

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

NOTICE TO CONTRACTOR
 All construction shall comply with current NC Building Code and is subject to field inspection and verification.

APPROVED
 United Building Code Review
 Permit holder responsible for full compliance with the code
 07/16/2021



EXPIRES: 12/31/21



HAWARD RESIDENCE FLOOR SUPPORT
 8092 NC 210 S
 BUNNLEVEL, NC 28623

GENERAL NOTES

REVISIONS

PROJECT NO: SE21-204
 DESIGNED BY: ST
 DRAWN BY: ST
 CHECKED BY: CVA, CAF, JLD
 DATE: 06-25-2021

SHEET NO:
S1.1

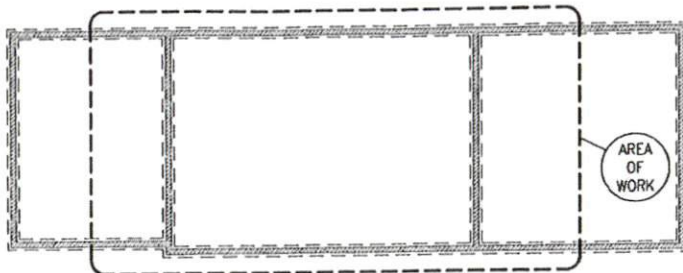
FSI SMARTJACK SYSTEM INFO				
PART	DESCRIPTION	COMMENTS	MIN YIELD STRESS, F _y	MIN TENSILE STRESS, F _u
SJQ350T	ASTM A500 GRADE C HD GALV, PER ASTM 123. HSS 3 1/2 x 3 1/2 x 0.095" x 1' SQUARE TUBE		50 KSI	62 KSI
S4x7.7	ASTM A992 STEEL S SHAPE BEAM (L=120" & 144" - FIELD CUT TO LENGTH)	STEEL BEAM CONDITION	50 KSI	65 KSI
SJQ125ATR	ASTM A108 GRADE 1018 1 1/4" Ø x 0' - 10" L THREADED ROD W/ WELDED HEAVY HEX NUT		54 KSI	64 KSI
SJQ350BP-C	ASTM A572 GRADE 50 R 3/16 x 16 x 3' - 0" ASTM A572 GRADE 50 R 3/16 x 3 1/2" STIFFENERS	COMPETENT NATIVE SOIL W/ SAND FTG CONDITION PER PLAN	50 KSI	65 KSI
SJ350TPS4	ASTM A36 BENT R 3/16 x 3 x 0' - 6" ASTM A53 GRADE B 1 3/4" Ø x 1/4" x 1.38" L CONFINING RING (AT INTERMEDIATE LOCATIONS)		36 KSI 35 KSI	58 KSI 60 KSI
SJ350TBBS4	ASTM A36 R 3/8 x 4 1/2 x 0' - 5" BOTT BEAM SPLICE BRACKET (AT BEAM SPLICE & END LOCATIONS)	STEEL BEAM CONDITION	36 KSI	58 KSI
SJTBS4	ASTM A36 R 3/8 x 4 1/2 x 0' - 5" TOP BEAM SPLICE BRACKET W/ (4) ASTM A108 1/2" Ø x 5 1/2" BOLTS W/ NUTS (ASTM A307 MIN) & ASTM A53 GRADE B 1 3/4" Ø x 1/4" x 1.38" L CONFINING RING (AT BEAM SPLICE & END LOCATIONS)		36 KSI 36 KSI MIN 35 KSI	58 KSI 60 KSI MIN 60 KSI
SJQ350TP-B	ASTM A36 0.120" BENT CAPTURE R ASTM A572 GRADE 50 R 3/4 x 2 1/2 x 0' - 4.13" ASTM A53 GRADE B 1 3/4" Ø x 1/4" x 1 3/8" L CONFINING RING	STEEL BEAM U-BRACKET CONDITION	36 KSI 50 KSI	58 KSI 65 KSI
SJQ350TP-C	ASTM A572 GRADE 50 BENT R 3/16 x 9.78 x 0' - 11" ASTM A572 GRADE 50 R 3/8 x 3 1/2 x 0' - 11" ASTM A53 GRADE B 1 3/4" Ø x 1/4" x 1.38" L CONFINING RING	STEEL BEAM SPLICE BRACKET CONDITION	50 KSI 50 KSI 35 KSI	65 KSI 65 KSI 60 KSI
SJQ350TI	ASTM A36 BENT R 0.120" ASTM A572 GRADE 50 R 3/4 x 3.63 x 0' - 3.63" W/ 1 1/4" Ø THREAD TAP		36 KSI 50 KSI	58 KSI 65 KSI



VICINITY MAP

SCALE: NTS

NOTE:
 INSTALL PER MFR RECOMMENDATIONS



KEY PLAN

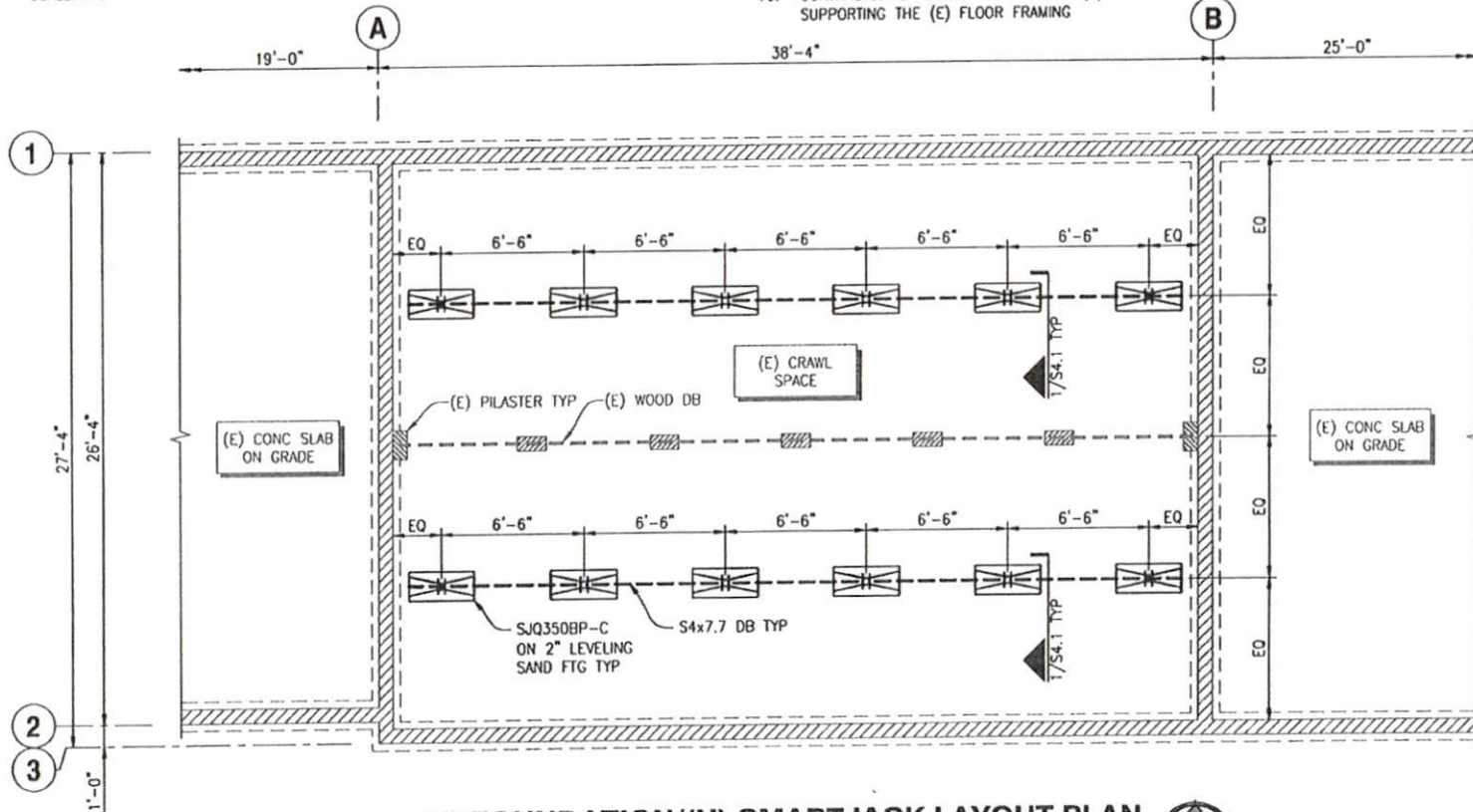
SCALE: NTS

(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 WALL ON (E) CONC FOOTING (NOTIFY ENGINEER OF RECORD IF FIELD CONDITIONS DIFFER IN THE AREA OF WORK))
5. SECTION CUT - DETAIL NUMBER/SHEET NUMBER
X/SX.X
6. INDICATES LOCATION OF FSI SJQ350 SMARTJACK ((12) TOTAL)
MAX LOAD TO SMARTJACK = 2,704 LBS
7. REPLACE "IN-KIND" ALL (E) WOOD MEMBERS (JOISTS, PURLINS, SUBPURLINS, SHEATHING, STUDS, WALL PLATES) WHICH SHOW SIGNS OF DRY ROT OR STRUCTURAL DAMAGE
8. ALL WOOD EXPOSED TO CONCRETE, WEATHER, OR WITHIN 6" OF FINISH GRADE SHALL BE PRESSURE-TREATED
9. ALL CONSTRUCTION MATERIALS ON PLANS, ELEVATIONS & DETAILS ARE (N) UNO
10. CONTRACTOR SHALL NOT REMOVE ANY (E) POSTS OR PRE-CAST FOOTINGS SUPPORTING THE (E) FLOOR FRAMING



EXPIRES: 12/31/21



(E) FOUNDATION/(N) SMARTJACK LAYOUT PLAN

SCALE: 3/16"=1'-0"



SFA Design Group, LLC
PROFESSIONAL ENGINEERING FIRM
P.O. Box 114, Lenoir, NC 28540
Tel: 252-338-4444 Fax: 252-338-4445

HAWARD RESIDENCE FLOOR SUPPORT

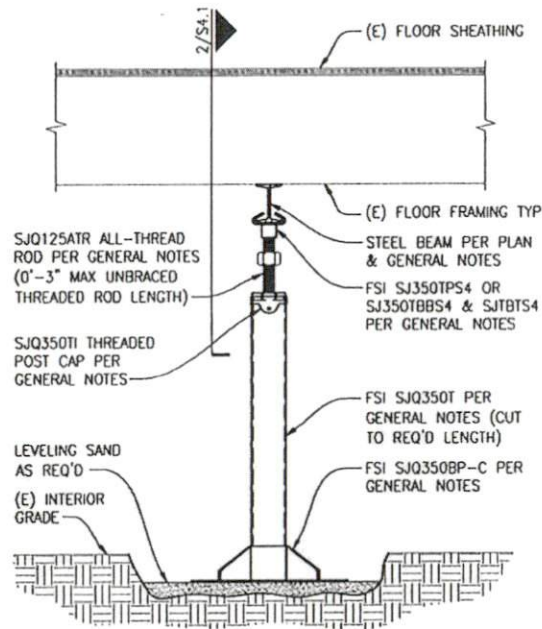
8092 NC 210 S
BUNNLEVEL, NC 28323

(E) FOUNDATION/
(N) SMARTJACK
LAYOUT PLAN

REVISIONS	

PROJECT NO:
SE21-204
DESIGNED BY:
ST
DRAWN BY:
ST
CHECKED BY:
CVR, CAF, JLD
DATE:
06-25-2021

SHEET NO:
S2.1



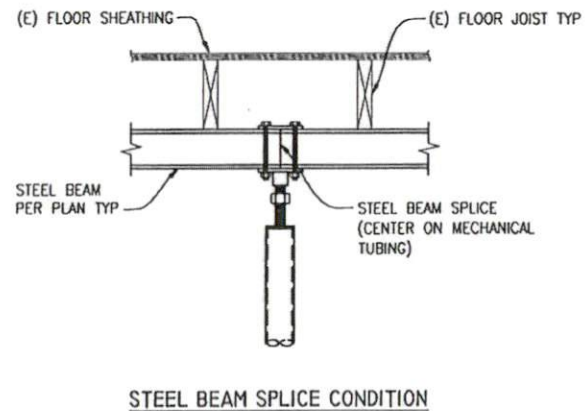
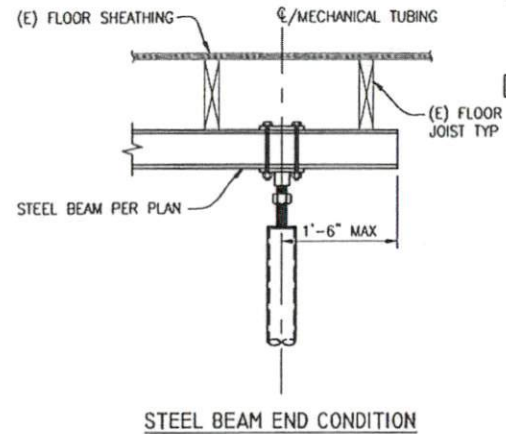
NOTES:

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

FSI Sjq350 SMARTJACK IN CRAWLSPACE

SCALE: 1"=1'-0"

1



NOTE:

REF 1/S4.1 FOR CALLOUTS IN COMMON

(N) SMARTJACK W/ SUPPLEMENTAL BEAM

SCALE: 1"=1'-0"

2



EXPIRES: 12/31/21



HAWARD RESIDENCE FLOOR SUPPORT

8092 NC 210 S
BUNNLEVEL, NC 28923

SMARTJACK
DETAILS

REVISIONS

NO.	DESCRIPTION

PROJECT NO:
SE21-204
DESIGNED BY:
ST
DRAWN BY:
ST
CHECKED BY:
CVR, CAF, JLD
DATE:
06-25-2021

SHEET NO:
S4.1