

GENERAL REQUIREMENTS

REFER TO SUBSEQUENT PLAN AND DETAIL NOTES FOR VARIATIONS AND REQUIREMENTS SPECIFIC TO REFERENCED PROJECT.
 NOTES ON DRAWINGS TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES.

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:
 FLOOR DEAD LOAD 15 PSF
 INTERIOR WOOD WALL DEAD LOAD 9 PSF

LIVE LOADS:
 FLOOR LIVE LOAD (RESIDENTIAL) 40 PSF

DEFLECTIONS:
 TOTAL LOAD DEFLECTION LIMIT L/240
 LIVE LOAD DEFLECTION LIMIT L/360

REFERENCE STANDARDS:
 CONFORM TO IBC CHAPTER 18 "SOILS & FOUNDATIONS"

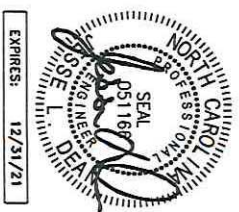
DESIGN SOIL VALUES:
 ALLOWABLE FOUNDATION PRESSURE (ASSUMED) 1500 PSF



FSI SMARTJACK SYSTEM INFO

PART	DESCRIPTION	COMMENTS	MIN YIELD STRESS, F _y	MIN TENSILE STRESS, F _t
SJ0350T	ASTM A500 GRADE C HD GALV, PER ASTM 123, HSS 3 1/2"x3 1/2"x0.095"x1" SQUARE TUBE		50 KSI	62 KSI
S4x7.7	ASTM A992 STEEL S SHAPE BEAM (L=120" & 144" - FIELD CUT TO LENGTH)	(N) STEEL BEAM	50 KSI	65 KSI
SJ350TP	ASTM A36 R ³ / ₈ "x4 1/2"x0'-4 1/2" ASTM A53 GRADE B 1 3/4"x1/4"x1.38" L CONFINING RING	WOOD BEAM CONDITION	36 KSI	58 KSI
SJ0125AIR	ASTM A108 GRADE 1018 1 1/4"x0'-10" L THREADED ROD W/ WELDED HEAVY HEX NUT		54 KSI	64 KSI
SJ0350BP-A	ASTM A36 R ³ / ₈ "x12x1'-0" ASTM A36 BENT R0.120"	CRUSHED STONE FTG PER PLAN	36 KSI	58 KSI
SJ350TPS4	ASTM A36 BENT R ³ / ₈ "x3x0'-6" ASTM A53 GRADE B 1 3/4"x1/4"x1.38" L CONFINING RING (AT INTERMEDIATE LOCATIONS)		36 KSI	58 KSI
SJ350TPBS4	ASTM A36 R ³ / ₈ "x4 1/2"x0'-5" BOTI BEAM SPLICE BRACKET (AT BEAM SPLICE & END LOCATIONS) OR	STEEL BEAM CONDITION	36 KSI	58 KSI
SJ1B7S4	ASTM A36 R ³ / ₈ "x4 1/2"x0'-5" TOP BEAM SPLICE BRACKET W/ (4) ASTM A108 1/2"x5 1/2" BOLTS W/ NUTS (ASTM A307 MIN) & ASTM A53 GRADE B 1 3/4"x1/4"x1.38" L CONFINING RING (AT BEAM SPLICE & END LOCATIONS)		36 KSI MIN 35 KSI	58 KSI 60 KSI MIN
SJ0350T1	ASTM A36 BENT R0.120" ASTM A572 GRADE 50 R ³ / ₈ "x3.63x0'-3.63" W/ 1 1/4" THREAD TAP		36 KSI 50 KSI	58 KSI 65 KSI

NOTE: INSTALL PER MFR RECOMMENDATIONS



VICINITY MAP

SCALE: NTS

sfa
 SFA Design Group LLC
 PROFESSIONAL ENGINEERING
 10110 NC-27, LILLINGTON, NC 27546

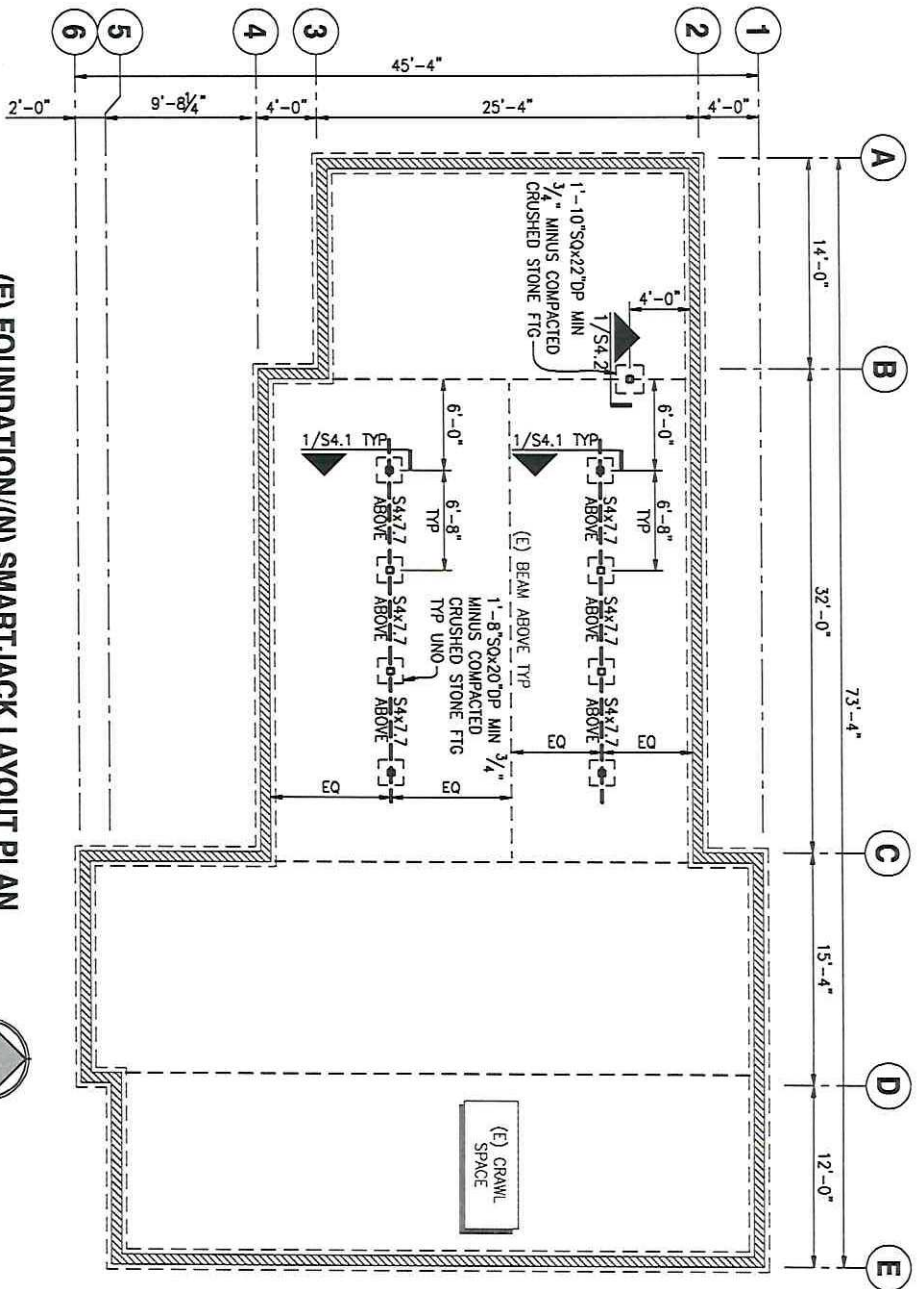
**NELSON RESIDENCE
 FLOOR SUPPORT**
 10110 NC-27
 LILLINGTON, NC 27546

GENERAL NOTES

REVISIONS

PROJECT NO.: SE21-057
 DESIGNED BY: JN
 DRAWN BY: DRA
 CHECKED BY: CWR, JLD
 DATE: 02-22-2021

SHEET NO.: **S1.1**



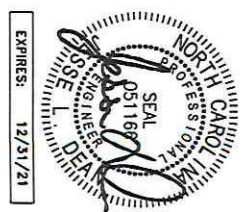
(E) FOUNDATION/(N) SMARTJACK LAYOUT PLAN

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

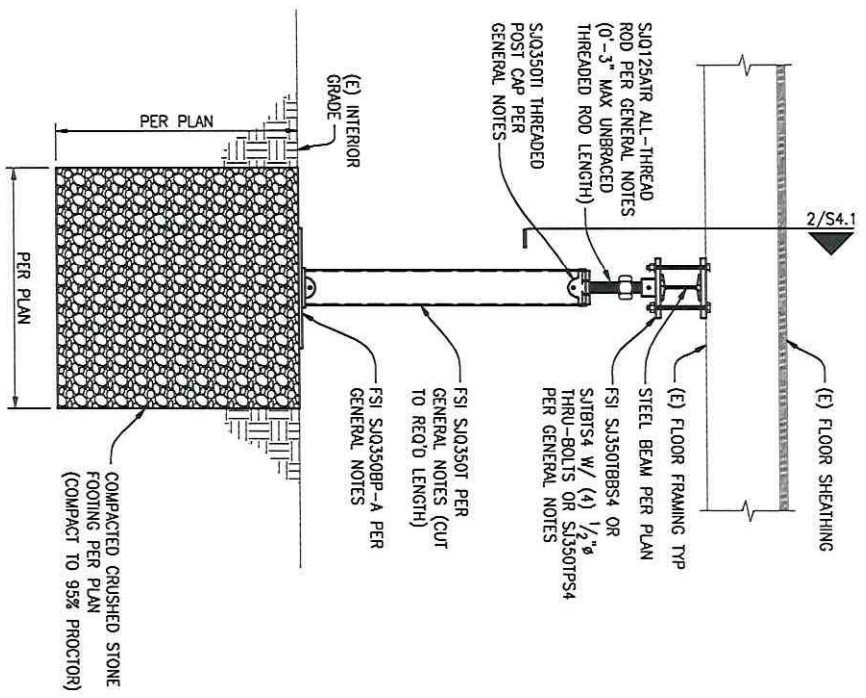


(E) FOUNDATION/(N) SMARTJACK LAYOUT PLAN NOTES:

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 WORK TYP
3. INDICATES (E) CMU STEMWALL ON (E) CONC FOOTING
4. SECTION CUT -- DETAIL NUMBER/SHEET NUMBER X/SX.X
5. INDICATES LOCATION OF FSI SJO350 SMARTJACK (9) TOTAL
* MAX LOAD TO SMARTJACK = 4,224 LBS
6. SMARTJACK SPACING SHALL BE AS INDICATED ON PLAN (6'-8" OC MAX) UNO
7. ALL FASTENERS AND HARDWARE IN CONTACT W/ PT WOOD, CONCRETE OR MASONRY SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL
8. REPLACE "N-KIND" ALL (E) WOOD MEMBERS (JOISTS, PURLINS, SUBPURLINS, SHEATHING, STUDS, WALL PLATES) WHICH SHOW SIGNS OF DRY ROT OR STRUCTURAL DAMAGE
9. ALL CONSTRUCTION MATERIALS ON PLANS, ELEVATIONS & DETAILS ARE (N) UNO



	<p>NELSON RESIDENCE FLOOR SUPPORT 10110 NC-27 LILLINGTON, NC 27546</p>								
<p>PROJECT NO: SE21-057 DESIGNED BY: JN DRAWN BY: JN CHECKED BY: JN DATE: 02-22-2021</p>	<p>(E) FOUNDATION/(N) SMARTJACK LAYOUT PLAN</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">REVISIONS</th> <th style="width: 50%;">DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	DATE						
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<p>SHEET NO: S2.1</p>									

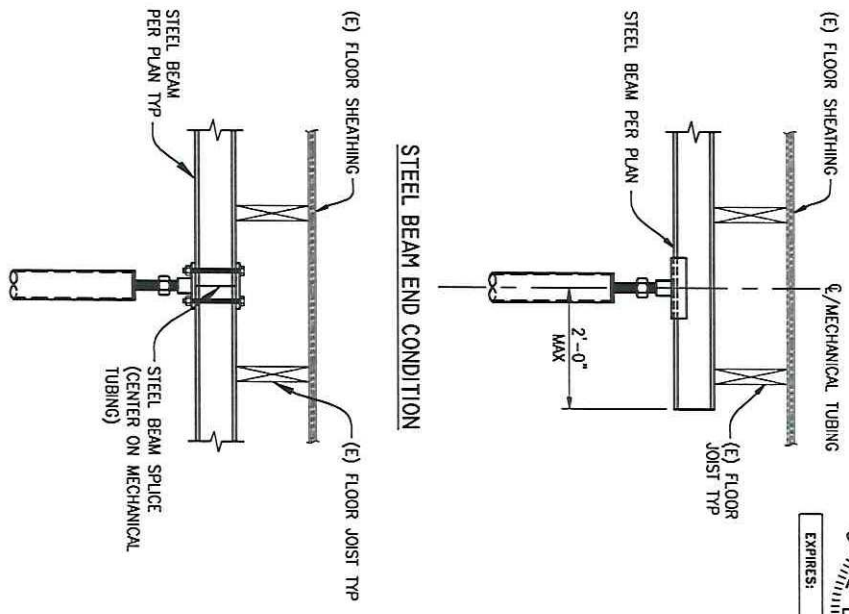


- NOTES:
1. REF PLAN FOR LAYOUT & INSTALLATION REQ'S
 2. INSTALL PER MFR RECOMMENDATIONS

FSI SMARTJACK W/ (N) STEEL BEAM

SCALE: 1"=1'-0"

1

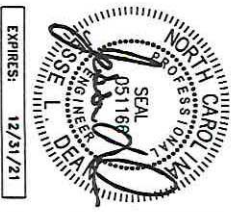


- NOTE:
1. REF 1/54.1 FOR CALLOUTS IN COMMON

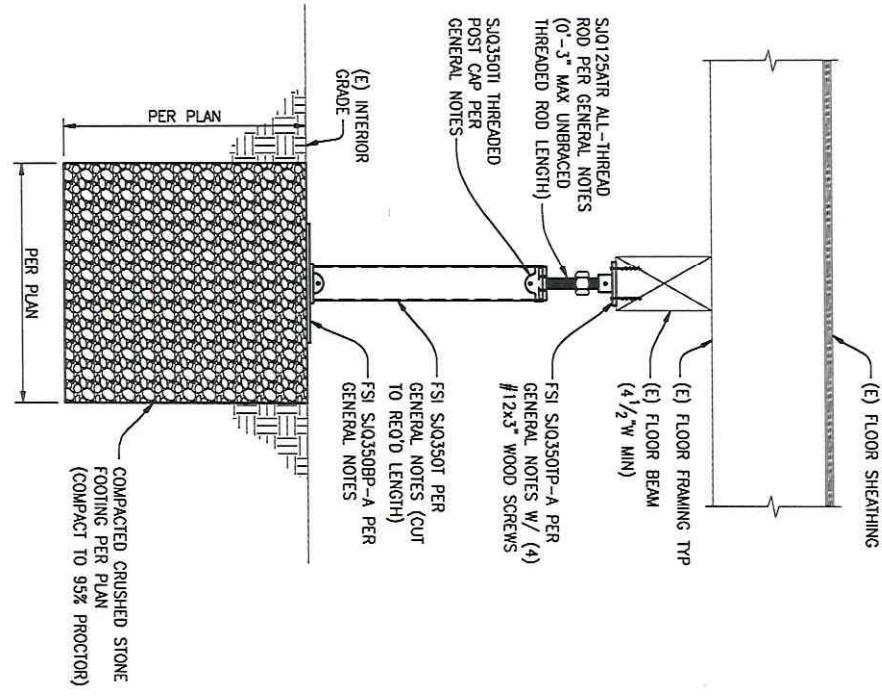
FSI SMARTJACK CONNECTIONS

SCALE: 1"=1'-0"

2



	<p>NELSON RESIDENCE FLOOR SUPPORT 10110 NC-27 LILLINGTON, NC 27546</p>	
	<p>PROJECT NO: SE21-057</p>	<p>DESIGNED BY: JN</p>
<p>DRAWN BY: JN</p>	<p>CHECKED BY: JLD</p>	
<p>DATE: 02-22-2021</p>	<p>REVISIONS</p>	
<p>SHEET NO: S4.1</p>	<p>SMARTJACK DETAILS</p>	



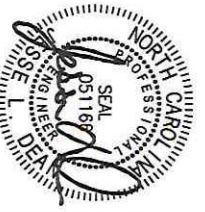
- NOTES:
1. REF PLAN FOR LAYOUT & INSTALLATION REQS
 2. INSTALL PER MFR RECOMMENDATIONS


FSI SMARTJACK TO (E) BEAM

SCALE: 1"=1'-0"

1

EXPIRES: 12/31/21



 SFA <small>Structural Framing Associates, LLC 1000 S. Salisbury Blvd., Suite 200 Raleigh, NC 27605</small>	<p>NELSON RESIDENCE FLOOR SUPPORT 10110 NC-27 LILLINGTON, NC 27546</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>										
<p>SHEET NO: S4.2</p>	<p>PROJECT NO: SE21-057 DESIGNED BY: JN DRAWN BY: JN CHECKED BY: CJR, JLD DATE: 02/22/2021</p>	<p>SMARTJACK DETAILS</p>										