

TO: CITY MANAGER

2004 December 07

FROM: DIRECTOR PLANNING AND BUILDING
DIRECTOR ENGINEERING

OUR FILE: PL 2156-01
TransLink MRN Capital

SUBJECT: TRANSLINK MRN CAPITAL (MINOR ROADS) PROGRAM: 2005
FUNDING APPLICATION

PURPOSE: To seek Council approval of the major roads projects recommended for funding under the 2005 TransLink MRN Capital (Minor Roads) Program.

RECOMMENDATIONS:

1. **THAT** Council approve the projects identified in Section 2.2 for funding under the 2005 TransLink MRN Capital (Minor Roads) Program.
2. **THAT** a copy of this report be forwarded to M. Lai, Program Manager, Road and Infrastructure Planning, TransLink, 4330 Kingsway, Burnaby, B.C., V5H 4G8.

REPORT

1.0 BACKGROUND

The City of Burnaby was approved for funding of \$2,040,000 from TransLink under the block allocation portion of the TransLink 2004 MRN Capital (Minor Roads) Program for upgrading the south side of Marine Way at Byrne Road, safety improvements to Gaglardi Way, sidewalks on Lougheed to access the Millennium Line stations and property acquisition for the Willingdon HOV lane extension.

The purpose of this report is to bring projects forward for Council consideration as Burnaby's 2005 submission for funding under the MRN Capital (Minor Roads) Program. The 2005 projects, if approved by Council, will be reviewed by the Major Roads and Transportation Advisory Committee (MRTAC) and ultimately by the TransLink Board in 2005 February or March.

2.0 PROPOSED 2005 MRN CAPITAL (MINOR ROADS) PROJECTS

2.1 Available Funding

The TransLink Three Year Plan identifies a total of \$20 M. to be available each year in the 2004 - 2006 period to municipalities for projects submitted under the "block

allocation” portion of the MRN Capital Program funding formula. Any “unallocated” funds remaining after municipal project submissions have been approved can be assigned to other projects on the MRN based on need, i.e., “needs based” projects.

The maximum funding available to the City of Burnaby in 2005 under the MRN Capital (Minor Roads) Program is currently \$2,334,000. However, as the City does not have to complete the projects applied for in 2005 until the end of 2006, the City can budget its cost share of 2005 TransLink-funded projects in the Major Roads component of the City’s 2005 - 2009 Financial Plan in 2005 and/or 2006.

Approved projects are cost-shared by TransLink up to a maximum of 50% for any single project.

2.2 Proposed 2005 MRN Capital Projects

The projects proposed for submission under the 2005 MRN Capital (Minor Roads) Program include the following:

2.2.1 Marine Way and Byrne Road (Phase 2)

Upgrading the intersection of Marine Way and Byrne Road is necessary to accommodate travel generated by regional growth and future development in the Big Bend expected over the next ten years. The City (with cost sharing from TransLink) would be responsible for upgrading the intersection to accommodate traffic growth on Marine Way and on Byrne Road, while adjacent developers will be responsible for road upgrading and traffic signals required to serve their development as well as urban treatments adjacent to developments including curbs, Urban Trails, sidewalks, landscaping and street lighting.

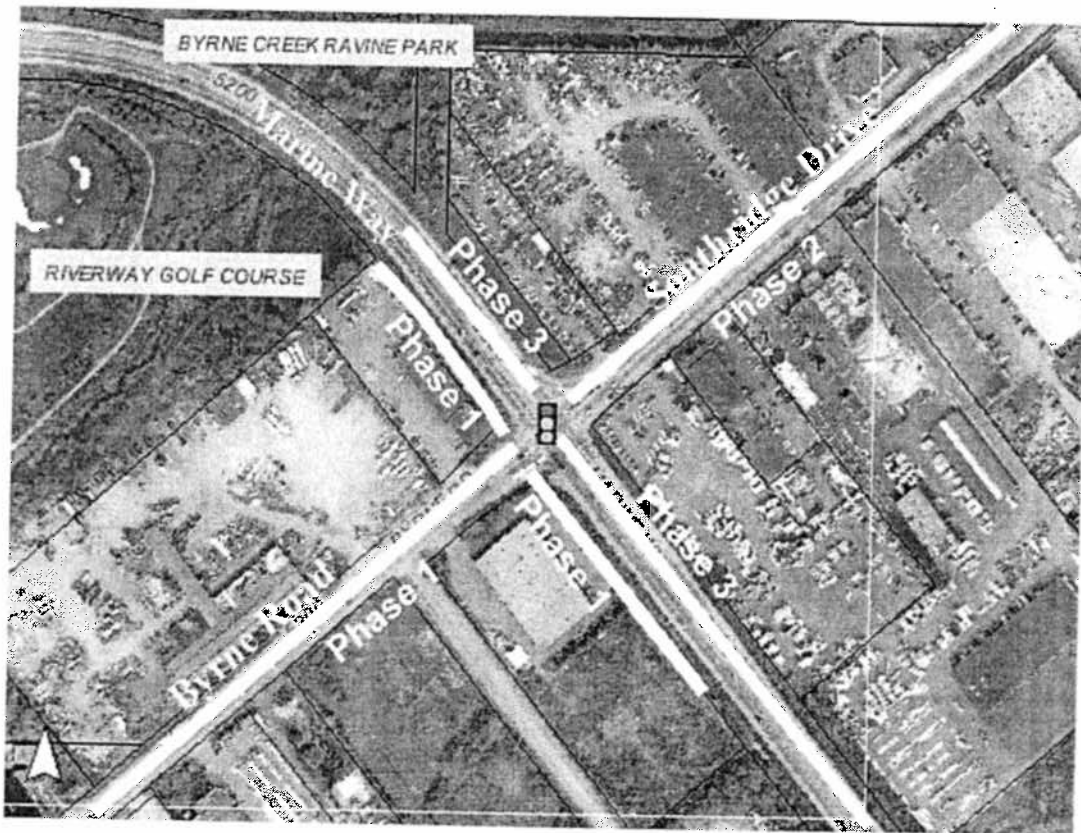
The City and TransLink will also be seeking funding from the Border Infrastructure Program.

The Marine Way/Byrne project will involve the reconstruction of Marine Way and of Byrne Road in three phases as shown in *Figure 1*. Phase 1 involves construction of an additional eastbound traffic lane on the south side of Marine Way (east and west of Byrne Road). The City applied for \$2.1 M. under the **2004** TransLink MRN Capital Program for these works. Design is underway and the timing of construction is linked to the development of the southeast quadrant of the intersection.

Phase 2, applied for in this application under the 2005 MRN Capital Program, would involve the upgrading of Southridge Drive from Marine Way to Marine Drive to accommodate four through-traffic lanes, left turn lanes and a right turn lane to westbound Marine Way (including upgrading of signalization).

The estimated cost of Phase 2 is \$1,500,000. The 2005 - 2009 Provisional Financial Plan currently provides \$100,000 in 2005 for design and \$1,400,000 in 2006 for construction.

Figure 1
Marine Way/Byrne Road Phasing



The City's application under the TransLink 2005 MRN Capital Program would provide cost sharing for Phase 2 as shown below:

Phase 2 Cost	\$1,500,000
TransLink Share	\$ 750,000
Burnaby Share	\$ 750,000

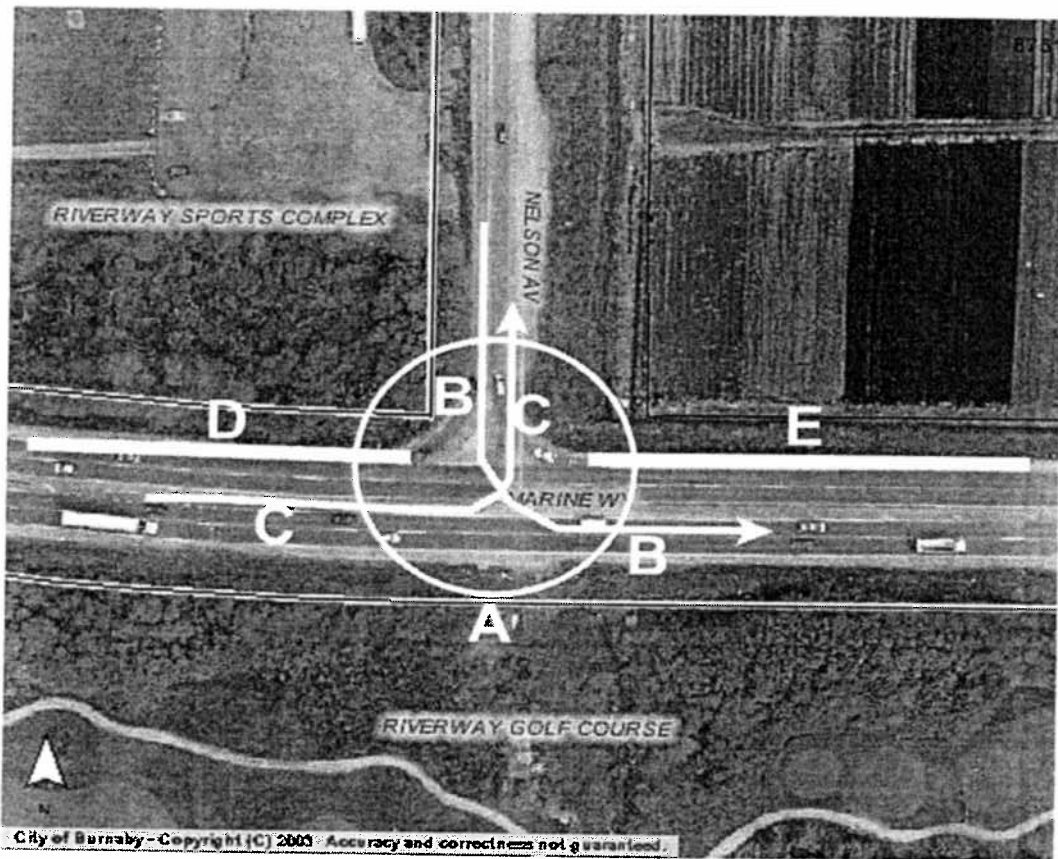
2.2.2 Marine Way at Nelson

Nelson Avenue currently provides a direct connection between Metrotown and the Big Bend. However, the intersection of Marine Way and Nelson is unsignalized (*circled A in Figure 2*) and does not allow left-out movements from Nelson onto Marine Way headed eastbound (*B in Figure 2*). The left turn from Marine Way to Nelson is also a safety hazard as vehicles must turn left against the flow of fast moving traffic. To upgrade the safety of this intersection, improve access to/from the Big Bend area and reduce traffic congestion on the left turn movement from southbound Byrne to Marine Way, it is proposed to signalize and reconstruct the intersection. This reconstruction would accommodate the "left-out" movement (*B*), provide signalized control for the left turn in (*C in Figure 2*) and provide acceleration and deceleration lanes (*D and E in Figure 2*) to accommodate right turn movements from Marine Way to Nelson northbound and from Nelson onto Marine Way westbound. The cost estimate below includes some contingency to account for difficult soils and possible watercourse relocation.

Total Cost	\$ 700,000
TransLink Share	\$ 350,000
Burnaby Share	\$ 350,000

A functional design and costing would be undertaken in 2005 with final design and construction in 2005/2006. The Major Roads component of the 2005 - 2009 Provisional Financial Plan allocates \$500,000 in 2005 for this project. This estimate will be reviewed based on the functional design and the budget allocation for 2006 and revised as necessary to add funds at the time of the 2006 - 2010 Provisional Financial Plan and confirm the funding amount requested from TransLink.

Figure 2
Marine Way at Nelson Improvements



2.2.3 ITS System

The City is proposing to upgrade its signal system to a new open architecture Advanced Traffic Management System (ATMS) that would provide a centralized integrated platform for traffic signal system control, information management, and graphical data display. In addition to providing advanced traffic signal management capabilities, this system would enable us to participate fully in Intelligent Transportation System (ITS) solutions with TransLink and other agencies to enhance traffic flow and information distribution.

ITS systems are being developed and deployed throughout North America to reduce crashes, improve traffic flow, provide better driver information, provide guidance to tourists, improve goods movement, and reduce fuel consumption and emissions. This would enable us to combine changeable message signs, camera systems, and data collection in a standard open data base that could be used to provide better information to citizens and other agencies. The estimated cost of this system upgrade is \$300,000 with cost sharing as follows:

Total Cost	\$ 300,000
TransLink Share	\$ 150,000
Burnaby Share	\$ 150,000

This project would be undertaken in 2005 and funds have been included for this project in year 2005 of the 2005 - 2009 Provisional Financial Plan.

3.0 CONCLUSION

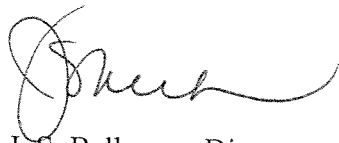
For 2005, the funding available from the TransLink MRN Capital (Minor Roads) Program is \$20 M. region-wide. The City of Burnaby share of this funding currently would be a maximum of \$2,334,000.

For 2005, it is proposed to apply to the program for funding of Phase 2 of the intersection of Marine Way and Byrne Road involving the reconstruction of Southridge Drive from Marine Way to Marine Drive, the reconstruction and signalization of the intersection of Marine Way and Nelson and the ITS project. The Marine Way/Nelson and the ITS Project would be initiated in 2005 while the Southridge Drive project would be undertaken in 2006. These projects are included in the Major Roads component of the Provisional 2005 - 2009 Capital Program.

Southridge Drive (Marine Way to Marine Drive)	\$ 1,500,000
Marine Way/Nelson	\$ 700,000
ITS System	<u>\$ 300,000</u>
TOTAL	\$ 2,500,000

The total cost of the 2005 MRN Capital projects is estimated at \$ 2.5 M. of which the TransLink share would be 50% or \$1,250,000 out of the allotted total of \$2.334 M. for 2005. The remaining amount could be carried over into 2006 for application for that year's identified priority project(s).

This report is written to seek Council approval to submit these projects for cost sharing with TransLink under the 2005 MRN Capital (Minor Roads) Program. Staff would be bringing forward specific reports in 2005 and 2006 to seek bylaw authority from Council for financing of the individual projects.



J. S. Belhouse, Director
PLANNING AND BUILDING



W.C. Sinclair, Director
ENGINEERING

RG/jc

cc: Director Finance

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