



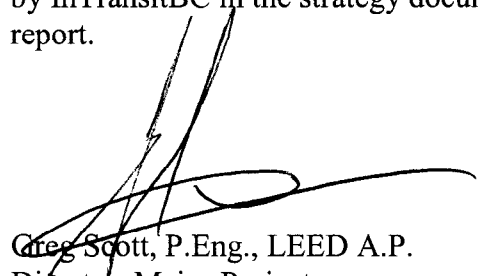
City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** January 6, 2006
From: Greg Scott, P.Eng., LEED A.P. **File:** 10-6520-02-01/2006-Vol
 Director, Major Projects 01
Re: **Canada Line - Richmond Section, Traffic Management Strategy**

Staff Recommendation

That Council approve the Traffic Management Strategy for 2006 construction works as proposed by InTransitBC in the strategy document dated December 5, 2005 and outlined in the attached report.



Greg Scott, P.Eng., LEED A.P.
 Director, Major Projects
 (4372)

FOR ORIGINATING DIVISION USE ONLY			
ROUTED TO:	CONCURRENCE		
Transportation.....	Y	<input checked="" type="checkbox"/>	N <input type="checkbox"/>
RCMP.....	Y	<input checked="" type="checkbox"/>	N <input type="checkbox"/>
Fire.....	Y	<input checked="" type="checkbox"/>	N <input type="checkbox"/>
Economic Dvlp / Business Liaison.....	Y	<input checked="" type="checkbox"/>	N <input type="checkbox"/>
REVIEWED BY TAG	YES	NO	REVIEWED BY CAO
	<input checked="" type="checkbox"/> <i>sw</i>	<input type="checkbox"/>	YES <input checked="" type="checkbox"/> <i>GS</i> NO <input type="checkbox"/>

Staff Report

Origin

The construction of the Canada Line will require short-term diversion of traffic along the future guideway alignment of No. 3 Road. On December 19, 2005, InTransitBC has submitted a report to provide information on the Traffic Management Strategy for 2006 construction work.

This report presents a summary of the proposed Traffic Management Strategy and seeks Council's approval of it prior to the commencement of the roadway utility construction activities which are scheduled later this month.

Findings Of Fact

Purpose of Traffic Management Strategy and Plan

The traffic management strategy is an analysis of the impacts based on traffic operational requirements for each construction phase. The strategy is used to guide the production of the Traffic Management Plan. The Traffic Management Plan will consider all impacts relating to the construction both direct and indirect and provides details on the following plans:

- Traffic Control Plan
- Public Information Plan
- Incident Management Plan
- Implementation Plan

General Sequence of Construction Activities

Construction and relocation of utilities in advance of guideway construction for the Canada Line in Richmond is scheduled to commence in January 2006 and be completed by the middle of the year. Civil works will begin in April 2006 and will be completed in mid-2008.

Utility work involves constructing a new underground hydro line from Granville Avenue to Westminster Highway as well as hydro and storm sewer relocation between Westminster Highway and Cambie Road. Minor utility relocation is also required north of Bridgeport. All of this work will be completed 2006.

Civil works involve piling, footing and column construction along the guideway alignment and subsequent erection of precast guideway beams. During 2006, construction is scheduled to occur north of Bridgeport Road and along the east side of No. 3 Road between Bridgeport Road and Ackroyd Road. Guideway construction between Ackroyd Road and Cook Road is scheduled for 2007 and a Traffic Management Strategy will be prepared for this work in 2006.

Upcoming Work on Utility Relocation and Guideway Construction

The proposed utility relocation and guideway construction for 2006 has five stages with different traffic operational scenarios. Generally the operational scenarios are combinations of relaning No. 3 Road from 5-lanes to 6-lanes south of Ackroyd and moving the northbound general

purpose lanes to the dedicated bus lanes north of Ackroyd. There will be some overnight complete closures of side streets for the purpose of erecting sectional guideways at intersections.

South of Ackroyd where bus lanes do not exist, the new re-laned 6 lanes will generally consist of 2 southbound lanes, and one centre left-turn lane, and 3 northbound lanes. The 3 northbound lanes will have a bus lane on the northbound curb lane and 2 general purpose lanes. Within the immediate construction zone, the bus lane and one northbound lane will be closed in 100 m sections.

North of Ackroyd where bus lanes exist, the utility works start in the busway requiring the 98 B-Line to be rerouted to general purpose traffic lanes. After that, the general northbound traffic will be rerouted permanently to the bus lanes that will become the northbound general purpose lanes. Two lanes of traffic each way and one left-turn lane will be retained at all times during construction.

The following are the details of the five different stages for 2006:

Stage 1 – Early February to Early March

- Busway closed Bridgeport Road to Ackroyd Road
- No. 3 Road reduced by two lanes from Granville Ave to Cook Road
- Utility relocation north of Bridgeport Road continues

Stage 2 – Early March to Mid April

- Busway closed Bridgeport Road to Ackroyd Road
- No. 3 Road restored from Granville Ave to Cook Road
- No. 3 Road reduced by two lanes from Cook Road to Westminster Highway
- Utility relocation north of Bridgeport Road continues

Stage 3 – Mid May to Mid June

- Busway closed Bridgeport Road to Ackroyd Road
- Piling, footing and column construction north of Bridgeport Road – reduced traffic lanes for short stretches of local streets
- No. 3 Road restored from Cook Road to Westminster Highway
- No. 3 Road reduced by two lanes from Westminster Highway to Ackroyd Road

Stage 4 – Mid June to Mid August

- Busway closed Bridgeport Road to Ackroyd Road
- Piling, footing and column construction north of Bridgeport Road – reduced traffic lanes on local streets
- No. 3 Road restored from Westminster Highway to Ackroyd Road

Stage 5 – Mid August to end of December

- Piling, footing and column construction north of Bridgeport Road completed
- All northbound traffic relocated to reconfigured busway from Bridgeport Road to Ackroyd Road

Analysis

Projected Weekday Traffic Impact

Based on traffic simulation analysis done by InTransit BC and TranLink, traffic delays are expected to be minimal on weekdays with delays of less than one minute between the Airport exchange and Richmond Centre. Traffic lights will be adjusted to minimize delays to both buses and general traffic.

Projected Weekend Traffic Impact

On weekends, delays are expected to be over one minute for general purpose traffic at each intersection and up to 3-5 minutes for 98 B-Line.

Impacts on general traffic can be mitigated by the following:

- reduction in traffic volumes on weekends may be greater as there is a higher proportion of “non-essential” trips
- elimination of the busway from Bridgeport to Ackroyd permits for more efficient signal operation for general traffic
- utility relocation south of Ackroyd will only affect approximately 100 metres of No.3 Road at any one time so that the effects will be localised and relatively short in duration

Impact of Traffic Diverted to Other City Streets

There appears to be no significant impact on other arterial routes or local residential neighbourhoods therefore requiring no need for further mitigation measures outside of the No. 3 Road corridor at this time.

Impact on Transit Services

No significant increases in bus running times are expected during weekday peak periods as a result of construction stages 1 through 5. Consequently, no changes in weekday bus schedule are recommended. However, it appears likely that the elimination of the busway will increase bus running times during peak shopping hours, especially on weekend afternoons. This may add up to ten minutes to 98B Line round trip running time between Richmond City Centre and Vancouver waterfront.

It is proposed that the weekend afternoon schedule for this route be adjusted to maintain satisfactory headway and capacities and that the performance of the 98B Line be monitored during all construction stages to maintain satisfactory service. Coast Mountain Bus Company is planning for additional buses to supplement the current fleet should the delays in travel time require such actions to minimize the impacts on current frequency of service.

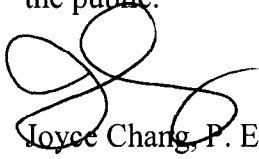
Financial Impact

No financial impact to the City is anticipated. All costs associated with the traffic control measures necessary to facilitate the traffic pattern changes as a result of the Canada Line construction activities are expected to be borne by the project.

Conclusion

Based on the results of the study, the anticipated impacts appear to be minimal. Transportation, RCMP, and Fire have reviewed the report and have not expressed any concerns but stressed that emergency services must be notified in advance of any traffic pattern changes in a timely manner so that adjustments to emergency response routes can be adjusted accordingly. In that regard, InTransitBC will be required to ensure that the City, RCMP, and Fire will be notified and consulted on a continual basis on planned lane closures throughout the duration of the project to ensure public safety.

Provided separately for your information is a *draft* copy of InTransitBC's public information on the Traffic Management Strategy, which upon Richmond's approval will be made available to the public.



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GS:jc