

TRANSPORTATION COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

**SUBJECT: REVISED PHILLIPS-BAINBRIDGE CONNECTOR:
PETITION FROM T. BOYLE AND M. SORBO**

RECOMMENDATION:

1. THAT Council forward a copy of this report to the nine residents of Bainbridge Avenue between Lougheed Highway and Broadway Avenue who submitted a petition to the Transportation Committee.

REPORT

The Transportation Committee, at its meeting held on 2007 March 14, received and adopted the *attached* report in response to the concerns expressed in a petition regarding the revised configuration for the Phillips-Bainbridge Connector.

Respectfully submitted,

Councillor N. Volkow
Chair

Councillor S. Dhaliwal
Vice Chair

Councillor L. Rankin
Member

Copied to:	City Manager
	Director Finance
	Director Engineering
	Director Planning & Building

TO: CHAIR AND MEMBERS
TRANSPORTATION COMMITTEE

DATE: 2007 March 08

FROM: DIRECTOR PLANNING AND BUILDING

FILE: PL 37500-01
Ref: Phillips

**SUBJECT: REVISED PHILLIPS-BAINBRIDGE CONNECTOR:
PETITION FROM T. BOYLE AND M. SORBO**

PURPOSE: To respond to the concerns expressed in a petition regarding the revised configuration for the Phillips-Bainbridge Connector.

RECOMMENDATION:

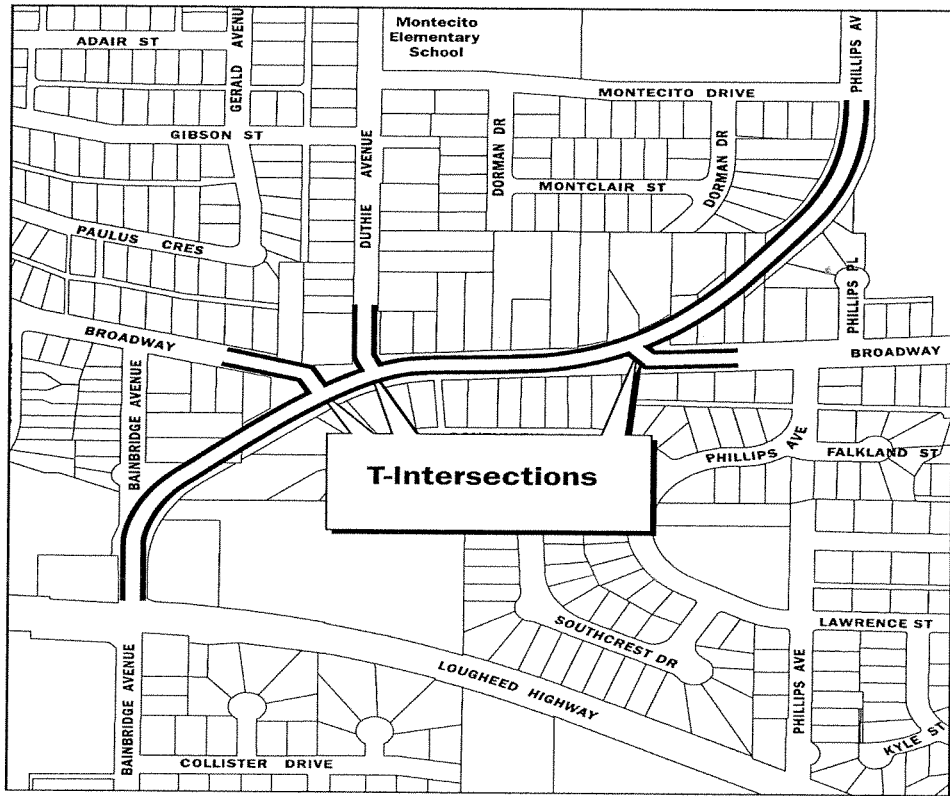
1. **THAT** the Transportation Committee recommend that Council forward a copy of this report to the nine residents of Bainbridge Avenue between Lougheed Highway and Broadway Avenue who submitted a petition to the Transportation Committee.

REPORT**1.0 BACKGROUND**

The Phillips-Bainbridge Connector was a component of the Burnaby Transportation Plan as originally adopted by Council in 1980. The Connector was intended as a major road connecting Lougheed Highway to the Burnaby Mountain Parkway through the Montecito area of Burnaby.

The original configuration of the south portion of the connector from Phillips to Lougheed Highway followed a curved alignment from Phillips to Broadway to Bainbridge and Lougheed Highway, as shown in *Figure 1*.

Figure 1 Phillips-Bainbridge Connector Original Configuration

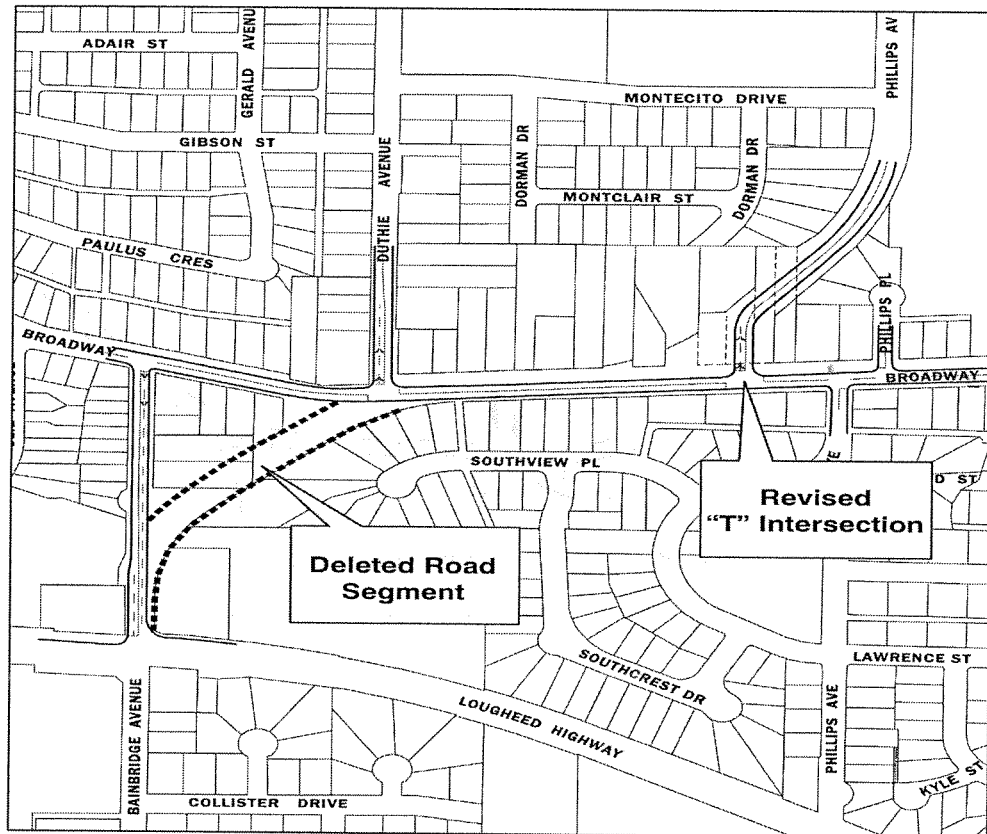


More recently at its regular meeting of 2006 May 15, Council received a report from the City Manager recommending a revised configuration for the Connector (as shown in *Figure 2*) and approved this configuration. The revised configuration removed the segment of the Connector from Lougheed Highway to Broadway and realigned the segment from Broadway to Phillips. Council also approved a recommendation to forward the report to residents of the area affected by the change including the residents of Bainbridge.

Subsequently, on 2006 September 13, the Transportation Committee received a petition signed by nine residents of Bainbridge Avenue who raised a number of traffic issues regarding Bainbridge Avenue and recommending that the original configuration be reinstated.

This report provides background on the revised configuration for the Phillips-Bainbridge Connector and responds to the concerns of the residents as outlined in their petition.

Figure 2 Revised Configuration



2.0 PHILLIPS-BAINBRIDGE CONNECTOR: REVISED CONFIGURATION

The revised configuration (*Figure 2*) was approved by Council based on the following considerations:

- **Reduced Function for the Connector** - the original configuration for Phillips-Bainbridge Connector was appropriate for an arterial road which would have extended from Lougheed Highway to the Burnaby Mountain Parkway. The revised configuration reflects the change in the function of the Connector from an arterial to a Major Collector-Residential road providing access in and out of the Montecito neighbourhood.
- **Higher Construction Costs** - The original configuration for the Connector from Lougheed to Phillips Avenue would have entailed significantly higher property acquisition and construction costs including construction of a new segment of road from Lougheed to Broadway and from Broadway to Phillips.
- **More Traffic on Phillips** - Due to its continuity to the Lougheed Highway, the original configuration would have attracted more traffic to Phillips Avenue than

To: Transportation Committee
 From: Director Planning and Building
 Re: Revised Phillips-Bainbridge Connector:
 Petition from T. Boyle and M. Sorbo
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the revised configuration with its a minor connection to Broadway. Some residents of Phillips Avenue had expressed concerns regarding the potential traffic impacts of the original configuration.

The revised configuration relies on the continued use of Bainbridge Avenue as the connection from Loughheed to Broadway rather than constructing a new connection as envisioned in the original Phillips-Bainbridge plan. As well, the existing “interim standard” section of Broadway between Bainbridge and the new Phillips extension would be developed to a finished standard with two travel lanes, two parking lanes and an urban trail on the north side as indicated in *Figure 3*. Bainbridge would be designed as a Major Collector with one travel lane in each direction and one parking lane on the east side This road upgrade on Bainbridge would be undertaken as part of the future subdivision servicing of the land on the east side of Bainbridge (*Figure 3*).

3.0 RESIDENT CONCERNS

The petition received from residents outlined the following concerns with traffic on Bainbridge and expressed the opinion that these concerns could only be addressed by proceeding with the original configuration:

3.1 Traffic Volumes

Issue: Residents are concerned that Bainbridge carries higher traffic volumes than the capacity of the road. The most recent count on Bainbridge between Loughheed Highway and Broadway Avenue shows a daily traffic volume of approximately 5,850 vehicles (rounded to the nearest 25 vehicles). As shown in *Table 1*, weekday traffic volumes on Bainbridge from Loughheed to Broadways have declined since 1983 largely due to completion of the Kensington Overpass.

**Table 1 Weekday Traffic Volume Bainbridge Avenue
 (Loughheed Highway to Broadway Avenue)**

YEAR	Daily Traffic Volume
1983	7,400
1988	6,500
1997	6,525
2003	5,900
2006	5,850

Staff Comment: The desirable maximum volume of traffic on a Major Collector-Residential street like Bainbridge is 12,000 vehicles per day. At 5,850 vehicles per day, Bainbridge is carrying traffic volumes which are well under this maximum. It is expected that Bainbridge should continue to operate at these relatively low volumes even with the provision of the new connection from Broadway to Phillips proposed under the revised configuration (*Figure 2*).

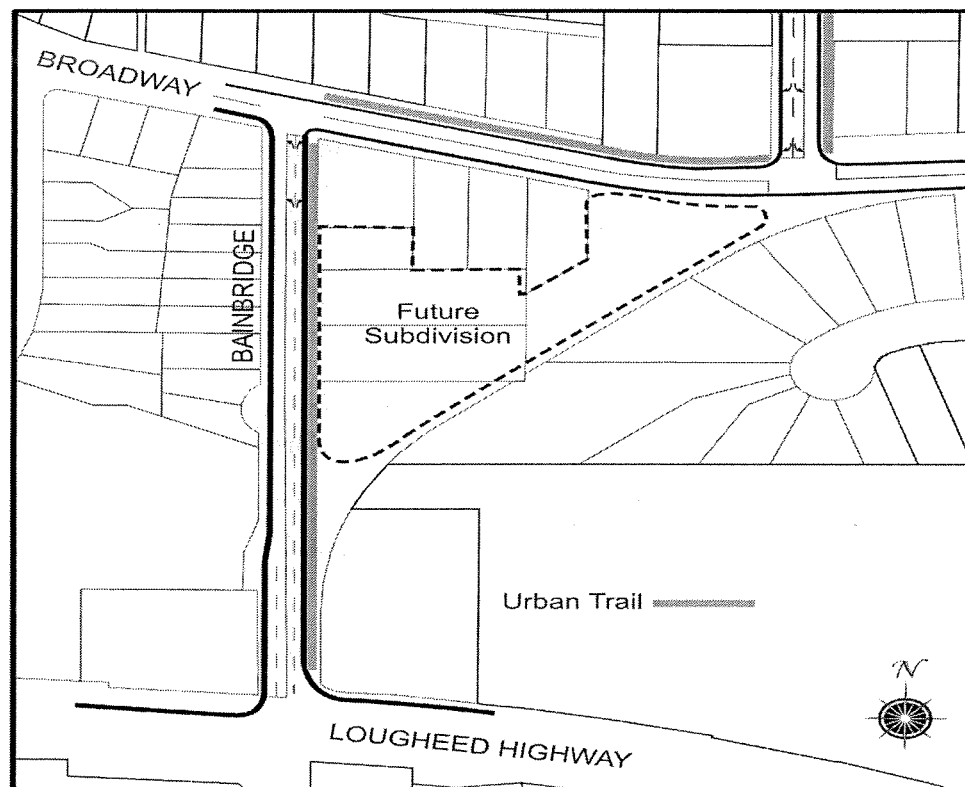
In comparison, under the original configuration for the Phillips-Bainbridge Connector, a cul-de-sac would have been constructed on Bainbridge and through-traffic on Bainbridge Avenue would have been diverted to the new Connector. This would have effectively reduced traffic volumes on Bainbridge to local traffic only (approximately 1,000 vehicles per day).

3.2 Traffic Queuing

Issue: The residents raised the issue of traffic queuing up to the intersections of Bainbridge/Lougheed and Bainbridge/Broadway during peak periods.

Staff Comment: The upgrading of Bainbridge proposed under the revised configuration as shown in *Figure 3* would involve the provision of an additional northbound lane on Bainbridge from Lougheed up to Broadway and a south bound lane on Bainbridge near Lougheed to accommodate both right turning and left turning vehicles at Broadway and at Lougheed.

Figure 3 Bainbridge Upgrading: Revised Configuration



The provision of these turning lanes would reduce the traffic queuing back from these intersections during the peak periods as referred to in the residents' petition.

3.3 Truck Traffic and Noise

Issue: In the petition, residents refer to the effect of dust and noise caused by the large trucks which use Bainbridge.

Staff Comment: As Bainbridge Avenue between Broadway and Lougheed Highway is not a truck route, the large trailer trucks which can create significant noise issues are prohibited from using Bainbridge. As shown in *Table 2*, the vehicle classification data for Bainbridge show that those trucks regulated by the Burnaby Truck Route Bylaw (i.e., identified in boldface as Trailer Trucks) constitute less than 0.2 % of the total vehicles on Bainbridge. The addition of the largest group of trucks, the 3.5% single-unit trucks, raises the number of total trucks in the traffic mix to 3.7%.

**Table 2 Truck Volumes
 Bainbridge Avenue - Lougheed to Broadway**

Vehicle Classification	Weekday Volume	Percent of All Weekday Traffic
Motorcycles	10	0.2
Passenger Cars	4,540	78.0
Light Trucks	1,030	17.5
Buses	85	1.5
Single Unit Trucks	165	3.5
Trailer Trucks	10	0.2
Total	5,840	100

Relative to other Major Collector–Secondary streets which typically carry up to 15% trucks in the traffic stream, the proportion of trucks using Bainbridge at 3.7% of the total traffic is less than the average for this class of street. Moreover, it is noted that the majority of these trucks (3.5% of the overall traffic) are permitted to use Bainbridge for through movements under the Burnaby Truck Bylaw.

3.4 Traffic Calming

Issue: Residents support the original configuration as the best way to calm traffic on Bainbridge in terms of volume and speed.

Staff Comment: As previously noted, the original configuration would have reduced traffic volumes to about 1000 vehicles per day. Regarding traffic speeds, *Table 3* provides data from a January 2003 traffic survey.

**Table 3 Vehicle Speeds – 24 Hour Average
 Bainbridge Avenue (Broadway to Lougheed)**

Vehicle Speed Grouping	Vehicle Speed Northbound	Vehicle Speed Southbound
15 th Percentile	40.5 kph	41.2 kph
50 th Percentile	49.9 kph	50.4 kph
85 th Percentile	58.7 kph	58.5 kph

Traffic speeds over a 24 hour period show that 50% of the northbound or southbound vehicles were traveling at the speed limit of 50 kph or lower. The 85th percentile speeds were 58.7 kph northbound and 58.5 kph southbound which means that 85% of the vehicles were traveling at or below these speeds. The 85th percentile speeds are somewhat lower than those experienced on other streets of this type in Burnaby.

3.5 Traffic Circle

Issue: The report and petition from the residents proposes the provision of a traffic circle on Bainbridge at Queensbridge Drive as shown in *Figure 4*. This type of traffic calming measure and others, such as speed humps are not considered appropriate for the Major Collector-Secondary streets which may have to accommodate higher traffic volumes and larger vehicles on a regular basis than lower classified streets such as Local Collectors and Local Residential streets

Figure 4 Residents Proposed Traffic Circle



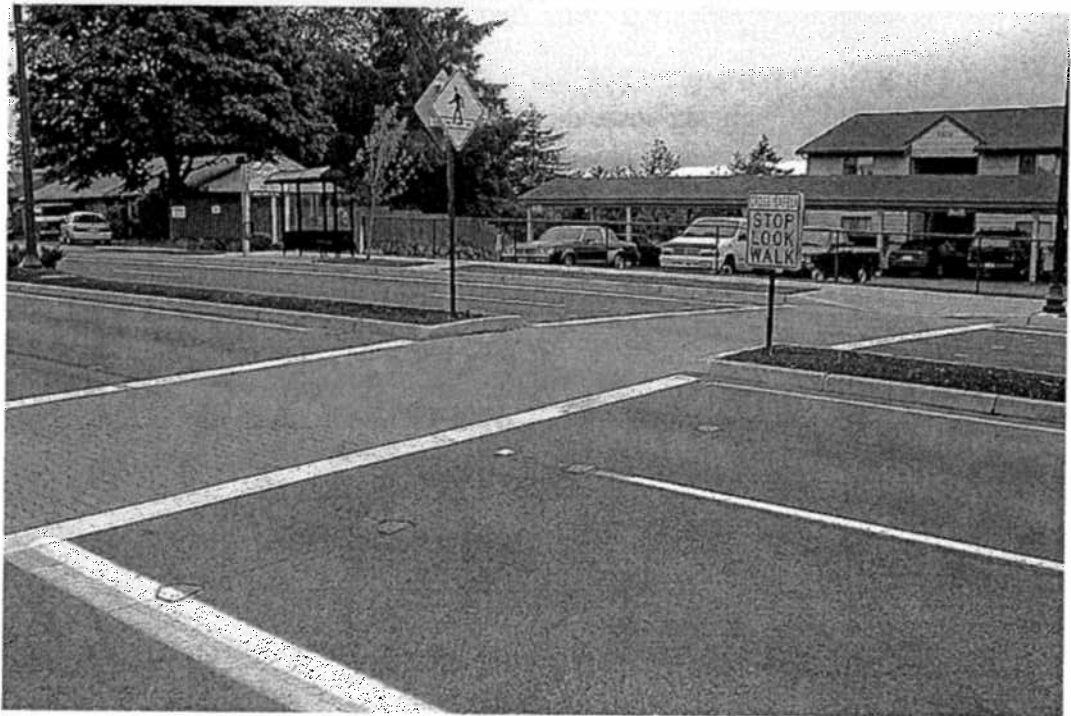
Staff Comment: Staff are supportive of other speed control measures which could be considered in the future reconstruction of Bainbridge including median diverters and raised crosswalks.

A median diverter (*Figure 5*) would tend to slow traffic on Bainbridge in the immediate vicinity of the diverter and provide a safer mid-block crossing point with a refuge area for pedestrians and cyclists. Raised crosswalks (*Figure 6*) accomplish the same objectives by introducing a slight rise in the pavement surface. Both options would maintain the function of Bainbridge. Median diverters and raised crosswalks have been installed on other Major Collector-Residential streets, such as Curtis Street and Sperling Avenue.

Figure 5 Median Diverter



Figure 6 Raised Crosswalk



Recommendation: Staff will include consideration of these options in the future works to be completed on Bainbridge as part of the future subdivision of lands to the east.

3.6 Pedestrian Safety on Bainbridge

Issue: Residents indicated the need for sidewalks on Bainbridge to accommodate the large number of pedestrians walking to the bank, the store (on Bainbridge near the Lougheed Highway) and the Sperling SkyTrain station.

Staff Comment: As shown in *Figure 3*, Bainbridge between Lougheed Highway and Broadway is constructed with sidewalks on the west side only.

Recommendation: Reconstruction of Bainbridge to the final standard would involve the provision of a 3.0 metre Urban Trail on the east side of Bainbridge from Lougheed Highway to Broadway Avenue and on the north side of Broadway. Again, these measures would be undertaken in conjunction with the subdivision of lands to the east of Bainbridge which includes City-owned lands.

3.7 Resident On-Street Parking

Issue: The residents would like to have on-street parking available on Bainbridge to accommodate visitors and to help slow traffic down.

Staff Comment: As Bainbridge is currently only two traffic lanes, one northbound and one southbound with gravel shoulders on the east side, there is no provision for on-street parking. On a finished Major Collector-Residential street, parking lanes would normally be provided on both sides of the street. However, to provide this parking lane on the west side of Bainbridge would require complete reconstruction of this side including the removal and reconstruction of the existing curb, gutter and sidewalk and the removal of a number of large trees. For this reason it is proposed that Bainbridge reconstruction occur on the east side only with a new curb/gutter and Urban Trail to be provided. This reconstruction would provide on-street parking for residents in the added northbound curb lane on the east side of the street. Use of this parking may be restricted during the PM peak period in response to traffic demands.

4.0 CONCLUSION

Council has approved a revised configuration for the Phillips-Bainbridge Connector which would extend Phillips to Broadway but would not provide a new connection from Broadway to Lougheed as envisioned in the original configuration. The revised configuration would use the existing Bainbridge Avenue to accommodate traffic from the Lougheed Highway up to Broadway while Broadway would be upgraded to a finished standard between Bainbridge and the new connector.

This report is written in response to a petition received from a group of residents on Bainbridge Avenue between Lougheed Highway and Broadway Avenue. The residents raise a number of traffic issues with Bainbridge Avenue including vehicle volumes, truck traffic and noise, traffic queuing, pedestrian safety, lack of parking and sidewalks. The

