HERITAGE ASSESSMENT
BROWLANDS, CHEDOKE HOSPITAL, HAMILTON, ONTARIO
for
DEANLEE MANAGEMENT INC.'s OFFICIAL PLAN SUBMISSION

SBA Project #: A0679 June 2007

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APPENDICES

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1.0 INTRODUCTION

The Chedoke Health Corporation (CHC) has no requirement for the facilities on the Browlands. CHC undertook an extensive search for health related and institutional purchases. The CHC then sent out a request for proposal to redevelop the lands for residential use. Because of its natural beauty, the single family housing to the east and west, and the increasing demand for alternate housing forms in the City of Hamilton, the site was thought ideal for multi-family housing.

The Browlands are listed on the City of Hamilton's Cultural Heritage Landscape Inventory. The Long and Bisby Building, a daycare on the site, is also listed on the City's inventory as a Building of Architectural and Historical Significance.

Deanlee Management Inc. was the proponent awarded the site. Deanlee Management Inc. retained the services of Stevens Burgess Architects Ltd. (SBA) and Wendy Shearer Landscape Architects Inc. to undertake a Heritage Impact Study (HIS) of their proposed development as required by the City of Hamilton.

SBA and Wendy Shearer Landscape Architects Inc. are firms which specialize in heritage conservation. The principals of both firms, Jane Burgess and Wendy Shearer, are longstanding members of the Canadian Association of Professional Heritage Consultants.

The Provincial Policy Statement (PPS), 2005 of the Ontario Planning Act provides a policy framework for making decisions on land use planning matters in Ontario. Policies regarding Cultural Heritage Landscapes and Built Heritage Resources are outlined in Policy 2.6.1 of the PPS and strengthened by Section 3 of the Planning Act which dictates that land use planning decisions by municipalities and approval authorities be consistent with the PPS, 2005 (Ministry of Culture, 2006).

The development of the Browlands requires Official Plan changes and Rezoning. As the planning for the site's redevelopment evolved, it became apparent that approved heritage intervention guidelines would be an important tool in the design of the site. It was determined that at this preliminary juncture, a Heritage Assessment / Intervention Guidelines for the redevelopment of the site from institutional health care to multi-family residential should be undertaken in lieu of a HIS.

It is not the intent of this report to supplant the requirement for a HIS. A HIS that takes into account the Intervention Guidelines contained in this report will be submitted as part of the Site Plan Agreement process.

2.0 LANDSCAPE HERITAGE ASSESSMENT

2.1 INTRODUCTION

The site of Chedoke Browlands has experienced a long evolution from first nations' use, to farmland, to the site of the Mountain Sanatorium, to providing rehabilitative and child and family services to the Hamilton community. It is currently in the process of redevelopment planning by a new owner and the landscape will continue to change with the proposed redevelopment of the site for private residential use. By understanding its significant landscape features and the historical context in which the site was developed, new development may add another layer to its evolution while also honouring and conserving its past.

The Chedoke Browlands site is listed by the City of Hamilton as a Cultural Heritage Landscape in its inventory of historic properties. This listing identifies properties which require investigation and may be worthy of designation under the Ontario Heritage Act. As a result of the listing, an investigation of the heritage features and attributes of the cultural landscape is warranted in order to determine the heritage values and significance and the potential impact of redevelopment on the heritage landscape resources.

In the early twentieth century, the first significant alteration of the landscape occurred with settlement by Euro-Canadians. At that time, the geometric grid of the lands above the escarpment was laid out and the orderly array of farmlands and roads characterized the area. The Browlands site was cleared and farmed to the escarpment edge. Fields and lanes were defined by fencerows and vegetation and farm buildings were clustered together and oriented to the concession roads.

In the early twentieth century, a distinctive new plan for the Sanatorium dramatically changed the road pattern, creating a curvilinear alignment to Scenic Drive, which encircled the south west side of the site. Sanatorium Road with its gently curving alignment connected the Browlands to the Orchard site, the original development area of the Mountain Sanatorium. This configuration of roads created a framework for the deliberately designed landscape setting of the Browlands site.

The organic configuration of the road network responded to the irregular escarpment edge and the drainage course running through the property. In contrast to this, the buildings were aligned in an orderly quadrangle, facing toward the sun and the prevailing fresh air from the south east. The landscape setting for the buildings contained formal beds and walkways and naturalized pleasure grounds along the stream. The landscape supported the therapeutic purpose of the facility – to provide a green backdrop for viewing by patients confined to bed rest. The landscape created a healthy environment which supported the healing that took place within the Sanatorium walls.

2.2 CULTURAL HERITAGE LANDSCAPES

2.2.1 DEFINITIONS AND LEGISLATION

The Provincial Policy Statement, 2005 of the Ontario Planning Act provides a policy framework for making decisions on land use planning matters in Ontario. Policies regarding Cultural Heritage Landscapes are outlined in Policy 2.6.1 of the PPS and strengthened by Section 3 of the Planning Act which dictates that land use planning decisions by municipalities and approval authorities be consistent with the PPS, 2005 (Ministry of Culture, 2006).

The Provincial Policy statement, 2005 defines a **cultural heritage landscape** as "a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archeological sites and natural elements, which together form a *significant* type of heritage form, distinctive from that of its constituent elements or parts (Ministry of Culture, 2006). A cultural heritage landscape is defined as **significant** if it is valued for the important contribution it makes to our understanding of the history of a place, an event, or a people.

Identifying the significance of a cultural heritage landscape is a multi-step process that includes historical research, site survey and analysis, and evaluation.

Historical research includes consulting maps, land records, photographs, and publications to understand the sites' history and chronology. **Site survey and analysis** involves inventorying and analyzing various features and characteristics that make up the landscape. The federal "Standards and Guidelines for the Conservation of Historic Places in Canada" (Parks Canada, 2006), provides a process for identifying and assessing the various features and attributes of a landscape:

- **Land Patterns** - such as the overall arrangement and interrelationship of forests, meadows, water, topography, built features and other larger landscape components.
- **Landforms** - such as naturally occurring hills, valleys, slopes, plains and other topographical features, as well as terraces, embankments, berms, swales and other human-engineered topographical changes to the underlying ground plane.
- **Spatial Organization** - such as the arrangement in three dimensions of a landscape's component elements, their relationship to each other and their relationship to the overall landscape.
- **Vegetation** - such as trees, shrubs, herbaceous plants, grasses, vines and other living plant material.
- **Viewscapes** - such as vistas, views, aspects, visual axes and sight lines that may (or may not) be framed by vertical features or terminate in a focal point.

- **Circulation Systems** - such as paths, walkways, parking lots, roads, highways, railways and canals.

- **Water Features and Water Sources** - such as lakes, ponds, rivers and streams, as well as constructed pools, and fountains.

- **Built Features** - such as gazebos, bridges, fences, benches, site furniture, light standards, statuary and other constructed amenities.

Evaluation involves applying criteria that define the characteristics that have cultural heritage value or interest, to evaluate the design, history and context of the subject area. This step results in identification of **heritage attributes**, which are defined as the "principal features, characteristics, context and appearance that contribute to the cultural heritage significance of a protected heritage property" (Ministry of Culture, 2006, p.3).

The Ontario Heritage Act enables municipalities to conserve properties with cultural heritage value or interest. In the Provincial Policy Statement of 2005, **conserved** is defined as "the identification, preservation, use and/or management of cultural heritage and archaeological resources in such a way that their heritage values, attributes and integrity are retained" (Ministry of Culture, 2006, p.4). The Ontario Heritage Act also states that cultural heritage landscapes that are determined to be 'significant' must be conserved.

There are generally three types of Cultural Heritage Landscapes: designed, evolved and associative.

Designed landscapes: those which have been intentionally designed by an architect, horticulturalist, or landscape expert following a recognized style.

Evolved landscapes: those which have evolved through the use by people and whose activities have directly shaped the landscape or area. Relic evolved landscapes are those where the process has stopped and continuing evolved landscapes are in ongoing use and although the original purpose may have changed, the later uses respect the evidence of the earlier periods.

Associative landscape: those with powerful religious, artistic, or cultural associations of the natural element, as well with material cultural evidence e.g. a sacred site within a natural environment (Ministry of Culture, 2006, p.2).

2.3 CHEDOKE AS A CULTURAL HERITAGE LANDSCAPE

The Chedoke Hospital Browlands site is a 'designed' cultural heritage landscape. The landforms, spatial organization, vegetation, viewscapes, circulation systems, water features, and built features of site, which date from its period as a specialized treatment centre for tuberculosis reflect an intention to create a purpose built facility that capitalizes

on the natural landscape attributes of the site for therapeutic purposes. To understand the significance of these features it is first necessary to understand the historical context in which the site developed and how it has changed over time.

2.4 THE HISTORY OF TUBERCULOSIS

2.4.1 'THE WHITE PLAGUE'

Tuberculosis is an illness that extends back centuries. Neolithic skeletons (4500 B.C.) and Egyptian Mummies (1000 B.C.) have been found with tubercular lesions on their bones. 'Consumption', another term used for the disease, is a translation of a Sanskrit word from 1000 B.C. Despite the fact that tuberculosis is an ancient disease, it only became an epidemic in the 17th century and by the early 20th century it was one of the leading causes of death in North America. Few families escaped its effects. (Archives of Hamilton Health Sciences, 2007 and Wilson, 2006).

Tuberculosis is an infectious disease that attacks humans of all ages and is most commonly spread by breathing in infected droplets of sputum. Initially affecting the lungs, tuberculosis can eventually move to the blood stream and overcome the natural functions of the body. "Breathing becomes laboured, a persistent cough accompanied by bloody sputum and night fevers develop. As the blood and therefore the body become starved of oxygen, the person starts loosing weight, loosing colour, loosing energy" (Archives of Hamilton Health Sciences, 2007, p.1). The ensuing paleness of the tuberculosis patient, led to the common term for the disease: 'The White Plague'.

Tubercule bacteria can lie dormant for years, but will be activated by a lowering of the immune system by stress or another illness. Therefore, the poverty, overcrowding, poor nutrition, and other stressful conditions that accompanied the mass immigration of settlers from Europe to North America in the 19th and 20th centuries, greatly increased the likelihood of infection and transmission of the disease (Archives of Hamilton Health Sciences, 2007).

2.4.2 CULTURAL SIGNIFICANCE OF TUBERCULOSIS

In the 19th century, tuberculosis was considered a disease of the poor and had great social stigma attached to it. However, it was also a disease associated with the sensitive and artistic. Several writers including Edgar Allan Poe, Robert Louis Stevenson, Henry David Thoreau, Emily and Ann Bronte, and H.G. Wells all suffered from pulmonary tuberculosis. The disease inflicted composers Frederick Chopin, Amadeus Mozart, and Irving Berlin and the chemists Marie and Pierre Curie. Tuberculosis also struck the great inventor Sir Alexander Graham Bell as well as U.S. Presidents Andrew Jackson and Ulysses S. Grant.

Lorrie Alfreda Dunington-Grubb, a founding member of Canadian Society of Landscape Architects (CSLA) and one of the first women in Canada to practice professionally as a

landscape architect, also suffered from the disease. On her own and in collaboration with her husband Howard Dunington-Grubb, she worked on private and public garden designs, and town planning projects including University Avenue and Victoria Square in Brantford, the CNE in grounds in Toronto, Gage Park and McMaster University in Hamilton, and private estates including Erchless in Oakville and Whithern in Hamilton. "Noted for her contribution to the growth of urban planning, she was instrumental in gaining the collaboration of other artists, particularly sculptors, in the design of public spaces" (Milovsoroff, 2007). She died on January 17, 1945 at the age of 68, at Mountain Sanatorium in Hamilton, Ontario.

Despite its associations with the poor and the great, no one was immune from the effects of Tuberculosis. The social, cultural, and physical impact of the disease is enormous. "Until recently, it was the most important causes of death in Europe and North America. It killed and capacitated millions of people, many of them during their most productive years. It orphaned and widowed and ruined millions more" (Tuberculosis - Archives of Hamilton Health Sciences, 2007, p.2).

2.5 THE HISTORY OF SANATORIA

2.5.1 THE DEVELOPMENT OF SANATORIA

Until the development of the sanatorium in the mid nineteenth century, most patients received care in their homes, which was often inconsistent and provided little relief from the symptoms of tuberculosis. 'Sanare', meaning 'to heal'is the Latin root of the word sanatorium. However, the founding of the sanatorium was a way of both isolating and treating the victims of tuberculosis. These "efforts to both prevent and treat the illness, created a community that physically exemplified the social and medical beliefs relating to tuberculosis. Built on feelings of hope for recovery and fear of contagion, these environments physically document the history of the disease" (Nolt, 2007, p.1).

The belief in the "a community or place as and active part of healing" was at the heart of tuberculosis treatment and sanatorium design. "The direct relationship between medical advancement, building construction, and engagement with the landscape is prominent in tuberculosis sanatorium history" (Nolt, 2007, p.1).

The first Sanatorium established in Europe in 1859 by Gustav Brehmer, influenced the standard of sanatorium siting, building layout, and design. He gave special attention to choosing the location and aesthetic of the site, locating the sanatorium high in the mountains at Gorbersdorf, which provided sunshine, fresh air, astounding views as well as a physical boundary between the sanatorium and the industrial life of the city (Nolt, 2007).

The grounds were designed with a great attention for detail - a deliberately constructed landscape of flowerbeds, shade trees, grottos, ponds and pathways, framed by a natural

forest backdrop. The design embodied the medical and social belief that nature and beautifully constructed landscapes had the power to heal (Nolt, 2007).

2.5.2 SANATORIUM DESIGN PRINCIPLES

This early sanatoria with its embodied ideas of 'natural healing' greatly influenced sanatoria design throughout Europe and North America. In 1911, Thomas Carrington published a book called 'Tuberculosis Sanatorium and Hospital Construction', which outlined a set of guidelines for the siting and planning of tuberculosis sanatoria (Nolt, 2007). The following criteria outline his recommendations:

.1 **Transportation Facilities:**
A sanatorium should hold close proximity to public transportation. They should be a short distance from the city but "removed from the filth of the city" (Nolt, 2007, p.4).

.2 **Extent and Nature of Land:**
A site should include 20-200 acres of land including a forest, orchard or land that can be cultivated. It is also advantageous to select a property with existing buildings, which can be transformed into an Administration Building to help reduce initial costs.

.3 **Lighting, Water and Sewage:**
It is helpful to use the electric, water and sewage systems of the adjacent city, if considering a site near a city. The existence of natural spring clear running stream, is beneficial if the site is far from a city's utility system.

.4 **Meteorological Conditions:**
The land should be selected on the southern side of a hill or mountain to maximize sun exposure for patients. The placement of buildings should avoid prevailing winds and heavy frost and trees should be planted and maintained to shade the summer sun and shield the winter wind.

.5 **Natural Beauty:**
The site should be sloping, rolling, or hilly and contain a body of water to add interest to views for the patient.

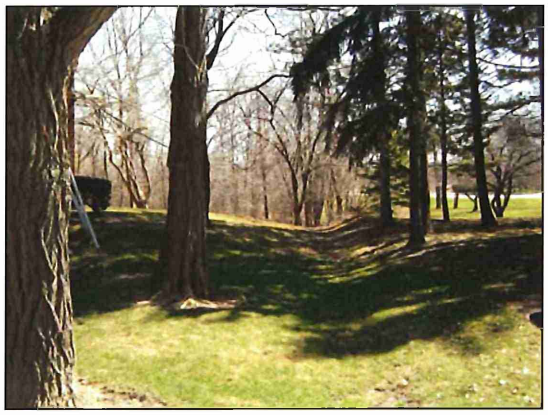
2.5.3 SANATORIUM DESIGN PRINCIPLES AND THE CHEDOKE BROWLANDS

The design principles are evident in the landscape of the Chedoke Browlands. These historical design and planning guidelines help to inform the evaluation process for determining the significance of historical landscape features and elements at the Browlands site of Chedoke Hospital.

2.6 HERITAGE LANDSCAPE FEATURES AND ATTRIBUTES

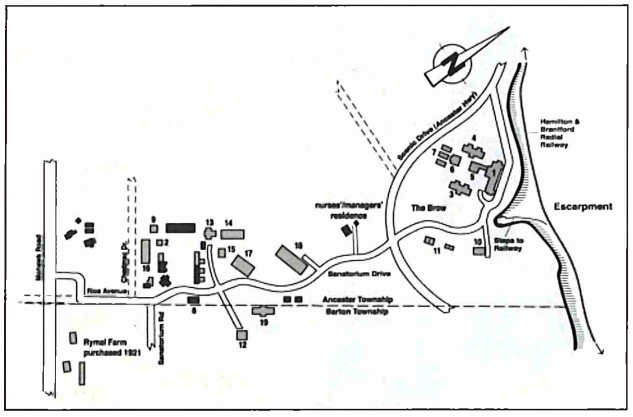
2.6.1 LANDFORM

The Chedoke Browlands site is gently undulating with flatter areas around the buildings and channels of a water course running through it. The Niagara escarpment located at the edge of the site, provides a dramatic change in grade as well as overlook opportunities. The diversity of landforms on the site creates interest and provides opportunities for a range of user experiences. This characteristic is fitting with the criteria set out in Thomas Carrington's book of 1911.

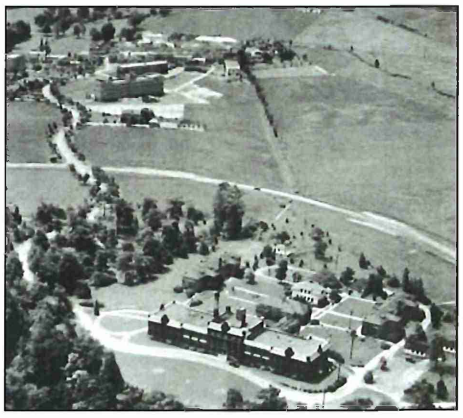


2.6.2 SPATIAL ORGANIZATION

The site contains a cluster of buildings concentrated in a central area and surrounded by large, open lawn areas at the north and south corners. As recommended by Thomas Carrington, the east and west pavilion were oriented in the south-east direction to maximize the patient's exposure to sunlight and fresh air. The spatial arrangement of the Brow site exemplifies historical beliefs about 'the cure' for tuberculosis – rest, fresh air, and sunshine - before the discovery of antibiotics and the resultant models for sanatorium design.



Map Showing Building Configuration 1916-1932
(Wilson, 2006, p.41)



Aerial Photograph of Browlands 1938
(Unterman McPhail, 2006, Appendix A)

2.6.3 VEGETATION

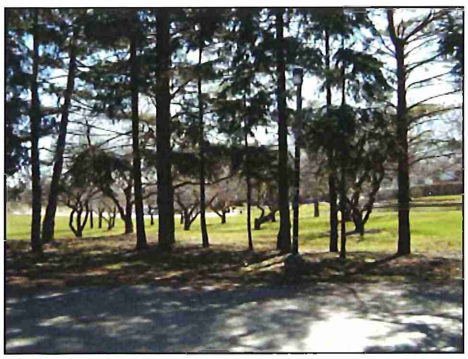
The vegetation of Browlands is varied and contains areas that have been deliberately planted and other areas that have been left undisturbed with only the edges defined by maintenance activities. This latter category includes the woodlot on the eastern part of the site, a section of the water course and the escarpment face.

.1 Woodlot

One of the key heritage features of the site is the woodlot, which contains young and mature trees of a mixed deciduous forest such as beech, maple, serviceberry and oak. The stand is dominated by red oaks, a species which has been prevalent on the site since the development of the Sanatorium. Although there is no definitive theory regarding the origin of the word 'Chedoke', the most accepted one is that 'Chedoke' was a first nation's word (perhaps Iroquoian or Algonkian) that meant 'a collection of oaks'. More specifically, 'Chedoke' is believed to mean 'seven oaks', 'ten oaks' or 'many oaks'. The woodlot represents the naturalistic setting of the Mountain Sanatorium and also provides areas for wildlife habitat and recreational use. It has associative values because of the presence of the red oak at 'Chedoke'.

.2 Plantation Planting

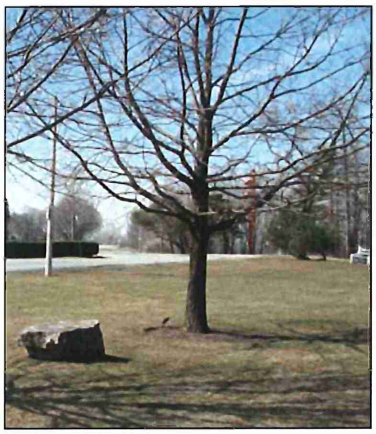
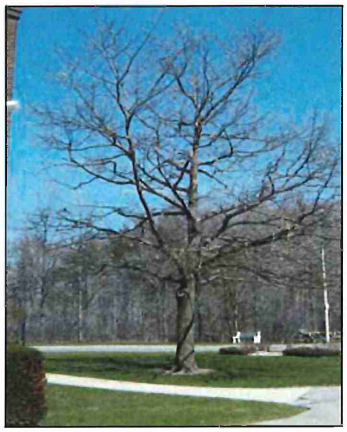
In contrast to the unmaintained natural woodlot, the interior of the site contains a large grouping of deliberately planted conifers – spruce and pine planted in the mid twentieth century. These trees are closely spaced and as a result much of the lower branching shows significant dieback. A group of ornamental fruit trees of alternating bloom colour is located along Scenic Drive, also dating from the second half of the twentieth century.



.3 Individual Specimen, Commemorative and Street Trees

The individual specimen, commemorative and street trees add visual interest, provide habitat for wildlife, add to the recreational and environmental value of the site, and although added later, complement the original design intent. Species of particular interest include the Shagbark Hickory and Red Oak found in the central area of the site. Further assessment should be done to determine the individual value and condition of the trees as well as the potential for their protection and incorporation into redevelopment plans. Dedicated trees and associated plaques have commemorative value and must also be considered in the future plans.

By the last half of the twentieth century, streetscape improvements were undertaken along Scenic Drive and the western portion of Sanatorium Road. The work included the planting of regularly spaced, non-native street trees selected for their tolerance of urban growing conditions. While contributing to the visual character of the neighbourhood and the site, these street trees were not part of the original tree collection associated with the Sanatorium, as seen in the 1938 aerial photograph of the site (included in 'Spatial Organization').

2.6.4 VIEWS

There are several major views from and into the Chedoke Browlands landscape: the view to the city from the top of the escarpment, views to the stream corridor, views from the adjacent road network, views to the Brow Building, and views along Scenic Drive and Sanatorium Road.

Throughout the long period of activity on the site, the view from the edge of the escarpment has been generally unobstructed by vegetation. Early photos of the Browlands show that the natural vegetation found on the escarpment face was removed to allow for the open vista of the city and the distant horizon. Over time, individual specimen trees were allowed to grow and these served to frame the distant views.

The 1954 artists' view of the edge of the escarpment shows no understorey material on the bank below a few the individual specimen trees of deciduous and coniferous types.

Oblique View to the Western End of the Brow Building from Sanatorium Road.

Open View from the top of the Escarpment to the North East.

2.6.5 CIRCULATION SYSTEMS

The curvilinear alignment of Scenic Drive and Sanatorium Road define the site, contrast the linear grid of the surrounding neighbourhood, and provide a succession of views into the site. The existing circulation system responds to the natural features of the site, the irregular escarpment edge and stream corridor. Within the site, there are secondary driveways and parking areas associated with individual buildings that have been added over time. There is also an internal walkway system linking the buildings.

The 1938 photo shows that the original walkways and driveways associated with the Brow building have changed over time. The original alignment of Sanatorium Road curved to immediately abut the building entrance, creating a wider lawn area between the building and the brow edge. As well, at the east end of the building, a circular walkway introduces a formal geometry to the building setting. This area is now parking lots and the road alignment has been moved away from the building entrance. The lawn area between the road and the brow edge still remains, although it is narrower than the previously designed.

2.6.6 WATER FEATURES

The water course running through the site has a natural bank profile with naturalized vegetation along its length. It provides habitat for wildlife and ideal growing conditions for the Browland collection of Mertensia virginica (Virginia Bluebells), mentioned in a previous background study as prevalent on site in the 1920s. The stream is crossed by an ornamental pedestrian bridge, which together create a picturesque composition and amenity area. The water level fluctuates throughout the seasons, adding a dynamic quality to the landscape. The stream outlets through a storm pipe at the edge of the Niagara escarpment, demonstrating the considerable volume of water that shaped the landscape.

2.6.7 BUILT FEATURES

.1 The Cross of Lorraine

The suggestion of using the Cross of Lorraine as a distinctive emblem of the war against tuberculosis was made at the International Conference on Tuberculosis in Berlin, 1902 and the official cross design of equal arms lengths and pointed ends was adopted in 1912.

The Cross of Lorraine has a long history as a symbol of hope and humanity. The double barreled cross was the emblem for the Dukes of Lorraine in France; was chosen by Godfrey de Bouillon, the leader of the first Crusade as his standard when he was made Ruler of Jerusalem in 1099; and was the symbol of the Free French during World War II.

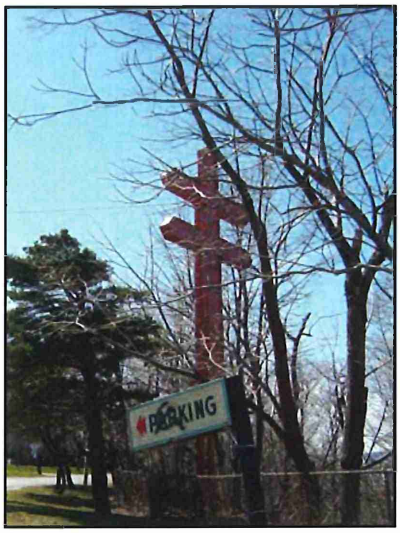
The Cross of Lorraine, also known as the archiepiscopal cross because it is part of heraldic arms of the archbishop of the Roman Catholic Church, was also the emblem of the eastern branch of the Christian church and is still the symbol of the Greek or Orthodox Catholic church.

The Cross of Lorraine at the Chedoke site was built by E.L. Ruddy Co. and erected in November 1953. "It was placed on the edge of escarpment so that it would be visible from most of the city and across the bay. Its purpose was to publicize the constant threat

of TB, to keep people alert to its dangers and to bring hope to those already afflicted" (Archives of Hamilton Health Sciences, 2007). This placement indicates that the crest of the escarpment was at least partially open and not forested.

The Cross of Lorraine is a community landmark and as the site continues to evolve and change, its importance as a key interpretive device will continue to grow.

Mountain San greeting card - 1954.
(Wilson, 2006, p. 3)



.2 The Pedestrian Bridge

The early concrete pedestrian bridge is part of the designed landscape adding a scenic picturesque quality to the site. The composition of the bridge and meandering stream is part of viewing yard overlooked by the East Pavilion and Brow Building. The tree collection contains a variety of trees such as white birch, Norway spruce and others which add interest to the setting. The access to the bridge is by means of a walkway which leads from the East Pavilion to Sanatorium Road.

.3 The Stone Wall and Pillars at the Vehicular Bridge

The stone wall and two pillars at the vehicular bridge along the edge of escarpment are a rare example of ornamental rustic stone work with raised ribbon jointing. The deliberately selected granite boulders contrast the indigenous limestone of the escarpment found below it. There is evidence of extensive repairs being completed and oral history confirms that a staff person repaired or built a section of the wall in the 1950s. Pillars mark the end of the bridge section with a lower wall extended north around the top of the brow for several metres.

.4 The Stairs

There is documentary evidence that a set of stairs extended down the escarpment, providing access to the railway below for employees and visitors of the Sanatorium. The existing concrete stairs lead directly to the stream headwall outfall and are possibly a remnant of this earlier access route. The top of the stairs is currently blocked by a section of the restored stone wall which may indicate that this section of the wall was extended across the stairs from the northern most bridge pillar. Further investigation will be required to more precisely date the period of the concrete stairs in comparison to the wall.

2.7 HERITAGE ASSESSMENT

The Browlands site has evolved and changed dramatically over time. Many of the cultural landscape features existing today reflect the various periods of the properties past. However, within the site's chronology the period from 1916 to 1963 is most important to understanding the commitment of the community to the treatment and care for TB patients. The Chedoke Browlands Sanatorium was one of a small number of sanatoriums specifically built to deal with the growing impact of this terrible disease at the beginning of the twentieth cnetury. The initiative of the citizens of Hamilton resulted in the creation of the Chedoke Browlands complex- specifically planned to take advantage of the orientation and exposure of the site to the sun and fresh air- the necessary foundations for treatment. The natural beauty of the site at the edge of the escarpment overlooking the city below and the country side and harbour at the horizon was used to create a scenic setting for treatment which encouraged rest and quiet. Many of the existing cultural landscape features date from this period and are significant evidence of this design intent.

The landscape components which are the key defining features if the sanatorium era are:

Landform
The gently undulating natural topography of the site varies from the flatter grades around the building perimeters, across the level lawns to the naturalized stream corridor and the dramatic drop at the escarpment face.

Circulation
The curvilinear alignment of both Scenic Dr. and Sanatorium Rd. has generally remained unchanged since the site was designed. Only the shifting of the road immediately in front of the Brow Building closer to the escarpment has altered the original layout.

Views
The original road alignment and the treatment of the escarpment have created many significant views into and from the site. As illustrated on the attached figure, the significant views to the site are primarily from Scenic Dr. at the north and south entrances and where the stream corridor crosses Scenic Dr. Distant views to the site are from the extreme distance of York Boulevard and Hwy 403 since the view of the site from immediately below the escarpment is obstructed by the edge. Important unobstructed views within the site are oblique views to either end of the Brow building, from the vehicular bridge to the pedestrian bridge and from Sanatorium Rd. to the Long and Bisby building. The open view from the top of the escarpment out over the city is one of the most dramatic in Hamilton.

Vegetation
The natural area of the woodlot is a significant concentration of a variety of trees, understorey shrubs and ground covers providing unique bird and wildlife habitat in an urban setting. The edge of the woodlot and the interior trail are significant cultural landscape features. The association of the Chedoke name with the oaks found at the

woodlot add value to the tree collection in the woodlot. The tree collection within the stream corridor is an important feature of the cultural landscape as well since it is part of the amenity area and contains both native and non-native species. The plantation and street trees and the remainder of the specimen trees have generally been added since the original landscape design although complement its intent is to create an attractive healthy setting for healing.

2.8 SUMMARY

The heritage values associated with the landscape are those which illustrate the period of development on the site when it provided healing and treatment for tuberculosis sufferers. The overall landscape setting in general and specifically the curvilinear road alignment, the integration of the ordered geometry of the buildings in a natural setting, the views, natural and planted vegetation, the stream corridor, and built landscape features such as the bridges reflect the original design intent. All these features contribute to a significant cultural landscape which should be considered and integrated in planning for the redevelopment of the site.

3.0 BUILT HERITAGE

For the evolution of the Browlands and the development of sanatoria, refer to 2.0 - Landscape Heritage Assessment. Design principles for sanatoria buildings were greatly influenced by English design guidelines for "garden cities," resulting in pavilion-like structures.

3.1 AS-FOUND ASSESSMENTS

3.1.1 LONG & BISBY BUILDING (1920)

Site Assessment March 2007

.1 Building Age / Type (Architect: Witton [2])
- 1920 built as a nurses' residence
- 1973 'Cool School' for troubled children
- 1983 daycare
- Neoclassical with asymmetrical facade [2]

.2 Present Use
- Daycare

.3a Integrity of Original
- Protruding wooden cornice with dentils has been replaced with flush wood band & metal flashings.
- Flag standard and masonry chimney have been removed.
- Returned stone entry steps have been replaced by straight run.
- Original double hung 6 panes over 6 panes have been replaced by single hung single pane, single glazed sash.

.3b Additions to Original
- Fire escape and roof access
- Exterior entry to basement
- To the rear, one or two single storey additions

.4 Number of Storeys Above & Below Grade:
- Ground floor 10'-8" to underside of ceiling
- Second floor ?? to underside of ceiling
- Basement 9'-0" to underside of ceiling

.5 Approximate Footprint / Size
- 78' x 40' / 3,120 sq.ft. per floor

.6 Condition Assessment

#	ELEMENT	CONDITION / MAKE GOOD
A10	**FOUNDATIONS** Poured concrete or double layered parged bricks similar to Brow Building?	Good No settlement cracking noted. Some cracking has occurred, possibly from water penetration. Repairs required.
B10	**STRUCTURAL SYSTEM** unknown	Very good
B20	**EXTERIOR WALLS** Buff (tapestry) clay brick running bond assumed to be backed by some type of masonry. (Same brick as Brow Building) Continuous tooled limestone band at sill height of first floor windows. Bricks recessed around windows, end stacked on sides with turned end course over. Limestone tablet over entry	Good All protruding courses require 100% repointing. Some cracks associated with rear additions Efflorescence adjacent to driving surfaces
B22	**PARAPETS / CORNICE** Brick parapet (2'6" high?) Limestone or manmade stone coping Two corbelled end courses below cornice and recessed brick panel above cornice	Fair Coping stone has extensive repairs. Parapet and protruding courses require 100% repointing. Parapets require 10% rebuilding/replacement. Either restoration of cornice and/or significant maintenance of existing
B23	**CHIMNEYS** None visible from grade	
B24	**WINDOWS** The windows are wood replacement single pane single hung windows. All windows have aluminum storms. Replacement campaign started very early (see historic photo). Air conditioning units are through some sash. Some basement windows have been closed in; others suffer sill rot from creeping grade. Blue paint not sympathetic to design intent	Fair Preference would be installation of thermally broken wood windows with dividing panes to match original, cream (?) coloured to match original

B25	**ENTRIES / DOORS** Main entry portico: overhanging flat roof with metal railing and dentil decorated wood soffit supported by a wood ring beam held up by two sets of paired columns The front stone and concrete stoop have undergone modification and require foundation work. Top stone cracked. Concrete stairs not as per original design. Original wood door, glazed fanned transom and sidelights. Side entry has been modified and is being deteriorated by salt. Rear entry stairs are precast replacement. There appears to be ongoing history of deterioration. Canopy over entry appears original.	Main entry: Fair Conserve iron railing. Re-roof. Minor wood repairs. Replace bases of all columns. Remove stairs, rebuild foundation, install new stairs and railing. Paint all woodwork. Side entry: Fair to good Move driving surface farther from building. Rear entry: Poor Staircase railings do not meet code. See D10-Accessibility. The newer addition should be removed while the older if retained requires considerable upgrading.
B30	**ROOF TYPE & MATERIALS** Flat roof, no access	From the condition of the parapets, at the very least, vented back flashings need to be installed.
B31	**SOFFIT, FASCIA, GUTTERS, DOWNSPOUTS** etc.	Condition of internal drains not known
C10	**INTERIOR CONSTRUCTION** Unknown	Very Good
C20	**STAIRCASES** Main stair has iron railing with wooden rail and terrazzo treads. Flight to basement now separated with fire enclosure	Good. Fire separations detract from appearance. Building code audit will be required to determine if additional exit from second floor is required with change of use.
C30	**INTERIOR FINISHES** Variety of floor, wall and ceiling finishes. Few original doors or moldings other than in lounge area.	Fair to Good If this building were to be reused as a showpiece, all floors and ceilings would require replacement or repair.
C40	**FIXTURES & FITMENTS** **Lounge:** retains beamed ceiling, tiled fireplace & mantle, beveled glass transom and moldings. It would appear the original main entry was through what is now the nursery.	Fair to Good It is desirable to completely restore the lounge inclusive of: wall, floor and ceiling refinishing, removal of vent from fireplace, new light fixtures, restoration of original entry and closure of new secondary entry. See also B25-rear entry.

D10	**ACCESSIBILITY** The main floor is 6' above grade. The split entry vestibule makes retrofitting for accessibility almost impossible.	Very bad Presently no entry is accessible. No elevator. No barrier free washrooms.
D20	**BUILDING SYSTEMS: ELECTRICAL HVAC** Self contained boiler in basement and cast iron radiators throughout building. No air conditioning	Will require upgrades, at a minimum air conditioning.
D40	**FIRE PROTECTION** Annunciator panel, standpipe, emergency exit lighting, smoke detection and fire alarm.	Any change in use could trigger requirement for sprinklers.

- 3

.7 Feasibility for Reuse

It is the intention to continue to use this building.

The uses requiring the minimum change would be to continue as a daycare centre or convert to office use. All other uses would require a second means of egress from the second floor.

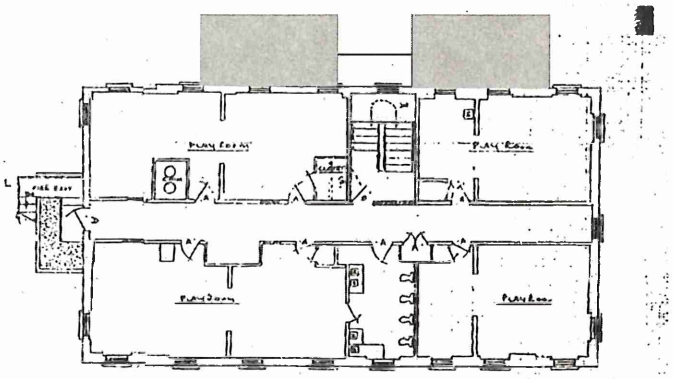
Conversion to high end residential units (2 to 4?) would likely result in changes to the openings in the building envelope.

If the building was to be converted to a community centre, it would be difficult to allow public access to the second floor as either a second stairwell or negotiation under Part 11 of the Code for alternative measures through the addition of sprinklers would be required.

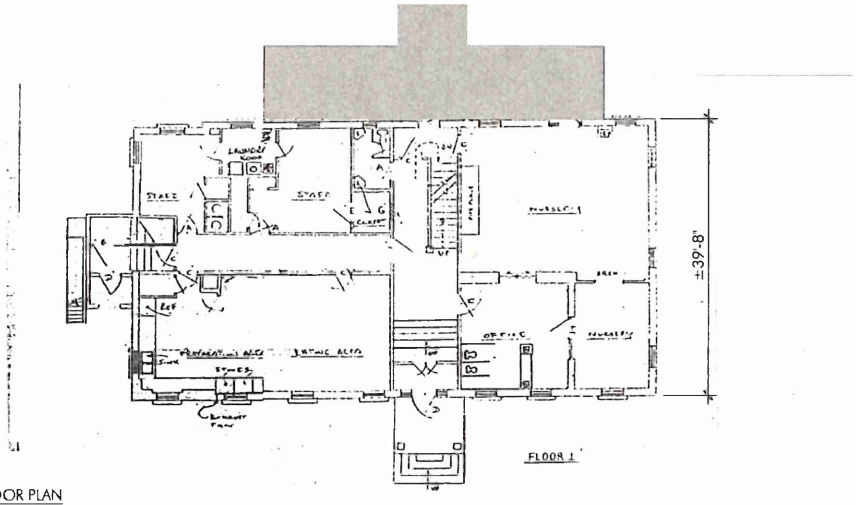
Due to the split level main entry, accessibility poses the largest challenge to building reuse. Reworking of the area where the rear additions are could facilitate building access. Reworking of the side entry in combination with an elevator might also be feasible. A ramp, elevator and accessible washrooms would have to be added should there be any change in use.

Regardless of the future use, the building envelope requires work as outlined in the Condition Assessment. Air conditioning would have to be added to the building and other systems would require upgrading.

.8 Floor Plans



2ND FLOOR PLAN



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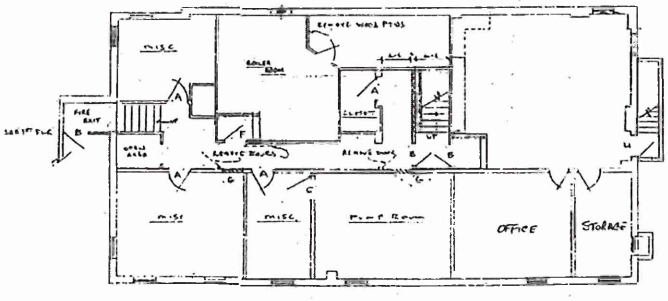


BASEMENT

LEGEND

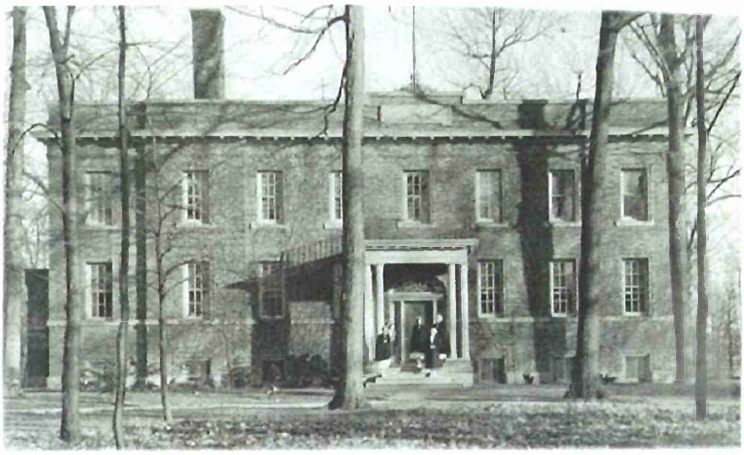
ORIGINAL BUILDING FOOTPRINT

ADDITION

0 5 10 20 30 FT

N

.9 Photo Elevations



EARLIER PHOTO

NORTH ELEVATION

EAST ELEVATION

SOUTH ELEVATION

WEST ELEVATION

3.1.2a BROW BUILDING (1916) Site Assessment March 2007

.1 Building Age / Historical Use (Architects Stewart and Witton)
- 1916: built to house and treat First World War soldiers
- 1923: last military patients
- 1959: converted to convalescent and chronic care facility

.2 Present Use
- Vacant, undergoing decommissioning

.3a Integrity of Original
- The following elements are missing: the curvilinear parapets over the entries, the glazed roofing tiles on the sloped roofs at the entries and parapets, the decorative eave brackets, the balconies, floor to ceiling wood windows, and the balustrade of the roof decks of the bays adjacent to the central three storey portion.
- All window openings have been shortened to accommodate perimeter fan coil units.
- Some window openings have been blocked in their entirety.
- The chimney stack is considerably lower than at some point in the past.
- The interiors have undergone continual renovation

.3b Additions to Original
- Stairwells at either end of the building
- Numerous rear additions
- Connection to annex is not the1917? original connection.
- Communication tower and a myriad of roof top units

.4 Number of Storeys Above & Below Grade:
- Central portion: 3 storeys above grade plus basement
- Wings: two storeys above grade plus crawl space
- First floor: 11' floor to ceiling
- Second and third floors 10'-10" floor to ceiling

.5 Approximate Footprint / Size
- 64' (max) x 227' / 47,000 sq.ft. including basement

.6 Condition Assessment

#	ELEMENT	CONDITION
A10	**FOUNDATIONS** The wings have crawl spaces with exposed hollow clay tile on much of the interior surfaces. The central portion has a full basement with parging on the interior. The exterior wythe is soft fired red clay brick with a heavy cementitious coating. The footings rest directly on escarpment limestone; thus settlement is not an issue.	Water infiltration has been a chronic problem. The building lacks perimeter waterproofing and drainage. The exterior parging has had ongoing repair campaigns of varying degrees of success. (Parging extends above grade to finish floor over cants and decorative rolls.)
B10	**STRUCTURAL SYSTEM** Reinforced concrete columns and beams. The floor slabs are concrete ribs infilled with hollow clay tile. Hollow clay tile is brittle and must be penetrated with care.	Structure and floor slabs appear in remarkably good shape. (Loading of this archaic system would have to be confirmed.)
B20	**EXTERIOR WALLS** Tapestry buff clay brick, the same as used in the Long and Bisby Building, in Belgium bond coursing over masonry backing (clay tile?). Areas that had been previously covered by sloped roof and protruding brick courses have a remedial cementitious coating.	Brick is in good condition; cementitious coating is in only fair condition and is less than attractive.
B22	**PARAPETS** Prefinished brown back and coping flashing. (The rear sunroom has the only residual ornamental coping flashing.) Parapet brick is mismatched replacement brick as originally concealed behind sloped roofing.	Fair
B23	**CHIMNEYS** There are miscellaneous chimneys and roof vents from differing periods.	Good
B24	**WINDOWS** There are second and third generation replacement windows. The window units are all shorter than original. The replacement units have much smaller operating sections, severely limiting the through ventilation. Windows have solid sections for the insertion of air conditioning units. Many of the thermopane units have failed seals.	Fair. Even if new, these windows would be substandard in today's luxury housing market.

B25	**ENTRIES / DOORS** All steel and all well used. Front entry stairs in poor condition and very ugly.	Fair to poor
B30	**ROOF TYPE & MATERIALS** Flat roof sloping to hidden interior drains. The roofing appears to be stone ballast, over rigid insulation (?), over some form of membrane on a concrete deck.	Fair Anecdotal evidence has it that there have been chronic problems with the roofing. There only appeared to be one leak at time of inspection.
C10	**INTERIOR CONSTRUCTION** Mostly masonry units with plaster coating.	
C20	**STAIRCASES** Two open interior metal staircases with terrazzo treads. Two enclosed metal fire stairs at either end of the building.	Good
C30	**INTERIOR FINISHES** Mix of vinyl tile, linoleum, drywall, plaster, and acoustic tile.	Poor Decommissioning of the systems has resulted in damage to interior finishes.
C40	**FIXTURES & FITMENTS** None of significance	
D10	**ACCESSIBILITY** Rear entry is accessible. Elevator to all levels. Washrooms barrier free.	Yes
D20	**BUILDING SYSTEMS :** **ELECTRICAL HVAC**	In the process of being decommissioned. The decommissioning of these systems brings urgency to building reuse.
D40	**FIRE PROTECTION**	Fire/smoke alarm being maintained

.7 Feasibility for Reuse

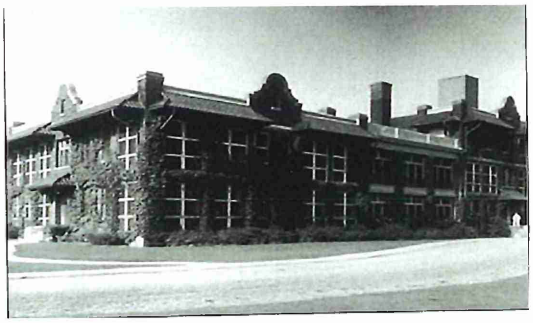
The reuse of the building envelope and structure poses some real challenges:
- In the crawl spaces, there is water infiltration between the footings and the underlying limestone.
- There is water infiltration through cracks in the parging over the soft fired clay bricks of the foundation walls.
- The replacement windows are substandard.
- The ballasted membrane roofing system complete with metal flashing has had the chronic leaking problems commonly associated with this type of system. Substantial interventions would be required to run services and insulate the envelope.

The distance from the face of building to the corridor is almost 30 feet, a reasonable depth for a modern condominium unit. (The interior load bearing columns are approximately 15 feet on centre which could be accommodated within the unit, but is less than the 20 feet plus dimension desirable in units that also facilitates parking beneath.) The central corridor with fire stairs at each end is a reasonable residential plan.

Reusing the existing building envelope without restoring the original decorative features would not only do a disservice to interpreting what the original design intent was, but it would also be less than visually appealing to potential purchasers.

This building is presently being decommissioned. The decommissioning will leave the aboveground area extremely susceptible to mould. The hollow clay tile foundations are extremely susceptible to damage once the heat has been shut off.

Reusing the building envelope may allow for an existing non-conforming encroachment within the 30m conservation authority setback from the top of the defined brow.

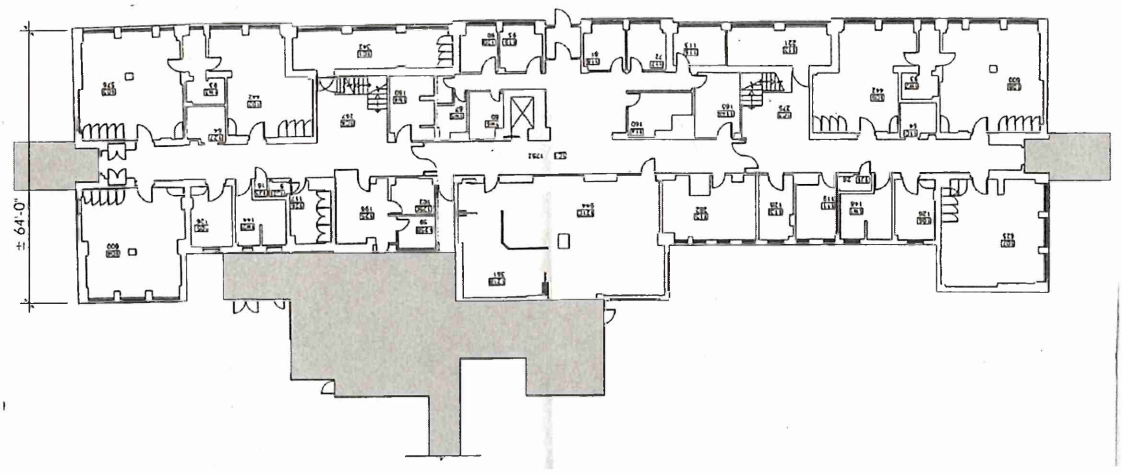


Early Photo

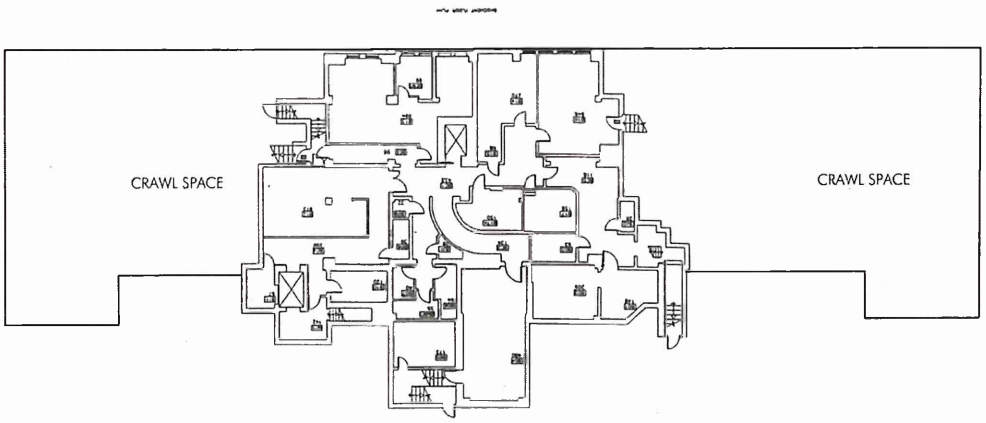
2007 Photo

.8 Floor Plans

Basement and First Floor



1ST FLOOR PLAN



BASEMENT

LEGEND

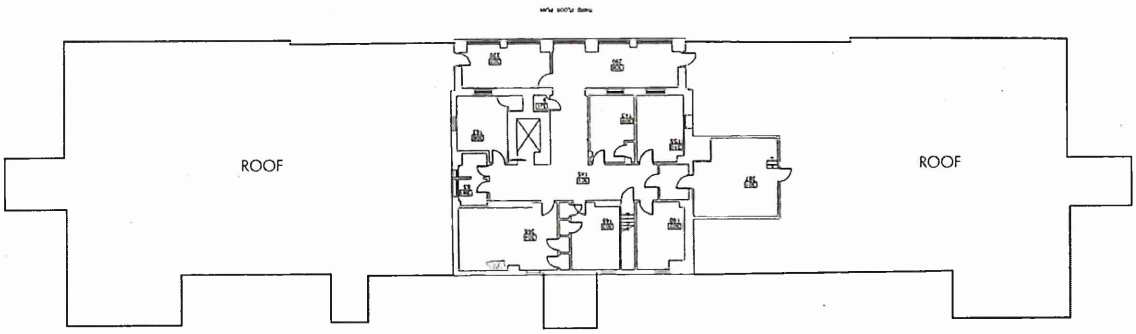
ORIGINAL BUILDING FOOTPRINT

ADDITION

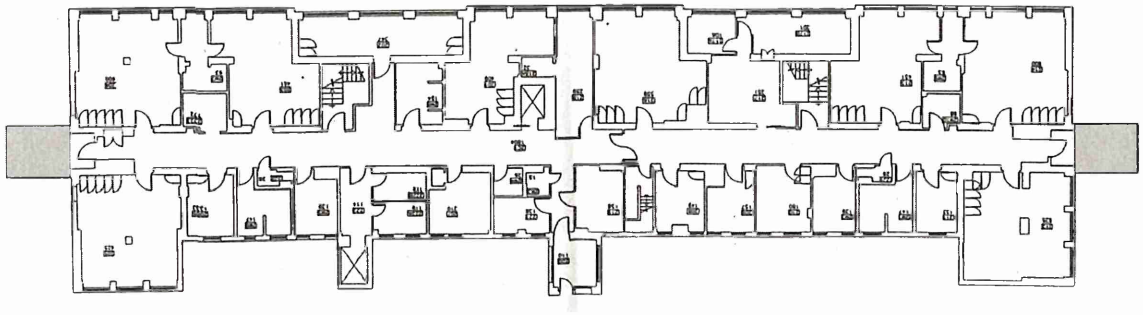
0 5 10 20 30 40 50 FT

N

Second and Third Floor



3RD FLOOR PLAN



2ND FLOOR PLAN

LEGEND

ORIGINAL BUILDING FOOTPRINT

ADDITION

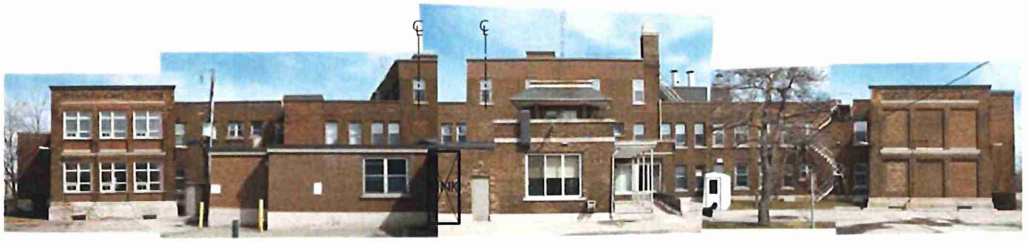
0 5 10 20 30 40 50 FT

N

.9 Photo Elevations

FRONT (NORTH)

EAST SIDE



REAR (SOUTH)

WEST SIDE

3.1.2b BROW ANNEX (1917)

Site Assessment March 2007

.1 Building Age / Type

- Built in 1917 as a cafeteria ground floor. (Second floor?)
- The link to the main building may have been original but the present link is not that link. (A link with gabled entries is in a 1934 aerial photo.)

.2 Present Use:

- Vacant (recently used as cafeteria with offices on second floor)

.3a Integrity of Original

- The only substantial loss is wooden soffits and eave brackets, and original windows on the ground floor.
- Some ground floor windows have been blocked.
- Portions of exterior walls enclosed by additions have been drywalled over.

.3b Additions to Original

- There are additions upon addition, mostly for vocational space, to the north and west
- Fire escape
- All additions are purely utilitarian and have no architectural significance.

.4 Number of Storeys Above & Below Grade

- Ground Floor: 10'-11"
- Second Floor partially sloped, 8'-11" under flat portion

.5 Approximate Footprint / Size

- 30' x 75' / approx 2,250 sq.ft. per floor

.6 Condition Assessment

#	ELEMENT	CONDITION
A10	**FOUNDATIONS** Slab on grade, foundations inaccessible.	Appear to be in good condition as no cracking in walls above grade was noted
B10	**STRUCTURAL SYSTEM** Floor system unknown Wood frame roof	Good
B20	**EXTERIOR WALLS** Red clay brick, medium to soft	Good 30% of brick sugared but not requiring replacement. Some repoint near grade
B23	**CHIMNEYS** None extant	NA

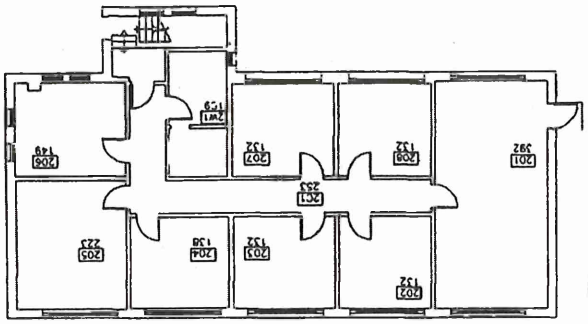
B24	**WINDOWS** Original wood three over three panes casement on second floor Replacement single pane on ground floor	Fair to good
B25	**ENTRIES / DOORS** The original exterior entrance was at the south which is now buried inside an addition.	NA
B30	**ROOF TYPE & MATERIALS** Cottage roof Asphalt Shingles	Excellent; recently re-roofed
B31	**SOFFIT, FASCIA, GUTTERS, DOWNSPOUTS etc.** All replacement. Decorative elbow brackets missing.	Good
C10	**INTERIOR CONSTRUCTION** Ground floor - a single open room.	Good
C20	**STAIRCASES**	One conforming interior. One non-conforming exterior.
C30	**INTERIOR FINISHES** Drywall and plaster walls. Ground floor has original T&G wood ceiling and beams above T bar. Linoleum flooring. Second floor has a variety of flooring. Residual plaster ceilings have lost their key & are in danger of collapse.	Ground floor: good, T&G ceiling very good. Second floor: poor to good
C40	**FIXTURES & FITMENTS** None of significance	NA
D 10	**ACCESSIBILITY**	Ground Floor only

.7 Feasibility for Multi-Family Residential Reuse

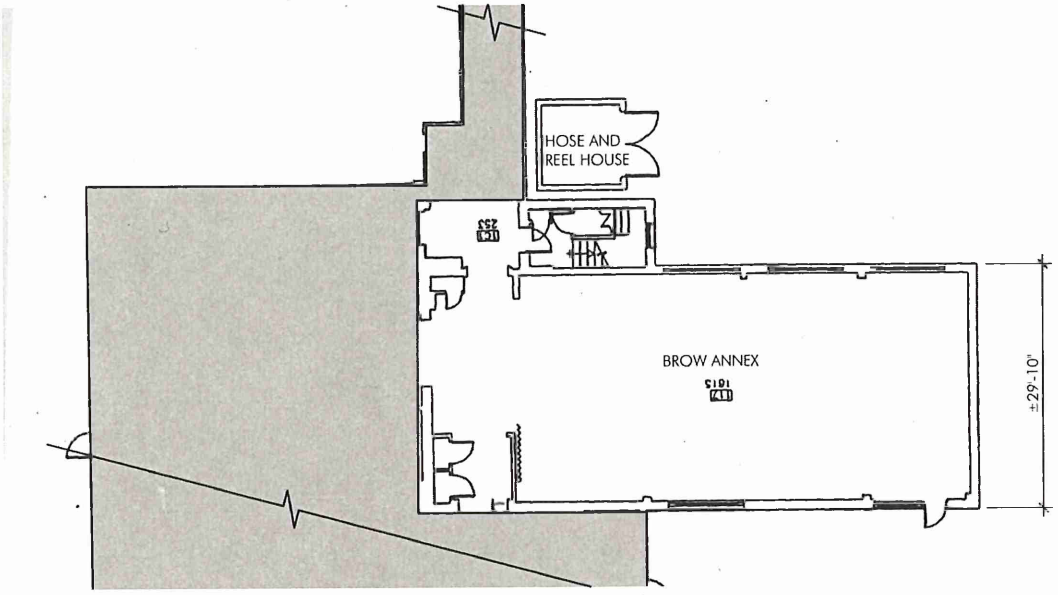
The design of this small pavilion-like building does not easily lend itself to use as a multi-family residential building.

The ground floor of this building could easily be re-used for recreational purposes as per the original design intent. OBC compliance would limit the use of the second floor as it has only one Code conforming means of exit.

.8 Floor Plans



2ND FLOOR PLAN



1ST FLOOR PLAN

LEGEND

ORIGINAL BUILDING FOOTPRINT

ADDITION

0 5 10 20 FT

.9 Photo Elevations

FRONT (NORTH) ELEVATION

EAST ELEVATION

SOUTH ELEVATION

3.1.2c HOSE AND REEL HOUSE (1917?)

Site Assessment March 2007

.1 Building Age / Historical Use

- Assumed built about the same time as the Brow Annex , 1917?
  The Unterman McPhail report (2) refers to this building as the hose and reel building.
  Rick Provo (3) indicated that it has served to house the emergency back-up generator since the fifties. (Rick indicated no early artifacts remain in the building.)

.2 Present Use

- Emergency back-up generator (in the process of being decommissioned)

.3a Integrity of Original

- New roofing, doors, fascia and soffit

.3b Additions to Original

- None

.4 Number of Storeys Above & Below Grade:

- Slab on grade

.5 Approximate Footprint / Size

- 20ft x 20ft.

.6 Condition Assessment (No access)

#	ELEMENT	CONDITION
A10	**FOUNDATIONS**	Good. No settlement cracking
B20	**EXTERIOR WALLS** Red brick, matching Annex	Fair Lower portion requires repointing, replacement
B25	**ENTRIES / DOORS** Replacement	Serviceable
B30	**ROOF TYPE & MATERIALS** Cottage Roof Quaint central pole framing	Good New asphalt shingle roofing

.7 Feasibility for Reuse

This building would have no continuing use for fire fighting or emergency generator systems. The building does not serve an interpretive function either as there are no visual indicators of its design intent.

.8 Photo Elevation

3.1.3 EAST PAVILION (1917)

Site Assessment March 2007

.1 Building Age / Historical Use

- Built in 1917
- Accommodation for soldiers returning with tuberculosis and gassed lungs
- Wards / dining room / vocational workshop

.2 Present Use

- Employees Assistance Program (EAP) offices and administration
- Partly vacant

.3a Integrity of Original

- Extensively remodeled on the interior in 1980 (Provo [3])
- Missing soffit brackets, shed dormer louvers
- Missing wood fascia, soffits and exposed rafter ends
- Ground floor windows replaced with vinyl
- All entrances have been modified. Gabled parapets missing above east entries
- Bay's decorative roof pediment missing and coping stone missing or flashed over.
- Two east bays have been given over to mechanical ducts, and the prime exterior space adjacent to the bay has been given over to a mechanical compound. (Building not designed to be heated)

.3b Additions to Original

- Enlarged in 1922, 1932, and 1950-52 [3]
- Basement and basement entry addition
- Mechanical compound to the east

.4 Number of Storeys Above & Below Grade

- Ground floor: 10'-6" floor to ceiling
- Second floor: 10'-0" floor to ceiling
- Partial basement with crawl space under the wings

.5 Approximate Footprint / Size

- 26' x 137' / total area 6,800 sq.ft [3]

.6 Condition Assessment

#	ELEMENT	CONDITION
A10	**FOUNDATIONS** The underpinned poured concrete basement in central portion is an addition. Wings: early poured concrete crawl spaces	Fair Water seepage running through from north wing to sump, moisture infiltration throughout. due to lack of, or poor, perimeter drainage. No settlement cracking

B10	**STRUCTURAL SYSTEM** Exterior load bearing masonry walls with one interior load bearing wall running the length of the building. Floors are industrial wood flooring (dimensional lumber on side nailed together forming a structural slab) Wood frame roof.	Good
B20	**EXTERIOR WALLS** Low fired red clay brick (bricks matching those of the Brow Annex). Concrete sills continuous between brick pilasters	Good 5 to 10% sugared bricks
B22	**PARAPETS** Removed or residual over east entries. Flashed over at bay.	Fair Suspected problems under flashings
B23	**CHIMNEYS** One rebuilt chimney for boiler in basement	Good
B24	**WINDOWS** Double hung wood windows with aluminum storms on most of second floor. Vinyl clad thermopane units on ground floor.	Fair condition Excellent (appear new)
B25	**ENTRIES / DOORS** Front door could be original; others are modern steel fire doors. Canopies over all three entries are original.	Good
B30	**ROOF TYPE & MATERIALS** Asphalt shingles	Good
B31	**SOFFIT, FASCIA, GUTTERS, DOWNSPOUTS, etc.**	Very Good
C10	**INTERIOR CONSTRUCTION** Much renovated	Good
C20	**STAIRCASES** Original wood staircases of simple design at either end of building	Good **Non Code conforming**

C30	**INTERIOR FINISHES** Walls: painted plaster and GWB. Floors: carpet, vinyl tile, etc. Ceilings: plaster second floor, ground floor different acoustic tile systems	Fair A mishmash of materials. Some 12" x12" acoustic tiles may contain asbestos.
C40	**FIXTURES & FITMENTS** Some original 5 panel doors and casing on the second floor. Cast iron radiators in stairwells	Good in the few locations still remaining
D10	**ACCESSIBILITY** Washroom accessibility unknown	Building is accessible. Second floor not accessible.
D20	**BUILDING SYSTEMS: ELECTRICAL HVAC** Built without heating system. Then, on central steam plant. Presently self-contained boiler / air handling units in compound at grade, Perimeter fan coil units.	Adequate
D40	**FIRE PROTECTION** fire alarm smoke detection system	Unknown

.7 Feasibility for Multi-Family Residential Reuse While Retaining Heritage Assets

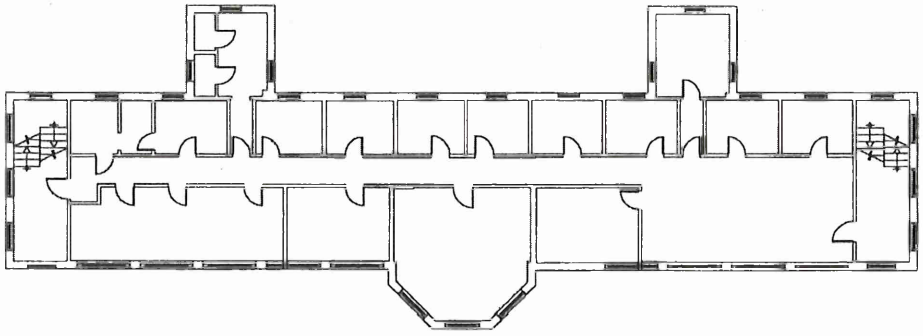
The building envelope is feasible for reuse.

Inserting a modern heating and cooling system within the envelope would be a challenge.

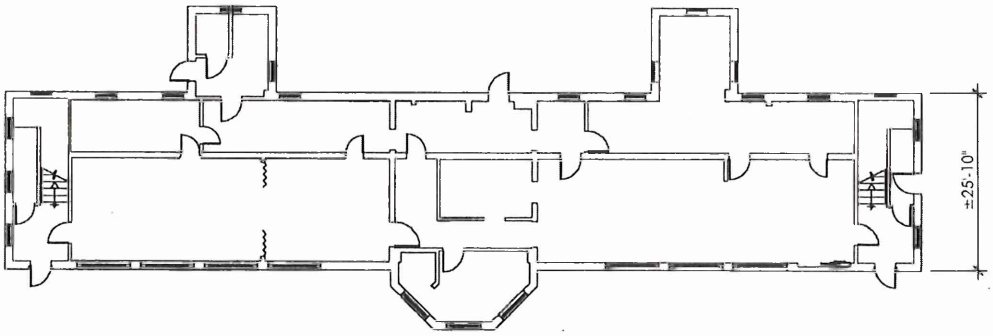
Because the building is so narrow, 26 ft, it could only logically be divided into row housing, seven units of approximately 1,300 sq.ft. each.

This building has already lost many of its significant features. New entries and the enlargement of windows on the west elevation would be essential to the conversion. These interventions required to convert the structure to row housing would further distort the building's historical design intent of being a pavilion like structure having the architectural features associated with the garden city movement in England.

.8 Floor Plans



2ND FLOOR PLAN



1ST FLOOR PLAN

LEGEND

ORIGINAL BUILDING FOOTPRINT

ADDITION

0 5 10 20 30 FT

.9 Photo Elevations

NORTH ELEVATION

EAST ELEVATION

SOUTH ELEVATION

WEST ELEVATION

3.1.4 MORELAND RESIDENCE (1936)

Site Assessment March 2007

.1 Building Age / Historical Use

- Belongs to the intermediate phase of hospital development
- 1936: built as a residence for 60 males, known as the "Orderlies Home"
- 1962: renovated for School of Medical Technology
- 1974: closed as a residence
- 1974 to 2003: ?

.2 Present Use

- 2004: Alcohol Treatment Education Centre (offices)

.3a Integrity of Original

- Exterior is intact except for: missing parapet and original windows (The new windows are vinyl clad with a small operating lower sash, while the originals were wood, double hung, 9 panes over 9 panes.)
- Interior extensively altered

.3b Additions to Original

- None
- Fire escape north elevation?

.4 Number of Storeys Above & Below Grade

- Ground floor 9'-6" floor to ceiling
- Second floor 8'-6" floor to ceiling
- Third floor 8'-6" floor to ceiling
- No basement

.5 Approximate Footprint / Size

- 38' x 82' / 3,100 sq.ft. per floor

.6 Condition Assessment

#	ELEMENT	CONDITION
A10	**FOUNDATIONS** No basement Exterior assessment	
B10	**STRUCTURAL SYSTEM** Assumed: Exterior and interior load bearing masonry walls with concrete slab floors and wood frame roof.	Very good condition. Loading capacity unknown as built as residence

B20	**EXTERIOR WALLS** Blended red rugged clay brick with clay tile or similar masonry backing. A highly fossilized limestone is used for lintels; sills roll molding.	Very good condition
B22	**PARAPETS** Thought to be more of a gravel stop as the higher original parapet has been removed, probably due to poor condition. Limestone coping stones (originally stone cornice)	Not inspected from roof Good
B23	**CHIMNEYS** None visible, original appears to be removed	NA
B24	**WINDOWS** Recent replacement vinyl clad	Very good
B25	**ENTRIES / DOORS** All doors are replacement metal and glass doors. Main entry has original sidelights and glazed transom and decorative stone surround.	Good
B30	**ROOF TYPE & MATERIALS** Not accessed - assumed to be built-up roofing	
C10	**INTERIOR CONSTRUCTION** Hollow clay tile load bearing walls(3) and stud partitions	Very good but spaces very broken up
C20	**STAIRCASES** The central staircase is a very simple yet elegant bolted cast iron system with wood rail. Probably too steep to be Code conforming.	Very good
C30	**INTERIOR FINISHES** Floors mostly carpeted, 2' x 4' acoustic tile ceilings, and painted GWB and plaster walls	Fair
C40	**FIXTURES & FITMENTS** None of interest other than central staircase	

D10	**ACCESSIBILITY** Only the ground floor, through the north entrance, is accessible.	No accessibility above ground floor level.
D20	**BUILDING SYSTEMS : ELECTRICAL HVAC**	unknown
D40	**FIRE PROTECTION** Smoke detectors, fire alarm, emergency exit lighting, standpipe	unknown

.7 Feasibility for Multi-Family Residential Reuse While Maintaining Heritage Assets

The building envelope is in very good condition and feasible for reuse.

As the building only has one interior staircase, which is not Code conforming, some significant modification would have to be made to allow for safe exiting if the use was to be changed to residential. The building could continue in as non conforming office use.

The building was designed to house orderlies in wards with a shared central bathroom. Later the wards were broken down into rooms designed for two to share.

The building's narrow floor plate does not lend itself to an efficient layout of units on both sides of the central corridor.

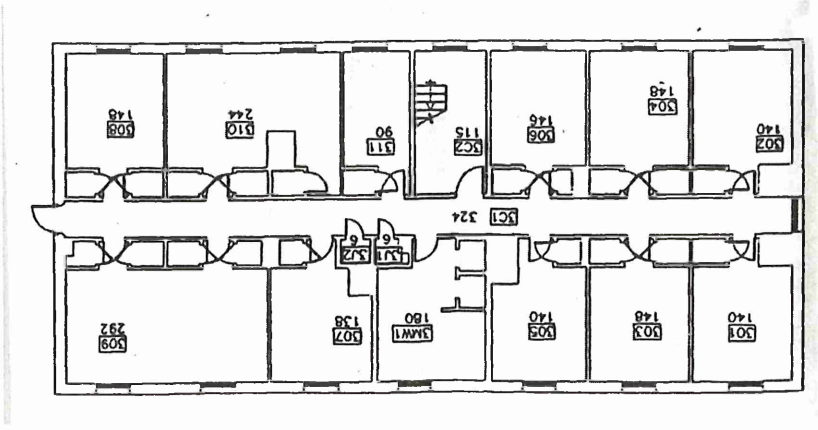
The building could be converted into 4 large three-storey townhouses. The additional entrances plus the enlargement of all ground floor windows would significantly change the appearance of the building.

or:

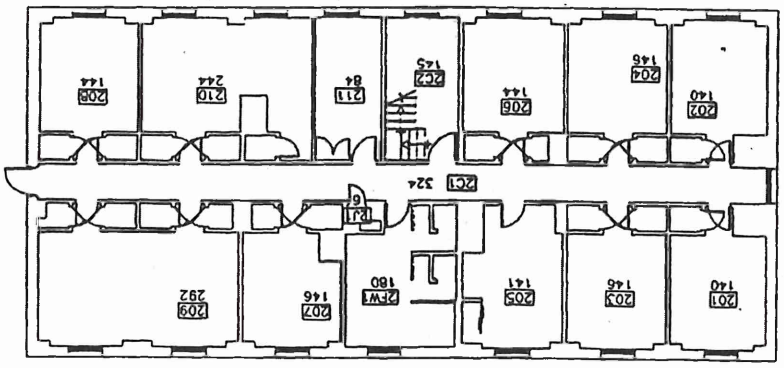
If the building were sprinklered and a second enclosed staircase added, it could be converted into four one-bedroom units per floor. In order to make these units desirable, significant changes would have to be made in the fenestration.

Although built as a residence, in order to retain the original appearance, the building is most suitable for continued use as offices.

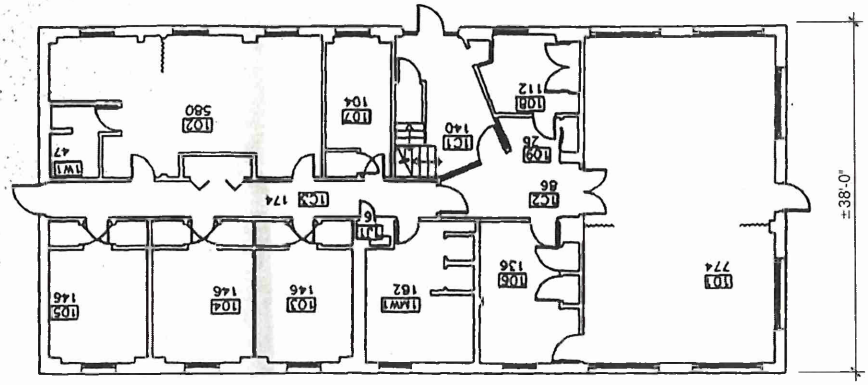
.8 Floor Plans



3RD FLOOR PLAN



2ND FLOOR PLAN



1ST FLOOR PLAN

LEGEND

ORIGINAL BUILDING FOOTPRINT

ADDITION

0 5 10 20 FT

.9 Photo Elevations

EARLIER PHOTO

PHOTO TAKEN AT 2007

NORTH ELEVATION

EAST ELEVATION

SOUTH ELEVATION

WEST ELEVATION

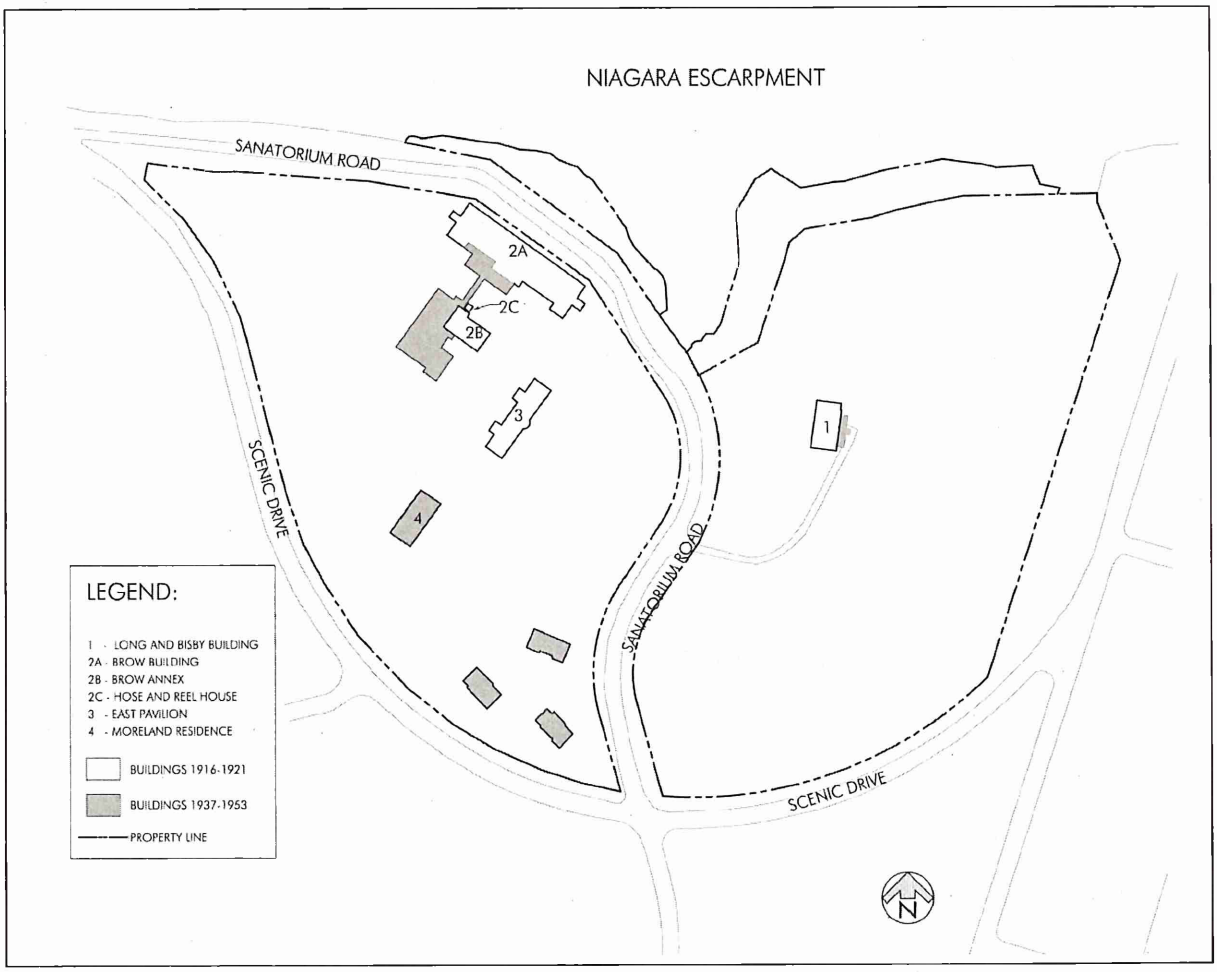
3.2 BUILT HERITAGE ASSESSMENT

Note: Refer to Unterman and McPhail report [2] for contextual history and historical development of Chedoke Hospital

3.2.1 BUILT FORMS' CONTRIBUTION TO CULTURAL HERITAGE LANDSCAPE

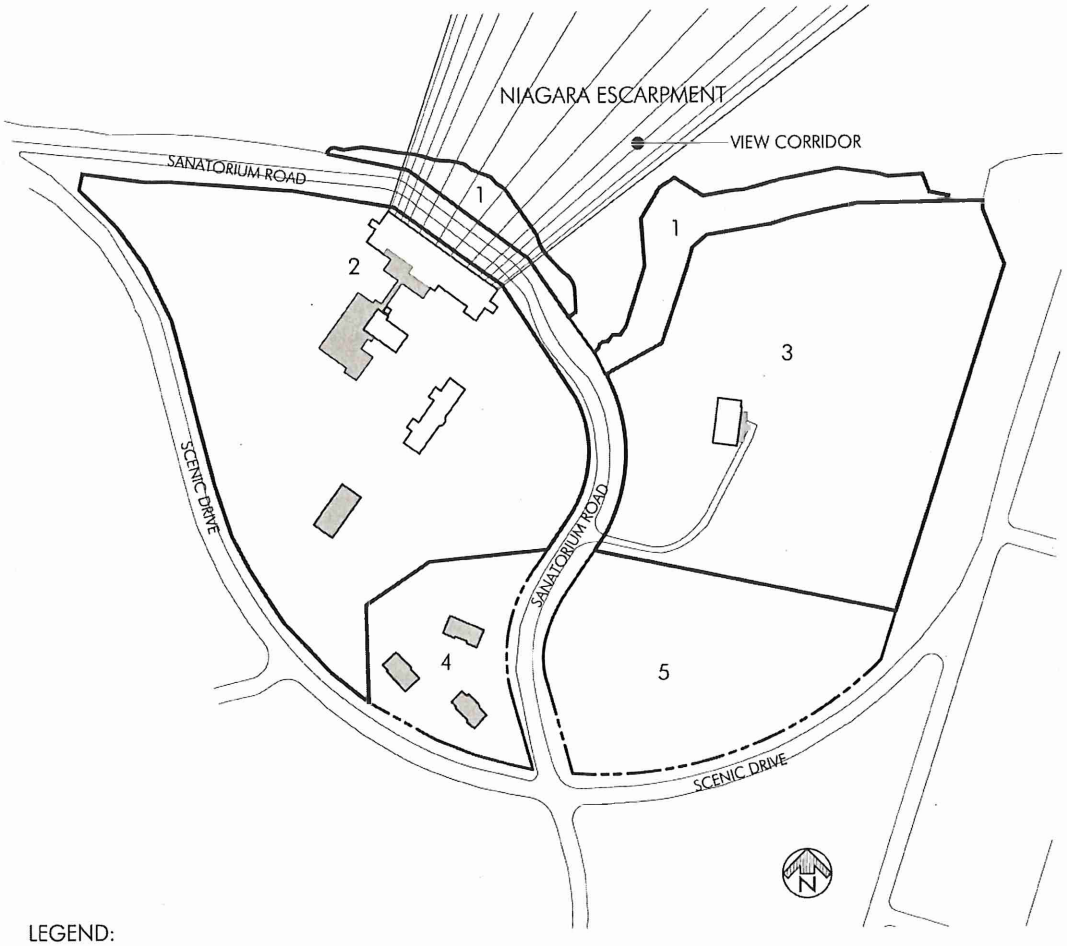
Chedoke Hospital developed from 1906 to 1914 south of Scenic Drive in an area referred to as the Orchard site.

The Browlands represent the second wave of development, from 1915 to 1920. This wave of development was in tuberculosis chronic care. Much of the funding came from the Military Hospital Commission, and the majority of the patients were soldiers returning from WWI. The Brow Building, Brow Annex, and East and West Pavilions were all built from 1916 to 1917. These two years represented the zenith of sanatorium development of the Browlands. The buildings and design intent of this period have the greatest heritage significance.



Staff residences were later built to better service the sanatorium - Long and Bisby in 1920, and the double doctor's residences in 1921. Moreland Residence (1937) is the only building of any stature built on the Browlands after 1920 and in many ways is more closely tied to the Orchard site to the south.

A very important attribute of the buildings of the Browlands is their contribution to the understanding of the Cultural Heritage Landscape. They contribute to the cultural landscape through *historical association and context.*



LEGEND:

1. LANDS ASSOCIATED WITH THE ESCARPMENT.
2. LANDS ASSOCIATED WITH WW1 SOLDIER CARE. BUILDINGS FORMALLY ARRANGE TO MAXIMIZE VIEW, SUN AND THROUGH BREEZES (1915-1917)
3. LANDS ASSOCIATED WITH NATURE. BUILDINGS IN PARK LIKE SETTINGS.
4. LANDS UNDEVELOPED UNTIL 1953
5. UNDEVELOPED LANDS.

.1 West of Sanatorium Road

Up until 1937 when the Moreland Residence was built, all substantial masonry buildings west of Sanatorium Road were for hospital and hospital ancillary use.

The Brow Infirmary Building boldly marks the northern most extent of the hospital site.

The Brow Infirmary Building established the east of north axis that all the other buildings west of Sanatorium Road respected.

The campus design for buildings west of Sanatorium Road was very formal. All buildings were laid out on or perpendicular to the Brow Infirmary's axis. The Brow Infirmary Building with the East and West Pavilions formed a large quadrangle with the Brow Annex, the community focal point in the centre.

.2 East of Sanatorium Road

Buildings east of Sanatorium Road were designed for residential use; nurses and doctors residences. They did not follow any formal grid but rather were fit into the landscape. Their longitudinal axis was parallel to Sanatorium Road.

3.2.2 ARCHITECTURAL MERIT

Note: The italicized significance statements that follow are from Unterman McPhail [(2)]. Although only buildings assessed in the Unterman McPhail work as being significant were included, the Brow Annex has been treated in this report as the separate building it is rather than an add-on to the Brow Building.

.1 Long and Bisby Building 1920, Architect unknown, General Contractor W.H. Cooper

Significance:
The Long and Bisby building is listed in the City of Hamilton LACAC Inventory of Buildings of Architectural and Historical Interest. This structure is considered an important local architectural feature and merits appropriate preservation treatment and consideration for reuse.

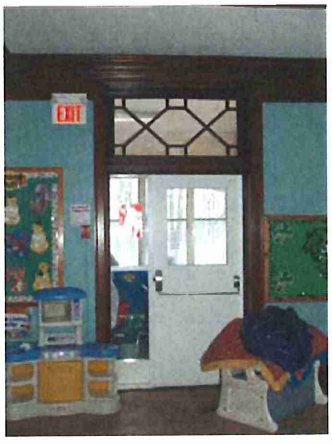
Historical Value

The Long and Bisby Building is historically interesting because of its association with Chedoke Hospital's Browlands. The building is named after the two realtors who donated the 96 acres for the Hamilton Sanatorium and the building costs.

Early Photo - Long & Bisby Building

2007 Photo

Lounge



Glazed Transom

Architectural Value

It is a handsome building made of the same buff tapestry brick as the earlier Brow Building. Its architectural merit is based on its classical symmetry and the restrained use of materials, offset by the neo-classical entry with decorative tablet and flag mast over.

The nurses' lounge is one of the most significant interior spaces on the site, giving a glimpse into a past nursing lifestyle.

Contextual Value

It is the only remaining residence associated with WWI chronic care. It is the only remaining building of stature in a park-like setting.

.2a The Brow Infirmary Building 1916, Architects: Witton and Stewart

Significance:
The Infirmary building is the oldest building on the former Mountain Sanatorium site and is closely associated with the initial phase of development at the Mountain Sanatorium by the HHA.

Historical Value

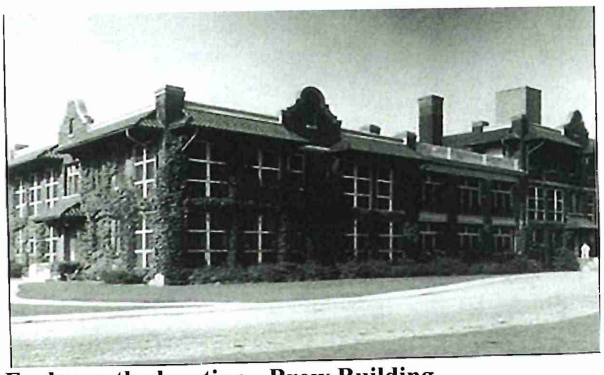
The Brow Building, later known as the Continuing Chronic Care Building, is the first and largest hospital purpose building built on the Browlands. Historically, it is the most significant building on the site.

Architectural Value

The Brow Infirmary Building as originally designed and built would have been the building of enduring architectural merit. Unterman McPhail has called the original design "Spanish Colonial Revival." Unfortunately nothing remains of the significant features of this style; the curvilinear parapets over the entries, the glazed roofing tiles on sloped roofs at the entries and parapets, the decorative eave brackets, the balconies and even the windows have all been removed.

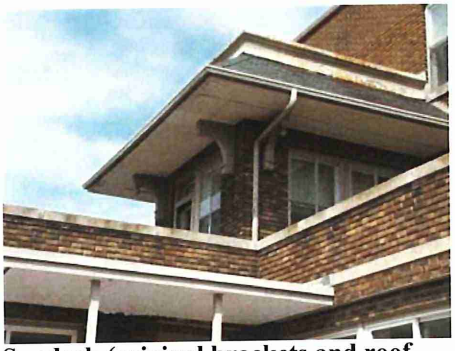
The second floor sundeck is the only location where any of the sloped features remain.

The Brow Infirmary Building as it appears today has little architectural merit and does not reflect the original design intent. It would be possible to reconstruct the missing architectural features but this would be pure reconstruction, not preservation of existing significant features.



Early north elevation - Brow Building

2007 north (front) elevation



Sundeck (original brackets and roof flashings)

Contextual Value

The Brow Infirmary Building's relationship to the brow of the escarpment is significant. It was sited as close to the Brow as possible. The vegetation directly in front of the building was kept low. This not only ensured the curative winds off the lake would reach the tubercular patients, but also ensured view corridors from the hospital to the City of Hamilton and from the City back to the hospital that cared for its citizens.

The tallest structure on the site is the three storey central block.

.2b The Brow Building Annex 1917

Historical Value

The Brow Building Annex was designed as a cafeteria and recreational building. With its construction, the Browlands became more independent from the Chedoke Orchard site.

Architectural Value

The Brow Annex was a classic example of an early 20th century institutional cottage type building. It is built of the same red brick as the East Pavilion. With the exception of the eave brackets, its original architectural features are intact, and it is today the only building that retains the sense of a 'garden city' pavilion.

Removing the extensive additions would allow for the interpretation of the structure's original use. (The existing connection to the Brow Building does not appear to be original.)

Contextual Valve

Both physically and socially, the Brow Building Annex was the focal point of all other structures.

.2c The Hose and Reel Building No. 7 (Unterman McPhail name for building)

Significance:
It contributes to the historical character and context of the Brow site.

Historical Value
This small building's value, whether as a fire hose building or more recently as the back-up generator building, was to contribute to the site's independence from the remainder of the hospital.

Architectural Value
The exposed carved peak support of the roof is an interesting element.
The bricks match those of the Brow Annex and East Pavilion

Contextual Value
This building may have housed the fire house and reel for the site. Today, and as far back as current staff can recall, it houses the emergency back-up generators. Although it may represent original fire protection for the site, there is nothing about the building that would give the casual observer any clue to its original or present use. The casual observer would assume it is a garbage enclosure.

Its location smack up against the Brow Annex is unfortunate from an architectural appreciation of the Brow Annex.

.3 The East Pavilion 1917

Significance:
Build as part of a federal government program during World War I to build its own permanent tuberculosis facilities across Canada to serve returning soldiers. It was one of the first permanent facilities built by the federal government in Canada.

Historical Value

This is the only remaining pavilion which housed the WW1 and the many other that followed patients. (The West pavilion which married the East around the vertical design axis has been demolished.)

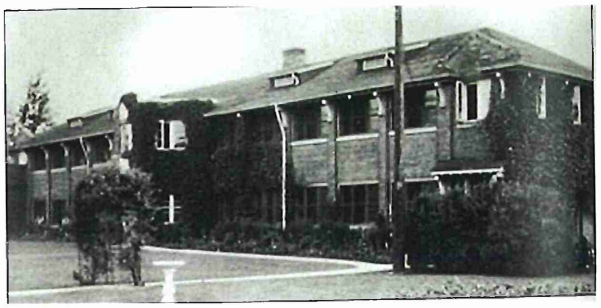
Architectural Value

Its more charming architectural features, decorative eave brackets and parapets, have been lost.

As it appears to-day this building's significance lies in giving context to the Brow Site portion of Chedoke Sanatorium, not in its architecture.

Contextual Value

This building forms the western built edge of the 1916 / 1917 buildings. Its glazed side where the wards were located opened onto a garden with water feature.



Early East Pavilion

2007 east elevation

.4 Moreland Building 1936

Significance:
This is the only building to be erected on the Brow Site between early 1920s and 1937.

Historical Value

By 1922, with the completion of the doctors' residences, the Brow Site was complete as a self-sustaining community. The Moreland Building was built to house male orderlies.

The Unterman McPhail report indicates that it represents the intermediate years of the site (1920 - 1960) and is the only building built on the site between 1920 and 1937.

It is not associated with the original 1916 / 1917 development of the site.

Architectural Value

It is a handsome building typical of institutional buildings of the time. Other examples of this period can be found on the Orchard site.

Contextual Value

It is the building sited farthest from the brow. It is both architecturally and historically more closely associated with the orchard site than the Browlands.

Early north elevation - Moreland Building

2007 north elevation

4.0 HERITAGE INTERVENTION PRINCIPLES AND GUIDELINES

4.1 INTRODUCTION

Preservation of a heritage resource must be based on recognized principles. When it is a given that the anticipated interventions will be of a substantive nature (as in this case, where after a century the land use is to change from sanatorium to multi-family), these principles must address the balance between attaining functional goals and conserving the significant heritage characteristics of both the landscape and the buildings that are found on the site. Careful consideration must be given to the impact of a decision to achieve a functional goal at the expense of a significant heritage feature and vice versa. In an ideal world all heritage features would be retained, but in reality many significant features have already been lost and there are legitimate needs that run contrary to heritage conservation.

In establishing intervention guidelines that can practically govern the redevelopment of this site, the basic approach must respect the elements of heritage significance of both the buildings and the setting.

Interventions may occur anywhere in a spectrum from slow and natural deterioration to total demolition and redevelopment. The scale of intervention will determine whether it affects the entire site, a setting within that site, several buildings or a single building or only an element of a building or landscape. The activities which characterize such scales and *levels of intervention* may range from "documentation, monitoring and maintenance, conserve and repair, stabilize and mothball, retrofit and/or alter for rehabilitation, reconstruction to replicate, alteration and additions or infill, and severe acts such as moving, salvage, fragmentation and monumentation in conjunction with demolition and redevelopment.

The aim in setting out these guidelines is to mitigate the effects of change on the heritage significance of the site. A clear understanding of the significance of the site is required. The documents listed in the bibliography are a major contributing source to the understanding of the heritage significance of this site and should be read in conjunction with this report.

Any proposal for this site should explain what aspects of the proposal conform to these intervention guidelines; or in the event that some aspects of the proposal do not, it should be shown how the proposal mitigates any detrimental impact on the heritage significance of the site.

4.2 INTERVENTION PRINCIPLES

4.2.1 The principles of intervention must apply at all levels of intervention activity and to all owners, lessees, and tenants of all portions of the 'Browlands.'

4.2.2 The overall site planning objectives have created, within Setting #2, a juxtaposition between the axial symmetry of the buildings and internal pedestrian paths and a curvilinear vehicular circulation network. This juxtaposition should be preserved.

4.2.3 Major historic views of and view corridors from the site and its built form should be protected.

4.2.4 Historical associations, environmental context, and the functional and spacial relationships should be respected.

4.2.5 Historical natural environmental precincts and significant cultural landscape features should be protected and integrated in the redevelopment plans.

4.2.6 Pedestrian precincts should be protected.

4.2.7 Buildings and structures retaining heritage significance should be respected and protected.

4.2.8 Services should be provided in a manner that causes the least physical harm to and visual impact on the landscape, buildings and structures.

4.2.9 Public interest in the integrity and significance of the site should be protected and interpreted.

4.3 CULTURAL HERITAGE LANDSCAPE INTERVENTION GUIDELINES

The heritage value of this cultural landscape is found in the various character defining features still found on site and dating from the development period of the Mountain Sanatorium. Figure 1 in Appendix A is a plan illustrating the landscape features of the site with heritage value. These features include:

4.3.1 LANDFORM

The existing topography of the perimeter roads and the central stream corridor and woodlot should be retained and integrated into the new development plan. Significant regrading of the landscape for engineering purposes such as stormwater management should be limited.

4.3.2 SPATIAL ORGANIZATION

The overall design intent including the orientation, grouping and axial symmetry of the core quadrangle of buildings juxtaposed with a naturalistic landscape setting should be respected.

4.3.3 VEGETATION

.1 Woodlot and Stream Courses

The vegetation of the woodlot and the stream courses should be retained and protected.

.2 Individual Specimens and Street Trees

A tree assessment should be undertaken to determine candidates for protection and preservation of individual specimens and street trees before detailed design and Site Plan Approval submissions.

.3 Commemorative Trees

Commemorative trees should be protected and integrated into the redevelopment plans.

4.3.4 VIEWS

All significant views should be protected including the view to the city from the top of the escarpment, views along the stream corridor, views to the Brow Building from Sanatorium Road, and views into the site at the Scenic Drive and Sanatorium Road entrances. The open view of the park-like setting in front of the Long and Bisby Building should be retained and integrated in the new development.

4.3.5 CIRCULATION SYSTEM

New circulation routes in the redevelopment plan should respect the alignment of Scenic Drive and Sanatorium Road.

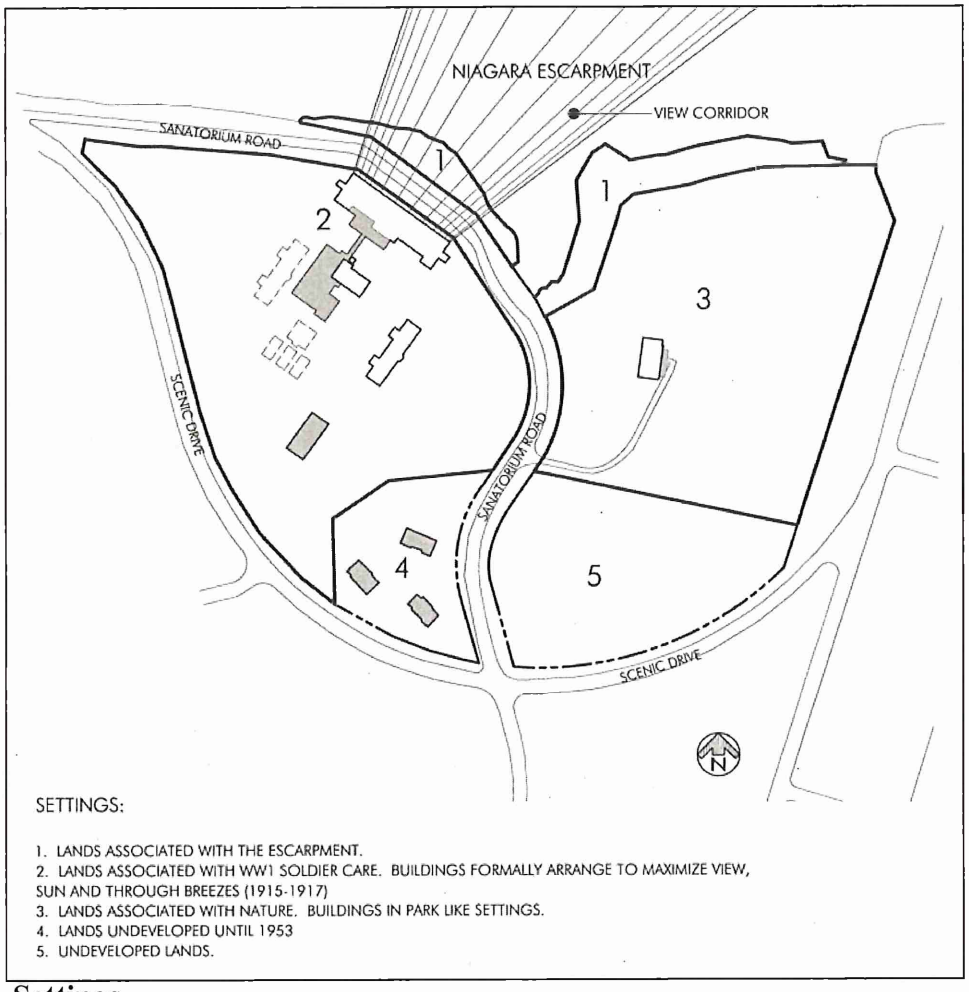
4.3.6 STREAM CORRIDOR

Any new development should not encroach on the paleo stream channel corridor which varies in width from 4m -20m within the site.

4.3.7 BUILT FEATURES

All built features with heritage significance including the pedestrian bridge, the stone wall and pillars at the vehicular bridge, and the Cross of Lorraine should be protected, and retained in their current location, and repaired as needed.

4.4 BUILT FORM INTERVENTION GUIDELINES



Settings

4.4.1 GENERALLY APPLICABLE GUIDELINES FOR SETTINGS #1 & #2

4.4.1.1 The future use of this previously public site will be private. The exception to this is the edge of the Brow, which will become an ever increasingly important public corridor. For this reason, special attention must be paid to ensure that the historical significance of the site can be interpreted along the length of the Brow corridor whether it becomes a pedestrian corridor or remains a vehicular route.

4.4.1.2 At a minimum, any building of significance that it is to be demolished shall be documented (minimum 4 elevations, professional archival quality photographs and scaled floor plans).

4.4.1.3 The site and building services are presently in the process of being decommissioned. Until such time as a demolition permit has been issued by the City of Hamilton, an approved stabilization/maintenance/monitoring plan should be followed.

4.4.2 SETTING #2 ASSOCIATED WITH WWI SOLDIER CARE

4.4.2.1 Brow Building - Historical and Contextual Value

This is the most important building in this most significant setting. Unfortunately, the removal of decorative features and fenestration has denuded the building of the majority of its heritage assets.

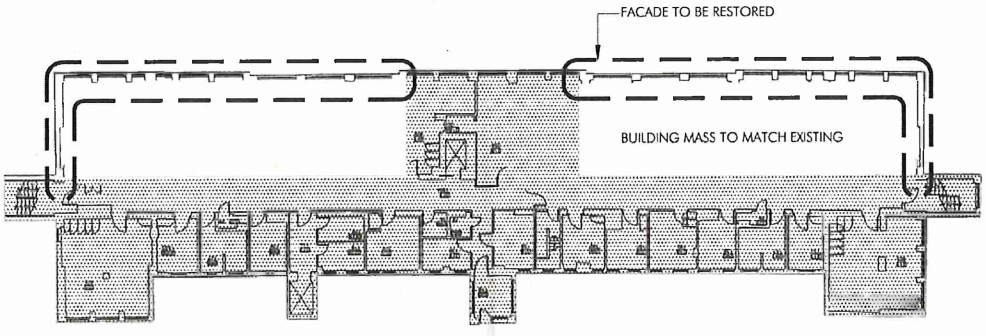
The heritage impact to the Brow Building as it now stands can be mitigated by different strategies. Regardless of which strategy is chosen, some built feature must remain or be created that allows the public to be able to interpret the front edge of where the Brow Infirmary Building stood.

Strategy #1 Conforming to Niagara Escarpment Planning Policies

The preferred strategy would preserve portions of the front façade, restoring lost architectural features.

Policy 1.3 Escarpment Natural Area, Objectives: *"To maintain the most natural Escarpment features, stream valleys, wetlands, and related significant natural areas and associated cultural heritage features"* should then allow for building within 30 m of the top of the defined bank.

.1 Preserve the facades of the outer two bays (see sketch) and reconstruct all missing architectural features.
.2 Reconstruction should include window openings, window types, tile roofing elements, straight and decorative parapets, stone and decorative metal copings, and railings.
.3 Maintain the massing back as far as the central corridor.
.4 The central bay could be dealt with as an infill or reconstruction to approximately the existing height.
.5 Massing could be added to the rear, south, of the building providing it is stepped backwards.



Strategy #1 Partial Restoration of Facades

Strategy #2 Fragmentation

This strategy would require any new construction to be a minimum of 30 m back from the defined Brow as per the Niagara Escarpment Plan.

.1 Demarcate the line and extent of the front façade of the building.
.2 Enduring hard materials should be utilized, and for this reason, it is not necessary to preserve the existing foundation wall, which would have significant structural problems.
.3 The demarcations could be complemented by plant materials.

In both strategies, sufficient brick should be reclaimed to conserve and if proposed alter the Long and Bisby Building.

4.4.2.2 Brow Annex - Architectural and Contextual Value

.1 Any redevelopment plan of this setting should include for the feasibility of restoring this building, which is the only one that retains the air of a 'garden city' pavilion-type building.
.2 The restoration should include eave brackets, soffits and fascia, demolition of all additions, and the reuse of the building as a community focus for the setting. Every effort should be made to restore the wood ceiling of what was the cafeteria.
.3 Should the approved scheme require the demolition of this building, efforts should be made by the developer to give or sell the bricks to heritage suppliers or projects. The demolition plan submitted to the City for permit should include a methodology that preserves the majority of the bricks.

4.4.2.3 Hose and Reel Building No 7 - Contextual Value

.1 Even surrounded by the buildings it served, the Hose and Reel Building is very difficult to interpret as part of the fire fighting system for the site. Once the site is redeveloped, there will be no context and the building chief heritage asset will have been lost.
.2 In addition to the documentation noted as required for all buildings, research into whether original equipment exists should be undertaken, and that equipment and the roof structure should be documented.
.3 If the Brow Annex is to be retained, bricks from this building should be reclaimed for repairs

4.4.2.4 East Pavilion - Historical and Contextual

.1 Much of the architectural value has already been lost, and once the site is redeveloped, there will be no context for this building buried on the perimeter of the setting.

.2 Should the approved scheme require the demolition of this building, efforts should be made by the developer to give or sell the bricks to heritage suppliers or projects. The demolition plan submitted to the City for permit should include a methodology that preserves the majority of the bricks.

4.4.2.5 Moreland Building

.1 The Moreland building, architecturally and contextually, is this least representative of this setting.
.2 The building could be demolished should the redevelopment scheme require it.

4.4.2.6 New Buildings in this setting

Siting
.1 Maintain the feeling of a formally arranged campus around a central space.
.2 Although not desirable, should the single family neighbourhood bordering Scenic Drive require it, the buildings fronting onto Scenic Drive frontage could be sited more in keeping with that neighbourhood.

Form
.1 Be primarily rectilinear in form.
.2 Adjacent to the east-west portion of Sanatorium Road, have a maximum height similar to that of the central bay of the Brow Building.

Architecture
.1 Be substantially clad in stone or clay masonry units of either red or buff colour (not both).
.2 The following architectural features are desirable:
- parapets with stone or decorative metal copings
- decorative eave brackets
- stone or precast window sills
- divided window units with clear glazing
- recessed masonry panels
- horizontal stone banding

4.4.3 SETTING #3 BUILDINGS IN PARK-LIKE SETTINGS

4.4.3.1 Long and Bisby Building

.1 This building is to be retained.
.2 As a condition of Site Plan Approval:
- the building should be designated
- a building conservation masterplan should be submitted and approved for but not limited to the make good requirements outlined in 3.1.1

.3 A permanent long term use should be established that enables public access, while limiting interventions to significant features.
.4 This may prove to be an appropriate location to showcase site interpretive material.

4.4.4 SETTING #4 LANDS UNDEVELOPED UNTIL 1953

The three 'modern' bungalows were built for married doctors in 1953 [(1)]. They have no associative value in relation to Setting #2 and little architectural value. They may be demolished.

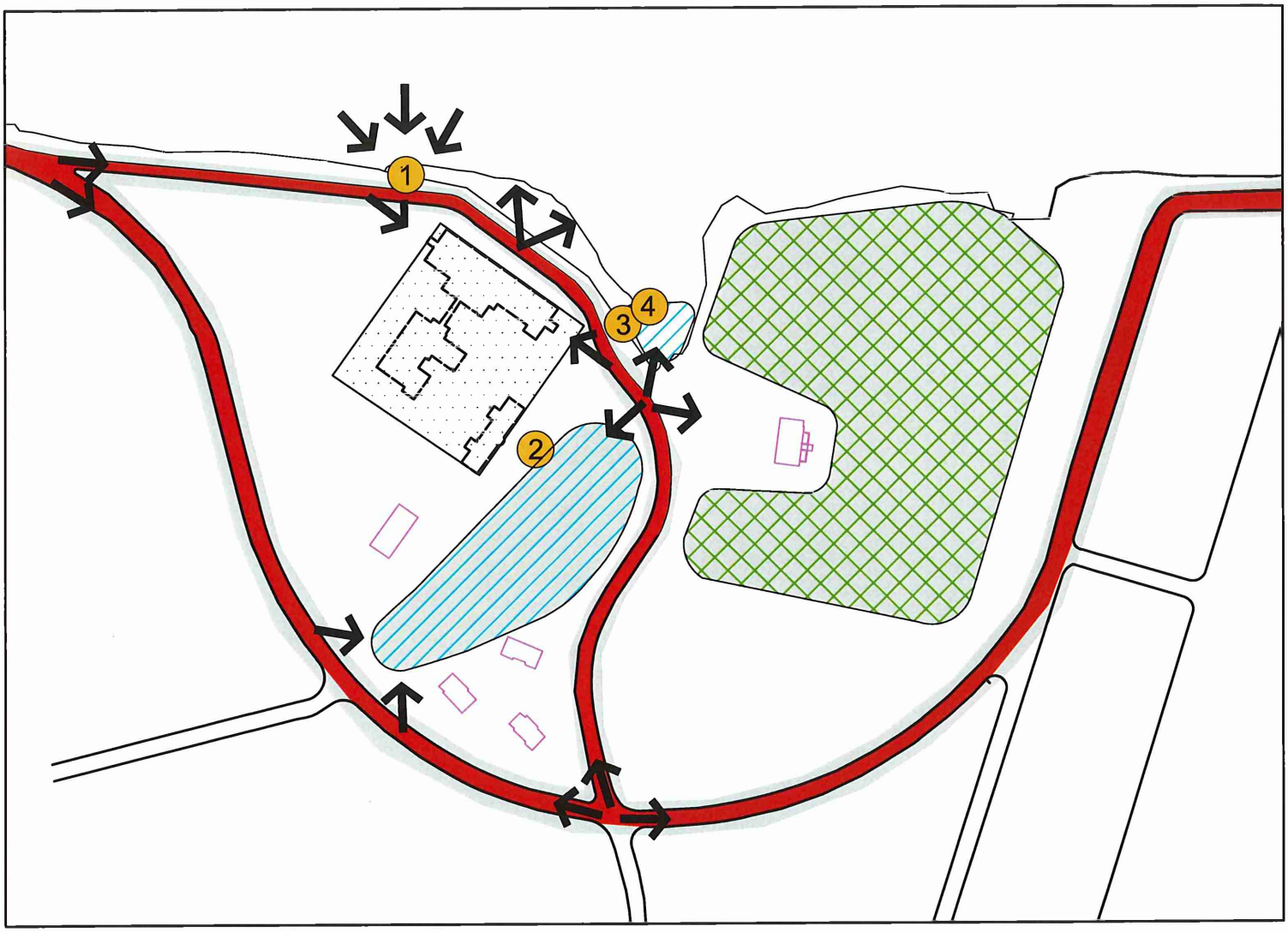
4.4.5 SETTING #5 UNDEVELOPED LANDS

There are no permanent structures in this setting.

APPENDIX A

PLAN OF CULTURAL LANDSCAPE FEATURES

CULTURAL LANDSCAPE FEATURES WITH HERITAGE VALUE



LEGEND

BUILT FEATURES
- 1 THE CROSS OF LORRAINE
- 2 PEDESTRIAN BRIDGE
- 3 STONE WALL & PILLAR
- 4 STAIRS

CIRCULATION
- VEHICULAR AND PEDESTRIAN ROUTE

VIEWS
- DIRECTION OF VIEWS

WATER FEATURES
- WATER COURSE & VEGETATION

VEGETATION
- WOODLOT

SPATIAL ORGANIZATION
- BUILDING ORIENTATION AT CORE QUADRANGLE

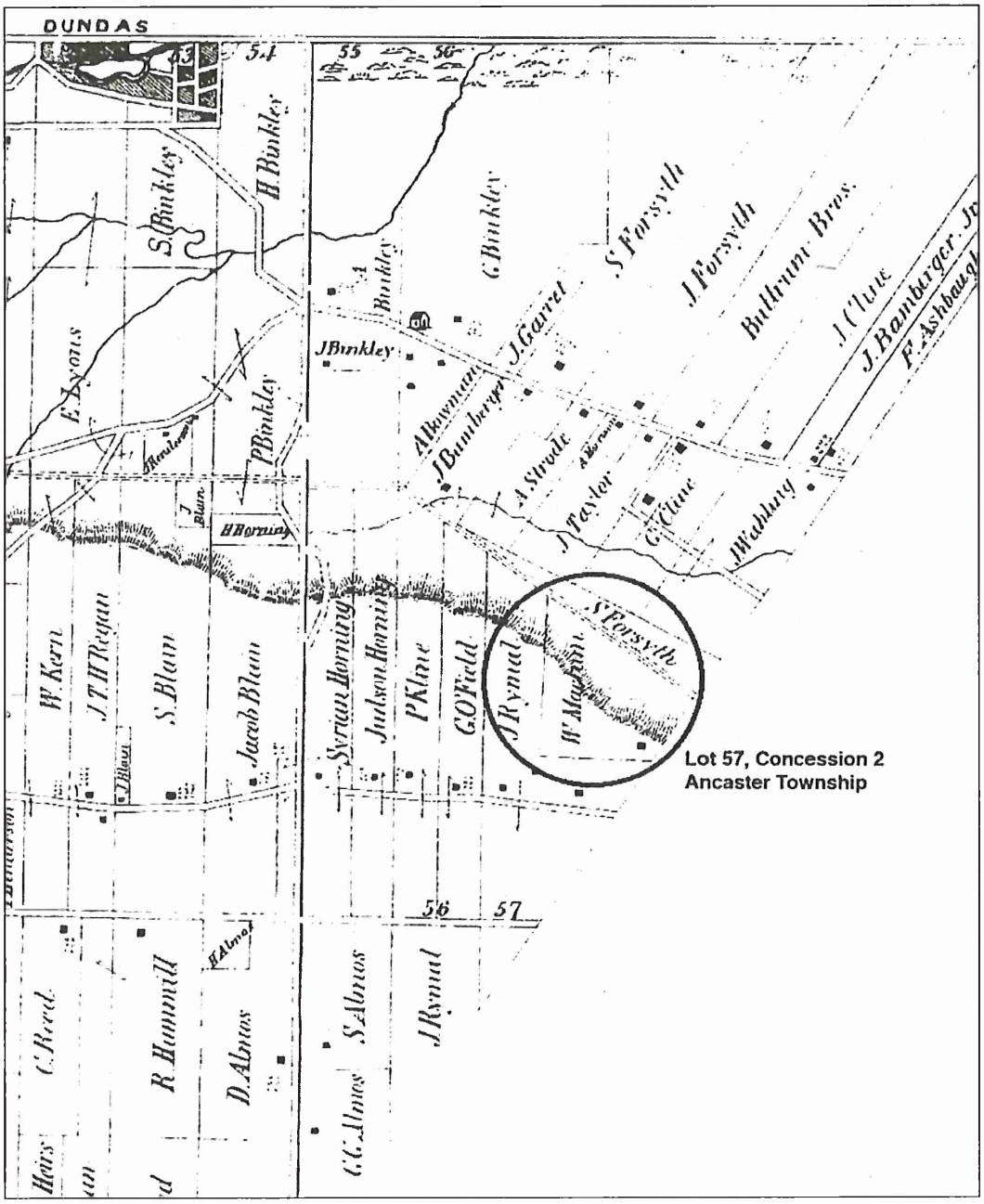
TOPOGRAPHY
- TOPOGRAPHICAL FEATURES

WENDY SHEARER LANDSCAPE ARCHITECT LIMITED
MAY 2007

APPENDIX B

HISTORICAL MAPS

Ancaster Township, 1875 (1 page)
Map of Barton Township, 1889 (1 page)
Map of the City of Hamilton, 1920 (1 page)
City of Hamilton: Western Section, 1921 (1 page)
Hamilton: A Panorama of Beauty and Industry, 1938 (1 page)
City of Hamilton, 1940 (1 page)
Mountain Sanatorium Key Plan, 1960 (1 page)



Ancaster Township, Illustrated Historical Atlas of the County of Wentworth. Page and Smith, Toronto. 1875.

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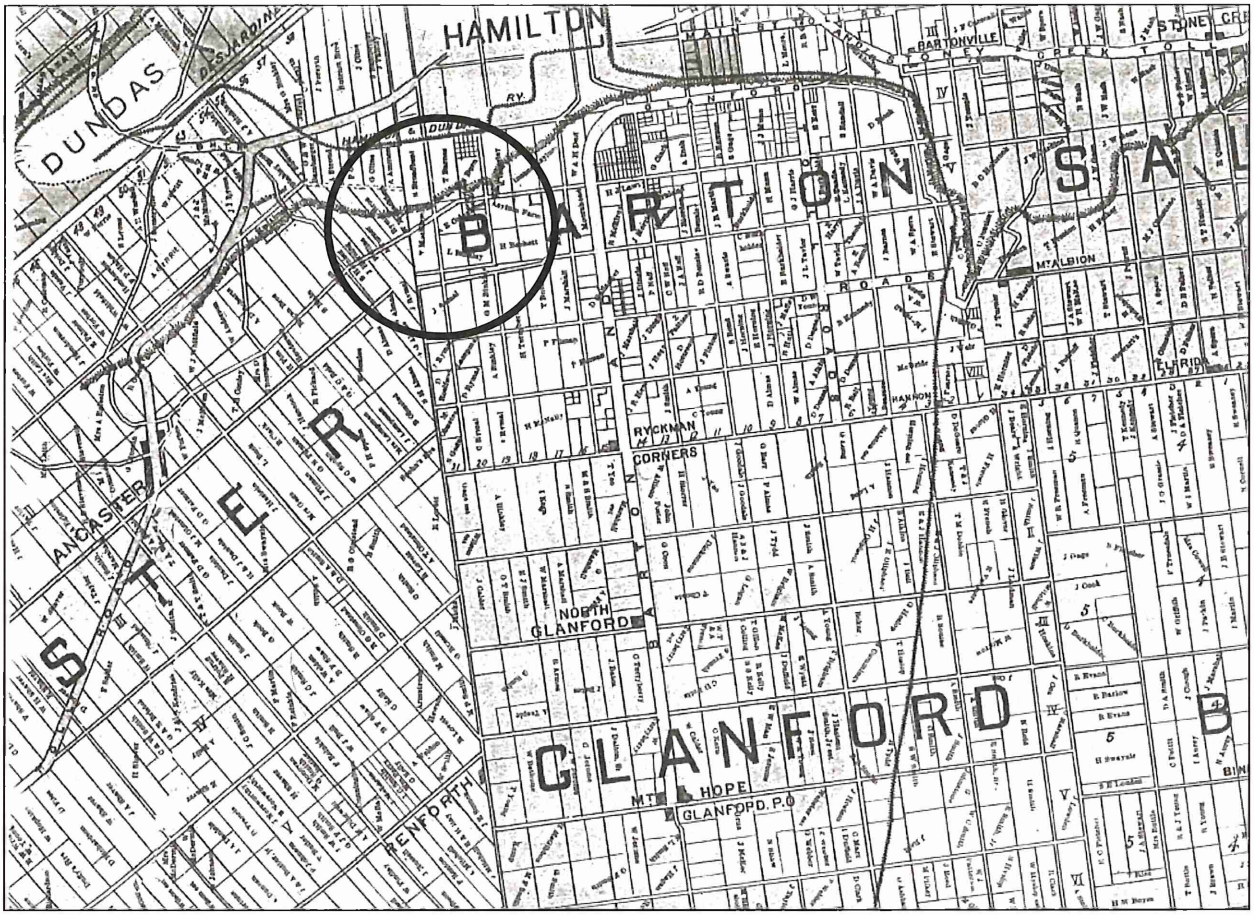

Map of Barton Township. Howell Lith. Co. Hamilton, ONT. 1889

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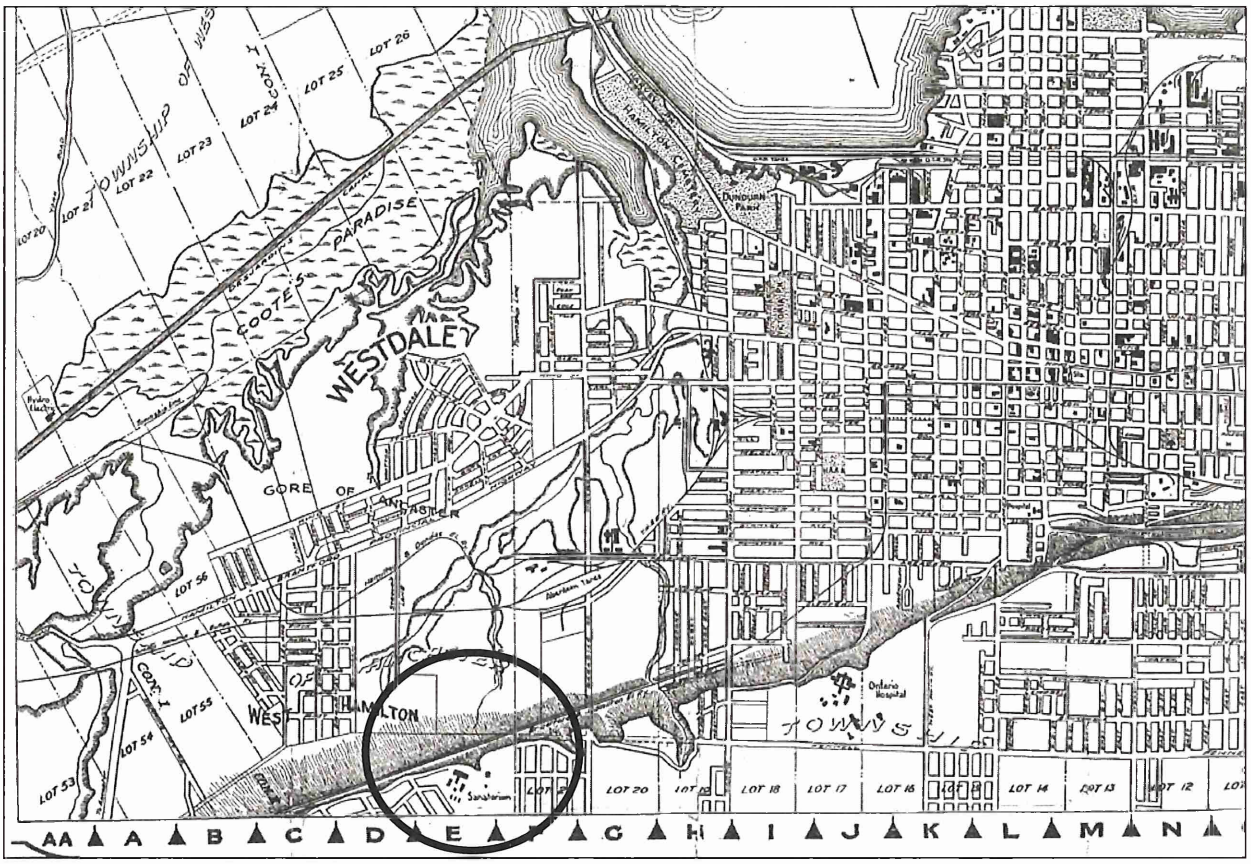

Map of the City of Hamilton. J.W. Tyrell & Co. 1920. Scale 1 inch = 2000 feet

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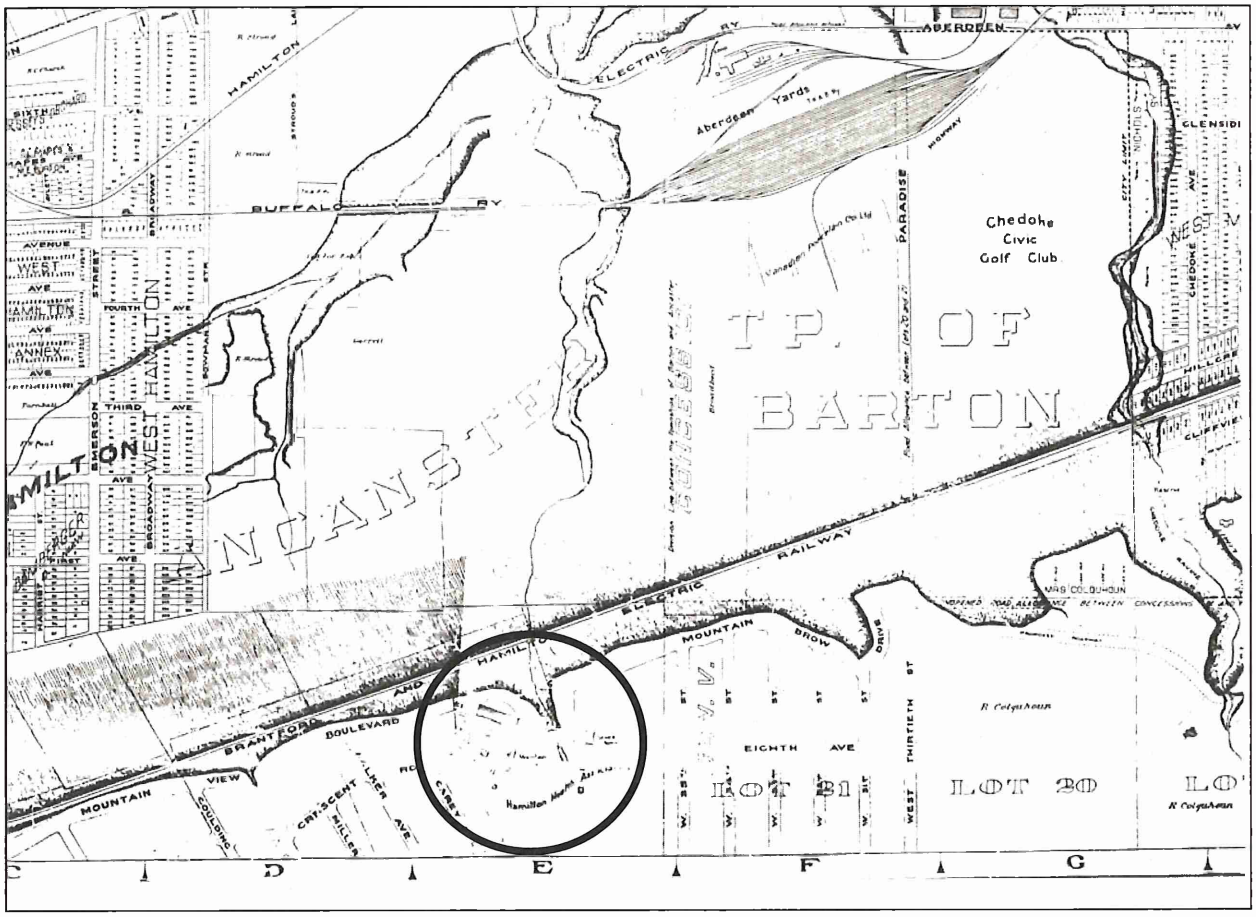

City of Hamilton: Western Section. J.W. Tyrell & Co. 1921.

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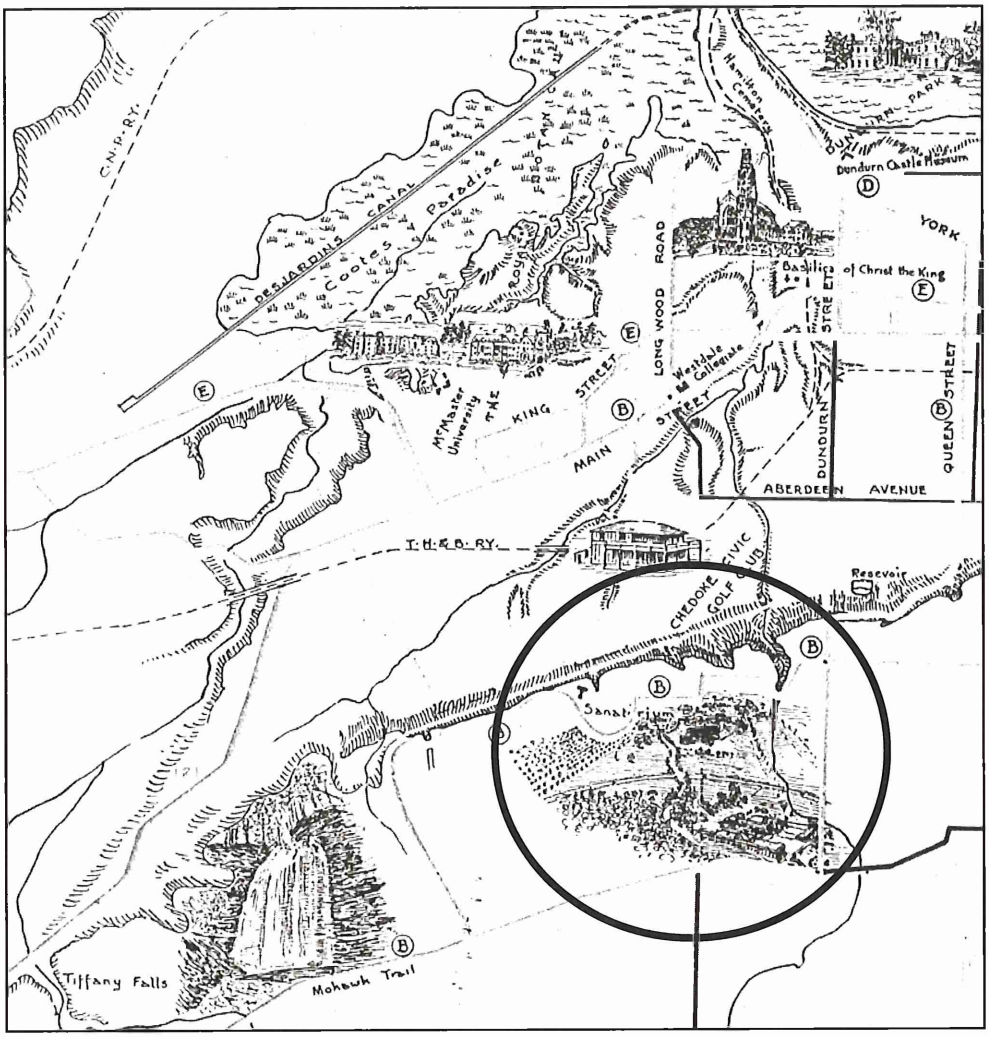

Hamilton, Ontario, Canada: A Panorama of Beauty and Industry. 1938

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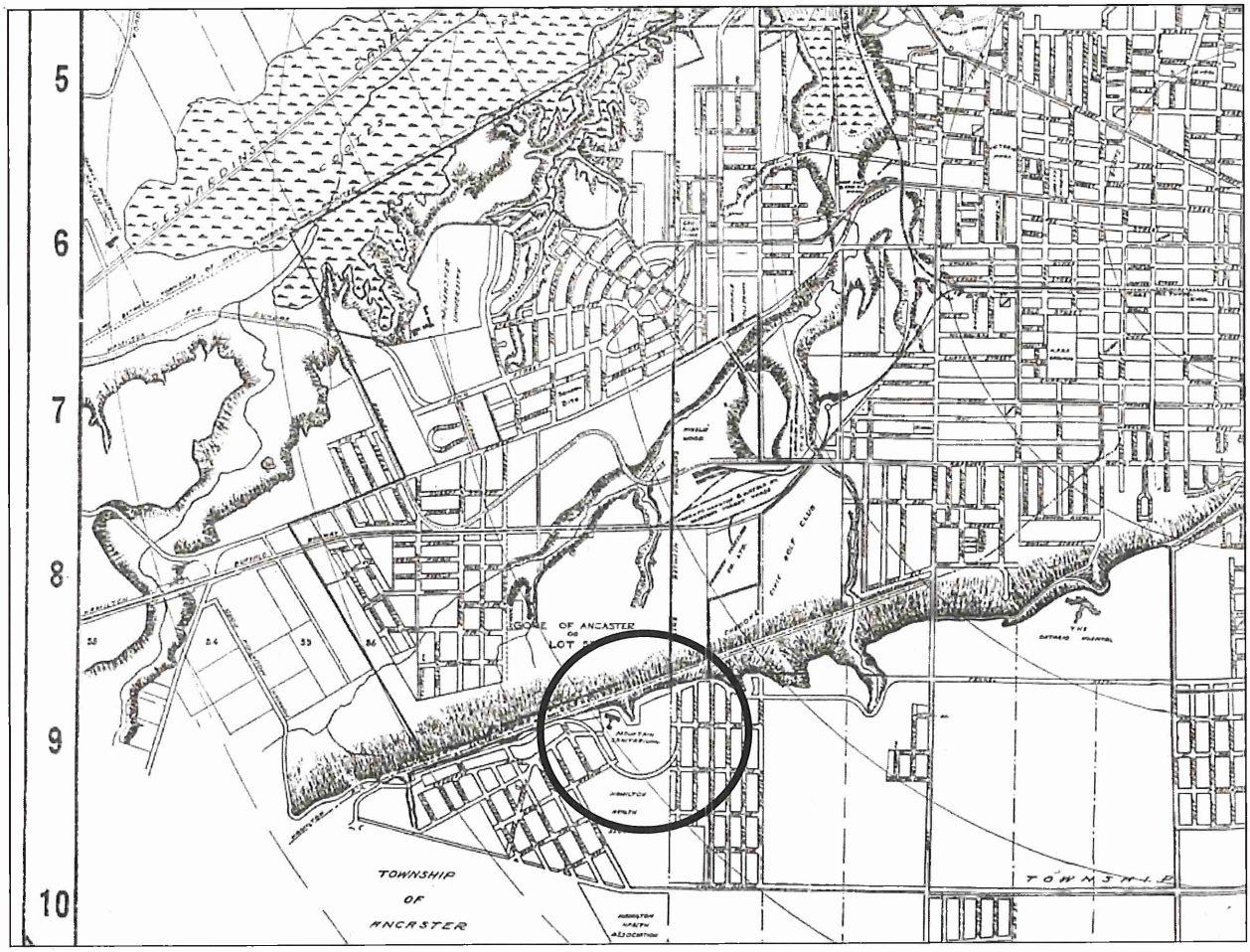

City of Hamilton. W.L. McFaul. 1940. Scale 1 mile = 3 inches

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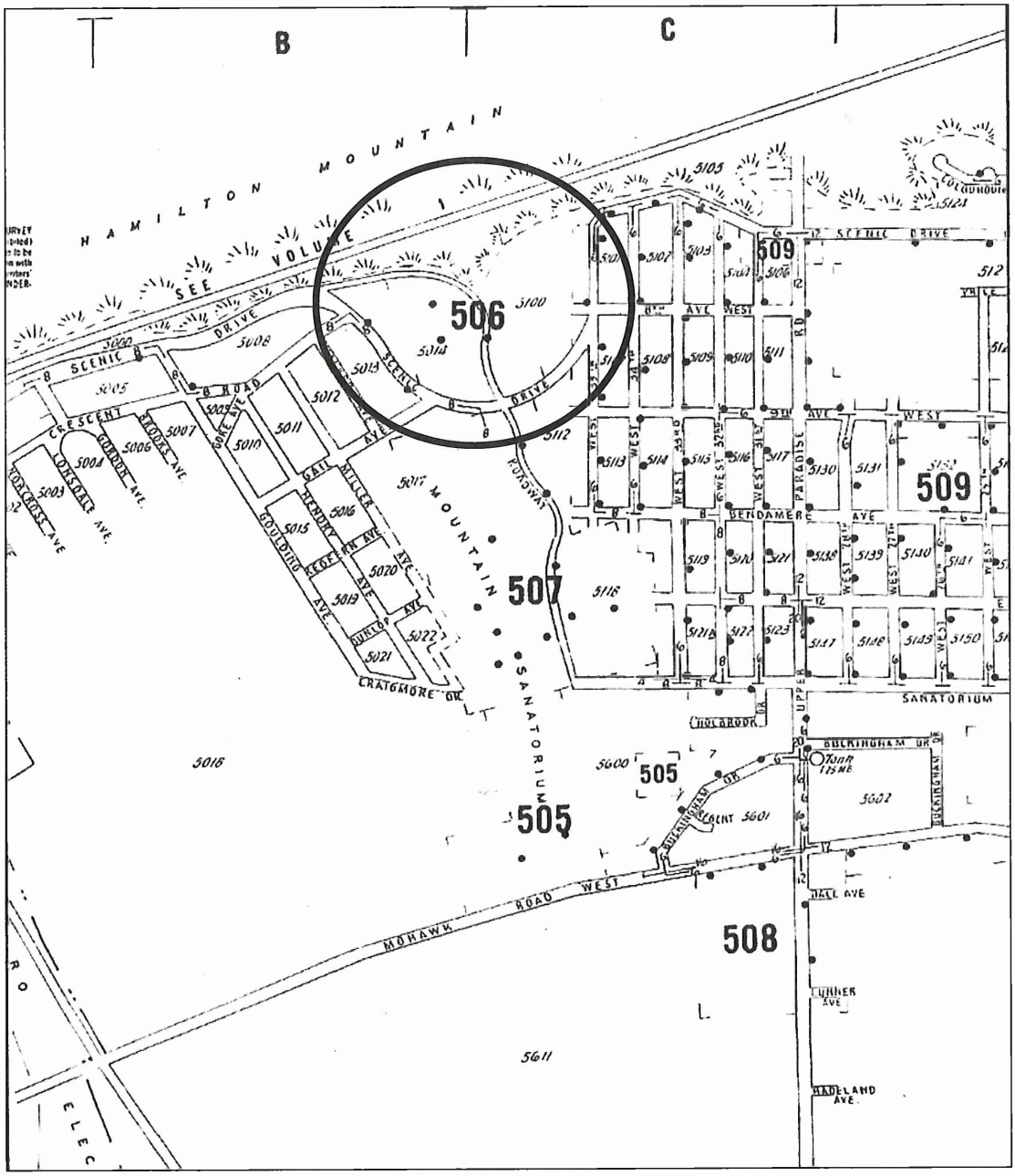

Mountain Sanatorium Key Plan. Underwriters' Survey Bureau, Volume 5, (September 1960).

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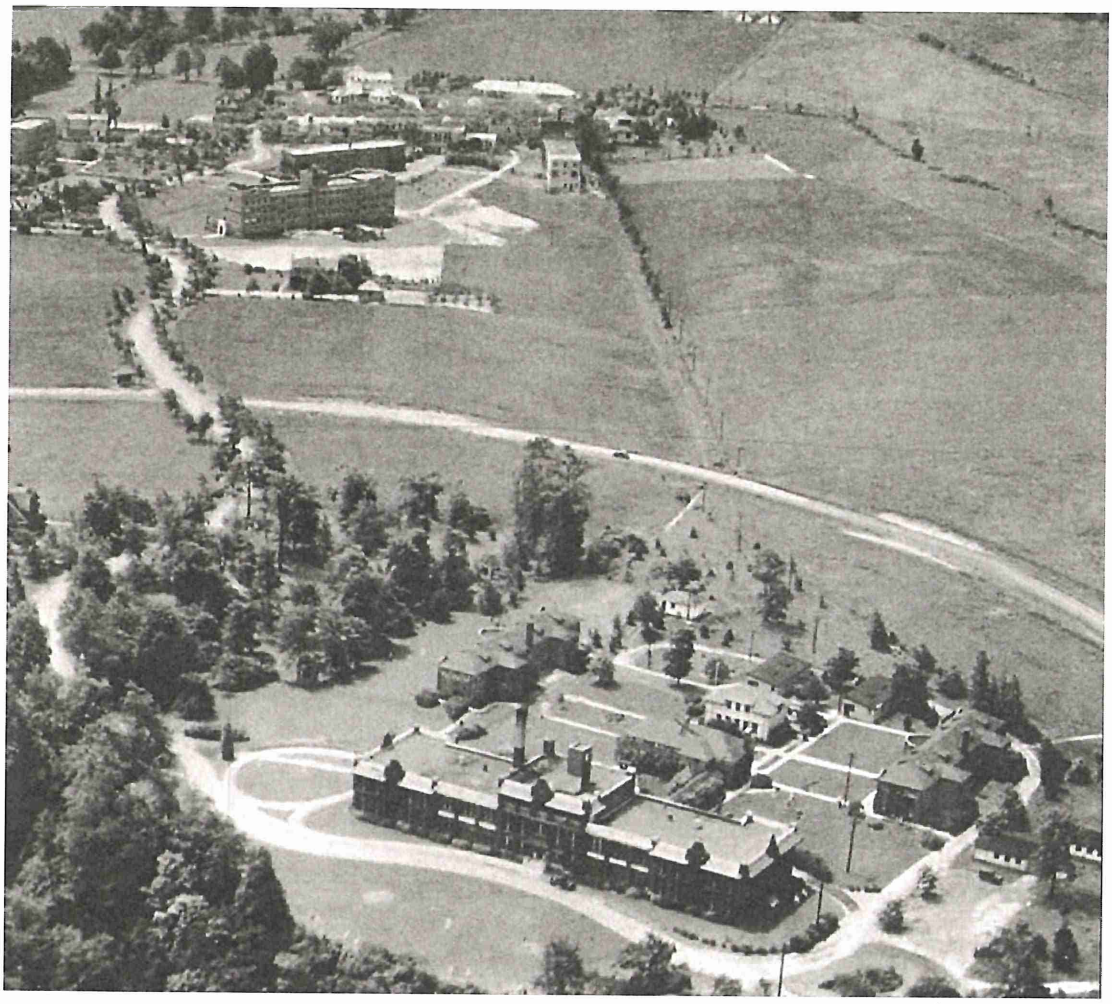
APPENDIX C

AERIAL PHOTOGRAPHS



Aerial Photo of Chedoke Hospital Site, 1934.

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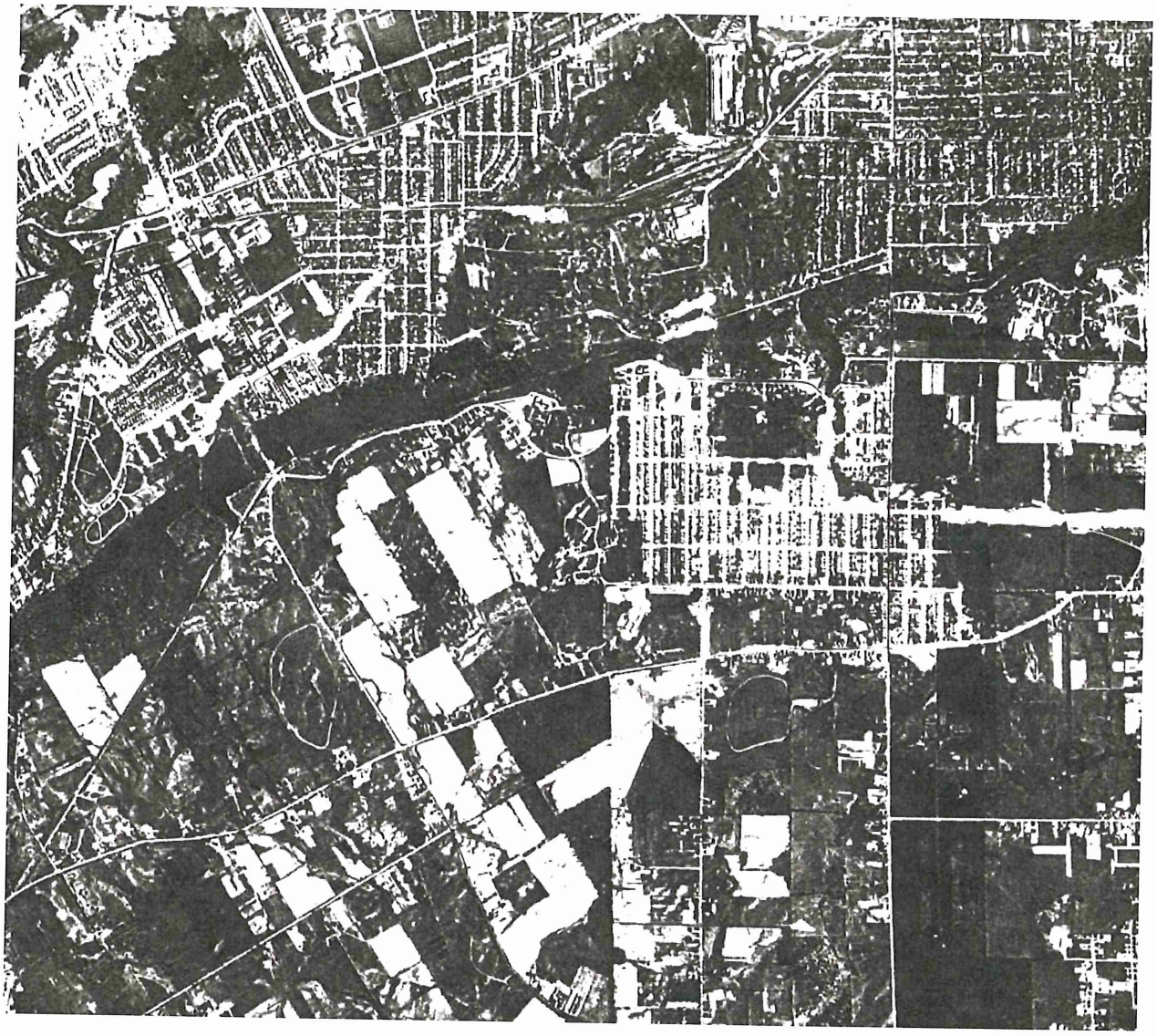

Aerial Photo of Chedoke Hospital Site, 1958.

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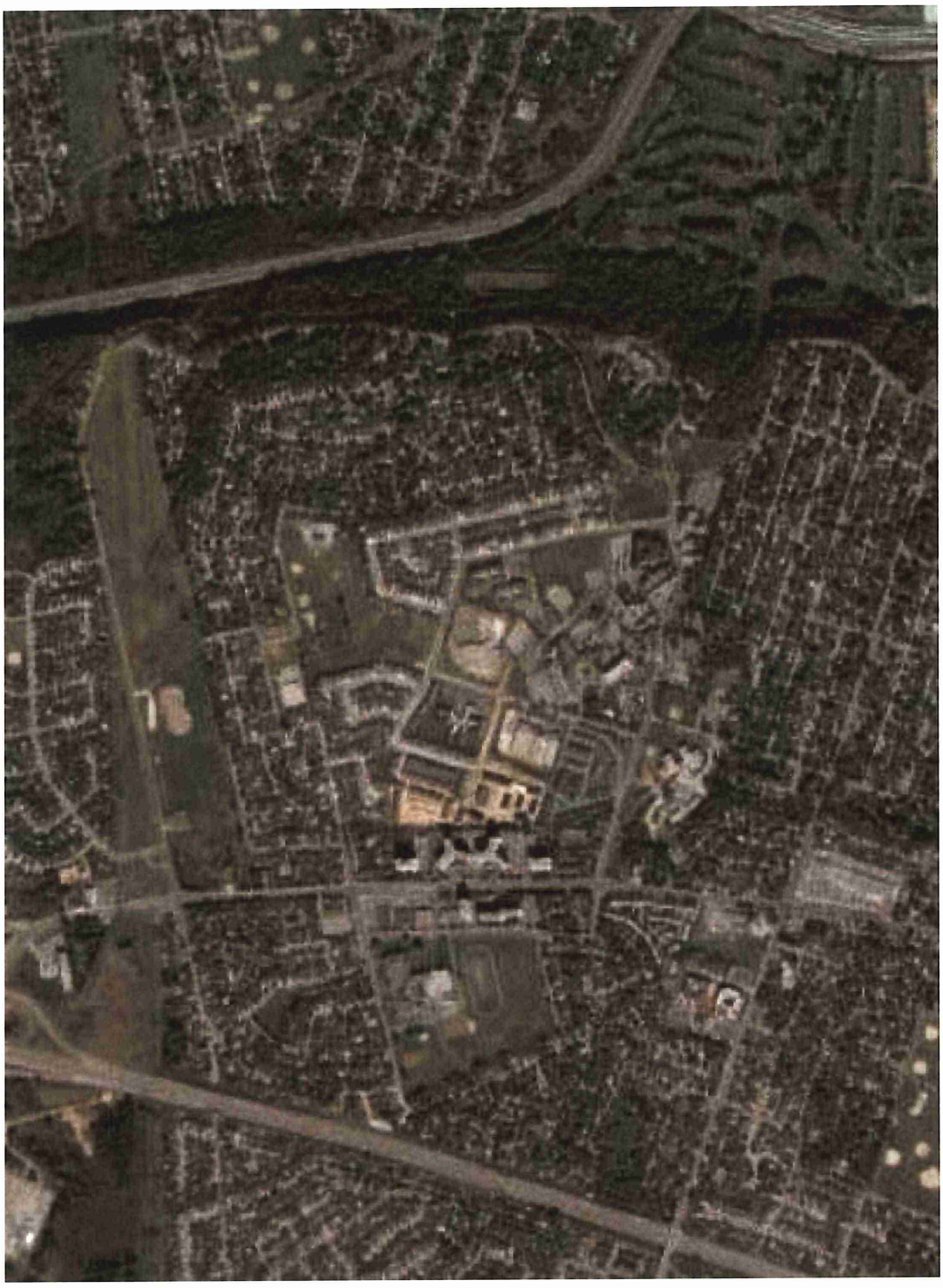

Aerial Photo of Chedoke Hospital Site, Google Earth, 2007.

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APPENDIX D

CHEDOKE HOSPITAL HISTORICAL TIMELINE

Archives Hamilton Health Sciences - Timeline

1882 Dr. Robert Koch, a German physician, discovered the mycobacterium tuberculosis, the organism which causes tuberculosis.

1882 Dr. Edward Livingston Trudeau, afflicted with tuberculosis since 1874, heard about Dr. Koch's discovery and established the Trudeau Laboratory in order to identify and isolate the bacteria for himself.

1884 The Adirondack Cottage Sanatorium was founded by Dr. Trudeau on Saranac Lake in the Adirondacks of New York State. It was the first sanatorium in North America.

1895 Wilhelm Konrad von Roentgen, a German physicist, discovered x-rays for which he received the first Nobel Prize for physics in 1901. The chest x-ray became a standard diagnostic tool in the diagnosis of pulmonary tuberculosis. Permanent and travelling chest clinics were used to screen various population groups such as school children and industrial workers for suspected cases.

1896 National Sanatorium Association (NSA) was founded in Canada.

1897 Muskoka Cottage Hospital opened at Gravenhurst, Ontario. It was the first sanatorium in Canada.

1899 The next province after Ontario to start building sanatoriums was Nova Scotia. The Highland View Sanatorium in Nova Scotia operated from 1899-1903.

1900 The Canadian Association for the Prevention of Consumption and other Forms of Tuberculosis was founded. It became the Canadian Tuberculosis Association in 1922 and the Canadian Lung Association in 1977.

1900 The Hamilton City Improvement Society was formed.

1902 Second sanatorium in Ontario opened as the Muskoka Free Hospital for Consumptives, 1 mile from the Muskoka Cottage Sanatorium.

1903 The Hamilton City Improvement Society collected $8000 towards establishing a sanatorium locally. Controversy over where the sanatorium should be located discouraged the idea and the money was donated to the National Sanatorium Association. A frame pavilion at the Muskoka Cottage Hospital was renamed the Hamilton Pavilion and some Hamiltonians were treated there. The society disbanded shortly thereafter.

1904 First Christmas Seals were introduced in Denmark.

1904 The National Tuberculosis Association was founded in the United States.

1904 The third sanatorium in Ontario, the Toronto Hospital for Tuberculosis at Weston, Ontario opened by the National Sanatorium Association. It was the first sanatorium in Canada to isolate juvenile from adult patients.

1905 Even though health care is a provincial concern, the federal government passed a resolution in the House of Commons to take active steps to combat tuberculosis. Plans were made to facilitate the establishment of sanatoriums in each province.

1905 Hamilton Health Association (HHA) was formed to combat tuberculosis in Hamilton.

1905 A farm on the escarpment overlooking what would one day be West Hamilton was donated to the HHA for use as a sanatorium by W.D. Long and G.H. Bisby, two Hamilton businessmen.

1906 May 28: The Mountain Sanatorium opened with a matron, a nurse, a housekeeper, two "men of all work" and four patients. Governor-General Earl Grey and his daughter, Sybil officiated. It was the fourth sanatorium founded in Canada.

1906 The following buildings were constructed in the original orchard to replace the two tents: Crerar Reception Hall. Torn down in 1930; Doctors shack, Dispensary and Laboratory, renamed Villa St. Julian. Torn down in 1939; Villa St. Cecilia. Torn down in 1939; Dunedin Pavilion. Torn down in 1947; The original farm house called the Staff house. Torn down in 1972.

1906 The Ladies Auxiliary Board was founded. It acted as the operating committee for the sanatorium while the Gentlemen's Board, later renamed the Board of Directors of the Hamilton Health Association, acted as the executive committee. In 1945 the Ladies Board changed its name to the Women's Auxiliary Board.

1907 Stevens Shack constructed. Torn down in 1926.

1907 Sanholm farm began with the purchase of chickens.

1907 Grafton Pavilion, also called the Grafton Infirmary, constructed. Torn down in 1969.

1907 Dr. Charles Mantoux, a French physician, developed on the work of Dr. Robert Koch and Austrian scientist, Clemens Peter Freiherr von Pirquet, to create the Mantoux test, in which tuberculin is injected under the skin as a diagnostic test for tuberculosis. This was the TB skin test, which became the primary diagnostic test for tuberculosis.

1908 Hamilton Health Association opened the first chest clinic in Hamilton on Hess Street.

1908 Dr. J. Howard Holbrook took over as Physician-in-charge from Dr. Alexander Unsworth.

1908 Empire Shack, funded by Imperial Order Daughters of the Empire, constructed. Torn down in 1927.

1908 Christmas Seals introduced in Canada.

1909 Southam Home for Consumptives, a 24 bed hospital for advanced cases of tuberculosis constructed on the grounds of the Hamilton General Hospital.

1910 Preventorium, to house infant and child patients, constructed. Torn down in 1952.

1910 Commercial Travellers' shack constructed. Torn down in 1939.

1912 Reporting on cases of tuberculosis became mandatory in Ontario.

1912 35-acre Sanholm dairy farm began operation. It operated until 1968.

1912 Administration Building, last known as the Child and Family Research Building, constructed. Torn down in 1999.

1916 Long and Bisby Cottage constructed. Torn down in 1926.

1916 **Brow Infirmary, also called the New Infirmary, constructed. Gassed and tuberculosis stricken soldiers returning from the World War I were treated here.**

1917 **East and West Pavilions constructed. The East Pavilion was torn down in 2001.**

1918 McLean Nurses' Residence constructed. Torn down in 1995.

1919 Pneumothorax treatment (collapse lung therapy) became standard practice in Canada.

1920 **Long and Bisby Home for Nurses constructed.**

1921 The Bacillus Calmette Guerin (BCG) vaccine was created by French bacteriologists, Albert Leon Calmette and Alphonse F.M. Guérin. Canada was a pioneer in the study and clinical trials of this vaccine. In 1947, the Canadian Tuberculosis Association officially endorsed its use to prevent and control tuberculosis. It is now a internationally accepted protection against tuberculosis.

1921 Bruce Memorial Building constructed.

1922 March 1: Macklem farmhouse destroyed by fire. It was the residence of the Medical Superintendent and his family on the sanatorium grounds.

1922 Residence 37 constructed as the new home for the Medical Superintendent and his family.

1923 Radio equipment installed, a gift from Mr. Charles S. Wilcox, a member of the Board of Directors.

1924 Service Building constructed as new laundry for the sanatorium. It operated until 1969. The building was then renovated for administrative offices.

1925 Staff House partially destroyed by fire. Rebuilt and finally torn down in 1972.

1926 Central Building constructed as new kitchen and later administration building for the sanatorium.

1926 Steven Shack and the Long and Bisby Cottage torn down.

1927 Empire Shack torn down.

1927 Marion Crerar Daughters of the Empire Building constructed, replacing the Empire Shack.

1927 The sale of Christmas Seals was introduced in the first national campaign. Christmas Seals became the official method for tuberculosis associations to raise money.

1928 Southam Pavilion constructed.

1930 McMaster University moves to Hamilton from Toronto (incorporated 1887 with bequest by Senator William McMaster)

1930 Crerar Reception Hall torn down.

1932 Evel Pavilion constructed.

1932 Patterson Building constructed.

1937 Moreland Building constructed.

1939 Wilcox Pavilion constructed.

1939 Villa St. Julian, Villa St. Cecilia and the Commercial Travellers' Shack all torn down.

1944 Dr. Selman A. Waksman, an American microbiologist, discovered streptomycin, the first specific antibiotic lethal to mycobacterium tuberculosis. Two other antibiotics, Para-amino-salicylic acid (PAS) and isoniazid were also soon discovered. By 1953 drug therapy was the standard, phasing out inpatient treatment and the need for sanatoriums. Today most tuberculosis patients are treated as outpatients.

1946 Dr. Holbrook retired after 37 years as Medical Superintendent.

1946 Dr. Cecil H. Playfair, appointed Medical Superintendent. He died suddenly in August 1947.

1947 Dr. Hugo Turnbull Ewart appointed Medical Superintendent.

1947 Dunedin Pavilion torn down.

1949 Inauguration of a pension plan for all Mountain Sanatorium employees.

1950 Inauguration of a hospitalization plan for all Mountain Sanatorium employees.

1950 737 patients in residence, the largest number since the Mountain Sanatorium opened.

1951 Holbrook Pavilion constructed.

1951 Bed capacity at the sanatorium reached its maximum at 754 beds.

1952 Preventorium torn down.

1953 The Cross of Lorraine, the symbol of the National Tuberculosis Association and the fight against respiratory diseases, erected on the edge of the escarpment.

1953 Peak number of beds available in Canada for tuberculosis patients with 19,000 beds in 101 sanatoriums and special tuberculosis units in hospitals. By 1963 this number had been halved and sanatoriums were closing.

1954 **Due to a lack of hospital beds in the far north, Dr. Ewart received a request from the Dept. of National Health and Welfare to treat Inuit tuberculosis patients.**

1955 Inuit tuberculosis patients began to arrive for treatment at the Mountain Sanatorium. In 1960 half the tuberculosis patients in the sanatorium were Inuit. Between 1954-1963, 1274 Inuit had been at the sanatorium.

1957 March 14: Dr. Holbrook died age 82.

1957 Hamilton Health Association leased a 13 acre site for 99 years at a dollar per year on which the Aged Women's Home was constructed. It was later renamed Idlewyld Manor.

1957 Hamilton Health Association granted a 2 acre site to the Hamilton Board of Education on which the Holbrook Elementary School was constructed.

1958 The Charter of the Hamilton Health Association was amended to broaden its activities to all health related fields.

1959 Mortality rate for tuberculosis in Hamilton was 2.7 per 100,000 population. This was a dramatic decrease even from 1950 when it had been 6.1 per 100,000 population. The number of tuberculosis patients was almost half what it had been in 1950 falling to 387 from 737 patients. The average length of stay had fallen from 511 days in 1950 to 332 days. In 1905 the mortality rate had been 126 per 100,000 population.

1959 The Brow Infirmary was renovated and reopened as AThe Hospital for Convalescent and Chronic Care Patients.

1960 The Wilcox Building was renovated and reopened as "Chedoke General and Children's Hospital".

1961 The Women's Auxiliary Board was dissolved after 55 years of service and the Women's Auxiliary was created.

1961 The Nash Lecture Hall opened.

1962 Feb. 28: Ellen Wanless Ewart, Director of Nurses, died suddenly. The Ellen Wanless Ewart Memorial Chapel was created in the Evel Pavilion in her honour.

1962 Hamilton and District School of Medical Technology opened.

1963 **Last of the Inuit tuberculosis patients discharged.**

1964 The first class of nursing students in the Hamilton and District School of Nursing started classes in the Holbrook Building. A year later, in 1965, the building was completed.

1968 Hamilton and District School of Radiology opened.

1968 Chedoke-McMaster Centre opened with two parts, the Hamilton and District Rehabilitation Hospital in the Holbrook Building and the Chedoke Child and Family Centre in the Evel and Bruce Buildings.

1968 Dairy herd sold.

1968 The first class of medical students arrived at the new McMaster University School of Medicine. Because the McMaster University Medical Centre was not completed until 1972, the students received their instruction at Chedoke.

1969 January: Sanholm farm sold after 63 years of operation.

1969 Grafton Pavilion torn down.

1969 War Memorial cairn was erected by the Royal Canadian Legion 163 (Mountain Branch) in Grafton Gardens on the site of the former Grafton Pavilion.

1969 Hamilton and District School of Medical Technology building constructed between the Southam and Evel Pavilions.

1970 Dr. Hugo Ewart retired after 23 years as Medical Superintendent.

1970 Dr. James Allison became Executive Director, Chedoke Hospitals.

1971 Cool School, "The Experimental Secondary School Program for the Rehabilitation of Drop-Outs Who Have Used Drugs" opened under the direction of Dr. James Anderson. In 1973 Chedoke Hospitals took over formal sponsorship of the program.

1971 The Hamilton Health Association renamed Chedoke Hospitals.

1972 The original farmhouse called the Staff House torn down.

1971 Mohawk Hospitals Services created to provide laundry and linen service to the district hospitals.

1972 McNally (West or Beamis) and B'nai Brith (East or Miller) cottages constructed. Torn down in 1997.

1972 The name "Mountain Sanatorium" was officially discontinued. Tuberculosis patients were now treated in the Respiratory Disease Unit of Chedoke Hospitals which was located in the Evel Building. It had 19 beds and existed until 1974.

1972 Hamilton and District School of Radiology transferred to the authority of Mohawk College.

1973 Hamilton District Schools of Nursing and Medical Technology transferred to the authority of Mohawk College.

1973 Brow Infirmary renamed Chedoke Continuing Care Centre.

1974 Chedoke General and Children's Hospital renamed Chedoke General Hospital.

1975 The Women's Auxiliary changed its name to the Volunteer Association of Chedoke Hospitals.

1976 Alcohol Treatment and Education Centre opened in Moreland Residence.

1976 March 24: The Ministry of Health announced plans to close all active treatment beds at Chedoke as of June 1. Chedoke must stop admitting active treatment patients by April 30. Chedoke to concentrate on rehabilitation and chronic care.

1976 April 5: Public rally held in support of Chedoke at Sir Allan McNab School with more than 750 people in attendance.

1976 Apr. 9: Delegation from the Hamilton District Health Council presented "Save Chedoke" petition of 80,000 signatures to the Minister of Health, Bette Stephenson.

1977 Mar 22: Ministry of Health plan revised to allow Chedoke to keep 150 acute-care beds. Chedoke told to plan for a future as a rehabilitation, chronic care and community health centre.

1979 Apr. 1: Chedoke Hospitals and McMaster University Medical Centre amalgamated to form Chedoke-McMaster Hospitals.

1980 June 3: Chedoke Hospitals renamed Chedoke Health Corporation (CHC).

1983 Children's Exercise and Nutrition Centre opened under the aegis of Dr. Obed Bar-Or.

1990 Sir William Osler Health Institute constructed.

1992 Emergency Dept converted into Urgent Care Services. Urgent Care closed as of Jan. 31, 1999.

1992 Centre for Studies of Children at Risk opened. Later renamed the Offord Centre for Child Studies in honour of its founder, Dr. David Offord.

1994 Oct 25: Dr. Hugo Ewart died. Mrs. Margaret (Boggs) Ewart died on Sept. 15, 2006.

1995 Mclean Nurses' Residence torn down.

1996 Nov. 28: Hamilton Civic Hospitals and Chedoke-McMaster Hospitals amalgamated to form the Hamilton Health Sciences Corporation.

1999 St. Peter's Hospitals assumed responsibility for Chedoke Continuing Care Centre.

1999 Hamilton Health Sciences' human resources and finance offices, formerly the Hamilton and District School of Medical Technology, renamed the Ewart Building in honour of Dr. Hugo Ewart.

1999 Administrative Building, last known as the Child and Family Research Building, torn down.

2001 St. Peter's Hospital received $2.2 million worth of land from Chedoke Hospital Corporation.

2001 **East Pavilion demolished.**

2002 Hamilton Health Sciences announced it will close all continuing care beds at Chedoke.

2003 Chedoke Hospital is no longer an acute care hospital. It provides rehabilitation and child and family services to the Hamilton community.

APPENDIX E

BIBLIOGRAPHY AND MAP REFERENCES

Bibliography

Archives of Hamilton Health Sciences and Faculty of Health Sciences Collections. The Cross of Lorraine. 2007. http://fhs.mcmaster.ca/archives/histinfo/hhsc/chedoke/crossofl.htm

Johns + Khes Planning Solutions (Unterman McPhail Associates). Background Information Report: North Scenic Planning Area, City of Hamilton, Draft #2. October 2001. **(2)**

Milosvsoroff, Ann. Dunington-Grubb, Lorrie Alfreda - The Canadian Encyclopedia. 2007. http://thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0011588

Provincial Policy Statement. 2005. http://www.mah.gov.on.ca/userfiles/page_attachments/Library/1/1230942_pps2005_.pdf

Provo, Rick, Site Supervisor, Electrical/Building Trades, Chedoke Hospital. Interview March 2007. **(3)**

Standards and Guidelines for the Conservation of Historic Places in Canada. Parks Canada, 2003. http://www.historicplaces.ca/nor-sta/request.aspx?page=index_e

The Ministry of Culture. Heritage Resources in the Land Use Planning Process: Cultural Heritage and Archeology Policies of the Ontario Provincial Policy Statement, 2005. Toronto: Queens Printer for Ontario, 2006.

Unterman McPhail Associates. Cultural Heritage Resource Assessment Report of the Bruce Memorial Building, Southam Pavilion, Evel Pavilion, and Brow Site. May 2006.

Wilson, Ralph H. Chedoke: More Than a Sanatorium. Hamilton: Hamilton Health Sciences, 2006. **(1)**

Map References

Ancaster Township, Illustrated Historical Atlas of the County of Wentworth. Page and Smith, Toronto. 1875.

Map of Barton Township. Howell Lith. Co. Hamilton, ONT. 1889

Map of the City of Hamilton. J.W. Tyrell & Co. 1920.

City of Hamilton: Western Section. J.W. Tyrell & Co. 1921.

Hamilton, Ontario, Canada: A Panorama of Beauty and Industry. 1938

City of Hamilton. W.L. McFaul. 1940.

Mountain Sanatorium Key Plan. Underwriters' Survey Bureau, Volume 5, (September 1960).

(All maps except the 'Mountain Sanatorium Key Plan' are located in the City of Hamilton Public Library Special Collections)