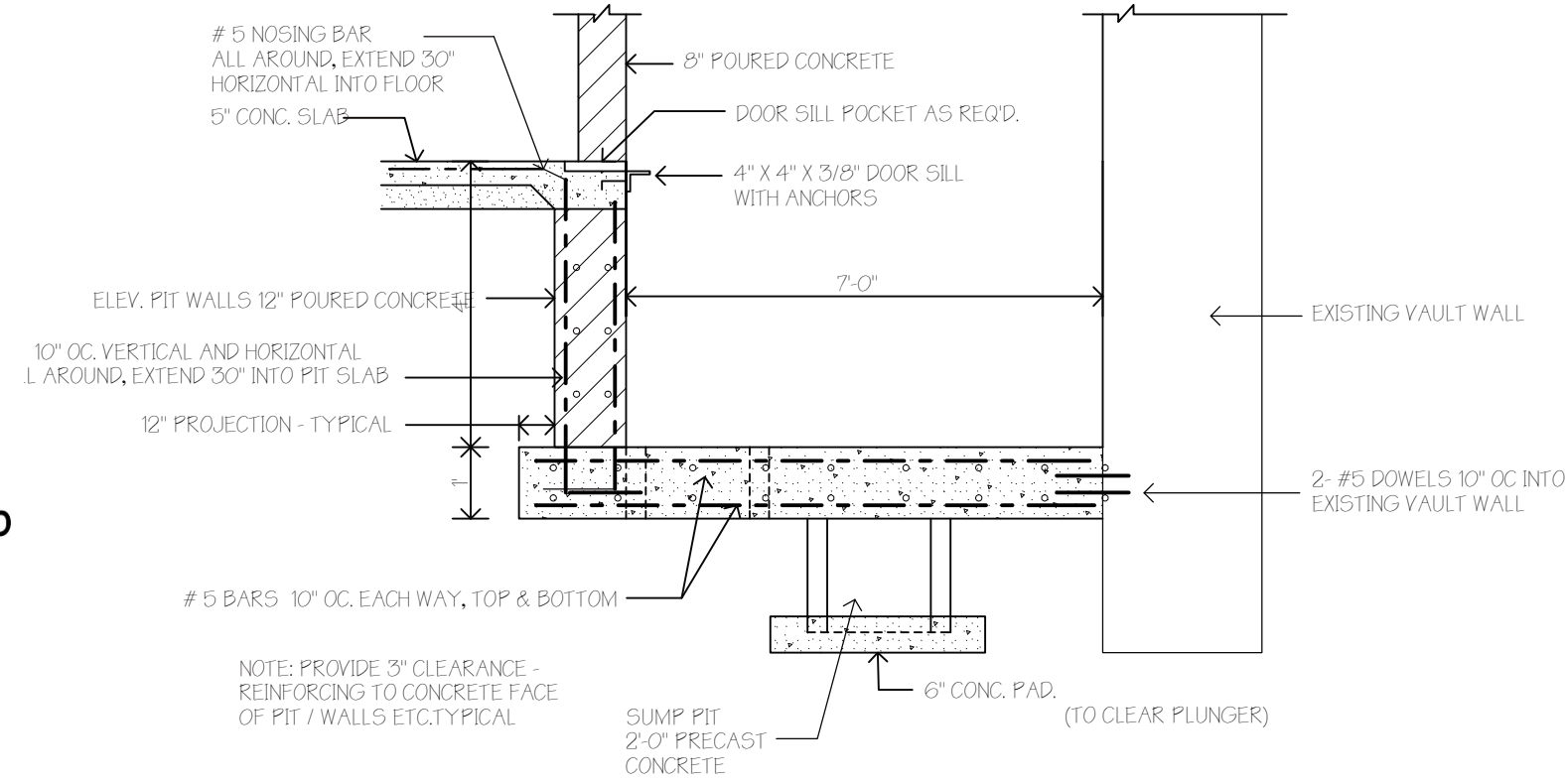


CONCRETE NOTES

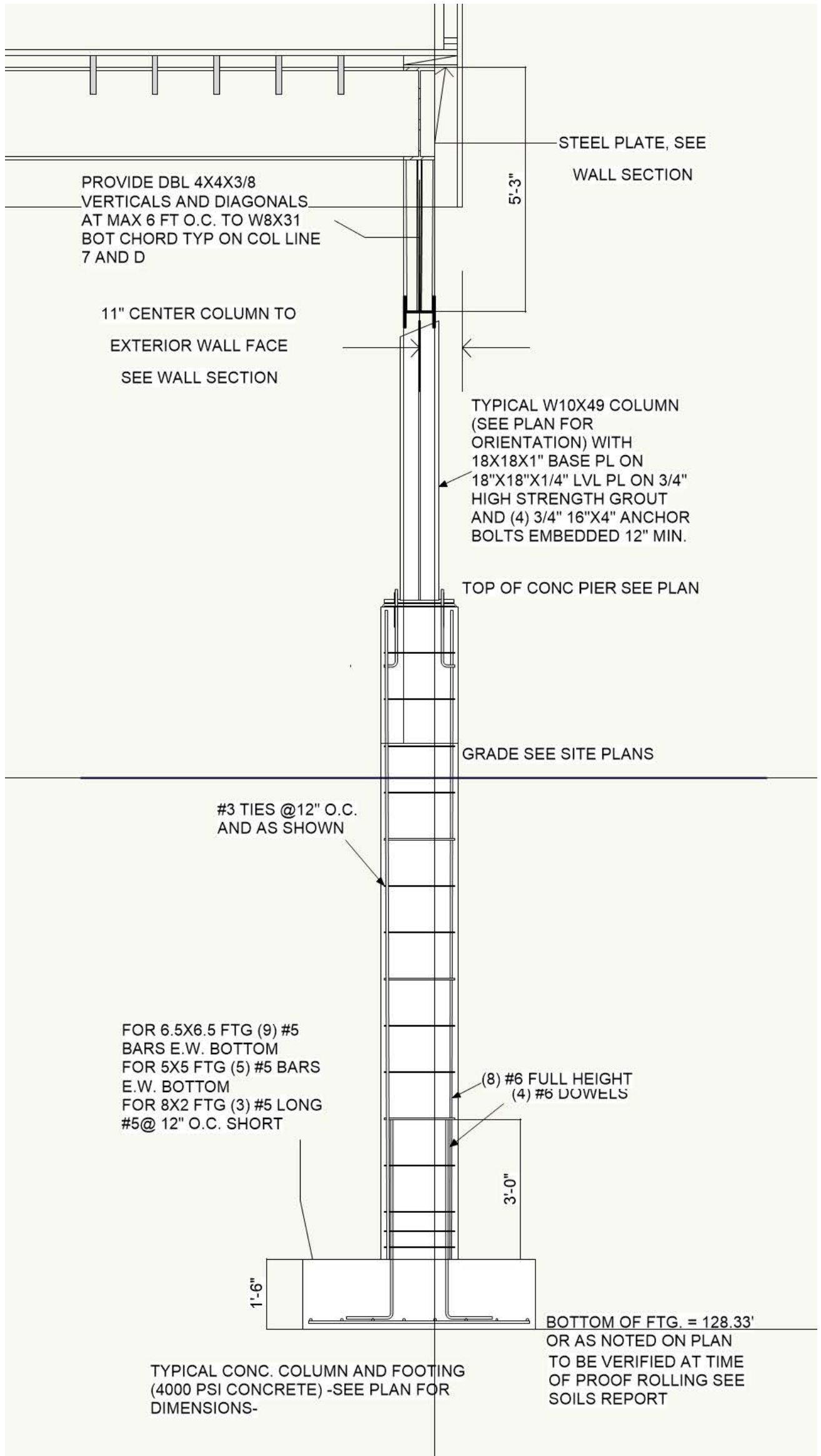
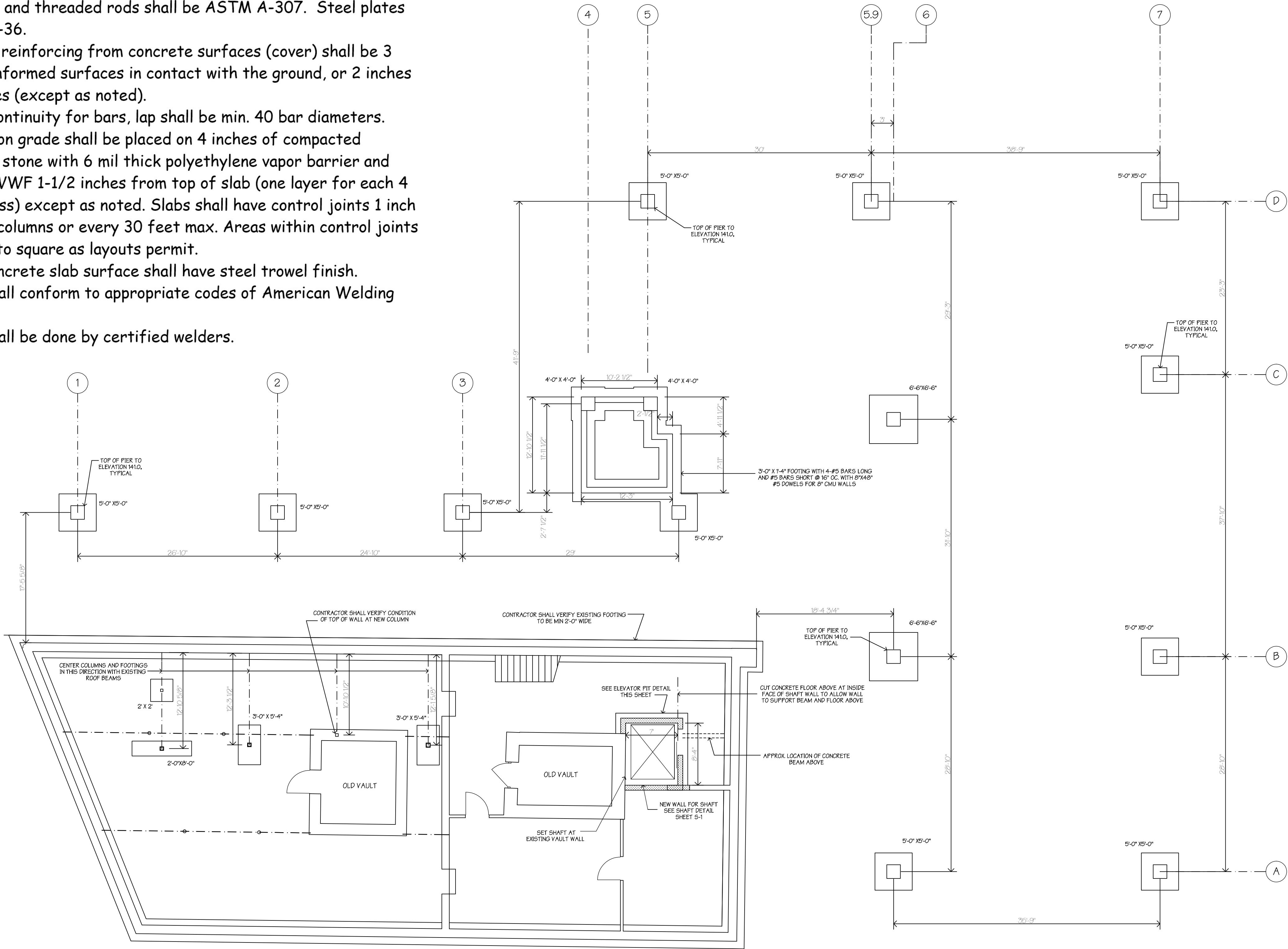
- Foundations shall be placed on undisturbed soil or compacted structural fill. Compacted structural fill shall be well-graded, clean, granular material, compacted in 8-inch lifts with a vibratory compactor. Soil bearing capacity = 4000 psf
- All concrete shall conform to ACI-301.
- All concrete shall have a compressive strength of 4000 psi at 28 days.
- Reinforcing bars shall be ASTM A-615 grade 60.
- The concrete contractor shall coordinate all work for embedded items
- Ready-mixed concrete shall conform to ACI-304 and ASTM C-94 and items noted below
- Anchor bolts and threaded rods shall be ASTM A-307. Steel plates shall be ASTM A-36.
- Clearance to reinforcing from concrete surfaces (cover) shall be 3 inches min. for unformed surfaces in contact with the ground, or 2 inches min. in other cases (except as noted).
- To provide continuity for bars, lap shall be min. 40 bar diameters.
- Floor slabs on grade shall be placed on 4 inches of compacted crushed 3/4 inch stone with 6 mil thick polyethylene vapor barrier and with 6x6-10/10 WWF 1-1/2 inches from top of slab (one layer for each 4 inches of thickness) except as noted. Slabs shall have control joints 1 inch deep in line with columns or every 30 feet max. Areas within control joints shall be as close to square as layouts permit.
- Interior concrete slab surface shall have steel trowel finish.
- Welding shall conform to appropriate codes of American Welding Society.
- Welding shall be done by certified welders.

MASONRY NOTES

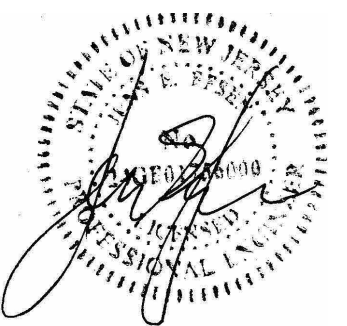
- ACI 530, specification for masonry structures. all materials and workmanship.
- All mortar shall be ASTM C-270 type S except as noted.
- ASTM A-82 for Zinc-coated steel wire reinforcement.
- Concrete masonry units (CMU) shall be ASTM C-90-N.
- For block fill, conform to ASTM C-476 and ACI-531 for materials and procedures.
- a. All masonry basement walls with unbalanced fill conditions greater than 4 ft. shall be braced by shoring or by the completion of the ground floor framing before backfill is placed and compacted.
- b. Backfill shall be compacted in maximum 8" lifts with a vibratory compactor minimum 3 passes and so that no further compression of the material is noticed.
- Mortar or 3000 psi grout shall be used to grout masonry solid where noted.
- Masonry contractor shall coordinate with other trades for openings and built-in items.



ELEVATOR SHAFT DETAIL
NOT TO SCALE



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



1. Steel shall be A50 for wide flange sections, A36 for plates, Channels & L's except as noted. Steel shall be A53 for pipe and structural tubing.
2. Bolts shall be 3/4 inch diam. ASTM A-325. Tighten bolts by A.I.S.C. "Turn of Nut" method (for short bolts: 1/3 turn after full force-fit by hand with spud wrench), or use self-calibrating bolts.
3. Welding shall be done by certified welders and shall conform to A.W.S. "Structural Welding Code".
4. Anchor bolts and threaded rods shall be ASTM A-307.
5. Structural steel details shall conform to the American Institute of Steel Construction's "Specification for the Design, Fabrication, and Erection of Structural Steel Buildings".
6. Shop drawings of all structural steel shall be submitted for approval.
7. All steel shall be cleaned of all mill-scale, rust, oil and other dirt and shall be shop-coated with minimum 2 mil. thick primer.
8. Steel Columns: see S-1 and S2
9. All steel beams shall have 9/16" nailer holes @ 36" o.c. (maximum sps) top and bottom flanges.
10. Steel stair construction shall be as follows:
 - a. Stair stringers shall be C12x20.7 welded bent stringers bearing on 8x8x1/2" plates grouted to masonry or bolted to C8x20 header beams with similar bearing to masonry.
 - b. All stair treads and platforms shall be steel pans with concrete fill manufactured to industry standards with bolting to stringers and beams
 - c. Hand rail shall be welded construction. Posts and rails shall be minimum 1-1/2" diameter schedule 40 pipe with posts spaced at 48 inches o.c. max., anchored 4 inches minimum in concrete or welded to steel.
11. Grating shall be galvanized all-welded construction with 3/8 inch rods at 4 inches o.c. max. and 1-1/2 inch x 3/16 inch bars spaced at 1-1/2 inches o.c. max. Anchor grating with 1/2 inch bolts & clips. Grating shall be banded at edges and openings.
12. Ovals near mid point of beams indicate where maximum 6" diameter holes in webs may be cut minimum 4" from flange bottom.

