SECTION 01050

FIELD ENGINEERING

PART 1 GENERAL

1.1 QUALITY CONTROL

- A. Land Surveyor: Registered in the State of Tennessee, and acceptable to the City.
- B. Professional Engineer: Registered Professional Engineer of the discipline required for specific service on Project, licensed in the State of Tennessee and acceptable to the City.
- C. All work shall be performed using the Tennessee State Plane coordinate system.

1.2 SUBMITTALS

- A. Submit name, address and telephone number of Surveyor or Engineer before starting survey work.
- B. Upon request, submit documentation verifying accuracy of survey work.
- C. Submit certificate signed by Surveyor or Engineer certifying that elevations and locations of improvements are in conformance, or nonconformance, with Contract Documents.

1.3 PROJECT RECORD DOCUMENTS

- A. Maintain complete, accurate log of control and survey work as it progresses.
- B. Submit Record Documents under provisions of the "New Development Guidelines and Procedures" and Section 01720.
- PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

- 3.1 INSPECTION
 - A. Verify locations of survey control points prior to starting work. Promptly notify City of any discrepancies discovered.

3.2 SURVEY REFERENCE POINTS

- A. Existing basic horizontal and vertical control points for the Project are those designated on Drawings.
- B. Protect survey control points prior to starting site work, and preserve permanent reference points during construction. Make no changes or relocations without prior written notice to Architect/Engineer.
- C. Promptly report to the City the loss or destruction of any reference point or relocation required because of changes in grades or other reasons. Replace dislocated survey control points based on original survey control.

3.3 PROJECT SURVEY REQUIREMENTS

- A. Establish a minimum of two permanent bench marks on site, referenced to data established by survey control points. Record locations, with horizontal and vertical data on Project Record Documents.
- B. Establish lines and levels, locate and lay out, by instrumentation and similar appropriate means:
 - 1. Site improvements, including pavements; lot corners; centerline of water and sewer lines; cut and fill areas; utility slopes and sewer line segment elevations; manhole inverts; corners of pump station property; easement locations.
- C. Periodically verify layouts.
- D. Replace lost or damaged reference points as needed.

END OF SECTION 01050 - FIELD ENGINEERING