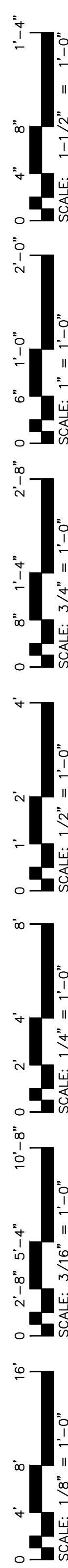


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 Plotted by: Michael
 Plotted Date: Jul 13, 2020 - 10:35am



SHEET INDEX:

CS	COVER SHEET & INDEX TO DRAWINGS	M3	MECHANICAL SCHEDULES
BCS	BUILDING CODE SUMMARY	E1	ELECTRICAL NOTES & SCHEDULES
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G1	CALLOUT FLOOR PLAN	E3	ELECTRICAL PLAN-LIGHTING
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G2	DIMENSIONED FLOOR PLAN	P2	PLUMBING PLAN-WASTE
G2.1	FRAMING DIMENSION PLAN	P3	PLUMBING PLAN-WATER
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G3.1	ADA DETAILS & ACCESSORIES-WOMEN		
G4	EXTERIOR ELEVATIONS		
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M1	MECHANICAL NOTES		
M2	MECHANICAL PLAN		

PROJECT:

CONSTRUCTION PLANS for: WATERMARK HOMES OFFICE BUILDING

196 ANNETTE DRIVE
BENSON, NC 27504

PROJECT TEAM:

BUILDING OWNER:

WATERMARK HOMES, INC
BRADY RUFENACHT
1308 FT. BRAGG RD SUITE 201
FAYETTEVILLE, NC 28305
910-483-2229

CONSTRUCTION MANAGEMENT COMPANY:

WATERMARK HOMES, INC
BRADY RUFENACHT
PHONE: 910-483-2229
EMAIL: brady@watermarkhomesnc.com
WEBSITE: watermarkhomesnc.com

BUILDING & MEP DESIGN

JENKINS CONSULTING ENGINEERS, PA
1582 MCARTHUR ROAD
FAYETTEVILLE, NC 28311
KELLY J. DODSON, PE & BUDDY JENKINS, PE
(910) 822-1724

STRUCTURAL DESIGN

MARSHALL ENGINEERING SERVICES PLLC
7575 McARTANS FORD
LINDEN, NC 28356
RANDOLPH MARSHALL, PE
(910) 850-5874

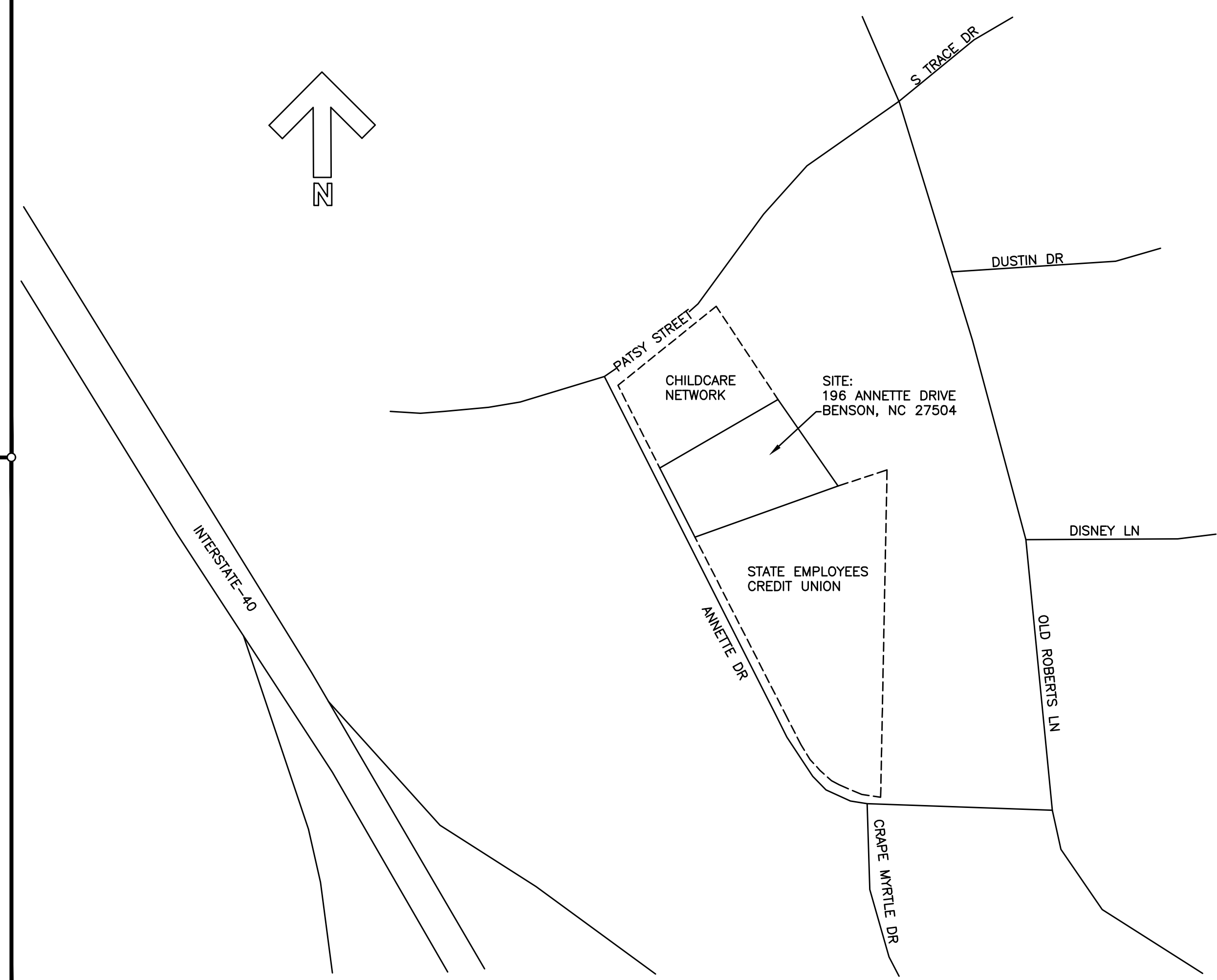
BUILDING DEPARTMENT:

JOHNSTON COUNTY
INSPECTION DEPARTMENT
309 E. MARKET STREET
SMITHFIELD, NC 27577
(919)-989-5060

CODE REVIEW:

BUILDING	2018 NC BUILDING CODE
PLUMBING	2018 NC PLUMBING CODE
MECHANICAL	2018 NC MECHANICAL CODE
ELECTRICAL	2017 NATIONAL ELECTRICAL CODE (NFPA-70)
FIRE PREVENTION	2018 NC FIRE CODE
ENERGY	2018 NC ENERGY CONSERVATION CODE
ACCESSIBILITY	ICC A117.1-2009 AND THE AMERICANS WITH DISABILITIES ACT (ADAAG)

VICINITY MAP:



DESIGNED/CHECKED BY:
K. DODSON

DRAWN BY:
MJ

DATE:
8 JUL 2020

PROJECT:
WATERMARK HOMES OFFICE BUILDING

196 ANNETTE DRIVE, BENSON, NC 27504

SHEET:
COVER SHEET

OWNER/TENANT:
WATERMARK HOMES

CONTRACTOR/BUILDER:
WATERMARK HOMES

1308 FT. BRAGG RD. STE. 201, FAYETTEVILLE, NC 28305

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

CS

2018 NC BUILDING CODE SUMMARY: APPENDIX B

Name of Project: WATERMARK HOMES OFFICE BUILDING PIN: 163400-24-1535
 Address: 196 ANNETTE DRIVE, BENSON, NC Zip Code: 27504
 Proposed Use: BUSINESS
 Owner or Authorized Agent: BRADY RUFENACHT Phone 910-483-2229 E-Mail brady@watermarkhomesnc.com
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City County JOHNSTON State NORTH CAROLINA

CONTACT: DOUGLAS L. JENKINS

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	N/A	N/A	N/A		
Civil	N/A	N/A	N/A		
Electrical	JCE	DOUGLAS L. JENKINS	NC PE 28803	(910) 822-1724	buddy@jenkinsce.pro
Fire Alarm	N/A	N/A	N/A		
Plumbing	JCE	DOUGLAS L. JENKINS	NC PE 28803	(910) 822-1724	buddy@jenkinsce.pro
Mechanical	JCE	DOUGLAS L. JENKINS	NC PE 28803	(910) 822-1724	buddy@jenkinsce.pro
Sprinkler-Standpipe	N/A	N/A	N/A		
Structural	MES	RANDOLPH MARSHALL	NC PE 34198	(910)-850-5874	randolf@randolphmarshall.com
INTERIOR WALLS	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyd@jenkinsce.pro
Retaining Walls >5' High	N/A	N/A	N/A		
Building	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyd@jenkinsce.pro

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

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

CONSTRUCTED (date) _____ CURRENT USE (S) (Ch. 3): _____
 RENOVATED (date) _____ PROPOSED USE (S) (Ch. 3): BUSINESS

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

BASIC BUILDING DATA

Construction Type: I-A II-A III-A IV V-A
 I-B II-B III-B V-B
 Sprinklers: No Partial NFPA 13 NFPA 13R NFPA 13D
 Standpipes: No Class I II III Wet Dry
 Primary Fire District: No Yes (APPENDIX D) Flood Hazard Area: No Yes
 Special Inspections Required: No Yes

GROSS BUILDING AREA TABLE

FLOOR	EXISTING (sq ft)	NEW (sq ft)	SUBTOTAL
1st Floor	-	4,917	
TOTAL		4,917	

ALLOWABLE AREA

Primary Occupancy Classification(s):
 Assembly A-1 A-2 A-3 A-4 A-5
 Business
 Educational
 Factory F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 I-2 I-3 I-4
 I-1 Condition 1 2
 I-2 Condition 1 2
 I-3 Condition 1 2 3 4 5
 Mercantile
 Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Parking Garage Open Enclosed Repair Garage
 Utility and Miscellaneous

Accessory Occupancy Classification(s):

Incidental Uses (Table 509): NONE
 This separation is not exempt as a Non-separated Use (see exceptions).
 Special Uses (Chapter 4): 402 403 404 405 406 407 408 409 410 411 412 413
 414 415 416 417 418 419 420 421 422 423 424 425
 426 427 428 429 430
 Special Provisions (Chapter 5): 510.2 510.3 510.4 510.5 510.6 510.7 510.8 510.9
 Mixed Occupancy: No Yes Separation: _____ Hr. Exception: _____
 Non-separated Use (508.3)
 Separated Use (508.4) -- See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area of each use shall not exceed 1.

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

STORY NUMBER	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.24 AREA	(C) AREA FOR FRONTAGE INCREASE, S	(D) ALLOWABLE AREA PER STORY OR UNLIMITED S
1	BUSINESS	4,917	9,000	N/A	9,000

1 Frontage area increases from Section 506.3 are computed thus:
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
 b. Total Building Perimeter = _____ (P)
 c. Ratio (F/P) = _____ (F/P)
 d. W = Minimum width (weighted average) of public way = _____ (W) where $W = (L_1 \times W_1 + L_2 \times W_2) / F$ (Equation 5-4)
 e. Percent of frontage increase = $\frac{1}{2} = 100 \left[\frac{F}{P} - 0.25 \right] \times \frac{W}{20}$ (%) (Equation 5-5)

FRONTAGE INCREASE WORKSHEET FOR CALCULATIONS:

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

2 Unlimited area applicable under conditions of Sections 507
 3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (Section 506.2).
 4 The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.5.1
 5 Frontage increase is based on the unsprinklered area value in Table 506.2.

BUILDING CODE SUMMARY (continued)

	ALLOWABLE HEIGHT		CODE REFERENCE
	ALLOWABLE	SHOWN ON PLANS	
Building Height in Feet (Table 504.3)	40	24	-
Building Height in Stories (Table 504.4)	2	1	-

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

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING ** (TABLE 601)		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (w/REDUCTION)				
Structural Frame, including columns, girders, trusses		0	0				
Bearing Walls							
Exterior		0	0				
North							
East							
West							
South							
Interior		0	0				
Nonbearing walls and partitions							
Exterior walls							
North							
East							
West							
South							
Interior Non-Bearing Walls		0	0				
Floor construction including supporting beams and joists		0	0				
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof construction including supporting beams and joists		0	0				
Roof Ceiling Assembly		0	0				
Columns Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy / Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/Sleeping Unit Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

EXTERIOR WALL	FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINE	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
North	-	-	-	-
South	-	-	-	-
East	-	-	-	-
West	-	-	-	-

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

LIFE SAFETY PLAN REQUIREMENTS
 Life Safety Plan Sheet #: LS-1
 Fire and/or smoke rated wall locations (Chapter 7)
 Assumed and real property line locations (if not on the site plan)
 Exterior wall opening area with respect to distance to assumed property lines (705.8)
 Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
 Occupant loads for each area
 Exit access travel distances (1017)
 Common path of travel distances [1006.2.1 & 1006.3.2(1)]
 Dead end lengths (1020.4)
 Clear exit widths for each exit door
 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
 Actual occupant load for each exit door
 A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
 Location of doors with panic hardware (1010.1.10)
 Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
 Location of doors with electromagnetic egress locks (1010.1.9.9)
 Location of doors equipped with hold-open devices
 Location of emergency escape windows (1030)
 The square footage of each fire area (903)
 The square footage of each smoke compartment for Occupancy Classification I-II (407.5)
 Note any code exceptions or table notes that may have been utilized regarding the items above

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

LOT OR PARKING AREA	ACCESSIBLE PARKING (SECTION 1106)				TOTAL # OF ACCESSIBLE SPACES PROVIDED
	TOTAL # OF PARKING SPACES REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 13' ACCESS AISLE	
EXISTING	SEE SITE PLAN BY OTHERS				
NEW					
TOTAL					

BUILDING CODE SUMMARY (continued)

USE	PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)									
	WATER CLOSETS MALE/FEMALE/UNISEX	URINALS	LAVATORIES MALE/FEMALE/UNISEX	SHOWERS/TUBS	DRINKING FOUNTAINS REGULAR/ACCESSIBLE	SERVICE SINK				
BUSINESS	1/1/1		1/1/1	1	1/1	1				
INSTALL NEW FIXTURES	1/1/1		1/1/1	1	1/1	1				

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

ENERGY SUMMARY

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

Existing building envelope complies with code: (if checked, the remainder of this section is not applicable).

Exempt Building: Provide code or statutory reference: _____

Climate Zone: 3A 4A 5A JOHNSTON COUNTY

Method of Compliance:
 Energy Code: Performance Prescriptive
 ASHRAE 90.1: Performance Prescriptive
 Other: Performance (specify source) _____ Value of total assembly: _____

THERMAL ENVELOPE: (Prescriptive method only)
 Roof/Ceiling Assembly (each assembly)
 Description of assembly: GWB CEILING, INSULATION, TRUSSES, SHEATHING, ASPHALT SHINGLES
 U-Value of total assembly: _____
 R-Value of insulation: R-38
 Skylights in each assembly:
 U-Value of skylight: _____
 Total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
 Description of assembly: GWB, 2X6 WOOD STUD, INSULATION, SHEATHING, VAPOR BARRIER, BRICK VENEER
 U-Value of total assembly: _____
 R-Value of insulation: R-19
 Openings (windows or doors with glazing)
 U-Value of assembly: 0.47
 Solar heat gain coefficient: _____
 Projection factor: _____
 Door R-Values: _____

Walls below grade (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____

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

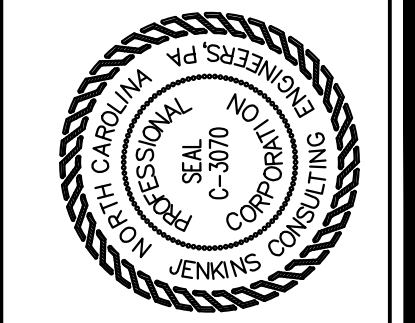
Floors slab on grade
 Description of assembly: UNHEATED SLAB
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Horizontal/vertical requirement: _____
 slab heated: _____

MECHANICAL SUMMARY (SEE DRAWING SHEET M3)

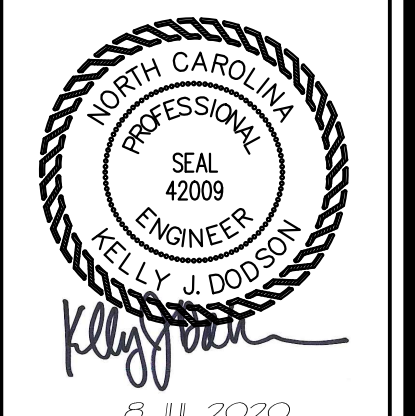
ELECTRICAL SUMMARY (SEE DRAWING SHEET E1)

Johnston County
 BUILDING CODE SUMMARY
 for:
 WATERMARK HOMES
 OFFICE BUILDING

196 ANNETTE DRIVE
 BENSON, NC 27504



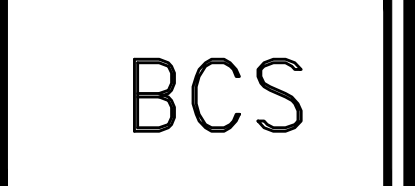
D. L. JENKINS
 CONSULTING ENGINEERS, P.A.
 OFFICE IN: EUREKA SPRINGS, NORTH CAROLINA
 CORPORATION NUMBER C-3070
 1502 HAWTHORNE RD., STATE 201, FAYETTEVILLE, NC 28405
 TEL: 910.822.4645
 FAX: 910.822.1724



K. J. DODSON
 ENGINEER
 8 JUL 2020

DESIGNED/CHECKED BY: K. DODSON
 DRAWN BY: M.J.
 PROJECT#: 2020-05-04
 DATE: 8 JUL 2020
 OWNER/TENANT: WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28405
 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28405

PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE, BENSON, NC 27504
 SHEET: BUILDING CODE SUMMARY



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 Plotted Date: Jul 08, 2020 - 10:33am
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 8"
 2'-0" 0 4"
 1'-1/2" = 1'-0"
 6"
 1'-0" 0 4"
 1'-0" = 1'-0"
 2'-8" 0 4"
 1'-4" = 1'-0"
 4"
 1'-0" 0 2"
 1/2" = 1'-0"
 8"
 1'-0" 0 4"
 1/4" = 1'-0"
 10'-8" 0 2"
 1/8" = 1'-0"
 16'-8" 0 4"
 1/8" = 1'-0"
 0 4" 8"

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 Plotted Date: Jul 13, 2020 - 11:03am

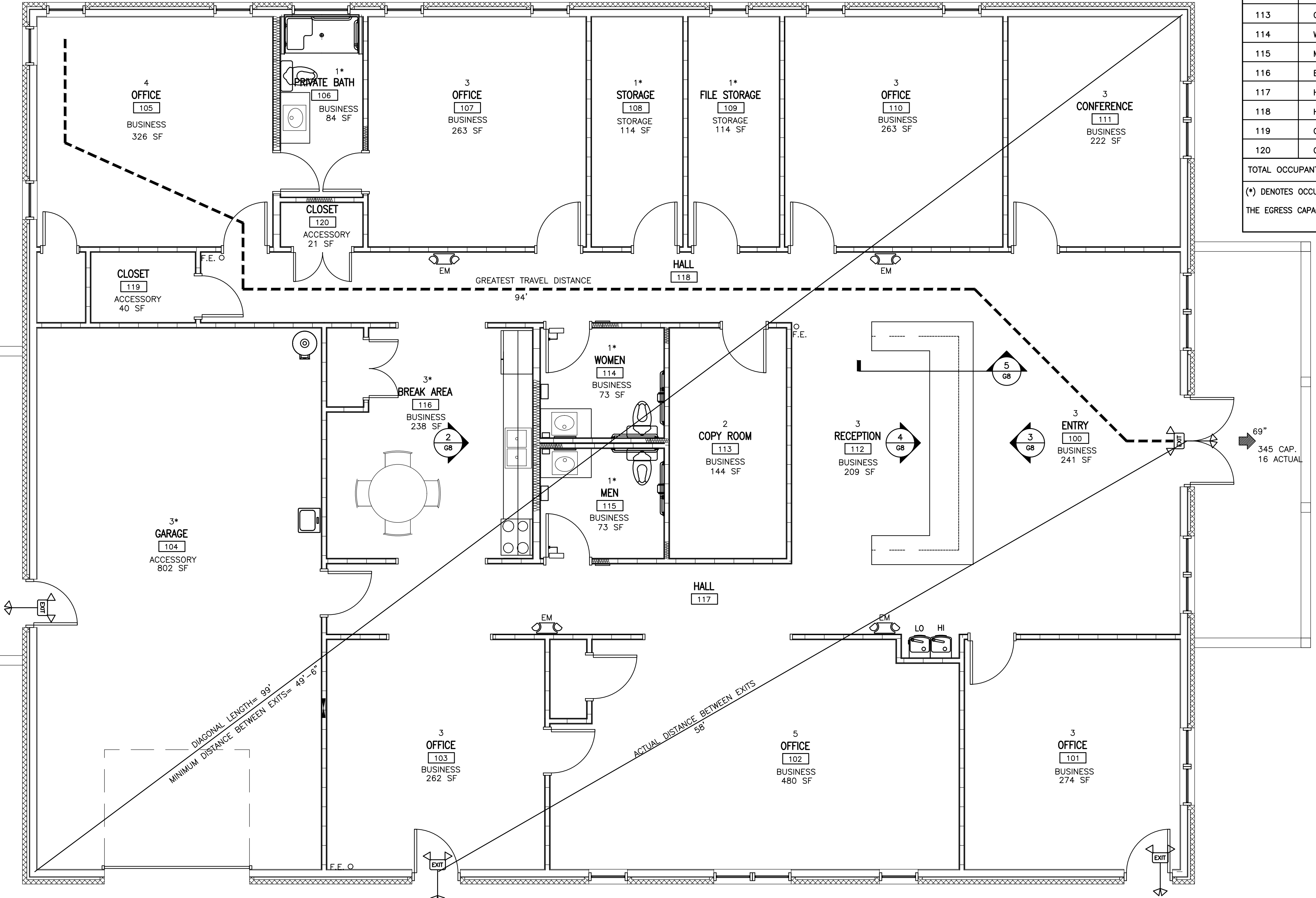
BUSINESS (B) OCCUPANCY:

TYPE OF CONSTRUCTION: III-B
 BUILDING IS TO BE USED AS BUSINESS OFFICE
 BUILDING ADDRESS IS 196 ANNETTE DRIVE
 TOTAL BUILDING AREA IS 4,917 SF
 TOTAL OCCUPANT LOAD IS 50 PERSONS 4,917/100=50 (CALCULATED BY WHOLE SPACE USE)
 TOTAL OCCUPANT LOAD BY INDIVIDUAL ROOM USE IS 32 PERSONS
 EGRESS CALCULATION IS BASED UPON OCCUPANCY OF 32 PERSONS
 BUILDING EXIT WIDTH CALCULATIONS:
 32 PERSONS * 0.2/OCCUPANT = 6.4" REQUIRED, 69 INCHES TOTAL PROVIDED. (PER 1005.1)
 GREATEST TRAVEL DISTANCE SHOWN: 94 FEET. (PER 1017)
 MAXIMUM ALLOWABLE TRAVEL DISTANCE: 200 FEET (PER TABLE 1017.2)
 THE COMMON PATH OF TRAVEL IS GREATER THAN 75 FEET. (PER 1006.2.1)
 MIN. NO. OF EXITS REQUIRED: TWO (2) (PER TABLES 1006.2.1 AND 1006.3.2 (2))
 NUMBER OF EXITS PROVIDED: TWO (2) ACCESSIBLE
 DIAGONAL LENGTH: 99 FEET
 1/2 DIAGONAL LENGTH: 45 FEET 6 INCHES
 ACTUAL DISTANCE BETWEEN DOORS: 58 FEET
 MINIMUM REQUIRED DISTANCE BETWEEN DOORS: 45 FEET 6 INCHES
 EGRESS DOORS DO NOT REQUIRE PANIC HARDWARE. (PER 1010.1.10)
 DOORS DO NOT HAVE DELAYED EGRESS LOCKS (PER 1010.1.9.7)
 DOORS DO NOT HAVE ELECTROMAGNETIC EGRESS LOCKS (PER 1010.1.9.9)
 DOORS DO NOT HAVE HOLD OPEN DEVICES.
 THERE ARE NO EMERGENCY ESCAPE WINDOWS (PER 1030)
 THE FIRE AREA SQUARE FOOTAGE IS 4,917 SQUARE FEET (PER CH. 2)

OCCUPANCY CLASSIFICATION SCHEDULE per TABLE 1004.1.1

SPACE NUMBER	CURRENT SPACE USE	FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	ROOM AREA (SF)	EGRESS OCCUPANCY TOTAL
100	ENTRY	BUSINESS	100	241	3
101	OFFICE	BUSINESS	100	274	3
102	OFFICE	BUSINESS	100	480	5
103	OFFICE	BUSINESS	100	262	3
104	GARAGE	ACCESSORY	300	802	3*
105	OFFICE	BUSINESS	100	326	4
106	PRIVATE BATHROOM	BUSINESS	100	84	1*
107	OFFICE	BUSINESS	100	263	3
108	STORAGE	STORAGE	300	114	1*
109	STORAGE	STORAGE	300	114	1*
110	OFFICE	BUSINESS	100	263	3
111	CONFERENCE	BUSINESS	100	222	3
112	RECEPTION	BUSINESS	100	209	3
113	COPY ROOM	BUSINESS	100	144	2
114	WOMEN'S RESTROOM	BUSINESS	100	73	1*
115	MEN'S RESTROOM	BUSINESS	100	73	1*
116	BREAK AREA	BUSINESS	100	238	3*
117	HALL	BUSINESS	100	-	-
118	HALL	BUSINESS	100	-	-
119	CLOSET	ACCESSORY	300	40	1*
120	CLOSET	ACCESSORY	300	21	1*
TOTAL OCCUPANT COUNT FOR BUILDING & EGRESS CAPACITY				4,243	32

(*) DENOTES OCCUPANT NUMBER ACCOUNTED FOR IN OCCUPANT TOTAL
 THE EGRESS CAPACITY SHALL BE BASED UPON OCCUPANT LOAD OF 32 PERSONS



LEGEND

SYMBOL	DESCRIPTION
F.E. O	ABC FIRE EXTINGUISHER SUGGESTED LOCATION
EXIT ROUTE	EXIT ROUTE
-----	GREATEST TRAVEL DISTANCE
33" 165 CAP.	EXIT WIDTH, 36" - 3 = 33" CLEAR WIDTH. EXIT CAPACITY (NUMBER OF PERSONS)
22 ACTUAL	ACTUAL OCCUPANT LOAD FOR EXIT DOOR
EXIT	EXIT SIGN
EM	EMERGENCY EGRESS LIGHTING (SEE ELECTRICAL LIGHTING PLAN)
36"	AISLE WIDTH WHERE SHOWN
EXIT	EXIT SIGN WITH EMERGENCY LIGHTING
ROOM LABEL	DESCRIPTION
10	OCCUPANT TOTAL
RETAIL	ROOM NAME
1	ROOM NUMBER
MERCANTILE	FUNCTION TYPE
100 SF	SPACE AREA

1 LIFE SAFETY PLAN
 LS1
 SCALE: 1/4" = 1'-0"

J. JENKINS
 CONSULTING ENGINEERS, P.A.
 OFFICE IN EUREKA SPRINGS, NORTH CAROLINA
 1582 MARATHON RD., FAYETTEVILLE, NC 28311-1022
 CORPORATION NUMBER C-3070 BUSY@jenkinspa.com
 FAX 910.822.4645

DESIGNED/CHECKED BY: **K. DODSON**
 DRAWN BY: **MJ**
 PROJECT#: **2020-05-04**
 DATE: **8 JUL 2020**

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

OWNER/TENANT:
WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28305

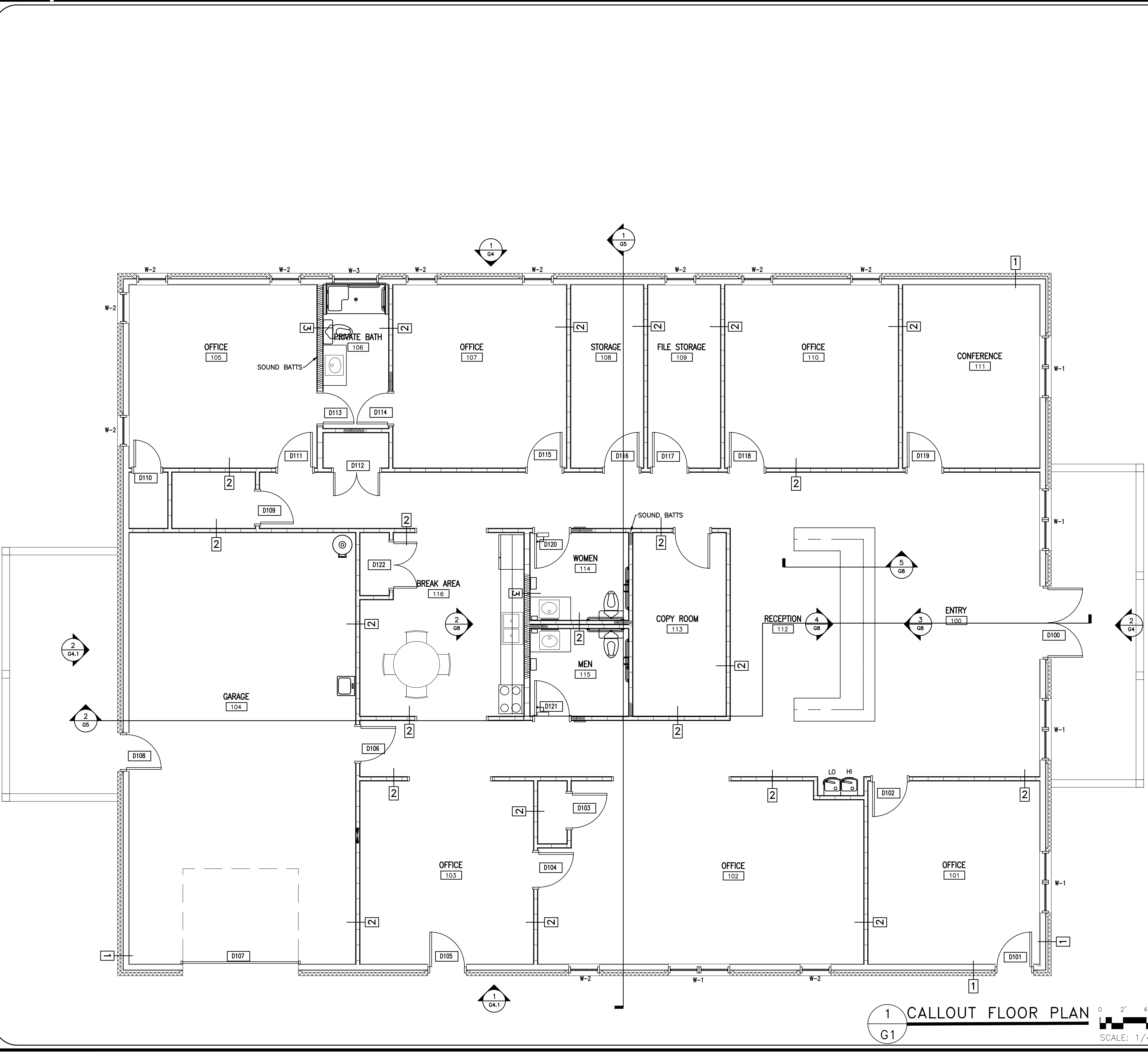
CONTRACTOR/BUILDER:
WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28305

PROJECT:
WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE, BENSON, NC 27504

SHEET:
LIFE SAFETY PLAN

LS1

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 Plotted by: Michael J
 Plotted Date: Jul 08, 2020 - 10:40am




WALL LEGEND

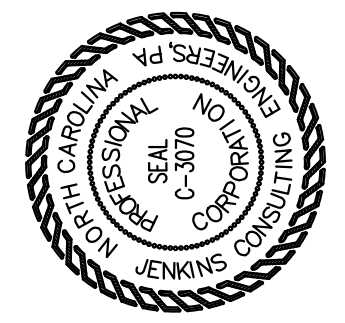
SYMBOL	DESCRIPTION
1	EXTERIOR WALL CONSTRUCTED OF 5/8" INTERIOR GYPSUM BOARD, 2X6 (5.5") WOOD STUDS W/R-19 BATT INSULATION, 7/16" OSB SHEATHING, VAPOR BARRIER, AIRSPACE, AND BRICK VENEER
2	INTERIOR WALL CONSTRUCTED OF 5/8" INTERIOR GYPSUM BOARD ON EACH SIDE OF 2X4 (3.5") STUD WALLS. PROVIDE SOUND BATTS WHERE SHOWN.
3	INTERIOR WALL CONSTRUCTED OF 5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 (5.5") STUD WALLS. PROVIDE SOUND BATTS WHERE SHOWN.

1 CALLOUT FLOOR PLAN
 G1

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



8 JUL 2020



J. JENKINS
 CONSULTING ENGINEERS, PA.
 OFFICE IN EUREKA SPRINGS, NORTH CAROLINA
 1582 MARTIN RD. FAYETTEVILLE, NC 28311-1032
 CORPORATION NUMBER C-3070 BUSBY@jenkins.com
 910.822.7474 FAX 910.822.4645

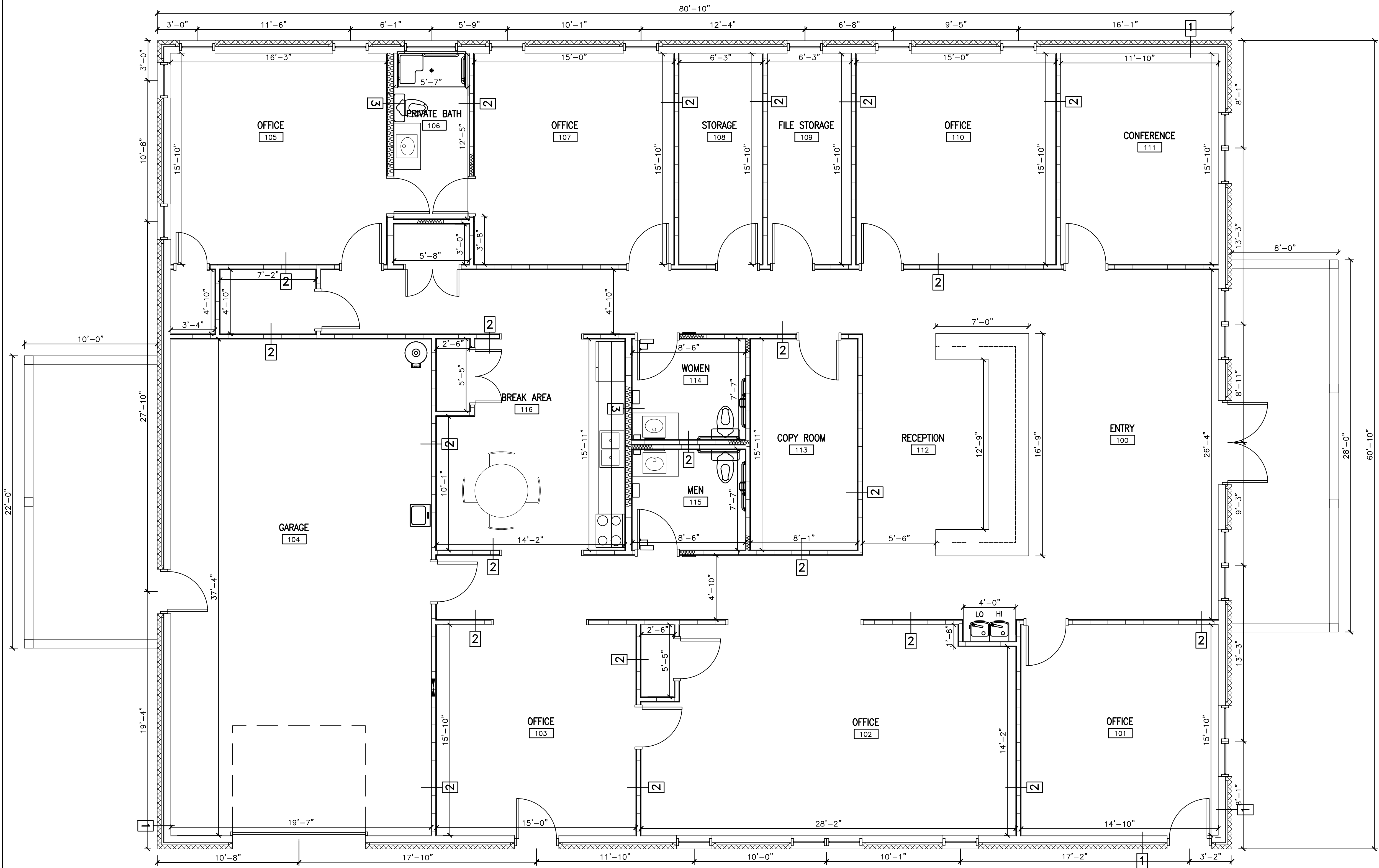
DESIGNED/CHECKED BY: K. DODSON	DRAWN BY: MJ
FINAL DRAWING <input type="checkbox"/> FOR REVIEW PURPOSES ONLY PRELIMINARY <input type="checkbox"/> FOR DESIGN DEVELOPMENT ONLY FINAL DRAWING <input checked="" type="checkbox"/> FOR CONSTRUCTION	PROJECT#: 2020-05-04
OWNER/TENANT: WATERMARK HOMES 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28309	DATE: 8 JUL 2020
CONTRACTOR/BUILDER: WATERMARK HOMES 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28309	

PROJECT: **WATERMARK HOMES OFFICE BUILDING**
 196 ANNETTE DRIVE BENSON, NC 27504
 SHEET: **CALLOUT FLOOR PLAN**

G1

Drawing File: H:\2020\Watermark\WatermarkHomes-7JUL.dwg
 Plotted by: Michael J. Dodson
 Plotted Date: Jul 08, 2020 - 10:41am

SYMBOL	DESCRIPTION
	EXTERIOR WALL CONSTRUCTED OF 5/8" INTERIOR GYPSUM BOARD, 2X6 (5.5") WOOD STUDS W/R-19 BATT INSULATION, 7/16" OSB SHEATHING, VAPOR BARRIER, AIRSPACE, AND BRICK VENEER
	INTERIOR WALL CONSTRUCTED OF 5/8" INTERIOR GYPSUM BOARD ON EACH SIDE OF 2X4 (3.5") STUD WALLS. PROVIDE SOUND BATTS WHERE SHOWN.
	INTERIOR WALL CONSTRUCTED OF 5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 (5.5") STUD WALLS. PROVIDE SOUND BATTS WHERE SHOWN.



1 DIMENSIONED FLOOR PLAN
 G2 SCALE: 1/4" = 1'-0"



DESIGNED/CHECKED BY: K. DODSON
 DRAWN BY: MJ
 PROJECT#: 2020-05-04
 DATE: 8 JUL 2020

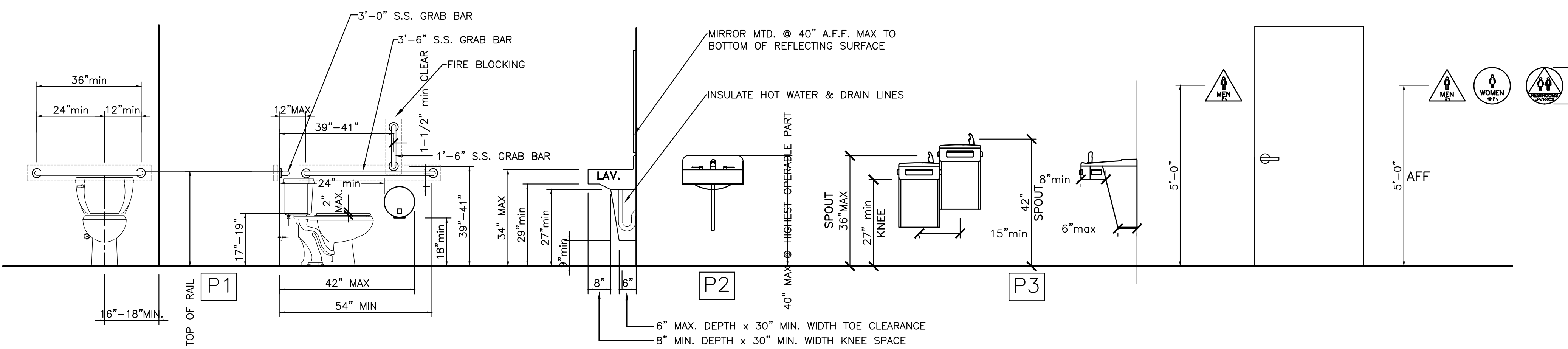
OWNER/TENANT: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201 FAYETTEVILLE, NC 28405
 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201 FAYETTEVILLE, NC 28405

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

PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE BENSON, NC 27504
 SHEET: DIMENSIONED FLOOR PLAN

G2

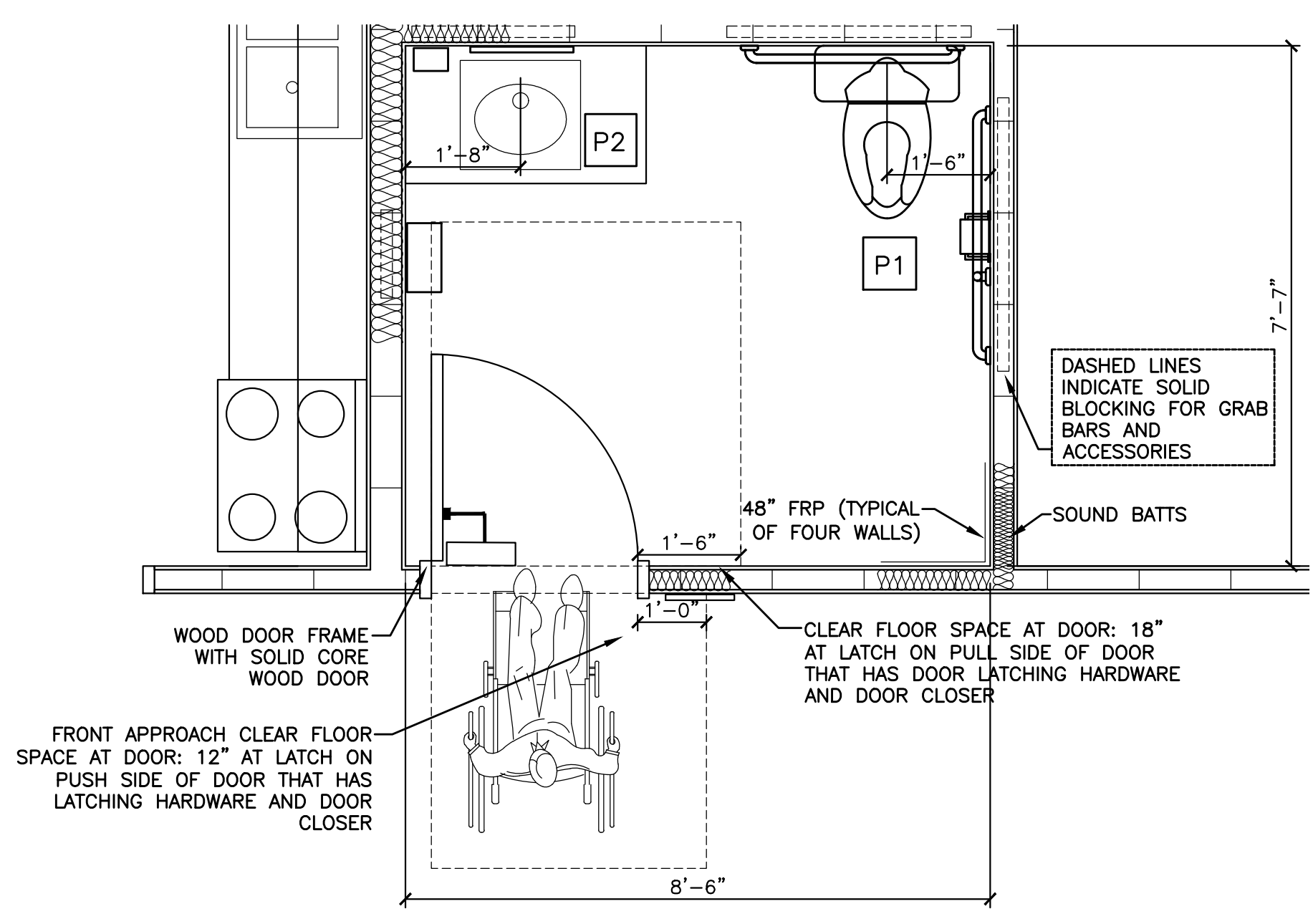
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 Plotted Date: Jul 08, 2020 - 10:41am



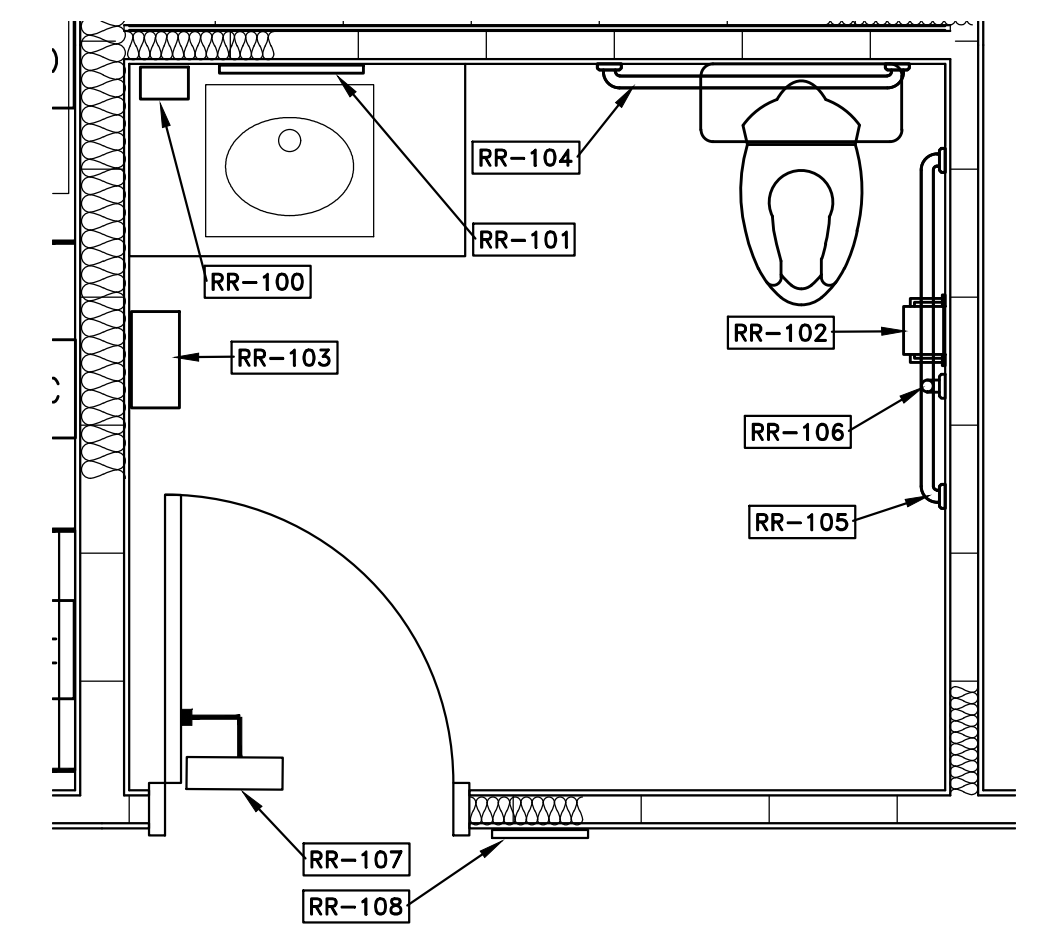
ACCESSORY LEGEND					
NO.	QTY	G.C.INST.	ITEM DESCRIPTION	MODEL #	MANUFACTURER
RR-100	2	X	SOAP DISPENSER (WALL MOUNT)	B-2111	BOBRICK
RR-101	2	X	MIRROR, 18" X 36"	B-165 1836	BOBRICK
RR-102	2	X	TOILET PAPER DISPENSER	B-273	BOBRICK
RR-103	2	X	PAPER TOWEL DISPENSER	B-2620	BOBRICK
RR-104	2	X	GRAB BAR 1-1/2"DIA X 36" S.S. FIN.	B-5806 X 36	BOBRICK
RR-105	2	X	GRAB BAR 1-1/2"DIA X 42" S.S. FIN.	B-5806 X 42	BOBRICK
RR-106	2	X	GRAB BAR 1-1/2"DIA X 18" S.S. FIN.	B-5806 X 18	BOBRICK
RR-107	2	X	DOOR CLOSER	UH4031	UNIVERSAL HARDWARE
RR-108	2	X	RESTROOM SIGNAGE	RR-120-DCTS	COMPLIANCE SIGNS

- ACCESSORY NOTES:
1. PROVIDE BLOCKING AT ALL WALL MOUNTED ACCESSORIES.
 2. GRAB BARS, FASTENERS AND MOUNTING DEVICES SHALL BE INSTALLED PER ADA REQUIREMENTS.
 3. INSTALL AT LOCATIONS REQUIRED AND AS SHOWN ON DRAWINGS.
 4. ALL TOILET ACCESSORIES TO BE SELECTED BY OWNER
 5. ALL TOILET ACCESSORIES TO BE INSTALLED BY CONTRACTOR
 6. ALL LAVATORIES & SINKS SHALL HAVE PROTECTIVE COVERING ATTACHED TO THE SUPPLY & DRAIN LINES BELOW THE FIXTURES.

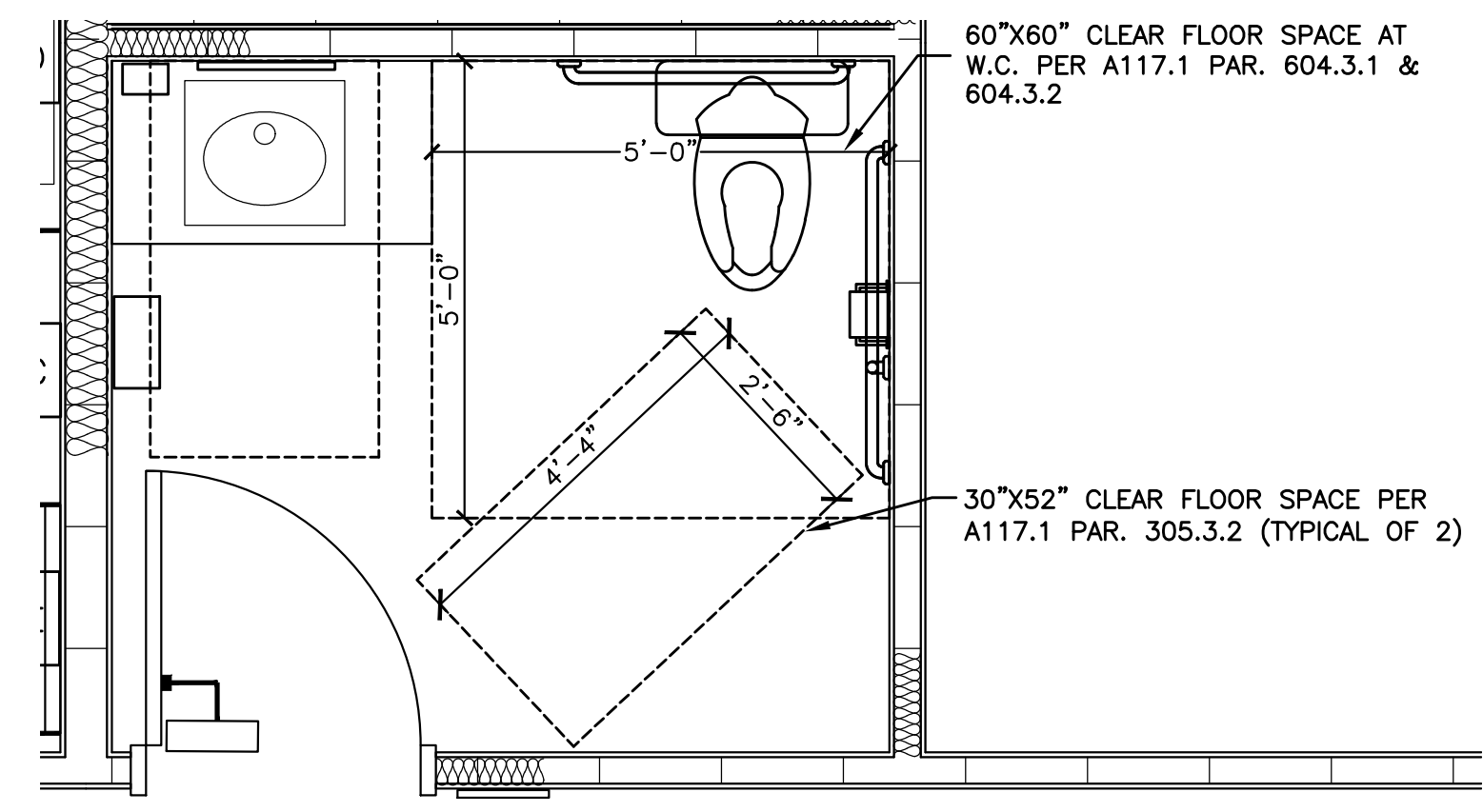
3 ADA DETAILS
G3 SCALE: 1/2" = 1'-0"



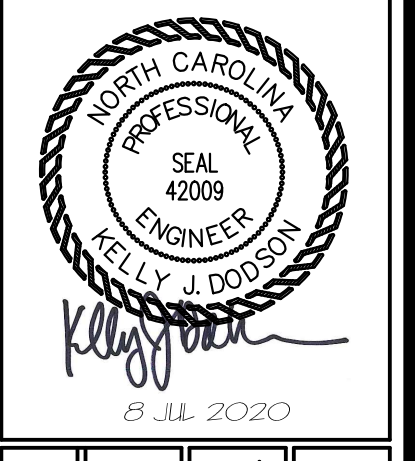
1 ENLARGED RESTROOM PLAN
G3 SCALE: 1/2" = 1'-0"



2 ACCESSORY PLAN
G3 SCALE: 1/2" = 1'-0"



3 ADA CLEARANCES
G3 SCALE: 1/2" = 1'-0"



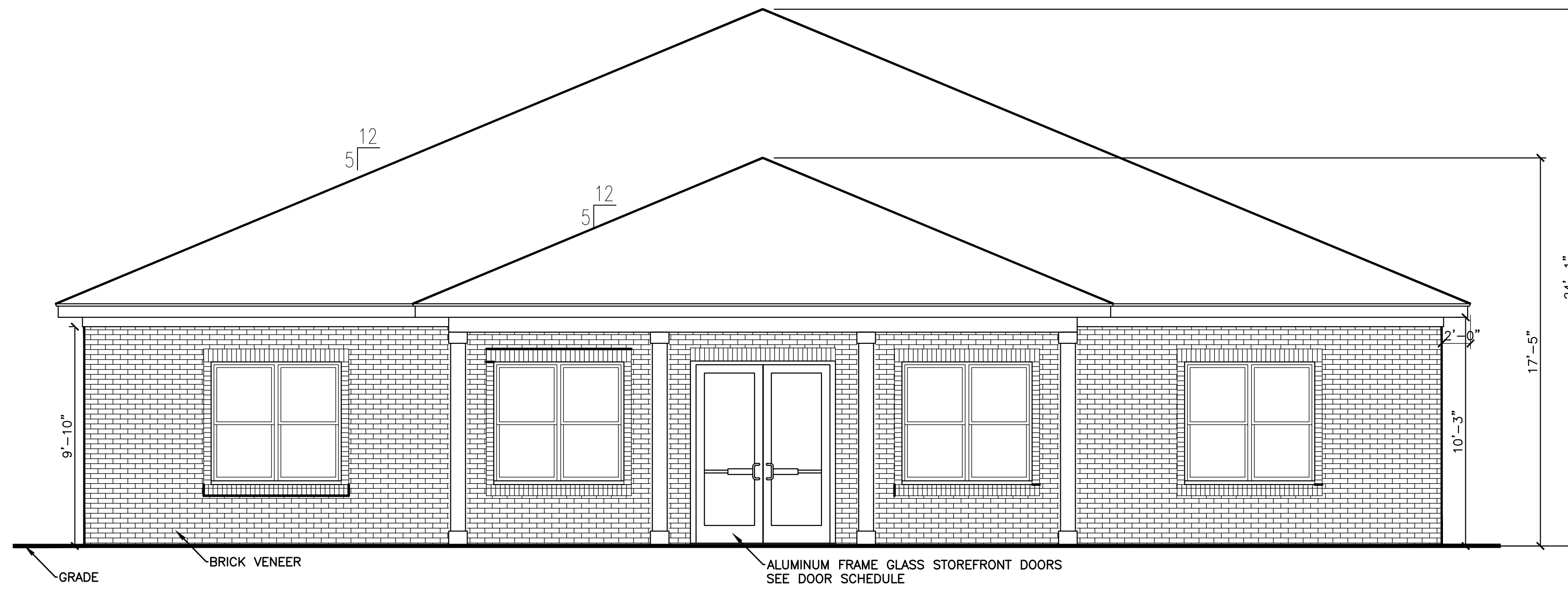
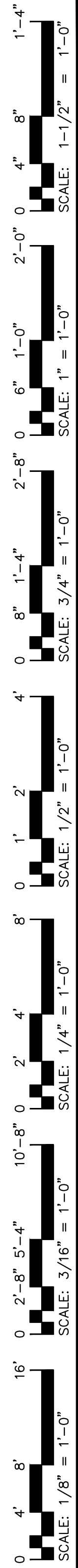
DESIGNED/CHECKED BY: K. DODSON
 DRAWN BY: MJ
 PROJECT#: 2020-05-04
 DATE: 8 JUL 2020

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 PRELIMINARY [] FOR DESIGN DEVELOPMENT ONLY
 FINAL DRAWING [X] FOR CONSTRUCTION
 OWNER/TENANT: WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28409
 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28409

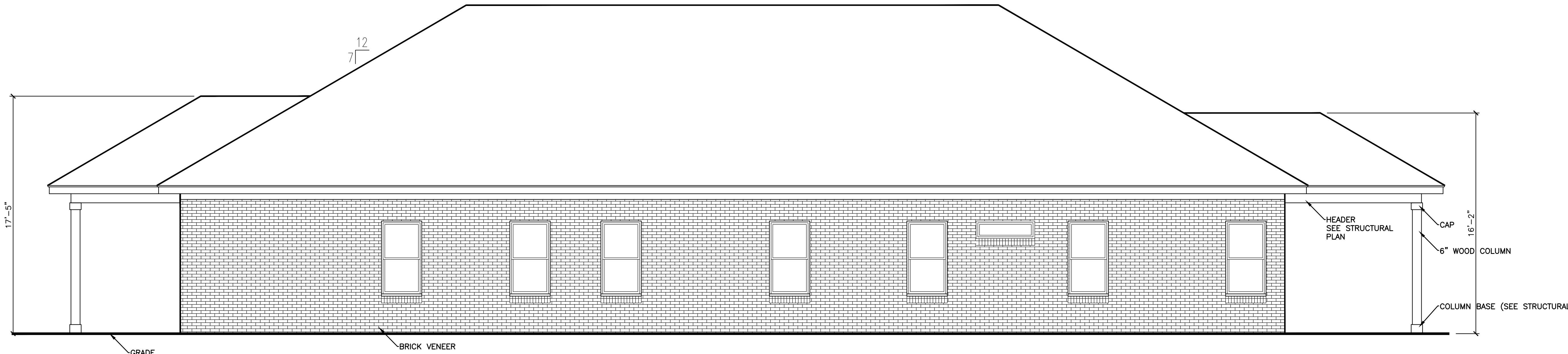
PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE, BENSON, NC 27504
 SHEET: ADA DETAILS & ACCESSORIES - MEN

G3

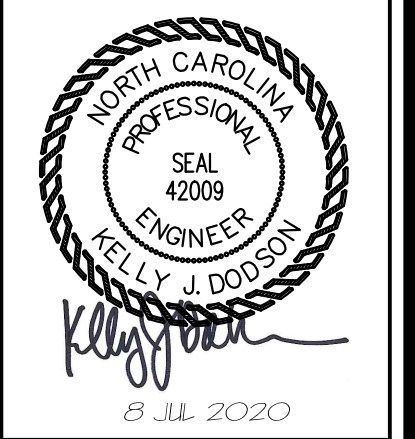
Drawing File: H:\2020\Watermark\WatermarkHomes-7JUL.dwg
 Plotted by: MichaelJ
 Plotted Date: Jul 08, 2020 - 10:42am



2 WEST ELEVATION
 G4 FRONT
 SCALE: 1/4" = 1'-0"



1 SOUTH ELEVATION
 G4 RIGHT
 SCALE: 1/4" = 1'-0"

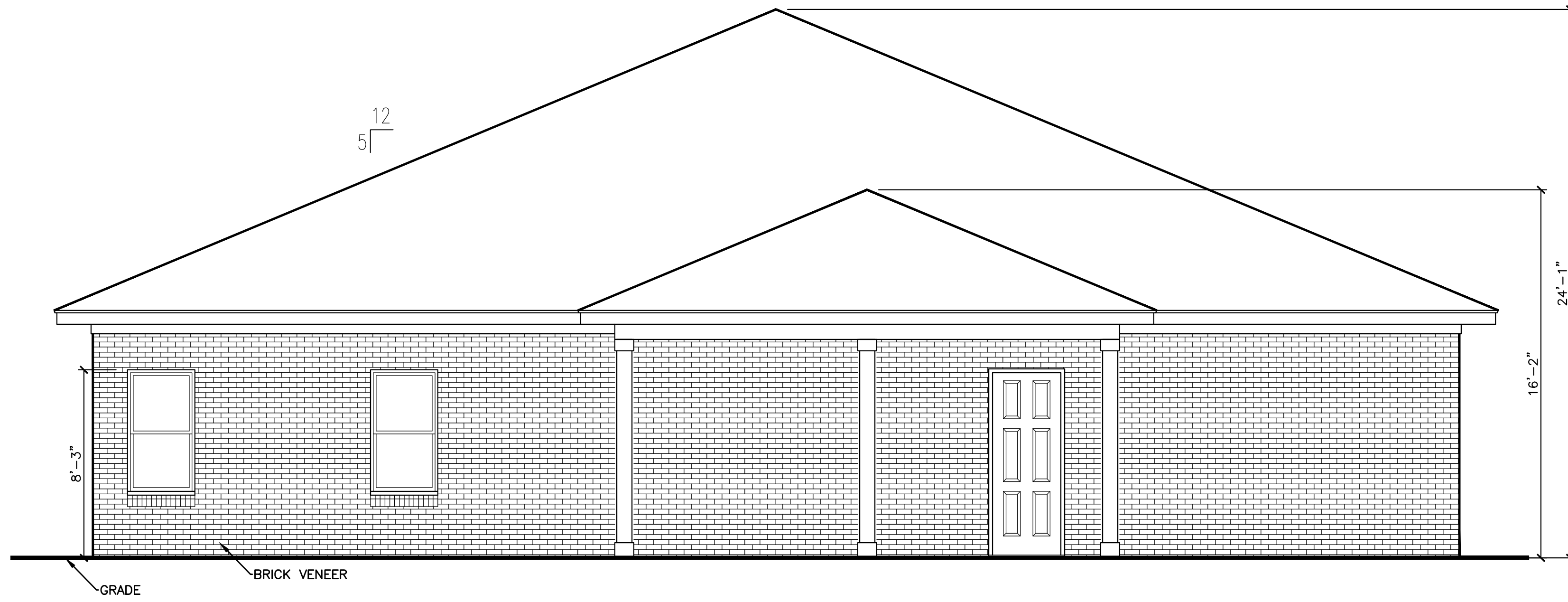
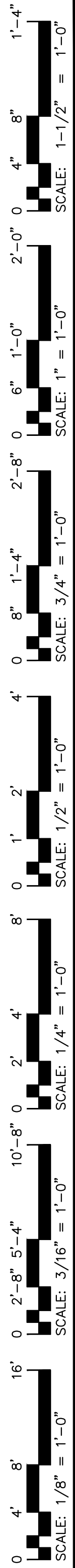


DESIGNED/CHECKED BY: K. DODSON
 DRAWN BY: MJ
 JCE PROJECT#: 2020-05-04
 DATE: 8 JUL 2020

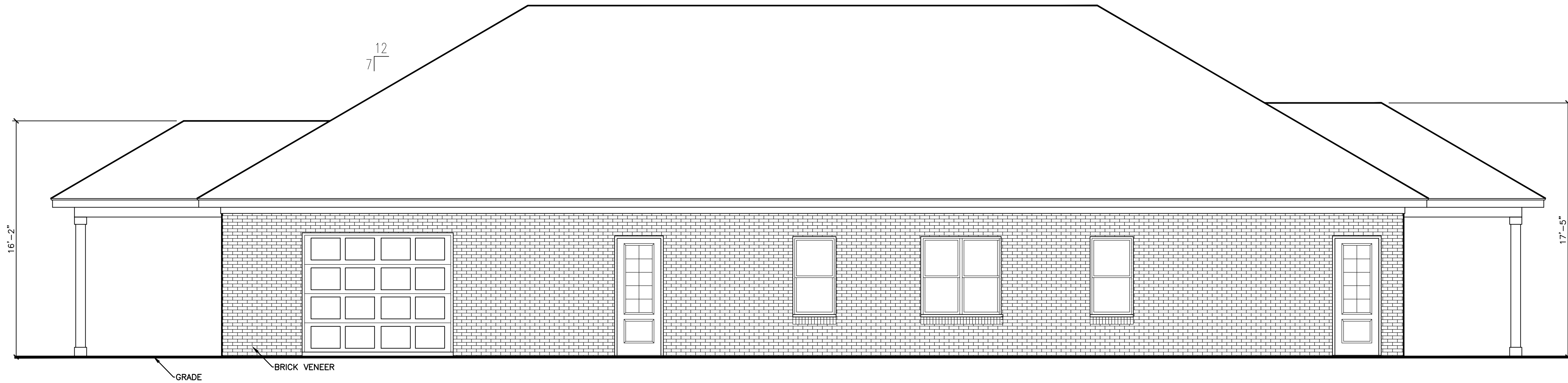
FINAL DRAWING FOR REVIEW PURPOSES ONLY
 PRELIMINARY FOR DESIGN DEVELOPMENT ONLY
 FINAL DRAWING FOR CONSTRUCTION
 OWNER/TENANT: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28509
 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28509

PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE BENSON, NC 27504
 SHEET: EXTERIOR ELEVATIONS

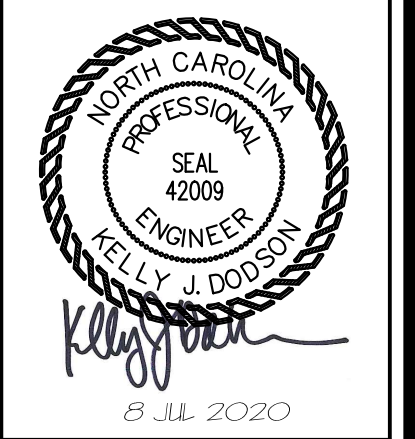
G4



2 EAST ELEVATION
 G4.1 REAR
 SCALE: 1/4" = 1'-0"



1 NORTH ELEVATION
 G4.1 LEFT
 SCALE: 1/4" = 1'-0"

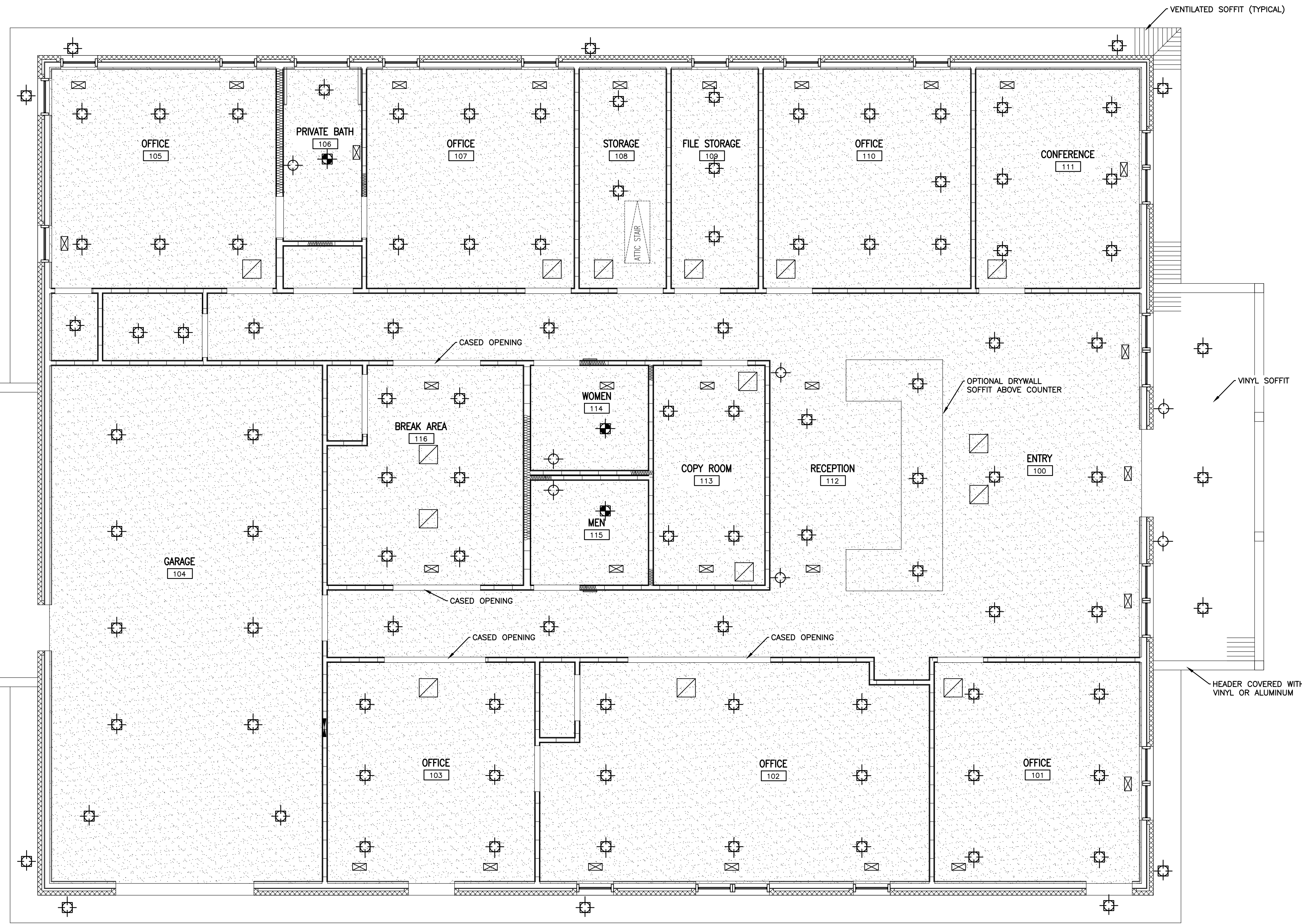
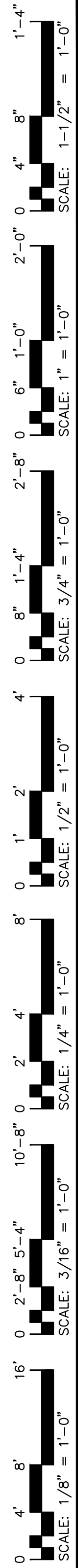


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 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28509

PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE BENSON, NC 27504
 SHEET: EXTERIOR ELEVATIONS

G4.1



1 REFLECTED CEILING PLAN
 G7
 SCALE: 1/4" = 1'-0"

NOTE: CEILING HEIGHT 10'-0"

CEILING LEGEND	
SYMBOL	DESCRIPTION
	SUPPLY DIFFUSER
	RETURN GRILLE
	RECESSED LED CAN LIGHT
	EXHAUST FAN
	PULL DOWN ACCESS STAIR
	GYPSUM BOARD CEILING FINISHED SMOOTH
	EXTERIOR VINYL SOFFIT

KELLY J. DODSON
 8 JUL 2020

DESIGNED/CHECKED BY: K. DODSON
 DRAWN BY: MJ
 PROJECT#: 2020-05-04
 DATE: 8 JUL 2020

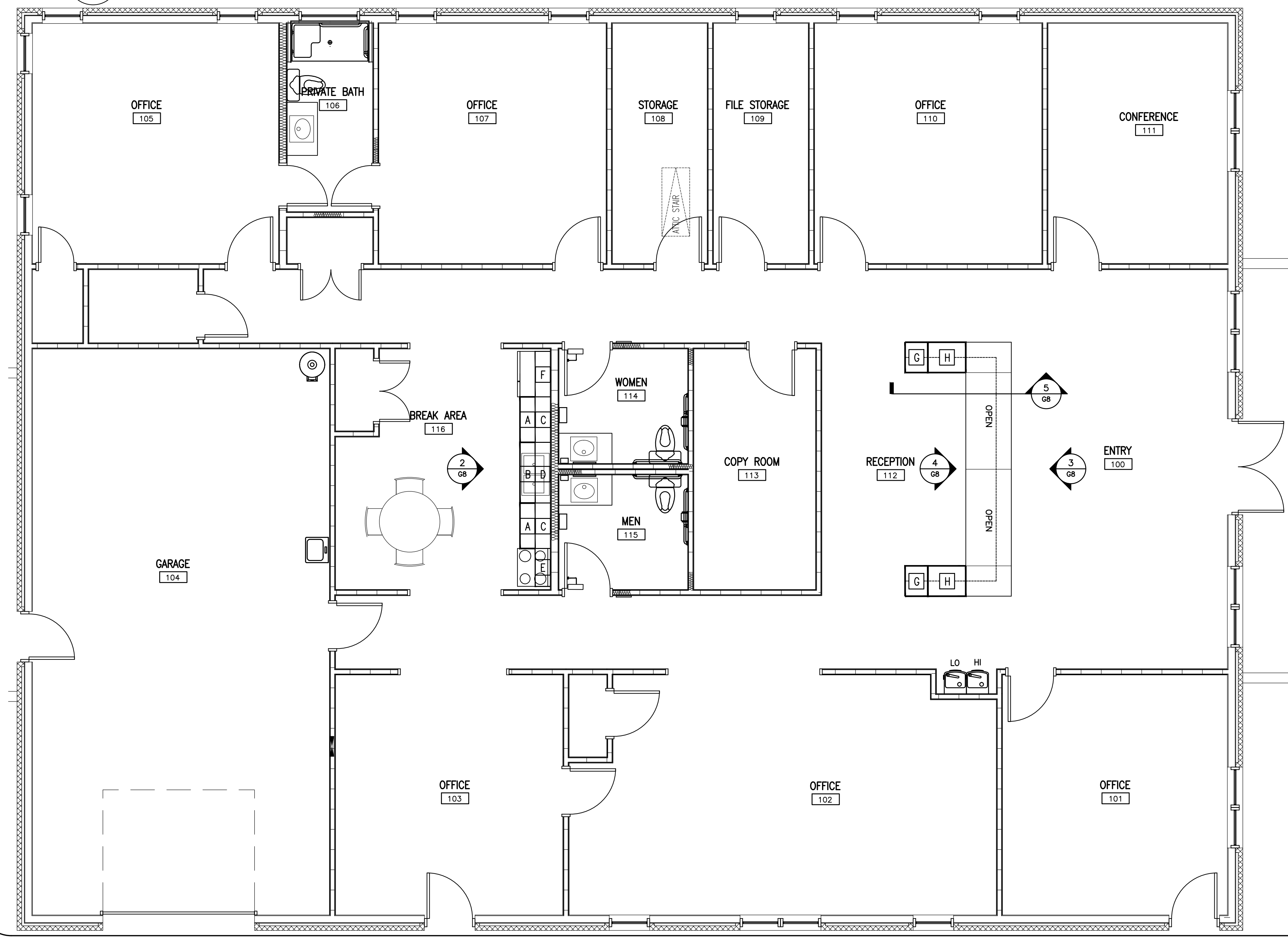
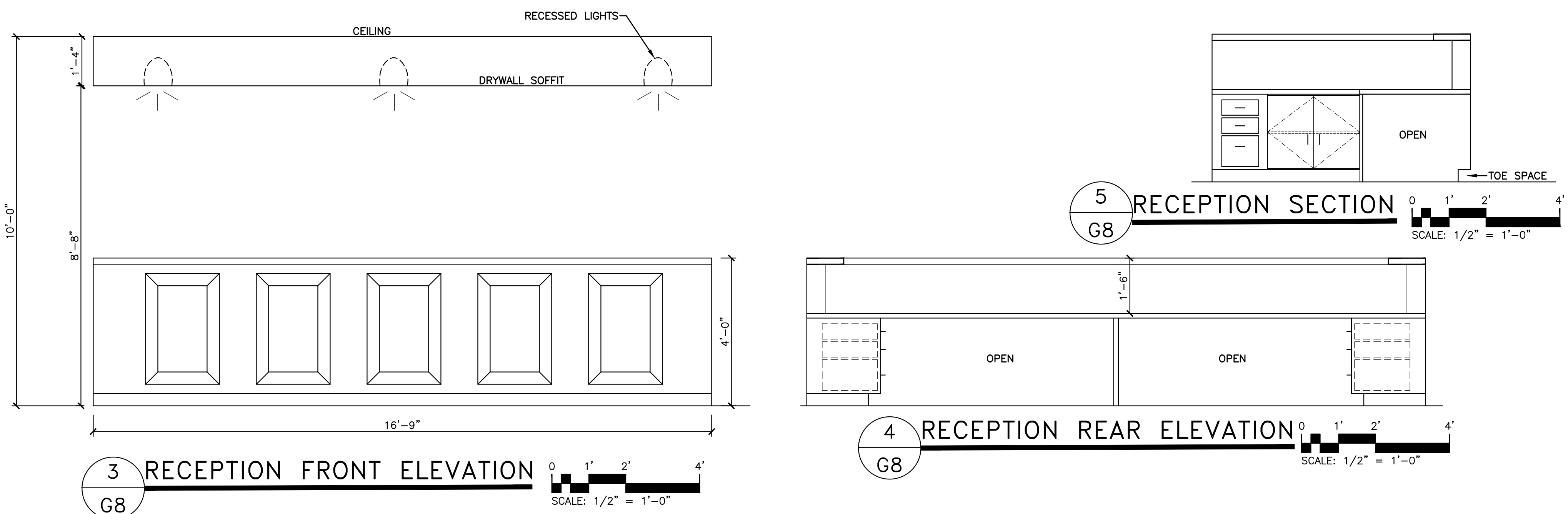
FINAL DRAWING FOR REVIEW PURPOSES ONLY
 PRELIMINARY FOR DESIGN DEVELOPMENT ONLY
 FINAL DRAWING FOR CONSTRUCTION

OWNER/TENANT: WATERMARK HOMES
 1308 FORT BRASS RD. STE. 201, FAYETTEVILLE, NC 28409
 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BRASS RD. STE. 201, FAYETTEVILLE, NC 28409

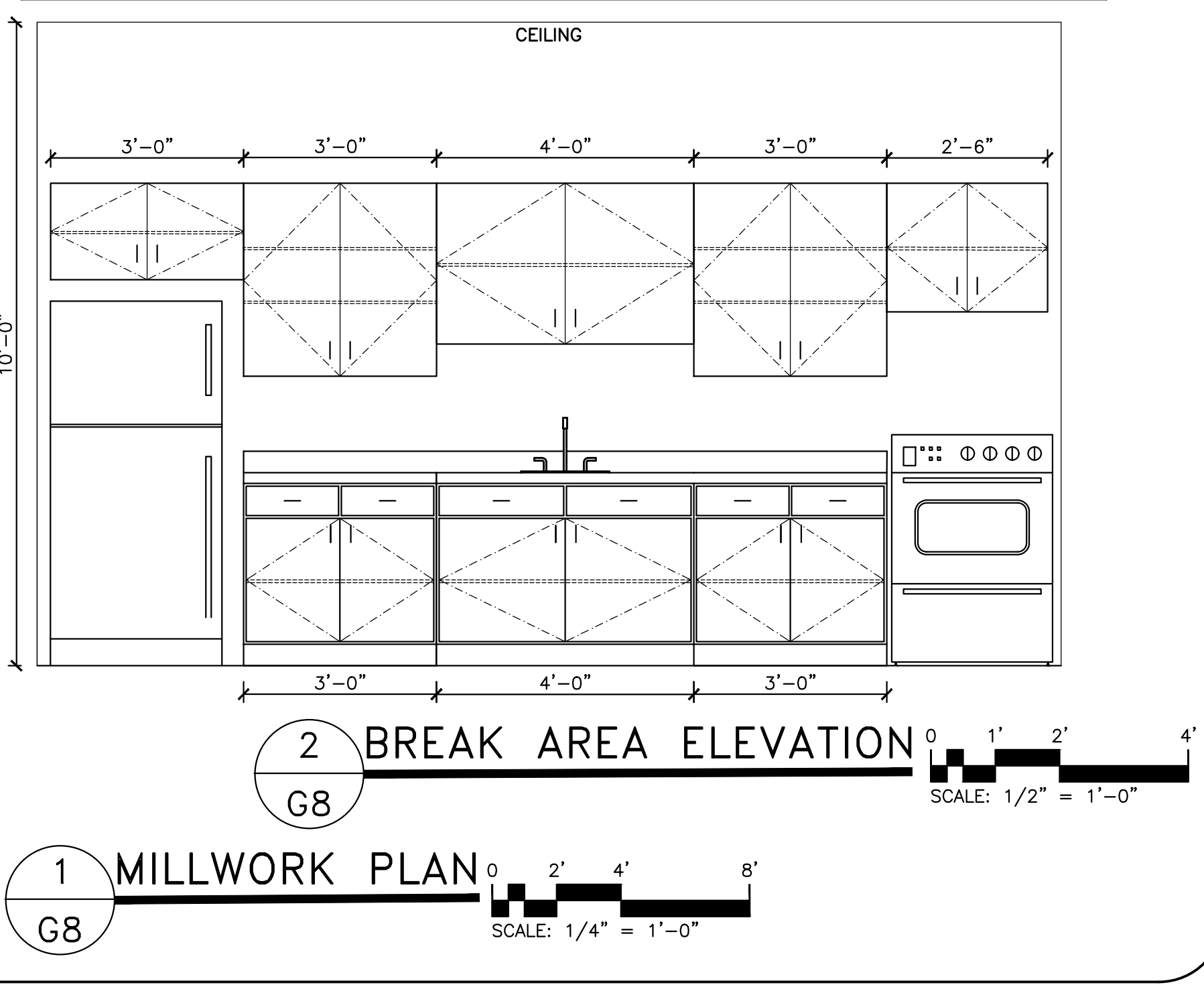
PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE, BENSON, NC 27504
 SHEET: REFLECTED CEILING PLAN
 G7

J. JENKINS
 CONSULTING ENGINEERS, PA
 OFFICE IN FAYETTEVILLE, NORTH CAROLINA
 CORPORATION NUMBER C-3070
 BUSBY@JENKINS-PA.COM
 FAX 910.822.4645

1'-4" 8" 2'-0" 0 4" 1'-1/2" = 1'-0"
 2'-8" 0 6" 1'-0" 2'-0" 0 4" 1'-1/2" = 1'-0"
 0 8" 1'-4" 2'-8" 0 6" 1'-0" 2'-0" 0 4" 1'-1/2" = 1'-0"
 0 8" 1'-4" 2'-8" 0 6" 1'-0" 2'-0" 0 4" 1'-1/2" = 1'-0"
 0 4" 8" 16" 0 2'-8" 5'-4" 10'-8" 0 2' 4" 1'-0" 3/16" = 1'-0"
 0 4" 8" 16" 0 2'-8" 5'-4" 10'-8" 0 2' 4" 1'-0" 3/16" = 1'-0"
 0 4" 8" 16" 0 2'-8" 5'-4" 10'-8" 0 2' 4" 1'-0" 3/16" = 1'-0"



MILLWORK LEGEND & SCHEDULE				
KEY	PLAN VIEW	FRONT VIEW	SIDE VIEW	REMARKS
A				BASE CABINET WITH DRAWERS & DOORS 4" TOE KICK BASE 4" BACK SPLASH
B				BASE CABINET WITH DRAWERS & DOORS 4" TOE KICK BASE 4" BACK SPLASH
C				UPPER CABINET 18" ABOVE BASE CABINET
D				UPPER CABINET 24" ABOVE SINK
E				UPPER CABINET 30" ABOVE RANGE
F				UPPER CABINET 4" ABOVE REFRIGERATOR
G				FILE STORAGE BELOW RECEPTION DESK WITH 4" TOE SPACE
H				LOWER CABINET BELOW RECEPTION DESK WITH 4" TOE SPACE



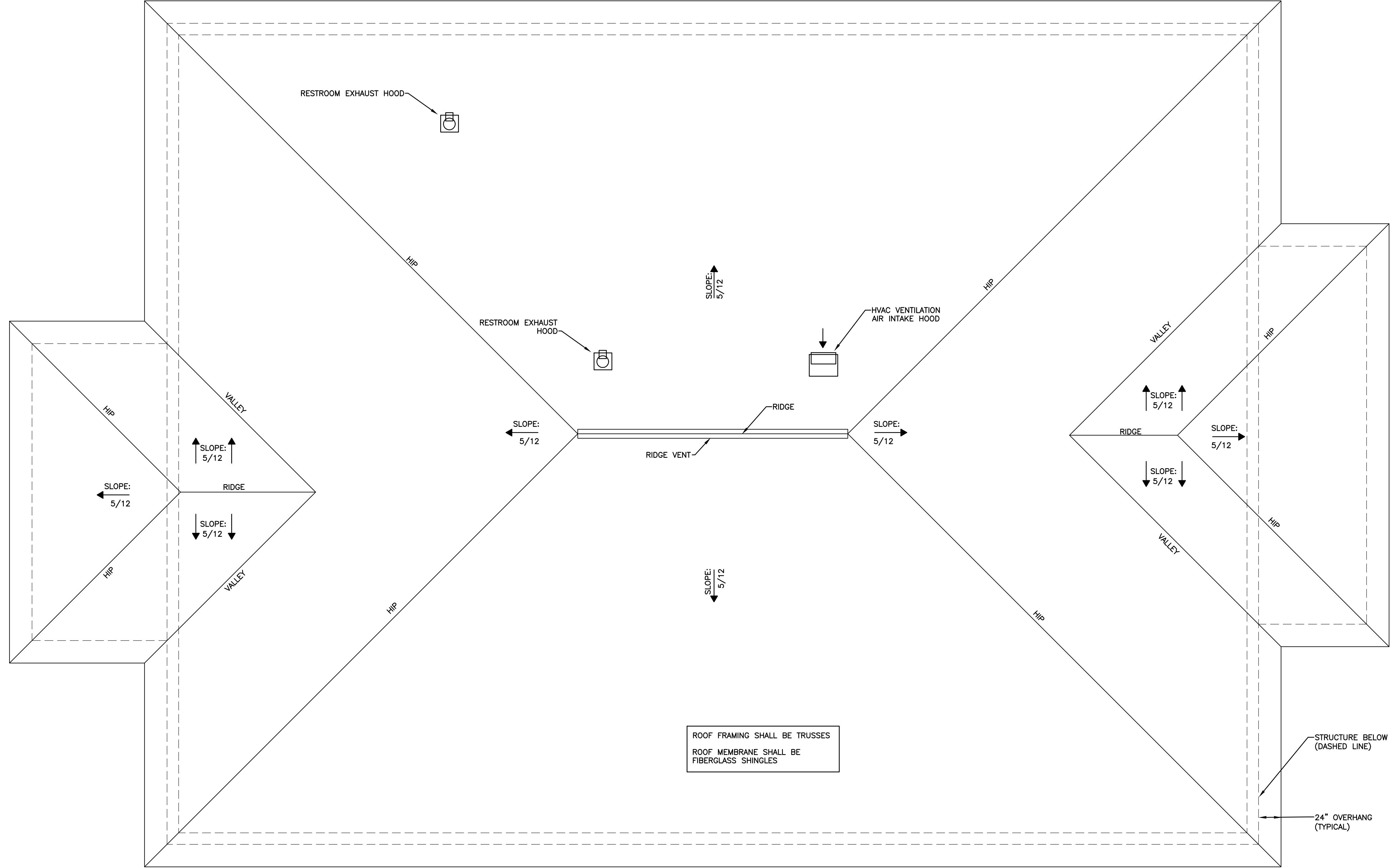
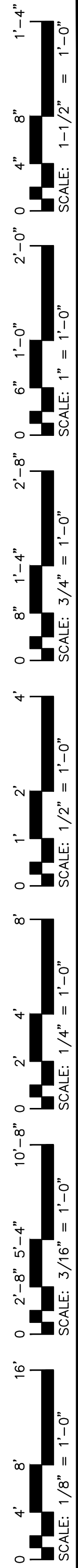
DESIGNED/CHECKED BY: **K. DODSON**
 DRAWN BY: **MJ**
 PROJECT#: **2020-05-04**
 DATE: **8 JUL 2020**

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

OWNER/TENANT: **WATERMARK HOMES**
 1308 FORE BRIDGE RD. STE. 201, FAYETTEVILLE, NC 28405
 CONTRACTOR/BUILDER: **WATERMARK HOMES**
 1308 FORE BRIDGE RD. STE. 201, FAYETTEVILLE, NC 28405

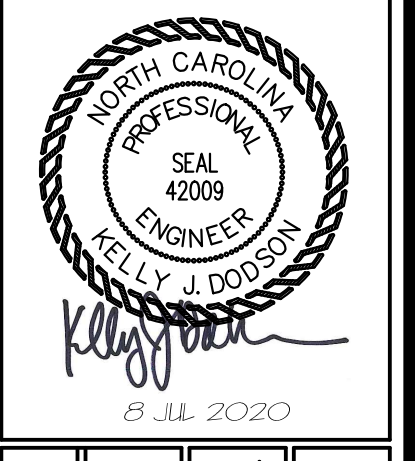
PROJECT: **WATERMARK HOMES OFFICE BUILDING**
 196 ANNETTE DRIVE, BENSON, NC 27504
 SHEET: **MILLWORK PLAN/ELEVATIONS**

G8



ROOF FRAMING SHALL BE TRUSSES
 ROOF MEMBRANE SHALL BE FIBERGLASS SHINGLES

1 ROOF PLAN
 G9
 SCALE: 1/4" = 1'-0"

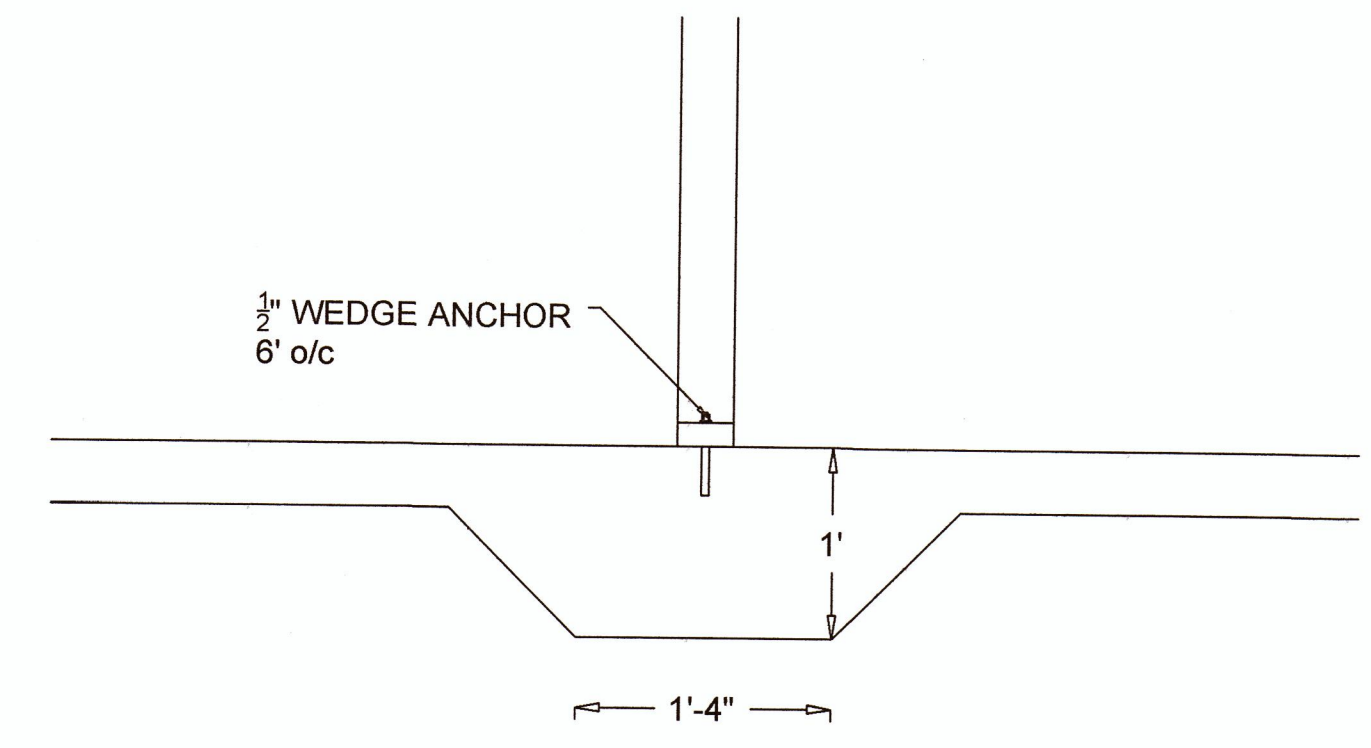
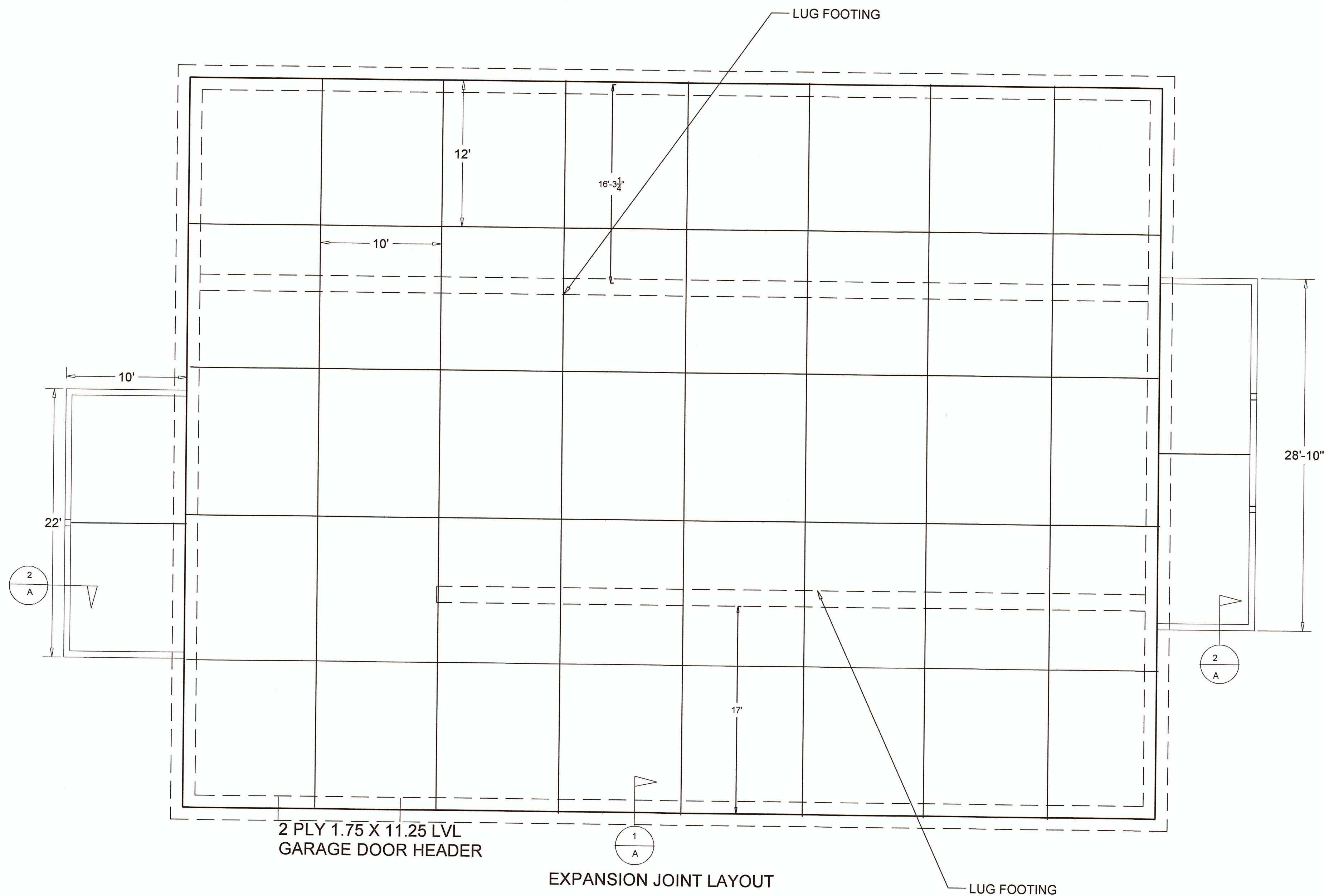
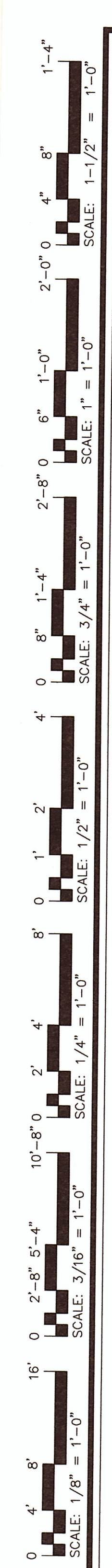


DESIGNED/CHECKED BY:
 K. DODSON
 DRAWN BY:
 MJ
 PROJECT #:
 2020-05-04
 DATE:
 8 JUL 2020

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 OWNER/TENANT:
 WATERMARK HOMES
 1308 FORT BRASS RD. STE. 201, FAYETTEVILLE, NC 28409
 CONTRACTOR/BUILDER:
 WATERMARK HOMES
 1308 FORT BRASS RD. STE. 201, FAYETTEVILLE, NC 28409

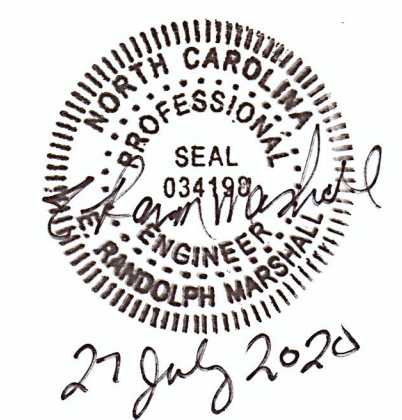
PROJECT:
 WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE BENSON, NC 27504
 SHEET:
 ROOF PLAN

G9

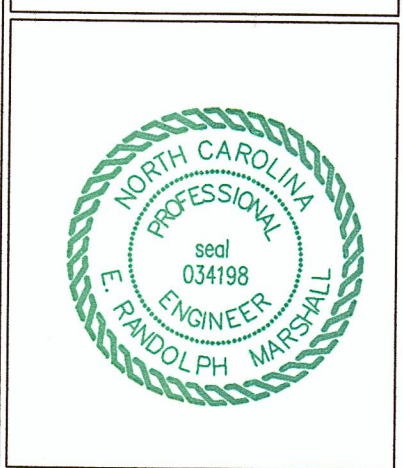


LUG FOOTING

NOTE:
COORDINATE LUG FOOTING LOCATION TO
BEARING POINTS ON TRUSSES.



Marshall Engineering Services PLLC
7575 McArtans Ford
Linden, NC 28356
Randolph@RandolphMarshall.com
Corporate Licensed P-0682



DESIGNED/CHECKED BY:
ERM
DRAWN BY: ERM
JCE PROJECT#:
DATE: 9 JULY 2020

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

OWNER/TENANT:
WATERMARK HOMES
1308 FORT BRAGG RD, STE 201, FAYETTEVILLE, NC 28305

CONTRACTOR/BUILDER:
WATERMARK HOMES
1308 FORT BRAGG RD, STE 201, FAYETTEVILLE, NC 28305

PROJECT: **WATERMARK HOMES OFFICE BUILDING**
196 ANNETTE DRIVE BENSON, NC 27504

SHEET: **FOOTING & SCHEDULES**

S.1.1

Drawing File: H:\2020\WatermarkHomes-7JUL.dwg
 Plotted by: Michael
 Plotted Date: Jul 08, 2020 - 10:45am

HVAC LEGEND	
	SUPPLY/MAKEUP DUCTWORK WITH INSIDE SIZE NOTED
	RETURN/EXHAUST DUCTWORK WITH INSIDE SIZE NOTED
	SQUARE/RETANGULAR SUPPLY/RETURN/EXHAUST TRANSITION
	ROUND/OVAL SUPPLY/RETURN/EXHAUST TRANSITION
	RADIUS TYPE SUPPLY/RETURN/EXHAUST DUCTWORK ELBOW
	SQUARE TYPE SUPPLY/RETURN/EXHAUST DUCTWORK ELBOW WITH TURNING VANES
	INCREASED AREA TAKEOFF WITH/WITHOUT VOLUME DAMPER
	LAY-IN/SURFACE SUPPLY DIFFUSER WITH TAG AND CFM NOTED
	SIDEWALL SUPPLY/RETURN/EXHAUST DIFFUSER WITH TAG AND CFM NOTED
	LAY-IN/SURFACE RETURN GRILLE WITH TAG
	ROUND DUCTWORK TURN UP/DOWN
	FLEXIBLE/RIGID AIR DUCT CONNECTOR WITH/WITHOUT VOLUME DAMPER
	HVAC EQUIPMENT WITH TAG: SEE EQUIPMENT SCHEDULE FOR MORE INFORMATION
	OUTSIDE AIR MOTORIZED DAMPER
	INSULATED FLEX

GENERAL NOTES:

ALL WORK SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA MECHANICAL CODE 2018 EDITION, ASHRAE, SMACNA, AND NFPA. STRUCTURAL MEMBERS OF THE BUILDING SHALL NOT BE CUT IN ANY MANNER FOR THE INSTALLATION OF ANY EQUIPMENT UNLESS PRIOR APPROVAL IS OBTAINED.

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

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

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

ALL CONTRACTORS TO FOLLOW THIS ORDER OF PRIORITY:

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

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

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

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

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

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

ALL EQUIPMENT MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE WORK OR IN ACCORDANCE WITH THE PARTICULAR MANUFACTURER'S STANDARD GUARANTEE IF LONGER. ANY FAULTY MATERIAL OR WORKMANSHIP OR FAILURE OF ANY PART OF THE SYSTEM DURING NORMAL OPERATIONS UNDER THIS GUARANTEE SHALL BE CORRECTED WITHOUT COST TO THE OWNER.

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

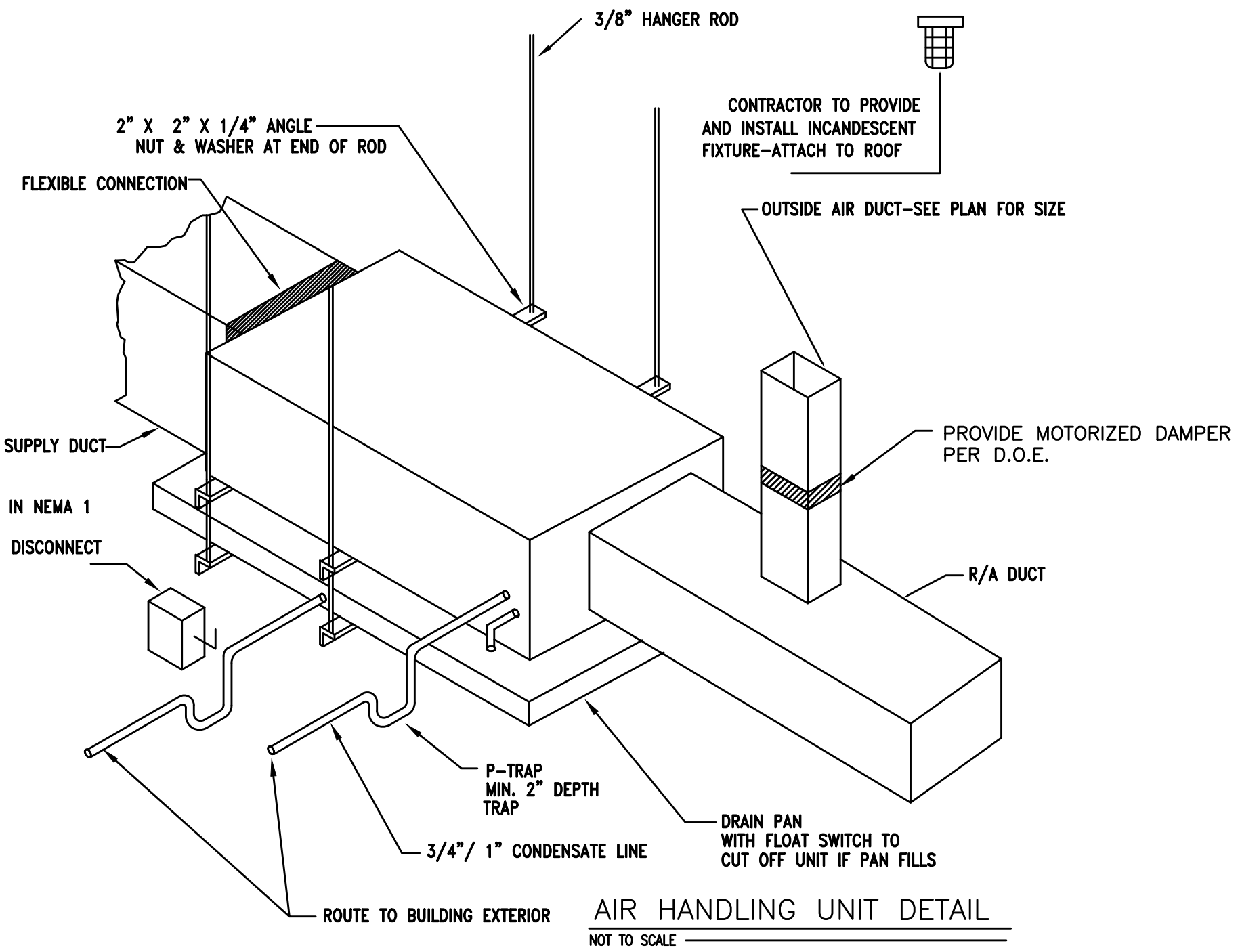
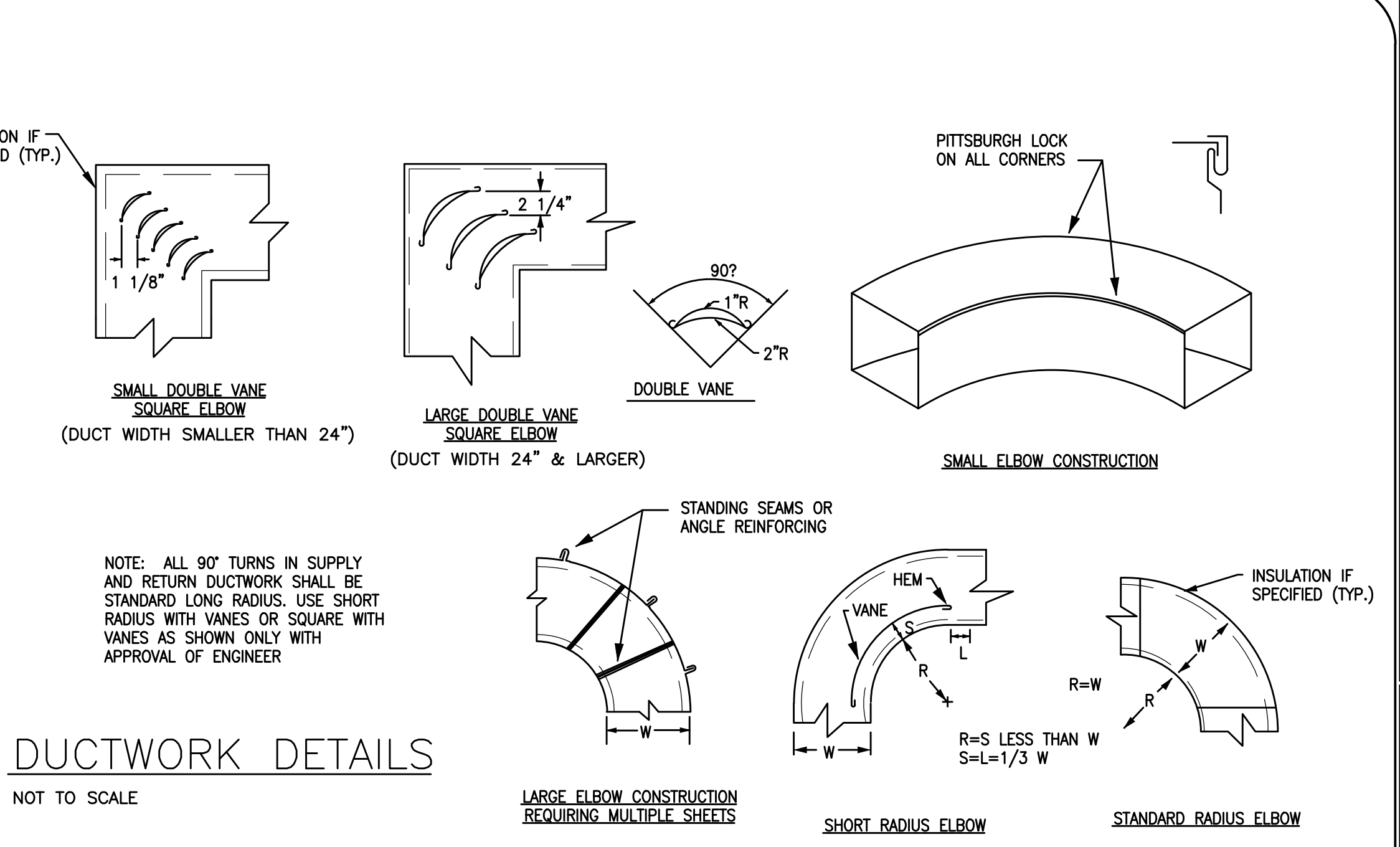
ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.

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

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

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

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



DUCT/PIPING INSULATION NOTES:

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

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

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

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

DESIGN CRITERIA NOTES:

ALL SUPPLY, RETURN, EXHAUST AND OUTDOOR AIR DUCTWORK (WITH THE EXCEPTION OF COMMERCIAL KITCHEN DUCTWORK) SHALL BE SIZED AT 0.08" PER 100'-0" OF DUCT FOR EXTERNAL STATIC PRESSURE. ALL DUCTWORK SHALL BE 1" WG PRESSURE CLASS.

ECONOMIZERS ARE REQUIRED FOR ANY HVAC SYSTEM WITH A COOLING CAPACITY OF 65,000 BTU/HR OR GREATER (NCECC C403.1)

CORRIDORS SHALL NOT SERVE AS SUPPLY, RETURN, EXHAUST, RELIEF OR VENTILATION AIR DUCTS; CORRIDORS MAY BE USED FOR MAKEUP AIR PROVIDED TO TOILET AREAS FOR EXHAUST MAKEUP PROVIDING THE CORRIDOR IS PROVIDED WITH AN OUTSIDE AIR RATE GREATER THAN THE MAKEUP REQUIRED FOR EXHAUST. WHERE LOCATED IN TENANT SPACES OF LESS THAN 1000 SQ/FT THE USE OF CORRIDORS FOR RETURN AIR IS PERMITTED. (NCECC 601.2.1 & 601.2.3)

HVAC SYSTEM SHALL HAVE PROGRAMMABLE THERMOSTAT CAPABLE OF OFF HOUR CONTROLS (NIGHT SETBACK) TO MAINTAIN NO MORE THAN 85°F OR NO LESS THAN 55°F (NCECC C403.2.4.2.1, C403.2.4.2.3 & C403.2.4.2.3)

THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL A DUCT MOUNTED SMOKE DETECTOR IN THE RETURN AIR DUCT AT EACH UNIT IN ACCORDANCE WITH NORTH CAROLINA BUILDING CODE EDITION 2012. THE MECHANICAL CONTRACTOR TO WIRE FROM THE DETECTOR TO EACH UNIT.

DUCTWORK NOTES:

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

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

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

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

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

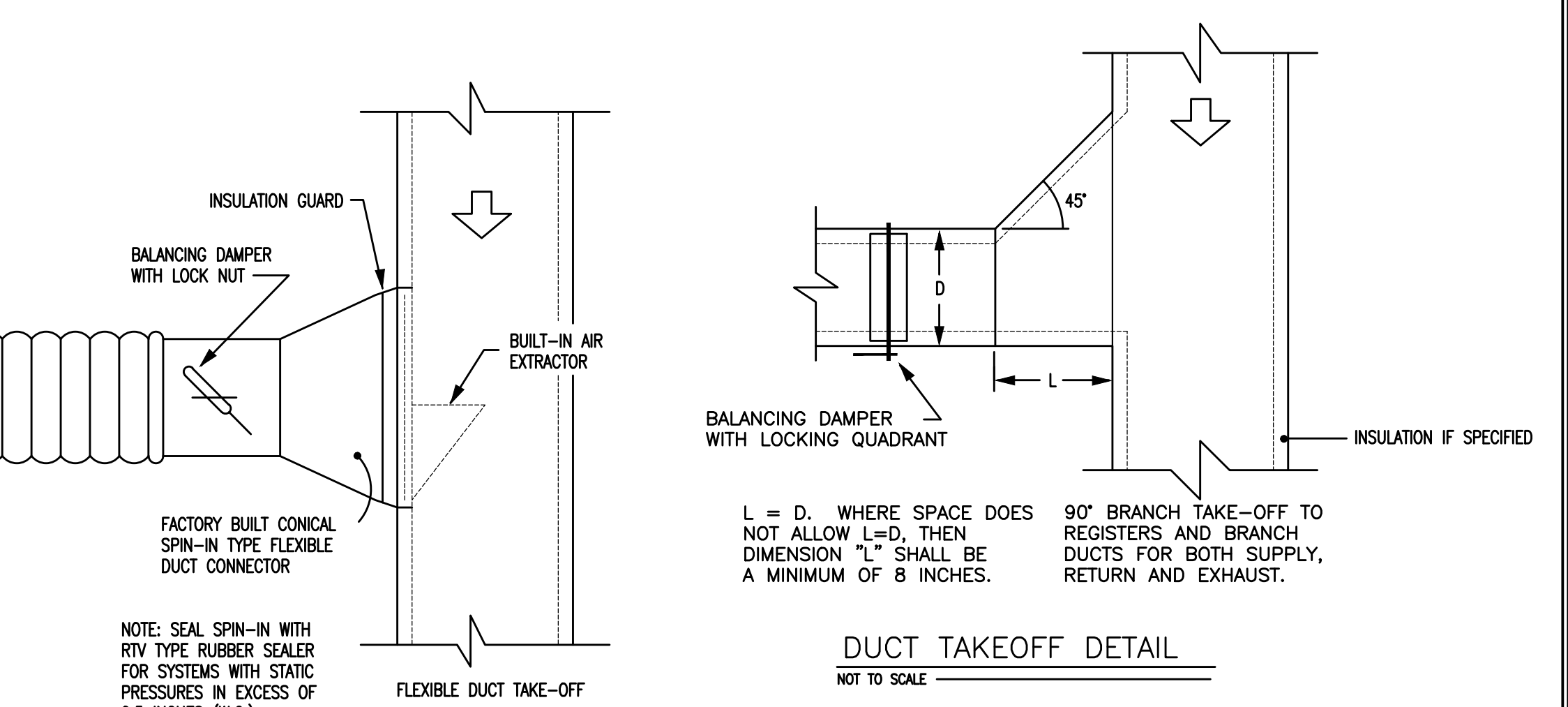
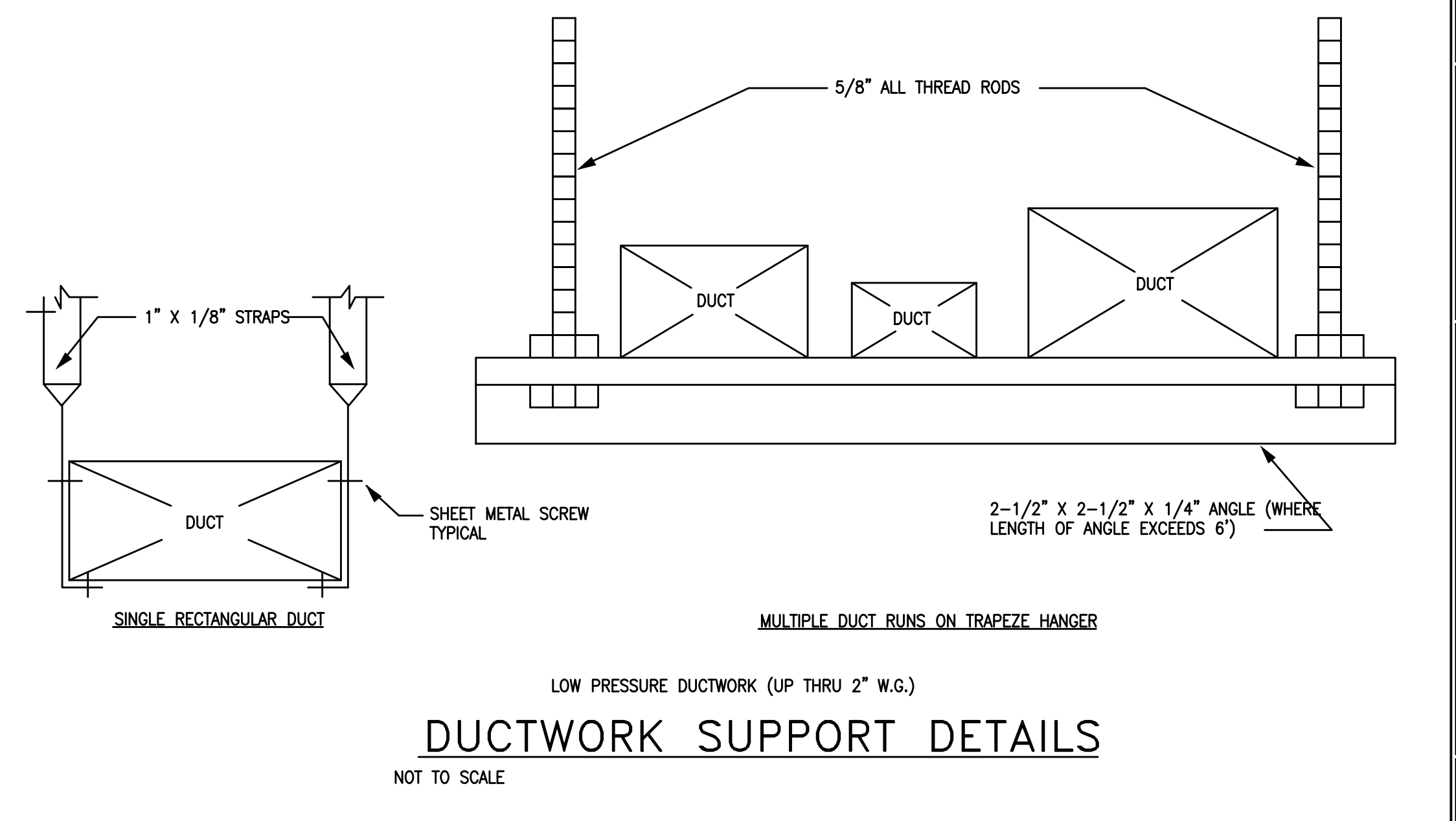
FLEXIBLE DUCT RUNS SHALL NOT EXCEED 12'-0" IN LENGTH. FLEXIBLE DUCT SHALL BE SUPPORTED EVERY 5'-0". MAXIMUM SAG IS A 1/2 INCH PER FOOT OF SPACING BETWEEN SUPPORTS. SADDLE MATERIAL IN CONTACT WITH THE FLEXIBLE DUCT SHALL BE WIDE ENOUGH SO THAT IT DOES NOT REDUCE THE INTERNAL DIAMETER OF THE DUCT. THE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

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

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

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

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



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8 JUL 2020

DESIGNED/CHECKED BY: B. JENKINS	DRAWN BY: MJ	PROJECT #: 2020-05-04	DATE: 8 JUL 2020
FINAL DRAWING <input type="checkbox"/> FOR REVIEW PURPOSES ONLY PRELIMINARY <input type="checkbox"/> FOR DESIGN DEVELOPMENT ONLY FINAL DRAWING <input checked="" type="checkbox"/> FOR CONSTRUCTION		OWNER/TENANT: WATERMARK HOMES 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28309	
CONTRACTOR/BUILDER: WATERMARK HOMES 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28309		PROJECT: WATERMARK HOMES OFFICE BUILDING 196 ANNETTE DRIVE, BENSON, NC 27504	

MECHANICAL NOTES

M1

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 Scale: 1/176684708594565524335794388640310260622208" = 1'-0"
 Scale: 1/3533694171891310486715877772806052124444352" = 1'-0"
 Scale: 1/70673883437826209734317555456121044888864" = 1'-0"
 Scale: 1/141347766875652419468635110912208177777328" = 1'-0"
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 Plotted by: Michael
 Plotted Date: Jul 08, 2020 - 10:46am

APPENDIX B ELECTRICAL DESIGN 2018 BUILDING CODE SUMMARY

PROJECT NAME: WATERMARK HOMES

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT
 METHOD OF COMPLIANCE:
 ENERGY CODE: X PRESCRIPTIVE PERFORMANCE
 ASHRAE 90.1: PRESCRIPTIVE PERFORMANCE

LIGHTING SCHEDULE (EACH FIXTURE TYPE)
 LAMP TYPE REQUIRED IN FIXTURE LED
 NUMBER OF LAMPS IN FIXTURE (SEE FIXTURE SCHEDULE)
 BALLAST TYPE USED IN THE FIXTURE ELECTRONIC
 NUMBER OF BALLASTS IN FIXTURE 1
 TOTAL WATTAGE PER FIXTURE 34 PER FIXTURE
 TOTAL INTERIOR WATTAGE SPECIFIED VERSUS ALLOWED (WHOLE BUILDING) 1,722 ALLOWED - 578 SPECIFIED
 TOTAL EXTERIOR WATTAGE SPECIFIED VERSUS ALLOWED N/A

SECTION C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS

C406.1 BUILDINGS SHALL HAVE AT LEAST ONE OF THE FOLLOWING PRESCRIPTIVE COMPLIANCE (REQUIRED FOR NEW BUILDINGS, OPTIONAL FOR EXISTING BUILDINGS)

1. MORE EFFICIENT MECHANICAL EQUIPMENT PER C406.2
2. REDUCED LIGHTING POWER DENSITY PER C406.3
3. ENHANCED LIGHTING CONTROL SYSTEMS PER C406.4
4. ON-SITE SUPPLY OF RENEWABLE ENERGY PER C406.5
5. DEDICATED OUTDOOR AIR SYSTEM PER C406.6
6. HIGHER EFFICIENCY SERVICE WATER HEATING PER C406.7

DESIGNER STATEMENT:

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE 2018 NC ENERGY CONSERVATION CODE.

SIGNED: Buddy Jenkins
 NAME: BUDDY JENKINS
 TITLE: PROFESSIONAL ENGINEER

ELECTRICAL NOTES:

ALL WORK SHALL BE IN ACCORDANCE WITH 2017 NEC.
 WIRE AND CABLE SHALL BE INSULATED, TYPE THHN, 600 VOLTS, WITH COPPER CONDUCTORS. CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTOR SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED.

ROMEX CAN BE USED IN THIS PROJECT.

EMT SHALL BE GALVANIZED STEEL TUBING 1/2-INCH MINIMUM SIZE, EQUAL TO ELECTRUMITE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSION FITTINGS. MC CABLE MAY BE SUBSTITUTED FOR CONDUIT RACEWAYS WHERE PERMITTED BY THE CODE, AND APPROVED BY OWNER.

PLASTIC CONDUIT SHALL BE RIGID, 3/4-INCH MINIMUM, NONMETALLIC, HEAVY DUTY, POLYVINYLCHLORIDE (PVC), TYPE I WILL BE USED FOR CONCRETE ENCASEMENT. FITTINGS SHALL BE THE SAME MATERIALS AND MANUFACTURER AS THE PLASTIC CONDUIT.

FLEXIBLE METAL CONDUIT SHALL BE 1/2-INCH MINIMUM SINGLE STRIP, STEEL, HOT DIPPED GALVANIZED INSIDE AND OUTSIDE, MAXIMUM LENGTH OF 72 INCHES FOR LIGHTING, AND 36 INCHES FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUID TIGHT OR WATER TIGHT WITH PVC JACKET WHERE USED IN DAMP, WET, OR OUTSIDE AREAS, AND LIQUID TIGHT OR WATER TIGHT CONNECTORS SHALL BE USED.

NO RECEPTACLES OR TELEPHONE OUTLETS ARE TO BE MOUNTED BACK TO BACK. KEEP AT LEAST 1/2 INCHES BETWEEN RECEPTACLES AND TELEPHONE OUTLETS.

ALL CONDUCTORS SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA REQUIREMENTS.

THE ELECTRICAL CONTRACTOR SHALL ALIGN ALL FIXTURES, SMOKE DETECTORS, CEILING DIFFUSERS, ETC. AS REQUIRED TO PROVIDE A UNIFORM PRESENTATION. FOLLOW THE REFLECTED CEILING PLAN IF PROVIDED.

CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS, FIXTURES, CONDUIT, AND ETC. FOR THIS PROJECT, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA FOR THE EQUIPMENT THAT WILL BE ACTUALLY INSTALLED. RECOMPUTE WIRE AND BREAKER SIZES IF REQUIRED BY THE NEC.

THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE GENERAL CONTRACTOR AND OWNER PRIOR TO INSTALLATION FOR USE WITH ACTUAL EQUIPMENT.

ALL LIGHT SWITCHES, RECEPTACLES, WALL PLATES, TELEPHONE/COMPUTER OUTLET BOXES, AND CABLE OUTLET BOXES SHALL BE WHITE.

EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED IN HIS CONTRACT AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE ELECTRICAL CONTRACTORS EXPENSE.

THE ELECTRICAL CONTRACTOR SHALL REFER TO THE DRAWINGS FOR FLOOR PLAN AND BUILDING ELEVATION DIMENSIONS.

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

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

THE ELECTRICAL CONTRACTOR TO ORGANIZE HIS CONDUIT, WIRE, AND CABLE RUNS IN ATTIC SPACES AND ABOVE CEILINGS, MAKE RUNS PARALLEL, PERPENDICULAR, AND GROUPED TOGETHER WHERE POSSIBLE. LOCATE MAJOR GROUPINGS OVER HALLWAYS AND AREAS OF PUBLIC ACCESS. FREE RUNS OF PHONE, TELEVISION, SECURITY, ALARM, AND OTHER CABLES IS NOT ACCEPTABLE.

ALL DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT, KITCHEN EQUIPMENT, AND ETC. SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.

WHERE EQUIPMENT PENETRATES EXTERIOR WALLS OR ROOF, THEY SHALL BE PROPERLY SEALED.

EXHAUST FANS ARE TO BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR, AND ELECTRICAL WIRING BY THE ELECTRICAL CONTRACTOR.

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

THE ELECTRICAL CONTRACTOR IS NOT TO SCALE THE DRAWINGS FOR RECEPTACLES AND LIGHT FIXTURES TO BE INSTALLED. THE DRAWINGS ARE FOR DIAGRAMMATIC PURPOSES ONLY TO SHOW GENERAL LOCATION. THE ELECTRICAL CONTRACTOR TO COORDINATE EXACT LOCATION OF RECEPTACLES AND LIGHT FIXTURES WITH THE GENERAL CONTRACTOR AND/OR CASEWORK DRAWINGS.

ALL LIGHT SWITCHES AND RECEPTACLES SHALL BE RATED FOR 20 AMP UNLESS NOTED OTHERWISE.

PANEL A

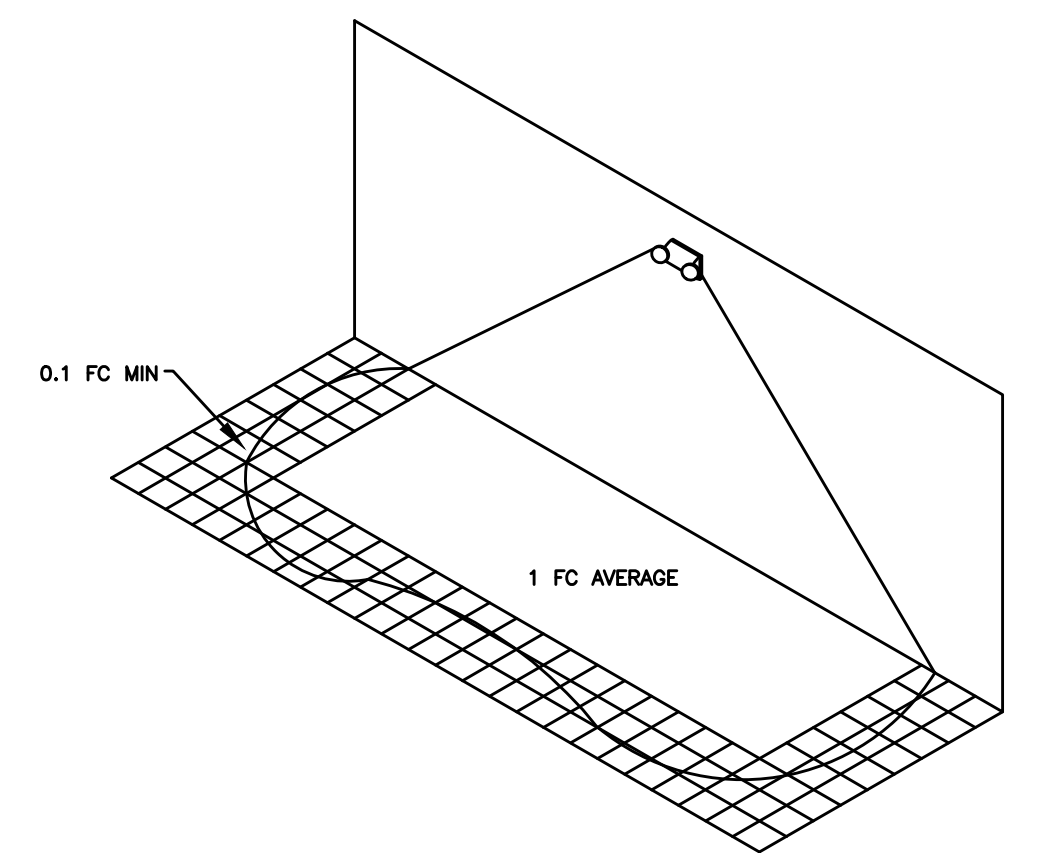
PHASE 1 WIRE 3 VOLTS 120/240 MAIN 400 MCB
 TYPE NEMA 1 MOUNTING SURFACE ENCLOSURE TYPE 1
 SHORT CKT. RATING EXISTING RMS SYM.
 GROUND TERMINAL BAR NEUTRAL TERMINAL BAR

PHASE LOADING	A	B	DESCRIPTION	CKT. BKR. TRIP	CKT. NO.	A	B	DESCRIPTION	CKT. BKR. TRIP	CKT. NO.	PHASE LOADING	A	B				
0.86			OFFICE LIGHTS	20/1	1			BREAK AREA RECEPTACLES	20/1	2	0.54						
	0.25		OUTDOOR TIMER LIGHTS	20/1	3			GARAGE RECEPTACLES	20/1	4		1.44					
0.45			GARAGE, STORAGE, HALL LIGHTS	20/1	5			SPARE	20/1	6							
	0.30		PORCH, ENTRY, RECEPTION LIGHTS	20/1	7			SPARE	20/1	8							
0.24			RESTROOM, COPYROOM, BREAKAREA LIGHTS	20/1	9			OFFICE #103 RECEPTACLES	20/1	10	1.08						
	0.21		EXHAUST FANS	20/1	11			OFFICE #102 & WATER FNTN RECEPT.	20/1	12	1.44						
0.18			BREAK AREA GFCI RECEPT #1	20/1	13			OFFICE #101 RECEPTACLES	20/1	14	1.26						
	0.18		BREAK AREA GFCI RECEPT #2	20/1	15			PORCH CEILING RECEPTACLES	20/1	16	0.36						
1.62			OFFICE #105 RECEPTACLES	20/1	17			HEAT PUMP HP-1	30/2	18	1.98						
	0.20		ATTIC RECEPTACLE & LIGHT	20/1	19					20	1.98						
1.80			OFFICE #107 RECEPTACLES	20/1	21			AIR HANDLER AHU-1	50/2	22	4.99						
	1.80		OFFICE #110 RECEPTACLES	20/1	23					24	4.99						
1.80			CONFERENCE & ENTRY RECEPTACLES	20/1	25			HEAT PUMP HP-2	30/2	26	1.98						
	1.44		HALL RECEPTACLES	20/1	27					28	1.98						
1.26			RECEPTION RECEPTACLES	20/1	29			AIR HANDLER AHU-2	50/2	30	4.99						
	1.08		COPYROOM RECEPTACLES	20/1	31					32	4.99						
0.54			BATHROOM GFCI RECEPTACLES	20/1	33			WATER HEATER	30/2	34	2.81						
	0.18		BACK PORCH GFCI RECEPTACLE	20/1	35					36	2.81						
7.5			ELECTRIC RANGE	40/2	37			SPACE		38							
	7.5				39			SPACE		40							
0.36			DATA ROOM RECEPTACLES	20/1	41			SPACE		42							
	0.72		ENTRY RECEPTACLES		43			SPACE		44							
			SPACE		45			SPACE		46							
			SPACE		47			SPACE		48							
			SPACE		49			SPACE		50							
			SPACE		51			SPACE		52							
			SPACE		53			SPACE		54							
16.61	13.86		SUB-TOTAL (VA)					SUB-TOTAL (VA)			19.63	19.99					
TOTAL CONNECTED LOAD =						70.09	KVA	AMPS =						292.04	TOTAL OF	54	SPACES

TOTAL ADDITIONAL CONNECTED LOAD SUMMARY

ELECTRICAL SYMBOL LEGEND

	SINGLE POLE POWER/LIGHTING HOME RUN
	SWITCH, RECEPTACLE
	QUAD RECEPTACLE
	3-WAY SWITCH
	OCCUPANCY SENSOR
	ILLUMINATED EXIT SIGN
	EGRESS LIGHT WITH 90 MIN BATTERY
	GROUND FAULT CIRCUIT INTERRUPTER
	LED RECESSED CAN
	OUTDOOR LED SCONCE
	INDOOR LED SCONCE
	EXHAUST FAN/LED
	4-PORT DATA GANG



ASSUMES OPEN SPACE WITH NO OBSTRUCTIONS, MOUNTING HEIGHT: 7'-6"; 9'-0" CEILING HEIGHT, AND REFLECTANCES 80/50/20

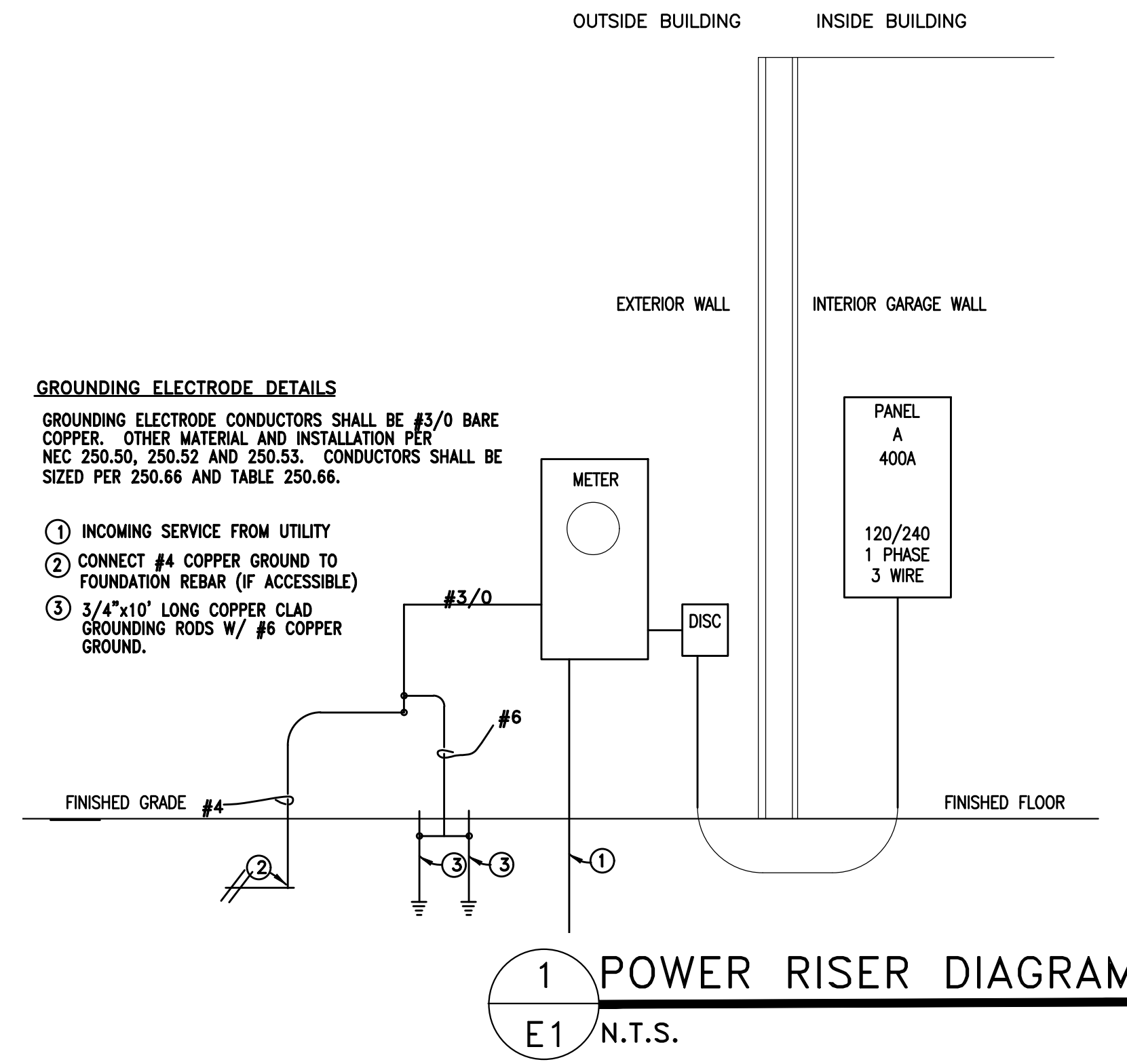
EMERGENCY LIGHT FIXTURE PERFORMANCE

6'-0" WIDE PATH OF EGRESS
 CENTER TO CENTER SPACING (MULTIPLE FIXTURES) 20'-0"
 SINGLE UNIT COVERAGE 18'-0"

3'-0" WIDE PATH OF EGRESS
 CENTER TO CENTER SPACING (MULTIPLE FIXTURES) 25'-0"
 SINGLE UNIT COVERAGE 24'-0"

LIGHT FIXTURE SCHEDULE

TAG	DESCRIPTION	SIZE	MOUNTING	QUANTITY	COLOR	LUMENS OUTPUT	BULB	BALLAST TYPE	HOUSING	VOLTAGE	WATTAGE	MANU/MODEL NUMBER	REMARKS
A	LED RECESSED CAN	6"	RECESSED	92	3000 K	900	LED	LED DRIVER	STEEL	120	15	LITHONIA NO. 68PMW LED 120 OR EQUAL	
B	EXHAUST FAN W/ LED	14"x12"	SURFACE	3	-	-	LED	LED DRIVER	STEEL	115	15	GREENHECK SP-B90-L-OD OR EQUAL	
C	OUTDOOR LED FLUSH MOUNT	12"	FLUSH	16	4000K	1077	LED	LED DRIVER	ALUM	120	12.5	LITHONIA OLCFM OR EQUAL	
D	OUTDOOR LED SCONCE LIGHT	8"x13"	WALL	2	4000 K	513	LED	LED DRIVER	ALUM	120	8.9	LITHONIA OLCFS OR EQUAL	
E	LED SCONCE LIGHT	5"x10"	WALL	5	2700	-	LED	LED DRIVER	STEEL	120	13	LITHONIA FERROS SCONCE OR EQUAL	
EM	EMERGENCY	N/A	WALL	4	N/A	N/A	(2) LAMPS	ELECTRONIC	POLYCARBONATE	120/240		LITHONIA 6ELM2 N	6 VOLT NICAD BATTERY, TEST SWITCH, POWER INDICATOR
EX	EXIT SIGN	N/A	SURFACE	4	N/A	N/A	LED LIGHT	LED DRIVER	POLYCARBONATE	120/240		LITHONIA LHQM S W 3 R 120/240 EL N	6 VOLT NICAD BATTERY, (2) REMOTE HEADS



8 JUL 2020

DESIGNED/CHECKED BY: **B. JENKINS**
 DRAWN BY: **MJ**
 PROJECT#: **2020-05-04**
 DATE: **8 JUL 2020**

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

OWNER/TENANT: **WATERMARK HOMES**
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28309

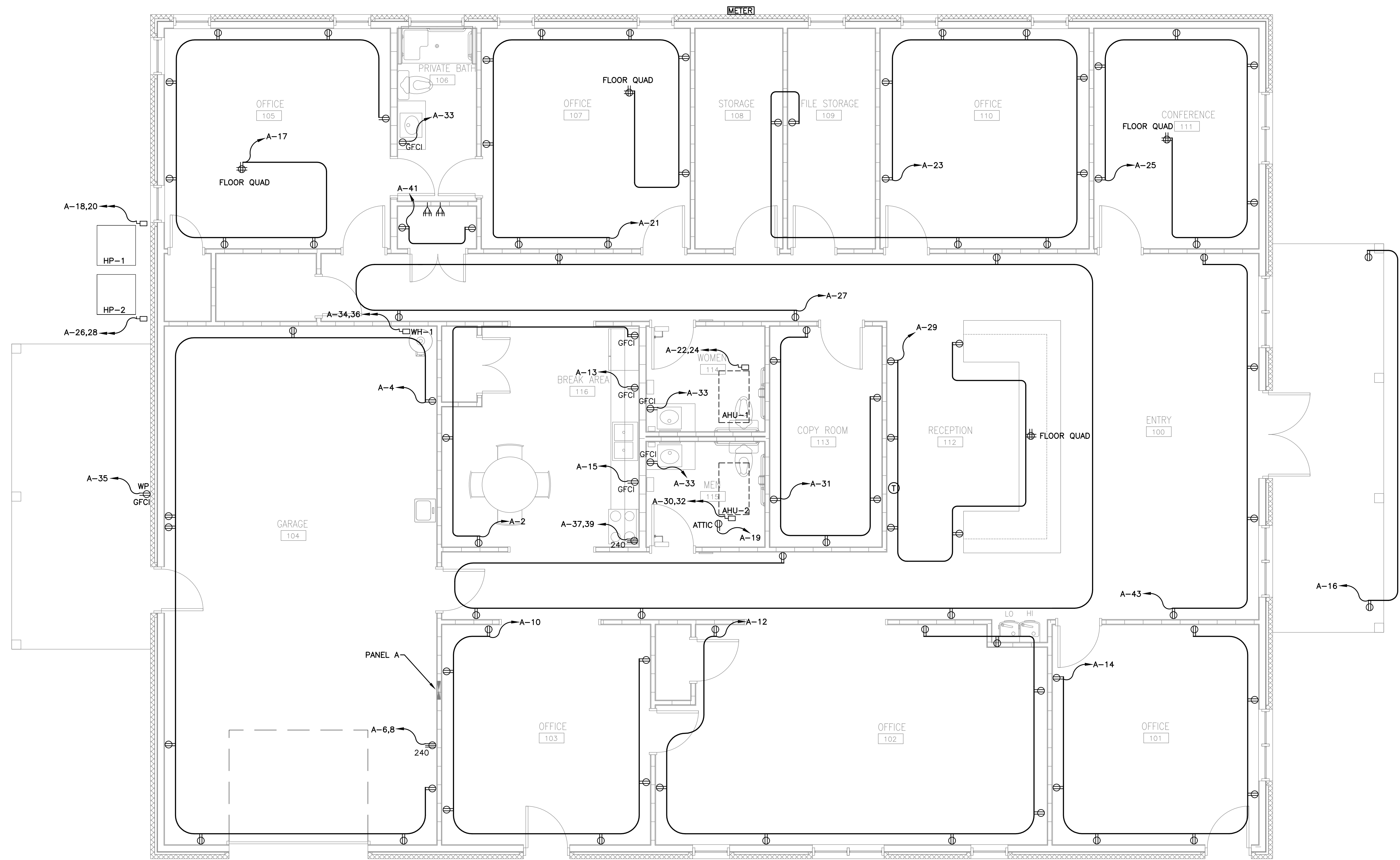
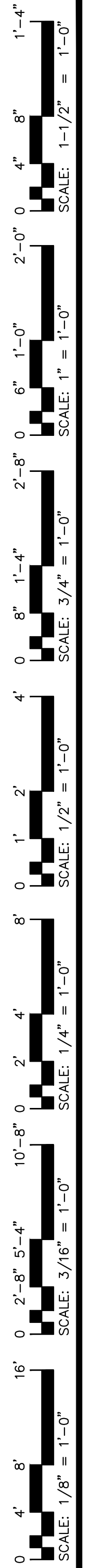
CONTRACTOR/BUILDER: **WATERMARK HOMES**
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28309

PROJECT: **WATERMARK HOMES OFFICE BUILDING**
 196 ANNETTE DRIVE, BENSON, NC 27504

SHEET: **ELECTRICAL NOTES & SCHEDULE**

E1

Drawing File: H:\2020\Watermark\WatermarkHomes-7JUL.dwg
 Plotted by: MichaelJ
 Plotted Date: Jul 08, 2020 - 10:46am



1 ELECTRICAL PLAN-POWER
 E2
 SCALE: 1/4" = 1'-0"

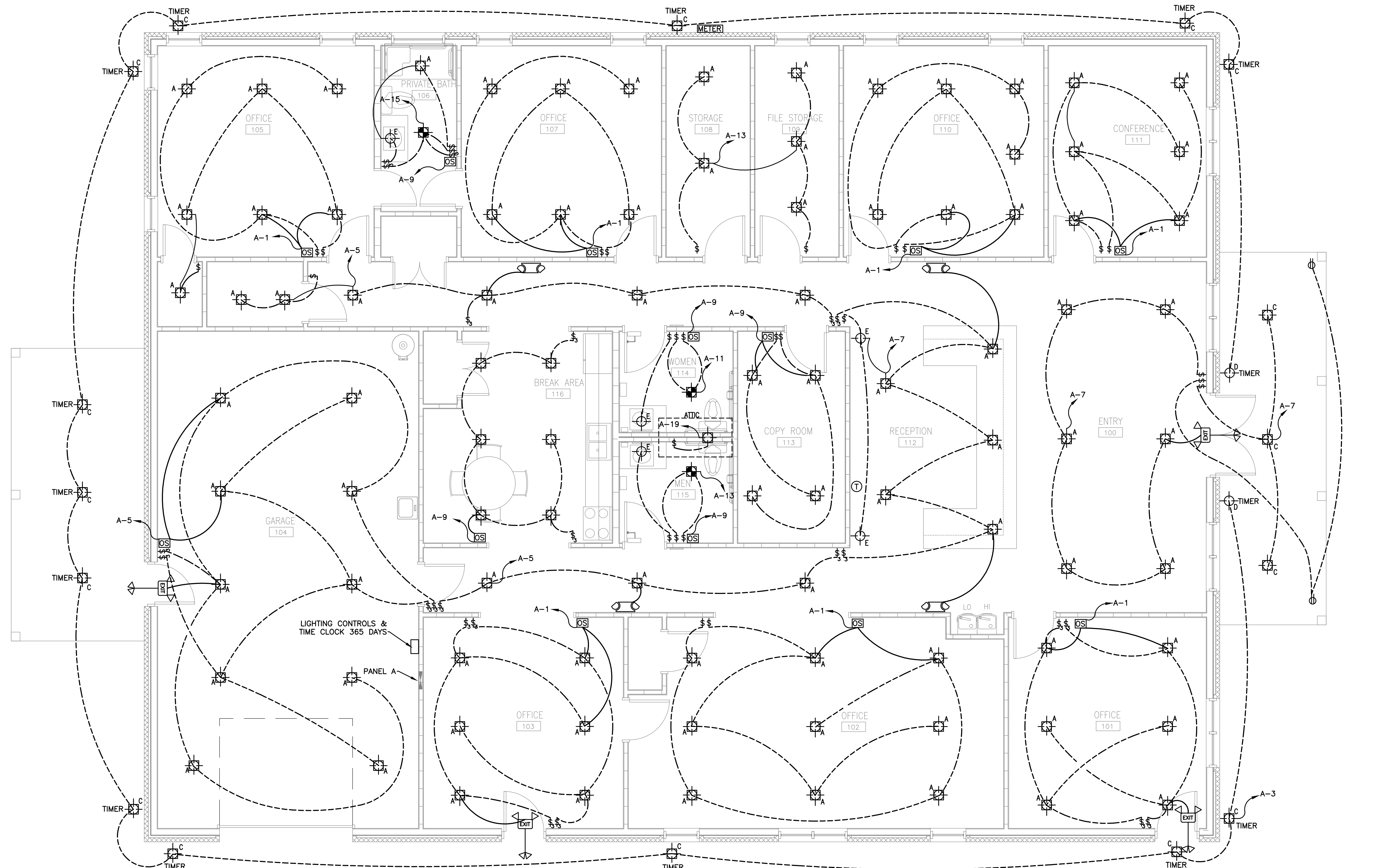
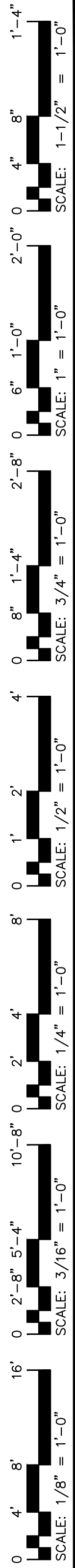


DESIGNED/CHECKED BY: B. JENKINS
 DRAWN BY: MJ
 DATE: 8 JUL 2020
 PROJECT#: 2020-05-04

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 PRELIMINARY [] FOR DESIGN DEVELOPMENT ONLY
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 OWNER/TENANT: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28309
 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28309

PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE BENSON, NC 27504
 SHEET: ELECTRICAL PLAN-POWER

E2



1 ELECTRICAL PLAN-LIGHTING
 E3
 SCALE: 1/4" = 1'-0"



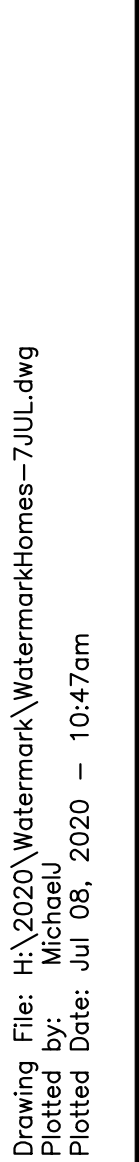
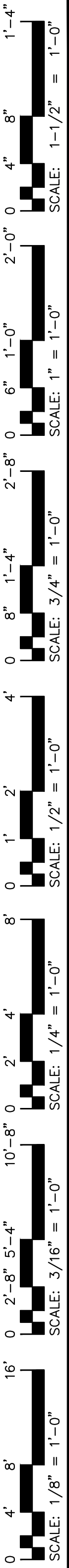
DESIGNED/CHECKED BY: B. JENKINS
 DRAWN BY: MJ
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PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE, BENSON, NC 27504
 SHEET: ELECTRICAL PLAN-LIGHTING

E3

Drawing File: H:\2020\Watermark\WatermarkHomes-7JUL.dwg
 Plotted by: Michael
 Plotted Date: Jul 08, 2020 - 10:47am



PLUMBING FIXTURE SCHEDULE

SYMBOL	MANUFACTURER	MODEL #	FIXTURE DESCRIPTION	FIXTURE MOUNTING	ACCESSORIES	SUPPLY	WASTE	VENT	ELECTRICAL	REMARKS
P1	AMERICAN STANDARD	CADET ADA/ 215AA.104	ELONGATED BOWL; FLUSH TANK TOILET	FLOOR MOUNTED	SEAT: AMERICAN STANDARD / 5901.100	3/4" C.W.	3"	2"		OR EQUAL
P2	AMERICAN STANDARD	LUCERNE/ 0355.012	TOILET LAVATORY	WALL MOUNTED	DELTA 501-WFHGMHDF FAUCET	1/2" C.W. /H.W.	2"	1-1/2"		OR EQUAL
P3	AMERICAN STANDARD	7695.008	SERVICE SINK	WALL MOUNTED	-	1/2" C.W. /H.W.	3"	1-1/2"		OR EQUAL
P4	GLACIER BAY	442808	DOUBLE BOWL KITCHEN SINK	DROP IN	-	1/2" C.W. /H.W.	3"	1-1/2"		OR EQUAL
P5	FREEDOM SHOWERS	APF6233BFF.875L	SHOWER FOR PRIVATE BATH	FLOOR MOUNTED	-	1/2" C.W. /H.W.	3"	1-1/2"		FOR PRIVATE USE ONLY
WH-1	RHEEM	XE40T06ST45U1	40 GALLON ELECTRIC WATER HEATER			3/4" C.W./H.W.			240V 4500 W	OR EQUAL

PLUMBING GENERAL NOTES:

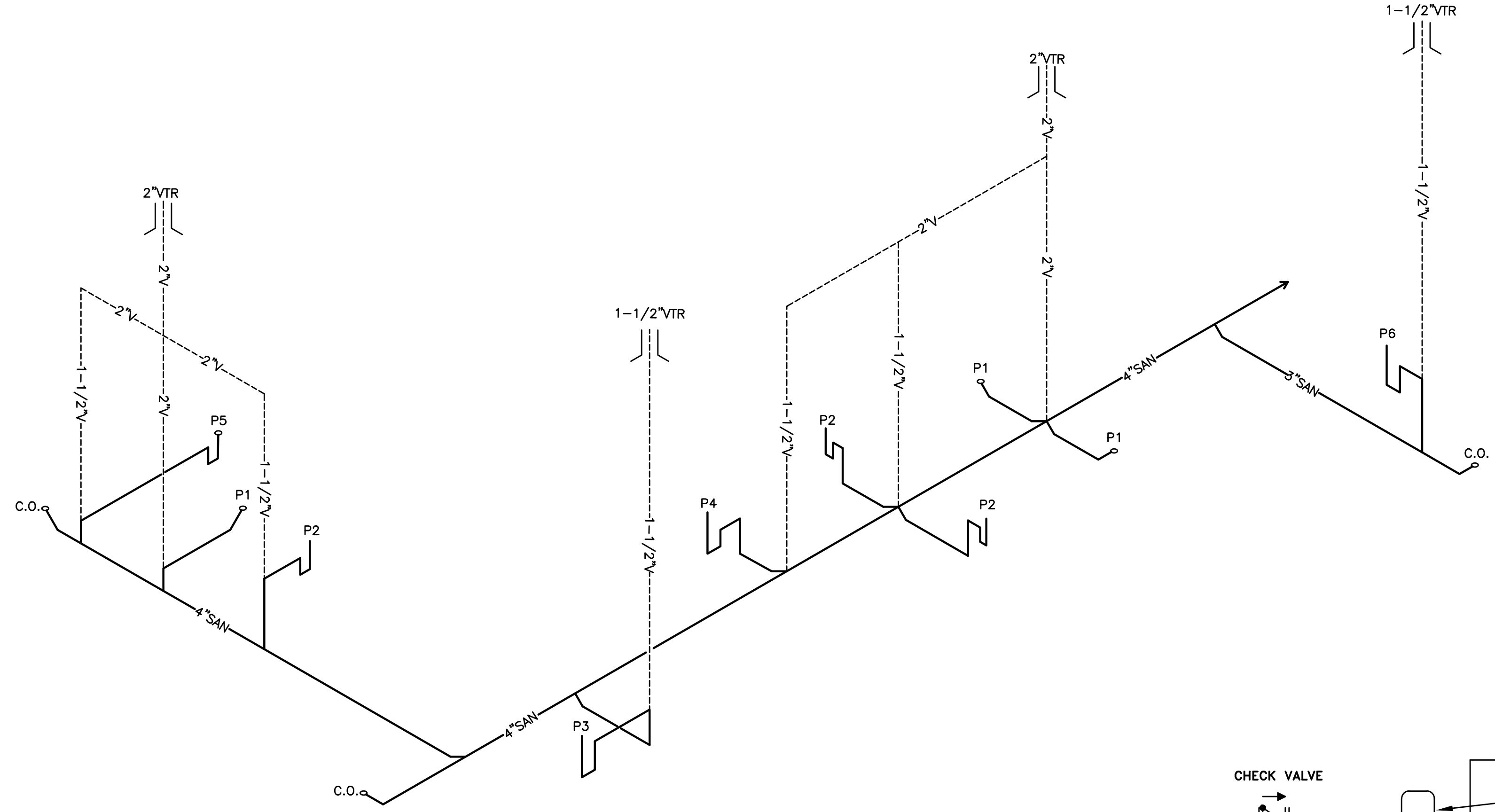
- PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA PLUMBING CODE 2018 EDITION AND LOCAL CODES.
- ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE GENERAL CONTRACTOR AND OWNER TO SUIT THE OWNER'S OPERATING CONDITIONS.
- PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE GENERAL CONTRACTOR OF ANY DEVIANCIES FROM THE CONTRACT DRAWINGS PRIOR TO STARTING ANY WORK.
- THE PLUMBING CONTRACTOR SHALL COORDINATE WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE. THINK OF OTHER CONTRACTORS AND THEIR REQUIREMENTS IN VERTICAL CHASES AND WALL MOUNT SPACE. ALL CONTRACTORS TO FOLLOW THIS ORDER OF PRIORITY:
 1. STORM AND SANITARY SEWER LINES
 2. DUCTWORK AND HVAC SYSTEMS
 3. HOT AND COLD WATER LINES
 4. RIGID CONDUIT
 5. CABLE
- THE PLUMBING CONTRACTOR TO ORGANIZE HIS PIPING IN ATTIC SPACES, CRAWL SPACES, AND ABOVE CEILINGS. MAKE RUNS PARALLEL, PERPENDICULAR, AND GROUPED TOGETHER WHERE POSSIBLE. LOCATE MAJOR GROUPINGS OVER HALLWAYS AND AREAS OF PUBLIC ACCESS IF POSSIBLE. FREE RUNS OF PIPING IS NOT ACCEPTABLE.
- THE PLUMBING CONTRACTOR SHALL LAY OUT AND INSTALL HIS WORK IN ADVANCE OF POURING CONCRETE FLOORS OR WALLS. HE SHALL FURNISH ALL SLEEVES TO THE GENERAL CONTRACTOR FOR OPENINGS THROUGH POURED MASONRY FLOORS, OR WALLS, ABOVE GRADE REQUIRED FOR PASSAGE OF ALL PIPES TO SUPPORT HIS EQUIPMENT.
- HORIZONTAL DRAINAGE AND WASTE PIPE SHALL HAVE A MINIMUM SLOPE OR FALL OF 1/8 INCH PER FOOT. ALL CHANGE OF HORIZONTAL DIRECTIONS IN SOIL WASTE PIPE SHALL BE MADE WITH LONG RADIUS FITTINGS WITH "Y" BRANCHES AND 1/8 OR 1/16 BENDS.
- COLD AND HOT WATER PIPING ABOVE GRADE SHALL BE TYPE "L" HARD DRAWN COPPER TUBING CONFORMING TO ASTM B-88 WITH SWEAT JOINTS AND WROUGHT OR CAST VALVES AND FITTINGS (UNIONS, STRAINERS, ETC.). JOINT SHALL BE MADE WITH LEAD FREE SOLDER. PEX PIPING MAY BE USED WITH OWNERS APPROVAL.
- ALL HOT WATER PIPING SHALL BE INSULATED WITH 1 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE.
- ALL COLD WATER PIPING SHALL BE INSULATED WITH 1/2 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE.
- SANITARY HORIZONTAL WASTE, VENT PIPING, AND FITTINGS ABOVE GRADE SHALL BE SCHEDULE 40 PVC-DWV PIPE-CELLULAR CORE FROM CHARLOTTE PIPE AND FOUNDRY COMPANY OR APPROVED EQUAL, AND MUST MEET OR EXCEED THE REQUIREMENTS OF ASTM F-891, NSF STANDARD NO. 14, AND IAPMO UPC.
- ALL WASTE STACK PIPING SHALL BE CAST IRON AND INSULATED FOR SOUND IN WALLS.
- ALL WASTE AND STORM PIPING ABOVE CEILING, VERTICAL CHASES, WALLS SHALL BE INSULATED WITH 1/2 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE. NO INSULATION REQUIRED IN CRAWL SPACE OR BELOW FLOOR SLAB OF ANY WASTE AND STORM PIPING.
- IN LIEU OF FIBERGLASS INSULATION, THE PLUMBING CONTRACTOR IS ALLOWED TO USE CLOSED CELL INSULATION, 1/2 INCH THICK ARMSTRONG/ARMAFLEX II ON ALL COLD WATER PIPES. RIGID URETHANE FOAM INSULATION, 1 INCH THICK ARMSTRONG/ARMALOK II ON ALL HOT WATER PIPING.
- ALL PLUMBING EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- ALL FIXTURES, DRAINS, TRAPS, ETC. SHALL BE SET PLUMB AND LEVEL.
- ALL HANDICAPPED FIXTURES AND TRIM SHALL BE INSTALLED IN ACCORDANCE WITH THE NORTH CAROLINA PLUMBING CODE 2018 EDITION.
- CHROME PLATED ESCUTCHEONS SHALL BE PROVIDED AT EACH WALL PENETRATION.
- ESCUTCHEONS SHALL BE CHROME PLATED, SPRING TYPE, ON ALL PIPES PASSING THROUGH WALLS AND CEILINGS IN FINISHED AREAS. FLOOR ESCUTCHEONS SHALL BE CAST BRASS, CHROME PLATED, WITH SET SCREW.
- ESCUTCHEONS SHALL BE OF SUFFICIENT SIZE TO COVER OUTSIDE DIAMETER OF THE PIPE OR THE INSULATION OF THE PIPE.
- FLASHING FOR VENTS THROUGH THE ROOF SHALL BE TWO-PIECE TYPE, 16 OUNCE COPPER COUNTER FLASHING AND BASE FLASHING, OR A TWO-PIECE TYPE, 4 POUND LEAD COUNTER FLASHING AND BASE FLASHING. THE BASE FLASHING SHALL BE INSTALLED BY THE GENERAL CONTRACTOR WITH THE ROOF SYSTEM.
- VENT FLASHING SHALL EXTEND DOWN AT LEAST 4 INCHES FROM THE TOP OF THE PIPE. FLASHING SHALL EXTEND AT LEAST 12 INCHES IN ALL DIRECTIONS FROM THE PIPE AND SHALL BE PARALLEL TO THE ROOF LINE.
- ALL EQUIPMENT AND INSTALLED MATERIALS SHALL BE THOROUGHLY CLEAN AND FREE OF ALL DIRT, OIL, GRIT, GREASE, AND ETC.
- ALL PLUMBING SYSTEMS AND EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE BUILDING FROM THE OWNER.

WATER CALCULATIONS

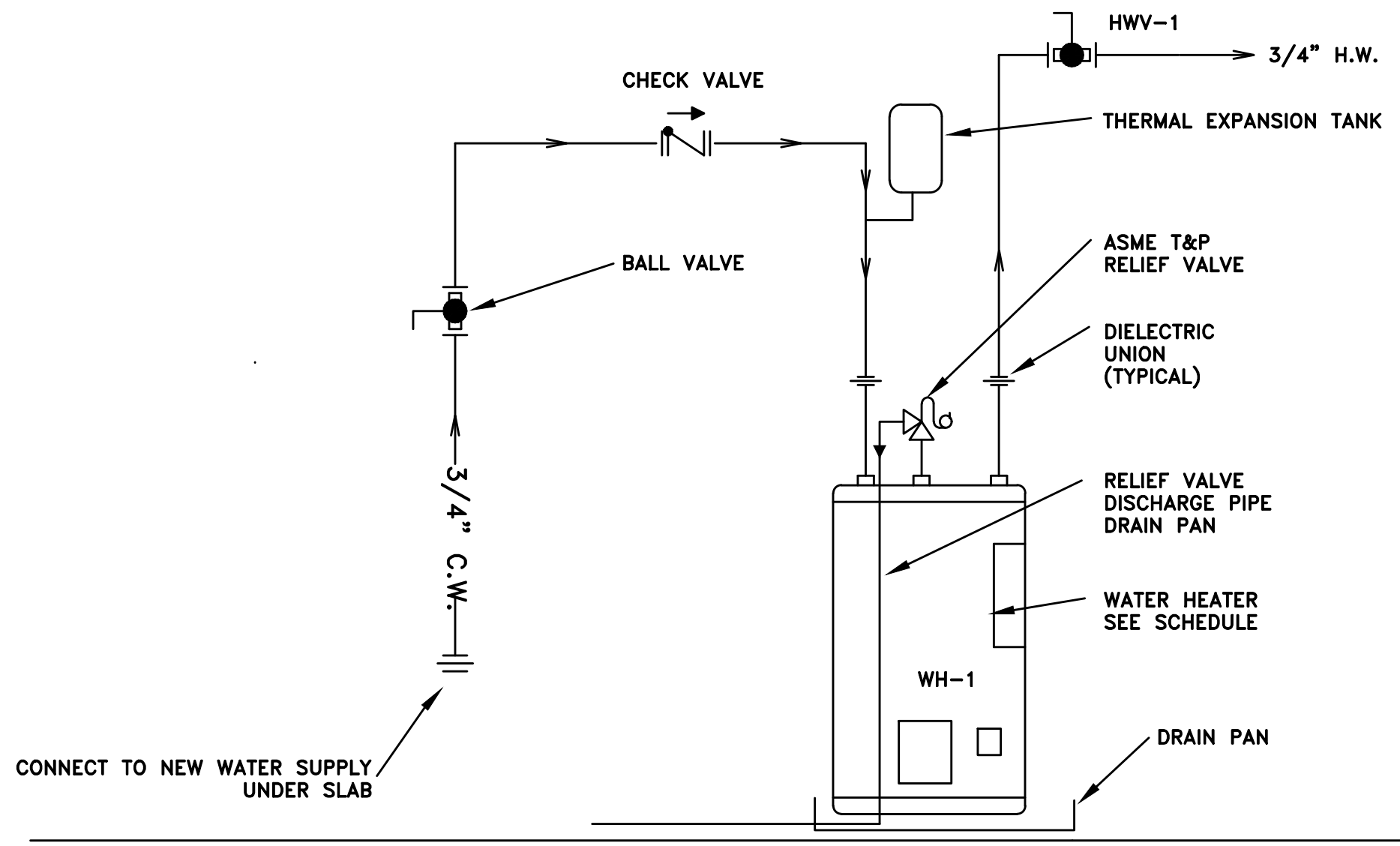
QTY.	ITEM	C.W. FIXTURE UNITS	H.W. FIXTURE UNITS	WATER SUPPLY FIXTURE UNITS TOTAL
3	WATER CLOSET	5.0	-	15.0
3	LAVATORY	1.5	1.5	6.0
2	DRINKING FOUNTAIN	0.25	-	0.25
1	SERVICE SINK	2.25	2.25	3.0
1	SHOWER	1.0	1.0	1.4
1	KITCHEN SINK	1.0	1.0	1.4
TOTAL WATER SUPPLY FIXTURE UNITS				27.05

DRAINAGE CALCULATIONS

QTY.	ITEM	DRAINAGE FIXTURE UNITS	DRAINAGE FIXTURE UNITS TOTAL
3	WATER CLOSET	4.0	12.0
3	LAVATORY	1.0	1.0
2	DRINKING FOUNTAIN	0.5	1.0
1	SERVICE SINK	2.0	2.0
1	SHOWER	2.0	2.0
1	KITCHEN SINK	2.0	2.0
TOTAL DRAINAGE FIXTURE UNITS			20.0



1 WASTE RISER
 P1 N.T.S.



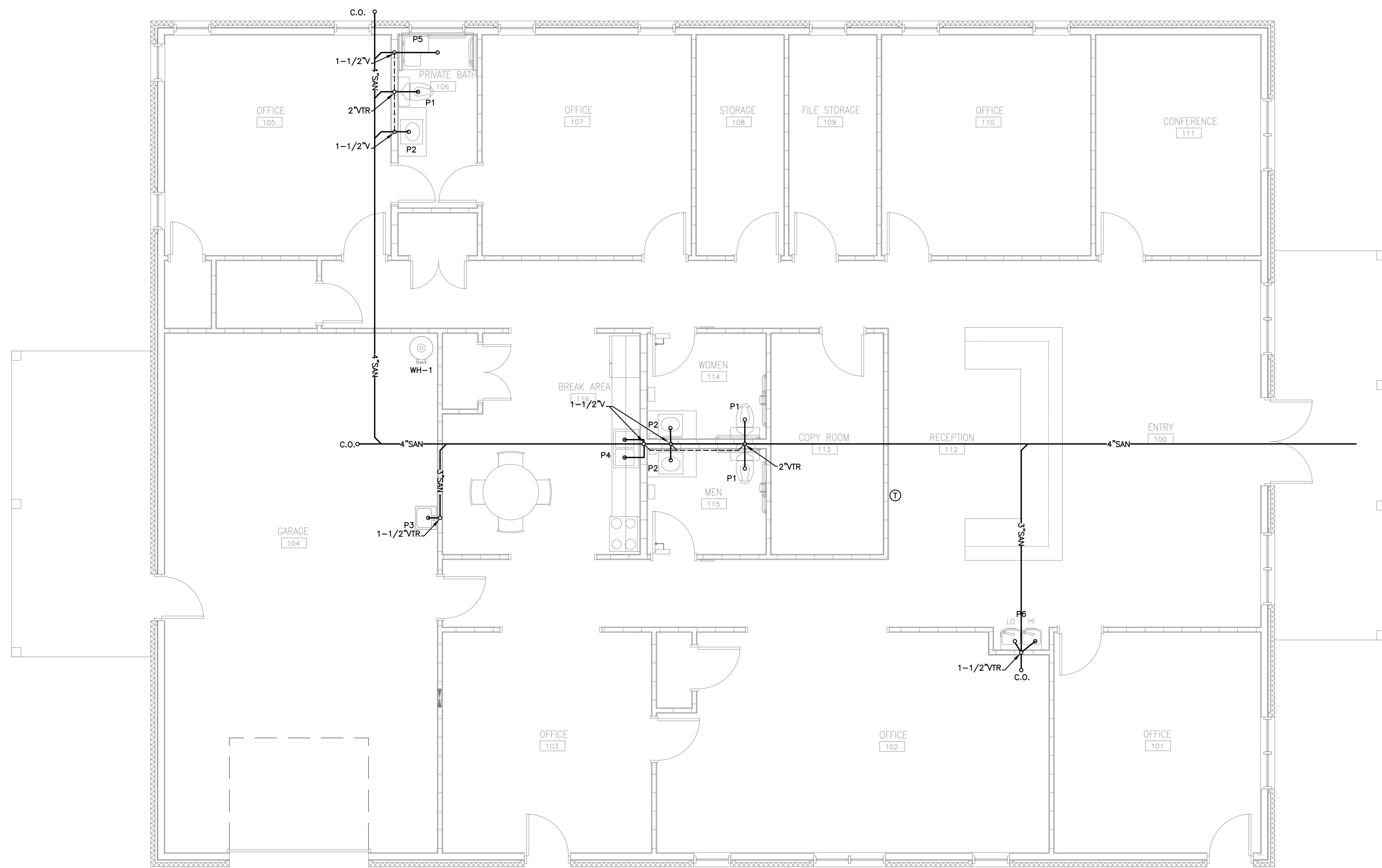
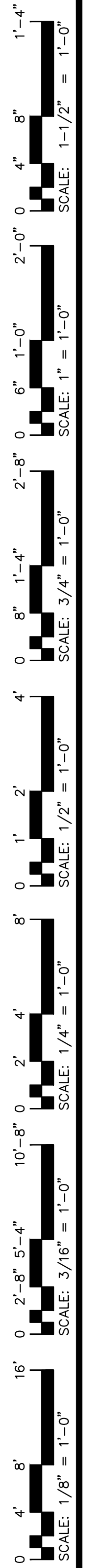
2 WATER HEATER DETAIL
 P1 N.T.S.



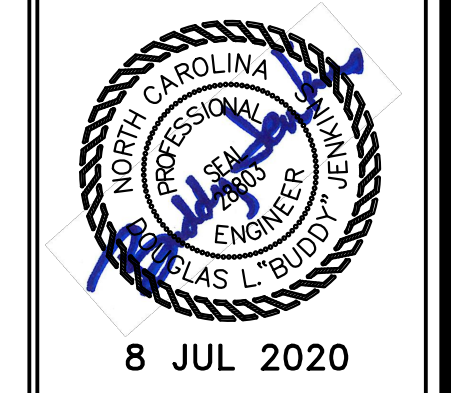
8 JUL 2020
 DESIGNED/CHECKED BY: B. JENKINS
 DRAWN BY: M.J.
 PROJECT#: 2020-05-04
 DATE: 8 JUL 2020

FINAL DRAWING FOR REVIEW PURPOSES ONLY
 PRELIMINARY FOR DESIGN DEVELOPMENT ONLY
 FINAL DRAWING FOR CONSTRUCTION
 OWNER/TENANT: WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28309
 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28309

PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE, BENSON, NC 27504
SHEET: PLUMBING NOTES, SCHEDULE, & RISER



1 PLUMBING PLAN-WASTE
 P2
 SCALE: 1/4" = 1'-0"

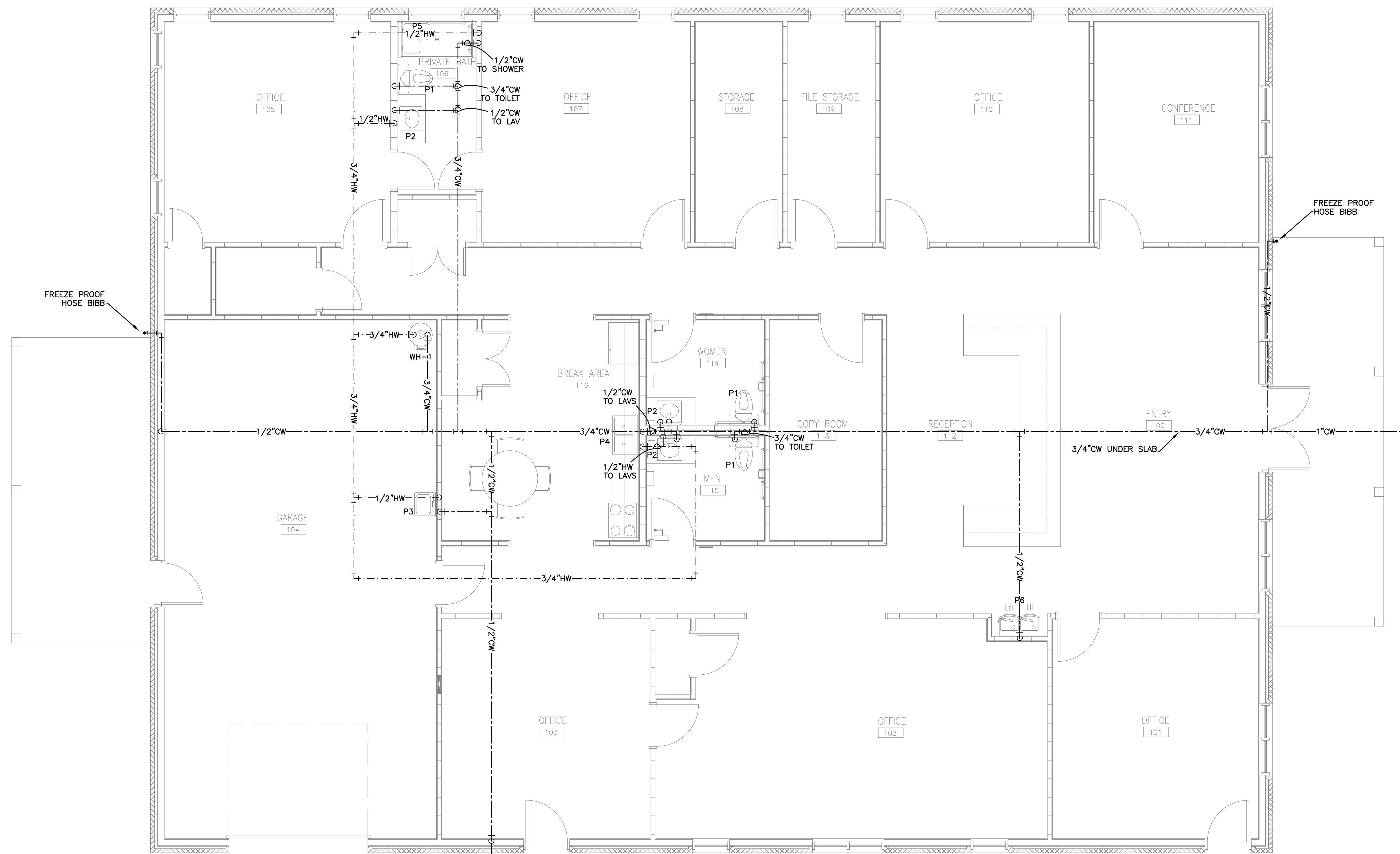
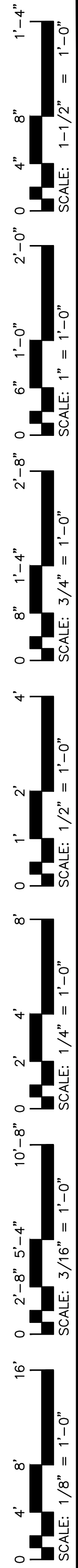


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 CONTRACTOR/BUILDER: WATERMARK HOMES
 1308 FORT BENSON RD. STE. 201, FAYETTEVILLE, NC 28509

PROJECT: WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE BENSON, NC 27504
 SHEET: PLUMBING PLAN-WASTE

P2



1 PLUMBING PLAN-WATER
 P3
 SCALE: 1/4" = 1'-0"



DESIGNED/CHECKED BY:
B. JENKINS
 DRAWN BY:
MJ
 PROJECT #:
2020-05-04
 DATE:
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 1308 FORT BRAGG RD. STE. 201, FAYETTEVILLE, NC 28309

PROJECT:
WATERMARK HOMES OFFICE BUILDING
 196 ANNETTE DRIVE, BENSON, NC 27504
 SHEET:
PLUMBING PLAN-WATER

P3