

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION)

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

RE: SKYTRAIN CONSTRUCTION: LOUGHEED/WILLINGDON DETOUR

RECOMMENDATION:

1. **THAT** a copy of this report be forwarded to the RTPO (Attn: John Eastman) and SAR Transit (Attn: Mark Jolink).

REPORT

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held on 2000 May 10, received and adopted the *attached* report to inform Council of the extensive detour requirements flowing from the construction of the SkyTrain guideway span over Willingdon and the Brentwood Station immediately to the West on Lougheed.

Respectfully submitted,

Councillor N. Volkow
Chair

Councillor D. Evans
Vice Chair

Councillor N. Harris
Member

<p>: COPY - CITY MANAGER - DIRECTOR ENGINEERING - DIR. PLNG. & BLDG.</p>
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City of Burnaby

INTER-OFFICE COMMUNICATION

TO: SECRETARY,
TRANSPORTATION/ TRANSIT COMMITTEE

DATE: 2000 05 04

FROM: ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENGINEERING SYSTEMS

FILE:

SUBJECT: SkyTrain Construction: Lougheed/Willingdon Detour

PURPOSE: To inform Council of the extensive detour requirements flowing from the construction of the SkyTrain guideway span over Willingdon and the Brentwood Station immediately to the West on Lougheed

RECOMMENDATION:

1. THAT a copy of this report be forwarded to the RTPO (Attn: John Eastman) and SAR Transit (Attn: Mark Jolink).

R E P O R T

1.0 INTRODUCTION

The SkyTrain project now under construction along the Lougheed corridor is being implemented by the provincial government through "Rapid Transit Project 2000" (RTPO), a company formed for this purpose. SAR Transit is a consortium of companies contracted to Design/Build most of the guideway and some of the stations. With this approach there is little lead time between detailed design and construction with changes to the detail and project scheduling occurring in a dynamic environment. The City's current operational concerns are related to the need for managing traffic along the Lougheed during the construction process. SAR subcontracts this Construction Traffic Management to a specialist firm.

2.0 BACKGROUND

The construction of the SkyTrain Guideway along the Lougheed corridor requires an extensive work zone both during column placement and guideway erection. The disruption to traffic has been greatest where the guideway crosses arterial roads or follows the centre line of the Lougheed Highway. Generally the project has been able to meet the requirement of providing one lane of travel in each direction at all times supplemented by an additional lane in the peak travel direction during rush hours.

The observed congestion through the constricted work zone areas has been less than we initially anticipated reflecting a significant diversion of traffic to other routes. There have been occasional rush hours where congestion along the corridor has been exacerbated by “emergency” construction work delaying the augmentation of added lane capacity.

3.0 CONSTRUCTION THROUGH BRENTWOOD TOWN CENTRE

The SkyTrain alignment is in the centre of the Lougheed Highway through the Brentwood Town Centre Area. There, right of way is more constrained than elsewhere along the corridor. The construction of the Brentwood station over the highway (between Willingdon and Alpha) will require significant foundation work as will the columns supporting the “special” long span over Willingdon. The size of the foundation excavation coupled with the large construction plant will require detouring traffic from the Highway for a period up to 3 months.

4.0 THE DETOUR

Exhibit A, attached, shows the detour around the major work areas in the Brentwood Town Centre. The intent is to continue carrying Westbound traffic on the Lougheed through the construction zone while all Eastbound traffic is moved to Dawson. The detour has been evaluated by a transportation consultant using traffic data gathered for the purpose. The conclusion is that, with some minor traffic diversion, the detour can accommodate the bulk of travel demand.

The conclusions of the consultant study are as follows:

- (a) At Lougheed Highway/Willingdon Avenue there will be no eastbound traffic, and therefore no southbound right turn or northbound left turn. From 6:00 to

9:00 am there will be two westbound lanes. One lane North of the construction will expand to provide one through and one right turn lane at Willingdon (left turn lane closed and left turns prohibited). The lane south of the construction provides one through and one left turn (no right turn) lane on approach. At other times, the lanes south of the construction will be closed and there will be one left turn, one through and one right turn lane north of the construction.

- (b) At Dawson Street/Willingdon Street it is recommended that advanced green phases be installed so that the higher volume left turn movements will operate adequately.
- (c) At Dawson Street/Beta Avenue a temporary signal will be required. In the eastbound direction a lagging left turn phase is recommended. Westbound left turns need to be prohibited. It is recommended that there be no crosswalk on the north leg of this intersection.
- (d) A significant amount of on street parking will be 'lost' during the detour. Stopping will need to be prohibited on both sides of the detour route.

At the time of writing staff are actively working on the detail of the proposed diversion strategy with SAR/RTPO staff. For example the west end of the diversion to Dawson will now utilize Gilmore rather than Rosser obviating the need to install the temporary signal at Rosser/Dawson. This improvement has been accomplished by preempting concurrent SkyTrain activity on Gilmore. There will undoubtedly be some further fine tuning of the measures discussed but they do not affect the thrust of the proposal.

5.0 DISCUSSION

The detour via Dawson was scheduled for operational implementation on the 19th May by SAR Transit, the contractor. How successfully the detour operates will depend on the dispatch with which some measures, such as the temporary signals are installed and the responsiveness of the construction traffic management operator (a SAR subcontractor)

to changing conditions. The City's staff are actively working on implementing changes to traffic control, signing and road marking on the understanding that the project will cover these expenses as well as reinstatement costs. Some items, such as the traffic signal work required will have a longer term "legacy" benefit.

Our observation suggests that the project has been effective in communicating with motorists, local interests, businesses, and residents to mitigate the temporary adverse impacts of construction. This detour will provide special challenges.

6.0 CONCLUSION

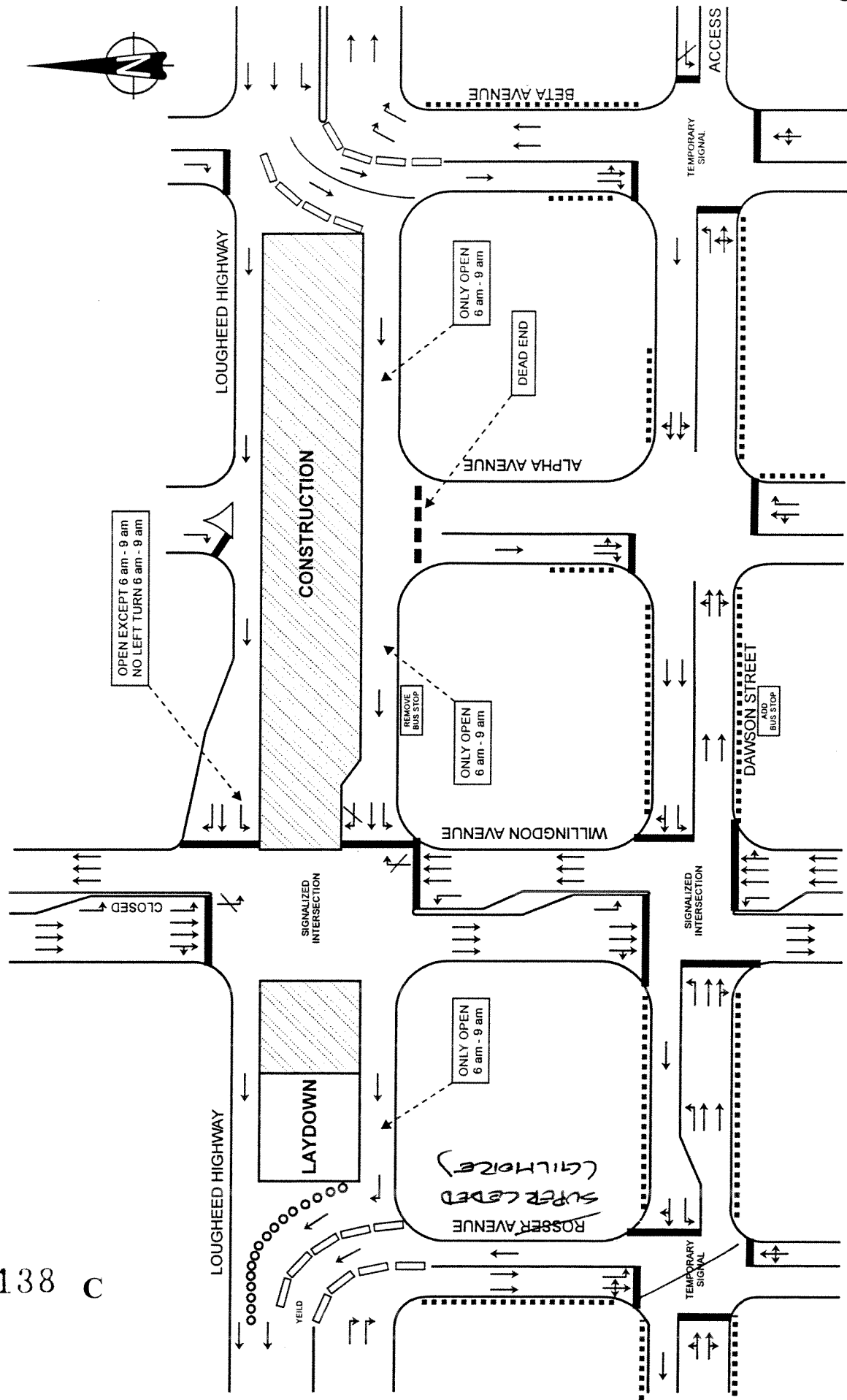
The fast track nature of this project continues to create unanticipated operational problems that need to be resolved precipitately. In this case, notwithstanding the imminent implementation, staff are assured that the detour proposal discussed in this report is the best measure that can be achieved given the significant constraints faced.



P. Liivamagi, P. Eng.
ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENG. SYSTEMS

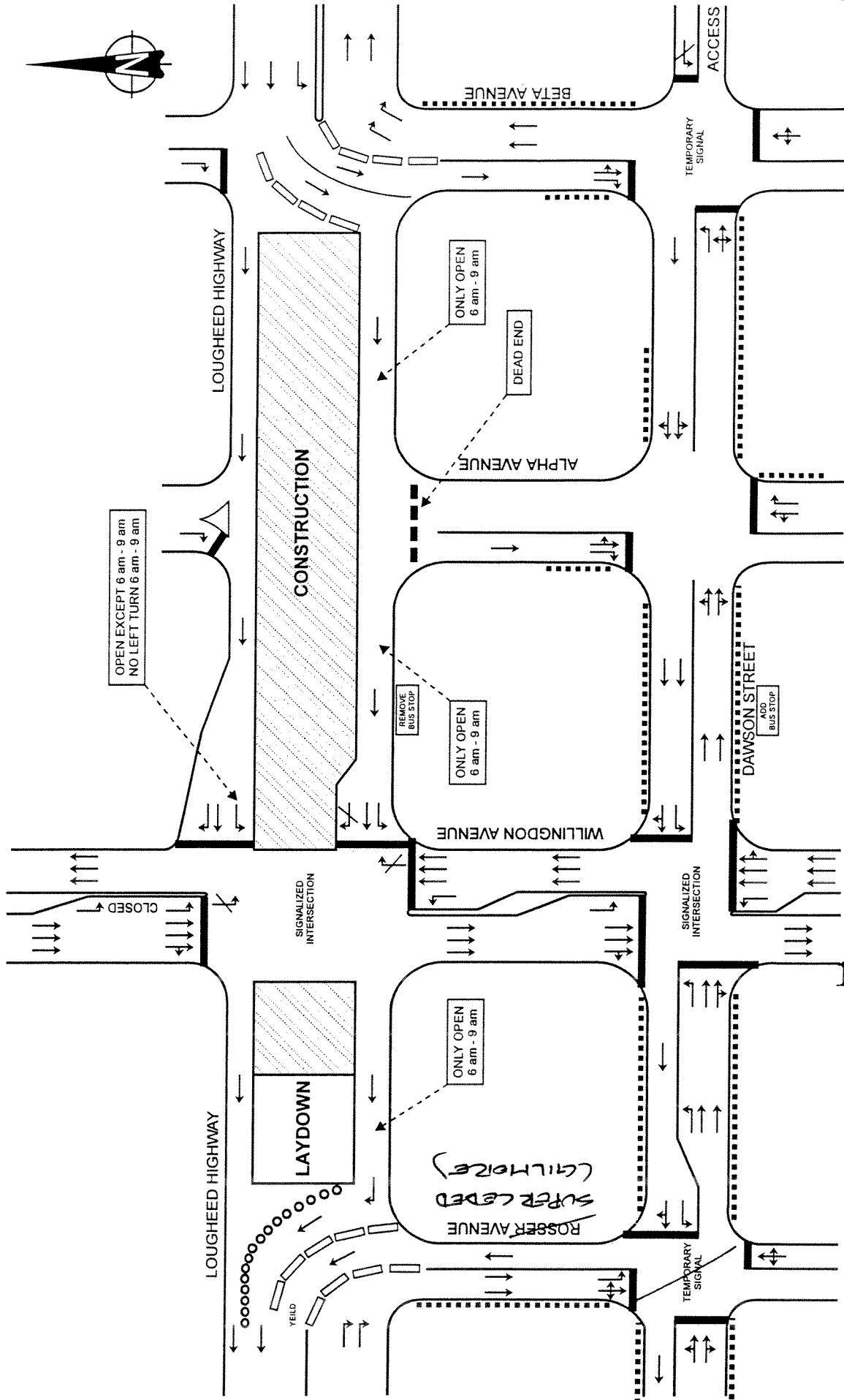
PL:jh

cc: City Manager



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LEGEND
 NEW NO STOPPING RESTRICTION
 DRAWING IS NOT TO SCALE



LEGEND

- NEW NO STOPPING RESTRICTION
- DRAWING IS NOT TO SCALE

