

THE CORPORATION OF THE DISTRICT OF BURNABY

FILE: 20-2

TRAFFIC SAFETY COMMITTEE

HIS WORSHIP, THE MAYOR
AND MEMBERS OF COUNCIL

Madam/Gentlemen:

REPORT OF THE TRAFFIC SAFETY COMMITTEE

1. Request for a Left Turn Phasing at the Intersection of Willingdon Avenue and Hastings Street

Recommendations:

- (a) "That any request to the Ministry of Transportation and Highways for changes to the signal phasing at the intersection of Hastings Street and Willingdon Avenue, be held in abeyance until such time as the current investigation of the Hastings Street corridor, from Boundary Road to Barnet Highway, is completed.
- (b) That Mr. H.F.R. Adams, 4771 Ridgelawn Drive, Burnaby, B.C., V5C 3Y1, be sent a copy of this report."

R E P O R T

A letter dated 1981 May 19 was received from Mr. H.F.R. Adams, 4771 Ridgelawn Drive, Burnaby, B.C., requesting the installation of left turn traffic control phases for traffic moving in all four directions at the intersection of Willingdon Avenue and Hastings Street.

This matter was referred to the Municipal Engineer who reported as follows:

SUMMARY:

"Preliminary investigation of the captioned intersection indicates that the provision of left-turn phasing could result in a reduction of accidents involving left-turning vehicles. In order to achieve this result though the overall efficiency of this intersection would be reduced and subsequently produce congestion related problems including use of adjacent residential streets by commuter traffic. Therefore, our recommendation is to withhold any decision affecting this intersection until such time as the currently on-going investigation of the Hastings Street corridor is completed.

REPORT:

The Hastings Street corridor, from Boundary Road to Barnet Highway, is currently the subject of extensive investigations by ourselves and the Ministry of Highways to determine the most effective and acceptable means of traffic control to both control traffic flows and increase traffic safety. Nonetheless in response to Mr. Adams' letter of 81 06 09, we have looked at his request in isolation.

: - AGENDA 1981 JULY 27
: - COPY - MANAGER

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On the sketches attached as appendix "A" to this report, we have summarized turning movements within the Hastings and Willingdon intersection. As can be seen from this data the left-turning movements from Hastings are extremely light whereas those from Willingdon are relatively heavy. In this situation one might consider banning left-turns from Hastings and the provision of a left-turn phase for Willingdon were it not for other important factors.

Willingdon Avenue, south of Hastings is a truck route, as is Hastings Street, therefore to ban left-turns westbound would force truck traffic to use non-truck routes to get onto Willingdon from Hastings. Similarly, Willingdon north of Hastings, while it is not a truck route, is the shortest, most direct route to major truck traffic generators, the Chevron refinery, and the docks on Burrard Inlet. Under these circumstances it would seem more reasonable to cater to the left-turn movement from Hastings Street. Catering to this movement, and the heavier left-turn movement from Willingdon, would involve the provision of left-turn phases which would require changes in the timing of the signal. These changes would result in increased delays and congestion to the major through movements on both Willingdon and Hastings. Also, provision of a southbound left-turn phase on Willingdon Avenue may also have the adverse effect of encouraging more traffic to use the residential streets north of Hastings Street, i.e. Oxford Street through to Boundary Road, an issue now of concern to the residents in that area.

Of the 100 recorded accidents within the intersection in the past two years, (52 in 1979 and 48 in 1980), 28% involved left-turning vehicles. These 28 accidents were as follows:

| | |
|---|------|
| Head-on left turns from Hastings Street (all in 1980) | - 06 |
| Head-on left turns from Willingdon Avenue | - 11 |
| Right-angle left turns (three in 1980) | - 09 |
| Pedestrian crossing parallel Hastings (1980) | - 01 |
| Pedestrian crossing parallel Willingdon (1980) | - 01 |

All of these types of accidents are considered correctable through the provision of separate left-turning phases.

While the accident statistics indicate that left-turn phasing could result in a safer intersection the problems of increased congestion and the resultant use of streets to bypass this congestion would probably negate the benefits. In view of this we are recommending that any request to the Ministry of Highways for changes in the signal phasing of this intersection be held in abeyance until such time as the current investigation of the Hastings Street corridor is completed.

STAFF RECOMMENDATIONS TO TRAFFIC SAFETY COMMITTEE:

1. THAT any request to the Ministry of Highways for changes in the signal phasing at the intersection of Hastings Street and Willingdon Avenue be held in abeyance until such time as the current investigation of the Hastings Street corridor, from Boundary Road to Barnet Highway is completed.

2. THAT Mr. H.F.R. Adams be sent a copy of this report."

2. Tenth Avenue and Chilliwack Street - Signal
Tenth Avenue and Langley Street - Marked Crosswalk

Recommendations:

- (a) "That the City of New Westminster be advised that as there are no warrants existing for a pedestrian signal at Tenth Avenue and Chilliwack Street that the Municipality of Burnaby is unable to support the petition request.
- (b) That the request for the remarking of the existing crosswalk on Tenth Avenue at Langley Street be denied due to the low volumes of pedestrians and the proven hazards of the marked crosswalk."

R E P O R T

The Municipal Engineer prepared a report with respect to this matter which reads as follows:

"The City of New Westminster have forwarded a petition on to us for comment which is requesting the installation of a pedestrian operated signal at the intersection of 10th Avenue and Chilliwack Street and for the repainting of the pedestrian crosswalk across 10th Avenue at Langley Street.

10th Avenue is a boundary road between the City of New Westminster and the Municipality of Burnaby and as such any works done on the right-of-way requires the consent of both Municipalities (Part 13, Division 6, Municipal Act).

The two intersections in question connect with 10th Avenue to form T intersections which are approximately 100 metres (300') apart. Langley enters from Burnaby while Chilliwack enters from New Westminster. Both of these streets are controlled by stop signs giving the right-of-way to the major collector, 10th Avenue. At the present time 10th Avenue has two travel lanes, one in each direction, with full time parking permitted adjacent each curb. The vehicle volumes on 10th Avenue are approximately 11,000 vehicles per day (V.P.D.).

From visual inspection we would confirm that at one time there was a painted crosswalk across 10th Avenue at Langley Street but it does not appear to have been repainted for quite a number of years. The Chilliwack intersection does not appear to have ever had its crosswalks painted.

While we did not conduct lengthy visual observations of pedestrian movements we did observe pedestrian crossings between the 07:30 and 08:30 peak period and observed only four (4) pedestrians crossing at Chilliwack and one (1) crossing at Langley. However, from count information received from the Engineering Department of the City of New Westminster, they found that in the period from about 08:30 to 16:30 there was an average of three pedestrian crossings per hour at Chilliwack and also at Langley.

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In view of the above information we must advise that there appears to be no warrant for the installation of the requested pedestrian signal at 10th Avenue and Chilliwick Street. We are also of the opinion that the crosswalk at 10th Avenue and Langley should remain unpainted not only because of the low pedestrian volumes but also because of the proven hazards of marked crosswalks.

STAFF RECOMMENDATION TO TRAFFIC SAFETY COMMITTEE:

1. THAT the City of New Westminster be advised that as there are no warrants existing for a pedestrian signal at 10th Avenue and Chilliwick Street that the Municipality of Burnaby is unable to support the petitioned request.
2. THAT the request for the re-marking of the existing crosswalk on 10th Avenue at Langley be denied due to low volumes of pedestrians and the proven hazards of the marked crosswalk."
3. Request for a Pedestrian Actuated Traffic Signal at the Intersection of Sixth Street and Thirteenth Avenue

Recommendations:

- (a) "That due to the absence of the required minimum warrant for a pedestrian signal, the petition for a pedestrian signal at the intersection of Sixth Street and Thirteenth Avenue be denied.
- (b) That Mr. & Mrs. G. Cameron, 7843 Thirteenth Avenue, Burnaby, B.C., V3N 2E7, be sent a copy of this report."

R E P O R T

An undated petition was received from Mr. & Mrs. G. Cameron, 7843 Thirteenth Avenue, Burnaby, B.C., requesting the installation of a pedestrian actuated traffic signal at the intersection of Sixth Street and Thirteenth Avenue.

This matter was referred to the Municipal Engineer who reported as follows:

"The present classification of 6th Street under the Conceptual Transportation Plan is that of a major industrial collector while 13th Avenue is a minor residential street. 6th Street has been improved to a 44 foot curb standard with two moving lanes of traffic (one in each direction) and a parking lane adjacent the curb. 13th Avenue is 28 feet between curbs and with parking permitted allows only a single lane for two-way traffic. Both facilities have concrete sidewalks.

The minimum warrant, as suggested by the Institute of Transportation Engineers, for a pedestrian signal on the 6th Street crosswalks would be satisfied when, for each of any eight hours of an average day, the following volumes exist:

- (1) On 6th Street, 600 or more vehicles per hour (V.P.H.) enter the intersection (total of both approaches).
- (2) During the same eight hours as in paragraph (1) there are 150 or more pedestrians per hour on the highest volume crosswalk.

Counts taken at the subject intersection in 1981 June give the following results for the highest 8 hours:

| <u>TIME</u> | <u>VPH</u> | <u>PEDS/ S.XWALK</u> | <u>PEDS/ N.XWALK</u> | <u>TOTAL PEDS</u> |
|---------------|------------|--------------------------|--------------------------|-----------------------|
| 7:00 - 8:00 | 1,350 | 4 | 3 | 7 |
| 8:00 - 9:00 | 1,275 | 0 | 9 | 9 |
| 11:00 - 12:00 | 1,090 | 2 | 0 | 2 |
| 13:00 - 14:00 | 1,090 | 13 | 3 | 16 |
| 14:00 - 15:00 | 1,210 | 7 | 7 | 14 |
| 15:00 - 16:00 | 1,370 | 4 | 14 | 18 |
| 16:00 - 17:00 | 1,440 | 2 | 3 | 5 |
| 17:00 - 18:00 | 1,240 | 6 | 7 | 13 |

Visual counts of pedestrian crossings failed to establish even a minimum warrant for the installation of a pedestrian signal.

The observers reported that while the vehicular traffic was quite heavy the few pedestrians that did cross did not experience undue problems.

STAFF RECOMMENDATIONS TO TRAFFIC SAFETY COMMITTEE:

- 1. THAT due to the absence of the required minimum warrant for a pedestrian signal the petition for a pedestrian signal at 6th Street and 13th Avenue be denied.
- 2. THAT Mr. & Mrs. G. Cameron of 7843 - 13th Avenue, Burnaby, be sent a copy of this report."

4. Centaurus Circle

Recommendations:

- (a) "That the requested one-way traffic flow on Centaurus Circle be denied.
- (b) That the requested parking restrictions in Centaurus Circle be denied.
- (c) That the requested yield signs and right turn only sign on streets intersecting with Centaurus Circle be denied.
- (d) That Mr. John Coburn, 3030 Carina Place, Burnaby, B.C., V3J 1B5, be sent a copy of this report."

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R E P O R T

Mr. John Coburn appeared as a delegation before Council on 1981 May 25 and requested changes in the existing regulations around Centaurus Circle.

This matter was referred to the Municipal Engineer who reported as follows:

SUMMARY:

"In the Engineering Department's investigation of the problems and requested treatment expressed in Mr. John Coburn's presentation of 81 05 25 failed to find any warrant, based on accident statistics and observations, for changes in the existing regulations around Centaurus Circle. Therefore, the Engineering Department's recommendation is to deny the requests for:

1. A one-way counterclockwise pattern on Centaurus Circle.
2. Limited parking around the north end of the Circle and adjacent all intersections with the Circle.
3. Install yield sign and right turn only sign on streets intersecting with Centaurus Circle.

REPORT:

In his presentation on 81 05 25 Mr. John Coburn made three "recommendations" to Council regarding traffic problems associated with the Centaurus Circle. These were:

1. "Institute a one-way counterclockwise pattern on Centaurus Circle."
2. "Limit parking as per attached sketch."
3. "All roads leading onto the Circle should be right turn only plus yield to traffic in Circle."

The reasons given for these requests were that parked vehicles impede the traffic flow and tend to obstruct the view at intersections and that due to the curves on the Circle vehicles tend to wander across the centre of the road.

In response to these concerns we would report that Centaurus Circle is built to an 11 metre (36 foot) standard which is intended to permit two travel lanes, one in each direction, and parking on both sides of the street. One of the benefits of this design is that the existence of parking on both sides and the two-way traffic tend to have a moderating effect on both the speeds and volumes of traffic using the street. To remove as much of the parking as indicated in Mr. Coburn's request and institute a one-way street would, in all probability, encourage speeding and the use of the Circle by "joy riders". While investigating Mr. Coburn's request we received, from another resident, a request for reduced speed limit signs on the Circle which indicate that there is some concern about speeding under the existing circumstances.

Another problem with the one-way street is that some people would be forced to detour a considerable distance to get to their destination. For example, the newest development contained within the Circle, almost midway between the two sections of Centaurus Drive. A resident of this development either approaching from the east or heading to the west would be required to travel an extra 700 metres with the requested one-way street.

A check of the accident statistics for the intersections with Centaurus Circle indicate that there is no existing problem which would be corrected through the installation of yield signs, or extending the existing restricted parking zones at the intersection. Of the two accidents reported, one each in 1979 and 1980 both at the intersection of Centaurus Circle and Centaurus Drive (west) one was a rear end collision and the other an out-of-control accident where a vehicle left the roadway and struck a pole. In addition to the two intersection accidents, the R.C.M.P. computer files of attended accidents contained only four mid-block accidents, all involving legally parked cars, and two of these occurred while parking.

Currently there is a proposal to develop the park at the north end of the Circle centre which will incorporate a playground. Included in the proposed layout are four pathways which will terminate at the Circle. As these pathways will also serve as accesses to the playground from the residential enclaves it is our intention to post parking restrictions adjacent these pathways and on the opposite side of the roadway to provide sight distance for the pedestrians using them.

As the result of our investigation we are of the opinion that none of the requested items are warranted, nor desirable, due to the probable adverse effects. Therefore, we are recommending the requests pertaining to traffic and parking contained in Mr. Coburn's letter be denied.

STAFF RECOMMENDATIONS TO TRAFFIC SAFETY COMMITTEE:

1. THAT the requested one-way traffic flow on Centaurus Circle be denied.
2. THAT the requested parking restrictions in Centaurus Circle be denied.
3. THAT the requested yield signs and right turn only signs on streets intersecting with Centaurus Circle be denied.
4. THAT Mr. John Coburn be sent a copy of this report."

5. Silhouette School Signing

Recommendation:

- (a) "That Council give approval to the Burnaby School Board to conduct a study regarding the use of 'Silhouette Crosswalk Signs' located adjacent to Burnaby Schools.
- (b) That the Royal Canadian Mounted Police be in attendance when the School Board places a 'Silhouette Crosswalk Sign' on a public right-of-way in Burnaby to assess its effect on traffic."

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R E P O R T

The Traffic Safety Committee on 1981 May 19 concurred with the request from the Burnaby School Board to conduct a study regarding the effectiveness of "Silhouette Crosswalk Signs" in Burnaby.

At the Traffic Safety Committee meeting held on 1981 July 21, it became apparent that the study would involve the placement of a "Silhouette Crosswalk Sign" on a public right-of-way in Burnaby to assess its effect on traffic.

The Municipal Engineer noted that the Legal Department has advised that they know of no statutory authority which would permit the Municipality of Burnaby to place such signs in the centre of a roadway.

Therefore, because the study will involve the placement of a "Silhouette Crosswalk Sign" on a public right-of-way in Burnaby to assess its effect on traffic, the Traffic Safety Committee were of the opinion that approval for this study should be sought from Council.

6. Sperling Avenue Adjacent Deer Lake Park

Recommendation:

"That the request for a "No Parking" restriction on both sides of Deer Lake Avenue adjacent to Deer Lake Park be denied, and that the complaints received regarding loud noise late in the evening from cars parked on the west side of Sperling Avenue adjacent to Deer Lake Park be referred to the Burnaby Detachment, Royal Canadian Mounted Police."

R E P O R T

At the enquiry portion of the Council meeting held on 1981 July 13, Alderman Lawson advised that she had received complaints regarding loud noise late in the evening from cars parking on the west side of Sperling Avenue adjacent to Deer Lake Park.

Arising out of Council's discussion, this matter was referred to the Traffic Safety Committee to investigate the feasibility of instituting "No Parking" restrictions on both sides of Sperling Avenue adjacent to Deer Lake Park and submit a report to Council.

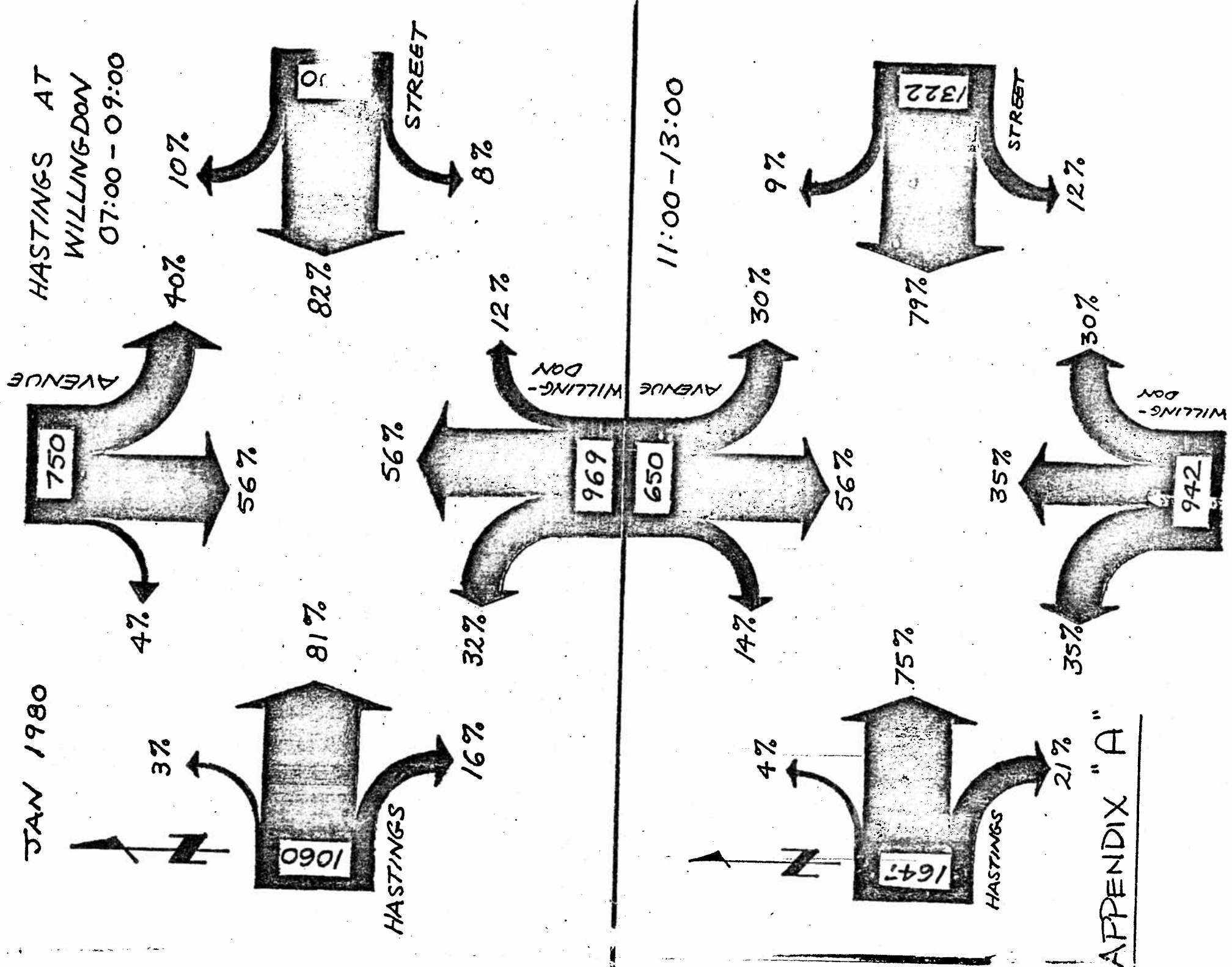
The Traffic Safety Committee is of the opinion that these complaints should be dealt with by the Burnaby Detachment, Royal Canadian Mounted Police.

Respectfully submitted,

Alderman G.D. Ast,
Chairman

Alderman D.N. Brown

Alderman F.G. Randall



APPENDIX "A"

