

Figure 11. 1892 Sanborn map of Iron Pier amusement area and Salina Pier pavilion, with approximate boundaries of SYW-12 highlighted.

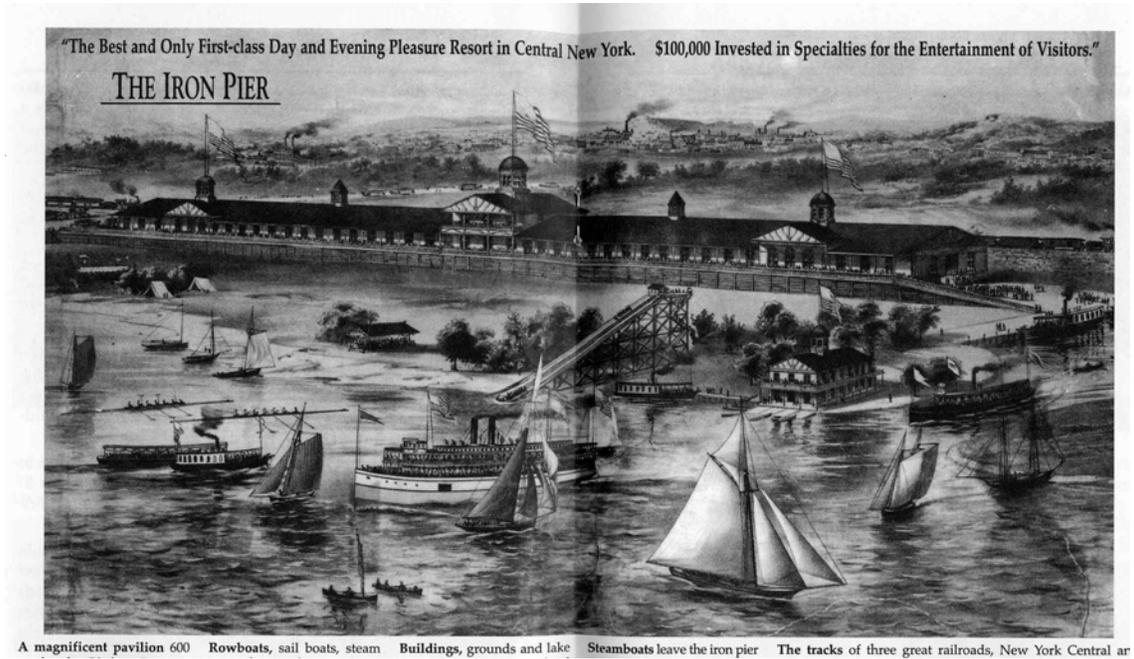


Figure 12. Late 19th century advertisement for the Iron Pier (from Onondaga County Parks 1998).

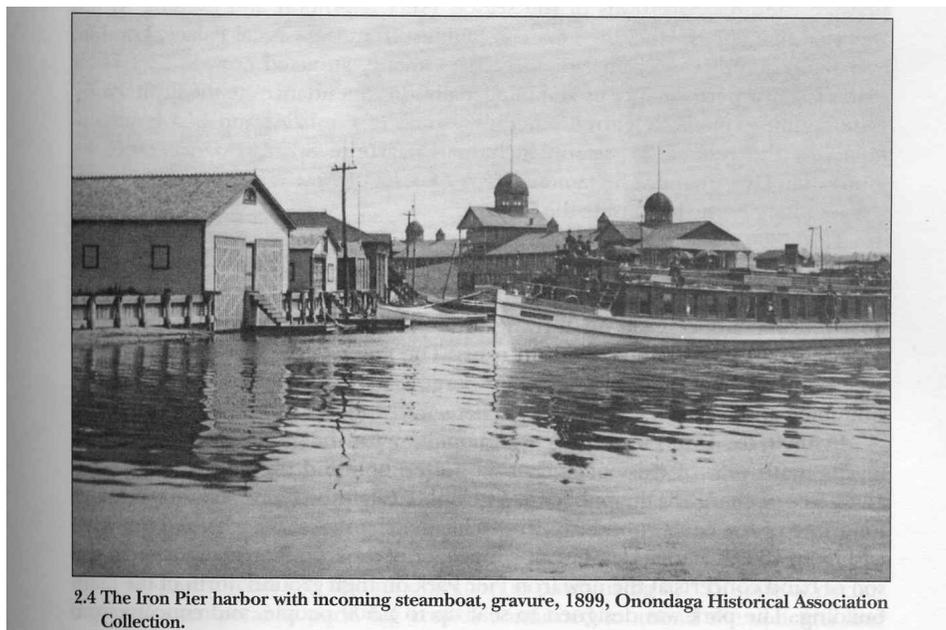


Figure 13. 1899 photograph of the Iron Pier harbor and park (from Thompson 2002), with pavilion in background.

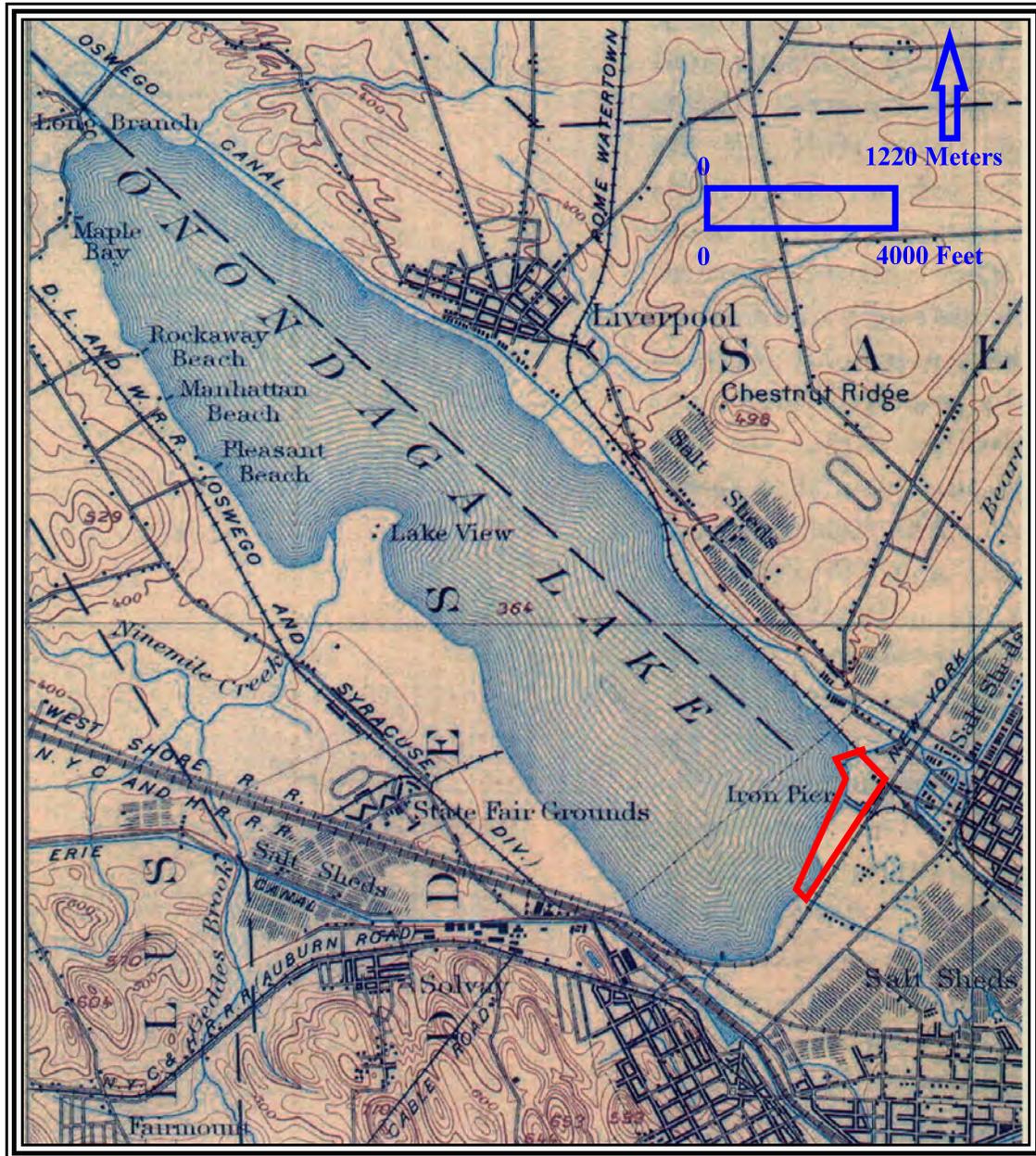


Figure 14. 1898 15-minute Syracuse East USGS quadrangle, with approximate APE of SYW-12 highlighted.

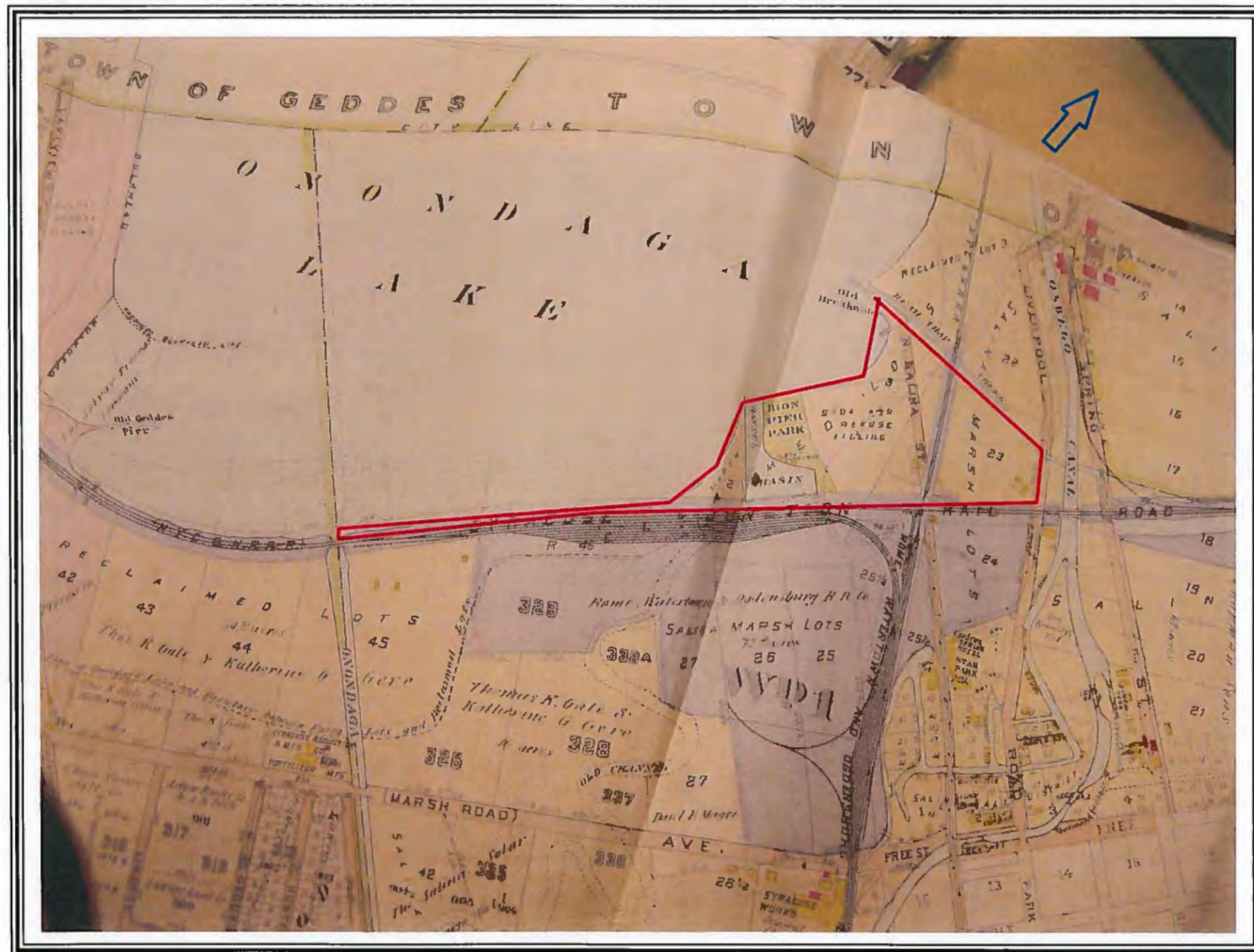


Figure 15. 1908 Hopkins map of southeastern corner of Onondaga Lake, with approximate APE of SYW-12 highlighted.

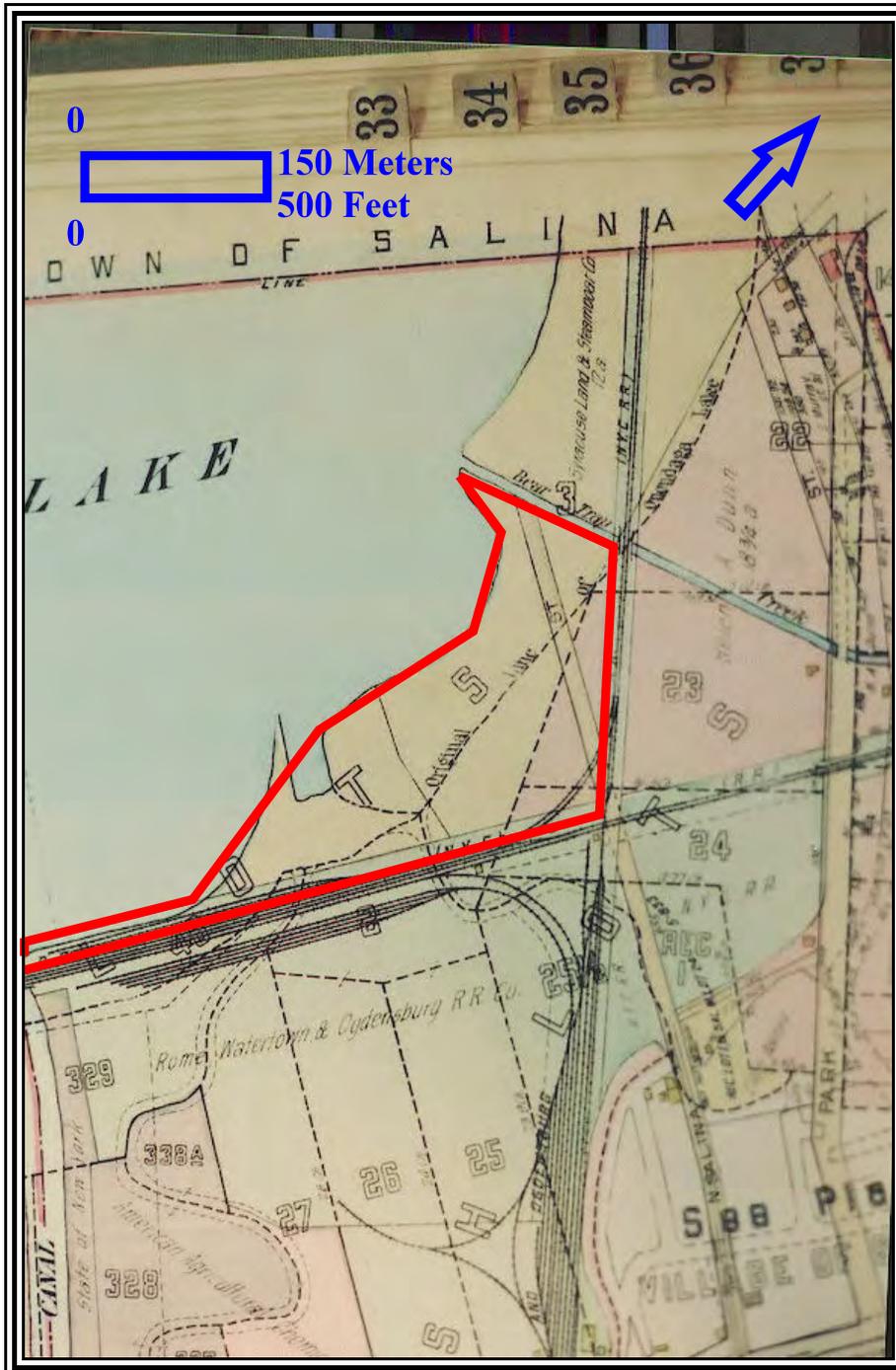


Figure 16. 1924 Hopkins map of southeastern corner of Onondaga Lake, with approximate APE of SYW-12 highlighted. Area of former harbor still existing adjacent to T within APE.

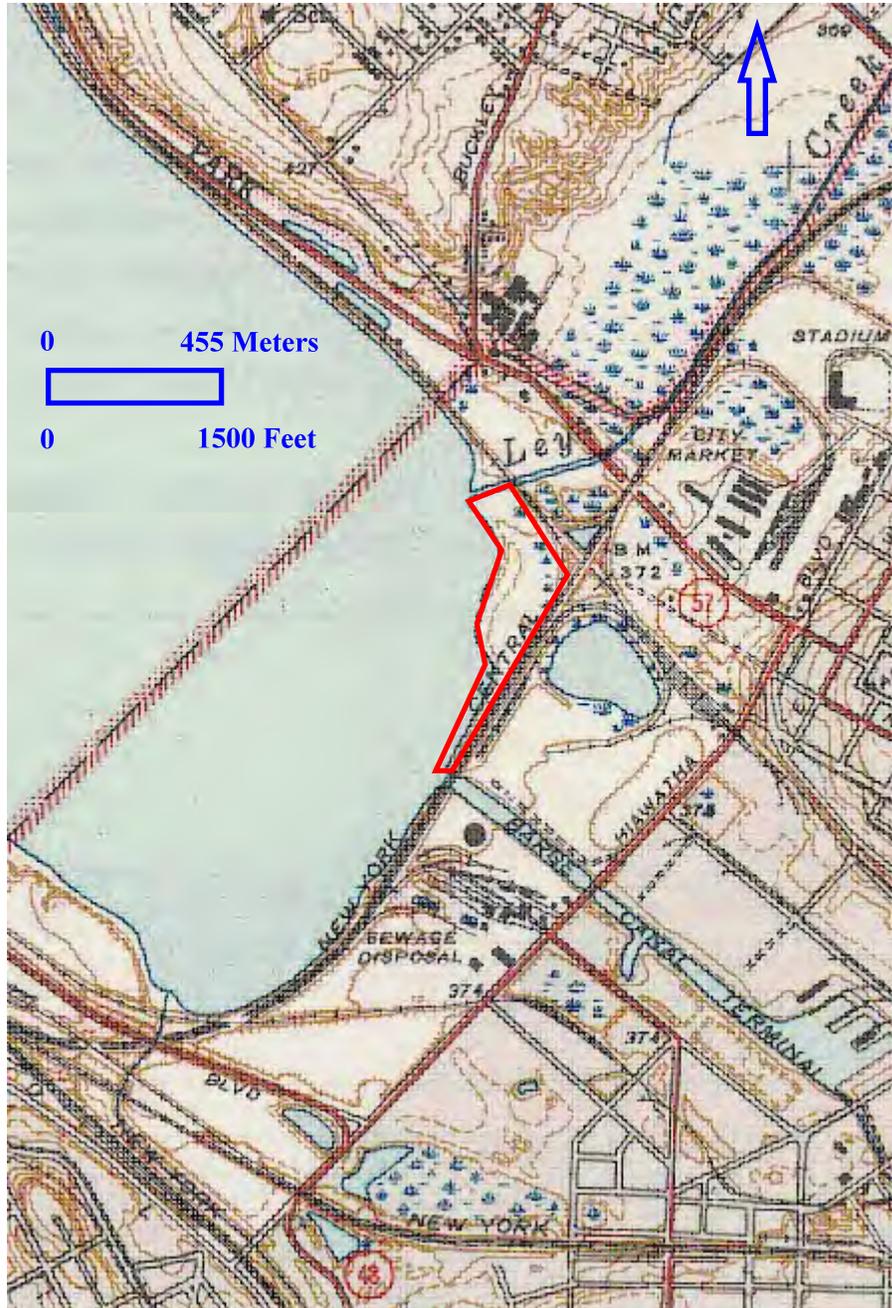


Figure 17. 1947 7.5-minute Syracuse West USGS quadrangle, with approximate APE of SYW-12 highlighted.

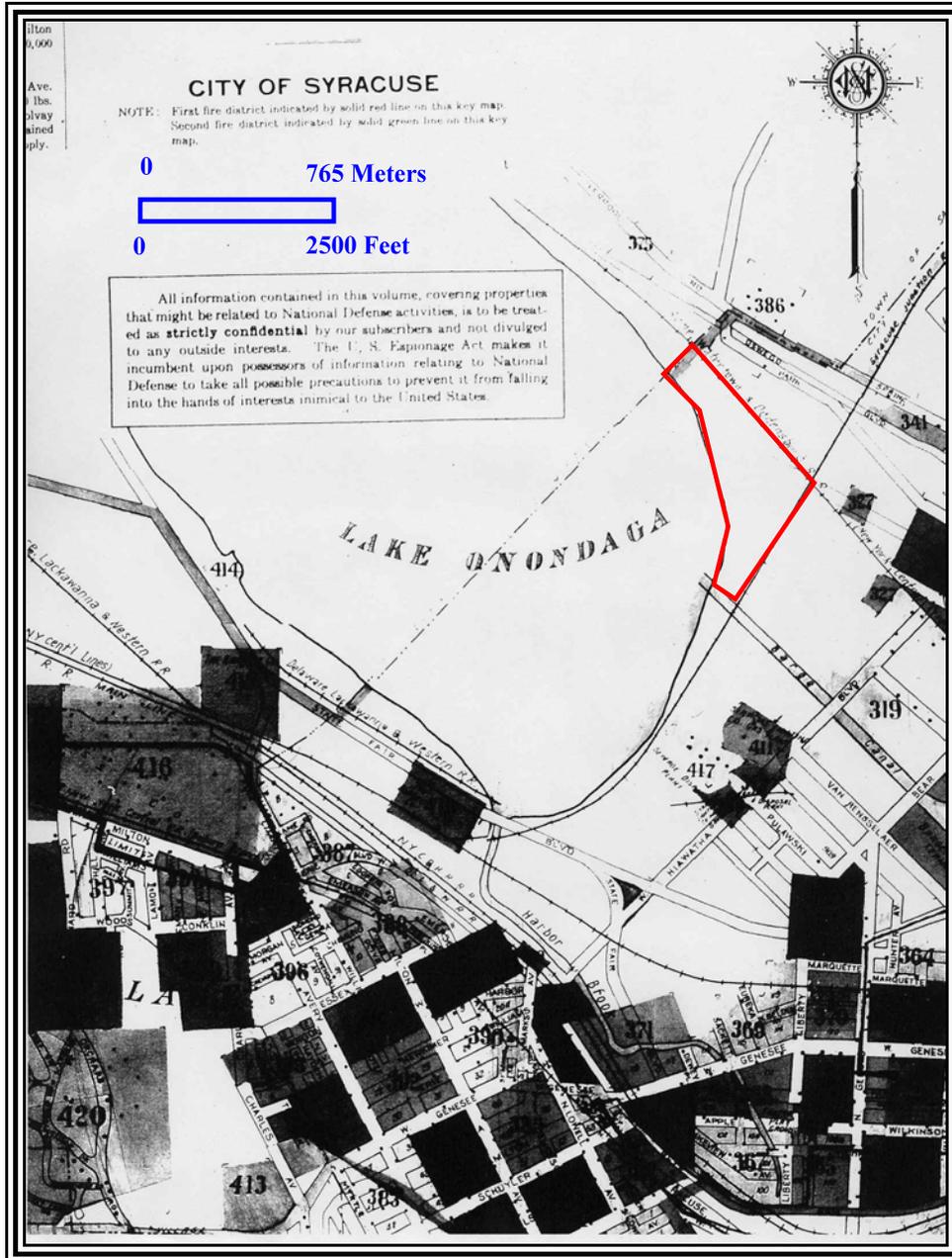


Figure 18. 1950 Sanborn map of area around southern end of Onondaga Lake, with approximate APE of SYW-12 highlighted.

4.6 Postcontact Sensitivity Assessment

The background research on the contact period suggests that Native Americans had a permanent settlement to the south of Onondaga Lake; the village of Kaneenda was occupied in the early 17th century for at least 25 years. It is believed that Kaneenda was located approximately 1200 m (3900 ft) to the southwest of the SYW-12 project area. Although Kaneenda is not located in the APE, the area adjacent to the lake margins may have been used by the Onondaga for purposes of everyday activities, including the procurement of various resources, and for ceremonies. However, the area of SYW-12 appears to have been under the water table of Onondaga Lake or was swamp/marsh adjacent to Onondaga Lake during the period from the 17th century through the middle of the 19th century. Wetlands are fragile environments that suffer from disturbance to their ecosystems and evidence of land use in the wetlands is highly unlikely during the postcontact period.

Other postcontact resources include the Salina Pier, the pavilion of the Iron Pier resort, and the maritime portion of the Iron Pier resort and park (pier, boathouses and channel). The Salina Pier was located at the southeast corner of Onondaga Lake on the south side of the confluence of the lake and Ley Brook. Remnants of the pier are not visible above the surface of the lake today. However, remnants of the Salina Pier were located during the underwater survey of Onondaga Lake as Anomalies 1 and 2 (Kane et al. 2011). The remains of the former pavilion associated with the Salina Pier are not visible on the surface and are probably located in the vicinity of the railroad line that serves as the southwest connector to the CONRAIL line. The former pavilion is also located in the vicinity of the 1908 soda ash and refuse filling (Figure 15, p. 19), where up to 1.2 m (4 ft) of waste was deposited. Therefore, there is the potential for both structural and artifactual remains associated with the pier pavilion to be present if they are located far enough away from the railroad. Structural remains could include the wooden floor of the pavilion if the floor was not removed during demolition of the superstructure of the pavilion. However, the floor of the pavilion can be discerned from Sanborn maps and finding it archaeologically would not have additional research potential. Artifactually, there is the potential for finding inadvertently dropped personal items, such as coins, combs, and jewelry, within and around the pavilion. It is equally likely that the grounds around the pavilion would have been cleaned and refuse removed regularly to keep a favorable appearance for visitors. These low density items, while informative of the clientele who enjoyed the pier and pavilion, would be difficult to find in sufficient quantity and diversity to provide a foundation for interpretation.

The Iron Pier resort was located at the southeast corner of Onondaga Lake and west of the former intersection of North Salina Street and New York Central Railroad. This area included a pavilion area adjacent to the former New York Central Railroad, as well as a channel and basin of a small harbor and the maritime structures along the edge of the harbor and on the edge of Onondaga Lake. Much of the pavilion area is located in the vicinity of the 1908 soda ash and refuse filling (approximately 1.2 m [4 ft] in depth). The maritime features of the Iron Pier resort and park appear to have been removed and possibly covered by 1924 (Figure 16, p. 20), while the channel and basin was filled in by 1947 (Figure 17, p. 21). Much of the original portion of the Iron Pier pavilion is within the eastern edge of SYW-12, as well as in the vicinity of the connector route to the CSX Railroad. As with the Salina Pier pavilion, there is the potential for both structural and artifactual remains associated with the pavilion to be present. Structural remains could include the wooden floor of the pavilion if that was not removed during the razing of the structure. The floor of the pavilion can also be discerned from Sanborn maps, and finding it archaeologically would not have additional research potential. As with the Salina Pier pavilion, there is the potential for finding inadvertently dropped personal items, but the low quantity and diversity of material would make it difficult to provide a foundation for interpretation.

The maritime portion of the Iron Pier resort and park is located to the southwest of the pavilion area under an area of soda ash and refuse filling, as well as off the edge of the current shoreline. The majority of the maritime portion of the Iron Pier resort and park may have been covered with soda ash and refuse up to, or greater than, 1.2 m (4 ft) in depth. Remnants of the dock or pier associated with the Iron Pier resort were identified off the edge of the shore through the underwater survey of Onondaga Lake (Anomaly 38) and is a contributing resource of the marine infrastructure of the Syracuse Maritime Historic District (Kane et al. 2011) (Figure 19). Therefore, there is the potential for finding additional structural remains associated with the Iron Pier Park.

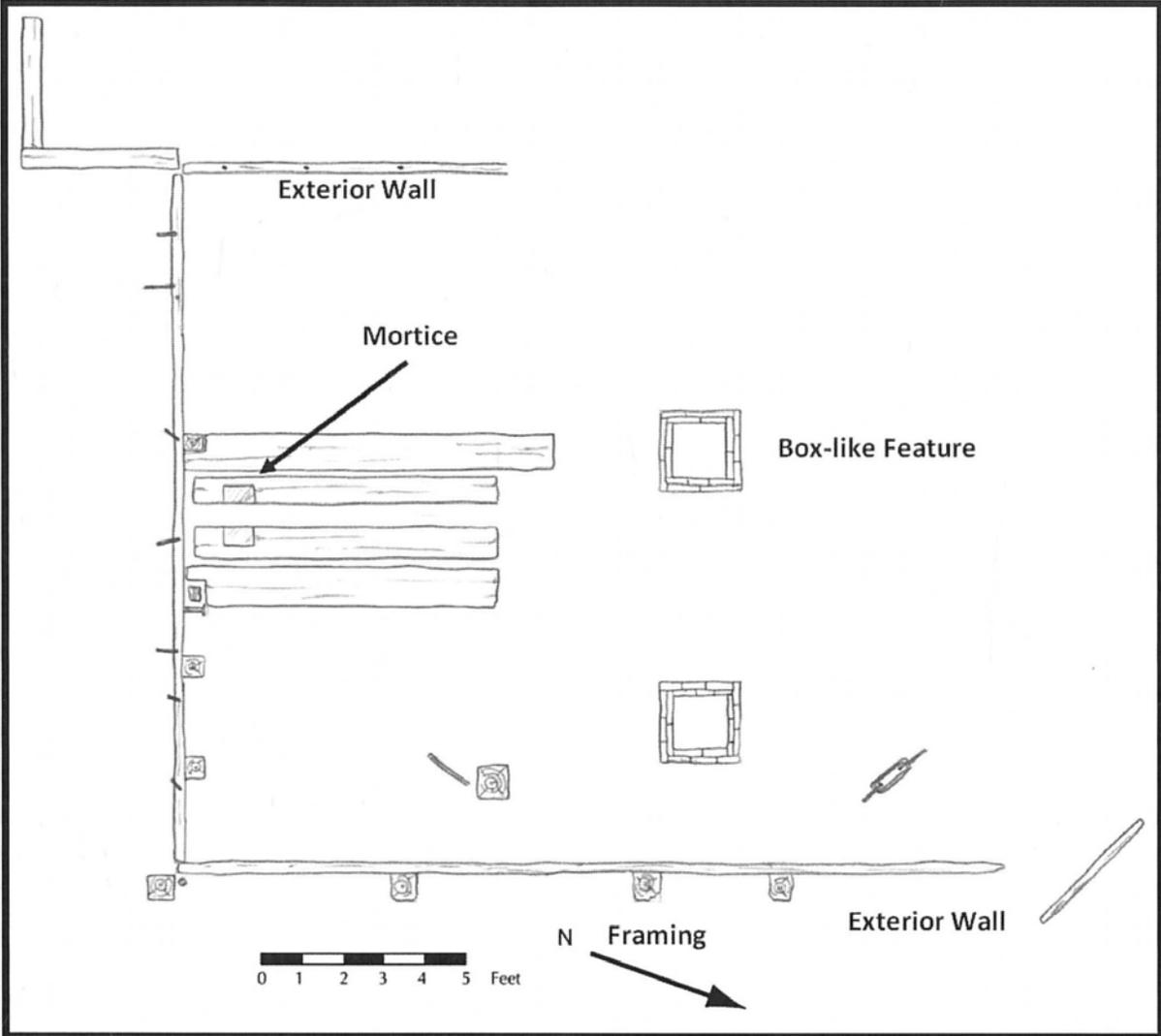


Figure 19. Identified features of Anomaly 38 from Underwater Archaeological Survey (Kane et al. 2011).

V. GEOMORPHOLOGICAL ANALYSIS

In June of 2012, a series of nine additional split spoon corings were completed by NYEG under the observation of Nathan Kranes of O'Brien and Gere, and Eva Hulse and Johnathan Garland of Geoarchaeology Research Associates (GRA). Those corings, and 25 earlier corings completed for O'Brien and Gere, were used to analyze the geomorphology of the area of the SYW-12 Wetlands. Analysis by Joseph Schuldenrein and others of GRA focused on the soil corings, 19th and 20th century maps, and the presence of *B. tentaculata* shells. Their analysis determined that the majority of lake-edge sediment within the project area accumulated since 1879 and represents about 125 years of deposition, largely attributable to impacts by removal and filling actions. C-14 dates from lacustrine sediments in lower marl deposits reveal that the lacustrine sediments were created during the mid to late Holocene period (5310 to 3570 BP) (Schuldenrein 2013 in Appendix II, p. 71). Schuldenrein concluded that the wetland and shoreline sediments do not indicate sensitivity for precontact occupation in the surrounding area (Appendix II, p. 71).

VI. ARCHAEOLOGICAL METHODOLOGY

In June of 2012, a series of backhoe trenches were excavated along four parallel transects (Trenches 54, 55, 56 and 57) and two perpendicular transects (55A and 55B) (Figure 20, p. 60). The trenches were labeled as TP-54 with numbers following TP-54 as the distance from the start point of the trench (for example TP-54-85, as being 85 ft from start point on Trench 54). These trenches were excavated by O'Brien and Gere for environmental and archaeological purposes for Honeywell, O'Brien and Gere, and the Public Archaeology Facility. These backhoe trenches were excavated with a 36 inch bucket under the supervision of Chris Hohman of the Public Archaeology Facility, Anthony Gonyea and Zenja Hyde of the Onondaga Nation, and Robert Trent, Nate Kranes and Mike Miller of O'Brien and Gere. Additional personnel observing the soil stratigraphy and backhoe excavation included Bruce Meigs of O'Brien and Gere, Dave Scheuing of New York State Department of Environmental Conservation and AECOM, Rene Surgi of AESI and Honeywell, Al Linstruth and Chris Stone of NYEG, and Eva Hulse and Johnathan Garland of Geoarchaeology Research Associates. If potential intact soil horizons were encountered, soils were examined for cultural material after they were brought to the surface. Soils were examined visually on the side walls of the trenches and measurements were taken for depths of soil horizons (approximate measurements were taken when trench walls collapsed or when excavation proceeded below the water table). Deeper soil horizons were examined when the backhoe brought soils to the surface. All soils that were removed from the backhoe trenches were generally placed on one side of the backhoe trench and then backfilled once environmental and archaeological analysis was completed.

VII. ARCHAEOLOGICAL RESULTS

Trench 54A

Trench 54A was excavated near the southeastern shore of Onondaga Lake and along the northwestern edge of SYW-12 (Figure 20, p. 60). The trench was approximately 82 m (270 ft) in length, approximately 9 to 18 m (30 to 60 ft) from the shoreline of Onondaga Lake, and ended at the southern end near the present shoreline of Onondaga Lake. The soil stratigraphy was recorded at five locations along the trench, with the stratigraphy observed throughout the excavation of the trench. The stratigraphy along the trench suggested that there was 1.8 to 2.1 m (6 to 7 ft) of fill on top of peat and marl, with 15-30 cm (6 in-12 in) of red brown silty sand at two locations (Photos 1-2). The shell in the red brown silty sand at HB-TP-54A-140 and HB-TP-54A-237 suggests a shoreline to the north and south of the former Iron Pier Harbor. At HB-TP-54A-50, the soil horizon between 1.8-2.1 m (6-7 ft) below the surface contained slag, cinder, and coal, with an assortment of cultural material. The cultural material included gaskets, yellow plastic bowl, porcelain, and amber bottle glass (Photos 3-4). The cultural material is suggestive of manufacture in the early 20th century (especially the yellow plastic bowl) and may mark a period of refuse deposition from the early to mid 20th century. At HB-TP-54A-140, a threaded clear jar was recovered from 0.76-0.9 m (2.5 to 3 ft) below the surface in a light brown sandy silt. At HB-TP-54A-150, a ironstone plate was identified at that same depth, with slag, coal and cinder being located between 1.8-1.9

m (6 to 6.5 ft) below the surface (Photos 5-6). At HB-TP-54A-200, the soils suggested that sands were being deposited starting at 0.9-1.2 m (3-4 ft) below the surface; the trench did not extend deeper than 1.2 m (4 ft) below the surface. It was determined later that this location was situated in the former location of the Iron Pier Harbor, and the sand represents fill within the harbor. At the southern end of the trench, soils were fairly similar to those locations north of the former harbor (Photo 7), with peat missing from the stratigraphy.



Photo 1. Facing northeast, northern part of Trench TP-54A, profile.



Photo 2. Facing northeast, overall stratigraphy of northern end of Trench TP-54A.



Photo 3. Fragment of amber bottle glass recovered 1.8-2.1 m (6-7 ft) below the surface at 50 ft south on Trench TP-54A.



Photo 4. Fragment of yellow plastic bowl recovered 1.8-2.1 m (6-7 ft) below the surface at 50 ft south on Trench TP-54A.



Photo 5. Facing south, 140-200 ft south section of Trench TP-54A.



Photo 6. Facing east, east wall profile of 140-200 ft section of Trench TP-54A.



Photo 7. Facing east, east wall profile of southern end of Trench TP-54A.

Trench 55

Trench 55 was excavated approximately 38-46 m (125-150 ft) southeast of Trench 54A (Figure 20, p. 60). The trench was initially 127 m (418 ft) in length and ended about 8 m (20 ft) from the shoreline of Onondaga Lake. Several 7.5 m (25 ft) sections were later excavated to look at the soil stratigraphy to the northeast. The final length was 158 m (518 ft). The soil stratigraphy was examined at six different locations along the trench, with the stratigraphy observed throughout the excavation of the trench. Cultural resources (pilings and milled wood) were also examined at the southern end of the trench. The soils to the north of the northern wall of the former Iron Pier Harbor contained 1.8-2.4 m (6-8 ft) of varying fill horizons on top of a dark organic marl which overlays a grey marl (Photos 8-9). The grey marl was encountered between 2.1-2.7 m (7-9 ft) below the surface. The marl represents lakebed and the organic marl appears to represent sediments in a vegetated marsh. At the eastern end of the trench, (HB-TP-55-(100)), a piece of milk bottle glass and a small piece of milled wood were recovered from 1.8-2.4 m (6-8 ft) below the surface in a dark black/grey brown

silt loam with gravel horizon. This horizon was situated on top of a mixed marl and peat horizon from 2.4-2.7 m (8-9 ft) below the surface and which was located above a marl horizon. The soils within the test pit (HB-TP-55-(100)) differ from those at HP-TP-55-(-50), where grey marl was located from 2.1-2.4 m (7-8 ft) below the surface and no peat horizon was present. The difference in the soil horizons appears to reflect the possible extension of Onondaga Lake as noted on Figure 11, p. 16, with the peat/marl horizon being located in the lake extension and the area to the south outside of the lake extension having no peat/marl horizon.



Photo 8. Facing west, west wall profile of northern end of Trench TP-55.



Photo 9. Facing north, northern end of Trench TP-55.



Photo 10. Facing east, east wall profile of Trench TP-55 between 335-385 ft south.

At HB-TP-55-284.5 to 286, a wooden piling was encountered at 2 m (6.5 ft) below the surface (Photo 11). The piling was pulled out and measured 4.4 m (14.5 ft) long with hand cuts at the end (Photos 12-14). Milled boards were located just to the north of the piling, with the milled wood being 5 cm (2 in) thick, 30 cm (12 in) wide and 127 cm (50 in) long (Photo 15). Following the identification of the piling, a backhoe trench (TP-55A) was excavated to the west toward Onondaga Lake to identify additional pilings along the edge of the former Iron Pier Harbor. After that backhoe trench was completed, excavation continued along Trench 55. Within the backhoe trench from TP-55-286 to TP-55-409, excavation identified sandy soils to the base of the trench, with the base of the trench being 2.4-3 m (8-10 ft) below the surface (Photo 10). A much greater concentration of contaminated soils were also encountered between TP-55-286 and TP-55-409 as compared to the excavations to the north of the piling. The organic marl or grey marl, which had been identified to the north of the piling at TP-55-284.5, was not present between TP-55-284.5 and TP-55-409 (approximately 37 m [123 ft]). The distance of 37 m (123 ft) matches the approximate width of the Iron Pier Harbor on the 1908 Hopkins map (Figure 15, p. 19). From TP-55-409 to TP-55-413, a piling as well as milled wood on the south were encountered at approximately 1.8-2.1 m (6-7 ft) below the surface (Photo 16). The piling (which was pulled out) is approximately 4 m (13 ft) in length (Photo 17); the milled wood is approximately 20 cm (8 in) in width, 5 cm (2 in) thick and approximately 30 cm (12 in) long (Photo 18).



Photo 11. Facing south, wood piling in Trench TP-55 at TP-55-284.5.



Photo 12. Facing south, wood piling at TP-55-284.5 pulled out by backhoe operator.



Photo 13. Facing southeast, wood piling at TP-55-284.5.



Photo 14. Bottom of wood piling from TP-55-284.5



Photo 15. Milled wood adjacent to wood piling TP-55-284.5.



Photo 16. Facing south, milled wood and piling at TP-55-409/413.



Photo 17. Facing southeast, piling from TP-55-409/413 and milled wood.



Photo 18. Facing east, milled wood from area of TP-55-409/413.

Trench 55AN

When the wooden piling was encountered at HP-55-284.5 in Trench 55, it suggested that a feature associated with the Iron Pier Harbor had been encountered. Trench 55AN was excavated toward the shoreline of Onondaga Lake to evaluate if the remainder of the north wall of the Iron Pier Harbor was present. The trench was excavated mainly for this purpose and soil stratigraphy was not observed during this search for additional pilings (Photo 19). The trench was excavated to within 1.5-3 m (5-10 ft) of the edge of Onondaga Lake. Approximately 5.2 m (17 ft) was skipped due to a large tree and its roots; an additional 2.7 m (9 ft) was skipped due to the intersection of the earlier excavated Trench 54A (Figure 20, p. 60). Within the trench, a total of 17 pilings were identified to the east of the earlier Trench 54A (Photos 20-24) and two pilings were identified on the edge of Trench 54 and 1.2 m (4 ft) to the west of Trench 54 (Figure 22, p. 64). Between 43.9-45.1 m (144-148 ft) west, a shoe sole was recovered between 1.8-2.4 m (6-8 ft) below the surface and a rubber gasket was recovered approximately 2.4 m (8 ft) below the surface (Photo 26). The soils were very oxidized with coal, cinder and slag at the west end of the trench just above the piling at 45.1 m (148 ft). At 3 m (10 ft) below the surface, a milled wooden board was encountered several feet away from the piling (Photo 25). The milled piece of wood was 30 cm (12 in) wide. The pilings were generally found 1.8-2.4 m (6-8 ft) below the surface and appear to represent the north edge of the Iron Pier Harbor.



Photo 19. Facing south, south wall profile of Trench TP-55AN, between pilings.