

DATE OF MEETING OCTOBER 18, 2021

AUTHORED BY ANNALISA FIPKE, PROJECT ENGINEER, ENGINEERING AND PUBLIC WORKS

SUBJECT **COMMITMENT TO MAINTENANCE OF INTEGRATED SURVEY AREA 20**

OVERVIEW

Purpose of Report

To provide Council with information on the Provincial survey monument program and to seek Council's support to commit to the Province of British Columbia on the City of Nanaimo's continued maintenance of the Integrated Survey Area.

Recommendation

That Council commit to the Integrated Survey Area program, continue the maintenance of the City of Nanaimo's integrated survey monuments, and authorize Staff to advise the Province.

BACKGROUND

Integrated Survey Areas (ISAs) have been a foundation of surveying and mapping in British Columbia for the last 50+ years and continue to play an important role today. The Integrated Survey Monuments (ISMs) within ISAs are part of a larger provincial network of coordinate control monuments that form an important public utility, supporting a range of activities: surveying, engineering, asset management, land development, construction, and resource development, among them.

The City of Nanaimo currently has a designation as ISA No. 20, established by Order in Council, on February 10, 1984 and amended on April 6, 1994, and again in 2014. The annual budget is \$10,000 per year to integrate new control monuments. Any monuments damaged through construction are funded by the capital project or through the third parties responsible.

DISCUSSION

The survey control monuments established across ISA No. 20 are used on a near daily basis by City Staff, consulting engineers, contractors, and land surveyors. They support a wide range of activities taking place across the City including the construction and renewal of municipal infrastructure works and private land development. The established control monuments, within the ISA, provide a standard vertical and horizontal reference system that supports mapping, engineering, and surveying. The positional information associated with the monuments also provides essential support for the City's Remote Sensing program and semi-annual update of orthophotography. The continued use of integrated monuments will ensure that the information is used to improve the City's spatial infrastructure database, ensuring a consistent and tight cadastral.

Providing our stakeholders/users with access to a common horizontal and vertical control network supports a standardized and quality controlled approach to integration of survey plans.

Given that some municipalities within BC have not maintained their ISMs over the years, the Surveyor General is looking to annul the ISA program in communities not willing to commit to their responsibility in maintaining an ISA.

The City has a process in place to track and replace destroyed monuments and to set new ones on an annual basis in order to maintain and expand the ISA. Our current process and practice meet the guidelines that the Surveyor General requires.

The City has been asked to submit a signed commitment letter to the Surveyor General to acknowledge our awareness of our responsibilities and ongoing commitment to the ISA program.

OPTIONS

1. That Council commit to the Integrated Survey Area program, continue the maintenance of the City of Nanaimo's integrated survey monuments, and authorize Staff to advise the Province.
 - The advantage of this option is that the City of Nanaimo will continue to have monuments available for mapping and surveying.
2. That Council declines the commitment outlined in the Integrated Survey Area program letter.
 - The advantage of this option is that funding can be redirected to other programs.
 - The disadvantage of this option is that it will result in the Surveyor General annulling the Integrated Survey Area within Nanaimo due to the City of Nanaimo's inability to fulfill the responsibilities of the Integrated Survey Area program.

SUMMARY POINTS

- The Integrated Survey Area monument system provides a reliable and cost-effective method of standardizing high accuracy surveys in Nanaimo.
- A great deal of investment has historically been made by the City of Nanaimo in this system, supported by continuous maintenance and expansion efforts.
- The Surveyor General requires the City of Nanaimo to commit to fulfilling our maintenance responsibilities, otherwise Integrated Survey Area 20 will be annulled.

ATTACHMENTS:

Attachment A – Changes to the Integrated Survey Area program - Nanaimo
Attachment B – Commitment to Integrated Survey Area 20 letter - Nanaimo

Submitted by:

Annalisa Fipke
Project Engineer
Engineering and Public Works

Concurrence by:

Poul Rosen
Director
Engineering