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**PROJECT:**

# LEVEL II ALTERATION For: BUILDING SHELL SPACES

185 MITTIE HADDOCK DR.  
CAMERON, NC 28326

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

Reviewed for Code Compliance

01/22/2025

SHELL ONLY

**BUILDING DEPARTMENT:**

COUNTY of HARNETT  
CENTRAL PERMITTING  
P.O. Box 65  
108 E. Front Street  
Lillington, NC 27546  
Phone - 910-893-2793

**PROJECT DESIGNER:**

JENKINS CONSULTING ENGINEERS, PA  
OFFICE in EUREKA SPRINGS, NC  
BUDDY JENKINS, PE  
KELLY DODSON, PE  
1606 MCARTHUR ROAD  
FAYETTEVILLE, NC 28311-1002  
910-822-1724

**CODE REVIEW:**

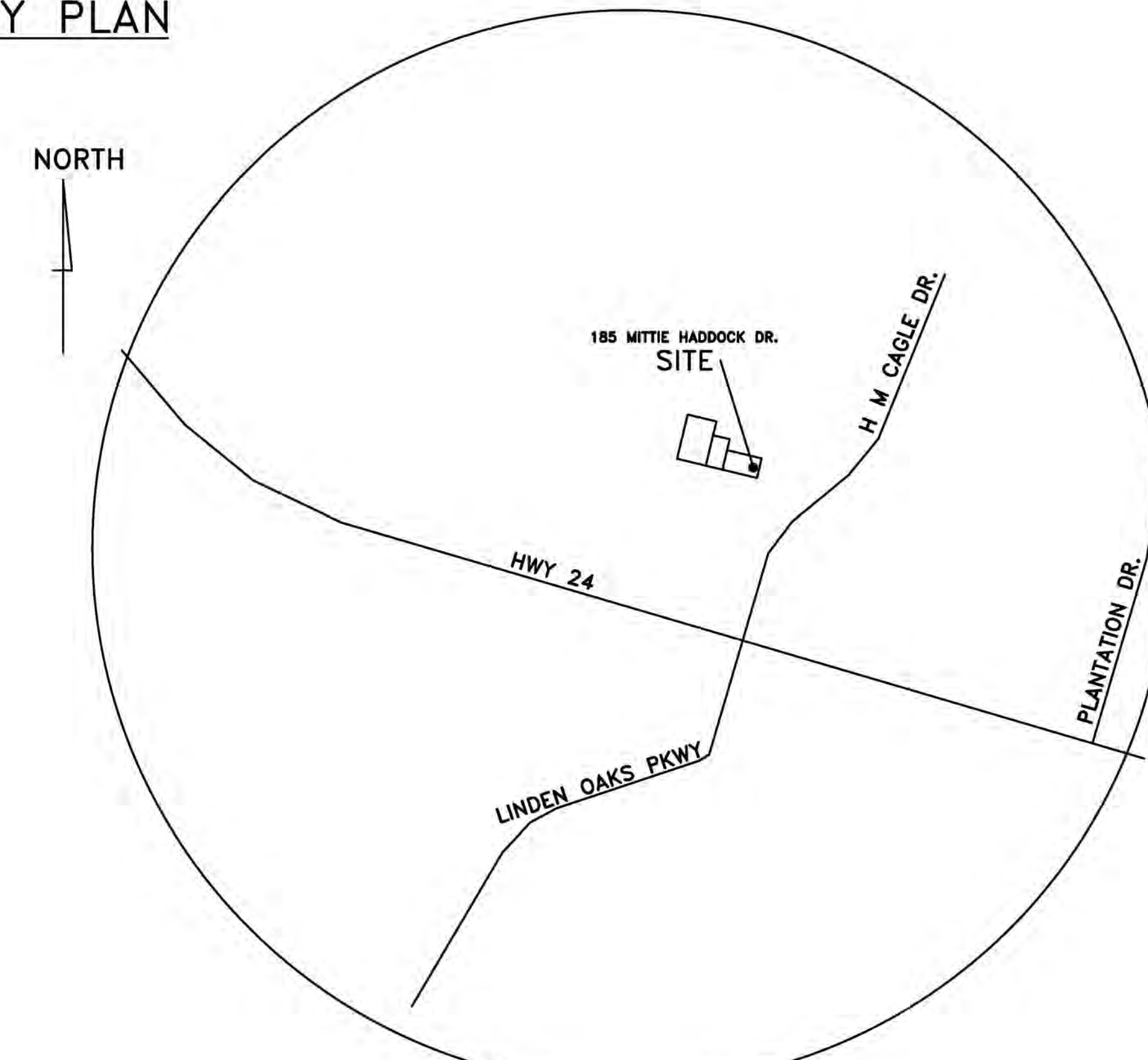
APPLICABLE CODES INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- NORTH CAROLINA STATE BUILDING CODE: BUILDING CODE 2018
- NORTH CAROLINA STATE BUILDING CODE: PLUMBING CODE 2018
- NORTH CAROLINA STATE BUILDING CODE: MECHANICAL CODE 2018
- 2020 NATIONAL ELECTRIC CODE
- 2009 STANDARD & COMMENTARY ICC/ANSI A117.1-2009 on ACCESSIBILITY
- NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE 2018
- NORTH CAROLINA STATE BUILDING CODE: FIRE PREVENTION CODE 2018
- THE 2018 EDITION OF THE LIFE SAFETY CODE NFPA 101
- NORTH CAROLINA STATE BUILDING CODE: EXISTING BUILDING CODE 2018

**BUILDING DATA:**

THE PROJECT IS TO RENOVATE EXISTING TENANT SPACES FOR SHELL SPACE USE.

**VICINITY PLAN**



THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS



13 December 2024

DESIGNED / CHECKED BY: <b>B. JENKINS</b>	DRAWN BY: <b>MAW</b>	PROJECT #: <b>2024-08-09</b>	DATE: <b>13 DEC 24</b>
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FINAL DRAWING <input type="checkbox"/> FOR REVIEW PURPOSES ONLY	CONTRACTOR/BUILDER:
PRELIMINARY <input type="checkbox"/> FOR DESIGN DEVELOPMENT ONLY	OWNER/TENANT:
FINAL DRAWING <input checked="" type="checkbox"/> FOR CONSTRUCTION	

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326  
 SHEET: **COVER SHEET & INDEX TO DRAWINGS**

CS



2018 NC BUILDING CODE SUMMARY: APPENDIX B

Name of Project: LEVEL II ALTERATION: BUILDING SHELL SPACES PIN: 9585-60-1624.000  
 Address: 185 MITTIE HADDOCK DR. Zip Code: 28326  
 Proposed Use: BUSINESS (ASSEMBLY LESS THAN 50 PERSONS)  
 Owner or Authorized Agent: WES DAVIS Phone: 910-818-9999 E-Mail: wsdavis@bcs.com  
 Owned By: City/County Private State  
 Code Enforcement Jurisdiction: City CAMERON County HARNETT State NORTH CAROLINA

CONTACT: KELLY DODSON, P.E. BUDDY JENKINS, P.E.

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	N/A	N/A	N/A		
Civil	N/A	N/A	N/A		
Electrical	JCE	DOUGLAS L. JENKINS	NC P.E. 28803	(910) 822-1724	buddy@jenkinsce.pro
Fire Alarm	N/A	N/A	N/A		
Plumbing	JCE	DOUGLAS L. JENKINS	NC P.E. 28803	(910) 822-1724	buddy@jenkinsce.pro
Mechanical	JCE	DOUGLAS L. JENKINS	NC P.E. 28803	(910) 822-1724	buddy@jenkinsce.pro
Sprinkler-Standpipe	N/A	N/A	N/A		
Structural : DRIVE-THRU	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyd@jenkinsce.pro
INTERIOR WALLS	N/A	N/A	N/A		
Retaining Walls >5' High	N/A	N/A	N/A		
Building	JCE	DOUGLAS L. JENKINS	NC P.E. 28803	(910) 822-1724	buddy@jenkinsce.pro

2018 NC BUILDING CODE:  New Building  Shell / Core  First Time Interior Completions  
 Addition  Phased Construction - Shell Core

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

CONSTRUCTED: (date) \_\_\_\_\_ CURRENT USE (S) (Ch. 3): BUSINESS (THERAPY & MEDICAL OFFICES)  
 RENOVATED: (date) \_\_\_\_\_ PROPOSED USE (S) (Ch. 3): BUSINESS

OCCUPANCY RISK CATEGORY (Table 1604.5): Current: II Proposed: II

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

FLOOR	EXISTING (sq ft)	NEW (sq ft)	SUBTOTAL
TENANT SPACE	1,625	-	1,625
TOTAL	1,625	-	1,625

ALLOWABLE AREA  
 Primary Occupancy Classification(s):  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  I-2  I-3  I-4  
 I-1 Condition  1  2  
 I-2 Condition  1  2  
 I-3 Condition  1  2  3  4  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): NONE  
 This separation is not exempt as a Non-separated Use (see exceptions).  
 Special Uses (Chapter 4):  402  403  404  405  406  407  408  409  410  411  412  413  
 414  415  416  417  418  419  420  421  422  423  424  425  
 426  427  428  429  430  
 Special Provisions (Chapter 5):  510.2  510.3  510.4  510.5  510.6  510.7  510.8  510.9  
 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 of each use shall not exceed 1.

Separated Use Formula 508.4.2:  $\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$

STORY NUMBER	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2</sup>
1	BUSINESS (B)	1,625	92,000	N/A	92,000

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 (weighted average) of public way = \_\_\_\_\_ (W) where  $W = \frac{L_1 X_1 + L_2 X_2 + \dots + L_n X_n}{L_1 + L_2 + \dots + L_n}$  (Equation 5-4)  
 e. Percent of frontage increase =  $\frac{1}{F} = 100 \left[ \frac{F}{P} - 0.25 \right] \times \frac{W}{30}$  (Equation 5-5)

EXTERIOR WALL	(F) OPEN LENGTH (feet)	(P) TOTAL LENGTH (feet)	(W) (weighted average) WIDTH OF PUBLIC WAY OR OPEN SPACE (feet)	(X) FROM CALC. ABOVE	(B) FROM TABLE ABOVE	AREA INCREASE FOR COLUMN (C) ABOVE (X * TABLE AREA)
North						
South						
East						
West						
TOTAL						
EXAMPLE	75	100	25	42	23,500	(42*23,500 = 9,870)

2 Unlimited area applicable under conditions of Sections 507  
 3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (Section 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 un-sprinklered area value in Table 506.2.

BUILDING CODE SUMMARY (continued)

ALLOWABLE HEIGHT	ALLOWABLE HEIGHT		CODE REFERENCE
	ALLOWABLE	SHOWN ON PLANS	
Building Height in Feet (Table 504.3)	75	20'	-
Building Height in Stories (Table 504.4)	4	1	-

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

BUILDING ELEMENT	FIRE PROTECTION REQUIREMENTS					
	FIRE SEPARATION DISTANCE (feet)	RATING REQ'D	PROVIDED (w/REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION
Structural Frame, including columns, girders, trusses		0				
Bearing Walls		0	EXISTING WALLS			
Exterior						
North						
East						
West						
South						
Interior		0				
Nonbearing walls and partitions						
Exterior walls						
North						
East						
West						
South						
Interior Non-Bearing Walls		0				
Floor construction including supporting beams and joists		0				
Floor Ceiling Assembly						
Columns Supporting Floors						
Roof construction including supporting beams and joists		0				
Roof Ceiling Assembly		0				
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		1 HR	U419/02-08			
Incidental Use Separation						

\* Indicate section number permitting reduction

EXTERIOR WALL	FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINE	DEGREE OF OPENINGS PROTECTION (TABLE 705.6)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
North	-	-	-	-
South	-	-	-	-
East	-	-	-	-
West	-	-	-	-

LIFE SAFETY SYSTEM REQUIREMENTS  
 Emergency Lighting:  Yes  No  
 Exit Signs:  Yes  No  
 Fire Alarm:  Yes  No  
 Smoke Detection Systems:  Yes  No Partial  Duct Detectors  
 Carbon Monoxide Detection:  Yes  No  
 Life Safety Systems Generator:  Yes  No

LIFE SAFETY PLAN REQUIREMENTS  
 Life Safety Plan Sheet #: LSI  
 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 [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 (903)  
 The square footage of each smoke compartment for Occupancy Classification I-II (407.5)  
 Note any code exceptions or table notes that may have been utilized regarding the items above

TOTAL UNITS	ACCESSIBLE DWELLING UNITS (SECTION 1107)						TOTAL ACCESSIBLE UNITS PROVIDED
	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	
NONE REQUIRED							

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS OR 96" ACCESS AISLE	TYPE B UNITS PROVIDED	
EXISTING	N/R					
NEW						
TOTAL						

BUILDING CODE SUMMARY (continued)

USE	PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)									
	WATER CLOSETS		LAVATORIES		SHOWERS/TUBS		DRINKING FOUNTAINS		SERVICE SINK	
	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	REGULAR	ACCESSIBLE		
BUSINESS			2	1		1				
EXISTING FIXTURES TO REMAIN			2	1		1				

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

ENERGY SUMMARY

ENERGY REQUIREMENTS:  
 The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code:  (If checked, the remainder of this section is not applicable).  
 Exempt Building:  Provide code or statutory reference: \_\_\_\_\_  
 Climate Zone:  3A  4A  5A HARNETT COUNTY  
 Method of Compliance:  
 Energy Code:  Performance  Prescriptive  
 ASHRAE 90.1:  Performance  Prescriptive  
 Other:  Performance (specify source) Value of total assembly: \_\_\_\_\_

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: \_\_\_\_\_  
 Projection factor: \_\_\_\_\_  
 Door R-Values: \_\_\_\_\_

Floors over unconditioned space (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_

Floors slab on grade  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Horizontal/vertical requirement: \_\_\_\_\_  
 slab heated: \_\_\_\_\_

MECHANICAL SUMMARY (SEE DRAWING SHEET \_\_\_\_\_)  
 ELECTRICAL SUMMARY (SEE DRAWING SHEET \_\_\_\_\_)

County of Harnett  
 BUILDING CODE SUMMARY  
 for:  
 LEVEL II ALTERATION FOR:  
 BUILDING SHELL SPACES

185 MITTIE HADDOCK DR.  
 CAMERON, NC 28326



13 December 2024  
 DESIGNED / CHECKED BY: B. JENKINS  
 DRAWN BY: MAW  
 PROJECT #: 2024-08-09  
 DATE: 13 DEC 24

FINAL DRAWING  FOR REVIEW PURPOSES ONLY  
 FOR DESIGN DEVELOPMENT ONLY  
 FOR CONSTRUCTION  
 OWNER/TEENANT: \_\_\_\_\_  
 CONTRACTOR/BUILDER: \_\_\_\_\_

PROJECT: LEVEL II ALTERATION: BUILDING SHELL SPACES  
 CAMERON, NC, 28326

SHEET: BUILDING CODE SUMMARY

BCS

THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS

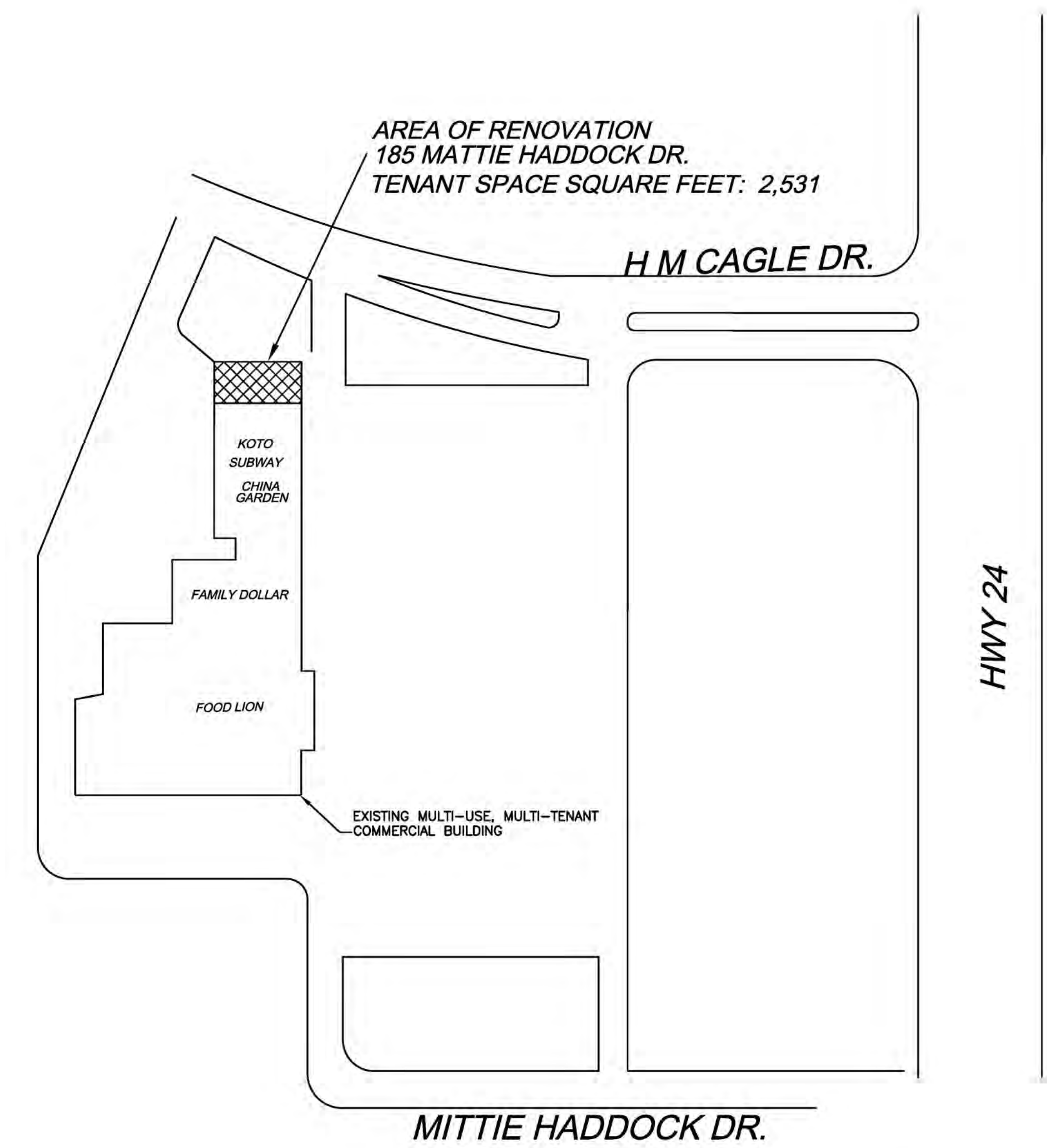
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 Plotter: HP DesignJet T1300

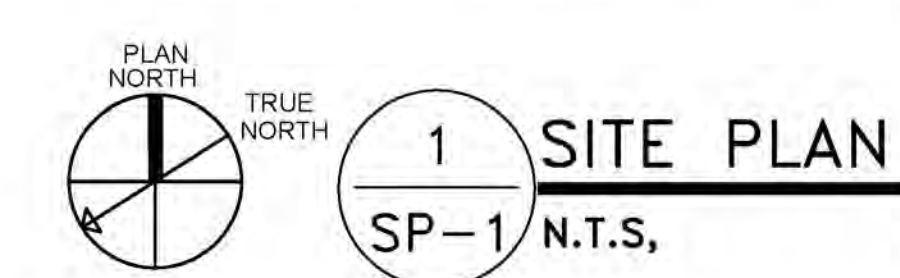


U 4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96 100  
 SCALE: 1/8" = 1'-0"  
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 SCALE: 1/16" = 1'-0"  
 U 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 SCALE: 1/4" = 1'-0"  
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 SCALE: 3/8" = 1'-0"  
 U 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 SCALE: 1/2" = 1'-0"  
 U 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 SCALE: 3/4" = 1'-0"  
 U 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 SCALE: 1" = 1'-0"

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 Plotter: HP DesignJet T1100e



**RENOVATION SCOPE OF WORK:**  
 THIS TENANT SPACE (CURRENTLY "BUSINESS USE") WILL BE RENOVATED PER LANDLORD WORK FOR TWO SHELL SPACES. THE SCOPE OF WORK FOR THIS PROJECT AT THIS TIME WILL BE RENOVATING THE EXISTING SPACE BACK TO A SPACE FOR THE UPCOMING NEW TENANT RENOVATION BY OTHERS. SCOPE OF WORK FOR THE SHELL SPACE WILL BE REMOVAL OF SOME WALLS, ADDING A DRIVE THRU WINDOW, INSTALLING A GREASE TRAP, SOME MECHANICAL AND PLUMBING WORK ALONG WITH MINIMAL HVAC WORK WILL BE REQUIRED.



THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS



**JENKINS**  
 CONSULTING ENGINEERS, PA  
 OFFICE IN EUREKA SPRINGS, NORTH CAROLINA  
 1606 MARTINBURG RD. FAYETTEVILLE, NC 28711-1022  
 NORTH CAROLINA LICENSE NUMBER: 06979  
 OFFICE # 910.322.1724



13 December 2024  
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PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326  
 SHEET: **PARTIAL SITE PLAN**

SP-1



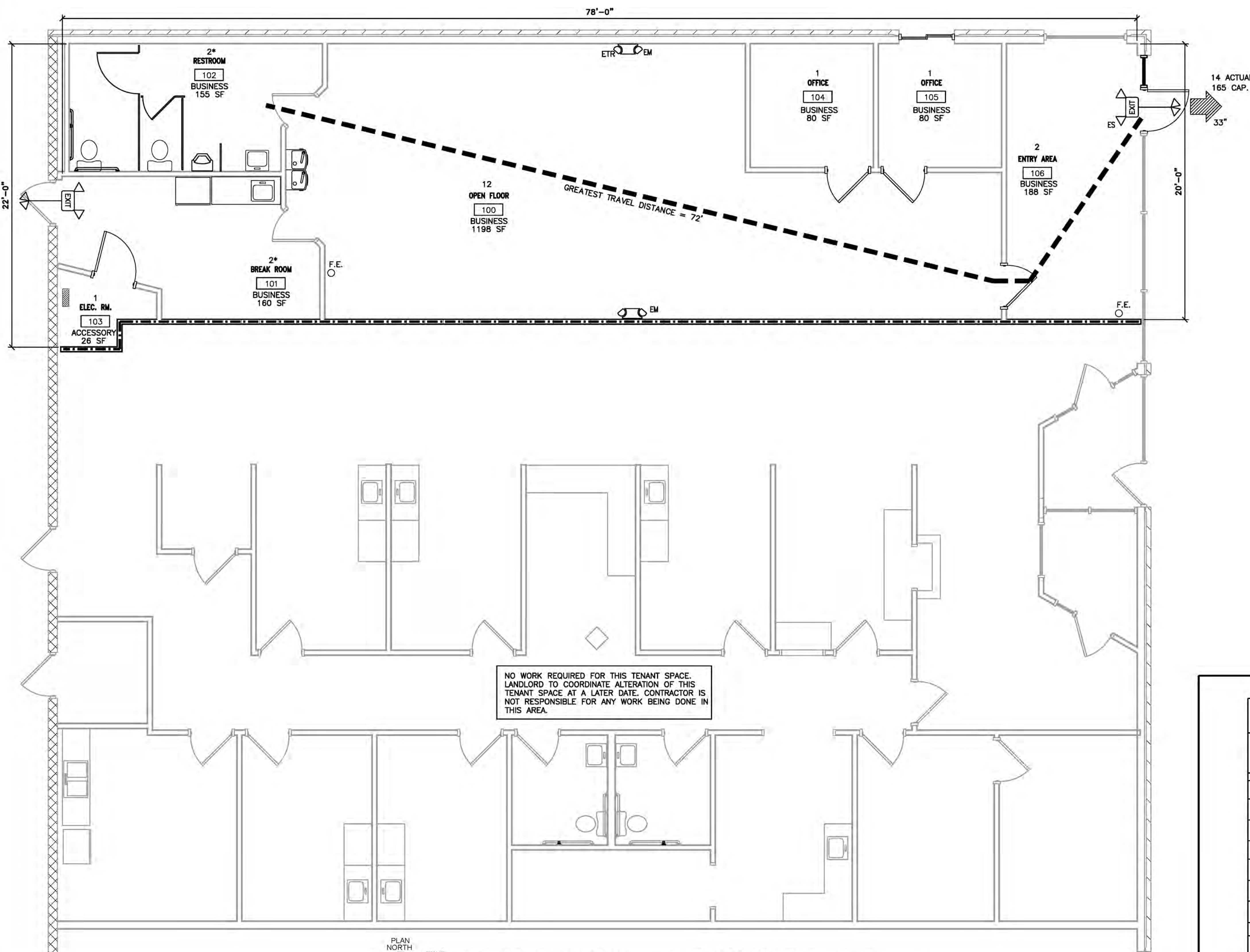
TABLE 803.13 (2018 NC BUILDING CODE)  
 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	SPRINKLERED(I)			NONSPRINKLERED		
	EXIT ENCLOSURES AND EXIT PASSAGEWAYS(a,b)	CORRIDORS	ROOMS AND ENCLOSED SPACES(c)	EXIT ENCLOSURES AND EXIT PASSAGEWAYS(a,b)	CORRIDORS	ROOMS AND ENCLOSED SPACES(c)
A-3(f), A-4, A-5	B	B	C	A	A(d)	C
B, E, M, R-1	B	C(m)	C	A	B	C

- a. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED FOR WAINSCOTTING OR PANELING OF NOT MORE THAN 1,000 SQFT OF APPLIED SURFACE AREA IN THE GRADE LOBBY WHERE APPLIED DIRECTLY TO A NONCOMBUSTIBLE BASE OR OVER FURRING STRIPS APPLIED TO A NONCOMBUSTIBLE BASE AND FIREBLOCKED AS REQUIRED BY SECTION 803.11.1.
- b. IN EXIT ENCLOSURES OF BUILDINGS LESS THAN THREE STORES ABOVE GRADE PLANE OF OTHER THAN GROUP 1-3, CLASS B INTERIOR FINISH FOR NONSPRINKLERED BUILDINGS AND CLASS C INTERIOR FINISH FOR SPRINKLERED BUILDINGS SHALL BE PERMITTED.

- c. REQUIREMENTS FOR ROOMS AND ENCLOSED SPACES SHALL BE BASED UPON SPACES ENCLOSED BY PARTITIONS. WHERE A FIRE-RESISTANCE RATING IS REQUIRED FOR STRUCTURAL ELEMENTS, THE ENCLOSING PARTITIONS SHALL EXTEND FROM THE FLOOR TO THE CEILING. PARTITIONS THAT DO NOT COMPLY WITH THIS SHALL BE CONSIDERED ENCLOSING SPACES AND THE ROOMS OR GOVERNING FACTOR REGARDLESS OF THE GROUP CLASSIFICATION OF THE BUILDING OR STRUCTURE.
- d. LOBBY AREAS IN GROUP A-1, A-2, AND A-3 OCCUPANCIES SHALL NOT BE LESS THAN CLASS B MATERIALS.
- e. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED IN PLACES OF ASSEMBLY WITH AN OCCUPANT LOAD OF 300 PERSONS OR LESS.
- f. FOR PLACES OF RELIGIOUS WORSHIP, WOOD USED FOR ORNAMENTAL PURPOSES, TRUSSES, PANELING OR CHANCEL FURNISHING SHALL BE PERMITTED.
- g. CLASS B MATERIAL IS REQUIRED WHERE THE BUILDING EXCEEDS TWO STORIES.
- h. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED IN ADMINISTRATIVE SPACES.
- i. CLASS C INTERIOR FINISH MATERIALS SHALL BE PERMITTED IN ROOMS WITH A CAPACITY OF FOUR PERSONS OR LESS.
- j. CLASS B MATERIALS SHALL BE PERMITTED AS WAINSCOTTING EXTENDING NOT MORE THAN 48 INCHES ABOVE THE FINISHED FLOOR IN CORRIDORS AND EXIT ACCESS STAIRWAYS AND RAMPS.
- k. FINISH MATERIALS AS PROVIDED FOR IN OTHER SECTIONS OF THIS CODE.
- l. APPLIES WHEN PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2.
- m. CORRIDORS IN AMBULATORY CARE FACILITIES SHALL BE PROVIDED WITH CLASS A OR B MATERIALS.

LEGEND	
SYMBOL	DESCRIPTION
F.E. O	ABC FIRE EXTINGUISHER SUGGESTED LOCATION
F.E. ⊕	K-CLASS F.E. LOCATED IN POS/DRINK AREA
⊕	EXIT ROUTE
---	GREATEST TRAVEL DISTANCE
33"	EXIT WIDTH, 36" - 3" = 33" CLEAR WIDTH. EXIT CAPACITY (NUMBER OF PERSONS)
22 ACTUAL	ACTUAL OCCUPANT LOAD FOR EXIT DOOR
EX	EXIT SIGN
EM	EMERGENCY EGRESS LIGHTING (SEE ELECTRICAL LIGHTING PLAN)
36"	AISLE WIDTH WHERE SHOWN
ES	EXIT SIGN WITH EMERGENCY LIGHTING
ROOM LABEL	DESCRIPTION
10	OCCUPANT TOTAL
RETAL	ROOM NAME
1	ROOM NUMBER
MERCANTILE	FUNCTION TYPE
100 SF	SPACE AREA



NO WORK REQUIRED FOR THIS TENANT SPACE. LANDLORD TO COORDINATE ALTERATION OF THIS TENANT SPACE AT A LATER DATE. CONTRACTOR IS NOT RESPONSIBLE FOR ANY WORK BEING DONE IN THIS AREA.

**BUSINESS (B) OCCUPANCY:**

GROSS SQUARE FOOTAGE OF TENANT SPACE 1,625 SQ. FT.  
 TYPE OF CONSTRUCTION: II-B  
 SPACE IS TO BE USED AS A BUSINESS, B.

OCCUPANT LOAD FOR CALCULATING EGRESS CAPACITY:  
 SPACE OCCUPANCY BY NET SF = (PER 1004.1.1)  
 (SEE TABLE ON THIS SHEET FOR INDIVIDUAL SPACE TOTALS)  
 TOTAL OCCUPANT LOAD BY AREAS = 17 PERSONS (MAX FOR EGRESS CALCULATION)  
 TOTAL OCCUPANT LOAD BY BUSINESS USE = 1,625/100 = 18

GREATEST TRAVEL DISTANCE SHOWN: 68 FEET. (PER TABLE 1017)  
 MAXIMUM ALLOWABLE TRAVEL DISTANCE: 250 FEET (PER TABLE 1017.2)  
 THE COMMON PATH OF TRAVEL IS LESS THAN 100 FEET. (PER TABLE 1006.2.1)  
 THERE ARE NO DEAD END CORRIDORS OVER 20 FEET. (PER 2018 NCBC 1020.4)  
 TYPICAL TENANT SPACE EXIT WIDTH CALCULATIONS:  
 18 PERSONS \* 0.2' / OCCUPANT = 3.6" REQUIRED, 33 INCHES TOTAL PROVIDED. (PER 1024.2)

MIN. NO. OF EXITS REQUIRED: ONE (1) (PER TABLE 1006.2.1)  
 NUMBER OF EXITS PROVIDED: ONE (1) ACCESSIBLE

EGRESS DOORS DO NOT REQUIRE PANIC HARDWARE. (PER 1010.1.10)  
 DOORS DO NOT HAVE DELAYED EGRESS LOCKS (PER 1010.1.9.7)  
 DOORS DO NOT HAVE ELECTROMAGNETIC EGRESS LOCKS (PER 1010.1.9.9)  
 DOORS DO NOT HAVE HOLD OPEN DEVICES.  
 THERE ARE NO EMERGENCY ESCAPE WINDOWS (PER 1030.5)  
 THE FIRE AREA SQUARE FOOTAGE IS 1,625 SQUARE FEET (PER 903)  
 THERE ARE NO SLEEPING AREAS (SMOKE COMPARTMENTS) (PER 407.2)

NO. OF FIRE EXTINGUISHERS PROVIDED: 2 ABC FIRE EXTINGUISHERS  
 FIRE EXTINGUISHER FOR CLASS A FIRE HAZARDS REQUIRE NO GREATER THAN 75 FT OF MAXIMUM TRAVEL DISTANCE IN LOW, ORDINARY AND EXTRA HAZARD OCCUPANCY.

THERE IS A FIRE SPRINKLER SYSTEM INSTALLED.  
 THERE IS A FIRE ALARM SYSTEM.  
 LOCK BOX FOR KEY IS INSTALLED AT FRONT ENTRANCE. (AS REQ'D.)

**OCCUPANCY CLASSIFICATION per TABLE 1004.1.1**

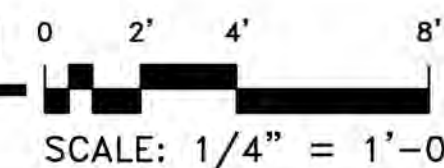
SPACE NUMBER	CURRENT SPACE USE	FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	ROOM AREA (SF)	EGRESS OCCUPANCY TOTAL (CALCULATED)	BUILDING OCCUPANT TOTAL (ACTUAL)
100	OPEN FLOOR	BUSINESS	100	828	9	9
101	BREAK ROOM	BUSINESS	100	160	2	2*
102	RESTROOM	BUSINESS	100	155	2	2*
103	ELECTRICAL ROOM	ACCESSORY	300	26	1	1
104	OFFICE	BUSINESS	100	80	1	1
105	OFFICE	BUSINESS	100	80	1	1
106	ENTRY AREA	BUSINESS	100	188	2	2
A	TOTAL OCCUPANT COUNT CALCULATED BY SPACES				1,517	14
B	TOTAL OCCUPANT COUNT CALCULATED FOR BUSINESS USE				17	LARGER OF A OR B
THE EGRESS CAPACITY SHALL BE BASED UPON OCCUPANT LOAD OF 18 PERSONS					18	18

THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS



1  
LS1

**LIFE SAFETY - EGRESS PLAN**



**JENKINS CONSULTING ENGINEERS, PA.**  
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 1006 AMANTUR RD. FAVEETVILLE, NC 28711-1022  
 NORTH CAROLINA LICENSE NUMBER: 05879  
 OFFICE # 910.522.1724

13 December 2024

DESIGNED / CHECKED BY:	B. JENKINS	MAW
DRAWN BY:		
PROJECT #:	2024-08-09	
DATE:	13 DEC 24	

FINAL DRAWING  FOR REVIEW PURPOSES ONLY  
 PRELIMINARY  FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING  FOR CONSTRUCTION

OWNER/TENANT: \_\_\_\_\_ CONTRACTOR/BUILDER: \_\_\_\_\_

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326

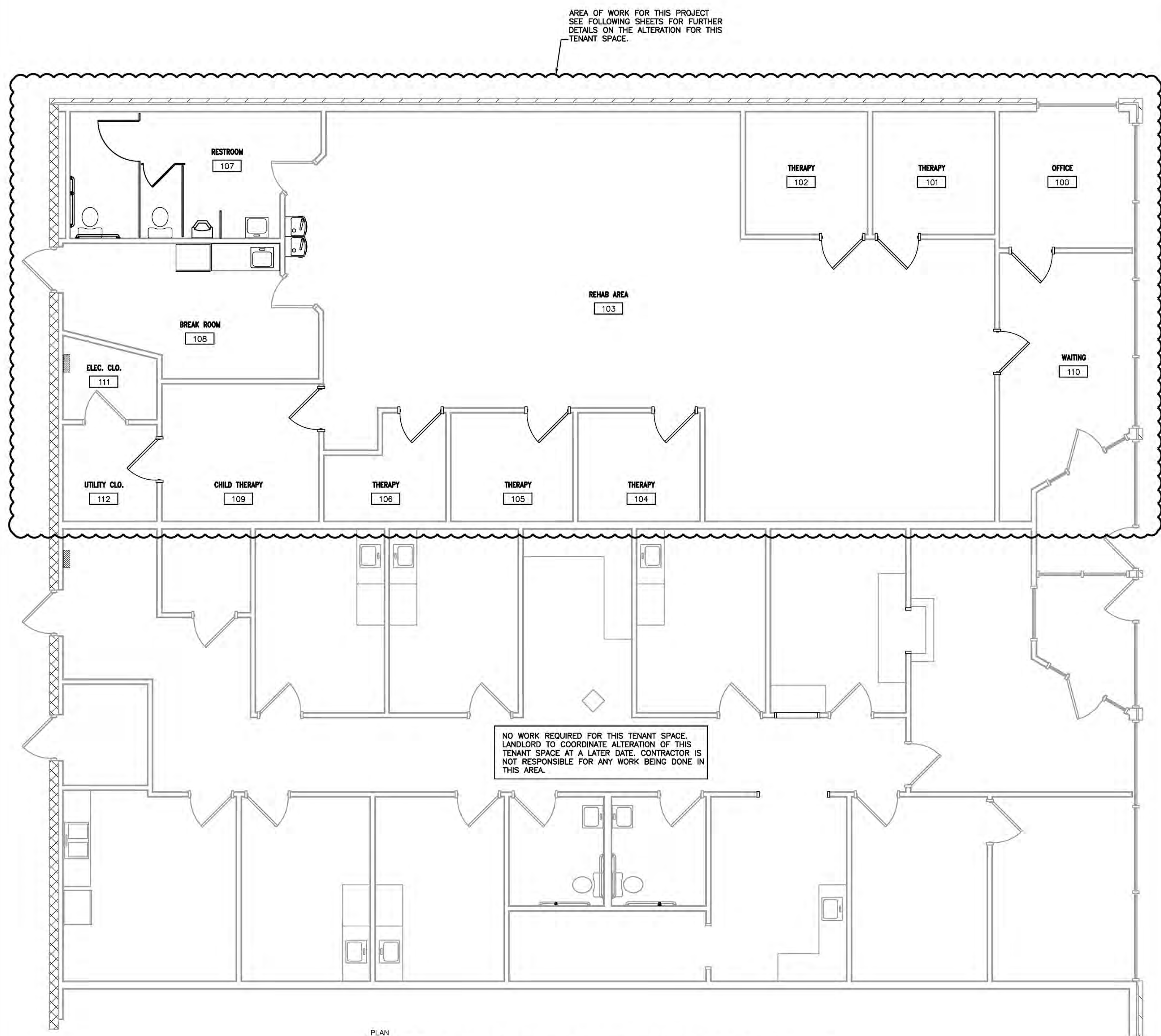
SHEET: **LIFE SAFETY - EGRESS PLAN**

**LS1**



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 Printed Date: Dec 13, 2024 - 11:00am

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 SCALE: 1/2" = 1'-0"  
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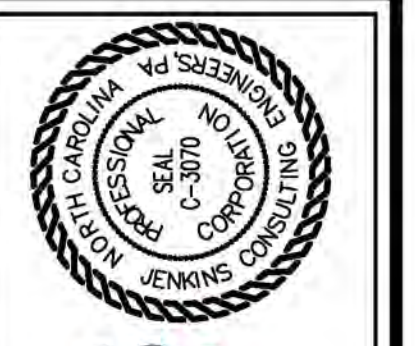


**TENANT SPACE ALTERATION GENERAL NOTES**

1. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND MAY NOT SHOW ALL OF THE DETAILS, MATERIALS AND METHODS REQUIRED TO COMPLETE THE ADDITION. THE DRAWING PACKAGE AS A WHOLE SHOULD BE USED TO CONSTRUCT THE NEW BUILDING AS DESCRIBED. THERE ARE NO TECHNICAL SPECIFICATIONS INCLUDED IN THESE CONSTRUCTION DOCUMENTS. THE PLANS DO INCLUDE FINISH MATERIALS SELECTIONS BUT SHALL BE COORDINATED WITH THE OWNER.
2. ALL CONSTRUCTION MATERIALS SHALL BE COORDINATED WITH THE DRAWINGS AND INTERIOR FINISH REQUIREMENTS.
3. DIMENSIONS ARE TO FINISHED FACE OF CMU AND WOOD/METAL STUD WALLS UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL COORDINATE ALL WORK AND ADJUST TO THE ACTUAL CONDITIONS ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONAL OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
5. THE CONTRACTOR SHALL COORDINATE WORK, TRADES, AND SHALL VERIFY DIMENSIONS, MEANS AND METHODS OF CONSTRUCTION, EXISTING CONDITIONS AND PROPOSED NEW CONSTRUCTION PRIOR TO COMMENCING ANY WORK, MATERIAL ORDERING, OR FABRICATION.
6. WORK SHALL BE FIRST CLASS TO THE ENTIRE SATISFACTION OF THE OWNER.
7. COORDINATE ALL ELECTRICAL/PLUMBING ROUGH-INS FOR OWNER SUPPLIED EQUIPMENT WITH THE OWNER AND MANUFACTURER.
8. ALL NEW INTERIOR WALLS ARE DETAILED PER PLAN SPECIFICATION. SEE SPECIFIC SHEETS REGARDING THIS PROJECT.
9. PATCH & REPAIR: THE CONTRACTOR SHALL PATCH AND/OR REPAIR WITH NEW, ANY WORK DAMAGED OR DISTURBED CAUSED BY THE SUB-CONTRACTORS AS A RESULT OF PROVIDING FOR OR INSTALLING NEW WORK SHOWN ON THE CONTRACT DOCUMENTS
10. CAULK ALL PENETRATIONS, OUTLETS, ETC. ON ALL PARTITIONS. LEAVE ALL WORK COMPLETE AND READY FOR THE INTENDED USE.
11. ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE REMOVED FROM THE SITE UPON COMPLETION. THE CONTRACTOR SHALL PROVIDE CLEANING SERVICES FOR THE RENOVATED SPACES AND DELIVER THE PROJECT COMPLETED.
12. CONSTRUCTION TO COMPLY WITH ALL STATE AND LOCAL CODES.
13. CONSTRUCTION IS AT AN OPERATING MULTI-SPACE RETAIL SHOPPING CENTER. CONSTRUCTION TRAFFIC WILL NOT INTERFERE WITH GENERAL PUBLIC TRAFFIC. CONTRACTOR WILL COORDINATE A MATERIAL DROP OFF/PICK UP AND CONSTRUCTION WORKER AREA ON SITE WITH LANDLORD/PROPERTY MANAGER.

**SCOPE OF WORK OUTLINE:**

- DEMOLITION**  
 DEMOLITION OF EXISTING DEMISING WALL BETWEEN TENANT SPACES  
 WALLS IN TENANT SPACE FOR FUTURE TENANT  
 SOME CEILING DEMOLITION REQUIRED FOR NEW DEMISING WALL CONSTRUCTION  
 EXTERIOR WALL FOR NEW DRIVE-THRU WINDOW  
 EXTERIOR STOREFRONT WINDOW FOR NEW STOREFRONT DOOR  
 BACK PARKING AREA FOR NEW 900 GALLON GREASE TRAP
- LANDSCAPING**  
 SEE SITE/CIVIL PLAN BY OTHERS FOR DETAILS CONCERNING NEW LANDSCAPING FOR THIS PROJECT
- GRADING & CONCRETE**  
 SEE SITE/CIVIL PLANS BY OTHERS FOR DETAILS ON GRADING AND ANY CONCRETE REQUIRED FOR THIS PROJECT
- MASONRY**  
 SOME MASONRY MIGHT BE REQUIRED. NEW DRIVE-THRU WINDOW IS BEING INSTALLED IN AN EXISTING MASONRY/BRICK WALL
- FRAMING**  
 FRAMING FOR INTERIOR WALLS AND DRIVE-THRU WINDOW
- MECHANICAL**  
 RELOCATE AN EXISTING AIR HANDLING UNIT AND CONDENSING UNIT TO THE NEW TENANT SPACE FOR FUTURE USE  
 NO WORK TO EXISTING HVAC UNIT IN TENANT SPACE BEING ALTERED FOR NEW TENANT
- ELECTRICAL**  
 ADD NEW RECEPTACLES IN NEW DEMISING WALL. UTILIZE EXISTING CIRCUIT  
 NO LIGHTING WORK REQUIRED IN ALTERED TENANT SPACE
- PLUMBING**  
 ADDING A 900 GALLON GREASE TRAP FOR FUTURE USE. WILL STUB-UP IN THE RESTROOM AND VENT BACK TOWARDS SAME RESTROOM UNDERGROUND. WILL CONNECT TO EXISTING SANITARY LOCATED AT BACK OF TENANT SPACE
- FINISHES**  
 APPLICATION OF GYPSUM BOARD, VINYL BASE, PAINT TO INTERIOR OF SPACE



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13 December 2024  
 DESIGNED / CHECKED BY: B. JENKINS  
 DRAWN BY: MAW  
 PROJECT #: 2024-08-09  
 DATE: 13 DEC 24

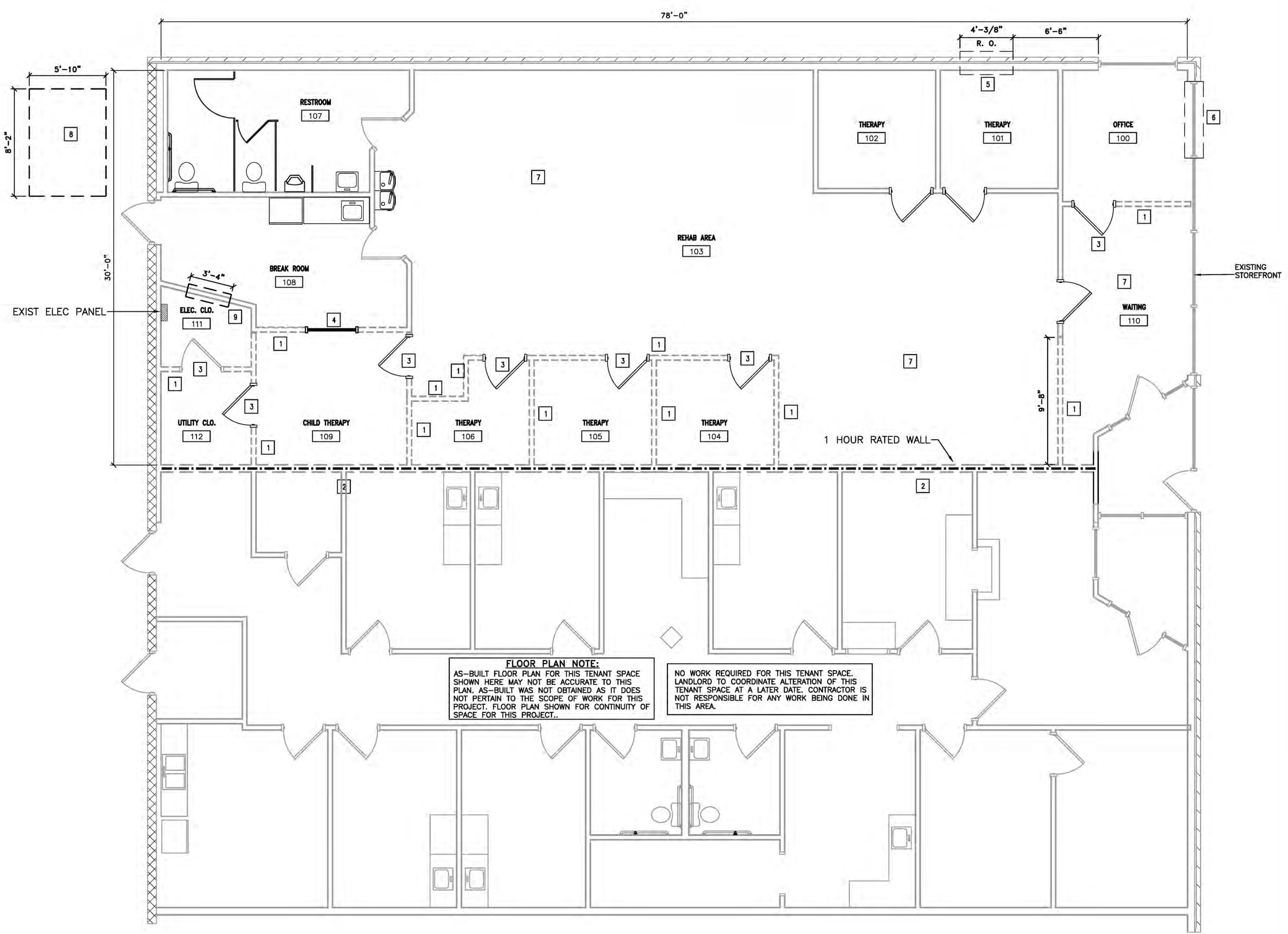
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 PRELIMINARY  FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING  FOR CONSTRUCTION  
 OWNER/TENANT:  
 CONTRACTOR/BUILDER:

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326  
 SHEET: **PARTIAL BUILDING PLAN/ SCOPE OF WORK**

GO



SCALE: 1/8" = 1'-0"  
 SCALE: 3/16" = 1'-0"  
 SCALE: 1/4" = 1'-0"  
 SCALE: 3/8" = 1'-0"  
 SCALE: 1/2" = 1'-0"  
 SCALE: 3/4" = 1'-0"  
 SCALE: 1" = 1'-0"



**FLOOR PLAN NOTE:**  
 AS-BUILT FLOOR PLAN FOR THIS TENANT SPACE SHOWN HERE MAY NOT BE ACCURATE TO THIS PLAN. AS-BUILT WAS NOT OBTAINED AS IT DOES NOT PERTAIN TO THE SCOPE OF WORK FOR THIS PROJECT. FLOOR PLAN SHOWN FOR CONTINUITY OF SPACE FOR THIS PROJECT.

NO WORK REQUIRED FOR THIS TENANT SPACE. LANDLORD TO COORDINATE ALTERATION OF THIS TENANT SPACE AT A LATER DATE. CONTRACTOR IS NOT RESPONSIBLE FOR ANY WORK BEING DONE IN THIS AREA.

**DEMOLITION WORK NOTE:**  
 DEMOLITION WORK WILL BE DENOTED BY DASHED LINES OR HATCHED AREAS CONCERNING EXISTING WALLS AND CEILING AREAS. OTHER AREAS AND OBJECTS MAY REQUIRE DEMOLITION AND BE NOTED AS MENTIONED ABOVE. SEE DEMOLITION NOTES FOR AFFECTED AREAS AND OBJECTS OTHER THAN WALLS AND CEILINGS THAT ARE DASHED OR HATCHED AND MARKED FOR DEMOLITION.

- DEMOLITION NOTES:**
- 1 DEMO WALL THIS AREA
  - 2 DEMO DEMISING WALL
  - 3 DEMO DOOR AND FRAME
  - 4 DEMO WINDOW
  - 5 DEMO EXTERIOR WALL THIS AREA FOR NEW DRIVE THROUGH WINDOW
  - 6 DEMO STOREFRONT THIS AREA FOR NEW DOOR
  - 7 DEMO FLOOR FINISH
  - 8 DEMO CONCRETE/ASPHALT, PREP FOR GREASE TRAP PLACEMENT WILL BE DIRECTED BY CONTRACTOR
  - 9 DEMO WALL THIS AREA FOR NEW DOOR TO ELECTRICAL ROOM



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 OFFICE # 910.522.1724



13 December 2024

DESIGNED / CHECKED BY:	B. JENKINS	MAW	PROJECT #:	2024-08-09	DATE:	13 DEC 24
DRAWN BY:						

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PRELIMINARY	<input type="checkbox"/>	FOR DESIGN DEVELOPMENT ONLY
FINAL DRAWING	<input checked="" type="checkbox"/>	FOR CONSTRUCTION

OWNER/TENANT:  
 CONTRACTOR/BUILDER:

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326

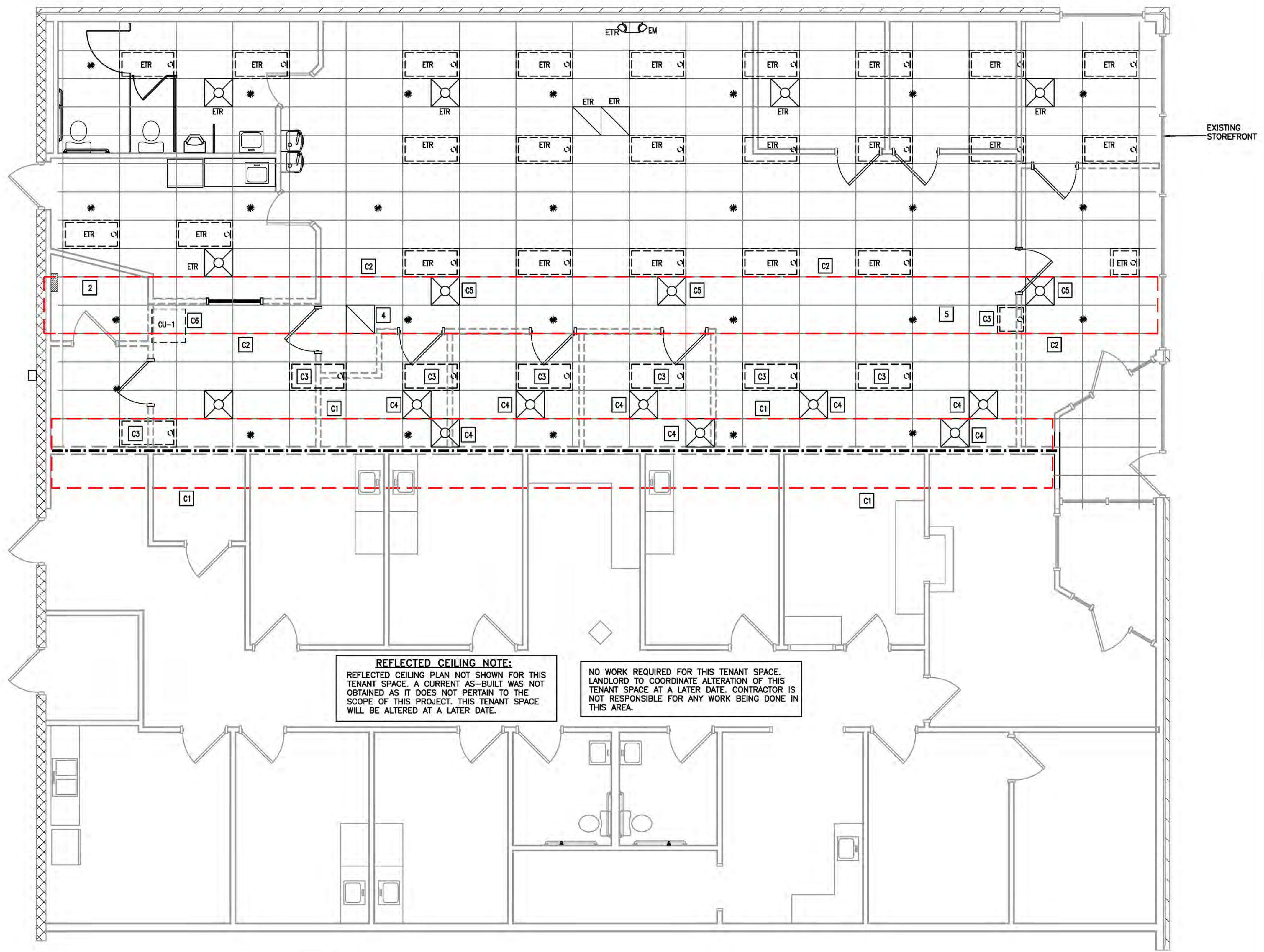
SHEET: **DEMOLITION FLOOR PLAN**

**G1**

THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS



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 SCALE: 1/4" = 1'-0"  
 SCALE: 3/16" = 1'-0"  
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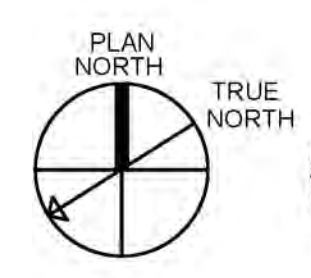


**REFLECTED CEILING NOTE:**  
 REFLECTED CEILING PLAN NOT SHOWN FOR THIS TENANT SPACE. A CURRENT AS-BUILT WAS NOT OBTAINED AS IT DOES NOT PERTAIN TO THE SCOPE OF THIS PROJECT. THIS TENANT SPACE WILL BE ALTERED AT A LATER DATE.

NO WORK REQUIRED FOR THIS TENANT SPACE. LANDLORD TO COORDINATE ALTERATION OF THIS TENANT SPACE AT A LATER DATE. CONTRACTOR IS NOT RESPONSIBLE FOR ANY WORK BEING DONE IN THIS AREA.

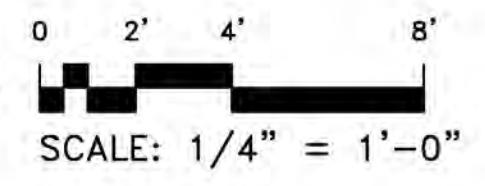
**DEMOLITION WORK NOTE:**  
 DEMOLITION WORK WILL BE DENOTED BY DASHED LINES OR HATCHED AREAS CONCERNING EXISTING WALLS AND CEILING AREAS. OTHER AREAS AND OBJECTS MAY REQUIRE DEMOLITION AND BE NOTED AS MENTIONED ABOVE. SEE DEMOLITION NOTES FOR AFFECTED AREAS AND OBJECTS OTHER THAN WALLS AND CEILINGS THAT ARE DASHED OR HATCHED AND MARKED FOR DEMOLITION.

- DEMOLITION REFLECTED CEILING NOTES:**
- C1 DEMO LAY-IN CEILING 2'-0" ON BOTH SIDES OF EXISTING DEMISING WALL AREA
  - C2 DEMO LAY-IN CEILING 2'-0" ON BOTH SIDES OF NEW DEMISING WALL AREA
  - C3 DEMO LIGHT FIXTURE
  - C4 DEMO HVAC SUPPLY DIFFUSER/RETURN GRILLE
  - C5 RELOCATE SUPPLY DIFFUSER - SEE HVAC PLAN SHEET M1
  - C6 RELOCATE HVAC UNIT TO RENOVATED TENANT SPACE SIDE SEE HVAC PLAN SHEET M1



1  
G1.1

**EXISTING REFLECTED CEILING PLAN**



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 DATE: 13 DEC 24

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 OWNER/TENANT:  
 CONTRACTOR/BUILDER:

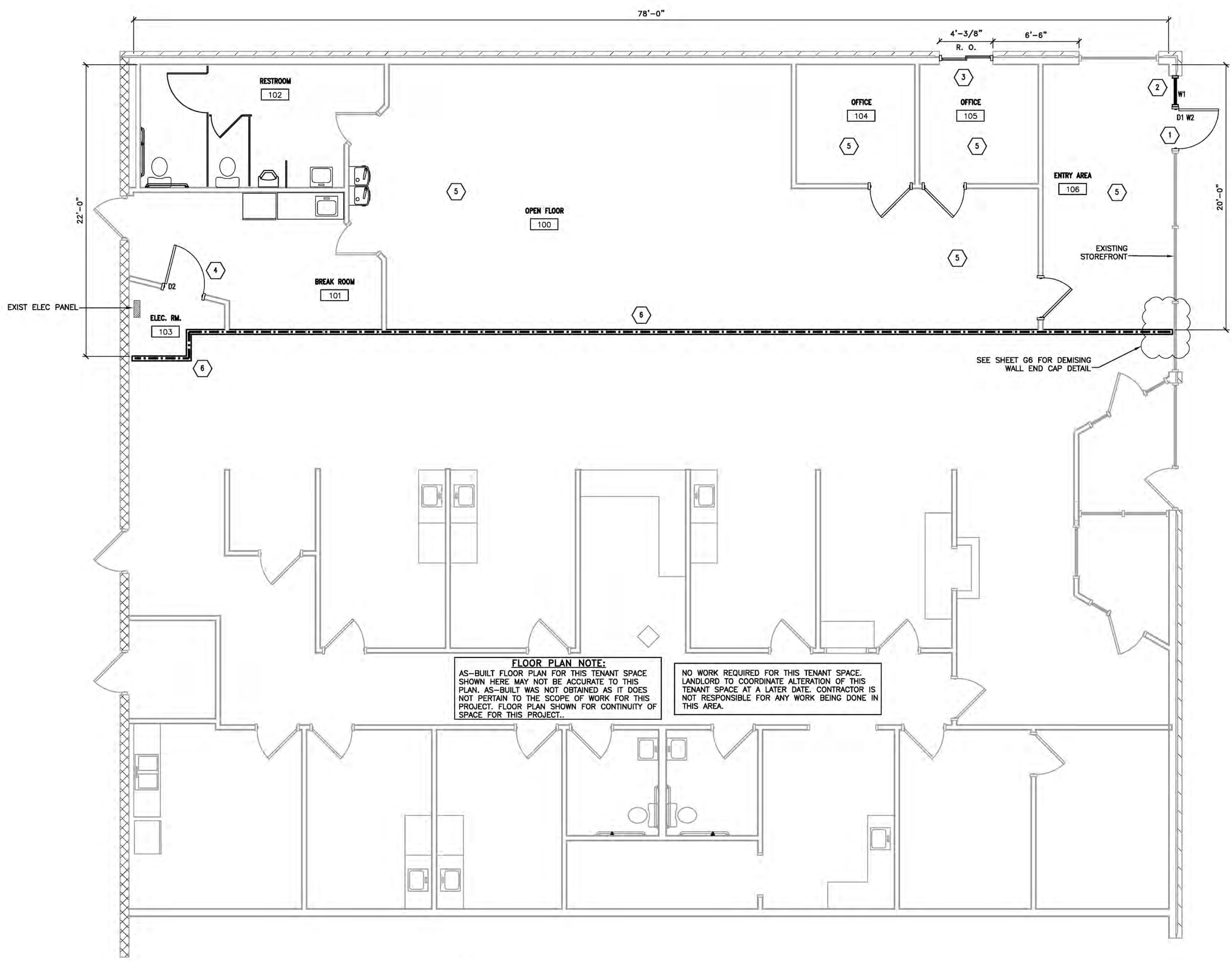
PROJECT: LEVEL II ALTERATION: BUILDING SHELL SPACES  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326  
 SHEET: DEMOLITION REFLECTED CEILING PLAN

G1.1

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 Printed Date: Dec 13, 2024 - 11:00am  
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 U 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100



**FLOOR PLAN NOTE:**  
 AS-BUILT FLOOR PLAN FOR THIS TENANT SPACE SHOWN HERE MAY NOT BE ACCURATE TO THIS PLAN. AS-BUILT WAS NOT OBTAINED AS IT DOES NOT PERTAIN TO THE SCOPE OF WORK FOR THIS PROJECT. FLOOR PLAN SHOWN FOR CONTINUITY OF SPACE FOR THIS PROJECT.

NO WORK REQUIRED FOR THIS TENANT SPACE. LANDLORD TO COORDINATE ALTERATION OF THIS TENANT SPACE AT A LATER DATE. CONTRACTOR IS NOT RESPONSIBLE FOR ANY WORK BEING DONE IN THIS AREA.



- NEW CONSTRUCTION NOTES:**
- 1 NEW 36" EXTERIOR STOREFRONT DOOR AND FRAME
  - 2 NEW EXTERIOR STOREFRONT WINDOW, MATCH EXISTING
  - 3 NEW DRIVE-THRU WINDOW - SEE DETAILS SHEET G3
  - 4 NEW 36" INTERIOR DOOR AND FRAME - MATCH EXISTING
  - 5 CONCRETE FLOOR EXPOSED FOR NEW FLOOR FINISHES BY OTHERS - LANDLORD WORK ONLY SHOWN IN SCOPE
  - 6 NEW DEMISING WALL - 1HR RATED

SYMBOL	DESCRIPTION
	EXISTING DOOR AND FRAME
	NEW DOOR AND FRAME WOOD TO MATCH EXISTING
	EXISTING WALL TO REMAIN
	NEW STOREFRONT WINDOW



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 1006 MARTIN LUTHER KING JR. BLVD., EUREKA SPRINGS, NC 28711-1002  
 NORTH CAROLINA LICENSE NUMBER: 00879



13 December 2024  
 DESIGNED / CHECKED BY: B. JENKINS  
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 PROJECT #: 2024-08-09  
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 PRELIMINARY  FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING  FOR CONSTRUCTION  
 OWNER/TENANT:  
 CONTRACTOR/BUILDER:

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326  
 SHEET: **FLOOR/REFLECTED CEILING PLAN**

**G2**

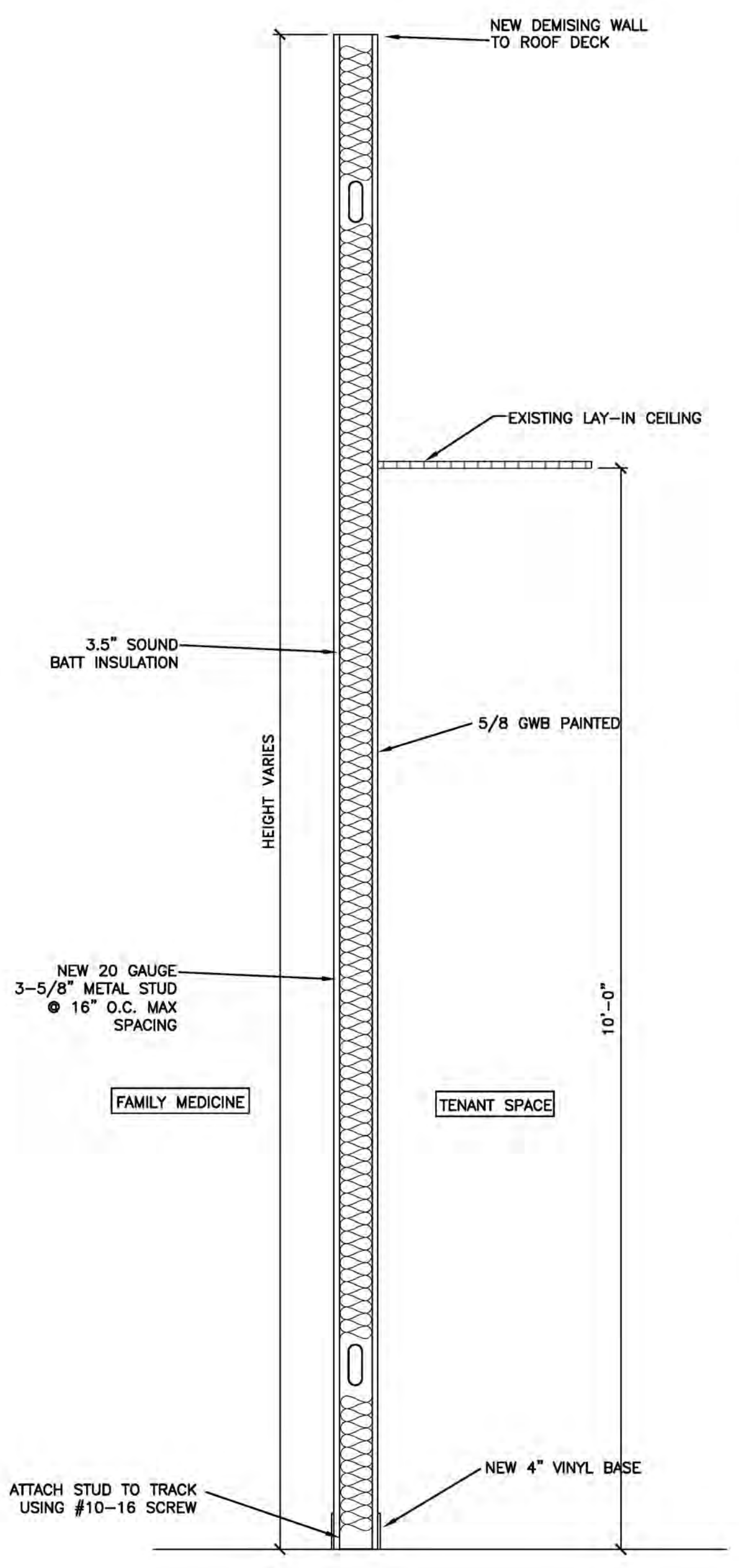
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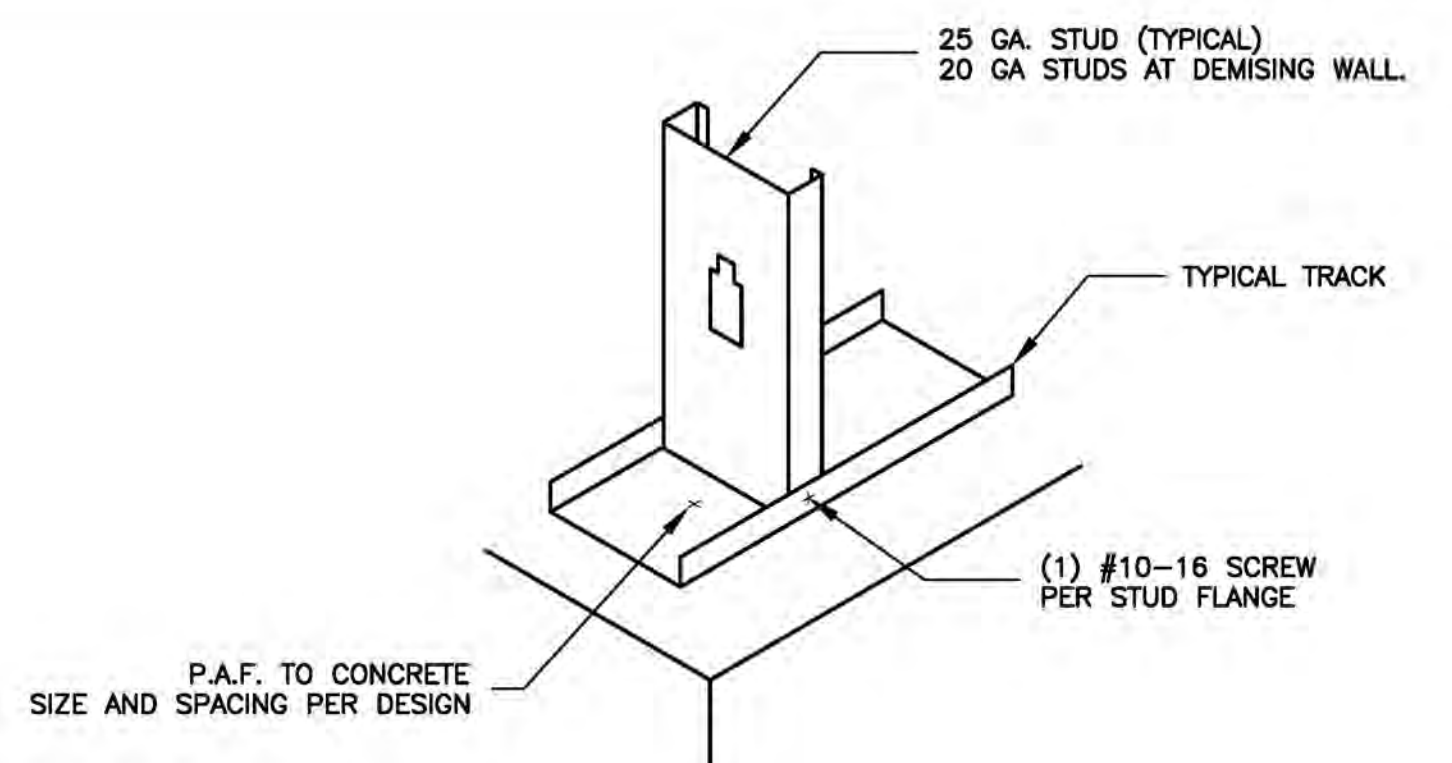




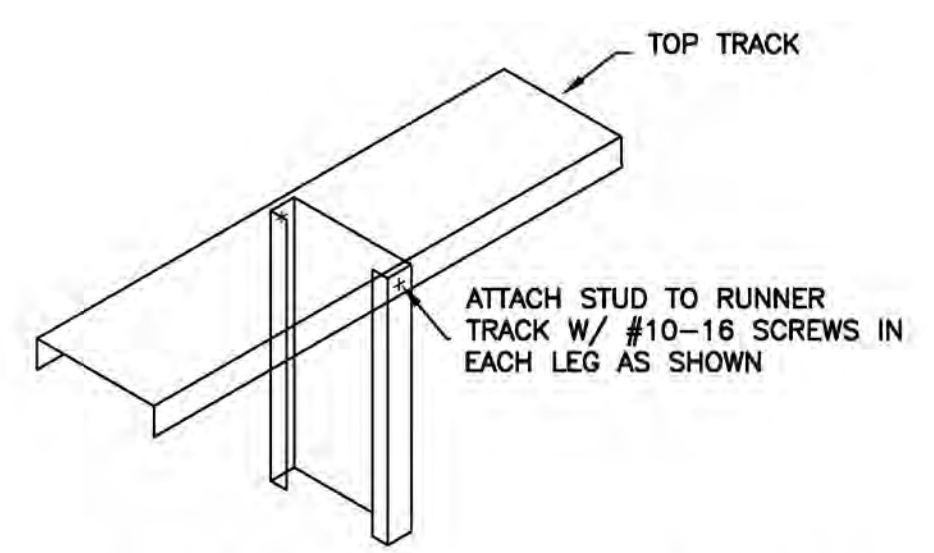
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 Project Date: 12/13/2024  
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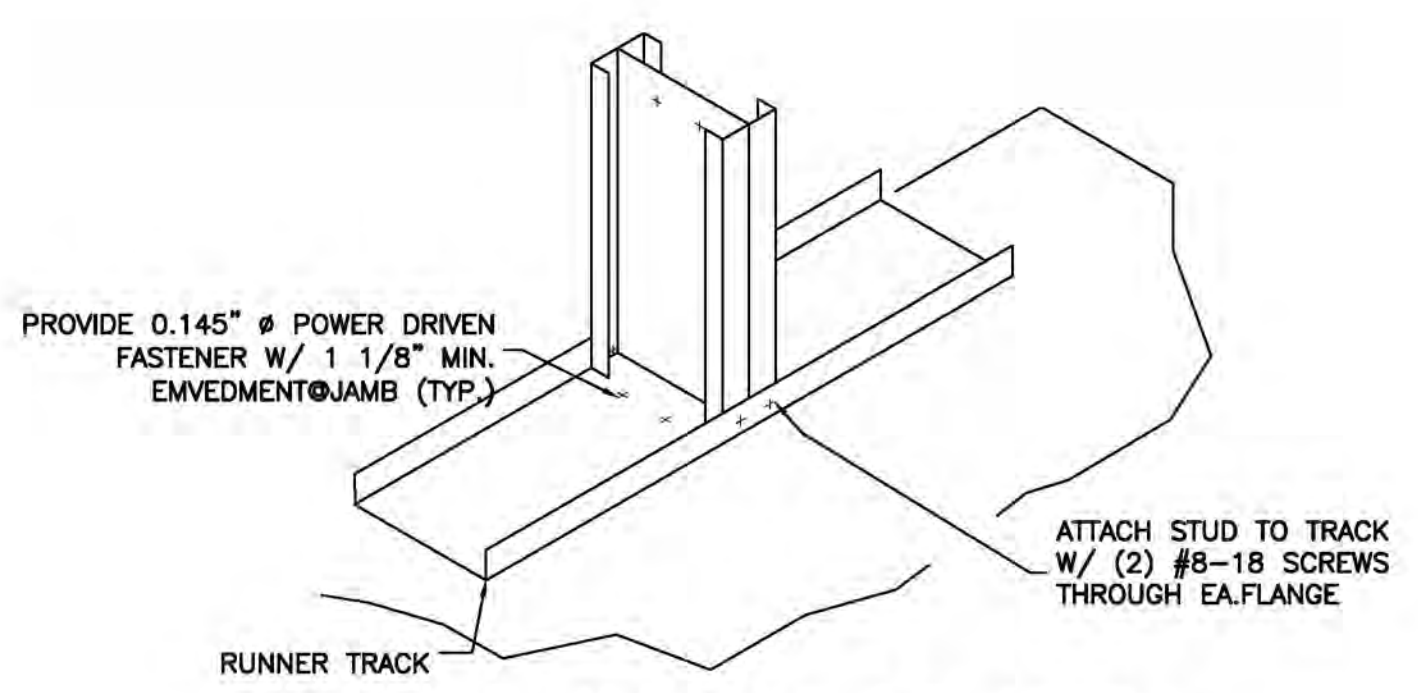
**1 DEMISING WALL SECTION**  
 G3 1" = 1'-0" UL DESIGN U-419



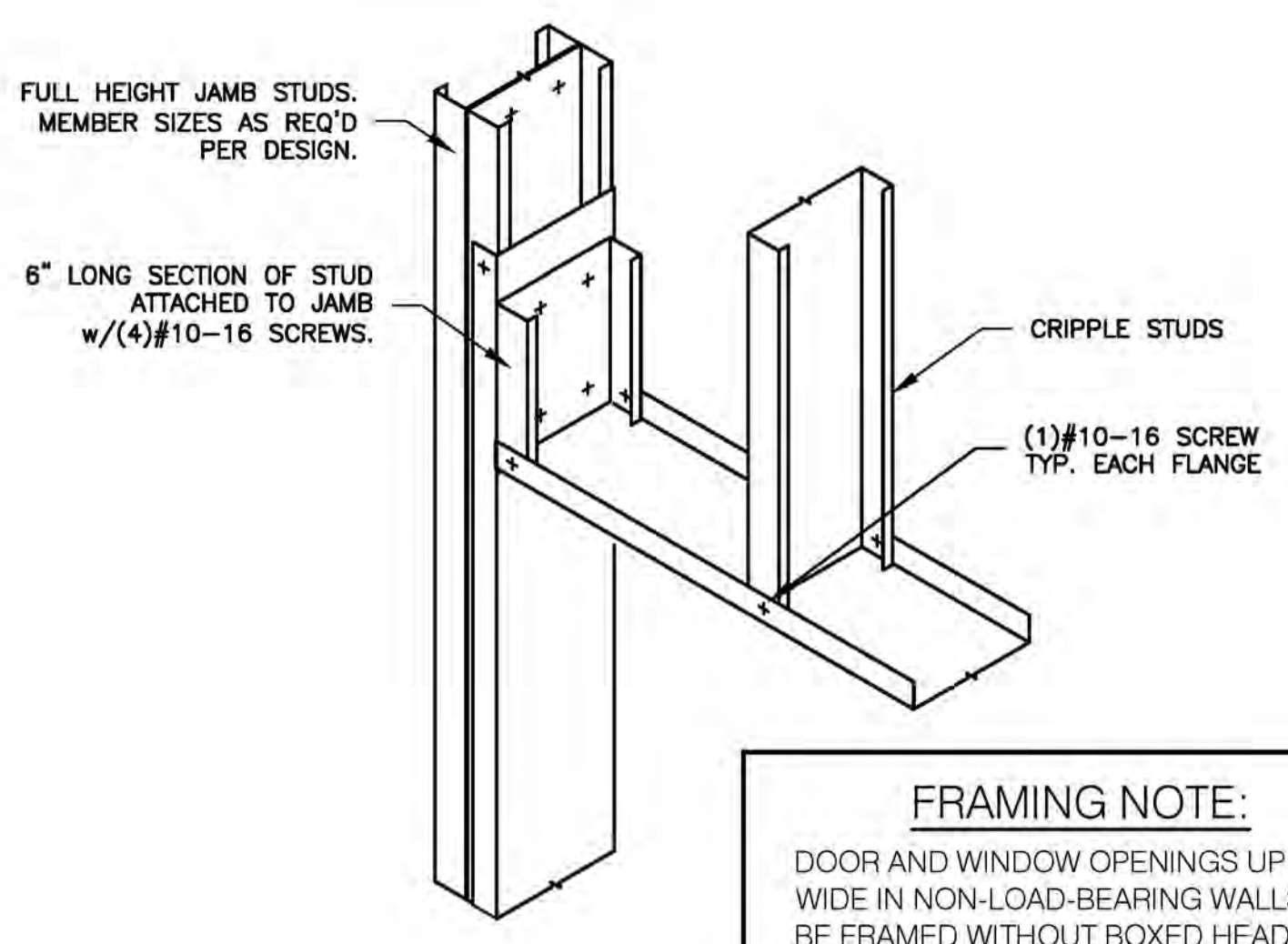
**2 STUD BASE DETAIL**  
 G5 N.T.S.



**3 STUD TO TOP TRACK CONNECTION**  
 G5 N.T.S.



**4 ANCHORAGE AT JAMB**  
 G3 N.T.S.



**5 BOX HEADER DETAIL 1**  
 G3 N.T.S.

**FRAMING NOTE:**  
 DOOR AND WINDOW OPENINGS UP TO 36" WIDE IN NON-LOAD-BEARING WALLS CAN BE FRAMED WITHOUT BOXED HEADERS.

INTERIOR DOOR SCHEDULE															
DOOR NO	DOOR SIZE			DOOR			FRAME			HARDWARE					REMARKS
	WIDTH	HEIGHT	THICKNESS	STYLE	MATERIAL	FINISH	MATERIAL	FINISH	FIRE RATING	ENTRANCE LOCK	PASSAGE SET	PRIVACY SET	ADA TURNKNOB	MORTISE CYLINDER	
D1	3'-0"	7'-0"	1-3/4"	A	ALUM	ALUM	1	ALUM	ALUM	-	X	-	-	-	
D2	3'-0"	7'-0"	1-3/4"	B	WD	P	Z	WD	P	-	-	-	-	-	

NOTE: G.C. TO REVIEW ALL HARDWARE SETS WITH OWNER BEFORE INSTALLATION

NOTE: ALL NEW HARDWARE TO BE LEVER ADA ACCEPTABLE  
 ALL THRESHOLDS TO MEET ADA SPECIFICATIONS

**NOTES:**

- APPLY 2 COATS OF SEMI-GLOSS TO ALL WOOD DOORS.
- ALL EXIT DOORS TO BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY TOOL. SPECIAL KNOWLEDGE OF EFFORT. ALL HARDWARE MUST BE DIRECT ACTING REQUIRING NOT MORE THAN ONE OPERATION.
- DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERABLE PARTS OF ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR PER ICC/ANSI A117.1-2009 SECTIONS 404.2.6& 404.2.7
- G.C. TO REVIEW ALL HARDWARE SETS WITH OWNER BEFORE INSTALLATION
- PROVIDE TRANSITION STRIPS AT ALL FLOORING MATERIAL CHANGES

**PASSAGE SET:** (CLOSED & HALL) PASSAGE LOCKSETS KEEP DOORS FIRMLY CLOSED, BUT DO NOT ACTUALLY LOCK. BOTH LEVERS ALWAYS TURN FREE WITH NO LOCK CYLINDER OR PROVISION FOR A KEY.

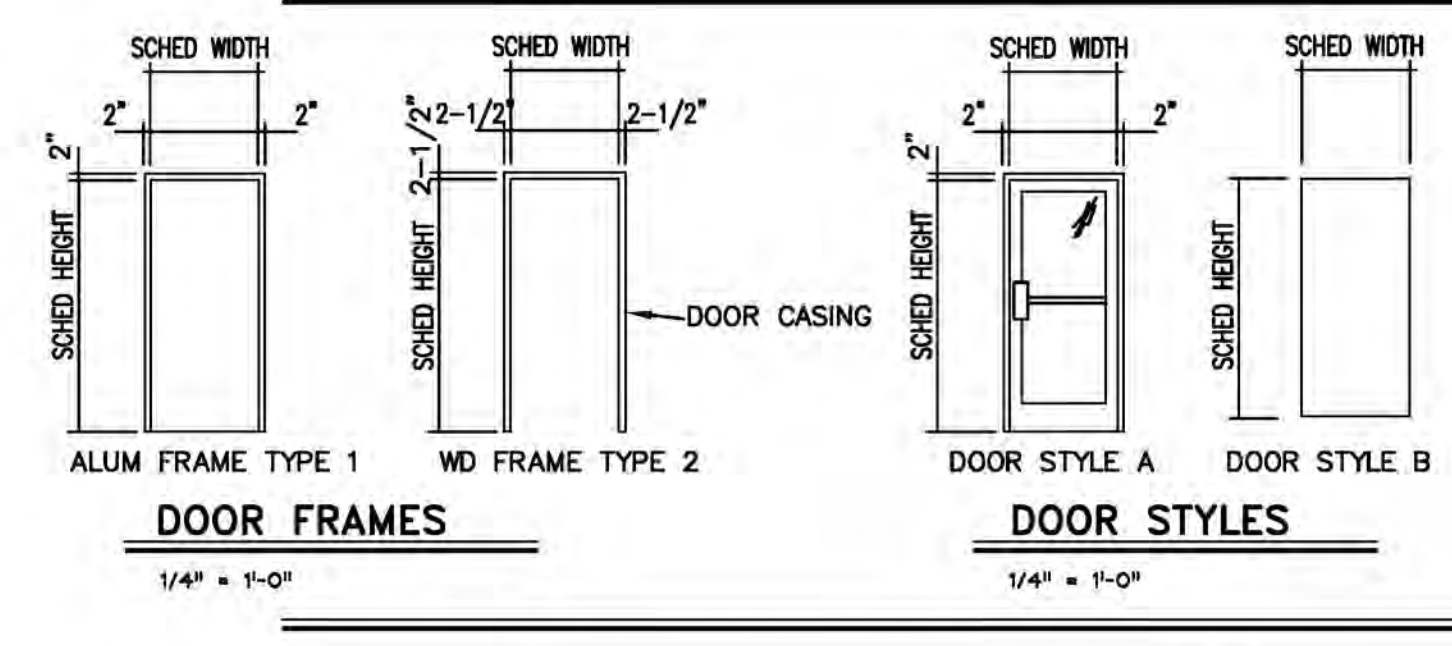
**PRIVACY SET:** (RESTROOM) PRIVACY LOCKSETS ARE LOCKED WITH AN INSIDE PUSH-BUTTON. TURNING THE INSIDE KNOB OR LEVER RELEASES THE LOCK. A SMALL SCREWDRIVER CAN BE USED AS AN EMERGENCY KEY, FROM THE OUTSIDE, IF NECESSARY.

**TURNKNOB MORTISE CYLINDER LOCK:** LOCKSETS ARE LOCKED WITH AN INSIDE PUSH-BUTTON OR LATCH. THE OUTSIDE LEVER REMAINS LOCKED UNTIL UNLOCKED WITH A KEY FROM THE OUTSIDE OR BY ROTATING THE INSIDE LEVER TRIM. THE INSIDE KNOB OR LEVER IS ALWAYS FREE FOR IMMEDIATE EXIT.

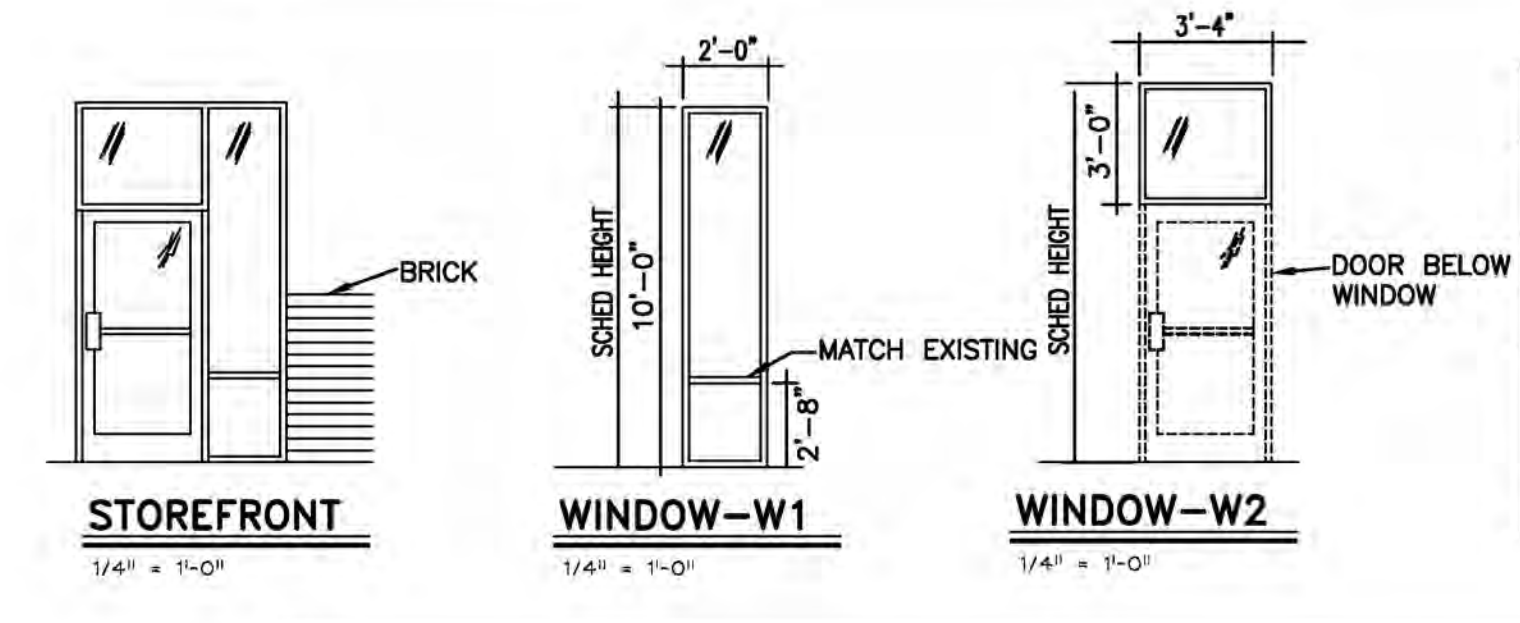
**ENTRANCE LOCK:** (ENTRY) ENTRANCE LOCKED BY PUSHING AND TURNING A BUTTON AND UNLOCKED BY THE KEY UNTIL THE INSIDE BUTTON IS MANUALLY UNLOCKED. THEY ARE ALSO AVAILABLE WITH PUSHBUTTON LOCKING, IN WHICH PUSHING THE BUTTON LOCKS THE OUTSIDE KNOB OR LEVER UNTIL IT IS UNLOCKED BY KEY OR BY TURNING THE INSIDE KNOB OR LEVER. THE INSIDE KNOB OR LEVER IS ALWAYS FREE FOR IMMEDIATE EXIT.

**CLASSROOM LOCK:** CLASSROOM LOCKSETS ALWAYS HAVE THE INSIDE KNOB OR LEVER UNLOCKED. THE OUTSIDE KNOB OR LEVER IS LOCKED AND UNLOCKED BY KEY.

**STOREROOM LOCK:** STOREROOM LOCKSETS ALWAYS HAVE THE INSIDE KNOB OR LEVER UNLOCKED. THE OUTSIDE KNOB OR LEVER IS FIXED; THE LATCH IS RETRACTED BY THE KEY FROM OUTSIDE.



DOOR SCHEDULE LEGEND			
H	HEIGHT	HM	HOLLOW METAL
W	WIDE	P	PAINT
ALUM	ALUMINUM	S	STAIN
WD	WOOD-SOLID CORE	M	METAL
T	THICKNESS	WI	WROUGHT IRON
		VA/B	VERIFY ANODIZED OR BRONZE



WINDOW SCHEDULE			
WINDOW NO	WINDOW SIZE	FRAME MATERIAL	REMARKS
W1	2'-4" x 10'-0"	ALUM	
W2	3'-0" x 3'-0"	ALUM	WINDOW ABOVE DOOR

**NOTES:**

- FINISH SELECTION PER SPECIFICATION THIS PAGE
- MATCH EXISTING STOREFRONT WINDOW AND DOOR, PROVIDE TEMPERED SAFETY GLAZING WHERE REQUIRED

ROOM FINISH SCHEDULE									
ROOM NAME	RM NO.	NET SQ. FT.	FLOOR	BASE (EXIST)	WALLS	WALL RATING	CEILING MAT. (EXISTING)	CEILING HEIGHT (EXIST)	REMARKS
OPEN FLOOR	100	1198	CONC	VINYL	GYP.BD/PT	-	ACOUSTIC	10'-0"	
BREAK ROOM	101	160	CONC	VINYL	GYP.BD/PT	-	ACOUSTIC	10'-0"	
RESTROOM	102	155	CONC	VINYL	GYP.BD/PT	-	ACOUSTIC	10'-0"	
ELECTRICAL ROOM	103	26	CONC	VINYL	GYP.BD/PT	-	ACOUSTIC	10'-0"	
OFFICE	104	80	CONC	VINYL	GYP.BD/PT	-	ACOUSTIC	10'-0"	
OFFICE	105	80	CONC	VINYL	GYP.BD/PT	-	ACOUSTIC	10'-0"	
ENTRY AREA	106	188	CONC	VINYL	GYP.BD/PT	-	ACOUSTIC	10'-0"	

FINISH SCHEDULE CODES									
V.C.T.	VINYL COMPOSITION TILE	PT	PAINTED	VW	VINYL WALLCOVERING	MT	MOSAIC TILE	V.P.	VINYL PLANK
CONC.	CONCRETE	CMU	CONCRETE MASONRY UNIT	SC	SEALED CONCRETE	PNL	PANELING	PAVERS	BRICK PAVERS
COMP.	COMPOSITION	AC	ACOUSTIC ACoustical	RU	RUBBER	WD	WOOD	CPT	CARPET
GYP. BD.	GYP.SUM BOARD	SV	SHEET VINYL	CER TILE	CERAMIC TILE	ST	STEEL	1-HOUR	U-305
AA	ANODIZED ALUMINUM	SS	STAINLESS STEEL	WC	WAINSCOT	FRP	FIRE RESISTANT PANEL	LVT	LUXURY VINYL TILE

**JENKINS CONSULTING ENGINEERS, PA.**

OFFICE IN EUREKA SPRINGS, NORTH CAROLINA  
 1606 AMANTHUR RD. FAYETTEVILLE, NC 28711-1022  
 NORTH CAROLINA LICENSE NUMBER: 06979  
 OFFICE 910.322.1724

DESIGNED / CHECKED BY: B. JENKINS  
 DRAWN BY: MAW

PROJECT #: 2024-08-09  
 DATE: 13 DEC 24

FINAL DRAWING FOR REVIEW PURPOSES ONLY  
 PRELIMINARY FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING FOR CONSTRUCTION

OWNER/TEENANT:  
 CONTRACTOR/BUILDER:

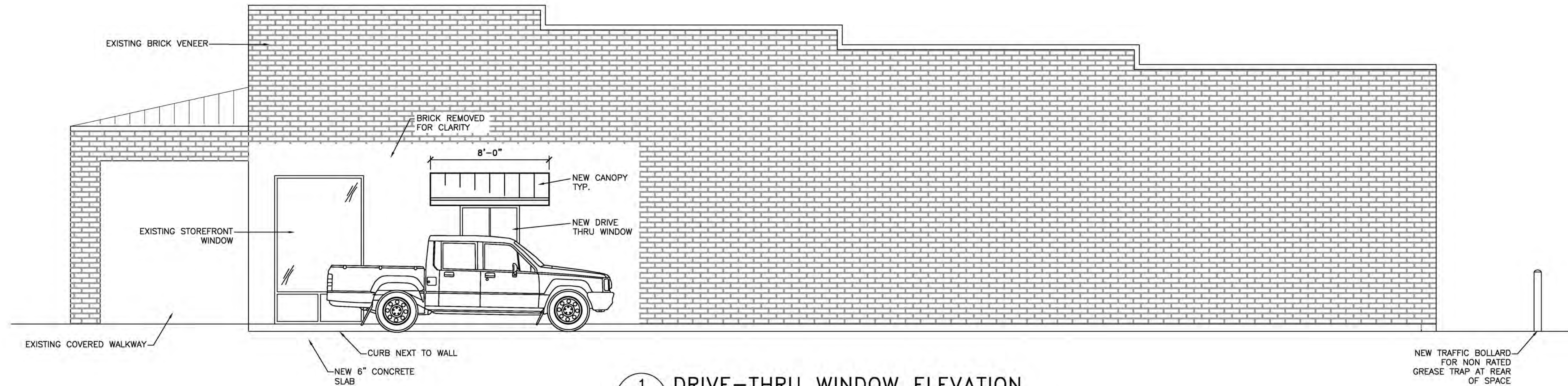
PROJECT: LEVEL II ALTERATION: BUILDING SHELL SPACES  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326

WALL FRAMING/SECTION - ROOM FINISH SCHEDULE

G3

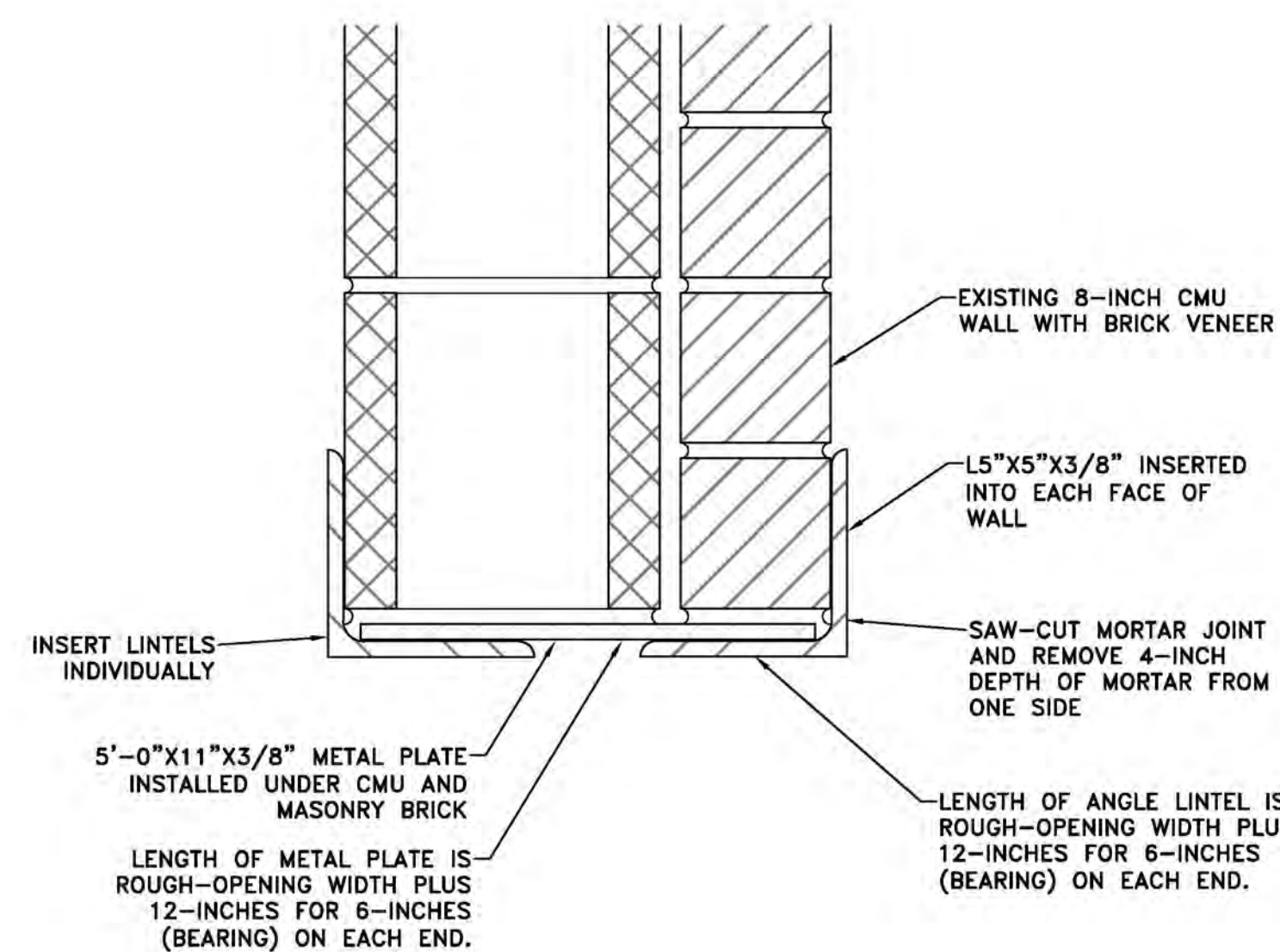
THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS



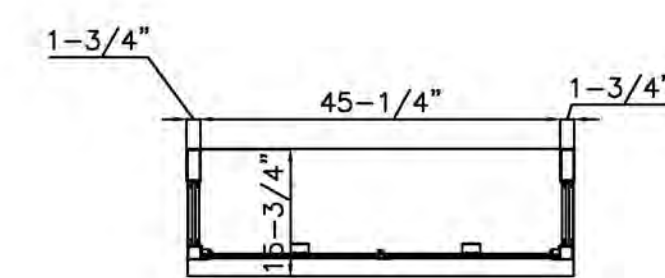


1 DRIVE-THRU WINDOW ELEVATION  
 G4 1/4" = 1'-0"

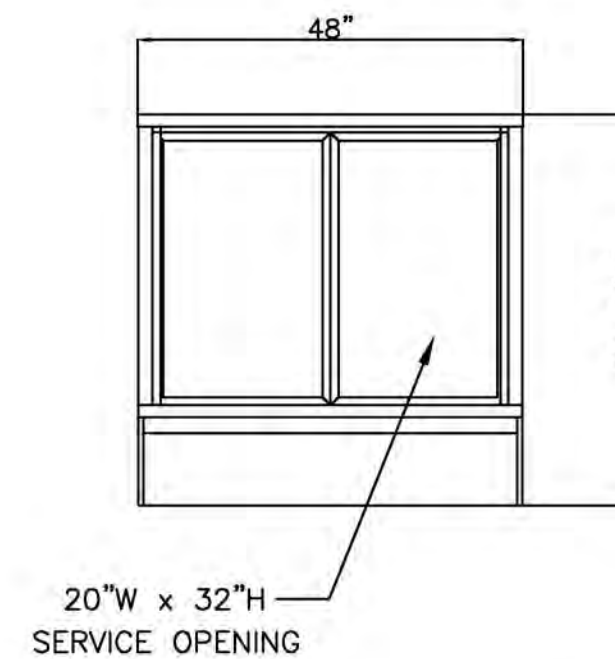
**DRIVE-THRU WINDOW NOTE:**  
 DRIVE-THRU WINDOW DEPICTED ON THESE PLANS ARE DIAGRAMMATIC. THE INFORMATION ON THIS PAGE IS RELATED TO THE CONSTRUCTION AND INSTALLATION OF THIS PARTICULAR DRIVE-THRU WINDOW PER LANDLORD WORK FOR THE UPCOMING TENANT. CONTRACTOR WILL NOTIFY ENGINEER OF RECORD FOR ANY CHANGES TO THIS INSTALLATION OR DESIGN OF THE PARTICULAR DRIVE-THRU WINDOW. NO SPECIFIC DRIVE-THRU WINDOW WAS SPECIFIED BY THE LANDLORD OR TENANT AT THE TIME OF THIS PROJECT.



2 DRIVE-THRU WINDOW WALL SECTION  
 G4 3" = 1'-0"

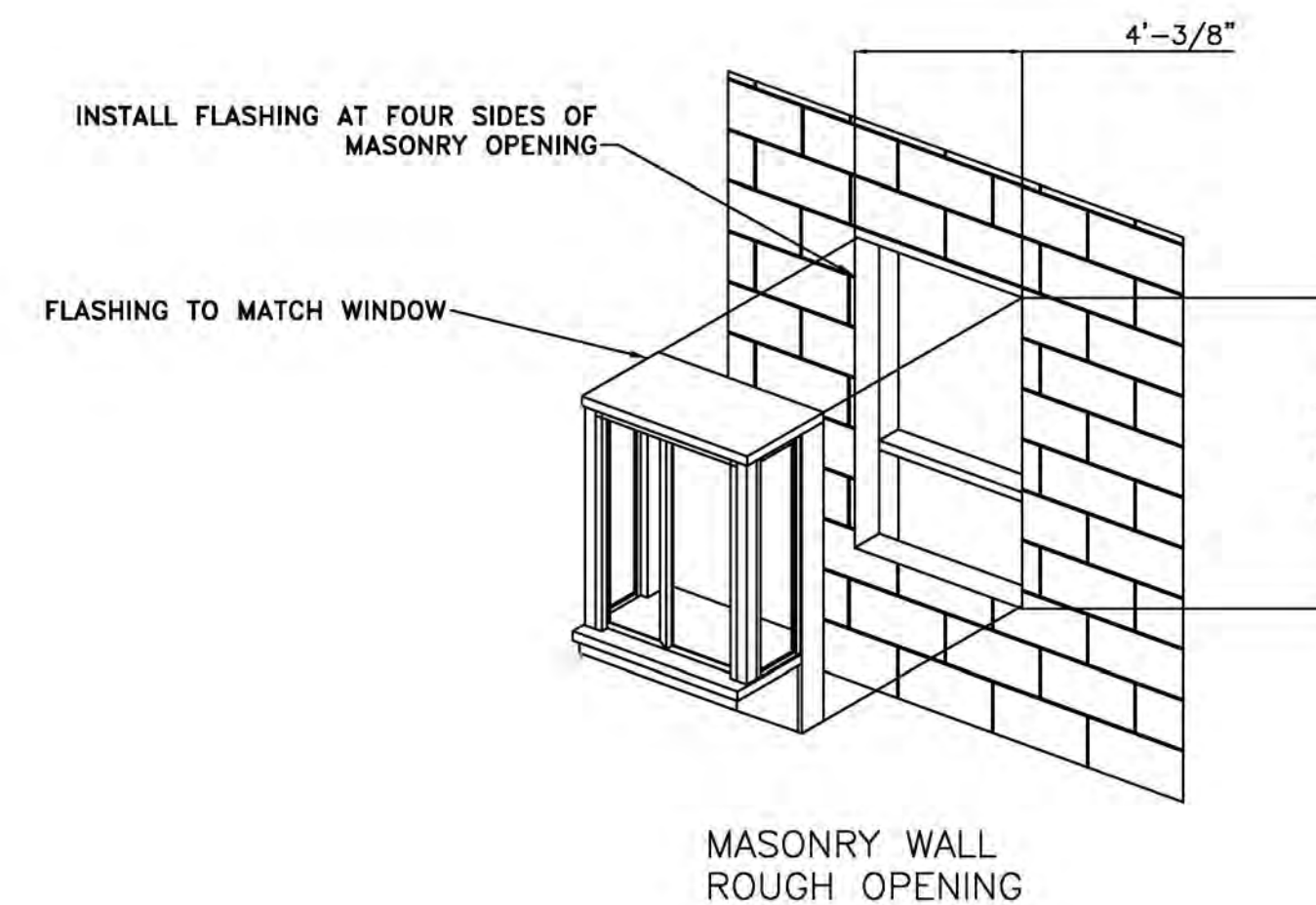


PLAN

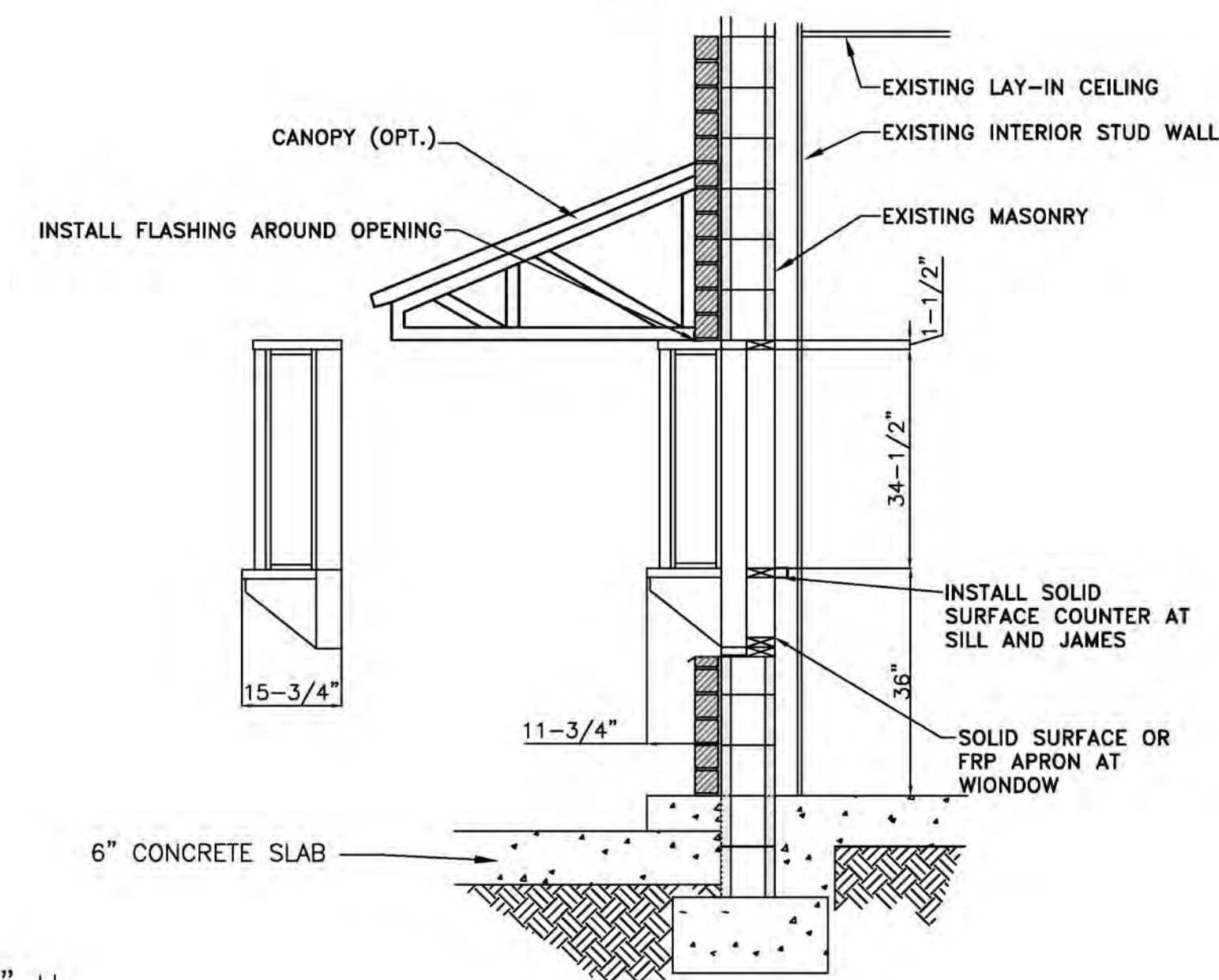


FRONT ELEVATION

MASONRY ROUGH OPENING = 4'-3/8" W x 49-1/4" H



ISOMETRIC



SECTION

3 DRIVE-THRU WINDOW DETAILS  
 G4 1/2" = 1'-0"

THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS

PROFESSIONAL SEAL  
 NORTH CAROLINA  
 JENKINS CONSULTING ENGINEERS, PA  
 OFFICE IN EUREKA SPRINGS, NORTH CAROLINA  
 1006 MARTIN LUTHER KING JR. BLVD., SUITE 100  
 EUREKA SPRINGS, NC 28741-1002  
 PHONE: (704) 732-1724  
 FAX: (704) 732-1724  
 PROJECT NUMBER: 2024-08-09

DESIGNED / CHECKED BY: K. DODSON  
 DRAWN BY: MAW  
 PROJECT #: 2024-08-09  
 DATE: 13 DEC 24

FINAL DRAWING [ ] FOR REVIEW PURPOSES ONLY  
 PRELIMINARY [ ] FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING [ ] FOR CONSTRUCTION

OWNER/TENANT: \_\_\_\_\_  
 CONTRACTOR/BUILDER: \_\_\_\_\_

PROJECT: LEVEL II ALTERATION: BUILDING SHELL SPACES  
 CAMERON, NC, 28326  
 185 MITTIE HADDOCK DRIVE

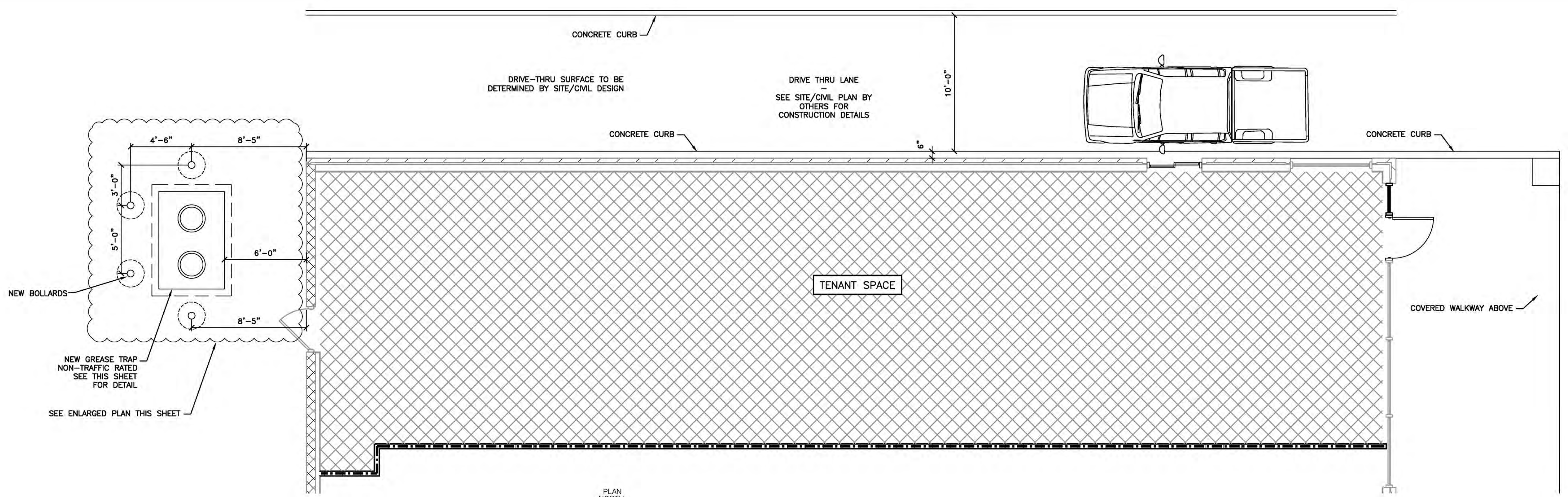
SHEET: DRIVE THRU DETAILS/SECTIONS/ELEVATIONS

G4

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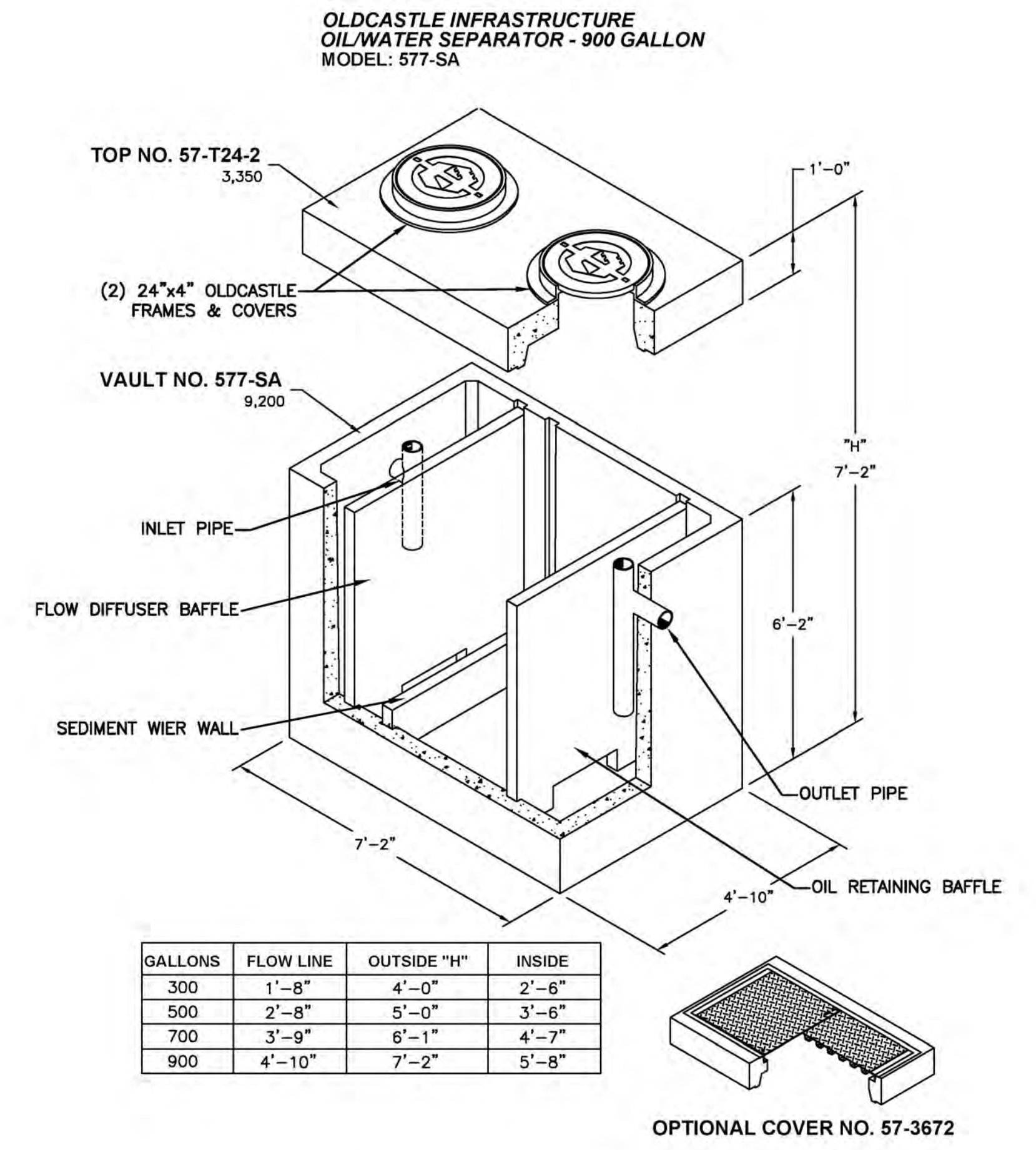


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 Plotter: HP DesignJet 5000PSN



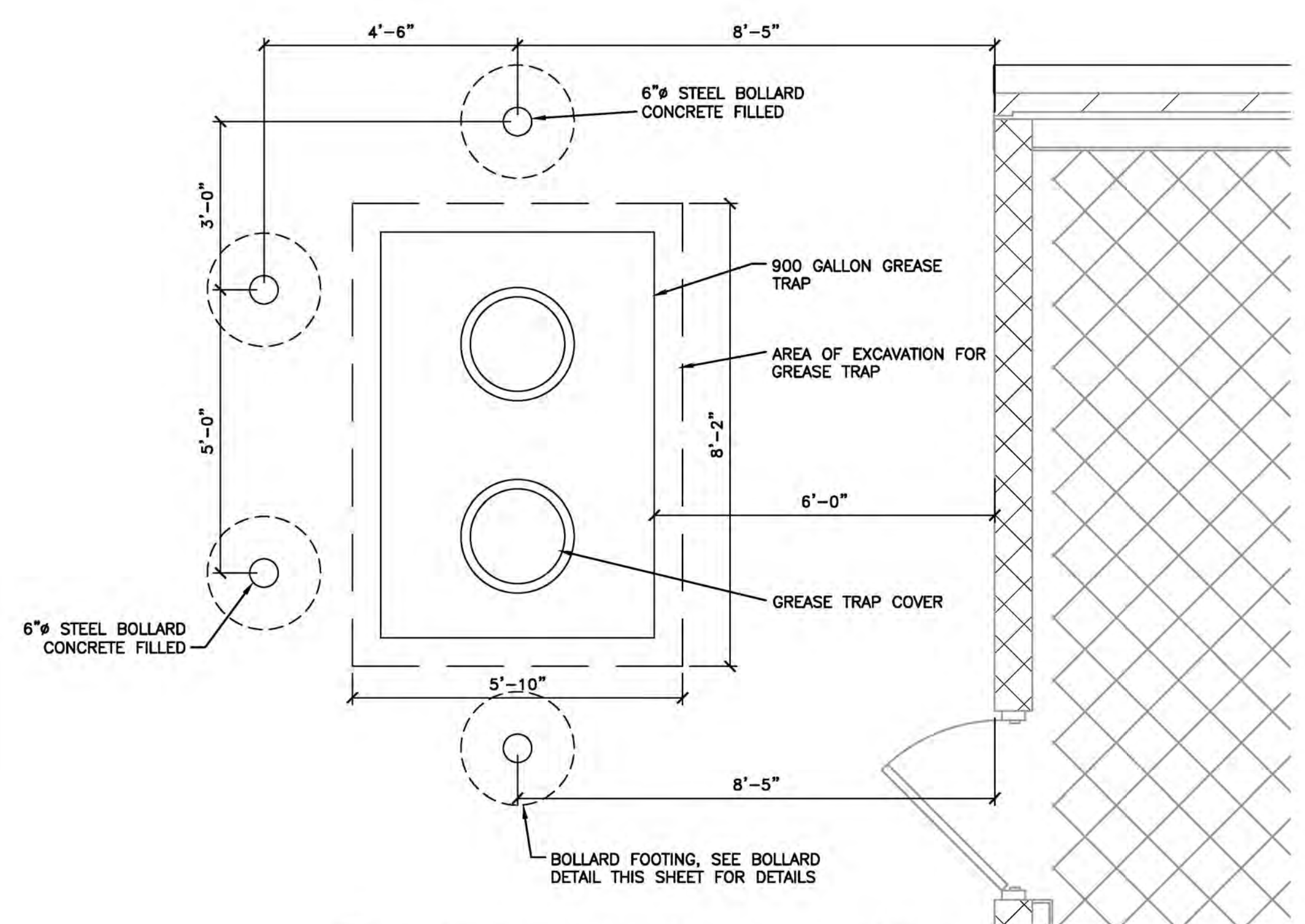
PLAN NORTH TRUE NORTH

**1 GREASE TRAP PLAN**  
G5 1/4" = 1'-0"

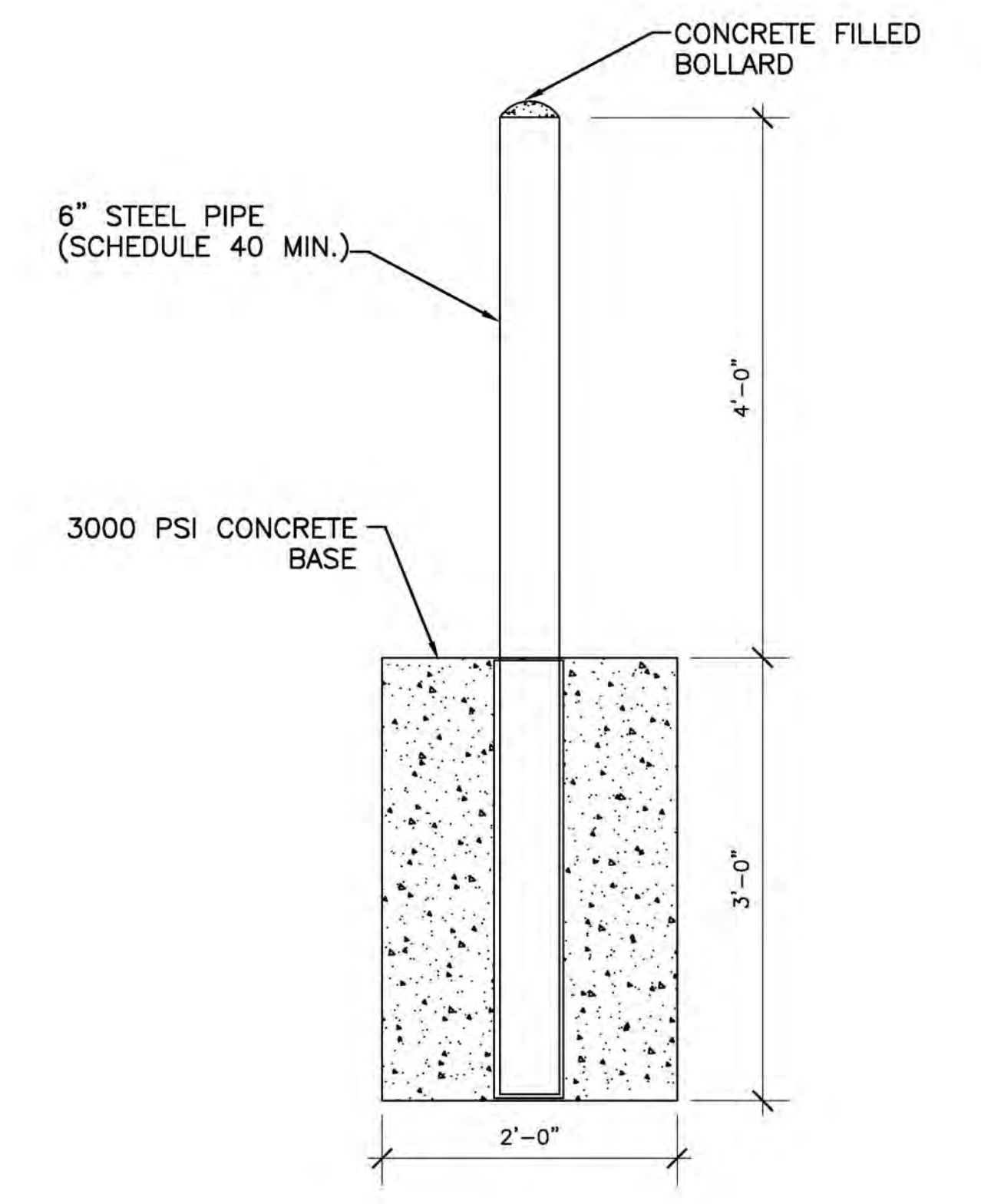


**2 GREASE TRAP DETAIL**  
G5 N.T.S.

**GREASE TRAP NOTE:**  
 NEW 900 GALLON NON-TRAFFIC RATED GREASE TRAP WILL BE INSTALLED AT THE BACK OF THE TENANT SPACE PER LANDLORD/TENANT REQUIREMENT. CONTRACTOR WILL LOCATE FINAL PLACEMENT OF GREASE TRAP ACCORDING TO UTILITY LOCATIONS IN THE INSTALLATION AREA AND LOCATION OF BUILDING FOOTING. TRAFFIC BOLLARDS WILL BE INSTALLED TO ENSURE SAFETY OF GREASE TRAP IS ENSURED.



**3 ENLARGED GREASE TRAP PLAN**  
G5 1/2" = 1'-0"



**4 TYPICAL BOLLARD POST/DETAIL**  
G5 N.T.S.

THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS

**JENKINS**  
CONSULTING ENGINEERS, PA.

OFFICE IN EUREKA SPRINGS, NORTH CAROLINA  
1606 MARTIN LUTHER KING JR. BLVD., EUREKA SPRINGS, NC 28711-1022  
NORTH CAROLINA LICENSE NUMBER: 062879  
OFFICE #103221724

13 December 2024

DESIGNED / CHECKED BY: <b>B. JENKINS</b>	DRAWN BY: <b>MAW</b>	PROJECT #: <b>2024-08-09</b>
FINAL DRAWING <input type="checkbox"/> FOR REVIEW PURPOSES ONLY	FINAL DRAWING <input type="checkbox"/> FOR DESIGN DEVELOPMENT ONLY	FINAL DRAWING <input type="checkbox"/> FOR CONSTRUCTION
OWNER/TENANT:	CONTRACTOR/BUILDER:	DATE: <b>13 DEC 24</b>

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
185 MITTIE HADDOCK DRIVE  
CAMERON, NC 28326

SHEET: **GREASE TRAP PLAN/DETAILS**

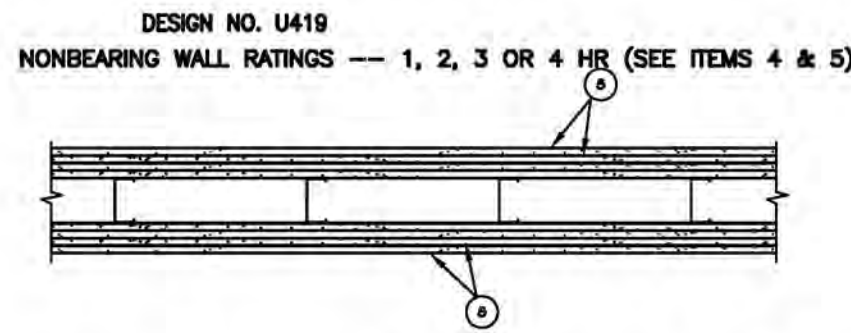
**G5**







Drawing File: \\A:\2024\NEW\Draws\Mod\_Shell\Draws\Shell-23Nov24.dwg  
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**1. FLOOR AND CEILING RUNNERS** --- (NOT SHOWN) --- FOR USE WITH ITEM 2 --- CHANNEL SHAPED, FABRICATED FROM MIN 25 MSG CORROSION-PROTECTED STEEL MIN WIDTH TO ACCOMMODATE STUD SIZE, WITH MIN 1 IN. LONG LEGS, ATTACHED TO FLOOR AND CEILING WITH FASTENERS 24 IN. OC MAX.

**1A. FLOOR AND CEILING RUNNERS\*** --- NOT SHOWN --- IN LIEU OF ITEM 1 --- FOR USE WITH ITEM 2A, PROPRIETARY CHANNEL SHAPED, MIN. 3-5/8 IN. WIDE WITH 1 IN. LONG LEGS, FABRICATED FROM MIN. 0.0150 IN. (0.0148 IN. MIN BARE METAL THICKNESS) GALVANIZED STEEL, ATTACHED TO FLOOR AND CEILING WITH FASTENERS 24 IN. OC MAX.

**DIETRICH INDUSTRIES INC** --- ULTRASTEEL7.

**1B. FLOOR AND CEILING RUNNERS** --- (NOT SHOWN) --- IN LIEU OF ITEM 1 --- FOR USE WITH ITEM 2A, PROPRIETARY CHANNEL SHAPED, MIN. 2-3/8 IN. WIDE WITH 1-3/16 IN. WIDE FLANGES, FABRICATED FROM MIN. 0.0150 IN. GALVANIZED STEEL, ATTACHED TO FLOOR AND CEILING FASTENERS 24 IN. OC MAX.

**DIETRICH INDUSTRIES INC** --- ULTRASTEEL7.

**2. STEEL STUDS** --- CHANNEL SHAPED, FABRICATED FROM MIN 25 MSG CORROSION-PROTECTED STEEL, MIN WIDTH AS INDICATED UNDER ITEM 5, MIN 1-1/4 IN. FLANGES AND 1/4 IN. RETURN, SPACED A MAX OF 24 IN. OC. STUDS TO BE CUT 3/8 TO 3/4 IN. LESS THAN ASSEMBLY HEIGHT.

**2A. STEEL STUDS\*** --- IN LIEU OF ITEM 2 --- PROPRIETARY CHANNEL SHAPED STUDS, MIN. WIDTH AS INDICATED UNDER ITEM 5, MIN. 1-1/4 IN. LONG LEGS AND 1/4 IN. LONG FOLDED BACK RETURN FLANGE LEGS, FABRICATED FROM MIN. 0.0150 IN. (0.0149 IN. MIN BARE METAL THICKNESS) GALVANIZED STEEL, SPACED A MAX OF 24 IN. OC. STUDS TO BE CUT 3/8 TO 3/4 IN. LESS THAN ASSEMBLY HEIGHT. ALLOWABLE USE OF STUDS IS SHOWN IN THE TABLE BELOW. FOR DIRECT ATTACHMENT OF GYPSUM BOARD ONLY.

**DIETRICH INDUSTRIES INC** --- ULTRASTEEL7.

**2B. STEEL STUDS** --- (AS AN ALTERNATE TO ITEM 2, FOR USE WITH ITEM 5B) CHANNEL SHAPED, FABRICATED FROM MIN 20 MSG (0.0327 IN. THICK) CORROSION-PROTECTED OR GALV STEEL, 3-1/2 IN. MIN WIDTH, MIN 1-1/2 IN. FLANGES AND 1/4 IN. RETURN, SPACED A MAX OF 16 IN. OC. STUDS FRICTION-FIT INTO FLOOR AND CEILING RUNNERS. STUDS TO BE CUT 5/8 TO 3/4 IN. LESS THAN ASSEMBLY HEIGHT.

**3. WOOD STRUCTURAL PANEL SHEATHING** --- (OPTIONAL, FOR USE WITH ITEM 5 ONLY) --- (NOT SHOWN) --- 4 FT WIDE, 7/16 IN. THICK ORIENTED STRAND BOARD (OSB) OR 15/32 IN. THICK STRUCTURAL 1 SHEATHING (PLYWOOD) COMPLYING WITH DOC P51 OR P52, OR APA STANDARD PDP-108, MANUFACTURED WITH EXTERIOR GLUE, APPLIED HORIZONTALLY OR VERTICALLY TO THE STEEL STUDS, VERTICAL JOINTS CENTERED ON STUDS, AND STAGGERED ONE STUD SPACE FROM WALLBOARD JOINTS. ATTACHED TO STUDS WITH FLAT-HEAD SELF-DRILLING TAPPING SCREWS WITH A MIN. HEAD DIAM. OF 0.292 IN. AT MAXIMUM 6 IN. OC. IN THE PERIMETER AND 12 IN. OC. IN THE FIELD.

**4. BATTS AND BLANKETS\*** --- (REQUIRED AS INDICATED UNDER ITEM 5) --- MINERAL WOOL BATTS, FRICTION FITTED BETWEEN STUDS AND RUNNERS, MIN NOM THICKNESS AS INDICATED UNDER ITEM 5. SEE BATTS AND BLANKETS (BKNV OR BZJZ) CATEGORIES FOR NAMES OF CLASSIFIED COMPANIES.

**4A. BATTS AND BLANKETS\*** --- (OPTIONAL) --- PLACED IN STUD CAVITIES, ANY GLASS FIBER OR MINERAL WOOL INSULATION BEARING THE UL CLASSIFICATION MARKING AS TO SURFACE BURNING CHARACTERISTICS AND/OR FIRE RESISTANCE. SEE BATTS AND BLANKETS (BKNV OR BZJZ) CATEGORIES FOR NAMES OF CLASSIFIED COMPANIES.

**5. GYPSUM BOARD\*** --- GYPSUM PANELS WITH BEVELED, SQUARE OR TAPERED EDGES, APPLIED VERTICALLY OR HORIZONTALLY. VERTICAL JOINTS CENTERED OVER STUDS AND STAGGERED ONE STUD CAVITY ON OPPOSITE SIDES OF STUDS. VERTICAL JOINTS IN ADJACENT LAYERS (MULTILAYER SYSTEMS) STAGGERED ONE STUD CAVITY. HORIZONTAL JOINTS NEED NOT BE BACKED BY STEEL FRAMING. HORIZONTAL EDGE JOINTS AND HORIZONTAL BUTT JOINTS ON OPPOSITE SIDES OF STUDS NEED NOT BE STAGGERED. HORIZONTAL EDGE JOINTS AND HORIZONTAL BUTT JOINTS IN ADJACENT LAYERS (MULTILAYER SYSTEMS) STAGGERED A MIN OF 12 IN. THE THICKNESS AND NUMBER OF LAYERS FOR THE 1 HR, 2 HR, 3 HR AND 4 HR RATINGS ARE AS FOLLOWS:

WALLBOARD PROTECTION ON EACH SIDE OF WALL

RATING	MIN STUD DEPTH ITEM 2	MIN STUD DEPTH ITEM 2A	NO. OF LAYERS & THICKS OF PANEL	MIN THICKS OF INSULATION (ITEM 4)
1	3-1/2	3-5/8	1 LAYER, 5/8 IN. THICK	OPTIONAL
1	2-1/2	3-5/8	1 LAYER, 1/2 IN. THICK	1-1/2 IN.
1	1-5/8	3-5/8	1 LAYER, 3/4 IN. THICK	OPTIONAL
2	1-5/8	2-1/2	2 LAYERS, 1/2 IN. THICK	OPTIONAL
2	1-5/8	2-1/2	2 LAYERS, 5/8 IN. THICK	3 IN.
2	3-1/2	3-5/8	1 LAYER, 3/4 IN. THICK	OPTIONAL
3	1-5/8	2-1/2	3 LAYERS, 1/2 IN. THICK	OPTIONAL
3	1-5/8	2-1/2	2 LAYERS, 3/4 IN. THICK	OPTIONAL
3	1-5/8	2-1/2	3 LAYERS, 5/8 IN. THICK	OPTIONAL
4	1-5/8	2-1/2	4 LAYERS, 5/8 IN. THICK	OPTIONAL
4	1-5/8	2-1/2	4 LAYERS, 1/2 IN. THICK	OPTIONAL
4	2-1/2	2-1/2	2 LAYERS, 3/4 IN. THICK	2 IN.

**CANADIAN GYPSUM COMPANY** --- 1/2 IN. THICK TYPE C, IP-X2 OR IPC-AR; WRC; 5/8 IN. THICK TYPE AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX OR WRC; 3/4 IN. THICK TYPES IP-X3 OR ULTRACODE

**UNITED STATES GYPSUM CO** --- 1/2 IN. THICK TYPE C, IP-X2, IPC-AR OR WRC; 5/8 IN. THICK TYPE SCX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR ; 3/4 IN. THICK TYPES IP-X3 OR ULTRACODE

**USG MEXICO S A D E C V** --- 1/2 IN. THICK TYPE C, IP-X2, IPC-AR OR WRC; 5/8 IN. THICK TYPE AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC OR; 3/4 IN. THICK TYPES IP-X3 OR ULTRACODE

WHEN ITEM 7B, STEEL FRAMING MEMBERS\*, IS USED, NONBEARING WALL RATING IS LIMITED TO 1 HR. MIN. STUD DEPTH IS 3-1/2 IN., MIN. THICKNESS OF INSULATION (ITEM 4) IS 3 IN., AND TWO LAYERS OF GYPSUM BOARD PANELS (1/2 IN. OR 5/8 IN. THICK) SHALL BE ATTACHED TO FURRING CHANNELS AS DESCRIBED IN ITEM 6. ONE LAYER OF GYPSUM BOARD PANELS (1/2 IN. OR 5/8 IN. THICK) ATTACHED TO OPPOSITE SIDE OF STUD WITHOUT FURRING CHANNELS AS DESCRIBED IN ITEM 6.

**5A. GYPSUM BOARD\*** --- (AS AN ALTERNATE TO ITEM 5) --- 5/8 IN. THICK, 24 TO 54 IN. WIDE, APPLIED HORIZONTALLY AS THE OUTER LAYER TO ONE SIDE OF THE ASSEMBLY, SECURED AS DESCRIBED IN ITEM 6.

**CANADIAN GYPSUM COMPANY** --- TYPE SHX.

**UNITED STATES GYPSUM CO** --- TYPE FRX-G, SHX.

**USG MEXICO S A D E C V** --- TYPE SHX.

**5B. GYPSUM BOARD\*** --- (AS AN ALTERNATE TO ITEM 5 WHEN USED AS THE BASE LAYER ON ONE OR BOTH SIDES OF WALL, FOR DIRECT ATTACHMENT ONLY, NOT TO BE USED WITH ITEM 3) --- NOM 5/8 IN. THICK LEAD BACKED GYPSUM PANELS WITH BEVELED, SQUARE OR TAPERED EDGES, APPLIED VERTICALLY. VERTICAL JOINTS CENTERED OVER STUDS AND STAGGERED MIN 1 STUD CAVITY ON OPPOSITE SIDES OF STUDS. WALLBOARD SECURED TO STUDS WITH 1-1/4 IN. LONG TYPE S-12 STEEL SCREWS SPACED 8 IN. OC AT PERIMETER AND 12 IN. OC IN THE FIELD.

**RAY-BAR ENGINEERING CORP** --- TYPE RB-LBG

**6. FASTENERS** --- (NOT SHOWN) --- FOR USE WITH ITEM 2 --- TYPE S OR S-12 STEEL SCREWS USED TO ATTACH PANELS TO STUDS (ITEM 2) OR FURRING CHANNELS (ITEM 7A). SINGLE LAYER SYSTEMS: LONG FOR 1/2 AND 5/8 IN. THICK PANELS OR 1-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 8 IN. OC WHEN PANELS ARE APPLIED HORIZONTALLY, OR 8 IN. OC ALONG VERTICAL AND BOTTOM EDGES AND 12 IN. OC IN THE FIELD WHEN PANELS ARE APPLIED VERTICALLY. FIRST LAYER: TWO LAYER SYSTEMS: IN. LONG FOR 1/2 AND 5/8 IN. THICK PANELS OR 1-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 16 IN. OC. SECOND LAYER: 1-5/8 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS OR 2-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 16 IN. OC WITH SCREWS OFFSET 8 IN. FROM FIRST LAYER. THREE-LAYER SYSTEMS: FIRST LAYER: 1 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS, SPACED 24 IN. OC. SECOND LAYER: 1-5/8 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS, SPACED 24 IN. OC. THIRD LAYER: 2-1/4 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS OR 2-5/8 IN. LONG FOR 5/8 IN. THICK PANELS, SPACED 24 IN. OC. FOURTH LAYER: 2-5/8 IN. LONG FOR 1/2 IN. THICK PANELS OR 3 IN. LONG FOR 5/8 IN. THICK PANELS, SPACED 12 IN. OC. SCREWS OFFSET MIN 6 IN. FROM LAYER BELOW.

**6A. FASTENERS** --- (NOT SHOWN) --- FOR USE WITH ITEM 2A --- TYPE S OR S-12 STEEL SCREWS USED TO ATTACH PANELS TO STUDS (ITEM 2) SINGLE LAYER SYSTEMS: 1 IN. LONG FOR 1/2 AND 5/8 IN. THICK PANELS OR 1-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 8-1/2 IN. OC WITH ADDITIONAL SCREWS 1 IN. AND 2-1/2 IN. FROM EDGES OF THE BOARD WHEN PANELS ARE HORIZONTALLY, OR 8 IN. OC ALONG VERTICAL AND BOTTOM EDGES AND 12 IN. OC IN THE FIELD WHEN PANELS ARE APPLIED VERTICALLY. TWO LAYER SYSTEMS APPLIED VERTICALLY: FIRST LAYER: 1 IN. LONG FOR 1/2 AND 5/8 IN. THICK PANELS OR 1-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 16 IN. OC. SECOND LAYER: 1-5/8 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS OR 2-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 16 IN. OC WITH SCREWS OFFSET 8 IN. FROM FIRST LAYER. HORIZONTAL LAYER SYSTEMS APPLIED HORIZONTALLY: FIRST LAYER: 1 IN. LONG FOR 1/2 AND 5/8 IN. THICK PANELS OR 1-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 16 IN. OC STARTING 8 IN. FROM EACH EDGE OF THE BOARD WITH AN ADDITIONAL SCREW PLACED 1-1/4 IN. FROM EACH EDGE OF THE BOARD WITH SCREWS OFFSET 8 IN. FROM FIRST LAYER. SECOND LAYER: 1-5/8 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS OR 2-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 16 IN. OC WITH SCREWS OFFSET 8 IN. FROM FIRST LAYER. BOARD-LAYER SYSTEMS: FIRST LAYER: 1 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS, SPACED 24 IN. OC. SECOND LAYER: 1-5/8 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS OR 2-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 12 IN. OC. THIRD LAYER: 2-1/4 IN. LONG FOR 1/2 IN. THICK PANELS OR 2-5/8 IN. LONG FOR 5/8 IN. THICK PANELS, SPACED 12 IN. OC. SCREWS OFFSET MIN 6 IN. FROM LAYER BELOW. FOR ALL LAYERS, AN ADDITIONAL SCREW SHALL BE PLACED 1-1/4 IN. FROM EACH EDGE OF THE BOARD. BOARD-LAYER SYSTEMS: FIRST LAYER: 1 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS, SPACED 24 IN. OC. SECOND LAYER: 1-5/8 IN. LONG FOR 1/2 IN., 5/8 IN. THICK PANELS OR 2-1/4 IN. LONG FOR 3/4 IN. THICK PANELS, SPACED 12 IN. OC. THIRD LAYER: 2-1/4 IN. LONG FOR 1/2 IN. THICK PANELS OR 2-5/8 IN. LONG FOR 5/8 IN. THICK PANELS, SPACED 12 IN. OC. SCREWS OFFSET MIN 6 IN. FROM LAYER BELOW. FOR ALL LAYERS, AN ADDITIONAL SCREW SHALL BE PLACED 1-1/4 IN. FROM EACH EDGE OF THE BOARD.

**7. FURRING CHANNELS** --- (OPTIONAL, NOT SHOWN, FOR SINGLE OR DOUBLE LAYER SYSTEMS) --- RESILIENT FURRING CHANNELS FABRICATED FROM MIN 25 MSG CORROSION-PROTECTED STEEL, SPACED VERTICALLY A MAX OF 24 IN. OC. FLANGE PORTION ATTACHED TO EACH INTERSECTING STUD WITH 1/2 IN. LONG TYPE S-12 STEEL SCREWS, NOT FOR USE WITH ITEM 5A.

**7A. STEEL FRAMING MEMBERS (NOT SHOWN)\*** --- (OPTIONAL ON ONE OR BOTH SIDES, NOT SHOWN, FOR SINGLE OR DOUBLE LAYER SYSTEMS) --- AS AN ALTERNATE TO ITEM 7, FURRING CHANNELS AND STEEL FRAMING MEMBERS AS DESCRIBED BELOW:

**A. FURRING CHANNELS** --- FORMED OF NO. 25 MSG GALV STEEL 2-3/8 IN. WIDE BY 7/8 IN. DEEP. SPACED MAX 24 IN. OC PERPENDICULAR TO STUDS, CHANNELS SECURED TO STUDS AS DESCRIBED IN ITEM 6. GYPSUM BOARD ATTACHED TO FURRING CHANNELS AS DESCRIBED IN ITEM 6. NOT FOR USE WITH ITEM 5A.

**B. STEEL FRAMING MEMBERS\*** --- USED TO ATTACH FURRING CHANNELS (ITEM 7AA) TO STUDS (ITEM 2). CLIPS SPACED MAX 48 IN. OC. RSIC-1 CLIPS SECURED TO STUDS WITH NO. 8 X 1-1/2 IN. MINIMUM SELF-DRILLING, S-12 STEEL SCREW THROUGH THE CENTER GROMMET. RSIC-V CLIPS SECURED TO STUDS WITH NO. 8 X 5/16 IN. MINIMUM SELF-DRILLING, S-12 STEEL SCREW THROUGH THE CENTER HOLE. FURRING CHANNELS ARE FRICTION FITTED INTO CLIPS.

**PAC INTERNATIONAL INC** --- TYPES RSIC-1, RSIC-V.

**7B. STEEL FRAMING MEMBERS (OPTIONAL, NOT SHOWN)\*** --- CHANNELS AND STEEL FRAMING MEMBERS ON ONLY ONE SIDE OF STUDS AS DESCRIBED BELOW:

**A. FURRING CHANNELS** --- FORMED OF NO. 25 MSG GALV STEEL, SPACED 24 IN. OC PERPENDICULAR TO STUDS, CHANNELS SECURED TO STUDS AS DESCRIBED IN ITEM 6. BATTS AND BLANKETS PLACED IN STUD CAVITY AS DESCRIBED IN ITEM 5. TWO LAYERS OF GYPSUM BOARD ATTACHED TO FURRING CHANNELS AS DESCRIBED IN ITEM 5. NOT FOR USE WITH ITEM 5A.

**B. STEEL FRAMING MEMBERS\*** --- USED TO ATTACH FURRING CHANNELS (ITEM 7BA) TO ONE SIDE OF STUDS (ITEM 2) ONLY. CLIPS SPACED 48 IN. OC, AND SECURED TO STUDS WITH TWO NO. 8 X 2-1/2 IN. COARSE DRYWALL SCREWS, ONE THROUGH THE HOLE AT EACH END OF THE CLIP. FURRING CHANNELS ARE FRICTION FITTED INTO CLIPS.

**KINETICS NOISE CONTROL INC** --- TYPE ISMAY

**8. JOINT TAPE AND COMPOUND** --- VINYL OR CASEIN, DRY OR PREMIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS AND SCREW HEADS OF OUTER LAYERS, PAPER TAPE, NOM 2 IN. WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS OF OUTER LAYER PANELS. PAPER TAPE AND JOINT COMPOUND MAY BE OMITTED WHEN GYPSUM PANELS ARE SUPPLIED WITH A SQUARE EDGE.

**9. SIDING, BRICK OR STUCCO** --- (OPTIONAL, NOT SHOWN) --- ALUMINUM, VINYL OR STEEL SIDING, BRICK VENEER OR STUCCO, MEETING THE REQUIREMENTS OF LOCAL CODE AGENCIES, INSTALLED OVER GYPSUM PANELS. BRICK VENEER ATTACHED TO STUDS WITH CORRUGATED METAL WALL TIES ATTACHED TO EACH STUD WITH STEEL SCREWS, NOT MORE THAN EACH SIXTH COURSE OF BRICK.

**10. CAULKING AND SEALANTS\*** --- (OPTIONAL, NOT SHOWN) --- A BEAD OF ACOUSTICAL SEALANT APPLIED AROUND THE PARTITION PERIMETER FOR SOUND CONTROL.

**UNITED STATES GYPSUM CO** --- TYPE AS

**11. LEAD BATTEN STRIPS** --- (NOT SHOWN, FOR USE WITH ITEM 5B) --- LEAD BATTEN STRIPS, MIN 1-1/2 IN. WIDE, MAX 10 FT LONG WITH A MAX THICKNESS OF 0.125 IN. STRIPS PLACED ON THE INTERIOR FACE OF STUDS AND ATTACHED FROM THE EXTERIOR FACE OF THE STUD WITH TWO 1 IN. LONG TYPE S-12 PAN HEAD STEEL SCREWS, ONE AT THE TOP OF THE STRIP AND ONE AT THE BOTTOM OF THE STRIP. LEAD BATTEN STRIPS TO HAVE A PURITY OF 99.9 QQ-L-201F, GRADE "C". LEAD BATTEN STRIPS REQUIRED BEHIND VERTICAL JOINTS OF LEAD BACKED GYPSUM WALLBOARD (ITEM 5B) AND OPTIONAL AT REMAINING STUD LOCATIONS. REQUIRED BEHIND VERTICAL JOINTS.

**12. LEAD DISCS OR TABS** --- (NOT SHOWN, FOR USE WITH ITEM 5B) --- USED IN LIEU OF OR IN ADDITION TO THE LEAD BATTEN STRIPS (ITEM 11) OR OPTIONAL AT OTHER LOCATIONS --- MAX 3/4 IN. DIAM BY MAX 0.125 IN. THICK LEAD DISCS COMPRESSION FITTED OR ADHERED OVER STEEL SCREW HEADS OR MAX 1/2 IN. BY 1-1/4 IN. THICK LEAD TABS PLACED ON GYPSUM BOARDS (ITEM 5B) UNDERNEATH SCREW LOCATIONS PRIOR TO THE INSTALLATION OF THE SCREWS. LEAD DISCS OR TABS TO HAVE A PURITY OF 99.9 MEETING THE FEDERAL SPECIFICATION QQ-L-201F, GRADE "C".

\*BEARING THE UL CLASSIFICATION MARK



13 December 2024  
 DESIGNED / CHECKED BY: B. JENKINS  
 DRAWN BY: MAW  
 PROJECT #: 2024-08-09  
 DATE: 13 DEC 24

FINAL DRAWING [ ] FOR REVIEW PURPOSES ONLY  
 PRELIMINARY [ ] FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING [ ] FOR CONSTRUCTION  
 OWNER/TELEANT: \_\_\_\_\_  
 CONTRACTOR/BUILDER: \_\_\_\_\_

PROJECT: LEVEL II ALTERATION: BUILDING SHELL SPACES  
 185 MITTIE HADDOCK DRIVE  
 CAMERON, NC, 28326  
 SHEET: UL DETAIL U-419 (1-HOUR)  
 G7



**GENERAL NOTES:**

ALL WORK SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA MECHANICAL CODE 2018 EDITION, ASHRAE, SMACNA, AND NFPA.

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

THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS AND ROUTING OF ALL DUCTWORK, PIPING, AND EQUIPMENT WITH OTHER TRADES TO AVOID CONFLICT.

THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION OF THE MECHANICAL SYSTEMS AND REVIEW ANY CONFLICTS WITH THE GENERAL CONTRACTOR.

THE MECHANICAL 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 MECHANICAL CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF ALL PENETRATIONS (PERTAINING TO HIS WORK) THROUGH THE ROOF, WALLS, FLOORS WITH THE GENERAL CONTRACTOR. ANY WATERPROOFING AROUND THE OPENINGS TO BE COMPLETED BY THE GENERAL CONTRACTOR.

THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL HIS OWN SUPPORT DEVICES. ALL LOCATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS PRIOR TO INSTALLATION. ALL PLATFORMS AND WALKWAYS IN ATTIC SPACES ARE PROVIDED BY THE GENERAL CONTRACTOR. THE MECHANICAL CONTRACTOR TO COORDINATE THE LOCATION AND DIMENSIONS OF ALL PLATFORMS IN THE ATTIC WITH THE GENERAL CONTRACTOR.

ALL EQUIPMENT HAVING ROTATING OR MOVING PARTS SHALL HAVE VIBRATION ISOLATORS TO ELIMINATE TRANSMISSION OF OBJECTIONABLE NOISE TO OTHER MATERIAL OR EQUIPMENT.

WHERE OUTSIDE AIR INTAKE DUCTWORK CONNECTS TO OUTSIDE AIR LOUVER, THE INSIDE FACE OF THE DUCTWORK SHALL BE PRIMED AND PAINTED WITH (2) TWO COATS OF FLAT BLACK TO PREVENT DUCTWORK FROM BEING VISIBLE.

THE MECHANICAL CONTRACTOR SHALL PROVIDE NAMEPLATES FOR IDENTIFICATION OF ALL EQUIPMENT. THE NAMEPLATES SHALL BE LAMINATED PHENOLIC PLASTIC, BLACK FRONT AND BACK WITH WHITE CORE, WHITE ENGRAVED LETTERS (1/4 INCH MINIMUM) ETCHED INTO THE WHITE CORE. NAME TAGS TO BE MOUNTED WITH SELF-TAPPING SHEET METAL SCREWS.

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.

THE MECHANICAL CONTRACTOR SHALL CLEAN ALL OF HIS EQUIPMENT PRIOR TO FINAL CLOSE OUT OF THIS PROJECT TO BE FREE OF ANY DIRT OR DEBRIS IN DRAIN PANS, CONDENSATE DRAINS, CONDENSING UNIT COILS, AND ETC.

ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.

PROVIDE EQUIPMENT SUPPORT PAD FOR ALL BASE MOUNTED EQUIPMENT. PAD SHALL BE 4" HIGH OR PREFABRICATED CONCRETE PAD FOR ALL CONDENSING UNITS, AND PACKAGE UNITS, 4" MINIMUM FROM EQUIPMENT EDGE TO END OF PAD ON ALL SIDES.

THE MECHANICAL CONTRACTOR SHALL CONFIRM ALL BREAKER AND DISCONNECT SIZES OF HIS EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING ANY EQUIPMENT FOR THIS PROJECT.

CONDENSATE DRAINS SHALL BE A MINIMUM OF 3/4" Ø PVC PIPE. A P-TRAP SHALL BE INSTALLED IN PIPE AT THE UNIT. ALL CONDENSATE LINES SHALL BE ROUTED AS INDICATED ON PLANS.

INSTALL FLEXIBLE DUCT CONNECTION AT SUPPLY AND RETURN DUCTWORK CONNECTIONS TO ALL AIR HANDLING UNITS, FAN BOXES, ETC.

**DUCTWORK NOTES:**

ALL DUCTWORK, PIPING, EQUIPMENT, ETC. SHALL BE SUPPORTED FROM THE BUILDING SUPPORT STRUCTURE AND NOT THE ROOF.

ALL DUCT LAYOUT AND LOCATIONS ARE SHOWN DIAGRAMMATIC. THE MECHANICAL CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE BUILDING CONDITIONS AND COORDINATE THE DUCT LAYOUT WITH ALL CONTRACTORS PRIOR TO INSTALLATION.

ALL DUCTWORK SHALL BE CONSTRUCTED OF SHEET METAL IN ACCORDANCE WITH ASHRAE & SMACNA. DUCT SIZES SHOWN ARE NET FREE AREA REQUIRED.

VOLUME OR SPLITTER DAMPERS SHALL BE INSTALLED WHERE NECESSARY TO GUIDE AND CONTROL THE AIR FLOW. TURNING VANES ARE REQUIRED IN ALL ELBOWS AND AIR DEFLECTION DEVICES WILL BE INSTALLED WHERE REQUIRED FOR A BALANCED SYSTEM. PROVIDE SHEET METAL SLEEVES AND COLLARS WHERE DUCTS PASS THRU WALLS.

ALL DUCTS SHALL BE AIR TIGHT, RIGID AND FREE FROM VIBRATION AND NOISE. ALL LAP JOINTS SHALL BE IN THE DIRECTION OF FLOW AND SEALED WITH DUCT SEALER. ALL TAPES AND MASTICS USED SHALL LISTED WITH UL181A AND SHALL BE MARKED. (NMGCM (603.9) & NCECC (C403.2.9))

FLEXIBLE DUCT RUNS SHALL NOT EXCEED 12'-0" IN LENGTH. FLEXIBLE DUCT SHALL BE SUPPORTED EVERY 5'-0". MAXIMUM SAG IS A 1/2 INCH PER FOOT OF SPACING BETWEEN SUPPORTS. SADDLE MATERIAL IN CONTACT WITH THE FLEXIBLE DUCT SHALL BE WIDE ENOUGH SO THAT IT DOES NOT REDUCE THE INTERNAL DIAMETER OF THE DUCT. THE SADDLE MUST COVER ONE-HALF THE CIRCUMFERENCE OF THE OUTSIDE DIAMETER OF THE FLEXIBLE DUCT AND FIT NEATLY AROUND THE LOWER HALF OF THE DUCT'S OUTER CIRCUMFERENCE.

PROVIDE PERMANENT MANUAL DAMPERS IN ALL SUPPLY AND RETURN AIR DUCTS AT THE MAIN TRUNK LINE FOR SYSTEM BALANCING. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR BALANCING THE AIR DISTRIBUTION SYSTEM AFTER THE SYSTEM HAS BEEN INSTALLED AND EQUIPMENT IS OPERATING. MANUAL DAMPERS ARE REQUIRED TO BE INSTALLED IN THE RETURN AIR DUCT IF THE DUCT IS RETURNING AIR FROM INDIVIDUAL ROOMS. MANUAL DAMPERS ARE NOT REQUIRED IF THE DUCT IS RETURNING AIR FROM CENTRALLY LOCATED FILTER/RETURN GRILLES.

THE OUTSIDE AIR INTAKE DUCTWORK SHALL BE HARD ROUND DUCT, FLEXIBLE DUCT WILL NOT BE ACCEPTED. SEE PLAN FOR DUCT SIZE.

ALL OUTSIDE AIR INTAKE DUCTS SHALL HAVE A FILTER BOX TO HOUSE A MINIMUM OF 16 IN. X 20 IN. X 2 IN. THICK FILTER, U.N.O. AT EACH AIR HANDLING UNIT EITHER IN THE ATTIC OR CRAWL SPACE. THE FILTER BOX SHALL HAVE A HINGED DOOR THAT IS GASKETED TO MAINTAIN A AIRTIGHT SEAL WITH A THUMBSCREW TO ACCESS THE FILTER.

THE OUTSIDE AIR FILTER SHALL BE THE HI-E 40 AS MANUFACTURED BY PURULATOR PRODUCTS AIR FILTRATION COMPANY, OR APPROVED EQUAL AIR FILTER SHALL BE (2) TWO INCHES DEEP, MEDIUM EFFICIENCY, PLEATED MEDIA, DISPOSABLE PANEL TYPE. THE FILTER MEDIA SHALL BE SELF-EXTINGUISHING NON-WOVEN COTTON AND SYNTHETIC FIBERS. THE FILTER MEDIA SHALL BE BONDED TO A 28-GAUGE CORROSION RESISTANT, EXPANDED METAL SUPPORT GRID WITH A 95% OPEN FACE AREA.

**DUCT/PIPING INSULATION NOTES:**

ALL SUPPLY AND RETURN AIR DUCTS SHALL BE INSULATED WITH MIN. R-6.0 INSULATION UNLESS NOTED OTHERWISE IN THE DRAWING. NCECC (C403.2.9) ACCEPTABLE MANUFACTURERS ARE JOHNSON MANVILLE.

LIQUID AND SUCTION PIPING TO AND FROM AIR HANDLING UNITS SHALL BE INSULATED WITH 1-1/2" THICK PIPE INSULATION IN ACCORDANCE WITH NCECC TABLE (C403.2.10).

ALL FLEXIBLE DUCT REQUIRING INSULATION SHALL HAVE A VALUE OF AT LEAST R-5.0. THE FLEXIBLE DUCT SHALL BE ATCO RUBBER PRODUCTS, INC. UPC NO. 036 OR APPROVED EQUAL WITH A REINFORCED METALLIZED POLYESTER JACKET. THE INNER CORE IS AIRTIGHT AND IS DESIGNED FOR LOW TO MEDIUM OPERATING PRESSURES IN HVAC SYSTEMS. AIR DUCT CONNECTIONS AND JOINTS SHALL BE MADE PER INSTALLATION INSTRUCTIONS OUTLINED BY ATCO.

OUTSIDE AIR INTAKE DUCTWORK AND EXHAUST DUCTWORK IS TO BE UNINSULATED.

**DESCRIPTION AND SEQUENCE OF OPERATION OF HVAC SYSTEM**

THE HVAC SYSTEM CONSISTS OF:

(1) EXISTING 5.0 TON PACKAGE HEAT PUMP WHICH PROVIDE COOLING/HEATING/VENTILATION TO RENOVATION AREA AND EXISTING TENANT SPACE AN EXISTING 3 TON SPLIT SYSTEM WILL BE RELOCATED INTO THE SPACE AND WILL NOT BE UTILIZED FOR THIS PROJECT PER LANDLORD REQUIREMENTS. IT WILL BE FOR FUTURE USE BY A FUTURE TENANT..

**OCCUPIED OPERATION**

EXISTING RTU-5 TO SERVE TENANT SPACE AS PRESENTLY INSTALLED. THE ADDITIONAL AHU-1 TO BE ROUTED TO SUPPLY CONDITIONING TO RENOVATED AREA UPON NEW TENANT UPFIT. THE SUPPLY FANS SHALL RUN CONTINUOUSLY TO PROVIDE THE REQUIRED VENTILATION RATE. IN THE COOLING MODE, A RISE IN TEMPERATURE BEYOND SET POINT OF PROGRAMMABLE T-STAT WILL RESULT IN ACTIVATION OF DX COOLING CYCLE UNTIL DESIRED TEMPERATURE IS REACHED. IN HEATING MODE, A SIGNAL FROM T-STAT WILL ACTIVATE THE HEAT PUMP TO DELIVER HEATING TO SPACES. IF OUTSIDE TEMPERATURE FALLS BELOW SET POINT, HEAT STRIPS WILL ACTIVATE TO BRING TEMPERATURE TO DESIRED SET POINT AT WHICH TIME THE HEAT STRIPS WILL TURN OFF AND HEAT PUMP SHALL BE USED TO MAINTAIN DESIRED SPACE TEMPERATURE.

PROVIDE HEAT STRIP LOCKOUT CONTROLS TO PREVENT HEAT STRIP OPERATION BETWEEN 35F AND 40F PER ENERGY CODE PARAGRAPH 503.2.4.1.1.

**UNOCCUPIED OPERATION**

THE SUPPLY FAN OF EACH UNIT SHALL BE INDEXED OFF AND MOTORIZED OUTSIDE AIR DAMPER SHALL BE CLOSED. PROGRAMMABLE THERMOSTATS SHALL PROVIDE CONTROL OF EACH UNIT.

**EXHAUST FAN OPERATION**

THE RESTROOM EXHAUST FANS EF-1 SHALL BE SWITCHED WITH LIGHTING FOR TOILET.

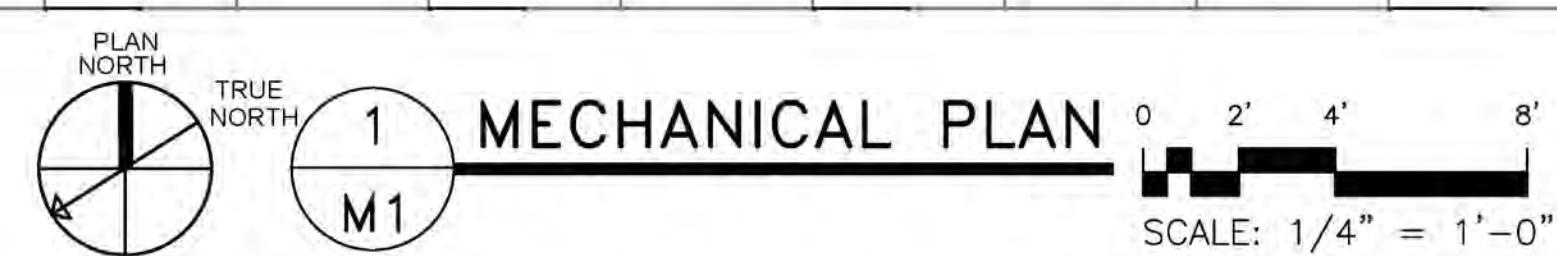
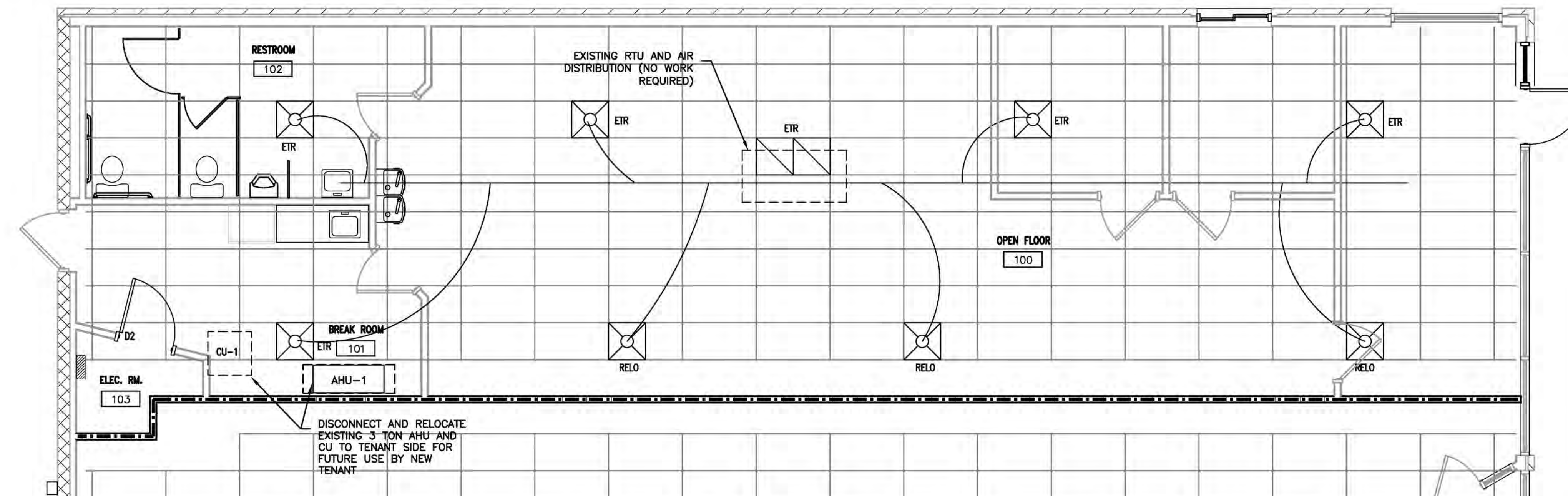
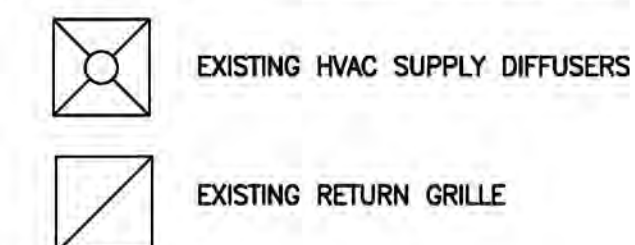
**OUTSIDE AIR CALCULATION**

OCCUPANCY TYPE:		BUSINESS
ACTUAL NUMBER OF OCCUPANTS (Pz)		18 PEOPLE
NET SQUARE FOOTAGE OF HEATED BUILDING: (Az)		1517 SQ/FT
<b>BUILDING EXHAUST REQUIREMENTS</b>		
TOILET EXHAUST REQUIRED (3 FLUSHING FIXTURES * 75 CFM EACH))		225 CFM
TOTAL BUILDING EXHAUST AIR REQUIRED		225 CFM
<b>BUILDING &amp; PEOPLE VENTILATION REQUIREMENTS</b>		
BUILDING VENTILATION (Az*Ra) (1517 * 0.06)		91 CFM
PEOPLE * 5 CFM TABLE 403.3.1.1: 2018 NC MECH CODE		90 CFM
PEOPLE (Pz*Rp) 18 PEOPLE * 5 CFM/PERSON		90 CFM
OUTSIDE AIR SUB-TOTAL		181 CFM
OUTSIDE AIR REQUIRED = 181 / 0.80 (EFFECTIVENESS)		226 CFM
<b>BUILDING EXHAUST PROVIDED</b>		
EF-1		
225 CFM		225 CFM
<b>OUTSIDE AIR PROVIDED</b>		
EXIST. RTU 5-TON UNIT		TOTAL
226 CFM		226 CFM

IT IS THE PURPOSE OF THESE DRAWINGS TO SHOW THE INTENT OF THIS SYSTEM DESIGN. EVERY EFFORT HAS BEEN MADE TO ACCURATELY SHOW EXISTING CONDITIONS- ANY DEVIATION TO THESE DRAWINGS UNCOVERED DURING NEW CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF GENERAL CONTRACTOR OR ENGINEER BEFORE ALTERING THIS DESIGN.

**MECHANICAL SCOPE OF WORK:**  
TENANT SPACE HAS ONE (1) EXISTING 5 TON RTU INSTALLED AND NO WORK IS REQUIRED. AN EXISTING 3 TON SPLIT SYSTEM WILL BE RELOCATED TO THE TENANT SIDE AND WILL NOT BE CONNECTED FOR THIS PROJECT. IT WILL BE UTILIZED FOR A FUTURE TENANT.

**EXISTING MECHANICAL SYMBOLS:**



THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS

Drawing File: \\A3204\CVS\Draws\A3204\Draws\Mech\25042024\A3204-M1.dwg  
 Drawing Title: MECHANICAL PLAN  
 Drawing Date: 12/13/2024 10:58:29 AM  
 Scale: 1/4" = 1'-0"

**B. JENKINS**  
CONSULTING ENGINEERS, PA.  
OFFICE IN EUREKA SPRINGS, NORTH CAROLINA  
1606 MARTINBURD RD. FAYETTEVILLE, NC 28411-1022  
NORTH CAROLINA LICENSE NUMBER: 05879  
OFFICE #9103221724

13 December 2024

DESIGNED / CHECKED BY:	B. JENKINS	MAW
DRAWN BY:		
PROJECT #:	2024-08-09	
DATE:	13 DEC 24	

FINAL DRAWING <input type="checkbox"/> FOR REVIEW PURPOSES ONLY	OWNER/TENANT:
PRELIMINARY <input type="checkbox"/> FOR DESIGN DEVELOPMENT ONLY	CONTRACTOR/BUILDER:
FINAL DRAWING <input checked="" type="checkbox"/> FOR CONSTRUCTION	

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
CAMERON, NC - 28326  
185 MITTIE HADDOCK DRIVE

SHEET: **MECHANICAL - HVAC PLAN/NOTES/SCHEDULES**

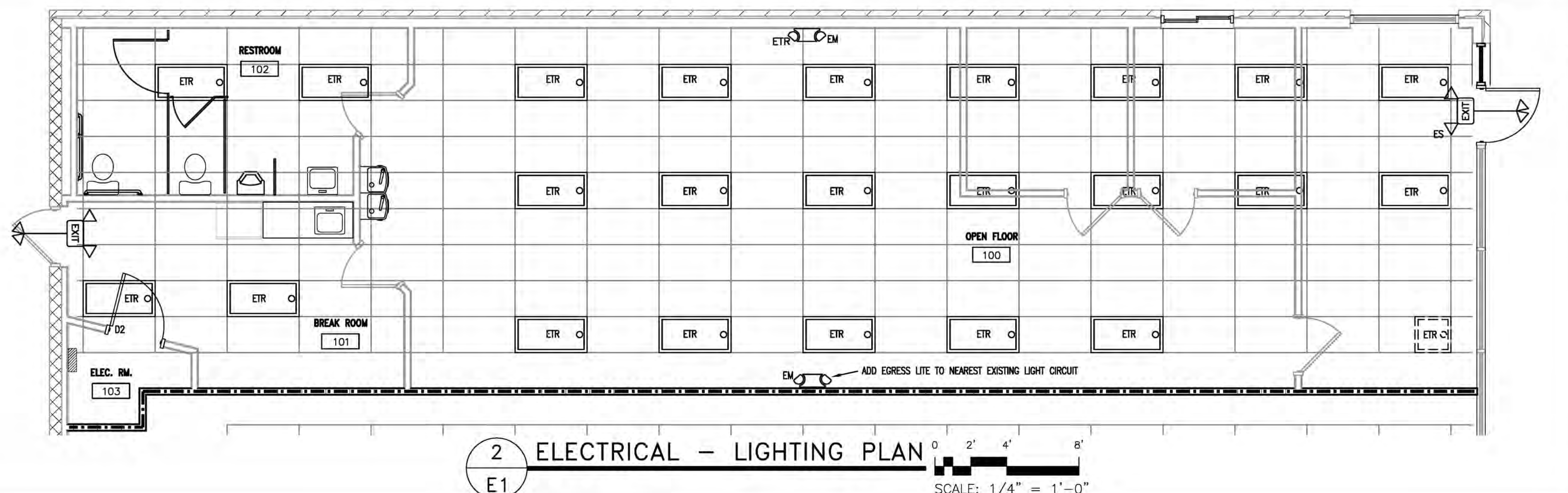
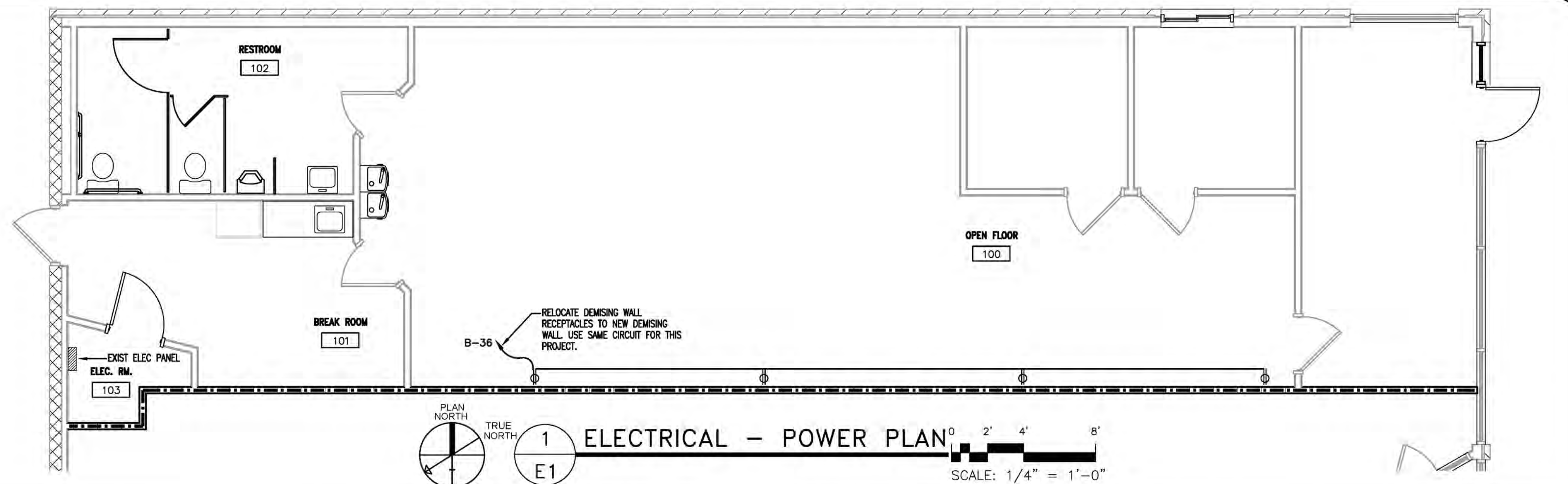
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Drawing Title: ALTERNATION: BUILDING SHELL SPACES  
 Drawing No.: 2024-08-09  
 Project No.: 2024-08-09  
 Scale: 1/8" = 1'-0"

**ELECTRICAL NOTES:**

- ALL WORK SHALL BE IN ACCORDANCE WITH 2020 NEC.
- WIRE AND CABLE SHALL BE INSULATED, TYPE THHN, 600 VOLTS, WITH COPPER CONDUCTORS. CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTOR SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED.
- ROMEX CANNOT BE USED IN THIS PROJECT.
- FMT 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. MC CABLE MAY BE SUBSTITUTED FOR CONDUIT RACKWAYS WHERE PERMITTED BY THE CODE, AND APPROVED BY OWNER.
- PLASTIC CONDUIT SHALL BE RIGID, 3/4-INCH MINIMUM, NONMETALLIC, HEAVY DUTY, POLYVINYLCHLORIDE (PVC), TYPE 1 WILL BE USED FOR CONCRETE ENCASUREMENT. 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 OF 72 INCHES FOR LIGHTING, AND 36 INCHES FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUID TIGHT OR WATER TIGHT WITH PVC JACKET WHERE USED IN DAMP, WET, OR OUTSIDE AREAS, AND LIQUID TIGHT OR WATER TIGHT CONNECTORS SHALL BE USED.
- NO RECEPTACLES OR TELEPHONE OUTLETS ARE TO BE MOUNTED BACK TO BACK. KEEP AT LEAST 1 1/2 INCHES BETWEEN RECEPTACLES AND TELEPHONE OUTLETS.
- ALL RECEPTACLES WITHIN THE FOLLOWING COMMERCIAL SPACES SHALL BE TAMPER RESISTANT PER 2020 NEC 406.12: MOTEL, GUEST/SUITE ROOMS, CHILD CARE FACILITIES, PRESCHOOLS AND ELEMENTARY EDUCATION FACILITIES, BUSINESS OFFICES, CORRIDORS, WAITING ROOMS AND THE LIKE AT (CLINICS, MEDICAL AND DENTAL OFFICES, AND OUTPATIENT FACILITIES), SUBSET OF ASSEMBLY OCCUPANCIES DESCRIBED 518.2 TO INCLUDE PLACES OF WAITING, TRANSPORTATION, GYMNASIUMS, SKATING RINKS, AND AUDITORIUMS, AND DORMITORIES.
- ALL CONDUCTORS SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA REQUIREMENTS.
- THE ELECTRICAL CONTRACTOR SHALL ALIGN ALL FIXTURES, SMOKE DETECTORS, CEILING DIFFUSERS, ETC. AS REQUIRED TO PROVIDE A UNIFORM PRESENTATION. FOLLOW THE REFLECTED CEILING PLAN IF PROVIDED.
- CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS, FIXTURES, CONDUIT, AND ETC. FOR THIS PROJECT, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA FOR THE EQUIPMENT THAT WILL BE ACTUALLY INSTALLED. RECOMPUTE WIRE AND BREAKER SIZES IF REQUIRED BY THE NEC.
- THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE GENERAL CONTRACTOR AND OWNER PRIOR TO INSTALLATION FOR USE WITH ACTUAL EQUIPMENT.
- ALL LIGHT SWITCHES, RECEPTACLES, WALL PLATES, TELEPHONE/COMPUTER OUTLET BOXES, AND CABLE OUTLET BOXES SHALL BE WHITE.
- EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED IN HIS CONTRACT AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE ELECTRICAL CONTRACTORS EXPENSE.
- THE ELECTRICAL CONTRACTOR SHALL REFER TO THE DRAWINGS FOR FLOOR PLAN AND BUILDING ELEVATION DIMENSIONS.
- THE ELECTRICAL 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 ELECTRICAL CONTRACTOR TO ORGANIZE HIS CONDUIT, WIRE, AND CABLE RUNS IN ATTIC SPACES AND ABOVE CEILINGS, MAKE RUNS PARALLEL, PERPENDICULAR, AND GROUPED TOGETHER WHERE POSSIBLE. LOCATE MAJOR GROUPINGS OVER HALLWAYS AND AREAS OF PUBLIC ACCESS. FREE RUNS OF PHONE, TELEVISION, SECURITY, ALARM, AND OTHER CABLES IS NOT ACCEPTABLE.
- ALL DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT, KITCHEN EQUIPMENT, AND ETC. SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.
- WHERE EQUIPMENT PENETRATES EXTERIOR WALLS OR ROOF, THEY SHALL BE PROPERLY SEALED.
- EXHAUST FANS ARE TO BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR AND ELECTRICAL WIRING BY THE ELECTRICAL CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE NAMEPLATES FOR IDENTIFICATION OF ALL EQUIPMENT, SWITCHES, PANELS, ETC. THE NAMEPLATES SHALL BE LAMINATED PHENOLIC PLASTIC, BLACK FRONT AND BACK WITH WHITE CORE, WHITE ENGRAVED LETTERS (1/4 INCH MINIMUM) ETCHED INTO THE WHITE CORE. NAME TAGS TO BE MOUNTED WITH SELF-TAPPING SHEET METAL SCREWS.
- THE ELECTRICAL CONTRACTOR IS NOT TO SCALE THE DRAWINGS FOR RECEPTACLES AND LIGHT FIXTURES TO BE INSTALLED. THE DRAWINGS ARE FOR DIAGNOSTIC PURPOSES ONLY TO SHOW GENERAL LOCATION. THE ELECTRICAL CONTRACTOR TO COORDINATE EXACT LOCATION OF RECEPTACLES AND LIGHT FIXTURES WITH THE GENERAL CONTRACTOR AND/OR CASEWORK DRAWINGS.
- ALL LIGHT SWITCHES AND RECEPTACLES SHALL BE RATED FOR 20 AMP UNLESS NOTED OTHERWISE.



EXISTING PANEL "B"											
PHASE LOADING			DESCRIPTION	CKT. TYPE	WIRE SIZE	CKT. BKRS. TRIP	CKT. NO.	PHASE LOADING			
A	B	C						A	B	C	
9.6			RTU 5-TON	H	#2	90/3	1				
	9.6		LIGHTS	C	#12	20/1	3				
		9.6	LIGHTING	C	#12	20/1	5				
0.72			LIGHTS	C	#12	20/1	7				
	0.90		LIGHTING	C	#12	20/1	9				
		1.80	LIGHTING	C	#12	20/1	11				
1.80			LIGHTING	C	#12	20/1	13				
	1.80		LIGHTING	C	#12	20/1	15				
		1.00	LIGHTING	C	#12	20/1	17				
0.36			LIGHTING	C	#12	20/1	19				
	0.54		LIGHTING	C	#12	20/1	21				
		1.80	LIGHTING	C	#12	20/1	23				
1.00			LIGHTING	C	#12	20/1	25				
	1.00		LIGHTING	C	#12	20/1	27				
		1.00	LIGHTING	C	#12	20/1	29				
0.49			BATH GFI	R	#12	20/1	31				
	0.49		BATH GFI	R	#12	20/1	33				
		0.39	LOAD	R	#12	20/1	35				
			SPACE				37				
	3.48		AHU-1 W/ SKW HEAT STRIPS	N	#8	30/2	39				
		3.48					41				
13.9	17.8	19.1	SUB-TOTAL (VA)						7.88	5.88	5.60
C CONTINUOUS LOAD			E ESTIMATED LOAD			TOTAL CONNECTED LOAD = 70.16 KVA AMPS = 195					
H HVAC LOAD						TOTAL OF 42 SPACES					
N NON-CONTINUOUS LOAD											
R RECEPTACLE LOAD											
K KITCHEN LOAD											

PHASE 3 WIRE 4 VOLTS 120/208 MAIN 200 MLO  
 TYPE NEMA 1 MOUNTING FLUSH ENCLOSURE  
 SHORT CKT. RATING 22,000 RMS SYM.  
 GROUND TERMINAL BAR  NEUTRAL TERMINAL BAR

IT IS THE PURPOSE OF THESE DRAWINGS TO SHOW THE INTENT OF THIS SYSTEM DESIGN. EVERY EFFORT HAS BEEN MADE TO ACCURATELY SHOW EXISTING CONDITIONS—ANY DEVIATION TO THESE DRAWINGS UNCOVERED DURING NEW CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF GENERAL CONTRACTOR OR ENGINEER BEFORE ALTERING THIS DESIGN.

**ELECTRICAL SCOPE OF WORK:**  
 TENANT SPACE DOES NOT REQUIRE ANY LIGHTING WORK FOR THIS PROJECT. A NEW DEMISING WALL WILL BE INSTALLED WITH NEW RECEPTACLES. WILL UTILIZE EXISTING DEMISING WALL CIRCUIT FOR NEW RECEPTACLES.

ELECTRICAL LEGEND	
	DUPLEX RECEPTACLE; MOUNT AT 18" A.F.F. UNLESS NOTED OTHERWISE
	SINGLE POLE POWER/LIGHTING HOMERUN
	POWER PANEL (EXISTING)
	LAY-IN/SURFACE MOUNTED LED (EXISTING)
	2x4 LAY-IN LED (EXISTING)
	EMERGENCY LIGHT (MARKED EM)
	EMERGENCY EXIT SIGN WITH REMOTE HEADS (MARKED EX)

**BJENKINS CONSULTING ENGINEERS, PA.**

OFFICE IN EUREKA SPRINGS, NORTH CAROLINA  
 10087 AVONHURST RD., EUREKA SPRINGS, NC 28711-1008  
 NORTH CAROLINA LICENSE NUMBER: 10087  
 OFFICE # 910.522.1724

13 December 2024

DESIGNED / CHECKED BY: B. JENKINS  
 DRAWN BY: MAW  
 PROJECT #: 2024-08-09  
 DATE: 13 DEC 24

FINAL DRAWING  FOR REVIEW PURPOSES ONLY  
 PRELIMINARY  FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING  FOR CONSTRUCTION

OWNER/TENANT:  
 CONTRACTOR/BUILDER:

**PROJECT:** LEVEL II ALTERATION: BUILDING SHELL SPACES  
**ADDRESS:** 185 MITTIE HADDOCK DRIVE  
**CITY:** CAMERON, NC, 28326

**ELECTRICAL - POWER/LIGHTING/SCHEDULE/NOTES**

E1

THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS



**PLUMBING GENERAL NOTES:**

PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE 2018 NORTH CAROLINA PLUMBING CODE 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. PEX PIPING MAY BE USED WITH OWNERS APPROVAL.

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/ARMAKOK 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 2018 NORTH CAROLINA PLUMBING CODE 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.

**PLUMBING FIXTURE SCHEDULE**

SYMBOL	MANUFACTURER	MODEL #	FIXTURE DESCRIPTION	FIXTURE MOUNTING	ACCESSORIES	SUPPLY	WASTE	VENT	ELECTRICAL	REMARKS
P1	OLD CASTLE	577-SA	PRE-CAST CONCRETE GREASE TRAP	IN-GROUND	-		4"	2"		①②

- ① PRE-CAST CONCRETE
- ② NON-TRAFFIC RATED

**GREASE INTERCEPTOR CALCULATIONS**

Project Name: Pizza Hut - CBI

Step 1: Flow rate to grease interceptor  
 Fixture flow rate: (cu in / 231) = gal x 0.75 / 2 min = 2 min flow rate

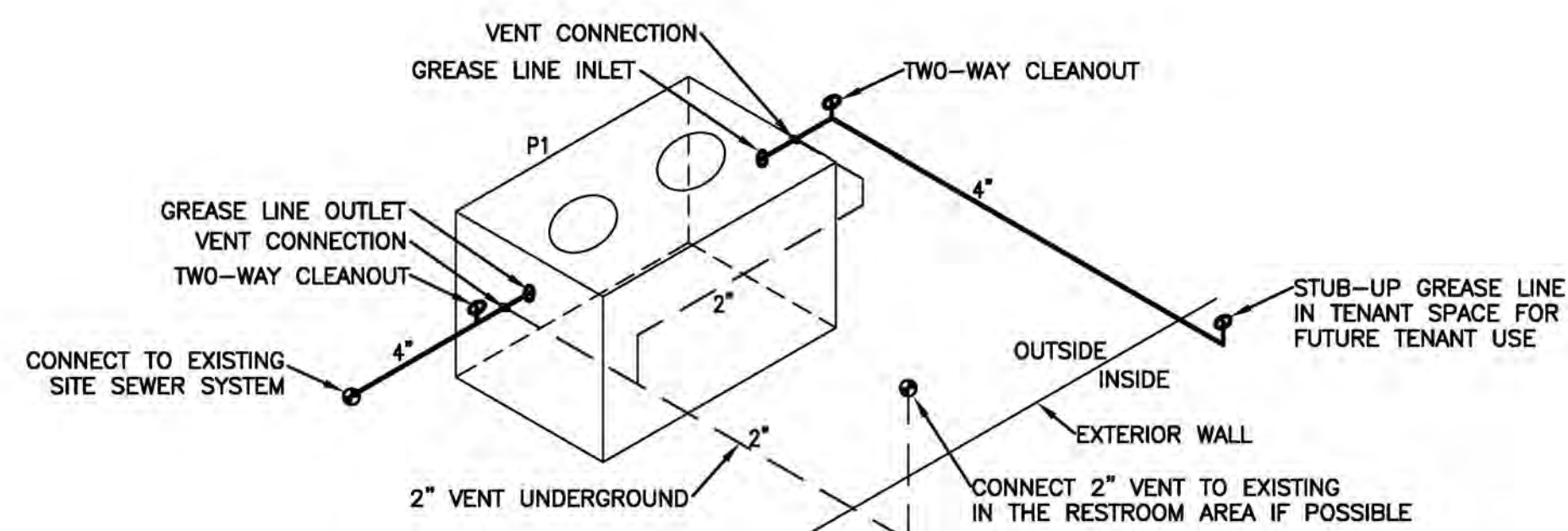
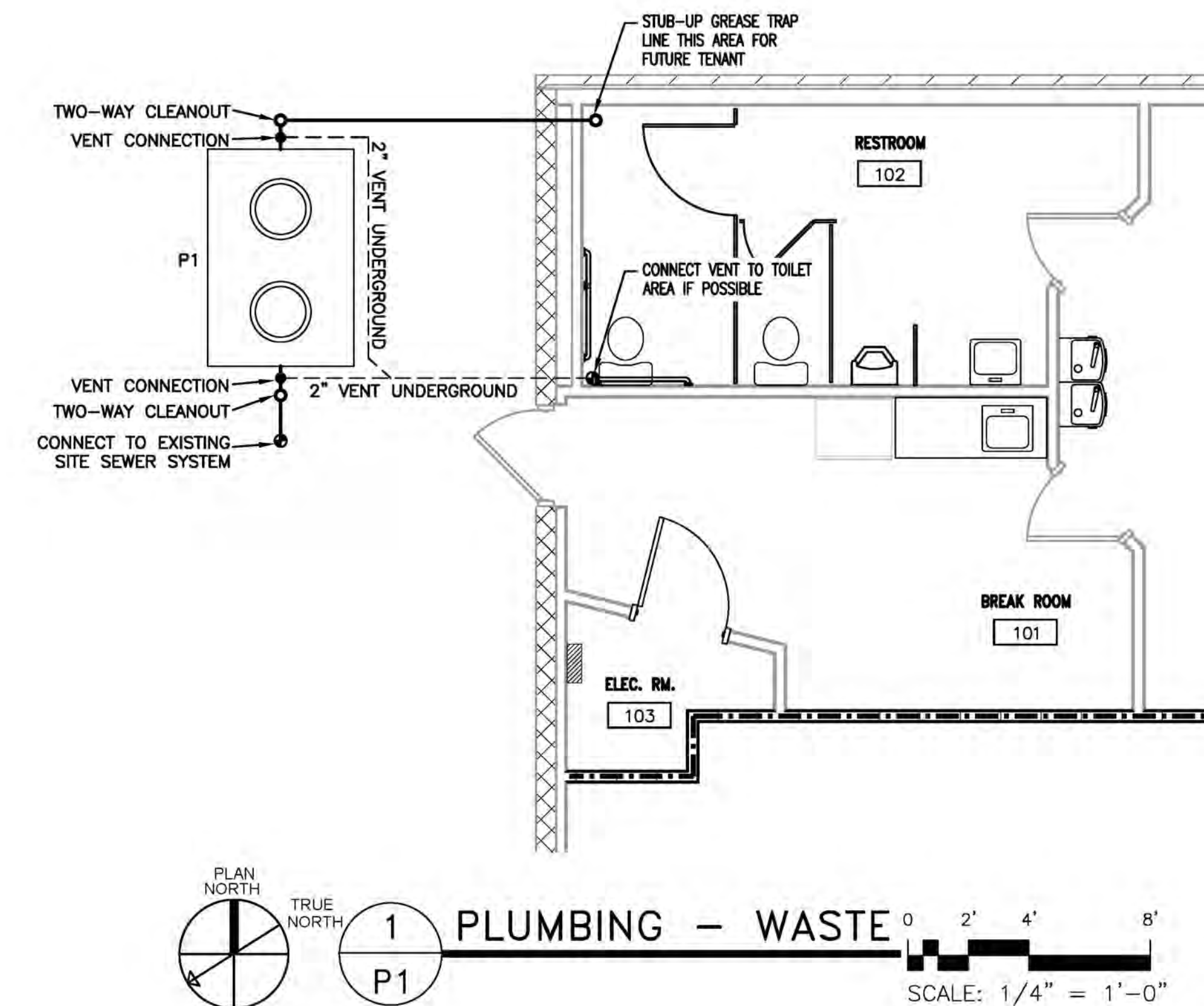
NAME	TYPE	DIMENSIONS	QTY	CU IN	FLOW RATE
3 Compartment Sink	3 Compartment Sink	21" x 21" x 14" (3)	1	18,522	30.07 GPM
Floor Drain	Floor Drain	N/A	2	N/A	0 GPM
Hand Sink	Hand Sink	10" x 14" x 5"	2	1,400	2.28 GPM
Ice Machine (with drain)	Ice Machine (with drain)	N/A	1	N/A	0.5 GPM
Mop Basin	Mop Basin	24" x 24" x 10"	1	5,760	9.35 GPM
Prep Sink One Bowl	Prep Sink One Bowl	21" x 21" x 14"	1	6,174	10.02 GPM
<b>Total</b>					<b>52.21 GPM</b>

Step 2: Grease Production  
 Total square feet x 60% = Dining area  
 Dining area / 14 Sq ft per seat x 4 turns per seat per day x [Grease Production Value] x [Days between pump-out] = Grease output

Amount of square feet in facility: 1625  
 Grease production value: 0.005 lbs per serving (Pizza Carryout: Low / No flatware)  
 Days between pump-outs: 90 days

(1625 x .6) / 14 x 4 x 0.005 x 90 = 125.357 lbs of FOG

OLDCASTLE MODEL	Description:
<b>577-SA</b>	GREASE INTERCEPTOR 100 GPM / 200 GPM, 4" PLAIN/FPT CONNECTIONS, H-20 RATED PICKABLE CAST IRON COVERS
PRE-CAST CONCRETE	Dimensions: Length: 7'-2", Width: 4'-10", Height: 7'-2"
NON-TRAFFIC RATED	Flow Rate/Grease Capacity: 100 GPM / 1895 lbs
	Liquid Capacity: 277 gal



**2 PLUMBING - WASTE RISER**  
P1

IT IS THE PURPOSE OF THESE DRAWINGS TO SHOW THE INTENT OF THIS SYSTEM DESIGN. EVERY EFFORT HAS BEEN MADE TO ACCURATELY SHOW EXISTING CONDITIONS- ANY DEVIATION TO THESE DRAWINGS UNCOVERED DURING NEW CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF GENERAL CONTRACTOR OR ENGINEER BEFORE ALTERING THIS DESIGN.

**PLUMBING SCOPE OF WORK:**  
 TENANT SPACE WILL REQUIRE A 900 GALLON GREASE TRAP INSTALLED PER LANDLORD REQUIREMENT. THE GREASE TRAP WILL BE NON-TRAFFIC RATED AND WILL BE AT THE BACK OF THE SPACE IN THE GROUND. GREASE WASTE PLUMBING WILL BE STUBBED UP IN THE EXISTING RESTROOM AND VENTED BACK TOWARDS SAME RESTROOM.

THIS BUILDING IS FULLY PROTECTED BY FIRE SPRINKLERS

**JENKINS CONSULTING ENGINEERS, PA.**  
 OFFICE IN EUREKA SPRINGS, NORTH CAROLINA  
 1006 MARTINBURG RD., FAYETTEVILLE, NC 28411-1002  
 NORTH CAROLINA LICENSE NUMBER: 04891  
 OFFICE # 910.322.1724

13 December 2024

DESIGNED / CHECKED BY: **B. JENKINS**  
 DRAWN BY: **MAW**  
 PROJECT #: **2024-08-09**  
 DATE: **13 DEC 24**

FINAL DRAWING FOR REVIEW PURPOSES ONLY  
 PRELIMINARY FOR DESIGN DEVELOPMENT ONLY  
 FINAL DRAWING FOR CONSTRUCTION

OWNER/TENANT:  
 CONTRACTOR/BUILDER:

PROJECT: **LEVEL II ALTERATION: BUILDING SHELL SPACES**  
 CAMERON, NC, 28326  
 185 MITTIE HADDOCK DRIVE

SHEET: **PLUMBING - WASTE/RISER/SCHEDULE/NOTES**

**P1**