

TO: CITY MANAGER 2003 June 10

FROM: DIRECTOR PLANNING AND BUILDING OUR FILE: 08.230.3
DIRECTOR ENGINEERING

SUBJECT: MILLENNIUM SKYTRAIN STATIONS: CAPITAL BYLAW FOR THE DESIGN AND CONSTRUCTION OF PEDESTRIAN FACILITIES

PURPOSE: To seek Council approval to bring down a Capital Reserves Expenditure Bylaw in the amount of \$655,000 to finance the design and construction of pedestrian facilities needed to improve the safety and convenience of pedestrian access to stations on the Millennium SkyTrain Line.

RECOMMENDATIONS:

1. **THAT** a Capital Reserves Expenditure Bylaw in the amount of \$655,000 (inclusive of 7% GST) be brought down to finance the construction of pedestrian facilities needed to improve the safety and convenience of pedestrian access to stations on the Millennium SkyTrain Line.
2. **THAT** copies of this report be forwarded to TransLink, 1700 - 4720 Kingsway, Burnaby, BC, V5H 4N2 (Attn: H. Wang); and to RTP 2000, 5650 Lougheed Highway, Burnaby, BC (Attn: M. Preece).
3. **THAT** a copy of this report be forwarded to T.H. Smith, Property Manager, Southview Property Management, 203 - 7080 River Road, Richmond, BC, V6X 1X5 (representing the 'Creekside' Strata Council); and to M. Merla, 7148 Cardinal Court, Burnaby, BC, V5A 1Y7.

REPORT

1.0 INTRODUCTION

Prior to the start of service on the Millennium SkyTrain Line, improvements were made to transportation infrastructure near the stations in Burnaby to provide access to the stations by car, bus, walking and cycling. Road upgrading to provide auto pick-up and drop-off areas, bus access, bike routes, bike storage areas and sidewalks around the stations were constructed under the Municipal Infrastructure Fund (MIF) Program, which was co-funded by the Rapid Transit Project 2000 (RTP 2000 Limited) and TransLink.

However, a number of potential SkyTrain access improvements were not accommodated under the MIF Program due to funding limitations, particularly, the provision of sidewalks on the Lougheed Highway required to provide access between residential neighbourhoods and stations. This report describes the current status of pedestrian facilities around each of the stations on the Millennium Line and recommends priority pedestrian facilities for Production Way/University Station, Lake City Station and Sperling/Burnaby Lake Station and requests Council's approval of a Capital Reserves Expenditure Bylaw in the amount of \$655,000 to fund these works in 2003.

City staff have also met with TransLink and have been advised that funding from the TransLink Transit-Related Road Infrastructure Program (TRRIP) could be available for these sidewalks, subject to MRTAC and Board approval. Staff will be making application for 50% cost sharing under this program.

2.0 PEDESTRIAN IMPROVEMENTS

2.1 Lougheed Station

As shown in *Figure 1 attached*, through the Municipal Infrastructure Fund (MIF) Program, sidewalks have been constructed on both sides of the Lougheed Station on the Lougheed Highway between Austin and North Road and on Gatineau from the bus loop driveway to the signalized intersection at Austin. A new, covered walkway has also been provided by Lougheed Mall to connect the mall west entrance to the west entrance to the station house. These and the existing sidewalks in the area provide good pedestrian access to the station.

2.2 Production Way/University Station

2.2.1 Context

Production Way/University Station is not only the main transfer point for buses serving SFU but also accommodates work trips to and from the Lake City Business Centre. As many of these employment destinations are within walking distance of the SkyTrain station, pedestrians will use Production Way to walk between the station and workplaces in Lake City.

As shown in *Figure 2 attached*, there is an interim sidewalk on the west side of Production Way from Lougheed Highway to Thunderbird Crescent and a final standard concrete sidewalk from Lougheed Highway south to Government Street. However, the location of the station on the east side of Production Way directs people along a well-worn path on the east side of the street from Thunderbird Crescent north to Eastlake Drive. The provision of a final standard sidewalk from Lougheed north to Thunderbird Crescent will be the responsibility of Bentall

Corporation as a servicing requirement for their office/retail development and the Commerce Court to Eastlake section would be provided within the next two years as a servicing requirement for the redevelopment of the PMC Sierra-owned property. The section from Thunderbird Crescent to Commerce Court connecting these two pieces would remain to be provided by the City.

South of the Lougheed Highway, there is an existing sidewalk on the west side of Brighton for residents of the Government Road area to access the station. A sidewalk on the east side adjacent to the Costco wholesale outlet is a lower priority and would be more difficult and costly to provide. Other missing sidewalks in Lake City along Enterprise and Thunderbird Crescent would be provided through redevelopment as the industrial uses with fewer employees are converted to higher-density office uses with more employees using the Millennium Line.

2.2.2 Proposed Sidewalk

It is proposed to provide a 1.5 metre asphalt sidewalk on the east side of Production Way from Thunderbird Crescent to Commerce Court at an estimated cost of \$9,250 (inclusive of 7% GST) with potential 50% cost sharing from TransLink under the Transit-Related Road Infrastructure program (TRRIP).

2.3 Lake City Station

2.3.1 Context

The Lake City Station, currently under construction, is expected to be completed and in operation by the Fall of 2003. As shown in *Figure 3 attached*, the station is bordered by the Phillips single family residential area on the west and the Lozells neighbourhood on the south and west but access to/from these neighbourhoods is constrained by the lack of safe pedestrian facilities on the Lougheed Highway to connect to the station. The lack of sidewalks connecting to these residential areas would require people accessing the station to walk in the bike lane along a high speed section of the Lougheed Highway. As these sidewalks would address this safety concern and would not be provided through redevelopment, they are viewed as a high priority.

A sidewalk on the east side of Lake City Way south of Enterprise exists. A new sidewalk along the south side of Enterprise is proposed as part of the rezoning of the Red Cross building at the corner of Lake City Way and Enterprise. Sidewalks are also not available on both sides of Lake City Way north of Enterprise but these are not viewed as high a priority from a safety perspective and can be implemented through redevelopment.

2.3.2 Proposed Sidewalks

Two sidewalks shown in *Figure 3* as priority walkways are proposed as follows:

- ***Lougheed North Side (Lake City Substation to Greenwood) Design Only*** - on the north side of the highway, an asphalt sidewalk from the station to Greenwood Avenue to accommodate pedestrians from the Greenwood residential subdivision is needed. It is proposed to undertake design work only for 2003 on this sidewalk at an estimated cost of \$50,000. Council has previously approved a Capital Works Expenditure Bylaw which included \$65,000 for the installation of street lighting on the north side of this section of the highway to complement a future sidewalk.

After investigating a number of options for a walkway between Lake City Station and the residential area on limited right of way available on the Lougheed Highway, it has been concluded that an asphalt sidewalk can be constructed on the north side of the highway. In the 70 metre section abutting Eagle Creek the provision of a 1.6 metre sidewalk would require reducing the bike lane from 2.4 metres to 1.5 metres and replacing the existing concrete barrier at the top of the slope with narrower steel guardrail as shown in the attached cross section (*Figure 4 attached*). Retaining walls would be required to replace the slope adjacent to the residential properties in the section between Eagle Creek and Greenwood. The estimated cost of this project of \$320,000 is included in the 2004 Major Roads component of the 2004 Capital Budget.

Other options, including upgrading the existing path through Eagle Creek ravine, raised personal security and environmental issues. Constructing a sidewalk on a structure over the ravine would have a substantially higher cost, estimated at approximately \$650,000. Staff have concluded that the recommended option meets acceptable standards and would be the most cost-effective and safe for pedestrians and cyclists. For 2003, the City would be undertaking design of this project at a cost of \$50,000 (cost sharing of \$25,000 from TransLink) with construction to follow in 2004.

- ***Lougheed South Side (Piper to Lozells) Design and Construction*** - on the south side of the highway, an asphalt sidewalk on Lougheed from Lozells to Piper, connecting to the existing sidewalk on Piper, has been planned to accommodate access from the Government Road residential area to the Lake City Station at a total cost of \$115,750. RTP 2000 have agreed to cost-share this sidewalk under the MIF program as defined in the Access Agreement up to a maximum of \$30,750. With additional funding of \$42,500 from TransLink the net cost to the City would be \$42,500.

The total cost in 2003 of the pedestrian improvements at Lake City Station as shown in **Table 1** is estimated at a total cost of \$165,750 (inclusive of 7% GST).

Table 1
Lake City Station
Pedestrian Facilities

Section	Pedestrian Facility	Total Cost	Potential Cost Sharing	Potential Net City Cost
Lougheed Highway Lake City Substation to Greenwood Street	Design Only for an asphalt sidewalk on the north side adjacent to Lougheed Highway.	\$ 50,000	\$25,000	\$25,000
Lougheed Highway Lozells to Piper Avenue	Design and construct an asphalt sidewalk on the south side of the Lougheed Highway. Cost shared with RTP 2000.	\$115,750	\$73,250 (\$42,500 TransLink \$30,750 RTP 2000)	\$42,500
TOTALS		\$165,750	\$98,250	\$67,500

2.4 Sperling/Burnaby Lake Station

2.4.1 Context

The Sperling/Burnaby Lake Station lacks proper pedestrian connections to the residential neighbourhood north of the Lougheed Highway and in the area east of Bainbridge Avenue and south of the Lougheed Highway as shown on **Figure 5 attached**. For the area north of the Lougheed Highway, lighting improvements are being made to the pedestrian walkway on Sperling Avenue from Broadway Avenue to Lougheed Highway under a previous capital bylaw approved by Council.

As shown in **Figure 6**, however, counts undertaken on May 13 indicate that from 7 A.M. to 6 P.M., 191 pedestrians walk on the north and south shoulders in the marked bike lane of the unlighted Lougheed Highway between Bainbridge and Sperling. This is viewed as a significant safety hazard. These pedestrians are going either to or from the office buildings on the south side of the Lougheed near Bainbridge or

crossing the Lougheed Highway at Bainbridge to/from the residential areas around Bainbridge north and south of the highway.

Figure 6
Pedestrian Volumes
(7 A.M. to 6 P.M.)



Pedestrians are using both sides of the Lougheed Highway in significant numbers but more are using the **south** side from Bainbridge to the station ($74 + 47 = 121$ in both directions) than the **north** side from the Creekside townhouse development to Sperling ($47 + 23 = 70$ in both directions). As the pedestrian volumes are sufficiently high to warrant the provision of sidewalks on both sides of the Lougheed Highway, it is recommended that a sidewalk be provided on the south side from Bainbridge to Sperling and on the north side from the eastern property line of the Creekside townhouse development to Sperling. This approach reflects the observation during the pedestrian counts that the pedestrians using the north side of the highway predominantly originate from Creekside. However, due to budget limitations, it is proposed that design of the north sidewalk be done in 2003 with construction to follow as part of the 2004 Capital Budget.

The shortest route for pedestrians between the station and the residential area east of Bainbridge and south of the Lougheed Highway is via Greenwood and the north side of Winston. To accommodate these movements, an asphalt sidewalk is proposed for the north side of Winston from Greenwood to the Dairyworld/Sperling Station driveway off Sperling. As Greenwood is a relatively low traffic local street, a sidewalk on Greenwood from Bainbridge to Winston is not as high a priority.

2.4.2 Proposed Sidewalks

- **Lougheed South Side (Sperling to Bainbridge) Design and Construction (see Figure 7)** - installation of an asphalt sidewalk and street lighting on the south side of the Lougheed Highway to provide safe access for residents living north of the Lougheed near Bainbridge and employees south of Lougheed to walk to Sperling/Burnaby Lake Station. The estimated cost of this project is \$400,000. If accepted by TransLink for TRRIP cost sharing, the net cost to the City would be \$200,000.
- **Lougheed North Side (Creekside walkway to Sperling) Design Only (see Figure 7)** - design for the sidewalk between Creekside and Sperling at an estimated cost of \$10,000 in 2003 (\$5,000 with TransLink cost sharing). The estimated construction cost of this project in 2004 is \$125,000.

Figure 7
Lougheed Sperling to Bainbridge Sidewalks



- **Winston Street North Side (Sperling to Greenwood) Design and Construction (see Figure 5)** - the lack of a sidewalk restricts access to the Sperling/Burnaby Lake Station from the neighbourhood south of the Lougheed Highway and east of Bainbridge. Provision of an asphalt sidewalk along the north side of Winston adjacent to Dairyworld from Greenwood to the station at Sperling would cost \$70,000. With cost sharing of \$35,000 from the TransLink Transit-Related Road Infrastructure Program (TRRIP), the net cost to the City would be \$35,000.

The total City cost of these projects at Sperling/Burnaby Lake Station as shown in **Table 2** is estimated at \$480,000 (inclusive of 7% GST) of which \$240,000 would

be TransLink's cost share from the TRRIP program, leaving a net cost to the City of \$240,000.

Table 2
Sperling/Burnaby Lake Station Area
Pedestrian Facilities

Section	Scope of Work	Total Cost	Potential Cost Sharing	Potential Net City Cost
Lougheed Highway: Bainbridge to Sperling	Design and construct an asphalt sidewalk on the south side.	\$400,000	\$200,000	\$200,000
Lougheed Highway: Creekside to Sperling	Design only north side sidewalk	\$ 10,000	\$ 5,000	\$ 5,000
Winston Street: Greenwood to Sperling Avenue	Design and construct an asphalt sidewalk.	\$ 70,000	\$ 35,000	\$ 35,000
TOTALS		\$480,000	\$240,000	\$240,000

2.5 Holdom Station

Sidewalks have been provided through the Municipal Infrastructure Fund (MIF) Program in immediate proximity to the station on the west side of Holdom and on the south side of the Lougheed Highway as shown in *Figure 8 attached*. These connect with the existing sidewalks on Holdom north of the highway to Broadway Avenue and throughout the residential neighbourhood. Sidewalks are not available south of the station in the industrial area along Goring and Kingsland, but these areas will generate relatively few pedestrians to and from the stations until the areas redevelop as residential and office uses. At that time, sidewalks will be provided as a condition of development.

2.6 Brentwood Station

Under the Municipal Infrastructure Fund (MIF) Program, sidewalks have been provided on most sections of the Lougheed Highway in the Brentwood Town Centre except between Delta/Douglas and Beta Avenue shown as a priority walkway in *Figure 9 attached*. As the most direct route to access Brentwood Station from the apartment area located north of the Lougheed Highway between Delta and Holdom is via the north side of the Lougheed Highway as shown in *Figure 10*, a more

immediate need is to provide a sidewalk in this location. However, it is anticipated that the rezoning of the site north of the highway between Beta and Delta in the near term will provide this sidewalk. Other sidewalks along Alpha and Beta south of the Lougheed Highway will be needed to accommodate the higher density office and residential development planned for the Lougheed Town Centre, but will be also be provided through redevelopment.

Figure 10
Lougheed Highway Sidewalk
Beta to Delta



2.7 Gilmore Station

As shown in *Figure 11 attached*, sidewalks have been provided at Gilmore Station through the MIF program on Gilmore Avenue and on Dawson Street immediately adjacent to the station. On the section of Gilmore south of Henning/Dawson, sidewalks and an Urban Trail will be provided as part of the road reconstruction project which will be completed in 2004.

Sidewalks are needed on the Lougheed Highway between Gilmore and Madison, but these are covered in the servicing requirements for the recent rezoning of the Standard Life properties (between Lougheed Highway and Dawson east of Gilmore) and the Executive Inn site.

3.0 FINANCING

As shown in *Table 3*, the total cost of these pedestrian facilities is estimated at \$655,000. The City would be applying for cost sharing of these pedestrian facilities from the TransLink Transit-Related Road Infrastructure Program (TRRIP). However, the City must budget for the total cost of these facilities and any cost sharing which is received from TransLink at the completion of the projects would partially offset City costs.

Sufficient Capital Reserve funds are available and these projects are included under the 2003 Major Roads Component of the 2003 - 2007 Capital Program. It is recommended that a Capital Reserves Expenditure Bylaw in the amount of \$655,000 (inclusive of 7% GST) be brought down to finance these works.

Table 3
SkyTrain Millennium Line
Pedestrian Facilities
Summary

Station Area	Components	Total Cost	Potential Cost Sharing	Potential City Cost
Production Way/University	Sidewalk on Production Way	\$9,250	\$4,625	\$4,625
Lake City	Sidewalks on north and south sides of Lougheed Highway	\$165,750	\$98,250	\$67,500
Sperling/Burnaby Lake	Sidewalks on the north and south sides of Lougheed Highway and on Winston	\$480,000	\$240,000	\$240,000
TOTALS		\$655,000	\$342,875	\$312,125


4.0 SUMMARY

The Municipal Infrastructure Fund (MIF) Program was intended to provide facilities which would integrate the SkyTrain Millennium stations into the community by allowing people to access the stations. However, MIF funding for pedestrian facilities tended to be directed to the immediate area of the station. Recognizing the need for safe pedestrian facilities linking the stations with adjacent residential areas, this report identifies priority locations for

these facilities. Some of these would be gained through redevelopment but, where redevelopment is not expected to occur for some time, there are a number of sidewalks, as shown in **Figure 12 attached**, which would be a City responsibility.

The total cost in 2003 for these pedestrian facilities is estimated at \$655,000. In 2004, however, staff would be bringing forward for Council consideration sidewalk construction projects on Lougheed Highway from Lake City Way to Greenwood and from the Creekside pathway to Sperling for which design work would be completed this year. The estimated cost of construction of these two projects is \$445,000.

It is therefore recommended that Council bring down a Capital Works Expenditure Bylaw in the amount of \$655,000 to finance the 2003 works. City staff have met with TransLink to discuss funding of these projects and will be applying for cost sharing for both the 2003 and 2004 pedestrian facilities from the 2003 TransLink Transit-Related Road Infrastructure Program. If TRRIP funding is approved by MRTAC and the TransLink Board, the City could be eligible for a total of \$534,625 in cost sharing from TransLink (\$312,125 for 2003 projects and \$222,500 for 2004 projects). The City would also receive \$30,750 from the Rapid Transit Project 2000 as their contribution for the sidewalk on Lougheed from Lake City Way to Lozells.


for J.S. Belhouse, Director
PLANNING AND BUILDING


W.C. Sinclair, Director
ENGINEERING

RG/sa/jc
Attachments (9)

cc: Director Finance
Director Parks, Recreation and Cultural Services



Existing Walkways

Figure 1
Loughheed Station



Figure 2
Production Way/University Station
 — Existing Walkways
 Future Walkways
 - - - Priority Walkways

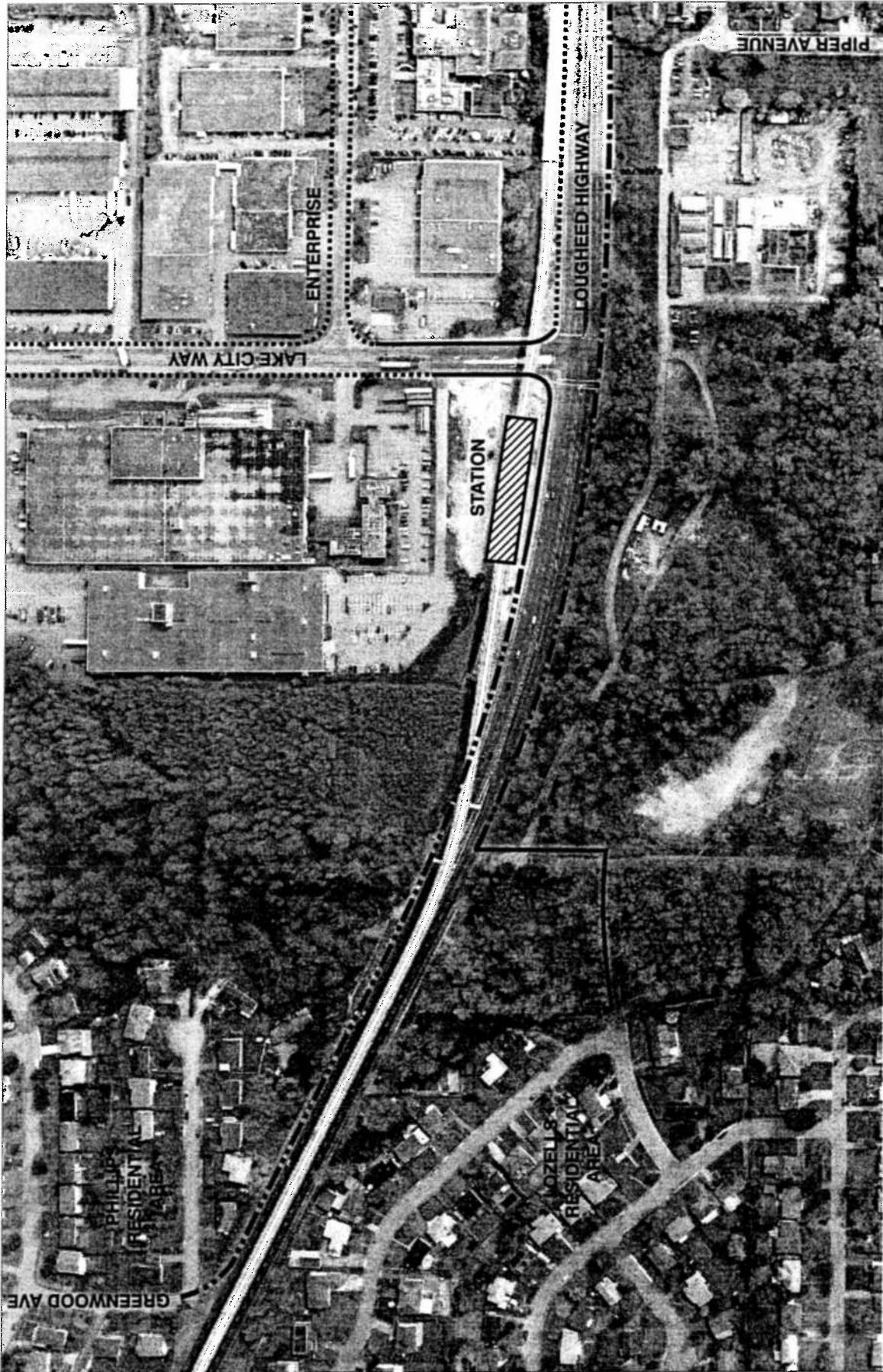
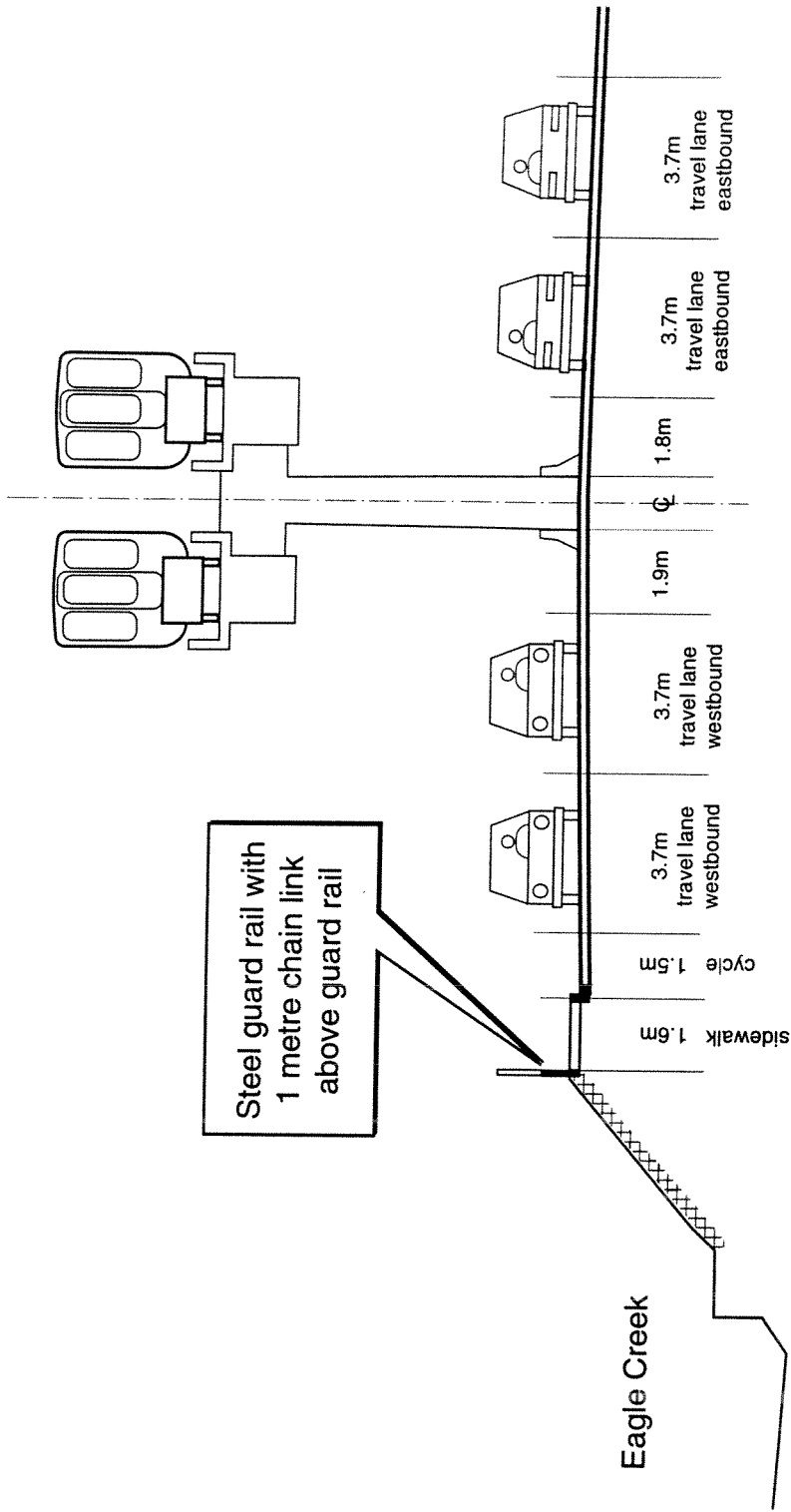


Figure 3
Lake City Station

- Existing Walkways
- Future Walkways
- - - - Priority Walkways



Planning & Building Department
 Transportation Planning
 2003 April

Figure 4
Lougheed Sidewalk
 North Side
 Lake City Substation to Sperling

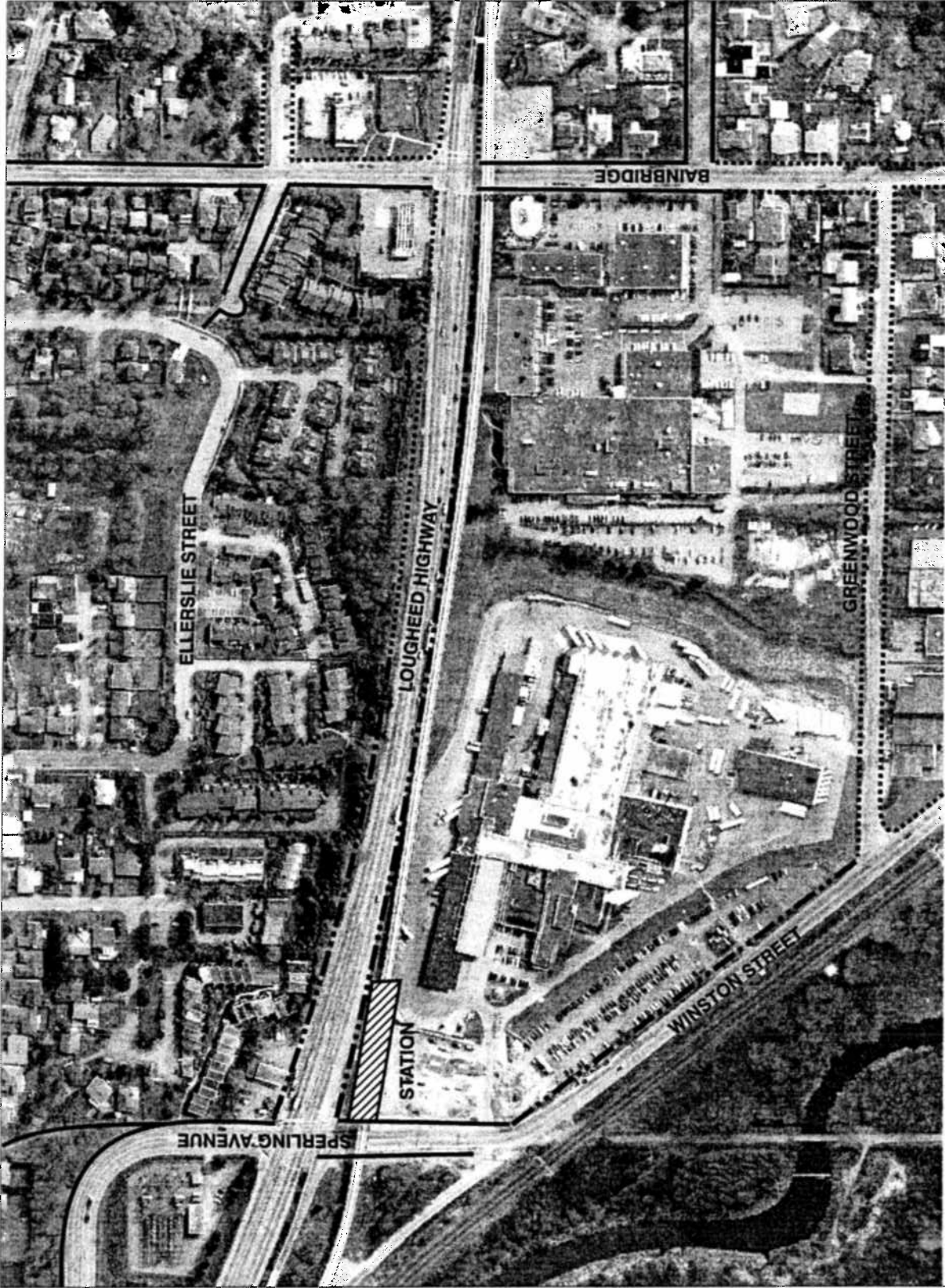


Figure 5
Sperling/Burnaby
Lake Station

- Existing Walkways
- Future Walkways
- - - Priority Walkways

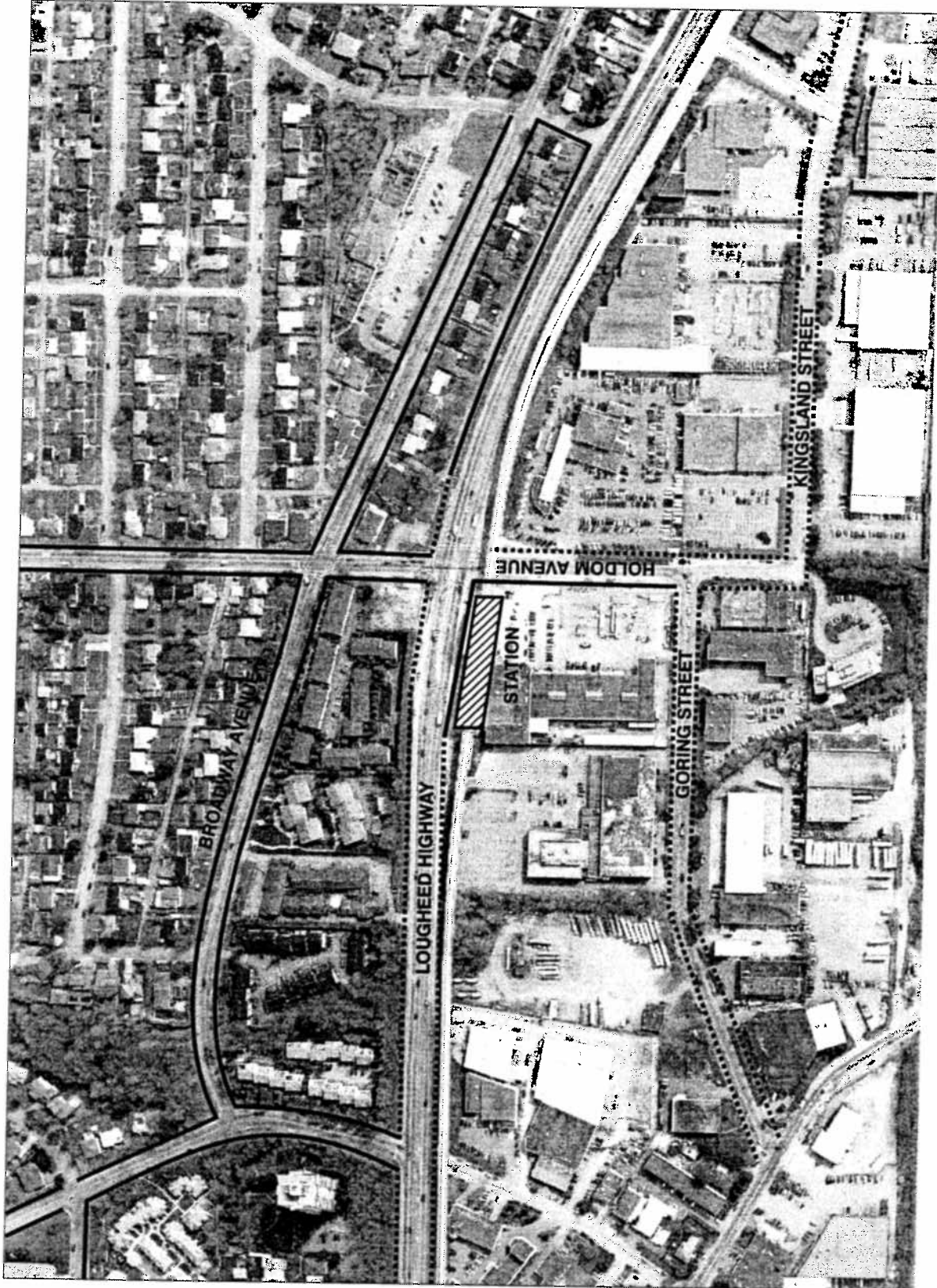


Figure 8
Holdom Station
 — Existing Walkways
 Future Walkways

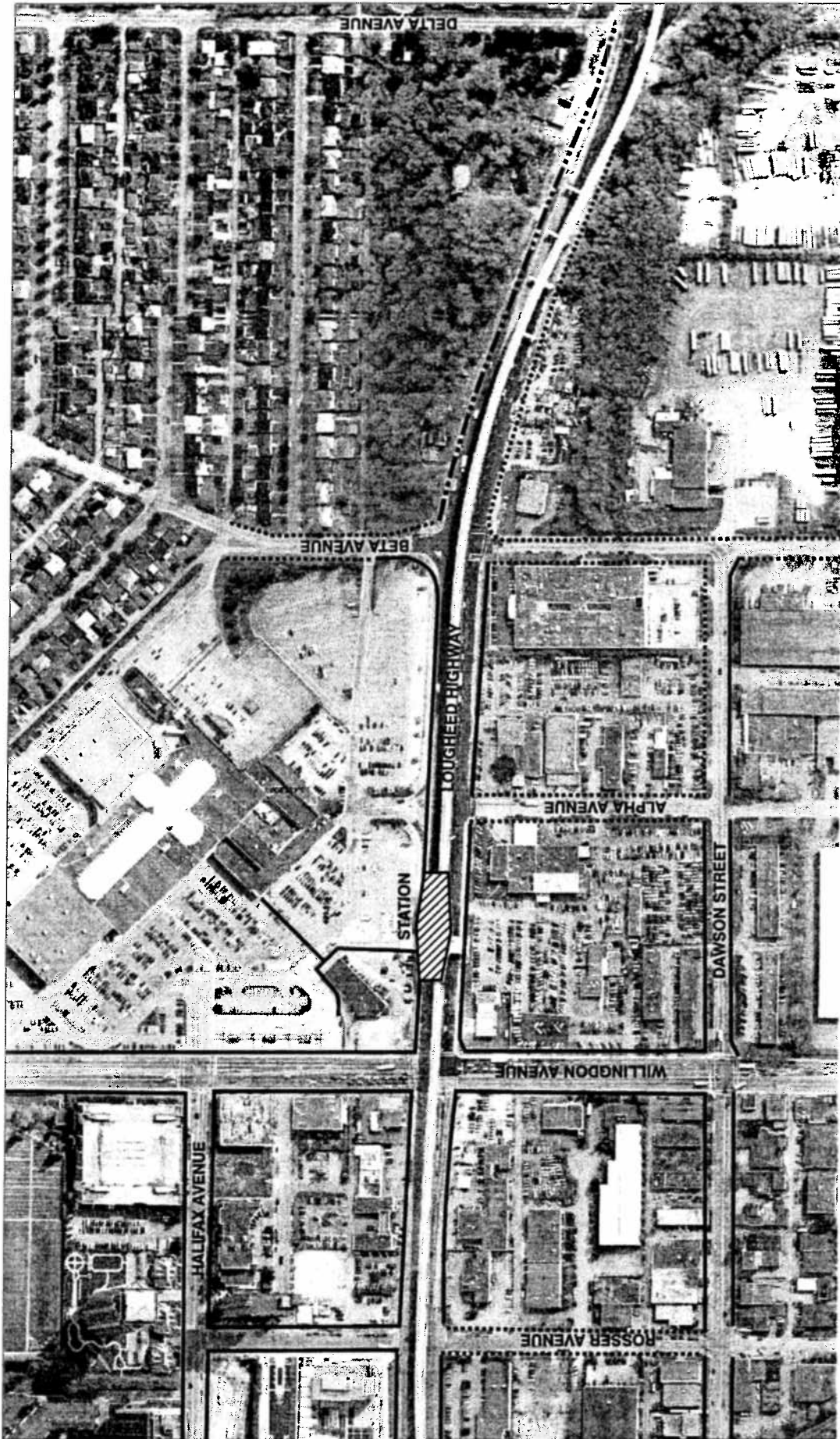


Figure 9
Brentwood Station

- Existing Walkways
- Future Walkways
- - - Priority Walkways

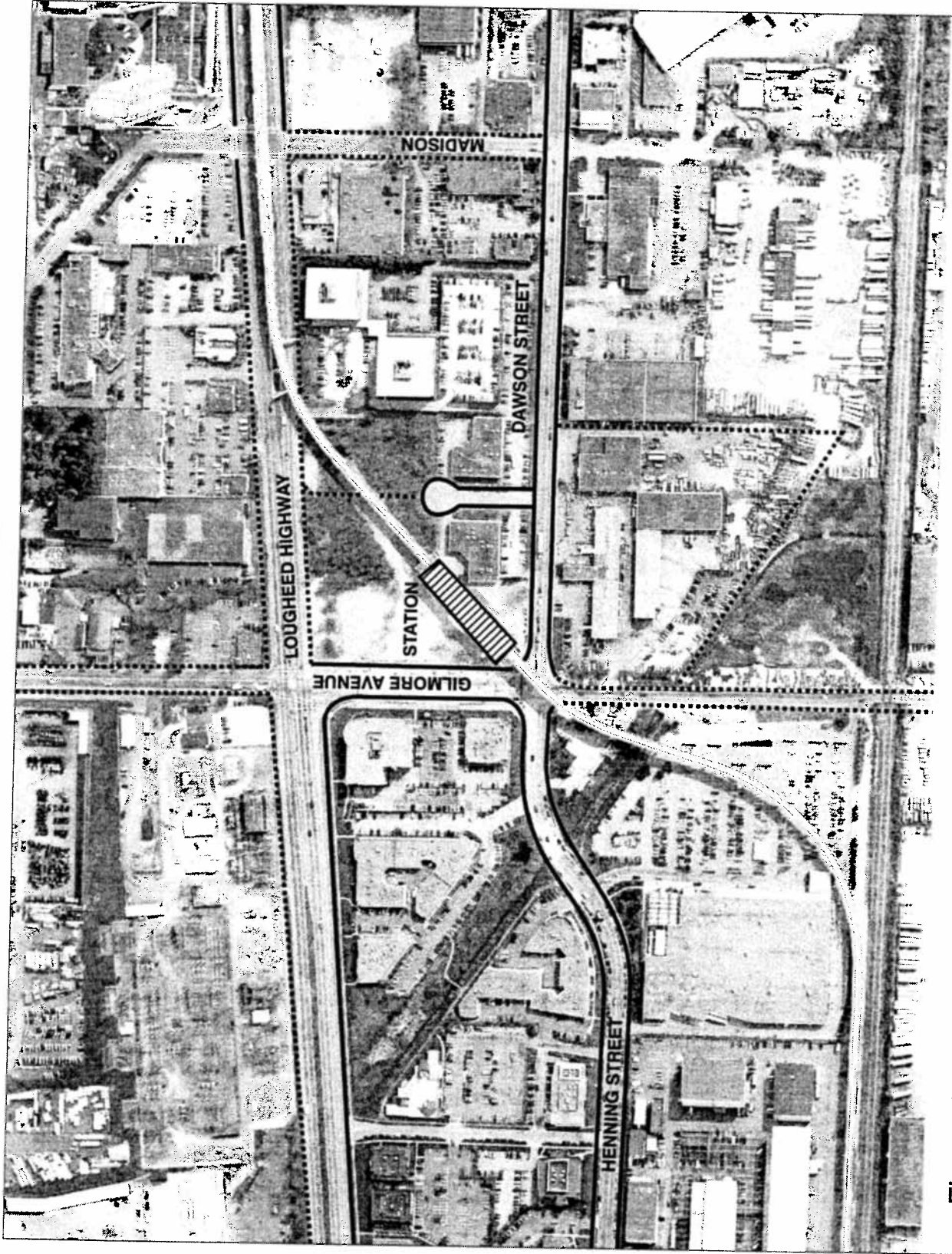
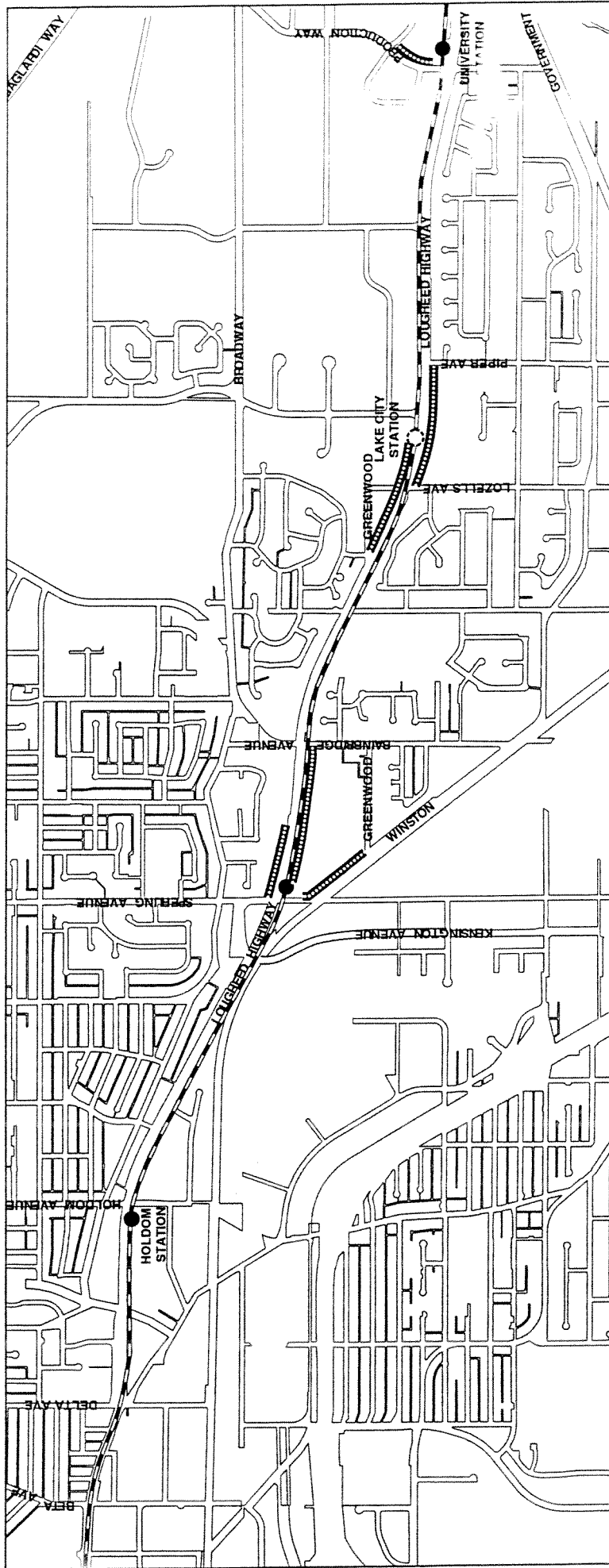


Figure 11
Gilmore Station

— Existing Walkways
 Future Walkways



2002 December
 Drawn by RCN
 Planning & Building Dept.

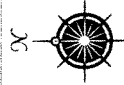


FIGURE 12
Millennium Line Pedestrian Facilities