REPORTS

Item No. 1  Amendment of the Transportation Master Plan to Reflect the Recommendation of the Southwest Rapid Transit Corridor Stage 2 Alignment Study

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

That the Transportation Master Plan be amended as follows:

1. The “SW Corridor” alignment from Map 5 – Rapid Transit (see Figure 1) be amended such that the alignment is shown extending westward through the Parker Lands and southeastward along the Manitoba Hydro Corridor.

2. Paragraph 4 on page 54, which currently reads as follows:

“There are two possible alignments of the Stage 2 extension of the southwest corridor to be considered in a future detailed alignment study. Past plans have identified the CN Letellier Subdivision as a possible alignment for the Stage 2 extension under a joint-use agreement with the railway. There is also the potential for an alignment along the hydro corridors (see Map 5), which would serve the emerging communities on the Parker and Taylor lands.”

be amended to read:

“Initially there were two possible alignments of the Stage 2 extension of the southwest corridor to be considered. An alignment study carried out in 2012 has resulted in the alignment option passing through the Parker Lands and the Manitoba Hydro Corridor being selected as the preferred alignment.”
ADMINISTRATIVE REPORT

Title: Amendment of the Transportation Master Plan to Reflect the Recommendation of the Southwest Rapid Transit Corridor Stage 2 Alignment Study

Critical Path: SPC on Infrastructure Renewal and Public Works – EPC - Council

AUTHORIZATION

<table>
<thead>
<tr>
<th>Author</th>
<th>Department Head</th>
<th>CFO</th>
<th>CAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Radstrom</td>
<td>D. Wardrop</td>
<td>P. Olafson, Acting CFO</td>
<td>M. Jack, Acting COO</td>
</tr>
</tbody>
</table>

RECOMMENDATIONS

That the Transportation Master Plan be amended as follows:

1. The “SW Corridor” alignment from Map 5 – Rapid Transit (see Figure 1) be amended such that the alignment is shown extending westward through the Parker Lands and southeastward along the Manitoba Hydro Corridor.

2. Paragraph 4 on page 54, which currently reads as follows:
   “There are two possible alignments of the Stage 2 extension of the southwest corridor to be considered in a future detailed alignment study. Past plans have identified the CN Letellier Subdivision as a possible alignment for the Stage 2 extension under a joint-use agreement with the railway. There is also the potential for an alignment along the hydro corridors (see Map 5), which would serve the emerging communities on the Parker and Taylor lands.”

be amended to read:

“Initially there were two possible alignments of the Stage 2 extension of the southwest corridor to be considered. An alignment study carried out in 2012 has resulted in the alignment option passing through the Parker Lands and the Manitoba Hydro Corridor being selected as the preferred alignment.”
REASON FOR THE REPORT

Amendments to the Transportation Master Plan require the approval of Council.

IMPLICATIONS OF THE RECOMMENDATIONS

Financial Implications
(X) Within approved current and/or capital budget
( ) Current and/or capital budget adjustment required

The approval of this report carries with it no financial implications. It will allow Winnipeg Transit to proceed with a functional design study of Stage 2 of the Southwest Transitway.

HISTORY

Overview

In the Transportation Master Plan adopted by City Council in November 2011, the exact alignment of Stage 2 of the Southwest Transitway was not established. Between Pembina & Jubilee and a point just northwest of the intersection of Pembina & Plaza, two high-level alignment options were presented:

1. South along the CN Letellier subdivision parallel to Pembina Highway
2. West through the Parker Lands and then southeast along a Manitoba Hydro transmission corridor (see Figure 1). Information and high-level cost estimates given in the Transportation Master Plan were not specific to either alignment, and the final recommendation of the alignment was left to a future study.

In early 2012, Dillon Consulting was engaged to carry out an alignment study to recommend a preferred alignment option for Stage 2 of the Southwest Transitway. The following alignments were evaluated (see Figures 2, 3, and 4):

Alignment 1A: Parker/Manitoba Hydro lands paralleling the CN mainline
Alignment 1B: Parker/Manitoba Hydro lands paralleling Parker Avenue
Alignment 2: CN Letellier subdivision

Note that all alignment options converge at point just to the northwest of the intersection of Pembina & Plaza. Alignment options between that point and Bison Drive, as well as for entering the University of Manitoba campus, are the same for all alignments.

An additional alignment option, Alignment 3 – Pembina Highway Median, was outlined in the report from Dillon Consulting. It was not included in the full evaluation process due to extensive property requirements, safety concerns, as well as disruption to residential properties, commercial properties and traffic (including transit service) along Pembina Highway.
Evaluation of the Options

The various options were evaluated on numerous criteria, including (but not limited to):

- Operational (including operating speeds)
- Implementation (including project phasing, and the ability to minimize disruption for adjacent landowners during construction)
- Environmental (including the potential impacts on ecologically significant natural areas, and the presence of lands with existing environmental contamination)
- Ridership & Community Impacts (including ridership potential, the accommodation of active transportation facilities, the impact of potential changes to transit service on existing communities, and the potential to increase the transit connectivity to nearby communities not lying directly on the corridor)
- Land acquisition costs
- Transit-oriented development (TOD) and tax increment financing (TIF) potential
- Capital costs
- Results of consultations with the public, area residents, area businesses, and other major stakeholders

The summary of the alignment evaluation is given below, followed by explanations of the selection process:

<table>
<thead>
<tr>
<th>Category</th>
<th>Weighting</th>
<th>Alignment 1A</th>
<th>Alignment 1B</th>
<th>Alignment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>High</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Implementation</td>
<td>Medium</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Environmental</td>
<td>Low</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Community</td>
<td>Medium</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Land Acquisition</td>
<td>High</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>TOD and TIF Potential</td>
<td>Medium</td>
<td>4</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Capital Costs</td>
<td>High</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Future Build Out</td>
<td>Medium</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Public Consultation</td>
<td>High</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Overall Rating</td>
<td></td>
<td>33</td>
<td>35</td>
<td>27</td>
</tr>
<tr>
<td>Weighted Average Rating</td>
<td></td>
<td>77</td>
<td>82</td>
<td>62</td>
</tr>
</tbody>
</table>

*Weighted average rating was achieved using a multiplier of 1 for Low, 2 for Medium, and 3 for High

The recommended alignment is therefore Alignment 1B – Parker/Manitoba Hydro lands paralleling Parker Avenue.

Overview of the Selection of the Recommended Alignment
The recommended alignment is shown in Figure 3. After crossing Pembina Highway at Jubilee, the transitway would extend westward through the Parker Lands (close to and parallel to Parker Avenue) to the Manitoba Hydro transmission corridor (adjacent to Hurst Way). The alignment would then extend southeasterly along the Manitoba Hydro transmission corridor, crossing McGillivray, Clarence and Chevrier, before rejoining the CN Letellier Subdivision at a point just northwest of the intersection of Pembina & Plaza Drive. The corridor would then extend southward to Bison Drive, with potential entrances to the University of Manitoba at either Thatcher, Markham or Chancellor Matheson. Regardless of the alignment for entering the University of Manitoba campus, the complete alignment under consideration extends to Bison Drive in order to serve transit routes to and from Waverley West, Fort Richmond, Richmond West and St. Norbert.

Operational

Alignments 1A and 1B rated higher than Alignment 2 on Operational considerations due to the potential for higher operating speeds (80 km/h vs. 60 km/h) and the presence of fewer roadway crossings. The higher operating speed on the longer Alignments 1A/1B allows for a travel time equal to that of the shorter Alignment 2.

Implementation

Alignments 1A and 1B rated higher than Alignment 2 on Implementation considerations due to simpler project phasing, smaller impacts on adjacent property owners, fewer disruptions to traffic on existing roadways during construction, and simpler land assembly requirements.

Environmental

Alignments 1A and 1B rated lower than Alignment 2 on Environmental considerations due to the presence of ecologically significant natural lands in the Parker Lands area and the presence of park space/green space and community gardens along the Manitoba Hydro transmission corridor.

Ridership and Community Impacts

Alignments 1A and 1B rated higher than Alignment 2 due to the ability to attract more ridership from future TOD development in the Parker Lands and other adjacent lands, as well as the potential for improved route connectivity to Linden Woods and new commercial development near Kenaston & Sterling Lyon. Alignment 2 rated relatively well in terms of Ridership and Community Impacts due to the fact that it would provide direct transit benefit for residents and businesses along Pembina Highway, and allow for the densification and redevelopment of the underutilized lands along Pembina Highway.

Alignments 1A and 1B offer a better ability to accommodate pedestrian and cyclist facilities alongside the corridor.

Land Acquisition Costs
Alignments 1A and 1B rated higher than Alignment 2 on land acquisition cost considerations due to substantially lower costs for both residential and commercial land acquisitions.

**TOD and TIF Potential**

Alignments 1A and 1B rated higher than Alignment 2 on TOD and TIF potential due to considerably higher present value of potential incremental tax revenues for the next 25 years.

**Capital Costs**

In terms of base capital costs (construction and land acquisition, shown in 2012 dollars), Alignment 1B has the lowest base cost, followed by Alignment 1A and Alignment 2:

- Alignment 1A: $296,400,000
- Alignment 1B: $291,700,000
- Alignment 2: $312,900,000

**Future Build-Out Opportunities**

Future build-out opportunities refers to the ability to construct grade-separations at key intersections on Alignments 1A and 1B so that transit operations on the transitway do not affect traffic flow on major intersecting streets (such as McGillivray, Chevrier and Clarence). When these opportunity costs are incorporated, the expected costs (in 2012 dollars) of Alignments 1A and 1B are as follows:

- Alignment 1A: $348,300,000
- Alignment 1B: $332,700,000

**Public Consultation**

The results of the public consultation showed that Alignment 1 rated roughly equally with Alignment 2, although Alignment 2 came out slightly ahead (52% of respondents chose Alignment 2, whereas 48% of respondent chose Alignment 1). Of those that selected Alignment 1 as their preferred option, Alignment 1A was selected by 37.5% of respondents while Alignment 1B was selected by 62.5% of respondents. The main reason for the slightly higher rating of Alignment 2 was the fact that it would better serve existing riders in existing built-up areas along Pembina Highway, whereas Alignment 1 would better serve future riders in future developments in the Parker Lands and adjacent to the Manitoba Hydro transmission corridor.

**Transportation Master Plan Amendment**

Approval of this report will require the amendment of the Transportation Master Plan, as follows:
1. The “SW Corridor” alignment from Map 5 – Rapid Transit (see Figure 1) be amended such that the alignment is shown extending westward through the Parker Lands and southeastward along the Manitoba Hydro Corridor.

2. Paragraph 4 on page 54, which currently reads as follows:
   “There are two possible alignments of the Stage 2 extension of the southwest corridor to be considered in a future detailed alignment study. Past plans have identified the CN Letellier Subdivision as a possible alignment for the Stage 2 extension under a joint-use agreement with the railway. There is also the potential for an alignment along the hydro corridors (see Map 5), which would serve the emerging communities on the Parker and Taylor lands.”

be amended to read:

“I initially there were two possible alignments of the Stage 2 extension of the southwest corridor to be considered. An alignment study carried out in 2012 has resulted in the alignment option passing through the Parker Lands and the Manitoba Hydro Corridor being selected as the preferred alignment.”
Financial Impact Statement  
Date: December 21, 2012

Project Name:

Amendment of the Transportation Master Plan to Reflect the  
Recommendation of the Southwest Transitway Stage 2 Alignment Study

COMMENTS:

The approval of this report carries with it no financial implications. It will allow Winnipeg Transit to proceed with a functional design study of Stage 2 of the Southwest Transitway.

original signed by: Tanis Yanchishyn, CA  
Manager of Finance & Administration

CONSULTATION

In preparing this report there was consultation with:

Public Works  
Planning, Property & Development

SUBMITTED BY

Department: Transit  
Division: Service Development  
Prepared by: Bjorn Radstrom, Acting Manager of Service Development  
Date: December 21, 2012
Figure 1 – Southwest Transitway alignment options from the Transportation Master Plan

SW Corridor Alignment to be Determined
Figure 2 – Alignment 1A
Figure 3 – Alignment 1B