



**AGENDA**  
**PUBLIC WORKS AND ENGINEERING COMMITTEE MEETING**

June 13, 2018, 4:30 PM - 6:30 PM  
Board Room, Service and Resource Centre,  
411 Dunsmuir Street, Nanaimo, BC

Pages

1. **CALL THE MEETING OF THE PUBLIC WORKS AND ENGINEERING COMMITTEE TO ORDER:**
2. **INTRODUCTION OF LATE ITEMS:**
3. **ADOPTION OF AGENDA:**
4. **ADOPTION OF MINUTES:**

**a. Minutes**

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Minutes of the Public Works and Engineering Committee Meeting held in the Boardroom, Service and Resource Centre, 411 Dunsmuir Street on Wednesday, 2018-APR-11 at 4:30 p.m.

5. **PRESENTATIONS:**
6. **REPORTS:**

**a. Boxwood Road Traffic Calming**

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To be introduced by Jamie Rose, Manager of Transportation.

*Purpose: To provide the Public Works and Engineering Committee with information on the Council motion for Staff to report back on traffic calming and pedestrian safety options on Boxwood Road.*

Recommendation: That the Public Works and Engineering Committee receive the report titled "Boxwood Road Traffic Calming", dated 2018-JUN-13, for information.

7. **OTHER BUSINESS:**
8. **QUESTION PERIOD:**
9. **ADJOURNMENT:**

**MINUTES**  
**PUBLIC WORKS AND ENGINEERING COMMITTEE MEETING**  
**BOARD ROOM, SERVICE AND RESOURCE CENTRE**  
**411 DUNSMUIR STREET, NANAIMO, BC**  
**WEDNESDAY, 2018-APRIL-11, AT 4:30 P.M.**

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Present: Councillor M. D. Brennan, Chair  
Councillor S. D. Armstrong  
Leon Cake  
Mike Donnelly  
Mike Herold  
Russ Irish  
Wally Wells  
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Absent: Mike Leach  
Will Milligan

Staff: P. Rosen, Senior Manager Engineering  
J. Rose, Manager of Transportation  
C. Davis, Manager of Sanitation, Recycling and Public Works Admin  
R. Fulla, General Foreman - Waterworks  
J. Vanderhoef, Recording Secretary

1. CALL THE PUBLIC WORKS AND ENGINEERING COMMITTEE MEETING TO ORDER:

The Public Works and Engineering Committee Meeting was called to order at 4:31 p.m.

2. INTRODUCTION OF LATE ITEMS:

- (a) Add verbal update from Poul Rosen, Senior Manager Engineering, regarding Committee Strategic Directions and Cross Connection Control. Reorder Agenda Item 5 – Presentations as follows:
  - (a) Verbal Update Poul Rosen, Senior Manager Engineering, re: Committee Strategic Directions and Cross Connection Control.
  - (b) Jamie Rose, Manager of Transportation, re: Update on Transportation Initiatives and Projects.
  - (c) Ritchie Fulla, General Foreman – Waterworks, re: Annual Water Main Flushing Program.

3. ADOPTION OF AGENDA:

It was moved and seconded that the Agenda, as amended, be adopted. The motion carried unanimously.

4. PRESENTATIONS:

- (a) Verbal Update Poul Rosen, Senior Manager Engineering, re: Committee Strategic Directions and Cross Connection Control

Poul Rosen, Senior Manager Engineering, provided a verbal update regarding the approval of the 2018 Public Works and Engineering Committee Strategic Directions and advised the Committee that the “Cross Connection Control Bylaw 2018 No. 7249” has been adopted by Council.

5. ADOPTION OF MINUTES:

Committee discussion took place regarding the wording of the 2018-JAN-23 Special Public Works and Engineering Committee Minutes.

It was moved and seconded that the Minutes of the Special Public Works and Engineering Committee Meeting held in the Board Room, Service and Resource Centre, 411 Dunsmuir Street, Nanaimo, BC, on Tuesday, 2018-JAN-23 at 4:30 p.m., be amended to show that discussion regarding garburators within the City of Nanaimo be limited and working towards prohibition. The motion carried unanimously.

It was moved and seconded that the Minutes of the Special Public Works and Engineering Committee Meeting held in the Board Room, Service and Resource Centre, 411 Dunsmuir Street, Nanaimo, BC, on Tuesday, 2018-JAN-23 at 4:30 p.m. be adopted as amended. The motion carried unanimously.

Committee discussion took place regarding the 2018 Committees Strategic Directions.

4. PRESENTATIONS: (continued)

- (b) Jamie Rose, Manager of Transportation, re: Update on Transportation Initiatives and Projects

Jamie Rose, Manager of Transportation, provided an update on Transportation Initiatives and Projects. He spoke regarding:

- various methods of transportation around the City and their usage;
- projects that have been undertaken since 2014;
- work being done with the school district for an active and safe route to school project;
- developing complete streets designs for future projects;
- projects that are nearing completion this year;
- new topics that are being discussed within transportation plans; and,
- future planned projects.

Committee discussion took place regarding:

- speed limits potentially being adjusted to 40km/h in residential areas;
- traffic congestion in popular intersections; and,

- Port Place Mall being used as a shortcut to access the Island Highway for Gabriola Ferry traffic.

It was moved and seconded that the Public Works and Engineering Committee receive the presentation from Jamie Rose, Manager of Transportation, regarding an update on Transportation Initiatives and Projects for information. The motion carried unanimously.

(c) Ritchie Fulla, General Foreman – Waterworks, re: Annual Water Main Flushing Program

Ritchie Fulla, General Foreman – Waterworks, provided information on the Annual Water Main Flushing Program. He spoke regarding the difference between the old reservoir and the new reservoir. He explained how the flushing process has evolved over the years to become more efficient especially with the addition of the new Water Treatment Facility. He explained that flushing is still necessary due to cast iron water mains, asbestos water mains, dead-ends and cul-de sacs.

It was moved and seconded that the Public Works and Engineering Committee receive the presentation from Ritchie Fulla, General Foreman – Waterworks, regarding the Annual Water main Flushing Program for information. The motion carried unanimously.

6. REPORTS:

(a) Policy 11-5400-09 Transportation Non Standard Crosswalk Marking Policy

Introduced by Jamie Rose, Manager of Transportation.

Presentation:

1. Jamie Rose, Manager of Transportation, provided a presentation regarding non-standard crosswalks. He spoke regarding requests for non-standard crosswalks. Staff are requesting that Council adopt a new policy to address non-compliant requests.

Committee discussion took place regarding the following:

- submission process for non-standard crosswalks requests;
- sidewalk regulations;
- existing non-compliant crosswalks being kept, or removed, in the future;
- currently requests are submitted directly to Council with no Staff review;
- budget for upkeep of painted crosswalks versus thermo plastic options;
- goal of the review process is to address concerns by providing the costs to implement, remove or maintain these requests;
- how locations of flashing light intersections are assessed; and,
- alternatives to flashing light intersection for traffic calming/safety.

It was moved and seconded that the Public Works and Engineering Committee endorse “Policy 11-5400-09 Transportation Non-Standard Crosswalk Policy” and recommend that Council endorse the Policy. The motion carried unanimously.

(b) Sort-Toss-Roll Phase Two Implementation Plan Update

Introduced by Charlotte Davis, Manager of Sanitation, Recycling and Public Works Administration.

Presentation:

1. Charlotte Davis, Manager of Sanitation, Recycling and Public Works Administration, provided a summary of Phase One of the Sort-Toss-Roll Automated Solid Waste Collection Services Rollout. She spoke regarding the following:
  - what was learned from phase one and how it will be applied towards phase two;
  - success of phase one due to the amount of communication and engagement with the public;
  - phase one residents are now able to upsize their carts;
  - the number of households with suites exchanging their single large cart for two smaller carts has been low, indicating that the sharing system is working so far;
  - feedback that the new trucks are quieter and there is a desire for larger organic carts;
  - phase two will have 6 new automated trucks, 53,000 carts and will be implemented by July 2018; and,
  - there will be a small procurement period to sell advertising on the sides of the trucks.

Committee members asked about access for servicing alleyways and the condition of the alley roadways. Charlotte Davis, Manager of Sanitation, Recycling and Public Works Administration, explained that the one smaller automated truck that has been ordered is specifically to service narrow alleyways.

Charlotte Davis, Manager of Sanitation, Recycling and Public Works Administration, spoke regarding some potential risks, future considerations and the “Carry out Services” and “Medical Program” available for residents who have medical conditions.

Committee discussion took place regarding:

- steep slopes and carry out services;
- future of the carry out service if it is inundated with requests; and,
- requests for larger green bins creating an excess of small unused green bins.

Charlotte Davis, Manager of Sanitation, Recycling and Public Works Administration, spoke regarding plans for the future such as a review of feedback in the spring of 2019 and opportunities to achieve a goal of 90% diversion from the landfill. Some potential changes could involve a set calendar schedule for curb side pick up and charging for each garbage pick up.

Committee discussion took place regarding:

- how new carts will be distributed;
- amount of waste being picked up; and,
- purchases of future bins from more than one provider.

It was moved and seconded that the Engineering and Public Works Committee endorse the Phase Two Implementation Plan of the Sort-Toss-Roll Automated Solid Waste Collection Services Roll Out. The motion carried unanimously.

7. QUESTION PERIOD:

- Ron Bolin re: contracting out waste services, loss of Nanaimo Recycling Exchange services, collection of waste, 90% diversion goal, and reduction of contaminated products from recycling.
- Dorothy Houghton re: access to list of recyclable items, and location of current areas with low amperage LED street lighting versus high amperage.
- Ron Bolin re: requested a map of the locations of recycling facilities.

8. ADJOURNMENT:

It was moved and seconded at 6:23 p.m. that the meeting terminate. The motion carried unanimously.

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CHAIR

CERTIFIED CORRECT:

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CORPORATE OFFICER

DATE OF MEETING 2018-JUN-13

AUTHORED BY JAMIE ROSE, MANAGER OF TRANSPORTATION

SUBJECT **BOXWOOD ROAD TRAFFIC CALMING**

## **OVERVIEW**

### **Purpose of Report**

To provide the Public Works and Engineering Committee with information on the Council motion for Staff to report back on traffic calming and pedestrian safety options on Boxwood Road.

### **Recommendation**

That the Public Works and Engineering Committee receive the report titled "Boxwood Road Traffic Calming", dated 2018-JUN-13, for information.

## **Background**

Boxwood Road is a major road, which serves the light industrial area bounded by Meredith Road, Bowen Road, and East Wellington Road. The light industrial zoning in the area creates a diverse combination of businesses, ranging from truss manufacturing to retail. These businesses have equally diverse transportation needs. There are also gymnastic and dance studios in the neighbourhood, which create localized pedestrian activity at the intersections of Island Diesel Way and Bollinger Road. Through the Nanaimo Transportation Master Plan Boxwood Road has been identified as a key future active transportation corridor linking the Country Club, Hospital, and Vancouver Island University Mobility Hubs.

## **Current Conditions**

Boxwood Road has been developing since 1995, and over that time traffic demands have increased steadily. In recent years Staff have received several requests for traffic calming and sidewalks. Some requests have explicitly identified speed humps, however it has been made clear that the City's Traffic Calming Guidelines, which were developed based on nationally accepted best practices, do not support the installation of speed humps on Major Roads. Instead, recommend that traffic calming on major roads be addressed through better lane delineation or narrowing of traffic lanes.

In response to requests from the community and a motion from Council, Staff have undertaken a traffic study on the Boxwood Corridor. In addition to gathering technical data, a notice was circulated to area businesses to seek feedback on a potential option. The study was intended to generate a recommendation for traffic calming and opportunities to enhance pedestrian mobility, however as information has been gathered it has become evident that the issues are complex and require careful planning to ensure that short term solutions compliment long term plans.

The following information has been gathered through the study:

- The 85<sup>th</sup> percentile speed (or the speed that the majority of traffic is traveling below) is 61 km/h.
- There are approximately 4000 vehicles per day traveling on Boxwood Road.
- Area businesses support efforts to calm traffic but are very concerned about any loss of parking.
- Typical Parking Occupancy on the west side of the street is 42%.
- Typical Parking Occupancy on the east side of the street is 50%.
- Sidewalk will be constructed through building permit requirements at the undeveloped properties of 1885, 1925, 1955, and 1965 Boxwood Road.

### **Future Needs**

Boxwood Road is one of the few, continuous north south transportation corridors in Central Nanaimo that is not an arterial road or Provincial Highway. With this in mind, it is anticipated that upon completion of the Boxwood Connector, it will become a highly desirable route for cyclists and pedestrians traveling north and south. For this reason, Boxwood was identified through the Transportation Master Plan as the “Off Bowen Bike Way”. Planning a transportation corridor for both heavy vehicles and cyclists requires a delicate balance of traffic calming features and road design that can accommodate large vehicles.

### **Options for Current and Future Conditions**

When considering options to address the current concerns of speeding and pedestrian mobility, staff are considering a variety of options. Physical traffic calming features, such as a traffic circle were considered first, but were discounted as they could not accommodate the movement of large vehicles. Staff then explored options to create a complete street cross section. This would not only address traffic calming concerns, but would also provide the added benefit of adding either cycling or pedestrian facilities. The complete street options, which provide the greatest benefit for traffic calming and active transportation mobility, would require the removal of parking from one side of the road, which the area businesses have expressed concern over.

Options Being Considered:

**Option 1** - Create a buffered multiuse path on the west side of Boxwood Road.

Creating a buffered multiuse path on the current parking lane on the west side of Boxwood Road between Dufferin Crescent and Tulsa Road will reduce travel lane widths, which will have a traffic calming effect and will provide a walking and cycling connection between Dufferin Crescent and Tulsa Road until such time as sidewalk can be constructed. This option would allow for the multi use trail to evolve into a bidirectional cycle track once the sidewalk has been constructed (through development). The drawbacks of this option are that parking will be eliminated from the west side of Boxwood Road and that sections of travel lanes will be limited to 3.4m. It is anticipated that parking will operate at 85% capacity, which is considered acceptable, however 3.4m wide travel lanes are at the lowest end of the acceptable range to accommodate large vehicles. This option has been estimated at approximately \$340,000.



**Option 2 - Create a buffered multiuse path on the east side of Boxwood Road.**

Creating a buffered multiuse path on the current parking lane on the east side of Boxwood Road between Dufferin Crescent and Tulsa Road will reduce travel lane widths, which will have a traffic calming effect and will provide a walking and cycling connection between Dufferin Crescent and Tulsa Road until such time as sidewalk can be constructed. This option would allow for the multi use trail to evolve into a bidirectional cycle track once the sidewalk has been constructed (through future development). The drawbacks of this option are that parking will be eliminated from the east side of Boxwood Road and that travel lanes will be limited to 3.4m. It is anticipated that parking will operate at 100% capacity, which will result in parked vehicles being displaced into the adjacent neighbourhood, and 3.4m wide travel lanes are at the lowest end of the acceptable range to accommodate large vehicles. This option has been estimated at approximately \$340,000.

**Option 3 - Create Bike Lanes with Curb Extensions at intersections.**

The creation of north and south bound bike lanes, with curb extensions at the intersections of Tulsa Road, Island Diesel Way, and Bollinger Road will reduce travel lane widths to 3.6m, which will have a traffic calming effect, and will provide cyclists with a conventional cycling facility. This option does not provide any immediate benefit to the pedestrian network, but is a familiar type of cycling facility which would be consistent with the portion of Boxwood Road south of Dufferin Crescent. The drawbacks of this option are the lack of pedestrian facility and that this type of cycling facility provides little separation between heavy vehicles and cyclists. The lack of separation will make this facility unappealing for novice riders and therefore limit future use. This option has been estimated at \$425,000.

**Option 4 - Construct sidewalk on the west side of Boxwood Road and mark a road centerline.**

Continuing the road centerline on Boxwood Road between Tulsa Road and Dufferin Crescent and constructing sidewalk on the west side will provide a higher level of service to pedestrians along the corridor and will have some traffic calming benefits during high demand parking periods. Outside of business hours when parking demand is low, traffic calming will be insignificant and vehicle speeds will likely remain unchanged. Constructing sidewalk on the west side of Boxwood Road (ahead of development) will require the relocation of multiple utility poles and landscaping which will result in a high cost of construction. This option does not provide any benefit to cyclists and would require one of the other options to be constructed in the future to support the future needs of the corridor. This option has been estimated at \$550,000.

**Summary**

Staff have identified four potential options for work on Boxwood Road to address the current speeding and pedestrian mobility concerns. Options 1 and 2 could provide significant short and long term benefits for traffic calming and pedestrian or cyclist mobility. The drawbacks of these options are constrained lane widths, which may be challenging for large vehicles, and a loss of parking on one side of the road which is a concern of area businesses. Option 3 would provide traffic calming benefits without impacting large vehicle movements, but would not provide benefit to pedestrians now, and would not provide a cycling facility that would be appealing for riders of all skill levels. Option 4 will provide a sidewalk, which supports pedestrian mobility; however, it is not expected to result in any noticeable reduction in vehicle speeds.

This report is being presented for information and to advise the committee that once staff have identified an option for recommendation, a decision report will be brought forward.

### **SUMMARY POINTS**

- The 85<sup>th</sup> percentile speed on Boxwood Road between Dufferin Crescent and Tulsa is 61 km/h.
- Approximately 4000 vehicles per day travel on Boxwood Road.
- Boxwood Road does not currently have pedestrian or cycling facilities.
- Boxwood Road provides access for large heavy vehicles to the industrial businesses.
- Loss of on street parking would be a concern of the businesses.

#### **Submitted by:**

Jamie Rose  
Manager of Transportation

#### **Concurrence by:**

Poul Rosen  
Senior Manager of Engineering