
TO: CITY MANAGER **DATE:** 2016 November 01

FROM: DIRECTOR PLANNING AND BUILDING **FILE:** 90300 20
Reference: North Road Median

SUBJECT: NORTH ROAD MEDIAN ENHANCEMENTS

PURPOSE: To describe a Partnership opportunity with the City of Coquitlam for expenditure on further enhancements to the North Road Median.

RECOMMENDATIONS:

1. **THAT** Council authorize an expenditure not to exceed \$693,000.00 (inclusive of 5% GST) from Gaming Funds for the installation of enhanced lighting and gateway features on North Road, under a cost share agreement with the City of Coquitlam, as outlined in this report.
2. **THAT** Council authorize staff to execute the related cost share agreement with the City of Coquitlam.
3. **THAT** Council authorize staff to enter into an operating agreement with the Province and TransLink to permit installation and operation of the lighting on the Evergreen Line guideway.

REPORT**1.0 BACKGROUND**

On 2012 October 22, Council authorized the completion of enhancements to the medians on North Road under the Evergreen Line Guideway. To achieve these enhancements, the City entered into a cost share agreement with the Province and the City of Coquitlam, on a 1/3 cost share basis, for the supply and installation of landscaping and rain gardens under the guideway from Lyndhurst Street to Gatineau Place. In addition, Council authorized a further 50/50 cost share agreement with the City for Coquitlam for the installation of infrastructure to support future lighting enhancements related to the guideway.

The City's \$333,000 contribution to enhance the medians on North Road resulted in the installation of irrigated plant material and rain gardens under the Evergreen Line guideway. The City's further contribution of \$167,000 was matched by the City of Coquitlam to provide for the installation of infrastructure to support future lighting enhancements under the guideway.

In establishing the agreement to provide for enhanced lighting, the City of Burnaby and Coquitlam indicated a willingness to give further consideration to future lighting and public enhancements related to the guideway, once the primary works for the median treatment and lighting infrastructure was completed.

This report presents the proposals prepared by City of Burnaby and City of Coquitlam staff on further lighting and gateway feature enhancements that could be pursued through a further cost share agreement between the two Cities.

2.0 COMPLETED ENHANCEMENT WORKS

2.1 Enhanced Median

Installation and completion of the enhanced medians including rain gardens, trees, shrubs, concrete aprons and ducts for power and lighting controls, was undertaken under the agreement; and, maintenance by the Cities of Burnaby and Coquitlam will commence once the Province provides for the resumption of North Road to City ownership.

2.2 Lighting

The electrical designs permitted pre-ducting of the lighting as part of the early construction phases of the Evergreen Line project. The expenditure provided for installation of pre-ducting to allow electrical and lighting control cables to the base and top of each individual column. The tops of the columns have been designed to permit lighting to be affixed. All of the lighting systems are proposed to be located at the top of the columns free of vandalism and theft. The approved funding also supported completion of a Conceptual Design for guideway lighting system.

3.0 POTENTIAL FURTHER ENHANCEMENTS

The City of Coquitlam has indicated a willingness for further expenditures on lighting and gateway feature installation on North Road, subject to City of Burnaby agreement.

The Conceptual Design work has resulted in a theme of “Exploring North Road”. The theme seeks to reflect the origins of North Road as the first surveyed road in Metro Vancouver, using the North Star as a conceptual guide to create streetscape enhancements. The proposed theme takes advantage of the well-known street name and the night-time use of lighting to celebrate the North Star, a natural navigation aide visible year round at the north end of North Road. The proposal includes both a lighting component and gateway feature components, as follows:

3.1 Lighting

Lighting of the guideway is comprised of two elements: down lighting of the columns to create a colonnade effect and lighting of the columns and underside of the guideway at intersections for a gateway effect.

Colonnade Lighting

The columns on North Road are of three different shapes: octagonal with a flared top, octagonal with a square top, and square. To create a uniform night-time experience, down lighting would be cast in narrow shafts on the north and south sides of the columns facing pedestrians and traffic traveling north and south on North Road which would create a similar effect on each of the columns regardless of its shape. The lighting would accentuate this effect by taking advantage of the sides of the columns that receive the least amount of ambient light from adjacent street lights and buildings, as shown in **Figure 1**.

Gateway Lighting

To create a gateway experience at each of the six existing and proposed intersections (Gatineau Place, Austin Road, Cross Creek, Cochrane Avenue, Cameron Street and Foster Avenue), the underside of the guideway would be lit by a narrow wash of light projecting out from the top of the columns on either side of the intersections, in addition to the down lighting. The lighting on the guideway would be capable of either projecting a narrow wash of light in a solid colour or by projecting images onto the guideway, such as a night sky, maple leaves, or other seasonal symbols, as shown in **Figure 2**.

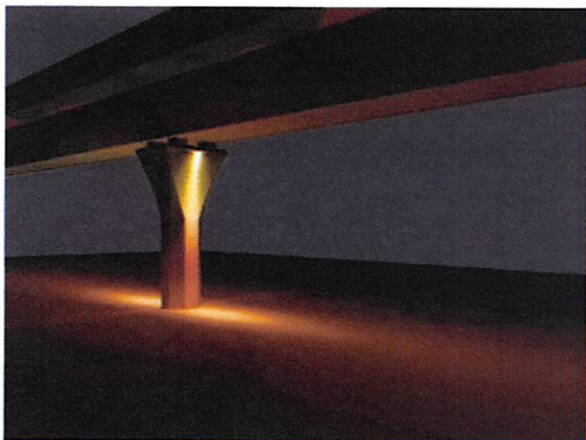


Figure 1: Proposed Down Lighting with Variable Colour Settings

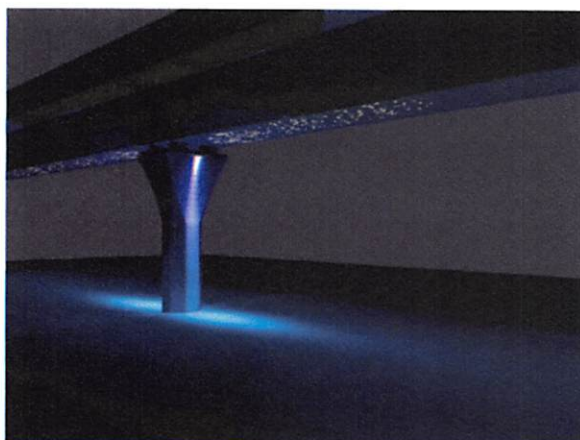


Figure 2: Proposed Gateway Lighting with Variable Colour and Graphic Settings

The City of Burnaby cost share for lighting enhancement is \$500,000, with operation and maintenance shared between the Cities under the North Road shared maintenance agreement. The guideway is under the control of the Province and will be turned over to TransLink upon completion of the project, necessitating an operation and maintenance agreement with the Province and TransLink to install and operate the lighting on the guideway columns.

3.2 Gateway Feature

Gateway feature installations, making reference to the North Star, are also proposed at the north and south ends of the guideway on North Road at Clarke Road and Gatineau Place respectively. The Gatineau installation would be located in the North Road centre median, 60 meters (200 ft.) south of Gatineau Place. To conform to the narrow median and avoid impacting sightlines, a

north star in the shape of a compass rose is proposed atop a pole to face north and south bound traffic as shown in **Figure 3**.

The Clarke Road installation is proposed on the northeast corner of the Y intersection of North Road and Clarke Road, facing northbound traffic, where northbound traffic veers to the northeast onto Clarke Road. Here a large North Star sculpture on the boulevard is proposed on axis with the centre of North Road as shown in **Figures 4 and 5**.



Figure 3: Proposed Gatineau Place Installation



Figure 4: Proposed Clarke Road Installation



Figure 5: Map of North Road Art Installations

Coquitlam has indicated that they would like to partner with Burnaby on the cost of both gateway feature installations. Given the locations of the gateway features (Gatineau – Burnaby) (Clarke Road – Coquitlam), Burnaby staff would recommended that each City assume cost and maintenance responsibility for their respective installations.

The cost of the Gatineau piece is estimated at \$160,000. The cost of the Clarke piece is estimated at \$440,000.

3.3 Benefits

Interim improvements to the sidewalks and the introduction of heavily planted medians in the centre of North Road have already changed the scale of the street dramatically by day. The proposed guideway and column lighting will create a dramatic and coherent experience at night that will help to define Lougheed Town Centre. The lighting could be changed from one season to the next to reflect holidays and celebrations. The proposed gateway features provide a daytime

experience that celebrates North Road's unique history and contributes as a unifying element for the Town Centre and, with up-lighting, could provide an anchor at each end of the guideway lighting.

Completion of the lighting would create a transformative night-time experience on North Road that would visually tie the disparate parts of streetscape and adjacent properties together; and it would create a gateway experience at each intersection under the guideway.

3.4 Summary of Costs

The total cost estimate for the improvements is \$1.59 million. *Table 1* outlines the cost break down of the improvements:

Table 1

Item	Amount
Guideway Lighting	\$1,000,000
Gateway Features	\$600,000
Total:	\$1,600,000

Cost share funding for this work has been approved by the City of Coquitlam totalling \$940,000. The net cost to Burnaby would be \$660,000. The funding distribution is shown in *Table 2* below:

Table 2

Funding	Amount
City of Burnaby - lighting	\$500,000
City of Coquitlam - lighting	\$500,000
City of Burnaby - gateway feature	\$160,000
City of Coquitlam - gateway feature	\$440,000
Total:	\$1,600,000

An allocation for this project has been provided for in the 2016–2020 Annual Financial Plan, with funding identified through the use of Gaming Funds. With Council approval of the requested expenditure, the lighting works and Gatineau Place gateway feature piece would be expected to be completed by spring 2017; and the Clarke Road gateway feature piece would be expected to be completed by the City of Coquitlam by 2020. Engineering would include a line item for maintenance in future operating budgets and Asset Management costs would be adjusted accordingly.

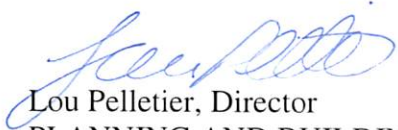
The installation of the works would be completed under contract by the City of Coquitlam with joint direction by the City of Burnaby and the North Road maintenance agreement between the two Cities would be adjusted to reflect a 50/50 cost share for operations and maintenance of the lighting.

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4.0 CONCLUSION

Enhancements to the North Road medians under the agreement with the Province and the City of Coquitlam, including raingardens and robust planting, are nearing completion and a maintenance agreement has been negotiated between the City of Burnaby and City of Coquitlam.

Under the City's agreement with the City of Coquitlam for initial lighting works, conceptual design work has also been completed. This report presents the resulting opportunity for a further partnership with the City of Coquitlam to complete lighting and gateway feature enhancements for Council consideration.



Lou Pelletier, Director
PLANNING AND BUILDING

IW:sa

cc: Director Engineering
Director Finance
Director Parks, Recreation and Cultural Services