APPENDIX C
AGENCY CORRESPONDENCE

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
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ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 17DCP159M
Project: BLOCK 675 REZONING
Date received: 5/3/2017

ARCHAEOLOGY REVIEW ONLY.

Properties with no Archaeological significance:

1) ADDRESS: 613 WEST 29 STREET, BBL: 1006750012
2) ADDRESS: 301 11 AVENUE, BBL: 1006750029
3) ADDRESS: 309 11 AVENUE, BBL: 1006750036
4) ADDRESS: 604 WEST 30 STREET, BBL: 1006750038
5) ADDRESS: 606 WEST 30 STREET, BBL: 1006750039

Gina Santucci

5/8/2017

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 32310_FSO_DNP_05082017.doc

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

November 2, 2017

Ms. Noreen Doyle
Executive Vice President
Hudson River Park Trust
Pier 40
353 West Street
New York, NY 10014

Re: CEQR
Air Rights Transfer for Block 675 in Manhattan
29th Street between 11th and 12th Avenues at 30th Street between 11th and 12th Avenues, New York City, NY
17PR07054

Dear Ms. Doyle:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP) regarding the proposed Air Rights Transfer for Block 675 in Manhattan. We have reviewed the submitted documents under the City Environmental Quality Review (CEQR) as requested. The role of this office in the CEQR process is act as a subject matter expert in the area of Historic Preservation. These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

We have reviewed the description of work and supporting documentation (draft PDEIS excerpts) that was provided to our office on October 11th, 2017. We note that the following National Register eligible properties are within the 400-foot study boundary: Hudson River Bulkhead; High Line; W & J Sloane Warehouse and Garage; West Chelsea Historic District; New York Terminal Warehouse Company Central Stores; 270 Eleventh Ave/556-560 W. 28th Street; 554 W. 28th St.; and the Berlin and James Envelope Company. We further note that the buildings located within the "Project Area" on Block 675/Lots 12, 29, 36, 38 & 39 are not eligible for listing in the State and National Registers of Historic Places.

Based on available information, Block 675 is located in an archaeologically sensitive area. Mid- to late-19th century industrial, commercial, and residential archaeological resources may be preserved below modern disturbances. If new construction results from the proposed transfer of

air rights, we recommend that a Phase IA archaeological sensitivity assessment be conducted and submitted to this office for review and comment.

Based on our review of the DEIS chapters provided, OPRHP concurs with the recommendation to implement a Construction Protection Plan for historic structures located within 90 feet of the receiving site, which includes the High Line. We further concur with the preliminary determination that the potential development at the receiving site would have no negative impacts on historic architectural resources.

The OPRHP appreciates the opportunity to comment under the CEQR review process as an interested agency. It should be noted that further consultation with our office will be necessary as the project moves forward if there is state or federal involvement in the projects. Involvement of a federal or state agency triggers a more formal review with our office under the National Historic Preservation Act of 1966 and Section 14.09 of the New York State Parks, Recreation, and Historic Preservation Law, respectively. If further correspondence is required regarding this project, I can be reached at (518) 268-2182.

If additional information correspondence is required regarding this project it should be provided via our Cultural Resource Information System (CRIS) at www.nysparks.com/shpo/online-tools/ Once on the CRIS site, you can log in as a guest and choose "submit" at the very top menu. Next choose "submit new information for an existing project". You will need this project number and your e-mail address. If you have any questions, I can be reached at (518) 268-2182.

Sincerely,

Olivia Brazee
Historic Site Restoration Coordinator
olivia.brazee@parks.ny.gov

via e-mail only

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

November 7, 2017

Ms. Noreen Doyle
Executive Vice President
Hudson River Park Trust
Pier 40
353 West Street
New York, NY 10014

Re: HRPT
Air Rights Transfer for Block 675 in Manhattan
29th St bet 11th and 12th Aves at 30th St bet 11th and 12th Aves, New York City, NY
17PR07054

Dear Ms. Doyle:

Thank you for continuing to consult with the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources.

We have reviewed the LPC findings regarding archaeology that were provided to our office on November 3rd, 2017. Based upon our review, it is OPRHP's opinion that the proposed work will have No Adverse Impact on historic resources, with the following conditions:

1. A Construction Protection Plan must be implemented for historic resources located within 90 feet of construction. The plan should be developed in accordance with the New York City Buildings Department Technical Procedure Policy Notice (TPPN) #10/88, and with the National Park Service *Tech Notes* #3, "Protecting a Historic Structure During Adjacent Construction", available online at: http://www.nps.gov/tps/how-to-preserve/tech-notes/Tech-Notes-Protection03.pdf.
2. Once it is determined that ground-disturbing activities will in fact take place on the receiving site, the previously requested Phase 1A archaeological assessment report must be submitted for our review and comment.

If additional information correspondence is required regarding this project it should be provided via our Cultural Resource Information System (CRIS) at www.nysparks.com/shpo/online-tools/ Once on the CRIS site, you can log in as a guest and choose "submit" at the very top menu. Next choose "submit new information for an existing project". You will need this project number and your e-mail address. If you have any questions, I can be reached at (518) 268-2182.

Sincerely,

Olivia Brazee
Historic Site Restoration Coordinator
olivia.brazee@parks.ny.gov

via e-mail only

NEW YORK STATE OF OPPORTUNITY.
Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

November 10, 2017

Ms. Noreen Doyle
Executive Vice President
Hudson River Park Trust
Pier 40
353 West Street
New York, NY 10014

Re: HRPT
Air Rights Transfer for Block 675 in Manhattan
29th Street between 11th and 12th Avenues at 30th Street between 11th and 12th Avenues, New York City, NY
17PR07054

Dear Ms. Doyle:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources.

In response to a letter from Elizabeth Meade, AKRF (9 November 2017), it is OPRHP's recommendation that the area of concern, where a Phase IA assessment of the current project is requested, is the portion of Block 675 that was identified as archaeologically sensitive by the Phase IA archaeological investigation for the Hudson Tunnel project.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via email only

cc: Elizabeth Meade, AKRF

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

November 13, 2017

Ms. Noreen Doyle
Executive Vice President
Hudson River Park Trust
Pier 40
353 West Street
New York, NY 10014

Re: HRPT
Air Rights Transfer for Block 675 in Manhattan
29th Street between 11th and 12th Avenues at 30th Street between 11th and 12th Avenues, New York City, NY
17PR07054

Dear Ms. Doyle:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources.

This letter is being provided in response to a request for clarification of our earlier letter regarding this project (Perazio, 10 November 2017). We are recommending that a supplemental archaeological assessment be conducted of that portion of Block 675 that was identified as archaeologically sensitive by the Phase IA archaeological investigation for the Hudson Tunnel project.

If you have any questions, please don't hesitate to contact me.

Sincerely,



Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via email only

cc: Elizabeth Meade, AKRF

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

November 17, 2017

Ms. Noreen Doyle
Executive Vice President
Hudson River Park Trust
Pier 40
353 West Street
New York, NY 10014

Re: HRPT
Air Rights Transfer for Block 675 in Manhattan
29th Street between 11th and 12th Avenues at 30th Street between 11th and 12th Avenues, New York City, NY
17PR07054

Dear Ms. Doyle:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources.

OPRHP has reviewed the latest submission for this project – *Block 675 East Redevelopment Project, Block 675, Lot 12 (Part), New York, New York, Supplemental Archaeological Assessment* (AKRF, November 2017). Based on the information provided, we have no further archaeological concerns regarding the portion of the project area described in this document. Furthermore, we concur with the Landmark Preservation Commission's recommendation that the remainder of the proposed project area is not archaeologically sensitive.

Our office has previously recommended (Brazee, 2 November 2017) that we have no concerns regarding architectural resources, based on the implementation of a Construction Protection Plan.

Therefore, we now recommend that the proposed project will have **No Adverse Impact** on historic properties listed or eligible for listing on the State and National Registers of Historic Places. This recommendation pertains only to the Area of Potential Effects (APE) described in the submitted materials. Should the project design be changed OPRHP recommends further consultation with this office.

If you have any questions, please don't hesitate to contact me.

Sincerely,



Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via email only

cc: Elizabeth Meade, AKRF

Block 675 East Redevelopment Project

Block 675, Lot 12 (Part)

NEW YORK, NEW YORK

Supplemental Archaeological Assessment

Prepared for:

DD West 29th LLC, c/o Douglaston Development
42-09 235th Street
Douglaston, NY 11363

and

West 30th Street, LLC
c/o Lalezarian Properties
1999 Marcus Ave., #310
Lake Success, NY 11042

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

NOVEMBER 2017

Management Summary

OPRHP Project Review Number: 17PR07054

Lead Agency: Hudson River Park Trust
New York City Department of City Planning
New York City Planning Commission

Phase of Survey: Supplemental Archaeological Assessment

Location Information
Location: Block 675, Lot 12 (part); Manhattan
Minor Civil Division: 06101
County: New York County

Survey Area
Length: Approximately 62.5 meters (205 feet)
Width: Approximately 30.5 meters (100 feet)
Area: 0.47 acres (20,500 square feet)

USGS 7.5 Minute Quadrangle Map: Weehawken Quadrangle

Report Author: Elizabeth D. Meade, MA
Registered Professional Archaeologist 16353

Date of Report: November 2017

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Chapter 1: Introduction and Methodology

A. INTRODUCTION AND PROPOSED PROJECTS DESCRIPTION

DD West 29th LLC and West 30th LLC are proposing to construct two mixed-use buildings on two adjacent project sites located on the block bounded by West 29th Street, West 30th Street, Eleventh Avenue, and Route 9A/Twelfth Avenue in Manhattan (see **Figure 1**). The two projects will be filing separate Uniform Land Use Review Procedure (ULURP) applications, but are being considered together for the purposes of environmental review. The construction of these new buildings would require the rezoning of the eastern end of Block 675 as well as additional land use actions. The project sites consist of project site A located at 601 West 29th Street (Block 675, Lots 12, 29, and 36) and project site B located at 606 West 30th Street (Block 675, Lot 39) (see **Figure 2**). The sites are separated by Block 675, Lot 38, which is not included within either project site though it is included in the proposed rezoning area ("the Project Area"). The proposed actions are subject to ULURP and City Environmental Quality Review (CEQR). The New York City Department of City Planning (DCP), acting on behalf of the City Planning Commission (CPC), is the lead agency for the environmental review. The Hudson River Park Trust (HRPT) is an involved agency.

As part of the proposed projects, the three tax lots within project site A (Block 675, Lots 12, 29, and 36) would be merged into a single lot. These lots are currently developed with a number of buildings. Lot 29 is occupied by a 1-story (without basement) garage that has been converted for use as office space and an art gallery. Lot 36 is currently developed with a gas station. Lot 12, which extends across much of the West 29th Street frontage of the project site A, is developed with a 4-story (with basement) loft building; a 1-story (with basement) commercial building, a 2-story (without basement) building used by the Department of Sanitation (DSNY), and an undeveloped parking lot used by the Port Authority of New York and New Jersey (PANYNJ). Project site B is currently developed with a 1-story building that is used for equipment storage and maintenance by DSNY. Lot 38 is currently developed with a 1-story auto repair shop. Project sites A and B would then be developed with new mixed-use buildings, including a 62-story building on project site A and a 32-story building on project site B. The new buildings would include both market-rate and affordable housing, a potential FDNY EMS station, and commercial and retail uses. No development is proposed for Block 675, Lot 38 although it could potentially be redeveloped as a result of the proposed rezoning.

B. SUMMARY OF ENVIRONMENTAL REVIEW AND PREVIOUS ARCHAEOLOGICAL ASSESSMENTS

The archaeological sensitivity of the Project Area was previously reviewed by the New York City Landmarks Preservation Commission (LPC) as part of the Hudson Yards/7 Train Extension project. In a comment letter dated October 26, 2003, LPC determined that Block 675, Lots 12, 29, 36, 38, and 39 were not archaeologically sensitive. As part of the environmental review for the Block 675 East Redevelopment Project, consultation was initiated with LPC, pursuant to City Environmental Quality Review (CEQR), regarding the archaeological sensitivity of the Project Area. In a comment letter dated May 7, 2017, LPC again determined that the project area is not archaeologically significant.

Consultation regarding the proposed projects was also initiated with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) pursuant to the State Environmental Quality Review Act (SEQRA) and Section 14.09 of the New York State Historic Preservation Act. In comment letters dated November 2, 2017; November 7, 2017; November 10, 2017; and November 13, 2017, OPRHP determined that a portion of the Project Area overlaps with an area of archaeological sensitivity as identified in a Phase 1A Archaeological Documentary Study ("Phase 1A Study") that was prepared by AKRF, Inc. in January 2017 in association with the Hudson Tunnel Project (described in greater detail below). This Supplemental Archaeological Assessment of the 205-foot western portion of Lot 12 ("the Block 675 East study area") has been prepared in response to OPRHP's comments.

SUMMARY OF THE HUDSON TUNNEL PROJECT PHASE 1A STUDY

The 2017 Hudson Tunnel Phase 1A Study of the Manhattan side of the Hudson Tunnel Project analyzed an approximately 9-acre area along the western side of Manhattan between approximately West 26th Street and West 33rd Street. The Area of Potential Effects (APE) analyzed for the Hudson Tunnel Project included the western 205 feet (approximately) of Lot 12 (see **Figure 3**). The Block 675 East study area was identified as a potential construction staging area within the Hudson Tunnel APE and the remainder of the APE was the proposed location of a ventilation shaft and ventilation plant to the west of the Block 675 East project sites. The Phase 1A determined that Block 675 was inundated by the Hudson River until the mid-19th century, when landfill and landfill-retaining structures were used to extend the shoreline to the west. The Hudson Tunnel Phase 1A identified a portion of Block 675 as potentially sensitive for archaeological resources associated with the presence of industrial and manufacturing complexes from the mid-19th century through the early 20th century as well as for the possible presence of shaft features associated with domestic occupation of the block, although the Phase 1A study did not confirm that residential structures were present within the portion of the APE located on Block 675. For the construction staging area, including the western portion of Lot 12, the Phase 1A concluded:

> *Use of Block 675 as a construction staging area has the potential to impact industrial and manufacturing sites, domestic sites, and historic piers, wharves, and landfill-retaining devices if construction activities have the potential to significantly compress or otherwise disturb the underlying soils. These resource types are expected below the depth of modern disturbance, utilities, or buried tanks* (AKRF 2017:6-2).

The Phase 1A determined that potential resources could be sufficiently shallow so that they would be "present immediately below the modern pavement and bedding material" and recommended "a thorough analysis of the development of each affected lot" in order to understand the potential archaeological sensitivity of the Block 675 East study area (AKRF 2017: 6-4).

C. PROPOSED PROJECTS IMPACTS WITHIN THE STUDY AREA

This Supplemental Archaeological Assessment has been prepared to provide the thorough analysis of the Block 675 East study area to better understand the potential archaeological sensitivity of that portion of the Hudson Tunnel APE and to determine if the construction of the Block 675 East project would result in impacts on archaeological resources. Within the Block 675 East study area, the proposed projects would construct a 1-story garage facility. The foundation slab for the garage would be situated at the grade of the new adjacent sidewalk and fill will be deposited to raise the grade for the construction of the slab. Limited excavation will be required in locations where support columns will be constructed. As currently planned, the maximum depth of disturbance within the Block 675 East study area would be approximately 4 feet below grade, which would only occur where the limited number of columns will be located.

D. DOCUMENTARY RESEARCH GOALS AND METHODOLOGY

This Supplemental Archaeological Assessment was prepared to address the following research goals: (1) to determine the likelihood that the Block 675 East study area is sensitive for the types of archaeological sensitivity identified in the Hudson Tunnel Phase 1A; (2) to determine the effect of development and landscape alteration on any potential archaeological resources that may have been located within the Block 675 East study area; (3) to determine if archaeological resources would be impacted by the proposed projects within the Block 675 East study area; and (4) to make recommendations for further archaeological analysis, if necessary.

In order to accomplish these goals, documentary research was completed to establish a chronology of the development of the Block 675 East study area, to identify landscape alteration, and to determine the extent to which the Block 675 East study area was disturbed by past human activity. The Hudson Tunnel Phase 1A study determined that the APE was not sensitive for archaeological resources associated with the precontact (Native American) occupation of the region and as such, this Supplemental Archaeological Assessment focuses only on the development and occupation history of the Block 675 East study area during the historic period beginning with the construction of the landfill in the mid-19th century.

As stipulated by the NYAC standards, sensitivity assessments should be categorized as low, moderate, or high to reflect "the likelihood that cultural resources are present within the project area" (NYAC 1994: 10). For the purposes of this Supplemental Archaeological Assessment, those terms are defined as follows:

- Low: Areas of low sensitivity are those where the original topography would suggest that Native American sites would not be present (i.e., locations at great distances from fresh and salt water resources), locations where no historic activity occurred before the installation of municipal water and sewer networks, or those locations determined to be sufficiently disturbed so that archaeological resources are not likely to remain intact.
- Moderate: Areas with some disturbance, but not enough to eliminate the possibility that archaeological resources are intact on the project sites.
- High: Areas with documented historic period activity, and minimal or no documented disturbance.

Data was gathered from various published and unpublished primary and secondary resources, such as historic maps, historic photographs, newspaper articles, and local histories. These published and unpublished resources were consulted at various repositories, including the New York Public Library, the Library of Congress, and other sources. Online textual archives, such as Google Books and the Internet Archive Open Access Texts, were also accessed.

According to NYAC standards, Phase 1B testing is generally warranted for areas determined to have moderate sensitivity or higher. Archaeological testing is designed to determine the presence or absence of archaeological resources that could be impacted by a proposed project.

A. ENVIRONMENTAL AND PHYSICAL SETTINGS

A summary of the environmental and physical setting of the Block 675 East study area is provided in the Phase 1A study prepared for the Hudson Tunnel Project, which looked at a larger area.

As part of this Supplemental Archaeological Assessment, soil borings from within the Block 675 East study area were reviewed. The first set of soil borings was completed as part of a Phase II Environmental Site Investigation (ESI) prepared by Fleming Lee-Shue in 2013. Prior to the completion of the borings, a non-invasive geophysical survey was completed that did not identify anomalies consistent with underground structures or storage tanks, although utilities were observed in the southern portion of the site. Five borings were advanced within Lot 12. One boring near the southeastern corner of the lot identified a second layer of asphalt 4 to 5 feet beneath the asphalt and concrete ground surface. The remaining borings identified layers of concrete and fill materials to depths of approximately 5 feet beneath the ground surface. Three additional borings were completed within Lot 12 by AKRF in 2017.[1] These borings indicated that Lot 12 has between 3 and 7 feet of fill material containing concrete and asphalt across portions of the lot.

B. HISTORIC PERIOD DEVELOPMENT AND OCCUPATION OF THE STUDY AREA

SUMMARY OF THE HISTORIC DEVELOPMENT OF THE STUDY AREA

As shown on the 1836 Colton map (see **Figure 4**), the Block 675 East study area was entirely inundated by the Hudson River. The 1845 Ensign map continues to show the Block 675 East study area as inundated. The landfill on the Block 675 East study area is first depicted on the 1849–1850 Perris and Hutchinson map of Manhattan (see **Figure 5**). The map shows the beginnings of the construction of Eleventh Avenue to the east of Block 675 and shows the block as partially landfilled to the west. The majority of the development on the block was situated to the east of the Block 675 East study area at that time, including an unidentified structure immediately to the east of the Block 675 East study area. The Block 675 East study area is also depicted on the 1852 Dripps map (see **Figure 6**). That map depicts a number of structures to the east of the Block 675 East study area, including a saw mill complex. A large rectangular structure is depicted near the northeastern corner of the Block 675 East study area on that map and a second small structure is shown adjacent to the extreme southeast corner of the Block 675 East study area.

The 1854 Perris map (see **Figure 7**) suggests that the landfill in the western portion of Block 675 had not been as developed as was depicted on the 1849–1850 Perris-Hutchinson and 1852 Dripps maps. That map suggests that the western portion of the Block 675 East study area was not entirely filled at that time and was instead occupied by a slip or basin near the terminus of West 29th Street. That map indicates that five

[1] A final report summarizing these borings is still being completed, but the boring logs were available for review as part of this assessment.

buildings were entirely or partially situated within the Block 675 East study area, all of which may have been associated with an adjacent lumber yard. Two adjacent wood frame buildings were located at the northeastern corner of the Block 675 East study area that may have been depicted as a single rectangular structure on the 1852 Dripps map. The western building is an unidentified wood frame building. The eastern building is identified as a first-class "specially hazardous" building, which could have been used for the following purposes: bakers, boat builders, brewers, brush manufactories, comb makers, copper smith with forgers, dyers, floor cloth manufacturers, hat manufactories, malt houses, oil manufactories, oil cloth manufactories, private stables, tobacco manufactories, type and stereotype founders, and wheelwrights. A second first-class wood frame building was situated immediately to the east of the Block 675 East study area on the lumber yard property; this may be the same building seen on previous maps. Three structures identified as "outbuildings" were wholly or partially situated in the southeastern portion of the Block 675 East study area. By the publication of an 1859 version of the Perris map, all of these buildings had been demolished (see **Figure 8**). At that time, the Block 675 East study area was nearly entirely landfilled and was in use as a lumber yard. The 1859 Perris atlas appears to suggest that the lumber yard on the Block 675 East study area was on a separate property than the lumber yard seen on previous maps to the north and east. Historic directories published in the early 1850s indicate that a number of commercial enterprises associated with the production and sale of lumber or associated industries (e.g., carpentry, sawmilling) identified their business address as the "foot of West 29th Street."

The Block 675 East study area would continue to be occupied by a lumber yard for decades. The 1867 Dripps map depicts the Block 675 East study area as an undeveloped lumber yard. The 1879 Bromley atlas (see **Figure 9**) suggests that the western portion of the Block 675 East study area was still not entirely developed with landfill. The remainder of the Block 675 East study area was undeveloped at that time and was a storage yard associated with the Pennsylvania Coal Company. The surrounding block was developed with a number of industrial facilities, including the Crane & Clark planing mill and lumber yard and the J.S. Peck mason wood material factory. The 1885 Robinson atlas also depicts these factories, and continues to depict the Block 675 East study area as undeveloped, though the map does not indicate its use at that time. The 1890 Sanborn map identifies it as the undeveloped lumber yard of the Dunber Box and Lumber Company. The 1891 and 1897 Bromley atlases depict the Block 675 East study area as the "W.L. Marshall Lumber Yard" and continue to show it as undeveloped.

The 1898 Sanborn map and atlases published by Bromley in 1911, 1913, 1916, 1920, 1921,[1] 1925, 1927, and 1930 also continue to depict the Block 675 East study area as part of an undeveloped lumber yard. The 1911 Sanborn map (see **Figure 10**) depicts large lumber piles across the Block 675 East study area, but it is does not appear that formal structures were present on the site at that time. An aerial photograph taken in 1924 depicts stored materials across the Block 675 East study area.[2] The 1930 Sanborn (see **Figure 11**) depicts the Block 675 East study area as part of a larger, undeveloped property that contained a small, 10-foot-square office building/shed to the east of the Block 675 East study area.

Development is first depicted on the Block 675 East study area on the 1951 Sanborn map (see **Figure 12**), which reflects the construction of two buildings. A 1-story cinder block "express terminal" was located near the eastern side of the Block 675 East study area; the remnants of which are still extant. At the western end of the Block 675 East study area, a 1-story (with basement) office building had been constructed. At least six underground gas tanks were located to the east of the building within the Block 675 East study area. These buildings are visible in photographs taken by P.L. Sperr in the 1930s and

[1] The 1921 Bromley atlas in the collection of the New York Public Library was updated with paste-overs through 1923, though no changes appear to have been made to the Block 675 East study area.
[2] Accessible at: http://maps.nyc.gov/doitt/nycitymap/.

1940s that are in the collection of the New York Public Library.[1] A 1955 Bromley atlas that was updated through 1956 identifies the building at the eastern end of the Block 675 East study area as a "loading platform."

A Sanborn map published in 1976 indicates that the building at the western end of the Block 675 East study area had been demolished and the adjacent gas tanks are no longer depicted. By the publication of the 1979 Sanborn map, many of the other buildings on Block 675 had also been demolished. Records on file with the New York City Department of Buildings suggest that the western side of the site was in use as a waste transfer station in the late 20th century. Aerial photographs taken in the late-20th century depict the majority of the Block 675 East study area as a paved parking lot. An aerial from 1996[2] may depict the western portion of the Block 675 East study area as unpaved; however, the resolution is not sufficient to identify exact site conditions. The former loading dock/trucking building continues to appear on Sanborn maps published through at least 2005 and on aerial photographs taken through 2010, but it appears to have been demolished down to a slab before 2012.

HISTORIC INFRASTRUCTURE IN THE VICINITY OF THE STUDY AREA

Access to municipal water and sewer networks was likely available in the vicinity of the Block 675 East study area at a fairly early date. Manhattan's early sanitary infrastructure was focused on Lower Manhattan, where the majority of the population lived until northward expansion surged in the mid-19th century. New York's earliest water pipes were constructed of wood and were installed throughout Lower Manhattan in the early 19th century by the Manhattan Company, the precursor to what would later become the Chase Manhattan Bank (Koeppel 2000). The initial water supply system could not be sustained and was replaced by the Croton Aqueduct system in 1842. A map of the complex distribution system associated with the Croton waterworks, published by Endicott in 1842, depicts water lines and stop cocks running through Manhattan at least as far north as 21st Street. Sewers were installed in the area bounded by 8th Street and 24th Street in the 1830s and 1840s and were built throughout the other areas of Manhattan beginning in the 1850s (Goldman 1997). Many existing buildings were not immediately connected to the sewers after their initial installation (ibid). Many early sewers emptied directly into the Hudson and East Rivers. The 1865 Viele map depicts sewers running through both West 29th and West 30th Streets north and south of the Block 675 East study area, both of which lead to the river's edge and presumably emptied directly into the water. In 1853, an advertisement was placed in the *New York Times* by J. Reeve & Co.—one of the lumber companies operating at the foot of West 29th Street—that promoted the sale of a house on West 28th Street near Sixth Avenue that at the time featured "Croton water" and a "bathing-room." Similar advertisements were placed for other homes in the general area, confirming the presence of indoor plumbing in the vicinity of the Block 675 East study area in the early 1850s.

[1] Accessible at: https://digitalcollections.nypl.org/items/510d47dc-fdfa-a3d9-e040-e00a18064a99 and https://digitalcollections.nypl.org/items/510d47dc-fdf8-a3d9-e040-e00a18064a99.
[2] Accessible at: http://maps.nyc.gov/doitt/nycitymap/.

Chapter 3: Conclusions and Recommendations

A. INTRODUCTION

The Hudson Tunnel Project Phase 1A Study determined that the portion of Block 675 included within the Hudson Tunnel Project APE (including the Block 675 East study area) was potentially sensitive for three types of archaeological resources: landfill-retaining structures and landfill deposits, industrial and manufacturing sites, and domestic/residential sites. These resources were determined to be situated "below the depth of modern disturbance, utilities, or buried tanks" (AKRF 2017: 6-2). The Phase 1A recommended that individual lots within the area of potential effect be further analyzed to determine their specific archaeological sensitivity. This Supplemental Archaeological Assessment was prepared to clarify the archaeological sensitivity of the Block 675 East study area to determine if the Block 675 East project would result in impacts to archaeological resources. On the western portion of project site A, construction of the proposed projects would result in disturbance of up to 4 feet below the ground surface only where the columns are to be located.

B. STUDY AREA DISTURBANCE CHARACTERIZATION

As described above, this supplemental analysis included a thorough analysis of soil borings and historic maps in order to document the specific development and disturbance history of the Block 675 East study area. Small wood frame industrial buildings were located within the western portion of the Block 675 East study area in the early 1850s. By 1859, the site was an undeveloped lumber yard and it would remain an undeveloped storage yard until the mid-20th century. The western side of the Block 675 East study area was disturbed by the construction of a building with a basement and a series of gas tanks before 1951. A building without a basement was constructed at the eastern end of the Block 675 East study area and portions of the site have been in use as a paved parking area for several decades.

Soil borings suggest that fill or disturbed soil is situated between depths of 3 to 7 feet across Lot 12. Given the fact that the only buildings documented on the Block 675 East study area during the 19th century were insubstantial wood frame structures, it is not likely that such buildings would have had substantial subsurface components. Furthermore, the regular use of the Block 675 East study area as a lumber or coal yard followed by the construction of buildings (including one with a basement), gas tanks, and a parking lot would have resulted in disturbance to shallowly buried surface deposits.

C. STUDY AREA SENSITIVITY ASSESSMENT

The three types of potential sensitivity identified in the Hudson Tunnel Phase 1A are addressed below.

LANDFILL DEPOSITS AND LANDFILL-RETAINING STRUCTURES

The Block 675 East study area is located in an area of mid-19th century landfill. Landfill and landfill-retaining structures have been an area of increased archaeological interest in recent years, and many archaeological investigations have focused on landfilled areas along the East and Hudson Rivers in Lower Manhattan, where the shoreline was expanded by several blocks between the 17th and 19th centuries. It

has been suggested that the practice of constructing landfill appears to have become standardized and professionalized between the 1840s and 1860s (Kardas and Larrabee 1991; Historical Perspectives, Inc. and Raber Associates 2005). Greater efforts have therefore been made to document earlier landfilling episodes, when unique and highly varied construction methods were in use. Regardless of the potential research value of the landfill deposits, those deposits are likely to be at a depth below the level of disturbance associated with the proposed projects within the Block 675 East study area. Therefore, the soil levels that would be disturbed by the construction of the Block 675 East project are considered to have low sensitivity for archaeological resources associated with landfill and landfill retaining devices, although such resources may be present at greater depths.

INDUSTRIAL AND MANUFACTURING SITES

Several small wood frame buildings and outbuildings were observed within the Block 675 East study area on maps dating between 1852 and 1854 and the Block 675 East study area was occupied by coal or lumber yards between the late 1850s and the early 20th century. The Block 675 East study area does not appear to have been developed with the same type of large-scale industrial facilities that were documented in other portions of the Hudson Tunnel APE. The wood buildings located on the Block 675 East study area are not expected to have had substantial subsurface components (e.g., deep foundations) and any surface deposits associated with their mid-19th century occupation were likely disturbed by lumber yard activity and the subsequent construction of buildings, gas tanks, and paved parking areas. Therefore, the Block 675 East study area is determined to have low sensitivity for archaeological resources associated with the block's past industrial and manufacturing uses.

DOMESTIC AND RESIDENTIAL RESOURCES

As described above, no residential structures appear to have been situated within the Block 675 East study area. Furthermore, it is likely that municipal water and/or sewer networks were available in this part of Manhattan shortly after the creation of the landfill on which the Block 675 East study area is located. Sewer lines appear to have emptied into the Hudson River along West 29th and West 30th Streets prior to the mid-1860s. Therefore, the Block 675 East study area is determined to have no sensitivity for domestic shaft features.

D. RECOMMENDATIONS

The Block 675 East study area has been identified as having low sensitivity for historic period archaeological resources associated with landfill/landfill-retaining devices and industrial/manufacturing sites, and no sensitivity for resources associated with domestic/residential resources. At this time, no additional archaeological work (e.g., a Phase 1B archaeological testing or monitoring during construction) is recommended. However, in the event that project plans change and construction-related soil disturbance would occur at greater depths than those described above, additional archaeological analysis may become necessary. Therefore, any future project design changes that would result in deeper disturbance than that proposed above within the Block 675 East study area should be submitted to LPC and OPRHP for further consultation.

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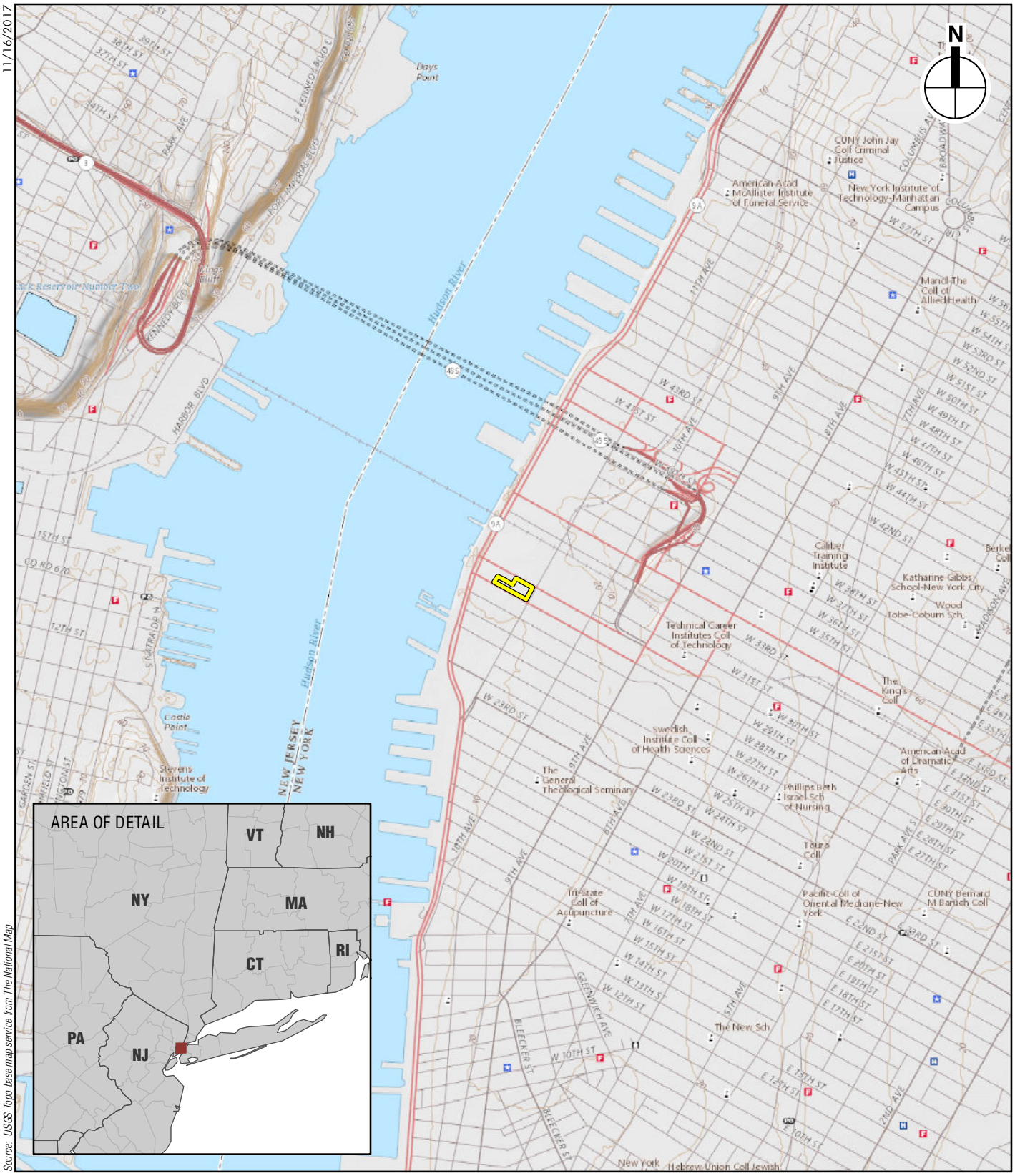
Figures



Block 675 East Project Sites and Lot 38

0 2,000 FEET

Approximate coordinates of APE:
74°0'18"W 40°45'12"N

USGS 7.5 Minute Topographic Map
Weehawken Quad

BLOCK 675 EAST

Figure 1

11/16/2017



Block 675 East Project Sites and Lot 38

675 Tax Block

33 Tax Lot and Boundary

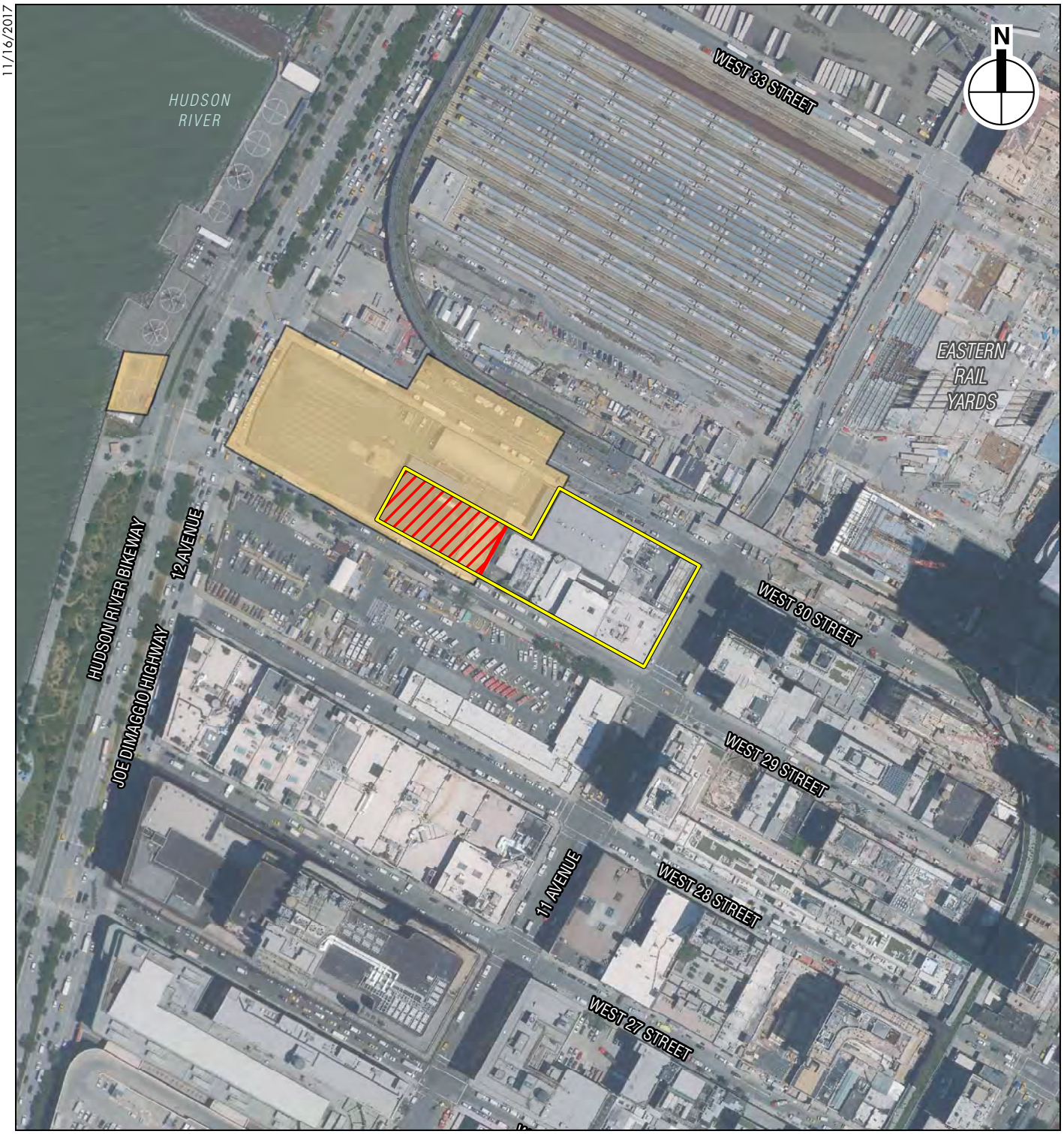
0 500 FEET

BLOCK 675 EAST

Project Location

Figure 2

11/16/2017



Block 675 East Project Sites and Lot 38

Hudson Tunnel Phase 1A Area of Archaeological Sensitivity

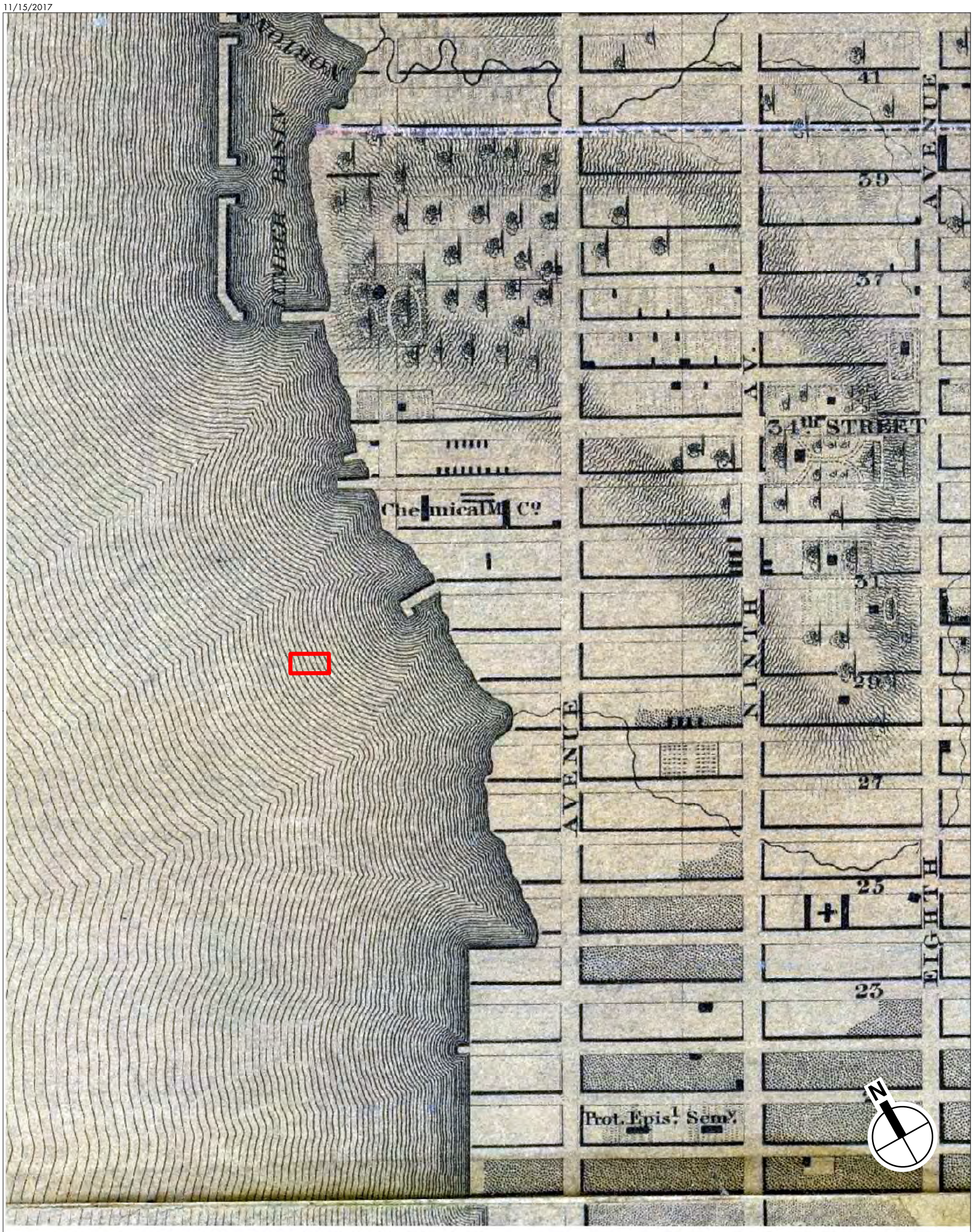
Study Area

0 500 FEET

BLOCK 675 EAST

Aerial Photograph

Figure 3



Study Area

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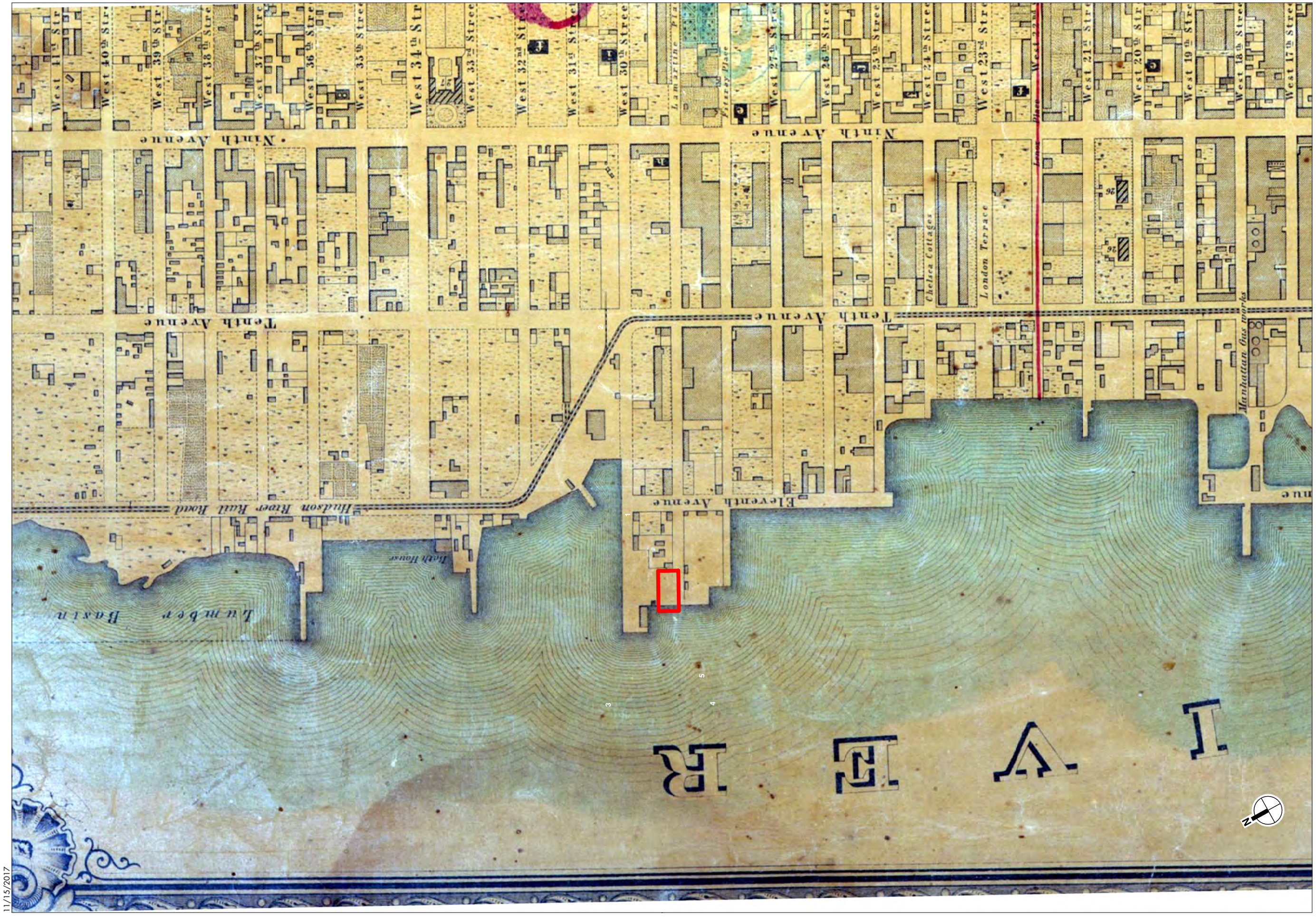
Colton 1836

BLOCK 675 EAST

Figure 4

Perris and Hutchinson 1850
Figure 5



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Study Area

BLOCK 675 EAST

11/15/2017



Study Area

0 1,000 FEET

BLOCK 675 EAST

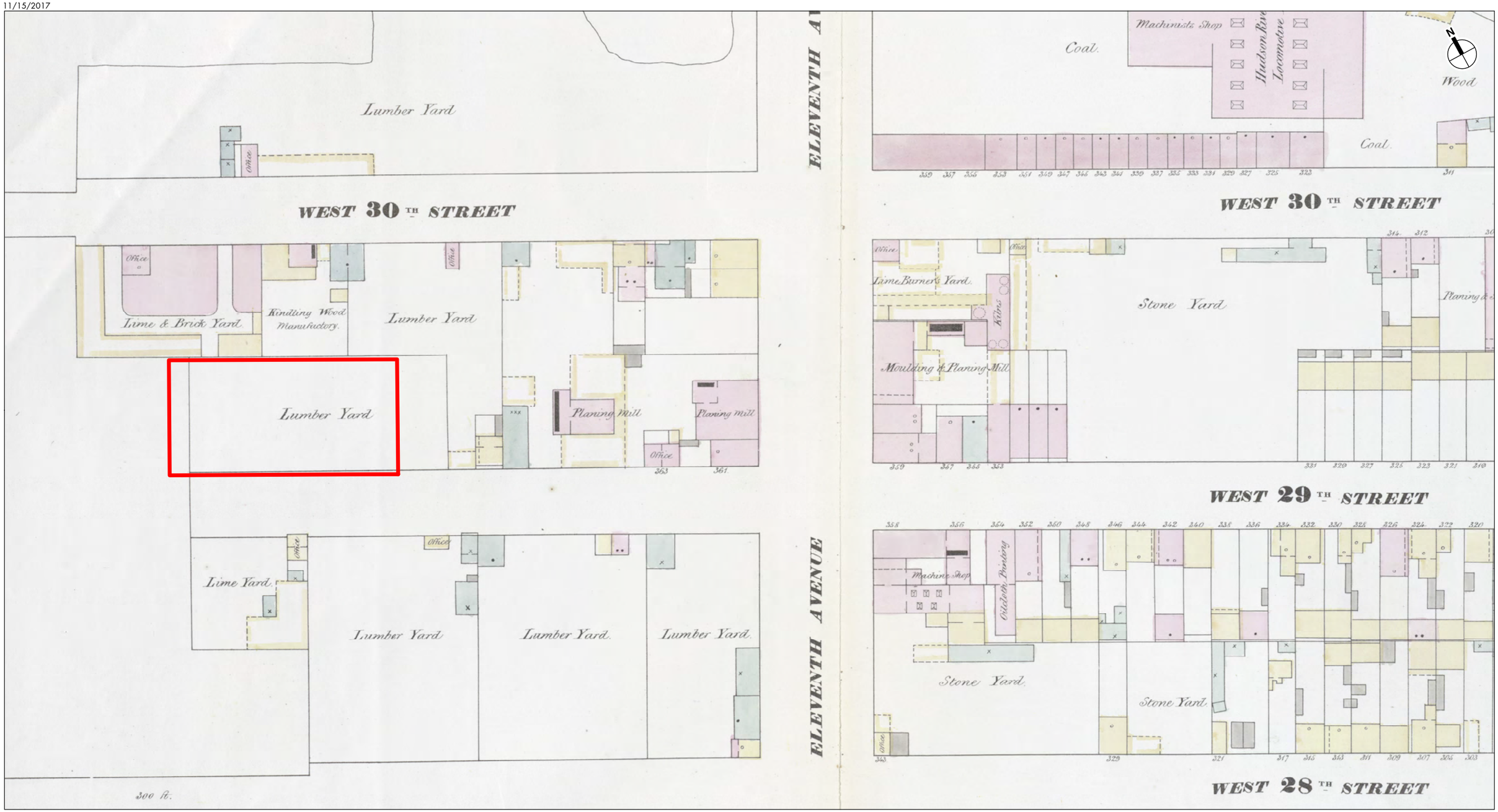
Dripps 1852

Figure 6



BLOCK 675 EAST

Perris and Hutchinson 1854
Figure 7

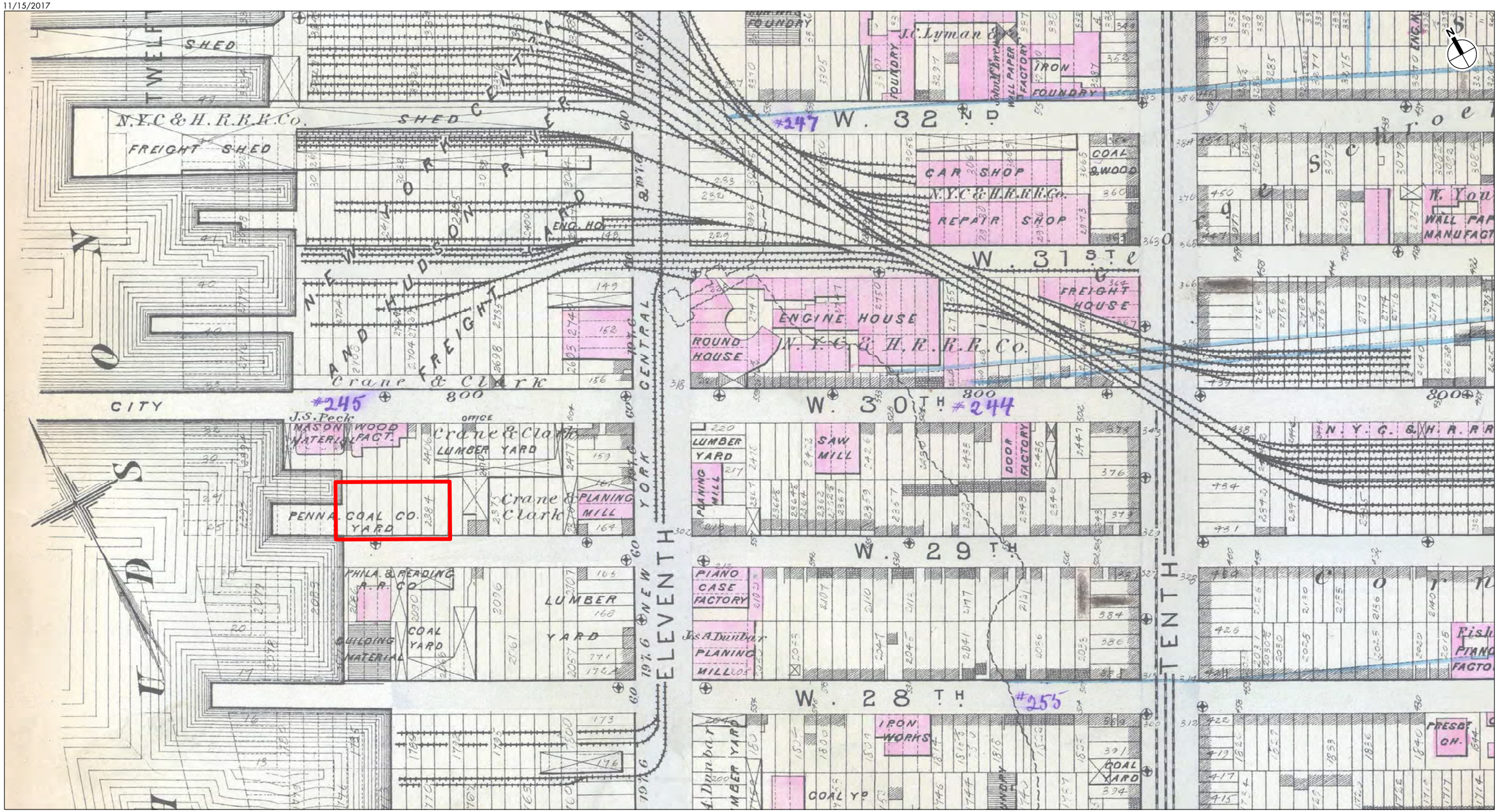


Study Area

BLOCK 675 EAST

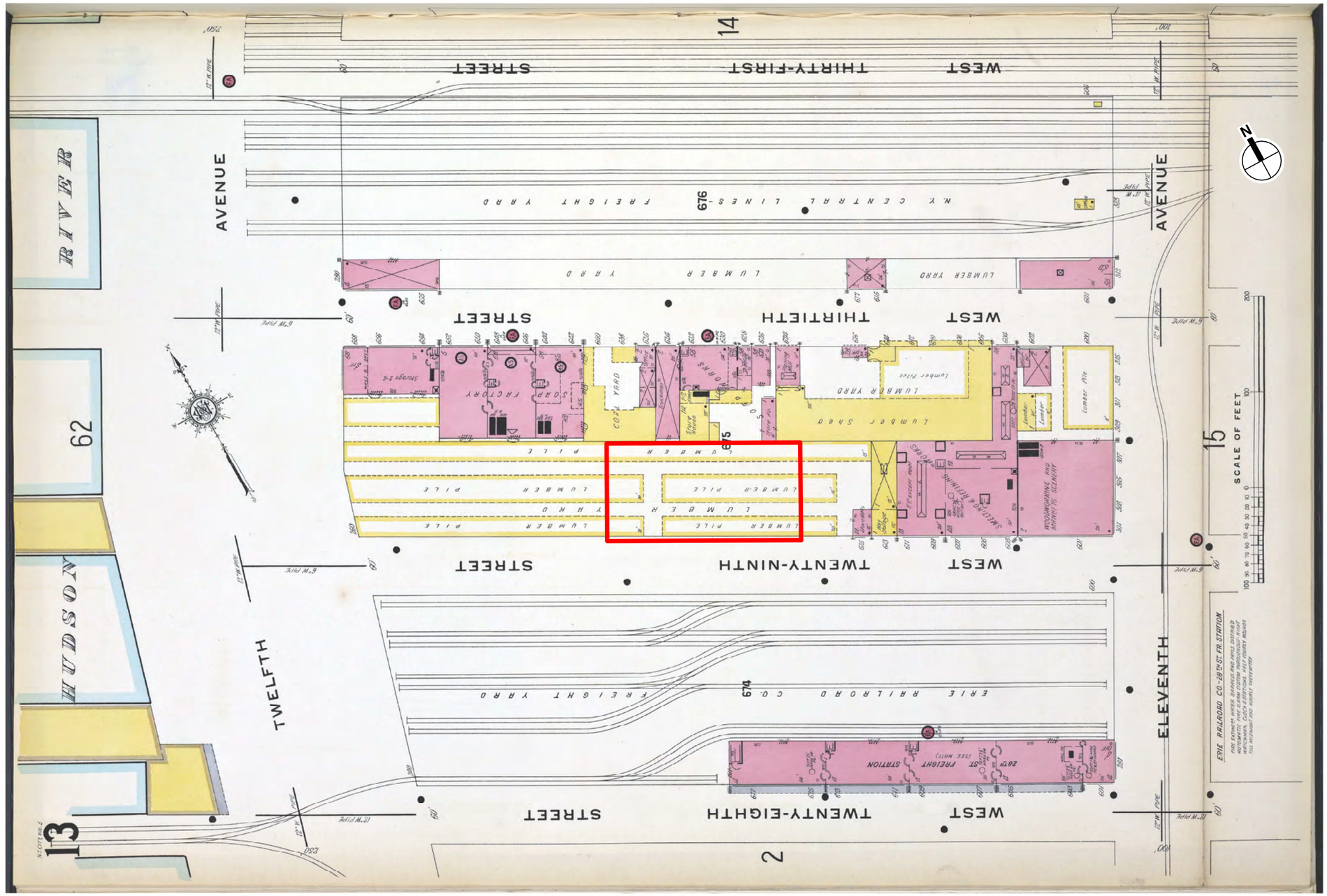
Perris and Hutchinson 1859

Figure 8



BLOCK 675 EAST

Bromley 1879
Figure 9

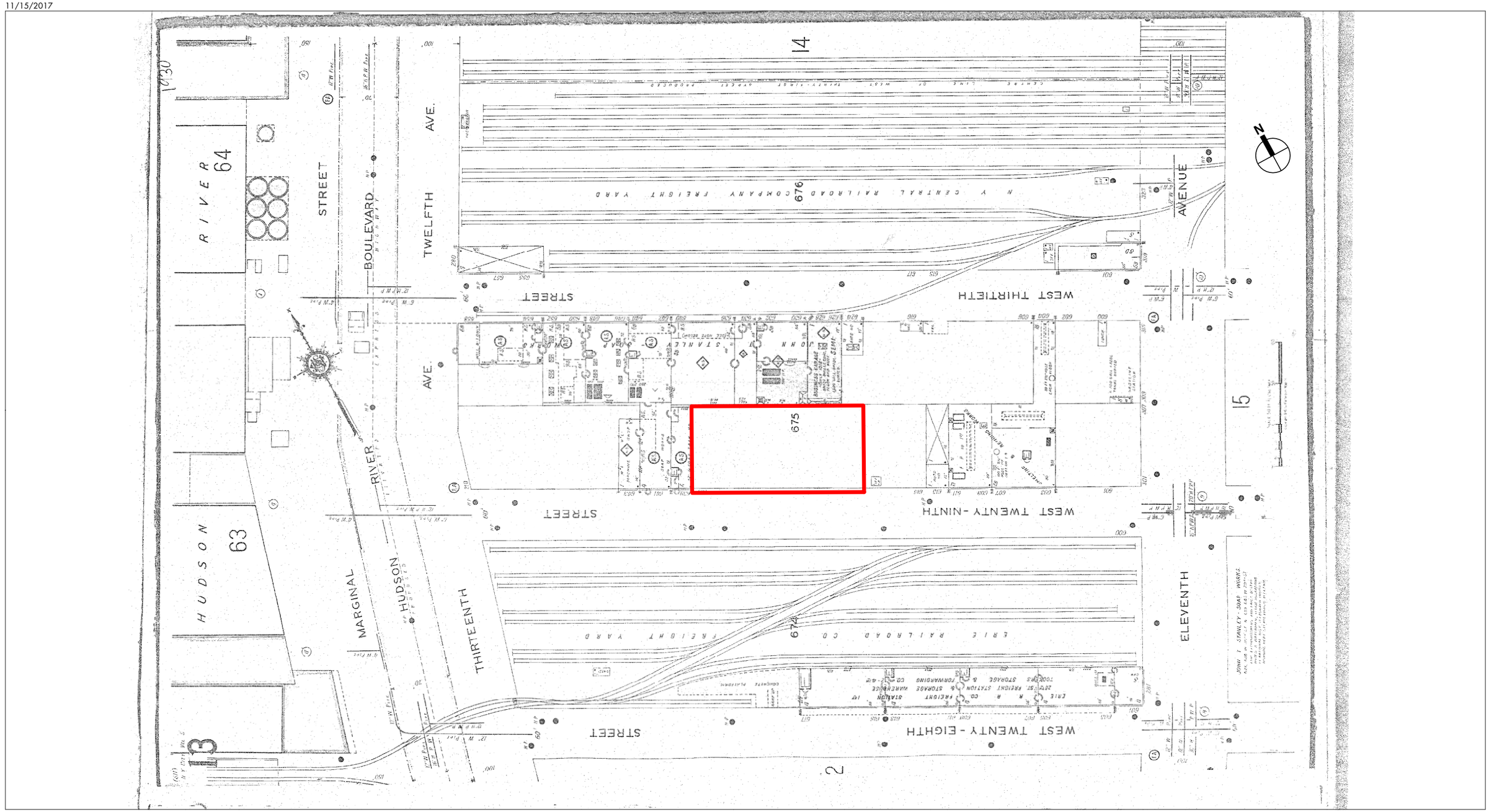


Study Area

0 500 FEET

BLOCK 675 EAST

Sanborn 1911
Figure 10

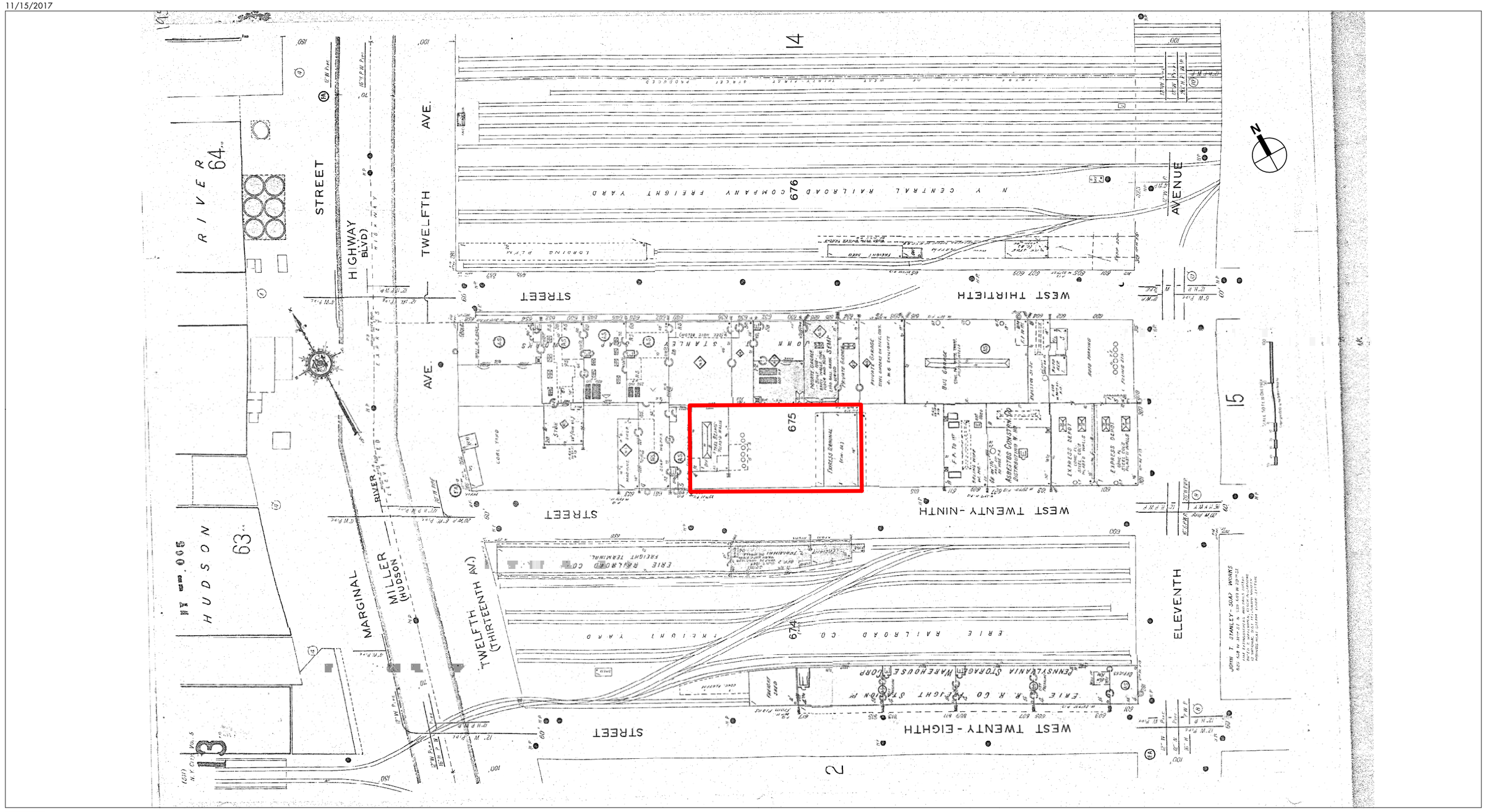


Study Area

0 500 FEET

BLOCK 675 EAST

Sanborn 1930
Figure 11



Study Area

0 500 FEET

BLOCK 675 EAST

Sanborn 1951
Figure 12