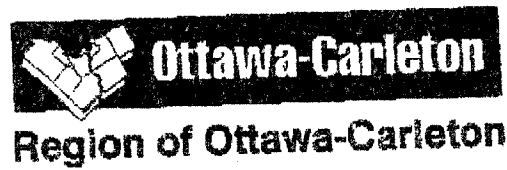


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Ottawa Light Rail Extensions to the Gatineau-Ottawa Airport

Conceptual Route Planning Study

Prepared by:



April 14, 2000

McCORMICK RANKIN

Region of Ottawa-Carleton

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1.0 Background

The Regional Official Plan adopted in 1997 includes provision for light rail service on sections of existing railway tracks in Ottawa-Carleton. The plan calls for a pilot project to be in place by the year 2001 (with service to be expanded as warranted). A Light Rail Study determined that the Canadian Pacific Corridor (Ellwood and Prescott Subdivisions) was the corridor that provided the best prospects of achieving high ridership levels in the initial period. The pilot project provides light rail transit service from Bayview to Greenboro Station with several transfer points to regular bus routes along the way. Five stations are proposed on this nine kilometre stretch of rail: Greenboro, Confederation Heights, Carleton University, Carling Avenue, and at LeBreton Flats (Bayview).

The Light Rail Study concluded that further extensions to the Pilot Project to downtown Ottawa, downtown Hull, Macdonald-Cartier International Airport and Barrhaven showed promise of attracting higher ridership to the light rail service. A subsequent study, "Ottawa Light Rail Extensions to Central Area and Airport, March 10, 2000", has identified concept plans for those extensions to the light rail pilot project.

2.0 Scope of Study

The purpose of this study is to identify preliminary alignment concepts for further extensions of the light rail network from both the Ottawa and Hull Central Business Districts (CBD) to the Gatineau-Ottawa Airport.

It has been assumed that for the purposes of this study that the alignment extensions would make use of the same pilot project vehicle technology (Bombardier Talent DLRT vehicle). In addition, as much use as possible would be made of existing transportation corridors including the SL & H Gatineau rail line.

3.0 Light Rail Extension Concepts

Gatineau is one of the fastest growing communities in the Region and an extension of the Light Rail system into this community would provide an alternative to the private car as a means of travel to and from the Ottawa / Hull CBD. The promotion of public transit as an alternative to car travel has many benefits including economic and environmental.

While the linking of the two airports will not itself satisfy any significant travel demands, it is important that both of these facilities are linked to the major employment, residential, commercial, institutional and retail generators within the region. It is also important that the light rail extensions be integrated with the existing bus services on both sides of the river to maximize choice for the public transit rider.

Exhibit 1 illustrates 4 possible alignment concepts for a light rail connections from the Gatineau - Ottawa Airport to the CBDs of Hull and Ottawa.

LRT Extensions to Gatineau-Ottawa Airport

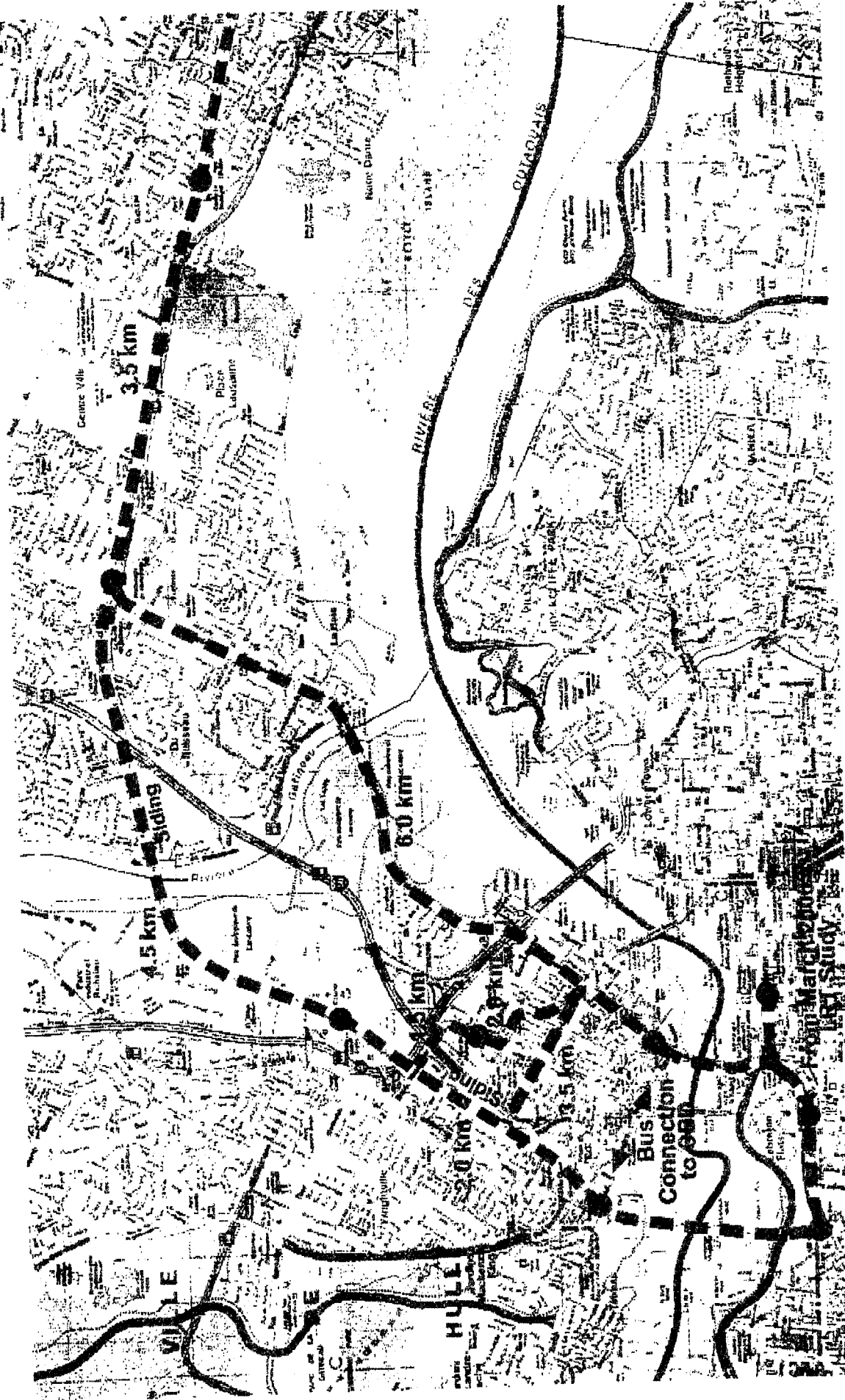
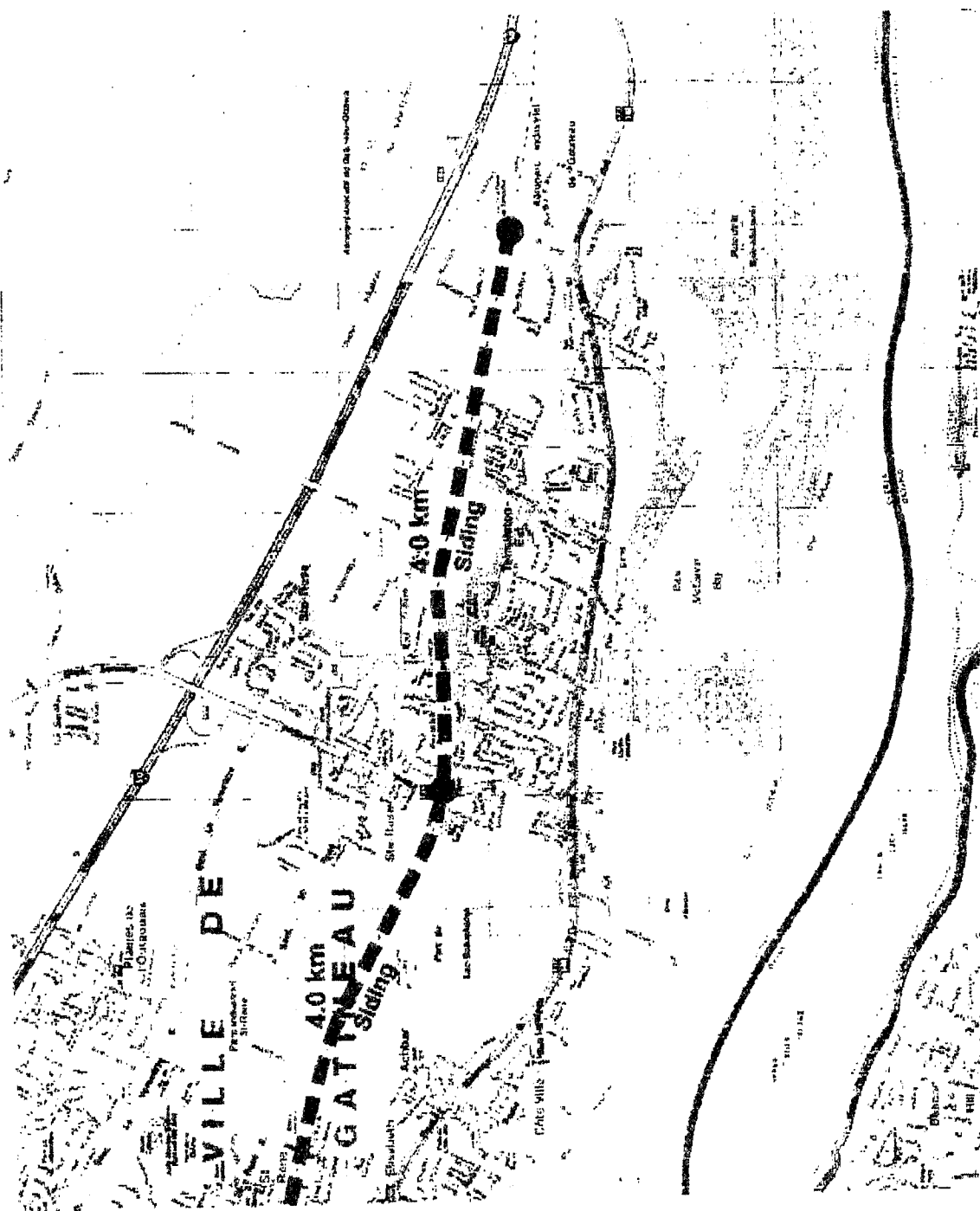


Figure 1 April 2000

LRT Extensions to Gatineau-Ottawa Airport



● - Station Location

--- - LRT Route on Existing Rail

--- Siding - Passing Opportunity

Figure 1(continued)

April 2000

The preliminary alignment concepts are based on either a further extension of the alignment previously identified in the report dated March 10, 2000 which terminated at Place du Portage and made use of the Portage Bridge or the continued use of the rail line from Bayview Station northerly across the Prince of Wales bridge into the existing rail corridor.

Option 1

The route for this alignment concept extends northerly from the Bayview Station and makes use of the existing rail corridor crossing over the Prince of Wales railway bridge to a station in the vicinity of Taché Boulevard. Stations would also be located near the Louis St. Laurent Building and Casino de Hull. The route would then continue easterly approximately 4.5 km to a station near the Promenade de l'Outaouais. A further 3.5 km to the east would be a station near the Centre le Boulevard shopping centre as well as a fourth station in the Lorrain Boulevard with a fifth station just south of the Gatineau-Ottawa Airport. The total length of the route along the existing rail corridor from the Bayview LRT station to the airport would be approximately route 20.5 km. To permit a 10-15 minute service frequency, railway sidings would likely be required at approximately 3 km intervals to allow for LRT vehicles to pass each other. Some of the sidings can be provided at the station locations.

Option 2

The alignment would start at the proposed Place du Portage station and extend northerly along Maisonneuve Boulevard. Depending on an analysis of traffic operations and the structural limitations imposed by the Place du Portage building the LRT extension could proceed either with a single track or double track in the median. The first of these alignments extends along the Maisonneuve Boulevard to St. Laurent Boulevard. At the intersection with St. Laurent / Maisonneuve Boulevards, the LRT route would run along the median of St. Laurent Blvd. approximately 1.5 km to join with the existing SL & H railway line. From this point the route would be the same as described for Route 1 to the station near Casino de Hull and then further east to the terminus station at the Gatineau-Ottawa Airport.

Option 3

The third alternative route would also extend northerly from Place du Portage along Maisonneuve Blvd. At St. Laurent Boulevard Blvd. a new rail line would be required within and sharing the pedestrian corridor to St. Redempteur Street and a station near the Robert Guertin Arena. From there the new track extends easterly within the median St. Redempteur Street another 1.5 km to the existing SL & H rail line just south of the proposed station near the Casino de Hull. From this station the alignment would follow the existing rail corridor to the terminus at the Gatineau-Ottawa Airport as outlined in option 1.

Option 4

The fourth alignment would also start at the Place du Portage station and extend northerly along Maisonneuve Blvd. North of St Laurent Blvd. a new rail would be required along the Greber Avenue which would eventually intersect with the SL & H rail line at the proposed station near the Promenade de l'Outaouais shopping centre. From this location the alignment follows the existing rail corridor to the terminus at the Gatineau-Ottawa Airport.

4.0 Summary of the features of the LRT options

At this point four basic options have been identified, however it is likely that as the planning progresses that some will be eliminated and others routes will be added. The following table summarizes the features of the options developed so far.

Table 1: "Summary of LRT Option Features" is presented to provide a general understanding of the differences amongst the concepts. It is not intended to represent a comparison for the purposes of selecting a preferred alignment. Additional studies would be required to carry out that level of evaluation.

TABLE 1: Summary of LRT Option Features

Option	Distances Ottawa- Hull CBD	Hull CBD- Airport (approximate)	Service Potential	Impact on Existing Road Network	Number of Stations	New Rail (approximate)
1 Along existing rail corridor	5km Rail station location requires bus transfer to Hull CBD.	21 km Requires 1.5 km bus transfer	Bus transfer required along Tache Blvd.	None	6 Not including Bayview	4 Sidings
2 Maisonneuve, St. Laurent to rail corridor	1.5 km Direct Rail Link between CBDs	19.5 km	Direct service to Hull CBD, and Airport.	Minor road widening, intersection modifications	5 Not including Place du Portage	3.5 km and 4 sidings, not including 4.2 km Bayview to CBDs extension
3 Maisonneuve to St. Laurent to St. Redempteur	1.5 km Direct Rail Link between CBDs	19.5 km	Direct Service to Hull CBD, and Airport	Minor road widening, intersection modifications, 1 structure, relocate casino access	6 Not including Place du Portage	3.5 km and 3 sidings, not including 4.2 km Bayview to CBDs. extension
4 Maisonneuve to Greber to Promenade de l'Outeouais	1.5 km Direct Rail Link between CBDs	17.5 km	Direct Service to Hull CBD, and Airport	Major road widening, intersection modification, 3 structures to upgraded or replaced	4 Not including Place du Portage	6 km and 2 sidings, not including 4.2 km Bayview to CBD,s extension

5.0 OPERATIONS

The extension of 21 km of light rail service would require additional trains to provide a 10 – 15 minute service frequency similar to the pilot rail project. Preliminary analysis would indicate that additional 8 or 9 trains will be required to provide the desired service frequency over the 21 kms.

In addition, sidings would be required every 2 to 3 km. Where possible the sidings should be incorporated into the station locations. Stations are proposed every 3 to 4 km at locations where there is a potential to serve a major generator and increase ridership.

6.0 Costing

A detailed costing has not been conducted at this time. Further study will be required before an estimated cost can be determined.