

## **Appendix C**

### **Tables**

## National Ambient Air Quality Standards (NAAQS)

Pollutant	Primary		Secondary	
	ppm	µg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>
<b>Carbon Monoxide (CO)</b>				
8-Hour Average <sup>(1)</sup>	9	10,000	None	
1-Hour Average <sup>(1)</sup>	35	40,000		
<b>Lead</b>				
Rolling 3-Month Average <sup>(2)</sup>	NA	0.15	NA	0.15
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>				
1-Hour Average <sup>(3)</sup>	0.100	189	None	
Annual Average	0.053	100	0.053	100
<b>Ozone (O<sub>3</sub>)</b>				
8-Hour Average <sup>(4,5)</sup>	0.075	150	0.075	150
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>				
24-Hour Average <sup>(1)</sup>	NA	150	NA	150
<b>Fine Respirable Particulate Matter (PM<sub>2.5</sub>)</b>				
Annual Mean <sup>(6)</sup>	NA	12	NA	15
24-Hour Average <sup>(7)</sup>	NA	35	NA	35
<b>Sulfur Dioxide (SO<sub>2</sub>) <sup>(8)</sup></b>				
1-Hour Average <sup>(9)</sup>	0.075	196	NA	NA
Maximum 3-Hour Average <sup>(1)</sup>	NA	NA	0.50	1,300
<p><b>Notes:</b></p> <p>ppm – parts per million (unit of measure for gases only)</p> <p>µg/m<sup>3</sup> – micrograms per cubic meter (unit of measure for gases and particles, including lead)</p> <p>NA – not applicable</p> <p>All annual periods refer to calendar year.</p> <p>Standards are defined in ppm. Approximately equivalent concentrations in µg/m<sup>3</sup> are presented.</p> <p><sup>(1)</sup> Not to be exceeded more than once a year.</p> <p><sup>(2)</sup> EPA has lowered the NAAQS down from 1.5 µg/m<sup>3</sup>, effective January 12, 2009.</p> <p><sup>(3)</sup> 3-year average of the annual 98th percentile daily maximum 1-hr average concentration. Effective April 12, 2010.</p> <p><sup>(4)</sup> 3-year average of the annual fourth highest daily maximum 8-hr average concentration.</p> <p><sup>(5)</sup> EPA has proposed lowering the primary standard further to within the range 0.060-0.070 ppm, and adding a secondary standard measured as a cumulative concentration within the range of 7 to 15 ppm-hours aimed mainly at protecting sensitive vegetation. A final decision on these standards has been postponed and is currently in review.</p> <p><sup>(6)</sup> 3-year average of annual mean. EPA has lowered the primary standard from 15 µg/m<sup>3</sup>, effective March 2013.</p> <p><sup>(7)</sup> Not to be exceeded by the annual 98th percentile when averaged over 3 years.</p> <p><sup>(8)</sup> EPA revoked the 24-hour and annual primary standards, replacing them with a 1-hour average standard. Effective August 23, 2010.</p> <p><sup>(9)</sup> 3-year average of the annual 99th percentile daily maximum 1-hr average concentration.</p> <p><b>Source:</b> 40 CFR Part 50: National Primary and Secondary Ambient Air Quality Standards.</p>				

### Representative Monitored Ambient Air Quality Data

Pollutant	Location	Units	Averaging Period	Concentration	NAAQS
CO	Queens College 2, Queens	ppm	8-hour	1.0	9
	Queens College 2, Queens		1-hour	1.9	35
SO <sub>2</sub>	Queens College 2, Queens	µg/m <sup>3</sup>	3-hour	42.2	1,300
			1-hour	52.7	196
PM <sub>10</sub>	P.S. 19, Manhattan	µg/m <sup>3</sup>	24-hour	40	150
PM <sub>2.5</sub>	JHS 126, Brooklyn	µg/m <sup>3</sup>	Annual	9.8	12
			24-hour	23.4	35
NO <sub>2</sub>	Queens College 2, Queens	µg/m <sup>3</sup>	Annual	33	100
			1-hour	114	189
Lead	IS 52, Bronx	µg/m <sup>3</sup>	3-month	0.005	0.15
Ozone	Queens College 2, Queens	ppm	8-hour	0.079	0.075

**Notes:**

-Based on the NAAQS definitions, the CO and 3-hour SO<sub>2</sub> concentrations for short-term averages are the second-highest from the year; the 3-hour SO<sub>2</sub> concentration is based on 2012 data, which is the most recent available data from DEC.

-SO<sub>2</sub> 1-hour and NO<sub>2</sub> 1-hour concentrations are the average of the 99th percentile and 98th percentile, respectively, of the highest daily 1-hour maximum from 2011 to 2013.

-PM<sub>2.5</sub> annual concentrations are the average of 2011–2013, and the 24-hour concentration is the average of the annual 98th percentiles in 2011- 2013.

-8-Hour average ozone concentrations are the average of the 4th highest-daily values from 2011 to 2013.

**Source:** DEC, New York State Ambient Air Quality Data.

**Table 5.6-1  
Vegetation Identified within the  
Project Site**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Stratum</b>
Red maple	<i>Acer rubrum</i>	Tree
Ginko	<i>Ginko biloba</i>	Tree
Honey locust	<i>Gledistia triacanthos</i>	Tree
Crabapple	<i>Malus sp</i>	Tree
London plan tree	<i>Platanus acerfolia</i>	Tree
Cherry	<i>Prunus sp</i>	Tree
Pin oak	<i>Quercus palustris</i>	Tree
Yew	<i>Taxus sp</i>	Shrub
American elm	<i>Ulmus americana</i>	Tree
Japanese zelkova	<i>Zelkova serrata</i>	Tree
<b>Sources:</b> Reconnaissance investigation on February 24, 2015		

**Table 5.7-1**  
**New York State Breeding Bird Atlas**  
**(2000-2005) Results for Block 5849C**

<b>Common Name</b>	<b>Scientific Name</b>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Mallard	<i>Anas platyrhynchos</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
House Finch	<i>Carpodacus mexicanus</i>
Killdeer	<i>Charadrius vociferus</i>
Rock Pigeon	<i>Columba livia</i>
American Crow	<i>Corvus brachyrhynchos</i>
Fish Crow	<i>Corvus ossifragus</i>
Yellow Warbler	<i>Dendroica petechia</i>
Gray Catbird	<i>Dumetella carolinensis</i>
American Kestrel	<i>Falco sparverius</i>
Barn Swallow	<i>Hirundo rustica</i>
Song Sparrow	<i>Melospiza melodia</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
House Sparrow	<i>Passer domesticus</i>
Ring-necked Pheasant	<i>Phasianus colchicus</i>
Downy Woodpecker	<i>Picoides pubescens</i>
European Starling	<i>Sturnus vulgaris</i>
American Robin	<i>Turdus migratorius</i>
Mourning Dove	<i>Zenaida macroura</i>
<b>Sources:</b> NYS Breeding Bird Atlas (2000-2005) Block 5849C	

## **Appendix D**

### **Correspondence**

**Appendix D**  
**Correspondence 5.7-1**  
**NYSHPO Consultation**

June 23, 2015

Ruth Pierpont  
Deputy State Historic Preservation Officer  
Division for Historic Preservation  
Peebles Island State Park  
P. O. Box 189  
Waterford, NY 12188-0189



**FEMA:** Section 106 Consultation, FEMA-DR-4085-NY, Hurricane Sandy

**Applicant:** NYC Health and Hospitals Corporation (HHC)

**Undertaking:** Elevation/flood proofing mechanical and electrical equipment; demolition of Hammett Pavilion, Buildings #3 and #6; construction of a perimeter floodwall on the Coney Island Hospital campus (CIH)

**Address:** 2601 Ocean Parkway, Brooklyn, New York

**County:** Kings

**SHPO PR#:** 13PR00417

Dear Ms. Pierpont:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended. FEMA is conducting Section 106 review for the above referenced Undertaking.

### **The Undertaking**

The Coney Island Hospital (CIH) campus is located on a superblock bounded by Ocean Parkway, Avenue Z, East 6th Street, and Shore Parkway just north of the Belt Parkway in Coney Island (40.58548, -73.96558). The surrounding Coney Island neighborhood is predominantly a residential area located in southern Brooklyn along Lower New York Bay.

Hurricane Sandy's storm surge inundated the Coney Island area and the CIH campus with floodwater from nearby Lower New York Bay. The basement/pipe space areas in the Main Building, the Hammett Pavilion, Building #3, and Building #6 of CIH were the first flooded approximately 1.5 feet. Damage to electrical equipment from floodwaters caused a complete power failure (including the emergency power) leading to a full evacuation of the hospital.

The undertaking proposed below includes hazard mitigation methods that focus on flood protection for future storm events. A portion of the proposed work meets the description of Tier II Allowances, Sections II.B.1 & II.B.2 as defined in the 2014 Programmatic Agreement as it is to pre-disaster conditions. The scope of work not covered by the Programmatic Allowances is identified below:

- 1) Demolition of Building #3, Building #6, and the Hammett Pavilion.

- 2) Construction of a floodwall around the perimeter of the Main Building and the Tower Building to provide added protection for non-critical functions in these buildings. (See attached site plan and flood wall elevation).
- 3) An improved storm water management system within the floodwall which will include the installation of a collection ring, pumps, and piping as well as drainage modifications.

### **Area of Potential Effects (APE)**

Based on the proposed scope of work, FEMA has determined that the APE for this undertaking is the CIH campus superblock bounded by Ocean Parkway (west), Avenue Z (north), East 6th Street (east), and Shore Parkway (south). In addition, the APE includes the view shed of the listed Ocean Parkway. The APE for archaeological resources is limited to the area of proposed ground disturbance on the CIH campus.

### **Known Resources and Research**

The original hospital (Hammett Pavilion) was opened in 1910 with the remaining construction periods of the hospital being 1924, 1951, 1996 and 2006. The resources within the identified APE have the following determinations:

- The CIH campus is identified as ‘not eligible’ in the CRIS database. A determination of ‘No Effect’ to cultural resources for CIH in 2013 (13PR00417) and deemed the campus not eligible for the NRHP.
- A series of brick row houses located adjacent to the site at 2649-2677 East 6<sup>th</sup> Street and constructed c.1951 (USN#04701.014395), are listed as “undetermined” in the CRIS database.
- The Ocean Parkway Scenic Highway that borders the CIH site is a listed resource on the National Register of Historic Places site (#83001697, added 1983) and is adjacent to the APE. Ocean Parkway is five and a half miles long from north to south and connects Prospect Park to Coney Island. It was designed by Frederick Law Olmstead and Calvert Vaux and constructed between 1874 and 1876.
- Ocean Parkway Scenic Highway is also listed on NYCity map as a Scenic Landmark in the City of New York (#LP-00871, added January 28, 1975).

Research revealed the project site is located in an area of archaeological sensitivity. While this is the case, no previously recorded archaeological sites have been identified within the project site and/or within one-mile of the APE. A previously conducted Phase IA documentary study conducted by AKRF (2001) was undertaken to identify the potential presence for significant archaeological resources in and/or around the immediate vicinity of the APE. The report was used to assess disturbance caused by past construction and/or demolition episodes, landscaping or farming practices. A study of 19<sup>th</sup> century maps shows that, as late as 1873, the hospital site was just north of a winding stream called Coney Island Creek that emptied into Gravesend Bay on the west and Sheep's Head (or Sheepshead) Bay on the east. These maps all show the creek surrounded by marshland, with the nearest elevated ground approximately 400 feet to the north.

By the time Ocean Parkway was built in 1897, the marsh is no longer in evidence. Cartographic study illustrates that the proposed Coney Island Hospital addition site was marshland associated

with Coney Island Creek until into the last quarter of the 19<sup>th</sup> century. The buildings of the hospital complex were the first structures on the site, beginning in 1910, with additions and subtractions through the following years. Although this marsh may have been used by both the Native Americans and the European settlers for harvesting plant materials, fishing and/or hunting, it is unlikely that it was ever a habitation site. Therefore, the potential to encounter historic archaeological resources is assessed as low.

**Determination of Effect**

Based on the information presented above, FEMA has made the determination of **No Historic Properties Affected** that are either in, or eligible for inclusion in, the State or National Register of Historic Places for the undertaking. We request concurrence with this determination of effect within fifteen (15) calendar days. Should you need additional information please contact James Zwolak at (646) 832-6255 for Historic Structures or Brock Giordano at (347) 574-1467 for archaeology.

Sincerely,



Michael Audin  
Environmental & Historic Preservation Advisor  
4085-DR-NY

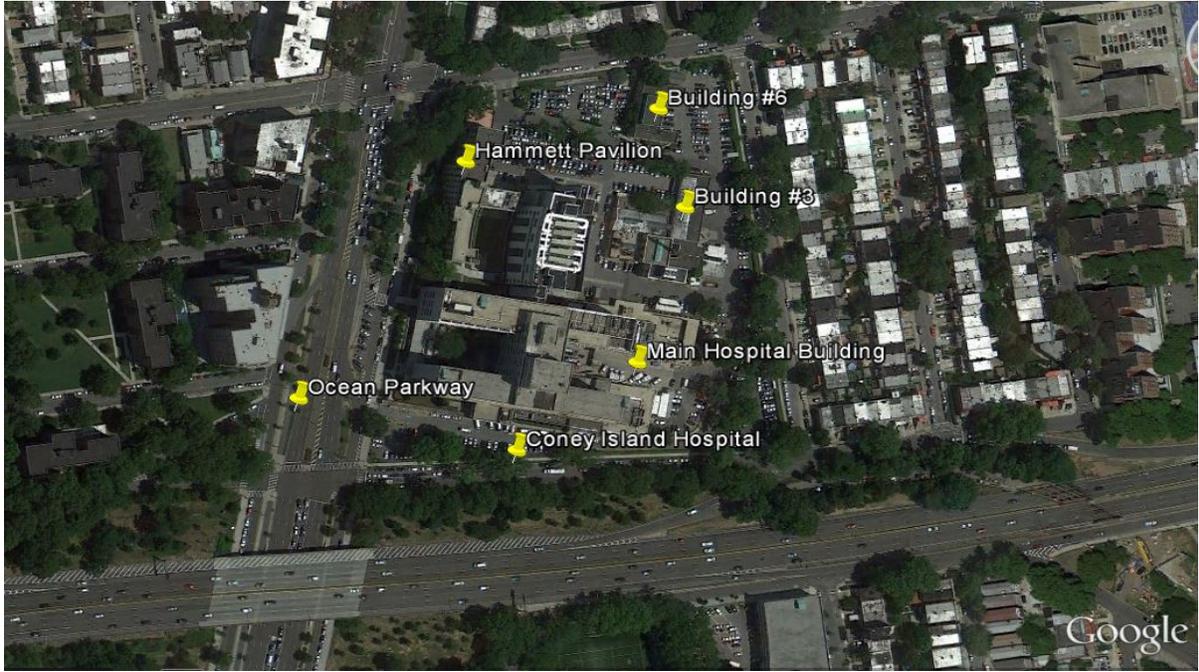
MA/jz

CC: Rick Lord, NYS Division of Homeland Security & Emergency Services

Enclosures: Coney Island Hospital Floodwall and Sections  
Map Index Coney Island Hospital  
Photo Index Coney Island Hospital

Photo Page  
Disaster 4085-DR-NY  
Coney Island Hospital

Location map with all the Buildings identified



Topographic Map – Coney Island Hospital



Photo Page  
Disaster 4085-DR-NY  
Coney Island Hospital -Hammett Pavilion

Hammett Pavilion – Front Elevation



Hammett Pavilion – north side oblique



Hammett Pavilion – rear elevation & extension wing



Hammett Pavilion – rear elevation



Photo Page  
Disaster 4085-DR-NY  
Coney Island Hospital -Building #6 & Building #3

Building #6 – front elevation



Building #6 – rear elevation



Building #3 – front elevation, main facade



Building #3 – front elevation, side addition



Photo Page  
Disaster 4085-DR-NY  
Coney Island Hospital –Building #3 & Main Hospital Building

Building #3 – front elevation oblique



Building #3 – rear elevation, power plant



Main Hospital Building – front elevation



Main Hospital Building – front elevation wing



Photo Page  
Disaster 4085-DR-NY  
Coney Island Hospital – Ocean Beach Parkway

Hammett Pavilion – viewshed from Ocean Parkway



Hammett Pavilion – with parking and bridle path along Ocean Parkway



Main Building – viewshed from Ocean Parkway



Ocean Parkway and bridle/pedestrian path

