

ITEM	13
MANAGER'S REPORT NO.	19
COUNCIL MEETING	1983 03 14

RE: LETTER FROM MR. FLAVIO S. CRESTANI WHICH APPEARED ON THE AGENDA
FOR THE 1983 MARCH 07 MEETING OF COUNCIL (ITEM 4b)
TRAFFIC PROBLEM AT KITCHENER STREET AND HOLDOM AVENUE

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendations of the Director Engineering be adopted.

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TO: MUNICIPAL MANAGER

83 03 07

FROM: DIRECTOR ENGINEERING

SUBJECT: TRAFFIC PROBLEM AT KITCHENER STREET AND HOLDOM AVENUE

RECOMMENDATIONS:

1. THAT the requests of Mr. Rizzo and Mr. Ciapponi, as conveyed by Mr. Crestani, be denied, and
2. THAT a checkerboard warning sign be installed at the intersection of Holdom Avenue and Kitchener Street for westbound traffic, and
3. THAT Mr. Rizzo, Mr. Ciapponi, and Mr. Crestani be sent copies of this report.

REPORT:

The captioned complaint, that of vehicles entering the property at 1387 Holdom Avenue as a result of motor vehicle accidents, has been dealt with by the Engineering Department on three previous occasions. On 1976 12 22 we installed a "T" intersection advance warning sign approximately 100 metres east of the Holdom/Kitchener intersection for westbound traffic. This sign was installed in response to Mr. Rizzo's concerns after an accident in which a vehicle entered his property damaging a tree and other landscaping.

On 1978 06 07 the above-noted "T" intersection sign was replaced with an advance "Stop Ahead" sign which was felt to be more definitive in the message conveyed, as westbound Kitchener traffic is required to stop at Holdom Avenue. Again this action was the result of a complaint from Mr. Rizzo after an accident in which the fence between himself and his neighbour, Mr. Ciapponi at 1403 Holdom Avenue was damaged.

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The most recent dealing with Mr. Rizzo occurred after the 1982 12 19 accident which resulted in extensive damage to his house. A meeting was held on-site with the Rizzo family, Mrs. Ciapponi and members of the Burnaby Engineering Department. During discussions pertaining to various solutions we offered to place a checkerboard sign directly in front of their property. This was declined by the Rizzos who felt that it would not stop a vehicle from entering their property (the driver of the vehicle involved in this latter accident was subsequently charged with impaired driving). They instead suggested that the Municipality place some form of barricade in front of their property to physically prevent vehicles from entering. An alternate suggestion from the Rizzos was that Kitchener Street be blocked at one end or made a one-way street eastbound only. These suggestions and our comments are as follows:

1. Checkerboard Sign:

Checkerboard signs are made from reflective material and would be highly visible at night. Placed in front of the Rizzos' property it would be directly in line with westbound traffic on Kitchener Street.

2. Barricades Along the Front of His Property:

Barricades in use in Burnaby are made of concrete and come in 10 foot lengths, are 18 inches high, and weigh about 1 ton. Our practice is to paint the surface with reflectorized yellow strips. Placed in front of the Rizzos' property they would serve the same purpose as the checkerboard sign, in fact the sign would be more highly visible as it is mounted higher and would not become obstructed by parked vehicles, etc.

The argument that the checkerboard will not stop a vehicle could also hold true for the concrete barricade. As the properties are below the level of the roadway, any barricade of the type currently in use could, and probably would, cause any vehicle hitting it straight on to become airborne. Without the drag created by the vehicle travelling on the ground the vehicle could travel further and hit with a greater impact. These concrete barricades when struck hard enough also have the tendency to shatter, a condition that could hurl large chunks of concrete into the house.

In 1975 July N.D. Lea & Associates Ltd. were retained by the Municipality to prepare a design for an "impact attenuating barrier" in response to a similar complaint from a resident at Empire Drive and Oxford Street. Although a barrier was designed, two of the "Conclusions and Recommendations" contained within the accompanying report were as follows:

"IX) The research carried out in United States has indicated that small variations in the theoretical or mathematical model design or in construction details of the full size model during construction can have adverse effects on the safety performance of the barrier. Therefore the research agencies recommend that a full scale test programme be carried out before the barrier is installed on Empire Drive. At this stage, it is virtually impossible to guarantee that the system will be foolproof and will behave exactly as assumed in the analysis.

X) Because of the unusual circumstances of this study, e.g. large angle of crash, steep gradient on Oxford Street, etc., N.D. Lea & Associates Ltd. cannot assume any responsibility for any consequences resulting from the use of this report is put to."

Due to the lack of a "guarantee" of the effectiveness of the proposed crash barrier the Municipality did not pursue a consideration of installing one at this location. A further consideration was that if the Municipality accepts the responsibility to protect private property from motor vehicle accidents and does not succeed could the Municipality be held responsible for any damages. Also, if the occupants of any vehicles involved in a collision with a barrier were to suffer greater injury than they may have suffered in the absence of the barrier could the Municipality be held responsible. Even if we were to discount the above as arguments to not place barricades we are left with the problem that once you assume a responsibility to protect property against the negligent act of others where do you draw the line.

3. Kitchener Street to be Closed to Through Traffic:

During our discussion with the Rizzos the question of closing Kitchener Street at Holdom Avenue was raised. We advised that this proposal would most certainly require the involvement of those residents on Kitchener Street, at least between Holdom and Fell Avenues, as they would be restricted to one entrance to their 1,254 foot long block. The end to be closed would most certainly require some form of cul-de-sac which would require property acquisition. In addition, the #36 Kitchener bus that now runs eastbound along Kitchener from Holdom would have to be rerouted to another street. The street receiving this bus plus the additional displaced or rerouted traffic may object to such a solution as may the residents of Kitchener when they at present have not identified a problem. Nevertheless the Rizzos indicated that they would gather a petition from the affected residents for submission to Council.

4. Kitchener Street to be Made One-Way Eastbound:

This proposal as with Proposal #3, would have to be accepted by the residents of Kitchener Street as well as the adjacent parallel streets which will experience additional traffic. The #36 Kitchener bus service, which is one-way eastbound, will not be affected by this proposal.

In any event your Engineering Department is of the opinion that the accident history of the intersection of Holdom Avenue and Kitchener Street does not justify such a change in the existing traffic pattern of Kitchener and adjacent streets. In addition to the major disruptions, such a change would require continued enforcement in perpetuity.

5. Install a Flashing Amber Light Atop the Existing Advance Stop Ahead Warning Sign on Kitchener East of Holdom Avenue:

While this item was not suggested by Mr. Rizzo, it was proposed by a Mr. Patrick who contacted the Engineering Department on Mr. Rizzo's behalf.

The effectiveness of this type of warning device is dependent upon the condition of the driver. In the case of the most recent accident the driver of the vehicle that hit the Rizzos' house was charged with being impaired. One would have to question whether this individual would have noticed a flashing light off to the side of the roadway. It is our opinion he would have been more inclined to see a reflectorized checkerboard sign placed directly in his path. Such a checkerboard would be placed on the west side of Holdom Avenue in line with the centre of Kitchener Street.

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The above discussion has dealt with our previous responses to Mr. Rizzo's direct contact with the Engineering Department. The suggestions contained within Mr. Crestani's letter are the same as those which we have already discussed with Mr. Rizzo. To summarize our position, we are unaware of any traffic control device which can guarantee that the incidents which have occurred in the past will not happen again. Even the one-way street suggestion requires compliance by the drivers to be effective. Also, any attempt to physically protect Mr. Rizzo's and Mr. Ciapponi's private property would be precedent setting and, if unsuccessful, could result in the Municipality being held at least partially responsible where previously the liability has lain fully with the motorists involved in the accidents. The Municipality's involvement should only be to the extent that adequate and if need be, additional warning devices be erected to inform the normal attentive motorist of the conditions to be encountered.

Further to the above report there were a number of questions raised at the 1983 March 07 meeting of Council which we will now comment on.

1. Barricades on Marine Drive at Royal Oak

We believe this was in reference to the placement of barricades some years ago along the south property line of Marine Drive west of Royal Oak. This was in response to complaints of vehicles running off Marine Drive. These are deflection barriers and are not meant for, nor would they stand up to, a right angled impact.

2. Previous request to Council for action

We have checked our files and can find no evidence of any written submissions from the Rizzos nor any reports to Council on the subject item. The only recorded contacts were those previously mentioned and they were all verbal and in each case action was taken, i.e. intersection ahead sign, advance stop sign, offer of checkerboard.


3. Same type of accident on similar streets

Over the years we have recorded dozens of vehicle accidents resulting in damage to private property, many resulting in requests for barricade protection, requests which were denied. Some of the ones that come to mind that were similar to the subject accident, i.e. "T" intersections were:

1. Empire and Oxford - house struck at least twice.
2. Gilley and Marine - store struck at least twice.
3. Marine Drive and Stride - house hit.
4. Denbigh and Oakland - several cases of vehicles crashing through fence and coming to rest in front yard.

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cc: () Traffic Supervisor


DIRECTOR ENGINEERING