

CITY OF BURNABY
TRAFFIC SAFETY COMMITTEE

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*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

SUBJECT: FOREST GROVE DRIVE - TRAFFIC CONCERNS

RECOMMENDATIONS:

1. **THAT** Council endorse the implementation of a crosswalk bulge at the existing crosswalk at the main school entrance.
2. **THAT** Council approve the construction of an interim asphalt walk adjacent Forest Grove Park to link the bus stop with the crosswalk.
3. **THAT** Mr. David Harvey, President, Forest Grove Parent Advisory Committee, 8846 Robins Court, Burnaby, BC, V5A 4K7, receive a copy of this report.

REPORT

The Traffic Safety Committee, at its meeting held on 2003 April 01, received and adopted the attached report addressing concerns relating to traffic and pedestrians in the area of Forest Grove Elementary School.

Respectfully submitted,

Councillor D. Evans
Chair

Councillor N. Volkow
Vice Chair

Councillor L. Rankin
Member

COPY: CITY MANAGER
DIRECTOR ENGINEERING

City of Burnaby

INTER-OFFICE COMMUNICATION

TO: TRAFFIC SAFETY COMMITTEE **DATE:** 2003 03 24
FROM: ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENGINEERING SYSTEMS **FILE:** 38000-03
37500-14
SUBJECT: FOREST GROVE DRIVE - TRAFFIC CONCERNS
PURPOSE: To address concerns relating to traffic and pedestrians in the area of Forest Grove Elementary School.

RECOMMENDATIONS:

1. **THAT** the Committee endorse the implementation of a crosswalk bulge at the existing crosswalk at the main school entrance.
2. **THAT** the Committee approve the construction of an interim asphalt walk adjacent Forest Grove Park to link the bus stop with the crosswalk.
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R E P O R T

1.0 INTRODUCTION

Appearing on the 2003 March 4 agenda of the Traffic Safety Committee was correspondence from Mr. David Harvey. Mr. Harvey is a resident of the Forest Grove neighbourhood and is the president of the Forest Grove Elementary School Parent Advisory Committee. In his correspondence, Mr. Harvey is raising issues relating to traffic and pedestrian safety in and around the school. Mr. Harvey's letter, originally sent to the Traffic Engineering, was copied to the School Board, who then forwarded it the Committee for consideration.

2.0 BACKGROUND

Forest Grove Elementary School is located on the north side of Forest Grove Drive, approximately 600m east of Underhill Avenue. Forest Grove Drive is a designated local collector roadway constructed to an 11m standard. It is the only “through street” in the neighbourhood connecting to Underhill to the west and Broadway to the east. As such is it used by all local traffic within the various residential complexes. It is also a bus route. Just to the west of the school is Forest Grove Park. A combined 30 km/h zone exists on this portion of Forest Grove. Sidewalks are on both sides adjacent the school however do not continue in front of the park.

3.0 REVIEW OF PAC CONCERNS

Prior to the submission of written correspondence, an on-site meeting took place between City staff and Mr. Russ Mitchell, traffic representative for the school PAC. At that time Mr. Mitchell described a number of traffic and pedestrian concerns in the area of the school. These include traffic on Forest Grove Drive, pedestrian crossing locations, and the lack of connector walks to the adjacent park and trail systems. Suggestions were also offered to address the specific concerns. The information reviewed at the time was then discussed amongst PAC members who then sent the City formal correspondence. The issues discussed at this meeting and reiterated in correspondence will be specifically discussed below.

3.1 Traffic on Forest Grove

Traffic volumes on the portion of Forest Grove Drive near the school have remained consistent over the last ten years with 3,500 - 3,900 vehicles per day (VPD) being recorded in four separate counts between 1993 and 2001. This is in line with the expected volumes for a local collector roadway which under the Burnaby Transportation Plan can range up to 5,000 VPD. The stable volumes reflect the fact that the residential component of the westerly side of the Forest Grove area has been fully built up for some time. Although some development has occurred towards the east, proximity to the Broadway-Production intersection make this a more likely access point to those developments. Through traffic does not appear to be an issue on Forest Grove due to the circuitous design of the road.

Data on traffic speed within the park zone has also recently been collected. This data has been broken down to provide measurements for “mean” speed and for “85th %”. Mean speed provides an overall average speed of all traffic over a set period of time. For the 24 hour period in which our data was collected a mean speed of 41 km/h was recorded. Although collected within a park zone this is not atypical as it includes times of day when the 30 km/h zone is not in effect.

Of somewhat more concern is the 85th % speed statistic. This measure is the speed below which 85% of traffic is travelling and is often used by police as an enforcement threshold. Data during the periods when the 30 km/h school zone is in effect indicates an 85% speed of 49 km/h. Although not so different than speeds noted within other reduced zones on similar roadways, it is a higher figure than what would be considered desirable. Unfortunately, excess vehicle speed is a reflection of the behaviour of many of today's drivers. Given that Forest Grove Drive is a collector roadway and a bus route, the more draconian traffic calming measures such as speed humps are not applicable at this location. Instead, enforcement and education are tools available. It is also suggested that the Neighbourhood Speed Watch program be involved in monitoring the school zone.

3.2 3-Way Stop - Forest Grove @ Ash Grove Crescent

Ash Grove Crescent runs north from Forest Grove approximately 200m east of the school and joins it a "T" intersection. A marked crosswalk with overhead, downlit signing is in place on the west leg of the intersection to aid in the crossing of Forest Grove. The correspondence suggests the installation of a three way stop at this intersection with the argument that this measure may reduce traffic speed through the school zone. During the site meeting, staff noted that stop signs are not intended as speed control measures but we would evaluate the request based on recognized warrant criteria. This warrant, based primarily on opposing traffic volume and intersection collision history was not met. Staff would not support this measure based solely on a speed control basis and have some specific reservations of the effectiveness of this measure at this location. While stop signs do obviously slow traffic down at the actual intersection, the school is far enough away from the intersection that traffic will get back to speed. Some drivers may accelerate at a quicker rate to make up for time lost stopping at what they may consider to be an unnecessary location. The drivers focus on acceleration may detract from attention to other driving tasks. Further, due to the low side street volumes, stop signs on Forest Grove may have a high violation rate as drivers, with familiarity, will "roll" through the stop not anticipating opposing traffic.

3.3 Crosswalk Locations and Drop-Off / Pick-Up Areas

Another issue raised relates to student crossings of Forest Grove Drive and the location of crossing facilities. Currently, there is one central crosswalk at the mid point of the school lining up with the main entrance (see attached exhibit). The correspondence suggests that children living east of the school, walk along the south side of Forest Grove until reaching the closest boundary and then cross. It further states that it is near this point that parents drop their children (first allowable parking east of the school zone parking restrictions) where students then immediately cross. A final suggestion is to install a pipe rail along the south

curb line in areas where crossings are not intended.

Staff have reservations in considering these request. The existing centralized crossing area was established to provide a designated crossing location in a logical position ie. at the main school entrance. This crossing is patrolled and can be used by students approaching from the east or west. This crosswalk has been in place since the opening of the school and through education students should be instructed to utilize this crosswalk. Students living further east can used the illuminated crosswalk at Ashgrove as an option.

Installing an additional crossing in the area where drop-offs are occurring is not considered desirable. A secondary crosswalk, established in a non standard location, may not be anticipated by drivers and detract attention from the primary crossing at the main entrance. Further if a new crossing area was established, appropriate parking bans would be required. If this crosswalk was at the east end of the school as has been suggested, the allowable parking area would be pushed east resulting in the same issue as currently describe, students crossing where they were dropped off. The existing crossing area also removes students from crossing in the area of congestion were the drop offs are occurring. Staff propose enhancing this crosswalk by installing crosswalk bulges on either side of Forest Grove. This measure has been used at several others schools and has a benefit of highlighting the crosswalk for both motorists and pedestrians, shortening crossing distance and pinching the travel width of the roadway.

The request for pipe rail barrier along the curb is not considered desirable from a safety perspective. Again, education of students and parents in utilizing the sidewalk is the more practicable solution. It should be noted that the City school liaison officer is available to speak to the student body about such issues and has contacted the school to advise of such. To date a request for this has not been received from the school.

3.4 Sidewalks Adjacent Forest Grove Park

A final item refers to the lack of walking facilities west of the school adjacent the park and crosswalk joining the park to the south side trail network. Staff support the need for the extension of an improved walk area at this location. An asphalt walk is proposed. It will provide a proper connection from the school to the park and to the existing bus stop located near the west side of the park. A crosswalk connection to the south side trail system is not warranted at this time, however, staff will monitor the usage after the interim path adjacent the park is constructed.

4.0 CONCLUSIONS/RECOMMENDATIONS

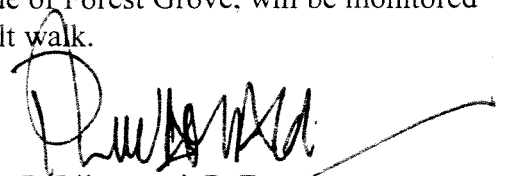
At a site meeting between City staff and a member of the Forest Grove School PAC and through subsequent correspondence, a number of traffic and pedestrian concerns in the area of the school were brought forward. These concerns relate to speed and volume on Forest Grove Drive, number and placing of school crosswalks, traffic control at the intersection of Forest Grove Drive and Ashgrove Crescent and the need for sidewalks adjacent Forest Grove Park.

Traffic count data collected in the area of the school indicate a stable vehicle volume over the last ten years, well within the expected range of the Burnaby Transportation Plan. Traffic classification data reveals speeds that are higher than would be desirable but not at variance with statistics found on similar roadways. As the majority of traffic that travels this route is local and familiar with the requisite speed zones, and given the limitations on deployment of traffic calming matters, it is felt that education, enhanced enforcement and the presence of the Neighbourhood Speed Watch program would be of benefit.

The request for a multi-way stop at the Forest Grove/Ash Grove intersection does not meet warrants and may have the undesirable effect of increasing stop sign violations and accelerated speed upon departure through the school zone.

In reviewing the student crossing areas, it is concluded that the present crosswalk is in the most appropriate location to maximize visibility and usage as it can be accessed from both the east and west and is in line with the main school entrance. The fact that crossings are occurring at drop off points again should be addressed by education of both parents and students. The school liaison officer is available to speak to this at the appropriate forum if requested. We believe that further enhancing the existing crossing with "bulges" will be of benefit. This will result in the crosswalk being further highlighted to drivers, crossing distance will be reduced and road width narrowed to slow vehicles.

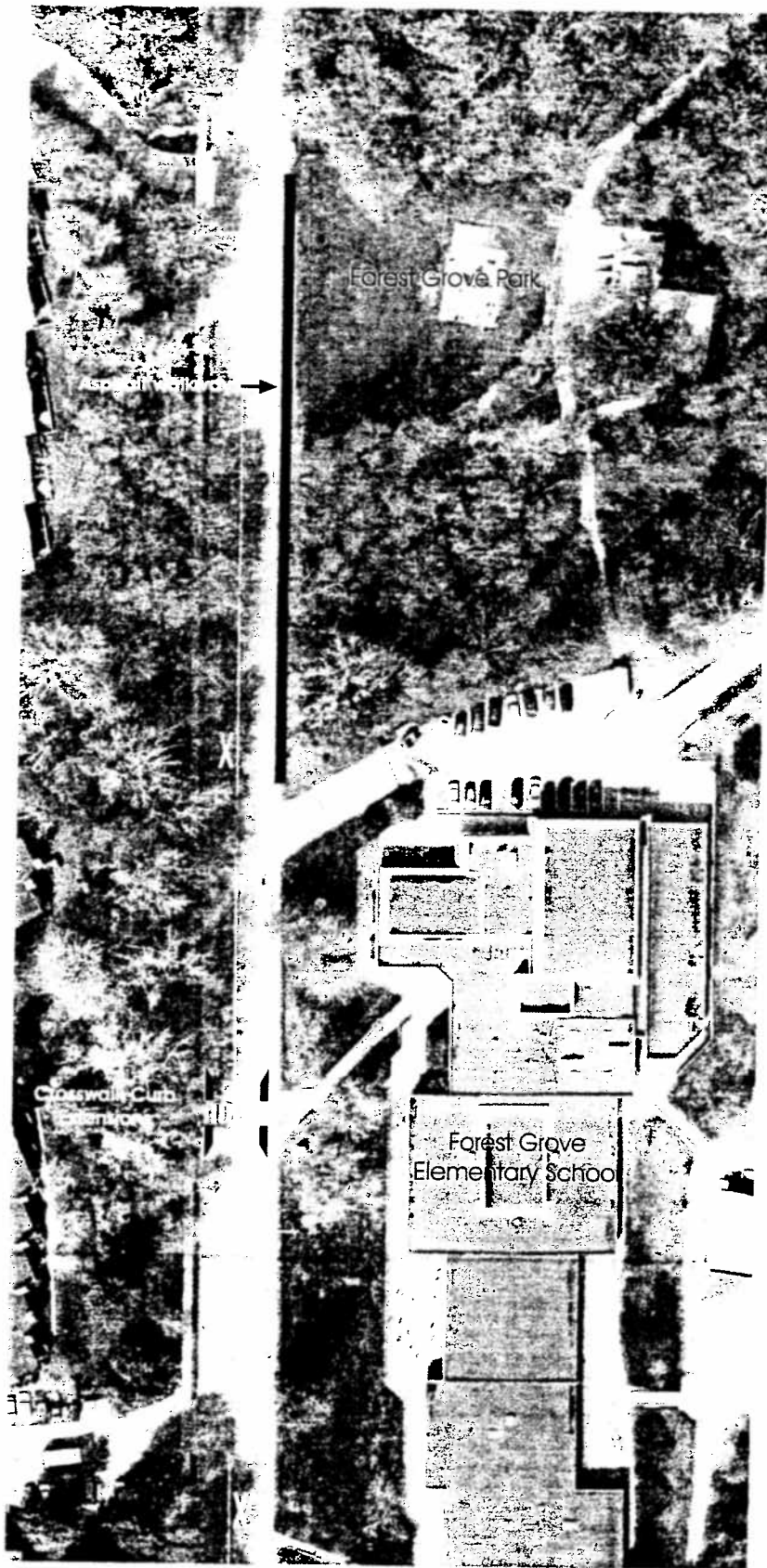
We also recommend the construction of an interim asphalt walk along the frontage of Forest Grove Park to the bus stop at the west end of park. The need for a crosswalk connection to the pathways on the south side of Forest Grove, will be monitored subsequent to the construction of the asphalt walk.



P. Liivamagi, P. Eng.
ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENG. SYSTEMS

EJ:
Attach.

cc: City Manager



Forest Grove School Proposed Improvements

DRAWN BY: AKE

SCALE: NTS

APPRV'D BY: PL

DATE: 19/12/01

