APPENDIX G

ARCHAEOLOGICAL ASSESSMENT REPORT

APPENDIX G-1

Stage 1 Archaeological Assessment

West Donlands Transit Environmental Assessment,

City of Toronto

November, 2007

Stage 1 Archaeological Assessment

West Donlands Transit Environmental Assessment,
City of Toronto, Ontario

EXISITING CONDITIONS

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November 2007

ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENTS

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EXECUTIVE SUMMARY

The Stage 1 Archaeological Assessment of proposed transit and road improvements to Cherry Street from the CNR rail corridor to King Street (Alternative 3R-C) in the City of Toronto has been carried out as a component of the West Donlands Transit Environmental Assessment. The assessment entailed consideration of the proximity of previously registered archaeological sites, the original environmental setting of the area, and its 19th and 20th century development history.

The assessment determined that one previously registered archaeological site, the Thornton Blackburn site (AjGu-16), is located in close proximity to Alternative 3R-C. The study area is also located within the former Government Park or Government Reserve which was set aside by the Upper Canadian government for two proposed uses: a Parliament House and a residence for the Lieutenant Governor, neither of which was actually developed.

A field review must be conducted to further refine the understanding of the archaeological potential of the study area in light of its overall development history. Any areas of identified potential must be subject to a Stage 2 archaeological assessment prior to the initiation of any land disturbances related to the project.

Stage 1 Archaeological Assessment

West Donlands Transit Environmental Assessment,
City of Toronto, Ontario

EXISITING CONDITIONS

1.0 INTRODUCTION

Archaeological Services Inc. was retained by McCormick Rankin to conduct a Stage 1 archaeological assessment of Cherry Street between King Street and the south limit of the Canadian National Railway corridor as part of the West Donlands Transit Environmental Assessment in the City of Toronto (Figure 1). The Stage 1 archaeological assessment was undertaken to determine if any archaeological resources are present within the study area and, to recommend if any required mitigation measures will be necessary to avoid impacting those resources if present.

Permission to carry out the activities necessary for the completion of the Stage 1 assessment was granted to ASI by McCormick Rankin on November 15, 2007.

This report presents the results of the Stage 1 background research and field review and makes several recommendations.

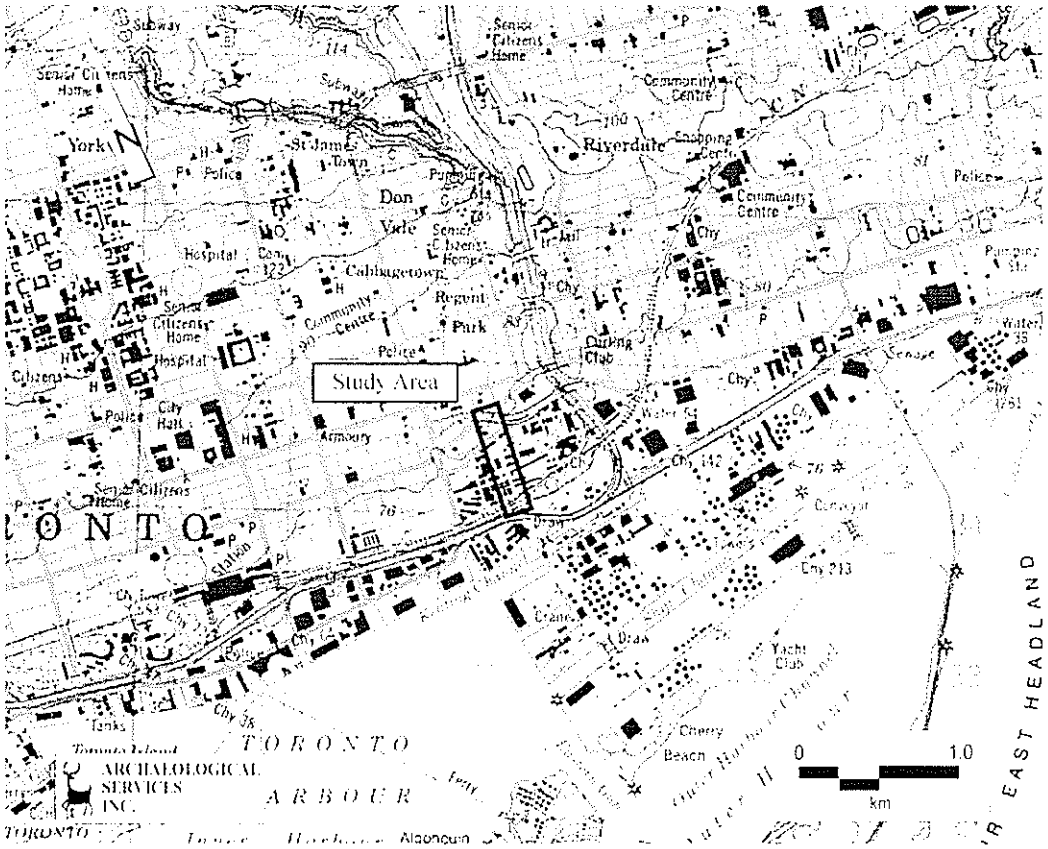

Figure 1: Location of the study area [NTS Sheet 30 M/11, Toronto].

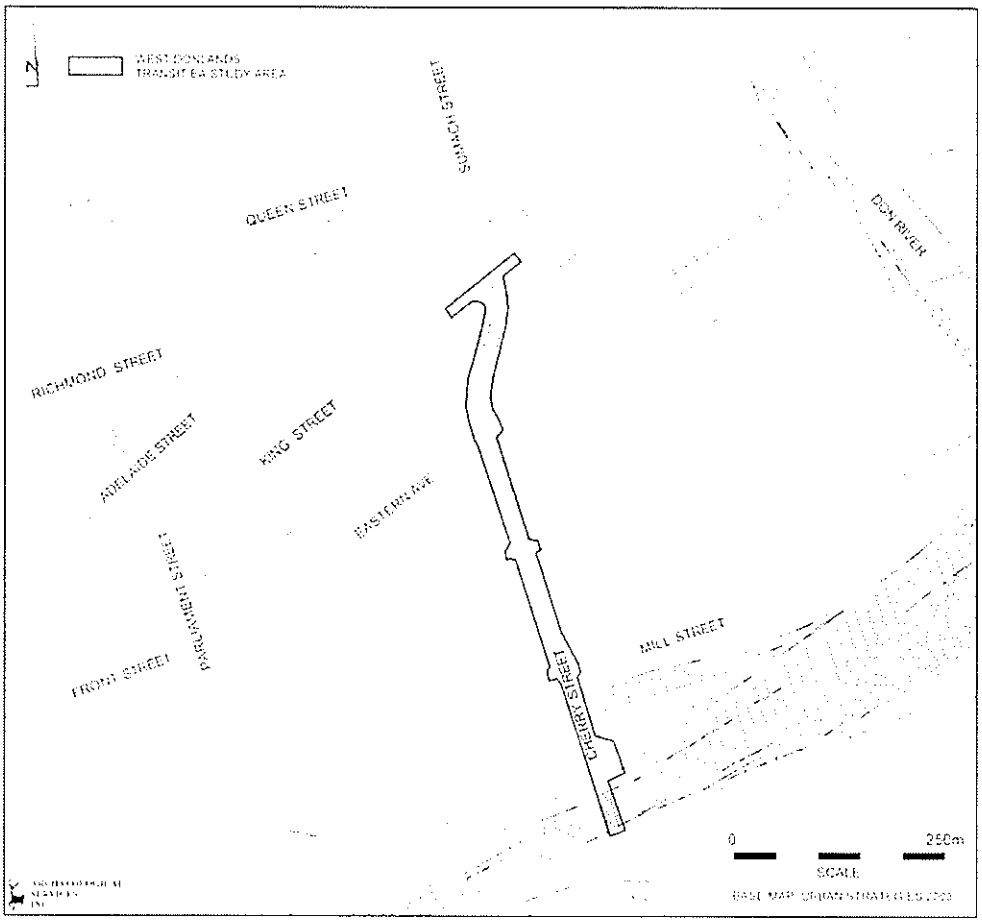

Figure 2: Location of the study area - Alternative 3R-C.

The study area, which measures approximately 660 metres in length and is of variable width either side of the existing Cherry Street travelled right-of-way, is located within the Old Town Archaeologically Sensitive Area, as defined by the *Interim Master Plan of Archaeological Resources for the City of Toronto* (ASI et al. 2003). It should be noted that the project area limits defined for this study are those identified as Alternative 3R-C (Figure 2).

2.0 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the study area was conducted in accordance with the Ontario Heritage Act (2005) and the Ontario Ministry of Culture's *Standards and Guidelines for Consulting Archaeologists* (2006, final draft). A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within the vicinity of the study area. Such an assessment incorporates a review of previous archaeological research, physiography, and land use history. Background research was completed to identify any archaeological sites in the study area and to assess its archaeological potential.

2.1 Previous archaeological research

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site record forms for registered sites housed at the Ministry of Culture (MCL); published and unpublished documentary sources; and files located at Archaeological Services Inc.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MCL. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden block is referenced by a four-letter designator, and sites within a Borden block are numbered sequentially as they are found. The study area under review is located within Borden Block *AjGu*.

Five archaeological sites have been investigated within approximately one kilometre of the study area, all of which are related to the 19th and early 20th century development of the City of Toronto. Particulars concerning these sites are provided in Table 1. One of these sites, the Thornton-Blackburn site (AjGu-16), which was excavated during a public program operated by the Toronto Board of Education, is located immediately adjacent to the project area, on the west side of Cherry Street between Eastern Avenue and King Street.

Table 1: Registered Archaeological Sites within an Approximate 1km Radius of the Subject Property

Borden	Site Name	Cultural Affiliation	Site Type	Researcher
AjGu-16	Thornton Blackburn	Multi-component	Afro-Canadian Residence/Late Iroquoian Camp	K. Smardz 1985
AjGu-35	Worts Estate	Historic Euro-Canadian	Residence	ASI 1996
AjGu-41	First Parliament	Historic Euro-Canadian	Public Building	ASI 2000
AjGu-46	Gooderham Windmill	Historic Euro-Canadian	Industrial	ASI 2003
AjGu-54	Barchard Box Factory	Historic Euro-Canadian	Industrial	ASI 2007

ASI=Archaeological Services Inc.

The Thornton Blackburn Site (AjGu-16)

Archaeological excavations were undertaken in the front playground of Inglenook (formerly Sackville) Public School by the Toronto Board of Education's Archaeological Research Centre in the summer of 1985. The site was named after its longest term occupants, Thornton and Lucie Blackburn, who resided there from 1834 to 1892. The Blackburns were slaves who escaped from Kentucky and made their way to Detroit. Their capture in Detroit, after a period of residence there, led to the first racial riot in the city and their escape to Upper Canada. The Blackburns moved to Toronto in 1834 and rented property on the north side of Eastern Avenue, between Sumach and Sackville Streets, where they built a one storey frame house (1834) and a small stable (1838). The Blackburns eventually bought the property in 1848. Thornton Blackburn was renowned as the first person to operate a taxi business in Upper Canada (ARC 1986).

The 1985 excavations concentrated on part of the house, which measured 33 by 24 feet, part of the stable, which measured 30 by 15 feet, and part of the yard at the rear of these structures. Portions of later semi-detached housing located at 72 and 74 Eastern Avenue were also investigated. These excavations did not result in the removal of all deposits associated with the site. Limited indications of an Aboriginal Late

Woodland period occupation were encountered at the site; however, all material was from secondary contexts (ARC 1986). The mapping provided in the ARC site report indicates that the archaeological deposits related to the Blackburn occupation are located between the school building and Eastern Avenue, (Figure 3).

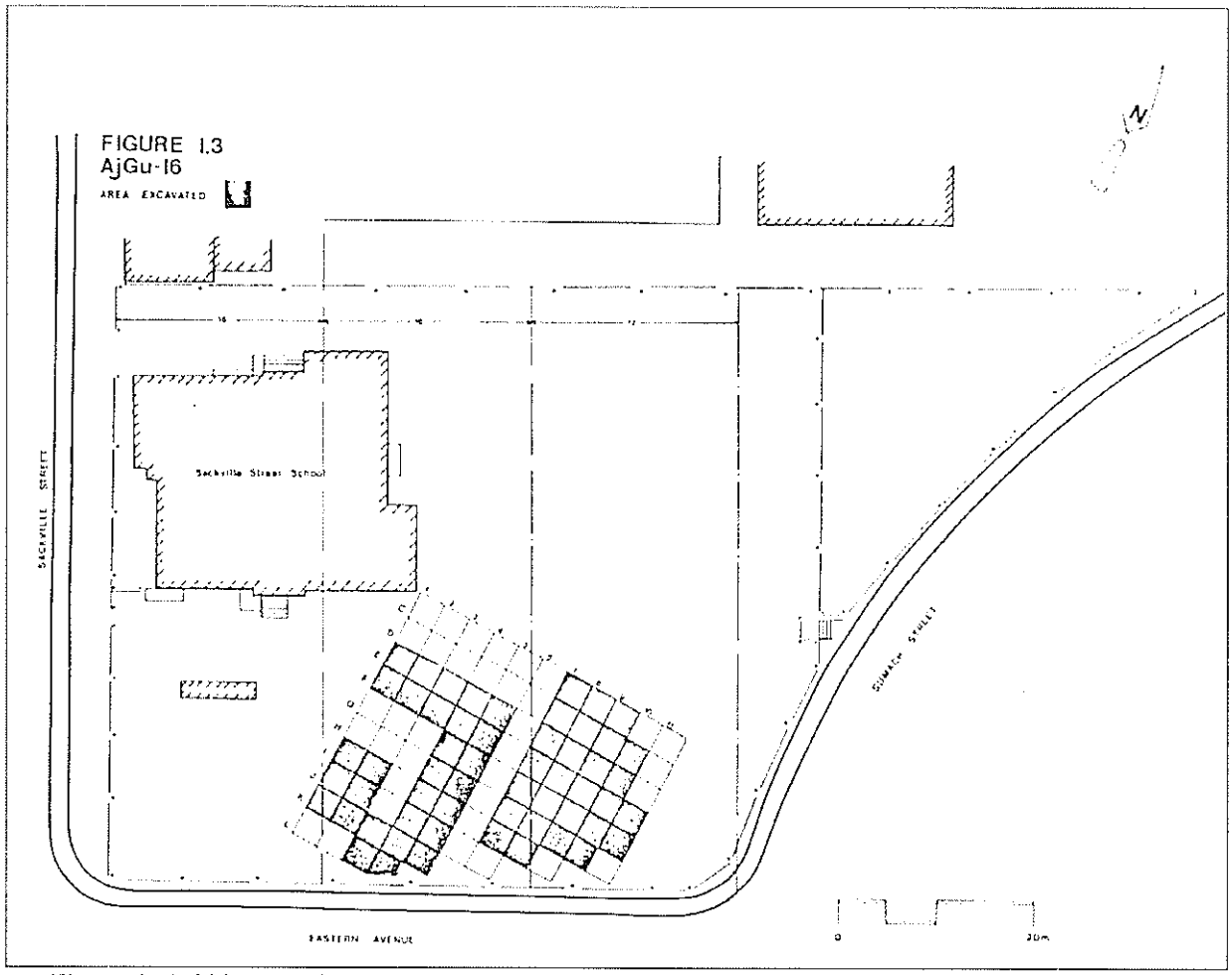

Figure 3: Grid layout of the 1985 excavation of the Thornton Blackburn Site - AjGu-16 (ARC 1986).

2.2 Physiography and Assessment of Aboriginal Archaeological Potential

The urban core of the City of Toronto has been extensively modified over the past 200 years. The study area lies within the Iroquois Plain physiographic region (Chapman and Putnam 1984), which is the former bed of glacial Lake Iroquois. In the Toronto area, the Lake Iroquois strand is situated approximately 4.5 kilometres inland from the current Lake Ontario shore. Below the strand, the Quaternary sediments are dominated by outwash sands typical of nearshore deposits. The balance of the plain, towards the modern lake shore, is dominated by fine sediments of silt and clay, typical of off-shore deposits, overlying till (Chapman and Putnam 1984; Gravenor 1957). More specifically, mapping of surficial deposits for the Toronto area indicates that a broad band of glacial clay and till exists directly north of the lakeshore, west of the Don River and south of Gerrard Street, including the study area (Chapman and Putnam 1984: Map 102).

Glacial Lake Iroquois came into existence by about 12,000 BP, as the Ontario lobe of the Wisconsin glacier retreated from the Lake Ontario basin. Isostatic uplift of its outlet, combined with blockage of subsequent lower outlets by glacial ice, produced a water plain substantially higher than modern Lake Ontario. Beginning around 12,000 BP, water levels dropped stepwise during the next few centuries in response to sill elevations at the changing outlet. By about 11,500 BP, when the St. Lawrence River outlet became established, the initial phase of Lake Ontario began, and this low water phase appears to have lasted until at least 10,500 BP. At this time, the waters stood as much as 100 metres below current levels. However, isostatic uplift was already raising the outlet at Kingston so that by 10,000 BP, the water level had risen to about 80 metres below present. Uplift since then has continued to tilt Lake Ontario upward to the northeast, propagating a gradual transgressive expansion throughout the basin, flooding the mouths of the creeks and rivers that rim the basin (Anderson and Lewis 1985; Karrow 1967:49; Karrow and Warner 1990).

In the downtown Toronto area, it has been estimated that the earliest Lake Ontario shoreline (circa 10,400 BP) was about five kilometres south of its present location. Over the following millennia, the shoreline gradually moved northward. Even by about 5,000 BP, however, it is still unlikely that Toronto Harbour, protected by the submerged bank of sediment associated with the emergent Toronto spit, had yet begun to fill. Between about 5,000 and 4,000 BP, the Nipissing Flood phase increased water levels to near or slightly above 19th century levels (Anderson and Lewis 1985; Weninger and McAndrews 1989). Levels subsided by three to four metres again between about 4,000 and 3,500 years ago, and by circa 3,000 BP, the shoreline was established more or less in the location at which it stood at the time of the founding of York in the 1790s.

The forests out of which York was carved had become established shortly after 7,000 BP Under median moisture regimes and eco-climates the climax forest of the Toronto lakeshore region was likely co-dominated by hard maple (*Acer saccharum*) and beech (*Fagus grandifolia*), in association with basswood (*Tilia americana*), red oak (*Quercus rubra*), white oak (*Quercus alba*), shagbark hickory (*Carya ovata*) and bitternut hickory (*C. cordiformis*) (Hills 1958; Burgar 1993).

The study area is located 450-475 metres from the former 19th century course of the Don River. The original character of the lower Don is captured in the following description by Pearson (1914):

> The river was so very serpentine that one would have to go about three miles to go in a straight line. There were long stretches of meadow land between the windings of the river, and a good deal of marsh. This, as well as the marsh between the harbour and Ashbridges Bay, was a great place for muskrats, and numbers were trapped.

Scadding's 1873 history of Toronto (1966:167) indicates that, as one progressed upstream, the marshes gave way to meadow at about the present position of Riverdale Park, approximately two kilometres inland. He too made note of the "morasses" which characterized Ashbridges Bay and the contiguous marshes through which the Don flowed into Lake Ontario (Scadding 1966:3-4). The riparian marsh he describes as "one thicket of wild willow, alder, and other aquatic shrubbery," including witch hazel, dogwood, highbush cranberry, wild grape, blue iris, reeds, and cattails (Scadding 1966:153, 159). He also refers to an island near the mouth of Castle Frank brook where wild rice grew plentifully (Scadding 1966:167). Pearson (1914:116) mentions "many stately elms" on the river flats, as well as wild plum, butternut, gooseberry, and currants in abundance.

Two minor tributaries of the Don River formerly flowed southeast through the general project area. Sumac Creek crossed Cherry Street at Queen Street, just to the north of the study area, while Crookshank Creek crossed Cherry between the Adelaide Street overpass and Eastern Avenue (TGC and TFN n.d.). While these

appear on two 19th century maps - Stoughton Dennis and Sanford Fleming's 1851 *Topographical Plan of the City of Toronto in the Province of Canada*, and in the 1858 *Boulton Atlas*—they do not appear on earlier maps. It is likely that these creeks were diverted into the City's sewer systems and buried in the 1860s or 1870s.

Finally, Taddle Creek formerly flowed approximately 250 metres east of the study area, between Parliament and Trinity Streets. Early maps such as Aitkens' 1793 *Plan of York Harbour*, Williams' 1813 *Sketch of the Ground In Advance of and Including York* and his 1814 *Plan of the Town and Harbour of York*, Phillpotts' 1818 *Plan of York* and to a lesser extent Chewett's 1827 *Plan of the Town of York Corrected*, and Bonnycastle's 1833 *No. 1 Plan of the Town and Harbour of York Upper Canada* depict the creek as one which is highly meandering yet entrenched within a well defined bed. The 1842 Cane *Topographical Plan of the City and Liberties of Toronto* and the 1851 Dennis and Fleming depictions are far more schematic. No indication of the creek appears in the 1858 *Boulton Atlas*, suggesting that the watercourse was buried in the 1850s. Stage 2 test excavations undertaken, in 2007, near the corner of Adelaide and Berkeley streets to the northwest of the study area (ASI 2007) suggest that the ravine cut by the creek was more than two metres below the surrounding tablelands, at least in this section of its course.

Water is arguably the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in southern Ontario after the Pleistocene era, proximity to water can be regarded as the primary indicator of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modelling of archaeological site location. Within the City of Toronto, care must be taken to identify watercourses that have long since been diverted into the City's storm and waste water management systems.

The Ministry of Culture's draft *Standards and Guidelines for Consulting Archaeologists* (2006: Unit 1e 5-7, 10) stipulates that undisturbed land within 300 metres of a primary water source (lakeshore, river, large creek, etc.), and undisturbed land within 200 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres of an ancient water source (as indicated by remnant beaches, shorecliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential.

This basic potential model has been further refined for the City of Toronto, as part of the City's Master Plan of Archaeological Resources, currently in development. The *Interim Master Plan of Archaeological Resources for the City of Toronto* (ASI et al. 2003) lists proximity to water as one of the indicators of potential for the presence of precontact Aboriginal archaeological sites. According to the model in development, land within 250 metres of an extant or formerly mapped river or creek, or within 250 metres of the pre-development shoreline of Lake Ontario, has potential for the presence of precontact Aboriginal archaeological sites. In addition, this potential is extended to any floodplain land, and in close proximity to the Lake Iroquois strand (i.e., land above and within 200 metres of the strand, or below and within 100 metres of the strand).

While no extant watercourses flow within this portion of the city today, it has been noted above that Crookshank Creek formerly traversed the study area, while Sumac Creek was located to its immediate north. Taddle Creek lay within 250 metres of the study area and the Don River, which was a major influencing factor in terms of settlement and travel was located to the east. Moreover, the mouth of the Don at the Lake Ontario shore lay at the south end of the study area, within the lands now occupied by the railway corridor. The biotic diversity of the marshlands at the mouth of the river would have been extremely attractive in terms of Aboriginal subsistence pursuits.

Given the character of urban development within the area, however, the potential for the recovery of precontact or early contact period Aboriginal material within any of the subject properties is minimal. Sites dating to the precontact and early contact periods are unlikely to have survived the historic development activities which have disturbed the original topography in this area.

2.3 Assessment of Historic Euro-Canadian Archaeological Potential

The study area lands originally formed part of the "Government Reserve" or "Government Park" which encompassed parts of lot 16 and Park lots 1 and 2 in Concession 1 from the Bay, in the Township of York. The Park was bounded by the Don River on the east, the marsh and harbour to the south, Parliament Street on the west and Carleton Street to the north. This land was primarily intended as a defensive buffer to shield the town in the event of an attack from the east. The first Legislative (Parliament) buildings for the new capital were constructed near the periphery of this reserve, and it was further proposed that the official residence of the Lieutenant-Governor be erected within "the Park." The Park was, however, used as a recreational retreat by the early inhabitants of York since the woods were free of heavy underbrush and crossed by a few trails which were used for walking and riding. Moreover, some residents found this a convenient place for grazing their livestock during the spring and summer. The first "Patent Plan" for York (circa 1800) showed this tract labeled as the "Government Lease."

Lieutenant-Governor Francis Gore proposed that the reserve, which contained 386 acres, be laid out into building lots in December 1810. The survey was completed by Samuel Wilmot by February 1811, laying out the reserve into rectangular lots with roads laid out at right angles from Parliament Street. The Wilmot survey showed that the reserve was crossed by a number of small creeks and Kingston Road was carried over them by two small bridges. The areas directly below the banks of the Don were labeled as "natural meadow which may be mowed" (Wilmot 1811). The bridges remained in existence until at least the summer of 1814. During the War of 1812 the reserve was put to limited use with the construction of a bakehouse and some earthworks or batteries which guarded the bridge crossing on the Kingston Road (Williams 1814).

Wilmot's original survey was abandoned in favour of a modified plan and new proposal whereby lots were to be sold or leased within the reserve in order to raise money for the support of a much needed hospital. In order to alienate this land it was necessary to patent it to a board of hospital trustees comprised of William Dummer Powell, James Baby and the Rev. John Strachan. This transfer was done by an Order-in-Council in April, 1819. Christopher Widmer was later added as another trustee. Roughly contemporary plans of the town of York show that this tract of land was undeveloped, the only notable features being a section of the Kingston Road and a trail or road which extended between the mouth of the Don and the Kingston Road along the east side of Taddle Creek (Phillpotts 1818).

The initial survey of this section of the Government Reserve was undertaken as early as December 1827 by J.G. Chewett, who laid out the area between Parliament Street and the Don River into half-acre lots. Chewett's subsequent plan of 1830, developed under instructions issued by Lieutenant Governor Sir John Colborne showed that a number of small plots of land had been occupied and fenced in by squatters. A few brickyards were shown in this area, notably on the east side of Trinity Street between Front and Mill Streets, and also near the northwest corner of Cherry and Mill Streets. The area south of Eastern Avenue was traversed by a number of trails or paths which did not correspond to the formally surveyed street grid, and at least five structures encroached into the southerly limit of Front Street in the block between Trinity and Cherry Streets (Chewett 1830).

By October 1833, the Bonnycastle map described the area as "recently laid out in streets and now building upon." Chewett's 1830 survey was later consolidated under Registered Plan 108, drawn up by Donald McDonald and certified by Charles Unwin and filed in the City of Toronto Land Registry Office on January 25, 1855. The earliest structures were erected along Cherry, Palace and King Streets. The upper end of the West Donlands precinct developed somewhat earlier than the lower end, and King Street contained industrial buildings such as carriage works and small shops and businesses. Both sides of Eastern Avenue remained vacant land throughout much of the 19th century, and part of the area was not developed until after 1890 because it formed part of the original channel of the Don River.

The area, in general, consisted of low-lying land, which formed the floodplain of the Don River. This floodplain extended northwards to where King Street meets the river today, and roughly followed the diagonal alignment of King Street on its western edge. This area was considered unhealthy due to its proximity to the marshes at the mouth of the Don River and the dumping of effluent in the adjacent Ashbridge's Bay. The river carried considerable silt, which clogged the harbour to the south and required ongoing dredging to maintain navigability. As development of the area proceeded, the river was also used as a convenient and inexpensive sewer outfall, which added to the silting of the harbour and to the real and perceived unsanitary character of the marshes. Pollution of the waters was exacerbated after 1872 when Gooderham and Worts opened a vast cattle-feeding operation on the east bank of the Don.

The lands within the study area became more attractive to businesses and for residential purposes following the Don Improvement project in the mid-1880s and in the decades which followed. City Council allocated funds, in 1886, to straighten and deepen the lower Don. The work extended downstream from Winchester Street (approximately where the Canadian Pacific Railway today crosses the Don River, north of Gerrard Street) to the Grand Trunk Railway bridge near the mouth of the river. Improvements within the West Donlands consisted of removing bends in the river, dredging the channel to 12 feet below lake level, and reinforcing the waterway with timber piling. On either side of the channel, 23 feet was reserved for dock space, 52 feet for railways, and 50 feet for roads. To further prevent flooding, low-lying land adjacent to the river was raised three feet above the lake high-water mark. The bulk of this work was completed in 1887. It seems to have done little good, however, as complaints about the shallowness of the east end of the harbour persisted and, in 1901, the city engineer noted that the reinforcing piles had completely rotted away in many cases, and needed replacing.

Three major industrial concerns played a key role in shaping the development of the West Donlands. In 1832, James Worts and William Gooderham constructed a mill west of Trinity Street and south of Mill Street on top of a steep bank overlooking a broad beach on what was once the lakeshore (Otto 1994:8). By 1837, Gooderham and Worts were distilling alcohol from surplus and low-grade grain and a building for that purpose was constructed on the west side of Trinity Street. As the business prospered, and technologies changed, more buildings and wharves were added to the complex, which grew to include portions of the study area. These included rack and barrel warehouses on the north side of Mill Street, and a large cooperage for manufacturing new barrels that operated until at least 1890 on the north side of Front Street near Cherry.

Similarly, the Toronto Gas Light & Water Company, which was founded in 1841, established their original building at the foot of Prince's Street, a block east of the west limits of the study area. This company was purchased by The Consumers' Gas Company of Toronto following its incorporation in 1848. In 1855, Consumers' Gas constructed a new gas works on a three-acre site on the east side of Parliament, south of Front Street. This was expanded between 1883 and 1890 to include most of the block of land between Parliament, Trinity, Front and Mill streets as well as lands west of Parliament, and became known as Station A of the Consumers' Gas Company.

However, the largest industrial land user in the Donlands precinct was the pork packing plant of the Davies Meat Packing Company. The company established its first slaughterhouse at Front and Frederick Streets in 1861, later relocating to a site at the end of Front Street at the Don River. This plant expanded enormously until it occupied most of the property east of Overend Street. In 1927, it became Canada Packers.

In addition, numerous iron-working mills were established in the precinct from a very early date. The first of these may have been the Don Foundry at modern 511 King Street, which was in operation by 1853. The St. Lawrence Foundry, established, in 1851, on the block bounded by Berkeley, King, Front and Parliament was another large iron-working mill; in 1873 the company opened a railway car wheel foundry at the northwest corner of Front and Cherry Streets, which was sold to the Toronto Car Wheel Company the following year. In 1857, the Toronto Rolling Mills were established at the southwest corner of Mill and Water Streets, to re-profile worn rails of the Grand Trunk Railway. The building and plant were demolished shortly after its closure in 1873.

When Eastern Avenue was developed between St. Lawrence Street and the Don River it became home to businesses connected with the burgeoning city such as lumber yards and paving companies. By the 20th century, these sites had been partly taken over and had to share their space with scrap metal and paper dealers, and oil and soap manufacturers among others.

Industrial development was soon accompanied by the establishment of railway corridors and yards along the lake shore to the south of the precinct. Rail yards, repair and service shops, and sidings to serve the factories became a prominent feature of the development of the area. The Grand Trunk Railway occupied all the land south of Mill Street to the Don River. Over the years, this area contained cattle yards, a railway shop and the original site of the Don Station, as well as the company's mainline from Toronto to Montreal. The company also built a wharf along the north bank of the Don, east of Cherry Street, served by a railway spur. By 1910, all of these facilities had been removed, and the area became a local yard and freight sheds for the Grand Trunk Railway. The Grand Trunk Belt Line, built in 1892, turned northward from the mainline at Overend Street. When the mainline was elevated during the viaduct construction of the 1920s, a new connection to the Belt Line was built between the Canada Packers abattoir and the Don River.

Residential development was concentrated north of Mill Street, providing housing for the workers employed by various industries. Most of these people were Irish immigrants from County Cork, leading to the neighbourhood being called Corktown. Originally a low-density mix of industry and workers' cottages, Corktown's population grew and the area was traversed by numerous small laneways that were built to squeeze additional housing into the area. An extensive photographic record undertaken in 1906-1907 by the City documents the poor quality housing that characterized the area. At the other end of the spectrum, both William Gooderham and James Gooderham Worts initially constructed their residences in the area, near their distillery. Worts' stately mansion, Lindenwold, was located on the north side of Mill Street, east of Trinity Street. By circa 1910, it had been demolished and replaced by the distillery's Rack House. Limited foundation remains and a massive rubble layer associated with the demolition of the house were documented during a 1996 assessment (ASI 1996). Gooderham's residence, consisting of the main house and several outbuildings, was located south of Mill Street between Parliament and Trinity. These features gradually disappeared between the 1860s and 1890s to make room for new factory buildings.

The area changed dramatically when the Canadian Pacific and Canadian Northern (today Canadian National) Railways acquired permission to use the Don valley and harbour front to build access lines to Union Station. In 1903, the Canadian Pacific Railway purchased all the housing south of Front and north of the Grand Trunk. In 1905 the Canadian Northern Railway applied to have access to Toronto over the same route, and it purchased the residential and industrial properties bounded by Trinity, Eastern, Olive, and Front in the

following year. Thus, within a few years almost all of the land that is today the West Donlands became railway yards. Together, the two railways purchased and then demolished over 200 houses for about $500,000. The Canadian Northern also acquired the municipal St. Lawrence Park for about $14,000.

With completion of the railway yards prior to World War I, the basic pattern of land use within the study area was established for the next 50 years. Railway yards occupied most of the land while Canada Packers and Consumers Gas were the major industrial concerns. Other industries were scattered through the precinct. By the late 20th century, the transportation and industrial functions of the area declined and much of the land had become derelict.

3.0 THE DEVELOPMENT HISTORY OF THE STUDY AREA AND ARCHAEOLOGICAL INVENTORY

The following discussion of the land use histories of the properties flanking and within the study area and inventory of potential archaeological resources has been developed using a variety of archival sources, 19th and 20th century mapping, aerial photography and the results of previous archaeological assessments within the area.

The approximate locations of structures depicted on the historic maps have been superimposed on a modern base (Figure 4). Mapping exercises of this type general proceed by overlaying historic maps on the modern streetscape, using common reference points between the various sources. Each attempt is likely to produce slightly different results, as there are numerous potential sources of error inherent in such a process. These include the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping. In this instance, there is considerable variation in all dimensions. In general, however, the distinction between probable changes in building footprints during episodes of redevelopment, on the one hand, and apparent changes that are a consequence of mapping errors, on the other, is clear.

3.1 Cherry Street within the CNR Corridor

Summary of Land Use History

By the 1860s, the Grand Trunk Railway, which became Canadian National Railway, had acquired virtually all the land south of Mill Street from Cherry to the Don River. Over the years, this area contained cattle yards, frame-constructed freight sheds, a brick-built railway shop and a brick and frame-built station, as well as the company's mainline from Toronto to Montreal. A related facility was the Toronto Rolling Mills. In 1857, the prominent railway contractor, Casimir Gzowski, in partnership with D.L. Macpherson and the Pomeroy Brothers of Pittsfield, Massachusetts, established the Toronto Rolling Mills at the southwest corner of Mill and Water Streets, to re-profile worn rails of the Grand Trunk Railway. Gzowski initially obtained a ten-year contract, which must have been extended since the plant remained open until 1873. Alternatively, the facility may have tried to branch out into other iron products. The building and plant were demolished shortly after its closure. While the mill was furnished with a large steam hammer that would have required massive foundations, some vestiges of which may survive, the former site of the operation has been redeveloped numerous times as a result of reconfigurations to the railway yards south of Mill Street. The

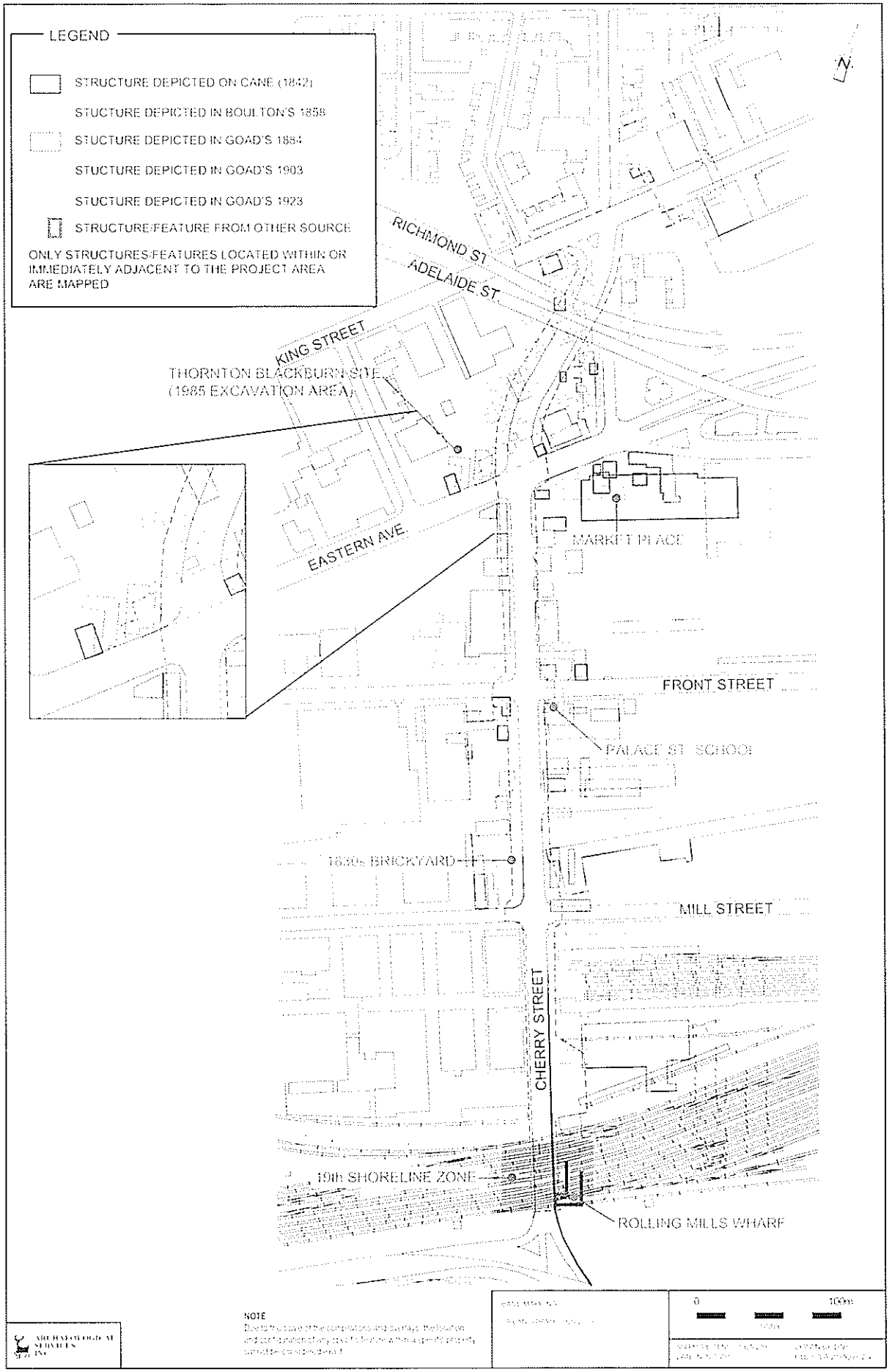

Figure 4: Stage 1 ARA of the West Donlands Transit EA-Historic Features

Grand Trunk station had been demolished by 1884 and by 1910, all of the remaining facilities had been removed or were substantially modified, and the area became a local yard featuring freight sheds.

Archaeological Inventory

- **Nineteenth Century Shoreline/Rivermouth Zone:** The lower Don, in its natural state was an area of shifting channels, small islands, sandbars, and marshland. Nineteenth century maps place the mouth of the river and the adjacent shoreline within the study area, although their configurations vary from one source to the next. The shoreline was reinforced with timber crib harbour walls south of the Gooderham & Worts distillery. Such construction may have occurred further east, in the study area as well.

  The original shoreline zone has not survived subsequent developments (cf. ASI 1996). Remnants of shoreline cribbing, however, may survive, buried below the fills within the railway corridor.

- **Rolling Mills Wharf:** A small waterfront wharf was constructed on the shore to service the Toronto Rolling Mills. The wharf was also intended to reduce silting from the Don River. In this latter capacity, it was succeeded by the Don Breakwater in 1870. As depicted on the 1862 Browne and Browne *Plan of the City of Toronto*, the wharf lies partially within the study area.

  Remnants may survive buried in fill if the structure was not removed during subsequent reconfiguration of the Don River channel.

- **Don Breakwater:** In 1870, a long, timber crib breakwater was built on the south side of the river— roughly at the foot of Cherry Street into the harbour to a point below Berkeley Street. By 1878, the *Globe* noted that the Don channel still needed to be frequently dredged. Additionally, although the docks along the Don generated adequate revenue, they were expensive to maintain because of the large volumes of silt carried by the river. Therefore, in 1886, by which time the structure was in ruins, the breakwater was officially abandoned, and the following year the City embarked on channelizing the river upstream of the Grand Trunk Railway bridge.

  Deeply buried remains may survive, although it is highly unlikely that the cribbing forms a continuous feature.

3.2 East Side of Cherry Street from the CNR Corridor to Mill Street

Summary of Land Use History:

See Section 3.1

Archaeological Inventory

- **Grand Trunk Railway Complex:** Two frame structures that appear on the 1858 *Boulton Atlas* encroach upon the study area, as well as the main frame shop building. The sheds were apparently demolished by the time of the compilation of the 1884 edition of the *Goad's Atlas*. Between 1884 and 1893, another freight shed had been built, the west end of which extends into the study area. Additional freight- and warehouses that fronted on Cherry were present by 1910. These remained in place until at least 1943. The main shop building was demolished between 1903 and 1910.

A previous archaeological assessment (ASI 2006) concluded that it is unlikely that significant vestiges of the complex have survived the demolition activities (ASI 2006). Monitoring of excavations undertaken along the Mill Street frontage in the location of one of the structures depicted on 1858-1903 maps confirmed that the area has been thoroughly disturbed.

3.3 West Side of Cherry Street from the CNR Corridor to Mill Street

Summary of Land Use History

This block is occupied by the Distillery District National Historical Site. Perhaps the most well known industrial activity in the West Donlands, the Gooderham and Worts Distillery was founded, in 1832, when James Worts and William Gooderham constructed a mill west of Trinity Street and south of Mill Street on top of a steep bank overlooking a broad beach on what was once the lakeshore (Otto 1994:8).

The Gooderham Windmill, built in 1832, served as a prominent local landmark, effectively designating the eastern boundary of the city until the 1850s. It also formed one end of the original Windmill Line defining the limit of lakefilling along the waterfront. The foundation of the windmill was documented through an archaeological assessment (ASI 2003).

By 1837, Gooderham & Worts were distilling alcohol from surplus and low-grade grain and a building for that purpose was constructed on the west side of Trinity Street. The original distillery burned to the ground in 1842. After 1856, the rebuilt distillery was cut off from the harbour by the Grand Trunk Railway, whose tracks came to form the southern boundary of the complex (though the Gooderham's wharf continued to function). Subsequently, however, major lakefilling schemes in the 1920s altered the flow of the river, pushed the harbour further south, and subsumed the wharf in fill.

After 1859, new mill and distillery buildings filled the site, followed by a malt house and company office in 1864. The operation continued to expand steadily and by 1873 distilling and storage facilities had expanded to the east side of Trinity. Many warehouses were required to support the company's massive output. At its peak, the property extended to its present western boundary at Parliament Street and east to Cherry Street by 1887. Cattle sheds were moved to the mouth of the Don River to make way for these new land developments.

Archaeological Inventory

- **Gooderham & Worts:** Two rack houses, built between 1884 and 1890, are located immediately adjacent to the study area. These buildings remain extant.

  It is assumed these structures will not be impacted by the proposed undertaking.

3.4 East Side of Cherry Street from Mill Street to Front Street

Summary of Land Use History

The lands flanking the study area on the east side of Cherry between Mill and Front were identified as lot 13 on Plan 108, which dates to 1855 but is based on Chewett's 1830 survey. Both Wilmot's survey of 1810 and the Chewett's plan show that the southwest corner of lot 13 was covered by a "meadow" and neatly bisected

in a north-south direction by a marshy area draining into the mouth of the Don. Settlement of individual parcels within this block was underway by the early 1840s as five small structures are depicted on the Cane map of 1842, east of the study area. Additional residential structures appear by the time of the compilation of the 1858 *Boulton Atlas*. While the majority of these are located well to the east of the study area along Water Street (the precursor of Overend Street), two are located along the Cherry Street frontage. Over the next 50 years, the area continued to be dominated by workers' housing, which reached its maximum density in the early 20th century. The abstract index shows that these properties were held by a large number of individual owners, some as private residences while others bought groups of lots for investment or speculative purposes.

Construction of the Palace Street School, at the intersection of Front and Cherry Streets, in 1859 further attests to the growing residential population of the area. However, by 1890, the school was no longer needed and it was converted into a hotel.

By 1889, the CPR had proposed to lay a line of tracks from Water Street (Overend) across Tate Street (an east-west street formerly located between Front and Mill streets in a north-easterly direction. The track was in place by 1893, and much of the housing remained undisturbed despite the construction of spur lines and freight depot at the corner of Cherry and Tate Streets between 1903 and 1910. The housing was ultimately demolished between 1910 and 1923, replaced post-1923 by freight sheds of various sorts. A search of the City Directories between 1885 and 1920 showed that this area contained a number of residences which were homes to a number of working class families, most probably employed at the nearby rail yards, the Gooderham & Worts distillery or the William Davies plant.

Archaeological Inventory

- **Circa 1858 Structures:** Two structures (residential, commercial, small scale industrial) depicted in the 1858 Cane *Boulton Atlas* front on to Cherry Street within the study area.

  The archaeological potential for the presence of vestiges of these occupations in light of later developments was been considered during a previous archaeological assessment within the West Donlands (ASI 2005). In no case is there potential for the survival of significant archaeological deposits or features related to these structures.

- **Palace Street School:** In 1857, the land at the southeast corner of Front and Cherry was purchased for use as the Palace Street School, which was designed by Toronto architect Joseph Sheard. Additions were designed for the building by William Irving in 1869. The school continued in operation until at least 1890 when the lot was sold to brewer Robert Davies. In 1890, it was the site of the D'Arcy Hotel. Further additions were designed for the structure by David Roberts Jr. (1890) and Sproatt and Rolph (1891). The building was listed in the City Directory of 1895 as the Cherry Street Hotel. It was vacant in 1900, and it appears to have operated as the Eastern Star Hotel in 1905. In 1906 it was re-named the Cherry Street Hotel. It later became a warehouse, and then the Canary Restaurant in 1965, which is still standing today. The structure is listed in the Inventory of Heritage Properties maintained by the City of Toronto's Heritage Preservation Services on the basis of its architectural merits.

  A previous archaeological assessment concluded that the extant building retains elements of the original school within its fabric, however, it is unlikely that significant exterior archaeological deposits dating from the early phases of the occupation have survived subsequent structural alterations and additions. Given the multiple functions of the structure over the past century, no

significant research questions concerning the building or its use are likely to be addressed by archaeological investigation of any remaining subsurface deposits exterior to the current building on the property (ASI 2005). In any case, it is assumed these structures will not be impacted by the proposed undertaking.

- **Late 19th early 20th Century Structures:** Residential development between Mill Street and Front Street, providing housing for the workers employed by various industries. According to the 1884 *Goad's Atlas*, four frame row houses located to the south of the Place Street School building that front on Cherry Street are partially located within the study area as is a fifth frame house and outbuilding that fronted on Mill. None of the buildings fronting Cherry appear to correspond with the two depicted on the earlier *Boultons' Atlas*. One additional frame house on Cherry appears on the 1890 edition, also partially within the study area. By 1910, a railway freight shed, the west end of which is located in the study area had been built between some of the houses. By 1923, the frame houses had all been demolished and an additional railway shed built, the west end of which is located in the study area.

  There is little potential for the survival of significant archaeological remains associated with these properties. This conclusion is based on consideration of the general type of housing stock within the area, which as can be seen from the City's photographic record, was characterized by frame buildings built on footings or shallow timber sleepers. No significant research questions would be resolved through archaeological investigations in these areas. These conclusions are consistent with those of an earlier archaeological assessment within the West Donlands (ASI 2005).

3.5 West Side of Cherry Street from Mill Street to Front Street

Summary of Land Use History

The lands flanking the study area on the east side of Cherry between Mill and Front were identified as lot 6 on Plan 108. Chewett's 1830 survey shows a brickyard near the northwest corner of Cherry and Mill Streets. Settlement of individual parcels within this block was underway by the early 1840s. By 1884, a variety of brick and frame structures, representing an array of residential and industrial functions were in place. These were expanded throughout the balance of the 19th century, but from circa 1903 to 1923, there were few changes to the buildings.

Archaeological Inventory

- **Circa 1830 Brickyard:** Typically, short-lived, early 19th century brickyards featured few permanent or large scale fixtures. The only trace of these works that may potentially have survived is the quarry pit itself, assuming it was excavated to any great depth. It would in any case, likely have been filled before later development took place. This fill would likely be dominated by imported material and debris.

  No significant research questions would be resolved through archaeological investigations of this former feature.

- **Circa 1842 Structures:** Two structures partially within the study area are depicted on the Cane map of 1842. Both were located at the southwest corner of Front and Cherry.

- **Circa 1858 Structures:** Only one of the 1842 structures appears on the 1858 *Boulton Atlas*, but one additional frame structure is located approximately mid-way between Front and Mill, partially within the study area, while a second lies at the northwest corner of Cherry and Mill in the area of the former brickyard.

  The archaeological potential for the presence of vestiges of these occupations in light of later developments was been considered during a previous archaeological assessment within the West Donlands (ASI 2006). In no case is there potential for the survival of significant archaeological deposits or features related to these structures.

- **Late 19th early 20th Century Structures:** This side of Cherry between Mill and Front was characterized by a mix of residential and industrial development in the later 19th and early 20th century. Three frame and two brick buildings that fall partially within the study area appear in the 1884 *Goad's Atlas*. No significant changes occurred until 1910, by which time one of the brick structures had been removed to make way for a rail line. All but one of the structures was demolished in the mid-20th century. The last survivor, built circa 1880 and most recently known as 401 Cherry Street, is to be (or has been) demolished.

  No significant research questions would be resolved through archaeological investigations of these later features. These conclusions are consistent with those of an earlier archaeological assessment within the West Donlands (ASI 2006).

3.6 West Side of Cherry Street from Front Street to Eastern Avenue

Summary of Land Use History

The lands flanking the study area on the west side of Cherry between Front and Eastern Avenue were identified as lot 12 on Plan 108. Settlement was underway by the 1840s. The houses built were modest frame structures of one or two stories, while others were described in the city assessments as "cottages." These were rented to local labourers. In the mid-1870s the east end of the block was purchased by William Hamilton where the Toronto Car Wheel Company established a division of their business, the St. Lawrence Car Wheel Foundry. However the business did not succeed and had ceased to function as a foundry by 1880. After that time the building housed a feed warehouse, with a large lumber yard to the rear on the west side, and by the later 1880s and into the 1890s, the lot was apparently vacant and used only for wood or coal storage. By the late 1910s and into the 1920s, the neighbourhood, which continued to be a working class district, experienced an ethnic mix and the City Directories began to record the presence of "foreigners" along Eastern Avenue.

Much of the property within this block was purchased in 1906 from the owners by the Toronto Dwellings Limited, and the property was conveyed to its parent company, the Canadian Northern Ontario Railway Company, in 1908. Unlike the lands to the south and east, however, the subject property was not immediately cleared for the construction of the Canadian Pacific, Canadian Northern and Grand Trunk railway yards that expanded to cover most of the West Donlands. Ultimately, however, all of the remaining houses were razed in the 1930s, and the neighbourhood disappeared into the railway yards.

In 1946, the subject property was purchased by Steel Distributors Ltd., initiating a sequence of industrial and commercial developments, demolition, abandonment and redevelopment of structures and their surrounding grounds on various portions of the block.

Archaeological Inventory

- **Circa 1858 Structures:** Three frame structures depicted on the 1858 *Boulton Atlas* are located within the study area. Two of these were originally on the east side of the street, which in this section formerly deviated to the northwest (an additional four structures were located under the existing Cherry Street roadbed).

- **Late 19th early 20th Century Structures:** By 1884, five frame row houses are depicted within the study area in the *Goads Atlas*, ranging southward from Eastern Avenue and fronting Cherry. Immediately south of these residences is the St. Lawrence Car Wheel Foundry, the front portion of which falls within the study area. The latter building had been demolished by 1890. By 1910, all but two of the rowhouses had been razed. By 1923, these too had been removed and during the same period, an industrial building, part of which falls within the study area, had been erected at the northwest corner of Front and Cherry. This building was cleared by 1938 and the property went through a number of other phases of development.

  A detailed archaeological assessment of the entire block bounded by Cherry, Eastern, Trinity and Front was completed in 2004 (ASI 2004). This work also documented deep grading throughout large portions of the block. Given the extensive and repeated construction, demolition, and grading activities related to 19th century mixed residential and industrial development and 20th century industrial, commercial and transportation development, it was concluded that any further archaeological investigations would be unlikely to provide significant insights into the history of its constituent properties.

3.7 East Side of Cherry Street from Front Street to Eastern Avenue

Summary of Land Use History

The lands flanking the study area on the east side of Cherry between Front and Eastern Avenue were identified as lot 13 on Plan 108. Residential development along this stretch of Cherry began in the 1840s. The most distinctive feature of the block, however, was the Market Place that developed on a gore or apex of land on the south side of Eastern Avenue, east of Cherry Street and opposite Sumach Street. While it is identified as reserved as a "Market Place" on Plan 108, it may have been functioning as early as 1834, as it appears on Chewett's *City of Toronto and Liberties* map of that year. After 1890, the market was demolished and replaced by the short-lived St. Lawrence Square Park. This park then disappeared into the morass of railway yards that took up the entire block. Later still, the market became the site of a foundry that still occupies the property.

Set further back from Cherry Street, was the later 19th century Gooderham & Worts cooperage. The structures making up this facility included a brick cooper's shop, a brick moulding shop and frame storage and ancillary buildings surrounded by work yards.

Archaeological Inventory

- **Market Place:** Among the maps consulted for this study, only the 1880-1890 *Goad's Atlas* plates illustrate the configuration of buildings on this plot, which consisted of a series of one-and two-storey frame structures located, for the most part along the peripheries of the market place. The 1880 Goad's map also identifies "City Weigh Scales."

  Even though weigh scales were massively-built, it is unlikely that any remains associated with the feature survive, given the repeated and extensive redevelopments in the area, and the character of the current modern structures present on the site. Likewise it is unlikely that any other features associated with the operation of the market remain. These conclusions are consistent with those outlined in a previous archaeological assessment (ASI 2006).

- **Circa 1858 Structures:** Two frame structures depicted on the 1858 *Boulton Atlas* are located within the study area.

- **Late 19th early 20th Century Structures:** By 1884, 11 frame row houses are depicted within the study area in the *Goads Atlas*, ranging southward from the former alignment of Market Street and fronting Cherry. Another detached frame building that occupied the northeast corner of Cherry and Front also partially falls within the study area. These stood, with relatively little change, until between 1903 and 1910, when they were all cleared to make room for the railway. By 1923, two freight sheds were constructed north of Front Street, the west ends of which extend into the study area.

  No significant research questions would be resolved through archaeological investigations of these later features. These conclusions are consistent with those of an earlier archaeological assessment within the West Donlands (ASI 2005).

3.8 West Side of Cherry Street from Eastern Avenue to King Street

Summary of Land Use History

Occupation of this block was underway by the 1830s, mostly on the part of tenants, the earliest of whom included Thornton Blackburn on lots 15 and 16 and Charles Barber, who had established a soap and candle factory on lots 17 and 18 (ARC 1986:23). Occupation intensified during the 1850s. By the 1880s, row houses lined the majority of the area. Residential occupations predominated. It should be noted that extreme east limits of the 1985 Thornton Blackburn site excavation area coincides with the west limit of the proposed widening of this section of Cherry Street as identified in Option 3-RC. The features documented within this part of the site are primarily related to features associated with the later row housing.

Archaeological Inventory

- **Circa 1842 Structures:** Three structures that lie partially within the study area is depicted on the Cane map of 1842. Two others are located immediately adjacent to the corridor.

- **Circa 1858 Structures:** Five structures appear on the 1858 *Boulton Atlas*, either wholly or partly within the study area. Two others are located immediately adjacent to the corridor.

All of these buildings were superseded by later structures which likely have obliterated any significant remains. It should be noted that the preservation of remains associated with the Thornton Blackburn site is attributable to the fact that the site was incorporated within the playing yard of Sackville Public School immediately following the conclusion of it occupation.

- **Late 19th early 20th Century Structures:** This section of the study area was characterized by residential development in the later 19th and early 20th century. A minimum of 11 such buildings are depicted on the *Goad's Atlas* maps. Most of these were removed by the realignment of Cherry Street.

  No significant research questions would be resolved through archaeological investigations of these later features.

3.9 East Side of Cherry Street from Eastern Avenue to King Street

Summary of Land Use History

The lands flanking the study area on the east side of Cherry between Eastern Avenue and King Street and Front were identified as lot 6 on Chewett's 1834 plan. Residential development along this stretch of Cherry began in the 1840s, but did not proceed as rapidly as in areas further south. By the 1880s, however, row houses lined the majority of the area between Eastern Avenue and King. Small-scale industrial operations were interspersed with the residences. Industrial concerns came to dominate the area by the mid-20th century.

The property located at the southeast corner of Cherry and King (549 King Street East) has been subject to a detailed Stage 1 Archaeological Assessment (ASI 2007). The property has been vacant since 1980 and was subject to an environmental remediation project in 2005. This work involved the removal of several underground storage tanks and over 1400 cubic metres of soil from the property.

Archaeological Inventory

- **Circa 1842 Structures:** One structure partially within the study area, and three located immediately adjacent to it are depicted on the Cane map of 1842.

- **Circa 1858 Structures:** Five structures depicted on the 1858 *Boulton Atlas* are located within the study area, while several others are located in close proximity.

  In no case is there potential for the survival of significant archaeological deposits or features related to these structures.

- **Late 19th early 20th Century Structures:** Between the 1880s and the early 1900s, as many as 20 structures, consisting of row houses and small scale manufacturies as well as a variety of outbuildings, were built within the study area. Additional structures appeared by 1923, in some cases replacing the earlier buildings. Many of these had commercial functions. Only a few of the buildings dating from this general period survive.

  No significant research questions would be resolved through archaeological investigations of these later features.

4.0 FIELD REVIEW

A field review will be conducted at a later date. The results of that field review will be subsequently described and mapped in detail.

5.0 SUMMARY AND RECOMMENDATIONS

A Stage 1 Archaeological Assessment of the West Donlands Transit EA (Alternative 3R-C), City of Toronto, has determined that one previously registered archaeological site, the Thornton Blackburn site (AjGu-16), is located in very close proximity to the study area. Because the 1985 excavations did not investigate the entire area of the site, archaeological deposits could extend into Alternative 3R-C.

The study area is located within the former Government Park or Government Reserve which was set aside by the Upper Canadian government for two proposed uses: a Parliament House and a residence for the Lieutenant Governor, although neither of these developments was carried out. In 1819, this land was patented by the trustees of the Toronto General Hospital. By the late 1820s, in order to raise money for the construction of a new hospital closer to the town of York, the hospital trustees authorized the survey of this large reserve into building lots which were subsequently sold to individual purchasers and built upon during the late 1830s and 1840s. Development accelerated during the second half of the 20th century. The chief landholding and industrial interests in the vicinity of the study area included the Gooderham & Worts distillery and the Grand Trunk (later Canadian National) Railway.

5.1 Aboriginal and Euro-Canadian Archaeological Potential

In view of the development history of the lands that comprise the study area, it is clear that all original A-horizon deposits, and the uppermost levels of its B-horizon have been removed or redistributed to such a degree as to seriously compromise the potential for the presence of any Aboriginal archaeological deposits, which generally would have been ephemeral compared to later occupations. The same considerations apply for those 19th century resources that would otherwise be considered of potential heritage value according the criteria outlined in the Ministry of Culture's 2006 *Draft Standards and Guidelines for Consulting Archaeologists*. The only exception to this generalization is the yard of the Inglenook Public School, which has not been redeveloped to the same degree and is the location of the Thornton Blackburn site (AjGu-16). Nevertheless, this overall assessment of the integrity and potential within the study area must be confirmed through field review.

In light of these considerations, the following recommendations are made:

1. A field review must be conducted to further refine the understanding of the archaeological potential of the study area in light of its overall development history. Any areas of identified potential must be subject to a Stage 2 Archaeological Assessment prior to the initiation of any land disturbances related to the project.

The above recommendation is subject to Ministry of Culture approval, and it is an offence to alter any archaeological site without Ministry of Culture concurrence. No grading or other activities that may result in the destruction or disturbance of an archaeological site are permitted until notice of Ministry of Culture approval has been received.

The following conditions also apply:

- Should deeply buried archaeological remains be found on the property during construction activities, the Heritage Operations Unit of the Ontario Ministry of Culture should be notified immediately.

- In the event that human remains are encountered during construction, the proponent should immediately contact both the Ontario Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Consumer and Business Services, Consumer Protection Branch at (416) 326-8404 or toll-free at 1-800-889-9768.

The documentation related to the archaeological assessment of the subject property shall be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner, the Ontario Ministry of Culture, and other legitimate interest groups.

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APPENDIX G-2

Stage 1 Archaeological Assessment

of the

East Bayfront, West Donlands and Portlands Areas,

City of Toronto

April 2004

Stage 1 Archaeological Assessment of the East Bayfront, West Donlands and Portlands Areas, City of Toronto

Submitted to

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April 2004

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Stage 1 Archaeological Assessment
of the
East Bayfront, West Donlands and Portlands Areas,
City of Toronto

1.0 INTRODUCTION

Archaeological Services Inc. was contracted by the Toronto Waterfront Revitalization Project to conduct detailed Stage 1 archaeological assessments of the East Bayfront, West Donlands and Portland areas of the City of Toronto's Central Waterfront Planning Area (Figure 1). This study area falls within that examined by the Archaeological Master Plan of the Central Waterfront (ASI 2003), however, it represents a more detailed analysis of the land use history of these areas flanking the mouth of the Don River, and the distribution and character of past land use features than could be carried out within the constraints of the master plan. It must be emphasized, however, that this study is focussed solely on potential archaeological resources. It does not consider potential or known built heritage features within the study areas.

2.0 BACKGROUND RESEARCH

2.1 Environmental Setting

The eastern portion of Toronto's waterfront has been extensively modified over the past 175 years. Much of the shorefront consists of modern fill which was dredged, dumped and shaped in the early part of the twentieth century, with some sections of the port lands completed as late as the 1960s. The pre and post-fill history of the area represents a succession of pre-contact Aboriginal use followed by military occupation, town planning, and the extensive expansion of transportation networks and subsequent industrialization. Over time, the consequent changes to the landscape have been dramatic, including not only the southerly extension of waterfront lands, but also modifications to the flow of the Don River, burial and channelization of its tributaries, and alterations to other pre-existing natural features such as sand spits, marshes and the peninsula which led to the present day Toronto Islands. The Don River and the sand spit at its mouth, represent the most significant natural features in the vicinity of the study area.

The Don River rises along the southern margins of the Oak Ridges Moraine approximately 38 kilometres from Lake Ontario. The majority of the watershed traverses the South Slope Till Plain, maintaining a relatively steep gradient of seven metres per kilometre for the first 10 kilometres and tapering to 4.2 m/km for the next 24 kilometres. From the forks, where the west and east branches join, to Lake Ontario, the gradient falls to about 1.25 m/km (Martin-Downs 1988:5). The reduced gradient of the lower reach is partly the result of the river's descent across the glacial Lake Iroquois strand. In addition, since the end of the Pleistocene, isostatic uplift has continued to gradually elevate the Lake Ontario outlet, thereby raising lake levels and flooding river mouths around the Ontario basin (Anderson and Lewis 1985; Chapman and Putnam 1984:104). Many of these estuarine river mouths, including the Don prior to historic remodelling, are characterized by extensive coastal wetlands.

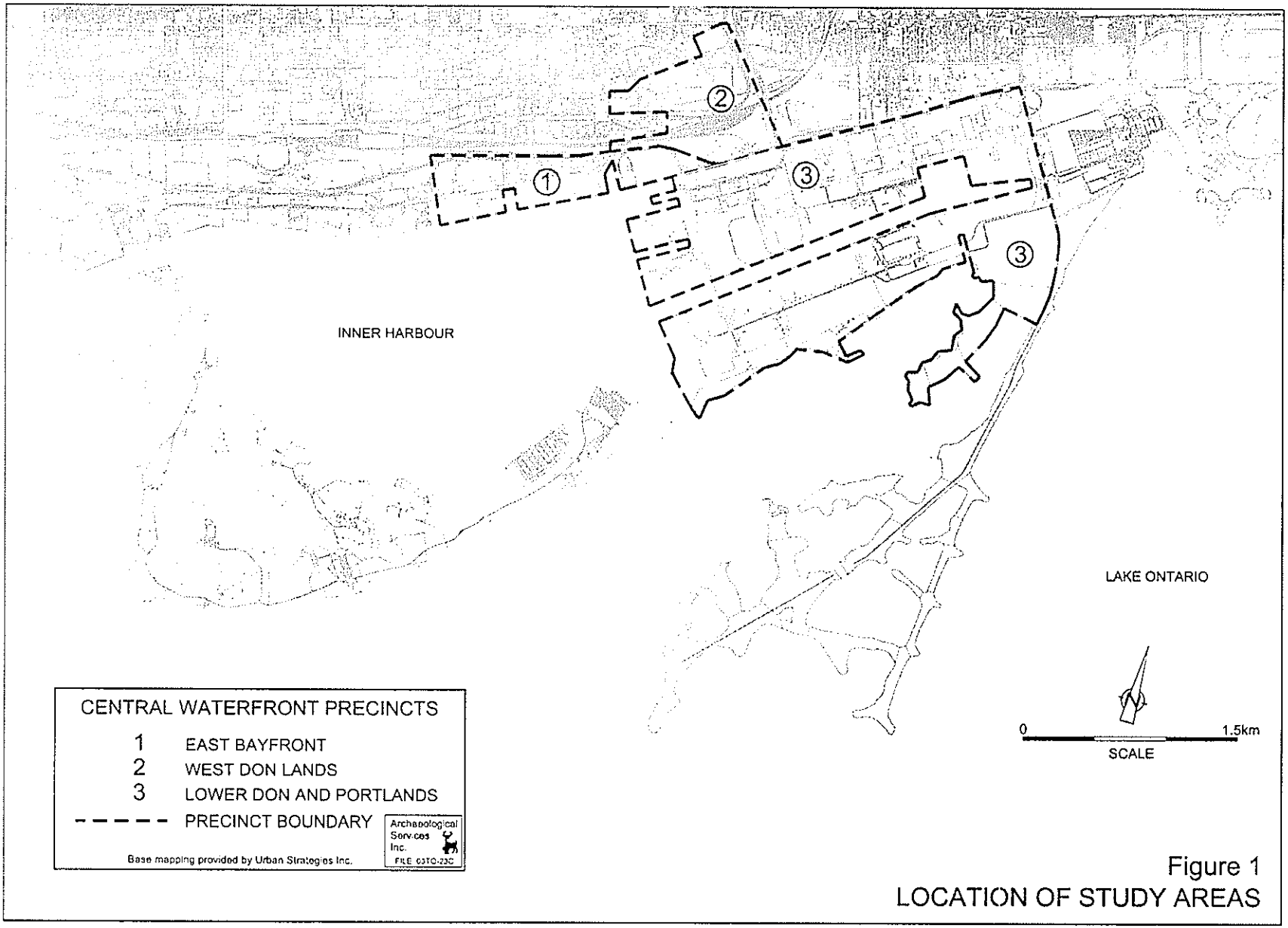


Figure 1
LOCATION OF STUDY AREAS

A legacy of the once-lower water levels that immediately followed the draining of glacial Lake Iroquois, and the resulting lower erosional base levels, is the deeply entrenched valley of the lower Don. This entrenchment is on the order of 30 metres below the surrounding upland in places. The higher base levels that have resulted from the re-filling of the Lake Ontario basin have caused the river to meander, widening the floodplain in the lower reaches to a maximum of around 750 metres.

A map compiled in 1788 by surveyor Alexander Aitkin (Figure 2) notes that the Don was navigable by boat for two or three miles (Sauriol 1981:65). The head of commercial navigation on the Don River was near Danforth Avenue, where there was a ford that was part of a trail leading to Montreal (Sauriol 1981:57). Sauriol (1981:143) notes that, during the nineteenth century, there was considerable traffic of schooners and smaller vessels to factory wharves in the vicinity of Gerrard Street. He also reports (Sauriol 1981:72-73) that pioneer records refer to the forks of the Don as the "boatbuildery", alluding to some degree of navigability farther upstream. Indeed, in the late eighteenth century, the North-West Company used the lower Don as part of their fur trade route to Lake Simcoe and Georgian Bay.

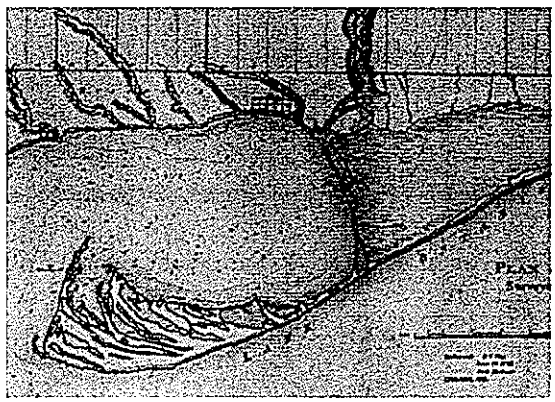


Figure 2: A. Aitken's *Plan of York Harbour, 1793* (from Benn 1993:27).

The Toronto lakeshore is believed to have stabilized in its early nineteenth century position circa 3000 B.C. (Figure 3). The sand spit at the mouth of the Don was formed by the deposition of sediments that were eroded from the Scarborough Bluffs to the east and transported westerly by longshore drift (Freeman 1976; Krentz 1985:4). The current model of lake level changes in the Ontario basin (Anderson and Lewis 1985) suggests that this process likely began sometime after about 7,000 B.P. Prior to that time, and beginning with the draining of glacial Lake Iroquois at about 12,000 B.P., the level of Lake Ontario was considerably lower and the shoreline was far to the south of its present location. Early mapping indicates that prior to human modifications, the position of the lakeshore varied from approximately 50 to 150 metres to the south of the present alignment of Front Street. The transgression of the Lake Ontario north shore through the Late Pleistocene and Holocene is outlined in Figure 3. The bathymetric contours in this figure also illustrate the submerged bank of sediment associated with the emergent sand spit.

Precisely when the sand spit emerged from Lake Ontario is currently unknown, although this would have depended on enough sediment having accumulated from erosion and littoral transport of material from the Scarborough Bluffs. The spit was clearly a dynamic entity, as evidenced by the flight of concentric beaches notable in its earliest recorded form (Figure 2). In addition to the accretion of sediments transported by longshore drift, the spit was also subjected to on-going erosion. Growth of the spit would occur as long as the net result of these processes was a gain in sediment, whereas the spit would shrink in periods when the net result was a loss. Early commentaries suggest gradual growth of the sand spit until the 1850s followed by a period of declining accretion and then erosion. This has been attributed to a decline in the quantity of

sediment being eroded from the Scarborough Bluffs. As only about six percent of the eroded bluff material is subsequently deposited at the spit, it is apparent that an enormous amount of sediment has been removed over the millennia, suggesting that the Scarborough Bluffs were once an even more significant promontory (Krentz 1985:6-8).

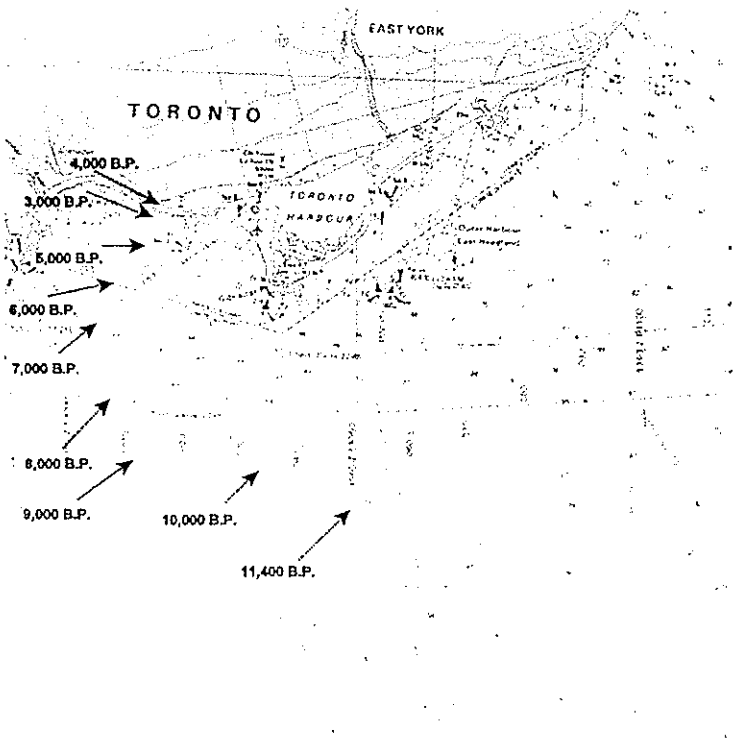


Figure 3: Bathymetric Chart of Toronto Central Waterfront (from C.H.S. Chart L/C 2077)
Arrows indicate approximate shoreline contour positions through time (based on Anderson and Lewis 1985).

In addition to on-going erosion, the sand spit has also been subjected to periodic catastrophic erosion. When first mapped the spit was a peninsula attached to the mainland by a slender isthmus. In 1852, a storm breached the isthmus and subsequent wave action enlarged the breach to about 45 metres. In 1858, another storm enlarged the breach to about 450 metres, and the gap had grown to about 1200 metres by the mid-1860s (Krentz 1985: 13).Under such a dynamic regime, the development of soils on the sandy substrate was likely quite retarded, with regosols likely the norm. Natural fertility would be low except in depressional situations where organic material would accumulate. The rolling nature of the topography, varying between dry sandy ridges and backwater basins, would have imparted considerable complexity to the soil drainage.

By the time the Toronto Islands sand spit began forming, sometime after about 7,000 B.P., an essentially modern forest had become established throughout southern Ontario. Under the widely used ecological zonation developed for Ontario by Hills (1958) and revised by Burger (1993), the Toronto lakeshore is situated in forest Site Region 7E. Under median moisture regimes and eco-climates the climax forest in this region tends to be co-dominated by hard maple (*Acer saccharum*) and beech (*Fagus grandifolia*), often in association with basswood (*Tilia americana*), red oak (*Quercus rubra*), white oak (*Quercus alba*), shagbark hickory (*Carya ovata*) and bitternut hickory (*C. cordiformis*). It is doubtful, however, that such a forest would have developed on the Toronto Islands sand spit. Given the inferred low fertility of the sandy soil and the complex interplay of drainage regimes, the original vegetation was likely a patchwork of dry uplands with early to mid-successional taxa such as cottonwood, black cherry, oak, white pine, and hard maple, wet lowlands with oak, ash, elm, and hickory, and wetlands with shrubs and emergent vegetation. This interdigitation of habitats and locally high bio-diversity would no doubt have given rise to a very rich coastal wetland ecosystem similar to other Great Lakes examples such as Long Point on Lake Erie.

The original character of the lower Don is captured in the following description by Pearson (1914):

> The river was so very serpentine that one would have to go about three miles to go in a straight line. There were long stretches of meadow land between the windings of the river, and a good deal of marsh. This, as well as the marsh between the harbour and Ashbridge's Bay, was a great place for muskrats, and numbers were trapped.

Scadding's 1873 history of Toronto (1966:167) indicates that, as one progressed upstream, the marshes gave way to meadow at about the present position of Riverdale Park, approximately two kilometres inland. He too made note of the "morasses" which characterized Ashbridge's Bay and the contiguous marshes through which the Don flowed into Lake Ontario (Scadding 1966:3-4). The riparian marsh he describes as "one thicket of wild willow, alder, and other aquatic shrubbery," including witch hazel, dogwood, highbush cranberry, wild grape, blue iris, reeds, and cattails (Scadding 1966:153, 159). He also refers to an island near the mouth of Castle Frank brook where wild rice grew plentifully (Scadding 1966:167). Pearson (1914:116) mentions "many stately elms" on the river flats, as well as wild plum, butternut, gooseberry, and currants in abundance.

At their confluence, the east and west branches of the Don are deflected westerly by a large relic baymouth bar that was formed at the mouth of the embayment in glacial Lake Iroquois. In addition to this extensive deposit of sand and gravel, most of the Iroquois Plain that flanks the lower Don Valley was capped by nearshore deposits of glacio-lacustrine sand. This porous substrate seems to have had considerable influence on the upland forest that surrounded the lower Don Valley. In the late eighteenth century, travelling to their summer retreat of "Castle Frank" near present-day Bloor and Bayview Streets, Governor and Mrs. Simcoe followed a trail along Yonge Street and then easterly to the Don through shady pine plains covered with ferns (Sauriol 1981:61).

2.2 The Development of Toronto's Waterfront: The General Historical Context of the East Bayfront, West Donlands and Portlands Areas

Immediately following British hegemony in the Canadas at the conclusion of the Seven Years War, settlement in the Toronto area was limited, although its potential to serve as an effective link in the transportation and communications network associated with the fur trade was widely recognized (Careless 1984:10). A substantial trading post established by Jean Baptiste Rosseau, at the mouth of the Humber, was a notable exception to this trend.

At the conclusion of the American War of Independence (1774-1783), however, the British were forced to recognize the emergence of a new political frontier, one which had to be maintained by a strong military presence. These new developments ultimately led, in 1793, to the founding of both the Town of York, on the west side of the outlet and associated wetlands of the Don River, and of a military establishment further to the west at the mouth of Garrison Creek, where Fort York was intended to control entry to the town's harbour (Careless 1984:11; 19-21).

The Town of York itself formed a compact plot, within the area now bounded by Front, George, Duke and Berkeley Streets (Careless 1984:21). The Government Reserve comprised many acres in the eastern section of the town and the very first parliament buildings for the colonial government of Upper Canada were located south of present day Front Street, west of Parliament Street, and were constructed between 1794 and 1797.

While the growth and development of the civilian town continued throughout the early nineteenth century, expanding inland to the present Queen Street by the 1830s, with additional lots having been surveyed as far north as Bloor Street, use of the waterfront remained restricted to commercial and transportation functions. A public walk along York's waterfront, known as the Esplanade, was established by a private trust in 1818, however, this facility was never tangibly developed for pedestrian use (Careless 1984:94). Harbour facilities, such as commercial wharves and piers, were constructed at several locations to the east of John Street. By 1823, four wharves were present along the shoreline, increasing in number to seven by 1841 (Historica Research Limited 1989:51). West of John Street, the British military continued to dominate use of the waterfront. In general, commercial and industrial development of Toronto's waterfront intensified into the second half of the nineteenth century. East of Yonge Street, a number of large factories were established, including the Gooderham and Worts distillery and its associated wharf east of Parliament Street, and by 1842, in the central portion of the city, seven piers were illustrated along the Toronto shoreline. The entire waterfront area was dotted with small factories and a variety of local service industries.

With the coming of the Northern, Great Western, and Grand Trunk railways to Toronto in the 1850s, the waterfront was radically altered, as trackways, terminals, freight stations, utilities and new wharves were erected. The history of Toronto's central waterfront after this time is inextricably linked to the city's railway and industrial history. Between 1850 and 1870, Toronto formed the centre of operations for Canada's earliest railways, whose tracks skirted the southern edge of the city, following the shoreline. By the 1860s, when the railways had completed their first phases of construction, the lakefront area to the west of the study area had been altered significantly. The majority of railway facilities were located between Fort York and John Street, on land which was relatively inexpensive compared to more desirable areas at the foot of Yonge Street. The most dramatic change of the period was the filling of the harbourfront from Bathurst Street to Parliament associated with the development of the Esplanade (between Spadina and the Don River) as the major rail corridor, despite the fact that it had originally been intended as a public thoroughfare. While the rail companies were insistent upon utilizing the Esplanade to reach the downtown core, and proposed several schemes by which this could be accomplished, much of the task was, in the end, carried out by the City (Historica Research 1989:55).

Commercial and industrial development of Toronto's waterfront intensified during the second half of the nineteenth century and the shoreline between Bathurst and Parliament Streets was altered through the filling of timber cribs constructed for the Esplanade, a right-of-way developed for use by the railways (Historica Research 1989:54). East of Spadina, the original shoreline appears to have been destroyed by levelling and filling operations carried out in the mid- to late nineteenth century.

The lakefilling operations carried out during this period generally used the "crib and fill" technique. Timber cribbing—the recommended widths of which were 15 to 20 feet, set in 11 feet of water, with an additional four feet remaining above the water line—were placed around the perimeter of the area to be filled. The fill used during this first phase of expansion included sewage, municipal waste, material from construction sites and material dredged from the harbour bottom. The latter type of fill may be expected to contain derelict boats, the remains of wharf structures and other marine material (Historica Research 1983; 1986). During this early period, the southern limits of lakefilling and wharf construction were defined by the Old Windmill Line, a surveyed line, established in 1837, from the Gooderham windmill, at the foot of Parliament Street, west to a prominent headland near the site of Fort Rouillé (*Brown Associates* 1988:4).

By 1865, all three railways possessed right-of-ways along the waterfront, and within a few years, the numerous tracks within the narrow area to the south of Front Street created an exceedingly busy corridor, which caused great inconvenience for harbour traffic. In addition, Canadian Pacific became a major transcontinental carrier in the 1880s and though its lines lay mostly in the northern part of the city, it quickly acquired access to the waterfront (Historica Research 1983:23-25).

The evolution of the city's shoreline continued at an even greater pace through the late nineteenth and early twentieth centuries, with the consolidation of the rail systems, and the growth of numerous industrial and commercial operations along the waterfront. In 1893, the area within which construction and filling was permitted in the harbour was extended to a "New Windmill Line." This would provide deep water piers in Toronto's harbour without the need for dredging, as the Great Lakes navigation system was moving to the use of boats with a draft deeper than 10 feet (Historica Research 1989:57).

Consequently, the City of Toronto constructed more timber and rock cribs in the water and placed municipal waste behind them. By the end of 1893, crib work was in place for the construction of Lake Street, and a large amount of fill was dumped at the foot of York Street. The fill was characterized as "all the ashes and other suitable material collected in the section bounded by College, Spadina, and Sherbourne Streets" (Historica Research 1994:58). The final section of cribbing was completed between Bay and Lorne Streets by 1899.

Extending the Esplanade was not the only waterfront issue in the late nineteenth century. Ashbridge's Bay to the east, and the Toronto Island, became the foci of a number of development proposals between 1886 and 1909 (Reeves 1992:20). At the time of the English settlement of York, the area that is now called the Port Industrial District was largely a marshy bay at the foot of the Don River. Ashbridge's Bay, as it was known, was bounded on the west by a sand spit and on the south by the peninsula which was later breached to form the Toronto Islands. It is likely that the peninsula and marshes, which extended from the present Woodbine beach in the east to Gibralter Point in the west, were used by the area's aboriginal peoples for hunting and fishing, and settlers continued this tradition; there was a float over the Don River for light crossings (Stinson 1990: 8).

In 1884, the federal government constructed a breakwater along the western side of the sand spit creating a new shape to Toronto's inner harbour, and consolidating the north-south passage to the peninsula— known as Fisherman's Island. Many local industries were active in this area, and modifications were made to the harbour, the spit and the Don River in order to manage the noxious stew of the lake in the east Bayfront area.

Land was reclaimed from the Great Marsh after 1912 using concrete headwalls, the areas behind which were filled with dredged sand from the bottom of the lake. Over a number of decades the port lands took shape, until the sand spit and peninsula were no longer recognizable as features. Another project of land reclamation to affect the study area was begun in 1916 by the Toronto Harbour Commission. It involved the construction of a harbour head wall that extended between the Don River and Bay Street, and marked the new southerly extension of the Toronto shoreline approximately 335 metres south of Lake Street (Terraprobe 1995:3). The area behind (north of) the wall was filled in with sediments dredged from the harbour floor, and the project was completed in stages. The process would not be completed until 1930. It was during this time that Lakeshore Boulevard was created.

The final major project affecting the lakeshore (prior to the construction of the Gardiner Expressway and the Leslie spit in the 1960s) was the separation of grades for road and rail traffic. Along the railway corridor, at all crossings, pedestrian and carriage traffic was blocked for long periods by regular train movement and the

switching of trains at freight sheds. Although several bridges were built to take traffic over the railway corridor, these were only a temporary solution. In the early twentieth century, plans were developed to raise the railway corridor above the roads by placing it on top of an embankment. The design, adopted during the 1920s, incorporated an embankment created from fill that rose approximately 17 feet above the grade of the existing track (Historica Research 1989:64). Generally, the embankments were constructed from temporary wooden trestles with a rail line on top, and the fill was dumped from the railway cars.

The grade separation was designed to take place between Bathurst Street and the Don River. While Spadina Avenue and Bathurst Street crossed the rail corridors by means of bridges, the major thoroughfares to the east utilized road subways. This design required a major campaign of filling along the waterfront, in order to raise the tracks approximately five metres above the existing grade. The harbour fill that was used to raise the elevation of the railway corridors was composed of material from borrow pits located in Scarborough, as well as dredged from the harbour (Historica Research 1989:64). Much of this work was undertaken by the Toronto Harbour Commission, which also extended the shoreline somewhat south of the area required by the railways, in order to provide additional, new industrial land. These costly and time-consuming operations were not completed until 1929 (Historica Research 1983:57-58).

3.0 LAND USE HISTORY OF THE EAST BAYFRONT, WEST DONLANDS AND PORTLANDS AREAS

This section charts the evolution of land use and planning within the study area over time, ending with the completion of the railway viaduct in 1929, and the Harbour Commission's lake filling activities of the early 1930s. This land use histories are organized according to the planning precincts defined by the Central Waterfront Plan, with the exception of the fact that the East Bayfront precinct has been extended west to Yonge Street. The modern planning divisions largely correspond to the natural historical boundaries of these lands:

West Donlands: The trend towards urban development of the West Donlands began in the 1830s, and was well established by the 1850s.

East Bayfront: Until the Harbour Commissioners landfill activities in the 1930s, this area was essentially open water in the Toronto Harbour. The immense earthwork of the present day railway viaduct marks the southern limit of most historic wharves; only the latest iterations of two such wharves–Polson's and Yonge Street–are believed to extend into the current East Bayfront Precinct.

The Lower Don and the Portlands: The land between the Canadian National Railways and the Keating Channel was originally an ill-defined area composed of the river, marshlands, and sandbars of the Lower Don. Starting in the 1880s, various attempts were made to channelize the Don and to fill the marshes at its mouth. Few industries occupied the area before 1910, and extensive urban use of the area did not start until after the Harbour Commission's campaign of filling.

The Portlands area encompasses most of the former Ashbridge's Bay and had two distinct land use histories. Until 1912 the area was a shifting mass of sandbars, marshland, and water, used by some Torontonians for various recreational activities. Beginning in the late nineteenth century, however, various efforts were made to prevent the marshlands from pushing into the Toronto harbour, and to ameliorate the effects of dumping raw

sewage into Ashbridge's Bay. The landfill and accompanying industrial uses that occurred after 1912 were seen as means to address these problems.

3.1 The West Donlands

The course of the Don River and early railway construction form two well-defined boundaries for the West Donlands Precinct. The present day Canadian National Railway corridor leading to Union Station is the result of grade separation carried out in the 1920s. However, beginning with the construction of the Grand Trunk Railway in the 1850s, railway tracks have historically separated the residential and industrial development from the marshlands to the south.

Although adjacent to the earliest settled part of Toronto, the land between Trinity Street and the Don River did not see significant urban development until the 1850s, when scattered housing began to appear throughout the area. At least three reasons account for this late growth. Legally, this area was part of the "Park" established at the time Toronto was first surveyed, and was initially reserved for government purposes. It appears that this restriction was not lifted until the 1830s/1840s. Secondly, this area consisted of low-lying land, which formed the floodplain of the Don River. This floodplain extended northwards to where King Street meets the river today, and roughly followed the diagonal alignment of King Street on its western edge. Thirdly, this area was considered unhealthy due to its proximity to the mashes at the mouth of the Don River and the dumping of effluent in the adjacent Ashbridge's Bay. This may account for the emphasis on industry and low-income housing in the area.

In any case, the mouth and lower stretches of the Don River as it enters Toronto Harbour were never viewed as much of an amenity by the Toronto business community. The river carried considerable silt, which clogged the harbour and required ongoing dredging to maintain navigability. It was also used as a convenient and inexpensive sewer outfall, which added to the silting of the harbour and to the real and perceived unsanitary character of the marshes. Pollution of the waters was exacerbated after 1872 when Gooderham & Worts opened a vast cattle-feeding operation on the east bank of the Don.

In view of these conditions, City Council allocated funds, in 1886, to straighten and deepen the lower Don. The work extended downstream from Winchester Street (approximately where the Canadian Pacific Railway today crosses the Don north of Gerrard) to the Grand Trunk Railway bridge near the mouth of the river. Improvements within the West Donlands consisted of removing bends in the river, dredging the channel to 12 feet below lake level, and reinforcing the waterway with timber piling. On either side of the channel, 23 feet was reserved for dock space, 52 feet for railways, and 50 feet for roads. To further prevent flooding, low-lying land adjacent to the river was raised three feet above the lake high-water mark. The bulk of this work was completed in 1887. It seems to have done little good, however, as complaints about the shallowness of the east end of the harbour persisted and, in 1901, the city engineer noted that the reinforcing piles had completely rotted away in many cases, and needed replacing.

Urban development within the West Donlands Precinct extended north from Mill Street and included a low-density mix of industry and workers' cottages, as depicted in the 1876 "Bird's Eye View" of Toronto (Figure 4). These residential developments were related to the development of the area originally known as Corktown, as it was occupied by Irish immigrants from County Cork who worked in the local breweries and brickyards. Between the major east-west streets of Mill, Front, and Eastern Avenue, numerous small laneways were built to squeeze additional housing into the area. An extensive photographic record undertaken in 1906-1907 by the City documents the poor quality housing that characterized the area (see Baldwin Room photos T30223, T30229-30235)]; almost all of these lanes, and their associated housing, disappeared with railway redevelopment in the early 20th century. Despite the overall poor conditions within the neighbourhood, George Gooderham initially constructed a stately mansion on the north side of Mill Street opposite his distillery. However, by the late 1880s the Gooderhams moved to a new mansion at Bloor and St. George and by circa 1910 the mansion on Mill Street had been demolished and replaced by the distillery's Rack House.

Figure 4: *Bird's Eye View of Toronto*, 1876. The extensive network of lanes and congested housing had not yet appeared in this view.

Construction of the Palace Street School, at the intersection of Front and Cherry Streets, in 1859 further attests to the growing residential population of the area. However, by 1890, the school was no longer needed and it was converted into the Cherry Street Hotel. The hotel was enlarged in 1900 and renamed the Eastern Star Hotel, which later became a warehouse, and then the Canary Restaurant in 1965, which is still standing today. There was at least one other hotel in the precinct at the intersection of Mill and Water Streets. Additionally, a municipal park developed at the intersections of Eastern Avenue, Sumac Street, and Cherry Street, the south boundary of which was known as Market Lane or Worts Avenue. This gore of land seems to have been used as a city market and contained a municipal weigh scale. By 1890, it had been converted into a park known as St. Lawrence Square. This park then disappeared into the morass of railway yards and later became the site of the Dominion Foundry.

Aside from these transient residential developments, it was transportation and industry that dominate the land use history of the West Donlands as they drove the development of area. In the 30 years following 1850, a considerable number of large and small plants were established in the precinct. Cheap land, a location at the east end of the city (where prevailing winds caused smoke to drift eastward), and good transportation facilities encouraged this development. One of the first developments, the Toronto Gas Light & Water Company, was established in 1841. The original building was at the foot of Princess Street (outside the study area). This company was purchased by The Consumers' Gas Company of Toronto following its incorporation in 1848. In 1855, Consumers' Gas constructed a new gas works on a three-acre site on the east side of Parliament, south of Front Street. This was expanded between 1883 and 1890 to include most of the block of land as well as adjacent properties outside the study area, and became known as Station A of the Consumers' Gas Company.

In addition, numerous iron-working mills were established in the precinct from a very early date. The first of these may have been the Don Foundry at 511 King Street at Don River, which was in operation by 1853. The St. Lawrence Foundry, established in 1851 (outside the study area at Parliament and Front) was another large iron-working mill; in 1873 the company opened a railway car wheel foundry at the northwest corner of Front and Cherry Streets, which was sold to the Toronto Car Wheel Company the following year. In 1857, the prominent railway contractor, Casimir Gzowski, in partnership with D.L. Macpherson and the Pomeroy Brothers of Pittsfield, Massachusetts, established the Toronto Rolling Mills at the southwest corner of Mill and Water Streets, to re-profile worn rails of the Grand Trunk Railway (Figure 5). Gzowski initially obtained a ten-year contract, which must have been extended since the plant remained open until 1873. Alternatively, the facility may have tried to branch out into other iron products. The building and plant were demolished shortly after its closure.

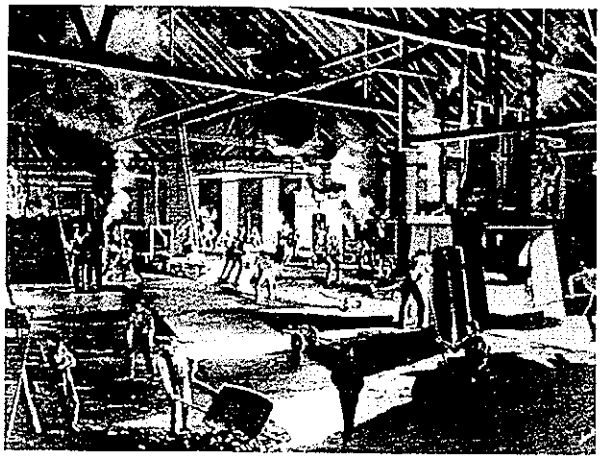


Figure 5: *Interior of Toronto Rolling Mills* painted by William Armstrong, 1864. In the foreground is a large steam hammer that would have required massive foundations. Behind the hammer is a furnace for heating rails. The rolling mills appear to be behind a second furnace on the left side.

Perhaps the most well known industrial activity in the precinct, although for the most part it falls outside of the current study area, was the Gooderham and Worts Distillery, founded in 1832. By 1871, the Goderham & Worts Distillery produced almost half of Ontario's total spirit production and exported its whisky and spirits to the rest of the country and to New York. The Gooderham Windmill, built in 1832, served as a prominent local landmark, effectively designating the eastern boundary of the city until the 1850s. Over time, the distillery expanded to include rack and barrel warehouses on the north side of Mill Street. A large cooperage for manufacturing new barrels operated until at least 1890 on the north side of Front Street near Cherry. In 1926, the Gooderham & Worts Distillery was merged under the parent company of Hiram Walker-Gooderham & Worts Ltd.

However, the largest industrial land user in the precinct, apart from railways, was the pork packing plant of the Davies Meat Packing Company. The company established its first slaughterhouse at Front and Frederick Streets in 1861, later relocating to a site at the end of Front Street at the Don River. This plant expanded enormously until it occupied most of the property east of Overend Street. In 1927, it became Canada Packers. Most other prominent industrial land users were also those that required large amounts of open space, such as lumberyards. Interestingly, the Toronto Street Railway, maintained horse stables within this precinct. The TSR was one of Toronto's first urban transit services, being granted the first franchise for a street railway by the city in 1861. It came to own a large building plus outdoor storage yard on the south side of King Street at St. Lawrence Street. Along with the Toronto Civic Railways, the Toronto Street Railway Company was acquired by the city, and merged into The Toronto Transportation Commission in 1921.

The Grand Trunk Railway, which became Canadian National Railway, occupied all the land south of Mill Street to the Don River. Over the years, this area contained cattle yards, a railway shop and the original site of the Don Station, as well as the company's mainline from Toronto to Montreal. The company also built a wharf along

the north bank of the Don, east of Cherry Street, served by a railway spur. By 1910, all of these facilities had been removed, and the area became a local yard and freight sheds for the Grand Trunk Railway. The Grand Trunk Belt Line, built in 1892, turned northward from the mainline at Overend Street. When the mainline was elevated during the viaduct construction of the 1920s, a new connection to the Belt Line was built between the Canada Packers abattoir and the Don River.

The area changed dramatically when the Canadian Pacific and Canadian Northern (today Canadian National) Railways acquired permission to use the Don valley and harbour front to build access lines to Union Station. In 1903, the Canadian Pacific Railway purchased all the housing south of Front and north of the Grand Trunk. In 1905 the Canadian Northern Railway applied to have access to Toronto over the same route, and it purchased the residential and industrial properties bounded by Trinity, Eastern, Olive, and Front in the following year. Thus, within a few years almost all of the land that is today the West Donlands became railway yards. Together, the two railways purchased and then demolished over 200 houses for about $500,000. The Canadian Northern also acquired the municipal St. Lawrence Park for about $14,000.

With completion of the railway yards prior to World War I, the basic pattern of land use within the study area was established for the next 50 years. Railway yards occupied most of the land while Canada Packers and Consumers Gas were the major industrial concerns. Other industries were scattered through the precinct. By the late twentieth century, the transportation and industrial functions of the area declined and much of the land had become derelict.

3.2 The East Bayfront

Located at the foot of Trinity Street, the Gooderham windmill marked the eastern boundary of the harbour. In addition, the windmill was used as a survey feature to define the southern boundary of water lots in the harbour. This "Windmill Line", as it came to be known, started on land at the windmill, and cut westward across the harbour to Queens Wharf. Presumably there was thought to be no need for water lots east of the Gooderham property. Until the twentieth century, the Toronto Harbour shoreline roughly followed Esplanade Street in the shape of a shallow bay between Parliament and Yonge Streets. Numerous wharves projected from the mainland into the harbour, with the Windmill Line dictating their southern termini. Since landfill activities significantly extended the shoreline beyond this survey line, it is only near Yonge Street where historic wharves may extend into the study area.

By 1900, 22 wharves were located between Yonge and Cherry Streets, of which the Gooderham wharves were the most easterly. In 1889, the practice of giving names to the wharves was dropped in favour of numbering them, starting in the west with Queens Wharf. Thus, the Yonge Street Wharf, formerly known as Milloy's Wharf, became wharves 21, and 22, Polson's Wharf became wharves 46 and 47 and the Gooderham Wharf became wharf 48.

Polson Iron Works established its boiler works at the foot of Frederick Street in 1883 and started ship building in 1893. Until the end of the First World War, the company was a successful builder of numerous vessels, but changes in the business of ship-building in Canada led to its sudden closure in 1919. The company is perhaps best remembered for building the experimental "Knapp's Roller Boat". This unique cylindrical ship, designed by Prescott lawyer Frederick Knapp, was launched in 1897. Knapp's design, intended to revolutionize the shipping industry, called for a narrow cylinder carrying crew, cargo and passengers to be placed in a larger cylinder equipped with paddles along the length of its centre portion. Rotation of the exterior cylinder would

drive the ship through the water while the inner compartment remained still. Although the concept worked well enough in calm waters, ultimately Knapp's invention proved unable to withstand rough weather and was unceremoniously abandoned near the site of its launching and was later buried in the harbour fill (Figure 6).

Figure 6: Looking southeast across the Polson Iron Works to Ashbridge's Bay, 1915. The white vessel tied up at the Polson Dock is a railway train ferry. In front of the vessel's bow are the remains of Knapp's Roller Boat.

In addition, the City maintained a municipal wharf at the foot of Frederick Street whose principal purpose was to carry street sweepings for dumping at the Toronto Islands. In 1906, the Polson Iron Works purchased this property to expand their ship building facilities. This area became part of the landfill designated in the 1912 Harbour Plan, the most distinctive component of which was the railway viaduct extending from Bathurst Street to the Don River, completed in 1929 (Figure 7). This earth filled viaduct provided for the elimination of rail and road crossings. From Yonge Street to Cherry Street the viaduct was built straight across the open water of the harbour, cutting off all the wharves extending south from the Esplanade.

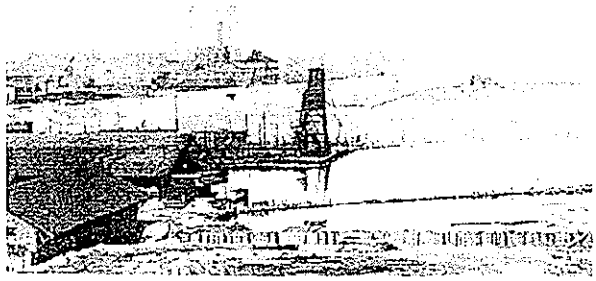


Figure 7: Looking east in 1928 from the Toronto Harbour Commission's building towards the railway viaduct under construction. Behind the earthworks are the landlocked wharves along the Esplanade. The large tower in the background is a Consumers Gas Company gasholder.

Whereas the Harbour Commissioners land reclamation was completed at Ashbridge's Bay and west of Yonge Street during the 1920s, the portion from Yonge to Cherry was virtually dormant during 1920s due to legal issues associated with land filling. Once they were solved, financial problems on the part of the Harbour Commission reduced the amount of newly created land to half that which had been planned. The first permanent industry was Sunsoy Products Limited on the property of the former National Iron Works at Cherry Street. The plant was operational by the end of 1944.

This section of the harbour grew in importance in the 1950s as a result of the projected completion of the St. Lawrence Seaway. The Harbour Commission anticipated a huge increase in port activity. The 1912 landfill plan was finally completed when all of East Bayfront south of Queen's Quay was filled in 1952. Sheds for Marine Terminal 27 were built on top of the former Yonge Street Wharf in 1955. Marine Terminal 28 was completed in 1958 while Marine Terminal 29 and the Redpath Sugar Refinery opened in 1959. Despite the enthusiasm with which these new developments were completed, ocean shipping never developed as a significant business in Toronto harbour

3.3 The Lower Don and the Portlands

3.3.1 The Lower Don

The Lower Don Precinct in its natural state was an area of shifting channels, small islands, sandbars, and marshland. The sandbar that defined the boundary between Toronto Harbour and Ashbridge's Bay joined the mainland in the vicinity of Cherry Street. A trail from Toronto to the outer sandbar crossed this area, and a few summer cottages and boathouses had begun to appear on maps of the late nineteenth century.

During much of the late nineteenth century, the city spent considerable energy in addressing the issue of silting at the mouth of the Don (Figure 8). In 1870, the Harbour Trust constructed a long, timber crib breakwater on the south side of the river – roughly at the foot of Cherry Street into the harbour to a point below Berkeley Street. By 1878, the *Globe* noted that the Don channel still needed to be frequently dredged. Additionally, although the docks along the Don generated adequate revenue, they were expensive to maintain because of the large volumes of silt carried by the river. Therefore, in 1886 the rotted remains of the breakwater were officially abandoned, and the following year the City embarked on channelizing the river upstream of the Grand Trunk Railway bridge. No work was undertaken at that time south of the bridge, as it had not yet decided whether the mouth of the Don should be in the harbour to ease navigation, or in Ashbridge's Bay to take the loading of silt and sewage.

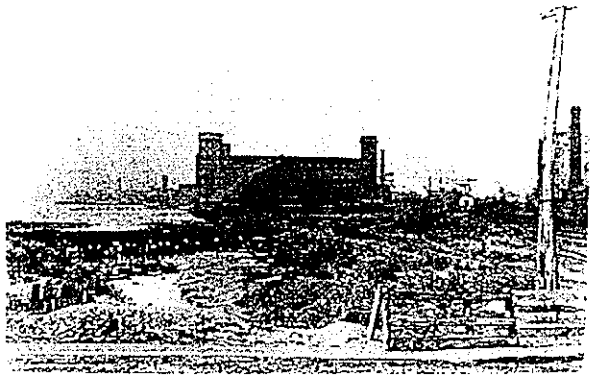


Figure 8: The silted up mouth of the Don River in an undated photograph. The Gooderham Wharf (Wharf 48) is in the middle background and also seems to have silted in.

The sewage problem finally drove the City's engineering department, in 1893, to dredge a channel – later known as the Keating Channel – from Toronto harbour to Coatsworth's Cut at the end of Ashbridge's Bay, some 3 1/3 miles in length. Approximately four years later, the Don River was extended south to join this cut in a design intended to produce a current that would flush effluent out of the bay. In addition, land reclamation commenced to expand the small triangle of land between the old Don and the Keating Channel. This seems to have been driven at least in part by the dumping of municipal garbage, as the City Engineer's *Annual Report* of 1901 notes the expense of hauling street cleaning and garbage to the marsh due to lack of dumping grounds in the central city. This new land was seen as a good location for factory sites, and by 1913 two concerns – the National Iron Works on the west side of Cherry Street and the British American Oil Co. on the east – were established in the

area. While the old mouth of the Don was not actively filled by these processes, it seems to have gradually silted in over time, although it did not disappear totally until the completion of the Harbour Commissions' land fill operations in 1912. In 1906, the connecting channel was replaced with an alignment to the east, creating a straighter route from the railway bridge.

In spite of these efforts, it appears that the Keating Channel proved to be no more effective than earlier attempts (Figure 9). The 1901 City Engineer's *Report* noted that the east end of the harbour was so filled with debris coming down the Don River that it could not be used for regular navigation. The following year, the Federal Department of Public Works indicated that it would not dredge the harbour until the City did something to stop the flow of debris down the Don into the harbour. This threat galvanized City council to provide funding for interceptor sewers, and a treatment plant on Ashbridge's Bay. This work was completed in 1909. The final changes to the Don River occurred when permanent concrete retaining walls were constructed in both the Keating Channel and Don River by the Harbour Commission in 1914 (Figure 10).

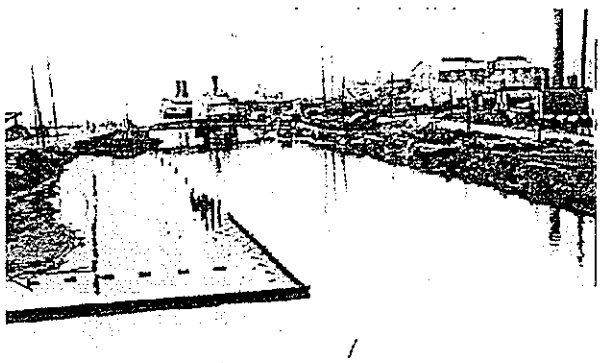


Figure 10: Concrete walls under construction on the Keating Channel at Cherry Street in 1914. The National Iron Works are in the right background.

The earliest industrial establishment in the Lower Donlands Precinct appears to have been the Toronto Dry Dock Company. By the mid 1870s, shipping interests were promoting a dry dock for Toronto, since at that time the nearest repair facilities were at Port Dalhousie on the Welland Canal, or in Kingston. Therefore, in 1881, a company was formed and obtained a 21-year lease on a plot of land 600 feet by 677 feet on the south side of the Don River, near the foot of Cherry Street. The intent was to construct a dry dock 60 feet wide and 280 feet long, which would have handled any vessel capable of using the Welland or St. Lawrence River canals. Although the dock was to have been completed in 1882, newspaper accounts in 1884 indicated that the works had already been abandoned, as it became apparent that frequent silt deposition made dock operations unfeasible (Figure 11). The company had spent a total of $26,600.00 on the dry dock – in 1901 the City contemplated buying the property for $5,000.

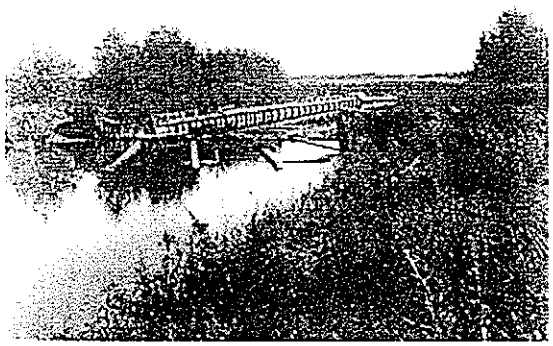


Figure 11: The Toronto Dry Dock looking south from the old Don River near Cherry Street in 1898. The structure appears to have been built of timber cribs.

3.3.2 The Portlands

At the beginning of the nineteenth century, the marsh around Ashbridge's Bay was perceived to be an unhealthy environment, as the source of pestilence and disease. By the late nineteenth century it was a dumping ground for municipal waste and sewage, uses which were incompatible with the growing use of the area for cottages and recreation.

The boundary between Toronto Harbour and Ashbridge's Bay was a narrow sandbar that extended south from the foot of Cherry Street, broken only by the mouth of the Don River. This bar joined the headland that started near Woodbine Avenue and became the Toronto Islands at its western end. Since at least the 1830s, a carriage path crossed the Ashbridge's Bay bar, to meet the headland and continued to Gibraltar Point at the western tip of the peninsula. A bridge was constructed across the Don River to enable people from the City to reach Lake Shore Avenue. Until 1852, this headland was a continuous land mass. However, a number of severe storms between 1852 and 1858 eroded the peninsula. This necessitated frequent repair to the small gaps that developed until a storm completely separated the peninsula from the mainland in 1858. This latest gap was not repaired. The new entrance into Toronto Harbour became known as the Eastern Gap and separates the Portlands from the Island today.

Apart from issues related to the dumping of sewage, the main concern with Ashbridge's Bay was its apparent tendency to migrate into Toronto harbour. In 1850, Sanford Fleming determined that 12 hectares had been added to the western section of the sandbars over the previous 50 years. In dealing with these issues, the famous American civil engineer, James Eads, prepared a report on the preservation of the Toronto Harbour in 1881. With regard to Ashbridge's Bay, he recommended that a double row of sheet piling be constructed between the harbour and the sandbar. Heavy storms in the spring of 1882 caused such severe damage that the length of the piling had to be considerably increased. The work was completed in 1882-1883 (Figure 12). Eads also recommended that the Eastern Gap should be made permanently navigable with the construction of breakwaters. This work was done in 1882.

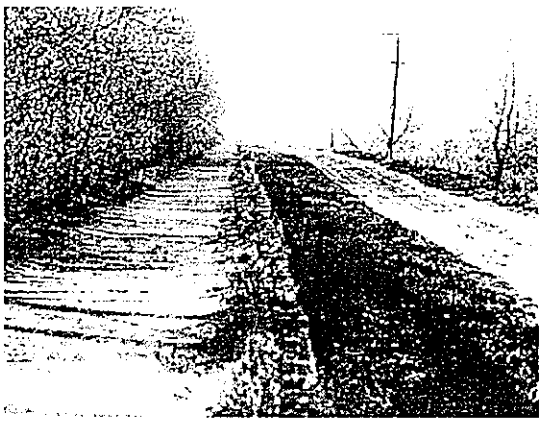


Figure 12: The Government Breakwater in 1909. The double rows of sheet piling are indicated by the line of trees on the left and the line between the light and dark ground in the middle.

By the early years of the twentieth century, development had intensified, and cottages replaced many of the shacks and boathouses of the area's largely transient residents (Figure 13). By 1911, two small foundries were located north and south of Keating's Channel and a manufacturing enterprise was under construction in the middle of the north-south sand spit (Figure 14).

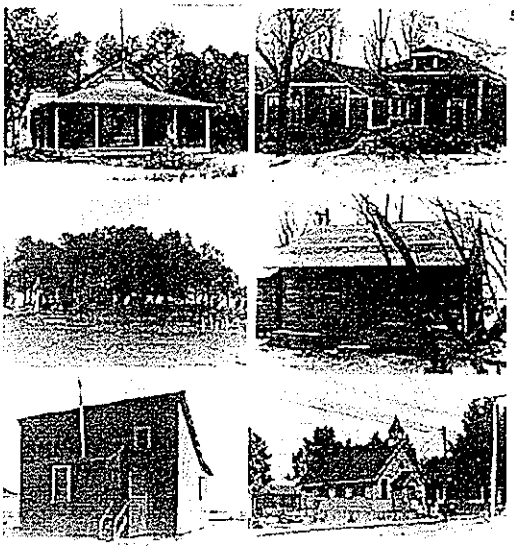


Figure 13: Some of the cottages at Fisherman's Island. St. Nicholas Church at the lower right administered to the spiritual needs of the cottagers during the summer. Reproduced from Stinson (1990).

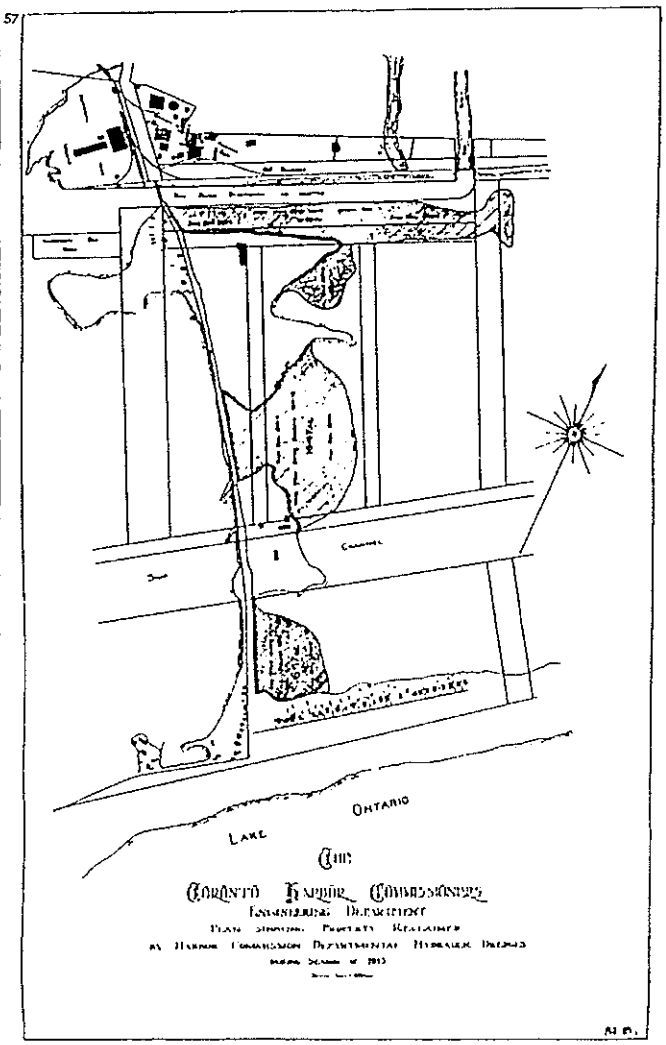


Figure 14: The Toronto Harbour Commission's 1913 map of the industrial area north of Keating Channel, the old and current locations of the Don Diversion Channel, the 1882 alignment of the Government Breakwater, and the cottage communities on the harbour and outer bars of Ashbridge's Bay.

Small-scale fishing enterprises lined some sections of the harbour edge while on the sandbar and outer headland there were two clusters of cottages. Whereas most of the cottages appear to have been built by squatters, about 20 cottages on the outer bar are shown as having been located on surveyed lots that were leased. On the lakefront of Fisherman's Island was a wide boardwalk (Stinson 1990:8). In the late 1920s, however, the residents of the cottages had their leases expropriated and their cottages were either demolished or relocated. This coincided with the Toronto Harbour Commission's lake filling operations.

The most significant industrial complex to be developed within the Portlands area was that of British Forgings Limited (Figure 15), although it was a short-lived operation. It was the first large plant built on the land newly

reclaimed from Ashbridge's Bay, it housed the largest electric steel plant in the world, and was constructed in the remarkably short time of six months. Work began in February 1917 on a 147-acre site to build the steel mill to produce forgings from scrap steel for the war effort. Steel production commenced in August and the company produced 9,000 tons per month until the end of the war. The plant closed at the end of 1918. Although the Harbour Commission announced that a new company would reopen the plant, it remained abandoned until completely dismantled by 1930.

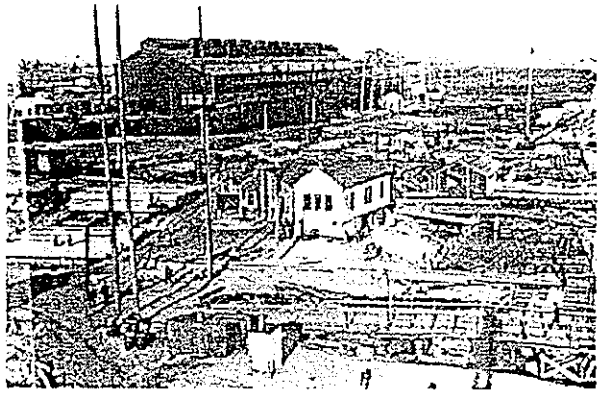


Figure 15: 1917 view of the British Forgings Plant.

The 1912 waterfront plan had anticipated that warehousing and heavy industry would become the predominant uses of the reclaimed Ashbridge's Bay area and at first, the British Forgings plant seemed to fulfill these expectations for the Lower Don and Portlands areas. However, most of the land between the wars was used for fuel storage and building materials. By 1931, 41 industries operated in the Port Industrial District, but most of the land was physically occupied by coal storage yards. British-American Petroleum, Imperial Oil and McColl-Frontenac established tank farms and oil refineries in the 1920s. However, changes in petroleum marketing dictated that this would be a short-lived industry. The Hearn thermal electric power station, built in 1950, continued the demand for coal storage in the Portlands. As with East Bayfront, the Harbour Commissioners anticipated a growth in ship traffic in the 1950s and built extensive dock facilities. Water traffic never developed to the scale expected.

4.0 ARCHAEOLOGICAL POTENTIAL

Assessment of archaeological site potential within urban contexts relies upon an understanding of the extent to which development activities have removed archaeological deposits related to earlier occupations and land uses.

4.1 Assessing Precontact Archaeological Potential

Given the inferred biotic richness of the mouth of the Don River and the Toronto Islands sand spit, it would seem that the general study area would have been highly attractive to aboriginal hunter-gatherers for purposes of seasonal occupation and harvesting of plant and animal resources both terrestrial and lacustrine. The historical descriptions of the area indicate that the riparian and coastal wetlands along the lower reaches of the Don River, in conjunction with the deepwater habitat of Lake Ontario itself, would have served as focal resource procurement areas in the subsistence-settlement systems of precontact populations, although more permanent habitation sites were most likely located further upstream and/or on the better drained tablelands overlooking the valley. Fish productivity would have been highest in the estuary and coastal marshes, due to several factors, including their high primary production, which is among the most productive of all known ecosystems, the diversity of the habitat structure, and the rejuvenating effects of natural fluctuations in lake water levels. Similar features pertain to the riparian wetlands of the Great Lakes estuaries, which also exhibit aquatic-terrestrial food webs that concentrate potential prey species within fairly constrained areas (Jude and Pappas 1992:661-662). The meadows and scrubby terrain of the lower Don River floodplain likely also have attracted large numbers

of white tailed deer, the most significant mammalian game in most precontact subsistence regimes. Likewise, the area would have supported dense populations of aquatic mammals such as beaver and river otter.

The shifting water levels of Lake Ontario discussed in Section 2.1 above, are likely to have destroyed or submerged evidence of occupations along the shoreline in the Toronto waterfront area prior to circa 3000 B.C. Moreover, the intensity of nineteenth and twentieth century land use in the study area may have destroyed the comparatively ephemeral archaeological deposits left by the precontact occupation of the 3000 B.C.- A.D. 1700 shoreline and river mouth zones.

There are no registered precontact archaeological sites south of the Withrow village (AkGt-1) above Riverdale Park. Withrow, along with many other sites in Toronto, was an Iroquoian settlement. From the end of the first millennium A.D. until the end of the 1600s the dominant aboriginal group in the Toronto area seems to have been culturally Iroquoian. It is true, however, that there were strong ties with the northern Algonquian-speaking people who, if analogies from Teieagon and Ganatsekiagon apply, descended the rivers and carrying places to trade. After 1690, the Mississauga, took over the villages and camps of the Iroquoians and were the culture of record when the land treaties began to be enacted following 1788.

There are several references to Mississauga occupation of the Humber, Don and Rouge Rivers and an extensive literature of the use of these river systems as routes into and out from the back country and the Upper lakes. Although no sites have been identified, excavated or analysed in the study area there are late eighteenth and early nineteenth century references to the presence of persistent encampments between the forks of the Don and the lands around the mouth. The nature of the camps is not known, but in 1793, Captain Walter Butler's diary entry for March 12, 1779 reported a Mississauga camp on the Bay of Toronto, suggesting that winter settlements, in addition to large macroband warm weather congregations were a feature of the area. The use of the area by Mississauga probably means that there is time depth to the occupation.

The mouth of Taddle Creek, the higher ground on both sides of the Don mouth, the beach bar where the river actually flowed into the harbour and the carrying places across the bar into the lake proper, and both into and out of Ashbridge's Bay likely represent the areas of greatest potential. Those areas of the Port Industrial district constituting natural features of the sandbar and isthmus also have pre-contact aboriginal potential. Although the precise boundaries of these natural features cannot be confirmed without soil testing (not only do massive amounts of fill surround them but their shape prior to re-development would have fluctuated with water levels and storm action), historic mapping can provide a reasonable basis for flagging certain areas for further study.

Over 85% of all registered pre-contact camps and villages in the City of Toronto and immediately adjacent areas are found within 250 metres of water (ASI et al. 2003), a finding which suggests that a buffer zone extending 250 metres from the former channel of the Don River within the West Donlands and East Bayfront, and within 250 metres of the former course of Taddle Creek in the West Donlands, would constitute an acceptable characterization of pre-contact archaeological site potential as that relates to water within the study area. Clearly, however, the complex land use history of the area, which has entailed repeated and extensive redevelopment of large parcels of land will result in significant reductions in those lands within this buffer zone that will exhibit any surviving integrity and hence potential for the presence of precontact or post-contact Aboriginal archaeological resources.

4.2 Inventory of Potential Nineteenth-Twentieth Century Sites/Features

The existence and condition of any particular archaeological site/feature depends upon several criteria, including:

- the character of the activity or process to which it is related;
- the method of its construction;
- the processes involved in its demolition and subsequent burial; and
- the character of subsequent land use(s).

Where known, these conditions are described in the inventory. In brownfield lands it must be recognized that, generally, some features associated with many historic archaeological sites are likely to have survived, as deeply buried deposits, in areas that have been developed and even re-developed. Only where land has been completely altered (i.e., removed or regraded) to a depth of three metres or more should it be concluded that there is no potential for survival.

The following inventory is based upon review of primary and secondary sources, such as available historical mapping of the waterfront and previous heritage assessments, as summarized in Section 3.0. The locations of individual sites/features for which a general identification has been possible are presented in Figures 16-18. The inventory includes two major classes of resource:

- potential subsurface structural features (e.g., foundations) that may, or may not, be associated with archaeological deposits that represent significant stratigraphic deposits associated with the construction and/or function of the site, and which may contain artifact assemblages (e.g., directly associated refuse deposits/middens, or materials abandoned in situ) that may further elucidate the character of the occupation or use of said feature; and

- larger scale landscape features represented only by structural elements or deposits associated with the construction or function of said feature (e.g., cribbing, fill).

4.2.1 Criteria for Evaluation of Heritage Sites/Features

Site/Feature Type:

the site/feature is illustrative of patterns of cultural, political, military, economic or industrial history (e.g. an industry typical of a particular activity in Toronto).

Site/Feature Integrity:

the degree to which a site/feature has been physically altered or disturbed. The integrity of the site/feature will affect the importance of the feature type.

Age:

importance of sites/features is often been based upon arbitrary time periods (e.g,. pre-1850). Nevertheless, age alone is not a criteria of significance; it must be combined with another characteristic. A relatively unique twentieth century site/feature for which little documentation exists, for example, may be important. Conversely, an older site/feature which is typical of numerous others may be relatively unimportant.

Historical Importance:

the site/feature is associated with a person, or group of people, of local, provincial, national or international importance; or associated with an event or process of local, provincial, national or international importance. This may include a short time period, such as a military battle, or an activity that occurred over a long time period. A process may include manufacturing, repair or servicing that form an integral part of the design of a structure.

Landscape Setting:

applies to sites/features manifested as visible ruins or earthworks. The removal of the ruin or earthworks, even if fully documented, or changes to the surrounding landscape, may modify society's perception of the area. From an archaeological perspective, this type of feature would be community landmark; one that forms an essential part of a distinctive skyline; or defines or terminates a vista.

Quality of Documentary Material:

applies only to large scale features that cover large areas (e.g., cribbing). If good quality drawings, illustrations and written records are available or other portions of the feature have been subject to archaeological investigation and recording, little additional *new* or *non-redundant* information may be obtained from the archaeological investigation of the feature. If, however, little documentation exists, or it is contradictory, physical examination may be necessary.

These criteria must then be applied, on a case by case basis, in light of the impact that the proposed developments within the study area, as they become known, may be reasonably expected to have on any particular feature. A development which requires substantial cutting of the existing grade, for example, will have considerably greater negative impacts upon any heritage features which may be present than a development, that relies primarily upon filling. Completion of this step in the evaluation process is not currently possible, as detailed designs for future development within the study area have not been prepared, nor in many cases can definitive conclusions regarding integrity be offered on the basis of the available data.

The mapping that accompanies the inventories (Figures 16-18) includes all sites/features depicted on the earlier map sources, including those sites/features for which it has been determined that there is no remaining integrity, due to subsequent land uses and those sites/features for which further archaeological investigation will not serve any purpose. In the case of the latter, it must be recognized that some sites may be of significance in terms of the historical development of the study area, but examination of their physical remains will not provide significant insights into their character or function.

With respect to the compilation of the inventory mapping, this study has proceeded using the same basic approach adopted in other cartographic studies of the evolution of Toronto's urban core that have been completed in an effort to establish the locations of former built and landscape features. Such projects have proceeded by overlaying historic maps on the modern streetscape, using common reference points between the various sources. There are numerous potential sources of error inherent in such a process, given the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, and the consistency with which both they and the target feature are depicted on the period mapping. In this instance, there is considerable variation in all dimensions. Furthermore, major landscape features such as the mouth and lower channel of the Don River were highly dynamic. The main course of the river appears in different locations

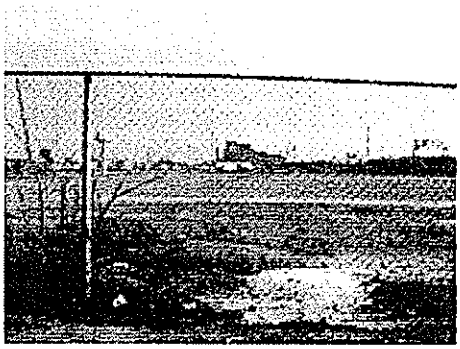
and configurations on each of the maps consulted for the study, even those that predate the rechannelization and straightening projects. This has necessitated definition of the river as a broad "corridor" rather than as a well-defined "two-line watercourse. The results of the overall mapping exercise may be considered approximate, but they are sufficient for present purposes.

Individual features depicted on the nineteenth and early twentieth century maps remain as points, although these locations are, to varying degrees, approximate. Summary descriptions of these potentially significant archaeological resources are provided in Sections 4.2.2-4.2.4. The elimination of particular sites or features from the inventory on the basis of the likelihood that they have been destroyed has been a conservative decision-making process, based on map review and visual review of the study areas. It should be noted, however, that in many locales within the study areas definitive conclusions concerning resource potential and integrity will require detailed field assessment (Section 5.1).

4.2.2 Potentially Significant Features: The West Donlands

Resource: Toronto Rolling Mill

Map	Figure 16, No. 8
History	Rail mill 1857-1873; established by Gzowski and partners
Significance	Early railway development in Canada; early heavy industry in Toronto; Gzowski a prominent Toronto industrialist
Integrity	Visual review suggests subsurface remains may survive
Comments	Subsurface integrity will be dependent upon the depth of alterations associated with demolition, regrading, and later construction



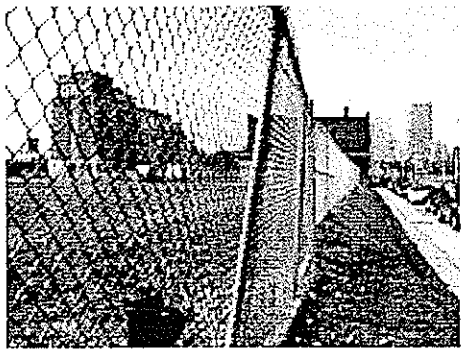
View east from Cherry Street towards the former sites of the Toronto Rolling Mill and the Grand Trunk Railway Shop

Resource: Nineteenth Century Housing, Commercial Establishments, Palace Street School

Map	Figure 16 (Palace Street School is No. 11; balance of structures from Cane's 1842 map and Boulton's 1858 atlas are not specifically identified as their individual functions are not known)
History	Working-class residential development
Significance	Urban social and economic conditions in the mid-nineteenth century; potential insights into aspects of the domestic lives of social classes that are otherwise generally poorly documented
Integrity	Many individual structures are located in areas that have been extensively altered and are unlikely to have any surviving integrity, while deposits associated with others may be relatively intact.
Comments	Additional research (e.g., census, assessment rolls, directories, etc.) required to determine the archaeological potential represented by individual sites

Subsurface integrity of the various sites will be dependent upon the depth of alterations associated with demolition, regrading, and later construction. Many of the properties has been redeveloped numerous times and the earliest features are likely to have been comparatively ephemeral. In such cases potential for the survival of archaeological deposits is minimal. In other cases, subsequent use of properties as storage yards/depots may not have resulted in the complete eradication of earlier subsurface deposits or features.

A preliminary attempt to distinguish between those structures that may have integrity and those that are unlikely to have survived has been made on the accompanying mapping, based on the field review.



View southwest from Front Street towards the lands to the west of the former site of the Palace Street School and several other mid-nineteenth century structures

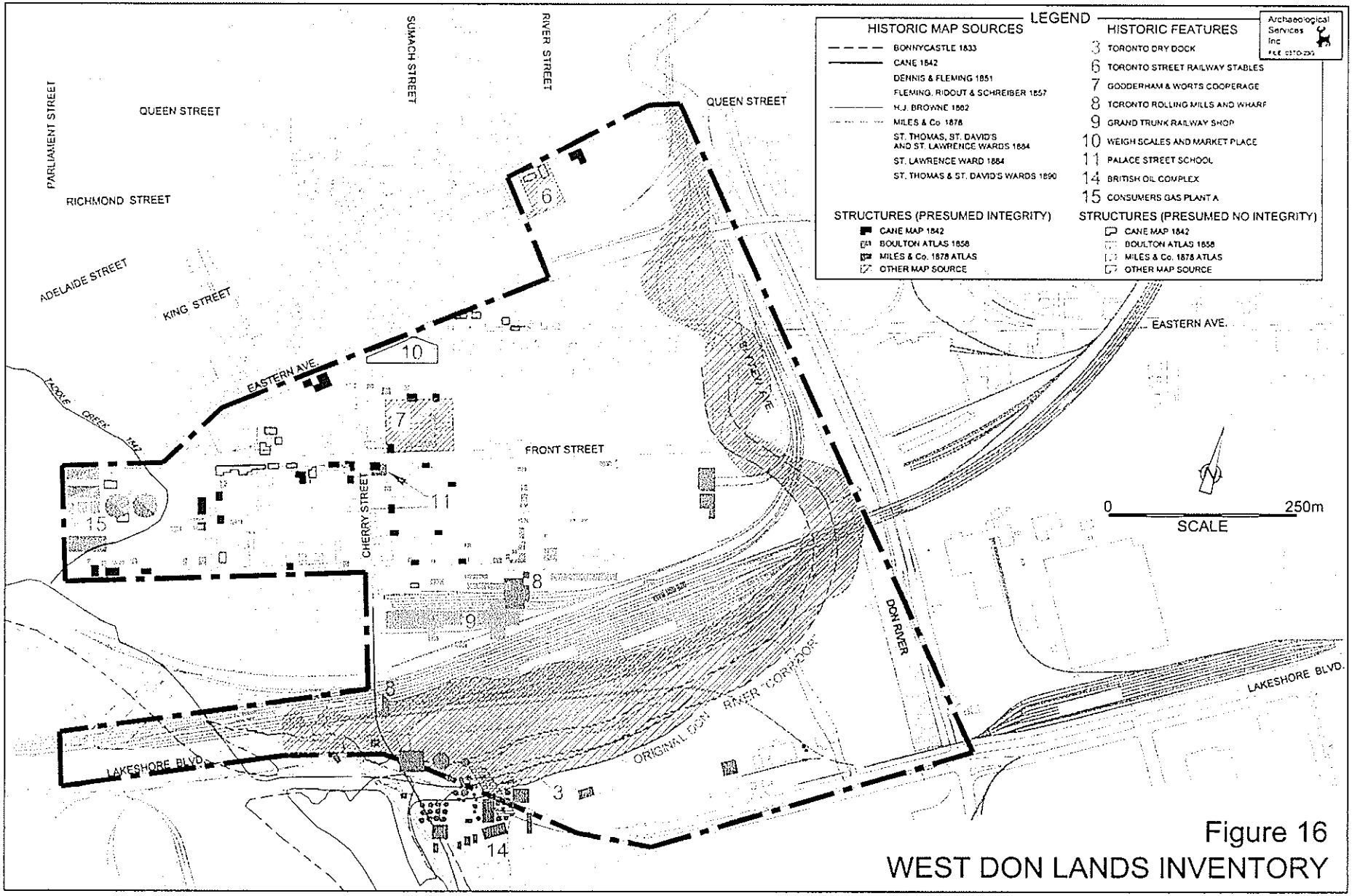


Figure 16
WEST DON LANDS INVENTORY

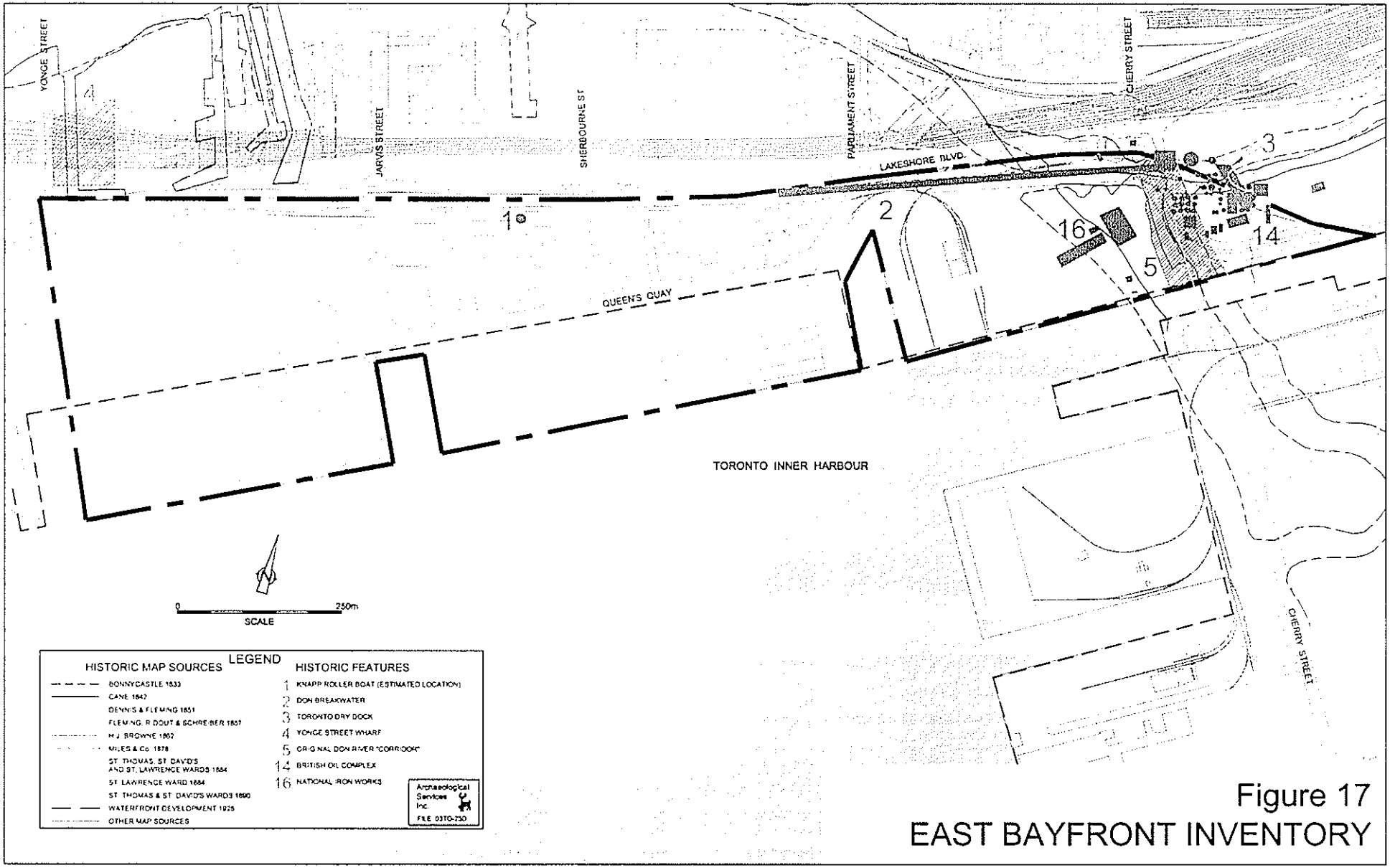


Figure 17
EAST BAYFRONT INVENTORY

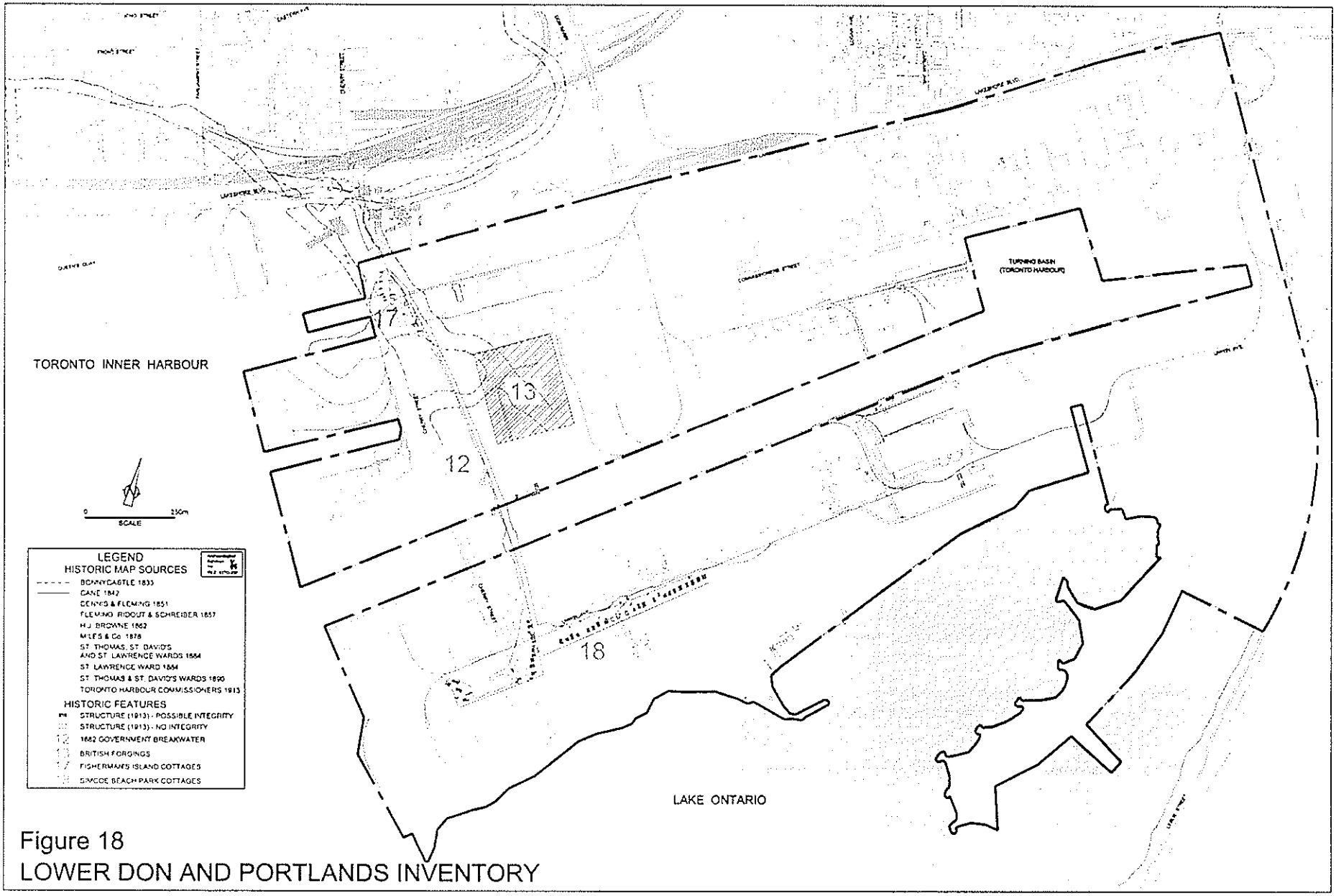


Figure 18
LOWER DON AND PORTLANDS INVENTORY

Resource: Street Railway Stables

Map Figure 16, No. 6

History Toronto Street Railway started in 1861 using horse-drawn cars; converted to electricity in the 1890s

Significance Early transportation history of the City; little is known about this aspect of the street railway operation

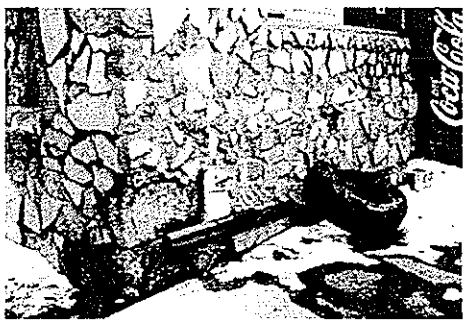
Integrity Unknown

Comments The railway stables and a neighbouring structure, are mapped within the footprint of the current building at 589 King Street East, which was subject to a previous Stage 1 archaeological assessment (ASI 2003). Using the Toronto City Directory to trace the first record of occupation at that location it was found that a man named James Kingsberry either built or moved into a structure on the corner (at that time listed as 483 King Street East) sometime around 1859. Kingsberry operated a grocery and liquor store on the site through the 1860s and 1870s and by 1880 he had transformed the operation into a hotel and tavern named Kingsberry House. Goad's 1880 Fire Insurance Map depicts the hotel on the corner lot with the Toronto Streetcar stables, hay barn and car storage in close proximity to the east (later described as comprising 589-603 King Street East), although the 1880 city directory indicates that the Toronto Streetcar stable lots had been vacated by that year. Goad's 1884 atlas confirms the vacated lots. The streetcar stables reappear on the 1893 atlas and the directory shows that this, likely new, facility was built around 1887.

Kingsberry sold his hotel in 1884 and the city directory lists William B. Beeton as the new proprietor. Three years later Beeton divested himself and the building was occupied by succession of individuals including Frederick Inch in 1889, John Daly in 1890 and 1891 and Edward Killacky in 1892. The building was vacated in 1894 at which time the corner property was transformed into the location of the Toronto Railway Sheds. Car barns continued to occupy the property until 1923 after which there was no listing between 585 and 611 King Street E. (and no structures on the 1923 atlas) until 1930 when Leyland Motors Limited appears with an address at 589 King Street E.

Goad's 1931 atlas revised in 1938 depicts the current building located on the property and it comprises a multi-use automotive complex spanning the addresses 589-605 King Street East. The northwest corner of the building was occupied for truck warehousing and repairs by a number of companies. The building, which is currently being demolished, is shown to be a one storey brick and concrete structure with a concrete floor.

It is possible that the current structure incorporates components of the hotel and tavern dating to the second half of the nineteenth century—if not the earlier grocery and liquor store assuming these were different structures—based on the fact that the northeastern portion of the building (at least) sits on a massive cut limestone block foundation. It seems less likely that this foundation, if indeed it is earlier than the current building would be related to the street railway facilities as available mapping does not depict a structure at the extreme northeast corner of the lot. Whether any significant archaeological deposits associated with the hotel or its precursors are likely to have survived the various redevelopments that have occurred on the property cannot be determined on the basis of the present evidence.



View of exposure of the heavy cut limestone foundation of the 589 King Street East building.

Resource: Grand Trunk Railway Shop

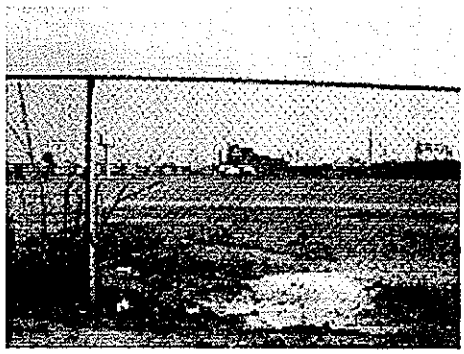
Map Figure 16, No. 9

History Grand Trunk established shop facilities in the mid-1850s; used until c. 1900

Significance Early regional and provincial transportation history; little is known about this aspect of railway technology

Integrity Visual review suggests subsurface remains may survive, depending upon the degree of subsurface alterations associated with the former presence of railway sidings.

Comments Subsurface integrity will be dependent upon the depth of alterations associated with demolition, regrading, and later construction



View east from Cherry Street towards the former sites of the Toronto Rolling Mill and the Grand Trunk Railway Shop

Resource: Gooderham Cooperage

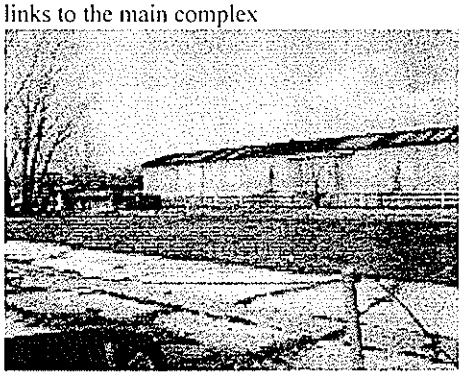
Map Figure 16, No. 7

History Built as part of the Gooderham & Worts distillery complex to build new barrels

Significance Associated with the distillery complex; may have material links to the main complex

Integrity Visual review suggests subsurface remains may survive.

Comments Subsurface integrity will be dependent upon the depth of alterations associated with demolition, regrading, and later construction



View northeast from Front Street towards the former site of the Gooderham Cooperage.

Resource: Market and Weigh Scale

Map Figure 16, No. 10

History Gore of land used as a city market and containing a municipal weigh scale

Significance Urban social and economic conditions in the mid-nineteenth century

Integrity Visual review suggests that is unlikely that subsurfaceremains survive.

Comments Even though weigh scales were massively built features it is unlikely that any remains survive, given the repeated and extensive redevelopments in the area, and the character of the current modern structures present on the property.

Before 1912, numerous industries were scattered through the residential areas of the West Donlands. Iron foundries seemed to have formed the single largest type of operation. No significant research questions concerning these industrial activities are likely to be addressed by archaeological investigation of any surviving material remains.

The Consumers Gas A Plant (Figure 16, No. 15) was a major industrial activity, and several of its buildings have been preserved and reused. The site of the original gas works was extensively rebuilt in 1883-1890. The gas industry is reasonably well documented as are the post-1883 changes. Although remains of the 1850s gas works would be of interest, they have probably disappeared in the rebuilding. As well, the potential toxicity of the land would make this a high-risk proposition.

A dock known, as Rolling Mill Wharf (Figure 16, No. 8) was one of several navigation structures built on the Don River. These docks had short working lives and were frequently superceded by larger structures. Archaeological investigations of wharves along the Toronto waterfront have resulted in the documentation of a limited range of basic construction techniques, but little other significant material evidence (e.g., ASI 2000).

4.2.3 Potentially Significant Features: The East Bayfront

Resource: Knapp's Roller Boat

Map	Figure 17, No. 1
History	Built in the Polson ship yard
Significance	Ship building industry, unique technology
Integrity	Visual review suggests that remains may survive.
Comments	Survival of remains of the boat will be dependent upon the depth of alterations associated with the deposition of lake fill, later construction, and demolition within this reclaimed land

View southwest from the corner of Sherbourne Street and Lakeshore Boulevard towards the parking lot in which is the estimated location of the buried remains of Knapp's Roller boat

4.2.4 Potentially Significant Features: The Lower Don and the Portlands

Resource: Toronto Dry Dock

Map Figure 17, No. 3

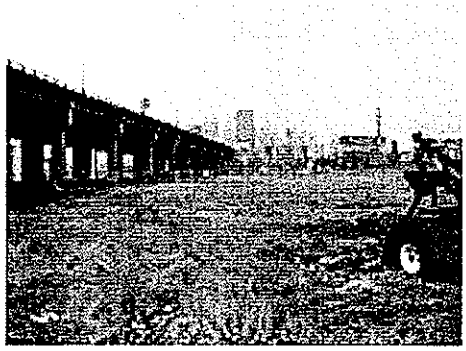
History Built by the Toronto Dry Dock & Shipbuilding Co. near Cherry Street

Significance Ship building/repair industry in Toronto Harbour; very rare construction

Integrity Visual review suggests that subsurface features may survive.

Comments Originally on south side of Don River – later on the north side of the Keating Channel.

Subsurface integrity will be dependent upon the depth of alterations associated with demolition, regrading, and later construction



View northeast to the approximate former location of the Cherry Street Dry Dock (beyond the chain link fence)

Resource: Don Breakwater

Map Figure 19, No. 2

History 1870 breakwater at mouth of Don; in ruins by 1886, destroyed in spring flood

Significance Navigation on the Don River; maintenance of Toronto Harbour

Integrity Visual review suggests that remains may survive, although no longer as a continuous feature.

Comments Subsurface integrity will be dependent upon the depth of alterations associated with demolition, regrading, and later construction within various areas traversed by the breakwater structure

View east from Lakeshore Boulevard and Parliament Street along the approximate alignment of the former Don Breakwater

Resource: Government Breakwater

Map	Figure 18, No. 12
History	Built by the Dominion government in 1882 to prevent the movement of Ashbridge's Bay into the harbour
Significance	Defined the western edge of Ashbridge's Bay
Integrity	Visual review suggests that remains may survive, although no linger as a continuous feature.
Comments	Subsurface integrity will be dependent upon the depth of alterations associated with demolition, regrading, and later construction within various areas traversed by the breakwater structure

Resource: British Forgings

Map	Figure 18, No. 13
History	Largest electric steel plant in world, 1917-c.1926
Significance	Early industry on reclaimed land in Ashbridge's Bay
Integrity	Visual review suggest remains may survive
Comments	Stinson (1990:121) makes a specific reference for exposure and preservation of the British Forgings Plant footprint (see Section 5.2). *This need not be accompanied by archaeological investigation.* Subsurface integrity will be dependent upon the depth of alterations associated with demolition, regrading, and later construction

View south from Commissioners Street to the approximate location of British Forgings

Resource: Summer Cottages

Map	Figure 18, No.s 17 and 18
History	During the late nineteenth century, a cottage community developed both on the bar running from Cherry Street and the headland
Significance	Recreational history of Toronto and especially Toronto Island
Integrity	Many individual structures are located in areas that have been extensively altered and are unlikely to have any surviving integrity, while deposits associated with others may be relatively intact. Evidence of earlier occupations or use (earlier nineteenth century, pre- and post-contact aboriginal) may have survived in certain less extensively altered locales.
Comments	Fisherman's Island and Simcoe Beach Park the two major areas. Material remains may provide insights on the social patterns of use of the area.

Subsurface integrity of the various sites will be dependent upon the depth of alterations associated with demolition, regrading, and later construction.

Portions of the lands associated with these sites have clearly been extensively altered through grading, filling, dumping, landscaping etc. In other areas, such activities have occurred, but surface indicators are less obvious, suggesting that deleterious effects may be less pervasive or extreme

View southwest from the foot of Cherry Street towards the approximate location of one of the clusters of cottages at Simcoe Beach Park (in the area of the parking lot and the grove of trees)

The Yonge Street Wharf (Figure 17, No. 4), in its first version, represents one of the earliest Euro-Canadian waterfront features, however, the remains of the early phases of it construction have, in all likelihood, been destroyed by the construction of the Canada Steamship Line Dock, circa 1927.

Before 1912, the Lower Don area contained a few small industries and two large businesses, the National Iron Works (Figure 17, No. 16) and the British American Oil Co. (Figure 17, No. 14). No significant research questions concerning these industrial activities are likely to be addressed by archaeological investigation of any surviving material remains.

Post-1912 developments in the Portlands remain largely extant and visible as built features. Preservation work directed at these structures should have due regard for landscape elements associated with their construction and operation. No significant research questions concerning these industrial activities are likely to be addressed by archaeological investigation of any surviving material remains.

The largest of the early twentieth century industrial complexes in the precinct (British Forgings, the National Ironworks and British American Oil) represent potential landscaping features, elements of which may be incorporated into the future design of the area (see Section 5.2). Exposure and conservation of these features does not constitute, nor require, archaeological investigation or monitoring.

5.0 PLANNING FOR THE ARCHAEOLOGICAL RESOURCES OF THE WEST DONLANDS, EAST BAYFRONT AND PORTLANDS: SUMMARY AND RECOMMENDATIONS

5.1 Archaeological Recommendations

The Stage 1 archaeological assessment of the West Donlands, East Bayfront and Portlands precincts comprised two basic steps: modelling of precontact potential based on consideration of past environmental and cultural historical considerations, and the compilation of an inventory of potential significant archaeological resources using a variety of nineteenth and twentieth century map sources. These tasks were followed by a review of the past and present land uses that have occurred within each study area in an effort to determine where buried features or deposits are likely to have survived. The ultimate identification of such areas, however, will require detailed field assessment. Given the prevalent conditions within the study areas, and the character of previous land uses, the most effective means to identify areas of potential archaeological significance that are also characterized by integrity is to undertake a campaign of auger coring and/or a backhoe equipped with tooth and smooth buckets to penetrate paving and sample deeply buried soil horizons. Other portions of the study area may be assessed through the hand excavation of test pits or test units.

This work will provide a clear understanding of the soil stratigraphy throughout the study areas in general and within the zones of potential as identified in this report specifically. Depending upon the outcome of these assessments within the proposed development impact areas, recommendations concerning the need for further archaeological assessment, test or mitigative excavation, or monitoring would be made. Such recommendations would also be based on further resource-specific documentary research as necessary for determining potential significance. An example of such additional research would include review of assessment rolls, city directories, etc., to ascertain the character of any mid-nineteenth century domestic, commercial and institutional sites that should prove to have survived in the West Donlands. This information would then be used to identify those that are the most suitable candidates for further investigation, in that they are those that are most likely to preserve archaeological data amenable to analyses that would lead to significant insights into the domestic lives of social classes that are otherwise generally poorly documented.

It must be emphasized that the detailed Stage 2 archaeological assessment tasks outlined above should be designed according to, and incorporated within, any development plans and schedules that are proposed for the study areas such that they are completed prior to construction.

5.2 Incorporating Current Landscape Features in Future Developments

Jeffery Stinson, in his 1990 study entitled *The Heritage of the Port Industrial District*, recommended a general approach to leaving visible material evidence of the past *in situ*, be it road surfaces, rails, machinery, etc. Such vestiges of industry are not generally treated as significant resources in either archaeological or built heritage studies. Nevertheless, this study strongly endorses Stinson's recommendation. In order to carry out such actions, it will be necessary to first prepare an inventory of such resources and establish guidelines to integrate them in any future planning and development decisions.

5.3 Documentation Curation Plan

The documentation related to this archaeological assessment will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the Ontario Ministry of Culture, and any other legitimate interest groups.

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APPENDIX G-3

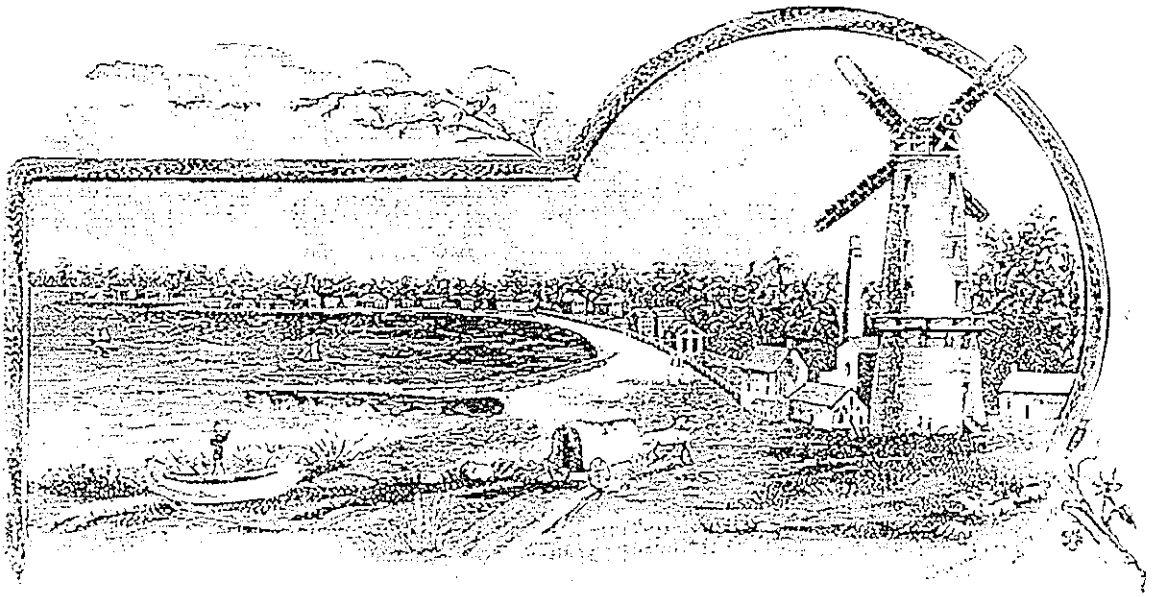
The Archaeological Master Plan

of the Central Waterfront

City of Toronto

September 2003

The Archaeological Master Plan of the Central Waterfront City of Toronto, Ontario



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File #00TO-07
September 22, 2003

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EXECUTIVE SUMMARY

Background

The City of Toronto has a cultural history that began at least 10,000 years ago and continues to the present. Due to the richness of its natural environment, the region has attracted human habitation from the time of the first peopling of Ontario. The archaeological sites that are the physical remains of this lengthy settlement history represent a fragile and non-renewable cultural legacy.

The Master Plan

As part of Culture Division's contribution to the Secondary Plan for the Central Waterfront, Heritage Preservation Services retained Archaeological Services Inc., in association with Historica Research Limited and Cuesta Systems Inc., to prepare an Archaeological Master Plan. The study area mirrors that of the Part II Plan, encompassing the lands between Leslie and Jameson Streets and (essentially) south of Front Street. The Archaeological Master Plan for the waterfront study area consists of four major components:

1. an overview of settlement history as it pertains to archaeological resources
2. mapping of the areas of archaeological potential
3. inventory of the 19 major areas of archaeological significance
4. guidelines for the management, development review and conservation of known and potential archaeological resources

Most of the lands along the Central Waterfront have been repeatedly developed over the last 200 years destroying much of the archaeological record. In addition, the majority of the modern waterfront was created through lake-filling activities undertaken by the railways, major industries and the Harbour Commission. As a result, large parcels of land are "artificial" and relatively recent additions that hold limited archaeological potential. Nonetheless, the research and analysis carried out in preparing the Archaeological Master Plan identified 19 surviving areas of archaeological potential. These zones are representative of the pre- and post-contact history of the City including that of the First Nations, the French regime, the early British Colonial Era, the War of 1812, commercial maritime development, the early railway era, and subsequent industrialization. It is highly likely that archaeological deposits from all of these periods has survived, representing significant archaeological value, and warranting conservation during any re-development along the central waterfront.

Legal Framework

In Ontario, Archaeology is a provincial interest as defined in the Provincial Policy Statement 2.5.2 issued under The Planning Act. It is regulated by the Ministry of Culture through legislation that includes: The Planning Act (Section 3), The Ontario Heritage Act (Part VI), The Environmental

Ministry administers the licensing program and reviews all archaeological assessments conducted in the Province. It is the responsibility of each Municipality to request archaeological assessments where they are warranted. In the City of Toronto, Heritage Preservation Services (Culture Division), with the cooperation of the Department of Urban Development Services, is responsible for the municipal stewardship and monitoring of archaeological resources located on both private and public lands.

Recommendation

The primary recommendation from the Master Plan is the requirement that all future development applications and major capital projects in areas of archaeological potential, as defined in this study, be subjected to an archaeological resource assessment (as per Provincial guidelines) prior to any land disturbance The Master Plan does not restrict development on sites of archaeological potential. Instead, it provides for the mitigation of impacts on archaeological resources prior to development.

Benefits

Once implemented, the Master Plan will reduce staff time required to review applications in the study area and will standardize and automate the archaeological resource management procedure. This will save the development sector time and money while best conserving the archaeological resources of the Waterfront. Understanding the archaeological potential of this area will provide property owners and City staff with the strategic information necessary to either avoid sites of archaeological significance or to plan for licensed salvage excavation of all or a portion of those sites at the earliest opportunity. As Toronto proceeds with its planning initiative for the waterfront, there will be confidence that the archaeologically-significant sites are identified and will be preserved as open space, incorporated into development (without being disturbed) or, where necessary, excavated. Also, the Central Waterfront Archaeological Master Plan provides the City with an excellent opportunity to use archaeology as a means of generating public awareness for heritage, as an educational tool, and as an impetus for historical interpretation all of which will enhance the waterfront's potential for cultural tourism.

Looking Ahead

The Archaeological Master Plan for the Central Waterfront is the first cultural resource management tool of its kind in the amalgamated City. Similar planning mechanisms are urgently needed in other areas of high archaeological potential and it is anticipated that the Waterfront Master Plan will form a precedent for those studies that follow in other parts of Toronto.

1.0 INTRODUCTION

1.1 Study Background And Objectives

Archaeological Services Inc. (ASI) in association with Historica Research Limited and Cuesta Systems Inc. was contracted by the Culture Division of the City of Toronto to prepare a master plan of the distribution of known and potential archaeological resources within the Central Waterfront zone of the City. In anticipation of significant re-development within this zone, requiring land use designations and infrastructure phasing to help ensure the long-term economic, social and environmental health of the City, this archaeological planning study had three major goals:

1) the preparation of an overview of the area's settlement history as it may be expected to pertain to archaeological resources;

2) the mapping of archaeological site potential, based on known site locations, past and present land uses, and environmental and cultural-historical data; and

3) the review of the current provincial planning and management guidelines for archaeological resources, as well as the identification of a recommended management strategy for known and potential archaeological resources within the study area.

1.2 Conservation And Change: Some Key Concepts

> *The Province's resources—its agricultural land base, mineral resources, natural heritage resources, water supply and cultural heritage resources—provide economic, environmental and social benefits. The wise use and protection of these resources over the long term is a key provincial interest* (Preamble, Provincial Policy Statement, Ministry of Municipal Affairs and Housing 1996).

In Ontario, cultural heritage conservation is accepted as a legitimate objective of planning activity, as it is in many other provinces and countries. Conservation planning provides an important mechanism for ensuring that future development (*e.g.*, residential, industrial and infrastructure construction) respects the cultural heritage of the City.

Conservation planning and management is generally concerned with ensuring that valued heritage resources are conserved and protected, in a sound and prudent manner, in the continuing and unavoidable process of change in the environment. A key issue is that the role of the custodian and steward of these resources generally falls to the private property owner. It is neither possible nor desirable that all resources be brought into public ownership. Therefore, conservation management is undertaken by a variety of actors, and it is necessary, through legislation and education, to bring all of these actors together in pursuit of a common goal. In many instances, it is traditional planning

mechanisms that now seek to ensure that heritage resources are conserved and/or maintained within the process of change.

In the process of change, heritage resources may be affected in several ways. Change may result from some action that is purposefully induced in the environment, such as development activities (*e.g.*, road building, residential construction). This may result in both adverse and beneficial impacts, depending on the degree to which the change is sensitively managed. Change may also be a gradual and natural process of aging and degeneration, independent of human action, that affects artifacts, building materials, human memories or landscapes. Thus conservation management must ensure that change, when it does occur, is controlled. Its negative impacts upon heritage resources must be either averted or minimized, through either ensuring that change has no adverse impacts whatsoever, or that intervention in the process will result in the promotion of beneficial effects.

1.3 Archaeological Resources As Cultural Heritage: Definitions

Defining Cultural Heritage

The utility of this report, as a guide that will assist to incorporate archaeological resources within the overall planning and development process, fundamentally rests upon a clear understanding of the physical nature of cultural heritage resources in general, the variety of forms they may assume, and their overall significance and value to society.

In common usage, the word heritage tends to be vaguely equated with "things of the past." While it may be arguable that such an interpretation of the term is true, it is so only in the very narrowest sense. An interest in heritage does indeed indicate an awareness of, and concern for, "things of the past," yet at the same time it recognizes that these "relics" are worthy of such interest primarily because they provide insights into the processes that have helped to shape the contemporary world in which we live, and that will continue to exert an influence into the future. Examination of our heritage, therefore, not only allows us to learn about our origins and our history, but it also provides a means of understanding who we are now, and a means of glimpsing who we may become.

In recognition of the essentially timeless quality of these "things of the past," Ontario's heritage has been defined as:

> *all that our society values and that survives as the living context—both natural and human—from which we derive sustenance, coherence and meaning in our individual and collective lives* (Ontario Heritage Policy Review [OHPR] 1990:18-19).

Such an all encompassing definition has the additional advantage of recognizing that our heritage consists of both natural and cultural elements. As human beings, we do not exist in isolation from our natural environment. On the contrary, there has always been a complex interrelationship between people and their environment and each has shaped the other, although the nature and direction of these mutual influences has never been constant. This definition further recognizes that heritage not only includes that which is tangible, but also that which is intangible.

All of those elements that make up this heritage are increasingly being viewed in the same manner as are "natural resources," in that they are scarce, fragile, and non-renewable. These cultural heritage resources, therefore, must be managed in a prudent manner if they are to be conserved for the sustenance, coherence and meaning of future generations, even if their interpretations of the significance and meaning of these resources in contributing to society may be different from our own.

The development of the means by which to manage these cultural resources depends, in turn, on the recognition that on a practical level it is necessary to categorize them by type, yet at the same time these basic types also form a continuum. Both the distinctiveness of the individual categories of cultural resources and the overlap between these categories has been recognized by the Ontario Heritage Policy Review. This work (OHPR 1990:23) defined three broad classes of cultural resources:

IMMOVABLE HERITAGE — land or land-based resources, such as buildings or natural areas, that are "fixed" in specific locations; for example:

structures — buildings, ruins, and engineering works, such as bridges;

sites — archaeological sites, battlegrounds, quarries, earth science sites such as rock formations, and life science sites such as rare species habitats;

areas — streetscapes, neighbourhoods, gardens, lakes, rivers and other natural, scenic, and cultural landscapes;

MOVABLE HERITAGE — resources, such as artifacts and documents, that are easily "detachable" and can be transported from place to place; for example:

objects — artifacts such as artworks, utensils and adornments, and earth and life science specimens, such as fossils and crystals;

documents — including newspapers, letters, films, and recordings;

INTANGIBLE HERITAGE — such as traditional skills and beliefs; for example:

values — attitudes, beliefs and tastes;

behaviours — including skills, games, dances and ceremonies;

speech — stories and narratives, songs, sayings, and names.

Each of these categories, however, often overlaps with others. Archaeological sites, for example, are "immovable" resources, yet in most cases these sites are formed by concentrations of man-made or man-modified objects that are "movable" resources. Similarly, "movable" or "immovable" resources, such as buildings or documents often derive their significance through their intangible cultural associations, as they may reflect or typify specific skills or beliefs.

Despite the fact that all cultural heritage resources should be viewed as components of a single continuum, there remains a need to distinguish between the three basic categories outlined above. This is because the approaches to the examination of resources within the different categories must be specifically tailored to their characteristics and needs. Not only does the study of the different types of resources require different, and often highly specialized techniques, but the threats that these resources face are often different as well. Thus planning decisions related to the conservation of different types of resources are informed by different sets of considerations. Likewise, the means by which such planning decisions are implemented will also vary.

Defining Archaeological Resources

Over the course of the past twenty-five years, a variety of terms and phrases have been used in Ontario to describe the material remnants of the past. "Cultural heritage," "cultural resources," "heritage features" and a number of combinations of these terms have all been used interchangeably to describe various facets of the heritage environment. For the purposes of "planning" or "environmental management," a number of definitions have been used in specific contexts, particularly as they relate to provincial legislation. Chief among these are the Ontario Planning Act (1996) and its Policy Statement, the provincial guidelines developed as part of the Ontario Environmental Assessment Act (1997).

The Planning Act Policy Statement defines **archaeological resources** as:

> *the remains of any building, structure, activity, place or cultural feature, which because of the passage of time is on or below the surface of the land or water, and which has been identified and evaluated and determined to be significant to the understanding of the history of a people or a place.*

The Environmental Assessment Act, on the other hand, includes archaeological resources within the more broadly defined category of **cultural feature**, which is understood to include:

> *any man-made or modified object in or on the land or underwater such as buildings of various types, street furniture, engineering works, plantings and landscaping, archaeological sites, or a collection of such objects seen as a group because of close physical or social relationships.*

Finally, the Canadian Environmental Assessment Act (1992) provides an all-encompassing definition of cultural heritage resources as:

> *lands and resources for traditional purposes by aboriginal persons, or on any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.*

Individual archaeological sites (that collectively form the archaeological resource base) are distributed in a variety of settings across the landscape, being locations or places that are associated with past human activities, endeavours, or events. These sites may occur on or below the modern land surface, or may be submerged under water. The physical forms that these archaeological sites may take include: surface scatters of artifacts; subsurface strata which are of human origin, or incorporate cultural deposits; the remains of structural features; or a combination of these attributes. As such, archaeological sites are both highly fragile and non-renewable.

The uniqueness and fragility of these features led the study team to identify and include on the study maps certain features that are on the immediate periphery of the study area.

The most important of these are the remains of the first parliament buildings of Upper Canada. These deposits are situated immediately south of Front Street between Berkeley Street and Parliament Street. Recently subjected to archaeological investigations, thereby confirming their partial survival and exact location, they have national and international historic significance.

The Gooderham & Worts Distillery complex is a designated National Historic Site and contains known archaeological resources.

Other potential regionally significant archaeological sites exist outside the study boundary but are also close to the study area. Mid-nineteenth century wharfs and railway features and the Consumer's Gas property are typical of such sites. These areas may be adversely affected by future development within the actual study area. For example, infrastructure improvements such as roads or transit lines, which link facilities within the study area with the rest of the city, and commercial construction stimulated by the revitalization of the study area, could, therefore, impact nearby significant archaeological resources.

Simply, future planning for the study area must take into account the impact on historic archaeological resources beyond the study area boundaries.

It should be noted that the archaeological features that have been identified on the project maps and described in text were all previously documented. Indeed, no primary research was undertaken for this study. On the other hand, sufficient detailed research has been conducted for much of the study area including those lands within the Canadian National Exhibition, the Railway Lands between Bathurst Street and Yonge Street, much of Fort York, and the Ashbridges Bay area. In most of these areas, potential resources have already been graded according to their integrity and significance and development plans approved by the City and Province. Indeed, many of the archaeological features have been subjected to mitigative investigations. This study is, therefore, fully consistent with all previously undertaken planning studies.

While there are also individual studies for selected sites within the rest of the study area, there is also less complete knowledge of the buried heritage features along the shoreline from Yonge to the Cherry Street/Keating Channel and within the former Ataratiri lands between the Don River, Eastern Avenue, Parliament Street and the Canadian Nation rail lines. Should development occur in these areas, it would be prudent to undertake detailed primary research to ensure that all significant heritage features of potential archaeological interest have been identified. This has been recognized through definition of specific requirements for Stage 1 archaeological assessments within this portion of the study area.

2.0 THE DEVELOPMENT OF TORONTO'S SHORELINE: AN OVERVIEW

2.1 Introduction

Toronto's central waterfront is considerably changed from what Aboriginal people would have known prior to their contact with Europeans. Before recorded history, the area was a junction point of land and water routes, with trails running northward from the shoreline (along river routes) linking the Lower and Upper Great Lakes. For ten millennia, temporary encampments and semi-permanent villages of various sizes comprised the extent of human habitation along the lake shore. These aboriginal occupants left no written record of their traditions or the generations that went before. Their legacy is their oral history and the archaeological sites and artifacts that were left behind.

By the late seventeenth century, the Five Nations Iroquois were using the region for hunting and fishing with main settlements near the mouths of the Humber and Rouge Rivers. For the most part, however, the region was left unoccupied, and by the time of European military occupation and settlement, former corn fields had succeeded to forest. Like the aboriginals before them, these new settlers chose the same locations for their homesteads.

During the late seventeenth and early eighteenth centuries, the region came to be occupied by the Mississaugas, an Algonquian people whose subsistence economy was based on garden farming, as well as hunting, fishing and gathering wild plants. The British crown recognized the Mississaugas as the "owners" of the north shore of Lake Ontario in the area of Toronto and entered into negotiations to facilitate settlement after the American Revolution. Although no archaeological sites have been registered as historic Mississauga within the City, there is certainly potential for their discovery and identification.

By 1720, the French had established a trading post on the lakeshore and later, in 1751, Fort Rouillé was built to strengthen a chain of forts protecting France's fledgling empire. With the ascendancy of British authority a decade later came more military sites (an Old Fort and a New Fort) yet the most substantial alterations to the waterfront occurred after European settlers arrived in York by boat in 1793. At this time, the establishment of the town on the best natural harbour on Lake Ontario coincided with the beginnings of free enterprise commerce on the Great Lakes and the shoreline would never look the same again.

In order to place the archaeological features identified in Section 3 within their historic and physiographic contexts, Section 2.2 outlines the physiographic development of the region while section 2.3 summarizes the extent of human activity and land development over time. Site references to Section 3 are also contained in the text where appropriate.

2.2 Physiographic Context

The lakeshore is believed to have stabilized in its early nineteenth century position circa 3000 B.C. To the east, a sand spit (E5) was formed by the deposition of sediments that were eroded from the

Scarborough Bluffs to the east and transported westerly by longshore drift (Freeman 1976; Krentz 1985: 4). The current model of lake level changes in the Ontario basin (Anderson and Lewis 1985) suggests that this process likely began sometime after about 7,000 B.P. Prior to that time, and beginning with the draining of glacial Lake Iroquois at about 12,000 B.P., the level of Lake Ontario was considerably lower and the shoreline was far to the south of its present location (Figure 1). Early mapping indicates that prior to human modifications, the position of the lakeshore varied from approximately 50 to 150 metres to the south of the present alignment of Front Street (Figure 2). The transgression of the Lake Ontario north shore through the Late Pleistocene and Holocene is outlined in Figure 1. The bathymetric contours in this figure also illustrate the submerged bank of sediment associated with the emergent sand spit (E5, T1).

Precisely when the sand spit emerged from Lake Ontario is currently unknown, although this would have depended on enough sediment having accumulated from erosion and littoral transport of

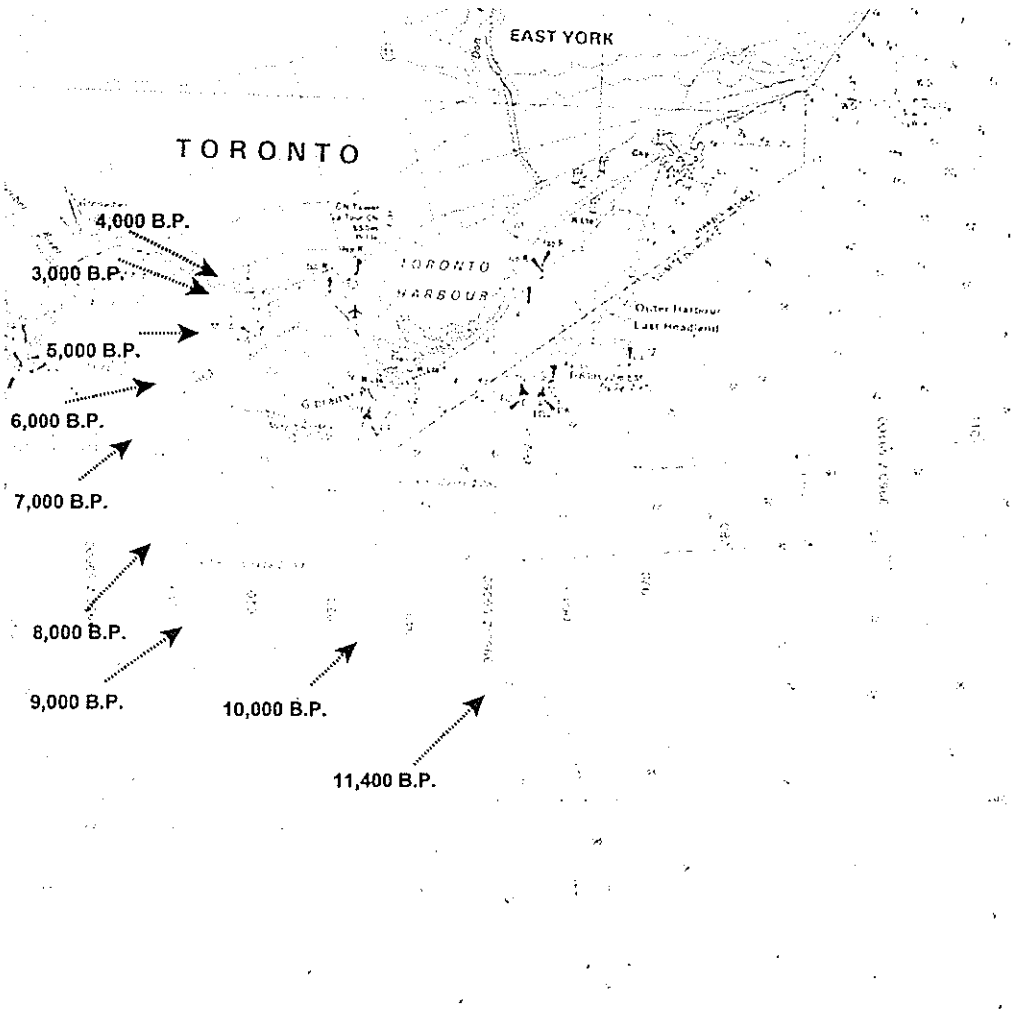


Figure 1: Bathymetric Chart of Toronto Central Waterfront (from C.H.S. Chart 1/C 2077)
Arrows indicate approximate shoreline contour positions through time (based on Anderson and Lewis 1985).

material from the Scarborough Bluffs. The spit was clearly a dynamic entity, as evidenced by the flight of concentric beaches notable in its earliest recorded form (see Figure 2). In addition to the accretion of sediments transported by longshore drift, the spit was also subjected to on-going erosion. Growth of the spit would occur as long as the net result of these processes was a gain in sediment, whereas the spit would shrink in periods when the net result was a loss. Early commentaries suggest gradual growth of the sand spit until the 1850s followed by a period of declining accretion and then erosion. This has been attributed to a decline in the quantity of sediment being eroded from the Scarborough Bluffs. As only about six percent of the eroded bluff material is subsequently deposited at the spit, it is apparent that an enormous amount of sediment has been removed over the millennia, suggesting that the Scarborough Bluffs were once an even more significant promontory (Krentz 1985:6-8).

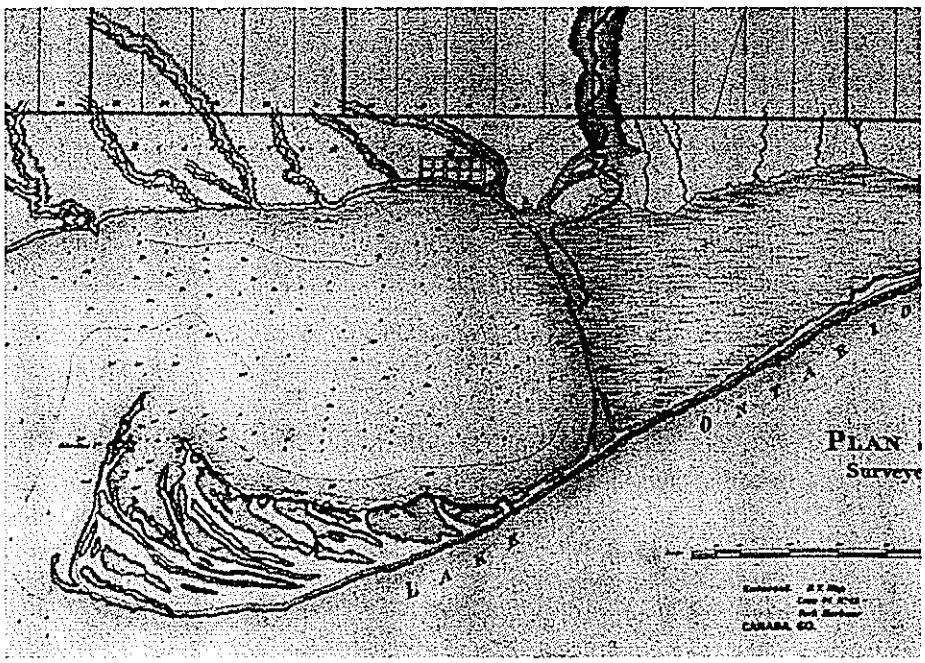


Figure 2: A. Aitken's *Plan of York Harbour, 1793.* Note the concentric beaches of the spit and the slender isthmus between the spit and the mainland (from Benn 1993:27).

In addition to on-going erosion, the sand spit has also been subjected to periodic catastrophic erosion. As indicated in Figure 2, when first mapped the spit was a peninsula attached to the mainland by a slender isthmus. In 1852, a storm breached the isthmus and subsequent wave action enlarged the breach to about 45 metres. In 1858, another storm enlarged the breach to about 450 metres, and the gap had grown to about 1200 metres by the mid-1860s (Krentz 1985: 13).Under such a dynamic regime, the development of soils on the sandy substrate was likely quite retarded, with regosols likely the norm. Natural fertility would be low except in depressional situations where organic material would accumulate. The rolling nature of the topography, varying between dry sandy ridges and backwater basins, would have imparted considerable complexity to the soil drainage.

By the time the Toronto Islands sand spit began forming, sometime after about 7,000 B.P., an essentially modern forest had become established throughout southern Ontario. Under the widely used ecological zonation developed for Ontario by Hills (1958) and revised by Burger (1993), the Toronto lakeshore is situated in forest Site Region 7E. Under median moisture regimes and eco-climates (Table 1) the climax forest in this region tends to be co-dominated by hard maple (*Acer saccharum*) and beech (*Fagus grandifolia*), often in association with basswood (*Tilia americana*), red oak (*Quercus rubra*), white oak (*Quercus alba*), shagbark hickory (*Carya ovata*) and bitternut hickory (*C. cordiformis*). It is doubtful, however, that such a forest would have developed on the Toronto Islands sand spit. Given the inferred low fertility of the sandy soil and the complex interplay of drainage regimes, the original vegetation was likely a patchwork of dry uplands with early to mid-successional taxa such as cottonwood, black cherry, oak, white pine, and hard maple, wet lowlands with oak, ash, elm, and hickory, and wetlands with shrubs and emergent vegetation. This interdigitation of habitats and locally high bio-diversity would no doubt have given rise to a very rich coastal wetland ecosystem similar to other Great Lakes examples such as Long Point on Lake Erie.

Table 1: Characteristic Tree Species in the Site Regions of Southcentral Ontario

ECOCLIMATE (TEMPERATURE)								
Hotter			Normal			Colder		
SOIL TEMEPERATURE								
Drier	Fresh	Wetter	Drier	Fresh	Wetter	Drier	Fresh	Wetter
Site Region 7E Lake Erie								
red, black, chinquapin Oak shagbark Hickory Butternut (Chestnut) largetooth, trembling Aspen	white, red Oak white Ash hard Maple Walnut Tulip pignut Hickory Buttemut	red, silver Maple white, red Ash white Elm Sycamore Tulip Cottonwood black Gum	white, red Oak shagbark, pignut Hickory white Pine White rock Elm	hard Maple Beech Basswood red, white Oak shagbark, pignut Hickory Cottonwood black Cherry	swamp, pin Oak red, black Ash white Elm bitternut Hickory	eastern Hemlock white Pine hard Maple	white Elm black Ash red Maple eastern Hemlock	white Spruce balsam Fir red Maple yellow, white Birch eastern white Cedar

Site Class comprises high proportion of site region

Site Class comprises moderate proportion of site region

Site Class comprises low proportion of site region

() = species common in part of site region

For each site region, the upper rows list climax species and the lower row lists pioneer species

Adapted from Burger (1993)

Another distinctive feature of the shore on the other side of the harbour was a narrow limestone shingle beach (Figure 3), just wide enough in the nineteenth century for the passage of vehicles, lying below a steep embankment (Historica Research Limited 1989:50; Brown Associates Limited 1988:1). In this area, Garrison Creek emptied into Lake Ontario, its course forming a low sandy peninsula further to the west, on which Fort York was built. The outlet of Garrison Creek may have provided an environment in which a variety of food resources were available to any precontact or

early historic occupants of the region. Salmon, for instance, were reported in some abundance prior to alterations of the watercourse due to the clearance of the local forest cover (Scadding 1873:36).

Figure 3: View west to the entrance of Toronto Harbour in 1793 (from Careless 1984:8)

2.3 Historical Context

The Precontact Cultural-Historical Background

The land now encompassed by the study area has a cultural history which begins approximately 11,000 years ago and continues to the present. As there tends to be little widespread awareness of the depth of this pre-contact settlement history, or general knowledge of the societies that inhabited Ontario prior to the onset of Euro-Canadian settlement, a brief review of the pre-contact history of the study area, as it is understood in its broader regional context, is included below. This material is further summarized in Table 2.

It should be noted that the shifting water levels of Lake Ontario discussed in Section 2.2 above, are likely to have destroyed or submerged evidence of occupations along the shoreline in the Toronto waterfront area prior to circa 3000 B.C. Moreover, the intensity of nineteenth and twentieth century land use in the study area is likely to have destroyed the comparatively ephemeral archaeological deposits left by the precontact occupation of the 3000 B.C.- A.D. 1700 shoreline zone. Nevertheless, occupations prior to this time are known to have occurred in locations in close proximity to the study area, as is attested by the discovery of numerous precontact sites within the balance of the City of Toronto.

Table 2: Southern Ontario Precontact Culture-History

Date	Period	Description
A.D. 1650 - A.D. 1400	Late Iroquoian (Late Woodland)	- complex agricultural society - villages, hamlets, camps - politically allied regional populations
A.D. 1400 - A.D. 1300	Middle Iroquoian (Late Woodland)	- major shift to agricultural dependency - villages, hamlets, camps - development of socio-political complexity
A.D. 1300 - A.D. 900	Early Iroquoian (Late Woodland)	- foraging with limited agriculture - villages, hamlets, camps - socio-political system strongly kinship based
A.D. 900 - A.D. 800	Transitional Woodland	- incipient agriculture in some regions - longer term settlement occupation and reuse
A.D. 800 - 400 B.C.	Middle Woodland	- hunter-gatherers, spring/summer congregation and fall/winter dispersal - large and small camps - band level society with kin-based political system - some elaborate mortuary ceremonialism
400 B.C. - 1000 B.C.	Early Woodland	- hunter-gatherers, spring/ summer congregation and fall/winter dispersal - large and small camps - band level society with first evidence of community identity - mortuary ceremonialism - extensive trade networks for exotic raw materials
1,000 B.C. - 7,000 B.C.	Archaic	- hunter-gatherers - small camps - band level society - mortuary ceremonialism - extensive trade networks for exotic raw materials
7,000 B.C. - 9,000 B.C.	Paleo-Indian	- first human occupation of Ontario - hunters of caribou and now-extinct Pleistocene mammals - small camps - band level society

Paleo-Indian Period (9,000 B.C.-7,000 B.C.)

While the arrival of Paleo-Indian hunting bands in southern Ontario has not been accurately dated, it is thought that they arrived sometime between approximately 11,000 and 10,500 years ago, soon after the area became habitable. During the previous millennia, southern Ontario was covered the glaciers that stretched across most of North America. As these glaciers began to retreat approximately 12,500 years ago, large meltwater lakes formed in their wake and continued to cover much of southern Ontario.

The landscape that subsequently emerged was one of relatively barren tundra interspersed with areas of open boreal forest. This environment supported herds of large Pleistocene mammals such as mastodon, moose, elk and especially caribou, who were in turn followed by small bands of nomadic hunters known as Paleo-Indians. Evidence concerning the Paleo-Indian (circa 9,000 to 7,000 B.C.) peoples is very limited since their populations were not large and since little of their sparse material culture has survived the millennia. Furthermore, in following the herds, Paleo-Indian groups traveled extremely long distances over the course of the year, and seldom stayed in any one place for a significant length of time. Virtually all that remains are the tools and by-products of their chipped stone industry, the hallmark being large distinctive spear points that have a prominent channel or groove on each face. Paleo-Indian sites are frequently found adjacent to the shorelines of large post-glacial lakes suggesting that their camping sites were located along the shores of lakes to intercept migrating caribou herds. The circa 12,500 B.P. strandline above Davenport Avenue north of the study area is one such relict shore, although it was likely located well inland by the time of any Paleo-Indian occupations of the central waterfront area. Any Paleo-Indian occupations along the former shores of Lake Ontario have submerged by the present lake.

Archaic Period (7,000 B.C.-1,000 B.C.)

The Archaic period is commonly divided into three sub-periods: Early Archaic (circa 7,000-6,000 B.C.), Middle Archaic (circa 6,000-2,500 B.C.), and Late Archaic (circa 2,500-1,000 B.C.). Few Early or Middle Archaic period sites have been investigated and they, like Paleo-Indian sites, are often identified on the basis of the recovery of isolated projectile points. Paleo-environmental data suggest that a mixed forest cover had been established in Ontario by circa 7,000 B.C. and that the nomadic hunter-gatherers of this period exploited deer, moose and other animals, as well as fish and some plant resources, still moving relatively large distances over the landscape during the course of the year. The landscape in which these people lived continued to change, with much lower water levels in the Great Lakes and the expansion of more temperate forests. Over the following millennia, technological and cultural change is evident in the wide variety of tools produced, which in turn are reflections of the shifts in hunting strategies necessitated by a constantly evolving environment. By the Late Archaic period, however, hunter-gatherer bands had likely settled into familiar hunting territories. Their annual round of travel likely involved occupation of two major types of sites. Small inland camps, occupied by small groups of related families during the fall and winter, were situated to harvest nuts and to hunt the deer that also browsed in the forests, and which congregated in cedar swamps during the winter. Larger spring and summer settlements located near river mouths, were places where many groups of families came together to exploit rich aquatic resources such as spawning fish, to trade, and to bury their dead, sometimes with elaborate mortuary ceremonies and offerings.

Woodland Period (1,000 B.C.-A.D. 1650)

The Woodland period is divided into four sub-periods: Early (1,000 B.C.-400 B.C.), Middle (400 B.C.-A.D. 800), Transitional (A.D. 800-A.D. 900) and Late Woodland (A.D. 900-A.D. 1650). The

Late Woodland period, which witnessed the fluorescence of Iroquoian society in the Great Lakes region, is further divided into the Early, Middle and Late Iroquoian stages.

The Early Woodland period differed little from the previous Late Archaic period with respect to settlement-subsistence pursuits. This period is, however, marked by the introduction of ceramics into Ontario. Although a useful temporal marker for archaeologists, the appearance of these ceramics, does not seem to have profoundly changed the hunter-gatherer lifestyle. There is compelling evidence in the Early Woodland period, however, for an expanding network of societies across northeastern North America that shared burial rituals. A common practice, for example, was the application of large quantities of symbolically important red ochre (ground iron hematite) to human remains and the inclusion in graves of offerings of objects that represented a considerable investment of time and artistic skill. Moreover, the nature and variety of these exotic grave goods suggest that members of the community outside of the immediate family of the deceased were contributing mortuary offerings.

The most significant change during the Early and Middle Woodland periods, was the increase in trade of exotic items, no doubt stimulated by contact with more complex, mound-building cultures in the Ohio and Mississippi valleys. These items were included in increasingly sophisticated burial ceremonies that occasionally involved the construction of burial mounds by local groups. These developments may have emanated from the need for greater social solidarity among growing aboriginal populations that were competing for resources. Elaborate burial sites from this period were discovered near Grenadier Pond and at Baby Point on the Humber River during the late nineteenth and early twentieth centuries.

The pace of cultural change seems to have accelerated during the Transitional Woodland period. Much of this change was brought about by the acquisition of tropical plants species such as maize and squash from communities living south of the Great Lakes. The appearance of these plants initiated a transition to food production that reduced the traditional reliance on naturally occurring resources. The incipient agriculture of these Transitional Woodland, obviously led to decreased mobility as people tended to their crops. Sites were more intensively occupied and subject to a greater degree of internal spatial organization.

The revolutionary changes in the settlement-subsistence regime of southern Ontario's Native peoples continued throughout the balance of the Late Woodland period. As the most populous group and the most involved in the development of this new life-style, Ontario Iroquoian society often forms a distinct focus of Late Woodland archaeology; hence the Late Woodland period is often subdivided into an Early (A.D. 900-A.D. 1300), Middle (A.D. 1300-A.D. 1400) and Late Iroquoian Period (A.D. 1400-A.D. 1650).

Early Iroquoian society represents a continuation of Transitional Woodland subsistence and settlement patterns. Villages tended to be small, palisaded compounds with longhouses occupied by either nuclear or, with increasing frequency, extended families. These extended families formed the basis of social and political relationships within each village and, to a lesser extent, to ties between one community and the next. Around the villages, camps and hamlets served as bases from which

to collect wild plants or to hunt game. While some corn appears to have been an important dietary component at this time, its role was still more that of a supplementary nature than a staple.

The Middle Iroquoian period marks the stage in Iroquoian cultural evolution at which point a fully developed agricultural system (based on corn, bean and squash husbandry) and complex political means of regulating village affairs and for linking separate villages had developed. Widespread similarities in pottery and smoking pipe styles also point to increasing levels of intercommunity communication and integration.

In most cases, it appears that individual Early Iroquoian communities may have amalgamated during the beginning of the fourteenth century precipitating these dramatic changes in the economic, social and political spheres. While the data are still difficult to interpret, it is also clear at this time that villages and village confederacies were in conflict, with each other, and/or together against Algonquin-speaking peoples to the southwest. Whatever the cause/effect relationship, some villages were more heavily defended and some household groups (and longhouses) were larger at this time. In part, this may be due to a general increase in population sizes within an increasingly densely settled landscape.

Settlement and subsistence patterns appear to have remained relatively stable during the Late Iroquoian period. The most noticeable changes appear in the socio-political system. Through the fifteenth century, certain village households were consistently larger and more variable in membership than others within the same community. This trend peaked around the turn of the sixteenth century with some longhouses being repeatedly enlarged to reach lengths of over 120 metres. Some villages attained a size of over four hectares. This trend may reflect changes in the fortunes and solidarity of dominant lineages within villages and/or the movement of families between allied communities. During the sixteenth century, longhouses became smaller again. This modification of residential patterning suggests that changes had occurred in the kin-based political system. It has been suggested that this change reflects increased importance of clans over lineages. Since clan membership cut across related communities, this aspect of kinship was an important source of tribal integration. When European explorers and missionaries arrived in Ontario at the beginning of the seventeenth century, Iroquoian villages were under the direction of various chiefs elected from the principal clans. In turn, these villages were allied within powerful tribal confederacies.

Many large Iroquoian village sites are located along the middle and upper reaches of the Humber and Don rivers. While a substantial portion of these have been destroyed by urban development, others have been investigated to some degree. Such work has clearly demonstrated the Iroquoian use of the central waterfront area, even if few traces of such activity have survived in the study area itself. The mouths of the rivers and creeks draining into Lake Ontario, as well as the rich littoral zones along the shore and around Toronto Island, for example, attracted seasonal fishing expeditions, during which large quantities of fish were caught and processed for consumption later in the year.

By the early seventeenth century, however, Iroquoians had largely abandoned the Lake Ontario shore, as they relocated their settlements to Simcoe County. While this process likely took place

over many generations, the final impetus for this move was likely increased conflict with the Five Nations Iroquois of New York State. Intertribal warfare with the Five Nations during the first half of the seventeenth century, exacerbated by the intrusion of Europeans, ultimately resulted in the dispersal of the three Ontario Iroquoian confederacies – the Huron, the Petun and the Neutral.

Post Contact

Both the nature and extent of the earliest European occupations of the lands along the original Toronto waterfront were largely defined by the area's strategic importance for control of the economic networks, which had emerged within the region by the eighteenth century. All of these occupations occurred on or near the Lake Ontario shoreline, between the Don and Humber Rivers, at sites which afforded both natural landfalls for Great Lakes traffic, and convenient access, via the various waterways draining the area and overland trails, into the hinterlands. Thus, the first European settlement of Toronto was very much a continuation of patterns which were in place at least 100 years earlier, when the Huron and Seneca regarded the area as a pivotal "Carrying Place"(W1). Although the French had established a modest presence at Toronto in the early 1700s, competition with the British for control of the fur trade led to the foundation, in 1751, of Fort Rouillé (W2), on the shore of the lake, roughly three miles east of the Humber River. Fort Rouille was a small, wooden trading post built for the purpose of intercepting Indian traders on the Toronto Portage (via the Humber and Rouge Rivers) before they could cross the lake to trade with the English on the south shore of Lake Ontario at Fort Oswego (Brown 1983:7).

After a string of defeats at the hands of the British during the Seven Years War (1756-1763), the French burned and abandoned Fort Rouille in 1759 (Careless 1984:9).

Founding the Town of York

Immediately following British hegemony in the Canadas at the conclusion of the Seven Years War, settlement in the Toronto area was limited, although its potential to serve as an effective link in the transportation and communications network associated with the fur trade was widely recognized (Careless 1984:10). A substantial trading post established by Jean Baptiste Rosseau, at the mouth of the Humber, was a notable exception to this trend.

At the conclusion of the American War of Independence (1774-1783), however, the British were forced to recognize the emergence of a new political frontier, one which had to be maintained by a strong military presence. These new developments ultimately led, in 1793, to the founding of both the Town of York, on the west side of the outlet and associated wetlands of the Don River, and of a military establishment further to the west at the mouth of Garrison Creek (one of the numerous watercourses draining the area between the Don and the Humber). Fort York (W6) was intended to control entry to the town's harbour (Careless 1984:11; 19-21).

The Town of York itself formed a compact plot, within the area now bounded by Front, George, Duke and Berkeley Streets (Careless 1984:21). The Government Reserve comprised many acres in the

eastern section of the town and the very first parliament buildings for the colonial government of Upper Canada (E2) were located south of present day Front Street, west of Parliament Street, and were constructed between 1794 and 1797.

The Garrison, on the other hand, maintained control of those lands east of Garrison Creek, between the lakeshore and the present Queen and Peter Streets. After the destruction of most of Fort York and a portion of the Town of York during the War of 1812, the fort was rebuilt between 1813 and 1815 (Benn 1993:69-70). Shortly thereafter, plans were laid for improved defences including a new Fort (to complement the existing complex) to the southwest. In the 1830s, the plan for a New Fort (W3) was rendered on maps and in 1842 several structures were built within the palisades around three sides. All were encircled around a large parade square. Despite the opening of the New Fort however, Fort York continued to be an important part of military life in the city.

Early Industry on the Waterfront

While the growth and development of the civilian town continued throughout the early nineteenth century, expanding inland to the present Queen Street by the 1830s, with additional lots having been surveyed as far north as Bloor Street, use of the waterfront remained restricted to commercial and transportation functions. A public walk along York's waterfront, known as the Esplanade, was established by a private trust in 1818, however, this facility was never tangibly developed for pedestrian use (Careless 1984:94). Harbour facilities, such as commercial wharves and piers, were constructed at several locations to the east of John Street. By 1823, four wharves were present along the shoreline, increasing in number to seven by 1841 (Historica Research Limited 1989:51). West of John Street, the British military continued to dominate use of the waterfront, erecting the Navy, King's and Queen's Wharves (W8) as well as a Commissariat Wharf with a substantial complex of related storage buildings at the foot of John Street, possibly as early as 1800 (Brown Associates Limited 1988:2; Historica Research Limited 1989:50). In general, commercial and industrial development of Toronto's waterfront intensified into the second half of the nineteenth century. East of Yonge Street, a number of large factories were established, including the Gooderham and Worts distillery and its associated wharf east of Parliament Street (E3), and by 1842, in the central portion of the city, seven piers were illustrated along the Toronto shoreline. The entire waterfront area was dotted with small factories and a variety of local service industries (Figure 4).

Figure 4: The city in 1854 before railway building had made its mark on the waterfront (from Careless 1984:70).

The Railway Era

With the coming of the Northern, Great Western, and Grand Trunk railways to Toronto in the 1850s, the waterfront was radically altered, as trackways, terminals, freight stations, utilities and new wharves were erected. These developments also expanded westwards from the original core as the military relinquished its control of the Garrison Reserve west of Peter Street. In this way, the history of Toronto's central waterfront after this time is inextricably linked to the city's railway and industrial history. Between 1850 and 1870, Toronto formed the centre of operations for Canada's earliest railways, whose tracks skirted the southern edge of the city, following the shoreline (ASI 1996c).

The first railway, the Ontario, Simcoe and Huron Railway (renamed the Northern Railway in 1858) opened from Toronto to Aurora in May of 1853. The arrival of the Northern Railway was followed in 1855 by that of the Grand Trunk and the Great Western Railways. The Northern Railway occupied several terminals in Toronto before being absorbed into the Grand Trunk system in 1888 and the company developed a freight handling complex, located approximately 150 metres to the east of the Queen's Wharf (W8). These facilities, which served to integrate the new railways with the existing water transportation networks, were constructed on harbour lakefill undertaken after 1853. The *Northern* was thus the first railway company to engage in filling Toronto's Harbour, beginning a process that would continue until the 1920s (Historica Research 1983:7). By the 1880s, the Northern Railway had constructed four wharves along the edge of the track linking the Northern's wharves to the rest of its system.

The second railway to arrive in Toronto—the Grand Trunk—was to become the most important in the city. The railway entered Toronto from the east, along the lakeshore. The track terminated at the

Don River (due, in all likelihood, to difficulties in negotiating rail access to the harbour via the Esplanade), despite the fact that the company's initial city terminal was located at the Queen's Wharf (Historica Research 1983:7). These difficulties were eventually resolved, and the Grand Trunk obtained a 12 metre right-of-way within the public lands of the Esplanade. Despite its holdings in the vicinity of Queen's Wharf, the Grand Trunk did not initially recognize the continued importance of lake shipping in the transportation of freight. It quickly rectified this oversight, however, by building a dock, which included a grain elevator, and a yard area at the foot of Peter Street (Historica Research 1983:8; 1986:119). By the 1870s, the Grand Trunk had shifted the majority of its facilities to the vicinity of Union Station, leasing its Queen's Wharf terminal to the Toronto Grey and Bruce Railway (Historica Research 1983:8).

The third and final railway of the first era to enter Toronto was the Great Western, entering the city from the west along the lakeshore. The company erected a locomotive terminal and freight shed on the north side of Fort York (W5), before relocating its central facilities to east of Yonge Street, in the mid-1860s (Historica Research 1983:8). By the 1860s, when the railways had completed their first phases of construction, the lakefront in the central portion of the study area had been altered significantly. The majority of railway facilities were located between Fort York and John Street, on land which was relatively inexpensive compared to more desirable areas at the foot of Yonge Street. The most dramatic change of the period was the filling of the harbourfront from Bathurst Street to Parliament associated with the development of the Esplanade (between Spadina and the Don River) as the major rail corridor, despite the fact that it had originally been intended as a public thoroughfare. While the rail companies were insistent upon utilizing the Esplanade to reach the downtown core, and proposed several schemes by which this could be accomplished, much of the task was, in the end, carried out by the City (Historica Research 1989:55).

Late Nineteenth-century Waterfront Development

Commercial and industrial development of Toronto's waterfront intensified during the second half of the nineteenth century and the shoreline between Bathurst and Parliament Streets was altered through the filling of timber cribs constructed for the Esplanade, a right-of-way developed for use by the railways (Historica Research 1989:54) East of Spadina, the original shoreline appears to have been destroyed by levelling and filling operations carried out in the mid- to late nineteenth century.

The lakefilling operations carried out during this period generally used the "crib and fill" technique. Timber cribbing—the recommended widths of which were 15 to 20 feet, set in 11 feet of water, with an additional four feet remaining above the water line—were placed around the perimeter of the area to be filled. The fill used during this first phase of expansion included sewage, municipal waste, material from construction sites and material dredged from the harbour bottom. The latter type of fill may be expected to contain derelict boats, the remains of wharf structures and other marine material (Historica Research 1983; 1986). During this early period, the southern limits of lakefilling and wharf construction were defined by the Old Windmill Line, an arbitrary line, established in 1837, from the Gooderham windmill (E3), at the foot of Parliament Street, west to a prominent headland near the site of Fort Rouillé (*Brown Associates* 1988:4).

By 1865, all three railways possessed right-of-ways along the waterfront, and within a few years, the numerous tracks within the narrow area to the south of Front Street created an exceedingly busy corridor, which caused great inconvenience for harbour traffic. In addition, Canadian Pacific became a major transcontinental carrier in the 1880s and though its lines lay mostly in the northern part of the city, it quickly acquired access to the waterfront, building a variety of facilities including a roundhouse (C1) and associated sheds in the 1890s (Historica Research 1983:23-25).

The evolution of the city's shoreline continued at an even greater pace through the late nineteenth and early twentieth centuries, with the consolidation of the rail systems, and the growth of numerous industrial and commercial operations along the waterfront (Figure 5). In 1893, the area within which construction and filling was permitted in the harbour was extended to a "New Windmill Line." This would provide deep water piers in Toronto's harbour without the need for dredging, as the Great Lakes navigation system was moving to the use of boats with a draft deeper than 10 feet (Historica Research 1989:57).

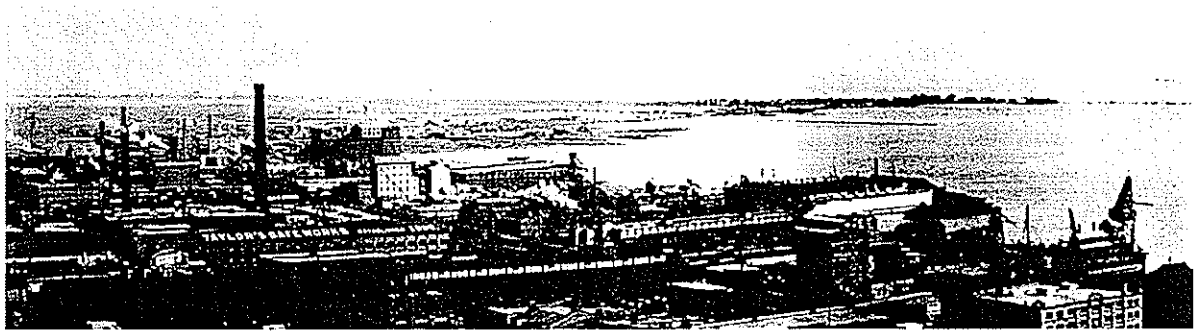


Figure 5: The central waterfront between the Don River and Jarvis Street, 1915 (from Stinson 1990:6)

Consequently, the City of Toronto constructed more timber and rock cribs in the water and placed municipal waste behind them. By the end of 1893, crib work was in place for the construction of Lake Street, and a large amount of fill was dumped at the foot of York Street. The fill was characterized as "all the ashes and other suitable material collected in the section bounded by College, Spadina, and Sherbourne Streets" (Historica Research 1994:58). The final section of cribbing was completed between Bay and Lorne Streets by 1899. The hull of a ship, the *Commodore Jarvis* (C2), was incorporated into the fill (ASI 1992).

Extending the Esplanade was not the only waterfront issue in the late nineteenth century. Ashbridge's Bay to the east, and the Toronto Island, became the foci of a number of development proposals between 1886 and 1909 (Reeves 1992:20). At the time of the English settlement of York, the area which is now called the Port Industrial District was largely a marshy bay at the foot of the Don River. Ashbridge's Bay, as it was known, was bounded on the west by a sandspit and on the south by the peninsula which was later breached to form the Toronto Islands. It is likely that the peninsula and marshes, which extended from the present Woodbine beach in the east to Gibralter Point in the west, were used by the area's aboriginal peoples for hunting and fishing, and settlers continued this tradition; there was a float over the Don River for light crossings (Stinson 1990: 8).

In 1884 the federal government constructed a breakwater along the western side of the sandspit creating a new shape to Toronto's inner harbour, and consolidating the north-south passage to the peninsula—known erroneously as Fisherman's Island. Many local industries were active in this area, and modifications were made to the harbour, the spit and the Don River in order to manage the noxious stew of the lake in the east Bayfront area.

The Twentieth Century: Land Raised and Reclaimed

In the east, land was reclaimed from the Great Marsh after 1912 using timber cribs filled with dredged sand from the bottom of the Lake where more depth was desirable. Over a number of decades the port lands took shape, until the sandspit and peninsula were no longer recognizable as features. Another project of land reclamation to affect the study area was begun in 1916 by the Toronto Harbour Commission. It involved the construction of a harbour head wall that extended between the Don River and Bay Street, and marked the new southerly extension of the Toronto shoreline approximately 335 metres south of Lake Street (Terraprobe 1995:3). The area behind (north of) the wall was filled in with sediments dredged from the harbour floor, and the project was completed in stages. The process would not have been completed until 1926, the period that the water lots west of Bay Street in front of the Harbour Square Wharf were filled (Historica Research 1989:63). It was during this time that Lakeshore Boulevard was created.

The final major project affecting the lakeshore (prior to the construction of the Gardiner Expressway and the Leslie spit in the 1960s) was the separation of grades for road and rail traffic. Along the railway corridor, at all crossings, pedestrian and carriage traffic was blocked for long periods by regular train movement and the switching of trains at freight sheds. Although several bridges were built to take traffic over the railway corridor, including the York Street bridge, these were only a temporary solution. In the early twentieth century, plans were developed to raise the railway corridor above the roads by placing it on top of an embankment. The design, adopted during the 1920s, incorporated an embankment created from fill that rose approximately 17 feet above the grade of the existing track (Historica Research 1989:64). Generally, the embankments were constructed from temporary wooden trestles with a rail line on top, and the fill was dumped from the railway cars (ASI 1992).

The grade separation was designed to take place between Bathurst Street and the Don River. While Spadina Avenue and Bathurst Street crossed the rail corridors by means of bridges, the major thoroughfares to the east utilized road subways. This design required a major campaign of filling along the waterfront, in order to raise the tracks approximately five metres above the existing grade. The harbour fill that was used to raise the elevation of the railway corridors was composed of material from borrow pits located in Scarborough, as well as dredged from the harbour (Historica Research 1989:64). Much of this work was undertaken by the Toronto Harbour Commission, which also extended the shoreline somewhat south of the area required by the railways, in order to provide additional, new industrial land. These costly and time-consuming operations were not completed until 1929 (Historica Research 1983:57-58; ASI 1992).

Following these major landscape alterations, Canadian National constructed its Spadina Yard, overlying the previous rail yards. Additional steam and water distribution lines and local stormwater catchbasins formed an elaborate collection of utilities on adjacent lands (Brown Associates 1988:9).

2.4 Conclusion

Thus the present shoreline of the harbour was achieved during the 1920s, pushing the active waterfront well to the south of the original circa 3000 B.C. shoreline. Concerted efforts to expand the lakefront area available for development, through both private and municipal lakefilling operations during the development of the transportation and commercial industries, has vastly altered the original shape of Toronto's waterfront. This process has created a succession of shorelines, each of which preserves the buried relics of a specific period of Toronto's precontact, military, commercial, industrial and transportation histories.

3.0 SITE INVENTORY

3.1 Introduction

Toronto's Central Waterfront has evolved and expanded with the city itself. As Section 2 outlined, much of the present land area is the result of human construction, including lakefill operations linked to industrial development and transportation. Between the 1830s and the 1930s the shoreline changed dramatically, and subsequent development has further altered the form and character of the landscape. As a result, many of the area's heritage resources—particularly those of an archaeological nature—lie buried in fill or encased in concrete. Nevertheless, recent excavations, site monitoring programs and heritage resource studies point to the presence of a variety of sites containing archaeological potential.

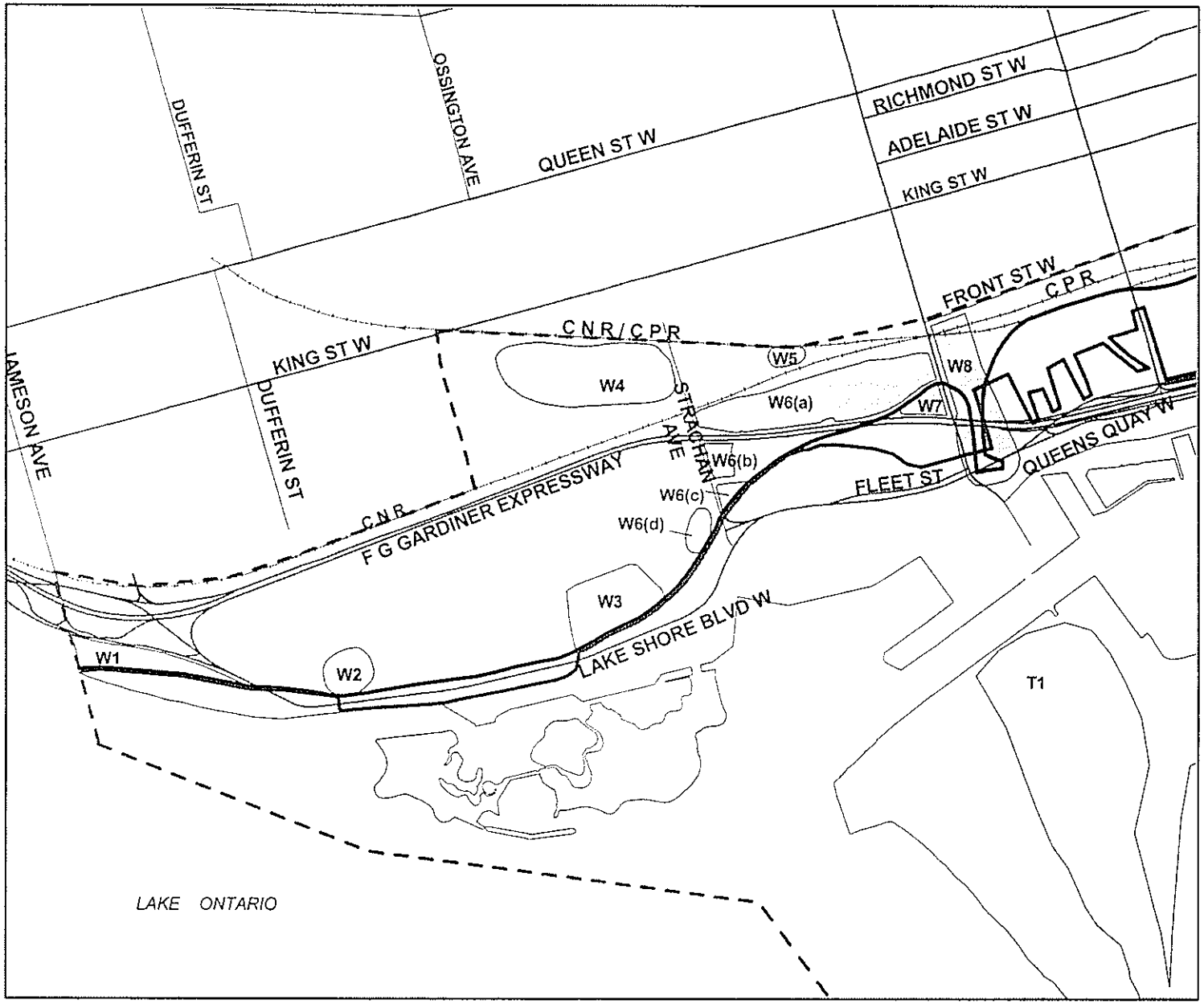
The following inventory is divided into geographic sections, with Sections 3.2, 3.3, 3.4 and 3.5 covering the western, central, eastern and islands portions of the study area respectively. Each entry includes a brief history of the identified feature or features, as well as a summary of related archaeological investigations to date. In all cases, the potential contribution of archaeological investigation to our understanding of the area's pre- and post-contact history will be indicated.

The site numbers correspond to those used on the large scale maps of the geographic portions of the study area. These maps also identify the various levels of archaeological potential found throughout the study area. Section 3.6 provides a discussion of these potential zones and their implications.

3.2 Toronto Waterfront: West

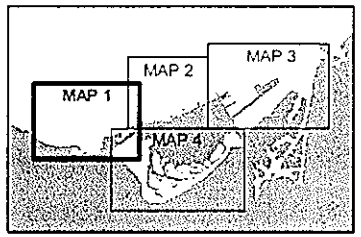
Over the course of time, the western portion of Toronto's waterfront has been altered by both environmental and human activities. Early mapping indicates that prior to human modifications, the position of the lakeshore varied from approximately 50 to 150 metres to the south of the present alignment of Front Street. Consequently, the original shoreline of Toronto Harbour lies buried beneath the present railway tracks in that portion of the study area west of Spadina. In most areas, evidence of pre-contact occupation would likely have been destroyed by a combination of rising water levels prior to circa 3000 B.C. and historic developments disturbing the original topography since then (ASI 1992; Historica Research Limited 1989). However, some areas of modest development near the original shoreline have been identified as having pre-contact potential and these, along with unexamined and known features associated with the early European period of military occupation and industrialization, have been numbered from W1 to W8.

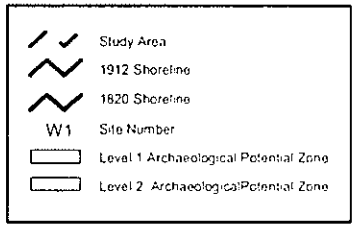
This section contains site identifications and historic detail on those properties within the portion of the study area bounded roughly by Jameson Avenue to the west and Spadina Avenue to the east (Figure 6).



CENTRAL WATERFRONT
ARCHAEOLOGICAL MASTER PLAN

Map 1
Western Portion





Map By
City of Toronto
Survey and Mapping Services
Technical Services
18 Dyas Road, 4th Floor
Toronto, Ontario M3B 1V5

Figure 6: The West Toronto Waterfront: Site Inventory

W1 Western Lakeshore Parcel

Located on the original pre-1820 shoreline, this parcel of land in the northern half of Marilyn Bell Park has both precontact and historic potential.

Potable water is arguably the single most important resource necessary for any extended human occupation or settlement, and is the most commonly used variable for predictive modelling of site location for the southern Ontario region. The Ministry of Culture Primer on Archaeology, Land Use Planning and Development in Ontario (1997:12-13) stipulates that undisturbed lands within 300 metres of a primary water source or 200 metres of a secondary water source, are considered to be of archaeological potential. Unlike other areas of the waterfront, where historic development activities have significantly disturbed the topography, this compact area has undergone comparatively modest change, with its southern border falling along the pre-nineteenth century shoreline (Figure 7).

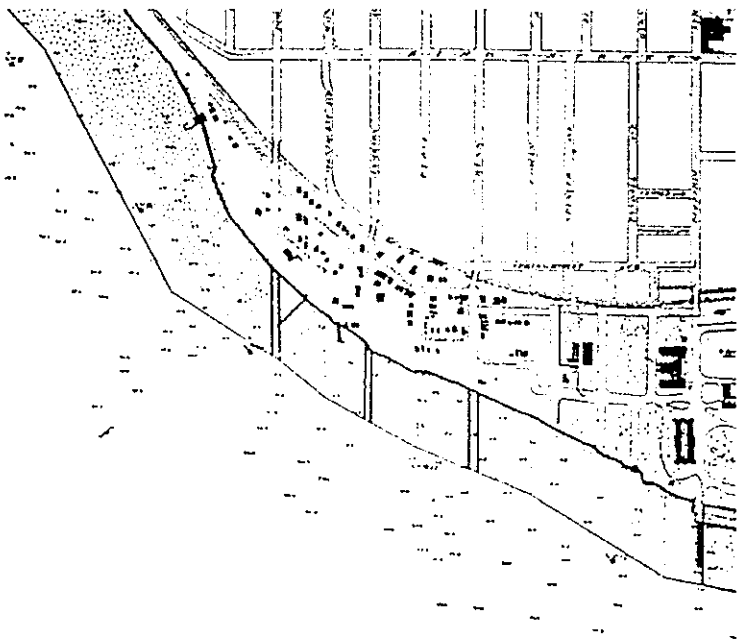


Figure 7: The Western Lakeshore Parcel (W1). From The Toronto Harbourfront Commissioners Waterfront Development (1912).

As Section 2.2 outlined, the early (pre-fill) lakeshore is believed to have stabilized circa 3000 B.C. Prior to this date, the shoreline lay further to the south. Although evidence of occupation earlier than this benchmark will have, in all likelihood, been destroyed by rising water levels, there is the potential for recovery of pre-contact material post-dating it.

In addition to the pre-contact potential of W1 there is also the possibility of recovering material remains of early Toronto cottage residences located on this site during the nineteenth and early twentieth centuries.

W2 Fort Rouillé

Summary History

Fort Rouillé was a small, wooden trading post built by the French in 1751, as an outstation to Fort Niagara. (Brown 1983: 7). It sat on the edge of a slight promontory overlooking the original Lake Ontario shoreline. The surrounding mixed deciduous forest was cleared for construction purposes

and to create an unobstructed view around the fort (Brown 1982:86). The French had established a trading post in the area decades earlier and the new fort, three miles east of the Humber river, was intended to strengthen the chain of forts protecting France's fledgling empire, and to facilitate increased trade. The entire site is estimated to have covered from 15 to 20 acres, though the outpost itself was quite small. An official report for 1754 tells that the garrison consisted of one officer, two sergeants, four soldiers and a storekeeper. Some labourers may also have lived in or near the site (Brown 1982: 10). By 1759, the number of soldiers had increased to 15, and a baker and blacksmith had also joined the garrison staff. After the fall of Fort Niagara on July 25, 1759, the French burnt and abandoned Fort Rouille, having destroyed any items of use (Brown 1982: 11).

The rough-sawn plank palisades were built in the French style of the time, on a square plan with pointed bastions projecting from each corner. They enclosed five buildings whose inward facing sides formed a small Place d'Armes (an area usually centrally located where troops were assembled for drill and inspection). None of the buildings were placed on stone foundations. Sills and floorboards were laid directly on the clay ground (Brown 1982:86). The narrow gate of the fort faced west and was flanked by the Guard House/Barracks and the Commandant's Quarters. Opposite to the gate was the store in which items were traded with local people. A building on the north side of the fort has been suggested as the blacksmith's house but no evidence was found to support this during a 1982 excavation. A building to the south is suggested to be a baker's house with an oven in or near the southeast bastion. To the north of the fort, protected by the bastions, were two to four structures (Brown 1982:86). A village is believed to have existed farther north, with a burial ground located north of the village.

Archaeological Potential

Fort Rouillé is located near the foot of present day Dufferin Street. A monument, sitting within the Place d'Armes and touching the southernmost structure marks the site. The actual boundaries of the fort have been determined through archaeological fieldwork (and they were found to correspond exactly with a land survey done by Augustus Jones two hundred years ago). Between 1982 and 1984 an archaeological excavation was conducted on the fort (Figure 8), adding to work that had already been done in 1980 on the area along the northern edge of the perimeter. Details of the distinctively French Canadian construction style of the site's buildings, as well as a discussion of some of the artifacts discovered in the subsurface layers can be found in Don Brown's excavation summary (Brown 1982:86-7). Work completed at that time added substantially to our understanding of the fort's form and functions—particularly the collection and comparison of historical documents, maps and archaeological reports. However, the entire site, including features to the north, has yet to be fully excavated.

Chief amongst those areas of interest includes the burial ground. (This cemetery should not be confused with the Fort York cemetery, originally located well to the north of this site but still within the grounds of the CNE). Brown makes reference to J. Ross Robertson's 1896 work, *Landmarks of Toronto*, in which Robertson relates the discovery in 1891 of a cemetery, some 100 yards (91 metres) north of the present monument during the course of excavations in Exhibition Park. But,

details concerning the relocation of these graves, their number, and a description of the remains are unknown (Brown: 1982: 20). Nevertheless, if burials related to the French fort are still extant within the C.N.E. grounds in this area, they would represent some of the earliest European gravesites in the region.

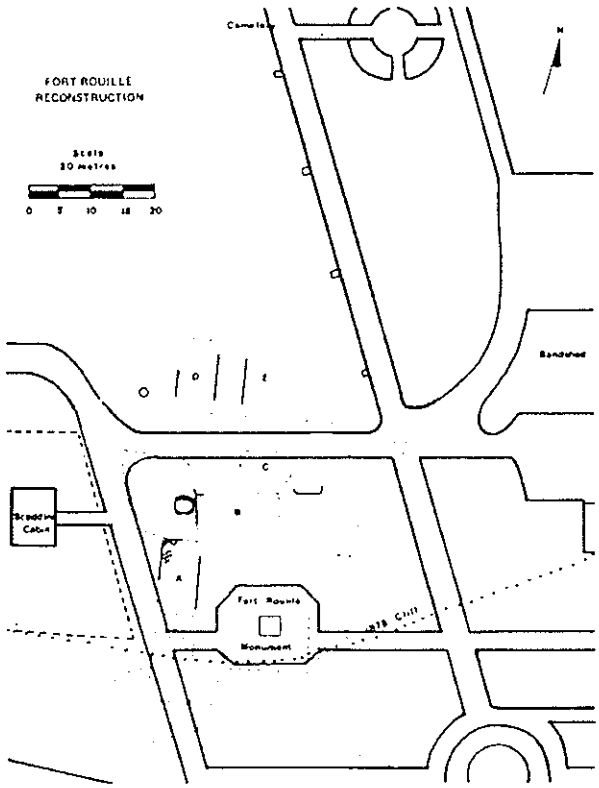


Figure 8: Fort Rouillé (W2). From Brown (1982: Figure 22)

Though it is not currently known how many of the French inhabitants and their allies were ever buried on the site, or how many graves remain to be uncovered, if any, Brown concludes that it should not be assumed that all of the remains were uncovered in 1891. No excavations for the cemetery as a whole were ever made, though the Toronto Historical Board was made aware of the location should work crews in the future excavate the area. It should be noted, however, that 1955 landfilling operations and the building of the Geodesic Dome in the early 1970s would have covered any evidence, making remote sensing survey impossible (Brown 1982: 20).

In regard to other site components, most of the store has probably been destroyed by activities associated with the CNE landscaping, including the construction of a storm drain, the growth of a massive chestnut tree and earlier archaeological investigations conducted in the 1960s. However, part of the Commandant's Quarters and the gate still lie under the gardens and sidewalk, the northeast bastions are still potentially recoverable under the baseline sidewalk and two or possibly three outbuildings lie under and north of this same sidewalk (Brown 1982:87).

It should be noted that the south half of the fort, including two bastions, the southern portion of the store, possibly the Commandant's House and all of the building tentatively called the Baker's House were obliterated by cliff erosion and stabilization efforts made in the 1870s. Approximately 20% of the fort and outlying buildings has been exposed, 45% is thought to have been destroyed over the years and 30% is still potentially recoverable—although much is lying under modern sidewalks and the monument platform (Brown 1982:87).

Future work must keep in mind Donald Brown's assessment that such labour will likely result in the recovery of few artifacts, less than spectacular features, stains and remnants. Yet, as he reminds us, the existence of those features already recovered demonstrate "that traces of Toronto's oldest European inhabitants and its oldest Aboriginal inhabitants are still to be found and should be protected from all excavations on the site deeper than one metre" (Brown 1982:88).

W3 The New Fort

Summary History

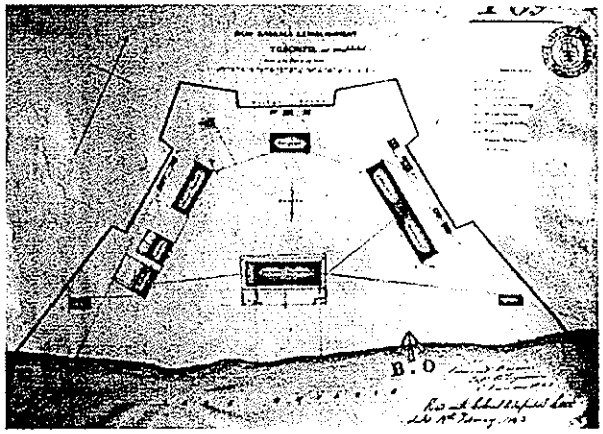


Figure 9: The New Fort (W3) as built by 1842 (from Benn 1983:43).

After the destruction of most of Fort York and some of the adjacent town of York in April 1813, plans were laid for improved defences. Several layouts for a new fort, to be situated due east of the Fort Rouillé ruins (W2) and west southwest of the Old Fort (W6), were put forward. In 1841, the new barracks establishment, also known as the New Fort to distinguish it from Fort York (which had been rebuilt) was completed, and it became the principal barracks for the Toronto Garrison at that time. Intended to house 300 men, the more substantial buildings were constructed of limestone and centred around a parade square (Figure 9). By 1842, several structures were built within the palisades around three sides, including an officer's barracks, a soldiers barracks, an armourer's shop, a canteen, a wash house, cleaning sheds, a hospital and a dead house. The landward side was enclosed by an 8 foot high cedar picket, with a wrought iron entrance gate placed on the east side where the road leading to Fort York was situated. The officers' barracks of the New Fort were later incorporated into what is now the Toronto Historical Board's Marine Museum. (ASI 1995a:24).

In 1861, work began on a northern annex to the New Fort for stabling and barracks for the Royal Artillery. Photographs in the Fort York library and military correspondence relating to their construction suggest that they were primarily wooden buildings necessary for a mounted artillery unit, including three ranges of stabling, a shoeing shed, wheeler and collar makers' shops and harness rooms. The larger stable with attached harness room was probably located at the south end of the annex, the second stable/harness room was along the eastern perimeter and the gun shed was probably the narrower building on the north side of the annex perimeter. The farrier, wheelwright and harness maker would have been located in the smaller service buildings along the east and north sides. (ASI 1995a:26).

The new barracks hut contained one large room for 60 men, four rooms for sergeants, a canteen and a hospital. A second hut for 80 men and four sergeants was authorized for immediate construction in 1866 in anticipation of the arrival of members of the 4th Battalion of the Royal Artillery. These barracks were probably located on the west side of the New Fort annex. An 1867 plan illustrated the annex as an enclosed rectangular area with buildings arranged around the perimeter connected by plank footpaths (ASI 1995a:24, 26).

The New Fort was officially transferred to the government of Canada on July 15, 1870, however, after the departure of the British troops, the Department of Militia and Defence found little

immediate use for the buildings. In 1874, the barracks and stables were briefly occupied by a contingent of men recruited for the North West Mounted Police (Sendzikas 1990:40, 46). However, it was not until 1883 that a more permanent solution was worked out with regards to the empty garrison. At that time, a new infantry and cavalry school was proposed and new occupants came in April of 1884. Among the occupants of the New Fort were the Royal Artillery, The Royal Canadian Regiment and the Royal Canadian Dragoons, who were established at Toronto in 1893, the year the New Fort was christened the Stanley Barracks (Sendzikas 1990: 62, 70-71; (ASI 1995a:26).

In 1878, the City of Toronto entered into a lease for 52 acres in the western portion of the Garrison Reserve, and made this the site of their first annual Toronto Exhibition held in 1879. In order to expand the scope of the exhibition, now known as the Canadian National Exhibition, the City, in 1903, purchased the lands and buildings on the Garrison from the Department of Militia and Defence, including the Stanley Barracks and Fort York (Sendzikas 1990:77).

During the First and Second World Wars, the area reverted back to its military origins when the Exhibition grounds were used by the Canadian military as a winter training camp, a mobilization centre where troops were assembled before they went overseas, an internment camp for enemy aliens and finally a demobilization centre for returning troops (Sendzikas 1990:84, 90).

Archaeological Potential

The first edition of Goad's Insurance Plan of the City of Toronto produced in 1884 indicated that none of the buildings in the annex had been removed since 1867 (Goad 1884:Plate 20). However, the fourth revised plan of 1903 showed that the wooden barracks along the west side had been demolished, along with one of the northern service buildings. This coincided with the sale of the land to the City of Toronto, which allowed the CNE association to construct new buildings and change the physical layout of the grounds substantially between 1902 and 1912 (Lorimer 1973:17). A streetcar loop was constructed on the grounds and by 1910 all of the military buildings north of the large stable range had been removed (ASI 1995a:27).

Subsequent alterations to the property were made during the First and Second World Wars while, in the inter-war period, the CNE implemented plans for a new program of buildings, a roadway and an entrance gate at the eastern end. The military occupied the "Exhibition Camp" until June 1, 1946, after which time the new and old military buildings were converted into emergency housing. Between 1951 and 1953 all of the wooden buildings making up Stanley Barracks as well as all of the limestone buildings, except the Officers' barracks (later occupied by the Marine museum), were demolished (ASI 1995a:29). Figure 10 provides a summary of the various structures built within the New Fort over the century of its use.

Thus, owing to large amounts of infrastructure, development and demolition in the area, features of the New Fort would have to have survived numerous land use changes. However, the success of Historic Horizon Inc.'s (1995) campaign of bore hole testing, which located several New Fort structures to the south of Princes' Boulevard, and the field investigations completed by Archaeological Services Inc. from 1995 to 1996 (ASI 1995a, 1998a), which revealed sub-surface

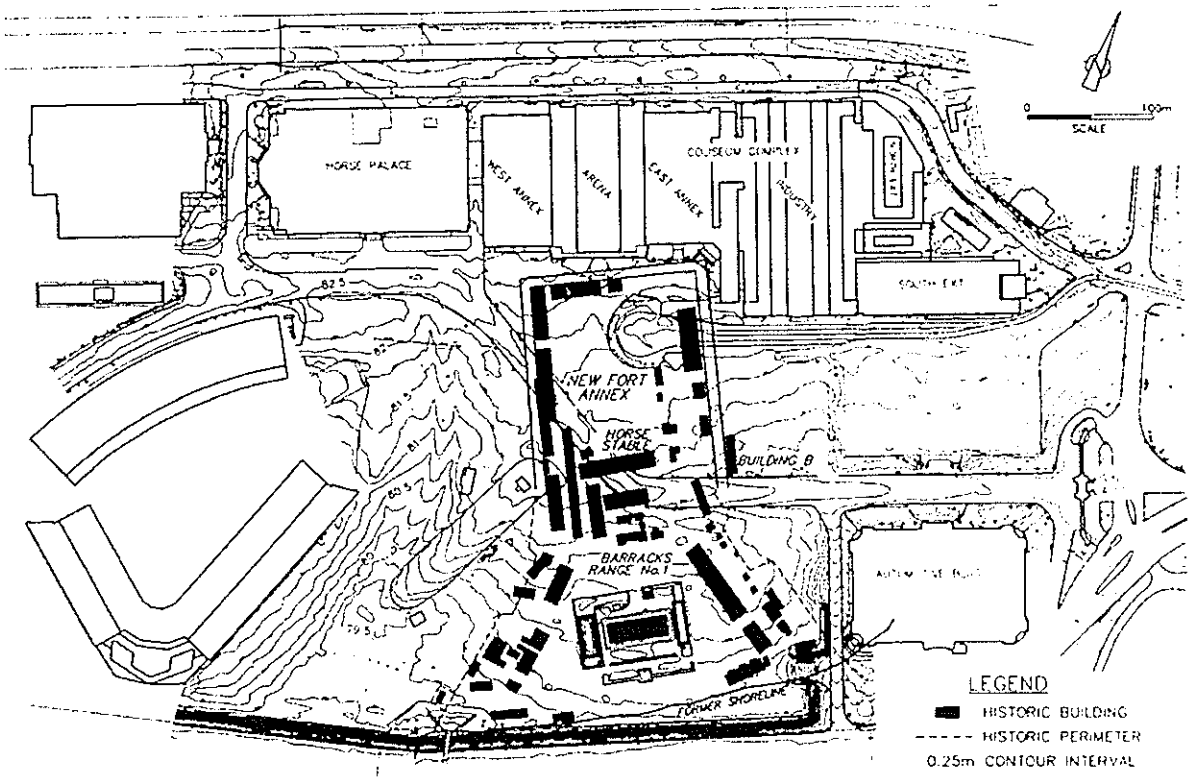


Figure 10: Composite map of the of the New Fort (W3), circa 1840-1950 within the context of the CNE grounds (from ASI 1995a).

remnants associated with the New Fort and its stable annex, indicate that there is still archaeological potential in the area.

W4 Central Prison

Summary History

Construction for Toronto's Central Prison (on Strachan Avenue south of King Street, between two rail corridors north of the New Fort) began in 1871 under the supervision of official government architect Kivas Tully. Intended to serve the reform impulses of the period (led in part by Attorney General Langmuir) the new institution was a three-storey building consisting of a main section one hundred feet wide, with wings on each side and large workshops in the rear of each wing (Figure 11). There were cells for 336 prisoners (Oliver 1998:406). The prison was designed as an industrial facility and the first industry to be served was the Canada Car Company, which manufactured

railway cars. Shortly after the prison's opening, workshops were completed and machinery was installed to Canada Car specifications. This central, if not exclusive, place of prison labour followed the correctional ethos of the time. Hard labour, mixed with military style discipline, was thought to provide both punishment and training, while instilling a healthy work ethic. Also, industrial work raised money for the prison (Oliver 1998:407).

Most of the men hired as guards had previous police or military training, and the practice of arming guards with rifles or handguns strengthened the prison's military appearance. (Oliver 1998:406). By the 1880s, Central Prison was known for its brutality. Its first warden, an alcoholic ex-military officer and chief of the Toronto police, was accused of sanctioning extreme beatings, withholding medical treatment, and supporting undocumented "nocturnal" burials. Successive Wardens adopted a less disciplinarian approach but the guards remained brutal.

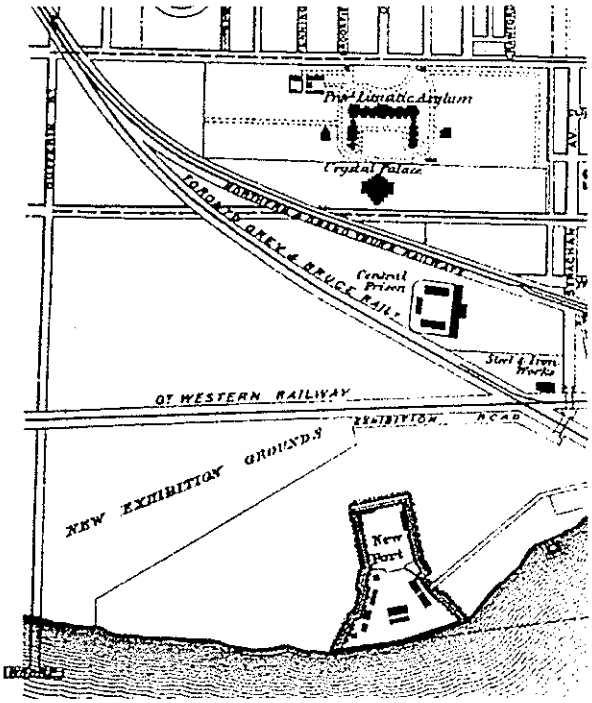


Figure 11: The Central Prison (W4) as depicted in the 1878 *Illustrated Historical Atlas of York County*.

In 1878, the prison was connected to the Toronto water supply and it had electricity by 1883. Prison labour built many of the surrounding streets and a commercially operated brickyard, and prisoners developed farms and gardens, following the example of the Provincial Lunatic Asylum. However, the operation of Toronto's Central Prison was short-lived. Constantly beset with financial and labour problems —as well as by rumours of gross brutality—its closure in 1915 signaled the failure of the institution to achieve any of its objectives (Oliver 1998:407).

For a brief period the buildings remained closed and vacant, but between 1915 and 1919, the site was taken over by the military as a storage facility, after which time it was demolished.

Archaeological Potential

Most of the property is currently used for industrial purposes, although part of the prison is still intact and visible, including the chapel and part of a wall of one of the workshops. Subsurface features likely to be encountered include the original foundation of the entire prison complex, as well as human remains associated with prison burials. Further historic research may help to determine the location of these grave sites, though precise co-ordinates within the yard walls of nineteenth century prisons are often undocumented—particularly in this case, when the deaths themselves may have gone unrecorded.

The last major works project undertaken at the prison was a huge reservoir for 400,000 gallons of water. Built in 1898 of prison-made bricks, the reservoir was used until 1936 and is assumed to exist today. Finally, the prison lands were heavily industrialized after the turn of the century, with parcels owned by the Inglis and Massey companies to name a few. Industrial remains constitute other potential archaeological resources on this site.

It should also be noted that in the years prior to prison construction, the grounds were within the battlefield area surrounding Fort York (W6), with burials potentially extant from the Garrison period.

W5 Great Western Railway Engine House and Turntable

While much of the Garrison Reserve excluding Fort York had been subdivided and sold by the military by 1836, intensive development of the area around the fort did not begin until the arrival of the railways in the 1850s. As Section 2.3 outlines, the construction of railway lines and associated buildings resulted in substantial alterations throughout the waterfront area.

The Great Western Railway was the third rail company to enter the Toronto market. The GWR's line into the city was completed in 1855, originally operating as a branch line from Hamilton. The line entered from the west along the lakeshore and passenger facilities were shared with the Grand Trunk in Union Station. The Great Western's yards were the furthest west of all three companies. A locomotive terminal and freight shed were erected on the north side of Fort York (Figure 12). The engine house and turntable were at the western end of the yard on lands encompassed by W5.

It is entirely possible that archaeological remnants of these facilities have survived.

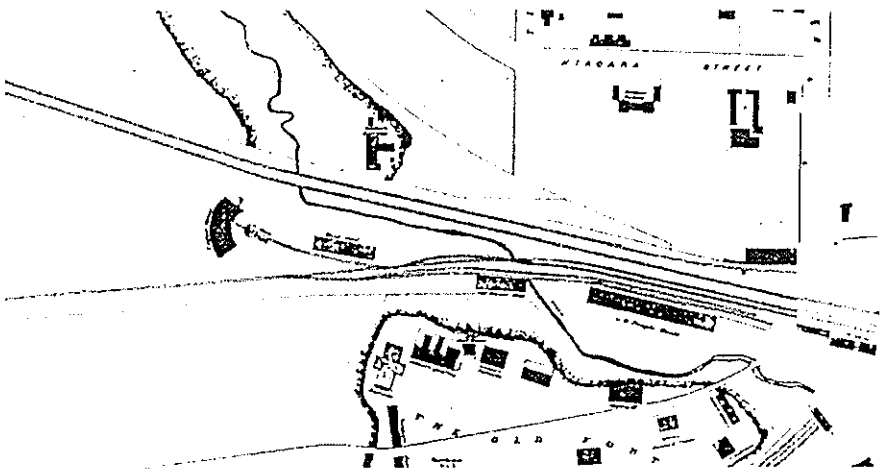


Figure 12: The Great Western Railway Terminal (W5) in 1858 (City of Toronto Archives)

W6 Old Fort York

The present site of Fort York constitutes one of the most identifiable and significant heritage resources in the City of Toronto, forming a valuable cultural landscape.

Summary History

To place Fort York within its historical context, it is necessary to understand the importance of its location vis a vis the original shoreline of Lake Ontario in the 18th century. At that time, the fort was right at the water's edge, on land obtained by the British government during the first Toronto Purchase, a treaty negotiated in 1787 with the Mississauga people to facilitate permanent European settlement. However, twentieth century lakefilling activities in the harbour have extended the shoreline several hundred metres into Lake Ontario, placing Fort York today in a much-changed landscape.

The fort was originally placed within the Garrison Reserve, established in 1793 when Lieutenant-Governor Simcoe founded both the Town of York and the military base of Fort York. The location of York from the outset was determined by its proposed function as the military and naval arsenal of the new province of Upper Canada. Governor Simcoe believed that a war with the United States was both inevitable and imminent (Firth 1962:xli), and in addition to its position on the overland route to Lake Huron and the northwest fur trade, York's excellent harbour and its defensibility became important considerations. The fort was necessary in order to guard what was then the only entrance into Toronto Harbour.

The Queen's Rangers were brought to the site in July of 1793 to begin the process of clearing the land and building a garrison (Firth 1962:xxxiii). The first log military barracks, or "Hutt" as they were termed, were built on the west side of Garrison Creek, and the mouth of the Creek was widened to accommodate bateaux and a wharf. An early view of the Garrison, illustrated by Elizabeth Simcoe in 1796, depicted the steeply sloping shore of the harbour entry (Careless 1984:20). The creek has since been filled in, and the Bathurst Street right-of-way immediately east of Fort York effectively extends where the creek once flowed (ASI 1992:8).

Simcoe's plans for the fortification of York were never fully approved by the Governor in Chief, Lord Dorchester, and little more could be accomplished by the time Simcoe returned to England in 1796. In that year, the Queen's Rangers were sent to other posts, and the new administrator, Peter Russell, found it difficult to continue the tasks of surveying, transporting provisions and building with a reduced garrison at York (Firth 1962:xlii). The Rangers returned in 1797 and it became necessary to construct additional barracks. Russell also ordered that a blockhouse be built on the east side of Garrison Creek which meant that the fortifications at York spanned both sides of the creek (see W8). This blockhouse has been identified as a possible archaeological feature (Brown 1986:23-24; ASI 1992).

The log buildings constructed in 1793 were never meant to be permanent structures, and in 1802 a report on the state of public works in Upper Canada noted that "the Old Hutts on the West Side of the Creek [were] condemned, and ordered to be pulled down" (Firth 1962:72). The report also noted

that seven officers' buildings, two hospital buildings, one bakehouse, one canteen, eight barracks, one guardhouse, one magazine, one carriage and engine shed, one provision storehouse and the Indian and Commissary's store were present at the military post at York (Firth 1962:71-72). The official residence of the Lieutenant-Governor of Upper Canada, known as Government House, was built on the west side of Garrison Creek, on the site of present-day Fort York (Benn 1984:10).

It has been suggested that the best record of the garrison's layout can be found in three sketches by Lt. Sempronius Stretton (Firth 1962:xliii). The *View of the Garrison at Toronto or York Upper Canada, March 11, 1805* shows, among other features, the blockhouse and numerous barracks within a palisade on the east side of the creek (Figure 13). In addition, there was a building in the Garrison Creek ravine just west of the palisade that would also lie near the eastern border of section W6(a). This has been identified as a 16-man barracks (Brown 1986:23), and may still be extant, buried under the fill that constitutes the Bathurst Street right-of-way (ASI 1992).

Today's west wall, moat and circular battery were built in 1811 and in 1812, when Simcoe's plan to turn York into a naval establishment was revived by Sir Isaac Brock (Firth 1962:xliv). The site of present day Fort York did not assume its familiar shape until after the makeshift garrison on the east side of Garrison Creek was captured by the Americans during the War of 1812. York in fact was occupied by the American army between April 27 and May 1, 1813. In August of that same year the Americans burnt the military establishment, including Government House. The current fort was constructed between late August 1813 and 1815.

Consideration of the nineteenth century military use of this portion of the original shoreline must also take into account three separate defensive works, often referred to collectively as the Western Battery (ASI 1995a:3). Several maps drafted during the War of 1812 illustrate the Western Battery of the fort east of a stream, at the edge of a steep bank on the lakeshore. It was one of several batteries positioned against vessels entering the harbour. The first western battery was in place prior to the Battle of York in April of 1813 but it was destroyed when a gunpowder magazine exploded. The second Western Battery was rebuilt at or near the site of the old one by November of that year, while the third and final one was erected in the late 1860s. (Benn 1993:50, 54, 116).

Finally, on the *Plan of the Town and Harbour of York* drawn by George Williams, and dated July 27, 1814 two small buildings on the east side of Garrison Creek are labelled "small huts, occupied by Artillerymen and Artificers," and a third building is labelled "Bakehouse". These buildings, along with a blockhouse depicted on an 1813 map, have also been identified as having archaeological potential (see W8) (Brown 1986:23; ASI 1992:21).

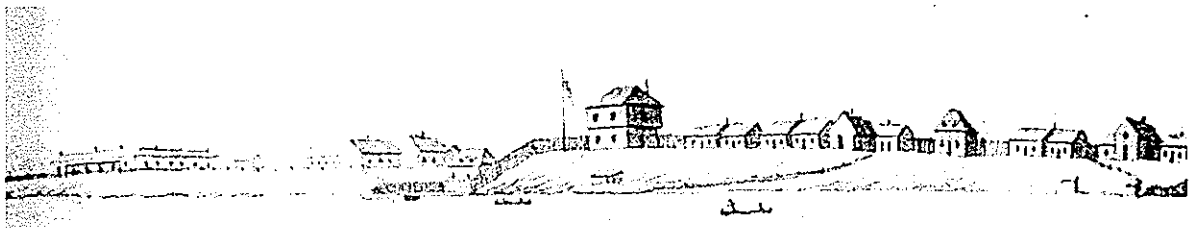


Figure 13: Fort York (W6[a]) in 1805. The structure on the left is Government House (the site of the 1793 fort). The few buildings to its right also likely date to 1793-1794. The depression in the approximate centre of the picture is the Garrison Creek valley. To its right is the main garrison comprising the 1797 blockhouse and palisades (from Benn 1983:43.)

While much of the Garrison Reserve had been subdivided and sold by the military by 1836, intensive development of the area did not begin until the arrival of the railways in the 1850s.

Archaeological Potential

Areas of archaeological potential within site W6 have been sub-divided into four sections, lettered a, b, c and d (note, some features related to Fort York are also present in site W8, The Queen's Wharf and site W4, Central Prison). Each portion comprises a collection of pre-contact and historic attributes. These can be briefly summarized as the following:

Representing the main body of the fort complex, **W6(a)** has been the most studied and well-documented portion of the site. However, a number of features depicted in historic mapping and/or described in communications from the period have yet to be uncovered, including the barracks near Bathurst Street. It should also be noted that land development in the early part of the twentieth century (largely associated with slaughterhouses and the meat-packing industry) created significant disturbance to the eastern edge of W6(a). Thus, material remains will likely be recovered from both historic periods. In 1903, Park-Blackwell Company is known to have demolished the fort's guardhouse, destroyed the southeast bastion and cut down the eastern rampart. In the process, workers also exposed two graves believed to be those of War of 1812 soldiers (Benn 1993:145). The presence of those graves suggests that additional human remains might be recovered from this area, as well as other evidence of military occupation. In particular, some of the dead from the battle of York were buried individually or in small groups along the field of action (from roughly Dowling Avenue in Parkdale to Fort York) and battle debris may also be found at various key battle points. Additional evidence may also be found at the location of a small unarmed earthwork, which was located approximately where Fort York Armouries now stand (assuming it was not located within the current armoury site) (Benn 1993: 62, 50).

W6(b) and **W6(c)** are two areas with similar attributes. The likelihood of recovering material remains from the early York garrison can be inferred from historic mapping and communications of the period. In addition, due to the absence of extensive industrial development on these land parcels over time, and their proximity to the original shoreline, they also have precontact potential.

W6(d) is the conjectural location of the second western battery associated with Fort York. Field investigations to date have yet to reveal the location of this important feature (or any of the other western batteries) though W6(d) is believed to be a likely location for recovery given the narrowing possibilities afforded by previous attempts.

Historic research completed by Historic Horizon Inc. (1995) and ASI (1995a) during the construction of the National Trade Centre on the CNE Grounds revealed that the second battery stood "six hundred yards westward of the present [1813] Garrison," and consisted of a ditch and banquette "enclosed by a cedar Palisade of 10 feet high, so placed as to form loop holes for the infantry to fire through." In addition, a musket proof loop-holed guard house for 40 men was constructed at the northwest angle of the battery (Figure 14).

The second battery appears on numerous maps following the War of 1812, although by March of 1825, the block (or guard) house was reported to be vacant. Nevertheless, the battery earthwork remained a feature in the landscape until land development obscured its location in subsequent years. Thus, subsequent utilization of this portion of the waterfront must also be considered in any attempt to assess the potential integrity of any features related to any of the three western batteries (ASI 1995a:3).

W7 Grand Trunk Railway Roundhouse

While much of the Garrison Reserve, excluding Fort York, had been subdivided and sold by the military by 1836, intensive development of the area around the fort did not begin until the arrival of the railways in the 1850s. As Section 2.2 outlines, the construction of railway lines and associated buildings entailed substantial alterations throughout the waterfront area. The Grand Trunk Railway (later bought up by Canadian Pacific) was the second rail company to enter the Toronto market.

After acquiring the Toronto and Guelph Railway (who were building a line westward from Toronto) the Grand Trunk Railway constructed an engine house with turntable, freight house, smithy, temporary shed, pumping house, carriage house and shed, and a temporary passenger station directly south of the fort on lakefill (Historic Horizon Inc. 1994:6). These facilities (Figure 15) were intended to help Grand Trunk to compete with the Great Western's traffic to the American mid-west,

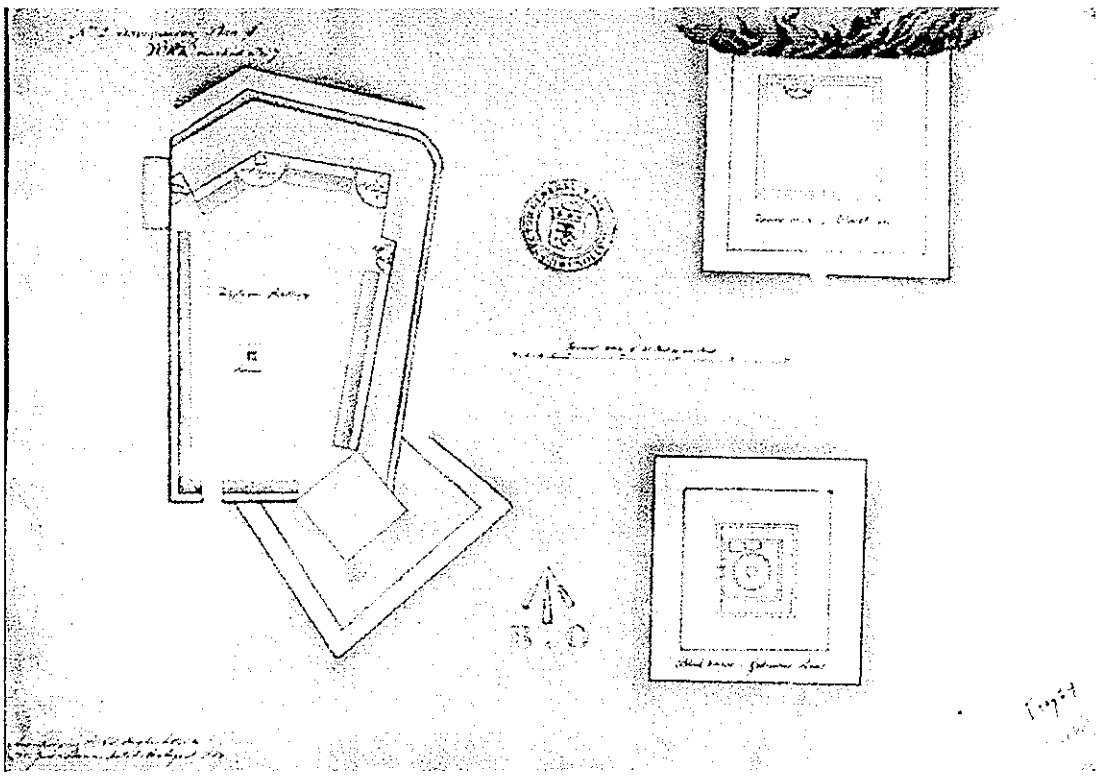


Figure 14: An 1814 plan of various military features. Left: the Western Battery (W6[d]). Upper right: the Ravine Blockhouse (see W8). Lower right: the Gibraltar Point Blockhouse (from Benn 1983:30).

though in 1859 the Grand Trunk re-laid its track from south of Fort York to a new alignment north of the Fort and parallel to the Northern railway lines (Historica Research Limited 1983:7-8).

Railway land use continued into the twentieth century, although the configuration of buildings changed periodically depending on the railway company involved.

Currently, planning initiatives for a new right of way crossing this portion of the study area (Fort York Boulevard) have included a preliminary archaeological assessment. It has been determined that the buried remains of the Grand Trunk roundhouse will likely be impacted by new developments, and bore hole testing in the area will be carried out by ASI. The new road will require re-grading and landscaping which, depending upon the depth of excavation, may reveal nineteenth-century features associated with the wharves and the railway, as well as the ramparts of Old Fort York.

Also related to this land parcel is the land reclamation which occurred south of Fort York, in which a meat packing plant was built at the east end of the fort around 1900. This entailed the demolition of a fort guardhouse, and the destruction of a portion of the southeast bastion and the eastern rampart at which time the work exposed graves believed to be those of War of 1812 soldiers. It was reported that the human remains were carted away with the construction debris (Benn 1993:145). Thus, any excavations in this areas must take into account the possibility of further burial sites.

Several buildings associated with this slaughterhouse business were removed in 1934 during the restoration of Fort York (Historic Horizon 1995:7).

W8 Queen's Wharf

The earliest structures known in site W8 all relate to the military use of the waterfront, and may be characterized as features within the military complex of Fort York (see historical summary for W6). Several such structures, which may survive as archaeological resources, have been identified in and around the historic Queen's Wharf area (Figure 15). These were identified on the basis of various period maps, Stretton's sketches, and a consideration of how the area was altered during the post-1856 railway construction (Brown 1986; ASI 1992:11).

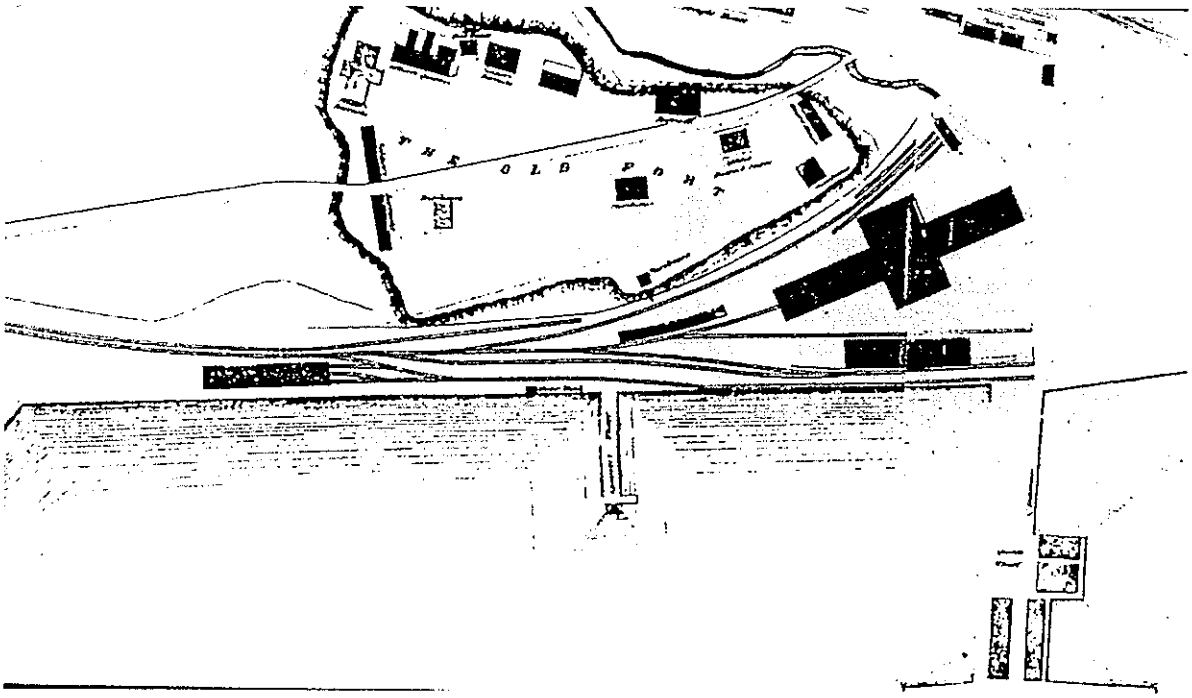


Figure 15: Plan of the Grand Trunk Railway (W7) and Queen's Wharf (W8) (City of Toronto Archives).

It has been suggested that the best record of the garrison's layout can be found in three sketches by Lt. Sempronius Stretton (Firth 1962:xliii). *The View of the Garrison at Toronto or York Upper Canada ... March 11, 1805* shows, among other features, the ravine blockhouse (Figure 14) and numerous barracks within a palisade on the east side of the Garrison creek, which generally follows the present day Bathurst Street right-of-way. Also shown on the *Plan of the Town and Harbour of York* drawn by George Williams, and dated July 27, 1813 are two small buildings on the east side of Garrison Creek which are labelled "small huts, occupied by Artillerymen and Artificers," and a third building labelled "Bakehouse". These buildings, along with a blockhouse depicted on an 1813 map, have also been identified as having archaeological potential in this area (Brown 1986:23).

Following Brown, a 1992 ASI report inventoried the above features as follows:

Blockhouse	
Date:	circa 1797
Description:	Part of a complex of structures representing the second phase of development at Fort York, on the east side of Garrison Creek along the original shoreline. The 1797 blockhouse provided accommodation for 48 men.
Status:	While possibly truncated by post-1856 railway construction, foundations may survive relatively intact. Area currently buried by fill.

Bakehouse

Date:	circa 1813 - circa 1835
Description:	Part of the second phase of construction of Fort York, the location and function of this building are identified on maps from 1813 to 1835. As a bakehouse is listed among the fort's buildings as early as 1802, however, the structure may be somewhat earlier in date. The building may not have been destroyed by the Americans during their 1813 attack on the fort since the structure lay outside the garrison palisades. By 1834, the building functioned as a temporary "Band Master's Quarters", but was apparently removed during the following year.
Status:	Road construction and utility lines have probably destroyed the remains of the building, however, some traces may be preserved under the road bed of the Bathurst Street ramp.

Buildings for Artillerymen and Artificers

Date:	circa 1813
Description:	These two poorly documented structures form part of the second phase of occupation of the fort, on the east side of Garrison Creek. Available maps indicate that the buildings were "huts for Artillerymen and Artificers", within the study area
Status:	Buried under active rail corridor.

Ravine Structure

Date:	pre-1803
Description:	In the ravine on the east side of Garrison Creek, is a frame structure identified as a 16 man barracks.
Status:	The remains of this building are probably relatively undisturbed, lying under 1850s landfill (ASI 1992:21-22)

In addition, it should be noted that after a second period of land reclamation south of Fort York, a meat packing plant was built at the east end of the fort around 1900. This entailed the demolition of a fort guardhouse, and the destruction of a portion of the southeast bastion and the eastern rampart (Benn 1993:145). This work exposed graves believed to be those of War of 1812 soldiers, and it was reported that the human remains were carted away with the construction debris (Benn 1993:145). Thus any excavations undertaken in and around the Bathurst Street right-of-way must take into account the possibility of similar discoveries.

In comparison to the waterfront lands in the central portion of the study area, commercial activity in the west was relatively slow to develop, despite the fact that the military had begun relinquishing its hold on the Garrison Reserve in the 1830s. The Queen's Wharf (1833 - circa 1918), however, was an important facility in the area, serving both commercial and military interests.

The Queen's Wharf was first constructed in 1833, on the eastern side of Garrison Creek's outlet, at the mouth of Toronto Harbour. A smaller wharf on the site was in use from circa 1800 to circa 1813. In addition to functioning as an important military and commercial facility, the wharf was also intended to reduce the silting which plagued Toronto's ports. The wharf was lengthened, in 1837, and was also further widened, during the late 1850s and early 1860s, in an effort to rebuild its decaying facilities (Brown 1986:25; Careless 1984:86).

Shipping activities were confined to the eastern and southern sides of the wharf while silt and sewage discharge, from the now channelled Garrison Creek, were allowed to accumulate along the west side. The east side of the wharf was filled in 1890 by the Grand Trunk Railway (Historica

Research 1983). A further phase of filling occurred in 1913 which extended the shoreline to the immediate west of the wharf. Lakefilling continued throughout the First World War, extending the shoreline as far south as Lakeshore Boulevard, and rendering the Queen's Wharf obsolete as a shipping facility.

Brown has identified the Queen's Wharf as a significant heritage resource (1986:25). Specifically, he states that:

> the edges of the wharf, especially on the north end closest to the shore are probable areas for the accumulation of damaged and discarded goods handled on the wharf. The west side is particularly important. Because this area was allowed to silt-in, it acted as a natural trap for all forms of artifacts from 1833-1890. This wharf was both an important military and commercial structure. A wide cross-section of well preserved mid-nineteenth century items relating to the early days of the City of Toronto can be expected to be recovered here.
>
> The site is currently covered with road and rail routes, an abandoned industrial building, and a vacant lot used for parking. Although the wharf was one of many to be built along the shoreline it was the latest and largest of all the military-built wharves. It has both naval and industrial significance and is one of the few wharves left along the original shoreline to be adequately documented as a feature in the landscape.

3.3 Toronto Waterfront: Central

As section 2.2 outlined, the central portion of the study area (Figure 16) is one in which massive landscape changes have occurred, with the most dramatic changes accompanying the development of railways and industry in the mid- to late nineteenth century, when much effort was made to expand the Toronto shoreline to accommodate new infrastructures. This process vastly altered the original shape of Toronto's waterfront and created a succession of shorelines, each of which preserves the buried relics of a specific period of Toronto's history.

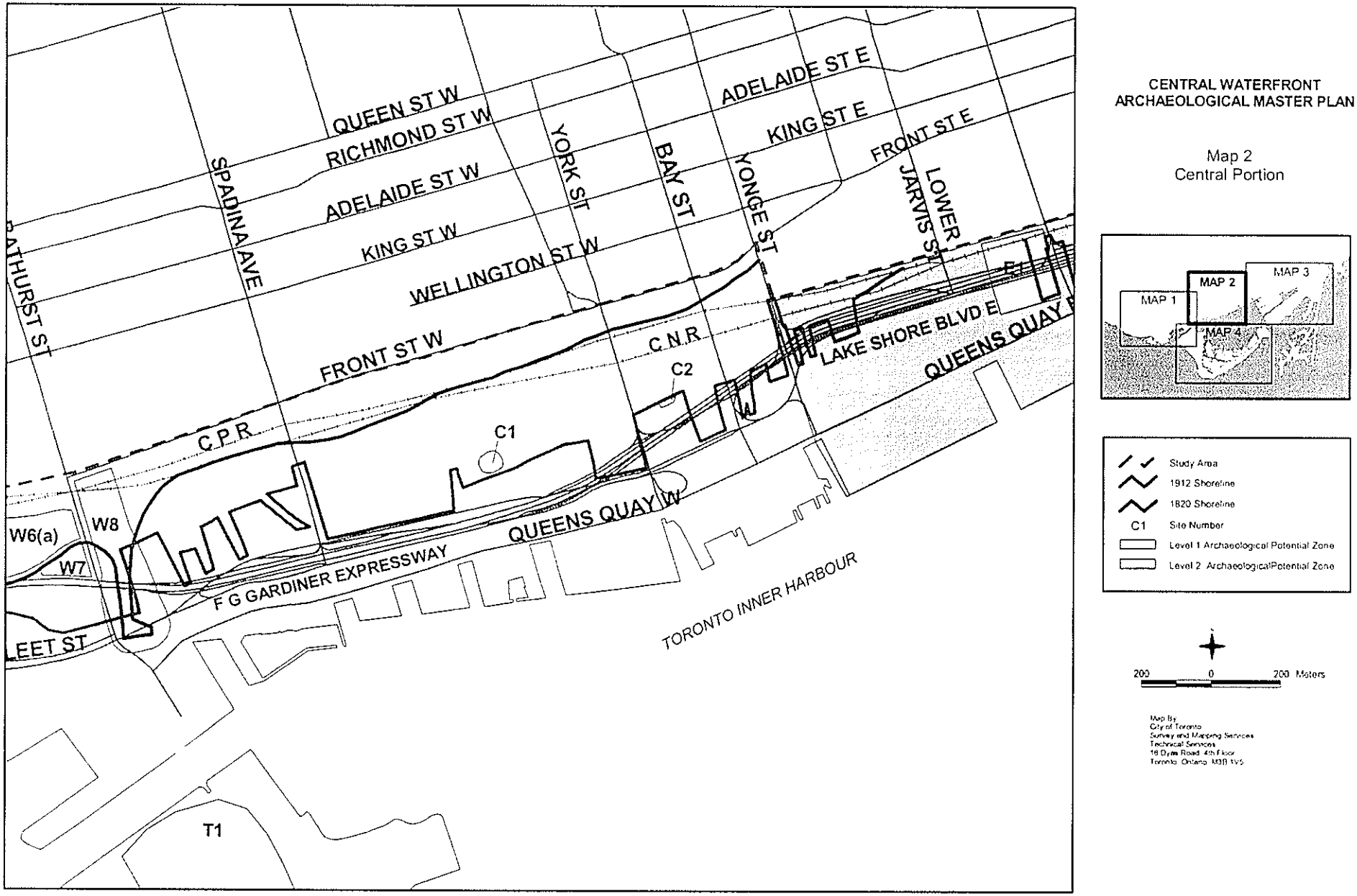


Figure 16: The Central Toronto Waterfront: Site Inventory

After 1834, the construction of piers and the dumping of fill was restricted to the area north of the Windmill Line, which marked the southern edge of the water lots in Toronto harbour (Historica Research 1994:5). By 1842, seven piers were illustrated along the Toronto shoreline on James Cane's 1842 *Topographical plan of the City and liberties of Toronto.*

The development of Toronto's waterfront intensified during the second half of the nineteenth century with the coming of the Northern, Great Western, and Grand Trunk railways. In particular, the shoreline between Bathurst and Parliament Streets was altered through the filling of timber cribs constructed for the Esplanade, a right-of-way developed for use by the railways (Historica Research 1989:54). Later, in 1893, the City of Toronto undertook to fill more sections along a new Windmill Line further south. Timber and rock cribs were constructed in the water and municipal waste was placed behind them, burying many of the existing features in fill. Another project affecting the study area a few decades later was the separation of grades for road and rail traffic, and the massive landfilling and lakefilling operations that accompanied it.

Although the original shoreline and associated features from the mid- to late nineteenth century were highly disturbed (and deeply buried) by the operations described above, a variety of heritage resources have been documented and/or recovered during late twentieth century construction. In particular, excavations for the CN Tower, the Metro Toronto Convention Centre and the Air Canada Centre have provided opportunities for archaeologists to identify a variety of early features—including the bulk of the area's early wharves and piers, sheet piling from the 1858-1893 period, and both the Windmill Line and the New Windmill Line.

What remains to be examined in the central portion of the waterfront are two known archaeological features: the 1890s Canadian Pacific roundhouse, and the remains of the Commodore Jarvis ship. In each case, partial documentation has been completed during previous fieldwork (see ASI 1995b, 1998).

The rest of this section contains more specific historic detail on those properties within the identified archaeological features within this portion of the study area, which is bounded roughly by Spadina Avenue to the west and Jarvis Street to the east.

C1 Canadian Pacific Railway Roundhouse

As Section 2.2 outlines, the construction of railway lines and associated buildings resulted in substantial alterations to the waterfront. In 1893, the area within which construction and filling was permitted in the harbour was extended to a "New Windmill Line." This would provide deep-water piers in Toronto without the need for dredging, as the Great Lakes navigation system was moving to the use of boats with a draft deeper than 10 feet (Historica Research 1989:57). The New Windmill Line also allowed the Canadian Pacific Railway to construct essential new terminal facilities at the foot of Simcoe Street (Figure 17). The City of Toronto undertook to fill the area by constructing cribs in the water and placing fill behind them. The fill was characterized as "suitable material collected in the section bounded by College, Spadina, and Sherbourne Streets at the waterfront"

(Historica Research 1994:5). This process was completed by the mid-1890s after an agreement had been reached with the City of Toronto and the Grand Trunk Railway in 1888.

The first 15 stalls and the turntable of the Canadian Pacific Roundhouse were completed in 1897 in an area between the present day CN Tower and the John Street Roundhouse. In 1907, an additional five stalls were added and in 1918 a further seven were constructed. The original 1897 turntable was replaced in 1918. The building and its associated structures were removed in 1929 prior to filling the area to raise the height of the railway corridor (Historica Research Limited 1994:4).

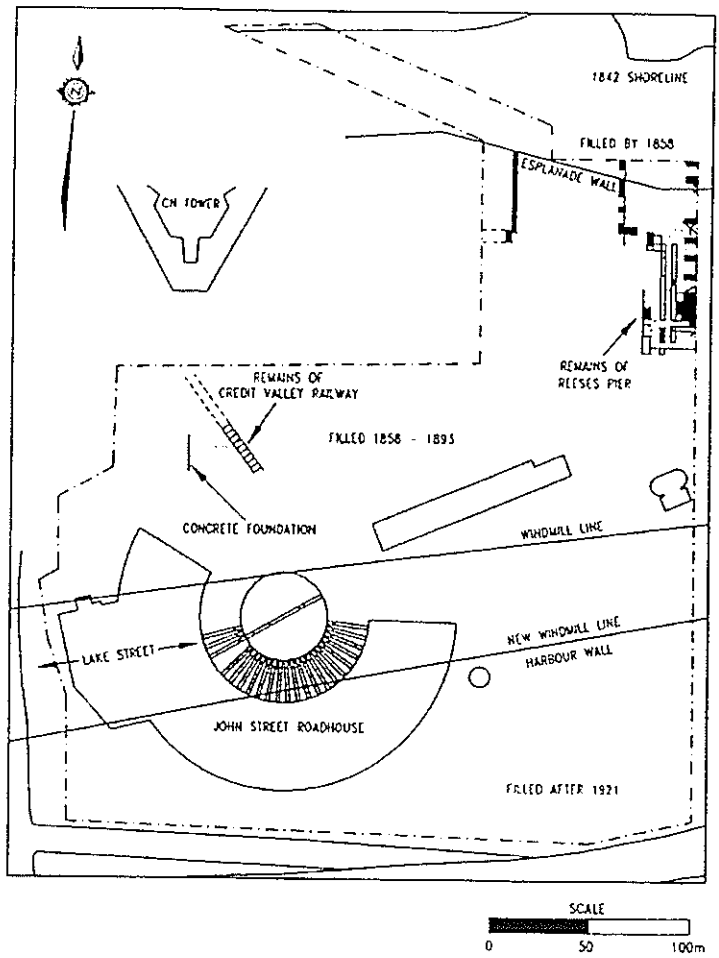


Figure 17: The Canadian Pacific Railway Roundhouse (C1) and associated shoreline features (after ASI 1995b).

In 1995, Eastern Construction Limited uncovered structural remains which had been exposed adjacent to the western limits of the Metro Toronto Convention Centre expansion project. Remnants of the old roundhouse were observed in the profile of the west lagging. Structural remains extended from vertical beam #43 south to vertical beam #37. From the base of the lagging, only about 3'6" of the structure had been exposed. It consisted of sections of 12 by 12" wooden beams atop a brick wall. In places, poured concrete sections were noted. The exposed area was photographed in detail from south to north. The structure extended at least 75' east of the lagging, and an unknown distance west of the lagging, towards the relocated coaling tower (ASI 1995b:11).

Mr. Christopher Andreae of Historica Research Limited confirmed the identification of this structure as the old roundhouse on April 16, 1995. Mr. Andreae further identified two concrete conduits, probably associated with the roundhouse. Of particular interest were the remains, on the interior of one conduit, of the original wooden tongue and groove forms. These features were carefully photo-documented (ASI 1995b:11).

Following the removal of the overburden, the structure was further exposed by hand. This section of the roundhouse was then measured, sketched and photo-documented. Features observed and

documented included the roundhouse floor, structural support systems and bay configuration. It was also confirmed that the majority of the roundhouse extends west of the lagging and south, below the present roundhouse.

After documentation, the structure was removed under the supervision of the archaeologists. This was done in order to obtain additional construction details. For example, it became evident that the concrete footings, which supported the roof beams, had been placed on four wooden piles (ASI 1995b:12). By May 26, 1995, an additional 30' section of the roundhouse had been excavated. According to Eastern Construction Limited personnel, the recently demolished section of roundhouse was similar in structure to the portion that had been documented up to May 19, 1995.

Since a portion of the old roundhouse extends west beyond the building site described above, it may be preserved for posterity and future interpretative purposes. As a known archaeological resource, the remainder of the CP roundhouse should be recovered and documented should further land development occur in the immediate vicinity.

C2 The Commodore Jarvis

Summary History

The hull of a naval vessel, the *Commodore Jarvis*, was incorporated into the fill of the study area. Apart from technical descriptions, virtually nothing is known about the early years of the vessel. However, due to its final use as a training ship and ultimate destruction by fire, the last four years of the *Commodore Jarvis* are reasonably well documented.

The *Commodore Jarvis* was a small oak framed vessel of 109 x 27 feet, with a moulded depth of six feet and 287 gross tons (97 net tons). Built in Bronte, Ontario, in 1904 by Isaac G. Gillespie of Toronto, the ship's registry described it as having a single deck but no galley. The *Commodore Jarvis* was a twin screw steamer powered by a two-cylinder, 11.3 h.p. engine manufactured by Fred Doty of Goderich (ASI 1998:5).

The Jarvis' history between 1904 and 1917 is unknown but a photograph in 1921, long after it had left commercial service, depicted a beamy vessel (wide in relation to length) with a square wheel house, a small passenger deck and a freight deck. The design suggests that the vessel was designed for short coasting voyages on Lake Ontario or on rivers or a canal system such as the Trent-Severn (ASI 1998:5).

The vessel registry was closed June 1917 at Amherstburg, Ontario, although it seems to have been moored at the Cherry Street wharf in Toronto. About a year later, the vessel was sold to the Navy League of Canada as a training ship. The Navy League of Canada was founded in 1896 for the purpose of assisting "the Imperial Policy of the command of the seas and to spread information showing the vital importance to the British Empire of maintaining this supremacy." In June, 1918, the *Commodore Jarvis* was towed from the Cherry Street wharf to the foot of the Canada Steamship dock at York Street, though the Canada Steamship Company was ultimately dissatisfied with the

training vessel at the dock and the Toronto Harbour Commissioners turned the vessel 90 degrees and towed it to a new mooring along the harbour wall a few feet away from the foot of the Canada Steamship dock (ASI 1998:6).

At the new berth, the *Commodore Jarvis* underwent extensive repairs and was totally renovated in 1920 after which the *Commodore Jarvis* had a short history as a training vessel. However, the vessel burned at the dock on Sunday morning, November 6, 1921, due to a defective heating system. The estimated loss was $7,000 but the boat was fully insured. The Navy League noted that they lost the best part of their equipment including two wireless sets, ammunition, rifles, models, navigation instruments and charts (ASI 1998:6).

This disaster could not have happened at a more unfortunate time. The Toronto Harbour Commissioners were expanding the lakefill along the waterfront and a new headland wall had been completed in the vicinity of the foot of Yonge and Bay Streets by September 1921. The harbour between the existing wharves and the new head wall was to be filled in 1922. It is unknown what plans the Navy League had for moving the *Commodore Jarvis* to a new berth, however, the sinking of the vessel added a new cost to the organization (ASI 1998:6).

The Harbour Commissioners lost no time in reminding the Navy League that the vessel could not be abandoned in place because it would interfere with navigation and dredging operations to take place in the early spring. A photograph in the *Toronto Telegram* (November 9, 1921) taken shortly after the fire shows the *Commodore Jarvis* sitting on the harbour bottom in about three or four feet of water. For unknown reasons, the Boy's Naval Brigade decided that the vessel could not be salvaged and, ultimately, despite numerous protestations of the Deputy Harbour Master, the hull was abandoned in place (ASI 1998:6).

By fall 1922,the *Commodore Jarvis* ' hull had been buried in landfill, though the front of the hull later rose out of the sand. The Harbour Master ordered the Navy League to break up the old hull so that the present site would not be above an elevation of 248' above New York sea level. However, this demand seems to have been ignored since the Deputy Harbour Master wrote to the Navy League again on November 2, 1922 to say that his patience had been exhausted.

It is unknown how the matter was settled, though a May, 1923 photograph in *Toronto World* shows the wreckage of the *Commodore Jarvis* still sticking out of the sand in the lakefill site. Sometime afterwards it appears that the exposed structure was demolished.

Archaeological Potential

In July 1997, a section of the *Commodore Jarvis* was excavated on the site of the new Air Canada Centre (Figures 18 and 19). The vessel was found lying at the slight upward angle that can be seen in Toronto Harbour Commission photos taken during dredging operations. It is not certain if the hull had been abandoned where the vessel sank or if it had been moved into deeper water after the fire.

Although the bow area of the vessel had been demolished almost to the keel, by the point at which the hull was still buried in the fill, the structure was intact to the passenger deck. The area exposed in 1997 would have been that section of the vessel above the fill line.

Figure 18: View of the remains of the hull and interior of the *Commodore Jarvis* (C2).

Details of the excavation can be found in ASI (1998), while much useful background information and photo-documentation is contained in Historica Research (1989) and Terraprobe (1995). Despite fire damage, stripping and subsequent demolition damage, it was still possible for archaeologists to acquire an understanding about the nature of the ship's construction, which added to the basic knowledge of early twentieth century coastal steamers of the Great Lakes.

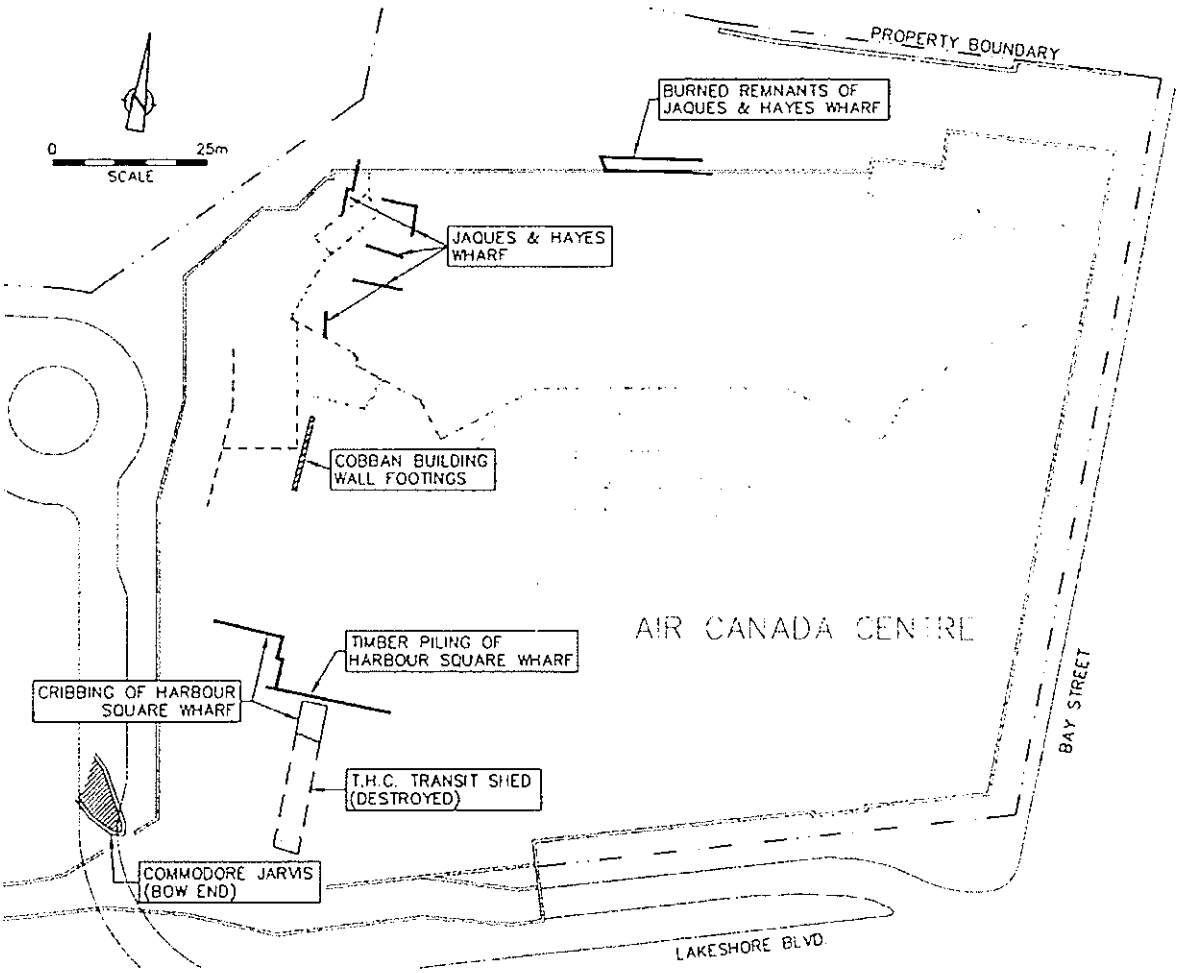


Figure 19: Shoreline features encountered during the construction of the Air Canada Centre in the vicinity of C2.

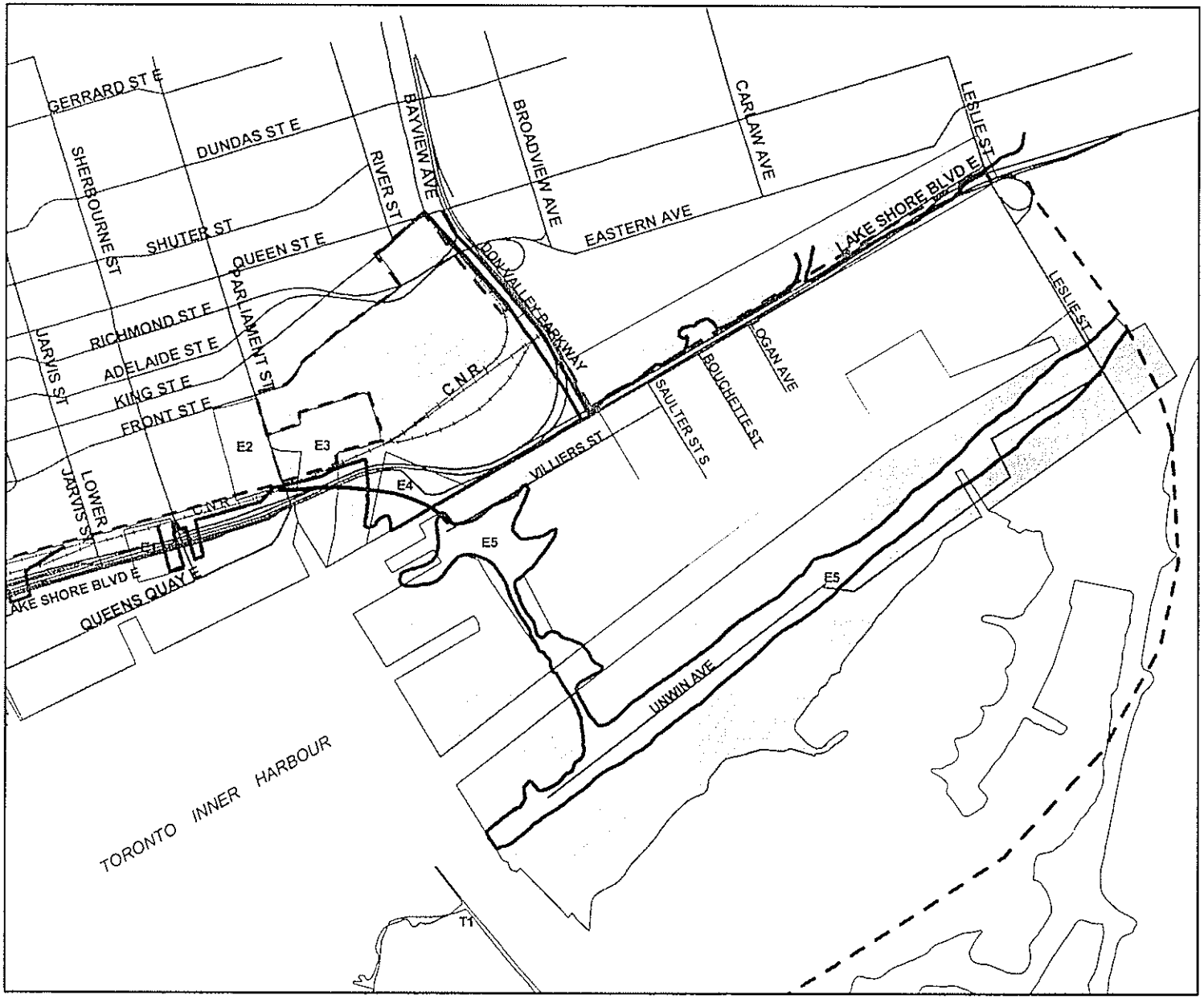
The *Commodore Jarvis* is a known archaeological resource on the Toronto waterfront. Given the manner in which the vessel was sunk, it is possible that the stern is more intact and in better condition than the portion investigated. In light of this possibility it is recommended that the remainder of the boat should be exposed and examined should further excavations occur in the vicinity.

3.4 Toronto Waterfront: East

The Eastern portion of Toronto's waterfront (Figure 20) is perhaps the most modified part of the study area. Like the lands to the west, much of the East Bayfront consists of modern fill which was dredged, dumped and shaped in the early part of the twentieth century, with some sections of the port lands completed as late as the 1960s. The pre and post-fill history of the area also mirrors the development of the western and central lands, with a succession of pre-contact Aboriginal use followed by military occupation, town planning, and the extensive expansion of transportation networks and subsequent industrialization. Over time, the consequent changes to the landscape have been dramatic, including not only the southerly extension of waterfront lands, but also modifications to the flow of the Don River, and other pre-existing natural features like sand spits, marshes and the peninsula which led to the present day Toronto Islands.

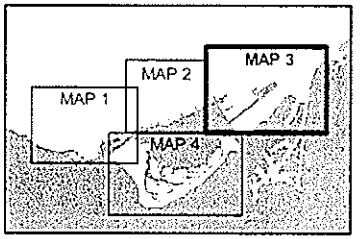
Human intervention in the landscape has resulted in an almost wholesale change to the configuration of harbour lands in this area, making future archaeological investigations difficult, but by no means impossible. Given the inferred biotic richness of the Toronto Islands sand spit, and its easy access from the mainland, it would seem to be an area that would have been highly attractive to aboriginal hunter-gatherers for purposes of seasonal occupation and harvesting of plant and animal resources both terrestrial and lacustrine. However, it was probably too exposed for prolonged or year-round occupation.

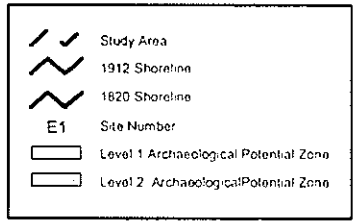
The age of the sand spit suggests that aboriginal people may have started visiting its shores during the Middle Archaic period, circa 7,000 to 6,000 B.P., and these visits likely continued right through the contact period. Unfortunately, the discovery of archaeological evidence of such occupations will be difficult. First, the dynamic and changing character of the sand spit itself has likely buried many sites. Second, and more significantly, the extensive land disturbance and filling which has occurred over the last 150 years has likely buried or destroyed many other sites. Nevertheless, approximate zones of archaeological potential can be mapped using early maps as a guide.

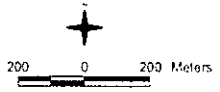


CENTRAL WATERFRONT
ARCHAEOLOGICAL MASTER PLAN

Map 3
Eastern Portion







Map By:
City of Toronto
Survey and Mapping Services
Technical Services
18 Dyas Road 4th Floor
Toronto, Ontario M3B 1V5

Figure 20: The East Toronto Waterfront: Site Inventory

Lands identified as having pre-contact potential, as well as known archaeological features with historic associations within the portion of the study area bounded roughly by Jarvis Street to the west and the Don Valley Parkway to the east have been listed and mapped in sequence from E1 to E5.

Although twentieth-century industrial development is largely outside the scope of this study, issues of industrial heritage will be addressed where applicable.

E1 Polson Iron Works and Knapp's Roller Boat

Summary History

By the 1880s, railways in Toronto looked after the bulk of the city's transportation requirements, but the port still handled a large quantity of merchandise. The eastern wharves below the Esplanade were home to a number of port-related industries, including the Polson Iron Works near the foot of Sherbourne Street.

Founded in 1883 by father and son railway engineers, William and Franklin Bates Polson, the Polson Iron Works Company built an assortment of marine engines, boilers, and general-purpose motors, including the revolutionary Brown automatic engine. After establishing an Owen Sound shipyard in 1888, the Iron Works became involved in the shipbuilding industry, producing several well-known vessels. The first of these, the passenger vessel *Manitoba*, was the first steamship built in Canada and was reputed to be the largest vessel afloat on fresh water when it was launched in May, 1889 (Stinson and Moir 1991).

Although the Owen Sound shipyard was operating at full production in the 1890s, the Polsons were caught in an economic depression and the company's bankrupt Toronto operation was purchased in 1893 by Frank and James Polson. At this time it appears that all shipbuilding operations were transferred to the shore of Lake Ontario from Georgian Bay. By 1907, the Toronto yards jutting into the harbour between Frederick and Sherbourne Streets employed around 500 men who produced a variety of vessels, including launches, car ferries and passenger ferries such as the *Segwun* and the *Trillium*. In addition, the country's first home-built, steam-powered warship, the *Vigilant*, was built and launched at this site, as well as a number of hydraulic dredges, including the *Cyclone* and *Tornado* which ironically were used to bury the Iron Works during harbour filling (Stinson and Moir 1991).

At first, business was steady for the Polson Iron Works as Toronto established itself as an early centre for the construction of steel-hulled ships on the Canadian side of the Great Lakes. However, overall, shipbuilding in Canada declined substantially after 1900 and the entire industry had difficulty competing with larger and more economical operations in the United States and the United Kingdom. Although construction of Navy trawlers and munitions freighters during World War I kept the company afloat (and even led to an expansion of existing yards) demand for their vessels disappeared with the 1918 armistice and by March of 1919 the firm had declared bankruptcy (Stinson and Moir 1991).

At the time of its closure, the Polson property extended into the area now known as the East Bayfront, east of the Frederick Street slip and over to Sherbourne, including some municipal lands near Frederick which had been closed off to support the expansion of the Iron Works a decade earlier. Much of the property lay dormant until the buildings were demolished shortly after the dock-yards were subsumed by a mixture of dumped land fill and dredged up sand between 1926 and 1928.

Archaeological Potential

In addition to the potential remains of industrial machinery, marine features and processes to be found below the current land grade on this site, an unusual vessel, *Knapp's Roller Boat*, is believed to be buried in fill under Lakeshore Boulevard and the northwest corner of the warehouse addition to the Alloy Metal Sales building, between Richardson and Sherbourne Streets. This unique cylindrical ship, designed by Prescott lawyer Frederick Knapp, was built on commission by the Polson Iron Works and launched in 1897 (Figure 21). Knapp's design, intended to revolutionize the shipping industry, called for a narrow cylinder carrying crew, cargo and passengers to be placed in a larger cylinder equipped with paddles along the length of its centre portion. Rotation of the exterior cylinder would drive the ship through the water while the inner compartment remained still. Although the concept worked well enough in calm waters, ultimately Knapp's invention proved unable to withstand rough weather and was unceremoniously abandoned near the site of its launching. Contemporary pictures (Figure 22) show its rusting wreck awaiting burial (Stinson and Moir 1991).

No known archaeological work has been done in this area.

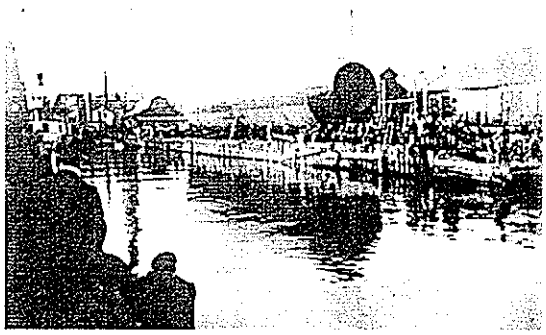


Figure 21: The launching of Knapp's Roller Boat from the ways of Polson's Iron Works, September 1895 (from Stinson Moir 1991:29).

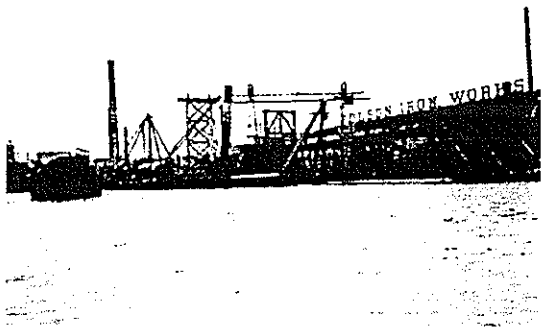


Figure 22: Knapp's Roller Boat rusting in the Frederick Street Slip, September 1914 (from Stinson and Moir 1991:5).

E2 Parliament Buildings

Summary History

In 1795, Lieutenant Governor Simcoe ordered the first Parliament Buildings of Upper Canada to be built at York. The structures, completed in 1797, were comprised of two brick buildings, situated

75 feet apart, each measuring 40 feet by 24 feet. The House of Legislative Council sat in the southern building and the House of Legislature Assembly in the northern building. The buildings were likely one and a half storeys, each with a small viewing gallery accessed by an outside staircase. Built to the immediate east of the brick buildings were two 30 foot frame dwellings used for committee rooms. The inaugural session in Upper Canada's first Parliament Buildings sat in June 1797.

The Parliament Buildings at York were used for a host of political and judicial purposes as well as for public gatherings. The most notable tenant of the Parliament Buildings was the Anglican Church, serving as the church at York for a full decade and adding to the growing political and judicial duties occurring at the houses of Parliament.

A Town Blockhouse was built in 1798 for the York Militia by the command of Russell, who feared native incursions into the town of York. An 1812 sketch by William Leney shows the town Blockhouse located less than 10 metres from the Lake Ontario shoreline bluff (Leney 1812), immediately south of the Parliament Buildings (see also the 1810 Wilmot Plan).

In the War of 1812, an American flotilla invaded York on April 27, 1813, culminating in the burning of the garrison and many public offices. On May 1, the Americans were ordered to embark their ships but not before they burnt the Parliament Buildings and the Town Blockhouse, among many other buildings.

Soon after the 1813 invasion, while the garrison was undergoing a post-invasion reconstruction, the first Parliament Buildings were rebuilt as two-storey brick structures for the billeting of British troops. In 1817, the reconstructed upper floors of the first Parliament Buildings were being used to house newly arrived immigrants.

The second Parliament Buildings of Upper Canada, constructed between 1818 and 1820, connected the rebuilt wings of the first buildings with a two storey brick building. The fate of the second Parliament Building was similar to that of the first buildings. On December 30, 1824, a fire broke out in the north wing, likely the result of sparks from an overheated chimney flue. The north wing and centre block were destroyed while the south wing was damaged but remained standing. Although the Legislative Assembly abandoned the building thereafter, a squatter took up residence inside the south wing. A series of letters dated between December 1826 and January 1828 details the temporary residency of the Chearnley family in the former Parliament Buildings. The remaining materials of the buildings were sold off by auction in April 1830.

The property remained vacant until the 1838-1840 construction of the Home District Gaol on the site. The third Home District jail was a substantial three storey limestone structure designed by John Howard. The building was built as two arms of a planned three wing structure with a central octagonal tower and a large stone walled exercise yard to the west and south. The jail was used as such between 1841 and 1860. Thereafter, the jail was utilised by both the military and later by a safe manufacturing company.

The Consumer's Gas Company purchased the property ca 1879; at that time coal was stored outside between Parliament Street and the old jail. A coke shed was located on Front Street and, in 1881, a coal shed was built extending down the east side of the property between the jail and Parliament Street. The empty jail building was demolished circa 1887 when Consumer's Gas began to expand their operations on the Parliament Street property. Consumer's Gas constructed a coal-gas retort house in 1888-89 along the west side of the property along Berkeley Street. Separating the two buildings was a 25 metre wide courtyard compete with a sunken rail spur and concrete footings to support a series of conveyers, and an administration building facing Front Street.

The Consumer's Gas structures were demolished in 1964, when the property was developed to house an automotive centre, car and truck washes, a gas station, and car rental agency. These structure, save the gas station, remain extant on the property today.

Archaeological Potential

The archaeological potential of the property was aptly demonstrated in the fall of 2000 when test excavations within the footprint of the 25 metre Consumer's Gas courtyard unearthed evidence of not only the Consumer's Gas occupation of the property, including a conveyer's concrete footing, brick piers, and the sunken rail spur, but also documented substantial features and artifacts dating from the era of the first and second Parliament Buildings of Upper Canada. These circa 1795 to 1825 features (Figure 23) included the charred remains of burned floorboards and joists, a limestone footing, brick rubble and lime mortar, and a mortar and flagstone feature associated with primarily creamware ceramics dating from the turn of the eighteenth century.

The presence of parliamentary era archaeological remains prompted a thorough evaluation of the property as to further archaeological potential for the recovery of additional remains associated with the first and second Parliament Buildings of Upper Canada. The evaluation resulted in the identification of a zone of archaeological potential (Figure 23), within which is the greatest likelihood for the recovery of additional parliament building features and artifacts.

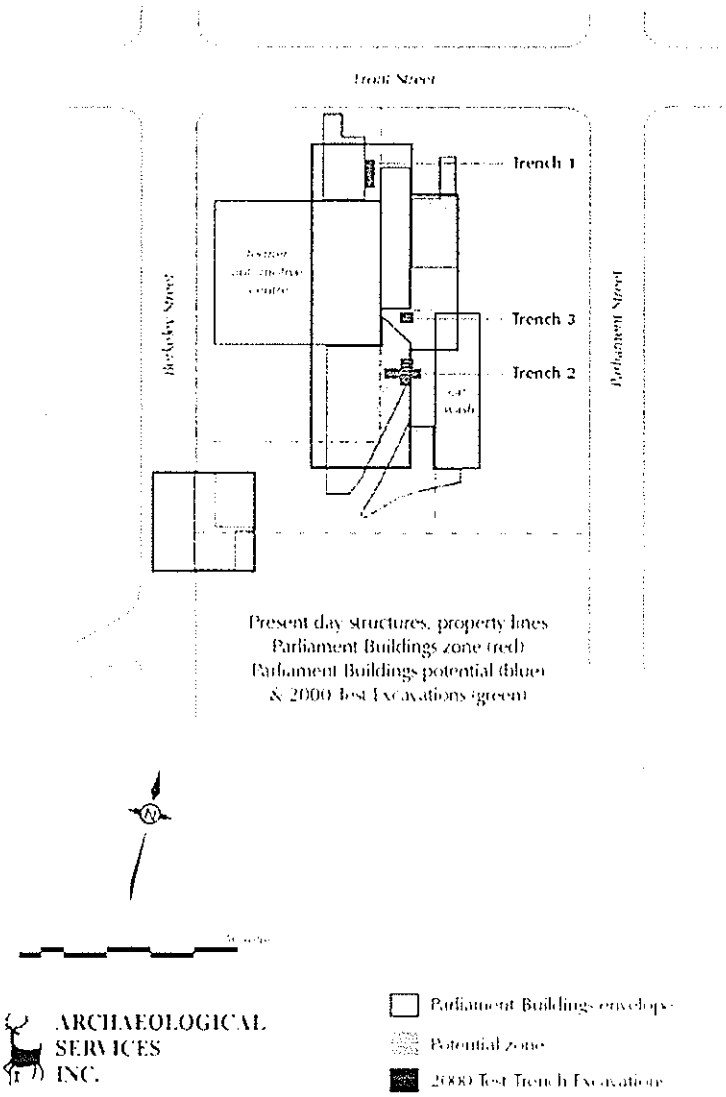


Figure 23: The results of the 2000 test excavations in the area of the Parliament Buildings (E2).

E3 Gooderham and Worts Distillery

Summary History

Within a year of his arrival from England in 1831, James Gooderham built a wind-powered gristmill on the shore of Toronto harbour. Joined by his brother-in-law in 1832, the partnership prospered and by 1837 the Gooderhams were distilling alcohol from surplus and low-grade grain. The distillery

occupied a small plot of land on the west side of Trinity Street near the harbour, and the company improved its waterfront with a small wharf (Diamond, Schmitt and Company, et al. 1990:26).

The 1833 Bonnycastle No. 1 *Plan of the Town and Harbour of York* indicates that the site of the Gooderham and Worts distillery was quite marshy, situated close to the mouth of the Don River. This map also shows that streets had been laid out for development associated with the construction of the Gooderham and Worts Windmill, which was used in 1834 as a survey reference point for the establishment of water lots in Toronto harbour. Until the 1880s, this "Windmill Line" formed the southern edge of the water lots and the limit for dumping fill in the harbour.

According to the 1842 James Cane *Map of the City and Liberties, Toronto*, the stabilization of the shoreline and construction of buildings within the newly surveyed streets had begun by this time, though the original distillery burned to the ground that same year. After 1856, the rebuilt distillery was cut off from the harbour by the Grand Trunk Railway, whose tracks came to form the southern boundary of the complex (though the Gooderham's wharf had been enlarged, supporting an elevator by 1857, and extending south of the rail lines). Later, the dock complex near the mouth of the Don River consisted of a grain elevator and coal sheds, and its angle and location created a little harbour. Subsequently, however, major lakefilling schemes in the 1920s altered the flow of the river, pushed the harbour further south, and subsumed the wharf in fill.

After 1859, new mill and distillery buildings filled the site, followed by a malt house and company office in 1864 (Diamond, Schmitt and Company, et al. 1990:26). The operation continued to expand steadily and by 1873 distilling and storage facilities had expanded to the east side of Trinity. Many warehouses were required to support the company's massive output. At its peak, the property extended to its present western boundary at Parliament Street and east to Cherry Street by 1887 (Figure 24). Cattle sheds were moved to the mouth of the Don River to make way for these new land developments. As late as 1885, despite the massive intrusion of rail yards, the Gooderham family maintained a large residence on Mill Street immediately north of the distillery. This eventually gave way to two tank warehouses and a multi-storied barrelhouse (Diamond, Schmitt and Company, et al. 1990:26).

The Gooderham family divested itself of the distillery business in 1926, though the property continued to function as Hiram Walker-Gooderham and Worts Limited. The last building constructed on the site was a rack warehouse opened in 1927. Over the years, vacant buildings and land have also been leased out for other purposes, including a lumberyard, junkyard, warehousing for a variety of industries and paper-recycling operations, while limited distillery operations continued into the latter part of the twentieth-century.

Archaeological Potential

Although portions of the Gooderham property are outside of the study area, its existence as a National Historic Site, and its proximity and importance to the development of the eastern waterfront warrants its inclusion as a whole on any planning study of archaeological resources.

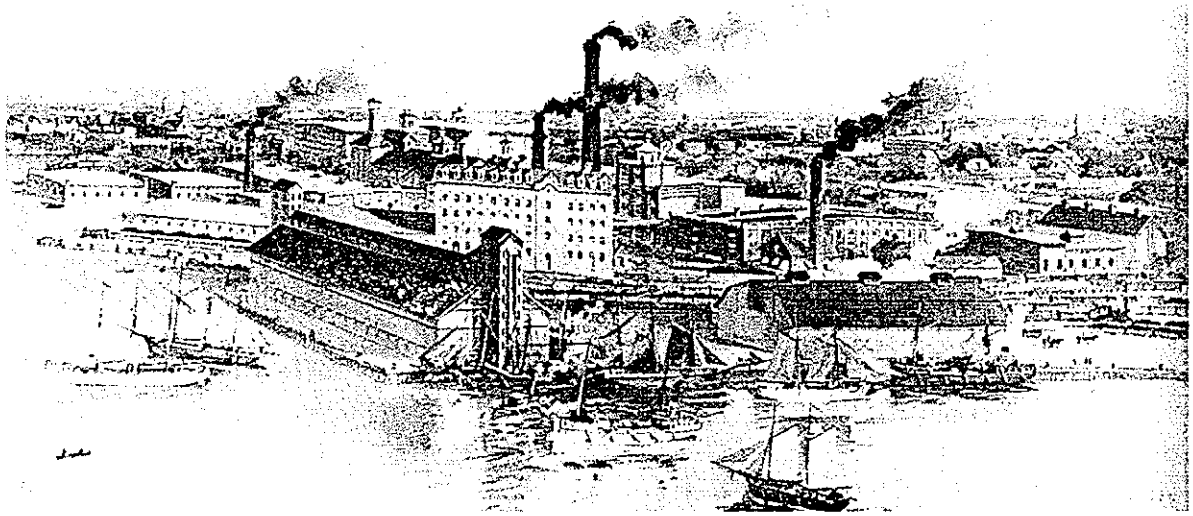


Figure 24: The Gooderham and Worts distillery (E3) near the mouth of the Don River (from Careless 1984:110).

Of particular interest is the recovery of further evidence of the Gooderham windmill, since the feature served as an important waterfront landmark for several decades in Toronto's early history. The "Windmill Line" used to survey the shore was an important marker for the first layer of early nineteenth century development. Also, vacant portions of the site might yet yield the foundations of now-demolished distillery structures.

It should be noted that some field investigations have already been conducted on this site, including an examination of features associated with the Worts family residence and rackhouses (ASI 1996a) and early shoreline cribbing (ASI 2000). In the latter it was suggested that a complex layout of crib structures exists south of the stone distillery and test trenches indicate that this cribbing ends somewhere in the vicinity of Trinity Street. Thus, the nature of the shoreline seems to be at variance with the way the distillery was depicted in art. All paintings made from the waterfront show a very level and neat crib structure. The reality, however, seems to be a much more crudely built facility (ASI 2000:3).

Consequently, the most useful question to answer in this regard is: at what point does cribbing end along the shoreline? It is recommended that the area beneath the storage pile in front of the stone distillery be examined for additional crib and wharf structures when the earth is removed. This will help to determine how far the east shore protection extended. Related to this project would be the recovery of features associated with the Gooderham and Worts Wharf, which projected into the bay on a southwest 45-degree angle from the southern perimeter of the site, below the 1856 rail-lines – an area currently known as the "Triangle Lands".

Although further archaeological assessment of shoreline features would be time consuming because of the depth of the excavation, proper monitoring of land re-development in this area (particularly in the vicinity of the Lakeshore/Gardiner Expressway corridor) would provide the opportunity to uncover and document important aspects of Toronto's industrial history. As Mark Fram wrote in his 1990 heritage assessment of the Triangle Lands, "the Gooderham and Worts waterfront is now

visible only indirectly, as the skew of the mill and distillery buildings from the city survey grid, together with the alignment of the railway spur delineating the southern boundary of the complex. However, it exists more tangibly but invisibly beneath the landfill and lakefill that covers the Triangle Lands. This portion of the study area has been disturbed by small-scale construction, but archaeological evidence of the nineteenth-century no doubt exists in some locations" (Diamond, Schmitt and Company, et al. 1990: 33-4).

E4 Cherry Street Dry Dock

The Cherry Street dry dock is a potentially buried feature, known largely through maps and photographic evidence (Figure 25). Although the precise location of the dry dock is not known (without the same permanence as a pier most cartographers left it undrawn), Jeffery Stinson's study of heritage resources in the Port Industrial district places it near the foot of Cherry Street, between the curve of Lakeshore boulevard and the northern end of the Cherry St. bridge which spans the Keating channel (Stinson 1990:18). Barclay Clark and Co.'s chromo-lithograph *Birds-eye view of Toronto Harbour* (1893) supports this general placement.

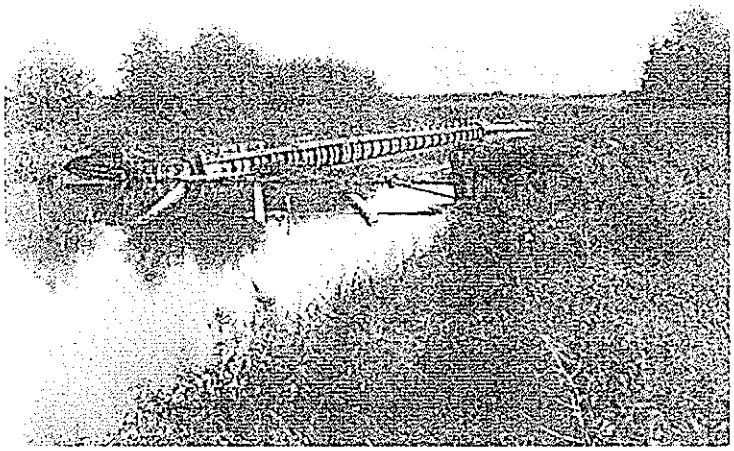


Figure 25: The Cherry Street dry dock in 1898 (from Stinson 1990:18).

Further historical research is required to determine the construction date of the dry dock though an 1898 photo shows it to be of timber construction, indicating mid-nineteenth century origin. In fact, it is unusual for a timber dry dock to be in existence at all in the late nineteenth century, even in derelict condition. Nevertheless, the Cherry Street dry dock is associated with the Toronto Dry Dock and Shipbuilding Company and the Don River, whose mouth ran into the bay at this location prior to diversion.

Stinson believes that evidence of its activities may still exist and it is quite likely that archaeological investigations focusing on the original alignment of the Don would yield evidence of previous engineering works and of the occupation of the edges. In particular, the Toronto Dry Dock and Shipbuilding company on the south shore may have left evidence of its installations if these were not in the way of later services or structures (Stinson 1990:64).

E5 Sandbar, Peninsula and the Port Industrial District

Site E5 comprises a collection of features in the extreme eastern section of the study area. Included in the inventory is the natural sandspit which connected the waterfront to a peninsula south of the shore (later breached to form the Toronto Islands to the west, see T1), the peninsula itself (known as Fisherman's Island), and the Government Breakwater which was constructed along the line of the sandspit in the 1880s (Figure 26). Also of interest are the early dock walls and cribbing to be found near the northeast corner of the site.

Figure 26: View north along the line of the Government Breakwater (from Stinson 1990:18).

Summary History

Prior to the massive re-development and infilling of the east Bayfront area (see section 2.3), a sandspit or isthmus formed the eastern boundary of Toronto harbour. Extending roughly north to south, its southern end terminated at a sandbar, its eastern side bordered a tangled wetland of marshes, creeks and ponds extending into Ashbridge's Bay and its northern end was on the mainland, curving between today's Parliament and Cherry Streets. The isthmus was formed over many centuries by sands eroded from the Scarborough Bluffs which were carried westward to meet silt deposited by the Don River (see section 2.2). The Don River had as many as five mouths in the area and the isthmus was bisected by two of them. In early years of settlement bridges crossed these outlets, though low water periods allowed easy fording at such times.

In an earlier time, Fisherman's Island, as the east-west peninsula was later known, was likely used by aboriginals for hunting and fishing. An appealing location, combined with an abundant source of fish, soon lured Europeans across the isthmus to the peninsula (which ran roughly east to west encompassing the present day Toronto Islands), including one famous visitor, Elizabeth Simcoe, who rhapsodized about the area in her diary. However, several storms in the mid-nineteenth century broke through the peninsula at the area of the present East Gap, isolating Toronto Islands.

By 1885, occupation of the peninsula and sandspit had begun to take on a more permanent form, following successful summer communities on Centre Island and Hanlan's Point. Around this time the mainland side of the isthmus became a site of early industry (and cheap land), and the natural pathway to the sandbar peninsula was made more concrete in the 1880s when the Federal Government constructed a breakwater along the western side. This allowed some protection from erosion and created a roadway to the sandbar now known as Fisherman's Island (Figure 27).

The Government Breakwater, which separated the harbour from the marsh and closed the southern opening of the Don, was the first major intervention in the Port Industrial district. It consisted of two lines of sheet piling with rock fill in between. It followed a curving line from the Don breakwater to the lake edge sandspit, bending west to the edge of the East Gap. The breakwater did not follow the natural line of the spit, though the top formed a dirt pathway that later supported the horse-drawn wagons, automobiles and hydro lines of local cottagers. The Breakwater regularized a path system that had probably existed since earliest times, but made its first official appearance on the Williams survey of 1814 (Stinson 1990:9). Under pressure to improve the sanitary conditions in Ashbridge's Bay, the breakwater was breached in 1893, beginning implementation of a new plan for the whole marsh area put forward by City Engineer, E.H. Keating (Stinson 1990:9). The result was the Keating Channel.

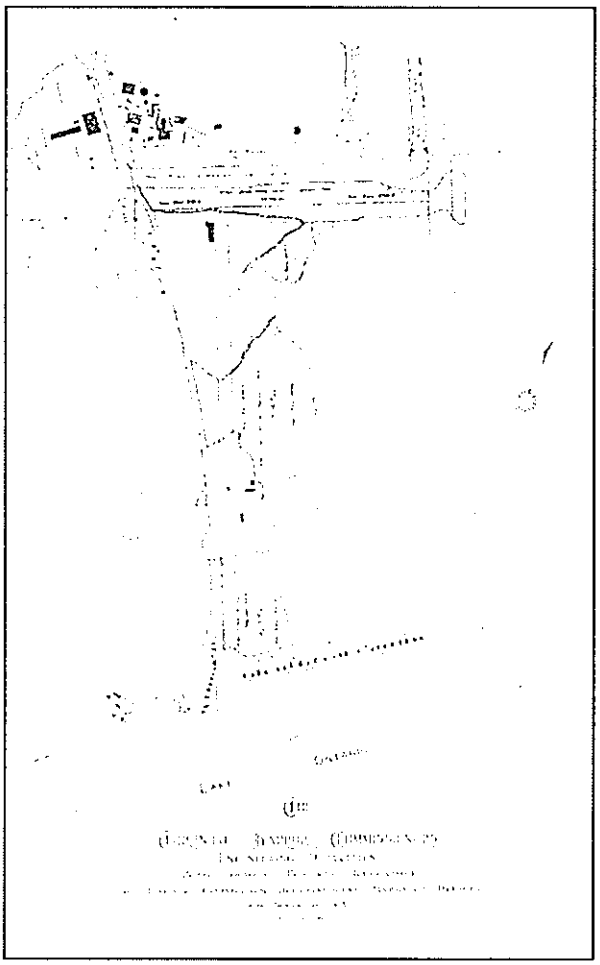


Figure 27: The Toronto Harbour Commission Engineering Department Plan showing property reclaimed by Harbour Commission departmental hydraulic dredges during season of 1913.

By the early years of the twentieth-century, development had intensified and cottages replaced many of the shacks and boathouses of the area's largely transient residents. By 1911, two small foundries were located north and south of Keating's channel and a manufacturing enterprise was under

construction in the middle of the north-south sandspit. Small-scale fishing enterprises lined some sections of the harbour edge while the sandbar peninsula had two clusters of cottages on either side of a beach park. The sandbar itself was divided into lots and leased to individuals. On the lakefront of Fisherman's Island was a wide boardwalk (Stinson 1990:8). In the late 1920s, however, the residents of the cottages had their leases expropriated and their cottages were either demolished or relocated. This coincided with the Toronto Harbour Commission's lakefilling operations.

Archaeological Potential

Those areas of the Port Industrial district constituting natural features of the sandbar and isthmus have pre-contact aboriginal potential. Although the precise boundaries of these natural features cannot be confirmed without soil testing (not only do massive amounts of fill surround them but their shape prior to re-development would have fluctuated with water levels and storm action), historic mapping can provide a reasonable basis for flagging certain areas for further study.

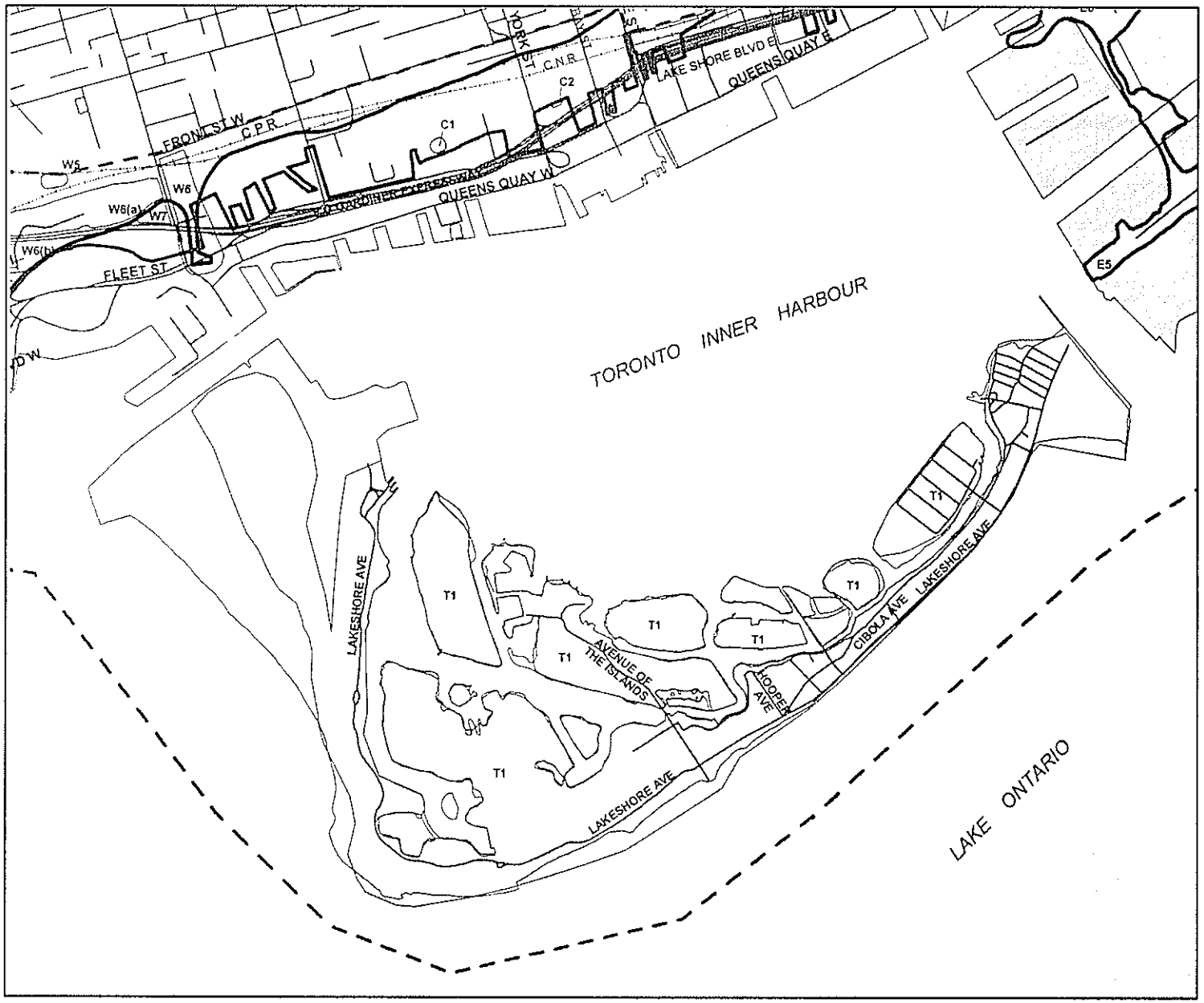
The Government Breakwater was the first human-made definition of the harbour. Apart from its significance as a path to sandspit communities, the breakwater was a substantial engineering work. Like the Don River outlet it seems quite likely that sections of the breakwater still exist where later construction did not demand its removal (Stinson 1990:64). It would not be difficult for the Breakwater to be accurately plotted.

Finally, all of the dockwall profile put in place by the Toronto Harbour Commissioners has a strong claim to historic significance.

3.5 Toronto Islands (T1)

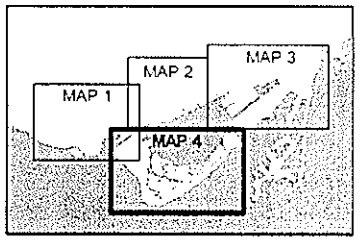
Summary History

The confluence of easterly sand-bearing currents, westerly winds and the outflow of the Don River produced a five-mile long peninsula stretching from the present Woodbine Avenue to Gibraltar Point. (Note: in early nineteenth century mapping Gibralter Point is the name given to the furthest western portion of the peninsula where the Island airport currently operates, while later maps re-name the area to the west of the lighthouse, Gibralter Point).



CENTRAL WATERFRONT ARCHAEOLOGICAL MASTER PLAN

Map 4
Toronto Islands



Study Area
1912 Shoreline
1820 Shoreline
T1 Site Number
Level 1 Archaeological Potential Zone
Level 2 Archaeological Potential Zone

200 0 200 Meters

Map By:
City of Toronto
Survey and Mapping Services
Technical Services
18 Dyas Road 4th Floor
Toronto, Ontario M3B 1V5

Figure 28: The Toronto Islands: Site Inventory

Comparatively more enduring structures on the island after the 1830s were a variety of hotels, mostly in the narrows areas, though even they suffered greatly during heavy island storms. The only known factory is the area was Benjamin Knott's Blue and Poland Starch Factory, which was presumably washed away during the 1850s storms that flattened its nearest neighbour, The Quinn Hotel. Other large hotels were built in the narrows area during the 1840s, as well as on present day Mugg's Island (Gibson 1984: 38, 52, 55, 63).

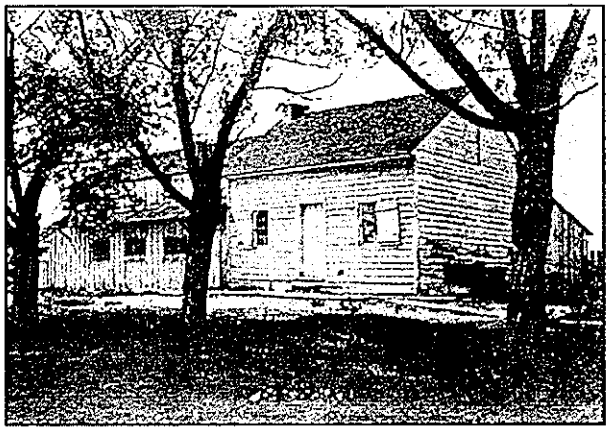


Figure 30: Toronto Island Cottage (from Gibson 1984:36).

During the 1850s a succession of severe storms breached the peninsula at the present location of the East Gap, and the "island" (as it was always erroneously known prior to this event) became island after all—at least to the west of the breach. Despite, or perhaps because of, the separation of the islands from the rest of the peninsula, cottages flourished in the Ward's Island and Hanlan's Point areas (Figure 30). For a time, the site became a resort for people with means, with hotels, yachting and boating clubs, and an amusement park at hand to residents who could pay the cost of city-licensed private leasing (Careless 1984:97).

In the late nineteenth-century plans were made to create public parkland on the island, and breakwaters were constructed to protect the island and the harbour from erosion. The filling and alterations to the configuration of Toronto's new islands and water channels continued for years (Figure 31). Perhaps most dramatically, in the 1930s, a site at Hanlan's Point was chosen for one of two municipal airports. Considerable filling took place to provide the necessary land before the airport opened in 1939.

Archaeological Potential

The Toronto Islands are underlain by shales, interbedded dolomitic siltstone, and minor limestone of the Upper Ordovician-aged Georgian Bay Formation (Freeman 1979). This bedrock is mantled by approximately 30 metres of Quaternary deposits, primarily nearshore deposits of sand and silt laid down during the Holocene (Figure 32) as well as extensive deposits of modern fill (Freeman 1976; Sharp 1980).

Although portions of the original sandbar can be inferred from historic mapping, only soil testing will be able to confirm the land composite, and archaeological potential by extension. It should also be noted that during the early nineteenth century, contractors regularly came to the peninsula and removed sand to aid their mainland construction. Like E5, precontact aboriginal potential exists in areas that comprise portions of the original peninsula. Anecdotal evidence from historic sources

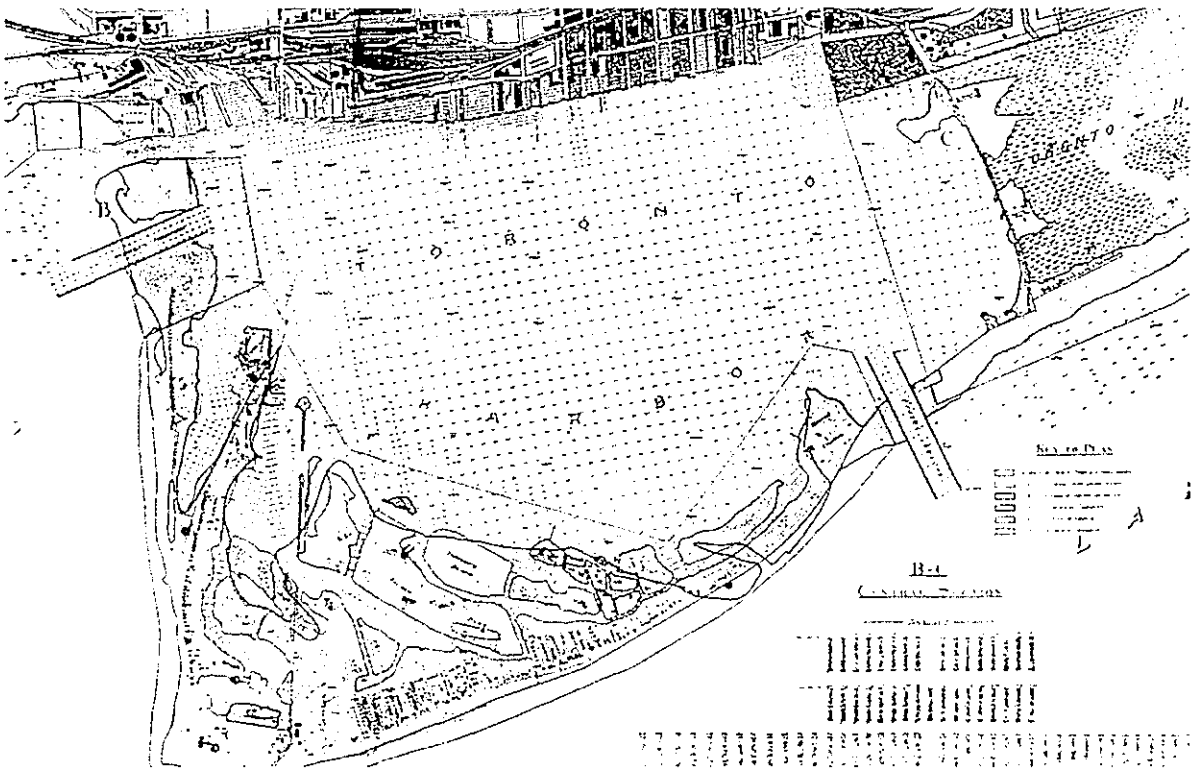


Figure 31: Toronto Island as depicted on the 1912 Toronto Harbour Commissioners Waterfront Development Property Ownership Plan.

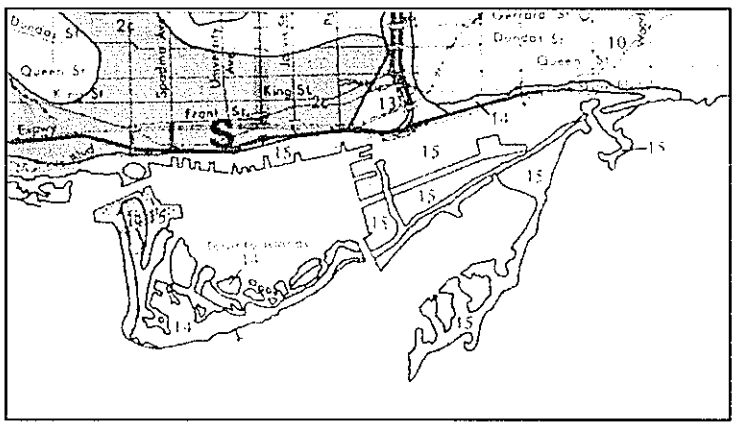


Figure 32: Quaternary Geology of the Toronto Islands (from Sharp 1980). *2c (green) = Sunnybrook till, 5a (blue) = deep-water silt/clay, 10 (yellow) = Lake Iroquois sand, 13 (dark grey) = recent alluvium, 14 (red stipple) = recent Lake Ontario nearshore sands/silts, 15 (grey tone) = modern fill*

suggests that burials may have taken place on this portion of the peninsula, while temporary encampments are also known to have existed over time. It is unlikely, given the massive disturbance to the original Gibralter Point area (in particular, the construction of the Toronto Island Airport), that any evidence of the brief York military settlement, comprising a blockhouse and a storehouse, is still in existence. However, the 1809 lighthouse is yet extant and combined with the site of the lighthouse keeper's cottage represents an area of potential for the study of domestic material culture over time. Of similar interest would be the sites of the many tents and cottages that populated both the eastern and western areas of the peninsula, as well as the variety of hotels and taverns that catered to vacationing Torontonians.

One of two registered archaeological sites on the island (AjGu-20), excavated by Don Brown, was an historic refuse dump of circa1860-1890, attesting to the occupation of lands during the late nineteenth-century cottaging period. The other site, registered by Charles Garrad, is the supposed (though undetermined) location of a Mississauga campsite.

3.6 Defining Archaeological Potential

The mapping of the inventoried features and potential zones within the study area proceeded largely on the basis of the results of previous research projects. In most of the western and central portions of the study area, these studies have resulted in grading the significance of potential resources according to their integrity and significance. Fewer such studies have been completed in the eastern portion of the study area. This has resulted in less complete knowledge of the buried heritage features along the shoreline from Yonge to the Cherry Street/Keating Channel and within the former Ataratiri lands, which lie roughly between the Don River, Parliament Street, Eastern Avenue and the CN rail lines.

Accordingly, two archaeological potential zones have been delineated on the accompanying maps:

Level 1 Archaeological Potential Zones: comprise those lands where archaeological potential has been confirmed to exist on the basis of the results of this and other studies. As discussed in Section 4.0, impacts within these zones must be preceded by a Stage 1 and 2 archaeological resource assessment.

Level 2 Archaeological Potential Zones: comprise those lands where archaeological potential can neither be confirmed nor ruled out on the basis of the data available from previous studies. As discussed in Section 4.0, impacts within these zones must be preceded by a Stage 1 archaeological resource assessment, which will determine if a Stage 2 assessment is required.

The balance of the study area comprises those lands that do not exhibit archaeological potential in consequence of twentieth century development and accompanying disturbances. Impacts within these zones need not be preceded by an archaeological resource assessment.

4.0 PLANNING FOR THE ARCHAEOLOGICAL RESOURCES IN THE CENTRAL WATERFRONT AREA

This section of the report presents the provincial planning and policy context for the study as well as a series of recommendations for the future management of archaeological features within the City

4.1 The Threats To Archaeological Resources

Protecting archaeological sites has become especially important in southern Ontario, where landscape change has been occurring at an ever increasing rate since 1950, resulting in substantial losses to the non-renewable archaeological record.

The scale of the threats facing the archaeological record of southern Ontario were considered in a study in which rates of demographic and agricultural change were examined over the last century, and estimates generated of the number of archaeological sites that have been destroyed (Coleman and Williamson 1994). While the period of initial disturbance to sites was from 1826 to 1921, when large tracts of land were deforested and cultivated for the first time, that disturbance typically resulted in only partial destruction of archaeological data as most subsurface deposits remained intact. However, extraordinary population growth in the post-World War I period, resulted in a more disturbing trend as large amounts of cultivated land were consumed by urban growth.

Indeed, consideration of development within the Region of York, including the City of Toronto, in the post-World War II period provides an instructive example of the nature and potential magnitude of the threat that continued landscape change poses to a finite and non-renewable archaeological resource base. It is possible that almost 2,400 sites were destroyed in York Region between 1951 and 1991, with the majority of this destruction occurring prior to 1971 (Coleman and Williamson 1994: Tables 2 and 3). Much of this resource loss may be directly attributable to housing, commercial and industrial development within urban areas, resulting in the concomitant total destruction of archaeological features. It is further estimated that approximately 25 percent of these sites (approximately 600) represented significant archaeological resources that merited some degree of archaeological investigation, since they could have contributed meaningfully to our understanding of the past.

While there has recently been a marked reduction in the rate of archaeological site destruction throughout much of the province, since certain municipalities adopted progressive planning policies concerning archaeological site conservation, the potential for the loss of archaeological resources in the future remains great, due to continuing growth and re-development.

4.2 Jurisdiction Over Archaeological Resources

In terms of direct conservation and protection, the lead provincial government role has been filled by the Minister of Culture. The Minister is responsible for encouraging the sharing of cultural heritage and for determining policies, priorities and programs for the conservation, protection and preservation of the heritage of Ontario (Cuming 1985). In order to maintain a professional standard of archaeological research and consultation, the Minister is responsible for issuing licences to qualified individuals, without which archaeological activities involving exploration, survey or field work are illegal. All reports submitted to the Ministry, as a condition of an archaeological licence, are reviewed by Ministry staff to ensure that the activities conducted under a licence meet current technical guidelines, resource conservation standards, and the regulations of the Ontario Heritage Act.

The rationale for a greater sharing of responsibilities between provincial and local governments for all types of heritage including archaeological resources was explained most effectively in a document entitled *A Strategy for Conserving Ontario's Heritage* (Ontario Heritage Policy Review 1990). This document suggested a re-allocation of roles, in which the provincial government would maintain an advisory function and the municipal governments would assume the day-to-day responsibility for monitoring those archaeological features in their jurisdiction.

4.3 Provincial Legislation

The specific provincial legislation governing planning decisions is complex, but provides for a number of opportunities for the integration of archaeological conservation. The two principal pieces of legislation are the Planning Act and the Environmental Assessment Act. Despite the on-going provincial transfer of review responsibilities, well over 1,000 formal development applications throughout the province, under both Environmental Assessment and Planning Act processes, are reviewed annually by the Ministry of Culture. Consequently, approximately 300 to 500 archaeological sites have been documented annually in southern Ontario since 1990 as a result of planning mechanisms (Ferris 1998).

The Planning Act

Section 2 of the Planning Act requires that municipalities "in carrying out their responsibilities under this Act, shall have regard to, among other concerns, matters of provincial interest such as ... (d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest". Moreover, new heritage policies in the Provincial Policy Statement under Section 2.5.2 "Cultural Heritage and Archaeological Resources" state in the case of archaeological resources:

> *Development and site alteration may be permitted on lands containing archaeological resources or areas of archaeological potential if significant*

> *archaeological resources have been conserved by removal[1] and documentation or preservation on site. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site will be permitted.*

For the above policy statement, Significant Archaeological Resources are defined as follows:

> *the remains of any building, structure, activity, place or cultural feature, which because of the passage of time is on or below the surface of the land or water, and which has been identified and evaluated and determined to be significant to the understanding of the history of a people or a place. The identification and evaluation of this resource is based upon an archaeological assessment.*

Provincial interests in land use planning are detailed in the Provincial Policy Statement issued under Section 3(1) of the Act. Section 3(5) of the Act states:

> *in exercising any authority that affects a planning matter, the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board commission or agency of the government, including the Municipal Board, shall have regard to the policy statements.*

Thus all decisions that affect a planning matter, regardless of the identity of the development proponent or the relevant approval agency, must have regard for potential heritage resource impacts. Sections 2 and 3 of the Act, along with other sections of the Act, permit a municipality to require that an archaeological assessment be completed prior to the approval of most planning applications relating to lands that contain areas of archaeological potential.

In the interest of meeting legislated processing deadlines under the Planning Act, it is appropriate and acceptable to make the requirement to undertake an archaeological assessment a condition of approval rather than a pre-requisite.

In the case of a zoning by-law, however, Section 36 allows a municipality to attach a holding "H" symbol to a zoning by-law and require that as a condition of removing the holding symbol, and before development can proceed, an archaeological assessment or other matter be completed. Site Plan Control requires the approval of plans by the municipality, which implies that due regard has been given to matters of provincial interest.

In regard to municipal projects, the Planning Act under Section 24(1) states that where there is an Official Plan in effect, no public work shall be undertaken that does not conform with the Plan. Section 34 (1) 3.3 of the Act also permits municipalities to pass zoning by-laws: "for prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land that is the site of a significant archaeological resource".

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[1] "Removal" of an archaeological resource is accomplished through mitigative documentation and/or excavation.

In summary, a municipality is obligated, within the existing legislative framework, to have regard for archaeological concerns in connection with any planning application and is able to require that an archaeological assessment be undertaken for most applications relating to lands containing areas of archaeological potential. The City can also pass zoning by-law(s) regulating the use of land that is the site of a significant archaeological resource. Moreover, a municipality is prevented from undertaking any public work that does not comply with its Official Plan. Heritage protection policies are appropriate in Official Plans, if developed and incorporated properly. If a municipality has a sound basis in its policies (Official Plan), it is possible to refuse applications that do not conform to heritage requirements.

The Heritage Operations Unit of the Ministry of Culture has the primary responsibility under the Planning Act for matters relating to cultural heritage including archaeological resources. One of their primary responsibilities is to oversee the Municipal Plans Review process. The first component of this process is the determination of the potential for a development application to impact archaeological resources, based on a range of environmental and historic criteria. Should it be determined that there is potential for impacts to archaeological resources resulting from the approval of the development application, then the second component is the requirement that the development proponent undertake an archaeological assessment, the results of which are subject to Ministry of Culture review and approval. Such assessments may be required for smaller-scale developments reviewed under consent and zoning by-law amendment applications. In all of those cases where potential is identified on all or a portion of a subject property, a standard archaeological condition is attached to the development application.

The current condition recommended by the Ministry of Culture reads:

> *The proponent shall carry out an archaeological assessment of the subject property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found. No grading or other soil disturbances shall take place on the subject property prior to the City of Toronto and the Ministry of Culture confirming that all archaeological resource concerns have met licensing and resource conservation requirements.*

While a generic primer has been developed by the Ministry of Culture (1997) for informing municipal planners about evaluating archaeological potential, those municipalities that have undertaken detailed archaeological potential studies or master plans have access to much more detailed information, that provides more effective and accurate means of determining archaeological potential and whether or not an assessment will be required. The review of site specific development applications, for the purpose of determining if archaeological resources or areas of archaeological potential are present, is now made directly by the City of Toronto, sometimes in consultation with the Province.

In the case of the Central Waterfront Area, this can now be accomplished through the use of this Archaeological Master Plan, consisting of potential mapping, explanatory text, and policies and procedures for implementation of the study's conclusions. Review of the resulting archaeological investigations, in order to determine that Heritage Act and Planning Act requirements have been

satisfied, remains the responsibility of the Ministry of Culture, which provides notification to the approval authority and the development proponent of the results of their review. That Ministry also administers all matters related to the management of the resources documented, mitigation strategies proposed, and any disputes arising from the conservation of archaeological resources under the land use planning process.

The Environmental Assessment Act

The Environmental Assessment Act, applies to public sector projects and designated private sector projects. Private sector projects that are designated by the Province as subject to the Act are usually major projects such as landfills. The purpose of the Act is "the betterment of the people ... by providing for the protection, conservation and wise management in Ontario of the environment" (Section 2). Environment is very broadly defined to include "the social, economic and cultural conditions that influence the life of humans or a community" [Section 1(c)(iii)] and "any building, structure ... made by humans" [Section 1(c)(iv)]. Thus, "environment" would include heritage artifacts and structures.

The Environmental Assessment Act requires the preparation of an environmental assessment document, containing inventories, alternatives, evaluations and mitigation. It is subject to formal government review and public scrutiny and, potentially, to a tribunal hearing. Heritage studies of these major undertakings are a common component. There are also Municipal Engineers Association (MEA) Class environmental assessments for municipal projects that require similar considerations, but entail a simplified review and approval process.

Various provincial ministries are establishing protocols related to activities subject to the environmental assessment process, in order to ensure that heritage concerns in their respective jurisdictions are addressed. The Ontario Ministry of Transportation, for example, ensures that archaeological surveys are undertaken in advance of all new road construction in order to ensure that no archaeological sites will be unknowingly damaged or destroyed, and the Ontario Ministry of Natural Resources prepared a set of guidelines on the conservation of heritage features as part of the Timber Management Planning Process.

Other Provincial Legislation

Other land use legislation in the province provides opportunities for archaeological resource protection. The Aggregate Resources Act governs the approval of pits and quarries and is administered by the Ministry of Natural Resources. The development of a pit or quarry will often require an official plan amendment or zoning by-law amendment, and thus would require involvement by the municipality at either the upper or lower tier level. The process for addressing archaeological concerns is similar to that outlined for Planning Act related projects. A background study, field survey and detailed archaeological investigations are all identified as required Technical Reports under Part 2.2 of the *Provincial Standards for Bill 53 under the Aggregate Resources Act.*

The Cemeteries Act (Revised) addresses the need to protect human burials, both marked and unmarked, which are yet another valuable link to the past. The discovery of burials at archaeological sites will require further investigation in order to define the extent and number of interments, and either the registration of the burial location as a cemetery, or the removal of the remains for re-interment in an established cemetery. The actual workings of this process are complex and vary depending upon whether the burial(s) are an isolated occurrence, or part of a more formal cemetery, and whether the remains in question are Aboriginal or Euro-Canadian. In all cases, the success of the process is dependent upon the co-operation of the landowner, the next of kin (whether biological or prescribed), and the Cemeteries Registrar (Ministry of Consumer and Business Services). The Ministry of Culture's role in the process is to assist in co-ordinating contact and negotiation between the various parties, and ensuring that archaeological investigations of such burial sites meet provincial standards.

With this legislative planning context, success in protecting heritage features depends on sufficient resource information, sound policies, the capability to implement requirements, and participation by both local and provincial heritage planners in the process.

4.4 Federal Legislation

The federal government's Archaeological Heritage Policy Framework (Department of Canadian Heritage 1990) states that:

> *As heritage protection is an essential element of our Canadian identity, and as our archaeological heritage is a source of inspiration and knowledge, it is the policy of the Government of Canada to protect and manage archaeological resources.*

In order to realize these objectives on all lands and waters under federal jurisdiction, the Federal Archaeology Office of the Department of Canadian heritage (DCH), has an advisory role for the protection and management of all archaeological resources on all lands and waters under federal jurisdiction. The Federal Archaeology Office is also recognized as an "expert department" for matters involving implementation of specific legislation in the Canadian Environmental Assessment Act, where it is outlined that the Government of Canada seeks to conserve and enhance environmental quality and to ensure that the environmental effects of projects receive careful consideration before responsible authorities take actions in connection with them. An "environmental effect", in respect of a project, is defined to include:

> *Any change that the project may cause in the environment, including any effect of any such change on health and socio-economic conditions, on physical and cultural heritage, on the current use of lands and resources ...*

Subject to a number of exceptions, the Canadian Environmental Assessment Act applies to a project if that project received federal funding, involves the leasing, purchase or transfer of federal land, or requires a federal authority to issue a permit or grant an approval in certain prescribed circumstances.

4.5 Ownership

The question of ownership of archaeological resources, whether they be sites or individual artifacts has never been adequately resolved in Ontario. Consequently, issues of ownership have often complicated the protection or conservation of the resource.

This situation led the Ministry of Culture's Advisory Committee on New Heritage Legislation to the suggestion that:

> *Ontario should follow the lead of many provincial governments in asserting Crown ownership of archaeological objects. This cuts out all claims but those of true owners. In the case of material of Aboriginal origin, however, such an approach may be inconsistent with current steps toward First Nations' self-government and jurisdiction over certain matters. Resolution of this matter should be negotiated with First Nations* (Minister's Advisory Committee 1992:42).

If the Crown is to become the custodian of such materials, however, it will first be necessary to make better provision for their storage, curation and access to interested individuals or groups, than currently exists (OHPR 1992:59). Furthermore, it will be essential to resolve the equally legitimate, but frequently conflicting, interests of First Nations, the scientific community and of society in general, regarding the ultimate disposition of pre-contact archaeological remains. Such an objective will only be met through a long process of negotiation and consultation among these groups. The first steps, however, have been taken in this regard. In the late 1980s, the Assembly of First Nations and the Canadian Museums Association together sponsored a Task Force on Museums, the purpose of which was to develop an ethical framework and strategies by which Aboriginal peoples and cultural institutions can work together to represent Aboriginal history and culture. The results of extensive consultations carried out by the Task Force are available in the *Task Force Report on Museums and First Peoples*. Also, the Canadian Archaeological Association together with the Federal Department of Communications sponsored an extensive program of consultation with aboriginal communities across Canada resulting in a *Statement of Principles for Ethical conduct Pertaining to Aboriginal Peoples*, which should serve to guide the actions of Canadian archaeologists (Nicholson et al. 1996). While neither of these documents asserts singular ownership of artifacts, they both provide guidelines regarding their interpretation and presentation to the public.

With regard to the matter of ownership of artifacts under current provincial legislation, the legislation under which archaeologists are licensed to carry out archaeological activities is the Ontario Heritage Act. This legislation stipulates, under subsection 66(1), that "The Minister may direct that any artifact taken under the authority of a licence or a permit be deposited in such public institution as the Minister may determine, to be held in trust for the people of Ontario". Moreover, under clause 6(a) of Regulation 881, pertaining to licensing under the above Act, it is a term and condition of a licence "that the licensee keep in safekeeping all objects of archaeological significance that are found under the authority of the licence and all field records that are made in the course of the work authorized by the licence, except where the objects and records are donated to her Majesty the Queen in right of Ontario or are directed to be deposited in a public institution under subsection 66(1) of the Act."

The application of this section of the Act and this regulation typically involves the curation of recovered artifacts by the archaeologist until such time that the analyses are complete and that a place for ultimate disposition can be arranged, usually a fully accredited public repository. It is also generally assumed that archaeologists will consult with the landowner and/or their client to decide upon the location for the ultimate disposition of artifacts. In general, it is desirable that material from a particular archaeological site are ultimately deposited in a public institution located in the same community (either a local museum or a First Nation cultural centre), provided that adequate storage, curatorial facilities for both artifacts and field records are available, that the institution's collections are accessible to researchers, and that the material is not transferred or disposed of without provincial approval.

4.6 Conserving Archaeological Resources: Opportunities And Obstacles

In the protection of archaeological sites from land use disturbances or infrastructure facilities, the major characteristics of both archaeological sites and "planning" have a bearing on success. Archaeological resources have many distinct attributes that make their protection a challenging task. Not only are they fragile and non-renewable, but from a planning perspective one of their most important characteristics is that they are frequently located on private property. Thus, any policy must attempt to satisfy the dual, and sometimes conflicting objectives of respecting certain private property rights while at the same time, protecting a resource valued by society. "Planning" is generally undertaken in an effort to seek a common or public good that market forces and private interests do not seek. Within the context of planning and development approval, archaeological sites are similar to ecological features in that they may not have a tangible market value. Moreover, traditional benefit-cost valuation techniques are unable to price the resource accurately in market terms, since there is no legitimate market for archaeological artifacts. Consequently, individuals responsible for the disruption of archaeological sites may not comprehend the value of preservation to society, a factor which as an obvious impact on protection policies.

On the other hand, the nature of the decision-making process constitutes one of the major and unique characteristics of planning in Ontario. Indeed, properly documented heritage criteria are often considered in the determination of the form, spatial extent and character of land disturbances. Also, the involvement of public and interest groups is encouraged or mandatory, such that decisions are sensitive to community concerns and are discussed openly. Moreover, the review and approvals process permits administrative hearings on matters at issue, with an independent decision. Thus, there is the opportunity to protect or conserve heritage features by selecting least damaging alternatives, through participation in planning decisions and in the review and approvals process.

4.7 Implementation

Introduction

As discussed above, the role of municipalities in the conservation of heritage features is crucial. Planning and land use control are predominantly municipal government responsibilities and the impact of municipal land use decisions on archaeological resources is significant, especially since municipally-approved developments constitute the majority of land disturbing activities in the Province (Hansen 1984). Without adequate screening at a municipal level, the provincial government is unable to ensure protection for valued archaeological resources. Viewed from this perspective, archaeological protection cannot be implemented without municipal involvement.

Indeed, the primary means by which resources are best protected is through the planning process. This requires the development of appropriate policies for the City of Toronto and their incorporation into the review process. At present, the City and its Committee of Adjustment are the approval authorities for all planning applications.

New Procedures

The archaeological review procedure proposed by this Archaeological Master Plan will require close co-operation between the Culture Division staff and Department of Urban Development Services, the staff of the Heritage & Libraries Branch of the Ministry of Culture, as well as the development and archaeological communities. This procedure will be applicable to all applications made under the Planning Act, except for applications made under sections 41 (site plan approval) or 70.2 (development permits[2]) of the Act, in areas of Level 1 and Level 2 archaeological potential (as indicated on the accompanying maps).

Small-scale consent applications should also be reviewed in order to determine impacts upon potential archaeological resources, although the need for a subsequent archaeological assessment will probably be less frequent. While these impacts may be more restricted in extent and will be a less frequent concern, the city will need to recognize when a small scale Planning Act development application should have regard for Provincial Policy 2.5.2 under the Planning Act.

An archaeological condition should be applied for any consent application which creates a new building lot (on land that is presently vacant) if:

- The application is situated within the zone of archaeological potential, or
- The application contains or will directly affect a federal, provincial, or municipal historic landmark, monument, site or designated property.

[2] Under the current Regulation (O.Reg. 246/01).

Archaeological conditions of approval involving archaeological assessments, determination of mitigation methodologies, and the undertaking of archaeological site mitigation should be applied as early as possible in the development application and approval process, always prior to any site disturbance. This will minimize delays and provide an opportunity to tie the review of large-scale applications directly to a predetermination of archaeological concerns associated with a property, and even provide the opportunity to ensure that any outstanding heritage concerns are identified or resolved will in advance of submission of a formal application to the City. As the development and implementation of mitigation or preservation options for significant archaeological resources may occasionally be comparatively time-consuming activities, it is to the development proponent's advantage to identify, schedule and budget for any mitigation measures at the earliest possible opportunity. Therefore, determination of the need for an archaeological assessment may be made in consultation between the applicant and City staff prior to the submission of a final application for a site within the area of archaeological potential.

Establishing these procedures will address the provincial interest in archaeological resources identified in the Planning Act and the related components of both the Federal and Provincial Environmental Assessment Acts.

The new archaeological procedure should also apply to municipal development and/or infrastructure projects that might disturb soils in areas of archaeological potential. Any on-site activities such as site grading, excavation, removal of topsoil, or peat and the placing and dumping of fill, building construction; drainage works, except for the maintenance of existing municipal drains, should be subject to the same procedures.

4.8 The Planning Review Process

The following outlines the basic procedure recommended for use in the development review process for all planning applications within the Central Waterfront Zone of the City of Toronto, except for applications under sections 41 (site plan approval) or 70.2 (development permits[3]) of the Planning Act (Figure 33).

[3] Under the current Regulation (O. Reg. 246/01).

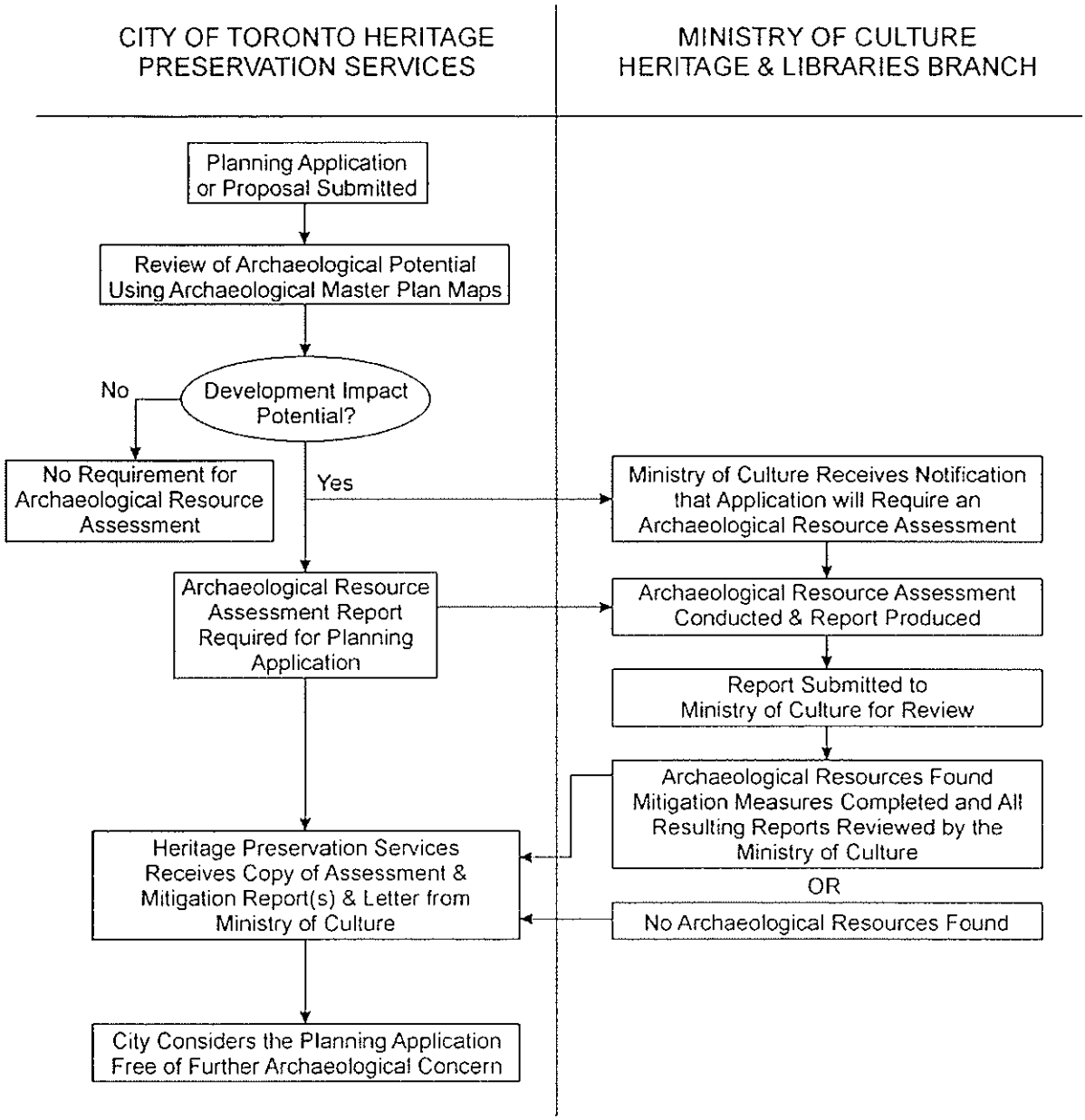

Figure 33: Planning Review Process

The general sequence of actions is as follows:

1) As part of the consultation process, Culture Division staff will determine if an archaeological assessment is required for a proposed application by means of review of the archaeological potential mapping. Should any portion of the property fall within a Level 1 or Level 2 zone of archaeological potential, then the Culture Division will require that the applicant undertake an archaeological assessment. Preferably, the assessment should be completed and submitted as part of the application. The Ministry of Culture must be provided with a copy of the notice from the Culture Division that an archaeological assessment will be required of the applicant. The Ministry of Culture will require this in order to complete their review of the archaeological assessment and to be able to provide the applicant and the City of Toronto Culture Division, each, with a letter recommending clearance of outstanding archaeological concerns.

2) When part of a proposed development falls within a Level 1 zone of archaeological potential, the applicant must retain a licensed archaeologist to conduct a Stage 1 and 2 archaeological assessment. When part of a property falls within a Level 2 archaeological potential zone, the applicant must retain a licensed archaeologist to conduct a Stage 1 archaeological assessment. In either case, the **entire** subject property must be assessed, not simply the portion(s) that falls within the Level 1 or Level 2 zones. Any deviation from this approach must be approved by the Ministry of Culture. Also, all work conducted by the archaeologist as a result of the archaeological condition must conform to the standards set forth in the most current *Archaeological Assessment Technical Guidelines* authorized by the Ministry of Culture.

WORDING FOR THE ARCHAEOLOGICAL CONDITION:

1. The applicant shall retain a consultant archaeologist, licensed by the Ministry of Culture under the provisions of the Ontario Heritage Act (R.S.O. 1990), to carry out an archaeological assessment of the entire development property and mitigate, through preservation or resource removal and documentation, adverse impacts to any significant archaeological resources found.

2. The consultant archaeologist shall submit a copy of the relevant assessment report(s) to the Heritage Preservation Services Unit.

3. No demolition, construction, grading or other soil disturbances shall take place on the subject property prior to the City's Culture Division (Heritage Preservation Services Unit) *and* the Ministry of Culture (Heritage Operations Unit) confirming, in writing, that all archaeological licensing and technical review requirements have been satisfied. In some locations in the waterfront planning area, it may be appropriate to schedule field assessment in conjunction with construction if the potential feature is deeply buried and the Ministry of Culture approves the approach.

A Stage 1 assessment consists of background research concerning registered sites on the subject lands or within close proximity, as well as the environmental character of the property and its land use history.

A Stage 2 assessment consists of field survey to document any sites that may be present on a property. It should be noted that completion of an archaeological field assessment of a particular development property, no matter how rigorous, does not fully guarantee that all significant archaeological resources on that property will be identified prior to land disturbance. This is particularly the case in areas where processes such as filling, flooding or erosion have resulted in the burial of original ground surfaces, or with respect to isolated human burials that are typically small features that can escape detection.

Stage 3 investigations are designed to secure a detailed understanding of the nature and extent of a site and may involve complete or partial systematic surface collection and test excavation.

Stage 4 undertakings comprise extensive excavation; comparative analysis and interpretation of content and contextual information. Further discussion of the various mitigative options may be found in Section 4.9 below.

3) Once the archaeological assessment, consisting of background research, or background research and a field survey, has been completed, the archaeological consultant will submit a report to the Heritage Operations Unit of the Ministry of Culture. The Ministry of Culture staff will review the report to determine if the assessment has met current licensing and technical standards. If this is not the case, the Ministry of Culture will require the consultant to carry out additional field work, and/or provide more extensive documentation.

4) If the assessment complies with current licensing and technical standards and did not result in the identification of any archaeological potential within the property (in the case of a Stage 1 assessment) or did not result in the documentation of any significant archaeological resources (in the case of a Stage 1-2 assessment), the Ministry of Culture will provide a letter to both the development applicant and the Culture Division, which will serve to notify them that all provincial concerns with respect to archaeological resource conservation and archaeological licensing have been met. Upon receipt of this notification of the Ministry of Culture approval, and supporting documentation from the archaeological consultant, the Culture Division may then clear the planning application of any further archaeological concern.

5) If a Stage 1 assessment of a property within the Level 2 archaeological potential zone confirms that potential does indeed exist, then a Stage 2 assessment must be completed.

6) If the assessment did result in the documentation of one or more significant archaeological resources, appropriate mitigation and/or preservation options must be recommended by the licensed archaeologist and approved by the Ministry of Culture. Upon completion of the mitigation, the archaeological consultant must provide a report detailing this work and its results to the Ministry of Culture, which will review the work and recommend to the consultant and the Culture Division that there are no further archaeological concerns, or that additional mitigations be undertaken, as the case may be.

   It should be noted, in this regard, that even if one or more significant archaeological sites that will require further mitigation are documented during the course of an assessment, it is generally possible to secure partial clearance for the property, in that the archaeological requirement may be removed from the balance of the subject lands not encompassed by the archaeological site(s) and suitable protective buffer zones. Similarly, although the final report of a comprehensive archaeological mitigation may take many months to complete, final clearance for the property may be available upon the archaeological consultant completing the fieldwork and submitting a brief executive summary to the Ministry of Culture staff, and the proponent providing information regarding any outstanding concerns (e.g., commitment to production of the final report).

7) Upon receipt of notification that all Ministry of Culture archaeological conservation and licensing concerns have been addressed, and receipt of the necessary supporting documentation from the archaeological consultant, the Culture Division will clear the planning application of further archaeological concern.

Toronto Waterfront Co-operative Environmental Assessment Process

The same sequence of actions should be followed for undertakings completed through the Toronto Waterfront Co-operative Environmental Assessment process. The purpose of the Toronto Waterfront Co-operative Environmental Assessment Process is to enable the process of complying with federal and provincial environmental assessment requirements to proceed in a timely manner. This will permit the Toronto Waterfront Revitalization Corporation to undertake proper management of the infrastructure construction and development processes for the Waterfront Revitalization.

The Toronto Waterfront Co-operative Environmental Assessment process provides for the consolidation of planning and assessment work that has been undertaken on the Toronto Waterfront over the last decade. It seeks to provide protection and wise management of the environment

through the use of regional environmental assessment. The process will provide for the completion of environmental assessments for a large number of highly interrelated and spatially crowded projects in a relatively short period of time and will reduce overlap and costs.

The Municipal Project Review Process

For municipal projects, whether or not they are subject to the Federal or Provincial Environmental Assessment Act, the same process will be followed. Should the project impact areas of archaeological potential, the completion of an assessment and any necessary mitigation, subject to the approval of the Ministry of Culture, will be required.

Development Permit System

Within the Central Waterfront Part II plan area, the Department of Urban Development Services is recommending that the area be covered by a Development Permit By-law. The Development Permit System would not apply to the Toronto Islands at this time. Under Section 70.2 of the Planning Act, a municipality may, if permitted by provincial regulation, establish a Development permit system to control development. This system allows a streamlined municipal approval process by consolidating the current zoning, site plan control and minor variance processes into one process. The Central Waterfront Area is included within Schedule 1 of Ontario Regulation 246/01 as an area that may be established as a development permit system area. However, under this Regulation, no authority currently exists to require an applicant to undertake an archaeological assessment as a condition of a development permit approval.

4.9 Assessing Resource Impacts and Identifying Mitigation Strategies

If no adverse impacts to an archaeological resource will occur, then development may proceed as planned, however, a contingency plan should be designed for implementation throughout the process to ensure protection of a previously undetected resource (*e.g.*, a deeply buried deposit) and for its rapid investigation.

Should a significant archaeological resource be discovered during the course of an assessment, the development proponent, the archaeological consultant, the Ministry of Culture, and the Culture Division must assess the potential impact to an archaeological resource and arrive at rational decisions regarding integration of that resource within the site or development plan or the implementation of mitigative options.

The review process at this stage, therefore, requires the input of the proponent in order to make the decisions regarding potential adverse effects to a site. Should a site be threatened, the two available options are to immediately integrate the site into the development plan through re-allocation of open space/community park space or provide for mitigative procedures. The decision-making process with respect to mitigative procedures may be subject, however, to a cost benefit analysis where the

mitigative option involves input from all of the stakeholders, *i.e.* Culture Division, Ministry of Culture, the heritage community and the development proponent (either public sector or private sector). The Aboriginal community might also be consulted throughout the site mitigation process. As discussed below, there are a number of mitigative options including avoidance, modifications to construction techniques, and various degrees of documentation and/or excavation. In all cases, thought should be given to the interpretive and educational potential of the site.

It should also be noted that detailed information regarding a site is frequently required in order to make a more accurate assessment of significance and to determine the potential for adverse effects. This may involve different levels of on-site investigations (i.e. Stage 3 assessment information).

All management decisions that are made during the development process regarding a particular archaeological site must be informed by an assessment of that site's significance. It is only after such an evaluation that the most appropriate mitigative strategy, both in terms of resource protection and in terms of successful integration within the overall development plan, can be identified. This evaluation depends, in turn, upon information recovered during the course of the archaeological resource assessment that led to its discovery.

The process of site significance evaluation is based on a number of overlapping criteria. These are to be used in the evaluation of specific archaeological features and not to compare areas of archaeological potential. These criteria, therefore, must be applied on a case-by-case basis. They fall into two basic categories: information potential and perceived value.

Information potential is generally determined through objective assessment of the numerous factors which may be expected to affect a particular archaeological resource's potential contribution to an increased understanding of the past. Such an assessment must be carried out through consideration of the following site attributes.

- *Site integrity*: the nature and extent of disturbance or physical alteration to which a site has been subject. Site integrity often influences the degree to which reliable data can be derived. Potential forms of disturbance range from those that are relatively minor, such as rodent or tree root activity, to more severe forms such as ploughing or road and building construction.

- *Context*: temporal and spatial association(s); uniqueness or representativeness of patterns of cultural, political, economic, military or industrial history; inter-site relationships; demonstrated relationship to known historic events, processes and/or people of local, provincial, national or international significance.

- *Content*: site size, density and complexity; range of data types present (*e.g.* ecological information, artifacts, settlement patterns). Sites represented by the recovery of isolated artifacts, for example, are seldom of significance, unless that artifact is rare or represents a relatively unknown temporal period or cultural group.

- *Potential for the presence of human remains*: certain types of sites, such as settlements occupied for relatively long periods of time, may be reasonably expected to contain, or be associated with, isolated human burials or more extensive cemeteries.

- *Quality of documentation*: applies only to large scale features that cover large areas (e.g., cribbing). If good quality drawings, illustrations and written records are available or other portions of the feature have been subject to archaeological investigation and recording, little additional *new or non-redundant* information may be obtained from the archaeological investigation of the feature. If, however, little documentation exists, or it is contradictory, physical examination may be necessary.

The **perceived value** of a specific archaeological site is determined through consideration of a number of factors.

- *Public interest*: the level to which society at large recognizes the significance of a particular archaeological resource or category of resources as representing a source of "sustenance, coherence and meaning in our individual and collective lives" (*OHPR* 1990:18).

- *Educational and economic potential*: the degree to which preservation and/or examination of the site will contribute to the general public's understanding of the past. This factor also reflects the degree to which the site represents an opportunity to form the basis of a long-term educational and interpretive programme aimed at both the local community and the tourism market. The development of such a programme, however, must always strive to achieve an appropriate balance between sensitivity to the natural environment as well as the culture of those whom the site represents, and the objectives of economic and tourism development.

- *Importance to specific ethnic groups*: the extent to which a site contributes to, or maintains, recognition of a particular ethnic group's activities or presence as a factor contributing to the fabric of society at the local, regional or national level.

- *Landscape setting*: applies to archaeological sites manifested as visible ruins or earthworks, as well as to their associated traditions. Archaeological resource removal, even if fully documented, or changes to its immediate surroundings, may modify society's perception of the area, if the visible elements of the site serve as a community landmark, or form an essential part of a vista.

Upon consideration of these significance criteria, further decisions with respect to the need for any further mitigative actions may then be undertaken. Many of the sites routinely encountered will prove to be of little or no significance and will not require further investigation, beyond the mapping, measuring and photographing of the surface attributes of the archaeological site that has already occurred during the course of the initial archaeological assessment.

Where more extensive archaeological mitigation is required, recommended mitigative options may take numerous forms, including:

- *Preservation*: the preferred mitigative option. Preservation may involve long term protective measures such as project design changes (site avoidance) that integrate the resource within the overall development plan. To further avoid both accidental impact and intentional vandalism and looting, additional protective measures may include fencing, screening, or capping (only in special circumstances).

- *Stabilization*: may be required in the case of eroding archaeological deposits. This may involve the salvage excavation of the eroding area and/or the construction of retaining walls or barriers.

- *Systematic Data Recovery*: involves the recovery of data from significant archaeological sites, when other mitigative options are not feasible. It includes a complete or partial systematic surface collection, excavation, or both; a comparative analysis and interpretation of content and contextual information; and production of an investigative report. This mitigation strategy ultimately results in the destruction of the archaeological site.

- *Monitoring*: monitoring may be undertaken (only in specific circumstances) to ensure that adverse impacts on archaeological sites which could not be predicted or evaluated prior to construction are addressed. Monitoring requires the presence of a licensed archaeologist during the construction phase of a project. This takes the form of scheduled site visits and on-call availability during a long term project.

It should be noted that decisions regarding mitigative options or preservation strategies are subject to Ministry of Culture review and approval.

The site preservation/avoidance option has both short- and long-term components. The short-term component involves both the redesign of the development plan (*e.g.*, lot layouts, parkland, road and service alignments) and ensuring that the resource(s) in question are physically protected during construction by means of fencing or other visible barriers. The long-term protective measures entail the use of prohibitive zoning by-laws, as permitted by subsection 34(1) of the Planning Act, or through other conditions or orders that prohibit any future land use activities that might result in soil disturbance.

4.10 Planning Recommendations

In light of the preceding considerations, the following recommendations are made:

Recommended Changes to the City's Official Plan

Recommendation 1
It is recommended that the Official Plan for the City of Toronto be amended to include a section specific to archaeological planning. It is recommended that both a definition of archaeological resources, consistent with the definition laid out in the provincial policy statement, and recognition of their fragile nature, be included. The section should also reflect the Culture Division's commitment to adhering to the planning process identified herein.

Recommendation 2
It is recommended that archaeological assessments be considered as an appropriate provision for the enactment of a holding by-law within the Official Plan.

Recommended Implementation for the Waterfront Part II Plan

Recommendation 3
Where any portion of a proposed development application exhibits potential for the presence of sites, as defined by the site potential maps (i.e., it falls within the Level 1 or Level 2 potential zones), an archaeological resource assessment must be prepared in accordance with current technical guidelines and to the satisfaction of the Ministry of Culture, to determine if an archaeological resource is present, and if so, to determine an appropriate method to protect and manage the resource. Such a report should be submitted to the City of Toronto and the Ministry in the case of all Planning Act applications (except applications under sections 41 and 70.2) and major municipal capital projects. In the case of small-scale consent applications which require an archaeological assessment, the report should also be submitted to the Culture Division and the Ministry prior to any land disturbing activity. In all cases, the plan for protection or salvage of any significant archaeological site(s) found during the course of the assessment must also be approved by the Ministry of Culture, and be implemented prior to land disturbance. It is not necessary to undertake such assessments on those lands that fall within zones identified as being of no potential.

Recommendation 4
The City should also review all building permit applications that fall within the zones of archaeological potential, as defined by the site potential maps. While the Ontario Building Code Act is not a piece of legislation covered by the Provincial Policy Statement on Archaeology, urban development projects may be of special interest.

Recommendation 5
It is recommended that the Culture Division establish guidelines with other agencies of the City (e.g. Exhibition Place) and City departments, such as Corporate Services and Works and Emergency

Services, which ensure that in all appropriate circumstances, construction projects that may negatively impact archaeological resources on public lands (e.g., trail, playground, playing field, public washroom, parking lot construction, road widening/extension, trunk sewer and watermain construction, stormwater management facility construction, municipal building and structure construction) and which are located in areas of potential, are subject to archaeological assessment prior to any land disturbing activity

Other Recommendations

Recommendation 6

In that there are certain situations in which the City has limited planning control, thus being restricted in its ability to implement archaeological management guidelines and given that archaeological assessments may fail to detect significant deeply buried or isolated deposits, it is recommended that the Culture Division develop and adopt, in consultation with the urban Development Services Department, the Ministry of Culture, other appropriate agencies, landowners, and the public, a "Contingency Plan for the Protection of Archaeological Resources in Urgent Situations."

As outlined in archaeological licensing regulations, the Contingency Plan should specify that if deeply buried archaeological remains are found on a property during construction activities, then the Ministry of Culture should be notified immediately. It should further specify that if human remains should be encountered during construction, the development proponent should immediately contact the police, the Ministry of Culture, and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Commercial Relations. If the burials are determined to be of Aboriginal origin, the local aboriginal community must also be notified and their assistance sought. In any case in which deeply buried archaeological remains (including burials) are encountered, all construction activity in the vicinity of the discovery should be postponed until an appropriate mitigation strategy and funding are identified and all potential impacts to the feature have been mitigated.

Such a Contingency Plan should address a notification process, involving the City, the land owner, the Ontario Ministry of Culture, and the local Aboriginal community (if relevant) and an investigation and reporting process undertaken by a licenced archaeologist.

4.11 Data Access

Under provincial policy, public access to information concerning archaeological site locations (either graphic or textual) is restricted, in order to reduce the possibility of illegal looting and site destruction. Access to information in the City's possession is determined in accordance with the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA).

Archaeological licence reports provided to the City are subject to MFIPPA and may be subject to copyright restrictions. There is no standard rule regarding ownership of copyright in archaeological

licence reports, which depends, in part, on the nature of the contract between the person who commissioned the report and the authoring archaeologist. If copyright in a licence report is owned by a third party, the City may not reproduce the report without the express written permission of the copyright owner.

4.12 Public Programmes and Interpretation

Site Interpretive Potential and Public Programmes in Archaeology

Concomitant with legislative measures intended to conserve and manage archaeological resources, means by which the general public might be made more knowledgeable of the wide range of archaeological resources present within the Culture Division, and of their significance as part of the area's cultural heritage should also be sought (bearing in mind the necessity that site locations remain confidential). A heightened public awareness of the importance and fragility of archaeological resources can serve as an additional and effective means of protecting those resources.

While the public is generally supportive of environmental causes, we must share with others that humans exist in time as well as space, and that the record of our temporal environment is slowly vanishing. As a science, archaeology often suffers from the attitudes and actions which result from public misconceptions about its motives, aims and methods. It is encouraging to note that when members of the public are made aware of archaeological sites, there exists a genuine interest not only in the prehistory and history of a region, but also in archaeology itself as an academic discipline.

Direct experience with a working archaeological project and its staff can help facilitate a clearer perception of archaeology. This kind of open exchange can clarify misunderstandings and encourage an attitude of cooperation between archaeologists and the public. The public can have an important role to play in archaeological research in the province, although their involvement should be part of a much broader research design and occur only when long-term funding is available. Otherwise, there may not be sufficient funds to properly analyze and report upon the objects acquired during a public program.

Public education programmes on archaeology increase popular knowledge and consequently increase public support for the protection of valuable cultural features. Local examples include the programs of the Toronto Chapter of the Ontario Archaeological Society and the Public Archaeology program operated at the Ashbridges' Bay site by the Ontario Heritage Foundation and the University of Toronto.

The creation of "on site" interpretive facilities can provide the public with an excellent opportunity to view archaeology in its proper context, as an ongoing process. The facility should be associated with an archaeological site, especially one which has high values for information potential, accessible to the public, is within an area where the integrity of the natural setting has been maintained to provide an ecological context, is close to existing support facilities and is available for long-term archaeological research.

Advertising and media coverage are also essential components of any public archaeology programme. Both are necessary to generate interest in the specific activities being offered at a particular site, and makes the public generally conscious of local archaeological resources and archaeological research. In order to generate the maximum amount of public interest and support for a public archaeology programme, more government participation in advertising is essential. This participation would fit the mandate of certain ministries. These programmes deserve special government "high-profile" advertising.

These public archaeological programmes, by offering a range of educational opportunities both appealing and beneficial to the public, have demonstrated the validity of public archaeology as a tool which can deepen the general understanding and awareness of archaeological resources. Public response, without exception, has been positive.

Recommendation 7
In light of the preceding, it is recommended that the City encourage site specific interpretation as a means of educating the public on the rich pre-contact and post-contact history of the City, enhancing awareness and understanding of archaeology and exhibiting the specific heritage significance of a site.

4.13 Archaeological Collections from Sites in the City of Toronto: Management and Curation

There is a need to co-ordinate the disposition of artifacts recovered from archaeological sites within the City. As discussed in Section 4.5, it may be preferable that material from a particular archaeological site is ultimately deposited in a public institution located in the same community, provided that: adequate storage and curatorial facilities for both artifacts and field records are available; that the institution's collections are accessible to researchers; and that the material is not transferred or disposed of without provincial approval.

While the existing museum facilities within the City may already have collections of material, or may be willing to accept additional material, many artifacts from sites in Toronto are currently curated elsewhere. Collections derived from the activities of private licensed archaeological consulting firms, for the most part, remain in the care of those firms.

Should the Culture Division deem it desirable to seek to establish a guideline encouraging the curation of material from archaeological sites within the City at local museums (existing or proposed), researchers active in the area could be made aware of this interest. It would first be necessary, however, to ensure that such institutions possess adequate storage and curatorial facilities, and collection management policies.

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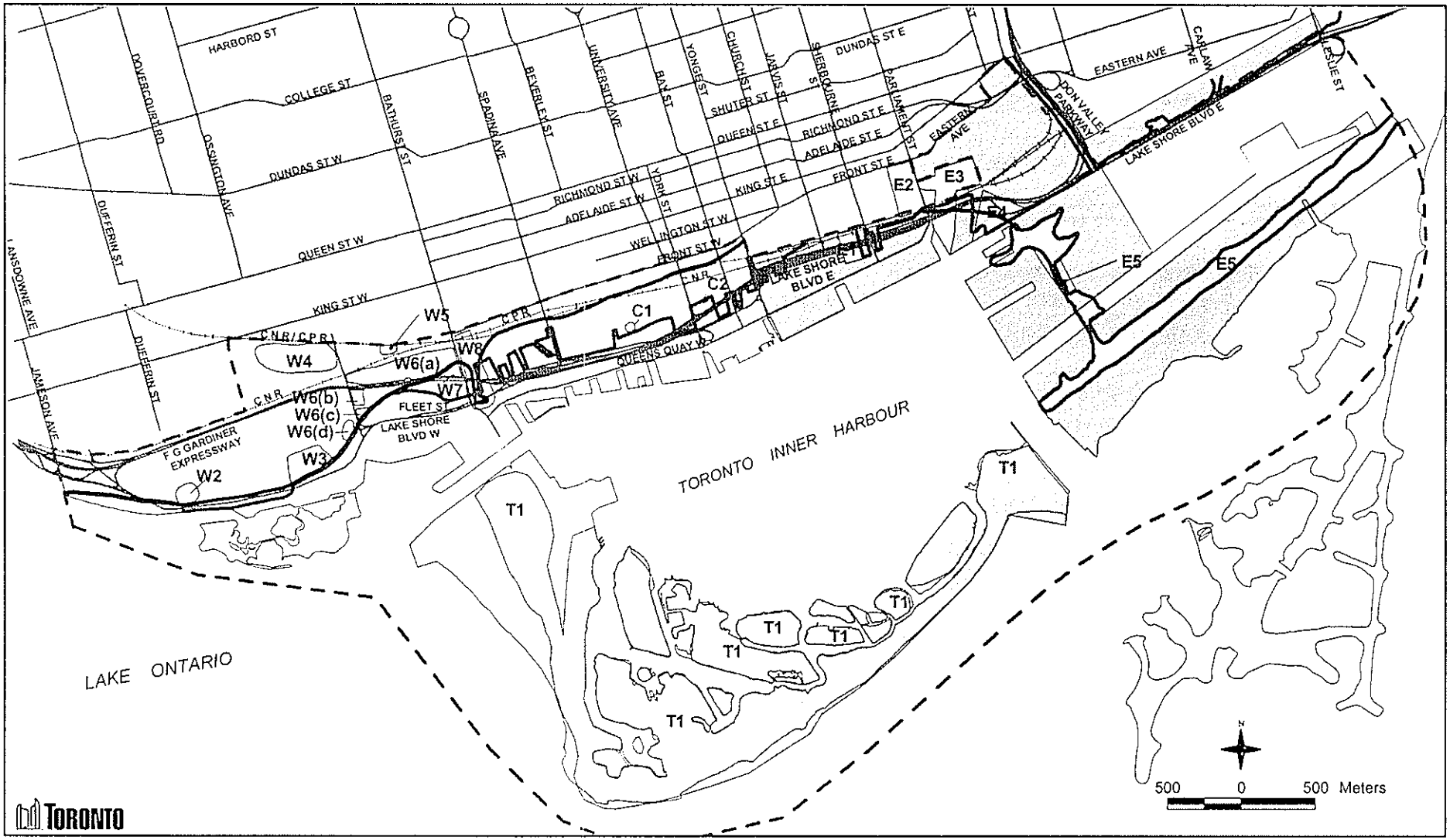

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Survey and Mapping Services
Technical Services
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Toronto, Ontario M3B 1V5

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Level 1 Archaeological Potential Zone
Level 2 ArchaeologicalPotential Zone
T1 Site Number
Study Area
1912 Shoreline
1820 Shoreline

CENTRAL WATERFRONT ARCHAEOLOGICAL MASTER PLAN