

CIRCULAR LETTER NO. 463A

(This Letter updates Circular Letter No. 463 issued January 27, 2014)

Amended December 16, 2019

TO ALL BRITISH COLUMBIA LAND SURVEYORS

Re: Official Horizontal Datums for Georeferencing Legal Surveys in British Columbia

The Survey and Plan Rules require the georeferencing of all legal surveys in British Columbia and the definition of "British Columbia Geo-Spatial Reference" (BCGSR) calls for a horizontal datum to be specified by the Surveyor General for use in legal surveys. Rule 2-2 states that all surveys must have at least two points georeferenced, referred to a framework (datum) required by the Surveyor General; the acceptable datums are to be expressed in the UTM map projection.

It is the responsibility of the land surveyor to ensure that they are using an approved horizontal datum for georeferencing of all legal surveys conducted within British Columbia. This circular letter is provided to specify approved horizontal datums for those surveys.

GeoBC publishes the official coordinates of Active (BC Active Control System (BCACS) and Federal Active Control Stations) and Passive Control Points within British Columbia on the MASCOT website. On each datasheet listing, the specified datum can be found in a section labelled "Horizontal - Datum" and will be a version of the horizontal datums listed below. An explanation of the version numbering scheme can be found on the MASCOT News site under the heading "NAD83 Coordinate Version Numbering".

Depending on the location of the survey within British Columbia and the method used to complete the required georeferencing the acceptable datums are:

1. NAD83(CSRS) 4.0.0.BC.1 Mainland BC (not within the MVRD) 2. NAD83(CSRS) 4.0.0.BC.1.MVRD Metro Vancouver Regional District (MVRD)¹ 3. NAD83(CSRS) 3.0.0.BC.1.NVI Vancouver Island (not within the CRD) 4. NAD83(CSRS) 3.0.0.BC.1.CRD Capital Regional District (CRD)

Typically the closest active or passive control point(s) will determine the appropriate datum to be used in your location. If using multiple active control points to post-process GNSS static

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¹ Revised GVRD to MVRD December 2019 to match updated datum tag in MASCOT.

baselines or comparing results from active control to results from PPP be sure not to mix different datums.

If using Natural Resource Canada's Precise Point Positioning (PPP) service to derive individual georeferenced coordinates be sure to use the appropriate epoch based on your location:

1. NAD83(CSRS) 2002.0

Mainland BC

2. NAD83(CSRS) 1997.0

Vancouver Island

It is critical that the full version number of the datum (e.g. NAD83 (CSRS) 3.0.0.BC.1.CRD or NAD83 (CSRS) 2002.0) which has been used to derive the georeferenced coordinates be clearly labelled on your plan.

Yours sincerely,

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Surveyor General of British Columbia