Phase 1A Archaeological Documentary Study

College Point South Infrastructure Improvements (Capital Project SE807)

Queens County, New York

Prepared for:

The New York City Department of Design + Construction

and

The New York City Department of Environmental Protection

Prepared by:

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Management Summary

SHPO Project Review Number: Formerly included within 13PR01416

Involved Agencies:
New York City Department of Transportation
New York City Department of Environmental Protection
New York City Department of Parks and Recreation
New York State Department of Environmental Conservation
New York State Department of State
United States Army Corps of Engineers (USACE)

Phase of Survey: Phase 1A Documentary Study

Location Information
Location: College Point, Queens, New York
Minor Civil Division: 08101
County: Queens County

USGS 7.5 Minute Quadrangle Map: Flushing

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Date of Report: March 2015

Summary of Findings:
The following Phase 1A Archaeological Documentary Study was designed to determine the likelihood that the project site was occupied during the precontact (i.e., Native American) and/or historic periods and to determine if intact archaeological resources associated with that occupation could still be present.

As described in greater detail below, the precontact sensitivity of project sites in New York City is generally evaluated by a site's proximity to level slopes, water courses, well-drained soils, and previously identified precontact archaeological sites. The project site is situated on a peninsula near tidal marshland and high ground, and would therefore have been an ideal site for camping or hunting and gathering, or permanent occupation. At least six Native American archaeological sites have been identified within one mile of the project site, including four burial locations, one of which appears to have been located on the project site itself.

The project site has experienced substantial disturbance as a result of the construction, grading, and paving of streets, the installation of utilities, and the construction of bulkheads and retaining walls. The locations of the proposed outfall and the proposed wetland restoration area are determined to have no

sensitivity for precontact archaeological resources as a result of previous disturbance. In addition, the portions of streetbeds that have been disturbed for utility installation are determined to have low sensitivity for precontact archaeological resources. However, the portions of the streetbeds that have not been disturbed for the installation of utilities are determined to have moderate sensitivity for archaeological resources associated with the Native American occupation of College Point, including human remains.

With respect to historic period archaeological resources, College Point was not extensively settled until after the Revolutionary War. The area surrounding the project site streetbeds was largely occupied by large estates until the late 19th and early 20th centuries, around the time when water and sewer networks appear to have become available in the area. There are several locations where modern streetbeds were constructed in the locations or in the immediate vicinity of map-documented structures or through the rear yards of historic estates. These streetbeds include:

- 12th Avenue between 117th and 121st Streets (location of Greef and Poppenhusen Estates);
- 15th Avenue between 120th and College Point Boulevard (Location of the A. Lermiger & Co. building and former Kellner home);
- 117th Street north of 12th Avenue (Location of the outbuildings on the James S. Murphy Estate);
- 118th Street between 12th and 14th Avenues (location of 19th century homes);
- 120th Street between a point north of 12th Avenue and 14th Avenue (Location of Koenig-Baker Estate);
- 123rd Street between 13th Avenue and a point parallel to the irregular lot line separating Lots 17 and 18 on Block 3998 (Location of the Herman A. Schleicher Estate); and
- Streetbeds in the vicinity of the former Strattonport Cemetery (15th Avenue between 124th and 126th Streets and 124th, 125th, and 126th Streets between 15th Avenue and a point midway to 18th Avenue). The streetbeds surrounding Saint Fidelis Church are not considered to have a low sensitivity for human remains.

The homes in these locations appear to have been constructed before the availability of water and sewer lines. The residents of these homes, including members of some of College Point's most influential families, would have relied on shaft features (e.g., privies, cisterns, and wells) for the purposes of water-gathering and sanitation. These deeply buried features may still be present within undisturbed portions of the modern roadbeds. Therefore, the streetbeds listed above are considered to have moderate sensitivity for historic period archaeological resources. The remainder of the project site streetbeds and the highly disturbed location of the proposed outfall are determined to have low sensitivity for archaeological resources dating to the historic period.

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Chapter 1: Introduction and Methodology

A. INTRODUCTION

The New York City Department of Design + Construction (DDC), on behalf of the New York City Department of Environmental Protection (NYCDEP), is proposing Capital Project No. SE807, the College Point South Outfall and Infrastructure Improvement Project (see **Figure 1**). The project site is located within several streetbeds in the neighborhood of College Point, Queens (see **Figures 2** and **3**). The project site, which is currently served by a combined (stormwater and sanitary) sewer system, is in a low-lying area and is therefore subject to street flooding and ponding. The proposed infrastructure improvements would reduce this flooding through the installation of new storm sewers and the replacement and enlargement of an existing outfall into Flushing Bay. The proposed improvements to the combined sanitary collection sewers would also bring that component of the sewer system into conformance with the current NYCDEP standards. In addition, the proposed water main installations would replace old, unlined cast iron pipe water mains, thereby improving and upgrading water distribution and supply in the project area.

The proposed project would require several permits or approvals from local, state, and federal agencies, including NYCDEP, the New York City Department of Transportation (NYCDOT), the New York City Department of Parks and Recreation (NYCDPR), the New York State Department of Environmental Conservation (NYSDEC), the New York State Department of State (NYSDOS), and the United States Army Corps of Engineers (USACE). The proposed project is therefore subject to City Environmental Quality Review (CEQR), the State Environmental Quality Review Act (SEQRA), and Section 106 of the National Historic Preservation Act (NHPA). NYCDEP is serving as lead agency in fulfilling the requirements of the environmental review process, including performing a coordinated review with the involved agencies (e.g., NYSDEC).

The proposed project also includes the restoration of tidal wetlands that would be temporarily impacted during construction of the proposed outfall. The site of the proposed wetland restoration was previously analyzed in a Phase 1A Archaeological Documentary Study of the College Point West project site (Capital Project SEQ200464), which was prepared by AKRF, Inc. in July 2013.[1] The site was determined to have no sensitivity for archaeological resources dating to either the precontact or historic periods, and no further archaeological work was recommended. In comment letters issued July 31 and August 1, 2013, respectively, the New York State Historic Preservation Office (SHPO) and the New York City Landmarks Preservation Commission (LPC) concurred with the conclusions and recommendations of the Phase 1A study for College Point West. As such, the proposed wetland restoration site is not included in this Phase 1A Archaeological Documentary Study.

[1] AKRF, Inc. (July 2013): *Phase 1A Archaeological Documentary Study Capital Project SEQ200464: College Point West Outfall and Infrastructure Improvements Queens County, New York*. Prepared for: The New York City Department of Design and Construction and the New York City Department of Environmental Protection.

B. PROJECT LOCATION AND DESCRIPTION

The proposed project would involve the replacement and enlargement of an existing outfall near the western terminus of 20th Avenue (see below), construction of new stormwater collection sewers and water mains, and other street improvements (e.g., final paving). The proposed storm sewer collection system would include new catch basins designed with sumps to capture floatables and sediments. The proposed sewer system would also include the installation of new high-level storm sewers that would separate storm flows from the combined system. The proposed action would also include the relocation of sanitary sewers and water mains where necessary in order to install the proposed storm sewers.

The following streetbeds are included within the project site (see **Figure 2**):

- 12th Avenue between 117th Street and College Place;
- 14th Avenue between 117th Street and College Point Boulevard and between College Point Boulevard and 124th Street;
- 14th Road between 115th Street and College Point Boulevard;
- 15th Avenue between 114th Street and College Point Boulevard and between 123rd and 125th Streets;
- 18th Avenue between 119th and 127th Streets;
- 20th Avenue between the Flushing Bay waterfront and 126th Street;
- 21st Avenue between College Point Boulevard and 124th Street;
- 115th Street between 14th Road and 14th Avenue;
- 116th Street between 14th Road and 14th Avenue;
- 117th Street between 15th Avenue and a point north of 12th Avenue;
- 118th Street between 15th Avenue and a point south of 12th Avenue;
- 119th Street between 22nd Avenue and 15th Avenue and between 14th Road and 12th Avenue;
- 120th Street between 22nd Avenue and a point north of 12th Avenue;
- 121st Street between 22nd Avenue and 15th Avenue and between 14th Road and 14th Avenue;
- College Point Boulevard between a point north of 22nd Avenue and College Place;
- 123rd Street between a point south of 21st Avenue and 13th Avenue;
- 124th Street between a point south of 21st Avenue and 15th Avenue;
- 125th Street between a point north of 22nd Avenue and 15th Avenue;
- 126th Street between 22nd Avenue and 15th Avenue; and
- 127th Street between a point north of 20th Avenue and a point south of 15th Avenue.

The proposed outfall would be constructed at the site of the existing outfall near the western terminus of 20th Avenue to handle street runoff from the area in order to reduce combined sewer overflows from the existing sewer system. The new outfall would measure 5.5 by 3 feet by and would empty into Flushing Bay at a location approximately 265 feet west of the intersection of 20th Avenue and 119th Street. The proposed outfall would be constructed at the end of 20th Avenue in a segment of street right-of-way owned by NYCDOT. The proposed outfall would be a reinforced concrete pipe supported by a concrete cradle with a flap gate installed at the pipe outlet. Slope pavement stone would be installed at the end of the

outfall. This pavement stone would occupy an area about 10 feet long and 12 feet wide and would provide a stabilized apron below the outlet of the storm pipe.

C. RESEARCH GOALS AND METHODOLOGY

The following Phase 1A Archaeological Documentary Study of the Capital Project SE807 project site has been designed to satisfy the requirements of SHPO and LPC and it follows the guidelines of the New York Archaeological Council (NYAC). The study documents the development history of the proposed project site as well as its potential to yield archaeological resources including both precontact and historic cultural resources. In addition, this report documents the current conditions of the project site and previous cultural resource investigations which have taken place in the vicinity.

This Phase 1A Archaeological Documentary Study has four major goals: (1) to determine the likelihood that the project site was occupied during the precontact (i.e., Native American) and/or historic periods; (2) to determine the effect of subsequent development and landscape alteration on any potential archaeological resources that may have been located at the project site; (3) to make a determination of the project site's potential archaeological sensitivity; and (4) to make recommendations for further archaeological analysis, if necessary. The steps taken to fulfill these goals are explained in greater detail below.

The first goal of this documentary study is to determine the likelihood that the project locations were inhabited during the precontact or historic periods and identify any activities that may have taken place on the project site that would have resulted in the deposition of archaeological resources. In order to determine the likelihood of the project site's occupation during the precontact and historic periods, documentary research was completed to establish a chronology of the project locations' development, landscape alteration, and to identify any individuals who may have owned the land, worked, and/or resided there and to determine if buildings were present on the project locations in the past. Data was gathered from various published and unpublished primary and secondary resources, such as historic maps, topographical analyses (both modern and historic), historic photographs, newspaper articles, local histories, and previously-conducted archaeological surveys. These published and unpublished resources were consulted at various repositories, including the Main Research Branch of the New York Public Library (including the Local History and Map Divisions). File searches were conducted at LPC, SHPO, and the New York State Museum (NYSM). Online textual archives, such as Google Books and the Internet Archive Open Access Texts, were also accessed. Attempts were made to access the archives of the Poppenhusen Institute, which contain information regarding the history of College Point.

The second goal of this Phase 1A study is to determine the likelihood that archaeological resources could have survived intact on the project site after development and landscape alteration (i.e., erosion, grading, filling, etc.). Potential disturbance associated with paving and utility installation was also considered. Historic maps documenting structures on the project location were analyzed and historic and current topographical maps were compared to determine the extent to which the project locations have been disturbed. After identifying the likelihood that archaeological resources were deposited on the project site and the likelihood that they could remain intact given subsequent development and landscape alteration, a sensitivity determination was made for the project locations for both precontact and historic period resources. As described by NYAC in their Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State, published in 1994 and subsequently adopted by SHPO (see page 2):

> *An estimate of the archaeological sensitivity of a given area provides the archaeologist with a tool with which to design appropriate field procedures for the investigation of that area. These sensitivity projections are generally based upon the following factors: statements of locational preferences or tendencies for particular settlement systems, characteristics of the local environment which provide essential or desirable resources*

> *(e.g., proximity to perennial water sources, well-drained soils, floral and faunal resources, raw materials, and/or trade and transportation routes), the density of known archaeological and historical resources within the general area, and the extent of known disturbances which can potentially affect the integrity of sites and the recovery of material from them.*

The third goal of this study was to make a determination of the project site's archaeological sensitivity. 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 study, 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 topographical features that would suggest Native American occupation, documented historic period activity, and with some disturbance, but not sufficient disturbance to eliminate the possibility that archaeological resources are intact on the project site.

- **High**: Areas with topographical features that would suggest Native American occupation, documented historic period activity, and minimal or no documented disturbance.

As mentioned above, the fourth goal of this study was to make recommendations for additional archaeological investigations where necessary. 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. Should they exist on the project locations, such archaeological resources could provide new insight into the precontact occupation of College Point, Queens, the transition from Native American to European settlement, or the historic period occupation of the project site.

Chapter 2: Environmental and Physical Settings

A. GEOLOGY AND TOPOGRAPHY

The borough of Queens is found within a geographic bedrock region known as the Atlantic Coastal Plain Province. This has been described as "that portion of the former submerged continental shelf which has been raised above the sea without apparent deformation" (Reeds 1925: 3). Soils on Long Island, on which Queens County is located, are composed of glacial till or undifferentiated sediments such as sand and clay. The Atlantic Coastal Plain is typified by "flat, low-lying" ground "that slopes very gently toward the sea" (Isachsen, et al. 2000: 149).

The glacial till making up the upland portions of Queens County was deposited by the massive glaciers that retreated from the area towards the end of the Pleistocene (1.6 million years before present [BP] to approximately 10,000 years BP). There were four major glaciations that affected New York City, culminating in a northeast-southwest direction (Homberger 1994). The deposition of glacial till in the wake of the retreating glaciers resulted in the creation of sand hills, known as kames, across New York City, some of which rose to heights of one hundred feet.

The original shoreline on the western shore of College Point was in the approximate location of modern 115th Street and land to the west of that road is composed of landfill. Other areas along the coast of the peninsula have been expanded through the addition of landfill, although the majority of the project site appears to be located on what was originally fast land. Historic topographical maps of the area show that the coastal areas of College Point were generally at lower elevations than the central portion, where the ground surface rose to a peak to the southwest of the project site near the intersection of modern 14th Avenue and College Point Boulevard. The location of modern MacNeil Park was one of the areas of highest elevation in the vicinity of the project site, featuring high bluffs rising steeply to elevations of approximately 40 feet above sea level. The remainder of the project site sloped gently upward to the northeast, reaching a maximum elevation near the center of the project site before decreasing to the northeast and east in the vicinity of the former marshland. Current USGS maps (see **Figure 1**) indicate that the surface topography of the area is generally similar.

B. HYDROLOGY

The project site is situated in north-central College Point, which is bordered to the north by the East River and to the west by Flushing Bay. Historically, the southern half of College Point was partially isolated from mainland Queens by a thick tract of tidal marsh punctuated by brooks and streams that drained into Flushing Bay (see **Figure 4**). Additional marshland was present to the east of the project site surrounding Powell's Cove and separating the area now known as Tallman Island from the mainland. No streams or water courses are depicted on current or historic maps within the project site.

C. SOILS

The *New York City Soil Reconnaissance Survey* published by the National Resource Conservation Service (2005) indicates that the soils within the project site and in the immediate vicinity belong to the following five soil complexes:

- **Pavement and Buildings-Till Substratum**: along the shoreline of College Point; found in generally level urban areas (zero to five percent slopes), 80 or more of which is covered with pavement and/or buildings;
- **Laguardia-Ebbetts-Pavement and Buildings-Wet Substratum**: along the shoreline of College Point; found in generally level areas (zero to eight percent slopes) of filled swamp or marshland, 15 or more of which covered with pavement and/or buildings;
- **Montauk-Foresthills**: along the shoreline of College Point; found in generally level areas (zero to eight percent slopes) that are "partially filled with natural soil for cemeteries, golf courses, or athletic fields with some patches of woods" (New York City Soil Survey Staff 2005: 11);
- **Pavement and Buildings-Laguardia-Ebbets**: makes up the majority of the inland portion of College Point in the vicinity of the project site; found in generally level areas (zero to eight percent slopes) containing both natural soils and fill made from construction debris, 80 or more of which is covered with pavement and/or buildings; and
- **Pavement and Buildings-Foresthills-Canarsie**: makes up portions of the inland portion of College Point in the vicinity of the project site; found in steeply sloping (8 to 15 percent) urban areas "that have been cut and filled with natural soil materials, mostly for residential use" (New York City Soil Survey Staff 2005: 11).

D. PALEOENVIRONMENT

Due to the extended glacial period that left the Northeast blanketed in thick ice sheets for thousands of years, the area was not inhabited by humans until approximately 11,000 years ago. As temperatures increased, a variety of flora and fauna spread through the region. At this time, large open forests of spruce, fir, pine, and other tree species expanded across the Northeast, interspersed with open meadows and marshland. A wide variety of animal life could also be found, including large mammals such as mammoth, mastodon, caribou, musk ox, moose, as well as smaller mammals such as fox, beaver, hare, and many kinds of marine animals.

Climate changes continued to re-shape the environment of the Northeast as time progressed. As the climate grew increasingly warmer, jack pine, fir, spruce, and birch trees were replaced with hardwood forests of red and white pine, oak, and beech (Ritchie 1980). Furthermore, a decrease in glacial runoff resulted in the creation of small bodies of water such as lakes as well as, later on, low-lying marshes and swampy areas. By the time of the Early Archaic period, beginning approximately 10,000 BP, there was "considerable environmental diversity, with a mosaic of wetlands, oak stands, and a variety of other plant resources…[making it]…an attractive and hospitable quarter for both human and animal populations" (Cantwell and Wall 2001: 53). Warmer temperatures forced the herds of large mammals to travel north before eventually dying out. The new surroundings attracted other animals such as rabbit, turkey, waterfowl, bear, turtles, and white-tailed deer. The expanded water courses became home to a variety of marine life, including many varieties of fish, clams, oysters, scallops, seals, and porpoises, among others (ibid).

E. CURRENT CONDITIONS

The majority of the project site is occupied by active streetbeds (see **Photographs 1** through **10**). The streets included within the project site area all developed with utilities—including water, sewer, gas, electric, and telecommunications lines—although some portions of the roadbeds do not contain utilities. The location of the proposed outfall is within a mapped estuarine subtidal wetland (see **Photograph 11**). The outfall would be constructed within a narrow inlet that extends westward from the terminus of 20th Avenue to Flushing Bay (see **Photograph 12**). The southern shoreline of this inlet contains a deteriorating timber and concrete bulkhead with an existing outfall that would be replaced as part of the

proposed project. Crumbling riprap is present along the northern edge of the inlet and is eroding into the inlet at some locations. Fill, construction and demolition debris, scrap metal, and household litter are very evident along the shoreline and there is also a derelict boat partially submerged to the west.

Chapter 3: Precontact Period

A. PRECONTACT CONTEXT

Archaeologists have divided the time between the arrival of the first humans in northeastern North America and the arrival of Europeans more than 10,000 years later into three periods: Paleo-Indian (11,000-10,000 BP), Archaic (10,000-2,700 BP), and Woodland (2,700 BP-AD 1500). These divisions are based on certain changes in environmental conditions, technological advancements, and cultural adaptations, which are observable in the archaeological record.

As mentioned in Chapter 2, human populations did not inhabit the Northeast until the glaciers retreated some 11,000 years ago. These new occupants included Native American populations referred to by archaeologists as Paleo-Indians, the forbearers of the Delaware—also called the Lenape Indians—who would inhabit the land in later years. Archaeological evidence suggests that the Paleo-Indians were likely highly mobile hunters and gatherers who utilized a distinct style of lithic technology, typified by fluted points. They appear to have lived in small groups of fewer than 50 individuals (Dincauze 2000) and did not maintain permanent campsites. In addition, most of the Paleo-Indian sites that have been investigated were located near water sources. Because of the close proximity of Paleo-Indian sites to the coastline, few have been preserved in the New York City area.

The Archaic period has been sub-divided into three chronological segments, based on trends identified in the archaeological record which reflect not only the ecological transformations that occurred during this period, but the cultural changes as well. These have been termed the Early Archaic (10,000-8,000 BP), the Middle Archaic (8,000-6,000 BP), and the Late Archaic (6,000-2,700 BP) (Cantwell and Wall 2001). The Late Archaic is sometimes further divided to include the Terminal Archaic (3,000-2,700 BP). The abundance of food resources which arose during this period allowed the Archaic Native Americans to occupy individual sites on a permanent or semi-permanent basis, unlike their nomadic Paleo-Indian predecessors. Fishing technology was developed during the Middle Archaic in response to an increasing dependence on the area's marine resources. Tools continued to be crafted in part from foreign lithic materials, indicating that there was consistent trade among Native American groups from various regions in North America throughout the Archaic period. Few Early and Middle Archaic archaeological sites have been identified in New York City, although numerous Late Archaic sites have been identified in the area.

The Woodland period represents a cultural revolution of sorts for the Northeast. During this time, Native Americans began to alter their way of life, focusing on a settled, agricultural lifestyle rather than one of nomadic hunting and gathering. Social rituals become visible in the archaeological record at this time. Composite tools, bows and arrows, domesticated dogs, and elaborately decorated pottery were introduced to Native American culture at this time and burial sites grew increasingly complex. Woodland-era sites across North America indicate that there was an overall shift toward full-time agriculture and permanently settled villages. Archaic sites in New York City, however, suggest that the Native Americans there continued to hunt and forage on a part-time basis. This was most likely due to the incredibly diverse environmental niches that could be found across the region throughout the Woodland period (Cantwell and Wall 2001; Grumet 1995).

The Woodland period ended with the arrival of the first Europeans in the early 1600s. At that time, College Point and the surrounding vicinity was included within the territory of a group of Native Americans known as the Matinecock (Bolton 1922). A large Matinecock village was located in what was

then the town of Flushing, at the southern end of College Point (Bolton 1922 and 1975). After the Dutch settled the colony of New Amsterdam in the early 17th century, they quickly began to purchase large areas of land from the Native Americans. Some Native Americans continued to reside in the vicinity of Powell's Cove through the end of the 17th century (Hecht 1974).

While relatively few Native American burials have been encountered in the New York City region, as discussed below, several burial sites have been identified in the College Point area (Bolton 1934). Local burial sites "were often well-defined spaces, selected for the purpose by reason of their suitable soil and the natural drainage of the surface" (Bolton 1934: 117). Native American burials have typically been identified in shallow (two to three feet in depth) "oval-shaped excavation[s]" that was "scraped out by hand," sometimes re-purposed food storage or cooking pits (ibid: 116). In addition, burials were usually in flexed positions to minimize space, and burial shafts were often lined with oyster shells although few grave goods were present (ibid).

B. PREVIOUSLY IDENTIFIED NATIVE AMERICAN ARCHAEOLOGICAL SITES

Site file searches at LPC, SHPO, and NYSM indicate that at least six precontact archaeological sites have been identified within approximately one mile of the project site, including at least two that overlapped with the site's boundaries (see **Table 1**). The majority of the sites represented precontact villages and burial sites. While some of these sites were observed in the vicinity of the project site, most were identified more than one mile to the south of the project site, along the shores of Flushing Bay and Flushing Creek near the southern end of College Point opposite Willet's Point. The presence of several precontact archaeological sites in the northern portion of College Point confirms that Native Americans were active in the vicinity of the project site.

Table 1
Previously Identified Precontact Archaeological Sites

Site Number	Approximate Distance from Project Site	Time Period	Site Type and Information	Reference(s)
NYSM: 4527 Parker: 4	partially overlaps with site	Precontact	Village and burial site	Parker (1922)
NYSM: 4540	partially overlaps with site	Precontact	Camp site with burials	Parker (1922) Solecki (1941)
NYSM: 4541	0.75 miles (4,000 feet)	Precontact	Traces of Occupation	Parker (1922)
The Wilkins Site SHPO: 08101.007355	1 mile (5,000 feet)	Possible Paleo-Indian; Late Archaic/Early Woodland; Late Woodland; Contact	Multi-component site with evidence of a Native American village, campsite, and burials.	Smith (1950) RBA Group (2000)
Graham Court NYSM: 719	0.38 miles (2,000 feet)	Late Woodland	Village site with burials and shell middens	Parker (1922) Solecki (2006)
Grantville Site SHPO: A081.01.0133	1.33 miles (7,000 feet)	Archaic and Woodland	Habitation site	Smith (1950)
NYSM 4542	1 mile (5,000 feet)	Precontact	Campsite	Parker (1922)
NYSM 4525	0.57 miles (3,000 feet)	Precontact	Burial Site on Thomas P. Duryea's Farm, discovered 1881	RBA Group (1997)
Nassau County Museum: 128	0.57 miles (3,000 feet)	Precontact	Shell Midden	RBA Group (1997)

Source: Site files of LPC (including Boesch 1997), SHPO, and NYSM and RBA Group (1997).

Several of these sites were discovered in the early 20th century by avocational archaeologists and were reported by author Arthur C. Parker (1922). Unfortunately, few of these sites were well-documented and little is known about the precontact sites' exact locations, extent, or artifact collections. The map of

Native American sites included in Parker's *The Archaeological History of New York* (1922) depicts a village and two burial sites on College Point. Only one of these (now identified as NYSM site 4527) is described in Parker's work. Parker described the area as a "village and burial site at College Point on the E. Platt Stratton estate. Skeletons were found in 1861, when excavating for the foundation of Knickerbocker Hall" (1922: 672). HPI (1999) states that this site was located near the intersection of 10th Avenue and 117th Street, and maps of the site included in SHPO's site files indicate that the site covered a portion of the project site.

Bolton's 1922 work documenting the Native American sites and trails in New York depicts only a large habitation site more than one mile to the south of the project site at the southern end of College Point along Flushing Creek. Bolton does, however, document the large Native American village *Snakapins* at Clason's Point, in the Bronx, directly opposite the project site across the Long Island Sound. Several Native American sites have been identified at this location, which is approximately one mile north of the project site.

Three sites in College Point have been well-documented and/or excavated using modern archaeological techniques: the Graham Court Site; the Wilkins Site; and the Grantville Site. These three Native American sites are discussed in greater detail below.

THE GRAHAM COURT SITE (NYSM #719)

The Graham Court site was initially excavated in 1934 by archaeologist Dr. Ralph Solecki—when he was just 16 years old—after a human burial was encountered during construction (Solecki 2006). The site at the time was situated on an eroding bluff 20 feet above the beach lining the western shore of College Point (ibid). The human remains were encountered on Graham Court between 121st and 122nd Streets (ibid). Dr. Solecki excavated additional disturbed and intact human burials as well as other Native American artifacts and numerous storage pits and middens (ibid). A dog burial was later encountered near the Graham Court site, one of several Late Woodland dog graves that have been discovered in New York City (Solecki 2006; Cantwell and Wall 2001).

THE WILKINS SITE

The Wilkins Site was identified approximately one mile east of the project site near the eastern shore of Powell's Cove. The site was described by archaeologist Carlyle Smith as having been "situated near the head of a small tidal cove on Fourteenth Avenue…[and] was excavated by the field party of the Flushing Historical Society in 1939 and 1940" (Smith 1950: 177). As originally identified, the site was composed of shell middens containing hundreds of decorated ceramic sherds—associated with the Bowmans Brook stamped and incised and East River cord marked pottery traditions—ceramic pipes, bone tools, and lithic tools and debitage (ibid). During excavations in the 1950s, amateur archaeologists and professional archaeologists from the American Museum of Natural History excavated burials from this site after they were encountered during construction (RBA 1997).

The Wilkins site has been subject to modern archaeological investigation, most notably by the RBA group in the late 1990s. Archaeological testing at the site was completed by the RBA group in 2000, which identified components dating between the Late Archaic and Late Woodland periods, as well as one potential Paleo-Indian fluted point (RBA Group 2000). This field investigation determined that the "site was a multi-component and multi-functional…camp site probably oriented chiefly to the exploitation of resources associated with Powells Cove" (ibid: 12-13). While stone tool production was also evident at the site, RBA determined that the site was likely occupied on a temporary basis and that the individuals interred at the campsite were "occupying the site at the time of their death [and] were quickly interred" (ibid: 13).

THE GRANTVILLE SITE (A081.01.0133)

This site—which was investigated in the 1930s by M.C. Schreiner and later by archaeologist Ralph Solecki—was "situated on a narrow promontory at the southwestern corner of College Point" on the shore of the Flushing Bay (Smith 1950: 173). Pottery recovered from this site were determined to be associated with the Bowman's Brook and Clason's Point traditions, the latter having been named for a site located along the southern shore of the Bronx directly opposite College Point (Smith 1950). While some non-ceramic traditions were observed among the Grantville site collections, Smith (1950) determined that they could not be identified as belonging to a "pre-pottery" culture, and as such it is assumed that the Grantville site dates to the Woodland period.

Chapter 4: The Historic Period

A. HISTORICAL CONTEXT OF COLLEGE POINT

DISCOVERY AND COLONIZATION

New York was "discovered" by Giovanni de Verrazano in 1524 and explored by Henry Hudson in 1609, thus marking the beginning of European occupation in the area. Queens quickly became the home of the European fur trade in the New World. In 1621, the States-General in the Netherlands chartered the Dutch West India Company (WIC) to consolidate Dutch activities in the New World. It was at this time that the WIC began to purchase large tracts of land from the Native Americans. In exchange for furs, entrepreneurs and government officials supplied Native Americans with a wide range of goods.

Dutch Director-General William Kieft purchased all of what is now Queens County from the local Native Americans in 1639. Shortly thereafter, settlements began to be established, albeit by English citizens fleeing religious persecution rather than the Dutch (Burrows and Wallace 1999). The first settler in the College Point area was William Lawrence, who was granted a 900-acre plot of land in 1645 (Copquin 2007). The area had previously been known as Tew's Neck—after a settler named Michael Tew, who appears to have lived nearby but not on College Point itself—but soon became known as Lawrence's Neck (Hecht 1974). While some sources (USACE 2003) suggest that Lawrence constructed a home on the site of modern MacNeil Park circa 1645, a different home occupied by the Lawrence family was located further to the east on modern 14th Avenue that may have been the original Lawrence home (Hecht 1974). That house was moved to the Old Bethpage Restoration Village on Long Island in the late 20th century (Lederer 2004).

A large English population grew throughout Queens and all of New Netherlands, and soon the English outnumbered the Dutch, making it easy for them to seize the colony in 1664. Although the Dutch were able to re-take the colony—which had been renamed "New York"—in 1673, they traded it back in 1674 for "the far more lucrative colony of Surinam" (Cantwell and Wall 2001: 181). New York would remain under British control for the next hundred years. During the British period, Queens experienced significant expansion. The Dongan Charter of 1683 officially recognized it as a county and further divided it into five townships: Flushing, which included College Point, Newtown, Jamaica, Hempstead, and Oyster Bay (the land that makes up modern Nassau County was included within Queens at that time). Although Jamaica became the county seat of Queens, Newtown became more populated due to its close proximity to Manhattan, while Flushing remained a relatively rural agricultural community, in part due to its inaccessibility. In fact, members of the Lawrence family were the only settlers of European descent living on College Point before the Revolutionary War (Hecht 1974).

Under British rule, Queens' open farmland and vast coastline became essential for the production of agricultural goods and the harvesting of marine resources for export to the city. The colony's progress was both hindered and facilitated in the mid-18th century during the French and Indian War, which concluded in 1763. Although the region experienced the economic side effects of being at war, thousands of British armed forces were stationed throughout the New York City area, bringing money to the region while at the same time increasing its population (Burrows and Wallace 1999).

CHANGES AFTER THE AMERICAN REVOLUTION

By the late 18th century, political troubles had led to a schism between American patriots and British loyalists. After the retreat of General Washington after the loss of the Battle of Long Island, Queens became important to the British during the war, as many British troops were stationed there throughout the war's duration. Although many Queens residents fled to Connecticut after the British took control of the city, many more stayed and vowed to remain faithful to the crown (Burrows and Wallace 1999). During the war, British soldiers were stationed throughout Queens, wreaking havoc on the private citizens by burning farms and stealing from private citizens (Stankowski 1977). The owner of College Point, William Lawrence, was an American patriot who suffered at the hands of the marauding British Army, and as a result, he had to sell a portion of his land on College Point after the close of the war (Hecht 1974). A map published by William Stewart in 1795 (not reviewed as part of this assessment) allegedly "illustrated a building and flag in a position corresponding with either Tallman's Island [on the eastern shore of College Point] or the northern tip of College Point," which were interpreted as possible representations of "the Lawrence house or a military installation on Tallman's Island" and "a notation that seemed to indicate a burial plot in this area" (USACE 2003: 3-39). The exact location of these developments is unknown.

Despite the loyalty of Queens County to the British, the Americans prospered and Queens soon adapted to the new American government. The availability of land brought about another surge in development in what are now the outer boroughs. Queens continued to grow steadily over the next few decades, fueled by events such as the opening of the Erie Canal in 1825, the end of the Civil War in 1865, and the relocation of the Long Island Rail Road (LIRR) headquarters to Queens in 1861 (Burrows and Wallace 1999). As stated above, William Lawrence sold land after the close of the Revolutionary War to pay off his debts. The purchaser, Eliphalet Stratton, established an estate in southern College Point, which soon became known as "Strattonport" (Hecht 1974). A portion of that land was later sold to John A. Flammer and Peter W. Longley, and a neighborhood known as "Flammersburg" was established (ibid). These smaller communities were united as a single village under the name "College Point" in 1867 (ibid).

19TH CENTURY DEVELOPMENT

One of the first major developments on College Point was that of Saint Paul's College for Seminarians, a school established for the purposed of training Episcopalian ministers and from which the area received its name (Hecht 1974). The seminary was built on a 175-acre tract of land purchased by William Muhlenberg of Saint George's Episcopal Church in Flushing and the cornerstone for the main school building was laid in 1836 (Hecht 1974). After financial troubles, the school was constructed on a reduced scale—containing a chapel and dormitory—and using wood rather than stone. The school opened in 1839 and ceased operations before 1850 (Hecht 1974; Lederer 2004). Muhlenberg had used his own funds to construct a plank walk across the impassable marshland to the south to connect the village of Flushing with College Point and the college (Von Skal 1908). This road was replaced with a formal causeway in 1855; both roads ran in the vicinity of modern College Place (Von Skal 1908; USACE 2003).

One of the earliest maps of Long Island, published by David H. Burr in 1839, is not detailed enough to depict individual structures, although it does indicate the presence (albeit inaccurately) of several roads on College Point, including what appear to be precursors to College Point Boulevard and 14th Avenue and the plank road constructed by Reverend Muhlenberg across the marshes to Flushing. That map also indicates that College Point was known as "Lawrence's Neck," while the smaller projection of land now occupied by MacNeil park was known as "Lawrence's Point."

Early maps of the area (e.g., Burr 1839, Mather 1842, and Smith 1844 and 1847) are relatively inaccurate, but depict a cluster of development centered around what is now College Place on the historic projection of land formerly known as Lawrence Point (now MacNeil Park). These structures likely represent the buildings of Saint Paul's College, which had been constructed on the site in the late 1830s. J.C. Sidney's

1849 *Map of Twelve Miles around New York* is one of the first detailed maps of the region. While not particularly accurate, the map depicts several structures in the vicinity of the project site including two buildings on the projection known as Lawrence's Point, which by that time was renamed College Point as a result of the construction of Saint Paul's College. To the south, the homes of Dr. Muhlenberg and I. Nichols were present along College Place north of 14th Avenue.

In the mid-19th century, around the time that the college closed, Queens began expanding at an astonishing rate. Between 1840 and 1880, the population of Queens tripled, echoing similar increases in Manhattan and the other future boroughs. As Manhattan's population became denser, industries were relocated to the surrounding counties, including Queens (Stankowski 1977). Connor's 1852 map of Queens depicts the area in greater detail, showing Saint Paul's College on the eastern side of College Point (now MacNeil Park) and the mansion of William E. Chisholm on the west half of College Point. Chisholm, who was married to Reverend Muhlenberg's niece, had been a student at Saint Paul's College. After the school was closed, his mother-in-law acquired the land and constructed a home for Chisholm and her daughter as a wedding present using unused materials that had been purchased for the school's construction but had not been used (Hecht 1974). In 1924, the former Chisholm estate was sold to the City of New York so that a park could be established in the site (ibid). The mansion was left in place and used as a summer home by Mayor Fiorello LaGuardia before it was demolished in the 1940s (ibid).

The Connor map depicts other buildings associated with the Chisholm estate on the large property, which covered the northern portion of the project site. In addition to the main Chisholm mansion, which was located within the boundaries of MacNeil Park, the map depicts several smaller structures, dirt roads, and a pond in the area now bounded by Poppenhusen Avenue, College Place, what would later be known as Avenue E, along the line of modern 8th Avenue. A property line in the vicinity of what would later be the line of modern 8th Avenue separated the Chisholm estate from the 60-acre property to the south, which the map indicates was inhabited by Nichols, Robert B. Carter, and Henry Carey.

One of the first detailed maps of the project site is an 1855 Coastal Survey prepared by F.H. Gerdes (see **Figure 5**). Within what is now MacNeil Park, the map depicts the structures formerly making up Saint Paul's College and the Chisholm mansion at the top of a hill. Smaller structures were depicted to the south at the base of the hill in the vicinity of modern Poppenhusen Avenue. To the south, the land making up the remainder of the project site was occupied by large estates and cultivated fields. The map also depicts modern 14th Avenue as a formal road bisecting the northern and southern halves of College Point. A similar—but less detailed—coastal survey was prepared by C. Rockwell in 1858.

Beginning in the mid-19th century, College Point became a small industrial hub, aided in large part to the establishment of Conrad Poppenhusen's Enterprise Rubber Works on the southwestern shore of College Point in 1854 (Copquin 2007). Poppenhusen, a wealthy German immigrant, had an arrangement with Goodyear to exclusively produce their hard rubber products and the factory was extremely successful (Lederer 2004). As a result of Poppenhusen's "advanced social ideas," he made great efforts to develop College Point to provide housing and other amenities for the individuals he employed, many of them fellow German immigrants (ibid: ii). Among the advancements introduced by Poppenhusen were paved streets and gas and water connections for individual homes (Hecht 1974). Historically, 14th Avenue (then called First Avenue) divided the northern portion of College Point—occupied by wealthy landowners, famers, and factory owners—from the working class housing that was constructed to the south of the avenue (Lederer 2004). The Poppenhusen Institute—located near western terminus of the project site at the intersection of 15th Avenue and 114th Street—was originally constructed for use as a school, town hall, jail, and other municipal purposes (ibid). Poppenhusen's factory closed in the late 19th century, by which time many other industrial enterprises had established themselves in College Point (Copquin 2007).

INDUSTRIAL DEVELOPMENT AND INTRODUCTION OF THE RAILROAD

Access to the area increased dramatically with the introduction of railroad lines in the 1860s. The Flushing and North Side Railroad was founded in 1868 and tracks—now part of the LIRR's Port Washington line—were constructed to connect College Point with the Village of Flushing and points west shortly thereafter (Hinsdale 1898; Walsh 2006). College Point soon became a sandy resort area known for its beaches (Hecht 1974). The area did not lose its rural nature, however, and by 1876, few streets in College Point were paved and most were dirt roads (Hecht 1974). As described in greater detail below, many of the streetbeds making up the project site were not constructed until the first half of the 20th century, when the large estates were divided for residential development beginning in the late 19th century.

The region's prosperity caused Manhattan and its surrounding counties to become increasingly co-dependent, both economically and culturally. It was therefore suggested that the counties surrounding Manhattan—including Queens—be consolidated under the name "New York City." With only moderate resistance from some Queens residents, the county officially became a city borough on New Year's Day, 1898. As part of the consolidated city, Queens flourished throughout the 20th century. Increased mass transit connected the boroughs and intensified their union, allowing more people to live outside of Manhattan while still having access to its varied resources. As the population exploded, the area was forced to augment its development in order to accommodate the rapidly increasing population.

B. HISTORIC DEVELOPMENT OF THE PROJECT SITE

While a general historic context for the project site has been provided above, a specific discussion of the historic development of each portion of the project site is included below.

PROPOSED OUTFALL LOCATION

The location of the proposed outfall is composed of landfill. The 1855 Gerdes survey depicts the location of the outfall as an inundated tidal marshland. The marsh is not depicted on the 1873 Beers or 1891 Wolverton atlases, which indicate that the shoreline was located just west of what is now 119th Street. Those maps indicate that the waterfront was developed with houses. The 1891 USGS map appears to suggest that some landfilling had occurred in the vicinity of the proposed outfall. The 1903 and 1916 Sanborn maps similarly reflect the extension and standardization of the waterfront in this area of College Point. Those maps indicate that the streetbed stopped abruptly just east of the line to which the land to the north and south was filled and developed, similar to how the area appears today.

DEVELOPMENT OF THE PROJECT SITE STREETBEDS

While some roads in College Point date to the area's initial settlement, many modern roads were not constructed until the late 19th and early to mid-20th century, as the population grew and development increased in the area. A brief summary of the development of the streetbeds included within the project site is presented in **Table 2**, below. Buildings and historic estates that formerly occupied some of the streetbed locations are discussed in greater detail in Section C, "Map-Documented Structures within the Project Site Streetbeds."

Table 2
Summary of the Development of Project Site Streetbeds

Street Name	Development History
12th Avenue between 117th Street and College Place	Portion between 117th and 119th Streets first depicted as Monument Avenue on the 1916 Sanborn atlas (originally only 32 feet wide); Cut through former E. Greef Estate. Portion between 119th Street and College Place first depicted as Manhattan Court on the 1909 Bromley; cut through former A.C. Poppenhusen Estate. When widened, Manhattan Court was extended in to the front yards of 20th century homes along 12th Avenue between 117th and 119th Streets.
14th Avenue between 117th Street and College Point Boulevard	Originally First Avenue, one of the oldest roads in College Point. Depicted on the 1855 Gerdes Coastal Survey.
14th Avenue between College Point Boulevard and 124th Street	Incongruous with 14th Avenue west of College Point Boulevard; first depicted as a full street (known in the 19th century as High Street) on the 1873 Beers atlas, although portions are shown on coastal surveys from the 1860s.
14th Road between 115th Street and College Point Boulevard	Originally Second Avenue, one of the oldest roads in College Point. Depicted on the 1855 Gerdes Coastal Survey.
15th Avenue between 114th Street and College Point Boulevard and between 123rd and 125th Streets	Originally Third Avenue; portion east of College Point Boulevard depicted on the 1855 Gerdes Coastal Survey. Western portion may be partially build on filled marsh and is fully depicted as a built street on the 1873 Beers atlas.
18th Avenue between 119th and 127th Streets	Originally Fourth Avenue; portion west of College Point Boulevard depicted on the 1855 Gerdes Coastal Survey. Portions to the east of College Point Boulevard depicted as developed on coastal surveys from the 1860s.
20th Avenue between the waterfront and 126th Street	Originally Fifth Avenue; portion west of College Point Boulevard depicted on the 1855 Gerdes Coastal Survey. Portions to the east of College Point Boulevard depicted as developed on coastal surveys from the 1860s.
21st Avenue between College Point Boulevard and 124th Street	Shown on the 1852 Dripps and 1852 Connor maps of College Point but not seen on the 1855 Gerdes Coastal Survey. Known as “Louisa Street” until the early 20th century.
115th Street between 14th Road and 14th Avenue	Originally Sixth Street; This block appears to be the only stretch of 115th Street constructed as of the 1855 Gerdes Survey.
116th Street between 14th Road and 14th Avenue	Originally Seventh Street; This segment is shown on the 1852 Dripps and 1852 Connor maps of College Point but not seen on the 1855 Gerdes Coastal Survey.
117th Street between 12th and 15th Avenues	Originally 8th Street; first depicted as fully constructed on the 1873 Beers atlas but portions between 14th and 15th Avenues are shown on the 1852 Dripps and 1852 Connor Maps but are not seen on the 1855 Gerdes Coastal Chart.
118th Street between 12th and 15th Avenues	Originally 9th Street; portion south of 14th Avenue shown on the 1852 Dripps and 1852 Connor Maps but are not seen on the 1855 Gerdes Coastal Chart. Northern portion developed after 1951, cut through former residential properties.
119th Street between 12th and 22nd Avenues	Originally 10th Street; portions between 20th and 14th Avenues appear on the 1855 Gerdes survey, the remainder is depicted as a built street by 1873.
120th Street between 12th Avenue and 22nd Avenue	Originally 11th Street; portion south of 14th Avenue appears on the 1855 Gerdes survey, northern portion partially constructed by 1903; interrupted by the former Koenig-Bakkar estate.
121st Street between 15th and 22nd Avenues and between 14th Avenue and 14th Road	Originally 12th Street; portion south of 14th Avenue depicted on the 1855 Gerdes Coastal Survey. Portion north of 14th Avenue included within the former A.C. Poppenhusen estate and first depicted as North 12th Street on the 1916 Sanborn map.
College Point Boulevard between 22nd Avenue and College Place	One of the oldest roads in College Point; depicted on early 19th century maps; also called 13th Street.
123rd Street between 21st Avenue and 13th Avenue	Originally 14th Street; segments appear on coastal surveys beginning in the early 1860s.
124th Street between 15th Avenue and 21st Avenue	Originally 15th Street; segments appear on coastal surveys beginning in the early 1860s.
125th Street between 15th Avenue and 22nd Avenue	Originally 16th Street; segments south of 15th Avenue appear on coastal surveys beginning in the early 1860s.
126th Street between 15th Avenue and 22nd Avenue	Originally 17th Street; segments south of 20th Avenue appear on coastal surveys beginning in the early 1860s; fully built street by 1873,

127th Street between 15th Avenue and 20th Avenue	Originally 18th Street; first appears as a fully built street on the 1873 Beers atlas.

C. MAP-DOCUMENTED STRUCTURES WITHIN THE PROJECT SITE STREETBEDS

Several map-documented structures—most of which were associated with large historic estates—were identified within or immediately adjacent to the locations now occupied by the project site streetbeds. These structures are discussed in greater detail below.

CONRAD POPPENHUSEN ESTATE—VICINITY OF 12TH AVE AND 120TH STREET

The largest map-documented structure in the vicinity of the project site is the home of Conrad Poppenhusen, located at what is now the intersection of 12th Avenue and 120th Street. This structure does not appear to be depicted on the 1855 Coastal Survey of the area. The home appears on the 1873 Beers atlas, which identifies it as part of the 95-acre A.C. Poppenhusen estate. That map depicts the main home as just east of the streetbed of 120th Street. The map also depicts a small building to the west of the home near what is now the intersection of 12th Avenue and 119th Street. The 1891 Bromley map depicts the home within the path of the streetbed, to the west of the building depicted on the 1873 Beers atlas and on subsequent Sanborn maps. In addition, the outbuilding to the west is depicted as a wood frame shed or stable further north than the outbuilding seen on the earlier atlas. The 1903 Sanborn map identifies another small structure in this location as a brick "tool house."

The 1909 Bromley atlas is the last to depict the former Poppenhusen estate as a single property, although the former mansion is not depicted on that map. The 1908 Ullitz atlas, updated through 1913, depicts the "Baracha Orphan Asylum" in the former location of the Poppenhusen mansion, although it appears to be the same structure. By the publication of the 1916 Sanborn map, all the buildings on the property had been demolished and the streets cut through.

KOENIG-BOKAR ESTATE—120TH STREET BETWEEN 12TH AND 14TH AVENUES

The former mansion of F.A. Bokar (also spelled "Boker" or "Bogar") was located to the south of the Poppenhusen mansion, within the streetbed of 120th Street midway between 12th and 14th Avenues. The building is not depicted on the 1855 Gerdes map, but it does appear on the 1872 Dripps map and the 1873 Beers atlas. The former map identifies the owner of the property as "F. Konig" while the latter identifies the property as the residence of A. Hammacher. Friedrich Koenig had constructed the house in the 1850s adjacent to the property of his business partner, Conrad Poppenhusen (Lederer 2004). Frank Boker purchased the property later and is identified as the owner on the 1891 Bromley atlas. The home stood, blocking the line of 120th Street, until 2004 and was used for a variety of purposes, including a hotel, a school, and a social club (Walsh 2006). The 1903 and 1916 Sanborn maps indicate that 120th Street had been constructed as far north as the home—identified on the earlier map as a hotel—which was lined to the south by a small street identified as Boker Court. The home was demolished in 2004, at which time 120th Street was continued through the area. A barn associated with this estate is also depicted on maps near the northeast corner of 120th Street and 14th Avenue.

HERMAN A. SCHLEICHER ESTATE—VICINITY OF 13TH AVENUE AND 123RD STREET

The former home of Herman A. Schleicher, a New York City Landmark, is still standing within the traffic circle that interrupts the intersection of 13th Avenue and 123rd Street. The home was constructed circa 1857; as seen on the 1855 Gerdes Coastal Survey, the land was undeveloped farmland prior to that time. The home is shown on the 1872 Dripps map, on which the owner is listed as "M. Schleicher," likely referring to Malvina, the widow of Herman Schleicher, who had died in 1866 (Postal 2009). The home was later owned by as Kenneth G. White and was used as the Grand View Hotel in the late 19th century

before being converted into apartments in the 1920s (ibid). White is listed as the owner of the home on the 1873 Beers atlas, although subsequent maps, including the 1891 Wolverton Atlas, also identify the Schleicher family as the owner. The 1891 map also depicts a circular driveway surrounding the house in the approximate location of the existing roundabout.

A map of the estate on file at the Poppenhusen Institute and reproduced in LPC's Landmark Designation Report of the Schleicher house (Postal 2009) depicts the estate as landscaped with gardens, ponds, orchards, winding paths, stables, and a "back house," or outhouse, located immediately south of the main dwelling, within or immediately adjacent to what is now the path of modern 123rd Street. Within the property to the northeast were a series of smaller buildings, including a "summer house" and duck houses that were located in the center of an artificial pond that was crossed by a bridge. West of these structures, in closer proximity to the main house, were a coach house and chicken coop. These structures also appear to be depicted on the 1873 Beers atlas, which does not depict the pond or summer house at the northeastern end of the property. Only the main home is depicted on the 1891 Wolverton map; however, the 1909 Bromley atlas also appears to depict some of the former outbuildings of the Schleicher estate within modern Block 3996, which are still standing today, at odd angles to the modern grid of streets and lots that were developed around them.

In the early 20th century, the estate was divided and the modern streets cut through the area, leaving the original Schleicher house standing alone in the center of the roundabout. The 1903 Sanborn map reflects the division of the former estate, and the construction of streets through the area, including Schleicher Avenue (also referred to as Schleicher Court), now modern 13th Avenue.

E. GREEF ESTATE—VICINITY OF 12TH AVENUE BETWEEN 117TH AND 119TH STREETS

The estate of E. Greef (also spelled "Greeff") formerly occupied the northern end of the block bounded by historic Avenue C—located north of modern 12th Avenue—and 117th and 119th Streets. When modern 12th Avenue and 118th Streets were constructed, the new roads were cut through this property. Early maps (i.e., the 1855 Gerdes survey) may depict a structure in the vicinity of the streetbed of 12th Avenue between 118th and 119th Streets. The 1873 Beers atlas is the first to depict the property as the Greef estate. Both that map and the 1891 Wolverton atlas depict the main residence to the east of the property, fronting on what is now 119th Street in the vicinity of the streetbed of 12th Avenue, in the approximate location of the potential structure seen on the 1855 map. A barn or other outbuilding is depicted to the north. The central portions of the estate, which likely contained a portion of the main residence and possibly other outbuildings, are included within the project site. Additional outbuildings are shown in the estate's former northwest corner—north of what is now 12th Avenue—on the ca. 1912 Ullitz atlas and within the path of 12th Avenue on the 1903 Sanborn map. By the publication of the 1916 Sanborn map, 12th Avenue—then known as Manhattan Court—had been constructed. The 1951 Sanborn map depicts 118th Street as a mapped but not constructed road. A large home was at that time located within what is now the streetbed of 118th Street south of 12th Avenue.

OUTBUILDINGS ON THE JAMES S. MURPHY ESTATE—117TH STREET NORTH OF 12TH AVENUE

Throughout the 19th century, a historic road identified as Avenue C is shown on historic maps (see **Figures 6A** and **7**) to the north of what is now 12th Avenue. It is unclear if this road was ever formally constructed and it is delineated on the 1903 Sanborn map with a dashed line and not depicted on the 1909 Bromley atlas at all. Several outbuildings are depicted near the northern terminus of 117th Street within a large historic estate. Portions of these structures may be included within the project site. The 1909 Bromley atlas identifies the 8.55 acre estate as that of James S. Murphy and shows that the southernmost structure that may be included within the project site was a brick barn or stable. By the publication of the 1916 Sanborn map, the outbuildings had been demolished and 117th Street constructed north of 12th Avenue.

STRUCTURES WITHIN THE STREETBED OF 118TH STREET BETWEEN 12TH AND 14TH AVENUES

To the south of the former Greef estate, what is now the streetbed of 118th Street also extended through at least four smaller historic properties. The smaller lots were first depicted as developed on the 1873 Beers atlas. From south to north, that map depicts the lots as being owned by H. Ruhl, A. Liebenroth, E. Spungenberg, and G. Cramer. Only the residence of the Ruhl family appears to have been partially situated in the streetbed, the homes on the other three properties were further to the west. To the east of the line of 118th Street was an episcopal church and a large property owned by A.C. Poppenhusen that was developed with a parsonage. The 1891 Wolverton atlas depicts the properties in a similar manner but identifies the owners as J.H. Ruhl, A. Libenroth, H. Funke, and E. Badenheuer. The 1903 Sanborn map indicates that outbuildings associated with the Ruhl and Spungenberg/Funke properties were located within the approximate line of 118th Street. These buildings are identified as a greenhouse and a shed, respectively, on the 1916 Sanborn map. By the publication of the 1951 Sanborn map, the entire corridor of the proposed—but not yet constructed—118th Street was vacant.

A. LERMIGER & CO. – VICINITY OF 15TH AVENUE BETWEEN 120TH AND 121ST STREETS

The 1873 Beers atlas depicts two structures within the streetbed of what is now 15th Avenue between 120th and 121st Streets. The larger of the two buildings, a T-shaped structure covering the entire streetbed and portions of the surrounding lots just east of 120th Street, was identified on the 1873 map as belonging to A. Levinger & Co. The second building, a small square, unlabeled structure, is depicted in the streetbed at the eastern end of the block, just west of 121st Street. The building may have been part of the Levinger property. The 1891 Wolverton atlas depicts a small square building in the location where the larger building had formerly stood, and the eastern structure is not depicted. No buildings are depicted in this location on any subsequent maps.

HOME OF L. KELLNER—VICINITY OF 15TH AVENUE BETWEEN 121ST STREET AND COLLEGE POINT BOULEVARD

The 1873 Beers map depicts two additional structures within the streetbed of what is now 15th Avenue between 121st and 122nd Streets, one block to the east of the former A. Lermiger & Co. buildings. The two buildings, each on opposite sides of the block, both appear to be labeled "L. Kellner" and are not depicted on any subsequent maps.

D. HISTORIC CEMETERIES IN THE VICINITY OF THE PROJECT SITE

At least two historic cemeteries have been located in College Point in the immediate vicinity of the project site streetbeds, both of which have since been removed and the human remains within reinterred in other cemeteries. These cemeteries are discussed in greater detail below.

SAINT FIDELIS ROMAN CATHOLIC CEMETERY—BLOCK 4087, LOT 50

Although other congregations were worshipping in the area, in 1856, Saint Fidelis Roman Catholic Church became the first church edifice to be constructed in College Point (Hecht 1976). The church was established by Father Joseph Huber, an Austrian immigrant who ministered to the local German-speaking population of the former village of Strattonport (ibid). The cemetery was originally located on the south side of the original wood frame church, as seen in historic photographs of the property (Lederer 2004). In 1895, the church was replaced with the existing brick structure, which was built on the site of the former cemetery so that the old church could be used for worship until the new structure was completed (ibid). Although the human remains within the churchyard were reburied in Saint Mary's Cemetery in nearby Flushing, Queens, evidence of past burials, including the remnants of coffins, tombstones, and

disarticulated human bones, were found on the site in the first half of the 20th century (French 2011). A single grave—that of the church's founder, Joseph Huber—remains on the property today.

The cemetery is depicted on the 1873 Beers atlas of College Point (see **Figure 6B**), which indicates that the church property was significantly smaller than it is today and was surrounded to the south and west by vacant land or private homes. While the church itself appears to be depicted on the 1891 Wolverton atlas (see **Figure 7**), neither the church nor the cemetery are identified as such, and the church property is depicted as a series of smaller lots. Both the 1903 Sanborn map and 1909 Bromley atlas depict the existing brick church but also indicate that the church property did not extend through the southern portion of the block. A historic image (republished in Lederer 2004) depicting the widening of 124th Street to the west indicates that the churchyard was set back a great distance from the streetbed. It, therefore, does not appear that the cemetery was ever partially located within the streetbeds of either 124th Street or 15th Avenue.

STRATTONPORT CEMETERY—SOUTH SIDE OF 15TH AVENUE BETWEEN 124TH AND 126TH STREETS

The burial ground of the small village of Strattonport was allegedly established circa 1851 by John Flammer, for whom Flammersburg was named. The cemetery was only in use for a short time in the 1850s (French 2010). The cemetery was located on the southern side of modern 15th Avenue between 124th and 125th Streets, although a portion of it may have extended onto land to the east, on the eastern side of 125th Street (ibid). The lots to the east were owned by John Reed, who in 1856 issued a public notice asking that all human interments be removed from his property (ibid). Reed eventually went to court against Charles Petters, whom Reed accused of trespass after Petters refused to remove human remains from the property as he believed that "the lots in question had been dedicated by the original purchasers of Strattonport as [a] burial ground" (*Long Island Farmer and Advertiser* 1858). After several trials, a jury finally found in Reed's favor and it was determined that interments should be removed from the fenced-in cemetery (*Queens County Sentinel* 1858). At least 68 bodies were removed from Reed's property and reburied at nearby Flushing Cemetery (French 2010).

The cemetery is not depicted on the 1852 Connor map of College Point or on coastal surveys dating to the 1850s, including the 1855 Gerdes survey (see **Figure 5**), which depicts the approximate location of the cemetery as a small hill. While a map of Strattonport (reproduced in French 2010) identifies the cemetery within the northern portion of what is now Block 4088, the hilltop to the east, on what was later John Reed's property, may have served as a better burial location. Subsequent maps, including the 1873 Beers and 1891 Wolverton maps depict the former cemetery's location as vacant but divided into individual lots. The property was still largely vacant on the 1903 Sanborn map; however, a greenhouse and a blacksmith shop were located on the land. The property was later developed with residential dwellings. The cemetery was established after 15th Avenue—originally known as the Road to Whitestone—was already in place and it is therefore unlikely that the cemetery extended into the road. However, subsequent road widening could have resulted in an overlap of historic burial locations and the modern streetbed.

Chapter 5: Conclusions and Recommendations

A. CONCLUSIONS

As part of the background research for this Phase 1A Archaeological Documentary Study, various primary and secondary resources were analyzed, including historic maps and atlases, historic photographs and lithographs, newspaper articles, and local histories. The information provided by these sources was analyzed to reach the following conclusions.

DISTURBANCE ASSESSMENT

PROJECT SITE STREETBEDS

The locations of the project site streetbeds have all been disturbed to some extent as a result of the construction of the streets and grading and paving associated with street maintenance. In addition, all of the project site streetbeds have been disturbed during the installation of utilities. However, portions of some of the streetbeds do not contain utility lines and may therefore be undisturbed. The locations of any existing utilities are considered to be disturbed from the ground surface to a depth of 1 to 2 feet below the bottom of the utility line and to a distance of 1 to 2 feet on either side, beyond the outer edges of each utility line, representing the trench that was likely dug as part of the line's installation. Any location where no utilities are present or where there is a space of 5 feet or more between the outer edges of existing utilities should be considered to be undisturbed. Those locations beneath the disturbed portions of existing utility trenches are also considered undisturbed.

PROPOSED OUTFALL

The location of the proposed outfall has experienced disturbance as a result of the construction of the existing outfall and bulkhead. The modern shoreline appears to have been extended to the west, and, therefore, portions of the outfall location appear to be made up of landfill deposits.

PRECONTACT SENSITIVITY ASSESSMENT

The precontact sensitivity of project sites in New York City is generally evaluated by a site's proximity to level slopes, water courses, well-drained soils, and previously-identified precontact archaeological sites. The project site is situated on a peninsula near tidal marshland and high ground, and would therefore have been an ideal site for camping or hunting and gathering, or permanent occupation. At least six Native American archaeological sites have been identified within one mile of the project site, including four burial locations, one of which appears to have been located on the project site itself.

The project site has experienced substantial disturbance as a result of the construction, grading, and paving of streets, the installation of utilities, and the construction of bulkheads and retaining walls. The locations of the proposed outfall and the proposed wetland restoration area are determined to have no sensitivity for precontact archaeological resources as a result of previous disturbance. In addition, the portions of streetbeds that have been disturbed for utility installation are determined to have low sensitivity for precontact archaeological resources. However, the portions of the streetbeds that have not been disturbed for the installation of utilities are determined to have moderate sensitivity for archaeological resources associated with the Native American occupation of College Point, including human remains.

HISTORIC SENSITIVITY ASSESSMENT

College Point was not extensively settled until after the Revolutionary War. The area surrounding the project site streetbeds was largely occupied by large estates until the late 19th and early 20th centuries, around the time when water and sewer networks appear to have become available in the area. There are several locations where modern streetbeds were constructed in the locations or in the immediate vicinity of map-documented structures or through the rear yards of historic estates. These include:

- 12th Avenue between 117th and 121st Streets (location of Greef and Poppenhusen Estates);
- 15th Avenue between 120th and College Point Boulevard (Location of the A. Lermiger & Co. building and former Kellner home);
- 117th Street north of 12th Avenue (Location of the outbuildings on the James S. Murphy Estate);
- 118th Street between 12th and 14th Avenues (location of 19th century homes);
- 120th Street between a point north of 12th Avenue and 14th Avenue (Location of Koenig-Baker Estate);
- 123rd Street between 13th Avenue and a point parallel to the irregular lot line separating Lots 17 and 18 on Block 3998 (Location of the Herman A. Schleicher Estate); and
- Streetbeds in the vicinity of the former Strattonport Cemetery (15th Avenue between 124th and 126th Streets and 124th, 125th, and 126th Streets between 15th Avenue and a point midway to 18th Avenue). The streetbeds surrounding Saint Fidelis Church are not considered to have a low sensitivity for human remains.

The historic homes in these locations appear to have been constructed before the availability of water and sewer lines. The residents of these homes, including members of some of College Point's most influential families, would have relied on shaft features (e.g., privies, cisterns, and wells) for the purposes of water-gathering and sanitation. These deeply-buried features may still be present within undisturbed portions of the modern roadbeds. Therefore, these streetbeds are considered to have moderate sensitivity for historic period archaeological resources. The remaining streetbeds and the highly disturbed location of the proposed outfall are determined to have low sensitivity for archaeological resources dating to the historic period.

B. RECOMMENDATIONS

The undisturbed portions of the project site (i.e., those locations where no utility lines are present or where there are gaps of more than 5 feet between existing utilities) are determined to have moderate sensitivity for precontact archaeological resources (including human burials), and four streetbeds are determined to have moderate sensitivity for historic period archaeological resources (see **Figure 9**).

Archaeological monitoring during construction is recommended for those undisturbed areas that would be impacted as a result of the construction of the proposed project. However, because the project plans have not yet been finalized and maps of existing utilities have not yet been prepared, it cannot yet be determined where archaeological resources may be impacted as a result of the proposed project and, therefore, where archaeological monitoring will be necessary.

After the plans are finalized, they should be reviewed by an archaeologist to determine those locations that require archaeological monitoring. Prior to the completion of the monitoring, an Archaeological Monitoring Plan should be prepared to document the steps that will be taken during the monitoring effort to document and protect any archaeological resources observed during construction, including potential human remains. No archaeological monitoring is recommended for those areas that have been identified as previously disturbed. However, it is recommended that a Plan for the Unanticipated Discoveries of Human Remains be prepared for the entire project site to outline the procedures that would be followed to

ensure the proper management of human remains in the event that such remains are encountered anywhere on the project site the construction of the proposed project. Both the Archaeological Monitoring Plan and the Unanticipated Discoveries Plan should be submitted to LPC and SHPO for review and approval before the start of construction.

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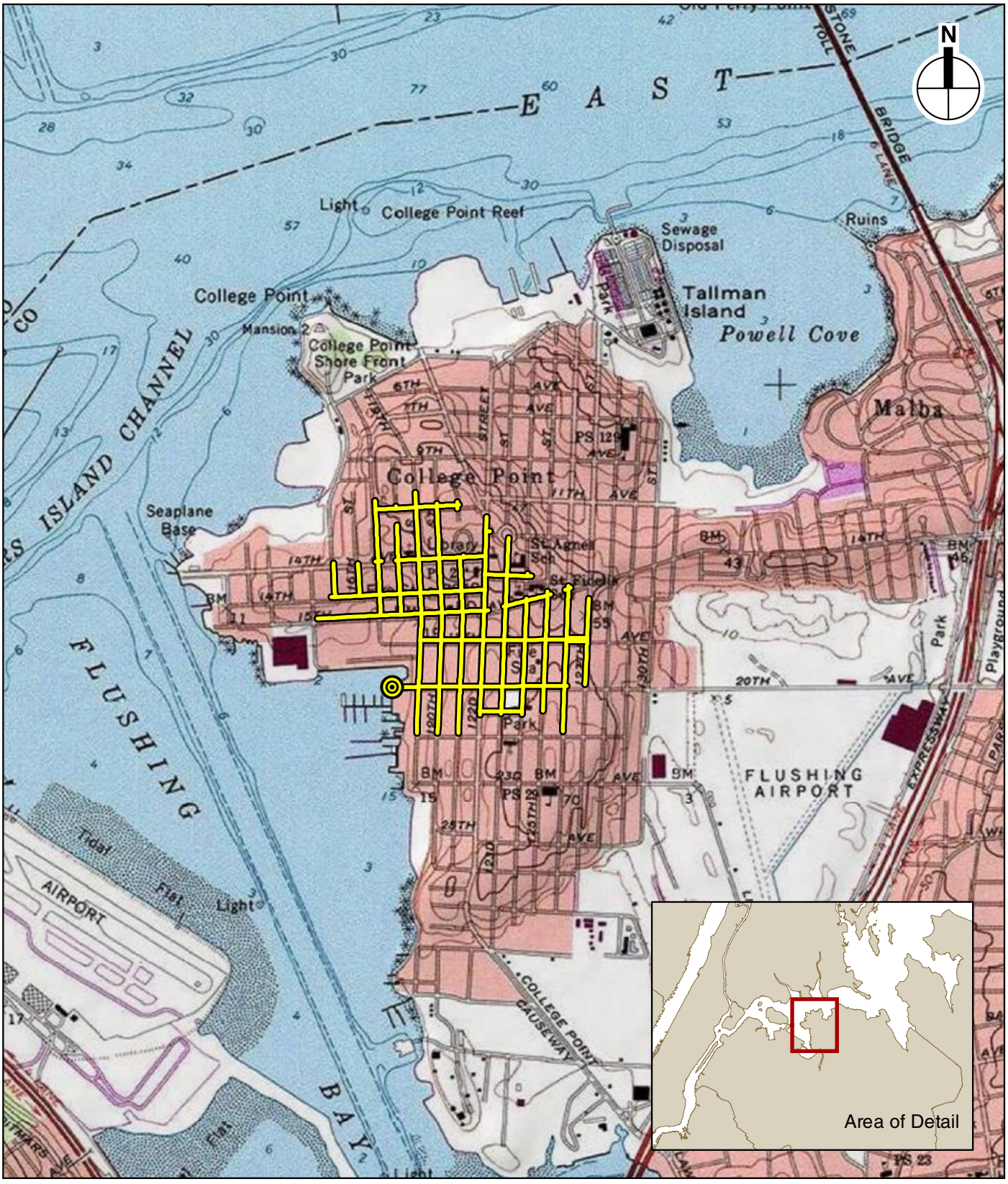
Figures

2/4/2015

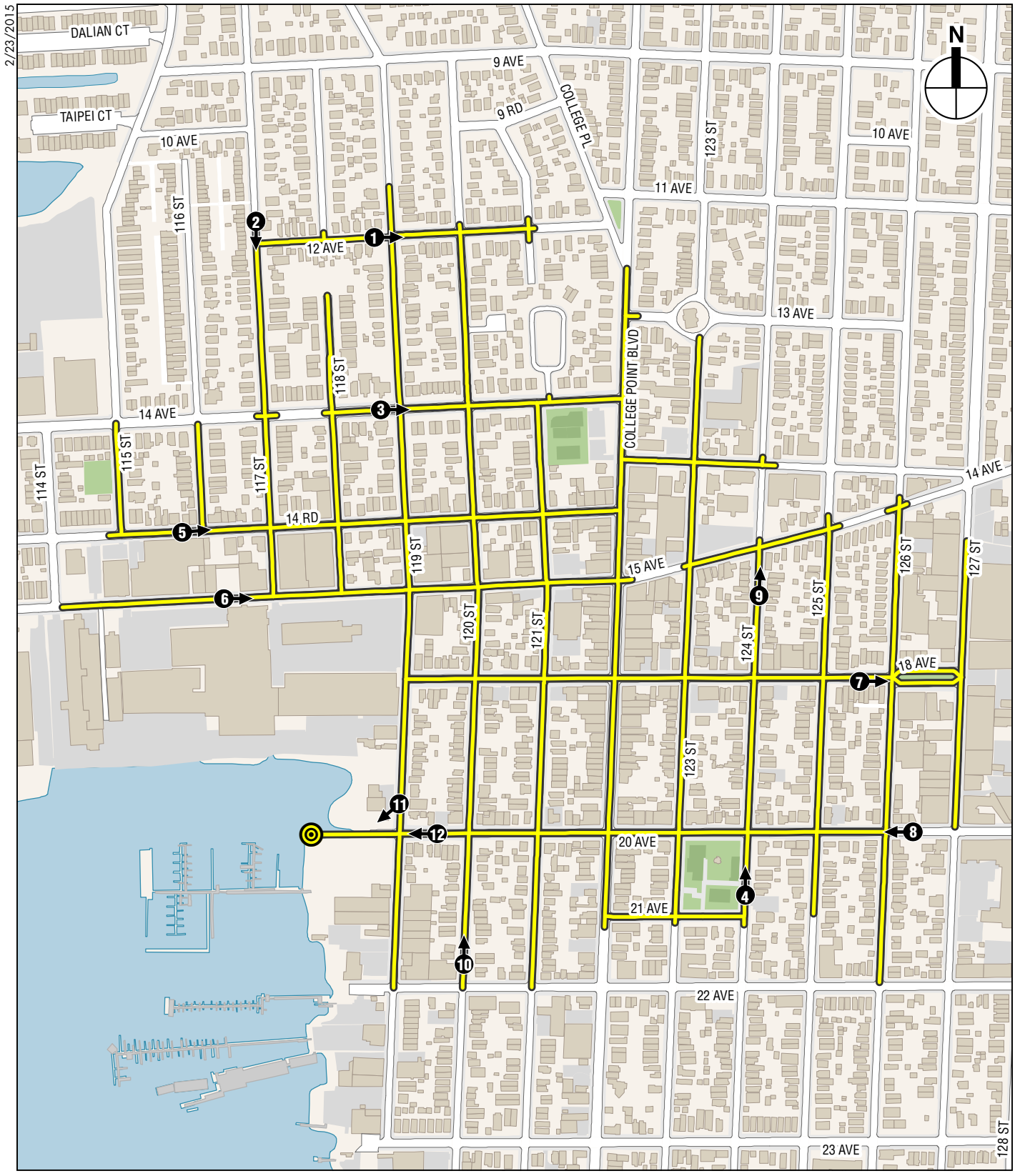


Proposed Storm Sewers

Proposed Outfall

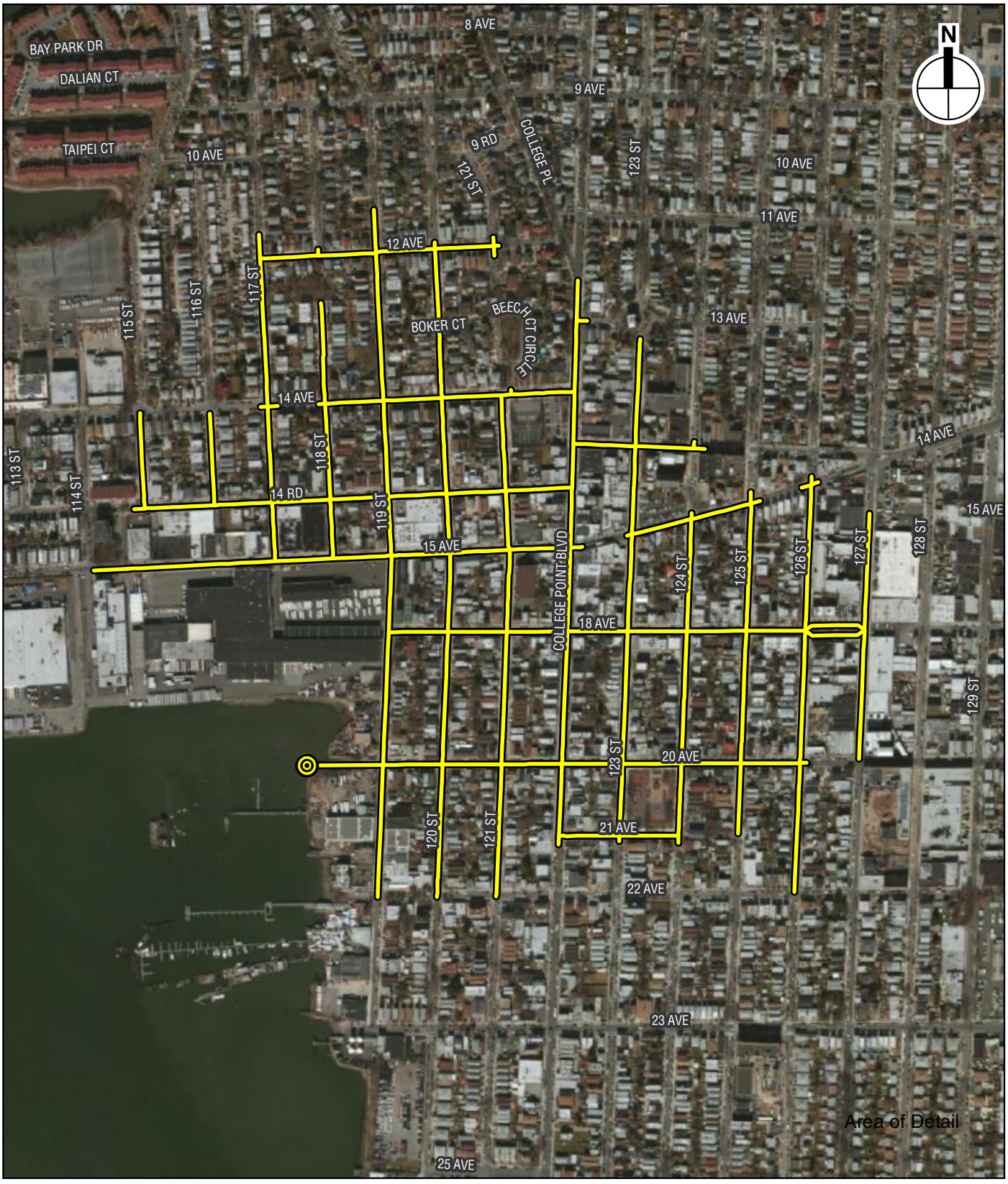
0 4,000 FEET

USGS 7.5 Minute Topographic Map
Flushing Quad
Figure 1



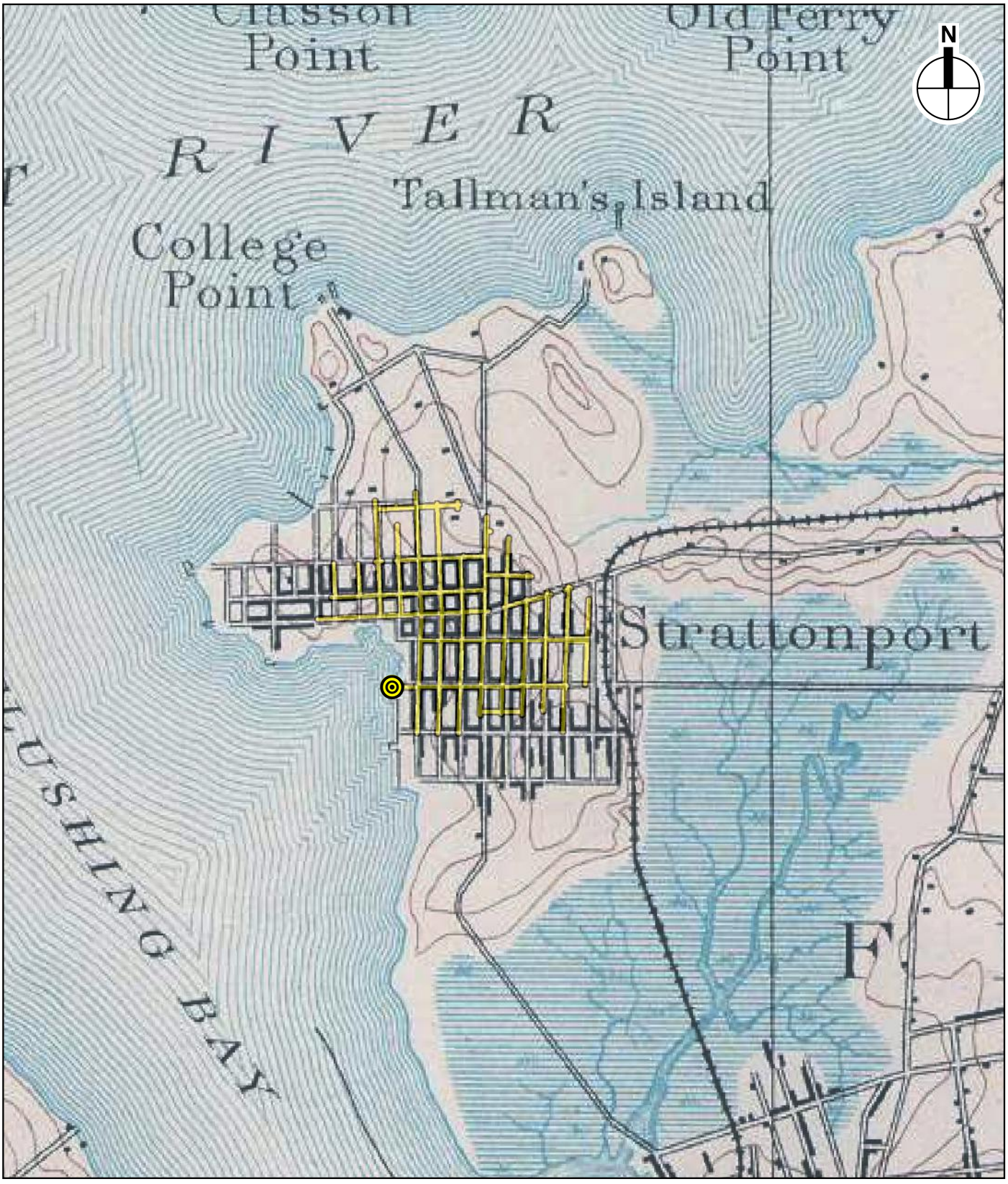
Project Site Map Showing Camera Angles for Site Photographs

Figure 2



Aerial Photograph
Figure 3

2/11/2015



Proposed Storm Sewers

Proposed Outfall

0 4,000 FEET

NOTE: This map was georeferenced to align the histroic and modern streets; due to innacuaracies in the original map, the project site location may appear to be incorrectly aligned in some places.

1891 USGS Map
Figure 4

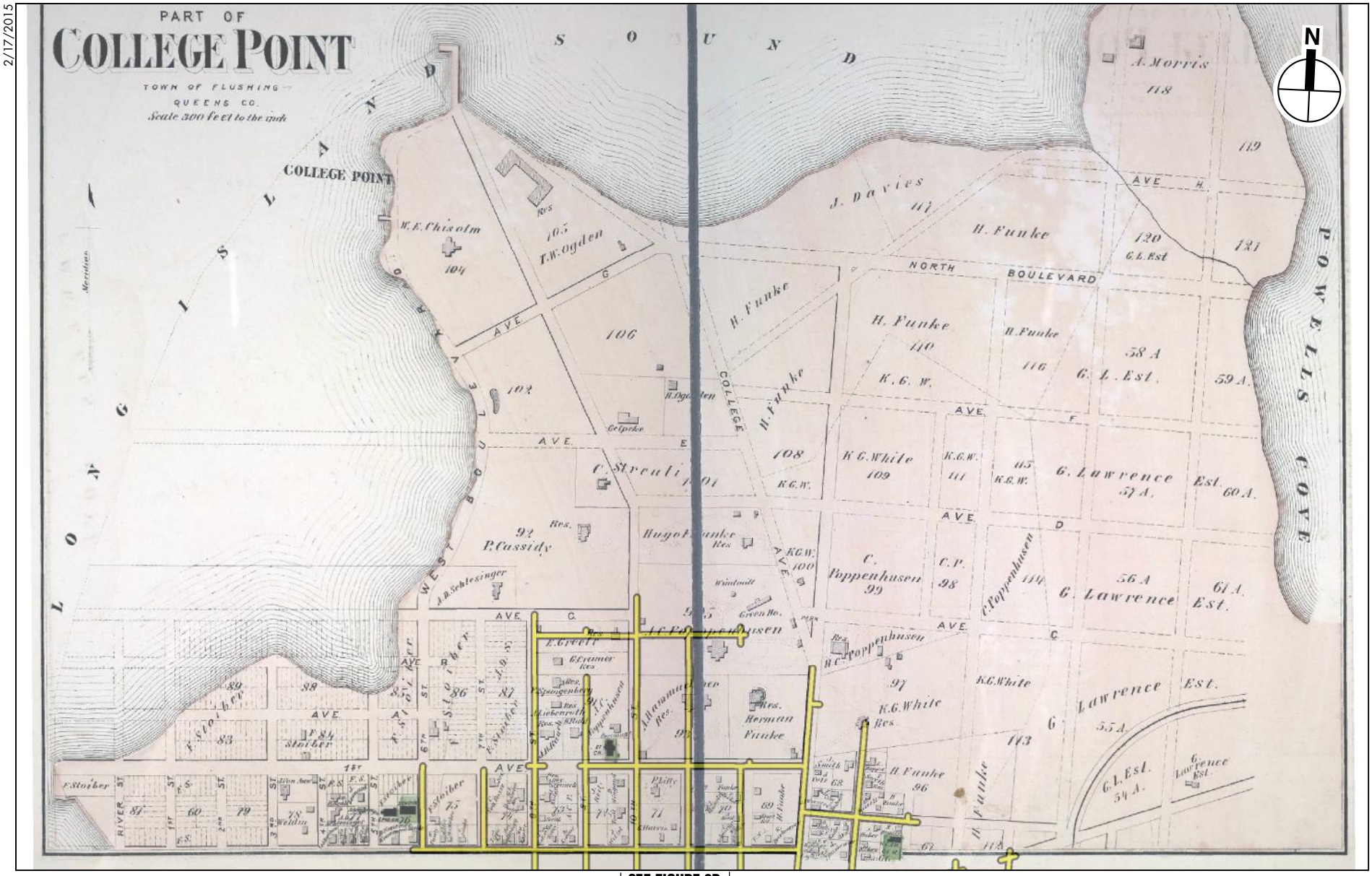
2/17/2015

NOTE: This map was georeferenced to align the histroic and modern streets; due to innacuaracies in the original map, the map projection has been slightly warped to match current streets.

1855 Coastal Survey by F.H. Gerdes

Figure 5

2/17/2015



Proposed Storm Sewers

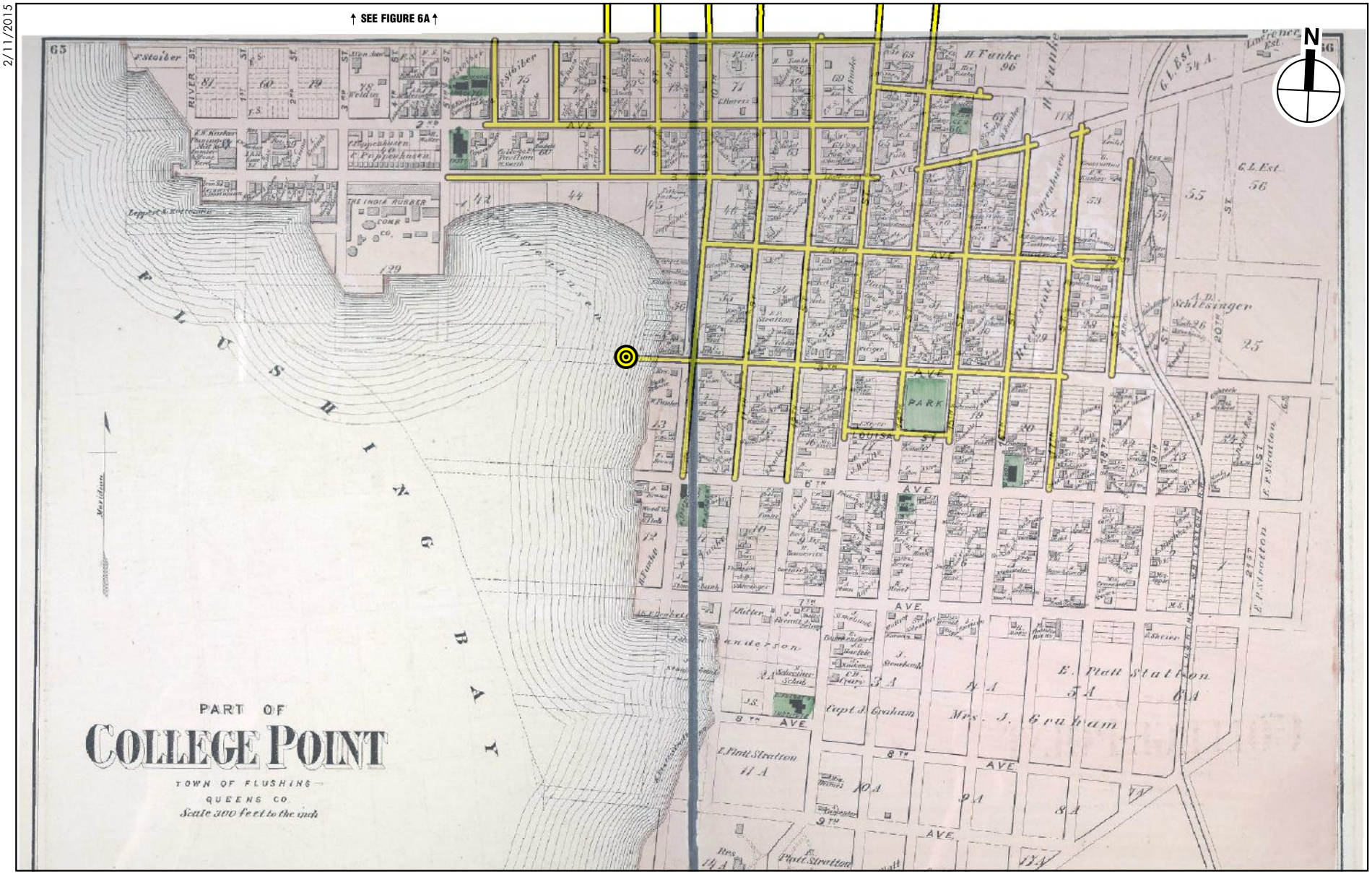
Proposed Outfall

0 400 FEET

1873 Beers Atlas

Figure 6A

2/11/2015



Proposed Storm Sewers

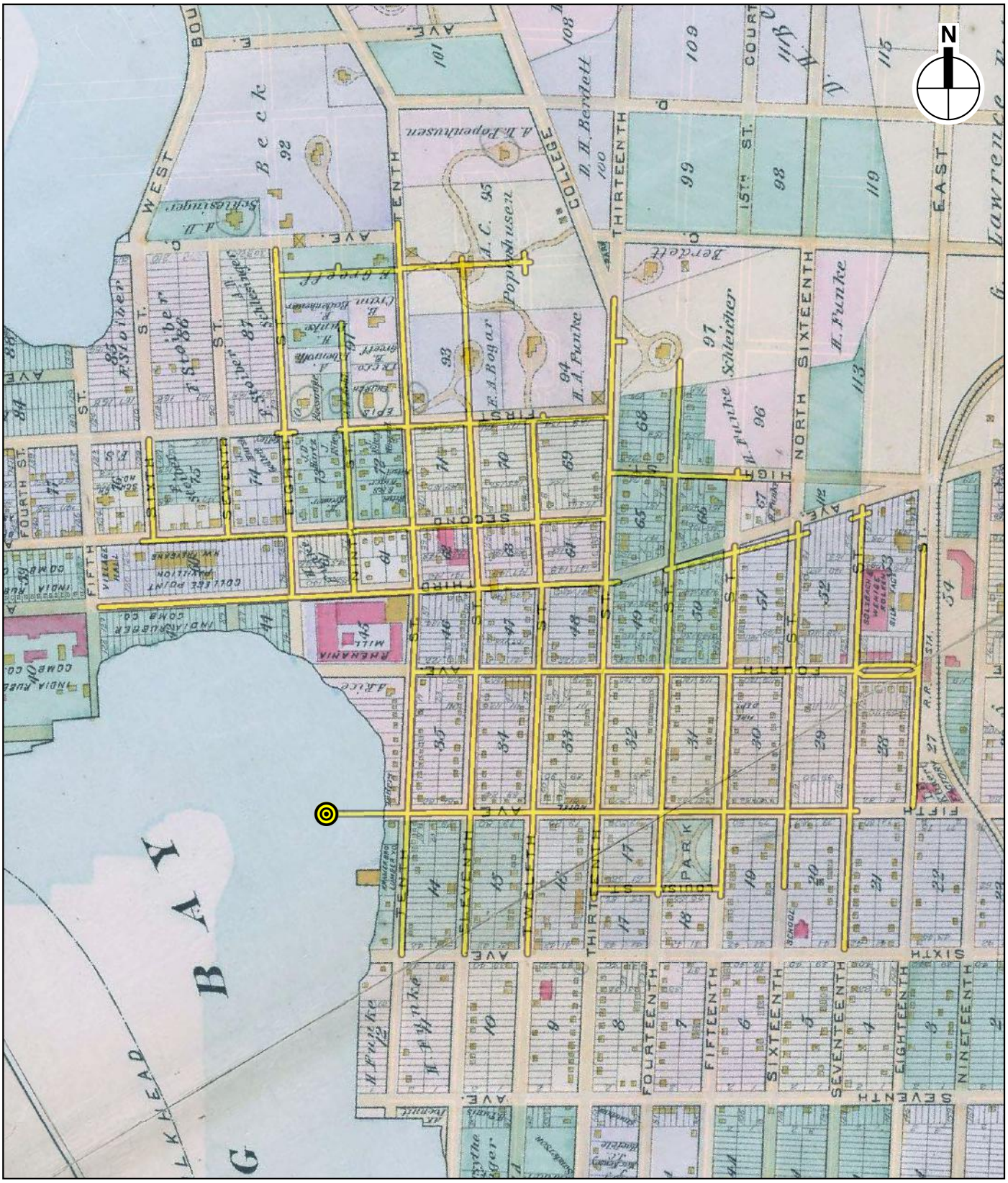
Proposed Outfall

0 400 FEET

1873 Beers Atlas

Figure 6B

2/11/2015



Proposed Storm Sewers

Proposed Outfall

0 500 FEET

NOTE: This map was georeferenced to align the histroic and modern streets; due to innacuaracies in the original map, the project site location may appear to be incorrectly aligned in some places.

1891 Wolverton Atlas

Figure 7

2/11/2015

Proposed Storm Sewers

Proposed Outfall

0 500 FEET

NOTE: This map was georeferenced to align the histroic and modern streets; due to innacuaracies in the original map, the project site location may appear to be incorrectly aligned in some places.

1909 Bromely Atlas
Figure 8A

2/11/2015

Proposed Storm Sewers

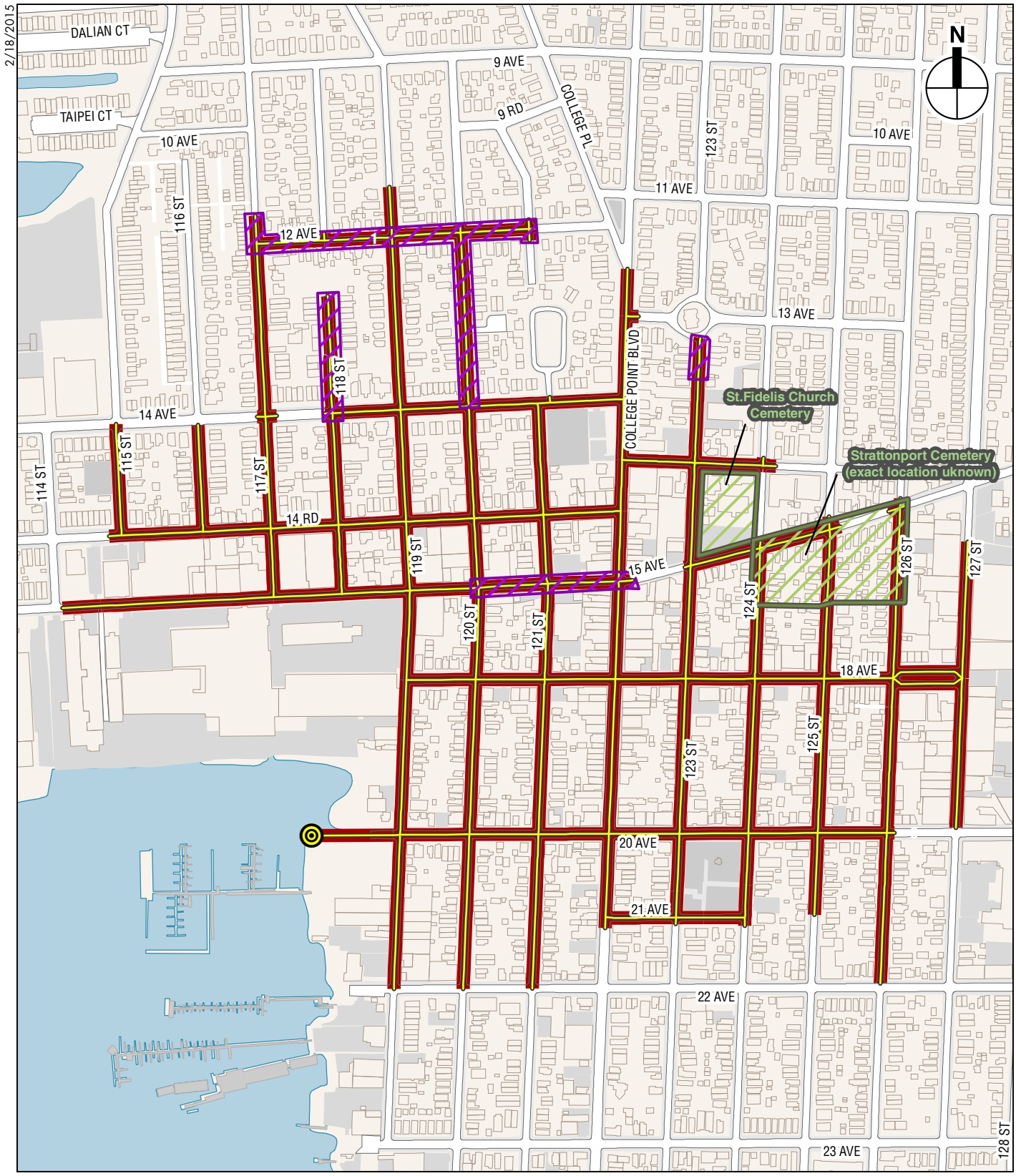
Proposed Outfall

0 500 FEET

NOTE: This map was georeferenced to align the histroic and modern streets; due to innacuaracies in the original map, the project site location may appear to be incorrectly aligned in some places.

1909 Bromely Atlas

Figure 8B



Archaeological Sensitivity
Figure 9

Photographs

View of 12th Avenue looking east towards 119th Street **1**

View of 117th Street south from 12th Avenue **2**

Looking east along 14th Avenue towards 119th Street **3**

View of 124th Street north from 21st Avenue **4**

View east along 14th Road towards 116th Street **5**

View east along 15th Avenue towards 117th Street **6**

Looking east towards the median within 18th Avenue between 128th and 129th Streets **7**

View of 20th Avenue west of 127th Street **8**

Saint Fidelis Church at the corner of 15th Avenue and 124th Street. While the area that is now a parking lot was formerly a burial ground, only a single grave remains in the center of the site **9**

Looking north along 120th Street from 22nd Avenue **10**

View of abandoned boat and shoreline with rip rap, facing west **11**

View of the terminus of 20th Avenue, facing west **12**