



Requirements for Dike Survey/GIS Data Submission as Part of *Dike Maintenance Act Approval*

As part of the conditions of a *Dike Maintenance Act* (DMA) approval, the engineer of record responsible for earthworks is required to submit to the Province post construction survey/GIS data **within 60 days of construction completion**. This document provides the requirements for this submission and the excel template (DMA_Survey-GIS Data Submission Template.xlsx) provides the format for the Geo-database file.

It is expected that the products will undergo QA/QC prior to submission. **Note the submission may not be accepted by the Province, deeming the DMA approval non-compliant, if it does not conform to the mandatory requirements below.**

MANDATORY requirements for survey/GIS data submission to the Province:

- (a) Submission must be made to the Inspector or Deputy Inspector of Dikes who issued the DMA approval.
- (b) Data must be in the following coordinate system:
 - (i) Horizontal – NAD 1983, with UTM Zone specified
 - (ii) Vertical – CGVD2013
- (c) Dike crest survey data is to be along the approximate (e.g., visually estimated) dike crest centerline at a maximum of 25 metre intervals.
- (d) A **Geo-database (gdb)** file that includes the dike crest survey data **in the form** of the template provided by the Province (DMA_Survey-GIS Data Submission Template.xlsx). Use the template's headings as provided, and populate values items using the list provided (if applicable) **in the gdb file**.

IMPORTANT - Submit separate gdb files depending on the type of submission:

- i. Line file includes the dike centreline and erosion protection linework.
- ii. Point file includes appurtenance works and dike centreline and erosion protection survey points.

RECOMMENDED survey requirements:

- (a) Spacing should be reduced where there is a visible elevation change such as depression / low spot, or a sharp alignment curve along the dike to fully capture the crest depression or the dike curve. The reduction in survey interval shall be decided by the surveyor based on the degree and nature of the depression or curve.
- (b) Minimum vertical and horizontal accuracy at ± 0.02 m (2 cm) for stationary surveys and ± 0.05 m (5 cm) for GPS surveys using a moving vehicle.
- (c) Ensure enough precision (i.e. decimal places) in geodatabase fields to achieve the above accuracy