

REPORT  
Regular Council Meeting  
1991 March 11

THE CORPORATION OF THE DISTRICT OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE  
(TRAFFIC SAFETY DIVISION)

HIS WORSHIP, THE MAYOR  
AND ALDERMEN

A. PEDESTRIAN CROSSINGS AT HALIFAX STREET AND ROSSER AVENUE

RECOMMENDATION:

1. THAT Mrs. Evelyn Collie, Resident Council President of Rideau Manor, 1850 Rosser Avenue, Burnaby, B.C., V5C 5E1, be sent a copy of this report.

REPORT

In a letter to the Traffic Safety Division dated 1990 November 03, Mrs. Evelyn Collie, representing the seniors of Rideau Manor, expressed concern regarding the difficulties pedestrians have crossing Halifax Street at its intersection with Rosser Avenue. She has requested a pedestrian signal at this location.

The Assistant Director Engineering - Traffic and Engineering Systems provided the following report to the Committee in response to the letter from Mrs. Collie.

"Staff have reviewed this request but cannot support the installation of a pedestrian signal at this location at this time. The first and most significant factors when evaluating the need for a pedestrian signal are pedestrian volume and the conflicting vehicle flow. In this case the respective volumes are relatively low, indicating that there are sufficient gaps in the traffic stream so as to not unduly delay crossing pedestrians. Another factor is that an alternate protected crossing location is available nearby at Willingdon Avenue.

Pedestrian activities were observed by staff during a peak 2 hour period on a weekday along Halifax Street. Over half the crossings occurred between Rosser Avenue and Willingdon Avenue. People tended to walk along the street and cross whenever an adequate gap in Halifax Street traffic presented itself. Any of these pedestrians could have crossed Halifax Street at the signal at Willingdon Avenue if inclined. Much of this traffic appeared to be generated by the B.C. Tel. training centre on the north west corner of Willingdon Avenue and Halifax Street. No potential pedestrian/vehicle incidents occurred during the observation period.

Very few seniors were observed during this noon time period. In a discussion with the correspondent staff suggested that the intersection at Halifax Street and Willingdon Avenue should serve as the preferred safe crossing point for seniors during their daily recreational walks. Mrs. Collie suggested that a crossing at Rosser Avenue would offer a change of pace.

INTERNAL DISTRIBUTION:  
AGENDA - 1991 MARCH 11  
COPY - MUNICIPAL MANAGER  
- DIRECTOR ENGINEERING  
- DIRECTOR PLANNING & BUILDING INSPECTION  
- O.I.C., R.C.M.P.

Mrs. Collie has also mentioned inadequate crossing time at the intersection of Halifax Street and Willingdon Avenue. Staff have received previous calls claiming the same problem and have since reviewed the signal timing and added time to the pedestrian clearance interval for Willingdon Avenue. This does not change the length of time the 'walk' signal is on as this is a standard 7 seconds for all pedestrian signals, but it will add to the overall time allowed to cross the roadway. Illustrated below is a leaflet which gives a brief description of crossing guidelines at pedestrian signals and staff propose forwarding this and other safety literature directed at pedestrians to the correspondent for distribution by her.

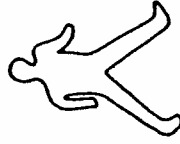
The gist of this report has been discussed with the correspondent."



**ENGINEERING DEPARTMENT  
 (TRAFFIC DIVISION)**

**HOW TO USE YOUR PEDESTRIAN SIGNAL**

1. When you arrive at the crosswalk and the signal indicates "Do Not Walk," push the button on the signal pole.



2. Wait until the signal indicates walk by showing the figure of a person walking. Then, and only then, do you step from the curb and again only after you are sure all vehicles have stopped.

3. While walking across the street the "Walk" indication may go out and the "Do Not Walk" come on. When this happens, continue crossing as there is a clearance during the start of a "Do Not Walk" that allows pedestrians on the crosswalk to get to the far curb before the green traffic signal comes on.



4. If you push the button for a walk signal and it does not change right away, be patient. If a pedestrian call had just been completed the signal will not return to the pedestrian until the vehicular traffic has been given a guaranteed time, usually 30 seconds in which to move off.

5. NEVER START TO CROSS UNLESS THE SIGNAL INDICATES "WALK."

(FORM No. 3650)

**B. WILLINGDON AVENUE AT MAYWOOD STREET**

**RECOMMENDATION:**

1. THAT a copy of this report be sent to Mr. & Mrs. W. Drewlo, Ms. G. Rempel, Ms. M. Walter, Ms. M.A.A. Guttormson, Ms. Noreen Belanger and Mr. & Mrs. Feke and other correspondents.

**REPORT**

Letters dated 1991 February 11 were received from the residents of 6595, 6622, 6688, 6689 and 6759 Willingdon Avenue requesting crosswalk signal lights at the intersection of Maywood Street and Willingdon Avenue.

The Assistant Director Engineering - Traffic and Engineering Systems provided the following report in response to the letters from the Willingdon Avenue residents.

"The installation of a fully actuated traffic signal (with pedestrian activated crossing protection) at the above intersection was approved by Council at the meeting of 1989 October 02. This signal was originally scheduled for installation by mid 1990. In the spring of 1990, the project was put on hold pending a review of the Community Plan by the Transportation Committee. This review included a re-determination of the location of the Maywood cul-de-sac that would have directly influenced the design of the traffic signal.

Now that the Community Area Transportation Plan has been finalized, this traffic signal will be installed under the municipality's next signal contract. Staff are currently finalizing designs and specifications for a contract expected to be released for tender by the second week of March. A total of six traffic signal installations will be included in this contract. Staff will likely be asking for a final completion date of 1991 June 30. Accordingly, the signal at Maywood and Willingdon may be finished and activated prior to this date."

C. SPERLING AVENUE BLOCKADE

RECOMMENDATION:

1. THAT a copy of this report be sent to Mr. Peter Keefe, 7661 Clayton Court, Burnaby, B.C., V5E 3M7.

REPORT

A letter dated 1991 February 21 was received from Mr. Peter Keefe requesting a partial removal of the Sperling Avenue blockade at the Rugby Street entrance. This would allow residents of Rugby Street and Clayton Court to make a legal left-turn onto Sperling Avenue, thereby accessing the Burriss Street light.

The Assistant Director Engineering - Traffic and Engineering Systems provided the following report to the Committee in response to Mr. Keefe's letter.

"1.0 INTRODUCTION/BACKGROUND

In the 1970's, developing traffic congestion at the Burriss Street/Canada Way intersection encouraged commuters travelling southbound Canada Way to westbound Burriss Street to bypass the signal by using Sperling Avenue and local streets to funnel onto Burriss Street via Buckingham Avenue. At that time it was estimated that up to 1,200 south west bound vehicles per day were using Buckingham Avenue as a short cut. In response to Buckingham Avenue and area residents the following measures were adopted by Council:

1. That a total closure of Chiselhampton Street, Haszard Street and Sperling Avenue at Canada Way be implemented by the placement of barricades.
2. That a partial closure of Rugby Street at Canada Way be implemented to allow right turn only egress from the area.
3. That a special gate be installed at Sperling Avenue and Canada Way to ensure that emergency vehicles would not be unduly delayed in getting into the Buckingham Heights area.

Subsequently, the barrier arrangement at Canada Way and Sperling Avenue was reviewed to resolve issues related to emergency access and secondary access during inclement weather. In 1980 Council adopted the recommendation:

1. THAT the existing barrier at Sperling Avenue and Canada Way be removed, and that portion of Sperling Avenue immediately south of Rugby Street be narrowed and designated as a one-way northbound except for emergency vehicles.

The implementation of this latter recommendation has resulted in the one-way restriction shown in Exhibit 1 attached. In his letter to the Traffic Safety Committee, Mr. Keefe proposes modifying the existing geometry to allow two-way access between Rugby and Sperling Avenue south of the one-way restriction. The proposed modification is shown dotted on Exhibit 1.

Such a modification would create a new more attractive route for some south (east) bound Canada Way traffic that turns right to Burris Street westbound. This is illustrated in Exhibit 2 attached. To forestall rat-running during the congested P.M. peak, Mr. Keefe proposes banning the left turn from Rugby Street to Sperling Avenue during those hours.

## 2.0 DISCUSSION

Staff estimate that Mr. Keefe's proposal could be implemented for \$8,800. While the proposal seems an attractive solution, staff cannot recommend it for the following reasons:

1. The changes proposed would facilitate circumvention of the intent of the one-way restriction. Currently there is a trickle of traffic that contravenes the posted one-way regulations and it is safe to assume that a shorter one-way section and a left turn prohibition that was not 'self enforcing' would be flouted. Staff regularly receive complaints from a Buckingham Street resident who wants to see all offenders ticketed if the full barricade is not reinstated.
2. Mr. Keefe's proposal should otherwise not displease Buckingham Avenue residents as, in theory, there should be a net reduction in traffic volume on that street. However, the correspondent's more immediate neighbours on Rugby Street might well be concerned with new traffic added to their street. Accordingly, staff would require significant resident support before recommending any change. Staff note that implementation of the existing scheme was preceded by considerable and protracted debate among area residents as the requirement for access was balanced against the desire to eliminate extraneous traffic.
3. The area on the other side of Canada Way also has access problems and there is a draft Land Use Plan which proposes the closure of Clayton Street in favour of the northward extension of Chiselhampton Street across Canada Way at a signalized intersection. If the Canada Way/Chiselhampton Street intersection signal is implemented, the access problems of both the area north of Canada Way and those of Mr. Keefe and his neighbours will be solved. However, the signal implementation is contingent on redevelopment in accordance with the community plan and approval by the Ministry of Transportation & Highways.

Staff have covered the gist of this report in previous discussions with Mr. Keefe and it would be appropriate that he be sent a copy of this report."

D. 5200-5600 CLINTON STREET TRAFFIC ANALYSIS

RECOMMENDATIONS:

1. THAT a four-way stop be installed at the intersection of Clinton Street and MacPherson Avenue.
2. THAT a four-way stop be installed at the intersection of Clinton Street and Buller Avenue.
3. THAT staff provide a report at the end of 1991 regarding the effectiveness of the four-way stops.

REPORT

BACKGROUND

Council, at the regular Council meeting held on 1990 August 27 received correspondence and a petition from the residents of the 5200-5600 blocks Clinton Street regarding traffic problems on Clinton Street between Royal Oak and Gilley Avenue and REFERRED same to the Traffic and Transportation Committee (Traffic Safety Division) for investigation and review.

At its meeting on 1990 September 18, the Traffic Safety Division received a report from the Assistant Director Engineering - Traffic and Engineering Systems regarding traffic problems on Clinton Street. The Committee adopted a motion recommending that a copy of the report be sent to B.C. Transit, Manager-Lower Mainland Operations, Burnaby-New Westminster Area Office.

Council, at the regular Council meeting held on 1990 October 01 received the Traffic Safety Division's report regarding traffic problems on Clinton Street and REFERRED same back to the Committee pending the appearance of a delegation at a forthcoming Committee meeting.

Mr. Jim Willows, 5537 Clinton Street, Burnaby, B.C., V5J 2L9 appeared as a delegation at the 1990 December 11 Traffic Safety Division meeting and as a result the Committee adopted a motion recommending that 30 km/h signs be posted on Clinton Street contiguous to the Clinton Elementary School. Further to this, the Committee then tabled motions recommending that four-way stops be installed at the Clinton Street/MacPherson Avenue and Clinton Street/Buller Avenue intersections pending a staff report including traffic counts.

CURRENT SITUATION

The Assistant Director Engineering - Traffic and Engineering Systems provided the following informational report in response to the Committee's request for traffic counts.

"Background

Staff carried out a comprehensive traffic count study of the 5200-5600 Clinton Street area which included both manual and automatic counts. Staff have also conducted a speed study on Clinton Street in front of the school grounds.

Vehicle Volumes

The following table shows automatic count data collected over the past five months. Shown are 24 hour vehicle totals. With the exception of one count taken in August of last year the bulk of the data was obtained in January and February.

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The R.C.M.P. have been notified of the 30 km/h speed zone and will take the appropriate action.

Recently, staff monitored the speed on Clinton Street and these results can be seen by hour of day on the graph attached as Exhibit 4. The data shows that the majority of drivers travel at an average speed, ranging from 42-52 km/h.

#### Accident History

As outlined in the 1990 September 12 report the Clinton/Buller, Clinton/MacPherson intersections have a relatively low accident rate. Neither intersection meets the accident warrant criteria established by the Institute of Transportation Engineers for the conversion of the existing 2 way stops to 4 way stops. The following table summarizes the accident history over a 10 year period.

Table 3: Accident Data: Number of 'Correctable' Right Angle

Year	Clinton/Buller	Clinton/MacPherson
1990	1 (snow)	0
1989	1	2
1988	0	0
1987	2	2
1986	0	1
1985	0	1
1984	0	2
1983	0	0
1982	0	1
1981	0	0
1980	2	0

Under guidelines set out by the Roads & Transportation Association of Canada, multi-way stop signs may be used where traffic signals are not warranted and a collision problem, as indicated by five or more reported collisions per year, of a type susceptible to correction by a multi-way stop installation, exists. Such accidents include right and left turn collisions as well as right angle collisions.

#### Conclusion

The data gathered and reviewed for this report confirms that the intersections at Clinton/Buller and Clinton/MacPherson do not meet warrants for 4 way stop control and that the 2 way stop control is functioning adequately.

Staff have discussed the problems along Clinton Street with Mr. J. Willows, the area residents' representative. He was emphatic that traffic volume, or control at intersections, was not at issue, but rather that the paramount problem was speeding vehicles. Staff were also left with the impression that it was speeding by a few vehicles, sometimes the same vehicle repeatedly, that was at issue. This is to a large extent borne out by staff data which confirms some non-compliance with posted urban speed and now wider non-compliance with the school zone limits.

As Council is aware, staff do not support the use of stop signs as speed control devices.

Staff believe that the speeding problems on Clinton Street should be resolved through targeted enforcement, and that the Clinton/Buller and Clinton/MacPherson intersections should not be converted to 4 way stops as a palliative."

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Following receipt of this report for information purposes, the Committee lifted the following two recommendations from the table and subsequently adopted same:

1. THAT a four-way stop be installed at the intersection of Clinton Street and MacPherson Avenue.
2. THAT a four-way stop be installed at the intersection of Clinton Street and Buller Avenue.

Further, the Committee requested that staff provide a report at the end of 1991 on the effectiveness of the four-way stops.

Respectfully submitted,

Alderman J. Young  
Chairman

Alderman D. Evans  
Member

Alderman D. Lawson  
Member

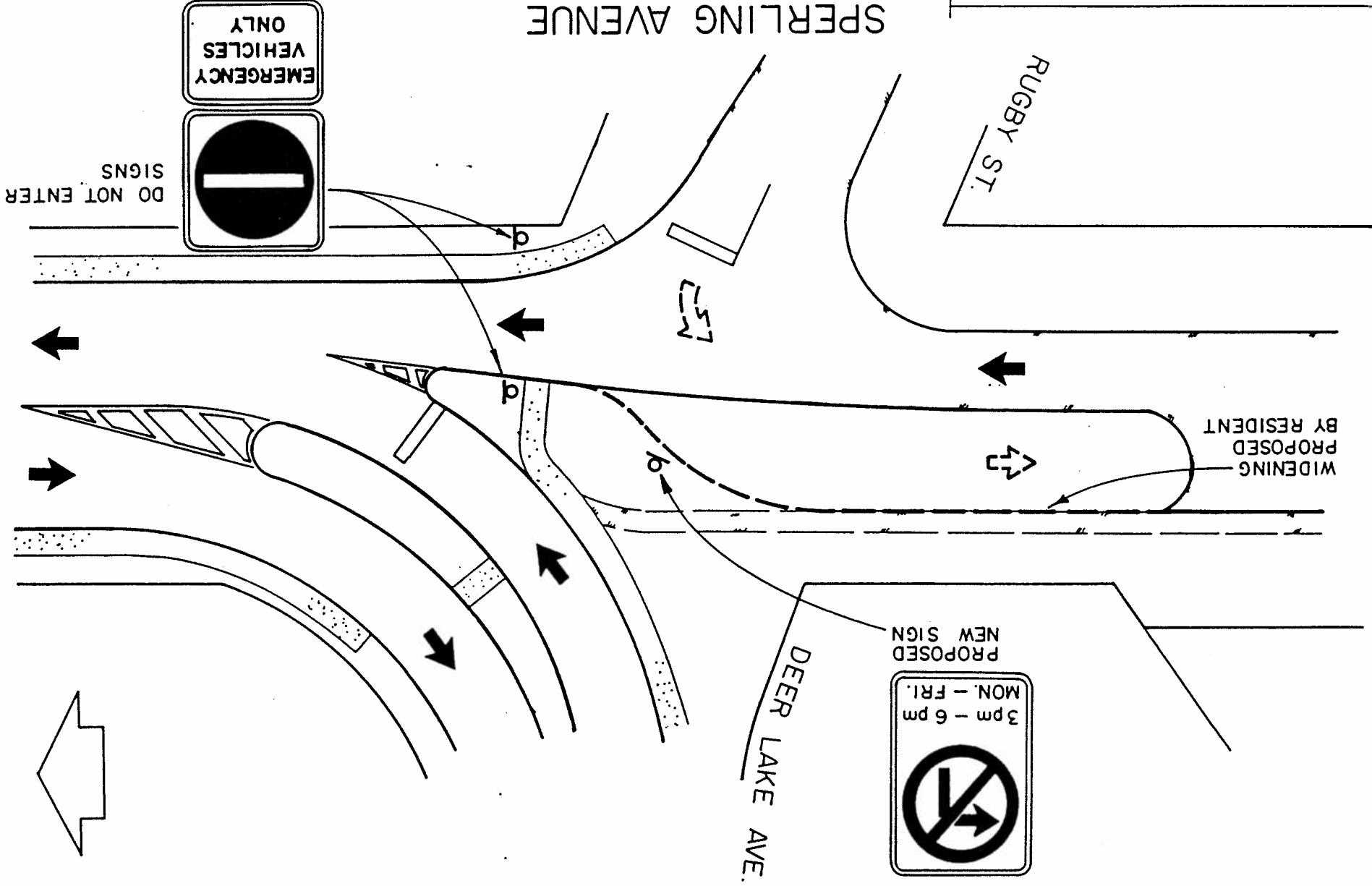
Alderman C. Redman  
Member

EXHIBIT I - SPERLING / RUGBY INTERSECTION  
EXISTING LAYOUT WITH SUGGESTED CHANGES

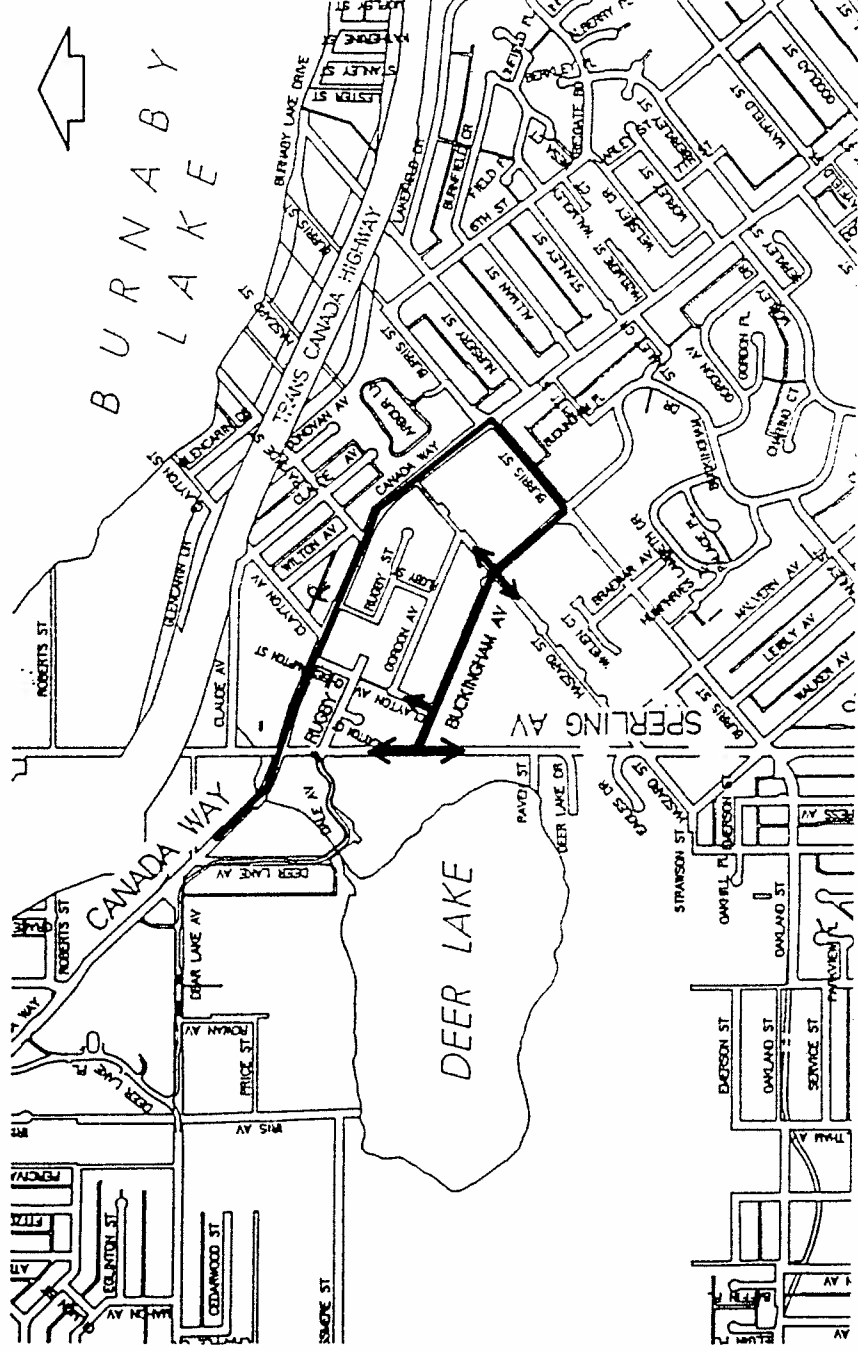
DESIGNED BY: DR Calocero  
CHECKED BY:  
APPROVED BY:  
DATE: 91.02.28  
SCALE: N.T.S.  
L 2228

NO.	DATE	REVISION

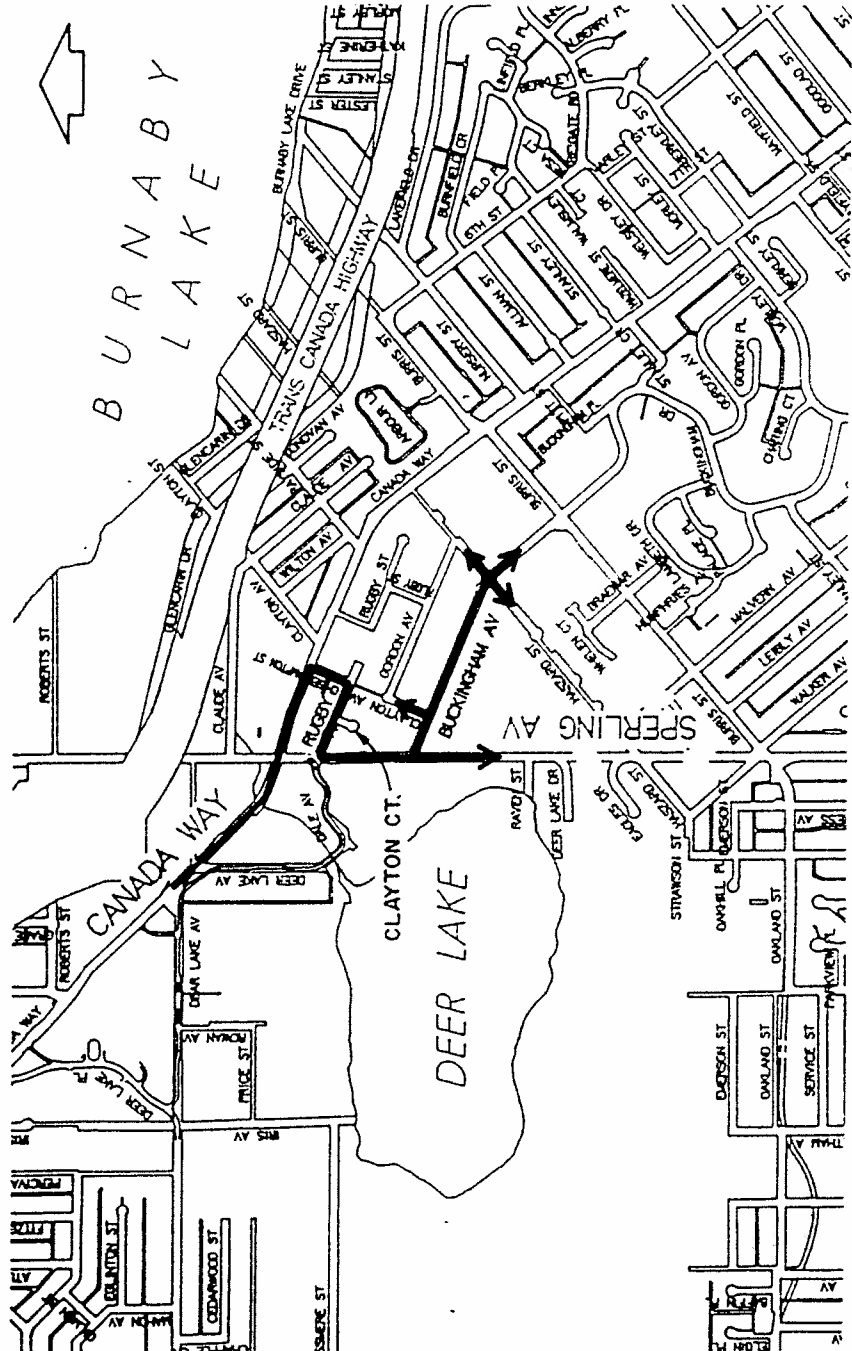
EXHIBIT I





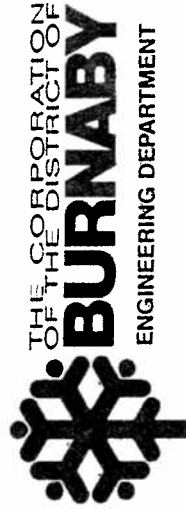


A.) AT PRESENT



B.) WITH CLAYTON COURT RESIDENTS' PROPOSAL

NO.	DATE	REVISION



THE CORPORATION  
OF THE DISTRICT OF  
**BURNABY**  
ENGINEERING DEPARTMENT

EXHIBIT 2 -  
ACCESS FROM CANADA WAY  
SOUTHEASTBOUND TO DEER LAKE  
PARK, BEACH & NEIGHBOURHOOD

DISTRICT OF DURHAM TRAFFIC ENGINEERING

\*\*\*\*\* Two Vehicle Analysis \*\*\*\*\*  
 Location: BULLER-CLINTON  
 Notes :  
 Study ID: ID # 00027  
 Operator: RANDY  
 Weather :  
 \*\*\*\*\*  
 Page: 4  
 Date: 2/04/1991  
 Starts : 01/29/91 at 16:00:00  
 Ends : 01/29/91 at 18:00:00  
 Interval : 5 min  
 S/N : G9  
 Type: Car, Truck, Pedest  
 Correction: 1.00  
 \*\*\*\*\*

TOTAL INTERSECTION PEAK HOUR ANALYSIS

Total Intersection Peak is: Tue Jan 29 16:10:00 1991

DIRECTION	VOLUME			PERCENTS		
	Peds	Left	Thru	Right	Total	Peak Factor
From North	0	5	34	5	44	0.32
From South	1	22	16	4	42	0.48
From East	6	0	34	3	37	0.27
From West	1	2	42	28	72	0.43
Totals	8	29	126	40	175	0.33
From North (Peds = 0)						
Total 65						
Approach 44 Depart 21						
Right Thru Left : 5 34 5 : 2 16 3						
-----						
Depart 61	5			3 Right		
-----						
Approach 72	22			34 Thru Approach 37		
-----						
From West (Peds = 11)	Left 2			0 Left		
-----						
Approach 72	Thru 42			From East (Peds = 61)		
-----						
Right	28			5		
-----						
Total 133	M + E			Total 88		
-----						
From North (Peds = 0)	M + E			From East (Peds = 61)		
-----						
Total 104	S			5		
-----						
Approach 42	28 34 0			22 16 4		
-----						
Depart 62	Left Thru Right			Left Thru Right		
-----						
Total 104	Approach 42			Depart 51		
-----						
From South (Peds = 1)	Total 104			4		
-----						
Approach 42	From South (Peds = 1)			4		
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DISTRICT OF DURHAM TRAFFIC ENGINEERING

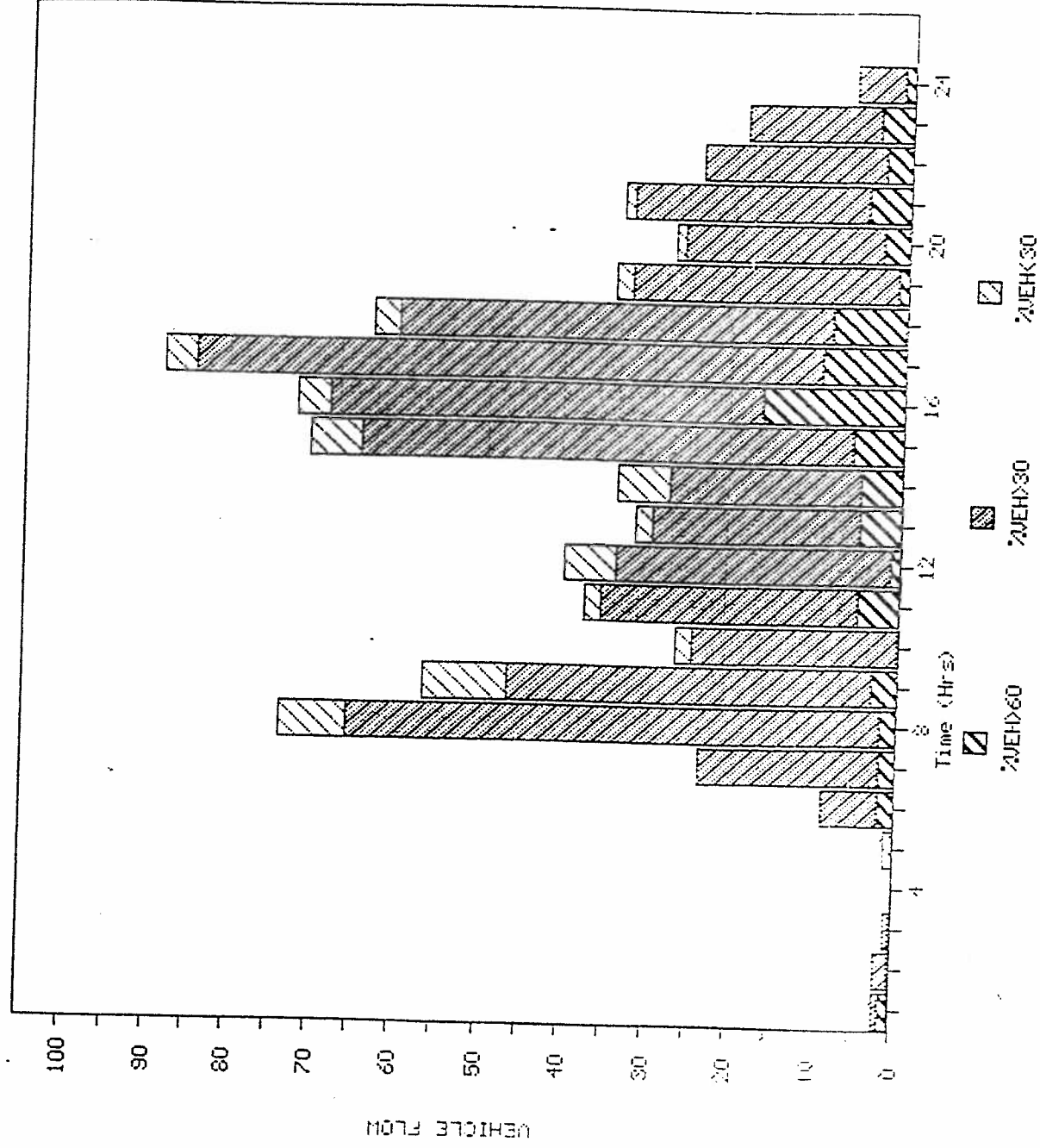
\*\*\*\*\* Two Vehicle Analysis \*\*\*\*\*  
 Location: CLINTON-MACPIERSON  
 Notes :  
 Study ID: ID # 00024  
 Operator: THERESA  
 Weather :  
 \*\*\*\*\*  
 Page: 4  
 Date: 2/04/1991  
 Starts : 01/29/91 at 16:00:00  
 Ends : 01/29/91 at 18:00:00  
 Interval : 5 min  
 S/N : G0  
 Type: Car, Truck, Pedest  
 Correction: 1.00  
 \*\*\*\*\*

TOTAL INTERSECTION PEAK HOUR ANALYSIS

Total Intersection Peak is: Tue Jan 29 16:10:00 1991

DIRECTION	VOLUME			PERCENTS		
	Peds	Left	Thru	Right	Total	Peak Factor
From North	5	1	21	7	29	0.35
From South	4	6	12	8	26	0.54
From East	6	7	41	10	58	0.25
From West	3	5	72	9	86	0.30
Totals	18	19	146	34	197	0.34
From North (Peds = 5)						
Total 56						
Approach 29 Depart 27						
Right Thru Left : 7 21 1 : 5 12 10						
-----						
Depart 54	7			10 Right		
-----						
Approach 86	41			41 Thru Approach 58		
-----						
From West (Peds = 3)	Left 5			7 Left		
-----						
Approach 86	Thru 72			From East (Peds = 61)		
-----						
Right	9			72		
-----						
Total 140	M + E			Total 139		
-----						
From North (Peds = 3)	M + E			From East (Peds = 61)		
-----						
Total 140	S			1		
-----						
Approach 86	9 21 7			6 12 8		
-----						
Depart 54	Left Thru Right			Left Thru Right		
-----						
Total 63	Approach 26			Approach 26		
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From South (Peds = 4)	Total 63			From South (Peds = 4)		
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CLINTON STREET SPEED STUDY / WEDNESDAY JANUARY 30TH





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