



CORPORATION OF THE TOWNSHIP OF ESQUIMALT

Municipal Hall
1229 Esquimalt Road
Esquimalt, B.C. V9A 3P1

Staff Report

File #: 16-026

REQUEST FOR DIRECTION

DATE: January 11, 2016 **Report No.** EPW-16-006

TO: Laurie Hurst, Chief Administrative Officer

FROM: Jeff Miller, Director of Engineering and Public Works

SUBJECT:

Funding Request for Fraser Street/Bewdley Avenue/Munro Street Intersection

ESSENTIAL QUESTION:

Which option is to be included in the 2016 budget discussions?

RECOMMENDATION:

That the Committee of the Whole receive Staff Report EPW-16-006 for information, provide any additional direction to staff as the COTW considers advisable, and direct staff to prepare a 2016 budget request for a preferred option.

BACKGROUND:

On September 28, 2015, Council received a report (EPW-15-023) detailing possible solutions for Fraser Street/Bewdley Avenue/Munro Street intersection (Intersection). The resolutions from that meeting were:

- That stop lines be installed on the Bewdley Avenue legs and the Saxe Point leg of the Intersection.
- That a sidewalk be installed along the south west corner of the Intersection complete with accessibility ramps.
- That a funding request for pedestrian activated overhead lights to be installed on the Fraser Street and Munro Street legs of the Intersection.

Further discussion on the Intersection took place on October 5, 2015 when the matter was brought back for reconsideration. Based on that meeting the resolutions were amended to include looking at any other options for the intersection, including additional sidewalk, speed limits, and a traffic circle.

The Intersection is a five legged intersection. Two of the roads are the major roads (Fraser and Munro) while the remaining three legs are the minor roads (Bewdley - east, west, and Saxe Point). Under the Official Community Plan (OCP) (see Attachment 1), Fraser Street, Munro Street and the east leg of Bewdley Avenue are designated as residential collector roads. Fraser/Munro/Lampson roads are also a bus route for the Number 25.

The speed limit for all the roads is 50 km per hour with an exception along Fraser adjacent to the Recreation Centre. Engineering undertook a preliminary review of the speeds along the Fraser/Munro legs. The results were that minimum velocity recorded was 5 km/hr. with a maximum velocity being recorded at 68 km/hr. The average speed was 43 km/hr.

Both major roads have existing sidewalks on both sides of the road. The Bewdley legs do not have any sidewalks. The east Bewdley leg will receive a sidewalk on one side of the road during the 2018 to 2023 Capital Sidewalk Program. Bewdley leg (west) is scheduled to receive a sidewalk under this program in the next phase of the program. The Saxe Point leg has a pathway on the east side that connects to one of the park paths. This pathway is made of asphalt and is slightly raised. There is no vertical separation between this travel lane and the pathway.

See Attachment 2 for an aerial view of the Intersection.

ISSUES:

Within the report, a number of options will be presented to Council to provide a preferred option that can be included in the 2016 budget discussions. Of the options reviewed, two are speed calming features while the other three are not.

Staff has reviewed five potential options for the Intersection. They are:

- **Option 1**
 - The addition of stop lines on the minor legs of the Intersection
 - The addition of sidewalk and two ramps on the south west corner of the Intersection
- **Option 2**
 - Reduction of speed limit along Fraser Street and Munro Street
- **Option 3**
 - The addition of pedestrian activated lights on Fraser Street and Munro Street
- **Option 4**
 - The addition of a roundabout at the Intersection
- **Option 5**
 - Installation of sidewalk along west side of Saxe Point until it connects with park pathway

It should be noted that scope of work laid out in Option 1 will be completed shortly. The remaining options would incorporate this work into their scope of work.

Option 1

The minor legs of the Intersection already have traffic control signage (stop signs) in place. The addition of stop lines has been included into the traffic control configuration. Public Works has scheduled the installation of the sidewalk and ramps in the south west corner for January 2016. The estimated cost for this work is \$4,000 and will be accommodated within the operational budget.

Option 2

The major legs are designated as residential collector roads in the OCP. These roads do not have any speed limit signage and under the Motor Vehicle Act have a speed limit of 50 km/hr. Fraser Street between Esquimalt Road and Lyall Street has speed limit of 30 km/hr. due to its proximity to the Recreation Centre.

The lowering of the speed limit is a traffic calming measure. In order to determine public support for this measure, staff would undertake the traffic calming implementation process as outlined in Council Policy E&PW-01 Guide to Traffic Calming (see Attachment 3). The Township would be considered the proponent in this process. The catchment area for response would include homes that front onto the proposed roads for lower speeds and an area of 100 metres from the centre of the intersection. In addition to this public response, notifications would be made at the Intersection and Fleming Beach and on the Township's web site requesting feedback from users of the road due to its designation under the OCP. Council would have to clarify whether Lampson Street from Esquimalt Road to Munro Street is to be included in this process.

The cost of lowering the speed limit on the various roads is as follows:

- Fraser Street (Lyall Street to Munro Street) - \$600 (4 signs)
- Munro Street (Fraser Street to Lampson Street) - \$600 (4 signs)
- Lampson Street (Munro Street to Esquimalt Road) - \$1,200 (8 signs)
- Total estimated cost of all three roads - \$2,400

The implementation of this option would be carried out within the operational budget that has the ability to accommodate it.

Option 3

In this option pedestrian activated crosswalk lights would be installed on the major roads. Due to the orientation of the major roads into the Intersection, sight lines are not available for a clear and unobstructed view of the Intersection and pedestrians that may be crossing the major roads. The pedestrian activated crosswalk lights with their height and location on both major roads would provide drivers with information that a pedestrian was crossing the road and allow the vehicle the ability to adjust its velocity accordingly. As these lights are pedestrian activated and not in continuous use, they are not considered traffic calming devices. If this option was the preferred choice, public consultation could be carried out in a manner similar to the methodology laid out in the Guide to Traffic Calming but without the threshold requirements.

The estimated cost for this option is \$100,000. Funding for this option would have to be allocated

from reserve fund or from current year taxation, to be determined as part of budget discussions.

Option 4

Engineering has carried out preliminary discussions with a consultant to determine if a roundabout traffic feature could be accommodated at the Intersection. Roundabouts are generally utilized for three or four legged intersections and rarely for five legged intersections. The conceptual design determined that due to the leg configuration, a roundabout would be possible in this location.

Further design efforts are needed to confirm what the size/radius of the roundabout would be. A very small radius roundabout may be possible but it would most likely have a mountable centre portion for vehicles with larger turning radius (i.e. buses, fire engines, garbage and recycling trucks, boat trailers). Staff also has concerns that this mountable roundabout would invite smaller vehicle operators to utilize it rather than the travel lane.

As the turning radius is increased, additional land would be required to accommodate the roundabout. While the Township does own the south west property, further exploration would be necessary to determine implications to the physical nature of the property and the restrictions in place. Depending on the size of the roundabout, concrete walks previously put in within the last six years may be lost.

The estimated cost for the small radius option is in the \$50,000 to \$100,000 range while a larger radius option would be in the \$900,000 to \$1,100,000 range (cost will be dependent on the amount of land required to acquire from adjacent property holders). Funding for this option would have to be allocated from reserve fund, current year taxation, or borrowing, to be determined as part of budget discussions.

The installation of roundabout is a traffic calming measure. In order to determine public support for this measure, staff would undertake the traffic calming implementation process as outlined in the Guide to Traffic Calming. The Township would be considered the proponent in this process. The catchment area for response would include homes that front onto the proposed roads for lower speeds and an area of 100 metres from the centre of the intersection. In addition to this public response, notifications would be made at the Intersection and Fleming Beach and on the Township's web site requesting feedback from users of the road due to its designation under the OCP.

Option 5

In this option, a sidewalk would be added to the west side of the Saxe Point leg from the Intersection to the first path on the west side (approximately 40 metres). This path only provides an entrance into a wooded portion of the park. The sidewalk would terminate where there is a slight bend in the road and where it narrows. This is a poor location for pedestrians to cross the road due to limited visibility to vehicles leaving the park. In order to reach the next path an additional 70 metres of sidewalk would have to be installed. Due to the road's width the sidewalk would be located on the park side of the road's edge and would require cutting back of the existing foliage.

This option was discussed with Parks staff. They can support this option but would prefer that this work not be completed at this time. In looking forward to short/medium range planning, the entrance

of the park could be modified and thus resulting in the loss of this concrete feature.

If this option was the preferred choice, public consultation could be carried out in a manner similar to the methodology laid out in the Guide to Traffic Calming (without the threshold requirements) and the requirements of the Parks Department.

The estimated cost for this option is \$25,000. If additional sidewalk is required to go to the next path an additional \$40,000 would be required. No estimates have been carried out at this time for the redevelopment of the entrance of Saxe Point Park. Funding for this option would have to be allocated from reserve fund or current taxation. This option would most likely require that the work is contracted out as the capacity of Public Works would be exceeded in completing operational requirements and ongoing infrastructure programs

ALTERNATIVES:

1. That the Committee of the Whole receive Staff Report EPW-16-006 for information, provide any additional direction to staff as the COTW considers advisable, and direct staff to prepare a 2016 budget request for a preferred option.
2. That the COTW provide alternative direction to staff.
3. That the COTW request further information from staff.