



CITY OF RICHMOND

REPORT TO COMMITTEE

TO: Public Works and Transportation Committee **DATE:** July 24, 2001
FROM: Steve Ono, P.Eng.
 Manager, Engineering Design & Construction **FILE:** 6340-01
**RE: Implementation of a Global Positioning System Reference Network and Survey
 Monument System – Follow-up Report**

STAFF RECOMMENDATION

That the report (dated July 24, 2001 from the Manager, Engineering Design & Construction) regarding Implementation of a Global Positioning System Reference Network and Survey Monument System – Follow-up Report, be received for information.

Steve Ono, P.Eng.
Manager, Engineering Design & Construction

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CONCURRENCE OF GENERAL MANAGER

STAFF REPORT

ORIGIN

At the September 11, 2000 meeting of Council it was resolved:

That staff continue to work with the GVRD - GPS Study Group to resolve outstanding issues including the GVRD project management structure, the cost to the City for GPS equipment purchase and details regarding conversion of historical survey data to the new NAD83 datum and UTM mapping standards, and report to Committee in June of 2001 with respect to progress in this regard.

This report is in response to the resolution.

ANALYSIS

In the period since September of 2000, significant progress has been made regarding the Regional Global Positioning System (GPS) Reference Network and Survey Monument System.

Project Management – The Greater Vancouver Regional District (GVRD) has created the position of GPS Co-ordinator and hired a full-time staff member for project management of the Regional GPS system. The GPS Co-ordinator will report to the GPS Steering Committee, a sub-committee of the Regional Engineers Advisory Committee (REAC), regarding implementation of the system. The GPS Steering Committee includes staff representatives from the member municipalities, and is the body for member municipalities to have input to the project management and implementation of the regional GPS system. The GVRD on behalf of the member municipalities, has also entered a formal agreement with Geographic Data BC, a provincial crown agency, for design and construction of the regional GPS network.

Project Costs - The Regional GPS system is expected to be partially operational in 2002, and fully operational by the end of 2003. Therefore, purchase of one high precision GPS receiver which is necessary for the City to utilise the GPS system may be deferred until 2003. The estimated cost to purchase a high-precision GPS receiver is in the order of \$50,000.

In addition, recommendation 2 of the September 11, 2000 Report to Council on Regional GPS Implementation stated:

That the regional GPS implementation cost to the City be included in the Capital Program as a three year program such that expenditures are \$76,900 in 2001, \$49,300 in 2002 and \$53,000 in 2003 for a total of \$180,300 as described in the appended business case.

Subsequently, in December of 2000, the GVRD agreed to fund the regional portion of the project costs from Sewerage & Drainage Reserves rather than via allocations collected from the member municipalities. Therefore, the \$180,300 in capital funds identified in recommendation 2 of the September 11, 2000 report are no longer required.

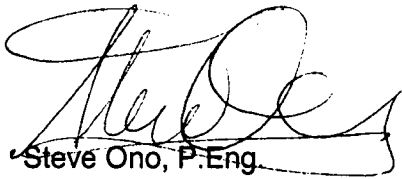
Conversion to NAD83 Datum – The City has already transformed all Geographic Information System (GIS) information to NAD83 ground level co-ordinates. Further conversion to NAD83(CRS2003) will not have a significant impact on the City's operation, and will be done regardless of the Regional GPS system implementation.

FINANCIAL IMPACT

There is no financial impact expected from the recommendation.

CONCLUSION

The Regional GPS project is now in progress. An agreement and work plan has been negotiated with Geographic Data BC, a provincial Crown agency, for design and construction of the regional GPS infrastructure. The GVRD has also hired a full-time GPS Co-ordinator to provide project management for this project on behalf of member municipalities. A project management structure including a GPS steering committee with staff representation from the member municipalities has been established. On this basis, it is expected that the Regional GPS system will be fully operational by the end of 2003.



Steve Ono, P.Eng.
Manager, Engineering Design & Construction

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