

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRAFFIC SAFETY DIVISION)

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

PLEASE NOTE THAT A QUORUM WAS NOT PRESENT WHEN THE TRAFFIC SAFETY DIVISION, AT ITS MEETING HELD ON 1994 JUNE 14 ADOPTED THE FOLLOWING REPORTS LISTED AS ITEMS A TO G.

A. SCHOOL SAFETY PATROL INCENTIVE GRANT

RECOMMENDATION:

1. THAT a grant in the amount of \$3,500 be awarded to School District No. 41 - Burnaby for its School Patrol Incentive Program.

REPORT

A letter dated 1994 May 05 was received from Mr. R.D. Ingram, Secretary Treasurer, School District No. 41 - Burnaby advising that during the 1993/94 school year, 29 Elementary schools in the district operated school patrols which involved a total of 1150 students. In support of this program, the City of Burnaby has, in past years, forwarded a grant which has been distributed to the schools on the basis of the number of pupils participating.

Following is a list of School Safety Patrol Incentive grants for previous years:

1993 - \$3,000
1992 - 3,000
1991 - 3,000
1990 - 2,500
1989 - 2,500

B. PEDESTRIAN CROSSING AT ROYAL OAK AVENUE
AND BERESFORD STREET

RECOMMENDATION:

1. THAT a copy of this report be sent to Bruce C. Watson, 5672 Keith Street, Burnaby, B.C., V5J 3C5.

:-COPY - CITY MANAGER
DIRECTOR ENGINEERING
DIRECTOR PLANNING & BUILDING
O.I.C.. R.C.M.P.

REPORT

The Assistant Director Engineering - Traffic and Engineering Systems submitted the following report to the Committee:

"In correspondence on the last meeting agenda, Mr. Bruce Watson outlined his concerns regarding the operation of this crossing and the matter was referred to staff for report. The special crosswalk installation referred to accords with the application standards of the B.C. Provincial Government and the Transportation Association of Canada's Pedestrian Crossing Control Manual. The application standards for special crosswalks purposely do not give pedestrians any feedback as to whether the orange amber is flashing in order to avoid imparting any false sense of security. The flashing lights are there as an additional visual cue to motorists. The right of a pedestrian to cross and the requirement for a vehicle to stop in B.C. are the same whether a crosswalk is marked or unmarked. Other provinces accord pedestrians fewer rights at unmarked crossing points and the Alberta example cited by the correspondent presumably reflects this (we are obtaining a copy of the Alberta Motor Vehicle Act).

We are concerned that the special crosswalk (a potentially useful device bridging the gap between a marked crosswalk and a pedestrian signal) remains relatively little used and hence not fully understood in the local context. Accordingly, we will be collecting further data at this crosswalk to determine how effective it is or whether an alternate more conventional crossing design might better serve pedestrian safety.

We have discussed the content of this report with Mr. Watson by telephone and thanked him for raising the issue."

C. TRAFFIC CONCERNS AT SPRINGER AVENUE AND BROADWAY

RECOMMENDATION:

1. THAT a copy of this report be sent to Allen Grandy, Property Manager, Strataco Management Ltd., #302 - 4180 Lougheed Highway, Burnaby, B.C., V5C 6A7.

REPORT

The Assistant Director Engineering - Traffic and Engineering Systems submitted the following report to the Committee:

"INTRODUCTION

Council, at a regular Council meeting held in 1994 February, received a letter from Strataco Management Ltd. outlining the concerns of residents from Springdale Manor located at Springer and Broadway. The residents were concerned with excessive traffic, speed, and safe accessibility out of the complex driveway during rush hour times. Council referred this letter to the Traffic Safety Committee for review. As indicated by Strataco in a subsequent letter, they appreciate our prompt prohibition of parking on both sides of the driveway to improve ingress and egress from the Springdale Manor driveway.

BACKGROUND

Broadway, west of Holdom, is classed as a major residential collector. While some Broadway traffic carries on west of Holdom, the link between Springer and Holdom also attracts residential traffic from the area of Bellwood, Ridgelawn, and Anola Drive.

This area (just west of Springer) has only one access with just three routes available:

1. South on Springer to Lougheed
2. North on Springer to Parker
3. West on Broadway to Holdom

Traffic counts taken before and after the installation of the traffic signal at Broadway and Holdom show some increase in traffic but we are unable to separate the effect of the signal from natural growth over 6 years.

	<u>1988</u>	<u>1994</u>
Broadway Eastbound	2152	2701
Broadway Westbound	1768	2441

REVIEW

A speed study taken on Wednesday, 1994 May 18 showed that 90% of the vehicles were travelling between 30-60 km/h while 10% were travelling in excess of 60 km/h. Staff have requested RCMP to do periodic enforcement/monitoring although this is not an atypical speed profile.

In response to the correspondence, we updated our intersection volume and accident data at Springer and Broadway in order to apply it to control warrants. The accident history of this intersection is as follows:

- 1990 - No accidents
- 1991 - No accidents
- 1992 - 1 accident (rear end, south on Springer)
- 1993 - 1 accident (side swipe on Broadway)
- 1994 - 1 accident (rear end, south on Springer)

The intersection does not approach meeting the warrants required for additional control (i.e. a 3-way stop) with the current accident history. More significantly, staff's extensive observations of traffic at this intersection carried out in conjunction with manual traffic counts revealed no problems or hazards. Accordingly, we propose further monitoring of this intersection."

D. PEDESTRIAN CROSSWALK ON FOREST GROVE DRIVE AT
MAPLE GROVE PARK

RECOMMENDATIONS:

1. THAT this report be received for information purposes.
2. THAT Colin Gregory of #22, 9151 Forest Grove Drive, Burnaby, B.C., V5A 3Z5 be sent a copy of this report.

REPORT

The Assistant Director Engineering - Traffic and Engineering Systems submitted the following report to the Committee:

"INTRODUCTION

At its 1994 March 08 meeting, the Committee received correspondence from Mr. Colin Gregory regarding his continuing concern for traffic safety along Forest Grove Drive adjacent Maple Grove Park. In his most recent correspondence, Mr. Gregory expressed concern for pedestrian safety relative to the new crosswalk of Forest Grove Drive. To alert and slow down drivers on the approach to the crosswalk, Mr. Gregory suggested the installation of 'rumble strips' on the roadway. The correspondence was referred to staff for report.

BACKGROUND

In April of this year the City completed the installation of a down-lit pedestrian crosswalk on Forest Grove Drive at Maple Grove Park. The installation of a crosswalk at this location had been requested by residents of the Forest Grove area. An informal crossing location had already existed as wheelchair ramps had been constructed to allow access from the park to a walkway connecting Forest Grove to the Beaverbrook/Lougheed Mall area via the Gaglardi Way pedestrian overpass. This informal crossing area was at a midblock location. Due to the road geometrics at this point it was felt that in the interest of pedestrian safety and for driver clarification a marked crosswalk should be installed.

The marking of this crosswalk and the installation of the overhead signing and downlighting have been well received by local residents. In correspondence to the Committee, Mr. Gregory also commends the installation however feels additional controls are required as sight lines and speed of traffic on this street are still hazards.

We have considered Mr. Gregory's suggestion of rumble strips but are somewhat hesitant to implement such a measure at this time. We have previously road tested the application of rumble strips and have found their effectiveness to be questionable except when their objective is to alert unwary motorists to an impending complex situation. Rumble strips are definitely noticeable when first encountered and do reduce speed because of the novelty of this control. However, with familiarity, drivers will realize that at increasingly higher speeds, the strips will actually have less of an effect on driver comfort level. Paradoxically, this may lead to an overall increase of speed through the park zone as area residents become accustomed to them.

More significantly, rumble strips would not be desirable from a maintenance perspective. Snow plowing requirements would virtually preclude their use on Forest Grove which is a bus route and is high on the snow clearing schedule.

SIGHT DISTANCE

As described by Mr. Gregory, the road geometrics adjacent the park are not ideal for providing a proper pedestrian crossing area. The curvature of the road and the sight lines at the formerly 'informal' crossing area were the main reasons for upgrading to a full crosswalk.

In reviewing road plans for this portion of Forest Grove Drive and referencing design standards relating to stopping sight distance it was found that design requirements were met for a speed up to 60 kmh. The posted speed adjacent Maple Grove Park is 30 KMH. The stopping sight distance requirements are as follows:

30 KMH - 125 feet
50 KMH - 200 feet
60 KMH - 250 feet

From a position on the west curblineline to a point where a drivers sight line would first bring to view a pedestrian crosswalk is approximately 260 feet.

CONCLUSIONS

A marked crosswalk on Forest Grove Drive at Maple Grove Park was recommended as a beneficial pedestrian safety measure. All required warning signing is in place along with additional overhead down lit signing. Based on the positive feed back we have received it is apparent that this installation is generally appreciated. At this time we are wary of installing rumble strips in advance of this crosswalk due to a potential net increase of speed and an ongoing maintenance problem. We will however, continue to monitor traffic on this street and our monitoring will include future speed studies. We have also contacted the RCMP Traffic Division requesting enforcement of the 30 kmh zone adjacent the park as frequently as is appropriate."

E. PEDESTRIAN CROSSINGS OF GOVERNMENT STREET

RECOMMENDATIONS:

1. THAT a marked crosswalk be installed on Government Street at Cardston Court.
2. THAT a copy of this report be forwarded to those who have appeared as a delegation on this matter.

REPORT

The Assistant Director Engineering - Traffic and Engineering Systems submitted the following report to the Committee:

"1.0 INTRODUCTION

At its last meeting, the Committee received a delegation and correspondence forwarded by Council regarding the traffic safety concerns of area residents. The delegation suggested a marked crosswalk on the north leg of Government Street at Manchester Drive. A staff report indicated that the choice of traffic control at the Manchester Drive and Cardston Court junction was the subject of further review but that both intersections had been partially pre-ducted to accommodate signal control if warranted.

The Committee directed staff to investigate alternate measures to improve pedestrian safety in the interim, pending the outcome of a fuller review of traffic control requirements and to report back to the Committee at its next (this) meeting.

2.0 BACKGROUND

Government Street, south west of Lougheed Highway, is currently undergoing major reconstruction. This project involves the widening of Government Street to a 4-lane standard such that 2 through-travel lanes will be available in each direction. The northbound direction transition to 4 lanes on approach Lougheed to accommodate separate right, left and through movements. This project commenced in early March of this year and should be near completion by the date of this Committee meeting. The construction work required for this project included the removal of all sidewalks on both sides of Government Street and this created a less than friendly pedestrian environment during construction. We have heard from a number of area residents concerned about pedestrian accessibility in the short term, but also with the realization of increased traffic and pedestrian volumes in the longer term.

3.0 TEMPORARY AND INTERIM MEASURES

3.1 Pedestrian Access During Construction

As mentioned, as a result of significant construction, pedestrian access on this portion of Government Street was seriously affected. At one time or another over the course of this project all the area existing sidewalks between Lougheed Highway and the bottom of the hill were removed and reconstructed. The reconstruction was phased so as not to require the removal of all pedestrian facilities at the same time. Construction began on the lower portion of the roadway from Manchester Drive south. The sidewalk was eliminated for a period however a temporary protected pedestrian walk area was established on the completed roadway. This enabled pedestrians to access walkways to the various complexes and the internal trail system at Keswick Park. This temporary walkway, a five foot section of roadway protected by no post barricades allowed for a crossing area at Manchester Drive and restricted haphazard crossings through the construction zone.

Construction in the second phase or upper portion of Government Street did not appear to generate the same pedestrian concerns. By this time the lower portion of the project was more or less complete and pedestrian access to Cardston Court and therefore the Lougheed underpass and other internal walkways was available. This probably reduced the need for usage of the upper portion of Government. It should also be noted that throughout the construction project the on-site flaggers were very proficient in their traffic control and whenever possible assisted pedestrian traffic in crossing Government Street.

3.2 Interim Measures in Improving Pedestrian Access

The completion of this project should greatly improve traffic flow through this area. The traffic backups, which at times extended well beyond the curve at the bottom of the hill, should also be reduced. There will also be improved pedestrian walkway facilities as sidewalks will be in place on both sides of Government Street to the traffic signal at Lougheed Highway.

However, the concerns of residents deal more with crossing of Government Street south of Lougheed Highway, at Cardston and at Manchester. Pedestrians wish to cross Government Street to access the park or the pathways leading to the Lougheed underpass (which is a school route). Crossing at these locations has not been an easy task. Traffic volumes, speed and road grade has made for a difficult crossing experience. With the construction of new highrises leading to an increase in traffic volumes and intersection conflict, along with an increased pedestrian demand, the problems will not improve.

It is agreed that crossing facilities need upgrading. It has not been possible to conduct an accurate investigation into the pedestrian needs to this point as during construction normal pedestrian activity has been affected. However, observations from several staff site visits and analysis of destinations indicate that a crossing at Cardston Court would be of most benefit in the interim and possibly in the longer term.

A crossing on the south leg of Government Street at Cardston Court would meet the needs of Manchester area residents accessing Keswick Park or the tunnel. Similarly, it would serve the residents in the new highrises who will have similar travel desires but would not be serviced by a crossing at Manchester. At this stage it is better to focus pedestrian crossing activity at one location. A marked crosswalk at Cardston Court is considered to be the safer (though not ideal) location. Because of sight line problems we will deviate from established application guidelines by additional signing. At this stage, we propose to implement an oversize, back-lit and down-lit overhead pedestrian crossing sign cantilevered to over the centre of the roadway.

4.0 LONGER TERM CONTROL

Upon completion of this reconstruction project we will be conducting a more in-depth investigation into pedestrian activity and needs. It was apparent that during construction there was not a proper reflection of pedestrian or vehicular movement. We will complete our investigation as travel patterns are re-established. Although it is clear that pedestrian needs must be addressed given the recent area growth, it is unclear at this time what actions or forms of traffic control will best meet these needs. In anticipation of possible signalization, of either or both, the intersections of Cardston/Government and Manchester/Government have been pre-ducted. It must kept in mind that, due to the proximity of Lougheed Highway, we must assure that any signalization not negatively affect traffic flow and safety at that intersection."

F. LANE SOUTH OF HASTINGS STREET BETWEEN SPERLING AND GROVE AVENUES

RECOMMENDATION:

1. THAT Council approve prohibiting left turns from Sperling Avenue northbound to the lane south of Hastings Street.

REPORT

The Assistant Director Engineering - Traffic and Engineering Systems submitted the following report to the Committee:

"As previously recommended by the Committee and subsequently approved by City Council, Grove Avenue at Frances Street was barricaded in response to resident concerns over excessive traffic volumes in the area. The installation of these barricades, in March of this year, has generated significant feedback and has prompted further review. As outlined in a report to the committee at its May meeting the barricades were approved for a six month trial period and our review will be complete and forwarded to the committee for the September meeting.

However, we have been requested to address the more immediate matter of traffic safety in the lane south of Hastings Street which is being used in lieu of Frances Avenue by some traffic. Traffic volume and congestion has increased in this lane as it can be used to directly access the Grove Avenue entrance to the mall. In discussion with the Burnaby RCMP it has been confirmed that the left turn movement from Sperling Avenue to the lane is the main safety concern. The proximity to the Hastings-Sperling intersection has resulted in conflicts as well as added to congestion in and around the intersection. We propose to restrict this left turn maneuver as a temporary measure and review its effect in conjunction with the overall area review."

G. EASTBOUND TRAFFIC ON THE MOSCROP APPROACH TO WAYBURNE

RECOMMENDATION:

1. THAT this report be received for information purposes.

REPORT

The Assistant Director Engineering - Traffic and Engineering Systems submitted the following report to the Committee:

"Some time ago, staff were asked by the Committee to review concerns regarding the speed of traffic and vehicle conflicts on Moscrop eastbound between Willingdon and Wayburne. This road link is marked for two through lanes, separated from the opposite travel direction by a central median. On the approach to Wayburne, there is an additional left turn pocket while on departure the road narrows and from Wayburne there is only one lane.

A part of the concern was generated by a single, anomalous, 60 km/h speed limit sign which was removed. We have been unable to trace the history of that sign installation. Staff have also installed a 'Right Lane Ends' sign with explanatory tab at the point where the two lane section ends. A review of accident records at the Wayburne intersection does not suggest a singular problem related to the westbound movement and periodic monitoring through observation has not identified further problems.

It is noted that we anticipate a need for signalization of the Wayburne/Moscrop intersection, particularly to protect pedestrians, subsequent to the completion of the Moscrop/Gilpin diversion project. One half of the cost of a signal has been garnered through the Air Care site rezoning."

MEMBERS:

Respectfully submitted,

- Mr. D. Rankin
- Mr. W.B. Bennett
- Mr. M. Bloomfield
- Ms. Libby Brown
- Mrs. L. Brown
- Mrs. M. Canessa
- Mrs. G. Evans
- Mr. E. Fourchalk
- Mr. M. Mullan
- Mr. D. Ramsbotham
- Mr. R. Weston

Councillor J. Young
Chairman

Councillor C. Redman
Member

