1.6 **Geodetic Control**

1.6.1 **General**

Geodetic Control Survey Monuments should be designed to further establish, complement and enhance the City of Vaughan permanent geodetic control survey network.

1.6.2 **Requirements**

The proposed monument shall be installed and certified by a currently practicing, licensed and registered Ontario Land Surveyor following sound, logical methodology and practices, satisfying the following requirements:

- To establish and certify Horizontal and Vertical Control. Specific data shall include Latitude, Longitude, Elevation, MTM Northing, MTM Easting, MTM Elevation, UTM Northing, UTM Easting, UTM Elevation, preferably in NAD-83 CSRS, including combined scale factor. Documentation to be in accordance with Standard Drawing G-106, including the following:
  - Key map
  - Sketch showing reference points including azimuths and distances.
  - Cross-referencing with a minimum of 5 points where possible,
  - Detailed description of location of control monument and reference points.
  - Values (Latitude, Longitude, MTM/UTM coordinates, etc.)
  - Combined scale factor.
  - Identification of NAD-83 version used (i.e., Original or CSRS)
  - Meridional convergence.
  - Identify order of accuracy.
  - Identify, at a minimum, the 4 closest control monuments in order of ascending proximity.
- Primarily located at intersecting roads with a designation status of Collector or greater.
- Be inter-visible to a minimum of 2 or more existing or proposed Survey Control Monuments, the identities of which are to be provided in the submitted documentation.
- Be properly constructed as per City Standard Drawing G-104 to G-107.
- Be accepted and approved by the Ministry of Natural Resources for inclusion into the COSINE database for geodetic control survey data.

Content, Submission and Digital File requirements can be found in Section 1.1.1 and Appendix F.