

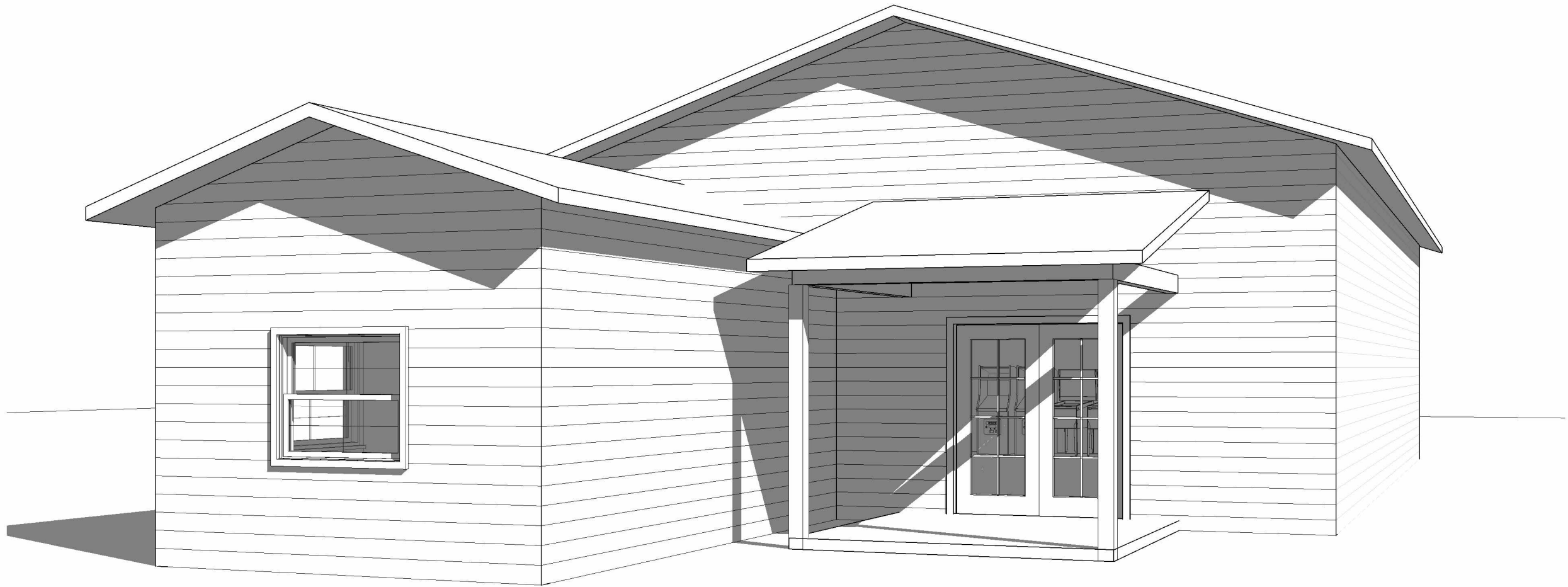
PROPOSED NEW
TENANT SPACE UPFIT
4318 RAY RD
SPRING LAKE, NC 28390

Reviewed for Fire Code Compliance

Harnett
COUNTY
NORTH CAROLINA

Matt Starling

11/07/2025 9:48:11 AM



CONSULTANTS

Architect
Name: 54393
Lic #: 7038 Rockridge Lane
Addr: Fayetteville, NC, 28306
Phone: 305-748-7291
email: kevincoledesigns@gmail.com
website: https://kcadesignstudios.net



REVISIONS

No.	Date	Action

PROJECT NAME

Spring Lake NC

4318 Ray Road

Enter address here

DRAWING NAME

COVERSHEET

Drawn By : TP
Checked By : TP
Issue Date : 7/22/25
Scale : 1" = 30'-0"
Job No. : 01102500001

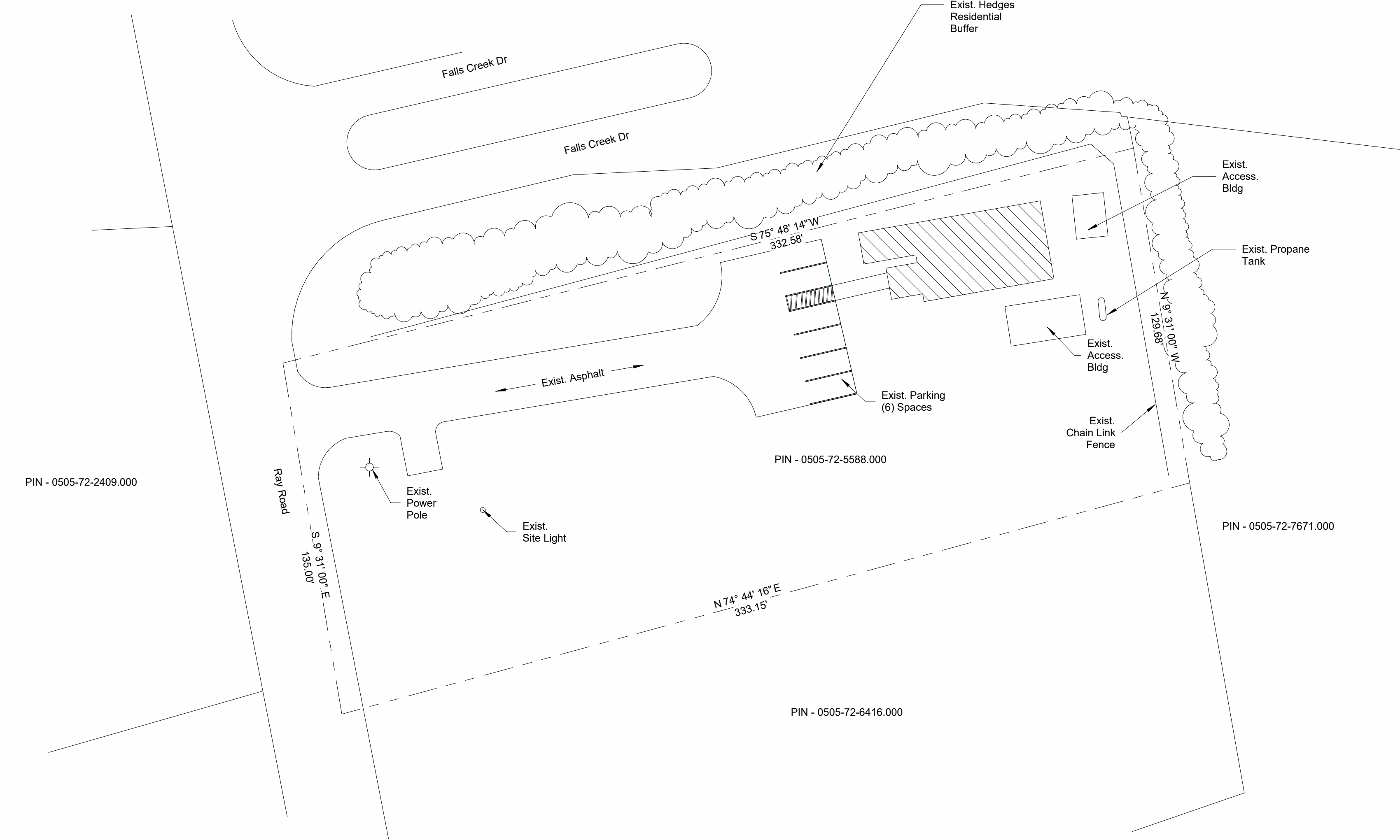
A-0.0

SEAL



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SHEET NUMBERING SYSTEM
A-0.0 COVER SHEET/SITE PLAN
A-1.0 APPENDIX B
A-2.0 FLOOR PLAN & LIFE SAFETY
A-2.1 DEMOLITION PLAN & INTERIOR ELEVATIONS
A2.2 ELEVATIONS
P-1.0 PLUMBING PLANS
E-1.0 ELECTRICAL LIGHTING & POWER PLAN
M-1.0 MECHANICAL PLAN



② Site
1" = 30'-0"

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BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Ray Road Arcade
Address: 4318 Ray Rd, Spring Lake NC
Owner/Authorized Agent: Luis Horton
Owned By: City/County Private State
Code Enforcement Jurisdiction: City County Cumberland, NC State

CONTACT: XXXXXXXXXXXXXXXX
DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL
Architectural Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Civil Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Electrical Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Fire Alarm Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Plumbing Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Mechanical Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Sprinkler-Standpipe Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Structural Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Retaining Walls >5' High Dillet Engineering Group Gregory Dillet 054271 (501) 817-1401 gdillet@ddilleteeneering.com
Other Tim Peppers Design LLC Tim Peppers (910) 644-4587 tpeppers@pepdc.com
("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: New Building Addition Renovation
1st Time Interior Completion
Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements
Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements

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

CONSTRUCTED: (date) 1988 CURRENT OCCUPANCY(S) (Ch. 3): Business B
RENOVATED: (date) N/A PROPOSED OCCUPANCY(S) (Ch. 3): Assembly A-3

RISK CATEGORY (Table 1604.5):
Current: I II III IV
Proposed: I II III IV

BASIC BUILDING DATA
Construction Type: I-A I-II-A I-IV I-V-A
(check all that apply) I-B I-II-B I-III-B I-V-B
Sprinklers: No Partial Yes NFPA 13 NFPA 13R NFPA 13D
Standpipes: No Yes Class I II III Wet Dry
Fire District: No Yes Flood Hazard Area: No Yes
Special Inspections Required: No Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table		
FLOOR	EXISTING (SQ FT)	NEW (SQ FT)
3rd Floor		
2nd Floor		
Mezzanine		
1st Floor	1,650	
Basement		
TOTAL	1,650	

ALLOWABLE AREA
Primary Occupancy Classification(s):
Assembly A-1 A-2 A-3 A-4 A-5
Business
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 I-4
I-2 Condition I-3 Condition I-4
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): N/A
Incidental Uses (Table 509): N/A
Special Uses (Chapter 4 - List Code Sections): N/A
Special Provisions: (Chapter 5 - List Code Sections): N/A
Mixed Occupancy: No Yes Separation: 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.

Actual Area of Occupancy A + Actual Area of Occupancy B
Allowable Area of Occupancy A Allowable Area of Occupancy B < 1
N/A + N/A + = N/A < 1.00

STORY NO.	DESCRIPTION AND USE(A)	BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.24 AREA(C)	AREA FOR FRONTAGE INCREASE 1/2	(D) ALLOWABLE AREA PER STORY OR UNLIMITED
First	Arcade	1,650 S/F	N/A	N/A	6,000
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
Total	N/A	1,650 S/F	N/A	N/A	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 = N/A (F)
b. Total Building Perimeter= N/A (P)
c. Ratio (F/P) = 1 (F/P)
d. W = Minimum width of public way = N/A (W)
e. Percent of frontage increase If = 100(F/P - 0.25) x W/30 = N/A (%)
2 Unlimited area applicable under conditions of Section 507.
3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
4 The maximum area of open parking garages must comply with Table 406.5.4.
5 Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT			
	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE 1
Building Height in Feet (Table 504.3) 2	40	16' ±	504
Building Height in Stories (Table 504.4) 3	1	1	504

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

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

*Indicate section number permitting reduction

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

LIFE SAFETY SYSTEM REQUIREMENTS
Emergency Lighting: No Yes
Exit Signs: No Yes
Fire Alarm: No Yes
Smoke Detection Systems: No Yes Partial
Carbon Monoxide Detection: No Yes

OCCUPANT LOAD AND EXIT WIDTH (THIS SECTION REQUIRED FOR ALL PROJECTS)									
USE GROUP AND/OR SPACE DESIGNATION	(a) AREA SQ. FT.	(b) AREA PER OCCUPANT	(ab) NUMBER OF OCCUPANTS	(c) EGRESS WIDTH PER OCCUPANT (SECTION 1005.1)		(d) REQUIRED WIDTH (SECTION 1005.1)		(e) ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
Game Room	802	11	73		0.20		14.6		72
Game Room	200	100	2		0.20		0.40		72
TOTAL # OF OCCUPANTS	1002		75						110

1 See Table 1004.1.1 to determine whether net or gross area is applicable
2 Minimum stairway width (Section 1009.1); min. corridor width (Section 1016.2); min. door width (Section 1008.1.1)
3 Minimum width of exit passageway (Section 1003.2)
4 The loss of 1 means of egress shall not reduce the availability capacity to less than 50% of the total req'd (Sect 1005.1)
5 Assembly occupancies (Section 1028)

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A1.0

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 sign locations (1013)
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

ACCESSIBLE DWELLING UNITS (SECTION 1107)								
UNIT CLASSIFICATION	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
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ACCESSIBLE PARKING (SECTION 1106)				
LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	# OF ACCESSIBLE SPACES PROVIDED	96" SPACES	132" SPACES
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
TOTAL	-	-	-	-

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)											
USE		WATER CLOSETS			LAVATORIES			SHOWERS /TUBS	DRINKING FOUNTAINS		
		MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE	
SPACE	EXISTG	1	-	1	-	-	-	-	-	-	-
	NEW	-	1	-	-	1	1	-	-	-	-
	REQ'D	1	1	0	-	1	1	-	-	-	-

SPECIAL APPROVALS

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

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (IS) 1
Seismic (IE) 1
Live Loads: Roof 20 psf
Mezzanine 100 psf
Floor N/A psf
Ground Snow Load: 10 psf
Wind Load: Ultimate Wind Speed 130 mph (ASCE-7)
Exposure Category B

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 SS %g S1 %g
Site Classification (ASCE 7) A B C D E F
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
Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) N/A psf
Presumptive Bearing capacity 2,000 psf
Pile size, type, and capacity N/A

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: 17° F
summer dry bulb: 91° F
Interior design conditions
winter dry bulb: 72° F
summer dry bulb: 74° F
relative humidity: 50%
Building heating load: 10 KW
Building cooling load: 34,000 BTU
Mechanical Spacing Conditioning System
Unitary
description of unit: TRANE (1) 3.0 Ton Heat Pump
heating efficiency:
cooling efficiency: 94%
size category of unit:
Boiler
Size category. If oversized, state reason.: N/A
Chiller
Size category. If oversized, state reason.: N/A
List equipment efficiencies: N/A

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code Performance Prescriptive
ASHRAE 90.1 Performance Prescriptive

Lighting schedule (each fixture type)
lamp type required in fixture
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified vs. allowed (whole building or space by space)
total exterior wattage specified vs. allowed

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
C406.2 More Efficient HVAC Equipment Performance
C406.3 Reduced Lighting Power Density
C406.4 Enhanced Digital Lighting Controls
C406.5 On-Site Renewable Energy
C406.6 Dedicated Outdoor Air System
C406.7 Reduced Energy Use in Service Water Heating

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website: https://kccadestudios.net



REVISIONS

No.	Date	Action

PROJECT NAME
4318 Ray Road
Spring Lake NC
Enter address here

DRAWING NAME

Appendix B

Drawn By : TP
Checked By : TP
Issue Date : 08/13/19
Scale :
Job No. : 01102500001

A-1.0

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REVISIONS

No.	Date	Action

PROJECT NAME
4318 Ray Road
Spring Lake NC

Enter address here

DRAWING NAME

Floor Plan

Drawn By : TP
Checked By : TP
Issue Date : 08/12/19
Scale : 1/4" = 1'-0"
Job No. : 0110250001

A-2.0

SEAL



SEE ALL NOTES THIS PAGE

NOTICE TO CONTRACTOR

All construction must comply with current NC Building Codes and is subject to field inspection and verification.

Reviewed for Code Compliance

11/07/2025



Floor Plan Notes:

- All structural information shown for reference purposes only. Contractor shall have licensed structural engineer review and design all structural elements such as all framing walls, beams, connections, headers, joists and rafters.
- All dimensions are from center line of stud to face of exterior stud unless noted otherwise.
- Window sizes indicated on plans are noted by approximate rough opening size. Refer to plans and exterior elevations for window types.
- Coordinate location of utility meters with site plan and locate away from public view visual impact shall be minimized, i.e. mount as low as possible.
- Do not scale drawings. Follow dimensions only.
- Contractor shall field verify all cabinet dimensions before fabrication.
- All glass located within 18" of floor, 12" of a door located within 60" of floor at bathtubs, whirlpools, showers, saunas, steam rooms or hot tubs shall be tempered.
- All exposed insulation shall have a foam e spread rating of less than 25 and a smoke density rating of less than 450.
- Provide combustion air vents, with screen and back damper, for fireplaces, wood stoves and any appliance with an open flame.
- Bathrooms and utility rooms shall be vented to the outside with a minimum of a 90 cfm fan. Range hoods shall also be vented to outside.
- Attic HVAC units shall be located within 20'-0" of its service opening. Return air grilles shall not be located within 10'-0" of a gas fired appliance.
- All walls and ceilings in storage areas to have 5/8" Type-X gyp. brd. with 1-Hour fire rating.
- All interior walls shall be covered with 1/2" gyp. brd., with metal corner reinforcing, tape float and sand. (3 coats) use 5/8" gyp. brd. on ceilings when supporting members are 24" O.C. or greater. Use 1/2" gyp. brd. on ceiling members less than 24" O.C.
- All bath and toilet area walls and ceiling shall have water resistant gyp. brd. or FRP

GENERAL CONSTRUCTION NOTES:

- Design Loads: Local
- Materials
 - Brick
 - Face Brick Standard: ASTM C216-84, Grade SW.
 - Brick type and color to match existing.
 - Mortar
 - ASTM C270, Type S. Mortar style and color consult owner
 - Do not use calcium chloride in mortar.
 - Brick Ties
 - ASTM A82 steel wire, hot dip galvanized after fabrication to ASTM A 153/A 153M, Class B
 - Insulation
 - ASTM C665; pre-formed glass fiber batt (R-19)
 - Wood Framing
 - No wood framing shall be used for partition wall framing
 - Waterproofing
 - #15 asphalt felt
 - Roof Shingles
 - Match existing
- Masonry:
 - Install mortar in accordance with premix mortar instructions or in accordance with ASTM C780.
 - Clean mortar off exposed finished surfaces immediately following placement.
 - Conform to the applicable code requirements for masonry construction and guidelines outlined by the Brick Institute of America.
 - Provide brick ties.
 - Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges.
 - Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Place through-wall flashing on sloping bed of mortar and cover with mortar. Seal penetrations in flashing with adhesive/sealant/tape as recommended by flashing manufacturer before covering with mortar.
 - Install weep holes in the head joints in exterior wythes of the first course of masonry immediately above embedded flashings as follows:
 - Keep head joints free and clear of mortar.
 - Space weep holes 24 inches o/c.
 - Weep Holes:
 - After wall construction is complete, clean brick with a non-acidic solution recommended by masonry unit manufacturer.
- Insulation
 - Verify that adjacent materials and insulation materials are dry.
 - Install insulation per manufacturer's instructions.
 - Tape seal tears or cuts in vapor retarder.
- Wall Framing
 - All wall studs shall be metal studs according to sizes designated on drawing.
- Miscellaneous
 - The contractor will be responsible for properly guying and bracing the structure to resist live, dead, wind and construction loads during construction.
 - Verify all existing building dimensions, elevations and details with the field conditions.

Per conversation with Mr. Horton, this door to be moved to obtain at least 37 feet separation between exits.

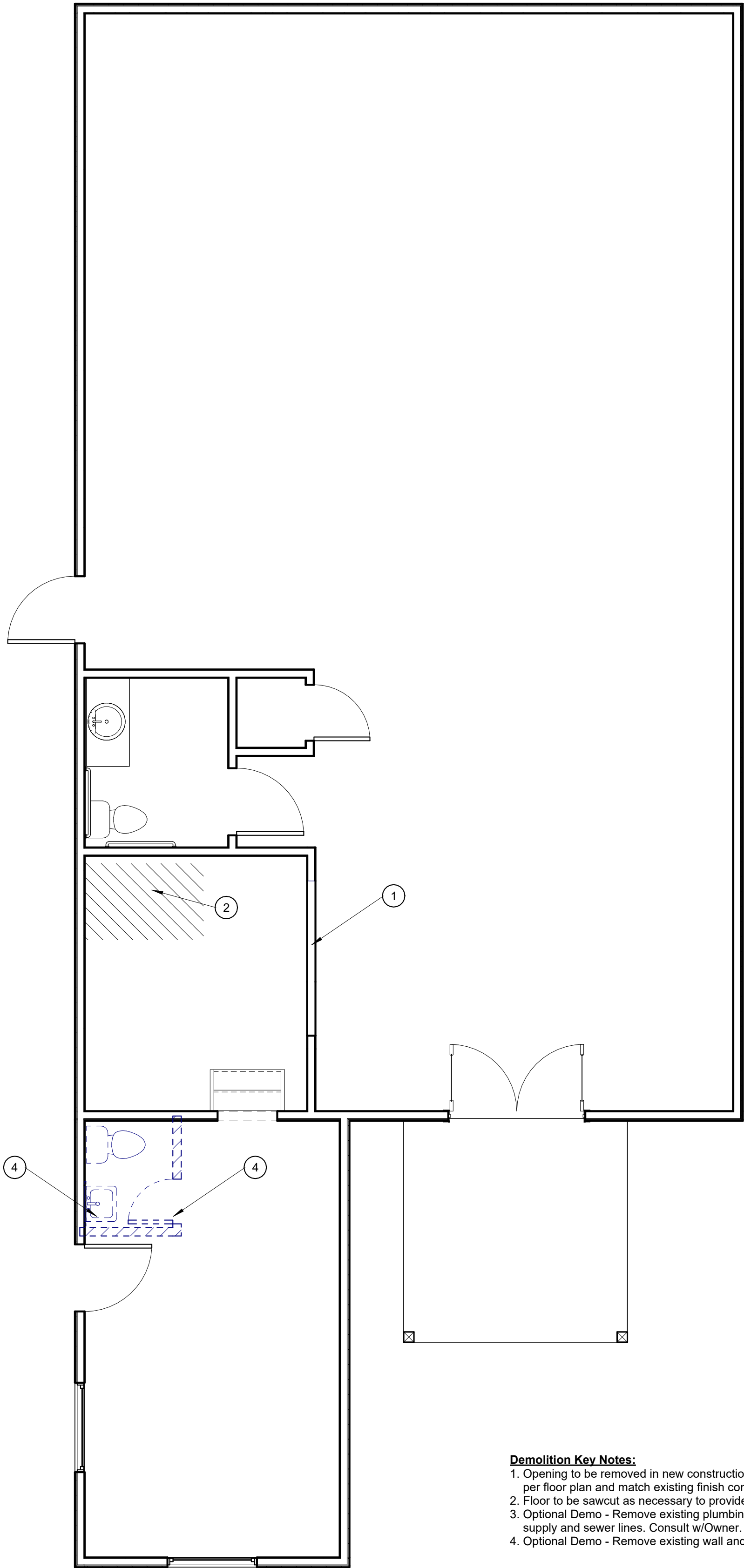
Both exits to have panic hardware

Garage door shall be removed or mechanically secured so it cannot be closed

This door to remain as is.

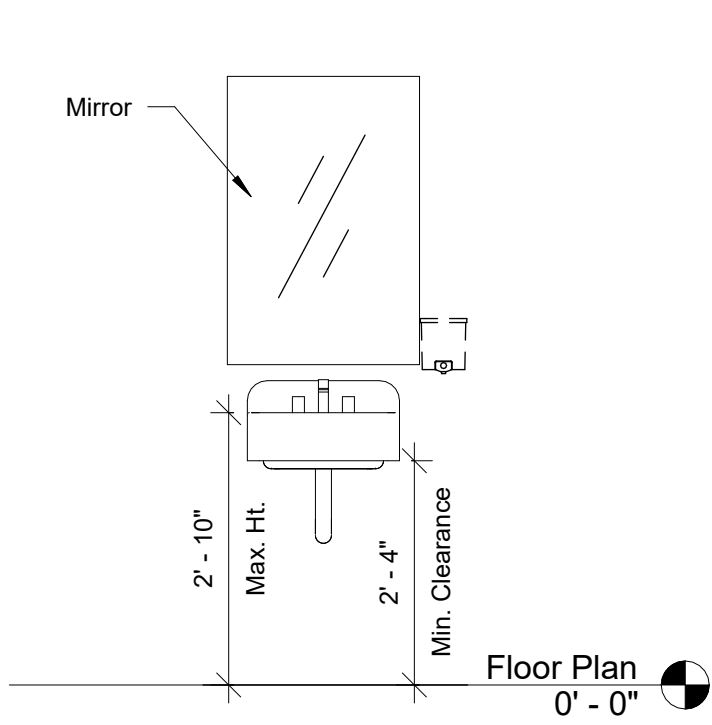
1 Floor Plan
1/4" = 1'-0"

2 Life Safety Plan
1/4" = 1'-0"

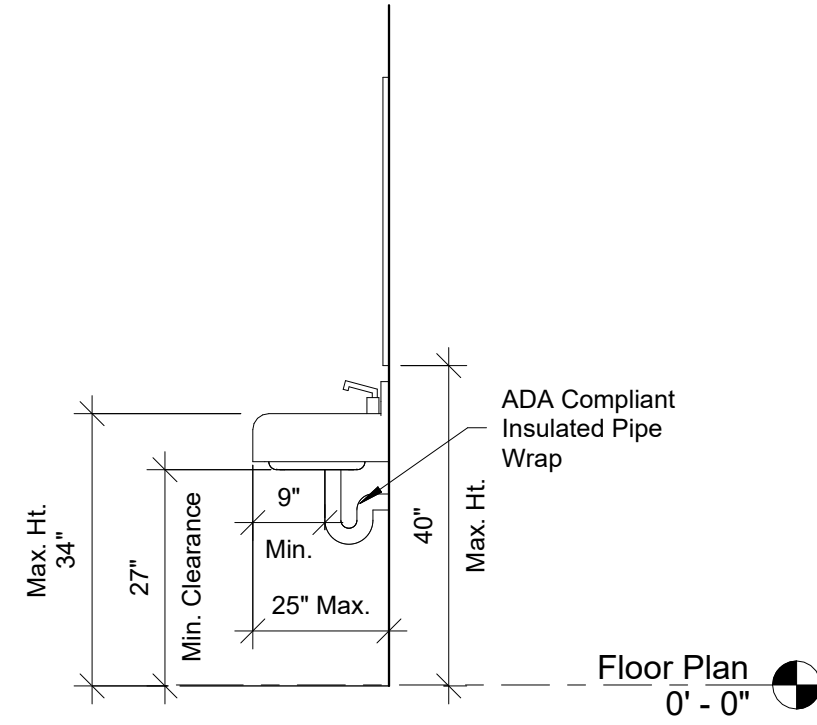


- Demolition Key Notes:**
1. Opening to be removed in new construction. Infill with framing per floor plan and match existing finish conditions.
 2. Floor to be sawcut as necessary to provide sewer to new plumbing fixtures.
 3. Optional Demo - Remove existing plumbing fixtures. Abandon existing water supply and sewer lines. Consult w/Owner.
 4. Optional Demo - Remove existing wall and door. Consult w/Owner.

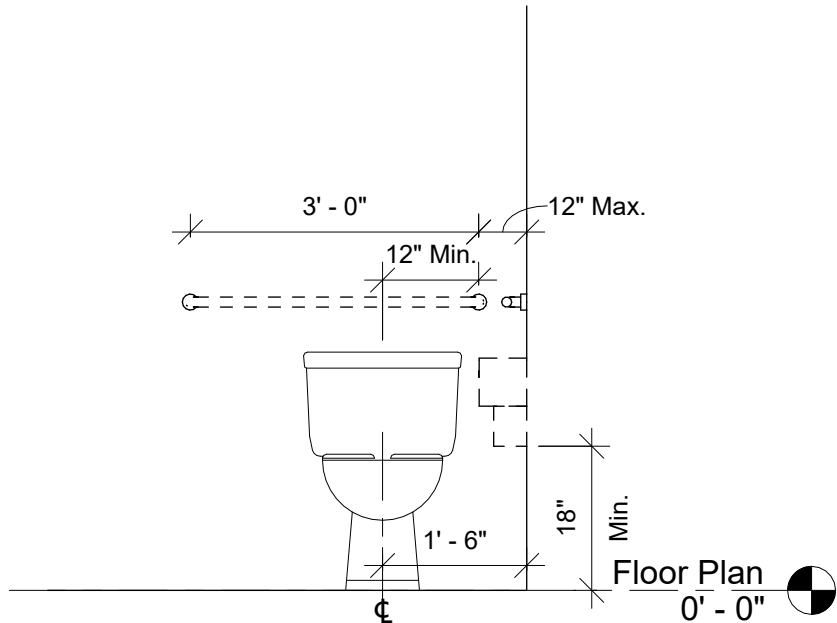
1 Demolition Plan
1/4" = 1'-0"



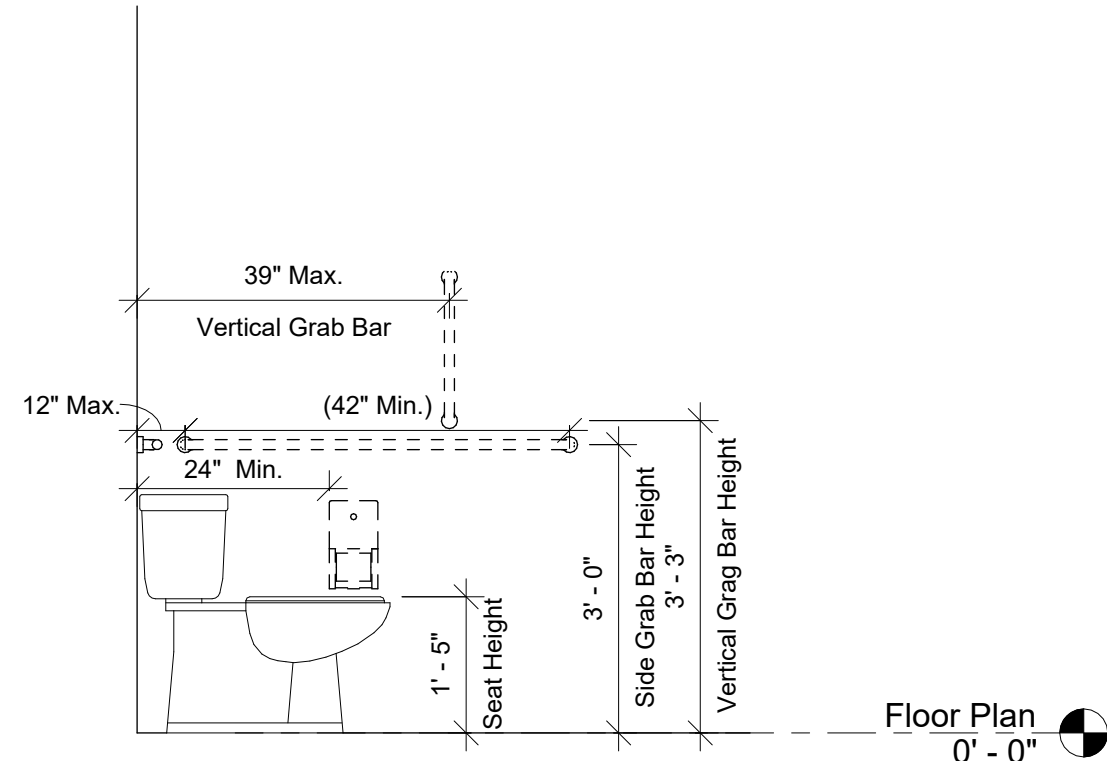
2 Elevation - ADA Lavatory Front
1/2" = 1'-0"



3 Elevation - ADA Lavatory Side
1/2" = 1'-0"



4 Elevation - ADA Toilet Front
1/2" = 1'-0"



5 Elevation - ADA Toilet Side
1/2" = 1'-0"

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Architect

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website: https://kcadesignstudios.net



REVISIONS

No.	Date	Action

PROJECT NAME

Spring Lake NC

4318 Ray Road

Enter address here

DRAWING NAME

Demolition Plan

Drawn By : TP
Checked By : TP
Issue Date : 08/12/19
Scale : As indicated
Job No. : 01102500001

A-2.1

SEAL



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REVISIONS

No.	Date	Action

PROJECT NAME
Spring Lake NC
4318 Ray Road
Enter address here

DRAWING NAME

Elevations

Drawn By : TP
Checked By : TP
Issue Date : 08/12/19
Scale : 1/4" = 1'-0"
Job No. : 01102500001

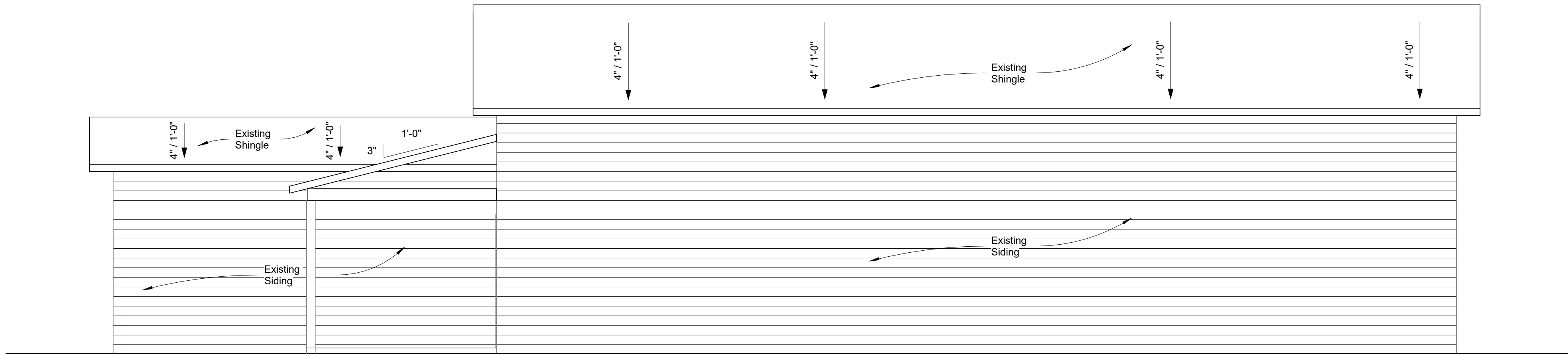
A-2.2

SEAL

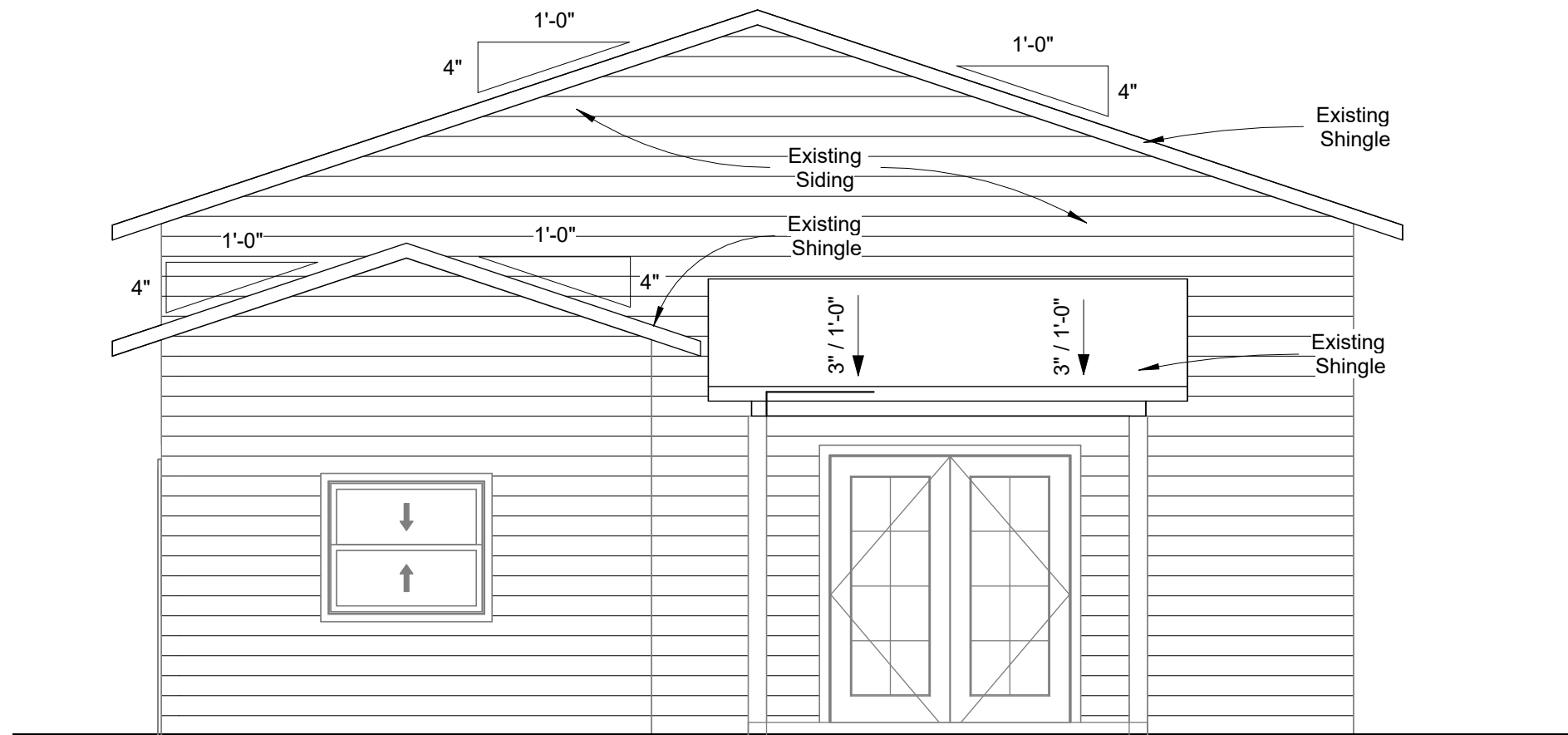


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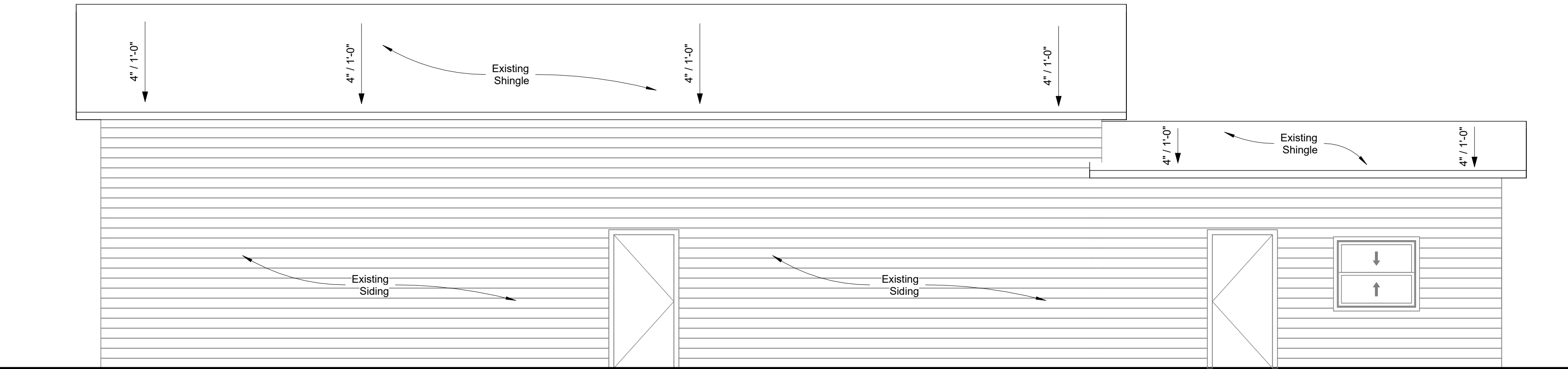
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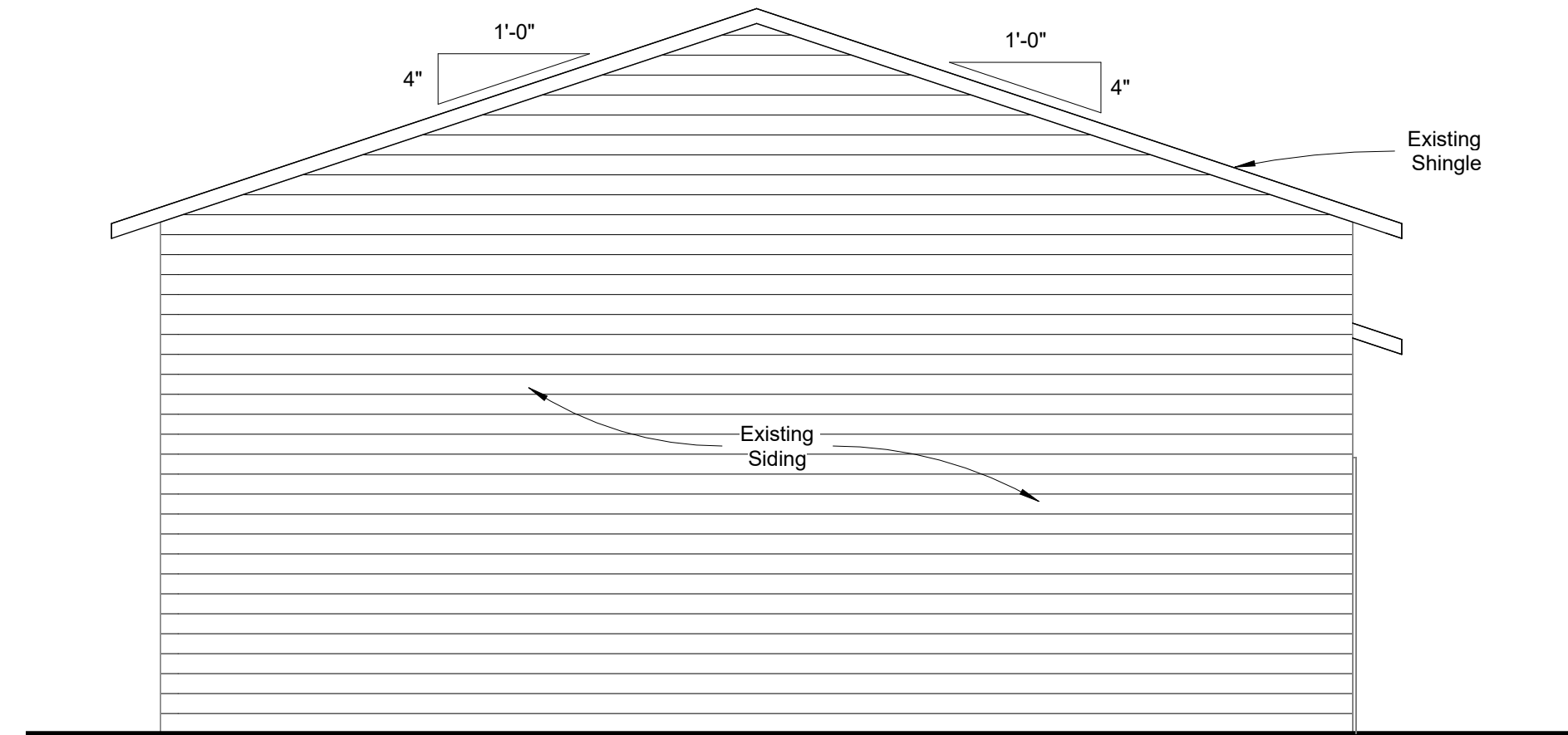
④ East
1/4" = 1'-0"



① South
1/4" = 1'-0"



③ West
1/4" = 1'-0"



② North
1/4" = 1'-0"

PLUMBING NOTES:
PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA PLUMBING CODE 2012 EDITION AND LOCAL CODES.

ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE GENERAL CONTRACTOR AND OWNER TO SUIT THE OWNER'S OPERATING CONDITIONS.

PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE GENERAL CONTRACTOR OF ANY DEVIANCES FROM THE CONTRACT DRAWINGS PRIOR TO STARTING ANY WORK.

THE PLUMBING CONTRACTOR SHALL COORDINATE WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO INSTALLATION OF HIS EQUIPMENT. SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE. THINK OF OTHER CONTRACTORS AND THEIR REQUIREMENTS IN VERTICAL CHASES AND WALL MOUNT SPACE. ALL CONTRACTORS TO FOLLOW THIS ORDER OF PRIORITY:

1. STORM AND SANITARY SEWER LINES
2. DUCTWORK AND HVAC SYSTEMS
3. HOT AND COLD WATER LINES
4. RIGID CONDUIT
5. CABLE

THE PLUMBING CONTRACTOR TO ORGANIZE HIS PIPING IN ATTIC SPACES, CRAWL SPACES, AND ABOVE CEILINGS. MAKE RUNS PARALLEL, PERPENDICULAR, AND GROUPED TOGETHER WHERE POSSIBLE. LOCATE MAJOR GROUPINGS OVER HALLWAYS AND AREAS OF PUBLIC ACCESS IF POSSIBLE. FREE RUNS OF PIPING IS NOT ACCEPTABLE.

THE PLUMBING CONTRACTOR SHALL LAY OUT AND INSTALL HIS WORK IN ADVANCE OF POURING CONCRETE FLOORS OR WALLS. HE SHALL FURNISH ALL SLEEVES TO THE GENERAL CONTRACTOR FOR OPENINGS THROUGH POURED MASONRY FLOORS, OR WALLS, ABOVE GRADE REQUIRED FOR PASSAGE OF ALL PIPES TO SUPPORT HIS EQUIPMENT.

HORIZONTAL DRAINAGE AND WASTE PIPE SHALL HAVE A MINIMUM SLOPE OR FALL OF 1/8 INCH PER FOOT. ALL CHANGE OF HORIZONTAL DIRECTIONS IN SOIL WASTE PIPE SHALL BE MADE WITH LONG RADIUS FITTINGS WITH "Y" BRANCHES AND 1/8 OR 1/16 BENDS.

COLD AND HOT WATER PIPING ABOVE GRADE SHALL BE TYPE "L" HARD DRAWN COPPER TUBING CONFORMING TO ASTM B-88 WITH SWEAT JOINTS AND WROUGHT OR CAST VALVES AND FITTINGS (UNIONS, STRAINERS, ETC.). JOINT SHALL BE MADE WITH LEAD FREE SOLDER.

ALL HOT WATER PIPING SHALL BE INSULATED WITH 1 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE.

ALL COLD WATER PIPING SHALL BE INSULATED WITH 1/2 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE.

SANITARY HORIZONTAL WASTE, VENT PIPING, AND FITTINGS ABOVE GRADE SHALL BE SCHEDULE 40 PVC-DWV PIPE-CELLULAR CORE FROM CHARLOTTE PIPE AND FOUNDRY COMPANY OR APPROVED EQUAL, AND MUST MEET OR EXCEED THE REQUIREMENTS OF ASTM F-891, NSF STANDARD NO. 14, AND IAPMO UPC.

ALL WASTE STACK PIPING SHALL BE CAST IRON AND INSULATED FOR SOUND IN WALLS.

ALL WASTE AND STORM PIPING ABOVE CEILING, VERTICAL CHASES, WALLS SHALL BE INSULATED WITH 1/2 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE. NO INSULATION REQUIRED IN CRAWL SPACE OR BELOW FLOOR SLAB OF ANY WASTE AND STORM PIPING.

IN LIEU OF FIBERGLASS INSULATION, THE PLUMBING CONTRACTOR IS ALLOWED TO USE CLOSED CELL INSULATION, 1/2 INCH THICK ARMSTRONG/ARMAFLEX II ON ALL COLD WATER PIPES. RIGID URETHANE FOAM INSULATION, 1 INCH THICK ARMSTRONG/ARMALOK II ON ALL HOT WATER PIPING.

ALL PLUMBING EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

ALL FIXTURES, DRAINS, TRAPS, ETC. SHALL BE SET PLUMB AND LEVEL.

ALL HANDICAPPED FIXTURES AND TRIM SHALL BE INSTALLED IN ACCORDANCE WITH THE NORTH CAROLINA PLUMBING CODE 2018 EDITION.

CHROME PLATED ESCUTCHEONS SHALL BE PROVIDED AT EACH WALL PENETRATION.

ESCUTCHEONS SHALL BE CHROME PLATED, SPRING TYPE, ON ALL PIPES PASSING THROUGH WALLS AND CEILINGS IN FINISHED AREAS. FLOOR ESCUTCHEONS SHALL BE CAST BRASS, CHROME PLATED, WITH SET SCREW.

ESCUTCHEONS SHALL BE OF SUFFICIENT SIZE TO COVER OUTSIDE DIAMETER OF THE PIPE OR THE INSULATION OF THE PIPE.

FLASHING FOR VENTS THROUGH THE ROOF SHALL BE TWO-PIECE TYPE, 16 OUNCE COPPER COUNTER FLASHING AND BASE FLASHING, OR A TWO-PIECE TYPE, 4 POUND LEAD COUNTER FLASHING AND BASE FLASHING. THE BASE FLASHING SHALL BE INSTALLED BY THE GENERAL CONTRACTOR WITH THE ROOF SYSTEM.

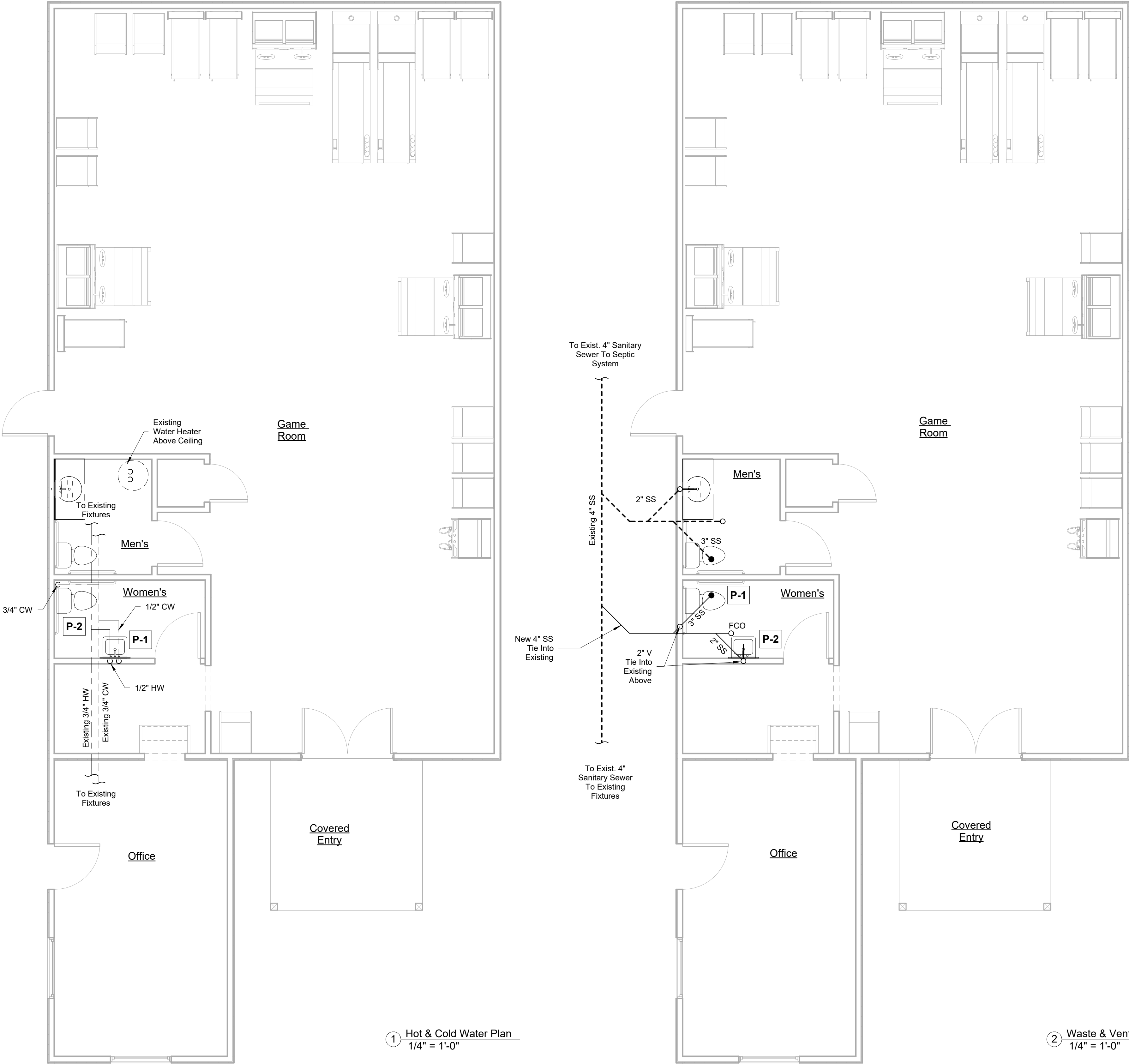
VENT FLASHING SHALL EXTEND DOWN AT LEAST 4 INCHES FROM THE TOP OF THE PIPE. FLASHING SHALL EXTEND AT LEAST 12 INCHES IN ALL DIRECTIONS FROM THE PIPE AND SHALL BE PARALLEL TO THE ROOF LINE.

ALL EQUIPMENT AND INSTALLED MATERIALS SHALL BE THOROUGHLY CLEAN AND FREE OF ALL DIRT, OIL, GRIT, GREASE, AND ETC.

ALL PLUMBING SYSTEMS AND EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE BUILDING FROM THE OWNER.

Scope Of Work: Plumbing

This proposed project includes the installation of new bathroom fixtures. New hot and cold water supply lines to be tied into existing water lines above the ceiling. Existing water heater to remain to serve existing and new fixtures. Sewer drain lines from new fixtures to be tied into existing sanitary sewer to existing septic system. New waste vents to be tied into existing vent thru roof.



1 Hot & Cold Water Plan
1/4" = 1'-0"

2 Waste & Vent Plan
1/4" = 1'-0"

PLUMBING FIXTURE SCHEDULE						
SYMBOL	FIXTURE DESCRIPTION	FIXTURE MOUNTING	SUPPLY	WASTE	VENT	REMARKS
P1	LAVATORY	WALL MOUNTED	1/2" C.W. /H.W.	2"	1-1/2"	3 4 5 8 10
P2	ELONGATED BOWL; FLUSH TANK TOILET	FLOOR MOUNTED	3/4" C.W.	3"	2"	1 2 6 7 12 13

- 1

HANDICAPPED
- 2

VITREOUS CHINA
- 3

4 INCH CENTER
- 4

SINGLE LIFT MIXING FAUCET
- 5

VINYL COVERED INSULATION FOR WASTE/WATER PIPING
- 6

16-1/2" HIGH BOWL
- 7

1.6 GALLONS PER FLUSH
- 8

STAINLESS STEEL
- 9

MOUNT BOTTOM OF APRON @ 29" A.F.F.
- 10

CHROME FAUCET FINISH
- 11

2 GALLON EXPANSION TANK
- 12

Accessible Fixture
- 13

RH Flush
- 14

LH Flush

DRAINAGE CALCULATIONS			
QTY.	ITEM	DRAINAGE FIXTURE UNITS	DRAINAGE FIXTURE UNITS TOTAL
3	WATER CLOSET	4.0	12.0
3	LAVATORY	2.0	6.0
TOTAL DRAINAGE FIXTURE UNITS			18.0

WATER CALCULATIONS				
QTY.	ITEM	C.W. FIXTURE UNITS	WATER SUPPLY FIXTURE UNITS EACH	WATER SUPPLY FIXTURE UNITS TOTAL
3	WATER CLOSET	5.0	5.0	15.0
3	HAND SINK (LAVATORY)	1.5	2.0	6.0
TOTAL WATER SUPPLY FIXTURE UNITS				21.0

CONSULTANTS

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REVISIONS

No.	Date	Action

PROJECT NAME

Spring Lake NC

4318 Ray Road

Enter address here

DRAWING NAME

Plumbing Plan

Drawn By : TP
Checked By : TP
Issue Date : 08/12/19
Scale : 1/4" = 1'-0"
Job No. : 01102500001

P-1.0

SEAL



NOT VALID WITHOUT SEAL

Architect

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REVISIONS

No.	Date	Action

PROJECT NAME

Spring Lake NC

4318 Ray Road

Enter address here

DRAWING NAME

Electrical

Drawn By : Author
Checked By : Checker
Issue Date : 02/28/20
Scale : As indicated
Job No. : 0110250001

E-1.0

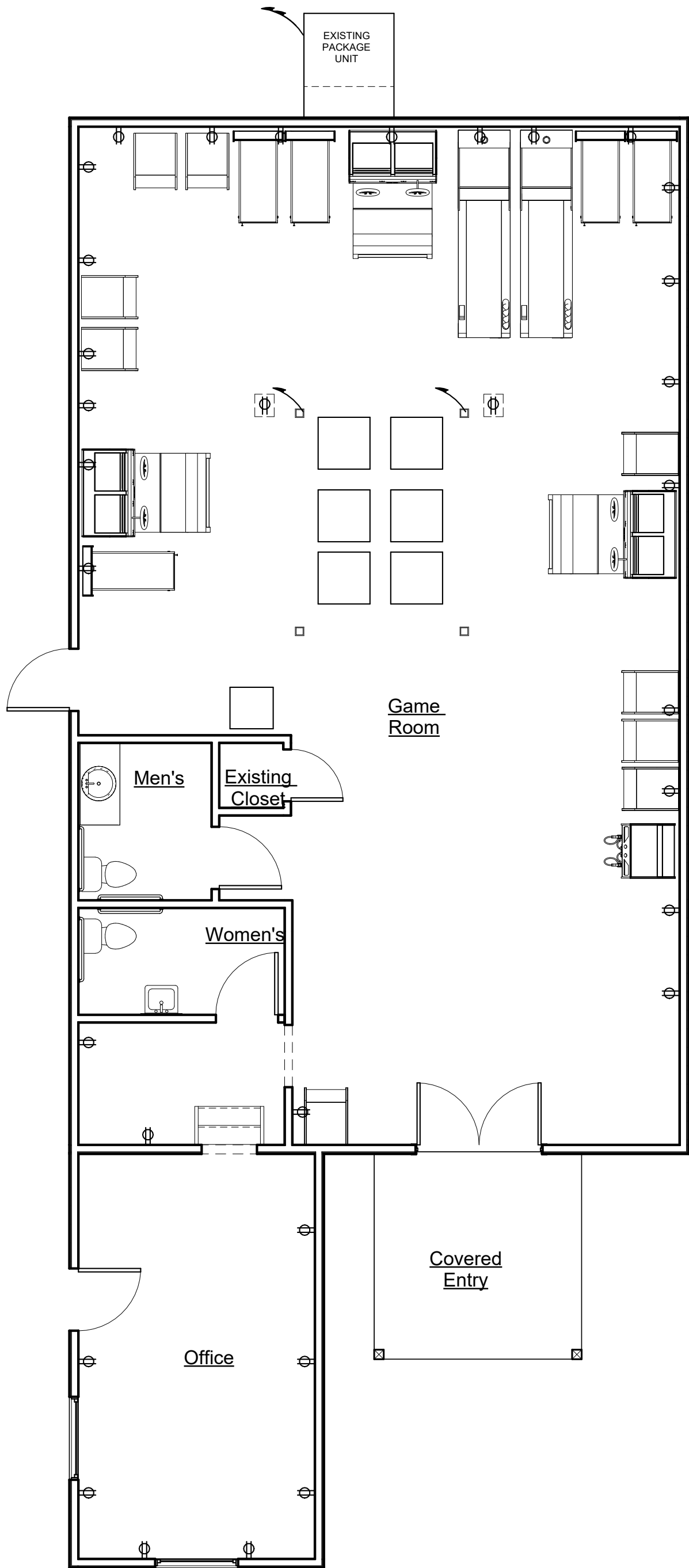
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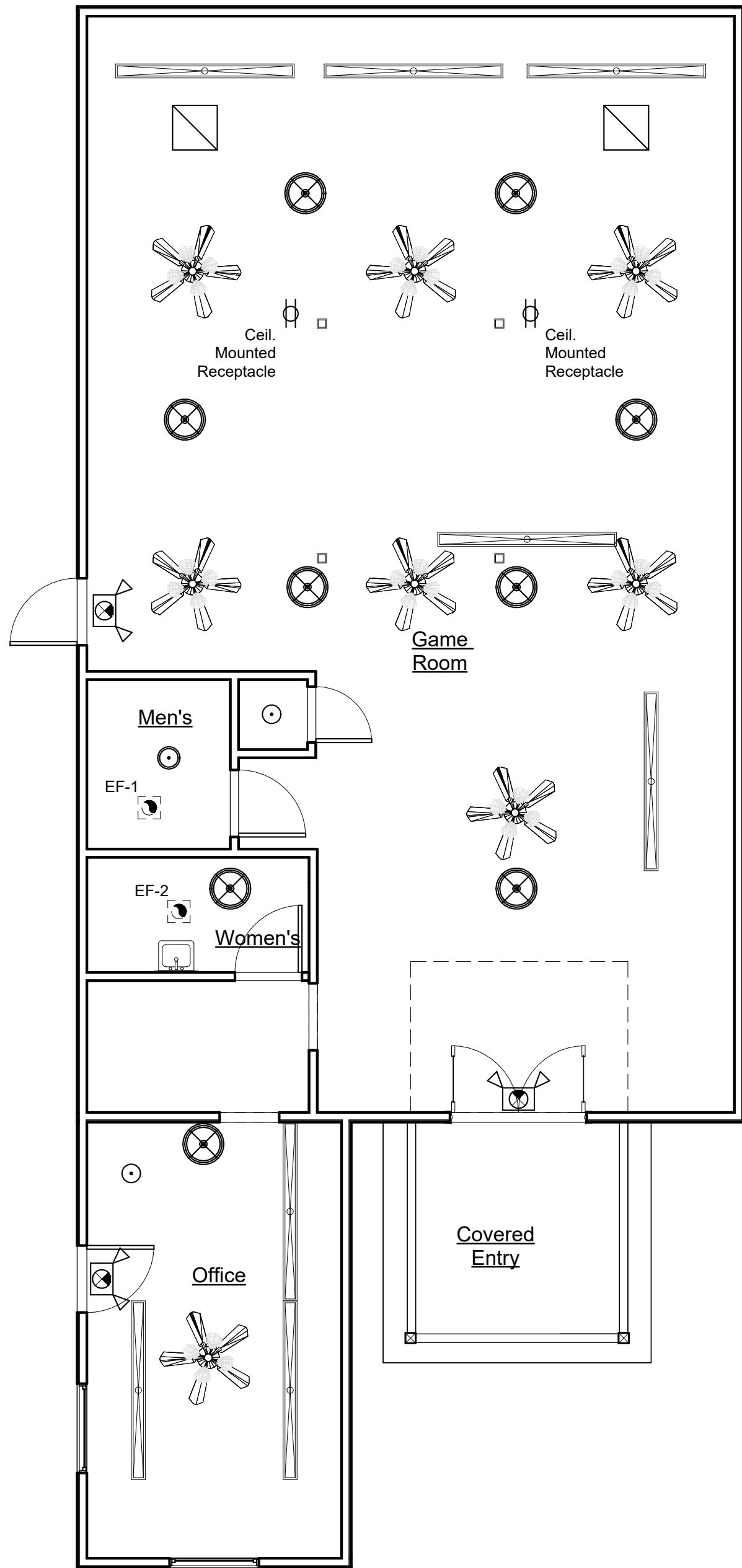
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Scope of Work: Electrical

Electrical work consists of the addition of new receptacles using existing circuits to power new game equipment for proposed gaming area. Existing circuits extended to new locations and the existing electrical panel is loaded as shown in panel schedule. New electrical work shall consist of the extension of the existing bathroom lighting circuit to serve new light and exhaust fan in new women's restroom. All other existing electrical to remain in place and in use.



2 Power Plan
3/16" = 1'-0"



1 Lighting Plan
3/16" = 1'-0"

EXISTING PANEL WITH NEW BREAKERS										PHASE 1 WIRE 3 VOLTS 120/240 MAIN 200 MCB													
U.L. SERVICE ENTRANCE LABEL										TYPE NOOD MOUNTING RECESSED ENCLOSURE NEMA 1													
(KVA)										SHORT CKT. RATING 10,000 RMS SYM.													
										☒ GROUND TERMINAL BAR ☒ NEUTRAL TERMINAL BAR													
										(KVA)													
PHASE LOADING		DESCRIPTION		CKT. TYPE	WIRE SIZE	CKT. BKR. TRIP	CKT. BKR.	A	B	CKT. BKR. TRIP	CKT. BKR.	WIRE SIZE	CKT. TYPE	DESCRIPTION	PHASE LOADING								
A	B														A	B							
0.80		Receptacles - Games		E	#12	20/1	1			2	20/1	#12	E	Receptacles - Games	0.80								
	0.80	Receptacles - Games		E	#12	20/1	3			4	20/1	#12	E	Receptacles - Games		0.80							
0.80		Receptacles - Games		E	#12	20/1	5			6	15/1	#14	E	Lighting	1.00								
	0.80	Receptacles - Games		E	#12	20/1	7			8	15/1	#14	E	Lighting		1.00							
0.54		Receptacles		E	#12	20/1	9			10					3.50								
	0.54	Receptacles		E	#12	20/1	11			12	30/2	#12	E	Air Conditioning		3.50							
1.80							13			14													
	1.80	Water Heater		E	#10	30/2	15			16	50/2	#12	E	RV Outlet	5.00								
6.20							17			18	15/1	#14	E										
	6.20	Heat		E	#10	40/2	19			20	20/1	#14	E	LIGHTS & EMERGENCY	1.00								
		SPARE					21			22				P1	1.80								
														SPARE	-	-							
10.14	10.14	SUB-TOTAL (VA)										SUB-TOTAL (VA)										11.30	12.10
C	CONTINUOUS LOAD			E	ESTIMATED LOAD																		
H	HVAC LOAD			L	LIGHTING LOAD																		
N	NON-CONTINUOUS LOAD													TOTAL CONNECTED LOAD =			43.68 KVA						
R	RECEPTACLE LOAD													AMPS =			182.0						
K	KITCHEN LOAD																TOTAL OF 22SPACES						

Architect

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REVISIONS

No.	Date	Action

PROJECT NAME

Spring Lake NC

4318 Ray Road

Enter address here

DRAWING NAME

Mechanical Plan

Drawn By : TP
Checked By : TP
Issue Date : 12/03/20
Scale : 1/4" = 1'-0"
Job No. : 01102500001

M-1.0

SEAL



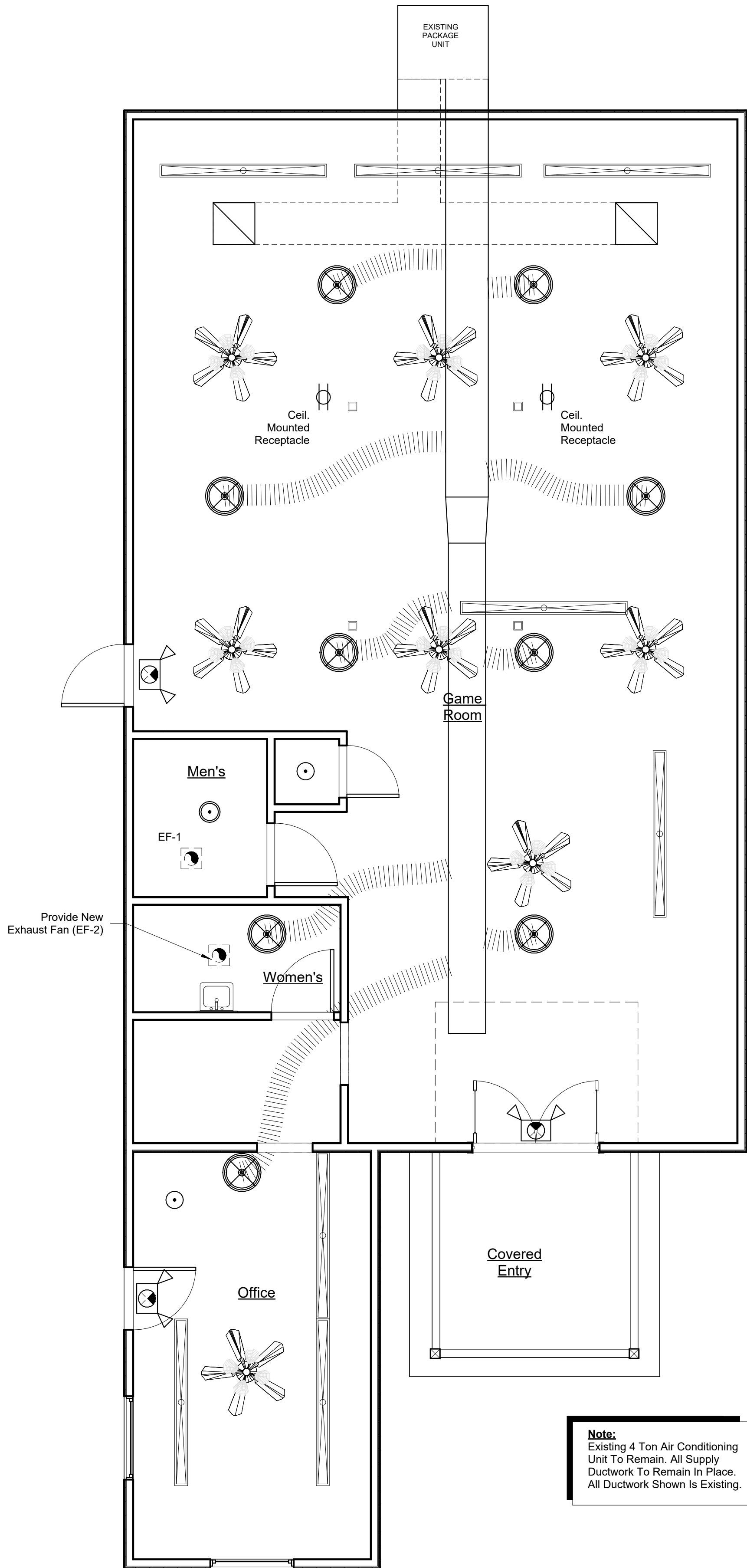
Scope Of Work: Mechanical

This proposed project includes the installation of new bathroom exhaust fan. All existing mechanical systems, ductwork, and controls to remain in place and in use.

EXHAUST FAN SCHEDULE											
MARK	LOCATION	SERVICE	CFM	S.P.	WATTS	RPM	VOLT	PHASE	DRIVE	MANUFACTURER MODEL	NOTES
EF-1	CEILING	EXHAUST	100	0.625"	16.4	1050	120	1	DIRECT	EXISTING	
EF-2	CEILING	EXHAUST	100	0.625"	16.4	1050	120	1	DIRECT	GREENHECK SP-A200-QD Or Equal 68-267 CFM	① ② ③
① ROOF CAP WITH BIRDSCREEN ③ BACKDRAFT DAMPER											
② MESH FILTER ④ WIRED FOR CONTINUOUS OPERATION DURING NORMAL HOURS											

OUTSIDE AIR CALCULATION											
OCCUPANCY TYPE:										BUSINESS B	
ACTUAL NUMBER OF OCCUPANTS (Pz)										75 PEOPLE	
NET SQUARE FOOTAGE OF HEATED BUILDING: (Az)										1650 SQ/FT	
BUILDING EXHAUST REQUIREMENTS											
EXHAUST REQUIRED		(1650 * 0.06)								99 CFM	
TOILET EXHAUST REQUIRED		(3 FLUSHING FIXTURES * 150 CFM EACH))								450 CFM	
TOTAL BUILDING EXHAUST AIR REQUIRED										549 CFM	
BUILDING VENTILATION REQUIREMENTS											
PEOPLE * 7.5 CFM TABLE 4.3: 2018 NC MECH CODE											
75 PEOPLE * 7.5 CFM/PERSON										563 CFM	
OUTSIDE AIR SUB-TOTAL										1112 CFM	
OUTSIDE AIR REQUIRED = 1112 / 1.0 (EFFECTIVENESS)										1112 CFM	
BUILDING EXHAUST PROVIDED											
EF-1	EF-2										
100 CFM	100 CFM									200 CFM	
OUTSIDE AIR PROVIDED											
Existing 4 TON UNIT								TOTAL		1200 CFM	

② Outside Air Calculation
1/4" = 1'-0"



① Mechanical Plan
1/4" = 1'-0"