

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
-------------------------------	--------

REFERENCE STANDARDS:

CONFORM TO IBC CHAPTER 18 "SOILS & FOUNDATIONS"

DESIGN SOIL VALUES:

ALLOWABLE FOUNDATION PRESSURE (ASSUMED)	1500 PSF
---	----------

WOOD FRAMING

- (1) IBC CHAPTER 23 "WOOD".
- (2) NDS - 2015 AND NDS SUPPLEMENT - 2015 "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION".

IDENTIFICATION: ALL SAWN LUMBER AND PRE-MANUFACTURED WOOD PRODUCTS SHALL BE IDENTIFIED BY THE GRADE MARK OR A CERTIFICATE OF INSPECTION ISSUED BY THE CERTIFYING AGENCY.

MATERIALS:

- **SAWN LUMBER:** CONFORM TO GRADING RULES OF WWSA, WCLIB OR NLGA.

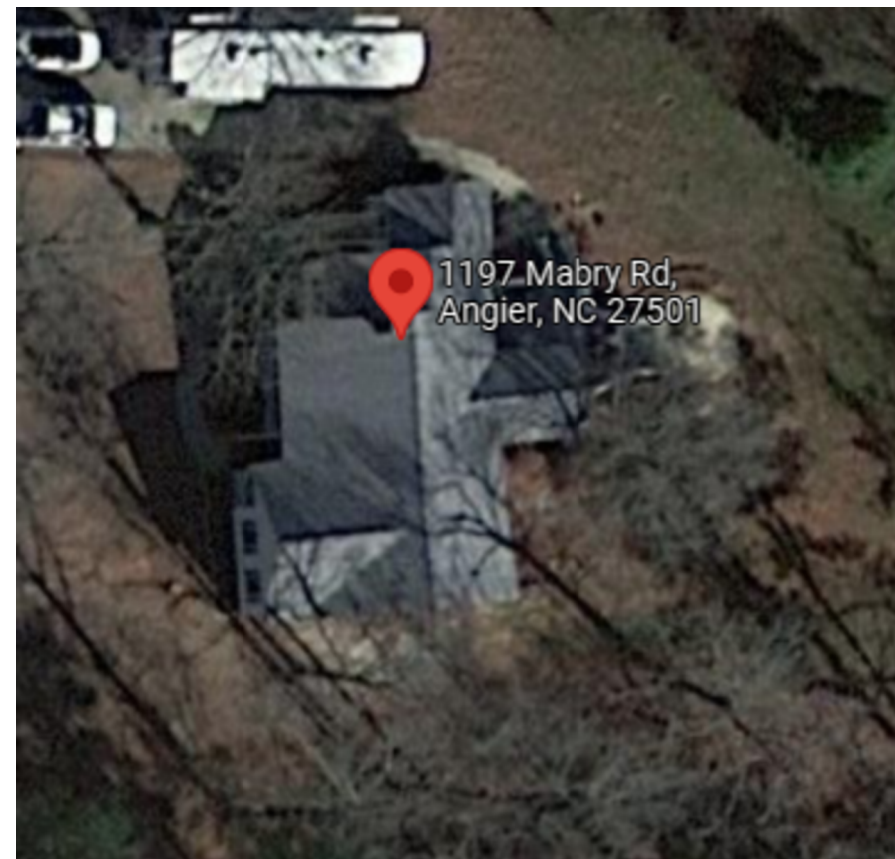
Member Use	Size	Species	Grade
Joists	2x10	Spruce-Pine-Fir	No. 1

- **WOOD FASTENERS:** CONFORM TO IBC SEC 2304.9 "CONNECTIONS AND FASTENERS". UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON. NAIL SIZES SPECIFIED ON THE DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
10D	3"	0.148"

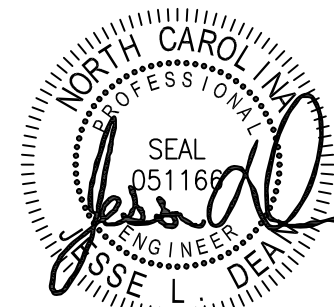
ALTERNATE NAILS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. SUBSTITUTION OF STAPLES FOR THE NAILING OF RATED SHEATHING IS SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION. TRUESPEC TYPE NAILS ARE RECOMMENDED FOR EASE OF IDENTIFICATION AFTER INSTALLATION.

- **MOISTURE CONTENT:** WOOD MATERIAL USED FOR THIS PROJECT SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19%. REFER TO TESTING & INSPECTIONS FOR THE VERIFICATION OF THESE LIMITS. THE MAXIMUM MOISTURE CONTENT REQUIRED MAY BE LESS THAN 19% IF BASED ON A PARTICULAR CLADDING/INSULATION SYSTEM. REFER TO THE ARCHITECT'S DRAWINGS AND/OR PROJECT SPECIFICATIONS FOR MORE RESTRICTIVE REQUIREMENTS.



VICINITY MAP

SCALE: NTS



EXPIRES: 12/31/21



SFA Design Group, LLC
STRUCTURAL | GEOTECHNICAL | SPECIAL INSPECTIONS
Portland, OR | Livermore, CA | Seattle, WA
p: (803) 641-8311 www.sfaidg.com

CARSWELL RESIDENCE FLOOR SUPPORT

1197 MABRY RD
ANGIER, NC 27501

FSI SMARTJACK SYSTEM INFO				
PART	DESCRIPTION	COMMENTS	MIN YIELD STRESS, F _y	MIN TENSILE STRESS, F _u
SJQ350T	ASTM A500 GRADE C HD GALV, PER ASTM 123, HSS 3 1/2x3 1/2x0.095"x'L' SQUARE TUBE		50 KSI	62 KSI
SJQ125ATR	ASTM A108 GRADE 1018 1 1/4"Øx0'-10"L THREADED ROD W/ WELDED HEAVY HEX NUT		54 KSI	64 KSI
SJQ350BP-C	ASTM A572 GRADE 50 P 3/16x16x3'-0" ASTM A572 GRADE 50 P 3/16x3 1/2" STIFFENERS	COMPETENT NATIVE SOIL W/ SAND FTG CONDITION PER PLAN	50 KSI	65 KSI
SJQ350TP-A	ASTM A36 P 3/8x4 1/2x0'-4 1/2" ASTM A53 GRADE B 1 3/4"Øx1 1/4"x1 3/8"L CONFINING RING	WOOD BEAM CONDITION	36 KSI 35 KSI	58 KSI 60 KSI
SJQ350TI	ASTM A36 BENT P 0.120" ASTM A572 GRADE 50 P 3/4x3.63x0'-3.63" W/ 1 1/4"Ø THREAD TAP		36 KSI 50 KSI	58 KSI 65 KSI

NOTE:
INSTALL PER MFR RECOMMENDATIONS

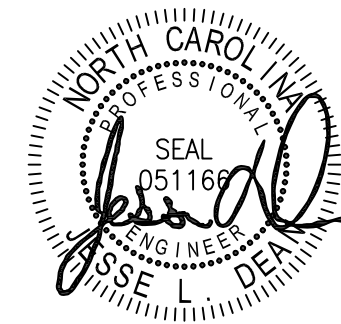
GENERAL NOTES

REVISIONS

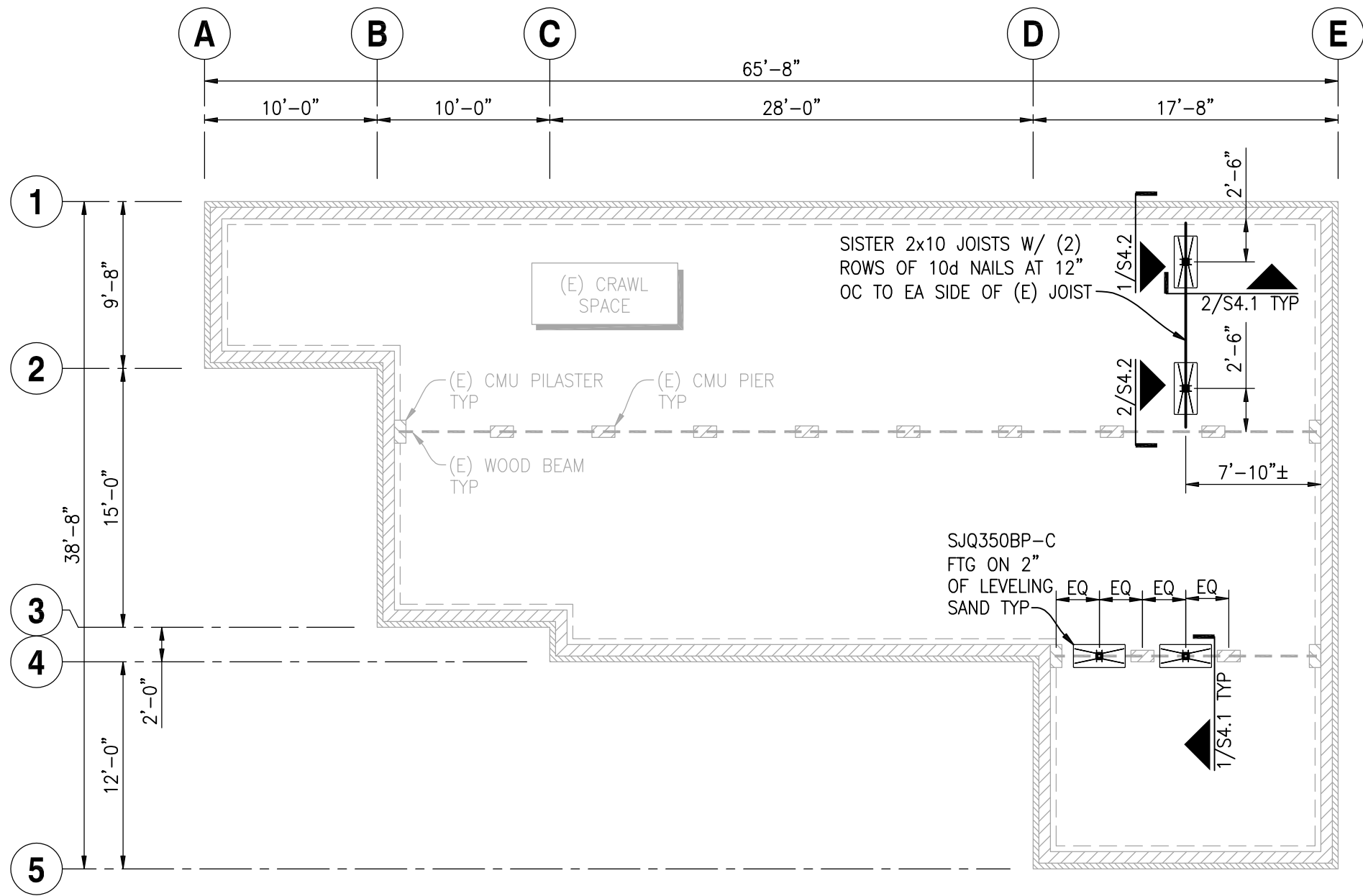
PROJECT NO:
SE21-334
DESIGNED BY:
ST
DRAWN BY:
ST
CHECKED BY:
JLD
DATE:
11-03-2021

SHEET NO:

S1.1



EXPIRES: 12/31/21

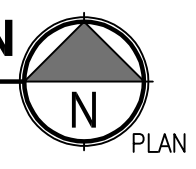


(E) FOUNDATION/(N) SMARTJACK LAYOUT PLAN NOTES:

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 W/ BRICK VENEER ON (E) CONC FOOTING (NOTIFY ENGINEER OF RECORD IF FIELD CONDITIONS DIFFER IN THE AREA OF WORK))
4. SECTION CUT - DETAIL NUMBER/SHEET NUMBER
X/SX.X
5. INDICATES LOCATION OF FSI SJQ350 SMARTJACK ((4) TOTAL) MAX LOAD TO SMARTJACK = 2,433 LBS
6. REPLACE "IN-KIND" ALL (E) WOOD MEMBERS (JOISTS, PURLINS, SUBPURLINS, SHEATHING, STUDS, WALL PLATES) WHICH SHOW SIGNS OF DRY ROT OR STRUCTURAL DAMAGE
7. CONTRACTOR SHALL NOT REMOVE ANY (E) POSTS OR PRE-CAST FOOTINGS SUPPORTING THE (E) FLOOR FRAMING
8. ALL CONSTRUCTION MATERIALS IN THESE DOCUMENTS ARE (N) UNO
9. ALL DIMENSIONAL LUMBER TO BE SPF #1 OR BETTER

(E) FOUNDATION/(N) SMARTJACK LAYOUT PLAN

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



CARSWELL RESIDENCE FLOOR SUPPORT

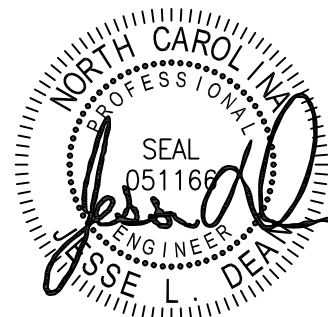
1197 MABRY RD
ANGIER, NC 27501

(E) FOUNDATION/(N)
PIER LAYOUT PLAN

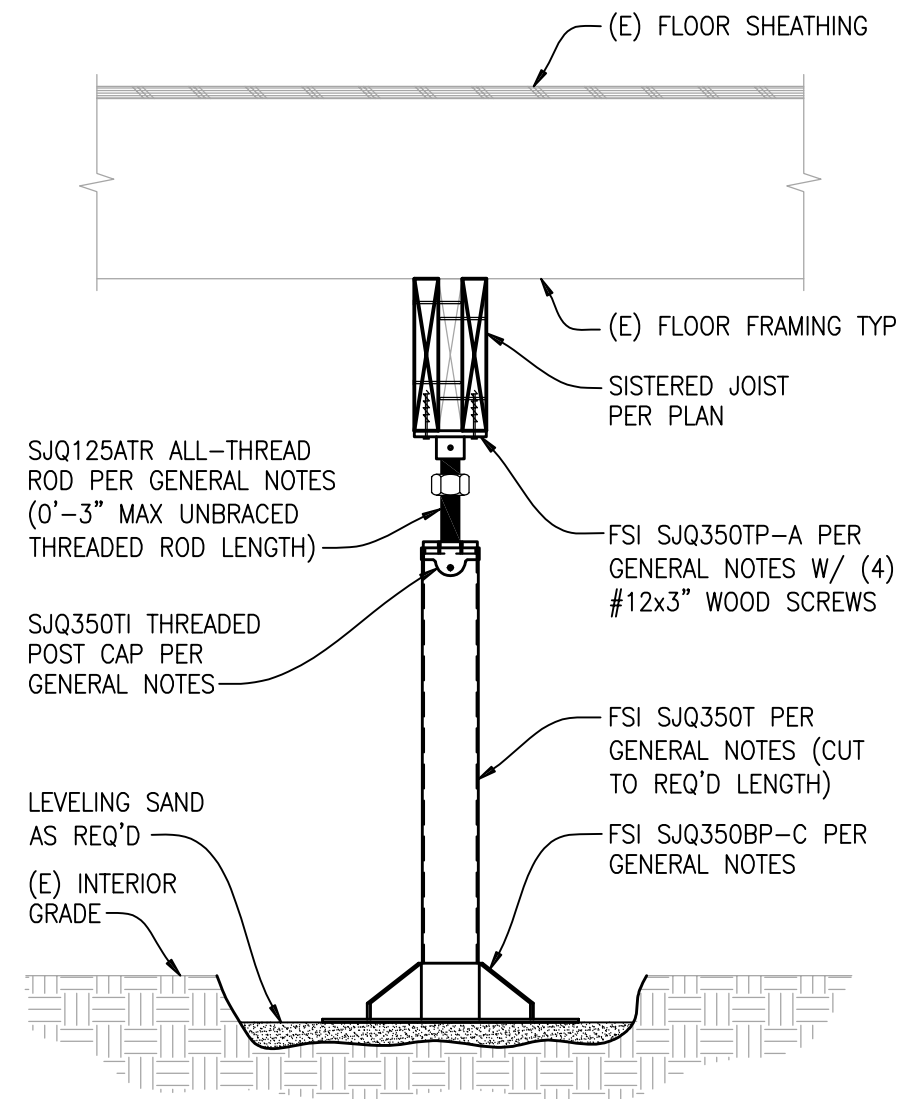
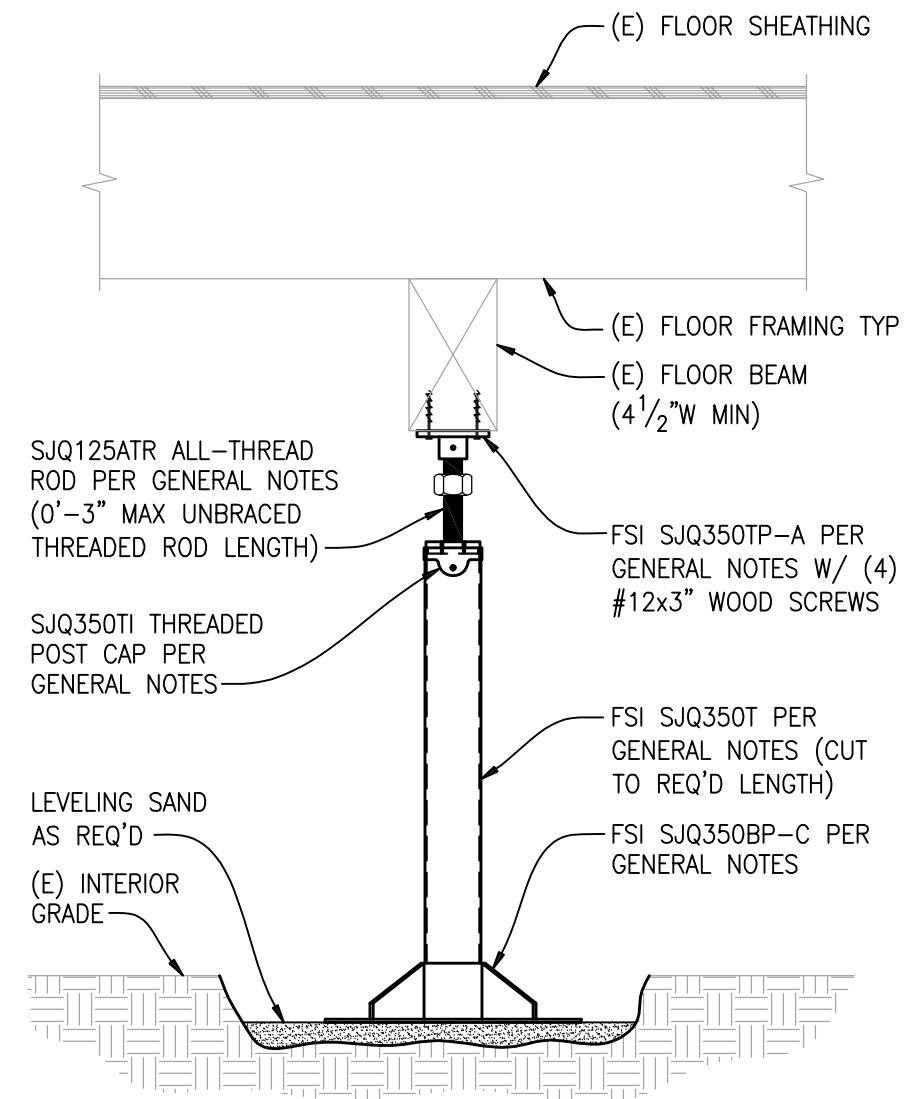
REVISIONS	

PROJECT NO:
SE21-334
DESIGNED BY:
ST
DRAWN BY:
ST
CHECKED BY:
JLD
DATE:
11-03-2021

SHEET NO:
S2.1



EXPIRES: 12/31/21



NOTES:

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

FSJ SMARTJACK IN CRAWLSPACE

SCALE: 1"=1'-0"

1

NOTES:

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

FSJ SMARTJACK IN CRAWLSPACE

SCALE: 1"=1'-0"

2

CARSWELL RESIDENCE FLOOR SUPPORT

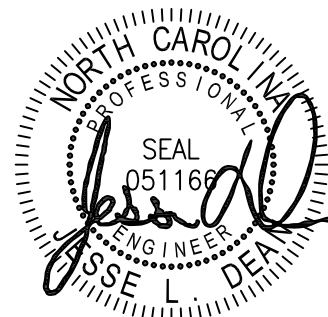
1197 MABRY RD
ANGIER, NC 27501

SMARTJACK
DETAILS

REVISIONS	

PROJECT NO:
SE21-334
DESIGNED BY:
ST
DRAWN BY:
ST
CHECKED BY:
JLD
DATE:
11-03-2021

SHEET NO:
S4.1



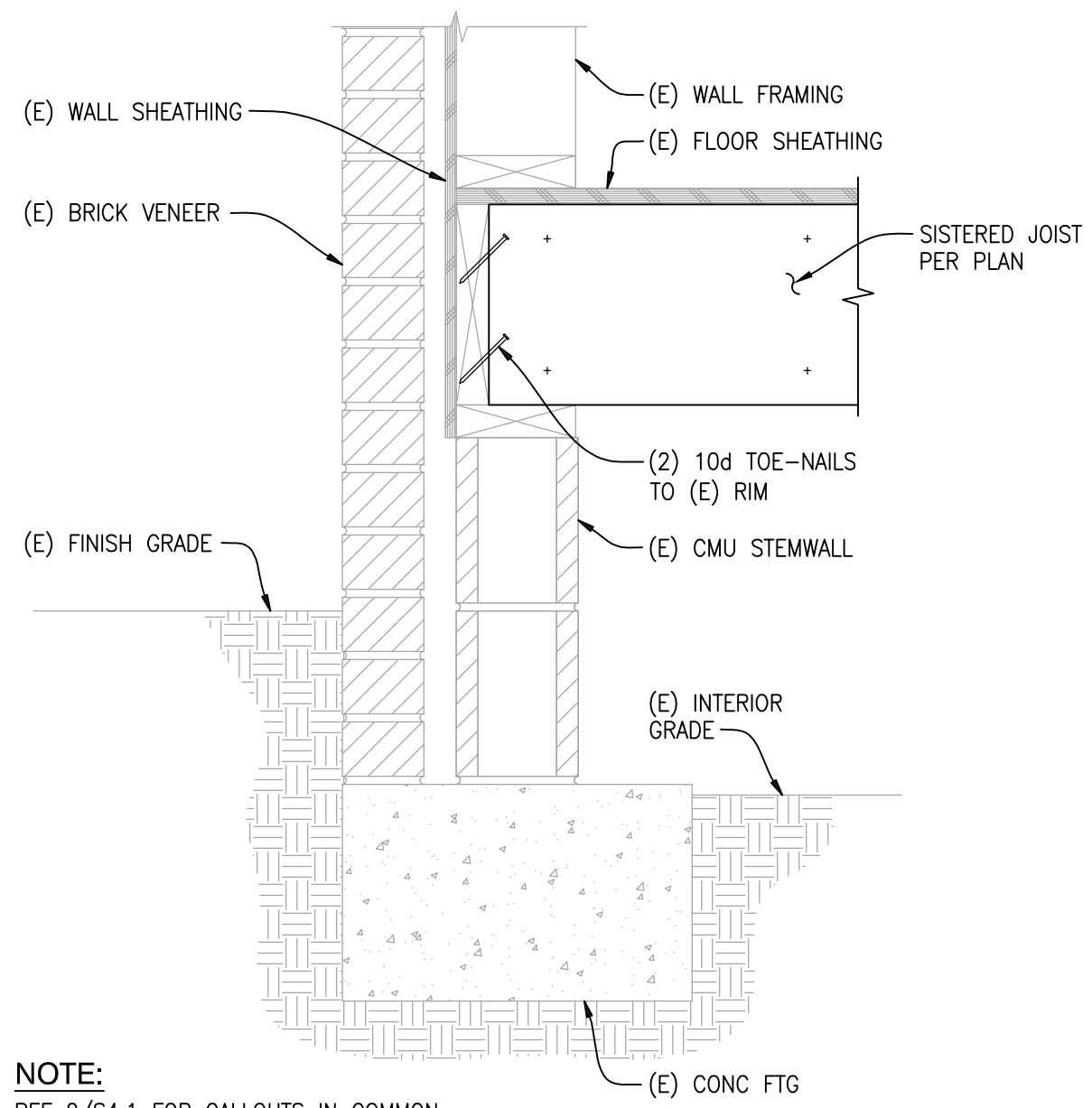
EXPIRES: 12/31/21



SFA Design Group, LLC
 STRUCTURAL | GEOTECHNICAL | SPECIAL INSPECTIONS
 Portland, OR | Livermore, CA | Seattle, WA
 p: (903) 641-8311 www.sfaidg.com

CARSWELL RESIDENCE FLOOR SUPPORT

1197 MABRY RD
 ANGIER, NC 27501

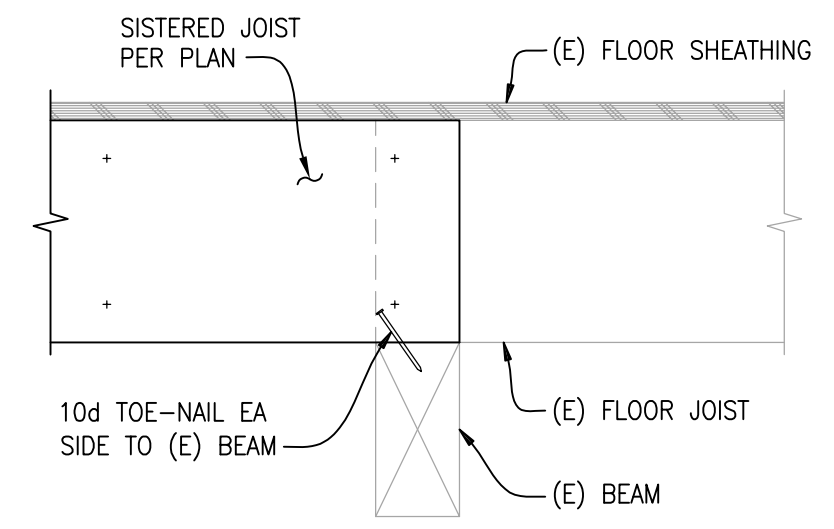


NOTE:
 REF 2/S4.1 FOR CALLOUTS IN COMMON

(N) SISTERED JOISTS AT EXTERIOR STEMWALL

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

1



NOTE:
 REF 2/S4.1 FOR CALLOUTS IN COMMON

(N) SISTERED JOISTS AT (E) BEAM

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

2

SISTER JOIST DETAILS

REVISIONS

PROJECT NO:
 SE21-334
 DESIGNED BY:
 ST
 DRAWN BY:
 ST
 CHECKED BY:
 JLD
 DATE:
 11-03-2021

SHEET NO:

S4.2