MEMORANDUM TO: DIVISION ENGINEERS, RESIDENT ENGINEERS, ROADWAY CONSTRUCTION ENGINEERS AND BRIDGE CONSTRUCTION ENGINEERS

FROM: Walton I. Jones
Field Concrete Engineer

SUBJECT: Minimum Sampling for Incidental and Structural Concrete

The minimum testing frequencies for Portland cement concrete for structures and incidental construction are the following. All tests must be performed by a certified “Concrete Field Technician” using the most recent AASHTO/ASTM standards. Additional tests may be required if directed by the Engineer.

**CLASS AA, A, and B:**

**AIR CONTENT - CHACE INDICATOR (AASHTO T-199):** Performed on every load.

**SLUMP (AASHTO T-119 / ASTM C-143):** Performed on the first load, and a random load per 30 cubic yards or fraction thereof. When test specimens are made.

**AIR CONTENT – PRESSURE AIR METER (AASHTO T-152 / ASTM C-231):** Performed on the first load, and a random load per 30 cubic yards or fraction thereof. When test specimens are made.

**TEMPERATURE (ASTM C-1064):** Performed on the first load and when test specimens are made.

**TEST SPECIMENS (AASHTO T-23 / ASTM C-31):** One set of cylinders per each placement operation per each 100 cubic yards cumulative or fraction thereof for Class AA and A Concrete. One set of cylinders per each 100 cubic yards or fraction thereof for Class B Concrete.

**LIGHTWEIGHT:**

**AIR CONTENT – CHACE INDICATOR (AASHTO T-199):** Performed on every load.

**SLUMP (AASHTO T-119 / ASTM C-143):** Performed on the first load, and a random load per 30 cubic yards or fraction thereof. When test specimens are made.

**AIR CONTENT – VOLUMETRIC (AASHTO T-196 / ASTM C-173):** Performed on the first load, and a random load per 30 cubic yards or fraction thereof. When test specimens are made.

**UNIT WEIGHT (AASHTO T-121 / ASTM C-138):** Performed on the first load, and when test specimens are made.

**TEMPERATURE (ASTM C-1064):** Performed on the first load and when test specimens are made.

**TEST SPECIMENS (AASHTO T-23 / ASTM C-31):** One set of cylinders per each placement operation per each 100 cubic yards or fraction thereof.

**DRILL PIER:**

Air content-Chace method (air content not to exceed 7.5%), slump, temperature, and test specimens will be performed on every load.