

**TO:** CITY MANAGER 2000 July 26

**FROM:** DIRECTOR PLANNING AND BUILDING Our File: 08.616.3

**SUBJECT:** **Burnaby Mountain Secondary and Cameron Elementary Schools Safety and Access Improvements**

**PURPOSE:** To seek Council approval for funding for safety and access improvements relating to Burnaby Mountain Secondary School.

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**RECOMMENDATIONS:**

1. **THAT** Council approve an expenditure from the Land Assembly Reserve Fund in the amount of \$275,000 to finance the cost of the safety and access improvements outlined in Table 2, Section 3.1.2 of this report.
2. **THAT** Council approve the operation of buses on the section of Brighton Avenue between Government Road and Lougheed Highway and Production Way between Lougheed Highway and Eastlake Drive.
3. **THAT** a copy of this report be forwarded to the members of the Burnaby Mountain Secondary School Integration Committee, the Burnaby School District (Secretary - Treasurer), the Principals of the Burnaby Mountain Secondary and Cameron Elementary Schools, TransLink (Manager of Implementation Planning), and the Coast Mountain Bus Company (Director of Operations, Burnaby/North Shore).

**REPORT**

**1.0 BACKGROUND**

Representatives from the Cameron Elementary School Parent Advisory Committee met with the Mayor requesting assistance from the City in addressing a number of school access/safety issues. Further to this initial request for assistance, there were a series of meetings held with key stakeholders from the community including the Burnaby Mountain Secondary School Integration Committee and representatives from the Cameron Elementary School Parent Advisory Committee. The Burnaby Mountain Secondary School Integration Committee was established as part of the rezoning process undertaken for the school. Representatives from the following groups attended:

- Northeast Burnaby Youth Advisory Committee,
- Northeast Burnaby Community Association,

- Stoney Creek Environmental Committee,
- RCMP Lougheed Community Police Office,
- Burnaby Mountain Parent Advisory Committee,
- Cameron Elementary School Parent Advisory Committee,
- Forest Grove Elementary School Parent Advisory Committee,
- Seaforth Elementary School Parent Advisory Committee, and
- Stoney Creek Elementary Parent Advisory Committee.

The following is a summary of the series of meetings held.

**2000 May 18** - This meeting was held at the request of the Cameron Elementary Parent Advisory Committee and took the form of a walking tour. The purpose of this meeting was to review access safety issues related to Cameron Elementary School, but issues related to the opening of the Burnaby Mountain Secondary School were also discussed. This meeting was attended by the principal of Cameron Elementary, senior staff of both the Burnaby Planning Department and the Burnaby Engineering Department, and representatives of the Cameron Elementary School Parent Advisory Committee and the Timberlea development.

**2000 May 29** - This meeting was held at the request of the Burnaby Mountain Secondary School Integration Committee at the new secondary school. The purpose of this meeting was also to review student access safety issues related to the routes to/from Burnaby Mountain Secondary School. This meeting was attended by the principal of Burnaby Mountain Secondary School, Planning Department staff as well as wide representation from the Burnaby Mountain Secondary School Integration Committee.

**2000 June 20** - Based on the first two meetings, staff prepared an issues list in order to consolidate all of the issues identified at the two separate meetings. This third meeting was held to confirm the concerns included in the issues list to ensure that no issues were being omitted. This meeting was attended by Burnaby Planning Department and Burnaby Engineering Department staff as well as wide representation from the Burnaby Mountain Secondary School Integration Committee.

This report outlines a staged approach to address the access issues identified by the process of consultation with the local community. This staged approach involves securing funding for the recommended list of projects which can be implemented immediately, and identifying those issues which continue to be under review.

This report would normally be directed to the Traffic and Transportation Committee (Traffic Safety Division). However, Burnaby Mountain Secondary School will be opening to receive approximately 900 students in 2000 September and this report has been developed in an effort to address urgent transit, pedestrian, and bicycle issues related to the opening of the

school and the safety issues associated with Cameron School.. The Chair of the Traffic and Transportation Committee (Traffic Safety Division) has concurred with the forwarding of this report directly to Council.

## 2.0 LOCATIONAL CONTEXT (BURNABY MOUNTAIN SECONDARY SCHOOL)

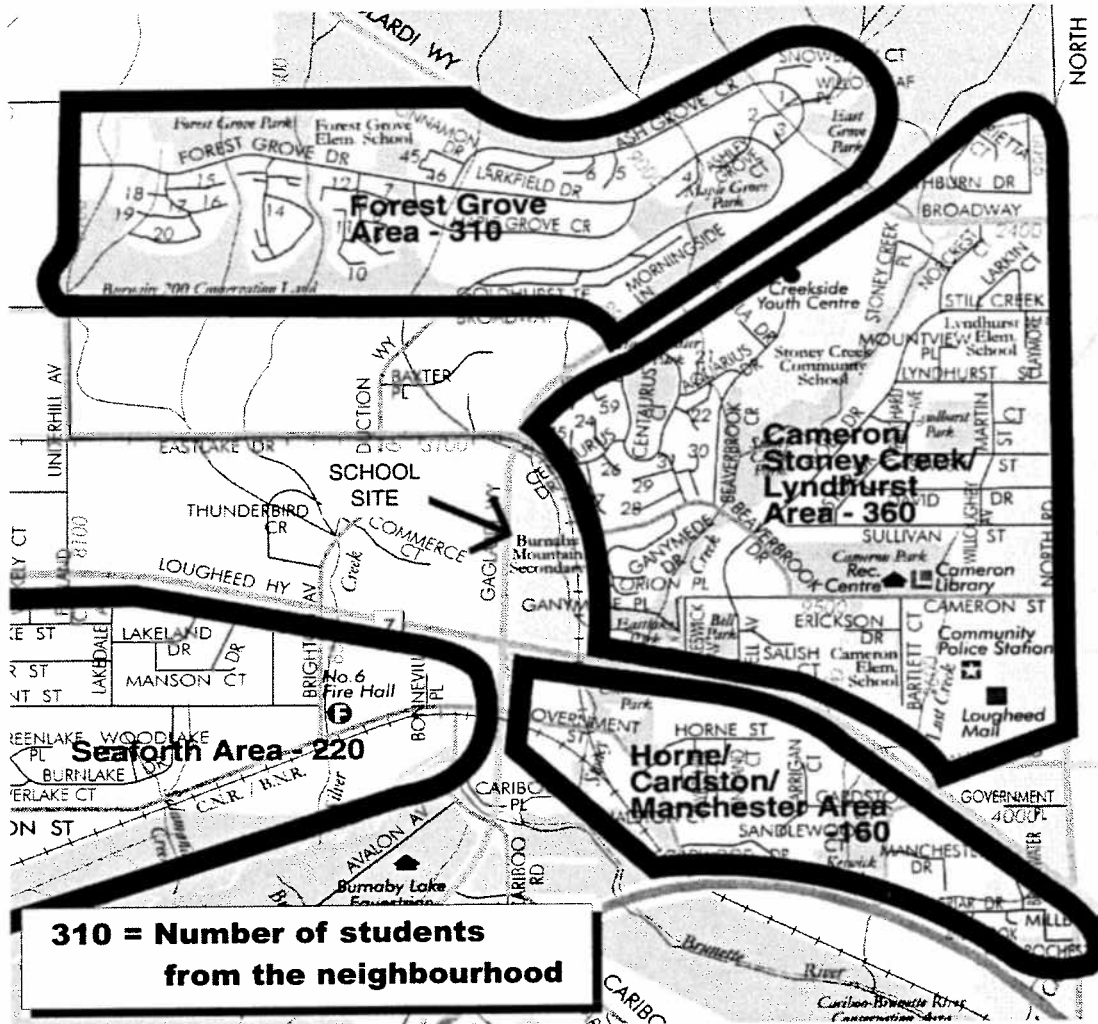
**Figure 1** is an aerial view of the new Burnaby Mountain Secondary School. The school's triangular site is bounded on two sides by two high volume primary arterial roads, Lougheed Highway (on the left side of the picture) and Gaglardi Way (middle of the picture). Eastlake Drive (in the foreground) borders the third side of the site.



*Burnaby Mountain Secondary School*

**Figure 1**

Lougheed Highway and Gaglardi Way also define the boundaries of the adjacent neighbourhoods which the Burnaby Mountain Secondary School will serve. These four neighbourhoods (Forest Grove, Seaforth, Cameron/Stoney Creek/Lyndhurst, and Home/Cardston) and the estimated number of Burnaby Mountain Secondary School students within each of these communities are shown in **Figure 2**.

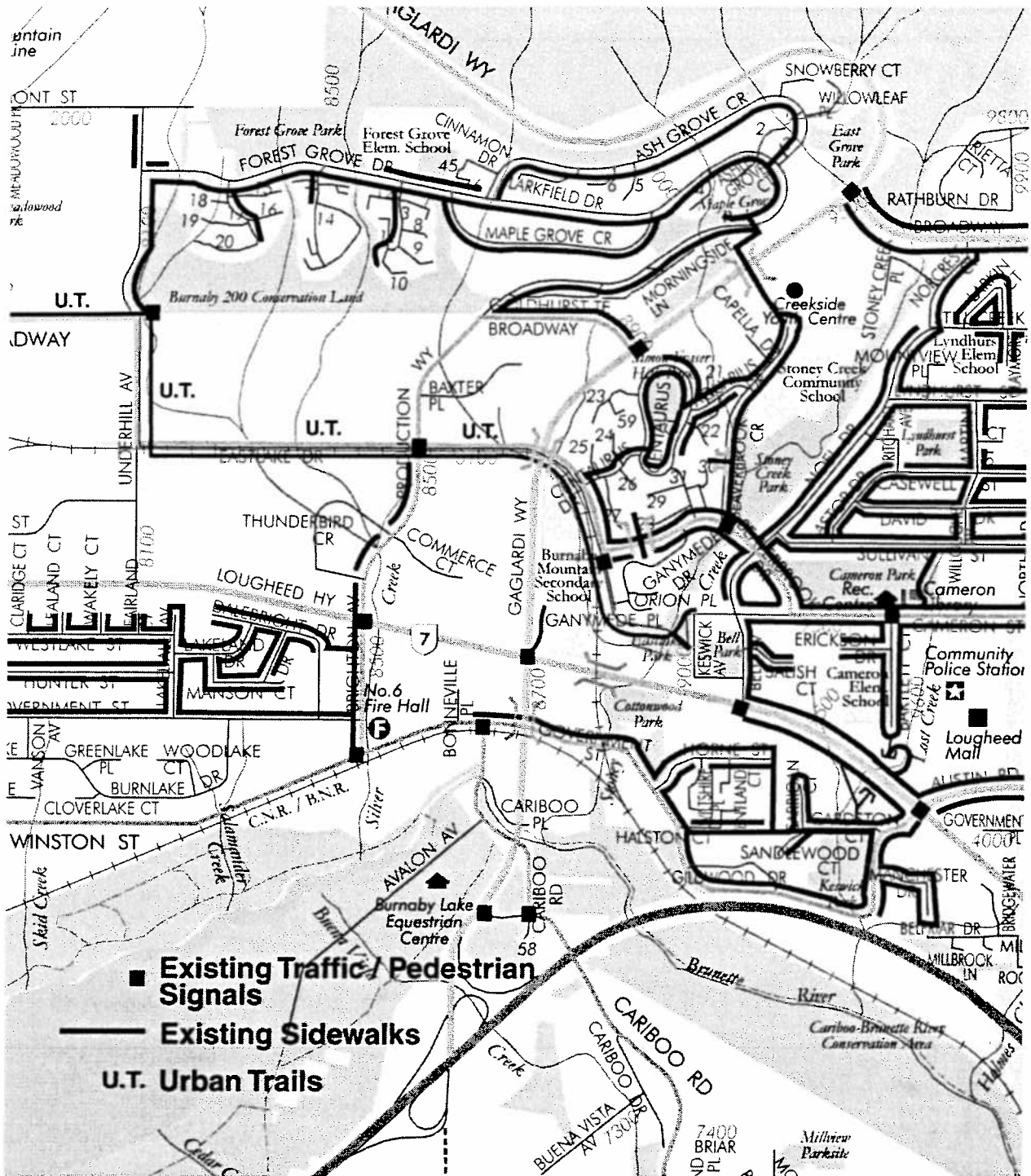


**Four Neighbourhoods Surrounding Burnaby Mountain Secondary School**

**Figure 2**

As shown in **Figure 3** there are good existing pedestrian / bicycle connections to the Burnaby Mountain Secondary School site from the residential neighbourhood immediately to the east (Cameron/Stoney Creek/Lyndhurst) of the school.

Recent improvements to the connections to the east are the result of the cost sharing arrangement established by Council at its regular meeting of 1998 October 26. Under this arrangement the City specifically contributed to the following items (also noted on **Figure 3**).



Existing Sidewalks and Urban Trails

Figure 3

- Traffic signal at the intersection of Eastlake and Beaverbrook.
- Sidewalks on Beaverbrook east of Eastlake.
- Connection between the new Beaverbrook sidewalks and the existing pedestrian bridge on Beaverbrook.

However, from the southeast (Home/Cardston/Manchester), southwest (Seaforth) and northwest (Forest Grove) there are school pedestrian safety and access issues that have been identified that need to be addressed. These have been further compounded by the ongoing construction of SkyTrain along the Lougheed Highway between Production Way and Austin Avenue.

### 3.0 ISSUES

The issues identified are separated into two groups, those which can be implemented immediately and those which will require further work and consideration.

#### 3.1 Immediate Infrastructure Recommendations

##### 3.1.1 Minor Items

The items described in **Table 1** below are relatively minor in nature and can be handled through the Engineering Department’s existing operating budget. **Figure 4** generally locates these items.

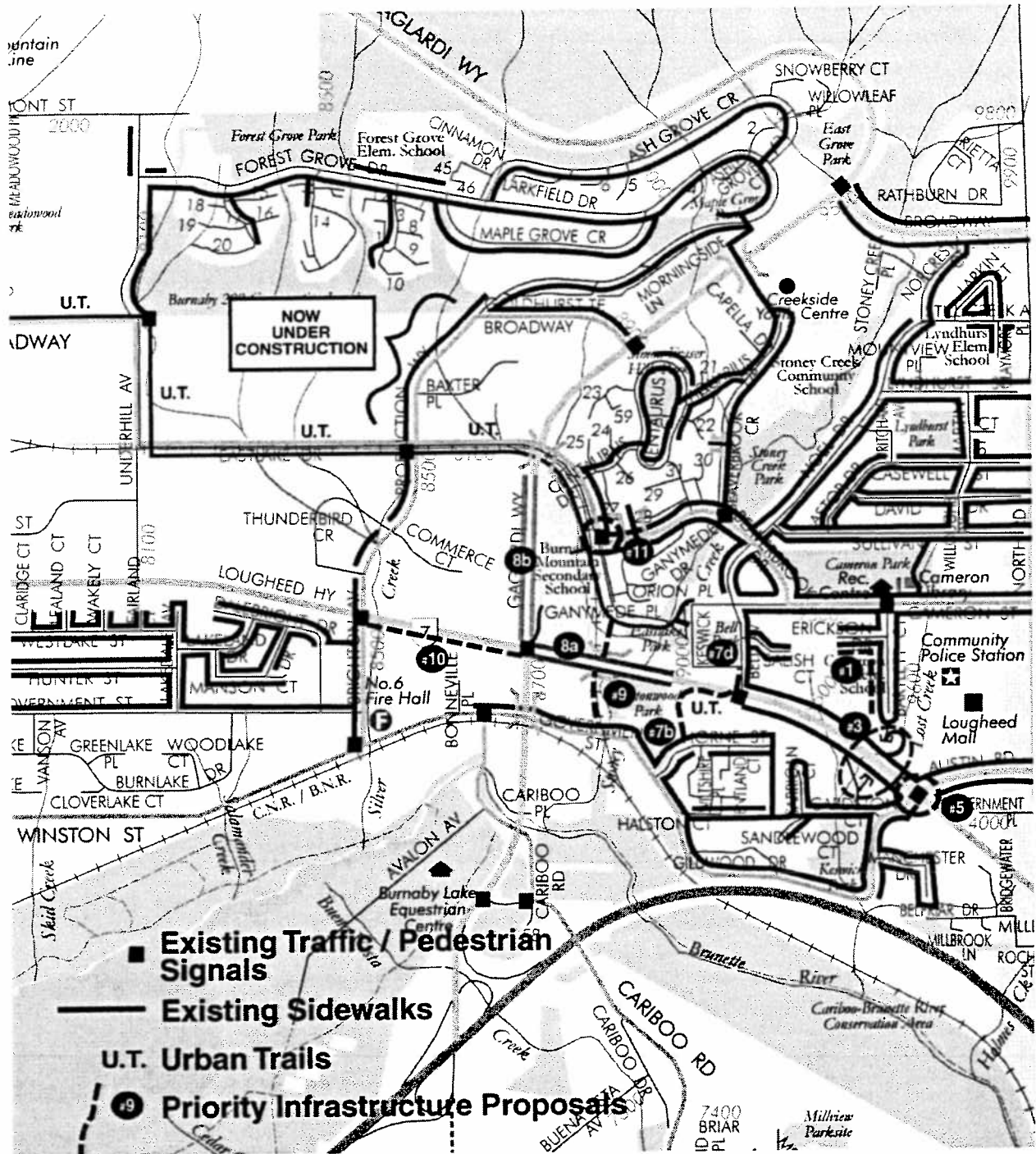
**Table 1**  
**Items to be Addressed Through Operating Budgets**

Map Ref #	Location, Issue and Proposal(s)
1.	<p><b>Location:</b> Bartlett Court and Erickson Drive at Cameron Elementary School.</p> <p><b>Issue:</b> Afternoon pick-up and drop-off activity on Bartlett is “chaotic”.</p> <p><b>Proposals:</b> Add <b>additional 5 minute pick-up / drop-off zone</b> on the south side of Erickson Drive and add <b>additional no stopping signs</b> to the east side of Bartlett Court.</p>

Map Ref #	Location, Issue and Proposal(s)
3.	<p><b>Location:</b> Pedestrian tunnel under Lougheed west of Austin</p> <p><b>Issue:</b> Pedestrian tunnel should be improved to increase personal safety and security.</p> <p><b>Proposals:</b> <u>Pedestrian tunnel improvements - north approach</u>            - add area spot light            - widen path            - clear underbrush            - remove graffiti</p> <p><u>Pedestrian tunnel improvements - tunnel</u>            - replace existing lights with brighter 100 w lights            - paint interior of tunnel</p> <p><u>Pedestrian tunnel improvements - south approach</u>            - modify existing pedestrian light fixtures            - trim tree branches around pedestrian light fixtures            - add area spot light to south tunnel entrance</p>
5.	<p><b>Location:</b> Intersection of Lougheed and Austin</p> <p><b>Issue:</b> High speed vehicles, eastbound Lougheed and southbound Austin, fail to yield to pedestrians crossing to delta islands.</p> <p><b>Proposals:</b> <b>Trim vegetation</b> on SW corner and <b>improve pedestrian markings</b></p>
11.	<p><b>Location:</b> Intersection of Eastlake and Beaverbrook</p> <p><b>Issue:</b> Southbound drivers do not pay attention to pedestrian when they are in the crossing on the east leg of the intersection even though they have a “walk” signal.</p> <p><b>Proposal:</b> Review and <b>modify signal timing / phasing</b> as required.</p>

In addition to the above, the Burnaby School District will be funding the construction of a new fence paralleling a walkway at the southern edge of the Cameron School grounds. This fence is being developed for school ground containment and security reasons.





**Immediate Infrastructure Recommendations**

**Figure 4**



### 3.1.2 Capital Funding Items

There are a number of other improvements required that are more significant in nature and will require capital funding. Every effort is being made to minimize expenditures, while at the same time ensuring that safe routes can be provided by the September school opening. Needed improvements to be done by the Rapid Transit Project Office are being advanced on a priority basis to help ensure continuity in the access system, even if only on an interim basis. A description of the elements requiring City funding are outlined in the following **Table 2**.

**Table 2**  
**Items Recommended Which Require Capital Funding**

Ref #	Location, Issue and Proposal(s)
7b.	<p><b>Location:</b> Western half of the Horne / Cardston / Manchester neighbourhood</p> <p><b>Issue:</b> The existing path on the Keswick right-of-way will become a major route to Burnaby Mountain Secondary School for this neighbourhood.</p> <p><b>Proposal:</b> A new section of <b>urban trail</b> on the south side of Lougheed is being proposed to connect the western half of the Horne / Cardston / Manchester neighbourhood to the existing traffic signal at Bell / Lougheed. The connection between the urban trail and the traffic signal will be via a <b>new concrete sidewalk</b> along the south edge of the Lougheed which is being provided by the RTP 2000 as part of the work related to the Millennium SkyTrain Line. The sidewalk connection will likely take the form of a temporary walkway on the paved shoulder of the Lougheed (separated from the travel lane with a concrete barrier) until the spring of 2001 when the RTP 2000 has scheduled the reconstruction of Lougheed in this area.</p>
7d.	<p><b>Location:</b> Bell from Lougheed to Hunter</p> <p><b>Issue:</b> Two pedestrian safe routes converge on this location (Keswick from the south of Lougheed and the existing sidewalk on the north side of Lougheed from Austin).</p> <p><b>Proposal:</b> A new section of <b>urban trail</b> on the north side of the Lougheed to connect the two existing pedestrian safe routes to the existing Eastlake Park urban trail.</p>

Ref #	Location, Issue and Proposal(s)
8a.	<p><b>Location:</b> Lougheed from Keswick to Gaglardi</p> <p><b>Issue:</b> School children using the Keswick right-of-way will be tempted to cross Lougheed to reach Burnaby Mountain Secondary School.</p> <p><b>Proposal:</b> The existing median barrier (Austin to Bell) will be replaced and extended (Austin to Keswick) by RTP 2000 as part of the work related to the Millennium SkyTrain Line. In order to encourage pedestrians to use the traffic signal at Bell / Lougheed and preclude pedestrians from crossing the Lougheed west of Bell, <b>an extension of the median barrier with a fence atop</b> is being proposed from Keswick to Gaglardi.</p>
8b.	<p><b>Location:</b> Gaglardi, Lougheed to Eastlake</p> <p><b>Issue:</b> Motorists will likely be “u”-turning on Gaglardi to drop-off and pick-up Burnaby Mountain Secondary School students.</p> <p><b>Proposal:</b> A <b>median barrier</b> is being proposed to preclude motorists from completing “u”-turns on Gaglardi north of Lougheed. This location is on the west side of the Burnaby Mountain Secondary School where some unauthorized pick-up and drop-off activity is anticipated.</p>
10.	<p><b>Location:</b> Lougheed (south side), Production Way to Gaglardi</p> <p><b>Issue:</b> Lougheed is a natural desire line from Production to Gaglardi between the Seaforth Community and Burnaby Mountain Secondary School.</p> <p><b>Proposal:</b> A <b>raised asphalt sidewalk</b> to serve as an interim connection until the urban trail on the north side of Lougheed can be put in place subsequent to the completion of the University (Production) SkyTrain Station (scheduled for completion in 2002).</p>

All of the items in both **Table 1** and **Table 2** are currently scheduled to be in place by 2000 September 5. These improvements will ensure that there are at least two pedestrian safe routes from three of the four neighbourhoods. The exception will be the Seaforth neighbourhood where item #10, the raised asphalt sidewalk on the south side of Lougheed from Production Way to Gaglardi, will not be in place for 2000 September. This connection is dependent on a retaining wall being put in place this fall as part of the Gaglardi (Bus) Queue Jump Project. As a result, the new raised asphalt sidewalk cannot be in place until 2000 November 01. Although not as direct, Brighton/Production/Eastlake will however, provide an alternative pedestrian safe route to the school for the first two

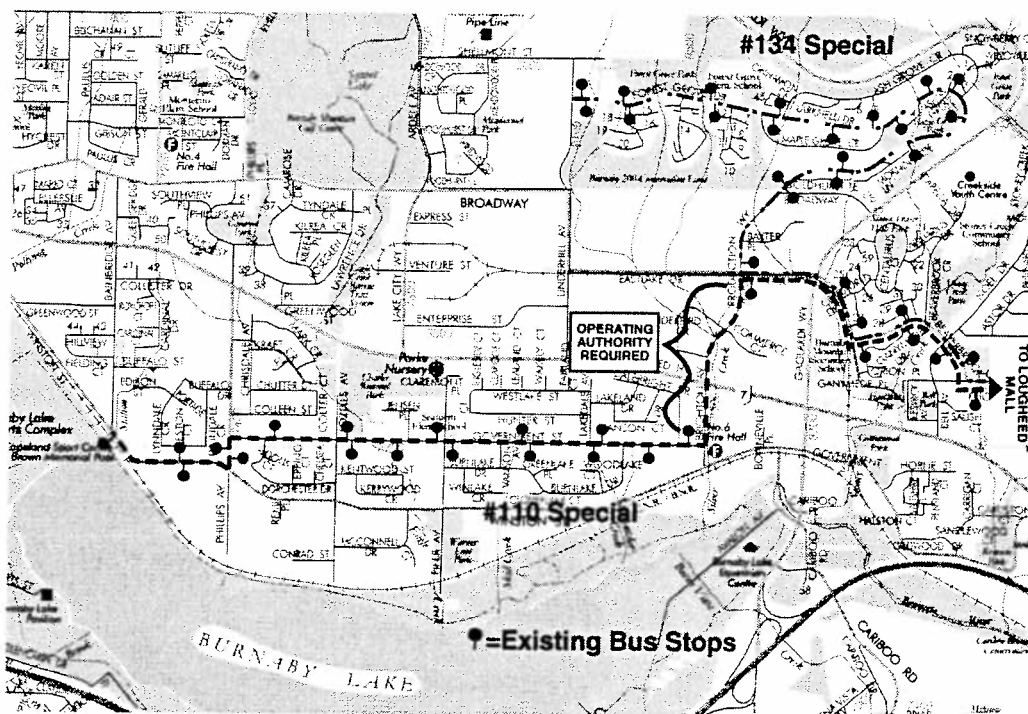
months of the school operation. Following completion of the construction of the University Station at Production Way, there are plans for the development of an urban trail on the north side of the Lougheed Highway between Production Way and Gaglardi Way. This is anticipated to be completed in 2002.

Item #9, the BNR trail from Government to Eastlake Drive (also shown on **Figure 4**), is being constructed by GVRD and is anticipated to be in place by end of 2000 September. This will provide a further grade separated connection between Government Road and East lake Drive from the Horne/Cardston neighbourhood.

The estimated costs of those items listed under **Table 2** is \$275,000. Of this amount, \$100,000 is currently provided for under the 2000 Major Road component of the Capital Budget.

### 3.2 Immediate Supplementary Bus Services

To supplement the existing bus services in the area of the Burnaby Mountain Secondary School, Coast Mountain Bus (on behalf of TransLink) will be adding a number of school “special” trips to better serve the school. **Figure 5** shows the two bus routes that will be used for these school “special” trips.



School “Special” Bus Routes

Figure 5

Five new school “special” trips to the school in the morning (two for the Seaforth area and three for the Forest Grove area) and four new school “special” trips from the school in the afternoon (two for the Seaforth area and two for the Forest Grove area) will be introduced for the opening of Burnaby Mountain Secondary School.

The “special” trips from the Seaforth area will offer direct service to the front entrance of Burnaby Mountain Secondary School and will avoid students having to travel past the school to transfer to a connecting bus at Lougheed Mall to reach the school. As the #110 school “special” bus route will operate on a section of Brighton between Government and Lougheed, and Production between Lougheed and Eastlake, which currently does not have bus service, TransLink has requested Council approval to operate on these sections of roadway. This approval will also allow bus routes access to the future University SkyTrain station proposed for the northeast corner of Lougheed and Production.

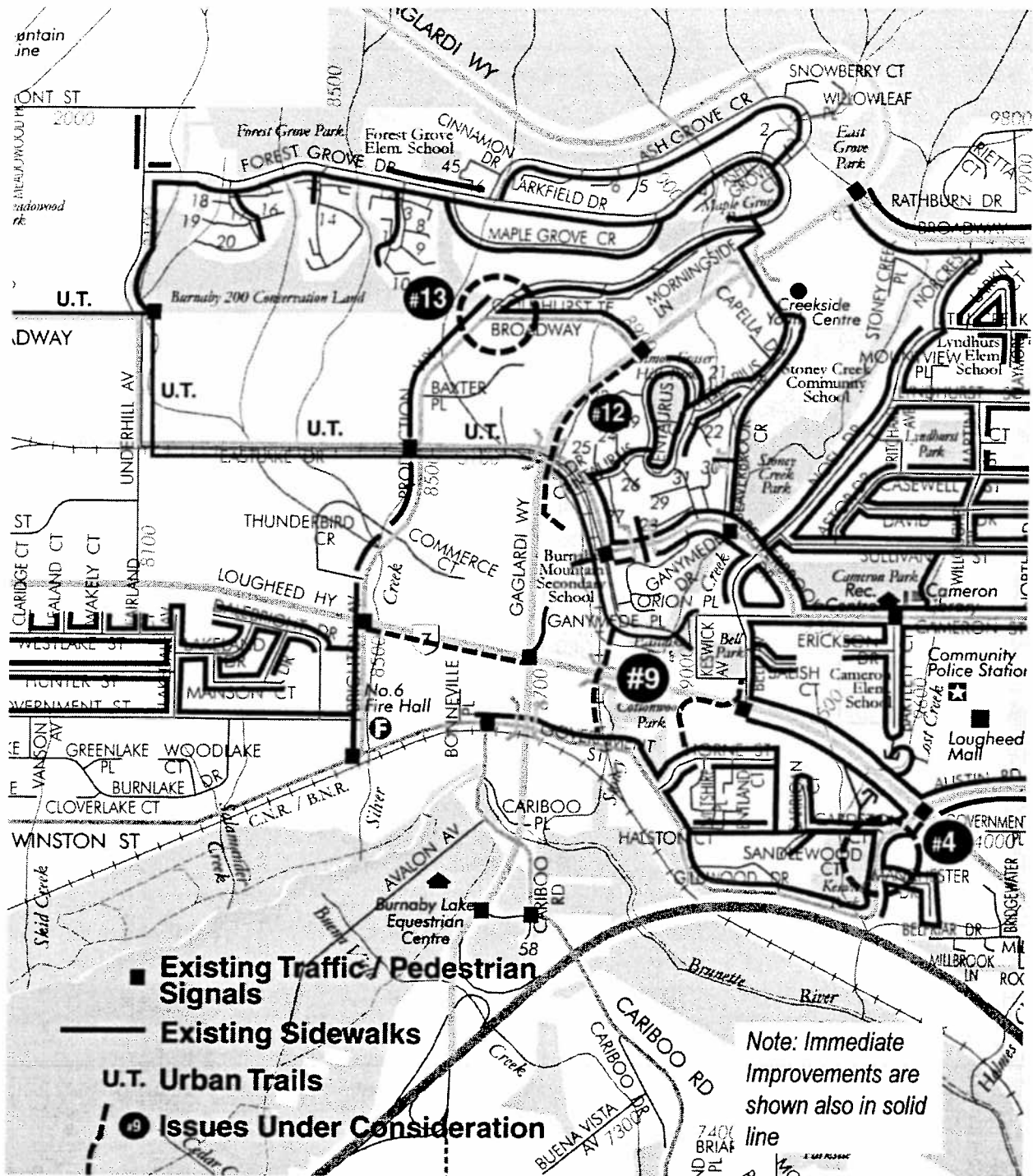
These two proposed school “special” bus routes will serve some of the existing bus stops along the existing bus routes (as shown on **Figure 5**). These two new school “special” bus routes will allow students to be picked up and dropped off at the main entrance of the school, and will avoid loading / unloading students on Gagliardi north of Lougheed.

### **3.3 Burnaby School Board Mailer**

The Burnaby School Board is now preparing a mailer which will be distributed to the families of all students who will be attending Burnaby Mountain High School. City staff are currently working with both TransLink/Coast Mountain Bus Company and Burnaby School Board staff to ensure that a map of the pedestrian / bicycle safe routes to the school, (including those projects anticipated to be in place for 2000 September) and a map of the “special” school bus trips will be included in this mailer. The school board anticipates distribution of this mailer in early August.

### **3.4 Issues Requiring Further Consideration**

**Figure 6** identifies two intersections which require further review and consideration. Once this additional work has been undertaken, recommendations will be reported back to Council via the Traffic and Transportation Committee (Traffic Safety Division). These medium term projects are also listed below in **Table 3**.



Issues Under Consideration

Figure 6

**Table 3**  
**Issues Under Consideration**

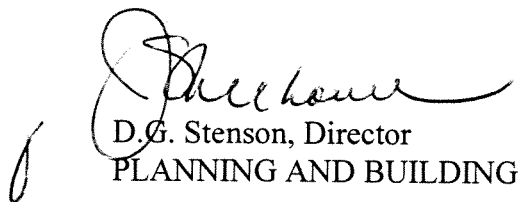
<b>Map Ref #</b>	<b>Location, Issue and Proposal(s)</b>
4.	<p><b>Location:</b> Intersection of Government and Cardston or Manchester.</p> <p><b>Issue:</b> Existing unsignalized pedestrian crossing is dangerous:            - pedestrians are getting “trapped” on median by high speed traffic            - eastbound left turns are also delayed            - southbound cars race to merge south of Manchester Drive            - southbound sight line of crosswalk compromised by northbound median sign</p> <p><b>Proposal:</b> Complete <b>crosswalk warrant analysis</b> in September of 2000 once new pedestrian walk patterns to Burnaby Mountain Secondary School can be observed. Prepare recommendation concerning need for pedestrian signal at Manchester or Cardston.</p>
9.	<p><b>Location:</b> BNR trail from Government to Eastlake</p> <p><b>Issue:</b> Trail as proposed will not be lit and walks to and from the school during the winter months would be in darkness.</p> <p><b>Proposal:</b> Investigate <b>pedestrian lighting</b> partnership with GVRD.</p>
12.	<p><b>Location:</b> Gaglardi, Broadway to Burnaby Mountain Secondary School</p> <p><b>Issue:</b> Gaglardi is a natural desire line for students travelling to the Burnaby Mountain Secondary School from the eastern half of the Forest Grove neighbourhood using the existing signal and crosswalk at Broadway and Gaglardi Way.</p> <p><b>Proposal:</b> Review implementation of a <b>raised asphalt sidewalk</b> for the east side of Gaglardi.</p>
13.	<p><b>Location:</b> Intersection of Broadway and Production</p> <p><b>Issue:</b> Intersection currently has no signal and no crosswalk. This location is also seen as “confusing” for motorists due to poor signage and complicated geometry.</p> <p><b>Proposal:</b> Undertake a <b>traffic signal warrant review</b> and prepare recommendation for installation of traffic signal.</p>

#### 4.0 FINANCING

Sufficient Land Assembly Reserve funds are available and \$100,000 is included under the 2000 Major Roads component of the 2000-2004 Annual Capital Program for these works. However, 2000 project expenditures (net of GST rebate) of \$275,000 will exceed the 2000 Capital Spending Limit by approximately \$175,000. Council is being requested to approve an expenditure from Land Assembly and Development in the amount of \$275,000.

#### 5.0 CONCLUSION

With the September 2000 opening, access ways for students attending the new Burnaby Mountain Secondary School from the southeast, southwest and northwest will require safety and continuity improvements. The recommended series of immediate projects contained within Tables 1 and 2 in Section 3.1.2 of this report collectively will ensure that there are appropriate improvements made to available routes to the Burnaby Mountain Secondary School and Cameron Elementary School from the neighbourhoods that they serve. Moreover, these recommended pedestrian and bicycle improvements will be of benefit to the wider community in providing improved access between the residential neighbourhoods, Lougheed Town Centre area and the future University SkyTrain Station. Other desired improvements are currently being evaluated and will be reported on through the Traffic and Transportation Committee (Traffic Safety Division) on completion of the current reviews.

  
D.G. Stenson, Director  
PLANNING AND BUILDING

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- cc. City Manager
- Director Engineering
- Director Finance
- Director Parks, Recreation & Cultural Services



