
1 FIELD ENGINEERING

- .1 The Contractor shall be responsible for all survey and field engineering work required for the project.
- .2 Employ a Land Surveyor registered to practise in the Province of Ontario and acceptable to the Owner to execute the field engineering work.
- .3 Survey Reference Points:
 - .1 Locate, confirm and protect control points prior to starting site work. Preserve permanent reference points during construction.
 - .2 Make no changes or relocations without prior written notice to Consultant.
 - .3 Report to Consultant when a reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.
 - .4 Require surveyor to replace control points in accordance with original survey control.
- .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.
 - .4 Establish pipe invert elevations.
 - .5 Stake batter boards for foundations.
 - .6 Establish foundation; column locations and floor elevations.
 - .7 Establish lines and levels for mechanical and electrical work.
- .5 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 Submit certificate signed by Surveyor certifying that elevations and locations of completed Work are in conformance, or non-conformance with Contract Documents.

2 DIMENSIONS

- .1 Check and verify dimensions wherever referring to the Work. Dimensions, when pertaining to the work of another Section, shall be verified with the Section concerned. Details and measurements of work which is to fit or conform with work installed shall be taken at the site.
- .2 Do not scale drawings. If there is ambiguity, lack of information or inconsistency, immediately consult the Consultant for directions. Be responsible for extra costs caused by the disregarding of this requirement.

3 EXISTING UTILITIES

- .1 It is the Contractor's responsibility to obtain all information required for sewer, gas, water, telephone, electrical signal systems, and any other utilities that are within the building and surrounding other locations.

- .2 Ensure that piping, sewer lines, conduit, and similar items, belonging to others, are protected during construction activity.

4 EXAMINATION

- .1 Examine areas and conditions under which work is to be performed and notify the Consultant in writing of conditions detrimental to the proper and timely completion of the work.
- .2 Verify that the existing site conditions and substrate surfaces are acceptable for subsequent work.
- .3 Verify that the existing substrate is capable of structural support or attachment of new work being applied.
- .4 Verify the specific conditions described in individual specification Sections.
- .5 Verify that utility services are available, of the correct characteristics, and in the correct locations.
- .6 Do not proceed with the work until unsatisfactory conditions have been corrected to the installer's satisfaction.
- .7 Commencement of the installation will be construed as acceptance of the site conditions.

5 PREPARATION

- .1 Clean substrate surfaces prior to applying next material or substance.
- .2 Allow substrate surfaces to cure or dry out to the moisture content limits recommended by the manufacturer of their material or substance to be applied.
- .3 Seal cracks or openings in the substrate prior to applying the next material or substance.
- .4 Apply the manufacturer's recommended or required substrate primer, sealer or conditioner prior to applying any new material of substance.

END OF SECTION