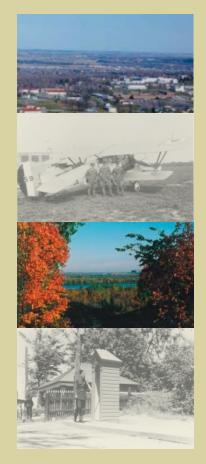


FORMER CFB ROCKCLIFFE Existing Conditions Summary Report





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1. INTRODUCTION

Above and Below: Historic Photos of CFB Rockcliffe





The former CFB Rockcliffe site (hereinafter called Rockcliffe), has a memorable history of service to the Canadian public. Rockcliffe was originally established by the Department of Defence in 1898 and at its peak totaled more that 800 acres (326 ha) in size. Over the years, the Base provided a wide assortment of military support operations notably aerial photography - and housing for military personnel. However, by 1984 the Department of National Defence (DND) had indicated that their operational facilities were to be vacated within one year. The residential component of the air base was to be retained for the following five to ten years.

Since 1984, large portions of the site have been transferred from DND to other federal departments and agencies. The remaining property currently owned by DND totals approximately 330 acres (134 ha). In the mid-1990's, Rockcliffe was identified as a potential major land disposal candidate for transfer to the Canada Lands Company Limited (CLC). In 1999 CLC commissioned an Existing Conditions analysis to assist in assessing the values and conditions on which the lands can ultimately be transferred. The report also identified broad opportunities and constraints associated with redevelopment as well as major upgrading that could be required and the broad costs associated with these activities.

This report summarizes and updates the Existing Conditions Report of May 1999 to reflect changes that have occurred since that time.

2. THE SITE CONTEXT

Ottawa is a city with a distinct role. As Canada's capital, Ottawa houses many of the offices of the federal government and its departments and is home to many national and international agencies. The city hosts visitors from across the country and abroad, and is the setting for many national cultural festivals throughout the year.

At the same time, Ottawa is part of a region not unlike many others in Canada, offering a variety of urban facilities and services to residents and visitors. Like other cities, Ottawa depends on, and benefits from, private sector growth and activity. In particular, Ottawa derives strength from its high technology and tourism sectors which continue to increase in relative importance to the local economy.

As shown in Figure 1, Rockcliffe is centrally-located within the context of the entire city. The site enjoys a prominent location with views of Parliament Hill and commanding panoramas of the Ottawa River and the Gatineau Hills beyond. The local context of the site is illustrated in Figure 2. On the north, the site is bordered by the Rockcliffe Parkway, a two-lane, limited access, scenic transportation corridor that is owned by the National Capital Commission (NCC). The parkway runs from Sussex Drive at Rideau Hall to St. Joseph Boulevard in the east and is used by local residents to meet day-to-day transportation needs, as well as by visiting tourists. The recreational pathways which run alongside it provide scenic opportunities for cyclists, as well as pedestrians. Beyond the Parkway, adjacent to the Ottawa River, is the Canada Aviation Museum.

Another NCC parkway defines the western boundary of the property. The Aviation Parkway is also a limited-access scenic roadway extending south from Rockcliffe Parkway to an interchange with Highway 417 (eastbound only).

To a large extent, Rockcliffe is surrounded by residential communities: Rothwell Heights to the east, Fairhaven and Thorncliffe Village to the south and the Village of Rockcliffe Park and the Manor Park neighbourhood to the west. These five communities present a range of populations and lifestyles from exclusively high-end single-family dwellings to more diverse neighbourhoods with a broad mix of housing types.

Abutting Rockcliffe on the east, is the main campus and headquarters of the National Research Council (NRC). The campus is approximately 380 acres (154 ha) in size and extends from the Rockcliffe Parkway, south to Ogilvie Road. While there is a roadway connection between Rockcliffe and the NRC campus, the campus is essentially a secure site.

Québec Rockland Constance Bay Fitzroy Harbour Dunrobin Arnprior Navan Carlsbad Springs
Vars OTTAWA Kinburn Carp Limoges Embrun Russell Metcalfe Manotick Almonte Stittsville Richmond Carleton Place Munster Kars Osgoode North Gower Winchester Kemptville Burritts Rapids 3

Figure 1 - Regional Context

Figure 2 - Surrounding Land Uses



Montfort Hospital, a French-language healthcare facility is located at the northeast corner of Montreal Road and the Aviation Parkway, and west of the Fairhaven community. Lands to the north of the hospital, abutting Rockcliffe, are known as the Montfort Woods. These woods are considered environmentally sensitive and have been acquired by the NCC for protection as public open space. On the south side of Montreal Road, opposite the Hospital, is the National Office of the Canada Mortgage and Housing Corporation (CMHC) and La Cité Collegiale, a French-language applied arts and technology col-



Above: View from Codd's Road looking into the site.

lege. Both facilities have access to Montreal Road and to the Aviation Parkway.

There are currently three (3) access points into Rockcliffe. Codd's Road extends north to the site from Montreal Road. From the west, access is from Hemlock Road, a two-lane road which links with St. Laurent Boulevard and interchanges with the Aviation Parkway. The third access point, via Douglas Street through the National Research Council campus to the east, is only open during business hours. Former access points along the north escarpment of the site have been closed. However, a new access point is potentially available at the south-east corner of the Base, via Burma Road to Montreal Road.





Above: Existing residential housing at Rockcliffe.

3. EXISTING SITE DEVELOPMENT

Over the years, as air operations were terminated and the site was declared surplus, DND operations at Rockcliffe have been reduced and several buildings have been demolished. Some, or all, of the foundations of these former buildings may have been left in place and will have to be removed as part of the site preparation for redevelopment. Four (4) operational and support buildings remain on the site. Details and locations of these buildings are illustrated in Figure 3.

A limited number of outdoor recreational facilities exist on the site, including baseball diamonds and playground facilities. DND also has a license with a private golf driving range at the north end of the site.

The road pattern at Rockcliffe consists of a few main roads (Via Venus, Codd's Road, Hemlock Road, Burma Road) from which extend several narrow, winding residential streets. None of the roadways comply with current municipal standards and all are in need of repair. Several roads at the north end of the site have been abandoned as non-residential buildings have been removed.

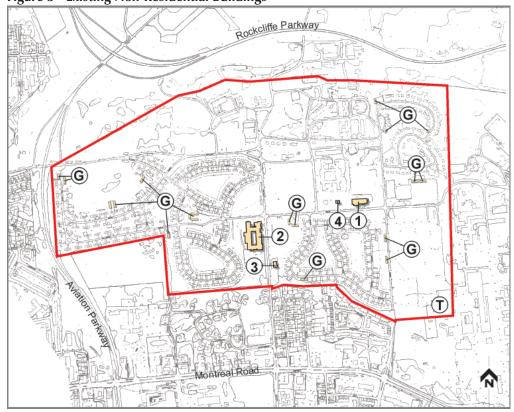
3.1 CFHA PHASE OUT PLAN

During the period following the Second World War housing units were built at Rockcliffe to accommodate the short-term housing needs of returning military personnel. The residential buildings, known as private married quarters (PMQs), were a mix of single-detached and semi-detached units of modest building design.

Housing has remained an important function at Rockcliffe and continues to be home to a significant military community. In 1999, there were 599 residential dwelling units in 469 buildings on the site with a total population of 1,510. Since then, however, Canadian Forces Housing Agency (CFHA) has undertaken an assessment of military housing needs in the National Capital Region and DND has initiated a phase out strategy to gradually transfer the military housing requirements out of the site. The status of the residential component of the site is as follows:

- Currently 469 residential units on the site, 143 of which are rented and 326 are vacant;
- DND employees will rent a declining percentage of these units over the next five years, and leave the site entirely after year 5;
- Units not rented to DND employees will be rented to private market or demolished by CLC;
- DND tenants will lease directly from CLC or its agent;
- DND will pay a nominal rent of \$1.00 for space in Building 164, and assume the cost of all building operations, maintenance, repairs and taxes a full triple net lease basis.

Figure 3 - Existing Non-Residential Buildings



- 1 Building 151 (vacant industrial)
- 2 Building 164 (Offices and community facilities)
- 3 Building 167 (National Archives)
- 4 Building 200 (Credit Union Building)
- G Garage
- T Outdoor Trailer Storage

4. PLANNING CONTEXT

4.1 FEDERAL LAND USE JURISDICTION

The National Capital Commission (NCC) is the federal agency with the primary responsibility for overseeing the development and use of federal lands within the National Capital Region. In fulfilling this mandate, the NCC reviews and approves development proposals for all federal lands and maintains certain approval authority (i.e. Federal Land Use Approval) for development on lands adjacent to important federal sites and routes throughout the Capital.

In April 1999, the NCC approved the Plan for Canada's Capital replacing the 1988 Federal Land Use Plan. The new Plan is based on several fundamental planning principles including:

- Sustainable Development recognizing the links between the economy, the
 community and the natural world and to present needs without compromising
 the ability of future generations to meet their own needs;
- Capital Planning Principles as they relate to the image of the Capital and the ability of Canadians to access and appreciate the national historical treasures and symbols which make up the Capital;
- Regional Planning Principles recognizing partnerships with municipal planning agencies, as well as broader planning considerations such as the quality of life in the Capital, the efficient use and re-use of federal investments.

The Plan recognizes that certain federal lands will become surplus and available for redevelopment as the federal government rationalizes its need for accommodations. Redevelopment of surplus lands or buildings is to be done in a manner that meets federal government needs and also complements municipal government objectives, such as urban intensification, mixed land uses and regional economic development.

The Plan for Canada's Capital designates Rockcliffe for Residential uses reflecting the fact that the site has been declared surplus and all military functions of the site are to be terminated. The Plan does not include policies for residential lands. Rather, these uses are to be regulated through the municipal Official Plan. The NCC will, however, continue to be interested in the nature of the redevelopment proposed for Rockcliffe, particularly in terms of the relationship of the development to the remaining federal lands and linkages surrounding the site.

4.2 MUNICIPAL POLICY & REGULATORY FRAMEWORK

City of Ottawa Official Plan

The new City of Ottawa Official Plan was approved by the Minister (with modifications) in November 2003. Although 85 appeals were filed on the new OP, many of these have been resolved or withdrawn by appellants. The outstanding appeals are under discussions between the appellants and City Staff or are being dealt with by the Ontario Municipal Board.

With respect to Rockcliffe the new Official Plan designates the entire site as Developing Community, as shown in Figure 4. This is a new land use designation aimed specifically at those sites that are substantially underdeveloped and will undergo comprehensive redevelopment in the future. Rockcliffe is the only Developing Community site located inside the Greenbelt. The other Developing Community sites are situated at the fringes of the urban area outside the Greenbelt.

The Plan anticipates that Developing Communities will provide a mix of housing types, a balance between jobs and housing, and a range and density of land uses, so as to create balanced, sustainable and transit-oriented communities from the outset. Furthermore, the development pattern should prioritize walking, cycling and transit over the automobile.

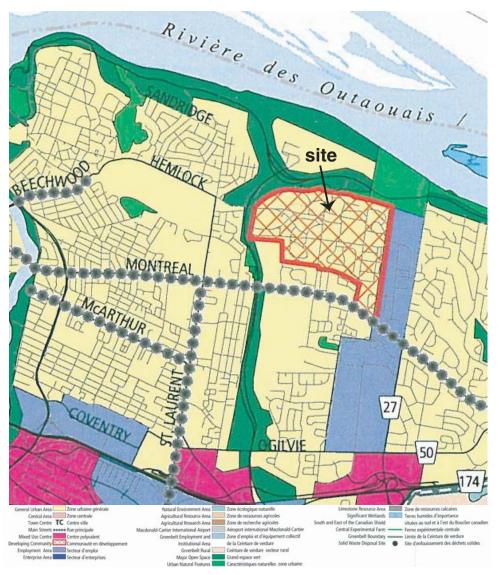
The Official Plan policies for Developing Communities specifically require a mix of residential dwellings that includes no more than 60% of units being single-detached and semi-detached, and at least 40% multiple dwellings, of which at least 10% are apartments [Policy 3.6.4(a)]. In terms of density, it is expected that residential densities for Developing Communities inside the Greenbelt will be "similar to those found in residential areas adjacent to the Central Area, commensurate with the greater proportion of multiple dwellings to be located in these areas." [Policy 3.6.4(b)].

The Plan also requires a mix of land uses within Developing Communities that contributes to achieving a balance of jobs and households that is identified for the larger area. It is projected that by 2021 there will be a total of 283,000 households and 514,000 jobs inside the Greenbelt. [Figure 2.2]

The Developing Communities policies also address urban design objectives dealing with matters such as establishing a modified grid road network, providing strong street edges through setbacks, creating variety within communities through an assortment of materials, different building designs, variations in lotting arrangements and the dispersion of housing types throughout the site.

Development in all Developing Communities will proceed by way of a Community Design Plan (CDP), which is essentially a secondary planning exercise that establishes the details of the proposed development as they relate to the mix and location of land uses, densities, open space networks, site amenities, site access, etcetera. As well, the CDP will establish guidelines for evaluating specific development applications and for making changes to the plan.

Figure 4 - City of Ottawa Official Plan



Other policies in the Official Plan that could impact development at Rockcliffe include the following:

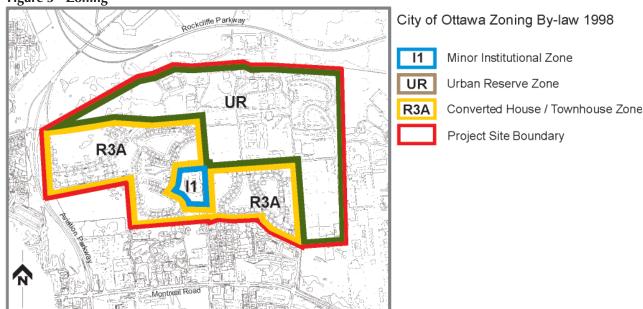
 Schedule D identifies Montreal Road (immediately south of Rockcliffe) as a Transit Priority Corridor. Future rapid transit is planned for this corridor although the alignment is still to be defined;

- Policy 2.5.2.2 of the Plan (as amended by OPA 10, under appeal) states that the
 City will "encourage and promote the production of affordable housing in new
 residential development and redevelopment to meet an annual target of:
 - 25% of all new rental housing is to be affordable to households up to the 30th income percentile, and
 - 25% of all new ownership housing is to be affordable to households up to the 40th income percentile.
- The Official Plan has identified a target for total public greenspace in large urban areas of 4.0 hectares per 1000 population or approximately 16-20% of gross land area. [Section 2.4.5(7)] These lands would include stormwater ponds, pathways, school grounds, etc. With respect to parks and leisure areas specifically, the OP targets a minimum of 2.0 hectares per 1000 population (or 8-10% of developable area) in Developing Communities. [Section 2.5.4(3)] This would include dedicated parkland, as well as parks owned by the City and other public agencies. In terms of design, all homes are to be located within 400 metres of a greenspace.

City of Ottawa Zoning By-law 1998

The City of Ottawa is currently preparing a new comprehensive Zoning By-law for the entire City, which will harmonize the 36 existing by-laws of the former municipalities. In the meantime, the former City of Ottawa Zoning By-law 1998 remains in effect for Rockcliffe. Zoning By-law 1998 zones approximately half of the site as Urban Reserve (a development zone) and the remaining half as R3A (medium density residential), as shown in Figure 5. The southwest corner of Via Venus and Codd's Road is zoned I1 (Minor Institutional) in recognition of the former school use and the continuing community uses at that location.

Figure 5 - Zoning



The Urban Reserve zone is considered a temporary zoning, acknowledging that secondary planning is required to define the range and distribution of land uses for the lands. It is expected, therefore, that new zoning will be defined for the entire site once a Community Design Plan has been approved for the site.

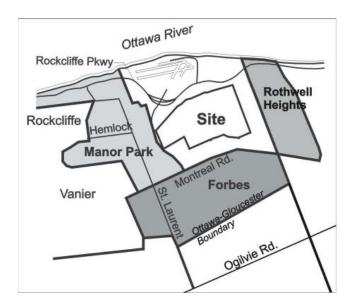
4.3 DEMOGRAPHICS AND HOUSING MARKET

Historical

The National Capital Region (NCR) is a growing region with an average annual population increase of approximately 16,600 in the next 20 years. Including the surrounding area, the population growth is about 20,600 annually. The residents of the NCR have the highest level of education in Canada (36% have university education or degrees), are among the top three in household income (about one quarter had incomes exceeding \$100,000 in 2001), and are socio-culturally, very diverse: about half of the residents are anglophones, close to one-third are francophones, and almost one in five have other mother tongues (with the top three being Arabic, Chinese, and Italian). The socio-demographic and income characteristics of the NCR residents are virtually identical to those of the residents of Bois Franc, which is a successful and growing new urbanism community in Montreal.

The NCR will be needing an average of 5,900 additional housing units annually over the next 20 years. Including the surrounding area, demand for additional housing is in the range of 8,000 per year. Therefore, in terms of the magnitude of demand for additional housing in the NCR, the diversity of its residents and thus their potential receptivity to new housing, we expect a strong support for the development of a new urbanism community on the Rockcliffe site.

Figure 6 -Census Tract Areas



The Inner East area of the Ottawa Region, where the subject site is located, is thus a growing area, with a diverse economic base, within the large, highly affluent, educated, and multicultural Capital Region. These are in turn, characteristics which are highly supportive of the concept of a new urbanism community, based on the research carried out by CLC (i.e., focus group sessions, telephone survey and review of five new urbanism communities).

Housing Demand and Competition

The NCR is subject to housing cycles and trends, like any other region, but less so, due to the relative stability of its economy, compared to other regions in Canada. Since about 1997, the NCR has been experiencing a strong housing cycle. The number of starts increased substantially, reaching its peak in 2002 (7,796 units), with strong performances in 2003 (6,381 units) and 2004 (7,243 units).

While still quite strong, 2005 has seen a slowdown in the NCR's housing market (approximately 32% lower starts than 2004). This trend is expected to last for another two to three years. In view of the expected population and employment growth, a new upward cycle in housing demand and development is expected in late 2007 or early 2008;

In the last 5 to 10 years, the NCR's housing market has become far more diversified and innovative. In terms of location, community features, unit type, design, architecture, materials and innovation in general, demand is further expanding. Rockcliffe has numerous locational advantages, is unique, large, and within the Greenbelt. These advantages make it ideal for a new urbanism community, which would be the most innovative within the NCR.

In each of the next 10-20 years, the NCR will need at least 5,900 additional housing units. A new urbanism community with approximately 5,000 units would thus provide for less than a single year's housing need.

Existing and future developments that will compete for the future Rockcliffe market include CLC's Forintek site, the NCC's LeBreton Flats redevelopment and Richcraft's Place des Gouverneurs.

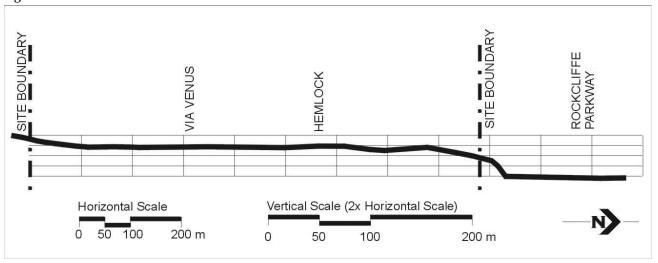
It is therefore, concluded that the NCR is affluent, expected to grow at robust rates of population and employment over the period 2004-2021, and thus generate demand for well over 100,000 additional dwelling units. The recommended new urbanism community on the Rockcliffe site would make up only 3.5% to a maximum of 5.2% of the total demand for housing for the period to 2021. For a large, new, innovative, and well promoted community, we believe that a market share of about 5% is quite reasonable.

5. ENVIRONMENTAL CONDITIONS

5.1 SITE TOPOGRAPHY AND VISUAL SETTING

Rockcliffe sits on a plateau overlooking the Ottawa River and Gatineau Hills. There is very little change in elevation across the site, however, the southern portion of the site sits at a slightly higher elevation as illustrated in Figure 7. The first escarpment extending along the northern boundary of the site drops approximately 30-35 metres down to the Rockcliffe Parkway. This escarpment offers spectacular, panoramic views of the Ottawa River, Kettle Island and as far as the CBC tower at Camp Fortune in the Gatineau Hills. The second escarpment, along the southern boundary of the site, insulates the site from commercial development on Montreal Road and provides a dramatic entrance view from Codd's Road.

Figure 7 - Cross Section of Rockcliffe



5.2 VEGETATION AND WILDLIFE COMMUNITIES OF THE SITE

Flora

The City of Ottawa's Urban Natural Areas Study, undertaken in 2005, identified two important natural areas adjacent to Rockcliffe: the NRC Woods which touch the north edge of Rockcliffe and the Montfort Woods located south and west of the site. The City of Ottawa will be further analysing these two areas through its Greenspace Master Plan.

Within the Rockcliffe site, CLC carried out a vegetation survey in the summer of 2004. The study evaluated existing vegetation from the perspective of both an arborist and landscape architect.

The results of that work are the identification of three large landscape zones of importance from a landscape architecture and design perspective, as well as the identification of 17 important tree groups and woodlots and 76 individual trees of importance, as illustrated in Figures 8 & 9. This information will be included and analyzed as part of the initial site analysis as a first step in the Community Design Plan process.

FAUNA

Fauna inventories undertaken by Niblett Environmental Associates Inc. (1999) and Jacques Whitford (2001) detected a total of 44 bird species during the 2000 breeding period. None of the species are considered rare, threatened or endangered from a federal, provincial or regional perspective. Thirty (30) species were detected during the fall migration and a total of 11 species were observed during the winter. Although Great Horned Owls and hawks were observed, no evidence of nest sites for raptors was noted in or around the site. Furthermore, winter surveys did not reveal the presence of any sizeable stick nests typically used by raptors such as Great Horned Owls. The presence of migratory species detected during spring and fall surveys and not during the breeding period indicates that the habitats in and around Rockcliffe may be used as a migratory stopover point as species move through the urban landscape.

In terms of reptiles, the literature indicates that few reptile and amphibian species are found on the Rockcliffe site and the site surveys generally confirmed this. As a result, the herpetofauna of the Rockcliffe area is considered to be of low diversity. Similarly, the mammal survey found a typical urban mammal community with no rare, threatened or endangered species.









Top: View from the site looking towards the Gatineau Hills.

Second: View across the site towards Aviation Parkway and the Gatineau Hills.

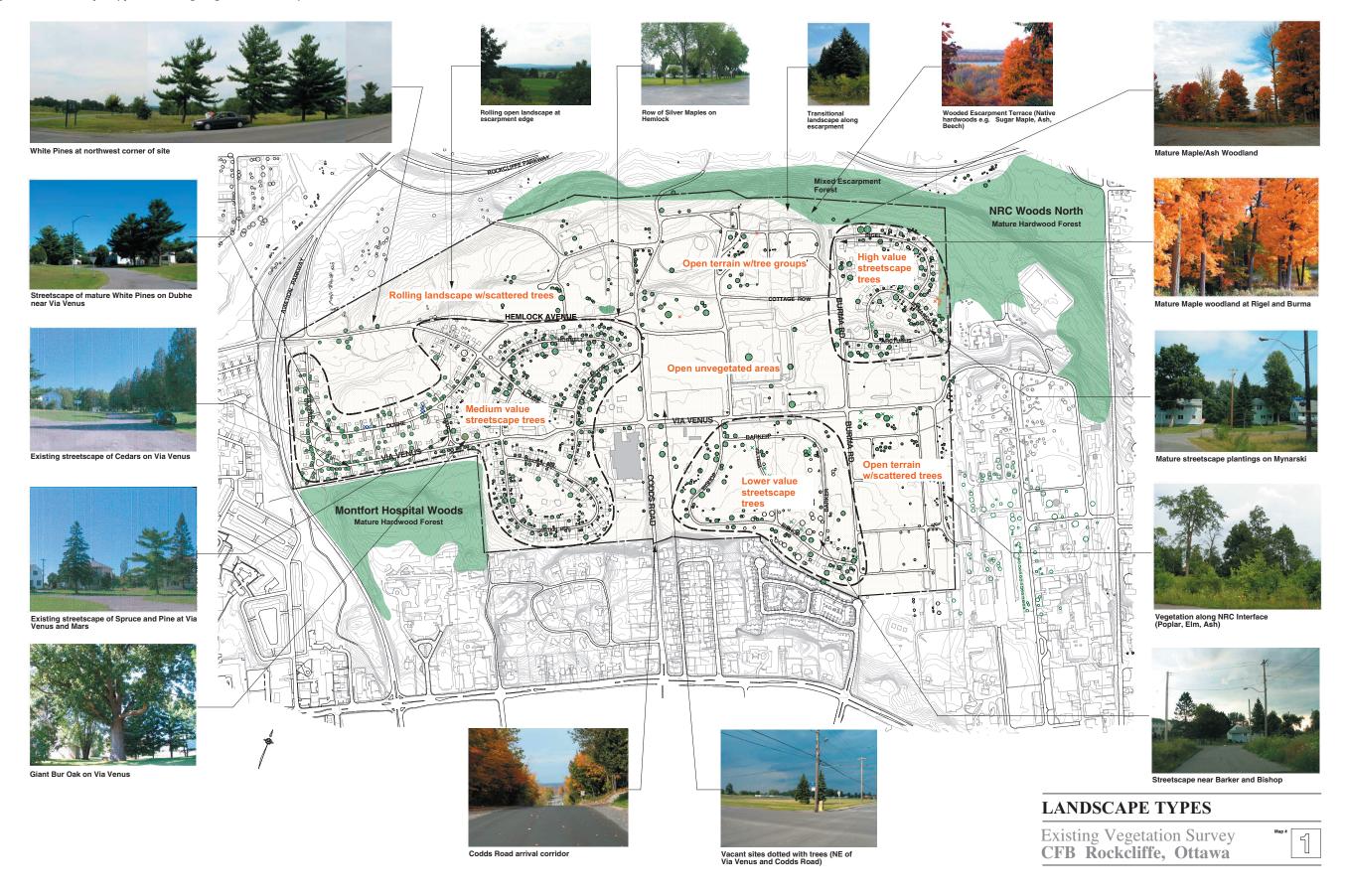
Third: View across the site showing Base housing and Montreal Road in the background.

Bottom: View across the site.

Figure 8 - Evaluation Categories: Existing Vegetation Survey



Figure 9 - Landscape Types: Existing Vegetation Survey



5.2 GEOTECHNICAL ASSESSMENT

McRostie Genest St-Louis, consulting engineers, assessed the geotechnical conditions at Rockcliffe. The generalized sub-surface conditions for the site (shown on Figure 10) are described as follows:

- the southerly half of the site is underlain by clay which is in turn underlain by glacial till. This glacial till veneers the bedrock. The clay soil overburden varies in thickness generally ranging from three (3) metres to more than five (5) metres;
- the northwesterly portion of the site is underlain by a relatively deep compressible clay deposit probably extending to depths of fifteen (15) metres;
- the clay gets thinner in the northerly portion of the site with some areas where clay is not present and where the overburden consists entirely of glacial till;
 and
- approximately 18% of the site has shallow soils (less than 2 metres to bedrock) appearing mainly in the north central portion of the site and in the central easterly portion of the site. These areas have been delineated based on borehole and test pitting.

Four (4) geotechnical issues that should be considered in the redevelopment of Rockcliffe include:

- the presence of shallow bedrock found over at least 18% of the site which will add to the cost of new infrastructure;
- the deep clay soils located in the far western portion of the site which do not present a problem for low-rise residential, commercial or institutional buildings but will impact on the type of foundation required for high-rise structures;
- flattening of the clay slope that is required on the western portion of the site in order to provide adequate engineering levels of safety for construction; and
- site remediation that will be required to remove former building foundations (where necessary) and to remove and replace unselected fill for proper support of any slab on grade floor.

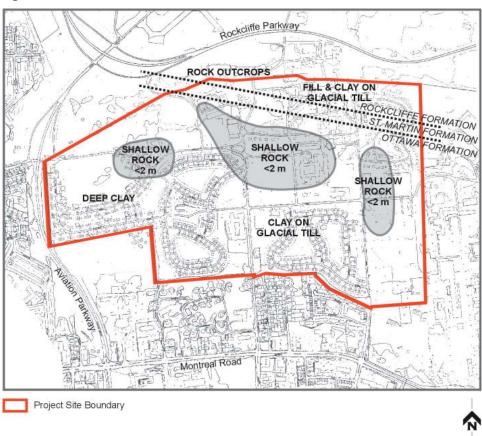


Figure 10 - Generalized Sub-surface Conditions

5.3 SITE REMEDIATION

A number of environmental studies have been carried out at Rockcliffe during the past decade. In the summer of 2004, these were reviewed, gaps and uncertainties identified and an extensive investigation program, featuring boreholes and test pits, was carried out. At the same time, a thorough analysis of the underground steam line network was completed. As a result approximately 14 specific sites were identified as requiring further remediation, as was 5.5 km. of underground steam lines. This work is being planned now and upon completion, CLC will submit three Records of Site Condition (RSC), covering the entire site, to the Ontario Ministry of the Environment. The sites will be remediated to a residential standard.

6. HERITAGE ISSUES

6.1 PREHISTORIC SITE POTENTIAL

In 1999, Archaeological Services Inc. conducted a Stage 1 Archaeological Assessment of the Rockcliffe site. Their assessment noted that the Ottawa River was one of Ontario's major transportation corridors throughout history. Although Rockcliffe is approximately one kilometre south of the river's edge, it occupies a commanding position overlooking the river. This may have been attractive to aboriginal peoples, however, to date no archaeological sites have been registered on, or in the vicinity of, Rockcliffe. Given the current understanding of prehistoric site densities in the Ottawa region, the probability of encountering such a site within Rockcliffe is considered relatively low. While the prehistoric site potential of the site is considered only moderate overall, the area with the greatest likelihood for archaeological potential, is within 200 metres of the small, historic streams that originally drained the upland and within 200 metres of the upland perimeter, as shown on Figure 11. Beyond this the prehistoric site potential is considered low.

6.2 SETTLEMENT HISTORY

Originally, settlement was slow in this area until the construction of the Rideau Canal in 1832 and the establishment of Montreal Road as a major transportation route. The original Crown patents for the lots which form Rockcliffe were awarded between 1802 and 1846. The Honourable William Dummer Powell, who was the Chief Justice of Upper Canada between 1815 and 1825, was the first owner of Lot 22, the most easterly portion of the site. Lot 23, in the central portion of the site, was first awarded to Richard Wrag in 1802 but was sold to Jean Bareille in 1844. M. Bareille erected a stone cottage constructed from locally quarried limestone. Remarkably, this stone cottage stood on the site until 1993 when it was demolished, having served as the base officers' mess for nearly 70 years.

By 1879 there were five (5) domestic structures located within the study area. Three of the five structures were clustered along the open road allowance known as Lang's Road which extended north of Montreal Road to the Ottawa River. Beginning in 1898, the Crown expropriated the lands adjacent to the Ottawa River for the establishment of a rifle range. In 1920, the Ministry of National Defence Air Board approved redevelopment of the rifle range as an aerodrome and experimental







Above: Historic photos of CFB Rockcliffe.

photography station. The land holdings at that time were approximately 453 acres. An additional 22 acres were expropriated in 1928 and in 1935, the Privy Council approved acquisition of an additional 485 acres. Soon after, the first married quarters were constructed with six cottage-style homes built near the brow of the escarpment along Cottage Row. These were followed, after World War 2, with the single family PMQ residences which still exist on the site.

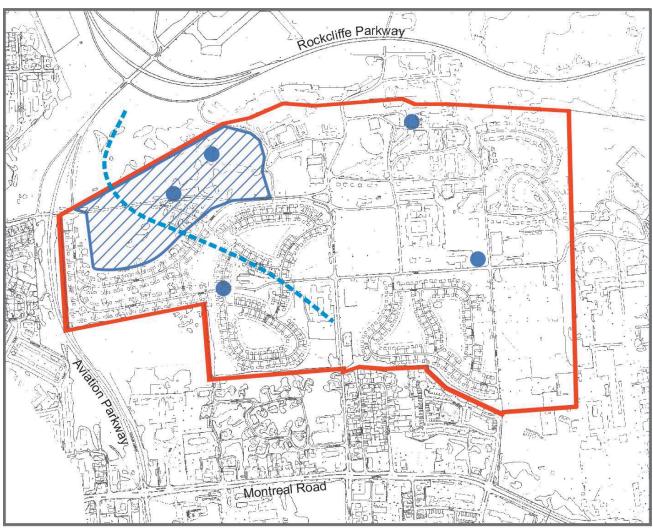
Despite the fact that the archaeological integrity of the site has been severely compromised by military development during and after World War II, there remains a high degree of potential for finding nineteenth century deposits in the vicinity of the five original farmsteads. Archaeological monitoring should occur around these buildings as site development occurs.

6.3 BUILT HERITAGE

The Federal Heritage Buildings Review Office (FHBRO) is the inter-departmental advisory body within Canadian Heritage / Parks Canada, which is charged with the responsibility of identifying and evaluating heritage buildings owned by the federal government. FHBRO had designated Building 155 at Rockcliffe as a "Recognized Heritage Building". However, no interest from either the federal or local governments was expressed and the building was demolished by DND.

It is clear, however, that there is an interest at both the federal and municipal levels of government, as well as with members of the public, that the history of the former Base be commemorated and that the memory of its past be preserved in any new development on the site.

Figure 11 - Archaeological Resource Potential



Project Site Boundary

Area of Archaeological Potential

Historic Farmsteads

Historic Watercourse (approximate)

7. SERVICING CONDITIONS

7.1 MUNICIPAL SERVICES

One of the main factors affecting the redevelopment of Rockcliffe is the ability to service the site for new and more intensive uses. Investigations undertaken by J.L. Richards & Associates Limited regarding the capacity of existing services to accommodate the redevelopment of the site concluded the following:

Sanitary

- The Ottawa Outfall Collector Sanitary Sewer which traverses the site has sufficient sanitary capacity for redevelopment and the three junction points into this sewer offer opportunities to phase redevelopment;
- For the purposes of undertaking the servicing analysis, three development scenarios were considered: low, medium and high densities with 2600, 4000 and 6100 residential units respectively
- As part of the Alvin Heights Pull-back Sewer Environmental Study Report, the City
 made certain assumptions with respect to the future redevelopment of Rockcliffe
 and the associated sanitary requirements;
- The sanitary flows associated with the low and medium development scenarios
 are well within those assumed by the City in the Alvin Heights ESR and, as a result,
 could be accommodated. The high scenario would exceed the projected sanitary
 requirements anticipated for Rockcliffe and would require further discussions with
 the City to determine how this excess could be accommodated;
- The existing sewer system at Rockcliffe is either combined or in places partially separated. The combined sanitary and stormwater sewer have a significant impact on the capacity of the collector sewer and separation will, therefore, be required.
 Otherwise redevelopment potential will be severely limited.

Stormwater

A stormwater management plan will be required for the redevelopment of the site
to control stormwater run-off. The Ottawa River in this area has been designated as
Level 1 fish habitat. As required by the MOE, the protection of this habitat would
require a stormwater quality facility (pond) to be constructed in the first phase of
development. This pond will likely be located off-site on adjacent NCC lands.

Water

- The existing water distribution system within the site is owned by DND and is reported to be old and leaking. A new water distribution system will be required as the site is redeveloped;
- The site is currently served by a 300mm watermain from the pump station at Montreal Road and Burma. There are other watermains adjacent to the perimeter of

- the site but these are not interconnected with the site's distribution system;
- The City is considering off-site improvements to the water system. The improvements that are being contemplated could likely accommodate the low and medium development scenarios. However, it appears that the high development scenario would require upgrades to the off-site watermains both upstream and down and, possibly an elevated storage tank.

Other Services

- Other services such as hydro, telephone and cable will require replacement to support new development;
- Gas service is currently available and could service the low and medium scenarios.
 However, a high density scenario would require the reinforcement of their plant in the area with the construction of a new gas line along Hemlock from St. Laurent

7.2 TRANSPORTATION NETWORK

A transportation assessment of the site undertaken by Delcan Corporation in 1999 and updated in 2002. The following key development considerations were identified:

- All existing on-site roads are generally in poor repair and will require substantial reconstruction (in terms of road width, curbs, sidewalks, lighting and drainage) prior to becoming municipal streets;
- All major signalized intersections adjacent to the study area currently operate at acceptable Levels of Service (LoS B or better). The volume to capacity ratios for the intersections indicate that there is surplus capacity in their current geometric state to accommodate additional traffic;
- No major road improvements are planned in the vicinity of the site;
- New Ottawa River Inter-Provincial Bridge crossings have been under consideration for several years. The three eastern bridge options are shown on Figure 12. While a specific crossing has not been selected, the Aviation Parkway/Kettle Island crossing remains a candidate. This option identified a four-lane cross-section for the Aviation Parkway, with a completely redesigned interchange with Hemlock Road. These changes would facilitate redevelopment of Rockcliffe Landing.

Subsequent to the Delcan analysis, the City of Ottawa adopted in September 2003 a Transportation Master Plan (TMP) to accompany the City's new Official Plan. The TMP sets out transportation objectives and strategies to the year 2021 to complement the City's overall growth management strategies. Most significantly, the TMP identifies Montreal Road as a Future Light Rail Transit (LRT) route.

For the purposes of undertaking a traffic impact analysis, Delcan considered three development scenarios: low, medium and high densities with 2600, 4000 and 6100 residential units respectively.

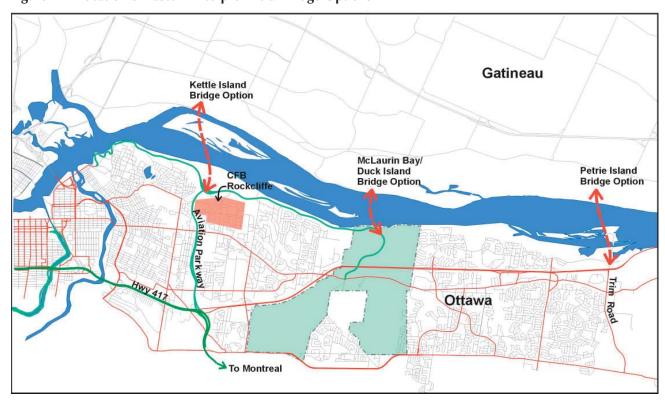


Figure 12 - Location of Eastern Interprovincial Bridge Options

Their analysis -- using 2001 City of Ottawa traffic counts -- concluded the following:

- There is spare capacity in the study area's existing transportation network to accommodate development. The capacity analysis indicates that the traffic projections associated with both the lower and medium densities can be reasonably accommodated by the existing off-site infrastructure and can be serviced internally by a network of two-lane collector roads. The higher density scenario is projected to place an undesirable strain on the arterial road network, Montreal Road in particular, and also triggers the need for four travel lanes on Hemlock Road and Codd's Road within the site.
- Three access connections to the arterial road network are most desirable from mobility and capacity perspectives. The three most desirable connections include Hemlock Road (existing), Codd's Road (existing) and Burma Road (proposed). This combination of site access connections provides an opportunity for equitable dispersal of site traffic given the assumed traffic distribution without unduly loading any one particular connection. Given the imbalance of site traffic demand to and from locations to the west and south of the site (over 90%), the fourth site connection to Blair Road would not likely be fully utilized unless capacity constraint issues were to develop at the other three site connections.
- The extent to which widening of Hemlock Road could be completed in the vicinity
 of the Aviation Parkway requires further investigation. Previous assessments indicated
 that the widening of Hemlock to an 11 m pavement width would possibly require
 bridge modifications at the Aviation Parkway overpass. It is unlikely that a four-lane

cross-section could be carried through this section of Hemlock Road (required for the higher density scenario).

Given that it is now 2005 and there has likely been growth in background traffic on study area roads due to continued suburban growth and residential infill, the amount of spare road network capacity will need to be revisited. It is also noteworthy that the Montfort Hospital is undergoing expansion, including a new driveway connection to the Aviation Parkway, which will result in a doubling of its size and the associated increase in site traffic generation.

8. DEVELOPMENT CONSIDERATIONS

8.1 STAKEHOLDERS

There are a number of key stakeholders with an interest in the planning, decision-making, and design process for the redevelopment of Rockcliffe. These include elected officials, federal departments and agencies, the municipal government, and community groups. All of the stakeholders will be involved, in various capacities, as the development plan for the lands is designed and implemented. Stakeholders include:

Elected Officials

- John Godfrey, Minister of State, Infrastructure and Communities
- <u>Mauril Bélanger M.P.</u>, is the local Member of Parliament, Associate Minister of National Defence, and is also a resident of the Fairhaven Community, immediately abutting Rockcliffe
- <u>Madelaine Meilleur, M.P.P.</u> is the current Member of Provincial Parliament for the Ottawa-Vanier riding and Minister of Culture and Minister of Francophone Affairs
- <u>Jacques Legendre</u>, is the City of Ottawa Councillor for Rideau-Rockcliffe Ward and a member of the City's Transportation Committee, the Transit Services Committee, the Planning and Environment Committee and the Police Services Board.

Federal Agencies

- <u>Department of National Defence (DND)</u>, is the custodian department and continues to use facilities and buildings on Rockcliffe for operational purposes.
- <u>Canadian Forces Housing Agency (CFHA)</u>, is the agency within DND responsible for the management of military housing at Rockcliffe.
- <u>Treasury Board Secretariat (TBS)</u> provides leadership and co-ordination in ensuring
 that surplus real property is disposed of in a manner consistent with the policy. They
 will assist the custodians in establishing the conditions upon which the transfer will
 occur, taking into account all stated federal interests.
- <u>National Research Council (NRC)</u> owns the lands immediately east of Rockcliffe.
 They have indicated a desire to ensure that development adjacent to their existing

- campus is compatible with their operations.
- <u>National Capital Commission (NCC)</u> is the Federal government's approval authority for land use, disposal and design of federal projects in the National Capital Region. They also own the lands north and west of Rockcliffe, along the Rockcliffe and Aviation Parkways.
- <u>The Canada Aviation Museum</u> is an adjacent landowner and has extensive historical resources which can be utilized in the development of the marketing and legacy theme for Rockcliffe.

Municipal Agencies

- <u>City of Ottawa</u> will be involved in the development approval process for Rockcliffe
 and will be encouraging development which fulfills the municipal objectives for
 more intensive development, transit use and the new municipal growth strategies.
 They will be expecting a full, public and participatory planning process as plans for
 Rockcliffe are developed.
- The City's police, fire and transit departments will also be involved in the planning and delivery of services for Rockcliffe.

Community and Interest Groups

- <u>DND Occupants and Employees</u> will be interested in the timing and implications of redevelopment plans.
- <u>The Rockcliffe Flying Club</u> will involved with development approvals to ensure their operations are considered in the redevelopment plan.
- Neighbouring Community Associations are interested in the process and plans for redevelopment. The issues which they have identified to date include:
 - preservation of sight lines to the Ottawa River,
 - protection of environmentally sensitive areas,
 - protection of Montfort Woods,
 - creation of parklands and recreation pathways,
 - impacts of redevelopment on traffic and transportation, and
 - proposed residential densities.

8.2 DEVELOPMENT ISSUES

As outlined below, a number of competing pressures and outstanding issues will influence the redevelopment opportunities for Rockcliffe.

Museums

In November 1998, the Federal Government announced a commitment to providing land for the relocation of the Canadian War Museum and, for a period of time, lands at Rockcliffe were assigned to this use. The new War Museum has been constructed on LeBreton Flats in the core of the City. Rockcliffe remains, however, a candidate for

the new home of a federal museum and 25 acres (10 ha.) in the northwest corner of the site will remain committed for a future federal cultural institution and under NCC ownership.

National Research Council

There have been discussions regarding the use of a portion of the Rockcliffe site for research and business employment uses to complement the functions and needs of the neighbouring 380-acre (154-hectare) NRC campus. The extent to which these uses will be incorporated into the plan of development for Rockcliffe will be determined through the planning consultation process. The NRC has requested a transition area adjacent to their existing campus in order to minimize the impact of their facilities on any new development at Rockcliffe.

National Archives Building

Public Works and Government Services Canada (PWGSC) is the custodian of Building 167 which is currently used by National Archives. DND is working with PWGSC and National Archives to find alternative off-site accommodations for this facility.

Affordable Housing and Homelessness

In July 2000, DND offered the use of 50 vacant houses to the City to temporarily bridge the serious housing shortage that Ottawa was experiencing. This arrangement was for one year; however, in July 2001, seventeen (17) dwellings remained occupied by the new tenants. DND extended the lease arrangements for these dwellings until July 2002 and has subsequently renewed the lease on an annual basis. The City of Ottawa in conjunction with the federal government through Human Resources and Skills Development Canada (HRSDC) is looking to identify new opportunities to provide long-term affordable housing. The methods for accomplishing these objectives are still evolving and the role of surplus housing stock from the Base, as well as the opportunities to incorporate affordable housing into the redevelopment, will be developed through the planning process.

8.3 DEVELOPMENT OPPORTUNITIES

Federal and Municipal Objectives for Redevelopment

The transfer of Rockcliffe to the Canada Lands Company will provide the opportunity to accommodate both federal and community stakeholder interests. Furthermore, a transfer to a single owner will facilitate a comprehensive planning approach for these lands and avoid uncoordinated and piecemeal redevelopment plans.

Physical Setting

The physical location of Rockcliffe, on a plateau above the Ottawa River, offers spectacular panoramic views of the surrounding region. The site is surrounded by green-spaces and scenic routes, and is relatively secluded from the surrounding residential communities. These aspects make the site highly desirable for redevelopment and readily marketable.

Urban Location

Rockcliffe is an urban infill site located only 3.5 miles (5.5 km) from Parliament Hill. The site enjoys easy access to downtown, either by car or transit, and full municipal services and amenities are available.

Site Size

The site is approximately 330 acres (134 ha) in size and is relatively undeveloped. This provides the opportunity for a comprehensive, planned redevelopment of the site that can incorporate and accommodate a full range of land uses and amenities.

Servicing

The preliminary engineering analysis indicates that there is currently sufficient sewage capacity available for the redevelopment of this site. Furthermore, flexible phasing of the development is possible given that the site is composed of three (3) sub-catchment areas each with independent access points into the main collector sewer.

Municipal Policies

The City of Ottawa has a clear policy encouraging the intensification and redevelopment of vacant lands inside the Greenbelt in a way that creates interesting, pedestrian-friendly neighbourhoods and supports transit ridership.

Support for Re-Use of Site

From discussions with planning agencies and members of the public, it is clear that there is an eagerness on the part of all stakeholders to initiate an open dialogue to explore the visions and options for redevelopment of this site.

8.4 DEVELOPMENT CONSTRAINTS

There are also a number of constraints to the redevelopment of Rockcliffe. Figure 13 is a composite illustration of the identified development constraints. In some instances, these issues are simply matters for consideration which can be addressed through the planning process. In others, the constraint will affect the form and nature of the development that is ultimately proposed for these lands.

Open Space

There are two (2) areas adjacent to the site where special environmental considerations are warranted. These are the Montfort Woods and NRC Woods North. The boundaries of these open space lands and the extent to which they will encroach on the developable area of the site will be more accurately defined as development plans are created. While this aspect is considered a constraint in terms of development, these elements also present an opportunity to incorporate natural features and amenities into the redevelopment of this site.

Archaeological

Certain portions of the site, primarily in the northwest quadrant, have been identified as areas of archaeological potential. This means that further archaeological investigations (ie. Phase 2 assessment) will be required for these lands as part of the development review process and certain on-site monitoring by a licensed archaeologist during earthmoving activities both of which will add to the development costs. Furthermore, should any significant findings be located on the site during the supplementary assessment or during construction, development for those sites will have to be modified accordingly.

Geotechnical

Three generalized locations within the site have been identified as areas of shallow bedrock (ie. less than 2 metres below the surface). This should be taken into account when considering land use configurations as the shallow rock may be more appropriate for certain types of construction. Moreover, the shallow rock conditions in certain portions of the site, as well as the clay soils at the western edge of the site, may require special engineering for building foundations and servicing. This could result in additional development costs.

Servicing

While sanitary servicing is available for the redevelopment of the site, the boundary water supply is less certain. Off-site improvements for water service will be required and could be costly. All on-site utilities will have to be replaced and/or upgraded.

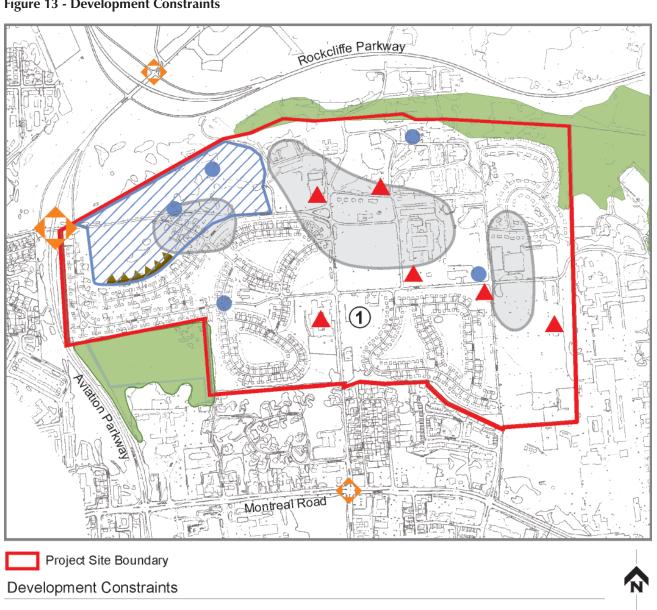
Environmental

Site contamination is limited to specific building locations and is not expected to affect the overall redevelopment of the site.

Transportation

It is known that the entire on-site road network will require upgrading to municipal standards. In addition, the preliminary transportation analysis indicates that certain off-site improvements may be required in order to accommodate intensive redevelopment of the site, including a possible new connection to Blair Road. The extent of development on the site may be restricted by the limitation of certain off-site constraints, specifically the Aviation Parkway overpass at Hemlock and the topography along Codd's Road.

Figure 13 - Development Constraints



Area of Archaeological Potential

Historic Farmsteads

Clay Slope

Major Open Space Areas

Sites of Potential Soil and/or Groundwater Contamination

Areas of Shallow Rock

Transportation Constraints

Combined Sanitary and Stormwater Sewers (throughout site) 1

