

**PART 1        GENERAL**

**1.1            REFERENCE STANDARDS**

- .1        Canadian Construction Documents Committee (CCDC)
  - .1            CCDC 2, Stipulated Price Contract.
  - .2            DOCUMENT 14, Design-Build Stipulated Price Contract (CCA, CSC, RAIC).
  - .3            DOCUMENT 15, Design-Builder/Consultant Contract (CCA, CSC, RAIC).

**1.2            QUALIFICATIONS OF SURVEYOR**

- .1        Qualified registered land surveyor, licensed to practice in Place of Work, acceptable to Departmental Representative.

**1.3            SURVEY REFERENCE POINTS**

- .1        Existing base horizontal and vertical control points are designated on drawings.
- .2        Locate, confirm and protect control points prior to starting site work. Preserve permanent reference points during construction.
- .3        Make no changes or relocations without prior written notice to Departmental Representative.
- .4        Report to Departmental Representative when reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.
- .5        Require surveyor to replace control points in accordance with original survey control.

**1.4            SURVEY REQUIREMENTS**

- .1        Establish two permanent bench marks on site, referenced to established bench marks by survey control points. Record locations, with horizontal and vertical data in Project Record Documents.
- .2        Establish lines and levels, locate and lay out, by instrumentation.
- .3        Stake for grading, fill and topsoil placement and landscaping features.
- .4        Stake slopes and berms.
- .5        Establish pipe invert elevations.
- .6        Stake batter boards for foundations.
- .7        Establish foundation column locations and floor elevations.
- .8        Establish lines and levels for mechanical and electrical work.

## **1.5 EXISTING SERVICES**

- .1 Where work involves breaking into or connecting to existing services, carry out work at times directed by authorities having jurisdiction, with minimum of disturbance to pedestrian and vehicular traffic.
- .2 Before commencing work, establish location and extent of service lines in area of Work and notify Departmental Representative of findings.
- .3 Remove abandoned service lines within 2 m of structures. Cap or otherwise seal lines at cut-off points as directed by Departmental Representative.

## **1.6 LOCATION OF EQUIPMENT AND FIXTURES**

- .1 Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate.
- .2 Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- .3 Inform Departmental Representative of impending installation and obtain approval for actual location.
- .4 Submit field drawings to indicate relative position of various services and equipment when required by Departmental Representative.

## **1.7 RECORDS**

- .1 Maintain a complete, accurate log of control and survey work as it progresses.
- .2 On completion of foundations and major site improvements, prepare a certified survey showing dimensions, locations, angles and elevations of Work.
- .3 Record locations of maintained, re-routed and abandoned service lines.

## **1.8 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit name and address of Surveyor to Departmental Representative.
- .2 On request of Departmental Representative, submit documentation to verify accuracy of field engineering work.
- .3 Submit certificate signed by surveyor certifying and noting those elevations and locations of completed Work that conform and do not conform with Contract Documents.

## **1.9 SUBSURFACE CONDITIONS**

- .1 Promptly notify Departmental Representative in writing if subsurface conditions at Place of Work differ materially from those indicated in Contract Documents, or a reasonable assumption of probable conditions based thereon.

- .2 After prompt investigation, should Departmental Representative determine that conditions do differ materially, instructions will be issued for changes in Work as provided in Changes and Change Orders.

## **PART 2 PRODUCTS**

### **2.1 NOT USED**

- .1 Not Used.

## **PART 3 EXECUTION**

### **3.1 NOT USED**

- .1 Not Used.

**END OF SECTION**