

8.8 Land Use & Socio-economic

This section presents the existing land use and socio-economic conditions in and around the Site. This component is divided into land use, socio-economic and visual sub-components; the study areas for these sub-components are provided in Section 2.3. The information and assessments presented in this section have been summarized from more detailed information contained in TSD #5.

8.8.1 Land Use

This section includes a review of the land use planning policy and regulatory context in addition to an analysis of existing land uses within the Site- vicinity and on-Site study areas. Planning policy was assessed to determine potential for future development in the area. Planning policy reviewed includes:

- MOECC Guideline D-4 - Land use On or Near Landfills and Dumps; 1994c;
- MMAH Provincial Policy Statement (PPS); 2014;
- MMAH Shape the Future: Eastern Ontario Smart Growth Panel; Final Report 2003;
- City of Ottawa Official Plan, By-law (2003-203), as amended; 2003a;
- City of Ottawa Background to the Official Plan Review – City of Ottawa Employment Lands Study, 2012 Update; 2013e;
- City of Ottawa Master Plans; various;
- City of Ottawa Zoning By-law (2008-250), as amended; 2008;
- City of Ottawa published data on public recreational facilities and activities; 2013f;
- NCC – Plan for Canada's Capital; 1999;
- NCC – Canada's Capital Greenbelt Master Plan; 2013; and
- Current Development Applications.

The Site is located in an area of the City with limited development, which has been constrained due to poor quality groundwater. As a result of this issue, the City has invested in a municipal drinking water supply to portions of this area of the City, known as the Carlsbad Springs Trickle Feed System. The Site is currently vacant, with the exception of three residences (owned by Taggart Miller) and a model aircraft club along Frontier Road and one residence along Boundary Road (also owned by Taggart Miller). The remainder of the Site is regenerating vegetative growth on land formerly used for agricultural area. Agricultural lands are located to the east of the Site along the opposite side of Frontier Road and a vacant, regenerating agricultural area, which is partially treed, to the south of the Site. Various industrial uses and an industrial subdivision are located immediately to the west of the Site along Boundary Road and six residences currently exist immediately to the west of the Site mixed in with the industrial and commercial uses along Boundary Road. In total, nine residences are located off-Site within 500 metres of the Site. A golf course is located to the north of the Site, on the opposite side of Highway 417. Importantly, there is an existing industrial subdivision adjacent to the Site and industrial/commercial activities such as soil management immediately northwest of the Site. An auto wrecker formerly occupied some of the land on which the proposed CRRRC will be situated. No environmental, archaeological or agricultural constraints have been identified on the Site by the City of Ottawa.

There are currently no Zoning By-law Amendments or Draft Plans of Subdivision active in this immediate area. Previously, a zoning amendment was approved to rezone 5592, 5606 and 5630 Boundary Road and 9460 Mitch Owens Road from Rural Commercial to Rural General Industrial. There are currently two applications for site plan in the vicinity of the Site. The first application is for a Long Combination Vehicle Truck Transport De-Coupling facility at the southeast corner of the Boundary Road and Highway 417 interchange and the site is identified as 5341 Boundary Road. This development is commercial/industrial in nature, which is consistent with the immediate surrounding area. The second application is for a Light Industrial Use including a warehouse and office within the Industrial Subdivision directly west of the CRRRC lands and identified as 100 Entrepreneur Crescent. This development being industrial in nature is consistent with the immediate surrounding area.

8.8.2 Socio-Economic Environment

In order to establish the general context, information was compiled from Statistics Canada census data, and municipal and regional economic development data, studies and reports on socio-economic conditions in the study area, including:

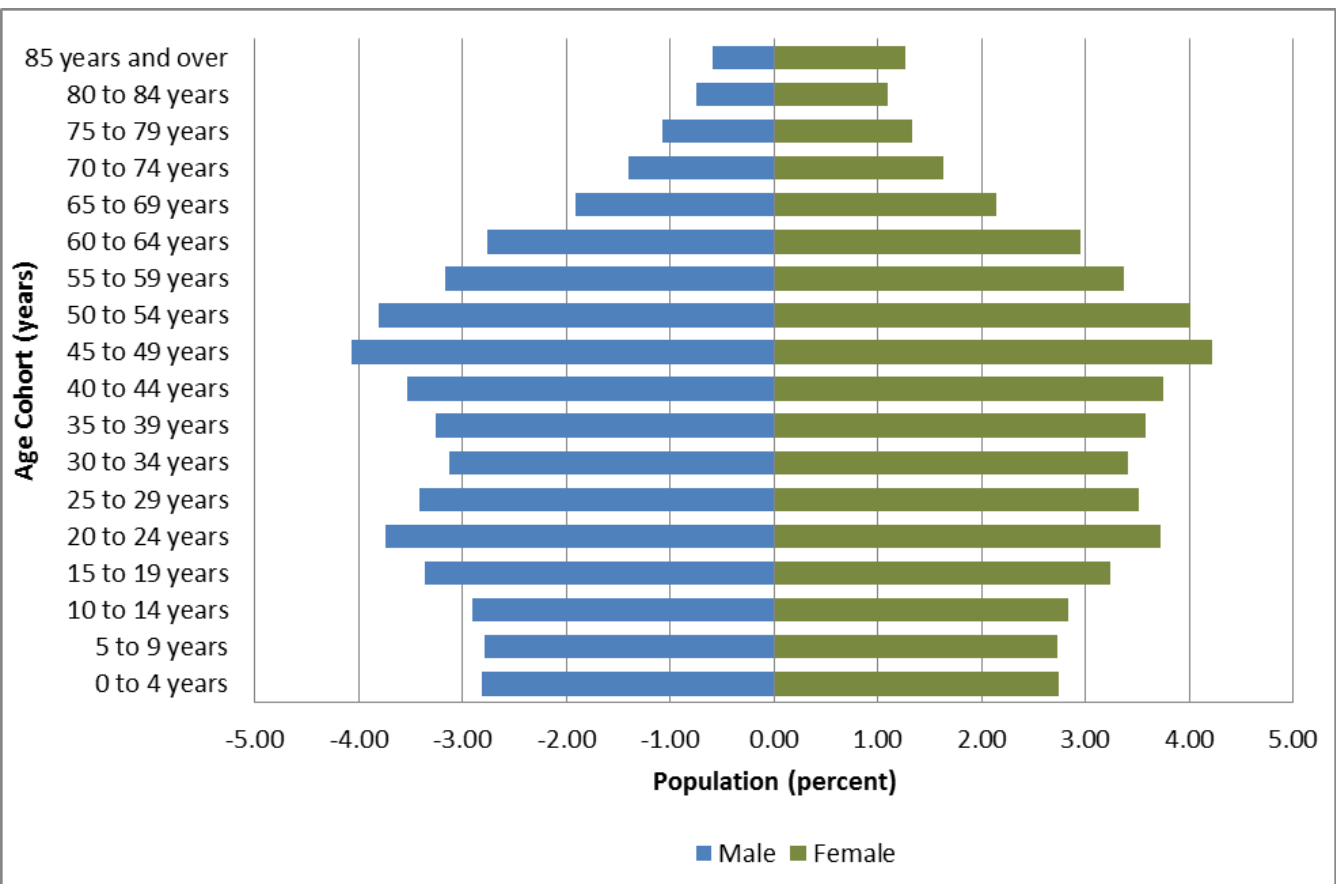
- Population and demographics;
- Labour force distribution;
- Key employment sectors and employers;
- Employment, unemployment and participation rates;
- Average household and personal incomes;
- Economic development trends and plans; and
- City of Ottawa financial statements.

8.8.2.1 Population and Demographics

The City of Ottawa, with a population of 883,391 in 2011 (Statistics Canada, 2013b), represents 6.9% of the population of the Province. It should be noted that the City of Ottawa estimated a population of 922,046 at mid-year 2011 and 927,120 at the end of 2011 (City of Ottawa, 2012a) and attributed the discrepancy with the Statistics Canada number largely to a 4.2% undercount by the census. Over the past decade, the City of Ottawa has shown a higher population growth rate than the Province overall. Similarly, the population density is substantially higher than the Province due to the mainly urban nature of the City of Ottawa.

The Site is located in a rural ward of the City of Ottawa. At year-end 2012, the estimated population of the ward of Cumberland was 44,400, including 16,300 households (City of Ottawa, 2013a). This represents 4.7% of the total population of the City of Ottawa and 4.2% of households.

The age structure of the Site-vicinity is shown in Figure 8.8.2-1. The population pyramid exhibits a negative growth scenario, whereby the largest age cohorts are from ages 45 to 59 years. This age structure is reflective of the aging baby boom generation.




NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING REPORT

REFERENCE

STATISTICS CANADA. (2012). OTTAWA, ONTARIO (CODE 3506008) AND OTTAWA, ONTARIO (CODE 3506) (TABLE). CENSUS PROFILE. 2011 CENSUS. STATISTICS CANADA CATALOGUE NO. 98-316-XWE. OTTAWA. RELEASED OCTOBER 24, 2012. [HTTP://WWW12.STATCAN.GC.CA/CENSUS-RECNSEMENT/2011/DP-PD/PROF/INDEX.CFM?LANG=E](http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?lang=E) (ACCESSED AUGUST 15, 2013).

PROJECT						
ENVIRONMENTAL ASSESSMENT OF THE CAPITAL REGION RESOURCE RECOVERY CENTRE						
TITLE						
AGE PROFILE FOR THE SITE-VICINITY IN 2011						
 Golder Associates		PROJECT No. 12-1125-0045		PHASE No. 4500		
		DESIGN	LB	NOV. 2013	SCALE AS SHOWN	REV.0
		GIS	--	--	FIGURE 8.8.2-1	
		CHECK	PLE	AUG 2014		
		REVIEW	PAS	AUG 2014		



8.8.2.2 Population Projections

The City of Ottawa released revised growth projections from 2006-2031 in 2007 (City of Ottawa, 2007a). These growth projections, including population and households, are shown in Table 8.8.2-1. Overall the City is expected to exhibit growth over this period, including increases in over 30% for population and households. The number of households is expected to disproportionately increase compared to the population, with a projected growth rate that is 10% greater than the population growth rate over this period. It can be expected that based on growth trends over the past decade, the majority of growth will occur in urban centres outside of the rural areas of the Site- vicinity; from 2001 to 2011, the rural areas maintained a consistent population of about 10% of the overall population of the city (City of Ottawa, 2012a).

Table 8.8.2-1: Growth Projections for the City of Ottawa from 2006-2031 (City of Ottawa, 2007a)

Year	Population	Households
2006	871,000	346,000
2011	923,000	376,000
2021	1,031,000	436,000
2031	1,136,000	489,000
% change 2006-2031	30	41

8.8.2.3 Labour Force Characteristics and Activities

Employment and participation rates for the Site- vicinity in 2011 are shown in Table 8.8.2-2. At this time, employment and participation rates were higher for the City of Ottawa than the province overall. Median income data for 2011 are not yet available from Statistics Canada. In 2006, the median individual and household incomes were also higher than the province overall. These trends are reflective of the stable and successful nature of the local economy.

**Table 8.8.2-2: Employment and Participation Rates for the Site- vicinity
(Statistics Canada, 2007 and Statistics Canada, 2013b)**

	City of Ottawa	Province of Ontario
Total population 15 years and over ¹	718,960	10,473,670
Labour force ¹	498,370	6,864,990
Employment rate (%) ¹	64.5	60.1
Unemployment rate (%) ¹	7.0	8.3
Participation rate (%) ¹	69.3	65.5
Individual median income (\$) ²	32,908	27,258
Median income – all private households (\$) ²	58,437	52,117

Notes: ¹ Source: Statistics Canada National Household Survey, 2013b

² Source: Statistics Canada, 2007

Industries of employment for the Site-vicinity are shown in Figure 8.8.2-2. The main industry of employment in the City of Ottawa is concentrated in the public administration sector. Overall, the industry of employment is comparatively less evenly distributed for the City of Ottawa than the province overall, demonstrating a focus on knowledge based and federal government services.

8.8.2.4 *Municipal Finances*

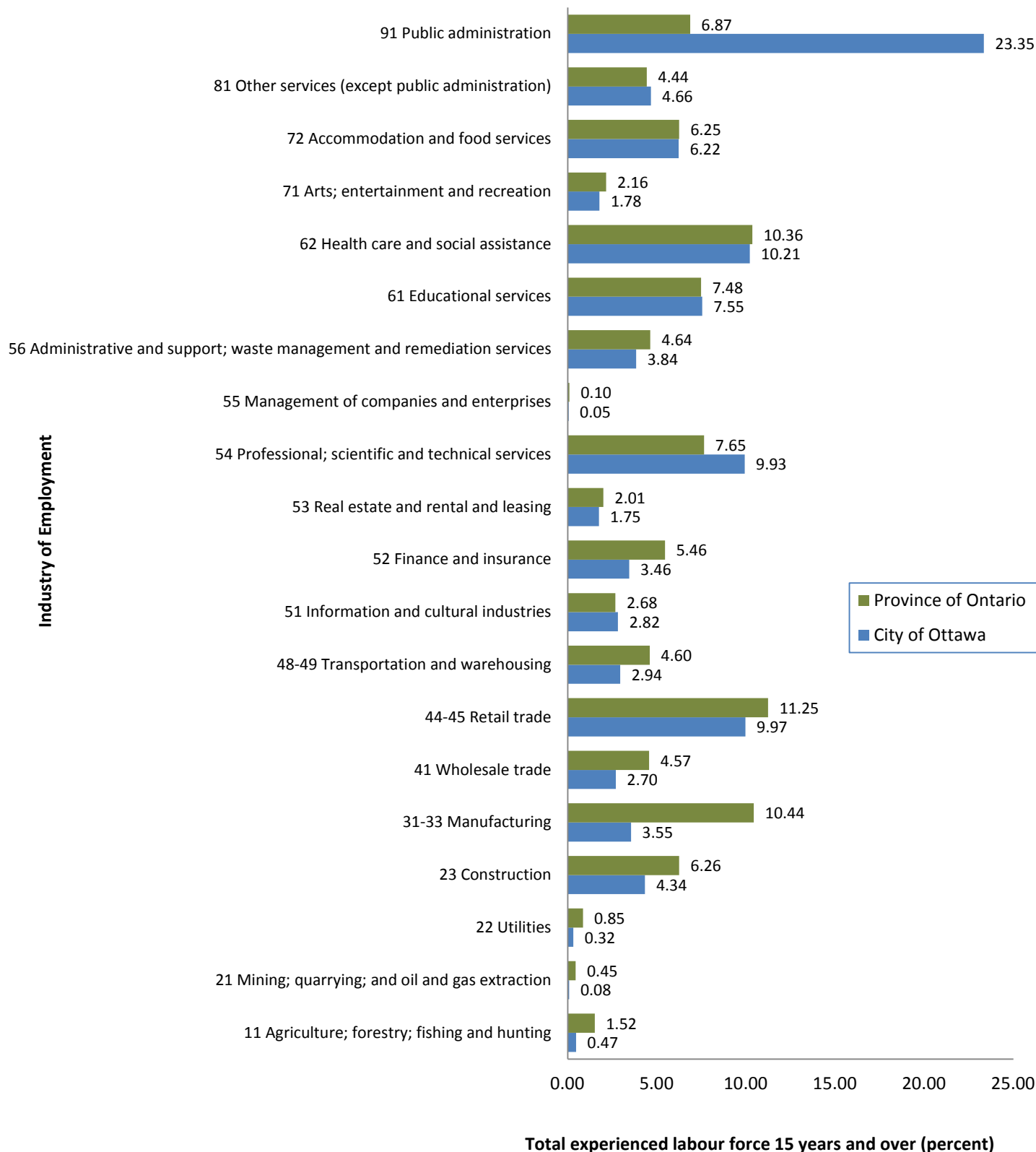
Consolidated Financial Statements from the City of Ottawa report total revenues of \$3.28 billion in 2012 and \$3.23 billion in 2011 (City of Ottawa, 2012b). Almost half of the revenue was derived from taxes, predominantly property taxes. The remaining revenue was from fees and user charges, government grants, capital assessments, development charges and other revenue sources. Total municipal government expenses were \$2.89 billion in 2012 and \$2.80 billion in 2011 (City of Ottawa, 2012b).

8.8.2.5 *Economic Development Trends and Plans*

In 2010, the City of Ottawa identified goals for sustainable economic development to address challenges associated with the local economy including: dependency on federal government, lack of diversification within the high-tech sector and lack of collaboration between sectors and stakeholders locally. The plan identified several actions for development over the next five years with the aim of leveraging development of knowledge-based businesses, promotion of Ottawa as a tourism location and place of residence, and placing an emphasis on holistic economic, social, cultural and environmental planning (City of Ottawa, 2010).

According to the City of Ottawa Annual Development Report (City of Ottawa, 2012a), in 2011 there was an increase in private-sector jobs from 60.2% to 60.4% of total employment in the City of Ottawa. A growth trend in professional, scientific and technical services was also observed in 2011 following a three year trend of industry job losses. While there was growth in the number of high-tech, or knowledge based jobs, this sector remained relatively focused. Twenty-six% of the workforce in the high-tech sector was employed by 10 large companies and there was an annual net loss of 22 companies. These trends demonstrate that while there has been some progress in developing private sector jobs, progress is still needed towards attaining the economic development goals identified by the City of Ottawa in 2010.

Industry of Employment




NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING REPORT

REFERENCE

STATISTICS CANADA. (2007). OTTAWA, ONTARIO (CODE3506008) (TABLE). 2006 COMMUNITY PROFILES. 2006 CENSUS. STATISTICS CANADA CATALOGUE NO. 92-591-XWE. OTTAWA. RELEASED MARCH 13, 2007. [HTTP://WWW12.STATCAN.CA/CENSUS-RECENSEMENT/2006/DP-PD/PROF/92-591/INDEX.CFM?LANG=E](http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?lang=e) (ACCESSED AUGUST 15, 2013).

PROJECT			
ENVIRONMENTAL ASSESSMENT OF THE CAPITAL REGION RESOURCE RECOVERY CENTRE			
TITLE			
INDUSTRIES OF EMPLOYMENT FOR THE SITE-VICINITY IN 2006			
		PROJECT No. 12-1125-0045	PHASE No. 4500
		DESIGN LB	NOV. 2013
		GIS	-
		CHECK PLE	AUG 2014
		REVIEW PAS	AUG 2014
FIGURE 8.8.2-2			

8.8.3 Visual Environment

As shown in Figure 8.8.3-1, the overall existing landscape can be divided into four components:

- 1) East – Agricultural comprised of open fields, hayfields and row crops divided by areas with vegetation cover and wooded areas adjacent to Devine Road and Frontier Roads;
- 2) North – Highway 417, disturbed lands and wooded areas;
- 3) West – Mixed residential/commercial/industrial land use and wooded lots along Boundary Road; and
- 4) South – Devine Road and regenerating vegetated lands.

The vegetation that surrounds the Site is characterized primarily by stands of mixed and deciduous forest with some deciduous thicket to the south and east; a mineral thicket swamp lies directly south of the Site. Hayfields and row crops broken by hedgerows and tree stands stretches almost 3 kilometres to the northeast from Devine Road. A hedgerow of mature coniferous trees grows alongside Highway 417 directly north of the Site. Other areas of tree cover consist of regenerative growth at various stages of development along roadsides.



Path: N:\Active\Spatial\JMM\Miller_Paving_Ltd\CRRRC\GIS\MXDs\12-1125-0045\Reporting\Phase4000\Vol.11211250045-4000-Vol1.8.3-1.mxd

LEGEND


VIEWPOINT LOCATIONS

PROPERTY BOUNDARY

NOTE
THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING REPORT.

REFERENCE
BACKGROUND IMAGERY - BING MAPS AERIAL (C) 2012 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS (C) 2012 NOKIA (C) 2012 DIGITAL GLOBE
AERIAL PHOTOGRAPHS PURCHASED FROM THE CITY OF OTTAWA
BASE DATA - CANVEC PROVIDED BY HER MAJESTY THE QUEEN IN RIGHT OF CANADA, DEPARTMENT OF NATURAL RESOURCES, 2010
PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 18

PROJECT			
ENVIRONMENTAL ASSESSMENT OF THE CAPITAL REGION RESOURCE RECOVERY CENTRE			
TITLE			
REPRESENTATIVE VIEWPOINTS SELECTED FOR VISUAL ANALYSIS			
PROJECT No. 12-1125-0045		SCALE AS SHOWN	REV. 0.0
DESIGN	PJM	DEC. 2013	FIGURE 8.8.3-1
GIS	PJM	DEC. 2013	
CHECK	PLE	AUG. 2014	
REVIEW	PAS	AUG. 2014	

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Ottawa, Ontario

The mixed commercial/industrial land uses and trees to the west of the Site break up the views into the Site from Boundary Road. The Site and surrounding topography is flat.

Field investigations were conducted to identify representative viewpoints for the visual impact assessment. Five key viewpoints were selected as identified in the following list and shown on Figure 8.8.3-1:

- Viewpoint 1: Projection from Devine Road
- Viewpoint 2: Projection from Highway 417
- Viewpoint 3: Projection from Boundary Road
- Viewpoint 4: Projection from Mitch Owens Road
- Viewpoint 5: Projection from Boundary Road, proposed main Site entrance

After the field investigations were conducted to identify these representative viewpoints for the assessment, photographs were taken in the field from each viewpoint using a Nikon D80 digital SLR camera mounted on a tripod. The photographs used to depict existing conditions for each viewpoint are provided in the impact assessment (Section 11.6.3). Each viewpoint is described below in more detail.

VIEWPOINT 1: From Devine Road

This is a long view westward from Devine Road across existing farm fields that are bisected by existing hedgerows and stands of trees with some shrubs.

VIEWPOINT 2: From Highway 417

This view is taken from eastbound Highway 417 through a break in a hedgerow of coniferous trees along Highway 417 at the northeast corner of the Site.

VIEWPOINT 3: From Boundary Road

This represents a view of the Site from southbound Boundary Road just north of Mitch Owens Road.

VIEWPOINT 4: From Mitch Owens Road

This view looks directly east from Mitch Owens Road towards the Site.

VIEWPOINT 5: From Boundary Road, opposite future access location to the CRRRC

This view looks eastward directly into the future access location for the CRRRC Site. Presently there are stockpiles of granular and soil materials and vehicles associated with the Pomerleau operations in the foreground.

8.9 Cultural Heritage and Archaeology

This section presents the existing cultural heritage and archaeological resource conditions in and around the Site. This component is divided into cultural heritage and archaeology sub-components; the study areas for these sub-components are provided in Section 2.3. The following sections provide a summary of regional and Site history, followed by a description of the Site's cultural and archaeological environments. The information and assessments presented in this section have been compiled from more detailed information contained in TSD #6 (Archaeology) and TSD #7 (Cultural Heritage).

8.9.1 Regional Pre-European Aboriginal Occupation

Human occupation of southern Ontario dates back approximately 10,000 years before present (BP). These first peoples, known as Palaeo-Indians to archaeologists, moved into Ontario as the last of the glaciers retreated northward. Although there is limited information on the lifestyle of the Palaeo-Indians, the little evidence that is available suggests that they were highly mobile hunters and gatherers relying on caribou, small game, fish and wild plants found in the sub-arctic environment. The Ottawa Valley remained very much on the fringe of occupation at this time. The ridges and old shorelines of the Champlain Sea and early Ottawa River channels would be the areas most likely to contain evidence of Palaeo-Indian occupation in this region.

During the succeeding Archaic Period (ca. 9,000 to 3,000 BP), the environment of southern Ontario approached modern conditions. While more land became available for occupation as the glacial lakes drained, Archaic populations continued as hunter-gatherers; however they appear to have focused more on local food resources, abandoning the highly mobile lifestyle of their predecessors. The Archaic Period tool kit became more diversified, reflecting the adaptation to a temperate forest environment. Ground stone tools such as adzes and gouges first appeared and may indicate the construction of the dug-out canoes or other heavy wood working activities. Extensive trade networks had developed by the middle to late Archaic Period. Items such as copper from the north shore of Lake Superior were exchanged during this time.

The first significant evidence for occupation in the Ottawa Valley appears at this time. Archaic sites have been identified on Allumettes and Morrison Islands on the Ottawa River near Pembroke and within the boundaries of Leamy Lake Park within the City of Gatineau (Pilon, 1999: 43-53, 64). Late Archaic sites have also been identified to the west in the Rideau Lakes and the east at Jessup Falls and Pendleton along the South Nation River (Daechsel, 1980).

The Woodland Period (ca. 3,000 to 400 BP) is distinguished by the introduction of ceramics. Early Woodland groups continued to live as hunters, gatherers and fishers in much the same way as earlier populations had done. They also shared an elaborate burial ceremonialism evidenced by the inclusion of exotic artifacts within graves (Spence et. al., 1990: 129). Extensive trade networks continued through the early part of this period and Early Woodland populations in Ontario appear to have been heavily influenced by groups to the south, particularly the Adena people of the Ohio Valley. By 1,700 BP, the trade networks had reached their peak and covered much of North America.

A greater number of known sites from the Middle Woodland Period (ca. 2,400 to 1,100 BP) have allowed archaeologists to develop a better picture of the seasonal round followed in order to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland 'family' hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in