34th STREET REZONING
PRELIMINARY ARCHAEOLOGICAL ASSESSMENT
POTENTIAL DEVELOPMENT SITE 5

Block 731, Lot 22

Bounded by 33rd Street to the south, the Lincoln Tunnel to the west, St. Michael’s School to the east, and Lot 65 to the north.

The 34th Street re-zoning might make development of other parcels in the re-zoning area more attractive. Originally, four such neighboring parcels were identified as potential development sites 1, 2, 3, and 4. Subsequently, sites 5 and 6 were also identified. In coordination with the comprehensive 34th Street project environmental assessment, the potential development sites will be preliminarily addressed. Based on the research being performed, if potential archaeological resources are identified on the project site or the potential development sites, then it is anticipated that development of these parcels would destroy such resources.

In order to assess, in a preliminary overview, the archaeological potential of these locations, Historical Perspectives, Inc. conducted documentary research, cartographic analysis, and a field inspection during July, August, and November, 1988. The following analysis is a vertical and horizontal comparative study of past and present building footprints. (Due to the nature of record keeping and permit regulations prior to the twentieth century, there are noticeable gaps in the data available for this review). This research is designed to indicate if there is need for further, in-depth archaeological examination, to identify the specific lots, or portions of lots that require such analysis, or to conclude that prior subsurface disturbances destroyed any prehistoric and historic potential and that further archaeological consideration (a Phase IIA) is not warranted.

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PREHISTORIC OVERVIEW

Prehistorically, subsistence and settlement patterns depended heavily upon environmental criteria. The availability of economic and technological resources influenced settlement. Throughout prehistory, influencing factors including topographic and environmental features have changed. An understanding of these changes and adaptations to them is required to develop a model of prehistoric land use.

Prior to European Contact, the topography of Manhattan was quite different than it is today. Many hills and valleys have been graded and filled, accounting for the present terrain. On the lower west side of the island, just south of the project area, the surface was once covered with coarse quality white limestone (French, p.418). Few visible remnants of rock outcrops and original features remain on the island.

Potential development site 5 was once located on the southwest slope of a rise which ran in a southeast to northwest direction (Fig. 1). The specific geographical characteristics of this potential development site, that is whether or not it was on the edge or the top of the knoll, is unknown. Vieele's nineteenth century topographic map that clearly depicts this knoll does not record elevations (Fig. 1) and his placement of features can not be accepted as exact and completely accurate. However, the 1811 Commissioner's Map does give elevations at block intersections along 34th Street. At the corner of 34th Street and 9th Avenue, the elevation in 1811 was 40'8" above mean high water.

The knoll, composed of gneiss and granite adjacent to marshland, was drained by streams running to the north and southwest (Grafther, plate 2). The north stream joined with two other streams to drain into the "Reed Valley" at about 10th Avenue and 40th Street. Here the streams formed the Great Kill which then drained into a deep bay at the Hudson River at 42nd Street and 11th Avenue (Stokes Vol.4, p.131). The Reed Valley was still in primitive condition when surveyed by Randall in the early 1800s.

The Hudson River and surrounding streams would have provided a diverse array of resources attractive to Native Americans. Much of the area surrounding the project parcel would have been ideal for resource procurement. The lacustrine, riverine and estuarine environments in close proximity, provide a wealth of floral and faunal resources including fish, birds, reptiles, mammals, and vegetation. In addition, there was at least one known fresh water spring in close proximity, somewhere on the Glass House Farm (Stokes, Vol.6, p.130-131). As the availability and desire to utilize resources varied through prehistory, it is necessary to understand trends and distinct cultural phases of Native Americans in the Northeast.

PaleoIndians, the first known inhabitants of the
Northeast, occupied the area between 10,000-12,000 years ago, relying heavily on big-game. Habitation sites have largely been located on upland bluffs or ridge tops, such as those along the Hudson (Eisenberg, p.123). Since sea levels were much lower during this period, few sites have been recovered as many are likely under water (Saxon, p.252). Although little is known of this period, the presence of PaleoIndians in the Hudson Valley has been established.

Following this, the Archaic period lasting from 9,000-3,000 years ago is much better documented. The warming environment provided seasonally available resources which promoted a settlement pattern based on seasonal rounds. Archaic sites in the coastal and tidewater area of New York are often "represented by numerous, small, nearly always multi-component sites, variously situated on tidal inlets, coves and bays, particularly at the heads of the latter, and on fresh water ponds...along the lower Hudson (Ritchie, p.143). Sites along the Hudson indicate it was utilized for shellfish exploitation during the Archaic period (Snow, p.182). Sites of the transition period between the Archaic and subsequent Woodland periods, tend to be located on high sandy river terraces.

The following Woodland period is marked by the introduction of ceramics. By this time, sea levels and the environment was much as it is today. During this period there was a preference for sites to be on well drained soils on knolls adjacent to fresh water, such as short term seasonal camps for the extraction of specific resources. Islands in the Northeast with strong northern winds, such as those coming down the Hudson, have often had sites of this period located on south facing slopes for protection (Little, p.26). Also at this time there appears to be a trend toward semi-permanent occupations, and increased, riverine aggregation for the exploitation of seasonal fish and bird migrations (Snow, p.265).

The parcel is in a location that would have provided an abundance of resources throughout prehistory. A model developed by the Landmarks Preservation Commission to predict archaeological sensitivity in Manhattan has placed this parcel immediately west of a high sensitivity zone (Fig. 2). Early maps indicate the shoreline of the Hudson was once much closer to the project site than it currently is (Fig. 1). Topographically, the rise would have been attractive for habitation as there were numerous diverse resources available nearby.

At the time of European arrival, northern Manhattan was occupied by a large number of Munsee Delaware-speaking Indians, identified by the colonists as Wiechquesgeck (Grumet, p.60). Historically, Fitzroy Road ran through the block between 33rd and 34th Streets and 8th and 9th Avenues. This road was a widened Indian trail leading north to the Great Kill (Stokes Vol.4, p.164). The trail appeared to run along the rise that this parcel was next to, although it did not run directly through the site. A map of known Indian
land use in Manhattan (Fig. 3) has no mention of Fitzroy Road or an Indian trail at this location (Grumet 1981). In fact the closest Native American land shown is a planting field called Sapokanikan, currently near Greenwich Village (Grumet, p.44-45). The majority of known archaeological sites are located in the northern Inwood park section of Manhattan.

It is very likely that prehistoric activities would have taken place on potential development site 5. The surrounding environment and topography is particularly conducive for resource extraction and processing. The nearby streams and freshwater springs are crucial factors for settlement. There are no known prehistoric sites within the parcel, although there is the possibility that it was utilized prehistorically. According to the New York State Museum, State Education Department, there are no known sites within this parcel (personal communication Philip Lord to Cece Kirkorian, July 26, 1988). It was also stated that the potential to recover prehistoric remains would vary with the amount of deposition over such sites.

Prehistoric remains recovered in southern New York tend to occur in shallow deposits. However, asphalt, sidewalks, and other build-up can protect these resources. The potential to recover archaeological resources rests largely on the original topography and subsequent alterations to it. Since the urbanization in the mid 1800s, the original knoll topography to the west has been graded. This may have extended to this potential development site. However, the research required to establish such terrain altering activities is beyond the scope of this project.*

* The detailed information of the nineteenth century landscape changes on neighboring Block 757, the 34th Street Project site, was available only because the New York Institute for the Education of the Blind was a state-funded school required to file itemized annual reports with the state legislature. It is highly unlikely that such disturbance records could be located for this potential development site.
HISTORIC OVERVIEW

This area of New York was originally part of rural Bloomingdale, farmed by the Dutch to provide supplies to the city at the southern tip of Manhattan. During the middle of the eighteenth century, land surrounding and including this parcel was referred to as "NewFoundland" (Stokes Vol.4, p.686). The southern portion of the Weylandt patent, traced to 1677, became part of the 'Glass House' Farm, established in the mid 1700s. This 30 acre farm, situated between 32nd and 41st Streets, housed a glass manufacturing industry which eventually was purchased by the Chemical Manufacturing Company. When the Glass House farm was sold in 1762, much of the land was subsequently transferred to the Rapelje family in 1779.

The Rapelje farm house was east of 11th Avenue between 34th and 35th Streets, with the Hudson River coming up to its garden and boundaries. Smaller farms adjacent to the Rapelje estate also became established at this time. Farms belonging to Isaac Moses and Samuel Watkins bordered the Rapelje estate to the east. Potential development site 5 straddled the border of the Moses and Watkins farms. At that time, and through the 1840s, the land remained rural and undeveloped as shown on nineteenth century maps (Sackersdorff, 1915; Colton 1836). Also at this time, Fitzroy Road crossed the westerly side of 8th Avenue between 31st and 32nd Streets and continued northwest to about 42nd Street. The road was eventually closed in 1832, with the advancement of the 1811 grid system from lower Manhattan (Stokes Vol.6, p.1000).

In the early 1800s, this area was generally characterized as residential, agricultural and industrial, in that order (NYCLP, Neighborhood Maps). In 1850 the area is listed as residential and undeveloped, with industrial and waterfront shipping and transportation complexes being south of 33rd Street (Ibid). An 1844 description of the terrain characterizes it as rising ground overlooking the Hudson River and New Jersey (Wait, p.3). A survey of landmarks in Manhattan by Stokes (Vol.3, plate 175) supports that this parcel was not occupied during earlier times including the Colonial or Revolutionary periods, and has never been occupied by a landmark structure.

In 1833 the streets and avenues in the neighborhood had not been opened and regulated, as it was a short distance beyond the paved part of the city (Wait, p.3). By this time much of this section of Manhattan had been divided into lots resulting from the adoption of the city plan in 1811 (WPA, p.147). By 1836, 8th, 9th and 10th Avenues as well as 34th Street were constructed and facilitated travel (Stokes Vol.3, pp.908,1006,1010). This portion of Manhattan was part of a residential belt "from the Twenties to the Fifties between Eighth and Tenth Avenues" housing rows of brick tenements (WPA, p.145). Beginning in the 1840s, north of the project area, Hell's Kitchen was predominantly occupied by Irish, as was Chelsea to the south (Ibid, p.145). The introduction of railways in the mid-nineteenth century, and increased traffic
on the Hudson created industrial sections, with unskilled laborers often being forced into nearby slums.

An 1866 report on the sanitary conditions for the vicinity states that out of 417 tenements in the district, 105 were not hooked into the public sewer system at this time (Citizens Assoc. of New York, p.257). Laws existed regulating when privies should be cleaned, however these were often violated. Privies were to be emptied as soon as they were full, but this was often ignored and they were left in horrible states (Ibid, p.261). The overall condition of this district was considered poor, with the nicer buildings being to the east of 8th Avenue.
SITE SPECIFIC LANDUSE

BLOCK 731

Potential development site 5 is located on the north side of 33rd Street, midway between 9th and 10th Avenues (Fig. 4). This portion of 33rd Street was open by 1849 although it had not yet been paved. The surrounding blocks had sewer and water lines available by the 1860s. An 1879 atlas shows a fire hydrant on 33rd street adjacent to lot 22, indicating water lines were available by then (Bromley, 1879). While public sewer and water lines were often available, not every building connected to them immediately. The connection date of each building is difficult to determine as these records are not always available, and are difficult to ascertain.

The following analysis of development on the parcel is presented by lot numbers in numerical sequence. The numbers referenced are those represented on the Bromley 1913 atlas corrected to 1920. What is now Lot 22 once encompassed Lots 22, 23 and 24 (Fig. 5).

Lot 22

Lot 22 was first built on by 1852, when there were two structures on the lot, one on the south side fronting 33rd Street, and another in back of it bordering the north end of the lot. A small vacant yard was retained between the two structures (Dripps, 1952). The lot remained virtually the same throughout the nineteenth century (Dripps, 1867; Bromley, 1879). The same two footprints appear in 1883, shown as brick buildings (Robinson, 1883). In 1906 the south building is listed as a four story structure, and in 1913 both the front four story and the rear three story buildings show basements (Hyde, 1906) (Figure 5). The structures remained the same through 1957 when they were razed. Demolition Permit 370 in 1957 indicates two structures were removed from this lot, both tenement houses with a vacant yard between them. The front structure, on the south side of the lot, was a four story tenement measuring 25' x 52', while the one on the north end was a four story tenement measuring 25' x 30'. Both apparently had cellars of unknown depth below the curb. Shortly thereafter the parcel was turned into a parking lot, and has remained that way since (Photos A and B).

* For a full discussion of the issue of utility installation see the Nineteenth Century Homelot Archaeological Potential section of the "Phase 1A Archaeological Assessment, 34th Street Rezoning Project", 1988. Ms. on file with Allee King Rosen and Fleming, Inc.
Lot 23

Lot 23 was first built on by 1852, when two structures appear on the lot, one on either end (Dripps, 1852). The two structures remained the same through the remainder of the nineteenth century, with a vacant yard remaining between them (Dripps, 1867; Bromley, 1879). In 1883 the two buildings show as being of brick construction (Robinson, 1883). In 1906 the two buildings are listed as brick, four story dwellings (Hyde, 1906). In 1913 the southern structure is shown as a four story brick building with a basement, while the northern one is shown as a three story brick building with a basement (Figure 5). The buildings remained the same until 1957 when they were demolished. A 1957 Demolition Permit (370) indicates the front structure on the south side of the lot was a 25' x 52' tenement building, while the one on the north side of the lot was a 25' x 30' tenement building. Both had cellars of unknown depth below the curb. The parcel was then turned into a parking lot, and has remained the same since (Photos A and B).

Lot 24

By 1852 Lot 24 hosted a structure on the north side (the back) of the lot. The exact location and dimensions are not shown, although the building stood through the 1870s (Dripps, 1852, 1867; Bromley, 1879). In 1883 there appears to be a large building on the south four-fifths of the lot, fronting 33rd Street, replacing the earlier structure. A small vacant backyard appears on the northern end of the lot where the previous structure had been. The structure remained the same for several decades, and in 1913 is depicted as a five story brick building with a basement (Hyde, 1906; Figure 5). By 1967 the lot was vacant. Although there are no demolition records, it is probable that the building was removed at the same time that the ones on Lots 22 and 23 were. A 1952 Alteration Permit (1411) was to combine these three buildings and put a parking garage beneath them. The latter part of the permit was denied, as the lots were too close to Lincoln Tunnel. By 1967 the lot was used for parking together with Lots 22 and 23 to the west (Bromley 1955, corr. to 1967; Photos A and B).
ARCHAEOLOGICAL POTENTIAL

Potential development site 5 lies in a sensitive area for prehistoric cultural remains. The land would have afforded ample opportunities for resource procurement, and likely some form of prehistoric utilization did take place on this parcel. Extended habitation is doubtful as the strong northerly winds coming down the Hudson would deter this, since the site is relatively unprotected. Short term habitations are most apt to be represented in such an area. The removal of the adjacent knoll during the urbanization of the neighborhood appears to be confined to land east of the parcel. A 1979 U.S.G.S. topographic map shows the height here to be greater than the land to the east. It is possible that the rise under this parcel may not have been removed.

Potential historic period archaeological resources are limited to mid to late nineteenth century remains. The lack of occupation prior to this period limits the potential to recover earlier remains. Sewers appear to have been available after the time of earliest construction, with water lines being available by 1879. Potential homelot remains would include privies, cisterns and wells. Features of this sort would tend to be located in open yards behind buildings. However, by at least 1866 privies were cleaned on a periodic basis and thus would likely not possess fill deposits representing this period.

The preliminary review documented subsurface disturbance including construction of below grade cellars and basements. The majority of the block appears to have experienced sub-surface disturbance. However, the initial review of the cartographic data and information acquired at the Building Department, Block and Lot files, suggests that there is possibly the potential to recover historic cultural resources from back yards that have not experienced construction.

The back yards between the front and rear buildings existing between at least 1852 and 1957 on lots 22 and 23, were never constructed on and possess the potential to yield historic cultural remains. The atlases and maps support that the remainder of both of these lots had historic structures with basements, negating the potential for prehistoric cultural resources to exist beneath buildings. In addition, the small size of each back yard indicates that historic activities would have probably significantly disturbed any potential prehistoric remains there. The lots were each 99' deep and 25' wide. Historic buildings covered the entire width of each lot, and at least 82' of the depth. Taking into consideration the extent of deep foundation disruptions, the remaining potentially undisturbed footage is very limited, enough so that if prehistoric features did exist, they would have been significantly disturbed.

Lot 24 possessed a large building with a cellar on the southern four-fifths of the parcel between at least 1883 and 1957. Prior to this, there was a structure of unknown size on the northern end of the lot. Construction of both of
these, and the cellar in the more recent tenement building has essentially disturbed the entire lot, rendering it non sensitive for prehistoric archaeological remains. Since the most recent building on the lot dates to the early twentieth century, there are probably no historic features associated with it either. If earlier historic features did exist at one time, they were obliterated by later construction of the tenement building.

Potential historic archaeological resources are limited to mid to late nineteenth century remains. The lack of occupation prior to this period argues against the potential to recover earlier remains. Sewers appear to have been available after the time of earliest construction, with water lines being available on 33rd Street shortly thereafter. Although there were laws regarding sewage disposal from outdoor privies, they were often disregarded. Therefore, we can not predict the possible presence of nineteenth century back yard features commonly investigated by archaeologists, e.g., cisterns, privies and wells.

RECOMMENDATIONS

Prehistoric

Potential development site 5 has experienced substantial subsurface disturbance. Although short term occupation sites throughout the prehistoric period may have once been present at this location, historic activities have probably disturbed any remnants of them. The limited potential to yield prehistoric resources is also due in large part to the massive earth moving undertaken in the nineteenth century. Clement Clark Moore, a nearby nineteenth century landowner, described the changes brought about by the 1811 Commissioners Survey: "The great principle which governs these plans is, to reduce the surface of the earth as nearly as possible to a dead level. The natural inequities of the ground are destroyed..." (Cohen, p.2511). However, the present day elevations roughly correspond to those taken by the street surveyors prior to leveling. Therefore, the question of the depth of intact soil stratigraphy on the potential development site remains unanswered. The archaeologists' reliance on soil boring logs for a glimpse at subsurface conditions will, in this case, not be helpful since they can not reveal the amount of "missing" pre-1811 A horizon or B horizon soil.

Lots 22 and 23 each hosted substantial historic development. For more than a century these spaces have been subject to multiple human activities which almost surely destroyed or hopelessly mixed shallow-lying prehistoric deposits. The most one could reasonably hope to find would be random artifacts rather than significant remains from Indian occupation.

Lot 24 possessed a substantial structure covering most of the lot, which had a full cellar. The subsurface
disturbance would have obliterated any potential prehistoric remains, and there would have been little room on the lot for historic remains, as the back yard was minimal. In addition, the presence of a previous building on the north end of the lot, where the subsequent back yard was, would have also significantly disturbed potential remains.

Historic

Remnants of historic lifeways are limited, as there was nothing constructed on this site prior to the middle of the nineteenth century. Documentation supports that the only areas with the potential to yield historic remains, are those rear yards previously mentioned (Lots 22 and 23). Although questionable, there is the possibility that privies, cisterns, and wells were once located in the back yards of these lots. As detailed in the above discussion, municipal sewer was available from the onset of construction on this site. However, based on nineteenth century sanitation reports and health violation records from neighboring blocks, there is no reason to believe that each tenement was connected to this available sewer. If privies were in rear yards of certain of these tenements (e.g., Lots 22 and 23), these privies were, according to late nineteenth century health code regulations, regularly emptied. Periodic cleanings would have destroyed any archaeologically significant deposits.

It has been impossible to ascertain the exact nature of an individual tenement's earliest water supply and, in consideration of the in-depth research expended on the 34th Street Rezoning Project for this same information, we do not feel that further documentary research will provide this evidence (See Phase 1A Archaeological Assessment, 34th Street Rezoning Project, 1988). Although there was municipal water in the immediate area at the time of first construction, there may be capped wells and cisterns in the back yard spaces behind Lots 22 and 23. It must be kept in mind that the buildings associated with these back yard spaces were classified as tenements, indicating multiple families that were possibly unrelated and transient. The presence of privy, cistern and well features does not guarantee they will provide additional information on historic lifeways. If we were to proceed on the limited possibility of back yard features/deposits, further research would have to be conducted to establish the possible significance to the archaeological record of such features (e.g., long term occupation by one family or ethnic group).

This vertical and horizontal analysis of past and present footprints was designed to establish potentially sensitive areas for archaeological remains. This preliminary analysis was not designed to provide sufficient data to determine the need for field investigations, but to recommend whether or not a full Phase 1A study as warranted. Based on their research goals and priorities, NYCLPC may want to consider the possibility of further investigations on a portion of the site, the rear yards of Lots 22 and 23 for
historic resources (Figure 6). However, a full Phase 1A archaeological analysis may not be appropriate for this potential development site because it is doubtful if further documentary research could give definitive assurance that potential resources, in fact, exist.
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FIGURE 1

Viele: 1859 Topographic Map
Detail from Figure 2: Prehistoric Sites of the New York City Landmarks Preservation Commission manuscript "Towards an Archaeological Predictive Model for Manhattan: A Pilot Study"

scale 1:24000
Figure J

68 / MANHATTAN

LEGEND FOR FIVE BOROUGH MAPS

NEW YORK CITY

PRESENT-SNY CITY MAPS

PLANTING AREAS AND OLD FIELDS

ROBERT GRUMET, 1981

Robert Grumet, 1981
FIGURE 4: Project Site Location  

1" - 120'
Tracing of Bromley Atlas of the City of New York, 1913 corrected to 1920
FIGURE 6: Project Site Location with Sensitive Areas Shown
A. Lot 22, facing northwest from 33rd Street.

B. Lot 22, facing northeast from 33rd Street.