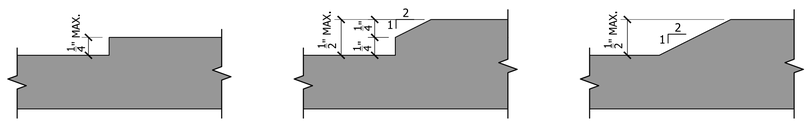
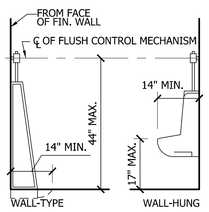
VOPAK MAINTENANCE & OPERATIONS BUILDING

1710 WOODBINE STREET
WILMINGTON, NC

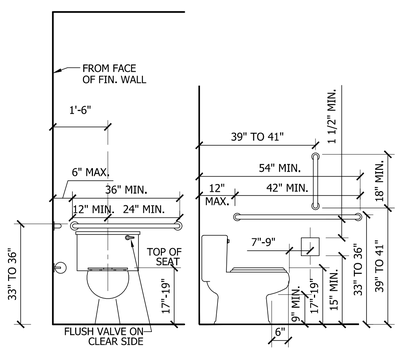


1 THRESHHOLD DETAILS

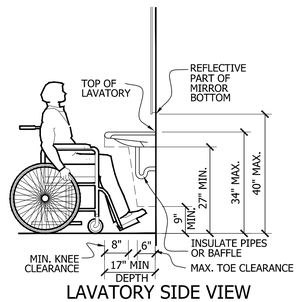
SCALE: 1" = 1'-0"



URINAL ELEVATIONS



TOILET ELEVATIONS



LAVATORY SIDE VIEW

GENERAL NOTES

1. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. SUBMIT TO ARCHITECT ANY DISCREPANCIES FOR CLARIFICATION.
2. ALL WORK SHALL BE IN COMPLIANCE WITH THE NORTH CAROLINA BUILDING CODES, RECOGNIZED INDUSTRY STANDARDS, ALL MANUFACTURER'S RECOMMENDATIONS AND ALL OTHER APPLICABLE CODES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BUILDING THIS PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS UNLESS HE RECEIVES A WRITTEN NOTIFICATION FROM THE OWNER OR ARCHITECT TO THE CONTRARY.
4. THE LOCATION OF THE EXISTING UTILITIES AND STRUCTURES SHOWN HERON ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF SUCH WHETHER SHOWN HEREON OR NOT, PRIOR TO ANY EXCAVATION. ANY DAMAGES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
5. THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF GOODRICH ARCHITECTURE, P.A.. THE OWNER SHALL BE PERMITTED TO RETAIN COPIES OF DRAWINGS AND SPECIFICATIONS FOR INFORMATION AND REFERENCE IN CONSTRUCTION WITH OWNER'S USE ON THIS PROJECT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY OTHER PROJECT WITHOUT WRITTEN AGREEMENT FROM GOODRICH ARCHITECTURE PLUS APPROPRIATE COMPENSATION.
6. THIS IS A LIMITED SET OF CONSTRUCTION DOCUMENTS. THE INFORMATION HEREIN ARE FOR GENERAL INTERIOR LAYOUT AND BASIC EXTERIOR AESTHETICS. IT IS THE CONTRACTORS RESPONSIBILITY AND LIABILITY TO PROVIDE A STRUCTURALLY SOUND STRUCTURE, AND FLASHED PROPERLY FOR A WATER DETERRENCE.
7. CONTRACTOR MUST FOLLOW AND MEET NC ENERGY CONSERVATION CODE REQUIREMENTS.
8. STRUCTURAL, ELECTRICAL, MECHANICAL AND PLUMBING ARE THE RESPONSIBILITY OF THE CONTRACTOR.

2012 APPENDIX B BUILDING CODE SUMMARY

Name of Project: _____
Address: 1710 Woodbine Street Zip Code: _____
Proposed Use: Warehouse
Owner/Authorized Agent: Stan Utley Phone: 910-762-2482 Email: stan.utley@southernindustrial.com
Owned by: ☐ City/County ☑ Private ☐ State
Code Enforcement Jurisdiction: ☐ City _____ ☑ County New Hanover ☐ State

LEAD DESIGN PROFESSIONAL: H. Blair Goodrich

DESIGNER	FIRM	NAME	LIC. #	TELE. #	EMAIL
Architectural	Goodrich Architecture PA	H. Blair Goodrich	NC 7434	910.343.1065	bgoodarch@aol.com
Civil	Landtek Design. LLC	Eric s. Tomczak		910.772.1802	
Structural	Dudek Consulting PC	Bob Dudek	NC C1489	910.762.1515	dudekconsulting@att.net
Plumbing	McDowell Consul. Eng.	Steve H . Everhart Jr.	NC 23933	910.270.3747	mcdowelleng@bellsouth.net
Mechanical	McDowell Consul. Eng.	Steve H . Everhart Jr.	NC 23933	910.270.3747	mcdowelleng@bellsouth.net
Electrical	McDowell Consul. Eng.	Gregory L. McDowell	NC 018518	910.270.3747	mcdowelleng@bellsouth.net
Fire Alarm					
Sprinkler-Standpipe					
Retaining Walls (>5' High)					
Other					

2012 EDITION OF NC CODE FOR: ☑ New Construction ☐ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair ☐ Renovation
CONSTRUCTED: (date) _____ **ORIGINAL USE(S)** (Ch. 3) _____
RENOVATED: (date) _____ **CURRENT USE(S)** (Ch. 3) _____ **PROPOSED USE(S)** (Ch. 3) _____

BUILDING DATA

CONSTRUCTION TYPE: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
☐ I-B ☑ II-B ☐ III-B ☐ V-B
Mixed Construction: ☑ No ☐ Yes Types _____

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
BUILDING HEIGHT: Feet 22' No. of Stories 1
GROSS BUILDING AREA:

FLOOR	EXISTING (SF)	NEW (SF)	SUB-TOTAL (SF)
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		6,000	6,000
Basement			
TOTAL		6,000	6,000

ALLOWABLE AREA

PRIMARY OCCUPANCY: 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 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Use 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
☐ Utility and Misc Parking Garge: ☐ Open ☐ Enclosed ☐ Repair Garage

ACCESSORY OCCUPANCY: 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 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Use 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
☐ Utility and Misc Parking Garge: ☐ Open ☐ Enclosed ☐ Repair Garage

INCIDENTAL USES (Table 508.2.5):
☐ Furnace room where any piece of equipment is over 400,000 Btu per hour input
☐ Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
☐ Refrigerant machine room ☐ Hydrogen cutoff rooms, not classified as Group H
☐ Incinerator rooms
☐ Paint shops, not classified as Group H, located in occupancies other than Group F
☐ Laboratories and vocational shops, not classified as Group H. located in a Group E or I-2 occupancy
☐ Laundry rooms over 100 square feet
☐ Group I-3 cells equipped with padded surfaces ☐ Group I-2 waste and linen collection rooms
☐ Waste and linen collection rooms over 100 square feet
☐ Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
☐ Rooms containing fire pumps
☐ Group I-2 storage rooms over 100 square feet ☐ Group I-2 commercial kitchens
☐ Group I-2 laundries equal to or less than 100 square feet
☐ Group I-2 rooms or spaces that contain fuel-fired heating equipment

SPECIAL USES: ☐ 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
SPECIAL PROVISIONS: ☐ 509.2 ☐ 509.3 ☐ 509.4 ☐ 509.5 ☐ 509.6 ☐ 509.7 ☐ 509.8 ☐ 509.9
MIXED OCCUPANCY: ☐ No ☑ Yes ☐ Separation: _____ Hr Exception: _____

☐ Incidental Use Separation (508.2.5)
This separation is not exempt as a Non-Separted Use (see exceptions).

☑ Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (508.4) - See below for area calculations
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

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

$$____ + ____ + \ldots = ____ \leq 1.00$$

STORY NO.	DESCRIPT. AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503 [5] AREA	(C) AREA FOR OPEN SPACE INCREASE [1]	(D) AREA FOR SPRINKLER INCREASE [2]	(E) ALLOWABLE AREA OR UNLIMITED [3]	(F) MAXIMUM BUILDING AREA [4]
1	Warehouse	6,000	17,500				17,500
1	Business	6,000	23,000				17,500

1. Frontage area increases from Section 506.2 are computed thus:
   a. Perimeter which fronts a public way or open space having 20 feet minimum width = ____ (F)
   b. Total Building Perimeter = ____ (P)
   c. Ratio (F/P) = ____ (F/P)
   d. W = Minimum width of public way = ____ (W)
   e. Percent of frontage increase I_f = 100 [F/P - 0.25] x W/30 = ____ (%)
2. The sprinkler increase per Section 506.3 is as follows:
   a. Multi-story building I_s = 200 percent
   b. Single story building I_s = 300 percent
3. Unlimited area applicable under conditions of Sections 507.
4. Maximum Building Area = total number of stories in the building x E(506.4)
5. The maximum area of open parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type: II-B		Type: II-B	
Building Height in Feet	Feet: 55	Feet = H + 20' = -	Feet: 22	
Building Height in Stories	Stories: 3	Stories + 1 = -	Stories: 1	

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ REDUCTION)*	DETAIL AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		0	0				
Bearing walls							
Exterior							
North		0	0				
East		0	0				
West		0	0				
South		0	0				
Interior							
Nonbearing Walls and Partitions							
Exterior Walls							
North		0	0				
East		0	0				
West		0	0				
South		0	0				
Interior Walls and Partitions		0	0				
Floor Construction including supporting beams and joists		0	0				
Roof Construction including supporting beams and joists		0	0				
Shafts Enclosure- Exit		N/A	N/A				
Shafts Enclosure- Other		N/A	N/A				
Corridor Separation		N/A	N/A				
Occupancy Separation		N/A	N/A				
Party/Fire Wall Separation		N/A	N/A				
Smoke Barrier Separation		N/A	N/A				
Tenant Separation		N/A	N/A				
Incidental Use Separation		N/A	N/A				

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM:

Emergency Lighting: ☐ No ☑ Yes
Exit Signs: ☐ No ☑ Yes
Fire Alarm: ☑ No ☐ Yes
Smoke Detection System: ☑ No ☐ Yes ☐ Partial _____
Panic Hardware: ☑ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS:

Life Safety Plan Sheet #: A1.2

☐ Fire and/or smoke rated wall locations (Chapter 7)
☐ Assumed and real property line locations
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☐ Existing structures within 30' of the proposed building
☐ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)
☐ Occupant loads for each area
☐ Exit access travel distances (1016)
☐ Common path of travel distances (1014.3 & 1028.8)
☐ Dead end lengths (1018.4)
☐ Clear exit widths for each exit door
☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
☐ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is is provided for purposes of occupancy separation
☐ Location of doors with panic hardware (1008.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
☐ Location of doors with electromagnetic egress locks (1008.1.9.8)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1029)
☐ The square footage of each fire area (902)
☐ The square footage of each smoke compartment (407.4)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

PLUMBING FIXTURE REQUIREMENTS

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	URINALS	UNISEX	LAVATORIES MALE	LAVATORIES FEMALE	SHOWERS TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE	EXISTING									
	NEW	2		1	1	2		3		
	REQUIRED				1					

ACCESSIBLE PARKING

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

SPECIAL APPROVALS

SPECIAL APPROVAL: (Local Jursidiction, Dept. of Insurance, OSC, DPI, DHHC, ICC, etc., describe below)

_____
_____
_____

STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL INFORMATION, IF REQUIRED, IS ON RESPECTIVE DRAWINGS

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VOPAK MAINTENANCE & OPERATIONS BUILDING
1710 WOODBINE STREET
WILMINGTON, NORTH CAROLINA

COVER / APPENDIX B

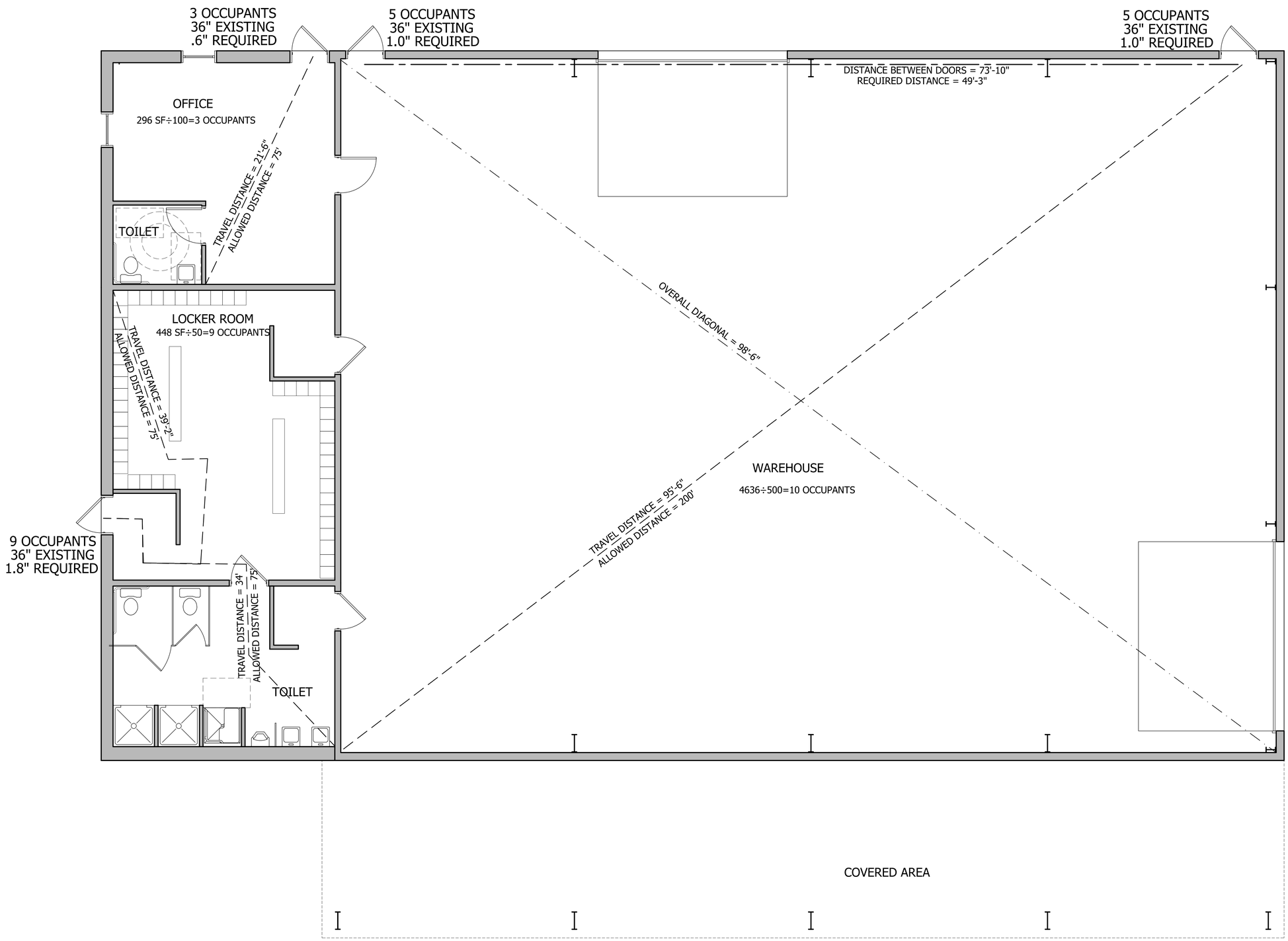
GOODRICH ARCHITECTURE, P.A. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 51316 NORTH CAROLINA WILMINGTON, N.C.

H. BLAIR GOODRICH REGISTERED ARCHITECT 7434 NORTH CAROLINA WILMINGTON, N.C.

DATE: 16 SEPTEMBER 2014

REVISION:

A1.1



A LIFE SAFETY PLAN
SCALE: 1/4" = 1'-0"

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LIFE SAFETY PLAN

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H. BLAIR GOODRICH
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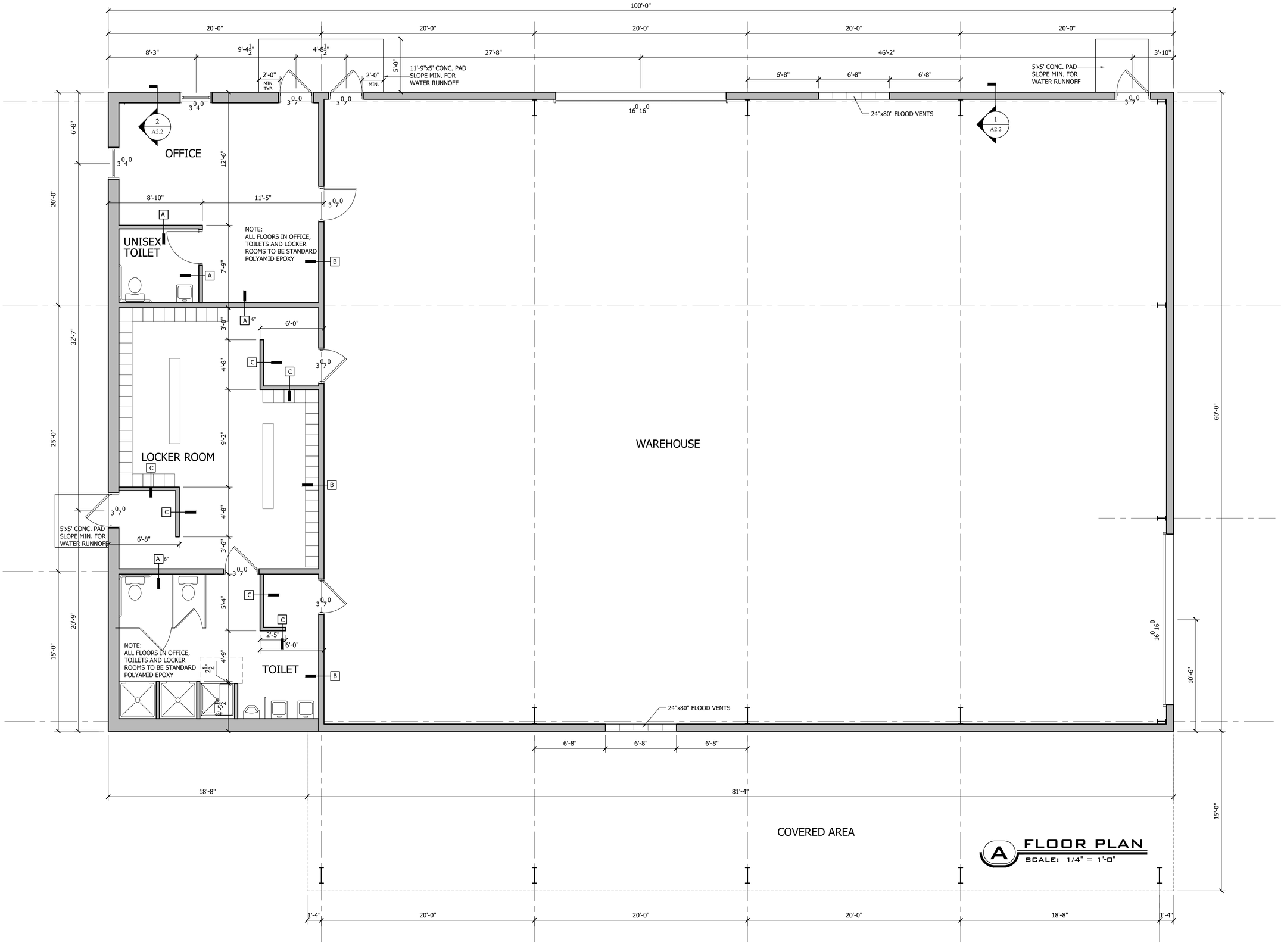

A FLOOR PLAN
SCALE: 1/4" = 1'-0"

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VOPAK MAINTENANCE & OPERATIONS BUILDING
1710 WOODBINE STREET
WILMINGTON, NORTH CAROLINA

FLOOR PLAN

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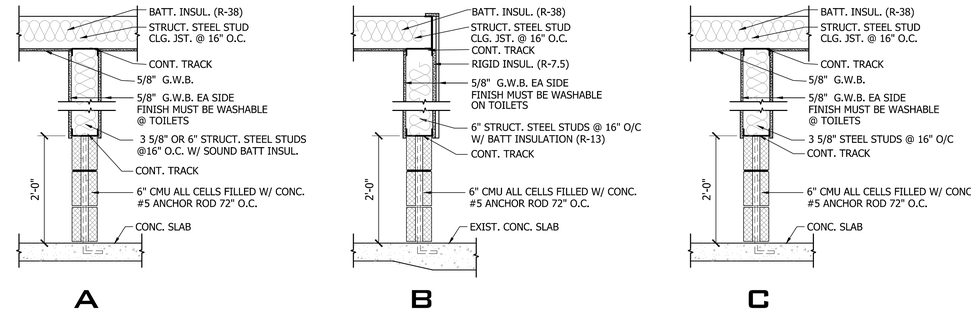
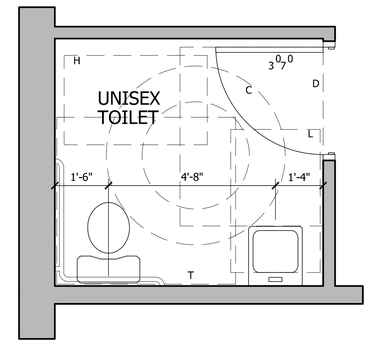
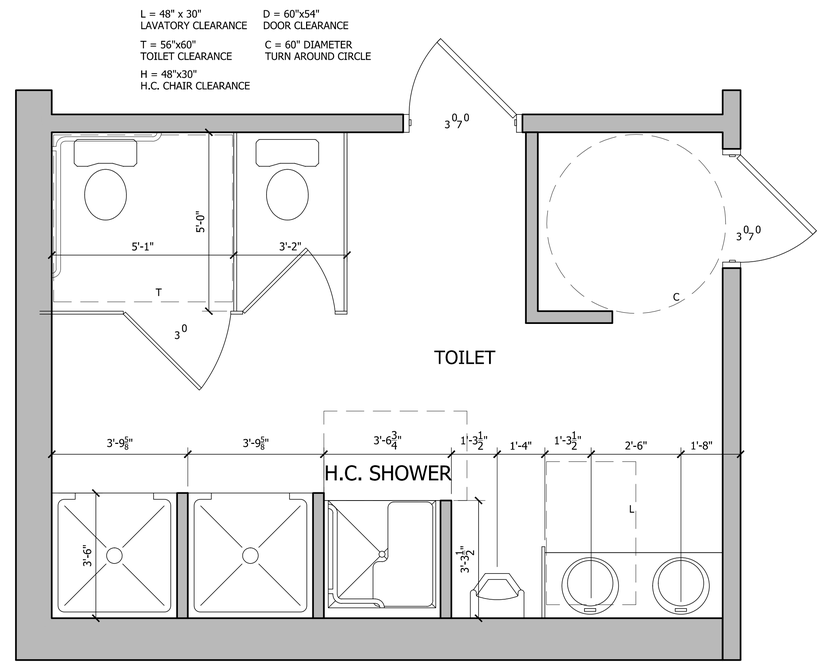


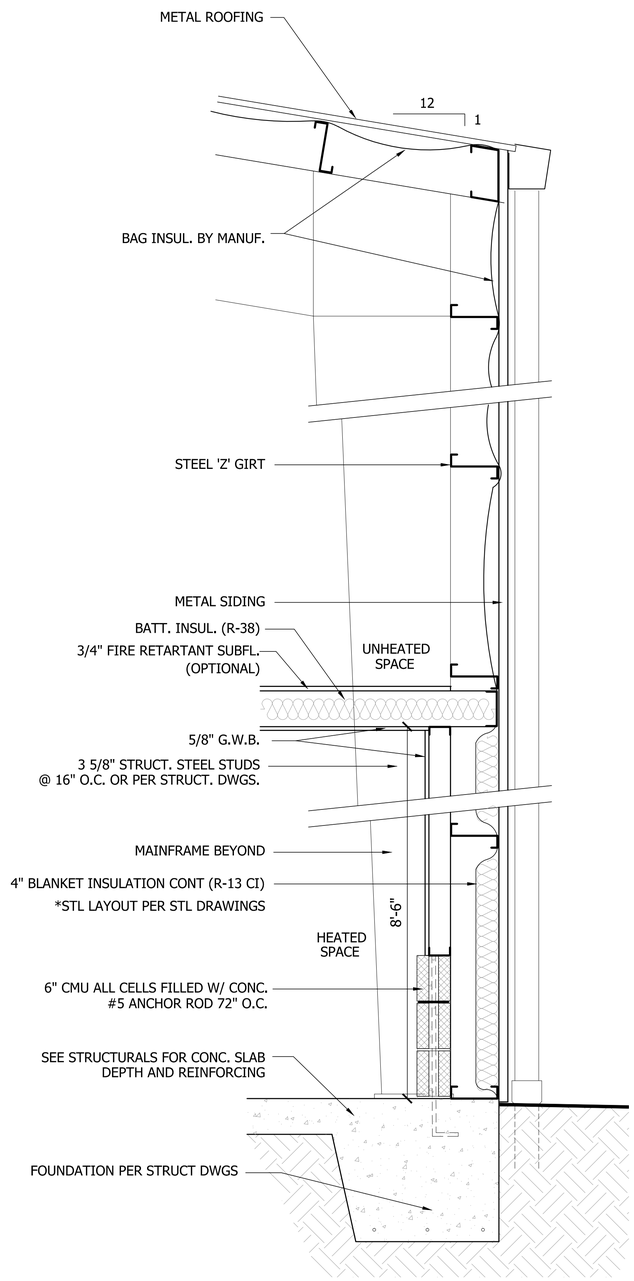
3 WALL TYPES
SCALE: 3/4" = 1'-0"



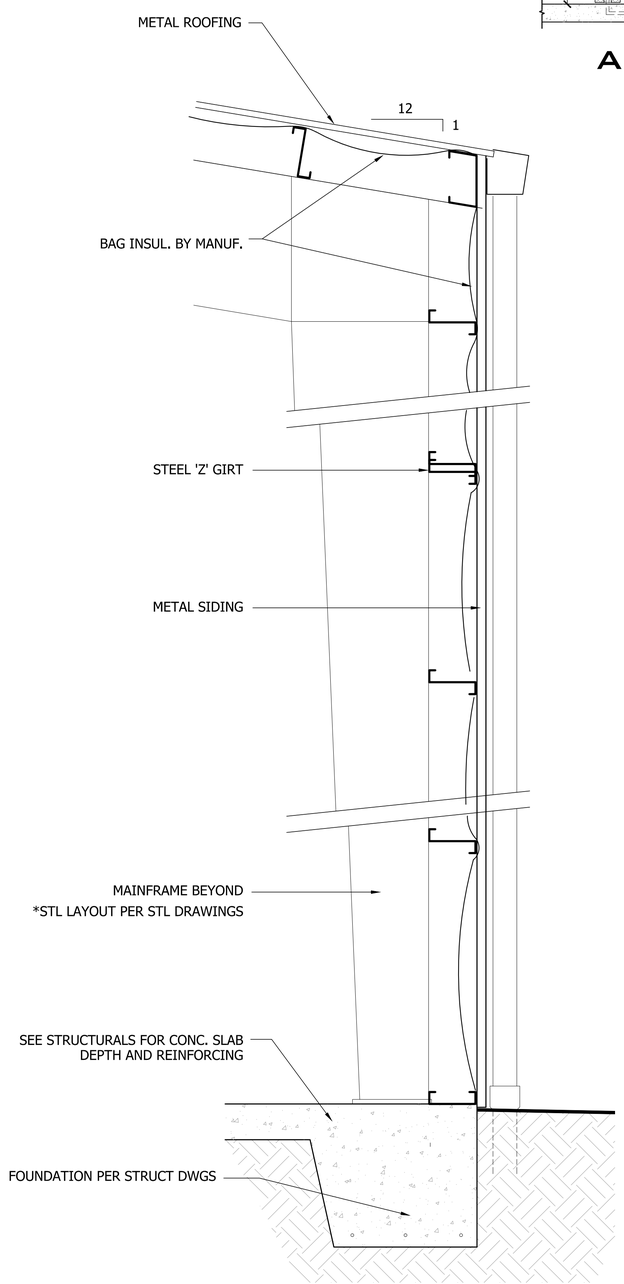
B ENLARGED UNISEX TOILET LAYOUT
SCALE: 1/2" = 1'-0"



A ENLARGED TOILET LAYOUT
SCALE: 1/2" = 1'-0"



2 WALL SECTION
SCALE: 1" = 1'-0"



1 WALL SECTION
SCALE: 1" = 1'-0"

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ENLARGED TOILET PLANS & WALL TYPES & SECTIONS

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H. BLAIR GOODRICH REGISTERED ARCHITECT 7434 NORTH CAROLINA WILMINGTON, N.C.

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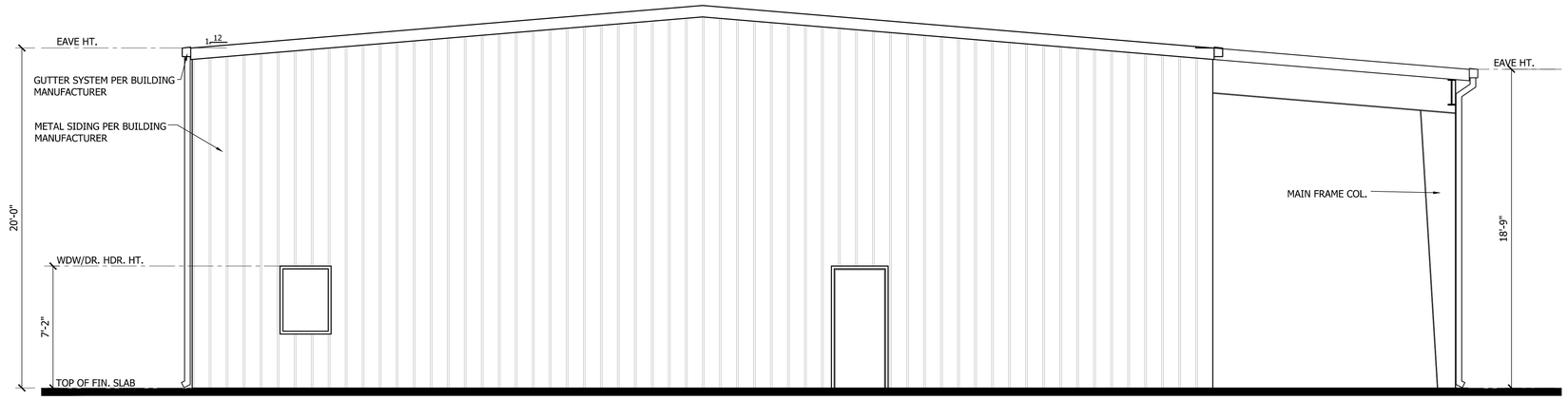
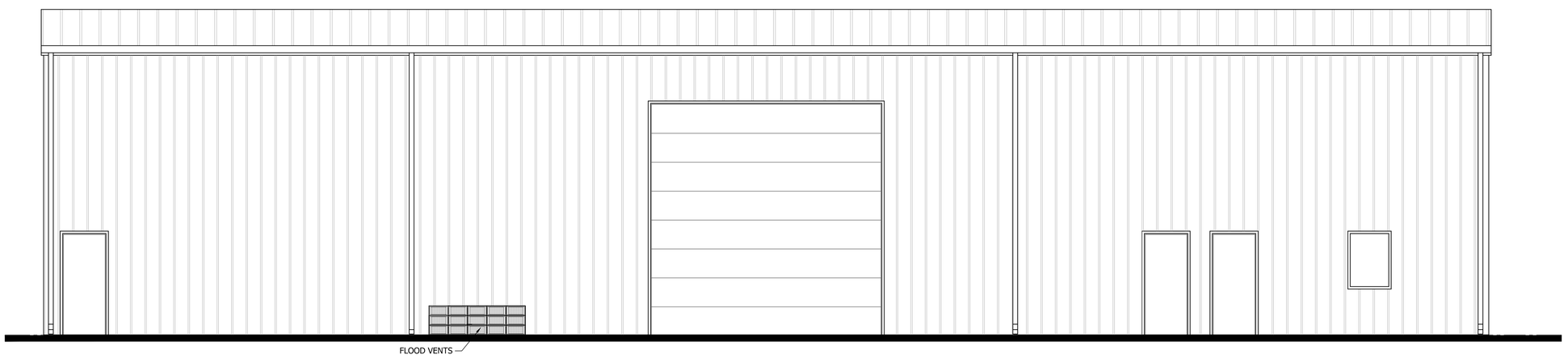
A2.2



B RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



A FRONT ELEVATION
SCALE: 1/4" = 1'-0"

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FRONT & RIGHT SIDE ELEVATIONS

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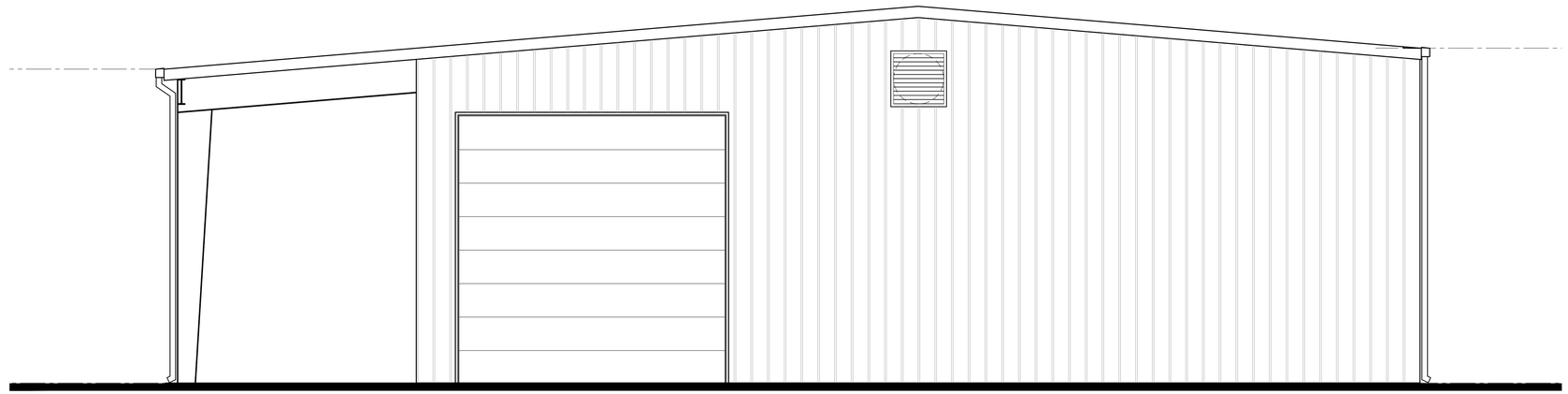
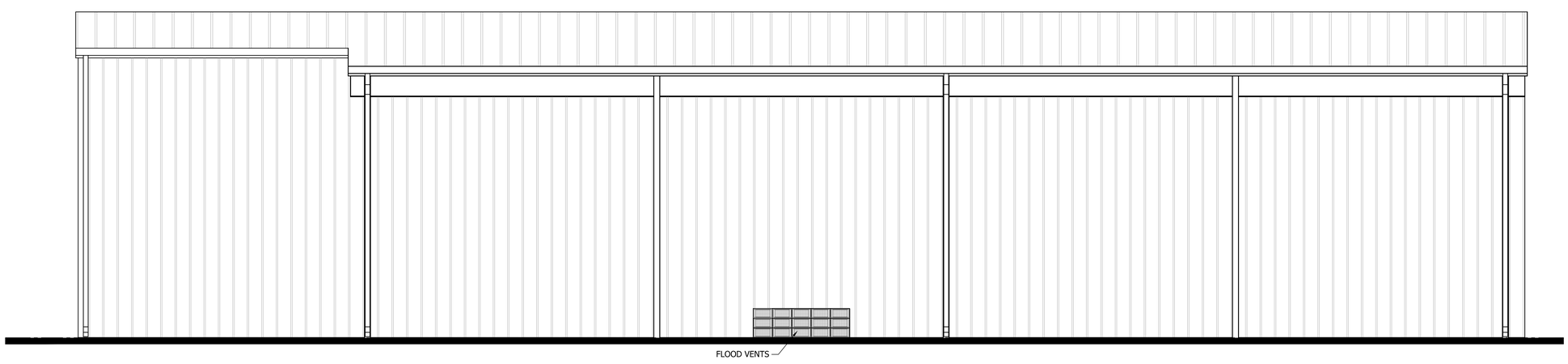


B LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



A REAR ELEVATION
SCALE: 1/4" = 1'-0"

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REAR & LEFT SIDE ELEVATIONS

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