Phase Ia Archaeological Sensitivity Evaluation of the Sea Girt Boulevard Development Project Far Rockaway, Queens, New York. (C.E.Q.R. No 89-068Q)


May 24, 1989
I. Introduction

The following Phase IA Cultural Resource Assessment was produced in response to C.E.Q.R. application for the Sea Girt Boulevard Development Project in Far Rockaway, Queens, New York at the request of Ethan Eldon Associates. A thirteen (13) story residential building is proposed. Archival, documentary and cartographic sources along with published archaeological records and oral accounts were surveyed to determine if any cultural resources had been previously identified, either historic or prehistoric. While no known or previously recorded prehistoric or historic structures or sites where encountered for the parcel under study, a pattern of limited past impacts, its proximity to coastal, riverine and fresh water sources, coupled with the former resource base (fish, shellfish and birds) suggests that the area may have once been suitable for prehistoric occupation and as such warrants further investigation in the form of presence or absence testing.

II. Physiographic Setting of the Project Area

The Impact Zone

The study parcel is located in the Borough of Queens, near the south ocean shore of Long Island, in Far Rockaway, N.Y. adjacent to the Nassau County-Queens County border. (See Figures 1,2) The proposed project is located on five (5) acres of land of which 3.4 acres (68%) exists above mean high sea level or high tide. The remaining consists of an oxbow-like meander of a tidal creek. The proposed thirteen story building will exist on 1,878 sq. ft., contain 168 dwelling units with an accompanying 143 parking lots. Various parts of the project area have proposed land filling. These proposed impacts, involving cut and fill operations, will occur along 1005' of frontage parallel to Seagirt Boulevard and will extend about 270' south into the 400' deep lot (at its maximum). The two rectangular building components, joined at a common corner, are approximately 60' by 150' in their length and breadth. The lot is bounded on the north by Seagirt Boulevard, on the south by Seagirt Avenue, and by the Nassau-Queens border on the east. Three proposed "paper streets" Beach 3rd-5th Streets, will be demapped, if approved.

Through the property, a creek, known at various points in time as Mott, Hook, and Bridge Creek (NYC Board of Estimate, Reel 1499, page 965), now a tidal estuary, flows through to join Bannister Creek which empties immediately to the south into the Atlantic Ocean. The creek formally flowed along a much longer course before it was cut off by land filling episodes to the north, and may have once contained freshwater. The land under the creek was sold by the City of New York to the current owners in 1980. Some impacts to this creek, in the form of landfill, are proposed. Immediately to the
east of the parcel and Bridge Creek is what is today the Atlantic Beach Bridge causeway, and in the past the barrier dunes which buffered the inner estuary zone from the Atlantic Ocean. Across the inlet is the coastal barrier islands and the various modern communities, such as Atlantic Beach.

The proposed building site was visited and surface inspected on April 12, 1989. The "ox-bow" was noted to have had some apparently recent clean sandy dredging material placed on it to a depth of about 1'. (See Plate 1) A thicker (3-4') deposit of sandy fill was observed to have been placed along about one-half of the frontage of Sea Girt Boulevard, apparently by dump truck loads of fill. (See Plate 2)

This general geological area forms part of the Coastal Plain Physiographic Province. (Ritchie, 1965) The general terrain can be described as a part of the rolling outwash plain from the glacial moraines, from the most recent Wisconsin glacial epoch. Decreasing generally in altitude from the moraines to north to the south shore, the soils are characteristic of glacial till of Long Island, some areas of surface till lie over a deeper clays and soil types from earlier episodes within the Wisconsin epoch. Erosion from past glacial meltwater and more geologically recent runoff into the less permeable, deeper deposits can create sources of water containment within the outwash plain. Characteristic soil profiles show interbedded (alternating) interstitial layers of sand and other till constituents alternating with depth.

Intermittent streams in the outwash plain flow generally to the south. The estuarine zone at the extreme south edge of the outwash plain is bounded by various spits, marshes and barrier islands, primarily the result of wind forces on the Atlantic, causing secondary tide and current interactions on the outwash drainages, creating dune structures and the chain or archipelago of barrier island(s) known as Fire Island, (which may have once have known as Five Islands, Bigelow, 1968). Long Island native inhabitants may have called the barrier island(s), "mattahbank". (Bigelow:1968)

III. Historic Development

The Borough of Queens is the largest in land area, 65,000 acres, of the five boroughs of the City of New York. (Marrero, 1977: p. 248). It is second only to Brooklyn in population. Early Queens at the time of European contact was settled by an Algonkian group called by Beauchamp the "Rockaways", (Beauchamp, 1900), from whom the area got its name. Early European colonization and settlement was done primarily by English immigrants, with the major early settlement concentrated at Jamaica, Queens, to the north of the project area. (Bonomi, 1971) By 1691, the province of New York was divided into 10 counties. Newtown, Jamaica, Flushing, Hempstead, and Oyster Bay were listed as the major towns in Queens County. An important influence in the early eighteenth century politics of colonial Queens was that of the Quakers, "who tended to cluster together and vote as a block." (Bonomi:p. 32).
IIIA. Historic Resources

All available deeds and title search information was requested from the client. Available title searches were provided and coincide with the land development and property ownership as depicted on the historic maps. The earliest copy of a deed provided was dated 3/2/1901, (Liber 1253 op 130).

A check of the files at the Office of Parks, Recreation and Historic Preservation in Albany lists no sites or inventoried structures in the area in or eligible for inclusion in the State or National Register of Historic Places. A check of the records at both the Office of Parks, Recreation and Historic Preservation and in the New York State Department of Environmental Conservation showed that no previous surveys were recorded within the general vicinity of the proposed development. (Steinback, pers. comm., 1989)

A survey of pertinent historic maps reveal that no construction was undertaken in the project area until shortly before 1912. (Ibid.) According to the Belcher-Hyde Atlas of 1912, by 1912 there were nine (9) frame structures south of Seagirt Ave., east of Jarvis Lane (now Beach 9th) and six (6) frame structures south of Bridge Creek, east of Jarvis Lane and north of Seagirt Ave. West of Jarvis Lane there were one (1) frame structure north of Seagirt Avenue and two (2) brick structures south of Seagirt Avenue. All of these structures were situated immediately adjacent to the streets. (Ibid.)

IIIB. Changes in Historic Landforms and Settlement Patterns

A survey of historic map data suggests that the past settlement history within the general area shows land holdings focused on high ground with easy access to the bays and inlets for water transport. The earliest maps show various roads running down the fast land to the south, to the area of "meadow lands" or salt marsh which characterized the historic setting of the project area. The procurement of hay for fodder and construction, (salt marsh hay was used as insulation and in construction, and was once a shippable commodity to the City of New York). Also, access to the bays and ocean was very important for the marine resources that were available in the form of shellfish, fish, and marine birds, all key food sources during both the colonial and pre-contact periods.

While available historic maps cannot usually be used to create a direct one-to-one correspondence with each other due in part to questions of different scales, and also different levels of accuracy, they can be compared through time, however, to trace continuity and change in landform through time. The available map sample spanned the period of time from prior to 1800 to the present. In all, seven (7) maps were located of which five (5) are reproduced here.

One of the earliest detailed depictions of the project area was the Queens Borough Map, which depicted property holdings as of 1800, although it was rendered in 1935. It shows the study parcel to be part of a larger parcel, belonging to a John A. Dayton, who held 250 acres, partly in Queens and mostly in Nassau County. It can be seen that the stream, flowing through the study parcel, is a formally a tributary of Banisters
Creek, which at the time turned 90 degrees downstream from the study parcel and then flowed east before turning to discharge into the Atlantic Ocean. (See Fig. 3). The Dripps 1852 map, on which presumably most of the preceding map's information was based, shows generally the same information with some more landform detail. The stream on the study parcel is shown within a wetlands area with a east-west high ridge, fast ground just to the south of the study parcel. This map also depicts what appears to be a dune structure developed along the shore with some vegetation markings also included on the map. The property in this period (1852) was owned by John A. Dayton. (See Fig. 4). It is presumed that the makers of the Queens Borough map (above) knew of the title history of the Dayton property and that is why the same ownership is depicted on the c. 1800 map, though it is possible that this information was carried over to the Queens Borough map without research since the owners name remains unchanged over a period of 52 years, (almost two generations). No structures or cultural features are depicted on either map within the project area.

The later Bromley map of 1909 shows relatively drastic changes in the drainage system compared to the nineteenth century depiction. Banisters Creek appears to have been channelized for a more direct egress to the ocean. The segment of creek, inside the study parcel, is now named Bridge Creek, and appears to have more drainage courses leading to it than depicted on larger scale maps. It's basic shape through the marshlands had not changed appreciably. By the first decade of the twentieth century, buildings and lot boundaries with assigned lot numbers are for the first distinguished on the fast land adjoining the study parcel: (See Fig. 5)

An early 1924 aerial photo again shows the "ox-bow" of the stream, adjacent to fastland, still basically unchanged, with the surrounding landscape to the West and North going through drastic changes. A large area directly west of the "ox-bow", part of a previous drainage appears to have been dredged out creating a fairly large area of water. The area through which Banisters Creek used to flow west-to-east, had also been dredged for a marina. (See Fig. 6) It is presumed that the mosquito control trenches were cut sometime before this period in various marshes in the general vicinity of the proposed project as is suggested in the aerial coverage.

Trends can be seen through time in regards to these changes. Throughout the oxbow remains relatively unchanged and there are no direct historic impacts on the oxbow. However, after 1924, more changes came to the surrounding vicinity of the proposed project parcel.

With the filling and development of surrounding area coupled with the construction of the Atlantic Beach Bridge, drastic changes occurred north of the oxbow. Sea Girt Blvd., bounding the study parcel on the north, is currently a landfill causeway of six lanes (not four as depicted on the USGS map), and was built across the marshlands. Fill at some recent point was brought in for the housing development to the north of the study parcel, formerly bounded by the "old" Sea Girt Boulevard, now off the causeway and part of the tract housing development. Despite these recent road and construction im-

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IV. Previously Identified Prehistoric Resources in the Area

"Coastal New York, of which Long Island forms the principal segment, appears on current evidence to have been visited or inhabited by man since about 5000 B.C. Two recorded examples of the Clovis style of fluted point, one of the earliest known New World projectile forms, found near Greenport and Bridgehampton, respectively, apparently attest to the brief presence of the paleo-Indian on eastern Long Island." (Ritchie, 1959: p. 9) Other examples of unstratified paleo-points have been found at various locations on Long Island in the intervening years, though none has been documented within the general vicinity of the proposed development project.

General archaeological overviews of New York archaeology, Beauchamp (1900), Funk (1976), Ritchie (1958 and 1969) and Funk (1973), do not contain specific information regarding prehistoric sites near Far Rockaway, Queens County. Parker (1922), however, documented two sites in the vicinity. One site was a "camp" site on the tidal flat northwest of Inwood, N.Y. The other was a "shell midden" and "village" with possible burials on the east bank of Bannister Creek, west of Sage Pond. Figure 7 shows the location of these two sites as recorded from files of the New York State Museum. Site 4050, within 4400', (less than a mile), of the proposed project, was characterized as a camp and was found at somewhere between 5' and 9' elevation above m.h.s. (mean high sealevel). The second only referenced site, site 4033, within 9500', (less than two miles), of the proposed project, was classified as a shell midden with an associated village and possible burial at the 10' to 14' elevation m.h.s.

Two other Parker sites are in this general area, but are further to the east. Site 4032 (Lawrence Quad), just east of Woodmere Golf course in Cedarhurst, just over two miles from the proposed project, was identified as a village with shell midden. The other site, just under two (2) miles from the proposed project, shares the 4033 number, but was further described as being to the east on the shoreline near Hicks Beach and consisted of a village and shell midden. Interestingly, this "village" seems to have been at or below the 5'above m.h.s. contour and in at compensable topographic zone as the project parcel (See Figure 7) Again, no specific information on time period or cultural affiliation of these Parker sites is available. The location of the project area near the confluence of Bridge and Bannister Creeks, along with the knowledge of previous shell middens, near a network of inlets and creeks suggests that the area could have potential for prehistoric finds.

V. Interviews and Oral Accounts

Interviews were conducted with local informants as well as avocational archaeologists for any otherwise undocumented information concerning the specific area of the proposed project. No archaeological materials were known by these informants to have come directly from the project area, although they did report cultural material...
having been found within the general area. It was also reported that in the opinion of one avocational archaeologist, that the creek was formerly part of a fresh water drainage, (anonymous communication, 1989) versus the current brackish tidal composition of the modern waterway.

VI. Conclusions and Recommendations

This Phase IA sensitivity evaluation has been performed to evaluate the potential prehistoric and historic sensitivity of the Sea Girt Development Project based on the available documentary sources. In addition to the review of pertinent general historical and archaeological studies, this evaluation has concentrated on four categories of information: 1) Thorough survey of all official state agency and museum records, 2) a diachronic survey and comparison of historic map coverage of the area to evaluate the relative continuity or change in landform and settlement patterns through time, 3) Surface reconnaissance of the project site as a basis for characterizing its observed conditions, and 4) Interviews with local informants and avocational archaeologists familiar with unpublished sources of pertinent information relative to the project area.

While the review of official archives and state agency files show that no archaeological resources or National Register eligible prehistoric or historic sites have been documented for the immediate project area, the general vicinity was clearly utilized and occupied in the pre-contact period as documented by the presence of two confirmed prehistoric archaeological sites within the general vicinity. In addition, historic references and past characterizations of the environment have highlighted the potential subsistence and economic resources which formerly existed in the estuary tidal marsh of the "meadow land", with the vicinity suggesting the possibility of seasonal or functionally specific archaeological encampments within the area.

The review of the historic map coverage shows that while the general area has gone through extensive land alteration through road-building, landfilling and historic dredging activity, the immediate project area can be demonstrated to have had relatively minimal impacts through time with a pattern of continuity in both the form and composition of the creek and oxbow waterway that bounds the project parcel on the south. It is neither a modern artifact of man-made land alteration nor has its general course changed appreciably from the 1800's to the present.

A review of past studies, draft environmental impact statements, and reported planning documents, showed that no systematic sub-surface or surface reconnaissance studies have been undertaken in the immediate vicinity of the project parcel, which would have been of relevance in projecting the potential sensitivity of the project parcel. These multiple lines of evidence suggest that despite the fact that no archaeological resources have been confirmed by past studies, the lack of any systematic surveys or presence and absence test programs in the vicinity, does not provide positive or negative evidence for establishing the presence of potential archaeological sensitivity. As a result, based on available sources and levels of definition, no strong basis exists for arguing against the archaeological potential of the area. The only basis for establishing
the presence or absence of potential resources, could only be derived by some level of presence and absence testing, given both the paucity of pertinent data and the lack of past investigations in the immediate area.

While it is understood that the need for the appropriate level of effort for sub-surface testing will have to be determined by the review agency, the Landmarks Preservation Commission, at minimum, it is recommended that a gridded network of shovel tests at no less than 30'-50' intervals be undertaken so as to guarantee that potential cultural remains would not be impacted by the proposed project.
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New York State Museum, Albany, N.Y.
New York State Office of Parks, Recreation and Historic Preservation, Albany, N.Y.
Fig. 1. USGS map (Laurence, N.Y.) showing vicinity of proposed development along Sea Girt Blvd. and Bridge Creek.
Fig 2. Color Xerox Reproduction of Project Impact Area (red) and Historic Oxbow Waterway (blue)
Along Seagirt Blvd, Queens, N.Y
Fig. 3. City Topographical Bureau showing land ownership in the vicinity as of 1800. Information seems identical to the Dripps 1852 (Fig. 4) with street names added.
Fig. 4. 1852 Dripps map of Kings and Queens Counties showing the vicinity of the proposed development. The property was then held by John A. Dayton. Note Banisters Creek does not empty directly into the Ocean as shown in Fig. 1.
Fig. 5. Bromley's 1909 Atlas of Queens showing the "Oxbow" in Fig. 2 before the two lane blacktop (Sea Girt Blvd), which exists today north and adjacent to the modern six lane highway, Sea Girt Blvd. The current proposed-development incorporates former 99 and 129 lots and the property of J. Cassidy.
Fig. 6. 1924 City of New York aerial map showing drastic dredging to the West of proposed development. Note dredging for a marina to the East of Bannister Creek, Ocean shore at bottom. Note absence of Atlantic Beach Bridge also.
Fig. 7. Map of the Far Rockaway and Lawrence, N.Y., USGS Quad sheets joined together. N. Y. S. Museum sites 4033 and 4050. Note proximity of project area (on the West of Bannister Creek), to the recorded vicinity of 4033 (on the East "bank" of Bannister Creek).
Plate 1: Photo looking South, showing north side of Project from northside of Sea Girt Blvd (See triangle "1" on Fig 2)
Plate 2: Composite Photo looking north at "Ox-bow" from North side of Sea Girt Ave. (See Triangle "2" on Fig. 2)