

Appendix Correspondence A
Costal Zone Management Act Consultation with
New York State State Department



FEMA

U.S. Department of Homeland Security

FEMA-4085-DR-NY

Sandy Recovery Office, Forest Hills Tower

118-35 Queens Blvd. 5th Floor, EHP

Forest Hills, NY 11375

May 23, 2014

Mr. Jeffrey Zappieri
Consistency Review and Analysis
New York Coastal Management Program
New York Department of State
99 Washington Avenue, Suite 1010
Albany, NY 12231-0001

Re: CMP Federal Consistency Review
Bay Park WWTP – PW 3714
Nassau County

Dear Mr. Zappieri:

The Department of Homeland Security-Federal Emergency Management Agency (FEMA) is proposing to contribute federal funding from its Public Assistance Program under Section 428 of the Stafford Act to assist Nassau County in restoring function and mitigating future damages to the Bay Park Waste Water Treatment Plant.

The following proposed alternate projects are being included for review and consideration.

1. Flood Berm, Bay Park Wastewater Plant

Construction of a plant boundary surrounding the Bay Park STP to mitigate against future flood events will be done. The boundary will protect up to a 500-year flood elevation which corresponds to an elevation of 17.1-ft NAVD88 or 18.3-ft NGVD 29 (where NGVD 29 is equivalent to the Nassau County Datum). The boundary will be part berm and part floodwall. Berms will cover a majority of the East and West sides of the Plant while a T-wall will comprise parts of the North and South boundaries. The boundary includes a slurry wall to stop infiltration of groundwater into the Plant. One main entrance gate and guardhouse is included at the North end of the Plant on Marjorie Lane, and two additional gates are included on the South side of the Plant.

The proposed contract also includes the rehabilitation of the park adjacent to the East side of the Plant, as the proposed berm footprint will displace current park elements. The Park includes a baseball field, tennis courts, restroom facilities, and other essentials elements.

2. Dewatering Improvements, Bay Park Wastewater Plant

- Installation of four new dewatering centrifuges with a new wash water system
- Replacement of the sludge feed system
- Replacement of the polymer system (except the polymer tanks)
- Resizing and replacement of the service air system

- Modification of the dewatered sludge cake conveying and unloading system
- Installation of two new free standing bridge cranes
- Modification of the odor control system
- Relocation of the electrical room from the first to the second floor
- Relocation of major heating, ventilation and air conditioning (HVAC) equipment from the first to the second floor
- Update fire protection system per codes and standards
- Structural modifications to the building

3. Electrical Improvements- Phase 1, Bay Park Wastewater Plant

Construction of three (3) new unit substations and install associated electrical equipment at the Bay Park STP based on the current Bid Document. The unit substations will have first floor elevations at or above the 500-yr flood elevation in order to mitigate all electrical equipment. Below are the proposed locations of the new unit substations.

- USS 3 will be located near the Effluent Pumping Facility. A new structure will replace the existing structure.
- USS 4 will be relocated near the Sludge Thickening Facility (Building 6), to replace the existing USS 4 and USS6.
- USS 5 will be located near the Grit Building.

Significant architectural consideration has been given to the unit substation structures in order to provide for efficient ventilation and sustainability.

4. Final Settling Tanks Rehabilitation, Bay Park Wastewater Plant

Construction has begun on the repair contract for the Final Settling Tanks at the Bay Park STP as they were extensively damaged during Hurricane Sandy. The principal work under this contract consists of demolition, removal, and installation of new or in-kind longitudinal and cross collection systems in all final settling tanks. This includes repair or replacement of all chain and flights, drives, guide rails, sprockets, scum piping, electrical and instrumentation and controls.

5. Grit Removal Facility Improvements, Bay Park Wastewater Plant

Work under this contract includes demolition and installation of new equipment per contract documents. Demolition work includes items such as grit tanks, grit collectors and conveyors and auxiliary equipment. Installation of new equipment includes vortex grit removal systems, a new odor control scrubber and HVAC improvements. Other improvements include electrical and building rehabilitation.

6. Sludge Thickening Facility Improvements, Bay Park Wastewater Treatment Plant

The principal features of the work to be performed under this contract consists of demolition and removal of piping and valves, pumps, pressure vessels, concrete demolition, and control panels associated with the abandoned Dissolved Air Flotation Thickeners located in the Sludge Thickening Building. New work will be code compliant and will include:

- Installation of a storage and polymer feeding system, including RFP tanks, mixing pumps, etc. to service four new Gravity Belt Thickeners currently in operation.

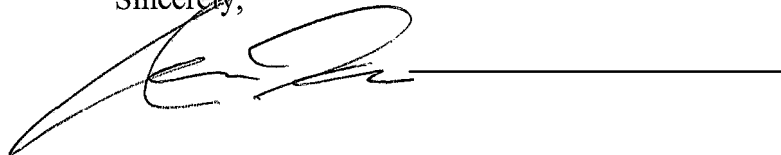
- Removal and replacement of the WAS booster pumps with VFDs
- Removal and replacement of screened effluent water pumps
- Architectural improvements to building
- Retrofitting existing DAF tanks to accommodate new equipment and systems
- New carbon absorber odor control system

State Coastal Policies 1 through 44 has been reviewed with respect to their applicability to the work performed under the disaster recovery operations. Based on this review, FEMA certifies that the above-referenced activities that will result from the proposed grant project are consistent with the policies of the NYS Coastal Management Program (CMP) and will not hinder the achievement of those policies. A summary of the proposed project's consistency with State Coastal Policies is included as an attachment.

FEMA is seeking the New York State Department of State's (NYSDS) concurrence with our Federal Coastal Zone Consistency Determination, in accordance with the requirement of the Coastal Zone Management Act of 1972 (15 CFR Part 930), prior to the release of funds by FEMA to grant recipient.

FEMA understand that we agreed to 60 day consult period but requests NYSDOS response to Federal Coastal Zone Consistency Review on this project within 30 days to align with other agency review processes to expedite the grant for this Project. We will assume concurrence with our Federal Coastal Zone Consistency Review determination if a reply is not received from your office within the 60 days. If you have any questions, please contact John Dawson at 202-286-1627 or john.dawson@fema.dhs.gov.

Sincerely,

A handwritten signature in black ink, appearing to be "EHP", followed by a horizontal line.

EHP Branch Director
New York Sandy Recovery Field Office

bmw/JD

Encl: Location maps, NYS Coastal Zone Atlas maps, NFHL flood and wetland maps, summary table for project's consistency with coastal policies, and plans.

Figure 1: Location Map Bay Park WWTP

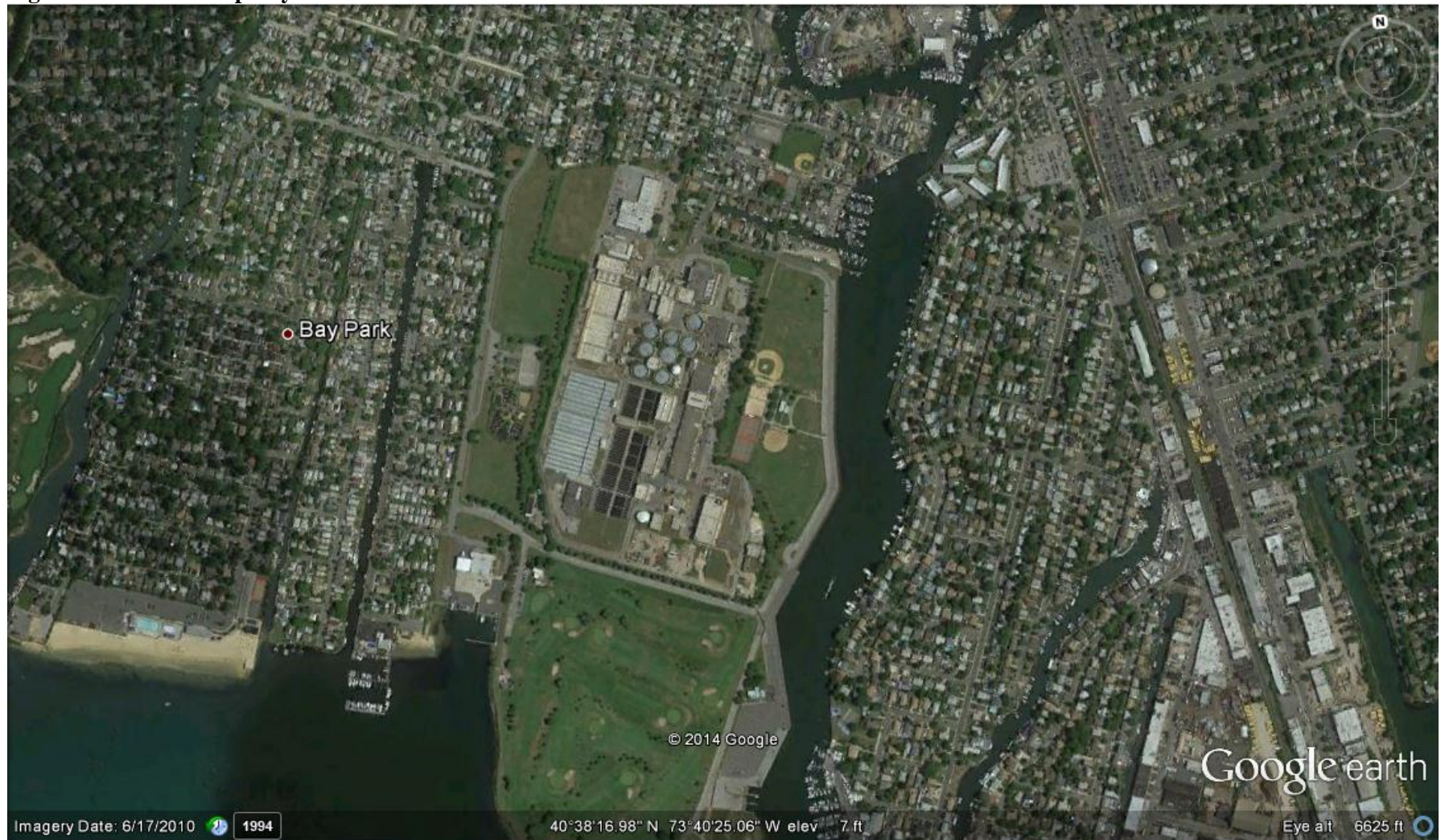


Figure 2: NYS Coastal Zone Atlas Map Bay Park

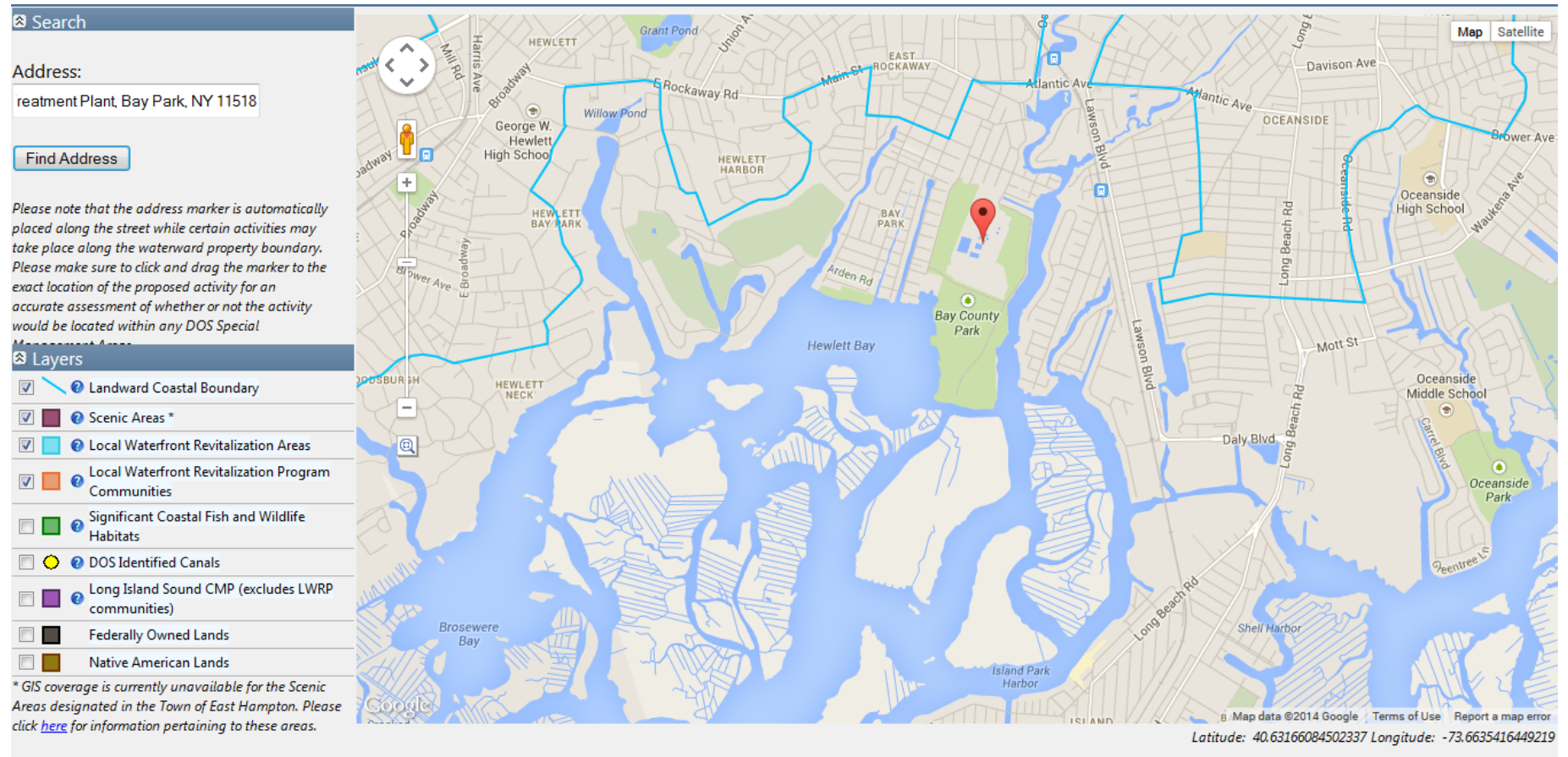


Figure 3: NFHL Bay Park



Figure 4: Wetland Map Bay Park



Electrical Improvements Plans

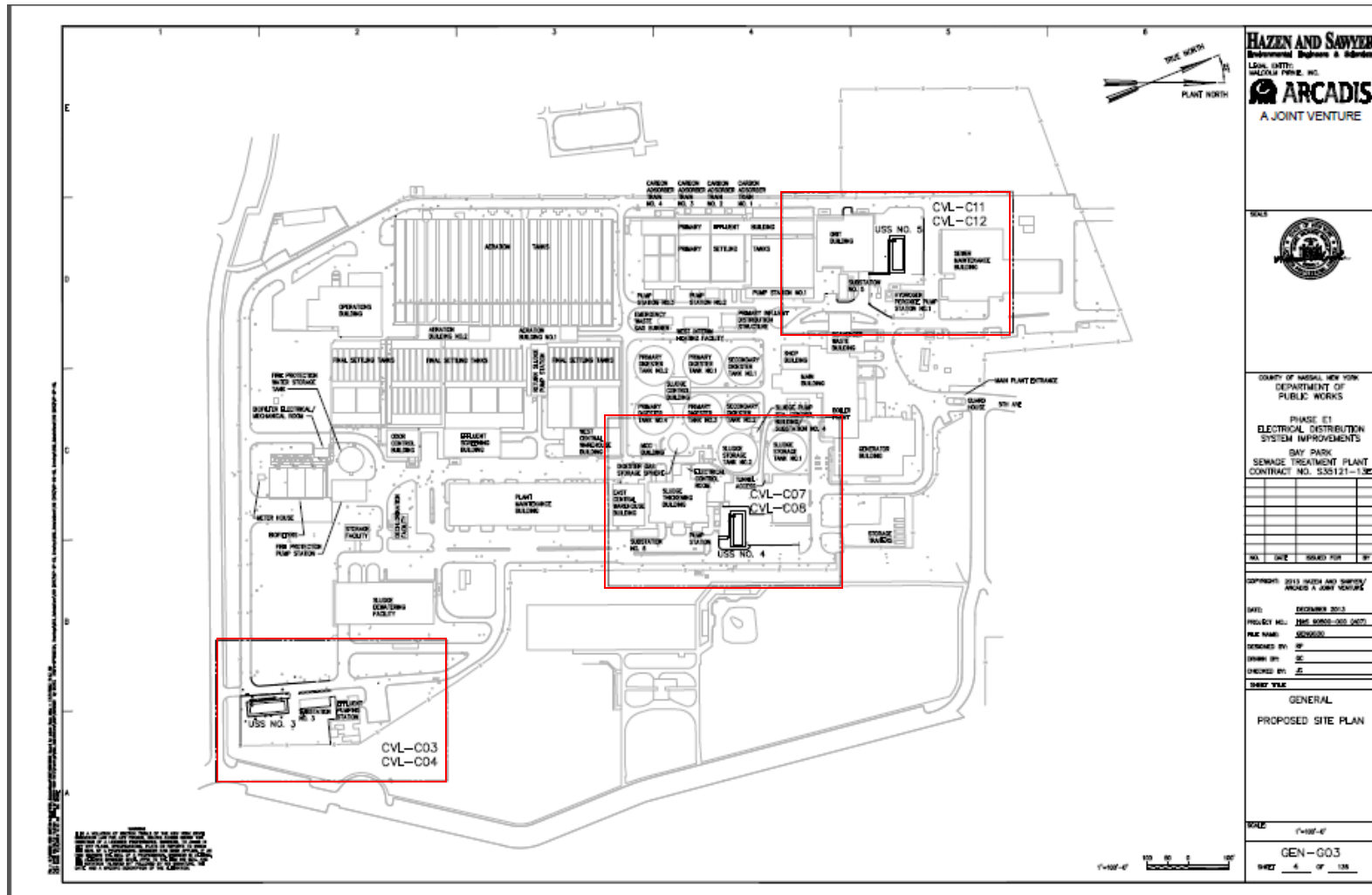


Figure 6: Summary Table for Project's Consistency with Coastal Policies

Policy 1

Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Project will repair and upgrade damaged waste water treatment plant to prevent future damage from flooding and therefore providing better service to the community.

Policy 2

Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

Facility is an existing waste water treatment plant system dependent on gravity-fed systems and is dependent on its elevation and location for the area served. Facility is functionally dependent on its current location.

Policy 3

Further develop the state's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of state public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

N/A no impact on any major ports

Policy 4

Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.

N/A no impact on any smaller harbors

Policy 5

Encourage the location of development in areas where public services and facilities essential to such development are adequate.

The project restores and strengthens an existing waste water treatment facility with flood protection and facility improvements to mitigate future flood damages.

Policy 6

Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

FEMA understand that we agreed to 60 day consult period but requests NYSDOS response to Federal Coastal Zone Consistency Review on this project within 30 days to align with other agency review processes to expedite the grant for this Project.

Policy 7

Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Existing facility is located near coastal fish and wildlife habitat; best management practices during construction will mitigate sedimentation related to ground-disturbing activities. Project is intended to increase protection for the facility from flooding events and is thus anticipated to reduce incidents of treatment plant failure related to flooding. Project is not expected to exacerbate any existing conditions and may incrementally reduce current affects.

Policy 8

Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub-lethal or lethal effect on those resources.

Existing facility is located near coastal fish and wildlife habitat; best management practices during construction will mitigate sedimentation related to ground-disturbing activities. Project is intended to increase protection for the facility from flooding events and is thus anticipated to reduce incidents of treatment plant failure related to flooding. Operations at the facility are subject to regulation by the New York Department of Environmental Conservation, U.S. Environmental Protection Agency, and other regulatory bodies.

Policy 9

Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.

N/A. Policy is not project's purpose

Policy 10

Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.

N/A. Policy is not project's purpose

Policy 11

Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Project location is functionally dependent and located within a 100-year floodplain. The addition of mitigation measures will reduce potential damages from future flooding.

Policy 12

Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

Construction will be undertaken using best management practices including erosion and sediment control measures. Facility is located within substantially developed infrastructure and will not directly impact natural resources indicated.

Policy 13

The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Not within a coastal erosion hazard area therefore no permanent erosion protection will be conducted at site.

Policy 14

Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Not within a coastal erosion hazard area therefore no permanent erosion protection will be conducted at site.

Policy 15

Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

Mining, dredging and excavation are not part of scope of work however ground disturbing activities for construction work are included. Commercially sourced fill for construction of the flood protection berm will be brought into the site.

Policy 16

Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

Not within a coastal erosion hazard area therefore no permanent erosion protection will be conducted at site. Inclusion of the flood protection barrier around the facility will assist in the reduction of risk to human health and restore and protect a critical facility.

Policy 17

Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Not within a coastal erosion hazard area therefore no permanent erosion protection will be conducted at site.

Policy 18

To safeguard the vital economic, social and environmental interests of the state and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal resource areas.

Project will prevent future damage to coastal resources by mitigating plant failure resulting from coastal flooding. This will prevent excessive effluent pollution entering bay from flood-related failures.

Policy 19

Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.

N/A project intent is not related in increasing water-related recreation resources and facilities

Policy 20

Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

N/A project intent is not related to increasing water-related recreation resources and facilities

Policy 21

Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast.

N/A project intent is not related in increasing water-related recreation resources and facilities

Policy 22

Development, when located adjacent to the shore, will provide for water-related recreation, whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.

N/A project intent is not related in increasing water-related recreation resources and facilities

Policy 23

Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the state, its communities, or the nation.

Proposed project has no or limited effect on historic properties or sites as established in FEMA's programmatic agreement with the New York State Historic Preservation Officer.

Policy 24

Prevent impairment of scenic resources of statewide significance.

Facility is not located in a scenic area of statewide significance.

Policy 25

Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

Facility is located within a substantially developed urban coastal community with marginal overall natural scenic qualities remaining.

Policy 26

Conserve and protect agricultural lands in the state's coastal area.

Surrounding land uses are residential and wetland, no agricultural or potential agricultural lands will be affected.

Policy 27

Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

N/A to the scope of this project

Policy 28

Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

N/A to the scope of this project

Policy 29

Encourage the development of energy resources on the outer continental shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities.

N/A to the scope of this project

Policy 30

Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.

Current effluent levels are within parameters of current SPDES permit. Project is not expected to affect water quality standards.

Policy 31

State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

Current effluent levels are within parameters of current SPDES permit.

Policy 32

Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

Does not apply due to population size of community.

Policy 33

Best management practices will be used to ensure the control of storm water runoff and combined sewer overflows draining into coastal waters.

Construction best management practices will be used for the project to control construction-related storm water runoff.

Policy 34

Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

The proposed project would not involve discharge from vessels and consequentially this policy is not applicable.

Policy 35

Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

Project does not involve dredging and filling; construction of flood protection barrier will consist of commercially-sourced fill and construction will be subject to applicable construction and SPDES permits.

Policy 36

Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

N/A to the scope of the project.

Policy 37

Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.

Construction best management practices will be used for the project to control storm water runoff.

Policy 38

The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Project is for repair and restoration of facility in addition to protecting against future flood-related losses and is not expected to have any additional affect surface or ground water quality.

Policy 39

The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.

The project involves the transport of solid waste during the construction phase and the day to day operation and will follow all New York Solid Waste Management Act regulations. Applicant will provide all necessary permits regarding waste transport and disposal.

Policy 40

Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

N/A to the scope of this project.

Policy 41

Land use or development in the coastal area will not cause national or state air quality standards to be violated.

Facility has a Title V air permit for onsite generators and is currently within limits stated by permit.

Policy 42

Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act.

Land areas will not be reclassified; policy not applicable to scope of project.

Policy 43

Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Project is not anticipated to cause acid rain precursors.

Policy 44

Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Project will prevent future effluent spikes from flooding disasters and efficiencies are expected to maintain or incrementally reduce existing effluent levels.



STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001

ANDREW M. CUOMO
GOVERNOR

CESAR A. PERALES
SECRETARY OF STATE

June 11, 2014

Mr. John Dawson
U.S. Dept. of Homeland Security
FEMA-4085-DR-NY
Sandy Recovery Office, Forest Hills Tower
118-35 Queens Blvd., 5th Floor, EHP
Forest Hills, NY 11375

Re: F-2014-0266 (FA)
Bay Park Wastewater Treatment Plant,
Nassau County, New York
Federal funding - installation of flood berm and
dewatering improvements at Bay Park WWTP

Concurrence - No Objection to Funding

Dear Mr. Dawson:

The Department of State received the information you submitted regarding the above matter on May 27, 2014. The Department of State has no objection to the use of FEMA Public Assistance Program funds for this financial assistance activity to Nassau County for the above-listed improvements to the Bay Park Wastewater Treatment Facility. According to the information submitted to us, all existing and available public park amenities and functions located at or adjacent to the site which may potentially be impacted or displaced by the project will be fully replaced or improved for continued public use.

This concurrence pertains to the financial assistance for this project only. If a federal permit or other form of federal agency authorization is required for the above activities, the Department of State will conduct a separate review for those permit activities. In such a case, please forward a copy of the federal application for authorization, a completed Federal Consistency Assessment Form, and all supporting information to the Department at the same time it is submitted to the federal agency from which the necessary authorization is requested.

When communicating with us regarding this matter, please contact Jeffrey Zappieri at (518) 474-6000 and refer to our file #F-2014-0266 (FA).

Sincerely,

Jeffrey Zappieri
Supervisor, Consistency Review Unit
Office of Planning and Development

JZ/ts

Appendix Correspondence B

Figure 1 - FEMA SHPO Consultation Correspondence



FEMA

May 22, 2014

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 Review, FEMA-4085-DR-NY, Hurricane Sandy (PW 3714)

Undertaking: Repairs, Improvements and Mitigation Work at Bay Park Sewage Treatment Plant

Addresses: 4 Marjorie Lane, East Rockaway (40.631334, -73.663039)

County: Nassau County

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 initiating Section 106 review for the above referenced properties.

As a result of the damage caused by Hurricane Sandy in New York, catastrophic loss across the City of New York and surrounding counties occurred, leaving many residents without homes or basic city services. In response, FEMA is committed to moving forward as quickly as possible to help these communities recover from the effects of this devastating weather event.

Project Information/Description of the Undertaking

As part of the agency response, FEMA will be providing funding to Nassau County Department of Public Works to fund permanent recovery work at the Bay Park Waste Water Treatment Plant. The facility, which first opened in 1950, comprises approximately 50 structures with associated systems and equipment, all of which sustained damage during the declared storm event. The applicant has requested Public Assistance Alternative Procedures (PAAP) funding for a proposal to mitigate the Bay Park Waste Water Treatment facility against the future risk of storm damage and consequent risk of service disruption from a similar storm event.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, the Nassau County Department of Public Works (through their consultant, Arcadis) conducted consultation with the

NY SHPO for the proposed repair and mitigation work at the Bay Park Waste Water Treatment Plant. On November 25, 2013, Arcadis initiated consultation for the following projects:

- Electrical Distribution System Flood Repair and Mitigation
- Perimeter Flood Protection
- Sludge Dewatering Facility Repair and Mitigation
- Hardening of Critical Tier I Facilities

In a letter dated April 7, 2014 the NYSHPO made a determination of ‘No Effect’ cultural resources in or eligible for inclusion in the National Registers of Historic Places by the above mentioned projects (14PR01284).

Additionally, Arcadis initiated consultation for:

- Final Settling Tank Rehabilitation
- Effluent Pumping Facility Improvements
- Barnes Avenue SSO Correction

In a letter dated April 25, 2014 the NYSHPO made a determination of ‘No Effect’ cultural resources in or eligible for inclusion in the National Registers of Historic Places by the above mentioned projects (14PR01284).

FEMA’s Historic Preservation and Archeological staff has reviewed the proposed scopes of work at the Bay Park WWTP, and concurs with the NY SHPO’s determination that the work will have **No Effect** upon cultural resources in or eligible for inclusion in the National Register of Historic Places. (This concurrence is based on the scopes of work as detailed by Arcadis in their submissions to NYSHPO. FEMA is currently re-evaluating additional information regarding the scope of work for the perimeter flood protection at the Bay Park WWTP to ensure that it is consistent with a **No Effect** determination. If the scope of work is not consistent with a No Effect determination, a subsequent letter will be sent clarifying the changes.)

In addition, FEMA feels that there are elements of the repair and mitigation work at the Bay Park WWTP and adjacent park that were not included in previous consultations initiated by Arcadis, as detailed below:

- Construction of three (3) new unit substations to house elevated electrical and mechanical equipment (minor ground disturbance will be required)
- Removal and replacement of equipment at the Grit Removal Facility (no exterior alterations are proposed)
- Demolition of an existing comfort station at the adjacent Bay Park, and construction of a new comfort station at a different location within the park.

The comfort station that is proposed for demolition is a simple brick building (built circa 1970) consisting of two interconnected structures with shed roofs, one housing bathrooms, and the other offering open-air covered shelter to park-goers. The building is located off of Marjorie Lane, adjacent to existing ball fields and recreational facilities.

Area of Potential Effects (APE) and Identification

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect historic resources. The APE for this undertaking is determined to include the area of ground disturbance at the location of the perimeter flood protection (berm and flood wall) and the proposed new unit substations; and the area of ground disturbance at the adjacent park, including the demolition of a comfort station and construction of a new comfort station at new location, and the demolition and reconfiguration of all sports facilities at the park. In addition, the APE includes the viewsheds from the surrounding communities and the view from the adjacent park.

The construction of the perimeter flood protection structure included in this proposed alternative will impact the adjacent county-owned park to the east and west of the Bay Park WWTP, which is utilized by the public for recreation. The construction of the perimeter flood protection structure will also impact nearby Marjorie Lane. As a result, it is being proposed to relocate the road adjacent to the earthen berm. Relocating this road also provides a benefit to the community in that the recreational park can be tied to the waterway and would allow access to the water by the public.

Review of Effects to Historic Resources

FEMA Archeologist Patrick McGinnis used NYSHPO maps to determine that the project area is located in an area of archaeological sensitivity. No previously recorded archaeological sites have been identified within the project site, and the project site is not contiguous to a property listed or eligible for listing on the National Register of Historic Places.

Based on historic maps of the site dating to the late 1800s the project area was once marshland connecting waterways leading to the Atlantic Ocean. The marshlands were filled to allow development, including the construction of the Bay Park WWTP. Geotechnical analysis for the project indicates that fill deposits present on the site vary from a depth of 4-feet to 13.5- feet. The fill layer is underlain by a layer of organic marine deposits of thick gray clay varying between 0.3-feet to 15-feet thick. The organic marine deposit is underlain by a layer of sand in which the borings were terminated after penetrations of 3.1-feet to 48-feet. Project related ground disturbance will not reach undisturbed soils below the level of the fill.

FEMA Historic Preservationist Andria Darby conducted a search for known historic sites. Based on the results of our historic property identification efforts, none of the structures at the Bay Park Waste Water Treatment Plant or at the adjacent park facility is listed in the National Register of Historic Places (NRHP), either individually, or as collectively as part of a National Register Historic District. As previously described, the Bay Park WWTP is an unremarkable public works facility that does not exhibit significant architectural design and/or detail, and is not associated with historically significant persons or events. Additionally, the Bay Park comfort station does not possess any distinguishing features that would make it eligible for listing in the NR. Therefore, FEMA finds that these properties are **not eligible** for listing in the NRHP.

FEMA has made the determination of **No Effect** upon cultural resources in or eligible for inclusion in the National Register of Historic Places by the proposed activities at the above mentioned property. We request concurrence with this determination of effect. FEMA is asking for a response within fifteen calendar days. Should you need additional information please contact Andria Darby, Acting Historic Preservation Lead, at (917) 543-2903.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Dawson', with a long horizontal line extending to the right.

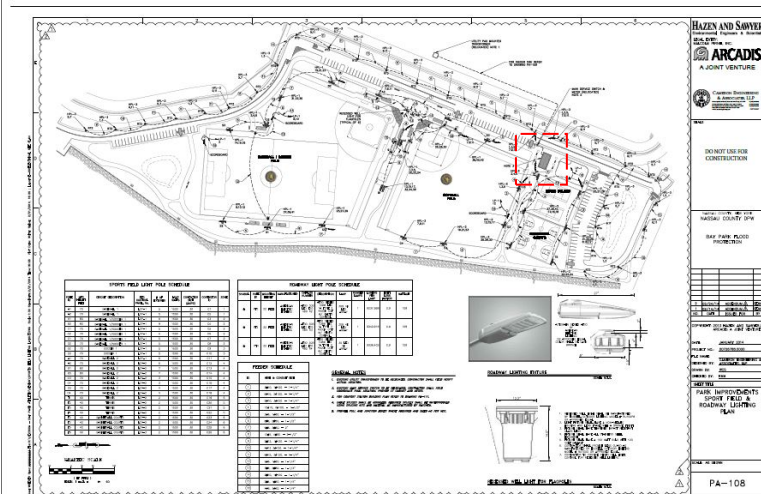
John Dawson
EHP Branch Director
4085-DR-NY

JD/tn

Enclosures

FEMA 4085-DR-NY Nassau County Department of Public Works - Bay Park Waste Water Treatment Plant

Bay Park – new sports facility schematic – new comfort station



Existing Comfort Station – front elevation



Existing Park Facility Building (Facing South)
Proposed to be Demolished and Replaced

HAZEN AND SAWYER
Environmental Engineers & Scientists
ARCADIS
DATE: May 2014

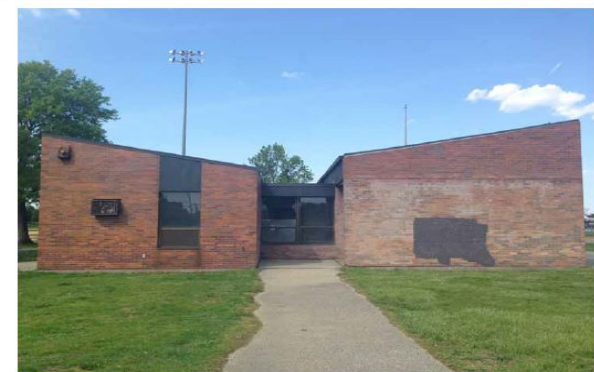
Existing Comfort Station – Oblique elevation



Existing Park Facility Building (Facing Northwest)
Proposed to be Demolished and Replaced

HAZEN AND SAWYER
Environmental Engineers & Scientists
ARCADIS
DATE: May 2014

Existing Comfort Station – side elevation



Existing Park Facility Building (Facing North)
Proposed to be Demolished and Replaced

HAZEN AND SAWYER
Environmental Engineers & Scientists
ARCADIS
DATE: May 2014

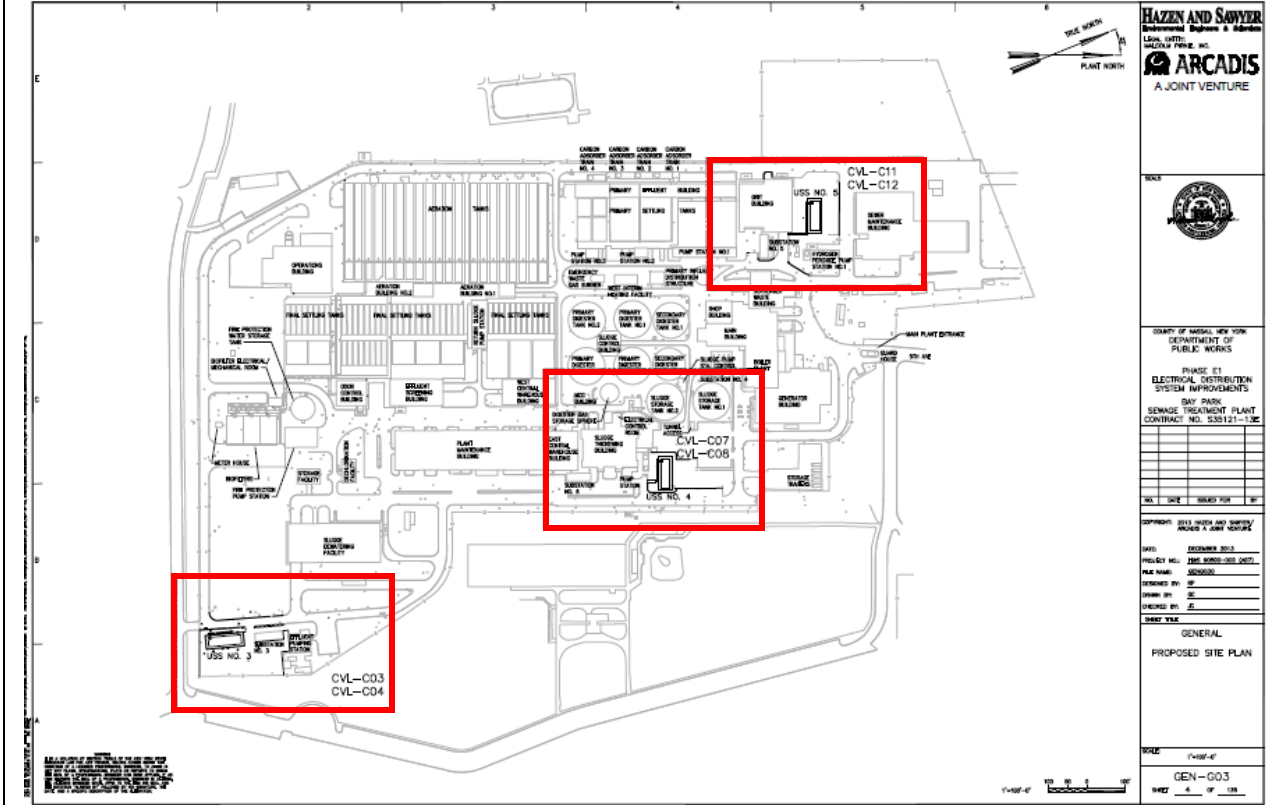
1) Bay Park WWTP Complex – Grit Building in (Yellow Rectangle)



FIGURE D
ALTERNATIVE 3 – MITIGATE ALL SYSTEMS
AND EQUIPMENT INDIVIDUALLY
PROPOSED SITE LAYOUT

DATE: MAY 2014

Locations of 3 new unit substations





FEMA

May 27, 2014

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 Review, FEMA-4085-DR-NY, Hurricane Sandy (PW 3714)

Undertaking: Repairs, Improvements and Mitigation Work at Bay Park Sewage Treatment Plant

Addresses: 4 Marjorie Lane, East Rockaway (40.631334, -73.663039)

County: Nassau County

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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 initiating Section 106 review for the above referenced properties.

As a result of the damage caused by Superstorm Sandy in New York, catastrophic loss across the City of New York and surrounding counties occurred, leaving many residents without homes or basic city services.

Project Information/Description of the Undertaking

As part of the agency response, FEMA plans to provide funding to Nassau County Department of Public Works (NCDPW) to fund permanent recovery work at the Bay Park Waste Water Treatment Plant. The facility, which first opened in 1950, comprises approximately 50 structures with associated systems and equipment, all of which sustained damage during the declared storm event. The applicant has requested Public Assistance Alternative Procedures (PAAP) funding for a proposal to mitigate the Bay Park Waste Water Treatment facility against the future risk of storm damage and consequent risk of service disruption from a similar storm event.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, the Nassau County Department of Public Works (through their consultant, Arcadis) conducted consultation with the New York State Historic Preservation Office (SHPO) for the proposed repair and mitigation work at the Bay Park Waste Water Treatment Plant. On November 25, 2013, Arcadis initiated consultation for the following projects:

- Electrical Distribution System Flood Repair and Mitigation
- Perimeter Flood Protection
- Sludge Dewatering Facility Repair and Mitigation
- Hardening of Critical Tier I Facilities

In a letter dated April 7, 2014 the NYSHPO made a determination of ‘No Effect’ cultural resources in or eligible for inclusion in the National Registers of Historic Places by the above mentioned projects (14PR01284).

However, FEMA has recently received a clarification in the scope of work for the perimeter flood protection. The original scope of work did not identify the vertical limits of construction. The clarification indicates that the project will exceed the depth of fill and extend into soils that could potential contain subsurface archaeological deposits. Therefore, the intention of this letter is to clarify the extent of ground disturbance necessary for the construction of the perimeter flood protection project, and address its potential impact to unidentified archaeological resources.

Area of Potential Effects (APE) and Identification

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect historic resources. The APE for this undertaking will include ground disturbance at the location of the perimeter flood protection (berm and flood wall). In addition, the APE includes the viewsheds from the surrounding communities and the view from the adjacent park.

The construction of the perimeter flood protection structure included in this proposed scope of work will impact the adjacent county-owned park to the east and west of the Bay Park WWTP, which is utilized by the public for recreation. The construction of the perimeter flood protection structure will also impact nearby Marjorie Lane. As a result, it is being proposed to relocate the road adjacent to the earthen berm.

Review of Effects to Historic Resources

FEMA Archeologist Patrick McGinnis used NYSHPO maps to determine that the project area is located in an area of archaeological sensitivity. No previously recorded archaeological sites have been identified within the project site and it is not contiguous to a property listed or eligible for listing on the National Register of Historic Places.

Based on historic maps of the site, dating to the late-1800s, the area was once marshland connecting waterways leading to the Atlantic Ocean. The marshlands were filled to allow development of the area including the construction of the Bay Park WWTP. The proposed flood mitigation work at the Bay Park WWTP includes the construction of a combination earthen berm and concrete flood wall structure around the perimeter of the plant as the primary defense against flooding. Project plans call for excavation for the flood barrier below the depth of the fill and into intact native soils. The grade elevation varies throughout the site from approximately 5’-10’, but the flood wall and berm will be approximately 10-feet in height along the perimeter of the

plant. A slurry wall will extend around the perimeter of the plant, from the ground surface down to an elevation of -25-feet. Geotechnical analysis for the project indicates that fill deposits present on the site vary from a depth of 4-feet to 13.5- feet (see attached report and figure). The fill layer is underlain by a layer of organic marine deposits of thick gray clay varying between 0.3-feet to 15-feet thick. The organic marine deposit is underlain by layer of sand in which the borings were terminated after penetrations of 3.1-feet to 48-feet.

In the geotechnical report, two borings in the NW corner of the site contained a thin, but distinctive layer of gray silty clay within the Sand Stratum between elevations -23 and -25. Additionally, three of the borings in the western half of the site did not return the layer of organic marine deposits in gray clay and instead the Sand Stratum was encountered immediately below the fill layer at elevations of -4, -4.7, and 3.2. The lower more compact layer of the sand stratum is representative of the older Ronkonkoma glacial advance, while the upper sand stratum is representative of the Harbor Hill glacial advance that had retreated from Long Island approximately 13,000 years ago. Previous research has identified prehistoric archaeological deposits within these latter Holocene glacial outwash sand deposits in areas with similar deposits. Although, no previously recorded archaeological sites have been identified within the project site, potential for prehistoric artifacts exists within the Holocene glacial outwash deposits.

Determination of Effect

Based on these factors FEMA has determined that there will be **No Adverse Effect** to cultural resources with the following condition:

- Archaeological monitoring and sampling be conducted during the construction of the slurry wall to determine the absence or presence of prehistoric materials using the methods outlined in the attached report (2012, Audin, Michael and John Stitler, *Archaeological Monitoring Report During Construction of the Slurrywall for the Standard Chlorine Chemical Company Site, Interim Response Action Workplan Town of Kearny, Hudson County, New Jersey*).

We request concurrence with this determination of effect. FEMA is asking for a response within fifteen calendar days pursuant to the executed Programmatic Agreement between the State of New York, FEMA, ACHP and resident tribes. Should you need additional information please contact Patrick McGinnis, Archaeologist, at (619) 756-3479.

Sincerely,



John Dawson
EHP Branch Director
4085-DR-NY

JD/tn

List of Attachments

- *Archaeological Monitoring Report During Construction of the Slurrywall for the Standard Chlorine Chemical Company Site, Interim Response Action Workplan Town of Kearny, Hudson County, New Jersey*
- *Geotechnical Data Report Bay Park Sewage Treatment Plant Perimeter Flood Protection*
- Map from Geotechnical Data Report showing boring locations and grading plan.



FEMA

May 28, 2014

Chief Paula Pechonick
Delaware Tribe of Indians
Delaware Tribal Headquarters
170 N.E. Barbara
Bartlesville, OK 74006

Re: **Notification of Undertaking by Department of Homeland Security, FEMA**
Grant Name and Number: PAAP/PW-3714
Grantee/Sub-grantee: State of New York/Nassau County (Department of Public Works)
Undertaking: Repairs and Mitigation work at Bay Park Waste Water Treatment Plant, 4
Marjorie Lane, East Rockaway, Nassau County (40.631334, -73.663039)

Dear Chief Pechonick:

The Public Assistance Program of the Department of Homeland Security-Federal Emergency Management Agency (FEMA) is proposing to provide grant funding through the Public Assistance Alternative Procedures (PAAP) Program to the State of New York (Grantee), who will provide funds to Nassau County (Sub-grantee) to mitigate the Bay Park Waste Water Treatment facility against the future risk of storm damage and consequent risk of service disruption from a similar storm event.

The Bay Park Waste Water Treatment Facility, which first opened in 1950, comprises approximately 50 structures with associated systems and equipment, all of which sustained damage during the declared storm event at 4 Marjorie Lane, East Rockaway. The project will include repairs, improvements, and mitigation work at the Bay Park Sewage Treatment Plant. This letter serves as notification that FEMA will be funding this undertaking, as described herein.

Undertaking

The proposed flood mitigation work at the Bay Park WWTP includes the construction of a barrier surrounding the Bay Park STP to mitigate against future flood events. The boundary will protect the property to a 500-year flood elevation, which corresponds to an elevation of 17.1-ft NAVD88 or 18.3-ft NGVD 29 (where NGVD 29 is equivalent to the Nassau County Datum). The barrier will be part earthen berm and part concrete floodwall. Berms will cover a majority of the East and West sides of the Plant while a T-wall will comprise parts of the North and South boundaries. The barrier includes a slurry wall to stop infiltration of groundwater into the Plant. A main entrance

gate and guardhouse is included at the North end of the Plant on Marjorie Lane, and two additional gates are included on the South side of the Plant. The proposed work also includes the rehabilitation of the park adjacent to the East side of the Plant, as the proposed berm footprint will displace current park elements. The Park, which includes a baseball field, tennis courts, restroom facilities, will be reconfigured, and one existing comfort station will be replaced with a new comfort station in a new location.

In addition, repair and mitigation work at the Bay Park WWTP will include the following: construction of three (3) elevated unit substations; mitigation and repair of the electrical distribution system; repair and mitigation of the sludge dewatering facility, hardening of Critical Tier I facilities; rehabilitation of the final settling tank; improvements to the effluent pumping facility; and correction at the Barnes Avenue SSO.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect historic resources. The APE for this undertaking will include ground disturbance at the location of the perimeter flood protection (berm and flood wall). In addition, the APE includes the viewsheds from the surrounding communities and the view from the adjacent park.

Identification and Evaluation

FEMA Archeologist Patrick McGinnis used NYSHPO maps to determine that the project area is located in an area of archaeological sensitivity. No previously recorded archaeological sites have been identified within the project site and it is not contiguous to a property listed or eligible for listing on the National Register of Historic Places.

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fill layer at elevations of -4, -4.7, and 3.2. The lower more compact layer of the sand stratum is representative of the older Ronkonkoma glacial advance, while the upper sand stratum is representative of the Harbor Hill glacial advance that had retreated from Long Island approximately 13,000 years ago. Previous research has identified prehistoric archaeological deposits within these latter Holocene glacial outwash sand deposits in areas with similar deposits. Although, no previously recorded archaeological sites have been identified within the project site, potential for prehistoric artifacts exists within the Holocene glacial outwash deposits.

Assessment of Effects

Based on these factors FEMA determined that there will be **No Adverse Effect** to cultural resources with the following condition:

- Archaeological monitoring and sampling be conducted during the construction of the slurry wall to determine the absence or presence of prehistoric materials using the methods outlined in the enclosed report (2012, Audin, Michael and John Stitler, *Archaeological Monitoring Report During Construction of the Slurrywall for the Standard Chlorine Chemical Company Site, Interim Response Action Workplan Town of Kearny, Hudson County, New Jersey*).

Other Interested Parties

FEMA is also providing notice of this Undertaking to the Shinnecock Nation.

If you have any questions or comments regarding this Undertaking, please contact John Dawson, EHP Branch Director at (202) 286-1627 or john.dawson@fema.dhs.gov.

Sincerely,



John Dawson
EHP Branch Director
Sandy Recovery Field Office
4085-DR-NY

CC: Dr. Brice Obermeyer, Tribal Historic Preservation Officer

Encl.: Archeological Monitoring Report (on CD)
Geotechnical Report (on CD)
Project Location Maps & Photos



FEMA

May 28, 2014

Chairman Daniel S. Collins, Sr.
Shinnecock Indian Nation Tribal Office
P.O. Box 5006
Southampton, NY 11969

Re: **Notification of Undertaking by Department of Homeland Security, FEMA**
Grant Name and Number: PAAP/PW-3714
Grantee/Sub-grantee: State of New York/Nassau County (Department of Public Works)
Undertaking: Repairs and Mitigation work at Bay Park Waste Water Treatment Plant, 4 Marjorie Lane, East Rockaway, Nassau County (40.631334, -73.663039)

Dear Chairman Collins:

The Public Assistance Program of the Department of Homeland Security-Federal Emergency Management Agency (FEMA) is proposing to provide grant funding through the Public Assistance Alternative Procedures (PAAP) Program to the State of New York (Grantee), who will provide funds to Nassau County (Sub-grantee) to mitigate the Bay Park Waste Water Treatment facility against the future risk of storm damage and consequent risk of service disruption from a similar storm event.

The Bay Park Waste Water Treatment Facility, which first opened in 1950, comprises approximately 50 structures with associated systems and equipment, all of which sustained damage during the declared storm event at 4 Marjorie Lane, East Rockaway. The project will include repairs, improvements, and mitigation work at the Bay Park Sewage Treatment Plant. This letter serves as notification that FEMA will be funding this undertaking, as described herein.

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Identification and Evaluation

FEMA Archeologist Patrick McGinnis used NYSHPO maps to determine that the project area is located in an area of archaeological sensitivity. No previously recorded archaeological sites have been identified within the project site and it is not contiguous to a property listed or eligible for listing on the National Register of Historic Places.

Based on historic maps of the site, dating to the late-1800s, the area was once marshland connecting waterways leading to the Atlantic Ocean. The marshlands were filled to allow development of the area including the construction of the Bay Park WWTP. The proposed flood mitigation work at the Bay Park WWTP includes the construction of a combination earthen berm and concrete flood wall structure around the perimeter of the plant as the primary defense against flooding. Project plans call for excavation for the flood barrier below the depth of the fill and into intact native soils. The grade elevation varies throughout the site from approximately 5'-10', but the flood wall and berm will be approximately 10-feet in height along the perimeter of the plant. A slurry wall will extend around the perimeter of the plant, from the ground surface down to an elevation of -25-feet. Geotechnical analysis for the project indicates that fill deposits present on the site vary from a depth of 4-feet to 13.5- feet (see attached report and figure). The fill layer is underlain by a layer of organic marine deposits of thick gray clay varying between 0.3-feet to 15-feet thick. The organic marine deposit is underlain by layer of sand in which the borings were terminated after penetrations of 3.1-feet to 48-feet.

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Other Interested Parties

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If you have any questions or comments regarding this Undertaking, please contact John Dawson, EHP Branch Director at (202) 286-1627 or john.dawson@fema.dhs.gov.

Sincerely,



John Dawson
EHP Branch Director
Sandy Recovery Field Office
4085-DR-NY

CC: Marguerite Smith, Esq., Office of Tribal Trustees

Encl.: Archeological Monitoring Report (on CD)
Geotechnical Report (on CD)
Project Location Maps & Photos



FEMA

June 5, 2014

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 Review, FEMA-4085-DR-NY, Hurricane Sandy (PW 3714)

Undertaking: Repairs, Improvements and Mitigation Work at Bay Park Sewage Treatment Plant

Addresses: 4 Marjorie Lane, East Rockaway (40.631334, -73.663039)

County: Nassau County

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 initiating Section 106 review for the above referenced properties.

As a result of the damage caused by Superstorm Sandy in New York, catastrophic loss across the City of New York and surrounding counties occurred, leaving many residents without homes or basic city services.

Project Information/Description of the Undertaking

As part of the agency response, FEMA plans to provide funding to Nassau County Department of Public Works (NCDPW) to fund permanent recovery work at the Bay Park Waste Water Treatment Plant. The facility, which first opened in 1950, comprises approximately 50 structures with associated systems and equipment, all of which sustained damage during the declared storm event. The applicant has requested Public Assistance Alternative Procedures (PAAP) funding for a proposal to mitigate the Bay Park Waste Water Treatment facility against the future risk of storm damage and consequent risk of service disruption from a similar storm event.

We consulted with your office by letter dated May 27, 2014 defining the scope of work for the slurry wall based on the assumption that the wall would be mechanically excavated by heavy equipment which would provide an opportunity for examination of the trench spoils for archaeological materials. As discussed by phone on June 4, 2014, FEMA has recently received a clarification in the scope of work for the perimeter flood protection. Therefore, the intention of

this letter is to clarify the extent of ground disturbance necessary for the construction of the perimeter flood protection project, and address its potential impact to unidentified archaeological resources.

Project plans call for ground disturbance for the flood barrier to elevation -25-feet which will penetrate below the depth of the fill and into intact native soils (see letter dated 5/27/2014 for a full description of the geoarchaeological sensitivity of the APE). The slurry will be installed by the Vibration Beam Method which uses a crane with a specially fabricated wide flange beam connected to a large vibratory hammer. Method of constructing a vertical barrier using a steel wide flange beam, plus a 14-inch fin, to penetrate and inject slurry through the existing soil to the required depth of the confining soil layer, or refusal, whichever occurs first. The fin acts as guide for the beam ensuring a continuous wall. The vibrated beam shall be a 33-inch wide flange beam, plus a 14-inch fin with appropriate slurry nozzles affixed to the bottom of the beam. The thickness of the driving shoe, as measured perpendicularly to the web shall be at least 4.5 inches. The vibratory hammer enables the vibrated beam to penetrate the subsoils. Slurry is injected at the base of the vibrated beam to create a non-erodible slurry wall panel. Each beam penetration in plan view is 47 inches long (33-inch beam plus the 14-inch fin). The continuous vertical barrier is created by advancing the beam 30 inches there by overlapping the previous 47-inch beam penetration (panel) approximately 17 inches. The 17-inch overlap is created from the 14-inch fin and 3 inches of the wide flange beam. Along the alignment, a shallow pre-trench is incorporated into the crane platform to contain the excess grout slurry as they came to the surface. If, necessary, at the beginning of each production day, additional grout is placed in the trench to replace any grout slurry that may have been lost due to settlement. Minimal excavation is required, as only a 2' x 2' reservoir trench needs to be dug along the wall's alignment. The reservoir trench is filled with slurry and maintained to ensure the availability of a sufficient volume of slurry to fill the void left by the beam, plus voids in the surrounding soil during extraction.

Jet-grouting will be used to inject create slurry columns beneath utilities in lieu of the slurry wall. A jet grout column is created by injecting the fluids at high pressure, rotating, and lifting the injecting monitor a constant rate. The soil is eroded and mixed with the fluids or grout and forms cementitious grout column. Piles will be used to support the T-wall construction and will also require some limited ground disturbance. The piles are 18" and 24" in diameter spaced between at intervals 6.6' and 7.6 feet depending on the diameter of the pile. The length of the piles varies between 27.25 and 52.75 linear feet. The methods of construction do not provide an opportunity to examine displaced and determine the presence or absence of archaeological materials within disturbed soil. This work will displace soils underneath the ground surface with only small amounts of spoils returned to the surface. If archaeological deposits were encountered during pile driving, slurry wall construction or jet grouting these materials would likely be compacted down or moved laterally within the same deposit. Based on these factors and given the limited potential for the disturbed sediments to contain prehistoric archaeological resources, improvements within the APE have little to no potential to affect a prehistoric archaeological site.

Area of Potential Effects (APE) and Identification

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect historic resources. The APE for this undertaking will include ground disturbance at the location of the perimeter flood protection (berm and flood wall). In addition, the APE includes the viewsheds from the surrounding communities and the view from the adjacent park.

The construction of the perimeter flood protection structure included in this proposed scope of work will impact the adjacent county-owned park to the east and west of the Bay Park WWTP, which is utilized by the public for recreation. The construction of the perimeter flood protection structure will also impact nearby Marjorie Lane. As a result, it is being proposed to relocate the road adjacent to the earthen berm.

Review of Effects to Historic Resources

FEMA Archeologist Patrick McGinnis used NYSHPO maps to determine that the project area is located in an area of archaeological sensitivity. No previously recorded archaeological sites have been identified within the project site and it is not contiguous to a property listed or eligible for listing on the National Register of Historic Places.

Determination of Effect

Based on these factors FEMA has determined that there will be **No Adverse Effect** to cultural resources with the following condition:

- An archaeological study synthesizing previous archaeological research and data on the intertidal estuarine marshes of the region will be conducted to better understand the potential for archaeological resources within the project APE.

We request concurrence with this determination of effect. FEMA is asking for a response within fifteen calendar days pursuant to the executed Programmatic Agreement between the State of New York, FEMA, ACHP and resident tribes. Should you need additional information please contact Patrick McGinnis, Archaeologist, at (619) 756-3479.

Sincerely,



John Dawson
EHP Branch Director
4085-DR-NY

JD/tn



FEMA

June 5, 2014

Chief Paula Pechonick
Delaware Tribe of Indians
Delaware Tribal Headquarters
170 N.E. Barbara
Bartlesville, OK 74006

Re: **Notification of Undertaking by Department of Homeland Security, FEMA**
Grant Name and Number: PAAP/PW-3714
Grantee/Sub-grantee: State of New York/Nassau County (Department of Public Works)
Undertaking: Repairs and Mitigation work at Bay Park Waste Water Treatment Plant, 4
Marjorie Lane, East Rockaway, Nassau County (40.631334, -73.663039)

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Other Interested Parties

FEMA is also providing notice of this Undertaking to the Shinnecock Nation.

If you have any questions or comments regarding this Undertaking, please contact John Dawson, EHP Branch Director at (202) 286-1627 or john.dawson@fema.dhs.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Dawson', with a long horizontal flourish extending to the right.

John Dawson
EHP Branch Director
Sandy Recovery Field Office
4085-DR-NY

CC: Dr. Brice Obermeyer, Tribal Historic Preservation Officer



FEMA

June 5, 2014

Chairman Daniel S. Collins, Sr.
Shinnecock Indian Nation Tribal Office
P.O. Box 5006
Southampton, NY 11969

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Undertaking: Repairs and Mitigation work at Bay Park Waste Water Treatment Plant, 4
Marjorie Lane, East Rockaway, Nassau County (40.631334, -73.663039)

Dear Chairman Collins:

The Public Assistance Program of the Department of Homeland Security-Federal Emergency Management Agency (FEMA) is proposing to provide grant funding through the Public Assistance Alternative Procedures (PAAP) Program to the State of New York (Grantee), who will provide funds to Nassau County (Sub-grantee) to mitigate the Bay Park Waste Water Treatment facility against the future risk of storm damage and consequent risk of service disruption from a similar storm event.

The Bay Park Waste Water Treatment Facility, which first opened in 1950, comprises approximately 50 structures with associated systems and equipment, all of which sustained damage during the declared storm event at 4 Marjorie Lane, East Rockaway. The project will include repairs, improvements, and mitigation work at the Bay Park Sewage Treatment Plant. This letter serves as notification that FEMA will be funding this undertaking, as described herein.

Undertaking

We recently sent you project notification by letter dated May 28, 2014 defining the scope of work for the slurry wall based on the assumption that the wall would be mechanically excavated by heavy equipment which would provide an opportunity for examination of the trench spoils for archaeological materials. As discussed by phone on June 4, 2014, FEMA has recently received a clarification in the scope of work for the perimeter flood protection. Therefore, the intention of this letter is to clarify the extent of ground disturbance necessary for the construction of the

perimeter flood protection project, and address its potential impact to unidentified archaeological resources.

Project plans call for ground disturbance for the flood barrier to elevation -25-feet which will penetrate below the depth of the fill and into intact native soils (see letter dated 5/28/2014 for a full description of the geoarchaeological sensitivity of the APE). The slurry will be installed by the Vibration Beam Method which uses a crane with a specially fabricated wide flange beam connected to a large vibratory hammer. Method of constructing a vertical barrier using a steel wide flange beam, plus a 14-inch fin, to penetrate and inject slurry through the existing soil to the required depth of the confining soil layer, or refusal, whichever occurs first. The fin acts as guide for the beam ensuring a continuous wall. The vibrated beam shall be a 33-inch wide flange beam, plus a 14-inch fin with appropriate slurry nozzles affixed to the bottom of the beam. The thickness of the driving shoe, as measured perpendicularly to the web shall be at least 4.5 inches. The vibratory hammer enables the vibrated beam to penetrate the subsoils. Slurry is injected at the base of the vibrated beam to create a non-erodible slurry wall panel. Each beam penetration in plan view is 47 inches long (33-inch beam plus the 14-inch fin). The continuous vertical barrier is created by advancing the beam 30 inches there by overlapping the previous 47-inch beam penetration (panel) approximately 17 inches. The 17-inch overlap is created from the 14-inch fin and 3 inches of the wide flange beam. Along the alignment, a shallow pre-trench is incorporated into the crane platform to contain the excess grout slurry as they came to the surface. If, necessary, at the beginning of each production day, additional grout is placed in the trench to replace any grout slurry that may have been lost due to settlement. Minimal excavation is required, as only a 2' x 2' reservoir trench needs to be dug along the wall's alignment. The reservoir trench is filled with slurry and maintained to ensure the availability of a sufficient volume of slurry to fill the void left by the beam, plus voids in the surrounding soil during extraction.

Jet-grouting will be used to inject create slurry columns beneath utilities in lieu of the slurry wall. A jet grout column is created by injecting the fluids at high pressure, rotating, and lifting the injecting monitor a constant rate. The soil is eroded and mixed with the fluids or grout and forms cementitious grout column. Piles will be used to support the T-wall construction and will also require some limited ground disturbance. The piles are 18" and 24" in diameter spaced between at intervals 6.6' and 7.6 feet depending on the diameter of the pile. The length of the piles varies between 27.25 and 52.75 linear feet. The methods of construction do not provide an opportunity to examine displaced and determine the presence or absence of archaeological materials within disturbed soil. This work will displace soils underneath the ground surface with only small amounts of spoils returned to the surface. If archaeological deposits were encountered during pile driving, slurry wall construction or jet grouting these materials would likely be compacted down or moved laterally within the same deposit. Based on these factors and given the limited potential for the disturbed sediments to contain prehistoric archaeological resources, improvements within the APE have little to no potential to affect a prehistoric archaeological site.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect historic resources. The APE for this undertaking will include ground disturbance at the location of the perimeter flood

protection (berm and flood wall). In addition, the APE includes the viewsheds from the surrounding communities and the view from the adjacent park.

Review of Effects to Historic Resources

FEMA Archeologist Patrick McGinnis used NYSHPO maps to determine that the project area is located in an area of archaeological sensitivity. No previously recorded archaeological sites have been identified within the project site and it is not contiguous to a property listed or eligible for listing on the National Register of Historic Places.

Determination of Effect

Based on these factors FEMA has determined that there will be **No Adverse Effect** to cultural resources with the following condition:

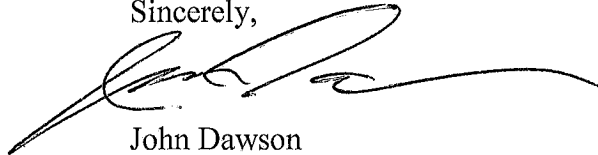
- An archaeological study synthesizing previous archaeological research and data on the intertidal estuarine marshes of the region will be conducted to better understand the potential for archaeological resources within the project APE.

Other Interested Parties

FEMA is also providing notice of this Undertaking to the Delaware Tribe of Indians.

If you have any questions or comments regarding this Undertaking, please contact John Dawson, EHP Branch Director at (202) 286-1627 or john.dawson@fema.dhs.gov.

Sincerely,

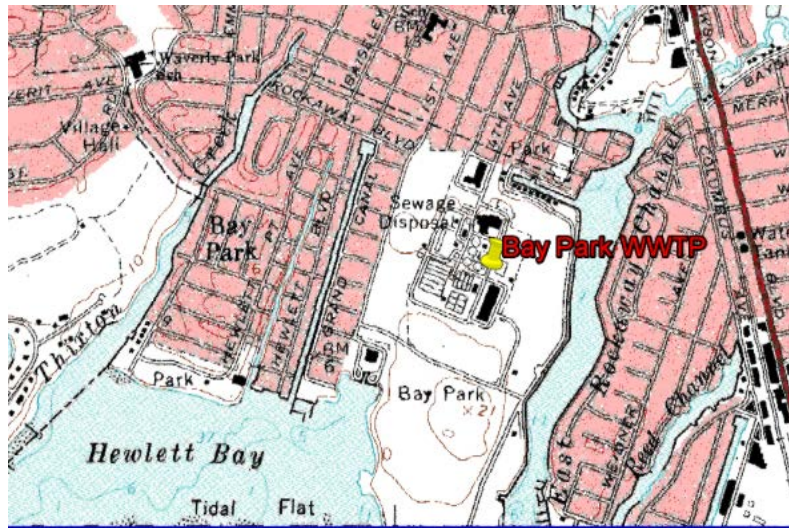


John Dawson
EHP Branch Director
Sandy Recovery Field Office
4085-DR-NY

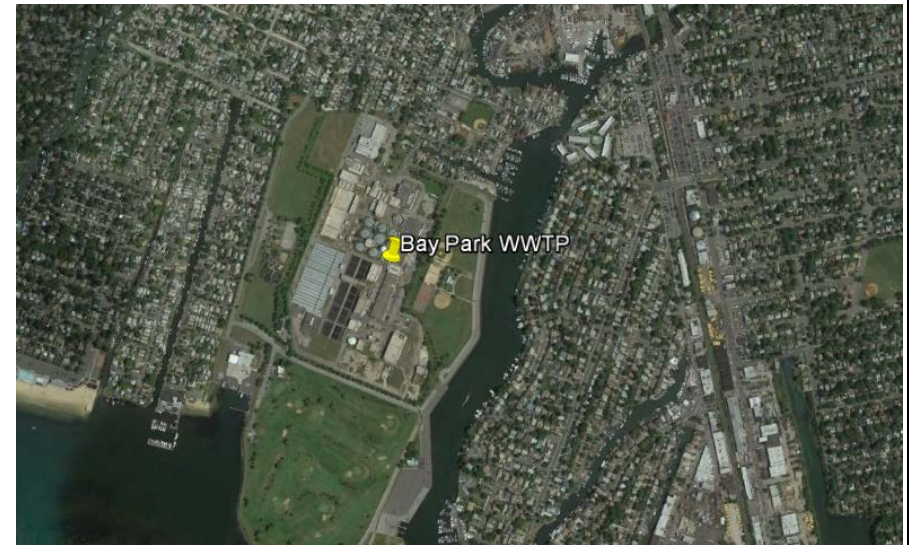
CC: CC: Marguerite Smith, Esq., Office of Tribal Trustees; Tohanash Tarrant (via email)

FEMA 4085-DR-NY Nassau County Department of Public Works - Bay Park Waste Water Treatment Plant

Bay Park WWTP: Topographical Map



Bay Park WWTP: Aerial View



Existing Comfort Station – Oblique Elevation

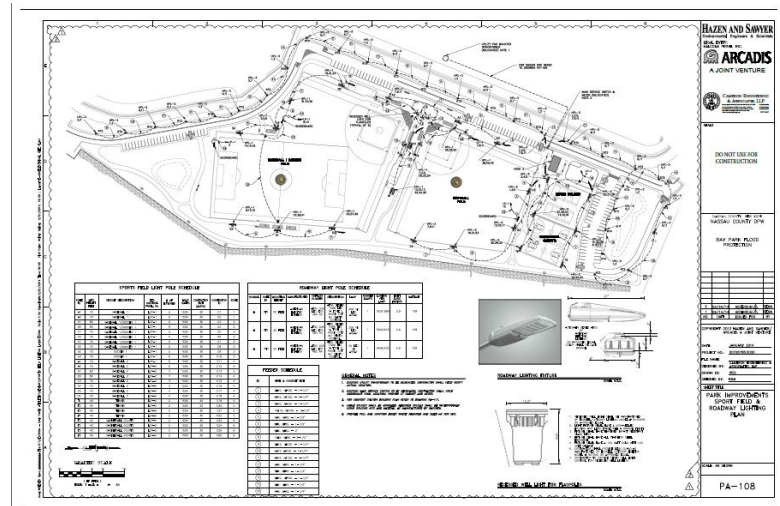


Existing Park Facility Building (Facing Northwest)
Proposed to be Demolished and Replaced

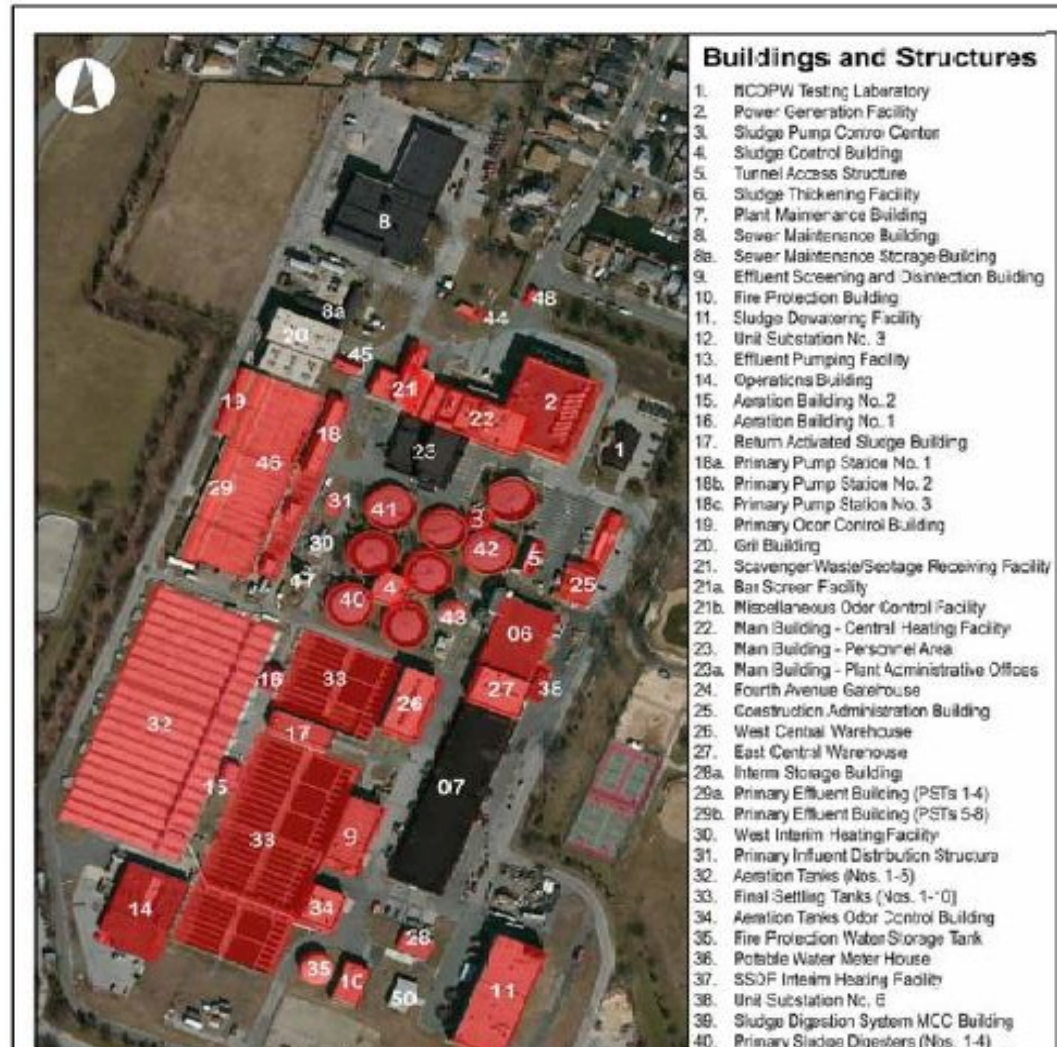
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Environmental Engineers & Scientists
ARCADIS
A JOINT VENTURE

DATE: May 2014

Bay Park: New Sports Facility Schematic – New Comfort Station



Bay Park WWTP Complex



HAZEN and SAWYER
Sewerage & Water Division

LOWE, LITTLE, LITTLE & LITTLE, INC.
ARCADIS
A JOINT VENTURE

PROPOSED SITE PLAN

GENERAL

CVL-C03
CVL-C04

CVL-C07
CVL-C08

CVL-C11
CVL-C12

HAZEN and SAWYER
Sewerage & Water Division

LOWE, LITTLE, LITTLE & LITTLE, INC.
ARCADIS
A JOINT VENTURE

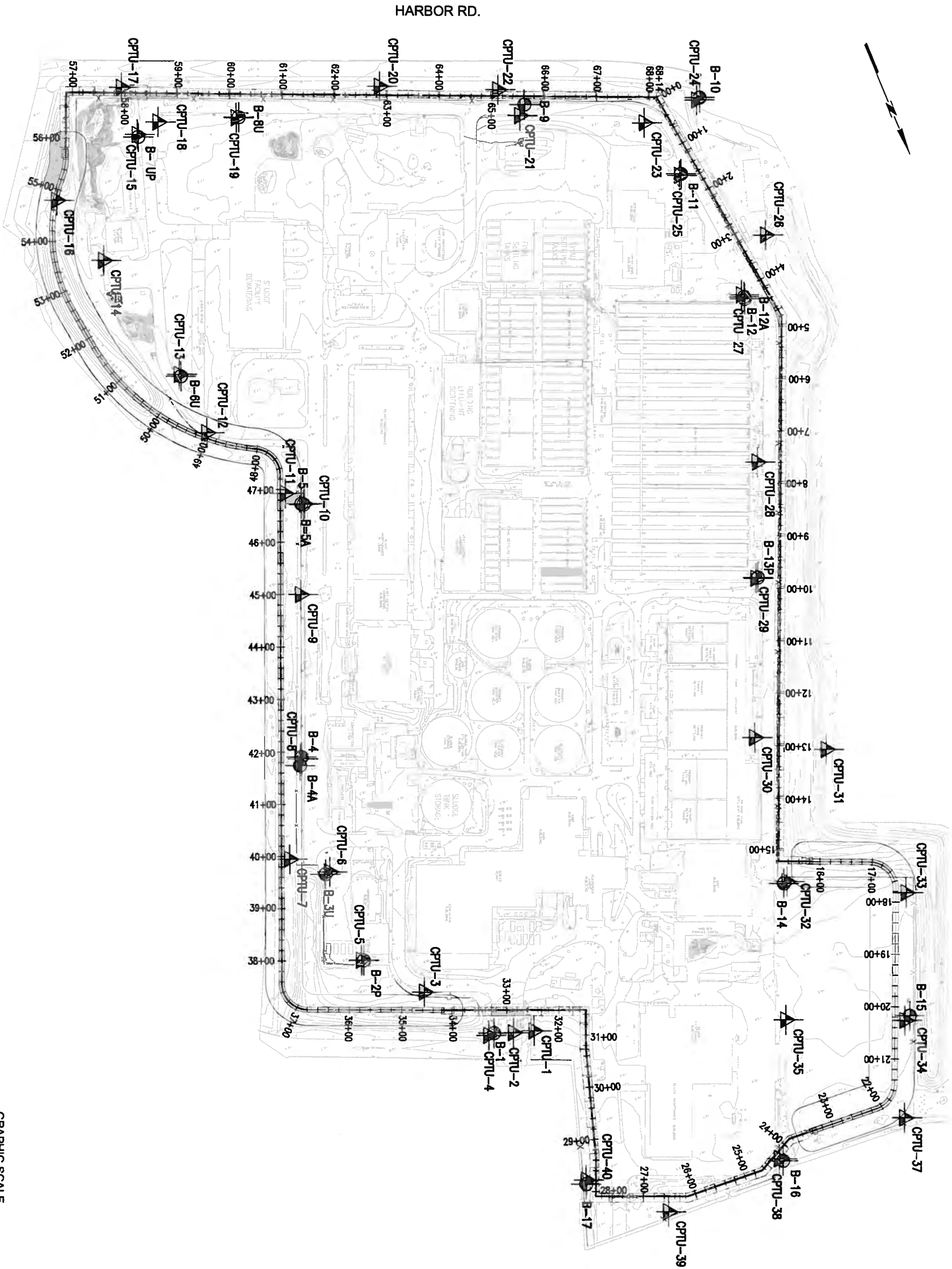
PROPOSED SITE PLAN

GENERAL

CVL-C03
CVL-C04

CVL-C07
CVL-C08

CVL-C11
CVL-C12



- NOTES:**
1. BASE PLAN IS ELECTRONIC FILE PROVIDED ARCADIS-U.S.
 2. BORING AND CPTU LOCATIONS AND GROUND SURFACE ELEVATIONS WERE SURVEYED BY MUNOZ ENGINEERING P.C. AS SHOWN ON DRAWING NO. BP-1 DATED 10-23-2013.
 3. BORINGS NOS. B-1 THROUGH B-17 WERE MADE BY WARREN GEORGE, INC. BETWEEN OCTOBER 4 AND 23, 2013 UNDER CONTINUOUS INSPECTION BY MUESER RUTLEDGE CONSULTING ENGINEERS (MRECE).
 4. CPTU SOUNDINGS NOS. CPTU-1 THROUGH CPTU-35 AND CPTU-37 THROUGH CPTU-40 WERE MADE BY CONETEC, INC. BETWEEN OCTOBER 7 AND 17, 2013.

- LEGEND:**
- B-1 - BORING MADE IN 2013.
 - U - INDICATES UNDISTURBED SAMPLING.
 - P - INDICATES PIEZOMETER INSTALLATION.
 - A - INDICATES OFFSET FROM ORIGINAL LOCATION.
 - CPTU-1 - PIEZOCONE SOUNDING MADE IN 2013.

REV.	DATE	BY	DESCRIPTION
BAY PARK SEWAGE TREATMENT PLANT PERIMETER FLOOD PROTECTION			
BAY PARK			
ARCADIS - U.S.			
LONG ISLAND CITY			
NEW YORK			
MUESER RUTLEDGE CONSULTING ENGINEERS			
14 PENN PLAZA - 225 W. 34TH STREET, NY, NY 10122			
SCALE		MADE BY: E.C.	DATE: 01-03-2014
GRAPHIC		CPTU BY: R.T.W.	DATE: 01-03-2014
BORING AND CPTU LOCATION PLAN			FILE NUMBER
			12047
			DRAWING NUMBER
			B-1

Appendix Correspondence B

Figure 2 - Nassau County's Consulting Firm

SHPO Consultation Correspondence

November 25, 2013

Ruth Pierpont
New York State Office of Parks, Recreation and Historic Preservation
Peebles Island Resource Center
Delaware Avenue
Cohoes, NY 12047

Subject:

Nassau County Department of Public Works
Bay Park Sewage Treatment Plant
Electrical Distribution System Flood Repair and Mitigation, Contract CI-5146-33-00

Dear Ms. Pierpont:

The Nassau County Department of Public Works (NCDPW) proposes to repair and mitigate the existing electrical facilities within the Bay Park Sewage Treatment Plant. The electrical distribution system is critical to the facility's operation and it sustained significant flooding damage by Hurricane Sandy.

The NYSHPO website was consulted and indicated that the Bay Park STP falls within archeologically sensitive areas. However, it is not contiguous to a property listed or recommended for listing in the New York State or National Register of Historic Places. Printouts of the NYSHPO maps are attached. This project is expected to be partially funded under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act).

Minor earth disturbance may be required for the replacement and repair of some of the electrical systems within the facility. All proposed work would be within the previously disturbed areas within the Bay Park Sewage Treatment Plant (Figure 1 Aerial Photograph).

The approval process requires a project review by the Historic Preservation Field Services Bureau. To facilitate review, an information package is enclosed and consists of the following documents:

- Completed Project Review Cover Form
- Aerial Photograph
- Site Map
- NYSHPO map identifying archeo-sensitive areas
- Site Photograph

It is anticipated that a Letter of No Impact would be issued for the proposed project activities. If there are any questions or if additional information is needed, please do not hesitate to contact Michael DeNicola at 917-882-9259, Peter Glus at 718-397-2378, or the NCDPW at 516-571-7515.

Sincerely,

Hazen and Sawyer/ ARCADIS, a Joint Venture



Michael DeNicola, P.E.
Vice President, Hazen and Sawyer



Peter H. Glus, P.E.
Vice President, ARCADIS U.S.

Enclosures

Copies:

J. Davenport [NCDPW]



**New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau**

Peebles Island Resource Center, PO Box 189, Waterford, NY 12188-0189 (Mail)
Delaware Avenue, Cohoes 12047 (Delivery)

(518) 237-8643

PROJECT REVIEW COVER FORM

Rev. 5-05

*Please complete this form and attach it to the top of any and all information submitted to this office for review.
Accurate and complete forms will assist this office in the timely processing and response to your request.*

This information relates to a previously submitted project.

PROJECT NUMBER _____ **PR** _____

COUNTY _____

☐

If you have checked this box and noted the previous Project Review (PR) number assigned by this office you do not need to continue unless any of the required information below has changed.

2. This is a new project.

☒

If you have checked this box you will need to complete ALL of the following information.

Project Name Nassau County Department of Public Works - Bay Park Sewage Treatment Plant - Electrical Distribution System Flood Repair and Mitigation

Location 4 Marjorie Lane
You MUST include street number, street name and/or County, State or Interstate route number if applicable

City/Town/Village East Rockaway, NY 11518
List the correct municipality in which your project is being undertaken. If in a hamlet you must also provide the name of the town.

County Nassau County
If your undertaking* covers multiple communities/counties please attach a list defining all municipalities/counties included.

TYPE OF REVIEW REQUIRED/REQUESTED (Please answer both questions)

A. Does this action involve a permit approval or funding, now or ultimately from any other governmental agency?

☐ No ☒ Yes

If Yes, list agency name(s) and permit(s)/approval(s)

Agency involved	Type of permit/approval	State	Federal
FEMA	Stafford Act - Repair/Mitigation Funding	<input type="checkbox"/>	<input checked="" type="checkbox"/>
_____	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	<input type="checkbox"/>	<input type="checkbox"/>

B. Have you consulted the NYSHPO web site at ** <http://nysparks.state.ny.us> to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes:

☐ Yes ☐ No

Was the project site wholly or partially included within an Identified archeologically sensitive area?

☒ Yes ☐ No

Does the project site involve or is it substantially contiguous to a property listed or recommended for listing in the NY State or National Registers of Historic Places?

☐ Yes ☒ No

CONTACT PERSON FOR PROJECT

Name Joseph L. Davenport, P.E. **Title** Chief Sanitary Engineer

Firm/Agency Nassau County Department of Public Works

Address 3340 Merrick Road, Building R, 3rd Floor **City** Wantagh **STATE** NY **Zip** 11793

Phone (516) 571-7515 **Fax** (516) 571-7511 **E-Mail** jdavenport@nassaucountyny.gov

**<http://nysparks.state.ny.us> then select HISTORIC PRESERVATION then select On Line Resources

The Historic Preservation Review Process in New York State

In order to insure that historic preservation is carefully considered in publicly-funded or permitted undertakings*, there are laws at each level of government that require projects to be reviewed for their potential impact/effect on historic properties. At the federal level, Section 106 of the National Historic Preservation Act of 1966 (NHPA) directs the review of federally funded, licensed or permitted projects. At the state level, Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law of 1980 performs a comparable function. Local environmental review for municipalities is carried out under the State Environmental Quality Review Act (SEQRA) of 1978. regulations on line at:

<http://nysparks.state.ny.us> then select **HISTORIC PRESERVATION** then select **Environmental Review**

Project review is conducted in two stages. First, the Field Services Bureau assesses affected properties to determine whether or not they are listed or eligible for listing in the New York State or National Registers of Historic Places. If so, it is deemed "historic" and worthy of protection and the second stage of review is undertaken. The project is reviewed to evaluate its impact on the properties significant materials and character. Where adverse effects are identified, alternatives are explored to avoid, or reduce project impacts; where this is unsuccessful, mitigation measures are developed and formal agreement documents are prepared stipulating these measures.

ALL PROJECTS SUBMITTED FOR REVIEW SHOULD INCLUDE THE FOLLOWING MATERIAL(S).



Project Description

Attach a full description of the nature and extent of the work to be undertaken as part of this project. Relevant portions of the project applications or environmental statements may be submitted.



Maps Locating Project

Include a map locating the project in the community. The map must clearly show street and road names surrounding the project area as well as the location of all portions of the project. Appropriate maps include tax maps, Sanborn Insurance maps, and/or USGS quadrangle maps.



Photographs

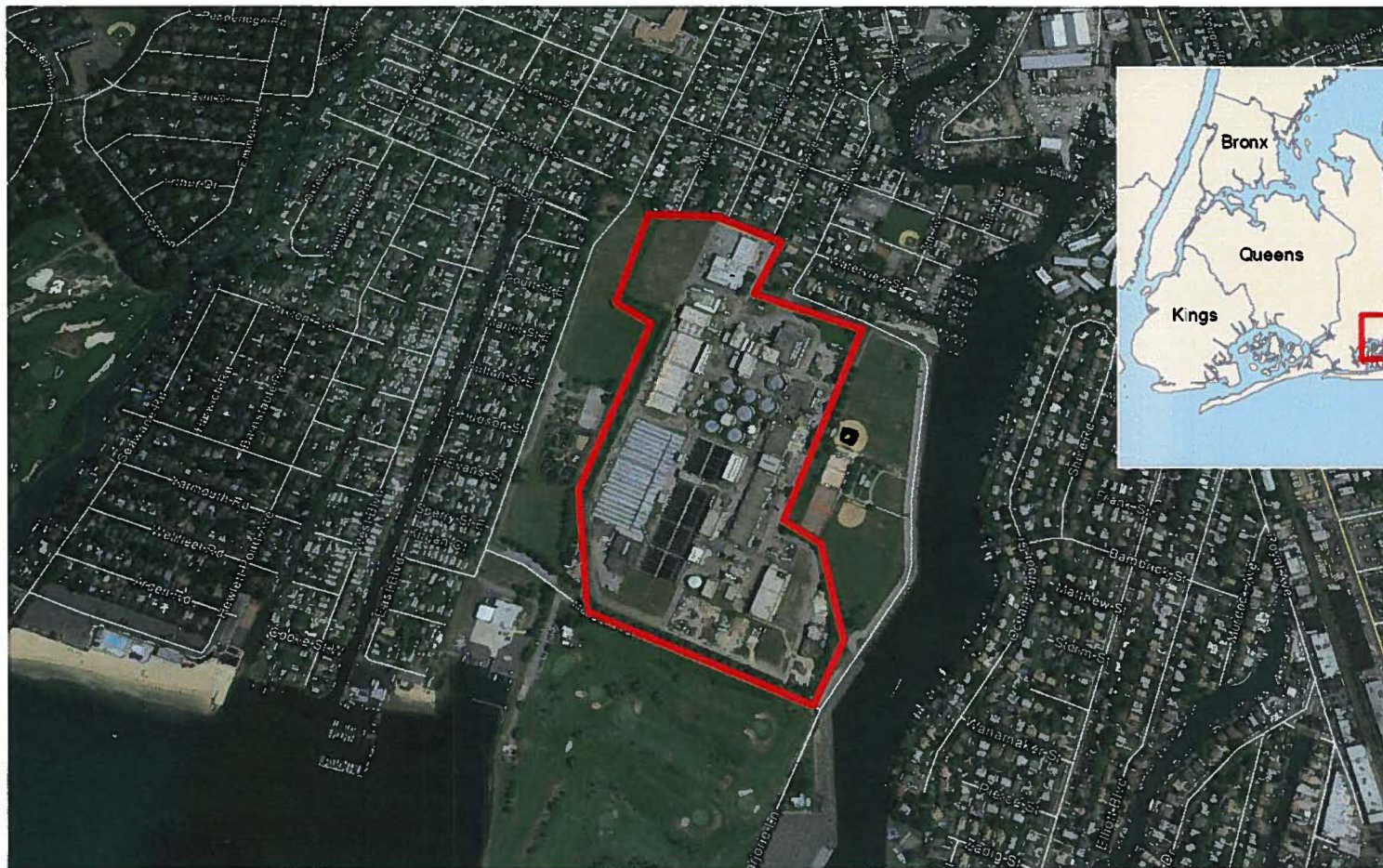
Photographs may be black and white prints, color prints, or color laser/photo copies; standard (black and white) photocopies are NOT acceptable.

-If the project involves rehabilitation, include photographs of the building(s) involved. Label each exterior view to a site map and label all interior views.

-If the project involves new construction, include photographs of the surrounding area looking out from the project site. Include photographs of any buildings (more than 50 years old) that are located on the project property or on adjoining property.

NOTE: Projects submissions will not be accepted via facsimile or e-mail.

***Undertaking** is defined as an agency's purchase, lease or sale of a property, assistance through grants, loans or guarantees, issuing of licenses, permits or approvals, and work performed pursuant to delegation or mandate.



Aerial Map – Approximate Boundaries of Bay Park STP

Bay Park STP – Electrical Distribution System Flood Repair and Mitigation

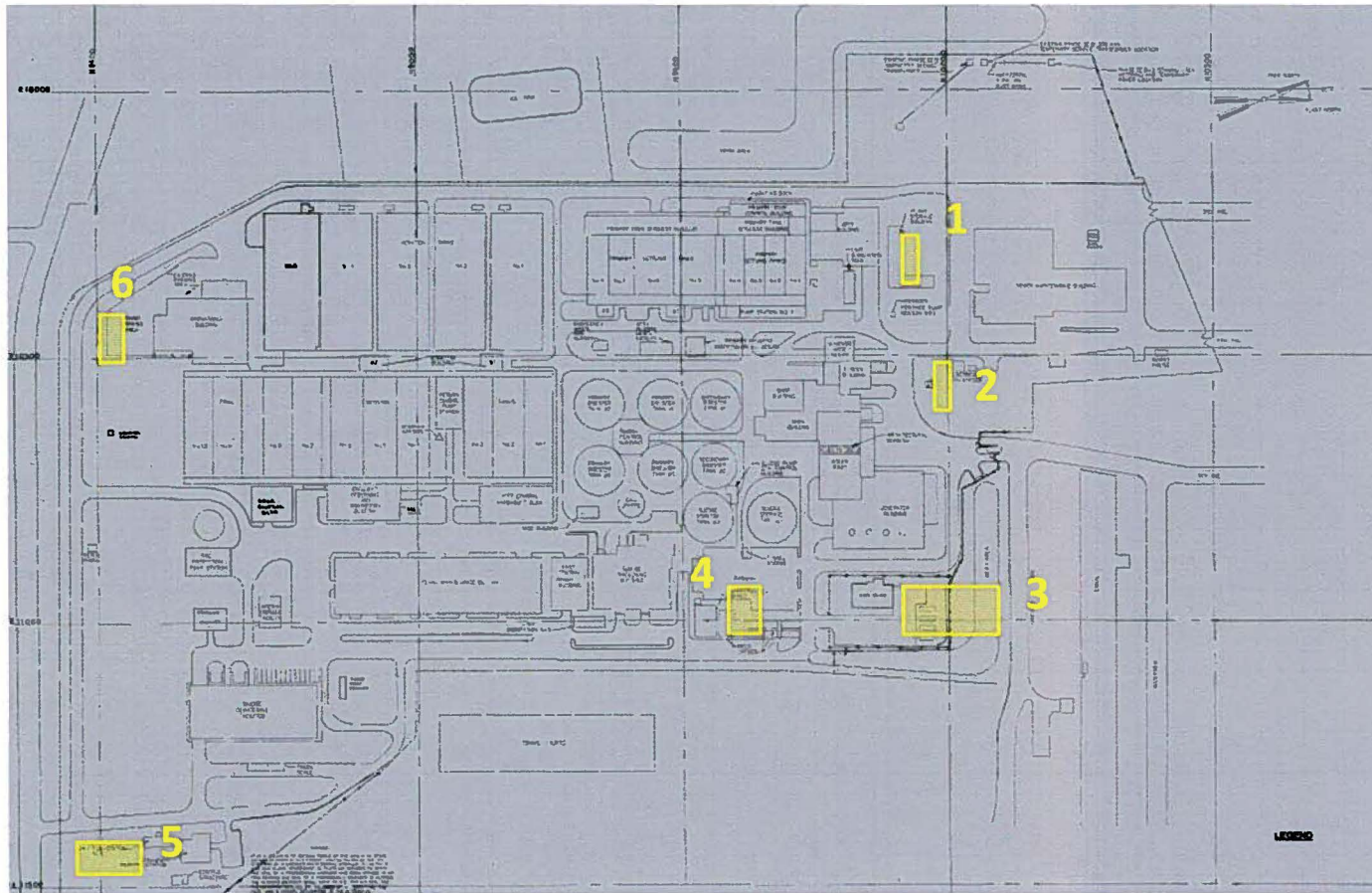
HAZEN AND SAWYER
Environmental Engineers & Scientists

ARCADIS
Infrastructure · Water · Environment · Buildings

a joint venture

DATE: November 2013

Figure
1



Site Map - Approximate Locations of Proposed Electrical Substation Improvements

Bay Park STP – Electrical Distribution System Flood Repair and Mitigation

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DATE: November 2013

Figure
2