# **PLANS FOR:**

# OFFICE / WAREHOUSE BLDG

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1.	ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT, INCLUDING ROOF GEOMETRY. JDS CONSULTING, PLLC ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. ENGINEER TO BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
2.	DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL GOVERN OVER DIMENSIONS.

**NOTES** 

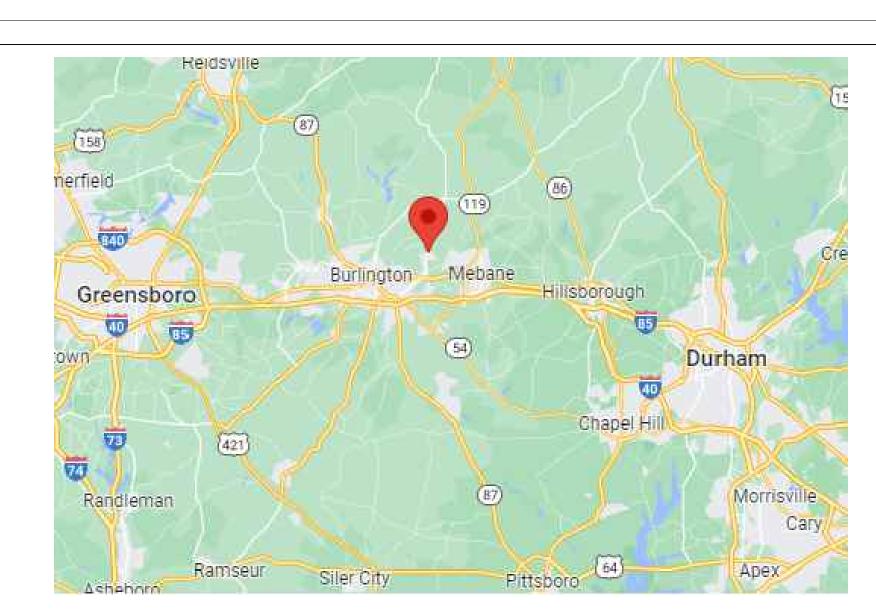
- DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL GOVERN OVER DIMENSIONS.
   PLANS MUST HAVE SIGNED SEAL TO BE VALID AND ARE LIMITED TO THE FOLLOWING USES:
- A. IF THESE PLANS ARE ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR 18 MONTHS FROM THE DATE ON THE SEAL, UNLESS ANY CODE-REQUIRED UPDATES ARE PLACED IN EFFECT BY THE MUNICIPALITY.
   B. IF THESE PLANS ARE NOT ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR A CONDITIONAL, ONE-TIME USE FOR THE LOT OR ADDRESS SPECIFIED ON THE TITLE BLOCK.

ODE		С
ODL		L

ALL CONSTRUCTION, WORKMANSHIP, AND MATERIAL QUALITY AND SELECTION SHALL BE PER:

2018 NORTH CAROLINA STATE BUILDING CODE: BUILDING CODE

# ENGINEER OF RECORD JDS CONSULTING, PLLC ENGINEERING, BUILDING DESIGN, & CONSTRUCTION CONSULTING SERVICES 8600 'D' JERSEY COURT RALEIGH, NC 27617 FIRM LIC. NO: P-0961 PROJECT REFERENCE: 21901603 23900685



VICINITY MAP
NO SCALE

ENGINEERING • D

JDS Consulting PLLC; 8600 'D' JERSEY CT, R

INFO@JDSCONSULTING.NET; WWW

GUTIERREZ, EDDIE

PROJECT:

GUTIERREZ WAREHOUSE

LOCATION:

2390068

DATE: DRAWN BY: NWS

TITLE SHEET

T

# **ABBREVIATIONS**

ABV	ABOVE	LVL	LAMINATED VENEER LUMBER
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
ALT	ALTERNATE	MECH	MECHANICAL
BRG	BEARING	MFTR	MANUFACTURER
<b>BSMT</b>	BASEMENT	MIN	MINIMUM
CANT	CANTILEVER	NTS	NOT TO SCALE
CJ	CEILING JOIST	OA	OVERALL
CLG	CEILING	OC	ON CENTER
CMU	CONCRETE MASONRY UNIT	PT	PRESSURE TREATED
CO	CASED OPENING	R	RISER
COL	COLUMN	REF	REFRIGERATOR
CONC	CONCRETE	RFG	ROOFING
CONT	CONTINUOUS	RO	ROUGH OPENING
D	CLOTHES DRYER	RS	ROOF SUPPORT
DBL	DOUBLE	SC	STUD COLUMN
DIAM	DIAMETER	SF	SQUARE FOOT (FEET)
DJ	DOUBLE JOIST	SH	SHELF / SHELVES
DN	DOWN	SHTG	SHEATHING
DP	DEEP	SHW	SHOWER
DR	DOUBLE RAFTER	SIM	SIMILAR
DSP	DOUBLE STUD POCKET	SJ	SINGLE JOIST
EA	EACH	SP	STUD POCKET
EE	EACH END	J J	SPECIFIED
EQ	EQUAL	SQ	SQUARE
EX	EXTERIOR	T	TREAD
FAU	FORCED-AIR UNIT	TEMP	TEMPERED GLASS
FDN	FOUNDATION	THK	THICK(NESS)
FF	FINISHED FLOOR	TJ	TRIPLE JOIST
FLR	FLOOR(ING)	TOC	TOP OF CURB / CONCRETE
FP	FIREPLACE	TR	TRIPLE RAFTER
FTG	FOOTING	TYP	TYPICAL
HB	HOSE BIBB	UNO	UNLESS NOTED OTHERWISE
HDR	HEADER	W	CLOTHES WASHER
HGR	HANGER	WH	WATER HEATER
JS	JACK STUD COLUMN	WWF	
KS	KING STUD COLUMN	XJ	EXTRA JOIST

NOTE: ALL CHAPTERS, SECTIONS, TABLES, AND FIGURES CITED WITHOUT A PUBLICATION TITLE ARE FROM THE APPLICABLE BUILDING CODE (SEE TITLE SHEET).

# **GENERAL**

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. FURTHERMORE, CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, AND SAFETY ON SITE. NOTIFY JDS CONSULTING, PLLC IMMEDIATELY IF DISCREPANCIES ON PLAN EXIST.
- 2. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.
- 3. NO OPENING SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
- 4. NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
- 5. OPENINGS 1'-4" OR LESS ON A SIDE ARE GENERALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SUCH OPENINGS.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOADS APPLIED TO THE STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE
- 7. FIRE PROOFING METHODS AND MATERIALS FOR STRUCTURAL MEMBERS ARE NOT SHOWN ON STRUCTURAL DRAWINGS, UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE PROOFING METHODS AND MATERIALS.
- 8. DO NOT SCALE THESE DRAWINGS; USE DIMENSIONS.

# **DESIGN CRITERIA**

D	ESIGN CRITERIA
1.	BUILDING CODE: SEE TITLE SHEET
2.	ASSUMED SOIL BEARING-CAPACITY 2,000 PSF
3.	DESIGN LIVE LOADS a. ROOF:
	b. FLOOR (OFFICE) :
	c. FLOOR (CORRIDOR) :
4.	SNOW LOADS
	a. GROUND SNOW: 15 PSF
	b. FLAT ROOF SNOW, Pf: 15 PSF
	c. SNOW EXPOSURE FACTOR, Ce:
	d. IMPORTANCE FACTOR, Is:
	e. THERMAL FACTOR, Ct:
	g. WIDTH OF SNOW DRIFT(S), w:
5.	WIND
	a. ULTIMATE DESIGN WIND SPEED: 116 MPH
	b. NOMINAL DESIGN WIND SPEED: 89 MPH
	c. RISK CATEGORY: II
	d. WIND EXPOSURE CATEGORY: B
	e. INTERNAL PRESSURE COEFFICIENT: +/- 0.18
	f. ROOF COMPONENTS AND CLADDING: + 10 PSF, - 31 PSF
	g. WALL COMPONENTS AND CLADDING: + 18 PSF, - 20 PSF
6.	SEISMIC
	a. RISK CATEGORY: II
	b. IMPORTANCE FACTOR, le:
	c. MAPPED SPECTRAL RESPONSE ACCELERATION, Ss:0.116 g
	d. MAPPED SPECTRAL RESPONSE ACCELERATION, S1: 0.058g
	e. SITE CLASS: D f. DESIGN SPECTRAL RESPONSE ACCELERATION, Sds: 0.23 g
	g. DESIGN SPECTRAL RESPONSE ACCELERATION, Sd1: 0.14g h. SEISMIC DESIGN CATEGORY:
	i. BASIC SEISMIC FORCE-RESISTING
	SYSTEM: STEEL MOMENT FRAME
	j. DESIGN BASE SHEAR: V = 8 k
	k. SEISMIC RESPONSE COEFFICIENT, CS:
	I. RESPONSE MODIFICATION COEFFICIENT, R:
	m. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

# **FOUNDATION**

- 1. MINIMUM ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE 2,000 POUNDS PER SQUARE FOOT (PSF). IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL BEARING CAPACITY IF UNSATISFACTORY CONDITIONS EXIST.
- 2. WOOD SILL PLATES TO BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 6'-0" OC AND WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. INSTALL MINIMUM (2) ANCHOR BOLTS PER SECTION. SEE DRAWINGS FOR SPECIAL CONDITIONS.
- 3. ALL FOOTINGS TO HAVE MINIMUM 2" PROJECTION ON EACH SIDE OF FOUNDATION WALLS (SEE DETAILS).

# STRUCTURAL CONCRETE

- 1. POURED CONCRETE COMPRESSIVE STRENGTH TO BE A MINIMUM 3,000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
- 2. NORMAL-WEIGHT CONCRETE SHALL HAVE A MAXIMUM UNIT WEIGHT OF 145 POUNDS PER CUBIC FOOT (PCF), UNLESS NOTED OTHERWISE.
- 3. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615, GRADE 60, INCLUDING TIES AND STIRRUPS.
- 4. MINIMUM CONCRETE COVER SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
- A. Unformed surfaces in contact with ground:
- B. Formed surfaces exposed to earth or weather:C. Formed surfaces not exposed to earth or weather
- 5. REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISHES. WHERE THE FINISH IS NOT SPECIFIED, CONFORM TO REQUIREMENTS OF ACI 301.
- 6. PLUMBING, MECHANICAL, AND ELECTRICAL (PME) DRAWINGS SHALL BE REFERRED TO FOR DRAINS, SLEEVES, OUTLET BOXES, CONDUIT, ANCHORS, ETC. THE VARIOUS TRADES ARE RESPONSIBLE FOR PLACING THEIR RESPECTIVE ITEMS.
- 7. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN AMERICAN CONCRETE INSTITUTE STANDARD ACI 318 OR ASTM C1157.
- 8. CONCRETE SUBJECT TO MODERATE OR SEVERE WEATHERING PROBABILITY SHALL BE AIR-ENTRAINED WHEN REQUIRED BY THE APPLICABLE CODE.
- 9. WITH CLASS 1 SOILS, VAPOR BARRIER AND CRUSHED STONE MAY BE OMITTED.

# STRUCTURAL MASONRY

- 1. COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS (CMU) SHALL BE 1,900 PSI ON NET AREA.
- 2. MORTAR SHALL BE TYPE S AND COMPLY WITH ASTM INTERNATIONAL STANDARD C270.
- 3. COMPRESSIVE STRENGTH OF MORTAR SHALL BE 1,800 PSI AT 28 DAYS.
- 4. COMPRESSIVE STRENGTH OF MASONRY ASSEMBLAGE SHALL BE 1,500 PSI ON NET AREA.
- 5. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE PUBLICATION 530: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES AND THE MASONRY SOCIETY PUBLICATION TMS 402/602: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES.

# STRUCTURAL STEEL

- 1. STRUCTURAL STEEL WIDE-FLANGE SHAPES SHALL CONFORM TO ASTM A992. Fy = 50 KSI, UNLESS NOTED OTHERWISE.
- 2. ALL STRUCTURAL STEEL TUBE SHAPES SHALL CONFORM TO ASTM A500, GRADE B, Fy = 46 KSI, UNLESS NOTED OTHERWISE.
- 3. ALL STRUCTURAL STEEL PIPE SHAPES SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B, Fy = 36 KSI, UNLESS NOTED OTHERWISE.
- 4. ALL MISCELLANEOUS STRUCTURAL STEEL SHALL CONFORM TO ASTM A36, Fy = 36 KSI, UNLESS NOTED OTHERWISE.
- 5. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO AISC CODE OF STANDARD PRACTICE, SECTION 10.
- 6. BOLTS FOR BOLTED CONNECTIONS SHALL BE 3/4" DIAMETER, ASTM A325, TYPE N, SNUG TIGHT, UNLESS NOTED OTHERWISE.
- 7. FABRICATOR SHALL DESIGN BEAM CONNECTIONS PER LOADS PROVIDED IN AISC UNIFORM LOAD TABLES, UNLESS NOTED OTHERWISE.
- 8. ALL BEAMS AND GIRDERS SHALL HAVE THEIR ROLLING CAMBER PLACED UP.
- 9. NO CHANGE IN SIZE OR POSITION OF THE STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD. HOLES, SLOTS, CUTS, ETC. ARE NOT PERMITTED THROUGH ANY MEMBER UNLESS THEY ARE DETAILED ON THE APPROVED SHOP DRAWINGS.
- 10. SPLICING OF STRUCTURAL STEEL MEMBERS, WHERE NOT DETAILED, IS PROHIBITED WITHOUT WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
- 11. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, UNLESS NOTED OTHERWISE.
- 12. NO FINAL BOLTING OR WELDING SHALL BE DONE UNTIL AS MUCH OF THE STRUCTURE AS WILL BE STIFFENED THEREBY HAS BEEN PROPERLY ALIGNED.
- 13. INDICATED MODEL NUMBERS FOR ALL METAL HANGERS, STRAPS, FRAMING CONNECTORS, AND HOLD-DOWNS ARE SIMPSON STRONG-TIE BRAND. EQUIVALENT USP BRAND PRODUCTS ARE ACCEPTABLE.
- 14. ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MIN BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR TWO 1/2" x 4" LAG SCREWS, UNO.

# STRUCTURAL WOOD

- 1. ALL STRUCTURAL WOOD SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19%, UNLESS NOTED OTHERWISE.
- 2. INTERIOR / TRIMMED FRAMING LUMBER SHALL BE #2
  SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING DESIGN
  PROPERTIES (#2 SOUTHERN YELLOW PINE MAY BE SUBSTITUTED):
- Fb = 875 PSI Fv = 70 PSI E = 1.4E6 PSI
- 3. FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED #2 SOUTHERN YELLOW PINE (SYP) WITH THE FOLLOWING DESIGN PROPERTIES:
  - Fb = 975 PSI Fv = 95 PSI E = 1.6E6 PSI
- 4. LVL STRUCTURAL MEMBERS TO BE LAMINATED VENEER LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
  - Fb = 2600 PSI Fv = 285 PSI E = 1.9E6 PSI
- 5. PSL STRUCTURAL MEMBERS TO BE PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
- Fb = 2900 PSI Fv = 290 PSI E = 2.0E6 PSI
- 6. LSL STRUCTURAL MEMBERS TO BE LAMINATED STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
  - Fb = 2250 PSI Fv = 400 PSI E = 1.55E6 PSI
- 7. REFER TO I-JOIST EQUIVALENCE CHART ON I-JOIST DETAIL SHEET FOR SUBSTITUTION OF MANUFACTURER SERIES.
- 8. ALL BEARING HEADERS TO BE (2) 2x6 SUPPORTED W/ MIN (1) JACK STUD AND (1) KING STUD EACH END, UNO.
- 9. ALL NON-BEARING HEADERS TO BE (2) 2x4, UNO.
- 10. NON-BEARING INTERIOR WALLS NOT MORE THAN 10' NOMINAL HEIGHT AND NOT SHOWN AS BRACED WALLS MAY BE FRAMED WITH 2x4 STUDS @ 24" OC.
- 11. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS
  THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER
  STRUCTURAL COMPONENTS.
- 12. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
- 13. FACE OF WALL FRAMING TO BE FLUSH WITH FACE OF FOUNDATION WALLS, UNLESS NOTED OTHERWISE.
- 14. ALL ENGINEERED WOOD PRODUCTS (LVL, PSL, LSL, ETC.) SHALL BE INSTALLED WITH CONNECTIONS PER MANUFACTURER SPECIFICATIONS.
- 15. ENGINEERED WOOD FLOOR SYSTEMS AND ROOF TRUSS SYSTEMS:

  A. SHOP DRAWINGS FOR THE SYSTEMS SHALL BE PROVIDED

  TO THE ENGINEER OF RECORD FOR REVIEW AND
  - COORDINATION BEFORE CONSTRUCTION.

    B. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS
  - MANUFACTURER.
    C. INSTALLATION OF THE SYSTEMS SHALL BE PER
  - MANUFACTURER'S INSTRUCTIONS.

    D. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN IN THESE
- 16. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED, WITH A MINIMUM OF THREE STUDS, UNO.
- 17. WHEN A 4-PLY LVL BEAM IS USED, ATTACH WITH (1) 1/2" DIAMETER BOLT, 12" OC, STAGGERED TOP AND BOTTOM, 1 1/2" MIN FROM ENDS. ALTERNATE EQUIVALENT ATTACHMENT METHOD MAY BE USED, SUCH AS SDS, SDW, OR TRUSSLOK SCREWS (SEE MANUFACTURER SPECIFICATIONS).
- 18. FOR STUD COLUMNS OF 4-OR-MORE STUDS, INSTALL SIMPSON STRONG-TIE CS16 STRAPS ACROSS STUDS @ 30" OC, 6" MAX FROM PLATES, ON INSIDE FACE OF COLUMN (EXTERIOR WALL), ON BOTH FACES OF COLUMN (INTERIOR WALL).
- 19. FLOOR JOISTS ADJACENT AND PARALLEL TO THE EXTERIOR FOUNDATION WALL SHALL BE PROVIDED WITH FULL-DEPTH SOLID BLOCKING, NOT LESS THAN TWO (2) INCHES NOMINAL IN THICKNESS, PLACED PERPENDICULAR TO THE JOIST AT SPACING NOT MORE THAN FOUR (4) FEET. THE BLOCKING SHALL BE NAILED TO THE FLOOR SHEATHING, THE SILL PLATE, THE JOIST, AND THE EXTERIOR RIM JOIST / BOARD.
- 20. PER SECTION 1604 OF THE APPLICABLE CODE (SEE TITLE SHEET), ANCHORAGE OF THE ROOF TO WALLS AND COLUMNS, AND OF WALLS AND COLUMNS TO FOUNDATIONS TO RESIST UPLIFT AND SLIDING FORCES, SHALL BE PROVIDED. REQUIREMENTS OF THE STRUCTURAL DRAWINGS THAT EXCEED THE CODE MINIMUM

SHALL BE MET.



P-0961

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BPLC IS NOT LIABLE FOR CHANGES MADE TO PLANS DUE
TION METHODS OR ANY CHANGES TO PLANS MADE IN THE FIEL
CTOR OR BY OTHERS. DRAWINGS ARE PROVIDED TO CLIENT FR

JDS Consulting PLLC IS NOT LIABLE CONSTRUCTION METHODS OR ANY BY CONTRACTOR OR BY OTHERS. THE LOT NUMBER, PROPERTY, OR SHEET. DIMENSIONS SHALL GOVERN OVER DIMENSIONS.

JGTON, NC 27217

BU

GUTIERREZ WAREHOUS
CATION:
2350 MANTIN MARIETTA DR. I

0:: 23900685

DATE: 05/24/2023

TIERRI

GENERAL NOTES

NWS

CN1 0

# 2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project	t:OFFICE/WAREHOUSE				
Address: 2350 MA				Zip C	ode _27217
·	zed Agent: JDS CONSULTING	Phone # ( 919	<b>)</b> 480 <b>-</b> 1075		il tcalabro@jdsconsultin
Owned By:		City/County	·		tate
•				<u>=</u>	
Code Enforceme	ent Jurisdiction: 🔲 C	City BURLINGTON	County	D	tate
CONTACT:					
DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	JDS CONSULTING	JONATHAN CROUCH	051518	<u>(919</u> ) 698-3683	JCROUCH@JDSCONSULTIN
Civil				()	
Electrical	JDS CONSULTING	JONATHAN CROUCH	051518	(919) 698-3683	JCROUCH@JDSCONSULTIN
Fire Alarm				()	
Plumbing	JDS CONSULTING	JONATHAN CROUCH	051518	<u>(919</u> ) 698-3683	JCROUCH@JDSCONSULTIN
Mechanical	JDS CONSULTING	JONATHAN CROUCH	051518	<u>(919</u> ) 698-3683	JCROUCH@JDSCONSULTIN
Sprinkler-Standı	pipe			()	
Structural	JDS CONSULTING	JONATHAN CROUCH	051518	<u>(919</u> ) 698-3683	JCROUCH@JDSCONSULTIN
	>5' High			()	
Other	include firms and individ			()	. —
2018 NC EXIS	Phas	sedures and requirents sed Construction - State additional process E: EXISTING:	hell/Core- Contac	_	tion jurisdiction for  Chapter 14
	Third Bell Dhird Cop	Alteration: [	Level I Historic Prope	Level II	Level III Change of Use
CONSTRI	JCTED: (date)	CURRE	T NT OCCUPANO	-	_
RENOVAT	, ,				
	(uaic)		BED OCCUI AN	<b>C1(8)</b> (Cn. 3)	
		_		_	
	<b>ORY</b> (Table 1604.5):	Current:  Proposed:		=	
RISK CATEGO BASIC BUILD	ING DATA_	_		=	□ V-A
RISK CATEGO  BASIC BUILD  Construction T	ING DATA Type:	Proposed:	II _ I	II 🗌 IV	□ V-A □ V-B
BASIC BUILD Construction T (check all that ap	ING DATA Sype:	Proposed:	I	II	☐ V-B
BASIC BUILD Construction T (check all that ap Sprinklers:	ING DATA Sype:	Proposed:   II-A  II-B  Yes  NFI	I	II	=
BASIC BUILD Construction T (check all that ap Sprinklers: Standpipes:	ING DATA  Sype:	Proposed:   II-A  II-B  Yes  II II II III	I	II	☐ V-B
BASIC BUILD Construction T (check all that ap Sprinklers:	ING DATA Sype:	Proposed:   II-A  II-B  Yes  II II II  III III  Flood Hazard	I	II	□ V-B FPA 13D

# **Gross Building Area Table**

FLOOR	EXISTING (SQ FT)	New (so	Q FT)	SUB-TOTAL
3 <sup>rd</sup> Floor				
2 <sup>nd</sup> Floor				
Mezzanine				
1 <sup>st</sup> Floor		7000 9	SQ. FT.	
Basement				
TOTAL		7000 \$	SQ. FT.	
		ALLOWABLE A	AREA	
Primary Occupa	ancy Classification(s):			
Assembly	□ A-1 □ A-2 □ A	A-3	-5	
Business				
Educational				
Factory	F-1 Moderate F	-2 Low		
Hazardous	☐ H-1 Detonate ☐ H	H-2 Deflagrate H-3	Combust H-4	Health H-5 HPM
Institutional	☐ I-1 Condition ☐ 1	$\square$ 2		
	☐ I-2 Condition ☐ 1	$\square$ 2		
	☐ I-3 Condition ☐ 1	$\square$ 2 $\square$ 3 $\square$	<b>□</b> 4 <b>□</b> 5	
	☐ I-4			
Mercantile				
Residential	☐ R-1 ☐ R-2 ☐ 1	R-3		
Storage	S-1 Moderate	S-2 Low High	n-piled	
	Parking Garage	Open    Enclosed [	Repair Garage	
Utility and M	Miscellaneous			
Accessory Occu	pancy Classification(s):	N/A		
Incidental Uses		N/A		
Special Uses (Ch	napter 4 – List Code Sec	ctions): N/A		
Special Provision	ns: (Chapter 5 – List Co	ode Sections): N/A	4	
Mixed Occupan			Hr. Exce	eption:
_ ^		The required type of applying the height at occupancies to the en	construction for the nd area limitations the tire building. The t	e building shall be determined be for each of the applicable most restrictive type of to the entire building.
☐ Sepa	be su		ratios of the actual	the area of the occupancy shall floor area of each use divided exceed 1.
· · · · · · · · · · · · · · · · · · ·	el Area of Occupancy A le Area of Occupancy A	· · · · · · · · · · · · · · · · · · ·	of Occupancy B a of Occupancy B	<b>≤</b> 1
		+	+	± = ≤1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 <sup>4</sup> AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1,5</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2,3</sup>
1ST FLOOR	BUSINESS/OFFICE	7000 SQ. FT.	23,000 SQ. FT.	13,800 SQ. FT.	36,800 SQ. FT.

- Frontage area increases from Section 506.3 are computed thus:

  a. Perimeter which fronts a public way or open space having 20 feet minimum width = 340 (F)

  b. Total Building Perimeter = 340 (P)

  c. Ratio (F/P) = 1 (F/P)

  d. W = Minimum width of public way = 24 (W)

  e. Percent of frontage increase  $I_f = 100[F/P 0.25] \times W/30 = 60$  (%)

  Unlimited area applicable under conditions of Section 507.

  Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).

  The maximum area of open parking garages must comply with Table 406.5.4.

  Frontage increase is based on the unsprinklered area value in Table 506.2.

# ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE <sup>1</sup>
Building Height in Feet (Table 504.3) <sup>2</sup>	55	21'	
Building Height in Stories (Table 504.4) <sup>3</sup>	1	1	

#### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE		RATING	DETAIL#	DESIGN#	SHEET # FOR	SHEET #
	SEPARATION DISTANCE	REQ'D	PROVIDED (W/*	AND SHEET #	FOR RATED	RATED PENETRATION	FOR RATED
	(FEET)		REDUCTION)		ASSEMBLY		JOINTS
Structural Frame,							
including columns, girders, trusses	>20	0 HR					
Bearing Walls	720	O TIIX					
Exterior	>20	0 HR	TABLE 602				
North	>20	0 HR	TABLE 602				
East	>20	0 HR	TABLE 602				
West	>20	0 HR	TABLE 602				
South	>20	0 HR	TABLE 602				
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North	>20						
East	>20						
West	>20						
South	>20						
Interior walls and partitions	>20						
Floor Construction							
Including supporting beams	>20	0 HR					
and joists	720						
Floor Ceiling Assembly	>20	0 HR					
Columns Supporting Floors	N/A						
Roof Construction, including supporting beams and joists	>20	0 HR					
Roof Ceiling Assembly	>20	0 HR					
Columns Supporting Roof	N/A	0 HR					
Shaft Enclosures - Exit	N/A						
Shaft Enclosures - Other	N/A						
Corridor Separation	N/A						
Occupancy/Fire Barrier Separat	tion N/A						
Party/Fire Wall Separation	N/A						
Smoke Barrier Separation	N/A			<b>_</b>			
Smoke Partition	N/A						
Tenant/Dwelling Unit/ Sleeping Unit Separation	N/A						
Incidental Use Separation	N/A						

Findicate section number permitting reduction



	CONSTRUCTION METHODS OR ANY CHANGES TO PLANS MADE IN THE FIELD BY CONTRACTOR OR BY OTHERS, DRAWINGS ARE PROVIDED TO CLIENT FOR THE LOT NUMBER, PROPERTY, OR AS A MASTER PLAN AS SPECIFIED ON TITLE SHEET. DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL	GOVERN OVER DIMENSIONS ON DRAWINGS.
CLIENT:  GUTIERREZ, EDDIE  PROJECT:  GUTIERREZ WAREHOUSE  LOCATION:	2350 MAN IIN MAKIELLA DK. BUKLINGLON, NC Z/ZI/	SCALE: 1/4 = 1-0 FOR 24X30 FAFER, NOT 10 SCALE FOR 11X17 FAFER, OR AS NOTED
23900685  DATE: DRAWN		

CODE SUMMARY

APP.B1

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

#### PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	Degree of openings Protection (Table 705.8)	Allowable area (%)	ACTUAL SHOWN ON PLANS (%)
>20	UP, NS	NO LIMIT	

	~	~			
$\mathbf{L} \in \mathbb{R}^{n}$	SAFE	TY SYS	FEM R	EOUIR	EMEN

Emergency Lighting:	☐ No 🏻 Yes
Exit Signs:	☐ No ☒ Yes
Fire Alarm:	No □ Yes
Smoke Detection Systems:	No □ Yes □ Partial
Carbon Monoxide Detection:	No □ Yes

# LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: \_\_\_\_\_\_B4.0

Fire and/or smoke rated wall locations	(Chapter 7)	) NONE

Assumed and real property line locations (if not on the site plan) SEE SITE PLAN

Exterior wall opening area with respect to distance to assumed property lines (705.8) >20FT

Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2) SHEET B4.0

Occupant loads for each area SHEET B4.0

Exit access travel distances (1017) SHEET B4.0

Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1)) SHEET B4.0

Dead end lengths (1020.4) NO DEAD ENDS

Clear exit widths for each exit door SHEET B4.0

Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3) SHEET B4.0

Actual occupant load for each exit door SHEET B4.0

A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for

purposes of occupancy separation NO FIRE RATED WALLS REQUIRED

Location of doors with panic hardware (1010.1.10) NO PANIC HARDWARE

Location of doors with delayed egress locks and the amount of delay (1010.1.9.7) NO DELAYED EGRESS LOCKS

Location of doors with electromagnetic egress locks (1010.1.9.9) NO ELECTRO-MAG EGRESS LOCKS

Location of doors equipped with hold-open devices NO DOORS WITH HOLD OPEN DEVICES

Location of emergency escape windows (1030) NO EMERGENCY ESCAPE WINDOWS

The square footage of each fire area (202) SHEET B4.0

The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) NOT GROUP I-2 OCCUPANCY

Note any code exceptions or table notes that may have been utilized regarding the items above NO CODE EXCEPTIONS

# ACCESSIBLE DWELLING UNITS

(SECTION 1107)

Тот	AL ACCESSIBLE	ACCESSIBLE	Түре А	Түре А	Түре В	Түре В	TOTAL
Uni	rs Units	Units	Units	Units	Units	Units	ACCESSIBLE UNITS
	Required	Provided	Required	Provided	Required	Provided	PROVIDED

# ACCESSIBLE PARKING

(SECTION 1106)

			(BECTION TIO	<u> </u>		
LOT OR PARKING	TOTAL # OF PA	RKING SPACES	# OF ACC	CESSIBLE SPACES PRO	OVIDED	TOTAL#
AREA	REQUIRED	PROVIDED	REGULAR WITH	VAN SPAC	ES WITH	ACCESSIBLE
			5' ACCESS AISLE	132" ACCESS	8' ACCESS	PROVIDED
				AISLE	AISLE	
TOTAL						

# PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

U	ISE	W	ATERCLOSI	ETS	URINALS		LAVATORIE	S	SHOWERS	DRINKING	FOUNTAINS
STORAGE	OCCUPANCY	MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX	/TUBS	REGULAR	ACCESSIBLE
SPACE	EXIST'G										
	NEW	1	1	0		1	1	0	0		
	REQ'D	1	1	0		1	1	0	0		

# SPECIAL APPROVALS

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

 r,,,,,,	,

#### **ENERGY SUMMARY**

**ENERGY REQUIREMENTS:** 

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

**Existing building envelope complies with code:** No Yes (The remainder of this section is not applicable)

Exempt Building: No Yes (Provide code or statutory reference): _	
Climate Zone: ☐ 3A ☐ 4A ☐ 5A	
Method of Compliance: Energy Code ☐ Performance ASHRAE 90.1 ☐ Performance	<ul><li>☑ Prescriptive</li><li>☐ Prescriptive</li></ul>
(If "Other" specify source here)	Frescriptive

#### **THERMAL ENVELOPE** (Prescriptive method only)

R30 BATT INSULATION Description of assembly: U-Value of total assembly: R-Value of insulation: Skylights in each assembly: N/A U-Value of skylight: total square footage of skylights in each assembly:

## Exterior Walls (each assembly)

R15 BATT INSULATION Description of assembly: U-Value of total assembly: R-Value of insulation: Openings (windows or doors with glazing) U-Value of assembly:

Solar heat gain coefficient: projection factor: Door R-Values:

### Walls below grade (each assembly)

Description of assembly: U-Value of total assembly: N/A R-Value of insulation: N/A

# Floors over unconditioned space (each assembly)

Description of assembly: U-Value of total assembly: R-Value of insulation:

# Floors slab on grade

Description of assembly: R5 CLOSED CELL FOAM INSULATION U-Value of total assembly: 0.2 R-Value of insulation: Horizontal/vertical requirement: VERTICAL DEPTH OF FING slab heated:

# 2018 APPENDIX B

# **BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

**ELECTRICAL DESIGN** (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

**ELECTRICAL SUMMARY** 

# **ELECTRICAL SYSTEM AND EQUIPMENT**

# **REFER TO SHEET M1.1**

<b>Method of Compliance:</b> Energy Code	Performan
ASHRAE 90.1	Performan

Prescriptive ☐ Prescriptive

# **Lighting schedule** (each fixture type)

lamp type required in fixture number of lamps in fixture ballast type used in the fixture

number of ballasts in fixture total wattage per fixture

total interior wattage specified vs. allowed (whole building or space by space)

total exterior wattage specified vs. allowed

# **Additional Efficiency Package Options**

(When using the 2018 NCECC; not required for ASHRAE 90.1)

C406.2 More Efficient HVAC Equipment Performance C406.3 Reduced Lighting Power Density

C406.4 Enhanced Digital Lighting Controls

C406.5 On-Site Renewable Energy

C406.6 Dedicated Outdoor Air System C406.7 Reduced Energy Use in Service Water Heating

# 2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

<b>DESIGN LOADS:</b>	
Importance Factors:	$\begin{array}{ccc} \text{Snow} & (I_{S}) & \underline{\qquad 1.0} \\ \text{Seismic} & (I_{E}) & \underline{\qquad 1.0} \end{array}$
Live Loads:	$ \begin{array}{cccc} \textbf{Roof} & \underline{} & \textbf{psf} \\ \textbf{Mezzanine} & \underline{} & \underline{} & \textbf{psf} \\ \textbf{Floor} & \underline{} & \underline{} & \textbf{00} & \textbf{psf} \\ \end{array} $
<b>Ground Snow Load:</b>	psf
	Itimate Wind Speed mph (ASCE-7) xposure Category B
SEISMIC DESIGN CATEGOR	RY:
Provide the following Seismic De Risk Category (Table 1 Spectral Response Acce	604.5) 🔲 I 💮 II 🔲 III 🔲 IV
Site Classification (ASC	
Data So <b>Basic structural system</b>	
<b>Analysis Procedure:</b>	☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechan	ical, Components anchored?
LATERAL DESIGN CONTRO	DL: Earthquake  Wind
SOIL BEARING CAPACITIES	S:
Field Test (provide copy	
Presumptive Bearing cap	pacity psf

# 2018 APPENDIX B

# **BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS** MECHANICAL DESIGN

(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

**MECHANICAL SUMMARY** 

MECHANICAL SYSTEMS. SERVICE SYSTEMS AND EQUIPMENT

Pile size, type, and capacity

CHANCAL SISIEMS, SERVICE SISIEMS A	ND EQUII MENT
Thermal Zone	REFER TO SHEET E1.1
winter dry bulb:	INEL EIN 10 OHEET EILI
summer dry bulb:	
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 of unit:

Size category. If oversized, state reason.: Size category. If oversized, state reason.:

List equipment efficiencies:



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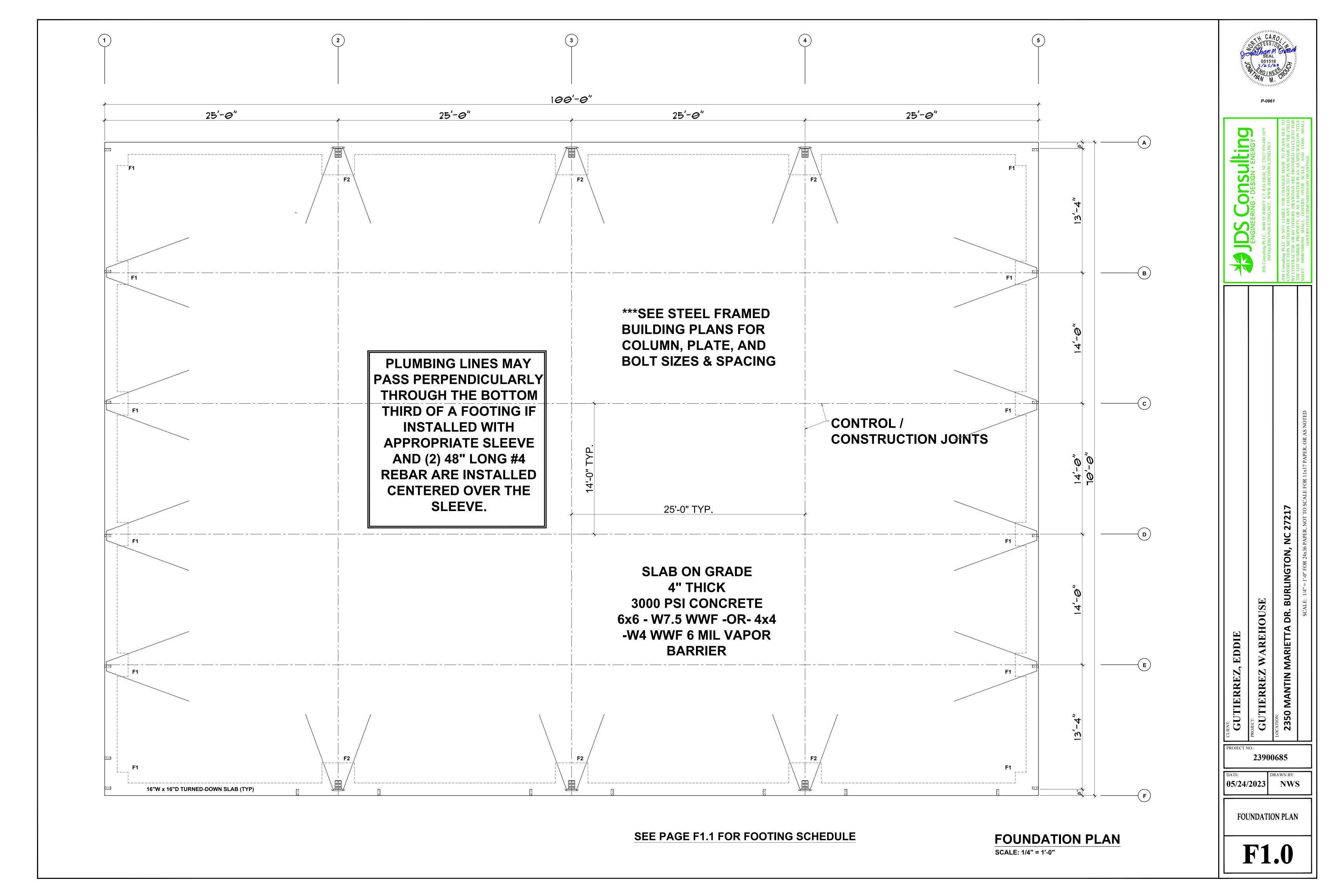
GUTIERREZ

23900685

**CODE SUMMARY** 

1

APP.B2



# EMBED 60% DEPTH-OF FOOTING 12" MINIMUM

# **GENERAL NOTES:**

- 1. FOUNDATIONS ARE DESIGNED FOR 2500 PSF BEARING. ALL STRUCTURAL FILL WITHIN FIVE FEET OF THE BUILDING LINE SHALL BE TESTED BY A GEOTECHNICAL PROFESSIONAL AND MUST HAVE AN IN PLACE DENSITY OF 95% OF MODIFIED PROCTOR. IT IS RECOMMENDED SLOPE THAT FILL BE PLACED IN MAXIMUM OF 8 INCH LIFTS. IF, AFTER EXCAVATION, THE CONDITION OF THE SOIL INDICATES A SAFE BEARING CAPACITY OF LESS THAN 2500 PSF ON SOIL, THE STRUCTURAL ENGINEER OF RECORD SHALL BE NOTIFIED AND THE FOOTINGS REVISED IF NECESSARY. COLUMN FOOTINGS AND WALL FOOTINGS SHALL BE POURED MONOLITHIC WITH TOPS OF ADJACENT FOOTINGS AT THE SAME ELEVATION. ALL FOOTINGS SHALL BEAR ON ORIGINAL UNDISTURBED SOIL, WHERE POSSIBLE.
- 2. ALL CONCRETE SHALL BE PROPORTIONED FOR A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS

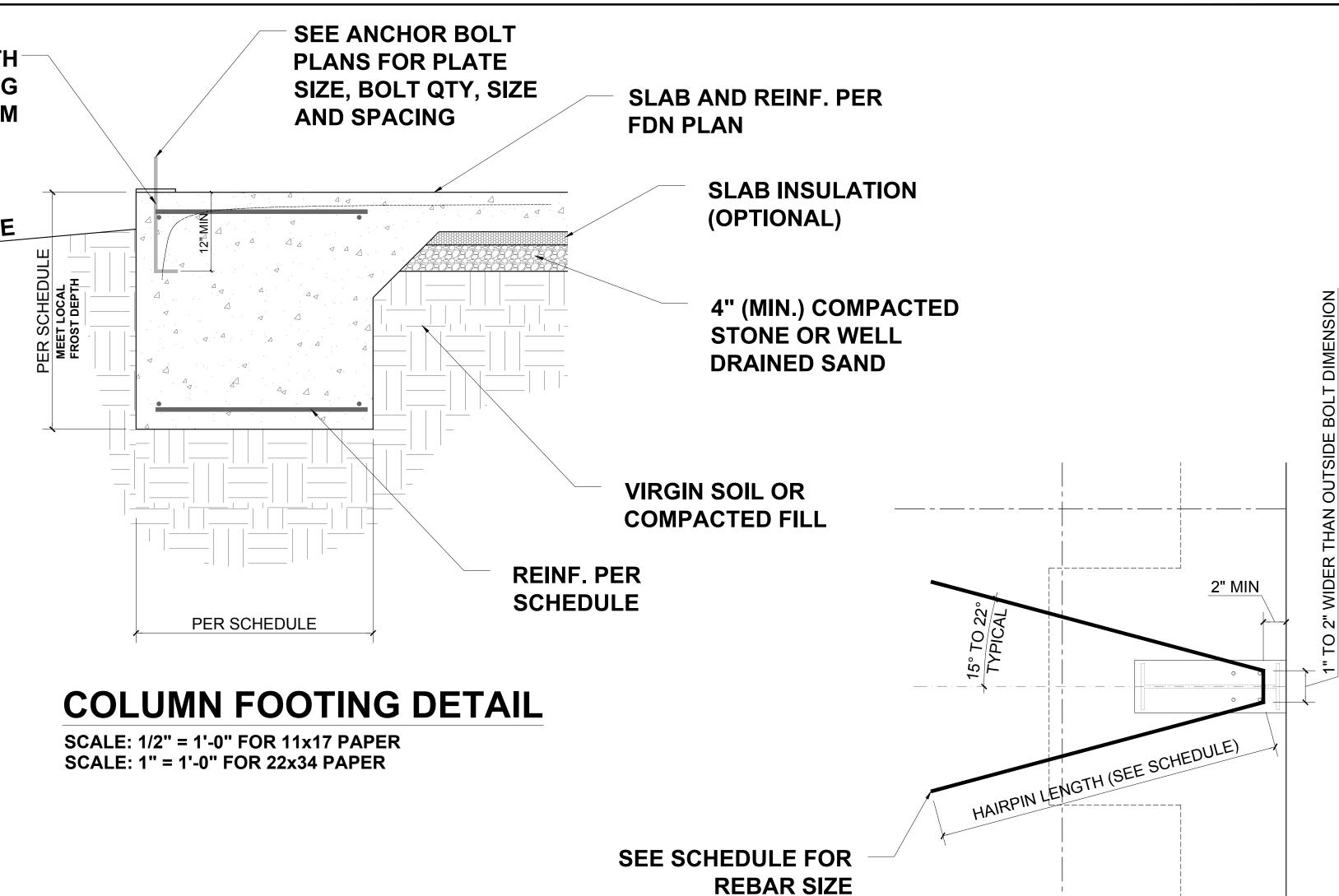
SLAB ON GRADE 3000 PSI FOUNDATIONS, PITS 3000 PSI

ALL WORK SHALL CONFORM TO ACI-301, ACI-318, ACI-347, ACI-315 AND ACI-304. USE EXCAVATED MATERIAL AS BACK FILL IF ACCEPTABLE TO TESTING AGENCY. IF EXCAVATED BACK FILL MATERIAL IS NOT AVAILABLE, USE SELECT FILL MATERIAL ACCEPTABLE TO ENGINEER.

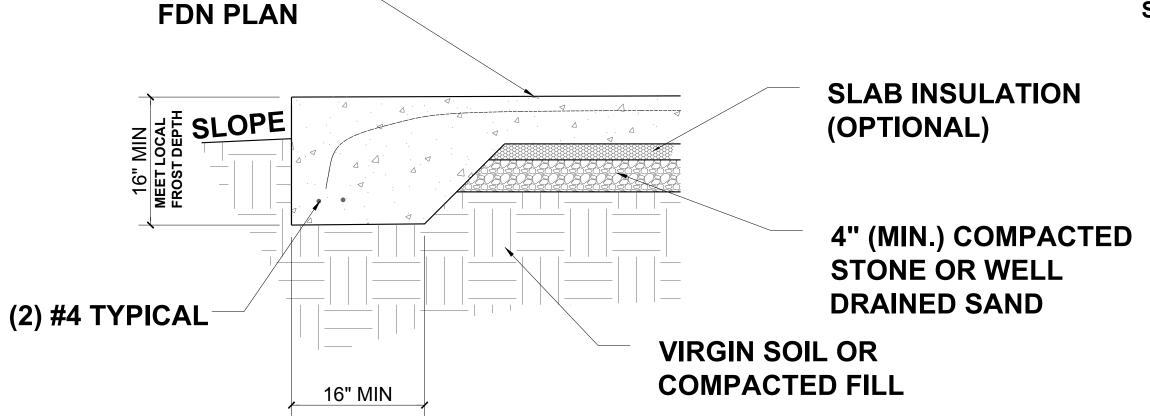
- 3. FORM WORK FOR CONCRETE EXPOSED TO VIEW SHALL BE EXT-DFPA PLY FORM, CLASS-1: FORM WORK NOT EXPOSED TO VIEW CAN BE EITHER PLYWOOD OR STANDARD CUT LUMBER. HEAVY EQUIPMENT FOR SPREADING AND COMPACTING BACK FILL SHALL NOT BE OPERATED CLOSER TO WALL, GRADE BEAM, ETC., THAN A DISTANCE EQUAL TO THE HEIGHT OF BACK FILL ABOVE TOP WALL FOOTING & BOTTOM OF GRADE BEAM.
- 4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 40 FOR NO.3 BARS AND SMALLER, GRADE 60 FOR NO.4 BARS AND LARGER.
- 5. TYPE AND LOCATION OF CONSTRUCTION & CONTROL JOINTS SHALL BE AS SHOWN ON DRAWINGS.
- 6. AFTER CONCRETE FLOOR SLAB HAS HARDENED SUFFICIENTLY TO PREVENT FINE MATERIAL FROM WORKING INTO SURFACE, IT SHALL BE WORKED TO A UNIFORM "STEEL TROWEL" FINISH.
- 7. FLOOR SEALING COMPOUND SHALL BE A LIQUID COMPOUND. INSTALLATION IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 8. ALL GROUTING SHALL BE HIGH STRENGTH, NON-SHRINK, NON-STAINING GROUT OF SINGLE MANUFACTURER. ALL GROUTING SHALL BE COMPACTED IN PLACE WITHOUT AIR POCKETS OR VOIDS. (NIC)
- 9. CONCRETE COVER REQUIREMENTS TO BE AS FOLLOWS:
  CONCRETE CAST AGAINST THE EARTH 3"
  CONCRETE EXPOSED TO WEATHER AND/OR
  IN CONTACT WITH THE EARTH
  #5 BAR OR > 2"

#5 BAR OR < 1-1/2"

- 10. WHERE REINFORCING BARS ARE INTERRUPTED BY OPENINGS OR EMBEDS, PROVIDE 50% AREA OF SUCH BARS ON EACH SIDE OF INTERRUPTION WITH 30 BAR DIAMETERS OF LAP.
- 11. THE LATEST VERSION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE ACI 301-96 FIELD REFERENCE MANUAL MUST BE RETAINED AND USED ON SITE FOR THE DURATION OF THE PROJECT.
- 12. CHAMFER ALL EXPOSED CORNERS OF FORMED CONCRETE.
- 13. FOUNDATION AND SLAB ON GRADE CONSTRUCTION MUST COMPLY WITH IBC CHAPTER 18,19, AND ALL OTHER APPLICABLE STANDARDS AND SPECIFICATIONS. ALL WORK TO COMPLY WITH IBC 2012
- 14. PROVIDE A VAPOR BARRIER UNDER THE SLAB ON GRADE PER IBC 1911.1, 6 MIL MINIMUM (SEE PLANS).
- 15. BACK FILLING OF WALLS AND PIERS SHALL BE PLACED SUCH THAT SYMMETRICAL LOADING SHALL BE MAINTAINED ON BOTH SIDES. WHERE DESIGN CONDITIONS REQUIRE BACK FILLING EACH SIDE TO UNEQUAL HEIGHTS, THEN WALLS OR PIERS SHALL BE FIRMLY SHORED IN POSITION, AND SHORES SHALL REMAIN UNTIL FLOORS OR OTHER PERMANENT BRACING ELEMENTS ARE PLACED AND PROPERLY SET TO PROVIDE FULL SUPPORT.
- 16. PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING AREA, BOTH DURING CONSTRUCTION AND PERMANENTLY.
- 17. MAINTAIN STABILITY OF EXCAVATIONS UNTIL PROPERLY BACKFILLED. KEEP EXCAVATIONS FREE OF ANY LOOSE MATERIAL. DEWATER EXCAVATIONS AND REMOVE ANY WET MATERIAL PRIOR TO THE PLACING OF CONCRETE WORK.
- 18. GRADE SHALL BE SUCH THAT THICKNESS OF FOUNDATION, SLAB ON GRADE, ETC., IS NOT REDUCED BY MORE THAN 5% OF THAT SHOWN ON DRAWINGS.







# PERIMETER FOOTING DETAIL

SCALE: 1/2" = 1'-0" FOR 11x17 PAPER SCALE: 1" = 1'-0" FOR 22x34 PAPER

**SLAB AND REINF. PER** 

# **FOOTING SCHEDULE**

NOTE	FOOTING SIZE	REINFORCING	LOC.	HAIRPIN
F4		3 - #4 E.W.	Т	#2 40L 0U
F1	2' - 6" x 2' - 6" x 2' - 6	3 - #4 E.W.	В	#3 - 10' - 0"
F2	3' - 6" x 3' - 6" x 3' - 6"	4 - #4 E.W.	Т	#2 40! 0!!
F2	3 - 6 X 3 - 6 X 3 - 6	4 - #4 E.W.	В	#3 - 10' - 0"

**ADDITION TO SCHEDULED DIMENSION REQUIREMENTS. \*\*** 



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B. PLLC IS NOT LIABLE FOR CHANGES MADE TO PLANS DUE TO TON METHODS OR ANY CHANGES TO PLANS MADE IN THE FIELD

TON METHODS OR ANY CHANGES ARE PROVIDED IN CLIENT FOR THE PLANS ARE PROVIDED TO CLIENT FOR THE PLAN

WAREHOUSE

AARIETTA DR. BURLINGTON, NC 27217

SCALE: 14" = 1'-0" FOR 24x36 PAPER, NOT TO SCALE FOR 11x17 PAPER, OR AS NOTED

23900685

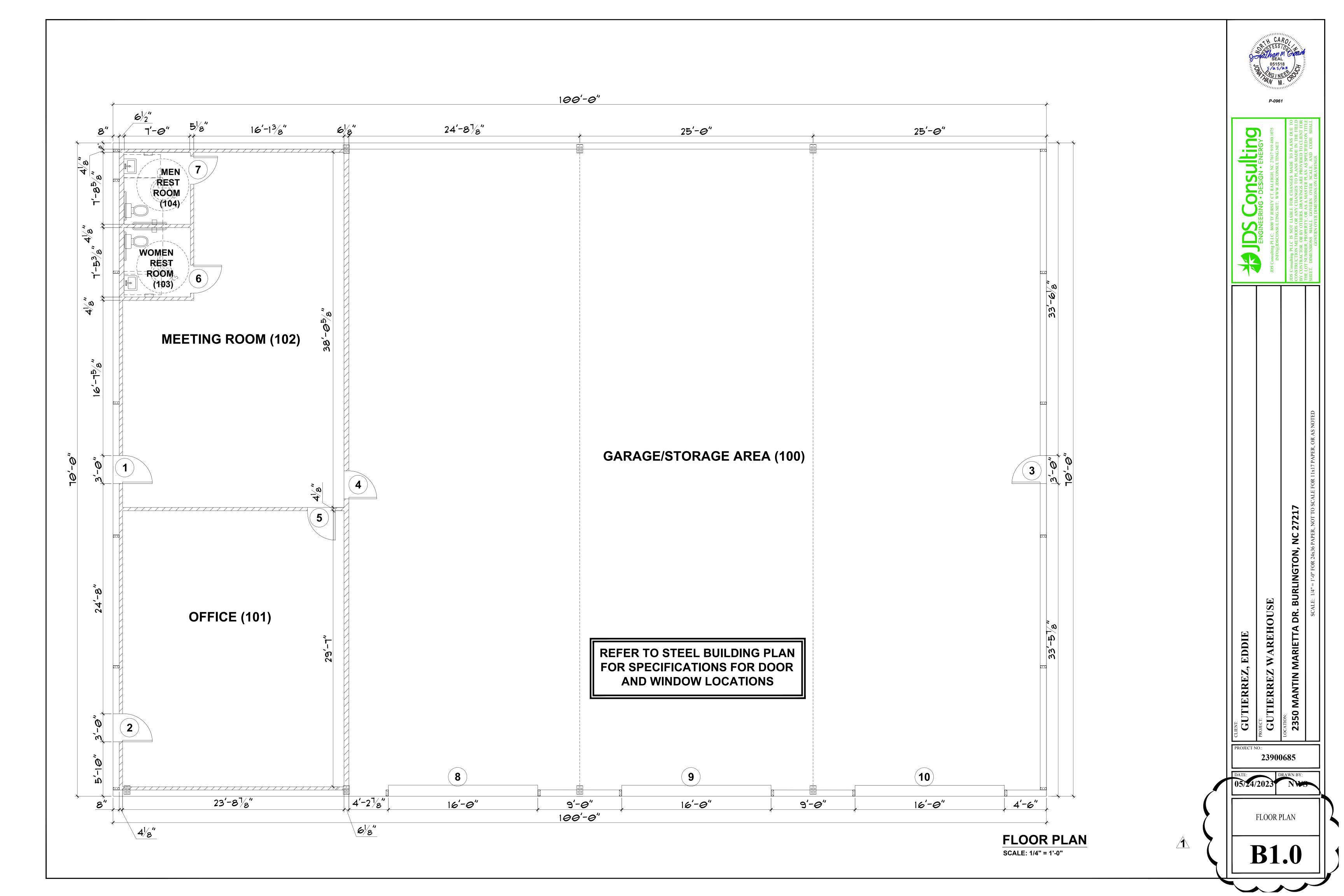
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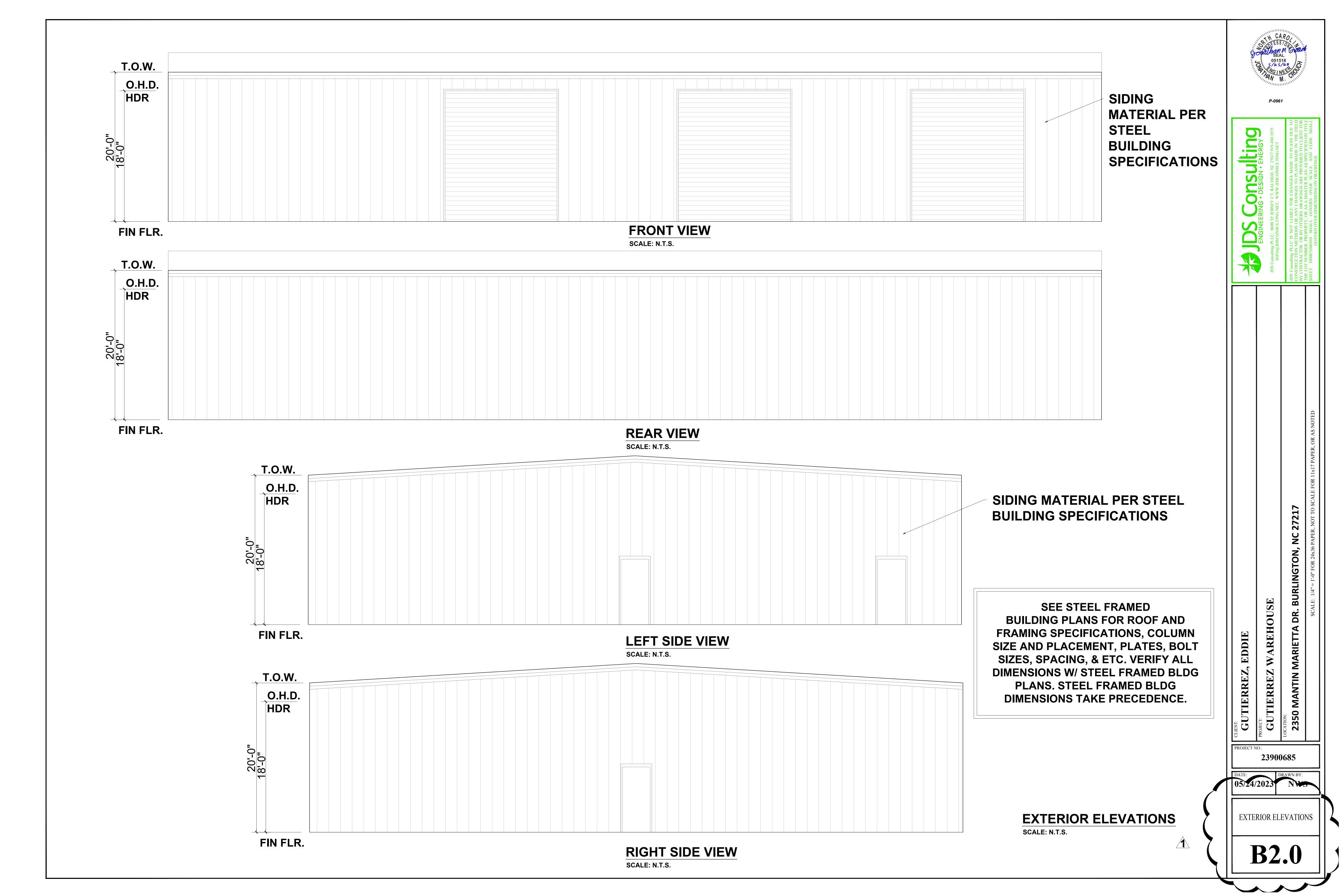
GUTIERREZ,

05/24/2023 NWS

FOUNDATION DETAILS AND NOTES

F1.1







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7217
NOT TO SCALE FOR 11x17 PAPER, OR AS NOTED

GUTIERREZ, EDDIE

OBCT:

GUTIERREZ WAREHOUSE

CATION:

2350 MANTIN MARIETTA DR. BURLINGTON, NC 27217

NO.: **23900685** 

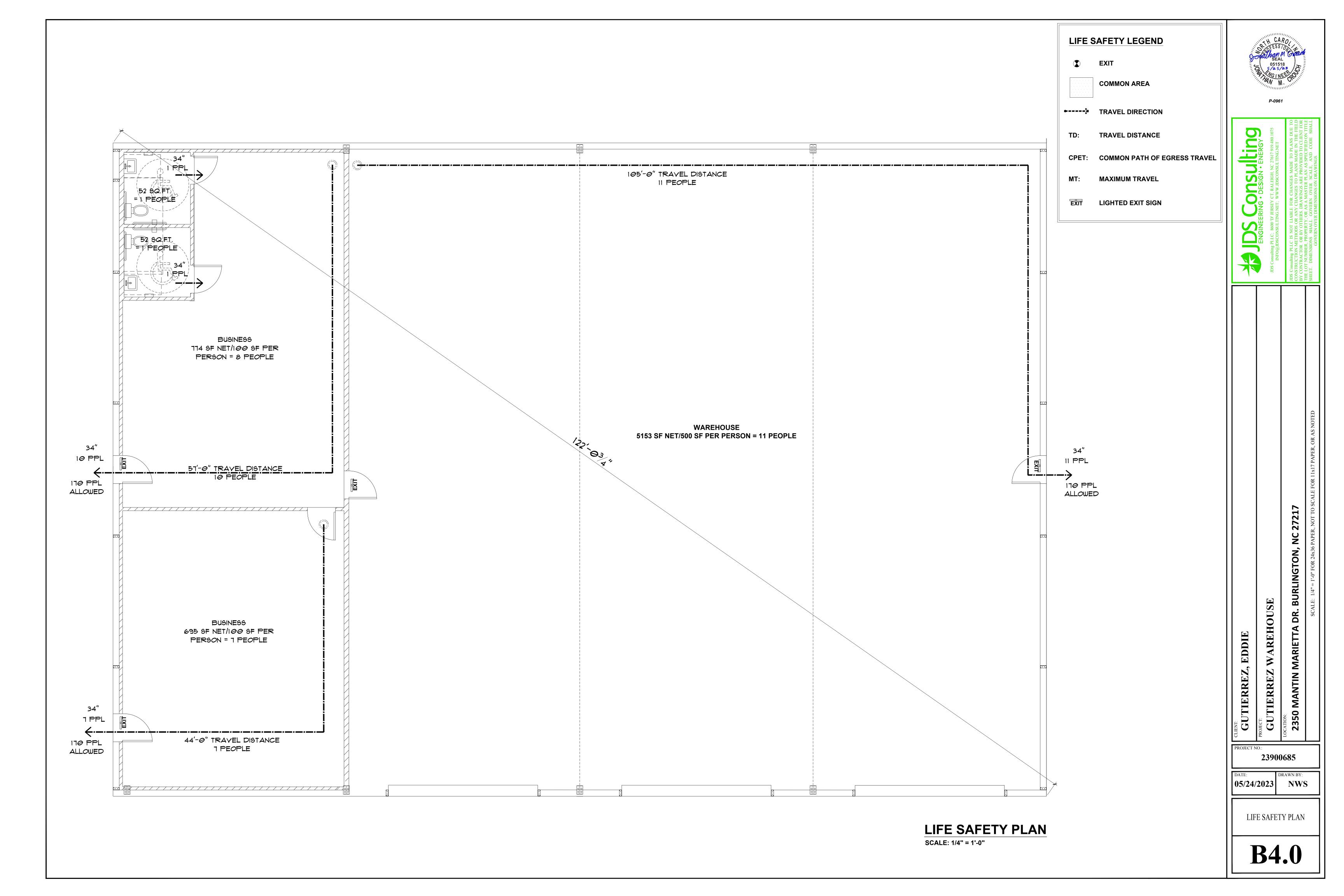
DATE: DRAWN BY: NWS

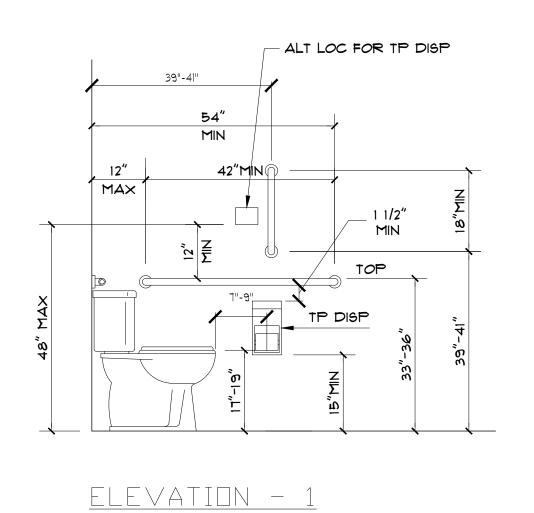
**ROOF PLAN** 

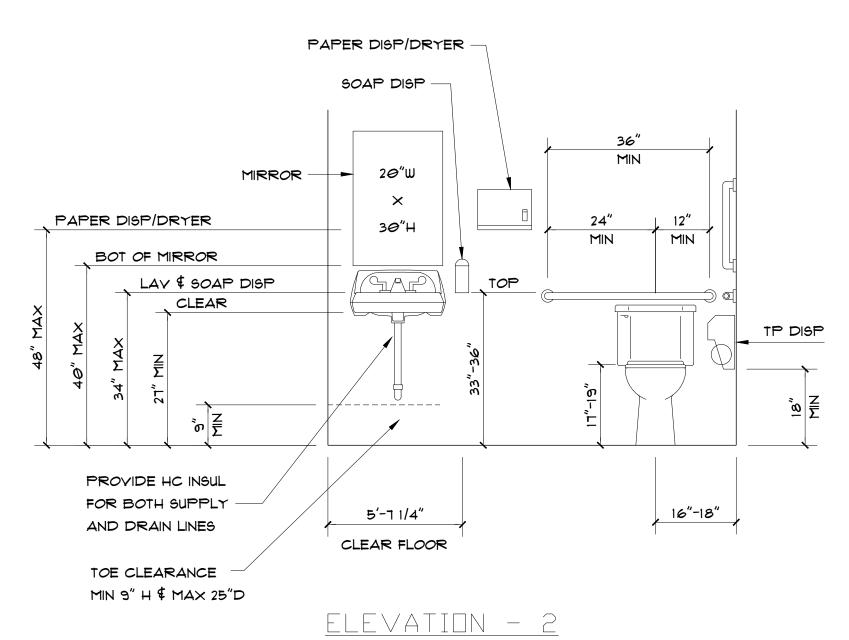
SCALE: 1/4" = 1'-0"

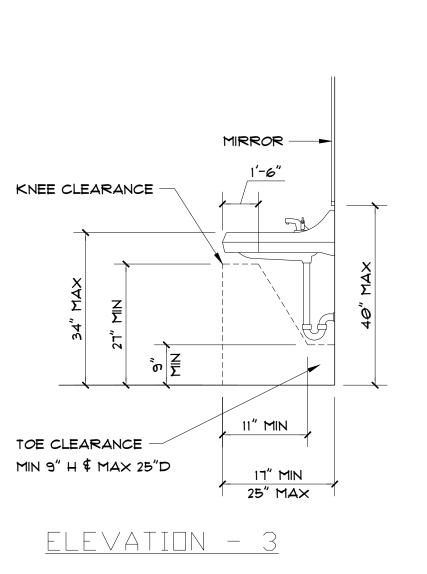
ROOF PLAN

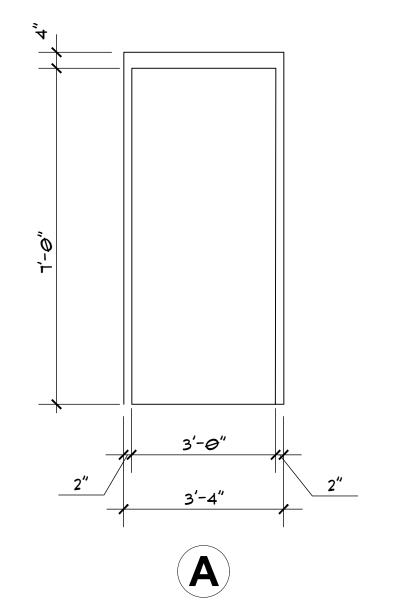
**B3.0** 

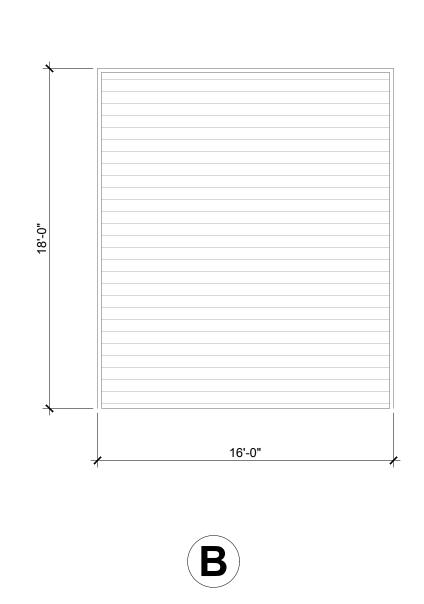












DOOR FRAME SIZES

# NOTE: FINISH DIMENSIONS

HC RESTROOM ELEVATIONS

SCALE: N.T.S.

ALL PLUMBING FIXTURES \$ ACCESSORIES TO MEET IBC/ANSI BARRIER FREE CODE. CLEAR FLOOR SPACES, CLEARANCES AT FIXTURES, AND TURNING SPACES SHALL BE PERMITTED TO OVERLAP. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE FOR ANY FIXTURE.

NOTE

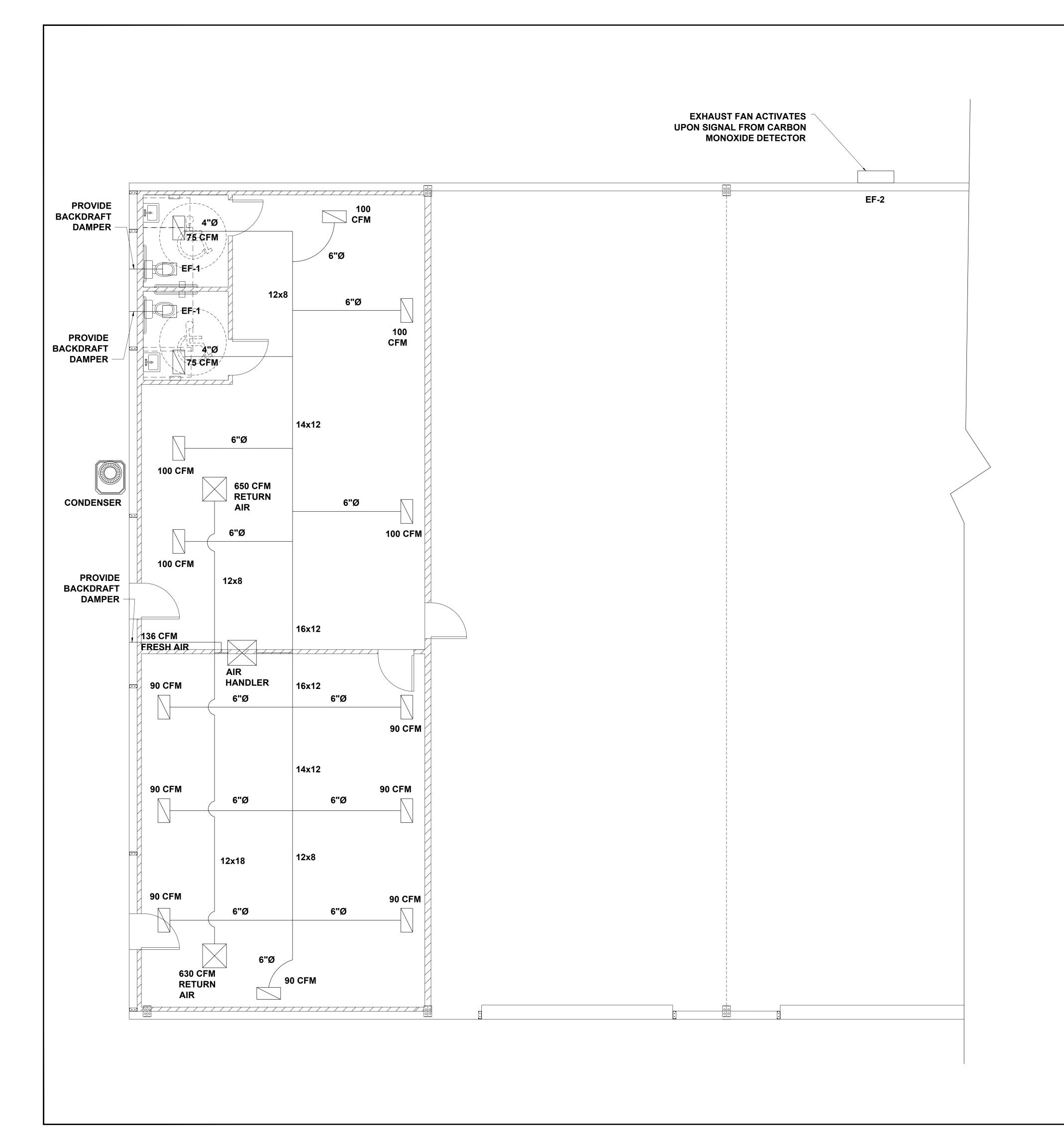
NO.	DESCRIPTION	FIRE	TYPE	SIZE	FINISH	FRAME TYPE	HARDWARE	REMARKS
1	METAL	-	Α	3/0 x 7/0		HOLLOW METAL		
2	METAL	-	Α	3/0 x 7/0		HOLLOW METAL		
3	METAL	-	Α	3/0 x 7/0		HOLLOW METAL		
4	METAL	-	А	3/0 x 7/0		HOLLOW METAL		
5	METAL	1	Α	3/0 x 7/0		HOLLOW METAL		
6	METAL	1	Α	3/0 x 7/0		HOLLOW METAL		
7	METAL	1	Α	3/0 x 7/0		HOLLOW METAL		
8	METAL	1	В	10/0 x 15/0		-		
9	METAL	ı	В	10/0 x 15/0		-		
10	METAL	-	В	10/0 x 15/0		-		

GL	ACOUSTICAL TREATMENT	DS	DOOR GASKET SEAL
	GLASS LAMINATE	WS	WEATHER STRIPPING
KL	KEYED LOCKSET	PP	PUSH, PULL
LA	LATCH SET	DP	DUST PROOF STRICK
PL	PRIVACY SET	LG	LOCK GUARDS
PS	PASSAGE SET	KP	KICK PLATE
DB	DEAD BOLT	KS	KICK STOP
SC	SECURITY COMBO LOCK	CR	PROXIMITY CARD READER
FED	FIRE EXIT DEVICE	ES	ELECTRIC STRIKE
CL	CLOSER	DD	DOOR BOTTOM DROP
AS	ASTRAGAL		SEAL GASKET
FB	FLUSH BOLTS	KF	KEY FOB
Т	THRESHOLD, ALUMINUM	ML	MAGNETIC LOCK
MT	MARBLE THRESHOLD	TH	THREE HINGES
MH	MAGNETIC HOLD OPEN	WB	WALL BUMPER
SB	SLIDE BOLT	MS	MOTION SENSOR, IF REQ'D

NO.	ROOM NAME	FLOOR		BASE	WAI	WALL		REMARKS
		MAT.	FIN.	FIN.	MAT.	FIN.	MAT.	
100	GARAGE	CONC.						
101	OFFICE	CONC.		RB	GYP. BD	PE-1	ACT	
102	MEETING ROOM	CONC.		RB	GYP. BD	PE-1	ACT	
103	W RESTROOM	CONC.		RB	GYP. BD	PE-1	ACT	
104	M RESTROOM	CONC.		RB	GYP. BD	PE-1	ACT	

SYMBOL	DEFINITION
EPC	EPOXY COVE BASE
RB	RUBBER BASE
EP-1	EPOXY PAINT
P-1A	PAINT 1 - GLOSS LEVEL A
P-1B	PAINT 1 - GLOSS LEVEL B
P-4A	PAINT 4 - GLOSS LEVEL A
RF-2	RESINOUS FLOORING SYSTEM TWO
RT-1	RUBBER TILE
RSTR-1	RUBBER STAIR TREAD AND RISER
PE-1	PAINT EGGSHELL - FIELD PAINT
PE-2	PAINT SEMI GLOSS - OIL BASED PAIN
PE-3	PAINT EGGSHELL - ACCENT PAINT
ACT	ACOUSTICAL CEILING TILE

FINISH SCHEDULE DOOR SCHEDULE RESTROOM DETAILS, **SCHEDULES** 



#### **MECHANICAL GENERAL NOTES**

- 1. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, **CEILING DIFFUSER.**
- 2. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN **ACCORDANCE WITH THE LATEST SMACNA STANDARDS. ALL** RECTANGULAR SUPPLY AND RETURN DUCTWORK AND ALL ROUND DUCT SHALL MEET THE REQUIREMENTS OF INTERNATIONAL ENERGY CODE SECTION 2. **503**.
- 3. CONDENSATE DRAIN PIPING SHALL BE HARD DRAWN COPPER (TYPE 'L'), PVC ACCEPTED.
- 4. ALL PIPING, DUCTS, VENTS, ETC. EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED COUNTER-FLASHED IN A WATERPROOF MANNER. ALL PENETRATIONS IN WALLS OR CEILINGS THAT ARE FIRE RATED SHALL BE SEALED TO THE FIRE RATING OF WALL OR CEILING EVEN IF NOT SHOWN ON PLANS IN A UL LISTED METHOD.
- 5. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
- 6. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT. 7.
- 7. LOCATE ALL THERMOSTATS AND **SWITCHES 48" AFF TO MEET** ACCESSIBILITY CODE LATEST ADDITION.
- 8. MECHANICAL CONTRACTOR SHALL **BALANCE SYSTEM TO AIR QUANTITIES** INDICATED ON PLANS.

#### ADDITIONAL MECHANICAL NOTES

**CLEAR AREA DIMENSION. INTERIOR DUCT INSULATION MUST HAVE AN** R-VALUE OF 6.0. ANY FLEX DUCT THAT RUNS OVER 10 FEET SHALL HAVE AN R-VALUE OF 6.0. ANY FLEX DUCT WHICH RUNS IN THE ATTIC SPACE SHALL HAVE AN R-VALUE OF 8.0. ALL DUCTWORK OUTSIDE BUILDING SHALL HAVE A MIN. R-8

- COORDINATE ELECTRICAL REQUIREMENTS OF THE UNITS WITH **ELECTRICAL CONTRACTOR.** PROVIDE RETURN AIR GRILL WITH FILTER.
- 4. ALL EQUIPMENT AND DUCTWORK SHALL BE INSTALLED PER MANUFACTURER AND IN ACCORDANCE WITH STATE AND LOCAL CODES AS WELL AS SMACNA STANDARDS.
- **ALL UNITS TO BE WIRED FOR** SINGLE SOURCE POWER. ALL AHU SHALL HAVE AN AUTOMATIC SHUT DOWN SWITCH INSTALLED. 6. BATHROOM TO BE EQUIPPED WITH
- **EXHAUST FANS PROVIDED BY THE** MECHANICAL CONTRACTOR. **MECHANICAL CONTRACTOR TO** PROVIDE AND INSTALL DUCT TO **OUTSIDE. FANS SHALL BE WIRED BY ELECTRICAL CONTRACTOR. MECHANICAL CONTRACTOR TO** COORDINATE DUCTWORK LAYOUT WITH ALL TRADES.
- REFRIGERANT LINES TO BE SIZED BY MANUFACTURER FOR LENGTH OF RUN BETWEEN COIL AND CONDENSER.
- 9. VERIFY THERMOSTAT LOCATIONS WITH OWNER.
- 10. MECHANICAL SYSTEM TO BE **BALANCED AND TESTED AFTER INSTALLATION TO ASSURE PROPER** OPERATION.

# **MECHANICAL SUMMARY**

# MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

THERMAL ZONE 4A

WINTER DRY BULB: 21 SUMMER DRY BULB: 91

INTERIOR DESIGN CONDITIONS WINTER DRY BULB: 72

SUMMER DRY BULB: 75 **RELATIVE HUMIDITY: 50** 

BUILDING HEATING LOAD: 32,700 BTU BUILDING COOLING LOAD: 42,000 BTU

# MECHANICAL SPACING CONDITIONING SYSTEM

UNITARY

**DESCRIPTION OF UNIT: HEAT PUMP SPLIT SYSTEMS HEATING EFFICIENCY: SEE PLANS** 

COOLING EFFICIENCY: 15.0 SEER SIZE CATEGORY OF UNIT:

SIZE CATEGORY. IF OVERSIZED, STATE REASON: N/A

SIZE CATEGORY. IF OVERSIZED, STATE REASON: N/A

LIST EQUIPMENT EFFICIENCIES:

S 

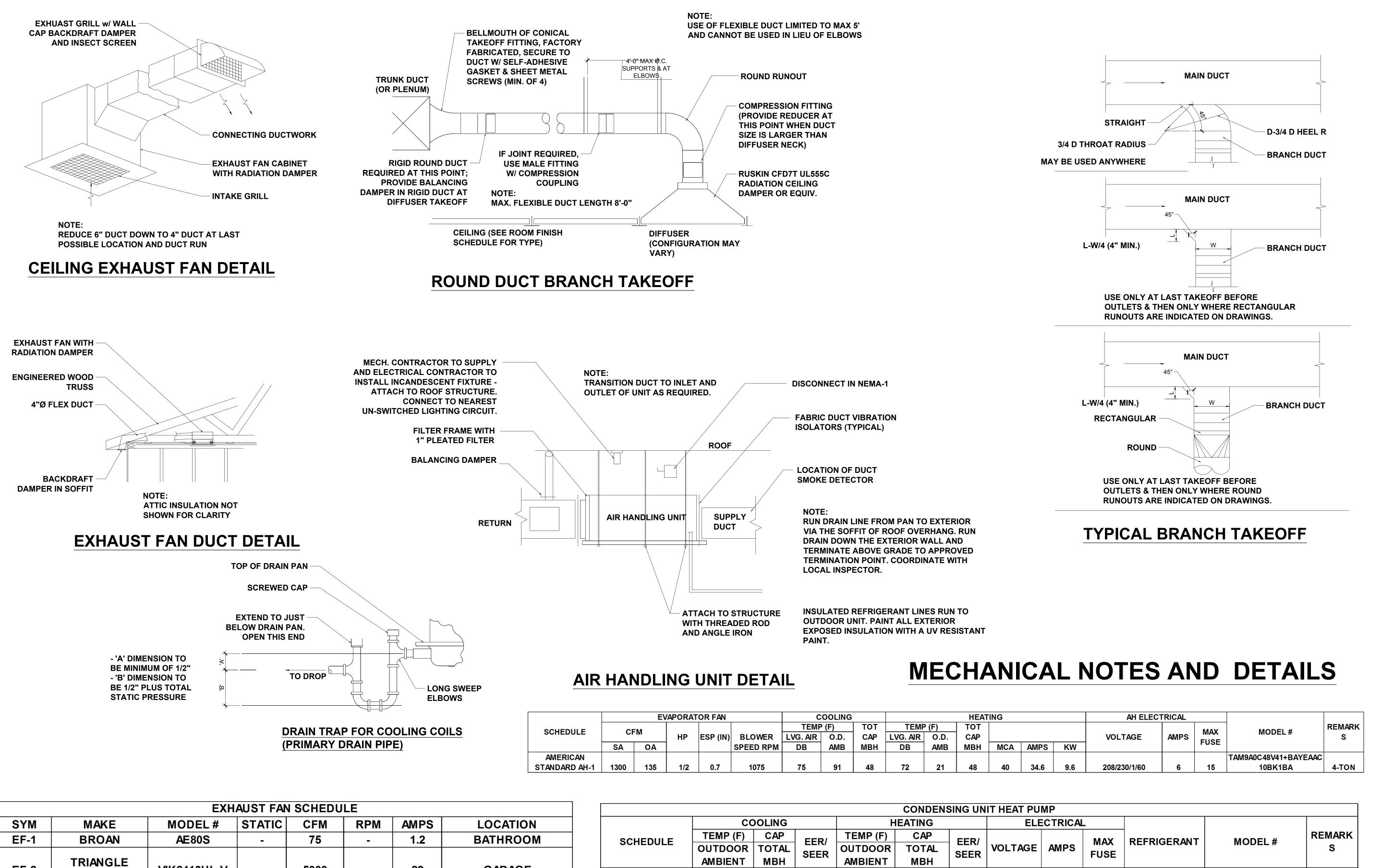
27217 NC BURLINGTON, AREHOUSE

GUTIERREZ, GUTIERREZ

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MECHANICAL PLAN



	EXHAUST FAN SCHEDULE										
SYM	MAKE	MODEL#	STATIC	CFM	RPM	AMPS	LOCATION				
EF-1	BROAN	AE80S	-	75	•	1.2	BATHROOM				
EF-2	TRIANGLE ENGINEERING	VIK2413HL-V	-	5000		22	GARAGE				

	CONDENSING UNIT HEAT PUMP													
	COOLING			HEATING		ELECTRICAL								
SCHEDULE	TEMP (F)	CAP	EER/	TEMP (F)	CAP	EER/			MAX	REFRIGERANT	MODEL#	REMARK		
SCHEDULE	OUTDOOR	TOTAL	SEER	OUTDOOR	TOTAL	SEER	VOLTAGE	AMPS	FUSE	KEFKIGEKANT		S		
	AMBIENT	MBH	SEEK	AMBIENT	MBH	SEEK			FUSE					
TRANE HP-1	91	42	15	21	42	15	208-230/1	23	40	R-410A	4TWR5042G1000AA	3.5-TON		

	FRESH AIR CALCULATIONS										
			SECTION 4	03.3.1.1 OF THE	2018 NC MECH	IANICAL CODE					
SPACE	NET AREA	EXHAUST	DENSITY	RP	RA	PPLE Pz	FRESH AIR	EXHAUST	UNIT	TOTAL FA	
OFFICE	1600		5	5	0.06	8	136.0	0	AH-1	136.0	
WAREHOUSE	5400	0.75			0.06	0		4050		0.0	
	·		•	•	•		136.0	4050		136.0	

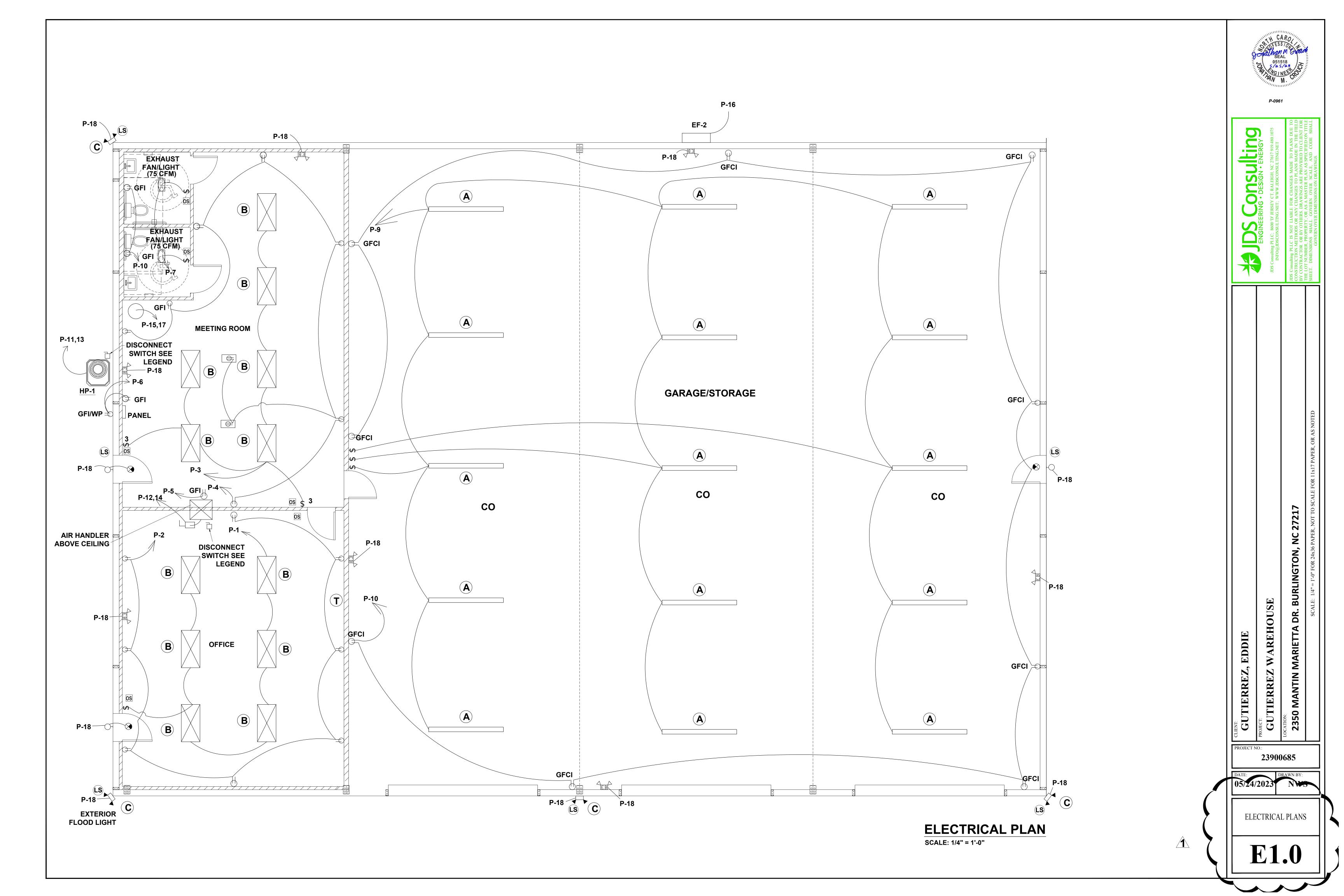


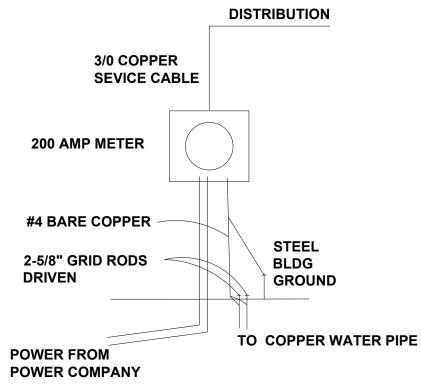
Consulting RING DESIGN ENERGY

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MECHANICAL NOTES & **DETAILS** 





# **ELECTRICAL RISER**

PANEI	_ : P1										
VOLTAG	E (L-N): 120	)			ENCLOS	JRE TYPE:	NEMA	3R			
VOLTAG	E (L-L): 24	0			MOUNTIN	G:	SURFA	CE			
PHASES	, WIRES: 1 φ.	3 W			AIC RATIN	NG:	22000				
MINIMUM	IBUS CAPACITY (A): 200 A	4			NOTES:						
MAIN O.C	C. DEVICE (A): 200	Α			_						
CKT NO	DESCRIPTION	TRIP AMPS	POLE		PHASE LO	OADS (VA)	В	POLE	TRIP AMPS	DESCRIPTION	CKT NO.
1	OFFICE LIGHTING	20	1	600	1400			1	20	RECEPTS - OFFICE	2
3	MEETING RM LIGHTING	20	1			600	1260	1	20	RECEPTS - MEETING RM	4
5	RECEPTS - AIR HANDLER	20	1	180	180			1	20	RECEPTS - A/C	6
7	REST ROOM LIGHTING	20	1			300	360	1	20	RECEPTS - REST ROOM	8
9	GARAGE LIGHTING	20	1	1260	2240			1	20	RECEPTS - GARAGE	10
11, 13	A/C CONDENSER	40	2	2500	4300	2500	4300	2	60	A/H UNIT/HEATER	12, 14
45 47	LICT MATER LIEATER	00				1500	3000	1	20	EXHAUST FANS	16
15, 17	HOT WATER HEATER	20	2	1500	600			1	20	EMERGENCY LIGHTING	18
				CONNEC	TED LOAD	PHASE TO	TALS (VA)				
				14	760	13	820				
				CONN	ECTED	DEMAND	DEMAND	LOAD		DEMAND LOAD	27.33 KVA
				LOAD	(KVA)	FACTOR	(KVA	۸)		SPARE CAPACITY	20.67 KVA
	RECEPTACLES (0 - 10 KVA)			5	5.6	1	3.6			SPARE CAPACITY	86 AMPS
	LIGHITNG			2	2.3	1.25	2.87	5		SPARE CAPACITY	43%
	LIGHTING EXTERIOR				1	1.25	1.25	5			
	COOLING				5	1	5.00	)			
	HEATING			9	9.6	1	9.60				
	CONTINOUS				3	1	3.00				
	NONCONTINOUS				2	1	2.00				
	TOTAL:			2	8.5	_	27.3	3			
	LOAD (AMPS)			1	19		114				

	ENERGY	CODE COMPL	IANCE	
		INTERIOR		
SPACE ACTIVITY	ALLOWANCE/SF.	AREA	ALLOWANCE	TOTAL ALLOWANCE
OFFICE	0.93	1484	1380.12	
WAREHOUSE/STORAGE	0.69	5131	3540.39	
RESTROOMS	0.85	107	90.95	
				5011.46
FIXTURE TYPE	NUMBER	WATTS/FIXTURE	TOTAL WATTS	TOTAL INSTALLED WATTS
Α	15	28	420	
В	12	36	432	
				852
		EXTERIOR		
	ALLOWANCE	NUMBER	ALLOWANCE	TOTAL ALLOWANCE
MAIN DOOR	30W/ DOOR LF	3	90	
OTHER DOOR	20W/ DOOR LF	2	520	
BUILDING FAÇADE	5W/LF	210	1050	
				1660
FIXTURE TYPE	NUMBER	WATTS/FIXTURE	TOTAL WATTS	TOTAL INSTALLED WATTS
С	5	18	90	
				90

	LIGHTING FIXTURE SCHEDULE											
MARK	LOCATION	MANUFACTURER	MODEL NUMBER	MOUNTING	# OF LAMPS	LAMP TYPE	TOTAL WATTS	VOLTS	REMARKS			
Α	GARAGE	TAMLITE	SLWEDT8	CEILING	1	LED	28	120				
В	OFFICE	TAMLITE	BLP24-CSWS	CEILING	1	LED	36	120				
С	EXTERNAL	SEA GULL	8642-12	WALL	1	LED	18	120				

# **ELECTRICAL ABBREVIATIONS**

ABV ABOVE
AFF ABOVE FINISHED FLOOR
CU COPPER WIRE
EF ELECTRIC FAN
EL EMERGENCY LIGHTING
EM EMERGENCY EXIT SIGN
GFI GROUND FAULT INTERRUPTER
GRD GROUND
HP HEAT PUMP
J JUNCTION BOX
MCB MINIATURE CIRCUIT BREAKER

PH PHASE
OS MOTION SENSOR
TWH INLINE WATER HEATER

**ELECTRICAL POWER LEGEND** 

DESCRIPTION

**SWITCH, SINGLE POLE, 120/277V, 20A, 48" AFF, LEVITON 1221-2** 

SWITCH, THREE WAY, 120/277V, 20A, 48" AFF

(TAMPER-RESISTANCE RECEPTACLE)

**ENCLOSURE**)

**EXHAUST FAN** 

**THERMOSTAT** 

PHOTO SENSOR

FLOOR RECEPTACLE

OCCUPANCY SENSOR SWITCH, 120/277V, 20A, 48" AFF

240V 2P 40A NONFUSED NEMA 3R DISCONNECT

EMERGENCY LIGHTS WITH BATTERY BACKUP

WALL MOUNTED LIGHT FOR DOORS

CARBON MONOXIDE DETECTOR

LIGHTED EVERGENCY EXIT SIGN WITH BATTERY BACKUP

LIGHTED EMERGENCY EXIT SIGN WITH ARROWS & BATT. BACKUP

INDIVIDUAL COMPRESSORS FOR EACH UNIT AND EQUIPMENT

RECEPTACLE, DUPLEX, 120V, 20A, 18" AFF LEVITON TBR20

RECEPTACLE, DUPLEX GFCI, 120V, 20A, ABOVE CABINET COUNTER TOP,

GROUND FAULT INTERRUPTOR LEVITON 6898 (EXTERIOR IN NEMA 3R

S PHOTO SENSOR

**SYMBOL** 

CO

(LS)

# ELECTRICAL CONTRACTOR IS TO REVIEW COMPLETE DRAWING SET BEFORE ANY WORK AND/OR INSTALLATION IS STARTED. ELECTRICAL CONTRACTOR IS TO REPORT ON ANY

DISCREPANCY(S) TO ENGINEER PRIOR TO
WORK/INSTALLATION FOR CLARIFICATION AND/OR
SOLUTION.

3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK EXPLICITLY SHOWN AND WORK IMPLIED UNLESS OTHERWISE NOTED.

**ELECTRICAL NOTES** 

4. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT.

5. ELECTRICAL CONTRACTOR SHALL COORDINATE CLOSELY WITH ALL OTHER TRADES TO AVOID CONFLICTS AND MISTAKES, AND TO ENSURE OTHER TRADES PROVIDE MEASURES TO ACCOMMODATE ELECTRICAL WORK (I.E. ACCESS DOORS, SLAB/WALL/ROOF OPENINGS, ETC.)

6. ELECTRICAL CONTRACTOR TO VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP, NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.

7. FINAL ELECTRICAL CONNECTION(S) TO ALL EQUIPMENT, AND/OR FURNITURE (I.E. CUBICLES, WORKSTATIONS, ETC.) IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

8. ALL CONDUCTORS SHALL BE COPPER AND TYPE NM #12AWG MINIMUM WIRE SIZES SHALL BE BASED ON 75 DEGREE WIRE & TERMINALS.

 ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE.
 ELECTRICAL CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT WITH ELECTRICAL UTILITY PRIOR TO PURCHASING DISTRIBUTION EQUIPMENT.

11. ALL EQUIPMENT AND COMPONENTS INSTALLED AS PART OF THIS FACILITY SHALL BE NEW U.L. LISTED AND LABELED, AND INSTALLED PER THE NEC, ANY JURISDICTIONAL REQUIREMENTS AND PER THE MANUFACTURERS REQUIREMENTS.

12. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADE DISCIPLINE TO AVOID INTERFERENCE AND RE-WORK.

13. ALL CONDUCTORS TO BE INSTALLED UNDERGROUND SHALL BE INSTALLED 24" B.F.G AND IN SCHEDULE 40 PVC CONDUIT.

14. ALL FLUORESCENT LAMPS SHALL BE T-8 SP 41 OR APPROVED EQUAL LAMPS SHALL BE ENVIRONMENTALLY SAFE

15. ELECTRICAL CONTRACTOR SHALL CHECK FOR ELIMINATE SHORTS PRIOR TO ENERGIZING CIRCUITS. FAILURE TO DO SO WILL RESULT IN REPAIRS TO BE MADE AT NO EXPENSE TO OWNERS OR REPRESENTATIVES.

16. ELECTRICAL CONTRACTORS OR DESIGNATED TELECOMMUNICATIONS SUBCONTRACTOR SHALL COORDINATE LOCATION AND REQUIREMENTS FOR TELEPHONE SERVICE WITH THE TELEPHONE COMPANY.

17. FIRESTOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS, AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING, PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN "F" RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.

18. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL BATHROOM EXHAUST FAN MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL BATHROOM EXHAUST DUCTWORK.

19. ELECTRICAL CONTRACTOR SHALL PROVIDE RACEWAY SEALS TO MAIN DISTRIBUTION PANELS PER NEC 225.27.

20. ALL DEVICES TO BE INSTALLED FOR ADA ACCESSIBILITY
PER ANSI A117.1

21. ELECTRICAL CONTRACTOR TO PROVIDE AIC PLAQUES PER NEC 110.24. WHERE APPLICABLE, PLAQUES SHALL ALSO INDICATE THAT THE BUILDING HAS TWO, OR MORE SERVICES IF TWO, OR MORE EXIST FOR THE BUILDING.

22. ALL EMERGENCY LIGHTS TO BE CONNECTED TO UNSWITCHED SIDE OF NEAREST LIGHT CIRCUIT.

23. ALL EXTERNAL LIGHTING TO BE CONNECTED TO TIMER AND PHOTO -CELL IF NOT INCLUDED.

# **ELECTRICAL SUMMARY**

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:
ENERGY CODE: PRESCRIPTIVE

LIGHTING SCHEDULE (EACH FIXTURE TYPE)

LAMP TYPE REQUIRED IN FIXTURE:

NUMBER OF LAMPS IN FIXTURE:

BALLAST TYPE USED IN THE FIXTURE:

NUMBER OF BALLASTS IN FIXTURE:

TOTAL WATTAGE PER FIXTURE:

TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED

(WHOLE BUILDING OR SPACE BY SPACE):

TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED:

SEE FIXTURE SCHEDULE

852 / 5012 WATTS 90 / 1660 WATTS CARO SESSION SEAL 051518 S/AS/AS WGINEE

P-0961

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C 27217

APER, NOT TO SCALE FOR 11x17 PAPER, OR AS NOTED

**A DR. BURLINGTON, NC 2721**SCALE: 1/4" = 1'-0" FOR 24x36 PAPER, NOT TO

GUTIERREZ WAREHOUSE
CATION:
2350 MANTIN MARIETTA DR. BL

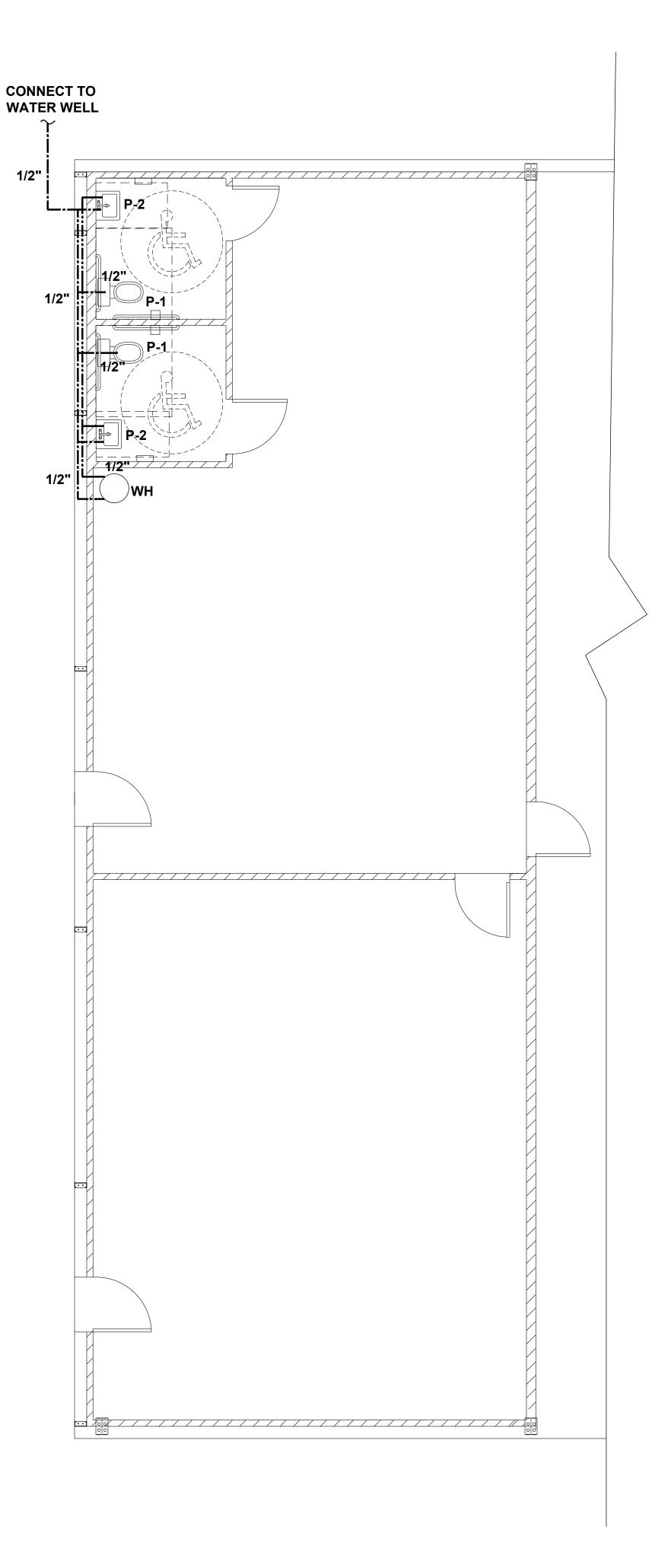
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23900685

05/24/2023 NWS

ELECTRICAL NOTES

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	PLUMBING FI						
SYMBOL	DESCRIPTION	MANUFACTURER	COLD	НОТ	W	V	NOTES
P-1	WATER CLOSET	BY OWNER	1/2"		3"	2"	OR APPROVED EQUIV
P-2	SINK	BY OWNER	1/2"	1/2"	3"	2"	OR APPROVED EQUIV
WH	WATER HEATER	BY OWNER	1/2"	1/2"	3"	2"	2 GAL OR APPROVED EQUIV
CO	CLEAN OUT	BY OWNER			4"		OR APPROVED EQUIV
FD	FLOOR DRAIN	BY OWNER			3"		OR APPROVED EQUIV

**SUPPLY PLAN** 

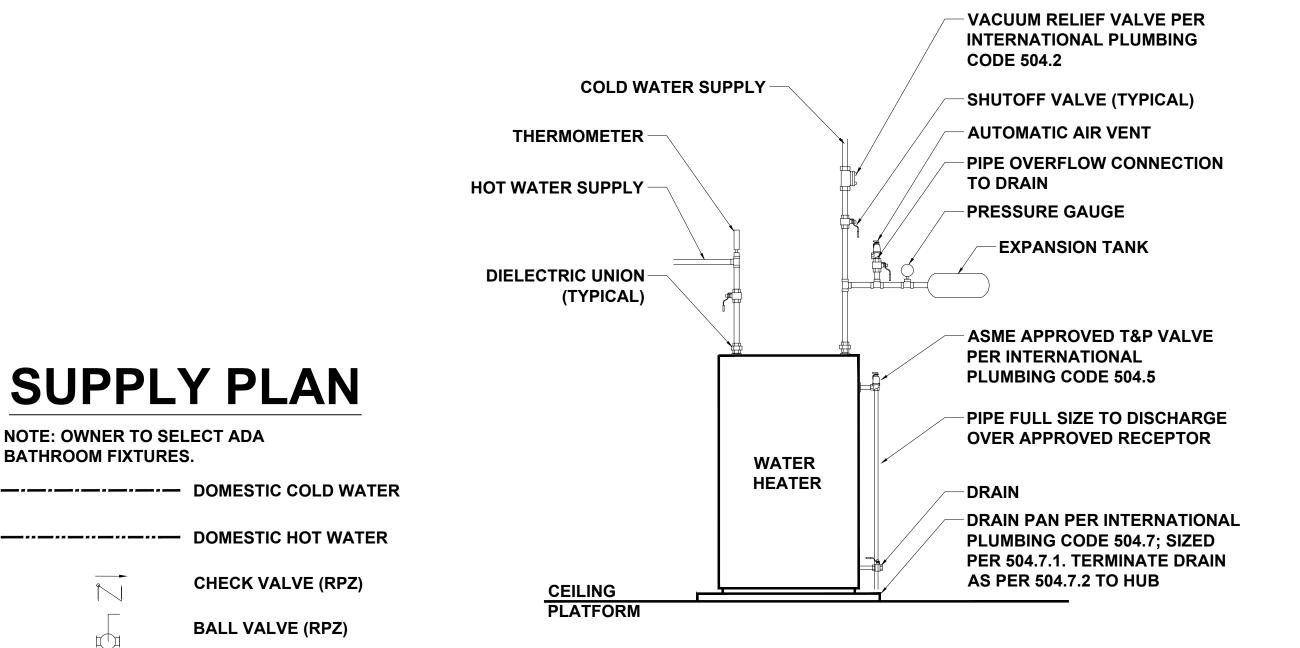
DOMESTIC HOT WATER

CHECK VALVE (RPZ)

BALL VALVE (RPZ)

NOTE: OWNER TO SELECT ADA

**BATHROOM FIXTURES.** 



# TYPICAL WATER TANK HEATER DETAIL

# **PLUMBING NOTES**

- 1. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH THE APPROVED EDITIONS OF THE PLUMBING CODE, THE LOCAL ADMINISTRATIVE AUTHORITY AND APPLICABLE NFPA CODES. INSULATE DOMESTIC **COLD & HOT WATER PIPING. PATCH EXISTING INSULATION WHERE DAMAGED UNDER CONSTRUCTION AND WHERE NEW CONNECTIONS ARE MADE.**
- 2. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES, AND INSPECTIONS REQUIRED BY ANY PUBLIC **AUTHORITY HAVING JURISDICTION. ACREAGE** CHARGES, BONDS, PROPERTY ASSESSMENTS AND FACILITIES CHARGE SHALL NOT BE CONSTRUED TO BE A PART OF THIS CONTRACT.
- 3. ALL MATERIALS AND EQUIPMENT PROVIDED AND/OR INSTALLED UNDER THIS SECTION OF THE SPECIFICATIONS SHALL BE GUARANTEED FOR A PERIOD OF 1 YEAR FROM THE DATE OF TURNOVER OF THE WORK TO THE OWNER.
- 4. THE PLUMBING CONTRACTOR SHALL COORDINATE WORK WITH THE CONTRACTORS OF OTHER TRADES, AND COMPLETE THE ENTIRE INSTALLATION AS SOON AS THE CONDITIONS OF THE BUILDING PERMITS.
- 5. INSTALL ANY GAS PIPING IN ACCORDANCE WITH **CURRENT GAS CODES, REQUIREMENTS OF** LOCAL GAS SUPPLIER AND N.B.F.U.
- 6. DOMESTIC WATER PIPE AND FITTINGS INSIDE **BUILDINGS SHALL BE TYPE L COPPER BELOW** AND ABOVE GRADE, JOINTS SHALL BE 95/5
- 7. FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING, PROVIDE A DEVICE(S) OR SYSTEM(S) PENETRATED.
- 8. ALL PLUMBING FIXTURES ARE THE BE **EQUIPPED WITH WATER HAMMER ARRESTORS** AS PER PLUMBING CODE 604.9. ARRESTORS ARE EXEMPT IF PLASTIC PIPE USED, PC 604.9 PLUMBING CONTRACTOR AND GENERAL **CONTRACTOR TO VERIFY.**
- 9. ALL PLUMBING MATERIALS USED WILL COMPLY WITH THE LATEST PLUMBING CODE. A. ANY ABOVE-GROUND DRAINAGE AND VENT **PIPING SHALL COMPLY WITH SECTION 702.1 B. ANY UNDERGROUND SANITARY DRAINAGE** AND VENT PIPING SHALL COMPLY WITH **SECTION 702.2.** C. ANY WATER SERVICE PIPE SHALL COMPLY WITH SECTION 605.3. D. ANY WATER DISTRIBUTION PIPE SHALL

**COMPLY WITH SECTION 605.4.** 

# PLUMBING ABBREVIATIONS

**ABOVE** ABOVE FINISHED FLOOR **HOSE BIBB** REFRIGERATOR **BACK FLOW PREVENTER INLINE WATER HEATER VENT THRU ROOF** 

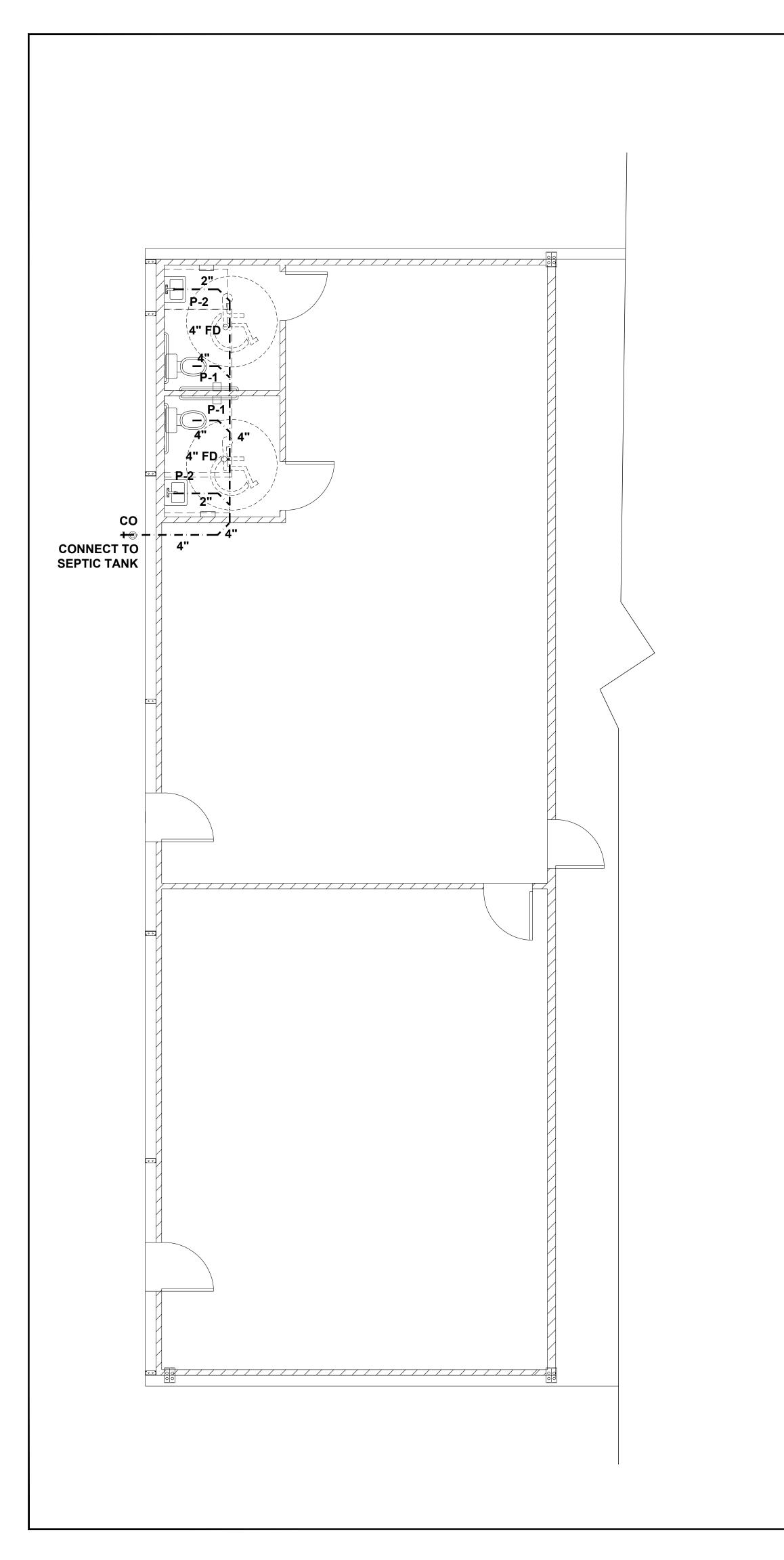
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# **PLUMBING ABBREVIATIONS**

ABOVE FINISHED FLOOR **HOSE BIBB** 

REFRIGERATOR

**BACK FLOW PREVENTER INLINE WATER HEATER** VTR VENT THRU ROOF



BURLINGTON, NC 27217

WAREHOUSE

GUTIERREZ

WASTE PLAN

1/2" AUTOMATIC PRIMER VALVE

- 1/2" MIN. PIPE

**—1/2" COLD H2O LINE** 1/2" HOT H2O LINE 3/4" SEE NOTE NO. 6 **CONNECT TO SEPTIC COLD & HOT WATER PIPING ISOMETRIC WASTE/VENT PIPING ISOMETRIC** 

**BRONZE** 

- PVC BODY

FLOOR DRAIN DETAIL

- PROVIDE TRAP

**STRAINER** 

CONCRETE

**FLOOR SLAB** 

**CONNECT TO WELL** 

SEE NOTE NO. 5

SEE NOTE NO. 7

PLUMBING LINES MAY PASS PERPENDICULARLY THROUGH THE BOTTOM THIRD OF A FOOTING IF INSTALLED WITH APPROPRIATE SLEEVE AND (2) 48" LONG #4 REBAR ARE INSTALLED CENTERED OVER THE SLEEVE.

# **WASTE PLAN**

NOTE: OWNER TO SELECT ADA **BATHROOM FIXTURES.** 

# **MATERIAL SPECIFICATIONS**

- 1. PIPE INSULATION: DG TURBOLIT FOAM PIPE INSULATION
- 2. WASTE: SCHEDULE 40 PVC
- 3. VENT: SCHEDULE 40 PVC
- 4. DOMESTIC WATER: COPPER / PEX / CPVC