

MAJESTIC MARBLE & GLASS

YOUNGSVILLE, NORTH CAROLINA

PROJECT

GENERAL CONTRACTOR

CADE CONSTRUCTION
BILL BLAND
120 WEATHERS CT. SUITE F
YOUNGSVILLE, NC
PHONE (919) 562-2115

ARCHITECT

DESIGN DEVELOPMENT
JONATHAN MEDLIN, AIA
800 SALEM WOODS DRIVE
SUITE 102
RALEIGH, NC 27615
PHONE (919) 848-4474

MEP ENGINEER

KILIAN ENGINEERING, P.A.
MICHAEL KILIAN
PO BOX 3301
HENDERSON, NC 27536
T (252) 438-8778
F (252) 213-3086

STRUCTURAL ENGINEER

WILLIAM PERSON
774 EF COTTRELL RD, SUITE A,
LOUISBURG, NC 27549

FIRE SPRINKLER ENGINEER

ASSOCIATED FIRE PROTECTION
JASON B. HICKS, ET
407 GORMAN ST., SUITE 101
RALEIGH, NC 27607
PHONE (919) 833-7336
FAX (919) 833-7337

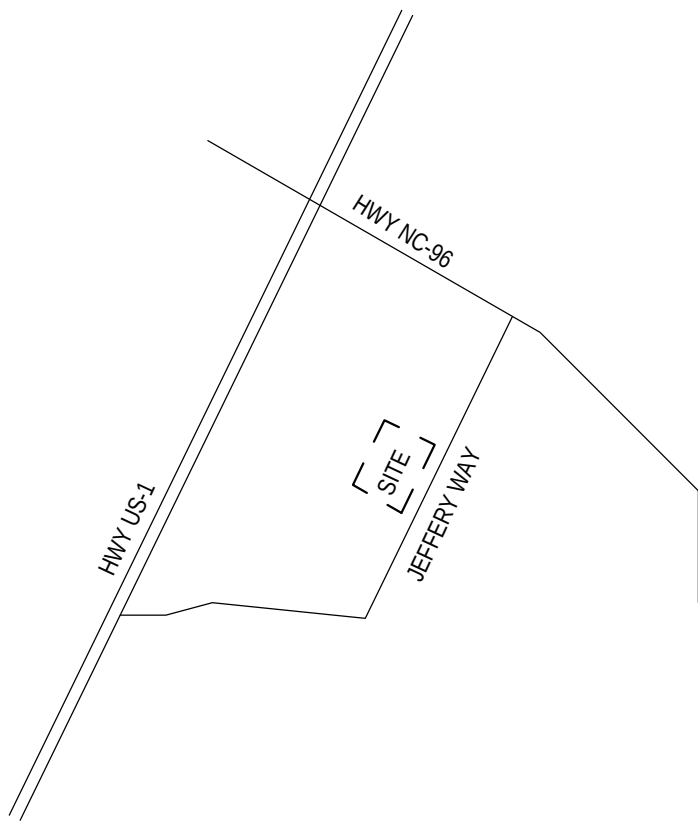
CIVIL ENGINEER

TRIANGLE SITE DESIGN
MATT LOWDER
4004 BARRETT DR, SUITE 101
RALEIGH, NC 27609
T (919) 553-6570

METAL BUILDING

CHIEF BUILDNGS, KEVIN HALBMAIER
ENGINEER: DUANE BECKER
P.O. BOX 2078
GRAND ISLE, NE 68802
T (308)-389 -7200

VICINITY MAP



DRAWING SHEET LOG LAST UPDATED: 16 11 04 ● = ISSUED WITH DRAWING CHANGES / REVISIONS	DRAWING DATE	DRAWING REVISION										YY MM DD	BULLETIN DRAWINGS
COVER													
T1 COVER SHEET	16 10 07	●	●										
T2 BUILDING CODE SUMMARY	16 10 07	●	●										
T3 BUILDING CODE SUMMARY	16 10 07	●											
CIVIL													
C0.0 COVER SHEET	16 09 29	●											
C1.0 SITE PLAN	16 09 29	●											
D1.0 EXISTING CONDITION PLAN	16 09 29	●											
C1.1 GRADING AND DRAINAGE PLAN	16 09 29	●											
C1.2 UTILITY PLAN	16 09 29	●											
C1.3 UTILITY DETAILS	16 09 29	●											
C1.4 CONSTRUCTION DETAILS	16 09 29	●											
C1.5 STORMWATER DESIGN DETAILS DETENTION	16 09 29	●											
C1.6a INITIAL PHASE EROSION CONTROL PLAN	16 09 29	●											
C1.6b GRADING PHASE EROSION CONTROL PLAN	16 09 29	●											
C1.7 EROSION CONTROL DETAILS	16 09 29	●											
C1.8 LANDSCAPING PLAN	16 09 29	●											
ARCHITECTURAL													
A0.1 REFERENCE	16 10 07	●											
A0.2 GUIDELINES OR ACCESSIBILITY REQUIREMENTS	16 10 07	●											
A1.1 1ST FLOOR PLAN	16 10 07	●	●										
A1.2 OFFICE FLOOR PLAN ENLARGED	16 10 07	●	●										
A1.3 ROOF PLAN	16 10 07	●											
A1.4 REFLECTED CEILING PLAN	16 10 07	●	●										
A1.5 OFFICE R.C.P. ENLARGED	16 10 07	●	●										
A1.6 DOORS, WINDOWS AND STOREFRONT ELEVATIONS	16 10 07	●	●										
A2.1 BUILDING ELEVATIONS	16 10 07	●	●										
A3.1 BUILDING SECTIONS	16 10 07	●	●										
A4.1 WALL SECTIONS	16 10 07	●	●										
A4.2 WALL SECTIONS	16 10 07	●	●										
A5.1 ENLARGED RESTROOM PLANS & ELEVATIONS	16 10 07	●	●										
A5.2 ENLARGED KITCHEN PLANS & ELEVATIONS	16 10 07	●	●										
A6.1 WAREHOUSE LAYOUT PLAN			●										
STRUCTURAL													
S-1 FOUNDATION PLAN	16 10 05	●	●										
S-2 FOUNDATION PLAN AT ENTRANCE AREA	16 10 05	●											
S-3 FOUNDATION PLAN AT DOCK	16 10 05	●											
S-4 STRUCTURAL DETAILS	16 10 05	●	●										
S-5 STRUCTURAL RETAINING WALL & MEZZANINE	16 10 05	●	●										
S-6 STRUCTURAL NOTES	16 10 05	●											
PRE-ENGINEERED METAL BUILDING													
C1 COVER PAGE	16 10 06	●											
A1 ANCHOR ROD	16 10 06	●											
A2 ANCHOR ROD	16 10 06	●											
A3 ANCHOR ROD	16 10 06	●											
A4 ANCHOR ROD	16 10 06	●											
A5 ANCHOR ROD	16 10 06	●											
CS1 CROSS SECTION	16 10 06	●											
CS2 CROSS SECTION	16 10 06	●											
RF1 ROOF FRAMING	16 10 06	●											
RF2 ROOF FRAMING	16 10 06	●											
RF3 ROOF FRAMING	16 10 06	●											
RF4 ROOF FRAMING	16 10 06	●											
RP1 ROOF PANEL	16 10 06	●											
RP2 ROOF PANEL	16 10 06	●											
S1 SIDEWALL DRAWING	16 10 06	●											
S2 SIDEWALL DRAWING	16 10 06	●											
S3 SIDEWALL DRAWING	16 10 06	●											
S4 SIDEWALL DRAWING	16 10 06	●											
E1 ENDWALL DRAWING	16 10 06	●											
E2 ENDWALL DRAWING	16 10 06	●											
E3 ENDWALL DRAWING	16 10 06	●											
E4 ENDWALL DRAWING	16 10 06	●											
P1 PARTITION PLAN	16 10 06	●											
P2 PARTITION PLAN	16 10 06	●											
MECHANICAL													
M1 MECHANICAL NOTES & SCHEDULES	16 10 07	●											
M2 MECHANICAL VENTILATION CALCULATIONS	16 10 07	●											
M3 MECHANICAL PLAN AND GAS PLAN	16 10 07	●											
M4 OFFICE MECHANICAL PLAN	16 10 07	●	●										
ELECTRICAL													
E1 ELECTRICAL NOTES & SCHEDULES	16 10 07	●											
E2 WAREHOUSE LIGHTING PLAN	16 10 07	●	●										
E3 WAREHOUSE POWER PLAN	16 10 07	●	●										
E4 OFFICE LIGHTING PLAN	16 10 07	●	●										
E5 OFFICE POWER PLAN	16 10 07	●	●										
E6 ELECTRICAL PANEL SCHEDULES & RISER DIAGR.	16 10 07	●	●										
FA1 FIRE ALARM PLAN	16 11 04	●											
PLUMBING													
P1 PLUMBING NOTES, SCHEDULES & DETAILS	16 10 07	●											
P2 WAREHOUSE SUPPLY PLAN	16 10 07	●											
P3 WAREHOUSE WASTE PLAN	16 10 07	●											
P4 OFFICE SUPPLY PLAN	16 10 07	●	●										
P5 OFFICE WASTE PLAN	16 10 07	●	●										
P6 PLUMBING RISERS	16 10 07	●	●										
FIRE PROTECTION													
FP - 1 SITE PLAN, DETAILS, DATA	16 10 07	●	●										
FP - 2 FIRE PROTECTION PLAN	16 10 07	●	●										
FP - 3 REFLECTED CEILING PLAN	16 10 07	●	●										



10/7/2016

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919.848.4474

MAJESTIC
MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
1	OWNER CHANGES	10/25/16
2	PERMIT CHANGES	11/4/16

PROJECT #:

160032

DATE:

10/7/2016

COVER SHEET

T1

APPENDIX B: BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

GENERAL INFORMATION

Name of Project: **Majestic Marble and Glass Factory**

Address: **Jeffery Way, Youngsville, NC** Zip Code: _____

Proposed Use: **Glass Factory**

Owner / Authorized Agent: **Jonathan Medlin, Architect** Phone #: **919-848-4474**

Email: **jonathanm@designdevelopment.com**

Owned By: ☐ City/County ☒ Private ☐ State

Code Enforcement Jurisdiction: ☐ City: _____ ☒ County: **Franklin** ☐ State

LEAD DESIGN PROFESSIONAL:

DESIGNER	FIRM	NAME	LICENSE #	TEL #
Lead Designer	Design Development Architects	Jonathan Medlin	10979	919-848-4474
Architectural	Design Development Architects	Jonathan Medlin	10979	919-848-4474
Civil	Triangle Site Design	Matt Lowder	P-0619	919-553-6570
Structural	William Person Engineer	William Person	13253	919-496-5228
Plumbing	Killian Engineering	Michael Killian	17304	252-438-8778
Mechanical	Killian Engineering	Michael Killian	17304	252-438-8778
Electrical	Killian Engineering	Michael Killian	17304	252-438-8778
Fire Alarm	Killian Engineering	Michael Killian	17304	252-438-8778
Fire Sprinkler	Associated Fire Protection	David Miracle	NC 29247	919-553-2169
Retaining Walls>5' High			E-MAIL: _____	
Other	CHEIF BUILDINGS	Kevin Halbmaier, Duane Becker	016540	308-385-4665

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: (Chapter 6)

Construction types: (Chapter 6)

☐ Type I-A ☐ Type I-B ☐ Type II-A ☐ Type II-B ☐ Type III-A ☐ Type III-B ☐ Type IV ☐ Type V-A ☐ Type V-B

☐ No ☐ Partial ☒ Yes

☐ NFPA ☒ I ☐ II ☐ III ☐ Wet ☐ Dry

Sprinklers: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Fire District: ☒ No ☐ Yes (Primary)

Flood Hazard Area: ☒ No ☐ Yes

Building Height: **30'-8"** Ft.

Gross Building Area (Sq. Ft.):

Floor	Existing	New	Fit-Up	Sub-Total
4th Floor				
3rd Floor				
2nd Floor				
Mezzanine				
1st Floor				
Basement				
Total		50,000		

ALLOWABLE AREA:

Primary Occupancy:

Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5 Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ B ☐ H-3 Combust ☐ H-4 Health ☐ H-5 Educational ☐ E ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4 HPM

Factory ☐ F-1 Moderate ☒ F-2 Low Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled Mercantile ☒ M ☐ Open ☐ Enclosed ☐ Repair Garage

Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4 Utility + Misc. ☐ I-3 Condition ☐ I ☐ 2 ☐ 3 ☐ 4 ☐ 5

Accessory Occupancies:

Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5 Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☒ B ☐ H-3 Combust ☐ H-4 Health ☐ H-5 Educational ☐ E ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4 HPM

Factory ☐ F-1 Moderate ☐ F-2 Low Storage ☐ S-1 Moderate ☒ S-2 Low ☐ High-piled Mercantile ☒ M ☐ Open ☐ Enclosed ☐ Repair Garage

Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4 Utility + Misc. ☐ I-3 Condition ☐ I ☐ 2 ☐ 3 ☐ 4 ☐ 5

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: **0** Hr. Exception: _____

F2 MOST RESTRICTIVE

☒ **Non-Separated Mixed Occupancy** (Section 508.3/303.1 Exception)
This separation is not exempt as a Non-Separated Use (see exceptions).
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 Mixed Occupancy** (Section 508.4/303.1/303.2) 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.
$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$
$$+ + + = < 1.00$$

Story No.	Description and Use	(A) Bldg. Area Per Story (Actual Area)	(B) 5 Table 503 (Allowable Area)	(C) Area for 1 Frontage Increase (Calculated Area)	(D) Area for 2 Frontage Increase (Calculated Area)	(E) Allowable Area or Unlimited	(F) Maximum Allowed Building Area
4th Floor							
3rd Floor							
2nd Floor							
1st Floor	FACTORY F2	50,000	23,000	NOT TAKEN	300% 69,000	507.3 UNLIMITED	UNLIMITED
Mezzanine							
Basement							

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. (P) Total Building Perimeter = _____ (P)
c. (F/P) Ratio = _____ (F/P)
d. (W)-Minimum width of public way = _____ (W)
e. Percent of frontage increases $I = 100 \text{ (F/P - 0.25) x W/30} = \text{_____ (\%)}$
f. The sprinkler increases per Section 506.3 is as follows:
a. Multi-story building $I = 200$ percent
b. Single story building $I = 300$ percent
c. Unlimited Area applicable under conditions of Section 507.
d. Maximum Building Area = total number of stories in the building x E (Section 506.4).
e. Maximum stairway width (Section 1009.1): min. corridor width (Section 1018.2); min. door width (Section 1008.1.1)
f. Minimum width of exit passageway (Section 1023.2)
g. The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required Section 1005.1)
h. Assembly occupancies (Section 1028)
2. The maximum area of open parking garages must comply with Section 406.3.5.
The maximum area of air traffic control towers must comply with Table 412.3.2

ALLOWABLE HEIGHT (Chapter 5)

	Allowable (table 503)	Increase for Sprinklers	Actual (Shown on Plans)	Code Reference
Type of Construction	Type II-B		Type:	
Building Height in Feet	Feet: 55'	Feet=H+20' = 75'	Feet: 32'	
Building Height in Stories	Stories: 3	Stories+1 = 4	Stories: 1	

FIRE PROTECTION REQUIREMENTS: (Chapter 6)

Life Safety Plan Sheet #, if Provided

Building Elements	Fire Separation Distance (Feet)	Rating Req'd	Provided (w/L or + reduction)	Detail # and Sheet#	Design # for Rated Assembly	Design # for Rated Penetration	Design # for Rated Joints
Structural Frame (including columns, girders, trusses) (Table 601)		0					
Bearing walls (Table 601)							
Exterior	North South East West	0 0 0 0					
Interior		0					
Nonbearing walls and Partitions (Table 601)							
Exterior	North South East West						
Interior walls and Partitions							
Floor construction (including supporting beams and joists) (Table 601)		0					
Roof construction (including supporting beams and joist) (Table 601)		0					
Shafts Enclosures - Exit (Section 708)		0					
Shafts Enclosures - Other (Section 708)		0					
Corridor Separation (Table 1018.1)		0					
Occupancy Separation (Table 508.4)		0					
Party/Fire Wall Separation (Table 715.4)		0					
Smoke Barrier Separation (Sections 407.4 & 710.3)		0					
Tenant Separation (Section 709.1)		0					
Incidental Use Separation		0					

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS: (Chapter 9 and 10)

Emergency Lighting: ☐ No ☒ Yes (As per 1006.1)

Exits Sign: ☐ No ☒ Yes (As per 1011)

Fire Alarm: ☐ No ☒ Yes (As per 907)

Smoke Detection Systems: ☒ No ☐ Yes ☐ Partial _____ (As per 907)

Panic Hardware: ☒ No ☐ Yes (As per 1008.1.10)

ACCESSIBLE PARKING REQUIREMENTS

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 5' Access Aisle	Access Aisle	
Total						

SEE CIVIL DRAWINGS

PLUMBING FIXTURE REQUIREMENTS (Chapter 29)

Occupancy	Waterclosets		Urinals		lavatories		Showers/ Tubs	Drinking Fountains	
	Male	Female	Male	Female	Male	Female		Regular	Accessible
EXISTING									
NEW									
REQUIRED									

SEE SHEET T3

EXIT REQUIREMENTS: (Chapter 10)

NUMBER AND ARRANGEMENT OF EXITS

Floor, Room or Space Designation	Minimum ² Number of Exits		Travel Distance		Arrangement Means of Egress ^{1,3} (section 1015.2)	
	Required	Shown on Plans	Allowable Travel Distance (Table 1016.1)	Actual Travel Distance Shown on Plans	Required Distance Between Exit Doors	Actual Distance Shown on Plans

Exit Width

1. Corridor dead ends (Section 1018.3)
2. Buildings with single exits (Table 1015.1)
3. Common Path of Travel (Section 1014.3)

Use Group or Space Description	(a) Areal SQ. FT.	(b) Area 1 Per Occupant (Table 1004.1.1)	Calculated Occupant Load	Egress Width (Per Occupant (Sec 1005.1)		Exit Width (in) 2,3,4,5,8			
				Stair	Level	Stair	Level	Stair	Level

1. See Table 1004.1.1 to determine whether net or gross area is applicable. See definition "Area, Gross" and "Area, Net" (Section 1002)
2. The sprinkler increase per Section 506.3 is as follows:
c. Multistory building $I = 200$ percent
d. Single story building $I = 300$ percent
3. Minimum stairway width (Section 1009.1): min. corridor width (Section 1018.2); min. door width (Section 1008.1.1)
4. Minimum width of exit passageway (Section 1023.2)
5. The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required Section 1005.1)
6. Assembly occupancies (Section 1028)

STRUCTURAL DESIGN (PROVIDED FOR REFERENCE ONLY SEE STRUCTURAL DWGS)

DESIGN LOADS: Importance Factors:

Wind (lw) _____
Snow (ls) _____
Seismic (le) _____

Live Loads: Roof _____ psf
Mezzanine _____ psf
Floor _____ psf
Ground Snow Load: _____ psf

Wind Load: Basic Wind Speed _____ 95 mph (ASCE-7-05)
Exposure Category: _____ C
Wind Base Shears (for MWFRS) $W_x = 57.9$ $W_y = 62.6$

SEISMIC DESIGN CATEGORY

Provide the following Seismic Design Parameters:
Occupancy Category (T1604.5) ☐ I ☒ II ☐ III ☐ IV
Spectral Response Acceleration S_s 14.32 %g S_1 17.23 %g
Site Classification (Table 1613.5.2) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F
Data Source: ☐ Field Test ☒ Presumptive ☐ Historical Data

Basic structural system (check one)

☒ Bearing Wall ☐ Dual w/ Special Moment Frame ☐ Building Frame ☐ Dual w/ Intermediate R/C or Special Steel Moment Frame ☐ Inverted Pendulum

Seismic base shear $S_x = 29K$ $S_y = 29K$
Analysis Procedure ☒ Simplified ☐ Equivalent Lateral Force
Architectural, Mechanical, Components anchored? ☐ Yes ☒ No
Dynamic

LATERAL DESIGN CONTROL: Earthquake _____ Wind ☒ X _____

SOIL BEARING CAPACITIES: Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity _____ 2000 psf
Pile size, type, and capacity _____

SPECIAL INSPECTIONS REQUIRED: ☐ Yes ☒ No

SPECIAL APPROVALS

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

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 ENERGY COST BUDGET METHOD, STATE THE ANNUAL ENERGY COST BUDGET VS ALLOWABLE ANNUAL ENERGY COST BUDGET.

Climate Zone: ☐ 3 ☒ 4 ☐ 5

Method Of Compliance:

☐ Prescriptive (Energy Code)
☐ Performance (Energy Code)
☐ Prescriptive (ASHRAE 90.1)
☒ Performance (ASHRAE 90.1)

LIFE SAFETY PLAN REQUIREMENTS:

Life Safety Plan Sheet #:

☐ 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 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 (903)
☐ 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

ACCESSIBLE DWELLING UNITS (Section 1107)

Total Units	Accessible Units Required	Accessible Units Provided	Type A Units Required	Type A Units Provided	Type B Units Required	Type B Units Provided	Total Accessible Units Provided

THERMAL ENVELOPE

METHOD OF COMPLIANCE - PERFORMANCE

COMcheck Software Version 4.0.4.1

Envelope Compliance Certificate

Project Information

Energy Code: 80.1 (2010) Standard
Project Title: Majestic Marble & Glass
Location: Youngsville, North Carolina
Climate Zone: 4a
Project Type: New Construction
Vertical Glazing / Wall Area: 4%

Constructor Site: jeffrey way
Youngsville, NC 27596

Owner/Agent: Majestic Marble & Glass
104 Jeffery Way
Youngsville, NC 27596

Designer/Certifier: Jonathan Medlin, ARCHITECT
Design Development Architects
809 Salem Woods Drive
Suite 102
Raleigh, NC 27615
919.848.4474
jonathanm@designdevelopment.com

Building Area Floor Area
1-Office - Nonresidential 15065

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor ₁
Roof: Office Area Metal Building Standing Seam, Liner System with Thermal Blocks (b), (Bldg. Use 1 - Office)	15065	30.0	11.9	0.025	0.035
South Wall - Office (Interior): Steel-Framed, 16" o.c., (Bldg. Use 1 - Office)	2675	19.0	0.0	0.109	0.064
Door Metal: Insulated Metal, Swinging, (Bldg. Use 1 - Office)	21	---	---	0.650	0.700
North Wall - Office Metal Building Wall, Single Layer Mineral Fiber, (Bldg. Use 1 - Office)	2675	19.0	0.0	0.084	0.084
Window Storefront with overhang Metal Frame Curtain Wall-Storefront, Part. Specs. Product ID 18986, SHGC 0.33, PF 1.50, (Bldg. Use 1 - Office) (b)	91	---	---	0.437	0.500
Door Metal: Insulated Metal, Swinging, (Bldg. Use 1 - Office)	342	---	---	0.650	1.500
Storefront Door: Glass > 50% glazing Metal Frame, Entrance Door, Part. Specs. Product ID 30080, SHGC 0.15, PF 1.50, (Bldg. Use 1 - Office) (b)	42	---	---	0.759	0.850
West Wall - Office (Interior): Steel-Framed, 16" o.c., (Bldg. Use 1 - Office)	4615	19.0	0.0	0.109	0.064
Door Metal: Insulated Metal, Swinging, (Bldg. Use 1 - Office)	63	---	---	0.650	0.700
East Wall - Office Metal Building Wall, Single Layer Mineral Fiber, (Bldg. Use 1 - Office)	4615	19.0	0.0	0.084	0.084

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor ₁
Window Storefront No Overhang Metal Frame Curtain Wall-Storefront, Part. Specs. Product ID 18986, SHGC 0.33, (Bldg. Use 1 - Office) (b)	275	---	---	0.437	0.500
Window Storefront with overhang Metal Frame Curtain Wall-Storefront, Part. Specs. Product ID 18986, SHGC 0.33, PF 1.50, (Bldg. Use 1 - Office) (b)	91	---	---	0.437	0.500
Door Metal: Insulated Metal, Swinging, (Bldg. Use 1 - Office)	21	---	---	0.650	0.700
Door Storefront With Overhang, Glass > 50% glazing Metal Frame, Entrance Door, Part. Specs. Product ID 30080, SHGC 0.15, PF 1.50, (Bldg. Use 1 - Office) (b)	42	---	---	0.759	0.850
Concrete Slab - Office Slab-On-Grade Unheated, (Bldg. Use 1 - Office) - Comment: (c)	518	---	---	0.730	0.730

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Manufacturer product performance must be certified in accordance with NFRC and require supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.
(d) Thermal spacer block with minimum R-3.5 must be installed above the purlin/bolt, and the roof deck secured to the purlin.

Envelope PASSES: Design 10% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2012 International Building Code requirements in COMcheck Version 4.0.4.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JONATHAN MEDLIN, ARCHITECT

Name - Title Signature Date 10/7/16

DESIGNER STATEMENT:

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

SIGNED: JONATHAN MEDLIN

NAME: ARCHITECT

TITLE:

ELECTRICAL SYSTEM AND EQUIPMENT

THIS SECTION REQUIRED FOR ALL PROJECTS THAT INCLUDE ELECTRICAL DESIGN

Method of Compliance:

Energy Code: ☐ PRESCRIPTIVE ☐ PERFORMANCE
ASHRAE 90.1: ☐ PRESCRIPTIVE ☐ PERFORMANCE

Lighting Schedule (Each fixture type)

Lamp type required in fixture _____
Number of lamps in fixture _____
Ballast type used in the fixture _____
Number of ballasts in fixture _____
Total wattage per fixture _____
Total interior wattage specified vs. allowed _____
Total exterior wattage specified vs. allowed _____

Additional Prescriptive Compliance

☐ 506.2.1 Efficient Mechanical Equipment
☐ 506.2.2 Reduced Lighting Power Density
☐ 506.2.3 Energy Recovery Ventilation Systems
☐ 506.2.4 Higher Efficiency Service Water Heating
☐ 506.2.5 On-Site Supply of Renewable Energy
☐ 506.2.6 Automatic Daylighting Control Systems

MECHANICAL SYSTEM, SERVICE SYSTEMS AND EQUIPMENT

THIS SECTION REQUIRED FOR ALL PROJECTS THAT INCLUDE MECHANICAL DESIGN

Thermal zone

Winter dry bulb _____
Summer dry bulb _____
Relative humidity _____

Interior design conditions

Winter dry bulb _____
Summer dry bulb _____
Relative humidity _____

Building heating load _____

Building cooling load _____

Mechanical Spacing Conditioning System

Unitary _____
Description of unit _____
Heating efficiency _____
Cooling efficiency _____
Size category _____
Boiler _____
Size category, if oversized, state reason _____
Chiller _____
Size category, if oversized, state reason _____

List equipment efficiencies: _____

JONATHAN L. MEDLIN
REGISTERED ARCHITECT
NORTH CAROLINA
RALEIGH, NC

JAMES W. MEDLIN
REGISTERED ARCHITECTURAL CONSULTANT
NORTH CAROLINA
RALEIGH, NC
CERT. NO. 586

10/7/2016

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Raleigh, NC 27615
919.848.4474

MAJESTIC MARBLE & GLASS

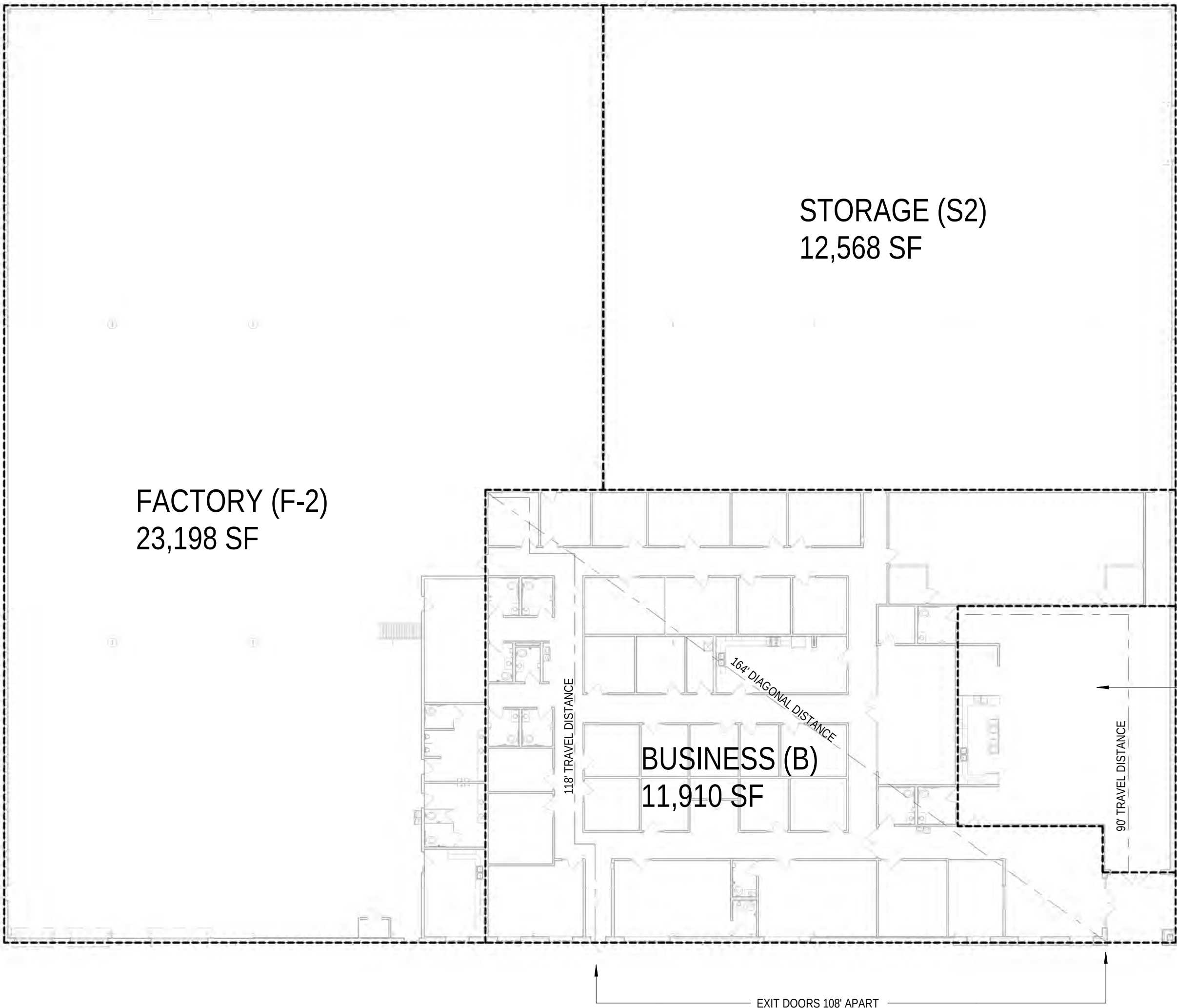
Jeffrey Way
Youngsville, NC

No.	Description	Date
1	OWNER CHANGES	10/25/16

PROJECT #: 160032

DATE: 10/7/2016

BUILDING CODE SUMMARY



1 1st FLOOR PLAN

1" = 20'-0"

CALCULATED OCCUPANT LOAD:

OCCUPANCY	SF	SF/OCP	NO. OCCUPANTS
FACTORY F2	23,198 SF	OWNER SPECIFIED	35
BUSINESS B	11,910	100 GROSS	119.1
MERCANTILE M	2,324	30 GROSS	77.5
STORAGE S2	12,568	300 GROSS	41.9
TOTAL:	50,000		273.5

PLUMBING FIXTURE CALCULATIONS 2902.1:

FACTORY F2	REQUIRED	PROVIDED
35 OCP		

(PER OSHA 29 CFR 1910.14.1)

W/C			
18 MEN	1/35	0.5	3
17 WOMEN	1/35	0.5	2
LAV			
18 MEN	1	1	2
17 WOMEN	1	1	2

BUSINESS B

119.1 OCP

W/C		
FIRST 50 OCCUPANTS:		
25 MEN	1/25	1
25 WOMEN	1/25	1

REMAINING 69.1 OCCUPANTS:		
35 MEN	1/50	0.7
35 WOMEN	1/50	0.7

W/C TOTALS		
MEN	1.7	4
WOMEN	1.7	3

LAVS		
FIRST 80 OCCUPANTS:		
40 MEN	1/40	1
40 WOMEN	1/40	1

REMAINING 39.1 OCCUPANTS:		
20 MEN	1/80	0.3
20 WOMEN	1/80	0.3

LAV TOTALS		
MEN	1.3	4
WOMEN	1.3	3

DRINKING FOUNTAIN	1 HI LO	1 HI LO
-------------------	---------	---------

MERCANTILE - M

77.5 OCP

W/C		
39 MEN	1/500	0.1
39 WOMEN	1/500	0.1

LAV		
39 MEN	1/750	0.1
39 WOMEN	1/750	0.1

DRINKING FOUNTAIN	1 HI LO	1 HI LO
-------------------	---------	---------

STORAGE - S2

41.9 OCP

W/C		
21 MEN	1/100	0.2
21 WOMEN	1/100	0.2

LAV		
21 MEN	1/100	0.2
21 WOMEN	1/100	0.2

SPECIAL INSPECTIONS CHAPTER 17

☒ No special inspections required for this project ☐ Special inspections required

The following sheets comprise the required schedule of special inspections for this project.
The construction divisions which require special inspections for this project are as follows:

- Fabricators
- ☐ IT-1 Verification of Soils

☐ IT-2 Excavation and Fill

☐ IT-3 Piling and Drilling Piers

☐ IT-4 Modular Retaining Walls

☐ IT-5 Reinforced Concrete

☐ IT-6 Post Tension Slab

☐ IT-7 Pre-cast Concrete Erection

☐ IT-8 Pre-stressed Concrete

☐ IT-9 Inspection of Pre-Cast Fabricators

☐ IT-10 Inspection of Structural Steel

☐ IT-11 Structural Masonry

☐ IT-12 Welding

☐ IT-13 High Strength Bolts & Steel Framing Insp.

☐ IT-14 Sprayed Fire-Resistance Materials

☐ IT-15 Exterior Insulations and Finish system

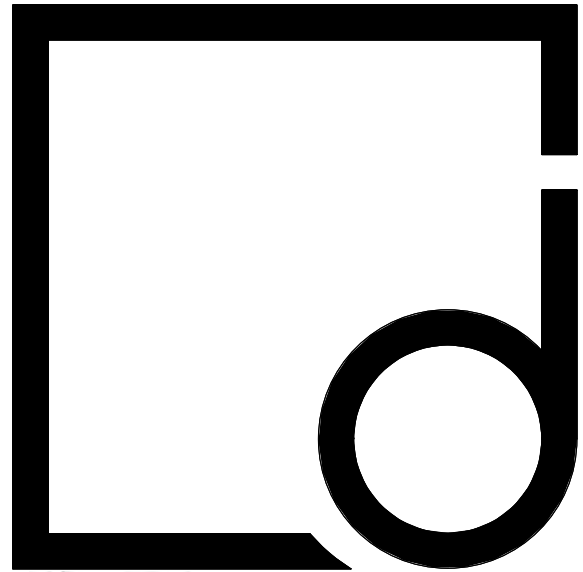
☐ IT-16 Seismic Resistance

☐ IT-17 Smoke Control

☐ IT-18 Detention Basin

☐ IT-19 Special Cases

Check the above boxes for the special inspection required for this project and list below specific special inspections required under Chapter 17.



10/7/2016

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MAJESTIC
MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
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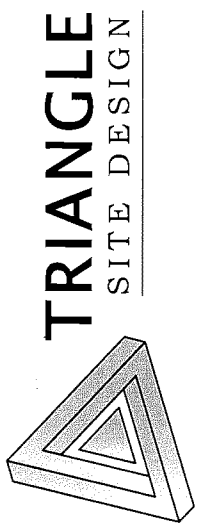
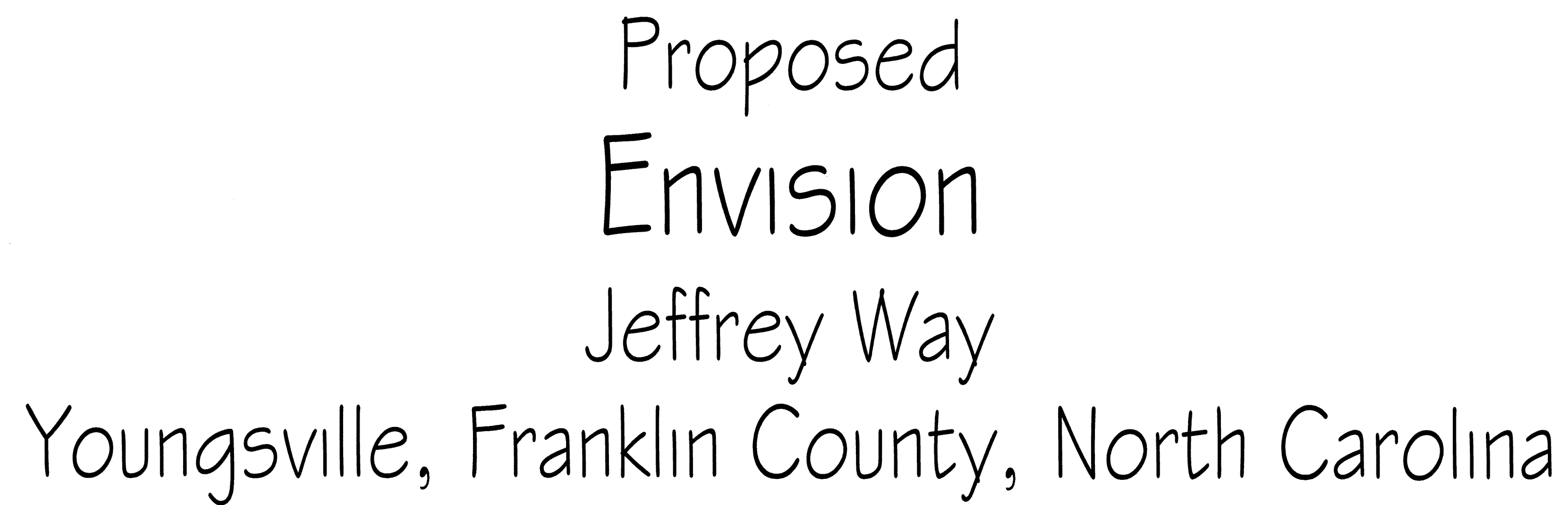
PROJECT #: 160032

DATE: 10/7/2016

BUILDING CODE

T3

DIGITAL PRINT DATE: 10/11/2016 2:33:47 PM



Cade, Inc.
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120-F Weathers Street
Youngsville, NC 27596
919-562-2115
bbland@cadenc.com

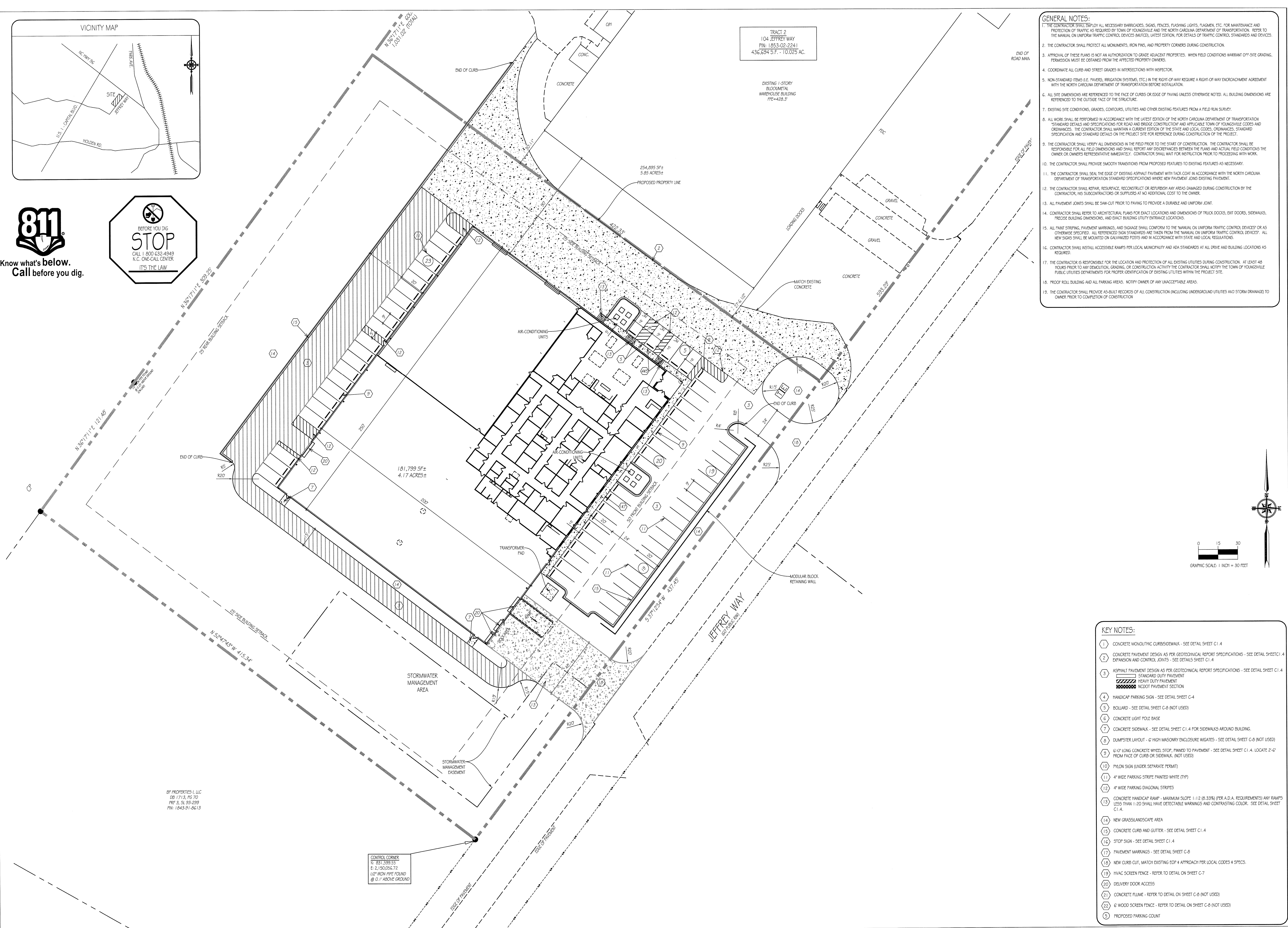
PROPOSED BUILDING:	50,000 SF	1.15 AC	27.5% OF SITE
PROPOSED SIDEWALK:	1,410 SF	0.03 AC	0.8% OF SITE
PROPOSED PAVEMENT:	50,575 SF	1.16 AC	27.8% OF SITE
PROPOSED IMPERVIOUS AREA:	101,985 SF	2.341 AC	56.1% OF SITE
OPEN SPACE:	79,814 SF	1.832 AC	43.9% OF SITE



CO.0	COVER SHEET
DI.0	DEMOLITION PLAN
CI.0	SITE PLAN
CI.1	GRADING & DRAINAGE PLAN
CI.2	UTILITY PLAN
CI.3	UTILITY DETAILS
CI.4	CONSTRUCTION DETAILS
CI.5	STORMWATER MANAGEMENT DETAILS
CI.6a	INITIAL SEDIMENTATION & EROSION CONTROL PLAN
CI.6b	GRADING SEDIMENTATION & EROSION CONTROL PLAN
CI.7	EROSION CONTROL DETAILS
CI.8	LANDSCAPE PLAN

Sheet No.
CO.0

Envision, Franklin County, North Carolina



- ## GENERAL NOTES:
1. THE CONTRACTOR SHALL EMPLOY ALL NECESSARY BARRICADES, SIGNS, FENCES, FLASHING LIGHTS, FLAGMEN, ETC. FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS REQUIRED BY TOWN OF YOUNGVILLE AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, FOR DETAILS OF TRAFFIC CONTROL, STANDARDS AND DEVICES.
 2. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
 3. APPROVAL OF THESE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
 4. COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH INSPECTOR.
 5. NON-STANDARD ITEMS (IE: PAVES, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY ENCROACHMENT AGREEMENT WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BEFORE INSTALLATION.
 6. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.
 7. EXISTING SITE CONDITIONS, GRADES, CONTOURS, UTILITIES AND OTHER EXISTING FEATURES FROM A FIELD RUN SURVEY.
 8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD DETAILS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE TOWNS OF YOUNGVILLE CODES AND ORDINANCES. THE CONTRACTOR SHALL MAINTAIN A CURRENT EDITION OF THE STATE AND LOCAL CODES, ORDINANCES, STANDARD SPECIFICATION AND STANDARD DETAILS ON THE PROJECT SITE FOR REFERENCE DURING CONSTRUCTION OF THE PROJECT.
 9. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND SHALL REPORT ANY INDIFFERENCES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS TO THE OWNER OR OWNERS REPRESENTATIVE IMMEDIATELY. THE CONTRACTOR SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING WITH WORK.
 10. THE CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS FROM PROPOSED FEATURES TO EXISTING FEATURES AS NECESSARY.
 11. THE CONTRACTOR SHALL SEAL THE EDGE OF EXISTING ASPHALT PAVEMENT WITH TACK COAT IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS WHERE NEW PAVEMENT JOINS EXISTING PAVEMENT.
 12. THE CONTRACTOR SHALL REPAIR, RESURFACE, RECONSTRUCT OR REFURISH ANY AREAS DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, HIS SUBCONTRACTORS OR SUPPLIERS AT NO ADDITIONAL COST TO THE OWNER.
 13. ALL PAVEMENT JOINTS SHALL BE SAW-CUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
 14. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF TRUCK DOCKS, EXIT DOORS, SIDEWALKS, PEDESTAL BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
 15. ALL PAINT STRIPES, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR AS OTHERWISE SPECIFIED. ALL REFERENCED SIGN STANDARDS ARE TAKEN FROM THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL NEW SIGN SHALL BE INSTALLED ON GUARANTEED POSTS AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
 16. CONTRACTOR SHALL INSTALL ACCURATE RAMPES PER LOCAL, MUNICIPALITY AND ADA STANDARDS AT ALL DRIVE AND BUILDING LOCATIONS AS REQUIRED.
 17. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY THE CONTRACTOR SHALL NOTIFY THE TOWN OF YOUNGVILLE PUBLIC UTILITIES DEPARTMENTS FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITH THE PROJECT SITE.
 18. PROOF ROLL BUILDING AND ALL PARKING AREAS. NOTIFY OWNER OF ANY UNACCEPTABLE AREAS.
 19. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES AND STORM DRAINAGE) TO OWNER PRIOR TO COMPLETION OF CONSTRUCTION.

- ## KEY NOTES:
- (1) CONCRETE MONOLITHIC CURB/SIDWALK - SEE DETAIL SHEET C.1-4
 - (2) CONCRETE PAVEMENT DESIGN AS PER GEOTECHNICAL REPORT SPECIFICATIONS - SEE DETAIL SHEET C.1-4
EXPANSION AND CONTROL JOINTS - SEE DETAILS SHEET C.1-4
 - (3) ASPHALT PAVEMENT DESIGN AS PER GEOTECHNICAL REPORT SPECIFICATIONS - SEE DETAIL SHEET C.1-4

 - (4) HANDICAP PARKING SIGN - SEE DETAIL SHEET C-4
 - (5) BOLLARD - SEE DETAIL SHEET C-8 (NOT USED)
 - (6) CONCRETE LIGHT POLE BASE
 - (7) CONCRETE SIDEWALK - SEE DETAIL SHEET C.1-4 FOR SIDEWALKS AROUND BUILDING.
 - (8) DUMPSTER LAYOUT - 6' HIGH MASONRY ENCLOSURE WIGATES - SEE DETAIL SHEET C-8 (NOT USED)
 - (9) 6'-0" LONG CONCRETE WHEEL STOP, FINNED TO PAVEMENT - SEE DETAIL SHEET C.1-4. LOCATE 2'-6" FROM FACE OF CURB OR SIDEWALK (NOT USED)
 - (10) PILON SIGN (UNDER SEPARATE PERMIT)
 - (11) 4' WIDE PARKING STRIPE, PAINTED WHITE (TYP)
 - (12) 4' WIDE PARKING DIAGONAL STRIPE
 - (13) CONCRETE HANDICAP RAMP - MAXIMUM SLOPE: 1:12 (0.83%) (PER A.D.A. REQUIREMENTS) ANY RAMPS LESS THAN 1:20 SHALL HAVE DETECTABLE WARNINGS AND CONTRASTING COLOR - SEE DETAIL SHEET C.1-4
 - (14) NEW GRASS/LANDSCAPE AREA
 - (15) CONCRETE CURB AND GUTTER - SEE DETAIL SHEET C.1-4
 - (16) STOP SIGN - SEE DETAIL SHEET C.1-4
 - (17) PAVEMENT MARKINGS - SEE DETAIL SHEET C-8
 - (18) NEW CURB CUT, MATCH EXISTING G/F APPROACH PER LOCAL CODES & SPECS.
 - (19) HYVAC SCREEN FENCE - REFER TO DETAIL ON SHEET C-7
 - (20) DELIVERY DOOR ACCESS
 - (21) CONCRETE PLUME - REFER TO DETAIL ON SHEET C-8 (NOT USED)
 - (22) 6' WOOD SCREEN FENCE - REFER TO DETAIL ON SHEET C-8 (NOT USED)
 - (23) PROPOSED PARKING COUNT

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awder@tranglesitedesign.com
FENSE #P-0619



ER/DEVELOPER:

Bill Bland
F Weathers Street
Angusville, NC 27596
562-2115
nd@cadeinc.com

Division
Jeffrey Way
Youngsville, NC
Franklin County

[illegible]

proved

ect No

10

C15

51

100%

(

1



Know what's below.
Call before you dig.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

CAUTIONARY NOTE

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE BASED ON ABOVE GROUND EVIDENCE OR INFORMATION GATHERED DURING THE FIELD SURVEY PORTION OF THIS PROJECT. AS SUCH, THIS INFORMATION IS SPECULATIVE IN NATURE. ONLY AND SHOULD NOT BE CONSTRUED AS FACT. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF THE UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY AND ALL CONSTRUCTION.

SURVEY NOTE:

ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: NEWCOMB LAND SURVEYORS, LLC.

STREAM/WETLAND NOTE:

THERE ARE NO EXISTING JURISDICTIONAL STREAMS AND/OR WETLAND AREAS ON THE PROPOSED DEVELOPMENT.

FLOOD NOTE:

SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE PER FEMA FLOOD INSURANCE RATE MAP (FIRM # 57201053001) EFFECTIVE DATE APRIL 16, 2013.

TRACT 2
104 JEFFREY WAY
PIN: 1853-02-2241
436,694 S.F. - 10.025 AC.

EXISTING 1-STORY
BLOCKMETAL
WAREHOUSE BUILDING
FTE=428.3'

KEYNOTES

DEMOLITION

- 1 REMOVE TREES AND ROOT SYSTEM
- 2 REMOVE EXISTING BUILDING AND FOUNDATION
- 3 REMOVE FENCE, POST, AND FOUNDATION (NOT USED)
- 4 REMOVE ALL EXISTING SHRUBS AND DEBRIS
- 5 REMOVE EXISTING SIDEWALKS (NOT USED)
- 6 REMOVE EXISTING CONCRETE CURB
- 7 REMOVE EXISTING DRIVEWAY APPROACHES
- 8 REMOVE EXISTING PAVEMENT
- 9 REMOVE EXISTING UTILITIES

DEMOLITION NOTES

GENERAL DEMOLITION NOTES:

1. ALL WORK TO BE ACCOMPLISHED IN STRICT ACCORDANCE WITH ALL LOCAL ORDINANCES, CITY OR STATE.
2. WITHIN THE SUBJECT PROPERTY, THE INTENT IS TO HAVE A CLEAN, CLEAR SITE, FREE OF ALL EXISTING ITEMS NOTED TO BE REMOVED IN ORDER TO PERMIT THE CONSTRUCTION OF THE NEW PROJECT.
3. ALL ITEMS NOTED TO BE REMOVED BY THE SELLER SHALL BE ACCOMPLISHED PRIOR TO THE CLOSING OF THE REAL ESTATE TRANSACTION. ALL OTHER ITEMS NOTED TO BE REMOVED SHALL BE DONE SO AS PART OF THE CONTRACT FOR GENERAL CONSTRUCTION.
4. REMOVE AND DISPOSE OF ANY SIDEWALKS, FENCES, STARS, WALLS, DEBRIS AND RUBBISH REQUIRING REMOVAL FROM THE WORK AREA IN AN APPROVED OFF SITE LANDFILL.
5. THE CONTRACTOR SHALL SECURE ALL PERMITS FOR HIS DEMOLITION AND DISPOSAL OF HIS DEMOLITION MATERIAL TO BE REMOVED FROM THE SITE. THE CONTRACTOR SHALL POST BONDS AND PAY PERMIT FEES AS REQUIRED. BUILDING DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR PERMITS AND DISPOSAL OF BUILDING DEMOLITION DEBRIS.
6. THE DETAILED PLANS MAY NOT REFLECT ALL UTILITIES ON THE SITE OR SURROUNDING STREETS AND PROPERTIES. THE CONTRACTOR SHALL VERIFY LOCATIONS AND EXISTENCE OF UTILITY SERVICES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL "DIG SAFE" AT 1-800-344-7233, 72 HOURS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR TO REMOVE ALL UTILITIES TO EXISTING STRUCTURES WHETHER SHOWN OR NOT OR ARRANGE FOR THE APPROPRIATE UTILITY COMPANY TO CUT AND CAP SERVICE PIPING AT THE PROPERTY LINE OR MAIN (AS REQUIRED). ALL SERVICES MAY NOT BE SHOWN ON THIS PLAN.
8. FOR ALL ITEMS NOTED TO BE REMOVED - REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS, BUT ALL UNDERGROUND ELEMENTS AS WELL INCLUDING BUT NOT NECESSARILY LIMITED TO: FOUNDATIONS, GRAVEL PILLS, TREE ROOTS, OLD PIPES, ETC.
9. BACK FILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK TO MEET THE REQUIREMENTS FOR FILL OUTLINED IN THE GEOTECHNICAL REPORT.
10. THE CONTRACTOR SHALL PROTECT ALL IRON PINS, MONUMENTS AND PROPERTY CORNERS DURING CONSTRUCTION. ANY CONTRACTOR DISTURBED PINS, MONUMENTS, ETC. SHALL BE RESET BY A LICENSED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
11. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPES, PAVEMENT, CURBS, SIDEWALKS OR LANDSCAPED AREAS DISTURBED DURING DEMOLITION TO THEIR ORIGINAL CONDITION TO THE SATISFACTION.
12. ALL BUILDINGS, FOUNDATION WALLS AND FOOTINGS INDICATED ON THIS PLAN TO BE REMOVED FROM SITE. CONTRACTOR SHALL SECURE ANY PERMITS AND PAY ALL FEES AND PERFORM CLEARING AND GRUBBING AND DEBRIS REMOVAL PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.
13. ASBESTOS AND ANY OTHER HAZARDOUS MATERIAL SHALL BE REMOVED BY THE GENERAL CONTRACTOR USING A LICENSED HAZARDOUS MATERIAL CONTRACTOR.



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LICENSE #P-0619



OWNER/DEVELOPER:

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Envision
Jeffrey Way
Youngsville, NC
Franklin County

REVISIONS		Date	
No.	Desc.		

Drawn
Checked
Approved

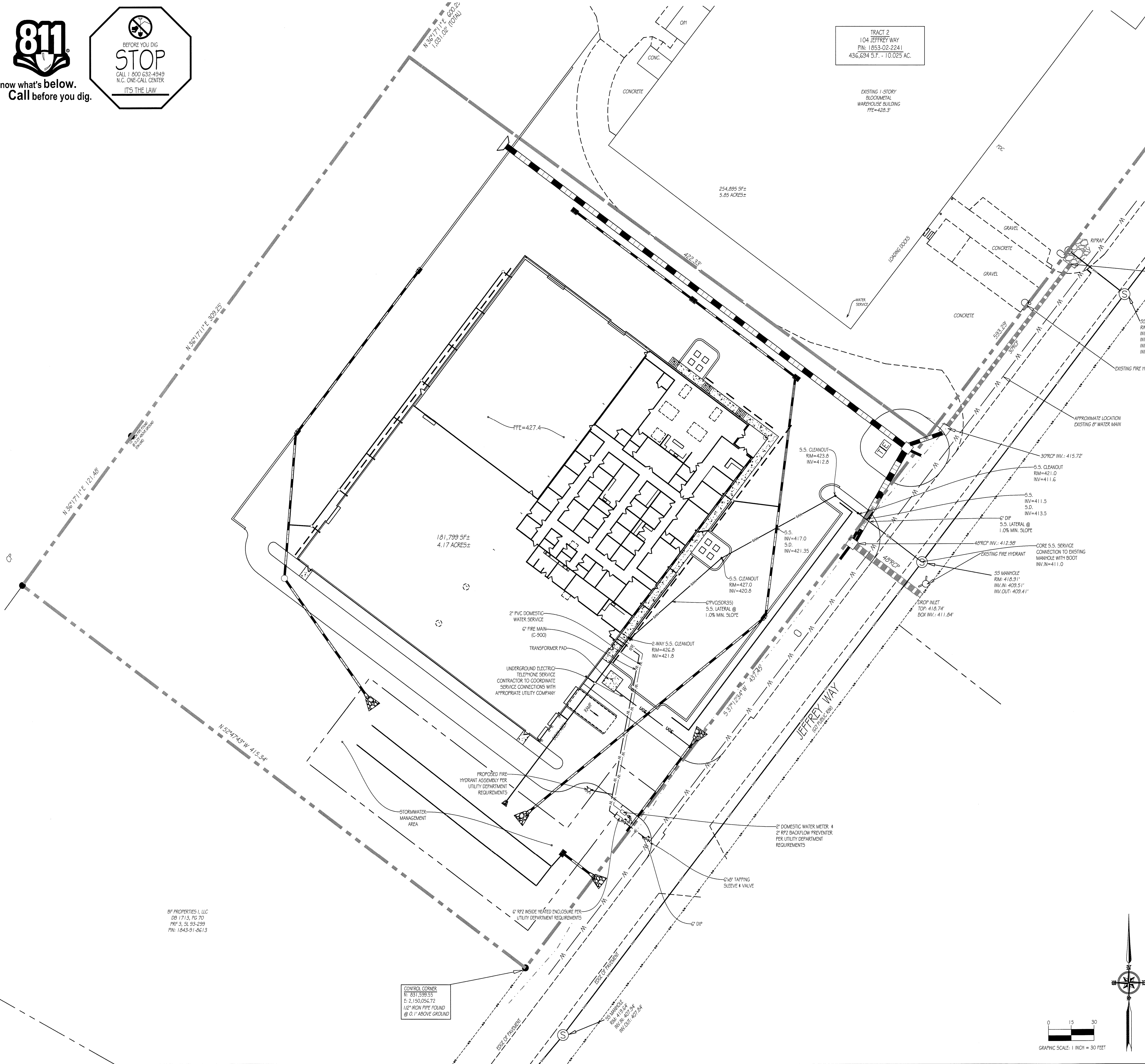
Project No. 027002
Date: September, 29 2016

EXISTING
CONDITIONS
PLAN

Sheet No.
D1.0



Know what's below.
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TRACT 2
104 JEFFREY WAY
PIN: 1853-02-224
436,694 S.F. - 10.025 AC.

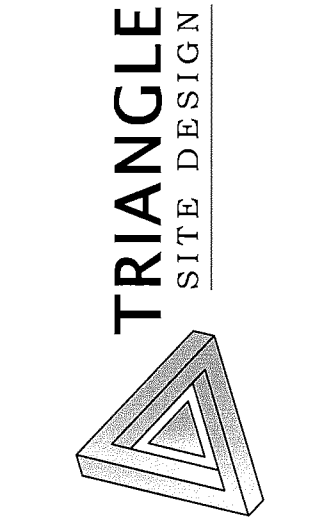
EXISTING 1-STORY
BLOCKMETAL
WAREHOUSE BUILDING
FTE=428.3'

UTILITY LEGEND	
PP	NEW POWER POLE
WM	NEW WATER METER
GM	NEW GAS METER
EM	NEW ELECTRIC METER
W-W-W-W	NEW WATER SERVICE (REFER TO CIVIL DRAWINGS)
G-G-G-G	NEW GAS SERVICE
SAN	NEW SANITARY SEWER (REFER TO CIVIL DRAWINGS)
SC	NEW SANITARY SEWER CLEANOUT (AT EVERY 60 FEET)
UGS	NEW UNDERGROUND POWER (120/208V-3 SERVICE)
UT	NEW UNDERGROUND TELEPHONE SERVICE

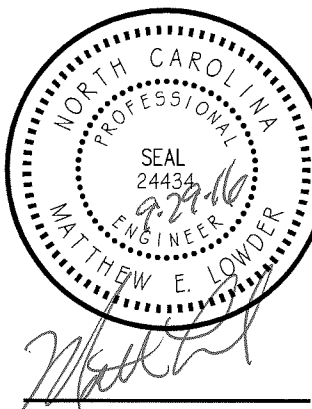
NOTE: 1. CONTRACTOR TO BE RESPONSIBLE FOR VERIFYING & APPLYING FOR UTILITY SERVICE WITH EACH UTILITY COMPANY PRIOR TO STARTING CONSTRUCTION.
2. CONTRACTOR TO BE RESPONSIBLE FOR STREET BORE, IF REQUIRED BY FRANKLIN COUNTY PUBLIC UTILITIES DEPARTMENT

UTILITY CONTACTS	
WATER AND SEWER: FRANKLIN COUNTY PUBLIC UTILITIES 1630 US HIGHWAY 1 YOUNGVILLE, NC 27596 PH: (919) 556-6177	GAS: N/A
TRANSPORTATION: NCDOT	ZONING/PLANNING: TOWN OF YOUNGVILLE PLANNING DEPT. ATTN: PH:
POWER: PROGRESS ENERGY	
CABLE/INTERNET: TIME WARNER CABLE ATTN: LIZ MUNLEY 101 INNOVATION AVE. MORRISVILLE, NC 27560 PH: 919-573-7368	

- UTILITY NOTES:**
- THE CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTACT THE LOCAL MUNICIPALITY PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO COMMENCEMENT OF WORK FOR UTILITY LOCATING SERVICES. ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS ONLY AND HAVE BEEN COMPILED FROM THE LATEST AVAILABLE MAPPING. THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
 - CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE FRANKLIN COUNTY UTILITY DEPARTMENT
 - CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE FRANKLIN COUNTY UTILITY DEPARTMENT WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SANITARY SEWER LINES.
 - CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. A PRE-CONSTRUCTION MEETING WITH THE VARIOUS UTILITY COMPANIES IS REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
 - CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTOR 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
 - THE CONTRACTOR SHALL COORDINATE ANY INTERRUPTION OF UTILITY SERVICE WITH THE OWNER AND THE UTILITY COMPANY. ANY PLANNED INTERRUPTION OF UTILITY SERVICE SHALL BE GIVEN A 48 HOUR NOTICE TO THE UTILITY COMPANY AND THE OWNER.
 - SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER IMMEDIATELY FOR DIRECTIONS. PSI - SEE MECHANICAL/PLUMBING PLANS.
 - PRESSURE REDUCING VALVES WILL BE REQUIRED ON THE DOMESTIC WATERLINES FOR EACH BUILDING IF THE STATIC PRESSURE IN THE WATER MAIN EXCEEDS 80 PSI.
 - ROUTES SHOWN FOR WATER SERVICES, ELECTRIC, SANITARY SEWER BUILDING LATERALS AND ROOF DRAIN PIPING ARE SUBJECT TO CHANGE.
 - THE CONTRACTOR SHALL SAW CUT, REMOVE, AND REPLACE ASPHALT PAVEMENT AS NECESSARY TO INSTALL UNDERGROUND ELECTRIC, TELEPHONE, SEWER, AND WATER.
 - THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE SERVICES CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT OWNER IN THE EVENT OF ANY UNRESOLVED CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
 - THE CONTRACTOR SHALL INSURE THAT ALL UTILITY COMPANIES AND FRANKLIN COUNTY UTILITY DEPARTMENT STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE WORKS TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTION, RELOCATIONS, INSPECTIONS, AND DEMOLITION.
 - THIS PLAN DETAILS PIPES UP TO 3" FROM THE BUILDING FACE. REFER TO THE BUILDING DRAWINGS FOR BUILDING CONNECTIONS. SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY.
 - ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT AND REPLACED IN ACCORDANCE WITH THE PAVEMENT REPAIR REQUIREMENTS OF THE FRANKLIN COUNTY UTILITY DEPARTMENT AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION.
 - MAINTAIN MINIMUM 10.0' HORIZONTAL SEPARATION BETWEEN ON-SITE SANITARY SEWER AND DOMESTIC OR IRRIGATION WATER PIPING WHENEVER POSSIBLE. WHERE WATER PIPING MUST CROSS OVER SANITARY SEWER PIPING, MAINTAIN A MINIMUM 18" VERTICAL SEPARATION. WHERE SANITARY SEWER PIPING MUST CROSS OVER WATER PIPING, MAINTAIN A MINIMUM 24" VERTICAL SEPARATION AND PROVIDE MIN. 4" THICK CONCRETE ENCASUREMENT OR 4" CONTINUOUS CAST IRON PIPE SLEEVE ON WATER PIPING FOR A MINIMUM OF 12" ON EACH SIDE OF THE SAN. SEWER CROSSING. WHERE PERMITTED BY LOCAL CODE, DOMESTIC WATER AND SANITARY SEWER SERVICE PIPING MAY BE INSTALLED IN A COMMON TRENCH. TRENCH AND PIPING PLACEMENT SHALL COMPLY WITH ALL GOVERNING CODES AND REGULATIONS.



CONSULTANT:
TRIANGLE SITE DESIGN, PLLC
4004 BARRETT DR., STE 101
RALEIGH, NC 27609
(919) 553-4570
tristone@trianglesitedesign.com
LICENSE #P-0619



OWNER/DEVELOPER:
Case, Inc.
Attn: Dale Brand
120 F. Wardens Street
Youngville, NC 27596
919-562-2115
bbrand@caseinc.com

Envision
Jeffrey Way
Youngville, NC
Franklin County

REVISIONS	
No.	Date

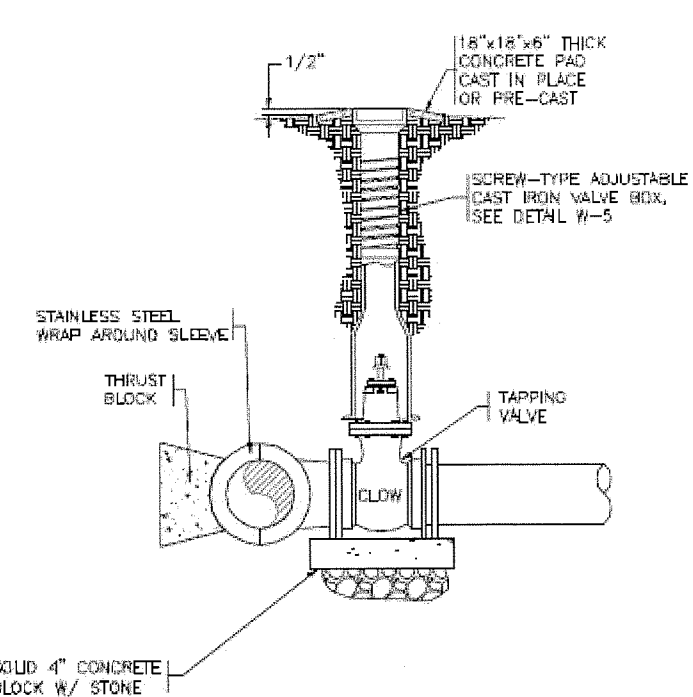
Drawn
Checked
Approved

Project No. 027002
Date: September, 29 2016

UTILITY
PLAN

Sheet No.
C1.2

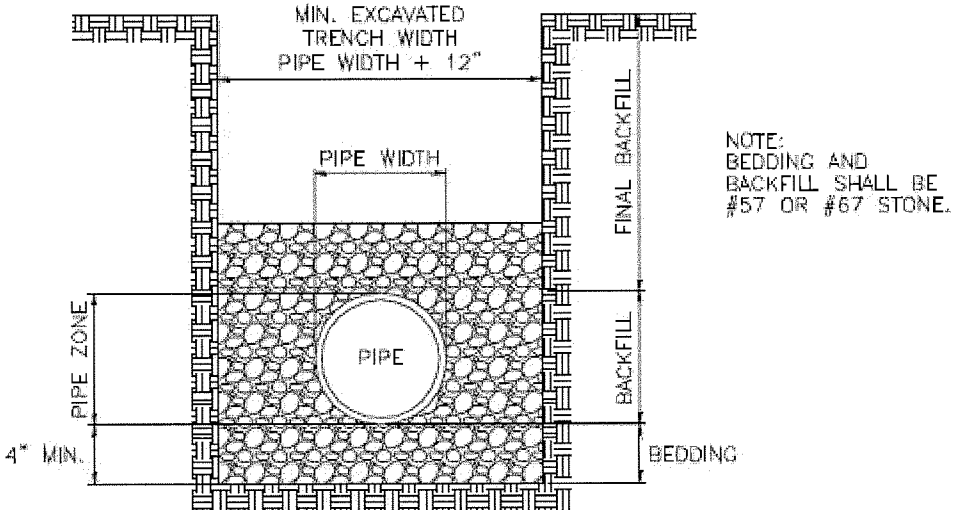
REVISIONS			
Sym.	DESCRIPTION	DATE	BY



-
- NOTES:
1. INSTALL MARKER POSTS ON EDGE OF THE DOT R/W LINE.
 2. PROVIDE MARKER POSTS AT ALL LINE VALVES.
 3. DIRECTIONS STAMPED ON POST AS FOLLOWS:
 W = MAIN VALVE
 BO = BLOW OFF VALVE
 PLATE W/ DIRECTIONAL ARROW POINTS TO VALVE TO NEAREST FOOT
- Diagram labels and dimensions:
- 5 1/2" (width of marker plate)
 - 5 1/2" (width of marker plate)
 - BRASS MARKER PLATE
 - 12" BRASS MARKER PLATE W/ 1/4" THICK
 - 3/4" CHAMFER AT EACH CORNER
 - EXISTING GROUND
 - 2" NO. 3 REINFORCEMENT BARS
 - 12 CUBIC FEET CONCRETE MINIMUM
 - 7'-0" (height of concrete)
 - 2'-0" (width of concrete base)

FRANKLIN COUNTY PUBLIC UTILITIES

FRANKLIN COUNTY PUBLIC UTILITIES	
DRAWING #	TAPPING SLEEVE AND VALVE ASSEMBLY
W-3	



- NOTES:
1. BEDDING WITH STONE TO SPRING LINE FOR DEPTHS UP TO 12". BACKFILL WITH STONE TO TOP OF PIPE FOR DEPTHS GREATER THAN 12".
 2. UNDER AREAS TO BE SEED OR SODDED, COMPACT SUCCEEDING LAYERS OF FINAL BACKFILL IN 12" LOOSE LIFTS TO 95% MAXIMUM DENSITY.
 3. UNDER STRUCTURES, PAVEMENTS, AND ROAD SHOULDERS, COMPACT SUCCEEDING LAYER OF FINAL BACKFILL IN 12" LOOSE LIFTS TO 95% MAXIMUM DENSITY EXCEPT COMPACT TOP 12" OF SUBGRADE TO 95 % MAXIMUM DENSITY

DRAWING #	SANITARY SEWER MAIN TRENCH DETAIL
S-1	

TOP	BOTTOM
10	15
10	24
16	24
16	36
26	36
26	48
26	60

FRANKLIN COUNTY PUBLIC UTILITIES

DRAWING #	
S-1	SANITARY SEWER MAIN TRENCH DETAIL

OWNER/DEVELOPER:
Cade, Inc.
Attn: Bill Bland
120-F Weathers Street
Youngsville, NC 27596
919-562-2115
bbland@cadeinc.com

Envision
Jeffrey Way
Youngsville, NC
Franklin County

[illegible]

Drawn _____
 Checked _____
 Approved _____

Project No. _____ 027002
 Date: _____ September, 29 20____

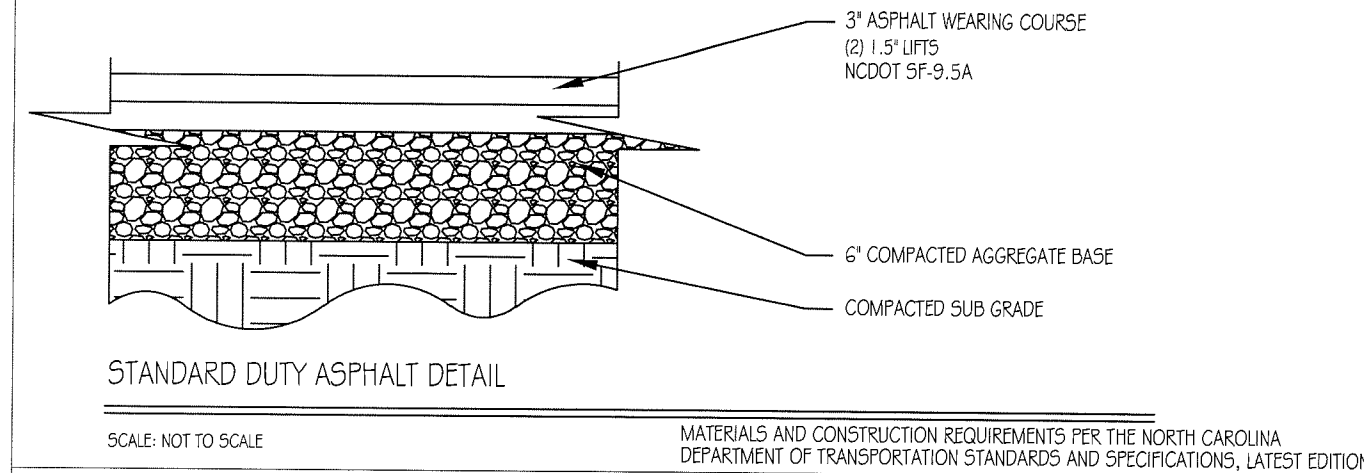
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UTILITY DETAILS

Sheet No. _____

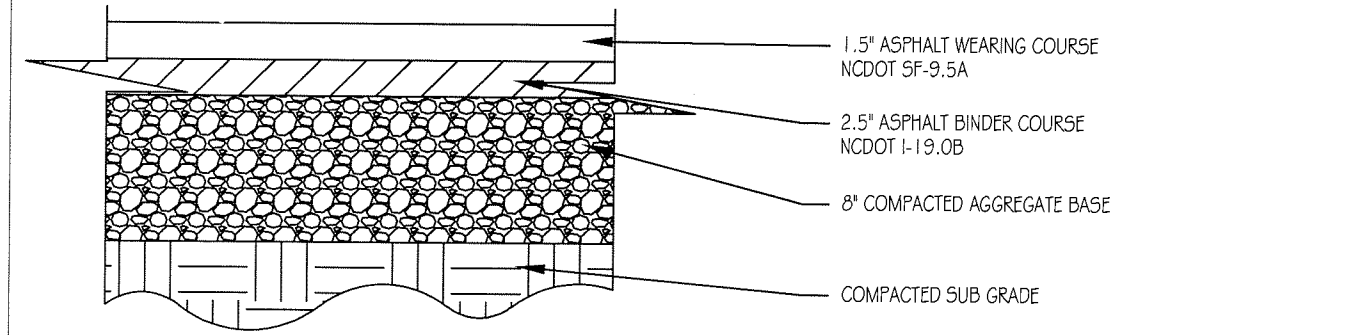
C1.3

ASPHALTIC PAVEMENT



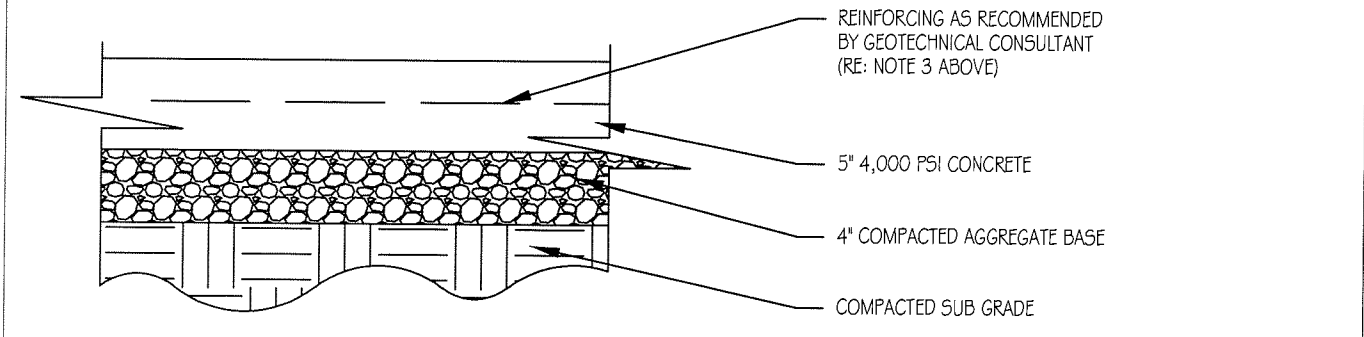
STANDARD DUTY ASPHALT DETAIL

SCALE: NOT TO SCALE
MATERIALS AND CONSTRUCTION REQUIREMENTS PER THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS, LATEST EDITION



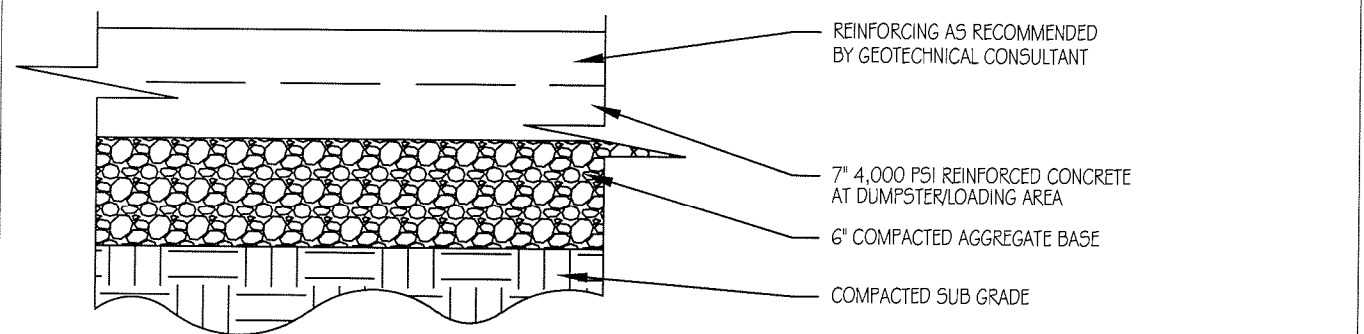
HEAVY DUTY ASPHALT DETAIL

SCALE: NOT TO SCALE
MATERIALS AND CONSTRUCTION REQUIREMENTS PER THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS, LATEST EDITION



STANDARD DUTY CONCRETE DETAIL

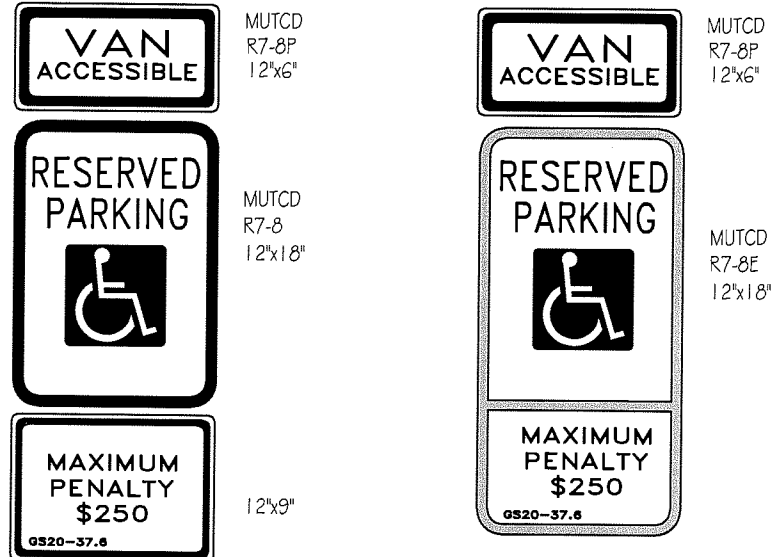
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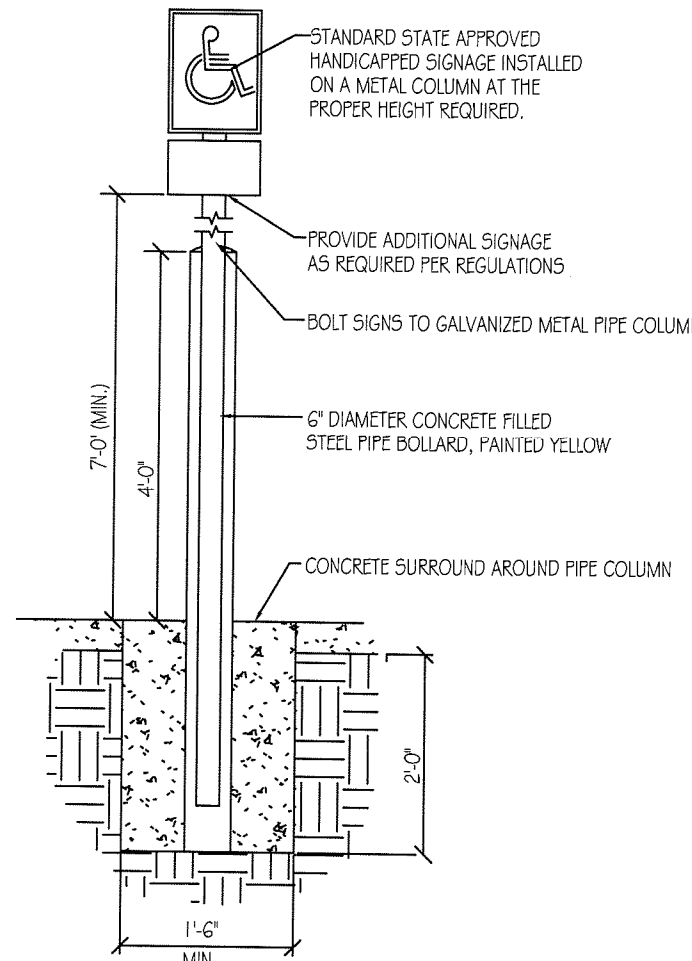
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SCALE: NOT TO SCALE
MATERIALS AND CONSTRUCTION REQUIREMENTS PER THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS, LATEST EDITION

- ACCESSIBLE PARKING SIGNAGE NOTES:
1. ALL LETTERS ARE TO BE PER THE LATEST EDITION OF THE MUTCD.
 2. TOP PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
 3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
 4. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER. CONTRACTOR SHALL VERIFY FINE AMOUNT AND ORDINANCE NUMBER.
 5. ONE (1) SIGN REQUIRED FOR EACH ACCESSIBLE PARKING SPACE.
 6. INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD)
 7. SIGN MAY BE MOUNTED ON BUILDING WALL, AT PROPER HEIGHT, IF ALIGNED WITHIN 12" OF CENTER OF PARKING SPACE.

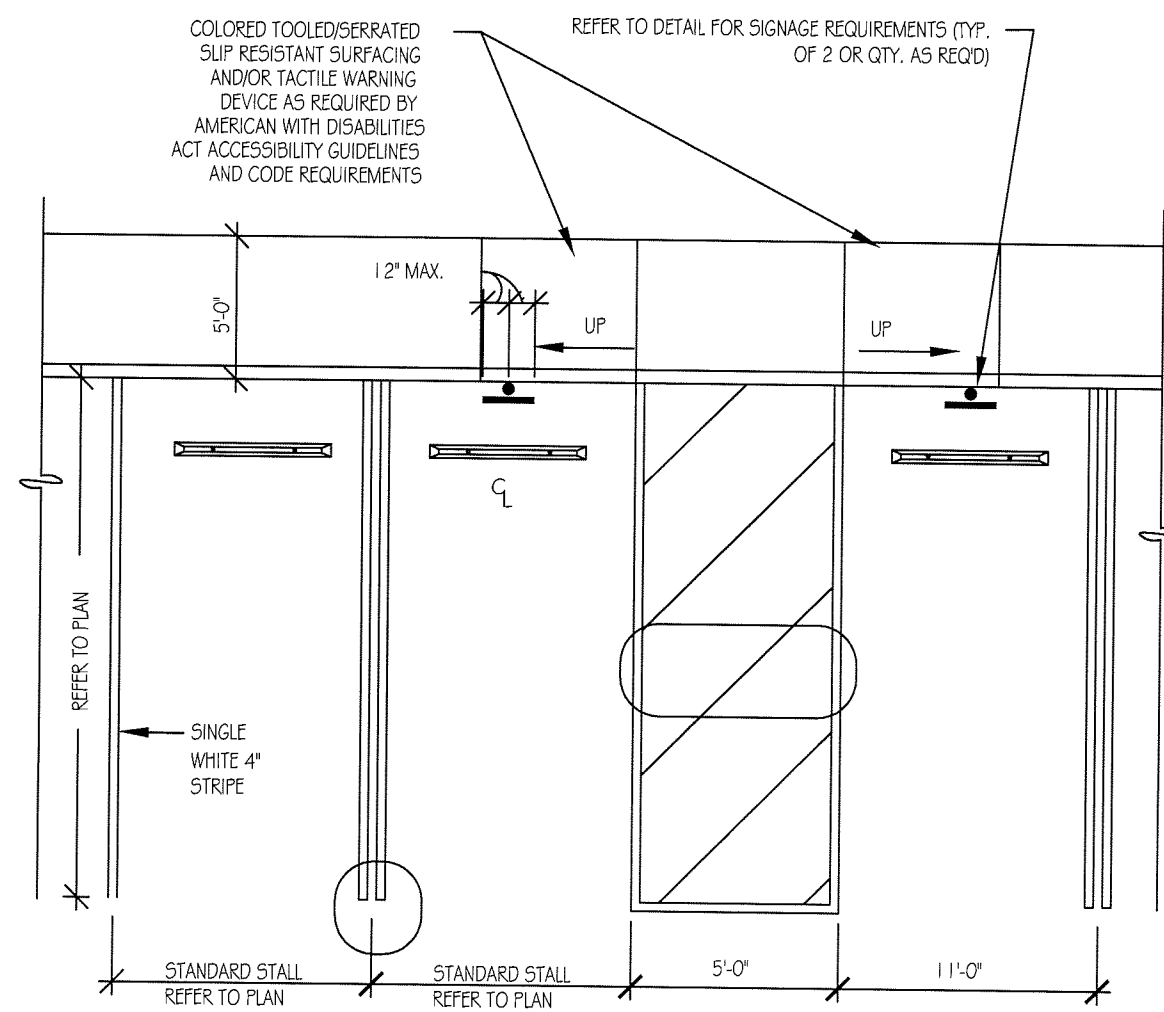


HANDICAP SIGN



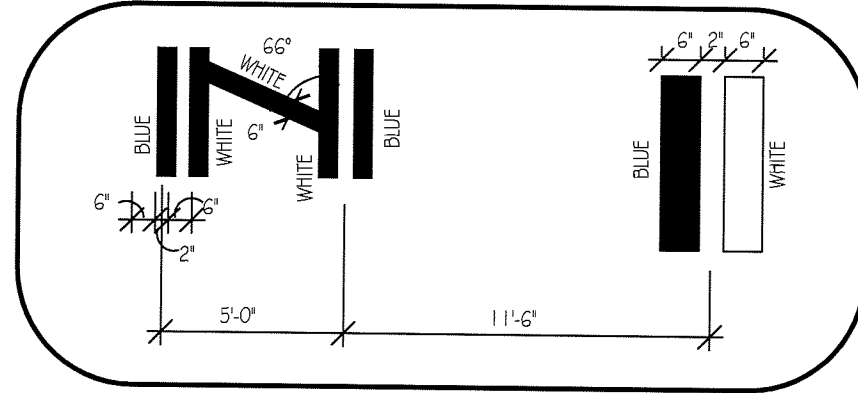
HANDICAP PARKING SIGN DETAIL

NOT TO SCALE

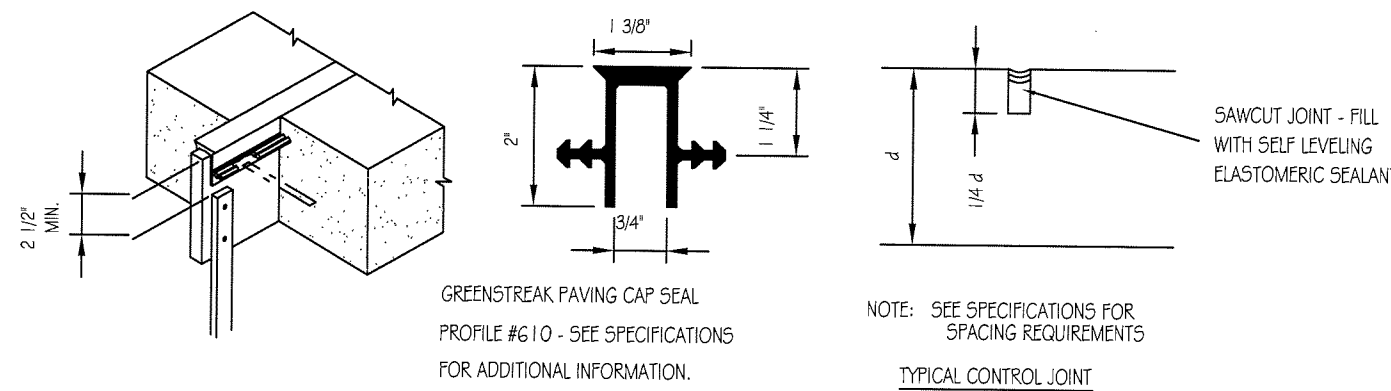


HANDICAP PARKING DETAIL

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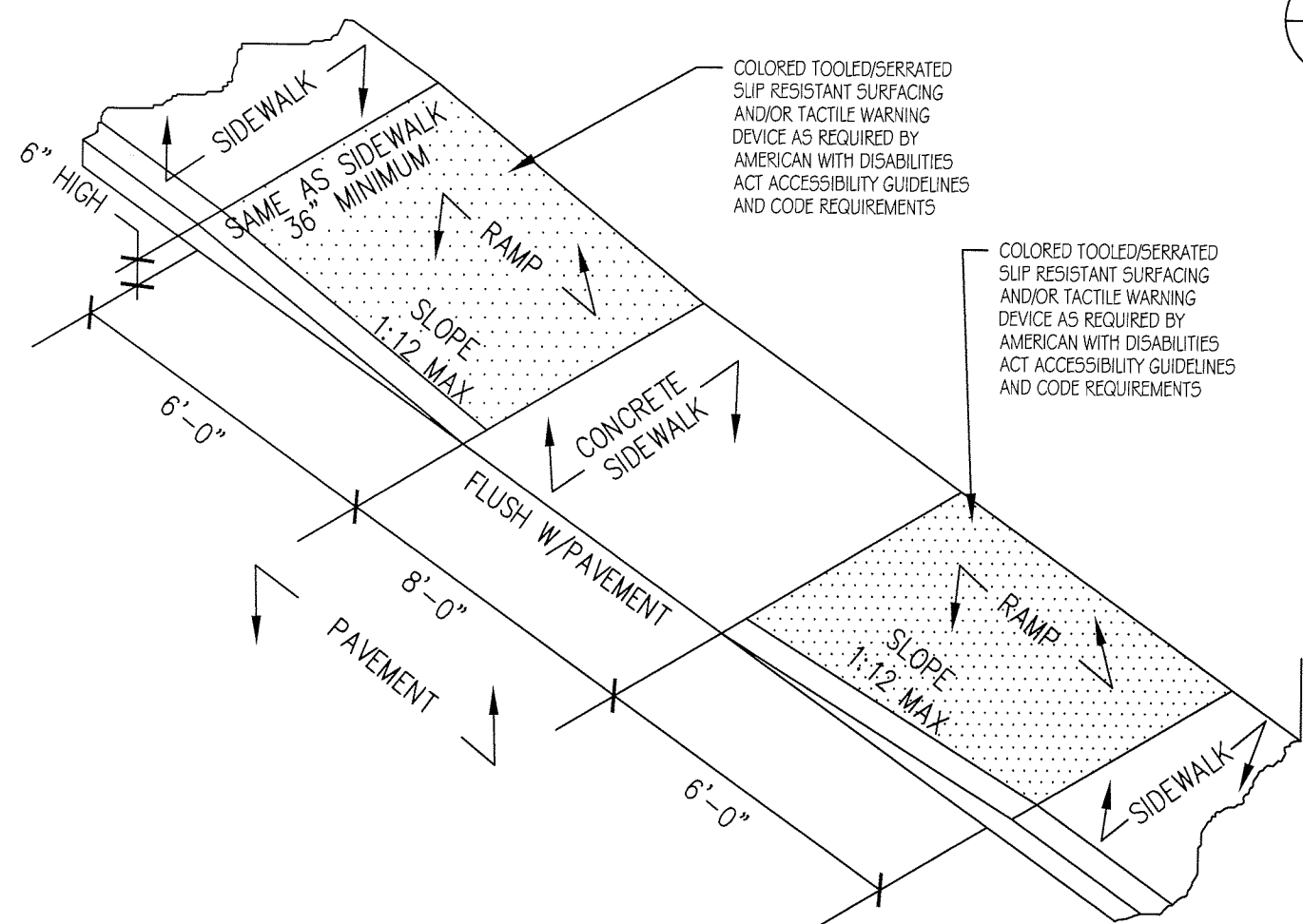
ENLARGED STRIPING LAYOUT



TYPICAL EXPANSION JOINT

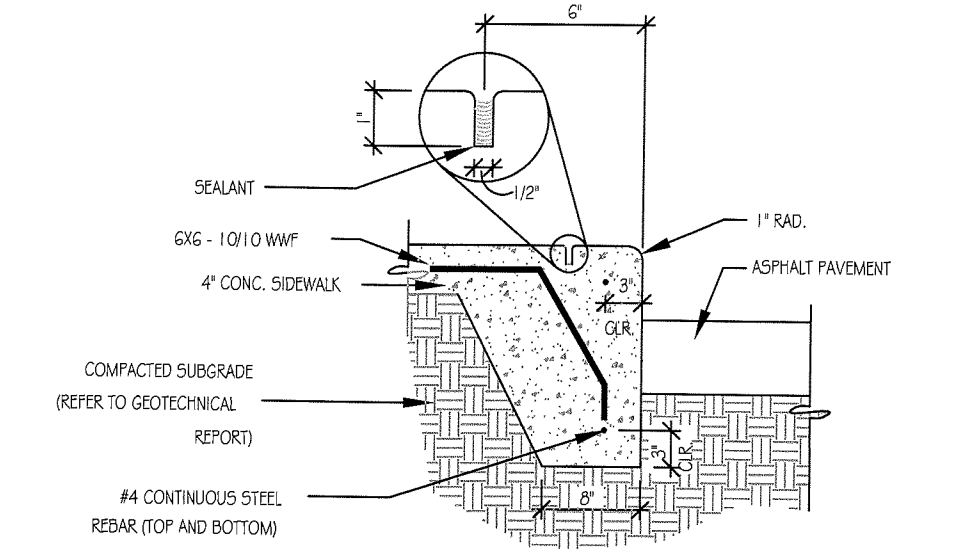
CONCRETE JOINTS

NOT TO SCALE



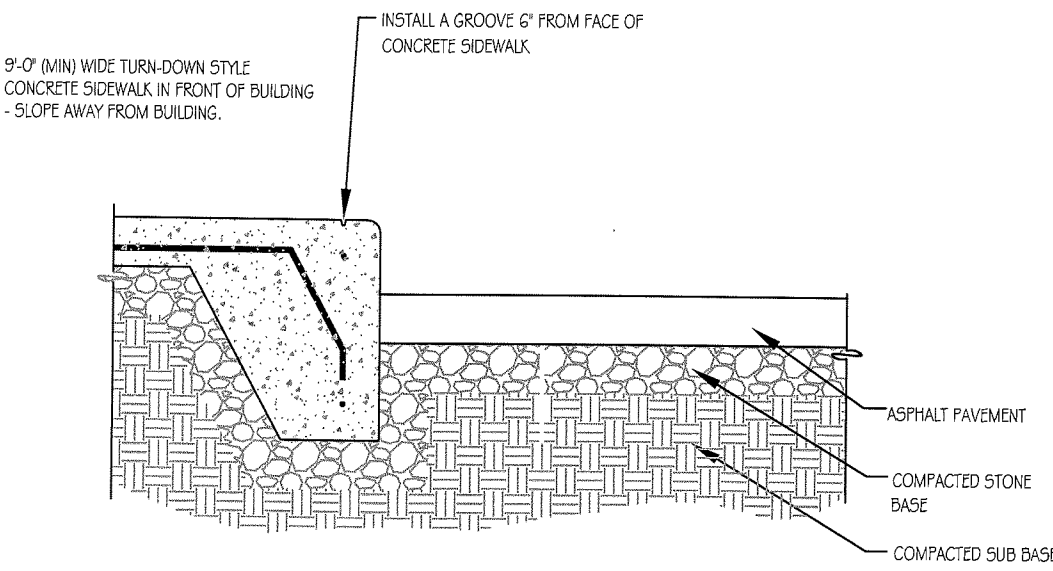
HANDICAP PARKING DETAIL

N.T.S.



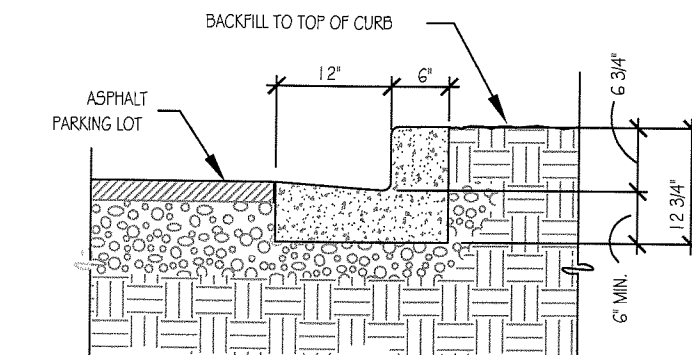
CURB EDGE CONCRETE SIDEWALK

NOT TO SCALE



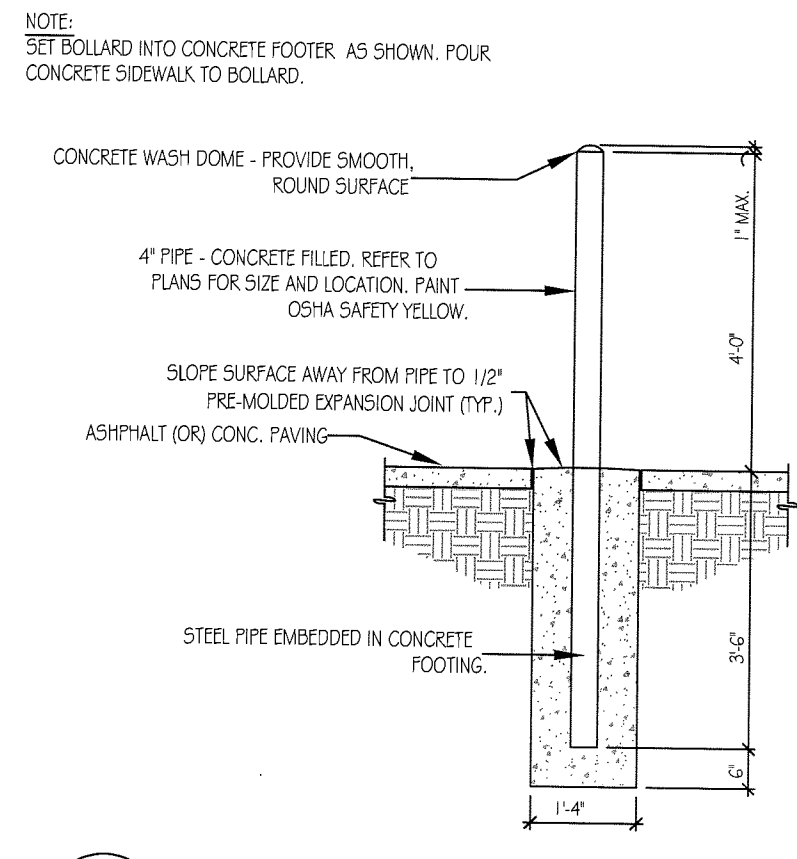
SIDEWALK DETAIL

NOT TO SCALE



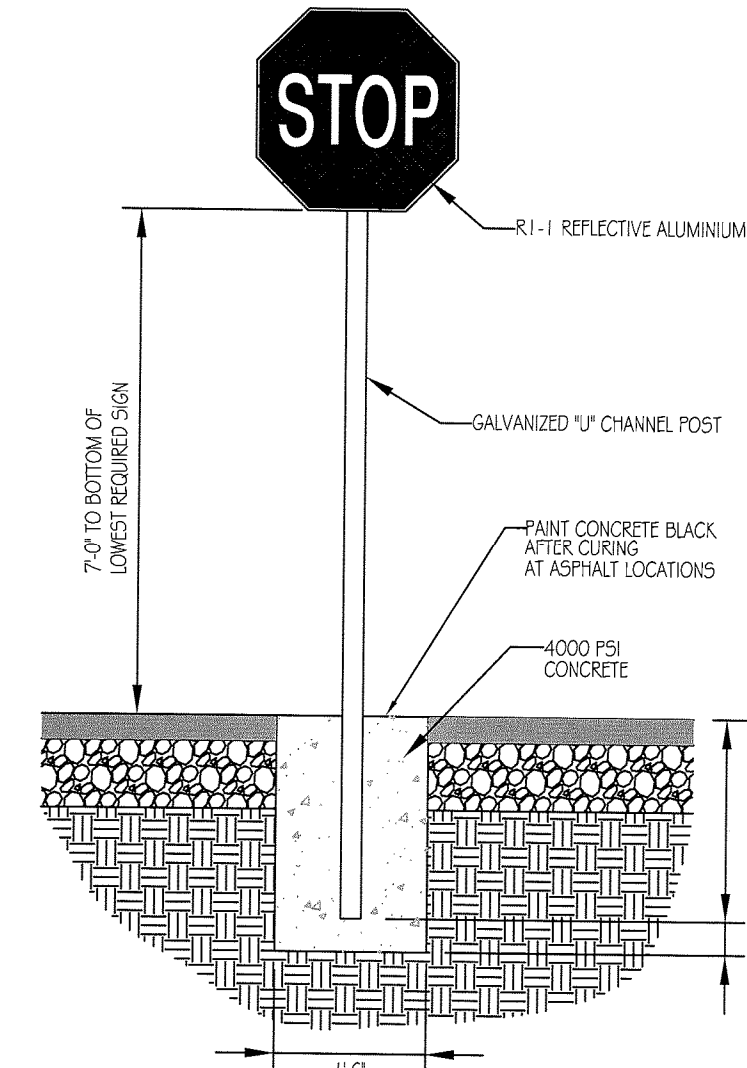
CURB/GUTTER DETAIL

NOT TO SCALE



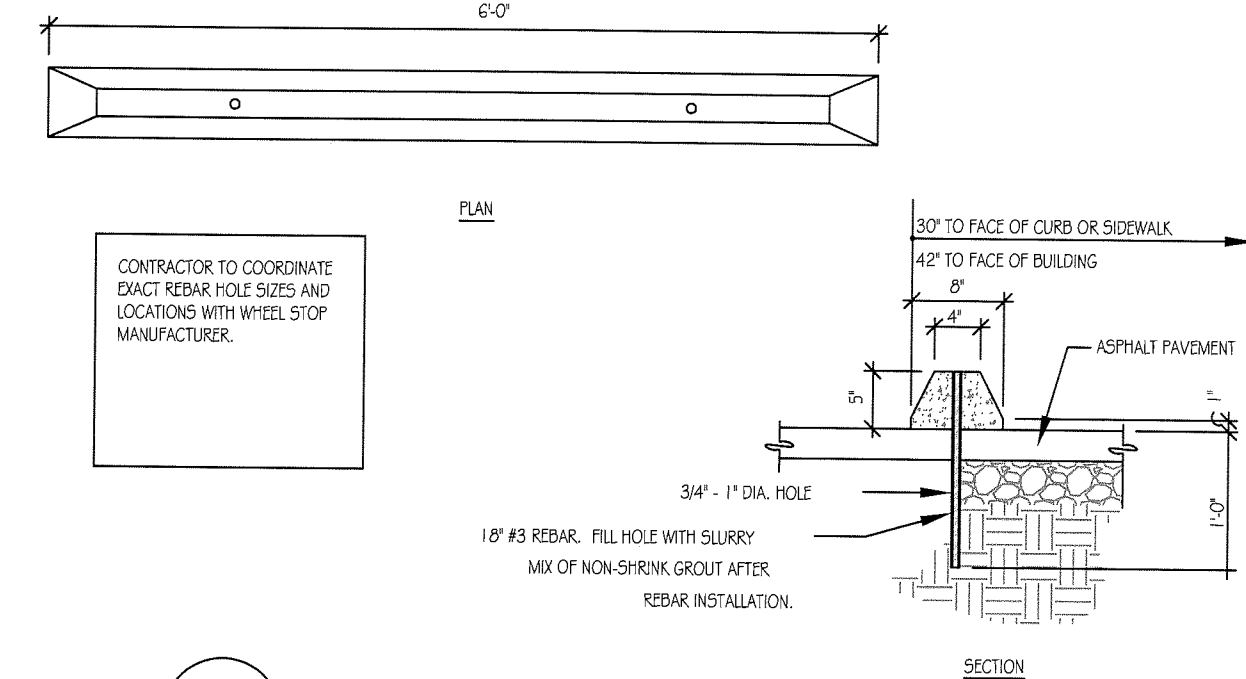
TYPICAL BOLLARD DETAIL

NOT TO SCALE



STOP SIGN DETAIL

NOT TO SCALE



WHEEL STOP

NOT TO SCALE

REV	DATE	DESCRIPTION

BMP element: The entire BMP	Potential problem: Trash/debris is present	How I will remediate the problem: Remove the trash/debris
The perimeter of the bio-retention cell	Areas of bare soil and/or erosion gullies have formed	Regrade the soil if necessary to remove the gully, and then plant a grass cover and water until it is established. Provide the one-time fertilizer application. Maintain vegetation at a height of approximately six inches.
The inlet device: pipe, stone verge or weir	The pipe is clogged. The pipe is cracked or otherwise damaged. Erosion is occurring in the swale.	Undoing the pipe. Dispose of the sediment off-site. Replace the pipe. Regrade the swale if necessary to smooth it over and provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.
The pretreatment area	Flow is bypassing pretreatment area and/or gullies have formed. Sediment has accumulated to a depth greater than three inches. Erosion has occurred.	Re-grade if necessary to route all flow to the pretreatment area. Reestablish the area after grading. Search for the source of the sediment and remedy the problem if possible. Remove the sediment and reestablish the pretreatment area. Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems.
The bio-retention cell: Vegetation	Best professional practices show that pruning is needed to maintain optimal plant health. Plants are dead, diseased or dying. Tree stakes/wires are present six months after planting.	Prune according to best professional practices. Determine the source of the problem: soils, hydrology, disease, etc. Remedy the problem and replace plants. Provide a one-time fertilizer application to establish the ground cover if a soil test indicates it is necessary. Remove tree stakes/wires (which can kill the tree if not removed).
The bio-retention cell: soils and mulch	Mulch is breaking down or has floated away. Soils and/or mulch are clogged with sediment.	Spot mulch if there are only random void areas. Replace whole mulch layer if necessary. Remove the remaining mulch and replace with triple shredded hard wood mulch at a minimum depth of three inches. Determine the extent of the clogging. Remove and replace either just the top layers or the entire media as needed. Dispose of the soil in an appropriate off-site location. Use triple-shredded hard wood mulch at a minimum depth of three inches. Search for the source of the sediment and remedy the problem if possible.
The underdrain system	Clogging has occurred.	Wash out the underdrain system.
The drop inlet	Clogging has occurred. The drop inlet is damaged.	Clean out the drop inlet. Dispose of the sediment off-site. Repair or replace the drop inlet.
The receiving water	Erosion on other parts of damage have occurred at the outlet.	Contact the local NC Division of Water Quality Regional Office, or the 401 Oversight Unit at 919-753-1786.

ITEM	PERCENT BY VOLUME	MATERIAL
SAND	85%-88%	CONSTRUCTION SAND
FINES	0%-12%	SILT
ORGANIC MATTER	3%-5%	COMPOST/PEAT MOSS
PERMEABILITY	THE PERMEABILITY SHOULD FALL BETWEEN 1 AND 6 INCHES PER HOUR, AND 1-2 INCHES PER HOUR IS PREFERRED.	
PHOSPHOROUS INDEX	RANGE BETWEEN 10 AND 30 (CONFORM WITH SOIL ANALYSIS REPORT FROM NCDA LAB)	

GRASS SOD NOTE:
GRASS SOD SHALL BE EITHER HYBRID BERMUDA GRASS OR CENTPEDE THAT HAS BEEN GROWN IN A SOIL THAT IS FREE OF AN IMPERMEABLE LAYER (SUCH AS CLAY).

BIO-RETENTION SOIL MIXTURE.
Bio-retention Soil Mixture (BSM) shall be placed and graded along low ground-contact pressure easement or by excavators and/or backhoes operating on the ground adjacent to the bio-retention facility. No heavy equipment shall be used within the perimeter of the bio-retention facility before, during, or after the placement of the BSM. The BSM shall be placed in horizontal layers not to exceed 12 inches for the entire area of the bio-retention facility. The BSM shall be compacted by saturating the entire area of the bio-retention facility after each lift of BSM is placed until water flows from the under-drain. Water for saturation shall be applied by spraying or sprinkling. An appropriate sediment control device shall be used to treat any sediment laden water discharging from the under-drain. If the BSM becomes contaminated during the construction of the facility, the contaminated material shall be removed and replaced with uncontaminated material at no additional cost to the Administration. Final grading of the BSM shall be performed after a 24-hour settling period. Final elevations shall be within 2 inches of elevations shown on the Contract Plans.

The Bio-retention Soil Mixture (BSM) shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be used or dumped within the bio-retention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations.

Prior to placing the under-drain and the BSM, the bottom of the excavation shall be roto-bladed to a minimum depth of 6 inches to eliminate any compaction of the facility bottom. Any substitute method for roto-blading must be approved by the Engineer prior to use. Any ponded water shall be removed from the bottom of the facility and the soil shall be tilled before roto-blading.

Once the BSM has been placed the entire bio-retention area shall be sodded with grass that has been grown in sandy soils or that has the roots washed clean of any clay or other materials that could clog the function of the bio-retention system.

OPERATION AND MAINTENANCE

North Carolina storm water rules require annual inspections by the regulating agency of bio-retention areas as a minimum. More frequent inspections by the land owner or system operator are strongly encouraged to ensure the proper operation of bio-retention areas.

A. Rainfall Event

- Inspect the basin after every runoff-producing rainfall event.

B. Monthly Inspection

- Inspect the basin monthly.
- Check the bio-retention area side slopes; remove trash and repair eroded areas before the next rainfall event.
- Check the vegetative and rock filters for sediment accumulation, erosion and proper operation of the flow spreader mechanism and repair as necessary.
- Visually inspect and repair soil erosion on a monthly basis.
- Remove any void area whenever necessary. Replacement of mulch layers may be necessary every two or three years. Mulch should be replaced in the spring. When the mulch layer is replaced, the previous layer should be removed first.
- Remove and replace all dead and diseased vegetation considered beyond treatment. This should be done twice a year, once in the spring and once in the fall. Treat all diseased trees and shrubs that are not beyond treatment as needed.

C. Quarterly Inspection

- Inspect the collection system (i.e. catch basin, pipes and grass swales) for proper functioning. Clear accumulated trash from basin grates and basin bottoms. Check piping for obstructions.
- Check pond inlet pipes for undersizing, replace rip-rap and repair broken pipes.
- Remove grassed swales, including the vegetated filter if applicable, twice a year as necessary. Repair eroded areas immediately.

D. Six Month Inspection

- Remove accumulated sediment from the bottom of the outlet structure or other areas where accumulated sediment is noted.
- Inspect the embankment taking note of any wet areas where water may be seeping through the soil.

E. General Inspection

- Maximum grass height is to be 6 in.
- No woody vegetation shall be allowed to grow in the bio-retention area.
- Stumps shall be removed from blocking the inlet and outlet structures and from areas of potential clogging.
- Provide removal of dead vegetation shall be accomplished.
- All components of the bio-retention system must be kept in good working order.

STORMWATER MANAGEMENT NOTES:

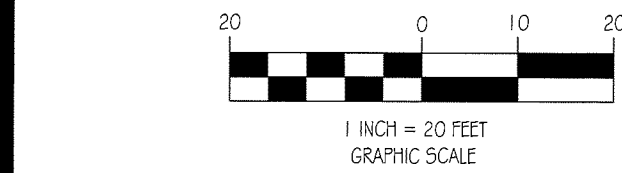
- THE DEVELOPER OR HIS AGENT SHALL CONTACT THE ENGINEER WHEN THE BEST MANAGEMENT PRACTICES ARE CONSTRUCTED AND ABOUT TO BECOME OPERATIONAL SO A FINAL INSPECTION CAN BE PERFORMED TO DETERMINE COMPLIANCE WITH THE APPROVED PLAN CAN BE PERFORMED.
- PRIOR TO CONSTRUCTION, A SOIL TEST OF THE BIO-RETENTION FILTER MEDIA SHALL BE REQUIRED AND APPROVED BY THE ENGINEER OF RECORD WITH A COPY SENT TO THE ENGINEER. THE TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR pH, PHOSPHORUS, AMMONIUM, AND POTASSIUM AND ADDITIONAL TESTS OF ORGANIC MATTER AND SULFATE-SOLUBLE. ALL TESTING RESULTS SHALL COME FROM THE SAME TESTING FACILITY. THE NC DEPARTMENT OF AGRICULTURE (NCDA) LAB IS THE PREFERRED TESTING FACILITY. SHOULD THE pH FALL OUT OF THE ACCEPTABLE RANGE, IT MAY BE MONITORED FURTHER WITH LIME OR LONAR WITH IRON SULFATE PLUS SULFUR OR AS DIRECTED BY THE NCDA OR ENGINEER.
- PRIOR TO CONSTRUCTION, A COMPOSITION TEST OF THE BIO-RETENTION FILTER MEDIA SHALL BE REQUIRED AND APPROVED BY THE ENGINEER OF RECORD WITH A COPY SENT TO THE ENGINEER. FILTER MEDIA SHALL CONFORM TO THE FOLLOWING: 85-88% SAND (USDA TEXTURAL CLASSIFICATION), 8-12% FINES (SILT AND CLAY), AND 3-5% ORGANIC MATTER (PEATMOSS OR FINE BARK) BY VOLUME.
- PERFORM A DOUBLE RING INFILTRATION TEST (MINIMUM OF 3 TESTS OR 1 PER 500 SF OF FILTER MEDIA WHICHEVER IS GREATER) AT THE COMPLETION OF THE BIO-RETENTION BMP. INFILTRATION RATE OF THE CONSTRUCTED BIO-RETENTION MEDIA SHALL BE BETWEEN 1-6 IN/HR. PROVIDE A COPY OF THE RESULTS TO THE ENGINEER.
- ANNUAL MAINTENANCE INSPECTION AND REPORT REQUIRED - THE OWNER OF A PERMITTED STRUCTURAL STORMWATER BMP/CONTROL SHALL ANNUALLY SUBMIT A MAINTENANCE AND INSPECTION REPORT FOR EACH BMP TO THE STORMWATER ADMINISTRATOR. ANNUAL INSPECTIONS SHALL BEGIN WITHIN ONE YEAR OF THE RECORDATION OF ANY DEVICES PROVIDING STORMWATER BMP/CONTROL STRUCTURES.
- UPON COMPLETION OF THE PROJECT, AND BEFORE A CERTIFICATE OF OCCUPANCY SHALL BE GRANTED, THE ENGINEER OF RECORD SHALL CERTIFY THAT THE COMPLETE PROJECT IS IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLANS AND DESIGNS.
- A FINAL INSPECTION OF THE SITE AND STORMWATER MANAGEMENT BMP/CONTROLS TO BE PERFORMED WITH AND COMPLETED BY THE ENGINEER A INSPECTOR.
- THE ENGINEER'S CERTIFICATION OF COMPLETION WILL BE REQUIRED PRIOR TO THE FINAL PLAT OR CERTIFICATE OF OCCUPANCY. THE STORMWATER CONTROL IS TO BE INSPECTED TO ENSURE IT IS FUNCTIONING AS DESIGNED AND HAS FULL DESIGN VOLUME PRIOR TO RESUMANCE OF THE FINAL CERTIFICATE OF OCCUPANCY.

STAGE (FT)	ELEVATION (FT)	CONTOUR AREA (SQ)	INCREMENTAL STORAGE (CY)	TOTAL STORAGE (CY)
0.0	420.0	8020	0	0
0.5	420.5	8840	4259	4259
1.0	421.0	9820	4947	9206
1.5	421.5	10195	4927	13774
2.0	422.0	10910	5275	19049
2.5	422.5	11630	5633	24663

STORMWATER MANAGEMENT BIO-RETENTION POND			
WATERSHED:		NEUSE RIVER	
RECEIVING STREAM, INDEX 4 CLASSIFICATION		RICHLAND CREEK (27.51) (0.35) (CWSM)	
BIO-RETENTION POND DESIGN SUMMARY			
DRAINAGE AREA TO BIO-RETENTION:		2.30 ACRES	
TOTAL DESIGN IMPERVIOUS AREA TO BIO-RETENTION:		2.34 ACRES	
	PRE-DEVELOPED	POST-DEVELOPED	POST DEVELOPED THROUGH POND
DRAINAGE AREA:	2.30 AC	2.30 AC	
CURVE NUMBER:	52	90.3	
TIME OF CONCENTRATION:	5 MIN.	5 MIN	
1-YEAR STORM EVENT:	0.047 CFS	9.030 CFS	0.046 CFS
5-YEAR STORM EVENT:	0.355 CFS	11.54 CFS	0.277 CFS
10-YEAR STORM EVENT:	2.662 CFS	16.05 CFS	2.076 CFS
25-YEAR STORM EVENT:	4.626 CFS	21.90 CFS	6.809 CFS

NOTE:

A PERMEABILITY SOIL REPORT SHALL BE PROVIDED AFTER BIO-RETENTION SOIL MIXTURE IS IN PLACE - REFER TO STORMWATER MANAGEMENT NOTES FOR REQUIREMENTS.



NOTES:

- ALL BIO-RETENTION SHALL HAVE AN ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY.
- ALL DRAINAGE AREAS TO A BIO-RETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF SOLIS OR GRASS SOD.
- WRAP PERFORATED UNDERDRAIN WITH FILTER FABRIC PRIOR TO BACKFILLING.
- UNDERDRAIN PIPE SHOULD HAVE 30" PERFORATIONS SPACED AT 6' CENTERS, MIN. 4 HOLES PER ROW. MAX SPACING OF UNDERDRAIN PIPE IS 10 FEET ON CENTER.
- UNDERDRAIN CLEANOUTS MUST EXTEND A MIN. OF 6 INCHES ABOVE TOP SURFACE OF GRASS LAYER, PREFERABLY TO THE TOP OF DESIGN MAXIMUM PONDING DEPTH IN THE BIO-RETENTION BASIN.

BIO-RETENTION CONSTRUCTION SEQUENCE:

Step 1. Construction of the bio-retention area may only begin after the contributing drainage area has been stabilized. It may be necessary to block certain canls or other inlets while the bio-retention area is being constructed. The proposed site should be checked for existing utilities prior to any excavation.

Step 2. Temporary ERS controls are needed during construction of the bio-retention area to divert stormwater away from the bio-retention area until it is completed. Maintain erosion control measures in place until bio-retention area has been completed. Special protection measures such as erosion control blankets may be needed to protect vulnerable side slopes from erosion during the construction process.

Step 3. Scarifiers or backhoes should work from the sides to scarify the bio-retention area to its appropriate design depth and dimensions. Scarifying equipment should have scoops with adequate reach so they do not have to sit inside the footprint of the bio-retention area. Contractors should use a call construction approach in larger bio-retention basins, whereby the basin is split into 500 to 1,000 sq. ft. temporary cells with a 10-15 foot earth bridge in between, so that cells can be excavated from the side.

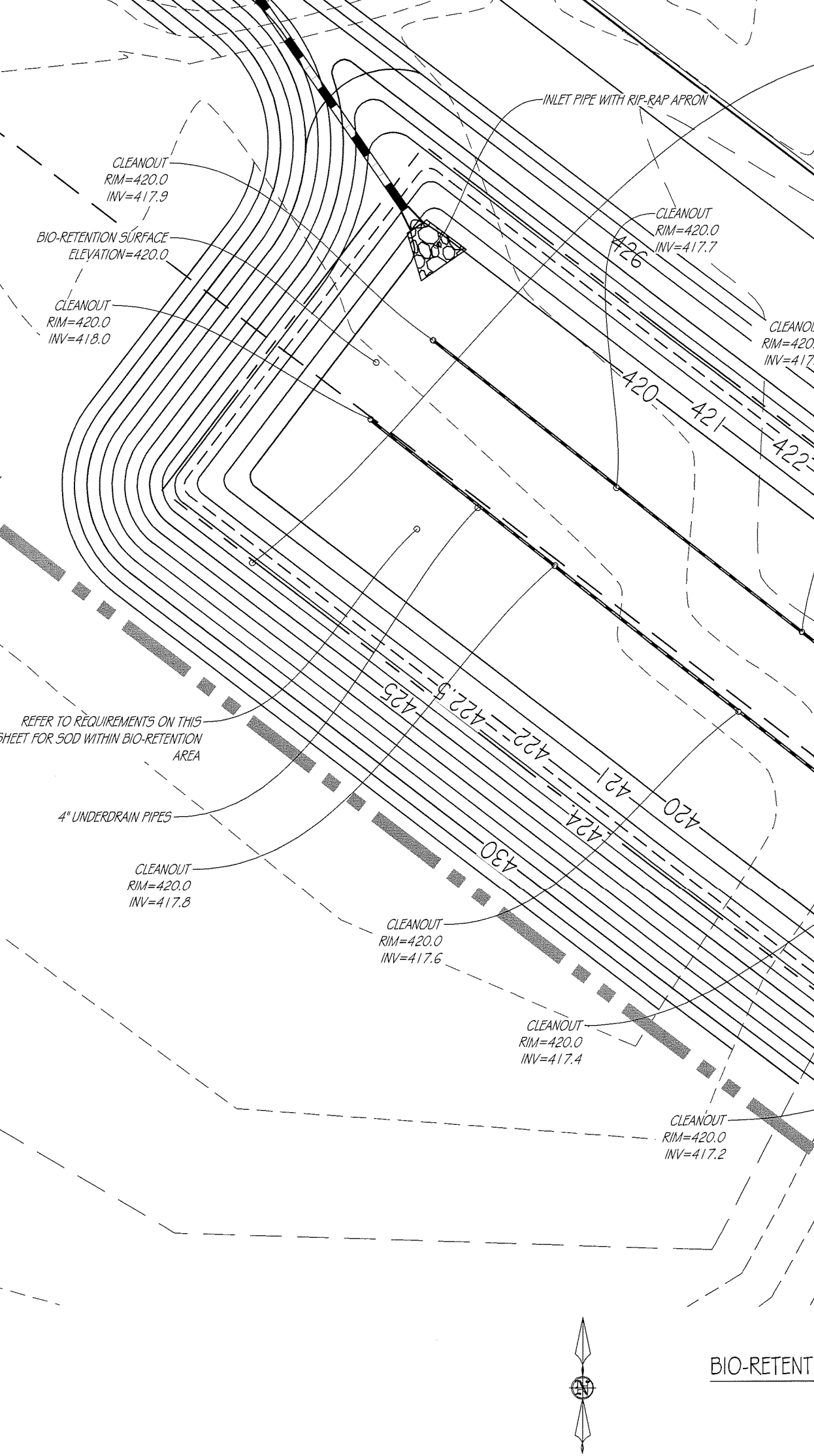
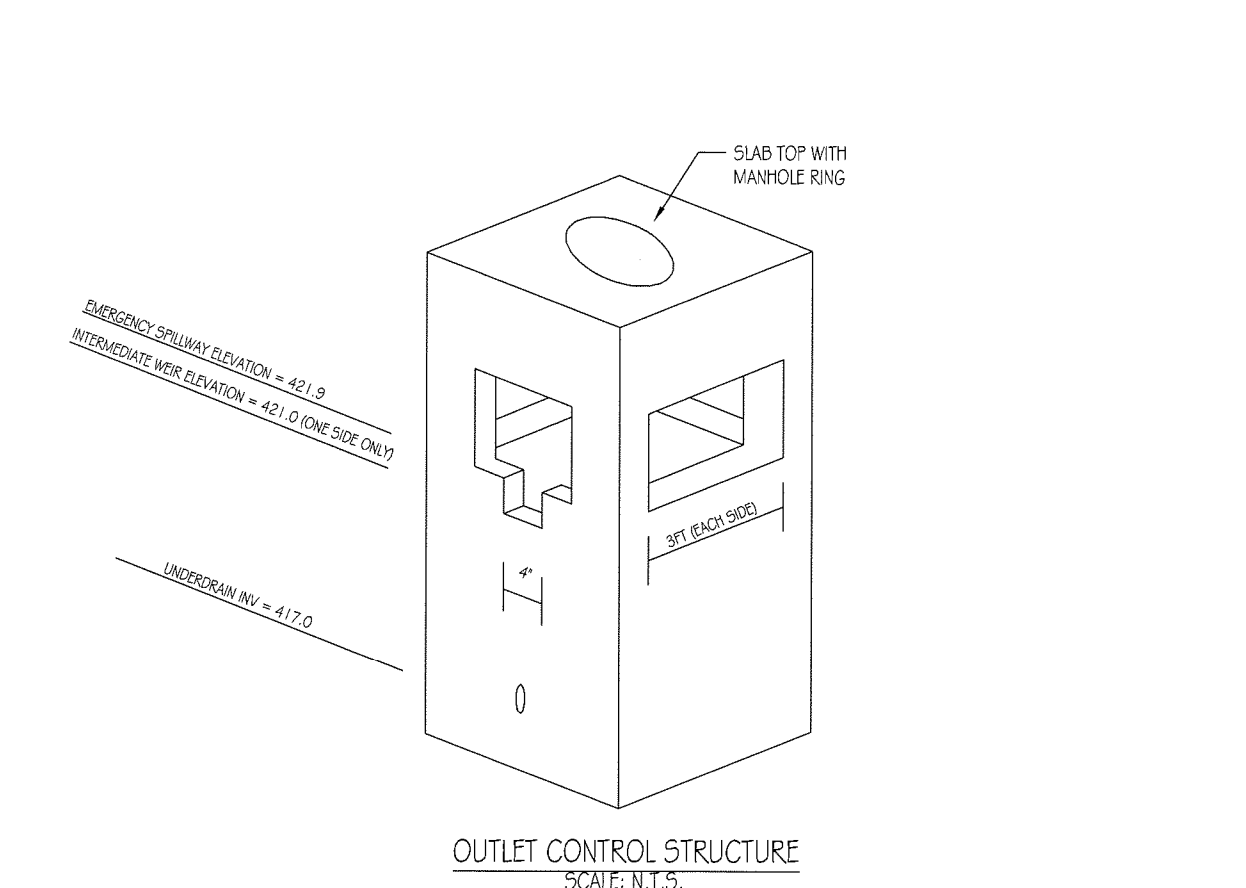
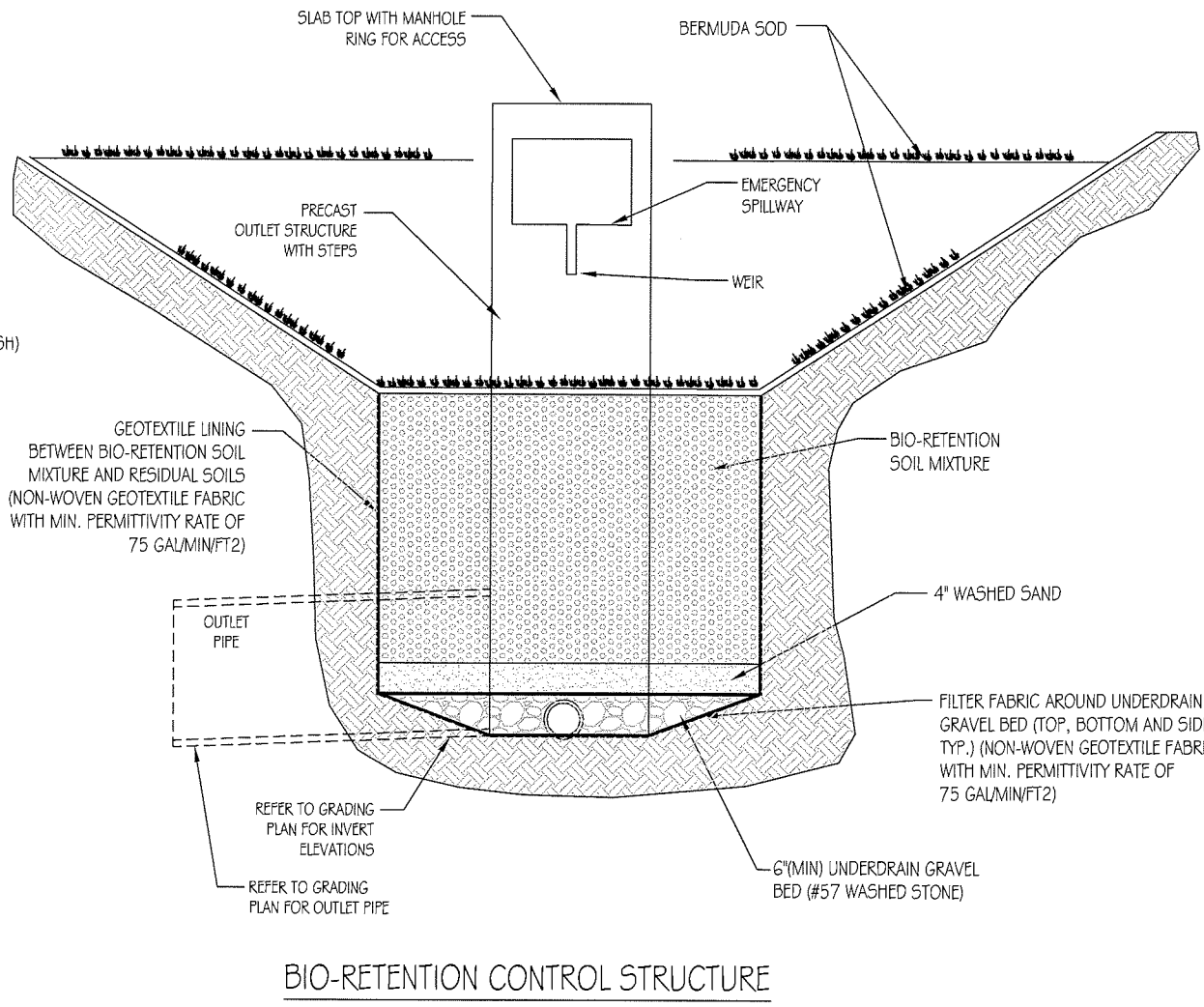
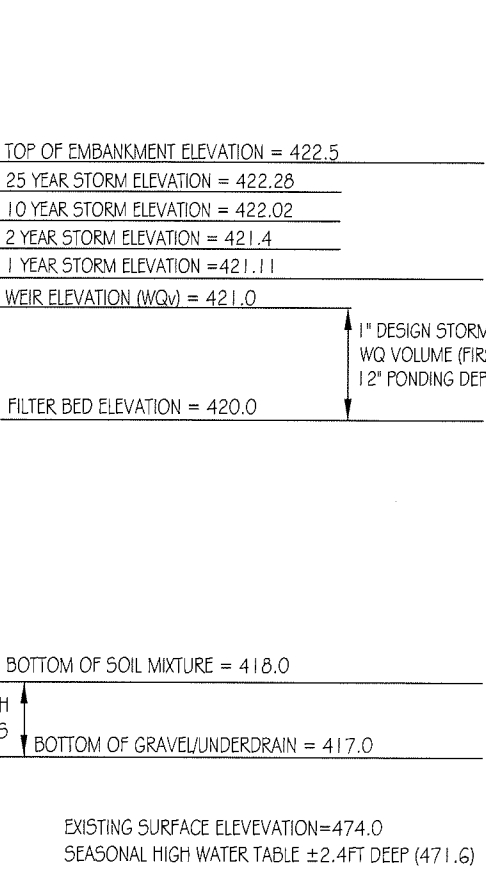
Step 4. It may be necessary to rip the bottom soils to a depth of 6 to 12 inches to promote greater infiltration.

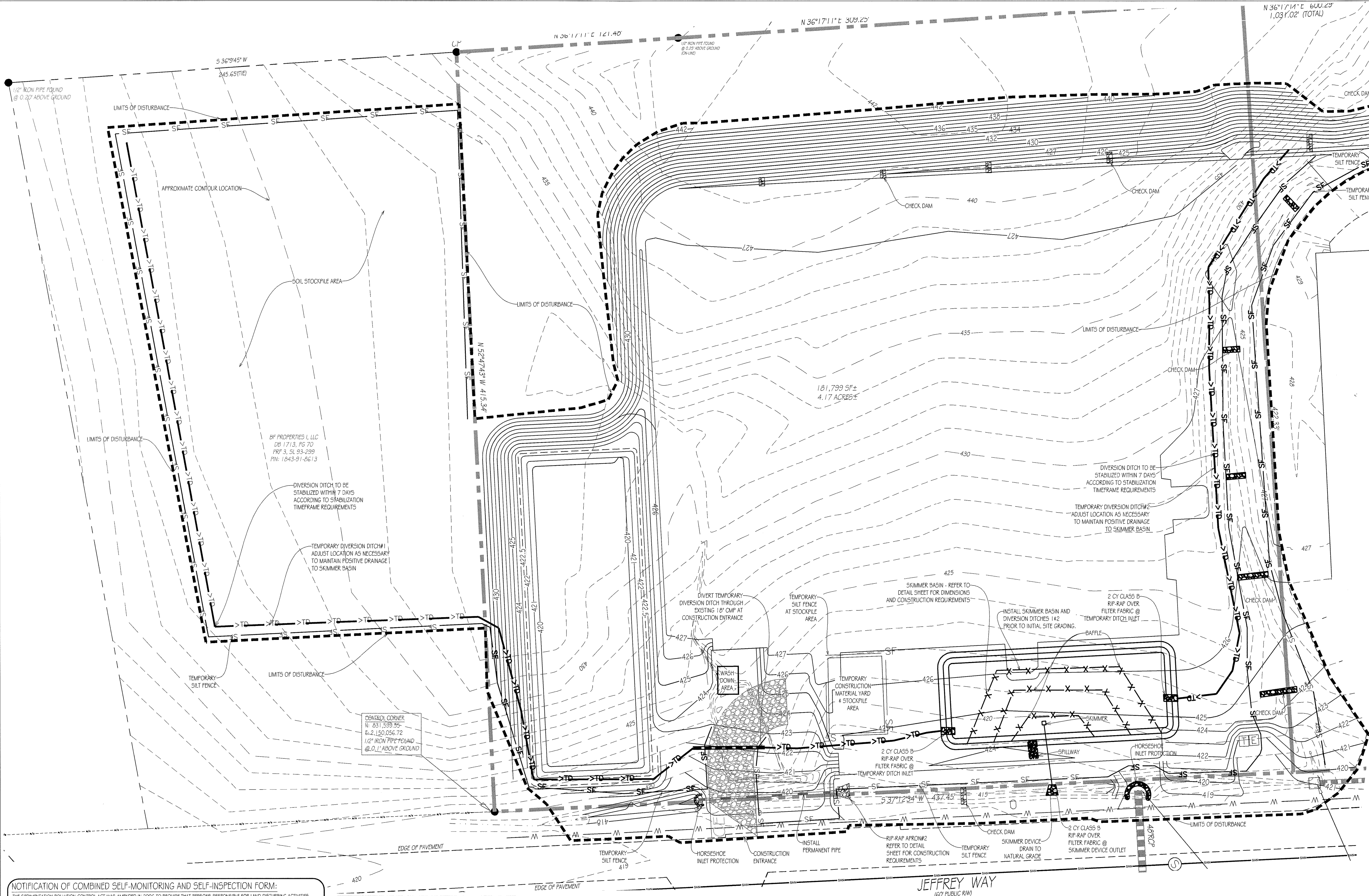
Step 5. Place geotextile fabric on the sides of the bio-retention area with a 6-inch overlap on the sides. Place the appropriate depth of stone on the bottom, install the perforated underdrain pipe, place stone above the underdrain pipe, and add sand layer between the underdrain and the soil media layer.

Step 6. Deliver the soil media from an approved vendor, and store it on an adjacent impervious area or plastic sheeting. Apply the media in 12-inch lifts until the desired top elevation of the bio-retention area is achieved. Wait a few days to check for settlement, and add additional media, as needed, to achieve the design elevation. CONTRIBUTING DRAINAGE AREA TO BIO-RETENTION POND TO BE STABILIZED PRIOR TO INSTALLING BIO-RETENTION SOIL MEDIA.

Step 7. Install the vegetation, and water accordingly.

Step 8. Coordinate with inspector and engineer to conduct the final construction inspection. Upon completion of bio-retention facility remove temporary erosion control measures and complete final stabilization of the project.





- SEDIMENT & EROSION CONTROL NOTES:**
1. THE EROSION AND SEDIMENTATION CONTROL MEASURES (BMPs) WERE DESIGNED USING THE FRANKLIN COUNTY REQUIREMENTS AND SHALL BE INSTALLED ACCORDINGLY. CONTRACTOR SHALL PERFORM ALL ACTIVITIES IN STRICT COMPLIANCE WITH THE NORTH CAROLINA WIDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (GENERAL PERMIT).
 2. REFER TO THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS FOR EROSION CONTROL DETAILS AND DESIGN TABLES FOR SEDIMENT BASINS, DIVERSION DITCHES, AND DIVERTERS, SLOPE DRAINS, RIP-RAP APPROACHES AND OTHER EROSION CONTROL MEASURES.
 3. DISTINGUISH BOUNDARIES, TOPOGRAPHY, 100-YR FLOODPLAIN, UTILITY AND ROAD INFORMATION TAKEN FROM AN EXISTING CONDITIONS SURVEY. ALL EXISTING INFORMATION IS TO BE FIELD VERIFIED BY THE CONTRACTOR.
 4. SEE THE LANDSCAPE PLAN FOR LOCATIONS OF PROPOSED PLANTINGS AND FINAL STABILIZATION.
 5. TEMPORARY DIVERSION DITCHES AND BERM SHALL BE MAINTAINED AS THE SITE IS BROUGHT TO GRADE.
 6. DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE EROSION CONTROL INSPECTORS SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
 7. SEE THE GENERAL NOTES SHEET AND THE GRADING AND DRAINAGE PLAN FOR OTHER NOTES REGARDING GRADING ACTIVITIES.
 8. SEE SITE PLAN, GRADING AND DRAINAGE PLAN, UTILITY PLAN, PLANTING PLAN AND OTHER PLAN SHEETS FOR DETAILED DESIGN INFORMATION OF PERMANENT SITE APPEARANCES SHOWN ON THIS SHEET.
 9. WHERE THE LIMITS OF DISTURBANCE AND TEMPORARY FENCE OF 5'-0" (5' FT) OR 10' (10' FT) LIMITS ARE ADJACENT, THE TEMPORARY FENCE LINE IS THE LIMITS OF DISTURBANCE. THE LINE TYPES ARE SHOWN SEPARATED FOR ILLUSTRATIVE PURPOSES ONLY.
 10. CONTRACTOR SHALL NOT DISTURB ANY EXISTING VEGETATIVE GROUND COVER OR TREES OUTSIDE OF THE LIMITS OF DISTURBANCE OR WITHIN ANY REQUIRED BUFFER LIMITS UNLESS OTHERWISE NOTED OR ILLUSTRATED.
 11. PROVIDE CONTROLS OF POLLUTANTS, INCLUDING, BUT NOT LIMITED TO DUST CONTROLS, DE-WATERING, SOLID WASTE DISPOSAL, AND HAZARDOUS MATERIALS.
 12. CLEAR ONLY AS REQUIRED TO INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES. MAINTENANCE CLEARING AND GRUBBING CAN BEGIN ONLY AFTER ALL DOWNSTREAM MEASURES HAVE BEEN INSTALLED.
 13. USE ROCK OR WASHED STONE TO BRING CONSTRUCTION DIRT TO GRADE. IMPLEMENT WHEEL WASHES AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION.
 14. DIVERT STORM WATER RUNOFF OFF THE FACE OF THE SEDIMENT BASIN SLOTTES USING DIVERSION DITCHES AND SLOPE DRAINS. CONTRACTOR SHALL MAINTAIN AND RELOCATE DIVERSION DITCHES AND SLOPE DRAINS TO ENSURE STORM WATER RUNOFF DOES NOT EXCEED THE FACE OF FINAL SLOPES.
 15. MAINTAIN POSITIVE FLOW TO THE SEDIMENT BASINS THROUGHOUT ALL PHASES OF CONSTRUCTION. PLACE EXCAVATED SOILS ALONG DOWNSTREAM EDGE OF THE DIVERSION DITCHES TO PROVIDE ADDITIONAL CAPACITY.
 16. REFER TO THE GRADING AND DRAINAGE PLAN FOR FINAL SITE AND PAVEMENT GRADES AND ELEVATIONS OF THE PROPOSED STORM SEWER SYSTEMS.
 17. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED EROSION AND SEDIMENT CONTROL DRAWINGS DURING CONSTRUCTION OPERATIONS.
 18. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
 19. ALL WORK SHALL BE CONTINUED TO PERMIT LIMITS SHOWN ON PLANS. UNLESS OTHERWISE NOTED, THE SITE PLAN PROPERTY LIMITS SHALL BE CONSIDERED THE PERMIT LIMITS.
 20. SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE.
 21. ADDITIONAL EROSION CONTROL MEASURES OR SILT BARRIERS TO BE PLACED AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER AND/OR LOCAL JURISDICTIONAL INSPECTOR.
 22. FOR ALL CONSTRUCTION ALONG AND/OR ACROSS WATERWAYS, BANK PROTECTION AND STABILIZATION SHALL BE REQUIRED AS PER LOCAL JURISDICTIONAL EROSION CONTROL LAWS.
 23. ALL TREE PROTECTION AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED AND GROUND COVER IS ESTABLISHED. CONSTRUCTION ENTRANCE PASSES SHALL BE INSTALLED BY THE CONTRACTOR AT CONSTRUCTION ACCESS POINTS PRIOR TO LAND DISTURBANCE.
 24. ALL EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION IN ACCORDANCE WITH EASEMENT PLATS PRIOR TO ACCEPTANCE.
 25. CONSTRUCTION LIMITS SHALL NOT BE EXCEEDED WITHOUT THE APPROVAL OF FRANKLIN COUNTY, NC.

- CONSTRUCTION SEQUENCE:**
1. CONTACT NEEDED BEFORE ANY LAND DISTURBANCE OCCURS.
 2. CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS HAVE BEEN RECEIVED AND THAT THOSE REQUIRED TO BE DISPLAYED ON-SITE ARE AVAILABLE.
 3. CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS BEFORE THE ACTUAL START OF CONSTRUCTION. CONTACT THE NCEC INSPECTOR.
 4. CONTRACTOR SHALL CONTACT CAROLINA ONE CALL AND ALL ENTITIES HAVING BURIED UTILITIES AT LEAST 72 HOURS PRIOR TO DIGGING OR AS DIRECTED AT THE PRE-CONSTRUCTION MEETING.
 5. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCES AT EACH POINT OF ACCESS TO STORAGE AND CONSTRUCTION AREAS. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION AND TREE REMOVAL OPERATIONS.
 6. INITIAL PHASE SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH PLANS BEFORE STARTING WORK INCLUDING SILT FENCE, INLET PROTECTION, SKIMMER BASIN, DIVERSION DITCHES, TREE PROTECTION, ETC., CLEARING ONLY AS NECESSARY FOR THE INSTALLATION OF THESE MEASURES.
CONTRACTOR SHALL INCLUDE A RAIN GAUGE AND LOG BOOK CONTAINING THE INSPECTION RECORDS FOR THE SITE.
INSTALL SKIMMER BASIN - STABILIZE EARTH BERMS AS WELL AS BASIN SLOPES PRIOR TO BEGINNING MASS GRADING OF THE SITE.
ONCE THE BASIN/DIVERSION ARE INSTALLED SEED/IMMEDIATELY IMMEDIATELY.
ALL DEMOLITION DEBRIS IS TO GO TO AN APPROVED LANDFILL OR RELATED FACILITY.
INITIALLY CONSTRUCT THE GRADE FOR THE BUILDING PAD AND THE PARKING AREAS THAT ARE DRAINING TO THE TEMPORARY SKIMMER BASIN, MAINTAINING STORMWATER RUNOFF TOWARD THE BASIN. ADJUST THE LOCATION OF TEMPORARY DITCHES AS NECESSARY TO DIVERT RUNOFF FROM THE DRAINAGE SYSTEMS TO THE TEMPORARY SKIMMER BASIN. ONCE THESE AREAS ARE UP TO GRADE AND STABILIZED WITH CONCRETE, PAVEMENT, OR VEGETATION THEN DIVERT STORMWATER RUNOFF TO THE PROPOSED STORMWATER MANAGEMENT DEVICES AND THE TEMPORARY SKIMMER BASIN CAN BE REMOVED AND THE REMAINDER OF THE PARKING AREA CAN BE COMPLETED.
CONTRACTOR TO USE PARKING AREAS ADJACENT TO THE PROPOSED BUILDING FOR LAND-OWNERS/AGRICULTURE - MAINTAIN THESE AREAS SO THAT SEDIMENT LADEN RUNOFF WILL BE DIVERTED TO EROSION CONTROL MEASURES. INSTALL SILT FENCE ALONG LAND-OWNERS/AGRICULTURE AREA AS SHOWN.
 7. CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
ALL APPLICABLE EROSION CONTROL MEASURES MUST BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
 8. STOCKPILE RIP-RAP ON SITE AND INSTALL ALL EROSION CONTROL MEASURES WHERE THE WORK IS OCCURRING. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE ENGINEER OR UPON RECOMMENDATION OF NCEC INSPECTION PERSONNEL AS CORRECT WARRANT.
 9. ALL DISTURBED AREAS SHALL HAVE GROUND STABILIZATION BY THE CONTRACTOR ACCORDING TO THE CHART ON THIS SHEET.
 10. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISHED GRADE.
 11. UPON COMPLETION OF THE INSTALLATION AND WITH APPROVAL OF NCEC, ALL EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF IN AN ACCEPTABLE MANNER. EACH SECTION SHALL BE DEMOLISHED IMMEDIATELY AFTER INSTALLATION OF PIPE, STRUCTURE, OR ACCESS. COORDINATE WITH THE EROSION CONTROL INSPECTOR FOR REMOVAL OF EROSION CONTROL MEASURES.
 12. ONCE GROUND COVER IS FIRMLY ESTABLISHED, ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITH THE APPROVAL OF THE NCEC INSPECTOR.
 13. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION & SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, NCEC, U.S. DEPT. OF AGRICULTURE, AND THE VILLAGE OF PINELAKE STANDARDS.

- EROSION CONTROL NOTES:**
1. TOTAL AREA DISTURBED = 4.87 ACRES
TOTAL SITE AREA = 41.7 ACRES
SOIL TYPE = CECI, SHADEY LOAM
 2. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NCEC EROSION AND SEDIMENT CONTROL HANDBOOK.
 3. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION ALL EROSION CONTROL MEASURES SHOWN WITHIN THESE PLANS IN ACCORDANCE WITH APPLICABLE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS.
 4. CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH REGULATIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER GENERAL PERMIT.
 5. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.
 6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
 7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE NCEC EROSION CONTROL INSPECTOR FOR ALL PERIODIC INSPECTIONS AND FOR THE PERIODIC INSPECTIONS AT APPROPRIATE STAGES OF CONSTRUCTION.
 8. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNER. A REVISION PLAN SHOWING OFF-SITE IMPACTS SHOULD BE SUBMITTED AND APPROVED PRIOR TO ANY OFF-SITE GRADING. CONTRACT PROJECT ENGINEER AND PROJECT EROSION CONTROL INSPECTOR TO ENSURE ADDITIONAL EROSION CONTROL MEASURES ARE INSTALLED PRIOR TO OFF-SITE GRADING.
 9. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREA, STAGING OR STORAGE AREAS), THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO NCEC FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL MAINTAIN NECESSARY RECORDS AND NO SEPARATE FILING. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGINEER A COPY OF THE APPROVED PERMIT.
 10. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDING AREAS SHALL BE CHECKED REGULARLY AND SHALL BE RESEED, FERTILIZED, BE GRASSED AND MULCHED AS NECESSARY TO OBTAIN A STONE STRONG OF GRASS.
 11. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOILED AND SEEDING, TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE NCEC EROSION CONTROL REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.
 12. WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PULSED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF THE ORIGINAL APPLICATION.
 13. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO NON-PAVED AREA, SIX INCHES OF STONE SHALL BE USED FOR THE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.
 14. ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF CLEANING.
 15. SEDIMENT BASINS AND TRAPS, PERIMETER DITCHES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
 16. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND-DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS COMPLETED.
 17. DURING DE-WATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.
 18. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RAINFALL PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

NOTIFICATION OF COMBINED SELF-MONITORING AND SELF-INSPECTION FORM:

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010.

TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, TWO AND DEMAR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED FINAL. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE FORM CAN BE ACCESS AT: <http://portal.ncdcr.org/npdes/erosion>

IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CALL THE APPLICABLE NCEC REGIONAL OFFICE: (RALEIGH) 919-791-4300; (FAYETTEVILLE) 910-433-3300; (WILMINGTON) 910-796-7215; (WASHINGTON) 252-846-6481; (WINSTON-SALEM) 336-771-5000; (MOOREVILLE) 704-663-1699; (KNOXVILLE) 800-296-4000.

EROSION CONTROL NARRATIVE:
DIVERSION, FRANKLIN COUNTY, NC.

CONTRACTOR WILL FIRST INSTALL THE CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL THEN MONITOR ON SITE AND INSTALL THE TEMPORARY EROSION CONTROL DEVICES INCLUDING SILT FENCE, INLET PROTECTION, SKIMMER BASIN, AND OTHER DEVICES IN ACCORDANCE WITH THE PLANS (INCLUDING ONLY AS NECESSARY TO INSTALL THESE ITEMS). BEGIN DEMOLITION, CLEARING AND SITE GRADING OPERATIONS. STABILIZATION OF EXISTING STRUCTURES IS REQUIRED IMMEDIATELY AFTER INSTALLATION. THE ON-SITE STORMWATER SYSTEM CAN NOW BE INSTALLED. IMMEDIATELY AFTER AN INLET IS INSTALLED, INLET PROTECTION SHALL BE PROPERLY INSTALLED ON THE STRUCTURE. THE ON-SITE SANITARY SEWER AND WATER SYSTEMS MAY ALSO BE INSTALLED ONCE THE SITE IS BROUGHT UP TO GRADE. THE SITE PAD WILL BE PREPARED FOR THE PROPOSED BUILDING. THE ROUGH GRADE WILL THEN BE ESTABLISHED FOR THE SITE. INSTALLATION OF CURB AND GUTTER WILL THEN BE PERFORMED. BASE STONE WILL THEN BE PLACED AND THE GRADED. ALL DISTURBED AREAS WILL BE DRESSED AND SEEDING. REMOVE ALL INLET PROTECTION FROM STORM STRUCTURES WITH PAVING IS TO BEGIN. PAVING AND STORMING WILL THEN BE COMPLETED. FINALIZE STORMWATER POND STRUCTURE. ONCE UPSTREAM AREAS HAVE BEEN STABILIZED (REMOVE ACCUMULATED SEDIMENT). ALL LANDSCAPING WILL BE COMPLETED. THE ON-SITE STORM SEWER SYSTEM SHALL BE CLEARED OF REMOVED ACCUMULATED SEDIMENT WHICH SHALL BE DISPOSED OF IN A LAWFUL MANNER. ACCORDING TO THE GROUND STABILIZATION REQUIREMENTS ON THIS SHEET, REMOVE ALL REMAINING SEDIMENT CONTROL MEASURES FROM THE SITE. CONTRACTOR SHALL MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL LAND DISTURBANCE AND FINAL VEGETATION STABILIZATION OF THE SITE.

THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES ARE INTENDED TO TRAP ANY STORMWATER RUNOFF FROM THE CONSTRUCTION SITE AND DETAIN IT LONG ENOUGH FOR SEDIMENT AND POLLUTANTS TO SETTLE OUT OF THE STORMWATER BEFORE DISCHARGE. VARIOUS EROSION CONTROL MEASURES ARE USED TO PREVENT POLLUTANT-LADEN STORMWATER RUNOFF FROM FLOWING ONTO ADJACENT PROPERTIES.

EROSION CONTROL MAT SHALL BE AS NOTED OR APPROVED EQUAL.

	FLOW (Q)	LONG (SLOPE)	H	B	W	SS	CHANNEL LINING
TEMPORARY DITCH #1	3.0 CFS	1.0%	1.0'	1.0'	5.0'	2.1	STRAW WITH NET NWS 0375
TEMPORARY DITCH #2	3.0 CFS	1.0%	1.0'	1.0'	5.0'	2.1	STRAW WITH NET NWS 0375

TEMPORARY DIVERSION DITCH DATA BLOCK
REFER TO DETAIL SHEET FOR TEMPORARY DITCH DETAIL.

BASIN NOTES:
SKIMMER BASIN DRAIN ON 3 DAYS TO DRAIN.

BASIN AND DIVERSIONS SHALL BE SEED, MULCHED AND ANCHOR/REINFORCED AND FINED UPON INSTALLATION OF MEASURES.

NOTE TO CONTRACTOR:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE EROSION CONTROL INSPECTOR OF THE LOCATION OF ANY OFF-SITE BORROW SOURCE OR OFF-SITE WASTE MATERIAL DISPOSAL SITE. OFF-SITE DISTURBANCES COUNT TOWARDS THE OVERALL PROJECT DISTURBED AREA AND MUST BE COVERED BY THE PERMIT FOR THIS PROJECT. AVOID THE PERMIT FROM ANOTHER ACTIVE FRANKLIN COUNTY OR NCEC PERMITTED SITE THAT IS APPROPRIATE FOR THE INTENDED USE (E.G., AGRICULTURE, MINING, RECREATION). NO OFF-SITE ACTIVITIES SHALL OCCUR UNTIL THE PERMIT FOR THIS PROJECT HAS BEEN MODIFIED TO INCLUDE THE INTENDED AND/OR IT HAS BEEN REVIEWED WITH THE EROSION CONTROL INSPECTOR THAT THE OFF-SITE AREAS ARE COVERED UNDER ACTIVE APPLICABLE FRANKLIN COUNTY OR NCEC PERMITS.

GENERAL NOTES:

1. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC. THAT MAY BE REQUIRED.
2. THE CONTRACTOR SHALL MAKE SURE THAT THE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED FOR A COMPLETE AND WORKING SYSTEM.
3. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
4. CONTRACTOR SHALL MAINTAIN AN "AS BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
5. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF EACH DEPARTURE AND REASONS THEREOF SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
6. THE CONTRACTOR MUST, AT ALL TIMES, KEEP THE PERIMETERS FREE FROM ACCUMULATIONS OF WASTE MATERIALS OR DEBRIS CAUSED BY WIND, ICE, EMPLOYEES OR HIS WORK. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.

EROSION CONTROL NOTES:
REFER TO DETAIL SHEET FOR CONSTRUCTION DETAILS OF THE PROPOSED EROSION CONTROL MEASURES TO BE USED IN THE DEVELOPMENT OF THIS SITE.

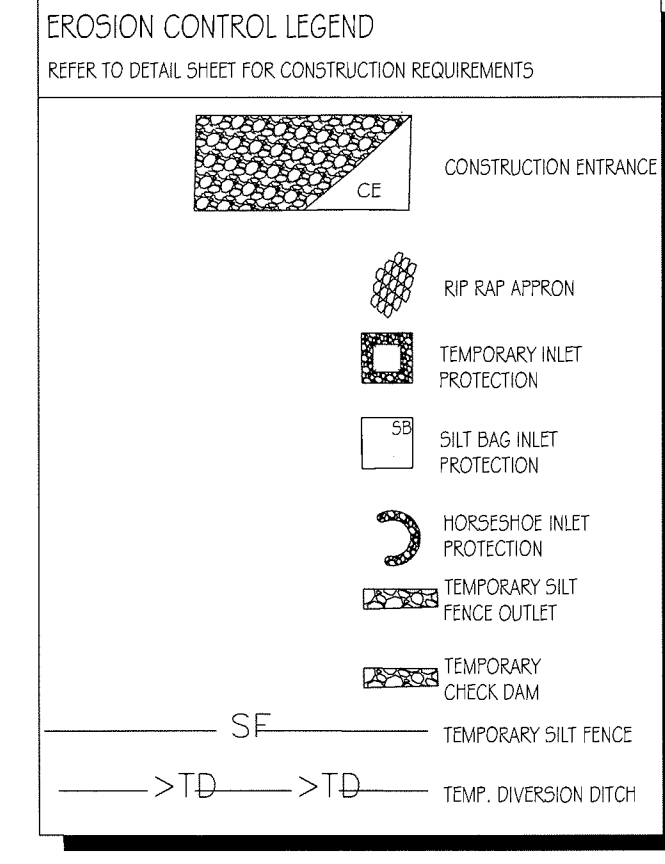
REFER TO DETAIL SHEET FOR TEMPORARY AND PERMANENT SEEDING SCHEDULES FOR PROVIDING GROUND COVER FOR THE DEVELOPMENT.

NOTE TO CONTRACTOR:
EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO THE BEGINNING OF DEMOLITION & TREE REMOVAL.

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
BASIN & TEMPORARY DIVERSION DITCHES	IMMEDIATELY	NONE
PERIMETER DITCHES, SHALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER FROM PONDS	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 2:1 IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND DOWN SLOPES.

GROUND COVER REQUIREMENTS:
THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, ACCORDING TO THE FOLLOWING CHART, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PROVISIONS FOR PERMANENT GROUND COVER SUPPORT TO RETAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING CHART FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

- TREE PROTECTION NOTES:**
1. THE CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS OUTSIDE OF CUTLINE LIMITS, IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO REQUIRED TO SAVE ALL OTHER EXISTING TREES AND SHRUBS WHERE POSSIBLE.
 2. WHEN MOULD PLANNING IS NECESSARY, CUT ROOTS CLEANLY USING A DIRT TRENCHER AND IMMEDIATELY COVER ALL ROOT TOP SURFACES LARGER THAN TWO INCHES IN DIAMETER WITH TREE WOUND DRESSING. USE 2:1 MOULD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK.
 3. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, DRILL BITS, TRENCHING OR OTHER LAND-DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARGOLES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS AND NOT TO BE REMOVED UNTIL AFTER CONSTRUCTION.
 4. NO GRUBBING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED. SUPPLEMENT WITH 1-2 INCHES OF MULCH. RE-SEED WITH GRASS ONLY IN DISTURBED/DEGRADED AREAS.
 5. TREE BARRIERS MUST BE INSTALLED BEFORE ANY DEMOLITION, CLEARING, GRADING OR CONSTRUCTION BEGINS AND NOT TO BE REMOVED UNTIL AFTER CONSTRUCTION.
 6. TREE PROTECTION FENCE IS TO BE LOCATED 1 FOOT FOR TREE DIAMETER, MIN. AWAY FROM THE TREE.



TRIANGLE SITE DESIGN

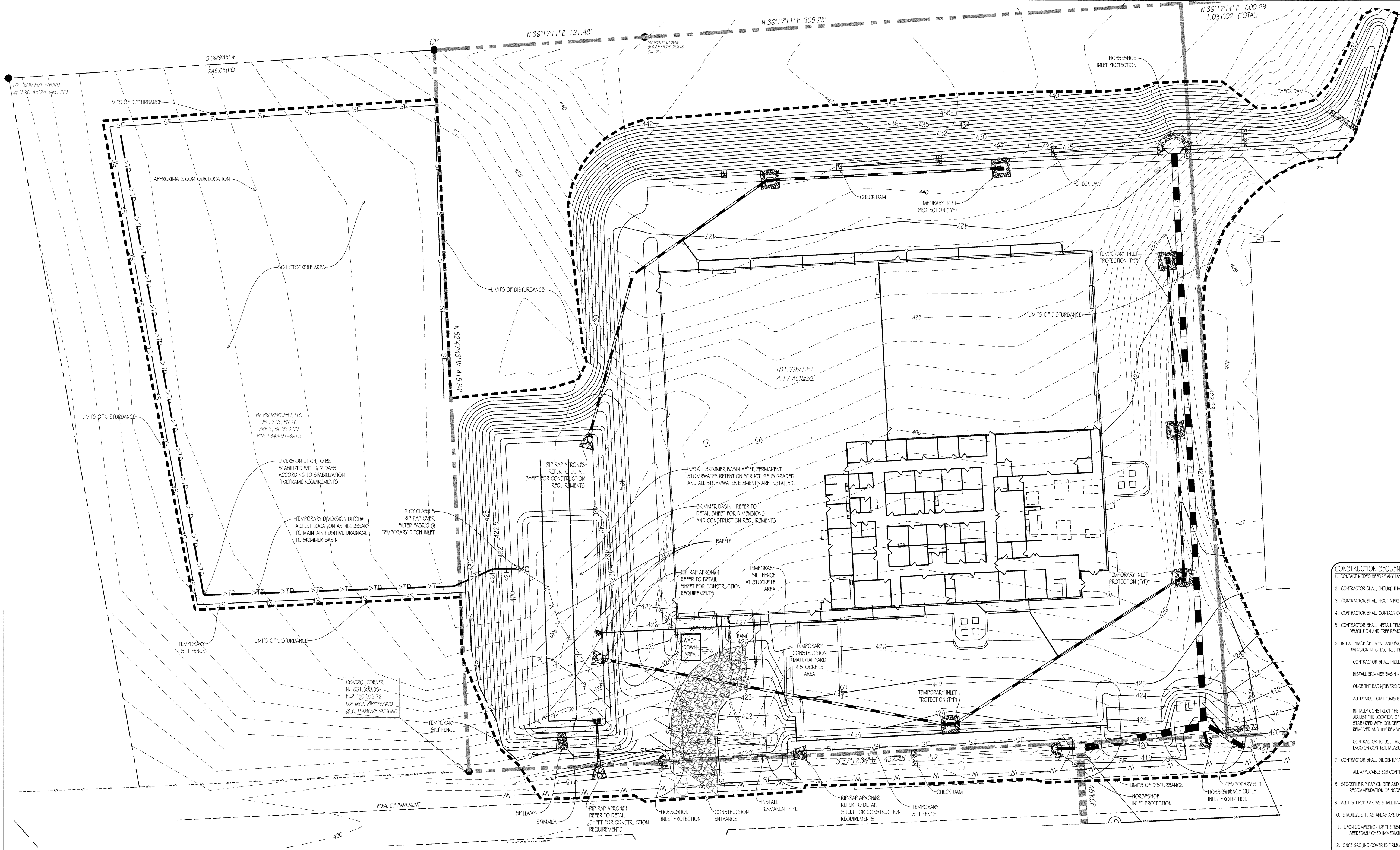
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REVISIONS	Date	By	Check	Approved

Project No. 027002
Date: September, 29 2016
Title: INITIAL PHASE EROSION CONTROL PLAN
Sheet No. C1.6a





**Know what's below.
Call before you dig.**

0 15 30
GRAPHIC SCALE: 1 INCH = 30 FEET

BEFORE YOU DIG
STOP
CALL 1 800 632-4349
N.C. ONE-CALL CENTER
IT'S THE LAW

- CONSTRUCTION SEQUENCE:**
1. CONTRACT NEEDS BEFORE ANY LAND DISTURBANCE OCCURS.
 2. CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS HAVE BEEN RECEIVED AND THAT THOSE REQUIRED TO BE DISPLAYED ON SITE ARE AVAILABLE.
 3. CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS BEFORE THE ACTUAL START OF CONSTRUCTION. CONTACT THE NCCD INSPECTOR.
 4. CONTRACTOR SHALL CONTACT CAROLINA ONE CALL AND ALL UTILITIES HAVING BURIED UTILITIES AT LEAST 72 HOURS PRIOR TO DIGGING OR AS DIRECTED AT THE PRE-CONSTRUCTION MEETING.
 5. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCES AT EACH POINT OF ACCESS TO STORAGE AND CONSTRUCTION AREAS. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION AND TREE REMOVAL OPERATIONS.
 6. INITIAL PHASE SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH PLANS BEFORE STARTING WORK INCLUDING SILT FENCE, INLET PROTECTION, SKIMMER BASIN, DIVERSION DITCHES, TREE PROTECTION, ETC., CLEARING ONLY AS NECESSARY FOR THE INSTALLATION OF THESE MEASURES.
CONTRACTOR SHALL INCLUDE A RAIN GAUGE AND LOG BOOK CONTAINING THE INSPECTION RECORDS FOR THE SITE
INSTALL SKIMMER BASIN - STABILIZE EARTH BEDDING AS WELL AS BASIN SLOPES PRIOR TO BEGINNING MAJOR GRADING OF THE SITE
ONCE THE BASIN/VERSION IS INSTALLED SEDIMENTATION IMMEDIATELY
ALL DEMOLITION DEBRIS IS TO GO TO AN APPROVED LANDFILL OR RELATED FACILITY
INITIALLY CONSTRUCT THE GRADE FOR THE BUILDING PAD AND THE PARKING AREAS THAT ARE DRAINING TO THE TEMPORARY SKIMMER BASIN, MAINTAINING STORMWATER RUNOFF TOWARD THE BASIN. ADJUST THE LOCATION OF TEMPORARY DITCHES AS NECESSARY TO DIVERGE RUNOFF FROM THE DRAINAGE SYSTEMS TO THE TEMPORARY SKIMMER BASIN. ONCE THESE AREAS ARE UP TO GRADE AND STABILIZED WITH CONCRETE, PAVEMENT, OR VEGETATION THEN DIVERGE STORMWATER RUNOFF TO THE PROPOSED STORMWATER MANAGEMENT DEVICES AND THE TEMPORARY SKIMMER BASIN CAN BE REMOVED AND THE REMAINDER OF THE PARKING AREA CAN BE COMPLETED.
CONTRACTOR TO USE PARKING AREAS ADJACENT TO THE PROPOSED BUILDING FOR LAY DOWN/STAGING AREAS - MAINTAIN THESE AREAS SO THAT SEDIMENT LADEN RUNOFF WILL BE DIVERTED TO EROSION CONTROL MEASURES. INSTALL SILT FENCE AROUND LAY DOWN/STAGING AREAS AS SHOWN.
 7. CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
ALL APPLICABLE ERS CONTROL MEASURES MUST BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
 8. STOCKPILE RIP-RAP ON SITE AND INSTALL ALL EROSION CONTROL MEASURES WHERE THE WORK IS OCCURRING. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE ENGINEER OR UPON RECOMMENDATION OF NCCD INSPECTION PERSONNEL AS CONDITIONS WARRANT.
 9. ALL DISTURBED AREAS SHALL HAVE GROUND STABILIZATION BY THE CONTRACTOR ACCORDING TO THE CHART ON THIS SHEET.
 10. STABILIZE SITE AREAS ARE BROUGHT UP TO FINISHED GRADE.
 11. UPON COMPLETION OF THE INSTALLATION AND WITH APPROVAL OF NCCD, ALL EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF IN AN ACCEPTABLE MANNER. EACH SECTION SHALL BE SEDIMENTED IMMEDIATELY AFTER INSTALLATION OF PIPE, STRUCTURE, OR ACCESS. COORDINATE WITH THE EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
 12. ONCE GROUND COVER IS FIRMLY ESTABLISHED, ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITH THE APPROVAL OF THE NCCD INSPECTOR.
 13. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION & SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, NCCD, U.S. DEPT. OF AGRICULTURE, AND THE VILLAGE OF PINEBLUFF STANDARDS.

Diagram illustrating the cross-section of a Temporary Diversion Ditch. The ditch is shown with a 50-foot width (W) and a 50-foot depth (H). The ditch is labeled "DITCH" and "TEMPORARY DITCH #1" and "TEMPORARY DITCH #2". The ditch is shown with a 50-foot width (W) and a 50-foot depth (H). The ditch is labeled "DITCH" and "TEMPORARY DITCH #1" and "TEMPORARY DITCH #2". The ditch is shown with a 50-foot width (W) and a 50-foot depth (H). The ditch is labeled "DITCH" and "TEMPORARY DITCH #1" and "TEMPORARY DITCH #2".

DITCH	FLOW Q1(0)	LONG. SLOPE (%)	H	B	W	SS	CHANNEL LINING
TEMPORARY DITCH #1	3.0 CFS	1.0%	1.0'	1.0'	5.0'	2:1	STRAW WITH NET MAG D575
TEMPORARY DITCH #2	3.0 CFS	1.0%	1.0'	1.0'	5.0'	2:1	STRAW WITH NET MAG D575

TEMPORARY DIVERSION DITCH DATA BLOCK

REFER TO EROSION DETAIL SHEET FOR TEMPORARY DITCH DETAIL.

STABILIZATION TIMEFRAME		
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
BASIN & TEMPORARY DIVERSION DITCHES	IMMEDIATELY	NONE
PERIMETER DITCHES, SWALES, DITCHES AND SLOPES WITH HIGH QUALITY WATER FROM ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50 FT IN LENGTH.
ALL OTHER AREAS WITH TEMPORARY OR PERMANENT GROUND COVER DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RETAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING CHART FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND ROW ZONES.

GROUND COVER REQUIREMENTS:
THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED SHALL, ACCORDING TO THE FOLLOWING CHART, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RETAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING CHART FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

NOTIFICATION OF COMBINED SELF-MONITORING AND SELF-INSPECTION FORM:
THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DEVELOPING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010.
TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, DWD AND DENR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE NPDES SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE FORM CAN BE ACCESSSED AT: [HTTP://PORTAL.NCDENR.ORG/MSB/ERS/EROSION](http://portal.ncdenr.org/MSB/ERS/EROSION)
IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CALL THE APPLICABLE NCOW REGIONAL OFFICE: RALEIGH: 919-789-4200; FAYETTEVILLE: 910-433-3300; WILMINGTON: 910-796-7215; WASHINGTON: 252-946-6401; WINSTON-SALEM: 336-771-5000; MOOREVILLE: 704-663-1699; ASHEVILLE: 828-296-4500.

EROSION CONTROL LEGEND
REFER TO DETAIL SHEET FOR CONSTRUCTION REQUIREMENTS

- CE CONSTRUCTION ENTRANCE
- RIP RAP APRON
- TEMPORARY INLET PROTECTION
- SILT BAG INLET PROTECTION
- HORSESHOE INLET PROTECTION
- TEMPORARY SILT FENCE OUTLET
- TEMPORARY CHECK DAM
- TEMPORARY SILT FENCE
- SF TEMP. DIVERSION DITCH

TRIANGLE SITE DESIGN

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SEAL
2443
JAN 16
NEW E. YOUNG
REGISTERED PROFESSIONAL ENGINEER
NORTH CAROLINA

OWNER/DEVELOPER:
Cade, Inc.
Attn: Bill Bland
120 F Weathers Street
Youngsville, NC 27596
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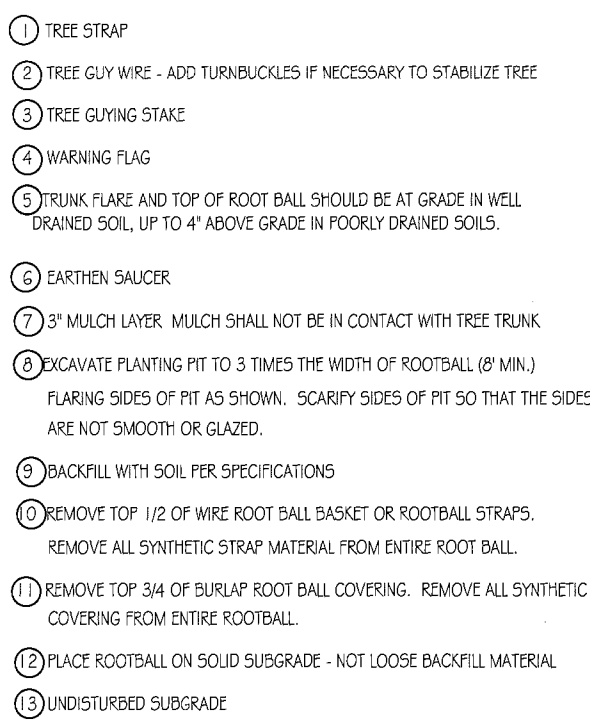
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Youngsville, NC
Franklin County

Project No: 027002
Date: September, 29 2016
Title: GRADING PHASE EROSION CONTROL PLAN
Sheet No: C1.6b

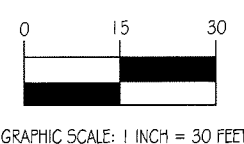
15' STREET YARD	LENGTH	REQUIREMENTS	REQUIRED	PROVIDED
CANOPY TREE	43'			9 TRIDENT MAPLE
SHRUB	178'			39 ZABEL LAUREL

1. THE CONTRACTOR SHALL EXERCISE ALL NECESSARY BARBERSHOPS, SIGNS, FENCES, FLASHING LIGHTS, FLAGMEN, ETC. FOR MAINTENANCE AND PROTECTION OF THE TRAFFIC AS REQUIRED BY FRANKLIN COUNTY AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, FOR DETAILS OF TRAFFIC CONTROL STANDARDS AND DEVICES.
2. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, BORN POINTS, AND PROPERTY CORNERS DURING CONSTRUCTION.
3. APPROVAL OF THESE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
4. COORDINATE ALL CURBS AND STREET GRASSES IN INTERSECTIONS WITH INSPECTOR.
5. NOW STANDARD ITEMS (E.G. PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY WIDENMENT AGREEMENT WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BEFORE INSTALLATION.
6. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.
7. EXISTING SITE CONDITIONS, GRADES, CONTOURS, UTILITIES AND EXISTING FEATURES FROM A FIELD RUN SURVEY.
8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION "STANDARD DETAILS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE FRANKLIN COUNTY CODES AND ORDINANCES. THE CONTRACTOR SHALL MAINTAIN A CURRENT EDITION OF THE STATE AND LOCAL CODES, ORDINANCES, STANDARD SPECIFICATION AND STANDARD DETAILS ON THE PROJECT SITE FOR REFERENCE DURING CONSTRUCTION OF THE PROJECT.
9. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SHALL PROVIDE ANY INFORMATION AND RECORDS PERTAINING TO THE PLANS AND ACTUAL FIELD CONDITIONS TO THE OWNER OR OWNER'S REPRESENTATIVE IMMEDIATELY. CONTRACTOR SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING WITH WORK.
10. THE CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS FROM PROPOSED FEATURES TO EXISTING FEATURES AS NECESSARY.
11. THE CONTRACTOR SHALL SEAL THE EDGE OF EXISTING ASPHALT PAVEMENT WITH TACK COAT IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS WHERE NEW PAVEMENT JOINS EXISTING PAVEMENT.
12. THE CONTRACTOR SHALL REPAIR, RESURFACE, RECONSTRUCT OR FURNISH ANY AREAS DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, HIS SUBCONTRACTORS OR SUPPLIERS AT AN ADDITIONAL COST TO THE OWNER.
13. ALL PAVEMENT JOINTS SHALL BE SAW-CUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
14. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF TRUCK DOCKS, EXIT DOORS, SIDEWALKS, PRECISE BUILDING DIMENSIONS, AND EXIST BUILDING UTILITY ENTRANCE LOCATIONS.
15. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (OR AS OTHERWISE SPECIFIED). ALL REPRESENTED SIGN STRIPINGS AND PAINT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL NEW SIGNS SHALL BE MOUNTED ON GALVANIZED POSTS AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
16. CONTRACTOR SHALL INSTALL ACCESSIBLE PAVEMENT PER ALL MUNICIPALITY AND ADA STANDARDS AT ALL DRIVE AND BUILDING LOCATIONS AS REQUIRED.
17. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, GRADING, OR CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE FRANKLIN COUNTY PUBLIC UTILITIES DEPARTMENT FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.
18. PROOF ROLL BUILDING AND ALL PARKING AREAS. NOTIFY OWNER OF ANY UNACCEPTABLE AREAS.
19. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES AND STORM DRAINAGE) TO OWNER PRIOR TO COMPLETION OF CONSTRUCTION.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING ALL REQUIRED LANDSCAPING FOR THE ENTIRE SITE. TO INCLUDE, BUT NOT LIMITED TO: SOLODESCRIBED AREAS, DRIVE DRIVES, PARKING LOT AREAS, WALKWAYS (SEE SCHEDULE), AND ADJACENT PLANTINGS.
2. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES REGARDING LANDSCAPING.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A HEALTHY STATUS OF GRASS ON ALL SEEDED AREAS.
4. IN THE EVENT THAT PLANTING BEDS AND MULCH ARE REQUIRED, THE CONTRACTOR SHALL INSTALL BLACK FABRIC WEED BLOCK LANDSCAPE MULCH UNDER THE MULCH TO PREVENT WEED GROWTH.
5. CONTRACTOR SHALL PROVIDE NATURAL TOPSOIL THAT IS FERTILE, FRACTION, WITHOUT MIXTURE OF SUBSOIL MATERIALS, AND OBTAIN FROM A WELL DRAINED, AVAILABLE SITE. IT SHALL NOT CONTAIN SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. IT SHALL BE SOFTENED AND FREE FROM CLAY, LIMES, STONES, ROOTS, PLANTS, OR SIMILAR SUBSTANCES. IT SHALL BE MORE IN DEMAND THAN THE SUBSOIL. IT SHALL BE SOFTENED AND HAVE A RANGE OF 5.5 TO 7.0.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE WATERING AND THE MAINTENANCE OF ALL LANDSCAPED AREAS UNTIL THE LATTER OF THIRTY (30) DAYS FOLLOWING THE PLANTING OF THE GRASS AND SHRUBS, OR (B) THE DATE THAT DIVISION OPENS FOR BUSINESS TO THE PUBLIC.
7. GENERAL CONTRACTOR IS TO CLEAN ENTIRE SITE OF ALL CONSTRUCTION DEBRIS AND RAKE ALL GRASS AREAS.
8. PROVIDE LANDSCAPE PLANS TO ENVIRONMENT AND AS REQUIRED BY CALIA JURISDICTION TO THE BLDG. DEPT. FOR REVIEW AND APPROVE PRIOR TO START OF WORK.
9. ALL LANDSCAPING, TREES, SHRUBS, ETC. SHALL NOT INTERFERE WITH THE VISIBILITY OF ENVIRONMENT SIGNAGE.
10. CONTRACTOR TO PROVIDE QUANTITIES PRIOR TO COMMENCING WORK.
11. OPEN AREAS WITHIN PLANTING BEDS SHALL BE MULCHED.

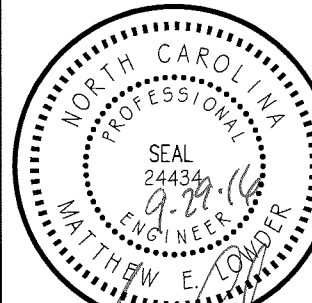


1. REFERENCE SPECIFICATIONS FOR ALL SOIL PROCEDURES IN CONSTRUCTION DWGS.
2. SITE SOILS ARE GENERALLY SANDY, SILTY CLAYS AND SAND CLAYEY SILTS.



MASTER PLANT LIST								
TYPE	SYM KEY	BOTANICAL NAME	COMMON NAME	SPECIFICATION				
				CAULIP	HEIGHT	ROOT	SPACING	OTHER
SHADE TREES	AD	ACER BURGERSHANUM	TRIDENT MAPLE	2"	8' MIN	BAB	AS SHOWN	
	15	LAGERSTROEMIA	ORANGE MYRTLE		9' MIN	BAB	AS SHOWN	MULTISTEM
SHRUBS	ZL	PRUNUS LAUROCERASUS DABELIANA	ZABEL LAUREL		10'	3 GAL - MIN	AS SHOWN	

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Drawn _____
Checked _____
Approved _____

Project No. 027002
Date: September, 29 201

LANDSCAPING

Sheet No.

C1.8

SYMBOLS

ARCHITECTURAL COMPONENT

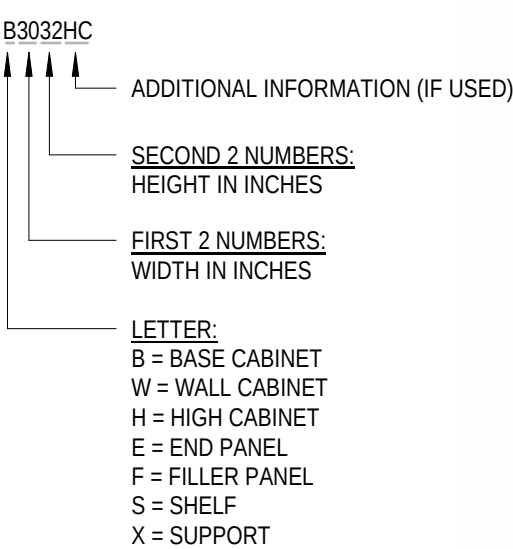
	ROOM TAG
	DOOR TAG
	WINDOW TAG
	WALL TAG
	RAILING TAG
	CEILING TAG
	REVISION
	SPECIAL EQUIPMENT
	PLUMBING TAG
	KEYNOTE TAG
	JOINT
	CONTROL JOINT
	REVEAL

MATERIAL & FINISH TAGS

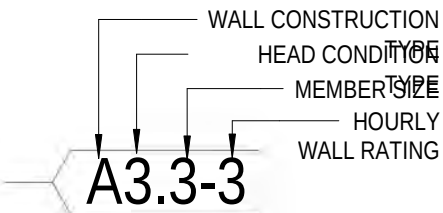
CPT-1	CARPET
LVT-1	LUXURY VINYL TILE
VCT-1	VINYL COMPOSITION TILE
PT-1	PORCELAIN TILE
RB-1	RUBBER BASE
VB-1	VINYL BASE
WB-1	WOOD BASE
WT-1	WOOD TRIM
WP-1	WALL PANEL
CT-1	COUNTERTOP

NOTE: FOR MATERIALS & FINISHES THE NUMBER AFTER THE MATERIAL (*XXX-1*) WOULD BE A COLOR/FINISH

CASEWORK TAGS



WALL TAGS



READING LEFT TO RIGHT:

1. THE FIRST CHARACTER IN THE TAG INDICATES WHICH DETAIL TO REFERENCE FOR THE WALL CONSTRUCTION
2. THE SECOND CHARACTER INDICATES THE HEAD CONDITION "1" (FULL HEIGHT TO UNDERSIDE OF STRUCTURE), "2" (TO THE DIMENSION ABOVE THE CEILING AS INDICATED IN THE DETAIL), OR "3" (TO THE DIMENSION ABOVE FINISH FLOOR INDICATED IN THE PLANS)
3. THE THIRD CHARACTER INDICATES THE STUD SIZE. REFERENCE THE DETAIL FOR THE STUD SIZE.
4. THE FOURTH CHARACTER INDICATES THE HOURLY

ABBREVIATIONS

AFF	ABOVE FINISH FLOOR	MEZZ.	MEZZANINE
AHU	AIR HANDLING UNIT	MIN.	MINIMUM
AL.	ALUMINUM	MO	MASONRY OPENING
ALT.	ALTERNATE	MTD.	MOUNTED
BF.	BARRIER FREE	N/A	NOT APPLICABLE
BRG.	BEARING	NC	NOISE CRITERIA
CJ	CONTROL JOINT	NIC	NOT IN CONTRACT
CLG.	CEILING	NO	NUMBER
CMU	CONCRETE MASONRY UNIT	NRC	NOISE REDUCTION
CO.	CLEANOUT	COEFFICIENT	
CONC.	CONCRETE	NTS	NOT TO SCALE
CONST.	CONSTRUCTION	OC	ON CENTER
CONT.	CONTINUOUS	OD	OUTSIDE DIAMETER
DA.	DIAMETER	OH	OVER HEAD
DN.	DOWN	OPP.	OPPOSITE
DS.	DOWNSPOUT	ORD	OVERFLOW ROOF DRAIN
EF	EXHAUST FAN	PERP.	PERPENDICULAR
EL.	ELEVATION	PL	PLATE
EJ	EXPANSION JOINT	PSF	POUNDS PER SQUARE FOOT
EQ.	EQUAL	PSI	POUNDS PER SQUARE INCH
EWC	ELECTRIC WATER COOLER	PVC	POLYVINYL CHLORIDE
FD	FLOOR DRAIN	R	RADIUS
FE	FIRE EXTINGUISHER	REQD.	REQUIRED
FEC	FIRE EXTINGUISHER & CABINET	RD	ROOF DRAIN
FRT	FIRE RETARDANT TREATED	RO	ROUGH OPENING
FT	FOOT/FEET	SCH.	SCHEDULE
GA.	GAUGE	SF	SQUARE FEET
GALV.	GALVANIZED	SIM.	SIMILAR
GC	GENERAL CONTRACTOR	SP.	SPACE/SPACING
HB	HOSE BIBB	SQ.	SQUARE
HP	HIGH POINT	SS	STAINLESS STEEL
HORIZ.	HORIZONTAL	STD.	STANDARD
HVAC	HEATING VENTILATING AIR CONDITIONING	TAN.	TANGENT
ID	INSIDE DIAMETER	TOW	TOP OF WALL
IE	INVERT ELEVATION	TYP.	TYPICAL
IN.	INCH/INCHES	UL	UNDERWRITERS LABORATORY
INSUL	INSULATION	UNO	UNLESS NOTED OTHERWISE
LAV.	LAVATORY	VERT.	VERTICAL
LED	LIGHT EMITTING DIODE	VTR	VENT THROUGH ROOF
LLH	LONG LEG HORIZONTAL	W	WITH
LLV	LONG LEG VERTICAL	WC	WATER CLOSET
LP	LOW POINT	WH	WATER HEATER
LP	LOW POINT	W/O	WITHOUT
MFR.	MANUFACTURER	WP.	WATERPROOF
MAY	MAZINIUM	W/UT	W/UT

SUBMITTALS

WHEN THE PROJECT DOCUMENTS CALL FOR SUBMITTALS, THE FOLLOWING SHALL APPLY:

- 1. SUBMITTAL SCHEDULE**
CONTRACTOR TO PROVIDE ARCHITECT WITH SUBMITTAL SCHEDULE PRIOR TO FIRST PAY APPLICATION. THIS IS A REQUIREMENT FOR THE PROJECT AND IS DUE BEFORE THE FIRST APPLICATION FOR PAYMENT. THE ARCHITECT RESERVES THE RIGHT TO WITHHOLD PROJECT PAYMENT UNTIL A COMPLETE SUBMITTAL SCHEDULE IS FURNISHED. SCHEDULE SHALL OUTLINE ALL SUBMITTALS REQUIRED ON THE PROJECT ALONG WITH THE DATE EACH SUBMITTAL IS TO BE MADE BY THE CONTRACTOR.
- 2. QUANTITY AND PROCEDURE**
SHOP DRAWINGS, PRODUCT DATA AND LITERATURE, AND OTHER SUCH PAPER-BASED SUBMITTALS: SUBMIT BY EMAIL ONE (1) PDF COPY TO ARCHITECT.

PHYSICAL SAMPLES: SUBMIT TO ARCHITECT'S OFFICE.
- 3. CONTRACTOR REVIEW**
REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. NOTE CORRECTIONS AND FIELD DIMENSIONS. MARK WITH APPROVAL STAMP BEFORE SUBMITTING TO ARCHITECT. STAMP SHALL INCLUDE NAME OF REVIEWER, DATE OF CONTRACTOR'S APPROVAL, AND STATEMENT CERTIFYING THAT SUBMITTAL HAS BEEN REVIEWED, CHECKED, AND APPROVED FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- 4. ARCHITECT / ENGINEER REVIEW**
SHOP DRAWINGS AND SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW BEFORE ANY CONSTRUCTION BEGINS. THESE SUBMITTALS WILL BE REVIEWED FOR OVERALL COMPLIANCE AS IT RELATES TO THE ARCHITECTURAL DESIGN OF THIS PROJECT. VERIFICATION OF THE SHOP DRAWINGS FOR DIMENSIONS, OR FOR ACTUAL FIELD CONDITIONS IS NOT THE RESPONSIBILITY OF THE ARCHITECT.
- 5. TIMEFRAME**
ALLOW ENOUGH TIME FOR SUBMITTAL REVIEW, INCLUDING TIME FOR RESUBMITTALS. TIME FOR REVIEW SHALL COMMENCE ON THE ARCHITECT'S RECEIPT OF SUBMITTAL. ALLOW 15 DAYS FOR INITIAL REVIEW OF EACH SUBMITTAL AND 15 DAYS FOR REVIEW OF EACH RESUBMITTAL.
- 6. DEVIATIONS**
SHOULD CHANGES MADE BY ARCHITECT IN THE SHOP DRAWING REVIEW PROCESS OR RESPONSES TO REQUESTS FOR INFORMATION (RFI'S) RESULT IN A CHANGE IN THE CONTRACT TIME OR PRICE, DO NOT PROCEED UNTIL A CHANGE ORDER IS SUBMITTED AND APPROVED.
- 7. DESIGN CHANGES**
SHOULD CHANGES MADE BY ARCHITECT IN THE SHOP DRAWING REVIEW PROCESS OR RESPONSES TO REQUESTS FOR INFORMATION (RFI'S) RESULT IN A CHANGE IN THE CONTRACT TIME OR PRICE, DO NOT PROCEED UNTIL A CHANGE ORDER IS SUBMITTED AND APPROVED.
- 8. OUT OF STOCK / OUT OF PRODUCTION**
NOTIFY ARCHITECT IMMEDIATELY OF ANY OUT OF STOCK OR OUT OF PRODUCTION MATERIALS FOR AN ALTERNATE SPECIFICATION.
- 9. SUBSTITUTIONS**

REQUEST FOR INFORMATION (RFI)

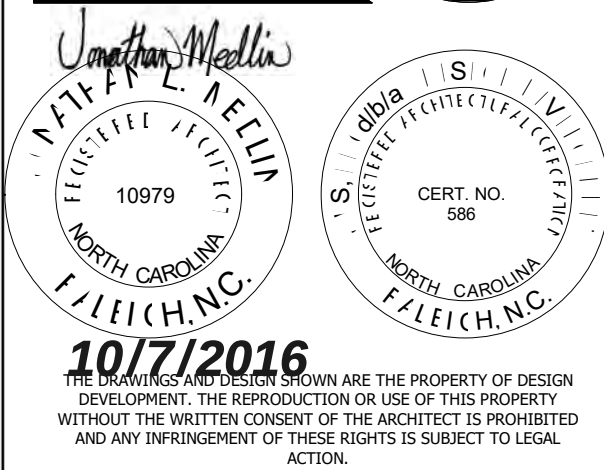
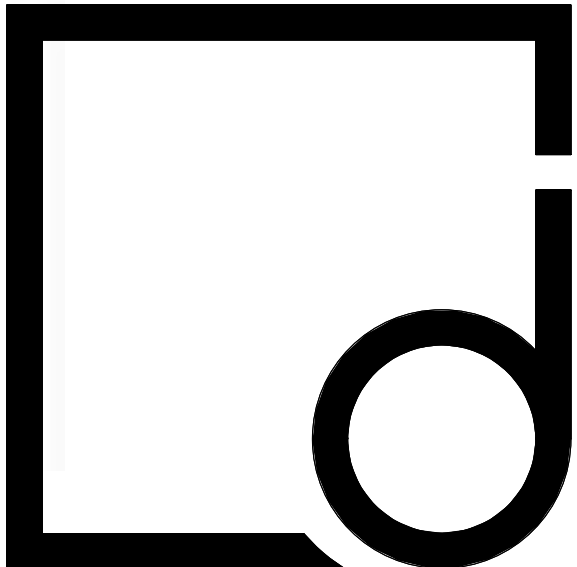
1. SUBMIT REQUESTS FOR INFORMATION BY EMAIL TO THE ARCHITECT.
2. EACH REQUEST SHALL BE INDIVIDUALLY NUMBERED.
3. ONLY ONE QUESTION PER RFI IS ALLOWED.
4. SUBMIT RFI ON ELECTRONIC FORM PROVIDED BY ARCHITECT.
5. FORM MUST BE FULLY COMPLETED TO BE ACCEPTED BY ARCHITECT.

GENERAL PROJECT NOTES & REQUIREMENTS

- 1. BUILDING CODES**
ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH CURRENT APPLICABLE BUILDING CODE WITH LOCAL AMENDMENTS AND WITH ALL OTHER CODES, ORDINANCES AND REQUIREMENTS. IF THERE IS A CONFLICT THE MORE STRINGENT SHALL BE USED.
- 2. ADDITIONAL STANDARDS**
ALL WORK RELATING TO THIS CONSTRUCTION SHALL COMPLY WITH U.S. DEPARTMENT OF LABOR, THE OCCUPATIONAL SAFETY & HEALTH STANDARDS AND ALL RELATED APPLICABLE LOCAL BUILDING CODES AND ORDINANCES.
- 3. THE PROJECT DOCUMENTS**
 - I) DO NOT SCALE DRAWINGS IN THE DOCUMENTS.
 - II) DRAWINGS ARE IN PART DIAGRAMMATIC AND DO NOT NECESSARILY SHOW COMPLETE DETAILS OF CONSTRUCTION WORK OR MATERIALS. PERFORMANCE OR INSTALLATION. DRAWINGS DO NOT NECESSARILY SHOW HOW CONSTRUCTION DETAILS. OTHER ITEMS OR WORK AND EQUIPMENT MAY AFFECT A PARTICULAR INSTALLATION. CONTRACTOR IS TO PROVIDE ALL MATERIALS AND CONSTRUCTION AS IS REASONABLY INFERRED AND CUSTOMARY FOR THE WORK AND FINISHED PRODUCT SHOWN ON THE DRAWINGS.
 - III) DIMENSIONS:
 - (i) INTERIOR DIMENSIONS ARE FROM FACE OF GYP BOARD TO FACE OF GYP BOARD UNLESS NOTED OTHERWISE.
 - (ii) DOOR & WINDOW DIMENSIONS: ARE ROUGH OPENING / NOMINAL DIMENSIONS UNLESS NOTED OTHERWISE
 - (iii) ALL DIMENSIONS ARE TO BE FIELD VERIFIED AND BACK CHECKED FOR CORRECTNESS. IF ANY DEVIATIONS OR DISCREPANCIES OCCUR, CONTACT THE ARCHITECT FOR VERIFICATION PRIOR TO PROCEEDING WITH THE WORK.
 - IV) THE PROJECT DOCUMENTS, INCLUDING PHYSICAL AND DIGITAL DOCUMENTS, ARE THE PROPERTY OF DESIGN DEVELOPMENT ARCHITECTS FOR USE SOLEY FOR THIS PROJECT AND SHALL NOT BE REPRODUCED, COPIED, OR USED FOR OTHER PURPOSES WITHOUT WRITTEN PERMISSION OF DESIGN DEVELOPMENT ARCHITECTS.
 - V) THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DOCUMENTS IS THE ARCHITECT OF RECORD FOR THIS PROJECT. NO OTHER PARTY MAY REVISE, ALTER, OR DELETE. THESE CONSTRUCTION DOCUMENTS, FOR THE PURPOSES OF THESE CONSTRUCTION DOCUMENTS THE ARCHITECT OF RECORD AND DESIGN DEVELOPMENT ARCHITECTS SHALL BE CONSIDERED THE SAME ENTITY.
 - VI) THE CONTRACTOR SHALL NOT ASSUME THAT DIGITAL FILES IN ANY OTHER FORMAT THAN PDF WILL BE MADE AVAILABLE DURING BIDDING OR AFTER AWARD. IF OTHER DIGITAL FILES OR FILE FORMATS ARE REQUESTED, DESIGN DEVELOPMENT ARCHITECTS RESERVES THE RIGHT TO SELECTIVELY PROVIDE THEM, AND IF PROVIDED, RESERVES THE RIGHT TO REQUIRE ADDITIONAL CONSIDERATION FOR THE TIME INCURRED TO PREPARE THEM FOR RELEASE.
- 4. RECORD DRAWINGS**
THE CONTRACTOR SHALL PREPARE AND MAINTAIN A COMPLETE SET OF RECORD CONSTRUCTION DRAWINGS INDICATING ALL ACTUAL WORK, MODIFICATIONS AND REVISIONS TO THE WORK DELINEATED ON THE CONSTRUCTION DOCUMENTS AS WELL AS ANY CONCEALED CONSTRUCTION WORK. INCLUDE ANY INFORMATION THAT WOULD BE HELPFUL TO THE OWNER.
- 5. PERSPECTIVE RENDERINGS AND PRESENTATION RENDERINGS**
ALL PERSPECTIVE RENDERINGS AND PRESENTATION RENDERINGS ARE FOR REFERENCE ONLY AND NOT TO BE CONSTRUCTED FROM - THIS INCLUDES PERSPECTIVE RENDERINGS OR VIEWS THAT ARE INCLUDED IN THE CONSTRUCTION DRAWING SET.
- 6. CONTRACTOR DESIGNED**
CONSTRUCTION METHODS AND MATERIALS NOT EXPLICITLY INDICATED OR IMPLIED ARE INTENDED TO BE CONTRACTOR DESIGNED. THE ARCHITECT SHALL BE NOTIFIED OF ANY VARIATION FROM THE DIMENSIONS AND/OR CONDITIONS SHOWN ON THESE DOCUMENTS. ANY SUCH VARIATION SHALL BE APPROVED BY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK OR THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR THE COST TO RECTIFY THE WORK. UNLESS SPECIFICALLY CONTRACTED OTHERWISE, CONTRACTOR DESIGNED WORK IS INCLUDED IN THE BASE BID AND SCHEDULE FOR THE PROJECT.
- 7. CONTRACTOR REVIEW AND COORDINATION**
 - I) THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL CAREFULLY REVIEW THE DRAWINGS, SPECIFICATIONS, DETAILS AND NOTES FOR INFORMATION REGARDING THE SCOPE OF THE WORK INTENDED PRIOR TO PROCEEDING WITH THE WORK.
 - II) THE GENERAL CONTRACTOR SHALL COORDINATE ALL BUILDING MANAGEMENT SYSTEMS, SECURITY SYSTEMS, AND LOCKING HARDWARE WITH THE OWNER PRIOR TO INSULATION. (SECURITY SYSTEMS EQUIPMENT FURNISHED BY OWNER. ALL CONDUIT BOXES BY ELECTRICAL SUBCONTRACTOR).
 - III) THE CONTRACTOR REPRESENTS AND WARRANTS THAT IT HAS EXAMINED THE PLANS, DRAWINGS, SPECIFICATIONS AND ALL CONSTRUCTION CRITERIA OF OWNER AND HAS SATISFIED ITSELF THAT THE INFORMATION CONTAINED THEREIN SUFFICIENT TO FULLY AND COMPLETELY CONSTRUCT THE PROJECT.
 - IV) THE CONTRACTOR SHALL REVIEW THE CIVIL DOCUMENTS, THE SOILS REPORT, AND THESE DOCUMENTS (ALL IN THEIR ENTIRETY) TO INSURE THAT ALL REQUIRED EARTHWORK, PAVING, CURB AND STRUCTURAL SLAB WORK IS FULLY COVERED IN THE SCOPE OF THE CONTRACTOR'S BID. CONTRACTOR SHALL FULLY COORDINATE ALL OF THE ABOVE REFERENCED WORK WITH THE OWNERS REPRESENTATIVE, THE ARCHITECT AND CIVIL ENGINEER TO INSURE THAT ALL WORK IS FULLY COORDINATED AND COMPLETED.
 - V) THE CONTRACTOR AND SUB CONTRACTORS SHALL CAREFULLY REVIEW ALL THE PROJECT DOCUMENTS INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE PROJECT DOCUMENTS AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE SET OF PROJECT DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTING INFORMATION PRIOR TO THE START OF CONSTRUCTION.
- 8. CONTRACTOR WARRANTY**
UNLESS OTHERWISE INDICATED, CONTRACTOR IS TO PROVIDE WRITTEN WARRANTY FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. THE WARRANTY SHALL STATE ALL WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, APPLICABLE CODES AND ENFORCING AUTHORITIES AND THAT ALL WORK IS FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP. THIS IS IN ADDITION AND NOT A LIMITATION TO ANY PRODUCT MANUFACTURER'S PRODUCT WARRANTIES.
- 9. RATED PENETRATIONS**
ALL PENETRATIONS THOUGH FIRE RATED PARTITIONS OR FIRE RATED CEILING ASSEMBLIES SHALL BE INSTALLED ACCORDING TO U.L. STANDARDS AND PER APPLICABLE CODES FOR REQUIRED HOUR FIRE RATED CONSTRUCTION.
- 10. PROJECT WORKMANSHIP**
WORKMANSHIP SHALL BE FIRST-CLASS AND PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN.
- 11. MATERIAL INSTALLATION STANDARDS**
ALL MATERIAL SHALL BE INSTALLED ACCORDING TO INDUSTRY STANDARDS, RECOMMENDATIONS REFERENCED IN THE SPECIFICATIONS, OR MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURES, WHICHEVER IS THE MOST STRINGENT, IN ORDER TO PROVIDE A COMPLETE AND HIGH QUALITY PROJECT.
- 12. CUTTING AND PATCHING**
CONTRACTOR IS TO INCLUDE ALL CUTTING AND PATCHING FOR PENETRATIONS THROUGH FLOORS, WALLS, CEILINGS AND ROOF. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER TO REDUCE ITS LOAD CARRYING CAPACITY.
- 13. UNFORSEEN CONDITIONS**
SHOULD UNFORSEEN CONDITIONS BE ENCOUNTERED THAT AFFECT DESIGN OR FUNCTION OF THE PROJECT, THE CONTRACTOR SHALL INVESTIGATE FULLY AND SUBMIT AN ACCURATE AND DETAILED REPORT TO THE ARCHITECT WITHOUT DELAY. WHILE AWAITING A RESPONSE, THE CONTRACTOR SHALL RESCHEDULE OPERATION AS REQUIRED TO AVOID DELAY OF THE OVERALL PROJECT.
- 14. DEFINED WORDS**
IN THE PROJECT DOCUMENTS, THE TERM "PROVIDE" SHALL MEAN "TO FURNISH AND INSTALL".

MISCELLANEOUS PROJECT LABOR AND MATERIALS TO BE PROVIDED BY CONTRACTOR

- 1. WOOD BLOCKING**
CONTRACTOR SHALL PROVIDE WOOD BLOCKING AS NECESSARY TO ADEQUATELY SUPPORT MOUNTED FINISHES, FIXTURES, BUILDING COMPONENTS, & EQUIPMENT - INCLUDING OWNER PROVIDED ITEMS. ADDITIONALLY, BLOCKING SHALL BE PROVIDED AS INDICATED ON THE DRAWINGS, WHETHER SPECIFICALLY IDENTIFIED AS BLOCKING OR NOT.
- 2. ACCESS PANELS**
ACCESS PANELS (2'x2') SHALL BE PROVIDED IN ALL GYP BOARD PARTITIONS OR CEILING WHERE ELECTRICAL TRANSFORMERS, J-BOXES, PLUMBING VALVES, HVAC VAV BOXES, PTB BOXES, MOTORIZED DAMPERS, VOLUME DAMPERS, FIRE DAMPERS, SANITARY OR GREASE LINE TRAPS REQUIRING ACCESS LOCATED. NOTE THAT MANY OF THESE ITEMS ARE NOT INDICATED ON THESE DOCUMENTS, BUT ACCESS PANELS SHALL BE PROVIDED AS THOUGH THEY HAVE BEEN SHOWN THROUGHOUT (BURDEN TO DETERMINE QUANTITY IS ON THE CONTRACTOR). THE ARCHITECT SHALL COORDINATE THESE ACCESS PANELS WITH THE CONTRACTOR AT A LATER DATE SO AS TO MINIMIZE THE IMPACT ON THE AESTHETIC DESIGN OF THE PROJECT. THE CONTRACTOR SHALL LOCATE ALL ELEMENTS WHICH REQUIRE ACCESS ABOVE NON-PUBLIC AREA CEILING OR ABOVE LAY-IN ACOUSTICAL TILE CEILINGS, IF POSSIBLE. THE CONTRACTOR SHALL PROVIDE A MARKED-UP PLAN TO THE ARCHITECT AND OWNER SHOWING ALL AREAS REQUIRING ACCESS.
- 3. FIRE EXTINGUISHERS**
PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY LOCAL CODE. PROVIDE SEMI-RECESSED CABINET TO MATCH SIZE OF EXTINGUISHER AND WALL CONSTRUCTION DIMENSIONS, WITH STAINLESS STEEL FINISH, FULL ACRYLIC GLASS DOOR, AND DOOR HANDLE. CONTRACTORS SHALL VERIFY ALL LOCATIONS, TYPES, AND QUANTITY OF FIRE EXTINGUISHERS WITH THE LOCAL CODE ENFORCEMENT OFFICIAL AND WITH THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. IF FIRE EXTINGUISHERS ARE SPECIFICALLY INDICATED ON THE PLANS, PROPOSED CHANGES TO ANY OF THOSE SPECIFIC LOCATIONS MUST BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
- 4. NECESSARY PARTS, PIECES, LABOR, & COMPONENTS**
CONTRACTOR SHALL PROVIDE ALL NECESSARY PARTS, PIECES, LABOR, AND COMPONENTS THAT ARE SUGGESTED OR IMPLIED IN WHOLE OR IN PART IN THIS DRAWING SET, WHETHER SPECIFICALLY DETAILED OR NOT.
- 5. KNOX BOX**
PROVIDE APPROVED KNOX BOX FOR PROJECTS THAT REQUIRE IT. FINAL LOCATION OF KNOX BOX MUST BE APPROVED BY BOTH THE ARCHITECT AND LOCAL CODE OFFICIAL.
- 6. TERMITE TREATMENT**
 - I) PROVIDE SOIL TREATMENT FOR TERMITE CONTROL A THE END OF EARTHWORK OPERATIONS. SUBMIT FOR APPROVAL PRODUCT DATA AND WARRANTY.
 - II) COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS. USE EXPERIENCED INSTALLERS.
 - III) DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - IV) PROVIDE WRITTEN WARRANTY AGREEING TO RETREAT SOIL AND REPAIR DAMAGE CAUSED BY TERMITE INFESTATION, CARPENTER ANTS, AND OTHER PESTS DURING A FIVE YEAR PERIOD FROM THE DATE OF SUBSTANTIAL COMPLETION.
 - V) USE SOIL TREATMENT MATERIALS WHICH BEAR A FEDERAL REGISTRATION NUMBER WITH US ENVIRONMENTAL PROTECTION AGENCY AND ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
 - VI) TREAT SOIL IN STRICT COMPLIANCE WITH NATIONAL PEST CONTROL ASSOCIATION STANDARDS AND WITH MANUFACTURER'S PRINTED INSTRUCTIONS AND RECOMMENDATIONS. DO NOT BEGIN TREATMENT WORK UNTIL ALL EXCAVATION, FILLING AND GRADING IS COMPLETED. DO NOT APPLY TREATMENT TO FROZEN OR EXCESSIVELY WET SOILS.
 - VII) POST SIGNS AND OTHER WARNINGS INDICATING THAT SOIL POSIONING HAS BEEN APPLIED. PROTECT PERSONS AND PROPERTY FROM INJURY AND DAMAGE FROM SOIL TREATMENT WORK.
- 7. SUB-GRADE WATERPROOFING**
PROVIDE ROLLER APPLIED WATERPROOFING SYSTEM FOR ALL MASONRY AND CAST IN PLACE CONCRETE WALLS BELOW GRADE. SUBMIT PRODUCT DATA FOR APPROVAL PRIOR TO ORDERING.
- 8. BUILDING THERMAL INSULATION**
WHETHER SPECIFICALLY DETAILED OR NOT, PROVIDE THERMAL INSULATION FOR THE PROJECT THAT MEETS THE MINIMUM STANDARDS AS REQUIRED BY THE JURISDICTION IN WHICH THE PROJECT IS LOCATED. INFORMATION CONTAINED IN THE PROJECT DOCUMENTS THAT SHOW A HIGHER LEVEL OF THERMAL INSULATION THAN THE MINIMUM REQUIRED SHALL BE INSTALLED AS INDICATED AND SHALL TAKE PRECEDENCE OVER THE MINIMUM STANDARD LANGUAGE WRITTEN ABOVE.
- 9. CONCRETE FLOOR SLAB PREPARATION**
CONCRETE FLOOR SLABS SHALL BE INSTALLED AND FINISHED AS REQUIRED TO RECEIVE THE SCHEDULED FINISH MATERIAL. NO CURING COMPOUND SHOULD BE UTILIZED ON CONCRETE TO RECEIVE TILE. SPECIAL ATTENTION SHOULD BE PAID TO CONCRETE SLAB RECEIVING PORCELAIN OR CERAMIC, TILE AND THE RECOMMENDATIONS OF THE CERAMIC TILE INSTITUTE OF AMERICA SHALL BE STRICTLY ADHERED TO BY THE ARCHITECT. IN CONJUNCTION WITH THE FLOOR TILE SUBCONTRACTOR, SHALL ESTABLISH LOCATIONS OF CONCRETE FLOOR SLAB CONTROL JOINTS SO AS TO MINIMIZE CUTTING OF FLOOR TILE.



800 Salem Woods Drive
Suite 102
Raleigh, NC 27615
919.848.4474

MAJESTIC MARBLE & GLASS

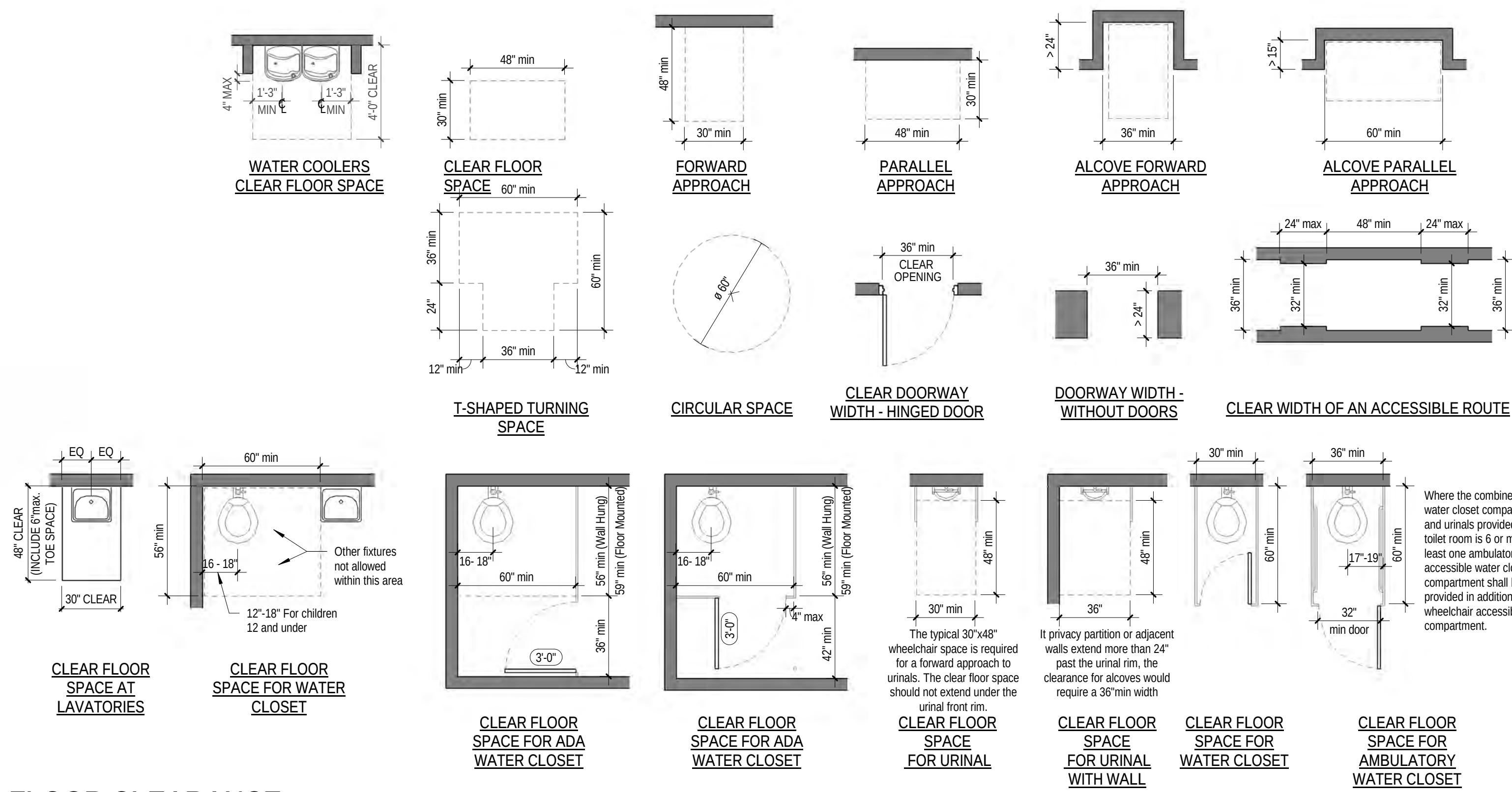
Jeffrey Way
Youngsville, NC

No.	Description	Date
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PROJECT #: 160032

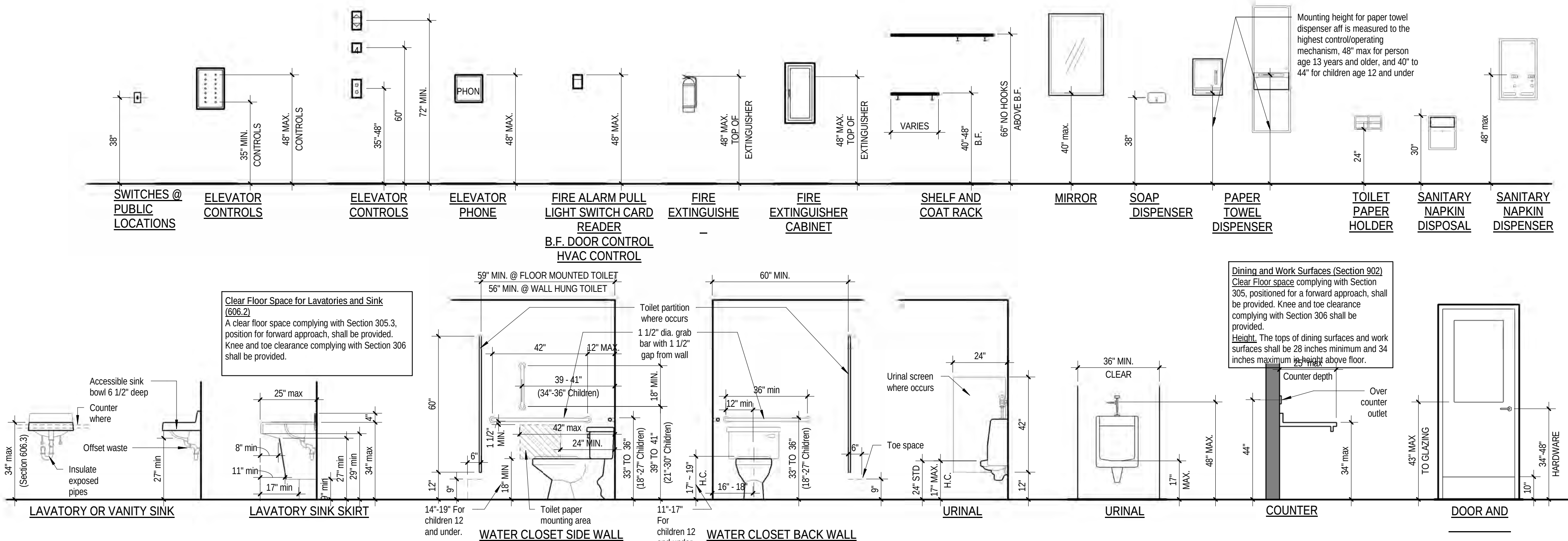
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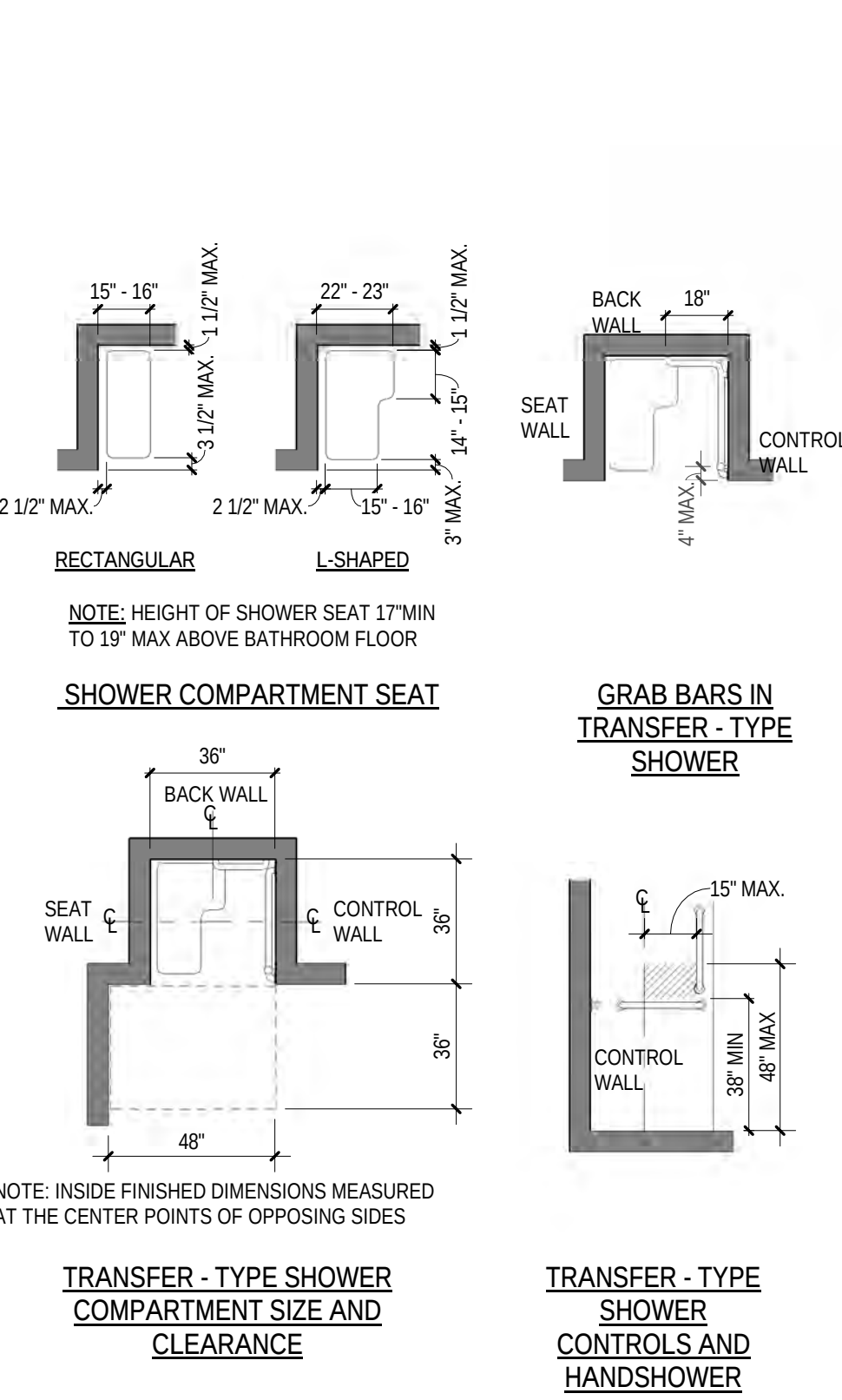
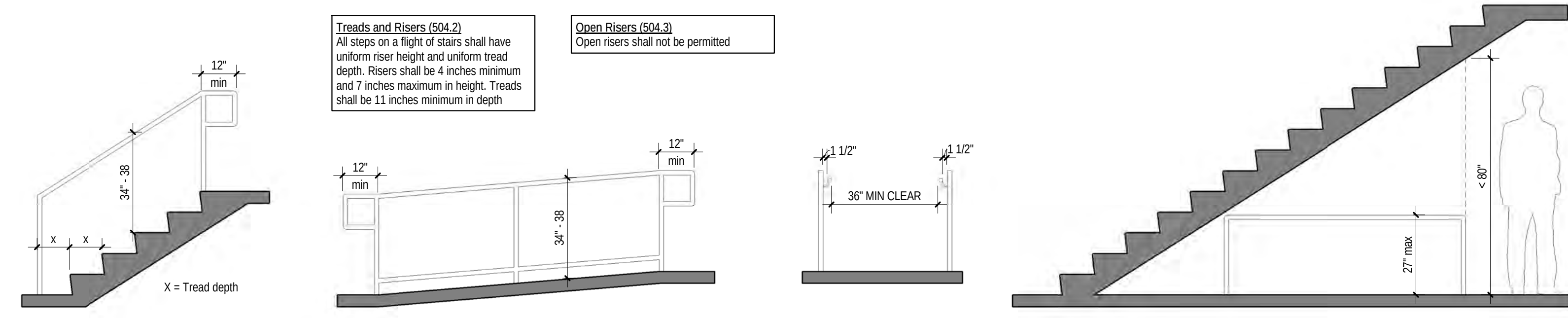
FLOOR CLEARANCE

1/4" = 1'-0"



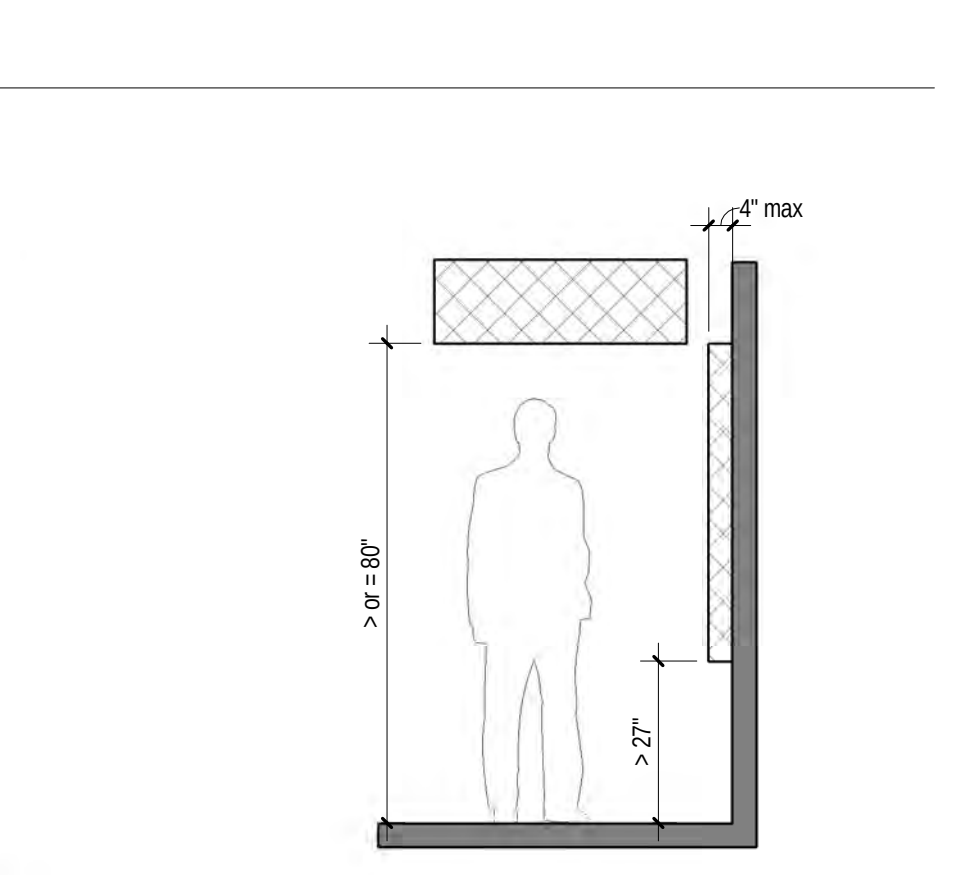
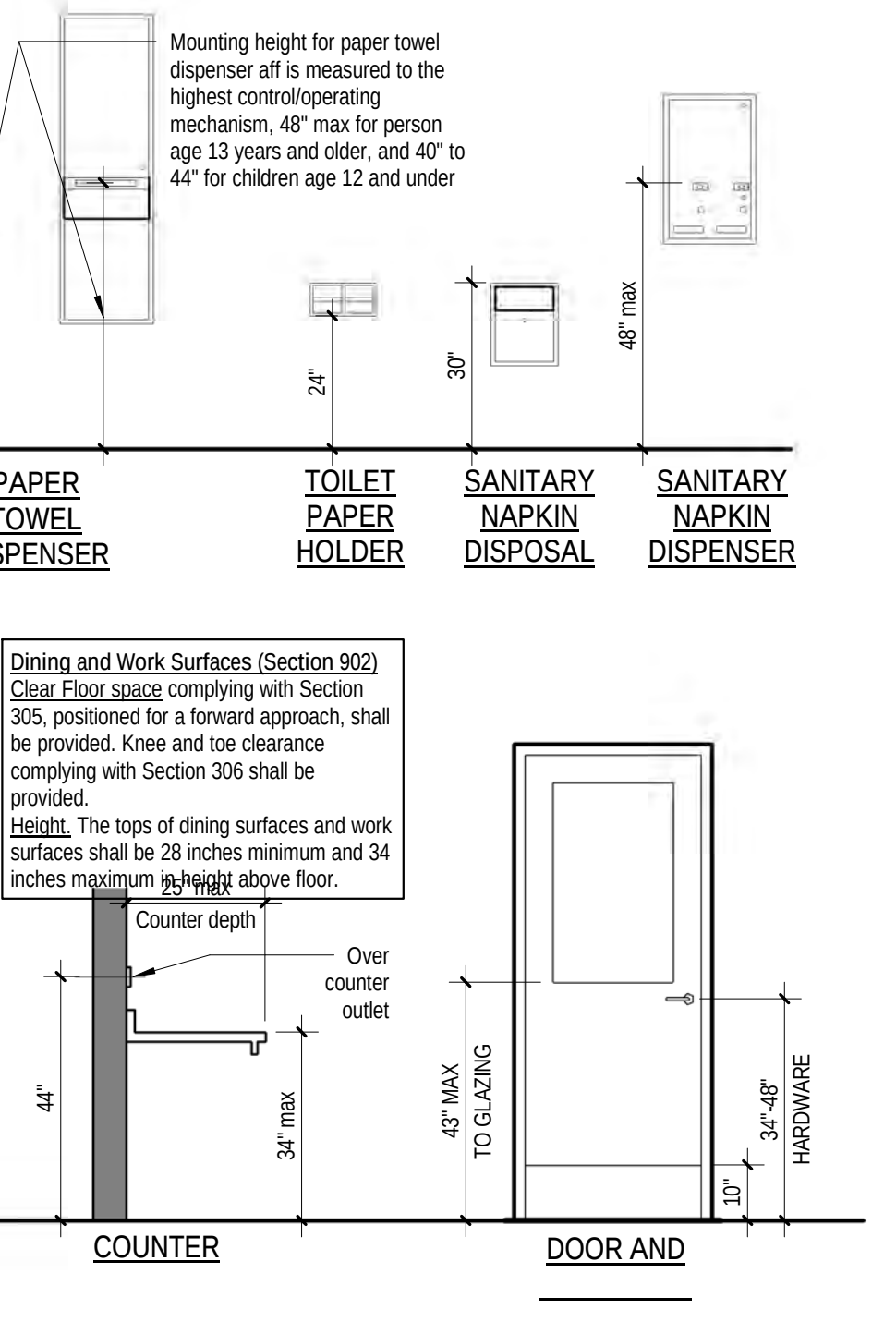
ACCESSIBLE HEIGHTS

3/8" = 1'-0"



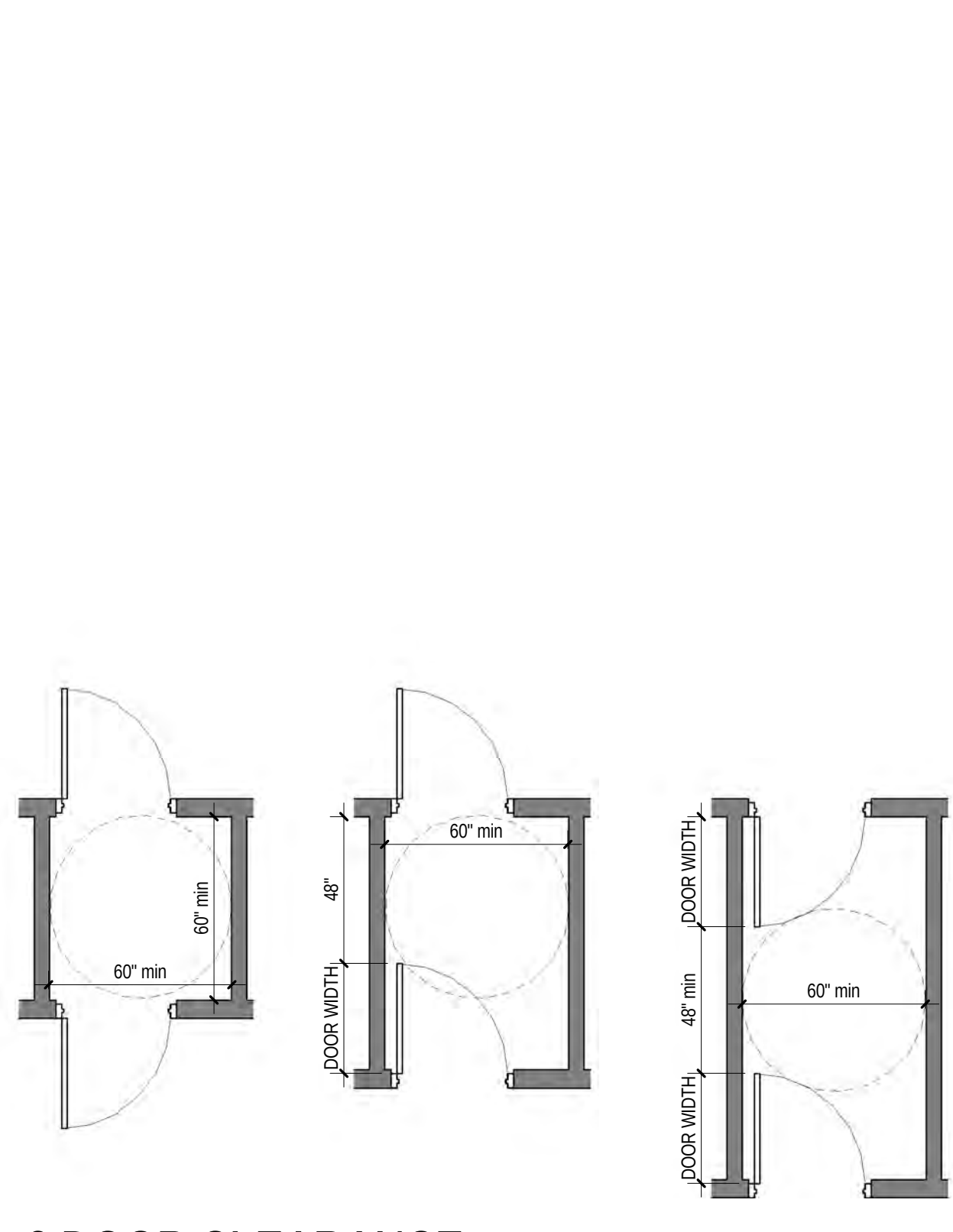
2 DOOR CLEARANCE

1/4" = 1'-0"



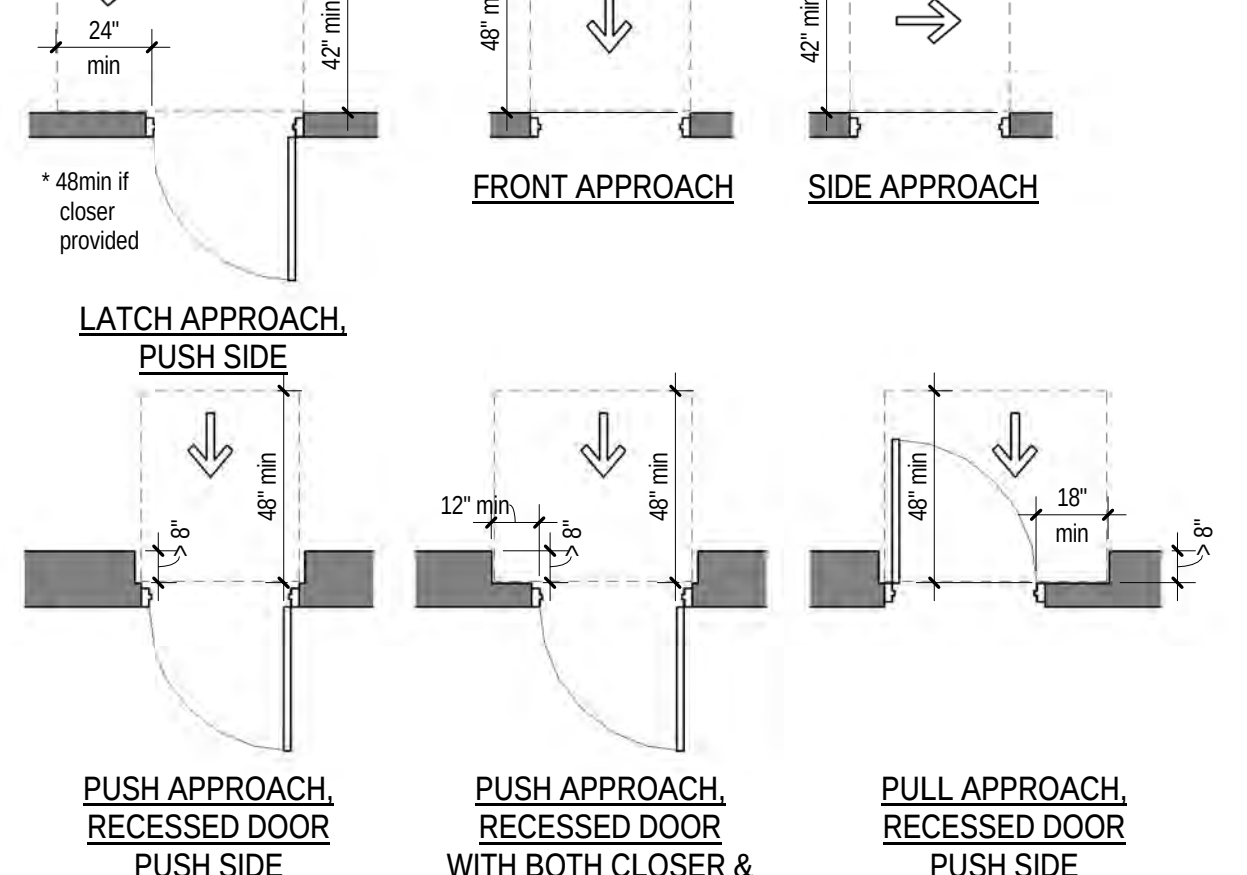
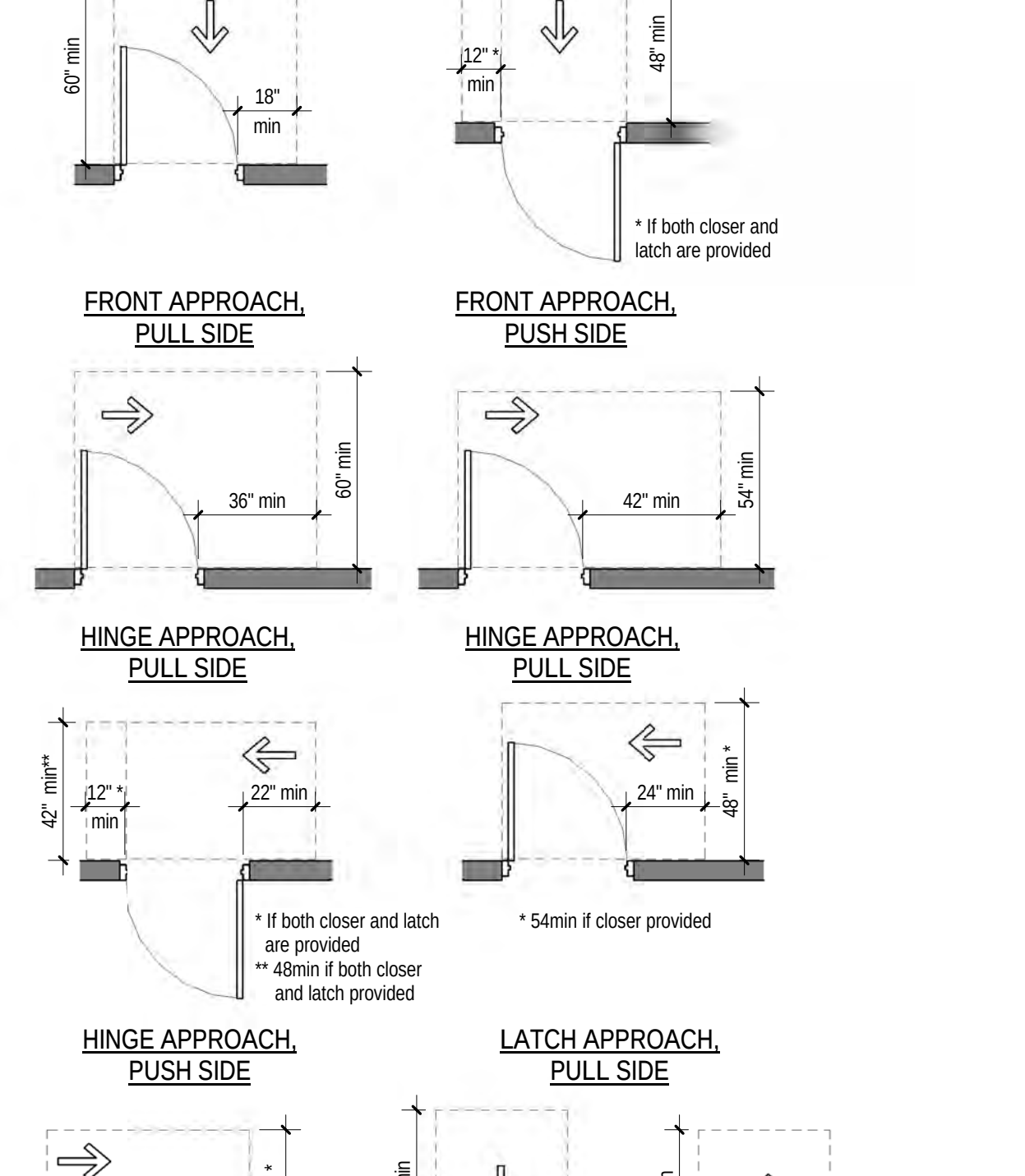
LIMITS OF PROTRUDING OBJECTS

3/8" = 1'-0"



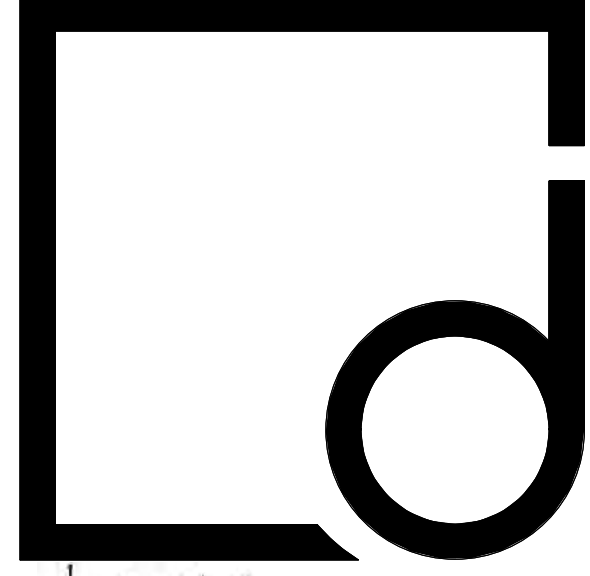
DOOR CLEARANCE

1/4" = 1'-0"



DOOR CLEARANCE

1/4" = 1'-0"



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MAJESTIC
MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
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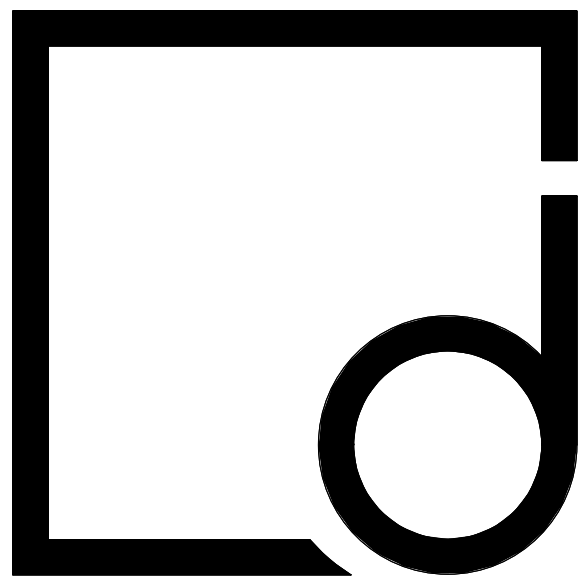
PROJECT #: 160032

DATE: 10/7/2016

GUIDELINES OR ACCESSIBILITY REQUIREMENTS

A0.2

DIGITAL PRINT DATE: 10/11/2016 2:30:39 PM



10/7/2016

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No.	Description	Date
1	OWNER CHANGES	10/25/16
2	PERMIT CHANGES	11/4/16

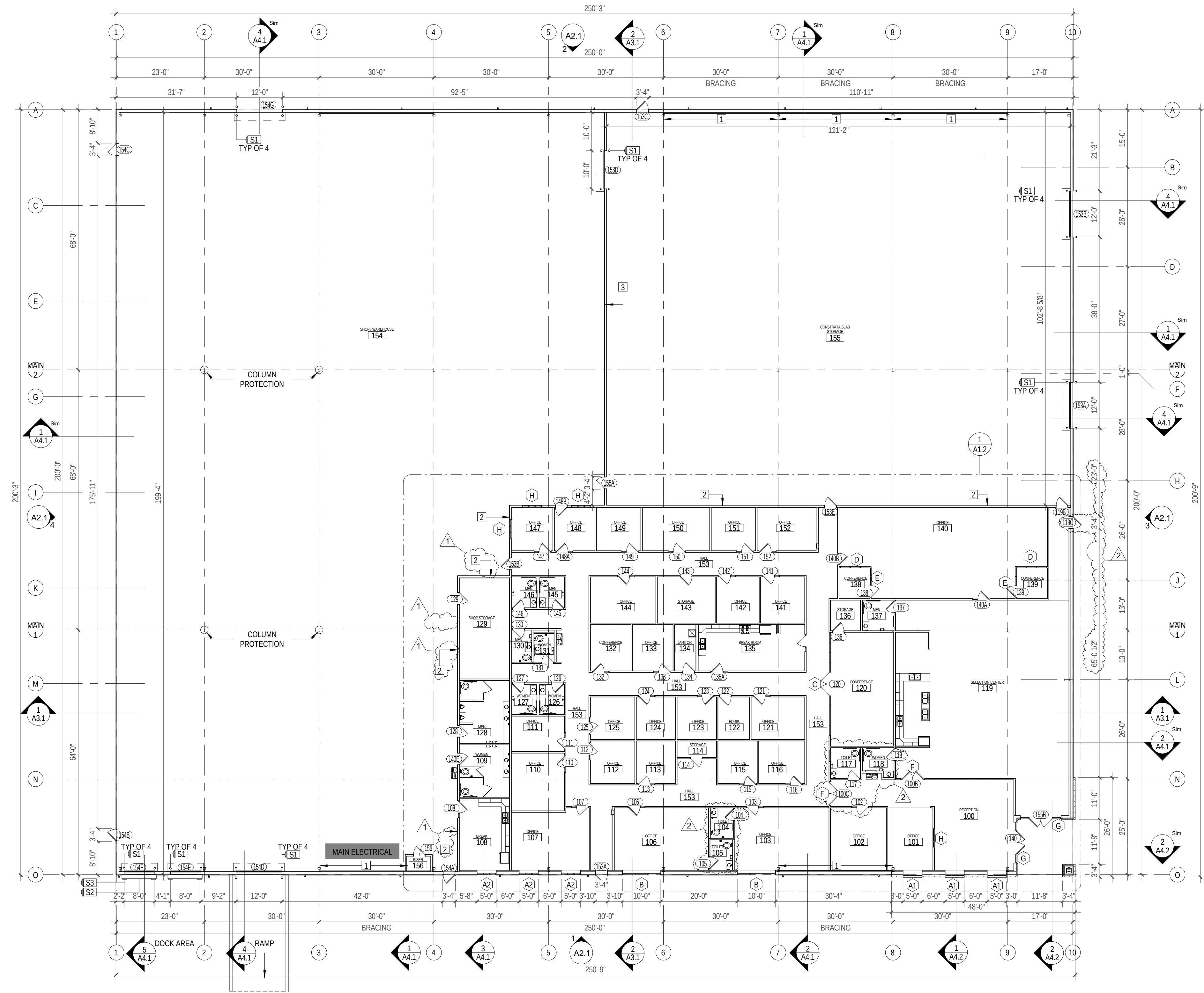
PROJECT #: 160032

DATE: 10/7/2016

1st FLOOR PLAN

A1.1

DIGITAL PRINT DATE: 11/7/2016 10:19:32 AM



1 1st FLOOR PLAN

1/16" = 1'-0"

Equipment Schedule			
No.	Qty.	Description	Notes
S1	24	6" STEEL BOLLARD	PROVIDED BY CONTRACTOR
S2	2	DOCK SEAL	PROVIDED BY CONTRACTOR
S3	2	EXTERIOR DOCK PLATE	PROVIDED BY CONTRACTOR
S5	2	FIRE EXTINGUISHER	PROVIDED BY CONTRACTOR
S6	3	FRIDGERATOR	PROVIDED BY OWNER
S7	1	STOVE & OVEN	PROVIDED BY OWNER
S8	1	DISH WASHER	PROVIDED BY OWNER

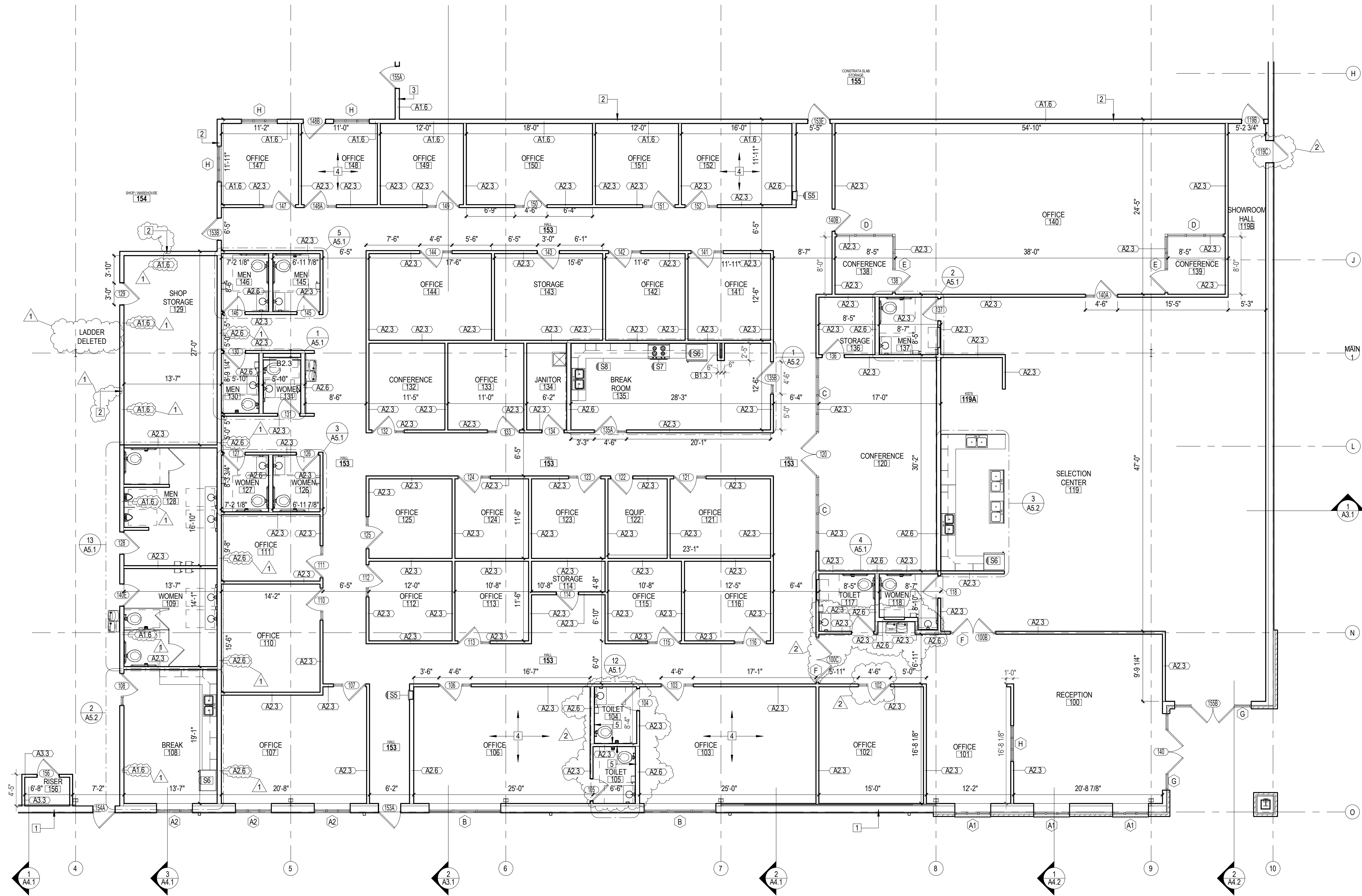
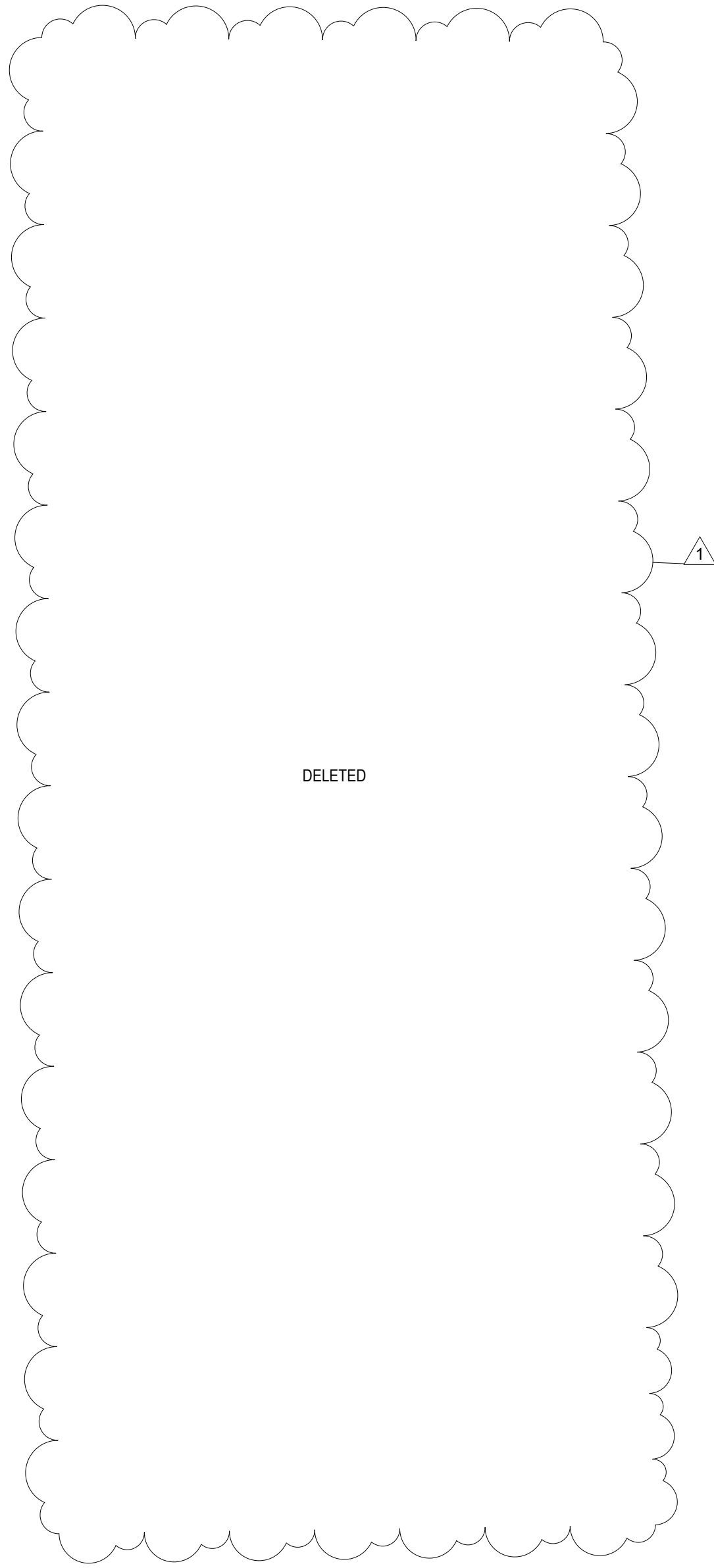
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GENERAL NOTES

1. PROVIDE 6" STEEL BOLLARDS AT THE INTERIOR AND EXTERIOR SIDE OF ALL OVERHEAD DOORS (TYP)

KEYNOTES

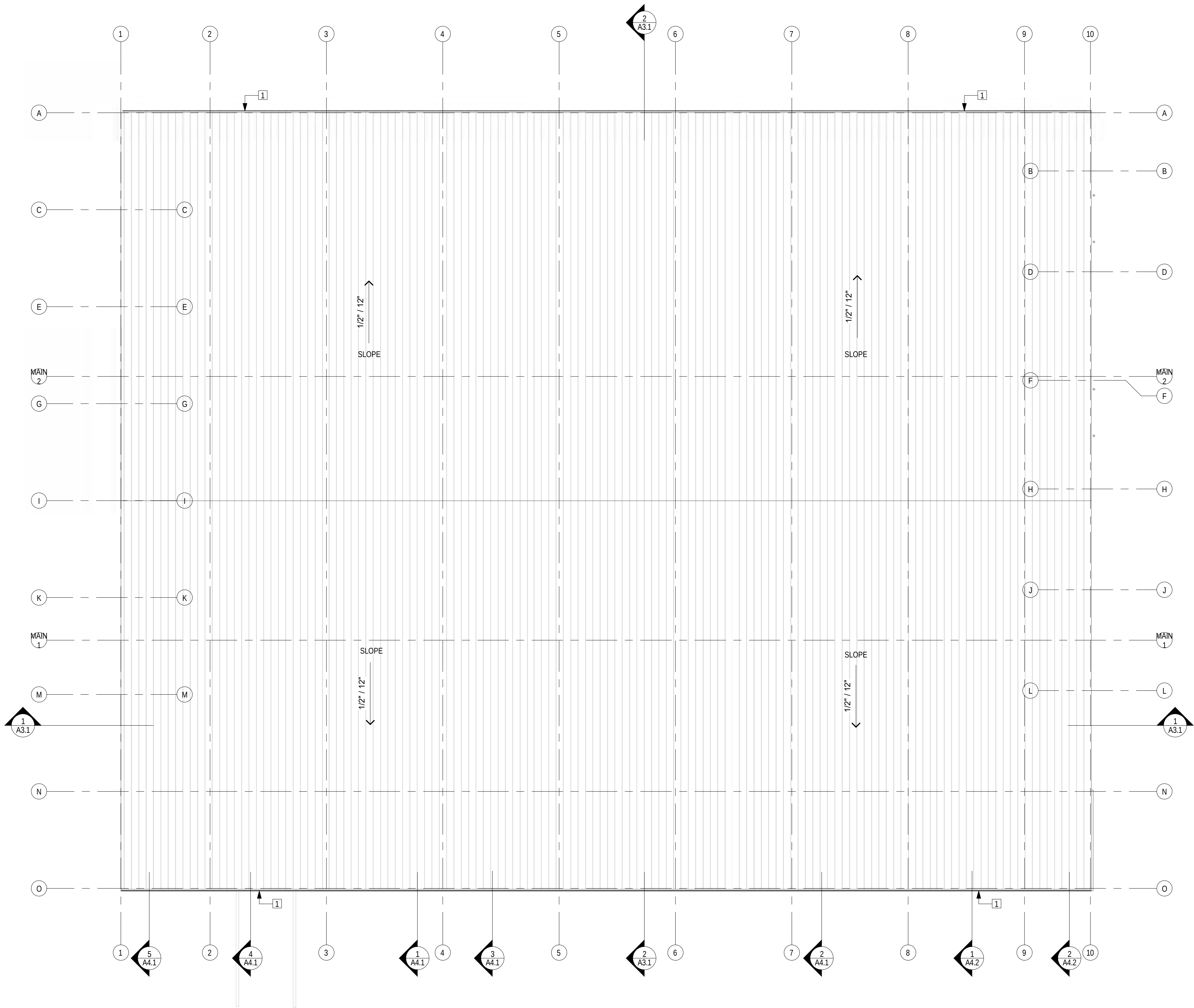
1. STRUCTURAL X-BRACING LOCATED IN THIS AREA. COORDINATE WITH METAL BUILDING DRAWINGS.
2. EXTEND WALL TO ROOF DECK. FULLY INSULATE WITH R-19 BATT.
3. EXTEND WALL TO ROOF DECK.



1 A1.2 ENLARGED OFFICE PLAN
1/8" = 1'-0"

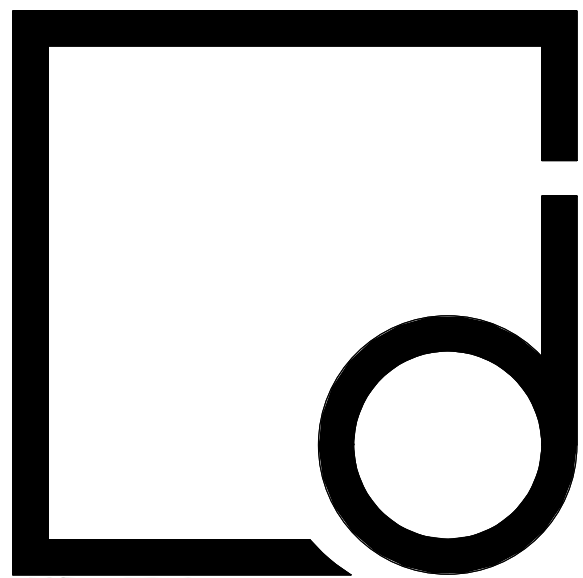
GENERAL NOTES	KEYNOTES
1. PROVIDE ACOUSTICAL WALL & CEILING INSULATION FOR ALL TOILET ROOMS IN THE PROJECT.	1. STRUCTURAL X-BRACING LOCATED IN THIS AREA. COORDINATE WITH METAL BUILDING DRAWINGS.
	2. EXTEND WALL TO ROOF DECK. FULLY INSULATE WITH R-19 BATT.
	3. EXTEND WALL TO ROOF DECK.
	4. PROVIDE ACOUSTICAL WALL AND CEILING INSULATION FOR THE OFFICES SHOWN.
	5. PROVIDE BLOCKING FOR FUTURE HANDICAP GRAB BARS IN THESE TOILET ROOMS.

INTERIOR WALL LEGEND	WALL CONSTRUCTION TYPE		HEAD CONDITION			MEMBER SIZES												HOURLY WALL RATING					
	 A	 B	 1	 2	 3	Metal	Wood	CMU	Concrete	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	.10	.12	.1	(1 HOUR RATING - SEE UL DETAILS)
	ACOUSTICAL INSULATION MTL STD 1 LAYERS 5/8" GYP. BOARD EACH SIDE	ACOUSTICAL INSULATION MTL STD 1 LAYERS 5/8" GYP. BOARD MTL STD	BOTTOM OF STRUCTURE	EXTEND PARTITION ABOVE FINISH CEILING LINE OF CEILING	HEIGHT AS DETAILED	7/8"	3/4"			1 5/8"	1 5/8"	2 1/2"	3 5/8"	4"	5"	6"	7 1/2"	8"	10"	12"			
										3 1/2"	3 1/2"	3 1/2"	3 5/8"	5 1/2"						7 1/2"	10 1/4"	11 1/4"	
																				7 5/8"	11 5/8"		
																		</					



1 ROOF PLAN
1/16" = 1'-0"

GENERAL NOTES	KEYNOTES
	1 CONTINUOUS ALUMINUM GUTTER



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Youngsville, NC

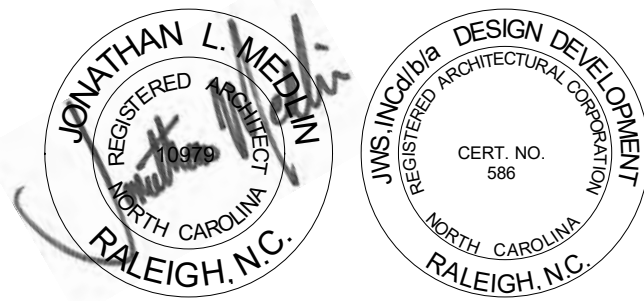
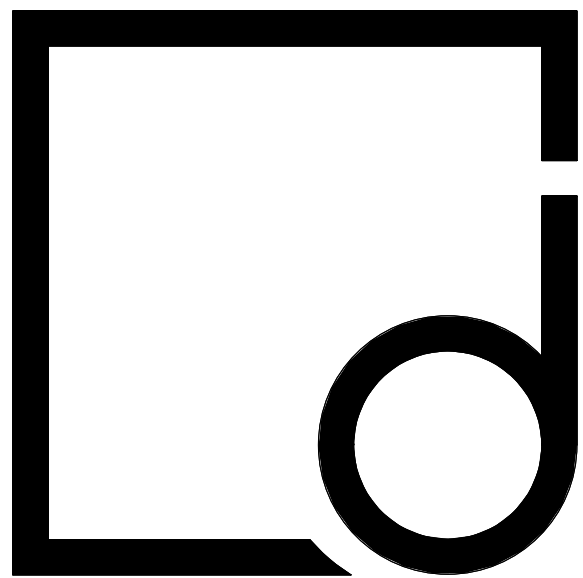
No.	Description	Date
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PROJECT #: 160032

DATE: 10/7/2016

ROOF PLAN

A1.3



10/7/2016

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Drive
Suite 102
Raleigh, NC 27615
919.848.4474

MAJESTIC
MARBLE & GLASS

Jeffrey Way
Youngsville, NC



1 RCP FIRST FLOOR
1/16" = 1'-0"

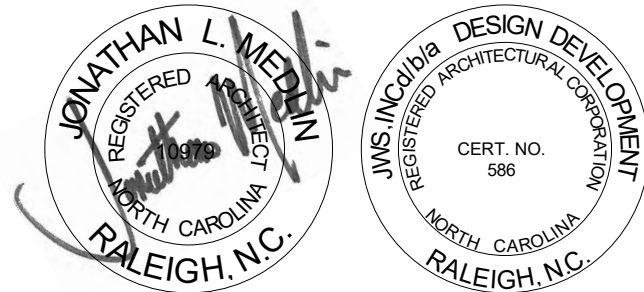
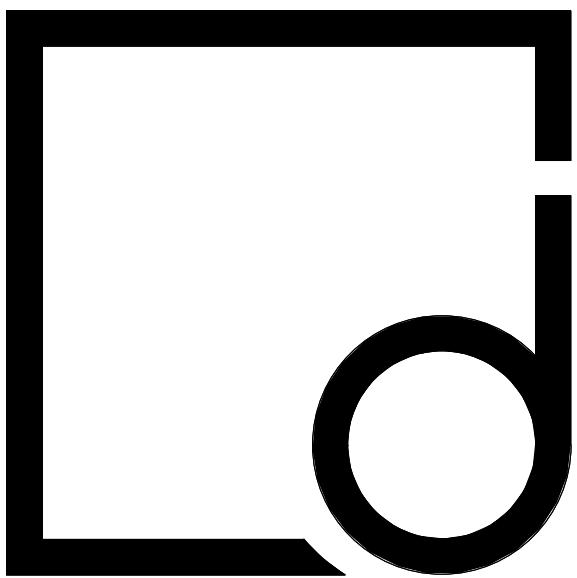
GENERAL NOTES	KEYNOTES

PROJECT #: 160032

DATE: 10/7/2016

RCP

A1.4



10/7/2016

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Raleigh, NC 27615
919.848.4474

MAJESTIC MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
1	OWNER CHANGES	10/25/16
2	PERMIT CHANGES	11/4/16

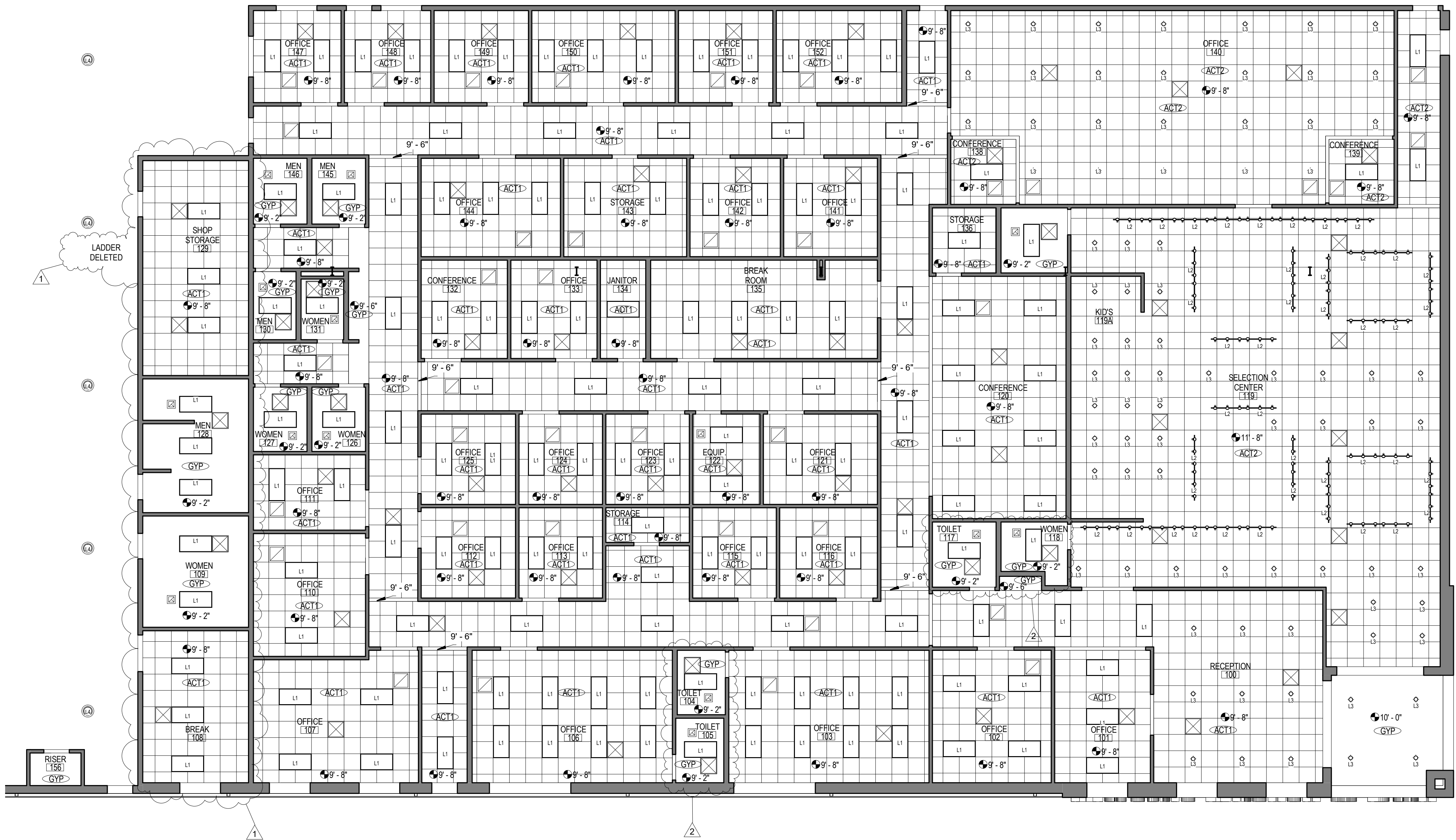
PROJECT #: 160032

DATE: 10/7/2016

OFFICE RCP
ENLARGED

A1.5

DIGITAL PRINT DATE: 11/7/2016 10:41:04 AM

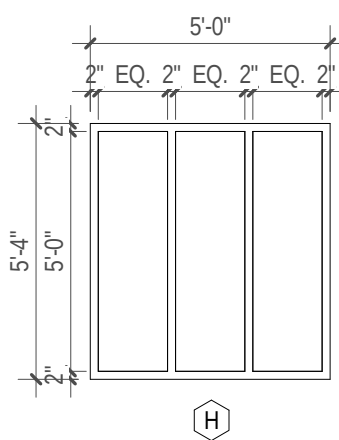


1 OFFICE RCP
1/8" = 1'-0"

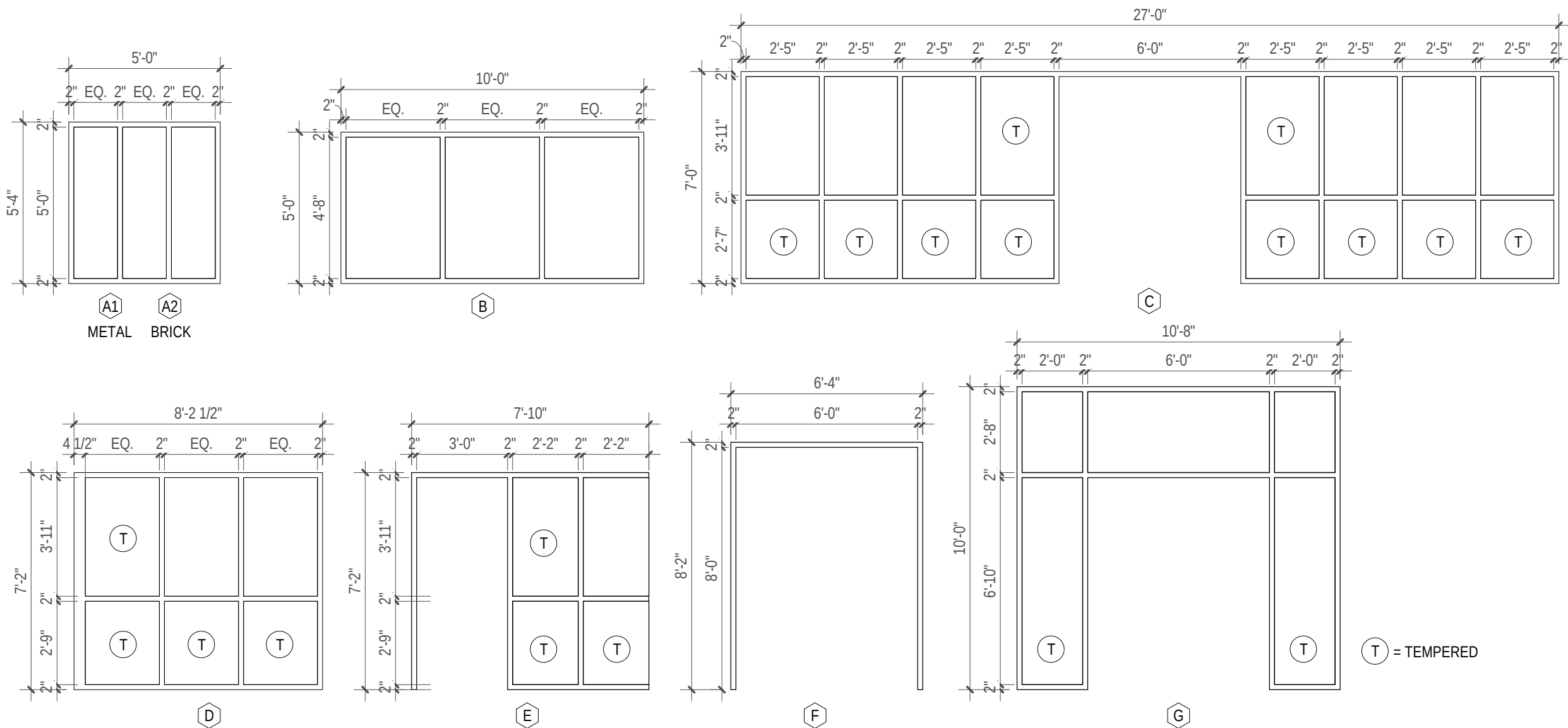
GENERAL NOTES

KEYNOTES

OFFICE RCP
ENLARGED



H.M. WINDOWS

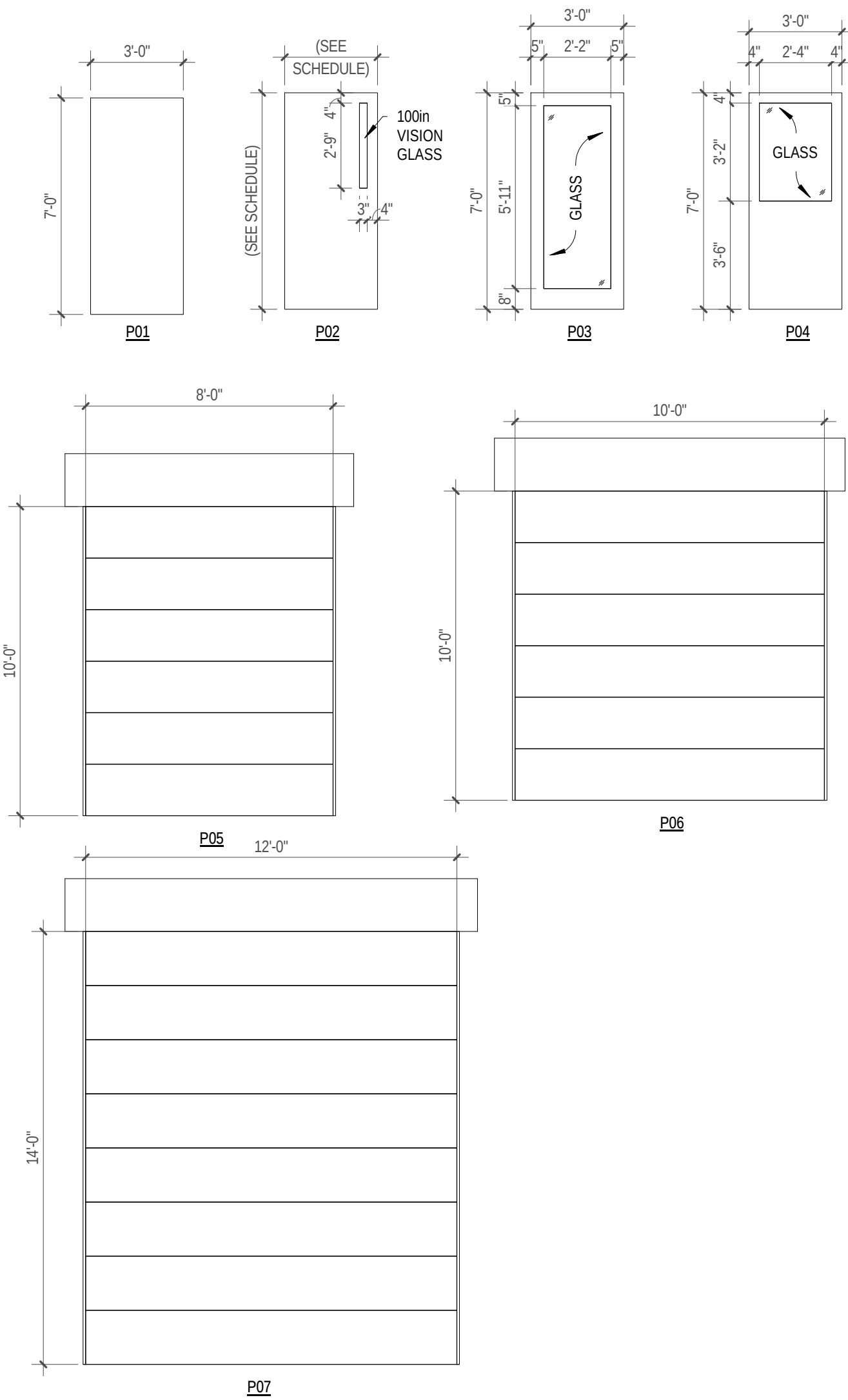


ALUMNUM WINDOWS

WINDOW ELEVATIONS

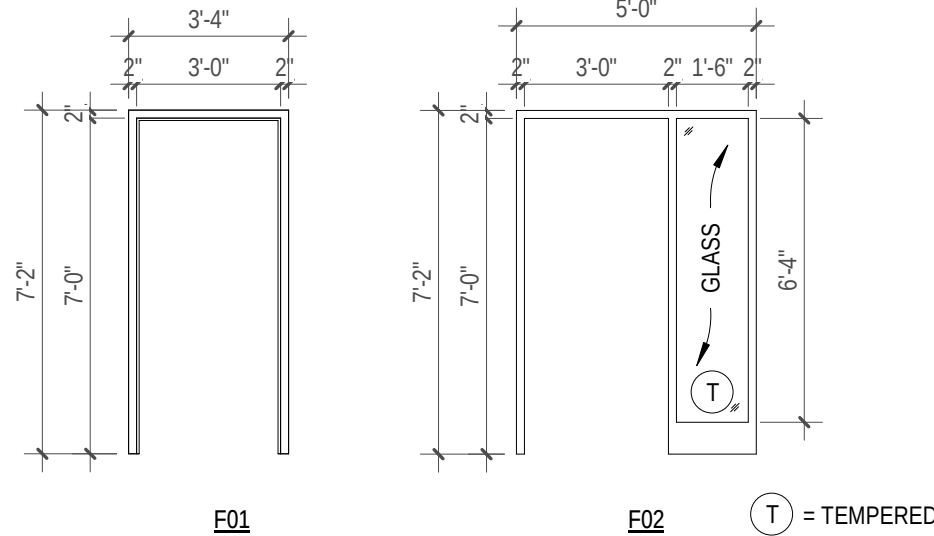
1/4" = 1'-0"

Room Finish Schedule						
No.	Name	Wall	Floor	Base	Ceiling	Remarks
100	RECEPTION	PAINTED GYP.	LVT	RUBBER	ACT-1	
101	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
102	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
103	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
104	TOILET	PAINTED GYP.	LVT	RUBBER	ACT-1	
105	TOILET	PAINTED GYP.	LVT	RUBBER	ACT-1	
106	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
107	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
108	BREAK	PAINTED GYP.	LVT	RUBBER	ACT-1	
109	WOMEN	PAINTED GYP.	STAINED CONCRETE	RUBBER	ACT-1	
110	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
111	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
112	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
113	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
114	STORAGE	PAINTED GYP.	LVT	RUBBER	ACT-1	
115	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
116	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
117	TOILET	PAINTED GYP.	LVT	RUBBER	ACT-1	
118	WOMEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
119	SELECTION CENTER	PAINTED GYP.	STAINED CONCRETE	RUBBER	ACT-2	
119A	KID'S	PAINTED GYP.	STAINED CONCRETE	RUBBER	ACT-2	
119B	SHOWROOM HALL	PAINTED GYP.	STAINED CONCRETE	RUBBER	ACT-2	
120	CONFERENCE	PAINTED GYP.	LVT	RUBBER	ACT-1	
121	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
122	EQUIP.	PAINTED GYP.	LVT	RUBBER	ACT-1	
123	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
124	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
125	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
126	WOMEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
127	WOMEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
128	MEN	PAINTED GYP.	STAINED CONCRETE	RUBBER	ACT-1	
129	SHOP STORAGE	PAINTED GYP.	STAINED CONCRETE	RUBBER	ACT-1	
130	MEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
131	WOMEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
132	CONFERENCE	PAINTED GYP.	LVT	RUBBER	ACT-1	
133	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
134	JANITOR	PAINTED GYP.	LVT	RUBBER	ACT-1	
135	BREAK ROOM	PAINTED GYP.	LVT	RUBBER	ACT-1	
136	STORAGE	PAINTED GYP.	LVT	RUBBER	ACT-1	
137	MEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
138	CONFERENCE	PAINTED GYP.	LVT	RUBBER	ACT-2	
139	CONFERENCE	PAINTED GYP.	LVT	RUBBER	ACT-2	
140	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-2	
141	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
142	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
143	STORAGE	PAINTED GYP.	LVT	RUBBER	ACT-1	
144	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
145	MEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
146	MEN	PAINTED GYP.	LVT	RUBBER	ACT-1	
147	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
148	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
149	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
150	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
151	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
152	OFFICE	PAINTED GYP.	LVT	RUBBER	ACT-1	
153	HALL	PAINTED GYP.	LVT	RUBBER	ACT-1	
153	HALL	PAINTED GYP.	LVT	RUBBER	ACT-1	
154	SHOP / WAREHOUSE	EXPOSED STRUCTURE	SEALED CONCRETE	NONE	EXPOSED STRUCTURE WALLS	RUBBER BASE @ GYP
155	CONSTRATA SLAB STORAGE	EXPOSED STRUCTURE	SEALED CONCRETE	NONE	EXPOSED STRUCTURE WALLS	RUBBER BASE @ GYP
156	RISER	PAINTED GYP.	LVT	RUBBER	ACT-2	
201	DELETED					



DOOR PANELS

1/4" = 1'-0"

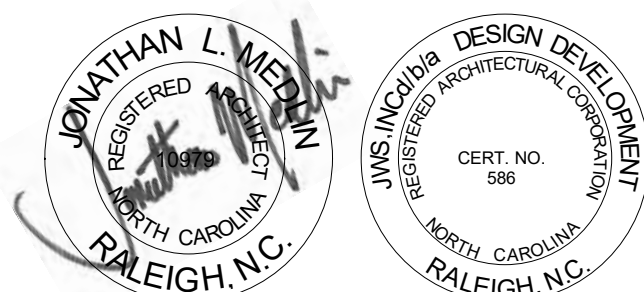
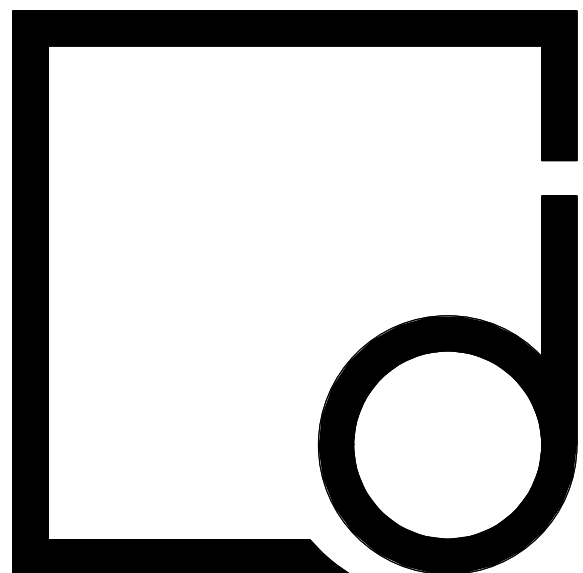


H.M. FRAMES

1/4" = 1'-0"

Window Schedule					
No.	Qty.	Description	Height	Width	Comments
A1	3	ALUMINUM	64"	60"	32"
A2	3	ALUMINUM	64"	60"	32"
B	2	ALUMINUM	60"	120"	32"
C	1	ALUMINUM	84"	324"	0"
D	2	ALUMINUM	86"	96"	0"
E	2	ALUMINUM	84"	36"	0"
F	2	ALUMINUM	96"	72"	0"
G	2	ALUMINUM	84"	72"	0"
H	4	HOLLOW METAL	64"	60"	32"

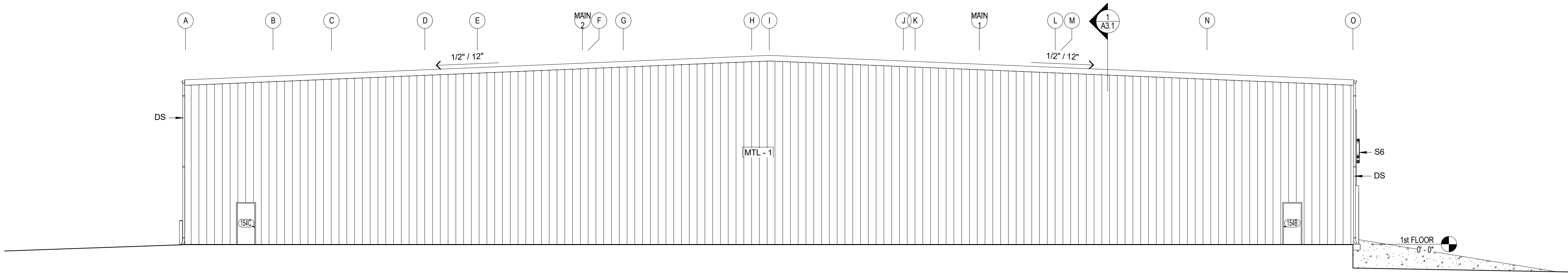
Door Schedule (All)													
No.	DOOR				TYPE	FRAME				W. Strip	THRES	CLOSERS	Rating
	Qty.	W	H	T		MATL.	TYPE	MATL.	TYPE				
100B	2	6'-0"	7'-0"	13/4"	P03	ALUM	-	-	-				STANDARD
100C	2	6'-0"	7'-0"	13/4"	P03	ALUM	-	-	-				STANDARD
102	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
103	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
104	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
105	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
106	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
107	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
108	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
110	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
111	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
112	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
113	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
114	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
115	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
116	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
117	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
118	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
119B	1	3'-0"	7'-0"	13/4"	P04	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
119C	1	3'-0"	7'-0"	13/4"	P02	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
120	2	6'-0"	7'-0"	13/4"	P03	ALUM	-	-	-				STANDARD
121	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
122	1	3'-0"	7'-0"	13/4"	P02	S.C.WD	F01	H.M.					STANDARD
123	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
124	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
125	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
126	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
127	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
128	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					PUSH/PULL
129	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
130	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
131	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
132	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
133	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
134	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
135A	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
135B	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
136	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
137	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
138	1	3'-0"	7'-0"	13/4"	P03	ALUM	-	-	-				STANDARD
139	1	3'-0"	7'-0"	13/4"	P03	ALUM	-	-	-				STANDARD
140	2	6'-0"	7'-0"	13/4"	P03	ALUM	-	-	-	Yes	Yes	Yes	STANDARD
140A	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
140B	1	3'-0"	7'-0"	13/4"	P04	S.C.WD	F01	H.M.					STANDARD
140E	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					PUSH/PULL
141	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
142	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
143	1	3'-0"	7'-0"	13/4"	P02	S.C.WD	F01	H.M.					STANDARD
144	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
145	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
146	1	3'-0"	7'-0"	13/4"	P01	S.C.WD	F01	H.M.					STANDARD
147	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
148A	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
148B	1	3'-0"	7'-0"	13/4"	P02	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
149	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
150	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
151	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
152	1	3'-0"	7'-0"	13/4"	P03	S.C.WD	F02	ALUM					STANDARD
153A	1	3'-0"	7'-0"	13/4"	P01	H.M.	F01	H.M.					STANDARD
153A	1	12'-0"	14'-0"	2"	P07	STEEL	-	STEEL					STANDARD
153B	1	3'-0"	7'-0"	13/4"	P04	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
153B	1	12'-0"	14'-0"	2"	P07	STEEL	-	STEEL					STANDARD
153C	1	3'-0"	7'-0"	13/4"	P01	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
153D	1	10'-0"	10'-0"	2"	P06	STEEL	-	STEEL					STANDARD
153E	1	3'-0"	7'-0"	13/4"	P04	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
154A	1	3'-0"	7'-0"	13/4"	P01	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
154B	1	3'-0"	7'-0"	13/4"	P01	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
154C	1	3'-0"	7'-0"	13/4"	P01	H.M.	F01	H.M.		Yes	Yes	Yes	STANDARD
154D	1	12'-0"	14'-0"	2"	P07	STEEL	-	STEEL					STANDARD
154E	1	8'-0"	10'-0"	2"	P06	STEEL	-	STEEL					STANDARD
154F	1	8'-0"	10'-0"	2"	P06	STEEL	-	STEEL					STANDARD
154G	1	12'-0"	14'-0"	2"	P07	STEEL	-	STEEL					STANDARD
155A	1	3'-0"	7'-0"	13/4"	P02	H.M.	F01	H.M.					STANDARD
155B	2	6'-0"	7'-0"	13/4"	P03	ALUM	-	-	-	Yes	Yes	Yes	STANDARD
156	1	3'-0"	7'-0"	13/4"	P01	H.M.	F01	H.M.					STANDARD



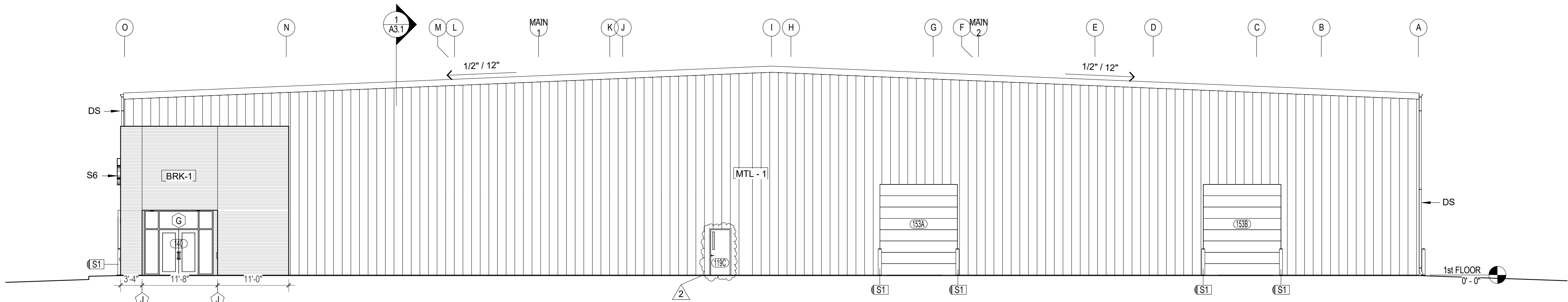
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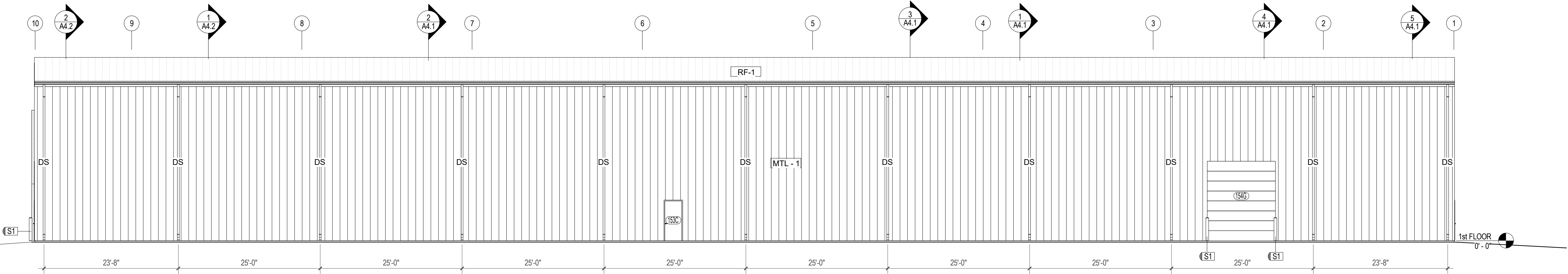
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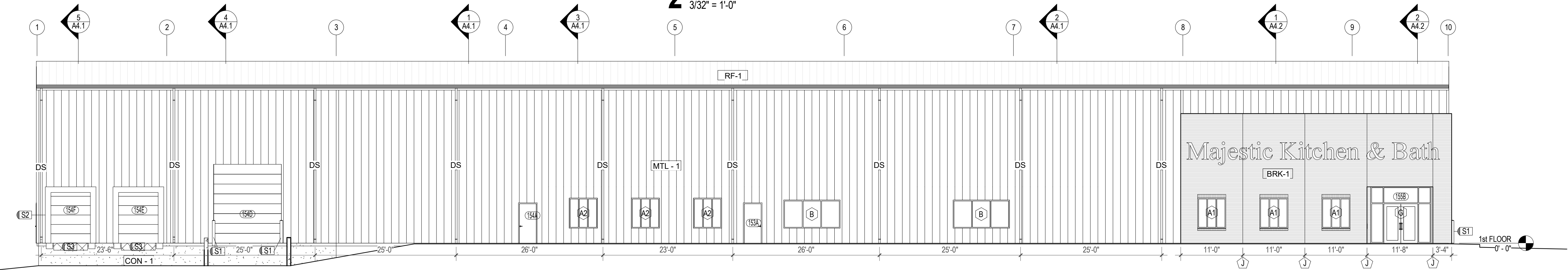
4 SOUTH ELEVATION
3/32" = 1'-0"



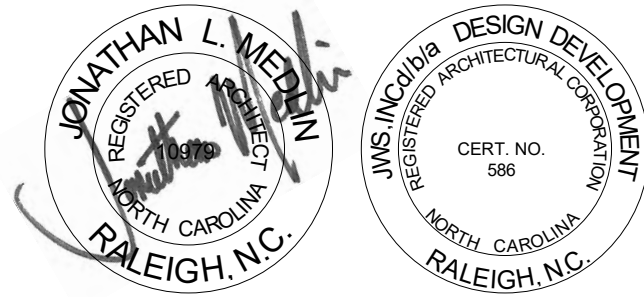
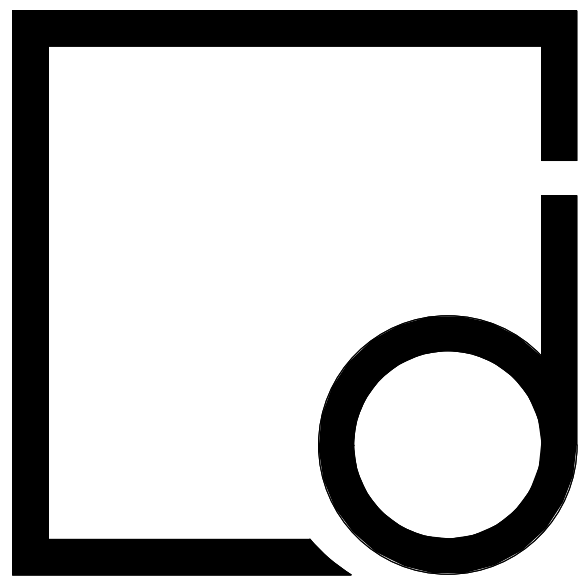
3 NORTH ELEVATION
3/32" = 1'-0"



2 WEST ELEVATION
3/32" = 1'-0"



1 EAST ELEVATION
3/32" = 1'-0"



10/7/2016

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919.848.4474

**MAJESTIC
MARBLE & GLASS**

Jeffrey Way
Youngsville, NC

No.	Description	Date
2	PERMIT CHANGES	11/4/16

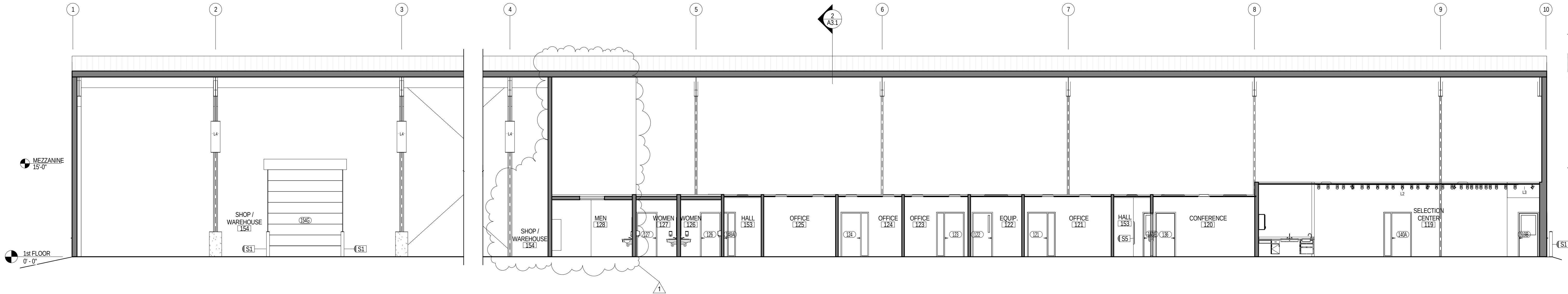
PROJECT #: 160032

DATE: 10/7/2016

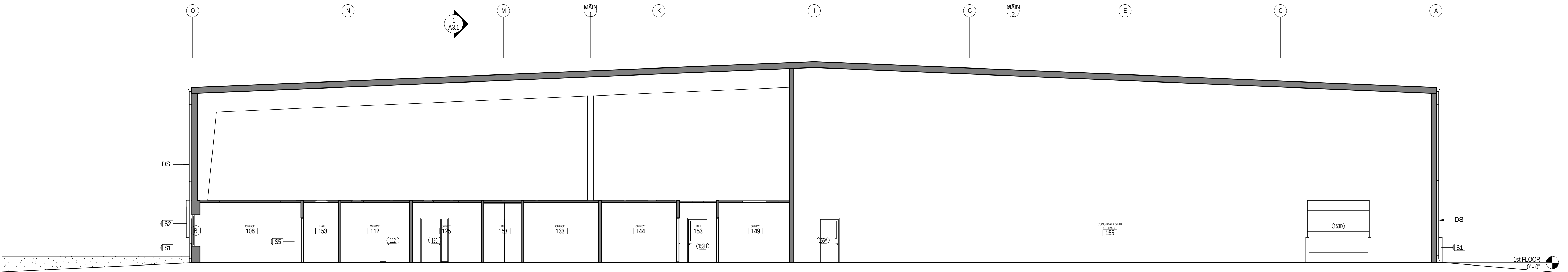
BUILDING ELEVATIONS

A2.1

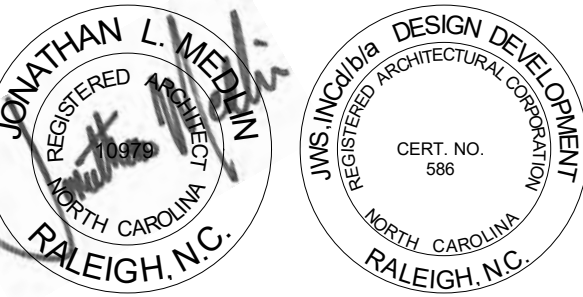
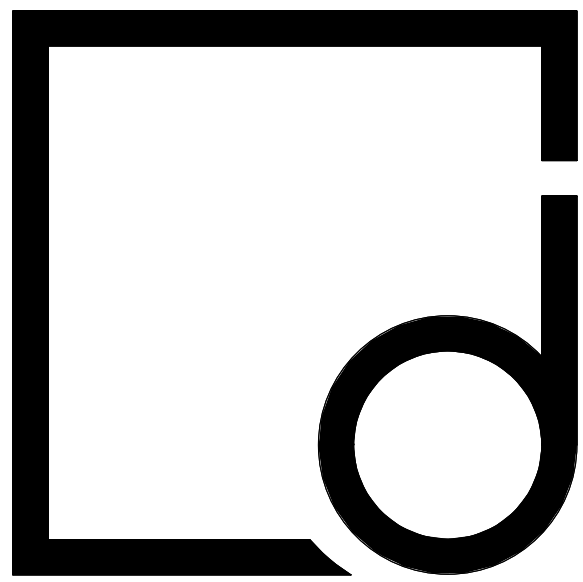
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1 BUILDING SECTION
1/8" = 1'-0"



2 A3.1 BUILDING SECTION TRANSVERSE
1/8" = 1'-0"



10/7/2016

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MAJESTIC
MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
1	OWNER CHANGES	10/25/16

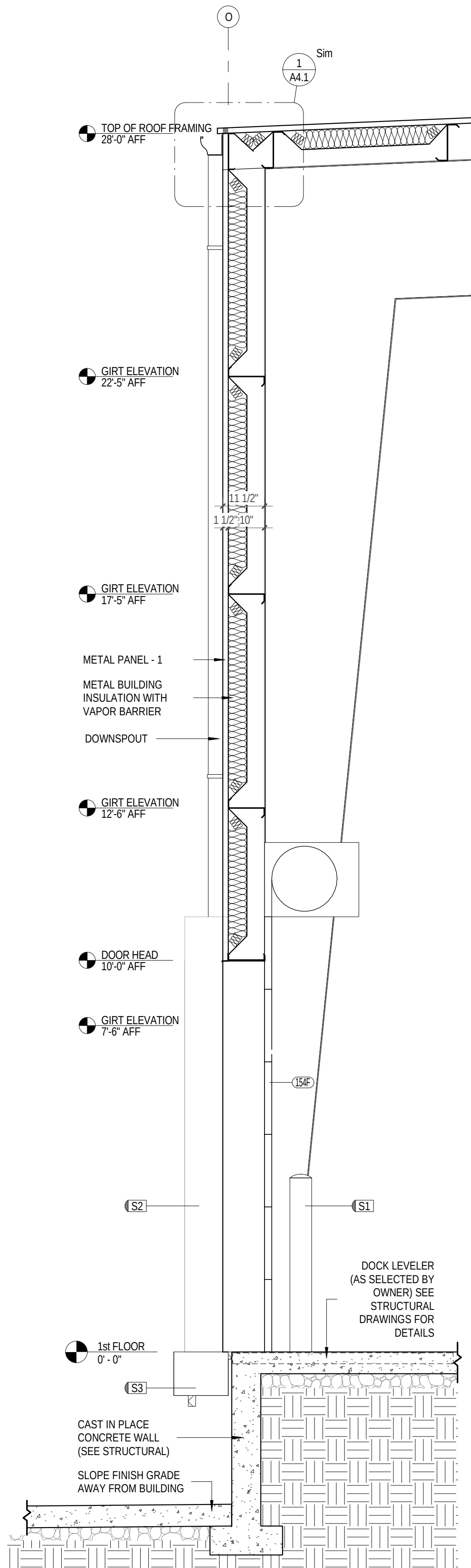
PROJECT #: 160032

DATE: 10/7/2016

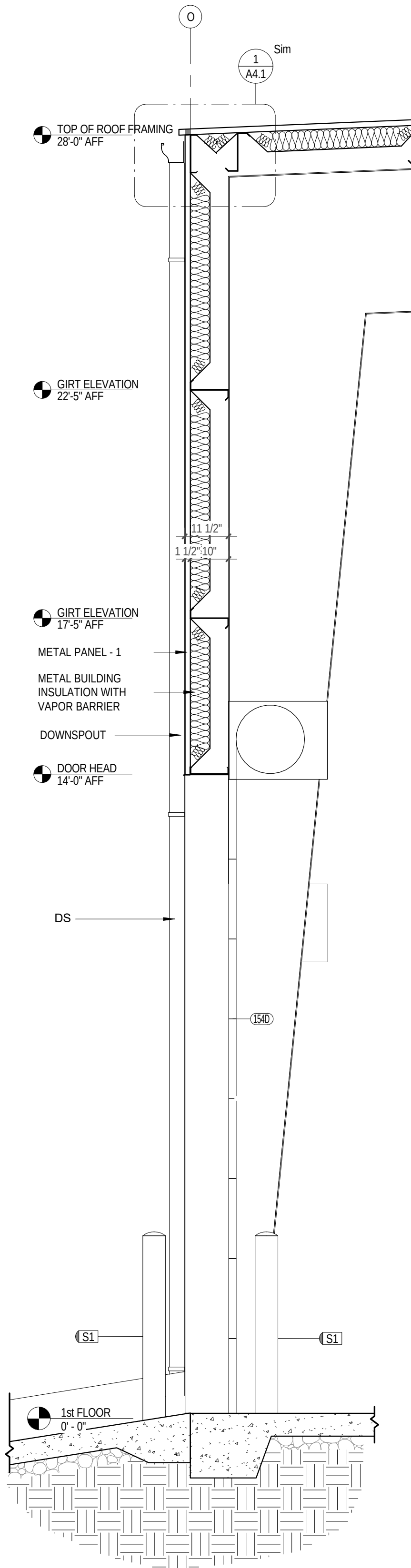
BUILDING SECTIONS

A3.1

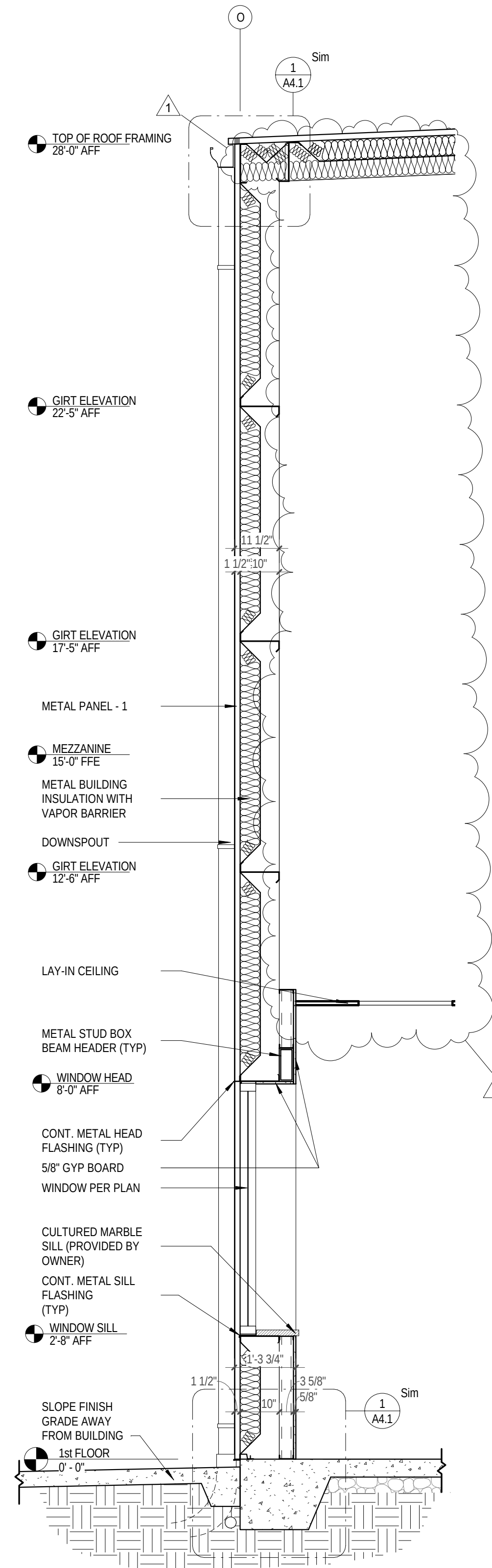
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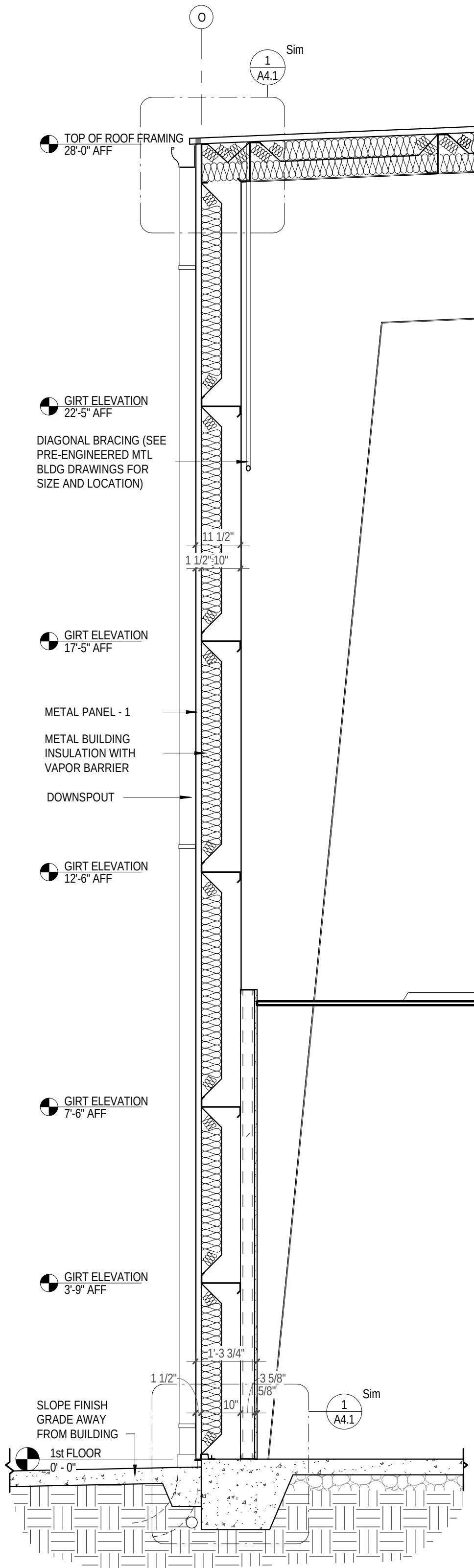
5 METAL PANEL - 10' OVERHEAD DOOR
1/2" = 1'-0"



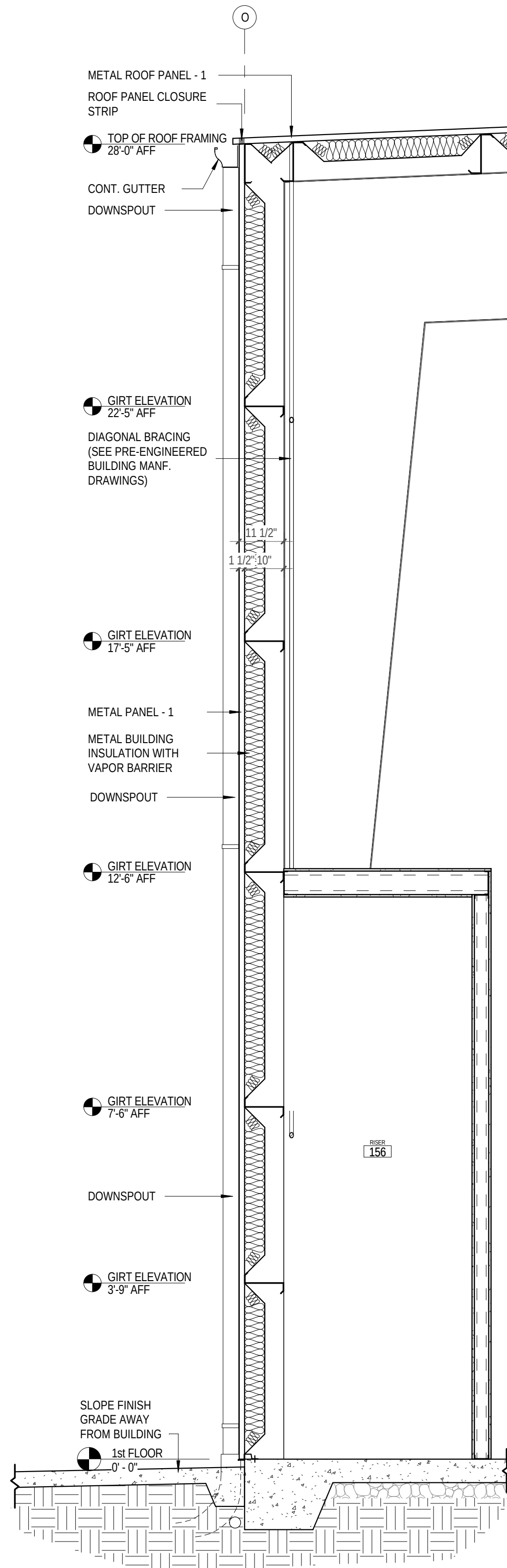
4 METAL PANEL - 14' OVERHEAD DOOR
1/2" = 1'-0"



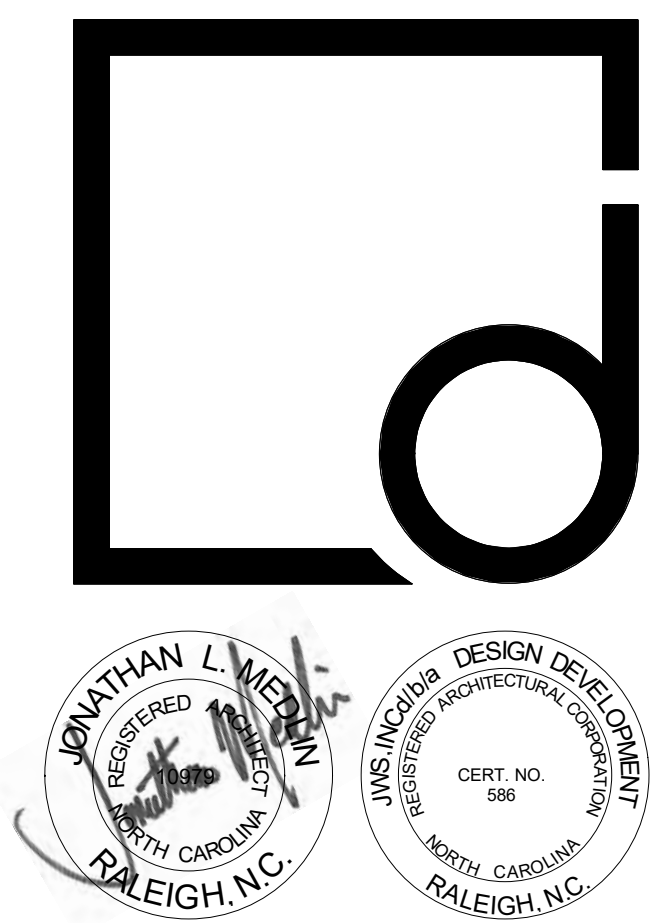
3 METAL PANEL BREAK ROOM
1/2" = 1'-0"



2 METAL PANEL - OFFICE
1/2" = 1'-0"



1 METAL PANEL (TYP)
1/2" = 1'-0"



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MAJESTIC MARBLE & GLASS

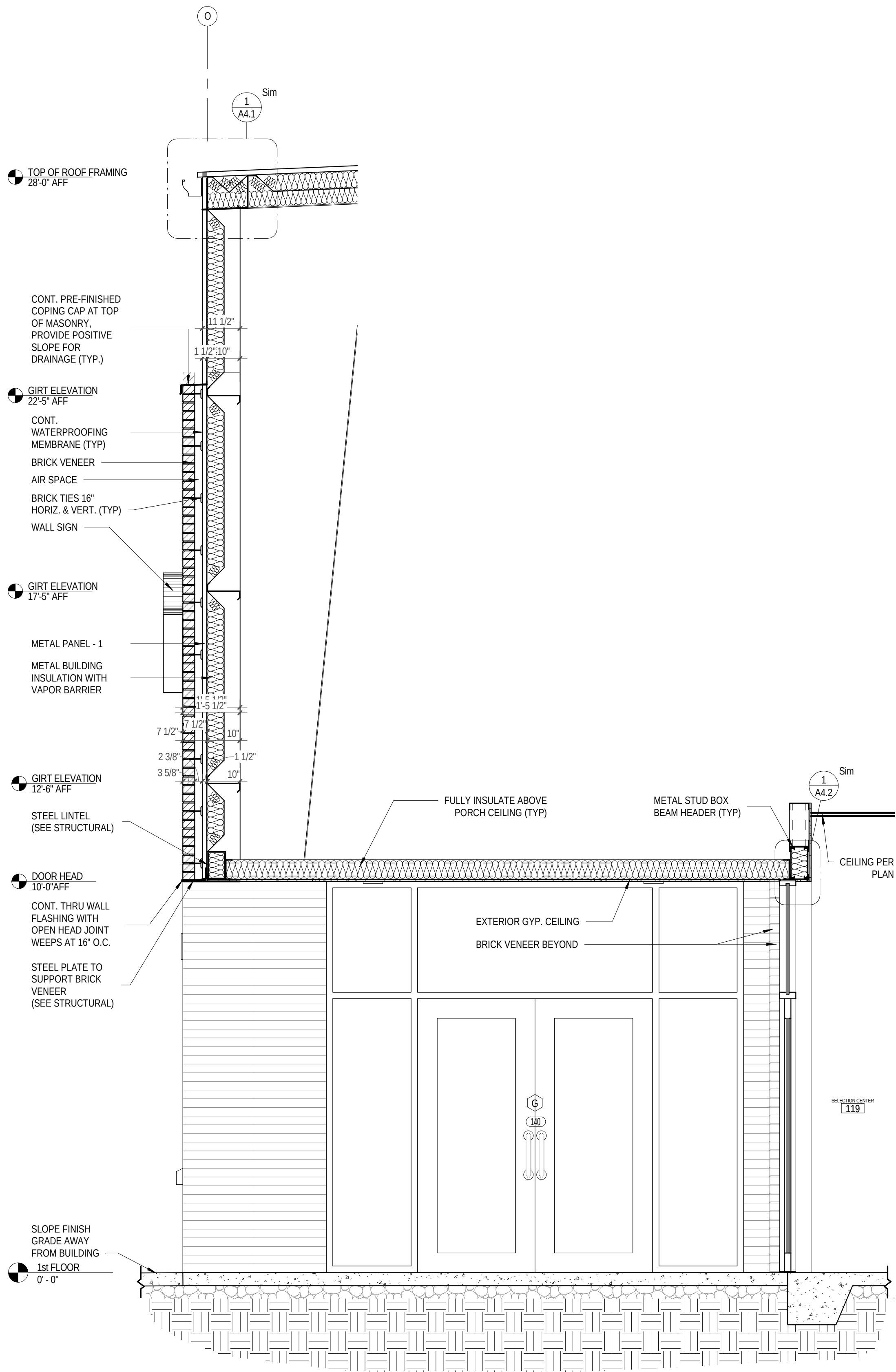
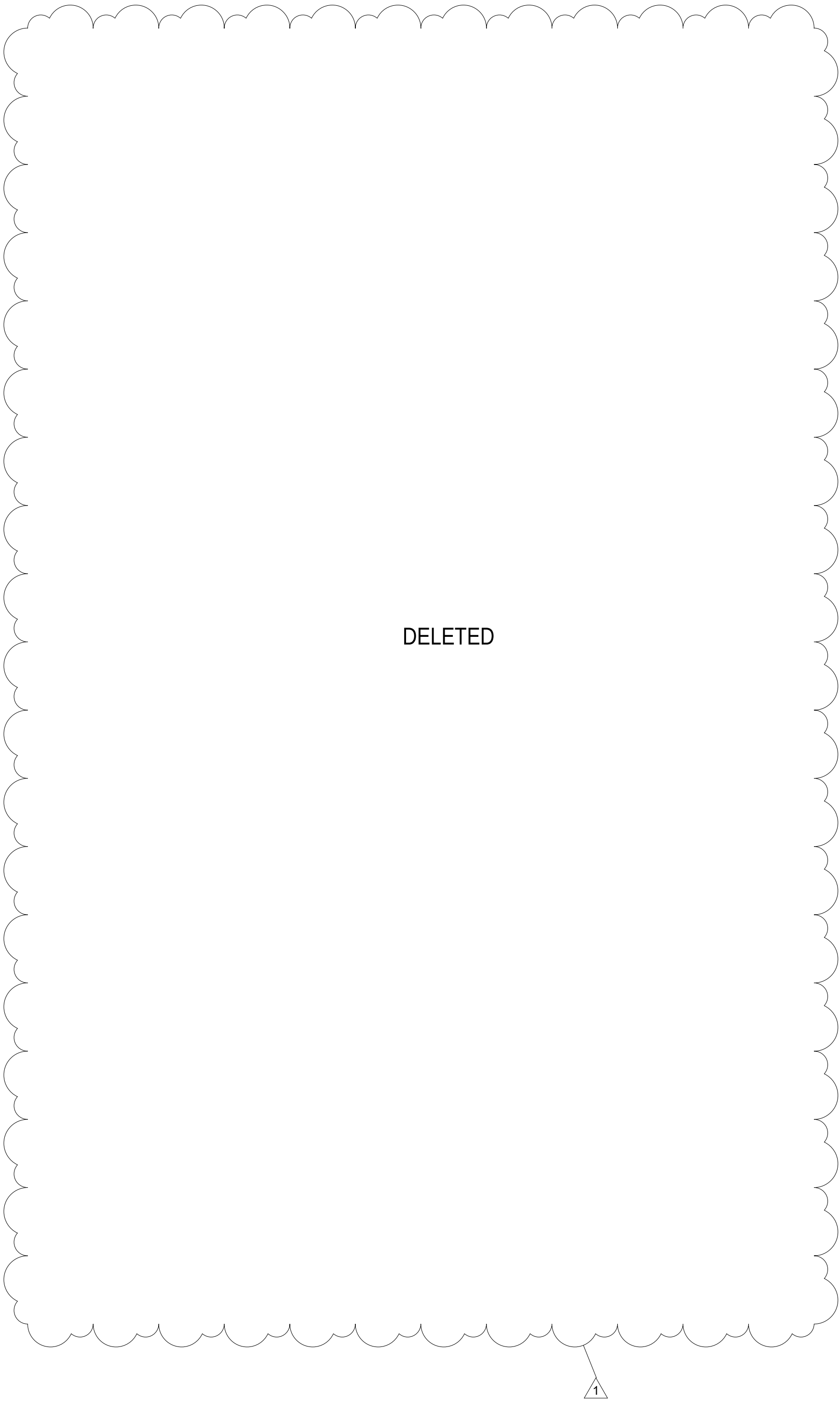
Jeffrey Way
Youngsville, NC

No.	Description	Date
1	OWNER CHANGES	10/25/16

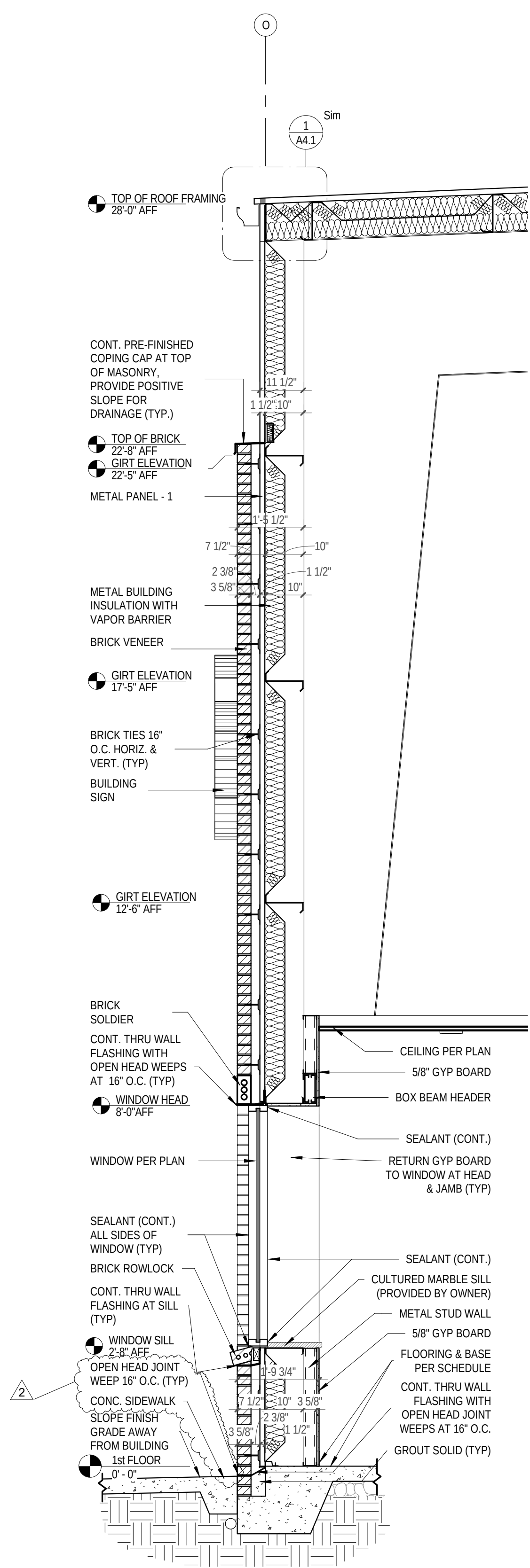
PROJECT #: 160032

DATE: 10/7/2016

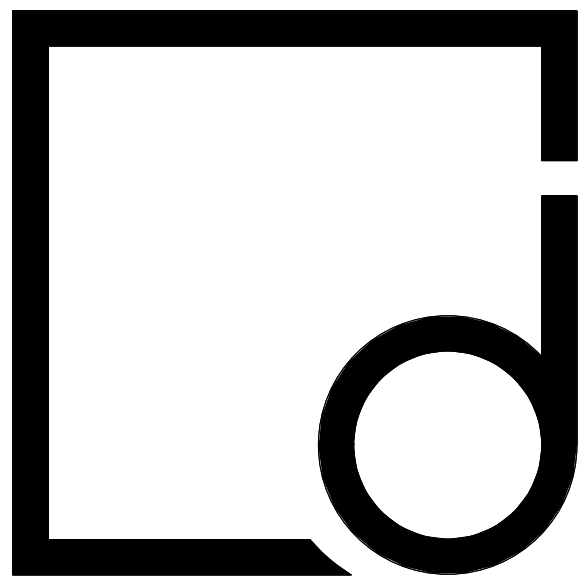
WALL SECTIONS



2 METAL PANEL - BRICK - OVERHANG STOREFRONT
1/2" = 1'-0"



1 METAL PANEL - BRICK - OFFICE WINDOW
1/2" = 1'-0"



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MAJESTIC MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
1	OWNER CHANGES	10/25/16
2	PERMIT CHANGES	11/4/16

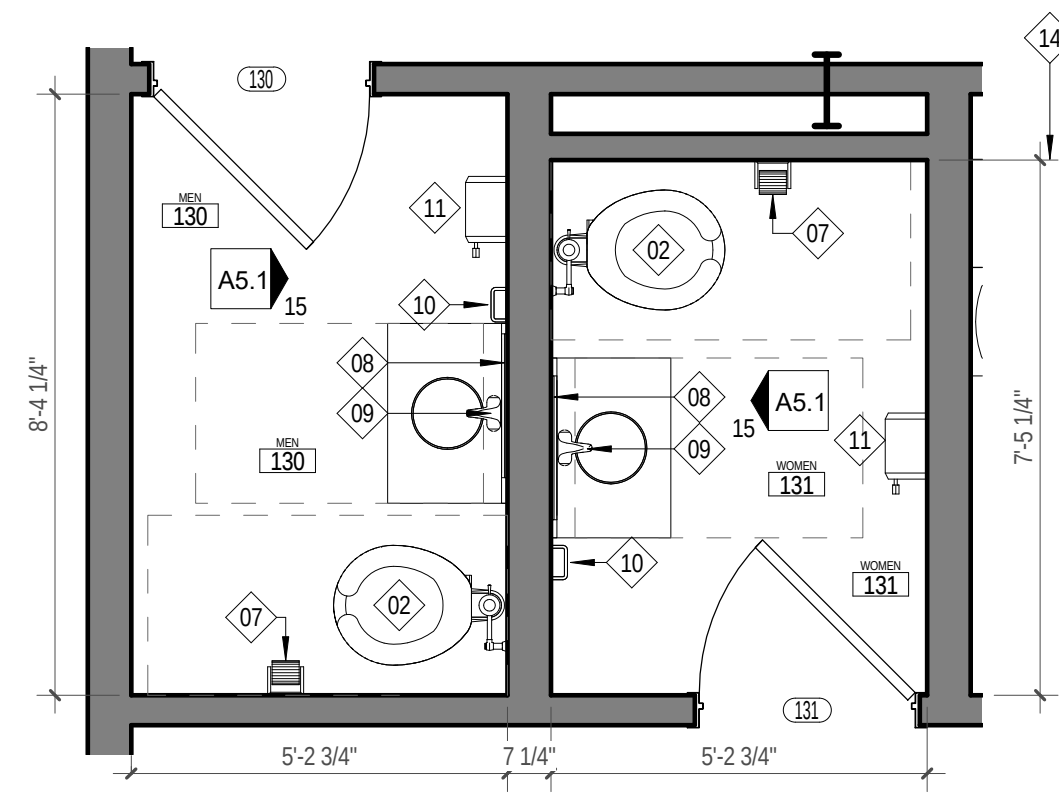
PROJECT #: 160032

DATE: 10/7/2016

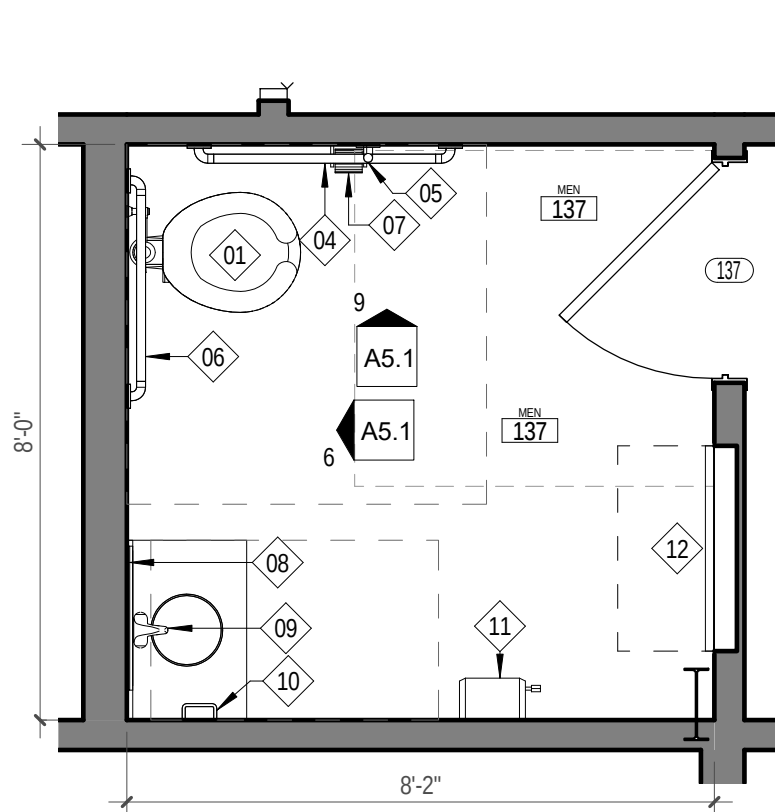
WALL SECTIONS

A4.2

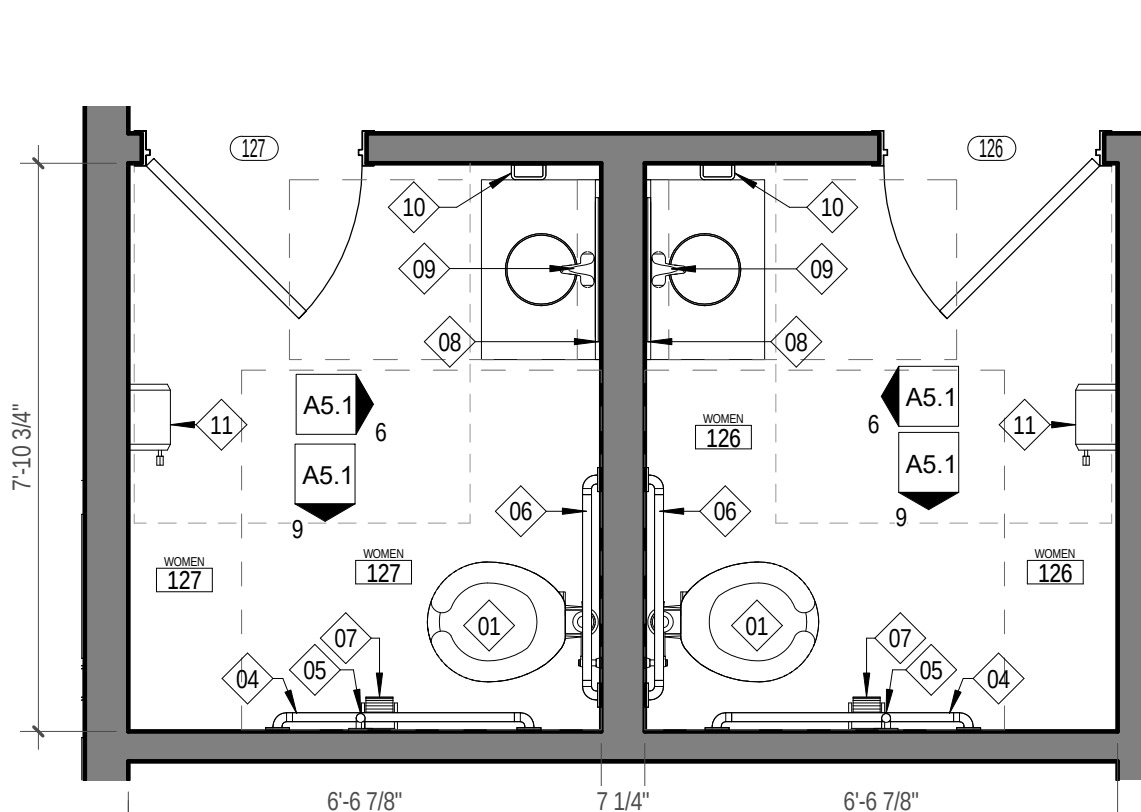
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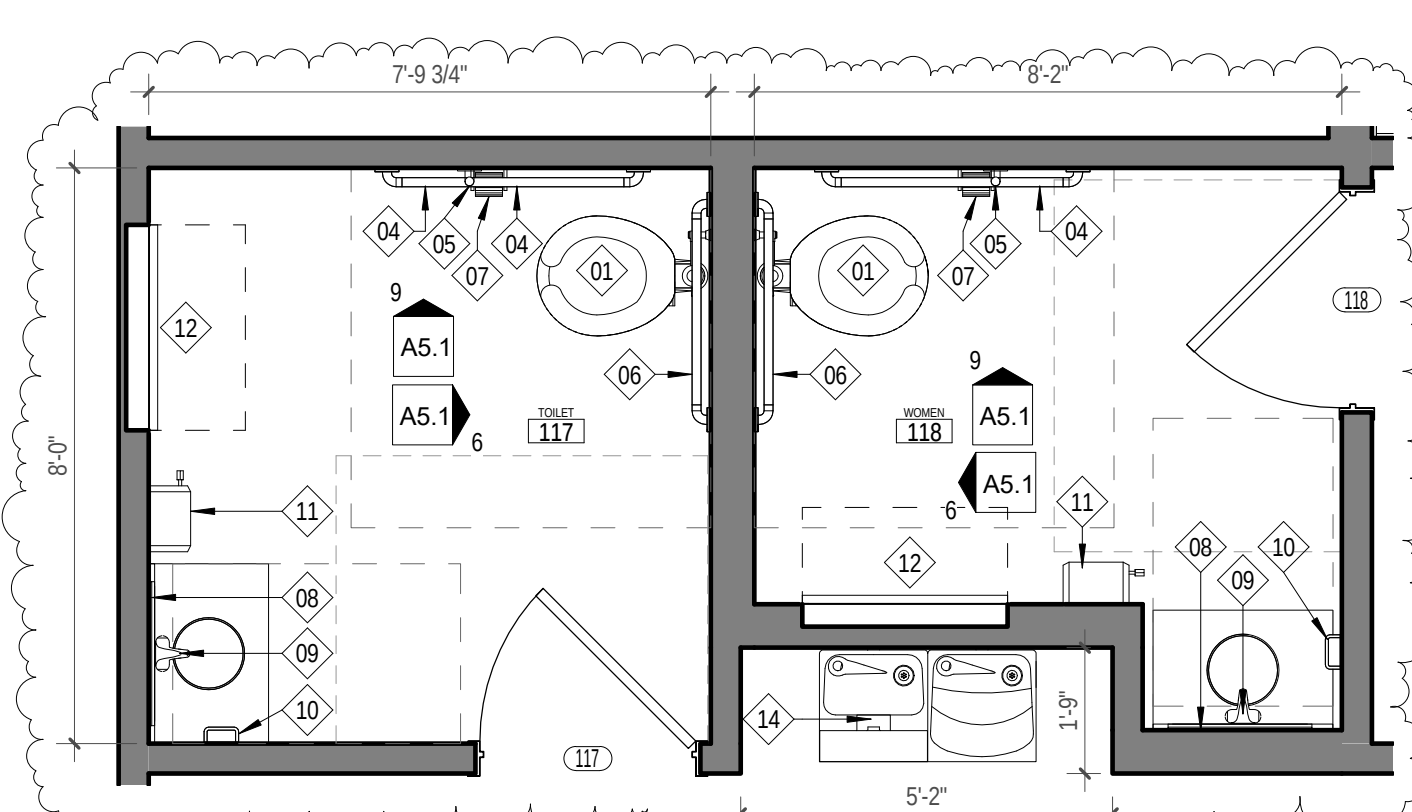
1 TOILET PLAN
3/8" = 1'-0"



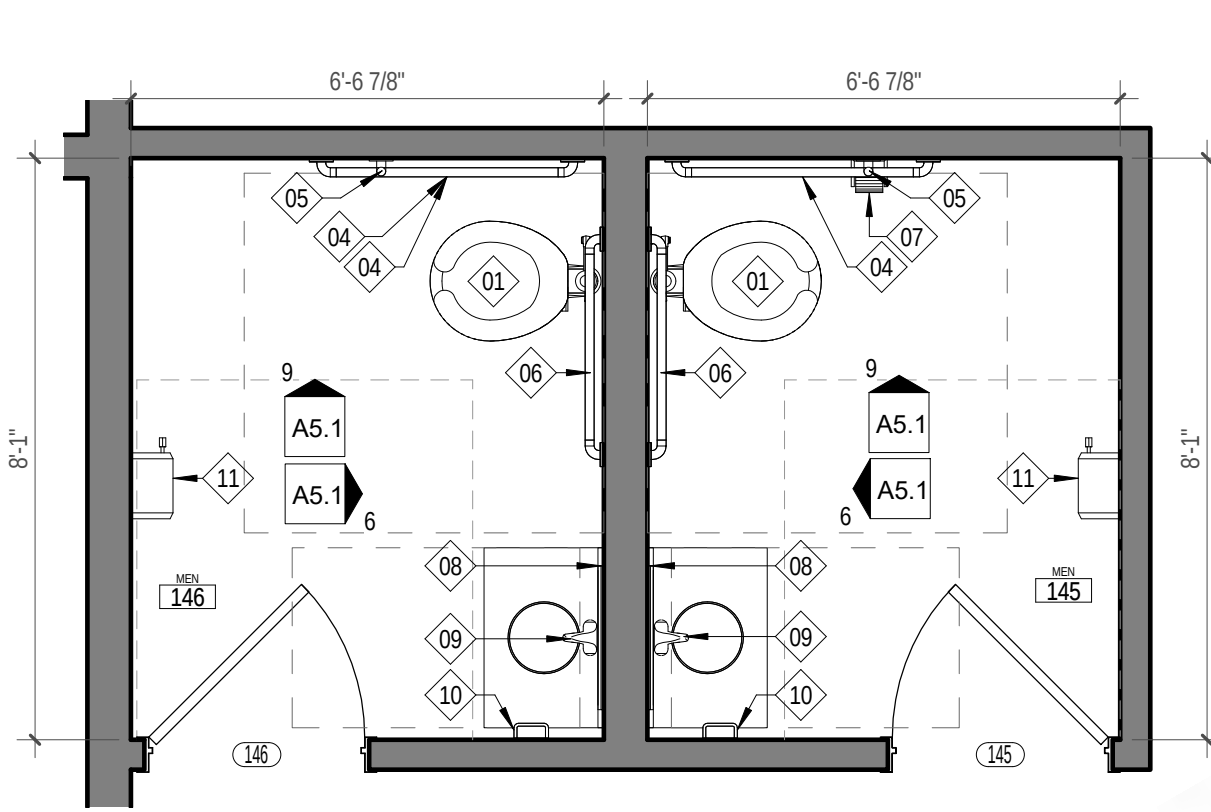
2 TOILET PLAN
3/8" = 1'-0"



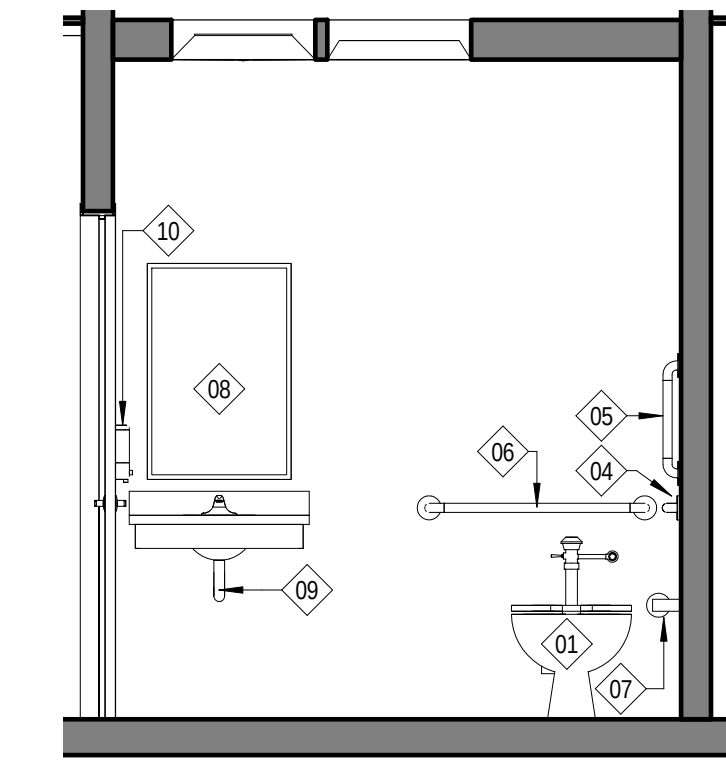
3 TOILET PLAN
3/8" = 1'-0"



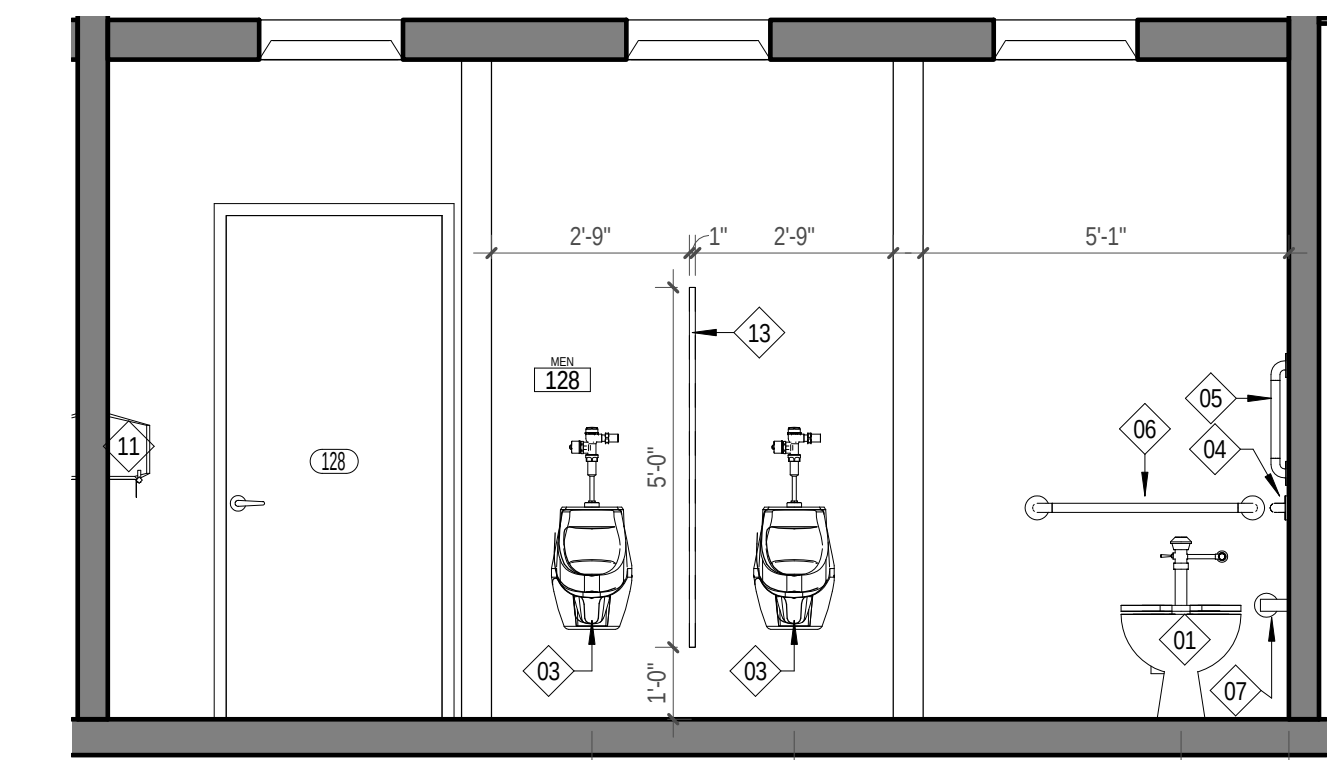
4 TOILET PLAN
3/8" = 1'-0"



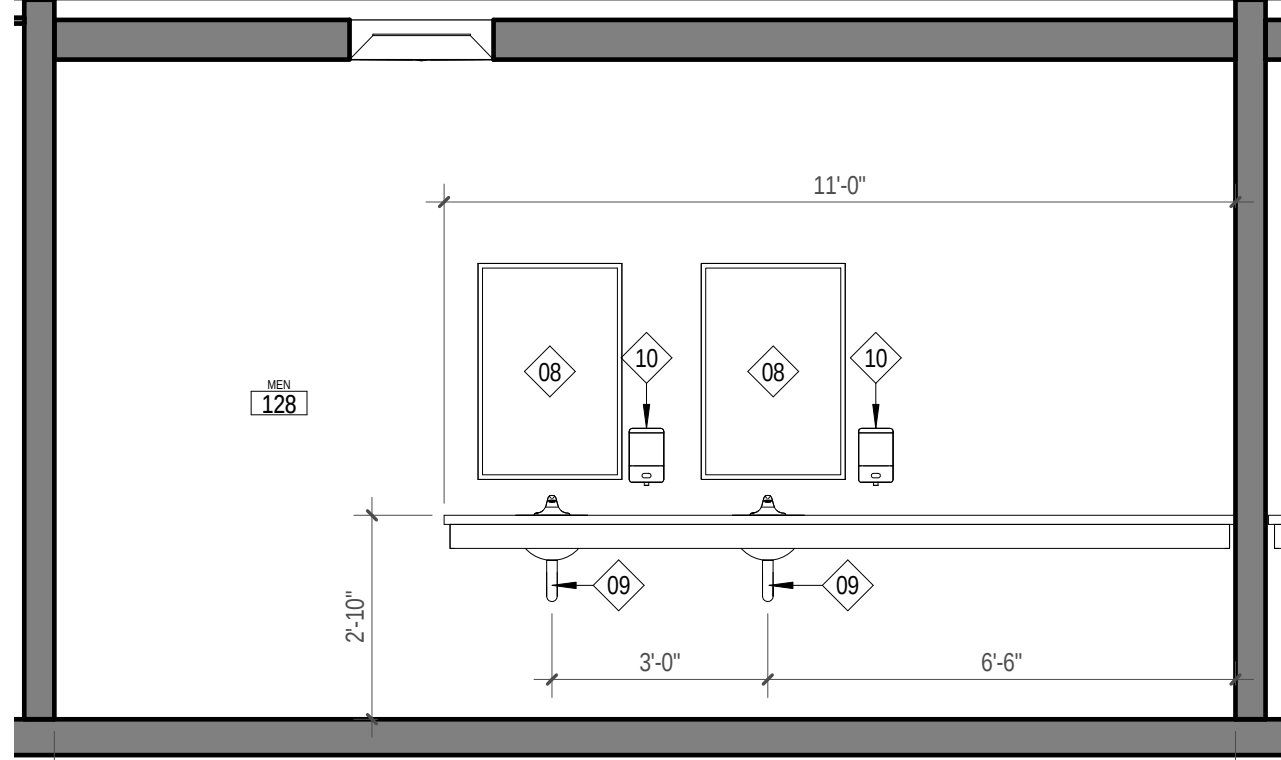
5 TOILET PLAN
3/8" = 1'-0"



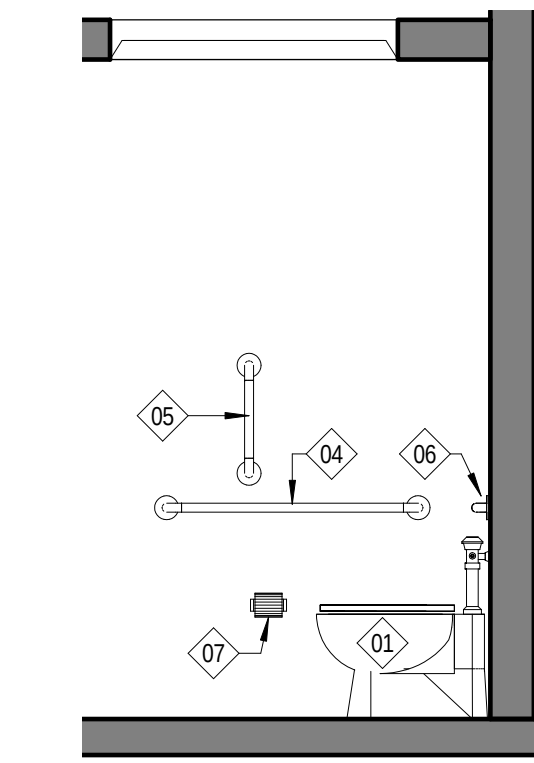
6 TOILET ELEVATION (H.C.)
3/8" = 1'-0"



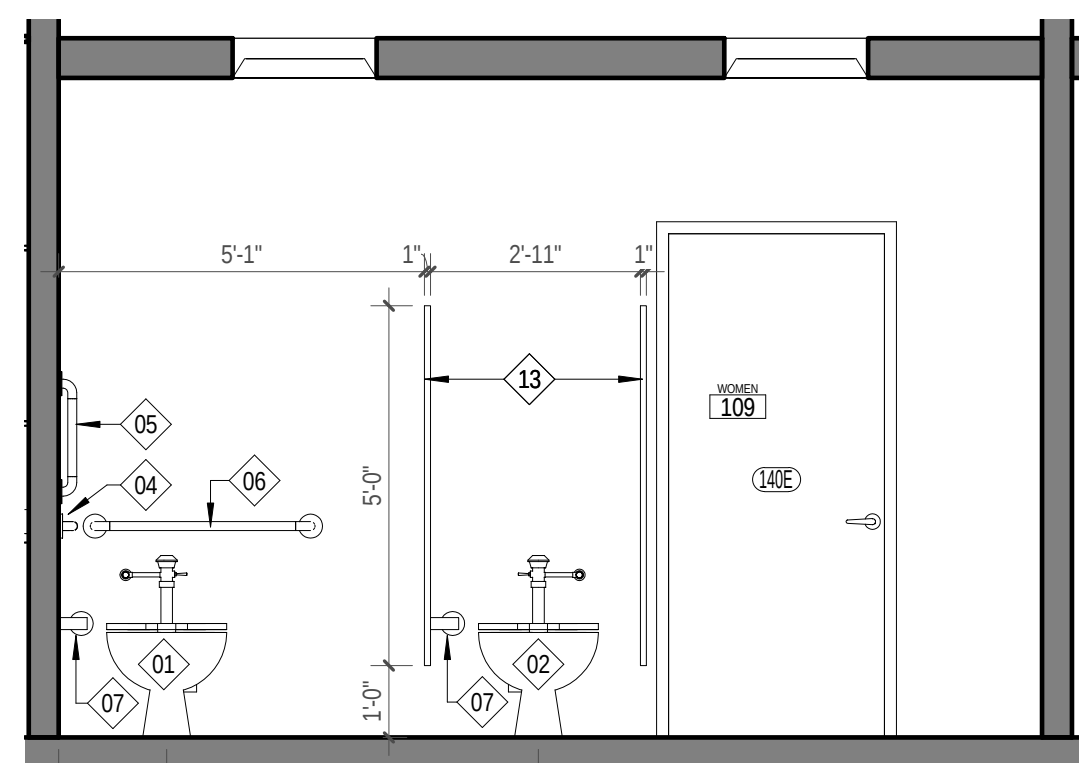
7 MENS SHOP TOILET
3/8" = 1'-0"



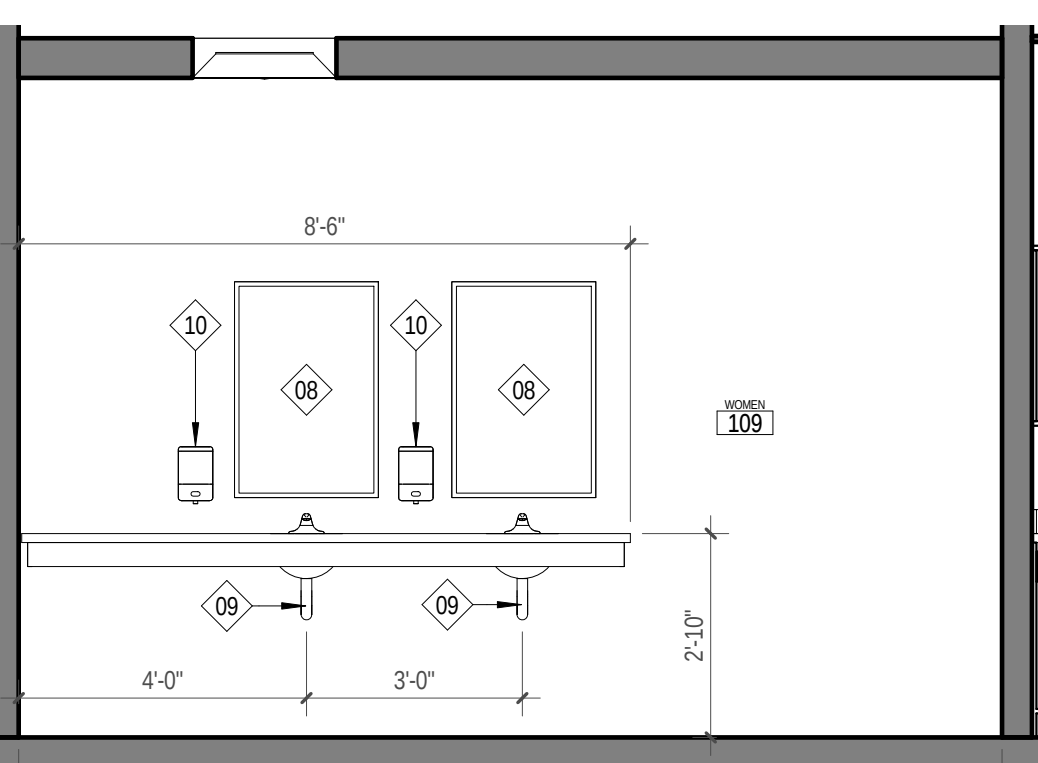
8 MENS SHOP TOILET
3/8" = 1'-0"



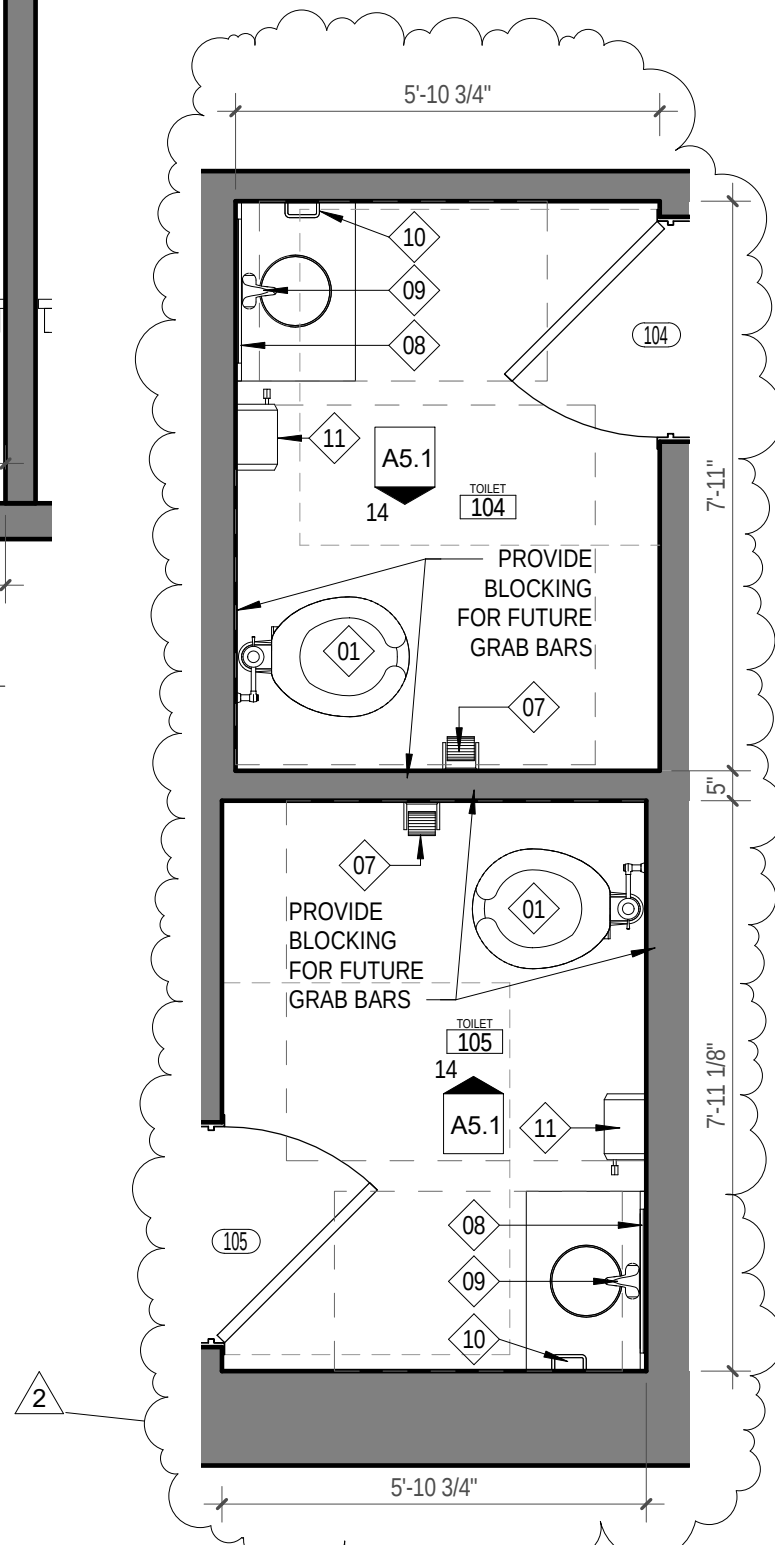
9 TOILET ELEVATION (H.C.)
3/8" = 1'-0"



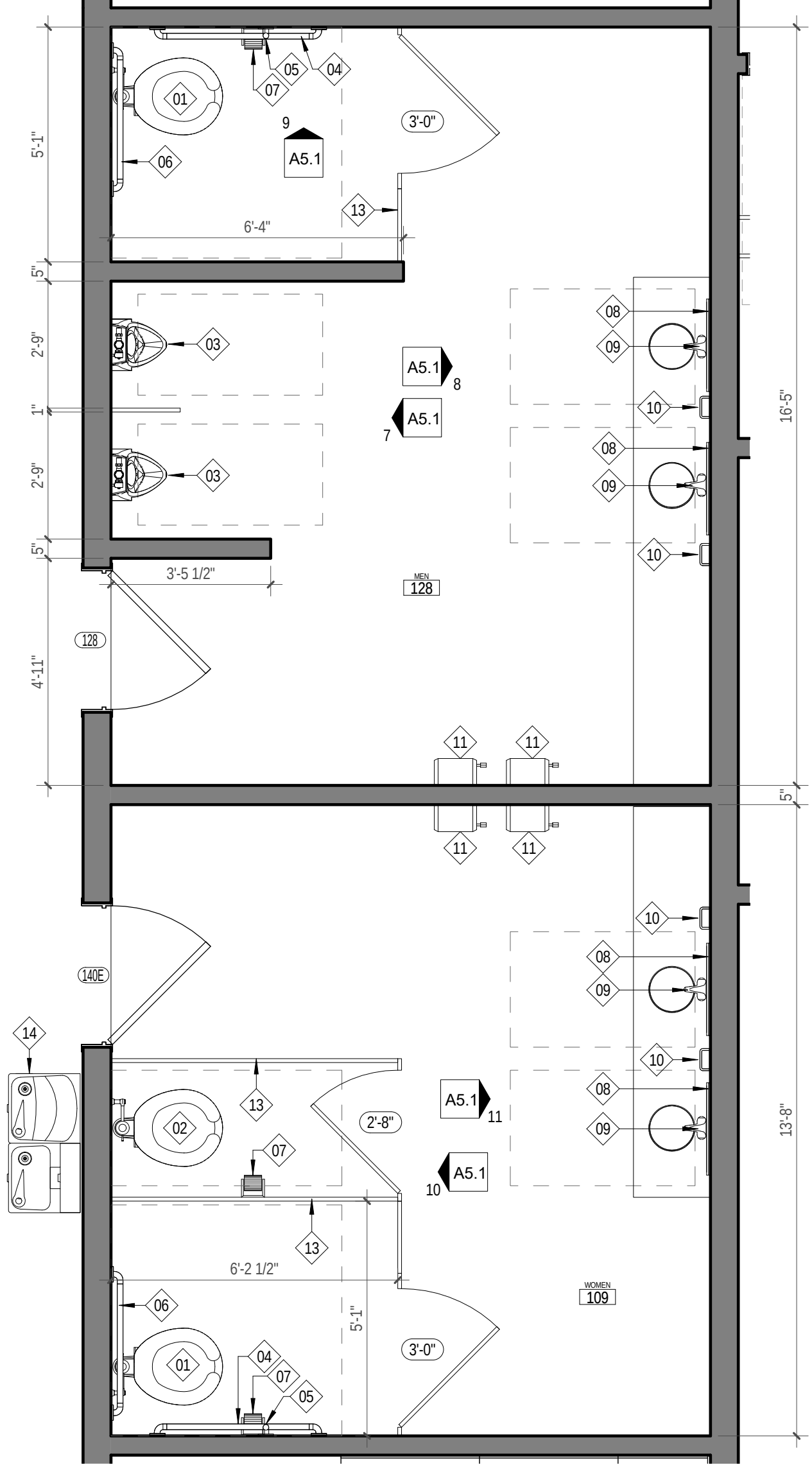
10 WOMENS SHOP TOILET
3/8" = 1'-0"



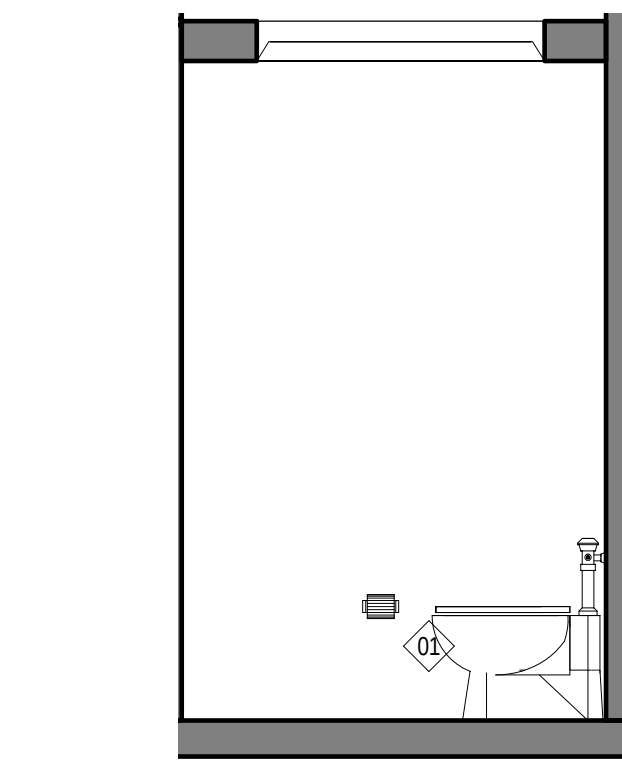
11 WOMENS SHOP TOILET
3/8" = 1'-0"



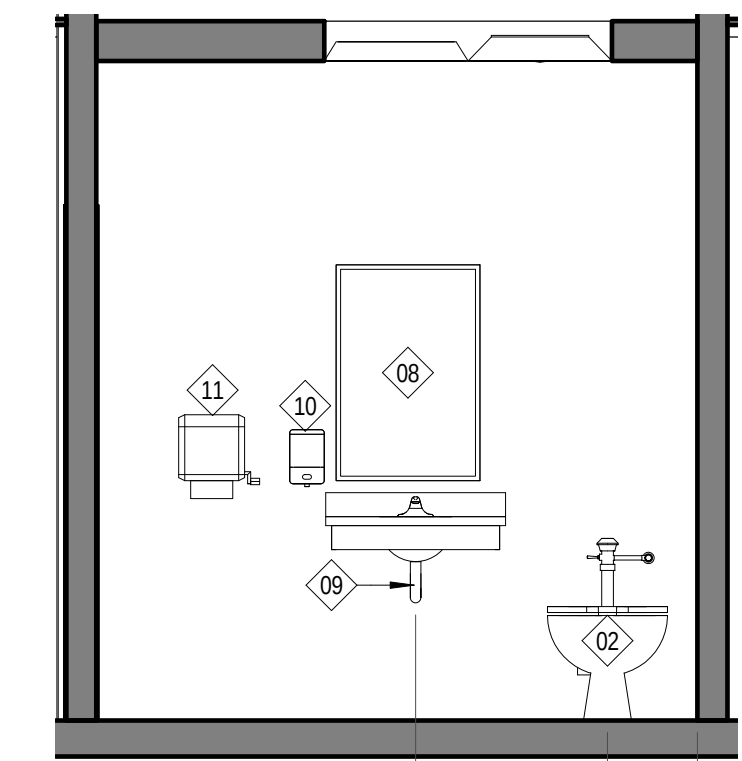
12 TOILET PLAN
3/8" = 1'-0"



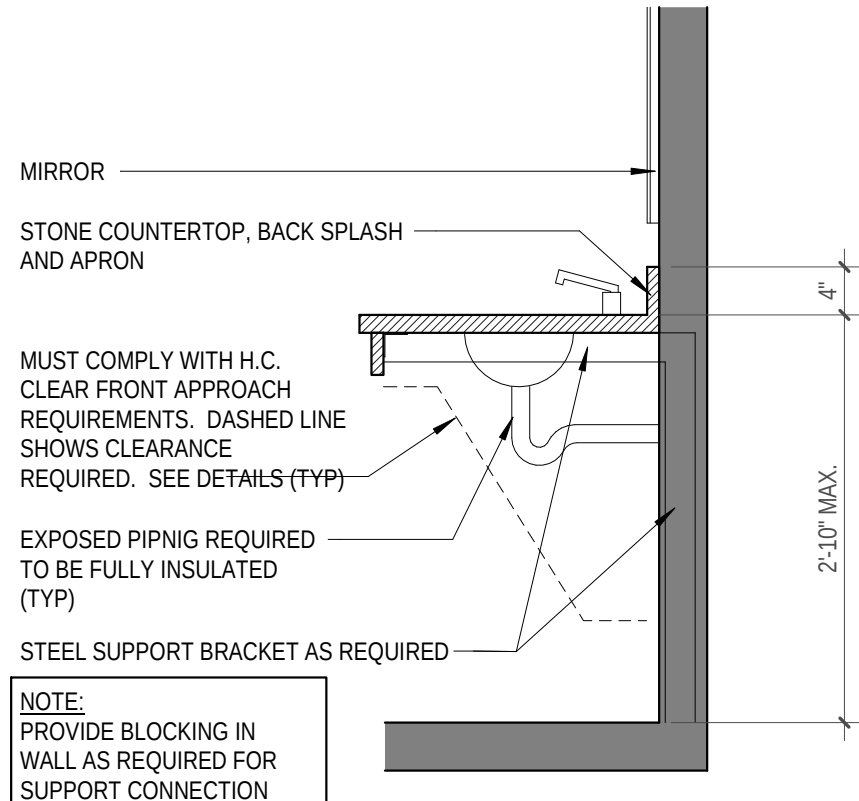
13 SHOP TOILET PLAN
3/8" = 1'-0"



14 TOILET ELEVATION
3/8" = 1'-0"

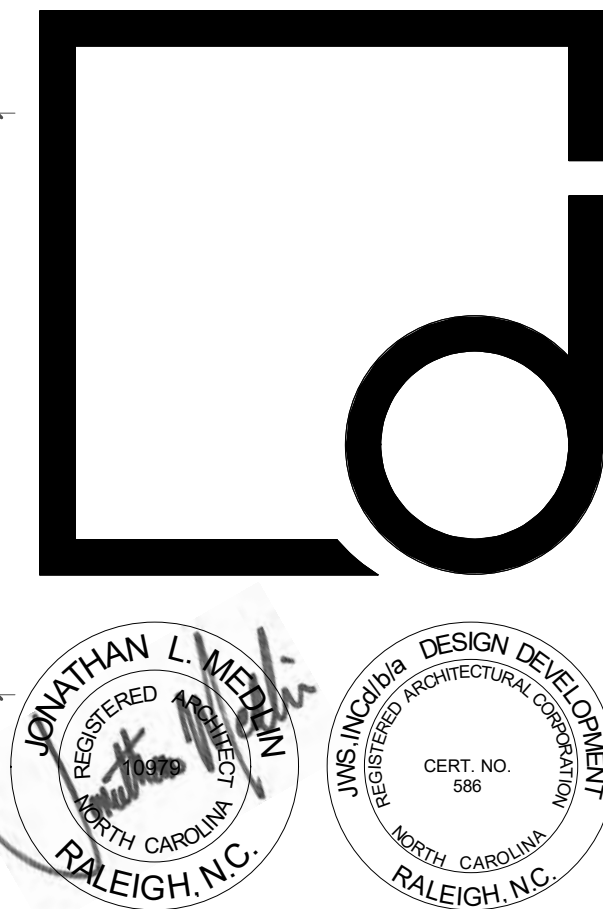


15 TOILET ELEVATION
3/8" = 1'-0"



16 TYPICAL HC SINK SECTION
3/4" = 1'-0"

IT IS THE CONTRACTORS RESPONSIBILITY TO MEET ALL ACCESSIBILITY HEIGHTS AND REQUIREMENTS. SEE SHEET A0.2 GUIDELINES OR ACCESSIBILITY REQUIREMENTS FOR ALL CLEARANCE AND HEIGHTS FOR ALL PLUMBING COMPONENTS



10/7/2016

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MAJESTIC
MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
2	PERMIT CHANGES	11/4/16

Plumbing Fixture Schedule				
No.	Qty.	Description	Provided & Installed By	Remarks
01	11	FLUSH VALVE WATER CLOSET - FLOOR MOUNTED	COORDINATE WITH OWNER	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCES (SEE PLUMBING DRAWINGS)
02	3	FLUSH VALVE WATER CLOSET - FLOOR MOUNTED	COORDINATE WITH OWNER	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCES (SEE PLUMBING DRAWINGS)
03	2	WALL MOUNTED URINAL	COORDINATE WITH OWNER	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET T6 FOR CLEARANCES (SEE PLUMBING DRAWINGS)
04	9	42" HORIZONTAL GRAB BAR	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
05	9	18" VERTICAL GRAB BAR	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
06	9	36" HORIZONTAL GRAB BAR	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
07	13	SINGLE TOILET PAPER DISPENSER	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
08	15	24" x 36" MIRROR	COORDINATE WITH OWNER	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
09	15	UNDERMOUNTED SINK AND FAUCET	COORDINATE WITH OWNER	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCES (SEE PLUMBING DRAWINGS)
10	15	WALL MOUNTED VERTICAL SOAP DISPENSER	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
11	15	ROLL PAPER TOWEL DISPENSER	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
12	3	RECESSED BABY CHANGING STATION	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
13	4	PARTITION	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCE
14	3	H-HO EWC	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCES (SEE PLUMBING DRAWINGS)
15	6	SINK	COORDINATE WITH OWNER	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCES (SEE PLUMBING DRAWINGS)
16	1	MOP SINK	G.C.	SEE GUIDELINES OR ACCESSIBILITY REQUIREMENTS SHEET A0.2 FOR CLEARANCES (SEE PLUMBING DRAWINGS)

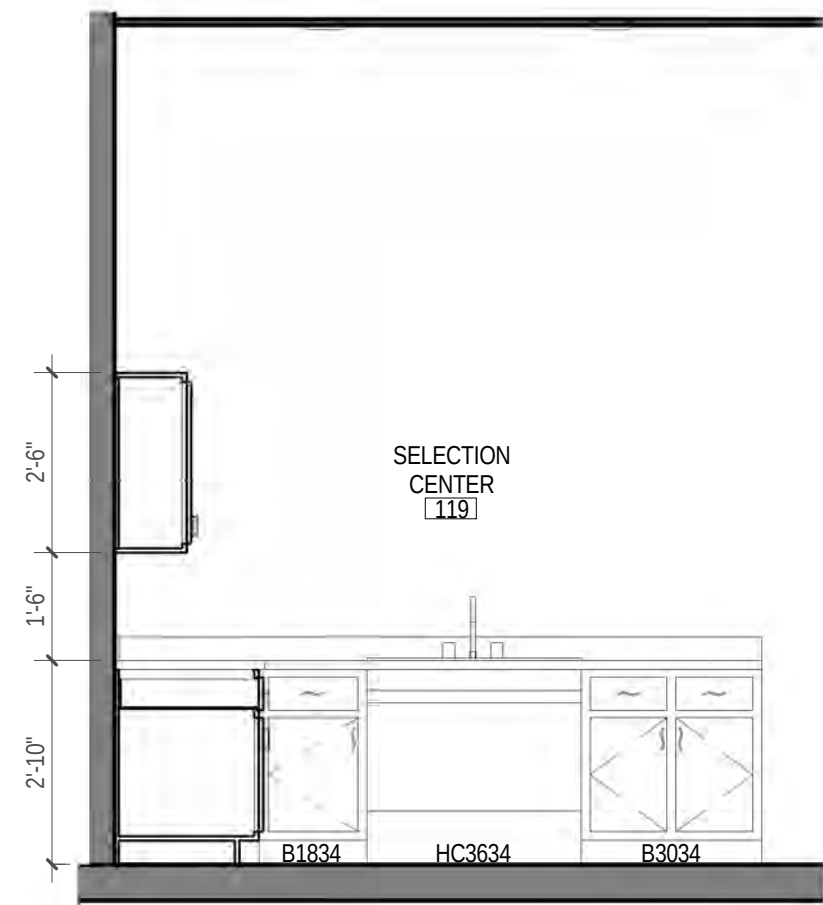
PROJECT #: 160032

DATE: 10/7/2016

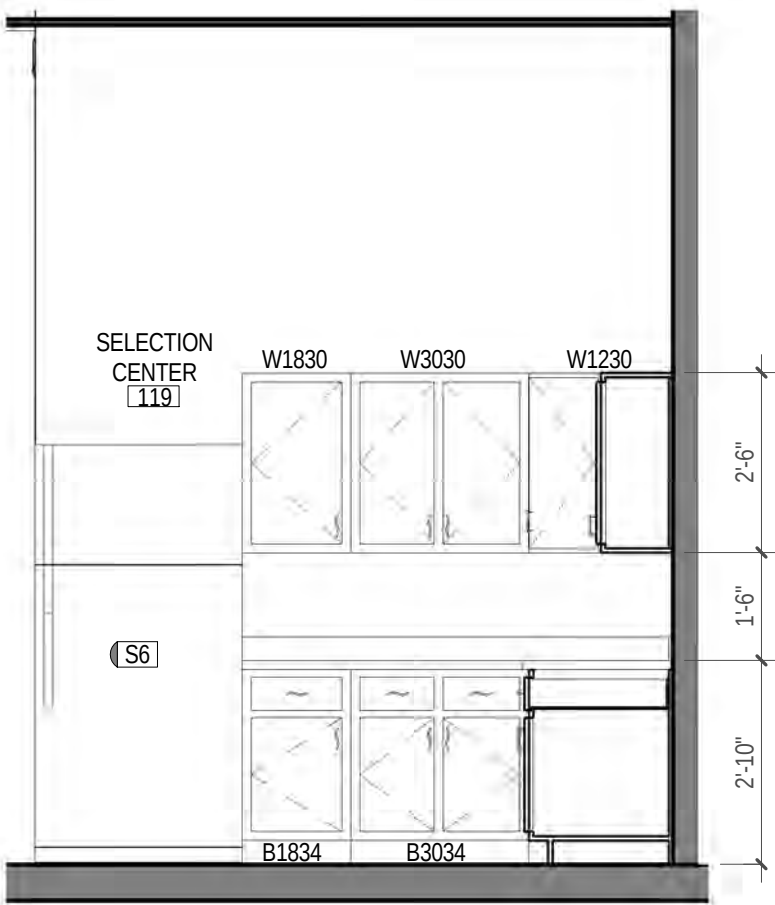
ENLARGED RESTROOM
PLANS AND
ELEVATIONS

A5.1

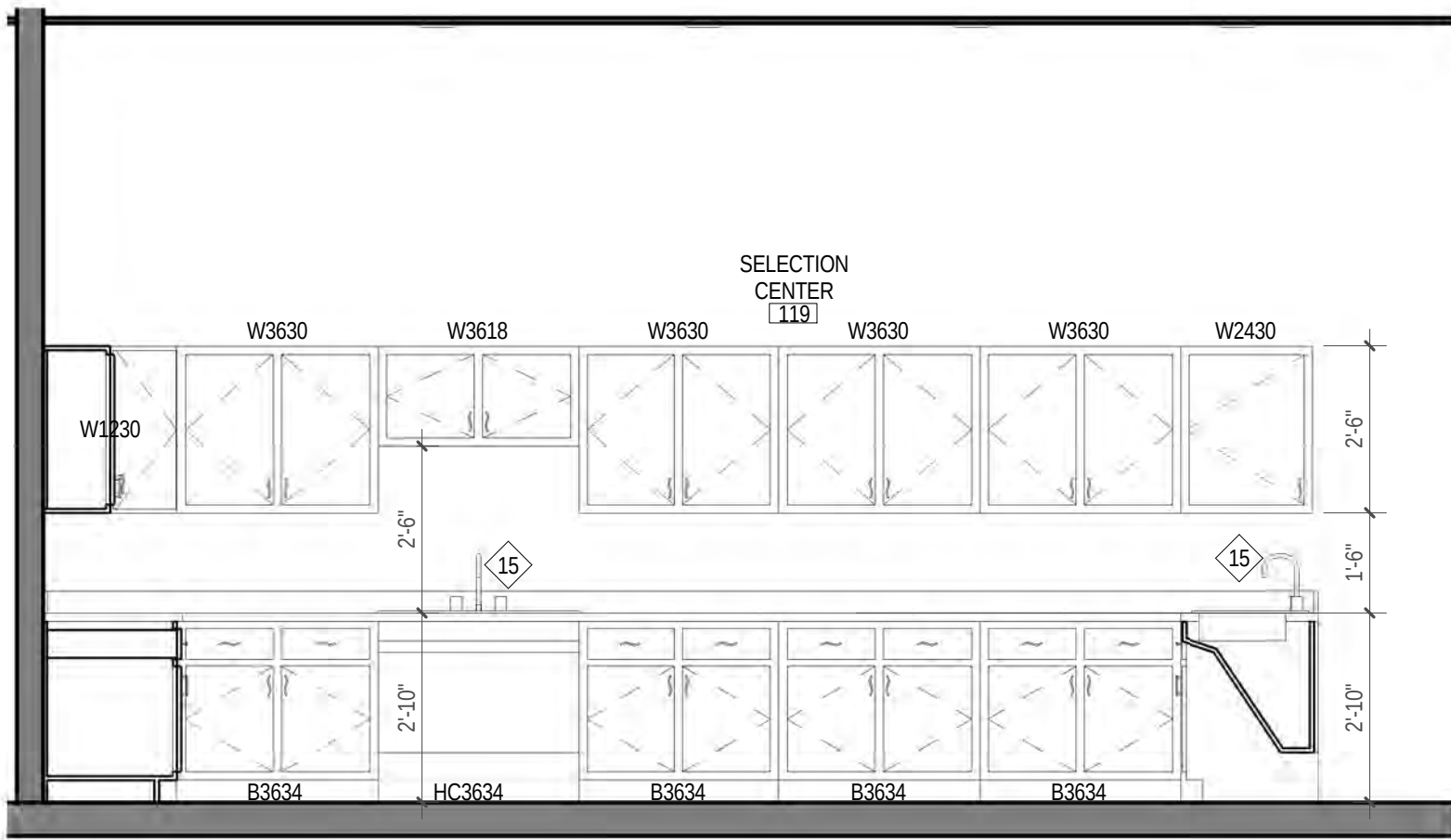
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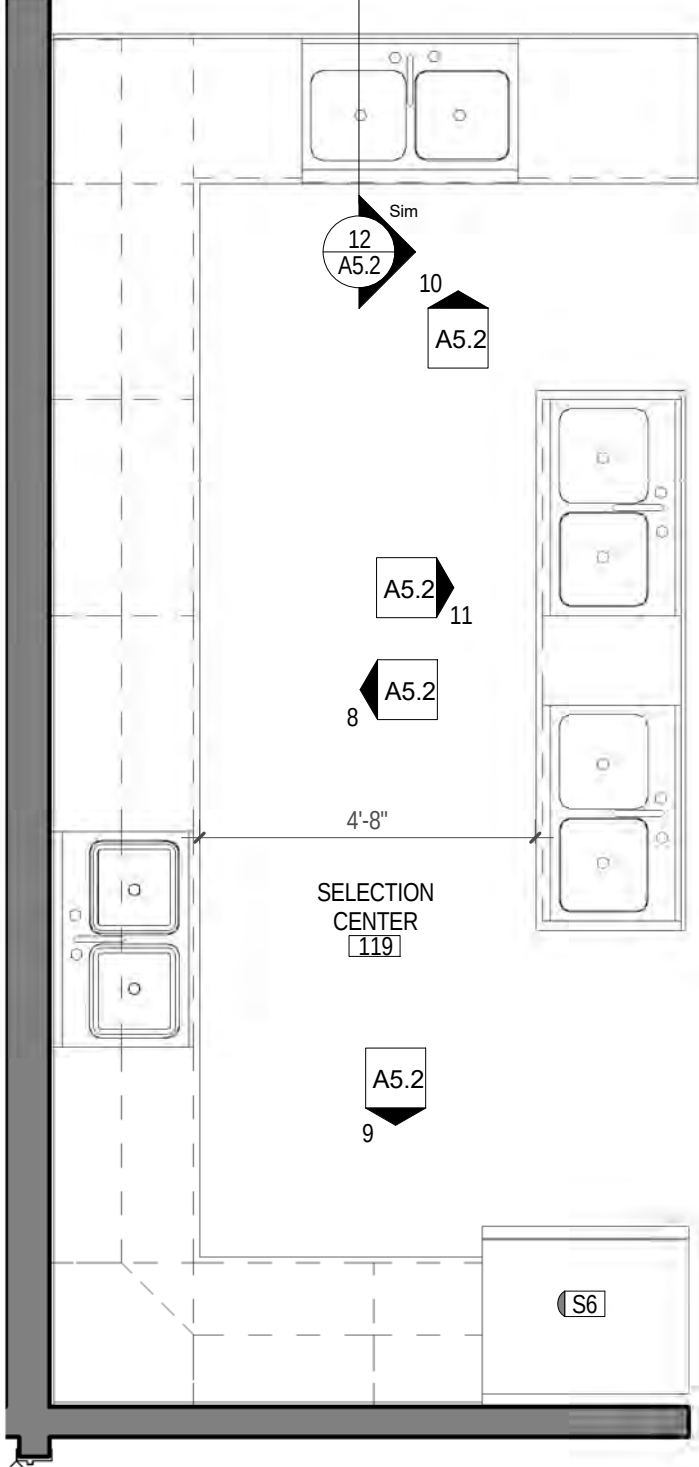
10 SELECTION CENTER
3/8" = 1'-0"



9 SELECTION CENTER
3/8" = 1'-0"



8 SELECTION CENTER
3/8" = 1'-0"



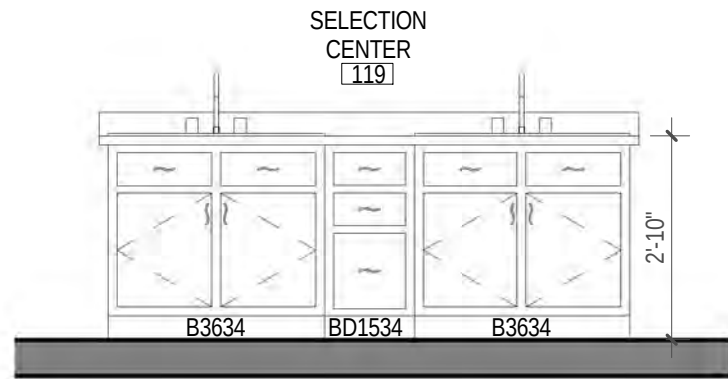
3 SELECTION CENTER
3/8" = 1'-0"

Casework Schedule (All)					
Unit	Tag	Qty.	Description	Depth	Notes
B	18 34 7	1	Drawer & 1 Cabinet Base	24"	
B	27 34 1	2	Drawer & 2 Cabinet Base	24"	
B	30 34 2	2	Drawer & 2 Cabinet Base	24"	
B	33 34 1	2	Drawer & 2 Cabinet Base	24"	
B	36 34 10	2	Drawer & 2 Cabinet Base	24"	
BD	15 34 1	3	Drawer Base	24"	
W	12 30 3	1	Corner Cabinet Hanging	12"	
W	18 30 6	1	Cabinet Hanging	12"	
W	24 30 1	1	Cabinet Hanging	12"	
W	24 30 1	2	Cabinet Hanging	12"	
W	27 30 1	2	Cabinet Hanging	12"	
W	30 30 2	2	Cabinet Hanging	12"	
W	33 30 1	2	Cabinet Hanging	12"	
W	36 18 4	2	Cabinet Hanging	12"	
W	36 30 8	2	Cabinet Hanging	12"	

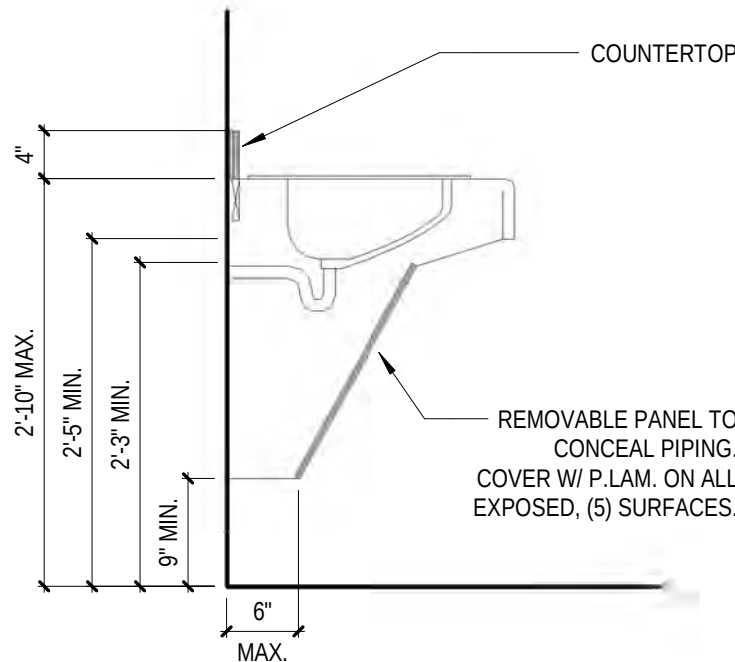
Equipment Schedule			
No.	Qty.	Description	Notes
S1	24	6" STEEL BOLLARD	PROVIDED BY CONTRACTOR
S2	2	DOCK SEAL	PROVIDED BY CONTRACTOR
S3	2	EXTERIOR DOCK PLATE	PROVIDED BY CONTRACTOR
S4	1	SHIP LADDER	PROVIDED BY CONTRACTOR
S5	2	FIRE EXTINGUISHER	PROVIDED BY CONTRACTOR
S6	3	FRIDGEATOR	PROVIDED BY OWNER
S7	1	STOVE & OVEN	PROVIDED BY OWNER
S8	1	DISH WASHER	PROVIDED BY OWNER

COUNTERTOP & CASEWORK NOTES:

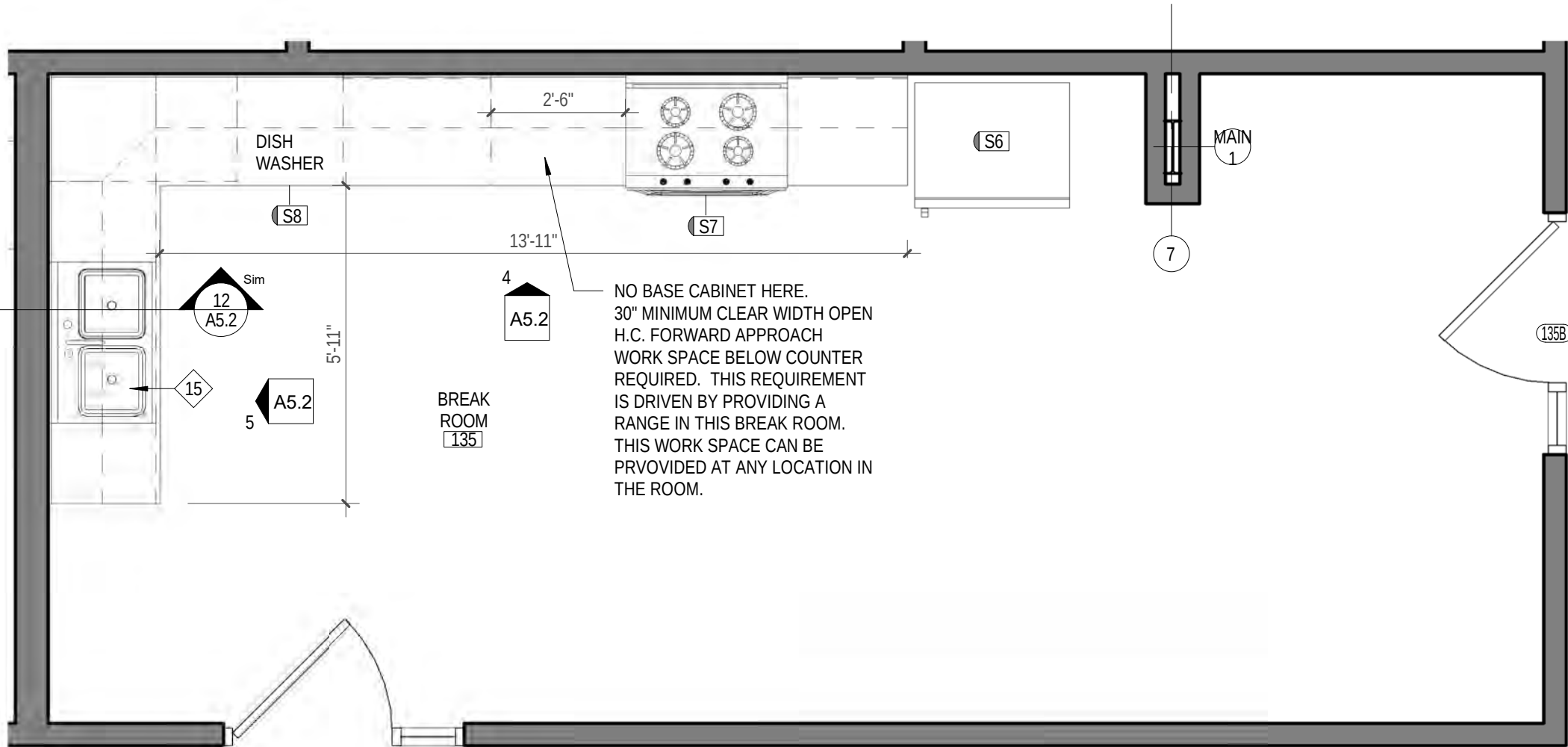
- OWNER TO PROVIDE ALL CASEWORK AND COUNTERTOPS SHOWN IN THE PROJECT.
- ALL COUNTERTOPS AND CASEWORK MUST BE INSTALLED IN COMPLIANCE WITH ALL ADA ACCESSIBILITY AND BUILDING CODE REQUIREMENTS. THOSE REQUIREMENTS HAVE BEEN REPRESENTED HERE SCHEMATICALLY. CONTACT ARCHITECT WITH ANY QUESTIONS PRIOR TO CONSTRUCTION.
- IF DROP IN STYLE SINKS ARE USED, THE COUNTERTOP MUST BE LOWERED SUCH THAT THE HIGHEST EDGE IF THE SINK BOWL DOES NOT EXCEED THE MAXIMUM HEIGHT OF 2'-10" AFF.
- A MINIMUM OF X1 SINK IN EACH ROOM/SPACE NEEDS TO BE ADA ACCESSIBLE.
- SEE EQUIPMENT SCHEDULE ON MAIN FLOOR PLAN.



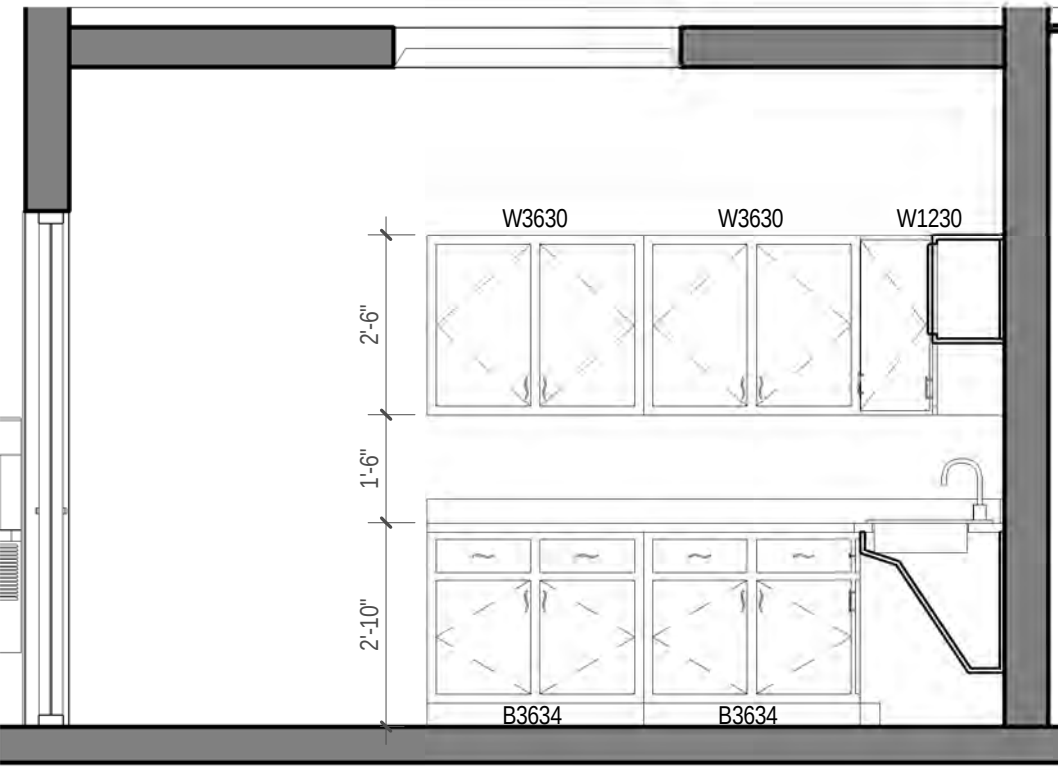
11 SELECTION CENTER
3/8" = 1'-0"



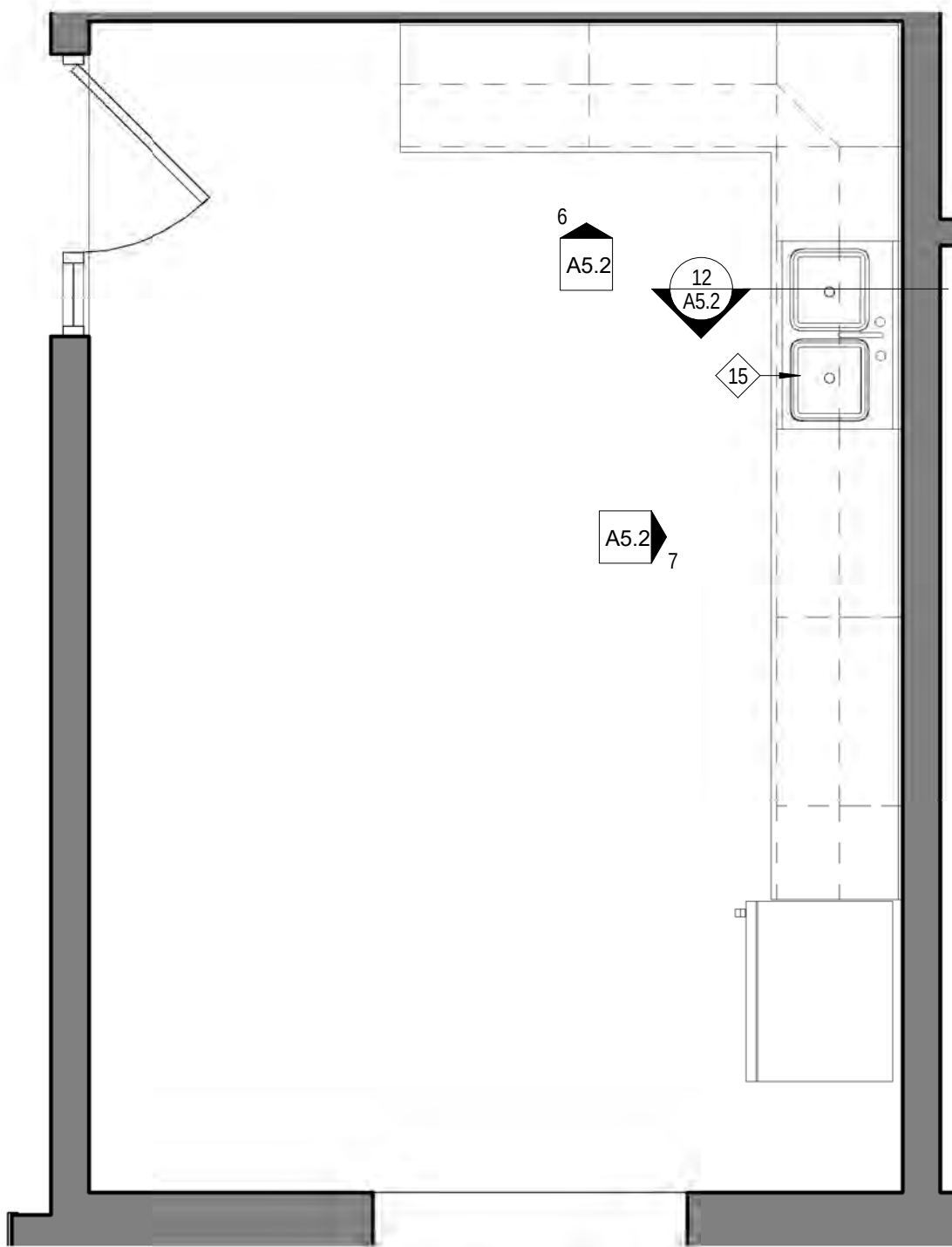
12 TYPICAL H.C. SINK SECTION
3/4" = 1'-0"



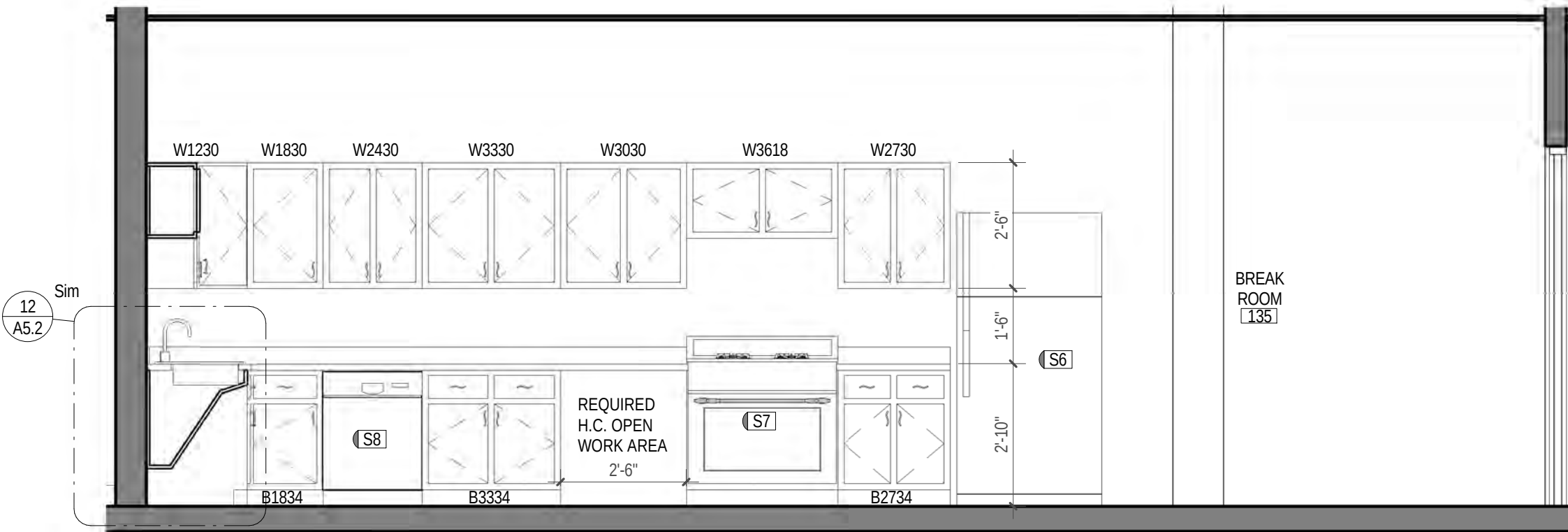
1 BREAK ROOM - OFFICE
3/8" = 1'-0"



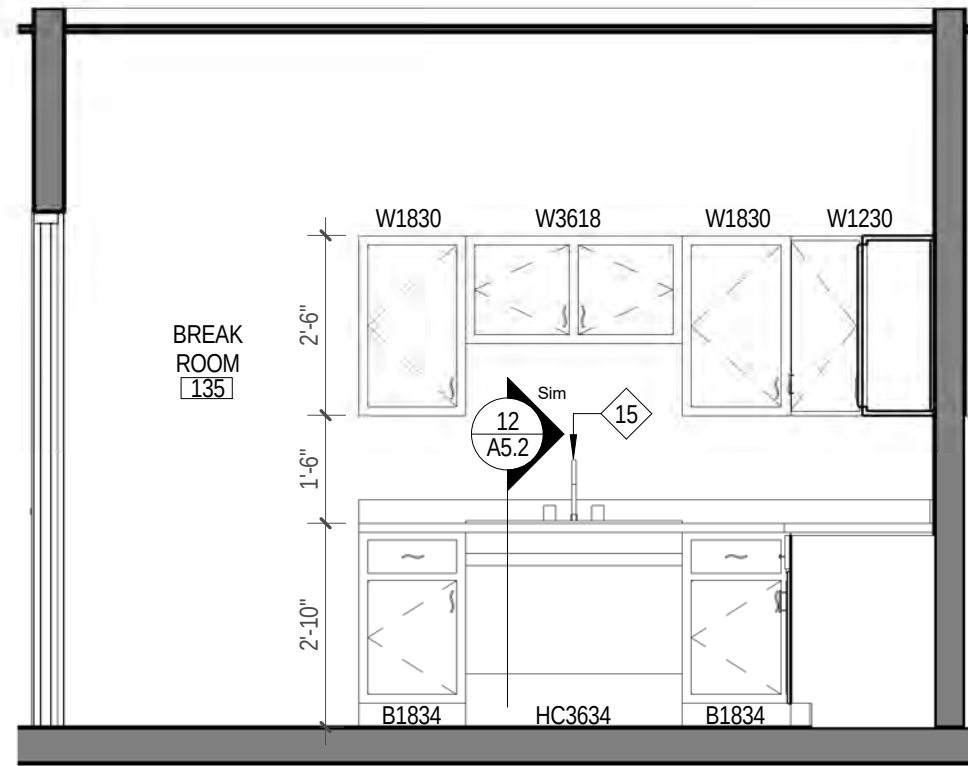
6 BREAK ROOM - SHOP
3/8" = 1'-0"



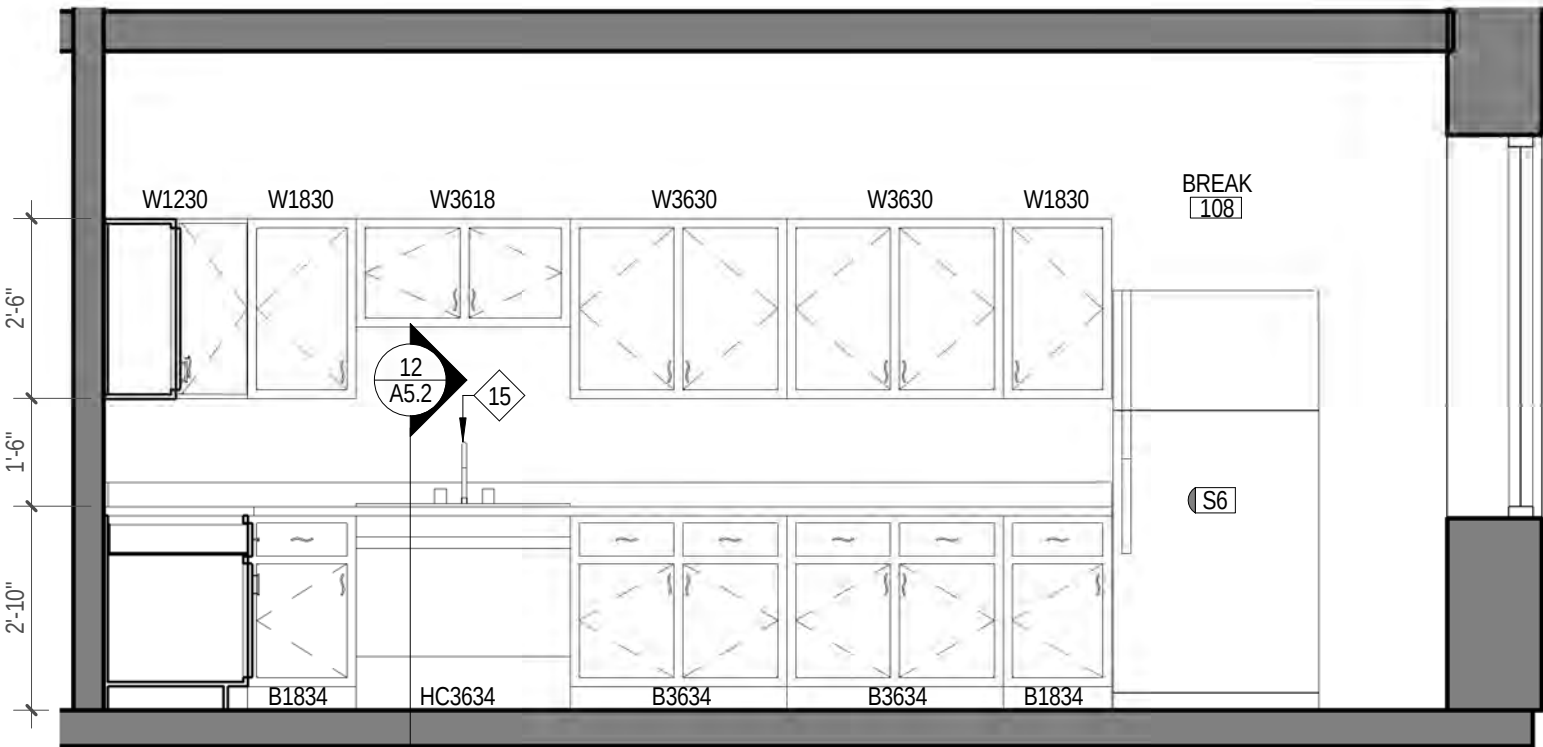
2 ENLARGED SHOP - KITCHEN/BREAK
3/8" = 1'-0"



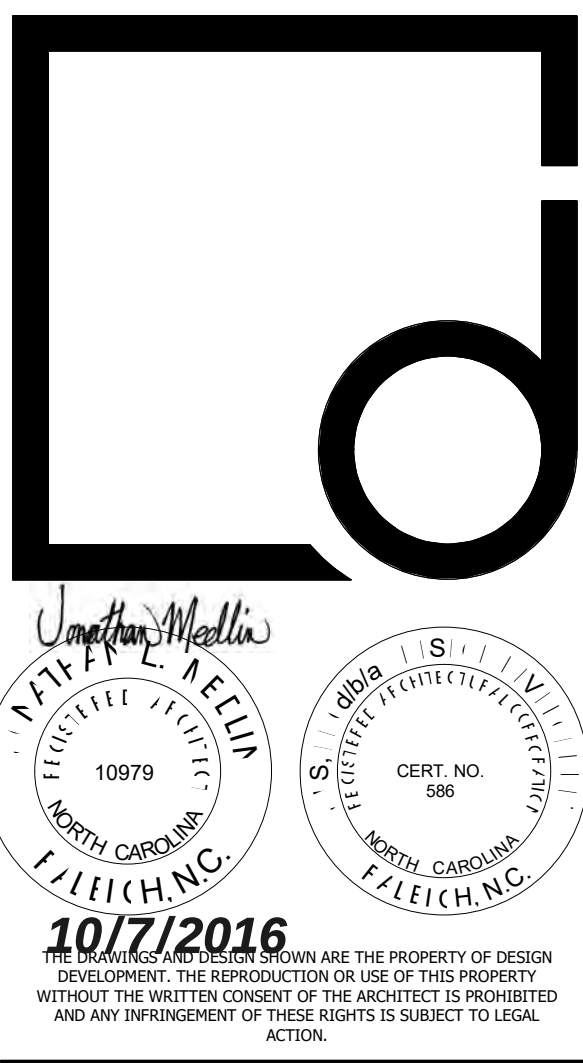
4 BREAK ROOM - OFFICE
3/8" = 1'-0"



5 BREAK ROOM - OFFICE
3/8" = 1'-0"



7 BREAK ROOM - SHOP
3/8" = 1'-0"



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MAJESTIC
MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
-----	-------------	------

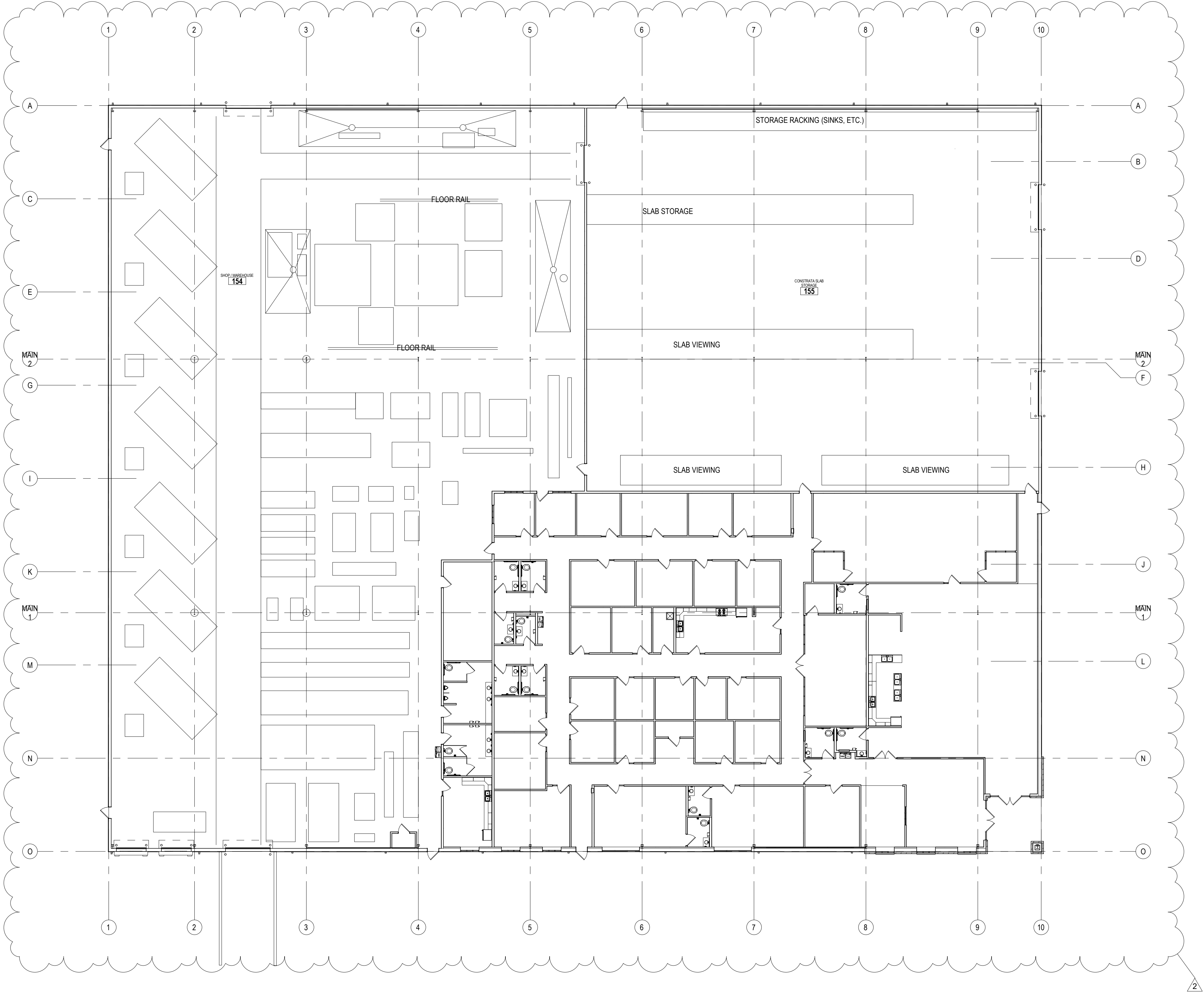
PROJECT #: 160032

DATE: 10/7/2016

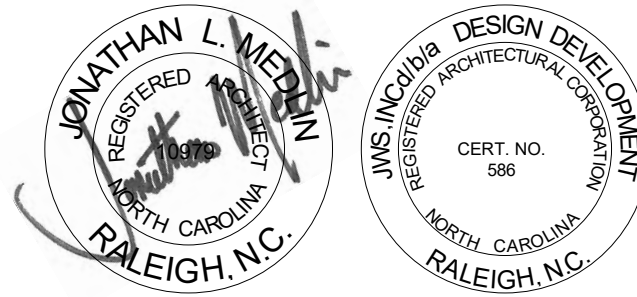
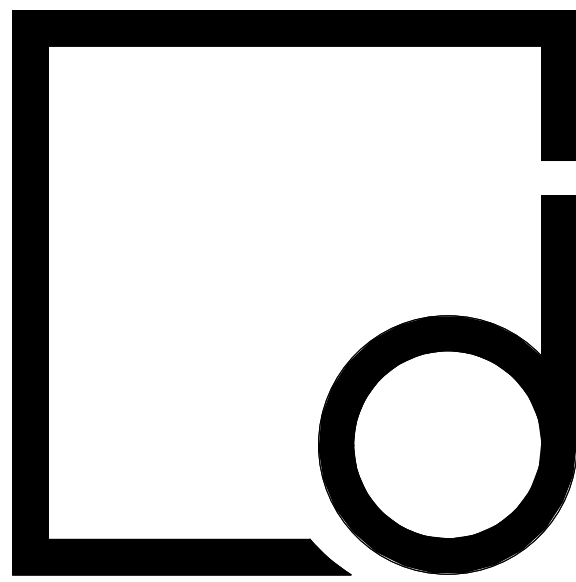
ENLARGED KITCHEN
PLANS AND
ELEVATIONS

A5.2

DIGITAL PRINT DATE: 10/11/2016 2:33:09 PM



1 SHOP/WAREHOUSE LAYOUT PLAN
1/16" = 1'-0"



10/7/2016

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MAJESTIC MARBLE & GLASS

Jeffrey Way
Youngsville, NC

No.	Description	Date
2	PERMIT CHANGES	11/4/16

PROJECT #: 160032

DATE: 10/7/2016

WAREHOUSE LAYOUT
PLAN

A6.1

DIGITAL PRINT DATE: 11/7/2016 1:56:04 PM



MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGVILLE, NORTH CAROLINA

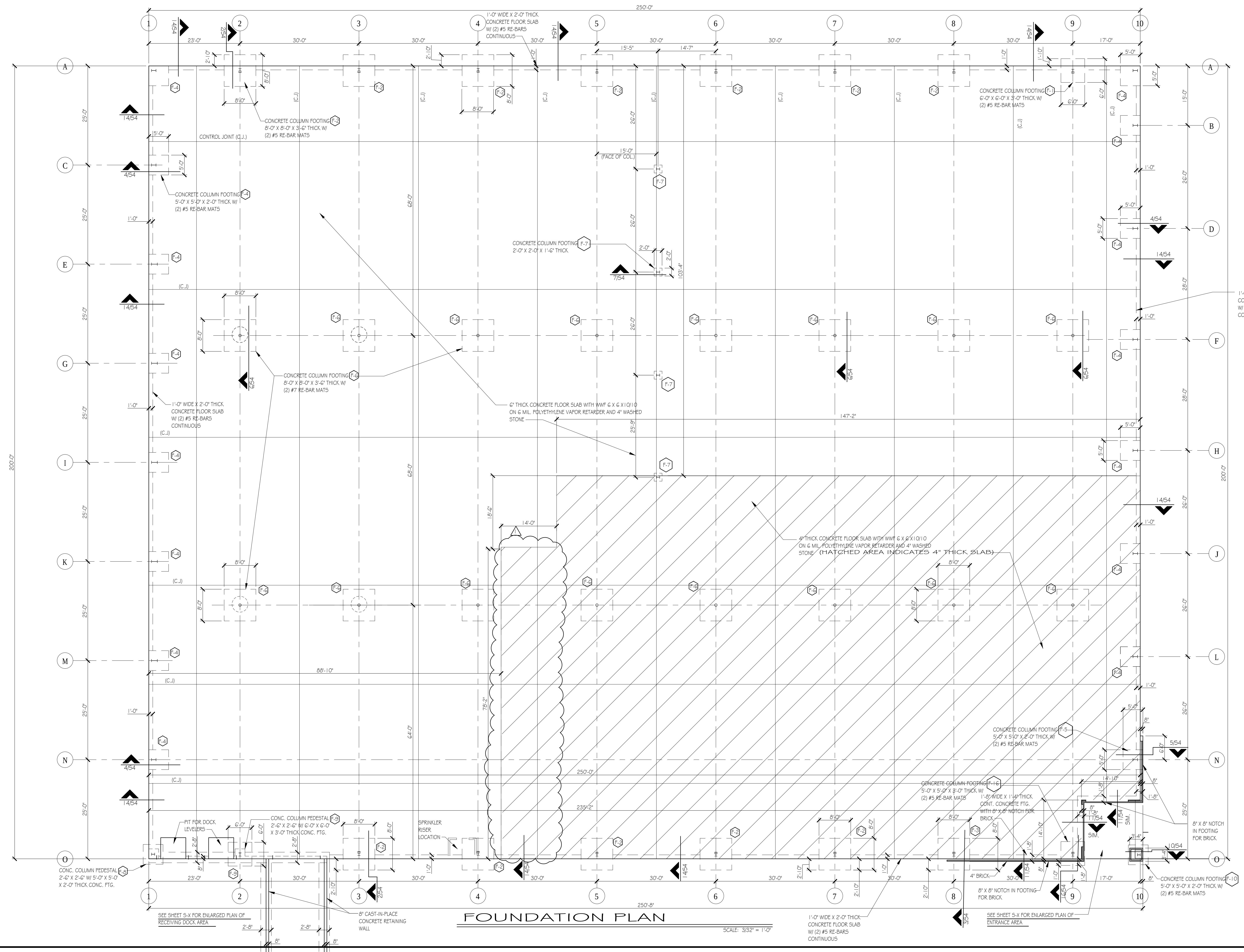
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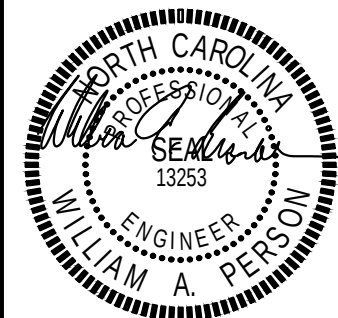
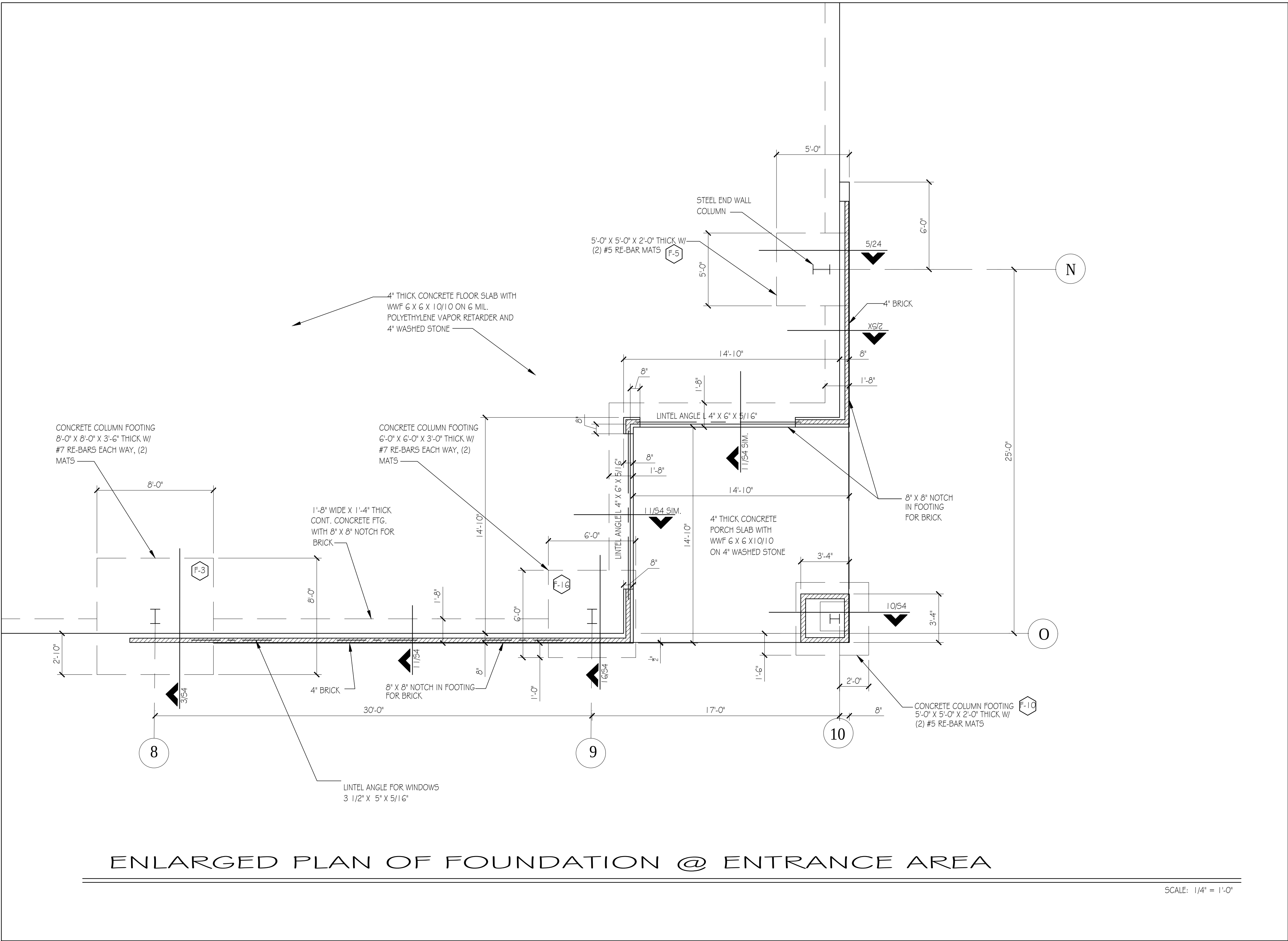
DRAWN BY:
WTG

DATE:
OCT. 7, 2016

REVISIONS:
OCT. 25, 2016
THICKENED SLAB
FOOTING DELETED

S-1

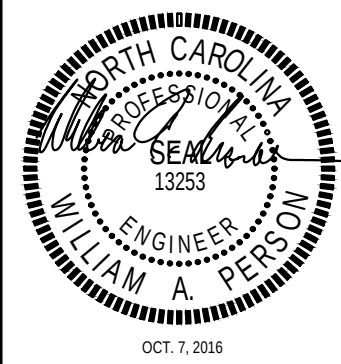
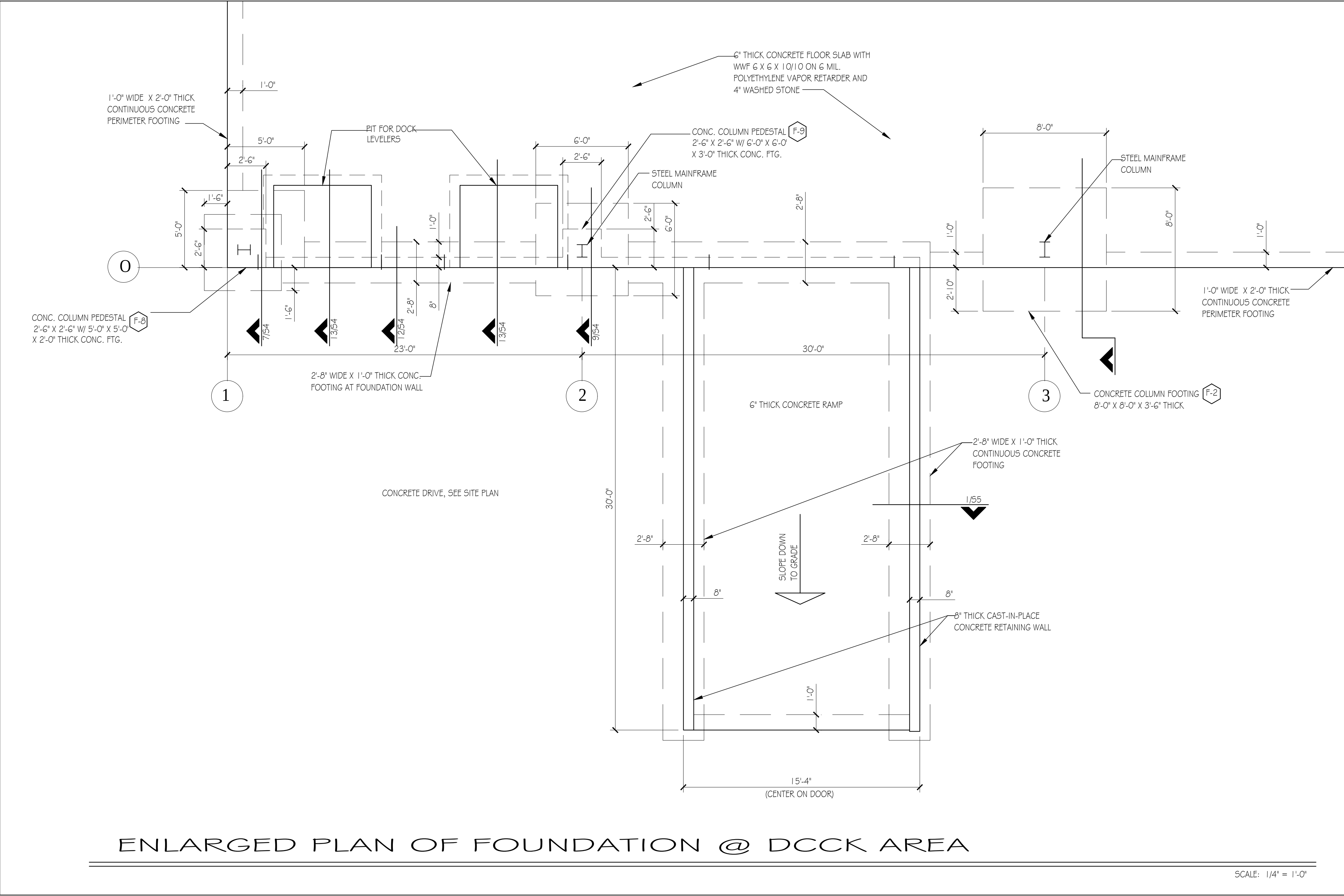




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TEL. (919) 496-5228

PROJECT: MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGSVILLE, NORTH CAROLINA

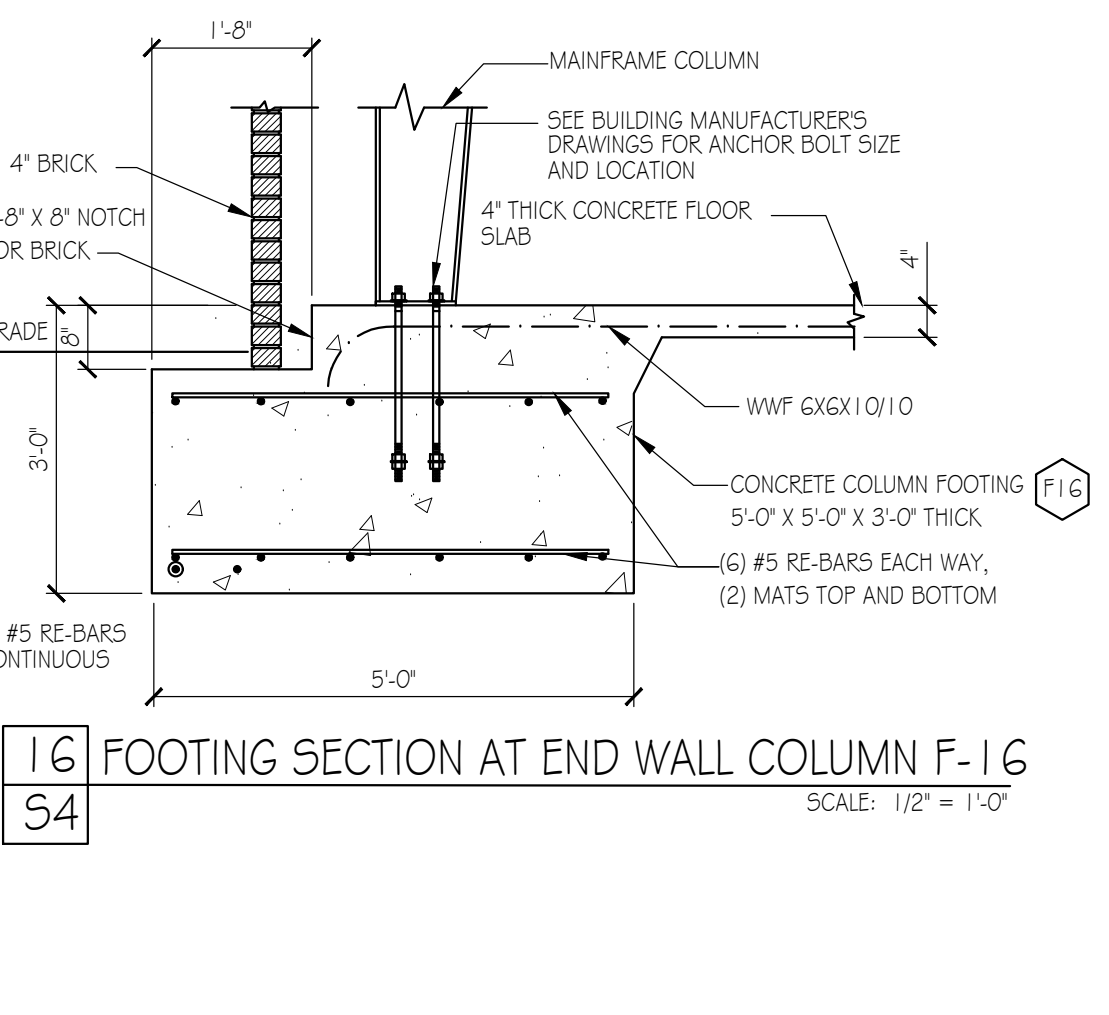
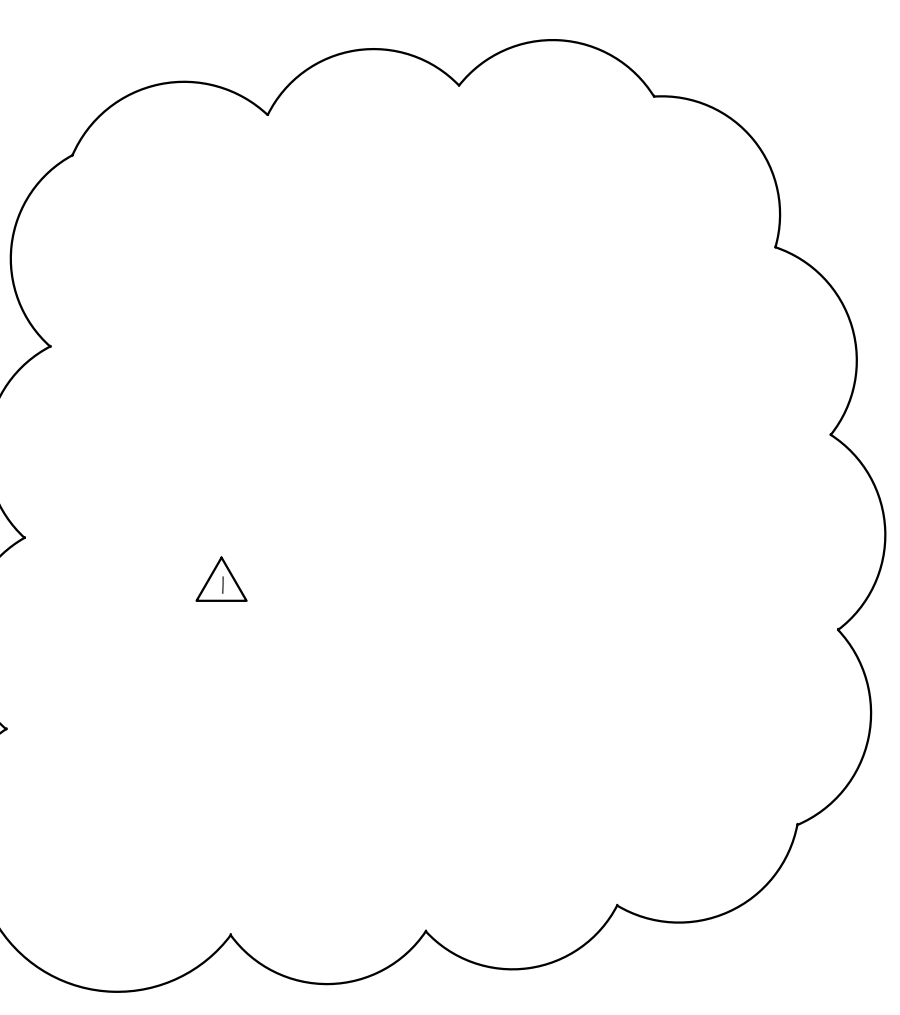
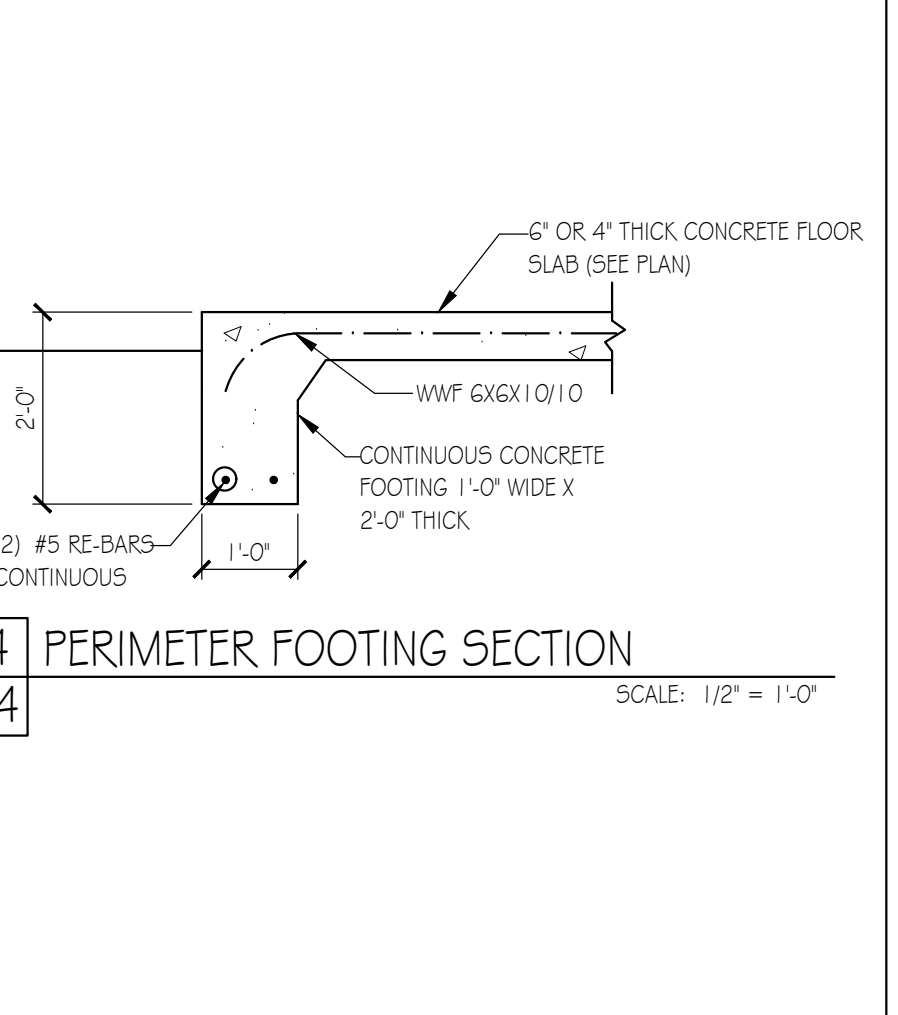
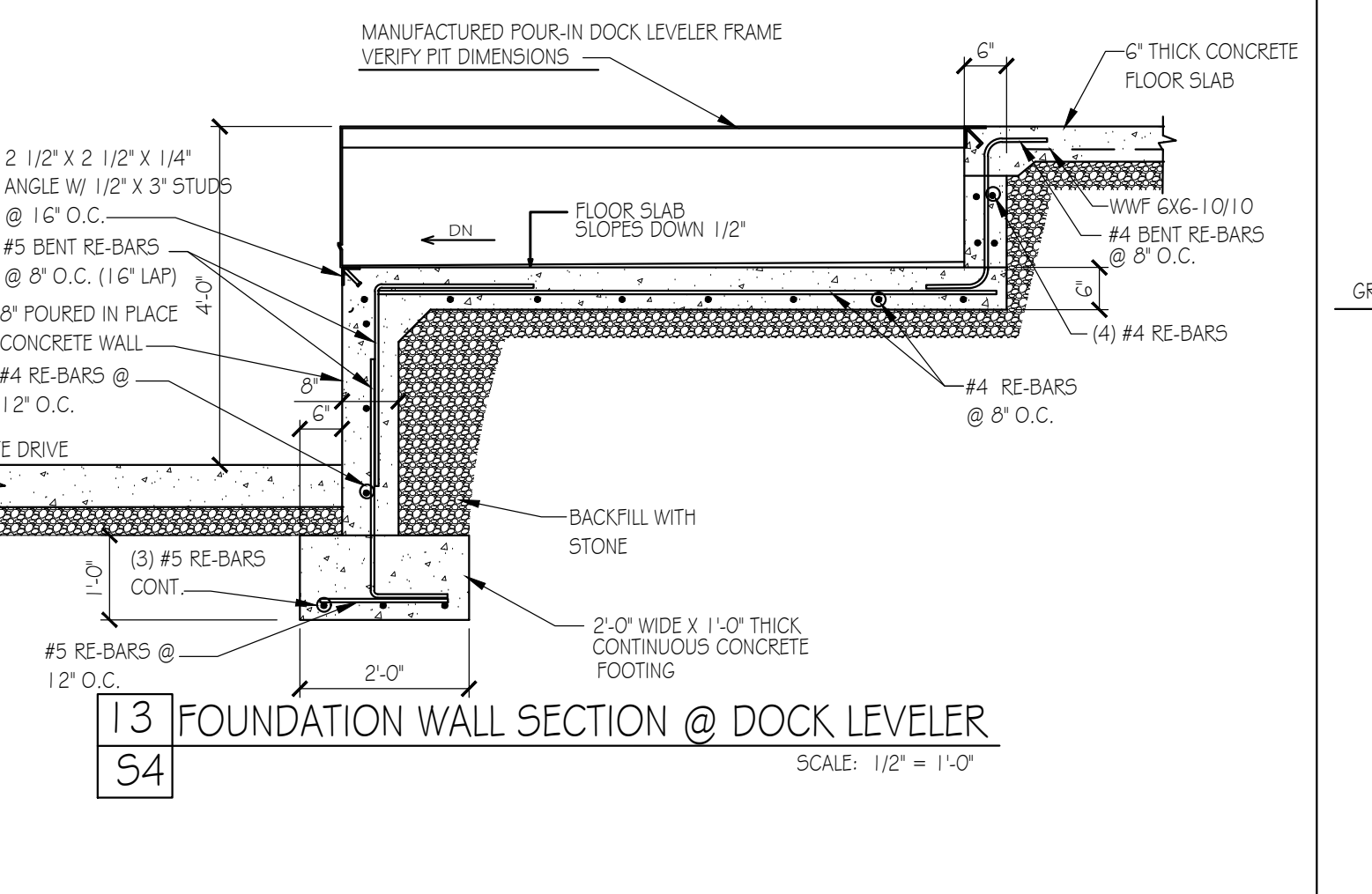
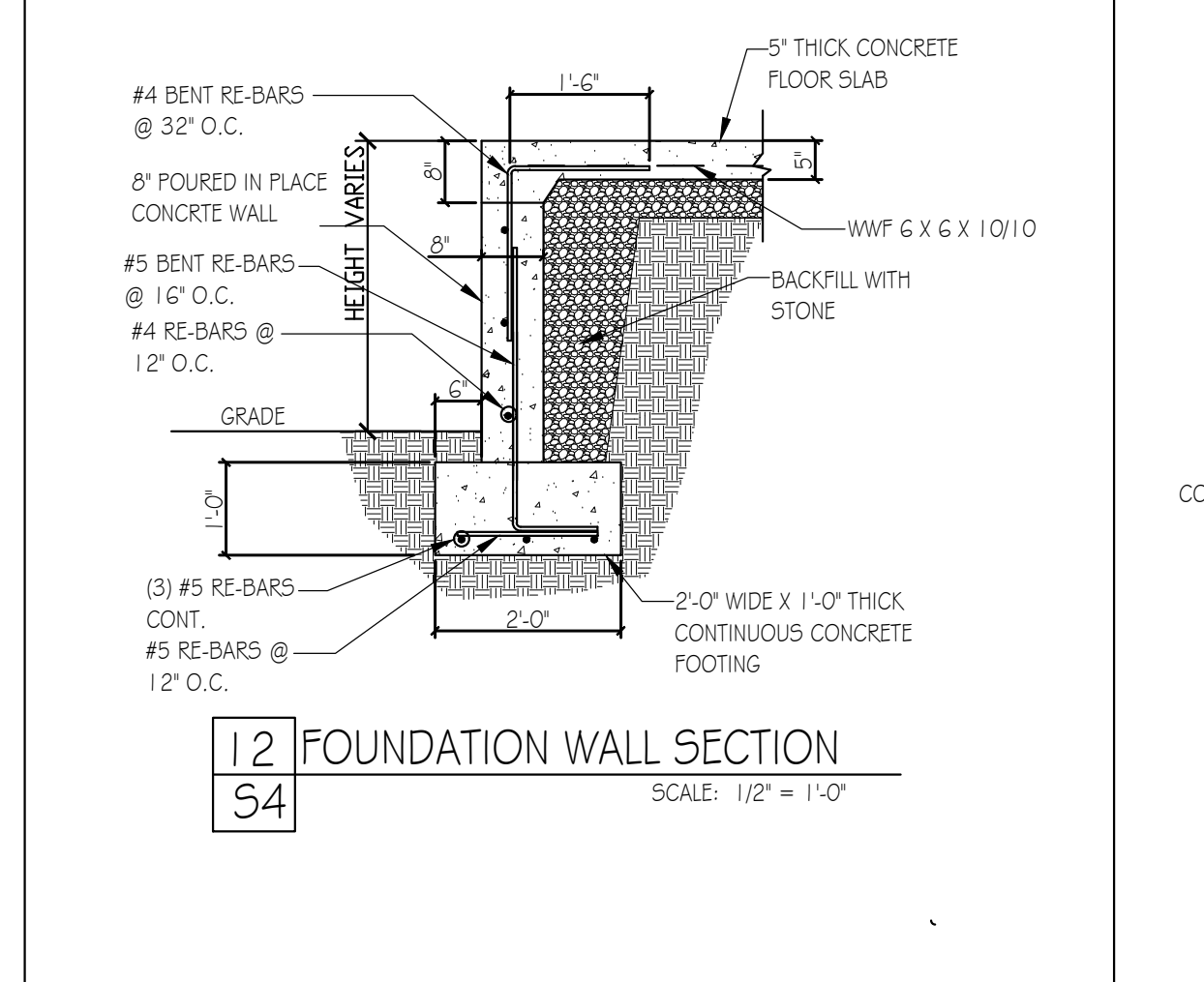
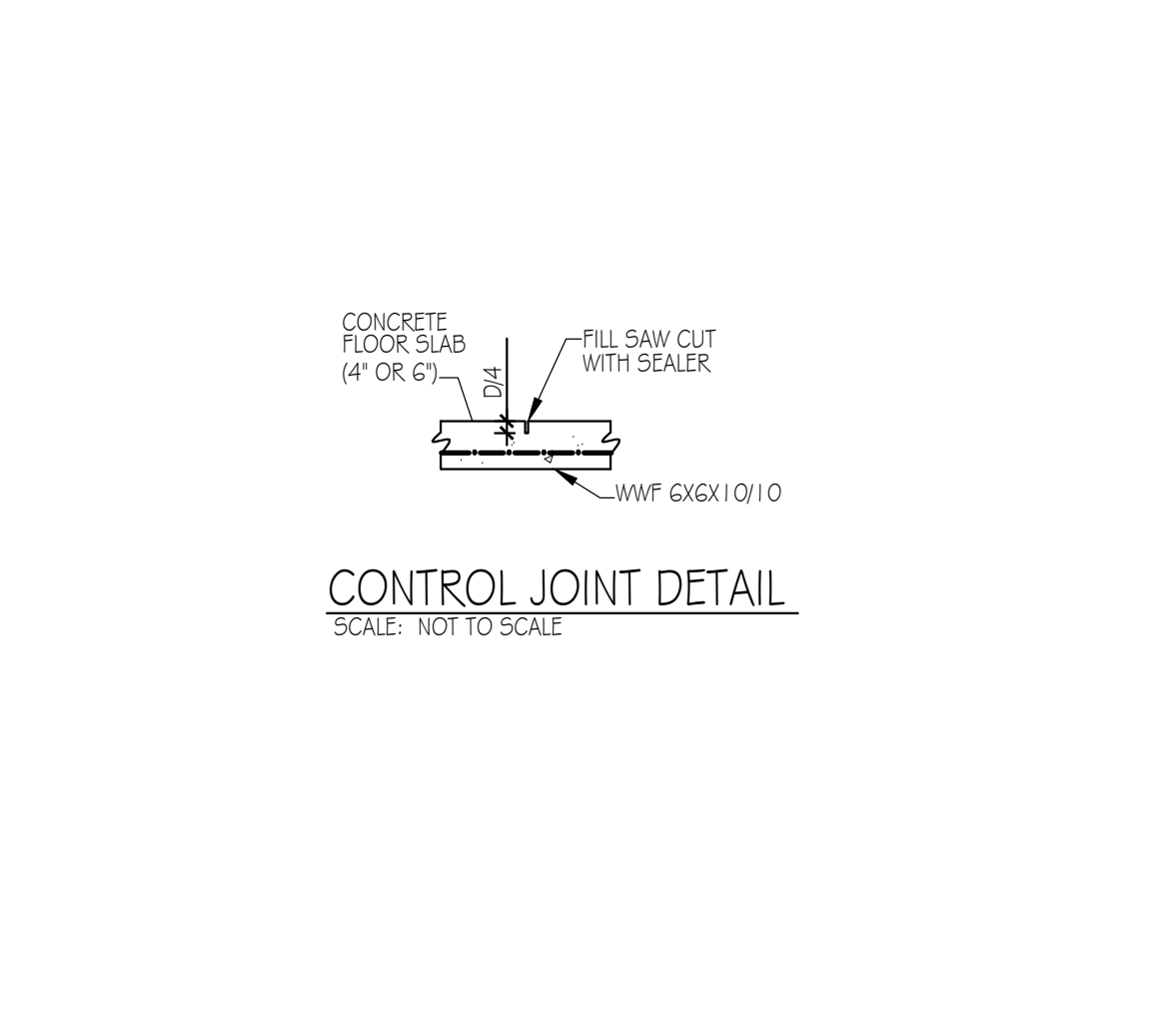
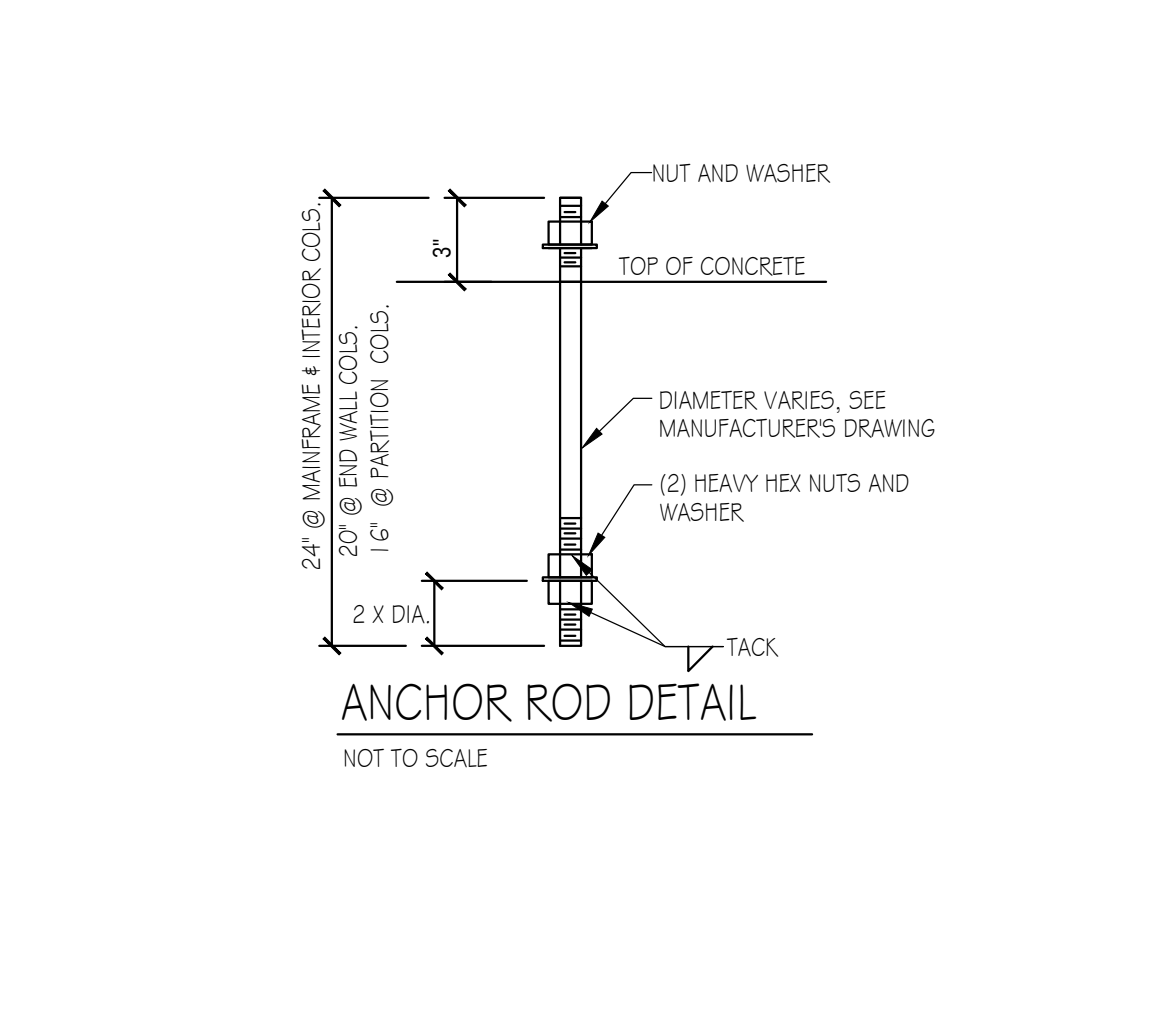
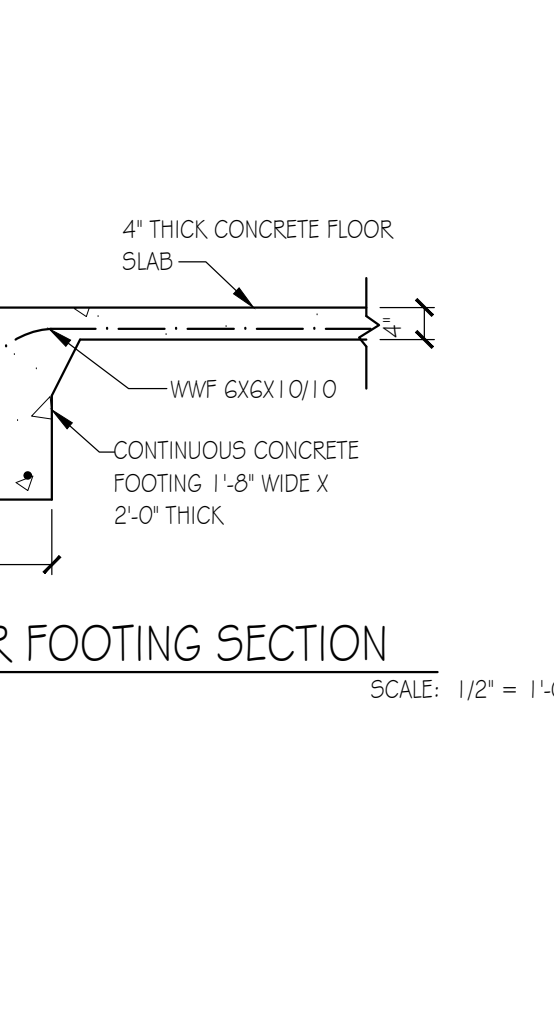
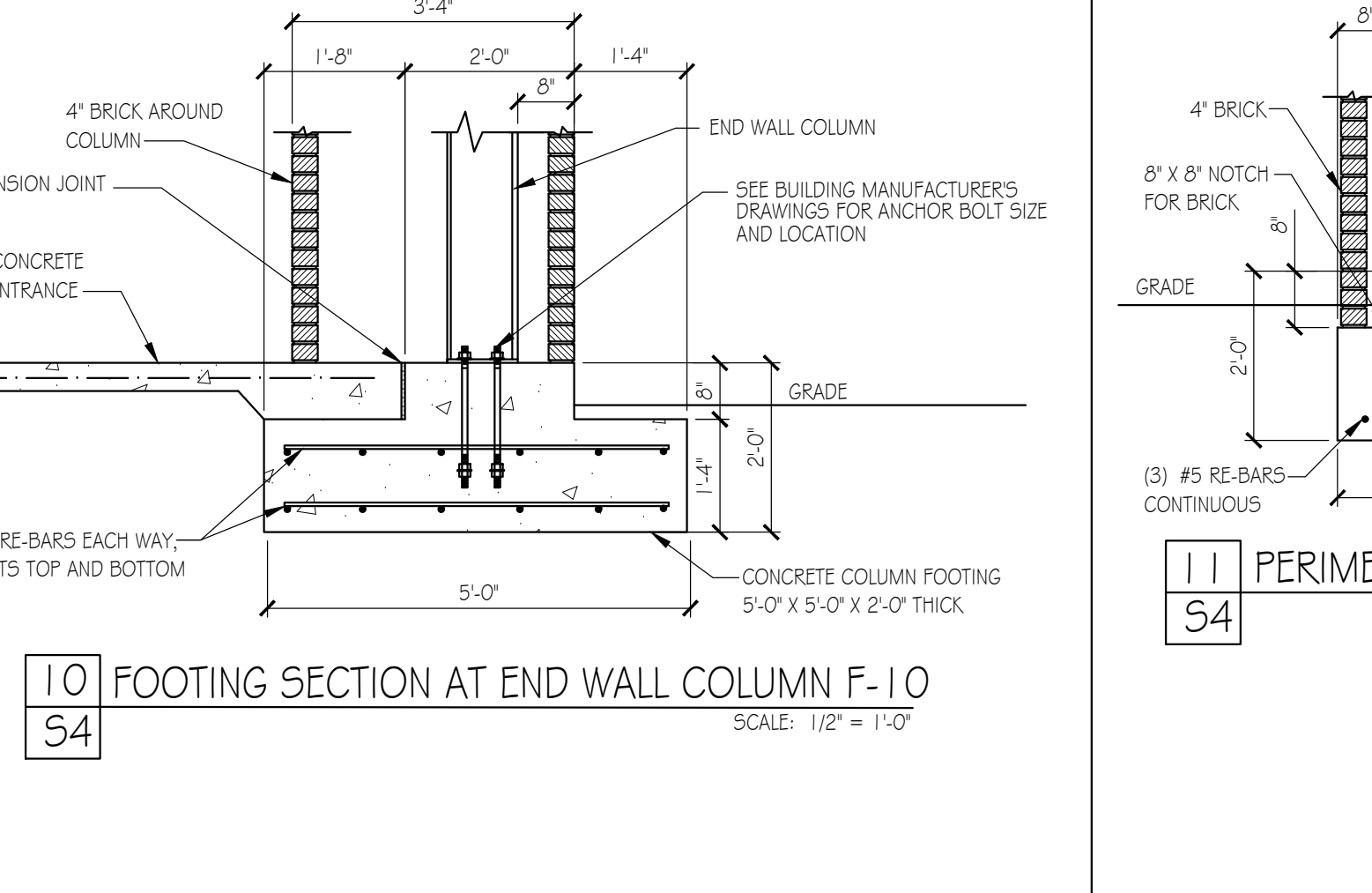
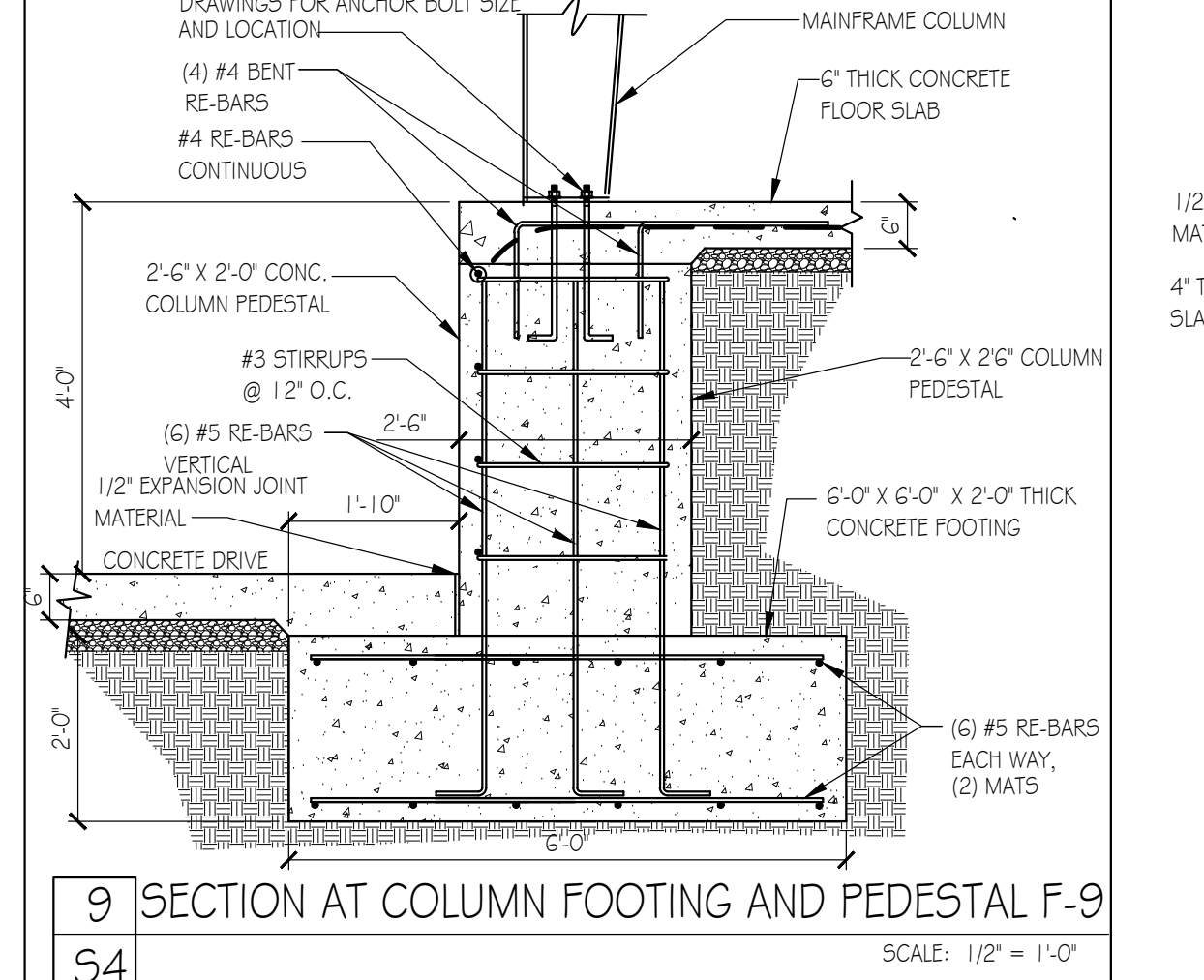
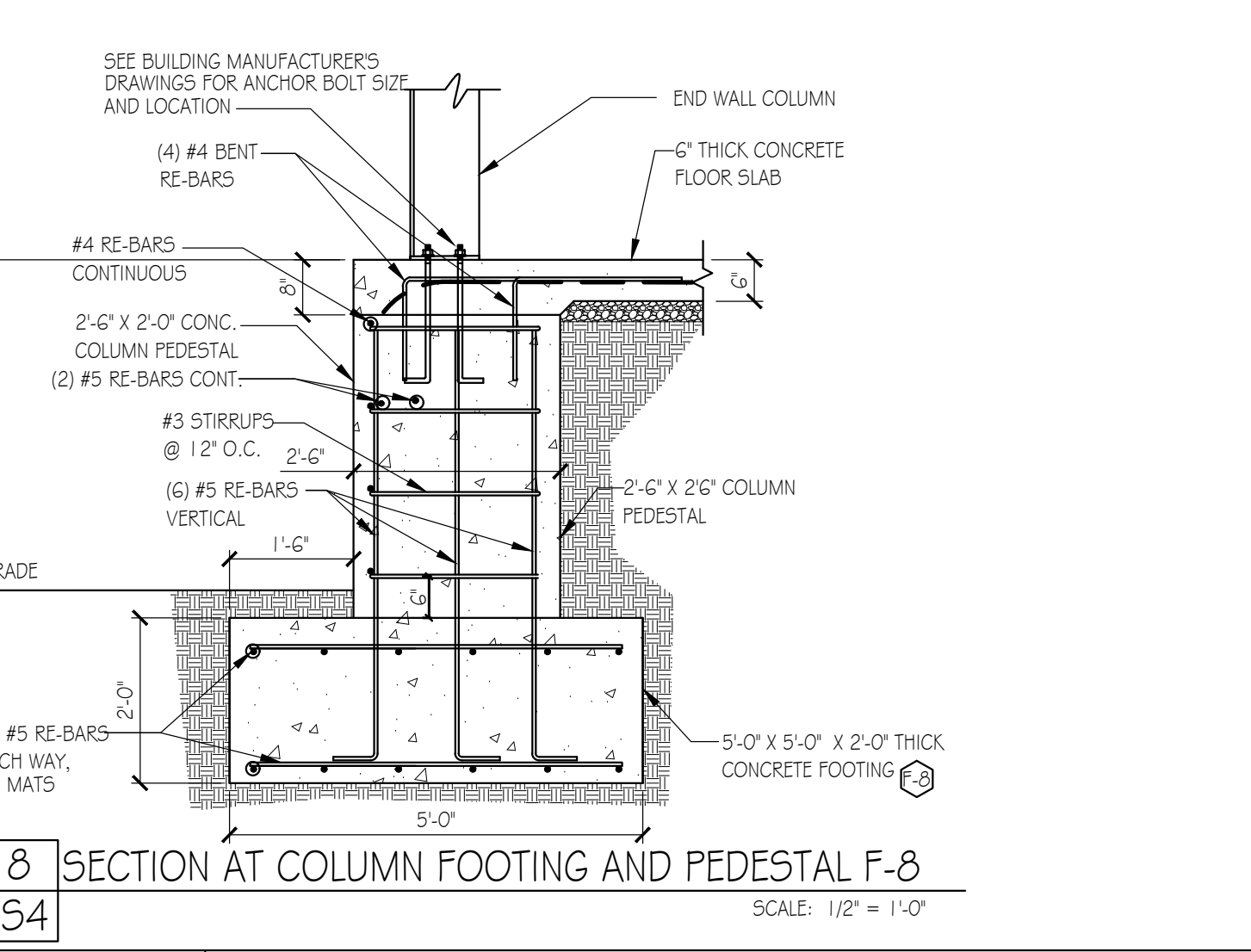
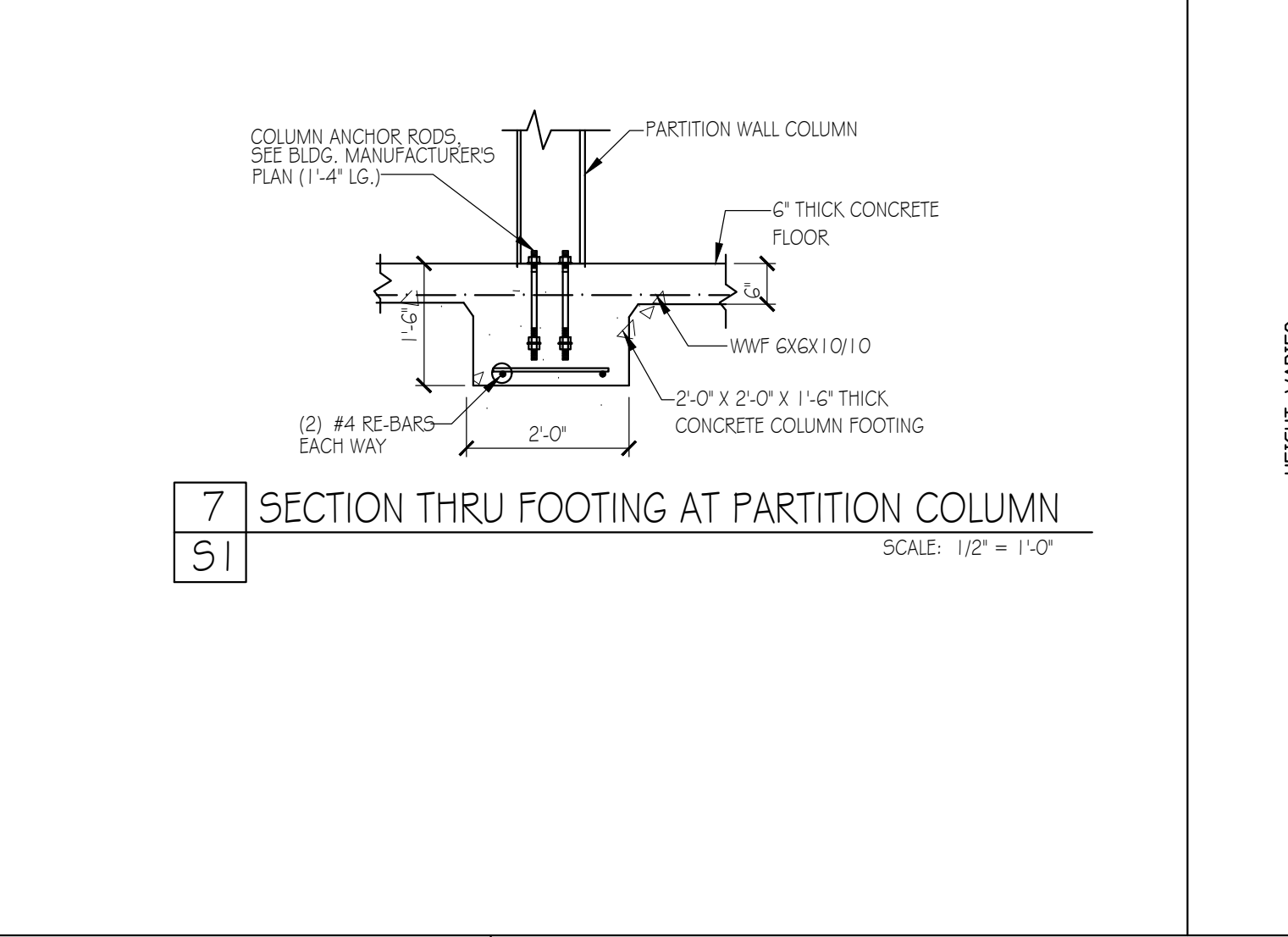
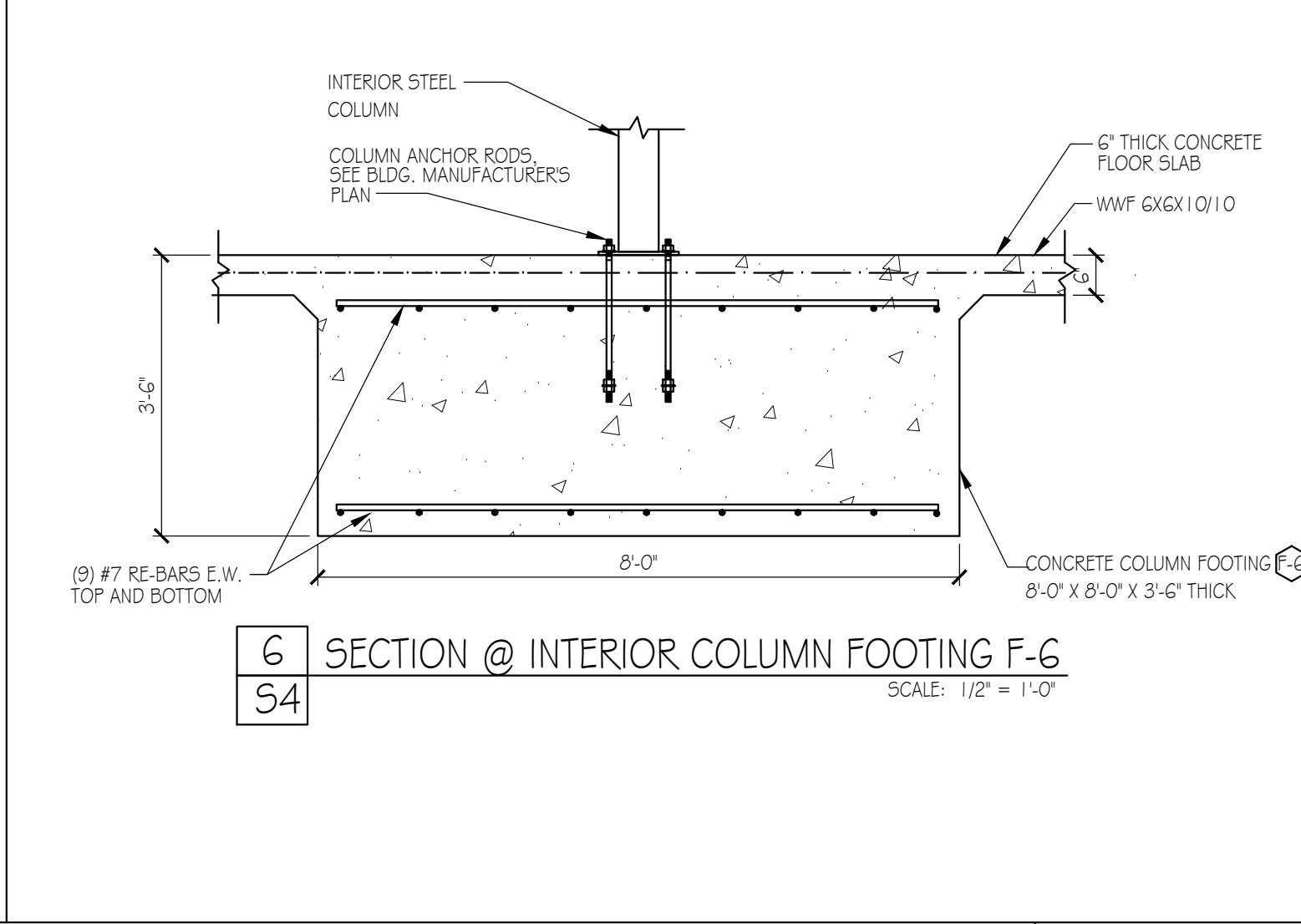
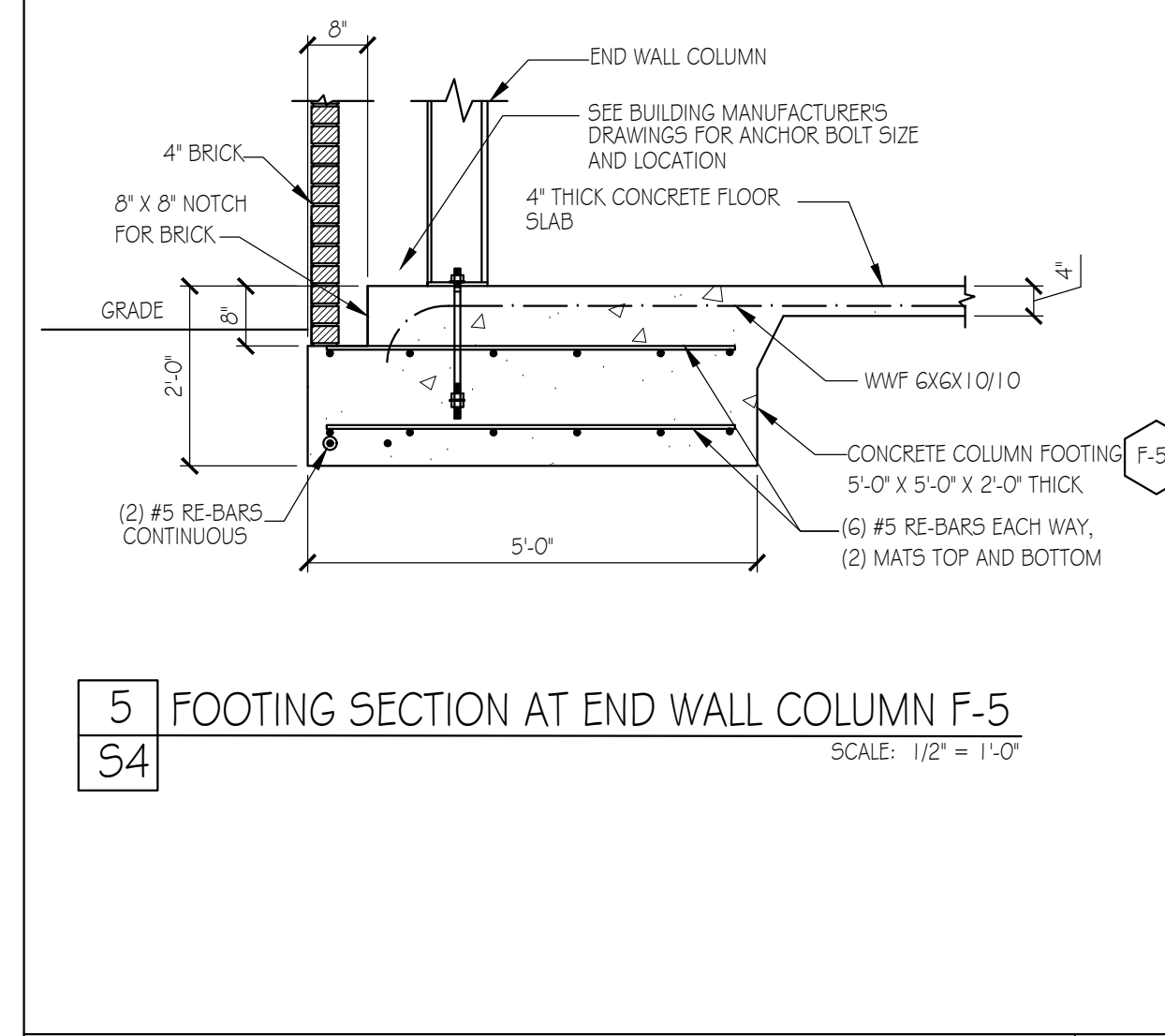
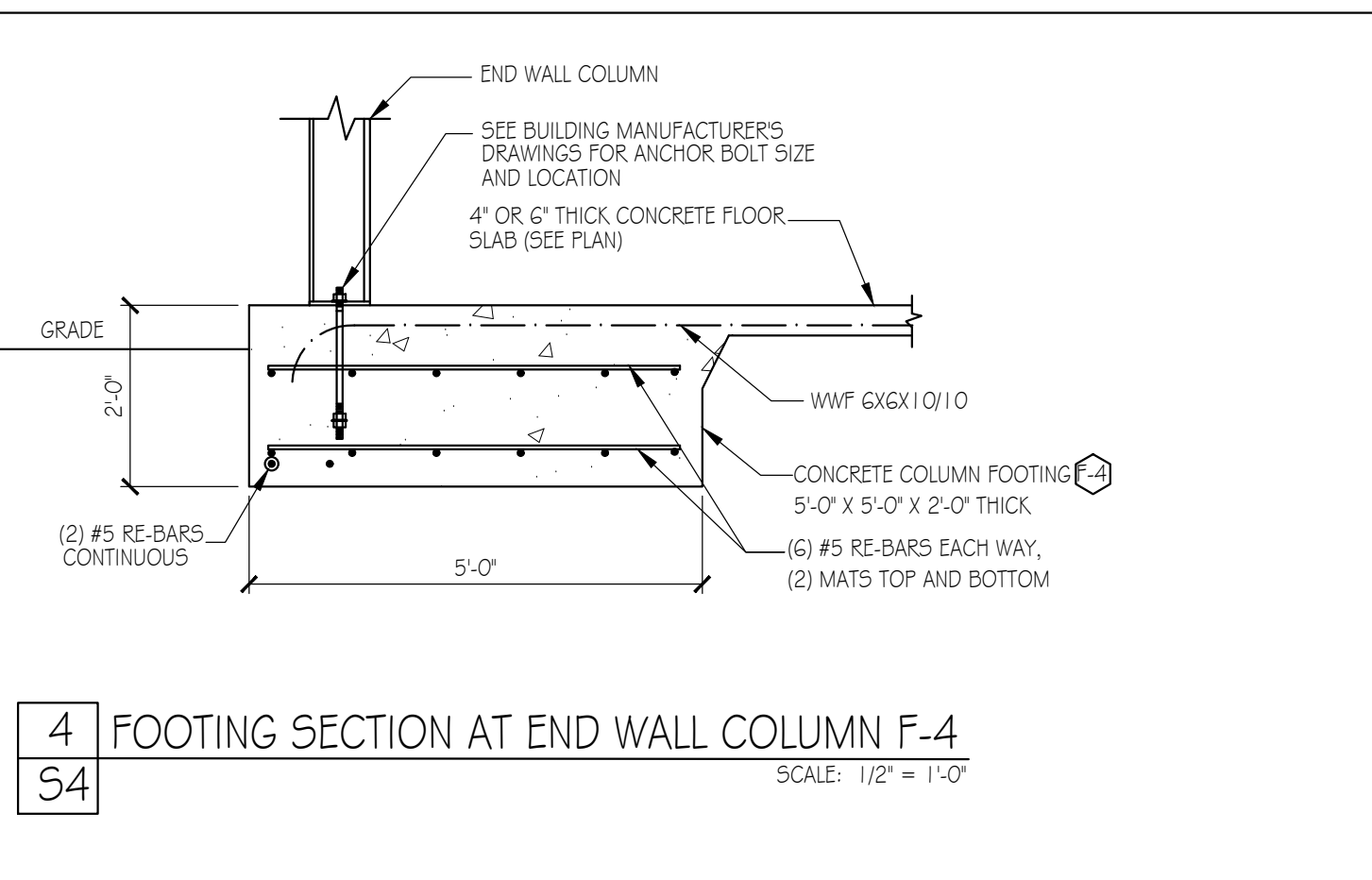
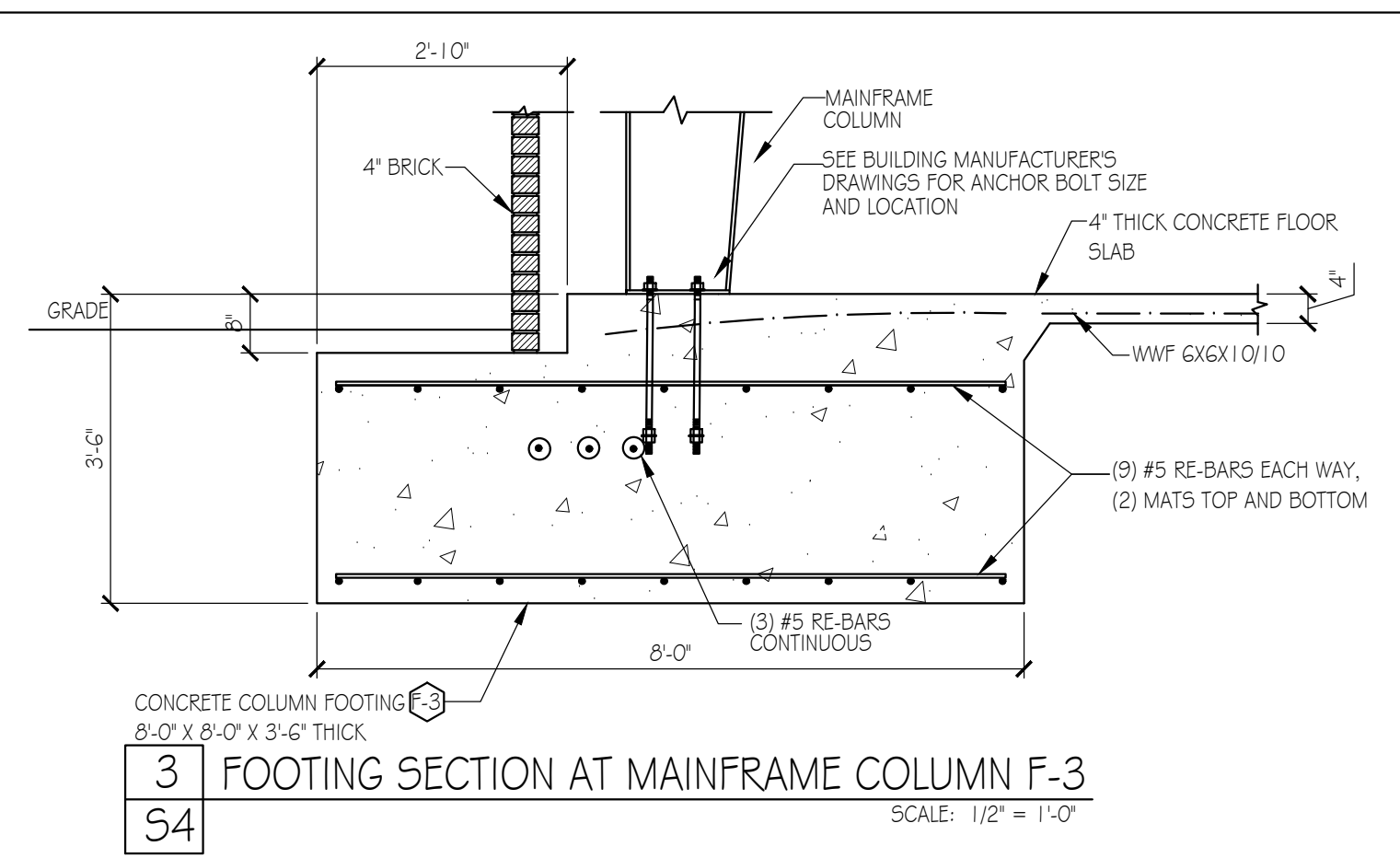
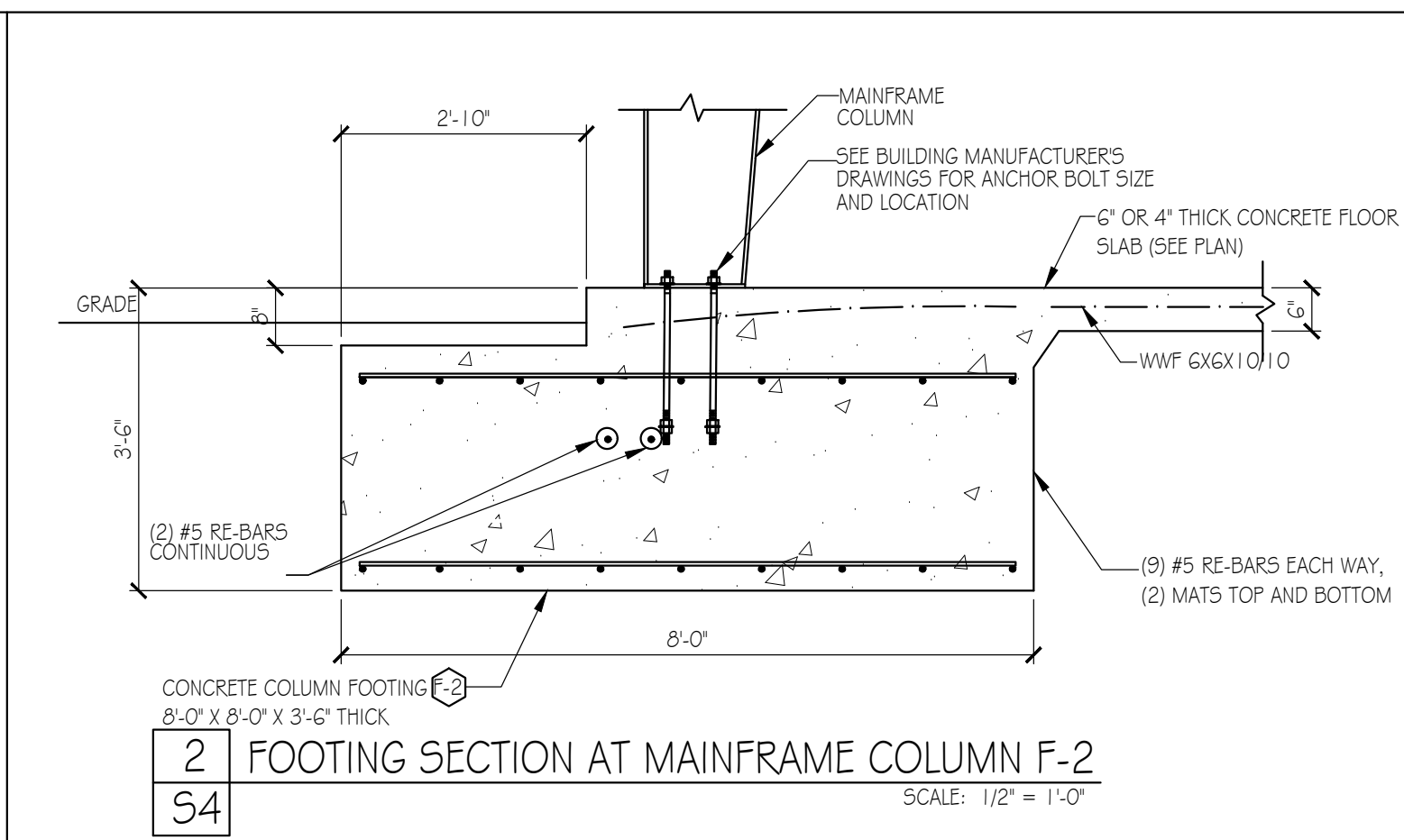
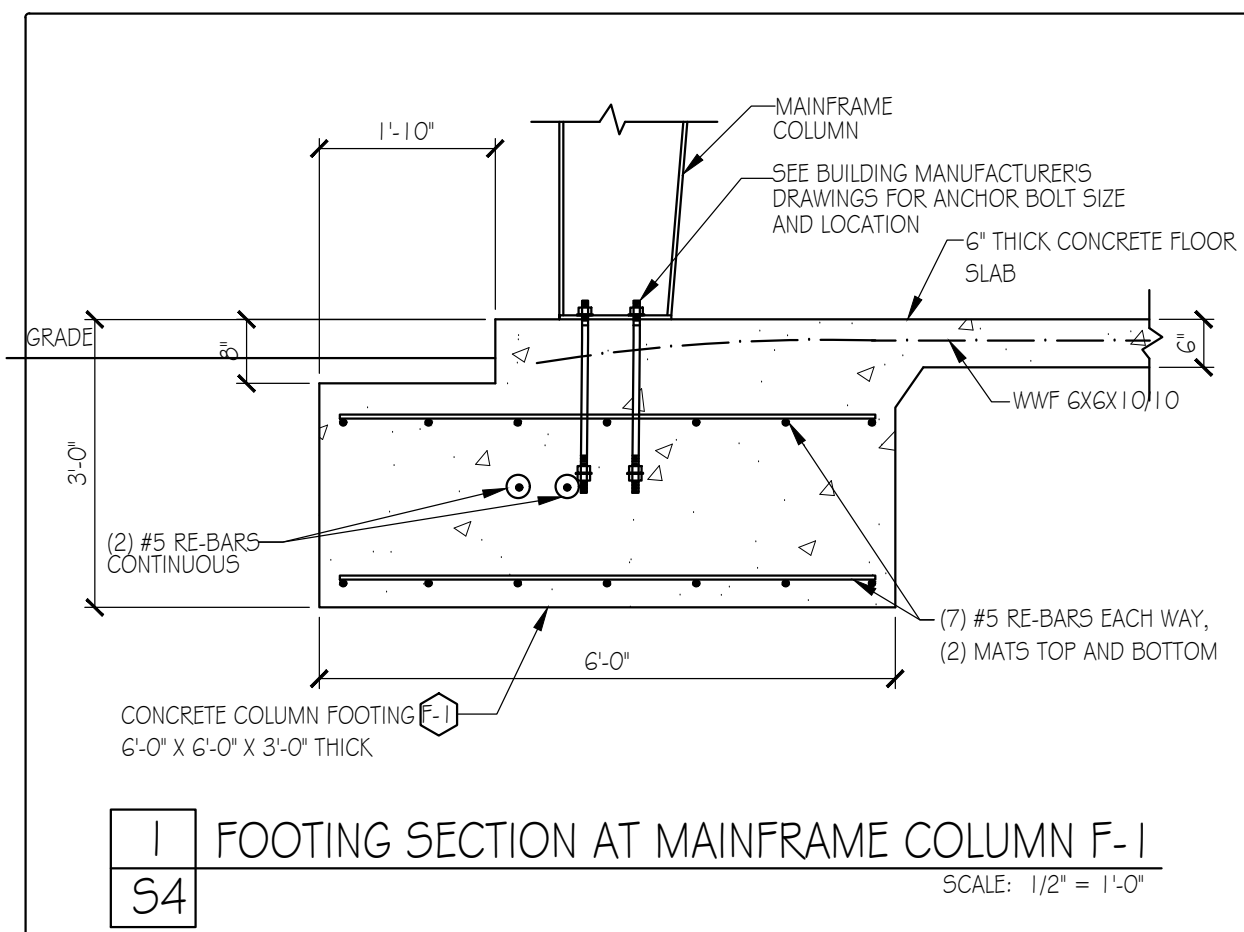
JOB NO: MAJESTIC.10.16
DRAWN BY: WTG
DATE: OCT. 5, 2016
REVISIONS:



WILLIAM A. PERSON, PE
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PROJECT: MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGSVILLE, NORTH CAROLINA

JOB NO: MAJESTIC.10.16
DRAWN BY: WTG
DATE: OCT. 5, 2016
REVISIONS:



PROJECT

MAJESTIC MARBLE AND GLASS

JEFFREY WAY

YOUNGSVILLE, NORTH CAROLINA

JOB NO:

MAJESTIC. 10.16

DRAWN BY:

WIG

DATE:

OCT. 7, 2016

REVISIONS:

OCT. 25, 2016 THICKENED SLAB DETAIL REMOVED

WILLIAM A. PERSON, PE

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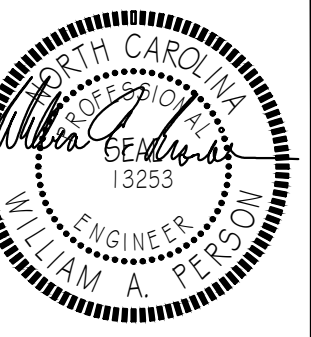
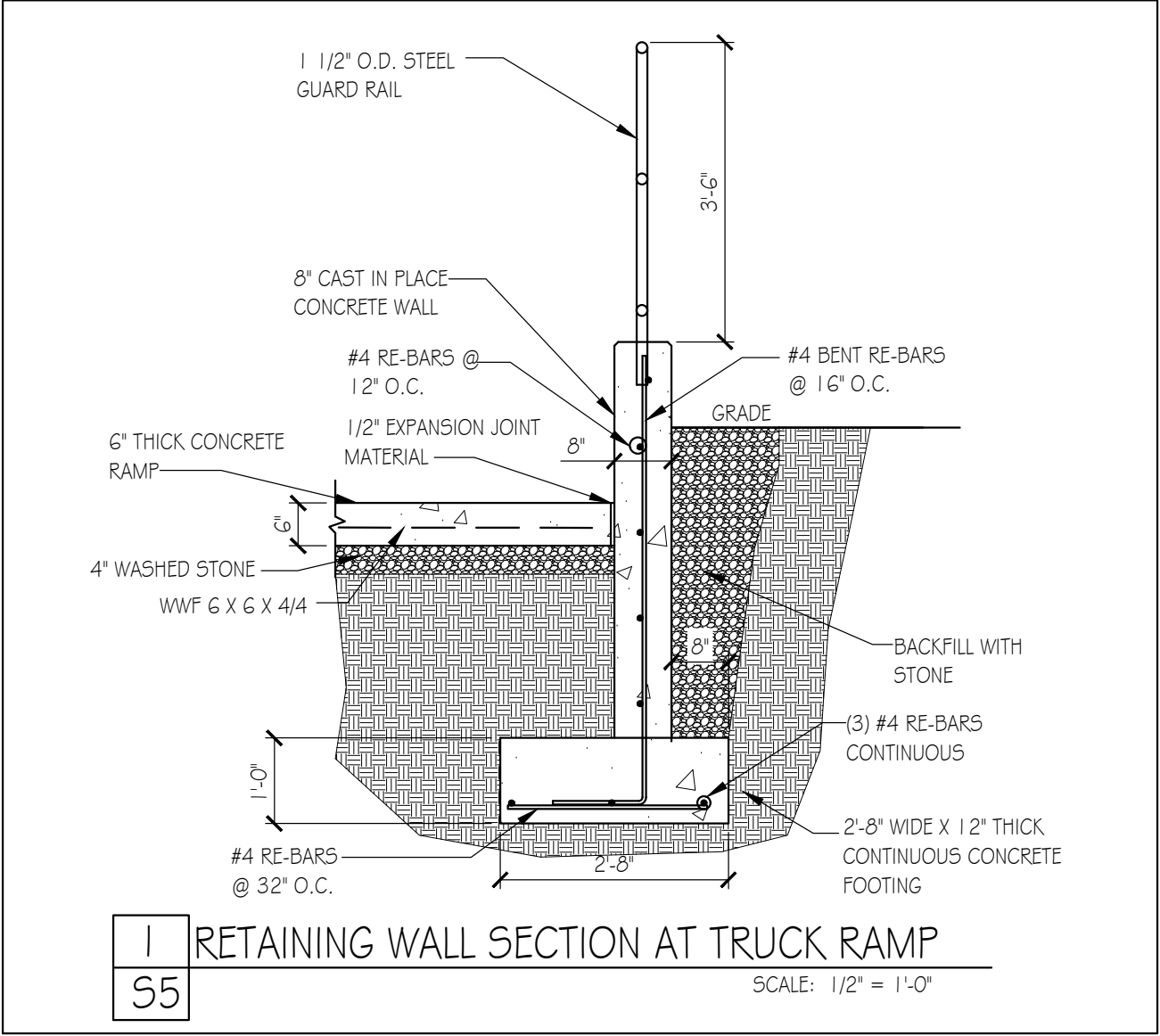
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REVISIONS:

OCT. 25, 2016 THICKENED SLAB DETAIL REMOVED

S-4



WILLIAM A. PERSON, PE
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PROJECT: MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGSMVILLE, NORTH CAROLINA

SHEET NO. MAJESTIC.10.16

DRAWN BY: WTC

DATE: OCT. 7, 2016

REVISIONS:
OCT. 25, 2016
MEZZANINE FRAMING
PLAN DELETED
DELETED

S-5

STRUCTURAL NOTES

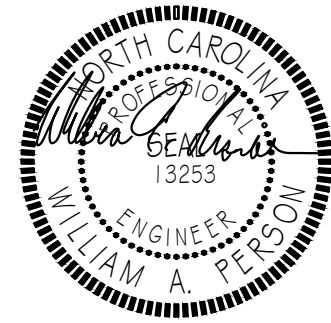
- A. DESIGN CRITERIA
- THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE NORTH CAROLINA STATE BUILDING CODE.
 - THE DESIGN LOADS ARE AS FOLLOWS:
 - ROOF LOAD = 20 PSF
 - SNOW LOAD = 15 PSF
 - WIND LOAD:
BASIC WIND SPEED = 95 MPH
WIND IMPORTANCE FACTOR = 1
BUILDING CATEGORY = I
WIND EXPOSURE = C
 - SEISMIC
 S_s = 14.32 % G.
 S_1 = 7.32% G.
SITE CLASSIFICATION = D
BASIC SEISMIC FORCE RESISTING SYSTEM = ORDINARY MOMENT FRAMES
DESIGN BASE SHEAR = 29 K
DESIGN ANALYSIS = EQUIVALENT LATERAL FORCE
 - ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
- B. SITE PREPARATION AND FOUNDATIONS
- THE SITE PREPARATION FOR THE FOUNDATIONS SHALL BE IN ACCORDANCE WITH THE SUBSURFACE EXPLORATION REPORT AS PREPARED BY SAME.
 - EXCAVATIONS FOR FOOTINGS SHALL EXTEND INTO THE NATURAL AND DENSE SAND STRATA.
 - AFTER EXCAVATING FOOTINGS, TAMP THE BOTTOM OF THE EXCAVATIONS WITH A MECHANICAL TAMPER.
 - BEFORE PLACING FILL SOILS, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, ETC. FROM THE BUILDING SITE.
 - PROOF ROLL THE EXPOSED SUB GRADE UNTIL A SURFACE DENSITY OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
 - BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR AT A MINIMUM DEPTH OF 1'-0" BELOW FINAL GRADE FOR FROST PROTECTION.
 - THE SLAB ON GRADE IS 4" OR 6" THICK PLAIN CONCRETE POURED OVER A 6 MIL VAPOR BARRIER ON 4" OF WASHED STONE AS DESCRIBED IN THE SAME REPORT. CONSTRUCTION JOINTS SHALL BE PLACED AS SHOWN ON DRAWINGS.
 - WHERE FOOTING STEPS ARE NECESSARY, THEY SHALL BE NO STEEPER THAN ONE VERTICAL AND TWO HORIZONTAL.
- C. CONCRETE
- PROVIDE MINIMUM CONCRETE COVER FOR ALL REINFORCEMENT IN ACCORDANCE WITH ACI 301-96, STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE.
 - CONCRETE SHALL BE NORMAL WEIGHT WITH A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
 - MIX DESIGNS SHALL BE IN ACCORDANCE WITH ACI 301-96 AND ACI 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
 - ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301-96.
 - VIBRATE CONCRETE IN ALL FOOTING EXCAVATIONS.
 - USE OF CALCIUM CHLORIDE, CHLORIDE IONS OR OTHER SALTS IS NOT PERMITTED.
 - CHAMFER OR ROUND ALL EXPOSED CORNERS, MINIMUM 3/4".
 - REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE COVER UNLESS NOTED OTHERWISE:

CONCRETE AGAINST EARTH (NOT FORMED).....3"

FORMED CONCRETE EXPOSED TO EARTH OR WEATHER
#6 BARS AND LARGER.....2"
#5 BARS AND SMALLER.....1 1/2"

CONCRETE NOT EXPOSED TO EARTH OR WEATHER
SLABS AND WALLS 1"
BEAM STIRRUPS AND COLUMN TIES 1 1/2"
 - WELDED WIRE FABRIC (MESH) SHALL CONFORM TO ASTM A185 AND SHALL BE PROVIDED IN FLAT SHEETS (ROLLS NOT PERMITTED).
 - DO NOT PLACE PIPES OR DUCTS EXCEEDING ONE THIRD THE SLAB OR WALL THICKNESS WITHIN THE SLAB OR WALL UNLESS SPECIFICALLY SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
 - DO NOT TACK WELD REINFORCING STEEL UNLESS APPROVED OR DIRECTED BY THE STRUCTURAL ENGINEER.
- D. REINFORCING STEEL
- REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60.
 - BAR SUPPORTS, DESIGN, REBAR PLACEMENT DRAWINGS, FABRICATION AND PLACEMENT OF REINFORCING SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE CODE AND DETAILING MANUAL, LATEST EDITION. SUPPORT ALL REINFORCING BARS ON BRICKS IS NOT AN APPROVED METHOD.
 - ALL REINFORCING STEEL LAPS SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS OTHERWISE NOTED, 24" MINIMUM. SEE DRAWING DETAILS FOR REINFORCING ARRANGEMENT AT CORNERS OF EACH RUN OF LONGITUDINAL REINFORCING.
- E. STRUCTURAL AND MISCELLANEOUS STEEL
- ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO THE GRADES LISTED BELOW UNLESS SPECIFIED OTHERWISE ON PLANS AND DETAILS:
 - WIDE FLANGE SHAPES: ASTM A992, GRADE 50
 - ALL OTHER ROLLED SHAPES EXCEPT FOR PIPE AND HSS SHAPES: ASTM 36
 - ANCHOR BOLTS: ASTM 36
 - STEEL PIPE: ASTM A53, TPE "E" OR "S", GRADE "B", Fy = 35 KSI.
 - HSS SHAPES: ASTM A500, GRADE "B", Fy=46 KSI.
 - ERECTION AND FABRICATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, AISC, AND THE CODE OF STANDARD PRACTICE, AISC.
 - BOLTED CONECTIONS SHALL CONFORM TO THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, APPROVED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS OF THE ENGINEERING FOUNDATION. ALL A325 OR A490 BOLTS SHALL BE TIGHTENED BY USING THE TURN-OF-NUT METHOD. ALTERNATIVE TIGHTENING METHODS OR STRUCTURAL ENGINEER FOR APPROVAL.
 - ALL SHOP AND FIELD WELDS SHALL CONFORM TO AWS D1.1. USE E70XX WELD ELECTRODES. SHOP DRAWINGS WILL INDICATE THE SIZE, LENGTH AND TYPE OF EACH WELD ON ALL SHOP WELDED CONNECTIONS.
 - SPlicing OF STEEL MEMBERS, UNLESS SHOWN ON PLANS AND DETAILS, IS PROHIBITED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
 - NO FIELD CUTTING OF STRUCTURAL MEMBERS, UNLESS SHOWN ON PLANS AND DETAILS, IS PROHIBITED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
 - ALL STRUCTURAL STEEL SHALL BE CLEANED IN ACCORDANCE WITH SSPC-SP3 AND RECEIVE ONE SHOP COAT OF FABRICATORS STANDARD PRIMER.
 - THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SHORING OF THE STRUCTURE UNTIL ALL COMPONENTS ARE ERECTED AND ALL CONNECTIONS ARE FULLY MADE. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL FRAMING IS COMPLETED AND THE FLOOR AND ROOF DIAPHRAGM CONNECTIONS ARE COMPLETED.
 - CONTRACTOR SHALL BRACE WALLS DURING CONSTRUCTION AGAINST WIND AND CONSTRUCTION LOADS.
 - CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, PROCEDURES AND SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- F. MASONRY
- CONCRETE MASONRY WORK SHALL CONFORM TO THE NATIONAL CONCRETE MASONRY ASSOCIATION, SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY.
 - HOLLOW LOAD BEARING CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT AND CONFORM TO ASTM C90, GRADE N-1.
 - SOLID LOAD BEARING CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT AND CONFORM TO ASTM C145, GRADE N-1.
 - NON LOAD BEARING CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT AND CONFORM TO ASTM C129, TYPE 1.
 - MORTAR SHALL CONFORM TO ASTM C270 TYPE S WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.
 - MASONRY JOINT REINFORCING SHALL BE GALVANIZED, 9 GAUGE, TRUSS TYPE, CONTINUOUS IN HORIZONTAL JOINT AT 16" O.C. WITH 6" MINIMUM LAP LENGTH. LOCATE JOINT REINFORCING IN FIRST AND SECOND BED JOINTS, AND IMMEDIATELY ABOVE UNTELS, AND BELOW SILLS AT MASONRY OPENINGS.

- G. METAL DECK (MEZZANINE)
- MEZZANINE DECK SHALL BE 1" DEEP, 20 GAUGE AND MEET ALL OF THE REQUIREMENTS OF THE STEEL DECK INSTITUTE. DECK UNITS SHALL BE PRIMED AND PAINTED. 3/4" PLYWOOD TO BE INSTALLED OVER METAL DECK.
 - DECK SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS.
 - DECK SHALL BE FASTENED TO ITS SUPPORTING MEMBERS AS FOLLOWS:
USE 3 - #10 SDS SCREWS EQUALLY SPACED BETWEEN SUPPORTING MEMBERS
- H. LIGHT GAUGE METAL FRAMING
- LIGHT GAUGE METAL FRAMING SHALL COMPLY WITH ASTM C645, A568 AND A4446.
ALL MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A525, OR ALUMINUMIZING COATED IN ACCORDANCE WITH ASTM A792.
 - GENERAL INSTALLATION
 - PLACE STUDS AT 16" O.C., BUT NO MORE THAN 2' FROM ABUTTING WALLS AND AT EACH SIDE OF OPENINGS.
 - INSTALL COLD FORMED METAL FRAMING PLUMB, SQUARE, TRUE TO LINE AND SECURELY FASTENED AS REQUIRED TO WITHSTAND THE DESIGN CRITERIA.
 - FOLLOW THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - CUT MEMBERS BY SHEARING OR SAWING.
 - INSTALL MEMBERS IN SINGLE PIECE LENGTHS EXCEPT THAT TRACKS MAY BE SPLICED, BUTT-WELDED, OR EACH LENGTH ANCHORED TO A COMMON BUILDING FRAME ELEMENT.
 - INSTALL INSULATION IN FRAMING SPACES OF INSULATED ASSEMBLIES MADE INACCESSIBLE AFTER ERECTION.
 - REPAIRS AND TOUCH-UP: CLEAN DAMAGED SURFACES AND COATINGS. TOUCH-UP FIELD WELDS AND DAMAGED GALVANIZED SURFACES WITH GALVANIZING REPAIR COMPOUND.
 - TOLERANCES
 - VARIATION FROM PLUMB, LEVEL AND TRUE TO LINE: 1/8" INCHS IN 10 FEET 1/8"
 - FRAME CORNERS WITH THREE STUDS
 - FRAME WALL OPENINGS WIDER THAN STUD SPACING WITH DOUBLE STUDS AT EACH JAMB.
 - INSTALL SUPPLEMENTARY FRAMING OR BLOCKING TO SUPPORT WORK ATTACHED TO FRAMING. WHERE TYPE OF SUPPORT IS NOT SHOWN, COMPLY WITH INDUSTRY STANDARDS.
- J. GENERAL
- THE GENERAL CONTRACTOR BEFORE COMMENCEMENT OF ANY WORK SHALL VERIFY AND COORDINATE ALL DIMENSIONS ON THE STRUCTURAL DRAWINGS WITH THOSE ON THE ARCHITECTURAL DRAWINGS.
 - FOUNDATION IS DESIGNED FOR ANCHOR BOLT REACTIONS AS SHOWN ON CHIEF BUILDING DRAWINGS. ORDER NO. 3013755



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PROJECT: MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGSVILLE, NORTH CAROLINA

JOB NO.
MAJESTIC.10.16

DRAWN BY:
WTG

DATE:
OCT. 5, 2016

REVISIONS:

S-6

SPLIT SYSTEM AIR HANDLER SCHEDULE																	
MARK	MFG / MODEL #	NOMINAL CAPACITY	AIR FLOW		HEATING CAPACITY				COOLING CAPACITY			ELECTRICAL			WEIGHT	REMARKS	
			SUPPLY	MIN. DA	FAN MOTORS	FAN SUPPLY	ESP	OUTPUT	AUX ELEC HEAT	EAT WB/DB	TOTAL	SENSIBLE	V/PH	NCA			MDCP
			TONS	CFM	CFM	MDL	in wg	MBH	kW	STAGES	*F	MBH	MBH				LIBS
AH-1, 2, 3	TAMAD0824S31SA	3	1200	SEE TABLE 1	1	.5	34.8	5	1	67/80	35.6	26.7	480/3	9.2	15	133	
AH-4, 5	TAMADAC08S41SA	4	1600	SEE TABLE 1	1	.5	45.8	5	1	67/80	47.4	35.5	480/3	9.2	15	143	
AH-6, 7	TAMADG05S1SA	5	2000	SEE TABLE 1	1	.5	57.3	5	1	67/80	58.9	44.9	480/3	12	15	159	

- | 480V CONVERSION KIT FOR AIR HANDLERS AH-1 THRU AH-7 | | | |
|---|-------|--------------|-------------|
| MFG / MODEL # | V/PH | HEATER WATTS | HEATER AMPS |
| WARREN TECHNOLOGY / WGM0505A | 480/3 | 4800 | 5.8 |

1. PROVIDE WITH PITCHED ROOF CURB & CAP FOR FLAT OR SLOPED ROOF, OR HOODED WALL WITH BACKDRAFT DAMPER CAP AS APPLICABLE.
2. PROVIDE WITH SQUARE TO ROUND DUCT ADAPTER AS NECESSARY
3. OR EQUAL BY LOREN COOK OR PENNBARRY OF TWIN CITY

FAN SCHEDULE							
MARK	MFG / MODEL #	TYPE	CFM	VOLT/PH	FLA	dBA @ 5'	NOTES
F1-F5	CANARM / LF1-S10-F1	IN-WALL	3200	120/1	4	73	1

- | LOUVER SCHEDULE | | | | |
|-----------------|-----------------|-------|---------|-------|
| MARK | MFG / MODEL # | SIZE | TYPE | NOTES |
| L1, L2 | RUSKIN / ELM6DV | 48x48 | IN-WALL | 1 |

- | REGISTER & GRILLE SCHEDULE | | | | | | |
|----------------------------|---------------|---------|-------|----------|--------------------------------------|-------|
| MARK | MFG | MODEL # | SIZE | MOUNTING | DESCRIPTION | NOTES |
| A | HART & COOLEY | HVS | 24X24 | LAY-IN | 4-WAY DIFFUSER, BRIGHT WHITE | 1 |
| B | HART & COOLEY | SRE | 24X24 | SURFACE | STEEL, 4 WAY DIFFUSER, BRIGHT WHITE | 1 |
| R1 | HART & COOLEY | RH90 | | SURFACE | ALUMINUM SURFACE MOUNT RETURN GRILLE | 1 |

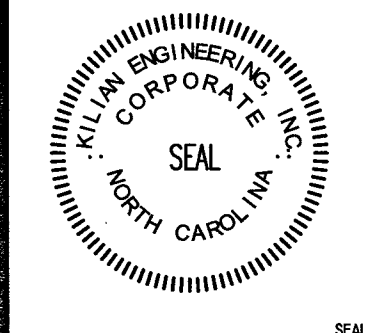
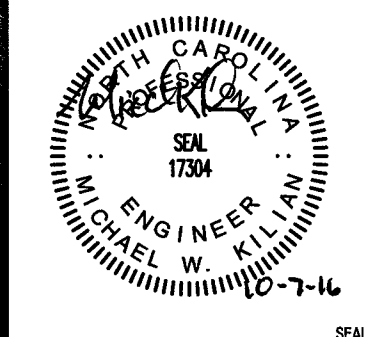
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Kilian

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Corporate License C-227

■ Plumbing
■ Mechanical
■ Electrical
■ Fire Alarm



NEW CONSTRUCTION FOR:

MAJESTIC MARBLE AND GLASS

JEFFREY WAY
YOUNGSVILLE, NC

REVISIONS

No.	DATE	DESCRIPTION
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CHECKED BY: MWK

MECHANICAL NOTES &
SCHEDULES

SHEET NO.

 $\mathcal{M}_1$

PROJECT NO: 16230

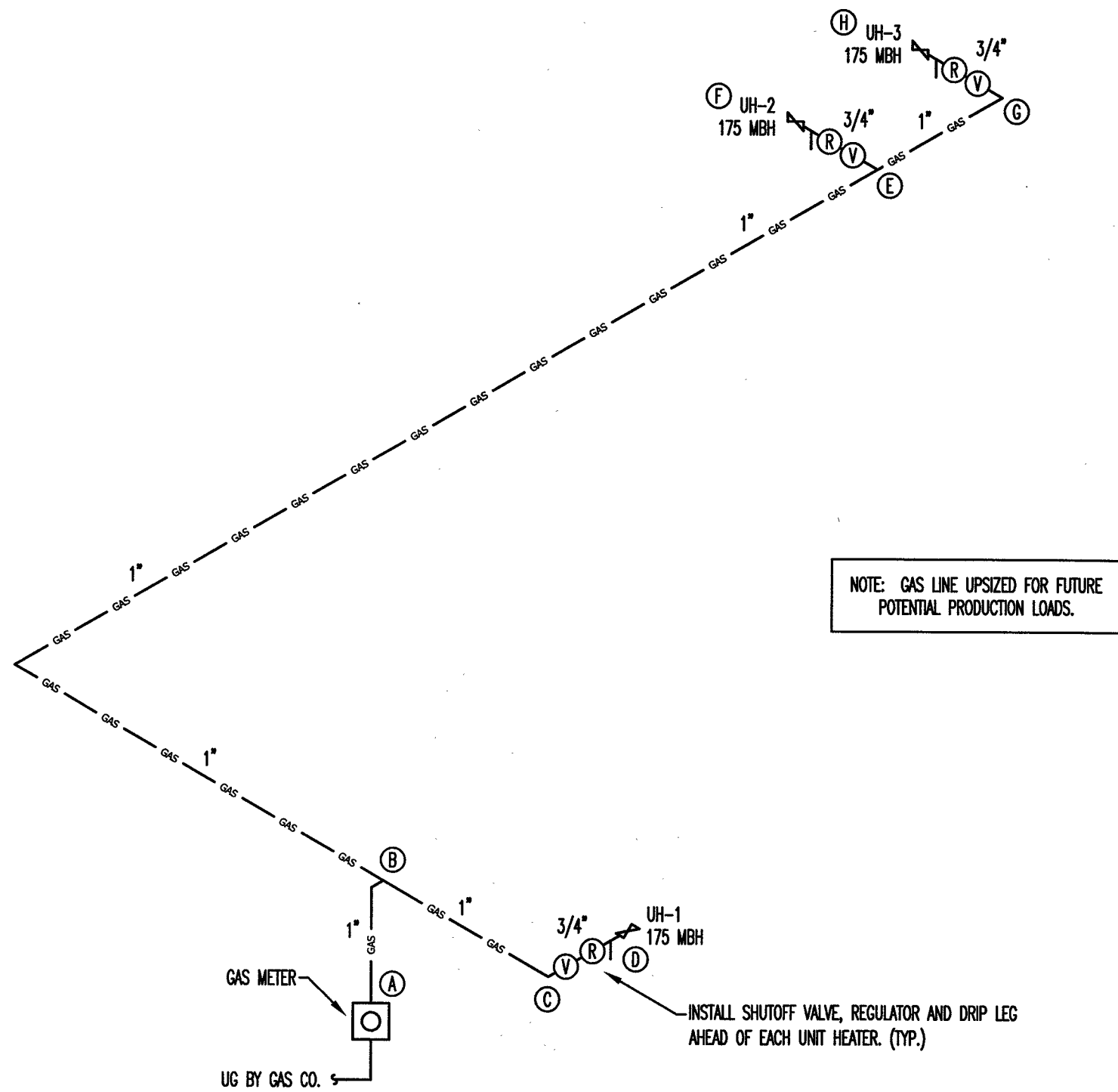
GENERAL GAS LINE PIPING NOTES

1. THE GAS PIPING CONTRACTOR (GPC) SHALL PROVIDE ALL MATERIALS AND LABOR AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM AS DESCRIBED BY THESE PLANS AND SPECIFICATIONS.
2. THE GPC SHALL INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH THE 2012 NORTH CAROLINA FUEL GAS CODE AND ANY APPLICABLE LOCAL CODES. WHERE A CONFLICT EXISTS BETWEEN THE ABOVE REQUIREMENTS, THE MORE STRINGENT SHALL BE USED. THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ENGINEER IN THE EVENT ANY PART OF THESE PLANS CONFLICTS WITH THE ABOVE REQUIREMENTS.
3. THE GPC SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY FOR THE COMPLETION OF THE WORK UNDER THIS CONTRACT.
4. DO NOT SCALE THESE DRAWINGS—REFER TO ARCHITECTURAL SHEETS FOR DIMENSIONS.
5. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS. CONTRACTOR SHALL CONTACT THE ENGINEER TO RESOLVE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS.
6. THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES PRIOR TO THE START OF CONSTRUCTION.
7. THE CONTRACTOR SHALL INSTALL HIGH PRESSURE REGULATORS AT EACH PIECE OF EQUIPMENT AS NECESSARY.
8. INSTALL A DRIP LEG IN GAS LINE AT EACH POINT WHERE CONDENSATE COULD COLLECT. ALL DRIP LEGS SHALL BE READILY ACCESSIBLE FOR CLEANING OR EMPTYING.
9. PIPING SHALL BE SCHEDULE 40 STEEL OR WROUGHT IRON AND COMPLY WITH ANSI/ASME B36.10, ASTM A 53, OR ASTM A 106.
10. ALL PIPES AND FITTINGS SHALL BE NEW, FREE OF DEFECTS, AND RATED FOR THE APPLICATION.
11. ALL PIPING SHALL BE INSTALLED SO AS NOT TO BE SUBJECT TO PHYSICAL DAMAGE.
12. PVC VENT PIPING SHALL NOT BE INSTALLED INDOORS.
13. THE TYPE OF PIPING JOINT USED SHALL BE SUITABLE FOR THE PRESSURE-TEMPERATURE CONDITIONS AND SHALL BE SELECTED CONSIDERING JOINT TIGHTNESS AND MECHANICAL STRENGTH UNDER THE SERVICE CONDITIONS.
14. PIPE JOINTS SHALL BE THREADED, FLANGED, BRAZED, OR WELDED.
15. FLEXIBILITY SHALL BE PROVIDED BY THE USE OF BENDS, LOOPS, OFFSETS, OR COUPLINGS OF THE SLIP TYPE. PROVISIONS SHALL BE MADE TO ABSORB THERMAL CHANGES BY THE USE OF EXPANSION JOINTS OF THE BELLONS TYPE OR BY THE USE OF "BALL" OR "SWIVEL" JOINTS. DO NOT USE EXPANSION JOINTS OF THE SLIP TYPE INSIDE THE BUILDING. PIPE ALIGNMENT GUIDES SHALL BE USED WITH EXPANSION JOINTS PER THE MFG.
16. ALL GAS PIPING SHALL BE LABELED TO INDICATE THE PRESSURE.
17. PIPE HANGERS AND SUPPORTS SHALL CONFORM TO ANSI/ASME SP-58.
18. BENDS SHALL BE MADE ONLY WITH BENDING TOOLS AND PROCEDURES INTENDED FOR THAT PURPOSE. DO NOT BEND PIPE THROUGH AN ARC OF MORE THAN 90°. ALL BENDS SHALL BE SMOOTH AND FREE OF CRACKS, BUCKLING, OR OTHER EVIDENCE OF DAMAGE.
19. INSTALL GAS SHUTOFF VALVES UPSTREAM OF EACH GAS REGULATOR. VALVES SHALL BE READILY ACCESSIBLE AND NOT SUBJECT TO PHYSICAL DAMAGE.
20. WHERE A SEDIMENT TRAP IS NOT INCORPORATED AS PART OF THE APPLIANCE, A SEDIMENT TRAP SHALL BE INSTALLED DOWNSTREAM OF THE APPLIANCE SHUTOFF VALVE AS CLOSE TO THE INLET OF THE APPLIANCE AS PRACTICAL.
21. PRIOR TO ACCEPTANCE BY THE OWNER, ALL GAS PIPING INSTALLATIONS SHALL BE INSPECTED AND PRESSURE TESTED IN ACCORDANCE WITH SECTION 406 OF THE NC FUEL GAS CODE.

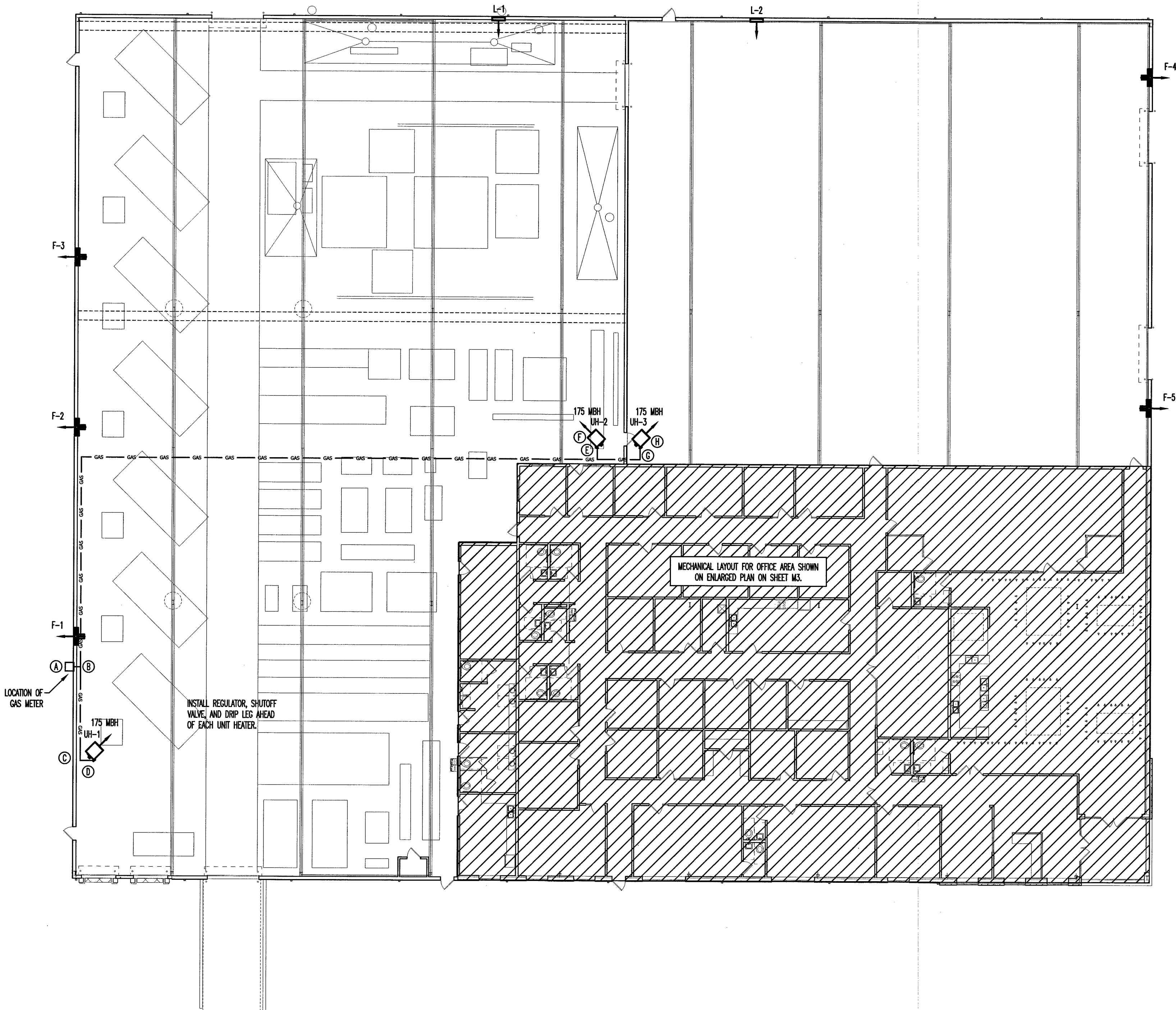
GAS LINE SIZING VERIFICATION TABLE				
PER NFPA 54 TABLE 402.4(3)				
SECTION	GAS LOAD	LINE SIZE	CAPACITY	PRESSURE
	MBTU/H	INCHES	CFH	PSI
A-B	525.0	1"	945.0	2
B-C	175.0	1"	945.0	2
C-D	175.0	3/4"	528.0	2
D-E	350.0	1"	945.0	2
E-F	175.0	1"	945.0	2
F-G	175.0	3/4"	528.0	2
G-H	175.0	3/4"	528.0	2

TOTAL DEVELOPED LENGTH < 300 FT.

GENERAL GAS NOTES AND LINE SIZING TABLE |



NATURAL GAS RISER DIAGRAM - NTS | 2

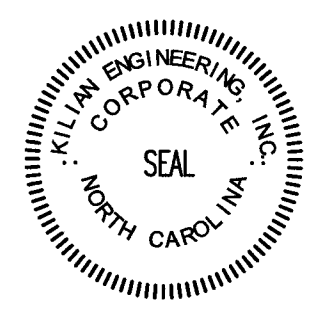
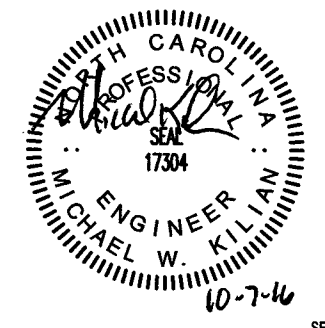


WAREHOUSE MECHANICAL PLAN - SCALE: 1/16" = 1'-0" | 3

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Plumbing ■ Mechanical
Electrical ■ Fire Alarm



NEW CONSTRUCTION FOR:

MAJESTIC MARBLE AND GLASS

JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION

DRAWN BY: CRL

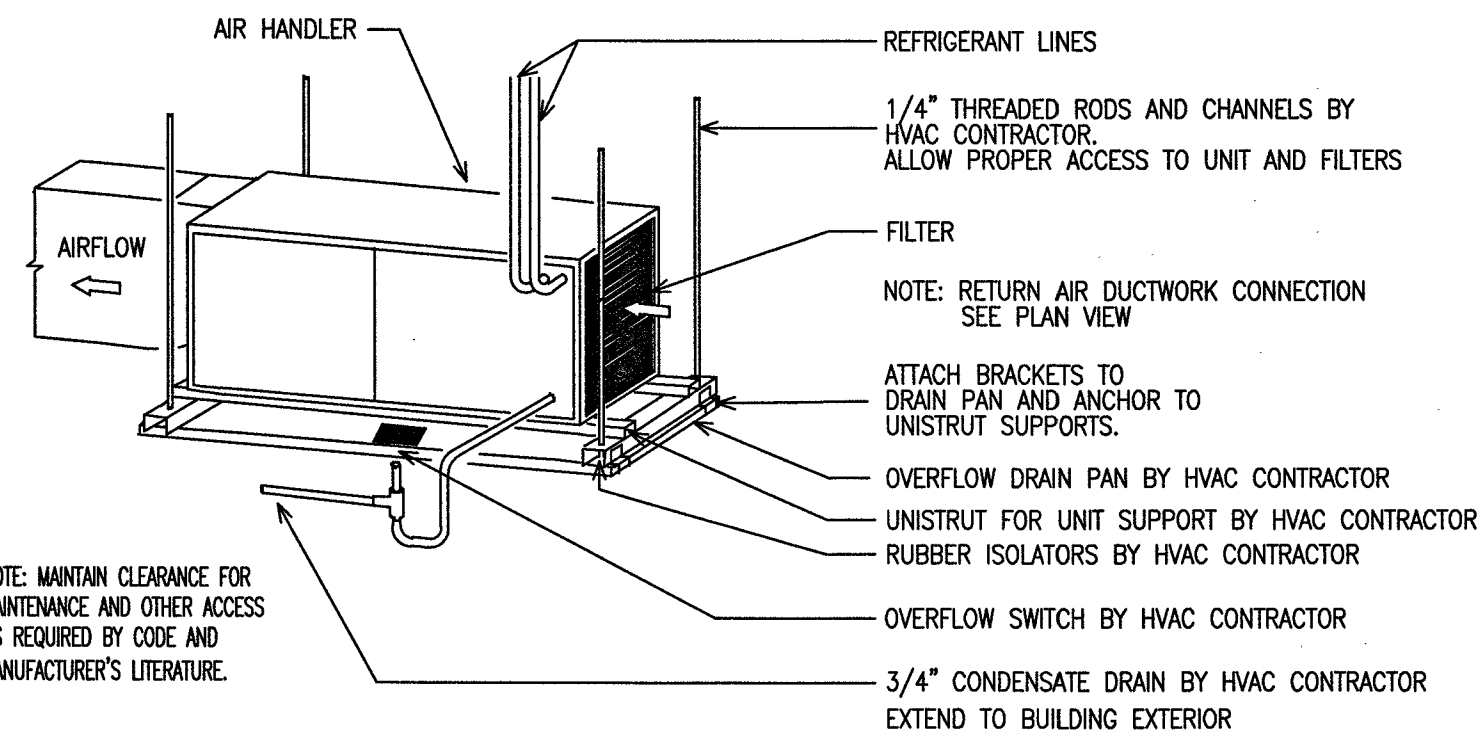
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WAREHOUSE MECHANICAL
PLAN & GAS PLAN

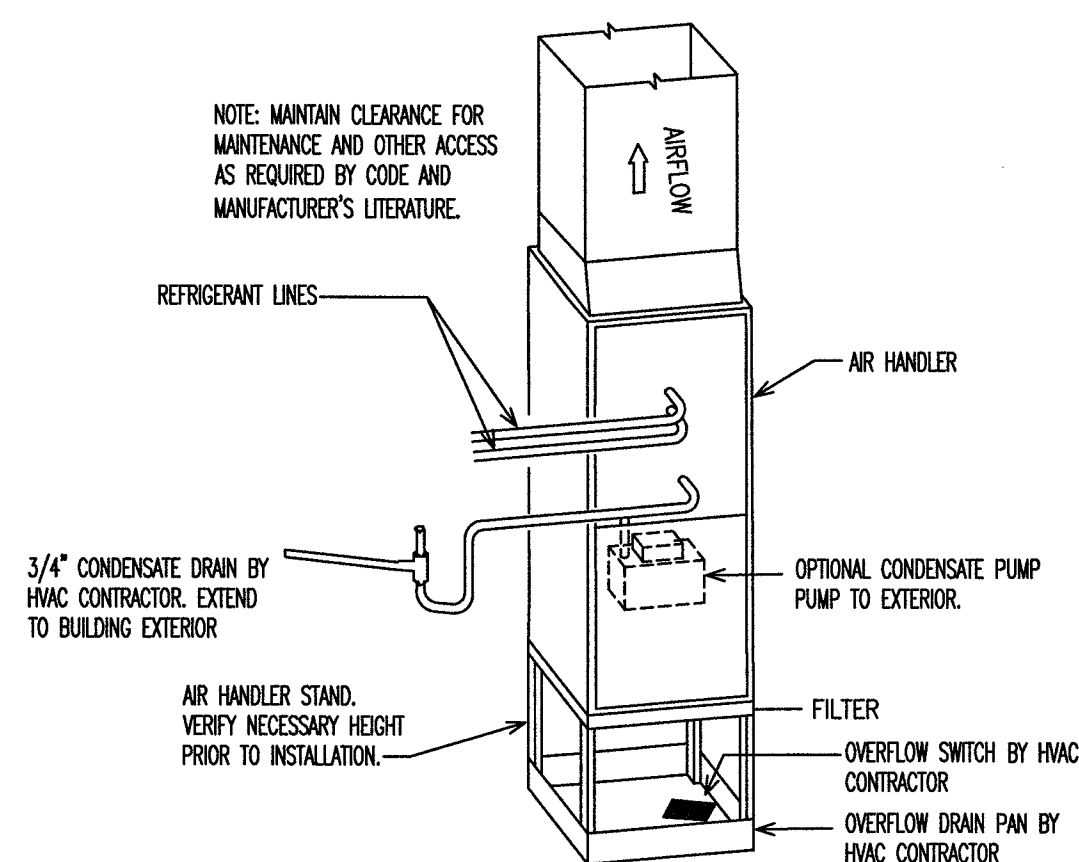
SHEET NO.

M3

PROJECT NO: 16230



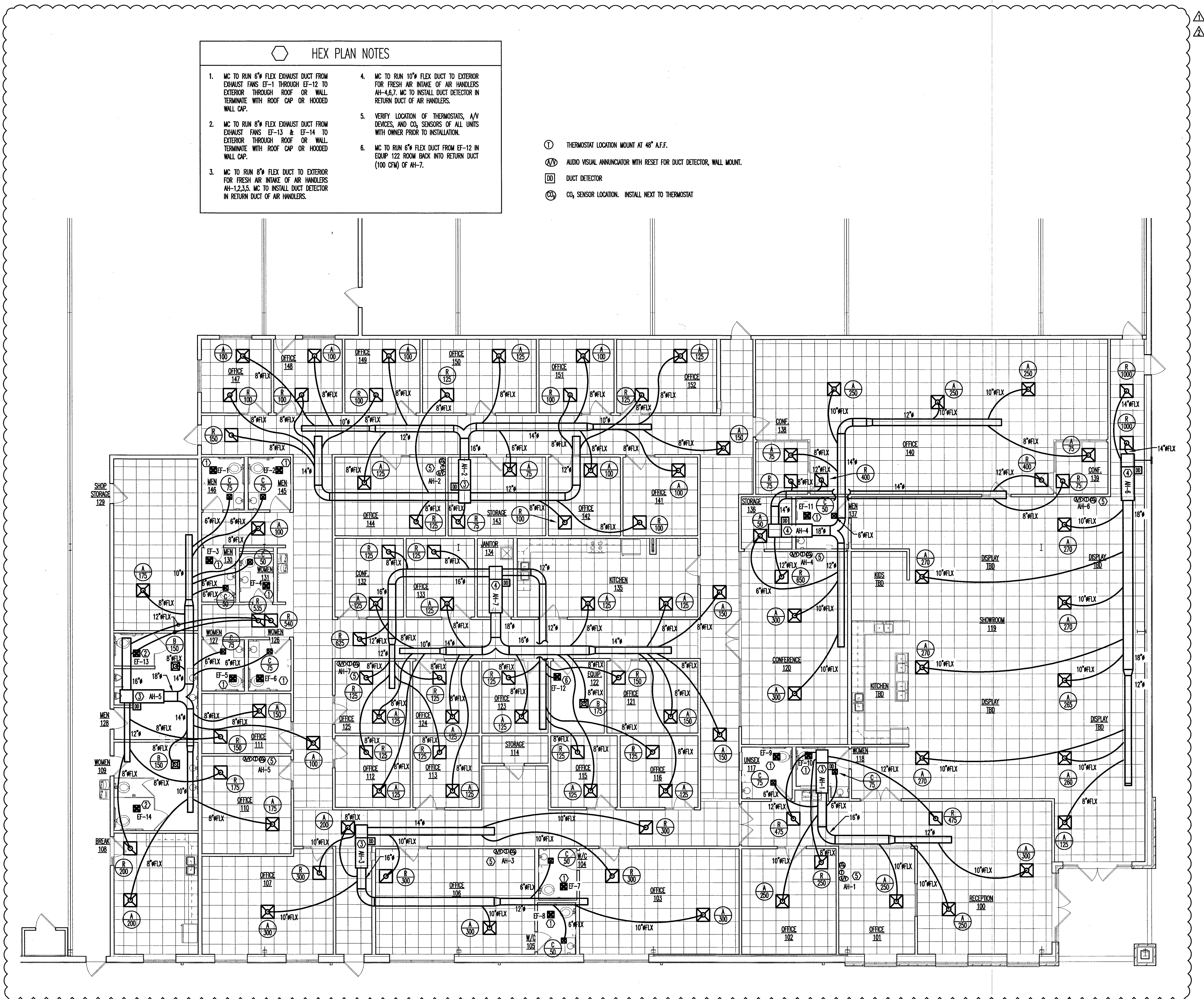
TYPICAL OVERHEAD AIR HANDLER - NO SCALE | 1



VERTICAL AIR HANDLER - NO SCALE | 2

- ### HEX PLAN NOTES
- MC TO RUN 6" FLEX EXHAUST DUCT FROM EXHAUST FANS EF-1 THROUGH EF-12 TO EXTERIOR THROUGH ROOF OR WALL. TERMINATE WITH ROOF CAP OR HOODED WALL CAP.
 - MC TO RUN 6" FLEX EXHAUST DUCT FROM EXHAUST FANS EF-13 & EF-14 TO EXTERIOR THROUGH ROOF OR WALL. TERMINATE WITH ROOF CAP OR HOODED WALL CAP.
 - MC TO RUN 8" FLEX DUCT TO EXTERIOR FOR FRESH AIR INTAKE OF AIR HANDLERS AH-1,2,3,5. MC TO INSTALL DUCT DETECTOR IN RETURN DUCT OF AIR HANDLERS.
 - MC TO RUN 10" FLEX DUCT TO EXTERIOR FOR FRESH AIR INTAKE OF AIR HANDLERS AH-4,6,7. MC TO INSTALL DUCT DETECTOR IN RETURN DUCT OF AIR HANDLERS.
 - VERIFY LOCATION OF THERMOSTATS, A/V DEVICES, AND CO₂ SENSORS OF ALL UNITS WITH OWNER PRIOR TO INSTALLATION.
 - MC TO RUN 8" FLEX DUCT FROM EF-12 IN EQUIP. 122 ROOM BACK INTO RETURN DUCT (100 CFM) OF AH-7.

- ① THERMOSTAT LOCATION MOUNT AT 48" A.F.F.
- AV AUDIO VISUAL ANNUNCIATOR WITH RESET FOR DUCT DETECTOR, WALL MOUNT.
- DD DUCT DETECTOR
- CS CO₂ SENSOR LOCATION. INSTALL NEXT TO THERMOSTAT



MARK	DESCRIPTION	LUMEN/LENS	LAMP - SYLVANIA			BALLAST		VOLTAGE	INPUT VOLTAGE	MOUNTING	REMARKS	MFG	MODEL
			TYPE	WATTAGE	QTY.	CCT	TYPE						
A	4' LED SURFACE MOUNT FIXTURE	ACRYLIC	LED	27	MULT.	3500K	LED DRIVER	1	277	27	SURFACE	2	LITHONIA LBL4-30L-E21-LP835
B	2'x4' VOLUMETRIC LED TROFFER	ACRYLIC	LED	31	MULT.	3500K	LED DRIVER	1	277	31	LAY-IN	2	LITHONIA 2VTL4-30L-ADPT-E21-LP835
C	6 INCH LED RECESSED CAN	PARABOLIC REFLECTOR	LED	13.2	MULT.	3000K	LED DRIVER	1	277	13.2	RECESSED	2,4	COOPER / EATON P0610C0D10-P06A930-61V-WB
E	LED EXTERIOR WALL PACK	FULL CUTOFF	LED	79	MULT.	5000K	LED DRIVER	1	277	79	SURFACE	2	COOPER / EATON XT09A
H	LED HIGH BAY FIXTURE	POLYCARBONATE	LED	220	MULT.	4000K	LED DRIVER	1	277	220.0	SUSPENDED	2	LITEIRONICS HB20B3400LT W/ MOTION SENSOR MODEL NO. HBAS41
T	LED TRACK LIGHTS W/ FRONT LOADING GIMBAL	-	LED	15	1	3500K	LED DRIVER	1	120	15	TRACK	2,4,5	LAZER LZR130P - SEE TRACK LIGHTING SCHEDULE FOR TRACK AND LIMITERS
OE	EXTERIOR DVAL LED EMERGENCY LIGHT	POLYCARBONATE	LED	3	2	-	LED DRIVER	1	277	2	SURFACE	1	EELP JCH-EM
EX	LED EXIT SIGN W/ BATTERY BACKUP	ACRYLIC	LED	N/A	-	N/A	-	-	277	1	VARIES	1	LITHONIA LDM-S-W-1-R-120/277-EL-H-S-D
EXH	LED EXIT/COMBO W/ BATTERY BACKUP	ACRYLIC	LED	N/A	MULT.	N/A	-	-	277	4	VARIES	1	LITHONIA LDM-LED-R-S-D
EM	DUAL HEAD EMERGENCY FIXTURE	ACRYLIC	LED	N/A	MULT.	N/A	-	-	277	2	VARIES	1	LITHONIA LDM-LED-S-D
EML	DUAL HEAD EMERGENCY FIXTURE	ACRYLIC	LED	N/A	MULT.	N/A	-	-	277	6	VARIES	1	LITHONIA EMLT-W-LP06WS-LTP-S-D

1. FIXTURE SHALL HAVE BATTERY BACKUP FOR 90 MINUTE ILLUMINATION.
2. OR EQUAL BY COOPER OR DAY-BRITE LIGHTING.
3. VERIFY PENDANT FIXTURE WITH OWNER PRIOR TO PURCHASE AND INSTALLATION.
4. FIXTURE TO BE DIMMABLE.
5. VERIFY COLOR OF TRACKS WITH OWNER PRIOR TO INSTALLATION.

TRACK LIGHTING SCHEDULE									
TRACK #	FIXTURE	LINEAR FT	TRACK SECTIONS (NOT INCLUDING ACCESSORIES AND CONNECTORS)	CURRENT LIMITER	VOLTAGE	MAX HEADS	TOTAL WATTS	AMPS	
1	T	8	(1) HTEK483	HTEK11CB01383	277	10	138	.5	
2	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
3	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
4	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
5	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
6	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
7	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
8	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
9	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
10	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
11	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
12	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
13	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
14	T	8	(3) HTEK483	HTEK11CB01383	277	10	138	.5	
15	T	24	(3) HTEK483	HTEK11CB02773	277	20	277	1	
16	T	32	(4) HTEK483	HTEK11CB06923	277	50	692	2.5	

EQUIPMENT CONNECTION SCHEDULE													
SYMBOL	DESCRIPTION	FURN. BY	kVA	HP	VOLT/PH	MCA	MCCP	DISC	Hz	AWG	EGC	CND	NOTES
1	GEM-V10	OWNER	27.0		480/3	57.0		60	60	#6	#10	1"	VERIFY EQUIP. HAS BUILT-IN DISCONNECT
2	GEM-6	OWNER	16.5		480/3	30.0		60	60	#8	#10	1"	VERIFY EQUIP. HAS BUILT-IN DISCONNECT
3	VERTICAL WASHING UNIT LV1604	OWNER	10.0		480/3	21.0			60	#10	#12	3/4"	VERIFY EQUIP. HAS BUILT-IN DISCONNECT
4	DRILLING MACHINE V1/1250	OWNER			480/3				60				VERIFY EQUIP. HAS BUILT-IN DISCONNECT
5A	AIR FLOAT TABLE	OWNER		3	480/3	3.7			60	#12	#12	3/4"	VERIFY EQUIP. HAS BUILT-IN DISCONNECT
5B	AIR FLOAT TABLE	OWNER		3	480/3	3.7			60	#12			VERIFY EQUIP. HAS BUILT-IN DISCONNECT
6	PUNCH	OWNER	7.5	208/3	3				60				VERIFY EQUIP. HAS BUILT-IN DISCONNECT
7	AIR COMPRESSOR	OWNER	7.5	480/3	12.5	20.0		30	60	#10	#12	3/4"	VERIFY COMPRESSOR MOTOR WIRED TO 480V
8	DRYER	OWNER	1/10	208/1	4.0	15.0		30	60	#12	#12	3/4"	
AH-1,2,3	3-TON AIR HANDLER	NC	480/3	9.2	15.0	30		60	60	#12	#12	3/4"	
HP-1,2,3	3-TON HEAT PUMP	NC	480/3	8	15.0	30		60	60	#12	#12	3/4"	
AH-4,5	4-TON AIR HANDLER	NC	480/3	9.2	15.0	30		60	60	#12	#12	3/4"	
HP-4,5	4-TON HEAT PUMP	NC	480/3	8	15.0	30		60	60	#12	#12	3/4"	
AH-6,7	5-TON AIR HANDLER	NC	480/3	12.0	15.0	30		60	60	#12	#12	3/4"	
HP-6,7	5-TON HEAT PUMP	NC	480/3	10.0	15.0	30		60	60	#12	#12	3/4"	

*NOTE: VERIFY 208/3 FOR EQUIPMENT.
GENERAL NOTE: OWNER AND EC MUST VERIFY EQUIPMENT.

ELECTRICAL SCHEDULES 2

GENERAL ELECTRICAL NOTES:

1. "PROVIDE" MEANS TO FURNISH AND INSTALL. THE ELECTRICAL CONTRACTOR (EC) SHALL ALSO INSTALL MATERIALS AND EQUIPMENT FURNISHED BY OTHERS AND THE GENERAL CONTRACTOR AS REQUIRED.
2. EC SHALL PROVIDE LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY AND REASONABLY INCIDENTAL TO INSURE A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. MINOR ITEMS, ACCESSORIES, AND DEVICES REASONABLY INFERRABLE AS NECESSARY FOR THE COMPLETION AND PROPER OPERATION OF ANY ELECTRICAL SYSTEM SHALL BE PROVIDED BY THE EC.
3. WORKMANSHIP SHALL BE IN ACCORDANCE WITH NECA 1 "STANDARD PRACTICE FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING."
4. ALL MATERIALS AND EQUIPMENT SHALL BE DELIVERED TO THE SITE AND UNLOADED BY THE CONTRACTOR AT AN APPROVED LOCATION. THE EC SHALL PROTECT ALL MATERIALS AND EQUIPMENT FROM BREAKAGE, THEFT, AND THE ELEMENTS. ALL MATERIALS AND EQUIPMENT SHALL REMAIN THE PROPERTY OF THE EC UNTIL THE PROJECT HAS BEEN COMPLETED AND TURNED OVER TO THE OWNER.
5. THE EC SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY FOR THE COMPLETION OF THE WORK UNDER THIS CONTRACT.
6. DO NOT SCALE THESE DRAWINGS-REFER TO ARCHITECTURAL SHEETS FOR DIMENSIONS.
7. TRADE NAMES AND MANUFACTURERS ARE SPECIFIED TO ESTABLISH A QUALITY STANDARD. SUBSTITUTIONS SHALL BE PERMITTED IF APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL LISTED MODEL NUMBERS SHALL BE VERIFIED WITH THE MANUFACTURER FOR PROPER APPLICATION OF EQUIPMENT.
8. THE EC SHALL VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS. THE EC SHALL CONTACT THE ENGINEER TO RESOLVE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS. THE EC SHALL COORDINATE WITH OTHER TRADES PRIOR TO THE START OF CONSTRUCTION.
9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DISCONNECTS, SWITCHES, RECEPTACLES, TERMINALS, ETC. UNDER THE ELECTRICAL BID AND SHALL INCLUDE ALL NECESSARY CIRCUITS TO AND CONNECTIONS TO THE EQUIPMENT PROVIDED BY ALL SUPPLIERS, UNLESS NOTED OTHERWISE BY OTHER SPECIFICATIONS.
10. EC SHALL PROVIDE ALL SERVICE ENTRANCE EQUIPMENT, SUB PANELS, AND OTHER ELECTRICAL DISTRIBUTION EQUIPMENT AS NECESSARY FOR A COMPLETE INSTALLATION. EC SHALL COORDINATE WITH UTILITY REGARDING SERVICE AND METERING DETAILS. PRIOR TO ORDERING EQUIPMENT, THE EC SHALL OBTAIN THE AVAILABLE FAULT CURRENT OR TRANSFORMER SIZE AND IMPEDANCE FROM THE UTILITY AND CONTACT THE ENGINEER IF THE VALUE EXCEEDS THE EQUIPMENT SPECIFIED. PANEL BORDERS AND SWITCH BORDERS SHALL BE SQUARE, D, CUTLER-HAMMER, SEMARS, OR GE. BUSES SHALL BE COPPER UNLESS OTHERWISE APPROVED BY THE ENGINEER. RECESSED PANEL BORDERS SHALL BE INSTALLED FLUSH WITH THE WALL FINISH. METER BASES SHALL COMPLY WITH THE UTILITY'S SPECIFICATIONS AND SHALL BE MOUNTED AT A HEIGHT APPROVED BY THE UTILITY. ALL EQUIPMENT IDENTIFIED FOR SERVICE ENTRANCE USE SHALL BE SO LABELED AND UL LISTED FOR SUCH USE. EC SHALL INSTALL ALL ELECTRICAL EQUIPMENT WITH PROPER CLEARANCES PER NEC 110.26. ELECTRICIAN SHALL PERMANENTLY LABEL EQUIPMENT PER NEC 110.24.
11. ENCLOSED SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE BY SQUARE D, EATON, OR GE. ENCLOSED SWITCHES SHALL HAVE A HANDLE LOCKABLE IN THE OFF POSITION AND SHALL HAVE A HANDLE INTERLOCKED TO PREVENT OPENING THE FRONT COVER WHILE IN THE ON POSITION. ENCLOSED SWITCHES OF THE FUSIBLE TYPE SHALL BE FUSED IN ACCORDANCE WITH NAMEPLATE DATA WITH DUAL ELEMENT TYPE FUSES BY BUSSMAN, ULTEFLUSE, OR Mersen.
12. OCCUPANCY SENSORS SHALL BE BY WATSTOPPER, LUTRON, LEVITON, SENSOR SWITCH, HUBBELL, OR APPROVED EQUAL.
13. CIRCUIT BREAKERS SHALL BE MOLDED-CASE, THERMAL MAGNETIC TYPE WITH QUICK-WAKE, QUICK-BREAK MECHANISM, COMMON TRIP ON MULTI-POLE BREAKERS, AND UL LISTED FOR BOTH COPPER AND ALUMINUM CONDUCTORS. CIRCUIT BREAKERS IN PANELS SHALL BE SERIES RATED WITH THE MAIN BREAKER, FULLY RATED FOR THE SYSTEM, OR SERIES RATED WITH THE BREAKER FEEDING THE PANEL FROM THE FACTORY.
14. WHERE CIRCUIT BREAKERS OR FUSES ARE APPLIED IN COMPLIANCE WITH THE SERIES COMBINATION RATINGS MARKED ON THE EQUIPMENT BY THE MANUFACTURER, THE EQUIPMENT ENCLOSURE(S) SHALL BE LEGIBLY MARKED IN THE FIELD TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION RATINGS.
15. EC SHALL REVIEW THE MECHANICAL PLANS TO ESTABLISH POINTS OF CONNECTION AND THE EXTENT OF THE ELECTRICAL WORK TO BE PROVIDED IN HIS CONTRACT. ALL CIRCUIT BREAKERS FEEDING HVAC EQUIPMENT SHALL BE TYPE FC. VAPORIZER DEVICES SHALL BE TYPE GS. WIRE SHALL BE MINIMUM #12 AWG IN 3/4" IN CONDUIT. EXPOSED MULTIWIRE BRANCH SURFACES SHALL BE PROVIDED WITH A MEANS TO MULTIWIRELESSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE SOURCE PER NEC 210.4(B). GROUP ALL DISCONNECTS OF EACH MULTIWIRE BRANCH CIRCUIT PER 210.4(D) WITH WIRE TIES OR SIMILAR MEANS. DO NOT EXCEED THREE HOMERUNS PER CONDUIT. DO NOT INSTALL ISOLATED GROUND AND NON-ISOLATED GROUND CIRCUITS IN THE SAME CONDUIT. INSTALL CONDUCTORS OF DIFFERENT VOLTAGES IN SEPARATE CONDUITS.
16. ALL WIRE, CONNECTORS, TERMINALS, AND LUGS SHALL BE PROVIDED BY THE EC. WHERE CONDUCTORS ARE RUN IN PARALLEL, LUGS SHALL BE LISTED FOR PARALLEL CONDUCTORS. PUSH WIRE CONNECTORS ARE NOT ALLOWED FOR BUILDING WIRE. PUSH CONNECTORS ARE ONLY ALLOWED, WHEN APPROVED, AS PART OF MANUFACTURED LISTED PRODUCTS. ALL WIRE SHALL BE INSTALLED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE.
17. THE INSULATION TYPE FOR INTERIOR WIRING SHALL BE DUAL RATED THIN/THIN OR XHHW; ALL WIRING INSTALLED BELOW GRADE OR IN MOIST OR WET LOCATIONS SHALL HAVE TYPE THIN OR XHHW INSULATION. INSULATION VOLTAGE RATING SHALL BE 600 VOLTS AND A MINIMUM TEMPERATURE RATING OF 75°C. CONDUCTORS SHALL BE SOLID OR STRANDED COPPER FOR #10 AWG AND #12 AWG, AND STRANDED COPPER FOR #8 AWG AND LARGER SIZES. ALL WIRING AND CABLE SHALL BE UL LISTED. ALL TERMINATIONS AND DEVICES SHALL BE RATED FOR USE WITH 75°C CONDUCTORS. FINAL CONNECTIONS TO ALL MOTORS AND EQUIPMENT SUBJECT TO VIBRATION OR MOVEMENT SHALL BE MADE WITH STRANDED COPPER CONDUCTORS. CONDUCTORS SHALL BE BY CERRO WIRE, INC., INDUSTRIAL WIRE & CABLE, INC., OR SOUTHWIRE COMPANY.
18. JOINTS IN SOLID CONDUCTORS SHALL BE SPLICED USING IDEAL "WIRE NUTS", 3M "SCOTCH LOCK", OR TBS "PUSH" CONNECTORS IN JUNCTION BOXES, OUTLET BOXES, AND LIGHTING FIXTURES. JOINTS IN STRANDED CONDUCTORS SHALL BE SPLICED BY APPROVED MECHANICAL CONNECTORS AND GUM RUBBER TAP OR FRICTION TAP. SOLDERLESS MECHANICAL CONNECTORS FOR SPLICES AND TAPS, PROVIDED WITH UL APPROVED INSULATING COVERS, MAY BE USED INSTEAD OF MECHANICAL CONNECTORS PLUS TAPE. IN ALL CASES, CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND NO SPLICING SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES, TROUGHS, OR OUTLETS. WHERE CONCENTRIC, ECCENTRIC, OR OVERSIZED ANNOCKOUTS ARE ENCOUNTERED, A GROUNDING TYPE INSULATED BUSHING SHALL BE PROVIDED.
19. COLOR CODE CONDUCTORS PER NEC. FEEDERS SHALL BE IDENTIFIED IN ACCORDANCE WITH 215.12. USE BLACK, RED, AND BLUE FOR PHASES A, B, AND C RESPECTIVELY ON 208/120 VOLT THREE-PHASE Y SYSTEMS AND WHITE FOR THE NEUTRAL. ISOLATED GROUND WIRES SHALL BE GREEN WITH YELLOW BANDS OR STRIPES. USE BROWN, ORANGE, AND YELLOW FOR PHASES A, B, AND C RESPECTIVELY FOR 480/277 VOLT THREE-PHASE Y SYSTEMS AND GRAY FOR THE NEUTRAL. COLORS SHALL BE FACTORY APPLIED FOR CONDUCTORS #6 AWG AND SMALLER. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL BE GREEN IN COLOR AND MINIMUM #12 AWG. THE EC SHALL PROVIDE PLUMBUM RATED CABLE FOR ANY TELEPHONE, TELEPHONE, COMMUNICATION, OR OTHER CABLE THAT ENTERS CEILING RETURN PLenums.
20. ALL LUMINAIRES SHALL BE LISTED. LUMINAIRES IN WET OR DAMP LOCATIONS SHALL BE MARKED AS SUITABLE FOR THE RESPECTIVE USE. EMERGENCY LIGHTING SHALL BE INSTALLED AS SHOWN. FINAL LOCATIONS OF ALL EXIT AND EMERGENCY LIGHTS SHALL BE VERIFIED WITH THE BUILDING INSPECTOR PRIOR TO INSTALLATION. ALL FLUORESCENT FIXTURES SHALL HAVE ELECTRONIC BALLASTS MEETING ANSI C82.11 FOR ELECTRONIC BALLAST PERFORMANCE. ALL BALLASTS SHALL BE UL LISTED AND MEET FEDERAL AND STATE EFFICIENCY REQUIREMENTS.
21. ALL LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF THE SUSPENDED CEILING. COORDINATE LIGHTING LAYOUT WITH CEILING GRID, MECHANICAL EQUIPMENT, DUCTWORK AND SPRINKLER HEADS AS NECESSARY. SEE REFLECTED CEILING PLAN FOR DETAILS. FLUORESCENT FIXTURES UTILIZING DOUBLE-ENDED LAMPS MUST HAVE A DISCONNECTING MEANS COMPLYING WITH NEC 410.13(C)(6).
22. MOUNT LIGHT SWITCHES AT 48 IN AFF. MULTIPLE SWITCHES AT SAME LOCATION SHALL BE UNDER ONE WALL PLATE. VERIFY WALL PLATE COLOR AND MATERIAL WITH THE ARCHITECT/OWNER. INSTALL SWITCHES WITH OFF POSITION DOWN. ALL SWITCHES SHALL BE HEAVY DUTY, NON-PLASTIC WITH TOGGLE HANDLE, RATED 120-277V AC, AND COMPLYING WITH NECA WD 6 AND WD 1. SWITCHES SHALL BE BY COOPER WIRING DEVICES, LEVITON MANUFACTURING, PASS & SEYMOUR, OR HUBBELL. PROVIDE BOX DEVICE PARTITION/DIVIDERS FOR MULTI-CIRCUIT BOXES FOR COMPLIANCE WITH NEC 404.4(B)(3).
23. EC SHALL PROVIDE FIRE-STOPPING AT ALL ELECTRICAL PENETRATIONS OF RATED FLOORS AND WALLS TO PRESERVE OR RESTORE THE FIRE-RESISTANCE RATING. SEAL PENETRATIONS USING A UL LISTED SYSTEM FOUND IN THE UL DIRECTORY SPECIFIC TO THE UL LISTING OF THE ASSEMBLY BEING PENETRATED. SEE ARCHITECTURAL PLANS FOR UL RATED ASSEMBLIES SPECIFIC TO THIS PROJECT.
24. EC SHALL PROVIDE GFCI RECEPTACLES IN KITCHENS, RESTROOMS, OUTDOORS, AT WATER COOLERS, AND AS REQUIRED BY NEC. EACH OUTDOOR HVAC UNIT MUST HAVE A GFCI RECEPTACLE WITHIN 25 FEET FOR SERVICING. GFCI RECEPTACLES SHALL CONFORM TO UL 943 CLASS A AND UL 498 STANDARDS. RECEPTACLES SHALL BE BY COOPER WIRING DEVICES, LEVITON MANUFACTURING, PASS & SEYMOUR, OR HUBBELL. ALL RECEPTACLES SHALL BE 125V RATED, HEAVY DUTY, AND COMPLY WITH NECA WD 6 AND WD 1.
25. LOCATIONS AND HEIGHTS OF ALL WALL-MOUNTED DEVICES SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.
26. GROUNDING AND BONDING SHALL BE PER NEC ARTICLE 250. THE RACEDAY SYSTEM SHALL NOT BE RELIED UPON FOR GROUNDING CONTINUITY. A GREEN EQUIPMENT GROUNDING CONDUCTOR,

PROPERLY SIZED PER NEC TABLE 250-122, SHALL BE RUN IN ALL POWER RACEDAYS. FOR NON-ISOLATED GROUND CIRCUITS PROVIDE ONE EQUIPMENT GROUNDING CONDUCTOR PER CONDUIT RUN. FOR ISOLATED GROUND CIRCUITS, PROVIDE ONE NEUTRAL AND ONE ISOLATED GROUND WIRE FOR EACH CIRCUIT; IN ADDITION, PROVIDE ONE EQUIPMENT GROUNDING CONDUCTOR PER CONDUIT RUN. MAIN BONDING JUMPERS AND SYSTEM BONDING JUMPERS SHALL BE INSTALLED IN ACCORDANCE WITH 250.28 OF THE NEC. FOR BUILDINGS OR STRUCTURES SUPPLIED BY FEEDERS OR BRANCH CIRCUITS, GROUNDING AND BONDING SHALL BE IN ACCORDANCE WITH 250.32. SEPARATELY DERIVED AC SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH 250.30. RESISTANCE TO GROUND SHALL NOT EXCEED 25 OHMS; ADDITIONAL GROUNDING ELECTRODES SHALL BE INSTALLED PER 250.56 AS NECESSARY.

27. THE EC SHALL ALSO COORDINATE WITH THE GC REGARDING THE BONDING OF THE FOOTING REBAR, SO THAT IT WILL BE IN PLACE AND READY AT TIME OF FOOTING INSPECTION. 28. ALL CONDUIT FITTINGS, COUPLINGS, AND SUPPORTS SHALL BE PROVIDED BY THE EC. CONDUIT FITTINGS AND COUPLINGS SHALL BE BY APPLETON, RACO, OR O-Z/GEORGY. COUPLINGS SHALL BE THREADED, SET-SCREW, OR COMPRESSION TYPE. INDENTOR OR GRMP TYPE ARE NOT PERMITTED. CONDUIT FITTINGS AT ALL ELECTRICAL BOXES INCLUDING PULL, JUNCTION, AND OUTLET BOXES, SHALL HAVE INSULATED THROATS TO PREVENT INSULATION SCORING. DIE CAST FITTINGS ARE NOT PERMITTED.

29. CONCEAL ALL CONDUIT EXCEPT IN MECHANICAL ROOMS OR UNFINISHED AREAS AS NOTED. USE CONDUIT FOR ALL BRANCH CIRCUITS AND FEEDERS INSIDE THE BUILDING. TYPE MC CABLE AND TYPE AC CABLE MAY BE INSTALLED WITHIN WALLS IF ALL NEUTRAL WIRES, ISOLATED GROUND WIRES, AND EQUIPMENT GROUND WIRES AS LISTED ABOVE ARE CONTAINED IN THE CABLE. FLEXIBLE CONNECTIONS TO MOTORS AND OTHER EQUIPMENT SHALL BE MADE USING WEATHERPROOF FLEXIBLE CONDUIT. FOR LAY-IN LIGHT FIXTURES, USE MAXIMUM OF SIX (6) FEET OF FLEXIBLE MC CABLE (OR THE FLEXIBLE CONDUIT PROVIDED BY THE FIXTURE MANUFACTURER). SCHEDULE 40 PVC CONDUIT MAY BE USED FOR THE SECONDARY UNDERGROUND SERVICE, UNDERGROUND TELEPHONE SERVICE, AND BRANCH AND FEEDER CIRCUITS UNDER SLAB OR EXTERIOR TO THE BUILDING. EXPOSED EXTERIOR CONDUIT SHALL BE SCHEDULE 80 PVC. ALL UNDERGROUND RACEDAYS SHALL BE IDENTIFIED WITH UNDERGROUND LINE MARKING TAPE 6-8 IN BELOW GRADE DIRECTLY ABOVE THE RACEDAY. PROVIDE PULL WIRE IN EMPTY CONDUITS. UPSIZE CONDUIT FROM MINIMUM SIZE AS NECESSARY FOR LONGER PULLS. UNDERGROUND RACEDAYS THAT STAY INTO THE BOTTOM OF SWITCHBOARDS, OUTDOOR TRANSFORMERS, GENERATORS, ETC. SHALL RISE AT LEAST 2 IN ABOVE THE FINISHED SLAB TO PREVENT WATER FROM DRAINING INTO THE RACEDAYS. RACEDAYS THAT PENETRATE EXTERIOR WALLS OR INTERIOR PARTITIONS SEPARATING SPACES THAT WILL BE AT SIGNIFICANTLY DIFFERENT TEMPERATURES SHALL BE SEALED IN ACCORDANCE WITH 300.5(G), 300.7(A), AND 300.5(C) OF THE NEC. ROUTE CONDUIT IN AND UNDER SLAB FROM POINT-TO-POINT. ROUTE EXPOSED CONDUIT AND CONDUIT INSTALLED ABOVE ACCESSIBLE CEILING PARALLEL AND PERPENDICULAR TO WALLS. COMPLETELY AND THOROUGHLY SEAL ALL RACEDAYS BEFORE INSTALLING WIRE. PULL ALL CONDUCTORS INTO EACH RACEDAY AT ONE TIME. USE A SUITABLE WIRE PULLING LUBRICANT FOR BUILDING WIRE #4 AWG AND LARGER.

30. CABLES, RACEDAYS, OR BOXES, INSTALLED IN EXPOSED OR CONCEALED LOCATIONS UNDER METAL-CORRUGATED SHEET ROOF DECKING, SHALL BE INSTALLED AND SUPPORTED SO THERE IS NOT LESS THAN 1-1/2 IN MEASURED FROM THE LOWEST SURFACE OF THE ROOF DECKING TO THE TOP OF THE CABLE, RACEDAY, OR BOX. A CABLE, RACEDAY, OR BOX SHALL NOT BE INSTALLED IN CONCEALED LOCATIONS IN METAL-CORRUGATED, SHEET DECKING-TYPE ROOF. SEE NEC 300.4(E).

31. EMT SHALL BE MANUFACTURED IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE-AMERICAN NATIONAL STANDARD FOR STEEL ELECTRICAL METALLIC TUBING (EMT), ANSI C80.3 AND UL 797. RIGID METAL CONDUIT SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI-AMERICAN NATIONAL STANDARD FOR ELECTRICAL RIGID STEEL CONDUIT (ERSC), ANSI C80.1 AND UL 6. INTERMEDIATE METAL CONDUIT SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI-AMERICAN NATIONAL STANDARD FOR INTERMEDIATE METAL CONDUIT ANSI C80.6 AND UL 1242.

32. METAL CONDUIT SHALL BE BY ALLEN TUBING & CONDUIT, BECK MANUFACTURING, INC., OR WHEATLAND TUBE COMPANY. FLEXIBLE METAL CONDUIT, LIQUID-TIGHT FLEXIBLE METAL CONDUIT, OR NONMETALLIC CONDUIT SHALL BE BY AFC CABLE SYSTEMS, INC., ELECTRO-FLEX COMPANY, OR INTERNATIONAL METAL HOSE.

33. THE EC SHALL PROVIDE ALL OUTLET, JUNCTION, PULL BOXES, FITTINGS, AND SUPPORTS. ALL OUTLET AND JUNCTION BOXES SHALL BE GALVANIZED STEEL. TYPE BY APPLETON, STEEL CITY, OR BACH. EXTERIOR BOXES SHALL BE TYPE FC. VAPORIZER DEVICES SHALL BE TYPE GS. WHERE SURFACE MOUNTED BOXES ARE USED, THOSE BOXES AND THEIR FACEPLATES SHALL HAVE ROUNDED CORNERS. BOXES INSTALLED IN FLOORS SHALL BE RATED FOR THE APPLICATION. MOUNTED JUNCTION AND OUTLET BOXES FLUSH WITH FINISH SURFACES UNLESS OTHERWISE NOTED. WHERE MOUNTING HEIGHTS ARE GIVEN, THEY SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTER OF THE BOX. ALL BOXES SHALL BE SIZED PER NEC ARTICLE 314. ALL OUTLET AND JUNCTION BOXES SHALL HAVE A COVER PLATE, PROVIDED BY THE EC. OUTLET BOXES IN RATED WALLS SHALL BE INSTALLED IN ACCORDANCE WITH THE BUILDING CODE 712.3.2 (MAXIMUM BOX SIZE IS 16 SQUARE IN AND MAXIMUM OF SIX (6) BOXES PER 100 SQUARE FEET). INSTALL OUTLET BOXES IN RATED WALLS SUCH THAT OPENINGS OCCUR IN ONE SIDE ONLY WITHIN ANY GIVEN STUD SPACE. ALL CLEARANCES BETWEEN THE OUTLET BOX AND THE GYPSUM BOARD SHALL BE FILLED WITH JOINT COMPOUND OR OTHER APPROVED FIRE STOP MATERIAL. FLUSH MOUNTED JUNCTION BOXES IN ADJACENT ROOMS SHALL NOT BE MOUNTED BACK-TO-BACK. SURFACE MOUNTED FIXTURES SHALL BE FED THROUGH FLUSH MOUNTED 4X4 OCTAGONAL OR SQUARE BOXES.

34. CONDUIT, BOXES, AND ELECTRICAL EQUIPMENT SHALL BE FIRMLY AND SECURELY FASTENED TO OR SUPPORTED FROM THE BUILDING STRUCTURAL MEMBERS-OR EMBEDDED IN CONCRETE OR MASONRY. ELECTRICAL SUPPORTS SHALL NOT BE ATTACHED TO DUCTWORK, PIPING, OR THEIR SUPPORTS. HANGERS SHALL BE CATALOG ITEMS COMPATIBLE WITH AND SUITABLE FOR THE INTENDED USE. FOR METAL ROOF DECK INSTALLATIONS, IN EMT CONDUIT MAXIMUM AND 4 IN JUNCTION BOXES MINIMUM MAY BE SUPPORTED BY DECKING. THE SUSPENDED CEILING SYSTEM SHALL NOT BE USED FOR THE SUPPORT OF ELECTRICAL RACEDAYS SYSTEMS OR SUPPORT OF COMMUNICATIONS OR DATA SYSTEMS WIRING. CONTRACTOR SHALL COMPLY WITH 1613 OF THE NORTH CAROLINA GENERAL CONSTRUCTION BUILDING CODE.

35. ABANDONED CONDUIT AND BOXES SHALL HAVE ALL ELECTRICAL WIRING REMOVED COMPLETELY AND NOT JUST "MADE SAFE." CONDUIT AND BOXES SHALL BE REMOVED WHERE PRACTICAL WITHOUT CREATING ADDITIONAL DEMOLITION/RESTORATION WORK FOR OTHER TRADES.

36. WHERE CONDUCTORS ARE RUN IN PARALLEL, THE EC SHALL COMPLY WITH NEC 310.4.

37. ISOLATED-GROUND TYPE RECEPTACLES SHALL BE INSTALLED IN ACCORDANCE WITH 250.146(D). ISOLATED GROUND RECEPTACLES SHALL BE ORANGE IN COLOR.

38. PROVIDE AN UNDERGROUND PVC CONDUIT SYSTEM FOR TELEPHONE SERVICE WITH PULL WIRES. EC SHALL COORDINATE WITH TELEPHONE UTILITY REGARDING ADDITIONAL FACILITIES REQUIRED FOR THE SERVICE INSTALLATION.

39. INSTALL ONE (1) 3/4 IN FIRE RETARDANT TREATED PLYWOOD BACKBOARD WHERE INDICATED ON THE DRAWINGS FOR THE USE BY THE TELEPHONE SYSTEM. PROVIDE A 120 VOLT RECEPTACLE ADJACENT TO THE TELEPHONE BOARD. GROUND ALL TELEPHONE AND COMMUNICATIONS CIRCUITS PER NEC 800.

40. ALL TELEPHONE AND COMMUNICATIONS OUTLETS AND RACEDAYS ARE ROUGH-IN ONLY. EACH TELEPHONE AND COMMUNICATIONS OUTLET SHALL BE A 4 IN SQUARE BY 2-1/8 IN DEEP BOX WITH 3/4 IN KNOCK-OUTS AND A 3/4 IN CONDUIT STUBBED FROM THE OUTLET BOX TO ABOVE THE CEILING. PROVIDE A NON-METALLIC INSULATING BUSHING ON ALL CONDUITS STUDDED ABOVE THE CEILING. PROVIDE A BLANK COVER PLATE ON ALL OUTLET BOXES.

41. ALL MATERIALS AND EQUIPMENT SHALL COMPLY WITH THE UNDERWRITERS' LABORATORIES, INC. STANDARDS OR HAVE UL APPROVAL, OR BEAR UL RE-EXAMINATION LISTING WHERE SUCH APPROVAL HAS BEEN ESTABLISHED FOR THE TYPE OF DEVICE IN QUESTION.

42. CONDUCTORS, FUSES, CIRCUIT BREAKERS, AND DISCONNECT SWITCHES SHOWN ON THESE PLANS HAVE BEEN SIZED FOR THE SPECIFIED EQUIPMENT. BEFORE ORDERING ELECTRICAL EQUIPMENT, THE EC SHALL COORDINATE WITH OTHER CONTRACTORS ON THE SITE AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES SHOULD CONDUCTOR, CIRCUIT BREAKER, OR FUSE SIZES REQUIRE CHANGE.

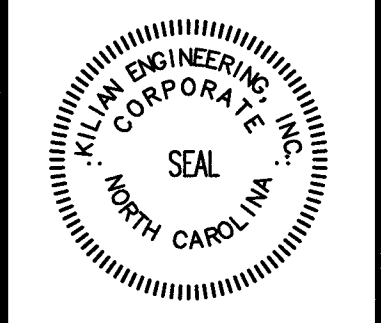
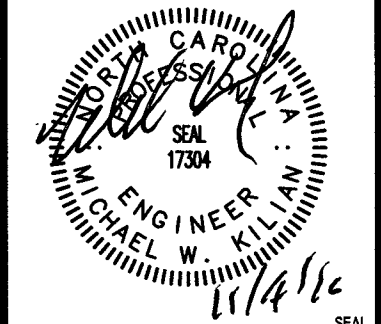
43. EC SHALL INSTALL DISCONNECT SWITCHES IN SIGHT OF ALL HANDHELD EQUIPMENT AND APPLIANCES OR PROVIDE BREAKERS CAPABLE OF BEING LOCKED IN THE OPEN POSITION PER NEC 422.31. FOR MOTOR DRIVEN APPLIANCES, PROVIDE A DISCONNECTING MEANS PER NEC 422.31 AND 430 PART II, WHERE AN INDIVIDUAL DISCONNECT SWITCH, CIRCUIT BREAKER, STARTER, ETC., IS SHOWN ON THE PLANS ADJACENT TO ITS LOAD AND NOT LOCATED ON A WALL. PROVIDE NECESSARY MATERIALS AND LABOR TO PROPERLY SUPPORT THE DEVICE.

44. EC SHALL FIELD IDENTIFY ALL SWITCH BOARD, PANEL BORDERS, CONTROL PANELS, METER SOCKETS, ETC., TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRICAL ARCH FLASH HAZARDS PER 110.16 OF NEC.

45. EC SHALL PROVIDE NAMEPLATES FOR IDENTIFICATION OF ALL EQUIPMENT, SWITCHES, PANELS, ETC. THE NAMEPLATES SHALL BE LAMINATED PNEUMATIC PLASTIC, BLACK FRONT, AND BACK WITH WHITE CORE, WHITE ENGRAVED LETTERS (1/4 IN MINIMUM) ETCHED INTO THE WHITE CORE. EC SHALL PROVIDE A TYPE WRITTEN DIRECTORY CARD THAT ACCURATELY IDENTIFIES CIRCUITS INSIDE EACH PANEL. HANDWRITTEN LABELS ARE NOT ACCEPTABLE.

46. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO ENSURE THE FOLLOWING MATERIALS ARE RECYCLED DURING THE CONSTRUCTION PHASE OF THE PROJECT: LIGHT FIXTURES, INCLUDING PROPER DISPOSAL OF BALLASTS, FLUORESCENT LIGHT BULBS, AND TRANSFORMERS, WIRING AND ELECTRICAL EQUIPMENT, AND INSULATION. WASTE MATERIALS CONTAINING LEAD, ASBESTOS, PCBs (FLUORESCENT LAMP BALLASTS), OR OTHER HARMFUL SUBSTANCES SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL AND STATE LAWS AND REQUIREMENTS CONCERNING HAZARDOUS WASTE.

47. ALL WORK SHALL CONFORM TO 2014 NATIONAL ELECTRIC CODE, 2012 STATE BUILDING CODE, AND ALL APPLICABLE LOCAL CODES.



NEW CONSTRUCTION FOR:
MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

REVISIONS:

NO.	DATE	DESCRIPTION
1	11-04-16	REVISED PER CODE COMMENTS & OWNER REQUEST

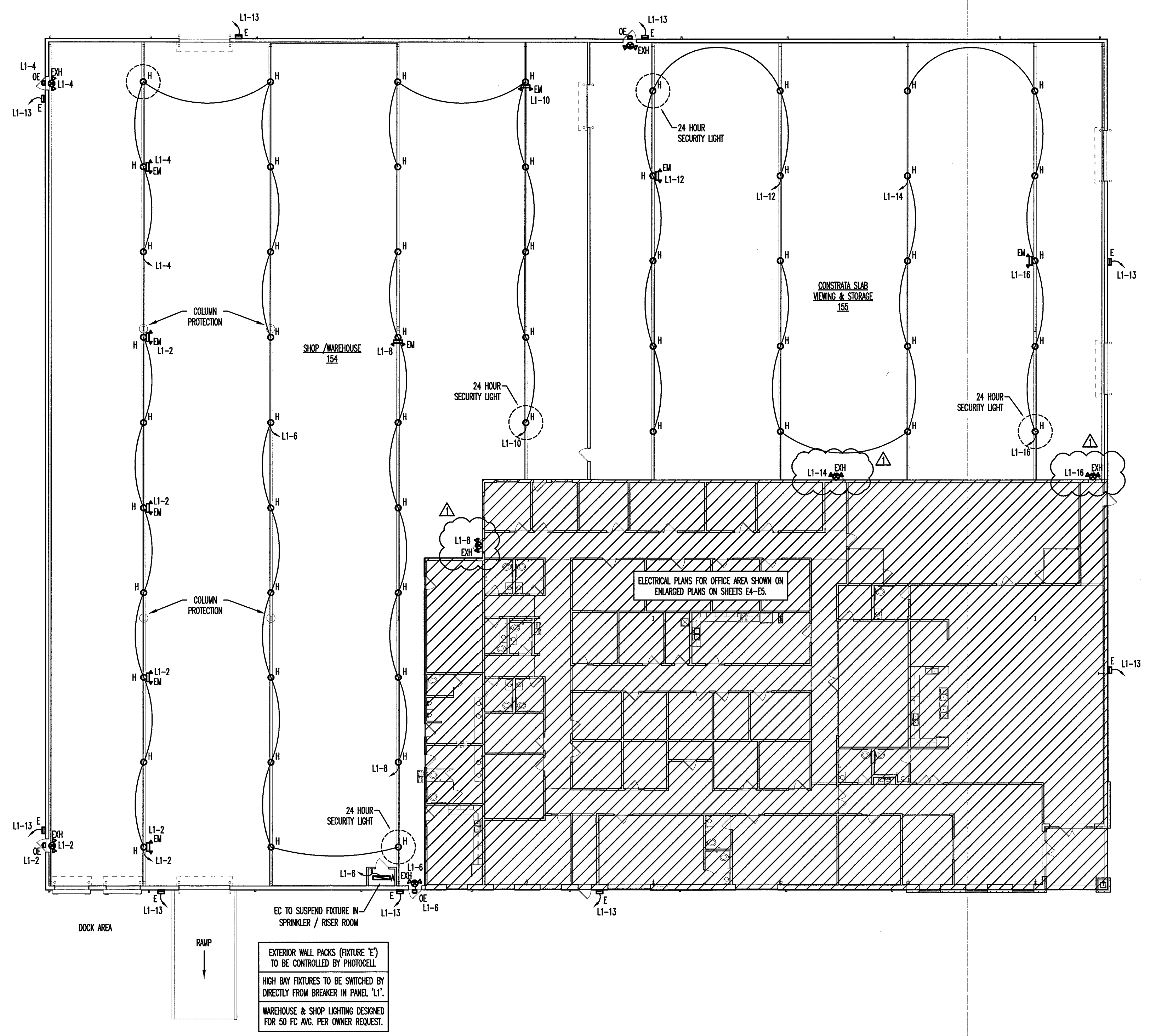
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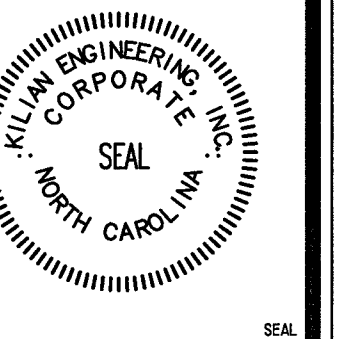
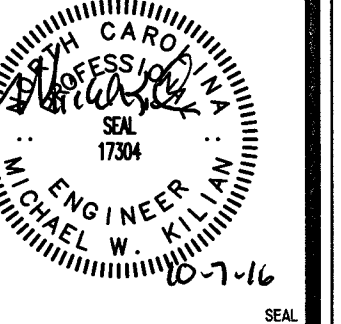
NO.	DATE	DESCRIPTION
1	11-07-16	ISSUED FOR PERMIT

DRAWN BY: CRL
CHECKED BY: MWK
WAREHOUSE LIGHTING
PLAN

SHEET NO.
E2

PROJECT NO: 16230



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NO.	DATE	DESCRIPTION
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DRAWN BY: CRL
 CHECKED BY: MWK
 WAREHOUSE POWER PLAN

SHEET NO.

$$\mathcal{E}_3$$

PROJECT NO: 16230



GENERAL LIGHTING SENSOR NOTES:

1. INSTALL PICO SWITCHES IN LOCATIONS SHOWN.
2. ALL SWITCHES AND SENSORS TO BE WHITE
3. RMJ'S WITH A NUMBER ASSOCIATE WITH THE WALL OR CEILING MOUNT DEVICE WITH THE SAME NUMBER (IE RMJ1 ASSOCIATES WITH WW1, WC1, WH1 ETC.)

MRF2-8S-DV-WH
MAESTRO WIRELESS
8A, 120/277V
COMMERCIAL SWITCH
(1 GANG US BACKBOX BY OTHERS
LOCATION TBD

120V/277V
INPUT FEED

ZONE 1
16A MAX

RMJ-16R-DV-B

POWPAK RELAY MODULE

WITH (1) 16A SOFTSWITCH RELAY

DIMENSIONS:

3.42"[86.9mm] (H) X 2.82"[71.6mm] (W) X 1.25"[31.8mm] (D)

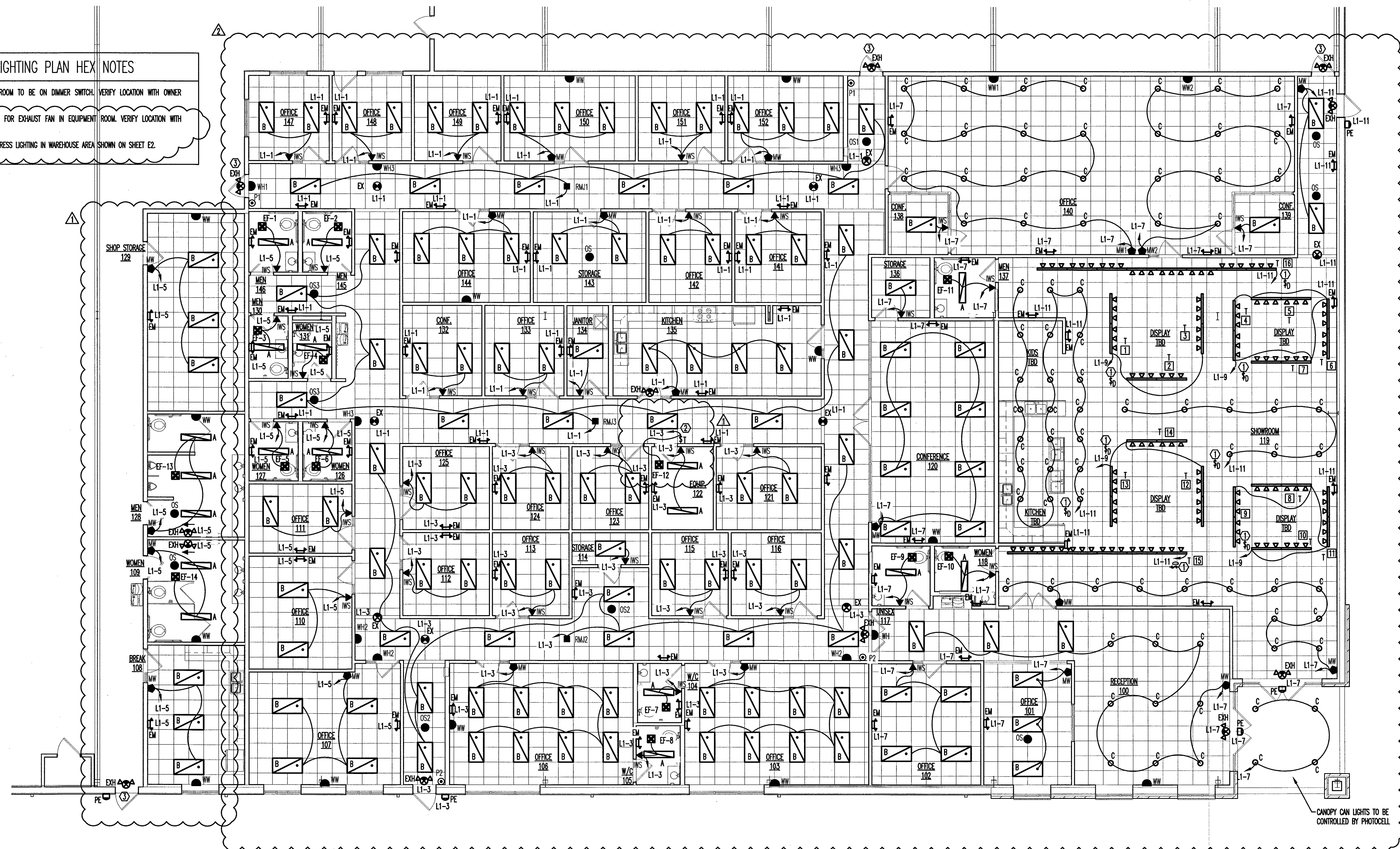
LOCATION TRD

LRF2-OWL-B-P-WH
 434MHZ WIRELESS
 WALL MOUNTED
 OCCUPANCY/VACANCY SENSOR
 180° COVERAGE
 4.35"[110mm] (H) X 1.8"[46mm] (W) X 1.35"[34mm] (D)
 MAX 10 PER QSM
 *DEVICE IS SURFACE-MOUNTED AND
 BATTERY POWERED, DOES NOT
 REQUIRE POWER FEED
 LOCATION TBD

LRF2-OCR2B-P-WH
 434MHZ WIRELESS
 OCCUPANCY/VACANCY SENSOR
 3.57"[90,7mm] (DIA) X 1.13"[28,7mm] (D)
 MAX 10 PER QSM
 *DEVICE IS SURFACE-MOUNTED AND
 BATTERY POWERED, DOES NOT
 REQUIRE POWER FEED

 LOCATION TBD
 (OPTION:WITH L-CRMK-WH
 RECESS MOUNT KIT FOR
 NON-METALLIC CEILINGS)

OFFICE LIGHTING PLAN HEX		NOTES
1. FIXTURES IN SELECTION SHOWROOM TO BE ON DIMMER SWITCHES PRIOR TO INSTALLATION.		VERIFY LOCATION WITH OWNER
2. SPRING LOADED TIMER SWITCH FOR EXHAUST FAN IN EQUIPMENT ROOM. VERIFY LOCATION WITH OWNER PRIOR TO INSTALLATION.		ROOM. VERIFY LOCATION WITH OWNER
3. CIRCUITING FOR EMERGENCY EGRESS LIGHTING IN WAREHOUSE AREA		SHOWN ON SHEET E2.



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■ Plumbing ■ Mechanical
■ Electrical ■ Fire Alarm



NEW CONSTRUCTION FOR:

MAJESTIC MARBLE AND GLASS

JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

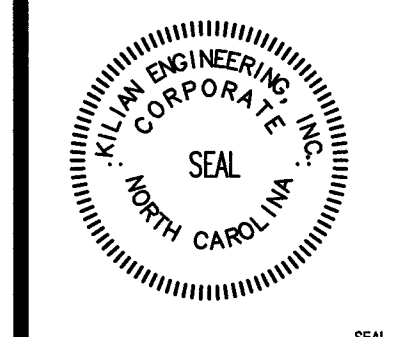
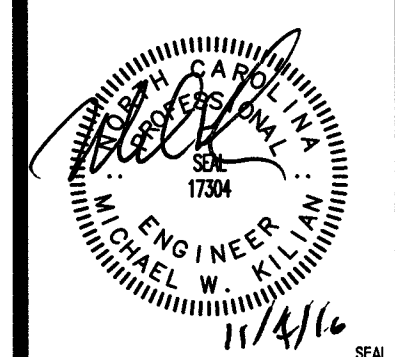
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DRAWN BY: CRL
 CHECKED BY: MWK
 OFFICE LIGHTING PLAN

SHEET NO.

E_4

PROJECT NO: 16230



NEW CONSTRUCTION FOR:
MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

REVISIONS:		
1	ISSUED FOR PERMIT	10-07-16
2	REVISED PER CODE COMMENTS & OWNER REQUEST	11-04-16
3	REVISED PER REQUEST	10-25-16

ISSUED:		
1	ISSUED FOR PERMIT	10-07-16
2	REVISED PER CODE COMMENTS & OWNER REQUEST	11-04-16
3	REVISED PER REQUEST	10-25-16

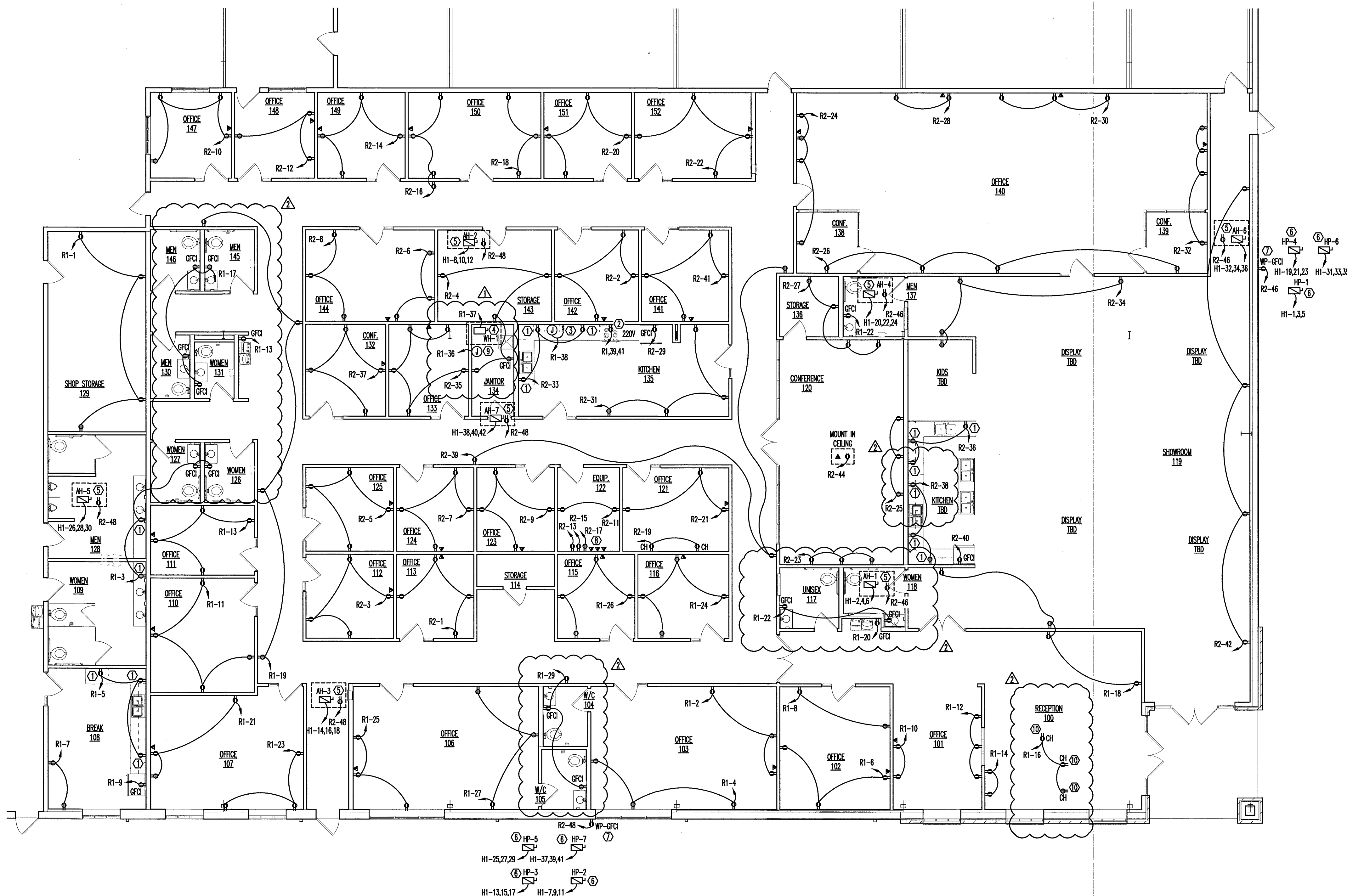
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OFFICE POWER PLAN

SHEET NO.

E5

PROJECT NO: 16230

- OFFICE POWER PLAN HEX NOTES**
- RECEPTACLES TO BE MOUNTED AT COUNTER HEIGHT AND TO BE GFCI.
 - VERIFY 220V GFCI PLUG TYPE FOR RANGE.
 - 20A, 120V JUNCTION BOX FOR DISHWASHER. DISHWASHER TO BE CONTROLLED BY SWITCH AS MEANS OF DISCONNECT. MOUNT SWITCH ABOVE COUNTER. VERIFY LOCATION WITH OWNER PRIOR TO INSTALLATION.
 - 30A DISCONNECT FOR WATER HEATER LOCATED ABOVE CEILING. 120V, 1A, NEMA 1.
 - 30A FUSIBLE DISCONNECT FOR AH-1 THROUGH AH-7 LOCATED ABOVE CEILING. 480V, 3A, NEMA 3R FUSED AT 15A. INSTALL DUPLEX RECEPTACLE ABOVE CEILING WITHIN 25' OF UNIT FOR SERVICE.
 - 30A FUSIBLE DISCONNECT FOR HP-1 THROUGH HP-7. 480V, 3A, NEMA 3R FUSED AT 15A. INSTALL DUPLEX RECEPTACLE ABOVE CEILING WITHIN 25' OF UNIT FOR SERVICE.
 - WEATHERPROOF GFCI HVAC SERVICE RECEPTACLE WITHIN 25' OF UNITS.
 - DEDICATED RECEPTACLES FOR SERVER AND IT EQUIP.
 - 20A, 120V JUNCTION BOX FOR HOT WATER CIRCULATION PUMP. VERIFY LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO INSTALLATION.
 - MOUNT RECEPTACLES AT COUNTER HEIGHT IN RECEPTION DESK. VERIFY WITH OWNER.



PANEL M0P									
CKT	LOAD	BKR	LOAD KVA	PH	LOAD KVA	BKR	LOAD	CKT	
1	PANEL H1	200/3	36.00	A	10.60	200/3	PANEL L1	2	
3			36.00	B	10.20			4	
5			36.10	C	7.70			6	
7	PANEL H2	200/3	20.80	A	13.60	100/3	TRANSFORMER X-1 / PANEL R1	8	
9			20.80	B	9.80			10	
11			20.80	C	11.50			12	
13	TRANSFORMER X-2 / PANEL R2	100/3	15.60	A	2.50	60/3	SPD SURGE PROTECTION DEVICE	14	
15			15.40	B	2.50			16	
17			16.00	C	2.50			18	
(19)	FUTURE CRANE	60/3	15.00	A	15.80	60/3	GENY-V10	(20)	
(21)			15.00	B	15.80			(22)	
(23)			15.00	C	15.80			(24)	
25	SPARE	200/3	0.00	A	0.00	100/3	SPARE	26	
27			0.00	B	0.00			28	
29			0.00	C	0.00			30	
			KVA	PH	AMPS				
			129.9	A	469				
			125.5	B	453				
			125.4	C	453				
VOLTAGE/PHASE					277/480V, 3P, 4W				
BUS RATING					1000A				
MAIN CIRCUIT BREAKER RATING					1000A				
AIC RATING					22K				
SERVICE ENTRANCE RATED					YES				
ENCLOSURE					NEMA 1				
MOUNTING					SURFACE				

VERIFY BREAKER SIZE FOR WORKSHOP EQUIPMENT WITH MANUFACTURER PRIOR TO ORDERING. FOLLOW MANUFACTURER'S INSTALLATION GUIDELINES FOR EQUIPMENT.

GROUND FAULT PROTECTION
AT MAIN MOP.

PANEL R1									
CKT	LOAD	BKR	LOAD KVA	PH	LOAD KVA	BKR	LOAD		CKT
1	SHOP STORAGE RECEPS.	20/1	0.72	A	0.54	20/1	OFFICE 103 RECEPS. #1		2
3	RESTROOM RECEPS.	20/1	0.72	B	0.54	20/1	OFFICE 103 RECEPS. #2		4
5	BREAKROOM 108 RECEPS. #1	20/1	0.54	C	0.54	20/1	OFFICE 102 RECEPS. #1		6
7	BREAKROOM 108 RECEPS. #2	20/1	0.36	A	0.36	20/1	OFFICE 102 RECEPS. #2		8
9	BREAKROOM 108 REFRIGERATOR RECP.	20/1	0.18	B	0.36	20/1	OFFICE 101 RECEPS. #1		10
11	OFFICE 110 RECEPS.	20/1	0.72	C	0.54	20/1	OFFICE 101 RECEPS. #2		12
13	OFFICE 111 RECEPS.	20/1	0.72	A	0.36	20/1	RECEPTION RECEPS. #1		14
15	WATER COOLER #1 RECP.	20/1	0.18	B	0.54	20/1	RECEPTION RECEPS. #2		16
17	RESTROOM RECEPS.	20/1	0.72	C	0.72	20/1	RECEPTION LOBBY RECEPS.		18
19	CORRIDOR RECEPS.	20/1	0.72	A	0.18	20/1	WATER COOLER RECP. #2		20
21	OFFICE 107 RECEPS. #1	20/1	0.54	B	0.54	20/1	RESTROOM RECEPS.		22
23	OFFICE 107 RECEPS. #2	20/1	0.54	C	0.72	20/1	OFFICE 116 RECEPS.		24
25	OFFICE 106 RECEPS. #1	20/1	0.54	A	0.72	20/1	OFFICE 115 RECEPS.		26
27	OFFICE 106 RECEPS. #2	20/1	0.54	B	0.00	20/1	SPARE		28
29	RESTROOM RECEPS.	20/1	0.54	C	0.00	20/1	SPARE		30
31	UH-1	20/1	0.83	A	0.00	20/1	SPARE		32
33	UH-2	20/1	0.83	B	0.00	20/1	SPARE		34
35	UH-3	20/1	0.83	C	0.29	20/1	CIRCULATION PUMP		36
37	WATER HEATER (WH-1)	30/1	5.62	A	1.88	20/1	DISHWASHER		38
39	RANGE #1	50/2	4.80	B	0.00		SPACE		40
41			4.80	C	0.00				42
43			0.00	A	0.00				44
45	SPACE		0.00	B	0.00		SPACE		46
47	SPACE		0.00	C	0.00		SPACE		48
49	SPACE		0.00	A	0.00		SPACE		50
51	SPACE		0.00	B	0.00		SPACE		52
53	SPACE		0.00	C	0.00		SPACE		54
			KVA	PH	AMPS				
			13.6	A	113				
			9.8	B	81				
			11.5	C	96				
VOLTAGE/PHASE						208Y/120V, 3P, 4W			
BUS RATING						225A			
MAIN CIRCUIT BREAKER RATING						200A			
AIC RATING						22K			
SERVICE ENTRANCE RATED						NO			
ENCLOSURE						NEMA 1			
MOUNTING						SURFACE			

VERIFY BREAKER SIZE FOR WORKSHOP EQUIPMENT WITH MANUFACTURER PRIOR TO ORDERING. FOLLOW MANUFACTURER'S INSTALLATION GUIDELINES FOR EQUIPMENT.

BREAKER CAPABLE OF BEING LOCKED IN THE OPEN POSITION.

PANEL H1									
CKT	LOAD	BKR	LOAD KVA	PH	LOAD KVA	BKR	LOAD	CKT	
1	HP-1	15/3	2.22	A	2.55	15/3	AH-1	2	
3			2.22	B	2.55			4	
5			2.22	C	2.55			6	
7	HP-2	15/3	2.22	A	2.55	15/3	AH-2	8	
9			2.22	B	2.55			10	
11			2.22	C	2.55			12	
13	HP-3	15/3	2.22	A	2.55	15/3	AH-3	14	
15			2.22	B	2.55			16	
17			2.22	C	2.55			18	
19	HP-4	15/3	2.22	A	2.55	15/3	AH-4	20	
21			2.22	B	2.55			22	
23			2.22	C	2.55			24	
25	HP-5	15/3	2.22	A	2.55	15/3	AH-5	26	
27			2.22	B	2.55			28	
29			2.22	C	2.55			30	
31	HP-6	15/3	2.77	A	3.33	15/3	AH-6	32	
33			2.77	B	3.33			34	
35			2.77	C	3.33			36	
37	HP-7	15/3	2.77	A	3.33	15/3	AH-7	38	
39			2.77	B	3.33			40	
41			2.77	C	3.33			42	
			KVA	PH	AMPS				
			36.0	A	130				
			36.0	B	130				
			36.1	C	130				

VOLTAGE/PHASE		277/480V, 3P, 4W
BUS RATING		225A
MAIN CIRCUIT BREAKER RATING		MLO
AIC RATING		22K
SERVICE ENTRANCE RATED		NO
ENCLOSURE		NEMA 1
MOUNTING		SURFACE

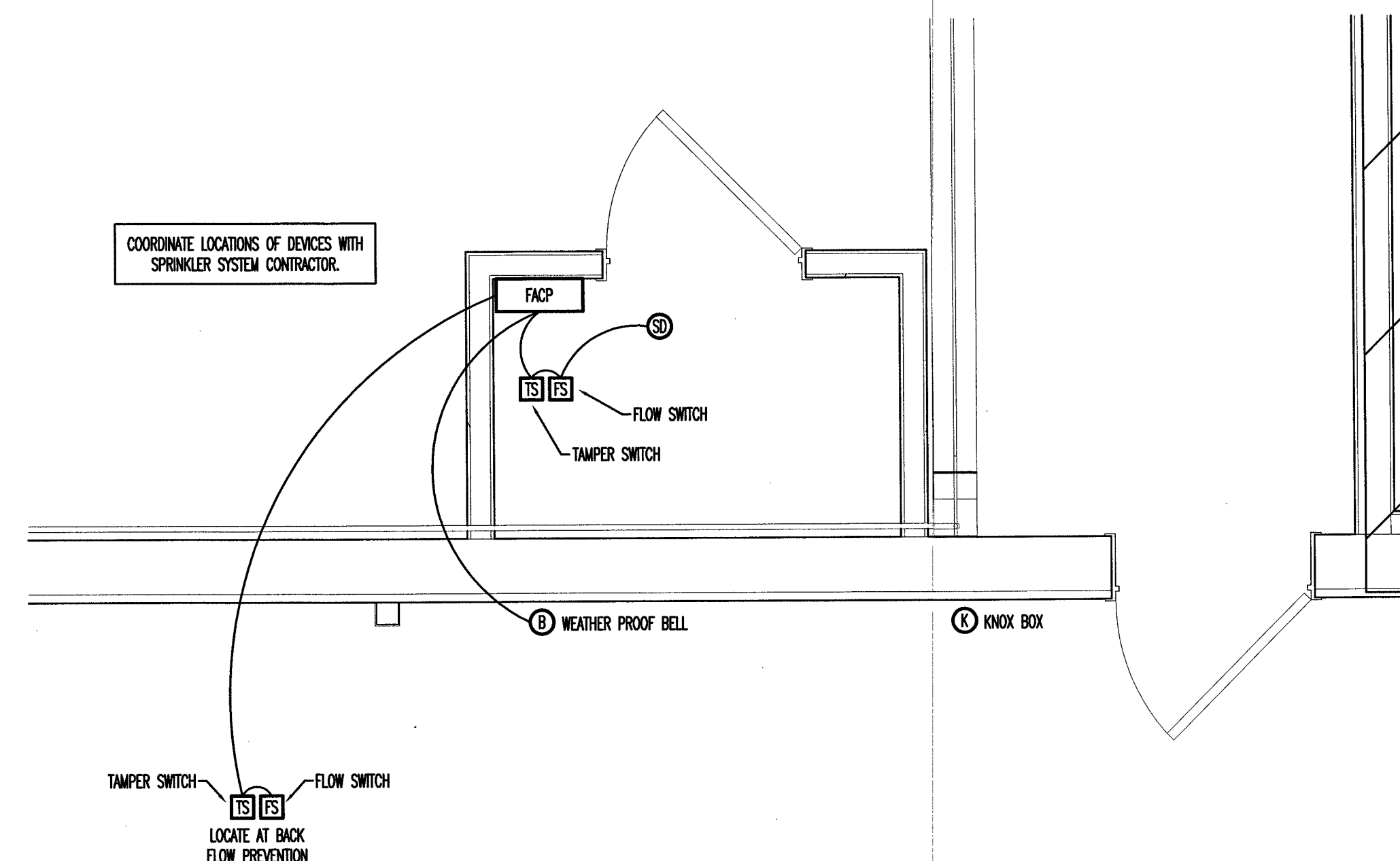
2. PROVIDE MEANS TO FURNISH AND INSTALL.
3. THE FIRE ALARM SYSTEM CONTROLLER (FASC) SHALL PROVIDE ALL MATERIALS, LABOR, ETC., AS NECESSARY FOR A COMPLETE AND OPERATIONAL FIRE ALARM SYSTEM.
4. THESE DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL MINOR DETAILS AND EXACT LOCATIONS. THE FASC SHALL ALLOW FOR ADJUSTMENTS TO ACCOMMODATE INTERFERENCES BOTH ABOVE AND BELOW THE DRAWING. THE FASC SHALL BE RESPONSIBLE FOR THE RIB RUN.
5. THE SUCCESSFUL FIRE ALARM BODER SHALL PROVIDE CONSTRUCTION DOCUMENTS TO THE AUI FOR APPROVAL INCLUDING ALARM CONTROLS AND TROUBLE SIGNALING EQUIPMENT, ANNUNCIATION, POWER CONNECTIONS, BATTERY CALCULATIONS, VOLTAGE DROP CALCULATIONS, CONDUCTOR TYPES AND SIZES, LOCATIONS OF INITIATING AND NOTIFICATION APPLIANCES, AND MANUFACTURERS, MODEL NUMBERS, AND LISTING INFORMATION FOR ALL EQUIPMENT, DEVICES AND MATERIALS.
6. ALL WORK SHALL BE IN ACCORDANCE WITH NFPA 72 AND APPLICABLE SECTIONS OF NFPA 70 AND 13.
7. CONDUIT, CONDUCTORS, BOXES, AND HANGERS SHALL BE THE SAME AS THOSE SPECIFIED IN THE ELECTRICAL SYSTEM.
8. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BEAR UL LABEL OR EQUIVALENT WHERE APPLICABLE.
9. THE FIRE ALARM SYSTEM SHALL BE OF THE ADDRESSABLE TYPE WITH EACH INITIATING DEVICE REPORTING INDIVIDUALLY TO THE FIRE ALARM CONTROL PANEL. ONLY THE MANUFACTURER OR AN AUTHORIZED DISTRIBUTOR WHO STOCKS SAYS COMPONENTS FOR THE ENTIRE SYSTEM SHALL CONVEY, PROGRAM OR TEST THE ADDRESSABLE FIRE ALARM SYSTEM. ALL TECHNICIANS PERFORMING SUCH WORK SHALL BE TRAINED AND INDIVIDUALLY CERTIFIED BY THE MANUFACTURER FOR THE MODEL OF SYSTEM BEING INSTALLED. COPIES OF THEIR CERTIFICATION SHALL BE AVAILABLE UPON REQUEST. THE MANUFACTURER OR AUTHORIZED DISTRIBUTOR SHALL STORE THE COMPLETE PROGRAMMING FOR THE ADDRESSABLE SYSTEM ON A 3 1/2" DISK OR DISKETTE AND ARCHIVE ANOTHER COPY OF THE PROGRAMMING. THE SYSTEM SHALL BE MADE AVAILABLE TO THE OWNER WHEN THE SYSTEM IS COMMISSIONED. THE MANUFACTURER OR AUTHORIZED DISTRIBUTOR SHALL MAINTAIN SOFTWARE VERSION RECORDS ON THE SYSTEM INSTALLED AND PROVIDE FIRM UPDATES IF THE MANUFACTURER RELEASES A NEW VERSION OF THE SOFTWARE DURING THE WARRANTY PERIOD. PROVIDE A SYSTEMS FURNISHER THAT GETS THE FIRE ALARM CONTROL PANEL RESPONSE FOR EACH INITIATING DEVICE.
10. THE SYSTEM SHALL BE NOMINAL 24VDC, NON-CODED, AND SUPERVISED (INCLUDING CONTROL PANELS). ALL EQUIPMENT SUPPLIED MUST BE LISTED FOR ITS PARTICULAR USE AND INSTALLED IN ACCORDANCE WITH ANY INSTRUCTIONS APPLICABLE TO ITS LISTING.
11. THE SYSTEM SHALL BE ELECTRICALLY SEPARATED FOR OPEN OR GROUND FAULT CONDITIONS IN DETECTION, ALARM, AND CONTROL CIRCUITS. THE REMOVAL OF ANY DETECTION DEVICE OR ALARM DEVICE, FUSE, OR SYSTEM COMPONENT, OR STRAYING FROM CONNECTIONS SHALL ALSO ACTIVATE A TROUBLE SIGNAL. THE FIRE ALARM SIGNAL SHALL OVERRIDE TROUBLE SIGNALS, BUT THE PRE-ALARM TROUBLE SIGNAL SHALL REAPPEAR WHEN THE PANEL IS RESET.
12. PROVIDE EACH SIGNALING LINE CIRCUIT WITH A MINIMUM OF 20 PERCENT SPARE ADDRESSES FOR FUTURE USE.
13. THE CONNECTIONS BETWEEN INDIVIDUAL ADDRESSABLE MODULES AND THEIR CONTACT TYPE INITIATING DEVICES MUST BE SUPERVISED.

13. THE FIRE ALARM CONTROL PANEL (FACP) POWER SUPPLY MUST HAVE A CONTINUOUS RATED ADEQUATE TO POWER ALL DEVICES AND FUNCTIONS IN FULL ALARM CONTINUOUSLY. BATTERIES MUST MEET THE APPROPRIATE NFA CAPACITY REQUIREMENTS. THE FACP SHALL INCLUDE AN ALARM SILENCE SWITCH AND SHALL BE EQUIPPED WITH THE SUBSEQUENT ALARM RESOUND FEATURE, THE ALARM SILENCE AND RESET FEATURE SHALL NOT REVERSE AR ROWLING UNITS SHUTDOWN. A SUPERVISED "HANG" SYSTEM SHUTDOWN SWITCH MUST BE PROVIDED IN THE FACILITY'S NORMAL OPERATING AREA.
14. ALL CONNECTIONS MADE AT THE FACP MUST BE BY THE MANUFACTURER'S AUTHORIZED FACTORY TRAINED PERSONNEL (NOT THE ELECTRICAL CONTRACTOR).
15. CONDUCTORS SHALL BE MINIMUM #16 AWG STRANDED COPPER TYPE THHN/THWN INSTALLED IN EMT (MINIMUM 3/4 INCH), PERMANENT WIRE MARKERS SHALL BE USED TO IDENTIFY ALL CONNECTIONS AND TERMINATIONS FOR EACH CIRCUIT. ALL FIRE ALARM JUNCTION BOXES SHALL BE SPRAYED RED AND LABELED "FIRE ALARM." TERMINAL BLOCKS SHALL BE PROVIDED IN ALL JUNCTION BOXES WHERE CONNECTIONS ARE MADE. IDENTIFICATION AT SPLICES SHALL INDICATE WHICH CONDUCTOR LEADS TO THE FACP.
16. THE FOLLOWING COLOR SCHEME SHALL BE USED FOR SYSTEM CONDUCTORS:
 - 16.1. INITIATING CIRCUITS (OTHER THAN SMOKE) RED & WHITE
 - 16.2. INITIATING CIRCUITS (SMOKE DETECTION) VIOLET & GRAY
 - 16.3. NOTIFICATION APPLIANCE CONNECTIONS BLUE & BLACK
17. LOW VOLTAGE WIRING SHALL NOT BE INSTALLED IN ANY RACKWAY CONTAINING POWER OR LINE VOLTAGE CONTROL WIRING. THE FACP, ANY AC CONTROL WIRING SHALL BE PROPERLY SEPARATED FROM OTHER CIRCUITS AND THE ENCLOSURE SHALL BE LABELED TO ALERT SERVICE PERSONNEL TO THE HAZARD.
18. DEVICES SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS DETAILED. WHENEVER POSSIBLE, DEVICES SHOULD BE CENTERED ON SPACES OR LOCATED ABOVE OTHER OUTLETS. SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN THREE (3) FEET OF AN HVAC SUPPLY OR RETURN. SMOKE DETECTORS SHALL MOUNTED SMOKE DETECTORS A MINIMUM OF TWELVE (12) INCHES FROM CEILING.
19. PROVIDE A PERMANENT MARK ON EACH DEVICE INSTALLED INDICATING THE DEVICE NUMBER AND ADDRESSABLE LOOP NUMBER. PROVIDE THE SAME INFORMATION INSIDE THE BOX FOR EACH DEVICE.
20. WATER FLOW SWITCHES, VALVE TRIP SWITCHES, AND PRESSURE SWITCHES SHALL BE PROVIDED BY THE INSTALLER BY THE SPRINKLER CONTRACTOR, CONNECTED BY THE ELECTRICAL CONTRACTOR, AND SUPERSEDED BY THE FACP.
21. TESTING SHALL INCLUDE ALL TESTS REQUIRED FOR THE ELECTRICAL SYSTEMS IN ADDITION TO TESTING AND CERTIFICATION BY THE FIRE ALARM SYSTEM SUPPLIER. PROVIDE INSTRUCTION MANUALS TO OWNER PERSONNEL.
22. DEVICES MUST MEET SURVIVABILITY REQUIREMENTS OF THE NFA IS APPLICABLE.
23. THE AUDIBLE ALARM NOTIFICATION APPLIANCE SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECEIBEL (dBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OF 5 dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPABLE SPACE WITHIN THE BUILDING.

NAC CIRCUITS - 16/2, SOLID, FPLP WIRE
DATA CIRCUITS - 18/2, SOLID, FPLP WIRE

MATRIX - SPRINKLED OFFICE BUILDING NOT HIGH-RISE

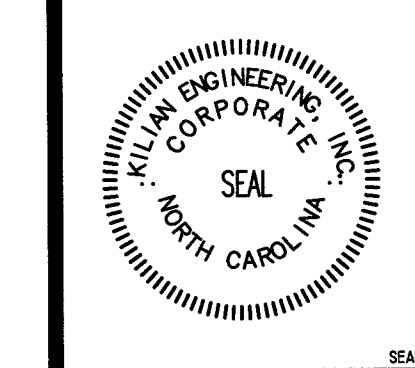
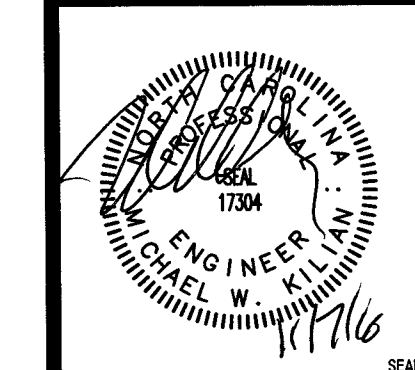
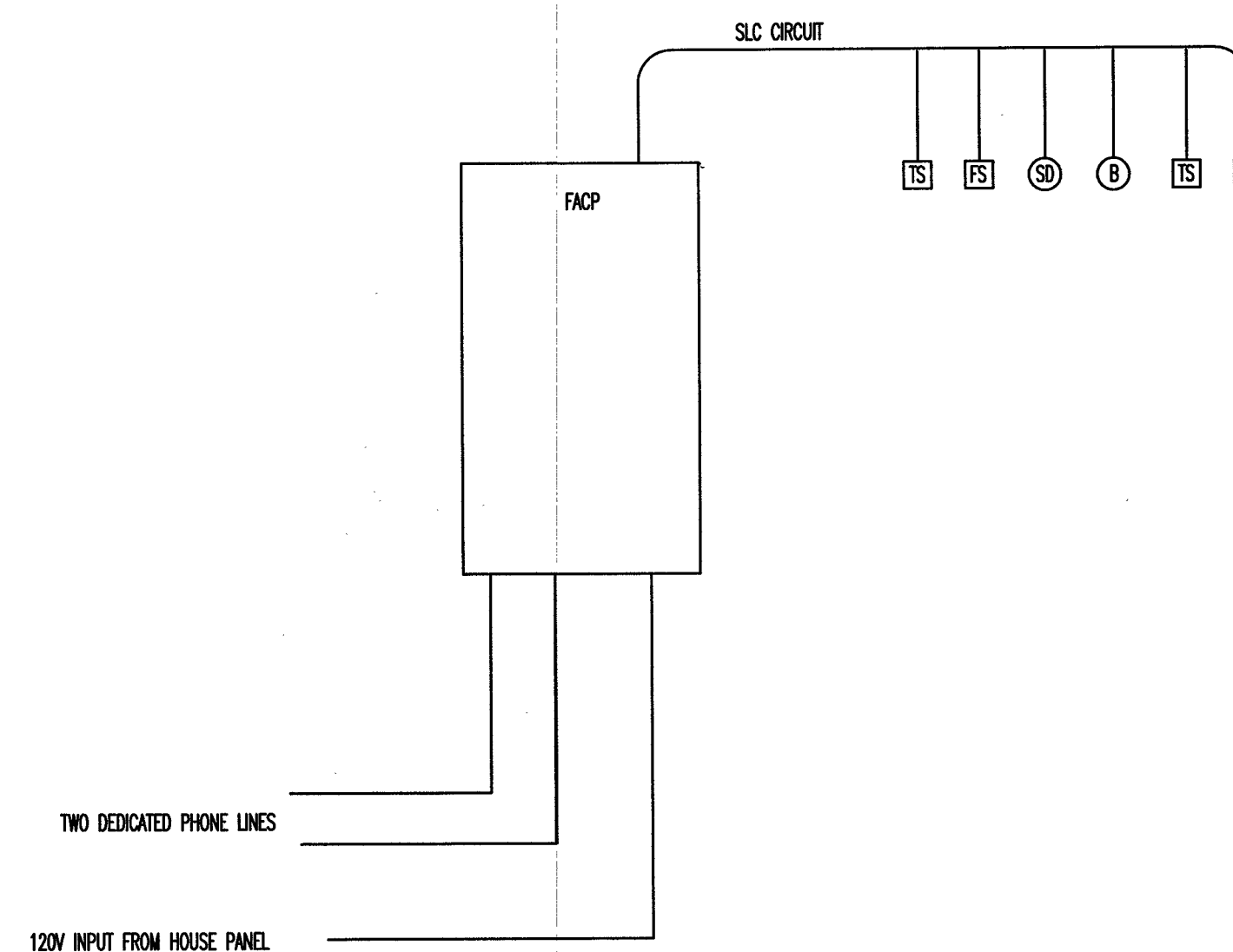
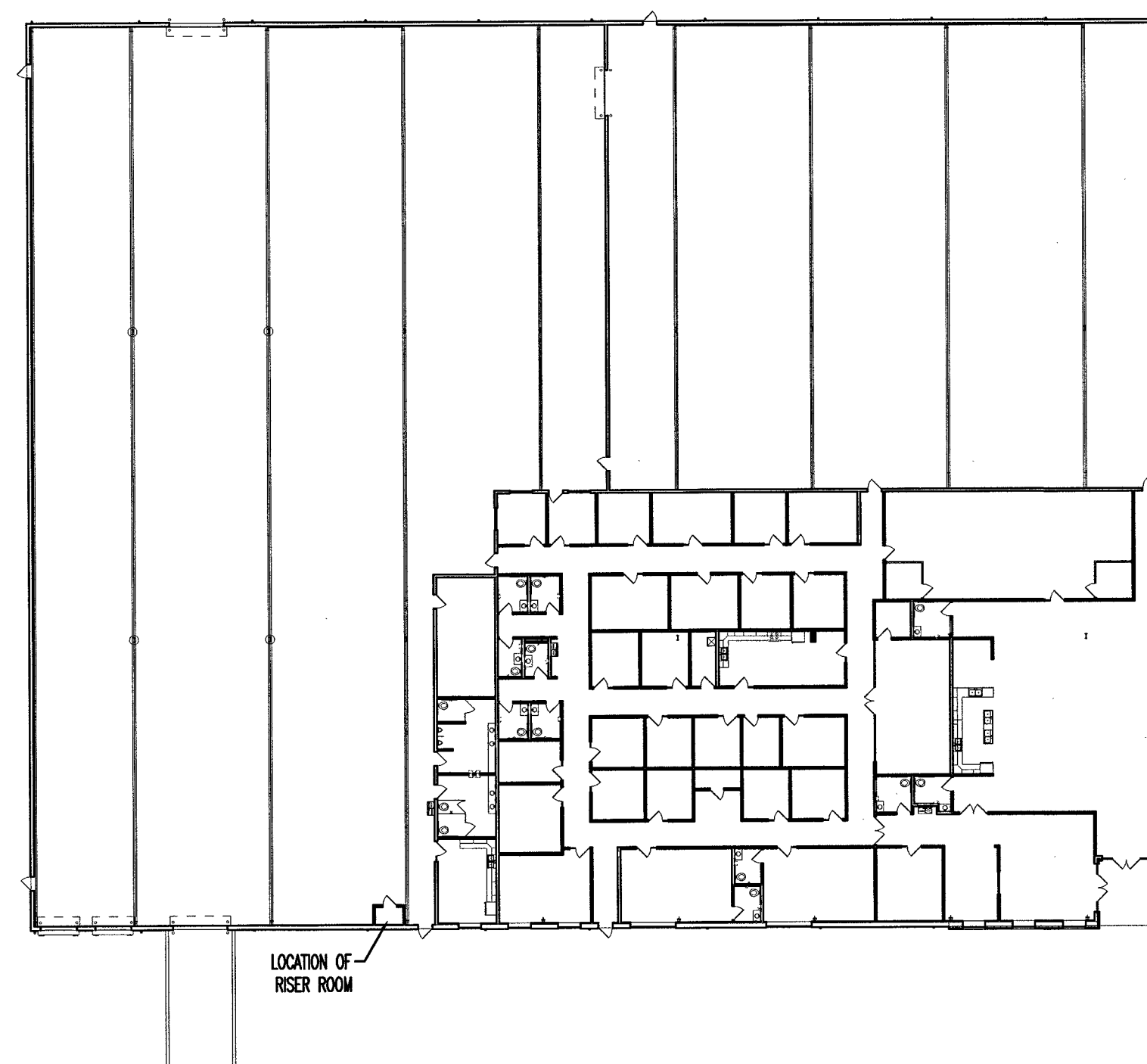
FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX										SYSTEM OUTPUTS		
										FACE	ANNUNCIATION	NOTIFICATION
										AC POWER FAILURE	AC POWER FAILURE	AC POWER FAILURE
										LOW BATTERY	LOW BATTERY	LOW BATTERY
										OPEN CIRCUIT	OPEN CIRCUIT	OPEN CIRCUIT
										GROUND FAULT	GROUND FAULT	GROUND FAULT
										NOTIFICATION APPLIANCE CIRCUIT SHORT (BELL ONLY)	NOTIFICATION APPLIANCE CIRCUIT SHORT (BELL ONLY)	NOTIFICATION APPLIANCE CIRCUIT SHORT (BELL ONLY)
										SPRINKLER TAMPER SWITCH	SPRINKLER TAMPER SWITCH	SPRINKLER TAMPER SWITCH
										SPRINKLER WATER FLOW IN BUILDING	SPRINKLER WATER FLOW IN BUILDING	SPRINKLER WATER FLOW IN BUILDING



	SMOKE DETECTOR
	FIRE ALARM CONTROL PANEL
	WEATHERPROOF BELL
	KNOX BOX

Diagram illustrating the NFPA 72 and ADA device installation requirements for a fire alarm system. The diagram shows the following components and their installation specifications:

- CONDUIT**: INSTALL PER NATIONAL ELECTRIC CODE
- SMOKE / HEAT DETECTOR**: MOUNT ON A 4" SQUARE OR OCTAGON BOX. CLEARANCE: 0'-4" MINIMUM (to ceiling), 3'-0" MINIMUM (to floor).
- AIR SUPPLY OR RETURN AIR OPENING**: MOUNT AUDIBLE & VISUAL DEVICES ON 4" SQUARE DEEP BOX. CLEARANCE: 0'-6" MINIMUM (to ceiling), 0'-4" MINIMUM 1'-0" MAXIMUM (to floor).
- STROBE**: CLEARANCE: 0'-6" MINIMUM (to ceiling), 0'-4" MINIMUM 1'-0" MAXIMUM (to floor).
- HORN**: CLEARANCE: 0'-6" MINIMUM (to ceiling), 0'-4" MINIMUM 1'-0" MAXIMUM (to floor).
- SMOKE / HEAT DETECTOR**: CLEARANCE: 0'-6" MINIMUM (to ceiling), 0'-4" MINIMUM 1'-0" MAXIMUM (to floor).
- GRAPHIC ANNUNCIATOR**: CLEARANCE: 7'-6" MINIMUM TOP OF HORN.
- CONTROL PANEL**: CLEARANCE: 6'-8" MINIMUM 8'-0" MAXIMUM.
- MANUAL PULL STATION**: CLEARANCE: 5'-0" MAXIMUM.
- MOUNT ON SINGLE-GANG BOX**: CLEARANCE: 3'-8" (3'-6" MINIMUM, 4'-0" MAXIMUM).
- FINISHED FLOOR**



NEW CONSTRUCTION FOR:

MAJESTIC MARBLE AND GLASS

JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

REVISIONS:

[illegible]

ISSUED:

[illegible]

DRAWN BY: CRL
CHECKED BY: MWK

FIRE ALARM PLAN AND
NOTES

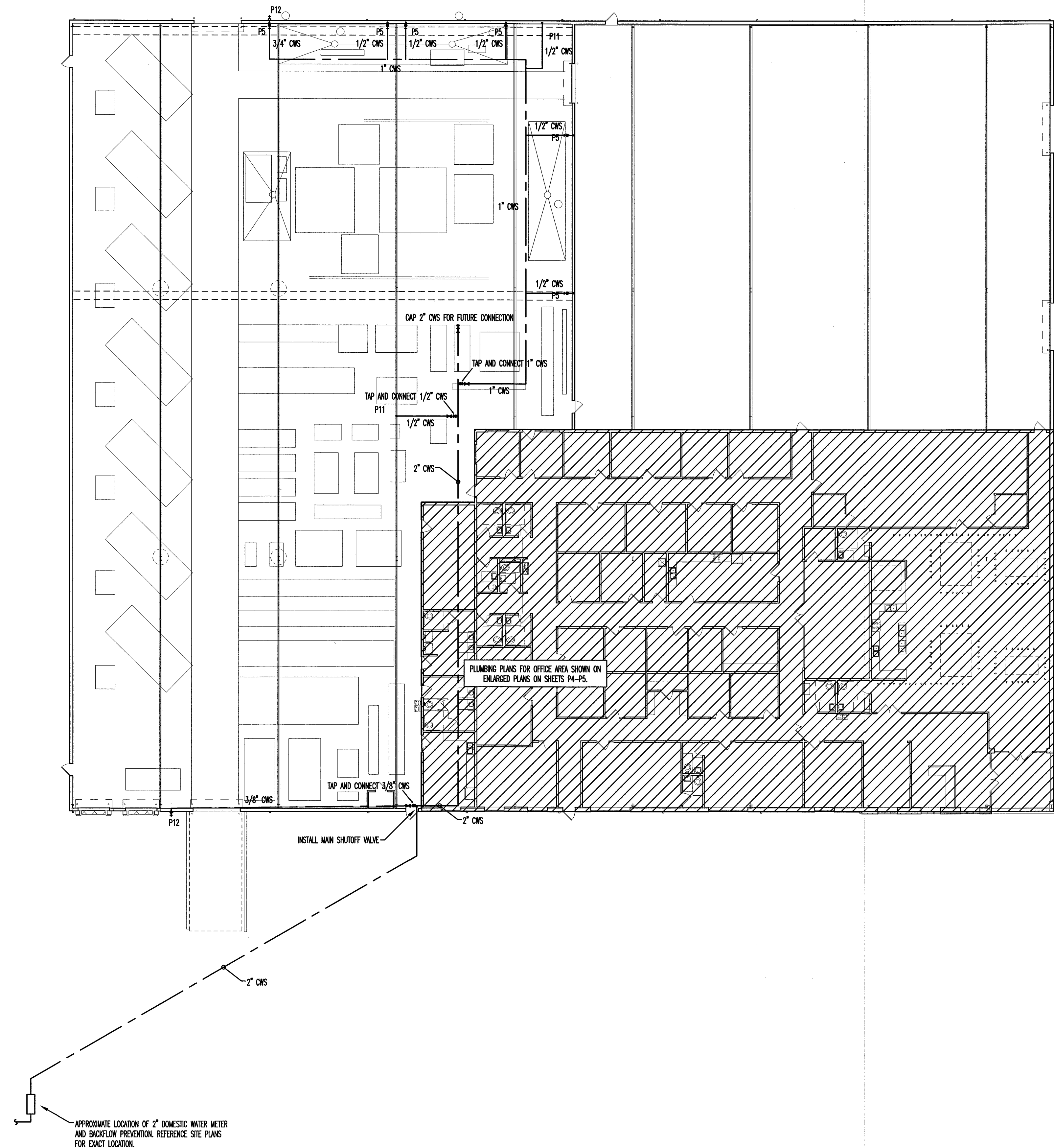
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6	PROJECT NO: 16230
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PLUMBING FIXTURE SCHEDULE									
SYMBOL	FIXTURE	MANUFACTURER	FITTING	HW	CW	WASTE	FURN. BY		
P1	FLUSH VALVE WATER CLOSET	TOTO C705EN OR EQUAL BY AMERICAN STANDARD DR KOHLER	FLOOR MOUNTED, VITREOUS CHINA, 1.28 GPF LOW CONSUMPTION SIPHON JET FLUSHING TOILET COMPLYING WITH ASME 112.19.2, TOILET SHALL BE ELONGATED FRONT BOWL. PROVIDE SCS34 OPEN FRONT SEAT LESS COVER, SLOW DOWN 111-1.28 FLUSHMETER OR EQUAL BY ZURN DR TOTO	-	1"	3"	OWNER		
P1H	ADA FLUSH VALVE WATER CLOSET	TOTO C705ELN OR EQUAL BY AMERICAN STANDARD DR KOHLER	FLOOR MOUNTED, VITREOUS CHINA, 1.28 GPF LOW CONSUMPTION SIPHON JET FLUSHING TOILET COMPLYING WITH ASME 112.19.2, TOILET SHALL BE ELONGATED FRONT BOWL. PROVIDE SCS34 OPEN FRONT SEAT LESS COVER, SLOW DOWN 111-1.28 FLUSHMETER OR EQUAL BY ZURN DR TOTO. TOP OF SEAT SHALL BE 17-19 INCHES AFF FOR ADA.	-	1"	3"	OWNER		
P2	WALL MOUNT LAVATORY	TOTO L7307.4 OR EQUAL BY AMERICAN STANDARD DR KOHLER	VITREOUS CHINA LAVATORY WITH BACKSPASH COMPLYING WITH ASME 112.19.2. TOP OF RIM SHALL BE 34 INCHES AFF FOR ADA. PROVIDE WITH LAV-GUARD PROTECTORS FOR SUPPLY AND DRAIN LINES. PROVIDE JR SMITH 0700 CONCEALED ARMS WITH 19" ARMS 0800 (WALL SUPPORT PLATED). USE A METERING TYPE FAUCET SIMILAR TO CHICAGO 3300-E280SAB.	1/2"	1/2"	2"	OWNER		
P2A	COUNTER MOUNT LAVATORY	TOTO L7511.4 OR EQUAL BY AMERICAN STANDARD DR KOHLER	VITREOUS CHINA SELF-RIMMING LAVATORY COMPLYING WITH ASME 112.19.2. MOUNT SO RIM IS 34 INCHES AFF AND 2 INCHES FROM FRONT EDGE FOR ADA. PROVIDE WITH LAV-GUARD PROTECTORS SUPPLY AND DRAIN LINES. USE A METERING TYPE FAUCET SIMILAR TO CHICAGO 3300-CP.	1/2"	1/2"	2"	OWNER		
P3	URINAL	TOTO U7447E OR EQUAL BY AMERICAN STANDARD DR KOHLER	VITREOUS CHINA, WALL-MOUNTED, ADA COMPLIANT, LOW CONSUMPTION WASHOUT URINAL COMPLYING WITH ASME 112.19.2, 0.5 GPF, SLOW DOWN 186-0.5 FLUSHMETER VALVE OR EQUAL BY ZURN DR TOTO. TOP OF RIM SHALL BE 17 INCHES AFF FOR ADA.	-	3/4"	2"	OWNER		
P4	DRINKING FOUNTAIN	DAVIS P86SL OR EQUAL BY ELKAY DR STERN VILLIAMS	ADA COMPLIANT FOR ADULT AND CHILD, 8.0 GPF @ 50°F WATER AT 90°F AMBIENT. PROVIDE ACCESSORY ASPEN FOR ADA COMPLIANCE AS NECESSARY.	-	3/8"	2"	PC		
P5	INTERIOR HOSE BIBB	MOOREFO MODEL 26 OR EQUAL BY ZURN DR MITAB	PROVIDE CHECK VALVE AND ANTI-SIPHON PROTECTION IF NOT INTEGRAL TO UNIT	-	1/2"	-	PC		
P6	2" RPZ BACKFLOW PREVENTER	WATTS LF909M1 OR EQUAL BY CONRADCO DR VILKINS	RPZ ASSEMBLY CONSISTING OF A PRESSURE DIFFERENTIAL RELIEF VALVE LOCATED IN A ZONE BETWEEN TWO POSITIVE SEATING CHECK VALVES. THE ASSEMBLY SHALL INCLUDE TWO TIGHTLY CLOSING SHUTOFF VALVES BEFORE AND AFTER THE ASSEMBLY, TEST COCKS AND A PROTECTIVE STRAINER UPSTREAM OF THE FIRST SHUTOFF VALVE. THE ASSEMBLY SHALL MEET THE REQUIREMENTS OF ASSE 1013 AND ANNA C511.	-	2"	-	PC		
P7	EXPANSION TANK	AMTROL ST-5 OR EQUAL BY WATTS DR BELL & GOSSETT	INSTALL ON COLD WATER LINE BETWEEN WATER HEATER AND RPZ	-	3/4"	-	PC		
P8	SINK DOUBLE BOWL	ELKAY L260319 OR EQUAL BY FRANKIE DR MOEN	TOP MOUNTED 18 GA STAINLESS STEEL, MAX BOWL DEPTH 6 INCHES FOR WHEEL CHAIR ACCESSIBILITY-USE DELTA FAUCET SET 340-WP OR EQUAL BY MOEN DR KOHLER.	1/2"	1/2"	2"	OWNER		
P9	MOP SINK	FIAT MSB2424 OR EQUAL BY FLORESTINE DR STERN VILLIAMS	OUTSIDE DIMENSIONS OF 24X24X10. 10 INCH HIGH WALLS WITH NOT LESS THAN 1 INCH WIDE STAINLESS STEEL DRAIN BODY DESIGNED TO PROVIDE FOR A CALK CONNECTION OR QDC-3 JOINT TO A 3 INCH DRAIN PIPE. INCLUDE A COMBINATION DOME STRAINER AND LINT BASKET OF STAINLESS STEEL. PROVIDE 80-AA CHROME PLATED SERVICE FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4 INCH HOSE THREAD ON SPOUT.	1/2"	1/2"	3"	PC		
P10	REFRIGERATOR VALVE BOX	DATLEY OR APPROVED EQUAL	HIGH IMPACT POLYSTYRENE BOX WITH 1/4 TURN BRASS BALL VALVE. COMPLIANT WITH NSF 61, SECTION 9.	-	1/2"	-	PC		
P11	EYEWASH STATION	HAWS 7360BWC OR APPROVED EQUAL	BARRIER FREE, ADA COMPLIANT EYE/FACE WASH STATION WITH EYE/FACE WASH HEAD ASSEMBLY. INTEGRAL MESH WATER STRAINER AND FLIP JUST COVERS. MEETS ANSI Z358.1 STANDARD. PROVIDE TUBS. EYE LEAD FREE THERMOSTATIC MIXING VALVE COMPLYING WITH ASSE 1071.	-	1/2"	1-1/4"	PC		
P12	FREEZEPROOF HOSE BIBB	MOOREFO MODEL 68 OR EQUAL BY ZURN DR MITAB	THE MODEL 68 IS AN ASSE 1053 LISTED HYDRANT, WITH A ASSE 1052 DOUBLE CHECK BACKFLOW PREVENTER, COMES WITH A CHROME PLATED BRASS HEAD WITH STAINLESS STEEL COVER. IT DRAINS AUTOMATICALLY EVEN WITH A ATTACHED HOSE, HAS A ONE-PIECE PLUNGER WHICH CONTROLS DRAIN AND FLUX FUNCTION, WORKS WITH PRESSURES UP TO 125 PSI, AND A MAX TEMPERATURE OF 120 DEGREES, TEE KEY FOR HYDRANT DOOR AND LOCK. EASIER TO INSTALL THAN STANDARD RECESSED BOX HYDRANT, WALL CLAMP IS INCLUDED, HEAD COVER FLIPS DOWN AND OUT OF THE WAY FOR UNOBSTRUCTED HYDRANT USE.	-	3/4"	-	PC		
P13	AUTOMATIC TRAP PRIMER	ZURN 1022 OR EQUAL BY WATTS DR JR SMITH	COMPLIANT WITH ASSE 1018. INSTALL IN SUPPLY LINE TO LAVATORY 12 IN OR MORE ABOVE FINISHED FLOOR. PROVIDE ACCESS PANEL FOR MAINTENANCE AND VISUAL INSPECTION.	-	1/2"	-	PC		
P14	FLOOR DRAIN	WATTS FD-200-A OR EQUAL BY ZURN DR JR SMITH	ON GRADE EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, WEEP HOLES, ADJUSTABLE ROUND NICKEL BRONZE STRAINER, AND NO HUB OUTLET. PROVIDE TRAP PRIMER CONNECTION OPTION IF NOTED.	-	-	3"	PC		
P15	FLOOR SINK	WATTS FS-740 OR EQUAL BY ZURN DR JR SMITH	12 INCH SQUARE X 8 INCH DEEP SANITARY FLOOR SINK WITH WHITE PORCELAIN ENAMEL COATED INTERIOR, LUGS SET PORCELAIN ENAMEL COATED CAST IRON GRATE, ALUMINUM DOME BOTTOM STRAINER, AND NO HUB OUTLET.	-	-	3"	PC		
P16	WATER HAMMER ARRESTOR	ZURN Z1700 SERIES OR EQUAL BY WATTS DR STOKR CHIEF	INSTALL ON BRANCH LINES PER MFG'S INSTRUCTIONS. PROVIDE ACCESS PANEL WHERE NECESSARY WHERE LOCATED ABOVE HARD CEILINGS OR WITHIN WALLS.	-	VARIES	-	PC		
FC0	FLOOR CLEAOUT	ZURN, WATTS, JR SMITH	EPOXY COATED CAST IRON FLOOR CLEAOUT WITH ROUND ADJUSTABLE GASKETED NICKEL BRONZE TOP, REMOVABLE GAS TIGHT GASKETED BRASS CLEAOUT PLUG, AND NO HUB INLET.	-	-	4"	PC		
WC0	WALL CLEAOUT	ZURN, WATTS, DR JR SMITH	CAST IRON CLEAOUT FERRULE WITH THREADED BRASS COUNTERSINK CLEAOUT PLUG, STAINLESS STEEL ACCESS COVER, AND VANDAL PROOF STAINLESS STEEL SCREW	-	-	4"	PC		
RD	ROOF DRAIN	ZURN Z121 OR APPROVED EQUAL	12 INCH DIAMETER ROOF DRAIN. DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRATEL GUARD AND LOW SILHOUETTE CAST IRON DOME.	-	-	4"	PC		
AAV	AIR ADMITTANCE VALVE	STUOR REDIVENT OR APPROVED EQUAL	ANSI/ASSE 1051 LISTED. NSF STANDARD 14. PROVIDE PVC OR ABS CONNECTOR AS NECESSARY. CONNECT VALVE TO PIPING PER MANUFACTURER. INSTALL IN THE VERTICAL, UPRIGHT POSITION AFTER ROUGH-IN AND PRESSURE TESTING OF THE SYSTEM PROVIDE WALL BOX IF NOT ABOVE CEILING OR OTHERWISE CONCEALED.	-	-	2"	PC		

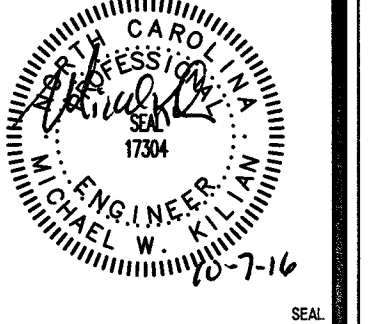
PLUMBING LINES SIZING TABLE									
FIXTURE TYPE	OCCUPANCY	QTY	DRAINAGE FIXTURE UNITS			WATER SUPPLY FIXTURE UNITS			
			EACH	TOTAL	CW	HW	CW & HW	HW TOTAL	TOTAL
WATER CLOSET (FLUSH VALVE)	PUBLIC	14	4.00	56.00	10.00	0.00	10.00	0.00	140.00
LAVATORY	PUBLIC	18	1.00	18.00	1.50	1.50	2.00	27.00	36.00
URINAL (3/4" FLUSH VALVE)	PUBLIC	2	2.00	4.00	5.00	0.00	5.00	0.00	10.00
DRINKING FOUNTAIN	PUBLIC	3	0.50	1.50	0.25	0.00	0.25	0.00	0.75
MOP SINK	PUBLIC	1	2.00	2.00	2.25	2.25	3.00	2.25	3.00
EMERGENCY FLOOR DRAIN	PUBLIC	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DEMAND FIXTURE	GPM	QTY	TOTAL GPM				TOTAL IFU		81.5
KITCHEN DISHWASHER	1.4	1	1.40				TOTAL WFSUs		29.3
HOSE BIBBS SHOWN AT 50%	2.5	8	20.00				GPM		42.00
						OTHER FIXTURES' GPM		1.40	20.00
						TOTAL GPM		43.40	107.50
MINIMUM BUILDING DRAIN SIZE	4"	BUILDING DRAIN SIZE 4" MINIMUM, 6" DRAIN SIZE OWNER / CONTRACTOR CHOICE							
MINIMUM WATER LINE SIZE	2"								



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Plumbing • Mechanical
Electrical • Fire Alarm



NEW CONSTRUCTION FOR:

MAJESTIC MARBLE AND GLASS

JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

REVISIONS:			
NO.	DATE	DESCRIPTION	

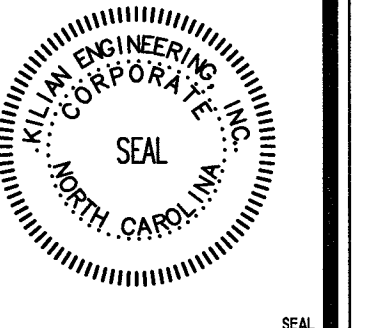
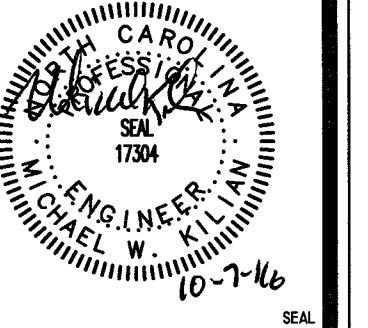
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NO.	DATE	DESCRIPTION	

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CHECKED BY: MWK

WAREHOUSE SUPPLY PLAN

SHEET NO.

P2



NEW CONSTRUCTION ONLY

MAJESTIC MARBLE AND GLASS

JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

VISIONS:

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SUED:

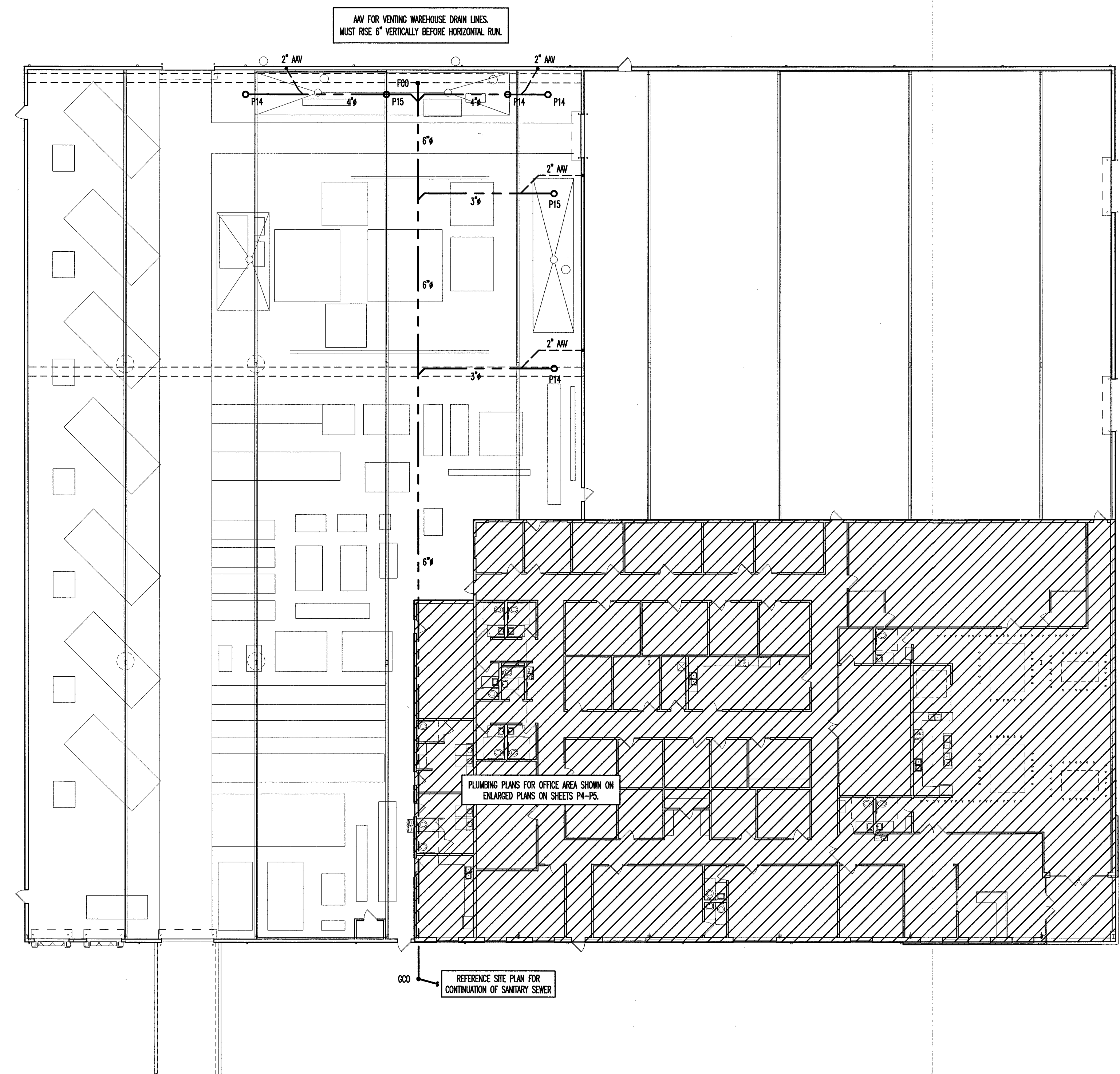
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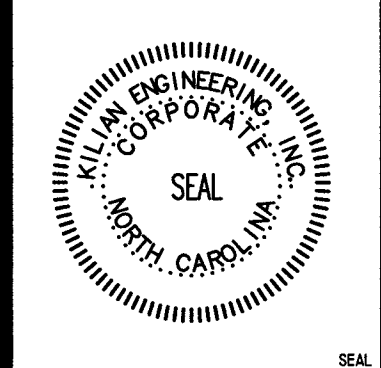
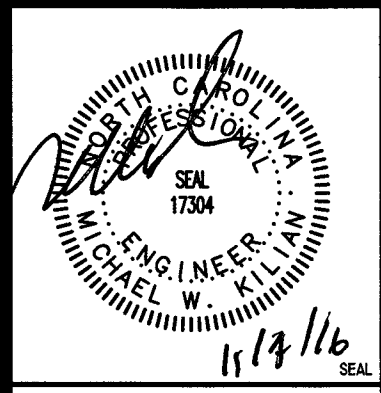
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ECKED BY: MWK
AREHOUSE WASTE PLAN

SHEET NO.

$$P_3$$

PROJECT NO: 16230





NEW CONSTRUCTION FOR:
MAJESTIC MARBLE AND GLASS
JEFFREY WAY
YOUNGSVILLE, NC
FRANKLIN COUNTY

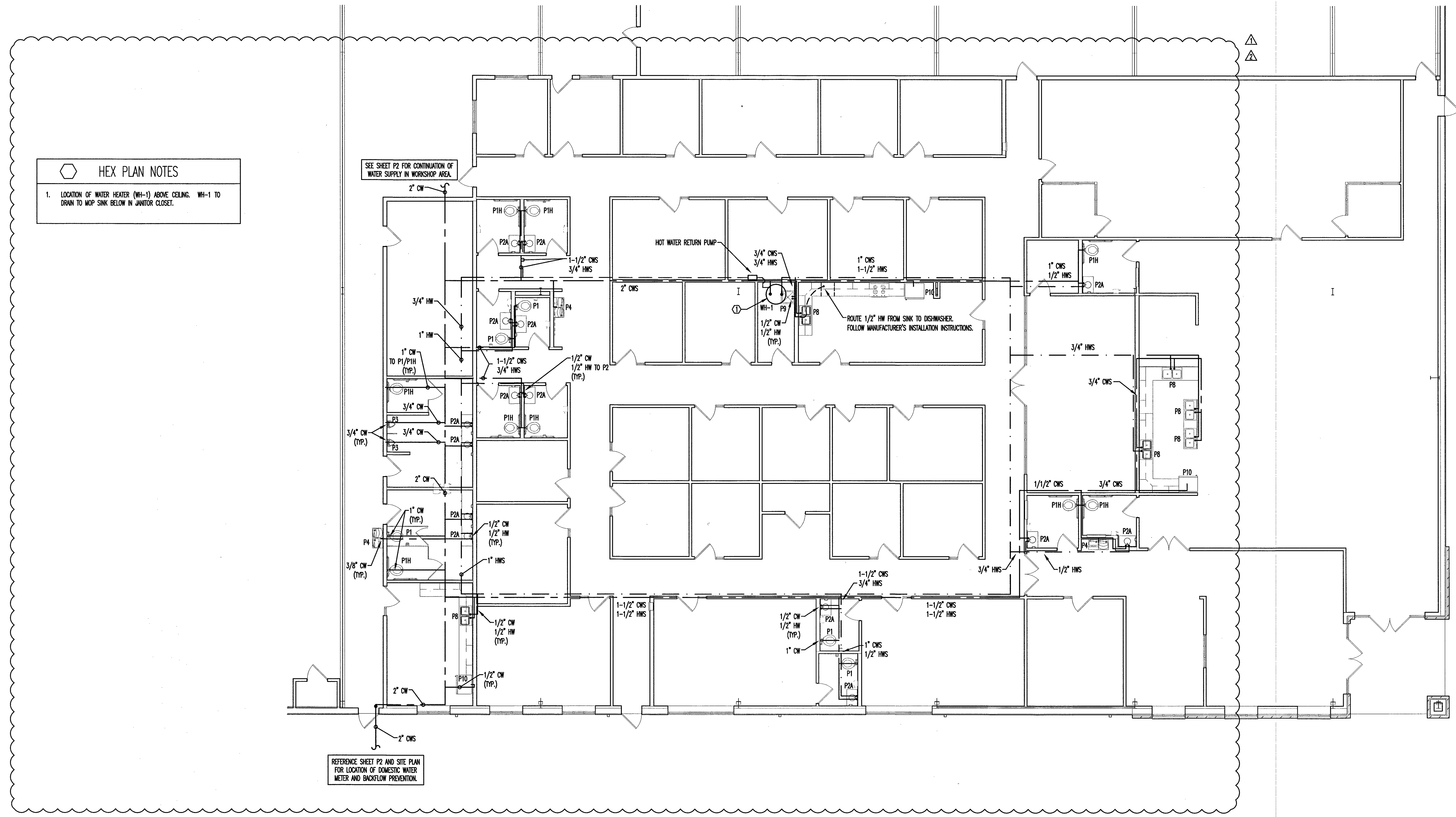
REVISIONS:

NO.	DATE	DESCRIPTION
1	11-04-16	REVISED PER CODE COMMENTS & OWNER REQUEST
2	10-25-16	REVISED PER REQUEST

ISSUED:

NO.	DATE	DESCRIPTION
1	10-07-16	ISSUED FOR PERMIT

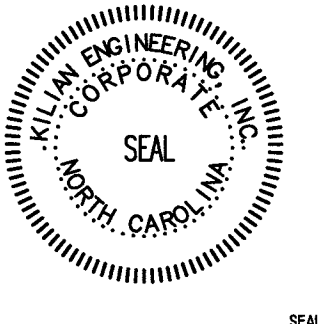
DRAWN BY: CRL
CHECKED BY: MWK
OFFICE SUPPLY PLAN



HEX PLAN NOTES
1. LOCATION OF WATER HEATER (WH-1) ABOVE CEILING. WH-1 TO DRAIN TO MOP SINK BELOW IN JANITOR CLOSET.

SEE SHEET P2 FOR CONTINUATION OF WATER SUPPLY IN WORKSHOP AREA.

REFERENCE SHEET P2 AND SITE PLAN FOR LOCATION OF DOMESTIC WATER METER AND BACKFLOW PREVENTION.



NEW CONSTRUCTION FOR:
MAJESTIC MARBLE AND GLASS
 JEFFREY WAY
 YOUNGSVILLE, NC
 FRANKLIN COUNTY

REVISIONS:

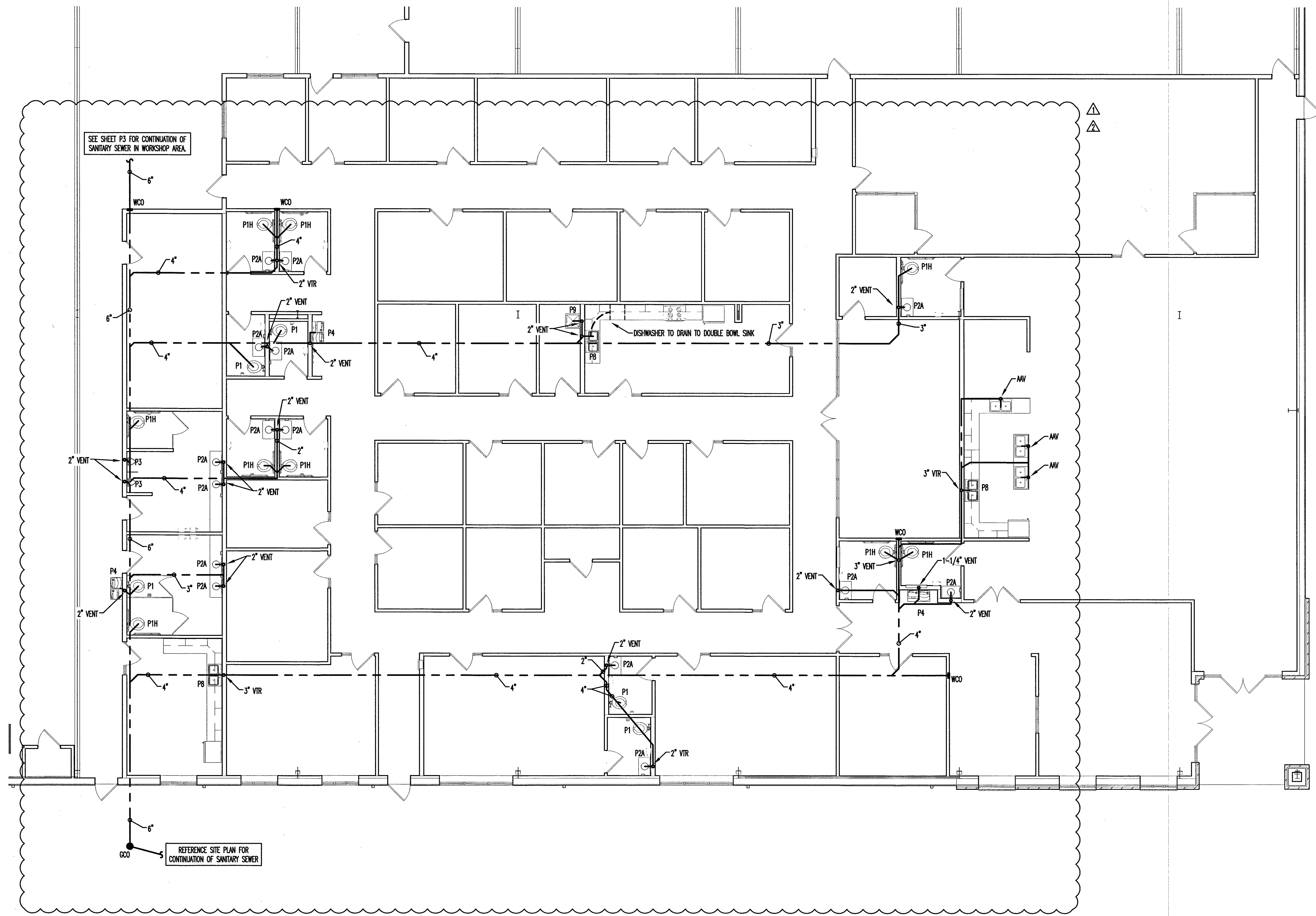
NO.	DATE	REVISION
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2	10-25-16	REVISED PER REQUEST

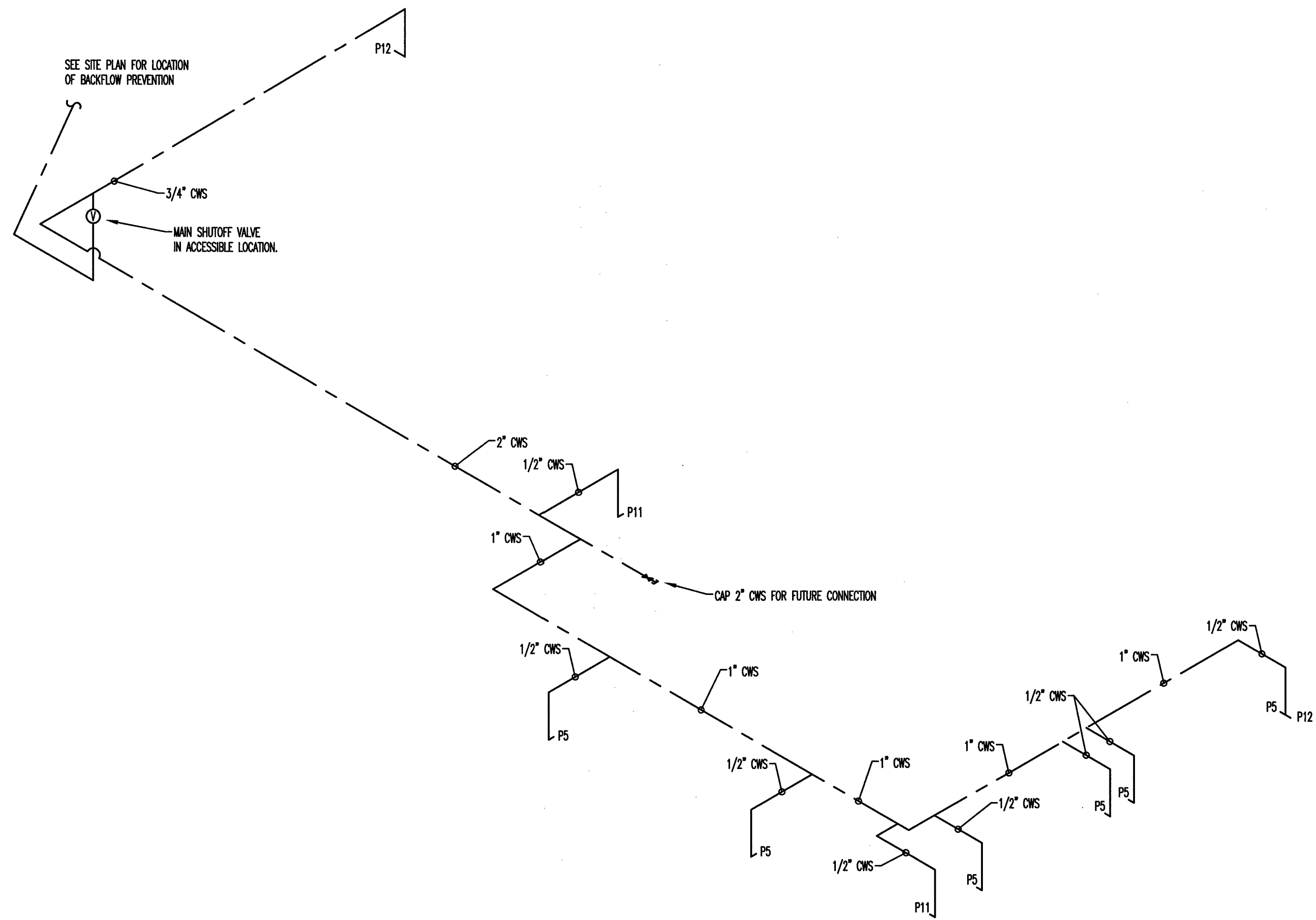
ISSUED:

NO.	DATE	REVISION
1	10-07-16	ISSUED FOR PERMIT

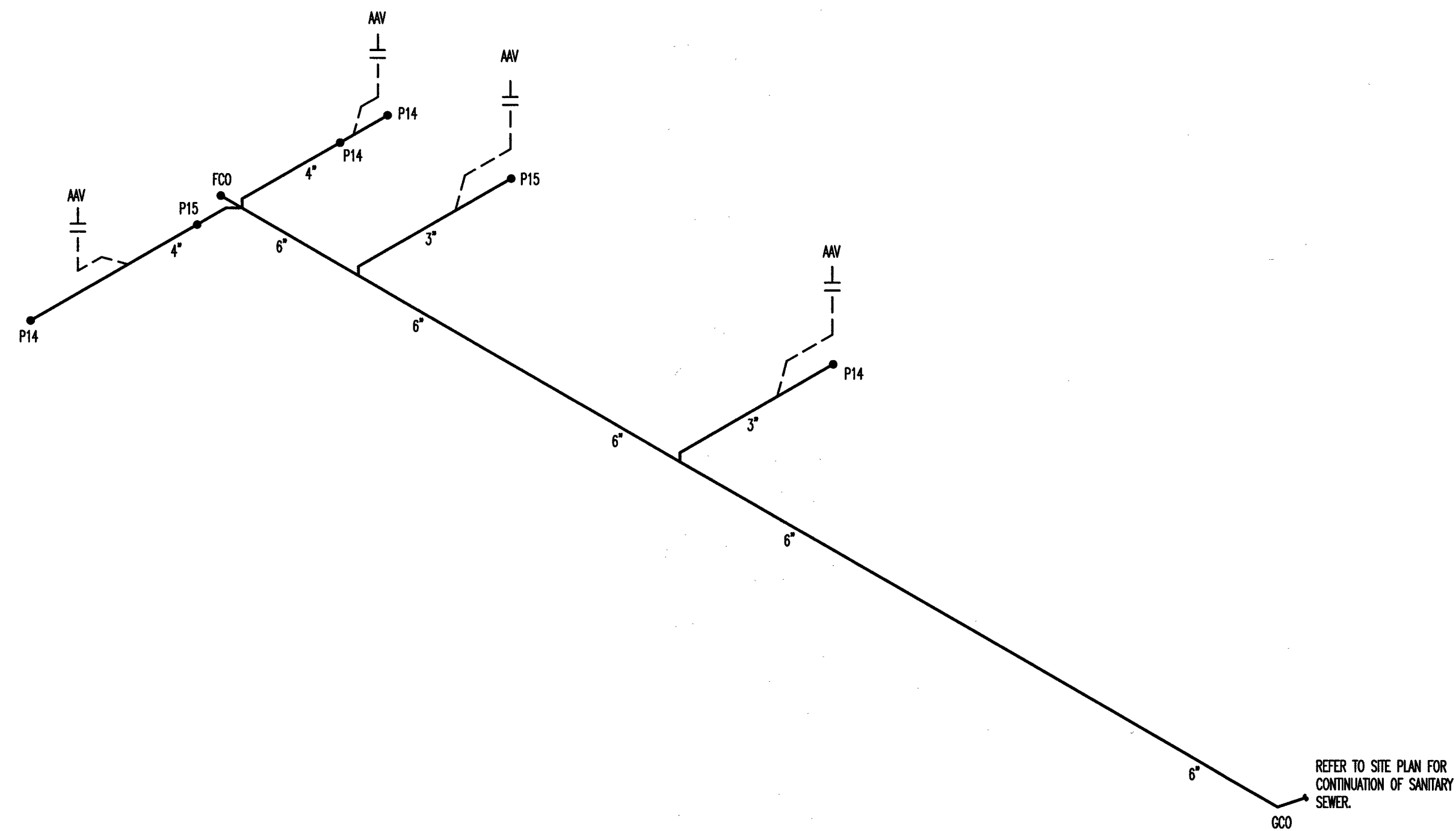
DRAWN BY: CRL
 CHECKED BY: MWK
OFFICE WASTE PLAN

SHEET NO.
P5
 PROJECT NO: 16230

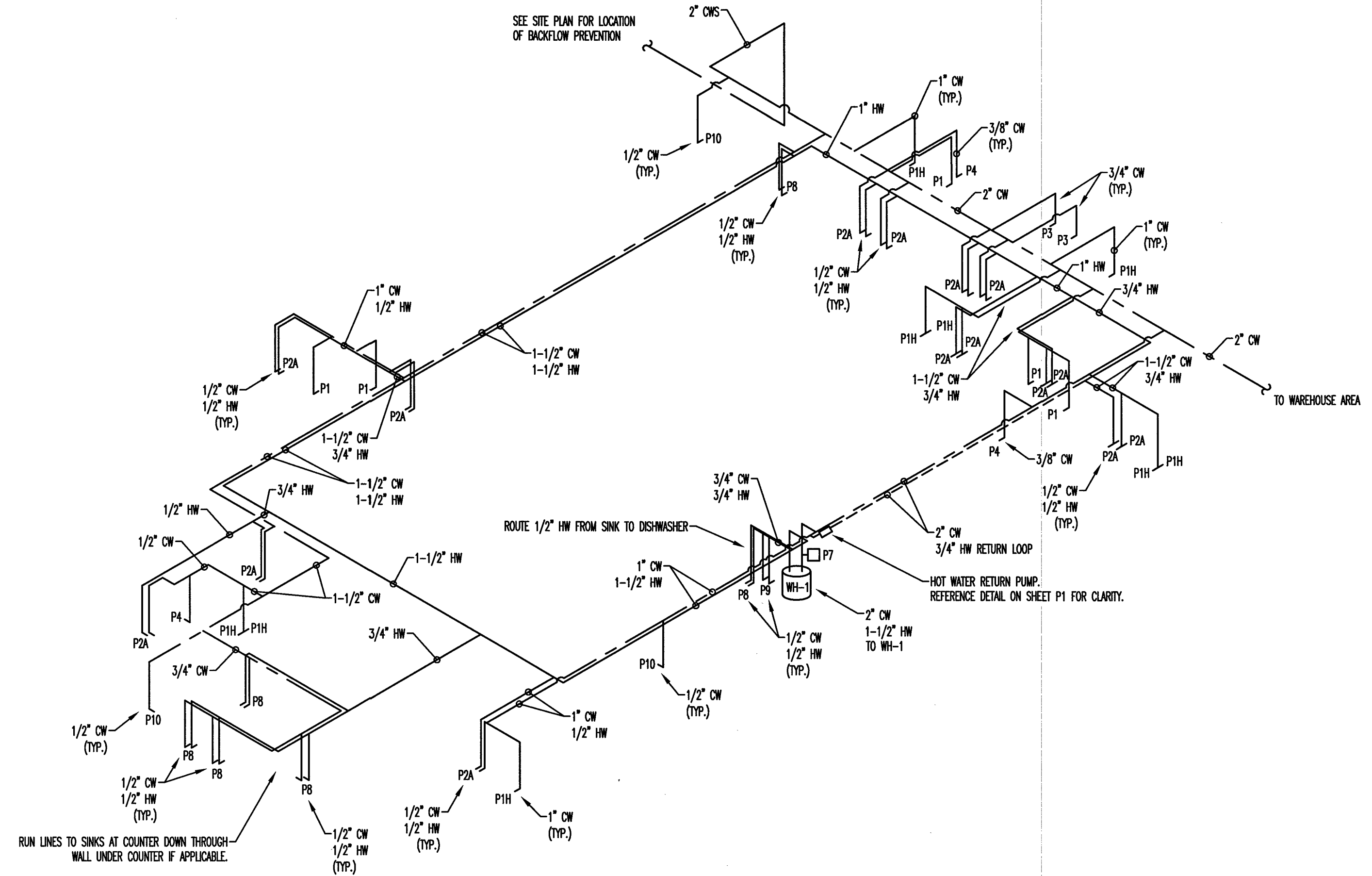




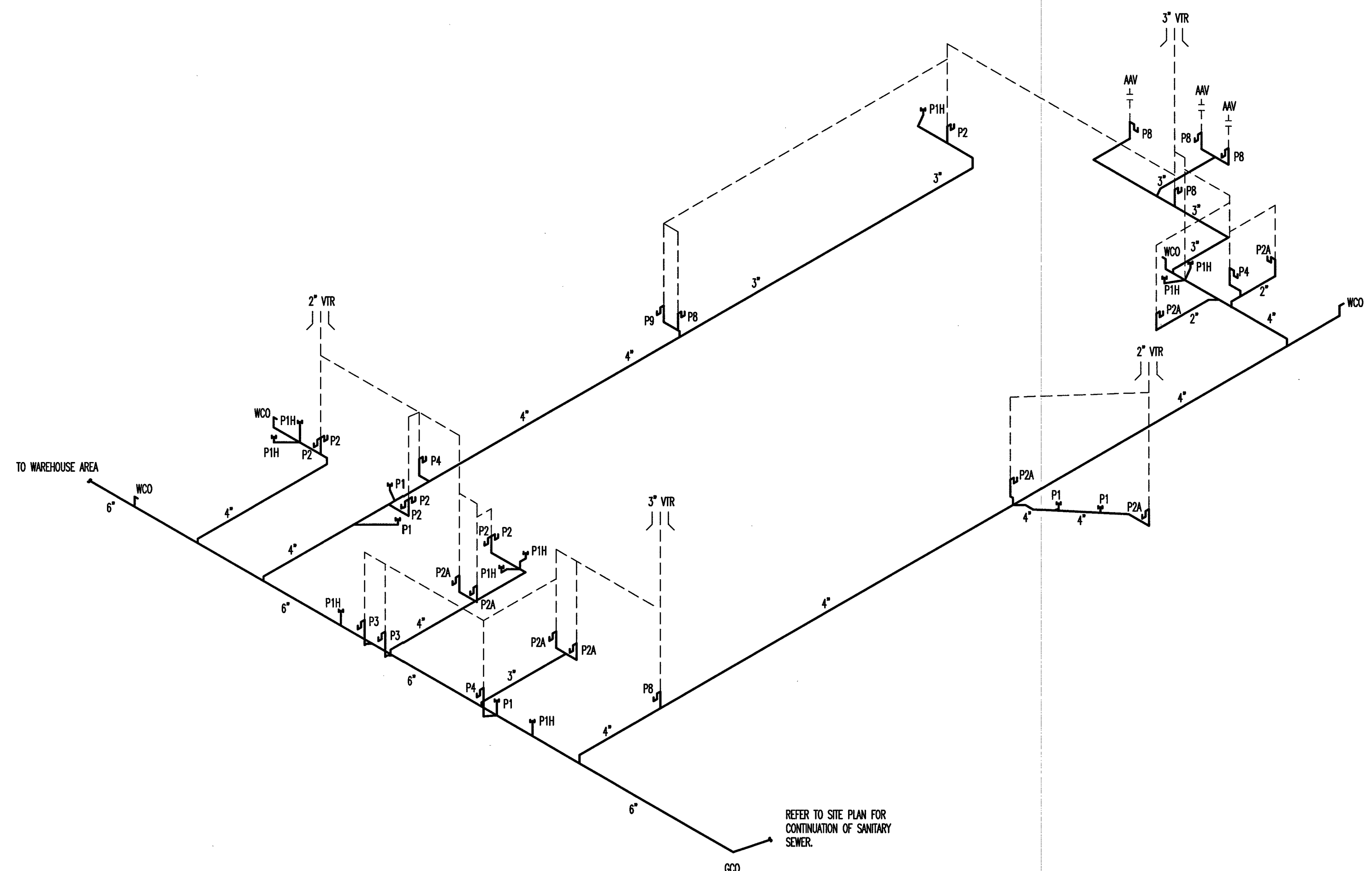
WAREHOUSE SUPPLY RISER - NTS | 1



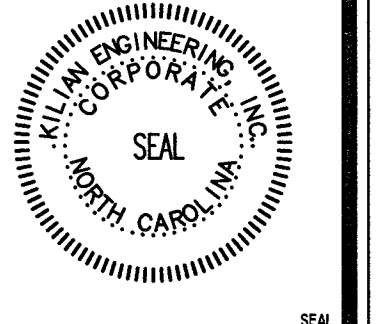
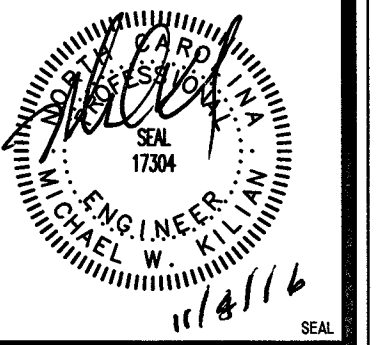
WAREHOUSE SEWER RISER - NTS | 3



OFFICE SUPPLY RISER - NTS | 2



OFFICE SEWER RISER - NTS | 4



NEW CONSTRUCTION FOR:
MAJESTIC MARBLE AND GLASS
 JEFFREY WAY
 YOUNGSVILLE, NC
 FRANKLIN COUNTY

REVISIONS:

NO.	DATE	DESCRIPTION
1	11-04-16	REVISED PER CODE COMMENTS & OWNER REQUEST
2	10-25-16	REVISED PER REQUEST

ISSUED:

NO.	DATE	DESCRIPTION
1	10-07-16	ISSUED FOR PERMIT

DRAWN BY: CRL
 CHECKED BY: MWK
PLUMBING RISERS

SHEET NO.

P6

PROJECT NO: 16230



Sheet No.

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