# **Appendix B**

# THE CORPORATION OF THE CITY OF WHITE ROCK CORPORATE REPORT



DATE:	July 22, 2019
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- TO: Mayor and Council
- FROM: Rosaline Choy, P.Eng., MBA Acting Director, Engineering and Municipal Operations

SUBJECT: Marine Drive "Hump" Vegetation Management Plan

# **RECOMMENDATIONS**

### THAT Council

- 1. Receive for information the corporate report dated July 22, 2019 from the Acting Director of Engineering and Municipal Operations titled "Marine Drive "Hump" Vegetation Management Plan"; and
- 2. Endorse the Marine Drive "Hump" Vegetation Management Plan as outlined in this corporate report.

# **INTRODUCTION**

At the regular Council meeting on July 8, 2019, Council directed staff to prepare a maintenance plan for the vegetation on the Marine Drive "Hump" that preserves views, slope stability, and greenery. The maintenance plan shall include cost estimates, schedule, and BNSF requirements for working within BNSF's property.

# PAST PRACTICE

Past practice for Marine Drive "Hump" maintenance includes mowing the top of the Hump from the Marine Drive. The work was conducted from City property without staff or contractors venturing onto BNSF property. The frequency of the mowing was once per year. This year (2019) is the first year that clearance mowing has not been completed.

# ANALYSIS

Staff reviewed the existing conditions and past practices. The view corridors enjoyed by residents and visitors are now blocked by Himalayan Blackberries and tree re-growth from the stumps (sucker growth). In previous years, the mid-summer mowing program maintained the view corridors.

A summary of the maintenance considerations are as follows:

- The brambles and suckers of the tree stumps along Marine Drive will continue to grow and obstruct views if not pruned.
- There will be a desire to cut back the vegetation if the brambles and suckers are allowed to grow to incredible heights and obstruct views.

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• If suckers are allowed to grow to a large size before it is pruned, it will leave large scars that are not aesthetically pleasing.

#### Schedule

The Himalayan Blackberry is an invasive species that grows quickly compared to other plant species. It is recommended that blackberry maintenance should be completed three (3) times per year: once after the first flush of growth in the spring, once in the summer (late July), and once at the end of the season in October. Dead stumps will biodegrade; this creates a void and could undermine the slope overtime. The suckers from the tree stumps are necessary for keeping the stumps alive but will slowly block views. It is recommended these suckers are pruned once every three (3) to five (5) years. This will allow the stumps and their roots to stay alive but still not block the views. The following table summarizes the proposed type and frequency of maintenance work.

#### Table 1 – Proposed Maintenance Plan

Task	Frequency
Mowing of view corridors	Spring / Summer / Autumn
Pruning of new tree growth from stumps	Once every 3 years

This approach will provide a tidy appearance throughout the year, maintain the vegetation, allow for multiple viewing corridors, and maintain slope stability.

BNSF requirements to work on BNSF property are as follows:

- Work with machinery north of the Marine Drive fence is permitted;
- Work with manual labour south of the Marine Drive fence requires a signed form that indemnify BNSF and a site meeting with BNSF's representative; and
- Work with manual labour within BNSF's fenced track area requires permits and BNSF flag personnel

#### **BUDGET IMPLICATIONS**

Blackberry mowing is anticipated to cost \$2,600 per session. For 3 sessions, the estimated annual cost is \$7,800. The pruning and removal of stems from tree stumps require work to be performed on BNSF property; the anticipated cost is \$3,600. Table 2 summarizes the costs for Marine Drive "Hump" maintenance in 2019.

 Table 2 – 2019 Marine Drive "Hump" Maintenance Costs

Task	Cost
Three mowing sessions of view corridors per year	\$7,800
Removal of tree growth (suckers)	\$3,600
Total	\$11,400

Although there are no funds specifically dedicated to the maintenance of the "Hump", funds are available from the Contract Maintenance – Parks operating budget to complete this work.

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#### **CONCLUSION**

The "Hump" is situated on the waterfront between East Beach and West Beach. This area is known for its viewing potential and would need regular maintenance in order to preserve views. At an annual cost of \$7,800 per year and \$3,600 every 3 years, the hump vegetation can be managed to support views, slope stability, and vegetation. Staff recommends Council support the maintenance plan as outlined in this corporate report.

Respectfully submitted,

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Rosaline Choy, P.Eng., MBA Acting Director, Engineering and Municipal Operations

#### **Comments from the Chief Administrative Officer:**

I concur with the recommendations of this corporate report.

Dan Bottrill Chief Administrative Officer

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