

SECTION 017123
FIELD ENGINEERING

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

- A. The General Contractor shall engage the services of a Surveyor to establish grades, lines and levels.
- B. Each separate Prime Contractor shall be responsible for layout of his own work, from grades, lines and levels established by the General Contractor.

1.2 RELATED REQUIREMENTS

- A. Applicable provisions of Bidding Requirements, Contract Requirements in Division 0 and all applicable Division 1 sections.

1.3 QUALITY ASSURANCE

- A. Surveyor shall be licensed in the Commonwealth of Pennsylvania.

1.4 SUBMITTALS

- A. Submit name, address, and telephone number of Surveyor prior to starting survey work.
- B. On request, submit documentation verifying accuracy of survey work.
- C. Submit reference point survey including field notes for record.
- D. Submit certification, signed and sealed by the Surveyor showing that elevations and locations of all improvements are or are not in conformance with Contract Documents.

1.5 PROJECT RECORD DOCUMENTS

- A. Maintain complete, accurate log of control and survey work as it progresses.
- B. Record on record documents all pertinent information under provisions of Division 1.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION

3.1 INSPECTION

- A. Verify locations of survey control points prior to starting work. Promptly notify Design Professional of any discrepancies discovered.

3.2 SURVEY REFERENCE POINTS

- A. Protect survey control points prior to starting site work; preserve permanent reference points during construction. Make no changes without prior written notice to Design Professional.

- B. Promptly report to Project Coordinator 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 SURVEY REQUIREMENTS

- A. Use instruments to establish a minimum of two (2) permanent bench marks on the site. Reference benchmarks to data established by survey control points. Record bench mark locations with horizontal and vertical data for Project Record Documents. Reference these benchmarks to finish floor lines. Provide accurate alignment and level of the work, and correct slope and curvatures as required.
- B. Periodically verify layouts by same means. No extra charges will be allowed for differences between dimensions shown and actual measurements. Advise the Project Coordinator of any differences.
- C. Prepare as-built site utility plan showing all utilities including stormwater, sanitary, water, gas and electric lines for permanent record.

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