

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION)

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

Re: Boundary Road Project (Kingsway to Vanness):
Design Concept and Implementation Strategy

RECOMMENDATIONS:

1. **THAT** Council approve the design and implementation strategy for the Boundary Road Project as outlined in this report.
2. **THAT** Council authorize staff to bring down a bylaw to enter into an agreement with the City of Vancouver for the reconstruction of Boundary Road from south of Kingsway to north of Vanness Avenue as outlined in this report.
3. **THAT** a copy of this report be forwarded to Mr. I. Adam, Engineering Department, City of Vancouver, Mr. J. Jensen, Ministry of Transportation and Highways, and Mr. D. Green, Building Department, B.C. Telephone Company.
4. **THAT** a copy of this report be forwarded to the Bicycle Advisory Committee of Council.

REPORT

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held on 1996 February 14 , adopted the attached staff report requesting approval of a design and implementation strategy for improvements to the section of Boundary Road from south of Kingsway to north of Vanness Avenue.

MEMBERS:

Mrs. Y. Coveney-Boyd
Mr. E. Neumann
Ms. L. Tatangelo
Mr. L. Werden

Respectfully submitted,

Councillor D. Evans
Chairman

Councillor J. Young
Member

: COPY - CITY MANAGER
- DIRECTOR ENGINEERING
+ DIRECTOR FINANCE
- DIR. PLNG. & BLDG.

TO: CHAIR AND MEMBERS 1996 FEBRUARY 07
TRAFFIC AND TRANSPORTATION COMMITTEE
(Transportation and Transit Division)

FROM: DIRECTOR PLANNING & BUILDING OUR FILE: 08.640"B"

SUBJECT: **BOUNDARY ROAD PROJECT (KINGSWAY TO VANNESS):
DESIGN CONCEPT AND IMPLEMENTATION STRATEGY**

PURPOSE: To request Council approval of a design and implementation strategy for improvements to the section of Boundary Road from south of Kingsway to north of Vanness Avenue.

RECOMMENDATION:

1. **THAT** the Traffic and Transportation Committee approve the design and implementation strategy for the Boundary Road Project as outlined in this report.
2. **THAT** staff be authorized to bring down a bylaw to enter into an agreement with the City of Vancouver for the reconstruction of Boundary Road from south of Kingsway to north of Vanness Avenue as outlined in this report.
3. **THAT** a copy of this report be forwarded to Mr. I. Adam, Engineering Department, City of Vancouver, Mr. J. Jensen, Ministry of Transportation and Highways, and Mr. D. Green, Building Department, B.C. Telephone Company.
4. **THAT** a copy of this report be forwarded to the Bicycle Advisory Committee of Council.

REPORT

1.0 BACKGROUND

At its regular meeting of 1994 December 12 Council approved an overall design concept for improvements to the section of Boundary Road from south of Kingsway to north of Vanness Avenue. This design concept was based on a proposal from the City of Vancouver, after negotiations between Councils, which would limit the signalization of the intersection of Boundary at Vanness to a pedestrian signal with actuation by transit buses turning left onto Boundary Road from Vanness. In this respect this proposal addressed Council's concerns regarding potential traffic infiltration via Burke Street associated with full signalization of this intersection.

Based on this agreement in principle, staff of the respective cities continued discussions on the development of a preliminary design and implementation strategy for the Boundary Road improvements. In the interests of developing a design which was acceptable to a variety of stakeholders these discussions also involved a number of agencies including B.C. Transit, B.C. Telephone, B.C. Ambulance Services and the Bicycle Advisory Committees of both cities. Out of this process a consensus has emerged between the City of Vancouver and the City of Burnaby with regard to the design and implementation of the Boundary Road Project.

This report outlines the approach to design and implementation of the Boundary Road project for the consideration of Council.

2.0 DESIGN CONCEPT

The design concept as developed by the City of Burnaby and the City of Vancouver is summarized in the following sections:

- i) **Boundary/Vanness Signalization** (as shown in Figure 1 *attached*) - a pedestrian/cycling signal with transit actuation would be installed at the intersection to accommodate pedestrians and cyclists crossing Boundary Road and the left turn out movement for the #28 bus route from Vanness to Boundary Road northbound. In addition, the B.C. Ambulance Service Station located adjacent to Vanness Avenue near Boundary Road would be accorded the capability to actuate the signal on request to allow ambulances to access Boundary Road. The pedestrian/cycling signal would not accommodate left turns out for general traffic, but it would improve access to the Collingwood Village project for all other movements (right in and out, left in) to and from Vanness Avenue.
- ii) **Boundary Road Reconstruction** - the design concept shown in Figure 1 provides for the reconstruction of Boundary Road to a six lane standard from north of Vanness Avenue to south of Kingsway, including removal of the existing BN Rail overpass. This design would provide increased capacity for six travel lanes through the two intersections of Kingsway and Vanness Avenue based on a full arterial standard for Boundary Road and would address the major traffic queuing problem during peak periods at the intersection of Boundary Road and Kingsway. Other elements of the project include the following:
 - ▶ the provision of a right turn lane from Boundary Road northbound to Kingsway eastbound. This has been a longstanding requirement in the Community Transportation Plan for the Maywood / Mayberry area in Metrotown to redirect commuter traffic currently shortcutting via Mayberry Street.
 - ▶ the provision of opposing left turn lanes from Boundary Road to Vanness westbound and to the B.C. Telephone driveway eastbound to accommodate increased vehicular movements generated by the Collingwood Village development and to the B.C. Tel. driveway eastbound. Provision of these left turn lanes is required from a traffic safety perspective to remove left turning vehicles from the through traffic stream.

The reconstruction of Boundary Road would require construction in the existing right-of-way along the west side of both Central Park and the B.C. Telephone headquarters building. The existing trees currently in the Boundary Road right-of-way adjacent to Central Park, except for one, would be retained.

- iii) **Kingsway Reconstruction** - the Project makes provision for the widening of Kingsway on the south side to accommodate an additional through lane from the City of Vancouver through the Boundary Road intersection approximately 60 m (200 ft.) into Burnaby. This additional lane, to be funded by the Ministry of Transportation and Highways, would increase capacity and alleviate severe traffic queuing eastbound into Burnaby on Kingsway up to Boundary during peak periods. Inclusion of this widening in the overall project will be dependent on Ministry approval of funding.
- iv) **B.C. Telephone Building Access** - the reconstruction of Boundary Road would require relocation of the parking / stopping area adjacent to B.C. Tel and realignment of the current driveway access from Boundary Road as follows:
- ▶ in conjunction with BC Telephone staff the design for Boundary Road incorporates a new parking / stopping area which includes nine short term parking spaces and a stopping area for the B.C. Tel. shuttle bus. Provision of this area will involve the removal and replacement of four trees fronting the B.C. Telephone Building on Boundary Road from their current location to the new rear boulevard behind the sidewalk on the east side of Boundary Road.
 - ▶ if the existing B.C. Tel driveway remains in its current location, reconstruction of Boundary Road will restrict access to the driveway to right turns only. Therefore, in order to retain the option for left turn driveway movements to and from Boundary Road, the driveway must be moved north to align with Vanness Avenue and the pedestrian signal. This driveway relocation will maintain the current provision for left turns into and out of the BC Tel driveway to Boundary Road. Inclusion of the driveway and parking area reconstruction will be dependent on B.C. Tel approval of funding.
- v) **B.C. Parkway** - The revised design concept enhances the safety of the existing B.C. Parkway as it crosses Boundary Road at Vanness through provision of a bicycle / pedestrian activated signal. However, the Project requires the removal of the existing Southern Rail overpass of Boundary Road. This overpass is not part of the BC Parkway and currently functions as a pedestrian crossing of Boundary Road. Removal of the rail overpass would not affect the operation of the B.C. Parkway as it does not connect directly with the Parkway. Rather, most cyclists and pedestrians cross Boundary Road at-grade at Vanness.

Provision of a new proper standard cycle and pedestrian overpass, would be desirable if the B.C. Parkway was realigned on the now abandoned Southern Rail right-of-way on both the Vancouver and Burnaby sides of Boundary Road as shown in Figure 2 **attached**. Staff from both cities are currently assessing the option of using the abandoned sections of the Southern Rail right-of-way as a future cycle / pedestrian route and should this be pursued, a new overpass, at an estimated cost of \$600,000, could be incorporated into an overall concept for a cycle / pedestrian route which could follow the Southern Rail right-of-way to a signalized crossing of Kingsway.

3.0 IMPLEMENTATION STRATEGY

3.1 Project Management

Although implementation of the Boundary Road Project would involve a number of agencies, including the City of Burnaby, the City of Vancouver, the Ministry of Transportation and Highways and B.C. Telephone, it is proposed that the City of Burnaby assume overall responsibility for managing the project. This approach is recommended as the majority of the Project would involve work on the Burnaby side of the boundary in conjunction with the Ministry of Transportation and Highways and B.C. Telephone.

3.2 Project Funding

The Boundary Road Project would be funded through cost sharing agreements between the City of Burnaby as overall project manager and the City of Vancouver, the Ministry of Transportation and Highways and B.C. Telephone. Table 1 provides a cost breakdown for the project including cost sharing.

Table 1
BOUNDARY ROAD PROJECT
Cost Breakdown and Responsibility

Project Item	Total Cost	Cost Responsibility			
		City of Burnaby	City of Vancouver	Min. of Transp. & Highways	B.C. Telephone
1. Boundary Rd. Reconstruction	\$1,050,000	\$525,000	\$525,000	—	—
2. Intersection Signalization					
i) Boundary/Kingsway	\$145,000	\$36,250	\$72,500	\$36,250	—
ii) Boundary/Vanness	\$100,000	\$25,000	\$75,000	—	—
3. Kingsway Reconstruction	\$250,000	—	—	\$250,000	—
4. B.C. Tel. Components					
i) Parking Replacement	\$120,000	—	—	—	\$120,000
ii) Driveway Relocation	\$100,000	—	—	—	\$100,000
TOTAL COST SHARING	\$1,765,000	\$586,250	\$672,500	\$286,250	\$220,000

Sufficient funds have been allocated in the Major Roads component of the 1996-2000 Capital Program to cover the total costs of the Boundary Road project. The City would recover all but its portion of the total costs from the City of Vancouver, the Ministry of Transportation and Highways and B.C. Telephone.

The City will retain a consultant to provide design and construction supervision services. This will be the subject of a separate report, at a later date, which will also request authority to bring down a capital works expenditure bylaw for the works proposed in 1996.

3.3 Project Phasing

The Boundary Road Project would be phased over a two year period beginning with overall design this year followed by work at the intersection of Boundary and Vanness Avenue. Reconstruction of this intersection is a priority for both the City of Burnaby and the City of Vancouver to accommodate transit, to provide a safe crossing for pedestrians and cyclists, and to serve high density residential development in the Collingwood area. Reconstruction of Boundary Road near Kingsway would follow in 1997.

3.4 Property Acquisition

The City of Vancouver has secured property on the southeast corner of Vanness and a minor acquisition is required on the Burnaby side north of the overpass.

4. CONCLUSION

The City of Burnaby and the City of Vancouver have reached overall agreement at the staff level on a design concept and implementation strategy for improvements to Boundary Road from Kingsway to Vanness. These improvements will provide access to the Collingwood Village development, significantly reduce traffic congestion on Kingsway and Boundary Road during peak periods, enhance safety for transit vehicles, cyclists and pedestrians, and accommodate the traffic needs of the B.C. Tel Headquarters building. To facilitate this project, it is recommended that the City assume overall responsibility for project management with project funding based on cost sharing agreements with the City of Vancouver, the Ministry of Transportation and Highways, and B.C. Telephone. The Boundary Road project would be phased over a two year period, beginning this year with Phase I focussing on the intersection of Boundary and Vanness. It is recommended that Council approve the design concept and implementation strategy as outlined in this report and authorize staff to enter into an agreement with the City of Vancouver.

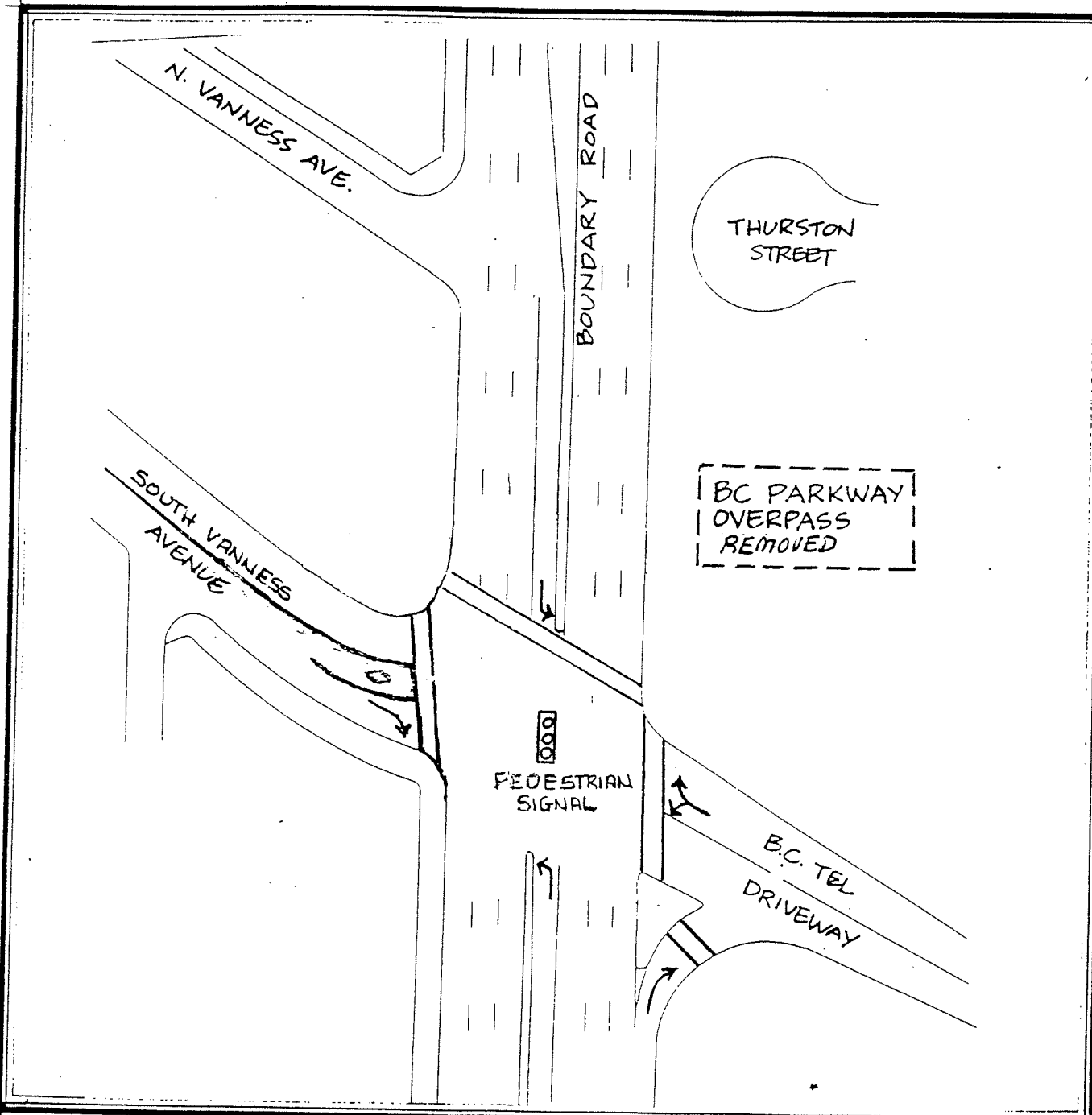


D.G. Stenson, Director
PLANNING & BUILDING

RG/jp
Attachments (2)

cc: City Manager
Deputy City Manager, Corporate Services
Director Engineering
Director Finance
Director Recreation and Cultural Services

C:\DOCS\TRANSP\BOUNDARY.RPT



Date:
1996 JAN

Scale:
NTS

Drawn By:
R.W.

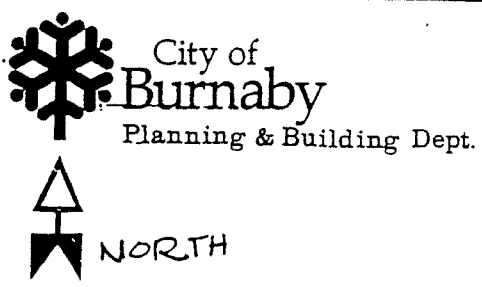
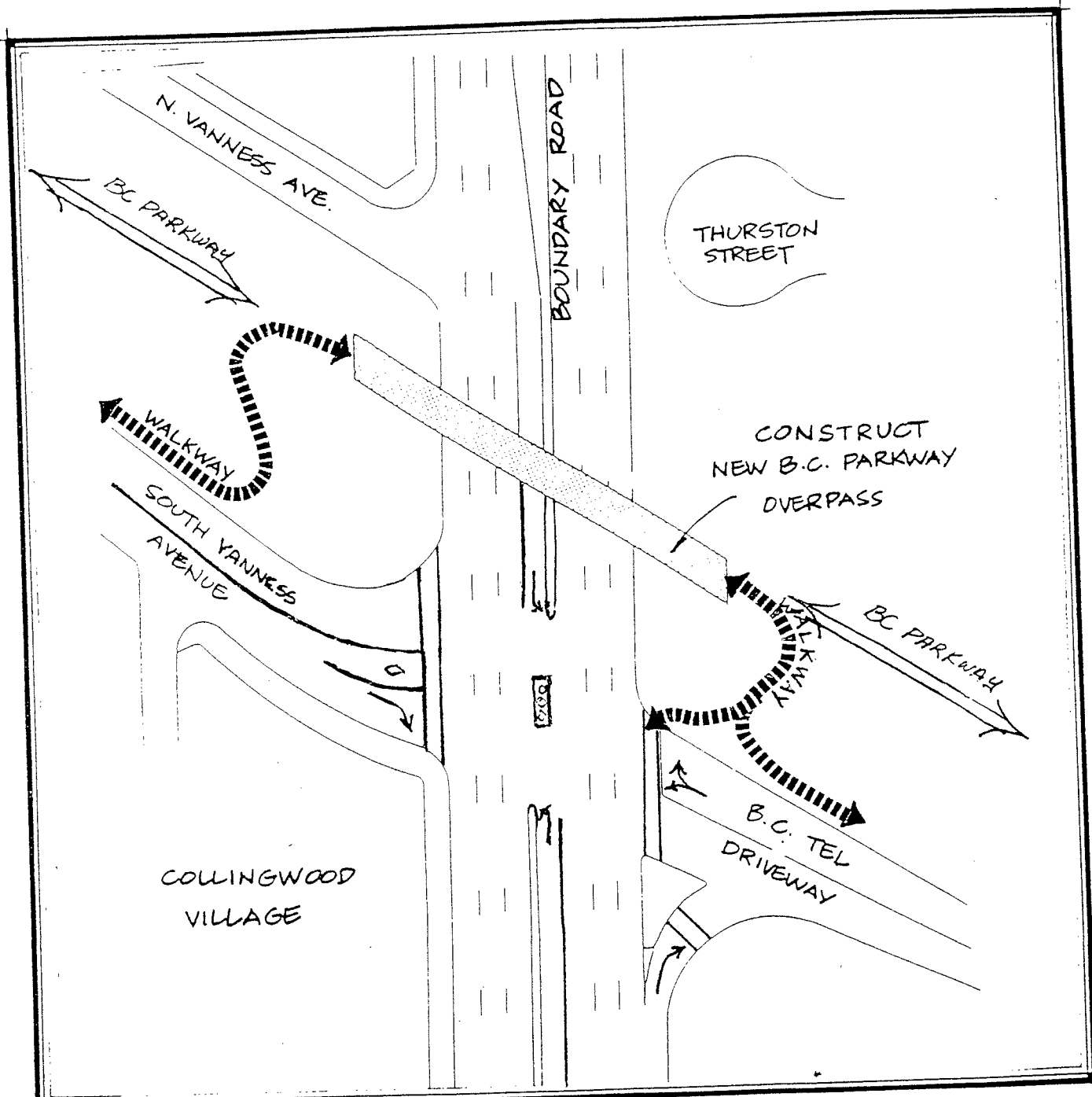


FIGURE 1
BOUNDARY/VANNESS
INTERSECTION



Date:
1994

Scale:
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RW

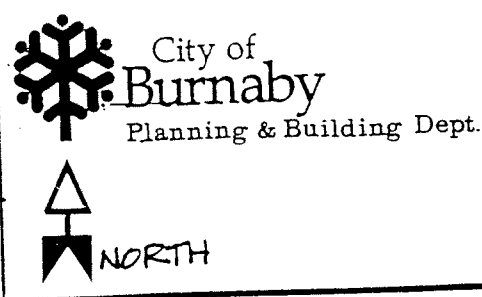


FIGURE 2
BOUNDARY / VANNESS
BC PARKWAY