

CITY OF BURNABY

TRAFFIC SAFETY COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

**SUBJECT: MARINE WAY AND NELSON AVENUE:
SIGNALIZATION**

RECOMMENDATION:

1. THAT Council approve the inclusion of the signal at Marine Way and Nelson Avenue in the future Capital Budget process.

REPORT

The Traffic Safety Committee, at its meeting held on 2004 September 07, received and adopted the attached report on the desirability of full signalization at the intersection of Nelson Avenue and Marine Way.

Respectfully submitted,

Councillor Doug Evans
Chair

Councillor Nick Volkow
Vice Chair

Councillor Lee Rankin
Member

COPY: CITY MANAGER DIRECTOR ENGINEERING
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TO: TRAFFIC SAFETY COMMITTEE **DATE:** 2004 08 30

FROM: ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENGINEERING SYSTEMS **FILE:** 38000-09

SUBJECT: MARINE WAY AND NELSON AVE: SIGNALIZATION

PURPOSE: To report on the desirability of full signalization at the intersection of Nelson Ave and Marine Way.

RECOMMENDATION:

1. **THAT** the signal at Marine Way and Nelson Ave be included in future Capital Budget process.

R E P O R T

1.0 INTRODUCTION

At its 2004 August 9 Council meeting, Council directed staff to review whether installation of a traffic signal at the intersection of Marine Way and Nelson Ave would be warranted.

2.0 BACKGROUND

The proposed signal is at the junction of Nelson Ave (Major Collector, Secondary) with Marine Way (Primary, Arterial). Nelson Ave is a major north/south corridor for the South Slope providing access to Metrotown. The restrictive movements at Marine Way limit current demand at the intersection and distribute traffic to Marine Drive. Marine Way is a major regional east/west corridor, handling high volumes of traffic throughout the day, with higher volumes in peak hours. There has been a significant collision rate at this intersection. During the last three years there were an average of 14 collisions a year, with a high proportion of personal injury crashes. No fatalities have been recorded.

3.0 REVIEW

A 24 hour count was conducted on Nelson Ave between Marine Dr and Marine Way between 2004 August 11 and 17. Recent count data from 2003 and 2001 from Marine Way were also used for this review. Two accepted traffic signal warrants were evaluated

to determine suitability of this intersection for traffic signal control. The standard Manual of Uniform Traffic Control for Canada (MUTCD) warrant is based on volume and collision history and indicated need for a signal. The same result was confirmed by the more comprehensive Institute of Transportation Engineers' (ITE) warrant analysis.

4.0 DISCUSSION

To allow installation of signal, roadworks will be required on Nelson Ave and Marine Way. Nelson Ave will require approximately 100m widening on the west side to maintain a free right turn westbound onto Marine Way, and storage capacity for southbound Nelson Ave to eastbound Marine Way traffic. Marine Way will require widening on the north side west of Nelson Ave for an acceleration lane, and on the south side east and west of the intersection to accommodate increased length and width of the eastbound to northbound left turn lane. The cost of widening and signal control is estimated to be \$300,000.

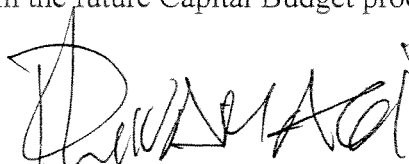
5.0 CONCLUSION

The intersection meets the requirements of MUTCD and ITE signal warrants for upgrading control for a full traffic signal. Advance warning lights would be required.

A signal in this location increases the level of service in this intersection by adding the southbound to eastbound left turn movement off Nelson Ave and increasing the safety of existing movements in the intersection, particularly the eastbound to northbound left turn off Marine Way.

A significant benefit provided by this signal will be the reduction in left turn demand from Byrne Rd to Marine Way which is currently over capacity. A commensurate reduction in eastbound Marine Drive (east of Nelson) traffic is also anticipated.

The estimated cost of the signal including related roadworks is \$300,000. No funds have been allocated for this project in the 2004 Capital Program, however, it is recommended that consideration be given for inclusion in the future Capital Budget process.

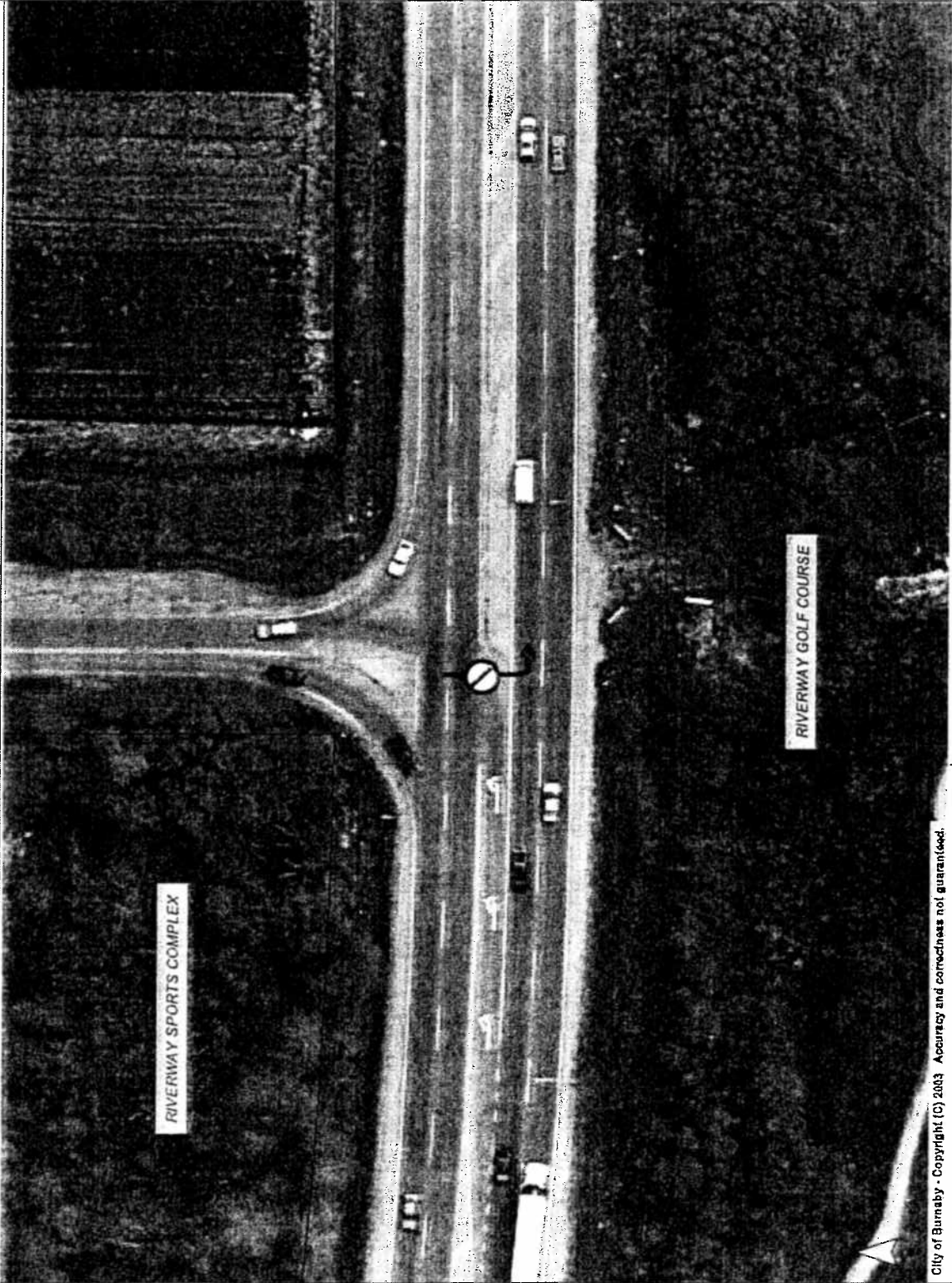


P. Liivamagi, P. Eng.
ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENG. SYSTEMS

BL:jb
cc: City Manager

Nelson Ave and Marine Way Intersection

August 30, 2004



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- Sitra Units
- Colour 2002
- Places
- Parks
- PARKLAND TO BE ACQUIRED
- Other
- Boundary
- 1 Golf
- P Police
- F Fire
- U Utility
- C Cemetery
- S School
- Ch Church
- L Library
- H Hospital
- M Mail
- PR Parks and Rec
- SS Skytrain Stations
- SL Skytrain Lines
- Addresses
- Lot
- Hydrology

Map Scale
1 : 750