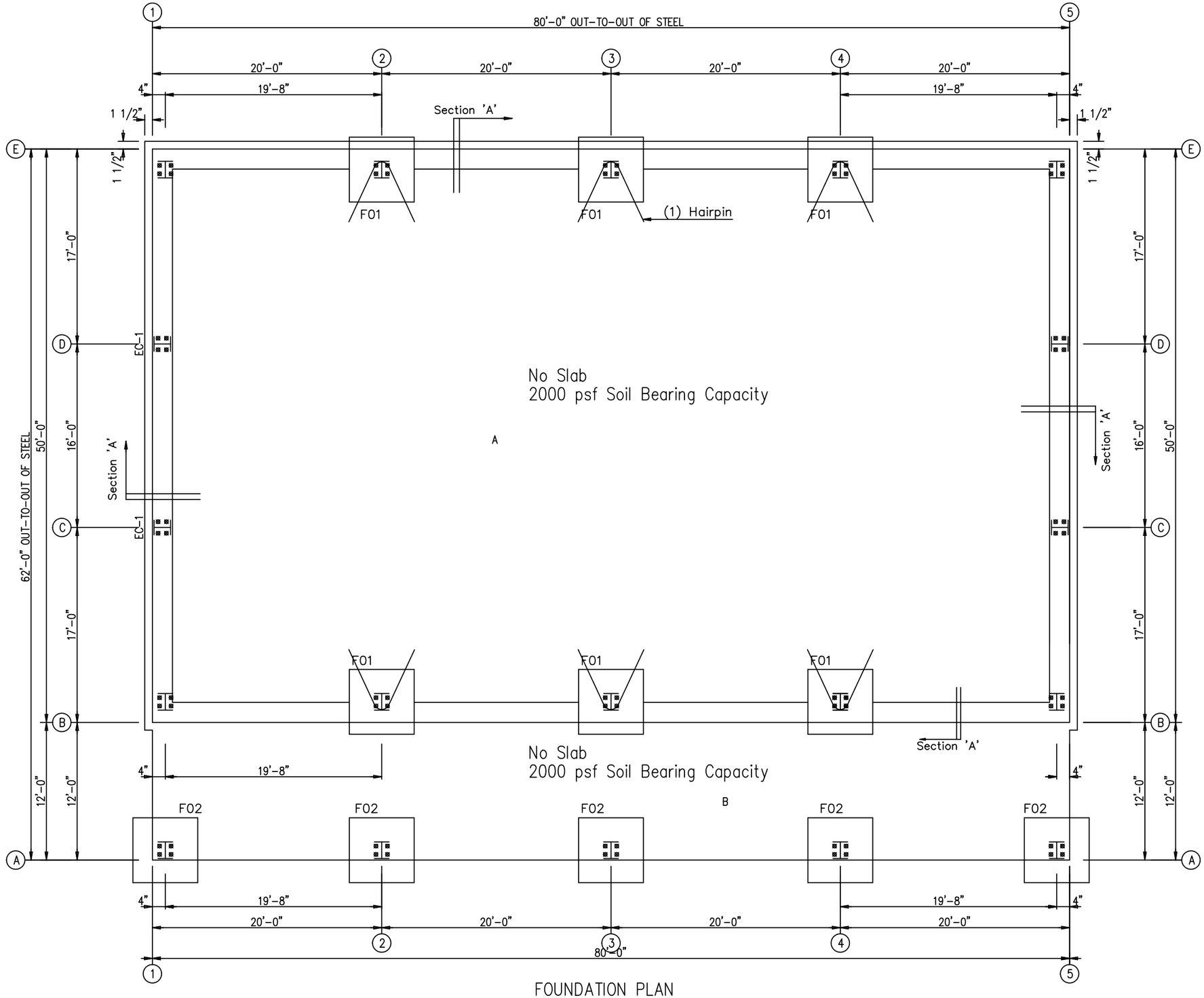

ISSUE	DATE	DWN.	CHK.	ENG.
CONSTRUCTION	8/15/20		CCJ	RTS

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3033 S. PARKER RD 12 FLOOR
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PHONE: (800)-497-2135
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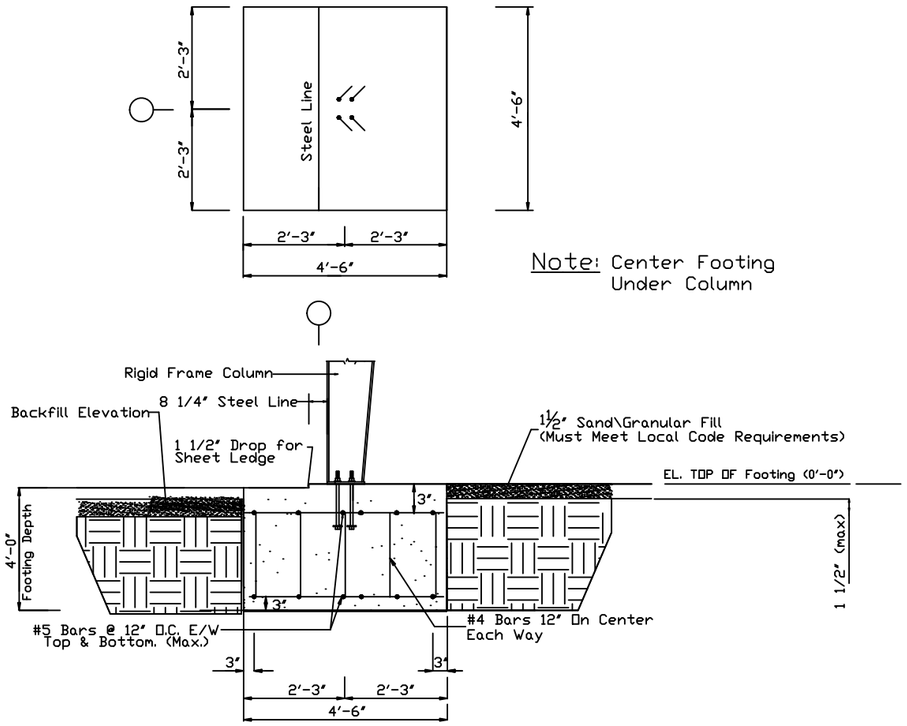
CUSTOMER NAME:	CASEY BOGENHAGEN/JEFF LAROCHE
PROJECT NAME:	EL JEFE LLC
PROJECT LOCATION:	TBD, STEAMBOAT SPRINGS, CO 80488
PROJECT COUNTY:	ROUTT
PROJECT END USE:	AGRICULTURAL
CUSTOMER PHONE NUMBER:	970.393.0846
CUSTOMER EMAIL:	JLAROCHE@E3CHOPHOUSE.COM
SCALE:	N.T.S.
SHEET NUMBER:	F1 OF 3
JOB NUMBER	92924ENG
SHEET TITLE:	FOUNDATION PLAN

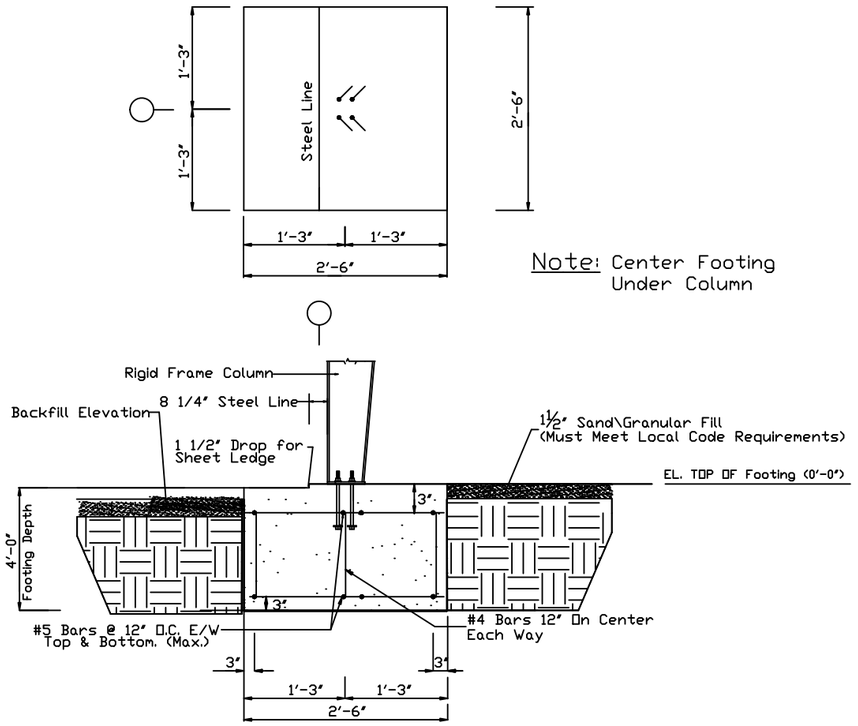
COLORADO LICENSED
RICHARD T. SMITH
35951
PROFESSIONAL ENGINEER

REVIEWED
By Richard T Smith at 6:01 pm, Aug 15, 2020



Note: Center Footing Under Column

Section Thru F-01



Note: Center Footing Under Column

Section Thru F-02

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STRUCTURAL NOTES

STRUCTURAL GENERAL NOTES AND SPECIFICATIONS:

DIVISION 01 - GENERAL

1. The Engineer of Record only assumes responsibility for that which was prepared by the Engineer of Record.
2. Refer to Structual Cover Sheet for applicable structural codes.
3. The structure shown on these drawings is structurally sound only in its completed form. The contractor shall brace all earth, forms, concrete, steel, wood, masonry, to resist gravity, earth, wind and construction loads during construction.
4. Contractor shall exercise proper precaution to verify all existing conditions and layout or work. Immediately notify Engineer of any discrepancies. Contractor is responsible for any error resulting from failure to exercise such precaution.
5. Any discrepancies, errors or omissions discovered in the contract documents shall be brought to the attention of the Engineer before proceeding with related work. Otherwise, the correction of such items is the responsibility of the contractor and/or subcontractor.
6. Where a detail, typical detail, section, typical section or a note is shown for one condition, it shall apply for all like or similar conditions unless otherwise noted.
7. Should structural conflicts occur affecting fit-up of structural material, contractor shall notify engineer. Under no circumstances should structural material be modified to accommodate fit-up without the engineer's approval.

DIVISION 03 - CONCRETE

Foundation Criteria:

1. Interior column footings have been designed for placement on original, undisturbed soil or compacted fill material of 2000 PSF minimum bearing capacity. A soils testing laboratory shall verify bearing capacity prior to placing of concrete. In the event, bearing capacity is less than 2000 PSF, notify engineer for further instructions.
2. All fill areas shall be cleared and stripped of organic material under building or paving areas. Proof rolling of existing soil and compaction of fill material to 95% Standard Proctor shall be completed to within 12" of the bottom of the floor slab to a distance of 8'-0" outside of building area before footing excavation is begun. The remaining 12" below the slab shall be compacted to 98% Standard Proctor. Parking areas shall be compacted to a minimum of 90% Standard Proctor. Any engineered structural fill shall be placed in 8" lifts, maximum.

Concrete:

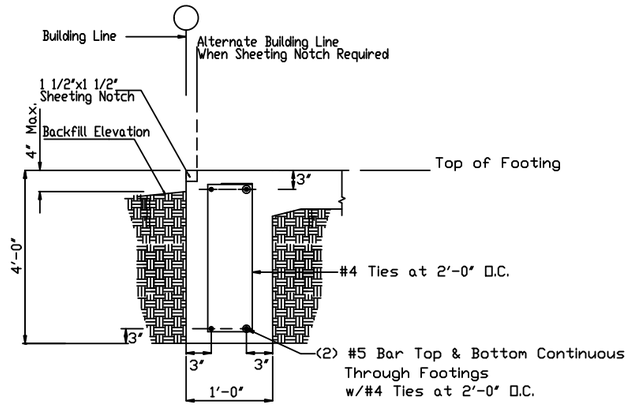
1. All concrete construction shall conform to ACI 318-14, Specifications for Structural Concrete for Buildings, ACI Building Code 318-14, ACI 322 and Guide for Concrete Floor and Slab Construction ACI 318-14.
2. When hot or cold weather conditions exist during placement and curing of concrete that would impair the quality and strength of concrete, special measures shall be taken as specified in ACI 305 "Hot Weather Concreting" and ACI 306 "Cold Weather Concreting".
3. Structural concrete shall be as follows, unless otherwise noted, 28 day minimum compressive strength:
   a) Footings & Foundations: 3000 PSI
   b) Floor Slab: (as noted on drawings)
   Slump attained shall be 4" (+/- 1"). Concrete for masonry filled cells may be placed with 8" to 11" slump.
4. Unless noted otherwise, details of concrete reinforcement and accessories shall be in accordance with ACI 315, Manual of Standard Practice for Detailing Reinforced Concrete Structures and CRSI MSP-1, Manual of Standard Practice, latest edition.
5. Reinforcing steel shall conform to ASTM A615, grade 60, and ASTM A616.
6. Unless otherwise noted, reinforcing lap splices shall be ACI Class B splices using the following lap lengths:
   #4 24"
   #5 30"
   #6 36"
   #7 42"
7. All welded reinforcing steel shall be ASTM A706 and be free of oil, scale, and rust. Welding of bars shall conform to ANSI/AWS D1.4 "Structural Welding Code - Reinforcing Steel".
8. Wire mesh shall conform to ASTM A185; minimum lap to be 6 inches.
9. Provide corner bars at corners of concrete walls and footings. Size and spacing of bars shall match size and spacing of longitudinal bars in walls or footings.
10. Concrete slab and design criteria shall be as noted on the structural plans.
11. Place 6 mil (nom.) polyethylene vapor barrier under all building slabs on grade, lap 12" minimum.
12. Concrete test reports shall be maintained at job site at all times and available for review by Building Inspectors.
13. Slabs on grade shall be placed using strip placement. Sawed joints (noted as S.J. foundation plan) shall be cut as soon as possible after slab is able to support weight of saw and be cut without ravelling. Sawing shall be performed within 4 to 12 hours and absolutely before 24 hours has passed from time after first placement. Saw joint nearest midpoint of strip first and then half-way between cuts next.

Concrete: (Cont'd)

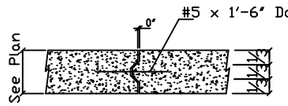
14. Unless noted otherwise, minimum clear cover for reinforcement shall be as follows:
    a. concrete cast against earth-3"
    b. formed concrete exposed to earth or weather- 1 1/2" for #5 bars and smaller, 2" for #6 bars and larger.
15. Immediately upon final troweling of slabs, coat with curing compound which meets or exceeds ASTM C-309 "Liquid Membrane-Forming Compounds for Curing Concrete." Coverage shall not be less than 1 gallon per 160 square feet of slab area or more if recommended by curing compound manufacturer (minimum of 8 to 10 mils thick).
16. Floors shall be finished to FF 35 and FL 25, minimum.
17. Do not add calcium chloride or other salty compounds to concrete without specific authorization by Structural Engineer. In no case shall calcium chloride exceed 1 percent.
18. Use Portland Cement Type I or II conforming to ASTM C150-92. Aggregates shall be normal weight conforming to ASTM C33.
19. For every vertical or horizontal bar discontinued by an opening, one bar (min. of two bars) shall be added at the side of the openings. Slabs at corners of openings, cut-outs and penetrations shall be reinforced with 2-#4 (3-0" long) diagonals unless otherwise noted.
20. Pipes, ducts, conduits, etc. shall not be placed in slabs unless approved by the engineer. (Place all pipes below slab).
21. Concrete exposed to weather shall be air-entrained 3.0% to 5.0%. Interior slabs shall have air content of 0% to 3% maximum.
22. All concrete anchorage shall be attained by using cast in place place headed studs with respective washers to increase the concrete breakout strength and shall conform to ASTM F1554-99 Standard Specification for Anchor Bolts & ASTM A307-00 Standard Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
23. Minimum edge distances for cast-in-place headed anchors that will be torqued, the minimum edge distances shall be 6 times the diameter. Minimum edge distances for cast-in-place headed anchors that will not be torqued, the minimum edge distances shall be 2" when cast in concrete exposed to earth or weather.
24. For cast-in-place threaded anchors, a metal or plywood template mounted above the surface of the concrete with nuts on each side of the template should be used to hold the anchors in a fixed position while the concrete is placed, consolidated, and hardens. Post-installed anchors shall be installed in accordance with the manufacturer's installation instructions.

DESIGN CRITERIA

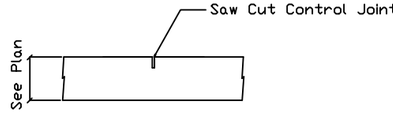
	Area A	Area B
Width (ft)	= 50.0	= 12.0
Length (ft)	= 80.0	= 80.0
Eave Height (ft)	= 18.0/ 18.0	= 13.0/ 15.0
Roof Slope (rise/12)	= 4.0 / 4.0	= 2.0
Dead Load (psf)	= 2.0	= 2.0
Collateral Load (psf)	= 3.0	= 1.0
Roof Live Load(psf)	= 20.0	= 20.0
Snow Live Load(psf)	= 100.0	= 100.0
Wind Speed (mph)	= 115.0	= 115.0
Wind Code	= IBC 15	= IBC 15
Exposure	= C	= C
Closed/Open	= Closed	= Partially Enclosed
Importance Wind	= 1.00	= 1.00
Importance Seismic	= 1.00	= 1.00
Seismic Design Category	= B	= B
Seismic Coeff (Fa*Ss)	= 0.43	= 0.43



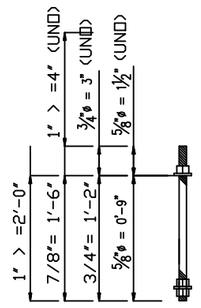
SECTION A



Keyed Construction Joint



SECTION F



Typ. Anchor Bolts

Threaded Rod w/ Double Nut
ASTM - F1554 Grade 36

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