1. GENERAL STRUCTURAL NOTES:
REFER TO SUBSEQUENT PLAN AND DETAIL NOTES FOR VARIATIONS AND REQUIREMENTS SPECIFIC TO REFERENCED PROJECT.

NOTES ON DRAWINGS TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES.

2. DESIGN CRITERIA:
BUILDING CODE CONFORMANCE (MEETS OR EXCEEDS REQUIREMENTS):
2015 INTERNATIONAL BUILDING CODE (IBC)
2015 INTERNATIONAL RESIDENTIAL CODE (IRC)
2018 NORTH CAROLINA BUILDING CODE (NCBC)
2018 NORTH CAROLINA RESIDENTIAL CODE (NCRC)

DEAD LOADS:

ROOF DEAD LOAD	15 PSF
FLOOR DEAD LOAD	15 PSF
WOOD WALL DEAD LOAD	12 PSF
CMU BLOCK W/ BRICK VENEER DEAD LOAD	39 PSF
CONCRETE	150 PCF

LIVE LOADS:

ROOF LIVE LOAD	20 PSF
FLOOR LIVE LOAD (RESIDENTIAL)	40 PSF

3. MATERIALS:
BRACKET PLATES – ASTM A36
(MIN YIELD STRESS, Fy = 36 KSI / MIN TENSILE STRESS, Fu = 58 KSI)
PIER TUBES – ASTM A500 GRADE B OR C
(MIN YIELD STRESS, Fy = 50 KSI / MIN TENSILE STRESS, Fu = 55 KSI)
EXTERNAL SLEEVE – ASTM A500 GRADE B OR C
(MIN YIELD STRESS, Fy = 50 KSI / MIN TENSILE STRESS, Fu = 62 KSI)
PIER CAP – ASTM A529 GRADE 50
(MIN YIELD STRESS, Fy = 50 KSI / MIN TENSILE STRESS, Fu = 65 KSI)
COIL ROD – ASTM A193 GRADE B7
(MIN YIELD STRESS, Fy = 105 KSI / MIN TENSILE STRESS, Fu = 125 KSI)
STEEL ANGLE SHAPES – ASTM A36
(MIN YIELD STRESS, Fy = 36 KSI / MIN TENSILE STRESS, Fu = 58 KSI)

4. WELDING NOTES:
CONFORM TO AWS D1.1. WELDERS SHALL BE CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS. USE E70 ELECTRODES OF TYPE REQUIRED FOR MATERIALS TO BE WELDED.

5. CORROSION PROTECTION:
SACRIFICIAL DESIGN THICKNESS – CAPACITIES INCLUDE A SCHEDULED LOSS IN STEEL THICKNESS DUE TO CORROSION FOR BLACK, UNCOATED STEEL. ANCHORS ARE DESIGNED FOR 50-YEAR SCHEDULED SACRIFICIAL THICKNESS LOSS IN ACCORDANCE WITH ICC-ES AC358.

6. INSTALLATION:
SYSTEM TO BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS. MINIMUM INSTALLATION PRESSURE IS TO BE DETERMINED BY THE FOLLOWING EQUATION:

PUSH PIER INSTALLATION PRESSURE (PSI): [DESIGN LOAD] X 2 / 9.62 IN^2.

MINIMUM INSTALLATION DEPTH IS 10'-0"± UNO.

CONTACT ENGINEER OF RECORD IF FIELD CONDITIONS DIFFER.

7. EXISTING UTILITY LINES:
CONTRACTOR TO REPAIR UTILITY LINES THAT MAY BE DAMAGED DURING INSTALLATION.

8. PUSH PIER SPLICING:
PILES ARE TO BE GRAVITY SPLICED WITH FITTING COUPLERS. BUILDING WEIGHT WILL ENSURE JOINTS DO NOT SEPARATE.

9. INSPECTION & TESTING:
CONTINUOUS SPECIAL INSPECTION IS REQUI DURING INSTALLATION PER 2015 IBC SECTION 1810.4.12.

THE SPECIAL INSPECTOR IS RESPONSIBLE I: VERIFYING AND RECORDING THE FOLLOWING:

-PROJECT DESCRIPTION (ADDRESS, IIALLATION DATE, PERMIT NUMBER
-PILE AND BRACKET CONFIGURATION
-PART DESCRIPTION (PRODUCT MANU;TURER, BRACKET TYPE, PIER TYPE, PIER OUTSIDE DIAMETER, PIER WALL CKNESS)
-PIER INCLINATION, LOCATION, DEPTH ND INSTALLATION PRESSURE ACHIEVED

NORTH CAROLINA PROFESSIONAL SEAL 041134 ENGINEER JEFFREY S. F

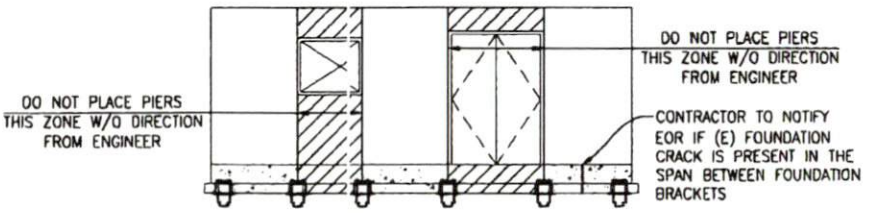
EXPIRES: 12/31/20

LOAD TESTING SHALL BE PERFORMED IN ACRDANCE WITH ASTM METHOD D1143 (QUICK METHOD) ON 20 PERCENT OF PIERS AND WILL BE SELECTED Y THE SPECIAL INSPECTOR. AN ALIGNMENT LOAD (AL) SHALL BE APPLIED TO THE PILE PRIOR TO SETTING T DEFLECTION MEASURING EQUIPMENT TO ZERO OR A REFERENCE POSITION. THE AL SHALL BE NO MORE TH 10% OF THE DESIGN LOAD. INCREMENTAL LOADING SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDL.

TEST LOADING SCHEDULE	HD TIME	MAX DEFLECTION
AL (.10 DL MAX)	(IIN.	
0.25 DL	UIL STABLE	
0.50 DL	UIL STABLE	
0.75 DL	UIL STABLE	
1.00 DL	UIL STABLE	
1.25 DL	UIL STABLE	
1.50 DL	HD FOR CREEP TEST (SEE BELOW)	0.04 INCHES
1.25 DL	UIL STABLE	
1.00 DL	UIL STABLE	
0.75 DL	UIL STABLE	
0.50 DL	UIL STABLE	
0.25 DL	UIL STABLE	

LOAD TESTING CREEP ACCEPTANCE CRITERI HALL BE NO GREATER THAN 0.04 INCHES WITHIN A 10 MINUTE PERIOD. IF MOVEMENT IS OBSERVED GREAT THAN 0.04 INCHES WITHIN THE 10 MINUTE PERIOD THE LOAD TEST SHALL BE HELD FOR AN ADDITIONAL 50 MITES, THE PIER IS TO BE DEEPENED AND RE-TESTED, OR THE PIER IS TO BE ABANDONED AND REPLACED WITH NEW PIER. IF THE LOAD TEST IS TO BE HELD THE PIER MOVEMENTS SHALL BE MEASURED AT 15, ; 30, 40, 50, AND 60 MINUTES. THE CREEP VERSUS THE LOGARITHM OF TIME SHALL BE PLOTTED. IF THE CREEIATE IS LESS THAN 0.080 INCHES BETWEEN 6 AND 60 MINUTES, THE LOAD TEST SHALL BE CONSIDERED SUESSFUL.

PUSH PIER TEST PRESSURE (PSI): [DESIGNAD] X 1.5 / 9.62 IN^2.



NO PIER PLACEMENT ONE

1

SCALE: NTS

SFA Design Group, LLC
PORTLAND, OR | LIVERMORE, CA | SEATTLE, WA

SOUTHEAST FOUNDATION REPAIR

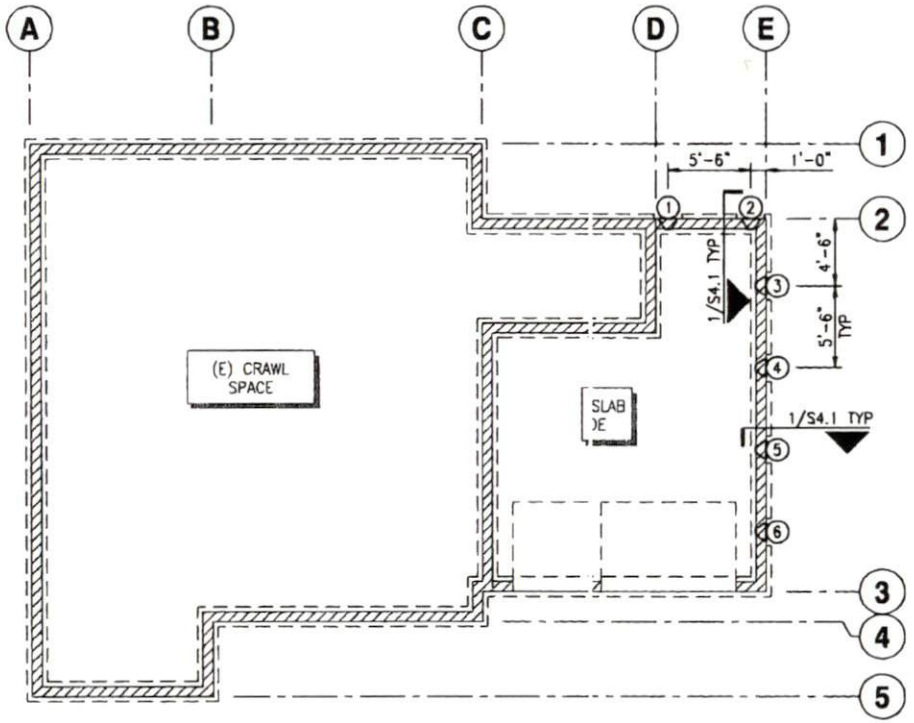
MONZON RESIDENCE
210 REMINGTON HILL DRIVE
BUNNLEVEL, NC 28323

GENERAL NOTES

REVISIONS

PROJECT NO: SE20-048
DESIGNED BY: MEK
DRAWN BY: MEK
CHECKED BY: CVR, JLD
DATE: 04-06-2020

SHEET NO: S1.1



(E) FOUNDATION/(N) PIER LAYOUT PLAN

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

(E) FOUNDATION/(N) PIER LAYOUT PLAN NOTES:

1. REFERENCE S1.1 FOR GENERAL REQUIREMENTS
2. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF DISCREPANCIES BETWEEN FIELD CONDITIONS & THOSE SHOWN IN THESE DOCUMENTS PRIOR TO CONSTRUCTION/INSTALLATION OF PIERS TYP
3. INDICATES (E) CMU STEMWALL W/ BRICK VENEER ON (E) CONC FOOTING (CONTRACTOR TO VERIFY 8"Wx1'-6"H (E) CMU STEMWALL AND 1'-4"Wx12"DP (E) CONC FOOTING MIN TYP (NOTIFY ENGINEER OF RECORD IF FIELD CONDITIONS DIFFER IN THE AREA OF WORK))
4. X/SX.X SECTION CUT – DETAIL NUMBER/SHEET NUMBER
5. INDICATES LOCATION OF FSI 288 PUSH PIER W/ FSI FS288BL FOUNDATION BRACKET ((6) TOTAL)

   PUSH PIER INSTALLATION NOTES:
   - MAX LOAD TO ANCHOR = 8766 LBS
   - 2.875"ø PIPE PILE W/ 0.165" THICK WALL
   - 3.5"ø x 48" LONG PIPE SLEEVE W/ 0.216" WALL
   - MINIMUM 10'-0" INSTALLATION DEPTH
   - MINIMUM 2000 PSI INSTALLATION PRESSURE
   - MINIMUM 1/4" FOUNDATION LIFT DURING INSTALLATION
6. PIER SPACING SHALL BE AS INDICATED ON PLAN (5'-6" OC MAX) UNO
7. CONTRACTOR TO NOTIFY ENGINEER OF RECORD IF (E) FOUNDATION CRACK IS PRESENT IN THE SPAN BETWEEN FOUNDATION BRACKETS
8. ALL CONSTRUCTION MATERIALS ON PLANS, ELEVATIONS & DETAILS ARE (N) UNO

NORTH CAROLINA PROFESSIONAL SEAL 041134 ENGINEER JEFFREY S. FITCH

EXPIRES: 12/31/20

sfa Design Group, LLC

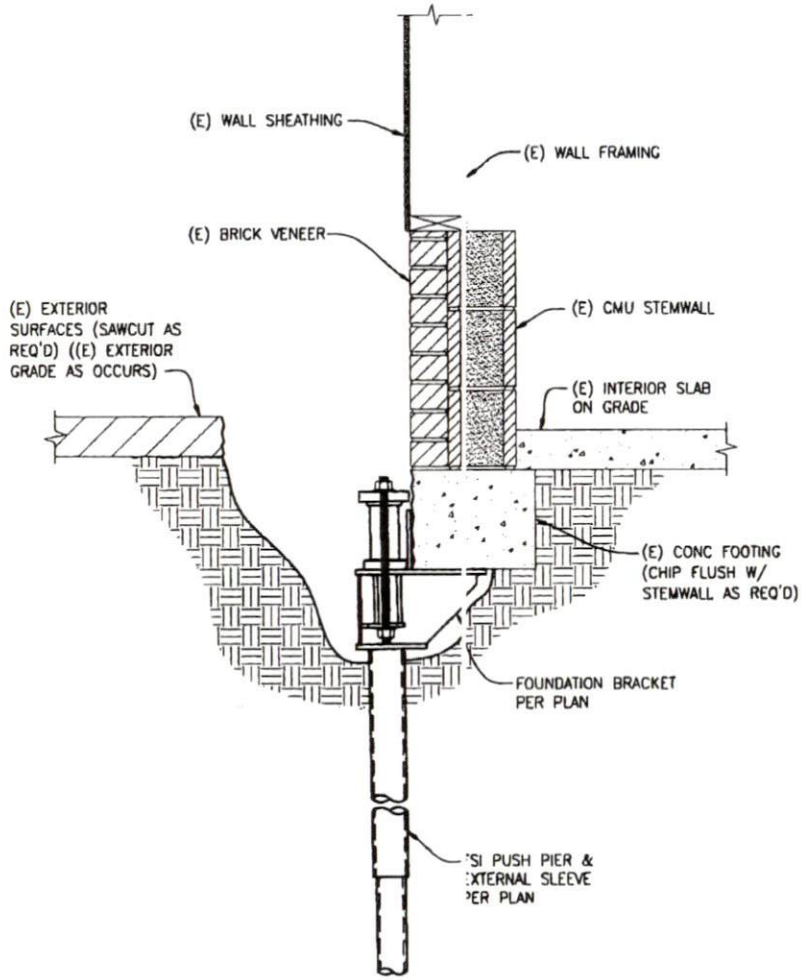
SOUTHEAST FOUNDATION REPAIR
MONZON RESIDENCE
210 REMINGTON HILL DRIVE
BUNNLEVEL, NC 28323

(E) FOUNDATION/(N) PIER LAYOUT PLAN

REVISIONS

PROJECT NO: SE20-048
DESIGNED BY: MEK
DRAWN BY: MEK
CHECKED BY: JVR, JLD
DATE: 4-06-2020

SHEET NO: S2.1



NOTE:
REF PLAN FOR LAYOUT & INSTALLATION REQ'S

(N) PUSH PIER TO (E) FOUNDATION DETAIL

1

SCALE: 1"=1'-0"

NORTH CAROLINA PROFESSIONAL SEAL 041134 ENGINEER JEFFREY S. FIX

EXPIRES: 12/31/20

sfa

SFA Design Group, LLC

SOUTHEAST FOUNDATION REPAIR
MONZON RESIDENCE
210 REMINGTON HILL DRIVE
BUNNLEVEL, NC 28323

IER DETAILS

REVISIONS

PROJECT NO: SI 10-048
DESIGNED BY: M K
DRAWN BY: M K
CHECKED BY: CTR, JLD
DATE: 04-06-2020

SHEET NO: S4.1