

THE CORPORATION OF THE DISTRICT OF BURNABY

TRAFFIC SAFETY COMMITTEE

HIS WORSHIP, THE MAYOR
AND MEMBERS OF COUNCIL

Madam/Gentlemen:

REPORT OF THE TRAFFIC SAFETY COMMITTEE

1. Request for Installation of a Marked Crosswalk - Intersection of Cameron Street and Erickson Drive

Recommendations:

- (a) "THAT the request for a marked crosswalk at Cameron Street and Erickson Drive be denied.
- (b) THAT Mr. J.P. Daem, Property Manager, Bradson Management Services Inc., 7409 Conway Avenue, Burnaby, B.C., V5E 2P7 be sent a copy of this report and its attachments."

R E P O R T

A letter dated 1983 March 22 was received from Mr. J.P. Daem, Property Manager, Bradson Management Services Inc., 7409 Conway Avenue, Burnaby, B.C., V5E 2P7 requesting the installation of a marked crosswalk at the intersection of Cameron Street and Erickson Drive.

This matter was referred to the Director Engineering who reported as follows:

"The Council adopted policy for the installation of marked crosswalks is that they are to be installed at signalized intersections or school patrolled crossings at locations other than a legal crosswalk, as defined in the Motor Vehicle Act. The captioned location does not warrant a marked crosswalk under this policy as it does have three legal crosswalks within the intersection. On 82 02 16 the Committee received a report regarding a request for signalization of the subject intersection.

Since this previous report there have been two accidents, both rear-end collisions. The vehicle volumes on Cameron have increased 6 percent but this increase will not significantly alter the only 34.6 percent traffic signal warrant. There have been some recent changes in the parking and stopping restrictions on Cameron Street, in the vicinity of Erickson Drive, as the result of the completion of the recreation center, parking and loading facilities and the relocation of the bus stops to standard farside intersection locations.

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On 82 08 09 Council requested reports from the Planning and Building Inspection Department on the Cameron Street area and from the Engineering Department on the ... ramifications, feasibility, and funding... for a pedestrian crossing of Cameron Street at Erickson Drive. This latter report has not yet been prepared due to the the requirement for the information contained within and decision resulting from the former report. On 83 02 28 the Director Planning and Building Inspection submitted a report to Council regarding Cameron Street, which was tabled pending a further report.

In summary there is no warrant for either the marking of a crosswalk or the installation of a traffic signal at the intersection of Cameron Street and Erickson Drive. As to whether or not there will be a warrant in the future depends upon the ultimate street pattern for the neighbourhood. The currently proposed street pattern is under review by the Planning and Building Inspection Department at the request of Council.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the request for a marked crosswalk at Cameron Street and Erickson Drive be denied.
- (ii) THAT Mr. J.P. Daem be sent a copy of this report and its attachments."

2. Request for Stop Signs - Intersection of Westlawn Drive and Delta Avenue

Recommendation:

- (a) "THAT the request for stop signs at the intersection of Delta Avenue and Westlawn Drive be denied."

R E P O R T

A memorandum dated 1983 March 10 was received from the Municipal Clerk who reported as follows:

"Please be advised that during the enquiry portion of the Council meeting held on 1983 March 07 Alderman Brown advised that a request for the installation of stop signs at the intersection of Westlawn Drive and Delta Avenue had been turned down by Council in 1982. Alderman Brown further stated that there is a need for stop signs at this intersection and requested that this matter be referred to the Traffic Safety Committee for their consideration at their next scheduled meeting on 1983 March 15.

His Worship, Mayor Lewarne, requested that this matter be placed before the Traffic Safety Committee for their consideration.

Would you kindly arrange to comply with the aforementioned request."

This matter was referred to the Director Engineering who reported as follows:

"The captioned intersection does not meet the Committee adopted warrant for the installation of stop signs at an isolated intersection. This warrant requires three accidents per year for each of the past three years involving vehicles approaching from the same direction considered correctable by stop sign control. The subject intersection has recorded one right-angle collision in 1982, one in 1983, and one in 1980.

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On 82 02 16 the Committee received and adopted a report that contained the recommendation that '...no changes be made to the present designation or traffic controls along Delta Avenue.' This previous report was in response to a request to designate Delta Avenue as a through street. To install isolated stop signs on Westlawn Drive at Delta Avenue could be perceived by some motorists as indicating that Delta Avenue is a 'through street' with possible detrimental effects such as increased speed of traffic on Delta and increased accident potential at existing uncontrolled intersections with Delta.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the request for stop signs at the intersection of Delta Avenue and Westlawn Drive be denied."
- 3. Request for Stop Light - Hastings and Rosser and a Bus Bench on the Northwest Corner of Hastings and Rosser
Recommendations:
 - (a) "THAT the request for a traffic signal at Hastings Street and Rosser Avenue be forwarded to the Ministry of Transportation and Highways.
 - (b) THAT together with the request the Traffic Safety Committee forward its non-endorsement of the request to the Ministry.
 - (c) THAT the Traffic Safety Committee endorse the Engineering Department's action with regard to the bus stop bench.
 - (d) THAT Mr. Maurice Whiteside, 4360 Frances Street, Burnaby, B.C., V5C 2M4 be sent a copy of this report."

R E P O R T

A letter and petition dated 1983 March was received from Mr. Maurice Whiteside, 4360 Frances Street, Burnaby, B.C., V5C 2M4 requesting the installation of a stop light at the intersection of Hastings Street and Rosser Avenue and also requesting the placement of a bench at the bus stop on the northwest corner of Hastings Street and Rosser Avenue.

This matter was referred to the Director Engineering who reported as follows:

"Hastings Street is a Provincial highway and as such any signalization must be approved and installed by the Ministry of Highways. Since 1976 there have been four accidents involving pedestrians crossing Hastings Street at Rosser Avenue, including the fatal accident in 1977. The latter accident involved a pedestrian crossing within the then marked crosswalk on the west leg of Hastings. This marked crosswalk has since been removed as it was deemed responsible for giving pedestrians a false sense of security. For example while the pedestrian killed had the legal right-of-way within the marked crosswalk the driver of the vehicle was in no condition to recognize that fact, he blew point one seven (0.17) in the breathalyzer test. Three of the four pedestrian accidents, including the fatal, occurred in the two years, 1976 and 1977, prior to the removal of the marked crosswalk and the fourth accident in 1981 after the crosswalk was removed.

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Willington Avenue and Madison Avenue are one block east and west, respectively, of Rosser Avenue and both are signalized, the latter pedestrian operated. As a comparison there have been nine pedestrian accidents within, and one just west of, the Willingdon and Hastings intersection and two pedestrian and one cyclist accident within the intersection of Madison and Hastings.

These accident statistics indicate that there may not be a reduction in accidents with the installation of a traffic signal at this location. Two possible detrimental effects of a signal installation at this location would be increased traffic on Rosser Avenue and increased traffic congestion on Hastings Street. This latter adverse affect could have the further result in transferring traffic to paralleling residential streets such as Pender, Albert, Oxford, etc., which are currently the source of complaints regarding traffic volumes.

While we have not conducted the necessary studies to calculate the statistical warrants for a traffic signal, we have an intuitive feeling, based upon experience, that the subject location would not meet the minimum statistical warrants. An accident frequency of less than 8 reported accidents per year produces a negative factor for the RTAC statistic warrant due to the correlation between signal installation and an increase in accidents. The subject location had 5 accidents reported in 1982.

The ITE minimum pedestrian warrant requires 150 pedestrians per hour in the highest volume crosswalk for each of eight hours during which the vehicle volumes exceed 600. This warrant would require at least 1,200 pedestrians crossing in either of the east or west leg crosswalks during 8 hours. From casual observations the frequency of pedestrian crossing of Hastings at Rosser does not approach the required frequency for the minimum warrant.

An intersection within 370 metres of an existing signalized intersection with a 70 second cycle length, as has Willingdon and Hastings, would produce a negative factor for the RTAC warrant. The signalized intersections of Hastings with Willingdon and with Madison are 200 metres from the subject intersection. The negative factor results from the adverse effects of signals in close proximity, i.e. traffic congestion and driver frustration.

Of the 137 signatures on the petition accompanying Mr. Whiteside's letter only 35 of them represent properties which would be considered tributary to the subject intersection. The remainder are either already closer to an existing signalized intersection or are coming from a distance such that a 'detour' to an existing signalized intersection would add less than 20 percent to their journey.

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The request for the bus bench is being handled in the usual manner, i.e. forwarded to one of the advertising companies who have an agreement with the Municipality to install benches, with advertising at approved locations. Since the Municipality does not install bus stop benches on its own whether or not a bench is installed will be up to the advertising company. Lately they have informed us of difficulties, due to the current economic situation, of finding advertisers and thereby the number of new benches installed is limited. Nonetheless we will attempt to have a bus bench installed on the northwest corner of Hastings Street and Rosser Avenue.

In summary, while the responsibility for the approval and installation of a traffic signal at Hastings Street and Rosser Avenue rests with the Ministry of Transportation and Highways, we do not endorse the request due to the lack of a warrant and the possible adverse effects of a signal at this location. The request for a bus bench is being handled in the usual manner by the Traffic Section.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the request for a traffic signal at Hastings Street and Rosser Avenue be forwarded to the Ministry of Transportation and Highways.
 - (ii) THAT together with the request the Committee forward its non-endorsement of the request to the Ministry.
 - (iii) THAT the Committee endorse the Engineering Department's action with regard to the bus stop bench.
 - (iv) THAT Mr. Maurice Whiteside be sent a copy of this report."
4. Cascade Heights Elementary School 4343 Smith Avenue, Burnaby

Recommendations:

- (a) "THAT the changes and additions noted in the School Board submission be approved.
- (b) THAT the present restriction on parking on Smith Avenue be retained.
- (c) THAT Mr. W.L. Wescott, Administrative Services, School District No. 41 - Burnaby, 5325 Kincaid Street, Burnaby, B.C., V5G 1W2 be sent a copy of this report.

R E P O R T

A letter dated 1983 April 05 was received from W.L. Wescott, Administrative Services, School District No. 41 - Burnaby, 5325 Kincaid Street, Burnaby, B.C., V5G 1W2 requesting the following changes and additions in the vicinity of Cascade Heights Elementary School:

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1. To relocate the existing school-patrolled crosswalk on Smith Avenue north of Pine Street to the North leg of the Smith-Pine intersection.
2. To relocate the Northbound school blue pentagon sign to a position fifty meters in advance of the crosswalk.
3. To install a Southbound blue pentagon sign fifty meters in advance of the crosswalk.
4. To attach "Children Crossing Ahead" tabs on both of the aforementioned pentagon signs.
5. To relocate the Southbound Smith farside Pine bus stop to farside Spruce.
6. To remove all existing concrete connector walks and the bus passenger landing area and replace with a connector walk aligned with the proposed crosswalk.
7. To install a blue pentagon sign for Northbound traffic on the first lamp standard South of Fir Street.

This matter was referred to the Director Engineering who reported as follows:

"The seven items requested in the submission from the School Board are the result of joint meetings between their staff and ours and we are in agreement to the additions and changes so noted. As noted Mr. Greg Blount, Principal of Cascade Heights Elementary School, has been involved as have the parents representatives and they concur with the above changes.

At the last meeting of this Committee we were requested to investigate the merit of allowing parking adjacent schools under certain conditions as is done in the City of Vancouver. The City of Vancouver do allow some parking adjacent schools but only after they have assured themselves that such parking does not increase the hazard to the school children. Things they look for is traffic volume, sight distances, speed of traffic, and most important access from the school property to the street. No parking is permitted adjacent unfenced school properties.

In checking the Cascade School we note that only a portion of the school property adjacent Smith Avenue is fenced, the portion of playfield at the south end of the school site. This fence has an opening at the lane corner where children can enter or exit. Under the described condition the City would not approve parking.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT changes and additions noted in the School Board submission be approved.
- (ii) THAT the present restriction on parking on Smith Avenue be retained.
- (iii) THAT the School Board be sent a copy of this report."

5. Requests for Traffic Improvements at the Intersection of Sussex Avenue and Grange Street

Recommendations:

- (a) "THAT the requests for signalization or 4-way stop control at Grange Street and Sussex Avenue be denied.
- (b) THAT the request for modification of the intersection of Sussex Avenue and Grange Street to facilitate right turning trucks from eastbound to southbound be deferred at this time.
- (c) THAT Mrs. Peterson, 5912 Booth Avenue, Burnaby, B.C., V5H 3A8, Mrs. M. Chase, 5470 Booth Avenue, Burnaby, B.C., V5H 3A3, Mrs. I. Plock, 5875 Sussex Avenue, Burnaby, B.C., V5H 3B7 and Mr. A.J. Moore, #106-4575 Grange Street, Burnaby, B.C., V5H 1P8 be sent copies of this report."

R E P O R T

A memorandum dated 1983 April 14 was received from the Director Engineering who reported as follows:

"We have received several requests for changes in the existing traffic control, 2-way stop, at the captioned intersection. Mrs. Peterson of 5912 Booth Avenue, Mrs. Chase of 5470 Booth Avenue, and Mrs. Irene Plock of 5875 Sussex Avenue have all requested signalization of this intersection. Mr. Fred Moore of #106 - 4575 Grange Street, while not requesting signalization, suggested to accommodate large trucks turning. As all these requests are involving the same intersection we are incorporating them within this report.

On 82 11 04 we conducted automatic traffic counts on all legs of the subject intersection then used the acquired data to calculate the R.T.A.C. warrant. The result was that the minimum R.T.A.C. warrant was only 52% met. The low warrant is due in part to the low accident frequency and the close proximity of the existing Kingsway-Sussex traffic signal.

The I.T.E. warrant for 4-way stops is a two part warrant using both accident statistics and vehicle approach volumes. The accident portion, 5 accidents per year of a type correctable by 4-way stop installation, was met in the past 12 months with 7 accidents but in the prior 24 months there were only 3 correctable accidents. The second part of the I.T.E. 4-way stop warrant was not met with the approach volumes on Grange Street being 4.6 times greater than the approach volumes on Sussex Avenue. In order to function both safely and efficiently the approach volumes on each street should be approximately equal.

The third request, that of Mr. Fred Moore, is in regard to the turning radius on the southwest corner of Sussex Avenue and Grange Street.

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A 15 metre wheelbase semi-trailer unit cannot make a right-hand turn without crossing either centerline and without mounting the curb. As both the west leg of Grange and the south leg of Sussex are designed truck routes (7:00 - 21:00 h, except Sundays and holidays) and that Sussex south of Kingsway is the destination, Kelly Douglas, for numerous large trucks the problem of truck turning can be frequent.

The possible solutions are: the elimination of Grange-Sussex as a truck route, the reconstruction of the southwest corner to a large radius curb return, or the relocation of the Sussex Avenue centerline. The first solution is not desirable in that this would result in greater congestion on Kingsway, from Willingdon to Sussex, due to the increased truck volumes and to trucks making the same right-turn at Sussex and Kingsway. This latter turn would be even more of a problem than that which exists at Sussex - Grange as the curb lane on Kingsway is a travel lane and trucks would have to turn from the middle lane.

The reconstruction of the southwest corner would involve, in addition to the curb and sidewalk, the relocation of an ornamental lamp standard and a wooden Hydro pole with anchor. It would also require the acquisition of a corner truncation to permit the maintenance of the sidewalk within public right-of-walk. The estimated cost of these improvements is approximately \$12,000. We cannot justify this expense at this time due to the possibility of major changes within the Metrotown area, of which the Grange-Sussex intersection may become a major access point. For example there is currently a very preliminary development proposal being examined by the Municipality which would see the Kelly-Douglas warehouse replaced with a commercial/residential/office complex. If implemented this development proposal would probably result in a substantial decrease in the volume of semi-trailer truck traffic turning at the subject intersection.

The relocation of the Sussex Avenue centerline can be accomplished quite easily and relatively inexpensively but would have the detrimental effect of removing the parking from the east side of Sussex Avenue. Due to the existence of the South Burnaby Post Office on the southwest corner of the subject intersection available parking is already at a premium.

In summary there is no warrant for either the signalization or installation of a 4-way stop at the intersection of Grange Street and Sussex Avenue. While the problems of right-turning, from eastbound to southbound, trucks does exist the solutions are either too expensive at this time or have adverse effects that may not result in a net benefit to the traffic situation in the vicinity.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the requests for signalization or 4-way stop control at Grange Street and Sussex Avenue be denied.
- (ii) THAT the request for modification of the intersection of Sussex Avenue and Grange Street to facilitate right turning trucks, from eastbound to southbound, be deferred at this time.
- (iii) THAT Mrs. Peterson, Mrs. Chase, Mrs. Plock, and Mr. Moore be sent copies of this report."

Respectfully submitted,

Alderman E. Nikolai,
Acting Chairman

MP/Sw

