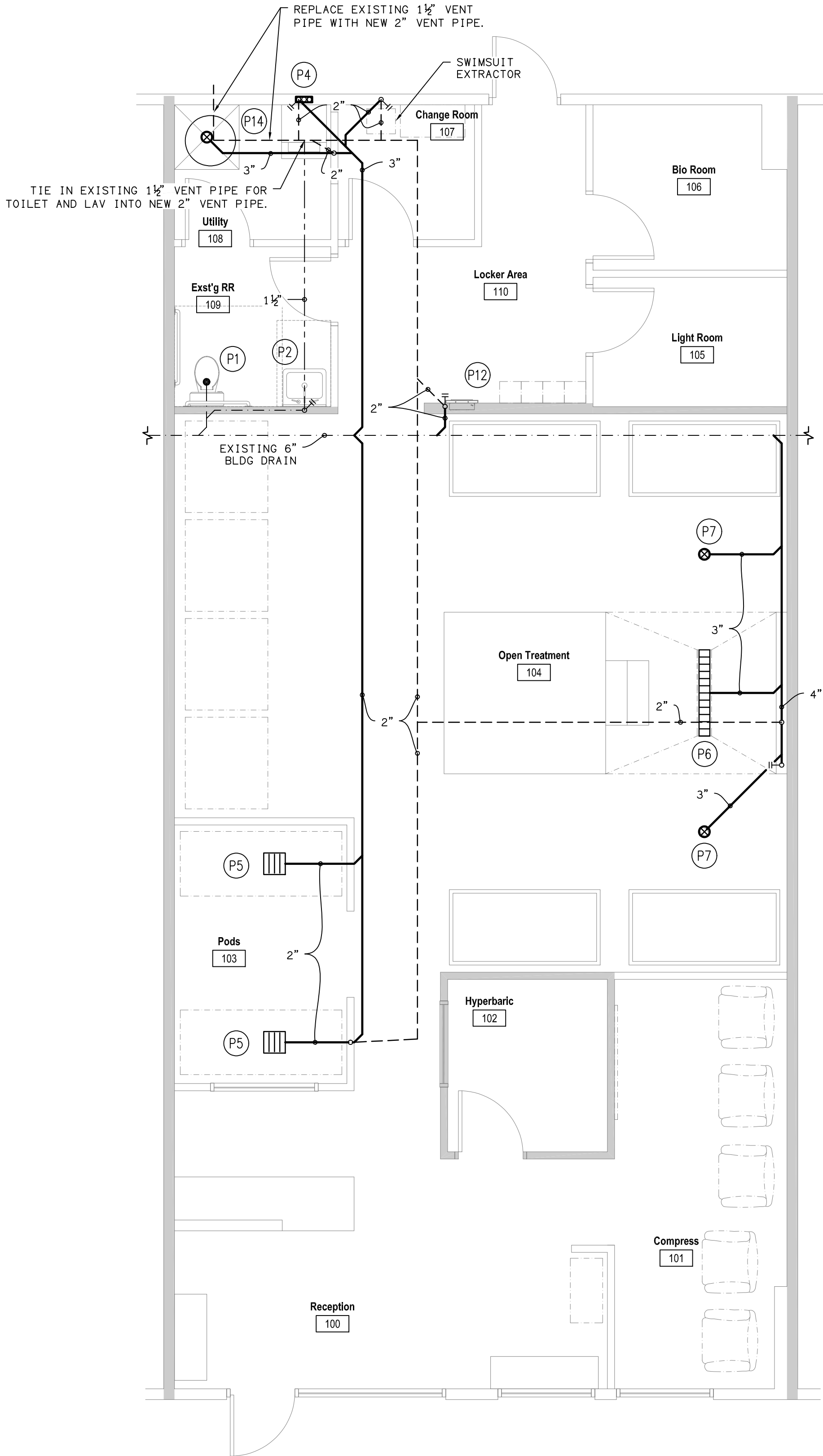
PLUMBING NOTES NOTES

01	EXISTING PLUMBING FIXTURE TO BE REMOVED. EXISTING WASTE, AND VENT PIPING SHALL BE REUSED IN A CODE APPROVED MANNER.
01	INCOMING CW AND HW LINES SHALL EACH HAVE AN EASILY ACCESSIBLE SHUT-OFF VALVE AND A WATER FILTER PRIOR TO ENTERING THE HYDRA-JET POD. PROVIDE FILTRATION AS PER THE MANUFACTURERS RECOMMENDATIONS. REFER TO THE MANUFACTURER'S MANUAL FOR ADDITIONAL INSTALLATION REQUIREMENTS.

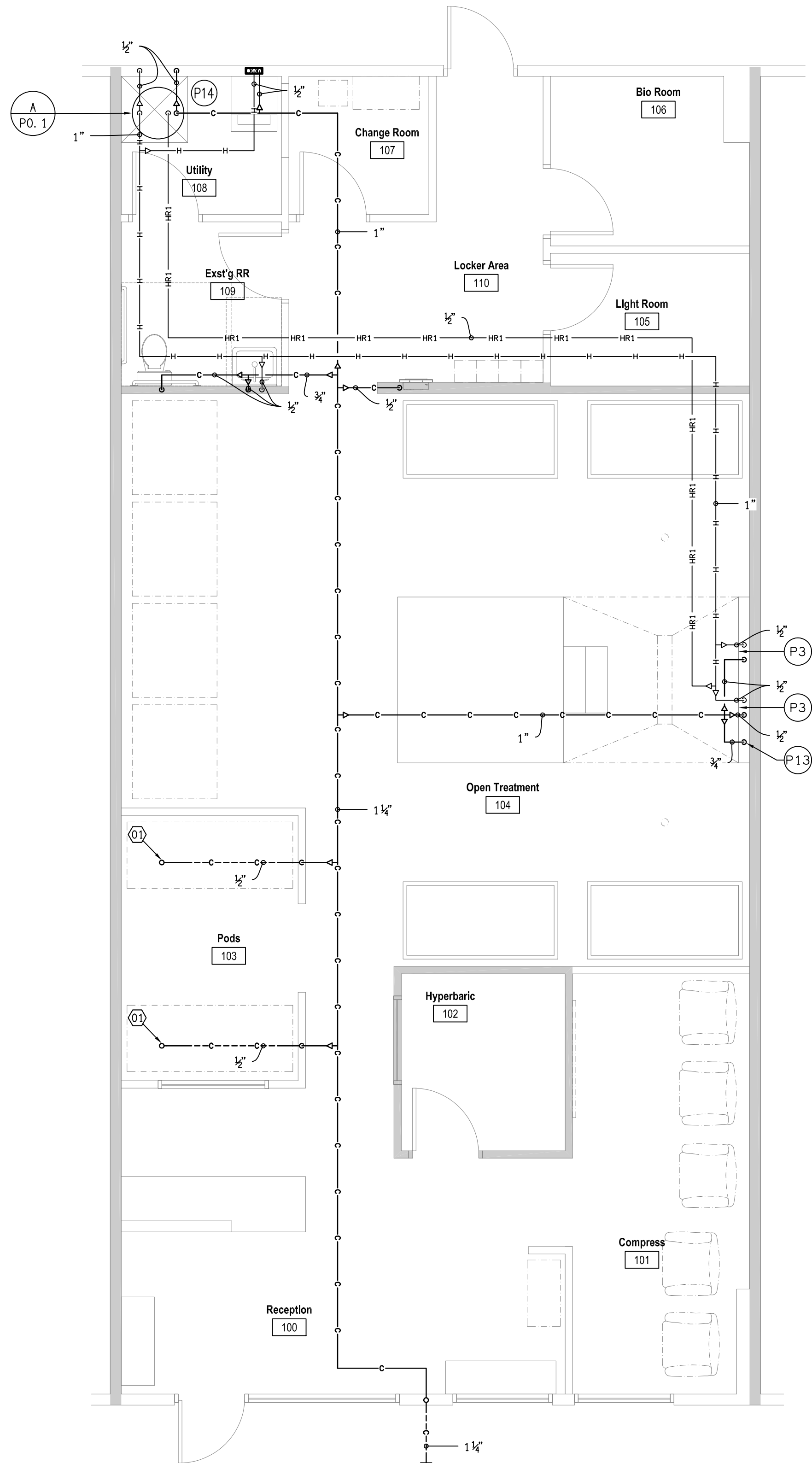
- WATER PIPING DESIGN ASSUMES:
- 65 PSI MINIMUM DAILY STATIC PRESSURE AT UTILITY WATER SERVICE CONNECTION
 - ¾" UTILITY CONNECTION TAP AND NO MORE THAN 10' OF ¾" COPPER K PIPE
 - ¾" WATER METER WITH MAXIMUM 4.0 PSI PRESSURE LOSS
 - ¾" BACKFLOW PREVENTER WITH MAXIMUM 14.5 PSI PRESSURE LOSS
 - 1¼" COPPER K UTILITY WATER SERVICE PIPING FROM METER & BACKFLOW PREVENTER TO BUILDING



A
P1.1
PLUMBING DEMO PLAN
Scale: 1/4" = 1'-0"



B
P1.1
PLUMBING DWV RENOVATION PLAN
Scale: 1/4" = 1'-0"



C
P1.1
PLUMBING WATER RENOVATION PLAN
Scale: 1/4" = 1'-0"

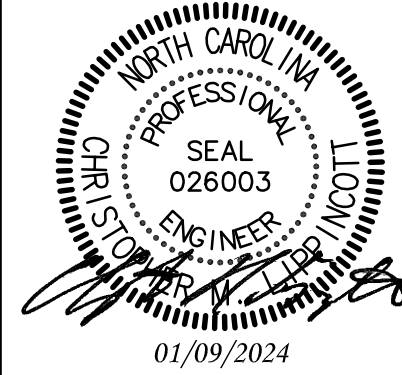


PROJECT NO: 23068

RELEASE: ?????

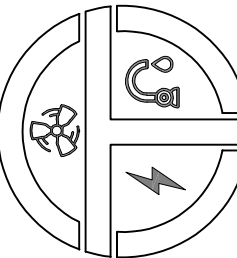
DATE

NO. REV/SUB.



OT ENGINEERING, PLLC
8208 MASONBORO SOUND RD
WILMINGTON, NC 28409
910.817.0641
www.otengineering.com

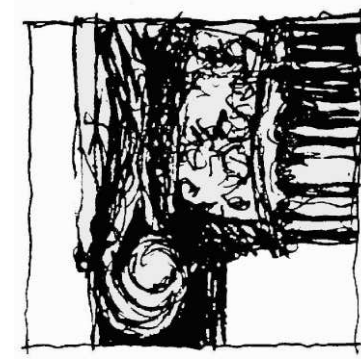
ENGINEERING



AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

Lisle Architecture & Design, Inc.

414 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



SHEET TITLE - NUMBER

Plumbing Piping
Plans

P1.1

1700 MECHANICAL SPECIFICATIONS

1701 GENERAL

- A. CODES, REGULATIONS AND STANDARD INSTALLATION ARE TO COMPLY WITH THE LATEST EDITION OF THE STATE BUILDING CODE, NFPA 90A, AND ALL OTHER APPLICABLE LOCAL AND NATIONAL CODES. IN THE CASE OF CONFLICT BETWEEN VARIOUS CODES, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
- B. FEES AND PERMITS: PROVIDE ALL LICENSES, FEES, PERMITS, INSURANCE, ETC., REQUIRED FOR THE EXECUTION OF THIS WORK.
- C. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL MATERIALS, PERFORM ALL WORK AND TEST AND PAY ALL FEES NECESSARY TO MAKE THE HEATING, AIR CONDITIONING AND VENTILATION SYSTEM OPERABLE AND READY FOR USE BY THE OWNER.
- D. GUARANTEE: ALL EQUIPMENT, MATERIALS AND INSTALLATION SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF WORK OR IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD GUARANTEE, IF LONGER. ALL COMPRESSORS SHALL HAVE A FIVE (5) YEAR GUARANTEE STARTING AFTER FINAL ACCEPTANCE OF WORK.
- E. IT IS UNDERSTOOD AND AGREED THAT THESE PLANS AND SPECIFICATIONS SHALL BE FULFILLED IN THEIR TRUE SPIRIT AND INTENT SO THAT ANY MINOR MATERIALS OR DEVICES ESSENTIAL TO PROPER AND CONVENIENT OPERATION, REQUIRED OR IMPLIED, SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR WITHOUT EXTRA CHARGE, EVEN THOUGH NOT SPECIFICALLY CALLED FOR.
- F. INSTALLATION SHALL COMPLY WITH OSHA STANDARDS.
- G. IN CASE OF CONFLICT BETWEEN THE PLANS AND SPECIFICATIONS OR CONFLICT BETWEEN INFORMATION PRESENTED ON THE PLANS OR IN THE SPECIFICATIONS, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
- H. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THIS OWN CLEAN UP AND REMOVAL OF SCRAP FROM THE JOB SITE. THE MECHANICAL CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE WORK AREA.
- I. DIVISION 1 SHALL BECOME A PART OF THESE SPECIFICATIONS BY REFERENCE.
- J. ALL MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS SHALL BE INSTALLED, SUPPORTED, AND RESTRAINED IN ACCORDANCE WITH THE STATE BUILDING CODE REQUIREMENTS FOR SEISMIC DESIGN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RETAIN A PROFESSIONAL ENGINEER COMPETENT IN THIS FIELD FOR THIS DESIGN. FOR ONE POSSIBLE SOURCE FOR THIS SERVICE, CONTACT SEISMIC CONTROL AND ISOLATION, INC. PHONE: 910-799-5204. ALL REQUIRED INSPECTIONS FOR THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED INSPECTORS AND AGENCIES HIRED BY THE OWNER OR OWNER'S AGENT.
- K. THE ENGINEER IS NOT RESPONSIBLE FOR JOB SITE SAFETY.

1702 SCOPE

- WORK SHALL INCLUDE BUT NOT BE LIMITED TO:
- A. PROVIDE AND INSTALL SPLIT SYSTEM HEAT PUMP SYSTEMS, DUCT, DIFFUSERS, GRILLES AND APPURTENANCES.
- B. PROVIDE AND INSTALL DEHUMIDIFIER SYSTEM.
- C. PROVIDE AND INSTALL VENT FANS AND DUCT.
- D. PROVIDE AND INSTALL ALL CONTROLS.
- E. PROVIDE ALL INCIDENTAL MATERIALS AND EQUIPMENT FOR A COMPLETE AND FUNCTIONING HVAC SYSTEM.

1703 MATERIALS

- A. HEATING, VENTILATION AND AIR CONDITIONING DUCT SHALL BE:
1. ALL CONCEALED HEATING AND COOLING MAIN SUPPLY AND RETURN DUCT SHALL BE GALVANIZED SHEET METAL WITH FIBERGLASS WRAP WITH FOIL BACKING, UL LABELED FOR CLASS 1 AIR DUCT MEETING NFPA 90 FLAME SPREAD AND SMOKE GENERATION REQUIREMENTS. DUCT INSULATION SHALL COMPLY WITH ALL STATE ENERGY CODE REQUIREMENTS AND HAVE A MINIMUM R-VALUE AS SHOWN BELOW:
- 1.1. SUPPLY DUCTS INSIDE THERMAL ENVELOPE.....R=6.0
- 1.2. RETURN DUCTS INSIDE THE THERMAL ENVELOPE.....FOR NOISE SUPPRESSION RECTANGULAR RIGID MAIN TRUNK SHALL HAVE $\frac{1}{2}$ " MEETING REQUIREMENTS OF ITEM 2 BELOW. ALL OTHER RETURN DUCTS: NONE REQUIRED.
- 1.3. FRESH AIR INTAKE DUCTS.....R=6.0
- 1.4. ALL DEHUMIDIFIER DUCTS.....NONE REQUIRED
- INSULATION SHALL MEET ALL CODE REQUIREMENTS.
2. ALL EXPOSED HEATING AND COOLING MAIN SUPPLY AND RETURN DUCT SHALL BE GALVANIZED SHEET METAL WITH DUCT LINER, UL LABELED FOR CLASS 1 AIR DUCT MEETING NFPA 90 FLAME SPREAD AND SMOKE GENERATION REQUIREMENTS. DUCT INSULATION SHALL NOT PROMOTE OR SUPPORT THE GROWTH OF MOLD, FUNGI OR BACTERIA (WHEN TESTED IN ACCORDANCE WITH UL 181, ASTM D1318, OR ASTM D3273), SHALL NOT BREAK, CRACK, PEEL, FLAME OFF, OR SHOW EVIDENCE OF DELAMINATION OR EROSION (WHEN TESTED IN ACCORDANCE WITH UL 181) AND SHALL COMPLY WITH ALL STATE ENERGY CODE REQUIREMENTS AND HAVE A MINIMUM R-VALUE AS SHOWN BELOW:
- 2.1. SUPPLY DUCTS.....R=4.0
- 2.2. RETURN DUCTS.....MINIMUM $\frac{1}{4}$ " FOR NOISE SUPPRESSION
- INSULATION SHALL MEET ALL CODE REQUIREMENTS.
3. FLEX RUNOUTS SHALL BE FLEX DUCT BY ATCO OR EQUAL AND SHALL BE UL LABELED FOR CLASS 1 AIR DUCT MEETING NFPA 90 FLAME SPREAD AND SMOKE GENERATION REQUIREMENTS. MINIMUM R-VALUE SHALL BE R=6.0
4. RIGID RUN OUTS SHALL BE GALVANIZED SHEET METAL WITH FIBERGLASS WRAP WITH FOIL BACKING WHICH MEET REQUIREMENTS OF ITEM 1.
5. PROVIDE SINGLE THICKNESS TURNING VANES IN MAIN SUPPLY AND RETURN DUCT AT TEES AND 90° ELLS.
6. FRESH AIR MAKE-UP SHALL BE CLASS 1 DUCT WITH INSULATION WHICH MEET REQUIREMENTS OF ITEM 1.
7. VENT DUCT:
- 7.1. VENT DUCT SHALL BE 26 GA. MINIMUM GALVANIZED SHEET METAL.
- 7.2. THE FIRST 3'-0" OF DUCT FROM THE EXTERIOR WALL SHALL BE INSULATED WITH INSULATION MEETING REQUIREMENTS OF ITEM 1 (MINIMUM R-VALUE SHALL BE 8.0).
- 7.3. VENTILATION DUCT FOR EXHAUST FAN MAY BE UNINSULATED EXCEPT AS REQUIRED BY ITEM 7.2
8. THERMOSTAT CABLE SHALL BE UL APPROVED FOR THE APPLICATION.
- CONDENSATE PIPE SHALL BE A MINIMUM OF $\frac{1}{2}$ " PVC (OR PEX FOR PLENUM SPACES) WITH 1/2" ARMAFLEX TYPE INSULATION FOR INTERIOR RUNS.
- D. ALL RUNOUT SUPPLY DUCTS SHALL HAVE BALANCING DAMPERS.
- E. REFRIGERATION TUBING SHALL BE SIZED PER THE EQUIPMENT MANUFACTURERS RECOMMENDATION AND INSULATED WITH A MINIMUM THICKNESS OF $\frac{1}{4}$ " AND A INSULATION CONDUCTIVITY NOT TO EXCEED 0.27 BTU*IN/(HR*FT²*F). DIFFERENT THICKNESSES AND CONDUCTIVITIES ARE ALLOWED THAT COMPLY THE REQUIREMENTS OF THE STATE ENERGY CODE. INSULATION SHALL MEET ALL MANUFACTURER'S RECOMMENDATIONS AND STATE ENERGY CODE REQUIREMENTS. ALL INSULATION EXPOSED TO SUNLIGHT SHALL BE PROVIDED WITH A UV PROTECTIVE COATING/COVERING.
- F. ALL SUPPLY AND RETURN GRILLES SHALL HAVE FULLY INSULATED BACK UNLESS NOTED OTHERWISE.
- G. ALL INTAKE OPENINGS SHALL BE PROTECTED WITH A CORROSION RESISTANT SCREEN WITH OPENINGS GREATER THAN $\frac{1}{4}$ " AND NOT GREATER THAN 1".
- H. ALL EXHAUST OPENINGS (EXCEPT DRYER EXHAUST) SHALL BE PROTECTED WITH A CORROSION RESISTANT SCREEN WITH OPENINGS NOT LESS THAN $\frac{1}{4}$ " AND NOT GREATER THAN $\frac{1}{2}$ ".

1704 EXECUTION

- A. ALL HOLES SHALL BE DRILLED OR CUT, DO NOT BREAK HOLES.
- B. THE MECHANICAL CONTRACTOR SHALL DO ALL CUTTING, PATCHING, AND PAINTING NECESSARY TO INSTALL ALL EQUIPMENT AS REQUIRED UNDER THIS CONTRACT, AND SHALL ESTABLISH ALL FINISHES WHEN CUTTING AND PATCHING OCCUR TO THEIR ORIGINAL CONDITION. QUALIFIED WORKERS SHALL DO ALL CUTTING AND PATCHING WORK (I.E. DRY WALL CUTTING AND PATCHING SHALL BE DONE BY QUALIFIED DRY WALL CRAFTSMEN.)
- C. CONTRACTOR SHALL BALANCE THE AIR CONDITIONING SYSTEM AS SHOWN ON THE PLANS WITHIN 10% OF THE NUMBER SHOWN. CONTRACTOR SHALL SUBMIT A BALANCING REPORT SHOWING THE ACTUAL CFM READINGS OF ALL SUPPLY REGISTERS TO THE ARCHITECT AT THE COMPLETION OF THE PROJECT.
- D. UNLESS NOTED OTHERWISE THE DUCT DIMENSIONS SHOWN REFER TO THE DUCTS INSIDE FREE AIR SPACE DIMENSION. ROUND OR RECTANGULAR DUCT MAY BE USED IN PLACE OF THE TYPE OF DUCT SHOWN AS LONG AS THE FOLLOWING REQUIREMENTS ARE MET:
1. THE REPLACEMENT DUCT SIZE SHALL HAVE A STATIC PRESSURE DROP AND AVERAGE DUCT VELOCITY EQUAL TO OR LESS THAN THE DUCT SIZE SHOWN ON THE DRAWINGS.
2. THE CONTRACTOR SHALL TAKE RESPONSIBILITY FOR THE NEW DUCT DESIGN, INCLUDING BUT NOT LIMITED TO, FIT, CLEARANCES AND AFFECTS ON OTHER TRADES.
- E. CONTRACTOR SHALL SUPPLY ALL HANGERS AND SUPPORTS NECESSARY TO SUSPEND DUCT WORK AND EQUIPMENT AS PER GOOD INSTALLATION PRACTICE AND THE STATE MECHANICAL CODE.
- F. ALL DUCT SHALL BE CONSTRUCTED, SUPPORTED AND REINFORCED PER SMACNA STANDARDS.
- G. MECHANICAL CONTRACTOR SHALL PROVIDE ALL THERMOSTATS, CONTROL, RELAY, STARTERS ETC., FOR A COMPLETE CONTROL SYSTEM FOR THE HEAT PUMP UNITS.
- H. MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR PENETRATIONS AND PATCHING.
- I. MECHANICAL CONTRACTOR SHALL PROVIDE CONDENSATE PUMPS WHERE GRAVITY DRAINAGE OF CONDENSATE IS NOT POSSIBLE WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
- J. INSTALLATION SHALL COMPLY WITH ALL STATE ENERGY CODE REQUIREMENTS.
- K. ALL REFRIGERATION PIPING AND CONDENSATE PIPING SHALL BE PROPERLY SUPPORTED AS PER MANUFACTURERS RECOMMENDATIONS, STATE BUILDING CODE, AND GOOD PIPING PRACTICES. PROPER DRAINAGE OF CONDENSATE LINES SHALL BE MAINTAINED.
- L. ALL MATERIALS AND EQUIPMENT SHALL BE PROPERLY INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS AND GOOD PRACTICE.
- M. THERE WILL BE MINIMUM 10' CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND ALL BUILDING EXHAUSTS AND PLUMBING VENTS.
- N. HORIZONTAL AIR HANDLER INSTALLATIONS SHALL INCLUDE VIBRATION ISOLATION SUPPORTS. VERTICAL FLOOR MOUNTED AIR HANDLERS SHALL BE SUPPORTED ON CORK PADS.
- O. AIR INTAKE AND EXHAUST WEATHER CAPS, GRILLES, AND LOUVERS SHALL BE SIZED TO PRODUCE A STATIC PRESSURE DROP OF 0.05" OR LESS AT DESIGN AIR FLOW. WEATHER CAPS SHALL BE ALUMINUM BY GREENHECK OR EQUAL.
- P. DUCT SYSTEMS SHALL BE SEALED STRICTLY AS PER THE STATE ENERGY CODE.
- Q. ALL DUCT WORK TRANSITIONS SHALL BE SUPPLIED AS REQUIRED FOR CONNECTION OF ALL DUCTED EQUIPMENT AND SYSTEM COMPONENTS.
- R. ALL OUTSIDE AIR INTAKE DUCTS (ONE FOR EACH AIR HANDLER) SHALL HAVE BACKDRAFT DAMPERS BALANCED TO OPEN AND ALLOW IN OUTSIDE AIR AS INDICATED ON DRAWINGS WHEN AIR HANDLER FAN IS RUNNING. THE USE OF ELECTRONICALLY DRIVEN DAMPERS TIED TO THE AIR HANDLER OPEN WHEN FAN IS ON, CLOSED WHEN FAN IS OFF, SHALL BE AN ACCEPTABLE ALTERNATE. ALL ELECTRICAL CONNECTIONS SHALL BE COORDINATED WITH ELECTRICIAN.
- S. PROVIDE OPERATION AND MAINTENANCE MANUALS TO THE BUILDING OWNER.

1705 ELECTRICAL CONNECTIONS

- ELECTRICAL CIRCUIT SIZES AND NUMBER ARE BASED ON THE MANUFACTURER OF THE EQUIPMENT SPECIFIED, AND IT SHALL BE THE RESPONSIBILITY OF THE HEATING AND AIR CONDITIONING CONTRACTOR TO CHANGE ANY AND ALL ELECTRICAL WORK IN ORDER TO FIT EQUIPMENT OTHER THAN THAT SPECIFIED. THE HEATING AND AIR CONDITIONING CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR AND THE OWNER TO ASSURE THAT ALL UNITS ARE PROPERLY CONNECTED AND SHALL CHECK THE WIRING PRIOR TO STARTING UNITS. TERMINATION OF ELECTRICAL POWER WILL BE AS FOLLOWS:
1. ELECTRICAL CONTRACTOR SHALL PROVIDE AND CONNECT ALL POWER TO THE MECHANICAL EQUIPMENT.
2. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL THE CONTROL AND THERMOSTAT SYSTEMS FOR THE HEATING, AIR CONDITIONING SYSTEMS.
3. MECHANICAL CONTRACTOR SHALL PROVIDE THE EMERGENCY SHUTDOWN CONTROLS AND COORDINATE WITH THE ELECTRICAL CONTRACTOR ON DUCT DETECTOR INSTALLATION AND AIR HANDLING UNIT SHUTDOWN.
4. MECHANICAL CONTRACTOR SHALL PROVIDE ANY REQUIRED ELECTRICAL CONNECTIONS FOR CONDENSATE PUMPS WITHOUT ADDITIONAL COST TO THE OWNER.

1706 TESTS

- A. ALL HEATING COOLING AND VENTILATION EQUIPMENT, UPON COMPLETION, SHALL BE TESTED FOR AT LEAST ONE (1) DAY AND SHALL BE SHOWN TO BE IN SATISFACTORY CONDITION ON BOTH HEATING AND COOLING.
- B. CONTRACTOR SHALL SUPPLY ALL NECESSARY LABOR AND EQUIPMENT FOR THE TEST.

1707 SUBSTITUTION

- ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE SHOWN OR SPECIFIED AND SHALL BE OF THE VERY BEST QUALITY AS SPECIFIED. REQUESTS TO SUBSTITUTE OTHER MATERIALS OR PRODUCTS FOR THOSE SPECIFIED SHALL BE SENT IN WRITING TO THE OWNER. REQUESTS SHALL BE ACCOMPANIED BY ENGINEERING DATA, SPECIFICATION SHEETS, ETC. AS NECESSARY TO FULLY IDENTIFY AND APPRAISE THE PRODUCTS. APPROVAL OF EQUIPMENT SHALL NOT RELIEVE THE CONTRACTOR OF NONCOMPLIANCE WITH THE SPECIFICATIONS, EVEN IF SUCH APPROVAL IS MADE IN WRITING, UNLESS THE ENGINEER IS CALLED TO THE NONCONFORMING FEATURES BY LETTER ACCOMPANYING THE SUBMITTAL DATA.

1708 VISIT TO SITE

- ALL BIDDERS ON THIS WORK SHALL VISIT THE SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS BEFORE SUBMITTING THEIR BIDS. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.

1709 SHOP DRAWINGS

- AS SOON AS POSSIBLE (AND NOT MORE THAN 30 DAYS) AFTER CONTRACT IS SIGNED, THE CONTRACTOR SHALL SUBMIT FIVE (5) COPIES OF SHOP DRAWINGS OF HEAT PUMPS, REGISTERS, FANS, ANY SPECIAL EQUIPMENT WHICH HE INTENDS TO USE. FOUR (4) COPIES OF THIS DATA WILL BE RETURNED BY THE ENGINEER WHO WILL INDICATE APPROVAL OR OTHERWISE.

1710 FIRE RATED WALLS, FLOORS & CEILINGS

- CONTRACTOR SHALL DETERMINE LOCATION OF ALL FIRE AND SMOKE RATED WALLS, FLOORS AND CEILINGS FROM ARCHITECTURAL DRAWINGS. PIPING PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE AS REQUIRED BY THE STATE BUILDING CODE, WITH APPROVED AND APPROPRIATELY RATED UL FIRESTOP SYSTEMS AT ALL PENETRATIONS. ALL DUCT PENETRATIONS SHALL BE PROPERLY PROTECTED WITH RADIATION OR FIRE DAMPERS WITH ALL INSTALLATION STRICTLY AS PER MANUFACTURERS RECOMMENDATIONS.

1711 PLACING IN SERVICE

- UPON COMPLETION OF THE ENTIRE SYSTEM, THE MECHANICAL CONTRACTOR SHALL INSTALL NEW AIR FILTERS AND LEAVE ENTIRE SYSTEM CLEAN AND READY FOR OPERATION. THE MECHANICAL CONTRACTOR SHALL DEMONSTRATE THE PROPER FUNCTION OF THE ENTIRE SYSTEM. THE MECHANICAL CONTRACTOR SHALL ACQUAINT THE OWNERS REPRESENTATIVE WITH THE PROPER OPERATION OF THE ENTIRE SYSTEM.

SPLIT SYSTEM HEAT PUMP SCHEDULE

COMPRESSOR							AIR HANDLING UNIT														GENERAL						
SYMBOL	COOLING CAPACITY (TONS)	ELECTRIC				MFG.	MODEL	SYMBOL	TYPE	HEATER		ELECTRIC				MFG.	MODEL	FAN CFM	FRESH AIR INTAKE (CFM)	FRESH AIR INTAKE DUCT SIZE	ESP (IN OF H2O) VERT/H. R.	SEER HSPF	REMARKS				
		VOLT	PHASE	MCA	MOCF					CAPACITY (KW)	STAGES	VOLT	PHASE	MCA	MOCF												
HP-1	3 TONS	VERIFY					AHU-1	HORIZ.	VERIFY														1,200	175	8"ø	VERIFY	NOTES 1&5
HP-2	5 TONS	208	1ø	32	50	TRANE	4TWR4060G1	AHU-2	HORIZ.	10.80	2	208	1ø	22/53	25/60	TRANE	GAM580C60	1,900	300	10"ø	0.5	14.00 8.50	NOTES 5 TO 11				

NOTES:

1. HP/AHU-1 IS EXISTING TO BE REUSED. RELOCATE AS INDICATED ON THE PLANS.
2. PROVIDE GALVANIZED DRIP PANS AT EACH UNIT WITH PAN DRAINS TO OUTSIDE BUILDING.
3. PROVIDE SOLID STATE PROGRAMMABLE THERMOSTAT WITH SET BACK CONTROLS FOR TIME OF DAY AND DAY OF WEEK, AND CAPABLE OF TEMPORARY MANUAL OVERRIDE.
4. PROVIDE CONCRETE PAD FOR COMPRESSORS AND ANCHOR COMPRESSORS TO PADS.
5. DURING CONSTRUCTION THE UNIT SHALL BE PROTECTED WITH CLEAN FILTERS. PROVIDE NEW CLEAN FILTERS AT UNIT AT THE END OF THE PROJECT BEFORE TURNING OVER TO OWNER.
6. PROVIDE FRENCH DRAINS FOR CONDENSATE DISCHARGE.
7. PROVIDE MANUFACTURER RECOMMENDED CLEARANCES AROUND ALL INDOOR AND OUTDOOR UNITS.
8. CONSULT WITH COMPRESSOR MANUFACTURER FOR THE CORRECT SIZING OF REFRIGERANT LINES. PROVIDE MANUFACTURER RECOMMENDED EQUIPMENT FOR ANY LONG REFRIGERANT LINE LENGTHS.
9. PROVIDE LOW AMBIENT CONTROLS FOR FREEZE PROTECTION DOWN TO 15°F.
10. PROVIDE CONTROLS THAT PREVENT AUXILIARY HEAT STRIPS FROM BEING ACTIVATED WHEN THE HEAT PUMP CAN HANDLE THE HEATING LOAD EXCEPT DURING DEFROST CYCLE.
11. AHU COIL SHALL COME WITH MANUFACTURER FACTORY APPLIED BLACK EPOXY COATING.

COMPLIANCE SCHEDULE - MECHANICAL

METHOD OF COMPLIANCE	PRESCRIPTIVE
ENERGY COST BUDGET	
THERMAL ZONE	3
EXTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	24°F
SUMMER DRY BULB	91°F
INTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	72°F
SUMMER DRY BULB	75°F
RELATIVE HUMIDITY	50%
BUILDING HEATING LOAD	42,896 BTUH
BUILDING COOLING LOAD	110,996 BTUH
MECHANICAL SPACING CONDITIONING SYSTEM	
UNITARY	
DESCRIPTION OF UNIT -	
HEATING EFFICIENCY -	SEE EQUIPMENT SCHEDULE.
COOLING EFFICIENCY -	
HEAT OUTPUT OF UNIT -	
COOLING OUTPUT OF UNIT -	
BOILER	
TOTAL BOILER OUTPUT (IF OVERSIZED STATE REASON)	N/A
CHILLER	
TOTAL CHILLER CAPACITY	N/A
LIST EQUIPMENT EFFICIENCIES	SEE EQUIPMENT SCHEDULE
EQUIPMENT SCHEDULES WITH MOTORS	
(MECHANICAL SYSTEM)	
MOTOR HORSEPOWER	N/A
NUMBER OF PHASES	N/A
MINIMUM EFFICIENCY	N/A
MOTOR TYPE	N/A
# OF POLES	N/A

DESIGNER STATEMENT

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE MECHANICAL SYSTEM SERVICE SYSTEMS AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE ENERGY CODE.

SIGNED: Christopher M. Lippincott, PE

NAME: Christopher M. Lippincott, PE

TITLE: ENGINEER

REGISTER SCHEDULE

SYMBOL	DESCRIPTION	NECK	FACE	RUN OUT	VOLUME DAMPER	MATERIAL	COLOR	MFG. (NOTE 1)	MODEL	REMARKS
A	LAY-IN PLAQUE DIFFUSER	6"ø	24x24	6"ø	NO	ALUMINUM	VERIFY	TITUS	OMNI-AA	-
B	LAY-IN PLAQUE DIFFUSER	8"ø	24x24	8"ø	NO	ALUMINUM	VERIFY	TITUS	OMNI-AA	-
C	LAY-IN PLAQUE DIFFUSER	10"ø	24x24	10"ø	NO	ALUMINUM	VERIFY	TITUS	OMNI-AA	-
D	DOUBLE DEFLECTION SUPPLY	8"x4"	-	6"ø	YES	ALUMINUM	VERIFY	TITUS	300FS	-
E	NOT USED									-
F	SPIRAL DUCT DOUBLE DEFLECTION SUPPLY	12"x6"	-	-	YES	ALUMINUM	VERIFY	TITUS	S330FL	-
G	SPIRAL DUCT DOUBLE DEFLECTION SUPPLY	16"x6"	-	-	YES	ALUMINUM	VERIFY	TITUS	S300FL	-
H	SPIRAL DUCT DOUBLE DEFLECTION SUPPLY	20"x8"	-	-	YES	ALUMINUM	VERIFY	TITUS	S300FL	-
I	DOUBLE DEFLECTION SUPPLY	32"x16"	-	14"øx2	NO	ALUMINUM	VERIFY	TITUS	300FS	-
RA	LAY-IN LOUVERED GRILLE	22"x22"	24x24	6"ø	NO	ALUMINUM	VERIFY	TITUS	350FL	-
RB	LAY-IN LOUVERED GRILLE	10"x22"	12x24	8"ø	NO	ALUMINUM	VERIFY	TITUS	350FL	-
RC	LOUVERED GRILLE	8"x8"	-	6"ø	NO	ALUMINUM	VERIFY	TITUS	350FL	-
RD	NOT USED									-
RE	LOUVERED GRILLE	36"x16"	-	-	YES	ALUMINUM	VERIFY	TITUS	350FL	-
RF	LOUVERED GRILLE	32"x16"	-	14"øx2	NO	ALUMINUM	VERIFY	TITUS	350FL	-
GA	LOUVERED GRILLE	12"x12"	-	10"ø	NO	ALUMINUM	VERIFY	TITUS	350FL	-

NOTES:

1. EQUALS ARE METAL-AIRE, PRICE AND KRUEGER.

DEHUMIDIFICATION UNIT SCHEDULE

SYMBOL	CAPACITY	EFFICIENCY	CFM	VOLT	PHASE	MCA	MOP	MFG.	MODEL	WEIGHT	REMARKS
DHUM-1	506 PINTS/DAY @ 80°F/60% RH 349 PINTS/DAY @ 75°F/50% RH	8.1 PINTS/WH 6.2 PINTS/WH	1,350	220-240 NOTE 8	1ø	19	30	QUEST	506	350 LBS	SEE NOTES

NOTES:

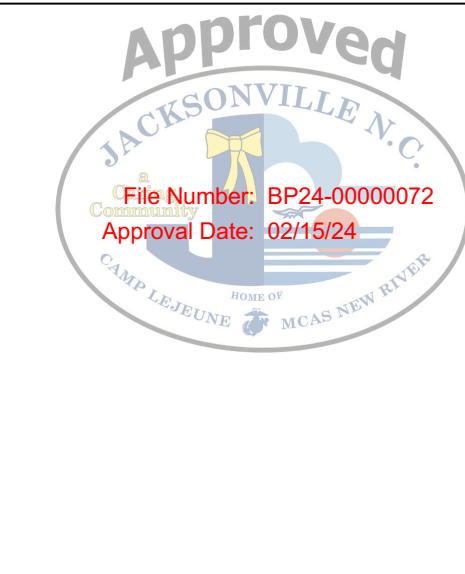
1. UNIT SHALL BE LISTED.
2. INSTALL AS PER MANUFACTURERS RECOMMENDATIONS.
3. MOUNT UNIT WITH VIBRATION ISOLATORS.
4. PROVIDE GALVANIZED DRIP PANS AT EACH UNIT WITH PAN DRAINS TO OUTSIDE BUILDING.
5. PROVIDE LOW VOLTAGE SOLID STATE PROGRAMMABLE WALL MOUNTED HUMIDISTAT.
6. PROVIDE MERV-13 FILTERS PER MANUFACTURERS RECOMMENDATIONS.
7. PROVIDE MANUFACTURERS EXHAUST AND INTAKE DUCTING KIT.
8. COORDINATE WITH ELECTRICAL CONTRACTOR FOR BUCK/BOOST TRANSFORMER FOR PROPER VOLTAGE.

VENTILATION FAN SCHEDULE

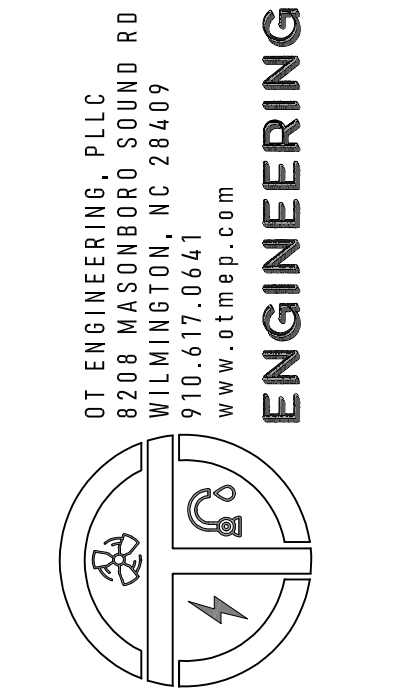
SYMBOL	DESCRIPTION	CFM SETTING	S.P. (w.g.)	VOLT	PHASE	WATTS	SONES	MOUNTING	MFG. (NOTE 1)	MODEL	CONTROL	REMARKS
F-1	CABINET FAN	325	$\frac{1}{4}$ "	120	1	98	1.2	IN-LINE	GREENHECK	CSP-A410	INTERLOCKED TO AHU-2	SEE NOTES

NOTES:

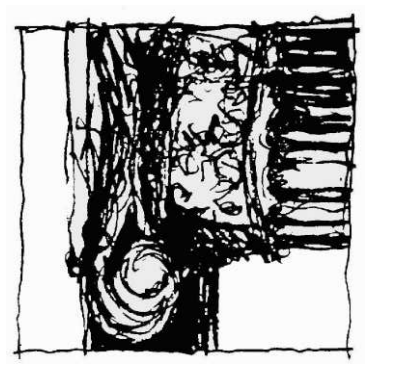
1. EQUALS ARE TWIN CITY, CAPTIVE-AIRE, PENNBARRY AND LOREN COOK.
2. PROVIDE BACKDRAFT DAMPER.
3. PROVIDE VARIABLE SPEED CONTROL.



DATE	01/29/24
NO. REV./SUB.	1
PLAN REVIEW	



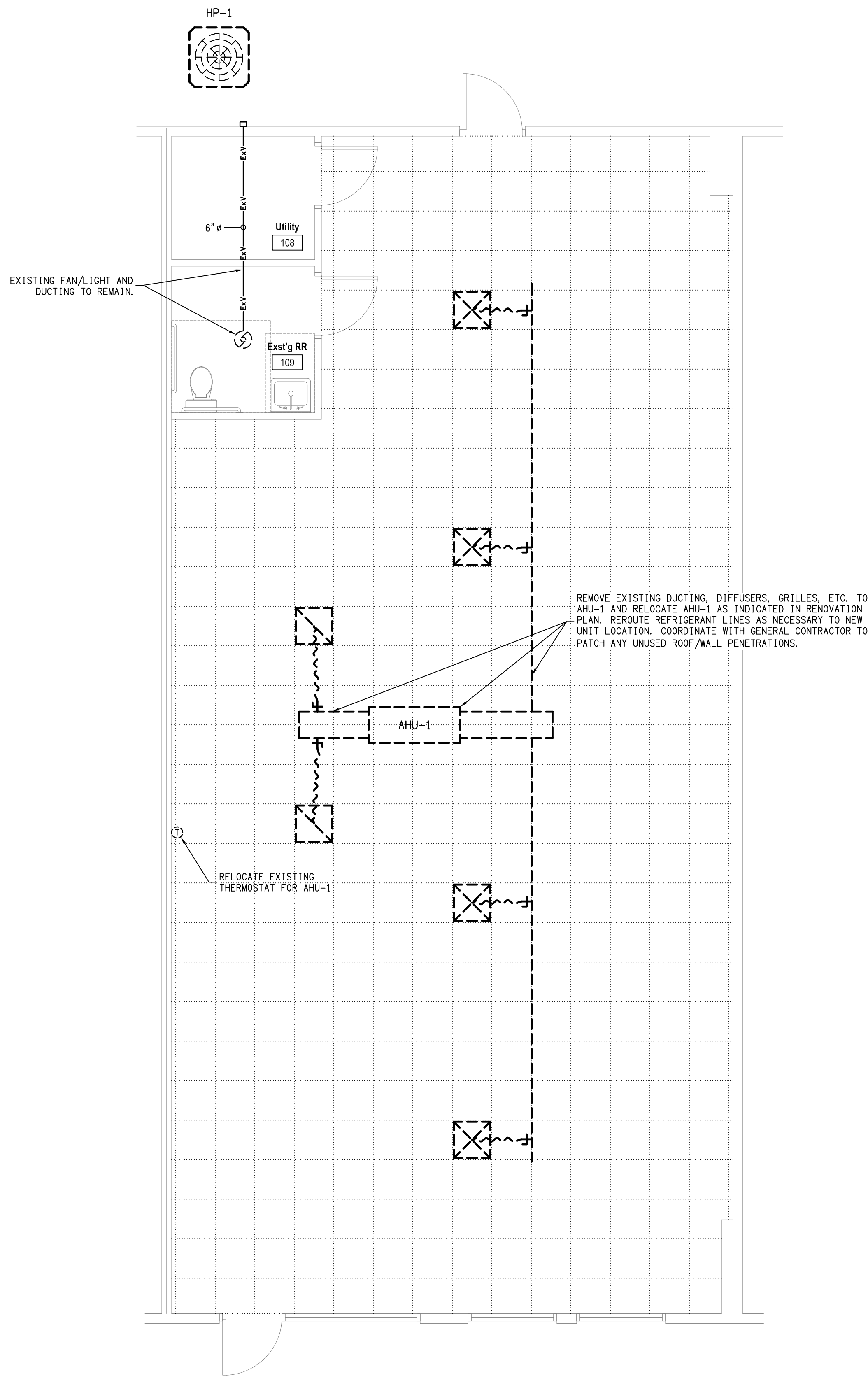
Lisle Architecture & Design, Inc.
AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540
614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



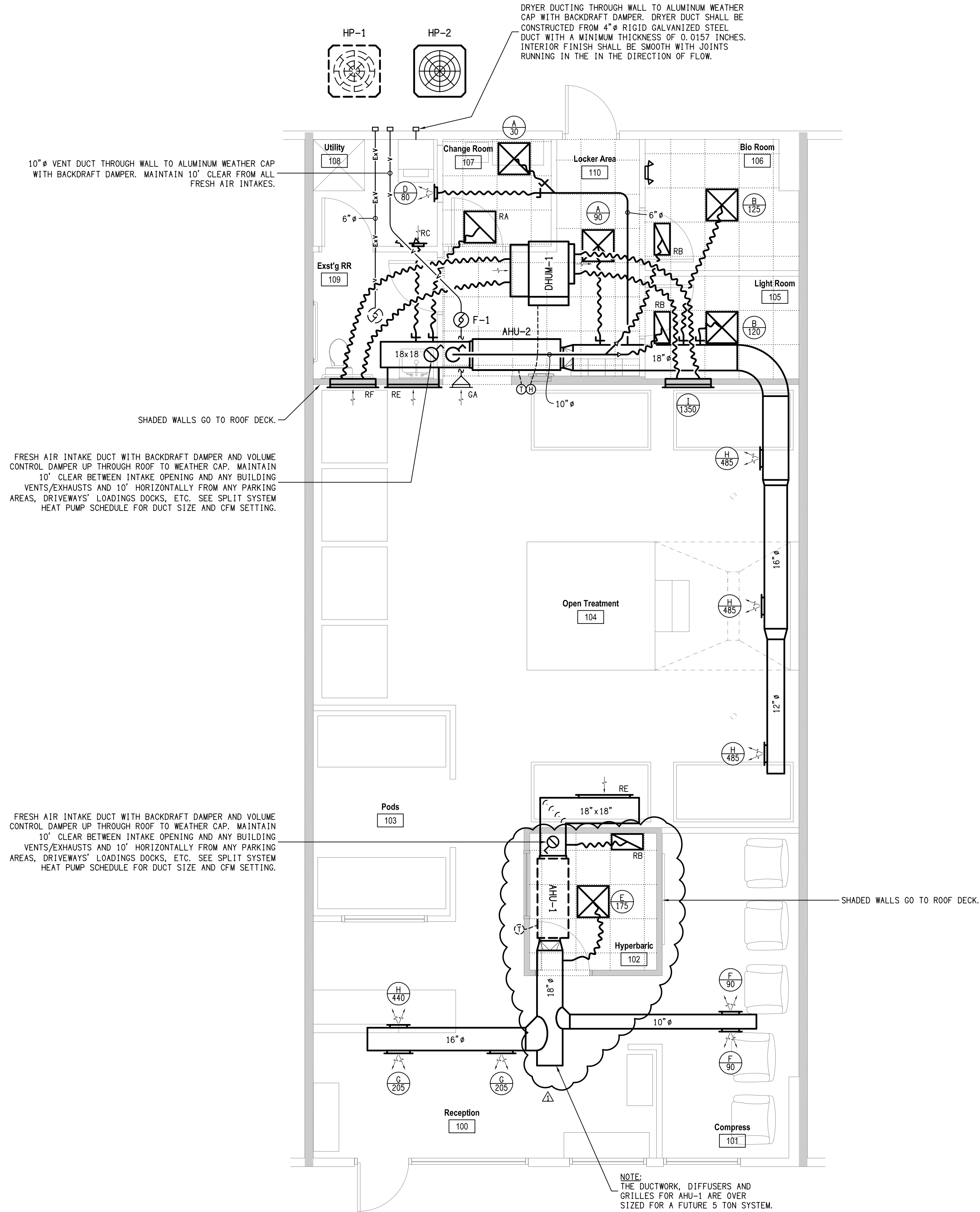
SHEET TITLE - NUMBER

Mechanical
Schedules
& Specifications

M0.1



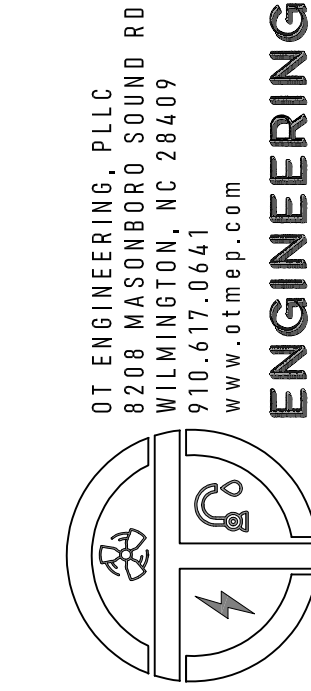
A
M1.1 Mechanical Demolition Plan
Scale: 1/4" = 1'-0"



A
M1.1 Mechanical Renovation Plan
Scale: 1/4" = 1'-0"

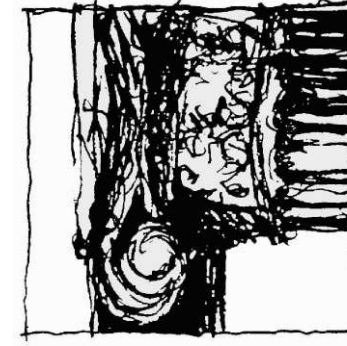


OTE PROJECT NO: 23171	RELEASE: ?????
NO. REV./SUB.	DATE
1	01/29/24
PLAN REVIEW	



AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

Lisle Architecture & Design, Inc.
614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



SHEET TITLE - NUMBER

Mechanical
Plans

M1.1

ELECTRICAL SPECIFICATIONS

- 1601 GENERAL
- A. INSTALLATION SHALL COMPLY WITH THE LATEST EDITION OF THE NORTH CAROLINA STATE BUILDING CODE, VOLUME I AND VOLUME X, NATIONAL ELECTRIC CODE, LOCAL BUILDING CODES AND ORDINANCES AND OTHER NATIONAL CODES AND ORDINANCES. IN THE CASE OF CONFLICT BETWEEN THE CODE AND THE DRAWINGS AND SPECIFICATIONS OR BETWEEN THE VARIOUS CODES, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
- B. PROVIDE AND PAY ALL LICENSES, FEES, PERMITS, POWER COMPANY CONNECTION CHARGES, IF ANY, INSURANCE, ETC., REQUIRED FOR EXECUTION OF THIS WORK.
- C. ELECTRICAL CONTRACTOR SHALL PROVIDE THE MATERIALS, PERFORM THE WORK AND TEST AND PAY ALL FEES NECESSARY TO MAKE THE ELECTRICAL SYSTEM OPERABLE AND READY FOR USE BY THE OWNER.
- D. GUARANTEE: EQUIPMENT, MATERIALS AND INSTALLATION SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF WORK OR IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD GUARANTEE, IF LONGER.
- E. IT IS UNDERSTOOD AND AGREED THAT THESE PLANS AND SPECIFICATIONS SHALL BE FULFILLED IN THEIR TRUE SPIRIT AND INTENT SO THAT ALL MINOR MATERIALS OR DEVICES ESSENTIAL TO PROPER AND CONVENIENT OPERATION, REQUIRED OR IMPLIED, SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR WITHOUT EXTRA CHARGE, EVEN THOUGH NOT SPECIFICALLY CALLED OUT.
- F. INSTALLATION SHALL COMPLY WITH OSHA STANDARDS.
- G. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN CLEAN UP AND REMOVAL OF SCRAP FROM THE JOB SITE. THE ELECTRICAL CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE WORK AREA. THE ENGINEER IS NOT RESPONSIBLE FOR JOB SITE SAFETY.
- H. IN CASE OF CONFLICT BETWEEN THE PLANS AND SPECIFICATIONS OR CONFLICT BETWEEN INFORMATION PRESENTED ON THE PLANS OR IN THE SPECIFICATIONS, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
- I. DIVISION 1 SHALL BECOME A PART OF THESE SPECIFICATIONS BY REFERENCE.
- J. ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED, SUPPORTED, AND RESTRAINED IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE REQUIREMENTS FOR SEISMIC DESIGN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RETAIN A PROFESSIONAL ENGINEER COMPETENT IN THIS FIELD FOR THIS DESIGN FOR ONE POSSIBLE SOURCE FOR THIS SERVICE CONTACT SEISMIC CONTROL AND ISOLATIONS, INC. PHONE: 910 799-5204. ALL REQUIRED INSPECTIONS FOR THESE DESIGNS SHALL BE PERFORMED BY APPROVED INSPECTORS AND AGENCIES PROVIDED BY OWNER AND OWNER'S AGENT.

- 1602 SCOPE
- WORK SHALL INCLUDE BUT IS NOT LIMITED TO:
- A. PROVIDE 120/208V-3-W SERVICE TO THE BUILDING.
- B. PROVIDE AND INSTALL FIXTURES AS SHOWN ON THE PLANS.
- C. PROVIDE AND INSTALL WIRING DEVICES, PANELS, AND CONDUIT.
- D. PROVIDE AND INSTALL TELEPHONE PANEL, CONDUIT TO TELEPHONE COMPANY POINT OF DELIVERY, TELEPHONE BOXES.
- E. PROVIDE CONNECTIONS TO MECHANICAL, AND PLUMBING EQUIPMENT.
- F. PROVIDE REQUIRED DEMOLITION.

- 1603 MATERIALS
- A. CONDUCTORS
1. ALL WIRE SHALL BE COPPER. WIRE #8 AND LARGER SHALL BE STRANDED.
2. USE WIRE WITH THHN/THWN INSULATION FOR ALL WIRE.
3. POWER CONDUCTORS SHALL BE #12 AWG MINIMUM. PILOT AND CONTROL CIRCUITS MAY BE #14 AWG.
- B. CONDUIT
1. UNDERGROUND CONDUIT SHALL BE PVC. CHANGE TO RIGID GALVANIZED BELOW CONCRETE FLOOR AND STUB UP THROUGH FLOOR WITH RIGID GALVANIZED.
2. ARMOR CLAD CABLE SHALL BE ALLOWED IN CONCEALED AREAS.
3. OTHER ABOVE GRADE CONDUIT SHALL BE EMT WITH STEEL COMPRESSION FITTINGS. IF EXPOSED TO MECHANICAL DAMAGE CONDUIT SHALL BE RIGID GALVANIZED.
4. CONNECTIONS TO EQUIPMENT AND FIXTURES SHALL BE MADE WITH SEAL TIGHT FLEX CONDUIT FOR EXTERIOR CONNECTIONS AND GREENFIELD FOR INTERIOR CONNECTION.
- C. WIRING DEVICES SHALL BE ONE MAKE, UNDERWRITERS APPROVED, MANUFACTURED BY PASS & SEYMOUR, HUBBELL OR EQUAL. DEVICE COVERS SHALL BE WEATHERPROOF FOR EXTERIOR COVERS. WIRING DEVICES SHALL BE STANDARD GRADE. COLOR SHALL BE DETERMINED BY THE ARCHITECT.
- D. DISTRIBUTION EQUIPMENT SHALL BE THE LATEST PRODUCTS, MANUFACTURER SHALL BE G.E., SQUARE D, WESTINGHOUSE, OR ITC. INTERIOR EQUIPMENT SHALL BE NEMA 1 AND EXTERIOR EQUIPMENT SHALL BE NEMA 3R MINIMUM.
- E. COORDINATE WITH POWER COMPANY TO OBTAIN BREAKER KAIC RATINGS. DRAWINGS SHALL INDICATE MINIMUM RATING. ALL BREAKERS SHALL BE BOLT ON TYPE. MAIN PANEL SHALL BE SERVICE ENTRY RATED AND LABELED. BREAKERS SHALL BE SERIES AND CURRENT LIMITING RATED.
- F. PROVIDE MOTOR RATED SWITCHES FOR SWITCHES SERVING MOTORS AS REQUIRED.
- G. FUSES SHALL BE CURRENT LIMITING TIME DELAY FUSES "CLASS RK5".
- H. ALL EQUIPMENT AND FIXTURES SHALL BE UL APPROVED.
- I. PROVIDE LAMPS FOR ALL FIXTURES. LAMPS SHALL BE G.E., OR PENNSYLVANIA.

- 1604 EXECUTION
- A. UNLESS OTHERWISE NOTED, SET ALL RECEPTACLES SET ALL RECEPTACLES AT 16" AFF TO CENTER OF OUTLET BOX, AND SET ALL SWITCHES AT 48" AFF TO TOP OF OUTLET BOX. ALL OTHER HEIGHTS ARE TO CENTER OF BOX UNLESS NOTED OTHERWISE.
- B. HOLES SHALL BE DRILLED OR CUT. DO NOT BREAK HOLES.
- C. THE ELECTRICAL CONTRACTOR SHALL DO ALL CUTTING, PATCHING AND PAINTING NECESSARY TO INSTALL ALL EQUIPMENT AS REQUIRED UNDER THIS CONTRACT, AND SHALL ESTABLISH ALL FINISHES WHEN CUTTING AND PATCHING OCCUR TO THEIR ORIGINAL CONDITION. QUALIFIED WORKERS SHALL DO ALL CUTTING AND PATCHING WORK (I.E. DRY WALL CUTTING AND PATCHING SHALL BE DONE BY QUALIFIED DRY WALL CRAFTSMEN).
- D. PATCHING SHALL BE DONE BY THE ELECTRICAL CONTRACTOR. ALL PATCHING SHALL BE DONE BY A CRAFTSMAN SKILLED IN THE WORK BEING PERFORMED.
- E. WIRE SHALL BE COLOR CODED AS FOLLOWS:

120/208
BLACK
RED
BLUE
WHITE
NEUTRAL
GROUND
GREEN

- F. CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EQUIPMENT AND POWER REQUIREMENTS FOR ALL EQUIPMENT BEFORE RUNNING SERVICE.
- G. CONDUIT AND WIRING IN FINISHED AREAS SHALL BE CONCEALED. ANY EXPOSED CONDUIT SHALL BE RUN IN A NEAT FASHION AND SHALL BE RUN PERPENDICULAR AND PARALLEL TO THE BUILDING LINES.
- H. TELEPHONE AND COMPUTER OUTLETS SHALL BE DUPLEX RECEPTACLE BOXES WITH 3/4" EMT STUBBED INTO THE CEILING WITH PULL STRINGS INSTALLED.
- I. CONTRACTOR SHALL PRESERVE ALL FIRE RATED WALLS AND CEILINGS. VERIFY RATING WAS OFF THE ARCHITECTURAL PLAN. THIS SHALL INCLUDE USING CAULKING THAT IS UL APPROVED FOR THE APPLICATIONS, OFFSETTING BOXES AS REQUIRED AND PROVIDING RATED CAPS OR COVERS FOR LIGHTS, AS REQUIRED.

- 1605 DIRECTORY CARDS, NAME PLATES & EQUIPMENT LABELS
- A. PROVIDE A TYPED DIRECTORY CARD IN EACH PANELBOARD INDICATING ELECTRICAL DEVICES OR EQUIPMENT SERVED BY EACH CIRCUIT BREAKER. FURNISH BLANK COVERPLATE.
- B. PROVIDE NAMEPLATES FOR PANELS AND DISCONNECTS. NAMEPLATES SHALL BE LAMINATED PLASTIC. EACH NAMEPLATE SHALL IDENTIFY THE PANEL AND THE VOLTAGE. NAMEPLATES SHALL BE MELAMINE PLASTIC, 0.125 INCH THICK, BLACK WITH WHITE CENTER CORE. SURFACE SHALL BE MATTE FINISH. CORNERS SHALL BE SQUARE. ACCURATELY ALIGN LETTERING AND ENGRAVE INTO CORE. MINIMUM SIZE OF NAMEPLATES SHALL BE 1X2.5 INCHES. LETTERING SHALL BE A MINIMUM OF 0.25 INCHES HIGH, NORMAL BLOCK STYLE.

- 1606 TEST & ADJUSTMENTS
- A. TEST AND ADJUST THE ELECTRICAL SYSTEM AND RELATED WORK PROVIDED UNDER THIS DIVISION OF THE SPECIFICATIONS.
- B. TEST ALL CIRCUITS WITH A "MEGGER" TEST TO DETERMINE THAT THE SYSTEM IS FREE OF SHORT CIRCUITS AND THAT PHASE CONDUCTORS ARE NOT GROUNDED. CHECK ALL ELECTRICAL EQUIPMENT FOR PROPER OPERATIONS.

- 1607 GROUNDING
- A. THE SERVICE EQUIPMENT, CONDUIT SYSTEM SUPPORT CABINETS, EQUIPMENT AND NEUTRAL CONDUCTOR SHALL BE GROUNDING IN ACCORDANCE WITH ARTICLE 250 OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE. GROUNDING CONDUCTORS SHALL BE SO ROUTED AS TO PERMIT, AS FAR AS PRACTICAL THE MOST DIRECT PATH TO THE GROUND ELECTRODE SYSTEM. ALL GROUND CONNECTIONS SHALL HAVE A CLEAN CONTACT SURFACE.
- B. RUN A SEPARATE EQUIPMENT GROUND IN ALL FEEDS.

- 1608 SUBSTITUTION
- A. ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE SHOWN OR SPECIFIED AND SHALL BE OF THE VERY BEST QUALITY AS SPECIFIED.
- B. REQUESTS TO SUBSTITUTE OTHER MATERIALS OR PRODUCTS FOR THOSE SPECIFIED SHALL BE SENT IN WRITING TO THE OWNER. REQUESTS SHALL BE ACCOMPANIED BY ENGINEERING DATA, SPECIFICATION SHEETS, ETC., AS NECESSARY TO FULLY IDENTIFY AND APPRAISE THE PRODUCTS.
- C. APPROVAL OF EQUIPMENT WILL NOT RELIEVE THE CONTRACTOR OF NONCOMPLIANCE WITH THE SPECIFICATIONS EVEN IF SUCH APPROVAL IS MADE IN WRITING, UNLESS THE ENGINEER IS CALLED TO THE NONCONFORMING FEATURES BY LETTER ACCOMPANYING THE SUBMITTAL DATA.

- 1609 VISIT TO SITE
- ALL BIDDERS ON THIS WORK SHALL VISIT THE SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS BEFORE SUBMITTING THEIR BIDS. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITION.

- 1610 SHOP DRAWINGS
- AS SOON AS POSSIBLE (AND NOT MORE THAN 30 DAYS) AFTER THE CONTRACT IS SIGNED, THE CONTRACTOR SHALL SUBMIT FIVE (5) COPIES OF THE SHOP DRAWINGS COVERING LIGHTING FIXTURES, PANELS, CIRCUIT, BREAKERS, AND WIRING DEVICES, AND ANY SPECIAL EQUIPMENT WHICH HE INTENDS TO USE. SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR HIS APPROVAL.

LIGHTING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	LAMP						MANUF.	MODEL	MOUNTING	REMARKS
		NO.	WATT	LUMENS	TEMP (°K)	TYPE	VOLT				
AX	EXISTING TO REMAIN 2' x 4' TROFFER	-	30	3,800	5,000	LED	120	EXISTING	EXISTING	EXISTING	REWIRE AS REQUIRED.
BR	EXISTING TO BE RELOCATED 2' x 4' TROFFER	-	36	4,500	5,000	LED	120	EXISTING	EXISTING	CEILING LAY-IN	REWIRE AS SHOWN.
CX	EXISTING FAN/LIGHT	-	13	-	-	LED	120	EXISTING	EXISTING	EXISTING	MAINTAIN ALL CONNECTIONS.
D	6" CAN	-	17	2,000	3,000	LED	120	ATLANTIC LIGHTING	LED6-SYL20-30K-U/6LED10	CEILING RECESSED	-
E	4' LINEAR	-	54	3,200	-	LED	120	ALCON LIGHTING	12100-23-RGBW-P-4-RS4-XX-AC4-XXX	CEILING SUSPENDED	SEE LIGHTING FIXTURE NOTE 3. U.L. DAMP LOCATION.
F	4' LINEAR	-	35	3,500	3,000	LED	120	ALCON LIGHTING	12180-4-XX	CEILING SUSPENDED	VERIFY COLOR AND MOUNTING HEIGHT WITH OWNER AND ARCHITECT.
G	DRUM PENDANT	-	21	1,700	3,000	LED	120	ALLMODERN	SINGLE LIGHT GLASS DIMMABLE LED PENDANT	CEILING SUSPENDED	COORDINATE FIXTURE WITH OWNER. VERIFY MOUNTING HEIGHT.
⊗	EXIT	-	-	-	-	-	120	SAYLITE	EZXTEU-1-R-W-EM	WALL OR CEILING SURFACE	-
↗	EMERGENCY	-	-	-	-	-	120	SAYLITE	RWR-16-LED	WALL AT 7'-6" AFF	-

LIGHTING FIXTURE NOTES:

1. CONTRACTOR SHALL PROVIDE ALL LAMPS. ALL LAMPS SHALL BE DIMMABLE LED.

2. CONTRACTOR SHALL COORDINATE WITH FIXTURE/LAMP MANUFACTURE AND PROVIDE COMPATIBLE DIMMERS WHERE REQUIRED.

3. CONTRACTOR SHALL VERIFY COLOR, MOUNTING HEIGHT AND CONTROLS WITH OWNER AND ARCHITECT. FIXTURE SHALL BE MOUNTED A MINIMUM OF 8'-6" TO BOTTOM OF FIXTURE ABOVE SHOWER THRESHOLD OR SPA/TUB RIM.

EQUIPMENT CONNECTION SCHEDULE

SYMBOL	DESCRIPTION	HP	KW	AMP	VOLT	PHASE	BKR	FEEDER		CONNECTION	REMARKS
								COND	WIRE		
HP-2	5 TON HEAT PUMP	-	-	26	208	1	50	¾"	2#8, 1#10G	FUSED DISC NEMA 3R	-
AHU-2	AIR HANDLING UNIT	-	10.8	60	208	1	90	-	-	FUSED DISC NEMA 1	SEE DETAIL B/E.O. 2.
DHUM-1	DEHUMIDIFICATION UNIT	-	-	15	240	1	30	½"	2#10, 1#10G	FUSED DISC NEMA 1	-
HWT	HOT WATER TANK	-	9.0	25	208	3	35	¾"	3#10, 1#10G	FUSED DISC NEMA 1	-
⌀ ³⁰	DRYER	-	5.0	24	208	1	30	¾"	3#10, 1#10G	30A RCPT	PROVIDE NEUTRAL.
⌀ ³⁰	VITALITY BOOTH	-	-	20	120	1	30	½"	2#10, 1#10G	20A RCPT	VERIFY REQUIREMENTS WITH SUPPLIER.
⌀ ²⁰	HYDRAJET	-	-	13	240	1	20	½"	2#12, 1#12G	20A RCPT	VERIFY REQUIREMENTS WITH SUPPLIER.
⌀ ⁵⁰	SPA	-	-	40	240	1	50	1"	2#8, 1#10G	50A RCPT	SEE DETAIL A/E.O. 1.

EQUIPMENT CONNECTION NOTES:

1. CONTRACTOR SHALL VERIFY ALL CONNECTIONS BEFORE RUNNING SERVICE OR ORDERING EQUIPMENT.

ELECTRICAL SUMMARY
ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:

ENERGY CODE: ☒ PRESCRIPTIVE ☐ PERFORMANCE
ASHRAE 90.1 ☐ PRESCRIPTIVE ☐ PERFORMANCE

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE - SEE PLANS
NUMBER OF LAMPS IN FIXTURE - SEE PLANS
BALLAST TYPE USED IN THE FIXTURE - SEE PLANS
NUMBER OF BALLASTS IN FIXTURE - SEE PLANS
TOTAL WATTAGE PER FIXTURE - SEE PLANS
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED - SPECIFIED=1,047 WATTS, ALLOWED=1,419 WATTS
TOTAL EXTERIOR WATTAGE SPECIFIED VS ALLOWED - N/A

ADDITIONAL PRESCRIPTIVE COMPLIANCE:

- ☐ 406.2 MORE EFFICIENT MECHANICAL EQUIPMENT
☒ 406.3 REDUCED LIGHTING POWER DENSITY
☐ 406.4 ENHANCED DIGITAL LIGHTING CONTROLS
☐ 406.5 ON-SITE RENEWABLE ENERGY
☐ 406.6 DEDICATED OUTDOOR AIR SYSTEM
☐ 406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING

DESIGNERS STATEMENT

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE THERMAL ENVELOPE REQUIREMENTS OF THE LATEST NORTH CAROLINA STATE ENERGY CODE.

SIGNED: Christopher M. Lippincott, PE

NAME: CHRISTOPHER M. LIPPINCOTT, PE

TITLE: ENGINEER

ELECTRICAL LEGEND

○	CEILING OUTLET WITH LED OR FLUORESCENT FIXTURE
♀	WALL OUTLET WITH LED OR FLUORESCENT FIXTURE
○	CEILING OUTLET WITH LED OR FLUORESCENT FIXTURE
S	SWITCH, SINGLE POLE, 120VAC, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX
Ss	SWITCH, THREE WAY, 120VAC, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX
Sso	30A SWITCH, SINGLE POLE, 120VAC, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX
Sos	DUAL TECH OCCUPANCY SENSOR WITH ON/OFF SWITCH, 120VAC, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX, SENSORWORX SWX-121 OR EQUAL
Ssv	DUAL TECH OCCUPANCY SENSOR WITH ON/OFF SWITCH, LOW VOLTAGE, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX, SENSORWORX SWX-121-I-MS OR EQUAL
Dos	DUAL TECH OCCUPANCY SENSOR WITH DIMMER AND ON/OFF SWITCH, 120VAC, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX, SENSORWORX SWX-121-D OR EQUAL
Dsv	DUAL TECH OCCUPANCY SENSOR WITH DIMMER AND ON/OFF SWITCH, LOW VOLTAGE, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX, SENSORWORX SWX-121-I-D-MS OR EQUAL
Sr	TIMER SWITCH WITH 2 HOUR MAX TIME LIMIT, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX
Sz	250V TWO POLE SWITCH, MATCH AMP RATING OF EQUIPMENT BREAKER
D	SLIDE DIMMER WITH ON/OFF SWITCH, SINGLE POLE, 120VAC, MOUNTED AT 48" AFF TO TOP OF OUTLET BOX
Ⓢ	DUAL TECH OCCUPANCY SENSOR, LOW VOLTAGE, CEILING MOUNT, SENSORWORX SWX-222-1 OR EQUAL
Ⓢh	DUAL TECH OCCUPANCY SENSOR, LOW VOLTAGE, CEILING MOUNT, SENSORWORX SWX-222-1-HE OR EQUAL
Ⓢp	POWER PACK FOR LOW VOLTAGE OCCUPANCY SENSORS, SENSORWORX SWX-900-AX OR EQUAL
Ⓢ	DUPLEX CONVENIENCE RECEPTACLE, 120VAC, MOUNTED AT 18" AFF TO CENTER OF OUTLET BOX, UNO
Ⓢ ¹⁵	15A DUPLEX CONVENIENCE RECEPTACLE, 120VAC, MOUNTED AT 18" AFF TO CENTER OF OUTLET BOX, UNO
Ⓢ ²⁰	NEMA 5-20 RECEPTACLE, 120V, MOUNTED AT EQUIPMENT, COORDINATE WITH EQUIPMENT SUPPLIER FOR RECEPTACLE TYPE
Ⓢ ³⁰	30A RECEPTACLE, 120VAC, MOUNTED AT EQUIPMENT, COORDINATE WITH EQUIPMENT SUPPLIER FOR RECEPTACLE TYPE, PROVIDE CORD & PLUG
Ⓢ	QUAD CONVENIENCE RECEPTACLE, 120VAC, MOUNTED AT 18" AFF TO CENTER OF OUTLET BOX, UNO
Ⓢ ²⁰	20A RECEPTACLE, 250V, SINGLE PHASE, MOUNTED AT EQUIPMENT, COORDINATE EXACT MOUNTING LOCATION AND RECEPTACLE TYPE WITH OWNER AND EQUIPMENT SUPPLIER, PROVIDE NEUTRAL
Ⓢ	EQUIPMENT CONNECTION, COORDINATE CONNECTION WITH EQUIPMENT CONNECTION SCHEDULE
Ⓢ	CONVENIENCE RECEPTACLE, 120V, FLOOR MOUNT, COVER FLUSH WITH FINISHED FLOOR, COVER SHALL BE NON-METALLIC
Ⓢ	FLOOR MOUNT PHONE/DATA OUTLET, COVER FLUSH W/ FINISH FLOOR
▼	PHONE OUTLET, MOUNTED AT 18" AFF TO CENTER OF OUTLET BOX
▽	DATA OUTLET, MOUNTED AT 18" AFF TO CENTER OF OUTLET BOX
▽	PHONE/DATA OUTLET, MOUNTED AT 18" AFF TO CENTER OF OUTLET BOX
Ⓢ	JUNCTION BOX
Ⓢ	TV CONNECTION, VERIFY REQUIREMENTS, MOUNT AT +18" AFF UNO
■	ELECTRICAL PANEL, SURFACE
■	ELECTRICAL PANEL, FLUSH
Ⓢ	DISCONNECT SWITCH, FUSIBLE
Ⓢ	FAN BY MECHANICAL CONTRACTOR
■	PHONE/CATV PANEL, 4x8x¾ PLYWOOD WITH #6 INSUL. GROUND IN ¾" CONDUIT TO ELEC. SYSTEM GROUND

NOTES:

1. FOR 20A - 14 - 120 VOLT SERVICE WIRE SIZE SHALL BE AS FOLLOWS:
DIST TO 1st CONNECTION WIRE SIZE
60' TO LESS #12
60' TO 100' #10
OVER 100' #8

OCCUPANCY SENSOR NOTES:

1. CONTRACTOR SHALL PROVIDE ALL REQUIRED ACCESSORIES INCLUDING WALL PLATES AND LOW VOLTAGE WIRING.
2. CONTRACTOR SHALL COORDINATE EXACT QUANTITIES OF POWER PACKS AND CEILING SENSORS WITH MANUFACTURER.

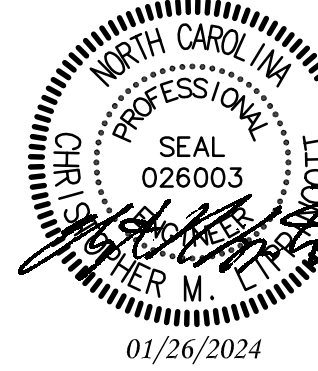
A	Receptacle Mounting Detail
E0.1	Scale: NTS



OTE PROJECT NC 23171

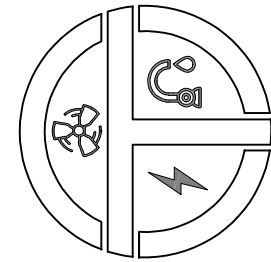
RELEASE: 7777

DATE	01/29/24
NO. REV./SUB.	1
PLAN REVIEW	



OT ENGINEERING, PLLC
8208 MASONBORO SOUND RD
WILMINGTON, NC 28409
910.617.0641
www.otemep.com

ENGINEERING

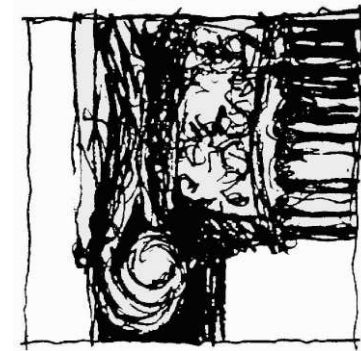


AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

Lisle Architecture & Design, Inc.

614 Market Street
Wilmington, NC 28401
(910) 763.6053

Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



SHEET TITLE - NUMBER

Electrical Legend,
Schedules and
Specifications

E0.1

PANEL NO.:	A	(EXISTING)	PROJECT:	AUGMENT SPA
USAGE:	LIGHTING AND APPLIANCE		CLIENT:	SURFACE
LOCATION:	OFFICE		MOUNTING:	NEMA 1
PHASES:	3		PANEL TYPE:	23171
L-L VOLTS	208V		ENGINEER:	WIRE CUTTER
L-G VOLTS	120V		PROJECT NO.:	
BUS AMPS:	225A		FED FROM:	
MAIN CB AMPS:	MLO			
AIC RATING:	12,823 MINIMUM			

LOAD AMPS.	DESCRIPTION	NOTES	BREAKER POLE	AMP.	CKT. #	CKT. #	BREAKER AMP.	POLE	NOTES	DESCRIPTION	LOAD AMPS.
6.0	LTS/MIRROR		1	20	1	A	2	20	1	RECPT	3.0
10.0	STGN		1	20	3	B	4	20	1	COMPRESSION CHAIR	10.0
2.0	RECPT		1	20	5	C	6	20	1	RECPT	2.0
0.0	SPARE		2	30	7	A	8	20	1	RECPT	2.0
0.0					9	B	10	20	1	HW CIRCULATION PUMP	1.0
5.0	LTS		1	20	11	C	12	20	1	RECPT	3.0
1.0	F-1		1	20	13	A	14	20	1	WASHER	10.0
30.0	AHU-1		2	40	15	B	16	20	1	WATER EXTRACTOR	9.0
30.0					17	C	18	20	1	BIOCHARGER	9.0
26.0	HP-1		2	40	19	A	20	20	1	RECPT	9.0
26.0					21	B	22	20	1	HAND DRYER	8.0
60.0	AHU-2		2	90	23	C	24	20	1	FWC	7.0
60.0					25	A	26	15	1	COLD TUB	10.0
26.0	HP-2		2	50	27	B	28	15	1	COLD TUB	10.0
26.0					29	C	30	20	1	MESSAGE BOARD/CLOCK	5.0
0.0	SPACE		1		31	A	32	15	1	COLD TUB	10.0
12.0	HYPERBARIC CHAMBER		1	20	33	B	34	15	1	COLD TUB	10.0
0.0	SPACE		1		35	C	36		1	SPACE	0.0
25.0	HWT		3	35	37	A	38		1	SPACE	0.0
25.0					39	B	40		1	SPACE	0.0
25.0					41	C	42		1	SPACE	0.0

LOAD SUMMARY	CON. KVA	%	DEM. KVA
RECEPTACLES	2.52	code	2.52
MISC	13.32	100%	13.32
LIGHTING	2.52	125%	3.15
HVAC	8.2308	100%	8.2308
HEAT STRIP	18.72	100%	18.72
REFRIGERATION	0	65%	0
KITCHEN	0	65%	0
COOKING	0	65%	0
WATER HEATING	9	100%	9
-	0	0%	0
TOTAL KVA	54 KVA		55 KVA
TOTAL AMPS	151 AMPS		153 AMPS

PANEL NOTES:

- PROVIDE GROUND BUS
- PROVIDE FULL SIZE NEUTRAL BUS UNLESS NOTED OTHERWISE
- LO - INDICATES C.B. EQUIPPED WITH "LOCK-OUT" DEVICE
- GFI - INDICATES C.B. IS GFI TYPE (30 mA FOR EQUIPMENT, 5 mA FOR PERSONNEL)
- ST- INDICATES C.B. EQUIPPED WITH SHUNT TRIP DEVICE
- IG - INDICATES CIRCUIT SHALL INCLUDE ADDITIONAL ISOLATED GROUND CONDUCTOR
- AFCI - INDICATES COMBINATION TYPE AFCI C.B.

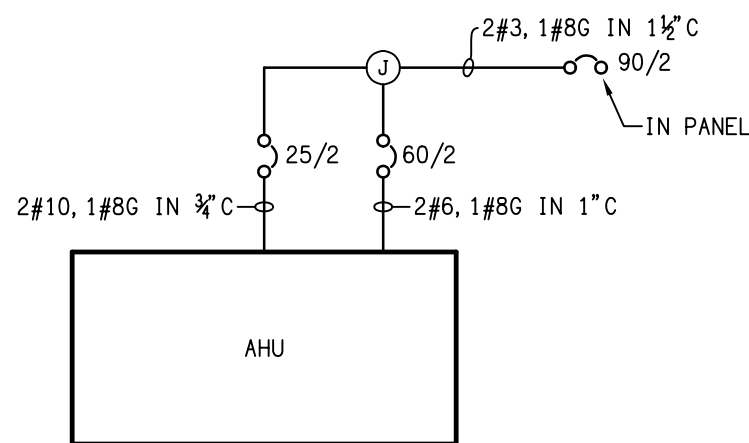
PANEL NO.:	SB		PROJECT:	AUGMENT SPA
USAGE:	LIGHTING AND APPLIANCE		CLIENT:	SURFACE
LOCATION:	OFFICE		MOUNTING:	NEMA 1
PHASES:	1		PANEL TYPE:	23171
L-L VOLTS	240V		ENGINEER:	B
L-G VOLTS	120V		PROJECT NO.:	
BUS AMPS:	225A		FED FROM:	
MAIN CB AMPS:	110A			
AIC RATING:	10,000 MINIMUM			

LOAD AMPS.	DESCRIPTION	NOTES	BREAKER POLE	AMP.	CKT. #	CKT. #	BREAKER AMP.	POLE	NOTES	DESCRIPTION	LOAD AMPS.
13.0	HYDRAJET			20	1	A	2	30	2	DHUM-1	15.0
13.0					3	B	4				15.0
13.0	HYDRAJET		2	20	5	A	6	50	2	GFI SPA	40.0
13.0					7	B	8				40.0
0.0	SPARE		2	20	9	A	10	20	1	SPARE	0.0
0.0	SPARE				11	B	12	20	1	SPARE	0.0

LOAD SUMMARY	CON. KVA	%	DEM. KVA
RECEPTACLES	0	code	0
MISC	15.84	100%	15.84
LIGHTING	0	125%	0
HVAC	3.6	100%	3.6
HEAT STRIP	0	100%	0
REFRIGERATION	0	65%	0
KITCHEN	0	65%	0
COOKING	0	65%	0
WATER HEATING	0	100%	0
-	0	0%	0
TOTAL KVA	19 KVA		19 KVA
TOTAL AMPS	81 AMPS		81 AMPS

PANEL NOTES:

- PROVIDE GROUND BUS
- PROVIDE FULL SIZE NEUTRAL BUS UNLESS NOTED OTHERWISE
- LO - INDICATES C.B. EQUIPPED WITH "LOCK-OUT" DEVICE
- GFI - INDICATES C.B. IS GFI TYPE (30 mA FOR EQUIPMENT, 5 mA FOR PERSONNEL)
- ST- INDICATES C.B. EQUIPPED WITH SHUNT TRIP DEVICE
- IG - INDICATES CIRCUIT SHALL INCLUDE ADDITIONAL ISOLATED GROUND CONDUCTOR
- AFCI - INDICATES COMBINATION TYPE AFCI C.B.



B Electrical Connection Detail - AHU-2
E0.2 Scale: NTS

ALL SHADED ITEMS IN
PANEL SCHEDULES ARE
EXISTING TO REMAIN.

PANEL NO.:	B		PROJECT:	AUGMENT SPA
USAGE:	LIGHTING AND APPLIANCE		CLIENT:	SURFACE
LOCATION:	OFFICE		MOUNTING:	NEMA 1
PHASES:	3		PANEL TYPE:	23171
L-L VOLTS	208V		ENGINEER:	WIRE CUTTER
L-G VOLTS	120V		PROJECT NO.:	
BUS AMPS:	225A		FED FROM:	
MAIN CB AMPS:	MLO			
AIC RATING:	12,823 MINIMUM			

LOAD AMPS.	DESCRIPTION	NOTES	BREAKER POLE	AMP.	CKT. #	CKT. #	BREAKER AMP.	POLE	NOTES	DESCRIPTION	LOAD AMPS.
24.0	DRYER		2	30	1	A	2	20	1	LTS - SHELVING	6.0
24.0					3	B	4	20	1	COMPRESSION CHAIR	10.0
20.0	VITALITY BOOTH		1	30	5	C	6	20	1	COMPRESSION CHAIR	10.0
16.0	SAUNA		1	20	7	A	8	20	1	COMPRESSION CHAIR	10.0
16.0	SAUNA		1	20	9	B	10	20	1	COMPRESSION CHAIR	10.0
16.0	SAUNA		1	20	11	C	12	20	1	LAED UNIT	5.0
16.0	SAUNA		1	20	13	A	14	20	1	HYPERBARIC CHAMBER	10.0
0.0	SPARE		1	20	15	B	16	20	1	SPARE	0.0
11.0	RECPT		1	20	17	C	18	20	1	SPARE	0.0
3.0	RECPT - DESK		1	20	19	A	20		1	SPACE	0.0
0.0	SPARE		1	20	21	B	22		1	SPACE	0.0
0.0	SPARE		1	20	23	C	24		1	SPACE	0.0
10.0	LOGO SIGN		1	20	25	A	26		1	SPACE	0.0
0.0	SPARE		1	20	27	B	28		1	SPACE	0.0
0.0	SPARE		1	20	29	C	30		1	SPACE	0.0
0.0	SPACE		1		31	A	32		1	SPACE	0.0
0.0	SPACE		1		33	B	34		1	SPACE	0.0
0.0	SPACE		1		35	C	36		1	SPACE	0.0
0.0	SPACE		1		37	A	38		1	SPACE	0.0
0.0	SPACE		1		39	B	40		1	SPACE	0.0
93.5	PANEL SB		2	125	41	C	42		1	SPACE	0.0

LOAD SUMMARY	CON. KVA	%	DEM. KVA
RECEPTACLES	1.68	code	1.68
MISC	36.312	100%	36.312
LIGHTING	1.92	125%	2.4
HVAC	3.6	100%	3.6
HEAT STRIP	0	100%	0
REFRIGERATION	0.12	65%	0.078
KITCHEN	0	65%	0
COOKING	0	65%	0
WATER HEATING	0	100%	0
-	0	0%	0
TOTAL KVA	44 KVA		44 KVA
TOTAL AMPS	121 AMPS		122 AMPS

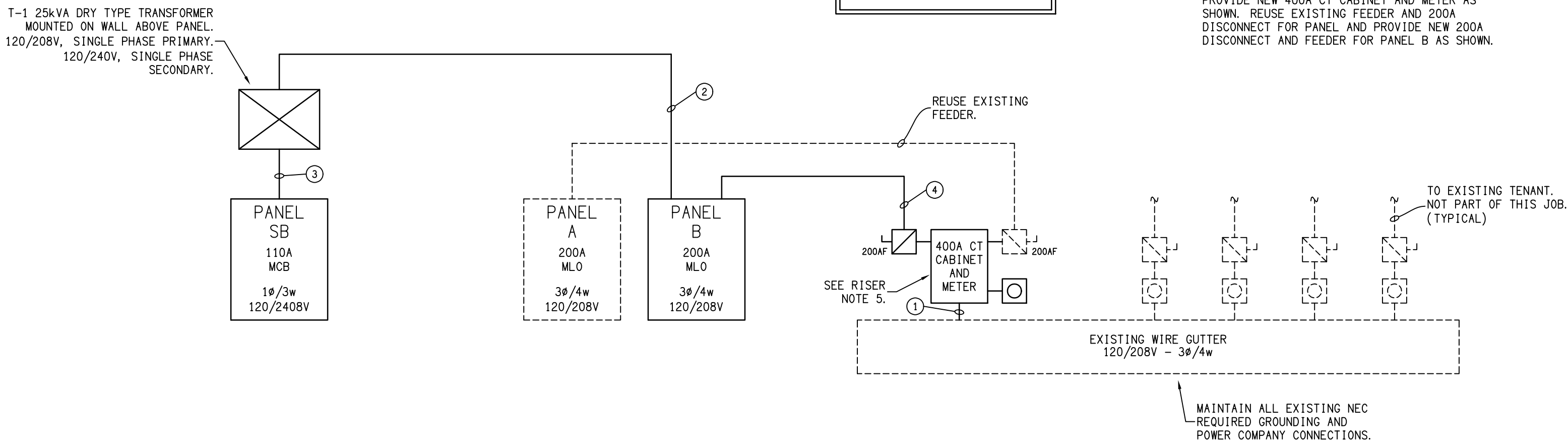
PANEL NOTES:

- PROVIDE GROUND BUS
- PROVIDE FULL SIZE NEUTRAL BUS UNLESS NOTED OTHERWISE
- LO - INDICATES C.B. EQUIPPED WITH "LOCK-OUT" DEVICE
- GFI - INDICATES C.B. IS GFI TYPE (30 mA FOR EQUIPMENT, 5 mA FOR PERSONNEL)
- ST- INDICATES C.B. EQUIPPED WITH SHUNT TRIP DEVICE
- IG - INDICATES CIRCUIT SHALL INCLUDE ADDITIONAL ISOLATED GROUND CONDUCTOR
- AFCI - INDICATES COMBINATION TYPE AFCI C.B.

WIRE SIZE LEGEND

- 4-500, 1#3G IN 3½" C
- 3#1, 1#6G IN 1½" C
- 3#2, 1#6G IN 1¼" C
- 4-3/0, 1#3G IN 2½" C

ALL DASHED ITEMS ON
RISER ARE EXISTING
TO REMAIN.



A Electrical Riser
E0.3 Scale: NTS

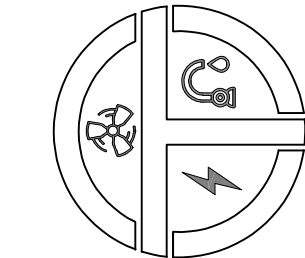


DATE	01/29/24
NO. REV./SUB.	1
PLAN REVIEW	



OT ENGINEERING, PLLC
8208 MASONBRO SOUND RD
WILMINGTON, NC 28409
910.617.0641
www.otmep.com

ENGINEERING



AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

Lisle Architecture
& Design, Inc.

614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



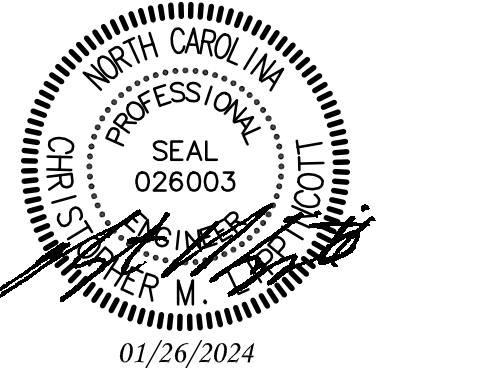
SHEET TITLE - NUMBER

Panel Schedules
and Electrical Riser

E0.2



DATE	01/29/24
NO. REV./SUB.	1
PLAN REVIEW	

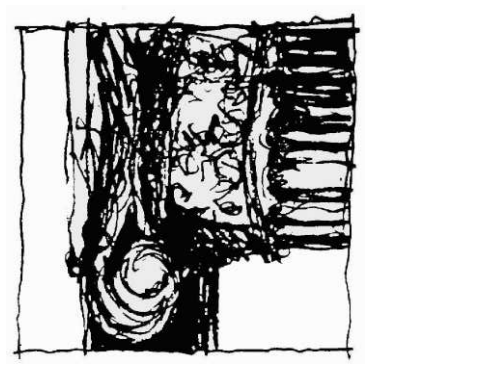


OT ENGINEERING, PLLC
8208 MASONBORO SOUND RD
WILMINGTON, NC 28409
910.617.0641
www.otmep.com

ENGINEERING

AUGMENT SPA
2457 Gum Branch Rd.
Suite 1700
Jacksonville, NC 28540

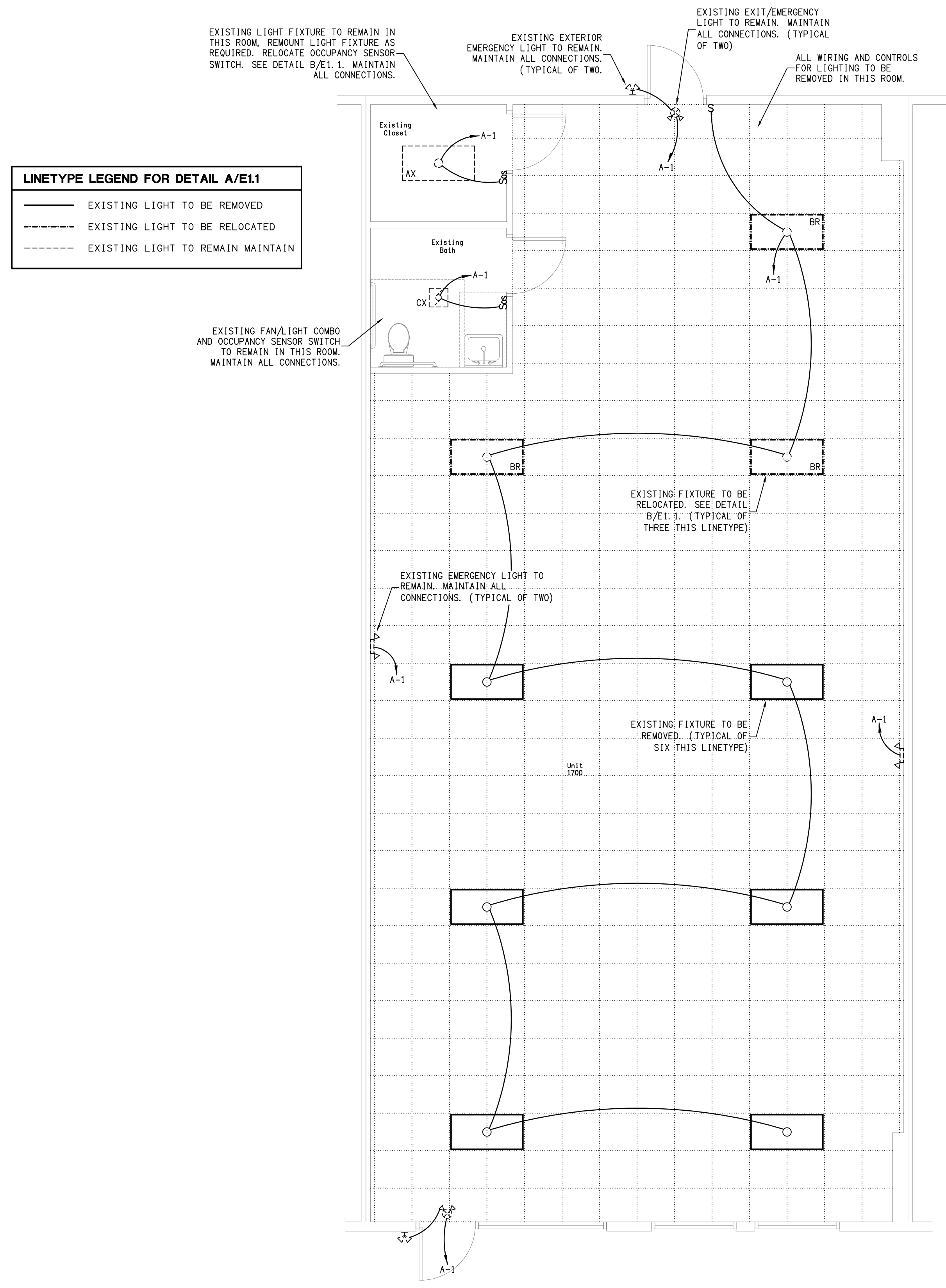
Lisle Architecture & Design, Inc.
614 Market Street
Wilmington, NC 28401
(910) 763.6053
Raleigh, NC (919) 980.0283
www.LisleArchitecture.com



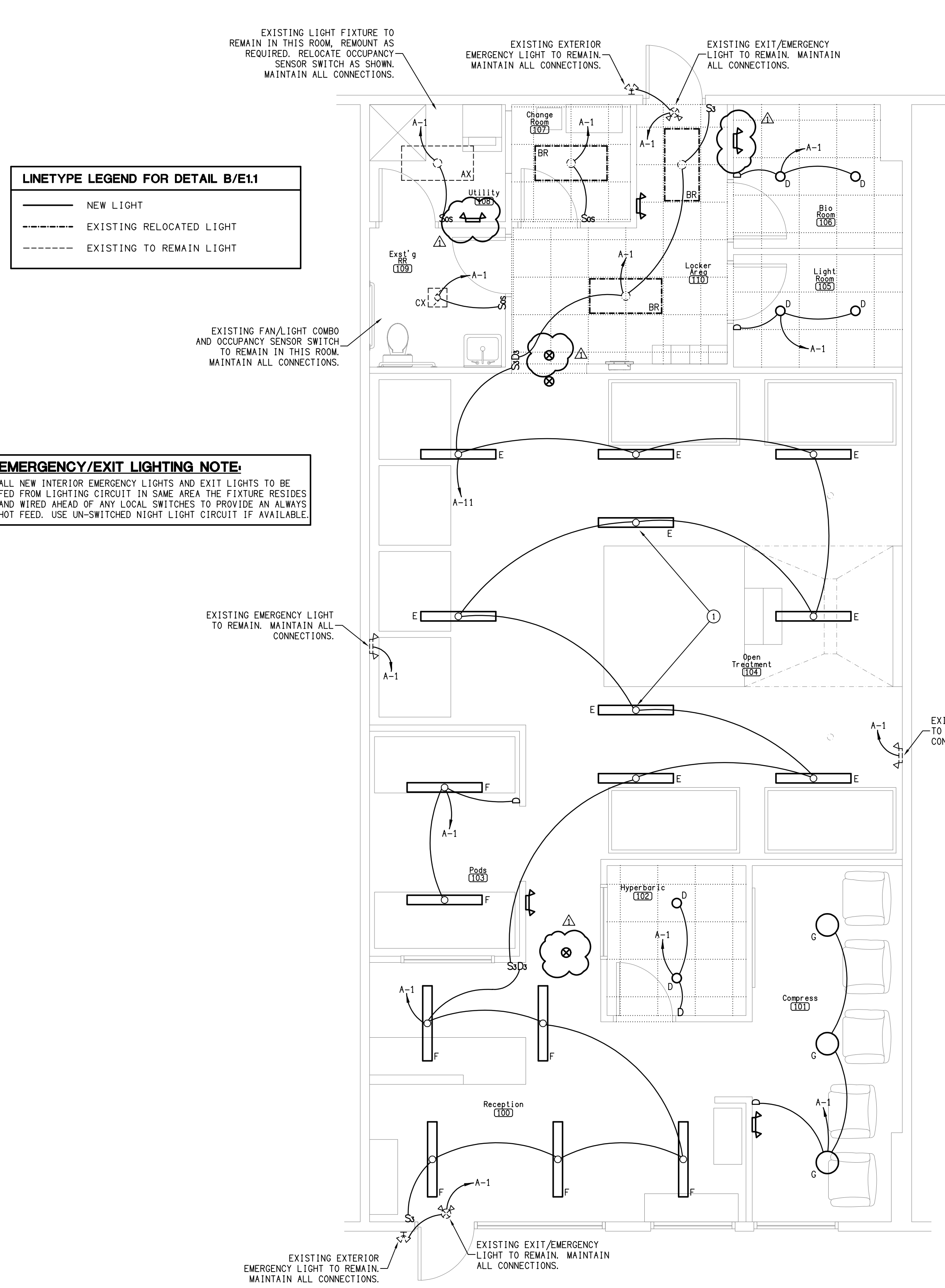
SHEET TITLE - NUMBER

Lighting Plans

E1.1

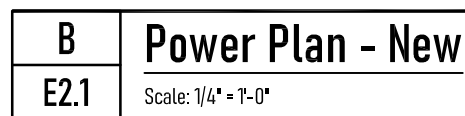


A
E1.1
Lighting Plan - Demolition
Scale: 1/4" = 1'-0"



B
E1.1
Lighting Plan - New
Scale: 1/4" = 1'-0"

KEY NOTES	
①	CONTRACTOR SHALL FIELD VERIFY MOUNTING HEIGHT OF FIXTURE. IF FIXTURE CAN BE MOUNTED AT 12'-0" ABOVE HIGHEST WATER LEVEL OF SPA THEN FIXTURE CAN BE LOCATED ABOVE SPA AND ONE FIXTURE CAN BE REMOVED.



KEY NOTES	
①	RECEPTACLES FOR WATER COOLER AND REMOTE CONDENSER. COORDINATE WITH OWNER AND EQUIPMENT SUPPLIER FOR EXACT LOCATIONS OF OUTLETS.
②	FAN F-1 SHALL BE INTERLOCKED WITH AHU-2. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS.
③	JUNCTION BOX FOR CONNECTION TO BUILT-IN CABINET/DESK LIGHTING. COORDINATE WITH CABINET/DESK PROVIDER FOR EXACT LOCATION AND CONNECTIONS REQUIREMENTS. PROVIDE SWITCH AS REQUIRED.
④	RECEPTACLE FOR BUILT-IN REFRIGERATOR. COORDINATE WITH CABINET SUPPLIER FOR EXACT LOCATION AND MOUNTING HEIGHT.
⑤	RECESSED JUNCTION BOX FOR HAND DRYER. COORDINATE WITH MANUFACTURE'S INSTRUCTIONS FOR EXACT MOUNTING LOCATION AND REQUIREMENTS.
⑥	RECESSED JUNCTION BOX FOR SWIMSUIT DRYER. COORDINATE WITH MANUFACTURE'S INSTRUCTIONS FOR EXACT MOUNTING LOCATION AND REQUIREMENTS.
⑦	RECEPTACLE AND CATV BOX. VERIFY MOUNTING HEIGHT AND LOCATION WITH OWNER AND ARCHITECT.
⑧	RECEPTACLE AND DATA OUTLET FOR DIGITAL MESSAGE BOARD AND CLOCK. COORDINATE WITH OWNER FOR EXACT MOUNTING HEIGHT AND LOCATION.
⑨	JUNCTION BOX RECESSED IN WALL FOR BACKLIT MIRROR. COORDINATE WITH OWNER AND SUPPLIER FOR EXACT REQUIREMENTS.
⑩	COORDINATE EXACT LOCATION WITH EQUIPMENT SUPPLIER AND OWNER. HYDRAULIC HAS BUILT-IN GFCI PROTECTION. ⚠
⑪	RECEPTACLE FOR SPA. COORDINATE EXACT MOUNTING LOCATION WITH OWNER AND SPA SUPPLIER. SEE DETAIL A/E.O. 1.
⑫	RECEPTACLE FOR BIOCHARGER. PROVIDE VERIFIED WORKING EARTH GROUND. COORDINATE WITH SUPPLIER FOR EXACT REQUIREMENTS.
⑬	RECEPTACLE FOR AED UNIT. VERIFY LOCATION AND EXACT REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER.
⑭	JUNCTION BOX AND SWITCH FOR LOGO SIGN. COORDINATE WITH OWNER FOR EXACT REQUIREMENTS AND LOCATION.