

GREGORY S. BARFIELD, PE



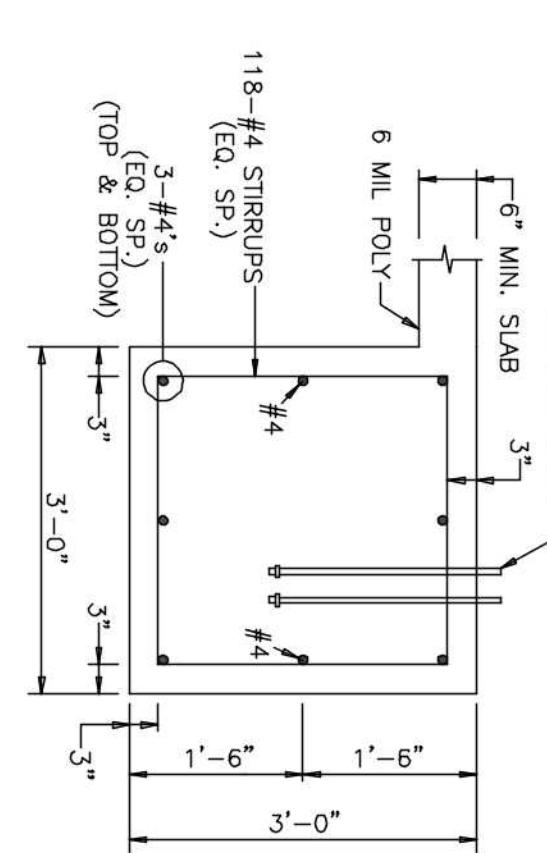
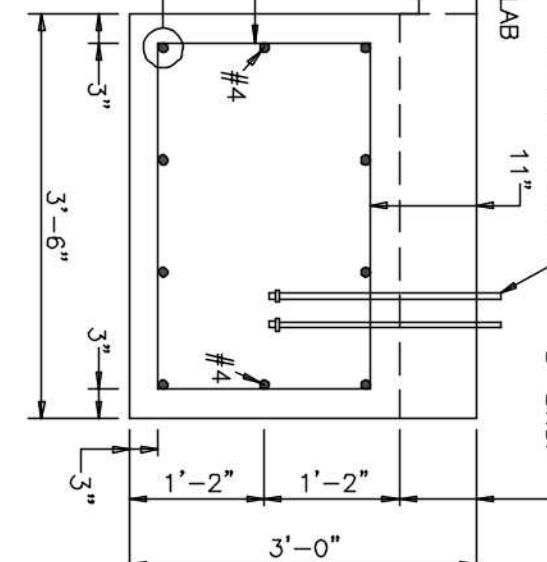
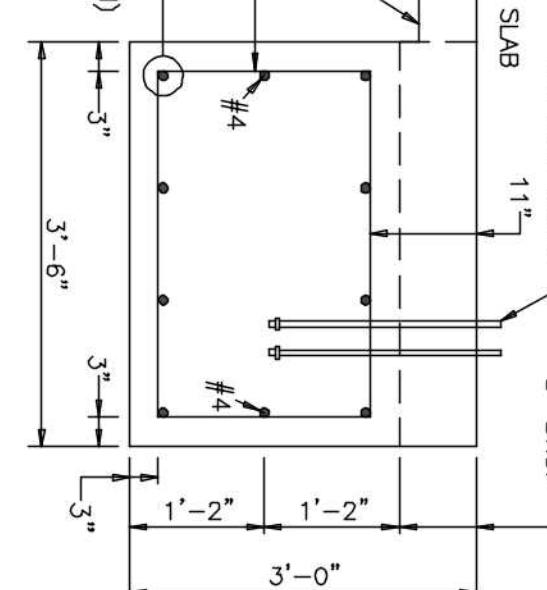
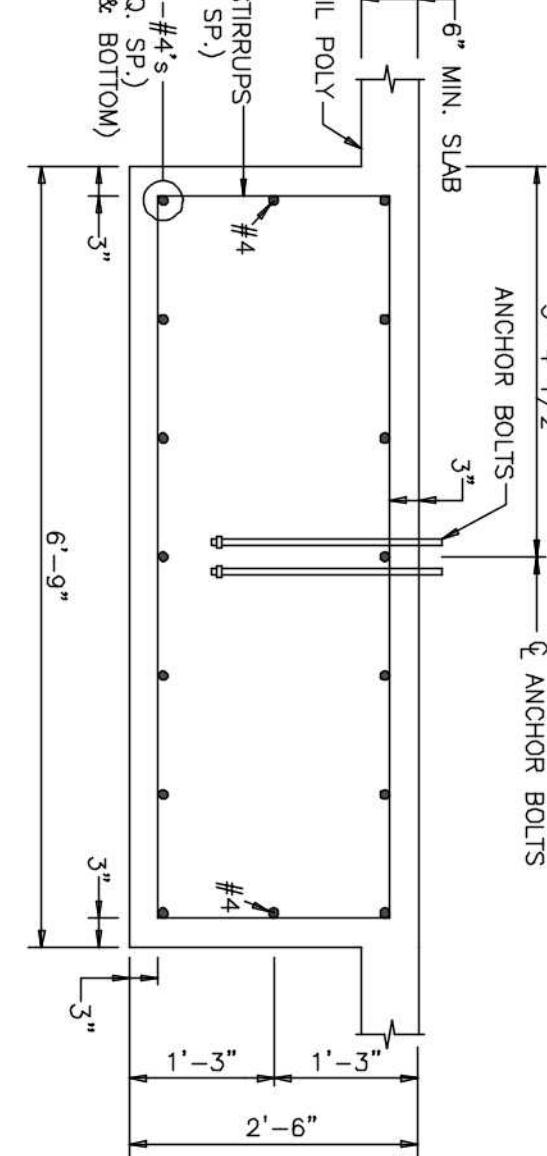
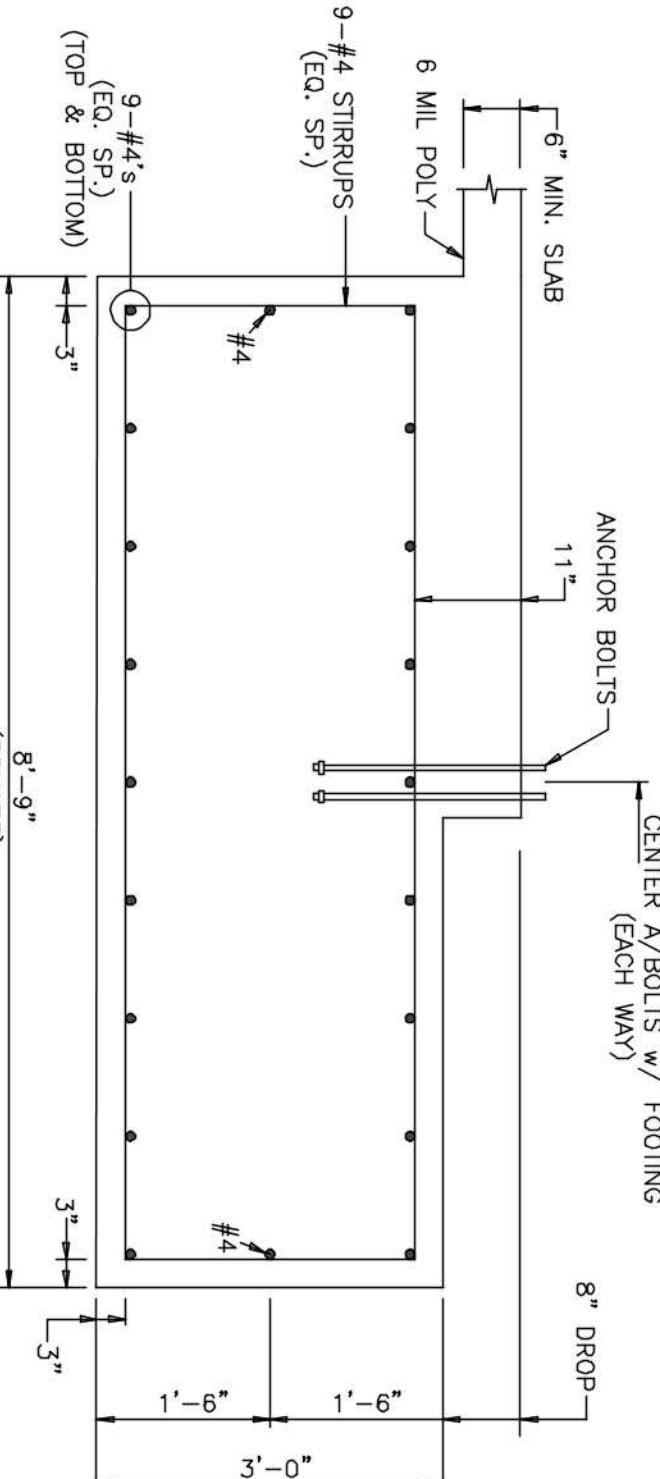
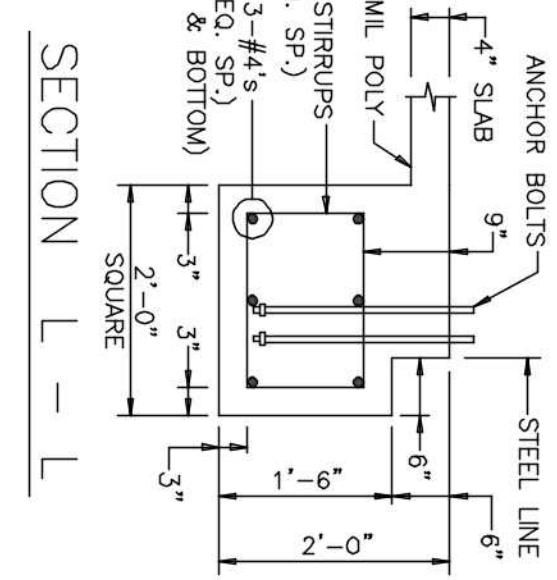
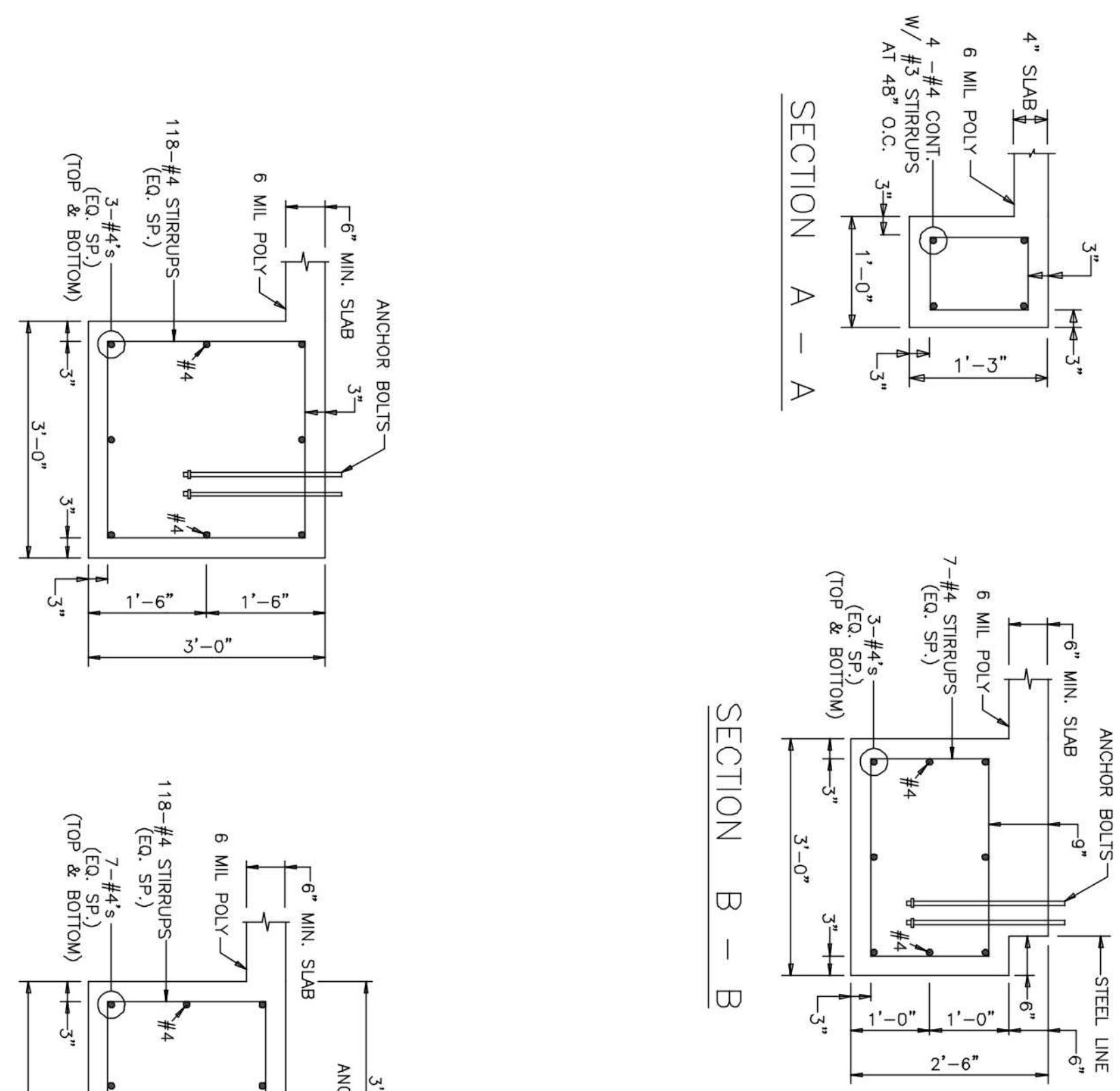
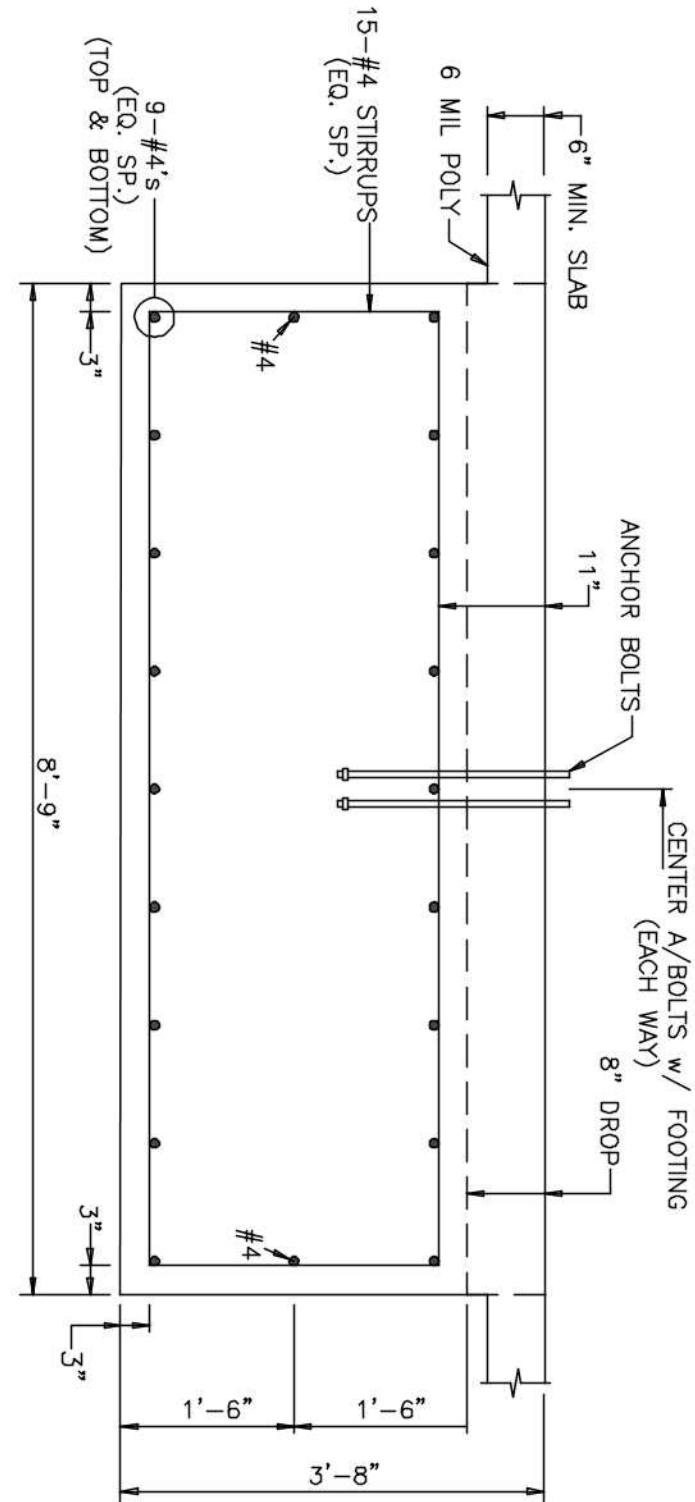
2149 NELL PURVIS ROAD  
ADEL, GEORGIA 31620

## FOUNDATION PLANS

# CAPITAL METALS SUPPLY

LAKE CITY, FL.

JOB #: GSB-1557



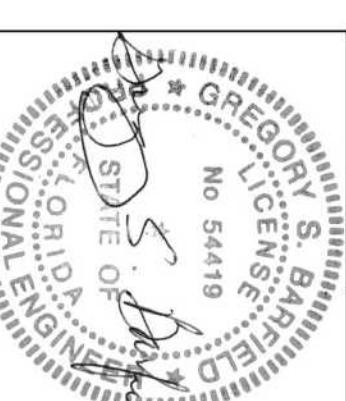
**SECTION K - K**

NO.	REVISION	DATE
1	ADDED SECTION A-A	1-31-20

GENERAL NOTES

- All work and materials shall be in accordance with the Florida Building Code 2017.
  - Prior to construction all vegetation, stumps, roots, foreign material, and surficial topsoil shall be removed from the area under the foundation and to a minimum distance of 5 feet beyond the limits of the proposed building. After this stripping and clearing has been completed the exposed natural soils shall be compacted to 95% of Modified Proctor in accordance with ASTM D 1557. At a distance of 50 feet or more from an existing structure this compaction shall be achieved by use of a vibratory drum roller in which the drum weighs a minimum of 5 tons with a minimum drum diameter of 3 feet. At a distance of within 50 feet from an existing structure this compaction shall be achieved by use of a light weight vibratory drum or sled compactor having a maximum weight of 1000 pounds.
  - Groundwater levels shall be controlled to a minimum of 2 feet below the construction level. Groundwater elevations may fluctuate during construction therefore temporary dewatering may be necessary to control the groundwater levels.
  - All fill material shall be placed in lifts not to exceed 8 inches and shall be compacted to 95% of Modified Proctor in accordance with ASTM D 1557.
  - If "pumping" of the near surface soils or fill material occurs during construction which results in strength loss of the subsequent soil, work shall be terminated in these areas and the disturbed soils removed. After removal of these soils, fill material which has a water content of not more than 10% shall be replaced and compacted. In lieu of removing the disturbed soils the excess moisture may be allowed to dissipate and the soil re-compacted.
  - When the fill material has been placed and properly compacted a "smoothed" bucket backhoe may be used to excavate to the planned foundation levels. After this excavation all soils at the bearing level shall be compacted to 95% of Modified Proctor in accordance with ASTM D 1557 to a depth of at least 1 foot. If backfilling is required in the footing excavations the fill shall be placed in lifts not to exceed 6 inches.
  - All fill material shall consist of soil with no more than 10% of the particles passing a #200 sieve and shall be free of vegetation, organic material, construction debris, large rocks, and all foreign material.
  - All footings have been designed for the following assumed soil properties:
 

Bearing Capacity = 2,000 psf  
 Angle of Internal Friction (phi angle) = 28 degrees  
 Coefficient of Friction = 0.45  
 Soil Weight = 110 lbs per cubic ft.
  - If it is determined after the soils survey that the actual soil properties are different than these assumed values, the contractor shall follow the recommendations of the geotechnical engineer.
  - The outlying perimeter areas of the proposed building shall be graded in such a way as to provide positive drainage away from the proposed building.
  - A vapor retarder shall be installed underneath the slab consisting of 6 mil minimum polyethylene with joints lapped not less than 6 inches and sealed.
  - All concrete shall have a minimum compressive strength of 3,000 psi at 28 days.
  - All concrete shall contain 2.5% to 6% entrained air to enhance frost resistance.
  - The maximum water-cement ration of the concrete shall be 0.55.
  - The slump limits of all concrete shall be 2 - 4 inches.
  - All concrete shall be mixed until there is a uniform distribution of materials in accordance with ACI 318.
  - All reinforcing bars that do not require welding shall conform to ASTM A706, Grade 60. All reinforcing bars that are to be welded shall conform to ASTM A-185. Welded wire fabric shall conform to ASTM A-185.
  - The #4 rebar in the slab turn down shall be continuous for the entire perimeter of the foundation and shall be lap spliced a minimum of 2 feet at terminal points in order to maintain continuity.
  - The slab reinforcing including the welded wire fabric and hairpins shall not be cut during or anytime after construction since this reinforcement provides structural stability for the building.
  - Fiber reinforced concrete is an acceptable alternative to welded-wire fabric. Synthetic fibers shall be fibermesh 650 as manufactured by Propex Concrete Systems applied at the rate of 3 pounds per cubic yard of concrete (or another equal system).
  - Since the passive resistance of the soil is an integral part of the ability of the foundation to resist the horizontal forces that will be present when the design loads are applied to the building system, it is expressly forbidden for any future excavation to take place within 50 feet of the building without the consent of the Engineer of Record.
  - Control joints shall be installed in the foundation at intervals not to exceed 15 feet.
  - Maintain 3 inches minimum clearance for all rebar and anchor bolts, unless otherwise noted.



**FOUNDATION PLANS**

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