

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, JULY 15, 2020**

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**SUBJECT**     **Solid Waste Management Plan – Traffic Impact Analysis**

**ISSUE SUMMARY**

To present a report on a high-level cost estimate on a passing lane on Willis Point Road.

**BACKGROUND**

On September 4, 2019, the Parks & Environment Committee considered proposed strategies and targets for the first round of public consultation on the Solid Waste Management Plan. The report identified potential traffic impacts associated with eventual transition of commercial truck traffic to a Willis Point Road entrance to Hartland Landfill. At the meeting, discussion considered road and traffic issues due to increased heavy truck traffic on Willis Point Road, and staff were directed to bring back a report on a high-level cost estimate for a passing lane on the steep 1.5 km section of Willis Point Road.

In response to this direction:

1. Staff retained transportation engineering consulting firm Bunt & Associates to evaluate the traffic impacts of increased heavy truck traffic on Willis Point Road; and
2. Staff retained Stantec Consulting Ltd. (Stantec) to develop a high-level cost estimate for a passing lane on the steep 1.5 km section of Willis Point Road.

**ALTERNATIVES**

*Alternative 1*

The Environmental Services Committee recommends to the Capital Regional District Board:

That the Stantec opinion of probable cost for the Willis point Road truck passing lane and the Bunt and &Associates *Hartland Landfill Alternate Access Transportation Impact Analysis* be received for information and that no further work be done on a passing lane for Willis Point Road.

*Alternative 2*

That the Stantec opinion of probable cost for the Willis Point Road truck passing lane and the Bunt & Associates *Hartland Landfill Alternate Access Transportation Impact Analysis* be received for information and be included in the Solid Waste Management Plan for the final phase of the consultation process.

**IMPLICATIONS**

*Service Delivery Implications*

The results of the Bunt & Associates traffic impacts evaluation are presented in appendices A and D. The results of the Stantec cost estimate are presented in appendices B and C.

Bunt & Associates evaluated three future scenarios for heavy truck traffic accessing Hartland landfill:

1. No change in vehicle access (all vehicle access to Hartland remains the same)
2. Move commercial vehicle access to Willis Point Road
3. Move the primary vehicle access to Willis Point Road (includes residential, commercial and operations access).

The results of the multi-criteria comparison between scenarios is presented in Table 5.1 of Appendix A. Overall, the impacts of re-routing vehicles from Hartland Avenue to Willis Point Road are relatively modest compared with the number of vehicles, not related to the landfill, travelling through the area. Furthermore, the study concluded that a passing lane on Willis Point Road is not warranted and would increase speeding. District of Saanich staff shared traffic data for the purposes of the traffic impact analysis and have reviewed the findings of the report. They are in concurrence with the recommendation that the passing lane is not warranted.

Willis Point Road has a single large hill with a maximum grade of 8%, whereas Hartland Avenue has a number of rolling hills with grades up to 15%. The Transportation Association of Canada suggests a maximum grade of approximately 10% for these environments, indicating that the grades on Willis Point Road are more appropriate for large commercial vehicles. Hartland Avenue currently has more vehicles than a typical rural local street. Willis Point Road currently has less than half of the vehicles of a typical rural collector road and is forecasted to remain well below capacity, even if all landfill access is relocated to Willis Point Road.

Safety concerns were identified at the intersection of West Saanich Road and Hartland Avenue due to poor sightlines. Relocating the landfill's primary access to Willis Point Road will significantly reduce the number of vehicles turning at this intersection. Overall, the route to Willis Point Road access is safer and more suitable for larger volumes of vehicles and heavy vehicles since the West Saanich Road and Wallace Drive intersection provides improved turning opportunities (less oncoming traffic) than the West Saanich Road and Hartland Avenue, and vehicle sight-distance is better at both the Willis Point Road intersection with Wallace Road and at the Wallace Road intersection with West Saanich Road.

#### *Environmental & Climate Implications*

There is no significant incremental increase in emissions associated with moving the primary access to Willis Point Road.

#### *Social Implications*

Moving the primary Hartland access to Willis Point Road will result in a reduction in air pollution affecting the health of neighbouring residents along Hartland Avenue. Moving the primary Hartland access to Willis Point Road will benefit the mountain biking and recreational cycling community accessing the Mount Work trail head at the end of Hartland Avenue. There will be a significant reduction in vehicles along Hartland Avenue and a reduction in vehicles crossing the Interurban Trail and trail head parking lot.

#### *Financial Implications*

Stantec's opinion of probable cost for the passing lane is \$5,080,031. Based on Bunt & Associates transportation engineering analysis the passing lane on the steep 1.5 km section of Willis Point Road is not warranted and, if implemented, would increase speeding.

**CONCLUSION**

In response to Parks & Environment Committee direction from its September 4, 2019 meeting, staff retained two engineering firms to perform a traffic impact analysis for changing the primary access to Hartland Landfill and a costing analysis for a passing lane on Willis Point Road. Using a multi-criteria evaluation, the traffic impact analysis compared scenarios for moving the main access to Hartland. The results of the analysis found that Willis Point Road is more appropriate for higher vehicle use than Hartland Avenue, the passing lane is not warranted, it would increase speeding, and would cost \$5.08 million. These results will help inform the decision to move the primary access to Hartland Landfill to the Willis Point Road entrance in conjunction with the Solid Waste Management Plan.

**RECOMMENDATION**

The Environmental Services Committee recommends to the Capital Regional District Board:

That the Stantec opinion of probable cost for the Willis point Road truck passing lane and the Bunt and &Associates *Hartland Landfill Alternate Access Transportation Impact Analysis* be received for information and that no further work be done on a passing lane for Willis Point Road.

Submitted by:	Stephen May, P. Eng., Senior Manager, Facilities Management & Engineering Services
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Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
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**ATTACHMENTS**

- Appendix A: Hartland Landfill Alternate Access Transportation Impact Analysis (Bunt & Associates)
- Appendix B: Willis Point Road Truck Passing Lane Class D Opinion of Probable Cost (Stantec)
- Appendix C: Willis Point Road Truck Passing Lane Concept Drawings
- Appendix D: Hartland Landfill Access Route Profiles and Grades