Testing Laboratory Services and Specialty Inspections

The following are testing requirements, per Specification 01 45 29, for the contractor to self-perform on the Replace Chilled Water & Sanitary Pipelines construction project. The contractor, upon award, will submit a Testing and Inspection Plan for VA review and approval.

Earthwork Compaction

1. Develop standard Proctor for each type of fill, backfill, and subgrade material used (ASTM D698).
2. Field density test of subgrade using ASTM D6938 (nuclear gauge) on the following frequencies;
    a. Under vaults: One (1) test per vault; two (2) tests minimum anticipated.
    b. Under paved areas: One (1) test per 400 SY, but no fewer than two (2) tests. Two (2) tests anticipated
    c. Curb, Gutter, and Sidewalk: One (1) test per 300 LF, but no fewer than two (2). Two (2) tests anticipated
    d. Trenches: One (1) test per 100 LF per 4' lift; twenty-eight (28) tests anticipated

Aggregate Base Course Compaction

1. Develop Modified Proctor for each base course material used.
2. Field density test of base course using ASTM D6938: Three (3) tests per day's placement.
3. Aggregate Gradation and Quality Test: One (1) per source

Asphalt Concrete

1. Aggregate Quality: Included in mix design
2. Mix Temperature: Throughout placement
3. Mat Density: Two (2) per day's placement:

Portland Cement Concrete

1. Three (3) cylinders collected for each fifty (50) CY placed, and no less than three (3) per day.
2. Slump Test: First load of the day and each time cylinders are collected.
3. Air Content: First load of the day and every twenty-five (25) CY thereafter.
4. Compressive Strength Testing: On all cylinders collected.

The contractor shall provide all submittal requirements, written and verbal, to the VA as required within the Construction Specifications section 014529, for the Replace Chilled Water Lines and Sanitary Pipelines project, stamped and signed on August 8, 2014.

The contractor shall provide a separate bid item for Testing and Inspection services.