## **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 2018 NORTH CAROLINA RESIDENTIAL CODE

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"

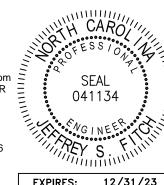
DESIGN SOIL VALUES:

ALLOWABLE FOUNDATION PRESSURE (ASSUMED) 1500 PSF

FSI SMARTJACK SYSTEM INFO						
PART	DESCRIPTION	COMMENTS	MIN YIELD STRESS, F <sub>y</sub>	MIN TENSILE STRESS, Fu		
SJQ350TP-A	ASTM A36 $\mathbb{R}^3/_8 \times 4^1/_2 \times 0' - 4^1/_2$ " ASTM A53 GRADE B $1^3/_4$ " $\phi \times 1^1/_4$ " $\times 1^3/_8$ "L CONFINING RING	WOOD BEAM CONDITION	36 KSI 35 KSI	58 KSI 60 KSI		
SJQ350TI	ASTM A36 BENT $\frac{1}{2}$ 0.120" ASTM A572 GRADE 50 $\frac{1}{4}$ 0.4×3.63×0'-3.63" W/ $\frac{1}{4}$ 0 THREAD TAP		36 KSI 50 KSI	58 KSI 65 KSI		
SJQ125ATR	ASTM A108 GRADE 1018 $1^{1}\!/_{\!4}$ "øx0' $-$ 10"L THREADED ROD W/ WELDED HEAVY HEX NUT		54 KSI	64 KSI		
SJQ350T	ASTM A500 GRADE C HD GALV, PER ASTM 123, HSS $3\frac{1}{2}$ x $3\frac{1}{2}$ x $0.095$ "x'L' SQUARE TUBE		50 KSI	62 KSI		
SJQ350BP-A	ASTM A36 $\mathbb{R}^{5}\!\!/_{16}$ x12x1'-0" ASTM A36 BENT $\mathbb{R}^{6}$ 0.120"	CRUSHED STONE FTG CONDITION PER PLAN	36 KSI 36 KSI	58 KSI 58 KSI		
IJ-IC	22"øx6" FIBER REINF PRECAST CONC FTG (ENDURACRETE) W/ $^3\!/_4$ "ø HOLE AT CENTER & $^3\!/_4$ " CHAMFER AT UPPER CIRCUMFERENCE (5,000 PSI MIN)	ENDUROCRETE FOOTING CONDITION				

NOTE: INSTALL PER MFR RECOMMENDATIONS

Digitally signed by jfitch@sfadg.com CN=jfitch@sfadg.com Location: Tigard, OR jfitch@sfadg.com approving this document Contact Info: Jeff Fitch, 503-860-9056 Date: 2023.06.26 14:20:18-07'00'



**EXPIRES:** 12/31/23 SFA Design Group, LLC
STRUCTURAL ENGINEERING
p: (503) 641-8311 | www.sfadg.com

RESIDENCE UNDERPINNING 193 LOTUS LN SANFORD, NC 27332 CONSAGRA

ENERAL NOTES	

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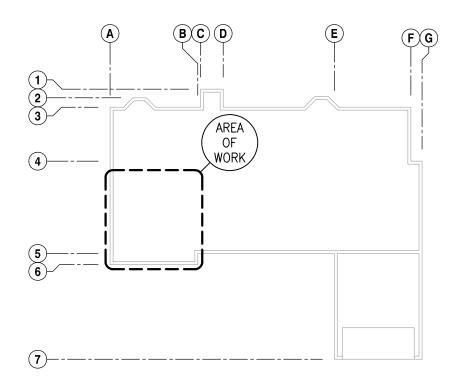
PROJECT NO: RBC23-121 DESIGNED BY: DRAWN BY: CAF CHECKED BY: DATE: 06.23.2023

SHEET NO:

**S1.**1

#### (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)
- 4. Land Section Cut Detail Number/Sheet Number
- 5. INDICATES LOCATION OF FSI SJQ350 SMARTJACK ((1) TOTAL)
  DESIGN LOAD = 3,189 LBS
- 6. SMARTJACK INSTALLATION LOACATION SHALL BE AS INDICATED ON PLAN
- 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 MULTI-LAM BUILT-UP BEAMS TO HAVE (3) ROWS OF 10d NAILS AT 12" OC EACH  $1\frac{1}{2}$ " LAM
- 10. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING
- 11. CONTRACTOR SHALL NOT REMOVE ANY (E) POSTS OR PRE-CAST FOOTINGS SUPPORTING THE (E) FLOOR FRAMING
- 12. FILL ALL VISIBLE CRACKS IN THE FOUNDATION WALL WITH HYDRAULIC CEMENT OR EPOXY
- 13. ALL CONSTRUCTION MATERIALS IN THESE DOCUMENTS ARE (N) UNO



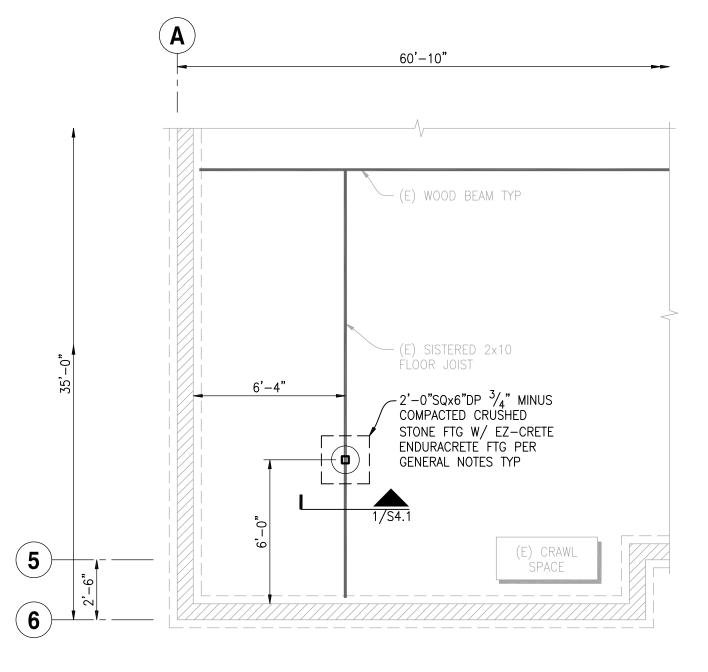
# **KEY PLAN**

SCALE: NTS

Digitally signed by iffitch@sfadg.com DN:

CN=ifitch@sfadg.com
Location: Tigard, OR
Reason: I am approving this document
Contact Info: Jeff
Fitch, 503-860-9056
Date: 2023.06.26
14:20:44-07'00'

EXPIRES: 12/31/23



# PARTIAL (E) FOUNDATION/(N) SMARTJACK LAYOUT PLAN



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(E) FOUNDATION/ (N) SMARTJACK LAYOUT PLAN

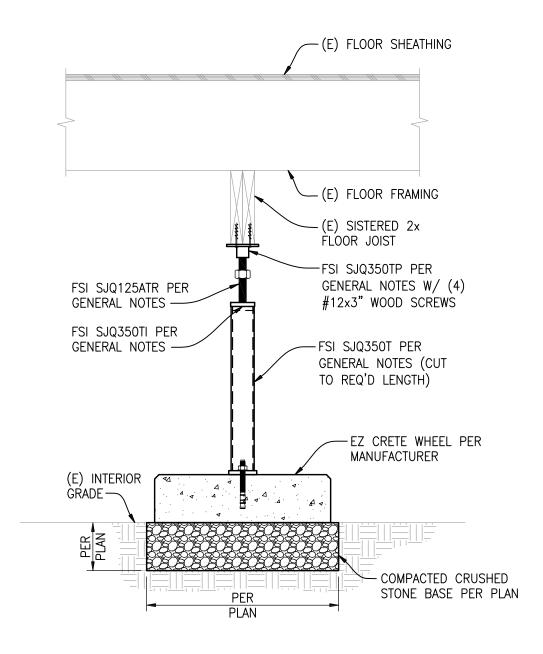
CONSAGRA

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PROJECT NO: RBC23-121 DESIGNED BY: CAF DRAWN BY: CAF CHECKED BY: JSF DATE: 06.23.2023

SHEET NO: **\$2.1** 

SCALE:  $\frac{1}{4}$ "=1'-0"



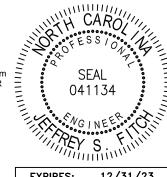
## **NOTES:**

- REF PLAN FOR LAYOUT & INSTALLATION REQ'S
- INSTALL PER MFR RECOMMENDATIONS

# **FSI SMARTJACK IN CRAWLSPACE**

SCALE: 1"=1'-0"

Digitally signed by jfitch@sfadg.com DN: CN=jfitch@sfadg.com Location: Tigard, OR jfitch@sfadg.com Reason: I am approving this Contact Info: Jeff Fitch, 503-860-9056 Date: 2023.06.26 14:20:58-07'00'



**EXPIRES:** 12/31/23

sfa SFA Design Group, LLC
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RESIDENCE UNDERPINNING CONSAGRA

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SMARTJACK
DETAIL

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PROJECT NO: RBC23-121 DESIGNED BY: DRAWN BY: CAF CHECKED BY: DATE: 06.23.2023

SHEET NO:

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