



NOTES

ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH BUILDING CODE REQUIREMENT FOR REINFORCED CONCRETE, ACT 318.

ALL CONCRETE SHALL BE NORMAL WEIGHT (SAND AND GRAVEL) WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.

ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 EXCEPT #3 AND #4 BARS WHICH ARE BENT (SUCH AS STIRRUPS, TIES AND DOWELS) SHALL BE GRADE 40.

DETAILING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE, ACI 315. UNLESS SHOWN OTHERWISE, LAP CONTINUOUS BARS 30 BAR DIAMETERS AT SPLICES.

PROVIDE 1-#5 x 4'-0" CORNER BAR, TOP AND BOTTOM AT EXTERIOR FACE OF GRADE BEAMS AT CORNERS, AND PROVIDE 4-#5 x 4'-0" CORNER BARS (2 TOP & BOT.) AT T-INTERSECTIONS AT SLABS CAST ON GRADE. PROVIDE BAR CHAIR AT 4'-0" ON CENTER MAXIMUM EACH WAY FOR SUPPORT OF REINFORCING.

UNLESS SHOWN OTHERWISE, CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS	3"
GRADE BEAMS	2" TOP; 3" BOTTOM & SIDES
SLAB ON GRADE	3/4" TOP (INTERIOR); 1 1/2" TOP (EXTERIOR)

MATERIAL

A CEMENT SHALL BE TYPE 1 PORTLAND CEMENT CONFORMING TO ASTM C 150.

B SAND SHALL BE CLEAN, DURABLE, AND MEET GRADING REQUIREMENTS FOR FINE AGGREGATES OF ASTM C 33 AND THE FOLLOWING REQUIREMENTS:

- CLASSIFIED AS SW, SP OR SM BY THE UNITED SOIL CLASSIFICATION SYSTEM OF ASTM D 2487.
- DELETERIOUS MATERIAL CONTENT:
 - A. CLAY LUMPS SHALL COMPRISE LESS THAN 0.5 PERCENT BY ASTM C 142.
 - B. LIGHTWEIGHT PIECES SHALL COMPRISE LESS THAN 5.0 PERCENT BY ASTM C 123.
 - C. ORGANIC IMPURITIES SHALL PRODUCE COLOR NO DARKER THAN THE STANDARD COLOR BY ASTM C 40 ASTM.
- PLASTICITY INDEX OF 4 OR LESS WHEN TESTED IN ACCORDANCE WITH ASTM D 4318.

C FINE AGGREGATE, MANUFACTURED FROM CRUSHED CONCRETE MEETING THE QUALITY REQUIREMENTS FOR CRUSHED ROCK MATERIAL IN SECTION 02255 - BEDDING, BACKFILL, AND EMBANKMENT MATERIALS, MAY BE USED AS A COMPLETE OR PARTIAL SUBSTITUTE FOR BANK SAND. THE BLENDING RATIO OF FINE AGGREGATE FROM CRUSHED CONCRETE AND BANK SAND SHALL BE DEFINED IN THE MIX DESIGN REPORT. +

PLACEMENT AND COMPACTION

A PLACE SAND-CEMENT MIXTURE IN 8-INCH-THICK LOOSE LIFTS AND COMPACT TO A MINIMUM OF 95 PERCENT OF ASTM D 558, UNLESS OTHERWISE SPECIFIED ON PLANS. THE MOISTURE CONTENT DURING COMPACTION SHALL BE ON THE DRY SIDE OF OPTIMUM BUT SUFFICIENT FOR HYDRATION. PERFORM AND COMPLETE COMPACTION OF SAND-CEMENT MIXTURE WITHIN 4 HOURS AFTER ADDITION OF WATER TO MIX AT THE PLANT.

B DO NOT PLACE OR COMPACT SAND-CEMENT MIXTURE IN STANDING OR FREE WATER.

