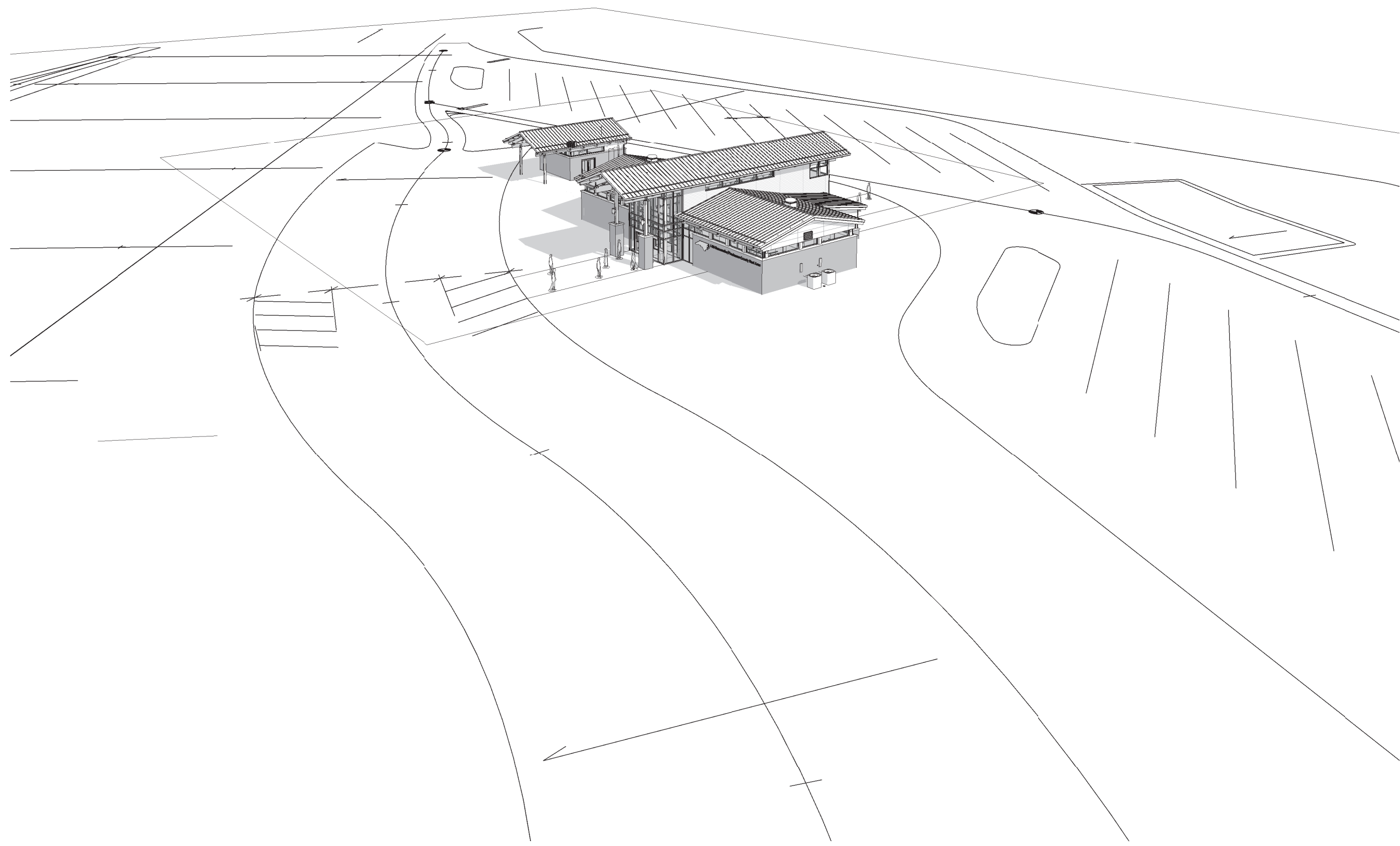


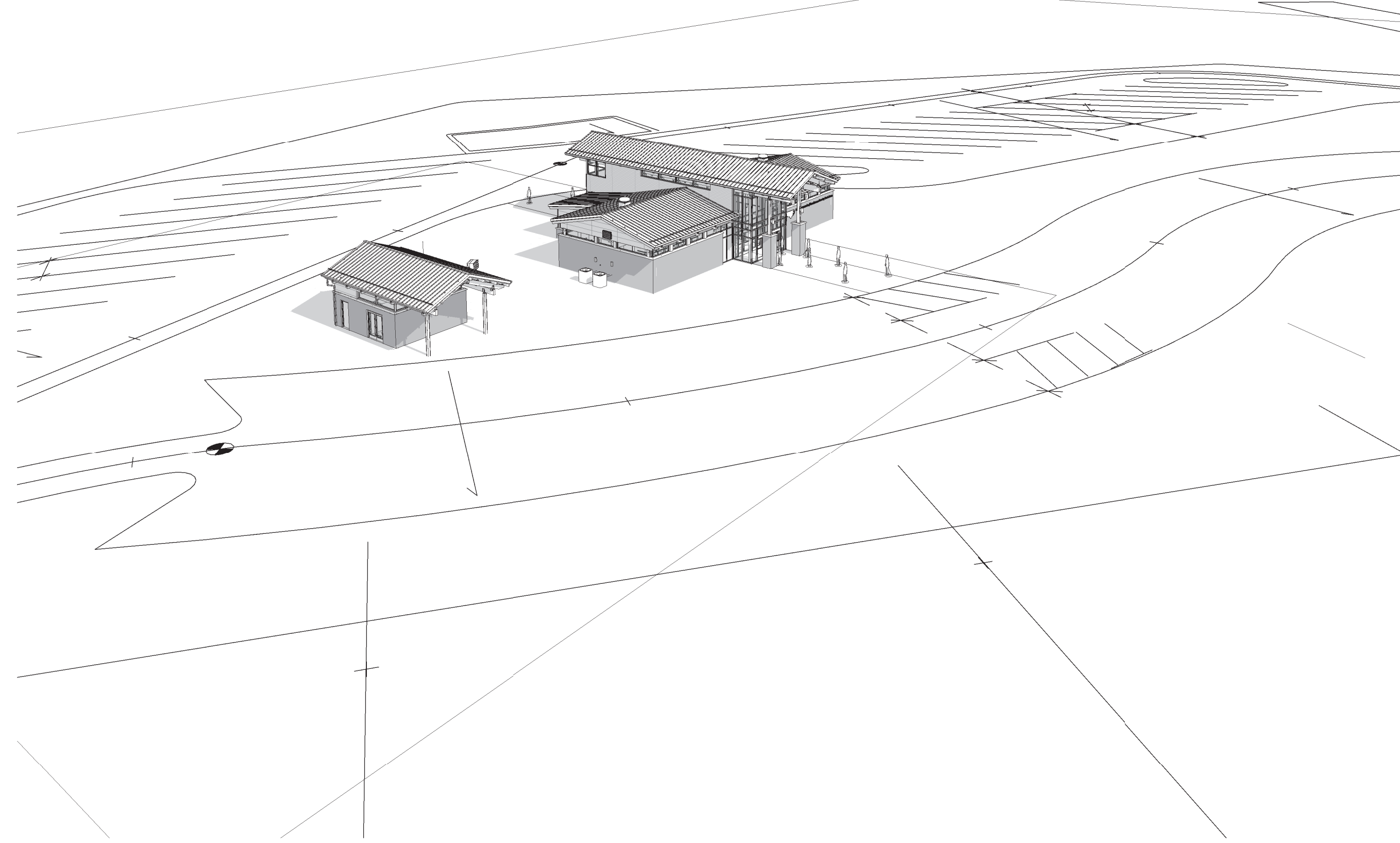
**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

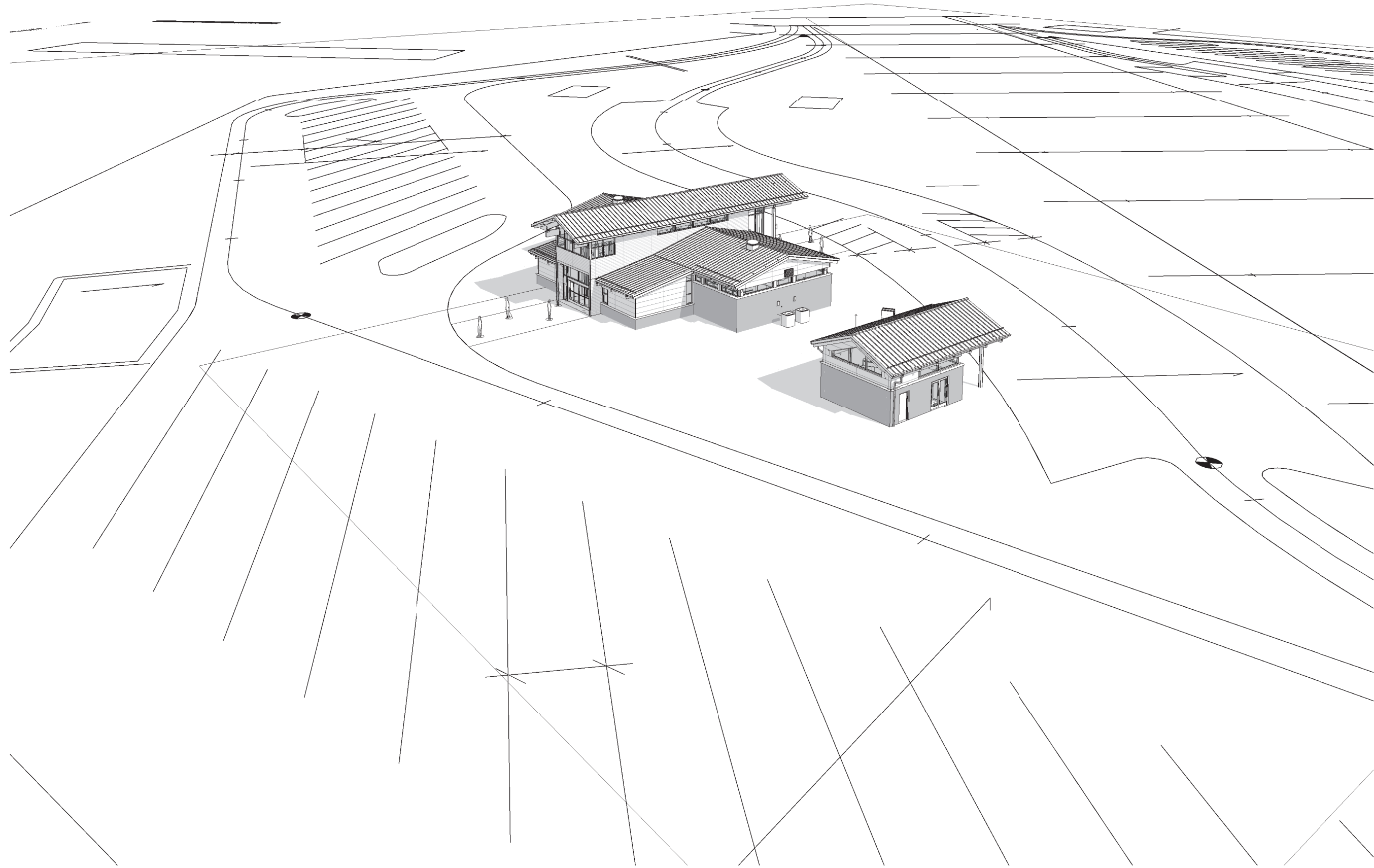
**This file or an individual page
shall not be considered a certified document.**



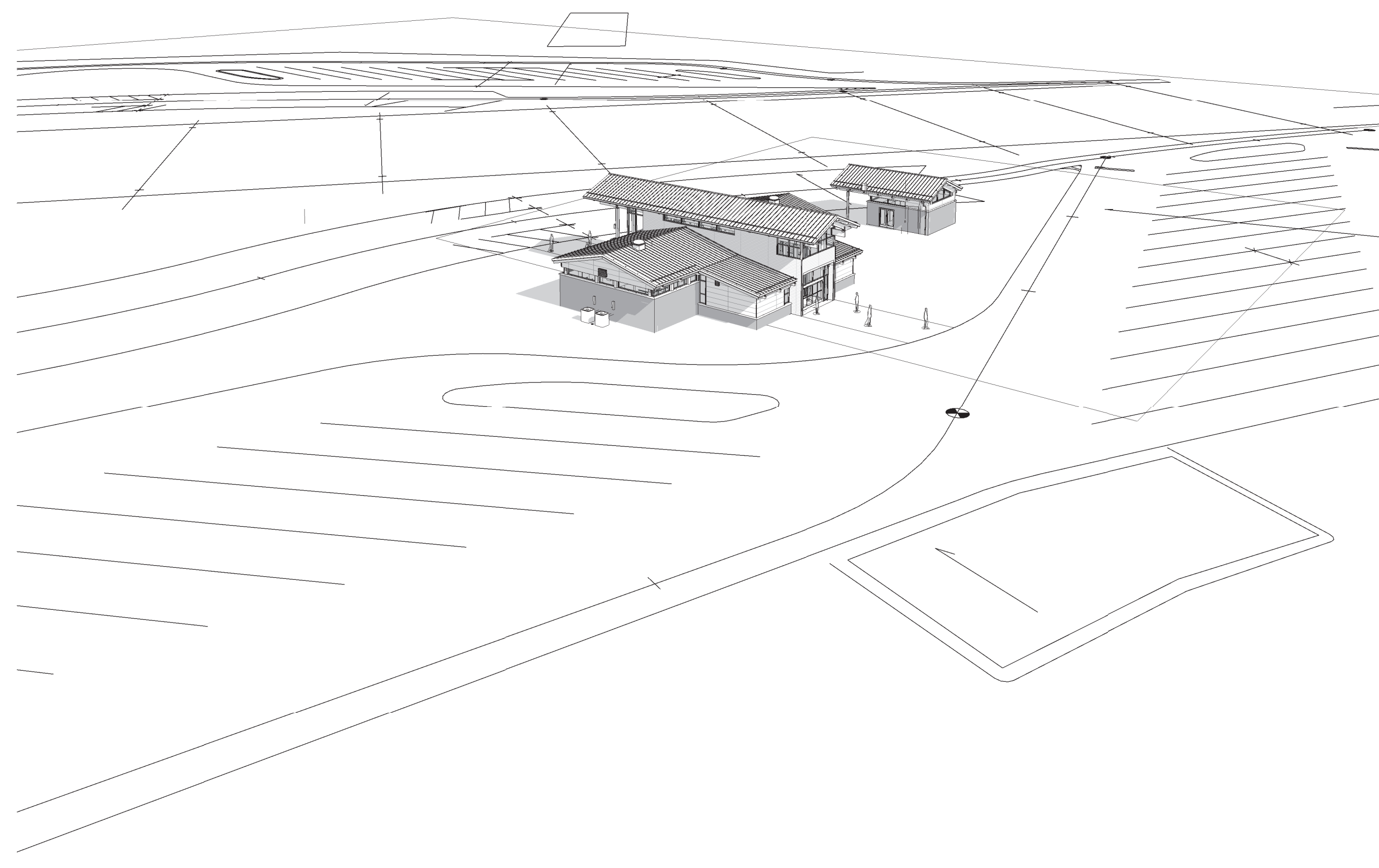
1 AERIAL - FRONT RIGHT



2 AERIAL - FRONT LEFT



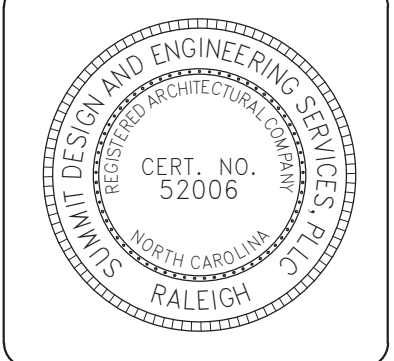
3 AERIAL - REAR LEFT



4 AERIAL - REAR RIGHT

SUMMIT
 DESIGN AND ENGINEERING SERVICES
 Creatively Inspired - Technically Executed
 License # P-20339
 1110 Navaho Drive, Suite 400
 Raleigh, NC 27609
 Phone: (919) 322-0115 Fax: (919) 322-0116
 www.SummitDE.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
 THIS DRAWING AND THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

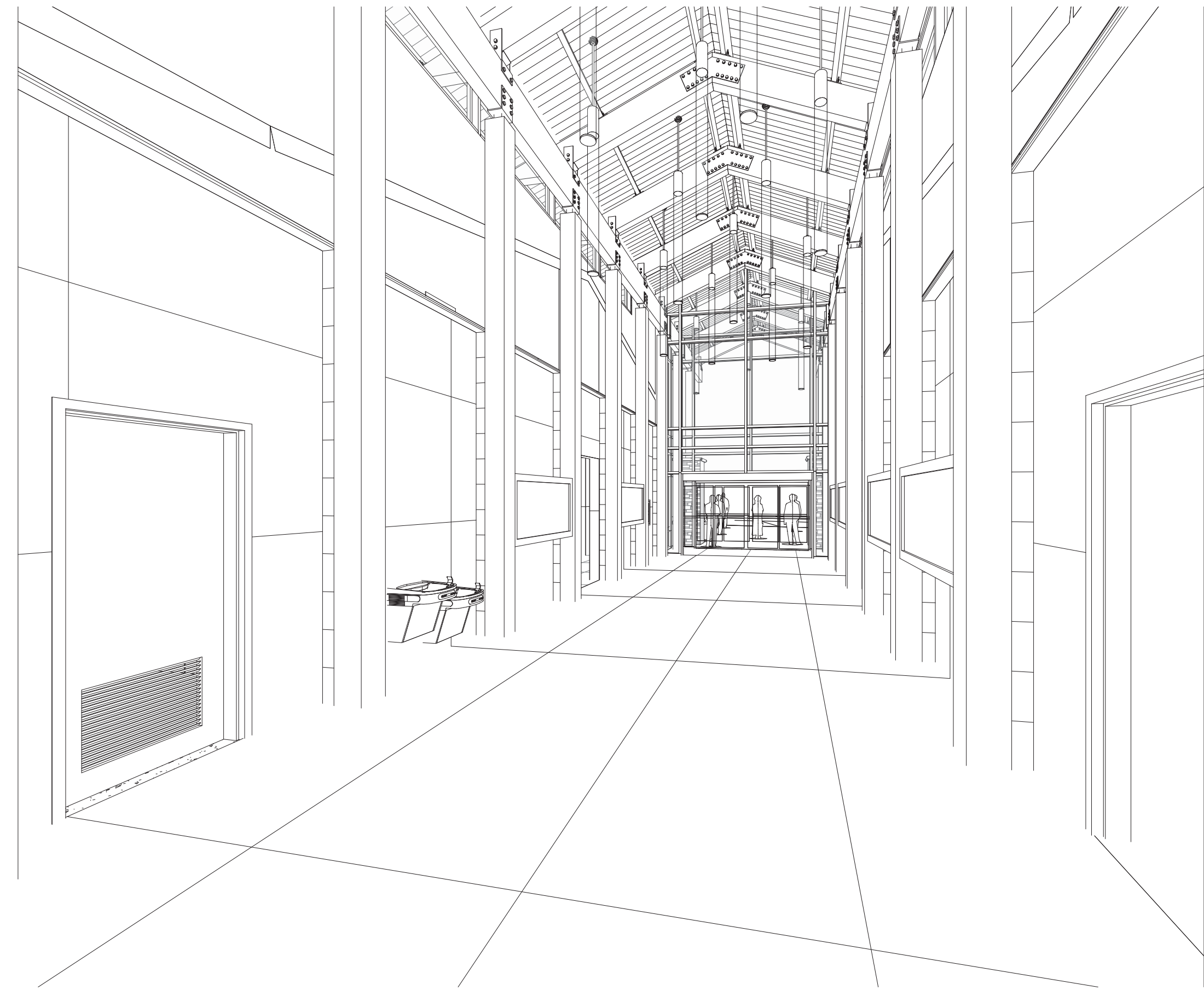


ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 PROJECT MANAGER
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

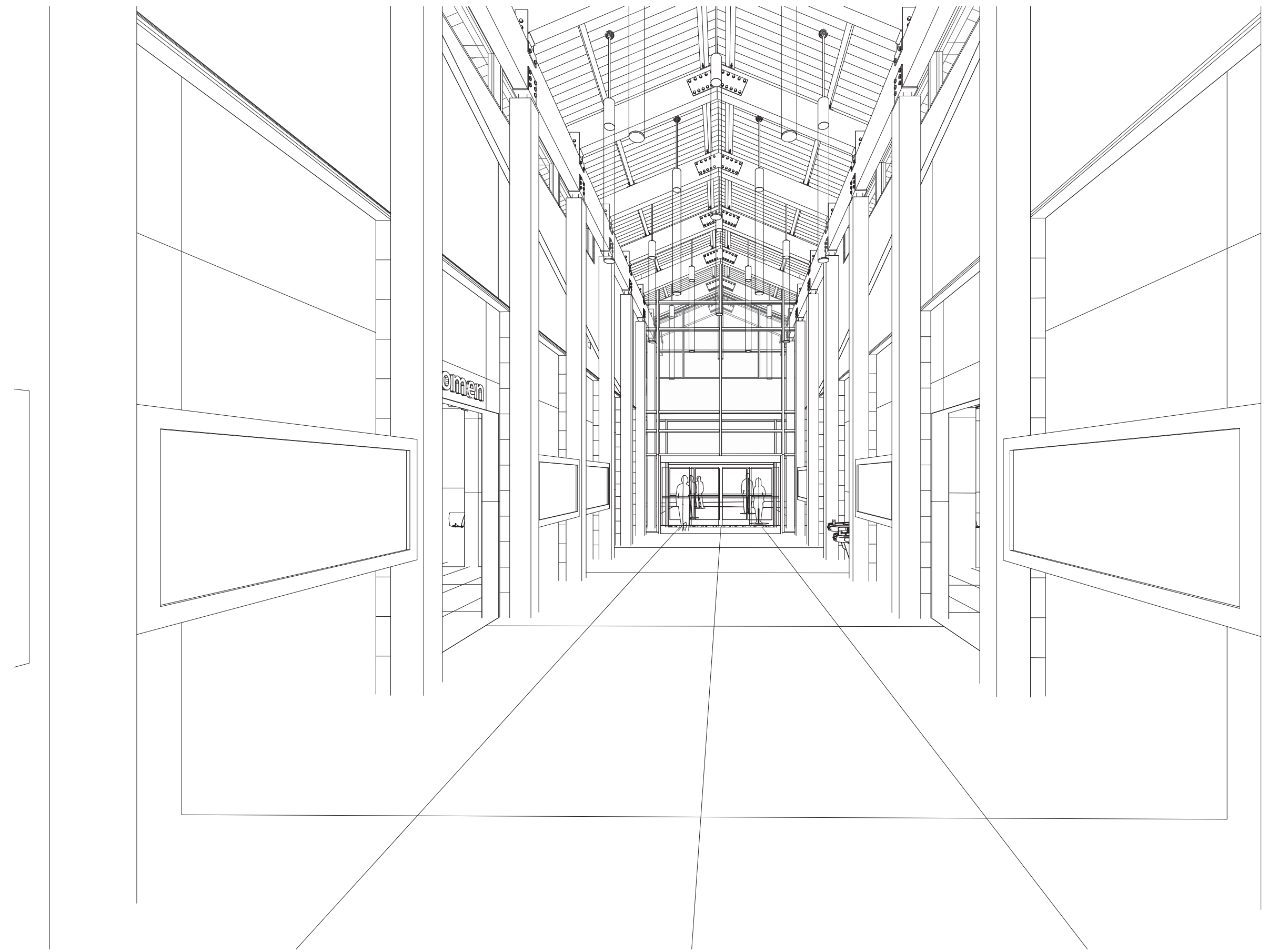
NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
PERSPECTIVES

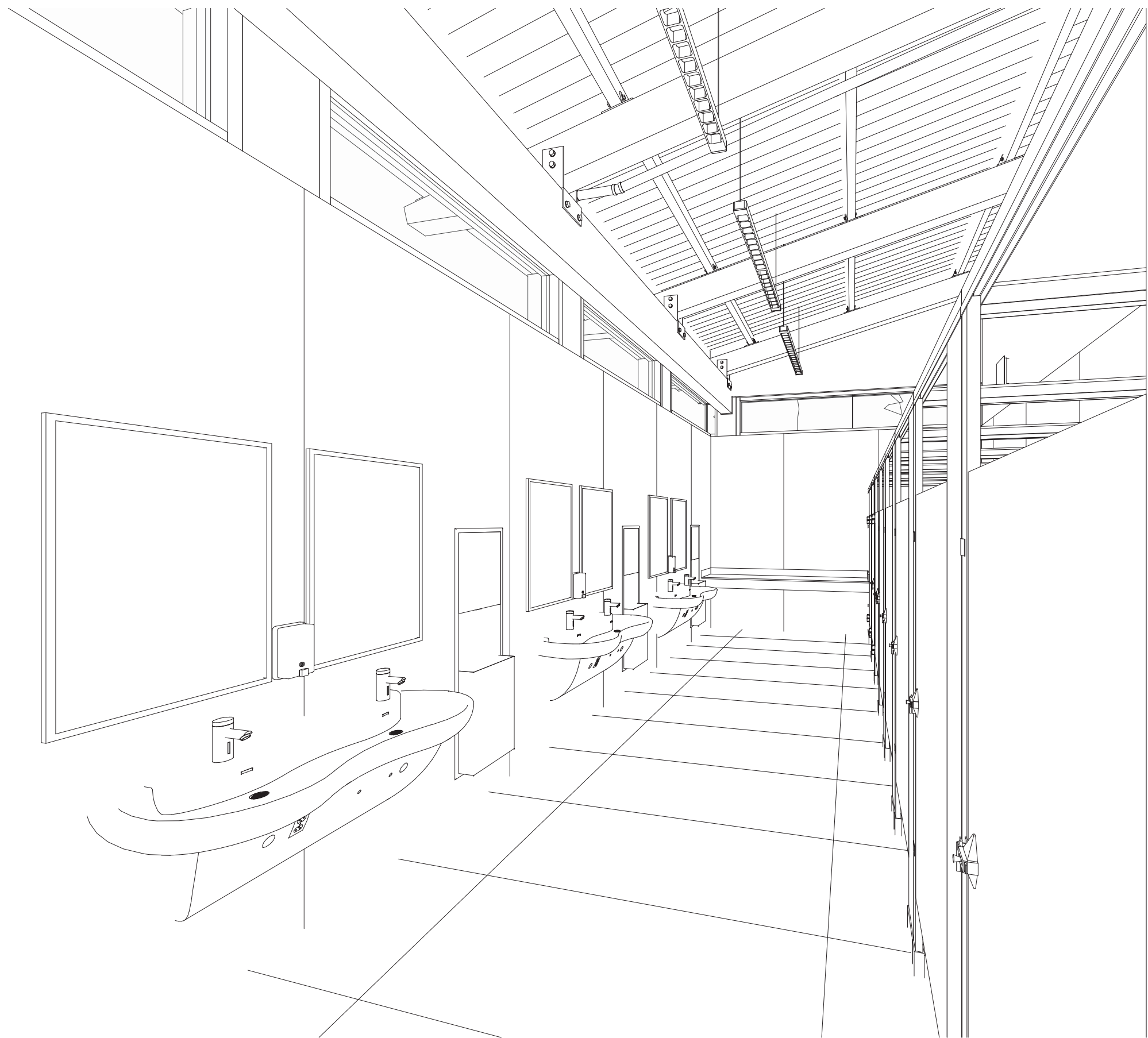
PROJECT NO.
18-0129.021
 SHEET NO.
A901



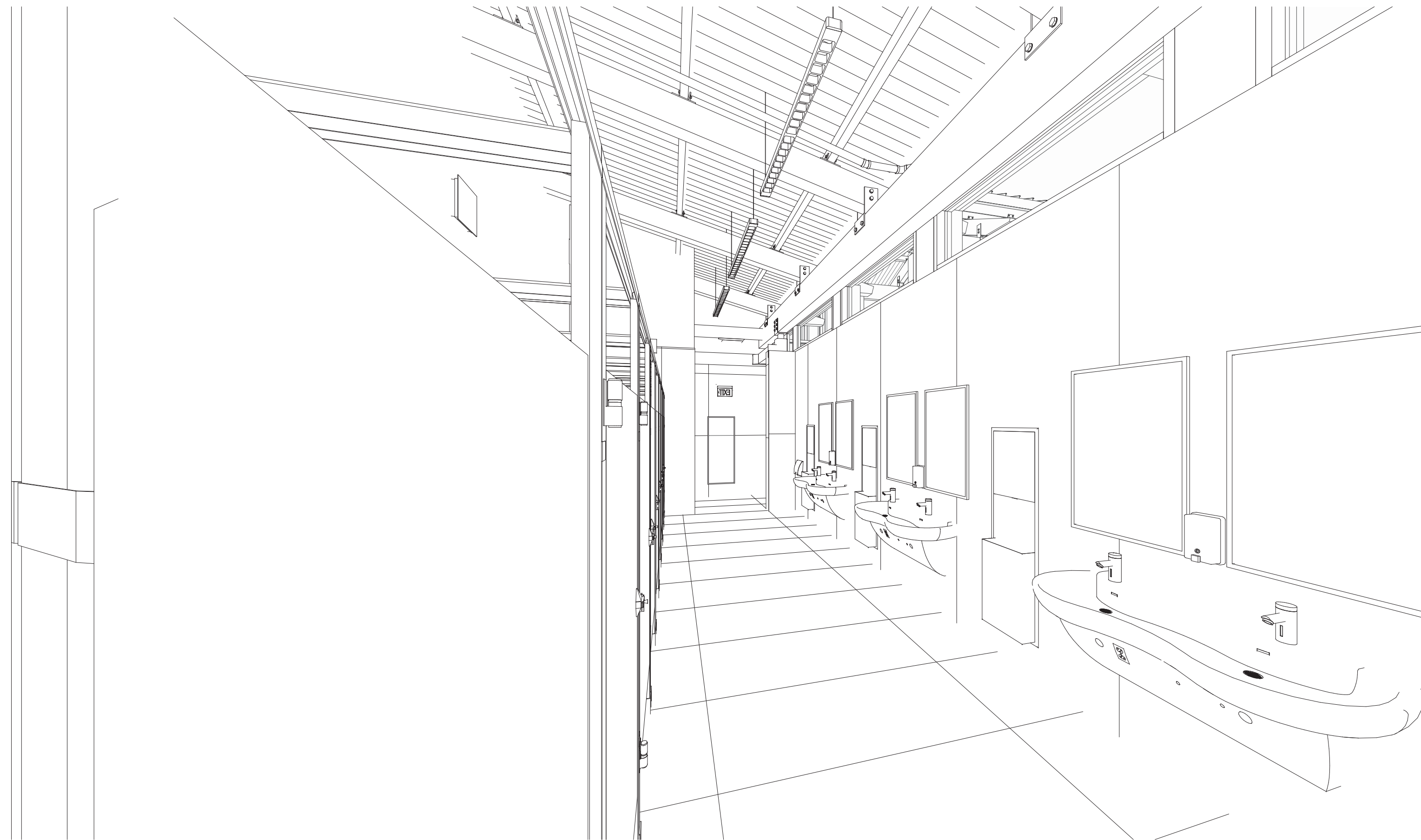
1 PERSPECTIVE - LOBBY



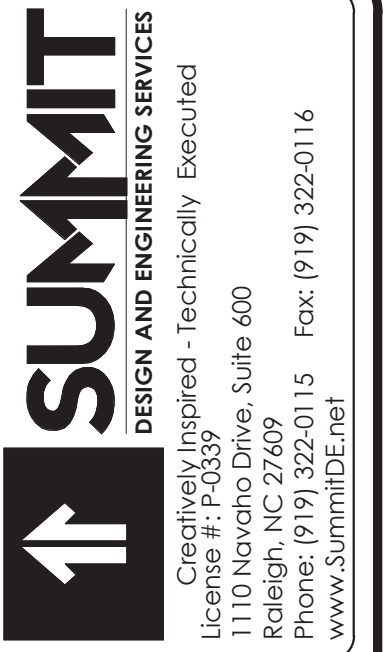
2 PERSPECTIVE - LOBBY



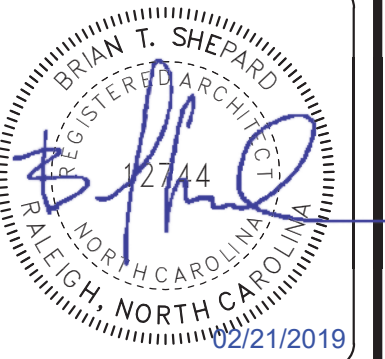
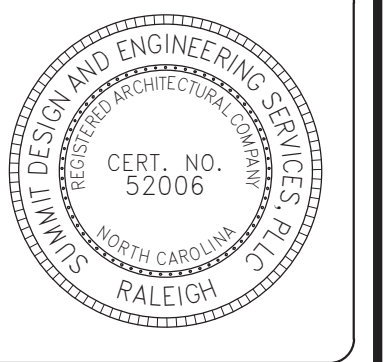
3 PERSPECTIVE - RESTROOM



4 PERSPECTIVE - RESTROOM



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

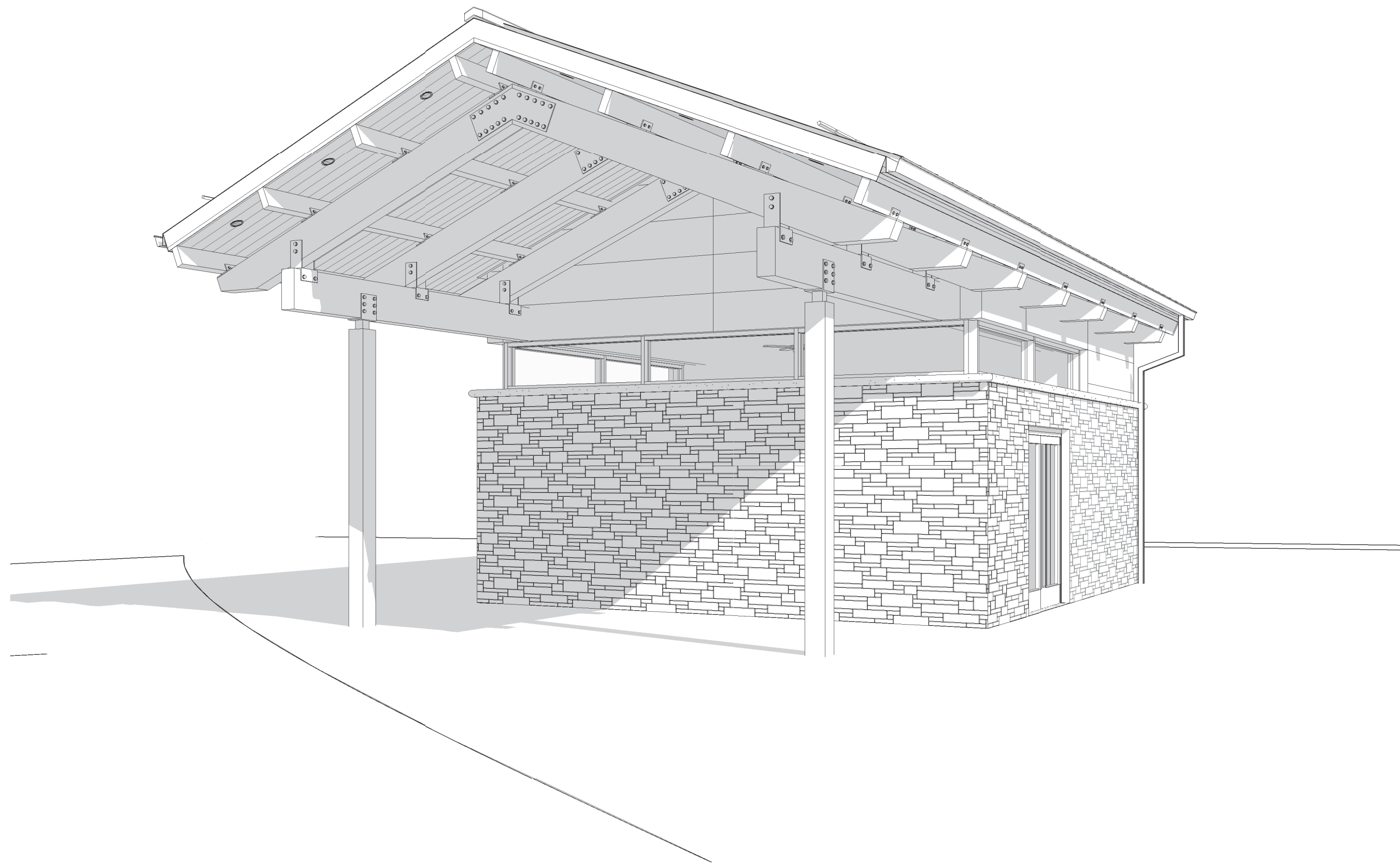


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

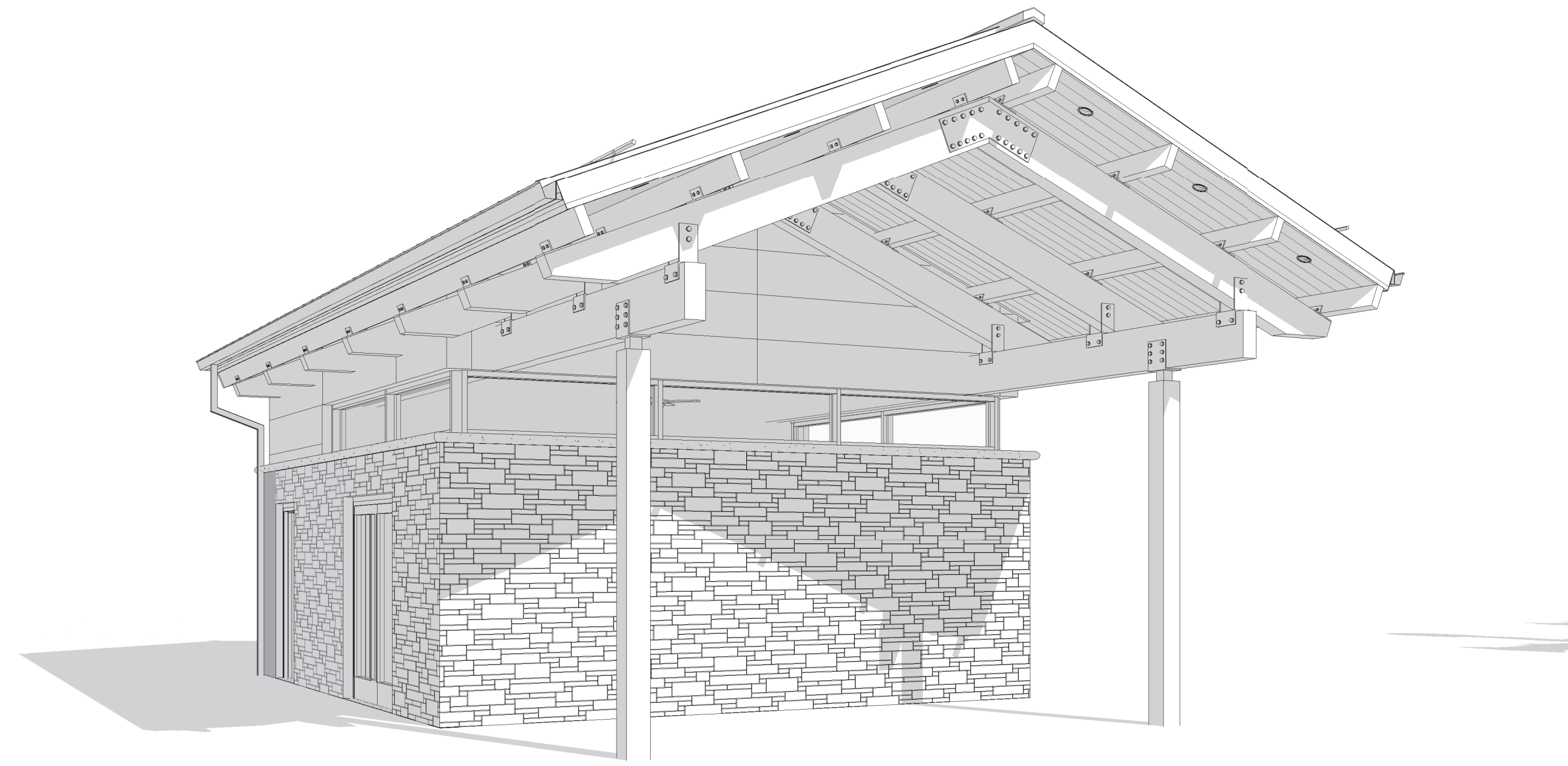
NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
PERSPECTIVES

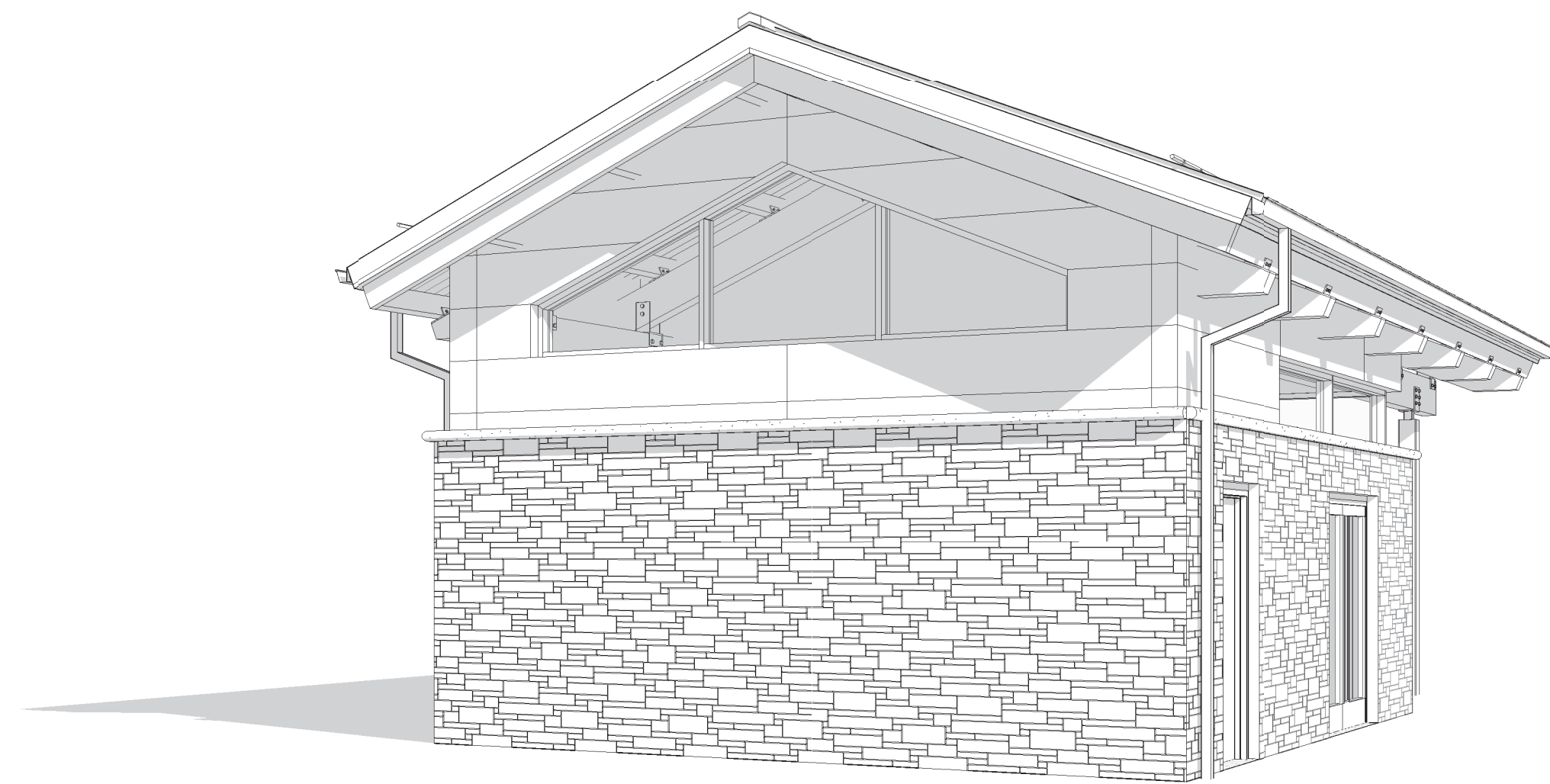
PROJECT NO.
18-0129.021
SHEET NO.
A902



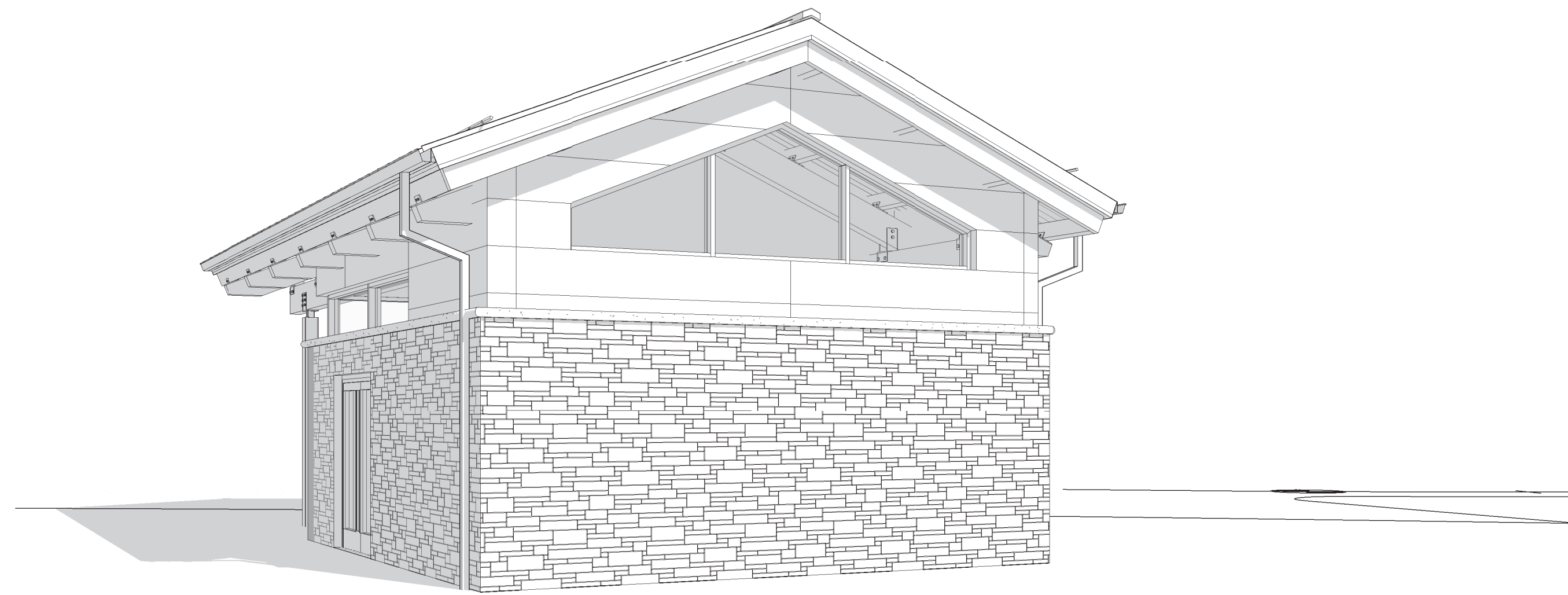
1 PERSPECTIVE - FRONT RIGHT



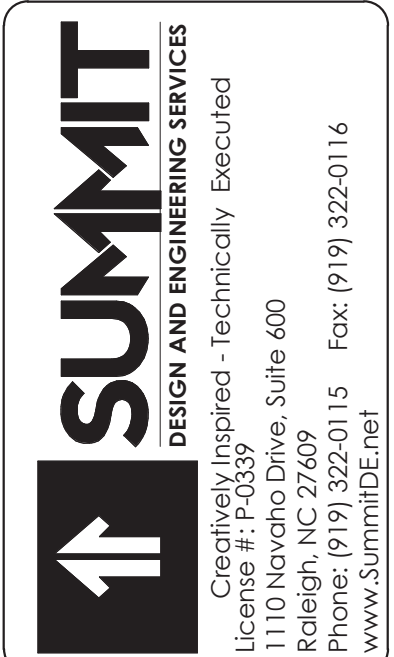
2 PERSPECTIVE - FRONT LEFT



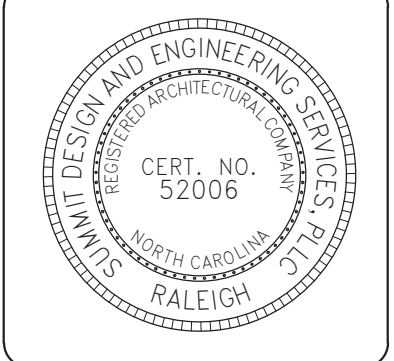
3 PERSPECTIVE - REAR RIGHT



4 PERSPECTIVE - REAR LEFT



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

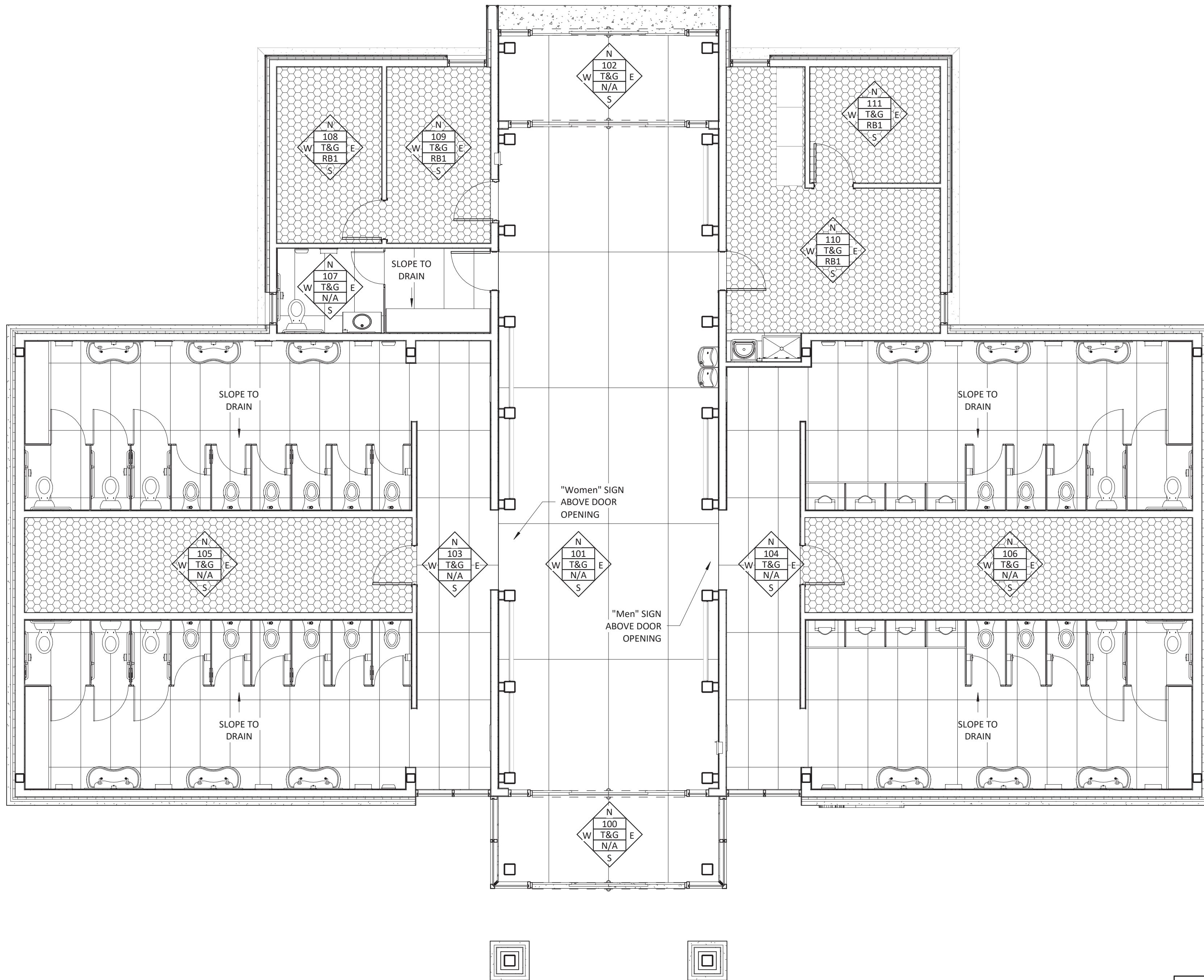


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
PERSPECTIVES

PROJECT NO.
18-0129.021
SHEET NO.
A903



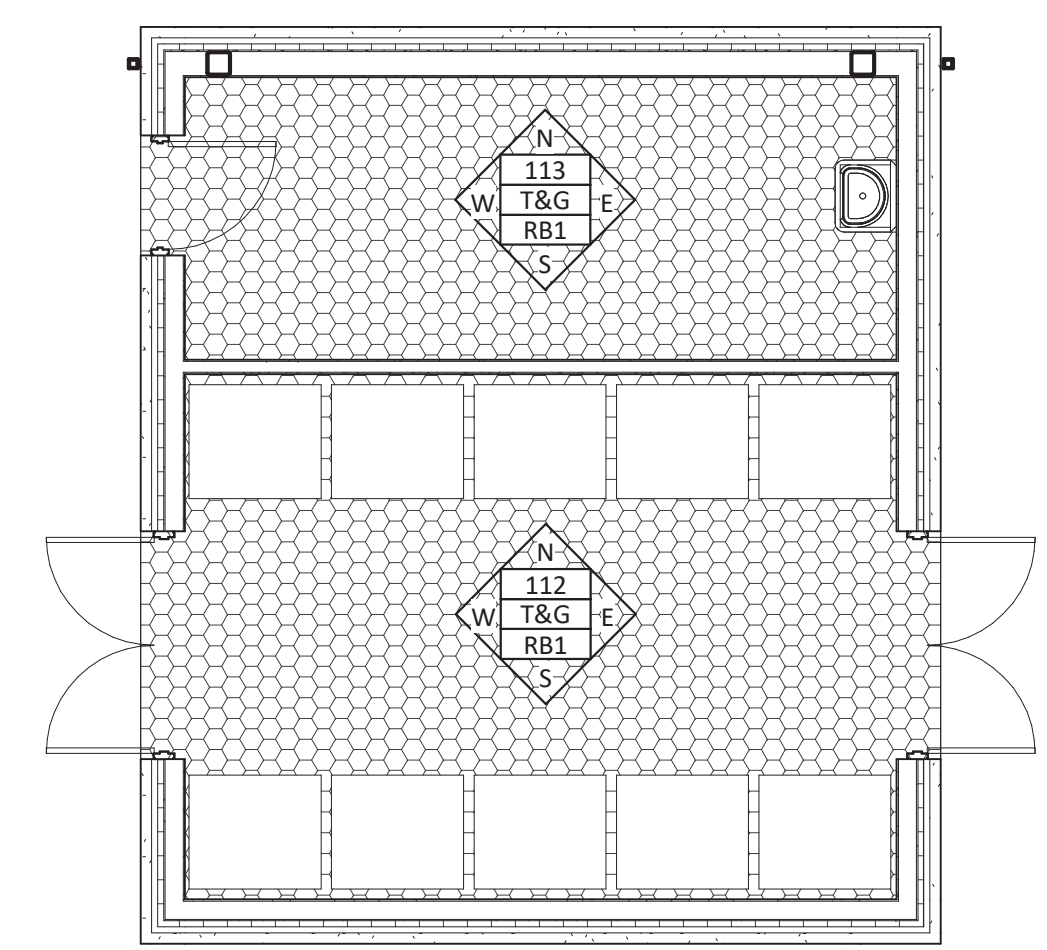
1 RESTROOMS FINISH FLOOR PLAN
3/16" = 1'-0"

INTERIOR FINISH SCHEDULE									
NO.	ROOM NAME	FLOORS		WALLS				CEILING	COMMENTS
		FINISH	BASE	NORTH	EAST	SOUTH	WEST		
FIRST FLOOR									
100	VESTIBULE	UC1	N/A	-	P1	-	P1	T&G	
101	LOBBY	UC1	N/A	-	UC4/P1	-	UC4/P1	T&G	WALL TILE TO EXTEND 12'-0" A.F.F.
102	VESTIBULE	UC1	N/A	P1	P1	-	P1	T&G	
103	WOMEN'S	UC2	N/A	UC3/P1	UC3/P1	UC3/P1	UC3/P1	T&G	SEE ENLARGED ELEVATIONS FOR PATTERN
104	MEN'S	UC2	N/A	UC3/P1	UC3/P1	UC3/P1	UC3/P1	T&G	SEE ENLARGED ELEVATIONS FOR PATTERN
105	CHASE	P2	N/A	-	-	-	-	T&G	
106	CHASE	P2	N/A	-	-	-	-	T&G	
107	FAMILY	UC2	N/A	UC3/P1	UC3/P1	UC3/P1	UC3/P1	T&G	SEE ENLARGED ELEVATIONS FOR PATTERN
108	ELECTRICAL	P2	RB1	P1	P1	P1	P1	T&G	
109	STORAGE	P2	RB1	P1	P1	P1	P1	T&G	
110	STORAGE	P2	RB1	P1	P1	P1	P1	T&G	SEE ENLARGED JANITOR PLAN AND ELEVATIONS FOR TILE LOCATIONS
111	STORAGE	P2	RB1	P1	P1	P1	P1	T&G	
112	VENDING	P1	RB1	P1	P1	P1	P1	T&G	
113	STORAGE	P1	RB1	P1	P1	P1	P1	T&G	

SYMBOL LEGEND	
	PLAN WALL
	ROOM No.
	CEILING FINISH
	WALL BASE

FINISH LEGEND	
	P2
	UC1
	UC2
	CPT1

- GENERAL FINISH NOTES**
- SEE SPECIFICATIONS FOR SELECTED FINISHES.
 - ALL GYPSUM WALLBOARD WALLS AND CEILINGS SHALL RECEIVE A LEVEL 4 OR 5 FINISH (SEE SPECIFICATIONS). PREPARE MOCK-UP FOR ARCHITECT'S APPROVAL.
 - SEAL ALL GAPS BETWEEN WALLS AND CEILINGS/FLOORS.
 - REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
 - REVIEW INTERIOR ELEVATIONS, WALL SECTIONS AND DETAILS FOR SPECIAL CONDITIONS RELATING TO FINISHING.
 - WHERE STOREFRONT INSTALLED, BASE FINISH SHALL NOT BE INSTALLED.
 - WHERE STOREFRONT INSTALLED, WALL FINISH REFERS TO GYPSUM WALLBOARD ABOVE.

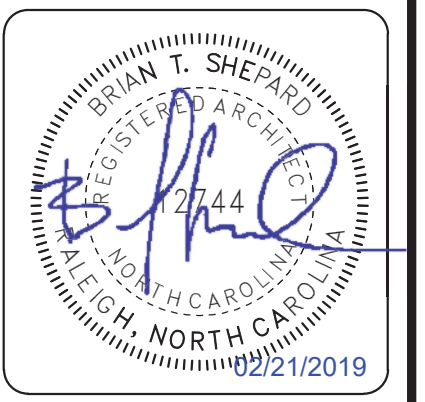
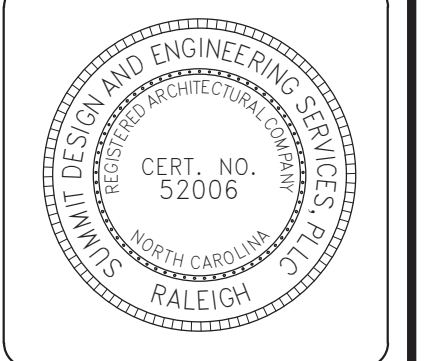


2 VENDING FINISH FLOOR PLAN
3/16" = 1'-0"

FINISH LEGEND				
	MNFR.	STYLE/ID	COLOR	COMMENTS
FLOORING				
PAINT				
P2	SEE SPECIFICATIONS	SEE SPECIFICATIONS	SEE SPECIFICATIONS	CONCRETE SEALER
TILE				
UC1	SEE SPECIFICATIONS	SEE SPECIFICATIONS	SEE SPECIFICATIONS	FULL SLAB IN LOBBY
UC2	SEE SPECIFICATIONS	SEE SPECIFICATIONS	SEE SPECIFICATIONS	27.5" X 62" IN RESTROOMS
WALL BASE				
RUBBER				
RB1	-	-	BLACK	
WALLS				
PAINT				
P1	SEE SPECIFICATIONS	SEE SPECIFICATIONS	SEE SPECIFICATIONS	
TILE				
UC3	SEE SPECIFICATIONS	SEE SPECIFICATIONS	SEE SPECIFICATIONS	FULL SLAB IN RESTROOMS
UC4	SEE SPECIFICATIONS	SEE SPECIFICATIONS	SEE SPECIFICATIONS	FULL SLAB IN LOBBY
WOOD				
WD1	-	-	TO MATCH T&G	1X12 BOARDS INSTALLED HORIZONTALLY
CEILING				
TONGUE & GROOVE				
T&G	SEE SPECIFICATIONS	SEE SPECIFICATIONS	SEE SPECIFICATIONS	

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
License # P-0339
1110 Navaho Drive, Suite 400
Raleigh, NC 27609
Phone: (919) 322-0115 Fax: (919) 322-0116
www.summitde.com

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	DATE	BY	MC
A	ISSUED TO SCO	11/16/18	MC	
B	ISSUED TO NCDOT	01/22/19	MC	
C	ISSUED FOR CONST.	02/21/19	MC	

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
FINISH PLAN, NOTES AND SCHEDULE

PROJECT NO.
18-0129.021
SHEET NO.
ID100

DESIGN CRITERIA

BUILDING CODE:	NORTH CAROLINA SATE BUILDING OCDE, 2012 EDITION
CONCRETE DESIGN CODE:	ACI 318-11, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
CONCRETE DESIGN METHOD:	EQUIV. RECTANGULAR STRESS BLOCK
STEEL DESIGN CODE:	AISC MANUAL OF STEEL CONSTRUCTION, LRFD, FOURTEENTH EDITION
STEEL DESIGN METHOD:	ELASTIC ANALYSIS, PLASTIC DESIGN
LIGHT GAUGE STEEL:	AISI NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, 2007 EDITION

SNOW LOAD

TERRAIN CATEGORY:	C
GROUND SNOW LOAD (Pg):	15 PSF
SNOW EXPOSURE FACTOR (Ce):	1.0
THERMAL FACTOR (Ct):	1.0
SNOW IMPORTANCE FACTOR (Is):	1.0
FLAT ROOF SNOW LOAD (Pf):	15 PSF

WIND LOADS

MINIMUM WIND PRESSURE:	10 PSF
BASIC WIND VELOCITY:	90 MPH
RISK CATEGORY:	II
WIND EXPOSURE CATEGORY:	C
INTERNAL PRESSURE COEFFICIENT:	±0.18
BASE SHEAR:	N/A
COMPONENTS & CLADDING:	CALCULATED BY PROVDER PER ASCE 7-05

SEISMIC DATA

BUILDING OCCUPANCY CATEGORY:	II
SEISMIC IMPORTANCE FACTOR (Ie):	1.0
MAPPED SPECTRAL RESPONSE ACCELERATION (SS):	37.9%
MAPPED SPECTRAL RESPONSE ACCELERATION (S1):	10.6%
SITE CLASS:	D
DESIGN SPECTRAL RESPONSE ACCELERATION (SDS):	37.8%
DESIGN SPECTRAL RESPONSE ACCELERATION (SD1):	16.8%
SEISMIC DESIGN CATEGORY:	C
BASIC SEISMIC FORCE RESISTING SYSTEM:	NOT DETAILED
RESPONSE MODIFICATION FACTOR (R):	1.25
DEFLECTION AMPLIFICATION FACTOR (Cd):	1.25
BASE SHEAR:	N/A
ANALYSIS PROCEDURE:	EQUIV. LATERAL FORCE

LIVE LOADS

ROOF (MINIMUM):	20 PSF
-----------------	--------

GENERAL NOTES

- THE STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS.
- THE CONTRACTOR WILL COORDINATE BETWEEN ALL TRADES. CONFLICTS BETWEEN THE STRUCTURAL DRAWINGS AND THE DRAWINGS OF OTHERS WILL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE STRUCTURAL ENGINEER IN A TIMELY FASHION THAT PERMITS CLARIFICATIONS WITHOUT EFFECTING THE CONSTRUCTION SCHEDULE.
- HESE DRAWINGS ALONG WITH ANY SPECIFICATIONS ISSUED CONSTITUTE THE CONTRACT DESIGN DOCUMENTS FOR THIS PROJECT. ANY DISCREPANCY BETWEEN THE TWO WILL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR STRUCTURAL ENGINEER FOR CLARIFICATION. FOR ESTIMATING PURPOSES THE CONTRACTOR WILL ASSUME THE MORE COSTLY ALTERNATIVE. NO MATERIALS MAY BE ORDERED, AND NO WORK MAY PROCEED UNTIL THE DISCREPANCY IS RESOLVED BY THE DESIGN PROFESSIONAL.
- ALTERNATES OR SUBSTITUTIONS TO STRUCTURAL MATERIALS OR DESIGN ARE AT THE SOLE DISCRETION OF THE LICENSED STRUCTURAL ENGINEER OF RECORD. ANY MODIFICATION MUST BE APPROVED IN THE MANNER SET FORTH IN THE "FRONT END" SPECIFICATIONS.
- ALL STANDARDS REFERENCED WITHIN THESE DOCUMENTS ARE TO BE THE EDITIONS REFERENCED IN CHAPTER THIRTY-FIVE OF THE INTERNATIONAL BUILDING CODE.
- STRUCTURAL MEMBERS, INCLUDING BEAMS, COLUMNS, JOISTS, TRUSSES, WALLS, SLABS AND BRACING ELEMENTS, ARE DESIGNED FOR THE FINAL DESIGN LOADS GIVEN ON THIS SHEET. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING. CONTRACTOR SHALL PROVIDE COMPLETE SHORING PLANS AND CERTIFIED STRUCTURAL CALCULATIONS PREPARED AND SEALED BY A QUALIFIED ENGINEER, REGISTERED IN NORTH CAROLINA, FOR APPROVAL PRIOR TO INSTALLATION. SHORING IS TO BE DESIGNED TO PRECLUDE THE OVERSTRESSING ANY STRUCTURAL ELEMENT (AS REQUIRED AT ANY STAGE OF CONSTRUCTION) UNTIL COMPLETION OF THIS PROJECT.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ON-SITE SAFETY. AT A MINIMUM, THE CONTRACTOR IS TO RESEARCH AND IMPLEMENT ALL SAFETY REGULATIONS IN FORCE IN THE JURISDICTION OF THIS PROJECT. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR WILL BRING TO THE ATTENTION OF THE STRUCTURAL ENGINEER ANY STRUCTURAL DETAIL THAT WOULD PRODUCE AN UNUSUALLY UNSAFE CONDITION.

FOUNDATIONS

- THE PRIMARY BUILDING STRUCTURE IS DESIGNED FOR SUPPORT ON SPREAD FOOTINGS WITH AN ASSUMED ALLOWABLE NET SOIL BEARING PRESSURE OF 3000 PSF ON UNDISTURBED SOILS OR COMPACTED FILL.
- IF SOIL AT THE SCHEDULED FOOTING ELEVATION IS OF QUESTIONABLE BEARING VALUE, THE ARCHITECT AND STRUCTURAL ENGINEER ARE TO BE NOTIFIED IMMEDIATELY. LOWER FOOTING ELEVATIONS IF REQUIRED BY ARCHITECT AND ENGINEER TO REACH FIRM SOIL.
- CONTRACTOR IS TO PROVIDE PROPERLY DESIGNED SHEETING AND SHORING AT ALL OPEN EXCAVATIONS, OR LAY BACK THE CUT AT A SLOPE APPROVED BY THE ON-SITE GEOTECHNICAL ENGINEER IN ORDER TO ENSURE SAFE WORKING CONDITIONS AND AS NECESSARY TO COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. ALL EXCAVATIONS SHALL BE ADEQUATELY DEWATERED BEFORE PLACEMENT OF CONCRETE.

CONCRETE

- ALL CONCRETE WORK SHALL COMPLY WITH THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI-301 AND THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI-318 (EDITIONS IN FORCE).
- CONCRETE MIX DESIGNS ARE REFERENCED IN THE PROJECT SPECIFICATIONS. FOR EACH DESIGN A SUBMITTAL WILL BE MADE BY THE CONTRACTOR AS OUTLINED IN THE SPECIFICATIONS.
- ALL REINFORCING STEEL IS TO BE TIED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. TACK WELDING OF REINFORCEMENT STEEL IS PROHIBITED.
- THE CONTRACTOR WILL SUBMIT A COMPLETE LIST OF ACCESSORIES AND PLACING DETAILS WITH SHOP DRAWINGS.
- ALL REINFORCING STEEL IS TO BE CONTINUOUS. LAP BARS 40 DIAMETERS FOR BARS #6 AND SMALLER OR 48 DIAMETERS FOR BARS #7 AND LARGER AT SPLICE UNLESS NOTED OTHERWISE ON SCHEDULES OR DETAILS.
- THE LOCATION OF ALL LAP SPLICES WILL BE SHOWN ON SHOP DRAWINGS.
- NO CONCRETE ELEMENT MAY BE CORED TO PLACE THROUGH ITEMS (ie PIPES, ELECTRICAL LINES, ETC.), ALL THROUGH ITEMS PENETRATING HORIZONTAL SURFACES ARE TO BE PLACED IN SCHEDULE 40, STEEL, PIPE SLEEVES OF A DIAMETER SUFFICIENT TO ACCOMMODATE THE THROUGH ITEM. AT PENETRATIONS IN THE VERTICAL PLANE OF ELEMENTS THE PIPE SLEEVE DIAMETER WILL BE INCREASED BY AN AMOUNT TO PROVIDE 1 1/2" CLEAR DIMENSION AROUND THE THROUGH ITEM. REFER TO ARCHITECTURAL DRAWINGS FOR ALL WATERPROOFING OF CONCRETE BELOW GRADE.
- NO HORIZONTAL CONSTRUCTION JOINTS ARE PERMITTED IN CONCRETE ELEMENTS. LOCATE VERTICAL CONSTRUCTION JOINTS AT THE MIDDLE THIRD OF THE SPAN. PROVIDE 2x4, CONTINUOUS, BEVELED KEYWAYS AT SLABS AND (ONE MINIMUM) AND 2x8 BEVELED KEYWAY AT BEAMS. SUBMIT PROPOSED CONSTRUCTION JOINT LOCATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL.
- ALL INTERSECTING BEAMS, WALLS, AND FOOTINGS SHALL HAVE CORNER BARS. REFER TO TYPICAL DETAILS.

STEEL

- DIMENSIONS GIVEN ON THE STRUCTURAL DRAWINGS ARE PROVIDED AS A CONVENIENCE AND ARE SOLELY TO CONVEY THE QUANTITY AND NATURE OF THE STRUCTURAL STEEL LAYOUT. ALL FINAL DIMENSIONS ARE TO BE COORDINATED BY THE CONTRACTOR WITH THE PROJECT ARCHITECT BEFORE MATERIAL IS ORDERED OR FABRICATIONS HAS BEGUN.
- UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWINGS, SHEAR CONNECTIONS ARE TO BE DESIGNED USING THE AISC ALLOWABLE STRESS DESIGN METHOD FOR THE MINIMUM SERVICE LOAD REACTIONS PROVIDED ON THE FRAMING PLANS. ADDITIONALLY, SINGLE ANGLE CONNECTIONS ARE PROHIBITED AND MEMBERS WILL BE FURNISHED WITH A MINIMUM NUMBER OF WEB BOLT ROWS AS FOLLOWS:

MEMBER DEPTH	MIN. NUMBER OF WEB BOLT ROWS
W4 - W10	2 BOLTS
W12 OR GREATER	3 BOLTS

- GENERALLY, 3/4" DIA., ASTM A-325-N BOLTS ARE TO BE USED FOR ALL BOLTED SHEAR CONNECTIONS UNLESS OTHERWISE INDICATED. THE FABRICATOR MAY USE OTHER DIAMETER BOLTS WHERE AISC RECOMMENDATIONS REQUIRE A SMALLER BOLT FOR GAGE OR BLOCK SHEAR REASONS OR WHERE STRENGTH REASONS REQUIRE LARGER DIAMETER BOLTS. THE PROVIDER OF BOLTS WILL PAINT THE HEADS OF THE NONSTANDARD BOLTS WITH IDENTIFYING COLORS UNIQUE TO A PARTICULAR DIAMETER OF BOLT AND WILL STRIPE THE FRAMING MEMBER AT THE CONNECTION SITE OUTSIDE THE FAYING SURFACE WITH THE CORRESPONDING COLOR.
- FULLY TENSION ALL BOLTS WHERE DESIGNATED ON STRUCTURAL DRAWINGS AND AT MOMENT CONNECTIONS, INCLUDING BOLTS RESISTING ONLY GRAVITY LOADS. PROVIDE ASTM A-325-SC BOLTS AT CONNECTIONS WHERE INDICATED ON DRAWINGS. PREPARE FAYING SURFACES AT SUCH CONDITIONS PER AISC REQUIREMENTS.
- SINGLE PLATE SHEAR CONNECTION IS THE PREFERRED METHOD OF ATTACHMENT BETWEEN BEAMS AND GIRDBERS AND WHERE HORIZONTAL FRAMING MEMBERS ATTACH TO COLUMNS AT ANGLES OTHER THAN 90°.
- COLD BENDING OF PLATE MATERIAL IS NOT PERMITTED FOR USE IN SKEWED CONNECTIONS. HEAT MEMBER OR BUILD UP FROM TWO PLATES AS REQUIRED AND FULLY TEST ANGLE FOR WELD DEFECTS.
- ALL COPES AND CUTS IN STRUCTURAL MEMBERS ARE TO BE MADE FREE OF NOTCHES OR OTHER STRESS CONCENTRATORS. COPES ARE TO BE CUT AT A MINIMUM RADIUS OF 1/2".
- ALL ROLLED STEEL MEMBERS ARE TO FABRICATED WITH MILL CAMBER UP.
- COLUMN SPLICES ARE NOT ANTICIPATED ON THIS PROJECT. THE FABRICATOR MAY REQUEST COLUMN SPLICES SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD. ALTHOUGH THE ACTUAL TYPE OF SPLICE WILL BE DETERMINED ON AN INDIVIDUAL BASIS, AISC TYPE VIIIID COLUMN SPLICES MAY BE ASSUMED FOR PRICING PURPOSES.
- ALL WELDS ARE TO CONFORM WITH ANSI/AWS D1.1 STANDARD AND ARE TO BE MADE BY CERTIFIED WELDERS.
- ALL FULL AND PARTIAL PENETRATION WELDS IN MOMENT CONNECTIONS ARE TO MEET CYCLICAL LOADING STANDARDS.
- A WELD SCHEDULE FOR ALL FIELD WELDS WILL BE FURNISHED BY THE ERECTOR. THIS SCHEDULE IS TO BE PREPARED BY A COMPETENT DESIGNER OF WELDS AND WILL INDICATE AT A MINIMUM PREHEAT, THE WELD FILLER MATERIAL, THE PROPER WELD DEPOSITION RATE AND THE WELDING MACHINE SETTINGS.
- THE TOP FLANGES OF ALL MEMBERS ARE TO REMAIN UN-PRIMED AND UNPAINTED UNLESS EXPOSED TO VIEW. ADDITIONALLY, MEMBERS TO RECEIVE SPRAY APPLIED FIRE PROOFING OR MEMBERS EMBEDDED OR ENCASED IN CONCRETE ARE TO REMAIN UN-PRIMED AND UNPAINTED
- ALL STEEL ELEMENTS AND CONNECTIONS WHICH WILL BE PERMANENTLY EXPOSED TO EXTERIOR CONDITIONS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.

LIGHT GAGE METAL FRAMING

- LIGHT GAUGE METAL WALL FRAMING IS TO BE DESIGNED BY IT'S SUPPLIER FOR ALL APPLICABLE LOADS, INCLUDING WIND LOAD, SELF WEIGHT, AND WEIGHT OF SUSPENDED PRE-FABRICATED CANOPIES.
- THE CONTRACTOR WILL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL LIGHT GAUGE FRAMING, WHICH BE SEALED BY A NC PROFESSIONAL ENGINEER
- THE FOLLOWING MINIMUM SIZES SHALL BE ASSUMED. FINAL STUD SIZES MAY EXCEED THESE AND SHALL BE DETERMINED BY THE ENGINEER PREPARING THE LIGHT GAUGE DRAWINGS:
TYPICAL WALL STUDS: 600S162-43 @ 16" O.C.
TYPICAL JAMB STUD: (2) 600S162-54
TYPICAL HEADER: (2) 600S162-54 W/ (2) 600T125-33

ENGINEERED LUMBER

- CODE FOR MEMBER DESIGN: ANSI/AF&PA NATIONAL DESIGN SPECIFICATION AND SUPPLEMENT. ALL MEMBERS SHALL BEAR AN APPROVED GRADE STAMP.
- ENGINEERED LUMBER DESIGN IS BASED ON THE FOLLOWING MINIMUM DESIGN PROPERTIES:
LVLs: Fb = 2600 PSI
Fv = 285 PSI
Fc (PERP) = 750 PSI
E = 1900 KSI
PSLs: Fb = 2400 PSI
Fc (PARA) = 2500 PSI
Fv = 190 PSI
E = 1800 KSI
GLULAM: 24F-V3 SP/SP ARCHITECTURAL STOCK
- LVLs AND PSLs SHALL BE PROTECTED FROM WEATHER ACCORDING TO THEIR MANUFACTURER'S RECOMMENDATIONS. GLULAM BEAMS ARE TO PRESERVATIVE TREATED IF THEY ARE EXPOSED TO WEATHER.

DIMENSIONAL LUMBER

- CODE FOR MEMBER DESIGN: ANSI/AF&PA NATIONAL DESIGN SPECIFICATION AND SUPPLEMENT. ALL MEMBERS SHALL BEAR AN APPROVED GRADE STAMP.
- DESIGN IS BASED ON SP. NO. 2 WITH DESIGN PROPERTIES ACCORDING TO THE SOUTHERN PINE 2013 ADDENDUM.
- ALL DIMENSIONAL LUMBER SIZES SHOWN ON DRAWINGS ARE NOMINAL DIMENSIONS.
- UNLESS NOTED OTHERWISE, LOAD BEARING PLATES AND LEDGERS SHALL BE PRESERVATIVE TREATED AND ANCHORED TO MASONRY OR CONCRETE WITH 1/2"Ø SILL ANCHORS AT 36" O.C.
- ALL LUMBER EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED.

DELEGATED DESIGN:

- THE STRUCTURAL DESIGN OF SEVERAL ELEMENTS IN THIS BUILDING HAVE BEEN DELEGATED TO THE PRODUCT MANUFACTURER. FOR EACH OF THESE ITEMS, A SUBMITTAL SEALED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA SHALL BE PROVIDED CERTIFYING THAT THE ELEMENTS HAVE BEEN DESIGNED TO SATISFY ALL REQUIRED LOADS AS NOTED ON THE DRAWING AND PER THE NORTH CAROLINA STATE BUILDING CODE.
- ITEMS CLASSIFIED AS "DELEGATED STRUCTURAL DESIGN" ON THIS PROJECT ARE, BUT NOT LIMITED TO:
A. LIGHT GAUGE FRAMING AND ASSOCIATED CONNECTIONS
B. CURTAIN WALLS AND ASSOCIATED SUPPORT SYSTEMS
- STRUCTURAL ITEMS NOT LISTED ABOVE THAT MAY REQUIRE AN ENGINEER'S SEAL SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER TO VERIFY CERTIFICATION REQUIREMENTS.

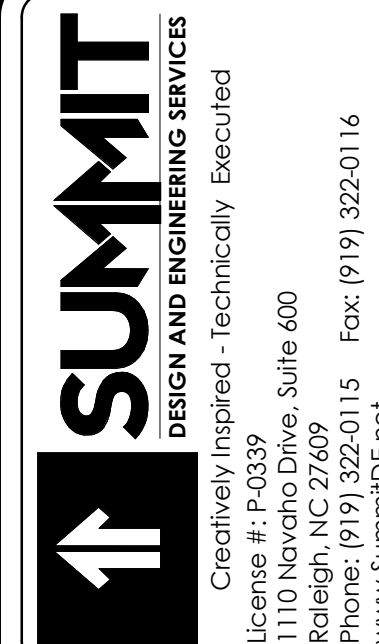
MATERIALS

- STEEL**
WIDE FLANGE MEMBERS
ANGLES & CHANNELS
PLATES & BARS (GENERAL)
PLATES & BARS (MOMENT CONNECTIONS)
HOLLOW STRUCTURAL SECTIONS (RECT)
MISCELLANEOUS PIPES
BOLTS (FRAMING MEMBERS)
ANCHOR RODS
ROOF DECKING
REINFORCING STEEL
GENERAL REINFORCING
WELDED WIRE FABRIC
WELD ELECTRODES
GENERAL - ROLLED OR FORMED MEMBERS
DECKING TO FRAME WELDS
CONCRETE
FOOTINGS
SLABS ON GRADE

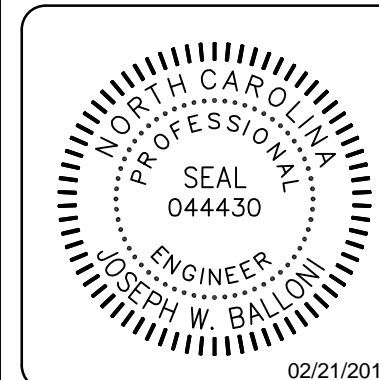
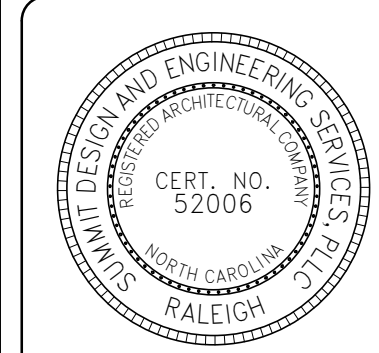
ASTM A992, Fy = 50KSI
ASTM A36, Fy = 36KSI
ASTM A36, Fy = 36KSI
ASTM A572, Fy = 50KSI
ASTM A500 GRADE B, Fy = 46KSI
ASTM A53, Fy = 35KSI
ASTM A352-N
ASTM F1554 GRADE 55, WELDABLE
ASTM A653SQ, GRADE 33 GALV.

ASTM A615, Fy = 60KSI
ASTM A185, IN FLAT SHEETS
E70xx ELECTRODES, CVN = 20#-FT AT 40 DEG.
E70xx OR E60xx

MIX F'c = 3000PSI NORMAL WEIGHT
MIX F'c = 4000PSI NORMAL WEIGHT



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSES OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

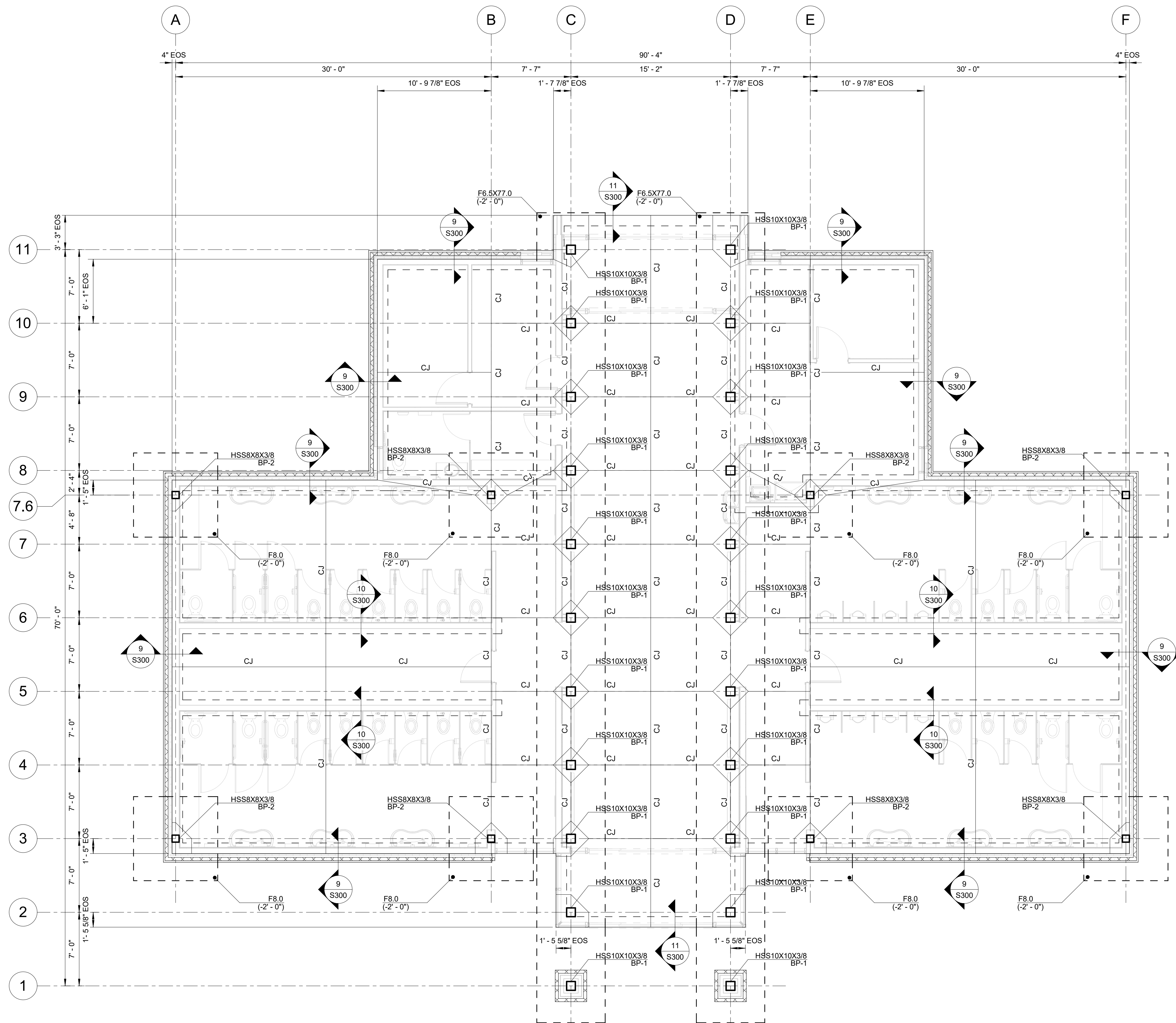


ENGINEER OF RECORD
JOSEPH W. BALLONI, PE
PROJECT MANAGER
C. CHRISTIAN BERG, PE
DRAWN BY: JWB
FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
GENERAL NOTES

PROJECT NO.
18-0129
SHEET NO.
S000



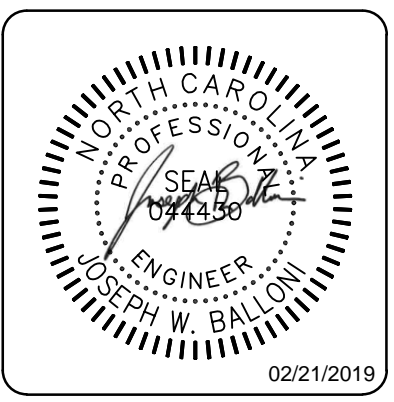
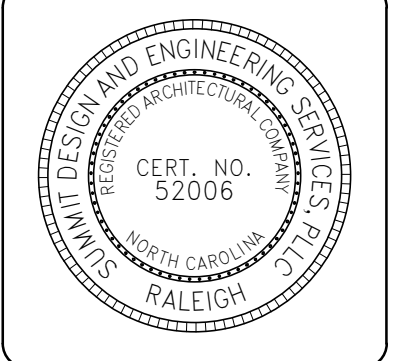
MARK	DIMENSIONS			REINFORCING	
	LENGTH	WIDTH	THK	LONG	SHORT
F6.5X77.0	6' - 6"	77' - 0"	1' - 0"	(6) #5	(65) #5
F8.0	8' - 0"	8' - 0"	1' - 6"	(8) #6	(8) #6

① FOUNDATION PLAN - RESTROOMS BUILDING
3/16" = 1'-0"

- NOTES:
- TOP OF SLAB REFERENCE ELEVATION = 0' - 0"
 - U.N.O. TYPICAL SLAB CONSTRUCTION CONSISTS OF 4" CONCRETE SLAB ON GRADE OVER 6MIL POLY VAPOR BARRIER ON 4" #7 STONE SUB-BASE. TYPICAL REINFORCEMENT CONSISTS OF W.W.F. 6X6 W1.4XW1.4. REFER TO DETAIL 1/S300 FOR ADDITIONAL INFORMATION.
 - ALL DIMENSIONS ARE TO EDGE OF SLAB (E.O.S.) OR COLUMN CENTERLINE. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
 - "FX-X" ON PLAN REFERS TO FOOTING MARK. SEE FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
 - "T.O.F." ON PLAN REFERS TO FOOTING ELEVATION AS MEASURED FROM REFERENCE ELEVATION AND IS NOTED (-X'-X") ON PLAN.
 - "C.J." ON PLAN DENOTES SLAB CONTROL JOINT. REFER TO DETAIL 2/S300 FOR ADDITIONAL INFORMATION.
 - "BP-X" ON PLAN REFERS TO COLUMN BASE PLATE. REFER TO DETAIL 7/S300 FOR ADDITIONAL INFORMATION.

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
License #: P-0339
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Phone: (919) 322-0115 Fax: (919) 322-0116
www.summitde.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



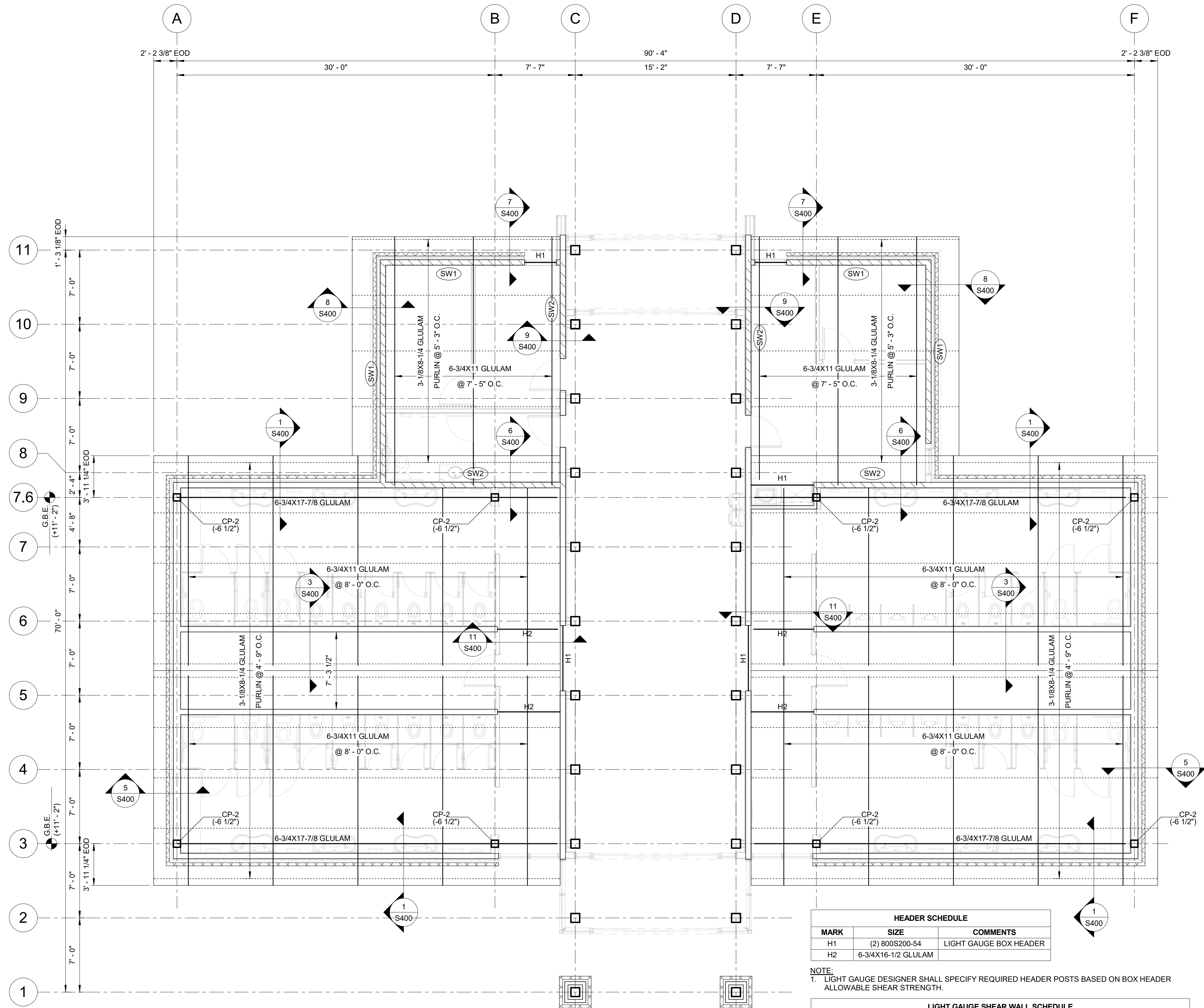
ENGINEER OF RECORD
JOSEPH W. BALLONI, PE
PROJECT MANAGER
C. CHRISTIAN BERG, PE
DRAWN BY: JWB FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

PROJECT NO.
18-0129
SHEET NO.
S100

FOUNDATION PLAN - RESTROOMS



HEADER SCHEDULE		
MARK	SIZE	COMMENTS
H1	(2) 800S200-54	LIGHT GAUGE BOX HEADER
H2	6-3/4x16-1/2 GLULAM	

NOTE:
 1. LIGHT GAUGE DESIGNER SHALL SPECIFY REQUIRED HEADER POSTS BASED ON BOX HEADER ALLOWABLE SHEAR STRENGTH.

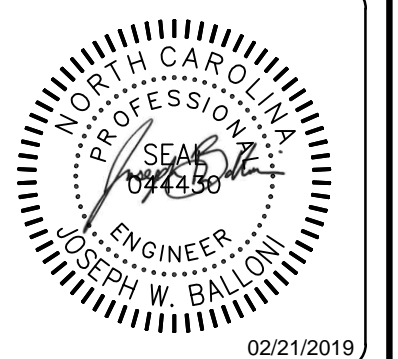
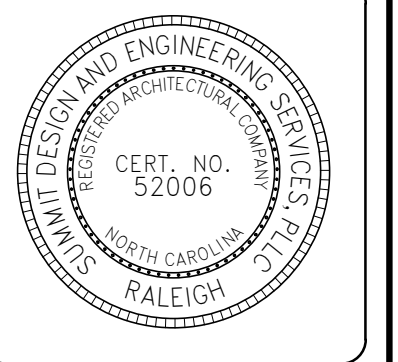
LIGHT GAUGE SHEAR WALL SCHEDULE					
MARK	SHEATHING	FASTENING		END POST	COMMENTS
		EDGE	FIELD		
SW1	7/16" OSB	#8 TEK @ 6" O.C.	#8 TEK @ 12" O.C.	600S200-54	
SW2	0.027" STEEL SHEET	#8 TEK @ 6" O.C.	#8 TEK @ 12" O.C.	600S200-54	

NOTES:
 1. LIGHT GAUGE STUDS AND RUNNER TRACKS SHALL BE 33 MILS MINIMUM THICKNESS.
 2. LIGHT GAUGE STUDS AND RUNNER TRACKS SHALL BE ASTM A1003, GRADE 33 TYPE H
 3. LIGHT GAUGE DESIGNER SHALL SPECIFY REQUIRED ANCHORAGE TO FOUNDATION AT EACH END POST BASED ON DESIGN SERVICE UPLIFT OF 3,400 LBS.
 4. LIGHT GAUGE DESIGNER MAY SUBSTITUTE STRAPPING INSTEAD OF STEEL SHEET SHEATHING. STRAPPING SHALL MEET OR EXCEED CAPACITY OF STEEL SHEET SHEATHING AS SPECIFIED.

1 LOW ROOF FRAMING PLAN - RESTROOMS BUILDING
 3/16" = 1'-0"

- NOTES:
 1. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
 2. ROOF SHEATHING TO BE 7/16" APA RATED OSB. SHEATHING SHALL BE NAILED TO T&G DECKING WITH 11 GAUGE X 1-3/4" ROOFING NAILS WITH MAX. SPACING 4" AND 12" AT EDGE AND FIELD, RESPECTIVELY. FIELD NAILING LINES SHALL BE SPACED A MAXIMUM OF 24" ON CENTER.
 3. ALL CUT ENDS OF T&G DECKING SHALL BEAR ON A PURLIN, EXCEPT AT ROOF EDGE CANTILEVER. DECKING SHALL BE FASTENED TO EACH PURLIN WITH (2) #12 X 4" WOOD SCREWS MINIMUM.
 4. ALL EXPOSED EXTERIOR TIMBER MEMBERS SHALL BE PRESSURE TREATED.
 5. "G.B.E." REFERS TO GIRDER BEARING ELEVATION AS MEASURED FROM TOP OF SLAB AND IS NOTED AS (+X-X") ON PLAN.
 6. "T.O.C." REFERS TO TOP OF COLUMN ELEVATION AS MEASURED FROM GIRDER BEARING ELEVATION AND IS NOTED AS (-X) ON PLAN.
 7. "E.O.D." ON PLAN REFERS TO EDGE OF DECK.
 8. "HX" ON PLAN REFERS TO HEADER, SEE HEADER SCHEDULE FOR ADDITIONAL INFORMATION.
 9. "SW" ON PLAN REFERS TO SHEAR WALL, SEE LIGHT GAUGE SHEAR WALL SCHEDULE FOR ADDITIONAL INFORMATION.

COPYRIGHT © 2018 SUMMIT
 DESIGN AND ENGINEERING SERVICES
 THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



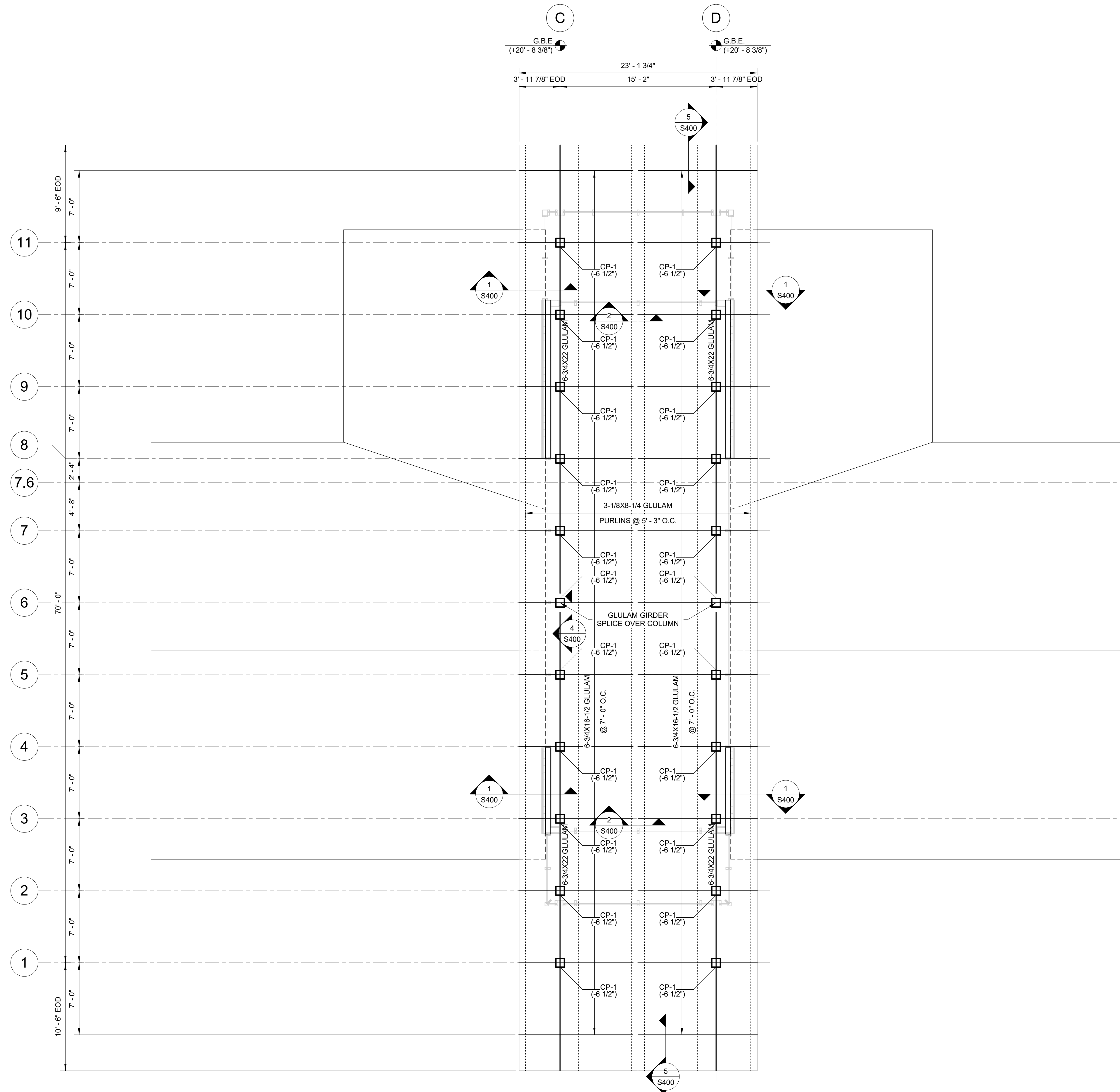
ENGINEER OF RECORD
 JOSEPH W. BALLONI, PE
 PROJECT MANAGER
 C. CHRISTIAN BERG, PE
 DRAWN BY: JWB FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCDOT	11/16/18	JB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732

LOW ROOF PLAN - RESTROOMS

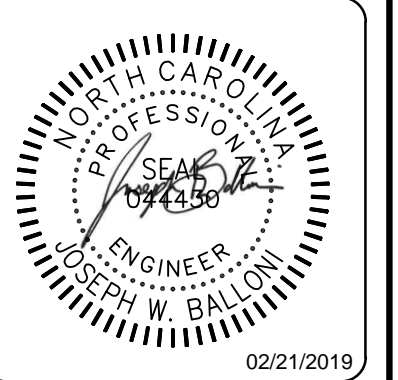
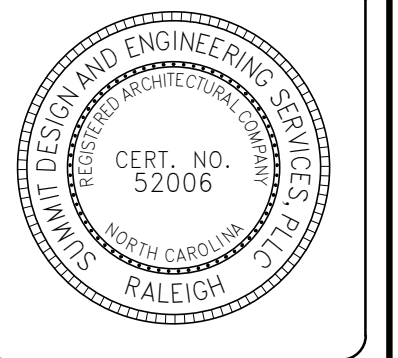
PROJECT NO.
18-0129
 SHEET NO.
S101



1 HIGH ROOF FRAMING PLAN - RESTROOMS BUILDING
3/16" = 1'-0"

- NOTES:**
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
 - ROOF SHEATHING TO BE 7/16" APA RATED OSB. SHEATHING SHALL BE NAILED TO T&G DECKING WITH 11 GAUGE X 1-3/4" ROOFING NAILS WITH MAX. SPACING 4" AND 12" AT EDGE AND FIELD, RESPECTIVELY. FIELD NAILING LINES SHALL BE SPACED A MAXIMUM OF 24" ON CENTER.
 - ALL CUT ENDS OF T&G DECKING SHALL BEAR ON A PURLIN, EXCEPT AT ROOF EDGE CANTILEVER. DECKING SHALL BE FASTENED TO EACH PURLIN WITH (2) #12 X 4" WOOD SCREWS MINIMUM.
 - ALL EXPOSED EXTERIOR TIMBER MEMBERS SHALL BE PRESSURE TREATED.
 - "G.B.E." REFERS TO GIRDER BEARING ELEVATION AS MEASURED FROM TOP OF SLAB AND IS NOTED AS (+X'-X") ON PLAN.
 - "T.O.C." REFERS TO TOP OF COLUMN ELEVATION AS MEASURED FROM GIRDER BEARING ELEVATION AND IS NOTED AS (-X") ON PLAN.
 - "E.O.D." ON PLAN REFERS TO EDGE OF DECK.

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



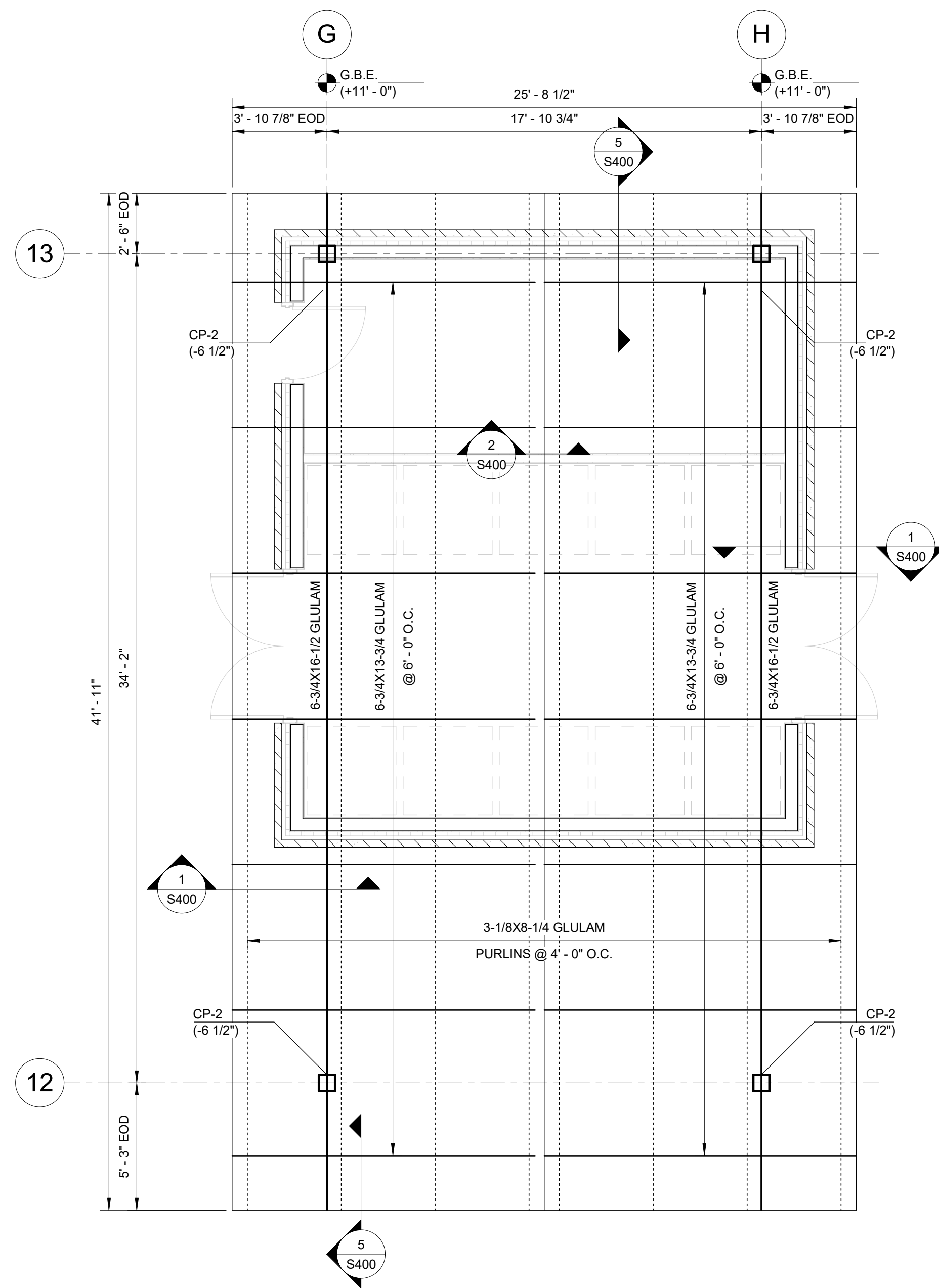
ENGINEER OF RECORD
JOSEPH W. BALLONI, PE
PROJECT MANAGER
C. CHRISTIAN BERG, PE
DRAWN BY: JWB FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JWB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

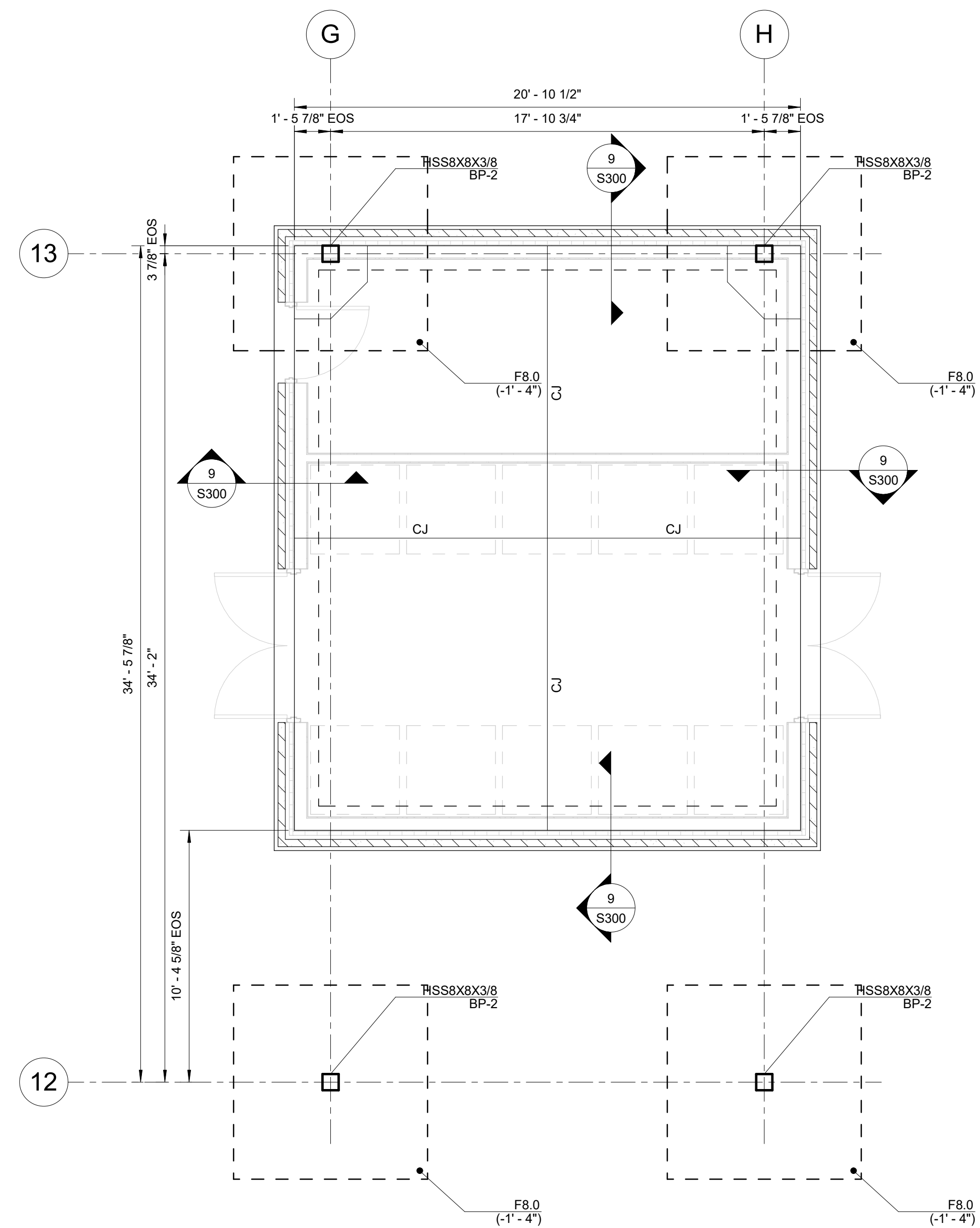
HIGH ROOF PLAN - RESTROOMS

PROJECT NO.
18-0129
SHEET NO.
S102



② ROOF FRAMING PLAN - VENDING BUILDING
1/4" = 1'-0"

- NOTES:
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
 - ROOF SHEATHING TO BE 7/16" APA RATED OSB. SHEATHING SHALL BE NAILED TO T&G DECKING WITH 11 GAUGE X 1-3/4" ROOFING NAILS WITH MAX. SPACING 4" AND 12" AT EDGE AND FIELD, RESPECTIVELY. FIELD NAILING LINES SHALL BE SPACED A MAXIMUM OF 24" ON CENTER.
 - ALL CUT ENDS OF T&G DECKING SHALL BEAR ON A PURLIN, EXCEPT AT ROOF EDGE. DECKING SHALL BE FASTENED TO EACH PURLIN WITH (2) #12 X 4" WOOD SCREWS MINIMUM.
 - ALL EXPOSED EXTERIOR TIMBER MEMBERS SHALL BE PRESSURE TREATED.
 - "G.B.E." REFERS TO GIRDER BEARING ELEVATION AS MEASURED FROM TOP OF SLAB AND IS NOTED AS (+X'-X") ON PLAN.
 - "T.O.C." REFERS TO TOP OF COLUMN ELEVATION AS MEASURED FROM GIRDER BEARING ELEVATION AND IS NOTED AS (-X") ON PLAN.
 - "E.O.D." ON PLAN REFERS TO EDGE OF DECK.

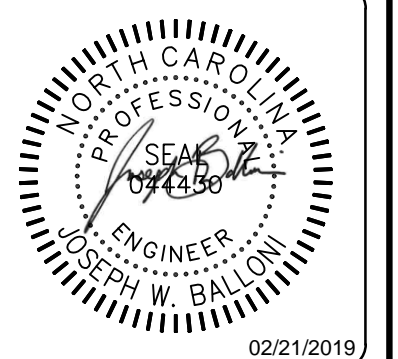
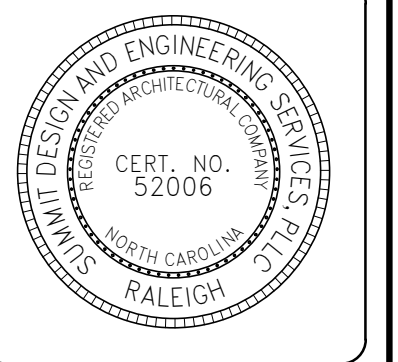


① FOUNDATION PLAN - VENDING BUILDING
1/4" = 1'-0"

- NOTES:
- TOP OF SLAB REFERENCE ELEVATION = 0' - 0"
 - U.N.O. TYPICAL SLAB CONSTRUCTION CONSISTS OF 4" CONCRETE SLAB ON GRADE OVER 6MIL POLY VAPOR BARRIER ON 4" #57 STONE SUB-BASE. TYPICAL REINFORCEMENT CONSISTS OF W.W.F. 6X6 W1.4XW1.4. REFER TO DETAIL 1/S300 FOR ADDITIONAL INFORMATION.
 - ALL DIMENSIONS ARE TO EDGE OF SLAB (E.O.S.) OR COLUMN CENTERLINE. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
 - "FX-X" ON PLAN REFERS TO FOOTING MARK. SEE FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
 - "T.O.F." ON PLAN REFERS TO FOOTING ELEVATION AS MEASURED FROM REFERENCE ELEVATION AND IS NOTED (-X'-X") ON PLAN.
 - "C.J." ON PLAN DENOTES SLAB CONTROL JOINT. REFER TO DETAIL 2/S300 FOR ADDITIONAL INFORMATION.
 - "BP-X" ON PLAN REFERS TO COLUMN BASE PLATE. REFER TO DETAIL 7/S300 FOR ADDITIONAL INFORMATION.

MARK	DIMENSIONS			REINFORCING	
	LENGTH	WIDTH	THK	LONG	SHORT
F6.5X77.0	6' - 6"	77' - 0"	1' - 0"	(6) #5	(65) #5
F8.0	8' - 0"	8' - 0"	1' - 6"	(8) #6	(8) #6

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



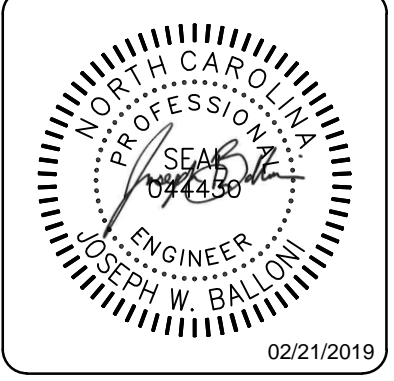
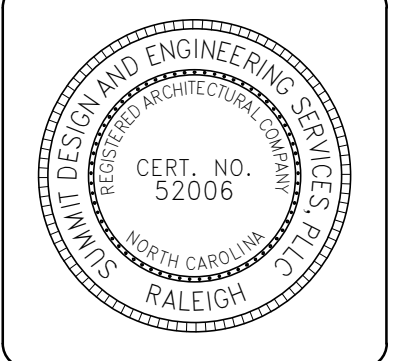
ENGINEER OF RECORD
JOSEPH W. BALLONI, PE
PROJECT MANAGER
C. CHRISTIAN BERG, PE
DRAWN BY: JWB FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
FDN & ROOF PLANS - VENDING

PROJECT NO.
18-0129
SHEET NO.
S200

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
 THIS DRAWING AND THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



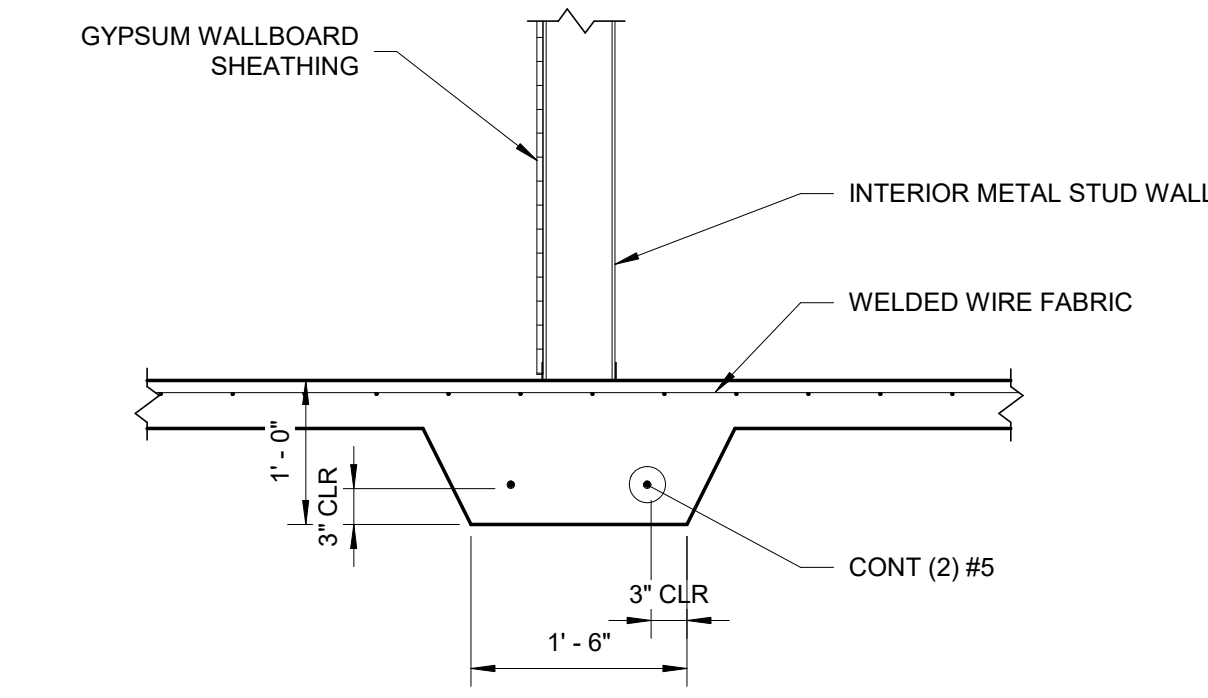
ENGINEER OF RECORD
 JOSEPH W. BALLONI, PE
 PROJECT MANAGER
 C. CHRISTIAN BERG, PE
 DRAWN BY: JWB
 FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

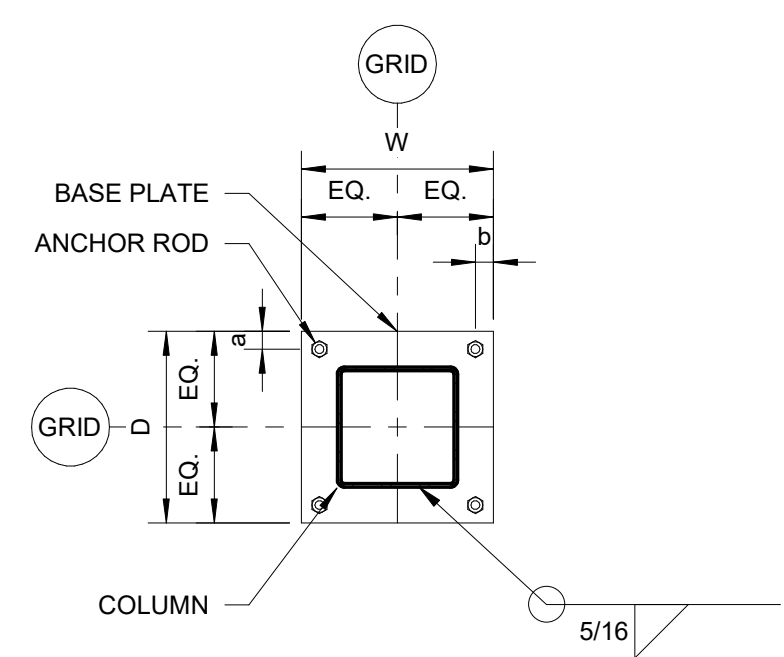
NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732

PROJECT NO.
18-0129
 SHEET NO.
S300

FOUNDATION DETAILS



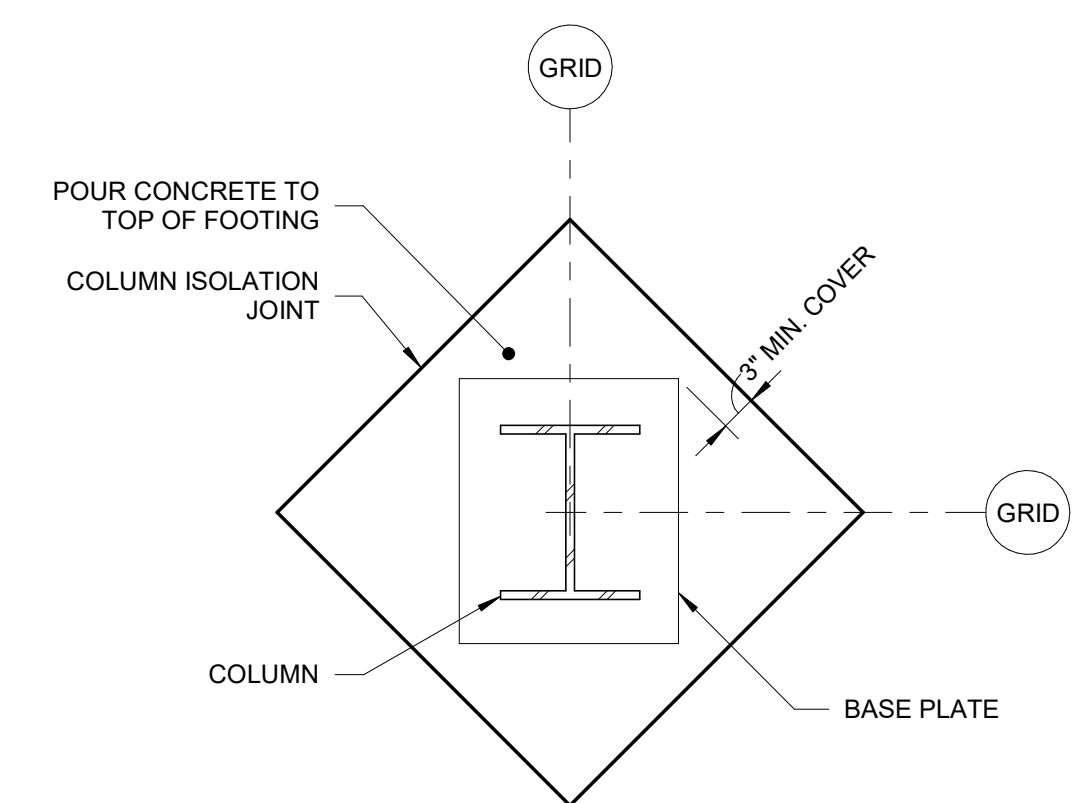
10 TYPICAL INTERIOR TURNDOWN SLAB SECTION
 3/4" = 1'-0"



BASE PLATE SCHEDULE

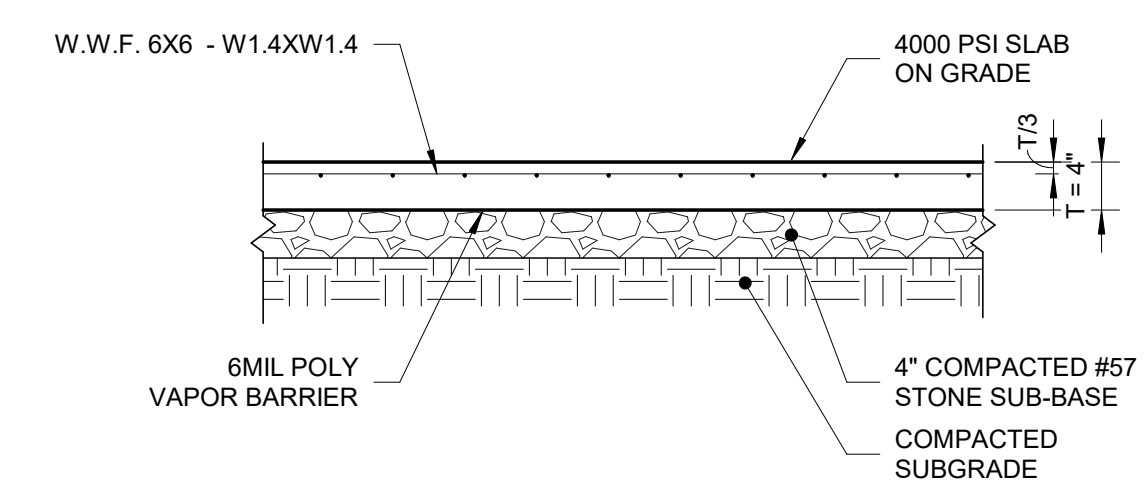
MARK	D	W	a	b	THK.	ROD DIA.	EMBED
BP-1	1'-5"	1'-5"	1 3/4"	1 3/4"	1"	1"Ø	0'-8"
BP-2	1'-3"	1'-3"	1 3/4"	1 3/4"	1 1/2"	1"Ø	1'-2"

7 COLUMN BASE PLATE PLAN
 NTS



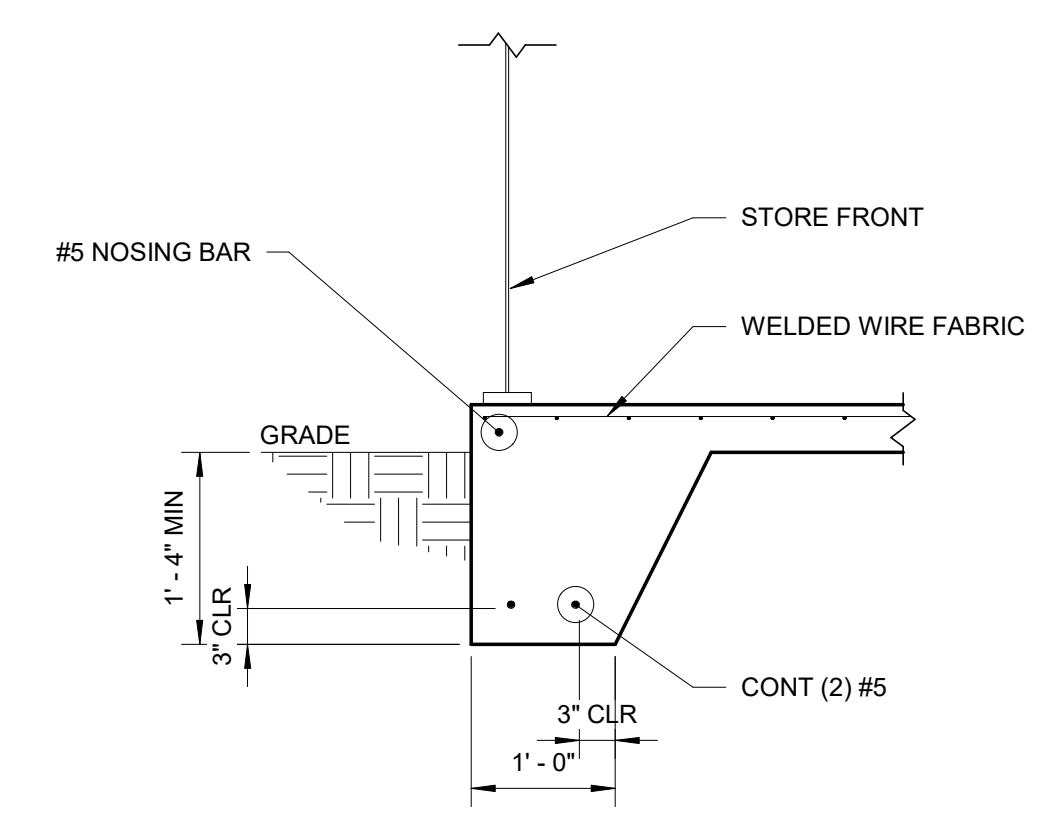
NOTE:
 1. ENSURE COLUMN ISOLATION BLOCK-OUT IS LARGE ENOUGH TO ACCEPTABLE TUBE BRACES WHERE APPLICABLE.

4 TYPICAL INTERIOR COLUMN ISOLATION JOINT
 NTS

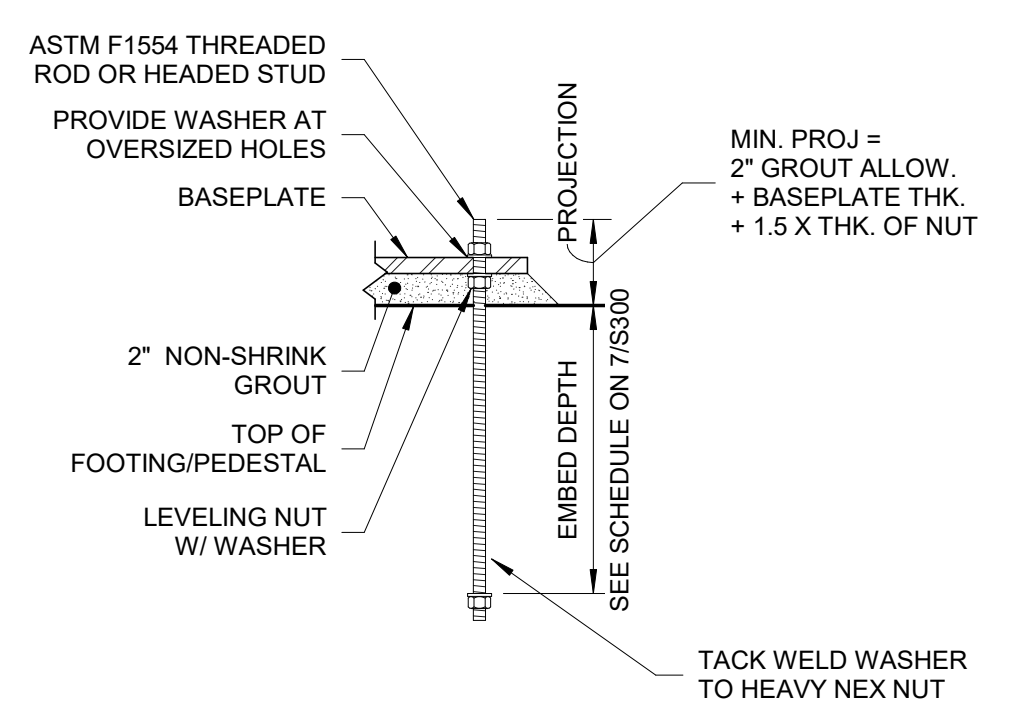


NOTE:
 1. SLAB REINFORCEMENT SHALL BE SUPPORTED BY CHAIRS AS REQUIRED TO MAINTAIN POSITION DURING CONCRETE POUR.

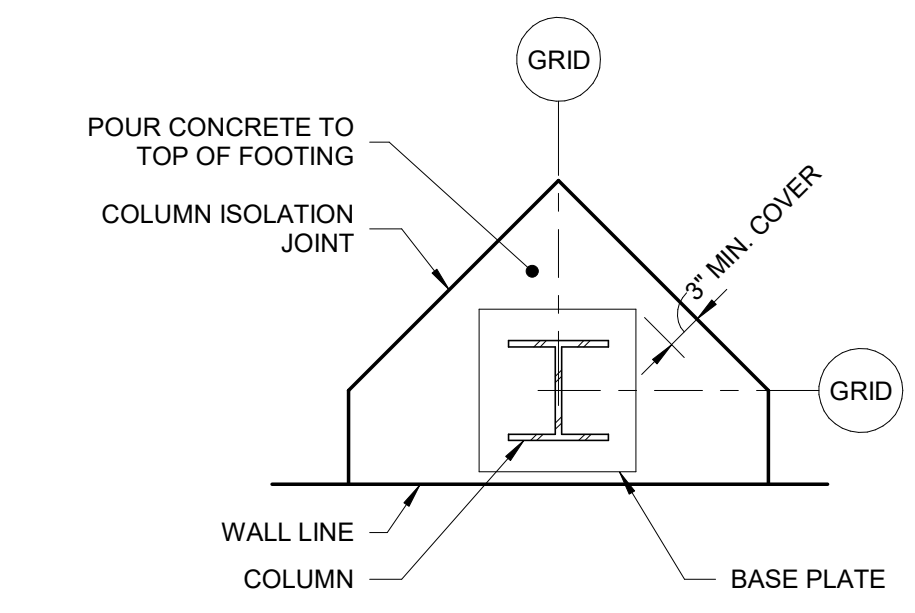
1 TYPICAL SLAB ON GRADE
 NTS



11 TYPICAL EXTERIOR TURNDOWN SLAB SECTION
 3/4" = 1'-0"

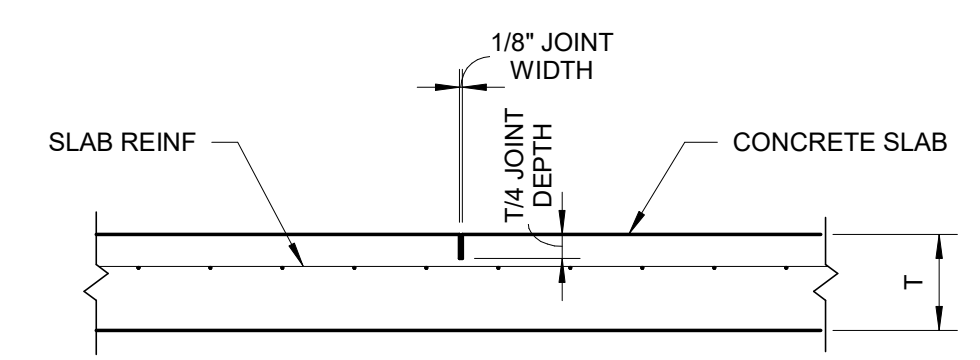


8 TYPICAL ANCHOR ROD DETAIL
 NTS

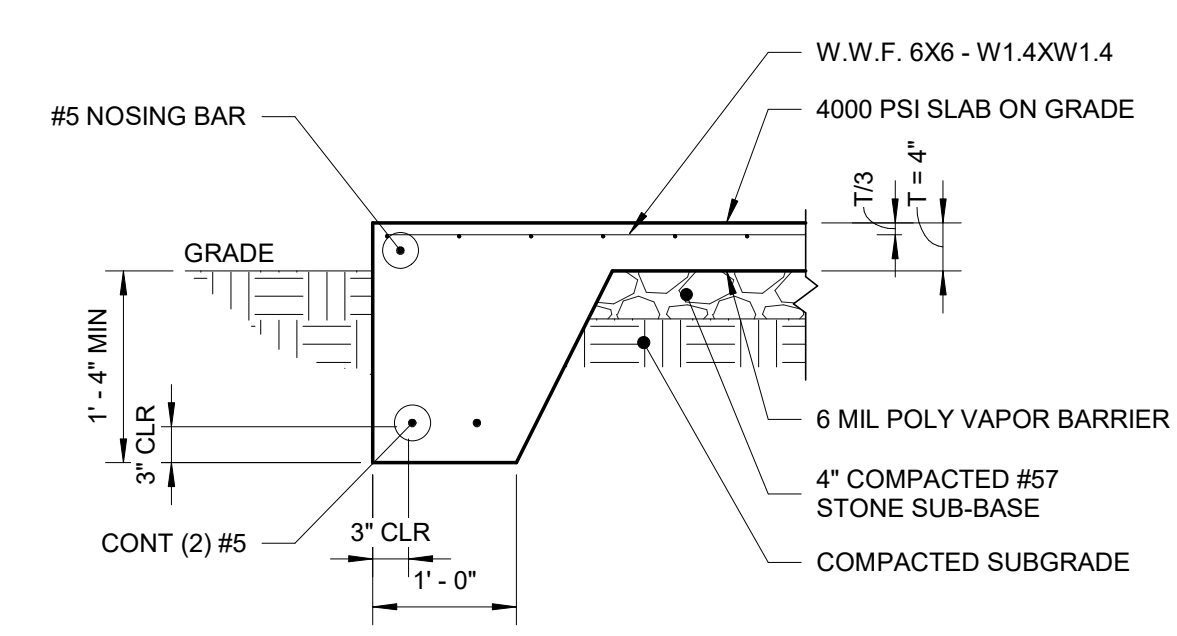


NOTE:
 1. ENSURE COLUMN ISOLATION BLOCK-OUT IS LARGE ENOUGH TO ACCEPTABLE TUBE BRACES WHERE APPLICABLE.

5 TYPICAL EXTERIOR COLUMN ISOLATION JOINT
 NTS

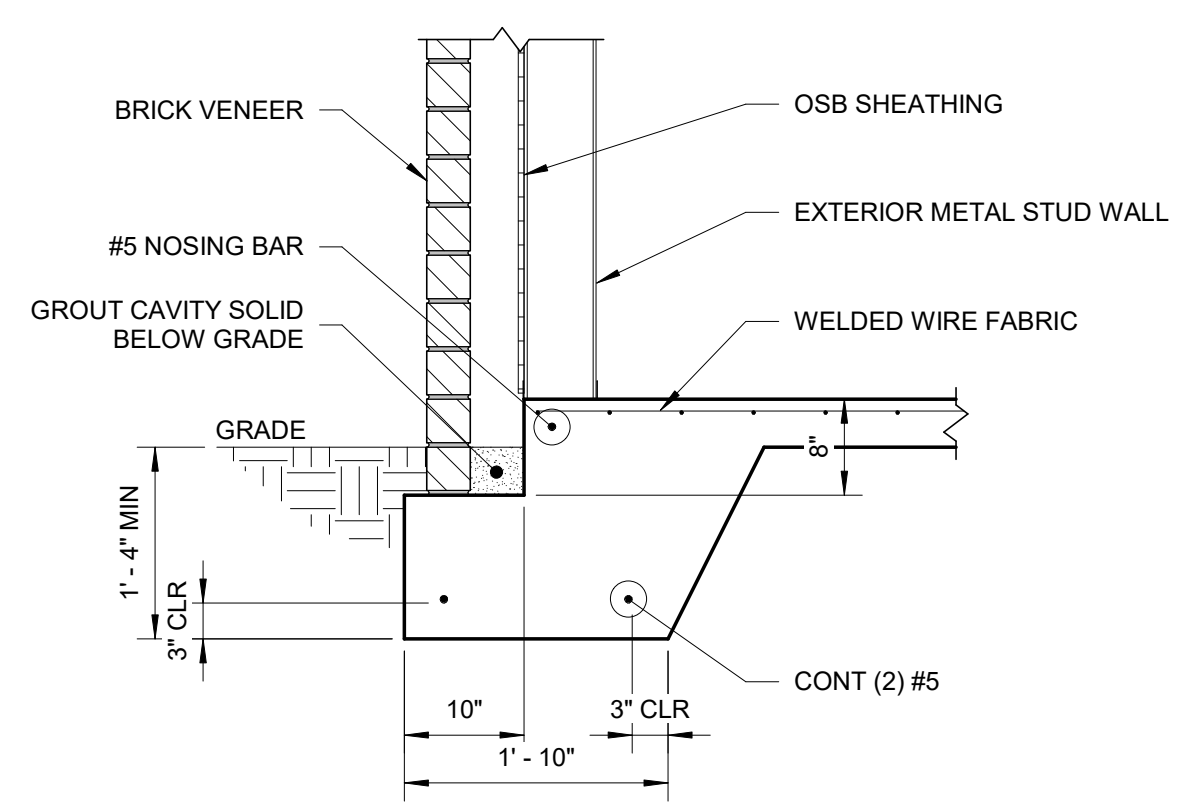


2 TYPICAL SLAB ON GRADE CONTROL JOINT - CJ
 NTS

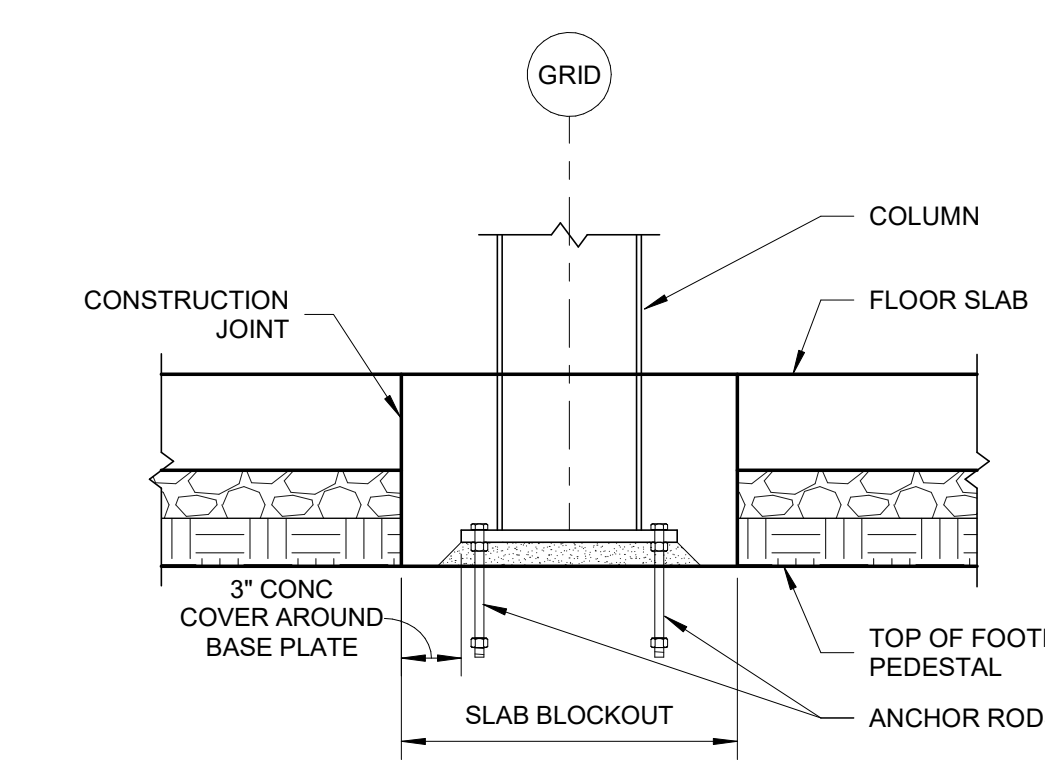


NOTES:
 1. PAD REINFORCEMENT SHALL BE SUPPORTED ON CHAIRS AS REQUIRED TO MAINTAIN POSITION DURING CONCRETE POUR.
 2. GENERATOR PAD DESIGN BASED ON A UNIT WEIGHT OF 5000 LBS, AND A MAXIMUM DISTRIBUTED DEMAND OF 50 PSF.
 3. SAWED CONTROL JOINTS SHALL BE SPACED APPROPRIATELY BASED ON FINAL GENERATOR PAD DIMENSIONS TO CONTROL CONCRETE CRACKING.

12 TYPICAL GENERATOR PAD SECTION
 3/4" = 1'-0"

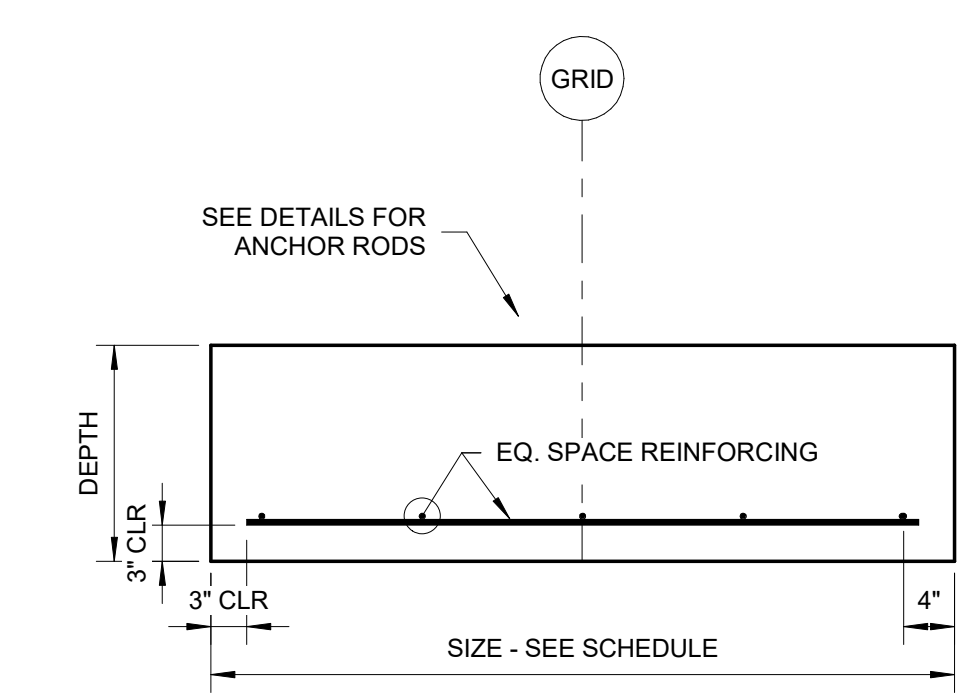


9 TYPICAL EXTERIOR TURNDOWN SLAB WITH BRICK SHELF SECTION
 3/4" = 1'-0"

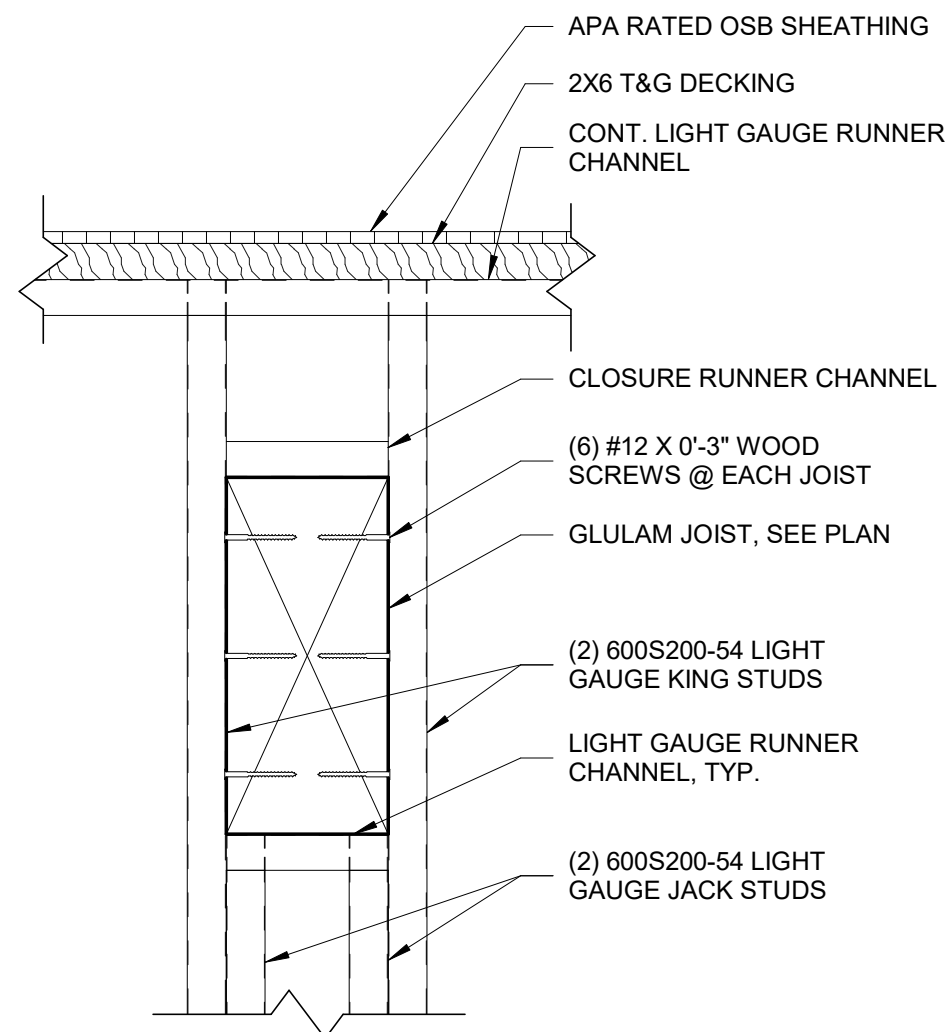


NOTE:
 1. POUR SLAB BLOCKOUT AFTER FLOOR SLAB HAS CURED AT LEAST 7 DAYS.

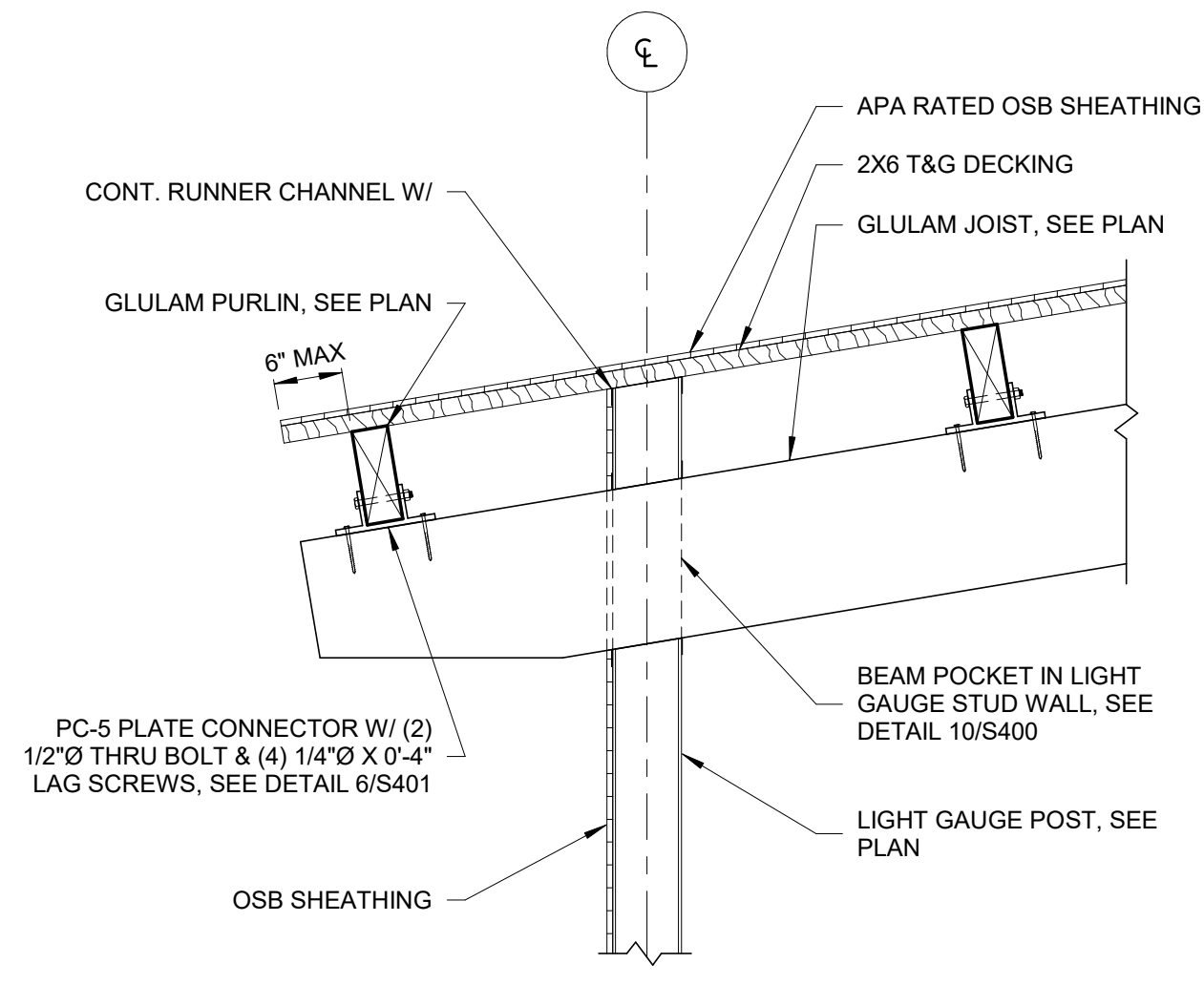
6 TYPICAL SLAB ON GRADE BLOCKOUT AT COLUMN
 NTS



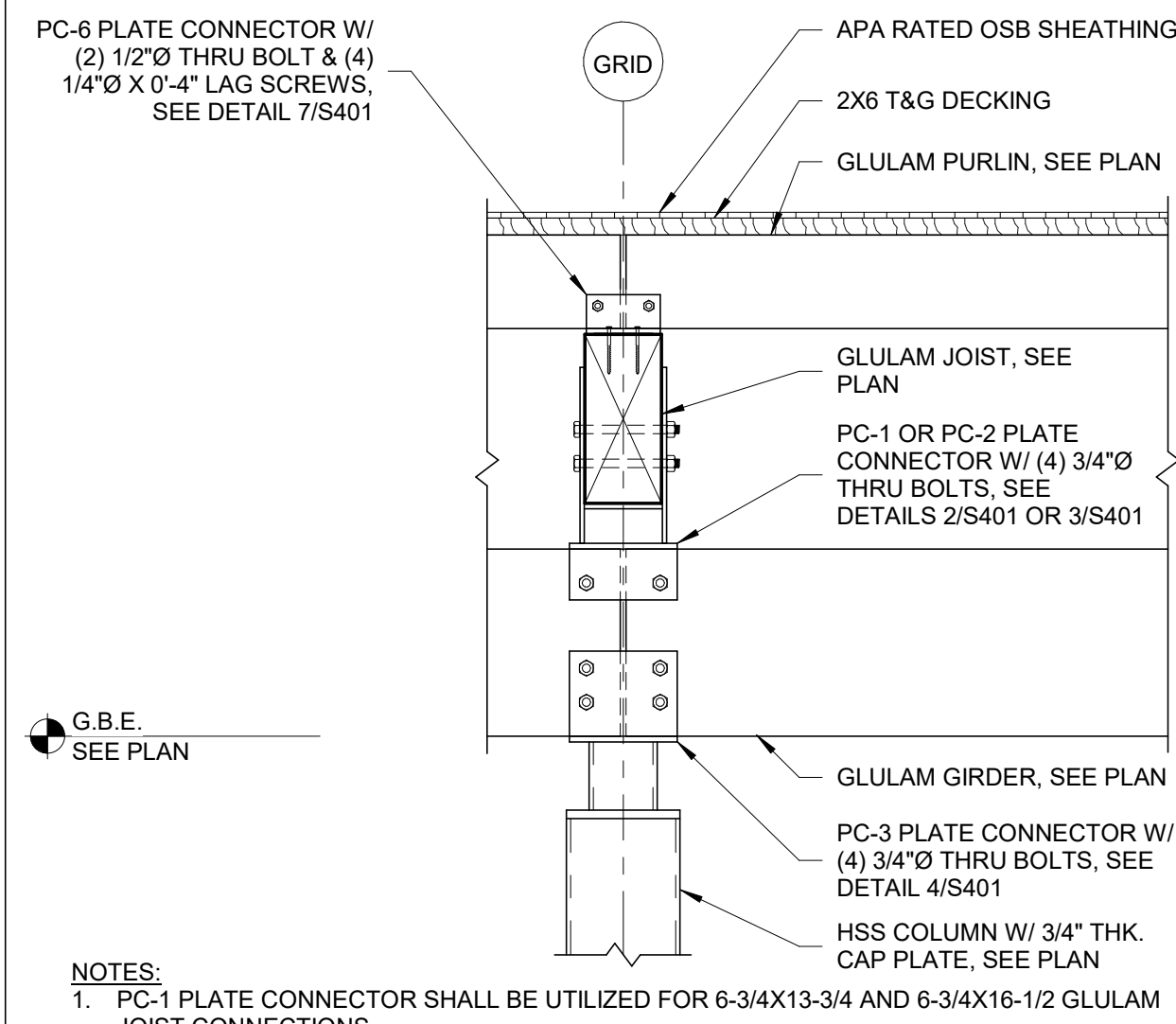
3 TYPICAL COLUMN FOOTING ELEVATION
 NTS



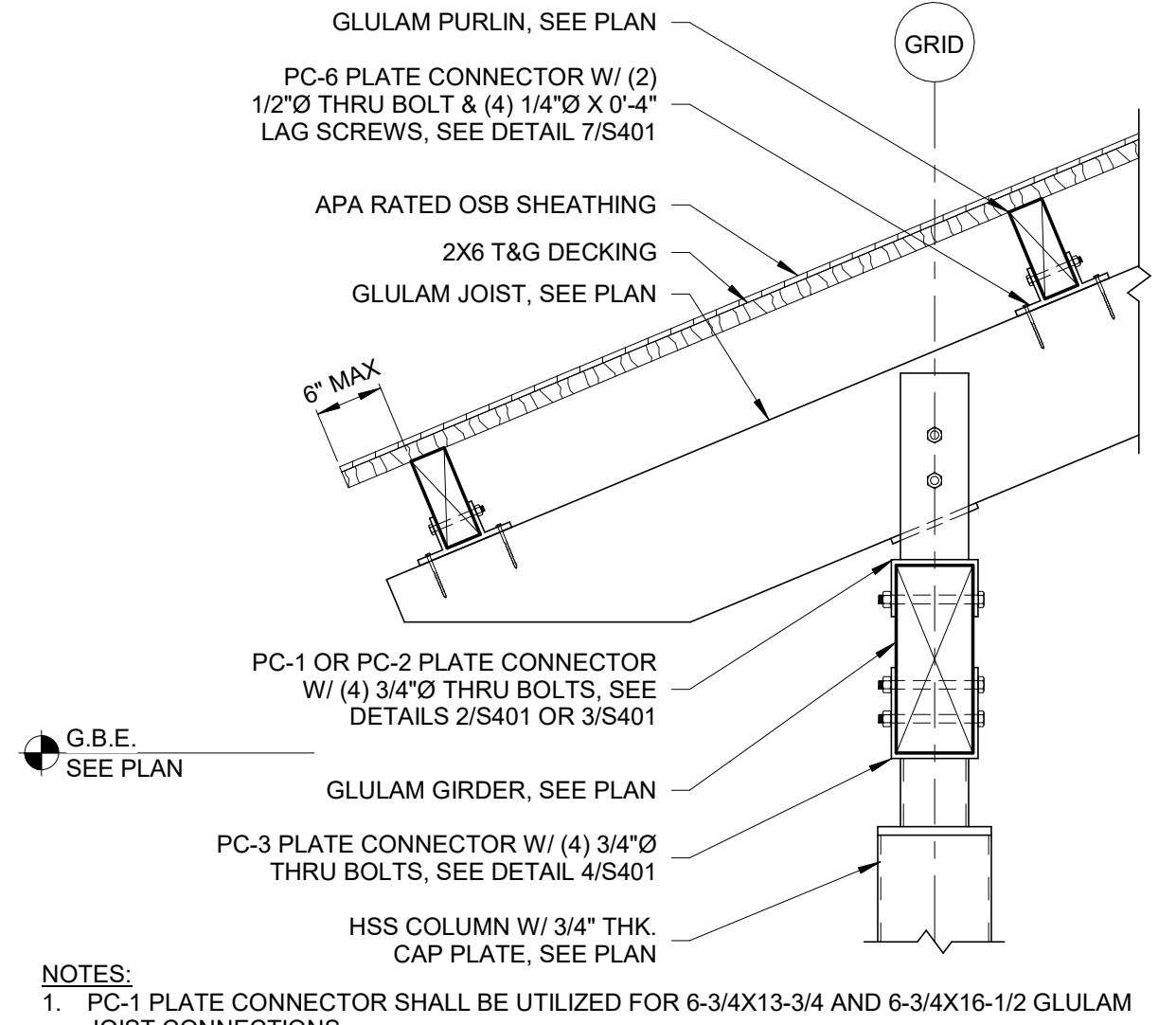
10 BEAM POCKET IN LIGHT GAUGE STUD WALL ELEVATION
1 1/2" = 1'-0"



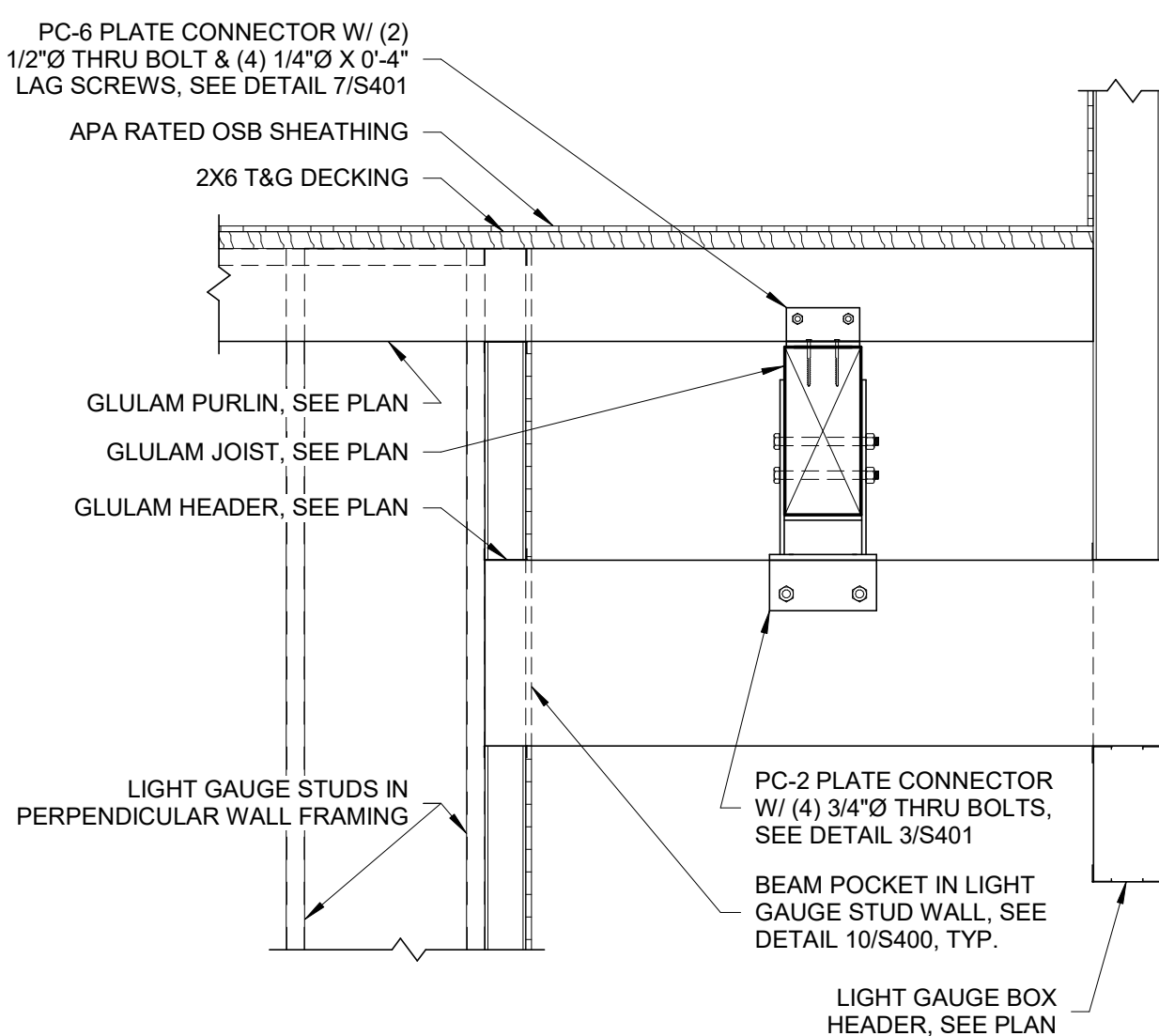
7 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



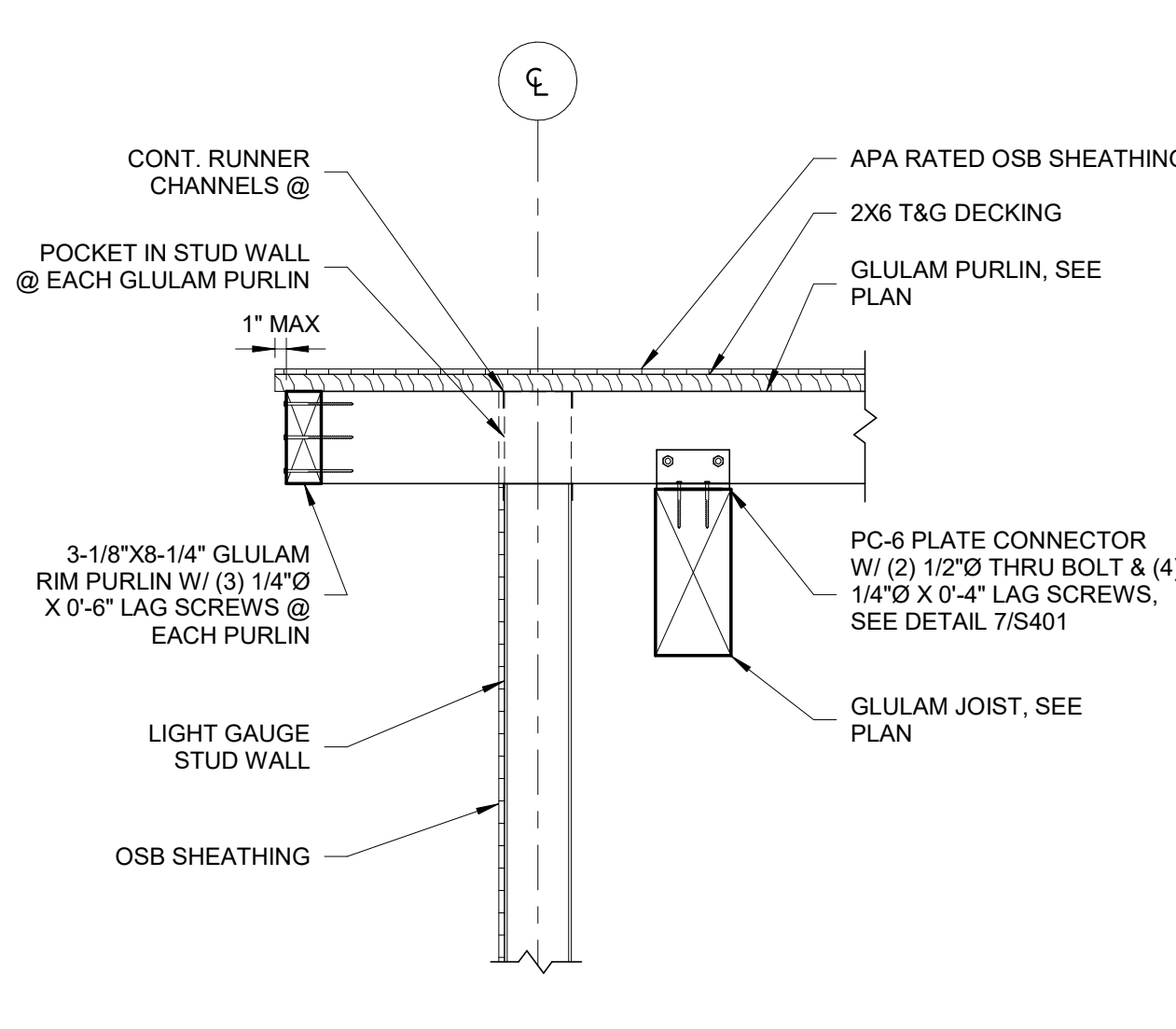
4 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



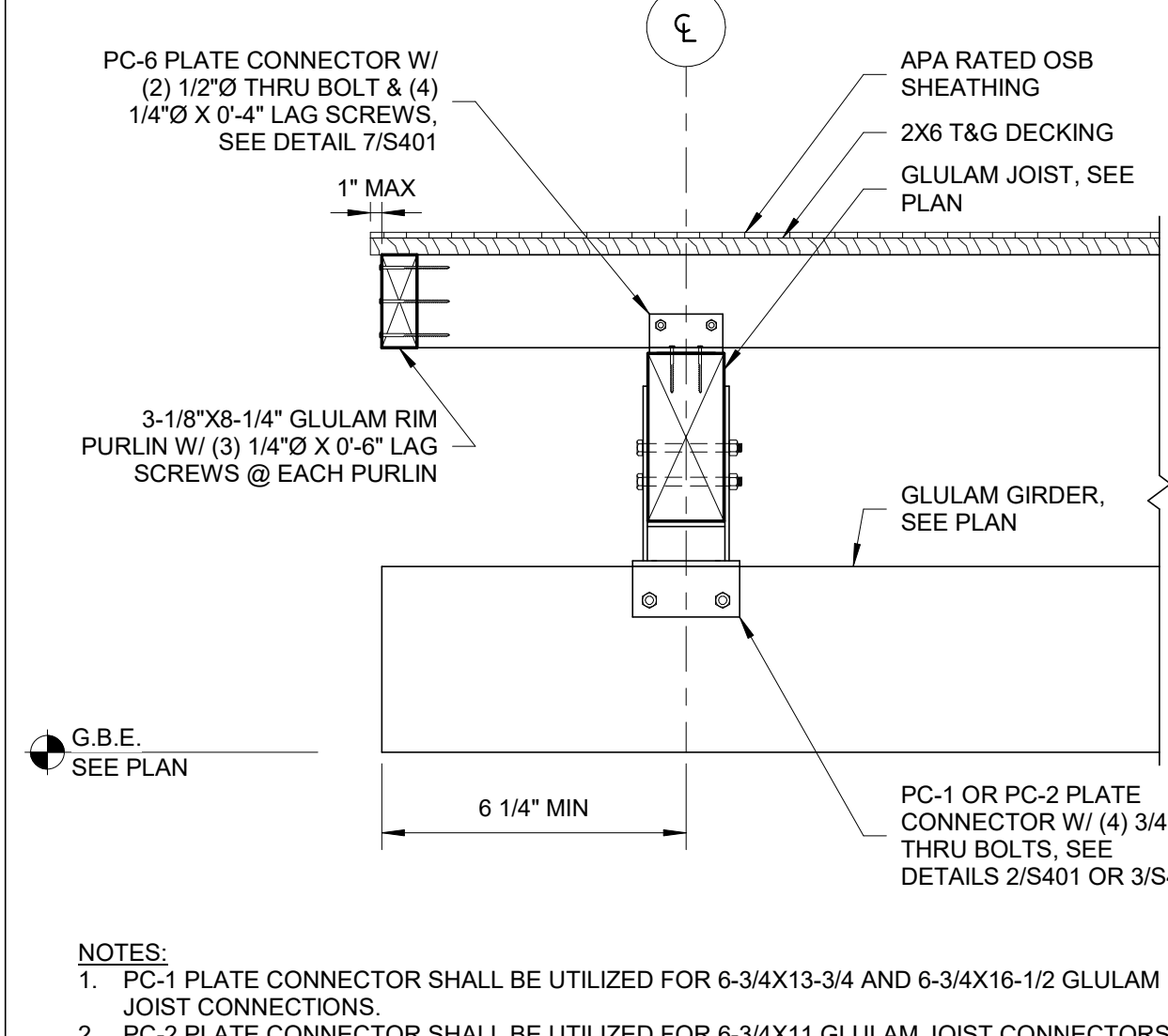
1 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



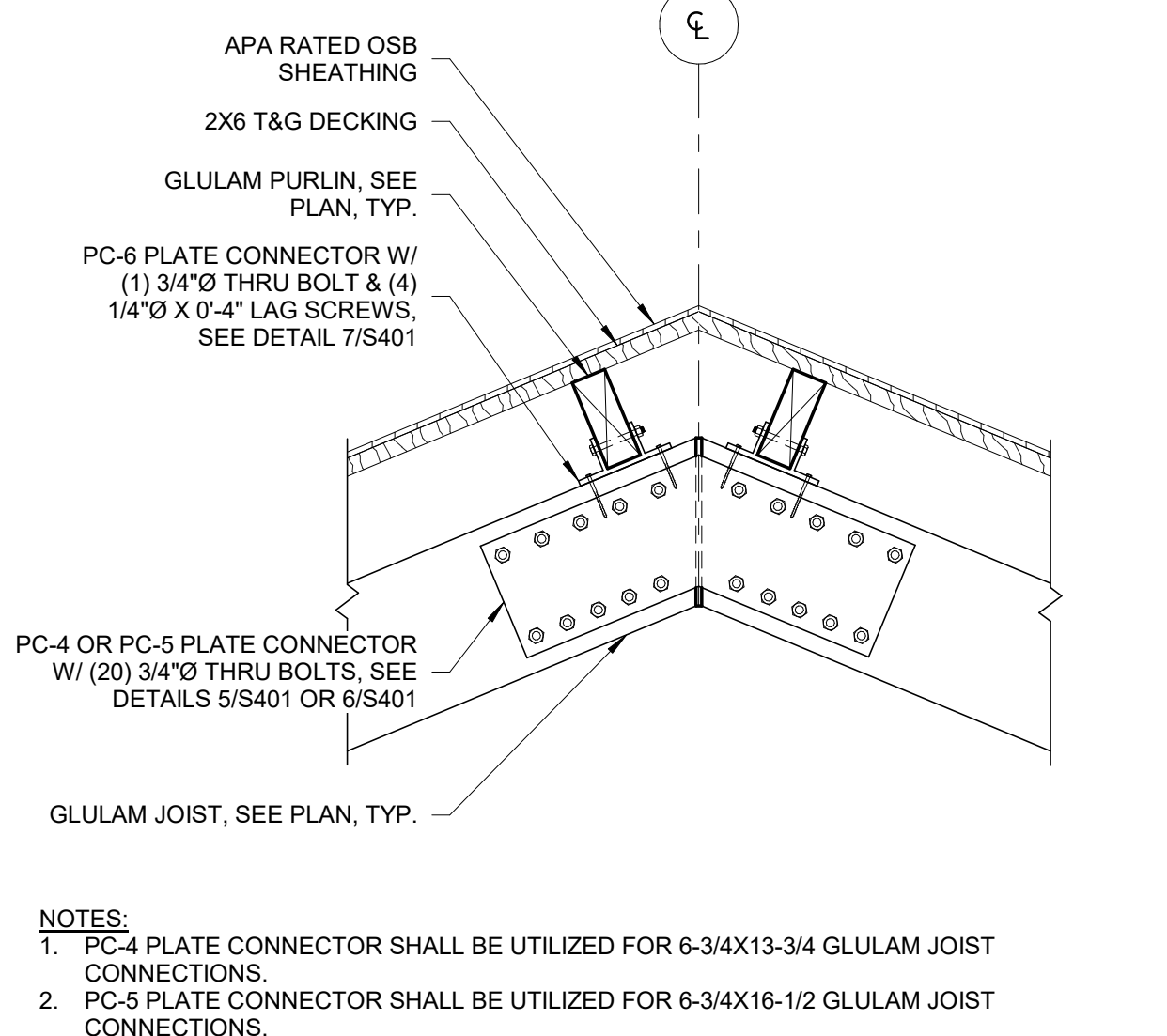
11 GLULAM HEADER ELEVATION
NTS



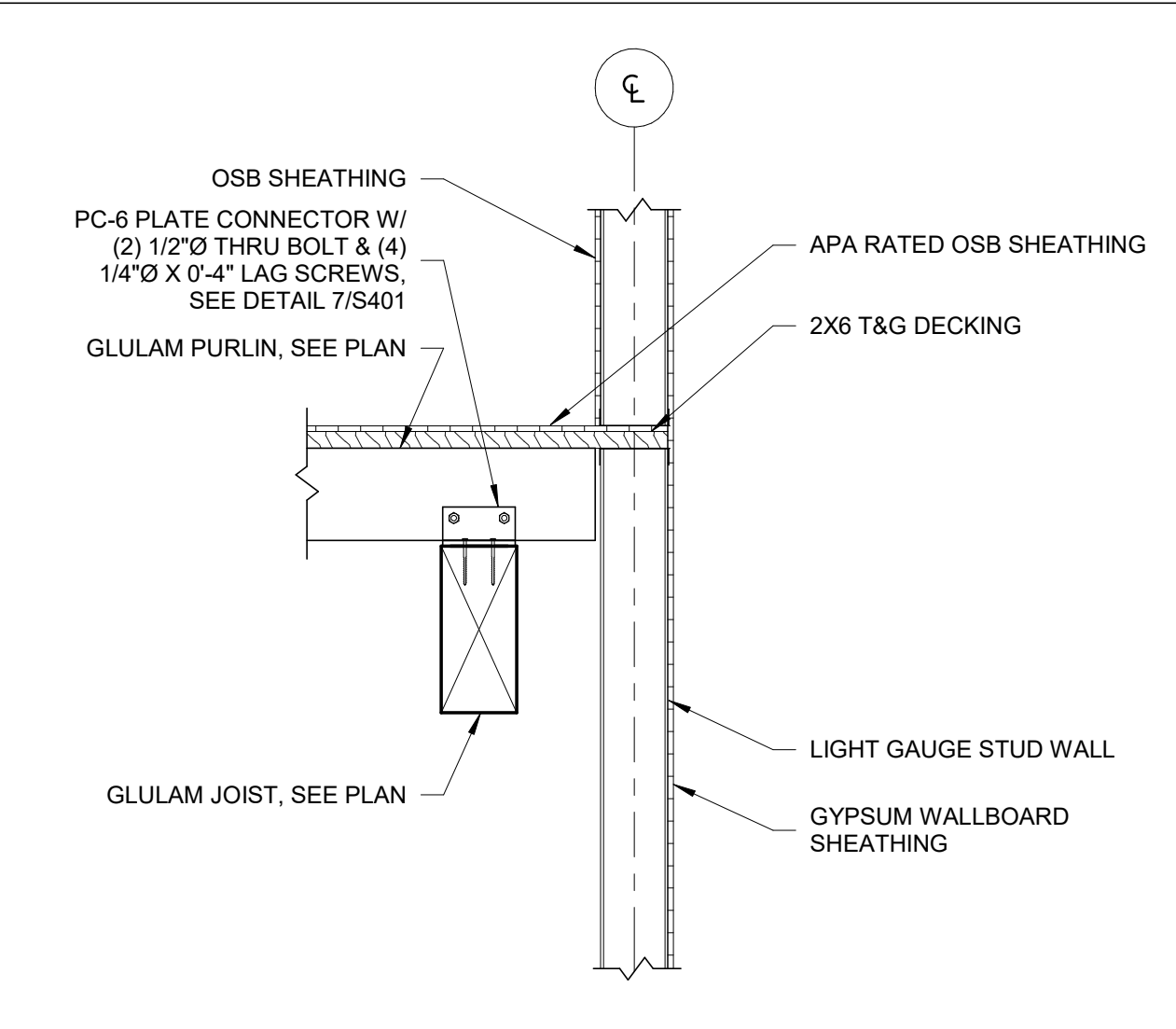
8 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



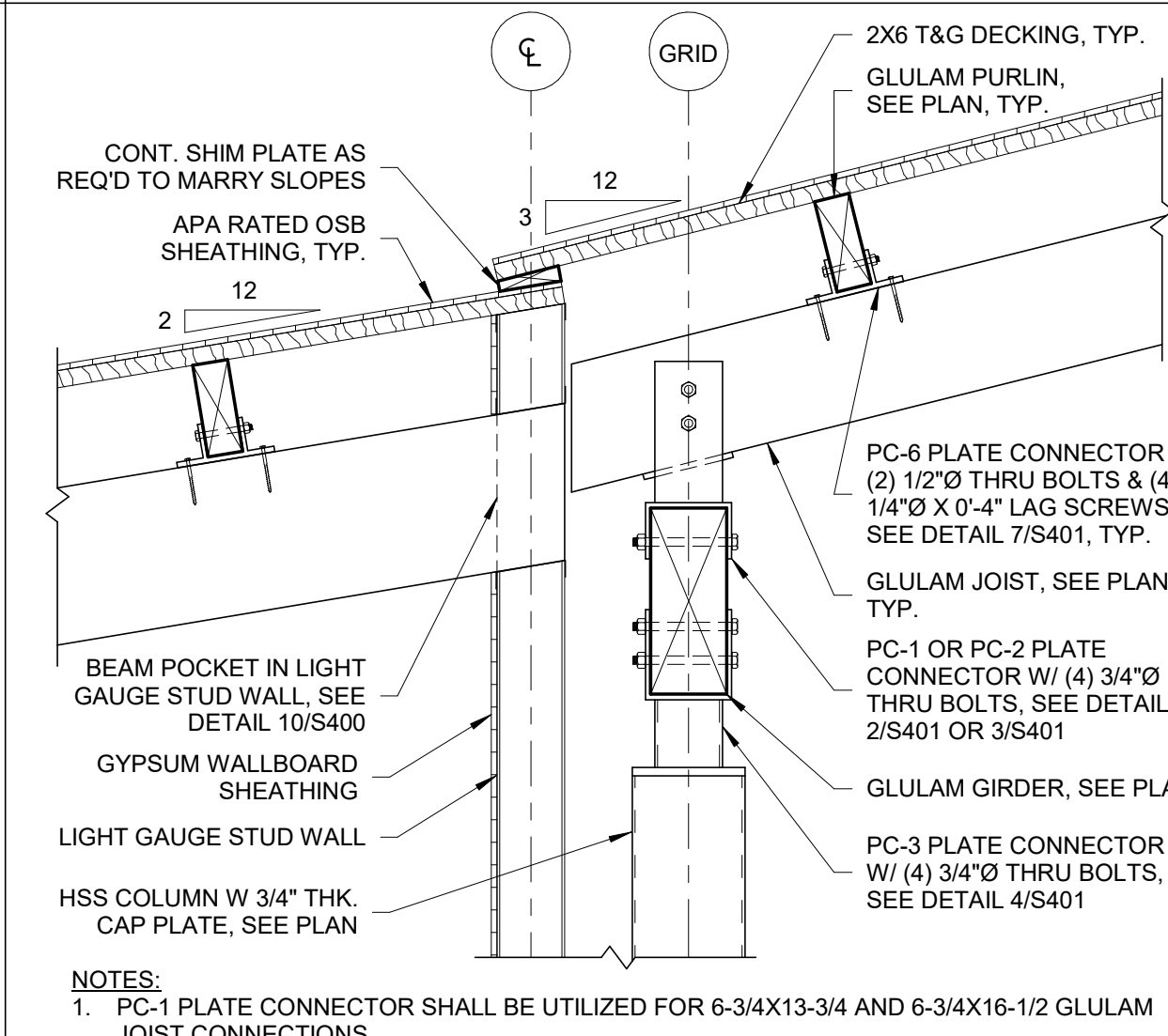
5 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



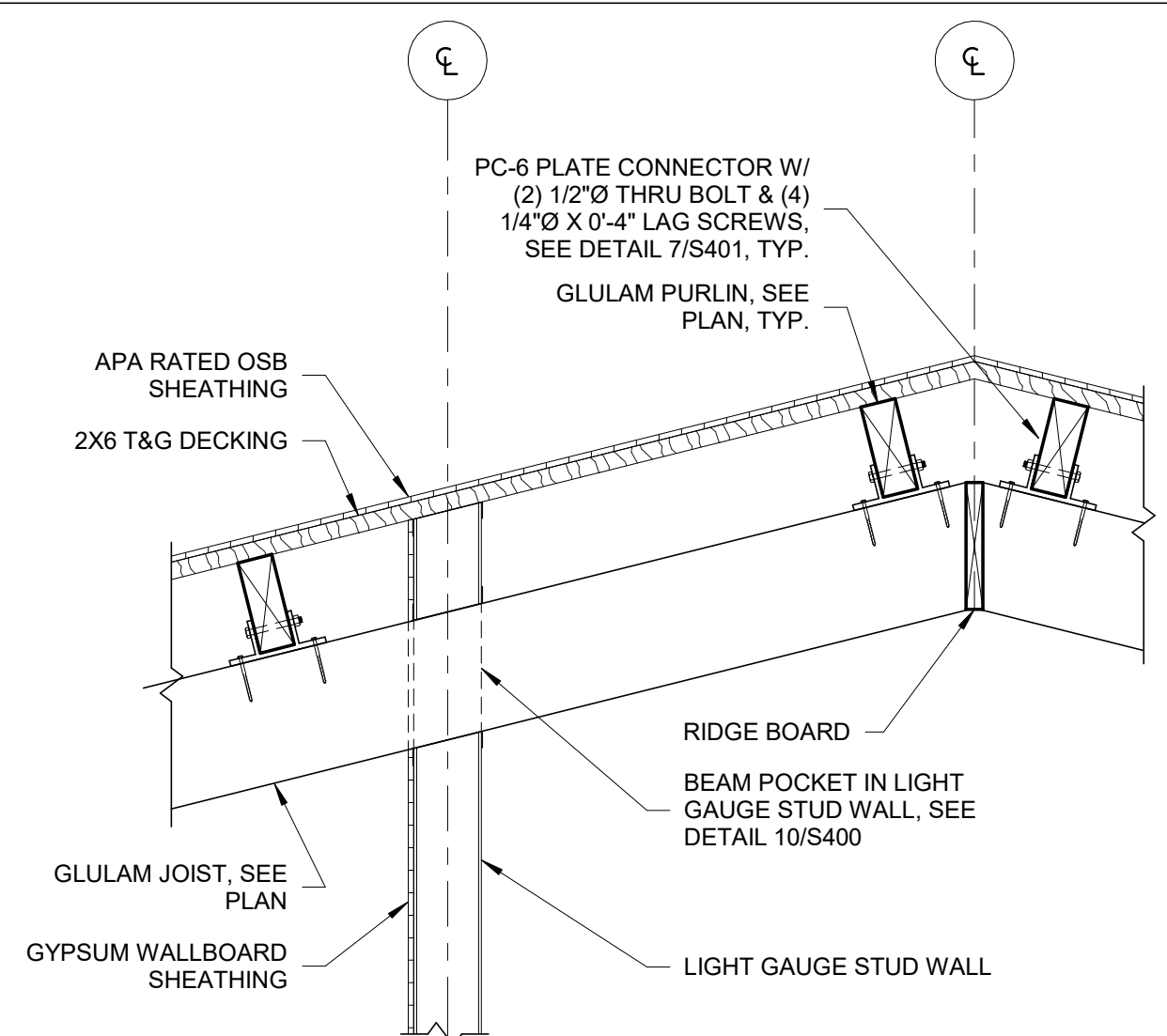
2 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



9 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



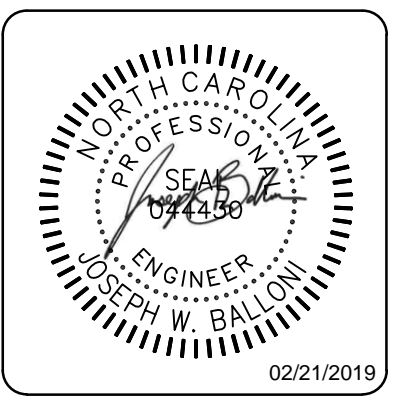
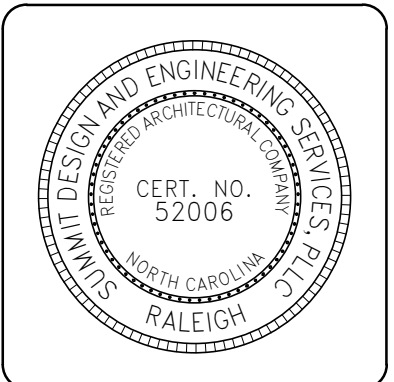
6 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"



3 GLULAM ROOF FRAMING SECTION
3/4" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
License #: P-0339
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Phone: (919) 322-0115
Fax: (919) 322-0116
www.summitdier.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



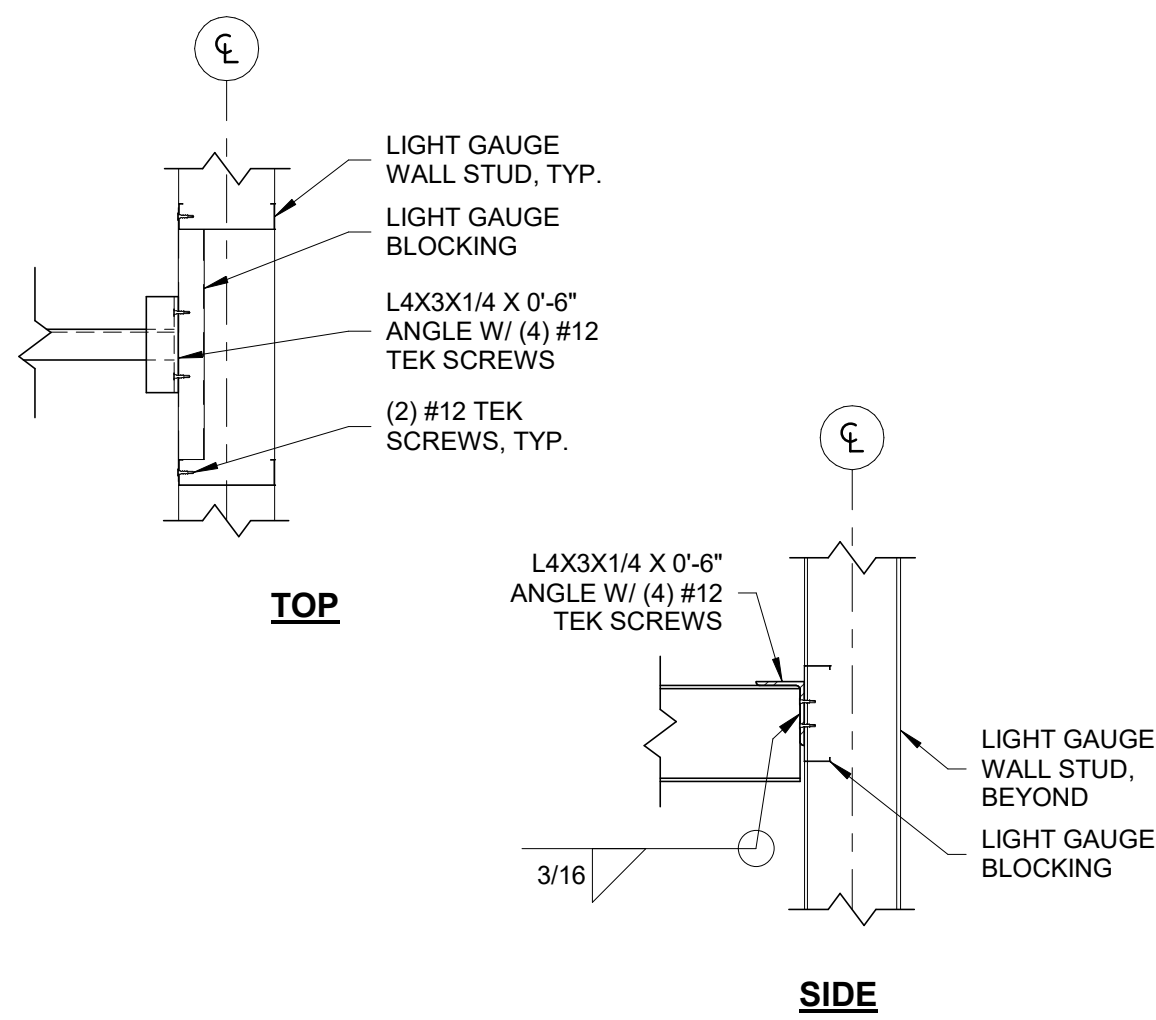
ENGINEER OF RECORD
JOSEPH W. BALLONI, PE
PROJECT MANAGER
C. CHRISTIAN BERG, PE
DRAWN BY: JWB
FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

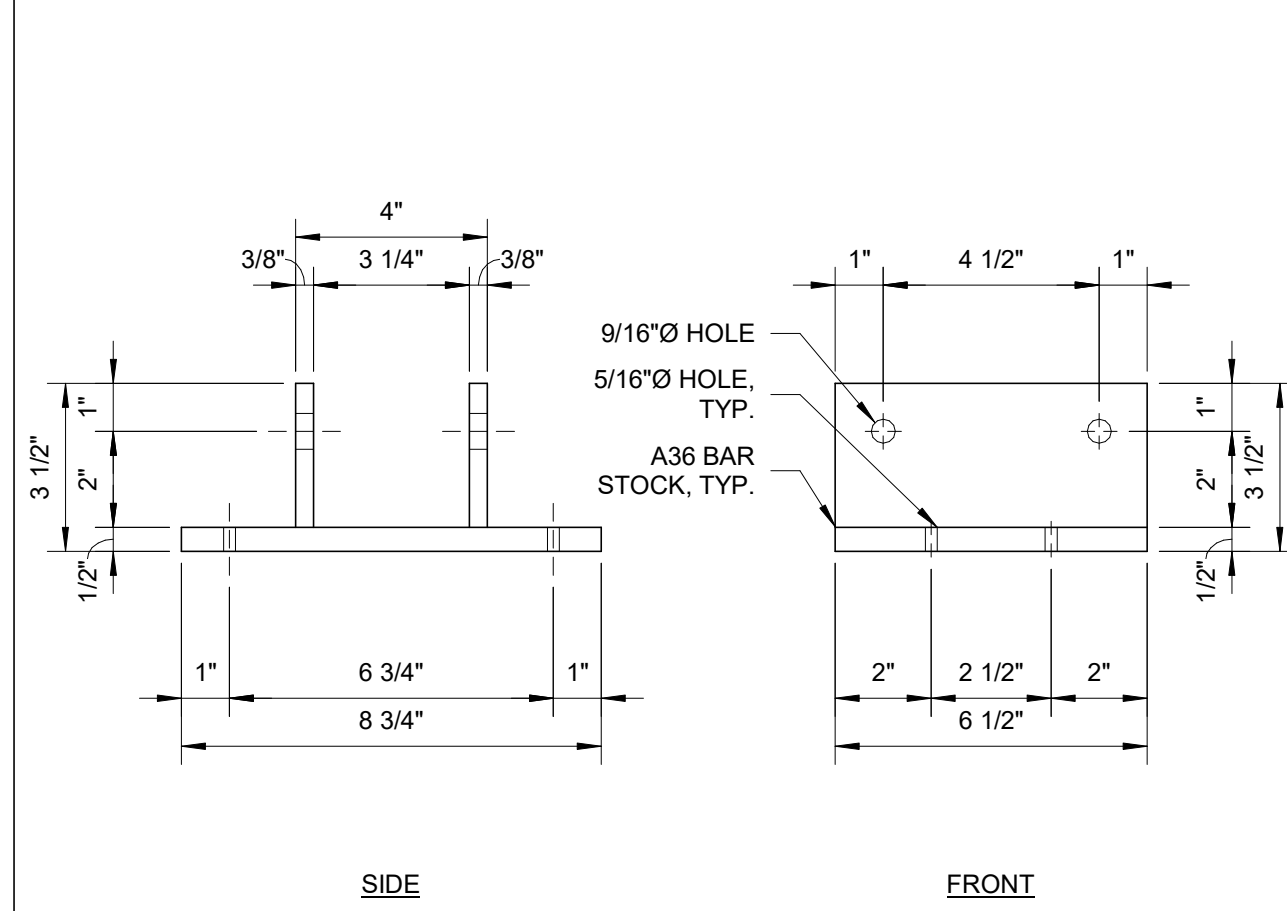
PROJECT NO.
18-0129
SHEET NO.
S400

FRAMING DETAILS

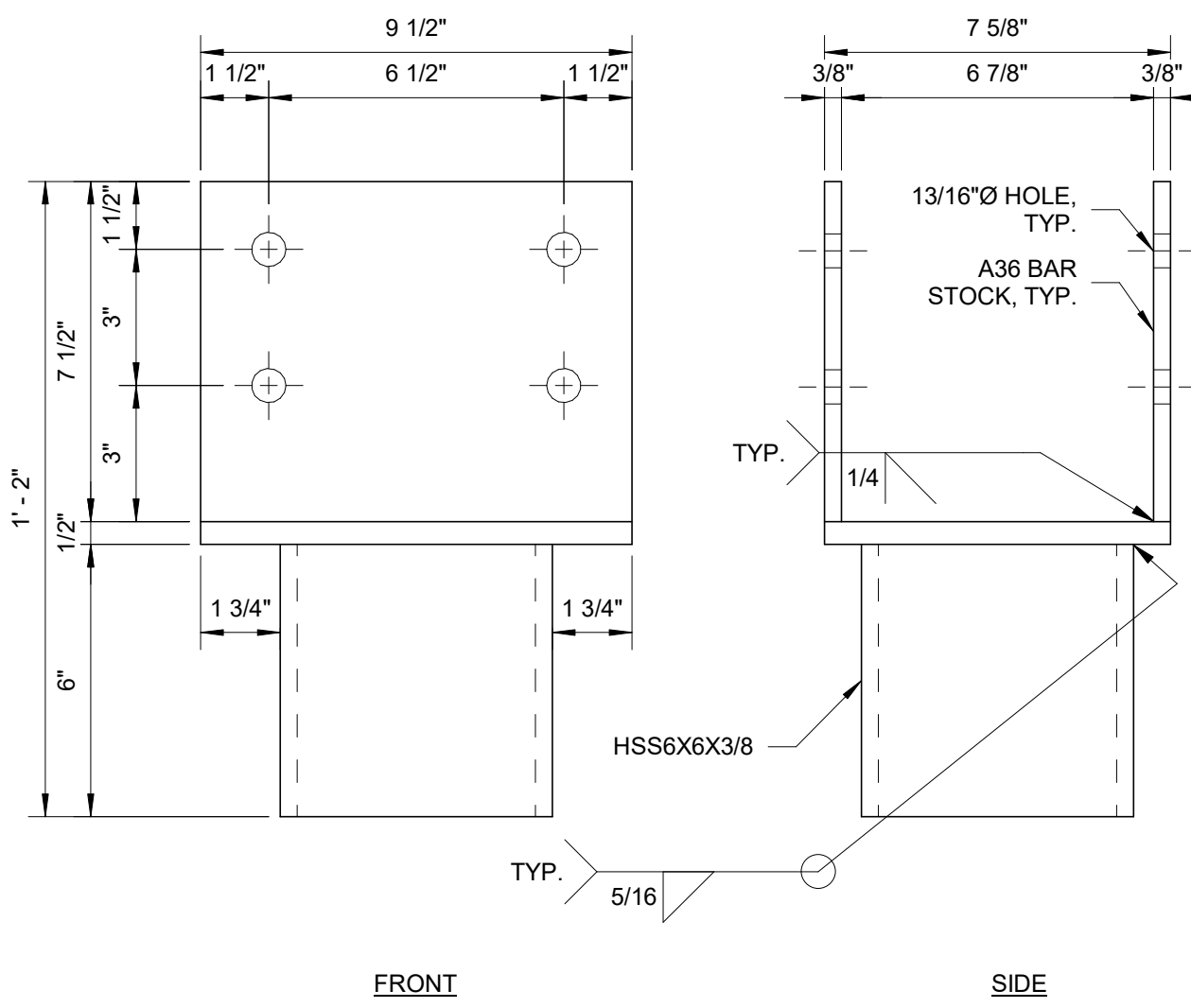


NOTE:
1. LIGHT GAUGE STUDS AND BLOCKING AT FRAME CONNECTIONS SHALL BE 43 MIL MINIMUM THICKNESS.

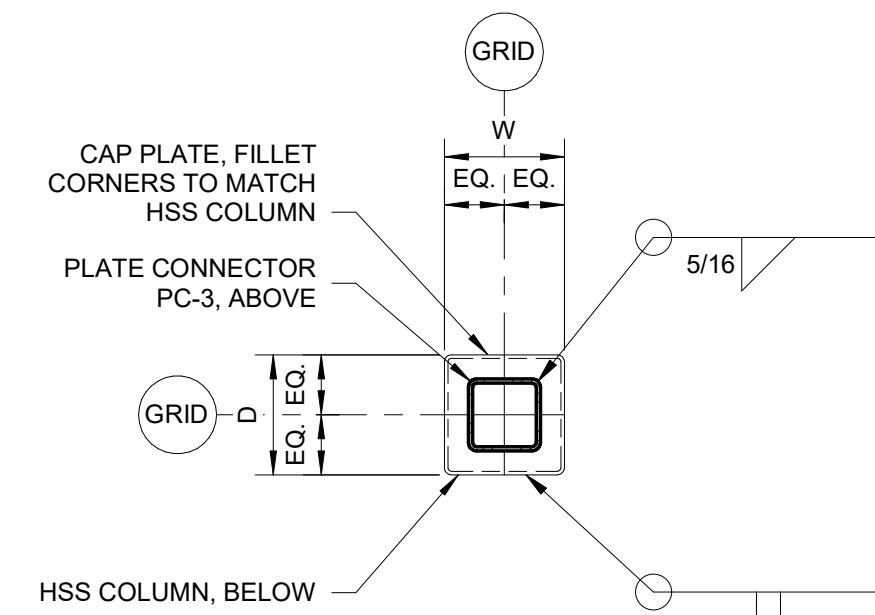
10 HVAC UNIT FRAME CONNECTION DETAIL
1" = 1'-0"



7 PLATE CONNECTOR PC-6
3" = 1'-0"

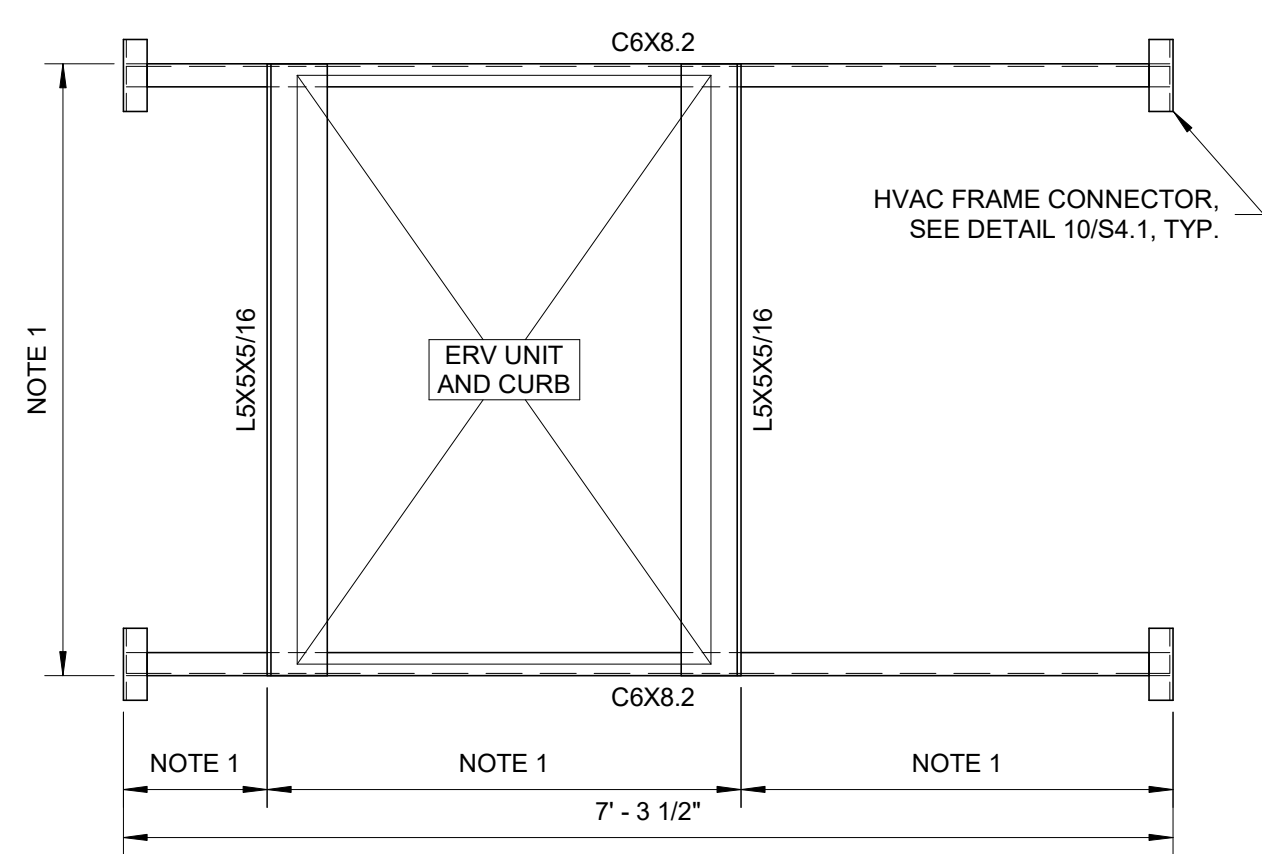


4 PLATE CONNECTOR PC-3
3" = 1'-0"



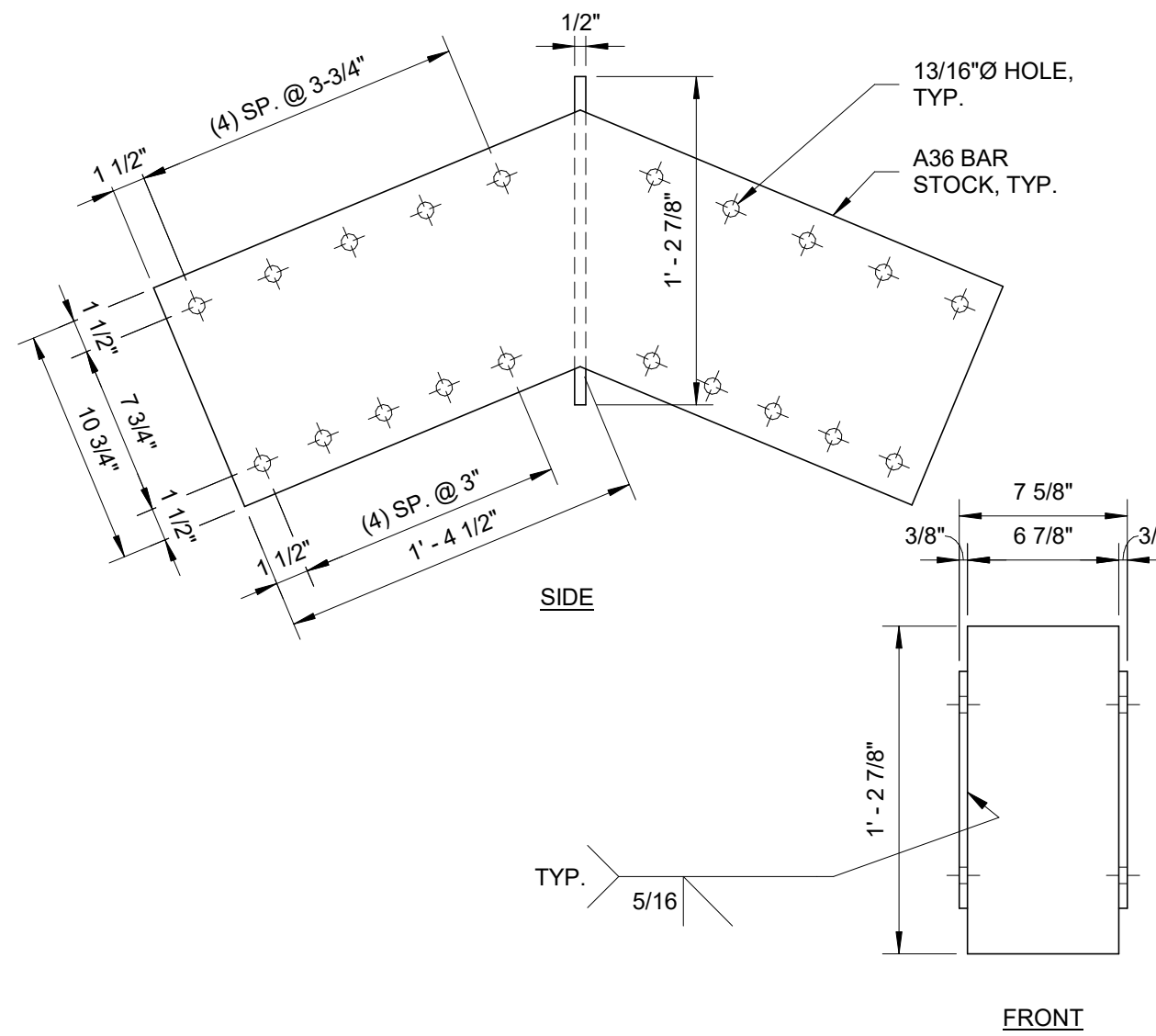
CAP PLATE SCHEDULE			
MARK	D	W	THK.
CP-1	0' - 10"	0' - 10"	3/4"
CP-2	0' - 8"	0' - 8"	3/4"

1 COLUMN CAP PLATE PLAN
NTS

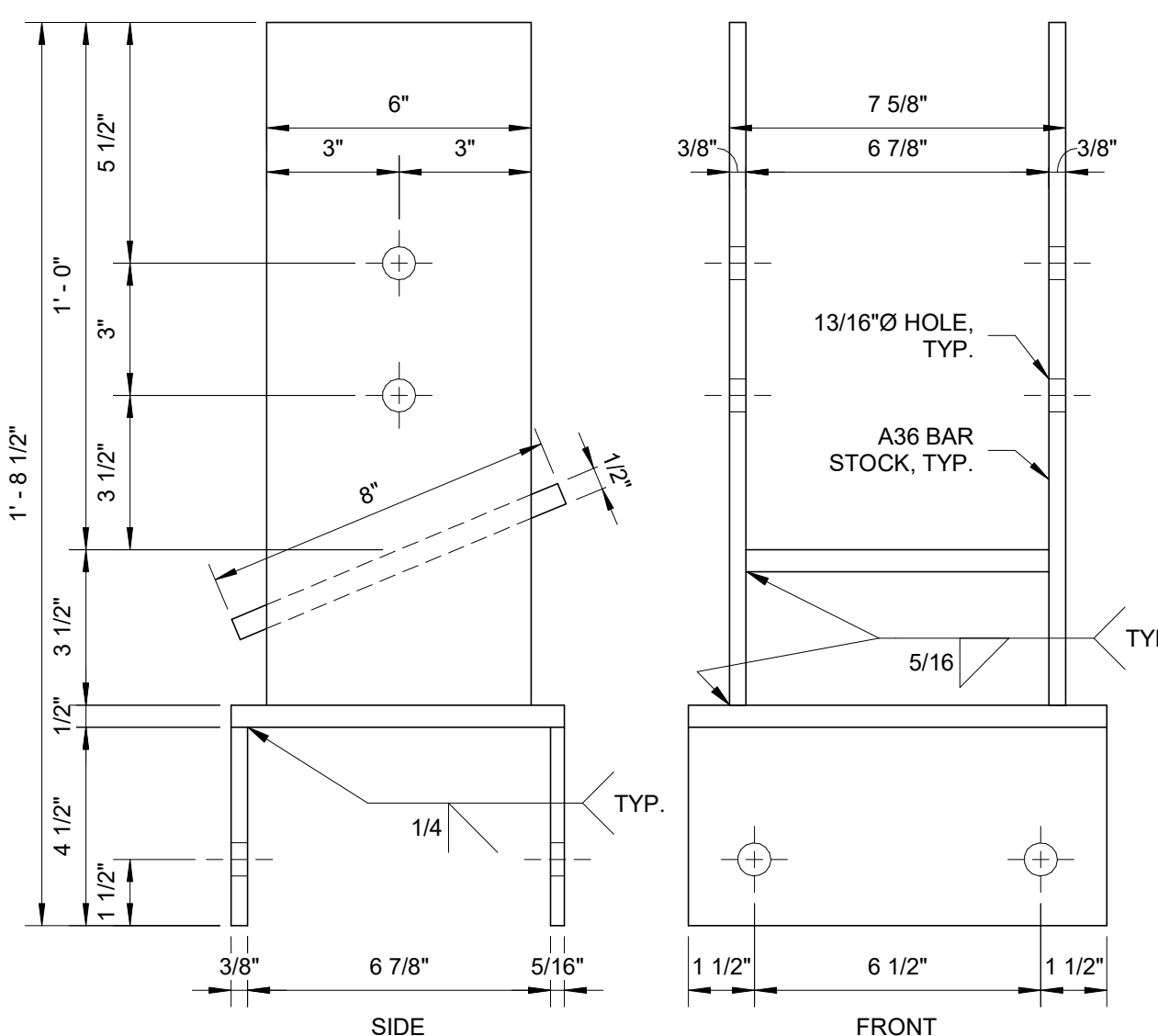


NOTES:
1. FRAME TO CARRY HVAC UNIT ERV-1 AND 2. FOR OPENING SIZE AND LOCATIONS, SEE MECHANICAL DRAWINGS.
2. FRAME WAS DESIGNED BASED ON A UNIT WEIGHT OF 550 LBS PER UNIT.
3. SHOP WELD ALL HOT ROLLED STEEL CONNECTIONS WITH 3/16" ALL AROUND FILLET WELD.

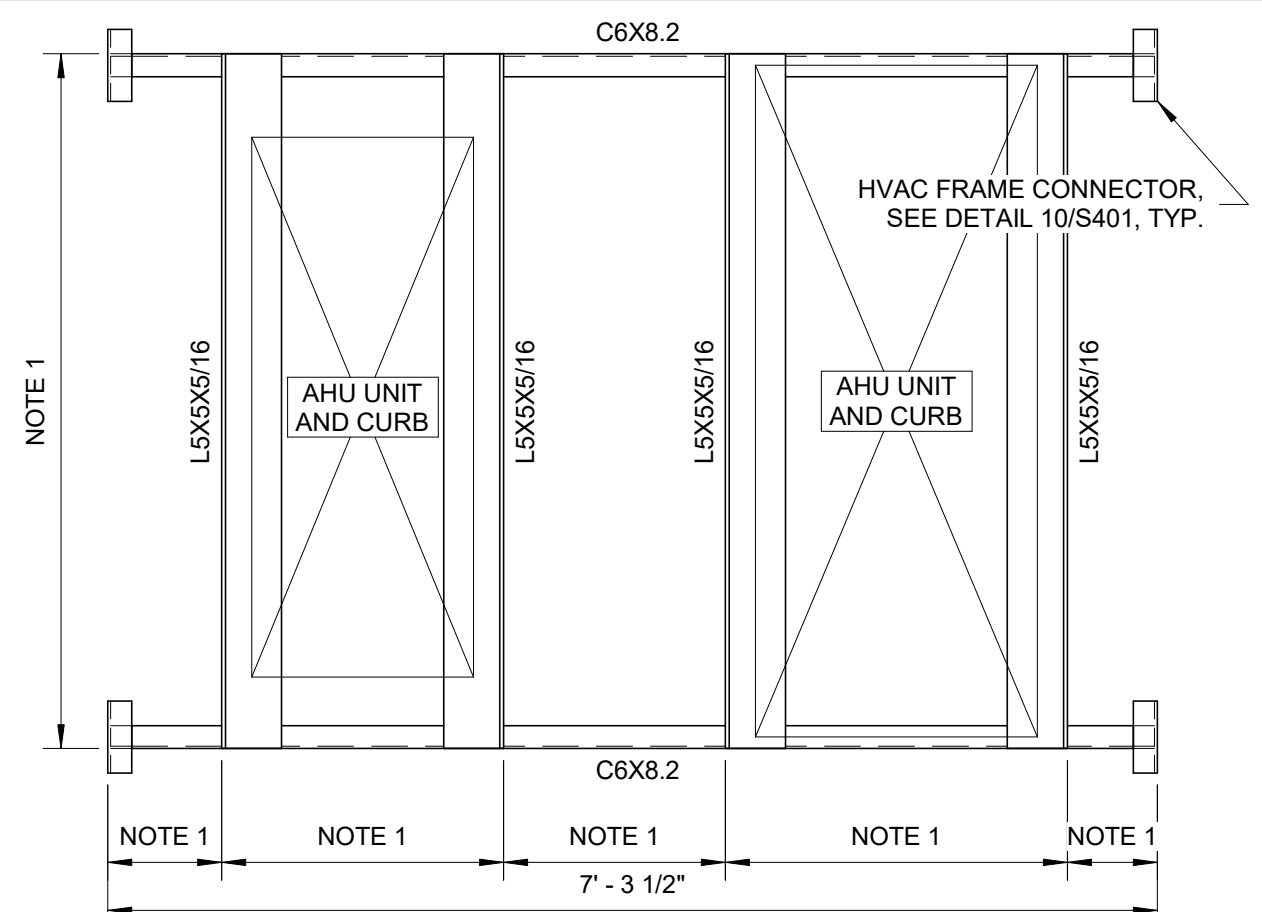
8 HVAC UNIT FRAME F-1
3/4" = 1'-0"



5 PLATE CONNECTOR PC-4
1 1/2" = 1'-0"

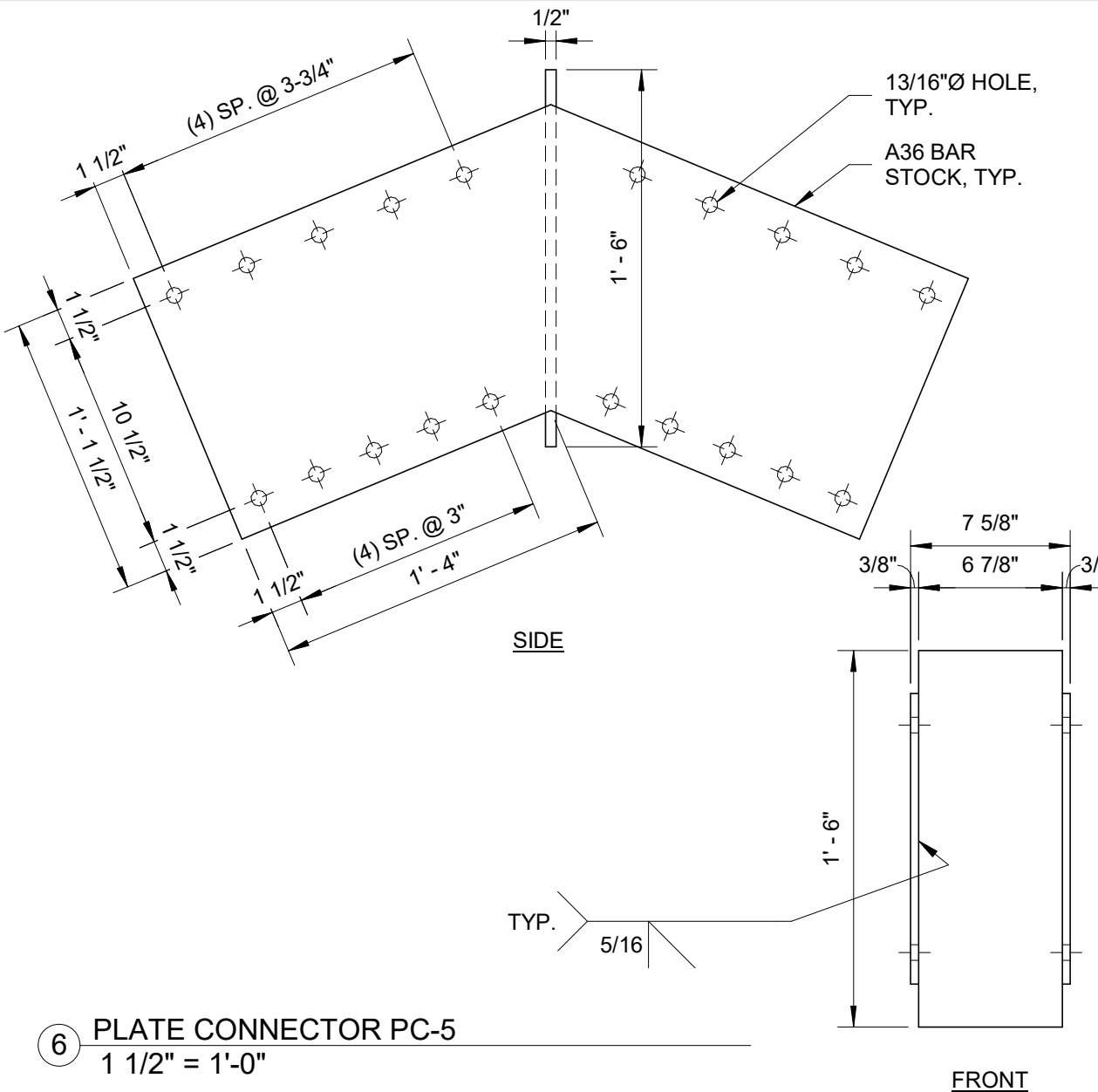


2 PLATE CONNECTOR PC-1
3" = 1'-0"

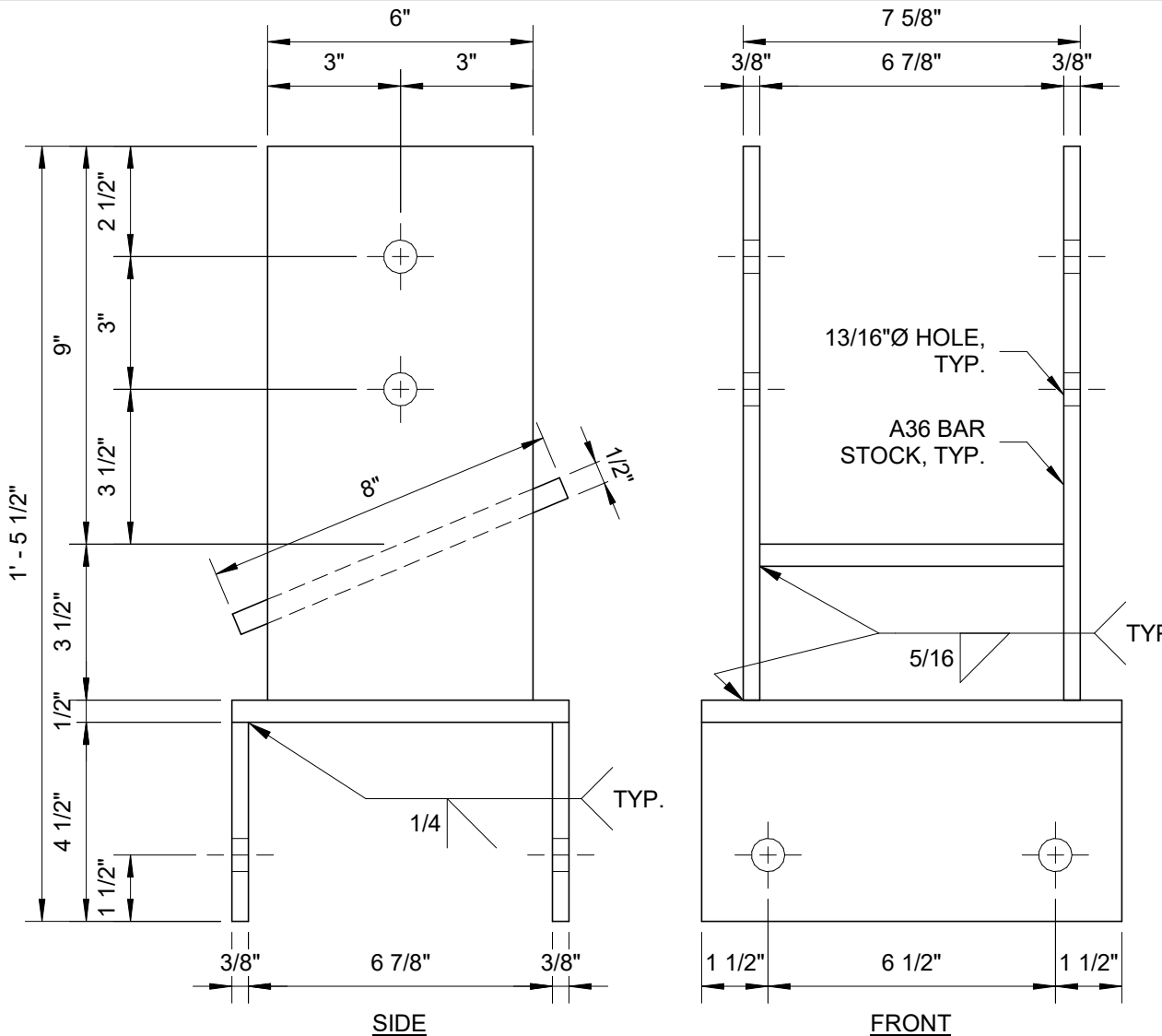


NOTES:
1. FRAME TO SUPPORT HVAC UNIT AHU-1 THRU 4. FOR OPENING SIZE AND LOCATIONS, SEE ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. FRAME WAS DESIGNED BASED ON A WEIGHT OF 200 LBS PER UNIT.
3. SHOP WELD ALL HOT ROLLED STEEL CONNECTIONS WITH 3/16" ALL AROUND FILLET WELD.

9 HVAC UNIT FRAME F-2
3/4" = 1'-0"



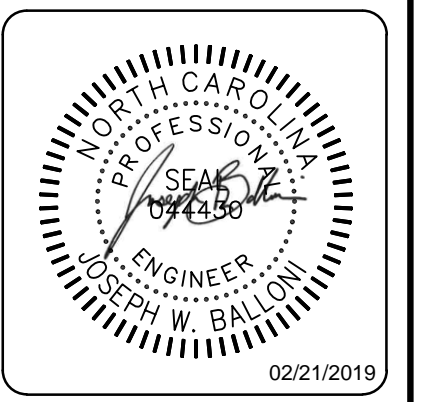
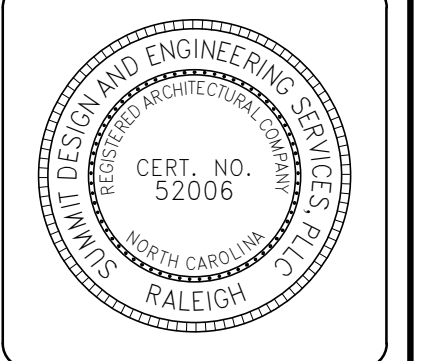
6 PLATE CONNECTOR PC-5
1 1/2" = 1'-0"



3 PLATE CONNECTOR PC-2
3" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
License #: P-0339
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Phone: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ENGINEER OF RECORD
JOSEPH W. BALLONI, PE
PROJECT MANAGER
C. CHRISTIAN BERG, PE
DRAWN BY: JWB FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JB
B	ISSUED TO NCDOT	01/22/19	JB
C	ISSUED FOR CONST	02/21/19	JB

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
FRAMING DETAILS

PROJECT NO.
18-0129
SHEET NO.
S401

PLUMBING SYMBOLS & ABBREVIATIONS

ANNOTATION ABBREVIATIONS

Table with 4 columns of plumbing abbreviations: A/E, ASME, BF, C, DCW, DHW, HWR, DF, DN, DS, DWG, DWH, DWV, EC, EL, EPA, EPACK, ESC, ET, F, FA, FB, FBO, FCO, FD, FPFB, FS, FU, etc.

PLUMBING SYMBOLS

Table of plumbing symbols including: PIPE SLOPE ARROW, FLOW ARROW, CONCENTRIC REDUCER, ECCENTRIC REDUCER, 3-WAY CONTROL VALVE, ANGLE GATE VALVE, ANGLE GLOBE VALVE, BALANCING/SHUTOFF VALVE, BALL VALVE, BUTTERFLY VALVE, CALIBRATED BALANCING VALVE, CHECK VALVE, CONTROL VALVE, EXPANSION VALVE, GAS COCK, GATE VALVE, GLOBE VALVE, PLUG VALVE, PRESSURE REDUCING VALVE (WATER), PRESSURE REGULATOR (GAS), QUICK OPEN VALVE, SAFETY RELIEF VALVE, SOLENOID VALVE, VACUUM RELIEF VALVE, BACKFLOW PREVENTER, HOSE BIBB / SILLCOCK, AUTOMATIC AIR VENT, PRESSURE GAUGE, THERMOMETER, FLOW SWITCH, PRESSURE SWITCH, TEMPERATURE SWITCH, PIPE UNION, WYE STRAINER, WYE STRAINER W/DRAIN VALVE, PUMP, FLOOR DRAIN - ROUND OR SQUARE, SUSPENDED CLEANOUT, WALL CLEANOUT, PIPE CAP, PIPE TURNING DOWN, PIPE TURNING UP, TEE UP, TEE DOWN, DROP AND RUN, DROP AND TURN, TEE OFF TOP, TEE OFF BOTTOM, CROSS AND RISER, PLAN 90° ELBOW, PIPE TEE, FLEXIBLE PIPE CONNECTOR, PIPE ANCHOR, PIPE GUIDES, WATER METER.

PLUMBING SYMBOLS

Table of piping system symbols: CD (CONDENSATE DRAIN), SAN (SANITARY WASTE), V (SANITARY VENT), DCW (DOMESTIC COLD WATER), DHW (DOMESTIC HOT WATER), HWR (DOMESTIC HW RECIRCULATION). Includes ANNOTATION SYMBOLS: # (NEW KEYNOTE), ## (DETAIL MODULE NUMBER), # (DETAIL OR SECTION MARK), P-### (PLUMBING EQUIPMENT DESIGNATION).

PLUMBING GENERAL NOTES

- 1. WORK SHALL BE PERFORMED BY A PLUMBING CONTRACTOR LICENSED IN THE STATE OF NORTH CAROLINA.
2. MATERIALS, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF STATE AND LOCAL CODE PROCEDURES, METHODS AND REQUIREMENTS, INCLUDING THE MOST STRINGENT OF HEALTH AND SAFETY STANDARDS AS REQUIRED AND AS INTERPRETED BY THE AUTHORITY HAVING JURISDICTION.
3. DRAWINGS ARE DIAGRAMMATICAL IN NATURE. AS SUCH, THE DRAWINGS DO NOT SHOW ALL RISES, DROPS OR FITTINGS THAT MAY BE REQUIRED.
4. ALL GENERAL NOTES ARE PART OF THIS CONTRACT.
5. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL SERVICES IN BUILDING AND TO 5'-0" BEYOND THE BUILDING CONSTRUCTION LINE.
6. COORDINATE ROUTING OF PIPING WITH ALL OTHER TRADES AND STRUCTURAL CONDITIONS.
7. MAINTAIN A MINIMUM CLEARANCE OF 3'-0" IN FRONT OF ELECTRICAL PANELS (OR AS REQUIRED BY TYPE OF PANEL AND NEC) AND 1'-0" EITHER SIDE FROM STRUCTURE TO STRUCTURE AND FLOOR TO STRUCTURE.
8. INCLUDE IN THE BID ALL LICENSE, PERMIT, INSPECTION AND OTHER FEES REQUIRED BY UTILITY COMPANIES OR AUTHORITIES HAVING JURISDICTION REQUIRED FOR COMPLETION OF WORK.
9. PROMPTLY INFORM THE ENGINEER, IN WRITING, OF ANY DEVIATIONS IN THE CONTRACT DOCUMENTS FROM REQUIREMENTS OF LOCAL UTILITIES, MUNICIPALITIES, STATE OR FEDERAL LAWS AND REGULATIONS.
10. PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, ETC. REQUIRED FOR COMPLETE AND FUNCTIONAL SYSTEMS AS SPECIFIED AND INDICATED ON THE DRAWINGS.
11. ALL CLEANOUTS, VALVES, AIR CHAMBERS, ETC. ARE TO BE ACCESSIBLE.
12. DURING CONSTRUCTION PROCEDURES, THE ENTIRE WORK AREA SHALL BE CLEAN OF ALL DUST, DIRT AND OTHER DEBRIS BEFORE APPLICATION OF ANY NEW MATERIALS.
13. ALL VALVES IN CORRIDORS SHALL BE LOCATED A MINIMUM OF 1'-0" AWAY FROM WALLS UNLESS NOTED OTHERWISE.
14. FURNISH AND INSTALL BALL TYPE SHUTOFF VALVES IN ALL DOMESTIC WATER BRANCH PIPING OFF OF THE MAINS, RISERS, AND IN ALL BRANCH PIPING TO EACH SEPARATE ROOM TO PERMIT WATER SUPPLY SHUT OFF WITHOUT INTERFERING WITH ANY OTHER ROOM OR PORTION OF BUILDING.
15. SANITARY WASTE PIPING SHALL BE SLOPED AT 1/8-INCH PER FOOT MINIMUM FOR ALL PIPING 4-INCH AND LARGER AND AT 1/4-INCH PER FOOT MINIMUM FOR ALL PIPING 3-INCH AND SMALLER.
16. INDIRECT WASTE FROM FIXTURES AND SPECIALTIES, AND EQUIPMENT DRAIN LINES TERMINATING AT FLOOR DRAINS, OR APPROVED RECEPTACLES SHALL HAVE A MINIMUM 2" AIR GAP.
17. ALL VENTS FROM HORIZONTAL SOIL OR WASTE PIPE SHALL COME OFF TOP OR AT 45 DEGREE VERTICALLY FROM CENTER OF PIPE BEFORE OFFSETTING HORIZONTALLY TO RISER.
18. ALL VENT TERMINATIONS SHALL BE COORDINATED WITH BUILDING OPENINGS, AIR INTAKES AND AIR EXHAUST OPENINGS.
19. SUPPORT ALL NEW PIPING AND EQUIPMENT FROM STRUCTURE ABOVE AS REQUIRED, EXCEPT IN MECHANICAL SPACES PIPING MAY BE SUPPORTED FROM FLOOR IF MORE PRACTICAL THAN SUPPORTING IT FROM STRUCTURE ABOVE.
20. PLUMBING CONTRACTOR SHALL PROVIDE NAIL PLATES WHERE PIPING PASSES THROUGH STUD(S) WITHIN 2" OF NAILING SURFACE TO PROTECT PIPE FROM NAILS OR DRYWALL SCREWS.
21. PLUMBING CONTRACTOR SHALL INSTALL APPROVED WATER HAMMER ARRESTORS IN WATER LINES, BOTH HOT AND COLD, SERVING BATTERY AND BACK TO BACK FIXTURE INSTALLATIONS IN PIPE SPACE AND PIPE CHASES.
22. PLUMBING CONTRACTOR SHALL INSTALL HOT WATER DISTRIBUTION LOOP AND BRANCH SUPPLY PIPING AS CLOSE AS POSSIBLE TO THE HOT WATER INLET SIDE OF POINT OF USE THERMOSTATIC MIXING VALVE.
23. ALL P-TRAPS FOR FLOOR DRAINS AND FLOOR SINKS SHALL BE DEEP SEAL TRAP FILLED WITH VEGETABLE OIL.
24. PLUMBING CONTRACTOR SHALL INSTALL, TEST, AND FIELD BALANCE APPROVED EQUIPMENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS.
25. PROVIDE DISCONNECT SWITCHES OR MAGNETIC MOTOR STARTERS FOR ALL DIVISION 22 EQUIPMENT.

SUMMIT DESIGN AND ENGINEERING SERVICES logo and contact information: 1110 Newchico Drive, Suite 400, Raleigh, NC 27609, Voice: (919) 322-0115, Fax: (919) 322-0116, www.SummitDE.net

APOGEE Engineers & Architects logo and contact information: Apogee Consulting Group, P.A., 1151 Klilane Farm Road, Suite 120, Cary, North Carolina 27511, NC License #C-1848, www.apogee.com

Professional Engineer seal for Paul L. Holmway, License # 47721, State of North Carolina, expires 12/22/2019.

ARCHITECT OF RECORD: BRIAN T. SHEPARD, AIA, NCARB, LEED

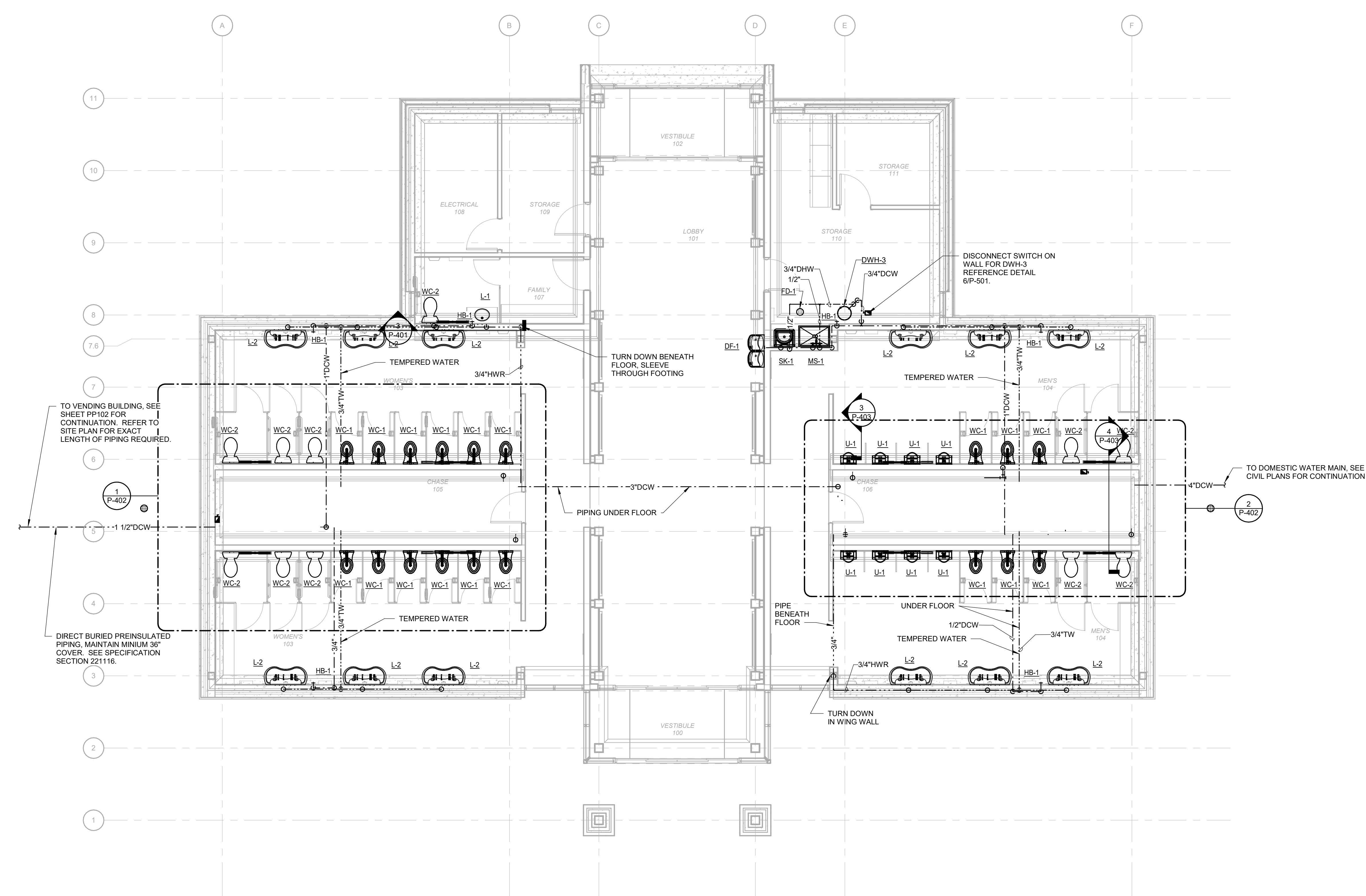
PROJECT MANAGER: JOSEPH A. ANGELL II, PE, F. SAME

DRAWN BY: SMH/PLH, FIRST ISSUE DATE: 11/02/18

Table with columns: NO, REVISIONS, DATE, BY, PLH. Rows A, B, C detailing revisions for SCO and NC DOT.

PROJECT INFORMATION: NCDOT PROJECT #1-4400C, I-26 REST AREA, EAST BOUND, HENDERSON/BUNCOMBE COUNTY, NORTH CAROLINA 28732. PLUMBING GENERAL INFORMATION.

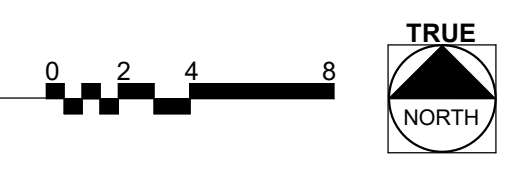
PROJECT NO. 18-0129.021, SHEET NO. P-001



TO VENDING BUILDING, SEE SHEET PP102 FOR CONTINUATION. REFER TO SITE PLAN FOR EXACT LENGTH OF PIPING REQUIRED.

DIRECT BURIED PREINSULATED PIPING, MAINTAIN MINIMUM 36" COVER. SEE SPECIFICATION SECTION 221116.

1 DOMESTIC WATER RESTROOM PLAN
Scale: 3/16" = 1'-0"



SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com
APOGEE
Engineers | Architects | Interiors

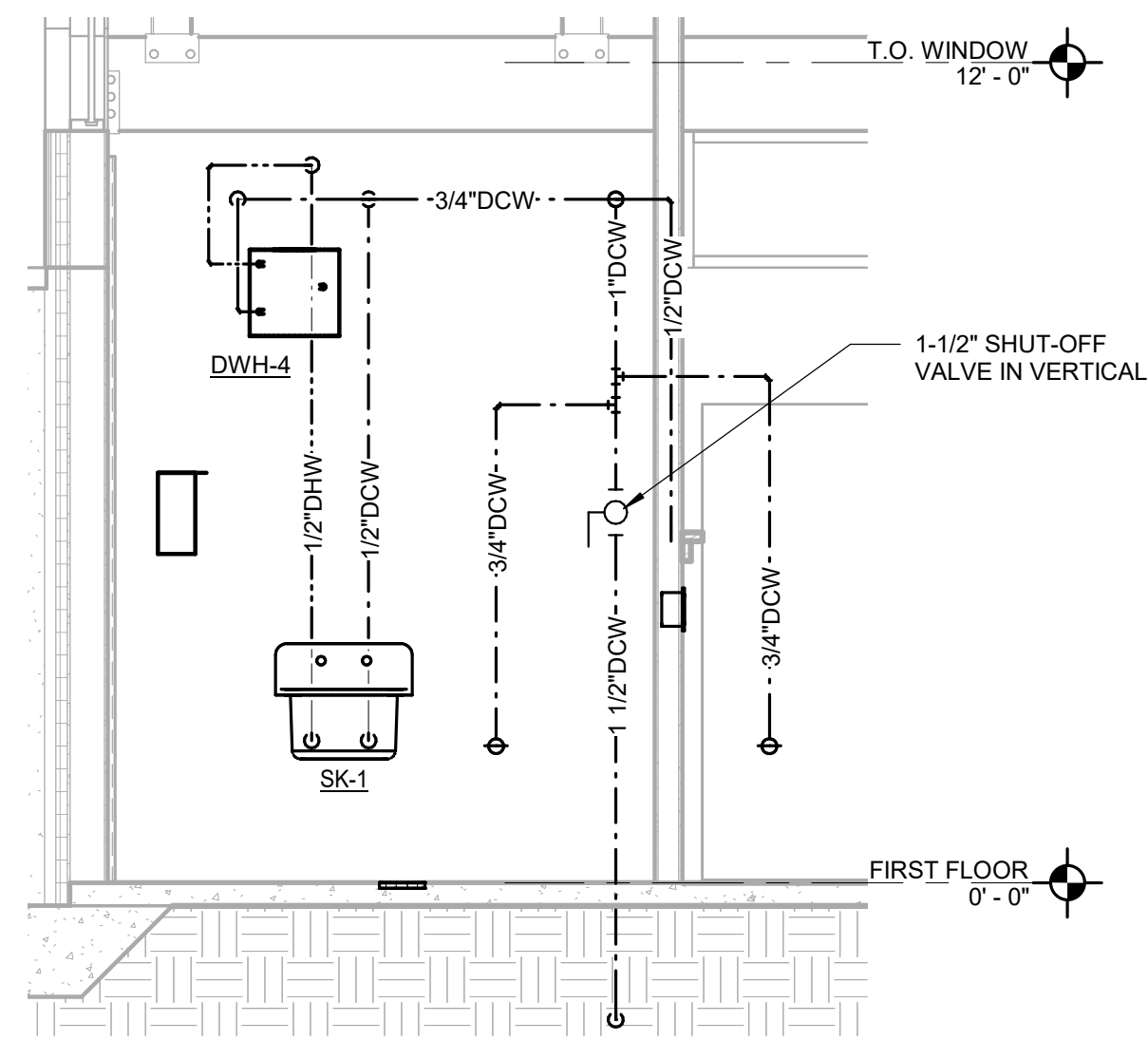
PROFESSIONAL SEAL
NORTH CAROLINA
PAUL L. HOLLOWAY
47721
02/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

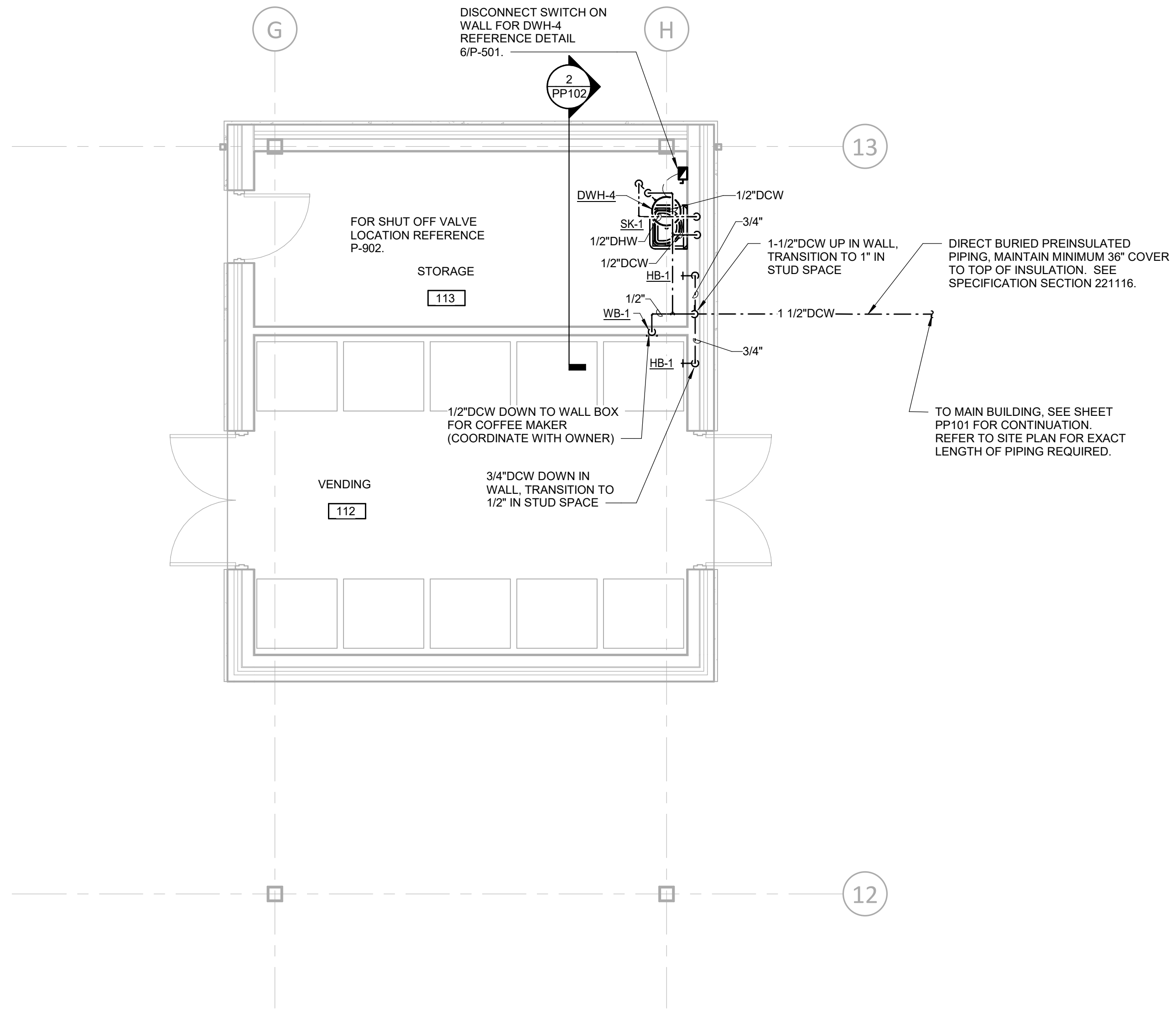
NO	REVISIONS	DATE	BY	PLH
A	ISSUED FOR SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
DOMESTIC WATER RESTROOM PLAN

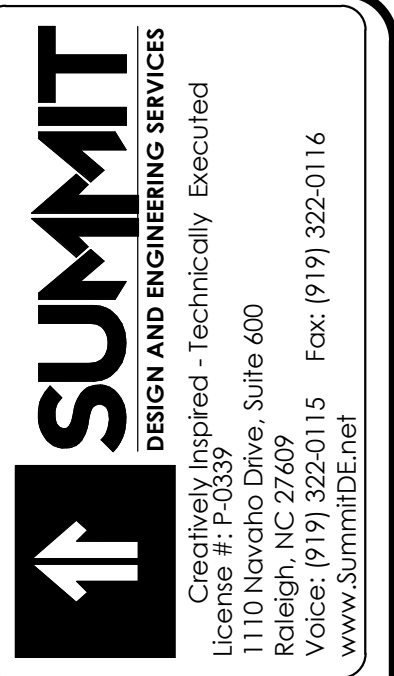
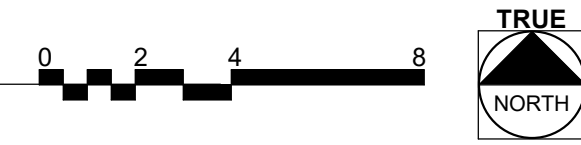
PROJECT NO.
18-0129.021
SHEET NO.
PP101



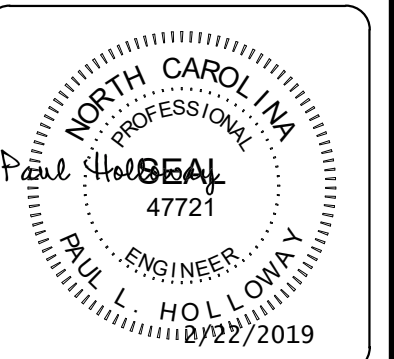
2 SECTION THROUGH STORAGE 113
Scale: 3/8" = 1'-0"



1 DOMESTIC WATER VENDING PLAN
Scale: 1/4" = 1'-0"



Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com 919-885-7420

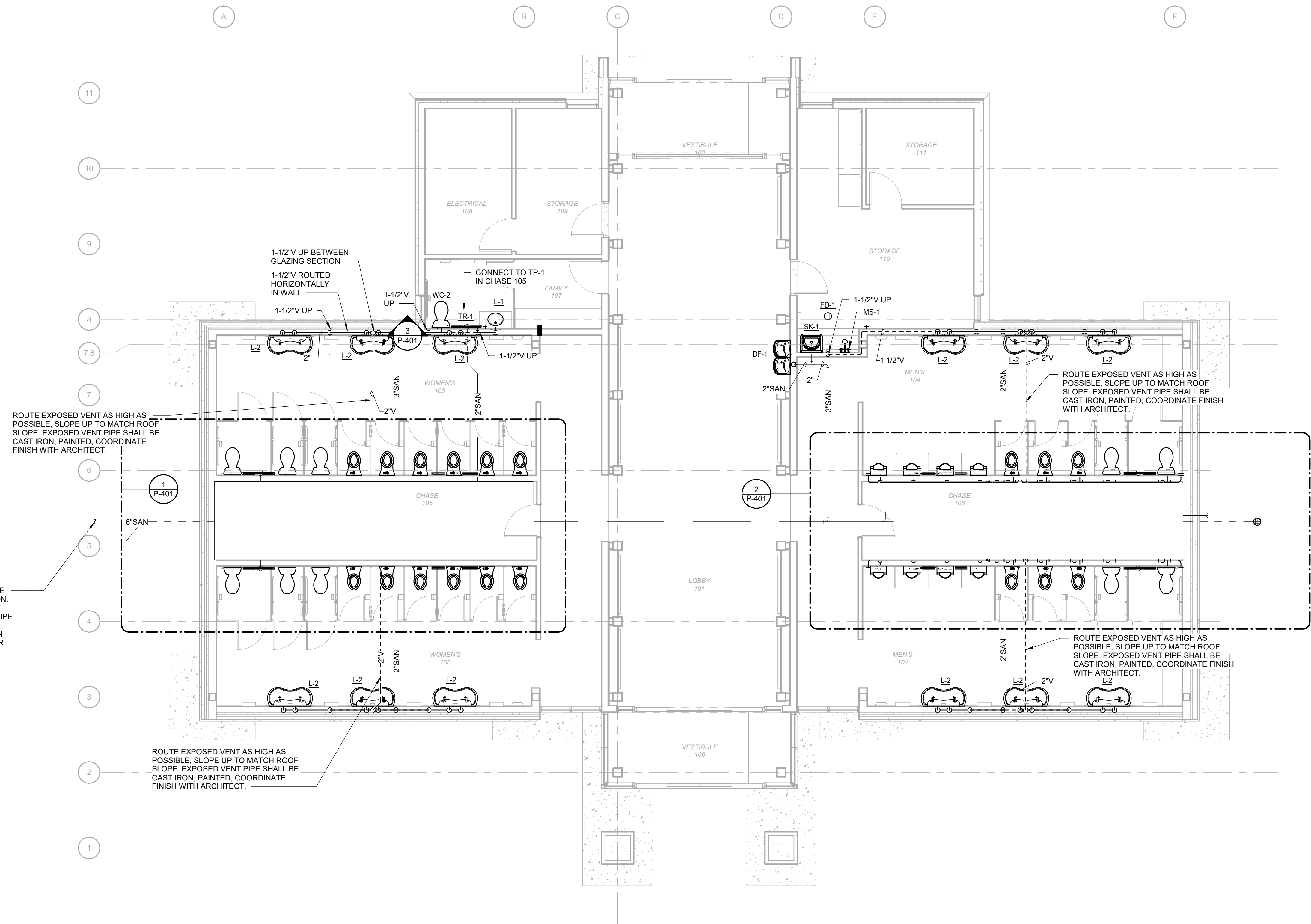


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED FOR SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
DOMESTIC WATER VENDING PLAN

PROJECT NO.
18-0129.021
SHEET NO.
PP102



ROUTE EXPOSED VENT AS HIGH AS POSSIBLE. SLOPE UP TO MATCH ROOF SLOPE. EXPOSED VENT PIPE SHALL BE CAST IRON, PAINTED, COORDINATE FINISH WITH ARCHITECT.

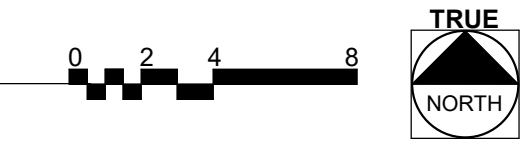
ROUTE EXPOSED VENT AS HIGH AS POSSIBLE. SLOPE UP TO MATCH ROOF SLOPE. EXPOSED VENT PIPE SHALL BE CAST IRON, PAINTED, COORDINATE FINISH WITH ARCHITECT.

ROUTE EXPOSED VENT AS HIGH AS POSSIBLE. SLOPE UP TO MATCH ROOF SLOPE. EXPOSED VENT PIPE SHALL BE CAST IRON, PAINTED, COORDINATE FINISH WITH ARCHITECT.

ROUTE EXPOSED VENT AS HIGH AS POSSIBLE. SLOPE UP TO MATCH ROOF SLOPE. EXPOSED VENT PIPE SHALL BE CAST IRON, PAINTED, COORDINATE FINISH WITH ARCHITECT.

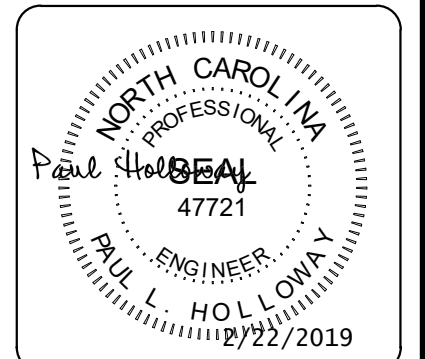
6\"/>

1 WASTE AND VENT RESTROOM PLAN
Scale: 3/16" = 1'-0"



SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE NC License #C-1848
Engineers | Architects WMAacgpa.com 919-888-7420

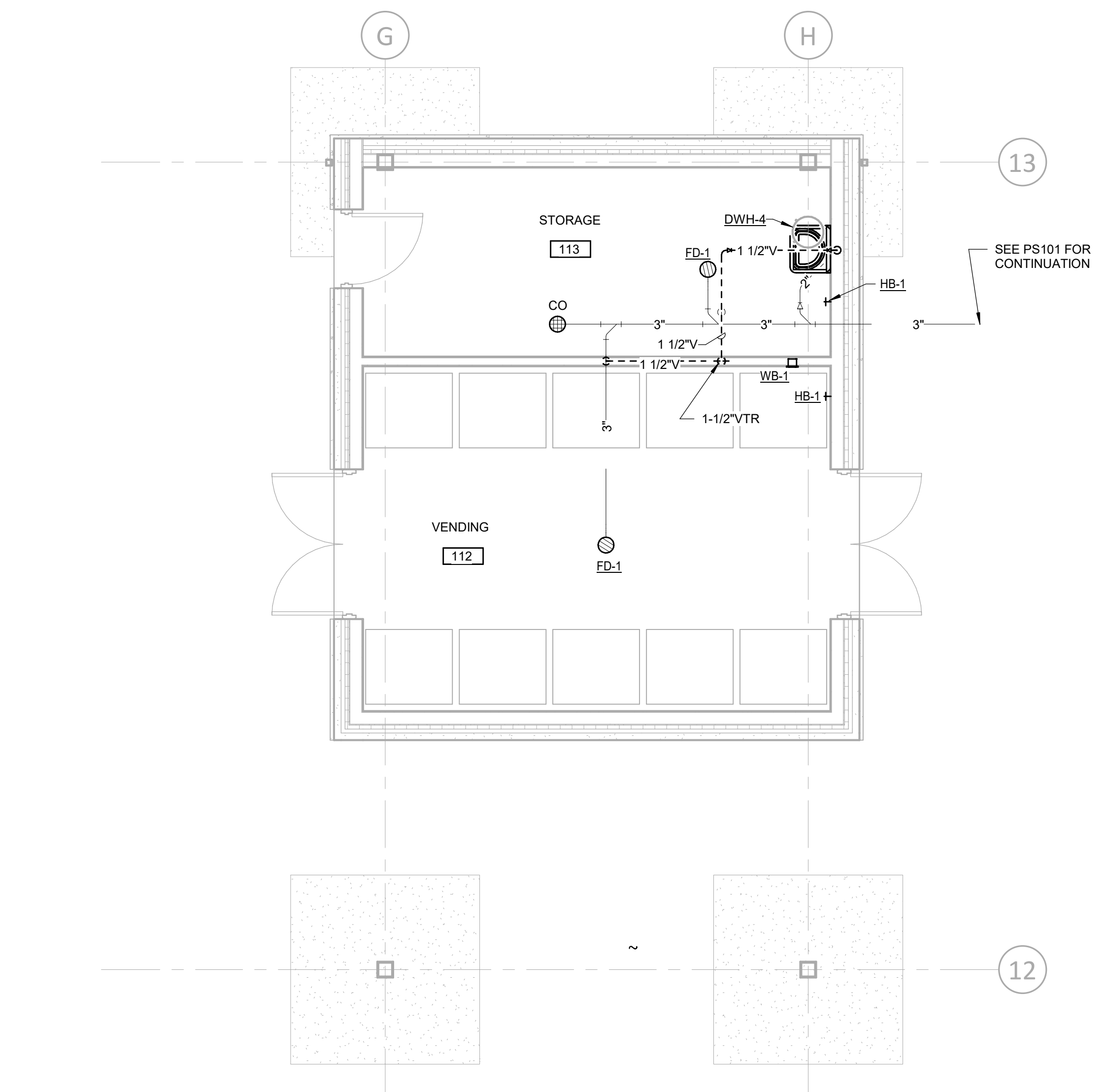


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

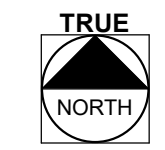
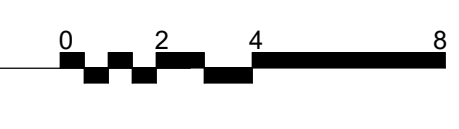
NO	REVISIONS	DATE	BY
A	ISSUED FOR SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
WASTE AND VENT RESTROOM PLAN

PROJECT NO.
18-0129.021
SHEET NO.
PW101

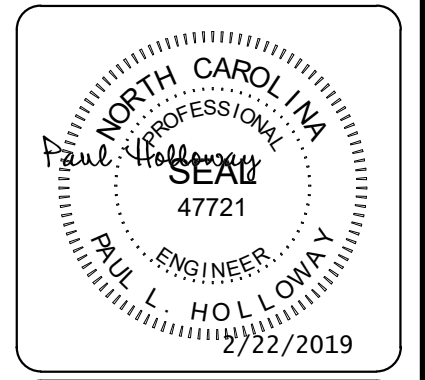


1 DRAIN, WASTE, AND VENT VENDING PLAN
 Scale: 1/4" = 1'-0"



SUMMIT
 DESIGN AND ENGINEERING SERVICES
 Creatively Inspired - Technically Executed
 1110 Newchico Drive, Suite 600
 Raleigh, NC 27609
 Voice: (919) 322-0115 Fax: (919) 322-0116
 www.SummitDE.net

Apogee Consulting Group, P.A.
 1151 Kildine Farm Road, Suite 120
 Cary, North Carolina 27511
 NC License #C-1848
APOGEE Engineers | Architects
 www.apogee.com 919-888-7420

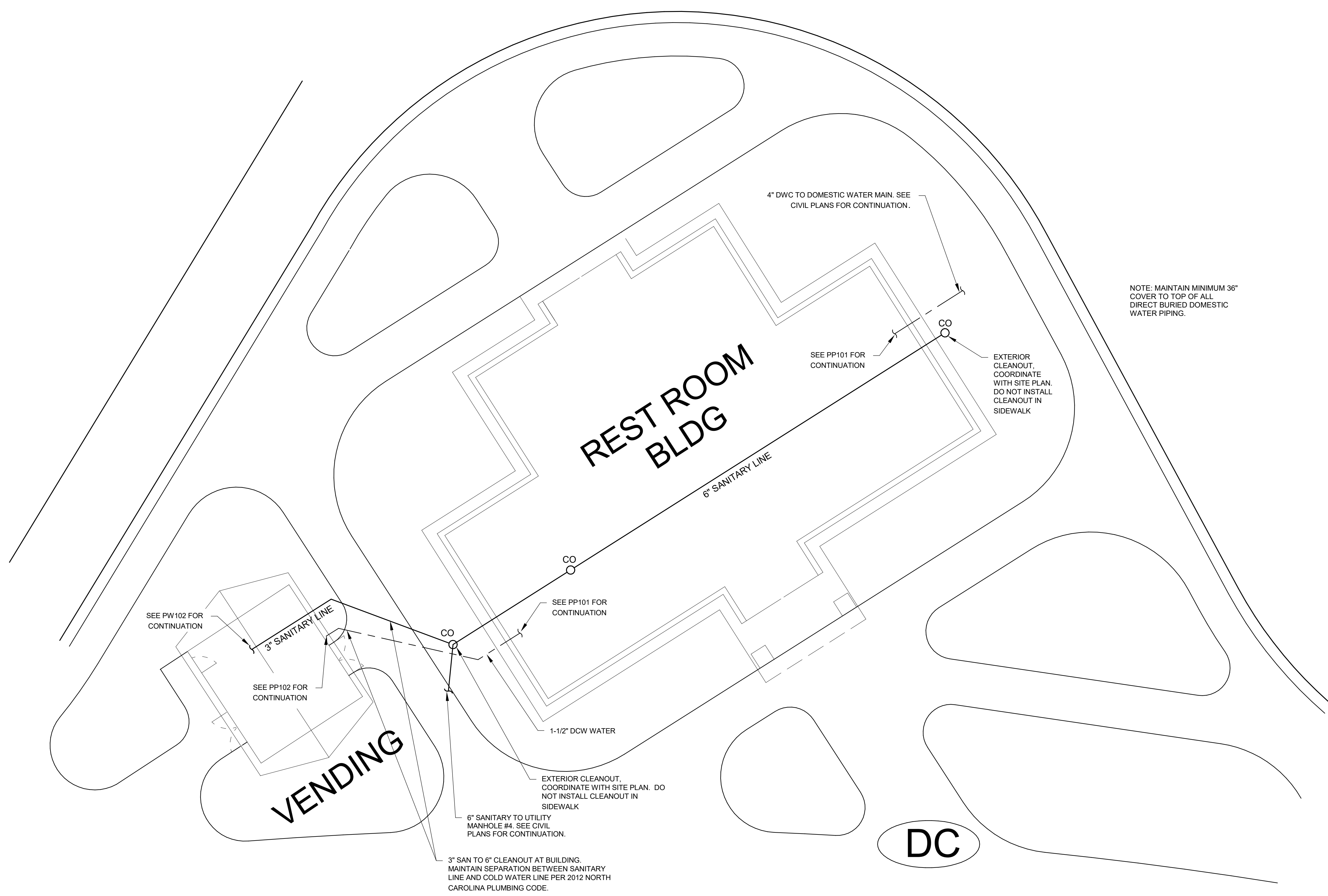


ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED
 PROJECT MANAGER
 JOSEPH A. ANGELL II, PE, F. SAME
 DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED FOR SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
DRAIN, WASTE, AND VENT VENDING PLAN

PROJECT NO.
18-0129.021
 SHEET NO.
PW102

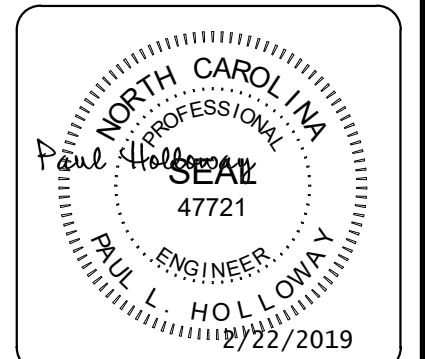


NOTE: MAINTAIN MINIMUM 36"
COVER TO TOP OF ALL
DIRECT BURIED DOMESTIC
WATER PIPING.

1 PLUMBING SITE PLAN
Scale: No Scale

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newcho Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

APOGEE
Engineers | Architects
Apogee Consulting Group, P.A.
1151 Kildine Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com 919-885-7420

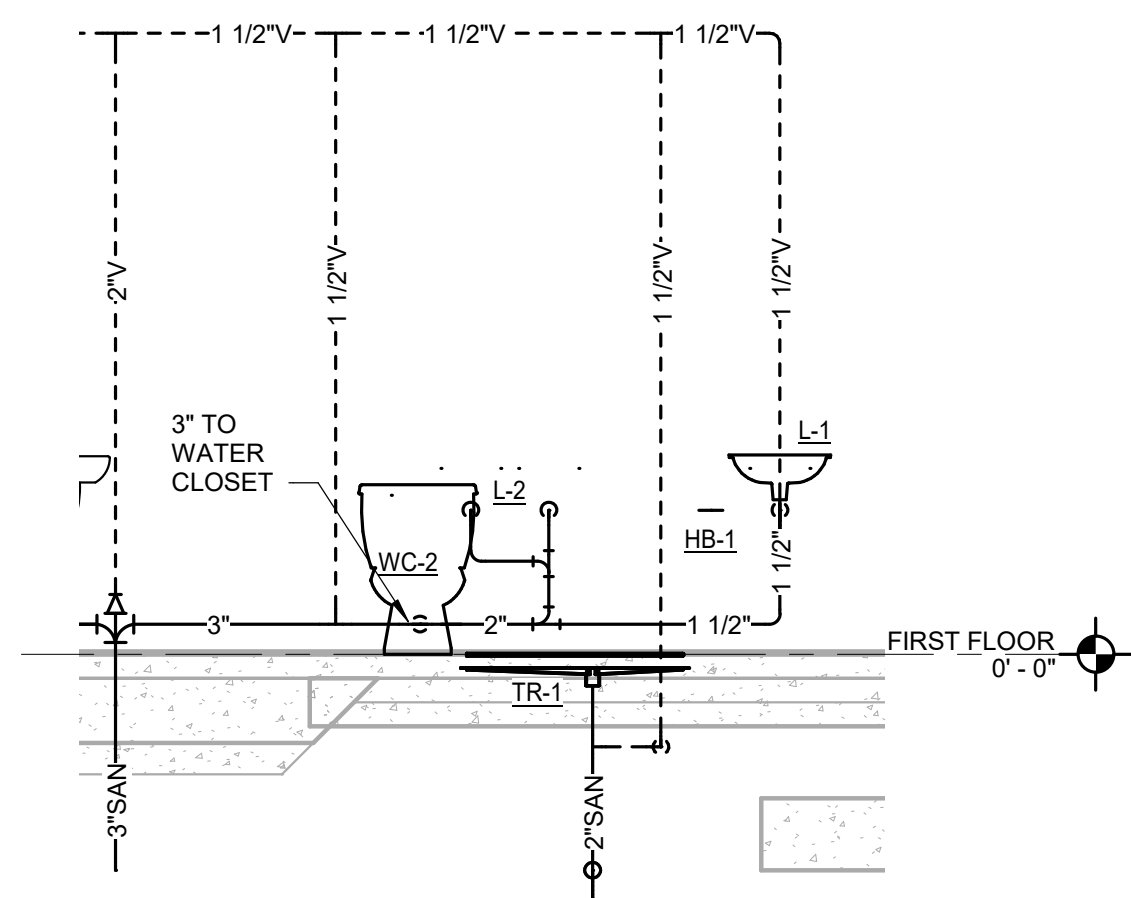


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH FIRST ISSUE DATE 11/02/18

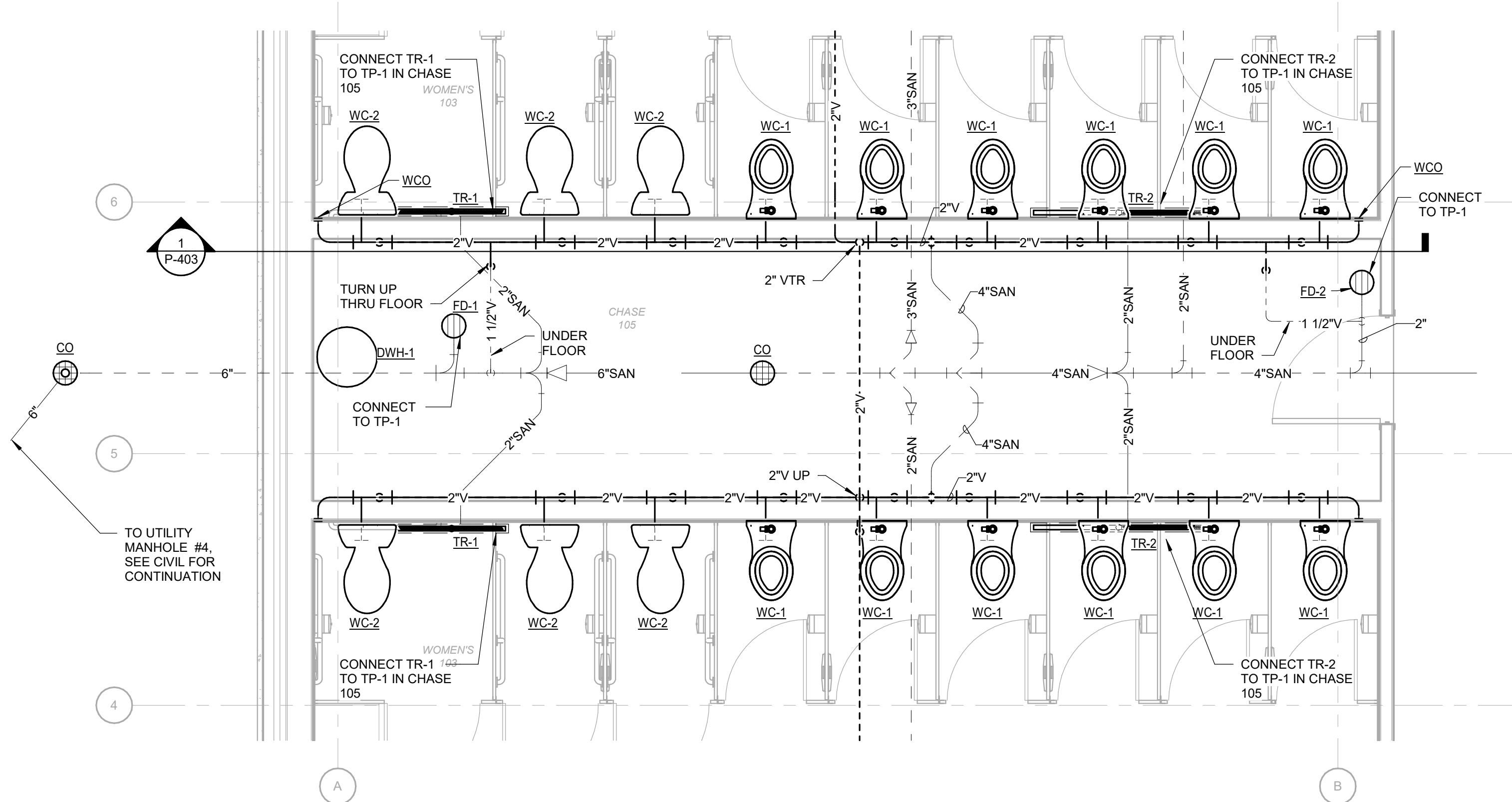
NO	REVISIONS	DATE	BY
A	ISSUED FOR SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
PLUMBING SITE PLAN

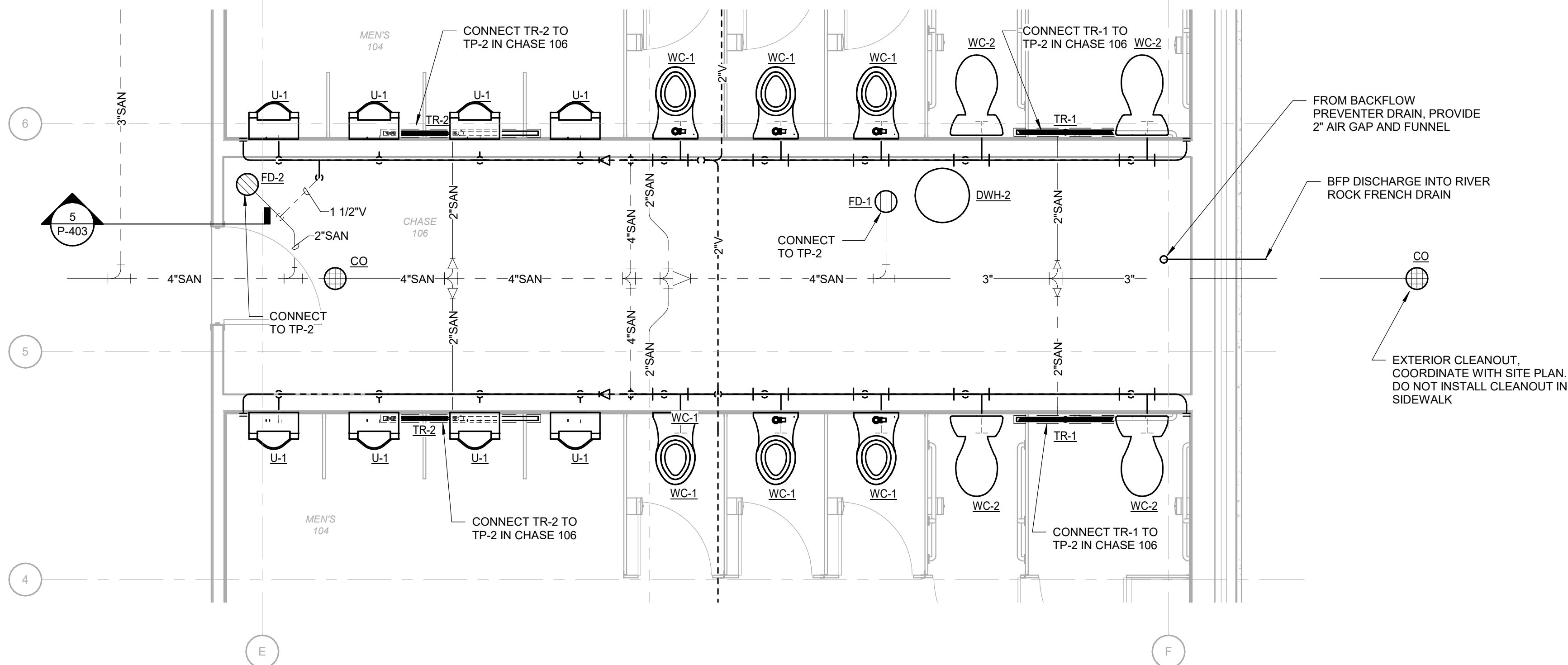
PROJECT NO.
18-0129.021
SHEET NO.
PS101



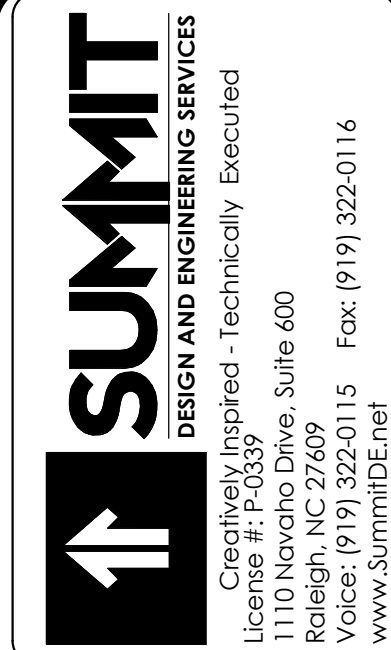
3 FAMILY ROOM 107 WASTE PIPING
Scale: 3/8" = 1'-0"



1 CHASE 105 ENLARGED FLOOR PLAN - DRAIN, WASTE, AND VENT
Scale: 3/8" = 1'-0"

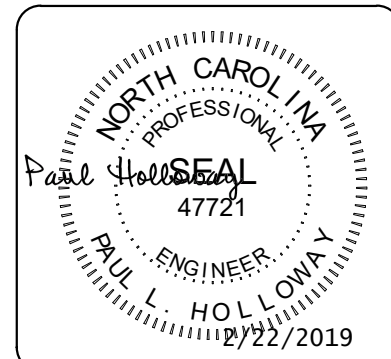


2 CHASE 106 ENLARGED FLOOR PLAN - DRAIN, WASTE AND VENT
Scale: 3/8" = 1'-0"



Apogee Consulting Group, P.A.
1151 Kilaheo Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
Architects WWAacgpa.com
919-888-7420

APOGEE
Engineers | Architects WWAacgpa.com



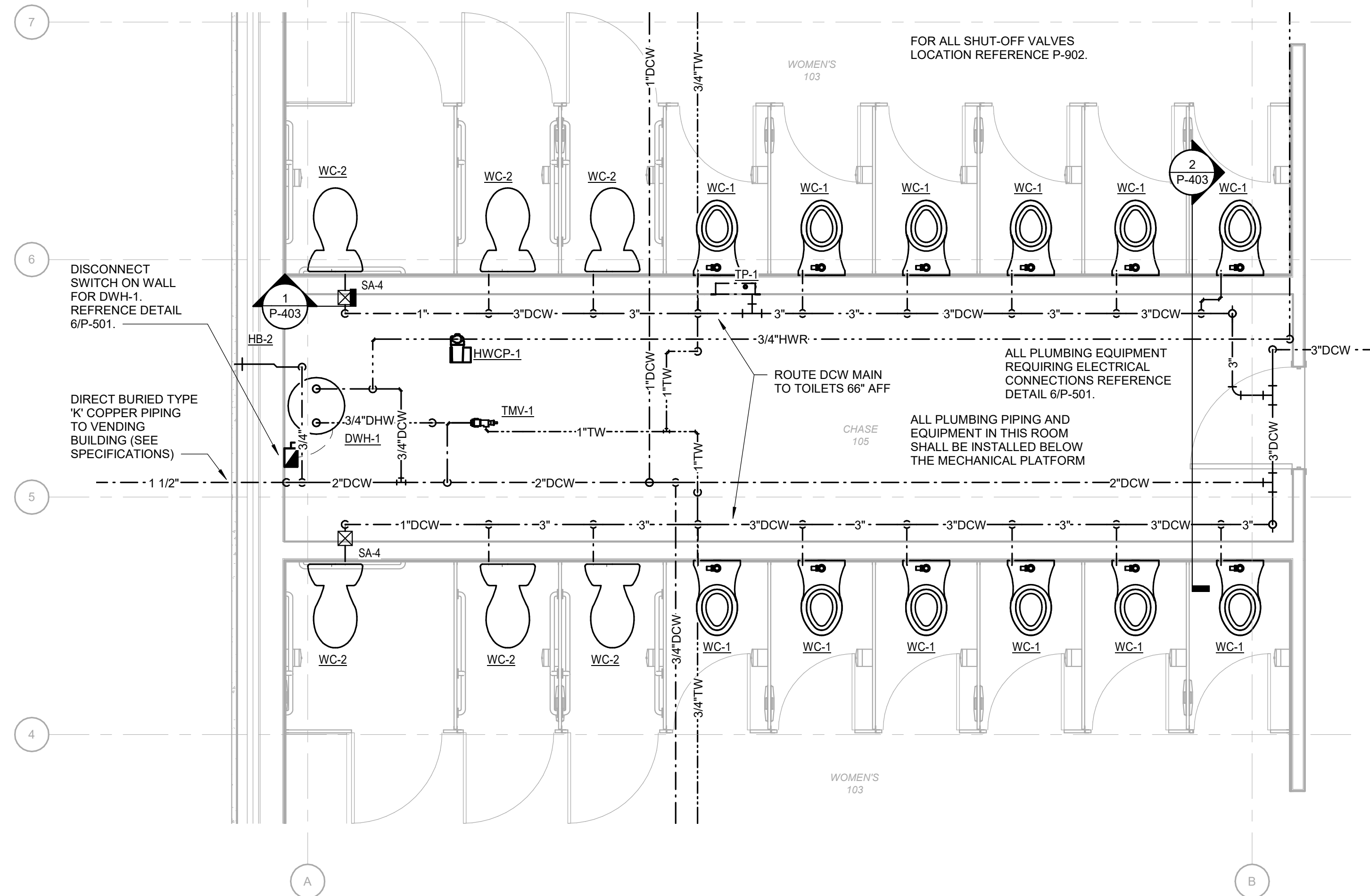
ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY
A	ISSUED FOR SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

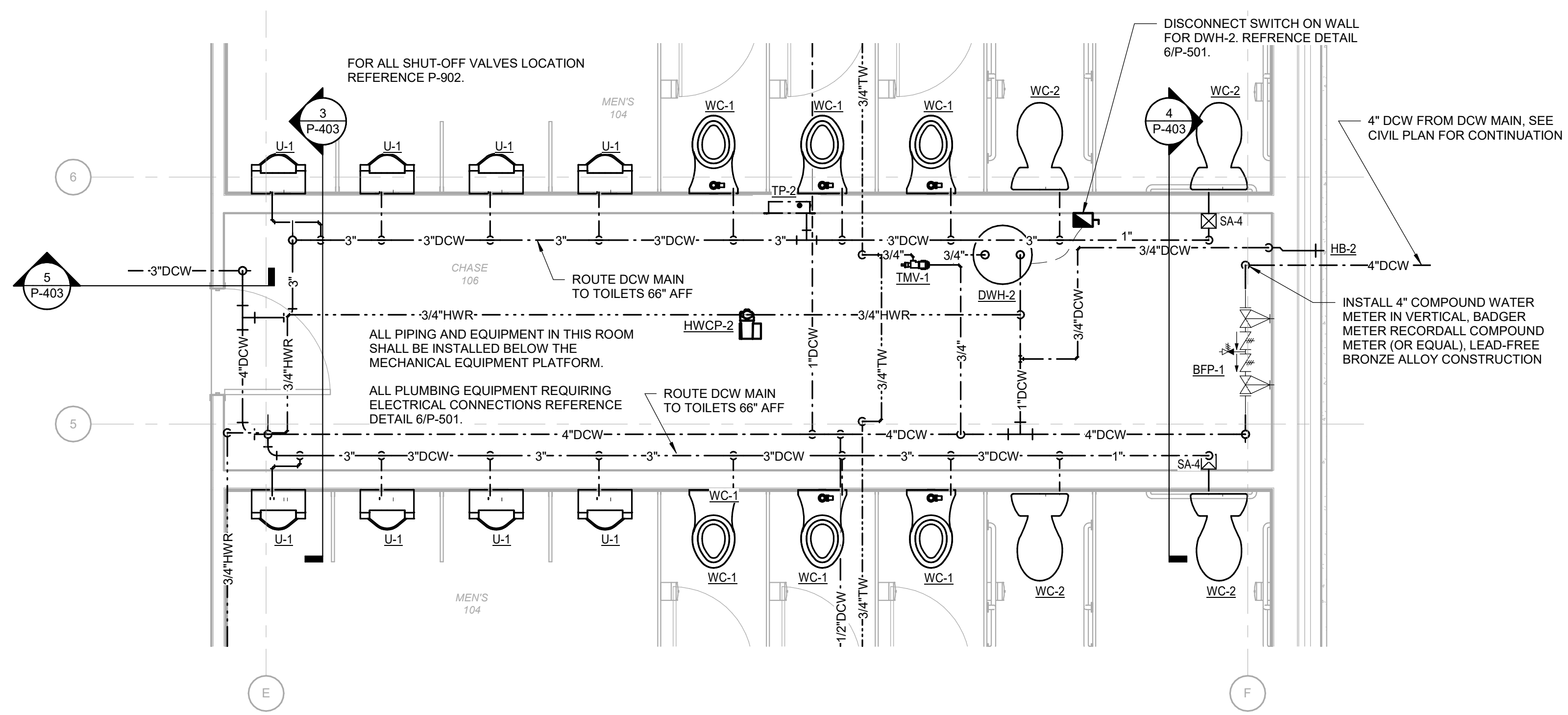
NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

PROJECT NO.
18-0129.021
SHEET NO.
P-401

ENLARGED FLOOR PLANS - PLUMBING



1 CHASE 105 ENLARGED FLOOR PLAN - DOMESTIC WATER
Scale: 3/8" = 1'-0"



2 CHASE 106 ENLARGED FLOOR PLAN - DOMESTIC WATER
Scale: 3/8" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kilaheo Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com
APOGEE
Engineers | Architects | Interior Designers

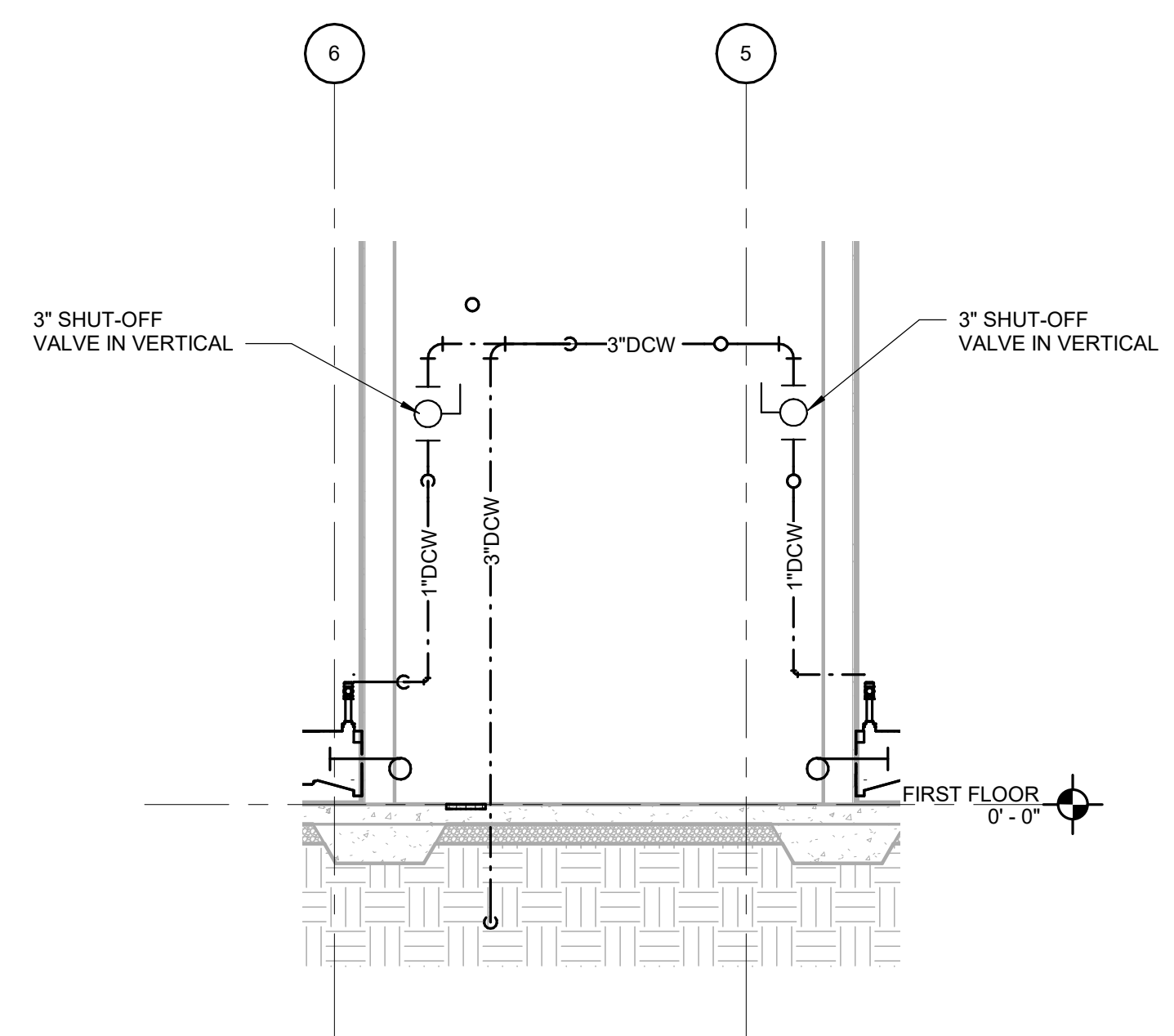
PAUL L. HOLLOWAY
Professional Engineer
No. 47721
02/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

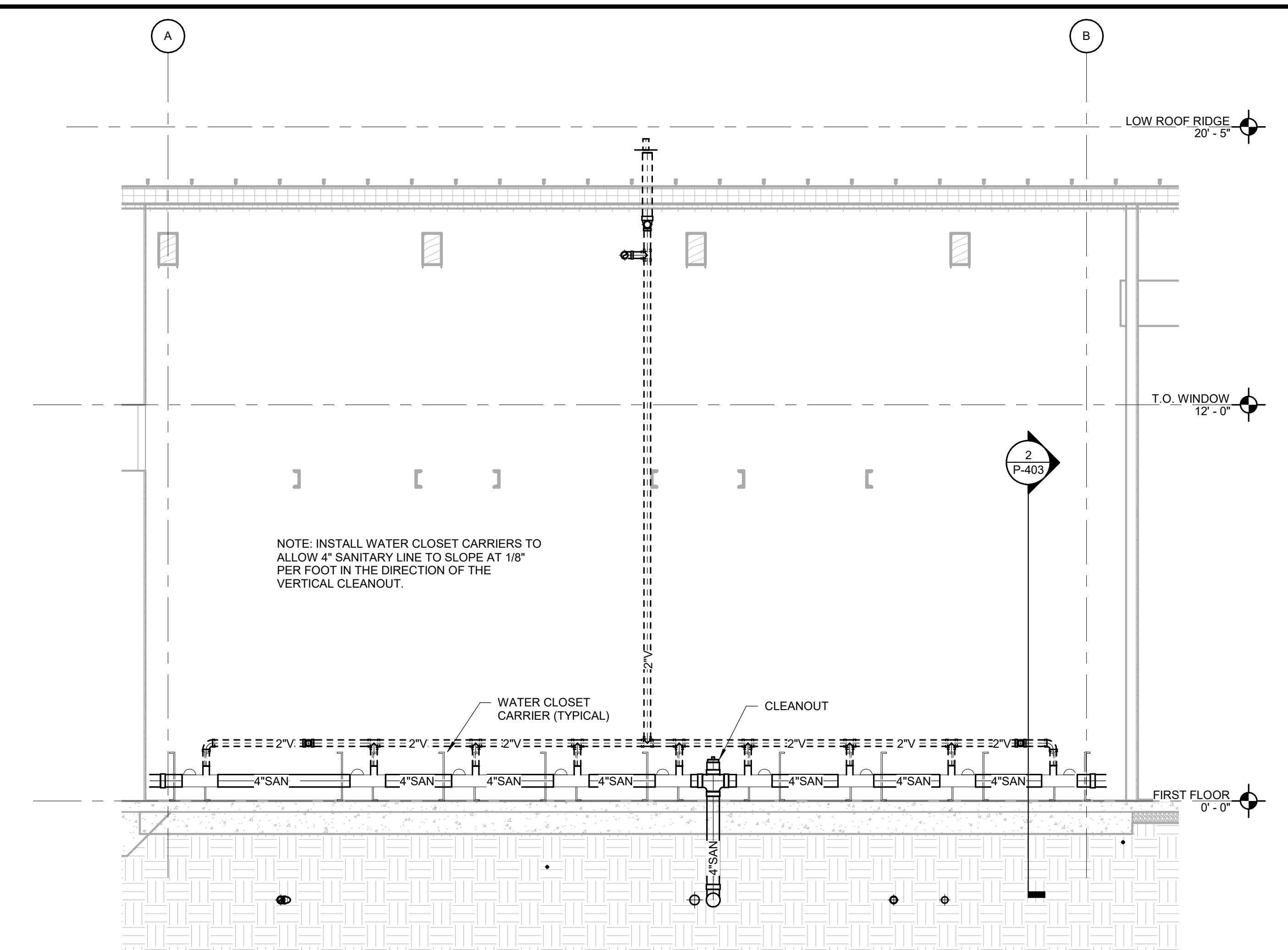
NO	REVISIONS	DATE	BY
A	ISSUED FOR SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
ENLARGED FLOOR PLANS - PLUMBING

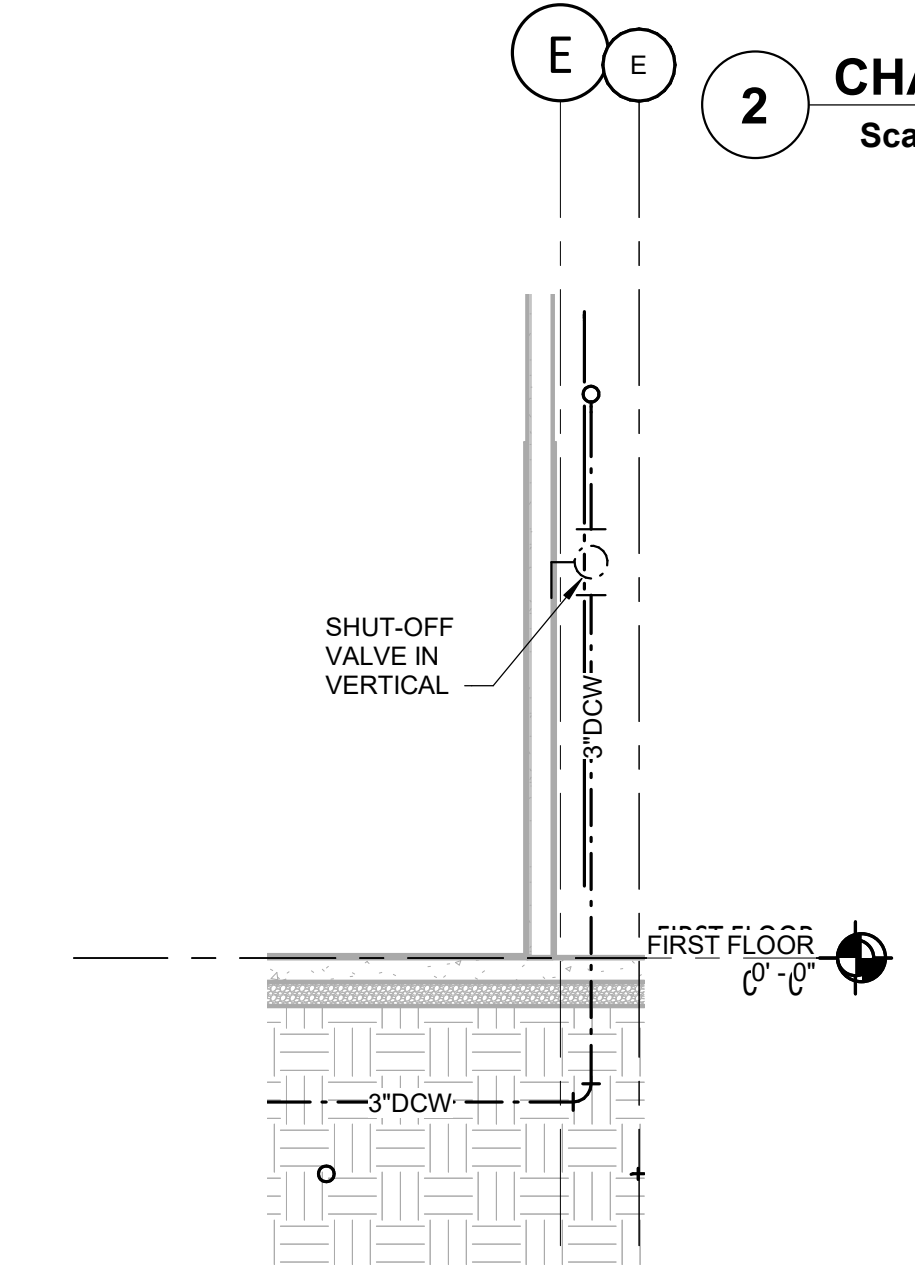
PROJECT NO.
18-0129.021
SHEET NO.
P-402



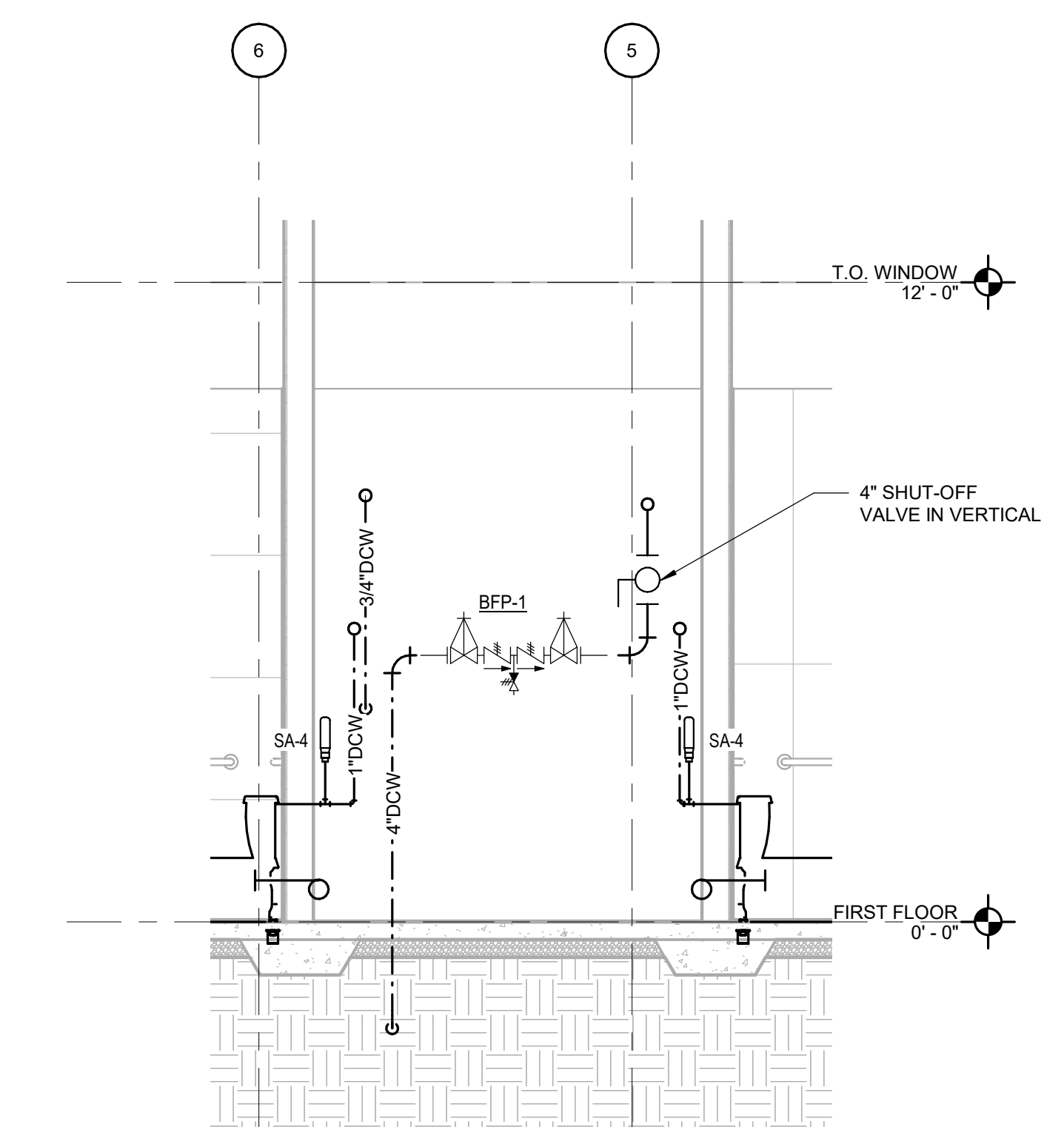
2 CHASE 105 - SECTION THROUGH CHASE RIGHT SIDE
Scale: 3/8" = 1'-0"



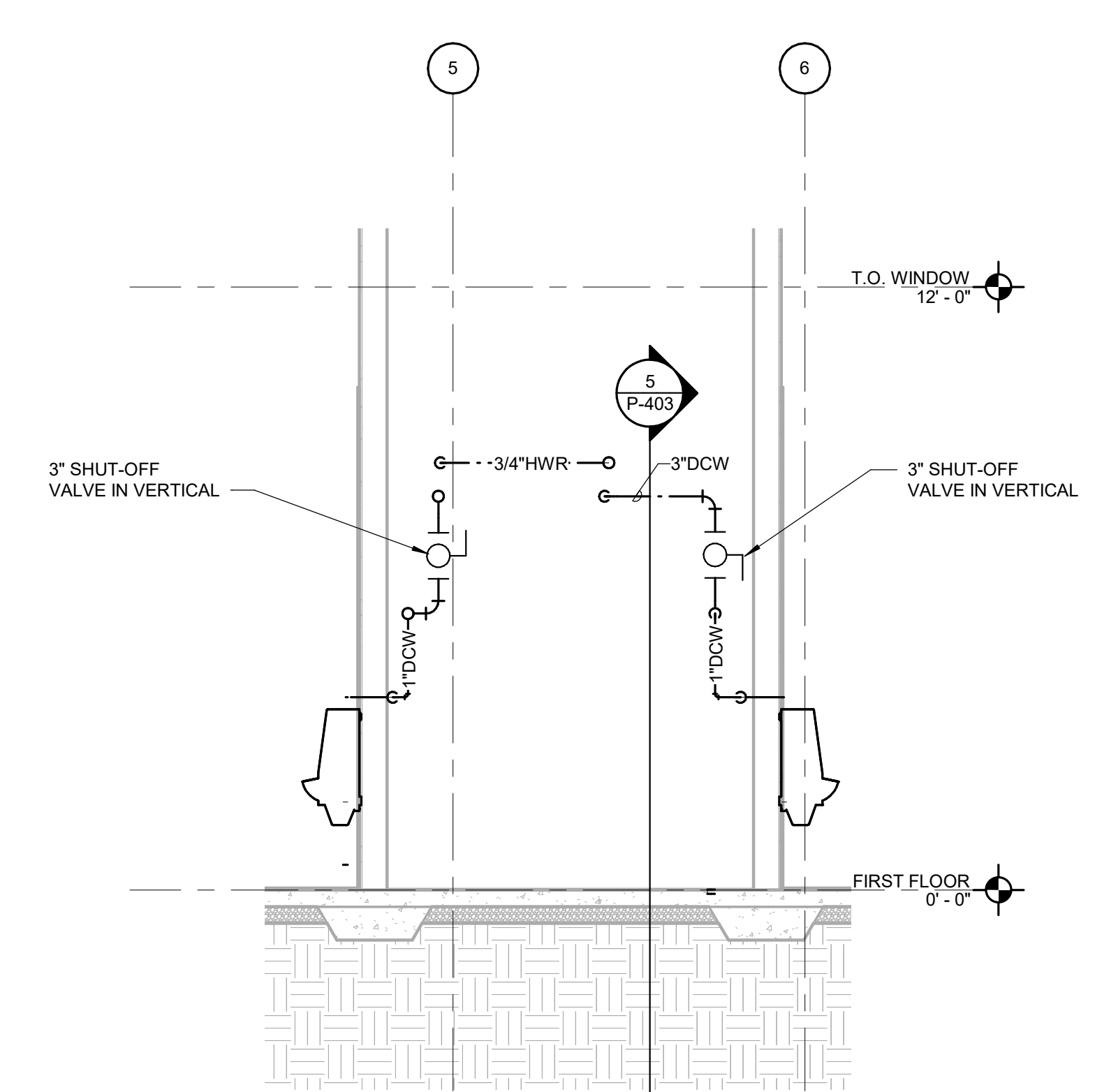
1 CHASE 105 - SECTION #1 AT WATER CLOSET CARRIERS
Scale: 3/8" = 1'-0"



5 CHASE 106 - SECTION #2 THROUGH CHASE RIGHT SIDE
Scale: 3/8" = 1'-0"



4 CHASE 106 - SECTION THROUGH CHASE LEFT SIDE
Scale: 3/8" = 1'-0"



3 CHASE 106 - SECTION THROUGH CHASE RIGHT SIDE
Scale: 3/8" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kilauea Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE NC License #C-1848
Engineers | Architects www.aogcpe.com 919-888-7420

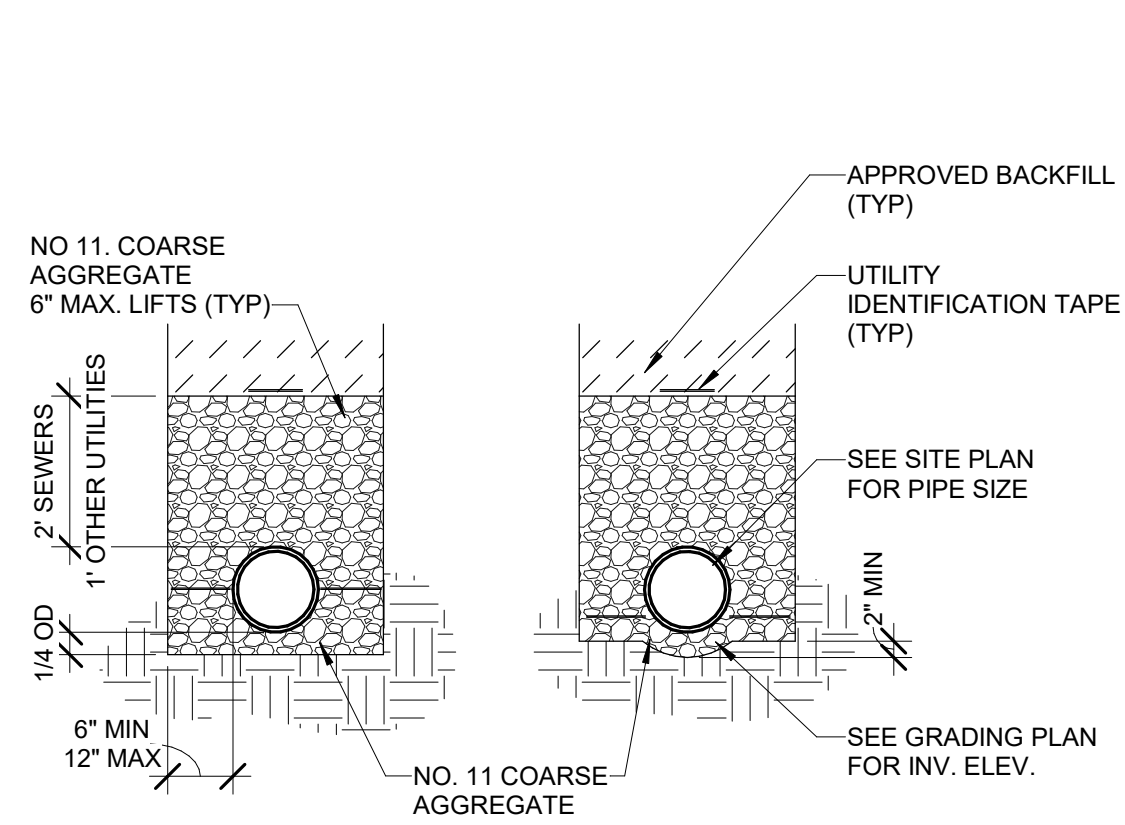
NORTH CAROLINA PROFESSIONAL ENGINEER
PAUL L. HOLLOWAY
47721
02/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

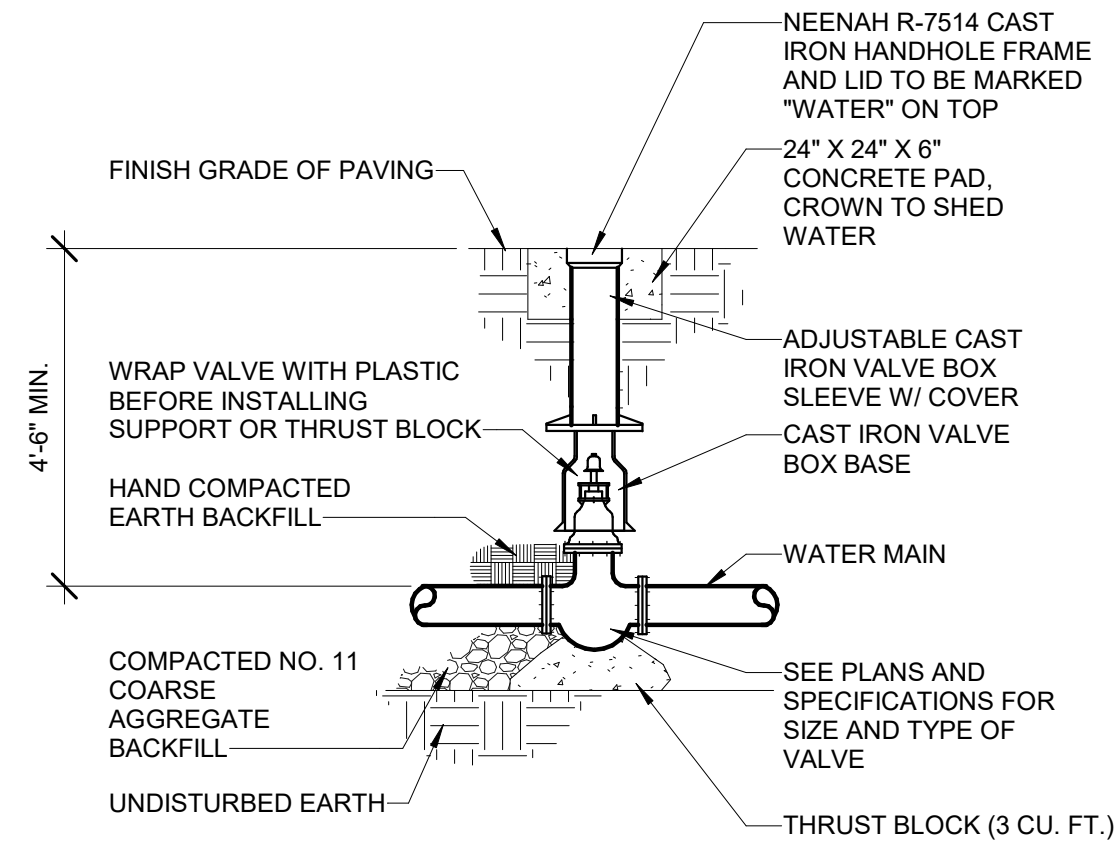
NO	REVISIONS	DATE	BY
A	ISSUED FOR SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
PLUMBING SECTIONS

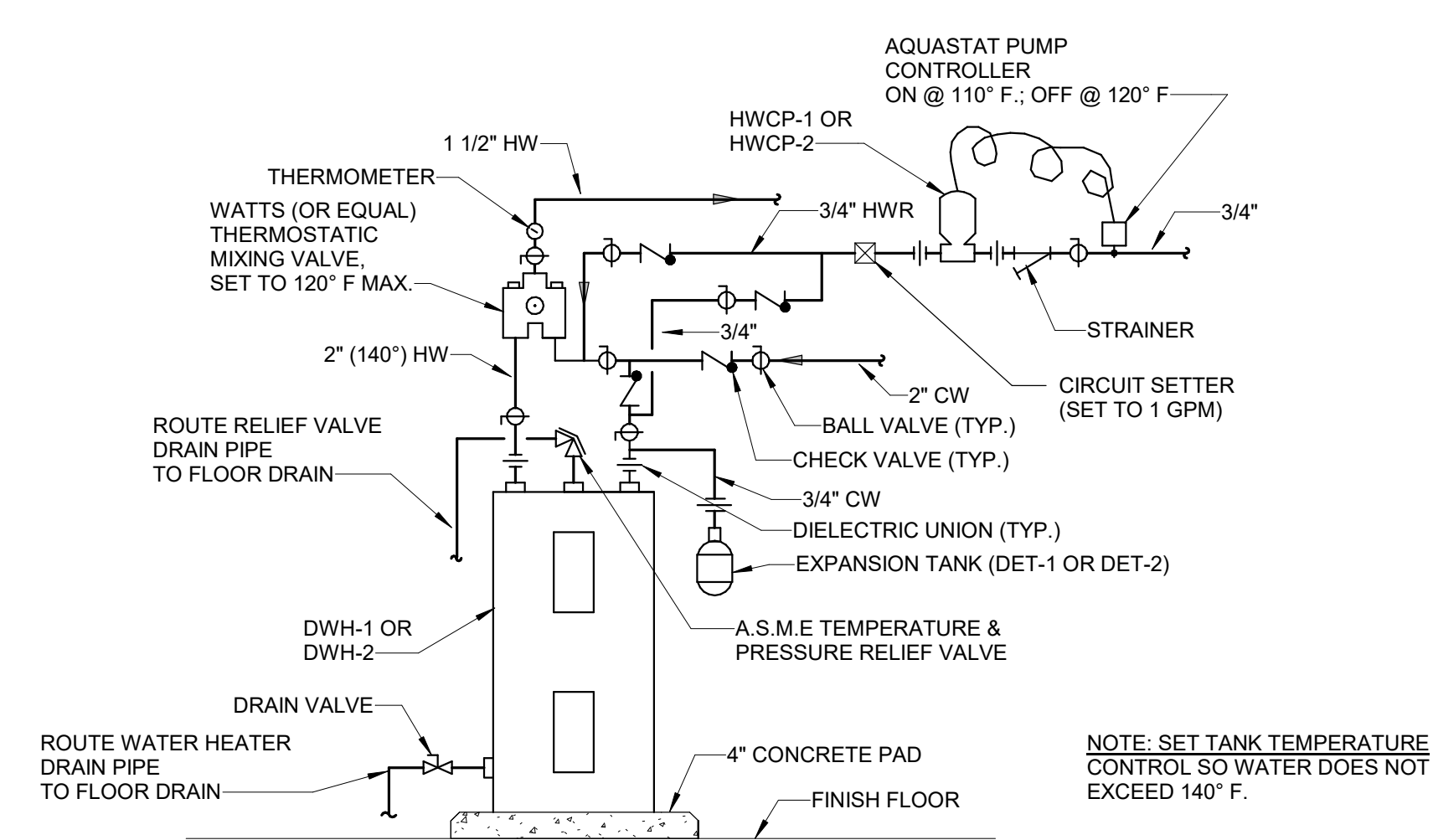
PROJECT NO.
18-0129.021
SHEET NO.
P-403



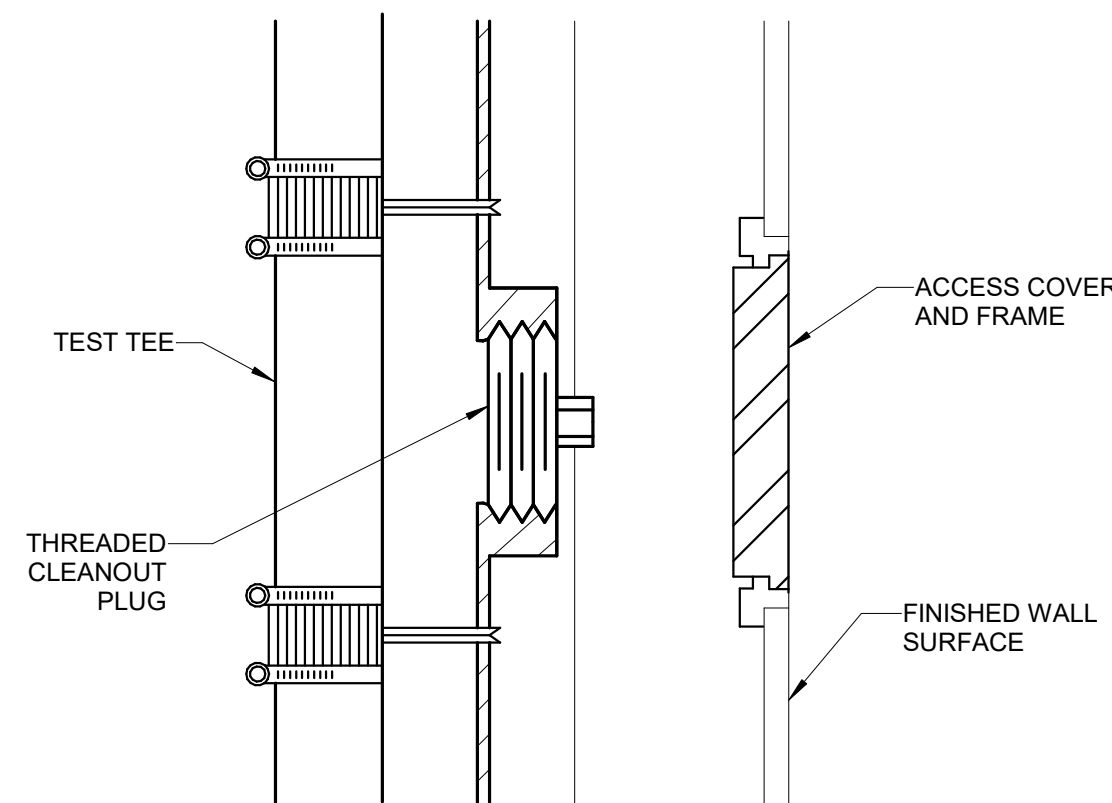
7 PIPE BEDDING AND BACKFILL DETAIL
Scale: N.T.S.



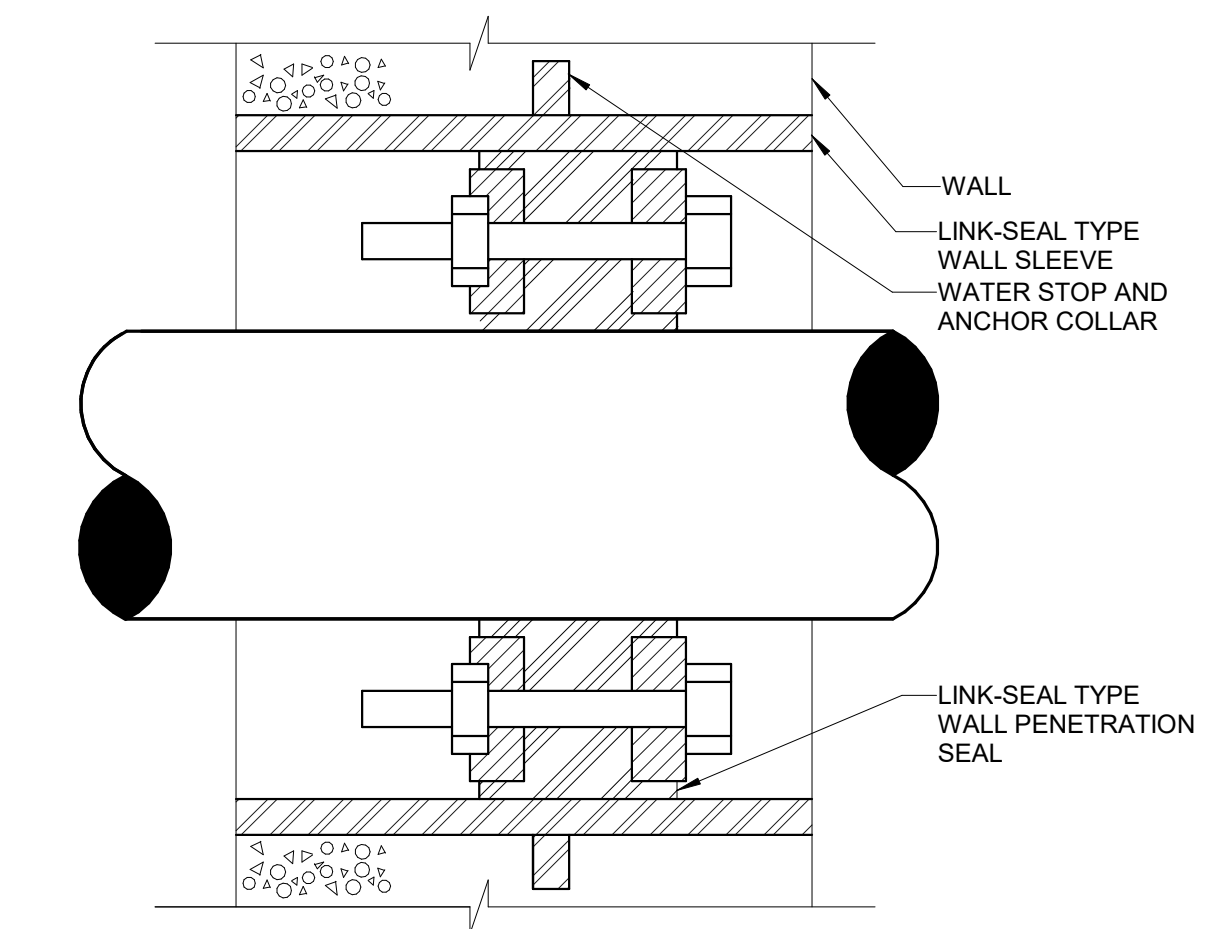
4 VALVE BOX DETAIL
Scale: N.T.S.



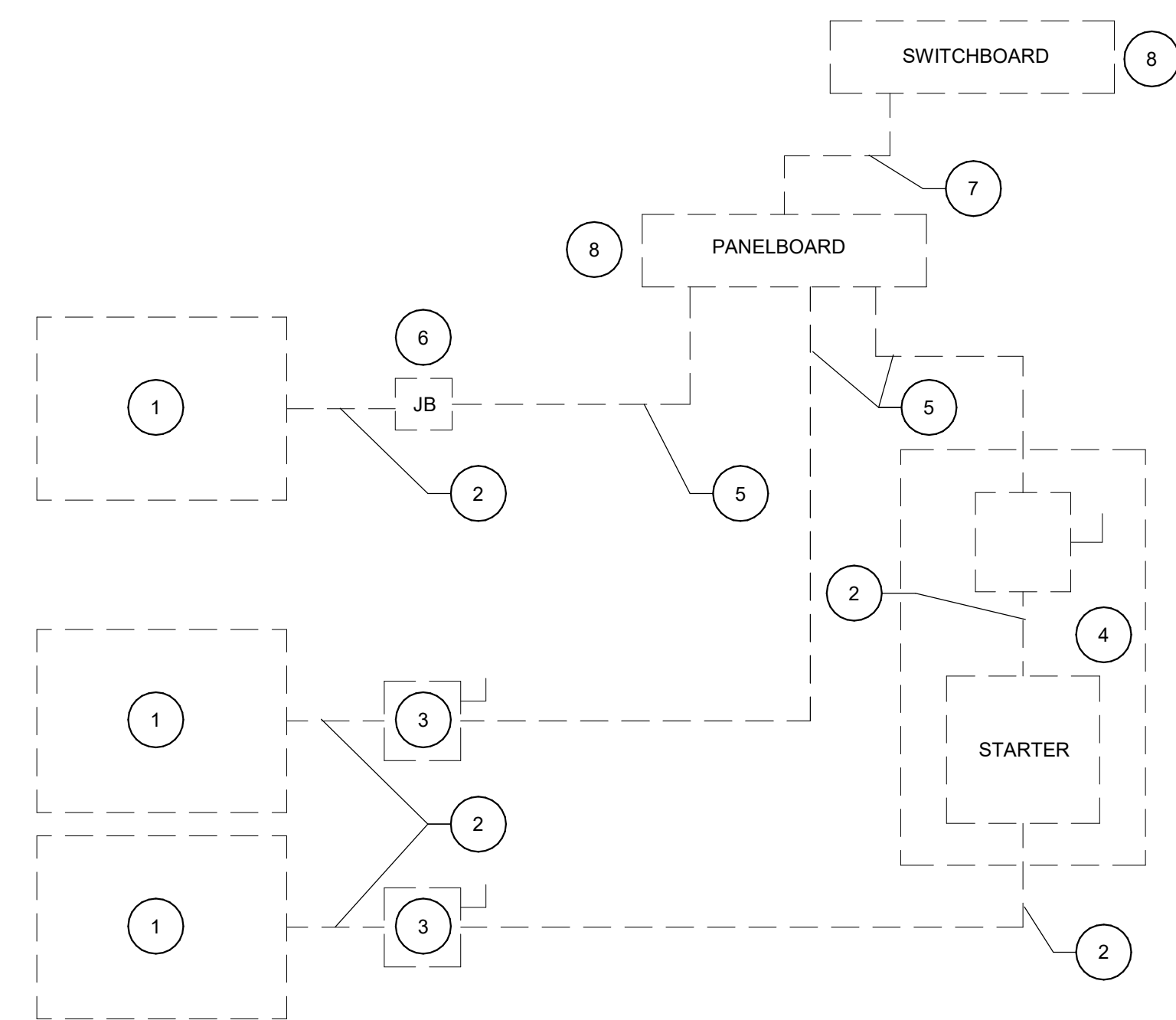
1 ELECTRIC HEATER PIPING DIAGRAM (DWH-1 AND DWH-2)
Scale: N.T.S.



5 NO HUB W/ACCESS DOOR DETAIL
Scale: N.T.S.

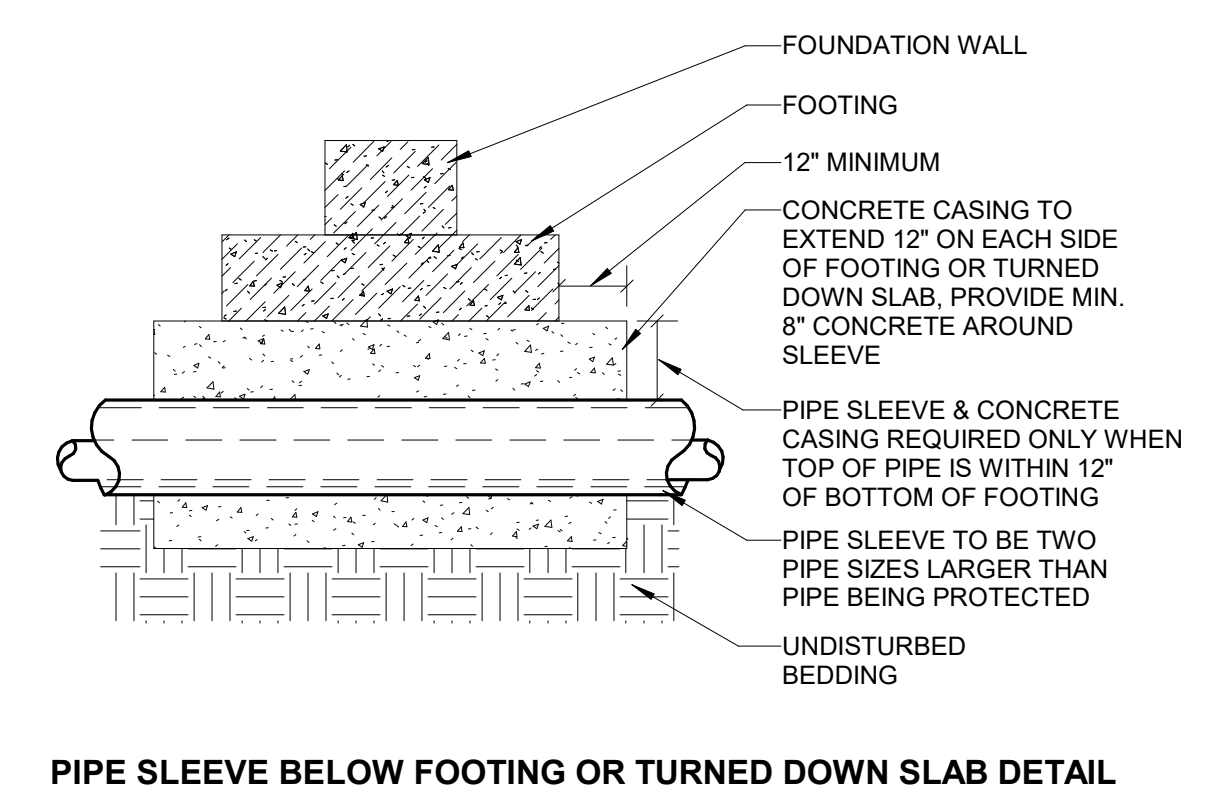


2 WALL / FLOOR SLEEVE DETAIL
Scale: N.T.S.



6 ELECTRICAL EQUIPMENT CONNECTION PLUMBING DETAIL
Scale: N.T.S.

- GENERAL NOTES:**
1. THE PURPOSE OF THIS DIAGRAM IS TO INDICATE THE RESPONSIBILITIES OF THE DIVISION 22 AND DIVISION 26 CONTRACTORS. THIS DIAGRAM IS NOT INTENDED TO BE USED TO SHOW THE METHOD OF INSTALLATION OF WIRING, CONDUIT OR EQUIPMENT. DO NOT USE THIS DIAGRAM FOR PURPOSES OTHER THAN THE INTENDED PURPOSE STATED ABOVE.
 2. COORDINATE WITH THE DIVISION 26 CONTRACTOR THE ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT, AS WELL AS THE SIZING AND ROUTING OF ALL CONDUIT.
 3. ALL WIRING AND CONDUIT SHALL BE SIZED, ROUTED AND INSTALLED IN ACCORDANCE WITH NEC AND THE APPLICABLE PORTIONS OF THE DIVISION 26 SPECIFICATIONS.
 4. THE DIVISION 22 CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
 5. SEE SPECIFICATION SECTION 26 28 16 FOR DISCONNECT SWITCHES. REFERENCE THE ELECTRICAL CONDUCTOR SCHEDULE ON SHEET E-601.
- DIAGRAM KEY NOTES:**
1. EQUIPMENT BY DIVISION 22.
 2. CONDUIT & WIRING BY DIVISION 22.
 3. IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, OR IS CALLED FOR ON THE FLOOR PLANS, EQUIPMENT SCHEDULES, OR SPECIFICATIONS, IT SHALL BE PROVIDED AND INSTALLED BY THE DIVISION 22 EQUIPMENT CONTRACTOR.
 4. A COMBINATION STARTER MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
 5. FEEDER CIRCUIT WIRING AND CONDUIT BY DIVISION 26.
 6. JUNCTION BOX BY DIVISION 26 (WHERE SHOWN ON PLANS).
 7. WIRING AND CONDUIT BY DIVISION 26.
 8. BY DIVISION 26.



3 PIPE SLEEVE BELOW FOOTING OR TURNED DOWN SLAB DETAIL
Scale: N.T.S.

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
Lic. No. 1110, Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.summitde.net

Apogee Consulting Group, P.A.
1151 Kilaheo Farm Road, Suite 120
Cary, North Carolina 27511
A.P.O.G.E.E. NC License #C-1848
www.apogee.com
Engineers | Architects | Interior Designers | 919-888-7420

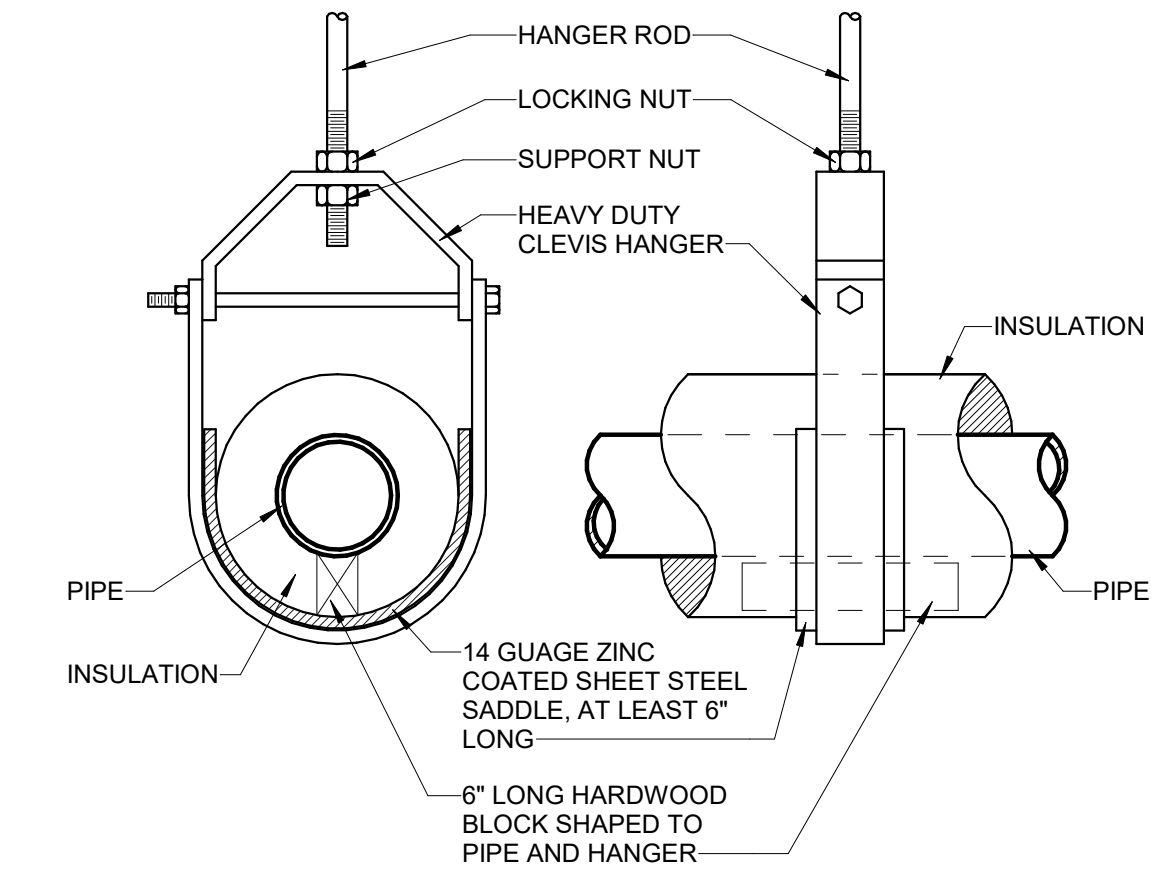
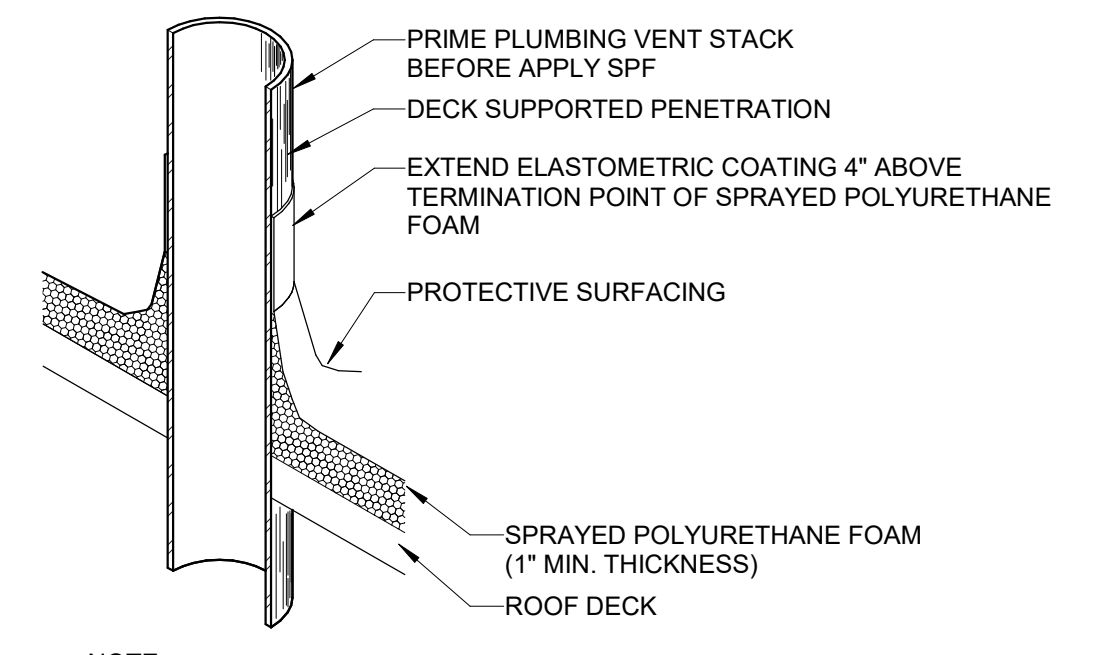
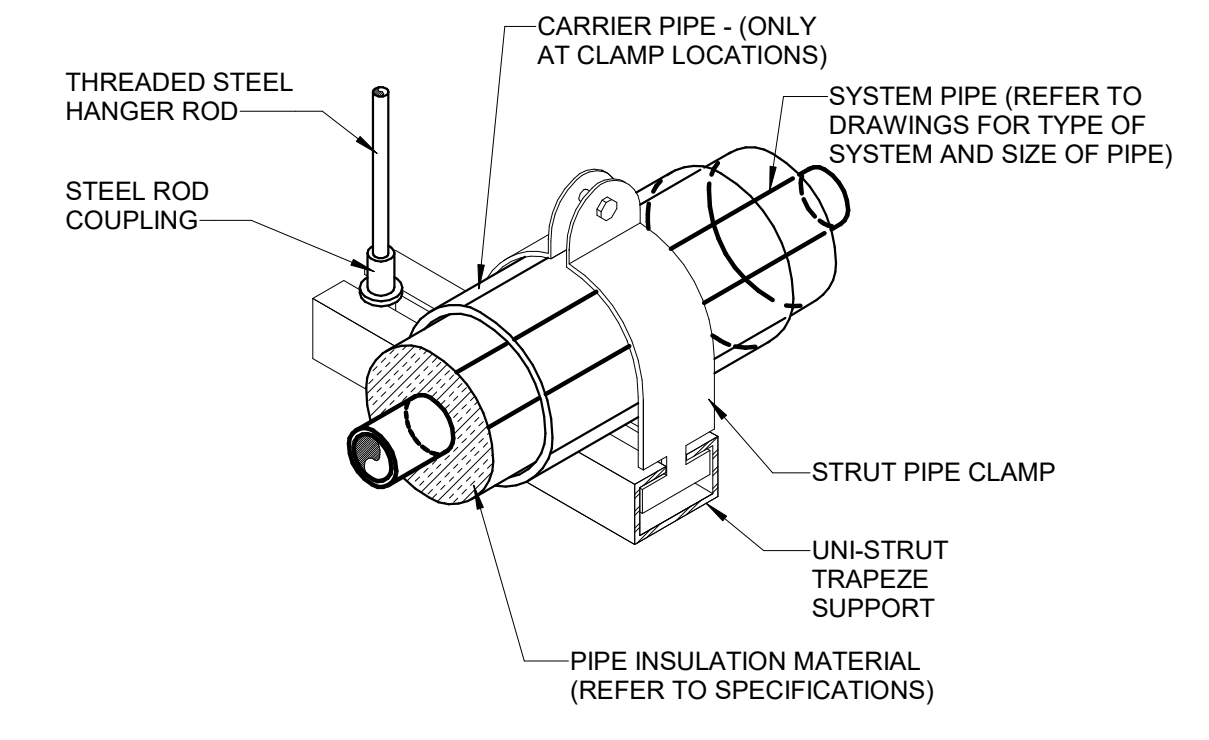
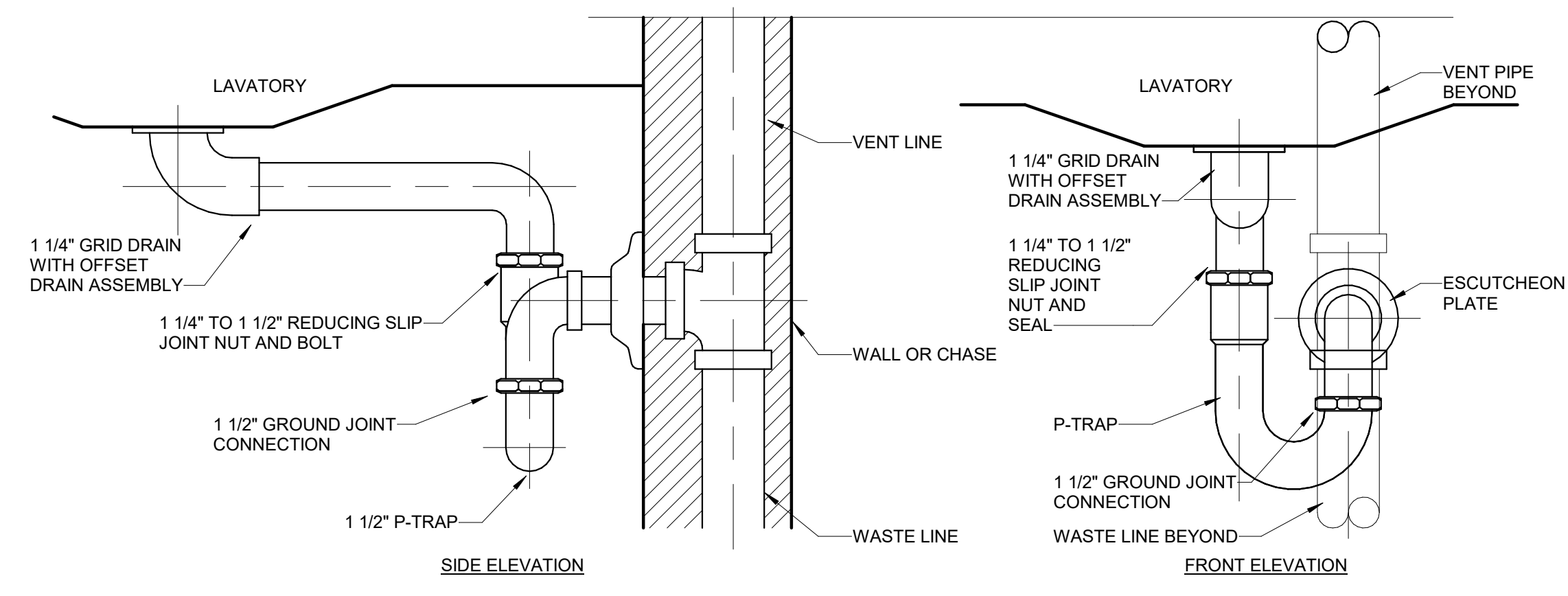
P.L.L.
NORTH CAROLINA PROFESSIONAL ENGINEERS
Paul H. Holloman
47721
PAUL L. HOLLAMAN
11/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

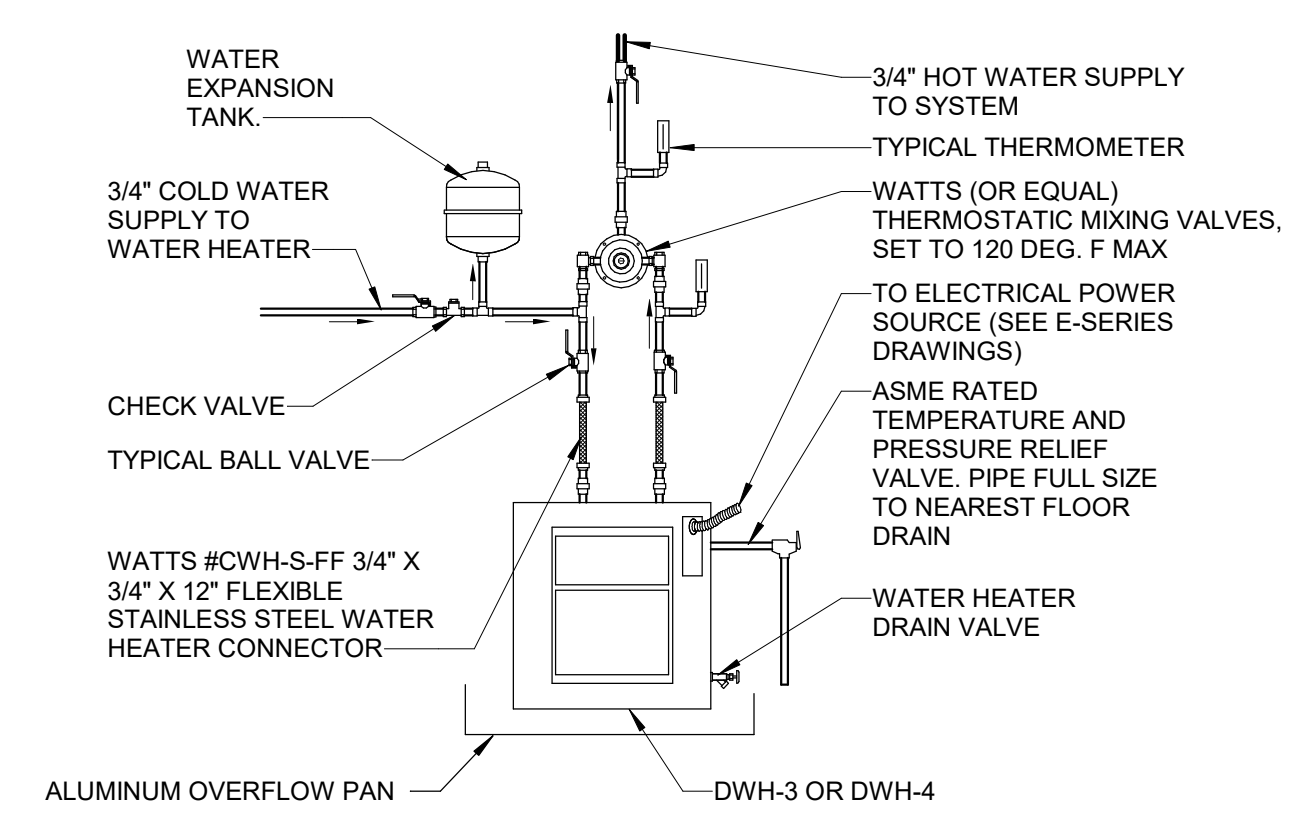
NO	REVISIONS	DATE	BY	PLH
A	ISSUED FOR SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
PLUMBING DETAILS

PROJECT NO.
18-0129.021
SHEET NO.
P-501



2 PIPE HANGER (6" & SMALLER) DETAIL
Scale: No Scale



SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com
APOGEE
Engineers | Architects | Interiors | 919-888-7420

PAUL L. HOLLOWAY
PROFESSIONAL ENGINEER
47721
02/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED FOR SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
PLUMBING DETAILS

PROJECT NO.
18-0129.021
SHEET NO.
P-502

DOMESTIC HOT WATER RECIRCULATION PUMPS

MARK	SERVICE	TYPE	GPM	HEAD, FT. H2O	MOTOR		ELECTRICAL (V/Ph/Hz)	SERIES	MODEL # (BELL & GOSSETT)	REMARKS
					HP	RPM				
HWCP-1	DWH-1 RECIRCULATION	WET ROTOR CIRCULATOR	1.0	8	1/12	3600	115/1/60	ECOCIRC XL	XL N 20-35	1, 2
HWCP-2	DWH-2 RECIRCULATION	WET ROTOR CIRCULATOR	1.0	8	1/12	3600	115/1/60	ECOCIRC XL	XL N 20-35	1, 2

REMARKS:
1. PUMP SHALL HAVE STAINLESS STEEL BODY.

DOMESTIC WATER HEATERS (ELECTRIC)

MARK	DESCRIPTION	STORAGE CAP., GALLONS	PRESSURE RATING, PSI	HEATING ELEMENTS		ELECTRICAL		MODEL #	REMARKS
				QUANTITY	KW (EACH)	V/Ph/Hz	FLA		
DWH-1	STORAGE TANK TYPE	40	150	2	3.0	240/1/60	25	DEN-40 (AO SMITH)	1, 4, 5
DWH-2	STORAGE TANK TYPE	40	150	2	3.0	240/1/60	25	DEN-40 (AO SMITH)	1, 4, 5
DWH-3	POINT-OF-USE TANK TYPE	10	150	1	3.0	240/1/60	12.5	EGSP10 (RHEEM)	2, 3, 4, 6
DWH-4	POINT-OF-USE TANK TYPE	10	150	1	1.5	240/1/60	6.3	EGSP10 (RHEEM)	2, 3, 4, 6

REMARKS:
1. INSTALL 28" DIAMETER ALUMINUM DRAIN PAN UNDER WATER HEATER WITH 1" DRAIN CONNECTION.
2. INSTALL 20" DIAMETER ALUMINUM DRAIN PAN UNDER WATER HEATER WITH 1" DRAIN CONNECTION.
3. MOUNT WATER HEATER ON FIELD-FABRICATED WELDED STEEL CANTILEVERED PLATFORM BOLTED TO WALL.

PLUMBING LOAD SUMMARY

* - PRIVATE FIXTURES

MARK	DESCRIPTION	QUANTITY	DFU EACH	DFU	CW WSFU EACH	CW WSFU	HW WSFU EACH	HW WSFU	TOTAL WSFU EACH	TOTAL WSFU
DF-1	WATER COOLER WALL HUNG	1	0.5	0.5	0.25	0.25	0	0	0.25	0.25
HB-1	HOSE BIBB	8	0	0	0	0	0	0	2.2	17.6
HB-2	FREEZELESS WALL HYDRANT CONCEALED BOX	2	0	0	0	0	0	0	2.2	4.4
L-1	LAVATORY WALL HUNG, PUBLIC	1	1	1	1.5	1.5	1.5	1.5	0.7	0.7
L-2	LAVATORY DOUBLE STATION SYSTEM	12	1	12	1.5	18	1.5	18	0.7	8.4
MS-1	MOP SINK	1	2	2	3	3	3	3	4	4
SK-1	SERVICE SINK CAST IRON	2	2	4	3	6	3	6	4	8
TP-1	TRAP PRIMING STATION, 115V (FLUSH MOUNT)	0	0	0	0	0	0	0	0	0
TP-2	TRAP PRIMING STATION, 115V (FLUSH MOUNT)	0	0	0	0	0	0	0	0	0
U-1	URINAL WALL HUNG	12	2	24	3	36	3	0	0	0
WB-1	ICE MAKER BOX	1	0	0	0.25	0.25	0	0	0	0
WC-1	WATER CLOSET, WALL-HUNG, PUBLIC	19	4	76	10	190	0	0	10	190
WC-2	WATER CLOSET, FLOOR MOUNTED, PUBLIC	11	4	44	10	110	0	0	10	110
		70		163.5		365		28.5		343.35

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	DFU EACH	CW WSFU	HW WSFU	TOTAL WSFU	WASTE PIPE	VENT PIPE	COLD WATER	HOT WATER	ELECTRIC SENSOR	REMARKS
BFP-1	ZURN 375 OSY BACKFLOW PERVENTER										3" ZURN 375 OSY
CO	FLOOR CLEAN OUT										ZURN ZN14004NH
DF-1	WATER COOLER WALL HUNG	0.5	0.25	0	0.25	1 1/2"	1 1/2"	1/2"			ELKAY EZ08" H/L/LOW
FD-1	3" FLOOR DRAIN										ZURN 3" Z415B WITH TRAP PRIMER CONNECTION
FD-2	2" FLOOR DRAIN										ZURN 2" Z415B WITH TRAP PRIMER CONNECTION
HB-1	HOSE BIBB	0	0	0	2.2	0"		1/2"			WOODFORD/26
HB-2	FREEZELESS WALL HYDRANT CONCEALED BOX	0	0	0	2.2	0"		1/2"			WOODFORD B67C-4 SINGLE CHECK VACUUM BREAKER. SELF DRAINING WITH LOCKABLE COVER.
L-1	LAVATORY WALL HUNG, PUBLIC	1	1.5	1.5	0.7	1 1/2"	0"	1/2"	1/2"	Yes	KOHLER K-2031 FAUCET SLOAN EAF-275
L-2	LAVATORY DOUBLE STATION SYSTEM	1	1.5	1.5	0.7	1 1/2"	0"	1/2"	1/2"	Yes	SLOAN ELS-72275 WITH 2 FAUCETS EAF-275 AND SOAP DISPENSER MSD ESD-350
MS-1	MOP SINK	2	3	3	4	3"	1 1/2"	1/2"	1/2"	No	TSB-3000 FLOOR MOUNTED STAIN RESISTANT TERRAZO
SK-1	SERVICE SINK CAST IRON	2	3	3	4	3"	1 1/2"	1/2"	1/2"	No	ZURN Z5888, FAUCET DELTA D28C2383, PROFLO PF003
TMV-1	THERMOSTATIC MIXING VALVE										WATTS WLFMMVM1USF
TP-1	TRAP PRIMING STATION, 115V (FLUSH MOUNT)										PRECISION PLUMBING PRODUCT MODEL PT-6
TP-2	TRAP PRIMING STATION, 115V (FLUSH MOUNT)										PRECISION PLUMBING PRODUCT MODEL PT-6
TR-1	TRENCH DRAIN 36" LONG										INFINITYDRAIN PLD36 - DRIAN BODY 36
TR-2	TRENCH DRAIN 55" LONG										INFINITYDRAIN PLD57 - DRIAN BODY 57
U-1	URINAL WALL HUNG	2	3	3	0	2"	2"	1"		Yes	ZURN Z5760 WALL HUNG SLOAN 195-1.0 ES-S FLUSH VALVE.
WB-1	ICE MAKER BOX	1	0.25			0"	0"	1/2"			PROPEX LF5955025 WITH SUPPORT BRACKETS
WC-1	WATER CLOSET, WALL-HUNG, PUBLIC	4	10	0	10	4"	2"	1"	0"	Yes	SLOAN ST-2060-A-1.28 WALL-HUNG, BACK DISCHARGE SLOAN ROYAL 152-1.28 ES-S WITH EL-154 TRANSFORMER PROFLO SEAT PFTSC0F2000WH
WC-2	WATER CLOSET, FLOOR MOUNTED, PUBLIC	4	10	0	10		2"	1"	0"	Yes	AMERICAN STANDARD PRIORO FLOOR MOUNTED, BACK DISCHARGE, SLOAN 8111-1.28 FLUSH VALVE

SHOCK ABSORBER - WATER HAMMER ARRESTOR SCHEDULE

MARK	FIXTURE UNIT RATING
SA-1	1 - 11
SA-2	12 - 32
SA-3	33 - 60
SA-4	61 - 113
SA-5	114 - 154
SA-6	155 - 330

NOTE: USE ZURN MODEL Z1700100 SIZE 100 OR EQUAL.

EXPANSION TANKS

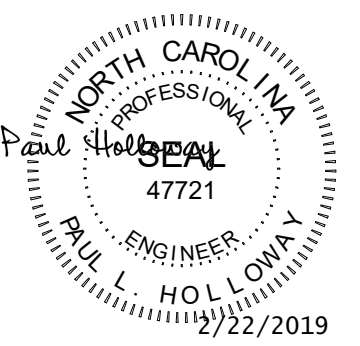
MARK	SERVICE	TANK VOLUME, GAL.	ACCEPTANCE VOLUME, GAL.	DIAMETER, INCHES	LENGTH, INCHES	MODEL # (AMTROL)	REMARKS
DET-1	DWH-1 HOT WATER	2.0	0.9	8	14	ST-5C	1, 2
DET-2	DWH-2 HOT WATER	2.0	0.9	8	14	ST-5C	1, 2
DET-3	DWH-3 HOT WATER	2.0	0.9	8	14	ST-5C	1, 2
DET-4	DWH-4 HOT WATER	2.0	0.9	8	14	ST-5C	1, 2

REMARKS:

- TANK SHALL BE STEEL CONSTRUCTION WITH HEAVY DUTY BUTYL RUBBER DIAPHRAGM.
- TANK SHALL HAVE A WORKING PRESSURE RATING OF 150 PSIG.



Apogee Consulting Group, P.A.
1151 Klilane Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE Engineers | Architects
www.apogee.com

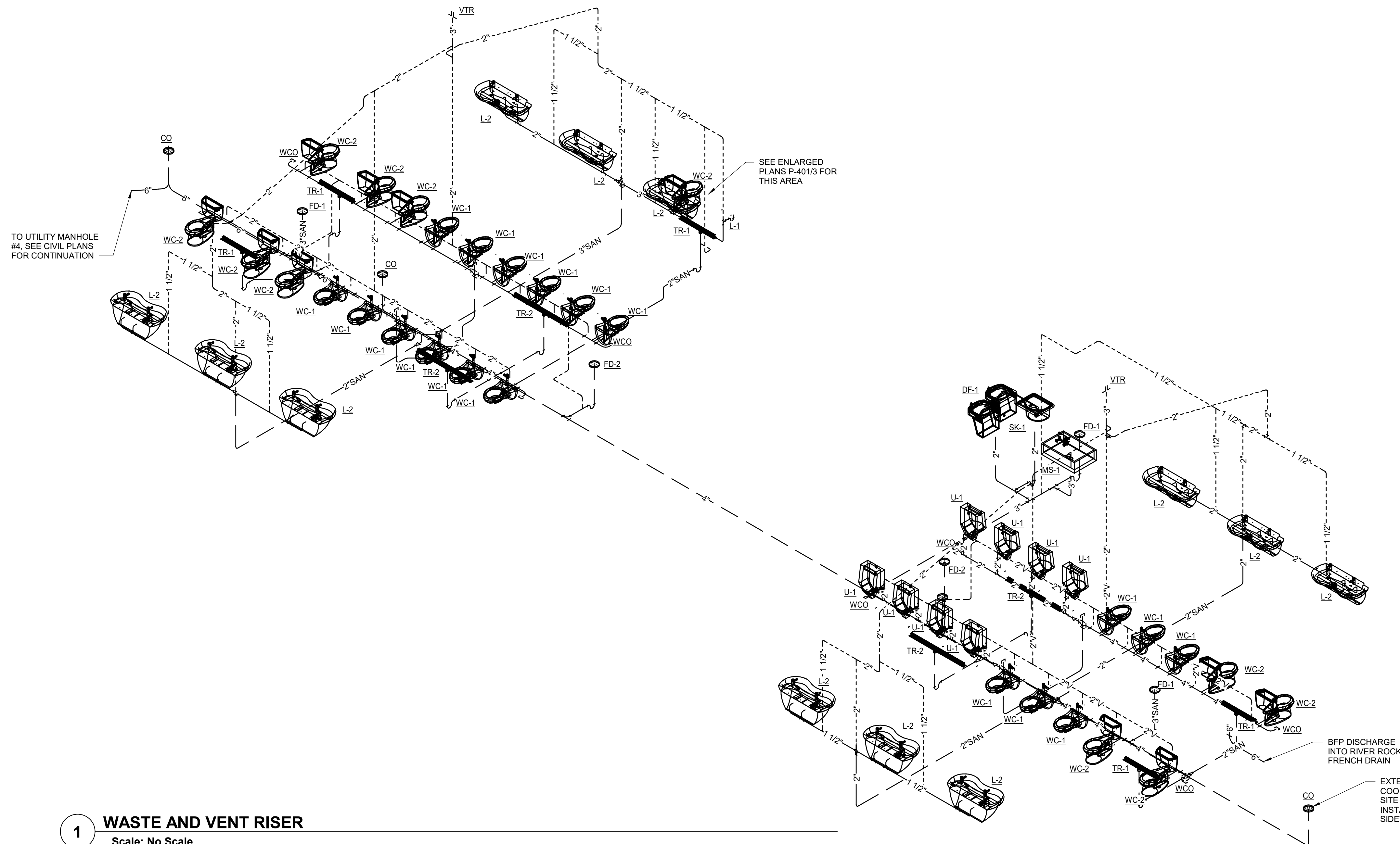
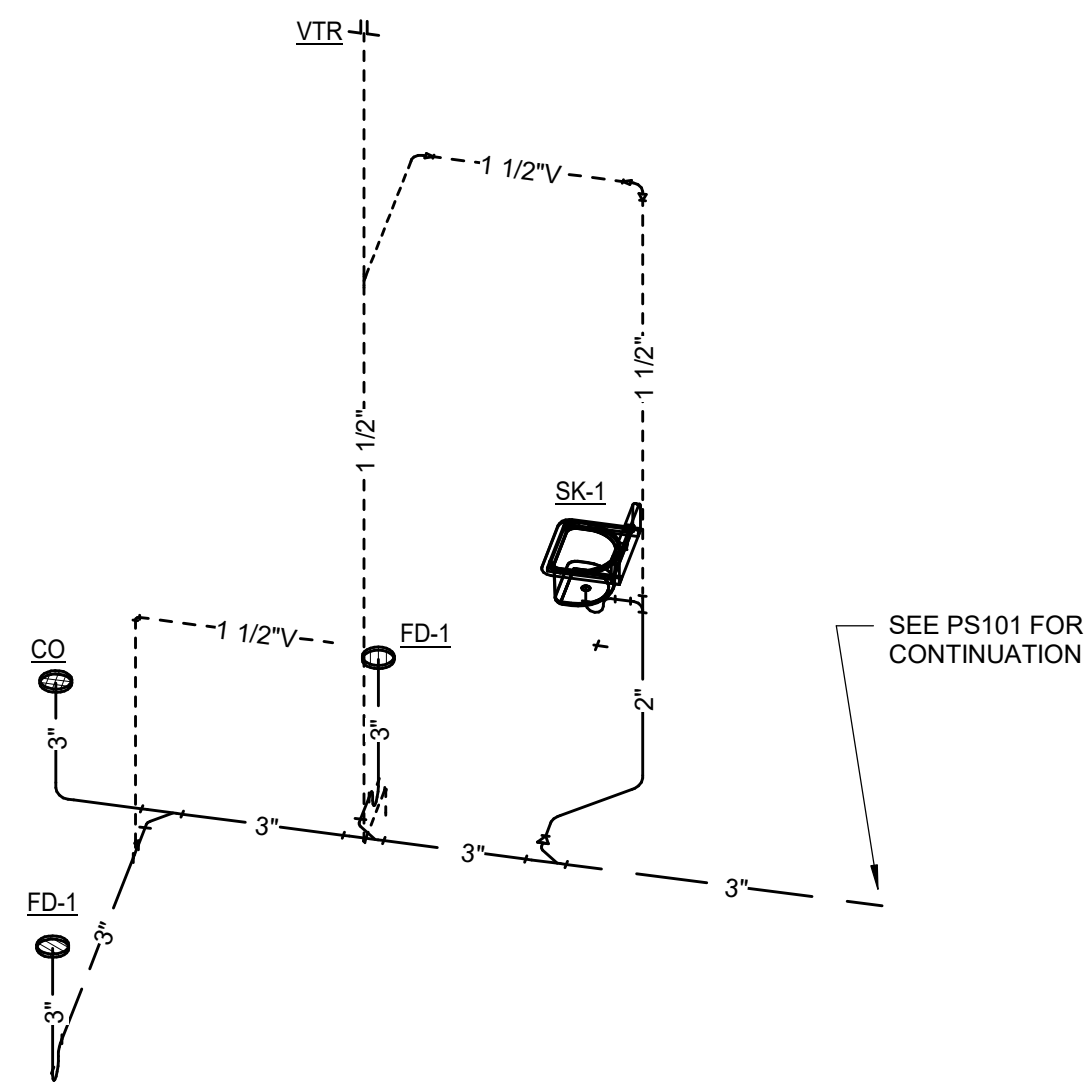


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY
A	ISSUED FOR SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
PLUMBING SCHEDULES

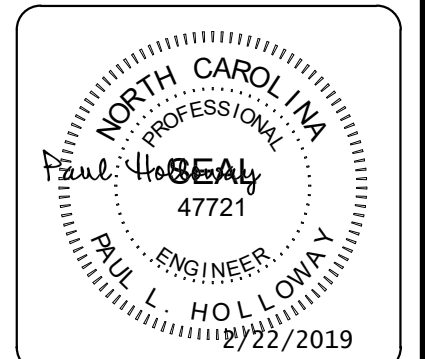
PROJECT NO.
18-0129.021
SHEET NO.
P-601



1 WASTE AND VENT RISER
Scale: No Scale

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively inspired - Technically Executed
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kilauea Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-7848
www.apogee.com
APOGEE
Engineers | Architects | Architects



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED FOR SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

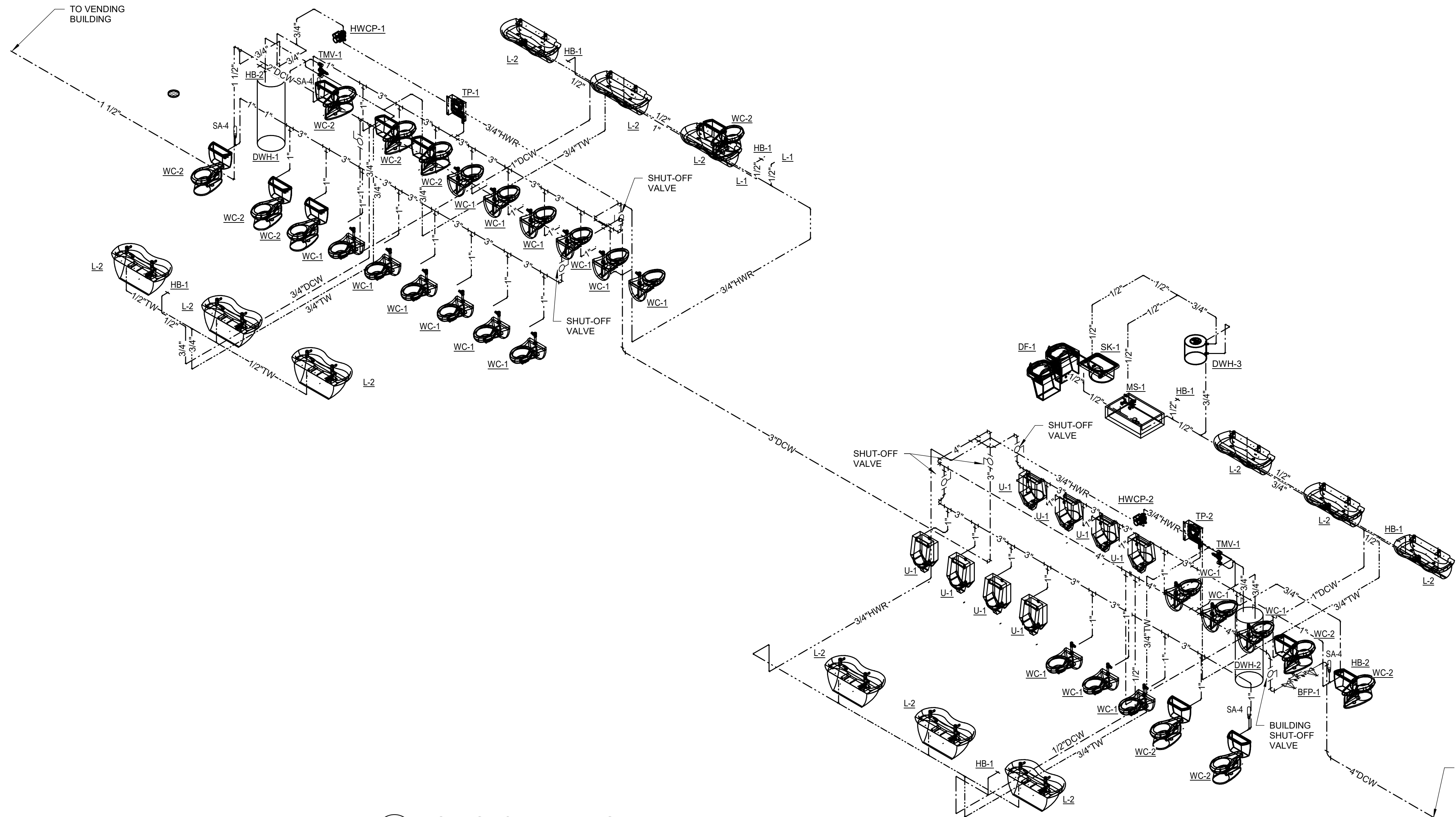
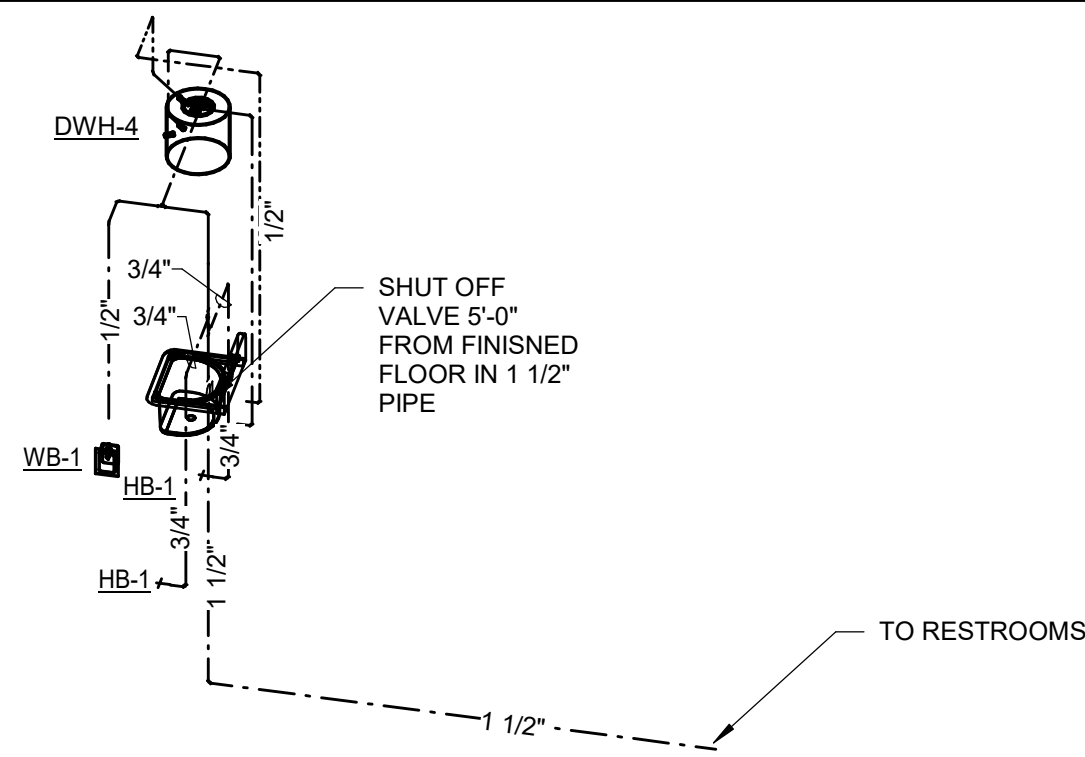
NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
SANITARY PIPE RISERS
PROJECT NO. **18-0129.021**
SHEET NO. **P-901**

EXTERIOR CLEANOUT, COORDINATE WITH SITE PLAN. DO NOT INSTALL CLEANOUT IN SIDEWALK

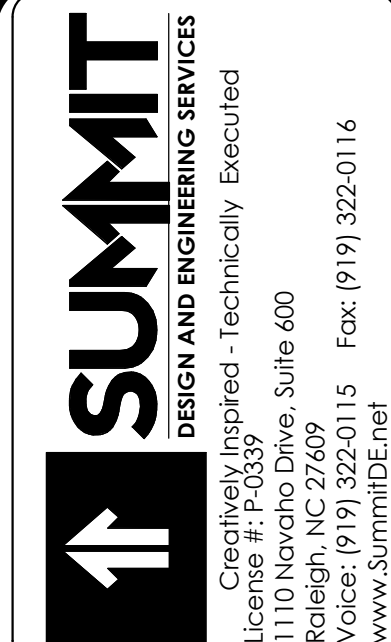
BFP DISCHARGE INTO RIVER ROCK FRENCH DRAIN

SEE ENLARGED PLANS P-401/3 FOR THIS AREA

TO UTILITY MANHOLE #4, SEE CIVIL PLANS FOR CONTINUATION

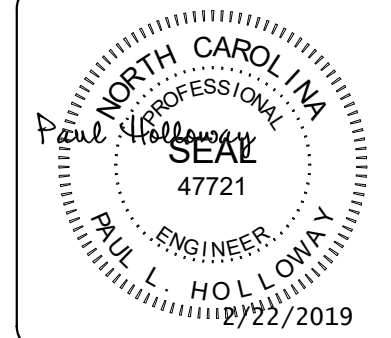


1 DOMESTIC WATER RISER
Scale: No Scale



Apogee Consulting Group, P.A.
1151 Kilauea Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com

APOGEE
Engineers | Architects | Interiors



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED

PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME

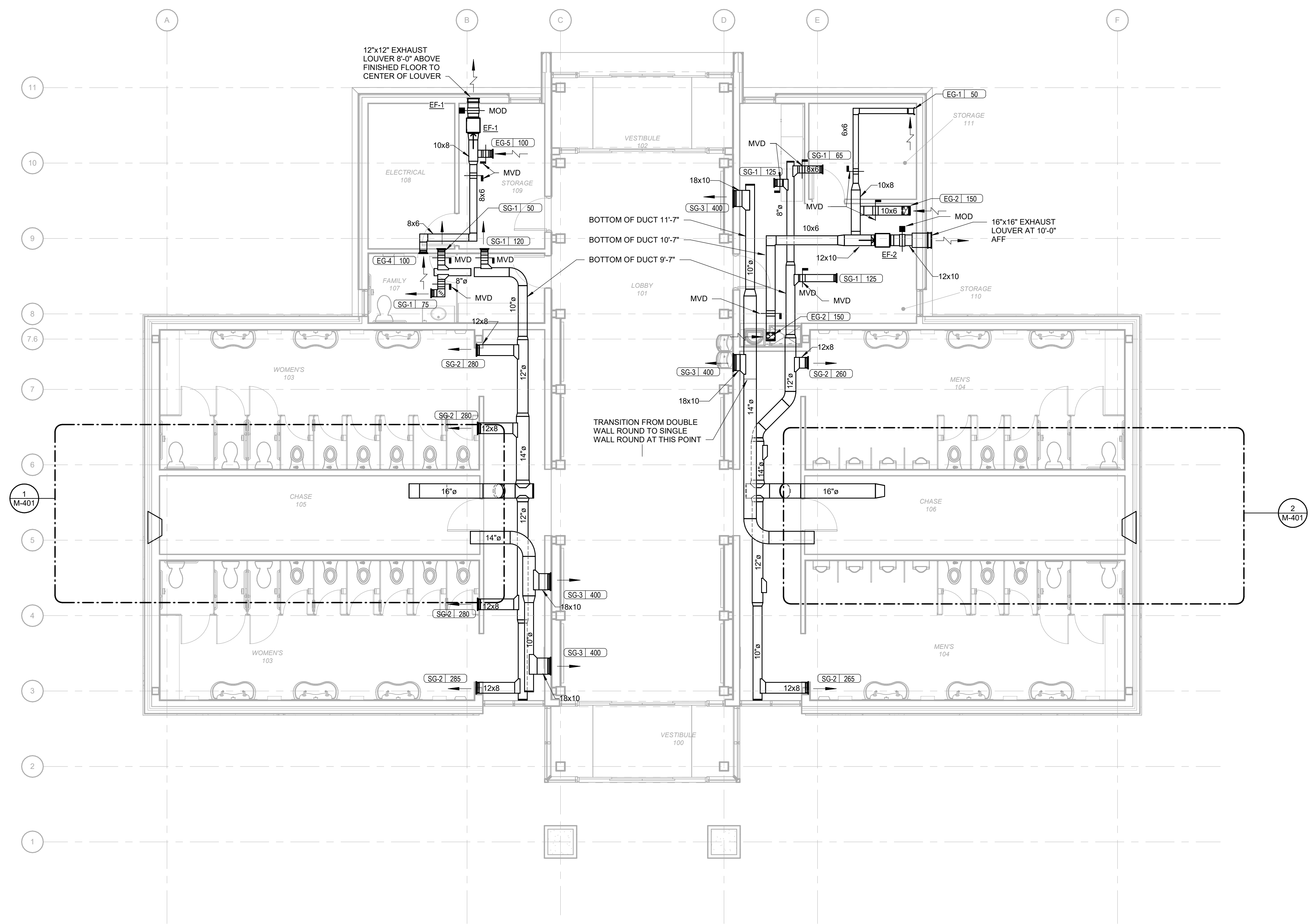
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED FOR SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

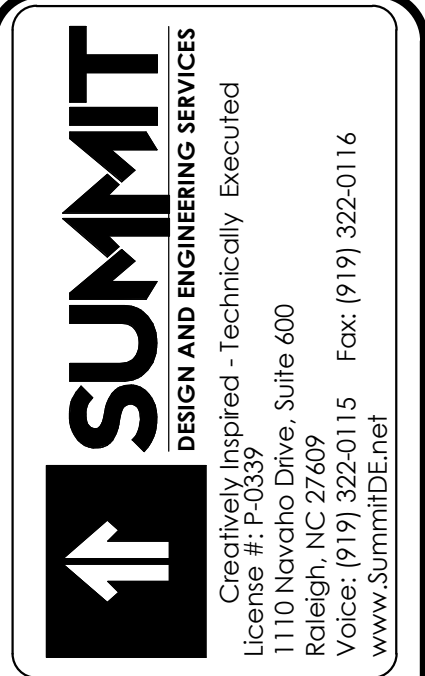
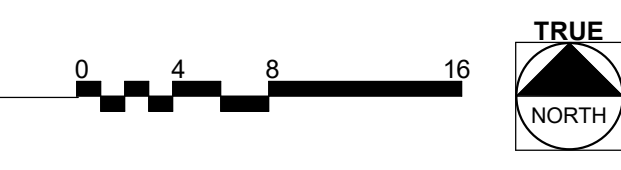
NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
DOMESTIC WATER PIPE RISERS

PROJECT NO.
18-0129.021

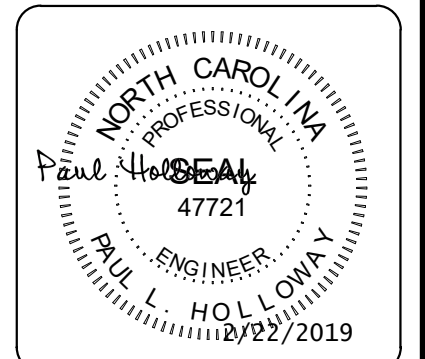
SHEET NO.
P-902



1 HVAC RESTROOM PLAN
Scale: 3/16" = 1'-0"



Apogee Consulting Group, P.A.
1151 Klaine Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com
919-888-7420

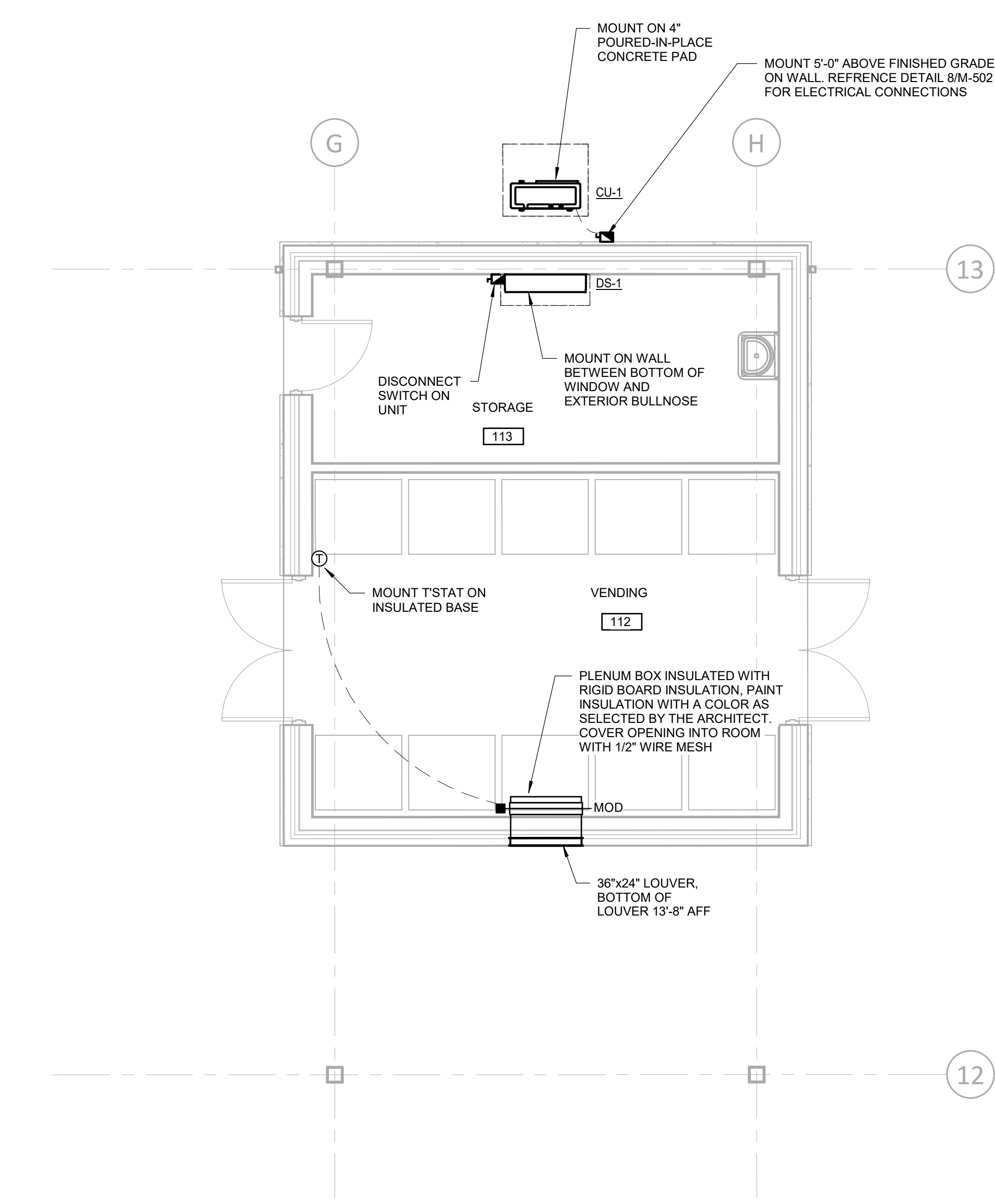


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

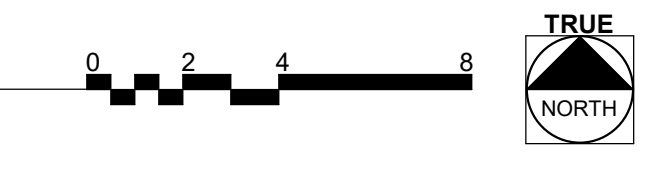
NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
HVAC RESTROOM PLAN

PROJECT NO.
18-0129.021
SHEET NO.
MH101

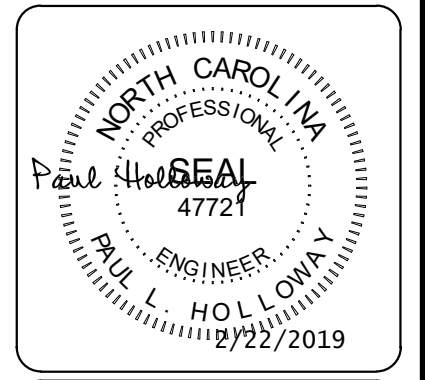


1 HVAC VENDING PLAN
Scale: 1/4" = 1'-0"



SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildine Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.aogp.com 919-888-7420
Engineers | Architects



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED

PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME

DRAWN BY: SMH/PLH FIRST ISSUE DATE: 11/02/18

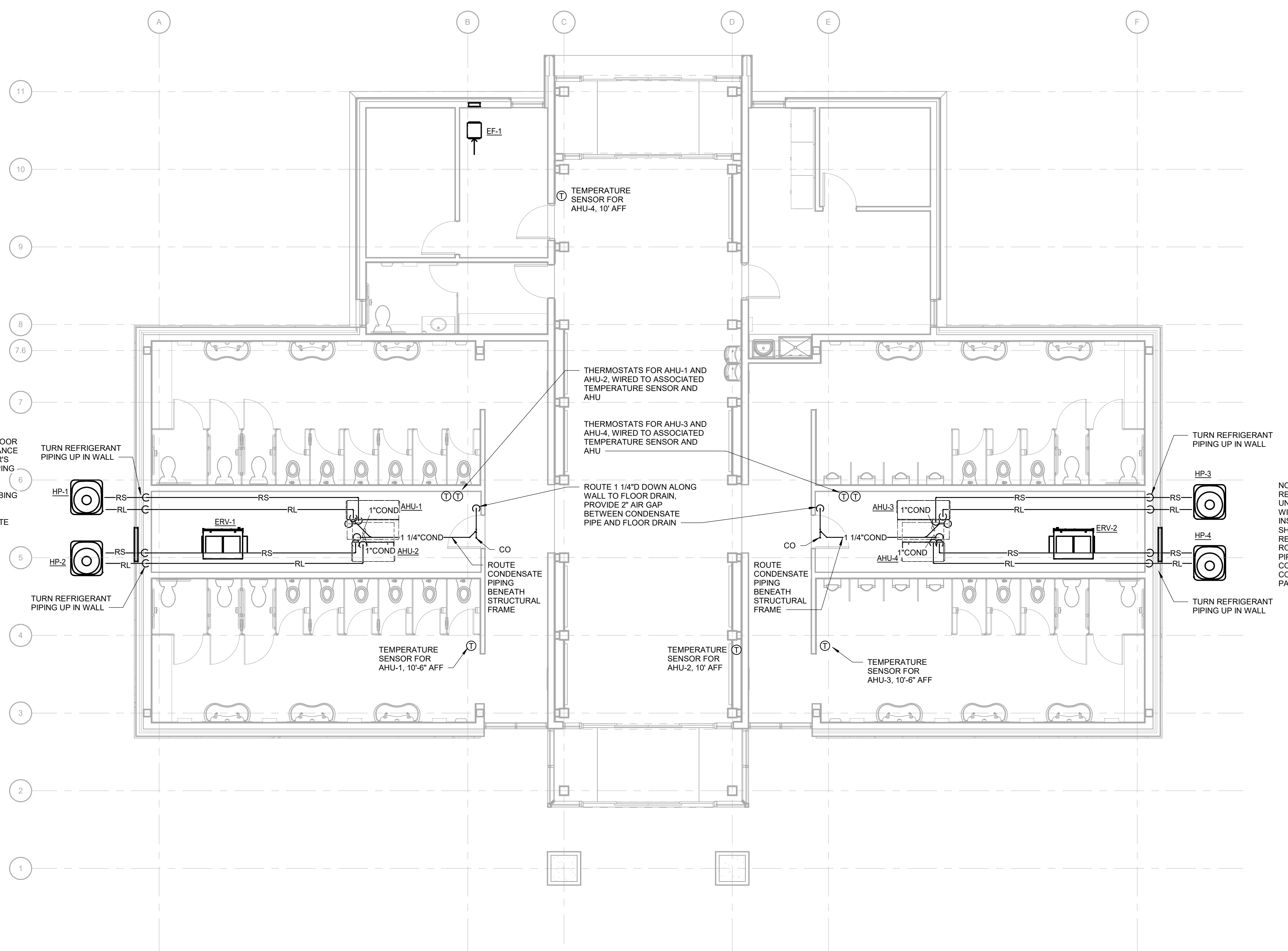
NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

HVAC VENDING PLAN

PROJECT NO.
18-0129.021

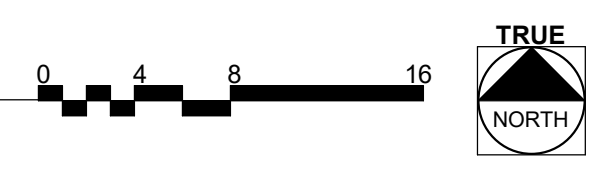
SHEET NO.
MH102



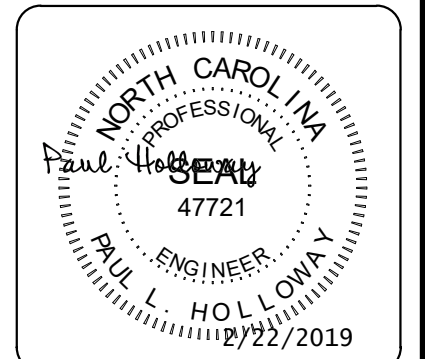
NOTE: SIZE, ROUTE AND INSTALL REFRIGERANT PIPING FROM OUTDOOR UNIT TO INDOOR UNIT IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S INSTRUCTIONS. REFRIGERANT PIPING SHOWN ON DRAWINGS IS FOR REFERENCE ONLY. COORDINATE ROUTING WITH DUCTWORK, PLUMBING PIPING, AND OTHER DISCIPLINES. COORDINATE LOCATIONS OF CONDENSING UNITS AND CONCRETE PADS WITH FRENCH DRAIN.

NOTE: SIZE, ROUTE AND INSTALL REFRIGERANT PIPING FROM OUTDOOR UNIT TO INDOOR UNIT IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S INSTRUCTIONS. REFRIGERANT PIPING SHOWN ON DRAWINGS IS FOR REFERENCE ONLY. COORDINATE ROUTING WITH DUCTWORK, PLUMBING PIPING, AND OTHER DISCIPLINES. COORDINATE LOCATIONS OF CONDENSING UNITS AND CONCRETE PADS WITH FRENCH DRAIN.

1 MECHANICAL PIPING RESTROOM PLAN
Scale: 3/16" = 1'-0"



Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE NC License #C-1848
Engineers | Architects www.aagc-pa.com 919-888-7420

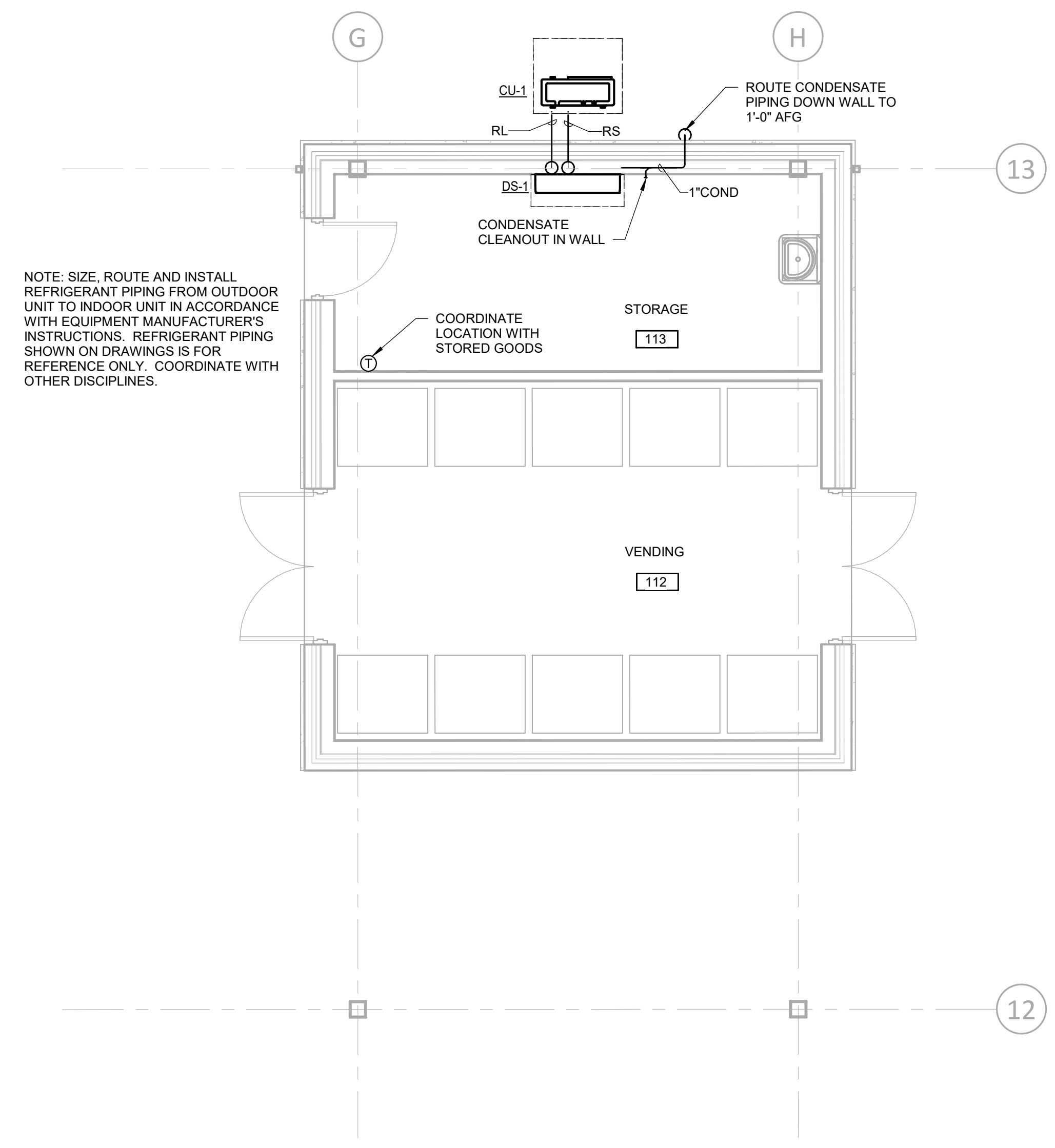


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	
B	ISSUED FOR NCDOT	01/22/19	PLH	
C	ISSUED FOR CONST.	02/21/19	PLH	

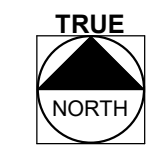
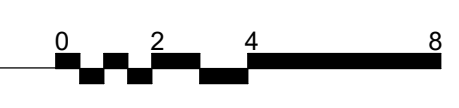
NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
MECHANICAL PIPING RESTROOM PLAN

PROJECT NO.
18-0129.021
SHEET NO.
MP101



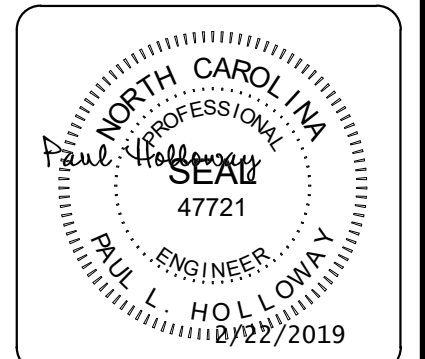
NOTE: SIZE, ROUTE AND INSTALL REFRIGERANT PIPING FROM OUTDOOR UNIT TO INDOOR UNIT IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S INSTRUCTIONS. REFRIGERANT PIPING SHOWN ON DRAWINGS IS FOR REFERENCE ONLY. COORDINATE WITH OTHER DISCIPLINES.

1 MECHANICAL PIPING VENDING PLAN
Scale: 1/4" = 1'-0"



SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.aogcpa.com 919-888-7420
APOGEE Engineers | Architects



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED

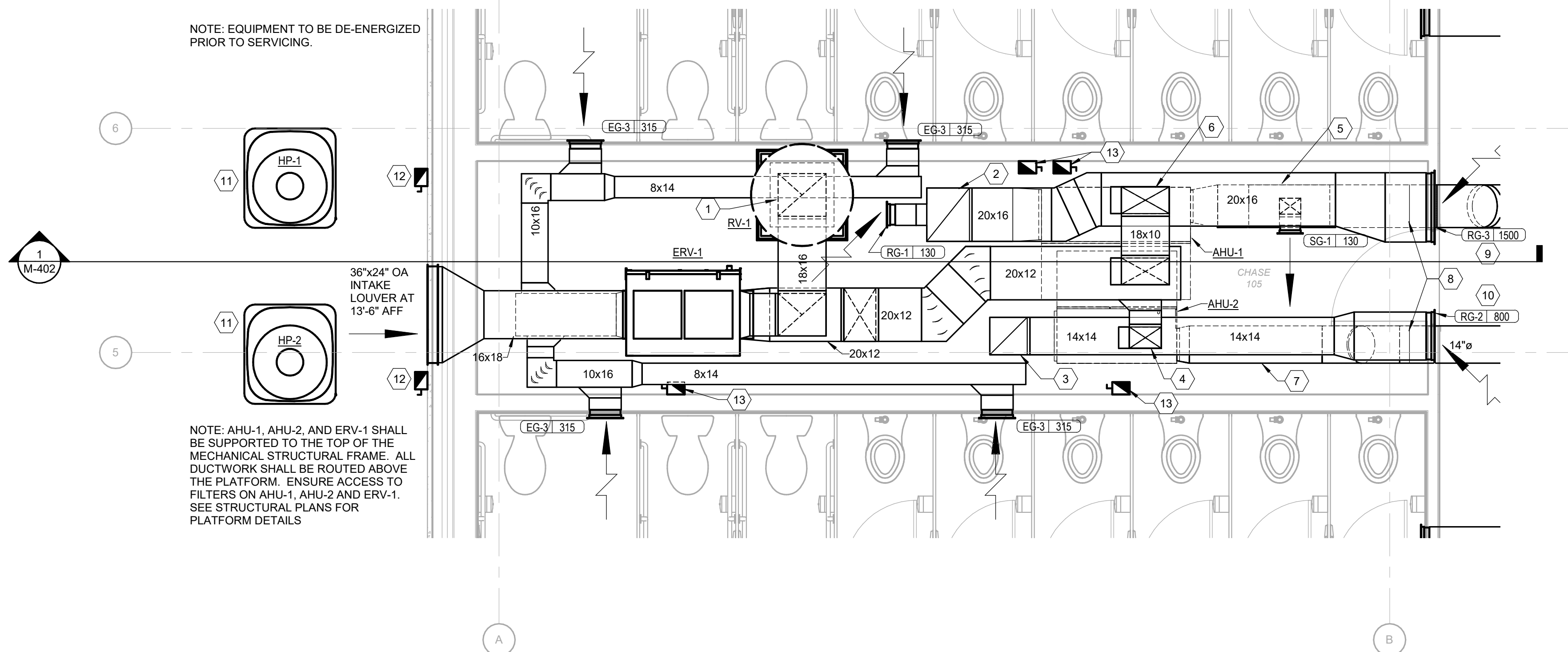
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME

DRAWN BY: SMH/PLH FIRST ISSUE DATE: 11/02/18

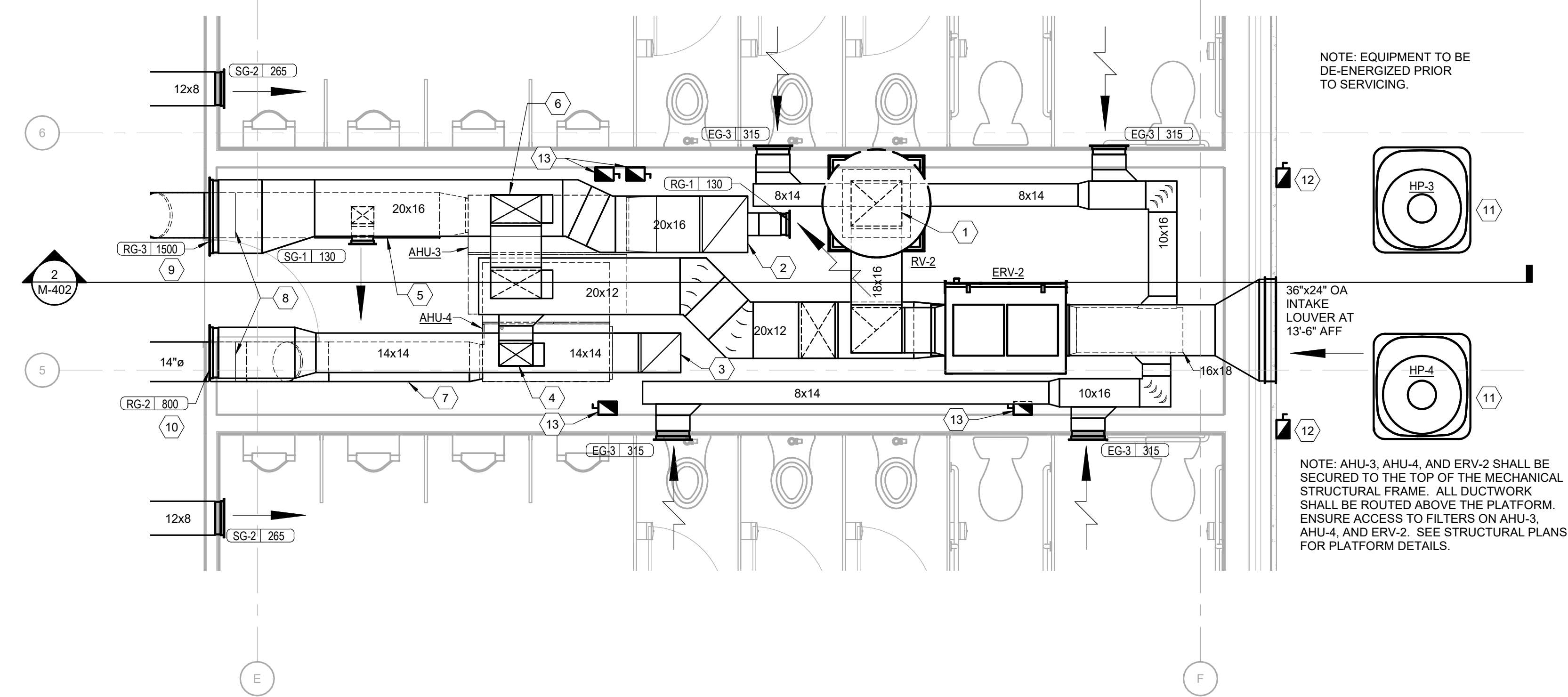
NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
MECHANICAL PIPING VENDING PLAN

PROJECT NO.
18-0129.021
SHEET NO.
MP102



1 CHASE 105 ENLARGED FLOOR PLAN - HVAC
Scale: 3/8" = 1'-0"



2 CHASE 106 ENLARGED FLOOR PLAN - HVAC
Scale: 3/8" = 1'-0"

KEYNOTES

- | NUMBER | NOTE |
|--------|---|
| 1 | 16"x18" UP TO RV-1 ON ROOF. |
| 2 | 20"x16" RETURN DUCT DN TO AHU-1 RETURN AIR CONNECTION. |
| 3 | 14"x14" RETURN DUCT DN TO AHU-2 RETURN AIR CONNECTION. |
| 4 | 12"x8" OUTSIDE AIR DUCT, CONNECT TO TOP OF RETURN DUCT. PROVIDE MANUAL BALANCING DAMPER IN VERTICAL, BALANCE OUTSIDE AIR TO 450 CFM. |
| 5 | 16" DIA SUPPLY DUCT BENEATH 20"x16" RETURN DUCT. |
| 6 | 18"x10" OUTSIDE AIR DUCT, CONNECT TO TOP OF RETURN DUCT. PROVIDE MANUAL BALANCING DAMPER IN VERTICAL, BALANCE OUTSIDE AIR TO 970 CFM. |
| 7 | 14" DIA SUPPLY DUCT BENEATH 14"x14" RETURN DUCT. |
| 8 | TRANSITION FROM SINGLE WALL ROUND TO DOUBLE WALL ROUND AT THIS POINT. |
| 9 | SCHEDULED RETURN AIRFLOW WILL OCCUR WHEN ERV-1 IS DE-ENERGIZED. RETURN AIRFLOW WHEN ERV-1 IS ENERGIZED SHALL BE 570 CFM. |
| 10 | SCHEDULED RETURN AIRFLOW WILL OCCUR WHEN ERV-1 IS DE-ENERGIZED. RETURN AIRFLOW WHEN ERV-1 IS ENERGIZED SHALL BE 350 CFM. |
| 11 | MOUNT OUTDOOR UNIT ON 4" POURED-IN-PLACE CONCRETE PAD. |
| 12 | MOUNT 5'-0" ABOVE FINISHED GRADE ON WALL. REFERENCE DETAIL 8/M-502 FOR ELECTRICAL CONNECTIONS |
| 13 | MOUNT 6'-0" ABOVE FINISHED FLOOR ON WALL. REFERENCE DETAIL 8/M-502 FOR ELECTRICAL CONNECTIONS |

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kilaheo Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE NC License #C-1848
Engineers | Architects | www.apogee.com | 919-888-7420

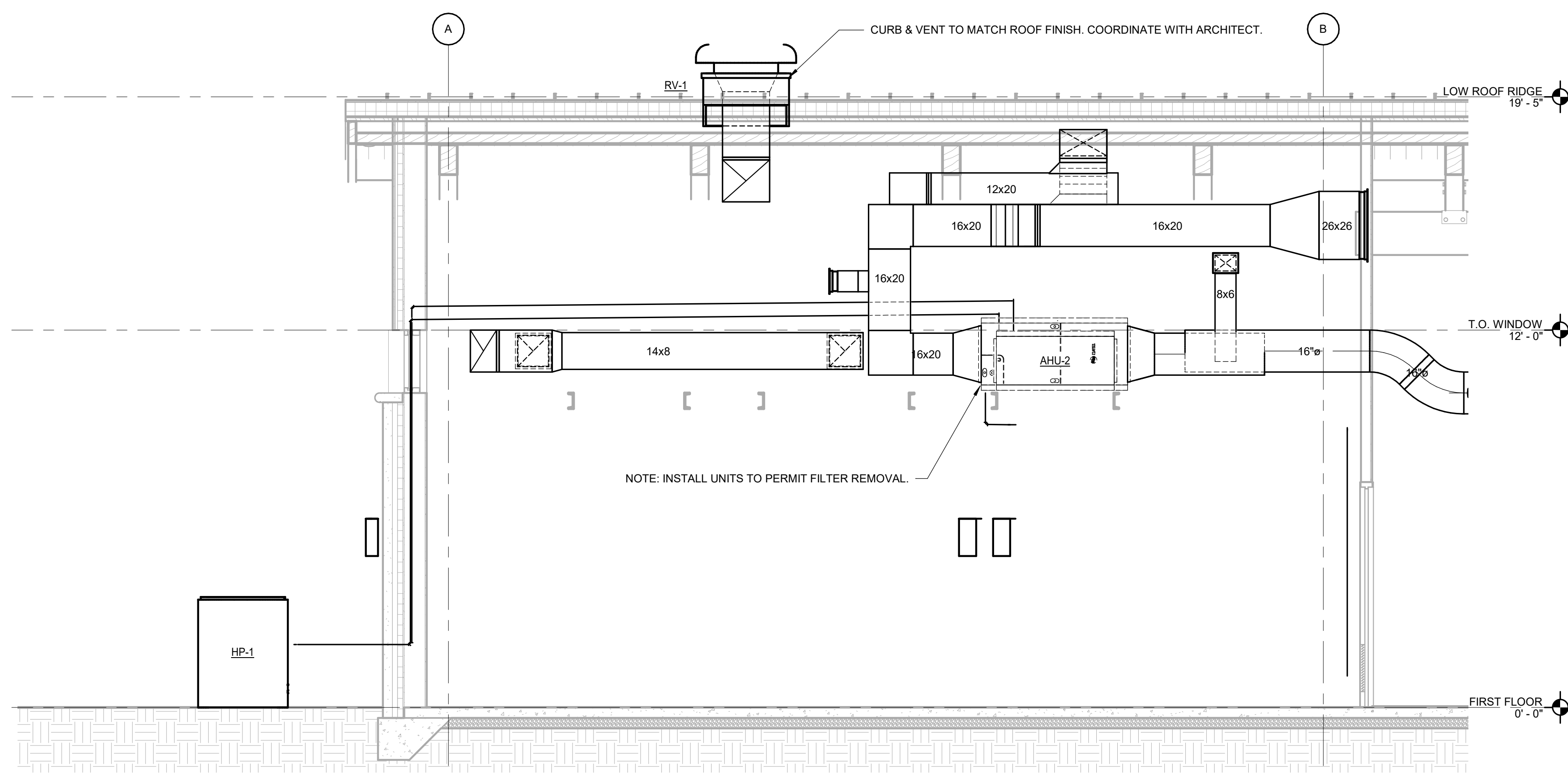
PAUL L. HOLLOMAN
Professional Engineer
No. 47721
NORTH CAROLINA
2/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

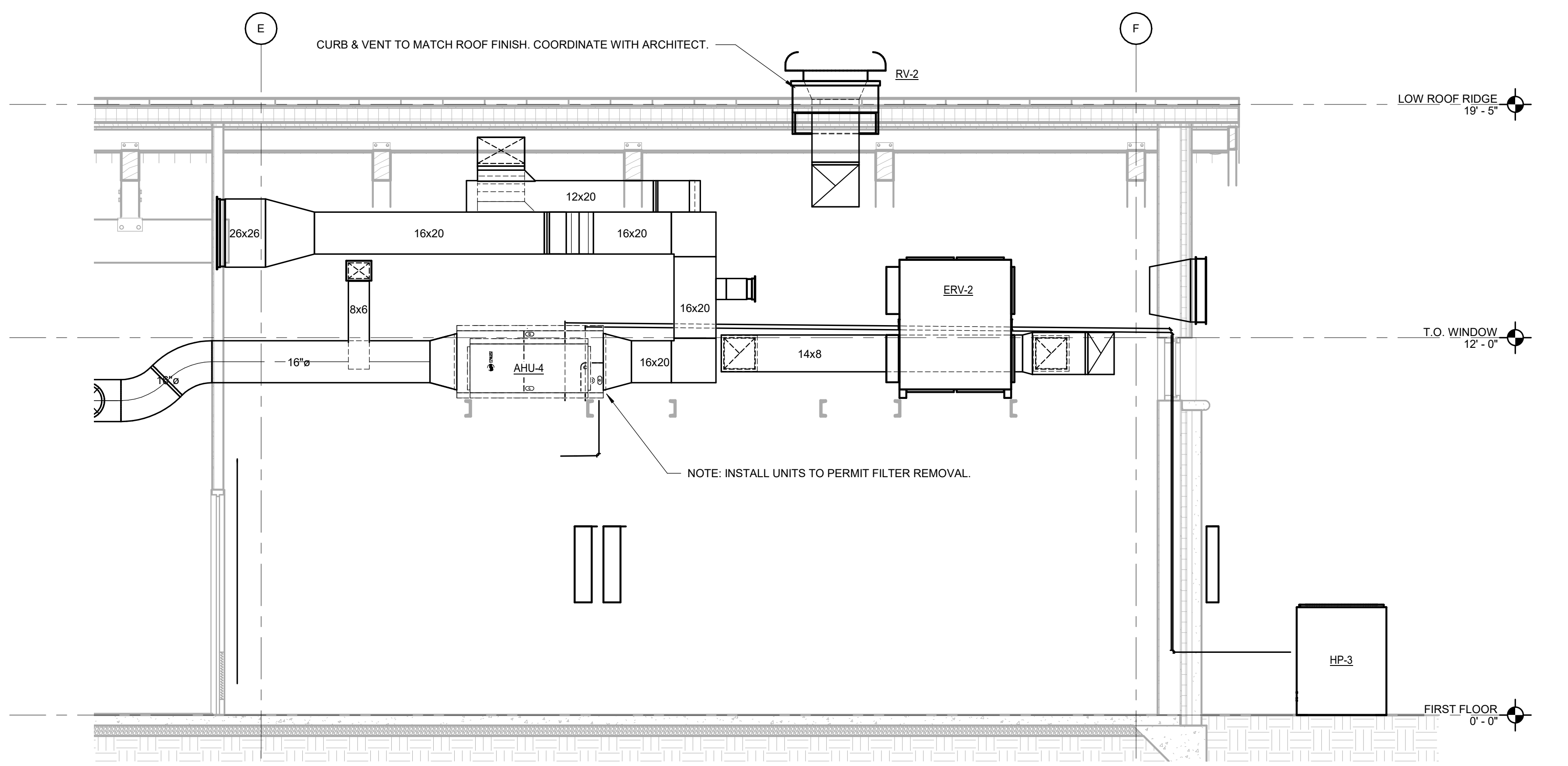
NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
ENLARGED MECHANICAL PLANS

PROJECT NO.
18-0129.021
SHEET NO.
M-401



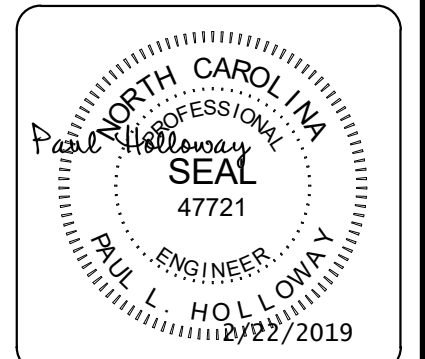
1 CHASE 105 SECTION #1 AT HVAC UNITS
Scale: 3/8" = 1'-0"



2 CHASE 106 SECTION #1 AT HVAC UNITS
Scale: 3/8" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kilaheo Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE NC License #C-1848
Engineers | Architects www.acgpa.com 919-888-7420

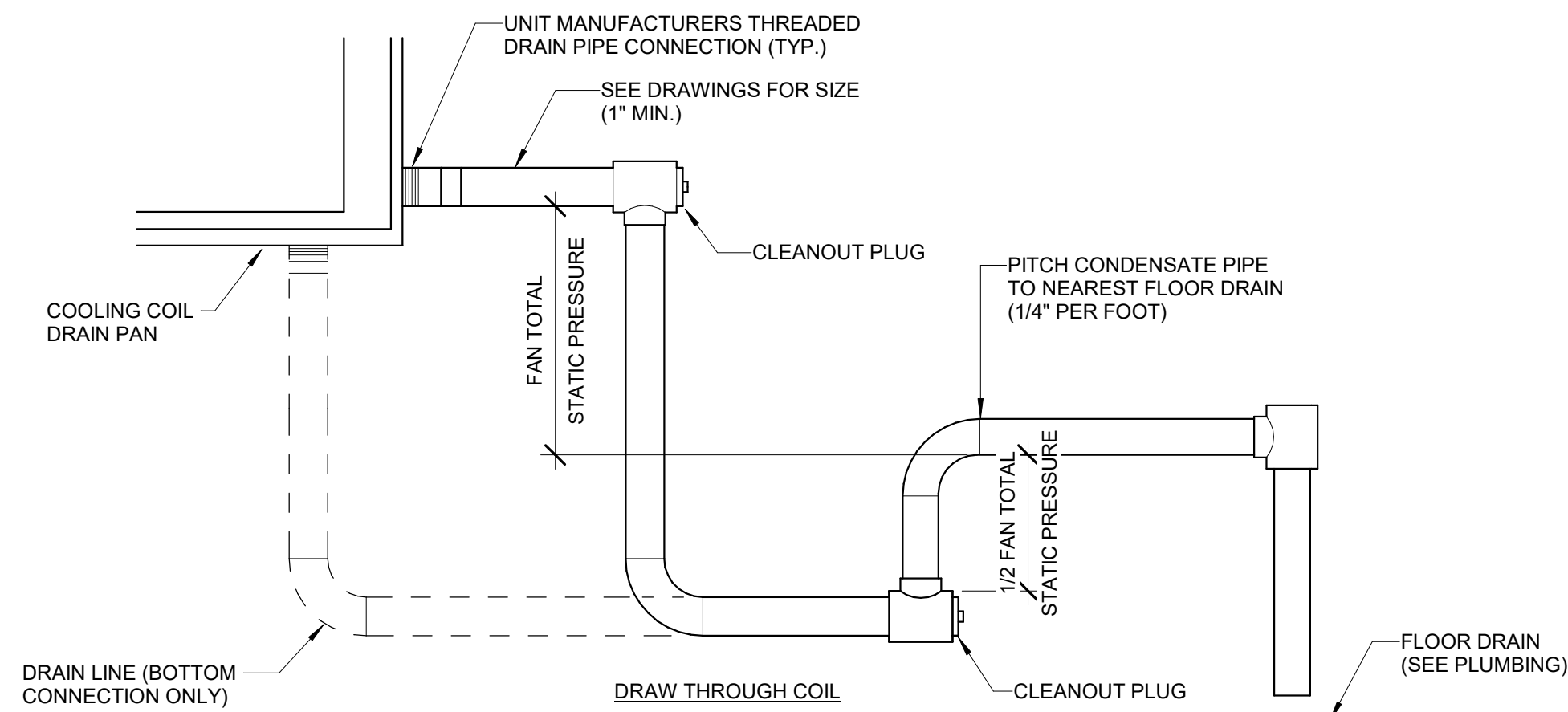
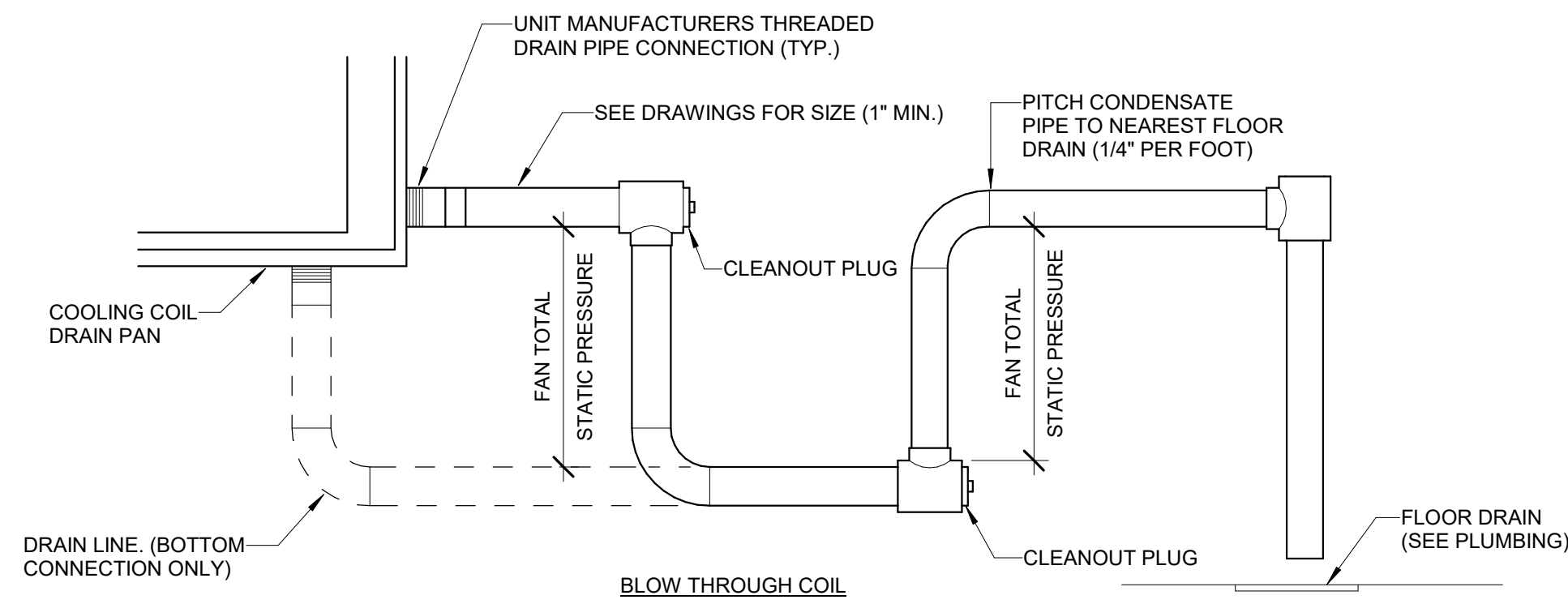


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

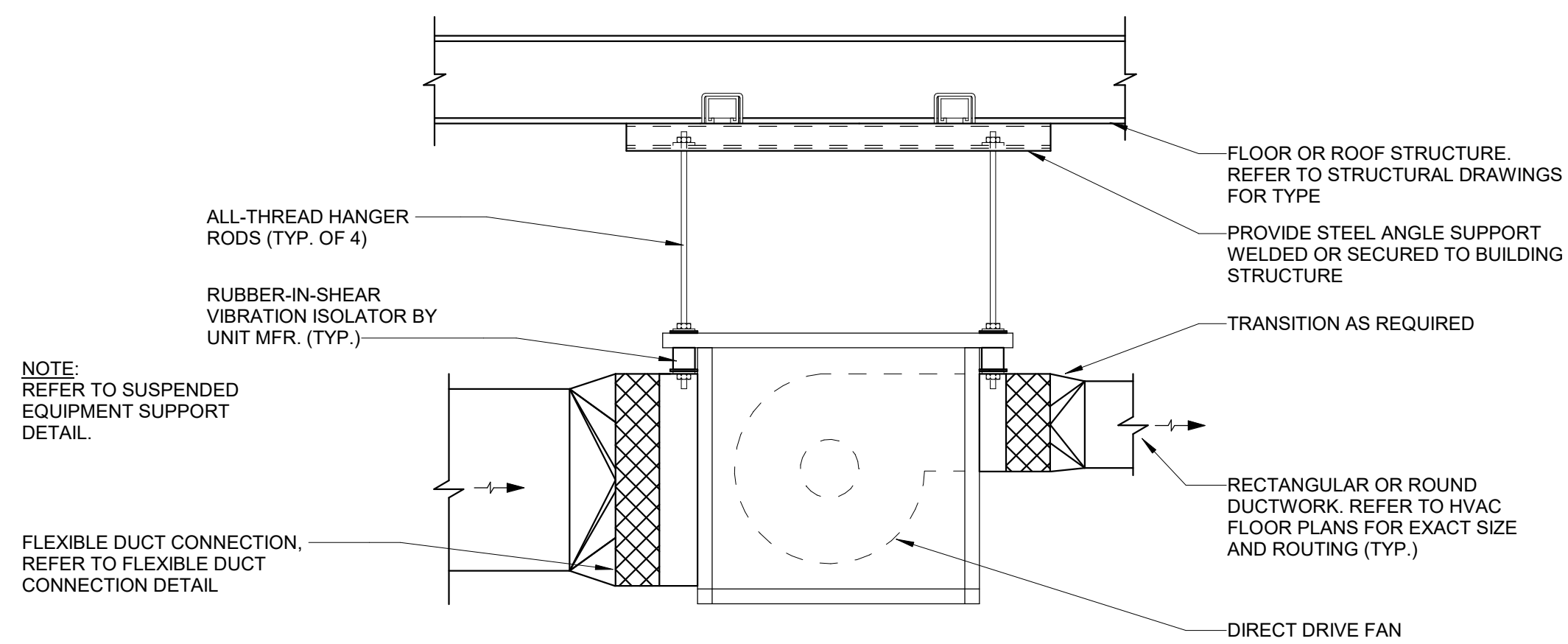
NO	REVISIONS	BY	DATE
A	ISSUED TO SCO	PLH	11/16/18
B	ISSUED FOR NCDOT	PLH	01/22/19
C	ISSUED FOR CONST.	PLH	02/21/19

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
ENLARGED MECHANICAL PLANS

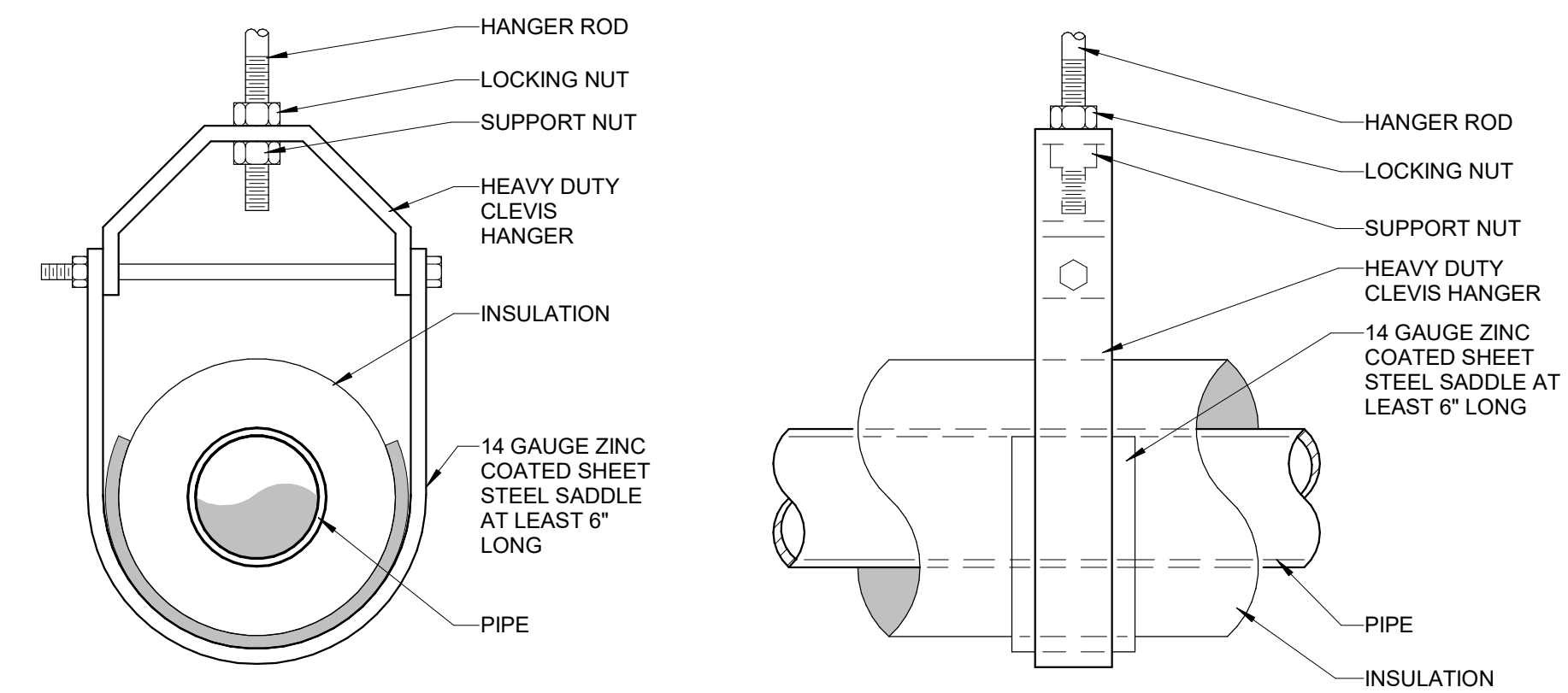
PROJECT NO.
18-0129.021
SHEET NO.
M-402



4 CONDENSATE DRAIN PIPING DETAIL
Scale: N.T.S.

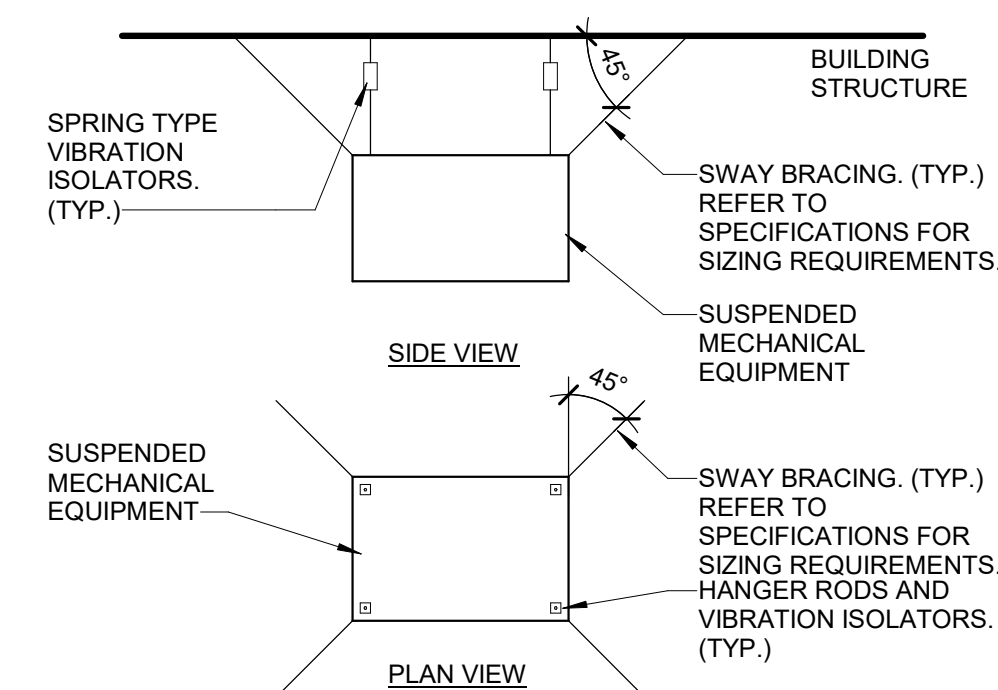


5 IN-LINE EXHAUST FAN DETAIL
Scale: 1/8" = 1'-0"



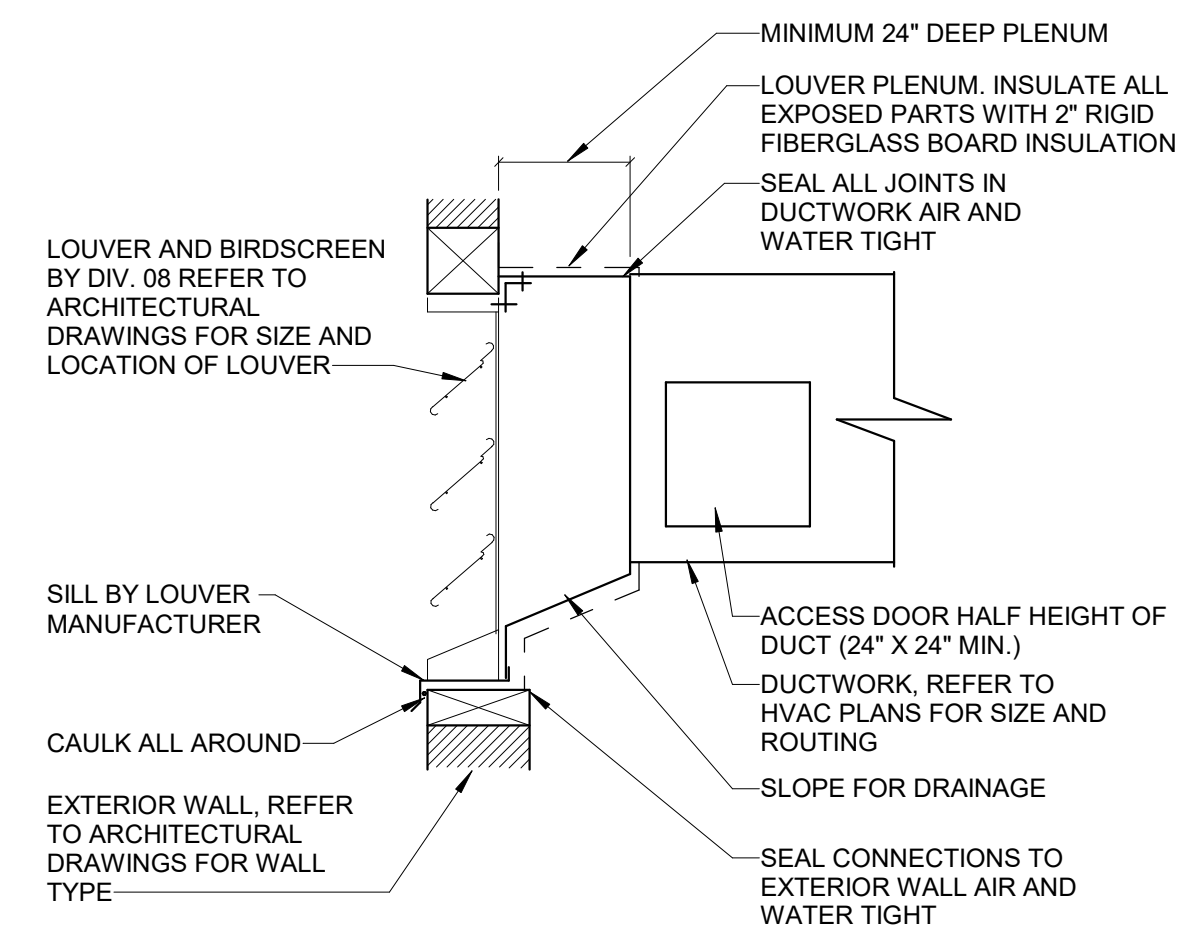
PIPE HANGER (6" AND SMALLER) DETAIL

1 PIPE HANGER (6" AND SMALLER) DETAIL
Scale: N.T.S.



NOTES:
1. PROVIDE ALL ASSOCIATED HARDWARE FOR THE ATTACHMENT OF THE SWAY BRACING TO THE BUILDING STRUCTURE AND TO THE HANGING EQUIPMENT.
2. INSTALL SWAY BRACING TO AVOID BENDING ACROSS SHARP EDGES.
3. SWAY BRACING SHALL BE INSTALLED WITH ADEQUATE SLACK TO ALLOW VIBRATION ISOLATION TO FUNCTION PROPERLY.

2 SUSPENDED EQUIPMENT SUPPORT DETAIL
Scale: N.T.S.



3 LOUVER CONNECTION DETAIL
Scale: 1/8" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com 919-888-7420
APOGEE Engineers | Architects

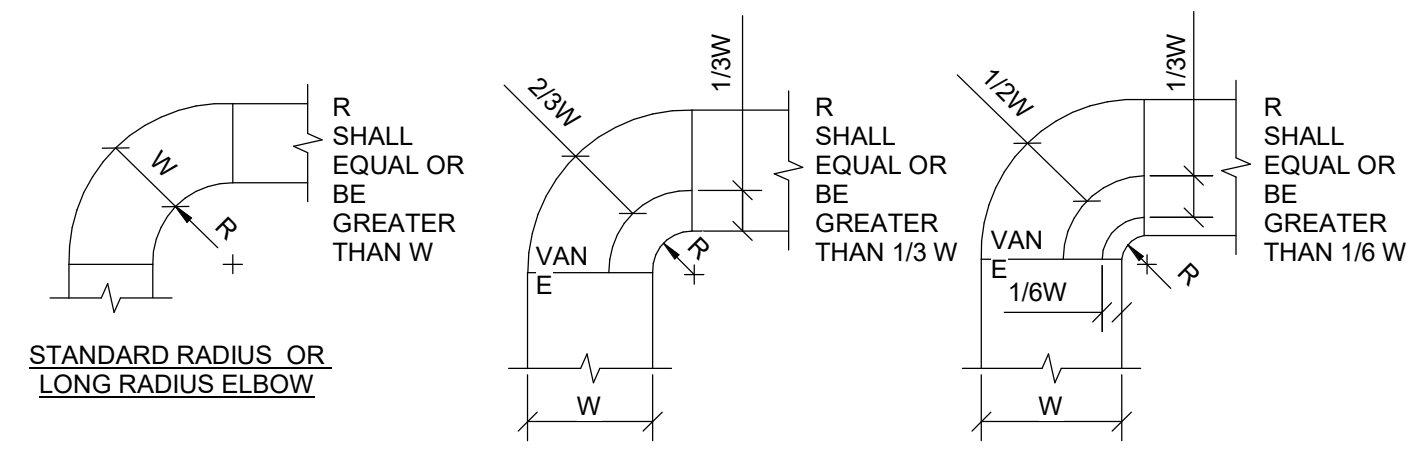
PAUL L. HOLLOMAN
Professional Engineer
47721
12/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

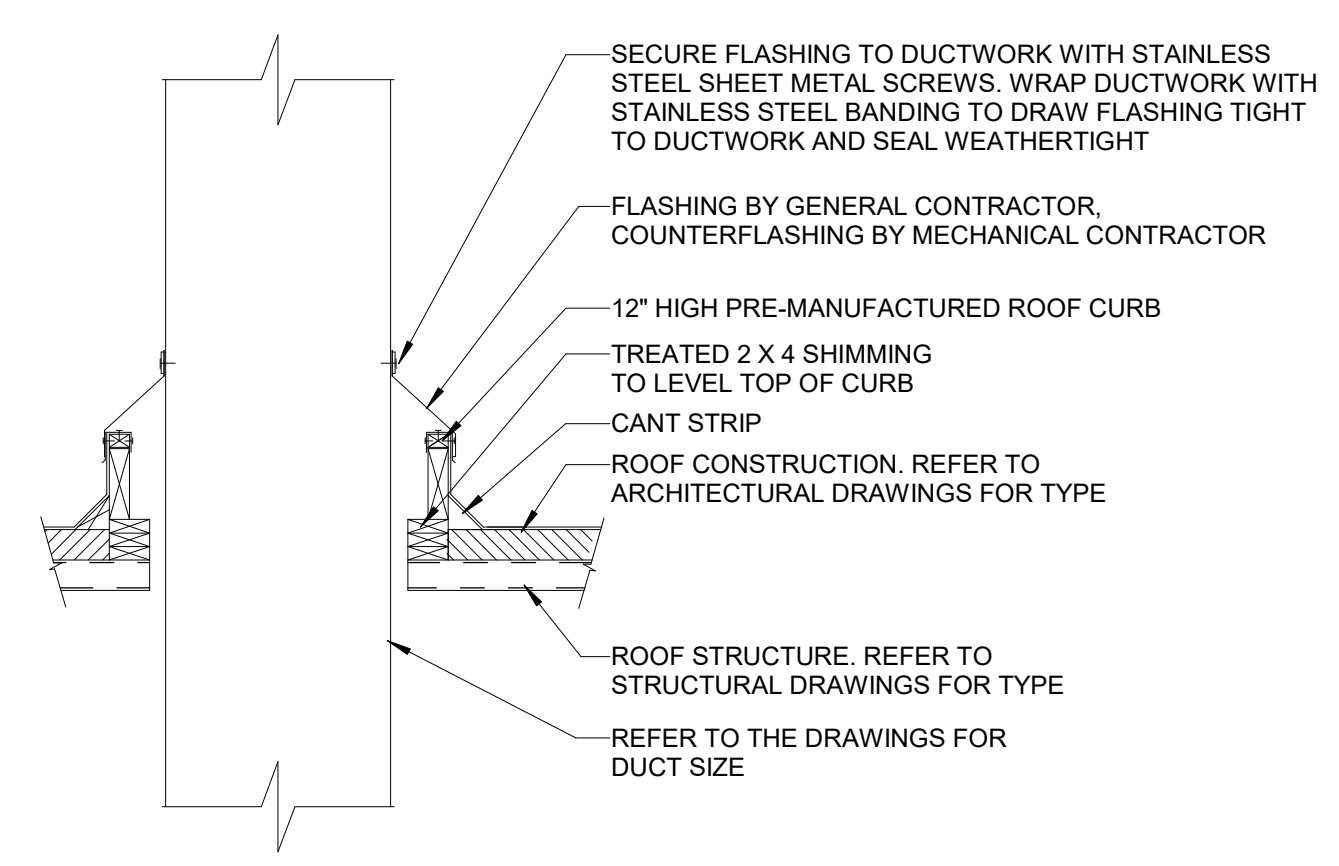
NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
MECHANICAL DETAILS

PROJECT NO.
18-0129.021
SHEET NO.
M-501

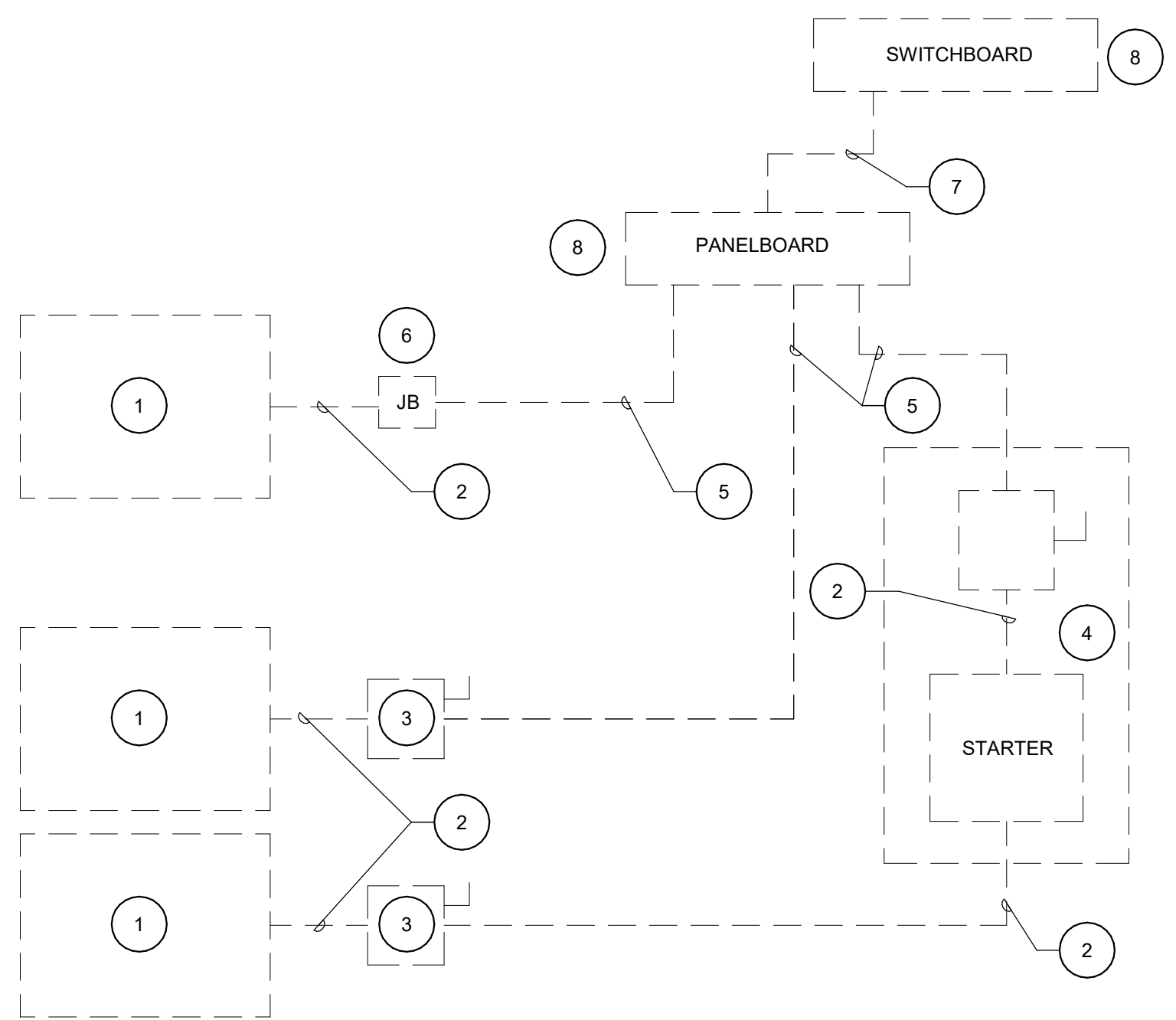


- NOTES:**
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
 2. ALL STANDARD ELBOWS MAY BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

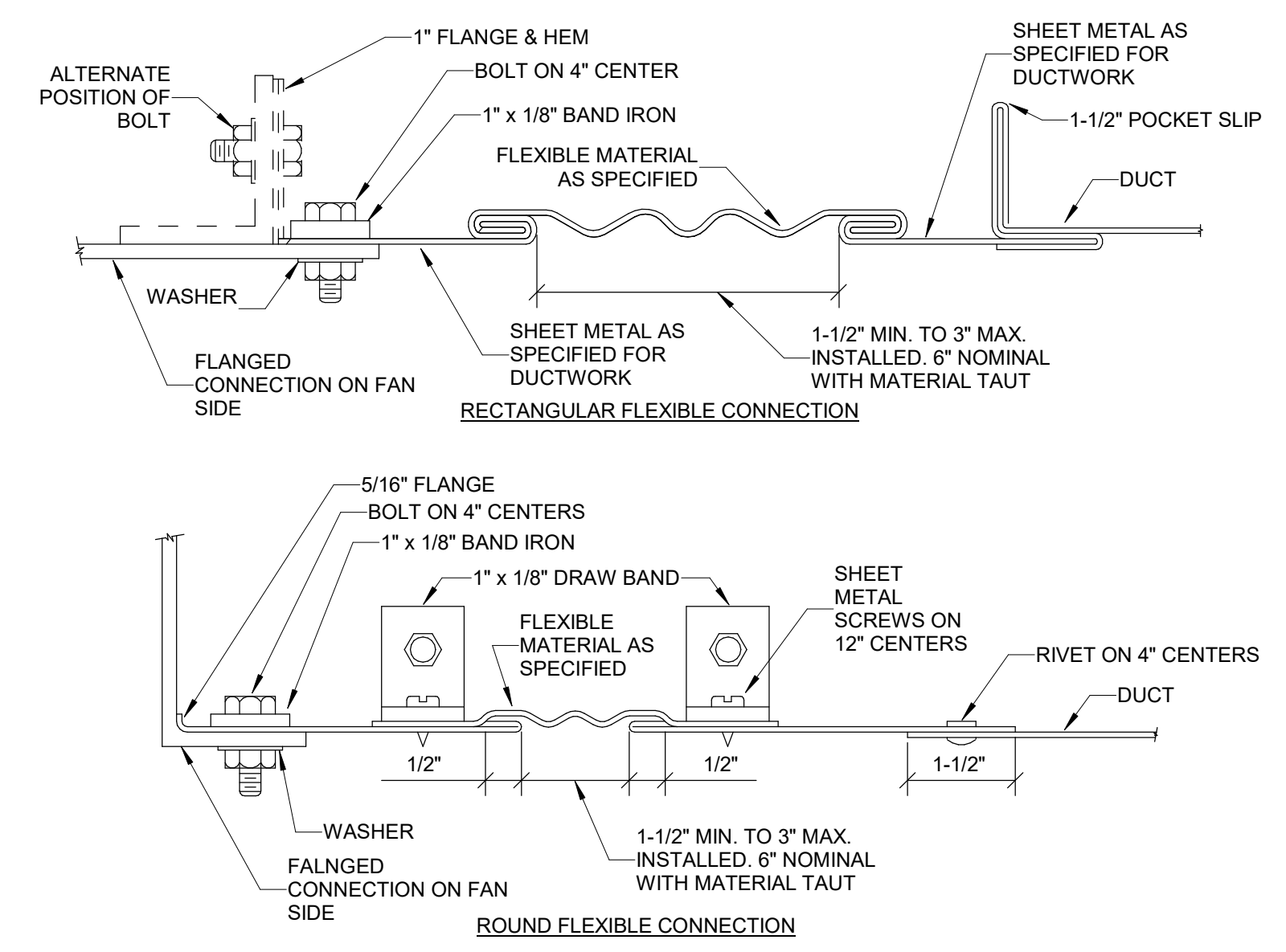
6 DUCTWORK RADIUS ELBOW
SCALE: N.T.S.



7 DUCTWORK ROOF PENETRATION DETAIL
SCALE: N.T.S.



8 ELECTRICAL EQUIPMENT CONNECTION MECHANICAL DETAIL
SCALE: 1/4" = 1'-0"



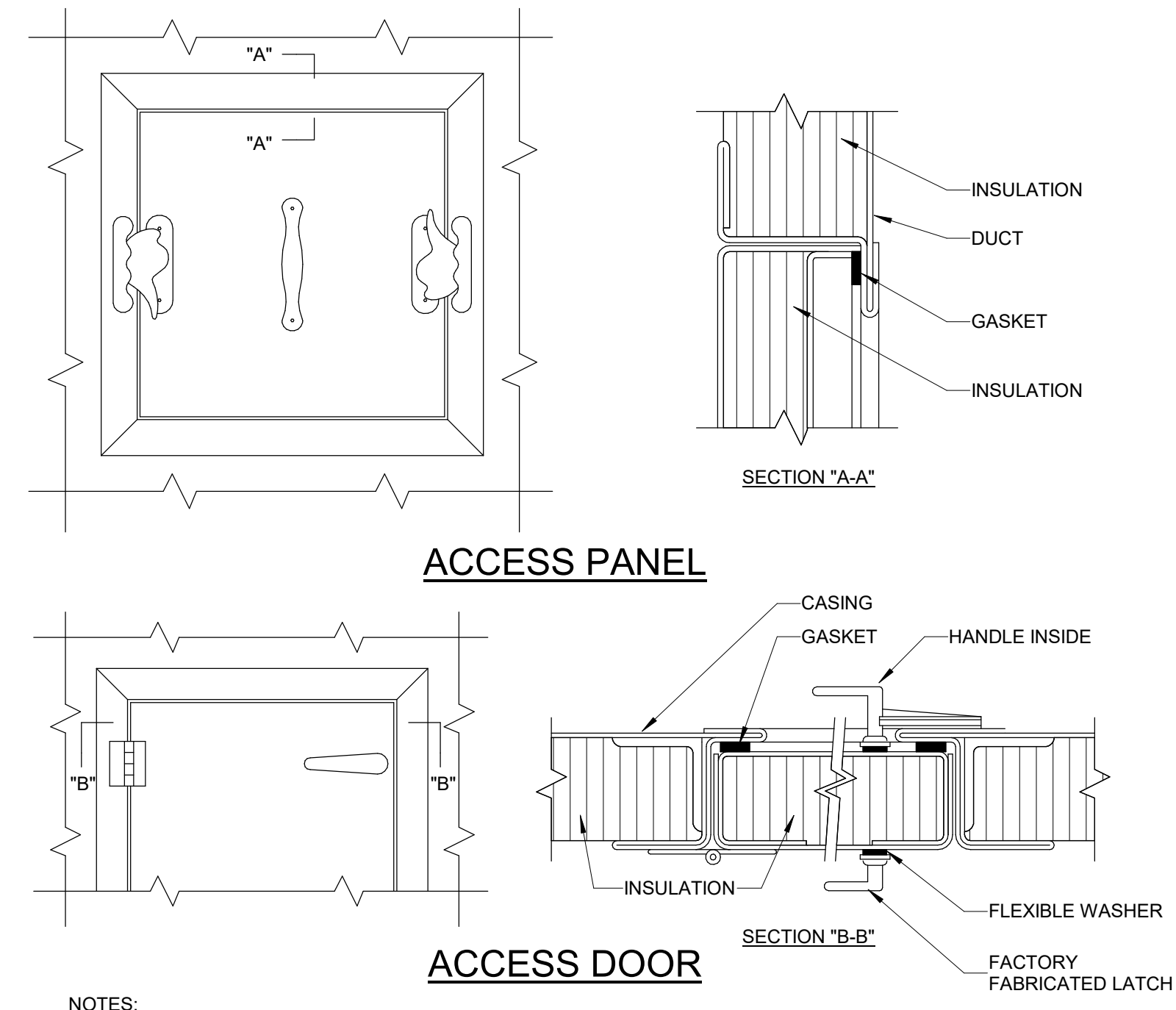
4 FLEXIBLE DUCT CONNECTIONS
SCALE: N.T.S.

- NOTES:**
1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
 2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
 3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1-1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
 4. WHEN W EQUAL W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANE TYPE.

5 DUCTWORK SQUARE VANE ELBOWS
SCALE: N.T.S.

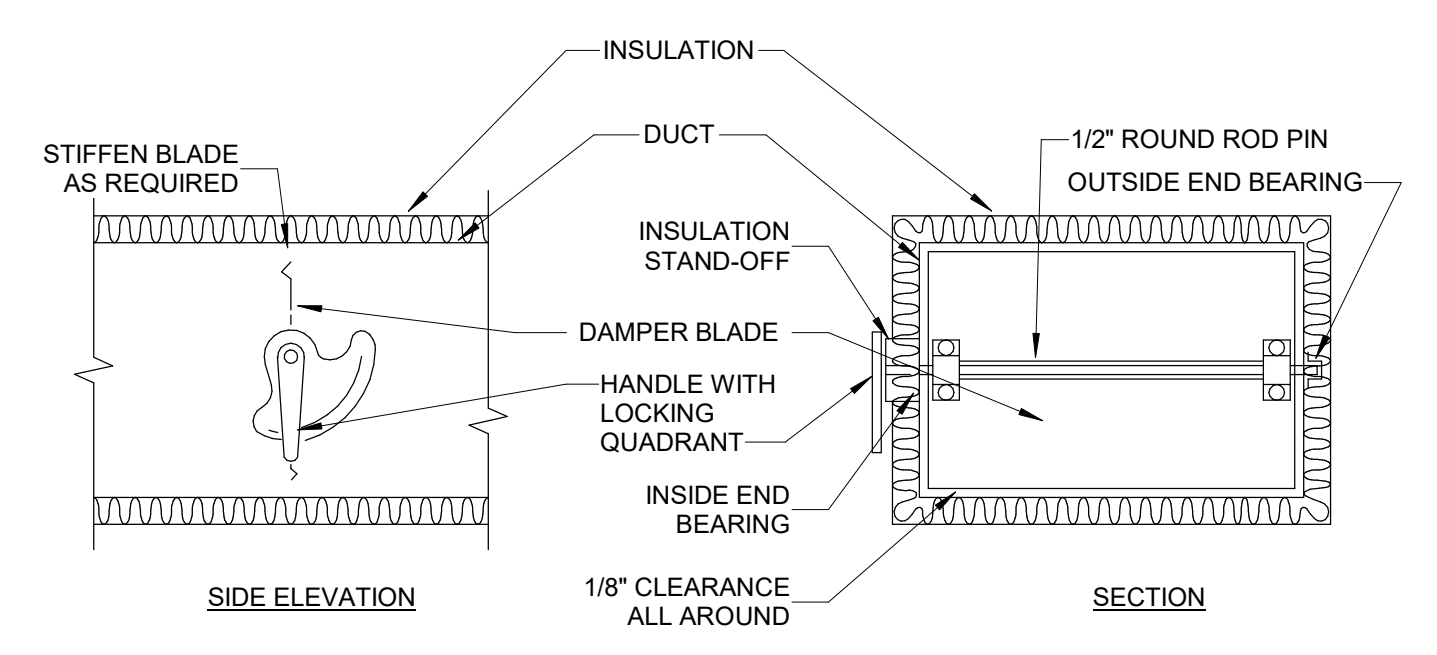
- GENERAL NOTES:**
1. THE PURPOSE OF THIS DIAGRAM IS TO INDICATE THE RESPONSIBILITIES OF THE DIVISION 23 AND DIVISION 26 CONTRACTORS. THIS DIAGRAM IS NOT INTENDED TO BE USED TO SHOW THE METHOD OF INSTALLATION OF WIRING, CONDUIT OR EQUIPMENT. DO NOT USE THIS DIAGRAM FOR PURPOSES OTHER THAN THE INTENDED PURPOSE STATED ABOVE.
 2. COORDINATE WITH THE DIVISION 26 CONTRACTOR THE ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT, AS WELL AS THE SIZING AND ROUTING OF ALL CONDUIT.
 3. ALL WIRING AND CONDUIT SHALL BE SIZED, ROUTED AND INSTALLED IN ACCORDANCE WITH NEC AND THE APPLICABLE PORTIONS OF THE DIVISION 26 SPECIFICATIONS.
 4. THE DIVISION 23 CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
 5. SEE SPECIFICATION SECTION 26 28 16 FOR DISCONNECT SWITCHES. REFERENCE THE ELECTRICAL CONDUCTOR SCHEDULE ON SHEET E-601.

- DIAGRAM KEY NOTES:**
1. EQUIPMENT BY DIVISION 23.
 2. CONDUIT & WIRING BY DIVISION 23.
 3. IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, OR IS CALLED FOR ON THE FLOOR PLANS, EQUIPMENT SCHEDULES, OR SPECIFICATIONS, IT SHALL BE PROVIDED AND INSTALLED BY THE DIVISION 23 EQUIPMENT CONTRACTOR.
 4. A COMBINATION STARTER MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
 5. FEEDER CIRCUIT WIRING AND CONDUIT BY DIVISION 26.
 6. JUNCTION BOX BY DIVISION 26 (WHERE SHOWN ON PLANS).
 7. WIRING AND CONDUIT BY DIVISION 26.
 8. BY DIVISION 26.



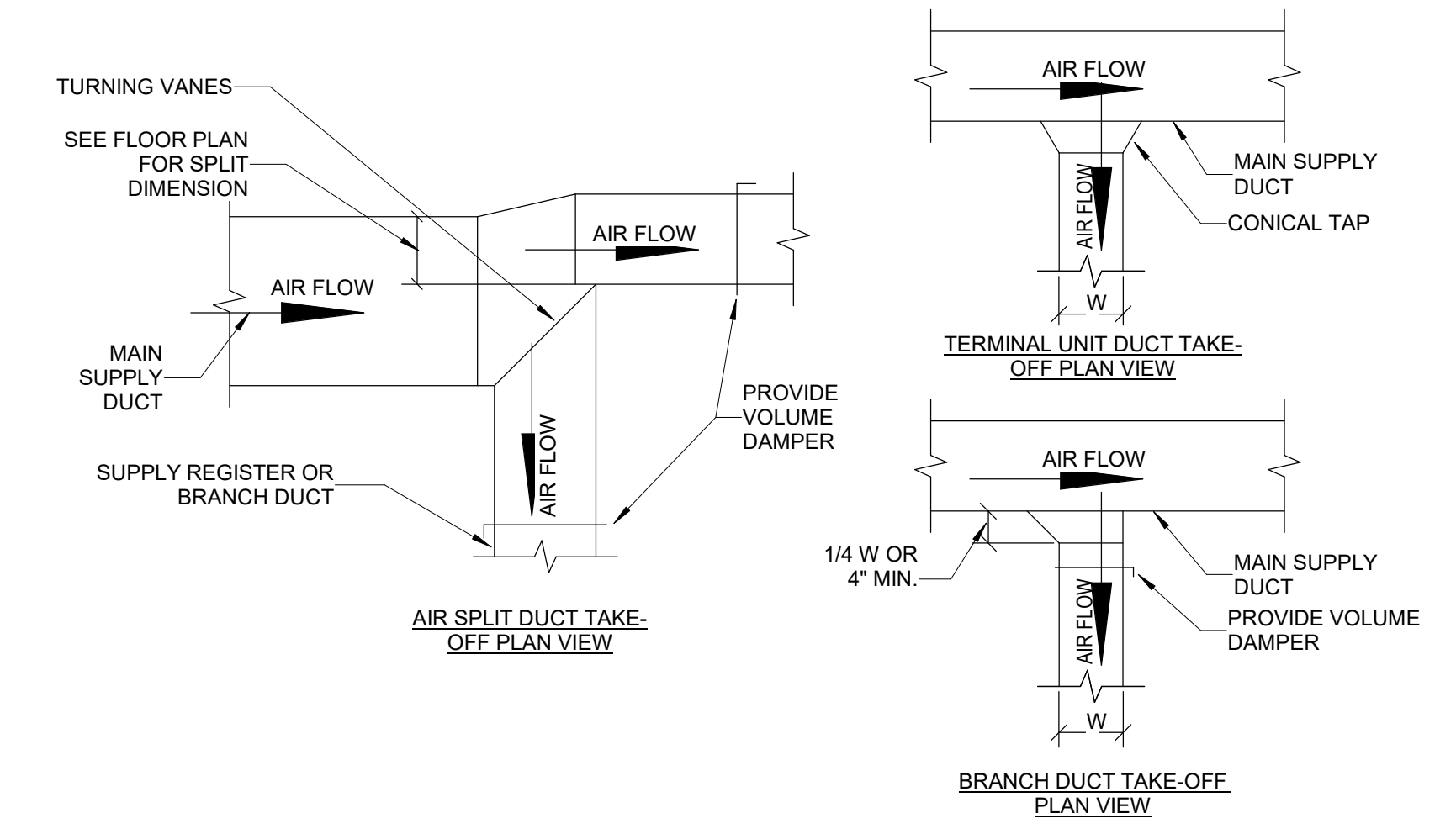
- NOTES:**
1. LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS TIGHTLY.
 2. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.
 3. SEE SMACNA 2005, FIGURE 9-16

1 ACCESS PANEL AND DOOR DETAIL
SCALE: N.T.S.



- NOTES:**
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
 2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

2 VOLUME DAMPER DETAIL
SCALE: N.T.S.



3 SUPPLY DUCT TAKE-OFFS
SCALE: N.T.S.

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 N. Hargett Street, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.summitde.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE NC License #C-1848
www.apogee.com
Engineers | Architects www.apogee.com 919-888-7420

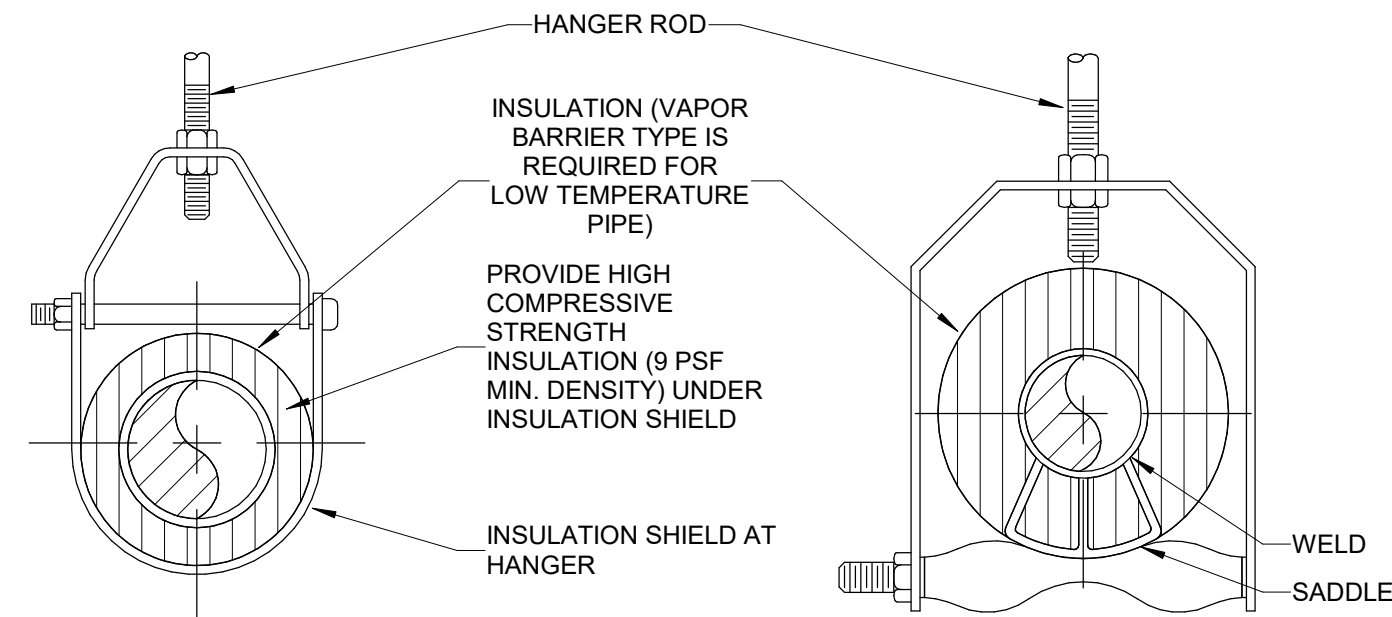
PAUL L. HOLLOWAY
PROFESSIONAL ENGINEER
47721
12/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME
DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	
B	ISSUED FOR NCDOT	01/22/19	PLH	
C	ISSUED FOR CONST.	02/21/19	PLH	

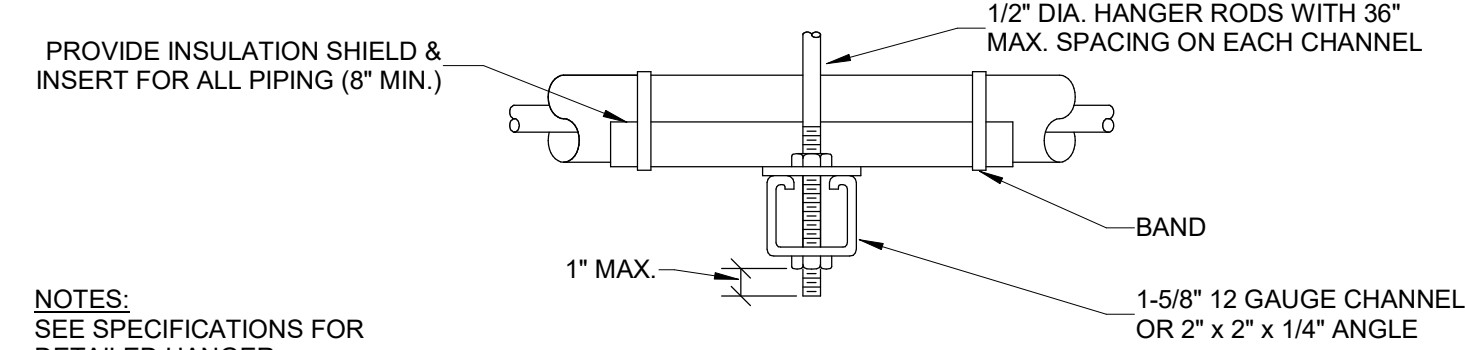
NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
MECHANICAL DETAILS

PROJECT NO.
18-0129.021
SHEET NO.
M-502



ADJUSTABLE CLEVIS HANGER TYPE 1 - SEE SPECIFICATIONS

ADJUSTABLE CLEVIS HANGER TYPE 43 - SEE SPECIFICATIONS

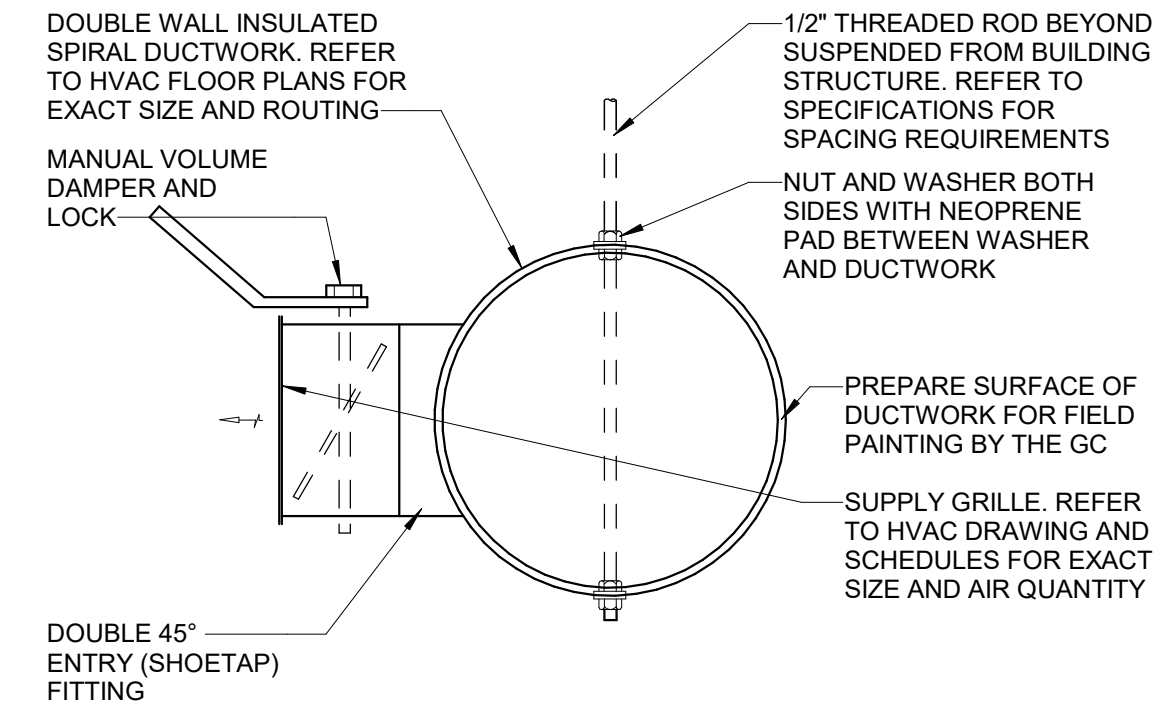


NOTES:
SEE SPECIFICATIONS FOR DETAILED HANGER REQUIREMENTS.

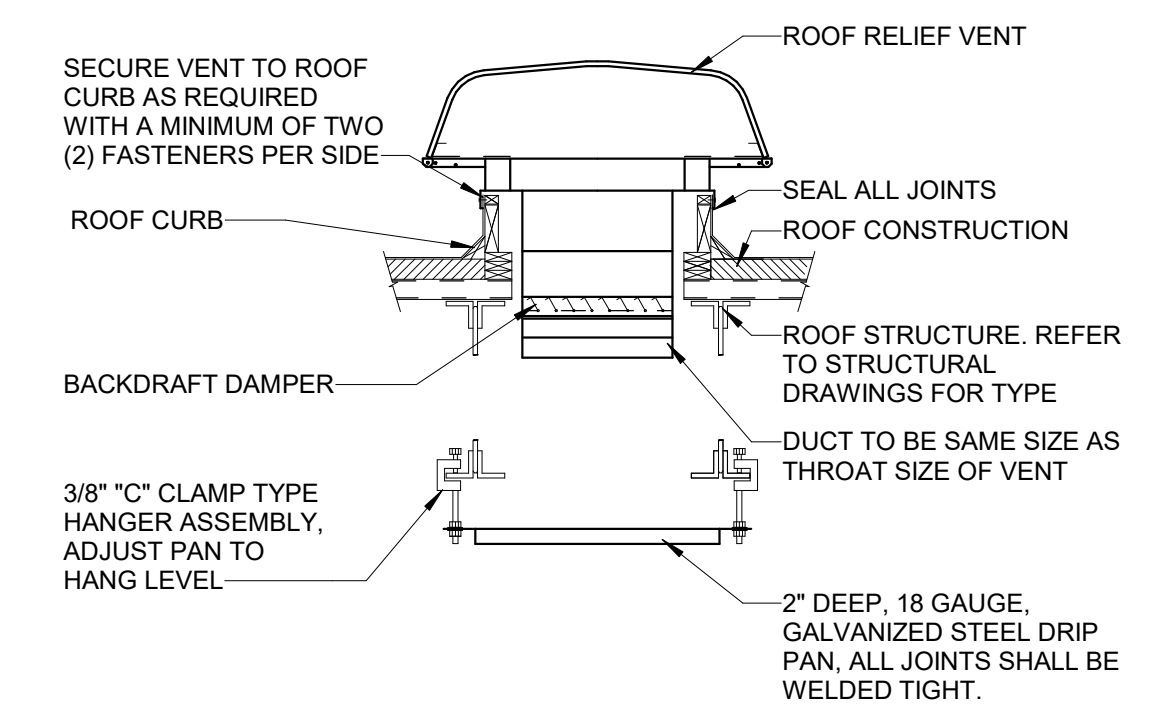
MAXIMUM PIPE/TUBING SUPPORT SPACING													
NOM. SIZE (IN.)	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
PIPE (FT.)	7	7	7	9	10	11	12	14	16	17	19	22	23
TUBING (FT.)	5 FT	6	7	8	8	9	10	12	13	14	16	-	-

NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE

3 PIPE HANGER
SCALE: N.T.S.

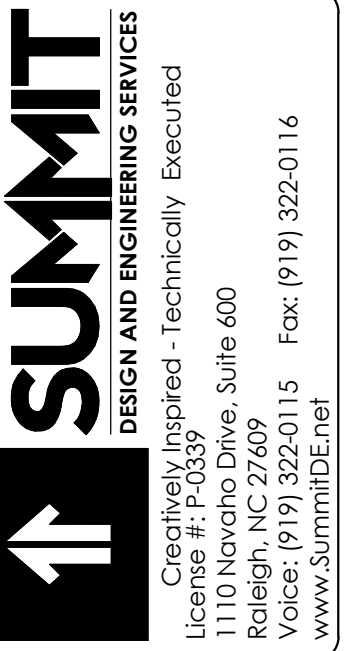


1 EXPOSED SUPPLY GRILLE AND DUCTWORK DETAIL
Scale: No Scale



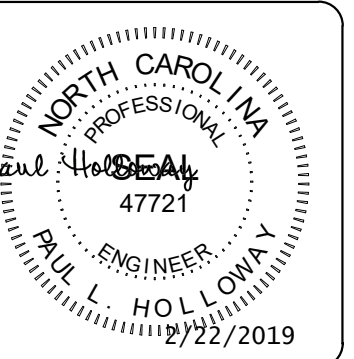
NOTE:
ALL INTAKE / RELIEF VENTS SHALL BE MOUNTED LEVEL. PROVIDE SLOPED CURBS AND SHIMS AS REQUIRED FOR SLOPED ROOFS. REFER TO ARCHITECTURAL DRAWINGS FOR PITCH OF ROOF.

2 RELIEF VENT INSTALLATION DETAIL
Scale: N.T.S.



Apogee Consulting Group, P.A.
1151 Kildine Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com

APOGEE
Engineers | Architects | Interiors | WMAA-CG-P&E



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED

PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME

DRAWN BY: SMH/PLH
FIRST ISSUE DATE: 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH	PLH
C	ISSUED FOR CONST.	02/21/19	PLH	PLH

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

MECHANICAL DETAILS

PROJECT NO.
18-0129.021

SHEET NO.
M-503

INDOOR ENERGY RECOVERY VENTILATION UNITS

MARK	OUTSIDE AIR			TOTAL ENERGY RECOVERY CORE						EXHAUST AIR			ELECTRICAL		MODEL # (RENEWAIRE)	REMARKS
	AIRFLOW	FAN POWER	ESP	SUMMER CONDITIONS			WINTER CONDITIONS			AIRFLOW	FAN POWER	ESP				
	CFM	HP	IN. W.G.	OA EAT, °F DB/WB	OA LAT, °F DB/WB	EA EAT, °F DB/WB	OA EAT, °F DB/WB	OA LAT, °F DB/WB	EA EAT, °F DB/WB	CFM	HP	IN. W.G.				
ERV-1	1,420	1	0.25	88/72	79.9/68.0	75/62.6	15/12	49.4/39.3	70/54	1,260	1	0.35	240/1/60	15	HE1.5XINH	1, 2, 3, 4
ERV-2	1,420	1	0.25	88/72	79.9/68.0	75/62.6	15/12	49.4/39.3	70/54	1,260	1	0.35	240/1/60	15	HE1.5XINH	1, 2, 3, 4

- REMARKS:
- PROVIDE UNIT WITH SINGLE POINT POWER CONNECTION AND DISCONNECT SWITCH.
 - PROVIDE UNIT WITH WITH ELECTRONICALLY COMMUTATED (EC) MOTORS WITH MOTOR-MOUNTED POTENTIOMETER.
 - PROVIDE 2" MERV 8 FILTER AND PREWIRED MOTORIZED DAMPERS IN OUTSIDE AIR AND EXHAUST AIR STREAMS.
 - PROVIDE 30 AMP DISCONNECT SWITCH, FUSE PER NAMEPLATE. LABEL DISCONNECT SWITCH CIRCUIT ORIGIN, EQUIPMENT FEED, VOLTS, AND AMPS.

INDOOR SPLIT SYSTEM HEAT PUMP AIR HANDLING UNITS

MARK	SUPPLY FAN			DX COOLING COIL				HEAT PUMP HEATING			ELECTRIC HEAT		ELECTRICAL			MAX. WEIGHT (LBS)	MODEL # (TRANE)	REMARKS
	TOTAL AIRFLOW	FAN POWER	ESP	TOTAL	SENSIBLE	EAT	LAT	TOTAL	EAT, °F	LAT, °F	CAPACITY	V/Ph/Hz	CIRCUIT #1 MCA/MOP	CIRCUIT #2 MCA/MOP				
	CFM	HP	IN. W.G.	MBH	MBH	°F DB/WB	°F DB/WB	MBH	°F	°F	kW/kW							
AHU-1	1,500	3/4	0.6	48.7	35.2	80/67	57.9/56.3	48.0/30.4	60	89.6	9.6/4.8	240/1/60	59/60	25/25	200	TEM6A0C48	1, 2, 3, 4, 5, 6, 7, 9	
AHU-2	800	1/3	0.4	25.0	18.8	80/67	57.9/56.7	24.2/15.3	60	88.0	7.68/---	240/1/60	44/45	---	200	TEM6ACB30	1, 2, 3, 4, 5, 6, 7, 8	
AHU-3	1,500	3/4	0.6	48.7	35.2	80/67	57.9/56.3	48.0/30.4	60	89.6	9.6/4.8	240/1/60	59/60	25/25	200	TEM6A0C48	1, 2, 3, 4, 5, 6, 7, 9	
AHU-4	800	1/3	0.4	25.0	18.8	80/67	57.9/56.7	24.2/15.0	60	88.0	7.68/---	240/1/60	44/45	---	200	TEM6ACB30	1, 2, 3, 4, 5, 6, 7, 8	

- REMARKS:
- AIR HANDLING UNIT SHALL HAVE SINGLE POWER CONNECTION.
 - HEATING CAPACITIES ARE BASED ON 47 DEG. F OUTDOOR AMBIENT AND 17 DEG. F. OUTDOOR AMBIENT.
 - COOLING CAPACITY IS BASED ON 95 DEG. F OUTDOOR AMBIENT.
 - PROVIDE FILTER RACK WITH 1" MERV 8 FILTER.
 - ELECTRICAL HEATERS SHALL HAVE INTEGRAL CIRCUIT BREAKERS.
 - PROVIDE OVERFLOW SWITCH IN CONDENSATE DRAIN PAN.
 - SUPPLY FAN MOTOR SHALL BE VARIABLE SPEED ELECTRONICALLY COMMUTATED MOTOR.
 - PROVIDE 60 AMP - 2 POLE, DISCONNECT SWITCH, FUSE PER NAMEPLATE. LABEL DISCONNECT SWITCH CIRCUIT ORIGIN, EQUIPMENT FEED, VOLTS, AND AMPS.
 - PROVIDE 60 AMP - 2 POLE (CIRCUIT #1), AND 30 AMP - 2 POLE (CIRCUIT #2), DISCONNECT SWITCHES, FUSE PER NAMEPLATE. LABEL DISCONNECT SWITCHES CIRCUIT ORIGIN, EQUIPMENT FEED, VOLTS, AND AMPS.

SPLIT SYSTEM HEAT PUMP OUTDOOR CONDENSING UNITS

MARK	REFRIGERANT	COOLING			HEATING				ELECTRICAL			REMARKS
		TOTAL COOLING CAPACITY	AMBIENT TEMP	EFFICIENCY	TOTAL HEATING CAPACITY	AMBIENT TEMP	EFFICIENCY		V/Ph/Hz	MCA/MOP	MODEL # (TRANE)	
		MBH	°F DB/WB	EER/SEER	MBH	°F	COP	HSPF				
HP-1	410A	48.0	95/75	13/17	48.7/30.4	47/17	4.1/2.8	9.5	240/1/60	28/45	4TWR7048	1, 2, 3, 4, 5
HP-2	410A	25.0	95/75	13/17	24.2/15.3	47/17	3.9/2.5	9.0	240/1/60	15/25	4TWR7024	1, 2, 3, 4, 6
HP-3	410A	48.0	95/75	13/17	48.7/30.4	47/17	4.1/2.8	9.5	240/1/60	28/45	4TWR7048	1, 2, 3, 4, 5
HP-4	410A	25.0	95/75	13/17	24.2/15.3	47/17	3.9/2.5	9.0	240/1/60	15/25	4TWR7024	1, 2, 3, 4, 6

- REMARKS:
- UNIT SHALL HAVE 2-STAGE COMPRESSOR.
 - PROVIDE CRANKCASE HEATER IN COMPRESSOR BODY.
 - MOUNT UNIT ON 4" POURED-IN-PLACE CONCRETE PAD.
 - HEATING CAPACITIES BASED ON 47 DB AND 17 DB OUTDOOR AMBIENT.
 - PROVIDE 60 AMP - 2 POLE, DISCONNECT SWITCH, FUSE PER NAMEPLATE. LABEL DISCONNECT SWITCH CIRCUIT ORIGIN, EQUIPMENT FEED, VOLTS, AND AMPS.
 - PROVIDE 30 AMP - 2 POLE, DISCONNECT SWITCH, FUSE PER NAMEPLATE. LABEL DISCONNECT SWITCH CIRCUIT ORIGIN, EQUIPMENT FEED, VOLTS, AND AMPS.

GRAVITY RELIEF ROOF VENTS

MARK	FREE AREA, SQ. FT.	AIRFLOW, CFM	THROAT DIA., IN.	DAMPER	MODEL # (GREENHECK)	REMARKS
RV-1	1.83	1,260	20-1/4	NO	GRSR 24	1, 2
RV-2	1.83	1,260	20-1/4	NO	GRSR 24	1, 2

- REMARKS:
- MOUNT VENT ON 8" HIGH ROOF CURB. CURB SHALL MATCH SLOPE OF ROOF.
 - VENT SHALL HAVE INTEGRAL BIRD SCREEN.

EXHAUST FANS

MARK	TYPE	CFM	ESP, IN. W.C.	RPM	MAX SONES	MOTOR		ELECTRICAL	MODEL # (GREENHECK)	REMARKS
						HP	RPM			
EF-1	INLINE CENTRIFUGAL	200	0.25	1,592	5.1	1/10	1,725	115/1	SQ-70-VG	1, 2, 3
EF-2	INLINE CENTRIFUGAL	350	0.25	1,576	6.4	1/10	1,725	115/1	SQ-80-VG	1, 2, 3

- REMARKS:
- DIRECT DRIVE FAN. PROVIDE MOTOR DISCONNECT SWITCH.
 - PROVIDE ELECTRONICALLY COMMUTATED (EC) MOTOR WITH POTENTIOMETER ON MOTOR FOR ADJUSTING MOTOR SPEED.
 - PROVIDE FAN WITH WALL-MOUNTED MOTION DETECTOR.

NOTE: FOR EQUIPMENT CONDUCTOR SIZES REFERENCE E-601.

AIR DEVICE SCHEDULE (SUPPLY)

MARK	TYPE	MATERIAL	PANEL/ FRAME SIZE	NECK SIZE	MAX ΔP IN. W.C.	MAX NC	DAMPER	MODEL # (PRICE)	REMARKS
			INxIN	IN					
SG-1	SURFACE-MOUNTED REGISTER	STEEL	10x8	8x6	0.1	25	YES	520D/F/S/A	1, 2
SG-2	SURFACE-MOUNTED REGISTER	STEEL	14x10	12x8	0.1	25	YES	520D/F/S/A	1, 2
SG-3	SURFACE-MOUNTED REGISTER	STEEL	20x12	18x10	0.1	25	YES	520D/F/S/A	1, 2

- REMARKS:
- FINISH COLOR AS SELECTED BY ARCHITECT.
 - PROVIDE SURFACE MOUNTING FRAME.

AIR DEVICE SCHEDULE (EXHAUST)

MARK	TYPE	MATERIAL	PANEL/ FRAME SIZE	NECK SIZE	MAX ΔP IN. W.C.	MAX NC	DAMPER	MODEL # (PRICE)	REMARKS
			INxIN	IN					
EG-1	DUCT-MOUNTED GRILLE	STEEL	8x8	6x6	0.05	20	NO	530/F/L/A	
EG-2	DUCT-MOUNTED GRILLE	STEEL	10x10	8x8	0.05	20	NO	530/F/L/A	
EG-3	SURFACE-MOUNTED GRILLE	STEEL	14x14	12x12	0.05	20	NO	530/F/L/A	
EG-4	SIDE WALL GRILLE	STEEL	8x8	8x6	0.05	20	NO	530/F/L/A	
EG-5	DUCT-MOUNTED GRILLE	STEEL	8x8	8x6	0.05	20	NO	530/F/L/A	

- REMARKS:

AIR DEVICE SCHEDULE (RETURN)

MARK	TYPE	MATERIAL	PANEL/ FRAME SIZE	NECK SIZE	MAX ΔP IN. W.C.	MAX NC	DAMPER	MODEL # (PRICE)	REMARKS
			INxIN	IN					
RG-1	SURFACE-MOUNTED REGISTER	STEEL	10x10	8x8	0.05	20	YES	530D/F/L/A	
RG-2	SURFACE-MOUNTED GRILLE	STEEL	20x20	18x18	0.05	20	NO	530/F/L/A	
RG-3	SURFACE-MOUNTED GRILLE	STEEL	28x28	26x26	0.05	20	NO	530/F/L/A	

- REMARKS:

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

APOGEE
Engineers | Architects
Apogee Consulting Group, P.A.
1151 Kilahe Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com 919-888-7420

PAUL L. HOLLOWAY
PROFESSIONAL ENGINEER
47721
9/27/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED

PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F. SAME

DRAWN BY SMH/PLH FIRST ISSUE DATE 11/02/18

NO	REVISIONS	DATE	BY	PLH
A	ISSUED TO SCO	11/16/18	PLH	
B	ISSUED FOR NCDOT	01/22/19	PLH	
C	ISSUED FOR CONST.	02/21/19	PLH	

I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

MECHANICAL SCHEDULES

PROJECT NO.
18-0129.021

SHEET NO.
M-601

DUCTLESS SPLIT SYSTEM INDOOR UNITS

MARK	TYPE	REFRIGERANT	CFM (HI/LO)	TOTAL COOLING CAPACITY	SENSIBLE COOLING CAPACITY	COOLING EAT	TOTAL HEATING CAPACITY	HEATING EAT	ELECTRICAL		MODEL # (DAIKIN)	REMARKS
				MBH	MBH	°F DB/WB	MBH	°F DB/WB	V/Ph	MCA/MOP		
DS-1	WALL MOUNTED	410A	500/400	18	13.7	80/67	20	70/60	240/1	0.4/15	FAQ18PVJU	1, 2, 3

REMARKS:

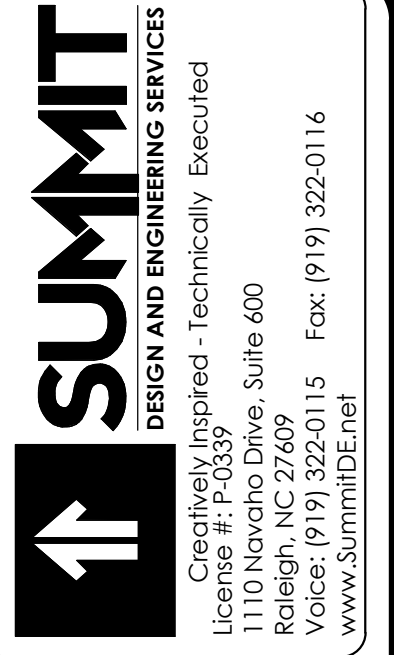
1. SIZE, ROUTE AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S INSTRUCTIONS.
2. PROVIDE WALL-MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT.
3. PROVIDE 30 AMP - 2 POLE, DISCONNECT SWITCH, FUSE PER NAMEPLATE. LABEL DISCONNECT SWITCH CIRCUIT ORIGIN, EQUIPMENT FEED, VOLTS, AND AMPS.

DUCTLESS SPLIT SYSTEM OUTDOOR UNITS

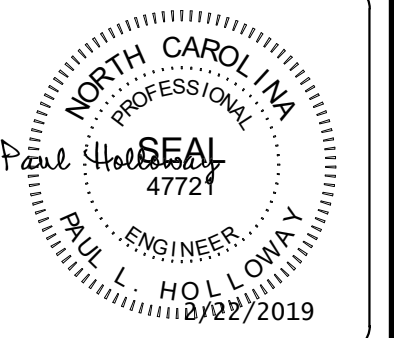
MARK	REFRIGERANT	TOTAL COOLING...	SENSIBLE COOLING...	COOLING AMBIENT	TOTAL HEATING...	HEATING AMBIENT	EFFICIENCY		ELECTRICAL		MODEL # (DAIKIN)	REMARKS
		MBH	MBH	°F DB/WB	MBH	°F DB/WB	EER	SEER	V/Ph	MCA/MOP		
CU-1	410A	18	13.7	95/75	20	47/43	12.7	18.6	240/1	16.5/20	RZQ18PVJU8	1, 2, 3, 4

REMARKS:

1. SIZE, ROUTE AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S INSTRUCTIONS.
2. UNIT SHALL BE CAPABLE OF COOLING DOWN TO 23°F AMBIENT TEMPERATURE WITHOUT A WIND BAFFLE.
3. INSTALL UNIT ON 4" HIGH POURED-IN-PLACE CONCRETE PAD.
4. PROVIDE 30 AMP - 2 POLE, DISCONNECT SWITCH, FUSE PER NAMEPLATE. LABEL DISCONNECT SWITCH CIRCUIT ORIGIN, EQUIPMENT FEED, VOLTS, AND AMPS.



Apogee Consulting Group, P.A.
 1151 Kildane Farm Road, Suite 120
 Cary, North Carolina 27511
APOGEE NC License #C-1848
 Engineers | Architects www.apogee.com 919-888-7420



ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED
 PROJECT MANAGER
 JOSEPH A. ANGELL II, PE, F. SAME
 DRAWN BY: SMH/PLH FIRST ISSUE DATE: 11/02/18

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	PLH
B	ISSUED FOR NCDOT	01/22/19	PLH
C	ISSUED FOR CONST.	02/21/19	PLH

NCDOT PROJECT #I-4400C
I-26 REST AREA, EAST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
MECHANICAL SCHEDULES

PROJECT NO.
18-0129.021
 SHEET NO.
M-602

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	CATALOG NUMBER	LAMP DESCRIPTION	VOLTAGE	LOAD (VA)	FINISH	MOUNTING	DESCRIPTION
A	FLUXWERX	APS-RD-B-35-B-06-S-F1-M-06	LED	120 V	21	BLACK	LINEAR PENDANT	6' LED LINEAR LED PENDANT MOUNT LIGHT
B	COLUMBIA	CFP24-4135-HE	LED	120 V	34	MATTE WHITE	CABLE MOUNT	2'X4' EDGE LIT PANEL WITH CABLE MOUNTING KIT
C	KENALL	MLHA84FMWCP45L40KDC120	LED	120 V	50	MATTE WHITE	SURFACE	4' LED INDUSTRIAL STRIP
C2	VODE	707-Z2-SL-57/0-36-M-0-RP-AE-1-0-Z-HO-40-A1-0-WH-0	LED	120 V	565	WHITE	SURFACE	57' 3" SECTION LINEAR LED LIGHTS
D1	PRESCOLITE	LF4SL-4LFLSL15L40KSPBL	LED	120 V	10	BLACK	RECESSED	4" RECESSED LED WET-LOCATION RATED DOWNLIGHT
D2	PRESCOLITE	LF4SL-4LFLSL20L40KSPBL	LED	120 V	10	BLACK	RECESSED	4" RECESSED LED WET-LOCATION RATED DOWNLIGHT
E1	LITHONIA	LED-X-EM-R-WA-TR	LED	120 V	7.2	WHITE	WALL MOUNT	CONTEMPORARY LED EXIT SIGN, WHITE WITH ALUMINUM HOUSING, BRUSHED ALUMINUM FACE, RED LETTERS, AND CHEVRON ARROWS AS SHOWN ON PLANS. FACE LIGHTING AS SHOWN ON PLANS.
H	LUMINIS	CL672 L504W100-120-DGT-CAT2-FT6-K35	LED	120 V	100	GUNMETAL	PENDANT	75" LED PENDANT FIXTURE
J	LUMINIS	SY802-L2W30r1-DGT-PH	LED	120 V	62	GUNMETAL	WALL	UP/DOWN LED OUTDOOR WALL SCNCE
NOTES: A. FOR CONTINUOUS FIXTURES, COORDINATE WITH SUPPLIER ON LENGTH AND REQUIRED FITTINGS, AND INSTALL WITH UNIFORM ILLUMINATION ALONG FIXTURE INCLUDING CORNERS. B. REMOVE ALL FINGER PRINTS FROM LENSES, REFLECTORS, AND LOUVERS FOLLOWING LIGHT FIXTURE INSTALLATION. C. FIXTURES FROM MANUFACTURERS OTHER THAN THOSE LISTED SHALL BE ACCEPTABLE PROVIDED THAT THEY ARE SIMILAR IN APPEARANCE AND ARE EQUAL IN QUALITY AND PHOTOMETRY. D. EXTERIOR LIGHTING CIRCUITS SHALL BE PHOTOCELL CONTROLLED.								

METHOD OF SHORT CIRCUIT CURRENT CALCULATIONS

SHORT CIRCUIT CURRENT CALCULATIONS WILL BE PERFORMED ON THE ELECTRICAL SYSTEM USING A BOLTED THREE PHASE FAULT CONDITION FOR CALCULATIONS TO ACHIEVE MAXIMUM THERMAL AND MECHANICAL STRESS TO THE SYSTEM FOR CALCULATIONS PURPOSES. EXISTING SHORT CIRCUIT VALUES WILL BE USED OUTSIDE THE WORK AREA, FOR THE STARTING POINT OF THE CALCULATIONS.

METHOD OF VOLTAGE DROP CALCULATIONS

USING OHM'S LAW AND THE KNOWN RESISTIVITY CONSTANT OF CONDUCTOR METAL (CIRCULAR MIL-OHM PER FOOT) FOR COPPER CONDUCTORS. OUR INTENT IS TO CALCULATE THE REQUIRED WIRE SIZE NECESSARY SO AS NOT TO EXCEED THE RECOMMENDED VOLTAGE DROP OF 3% FOR BRANCH CIRCUIT CONDUCTORS.

BUILDING CODE DATA

ELECTRICAL SYSTEM AND EQUIPMENT ENERGY COST BUDGET

METHOD OF COMPLIANCE: PRESCRIPTIVE PERFORMANCE

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE: _____ REFER TO LIGHT FIXTURE SCHEDULE
 NUMBER OF LAMPS IN FIXTURE: _____ REFER TO LIGHT FIXTURE SCHEDULE
 BALLAST TYPE USED IN THE FIXTURE: _____ REFER TO LIGHT FIXTURE SCHEDULE
 NUMBER OF BALLASTS IN FIXTURE: _____ REFER TO LIGHT FIXTURE SCHEDULE
 TOTAL WATTAGE PER FIXTURE: _____ REFER TO LIGHT FIXTURE SCHEDULE
 TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED: 5593 W SPECIFIED VS. 5615.39 W ALLOWED
 TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED: 1002 W SPECIFIED VS. 1819 W ALLOWED

EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS)

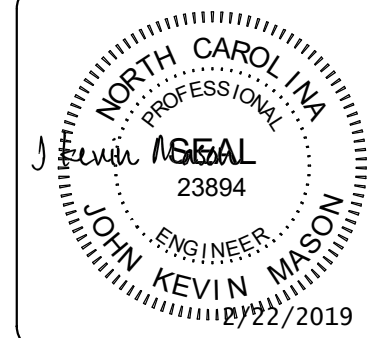
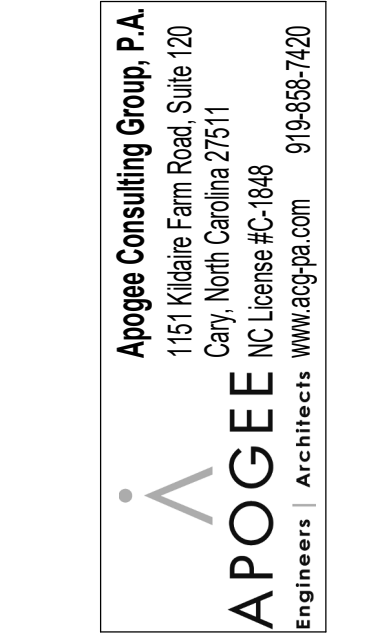
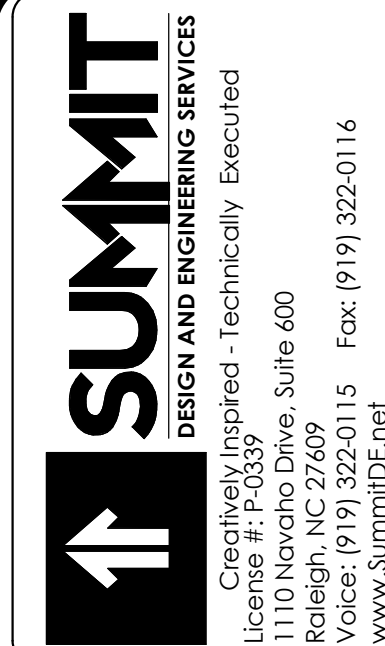
MOTOR HORSEPOWER: _____ N/A
 NUMBER OF PHASES: _____ N/A
 MINIMUM EFFICIENCY: _____ N/A
 MOTOR TYPE: _____ N/A
 NUMBER OF POLES: _____ N/A

DESIGNER STATEMENT:

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF 2012 NORTH CAROLINA ENERGY CONSERVATION CODE.

GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL DEVICES, FIXTURES, EQUIPMENT AND FEEDERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDED PROCEDURES, ALL APPLICABLE LOCAL AND STATE CODES, AMERICANS WITH DISABILITIES ACT AND WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- PROVIDE ADDITIONAL SUPPORT FOR DEVICES, FIXTURES, EQUIPMENT AND FEEDERS WHERE THE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING.
- FIRESTOP, DRAFTSTOP, SMOKESTOP AND/OR PROTECT THE ANNULAR SPACE AROUND ALL PENETRATIONS THROUGH WALLS, PARTITIONS, FLOORS, CEILING, AND ROOFS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, UL LISTING REQUIREMENT AND THE APPLICABLE BUILDING CODES.
- VERIFY CEILING SYSTEMS AND PROVIDE MOUNTING ACCESSORIES, TRIMS AND ALL REQUIRED MOUNTING HARDWARE TO SUIT THE PARTICULAR INSTALLATION.
- PROTECT EXISTING UNDERGROUND AND BUILDING INTERIOR UTILITIES DURING CONSTRUCTION.
- BRANCH CIRCUIT CONDUCTORS SHALL BE 12 AWG COPPER MINIMUM.
- COORDINATE ANY AND ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION SO AS TO AVOID CONFLICT DURING CONSTRUCTION.
- ALL PANELS SHALL HAVE TYPED, COMPLETED DIRECTORIES INDICATING EQUIPMENT SERVED AND ROOM NUMBER (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT LOCATION, OR SPARE, OR SPACE.
- MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES, TO INDICATE A QUALITY STANDARD, AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED. ALL PRODUCTS MUST COMPLY WITH "BUY AMERICAN ACT".
- ALL FEEDERS AND CIRCUITRY SHALL BE TORQUED PER THE PANEL, BREAKER, AND/OR PARTICULAR EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
- CIRCUITRY TO SWITCHES, RECEPTACLES, AND ALL OTHER DEVICES SHALL BE TERMINATED ON THE DEVICE'S SCREW TERMINALS.
- MOUNTING HEIGHTS INDICATED ARE TO CENTER OF DEVICE, OUTLET, FIXTURE, OR EQUIPMENT UNLESS NOTED OTHERWISE.
- ALL WIRE TERMINATIONS SHALL BE RATED FOR 75 DEGREES C.
- ALL CONDUCTORS SHALL HAVE THHN/THWN INSULATION, UNLESS OTHERWISE NOTED.
- ALL CONDUIT SHALL BE RGS OR EMT UNLESS OTHERWISE NOTED. FMC CONDUIT SHALL BE USED ON VIBRATING EQUIPMENT (MAXIMUM LENGTH OF 6 FEET). PVC SHALL BE USED FOR UNDERGROUND CONDUIT OR WHERE CONCRETE-ENCASED. WHERE VIBRATING EQUIPMENT IS LOCATED OUTSIDE, LFMC CONDUIT SHALL BE USED (MAXIMUM SIX FEET) FOR FINAL CONNECTIONS.
- ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
- FOR ALL LED FIXTURES, THE FIXTURE MUST BE CAPABLE OF SELF-RESETTING TO THE SWITCHED/CONTROLLED STATE DURING ANY FLUCTUATION IN POWER SUPPLY WHERE AUTOMATIC PROTECTIVE MEASURES DISABLE THE LED LAMPS. PROVIDE A LETTER OR STATEMENT FROM THE MANUFACTURER, OR OTHER ACCEPTABLE PROOF, THAT ALL LED FIXTURES, WITH OR WITHOUT BROWNOUT PROTECTION, WILL RETURN TO THE SWITCHED/CONTROLLED STATE AUTOMATICALLY. PROVIDE STATEMENT WITH THE FIXTURE SUBMITTALS.
- IN CASE OF CONFLICTS OR DISCREPANCIES WITHIN OR AMONG THE CONTRACT DRAWINGS, AS DETERMINED BY THE GOVERNMENT, SHALL BE PROVIDED.
- COMPRESSION COUPLINGS SHALL BE USED. NO SET SCREW FITTINGS ARE ALLOWED.



ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED

PROJECT MANAGER
 JOSEPH A. ANGELL II, PE, F.SAME

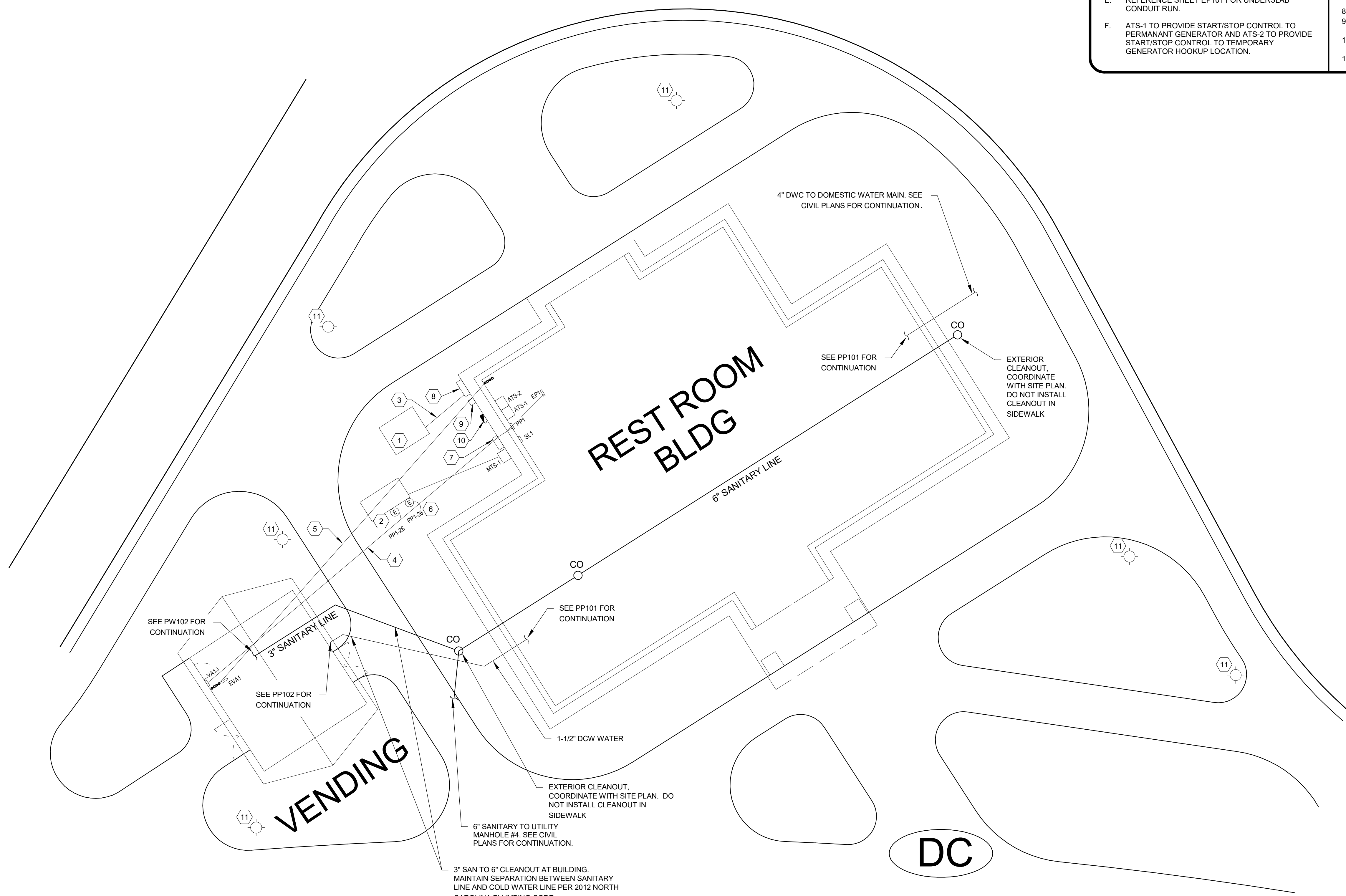
DRAWN BY: JDM FIRST ISSUE DATE: 11/02/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JM
B	ISSUED TO NCDOT	01/22/19	JM
C	ISSUED FOR CONST.	02/21/19	JM

NC DOT PROJECT # I-4400C
I-26 REST AREA, EAST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
ELECTRICAL NOTES AND ABBREVIATIONS

PROJECT NO.
18-0129.021
 SHEET NO.
F-002

SHEET NOTES	KEY NOTES
A. ALL RECEPTACLE CONDUCTORS ARE 2-12 AWG, 1-12 AWG EG IN 3/4" CONDUIT MINIMUM UNLESS NOTED OTHERWISE.	1 TRANSFORMER PAD SHALL BE BY THE CONTRACTOR, AND SHALL MEET THE REQUIREMENTS OF THE UTILITY COMPANY. TRANSFORMER SUPPLIED BY LOCAL UTILITY. REFERENCE PAD DETAIL ON SHEET S300.
B. COORDINATE LOCATION AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL AND PLUMBING CONTRACTORS.	2 CONTRACTOR TO INSTALL GENERATOR. GENERATOR PROVIDED BY OWNER.
C. COORDINATE EQUIPMENT WITH ARCHITECTURAL EQUIPMENT PLANS AND SCHEDULES.	3 SERVICE LATERAL. REFERENCE SINGLE-LINE E-601.
D. COORDINATE UNDERGROUND CONDUIT RUNS WITH OTHER TRADES AND WITH LOCAL UTILITY COMPANIES.	4 FEEDERS TO PANELS IN VENDING BUILDING. REFERENCE SINGLE-LINE E-601. RUN UNDERGROUND CONDUITS IN PARALLEL.
E. REFERENCE SHEET EP101 FOR UNDERSLAB CONDUIT RUN.	5 EMPTY CONDUITS WITH PULL CORDS INSTALLED. REFERENCE EP101.
F. ATS-1 TO PROVIDE START/STOP CONTROL TO PERMANENT GENERATOR AND ATS-2 TO PROVIDE START/STOP CONTROL TO TEMPORARY GENERATOR HOOKUP LOCATION.	6 GENERATOR HEATER AND BATTERY CHARGER.
	7 PROVIDE TEMPORARY GENERATOR CONNECTION POINT PER NFPA 70 700.3(F).
	8 CT CABINET. REFERENCE SINGLE LINE SHEET E-601.
	9 METER BASE. REFERENCE SINGLE LINE SHEET E-601.
	10 SE DISCONNECT. REFERENCE SINGLE LINE SHEET E-601.
	11 SITE LIGHTING POLE AND FIXTURE (BY OTHERS).



1 EASTBOUND SITE PLAN
Scale: 1" = 10'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kilauea Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com

APOGEE
Engineers | Architects | www.apogee.com

SEAL
23894
JOHN KEVIN MASON
ENGINEER
12/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED

PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F.SAME

DRAWN BY: JDM FIRST ISSUE DATE: 11/02/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JM
B	ISSUED TO NCDOT	01/22/19	JM
C	ISSUED FOR CONST.	02/21/19	JM

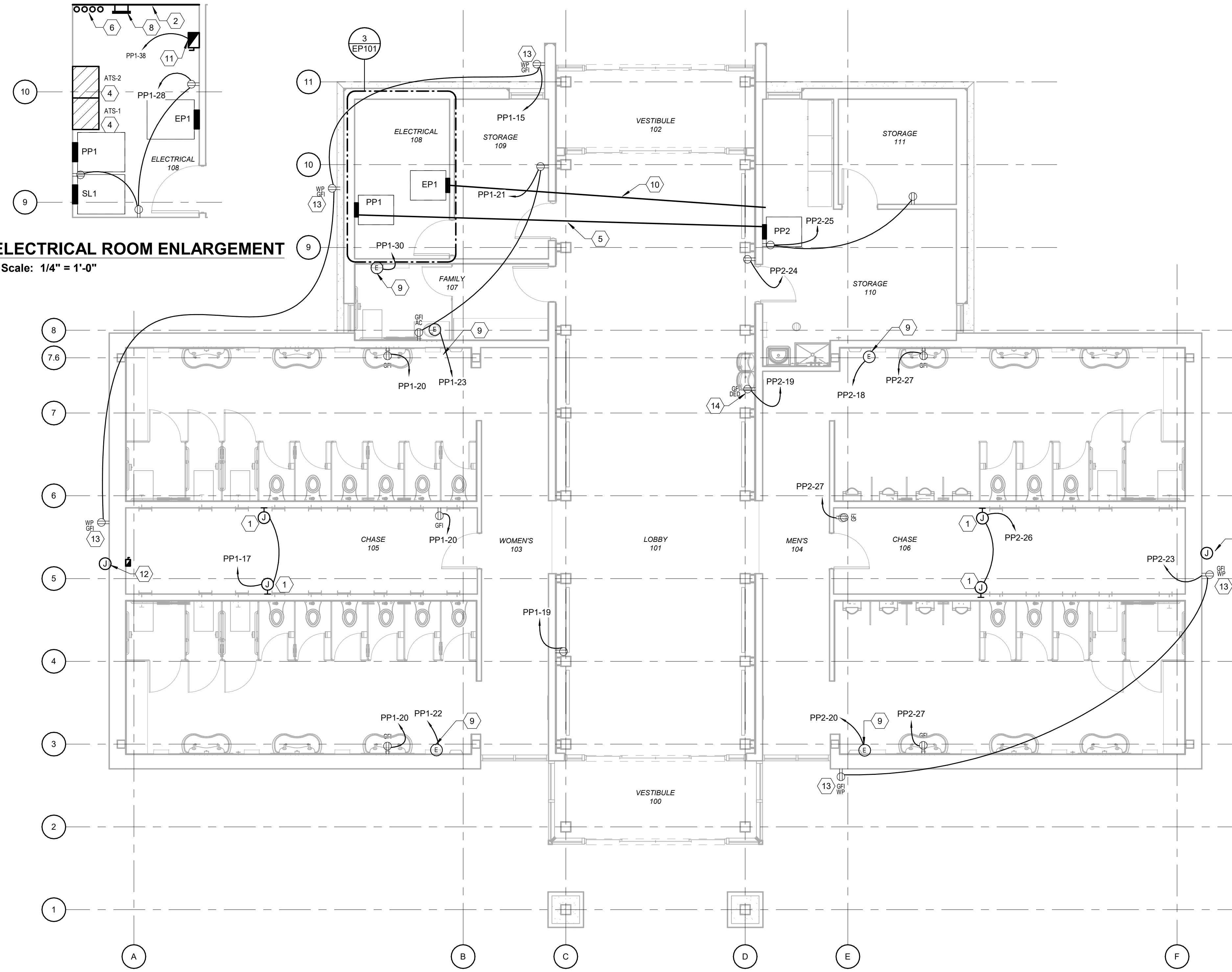
NCDOT PROJECT #: 4400C

I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732

ELECTRICAL SITE PLAN

PROJECT NO.
18-0129.021

SHEET NO.
ES101



3 ELECTRICAL ROOM ENLARGEMENT
Scale: 1/4" = 1'-0"

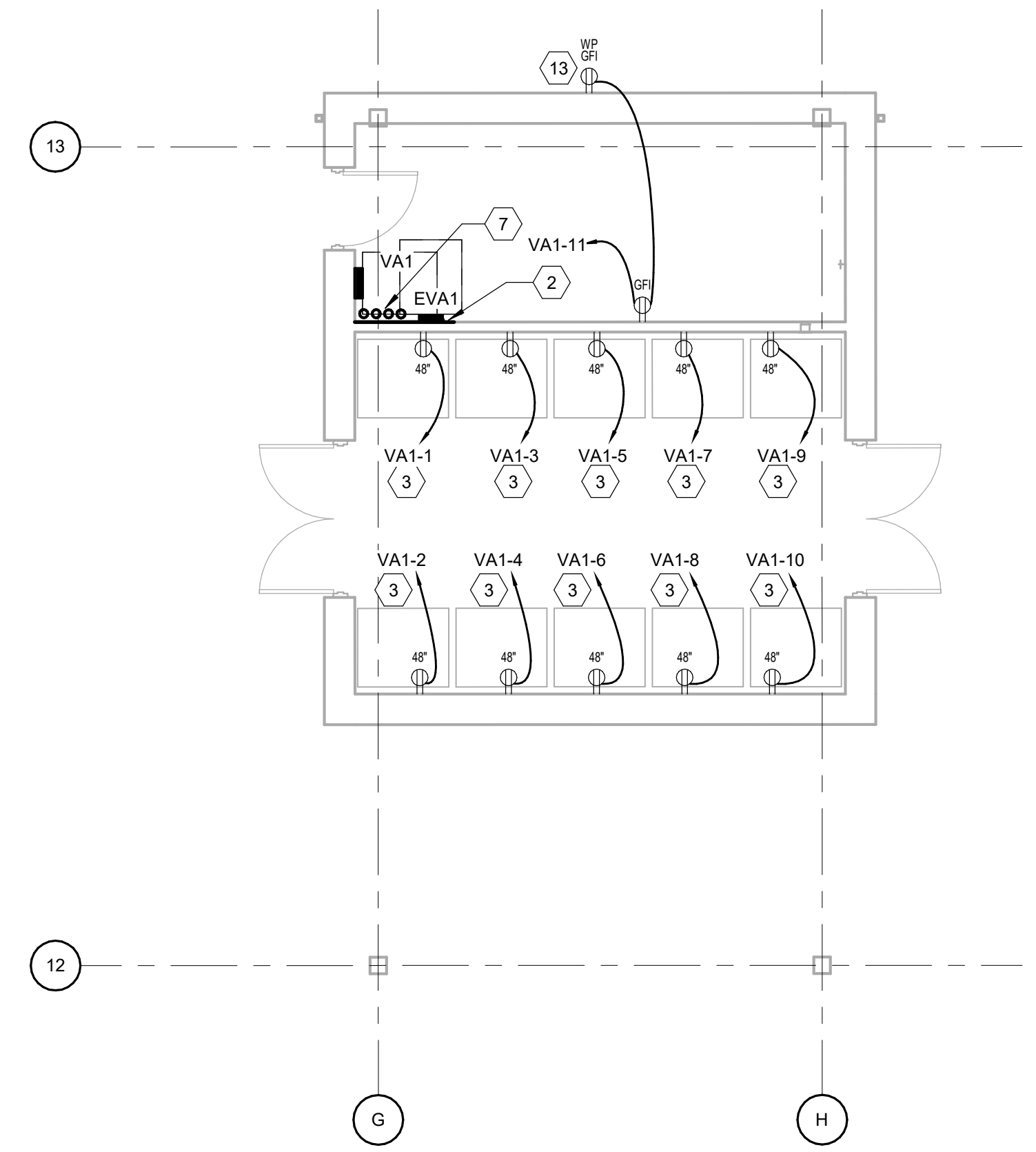
1 REST AREA ELECTRICAL PLAN
Scale: 3/16" = 1'-0"

SHEET NOTES

- A. ALL RECEPTACLE CONDUCTORS SHALL BE 2-12 AWG, 1-12 AWG EG IN 3/4" CONDUIT MINIMUM UNLESS NOTED OTHERWISE.
- B. COORDINATE LOCATION AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL AND PLUMBING CONTRACTORS.
- C. COORDINATE EQUIPMENT WITH ARCHITECTURAL EQUIPMENT PLANS AND SCHEDULES.
- D. ELECTRICAL CONTRACTOR SHALL FOLLOW SITE LOCK-OUT/TAG-OUT GUIDELINES TO DEENERGIZE EQUIPMENT.
- E. ALL RECEPTACLES SHALL HAVE THEIR SOURCE PANEL AND CIRCUIT NUMBER INDICATED ON THEIR FACEPLATE.

KEY NOTES

- 1 PROVIDE JUNCTION BOX & 120V 20A CIRCUIT AS INDICATED ON PLAN TO PROVIDE POWER TO PLUMBING FIXTURE SENSORS. COORDINATE WITH PLUMBING CONTRACTOR. (TYP. 3 JUNCTION BOXES PER BATHROOM.)
- 2 NEW 8'x4'x3/4" FIRE RATED PLYWOOD.
- 3 RECEPTACLES SHALL BE PROVIDED GFI PROTECTION THROUGH GFI BREAKER. PROVIDE 20A GFI BREAKER WITH 5 MILLIAMP TRIP.
- 4 600A ATS. REFERENCE SINGLE LINE SHEET E-601.
- 5 UNDER SLAB CONDUIT FROM PANEL 'PP1' TO PANEL 'PP2'. REFERENCE SINGLE LINE SHEET E-601.
- 6 PROVIDE 4-1" CONDUITS WITH PULL CORDS FROM THIS LOCATION TO VENDING BUILDING. REFERENCE PLAN 2 THIS SHEET AND REFERENCE SHEET ES101. COORDINATE UNDERGROUND ROUTINGS WITH OTHER DISCIPLINES.
- 7 PROVIDE 4-1" CONDUITS WITH PULL CORDS FROM THIS LOCATION TO RESTROOM BUILDING. REFERENCE PLAN 1 THIS SHEET AND REFERENCE SHEET ES101. COORDINATE UNDERGROUND ROUTINGS WITH OTHER DISCIPLINES.
- 8 PROVIDE GROUND BAR. SEE DETAIL 4/E501.
- 9 POWER CONNECTION FOR HAND DRYER. COORDINATE WITH OTHER DISCIPLINES.
- 10 UNDER SLAB CONDUIT RUN FOR LIGHTING CIRCUITING. REFERENCE EL101.
- 11 30A 240V RATED DISCONNECT PROVIDED BY OTHERS FOR SITE WATERWORKS AND LANDSCAPING FEATURES. REFERENCE SHEET E-501 DETAIL 4.
- 12 EMPTY WEATHERPROOF JUNCTION BOX MOUNTED AT 18" FOR SITE WATERWORKS AND LANDSCAPING FEATURES. PROVIDE EMPTY 1" CONDUIT BACK TO 30A DISCONNECT. REFERENCE KEYNOTE 11 THIS SHEET.
- 13 (TYP) RECEPTACLE IN WEATHERPROOF LOCKABLE HEAVY DUTY ENCLOSURE. PROVIDE GFI PROTECTION THROUGH GFI BREAKER (5mA).
- 14 DEDICATED RECEPTACLE FOR DRINKING FOUNTAIN. COORDINATE PLACEMENT WITH PLUMBING CONTRACTOR.



2 VENDING AREA ELECTRICAL PLAN
Scale: 3/16" = 1'-0"



Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com

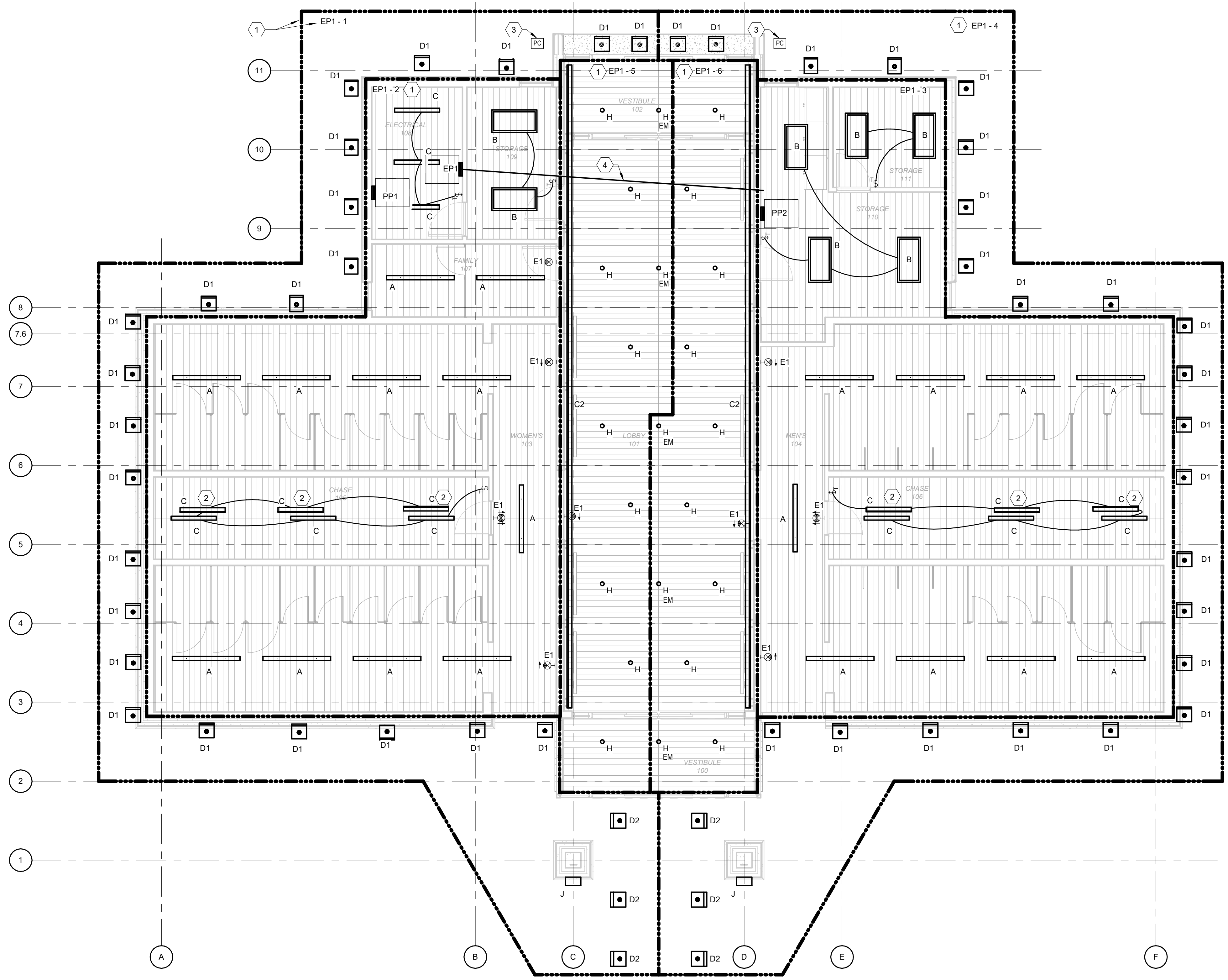


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F.SAME
DRAWN BY: JDM FIRST ISSUE DATE: 11/02/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JM
B	ISSUED TO NCDOT	01/22/19	JM
C	ISSUED FOR CONST.	02/21/19	JM

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
FIRST FLOOR POWER PLAN

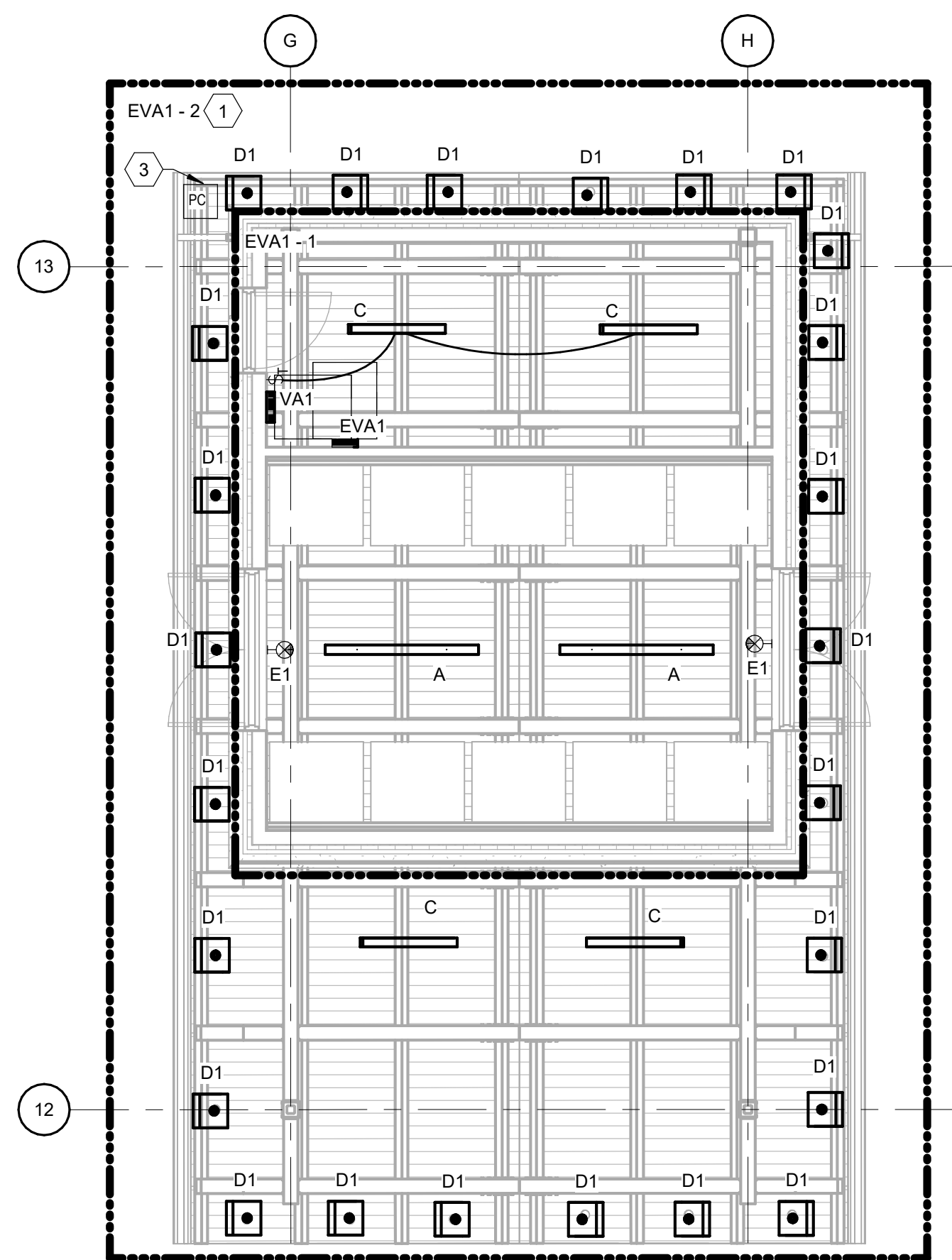
PROJECT NO.
18-0129.021
SHEET NO.
EP101



1 FIRST FLOOR LIGHTING PLAN
Scale: 3/16" = 1'-0"

- SHEET NOTES**
- A. ALL LIGHTING CONDUCTORS SHALL BE 2-12 AWG, 1-12 AWG EG IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.
 - B. CONTRACTOR SHALL VERIFY COMPATIBILITY OF ALL LIGHTING CONTROLS WITH THE LED DRIVERS TO BE CONTROLLED.
 - C. ALL EXTERIOR LIGHTING SHALL BE CONTROLLED BY LIGHTING CONTACTOR WITH PHOTOCELL.
 - D. ALL INTERIOR LIGHTS SHALL BE ALWAYS-ON UNLESS INDICATED OTHERWISE ON PLANS.

- KEY NOTES**
- 1 (TYP) CIRCUIT LIGHTS IN THIS AREA TO PANEL AND CIRCUIT INDICATED.
 - 2 MOUNT LIGHT ABOVE MECHANICAL PLATFORMS. 3 LIGHTS ARE ABOVE PLATFORM, AND 3 ARE BELOW PLATFORM TO LIGHT CHASE. RECOMMENDED ABOVE PLATFORM MOUNTING HEIGHT 16' AFF. COORDINATE WITH MECHANICAL.
 - 3 PHOTOCELL TO CONTROL OUTDOOR LIGHTS. COORDINATE WITH DEVICE MANUFACTURER.
 - 4 2 1/2" UNDER SLAB CONDUIT RUN FOR EMERGENCY LIGHTING CIRCUITING. RUN ALL EMERGENCY LIGHTING CIRCUIT WIRING THROUGH THIS CONDUIT TO PANEL 'EP1'. PROVIDE STUB-UPS AS REQUIRED.



2 VENDING AREA LIGHTING PLAN
Scale: 3/16" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
APOGEE Engineers | Architects www.apogee.com 919-888-7420

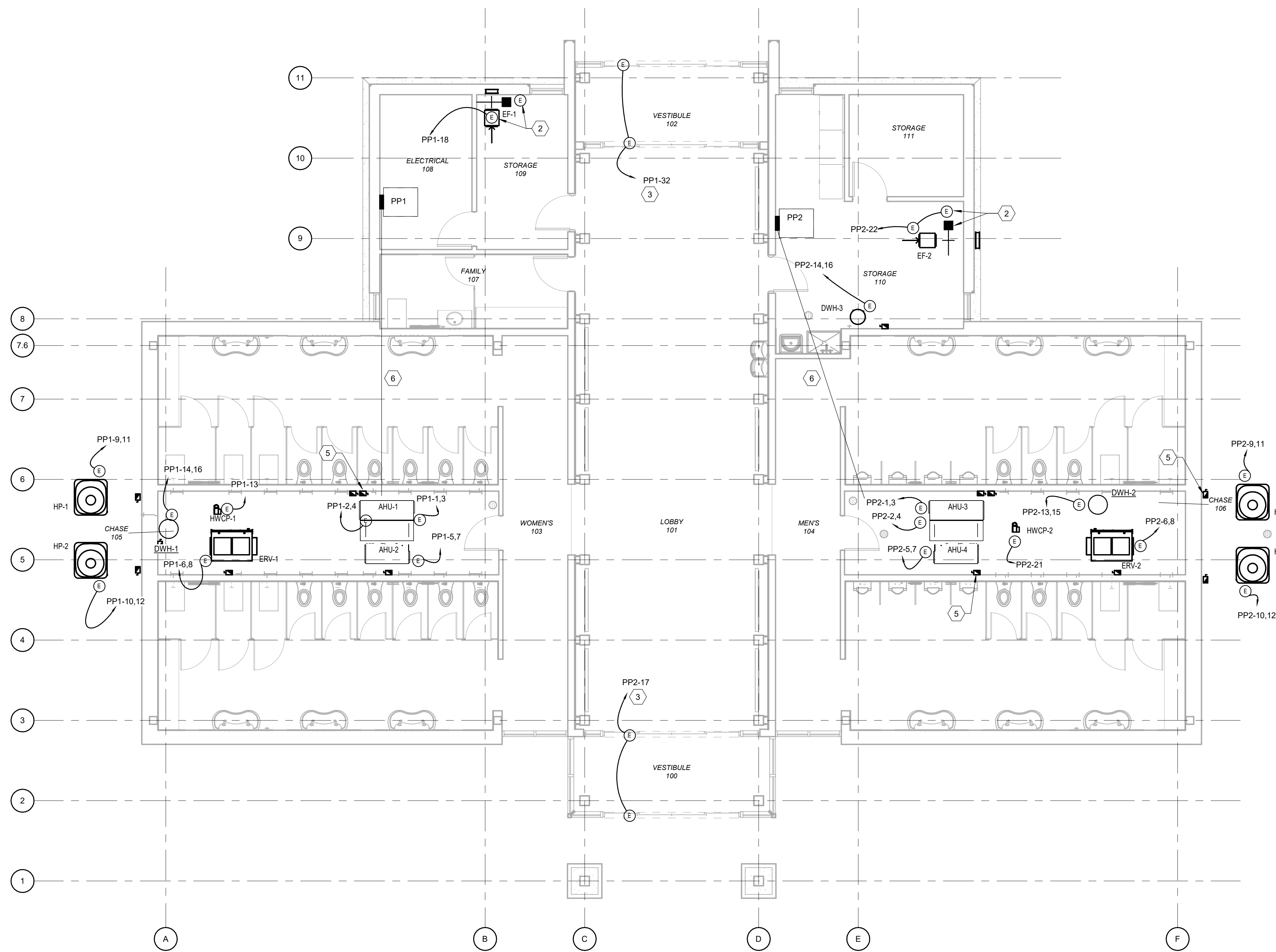
JOHN KEVIN MASON
PROFESSIONAL ENGINEER
23894
12/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F.SAME
DRAWN BY: JDM FIRST ISSUE DATE: 11/02/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JM
B	ISSUED TO NCDOT	01/22/19	JM
C	ISSUED FOR CONST.	02/21/19	JM

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
FIRST FLOOR LIGHTING PLAN

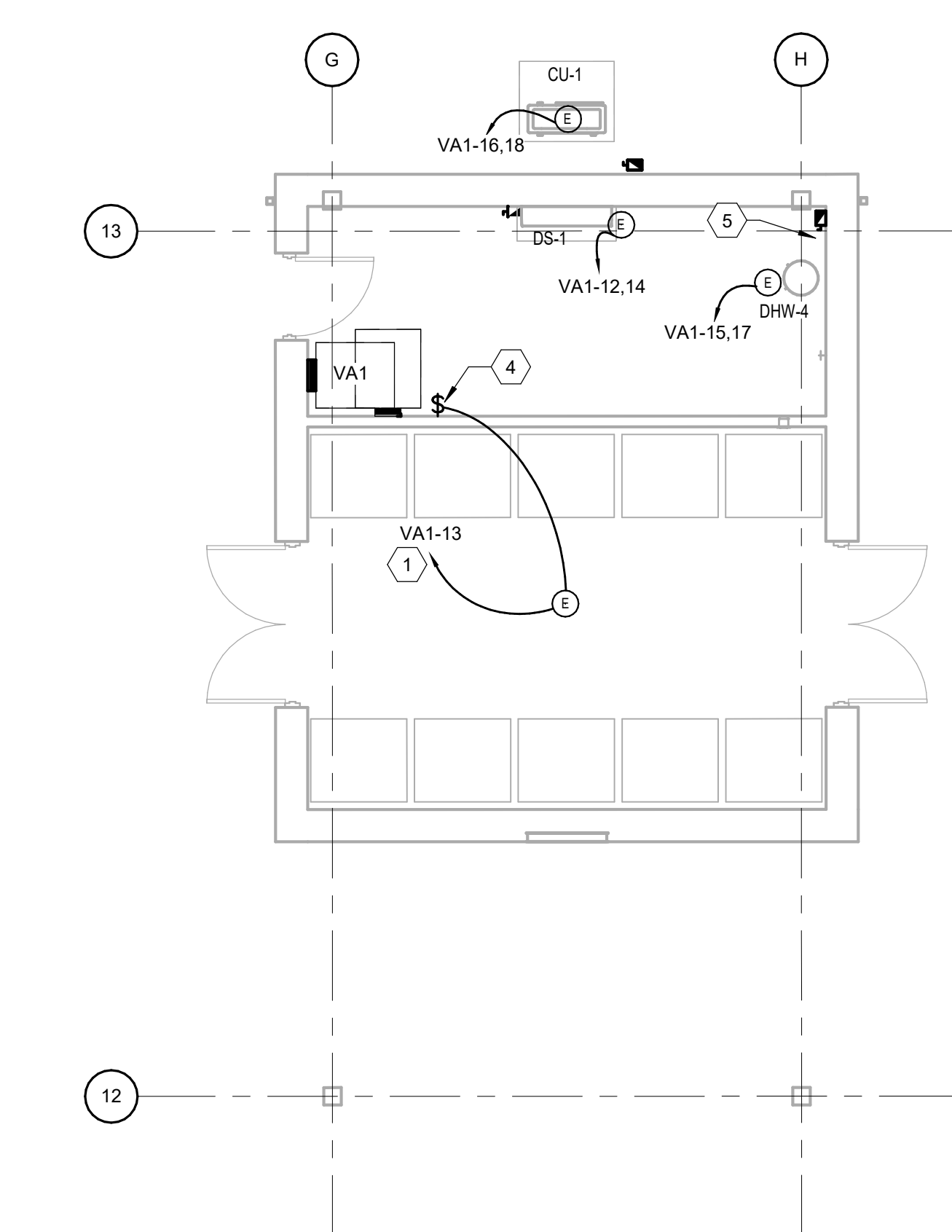
PROJECT NO.
18-0129.021
SHEET NO.
EL101



1 MECHANICAL POWER PLAN
Scale: 3/16" = 1'-0"

- SHEET NOTES**
- A. ALL CONDUCTORS SHALL BE 2-12 AWG, 1-12 AWG EG IN 3/4" CONDUIT MINIMUM UNLESS NOTED OTHERWISE. REFERENCE EQUIPMENT CONDUCTOR SCHEDULE SHEET E-601.
 - B. COORDINATE LOCATION AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL AND PLUMBING CONTRACTORS. REFERENCE DETAIL 4 SHEET E-501.
 - C. COORDINATE EQUIPMENT WITH ARCHITECTURAL EQUIPMENT PLANS AND SCHEDULES.
 - D. ALL EQUIPMENT SHALL HAVE THE SOURCE PANEL AND CIRCUIT NUMBER INDICATED ON DEVICE DISCONNECTING MEANS.

- KEY NOTES**
- 1 CEILING FAN SHALL BE CONTROLLED VIA MOTOR RATED SWITCH AS INDICATED. COORDINATE WITH MECHANICAL
 - 2 MOTORIZED DAMPER, CIRCUIT WITH NEARBY EXHAUST FAN.
 - 3 PROVIDE POWER FOR MOTORIZED DOORS. COORDINATE LOCATION WITH OTHER DISCIPLINES.
 - 4 MOTOR RATED SWITCH SHALL CONTROL FAN IN VENDING AREA. PROVIDE LABEL ON SWITCH FACEPLATE INDICATING PURPOSE.
 - 5 (TYP.) MOUNTING LOCATION FOR DISCONNECTS FOR PLUMBING AND MECHANICAL. COORDINATE INSTALLATION WITH OTHERS. REFERENCE DETAIL 4 SHEET E-501. PROVIDE LABELS "DISCONNECT TO BE DE-ENERGIZED PRIOR TO SERVICING".
 - 6 PROVIDE 2-1 1/2" EMPTY CONDUITS WITH PULL STRINGS FROM PANEL TO MECHANICAL ROOM.



2 VENDING AREA MECHANICAL POWER PLAN
Scale: 3/16" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
1110 Newchico Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com
APOGEE
Engineers | Architects | Interiors

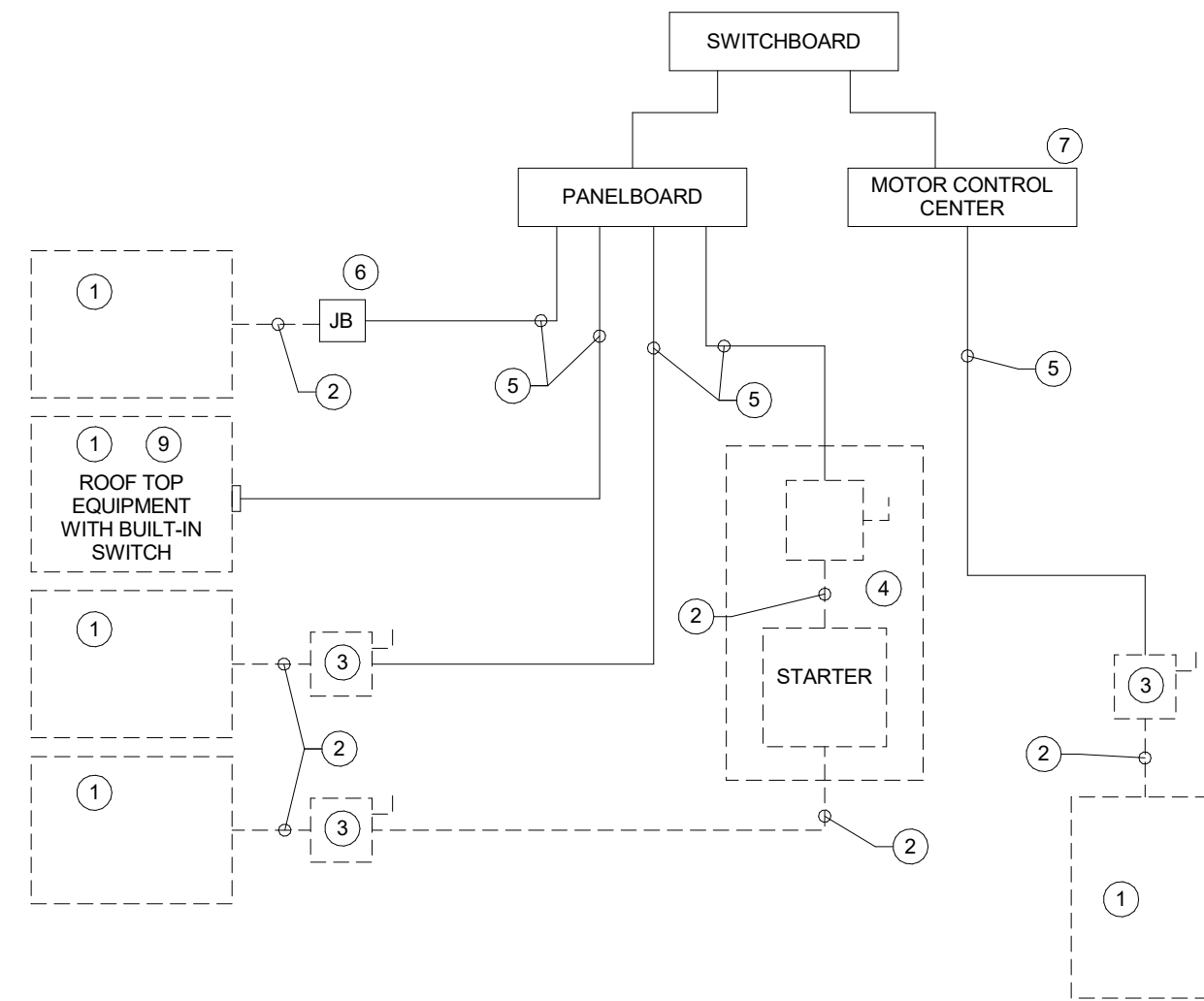
PROFESSIONAL SEAL
JOHN KEVIN MASON
ENGINEER
23894
02/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F.SAME
DRAWN BY: JDM FIRST ISSUE DATE: 11/02/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JM
B	ISSUED TO NCDOT	01/22/19	JM
C	ISSUED FOR CONST.	02/21/19	JM

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
MECHANICAL POWER PLAN

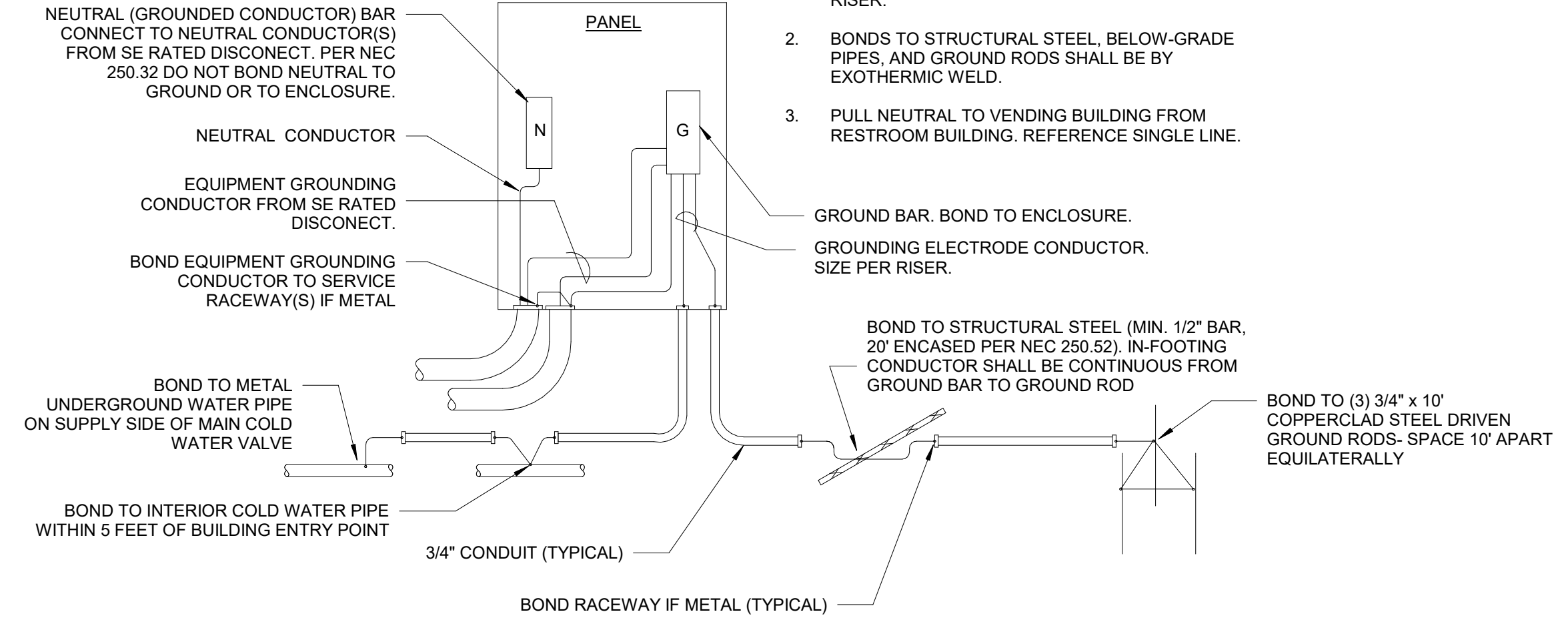
PROJECT NO.
18-0129.021
SHEET NO.
EM101



ELECTRICAL NOTES:

- ① EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
- ② CONDUIT & WIRING BY HVAC, PLUMBING CONTRACTOR, OR OTHER TRADES.
- ③ IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
- ④ A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
- ⑤ FEEDER CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES.
- ⑥ JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING WILL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
- ⑦ PROJECT UTILIZING AN MCC, THE STARTER, CB, OR VFD IN THE MCC ARE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- ⑧ IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
- ⑨ IF THE ROOF TOP EQUIPMENT IS NOT PROVIDED WITH BUILT IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.

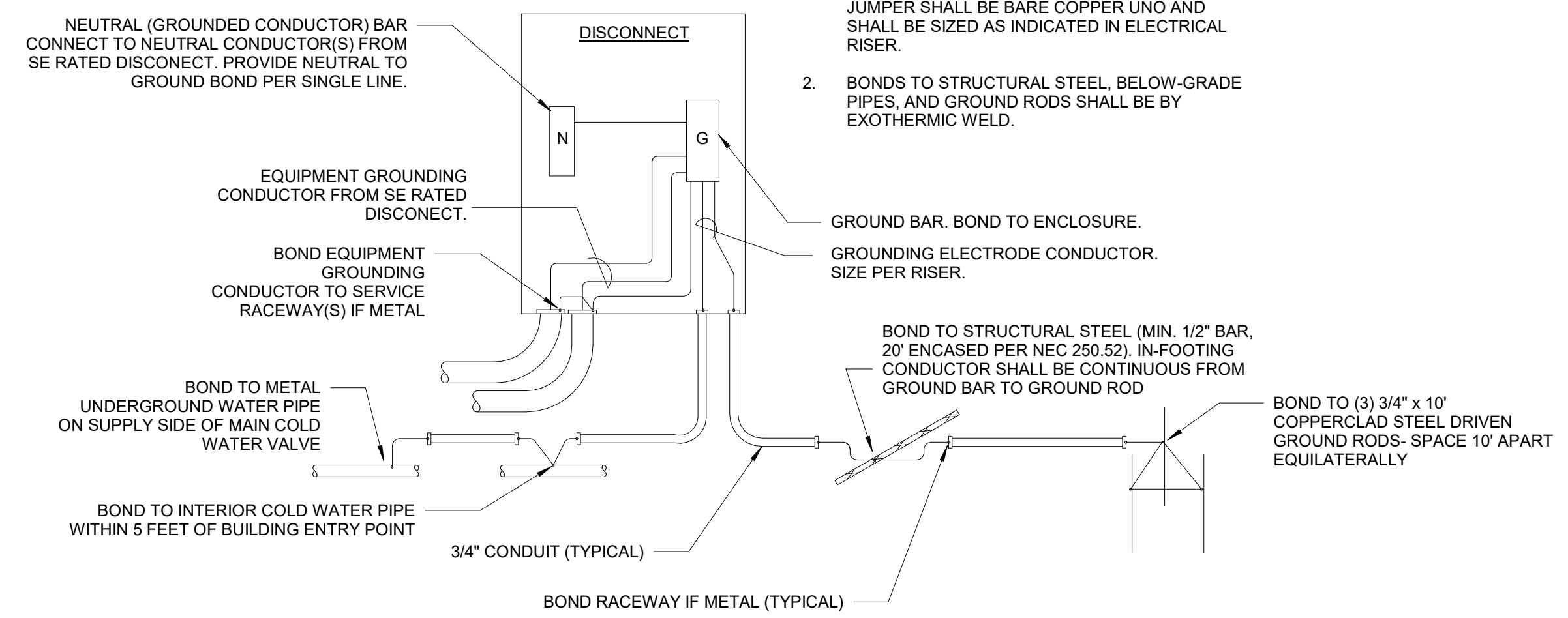
4 ELECTRICAL EQUIPMENT CONNECTION DETAIL
Scale: N.T.S.



NOTES:

1. GROUNDING CONDUCTORS AND MAIN BONDING JUMPER SHALL BE BARE COPPER UNO AND SHALL BE SIZED AS INDICATED IN ELECTRICAL RISER.
2. BONDS TO STRUCTURAL STEEL, BELOW-GRADE PIPES, AND GROUND RODS SHALL BE BY EXOTHERMIC WELD.
3. PULL NEUTRAL TO VENDING BUILDING FROM RESTROOM BUILDING. REFERENCE SINGLE LINE.

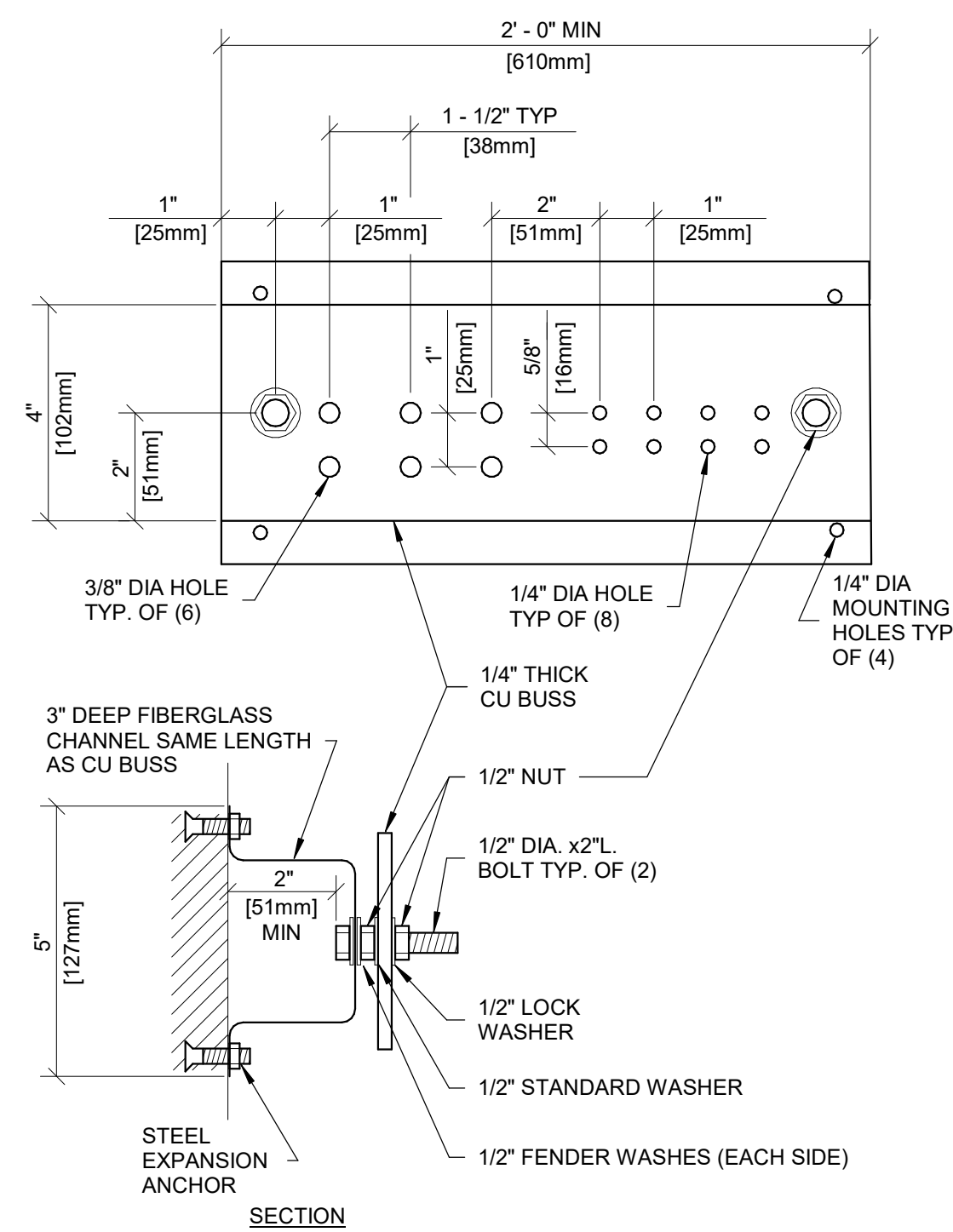
1 GROUND BOND AT VENDING BUILDING
Scale: N.T.S.



NOTES:

1. GROUNDING CONDUCTORS AND MAIN BONDING JUMPER SHALL BE BARE COPPER UNO AND SHALL BE SIZED AS INDICATED IN ELECTRICAL RISER.
2. BONDS TO STRUCTURAL STEEL, BELOW-GRADE PIPES, AND GROUND RODS SHALL BE BY EXOTHERMIC WELD.

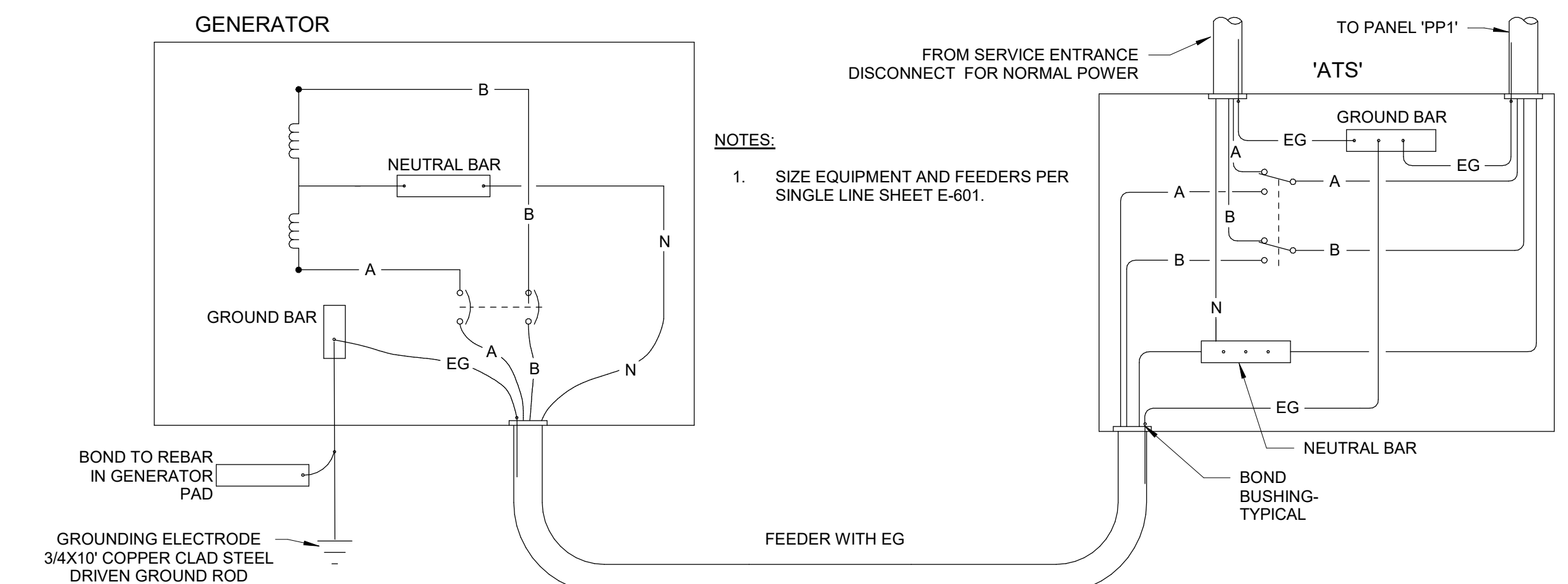
2 GROUND BOND AT RESTROOM BUILDING
Scale: N.T.S.



GENERAL NOTES:

1. ALL HARDWARE SHOWN SHALL BE STAINLESS STEEL.
2. PROVIDE 1 MOUNTING POINT PER 12" OF BAR LENGTH.
3. HOLES MAY BE ADDED IF REQUIRED.

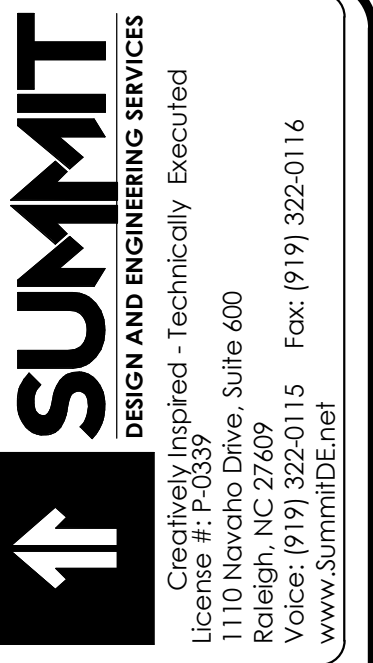
5 GROUND BAR
Scale: N.T.S.



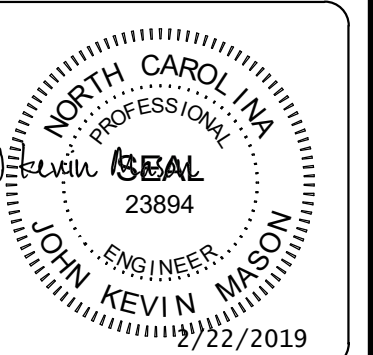
NOTES:

1. SIZE EQUIPMENT AND FEEDERS PER SINGLE LINE SHEET E-601.

3 GENERATOR GROUNDING - 2 POLE ATS
Scale: N.T.S.



Apogee Consulting Group, P.A.
1151 Kildane Farm Road, Suite 120
Cary, North Carolina 27511
NC License #C-1848
www.apogee.com
919-688-7420

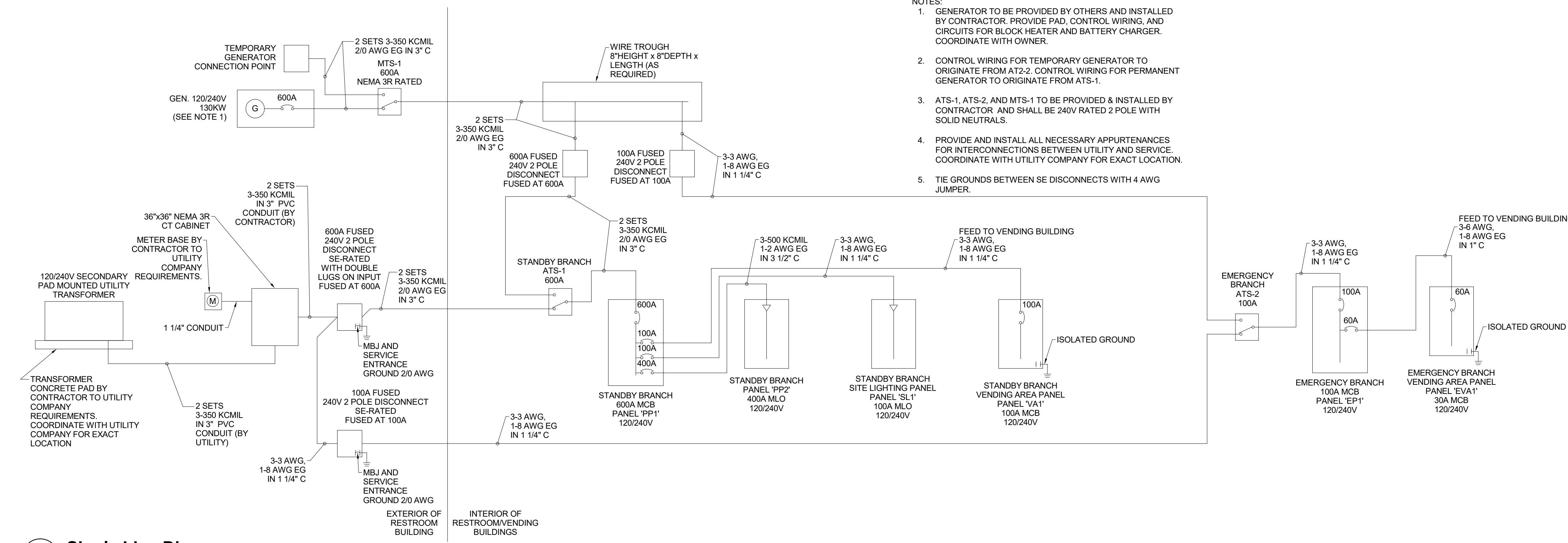


ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F.S.A.M.E.
DRAWN BY: JDM FIRST ISSUE DATE: 11/02/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	JM
B	ISSUED TO NCDOT	01/22/19	JM
C	ISSUED FOR CONST.	02/21/19	JM

NCDOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
ELECTRICAL DETAILS

PROJECT NO.
18-0129.021
SHEET NO.
F-501



1 Single Line Diagram
Scale: N.T.S.

- NOTES:
- GENERATOR TO BE PROVIDED BY OTHERS AND INSTALLED BY CONTRACTOR. PROVIDE PAD, CONTROL WIRING, AND CIRCUITS FOR BLOCK HEATER AND BATTERY CHARGER. COORDINATE WITH OWNER.
 - CONTROL WIRING FOR TEMPORARY GENERATOR TO ORIGINATE FROM (AT-2). CONTROL WIRING FOR PERMANENT GENERATOR TO ORIGINATE FROM AT-1.
 - ATS-1, ATS-2, AND MTS-1 TO BE PROVIDED & INSTALLED BY CONTRACTOR AND SHALL BE 240V RATED 2 POLE WITH SOLID NEUTRALS.
 - PROVIDE AND INSTALL ALL NECESSARY APPURTENANCES FOR INTERCONNECTIONS BETWEEN UTILITY AND SERVICE. COORDINATE WITH UTILITY COMPANY FOR EXACT LOCATION.
 - TIE GROUNDS BETWEEN SE DISCONNECTS WITH 4 AWG JUMPER.

EQUIPMENT CONDUCTOR SCHEDULE

Equipment Designation	EQUIPMENT TYPE	LOCATION	PANEL FED FROM	VOLTAGE (VOLTS)	PHASE	MOTOR HP / POWER REQUIREMENTS	LOAD (A)	CIRCUIT BREAKER SIZE	PHASE CONDUCTORS	NEUTRAL CONDUCTOR	GROUND WIRE	CONDUIT INCH SIZE	COMMENTS
ERV-1	INDOOR ENERGY RECOVERY VENTILATION UNIT	RESTROOM - CHASE 105	'PP1'	240	1	2-1 HP (MOP=15A)	14.00	20	2-12 AWG	-	1-12 AWG	3/4"	30A FUSED DISCONNECT (BY OTHERS) FUSED AT 15A.
ERV-2	INDOOR ENERGY RECOVERY VENTILATION UNIT	RESTROOM - CHASE 106	'PP2'	240	1	2-1 HP (MOP=15A)	14.00	20	2-12 AWG	-	1-12 AWG	3/4"	30A FUSED DISCONNECT (BY OTHERS) FUSED AT 15A.
EF-1	EXHAUST FAN	RESTROOM - ELECTRICAL 108	'PP1'	120	1	128 W	1.10	20	1-12 AWG	1-12 AWG	1-12 AWG	3/4"	
EF-2	EXHAUST FAN	RESTROOM - STORAGE 110	'PP2'	120	1	1/10 HP	3.00	20	1-12 AWG	1-12 AWG	1-12 AWG	3/4"	CIRCUIT WITH NEARBY MOTORIZED DAMPER ON THERMOSTAT FOR CONTROL. (REFERENCE EM101).
AHU-1 (AHU-1)	INDOOR SPLIT SYSTEM HEAT PUMP AIR HANDLING UNIT	RESTROOM - CHASE 105	'PP1'	240	1	59A MCA/60A MOP	48.00	60	2-6 AWG	-	1-10 AWG	3/4"	
AHU-2 (AHU-2)	INDOOR SPLIT SYSTEM HEAT PUMP AIR HANDLING UNIT	RESTROOM - CHASE 105	'PP1'	240	1	44A MCA/45A MOP	35.20	45	2-8 AWG	-	1-10 AWG	3/4"	
AHU-3 (AHU-3)	INDOOR SPLIT SYSTEM HEAT PUMP AIR HANDLING UNIT	RESTROOM - CHASE 106	'PP2'	240	1	59A MCA/60A MOP	48.00	60	2-6 AWG	-	1-10 AWG	3/4"	
AHU-4 (AHU-4)	INDOOR SPLIT SYSTEM HEAT PUMP AIR HANDLING UNIT	RESTROOM - CHASE 106	'PP2'	240	1	25A MCA/25A MOP	20.00	25	2-10 AWG	-	1-10 AWG	3/4"	
HP-1	SPLIT SYSTEM HEAT PUMP OUTDOOR CONDENSING UNIT	RESTROOM - EXTERIOR	'PP1'	240	1	44A MCA/45A MOP	35.20	45	2-8 AWG	-	1-10 AWG	3/4"	
HP-2	SPLIT SYSTEM HEAT PUMP OUTDOOR CONDENSING UNIT	RESTROOM - EXTERIOR	'PP1'	240	1	15 MCA/25 MOP	12.00	25	2-10 AWG	-	1-10 AWG	3/4"	
HP-3	SPLIT SYSTEM HEAT PUMP OUTDOOR CONDENSING UNIT	RESTROOM - EXTERIOR	'PP2'	240	1	28 MCA/45 MOP	14.00	45	2-8 AWG	-	1-10 AWG	3/4"	
HP-4	SPLIT SYSTEM HEAT PUMP OUTDOOR CONDENSING UNIT	RESTROOM - EXTERIOR	'PP2'	240	1	15 MCA/25 MOP	12.00	25	2-10 AWG	-	1-10 AWG	3/4"	
DWH-1	DOMESTIC WATER HEATER	RESTROOM - CHASE 105	'PP1'	240	1	6.0 kW	25.00	40	2-8 AWG	-	1-10 AWG	3/4"	
DWH-2	DOMESTIC WATER HEATER	RESTROOM - CHASE 106	'PP2'	240	1	6.0 kW	25.00	40	2-8 AWG	-	1-10 AWG	3/4"	
DWH-3	DOMESTIC WATER HEATER	RESTROOM - STORAGE 110	'PP2'	240	1	3.0 kW	12.50	20	2-12 AWG	-	1-12 AWG	3/4"	
DWH-4	DOMESTIC WATER HEATER	RESTROOM - STORAGE 110	'PP2'	240	1	1.5 kW	6.25	20	2-12 AWG	-	1-12 AWG	3/4"	
HWCP-1	DOMESTIC HOT WATER RECIRCULATION PU MP	RESTROOM - CHASE 105	'PP1'	120	1	1/12 HP	4.00	20	1-12 AWG	1-12 AWG	1-12 AWG	3/4"	
HWCP-2	DOMESTIC HOT WATER RECIRCULATION PU MP	RESTROOM - CHASE 106	'PP2'	120	1	1/12 HP	4.00	20	1-12 AWG	1-12 AWG	1-12 AWG	3/4"	
DS-1	SPLIT UNIT (INDOOR)	VENDING AREA - INTERIOR	'VA1'	240	1	0.4A MCA/15A MOP	0.40	20	2-12 AWG	-	1-12 AWG	3/4"	30A FUSED DISCONNECT (BY OTHERS) FUSED AT 15A.
CU-1	SPLIT UNIT (OUTDOOR)	VENDING AREA - EXTERIOR	'VA1'	240	1	16.5A MCA/20A MOP	13.20	20	2-12 AWG	-	1-12 AWG	3/4"	

EVA1

VOLTAGE: 240
PHASE/WIRE: 1Ø / 3W
RATED AMPERAGE: 60 A MCB
MAIN: 60 A MCB
SCC RATING (SYM): 10,000 AMPS SYMMETRICAL

CONNECTED LOAD PER PHASE	ISOLATED GROUND BUS (Y/N):	
	BUSSING: SEE SPEC	MOUNTING: SURFACE
MCB GROUND FAULT PROTECTION (Y/N): N		MCB SHUNT TRIP (Y/N): N
MCB 100% RATED (Y/N): Y		

CKT	IDENTIFICATION	TYPE (*)	BKR SIZE	POLES	A	B	POLES	BKR SIZE	TYPE (*)	IDENTIFICATION	CKT
1	VENDING INTERIOR LIGHTS		20 A	1	154	350		20 A		VENDING EXTERIOR LIGHTS	2
3	SPARE		20 A	1		0	1	20 A		SPARE	4
5	SPARE		20 A	1	0	0	1	20 A		SPARE	6
7	SPACE	--	--	--		0	0	--	--	SPACE	8
9	SPACE	--	--	--	0	0	0	--	--	SPACE	10
11	SPACE	--	--	--		0	0	--	--	SPACE	12

Load Classification	Connected Load	Demand Factor	Demand Load	PANEL TOTALS
Lighting - Continuous	0.50 kVA	125.00%	0.63 kVA	
				TOTAL CONNECTED LOAD: 0.50 kVA
				TOTAL DEMAND: 0.63 kVA
				TOTAL CONNECTED CURRENT: 2 A
				TOTAL DEMAND CURRENT: 3 A

NOTES:
1. ALL BREAKERS ARE STANDARD UNLESS OTHERWISE NOTED
2. (*) NUMBER INDICATES BREAKER TYPE: 1 = AFCI, 2 = CLASS A 5mA GFCI, 3 = 30mA GFPE, 4 = SHUNT TRIP ACTIVATED, 5 = PANELBOARD FEEDER SERVING UNIT SHALL BE LOCKABLE USING A PADLOCK, IN ACCORDANCE WITH OSHA LOCK-OUT-TAG RULES, 6 = LSI, 7 = LSI.G.

EP1

VOLTAGE: 240
PHASE/WIRE: 1Ø / 3W
RATED AMPERAGE: 100 A MCB
MAIN: 100 A MCB
SCC RATING (SYM): 22,000 AMPS SYMMETRICAL

CONNECTED LOAD PER PHASE	ISOLATED GROUND BUS (Y/N):	
BUSSING: SEE SPEC	MOUNTING: SURFACE	
MCB GROUND FAULT PROTECTION (Y/N): N		MCB SHUNT TRIP (Y/N): N
MCB 100% RATED (Y/N): Y		

CONNECTED LOAD PER PHASE	A	B	POLES	BKR SIZE	TYPE (*)	IDENTIFICATION	CKT
EXTERIOR LIGHTS	320	891	1	20 A		LIGHTING 103, 105, 107, 108, 109	2
LIGHTING 104, 106, 110, 111		960	320	1	20 A	EXTERIOR LIGHTS	4
LIGHTING LOBBY 101	1677	1777	1	20 A		LIGHTING LOBBY 101	6
SPARE		0	0	1	20 A	SPARE	8
SPARE		0	0	1	20 A	SPARE	10
SPARE		0	0	1	20 A	SPARE	12
SPARE		0	0	1	20 A	SPARE	14
SPARE		0	0	1	20 A	SPARE	16
SPARE		0	0	1	20 A	SPARE	18
SPACE	--	--	--	--	--	SPACE	20
SPACE	0	504	0	0	60 A	EVA1	22
SPACE	--	--	--	--	--	SPACE	24

Load Classification	Connected Load	Demand Factor	Demand Load	PANEL TOTALS
Lighting - Continuous	6.45 kVA	125.00%	8.06 kVA	
				TOTAL CONNECTED LOAD: 6.45 kVA
				TOTAL DEMAND: 8.06 kVA
				TOTAL CONNECTED CURRENT: 27 A
				TOTAL DEMAND CURRENT: 34 A

NOTES:
1. ALL BREAKERS ARE STANDARD UNLESS OTHERWISE NOTED
2. (*) NUMBER INDICATES BREAKER TYPE: 1 = AFCI, 2 = CLASS A 5mA GFCI, 3 = 30mA GFPE, 4 = SHUNT TRIP ACTIVATED, 5 = PANELBOARD FEEDER SERVING UNIT SHALL BE LOCKABLE USING A PADLOCK, IN ACCORDANCE WITH OSHA LOCK-OUT-TAG RULES, 6 = LSI, 7 = LSI.G.

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively inspired - Technically Executed
1110 Northchase Drive, Suite 600
Raleigh, NC 27609
Voice: (919) 322-0115 Fax: (919) 322-0116
www.SummitDE.net

Apogee Consulting Group, P.A.
1151 Kilaheo Farm Road, Suite 120
Cary, North Carolina 27511
APOGEE
Engineers | Architects | www.apogee.com

PROFESSIONAL SEAL
JOHN KEVIN MASON
ENGINEER
23894
02/22/2019

ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED
PROJECT MANAGER
JOSEPH A. ANGELL II, PE, F.SAME
DRAWN BY
JDM
FIRST ISSUE DATE
11/02/2018

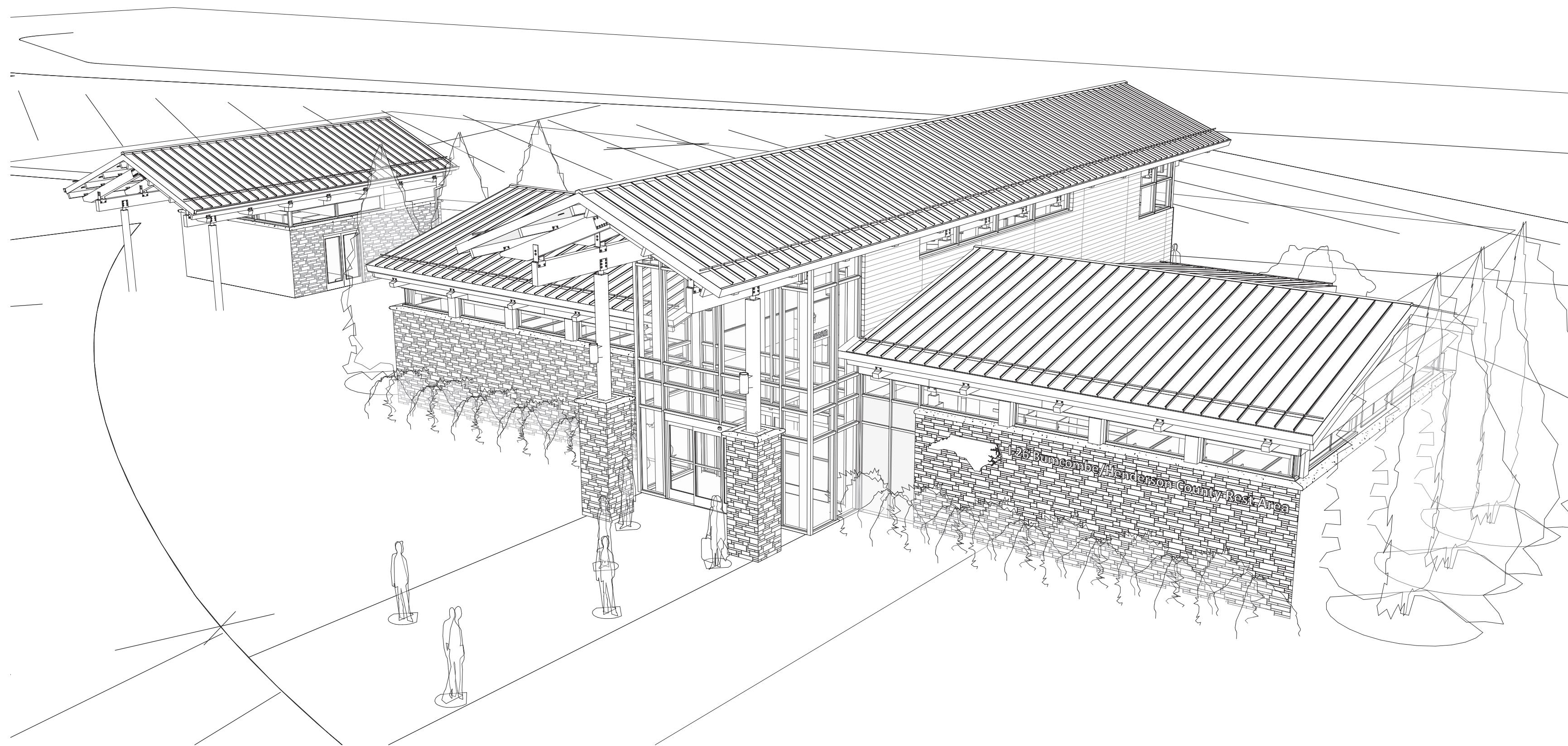
NO	REVISIONS	DATE	BY
B	01/22/19	JM	
C	02/21/19	JM	

NC DOT PROJECT #1-4400C
I-26 REST AREA, EAST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
ONE-LINE DIAGRAM AND SCHEDULES

NCDOT PROJECT #I-4400C

I-26 REST AREA, WEST BOUND

HENDERSON/BUNCOMBE COUNTY, NORTH CAROLINA, 28732



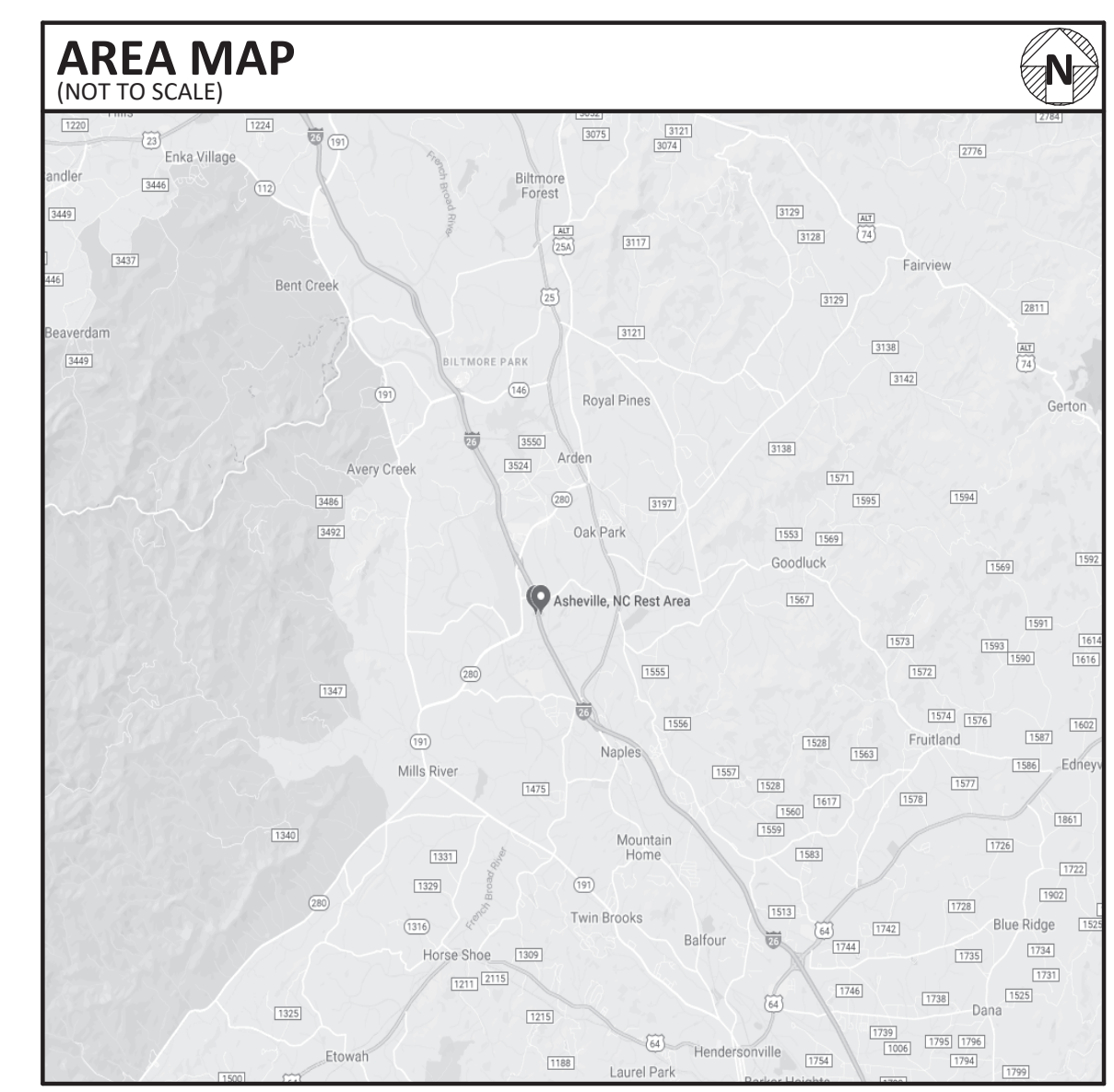
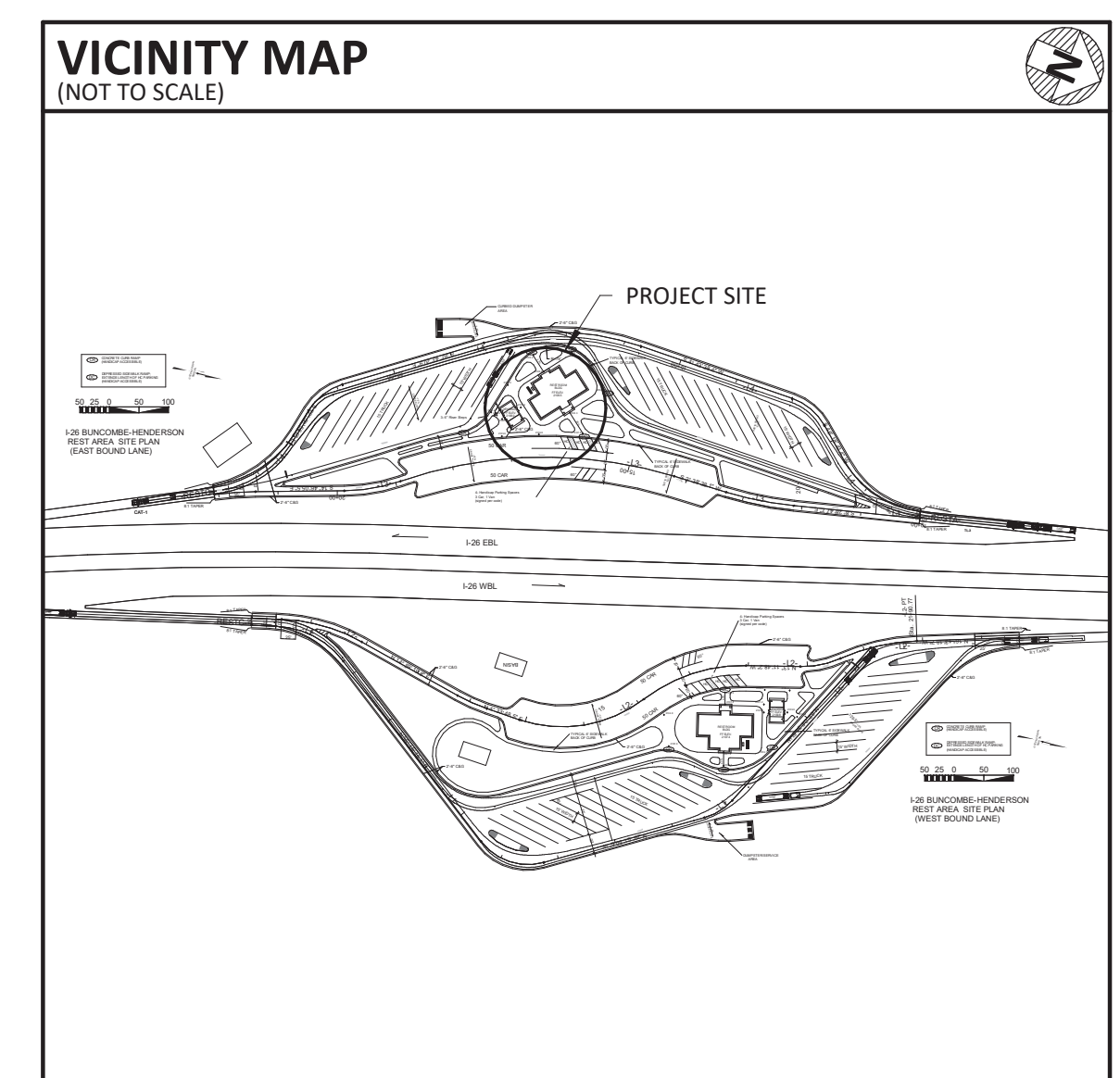
OWNER
 North Carolina Department of Transportation
 1 South Wilmington Street
 Raleigh, N.C. 27601
 Contact: Paul Stankiewicz
 E-Mail: PStankiewicz@NCDOT.gov
 Phone: (919) 707-2929

ARCHITECT
 Summit Design & Engineering Services
 1110 Navaho Drive, Suite 600
 Raleigh, NC 27609
 Contact: Brian T. Shepard, AIA, NCARB, LEED GA
 E-Mail: Brian.Shepard@SummitDE.net
 Phone: (919) 322-0115
 Fax: (919) 322-0116

STRUCTURAL
 Summit Design & Engineering Services
 1110 Navaho Drive, Suite 600
 Raleigh, NC 27609
 Contact: Joseph W. Balloni, PE
 E-Mail: Joseph.Balloni@SummitDE.net
 Phone: (919) 322-0115
 Fax: (919) 322-0116

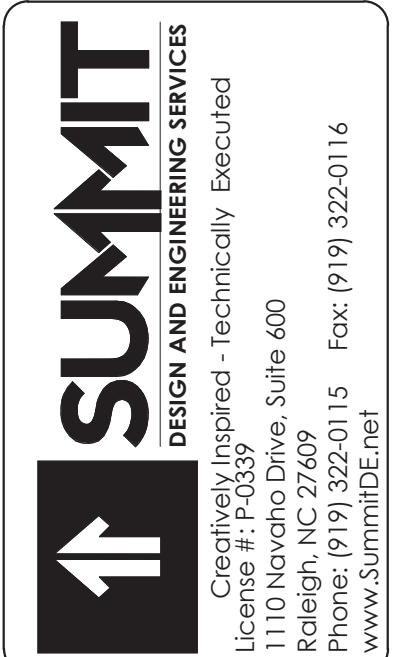
MECH., ELEC., PLBG.
 Apogee Consulting Group
 1151 Kildaire Farm Road, Suite 120
 Cary, NC 27511
 Contact: Joseph A. Angell II, PE, F.S.A.M.E.
 E-Mail: JAngell@ACP-PA.com
 Phone: (919) 858-7420
 Fax: (919) 234-6268

STATE CONSTRUCTION PROJECT NUMBER
18-19751.01A

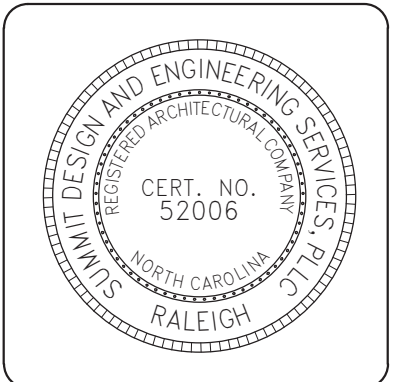


SHEET INDEX

COVER SHEET		A502	EXTERIOR DETAILS	P-001	PLUMBING GENERAL INFORMATION	M-503	MECHANICAL DETAILS
CS000	COVER SHEET	A503	EXTERIOR DETAILS	PP101	DOMESTIC WATER RESTROOMS PLAN	M-601	MECHANICAL SCHEDULES
GENERAL		A600	DOOR SCHEDULE & DETAILS	PP102	DOMESTIC WATER VENDING PLAN	M-602	MECHANICAL SCHEDULES
A001	WALL TYPE LEGEND	A610	STOREFRONT SCHEDULE & ELEVATIONS	PS101	PLUMBING SITE PLAN	ELECTRICAL	
G000	CODE SUMMARY	A611	STOREFRONT DETAILS	PW101	WASTE AND VENT RESTROOM PLAN	E-001	ELECTRICAL SYMBOLS
G100	LIFE SAFETY PLAN	A612	CURTAIN WALL SCH., ELEV. & DETAILS	PW102	DRAIN, WASTE, AND VENT VENDING PLAN	E-002	ELECTRICAL NOTES AND ABBREVIATIONS
G200	NOTES, ABBREVIATIONS, SYMBOLS	A810	VENDING PLAN, RCP, ROOF PLAN	PLUMBING		ELECTRICAL	
ARCHITECTURE		A820	VENDING EXTERIOR ELEVATIONS	P-401	ENLARGED FLOOR PLANS - PLUMBING	ES101	ELECTRICAL SITE PLAN
A100	ARCHITECTURAL OVERALL SITE PLAN	A830	VENDING BUILDING & WALL SECTIONS	P-402	ENLARGED FLOOR PLANS - PLUMBING	ELECTRICAL	
A110	RESTROOMS FLOOR PLAN	A900	PERSPECTIVES	P-403	PLUMBING SECTIONS	EP101	FIRST FLOOR POWER PLAN
A111	RESTROOMS REFLECTED CEILING PLAN	A901	PERSPECTIVES	P-501	PLUMBING DETAILS	ELECTRICAL	
A120	RESTROOMS CLERESTORY PLAN	A902	PERSPECTIVES	P-502	PLUMBING DETAILS	EL101	FIRST FLOOR LIGHTING PLAN
A130	RESTROOMS UPPER ROOF PLAN	A903	PERSPECTIVES	P-601	PLUMBING SCHEDULES	EM101	MECHANICAL POWER PLAN
A200	RESTROOMS EXTERIOR ELEVATIONS	INTERIOR DESIGN		P-901	SANITARY PIPE RISERS	ELECTRICAL	
A201	RESTROOMS EXTERIOR ELEVATIONS	ID100	FINISH PLAN, NOTES AND SCHEDULE	P-902	DOMESTIC WATER PIPE RISERS	E-501	ELECTRICAL DETAILS
A300	RESTROOMS BUILDING SECTIONS	STRUCTURAL		MECHANICAL		E-601	ONE-LINE DIAGRAM AND SCHEDULES
A301	RESTROOMS BUILDING SECTIONS	S0.0	GENERAL NOTES	M001	MECHANICAL GENERAL INFORMATION	E-602	PANEL SCHEDULES
A302	RESTROOMS BUILDING SECTIONS	S1.0	FOUNDATION PLAN - RESTROOM BUILDING	MH101	HVAC RESTROOM PLAN	MECHANICAL	
A310	RESTROOMS WALL SECTIONS	S1.1	MECH PLATFORM PLAN - RESTROOM BLDG	MH102	HVAC VENDING PLAN	M-401	ENLARGED MECHANICAL PLANS
A311	RESTROOMS WALL SECTIONS	S1.2	LOW ROOF FRAMING PLAN - RESTROOM BLDG	MP101	MECHANICAL PIPING RESTROOM PLAN	M-402	ENLARGED MECHANICAL PLANS
A400	ENLARGED PLANS, ELEV., & SCHEDULE	S1.3	HIGH ROOF FRAMING PLAN - RESTROOM BLDG	MP102	MECHANICAL PIPING VENDING PLAN	M-501	MECHANICAL DETAILS
A401	ENLARGED ELEVATIONS & DETAILS	S2.0	FDN & ROOF FRAMING PLANS - VENDING BLDG	MECHANICAL		M-502	MECHANICAL DETAILS
A402	ENLARGED ELEVATIONS & DETAILS	S3.0	FOUNDATION DETAILS	M-401	ENLARGED MECHANICAL PLANS		
A403	ENLARGED ELEVATIONS & DETAILS	S4.0	GLULAM FRAMING DETAILS & CONNECTORS	M-402	ENLARGED MECHANICAL PLANS		
A500	EXTERIOR PLAN DETAILS	S4.1	FRAMING DETAILS	M-501	MECHANICAL DETAILS		
A501	EXTERIOR DETAILS	PLUMBING		M-502	MECHANICAL DETAILS		



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
 THIS DRAWING AND THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

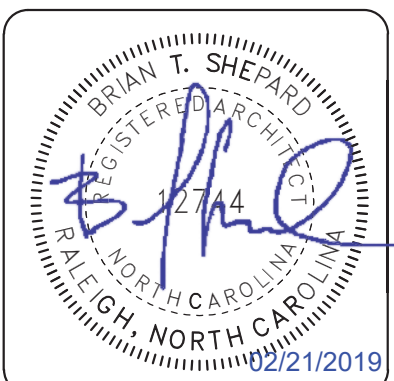
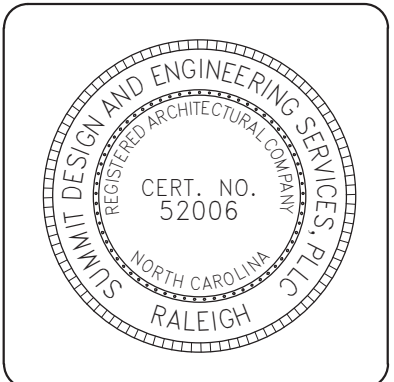


ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC
FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	ISSUED TO	BY	DATE
A	ISSUED TO SCO	SC	MSC	11/16/18
B	ISSUED TO NCDOT	MC	MSC	01/22/19
C	ISSUED FOR CONST.	MC	MSC	02/21/19

NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
COVER SHEET

PROJECT NO.
18-0129.021
 SHEET NO.
CS000



ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 PROJECT MANAGER
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 DRAWN BY MSC
 FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
LIFE SAFETY PLAN

PROJECT NO.
18-0129.021
 SHEET NO.
G100

BUILDING INFORMATION			
*PER TABLE 503 OF THE 2012 NCSBC			
CONSTRUCTION TYPE:		TYPE V-B	
USE GROUP:		BUSINESS (B)	
STORIES HEIGHT (ft)	AREA (sf)		
ALLOWED	PROVIDED	ALLOWED	PROVIDED
2	1	18,000 sf	5,224 sf

OCCUPANCY TYPE			
*PER TABLE 1004.1.1 OF THE 2012 NCSBC			
Type	Area	Factor	Count
ACC	1069 SF	300	5
S-1	478 SF	300	3
B	2989 SF	100	31
FIRST FLOOR	4536 SF		39
TOTAL	4536 SF		39

COMMON PATH OF TRAVEL	
REQUIRED	PROVIDED
75'-0"	56'-6"

EXIT TRAVEL DISTANCE	
*PER TABLE 1016.1 OF THE 2012 NCSBC	
REQUIRED	PROVIDED
200'-0"	80'-10"

REMOVEDNESS OF EXIT SEPARATION	
*PER 1015.21 OF THE 2012 NCSBC	
REQUIRED	PROVIDED
(1/2) * (99'-5") = 49'-8 1/2"	65'-0"

NUMBER OF EXITS	
*PER TABLE 1021.1 OF THE 2012 NCSBC	
REQUIRED	PROVIDED
2	2

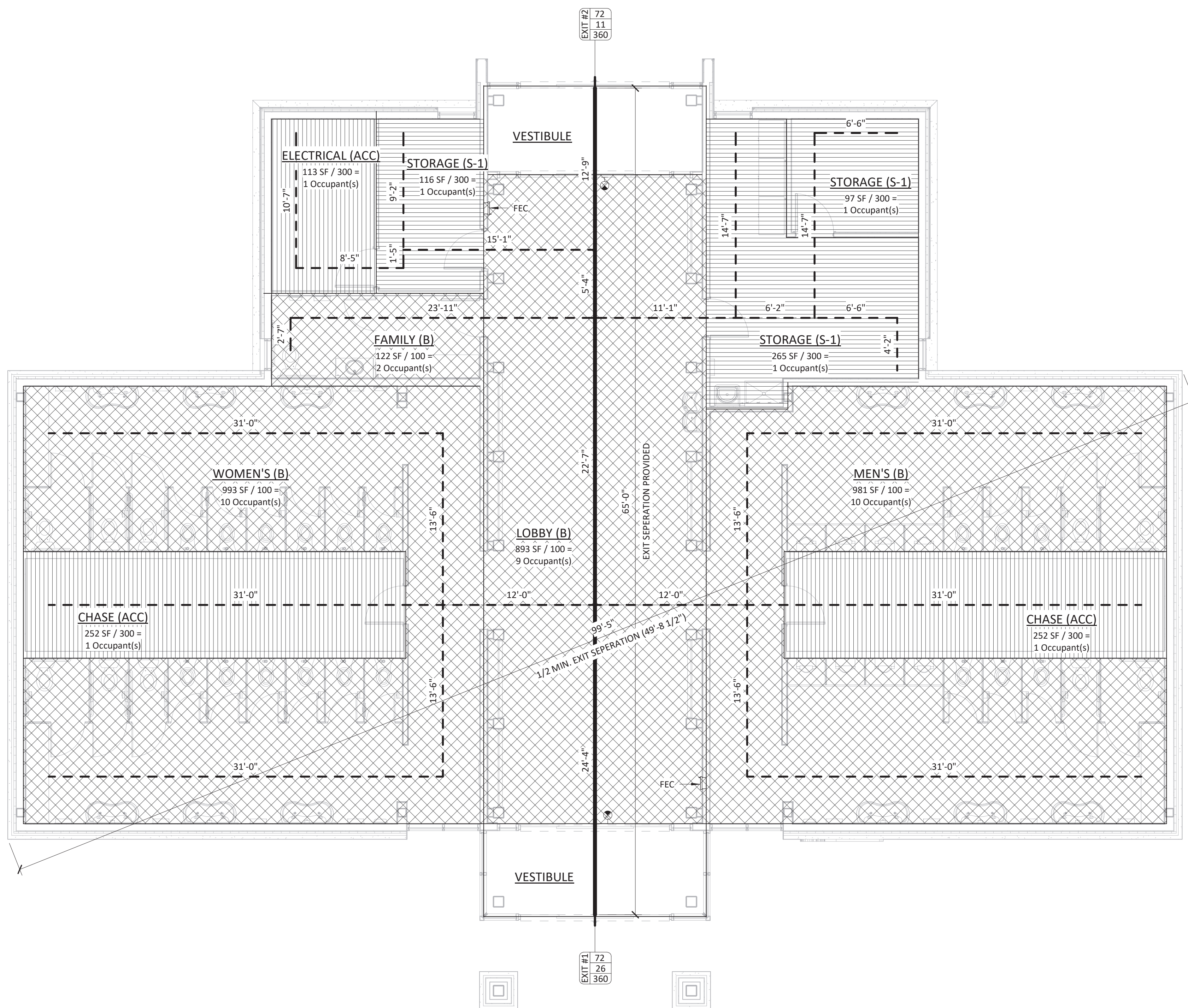
CLEAR EXIT WIDTH	
*PER 1005.1 OF THE 2012 NCSBC	
REQUIRED	PROVIDED
39 x (0.2) = 7.8"	EXIT #1 = 72" EXIT #2 = 72"

MAX. CALCULATED OCCUPANT LOAD CAPACITY PER EGRESS	
EXIT #1: CLEAR WIDTH = 72" / 0.2" = 360 OCCUPANTS	
EXIT #2: CLEAR WIDTH = 72" / 0.2" = 360 OCCUPANTS	

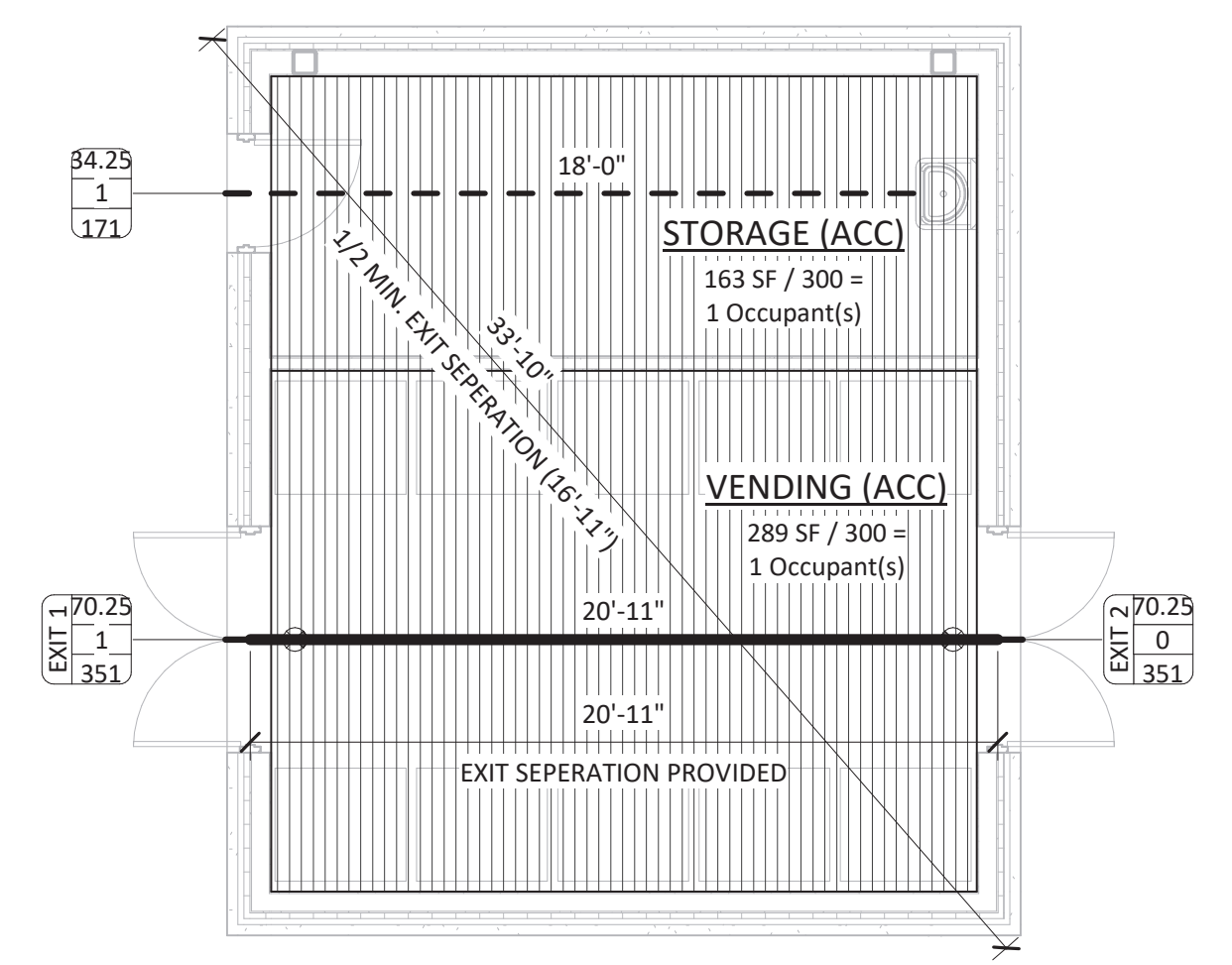
LIFE SAFETY SYMBOL LEGEND	
	COMMON PATH OF TRAVEL
	OCCUPANT TRAVEL PATH
	EGRESS WIDTH IN INCHES
	OCCUPANT LOAD
	MAXIMUM OCCUPANT CAPACITY
	CEILING MOUNTED DIRECTIONAL LED EXIT SIGN
	WALL MOUNTED DIRECTIONAL LED EXIT SIGN
	WALL MOUNTED FIRE EXTINGUISHER
	ADA COMPLIANT SEMI-RECESSED FIRE EXTINGUISHER CABINET
	BUSINESS OCCUPANCY
	ACCESSORY OCCUPANCY
	STORAGE OCCUPANCY

LIFE SAFETY NOTES

- INSTALL FIRE EXTINGUISHERS IN LOCATIONS INDICATED AND IN COMPLIANCE WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.



1 RESTROOMS LIFE SAFETY PLAN
 3/16" = 1'-0"



2 VENDING LIFE SAFETY PLAN
 3/16" = 1'-0"

GENERAL NOTES

- THE ARCHITECTURAL DRAWINGS SHOULD BE USED IN CONJUNCTION WITH THE CIVIL, STRUCTURAL, MEP, FIRE PROTECTION DRAWINGS AND SPECIFICATIONS. DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- THE AVAILABLE SPACE FOR ROUTING ALL ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, AND DUCTWORK MAY BE LIMITED IN MANY LOCATIONS. THE GENERAL CONTRACTOR SHALL COORDINATE ALL OF THE TRADES WORK AND MAKE ADJUSTMENTS WITH THE ARCHITECT'S APPROVAL TO THE ROUTING OF THESE ITEMS AS REQUIRED. ANY REWORK RESULTING FROM THE FAILURE TO COORDINATE WILL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE GENERAL CONTRACTOR SHALL FULLY ACQUAINT THEMSELVES WITH THE CONDITIONS OF THE CONTRACT, LOCAL CONDITIONS RELATING TO THE JOB SITE, ACCESSIBILITY AND GENERAL CHARACTER OF THE CONSTRUCTION SITE AND LOCAL LABOR CONDITIONS SO THAT THEY UNDERSTAND THE NATURE, EXTENT, DIFFICULTIES AND RESTRICTIONS RELATED TO THE EXECUTION OF THE WORK.
- NOTHING IN THE DRAWINGS AND/OR THE SPECIFICATIONS/PROJECT MANUAL SHALL BE CONSTRUED TO PERMIT AN INSTALLATION IN VIOLATION OF APPLICABLE CODES, MANUFACTURER RECOMMENDATIONS, AND/OR REQUIREMENTS. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND OWNER IMMEDIATELY AND CEASE WORK ON ALL PARTS OF THE CONTRACT THAT ARE AFFECTED. THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL BE IN FULL ACCORDANCE WITH THE MOST CURRENT ADOPTED, AND AS APPLICABLE, AMENDED, RULES, REGULATIONS, RESTRICTIONS, REQUIREMENTS AND CODES.
- THE CONTRACTOR/SUB-CONTRACTOR EXPRESSLY WARRANTS THAT ALL WORK SHALL BE EXECUTED IN A SOUND AND WORKMANLIKE MANNER IN CONFORMANCE WITH THE HIGHEST STANDARDS WITHIN THE INDUSTRY AND WARRANTS THAT ALL MATERIALS USED TO COMPLETE THE WORK/PROJECT ARE MERCHANTABLE, FREE FROM ANY PATENT OR LATENT DEFECT, FIT FOR THEIR INTENDED USE, AND EQUAL IN QUALITY TO THE BEST OF THEIR KIND.
- THE DRAWINGS ARE ONLY INTENDED TO PARTIALLY DESCRIBE THE OVERALL SCOPE OF WORK. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND ALERT THE ARCHITECT AND OWNER IN ADVANCE, TO ANY UNFORESEEN CONDITIONS AND/OR CONSTRUCTION DIFFICULTIES PRIOR TO COMMENCING WORK OR WORKING ON THE AFFECTED PORTION OF THE WORK.
- WHERE WORK IS REQUIRED FOR A COMPLETE PROJECT, BUT NOT SPECIFICALLY DRAWN OR INDICATED, THE CONTRACTOR SHALL PROVIDE THE NECESSARY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UTILITIES. ANY EXISTING UTILITIES INDICATED HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE INDICATED FOR CONVENIENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL UTILITY LOCATIONS NOT INDICATED. CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGE OR DISTURBANCE TO EXISTING UTILITIES.
- ITEMS NOTED AS TYPICAL MAY NOT BE NOTED AT EVERY OCCURRENCE. DIMENSIONS, NOTES, FINISHES, AND FIXTURES SHOWN ON TYPICAL PLANS, SECTIONS, OR DETAILS SHALL APPLY TO SIMILAR, SYMMETRICAL OR OPPOSITE PLANS, SECTIONS OR DETAILS.
- ALL PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE FIRE BLOCKED AND SEALED PER UL APPROVED METHODS.
- ALL CONCEALED FIRE RATED ASSEMBLIES SHALL BE PROVIDED WITH SIGNAGE INDICATING THE TYPE OF ASSEMBLY AND THE FIRE RATING IN HOURS IN LETTERS NO SMALLER THAN 2" HIGH. SEE NCSBC SECTION 701.2.
- THE GENERAL CONTRACTOR TO PROVIDE KNOX BOX AS REQUIRED BY LOCAL FIRE MARSHAL. GC TO REVIEW LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
- IN CASE OF ANY CONFLICT WHEREIN THE METHODS OR STANDARDS OF INSTALLATION OR THE MATERIALS SPECIFIED DO NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE LAWS OR ORDINANCES, THE LAWS OR ORDINANCES SHALL GOVERN. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND OWNER OF ALL CONFLICTS ONCE KNOWN.
- THE ARCHITECT ASSUMES NO RESPONSIBILITY AS TO THE PHYSICAL CHARACTERISTICS OF THE SOIL(S) OR THE ACCURACY OF ENGINEERING DATA SUPPLIED BY OTHERS.
- THE G.C. SHALL VERIFY DIMENSIONS, LEVELS, EASEMENTS, BOUNDARIES AND CONSTRUCTION INDICATED ON CONTRACT DRAWINGS BEFORE PROCEEDING WITH THE WORK. ALSO, THE G.C. SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS BETWEEN THE CONSTRUCTION DOCUMENTS AND FIELD CONDITIONS, BEFORE COMMENCING WITH ANY WORK AND REQUEST CLARIFICATION AS REQUIRED.
- DIMENSIONS NOTED AS "CLR." ARE TO BE CLEAR FROM FACE OF FINISH MATERIAL TO FACE OF FINISH MATERIAL OR CENTERLINE OF FIXTURE AND ARE NOT ADJUSTABLE WITHOUT WRITTEN APPROVAL OF ARCHITECT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS FOR THE EQUIPMENT FURNISHED AND INSTALLED BY CONTRACTOR OR OTHERS.
- PROVIDE RIGID BAFFLES (RESISTANT TO WIND DRIVEN MOISTURE). ALL EAVE VENTS TO DEFLECT INCOMING AIR ABOVE INSULATION SURFACE. INSTALL BAFFLES FROM TOP OF OUTSIDE OF EXTERIOR WALL TO MINIMUM 6" VERTICAL ABOVE TOP OF INSULATION. FOR LOOSE FILL INSULATION, INSTALL PERMANENT RETAINER TO MAINTAIN REQUIRED CLEARANCES.
- INSTALL AND SEAL ALL BATHROOM ACCESSORIES (I.E. GRAB BARS, TOWEL BARS, ETC.) ON OR WITHIN WALLS TO PROTECT ELEMENTS FROM MOISTURE. WALLS AT SHOWERS AND BATHTUBS SHALL BE WATERTIGHT TO A MINIMUM OF 7'-0" HIGH ABOVE DRAIN INLET.
- PROVIDE APPROPRIATE SEALANT AROUND WINDOWS, DOOR JAMBS & HEADS, AND ADJACENT CONSTRUCTION.
- WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE PRESERVATIVE TREATED; USE OF CCA PRESERVATIVE IS PROHIBITED. USE APPROPRIATE FASTENERS PER PRESERVATIVE.
- ALL MATERIALS AND/OR EQUIPMENT SHALL BE INSTALLED/USED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND/OR RECOMMENDATIONS & SHALL COMPLY W/ ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS.
- FIRE DEPARTMENT REQUIRED WATER MAINS, FIRE HYDRANTS AND TEMPORARY FIRE DEPARTMENT ACCESS TO BE INSTALLED, INSPECTED, AND APPROVED BY THE FIRE DEPARTMENT PRIOR TO COMMENCEMENT OF COMBUSTIBLE CONSTRUCTION.
- THESE DRAWINGS DO NOT CONTAIN THE REQUIREMENTS FOR JOB SAFETY. ALL PROVISIONS FOR SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE G.C. SHALL MAINTAIN A CURRENT AND COMPLETE SET OF APPROVED CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE BY ALL TRADES.
- THE G.C. SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND FOR ITEMS LISTED IN THE PROJECT MANUAL (UNDER SEPARATE COVER).
- ALL FINISHED FLOOR ELEVATIONS SHALL BE A MINIMUM OF 8" ABOVE THE FINISHED GRADE OR AS INDICATED ON THE DRAWINGS. GRADE SHALL BE SLOPED AWAY FROM BUILDING FOR POSITIVE DRAINAGE.
- PROVIDE TEMPERED GLASS AS REQUIRED BY CODE ADJACENT TO DOORS AND EXITWAYS.
- RIGID INSULATION SHALL BE PER IBC SECTION 2603
- ROWLOCKS ARE TO PROJECT MIN. 1/2" FROM THE FACE OF RUNNING BOND BELOW. UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- ALL HVAC, PLUMBING AND ELEC. PENETRATIONS THROUGHOUT THE EXTERIOR WALLS AND AT THE TOP AND BOTTOM PLATES SHALL BE PROPERLY SEALED.
- ALL CAULKING/SEALANT COLORS TO MATCH ADJACENT SURFACES.
- THE G.C. SHALL ASSURE THAT ANY AND ALL MATERIAL COMPATIBILITY IS ACHIEVED WITH NO NEGATIVE EFFECT ON MATERIALS; I.E. CONTACT OF DISSIMILAR MATERIALS WILL HAVE NO NEGATIVE IMPACT/EFFECT ON EITHER MATERIAL OR SURROUNDING CONSTRUCTION. G.C. SHALL INFORM ARCHITECT OF ANY AND ALL CONCERNS PRIOR TO FABRICATION/INSTALLATION.
- EXPOSED STEEL LINTELS AND 'BREAK' METAL TO BE PAINTED TO MATCH ADJACENT SURFACE UNLESS NOTES OTHERWISE.
- PROVIDE SOLID BLOCKING WITHIN WALL CAVITY SEGMENTS BEHIND ALL EXTERIOR LIGHTS, SIGNAGE, BRACKETS, ETC.
- VERIFY ALL FINISH FLOOR ELEVATIONS WITH CIVIL DRAWINGS.
- COORDINATE DOWNSPOUT/ROOF DRAIN LEADER TIE-INS WITH THE CIVIL DRAWINGS; FOR THOSE WITHOUT TIES, PROVIDE SPLASH BLOCKS.
- ANY AND ALL MECHANICAL EQUIPMENT, APPLIANCES, AND SUPPORTS THAT ARE EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO RESIST THE WIND LOADING/PRESSURES DETERMINED IN ACCORDANCE WITH IBC.

ABBREVIATIONS

KEY	DESCRIPTION
#	POUND OR NUMBER
&	AND
@	AT
ABV	ABOVE
ACT	ACOUSTIC CEILING TILE
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
B/O	BY OTHERS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLW	BELOW
BOT	BOTTOM
BTW	BETWEEN
BYND	BEYOND
CHNL	CHANNEL
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMPR	COMPRESSIBLE
CONC	CONCRETE
CONT	CONTINUOUS
COORD	COORDINATE
CPT	CARPET
CT	CERAMIC TILE
DBL	DOUBLE
DEMO	DEMOLISH OR DEMOLITION
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
ELEV	ELEVATION OR ELEVATOR
EPDM	ETHYLENE PROPYLENE DIENE M-CLASS (ROOFING)
EQ	EQUAL
EXIST	EXISTING
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FIXT	FIXTURE
FLR	FLOOR
FND	FOUNDATION
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOW	FACE OF WALL
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GWB	GYPSUM WALL BOARD
HC	HOLLOW CORE
HM	HOLLOW METAL
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
INSUL	INSULATION
INT	INTERIOR
IRGWB	IMPACT RESISTANT GYPSUM WALL BOARD
LH	LEFT HAND
LWC	LIGHT WEIGHT CONCRETE
MAX	MAXIMUM
MECH	MECHANICAL

KEY	DESCRIPTION
MEMBR	MEMBRANE
MFR	MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MO	MASONRY OPENING
MRGWB	MOISTURE RESISTANT GYPSUM WALL BOARD
MTL	METAL
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OPNG	OPENING
PCC	PRE-CAST CONCRETE
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLUMB	PLUMBING
PLYD	PLYWOOD
PNT	PAINT OR PAINTED
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RAD	RADIUS
RBR	RUBBER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REQ'D	REQUIRED
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
SCH	SCHEDULE
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
SPK	SPEAKER
SQ	SQUARE
SSTL	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STL	STEEL
STRUCT	STRUCTURE OR STRUCTURAL
T&G	TONGUE AND GROOVE
T/D	TELEPHONE/DATA
T/O	TOP OF
TELE	TELEPHONE
THK	THICK
TLT	TOILET
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TPD	TOILET PAPER DISPENSER
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
VB	VAPOR BARRIER
VIF	VERIFY IN FIELD
VR	VAPOR RETARDER
W/	WITH
W/O	WITHOUT
WD	WOOD

MATERIAL SYMBOLS

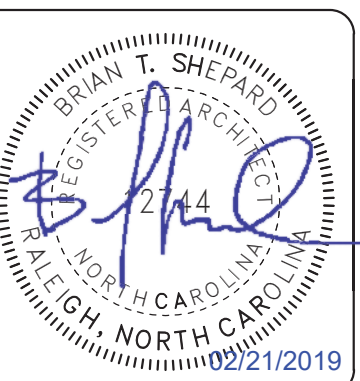
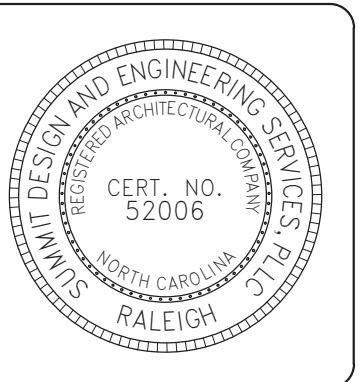
	ACOUSTICAL BATT INSULATION
	ALUMINUM
	BLOCKING/WOOD STUD (CONTINUOUS)
	BLOCKING (NON-CONTINUOUS)
	CONCRETE
	CONCRETE BLOCK
	EARTH, COMPACTED FILL
	FACE BRICK
	GYPSUM WALLBOARD
	PLYWOOD
	RIGID INSULATION
	SAND/MORTAR
	SPRAY FOAM INSULATION
	STEEL
	STONE/GRAVEL
	WOOD

DRAWING SYMBOLS

	DOOR WITH TAG
	ELEVATION TAG
	BUILDING SECTION
	WALL SECTION
	DETAIL SECTION/CALLOUT
	ROOM TAG, NAME & NUMBER
	WALL TAG
	STOREFRONT/WINDOW TAG
	CENTERLINE
	GRID LINE
	MATERIAL TAG
	REVISION TAG
	SPOT ELEVATION
	DEMOLISHED ITEM TO BE REMOVED
	DASHED LINE
	NEW WALL
	EXISTING ITEM TO REMAIN
	SLOPE ARROW
	SLOPE TRIANGLE
	EQUIPMENT TAG

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
License # P-0339
1110 Navaho Drive, Suite 400
Raleigh, NC 27609
Phone: (919) 322-0115 Fax: (919) 322-0116
www.summitde.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY: MISC FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY	MC
A	ISSUED TO SCO	11/16/18	MC	
B	ISSUED TO NCDOT	01/22/19	MC	
C	ISSUED FOR CONST.	02/21/19	MC	

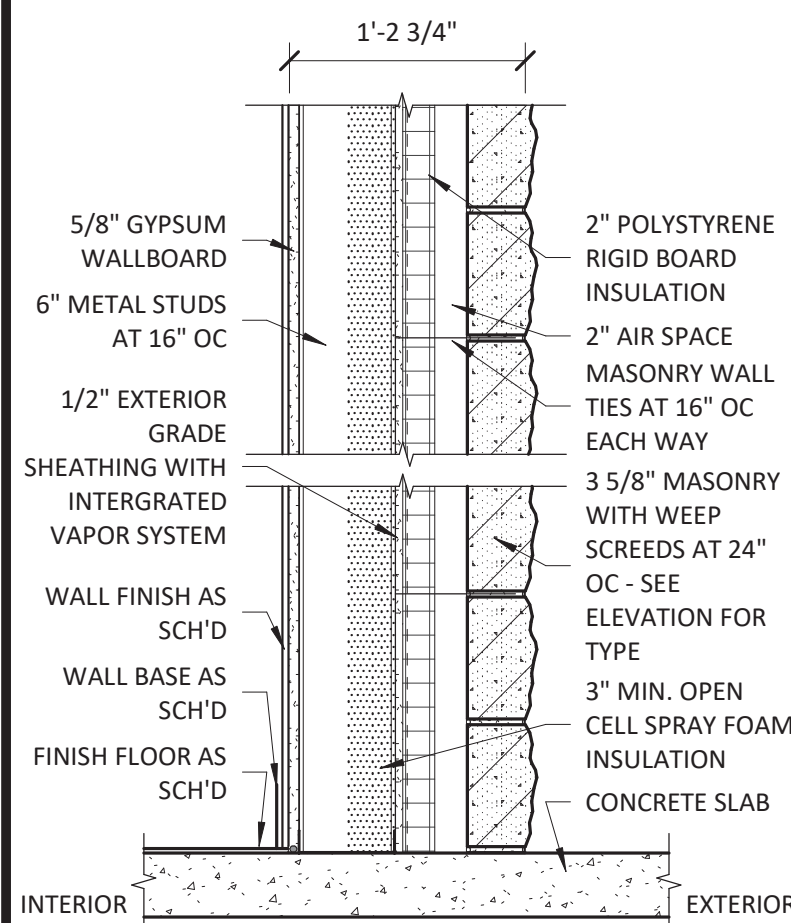
NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
NOTES, ABBREVIATIONS, SYMBOLS

PROJECT NO.
18-0129.021
SHEET NO.
G200

WALL TYPE LEGEND

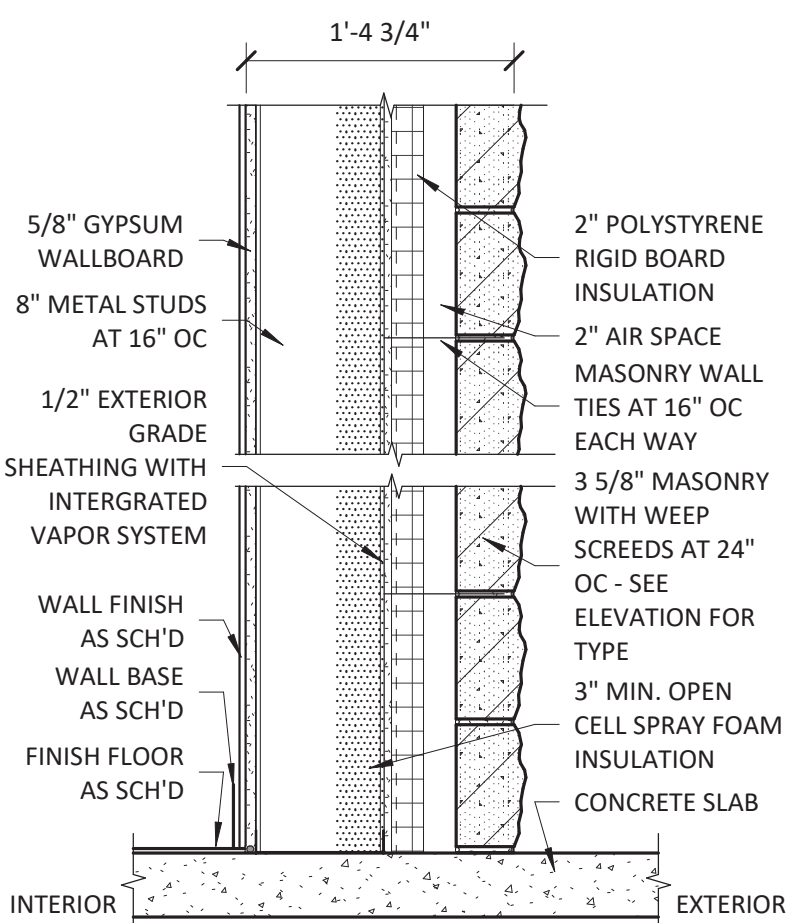
GENERAL NOTES: 1. ALL INTERIOR DIMENSIONS ARE TO FACE OF STUD FRAMING UNLESS NOTED OTHERWISE.
2. SEE ELEVATIONS FOR MASONRY TYPE.
3. WALLS EXTEND TO UNDERSIDE OF DECKING UNLESS NOTED OTHERWISE. REFER TO ELEVATIONS AND SECTIONS FOR REQUIRED HEIGHTS.

WALL TYPE: SM01



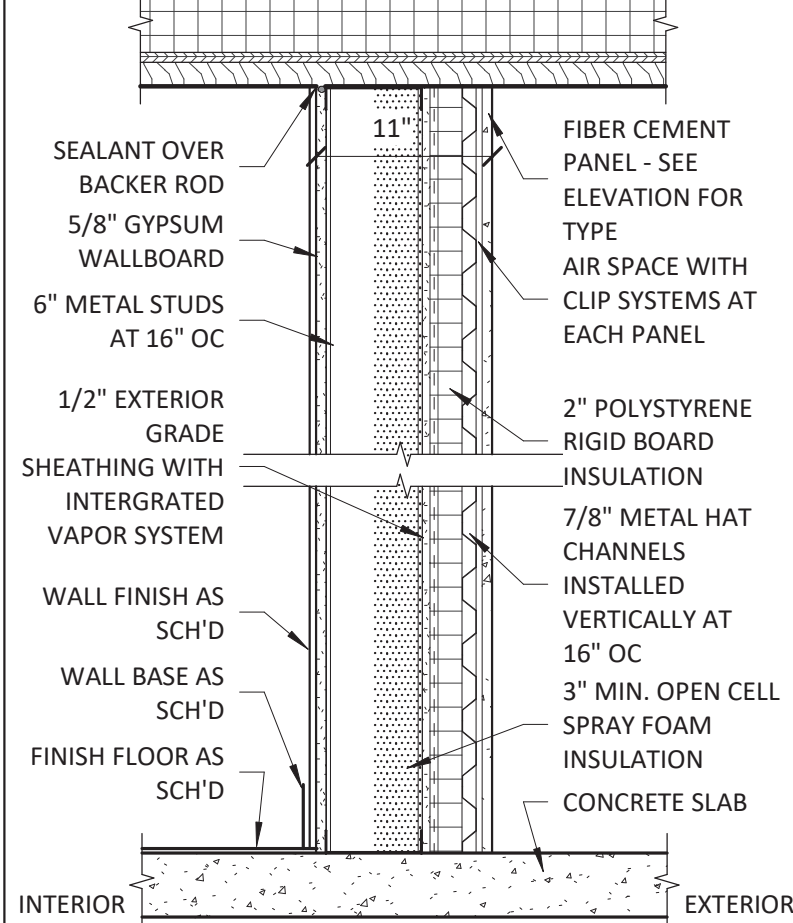
SCALE: 1" = 1'-0"
NOTES: REFER TO ELEVATION FOR HEIGHT
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM02



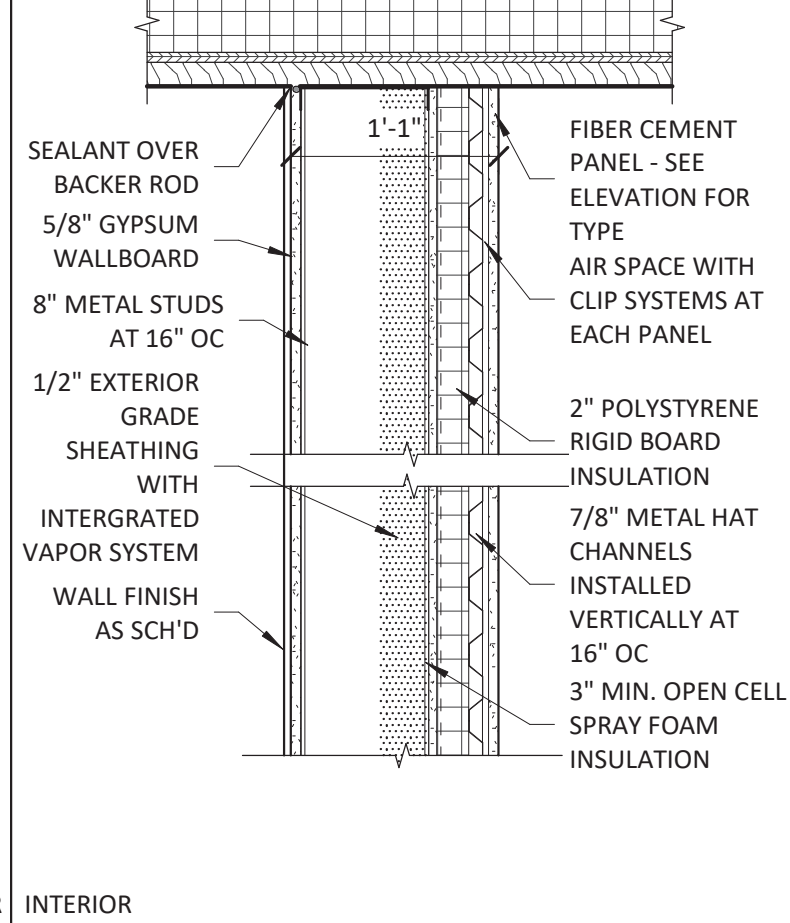
SCALE: 1" = 1'-0"
NOTES: REFER TO ELEVATION FOR HEIGHT
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM03



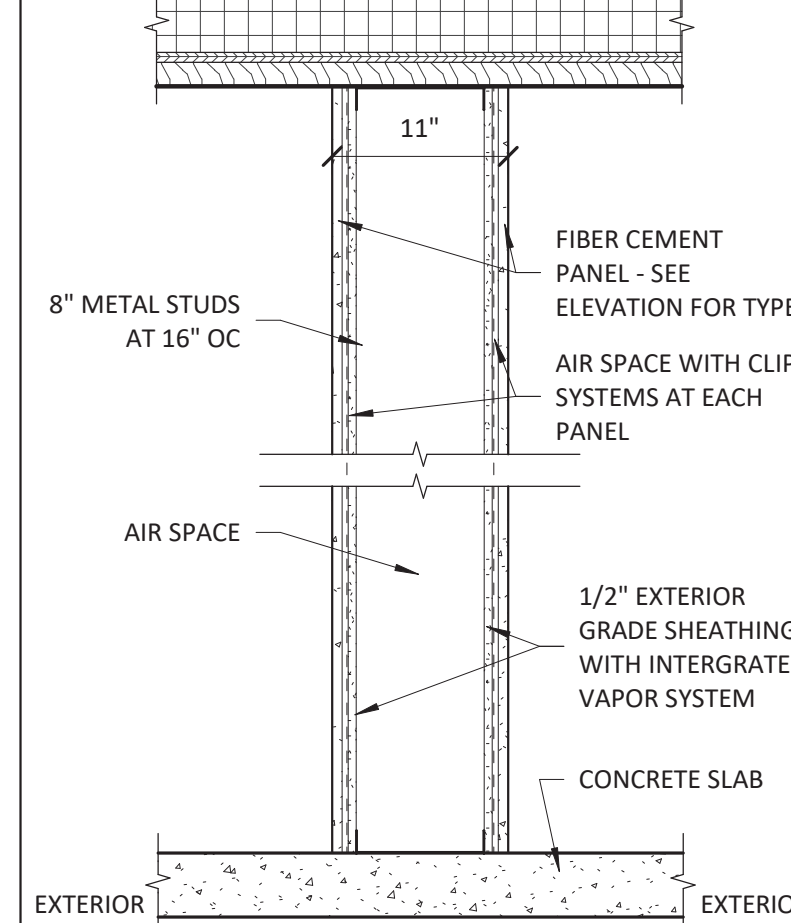
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM04



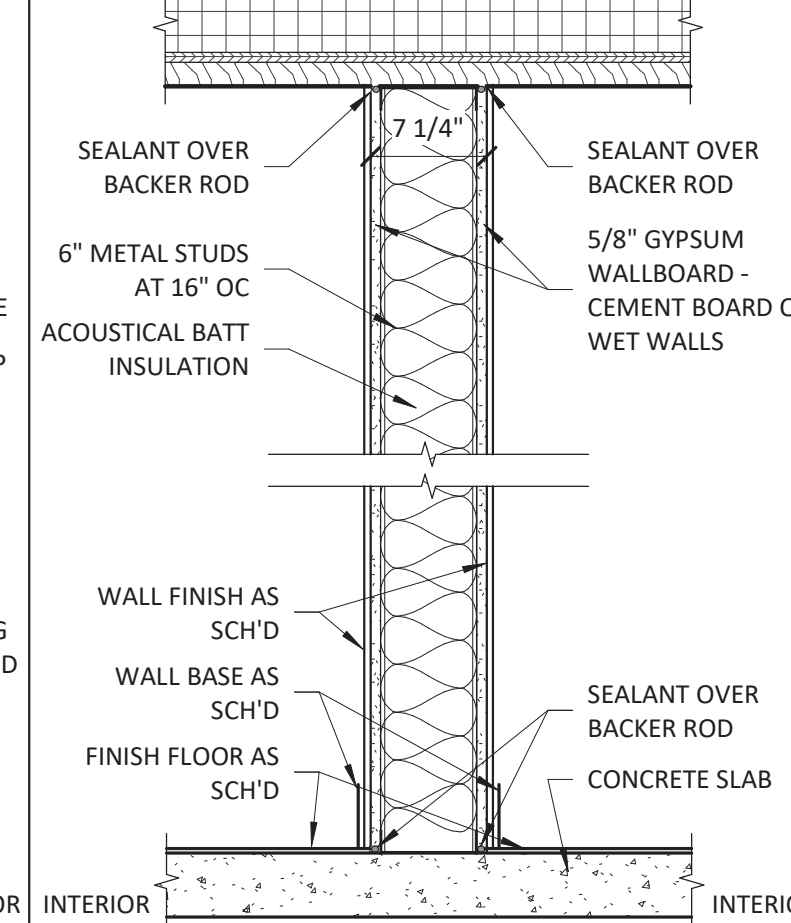
SCALE: 1" = 1'-0"
NOTES: REFER TO ELEVATION FOR HEIGHT
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM05



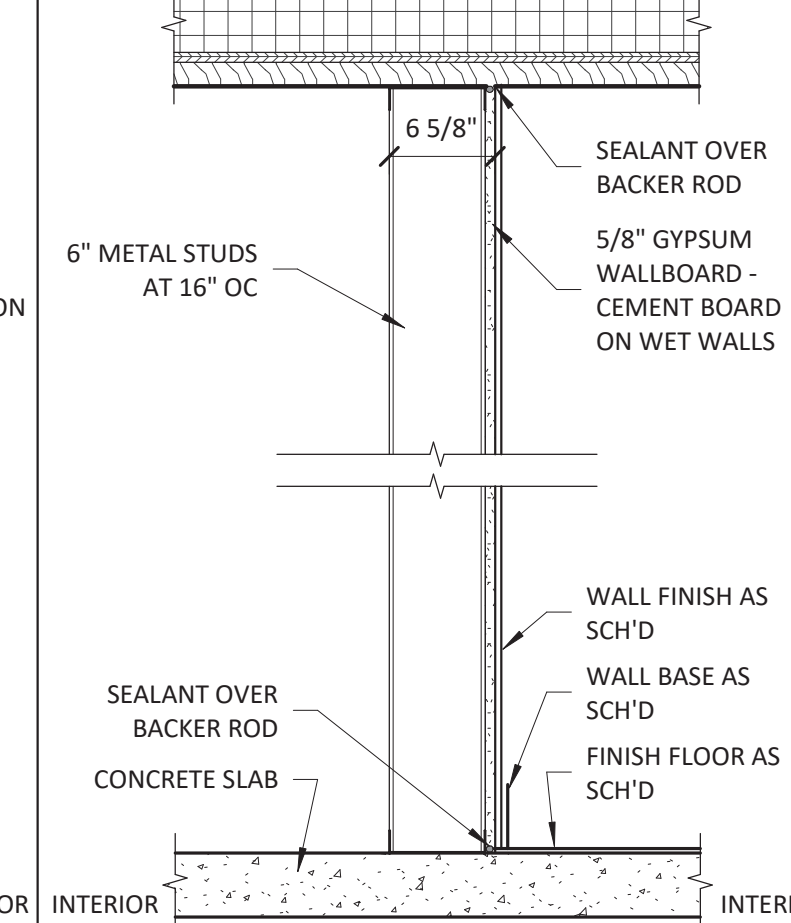
SCALE: 1" = 1'-0"
NOTES: EXTEND TO UNDERSIDE OF DECKING AS REQ'D
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM06 & SM06A



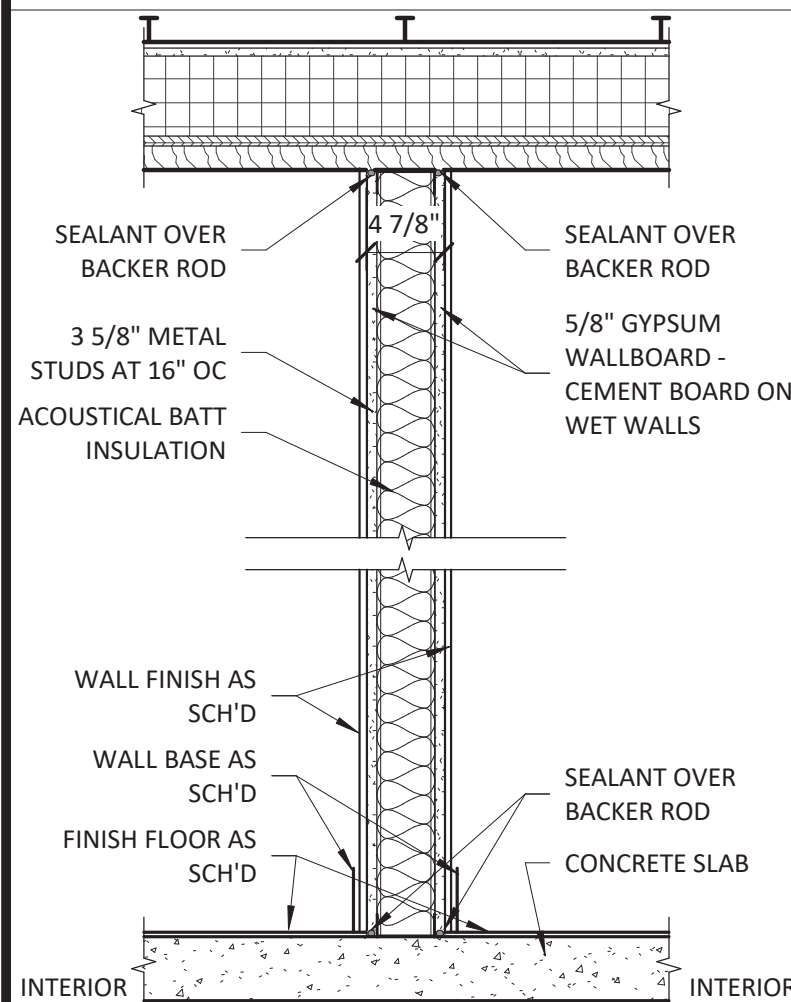
SCALE: 1" = 1'-0"
NOTES: ACOUSTICAL BATT INSULATION PRESENT IN WALL TYPE SM06A
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM07



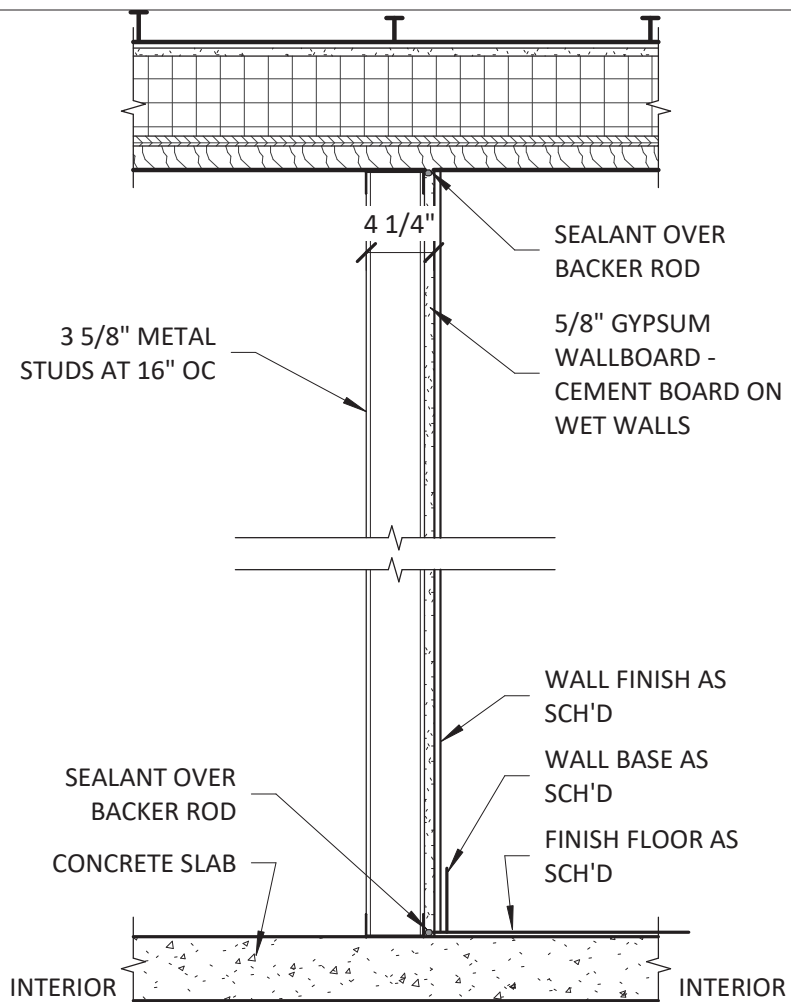
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM08 & SM08A



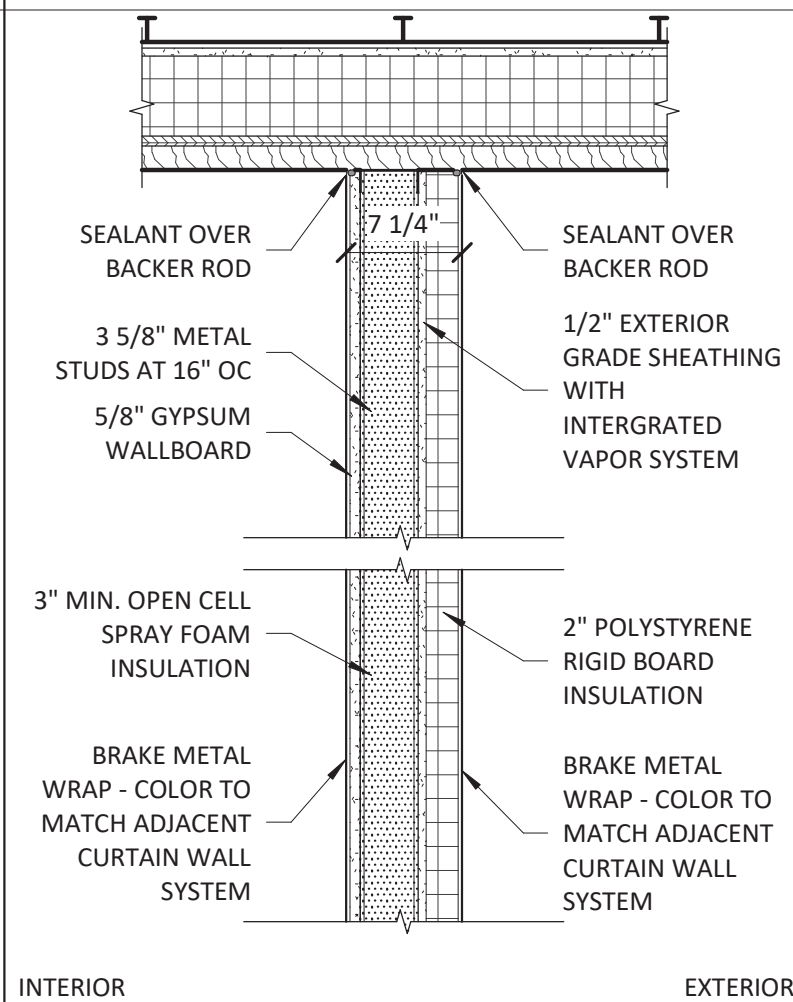
SCALE: 1" = 1'-0"
NOTES: ACOUSTICAL BATT INSULATION PRESENT IN WALL TYPE SM08A
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM09



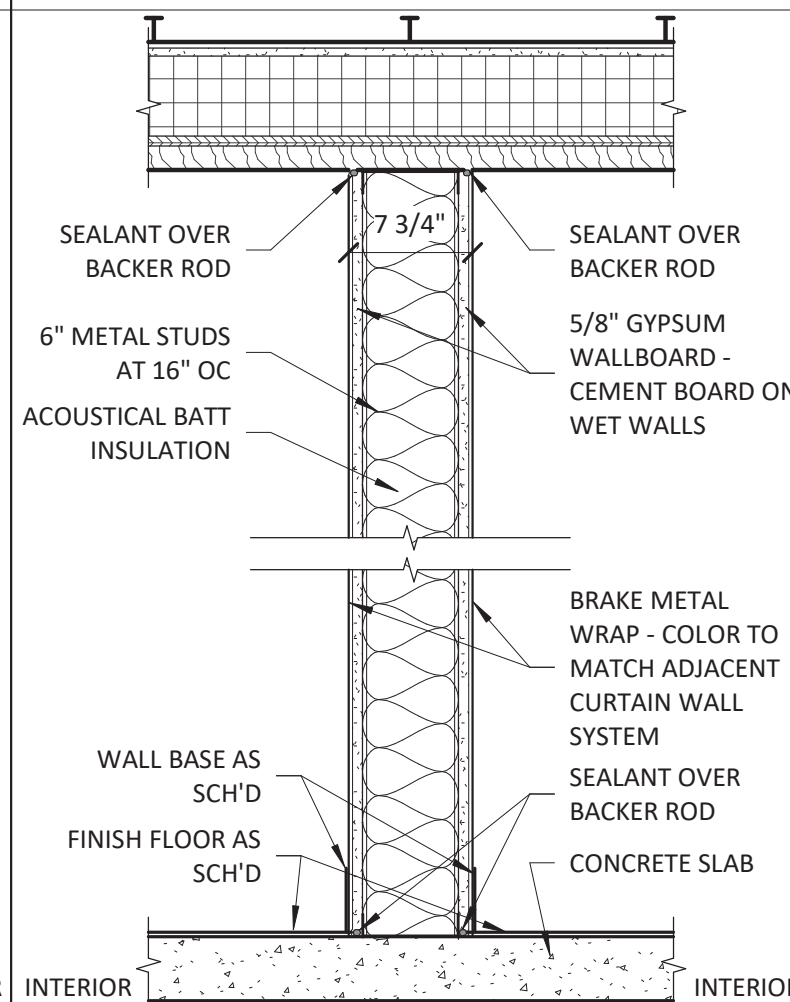
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM10



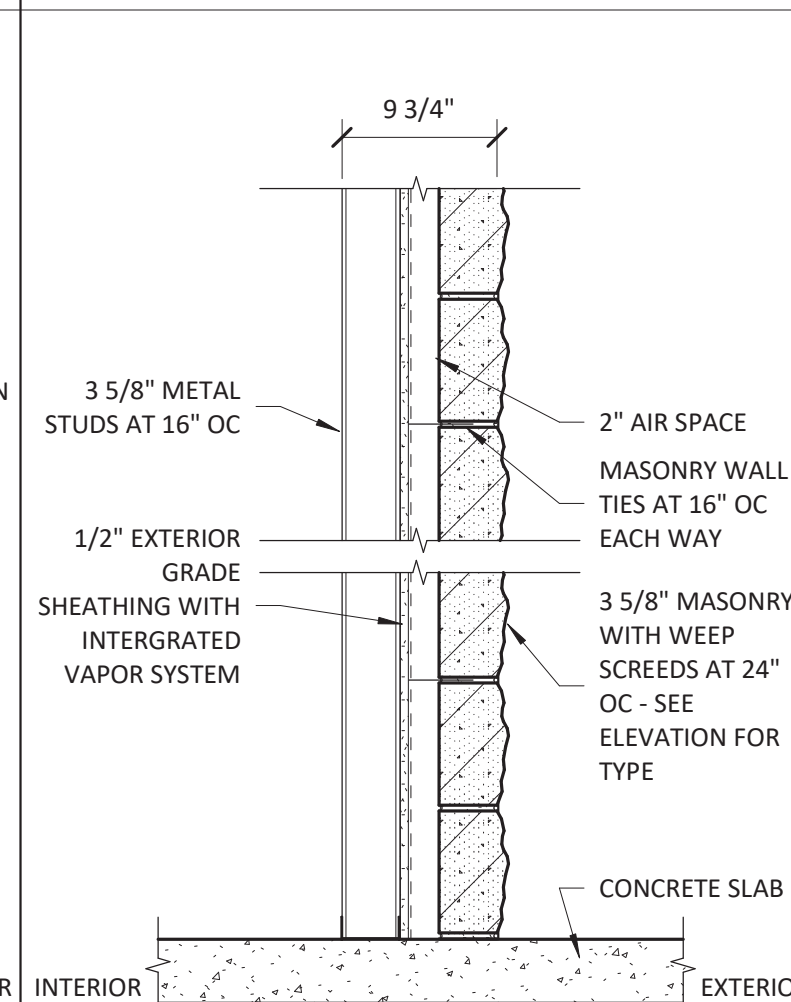
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM11



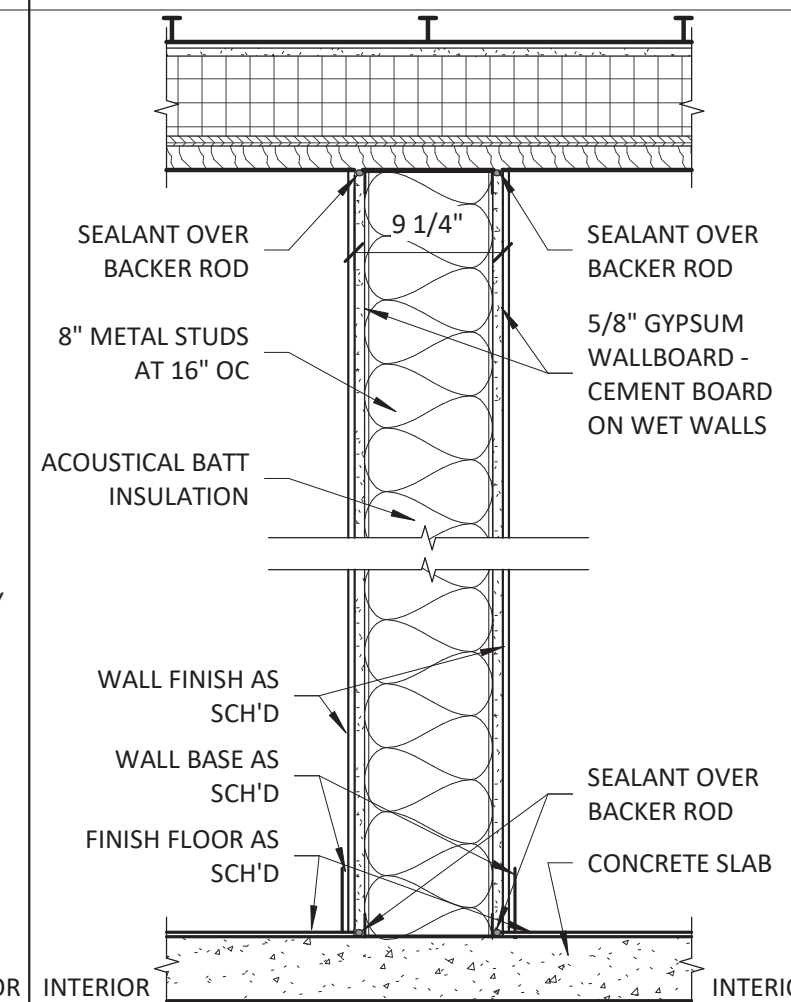
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM12



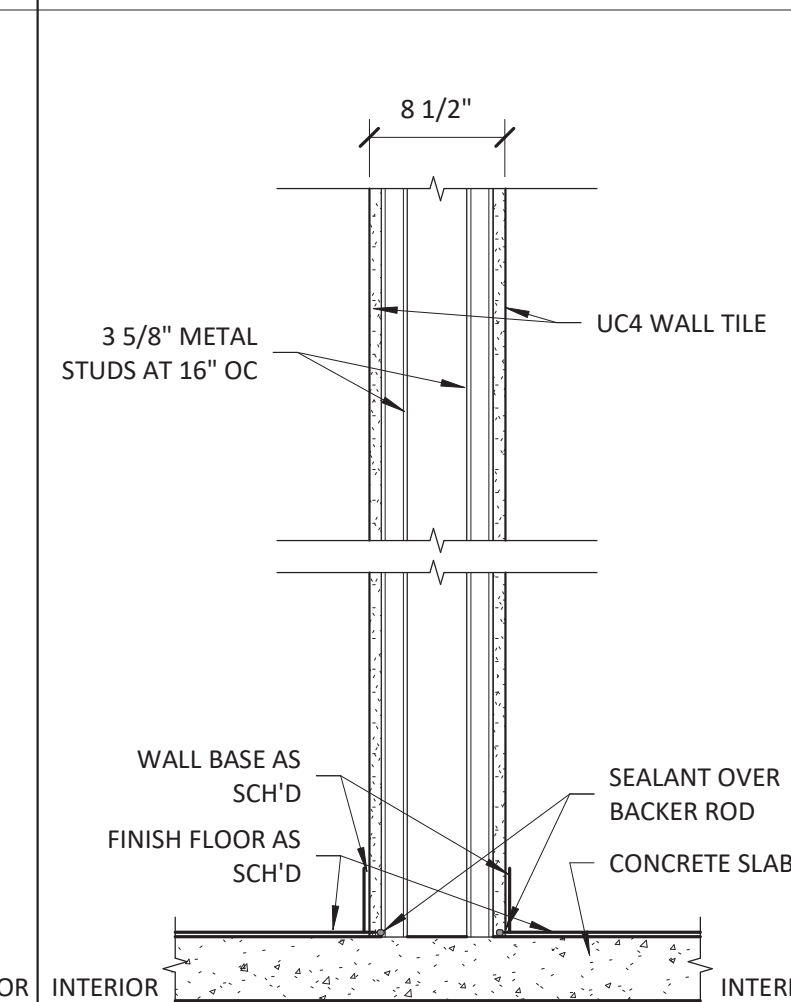
SCALE: 1" = 1'-0"
NOTES: REFER TO ELEVATIONS FOR HEIGHT
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM13 & SM13A



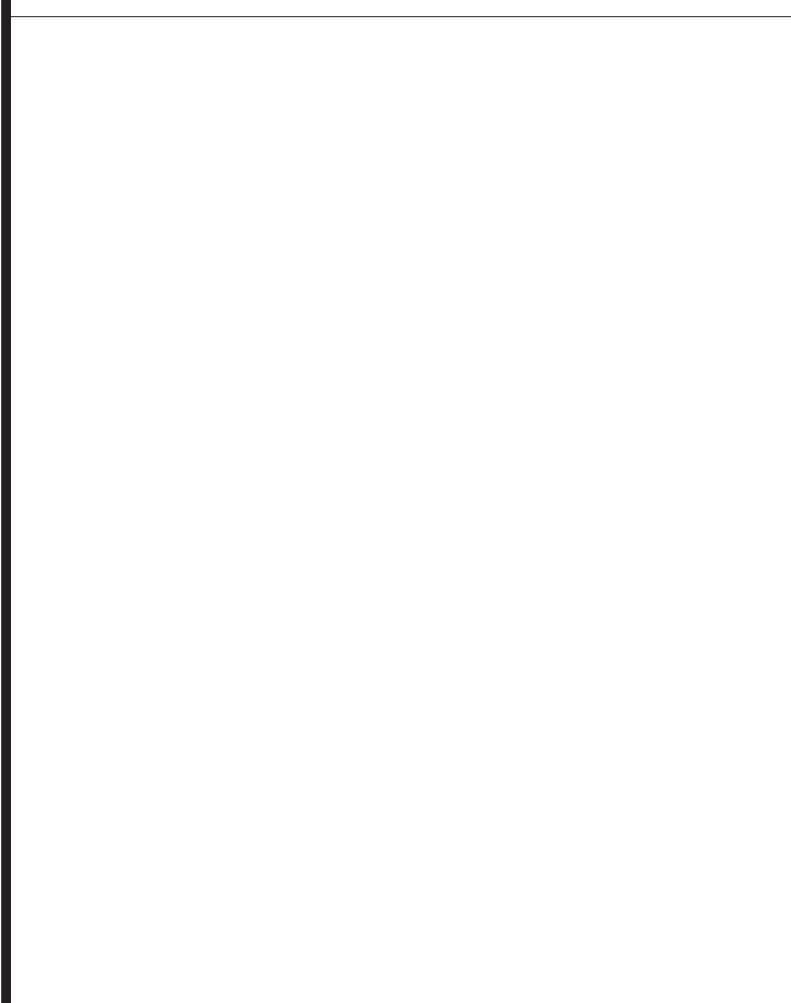
SCALE: 1" = 1'-0"
NOTES: ACOUSTICAL BATT INSULATION PRESENT IN WALL TYPE SM13A
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: SM14



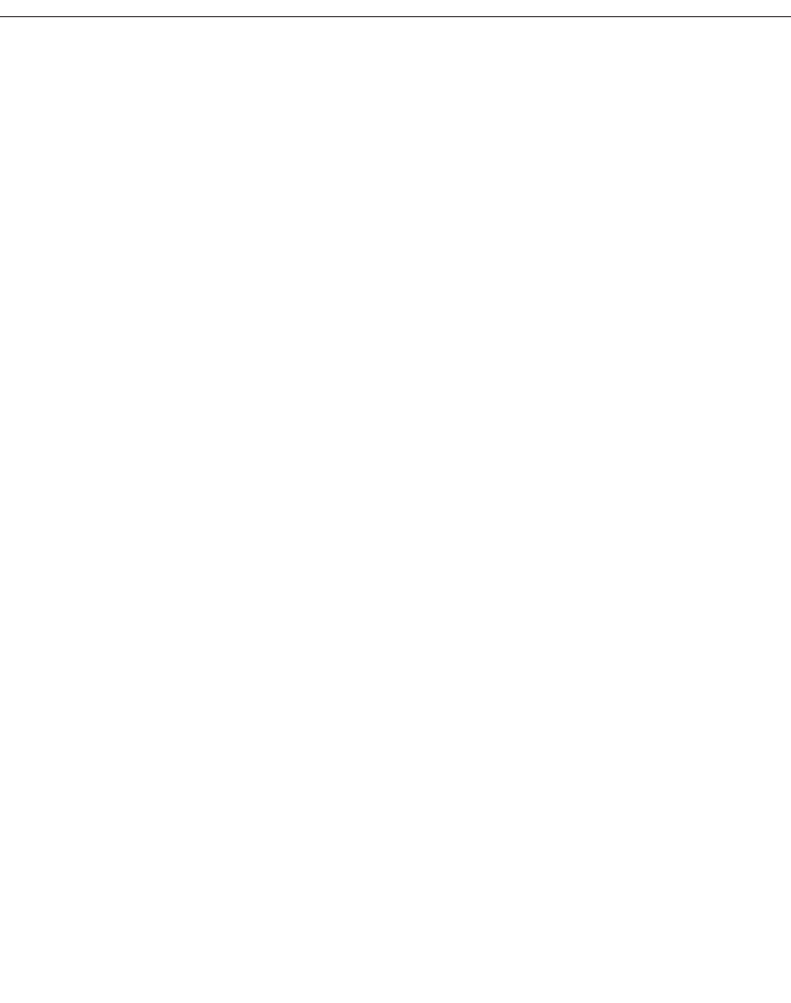
SCALE: 1" = 1'-0"
NOTES: REFER TO SECTION FOR HEIGHT
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: XX



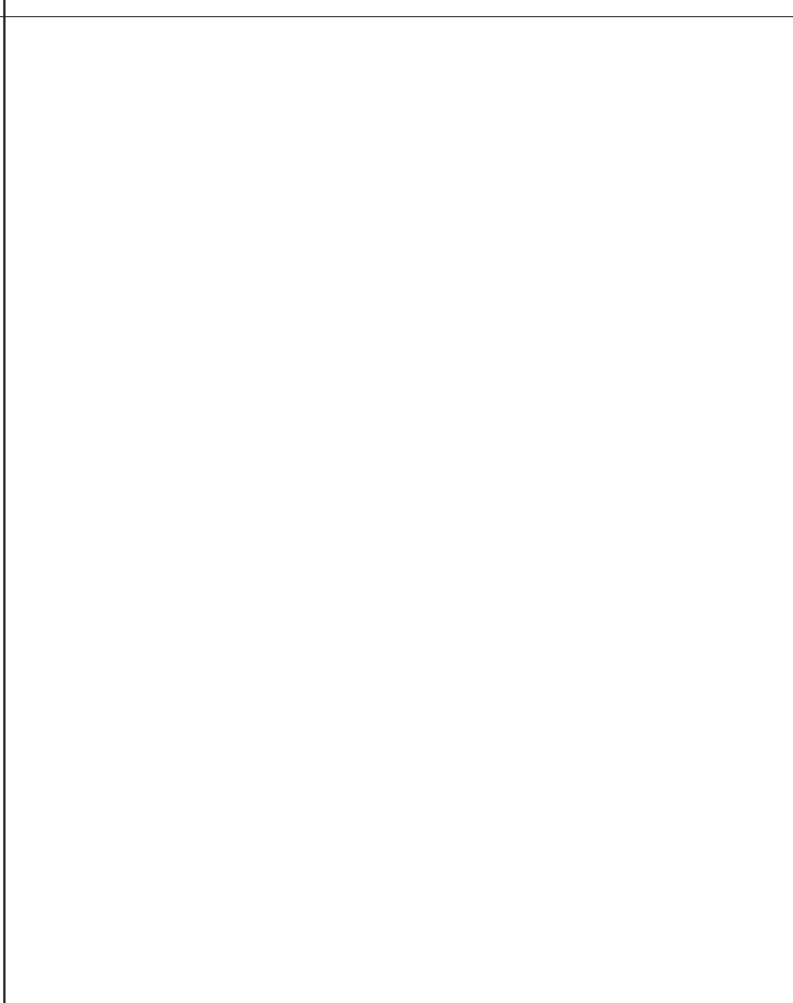
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: XX



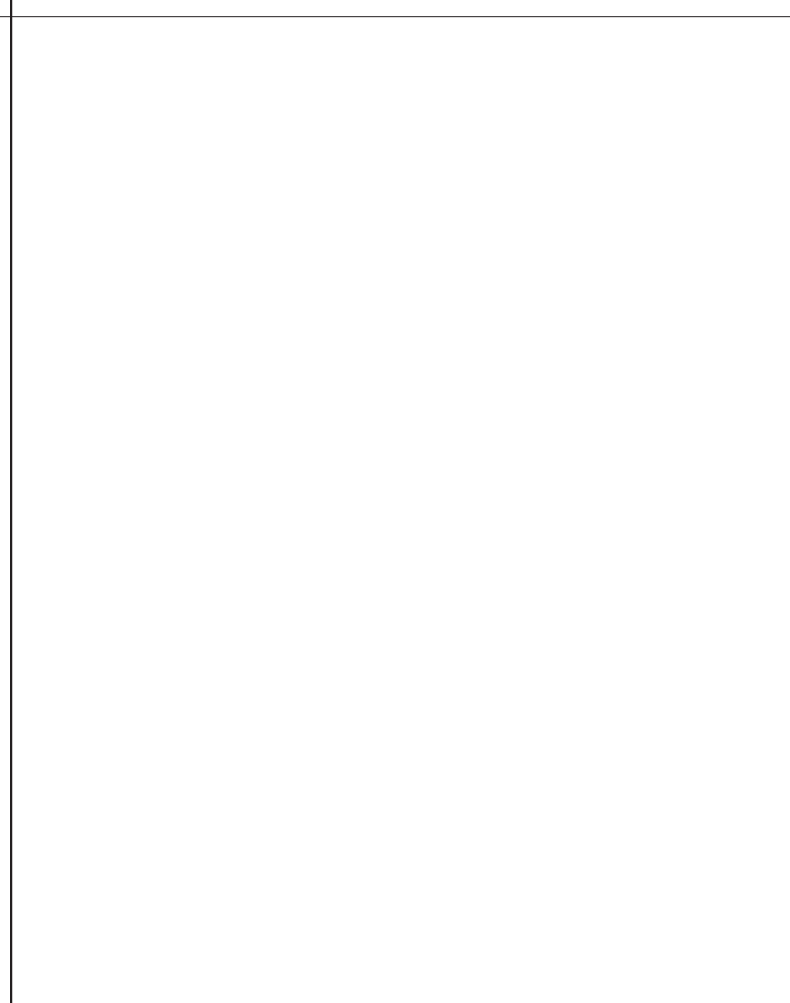
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: XX



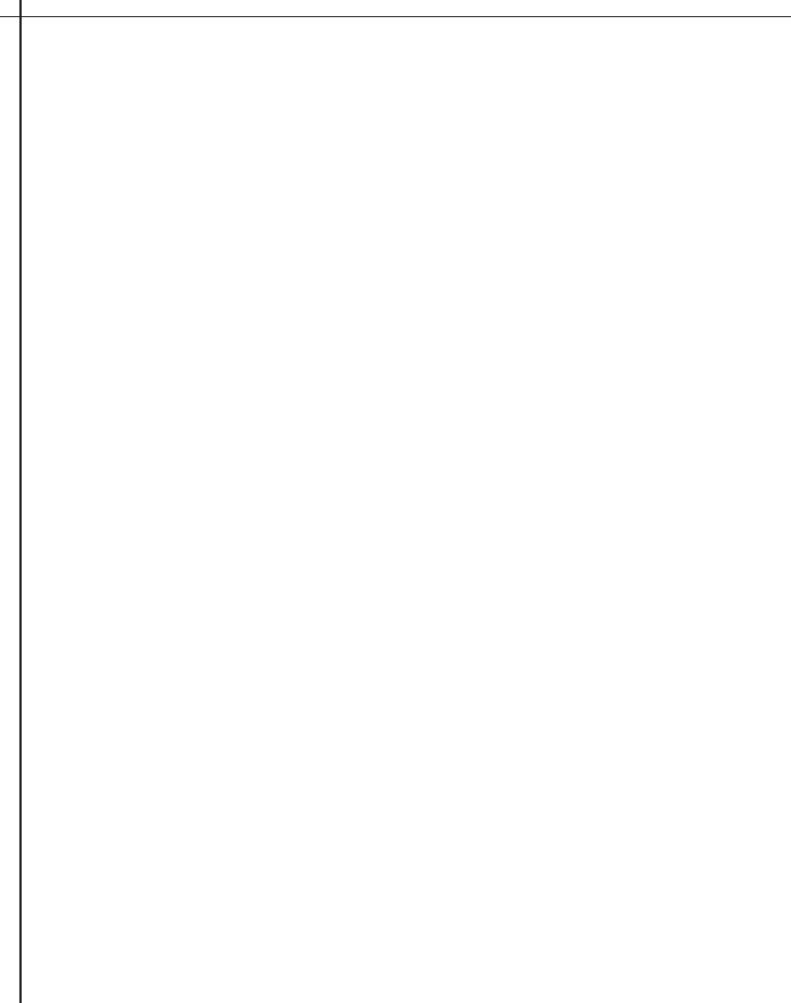
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: XX



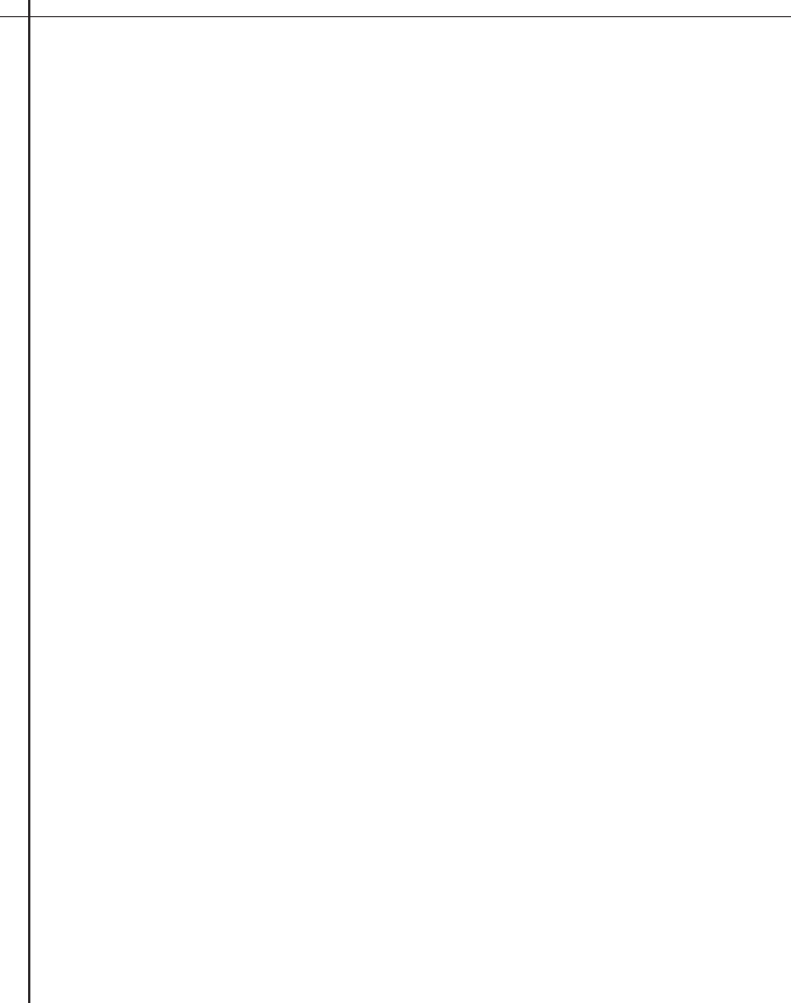
SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: XX



SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

WALL TYPE: XX

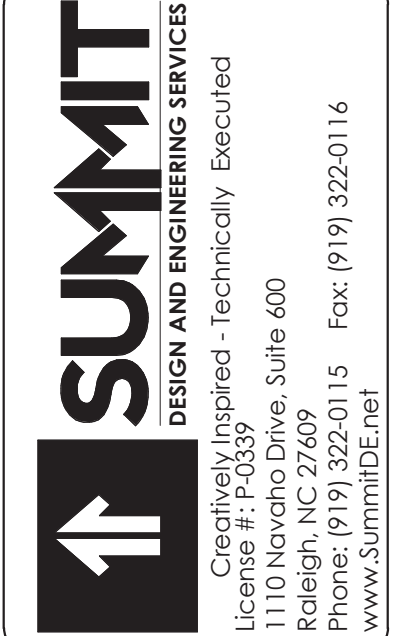


SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A

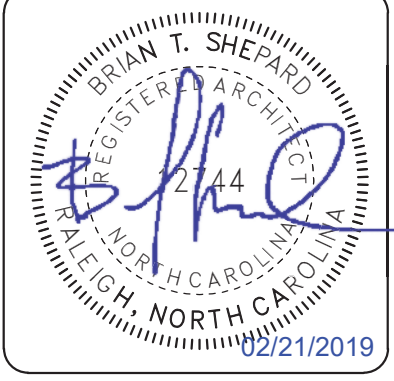
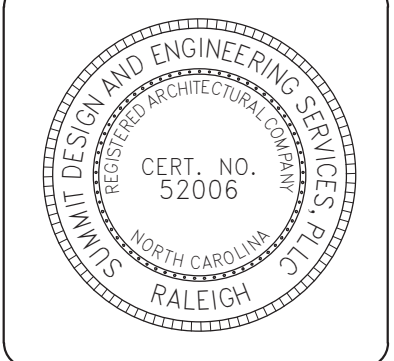
WALL TYPE: XX



SCALE: 1" = 1'-0"
NOTES:
FIRE RATING: N/A
UL DESIGN NO.: N/A
STC RATING: N/A



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING AND THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY: MISC
FIRST ISSUE DATE: 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
WALL TYPE LEGEND

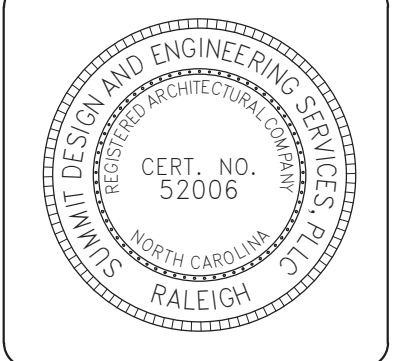
PROJECT NO.
18-0129.021
SHEET NO.
A001

GENERAL NOTES:

1. THIS SITE PLAN IS TO ONLY BE USED FOR REFERENCE. REFER TO CIVIL DRAWINGS FOR ALL CIVIL WORK.
2. ALL UTILITIES AND SITE FEATURES TO BE COORDINATED WITH CIVIL DRAWINGS

SUMMIT
 DESIGN AND ENGINEERING SERVICES
 Creatively Inspired - Technically Executed
 License #: P-20339
 1110 Navaho Drive, Suite 400
 Raleigh, NC 27609
 Phone: (919) 322-0115 Fax: (919) 322-0116
 www.summitde.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
 THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 PROJECT MANAGER
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

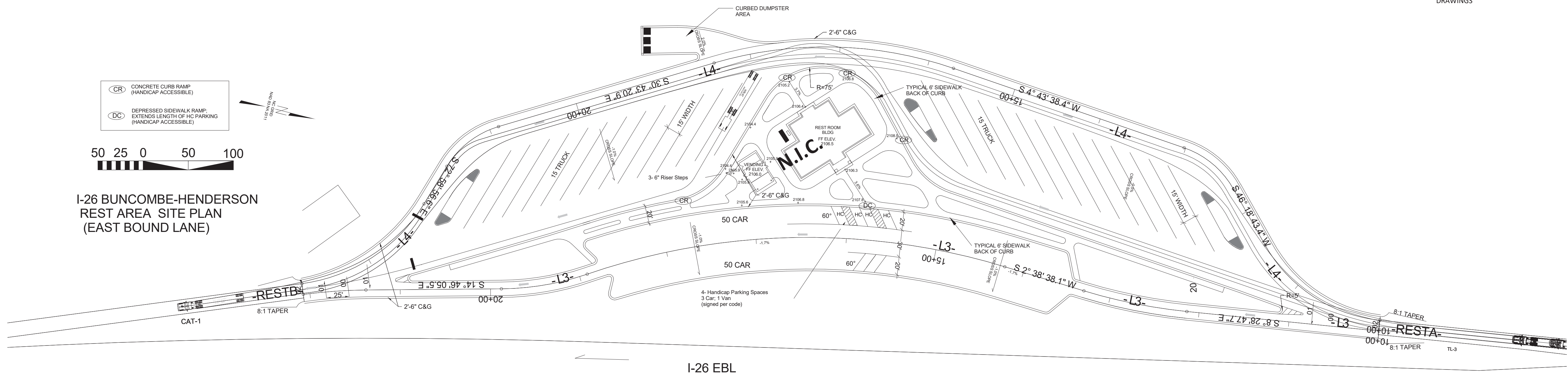
NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
ARCHITECTURAL OVERALL SITE PLAN

PROJECT NO.
18-0129.021
 SHEET NO.
A100

- CR CONCRETE CURB RAMP (HANDICAP ACCESSIBLE)
- DC DEPRESSED SIDEWALK RAMP, EXTENDS LENGTH OF HC PARKING (HANDICAP ACCESSIBLE)



I-26 BUNCOMBE-HENDERSON REST AREA SITE PLAN (EAST BOUND LANE)



I-26 EBL

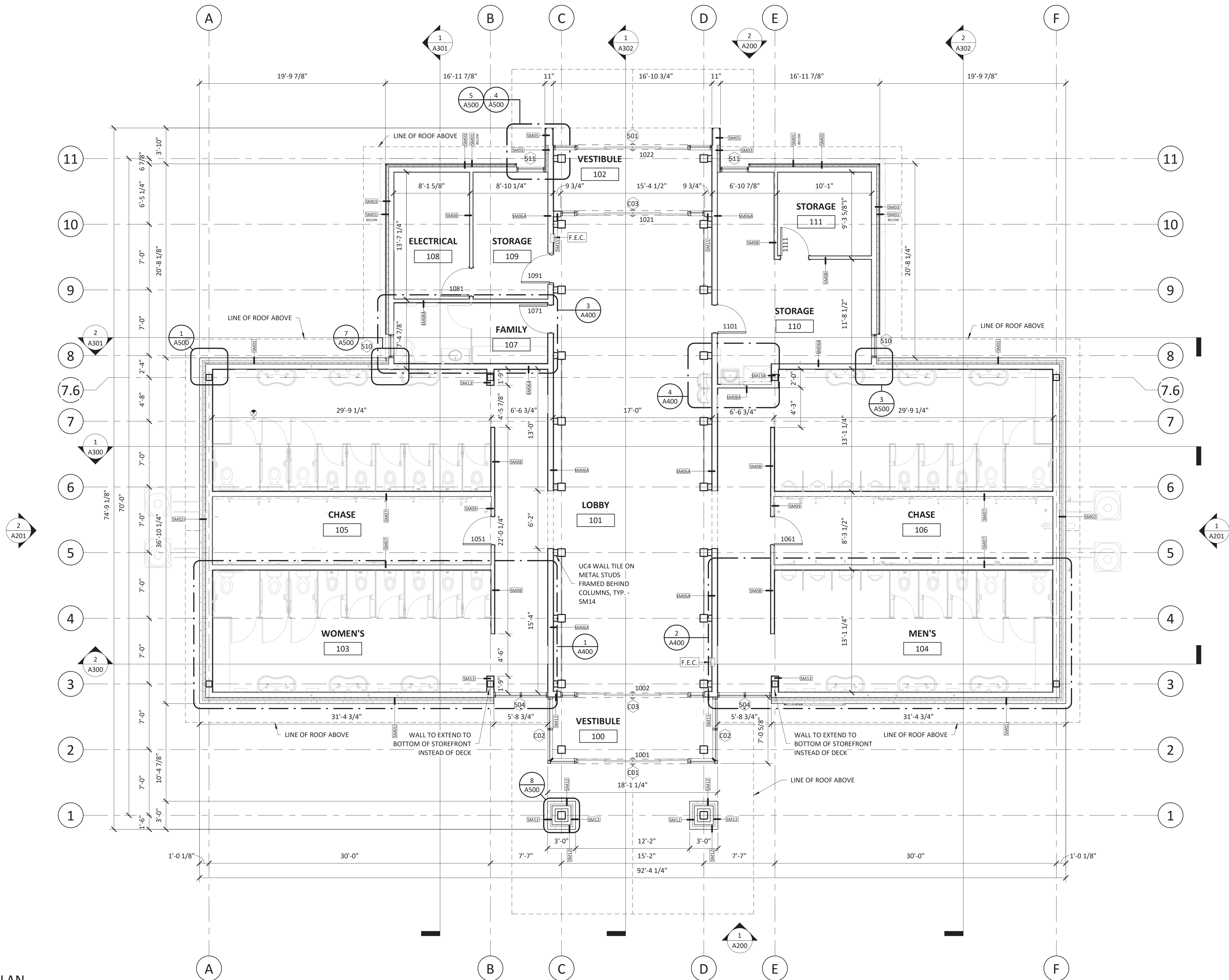
I-26 WBL

- CR CONCRETE CURB RAMP (HANDICAP ACCESSIBLE)
- DC DEPRESSED SIDEWALK RAMP, EXTENDS LENGTH OF HC PARKING (HANDICAP ACCESSIBLE)

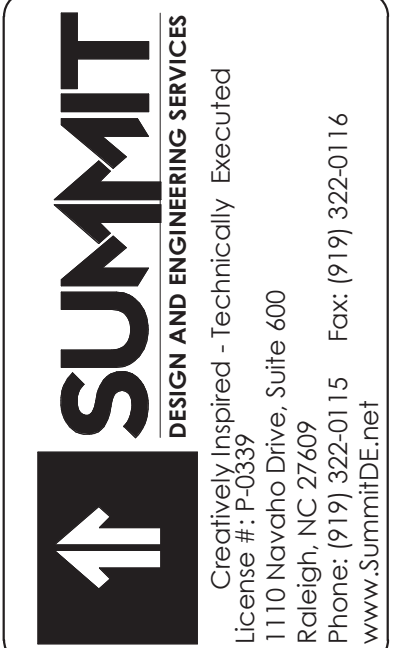


I-26 BUNCOMBE-HENDERSON REST AREA SITE PLAN (WEST BOUND LANE)

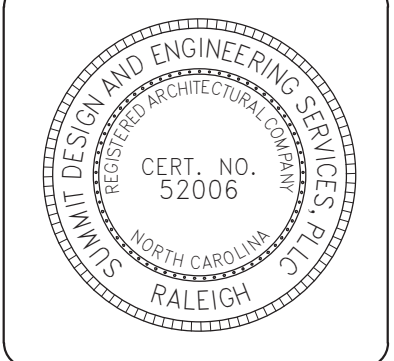
1 ARCHITECTURAL OVERALL SITE PLAN
 1" = 60'-0"



1 FIRST FLOOR PLAN
3/16" = 1'-0"



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

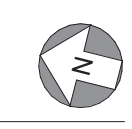


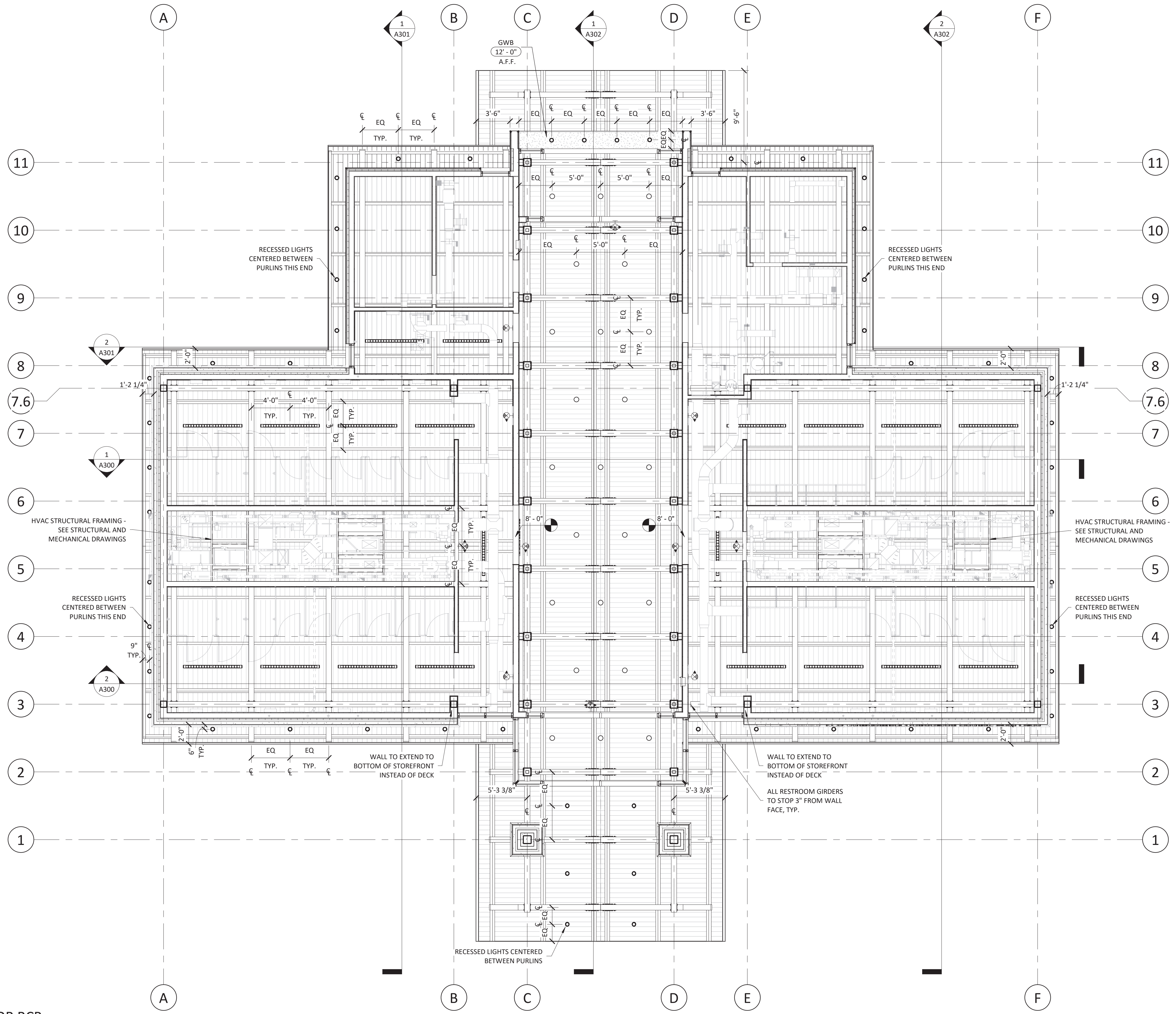
ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC FIRST ISSUE DATE 11/16/2019

NO	REVISIONS	BY	DATE	MC
A	ISSUED TO SCO	SC	11/16/18	MC
B	ISSUED TO NCDOT	MC	01/22/19	MC
C	ISSUED FOR CONST.	MC	02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
RESTROOMS FLOOR PLAN

PROJECT NO.
18-0129.021
SHEET NO.
A110





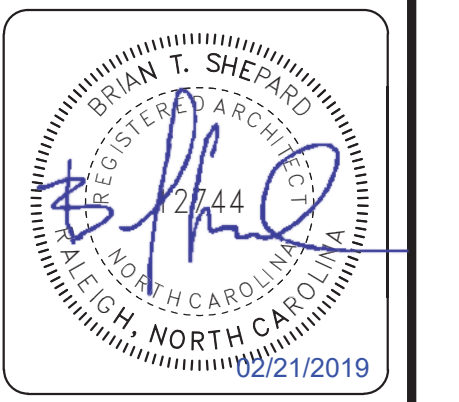
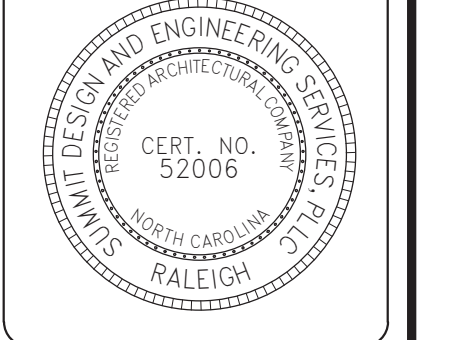
RCP LEGEND	
	RETURN AIR (WALL MOUNTED)
	SUPPLY AIR (WALL MOUNTED)
	DIRECTIONAL LED EXIT SIGN (CEILING MOUNTED)
	DIRECTIONAL LED EXIT SIGN (WALL MOUNTED)
	LED PENDANT LIGHT FIXTURE
	UP/DN SCONCE @ 14'-0" A.F.F.
	4" LED RECESSED DOWNLIGHT
	FLUXWERX APERTURE LINEAR LED LIGHT @ 12'-6" A.F.F. IN RESTROOMS AND VENDING
	TONGUE & GROOVE WOOD (T&G)
	5/8" GYPSUM WALLBOARD CEILING (GYP)

RCP NOTES

1. A.F.F. - ABOVE FINISH FLOOR
 2. REFER TO ID100 FOR FINISH SCHEDULE.

SUMMIT
 DESIGN AND ENGINEERING SERVICES
 Creatively Inspired - Technically Executed
 License # P-20339
 1110 Navaho Drive, Suite 400
 Raleigh, NC 27609
 Phone: (919) 322-0115 Fax: (919) 322-0116
 www.summitde.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
 THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



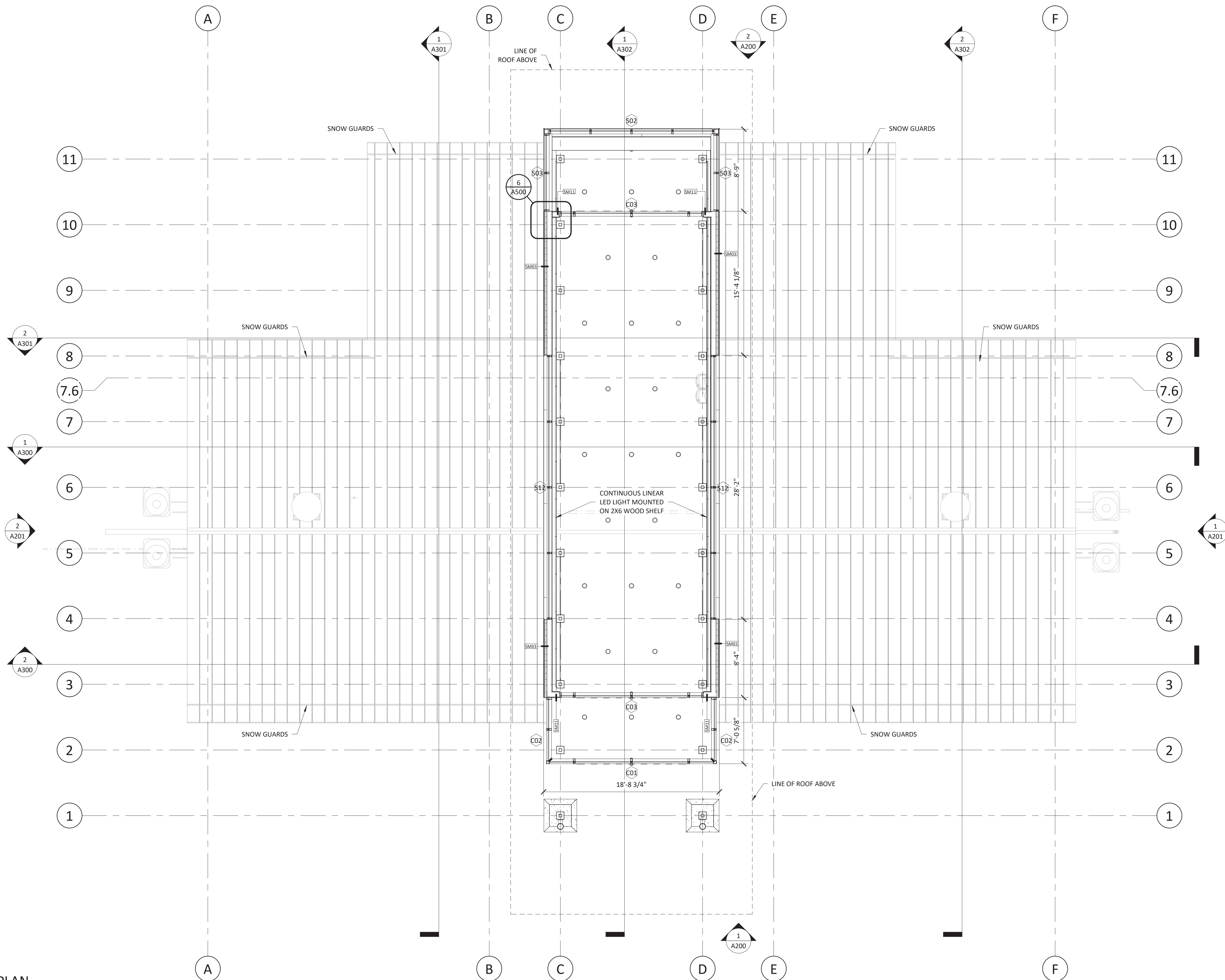
ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 PROJECT MANAGER
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	BY	DATE
A	ISSUED TO SCO	MC	11/16/18
B	ISSUED TO NCDOT	MC	01/22/19
C	ISSUED FOR CONST.	MC	02/21/19

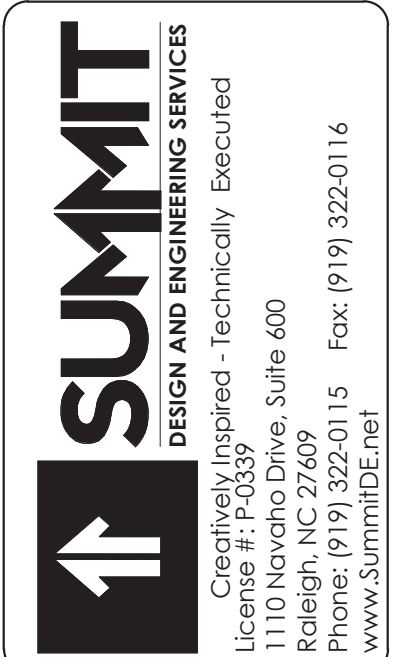
NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
RESTROOMS REFLECTED CEILING PLAN

PROJECT NO.
18-0129.021
 SHEET NO.
A111

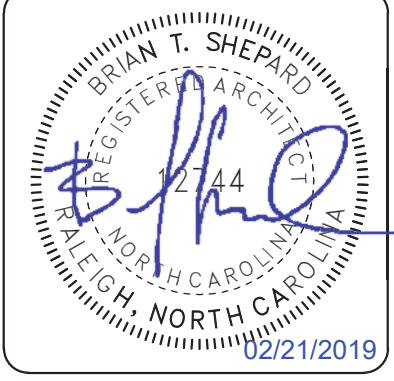
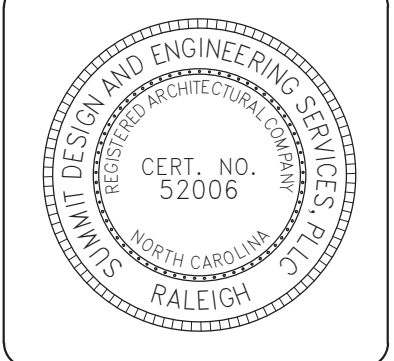
1 FIRST FLOOR RCP
 3/16" = 1'-0"



1 LOWER ROOF PLAN
3/16" = 1'-0"



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

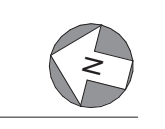


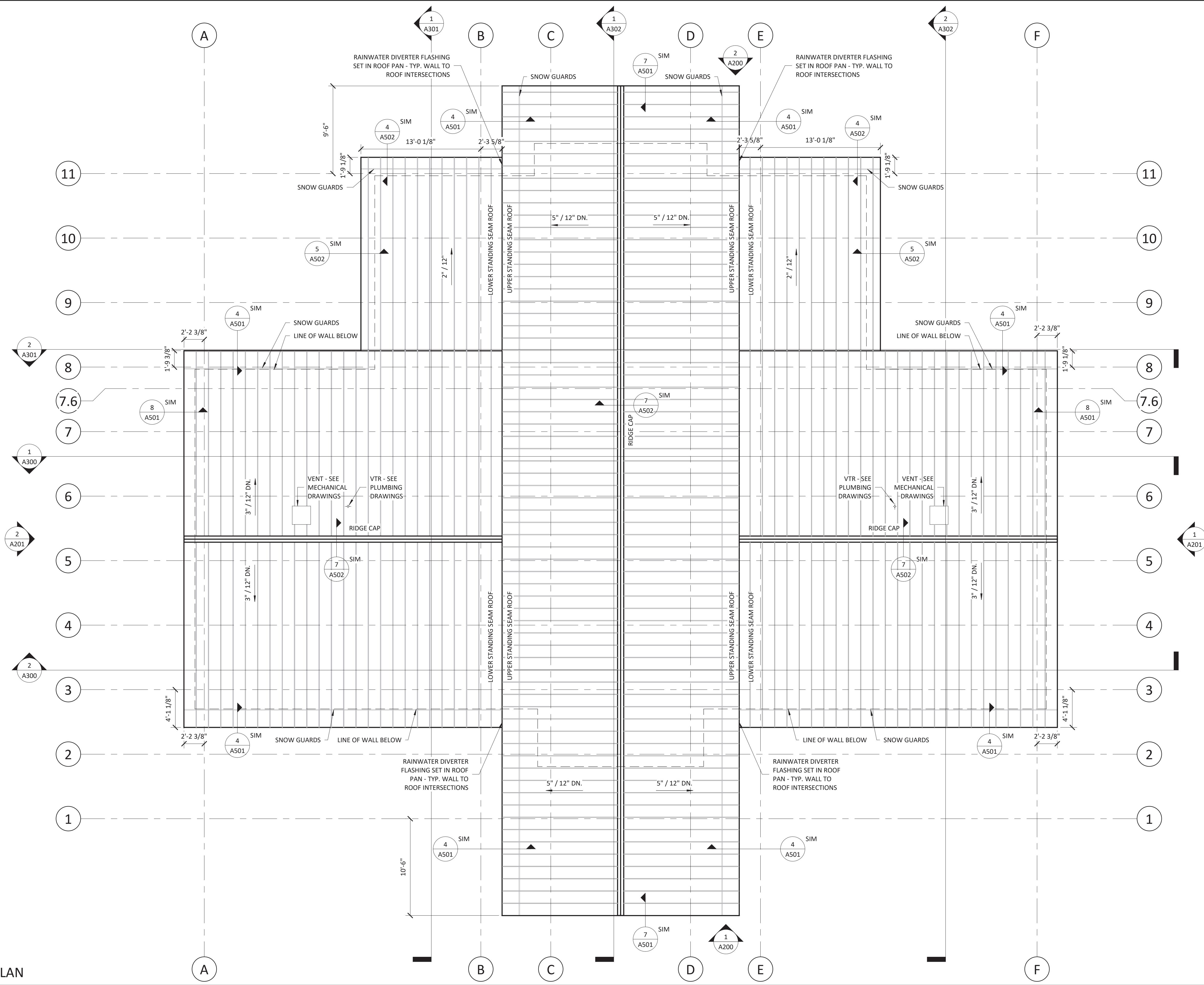
ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

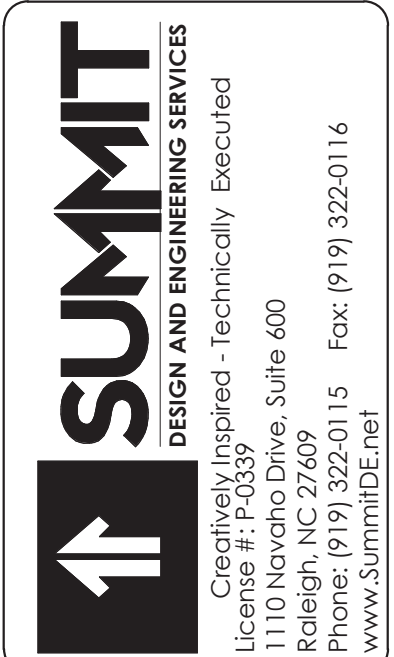
NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
RESTROOMS CLERESTORY PLAN

PROJECT NO.
18-0129.021
SHEET NO.
A120

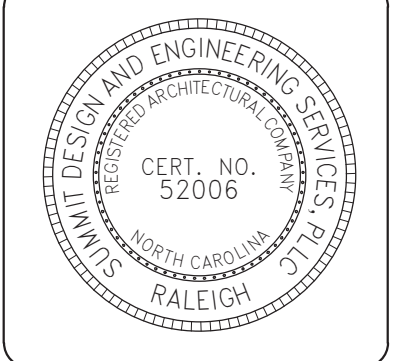




1 UPPER ROOF PLAN
3/16" = 1'-0"



COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

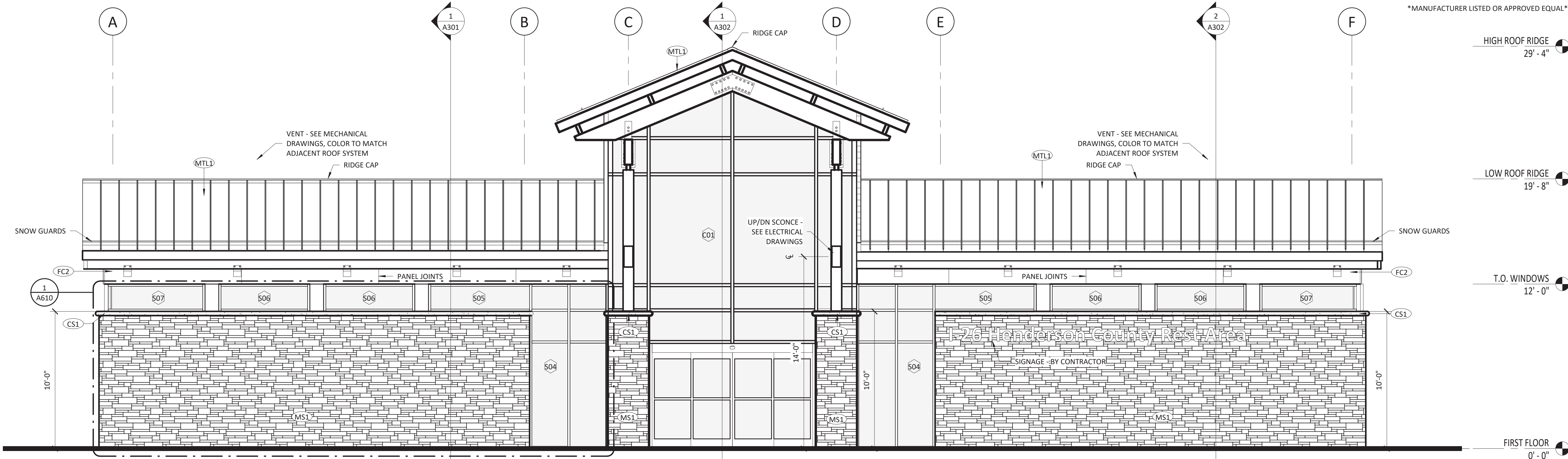
NO	REVISIONS	BY	DATE	MC
A	ISSUED TO SCO		11/16/18	MC
B	ISSUED TO NCDOT		01/22/19	MC
C	ISSUED FOR CONST.		02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
RESTROOMS UPPER ROOF PLAN

PROJECT NO.
18-0129.021
SHEET NO.
A130

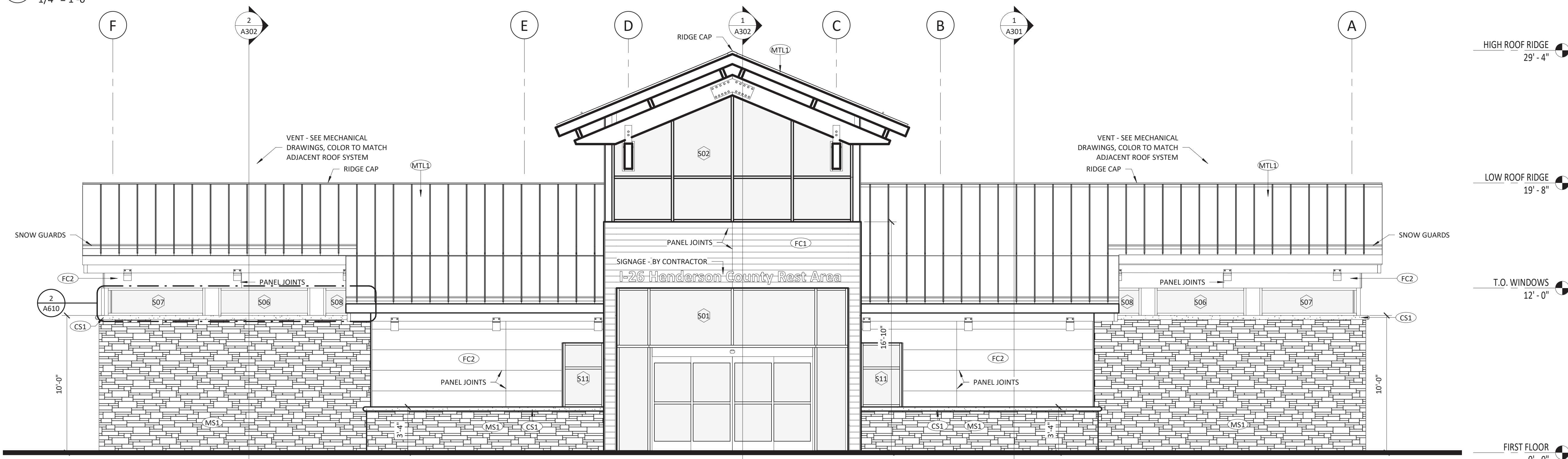
EXTERIOR FINISH SCHEDULE					
KEY	MATERIAL	MNFR.	ID	FINISH	COMMENTS
CS1	CAST STONE	SEE SPEC'S	SEE SPEC'S	CAFÉ	HOLCIM "COLUMBUS TAN" TYPE S MORTAR
FC1	FIBER CEMENT PANEL	SEE SPEC'S	SEE SPEC'S	CEDAR	INSTALLED HORIZONTALLY
FC2	FIBER CEMENT PANEL	SEE SPEC'S	SEE SPEC'S	SW 9171	SMOOTH FACE, INSTALLED HORIZONTALLY
MS1	FULL WIDTH MASONRY STONE	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	5-PC CITADEL W/ HOLCIM "COLUMBUS TAN" TYPE S MORTAR
I	GLASS	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	LOW-E, INSULATED
T	GLASS	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	TEMPERED
MTL1	STANDING SEAM METAL ROOF	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	CUSTOM COLOR MATCH TO IMETCO'S CHARCOAL

MANUFACTURER LISTED OR APPROVED EQUAL



1 FRONT ELEVATION

1/4" = 1'-0"

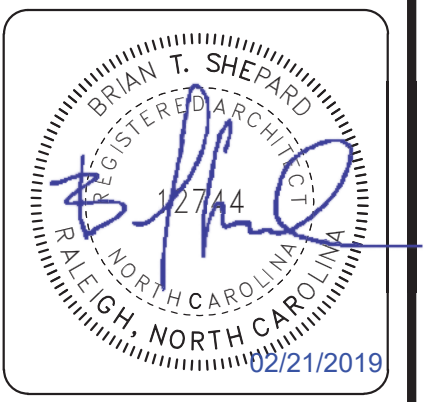
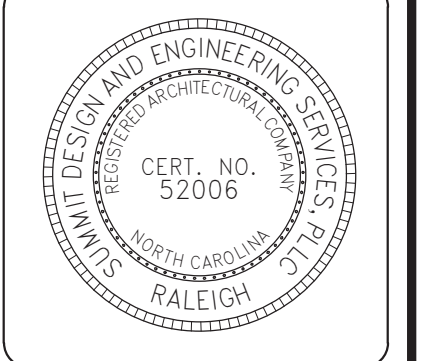


2 REAR ELEVATION

1/4" = 1'-0"

SUMMIT
 DESIGN AND ENGINEERING SERVICES
 Creatively Inspired - Technically Executed
 License #: P-20339
 1110 Navaho Drive, Suite 400
 Raleigh, NC 27609
 Phone: (919) 322-0115
 Fax: (919) 322-0116
 www.SummitDE.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
 THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 PROJECT MANAGER
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 DRAWN BY MSC
 FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

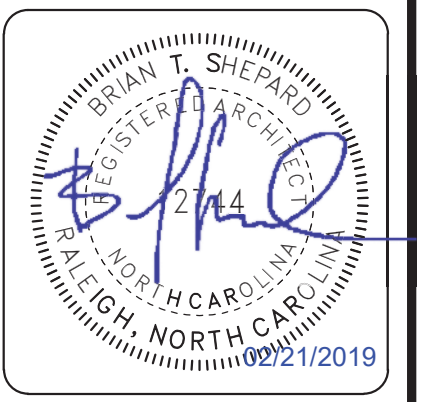
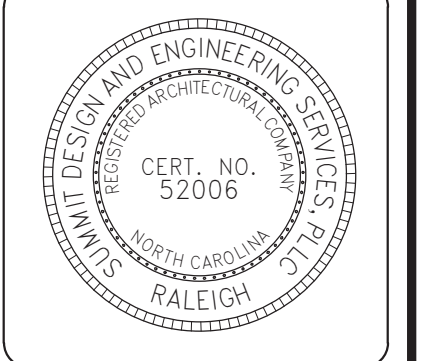
NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
RESTROOMS EXTERIOR ELEVATIONS

PROJECT NO.
18-0129.021
 SHEET NO.
A200

KEY	MATERIAL	MNFR.	ID	FINISH	COMMENTS
CS1	CAST STONE	SEE SPEC'S	SEE SPEC'S	CAFÉ	HOLCIM "COLUMBUS TAN" TYPE S MORTAR
FC1	FIBER CEMENT PANEL	SEE SPEC'S	SEE SPEC'S	CEDAR	INSTALLED HORIZONTALLY
FC2	FIBER CEMENT PANEL	SEE SPEC'S	SEE SPEC'S	SW 9171	SMOOTH FACE, INSTALLED HORIZONTALLY
MS1	FULL WIDTH MASONRY STONE	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	5-PC CITADEL W/ HOLCIM "COLUMBUS TAN" TYPE S MORTAR
I	GLASS	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	LOW-E, INSULATED
S	GLASS	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	SPANDREL
T	GLASS	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	TEMPERED
MTL1	STANDING SEAM METAL ROOF	SEE SPEC'S	SEE SPEC'S	SEE SPEC'S	CUSTOM COLOR MATCH TO EXISTING CLADDING *MANUFACTURER LISTED OR APPROVED EQUAL*

SUMMIT
DESIGN AND ENGINEERING SERVICES
Creatively Inspired - Technically Executed
License # P-20339
1110 Navaho Drive, Suite 600
Raleigh, NC 27609
Phone: (919) 322-0115
Fax: (919) 322-0116
www.summitde.net

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

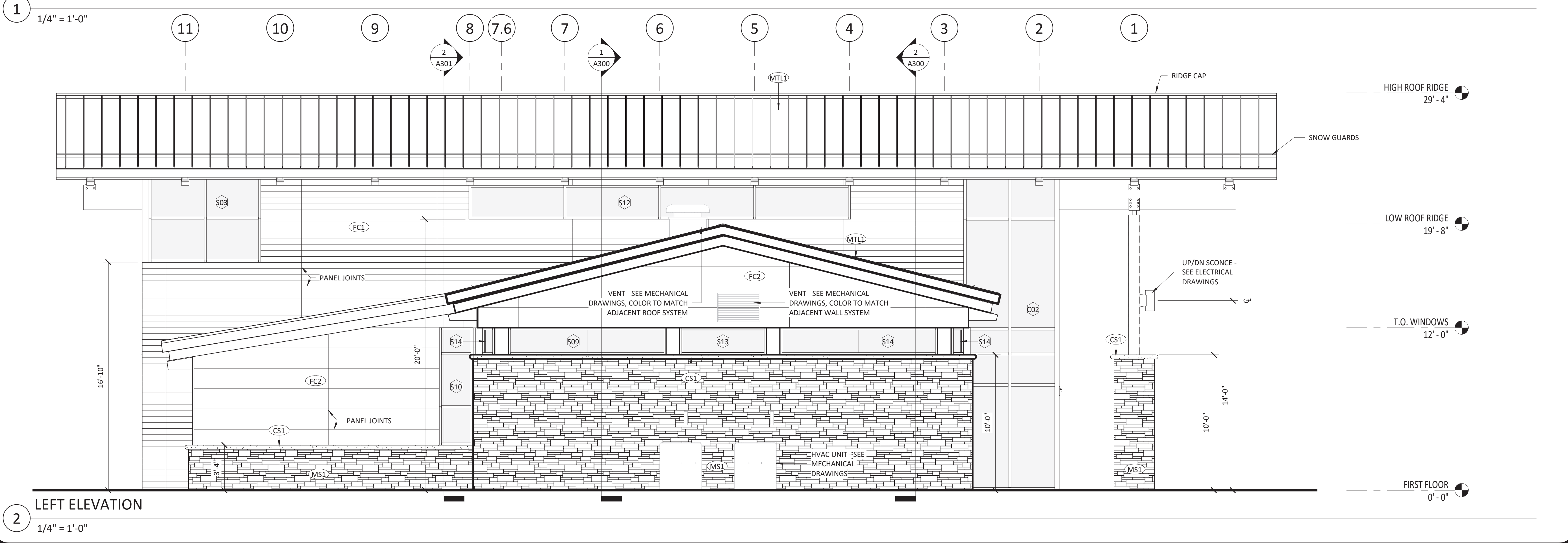
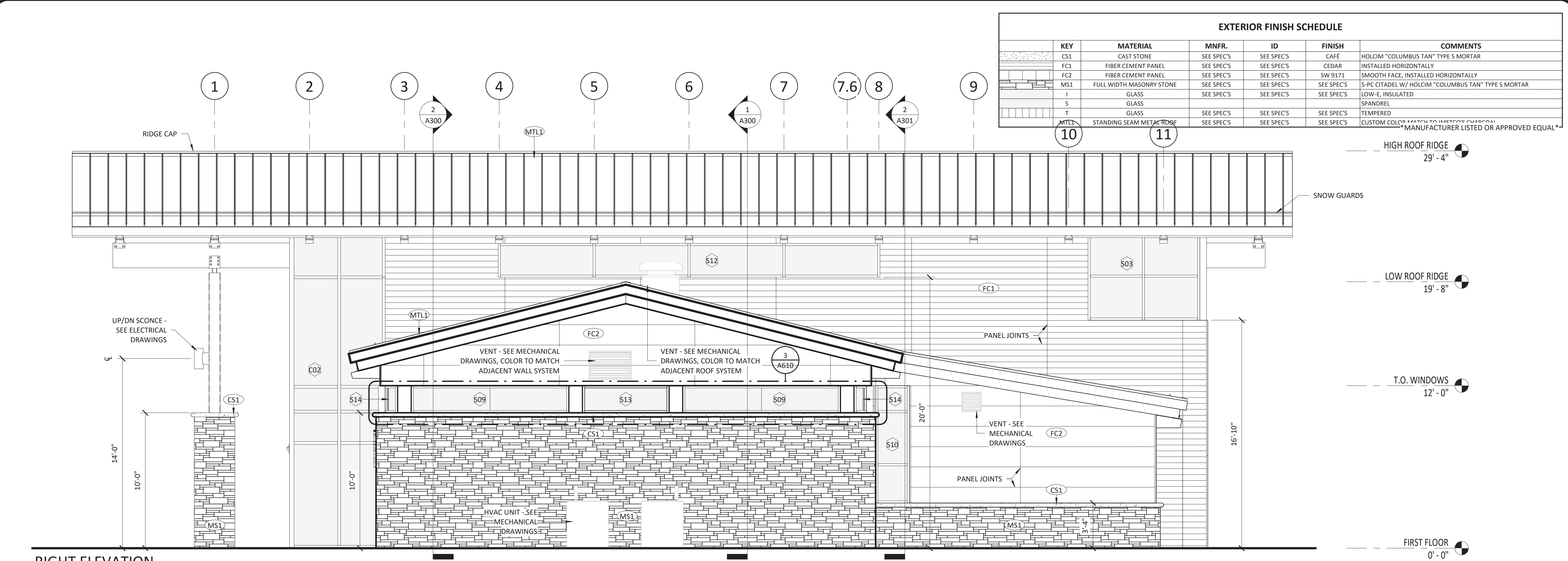


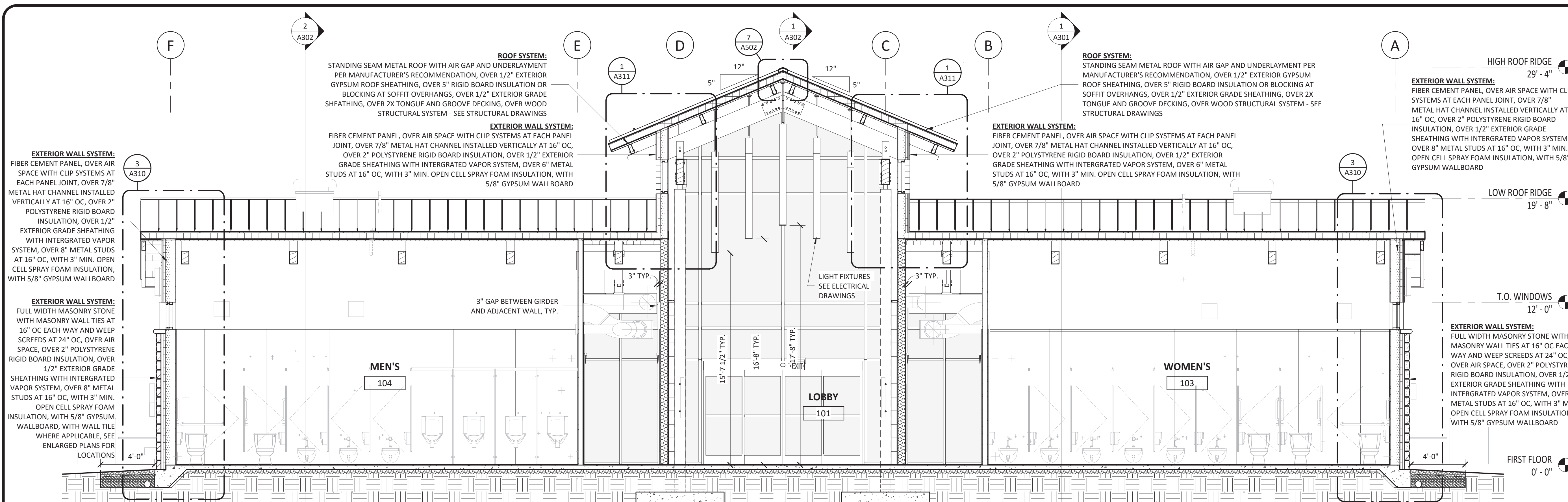
ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY MSC FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	BY	DATE	MC
A	ISSUED TO SCO	11/16/18	MC	
B	ISSUED TO NCDOT	01/22/19	MC	
C	ISSUED FOR CONST.	02/21/19	MC	

NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
RESTROOMS EXTERIOR ELEVATIONS

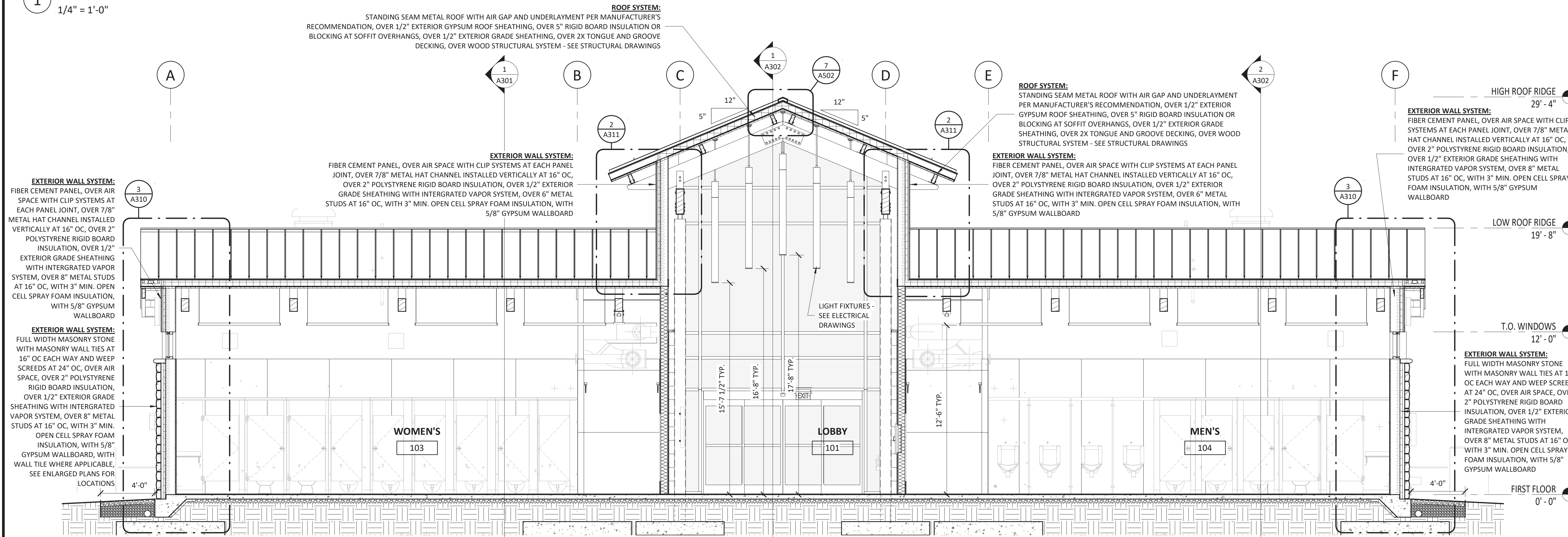
PROJECT NO.
18-0129.021
SHEET NO.
A201





BUILDING SECTION 01

1
1/4" = 1'-0"

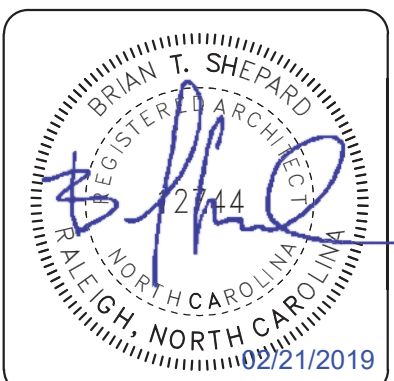
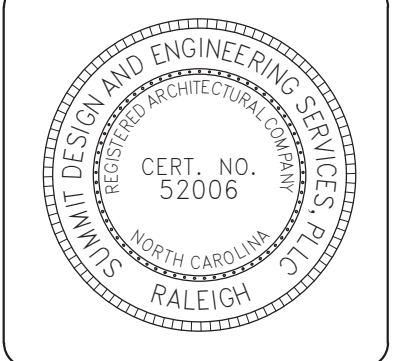


BUILDING SECTION 02

2
1/4" = 1'-0"

SUMMIT
 DESIGN AND ENGINEERING SERVICES
 Creatively Inspired - Technically Executed
 License # P-10339
 1110 Navaho Drive, Suite 400
 Raleigh, NC 27609
 Phone: (919) 322-0115
 Fax: (919) 322-0116
 www.summitde.com

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
 THIS DRAWING & THE DESIGN INTENT OF THIS INSTRUMENT OF SERVICE IS THE VESTED PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.

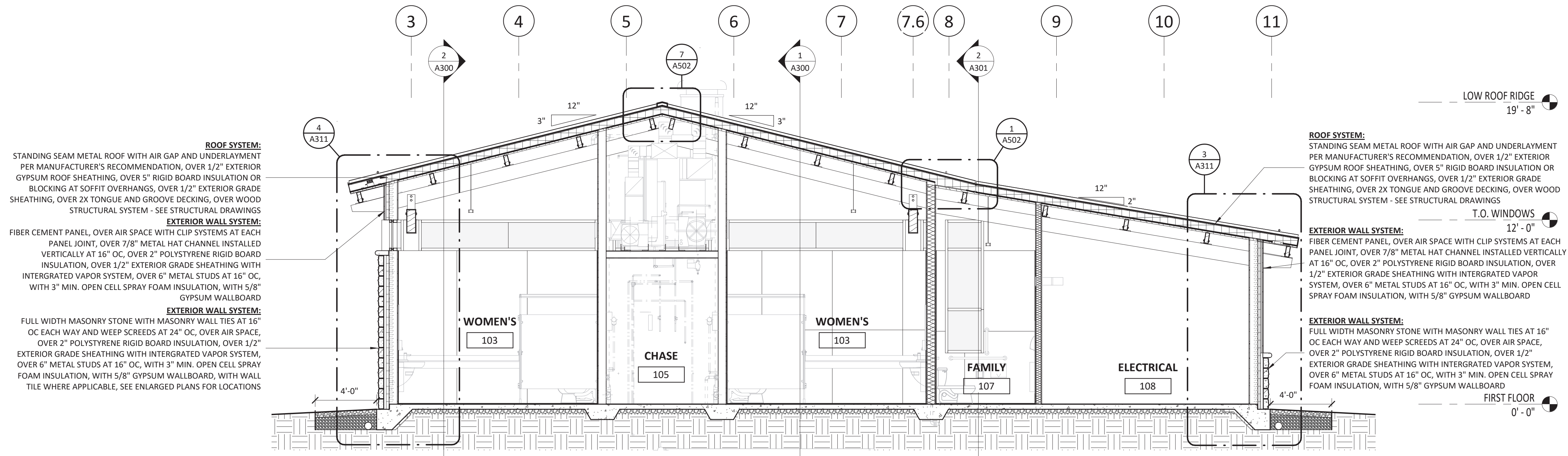


ARCHITECT OF RECORD
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 PROJECT MANAGER
 BRIAN T. SHEPARD, AIA, NCARB, LEED GA
 DRAWN BY MSC
 FIRST ISSUE DATE 11/16/2018

NO	REVISIONS	DATE	BY
A	ISSUED TO SCO	11/16/18	MC
B	ISSUED TO NCDOT	01/22/19	MC
C	ISSUED FOR CONST.	02/21/19	MC

NCDOT PROJECT #I-4400C
I-26 REST AREA, WEST BOUND
 HENDERSON/BUNCOMBE COUNTY
 NORTH CAROLINA 28732
RESTROOMS BUILDING SECTIONS

PROJECT NO.
18-0129.021
 SHEET NO.
A300



ROOF SYSTEM:
STANDING SEAM METAL ROOF WITH AIR GAP AND UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATION, OVER 1/2" EXTERIOR GYPSUM ROOF SHEATHING, OVER 5" RIGID BOARD INSULATION OR BLOCKING AT SOFFIT OVERHANGS, OVER 1/2" EXTERIOR GRADE SHEATHING, OVER 2X TONGUE AND GROOVE DECKING, OVER WOOD STRUCTURAL SYSTEM - SEE STRUCTURAL DRAWINGS

EXTERIOR WALL SYSTEM:
FIBER CEMENT PANEL, OVER AIR SPACE WITH CLIP SYSTEMS AT EACH PANEL JOINT, OVER 7/8" METAL HAT CHANNEL INSTALLED VERTICALLY AT 16" OC, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD

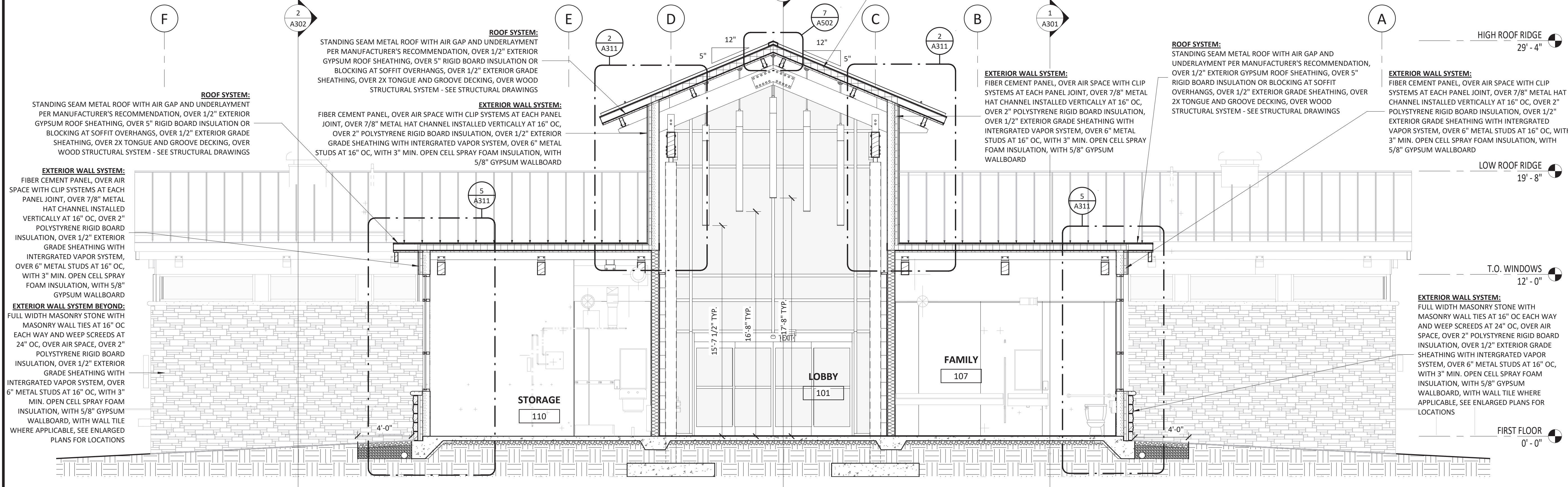
EXTERIOR WALL SYSTEM:
FULL WIDTH MASONRY STONE WITH MASONRY WALL TIES AT 16" OC EACH WAY AND WEEP SCREEDS AT 24" OC, OVER AIR SPACE, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD, WITH WALL TILE WHERE APPLICABLE, SEE ENLARGED PLANS FOR LOCATIONS

ROOF SYSTEM:
STANDING SEAM METAL ROOF WITH AIR GAP AND UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATION, OVER 1/2" EXTERIOR GYPSUM ROOF SHEATHING, OVER 5" RIGID BOARD INSULATION OR BLOCKING AT SOFFIT OVERHANGS, OVER 1/2" EXTERIOR GRADE SHEATHING, OVER 2X TONGUE AND GROOVE DECKING, OVER WOOD STRUCTURAL SYSTEM - SEE STRUCTURAL DRAWINGS

EXTERIOR WALL SYSTEM:
FIBER CEMENT PANEL, OVER AIR SPACE WITH CLIP SYSTEMS AT EACH PANEL JOINT, OVER 7/8" METAL HAT CHANNEL INSTALLED VERTICALLY AT 16" OC, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD

EXTERIOR WALL SYSTEM:
FULL WIDTH MASONRY STONE WITH MASONRY WALL TIES AT 16" OC EACH WAY AND WEEP SCREEDS AT 24" OC, OVER AIR SPACE, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD

1 BUILDING SECTION 04
1/4" = 1'-0"



ROOF SYSTEM:
STANDING SEAM METAL ROOF WITH AIR GAP AND UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATION, OVER 1/2" EXTERIOR GYPSUM ROOF SHEATHING, OVER 5" RIGID BOARD INSULATION OR BLOCKING AT SOFFIT OVERHANGS, OVER 1/2" EXTERIOR GRADE SHEATHING, OVER 2X TONGUE AND GROOVE DECKING, OVER WOOD STRUCTURAL SYSTEM - SEE STRUCTURAL DRAWINGS

EXTERIOR WALL SYSTEM:
FIBER CEMENT PANEL, OVER AIR SPACE WITH CLIP SYSTEMS AT EACH PANEL JOINT, OVER 7/8" METAL HAT CHANNEL INSTALLED VERTICALLY AT 16" OC, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD

EXTERIOR WALL SYSTEM BEYOND:
FULL WIDTH MASONRY STONE WITH MASONRY WALL TIES AT 16" OC EACH WAY AND WEEP SCREEDS AT 24" OC, OVER AIR SPACE, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD, WITH WALL TILE WHERE APPLICABLE, SEE ENLARGED PLANS FOR LOCATIONS

ROOF SYSTEM:
STANDING SEAM METAL ROOF WITH AIR GAP AND UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATION, OVER 1/2" EXTERIOR GYPSUM ROOF SHEATHING, OVER 5" RIGID BOARD INSULATION OR BLOCKING AT SOFFIT OVERHANGS, OVER 1/2" EXTERIOR GRADE SHEATHING, OVER 2X TONGUE AND GROOVE DECKING, OVER WOOD STRUCTURAL SYSTEM - SEE STRUCTURAL DRAWINGS

EXTERIOR WALL SYSTEM:
FIBER CEMENT PANEL, OVER AIR SPACE WITH CLIP SYSTEMS AT EACH PANEL JOINT, OVER 7/8" METAL HAT CHANNEL INSTALLED VERTICALLY AT 16" OC, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD

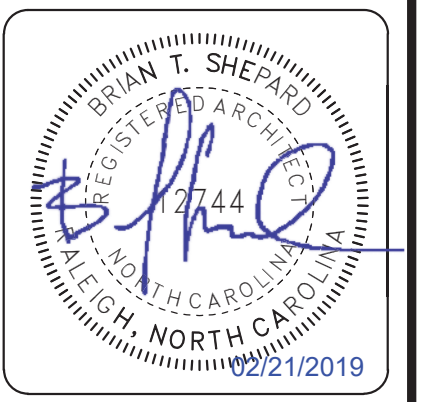
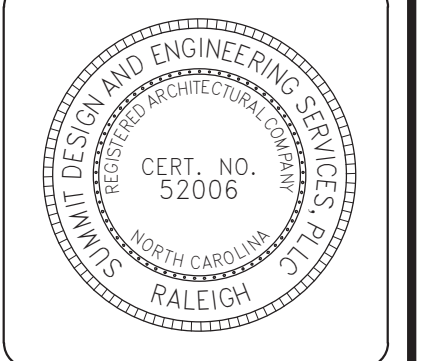
ROOF SYSTEM:
STANDING SEAM METAL ROOF WITH AIR GAP AND UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATION, OVER 1/2" EXTERIOR GYPSUM ROOF SHEATHING, OVER 5" RIGID BOARD INSULATION OR BLOCKING AT SOFFIT OVERHANGS, OVER 1/2" EXTERIOR GRADE SHEATHING, OVER 2X TONGUE AND GROOVE DECKING, OVER WOOD STRUCTURAL SYSTEM - SEE STRUCTURAL DRAWINGS

EXTERIOR WALL SYSTEM:
FIBER CEMENT PANEL, OVER AIR SPACE WITH CLIP SYSTEMS AT EACH PANEL JOINT, OVER 7/8" METAL HAT CHANNEL INSTALLED VERTICALLY AT 16" OC, OVER 2" POLYSTYRENE RIGID BOARD INSULATION, OVER 1/2" EXTERIOR GRADE SHEATHING WITH INTERGRATED VAPOR SYSTEM, OVER 6" METAL STUDS AT 16" OC, WITH 3" MIN. OPEN CELL SPRAY FOAM INSULATION, WITH 5/8" GYPSUM WALLBOARD

2 BUILDING SECTION 03
1/4" = 1'-0"

SUMMIT
DESIGN AND ENGINEERING SERVICES
Credentialed - Technically Executed
License # P-0339
1110 Navaho Drive, Suite 400
Raleigh, NC 27609
Phone: (919) 322-0115
Fax: (919) 322-0116
www.summitde.com

COPYRIGHT © 2018 SUMMIT DESIGN AND ENGINEERING SERVICES
THIS DRAWING IS THE PROPERTY OF THE ARCHITECT & THE ARCHITECTS CONSULTANTS, WHICH ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS OR METHOD WITHOUT EXPRESS WRITTEN CONSENT OF THE ARCHITECT. THIS INSTRUMENT OF SERVICE IS SOLELY & EXCLUSIVELY FOR THE PURPOSE OF CONSTRUCTING, USING, MAINTAINING, ALTERING & ADDING TO THIS SPECIFIC PROJECT AT ITS SPECIFIC LOCATION.



ARCHITECT OF RECORD
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
PROJECT MANAGER
BRIAN T. SHEPARD, AIA, NCARB, LEED GA
DRAWN BY: NSC
FIRST ISSUE DATE: 11/16/2019

NO	REVISIONS	DATE	BY	MC
A	ISSUED TO SCO	11/16/18	MC	
B	ISSUED TO NCDOT	01/22/19	MC	
C	ISSUED FOR CONST.	02/21/19	MC	

NCDOT PROJECT #1-4400C
I-26 REST AREA, WEST BOUND
HENDERSON/BUNCOMBE COUNTY
NORTH CAROLINA 28732
RESTROOMS BUILDING SECTIONS

PROJECT NO.
18-0129.021
SHEET NO.
A301