# 6.0 HMEP ENTRANCE

## 6.1 Context

Adding the small parcel at Henrietta Muir Edwards Park (HMEP) entrance, totaling approximately 763 m<sup>2</sup> in area, represents a minimal addition to the overall river valley project area for the Valley Line LRT. This small project component is bordered by the previously approved Project Area to the north, east and west, with 98 Avenue situated to the south (Figure 2.1c). This area consists of manicured and un-manicured lawn, one manicured planted bed and one naturalized planted bed which includes planted trees. These lands will be available to Project Co for general construction activities and may be used to access or egress the Lands north to the river.

### 6.2 Assessment Methods

Table 6.1 details the few VECs selected for this project component.

The spatial boundaries, or study area, for this assessment are shown in Figure 2.1c. Although this area was not included in the 2013 EISA, all surrounding lands were assessed. This fact, combined with the small area involved and the manicured nature of the lands, meant that detailed field studies were not warranted for the 2014 assessment. Investigations were limited to reconnaissance-level site inspections on 20 June and 15 September 2014 which included characterization of vegetation at an appropriate scale and documentation with photographs. Previous studies relied on for site-specific information includes a Phase I ESA covering all Valley Line river valley lands (ConnectEd Transit Partnership 2013a).

Table 6.1. Justification for the selection of VECs – HMEP Entrance

Valued Environmental Components	Potential for Additional or Unique Issues <sup>1</sup>	Relative Abundance or Status	Public Concern	Professional Concern	Economic Importance	Regulatory Concern	Relevant Legislation/Bylaw/Policy
Valued Ecosystem Components							
Soils/Geotechnical	Yes			1		1	<ul><li>Bylaw 7188</li><li>Drainage Bylaw 16200</li></ul>
Hydrology Surface Water/ Groundwater	No						
Fish and Fish Habitat	No						
Vegetation and Wildlife	Yes		/	1		1	<ul> <li>Bylaw 7188</li> <li>Federal Species at Risk Act</li> <li>Alberta Weed Control Act</li> <li>Federal Migratory Birds Convention Act</li> <li>Alberta Wildlife Act</li> </ul>
Habitat Connectivity	No						
Valued Socio-economic Components							
Land Disposition and Land Use Zoning	No						
Residential Land Use	No						
Recreational Land Use	Yes		1	1		1	• Bylaw 7188
Utilities	Yes	_	1	1	1	1	• Bylaw 7188
Worker and Public Safety	No						
Visual Resources	Yes		1	1		✓	• Bylaw 7188
Valued Historic Components							
Historical Resources	No						

In instances where it was determined that no potential existed for additional or unique issues to arise, no further consideration to that VEC was given

# 6.3 Key Issues

Key issues were identified by: 1) examining the project component location, known conditions and potential project activities; 2) considering concerns raised by the public and city services departments; and 3) applying professional judgement. Following are the key issues identified in association with the small parcel at HMEP entrance:

• Will re-grading activities potentially occur in this area? If so, could it have adverse impacts on the 98 Avenue Pedestrian Bridge or lead to erosion?

- Will additional manicured vegetation or planted trees require removal?
- Will works result in disruptions to the local pathway network?
- Will the entrance sign to HMEP be impacted by construction activities?
- Will works adversely impact visual resources in the local area?

# 6.4 Existing Conditions by VEC

# 6.4.1 Soils and Geotechnical Stability

Soils in this parcel have likely been subject to past disturbance associated with the construction of the existing 98 Avenue Pedestrian Bridge and associated landscaping. The soils present appear to be fill material. A constructed embankment associated with the bridge abutment occupies much of the area (Plate 6.1). The Phase 1 ESA undertaken for the Valley Line LRT did not identify issues pertaining to soil contamination or slope stability for these lands (ConnectEd Transit Partnership 2013a). Geotechnical studies have not been undertaken as there is no intended infrastructure in this area.

# 6.4.2 Vegetation & Wildlife Habitat

Vegetation within the proposed parcel includes manicured and non-manicured areas (Figure 5.2). Two planted beds are present: the first, in the southeast corner of the area, is manicured and includes junipers and pine shrubs (Plate 6.2), the second, in the north ends of the area, has naturalized and includes mature poplars with Manitoba maple shrubs interspersed throughout (Plate 6.3). Lands immediately around the planted beds consist of manicured lawns. Immediately west of the manicured planted bed is the constructed embankment associated with the 98 Avenue Pedestrian Bridge. No mowing appears to be conducted in this area likely due to the steep slope; vegetation consists of a mix of grass and weedy species with some small shrub saplings (Plate 6.4).

The wildlife habitat potential of this project component is low due to its small size, largely manicured nature, and adjacency to frequent anthropogenic disturbance. Manicured areas may provide foraging habitat for highly urban-adapted ground-foraging species (e.g., deer mice, black-billed magpies). The shrubs and poplar trees may provide limited breeding habitat for some disturbance-tolerant bird species, but are too small to provide an entire breeding territory for most species. Urban-adapted mammal species may use the lands as a stepping stone through the area on occasion.



Plate 6.1: Bridge abutment fill in the parcel to be added to the Project Area, looking northeast (June 2014).



Plate 6.2. HMEP near the north end of the 98 Avenue Pedestrian Bridge looking northeast; planted bed with park entrance sign, looking southwest (Sept 2014).



Plate 6.3. HMEP entrance looking northeast; mature poplar and Manitoba maple stand, (Sept. 2104).



Plate 6.4. HMEP entrance looking northeast; unmowed grasses on the pedestrian bridge embankment (Sept. 2014).

### 6.4.3 Residential Land Use

This proposed parcel, at the north end of the 98 Avenue Pedestrian Bridge, is located directly across the road from a condominium complex, situated along 96A Street that forms part of the Cloverdale neighbourhood.

## 6.4.4 Recreational Land Use

The proposed parcel is the landscaped entrance to HMEP and is signed as such (Plate 6.1); however no active recreational use occurs on the parcel. There is no trail access through the parcel to the 98 Ave Pedestrian Bridge; access to the bridge is from the parking lot and trails further north. The pedestrian bridge is an important recreational facility but it is excluded from this parcel and will remain open to the public during construction activities associated with the Valley Line LRT.

## 6.4.5 Visual Resources

Lands in this parcel provide no views of the NSR, or downtown across the river, as a result of low elevation and the screening provided by the bridge embankment and mature trees. The 98 Avenue Pedestrian Bridge is visible to the west. Residents of the condominium complex across 96A Street with western exposures look out directly on to this park entrance, including the pedestrian bridge. Motorists on 98 Avenue also have clear views of this area.

## 6.4.6 Utilities

Utilities have not been fully identified; however, this work is in progress. One above-surface power line and one light standard for 98 Avenue are situated on the southern edge of the project component boundary and a buried transmission line lies along the north edge of 98 Avenue.

# 6.5 Potential Impacts and Mitigation Measures

## 6.5.1 Soils

Impacts to soils resulting from construction activities in this parcel should be no different from impacts to soil resources in manicured areas further north in the park. If Project Co chooses to use the parcel for construction, soils are expected to be affected. In the most extreme scenario, Project Co would elect to re-grade this parcel to allow for a wider array of uses, shoring up the bridge abutment in a new way. This would be allowed, provided that measures were employed to protect the integrity of the bridge. The general Project Agreement clauses require Project Co to protect existing City infrastructure and to repair in the event of accidental damage. In this way, the infrastructure integrity will be achieved. Project-wide mitigation measures already detailed in the 2013 EISA and developed in the Project Agreement, are designed to minimize erosion, topsoil/subsoil mixing, compaction, contamination of or other degradation to soil resources will also be applied to any activities within this project component area. Thus, no new mitigation measures are required and the overall impact on soils, following mitigation, should be negligible.

# 6.5.2 Vegetation, Wildlife Habitat and Connectivity

# 6.5.2.1 Loss of Manicured Vegetation and Planted Beds/Trees

## **Impacts and Mitigation Measures**

Construction activity in this parcel may result in the removal of some or all of the vegetation within the parcel. Vegetation potentially impacted includes two planted beds including several mature balsam poplars and Manitoba maple shrubs, in a naturalized bed and manicured and un-manicured lawn. If all of the parcel were disturbed, approximately  $474 \text{ m}^2$  of lawn and  $228 \text{ m}^2$  of planted beds would be disturbed, totaling approximately  $702 \text{ m}^2$ .

Any removal of trees within this project component will be subject to the City's Corporate Tree Management Policy and all contractual obligations already developed for all Project Works. Post-construction, any areas disturbed within this project component will be reclaimed through landscaping, as identified in the Project Agreement. This will include replacement of the planted bed and trees in a new arrangement but roughly the same location. Such landscaping would be conducted as part of the overall planned landscaping in HMEP. Based on these considerations, long-term impacts to vegetation are considered to be negligible.

## 6.5.3 Recreational Land Use

The addition of this parcel to the Project Area is required to provide flexibility for Project Co with respect to required continuous pedestrian access to the north terminus of the 98 Avenue Pedestrian Bridge, for the duration of the construction period. To realize this, Project Co will likely create one or more temporary routes to the bridge through HMEP. Any change in access to the north end of the bridge, including through this parcel will be subject to the SUP/Pathway closure and detour plan that Project Co will be required to develop as part of the Valley Line LRT. Based on these considerations, no additional or unique impacts to the pathway network have been identified as part of this project component.

# 6.5.3.1 Temporary Removal of HMEP Entrance Sign

## Impacts and Mitigation Measures

The entrance sign to HMEP, situated within the planted bed, will require temporary removal in support of construction activities within the project component area. Prior to the initiation of construction, the City has committed to removing the above-ground portion of the sign. Project Co will then be responsible for removing and replacing the sign base. The original entrance sign to HMEP would then be reinstalled by the City on the new base. Project Co will notify the City at least 90 days prior to the planned removal of the sign base to permit adequate time for the City to remove the sign. Implementation of these measures will ensure that any long-term impacts will be mitigated and, therefore, negligible. The short-term loss of a park entrance sign is considered be negligible given the construction that will be occurring in this area of the park and the temporary unavailability of the trailhead parking lot.

### 6.5.4 Visual Resources

# **Impacts and Mitigation Measures**

Any activities to be undertaken in this small (approximately 763 m<sup>2</sup>) parcel will be highly visible to motorist and local residents. The Project Agreement contains conditions around visual screening of works in the river valley. The City will include this area in their review of areas to be adequately screened during construction to prevent unmitigated, chronic exposure to active construction. Post-construction, any areas disturbed within this project component will be reclaimed through landscaping. Project Co will be required to design and install a replacement bed slightly larger in area than the existing bed. The bed will be in the same general location and will accommodate the park sign and some trees. In the long-term, residents and motorists will have a view similar to existing views. Considering this, the long-term residual impacts to visual resources is considered to be negligible.

## 6.5.5 Utilities

No utility removals or relocations are currently planned as part of the work in the lands at the HMEP entrance. Project Co. will, however, be required to protect all existing utilities during construction activities. No additional or unique impacts to utilities have been identified.

# 6.6 Summary Assessment

# 6.6.1 Summary of Residual Impacts

This assessment identified no residual impacts or outstanding issues.

# 6.6.2 *Monitoring Requirements*

No monitoring requirements unique to this project component will be required. Monitoring requirements specific to erosion and sediment control, general construction activities and landscaping are defined through the general Project Agreement.

## 6.6.3 Resolution of Key Environmental Issues

The following are brief answers to the questions initially posed in Section 6.3.

# Will re-grading activities potentially occur in this area? If so, could it have adverse impacts on the 98 Avenue Pedestrian Bridge or lead to erosion?

In the most extreme scenario for this project component, Project Co would elect to regrade this parcel to allow for a wider array of uses, shoring up the bridge abutment in a new way. The general Project Agreement clauses require Project Co to protect existing City infrastructure and to repair in the event of accidental damage. In this way, the infrastructure integrity will be achieved. Project-wide mitigation measures already approved in the 2013 EISA and designed to minimize erosion, topsoil/subsoil mixing, compaction, contamination of or other degradation to soil resources will also be applied to any activities within this project component area.

# Will additional manicured vegetation or planted trees require removal?

Yes. Construction activity in this parcel may result in the removal of some or all of the vegetation within the parcel. If all of the parcel were disturbed, approximately 474 m<sup>2</sup> of lawn and 228 m<sup>2</sup> of planted beds would be disturbed, totaling approximately 702 m<sup>2</sup>. Post-construction, any areas disturbed within this project component will be reclaimed through landscaping, with specific requirements made of Project Co. This will include replacement of the planted bed and lost trees. Therefore, in the long-term all lost resources will be replaced.

## Will works result in disruptions to the local pathway network?

No. Work associated with this project component is required to provide flexibility for Project Co to provide the required continuous pedestrian access to the 98 Avenue Pedestrian Bridge for the duration of the construction period.

## Will the entrance sign to HMEP be impacted by construction activities?

Yes. The entrance sign will be temporarily removed by the City prior to construction activities in the project area. Project Co would then be responsible for removing, and ultimately reinstalling, the sign base as part of post-construction landscaping. The City would then reinstall the sign on the new base.

# Will works adversely impact visual resources in the local area?

Yes. Any activities to be undertaken in this small (approximately 763 m<sup>2</sup>) area will be highly visible to motorist and a few local residents. The City will require that this area be adequately screened during construction to prevent unmitigated chronic exposure to active construction. Post-construction, any areas disturbed within this project component will be reclaimed through landscaping. This will include replacement of the planted bed and trees such that the end result will be similar to present landscaping.