



Archaeological & Cultural  
Heritage Services

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**TO:** Meghan Bratt, MMM Group Limited

**FROM:** Lisa Merritt, ASI

**RE: Lower Yonge Precinct  
Existing Conditions Memorandum**

**August 5, 2016**

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In advance of the ESR Documentation, please find below our review of the Existing Conditions for archaeological resources captured within the Lower Yonge Precinct study area. We understand that the contents of this existing conditions report will be used to help inform the project and ultimately the ESR Documentation will assist the evaluation of design concepts and identify mitigation measures to minimize or eliminate identified archaeological impacts during design and construction.

Memorandum

## 1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by MMM Group Limited on behalf of the City of Toronto and Waterfront Toronto to provide input into the ESR documentation for the Lower Yonge Municipal Class Environmental Assessment (MCEA) study area (Figure 1). As part of the scope, ASI prepared an Existing Conditions memorandum outlining the preliminary results of the background research to inform the project and factor into the design process.

The 2011 *Standards and Guidelines for Consultant Archaeologists (S & G)* were used to guide the background research conducted. The S & G, Section 1, administered by the Ministry of Tourism, Culture and Sport (MTCS) discusses the objectives of background research as follows:

- To provide information about the geography, history, previous archaeological fieldwork and current land condition of the study area; and,
- To evaluate in detail the archaeological potential of the study area which can be used in a Stage 1 archaeological assessment, if necessary, to support recommendations for Stage 2 archaeological assessment for all or parts of the property.

This memorandum describes the Existing Conditions for this project and is organized as follows: Section 2.0 summarizes the background study that was conducted to provide the archaeological and historical contexts for the project study area; Section 3.0 analyses the characteristics of the project study area and evaluates its presence of criteria indicating archaeological potential; and the remaining sections contain other report information, including works cited and mapping.

Authorization to carry out the activities necessary for the completion of this memorandum was granted to ASI by MMM Group Limited.

## 2.0 EXISTING CONDITIONS: BACKGROUND RESEARCH

The following section provides a summary of the Archaeological Existing Conditions within the study area.

Glacial Lake Iroquois came into existence by about 12,000 before present (BP) as the Ontario lobe of the Wisconsin glacier retreated from the Lake Ontario basin. Isostatic uplift and the 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 started to drop 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. During this period the waters stood as much as 100 m below current levels. At this time isostatic uplift had started to raise the outlet around Kingston so that by 10,000 BP the water level had risen to about 80 m below present. Uplift has continued to tilt Lake Ontario upward to the northeast, propagating a gradual and transgressive expansion throughout the basin. Low-water levels continued until approximately 5,400 BP, by when water levels in the Lake Ontario basin had rebounded to their modern levels (Anderson and Lewis 1985; Karrow 1967:49; Karrow and Warner 1990:20-21). During these low-water levels the exposed lakeshore plain would have been occupied by human populations (Ellis 2013). The study area would have been shoreline zone at approximately 4,000 BP (ASI 2003:Fig.1).

Since between approximately 1893 and 1903 lake-fill was deposited into Lake Ontario creating a new waterfront up to the approximate extent of the between the modern day rail ROW and the Esplanade. This



lake-fill created the foundation of Toronto's late nineteenth century port waterfront. Further lake-fill between approximately 1910 and 1931 brought the waterfront to approximately the extent of Lakeshore Boulevard. Further lake-fill brought the waterfront largely to its modern extent approximately 1950 (ASI 2008).

Extensive review of historic mapping has been previously completed as part of the background research conducted for the *Waterfront Toronto Archaeological Conservation Management Strategy* (ACMS) (ASI 2008). The results of this research are analysed and summarised in this document and are addressed below (Section 3.0; Figure 3).

A review of the physiography of the study area indicates that it is situated within the Iroquois Plain physiographic region of southern Ontario which is a sand plain landform (Chapman and Putnam 1984) that has been submerged by the waters of Lake Ontario. The study area is naturally underlain by deposits of coarse-textured littoral lacustrine sand and includes deposits of gravel and minor deposits of silt and clay (Ontario Geological Survey 2010) (Figure 2). Detailed soil information is not available for the City of Toronto due to the extensive development affecting the natural soil (Department of Agriculture 1977; Hoffman and Richards 1955).

### **3.0 EXISTING CONDITIONS: CRITERIA INDICATIVE OF ARCHAEOLOGICAL POTENTIAL**

The S & G, Section 1.3.1, lists criteria which are indicative of archaeological potential. The study area meets the following criteria which are indicative of archaeological potential:

- Proximity to Euro-Canadian settlement (Toronto)
- Proximity to historic features (e.g. harbourfront wharfage)
- Proximity to historic transportation routes (Lake Ontario; wharves; Grand Trunk Railway)
- Proximity to water source (Lake Ontario)

These criteria are indicative of the study area having potential for the identification of Euro-Canadian archaeological sites, depending on the degree of disturbance and physical features of the study areas. The study area consists of lake-fill constructed at the close of the nineteenth century and subsequently modified in the early twentieth century (ASI 2008). The study area therefore does not include any potential for Aboriginal archaeological resources.

ASI (2008) prepared the ACMS for Waterfront Toronto in order to better inform the planning and development review process especially pertaining to the preservation and documentation of archaeological resources, to develop a framework for the evaluation of significant archaeological resources, to identify best practices for the preservation, interpretation, commemoration and exhibition of archaeological resources within a holistic framework, and to explore opportunities for new archaeological interpretive concepts. Pertinent to the present assessment, this document inventoried 11 archaeological resource features within the general study area. These features and recommended mitigation measures are outlined in Table 1 below.

Table 1: Details of previously inventoried archaeological resource features within the study area according to ACMS

<b>Inventory #</b>	<b>Feature/Resource</b>	<b>Significance Ranking and Recommended Action</b>	<b>Opportunity Options</b>
CW-1	Ca. 1893-1925 Yonge Street Wharf	Grade 2: Requires Archaeological Monitoring	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate
CW-2	circa 1893-1925 City Wharf	Grade 3: No further work required	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate
CW-3	Ca. 1893-1925 Toronto Electric Light Co. Wharf	Grade 2: Requires Archaeological Monitoring	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate
CW-4	Ca. 1903-1923 Toronto Canoe Club Wharf	Grade 2: Requires Archaeological Monitoring	Limited opportunity to restore; limited to fair opportunity to recreate; fair opportunity to commemorate
CW-5	Ca. 1903-1923 Argonaut Rowing Club Wharf	Grade 2: Requires Archaeological Monitoring	Limited opportunity to restore; limited to fair opportunity to recreate; fair opportunity to commemorate
CW-6	Ca. 1903-1923 Unidentified Wharf	Grade 2: Requires Archaeological Monitoring	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate
CW-7	Ca. 1903-1923 Harbour Square Wharf	Grade 2: Requires Archaeological Monitoring	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate
CW-8	Ca. 1893-1925 Toronto Ferry Terminal Wharf	Grade 3: No further work required	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate
CW-11	Ca. 1929-1939 Air Harbour	Grade 3: No further work required	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate
CW-12	Ca. 1925 Bulkhead/ Pierhead Line and Contemporary Shore	Grade 3: No further work required	No opportunity to restore; limited to fair opportunity to recreate; attractive opportunity to commemorate
CW-13	RCAF Equipment Depot No. 1	Grade 3: No further work required	No opportunity to restore; limited to fair opportunity to recreate; limited to fair opportunity to commemorate

Four additional wharves exist east of the 1893-1925 Toronto Electric Light Co. Wharf (Figure 4: marked in pink; from west to east: Nairn's Wharf, the Church/Adamson's/City/ St. Lawrence wharves in their various configurations through time, and the Beard's/Hagerty & Grassett's/Leak's/Cosmopolitan wharves in their various configurations through time also require archaeological monitoring prior to any proposed impacts. These features were outside of the ACMS study area.

According to the Ontario Archaeological Sites Database (OASD) maintained by the MTCS there are 26 previously registered archaeological sites located within one kilometre of the study area (MTCS 2016). Details of these sites are given below in Table 2. None of these sites is located within the study area or within 50 m of the study area.



Table 2: Details of previously registered archaeological site registered within one kilometre of the study area

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AjGu-15	Front Street	Euro-Canadian	Public Building	O'Brien (no date)
AjGu-17	St. James Burying Ground	Euro-Canadian	Cemetery	S. Janusas 1985; ASI 2002
AjGu-21	Navy Wharf	Euro-Canadian	Commercial/Transport Structure	MPP 1986
AjGu-23	Esplanade Crib	Euro-Canadian	Commercial/Transport Structure	MPP 1986
AjGu-24	Furniss Water Works Wharf	Euro-Canadian	Commercial/Transport Structure	MPP 1986
AjGu-25	1894 Landfill	Euro-Canadian	Commercial/Transport Structure	MPP 1986
AjGu-34	Southtown	Euro-Canadian	Commercial/Transport Structure	ASI 1994
AjGu-35	Lindenwold/The Worts Estate	Euro-Canadian	Residential	ASI 1996
AjGu-36	Court House Sqaure	Euro-Canadian	Fire Hall; Mechanic's Institute; midden	Triggs 1996
AjGu-41	First Parliament	Euro-Canadian	Public Building	ASI 2000
AjGu-46	Gooderham Windmill	Euro-Canadian	Industrial	ASI 2003
AjGu-48	The Grange	Euro-Canadian	Residence	ASI 1990
AjGu-49	Bishop's Block	Euro-Canadian	Residence	ASI 2006
AjGu-50	Ontario Heritage Centre	Euro-Canadian	Other building	Doroszenko 2006; Freisenhausen 2007
AjGu-51	Toronto General Hospital	Euro-Canadian	Institutional	ASI 2006
AjGu-64	Toronto Lime Kiln Works	Euro-Canadian	Industrial	Archeoworks 2009
AjGu-67	West Market Square Hotel	Euro-Canadian	Commercial	ASI 2011
AjGu-70	15-19 Beverley Street	Euro-Canadian	n/a	n/a
AjGu-74	Queen's Wharf Station	Euro-Canadian	Railway	ASI 2011
AjGu-75	n/a	Euro-Canadian	n/a	n/a
AjGu-81	Dollery	Euro-Canadian	Residence	ASI 2012
AjGu-82	King-Caroline	Euro-Canadian	Residential/Industrial	ASI 2012
AjGu-85	Berkeley House	Euro-Canadian	Residential	ASI 2013
AjGu-89	Old Upper Canada College	Euro-Canadian	Institutional	ASI 2015
AjGu-92	St. Lawrence Market	Euro-Canadian	Public Building	Golder & Associates Inc. 2015
AjGu-93	Jack Cooper Lane Parking Lot	Euro-Canadian	Residence	Stantec 2015

MPP – Mayer, Pihl, Poulton and Associates Inc.

As part of our review of archaeological projects located within 50 m of the project limits—as required by S & G Section 1.1, Standard 1, we determined that two previous archaeological assessment have been completed within 50 m of the study area which are relevant to the current study area (ASI 2007a; 2007b). These reports are summarised below.

ASI (2007a) prepared a monitoring report documenting twentieth century cribbing at 33 Bay Street (TE SPS 2003 0010) in the City of Toronto under the project direction of Debbie Steiss (MCL CIF P049-156-2007). Monitoring was conducted January 5, 9 and 26, 2007 under the field direction of Dr. Ronald Williamson and David Robertson. Remains of the 1903-1910 Toronto Ferry Terminal Wharf were recorded. The property was



recommended as free of further archaeological concern. Ministry of Tourism and Culture (MTC) concurrence was received on July 6, 2010 (MTC 2010b).

ASI (2007b) conducted a Stage 1 archaeological resource assessment of draft plan of subdivision of part of Lots 20-25, registered plan 696-E (125 Queens Quay East) in the City of Toronto under the project direction of Debbie Steiss (MCL CIF P049-188-2007). The background research for this assessment concluded that there was no potential for Aboriginal or Euro-Canadian archaeological resources and recommended that the property be considered free of any further archaeological concern. MTC concurrence was received on February 3, 2010 (MTC 2010a).

#### **4.0 EXISTING CONDITIONS: SUMMARY**

The Lower Yonge Precinct study area includes 10 previously inventoried archaeological resource features. Six of these features require further archaeological assessment by archaeological monitoring. Three other features outside of the original ACMS study area but within the present Lower Yonge MCEA study area, will also require further archaeological assessment through archaeological monitoring (Figure 3). The features in the Lower Yonge MCEA study area consist of the following:

- ca. 1893-1925 Yonge Street Wharf (AMCS CW-1) (the Lower Yonge MCEA study area also includes ca. 1830-1890 components of the Yonge Street Wharf complex);
- ca. 1893-1925 Toronto Electric Light Co. Wharf (AMCS CW-3) (the Lower Yonge MCEA study area also includes portions of ca. 1830-1890 predecessor wharves);
- ca. 1903-1923 Toronto Canoe Club Wharf (AMCS CW-4) (the Lower Yonge MCEA study area also includes portions of ca. 1830-1890 predecessor wharves);
- ca. 1903-1923 Argonaut Rowing Club Wharf (AMCS CW-5) (the Lower Yonge MCEA study area also includes portions of ca. 1830-1890 predecessor wharves);
- ca. 1903-1923 Unidentified Wharf (AMCS CW-6) (the Lower Yonge MCEA study area also includes portions of ca. 1830-1890 predecessor wharves);
- ca. 1903-1923 Harbour Square Wharf (AMCS CW-7) (the Lower Yonge MCEA study area also includes portions of ca. 1830-1890 predecessor wharves);
- ca. 1850-1923 Nairn's Wharf in its various configurations;
- ca. 1860-1923 Church/Adamson's/City/St. Lawrence wharves in their various configurations;
- ca. 1860-1923 Beard's/Hagerty & Grasset's/Leak's/Cosmopolitan wharves in their various configurations.

Any transportation improvement initiatives that will involve excavations approaching or exceeding an elevation of approximately 76.0 m above sea level (a.s.l.) in the locations of these inventoried features (Figure 3) should be subject to archaeological monitoring to ensure that any remains of these features are documented, through photography and the preparation of measured drawings. A Stage 1 Archaeological Assessment should be undertaken for any transportation initiative that moves forward, and the monitoring scope would be defined at this time.



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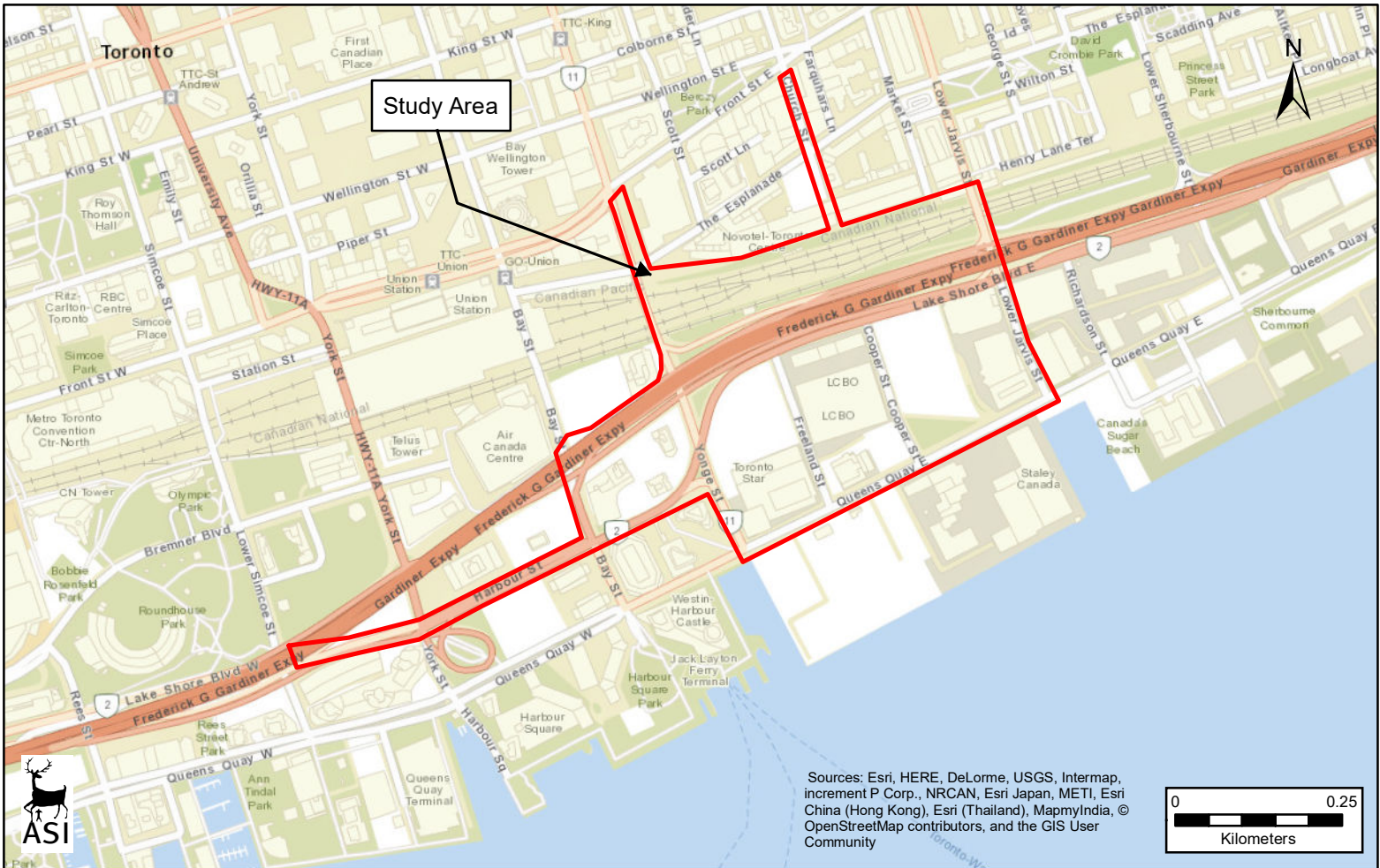
<[http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm\\_dir.asp?type=pub&id=MRD128-REV](http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD128-REV)>





**6.0 MAPS**






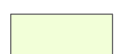
Study Area

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community






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 Study Area  
 Sand

0 500  
  
**Metres**

ASI PROJECT NO.: 15EA-219  
 DATE: 19 Jul 2016  
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Figure 2: Lower Yonge Precinct Study Area Surficial Geology

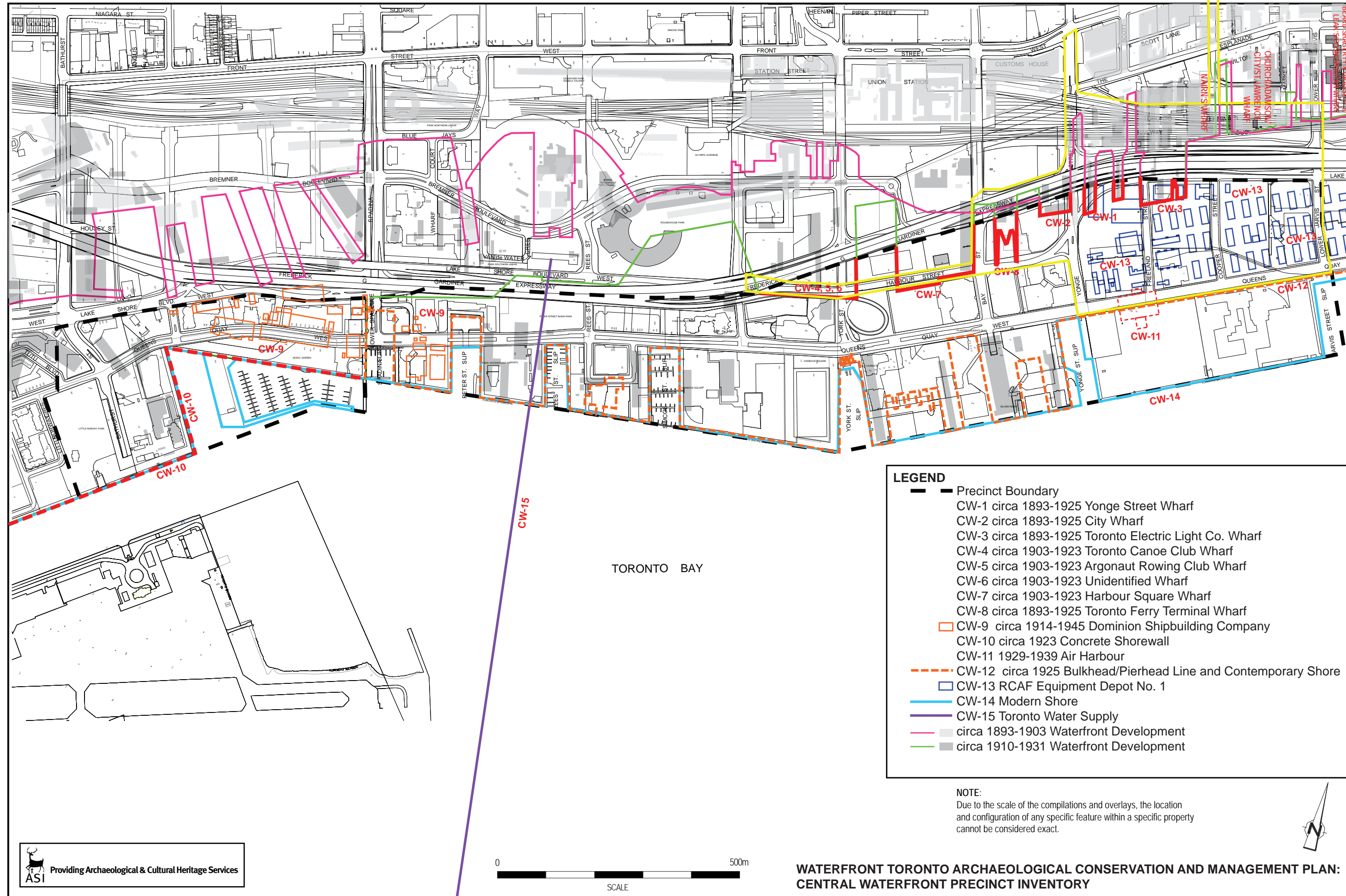
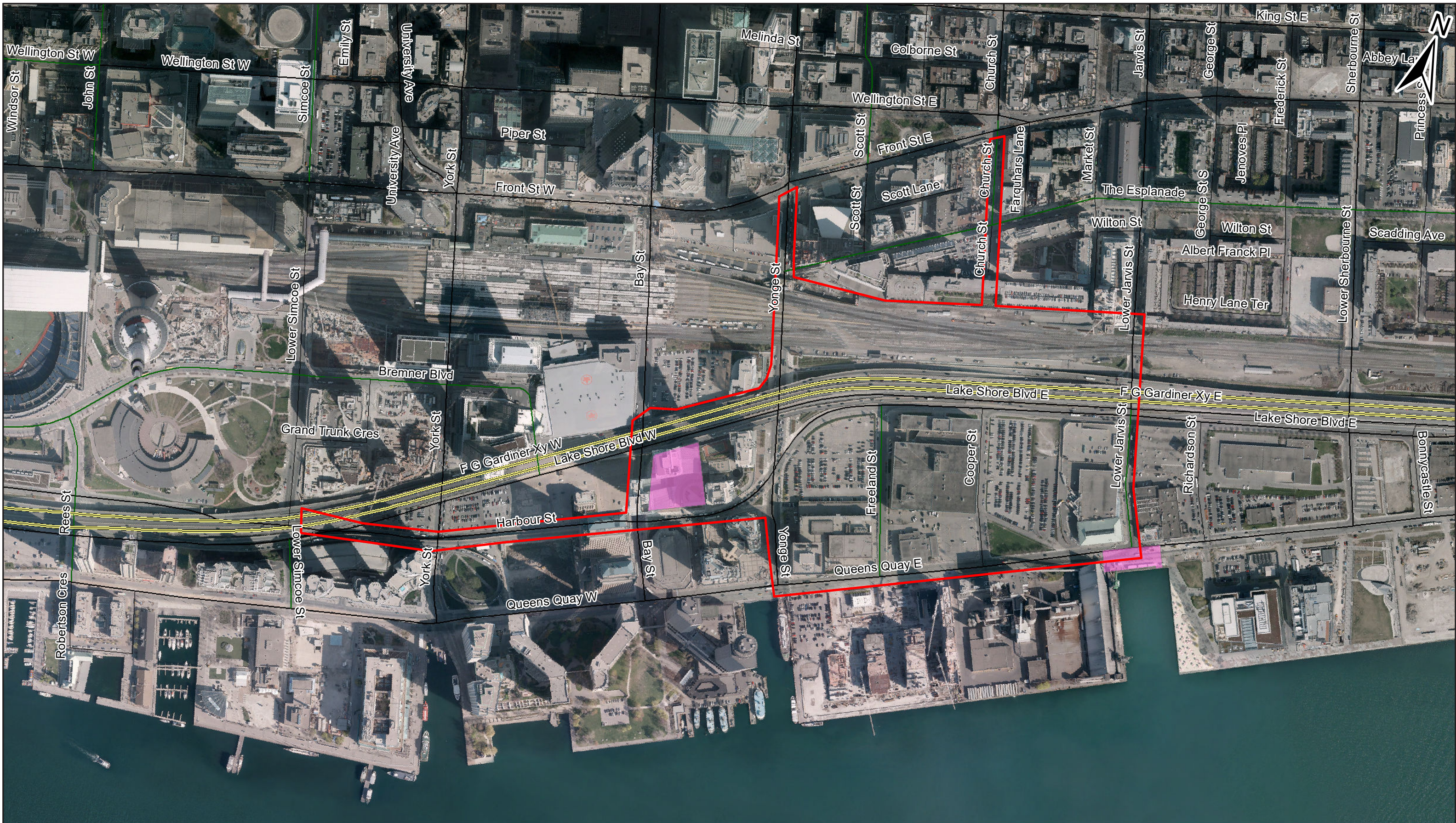




Figure 3: Lower Yonge Precinct Study Area overlaid on 2008 ACSM Central Waterfront Precinct Inventory





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 Study Area

 Previously Assessed (ASI 2007a; 2007b)

BASE:  
 Ortho  
 Esri, DigitalGlobe, GeoEye, i-cubed, USDA,  
 USGS, AEX, Getmapping, Aerogrid, IGN,  
 IGP, swisstopo, and the GIS User Community

0  250  
 Metres

ASI PROJECT NO.: 15EA-219  
 DATE: 21 Jul 2016

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Figure 4: Lower Yonge Precinct Study Area Previous Archaeological Asssment