

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: UPFIT PLAN FOR LIBERTY PLAY TOWN
 Address: 3211-3213 RAY ROAD, SPRING LAKE, NC Zip Code 28390
 Proposed Use: ASSEMBLY SPACE FOR INDOOR PLAY
 Owner or Authorized Agent: JASON WELLS Phone (910) 436-3131 E-Mail Jason@hsvellsonreality.com
 Owned By: City/County Private State County HARNETT State NORTH CAROLINA
 Code Enforcement Jurisdiction: City County HARNETT State NORTH CAROLINA

CONTACT: GEORGE M. ROSE, P.E.

DESIGNER FIRM NAME LICENSE # TELEPHONE #
 Architectural N/A N/A N/A N/A
 Civil COASTAL PLANS ENGINEERING CHRISTOPHER S. LOCKLEAR 20193 910-521-1213 coastalplanseng@gmail.com
 Electrical N/A N/A N/A N/A
 Fire Alarm N/A N/A N/A N/A
 Plumbing N/A N/A N/A N/A
 Mechanical COASTAL PLANS ENGINEERING CHRISTOPHER S. LOCKLEAR 20193 910-521-1213 coastalplanseng@gmail.com
 Sprinkler-Standpipe N/A N/A N/A N/A
 Structural: N/A N/A N/A N/A
 Precast: N/A N/A N/A N/A
 Retaining Walls >5' N/A N/A N/A N/A
 Building GEORGE M. ROSE, P.E. GEORGE M. ROSE 11816 910-471-5622 george@gmrpe.com

2018 NC CODE FOR: New Construction 1st Time Interior Completion Shell/Core Phased Construction - Shell/Core Renovation

2018 NC EXISTING BUILDING CODE: Prescriptive Repair Chapter 14
 Alteration: Level I Level II Level III Change of Use Historic Property

CONSTRUCTED: 1986 ORIGINAL OCCUPANCY(S) (Ch. 3): BUSINESS
 RENOVATED: N/A CURRENT OCCUPANCY(S) (Ch. 3): VACANT
 RISK CATEGORY (Table 1604.5) Current: I II III IV Proposed: I II III IV

BASIC BUILDING DATA
 Construction Type: I-A I-B II-A II-B III-A III-B IV V-A V-B
 (check all that apply)
 Sprinklers: No Partial Yes NFPA 13 NFPA 13R NFPA 13D
 Standpipes: Yes No Class: I II III Wet Dry
 Fire District: No Yes (Primary) Flood Hazard Area: No Yes
 Special Inspections Required: No Yes

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	RENOVATED (SQ FT)	SUB-TOTAL
3th Floor				
2th Floor				
1th Floor				
3rd Floor				
2nd Floor				
Mezzanine	4,288		2,854	2,854
1st Floor				
Basement				
TOTAL	4,288 (ENTIRE BUILDING 3207-3213 RAY ROAD)		2,854	2,854

Primary Occupancy Classification: SELECT ONE

ALLOWABLE AREA

Assembly A-1 A-2 A-3 A-4 A-5
 Business ASSEMBLY LESS THAN 50 PERSONS
 Educational
 Factory F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 CONDITION I-2 I-3 CONDITION I-4 I-5
 Mercantile
 Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Parking Garage Open Enclosed Repair Garage
 Utility and Miscellaneous

Accessory Occupancy Classification(s): _____
 Incidental Uses (Table 509): _____
 Special Uses (Chapter 4 - List Code Sections): _____
 Special Provisions (Chapter 5 - List Code Sections): _____
 Mixed Occupancy: No Yes Separation: 0 Hr. Exception: _____
 Non-Separated Use (508.3)
 The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
 Separated Use (508.4)
 See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

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

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,3}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
1	ASSEMBLY A-3	2,854	6,000		

1 Frontage area increases from Section 506.3 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) = _____ (F/P)
 d. W = Minimum width of public way = _____ (W)
 e. Percent of frontage increase $\% = 100 [(F/P) - 0.25] \times W/30 =$ _____ (%)
 2 Unlimited area applicable under conditions of Section 507.
 3 Maximum Building Area = total number of stories in the building x D (minimum 3 stories) (506.2).
 4 The maximum area of open parking garages must comply with Table 406.5.4.
 5 Frontage increase is based on the un sprinklered area value in Table 506.2.

ALLOWABLE HEIGHT			
	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55'	20'	
Building Height in Stories (Table 504.4)	2	1	

Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.
 1 The maximum height of air traffic control towers must comply with Table 412.3.1.
 2 The maximum height of open parking garages must comply with Table 406.5.4.

PERCENTAGE OF WALL OPENINGS CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

FIRE PROTECTION REQUIREMENTS						
BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (w/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED JOINTS
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						
Roof construction including supporting beams and joists						
Roof construction including supporting beams and joists						
Roof ceiling Assembly						
Column supporting roof						
Shafts Enclosures - Exit						
Shafts Enclosures - Other						
Corridor Separation						
Occupancy/Fire Barrier Separation	2		G1		U419	
Party/Fire Wall Separation	2		G1		U419	
Smoke Barrier Separation						
Tenant/Dwelling Unit/Sleeping Unit Sep						
Incidental Use Separation						

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENINGS CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS

Life Safety Plan Sheet #: G1 (2/G1)

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 types for each area as it relates to occupant load calculation (Table 1004.1.2)
 Occupant loads for each area
 Exit access travel distance (1017)
 Common path of travel distances (1006.2.1 & 2006.3.2(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 and supporting construction for a fire barrier/fire partition/smoke barrier.
 Location of doors with panic hardware (1010.1.10)
 Location of doors with electromagnetic egress locks (1010.1.9.9)
 Location of emergency escape windows (1030)
 The square footage of each fire area (202)
 The square footage of each smoke compartment for Occupancy Classification 1-2 (407.5)
 Note any code exceptions or table notes that may have been utilized regarding the items above

ENERGY SUMMARY

ENERGY REQUIREMENTS:
 The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy costs for the standard reference design vs. annual energy cost for the proposed design.
 Existing building envelope complies with code: No Yes (the remainder of this section is not applicable)
 Existing building: No Yes (Provide Code or Statute reference)
 Existing building: No Yes (Provide Code or Statute reference)
 Climate Zone: 3A 4A 5A
 Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive (if "Other" specify source here) _____
 THERMAL ENVELOPE (Prescriptive method only)
 Roof/Ceiling Assembly (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Skylights in each assembly: _____
 U-Value of skylight: _____
 Total square footage of skylights in each assembly: _____
 Exterior Walls (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Openings (windows or doors with glazing)
 U-Value of assembly: _____
 Solar heat gain coefficient: _____
 U-Value of assembly: _____
 Projection factor: _____
 Door R-Values: _____
 Walls below grade (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Floors over unconditioned space (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Floor slab on grade
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Horizontal/Vertical requirement: _____
 R-Value of insulation: _____
 Slab Heated: _____

ACCESSIBLE PARKING (SECTION 1106)					
LOT OR PARKING AREA	TOTAL PARKING SPACES		ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESSIBLE AISLE	
EXISTING AS REQ'D					
TOTAL					

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)										
USE	WATER CLOSETS			URINALS			LAVATORIES		SHOWERS/TUBS	DRINKING FOUNTAINS
	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	REGULAR	ACCESSIBLE	REGULAR	ACCESSIBLE
SPACE EXISTING	1	2	0	0	1	1	0	0	0	0
NEW	0	0	0	0	0	0	0	0	0	0
REQUIRED	1	2	0	0	1	1	0	0	0	0

SPECIAL APPROVALS

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



VICINITY MAP
NO SCALE

STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

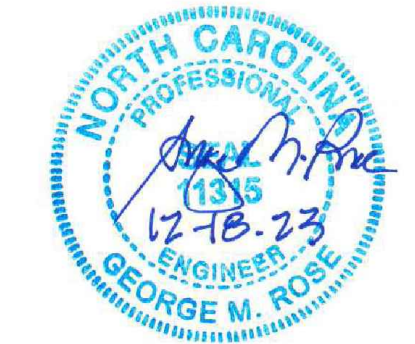
DESIGN LOADS:
 Importance Factors: Snow (I_s) 10
 Snow (I_e) 10
 Live Loads: Roof 20 psf
 Mezzanine 20 psf
 Floor 100 psf
 Ground Snow Load: 10 psf
 Wind Load: Ultimate Wind Speed 120 mph (ASCE-7)
 Exposure Category _____
 SEISMIC DESIGN CATEGORY: A B C D
 Provide the following Seismic Design Parameters:
 Risk Category (Table 1604.5) I II III IV
 Spectral Response Acceleration S_s _____ %g S_1 _____ %g
 Site Classification (ASCE 7) A B C D
 Data Source: Field Test Presumptive Historical Data
 Basic structural system Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
 Simplified Equivalent Lateral Force Dynamic
 Analysis Procedure: Architectural, Mechanical, Components anchored? Yes No
 LATERAL DESIGN CONTROL: Earthquake Wind
 SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) _____ psf
 Presumptive Bearing Capacity _____ psf
 Pile size, type, and capacity _____ psf

SHELL VARIABLE FORM (for all spaces - see plan)
 (THIS SECTION REQUIRED FOR ALL SHELL ALTERATIONS TO SHELL AND INTERIOR COMPLETION PROJECTS)
 Check each applicable line to match scope of work. Edit as necessary to provide clear detail of installation.
 Mechanical
 No work
 Equipment set with without power
 Trunk line installed with without outlets
 Gas Line
 Install complete operational system
 Other _____
 Plumbing
 No work
 Install water service and sewer
 Install building drain and water distribution main with without branches
 without branches
 Install complete plumbing system
 Other ROUGH-INS ARE INCOMPLETE, ADD'L IN-SLAB WORK IS REQUIRED. WATER SERVICE IS EXISTING (PRESENTLY INSTALLED).
 Sprinkler
 Install complete sprinkler system
 Building
 Install slab partial complete
 Install demising walls
 Install interior partitioning partial complete
 Install Ceilings
 White box (additional interior completion permits are required for Certificate of Occupancy and power)
 Other _____
 Electrical
 House panel
 Service laterals to meter centers/panels located on buildings
 Demise wall and ceilings only
 Conduit, duct, raceway in slab
 Power and lighting circuits to "J" Box
 Install light fixtures
 Install Heat/A/C Elevator Generator Parking lot lighting
 Install complete system
 Other SUITE PANEL AND SERVICE ARE EXISTING (PRESENTLY INSTALLED).
 Please provide full information on any alternate methods and means incorporated into the design of this project. Provide specific details and incorporate into plan submittal any supporting documents or agreement

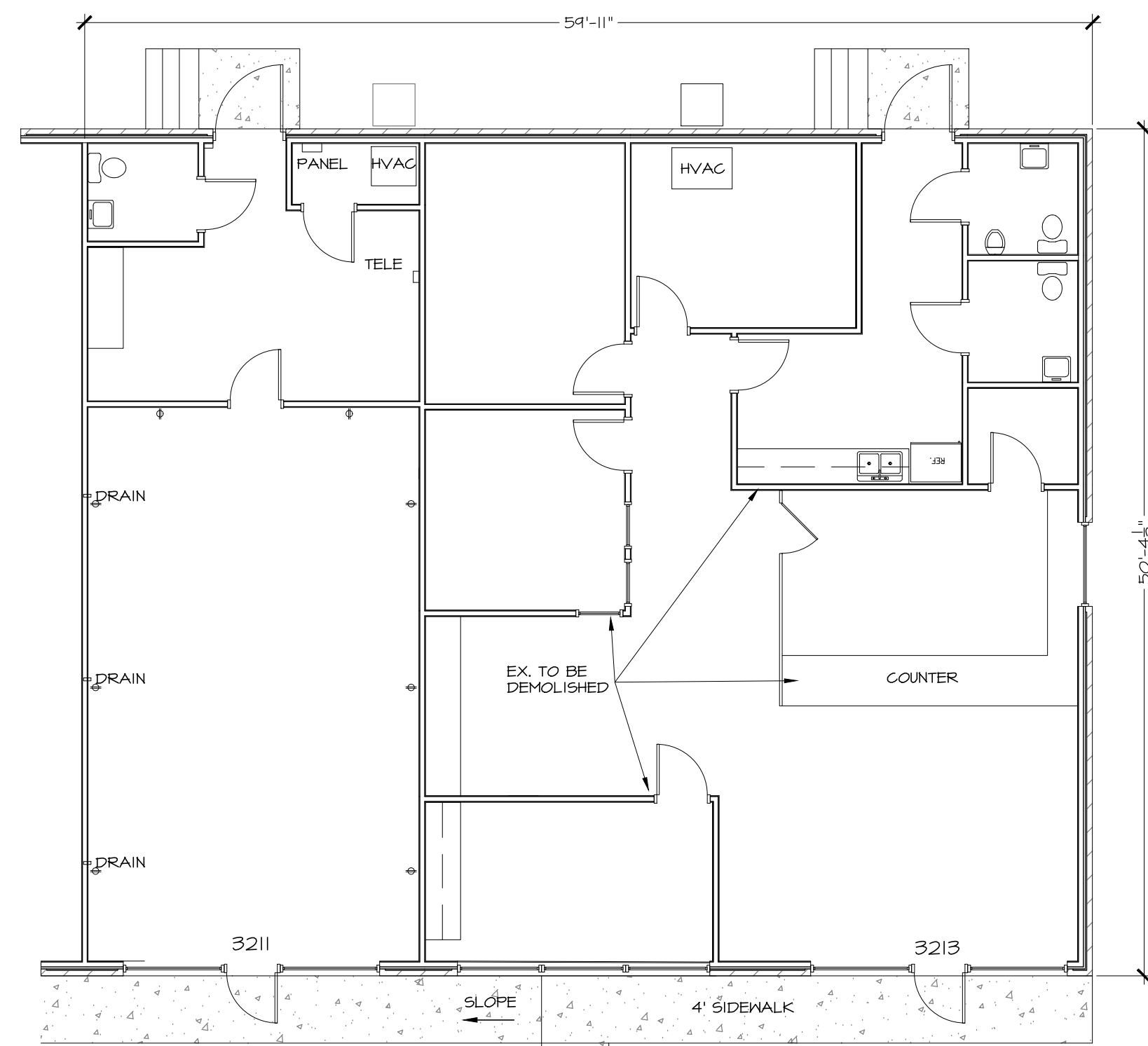
SPECIAL INSTRUCTIONS (CHAPTER 17)
 SPECIAL INSPECTIONS SHALL BE CONDUCTED ON ALL PROJECTS THAT FALL WITHIN BUILDING CATEGORIES AND/OR CONTAIN ELEMENTS SUBJECT TO SPECIAL INSPECTIONS AS PRESCRIBED BY REVISED SECTION 1704.
 To schedule a required pre-construction meeting with the City of Fayetteville, please call Doug Maples at (910) 433-1703. The main line number for the Development Services Center is (910) 433-1701.
 List whom will inspect the required special inspections:
 Fabricator of load bearing components _____
 Soil tests _____
 Concrete, caissons, piles, piers, pre-cast _____
 Post tension concrete _____
 Modular construction _____
 Steel and connections, welds, bolts, anchors _____
 Fire spray tests _____
 Smoke control _____
 Seismic, wind designs, Quality Assurance _____
 Retaining walls _____
 Masonry _____
 Wood _____
 Alternate Methods _____
 EIFS _____
 Other (describe) _____
 Other (describe) _____
 Owner or agent _____

SPECIAL APPROVALS:
 Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)
 NONE

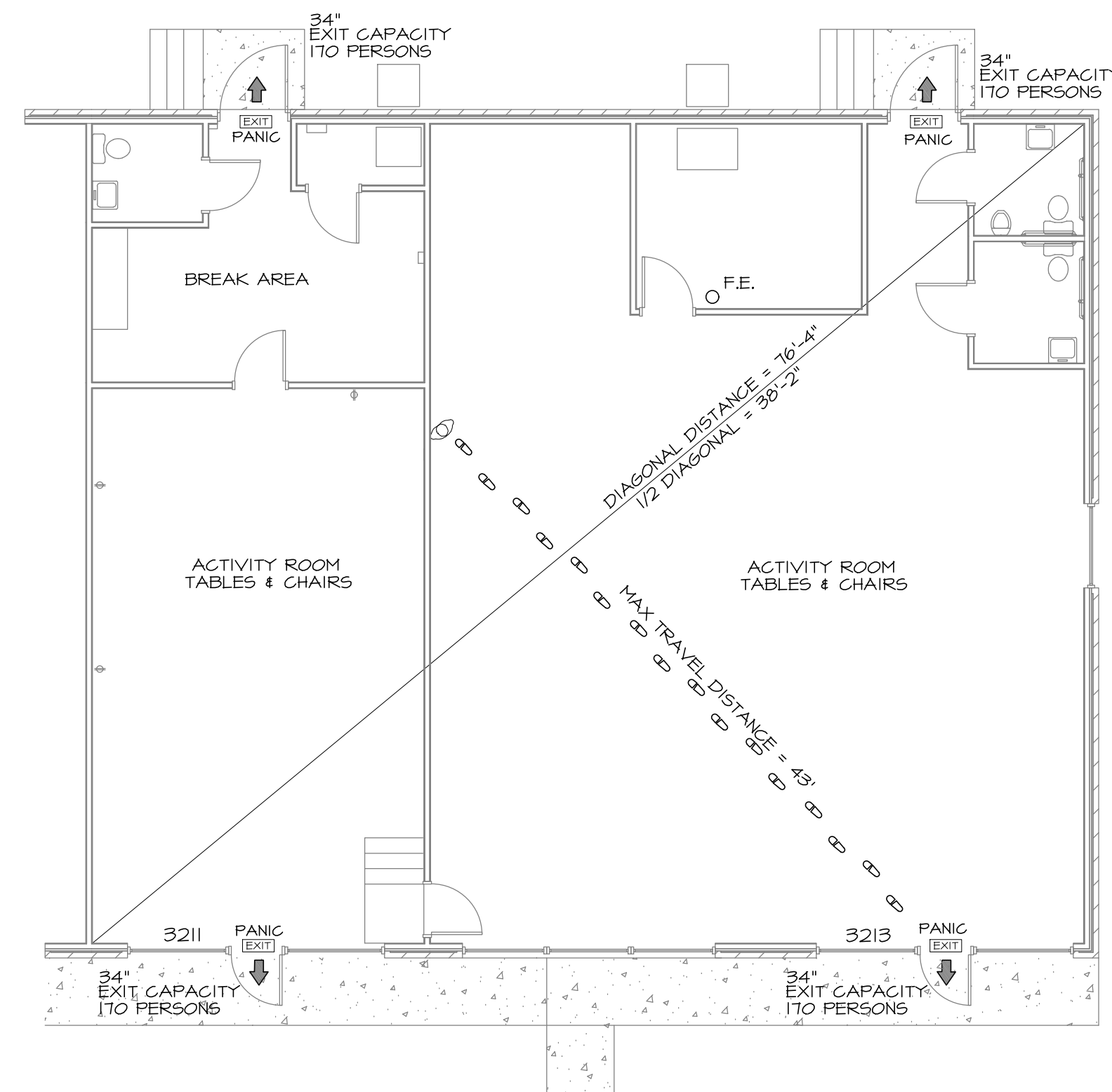
HARNETT COUNTY
 2018 APPENDIX B
 BUILDING CODE SUMMARY
 for:
 INTERIOR RENOVATIONS PLAN
LIBERTY PLAY TOWN
 3211-3213 RAY ROAD
 SPRING LAKE, NORTH CAROLINA
 28390



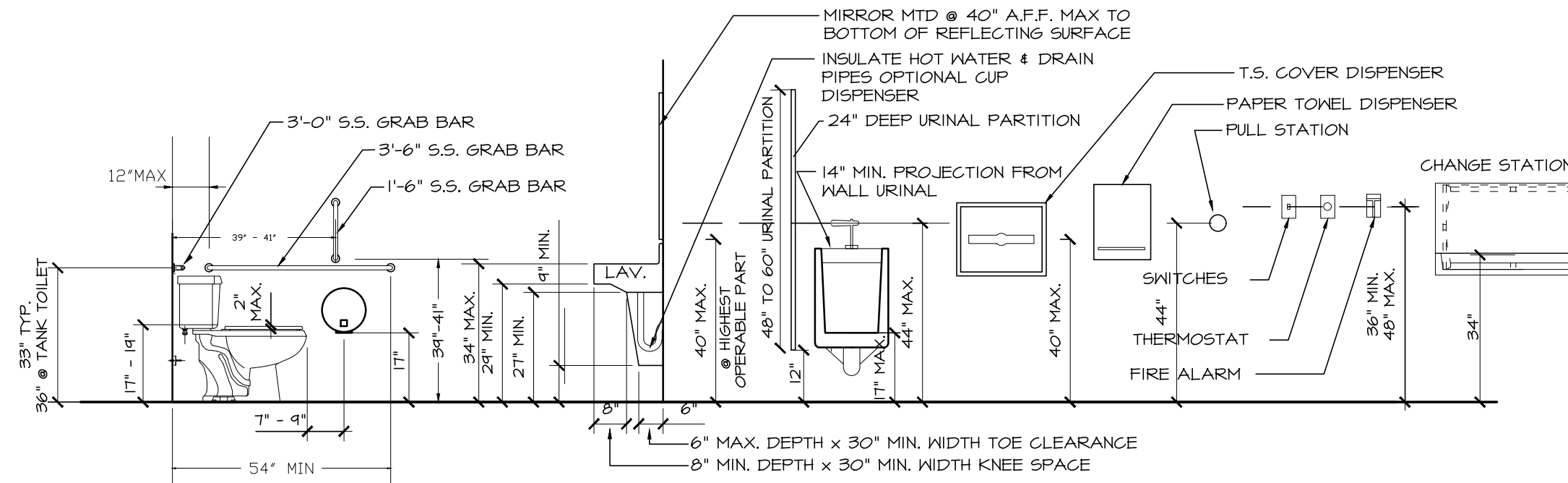
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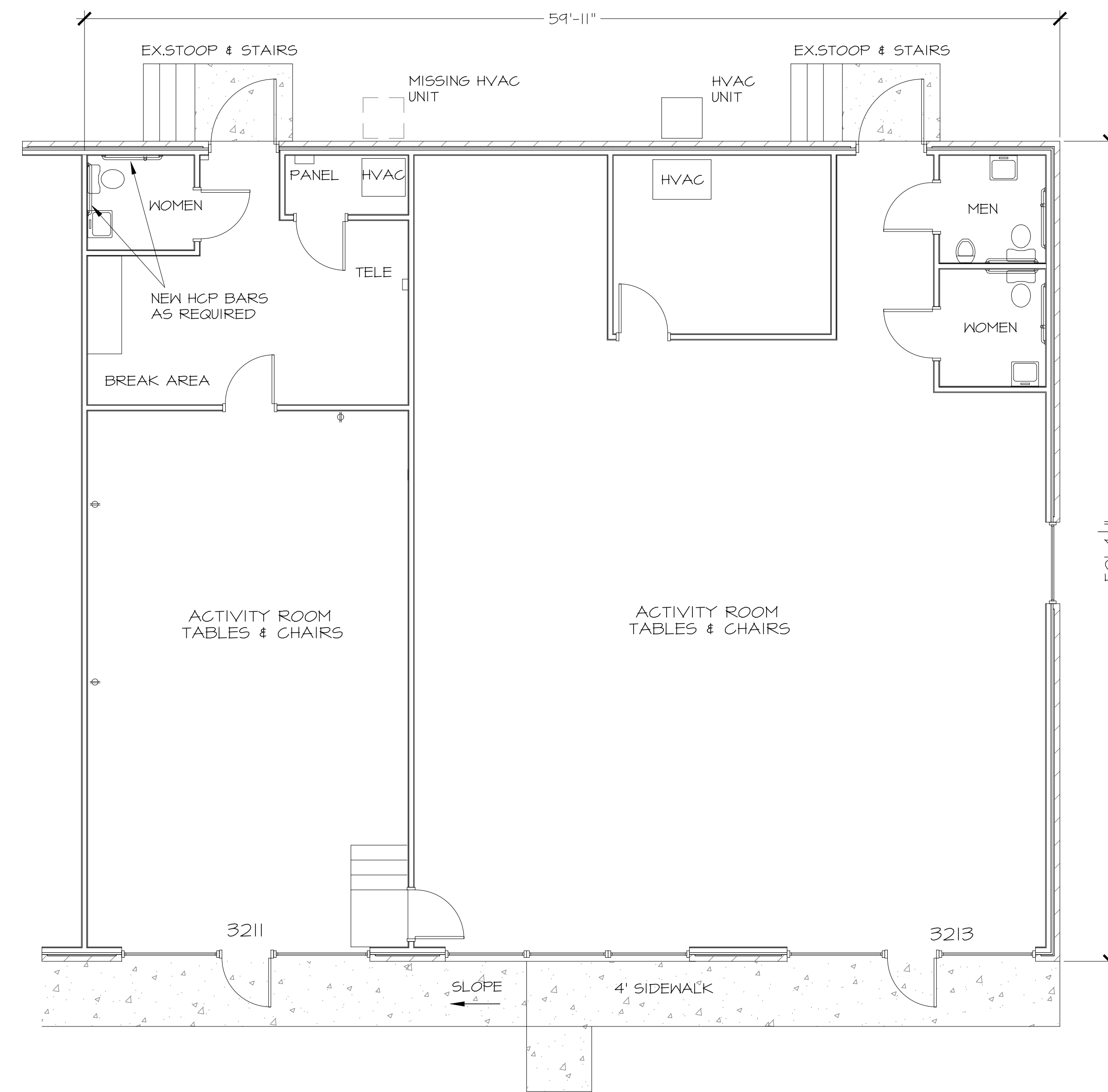
2 EXISTING FLOOR PLAN
1/8" = 1' - 0"



3 LIFE SAFETY PLAN
1/8" = 1' - 0"



4 TYPICAL MOUNTING HTS & CLEARANCES FOR ACCESSIBILITY
NTS



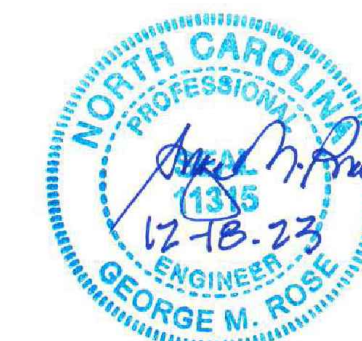
1 FLOOR PLAN
3/16" = 1' - 0"

OCCUPANCY AND PLUMBING FIXTURE INFORMATION
 TYPE OF CONSTRUCTION: V-B
 GROSS EXTERIOR SQUARE FOOTAGE = 2,854 SF
 GROSS SQUARE FOOTAGE LESS BATHS, HALLS, HVAC = 2854 - 432 = 2,422
 SPACE OCCUPANCY BY NET SF USING TABLE 1004.1.2
 ASSEMBLY A-3 (TABLES & CHAIRS) = 2421/15 SF PER PERSON
 = 162 TOTAL PERSONS
 = 81 MALES, 81 FEMALES
 MALE TOILETS REQUIRED = 1 PER 125 = 1 TOTAL (1 PROVIDED)
 MALE LAVATORIES REQUIRED = 1 PER 200 = 1 TOTAL (1 PROVIDED)
 FEMALE TOILETS REQUIRED = 1 PER 65 = 2 TOTAL (2 PROVIDED)
 FEMALE LAVATORIES REQUIRED = 1 PER 200 = 1 TOTAL (2 PROVIDED)
 MAXIMUM TRAVEL DISTANCE: 43 FEET
 MAXIMUM ALLOWABLE TRAVEL DISTANCE: 200 FEET (PER TABLE 1017.2)
 THE COMMON PATH OF TRAVEL IS LESS THAN 75 FEET (PER 1029.8)
 THERE ARE NO DEAD END CORRIDORS OVER 20 FEET (PER 1020.4)
 MIN. NO. OF EXITS REQ'D: ONE (PER SECTION 1006)
 NUMBER OF EXITS PROVIDED: TWO
 MAXIMUM DIAGONAL LENGTH = 161'-4" (1/2 DIAGONAL = 36'-2")
 ALL EXTERIOR DOORS SHALL HAVE PANIC HARDWARE (PER 1010.1.10)
 DOORS DO NOT HAVE DELAYED EGRESS LOCKS (PER 1010.1.9.6.2)
 DOORS DO NOT HAVE ELECTROMAGNETIC EGRESS LOCKS (PER 1010.1.9.4)
 DOORS DO NOT HAVE HOLD OPEN DEVICES
 THERE ARE NO EMERGENCY ESCAPE WINDOWS (PER 1030)
 EGRESS ILLUMINATION PROVIDED AT EACH EXIT (PER 1008)
 THIS SPACE IS NOT PROTECTED BY FIRE SPRINKLERS.
 NO. OF FIRE EXTINGUISHERS PROVIDED: 1 TOTAL
 PROVIDE FIRE EXTINGUISHERS UNDER THE FOLLOWING CONDITIONS:
 1. WITHIN 30' OF COMMERCIAL COOKING EQUIPMENT
 2. IN AREAS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED, USED OR DISPENSED.
 3. WHERE REQUIRED BY SECTIONS IN SECTION 1006
 4. SPECIAL-HAZARD AREAS WHERE REQUIRED BY FIRE CODE OFFICIAL.

LEGEND

F.E. O	ABC FIRE EXTINGUISHER SUGGESTED LOCATION
⊕ ⊖ ⊙	EXIT ROUTE
➔	36" EXIT WIDTH
EXIT	EXIT SIGN

NOTES:
 ALL EXTERIOR DOORS ARE TO BE EQUIPPED WITH PANIC HARDWARE.
 SEE ELECTRICAL PLAN FOR COMBINATION OF ELECTRICAL SERVICES.



REVISIONS

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INTERIOR RENOVATIONS
LIBERTY PLAY TOWN
 SPRING LAKE, NC
 3211-3213 RAY ROAD
 EXISTING AND PROPOSED FLOOR PLANS

DATE: NOV 2023
 DRAWN BY: GMR
 CHECKED: GMR
 SCALE: NOTED

SHEET NO.
G1



Coastal Plains Engineering, P.A.
 License No. C-2019
 206 LOCKLEAR RD
 FARMVILLE, NC 28572
 Phone: 910-621-7213
 www.coastalplainseng.com

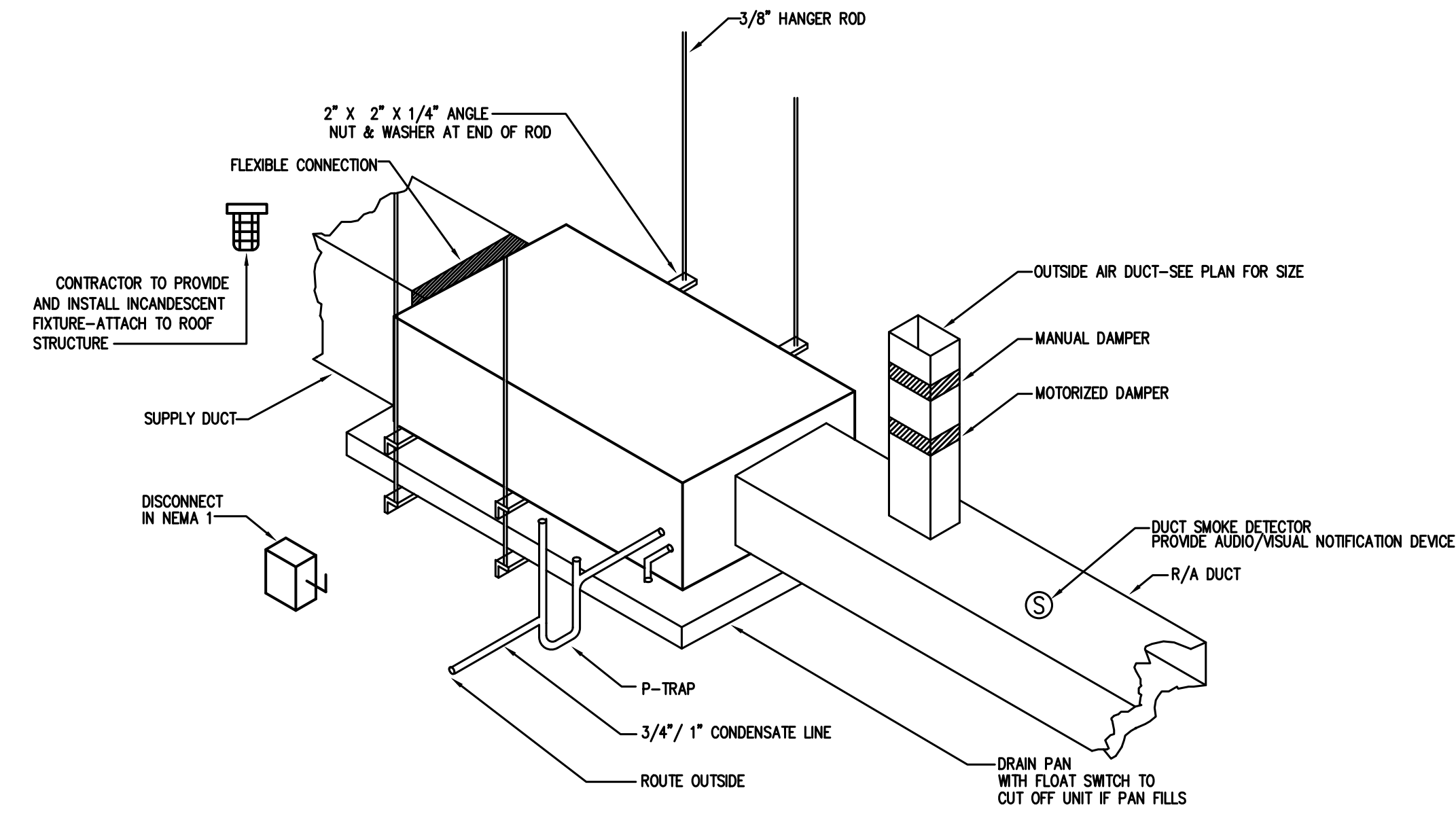
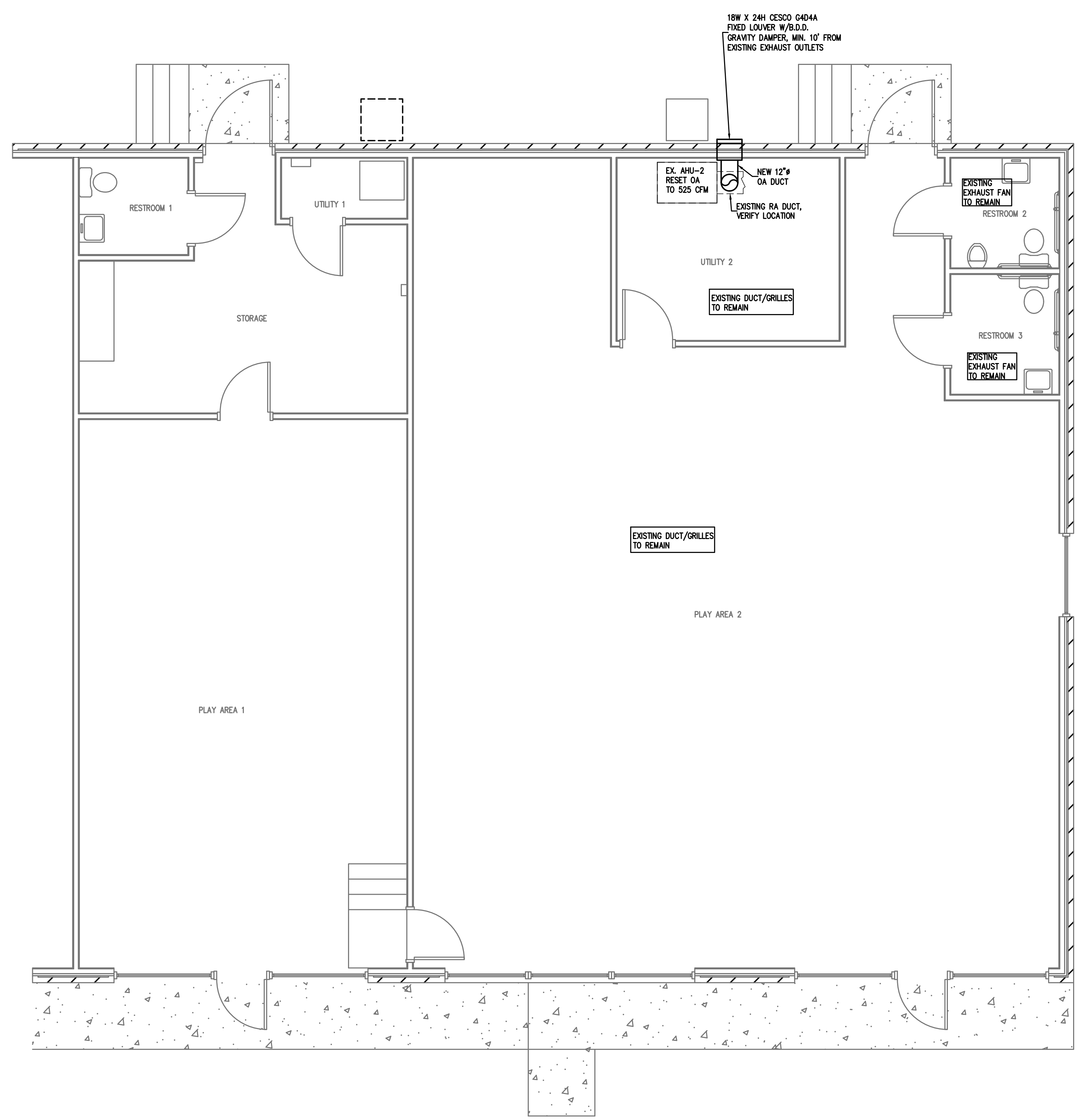
LIBERTY PLAY TOWN
 3211-3213 RAY ROAD, SPRING LAKE, NC

DRAWINGS AND THE DESIGN ARE THE PROPERTY OF THE ENGINEER. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT, THE DRAWINGS SHALL NOT BE USED BY THE PROJECT OWNER OR ANYONE ELSE FOR ANY OTHER PROJECT.

ADA AND LEGAL DISCLAIMER
 THIS DOCUMENT IS INTENDED TO COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA). ARCHITECTS AND ENGINEERS ARE NOT LICENSED TO INTERPRET LAWS OR GIVE ADVICE CONCERNING LAWS OR LEGAL MATTERS. THE OWNER SHOULD HAVE THIS DOCUMENT REVIEWED BY HIS ATTORNEY TO DETERMINE IF IT COMPLES ADA AND OTHER LAWS.

PROJECT NO: 2023-178
 DRAWN BY: SL
 REVISIONS:

SHEET NO:
M1



ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 NC MECHANICAL CODE.

ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL IN ACCORDANCE WITH ASHRAE & SMACNA. DUCT SIZES SHOWN ARE NET FREE AREA REQUIRED. ALL SUPPLY AND RETURN DUCTS AND FLEX SHALL BE INSULATED WITH MIN. R-8.0 INSULATION UNLESS OTHERWISE NOTED IN THE DRAWING.

ALL DUCTS SHALL BE AIR TIGHT, RIGID AND FREE FROM VIBRATION AND NOISE. ALL LAP JOINTS SHALL BE IN THE DIRECTION OF FLOW. VOLUME OR SPLITTER DAMPERS SHALL BE INSTALLED WHERE NECESSARY TO GUIDE AND CONTROL THE AIR FLOW. PROVIDE SHEET METAL SLEEVES AND COLLARS WHERE DUCTS PASS THROUGH WALLS.

STRUCTURAL MEMBERS OF THE BUILDING SHALL NOT BE CUT IN ANY MANNER FOR THE INSTALLATION OF ANY EQUIPMENT UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ARCHITECT.

MECHANICAL CONTRACTOR TO CONFIRM BREAKER/DISCONNECT SIZES OF HIS EQUIPMENT WITH THE ELECTRICAL CONTRACTOR.

FURNISH AND INSTALL A DUCT MOUNTED SMOKE DETECTOR IN THE RETURN DUCT OF THE A/C UNIT IN ACCORDANCE WITH 2018 NC MECHANICAL CODE. THE DETECTOR SHALL BE WIRED TO SHUT DOWN THE FAN IN THE EVENT THE DETECTOR IS ACTIVATED. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL THE DUCT DETECTOR AND RUN THE NECESSARY CONTROL WIRING FROM THE DETECTOR TO HIS EQUIPMENT. SMOKE DETECTORS ARE ONLY REQUIRED FOR UNITS SUPPLYING 2000 CFM OR MORE.

MECHANICAL CONTRACTOR SHALL PROVIDE A TEST AND BALANCE REPORT. SYSTEM COMPLIANCE STATEMENT REQUIRES A WRITTEN T&B REPORT. FINAL PROJECT SIGNOFF WILL BE DENIED WITHOUT THIS REPORT.

MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS AND ROUTING OF ALL DUCTWORK WITH OTHER TRADES TO AVOID CONFLICTS.

ALL EQUIPMENT MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE WORK OR IN ACCORDANCE WITH THE PARTICULAR MANUFACTURER'S STANDARD GUARANTEE, IF LONGER. ANY FAULTY MATERIAL OR WORKMANSHIP OR FAILURE OF ANY PART OF THE SYSTEM DURING NORMAL OPERATIONS UNDER THIS GUARANTEE SHALL BE CORRECTED WITHOUT COST TO THE OWNER.

ALL THERMOSTATS SHALL BE OF A PROGRAMMABLE TYPE.

BUILDING CONTRACTOR SHALL PROVIDE PERMANENT ACCESS TO ROOF STRUCTURE FOR ACCESS TO MECHANICAL EQUIPMENT WHEN ROOF STRUCTURE IS GREATER THAN 16'-0" HIGH.

2 HVAC NOTES
 M1 N.T.S.

1 MECHANICAL PLAN
 M1 1/4"=1'

OUTSIDE AIR CALCULATION -NC 2018 MECHANICAL CODE (TABLE 403.3.1.1) $V_{bz} = R_p P_z + R_a A_z$

OCCUPANCY TYPE:	SF (Az)	# OF OCCUPANTS PER 1000 SF	# OF OCCUPANTS (Pz)	O.A. CFM PER PERSON (Rp)	O.A. CFM PER SqFt (Ra)	O.A. CFM REQUIRED (Vbz)	EXHAUST CFM REQUIRED
PLAY AREA 2	1624	0	0.0	0	0.3	487	
UTILITY 2	146	0	0.0	0	0.12	18	
EX. AHU-2 RESTROOM 2	43	0	0.0	0	0	0	140
RESTROOM 3	47	0	0.0	0	0	0	70
TOTAL CFM REQUIRED						505	210
TOTAL CFM FURNISHED						525	210



CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY FOR SERVICE. A COMPLETE AND WORKING SYSTEM IS REQUIRED FOR COMPLIANCE WITH THESE DOCUMENTS. DETERMINE THE POINT OF CONNECTION TO THE UTILITY WITH THE UTILITY REPRESENTATIVE AND PROVIDE ACCORDINGLY FOR A COMPLETE WORKING SYSTEM.

WIRE AND CABLE SHALL BE INSULATED, TYPE THHN OR THHN, 600 VOLTS, WITH COPPER CONDUCTORS. CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTORS SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED. NO ROMEX PERMITTED.

EMT SHALL BE GALVANIZED STEEL TUBING, 1/2-INCH MINIMUM SIZE, EQUAL TO ELECTRUNITE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSION FITTINGS.

PLASTIC CONDUIT SHALL BE RIGID, 3/4-INCH MINIMUM NON-METALLIC, HEAVY DUTY, HIGH IMPACT, POLYVINYLCHLORIDE (PVC), TYPE I WILL BE USED FOR CONCRETE ENCASMENT. FITTINGS SHALL BE THE SAME MATERIALS AND MANUFACTURER AS THE PLASTIC CONDUIT.

FLEXIBLE METAL CONDUIT SHALL BE 1/2-INCH MINIMUM SINGLE STRIP, STEEL, HOT DIPPED GALVANIZED INSIDE AND OUTSIDE, MAXIMUM LENGTH 72 INCHES FOR LIGHTING AND 36" FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUDTIGHT OR WATERTIGHT WITH PVC JACKET WHERE USED IN DAMP, WET OR OUTSIDE AREAS, AND LIQUDTIGHT OR WATERTIGHT CONNECTORS SHALL BE USED.

NO RECEPTACLES OR TEL. OUTLETS TO BE MOUNTED BACK TO BACK, KEEP AT LEAST 2 INCHES BETWEEN RECEPTACLES AND TEL. OUTLETS.

ALL CONDUCTOR SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA.

CONTRACTOR SHALL ALIGN FIXTURES, SMOKE DETECTORS, CEILING DIFFUSERS ETC. AS REQUIRED TO PROVIDE A UNIFORM PRESENTATION. AT NO TIME WILL AN IONIZATION DETECTOR BE LOCATED WITHIN 3'-0" OF A SUPPLY OR RETURN AIR GRILLE.

CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS AND CONDUIT FOR THIS PROJECT THE CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA FOR THE EQUIPMENT WHICH WILL ACTUALLY BE INSTALLED, RECOMPUTING WIRE AND BREAKER SIZES IF REQUIRED BY THE NEC.

ALL CONDUIT TERMINATING IN THE CEILING CAVITIES IS TO BE LABELED.

ALL CONDUIT SHALL BE COLOR CODED WITH 1/2" WIDE TAPE, 10'-0" ON CENTER IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE.

THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT AND OWNER, PRIOR TO INSTALLATION, FOR USE WITH ACTUAL EQUIPMENT.

EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER/ARCHITECT. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER/ARCHITECT AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO THE INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE.

ALL FUSES DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.

WHERE EQUIPMENT PENETRATES EXTERIOR WALL OR ROOF THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ARCHITECT/ENGINEER.

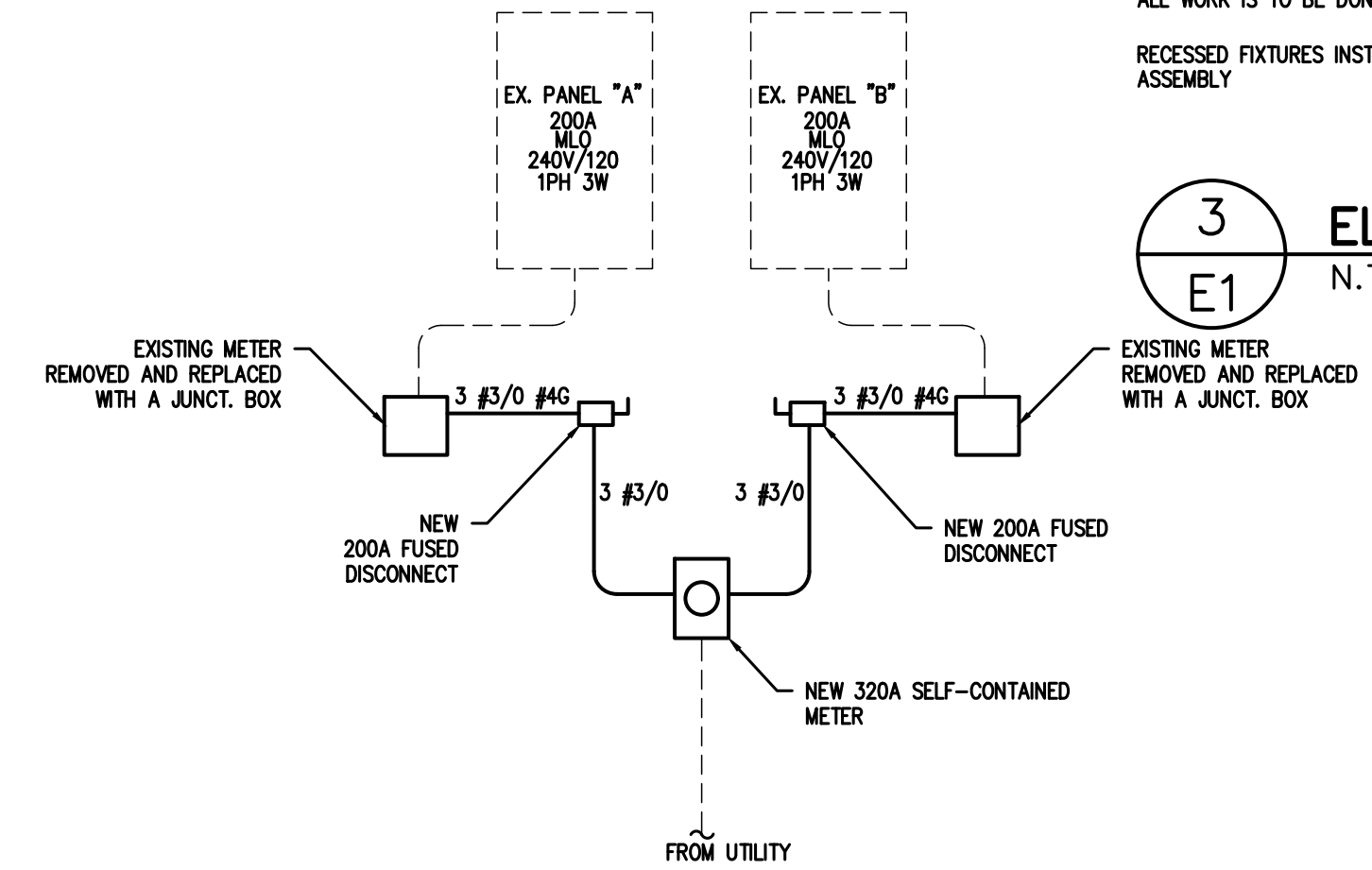
ALL WORK IS TO BE DONE IN STRICT COMPLIANCE WITH THE LATEST VERSION OF THE NEC AND APPLICABLE STATE CODES

RECESSED FIXTURES INSTALLED IN RATED ASSEMBLIES SHALL BE INSTALLED WITH AN ENCLOSURE SO AS TO MAINTAIN THE RATING OF ASSEMBLY

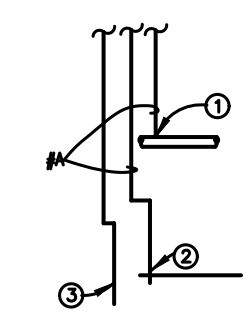
3 ELECTRICAL NOTES
N.T.S.

EXISTING METER REMOVED AND REPLACED WITH A JUNCT. BOX

EXISTING METER REMOVED AND REPLACED WITH A JUNCT. BOX



2 ELECTRICAL RISER
N.T.S.



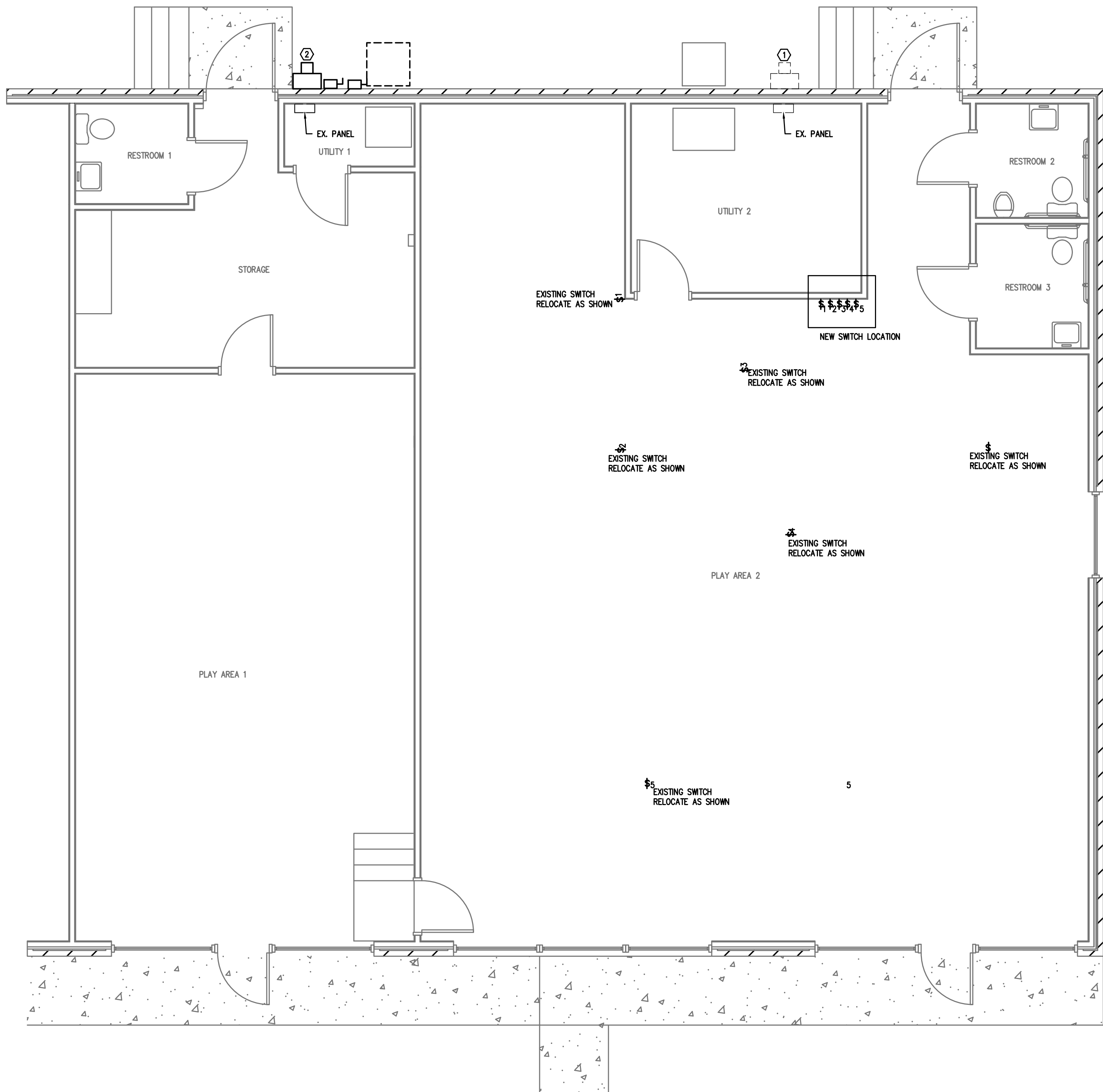
TYPICAL GROUNDING

GROUNDING ELECTRODE DETAILS

GROUNDING ELECTRODE CONDUCTORS SHALL BE #4 BARE COPPER. OTHER MATERIAL AND INSTALLATION PER NEC

- ① CONNECT TO METALIC WATER PIPE AS REQ'D.
- ② #4 COPPER GROUND PLACED TO BLDG STEEL
- ③ 3/4"x10' LONG COPPER CLAD GROUNDING ROD W/ #6 COPPER GROUND.

A=#4 CU Abb



1 POWER PLAN
1/4"-1'

- ① EXISTING METER TO BE REMOVED
- ② NEW 320 AMP SELF-CONTAINED METER AND NEW DISCONNECTS

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LIBERTY PLAY TOWN
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 THIS DOCUMENT IS INTENDED TO COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA). ARCHITECTS AND ENGINEERS ARE NOT LICENSED TO INTERPRET LAWS OR CODES CONCERNING LAWS OF LEAK WATER. THE OWNER SHOULD HAVE THIS DOCUMENT REVIEWED BY HIS ATTORNEY TO DETERMINE IF IT COMPLES ADA AND OTHER LAWS.

PROJECT NO: 2023-179
 DRAWN BY: SLL
 REVISIONS:

SHEET NO:
E1