

**Raritan Bay and Sandy Hook Bay
Highlands, New Jersey
Coastal Storm Risk Management
Feasibility Study**

**Appendix A
Environmental Documentation
July 2015**

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**Raritan Bay and Sandy Hook Bay, New Jersey
Combined Erosion Control and
Coastal Storm Risk Management Project
Borough of Highlands Feasibility Study**

**Draft Feasibility Report
July 2015**

**Appendix A1:
Essential Fish Habitat**

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EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 08/04)

PROJECT NAME: Highlands, Coastal Storm Risk Management Study, Union Beach, New Jersey

DATE: June 1 2015 **PROJECT NO.:** NA **LOCATION:** Highlands, NJ

PREPARER: U. S. Army Corps of Engineers, New York District

Step 1. Use the Habitat Conservation Division EFH webpage, Guide to Essential Fish Habitat Designations in the Northeastern United States to generate the list of designated EFH for federally-managed species for the geographic area of interest (<http://www.nero.noaa.gov/hcd/index2a.htm>). Use the species list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. Attach that list to the worksheet because it will be used in later steps. Make a preliminary determination on the need to conduct an EFH Consultation.

1. INITIAL CONSIDERATIONS		
EFH Designations	Yes	No
Is the action located in or adjacent to EFH designated for eggs?	x	
Is the action located in or adjacent to EFH designated for larvae?	x	
Is the action located in or adjacent to EFH designated for juveniles?	x	
Is the action located in or adjacent to EFH designated for adults?	x	
Is the action located in or adjacent to EFH designated for spawning adults?	x	
If you answered no to all questions above, then EFH consultation is not required -go to Section 5. If you answered yes to any of the above questions proceed to Section 2 and complete remainder of the worksheet.		

Step 2. In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Please note that, there may be circumstances in which new information must be collected to appropriately characterize the site and assess impacts.

2. SITE CHARACTERISTICS	
Site Characteristics	Description
Is the site intertidal, sub-tidal, or water column?	Bulkhead: water column, sub-tidal Reinforced dune: intertidal, sub-tidal
What are the sediment characteristics?	Bulkhead: variable Reinforced dune: gravel and sand, fine to coarse
Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so what type, size, characteristics?	No
Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the spatial extent.	No
What is typical salinity and temperature regime/range?	Based on NJDEP Marine Water Monitoring, Station 906A Salinity (ppt): range 30.8 – 12.7, average 24 Temperature (C°): range 26.5 – 3.0, average 13.9
What is the normal frequency of site disturbance, both natural and man-made?	Sand that remains in eroded nearshore zone builds up in intertidal zone in summer and is moved offshore in winter by wave action
What is the area of proposed impact (work footprint & far afield)?	Bulkhead: water column, sub-tidal 8,694 linear ft long and 2 ft wide Reinforced dune: 1,194 linear ft long and 12 ft wide



Step 3. This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

3. DESCRIPTION OF IMPACTS			
Impacts	Y	N	Description
Nature and duration of activity(s)			Higher elevated bulkheads will be placed along length of shoreline in front of existing bulkheads. On beach area, sand will cover wall and planted with native beach grass for aesthetics Total construction time estimated Dec. 2017- Aug. 2022.
Will benthic community be disturbed?	x		Burial of benthic infauna and some epifauna and small fish in intertidal zone and small portion of sub-tidal zone. New sand will be re-colonized within a year but benthic community structure (species composition and abundance) may change. Temporary loss of benthic prey species and or shift in species composition will not significantly affect EFH for any designated species since bottom feeders are opportunistic, other species prey on fish, and all can relocate to nearby undisturbed areas to feed.
Will SAV be impacted?		x	None present
Will sediments be altered and/or sedimentation rates change?	x		Sand that is similar in grain size to existing sand will be used. Seasonal displacement of sand and net transport along coast and offshore will be accentuated by increased quantity of new sand placed on beach.
Will turbidity increase?	x		Temporarily near the construction site. Could cause visually oriented species to relocate to find prey. No effect on EFH.
Will water depth change?		x	
Will contaminants be released into sediments or water column?		x	Preliminary HTRW search yielded no containments of concern
Will tidal flow, currents or wave patterns be altered?	x		Tidal flow, wave patterns will change only during storm events as flow will not reach inland during most storms No effect on EFH
Will ambient salinity or temperature regime change?		x	
Will water quality be altered?		x	

Step 4. This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species from the EFH species list (generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3. The Guide to EFH Descriptions webpage (<http://www.nero.noaa.gov/hcd/list.htm>) should be used during this assessment to determine the ecological parameters/preferences associated with each species listed and the potential impact to those parameters.

4. EFH ASSESSMENT			
Functions and Values	Y	N	Describe habitat type, species and life stages to be adversely impacted
Will functions and values of EFH be impacted for:			
Spawning		x	Prey for juvenile winter flounder will be buried under bulkhead causing temporary loss of nursery habitat, however flounder will relocate to undisturbed area as will bluefish.
Nursery		x	Prey for juvenile winter flounder will be buried under bulkhead causing temporary loss of nursery habitat, however flounder will relocate to undisturbed area as will bluefish.
Forage		x	Forage fish will move out of affected area.
Shelter		x	
Will impacts be temporary or permanent?			Impacts will be temporary. Possible long-term change in benthic community structure might improve EFH
Will compensatory mitigation be used?		x	Burial and mortality of winter flounder eggs and juveniles may occur however the footprint of the bulkhead is small.

Step 5. This section provides the Federal agency's determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.

5. DETERMINATION OF IMPACT		
		Federal Agency's EFH Determination
Overall degree of adverse effects on EFH (not including compensatory mitigation) will be: (check the appropriate statement)		There is no adverse effect on EFH EFH Consultation is not required
	x	The adverse effect on EFH is not substantial. This is a request for an abbreviated EFH consultation. This worksheet is being submitted to NMFS to satisfy the EFH Assessment requirement.
		The adverse effect on EFH is substantial. This is a request for an expanded EFH consultation. A detailed written EFH assessment will be submitted to NMFS expanding upon the impacts revealed in this worksheet.

Step 6. Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats. Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT	
Species known to occur at site (list others that may apply)	Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat).
alewife	n/a
blueback herring	n/a
rainbow smelt	n/a
Atlantic sturgeon	n/a
Atlantic menhaden	n/a
American shad	n/a
American eel	n/a
American lobster	n/a
blue mussels	n/a
soft-shell clams	n/a
quahog	n/a
Other species:	n/a

EFH Data Notice: Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional Fishery Management Councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

[NMFS Greater Atlantic Regional Office](#)

[NMFS Atlantic Highly Migratory Species Management Division](#)

Query Results

Map Scale = 1:9,028

Degrees, Minutes, Seconds: Latitude = 40°24'21" N, Longitude = 74°0'50" W



Decimal Degrees: Latitude = 40.41, Longitude = -73.99

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

*** WARNING ***

The list provided below is incomplete due to current data limitations. For a complete list of EFH designated at this location you must go to the following links:

EFH

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Clearence Skate	Adult ALL Eggs	New England	Skate
			Witch Flounder	Larvae ALL	New England	Multispecies
			Window Pane Flounder	Eggs Larvae Juvenile Adult ALL	New England	Multispecies
			Winter Skate	Juvenile ALL	New England	Skate
			Yellowtail Flounder	Larvae Eggs ALL	New England	Multispecies
			Winter Flounder	Larvae Eggs Juvenile	New England	Multispecies



Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
				Adult ALL		
			Sandbar Shark	Juvenile Adult ALL	Secretarial	HMS
			Red Hake	Larvae Juvenile Eggs ALL	New England	Multispecies
			Silver Hake	Larvae Juvenile ALL Eggs Adult	New England	Multispecies
			Bluefin Tuna	Juvenile	Secretarial	HMS
			Monkfish	Eggs Larvae ALL	New England	Multispecies
			Smooth Dogfish	ALL	Secretarial	HMS
			Skipjack Tuna	Adult ALL	Secretarial	HMS
			Tiger Shark	Juvenile ALL	Secretarial	HMS
			Summer Flounder	Adult Juvenile Larvae ALL	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Little Skate	Juvenile	New England	Skate
			Scup	ALL Adult Juvenile Larvae Eggs	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Longfin Inshore Squid	Juvenile Adult Eggs ALL	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Bluefish	Adult Juvenile ALL	Mid-Atlantic	Bluefish
			Atlantic Butterfish	Larvae Adult Juvenile ALL	Mid-Atlantic	Atlantic Mackerel, Squid, & Butterfish Amendment 11
			Atlantic Cod	Adult ALL	New England	Multispecies
			Atlantic Herring	Adult Juvenile Larvae ALL	New England	Atlantic Herring

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

Show	Link	Name	Management Council
		Southern Fishery Management Area	New England

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.

****For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

New England Council EFH,
Atlantic Salmon,
New England Council HAPCs,
Rivers in Maine for Atlantic Salmon

Raritan Bay and Sandy Hook Bay, New Jersey Combined Erosion Control and Coastal Storm Risk Management Project Borough of Highlands Feasibility Study

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**Appendix A2:
Coastal Zone Act Consistency Statement**

COASTAL ZONE ACT CONSISTENCY STATEMENT

Highlands, Coastal Storm Risk Management, Highlands, Monmouth County, New Jersey Prepared June 2015

I Introduction

The Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. §§1451-1464) was enacted by Congress in an effort to balance the often competing demands of growth and development with the protection of coastal resources. Its stated purpose is to "...preserve, protect, develop, where possible, to restore or enhance, the resources of the nation's coastal zone..." The Act established the framework for achieving this balance by encouraging the states to develop coastal zone management programs, consistent with minimum federal standards, designed to regulate land use activities that could impact coastal resources. The Coastal Zone Act Reauthorization Act Amendments of 1990 further strengthened the act by requiring the state programs to focus more on controlling land use activities and the cumulative effects of activities within designated coastal zones.

The State of New Jersey administers its federally approved coastal zone program through the Department of Environmental Protection, Land Use Regulation Program (LURP). Pursuant to the federal CZMA, New Jersey has defined its coastal zone boundaries and developed policies to be utilized to evaluate projects within the designated coastal zone, as set forth in New Jersey's Rules on Coastal Zone Management (CZM) (N.J.A.C. 7:7, 7:7E, dated July 18, 1994 and addendum to 7:7E-5 and 7:7E-8.7, dated August 19, 1996). The Waterfront Development Law (N.J.S.A. 12:5-3) and related requirements (N.J.A.C. 7:7-23) provide the authority for issuance of permits for, among other activities, the placement or construction of structures, pilings, or other obstructions in any tidal waterway. The State's Land Use Regulation Program in the review of permit applications and coastal decision-making employs New Jersey's Rules on Coastal Zone Management; they address issues of location, use, and resources. New Jersey's rules provide for a balance between economic development and coastal resource protection, recognizing that coastal management involves explicit consideration of a broad range of concerns, in contrast to other resource management programs that have a more limited scope of concern.

The Highlands project site is located within the coastal zone of New Jersey. The following assessment identifies the coastal zone management policies relevant to the proposed coastal storm risk management project.

II Subchapter 3 – Special Areas

7:7E-3.2 Shellfish Habitat

This policy generally limits disturbance of shellfish habitat. No long-term adverse effects to shellfish are expected from the project. Placement of bulkheads may destroy limited numbers of shellfish however, the shellfish should return within a year post construction.

7:7E-3.3 Surf Clam Areas

This policy prohibits development that would destroy or contaminate surf clam areas. Surf clams inhabit waters from 30-160 feet deep. The project area is in shallow waters along the shoreline. Actions of the project will not occur in or affect any surf clam areas; therefore, this policy is not applicable.

7:7E-3.4 Prime Fishing Areas

This policy prohibits sand or gravel mining in prime fishing areas. The selected plan will not mine sand or gravel; therefore, this policy is not applicable.

7:7E-3.5 Finfish Migratory Pathways

This policy prohibits development such as dams or dikes which would create physical barriers to migratory fish. Development, which would lower water quality so as to interfere with fish movement, is also prohibited. The selected plan will not create physical barriers to migratory fish; therefore, this policy is not applicable.

7:7E-3.6 Submerged Vegetation Habitat

This policy prohibits or restricts permanent significant impacts to submerged vegetation habitats unless compensation/mitigation efforts are enacted. The project will not have any significant impact on submerged vegetation; therefore, this policy is not applicable.

7:7E-3.7 Navigation Channels

This policy prohibits construction that would extend into a navigation channel that would result in the loss of navigability. Project actions will not impact any navigation channels; therefore, this policy is not applicable.

7:7E-3.8 Canals

This policy prohibits actions that would interfere with boat traffic in canals used for navigation. The project does not contain a canal as defined by the New Jersey State Department of Environmental Protection; therefore, this policy is not applicable.

7:7E-3.9 Inlets

This policy prohibits filling and discourages submerged infrastructure in coastal inlets. The project is not located in an inlet as defined by the NJDEP; therefore, this policy is not applicable.

7:7E-3.10 Marina Moorings

This policy prohibits non-water dependent development in marina mooring areas. Construction of the project would not involve development in any marina mooring areas nor is the project non-water dependent; therefore, this policy is not applicable.

7:7E-3.11 Ports

This policy prohibits actions that would interfere with port uses. The project is not located in a significant shipping port however; it is located where the Seastreak Ferry docks. The selected plan incorporates the ferry into the plan and will not interfere with the ferry operation.

7:7E-3.12 Submerged Infrastructure Routes

This policy prohibits any activity that would increase the likelihood of submerged infrastructure damage, or interfere with maintenance operations. The project will replace three existing outlets with new outlets however there will be no extending any outfall or intake pipes along the project beach; therefore, the project will not impact submerged infrastructure.

7:7E-3.13 Shipwrecks and Artificial Reefs

This policy restricts the use of special areas with shipwrecks and artificial reefs that would adversely affect the usefulness of the area as a fisheries resource. The project does not contain any artificial reefs and the borrow area has been surveyed; therefore, the project will not impact shipwrecks and artificial reefs.

7:7E-3.14 Wet Borrow Pits

This policy restricts the use and filling of wet borrow pits. The project does not contain any wet borrow pits; therefore, the project will not impacts wet borrow pits

7:7E-3.16 Dunes

This policy protects and preserves ocean and bay shoreline dunes. There are no existing dunes along the Highlands shoreline. The project will create a reinforced dune, which will be planted with native vegetation. provide long-term protection to the existing dune habitat, which is currently being lost due to erosion. Therefore, the project would be consistent with this policy.

7:7E-3.17 Overwash Areas

This policy restricts development in overwash areas due to their sensitive nature. The project site does not contain any overwash habitats; therefore, this policy is not applicable.

7:7E-3.18 Coastal High Hazard Areas

This policy restricts development in coastal high hazard areas (i.e., flood prone) as delineated on the FEMA maps. The project involves construction of coastal storm risk management methods. The plan does not include or encourage development in any coastal high hazard area. The project involves acceptable coastal storm risk management activities including restoration of erosion hazard areas; therefore, the selected plan would be consistent with this policy.

7:7E-3.19 Erosion Hazard Areas

This policy prohibits development in erosion hazard areas under most circumstances, to protect public safety. The project does not include or encourage development in an erosion hazard area.

The project involves acceptable coastal storm risk management activities including restoration of erosion hazard areas; therefore, the selected plan would be consistent with this policy.

7:7E-3.20 Barrier Island Corridor

This policy restricts new development on barrier islands. The project does not contain a barrier island corridor. Therefore, this policy is not applicable.

7:7E-3.21 Bay Islands

This policy restricts development on bay islands. The project does not contain any bay islands. The project involves construction of coastal storm risk management methods

7:7E-3.22 Beaches

This policy restricts development on beach areas. The project involves beach and dune restoration and planting of vegetation for dune stabilization. These are all acceptable activities that will meet the conditions listed within this coastal zone management plan; therefore, the project would be consistent with this policy.

7:7E-3.23 Filled Water's Edge

This policy seeks to promote water dependent uses at areas along the waterfront that have been previously filled. Existing access to the waterfront will not be impeded by the project. Current access areas will be maintained by creating walkovers and reconstructing existing access. Therefore, the selected plan is consistent with this policy.

7:7E-3.24 Existing Lagoon Edges

This policy restricts development at lagoon edges because of potential water quality problems. The project does not include any lagoon edges. This policy does not apply.

7:7E-3.25 Flood Hazard Areas

This policy is designed to restrict development in flood hazard areas and ensure that the waterfront is not pre-empted by uses that could function equally well at inland locations. The goal of this rule is to reduce losses of life and property resulting from unwise development of flood hazard areas, and allow uses compatible with periodic flooding. The project would involve the restoration of coastal storm risk management measures, thereby protecting life and property; therefore, the selected plan is compatible with this policy.

7:7E-3.26 Riparian Zone

This policy is designed to maintain the land and vegetation within the riparian zone. Sections of this project are within the riparian zone. The project is within the allowed limits as listed under N.J.A.C 7:13-10.2 therefore the project is consistent with this policy

7:7E-3.27 Wetlands

This policy restricts disturbance in wetland areas and requires mitigation if wetlands are destroyed or disturbed. The project would add beach sand and coastal storm risk management along the shoreline an acceptable measure under the regulations. Therefore, the project is consistent with this policy.

7:7E-3.28 Wetland Buffers

This policy restricts development in wetland buffer areas in order to protect wetlands. The selected plan will not impact wetland buffers; therefore, the plan is consistent with this policy.

7:7E-3.29 (Reserved)

7:7E-3.30 (Reserved)

7:7E-3.31 Coastal Bluffs

This policy restricts development on coastal bluffs. The landward extent of project does not contain coastal bluffs; therefore, this policy is not applicable.

7:7E-3.32 Intermittent Stream Corridors

This policy restricts actions in intermittent stream corridors. The project does not contain any intermittent stream corridors; therefore, the project is consistent with this policy

7:7E-3.33 Farmland Conservation Areas

This policy seeks to preserve large parcels of land used for farming. There is no farmland conservation areas located within the project.

7:7E-3.34 Steep Slopes

This policy seeks to preserve steep slopes by restricting development in such areas. There are no steep slopes in the project.

7:7E -3.35 Dry Borrow Pits

This policy restricts the excavation and filling of dry borrow pits. The project area does not contain any dry borrow pits; therefore, this policy is not applicable.

7:7E-3.36 Historic and Archaeological Resources

This policy protects the value of historic and archaeological resources. Cultural resource surveys and coordination with the New Jersey Historic Preservation Office have determined there are no archaeological resources within the shoreline protection portion of this project. There are several historic structures within the project area however, none of which will be directly impacted by the project. An assessment of effects to their setting and viewsheds will be undertaken as

stipulated in a Programmatic Agreement drafted to address all potential effects. This project is consistent with this policy.

7:7E-3.37 Specimen Trees

This policy seeks to protect specimen trees; the largest tree of its species in NJ. The project site does not contain any known specimen trees.

7:7E-3.38 Endangered or Threatened Wildlife or Vegetation Species Habitats

This policy restricts development in endangered or threatened wildlife or vegetation species habitats. No federally or state listed species have been identified in the project area. However, habitat for four state listed marine turtle species was identified. The occurrence of the turtles within the project area is low and not anticipated to impact the species. Therefore, the project is consistent with this policy.

7:7E-3.39 Critical Wildlife Habitats

This policy discourages development that would adversely affect critical wildlife habitat. The project would not affect any existing critical habitats. This policy does not apply

7:7E-3.40 Public Open Space

This policy encourages new public open spaces and discourages development that might adversely affect existing public open space. The project will not influence development. The plan is therefore consistent with this policy.

7:7E-3.41 Special Hazard Areas

This policy discourages development in hazard areas. The project does not contain any special hazard areas.

7:7E-3.42 Excluded Federal Lands

Federal lands are beyond the jurisdiction of the New Jersey Coastal Zone. New Jersey has the authority to review activities on Federal lands if impacts may occur in New Jersey's Coastal Zone. The project does not involve actions on or disturbance to Federal land.

7:7E-3.43 Special Urban Areas

This policy seeks to encourage development that would help to restore the economic and social viability of certain municipalities that receive state aid. The project area does not involve a Special Urban Area; therefore, this policy is not applicable.

7:7E-3.44 Pinelands National Reserve and Pinelands Protection Area

This policy allows the Pinelands Commission to serve as the reviewing agency for actions within the Pinelands National Reserve. The project area is not located within the Pinelands Area; therefore, this policy is not applicable

7:7E-3.45 Hackensack Meadowlands District

This policy allows the Hackensack Meadowlands Development Commission to serve as the reviewing agency for actions within the Hackensack Meadowlands District. The project area is not located within the Hackensack Meadowlands District; therefore, this policy is not applicable

7:7E-3.46 Wild and Scenic River Corridors

This policy recognizes the outstanding value of certain rivers in New Jersey by restricting development to compatible uses. The project area is not located within a wild and scenic river corridor; therefore, this policy is not applicable

7:7E-3.47 Geodetic Control Reference Marks

This policy discourages disturbance of geodetic control reference marks. There are no known geodetic control reference marks in the area of the selected plan; therefore, this policy is not applicable

7:7E-3.48 Hudson River Waterfront Area

This policy restricts development along the Hudson River Waterfront and requires development, maintenance, and management of a section of the Hudson Waterfront Walkway coincident with the shoreline of the development property. The project area is not located within the Hudson River Waterfront Area; therefore, this policy is not applicable

7:7E-3.49 Atlantic City

This policy is applicable to lands within the municipal boundary of the City of Atlantic City. The project is not within Atlantic City; therefore, this policy is not applicable.

7:7E-3.50 Lands and Waters Subject to Public Trust Rights

This policy maintains public access, which is the ability of the public to pass physically and visually to, from and along the ocean shore and other waterfronts. The project will not impair the public access and will enhance access; therefore, the project is consistent with this policy.

III Subchapter 3A – Standards for Beach and Dune Activities

7:7E-3A.1 Standards Applicable to Routine Beach Maintenance

The project does not involve routine beach maintenance; therefore, this policy is not applicable.

7:7E-3A.2 Standards Applicable to Routine Beach Maintenance

The project does not involve routine beach maintenance; therefore, this policy is not applicable.

7:7E-3A.3 Standards Applicable to Emergency Post-Storm Beach Restoration

This project is not due to emergency post-storm beach restoration as described by this policy; therefore, this policy is not applicable.

7:7E-3A.4 Standards Applicable to Dune Creation and Maintenance

This policy establishes requirements for dune creation and maintenance. The project is creating a reinforced dune. The dune will be planted with native vegetation and contain walkovers that comply with this policy; therefore, the project is consistent with this policy

7:7E-3A.5 Standards Applicable to the Construction of Boardwalks

Boardwalks will not be constructed; therefore, this policy is not applicable.

IV Subchapter 3B – Wetland Mitigation Proposals

This section details the requirements of a wetland mitigation proposal. The selected plan will impact less than an acre of wetlands. The exact acreage will be calculated during the optimization of the project. Mitigation will follow all requirements discussed within this policy.

V Subchapter 3C – Impact Assessment for Endangered and Threatened Wildlife.

This section details the performance and reporting standards for impact assessments for endangered and threatened wildlife species. If required, based on updated relevant agency correspondence, habitat/impact assessments for endangered and threatened species will conform to the performance and reporting standards listed.

At present, there are no endangered or threatened wildlife species at the project site. The recommended plan is consistent with the standards provided with this policy.

VI Subchapter 4 – General Water Areas

7:7E-4.2 Shellfish aquaculture

7:7E-4.3 Boat ramps

7:7E-4.4 Docks and piers for cargo and commercial fisheries

7:7E-4.5 Recreational docks and piers

7:7E-4.6 Maintenance dredging

7:7E-4.7 New dredging

These above policies are not applicable.

7:7E-4.8 Dredged material disposal

The placement of sand is necessary for the construction of the selected. Placement operations will meet the acceptability conditions for the applicable standards. The selected plan is consistent with this policy.

7:7E-4.9 Solid waste or sludge dumping
7:7E-4.10 Filling
7:7E-4.11 Mooring
7:7E-4.12 Sand and gravel mining
7:7E-4.13 Bridges
7:7E-4.14 Submerged pipelines
7:7E-4.15 Overhead transmission lines
7:7E-4.16 Dams and impoundments

These above policies are not applicable.

7:7E-4.17 Outfalls and intakes

Outfalls and intakes are conditionally acceptable provided that the use associated with the intake or outfall meets applicable Coastal Zone Management rules. Outfall will repair previously existing infrastructure to the appropriate needs of the selected plan and all construction will meet the acceptability conditions for the applicable standards. The selected plan is consistent with this policy.

7:7E-4.18 Realignment of water areas
7:7E-4.19 Vertical wake or wave attenuation structures
7:7E-4.20 Submerged cables
7:7E-4.21 Artificial reefs
7:7E-4.22 Miscellaneous uses
7:7E-4.23 Living shorelines

These above policies are not applicable.

VII Subchapter 5 – General Land Areas

This rule defines the acceptability of development in general land areas. The selected project is considered a linear development as defined in N.J.A.C. 7:7E-6.1. The requirements of this subchapter do not apply to linear developments; therefore, this policy is not applicable.

VIII Subchapter 6 – General Location Rules

7:7E-6.1 Location of Linear Development

This rule sets conditions for acceptability of linear development (*e.g.*, roads, walkways, pipelines). The project involves construction of an approximately 10,000 feet of shoreline protection. There is no prudent or feasible alternative alignment, which would have less impact, and there will be no long term or permanent loss of unique or irreplaceable areas; therefore, the selected plan is consistent with the rules on location of linear development.

7:7E-6.2 Basic Location

This rule states that the NJDEP may reject or conditionally approve a project for safety, protection of certain property, or preservation of the environment. The project involves promoting public safety, welfare, and protecting public and private property, through

construction of coastal storm risk management measures. An alternative and design analysis, in coordination with the NJDEP, has ensured that the selected plan is consistent under the location rule.

7:7E-6.3 Secondary Impacts

This rule sets the requirements for the secondary impact analysis. Additional development is not expected as a result of the selected plan; therefore, there will be no secondary impacts associated with the project; therefore, this policy is not applicable.

IX Subchapter 7 – Use Rules

- 7:7E-7.2 Housing Use
- 7:7E-7.3 Resort Recreational Use
- 7:7E-7.3A Marina Development
- 7:7E-7.4 Energy Use
- 7:7E-7.5 Transportation Use
- 7:7E-7.6 Public Facility Use
- 7:7E-7.7 Industry Use
- 7:7E-7.8 Mining Use
- 7:7E-7.9 Port Use
- 7:7E-7.10 Commercial Facility Use

These above policies are not applicable.

7:7E -7.11 Coastal Engineering

This section sets standards to protect the shoreline, maintain dunes, and provide beach nourishment. Only those standards applicable to the project areas are listed:

- (b) Nonstructural, hybrid, and structural shore protection and/or storm damage reduction measures shall be used according to a hierarchy. The project studied the use of shore protection measures consistent with this policy and determined that hybrid and structural measures shall be used.
- (d) The construction, maintenance, or reconstruction of a bulkhead shall comply with the listed standards. The bulkhead construction will comply with this policy.
- (e) Dune restoration, creation, and maintenance projects as non-structural shore protection and/or storm damage reduction measures are encouraged. Reinforced dunes will be created and planted with native vegetation.
- (f) Beach nourishment projects as non-structural shore protection and/or storm damage reduction. The sand placed along the reinforced dune will be the same or similar grain size as the existing sand.
- (g) Structural shore protection and/or storm damage reduction measures that are conducted using monies from the Shore Protection Fund established by N.J.S.A. 13:19-16 and/or any other Department monies shall comply with identified standards. The project will utilize state monies in accordance with this policy.

The project is consistent with the above policies.

7:7E-7.12 Dredged Material Disposal on Land

This rule sets standards for disposal of dredged materials. The project proposes coastal storm risk management measures largely consisting of purpose placed clean sand on the project site. This material has been previously tested and found suitable as beach restoration material; as such, this is not a disposal operation. This policy is not applicable.

7:7E-7.13 National Defense Facility Use

This rule sets standards for the location of defense facilities in the coastal zone. The project does not involve location of a defense facility; therefore, this policy is not applicable.

7:7E-7.14 High Rise Structures

This rule sets standards for high rise structures in the coastal zone. The project does not involve construction of high rise structures.

Subchapter 8 – Resource Rules

7:7E-8.2 Marine Fish and Fisheries

This rule sets standards of acceptability so as to cause minimal feasible interference with the reproductive and migratory patterns of estuarine and marine species of finfish and shellfish. The project is expected to cause minimal, if any, interference with migratory or reproductive patterns of known fisheries resources, as referenced in the Essential Fish Habitat evaluation.

7:7E-8.3 (Reserved)

7:7E 8.4 Water Quality

This rule sets standards for coastal development to limit effects on water quality. The project is not developmental. However, short-term water quality impacts resulting from construction activities are expected. There will be localized increases in total suspended sediment and turbidity proximal to the placement area. As clean, previously tested coarse sand is the placement material not other water quality impacts area anticipated. Therefore, the plan is consistent with this policy.

7:7E-8.5 Surface Water Use

This rule sets standards for coastal development so as to limit effects on surface water. The plan does not involve coastal development as defined by this policy. However, short-term water quality impacts resulting from construction activities are expected and are anticipated to be localized proximal to the placement area. The dominant impact will be that of increased turbidity via the resuspension of clean sediments. Changes in dissolved oxygen or other geo-chemical changes are not anticipated. The sand being placed on the beach has been previously analyzed and found suitable for beach nourishment and free of contaminants. Localized suspended sediment impacts have been shown to be comparable to increases in suspended sediments that result from naturally occurring coastal storms. The project is consistent with this policy.

7:7E-8.6 Groundwater Use

This rule sets standards for coastal development so as to limit effects on groundwater supplies. The project will not involve or effect future use of groundwater supplies; therefore, this policy is not applicable.

7:7E-8.7 Stormwater Management

This rule sets standards for coastal development so as to limit effects of stormwater runoff. This project is not developmental; therefore, the project is consistent with this policy.

7:7E-8.8 Vegetation

This rule sets standards for coastal development while protecting native vegetation. Creation of the reinforced dune will include planting of native vegetation to help stabilize the dune; therefore, the project is consistent with this policy.

7:7E-8.9 (Reserved)

7:7E-8.10 Air Quality

This rule sets standards for coastal development with requirements that projects must meet applicable air quality standards. The total direct and indirect emissions from this project are below the 100 tons trigger levels for NO_x or Carbon Monoxide (CO) for each project year and below the 50 tons trigger level for VOCs for each project year (40CFR§93.153(b)(1)&(2)). Volatile organic compounds and CO emissions are significantly lower than the NO_x emission estimates, as NO_x is the primary mass criteria pollutant from diesel equipment

7:7E-8.11 Public Access to the Waterfront

This rule requires that coastal development adjacent to the waterfront provide perpendicular and linear access to the waterfront to the extent practicable, including both visual and physical access. The project will not impede public access to the waterfront as all current access will be maintained and restored as part of the project; therefore, the project is consistent with this policy.

7:7E -8.12 Scenic Resources and Design

This rule sets standards that new coastal development be visually compatible with its surroundings. The project will be visually compatible with the surroundings; therefore, this policy is not applicable.

7:7E-8.13 Buffers and Compatibility of Uses

This rule sets standards for adequate buffers between compatible land uses. The project is compatible with adjacent land uses; therefore, it would be consistent with this policy.

7:7E-8.14 Traffic

This rule sets standards that restrict coastal development that would disturb traffic systems. The project's goal is to lessen the impact of storm induced coastal flooding which will help to prevent impacts to traffic. Project construction activities may on occasion temporarily affect traffic. The selected plan will make every effort possible to mitigate temporary impacts on traffic during construction. The project is consistent with this policy

7:7E-8.15 through 8.20 (Reserved)

7:7E-8.21 Subsurface Sewage Disposal Systems

This rule sets standards for subsurface sewage disposal systems in the coastal zone. The project does not involve sewage disposal; therefore, this policy is not applicable.

7:7E-8.22 Solid and Hazardous Waste

This rule sets standard for disposal of garbage, refuse, sludge or other waste material, including solid, liquid, and semi-solid or contained gaseous material. Project construction will generate small amounts of solid waste materials and there is the potential for spillage or disposal hazardous liquids relating to various fuels etc. All waste materials and storage procedures as well as protocols for handling potential spills of hazardous material are covered in the state approved SOP including HTRW, and Health and Safety plans. All plans and procedures are in compliance with N.J. CZM standards therefore the project is consistent with this policy.

7:7E-8A (Reserved)

Raritan Bay and Sandy Hook Bay, New Jersey Combined Erosion Control and Coastal Storm Risk Management Project Borough of Highlands Feasibility Study

**Draft Feasibility Report
July 2015**

Appendix A3: Clean Water Act Section 404(b) (1) Guidelines Evaluation

INTRODUCTION

This document presents Section 404(b) (1) guidelines evaluation for the coastal storm protection project Highlands, Monmouth County, New Jersey. The recommended plan consists of approximately 10,636 linear feet of raised bulkheads, raised ground surfaces, floodwalls, and reinforced dunes covered with sand. The project spans a geographic distance of approximately 8,000 linear feet along the bayshore of Highlands and ties into high ground (+10 ft NAVD 88) at either end. Because the project follows the actual perimeter of the shore, its total length is 10,636 linear ft. The discharge to waters of the U.S. that may occur related to the project would be the placement of bulkheads into shallow near shore waters along this reach of shoreline. Best management practices will be fully utilized to ensure that turbidity and sedimentation are limited to the area immediately adjacent to the project sit and minimized to the greatest extent possible. This evaluation is based on the regulations presented in 40 CFR 230, Section 404(b)(1): Guidelines for Specification of Disposal Sites for Dredged or Fill Material. The regulations implement Sections 404(b) and 401(1) of the Clean Water Act, which govern disposal of dredged and fill material inside the territorial seas baseline [§230.2(b)].

As stated in Section 230.10(a)(4): For actions subject to NEPA, where the U. S. Army Corps of Engineers (USACE) is the permitting agency, the analysis of alternatives required for NEPA environmental documents, including supplemental USACE NEPA documents will in most cases provide the information for the evaluation of alternatives under these Guidelines. The Environmental Assessment (EA), to which this evaluation is an appendix, provides the documentation necessary to attest that the project is fully in compliance with the Section 404(b) (1) guideline. The EA provides a full project description and location, description of existing conditions, full alternatives analysis, and description of potential impacts as a result of the project and the project's construction. The analysis provided within the EA coastal storm risk management plan will not cause or contribute to significant degradation of the waters of the United States, as is demonstrated in the following sections and tables.

404(b) (1) EVALUATION

Study Description

- A. Location - The Study area is located in the northern portion of Monmouth County in Highland, NJ. The Study area is defined by Sandy Hook Bay to the north, Sand Hook to the east, Middletown Township to the south, and the Borough of Atlantic Highlands to the west. The study area is approximately 8000 feet along the bayshore, from Murray Beach at the western end to the Route 36 bridge at the eastern end.
- B. General Description - Coastal storm risk management elements at an elevation of +10 ft NAVD88 to +12.4 ft NAVD88, consisting of 7,289 linear ft of raised bulkheads, 328 linear ft of raised ground surfaces, 375 linear ft of floodwalls, and 1,194 linear ft of onshore dune barrier, and a street closure gate that ties into high ground at either end of the project.
- C. Authority and Purpose - The Raritan Bay and Sandy Hook Bay, New Jersey project, including the Highlands study, was again authorized by a resolution of the Committee on Public Works and Transportation of the U.S. House of Representatives adopted August 1, 1990. This study authority covered the Raritan Bay and Sandy Hook Bay area, from South Amboy at the entrance to the Raritan River at the western end to Highlands at the eastern end.

The study was underway when Hurricane Sandy severely impacted the study area in October 2012. In response to the storm, the Disaster Relief Appropriations Act of 2013 was passed by Congress and signed into law by the President on January 29, 2013 as Public Law (P.L.) 113-2. The legislation provides supplemental appropriations to address damages caused by Hurricane Sandy and to reduce future flood risk in ways that will support the long-term sustainability of the coastal ecosystem and communities, and reduce the economic costs and risks associated with large-scale flood and storm events.

Chapter 4 of P.L. 113-2 directs the USACE to prepare two interim reports to Congress for areas that were affected by Hurricane Sandy, a project performance evaluation report, and a comprehensive study to address the flood risks of vulnerable coastal populations in areas that were affected by Hurricane Sandy within the boundaries of the NAD. The District prepared the *Second Interim Report, Disaster Relieve Appropriations Act, 2013* dated May 30, 2013, which includes the Highlands study among those authorized but unconstructed projects that were granted funding for study completion at full Federal expense. This report is a response to this authorization.

- D. General Description of Fill Material - Construction of the storm protection reinforced dune, bulkhead, floodwall, and road closure gate would require the placement of armor stone, bedding stone, concrete, geotextile fabric, and sand.
1. General Characteristics of Material - Sand would be required to cover the reinforced dune. Quarry stone, bedding stone, armor stone, steel sheetpile, and geotextile fabric, would be used to construct the protection elements.
 2. Quantity of Material - Construction of the protection elements would require the following quantities of materials (estimated): Bulkhead construction would require approximately 4, 240 cubic yards (cy) of concrete, 6,195 tons of bedding stone, 17,170 square yards (sy) of geotextile material, and 9,495 tons of armor stone. Reinforced dune construction would require 8,850 cy sand, 885 cy concrete, 1,295 tons of bedding stone, 3,590 sy geotextile material, 1,995 tons armor stone, and 9,875 sy dune grass. Floodwall construction would require 1,085 cy concrete, 1,440 sy geotextile material, and 435 tons gravel.
 3. Source of Material - Sources for fill material may include on-site and off site substrate dependent upon the composition of soils at the site-specific locations. Rocks and concrete materials will be obtained from commercial sources proximal to the Selected Plan. The sand will come from inland sources.
- E. Proposed Discharge Site
1. Location - The Study area location is described in I (a), above.
 2. Size - The size/dimensions of the coastal storm risk management measures are described in I (d), above.
 3. Type of Sites/Habitat - The potential coastal storm risk management measures would result in the following cover type impacts:

4. Time and Duration of Disposal - The Selected Plan will be constructed in various elements over a two-year period. Construction of the first elements is projected to begin in Dec 2017 and end Aug. 2022.
5. Disposal Method - Construction equipment such as bulldozers, backhoes, dump trucks, will be used.

2.0 FACTUAL DETERMINATIONS

Review of Compliance – Section 230.10(a)-(d)

	YES	NO
a. The discharge represents the least environmentally damaging practicable alternative and, if in a special aquatic site, the activity associated with the discharge must have direct access or proximity to, or be located in the aquatic ecosystem to fulfill its basic purpose.	X	
b. The activity does not appear to: 1) violate applicable state water quality standards or effluent standards prohibited under Section 307 of the CWA; 2) jeopardize the existence of Federally listed threatened and endangered species or their habitat; and 3) violate requirements of any Federally designated marine sanctuary.	X	
c. The activity will not cause or contribute to significant degradation of waters of the U.S. including adverse effects on human health, life stages of organisms dependent on the aquatic ecosystem, ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values.	X	
d. Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.	X	

Technical Evaluation Factors (Subparts C-F)

	N/A	Not Significant	Significant
a. Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C)			
1) Substrate		X	
2) Suspended particulates/turbidity		X	
3) Water column impacts		X	
4) Current patterns and water circulation		X	
5) Normal water circulation		X	
6) Salinity gradients	X		
b. Potential Impacts on Biological Characteristics on the Aquatic Ecosystem (Subpart D)			
1) Threatened and endangered species		X	
2) Fish, crustaceans, mollusks, and other organisms in the aquatic food web		X	
3) Other wildlife (mammals, birds, reptiles and amphibians)		X	
c. Potential Impacts on Special Aquatic Sites (Subpart E)			
1) Sanctuaries and refuges		X	

2) Wetlands		X	
3) Mud Flats		X	
4) Vegetated Shallows	X		
5) Coral reefs	X		
6) Riffle and pool complexes	X		
d. Potential Effects on Human Use Characteristics (Subpart F)			
1) Municipal and private water supplies	X		
2) Recreational and commercial fisheries		X	
3) Water-related recreation		X	
4) Aesthetic impacts		X	
5) Parks, national and historic monuments, national seashores, wilderness areas, research sites and similar preserves	X		

Evaluation and Testing – Subpart G

a. The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material. (Check only those appropriate.)			
1) Physical characteristics			X
2) Hydrography in relation to known or anticipated sources of contaminants			X
3) Results from previous testing of the material or similar material in the vicinity of the project			X
4) Known, significant sources of persistent pesticides from land runoff or percolation			X
5) Spill records for petroleum products or designated hazardous substances (Section 311 of CWA)			X
6) Public records of significant introduction of contaminants from industries, municipalities or other sources			X
7) Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities			X
8) Other sources (specify)			N/A
List appropriate references – See Environmental Assessment			
		YES	NO
b. An evaluation of the appropriate information factors in 3a above indicates that there is reason to believe the proposed dredged material is not a carrier of contaminants or that levels of contaminants are substantively similar at extraction and disposal sites and not likely to require constraints.			
		X	

4. Disposal Site Delineation - Section 230.11(f)

a. The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material. (Check only those appropriate.)			
1) Depth of water at disposal site			Yes
2) Current velocity, direction, variability at disposal site			Yes

	3) Degree of turbulence	Yes
	4) Water column stratification	Yes
	5) Discharge of vessel speed and direction	Yes
	6) Rate of discharge	Yes
	7) Dredged material characteristics (constituents, amount, and type of material, settling velocities)	Yes
	8) Number of discharges per unit of time	Yes
	9) Other factors affecting rates and patterns of mixing (specify)	Yes
List appropriate references – See Environmental Assessment		
	YES	NO
b. An evaluation of the appropriate information factors in 4a above indicated that the disposal sites and/or size of mixing zone are acceptable.		
	X	

Actions to Minimize Adverse Effects (Subpart H)

	YES	NO
All appropriate and practicable steps have been taken, through application of recommendation of Section 230.70-230.77 to ensure minimal adverse effects of the proposed discharge.	X	

Factual Determination – Section 230.11

A review of appropriate information, as identified in Items 2-5 above, indicates there is minimal potential for short or long-term environmental effects of the proposed discharge as related to:		
	YES	NO
a. Physical substrate at the disposal site (review Sections 2a, 3, 4 and 5 above)	X	
b. Water circulation, fluctuation and salinity (review Sections 2a, 3, 4 and 5)	X	
c. Suspended particulates/turbidity (review Sections 2a, 3, 4 and 5)	X	
d. Contaminant availability (review Sections 2a, 3 and 4)	X	
e. Aquatic ecosystem structure, function and organisms (review Sections 2b, 2c, 3 and 5)	X	
f. Proposed disposal site (review Sections 2, 4 and 5)	X	
g. Cumulative effects on the aquatic ecosystem	X	
h. Secondary effects on the aquatic ecosystem	X	

Findings of Compliance or Non-Compliance

	YES	NO
The proposed disposal site for discharge of dredged or fill material complies with Section 404(b)(1) guidelines.	X	

In summary, the implementation of the recommended Highlands Coastal Storm Risk Management Plan:

Will have no adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites.

Will have no significant adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes;

Will have no significant adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability.

Will have no significant adverse effects of discharge of pollutants on recreational, aesthetic, and economic values.

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Raritan Bay and Sandy Hook Bay, New Jersey Combined Erosion Control and Coastal Storm Risk Management Project Borough of Highlands Feasibility Study

**Draft Feasibility Report
July 2015**

Appendix A4: Pertinent Correspondence



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New Jersey Ecological Services Field Office
927 NORTH MAIN STREET, BUILDING D
PLEASANTVILLE, NJ 8232

PHONE: (609)646-9310 FAX: (609)646-0352

URL: www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html

Consultation Code: 05E2NJ00-2015-SLI-0394

May 27, 2015

Event Code: 05E2NJ00-2015-E-00280

Project Name: Highlands

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species that may occur in your proposed action area and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*)

If the enclosed list indicates that any listed species may be present in your action area, please visit the New Jersey Field Office consultation web page as the next step in evaluating potential project impacts: <http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

On the New Jersey Field Office consultation web page you will find:

- habitat descriptions, survey protocols, and recommended best management practices for listed species;
- recommended procedures for submitting information to this office; and
- links to other Federal and State agencies, the Section 7 Consultation Handbook, the Service's wind energy guidelines, communication tower recommendations, the National Bald Eagle Management Guidelines, and other resources and recommendations for protecting wildlife resources.

The enclosed list may change as new information about listed species becomes available. As per Federal regulations at 50 CFR 402.12(e), the enclosed list is only valid for 90 days. Please return to the ECOS-IPaC website at regular intervals during project planning and implementation to obtain an updated species list. When using ECOS-IPaC, be careful about drawing the boundary of your Project Location. Remember that your action area under the ESA

is not limited to just the footprint of the project. The action area also includes all areas that may be indirectly affected through impacts such as noise, visual disturbance, erosion, sedimentation, hydrologic change, chemical exposure, reduced availability or access to food resources, barriers to movement, increased human intrusions or access, and all areas affected by reasonably foreseeable future that would not occur without ("but for") the project that is currently being proposed.

We appreciate your concern for threatened and endangered species. The Service encourages Federal and non-Federal project proponents to consider listed, proposed, and candidate species early in the planning process. Feel free to contact this office if you would like more information or assistance evaluating potential project impacts to federally listed species or other wildlife resources. Please include the Consultation Tracking Number in the header of this letter with any correspondence about your project.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Highlands

Official Species List

Provided by:

New Jersey Ecological Services Field Office
927 NORTH MAIN STREET, BUILDING D
PLEASANTVILLE, NJ 8232
(609) 646-9310

<http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

Consultation Code: 05E2NJ00-2015-SLI-0394

Event Code: 05E2NJ00-2015-E-00280

Project Type: LAND - FLOODING

Project Name: Highlands

Project Description: Highlands, NJ coastal flood control consisting of buried seawalls, bulkheads, and roadway swing gate. Anticipated start of construction Dec 2017

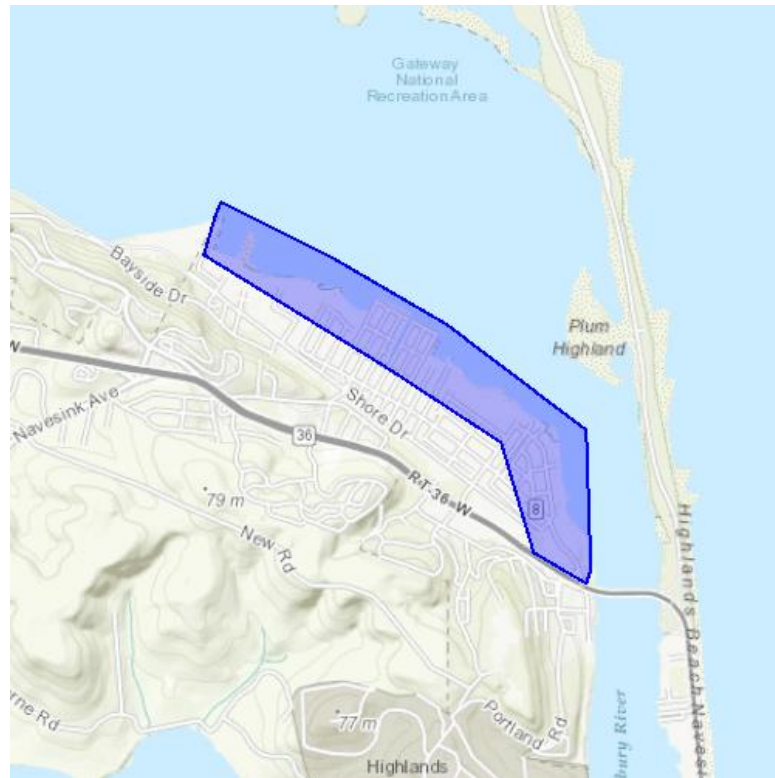
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Highlands

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-74.00107383728026 40.41140480914068, -74.00167465209961 40.409901689845256, -73.992018699646 40.405359451453684, -73.98583889007568 40.40228754814668, -73.98412227630615 40.39784284416162, -73.98128986358643 40.396600889127036, -73.98107528686523 40.39715650342182, -73.98133277893065 40.402777754883324, -73.98871421813965 40.40709142023647, -73.99463653564453 40.40970562833159, -74.00073051452635 40.41205832879732, -74.00107383728026 40.41140480914068)))

Project Counties: Monmouth, NJ



United States Department of Interior
Fish and Wildlife Service

Project name: Highlands

Endangered Species Act Species List

There are a total of 4 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Piping Plover (<i>Charadrius melodus</i>) Population: except Great Lakes watershed	Threatened	Final designated	
Red Knot (<i>Calidris canutus rufa</i>)	Threatened		
Flowering Plants			
Seabeach amaranth (<i>Amaranthus pumilus</i>)	Threatened		
Mammals			
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: Highlands

Critical habitats that lie within your project area

There are no critical habitats within your project area.



In Reply Refer To:
2014-TA-0427

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
Ecological Services
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609/646 9310
Fax: 609/646 0352
<http://www.fws.gov/northeast/njfieldoffice/>



Matthew Voisine, Biologist
U.S. Army Corps of Engineers - New York District
26 Federal Plaza, Room 2151
New York, New York 10278
matthew.voisine@usace.army.mil

JUL 15 2014

Dear Mr. Voisine:

The U.S. Fish and Wildlife Service (Service) has reviewed your June 24, 2014 request for updated information on the presence of federally listed threatened and endangered species for the Highlands Hurricane and Storm Damage Reduction Project, Monmouth County, New Jersey.

AUTHORITY

The following comments are provided as technical assistance.

FEDERALLY LISTED SPECIES AND SPECIES PROPOSED FOR LISTING

Piping Plover

The federally listed (threatened) piping plover (*Charadrius melodus*) nests approximately six miles east in Gateway National Recreation Area, Sandy Hook Unit during the breeding season between March 15 and August 31. The Highlands project area has no history of nesting piping plovers. We do not have any records indicating that piping plovers are nesting within the project area in 2014.

Seabeach Amaranth

The federally listed (threatened) plant seabeach amaranth (*Amaranthus pumilus*) is an annual plant endemic to Atlantic Coast beaches and barrier islands that was documented occurring in nearby Keansburg in 2013 approximately 3.5 linear miles from the proposed project area. The Highlands project area has no history of seabeach amaranth plants. The Service has yet to receive information regarding the presence of seabeach amaranth along the New Jersey coast in 2014.

Northern Long-Eared Bat

On October 3, 2013, the Service announced a proposed rule to list the northern long-eared bat (*Myotis septentrionalis*) as an endangered species throughout its range. The northern long-eared bat is a medium-sized bat found across much of the eastern and north-central United States. The northern long-eared bat predominantly overwinters in hibernacula that include caves and abandoned mines. During the summer, this species typically roosts singly or in colonies underneath bark or in cavities or crevices of both live trees and snags. Northern long-eared bats are also known to roost in human-made structures such as buildings, barns, sheds, and under eaves of windows. Threats to the northern long-eared bat include disease due to the emergence of white-nose syndrome, improper closure at hibernacula, degradation and destruction of summer habitat, and use of pesticides. Tree removal could impact this species by killing, injuring, or disturbing breeding or roosting bats if conducted between April 1 and September 30.

OTHER COMMENTS

Please be advised that Section 7 consultation pursuant to the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) requires the lead Federal agency in charge of the proposed project (*i.e.*, the U.S. Army Corps of Engineers, New York District) to provide a determination to the Service on whether the project as proposed may affect federally listed species. Also please be advised that Mr. Eric Davis is no longer employed at the New Jersey Field Office. Our Field Supervisor is Mr. Eric Schrading.

Thank you for the opportunity to provide this review. Should you have any questions, please contact Ron Popowski at Ron_Popowski@fws.gov.

Sincerely,



 Eric Schrading
Field Supervisor



REPLY TO
ATTENTION OF

Environmental Analysis Branch

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278-0090

June 24 2014

Mr. Eric Davis
U.S. Fish & Wildlife Service, New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232

Subject: Section 7 Consultation for Raritan and Sandy Hook Bay Hurricane and Storm Damage Reduction Project for Highlands, Monmouth County, New Jersey.

Dear Mr. Davis,

The U.S. Army Corps of Engineers, New York District (District), has been undertaking actions following Hurricane Sandy along the Atlantic Coast of New York and New Jersey, which includes the Raritan Bay shoreline. This assistance consists of the rehabilitation of federally authorized hurricane and shore protection projects under the Disaster Relief Appropriation Act of 2013 (Public Law 113-2 also known as the Sandy Relief Bill). Under this authorization, the District is evaluating the Raritan and Sandy Hook Bay Hurricane and Storm Damage Reduction Project for Highlands, Monmouth County, New Jersey (Project).

Pursuant to our above referenced subject, the District, would like to initiate informal section 7 coordination for the project. Through the Services iPac system, Piping Plover (*Charadrius melodus*), Seabeach amaranth (*Amaranthus pumilus*), and northern long-eared Bat (*Myotis septentrionalis*) were identified as potentially occurring in the project area. The project will not affect the northern long-eared bat as there will be no activities near mines or caves and there will be no removal of any trees >3" in diameter at breast height.

The District is requesting information regarding seabeach amaranth and Piping Plover in and near Highlands, NJ. The District has been in contact with Ron Popowski regarding this project and we have exchanged multiple documents discussing the project extent and footprint. If you have any questions regarding this request, please do not hesitate to contact me at matthew.voisine@usace.army.mil or 917-790-8718.

Sincerely,

Matthew Voisine, Project Biologist

cc:
Ron Popowski, USFWS



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

15 July 2015

Environmental Assessment Section
Environmental Analysis Branch

Mr. Daniel Saunders
Deputy State Historic Preservation Officer
State of New Jersey Department of Environmental Protection
Historic Preservation Office
PO Box 420
Trenton, NJ 08625-0420

Dear Mr. Saunders:

The U.S. Army Corps of Engineers, New York District (Corps) is preparing a feasibility study report for the Raritan Bay and Sandy Hook Bay, New Jersey, Combined Erosion Control and Coastal Storm Risk Management Project, Borough of Highlands. This report presents potential solutions to manage coastal storm risk in the Borough of Highlands, Monmouth County, New Jersey (Figure 1). The community has had a history of flooding and was severely impacted by Hurricane Sandy on October 2012. A feasibility study was under way at the time of Hurricane Sandy and alternatives have been reevaluated since the storm.

Undertaking

The shoreline of Highlands is composed primarily of bulkheads, which range in elevation from around +5 feet NAVD88 at low points to approximately +9 feet NAVD88 at the highest point. Small marinas, restaurants, and houses characterize the shoreline. Small beaches with public access are also located in the Borough. Several alternatives were considered as storm risk management measures. The Tentatively Selected Plan (TSP) consists of approximately 10,636 linear feet of raised bulkheads, raised ground surfaces, floodwalls, and reinforced dunes (seawalls with sand cover and vegetation cap). The project spans a geographic distance of approximately 8,000 linear feet along the bayshore of Highlands and ties into high ground (+10ft NAVD88 to +12ft NAVD88) at either end. For each segment of the project, features were chosen to match the existing surroundings, i.e., elevated bulkheads where the shoreline has bulkhead and reinforced dunes on the existing beaches. A closure gate is proposed to cross Bay Avenue. The final length and heights will be determined during project optimization.

Area of Potential Effect (APE)

The APE for this undertaking includes all areas to be directly impacted by activities required to construct project features as well as construction access and staging areas and, as required, environmental mitigation measures. The APE also includes viewsheds and landscapes in the vicinity of the Line of Protection (LOP).

Identification and Evaluation

Archaeology

The Corps prepared a Phase IA cultural resources report in 2005 in which archaeological testing of selected locations along the LOP was recommended. At that time your office, in response to the Corps' report, indicated there was no need for a Phase IB archeological survey (Enclosure 1, Correspondence). As per that opinion the Corps will undertake no archaeological testing where the project alignment remains unchanged. The western end of the alignment has been modified since the Phase I study to tie into a new development project. That development is being constructed by others so the Corps will undertake no testing there (see Figure 2). The eastern end of the alignment has been modified to tie into high ground along Bay Avenue (see Figure 3). An archaeological assessment, followed as needed by testing, will be undertaken of the newly proposed section of alignment.

Standing Structures

The Phase IA report recommended a survey of historic architecture and streetscapes within the APE. In 2007 Panamerican Consultants, Inc, conducted a survey for the Corps which identified a number of properties potentially eligible for the National Register of Historic Places (NRHP) (See Figures 1, 4 and 5 and Enclosure 2). Your office did not provide comments on this report.

The report identified the potential Shrewsbury Avenue Historic District comprised of five houses along the east side of Shrewsbury Avenue (Numbers 26 - 34). Lynn Rakos, of my staff, met with Michelle Hughes on 4 June of this year and was informed that your office determined that following Hurricane Sandy and subsequent repair these structures are not eligible as an historic district nor are any of the properties individually eligible.

The 2007 study identified two bungalow communities as remains of what was once a larger collection of bungalow/cottage communities within Highlands. Honeysuckle Lodge (between Atlantic and Cedar Street) is a large intact group of bungalows while 58 Fifth Street consists of a small group of bungalows (Figure 4). The authors of the 2007 report noted that there is a lack of context for these middle-class bungalow and cottage communities of the New Jersey shore and they suggest that should a multiple property nomination be prepared these two properties should be included. It is the Corps' opinion that Honeysuckle Lodge and 58 Fifth Street are potentially eligible for the NRHP under Criterion A as part of a multiple property of bungalow and cottage communities.

The Corps consulted with your office and based on the "Windshield Survey," conducted following Hurricane Sandy, there were four locations identified along the Highlands shoreline that had the potential for significant resources (Figure 6). One of these parcels is Honeysuckle Lodge discussed above. Structures on the other three parcels, including a row of bungalows and a clam processing plant, were studied by the Corps in 2007 and were determined not significant. It is the Corps' opinion that there are no historically significant properties on these parcels.

While most of Bay Avenue was outside the immediate Corps study area and APE at the time of the 2007 survey the authors noted that this mixed-use main artery of Highlands had the potential to be a historic district but was not considered in any detail as it was out of the APE. Your

“Windshield Survey” included just a small section of Bay Avenue (Figure 7). One structure noted in both surveys is Sculthorpe’s Auditorium, also known as the “Purple Building” due to its paint color. It was built in 1909 and was the first theater in Highlands dedicated exclusively to stage and motion picture entertainment. No NRHP-eligibility assessment was given for this structure. Noted in the windshield survey was the 24 Bay Avenue (not shown on Figure 7, but see Figures 5 and 8). The structure was built c. 1907 as the Creighton Hotel and now the FLoBar Apartments. It is one of few remaining middle-class, pre-WWII hotels on the New Jersey shore that retains any integrity and was determined potentially eligible in the 2007 study. The other structure noted in both surveys is 60 Bay Avenue but no assessment of its eligibility was made. As indicated in the 2007 report, previous studies by others determined that Sasha's Boutique Outlet (1 Bay Avenue), Bahrs Real Estate (15 Bay Avenue), and Mewes Bros. Dairy (19 Bay Avenue) were not eligible for the NRHP but may be determined to contribute to the Bay Avenue Historic District (Figure 8). At 2 Bay Avenue is Bahr’s Landing Restaurant and Marina which is an NRHP-eligible property located 500 feet east of the APE.

Two properties in the APE were identified by the Borough of Highlands in its Master Plan as historically interesting; a Sears, Roebuck & Co. kit house at 257 Bay Avenue and the former clam-processing plant (Clam Shanty) at the end of Miller Street. They were both determined by the 2007 survey as too altered and lacking integrity to be individually NRHP-eligible.

The Twin Lights (Navesink Lighthouse) National Historic Landmark (NHL) and the Water Witch Casino, an NRHP-listed property, are on high ground rising above the Borough of Highlands approximately one mile west of the APE. The NRHP-listed Fort Hancock and Sandy Hook Proving Grounds Historic District and the Sandy Hook Lighthouse NHL are located approximately three miles north, across Sandy Hook Bay, from the APE. While well outside the APE, sections of the LOP are within the viewsheds of these historic properties.

Assessment of Effects

It is the Corps’ opinion that the NRHP eligibility of Honeysuckle Lodge and 58 Fifth St., both identified previously as eligible as part of a thematic bungalow/cottage communities of the New Jersey shore, will need to be re-assessed following impacts from Hurricane Sandy and recovery measures. As the alignment is now proposed to cross Bay Avenue the eligibility of Bay Avenue, previously noted as a potentially eligible historic district before Hurricane Sandy, will need to be evaluated. The FloBar Apartments, determined to be a potentially individually eligible property by the Corps, is just three parcels from the now proposed closure gate. Sculthorpe’s Auditorium and 60 Bay Street would be included in the overall Bay Street evaluation but will also be evaluated for individual eligibility. It is clear that no above ground resources, if determined eligible, will be directly impacted by the proposed plan however indirect impacts to any properties determined significant will need to be evaluated and these include effects on viewsheds and setting. The project will have no effect on 2 Bay Avenue, Bahrs Restaurant and Marina, due to the distance of the property from the LOP.

Sections of the LOP are visible from the Sandy Hook Lighthouse NHL, the Twin Lights (Navesink Lighthouse) NHL, the Water Witch Casino and Fort Hancock Historic District. It is the Corps’ opinion that the project will have no adverse effect on the viewsheds from these properties as the views from them are focused out to sea. Also, the project as proposed will

match existing shoreline features so when viewed from these distant historic properties there will be little change from existing conditions.

The Corps has prepared a draft Programmatic Agreement (PA) which stipulates the work the Corps will undertake to assess the NRHP eligibility of the structures and potential Bay Avenue Historic District discussed above (Enclosure 3). The PA includes stipulations for archeological testing of locations where the LOP has shifted to cross Bay Avenue. An assessment of effects to any properties determined eligible will be made in coordination with your office and other interested parties. Mitigation measures will be developed, as per the PA, if avoidance of impacts to significant properties is not feasible. It should be noted that the Borough of Highlands has Master Plan which contains a Design Manual for the Central Business District which may be used to develop mitigation measures, if necessary, for Bay Avenue. The Corps will coordinate the draft PA with the Advisory Council on Historic Preservation, Federally Recognized Tribes and other interested parties. The draft PA will be available for public review in the Draft Environmental Assessment which will serve as the USACE's Section 106 public coordination.

Please review the enclosed documents and provide Section 106 comments, pursuant to 36 CFR 800.5. If you or your staff require additional information or have any questions, please contact Lynn Rakos, Project Archaeologist, at (917) 790-8629

Sincerely,

A handwritten signature in black ink, appearing to read 'Peter M. Weppeler', written in a cursive style.

Peter M. Weppeler
Chief, Environmental Analysis Branch

Enclosures

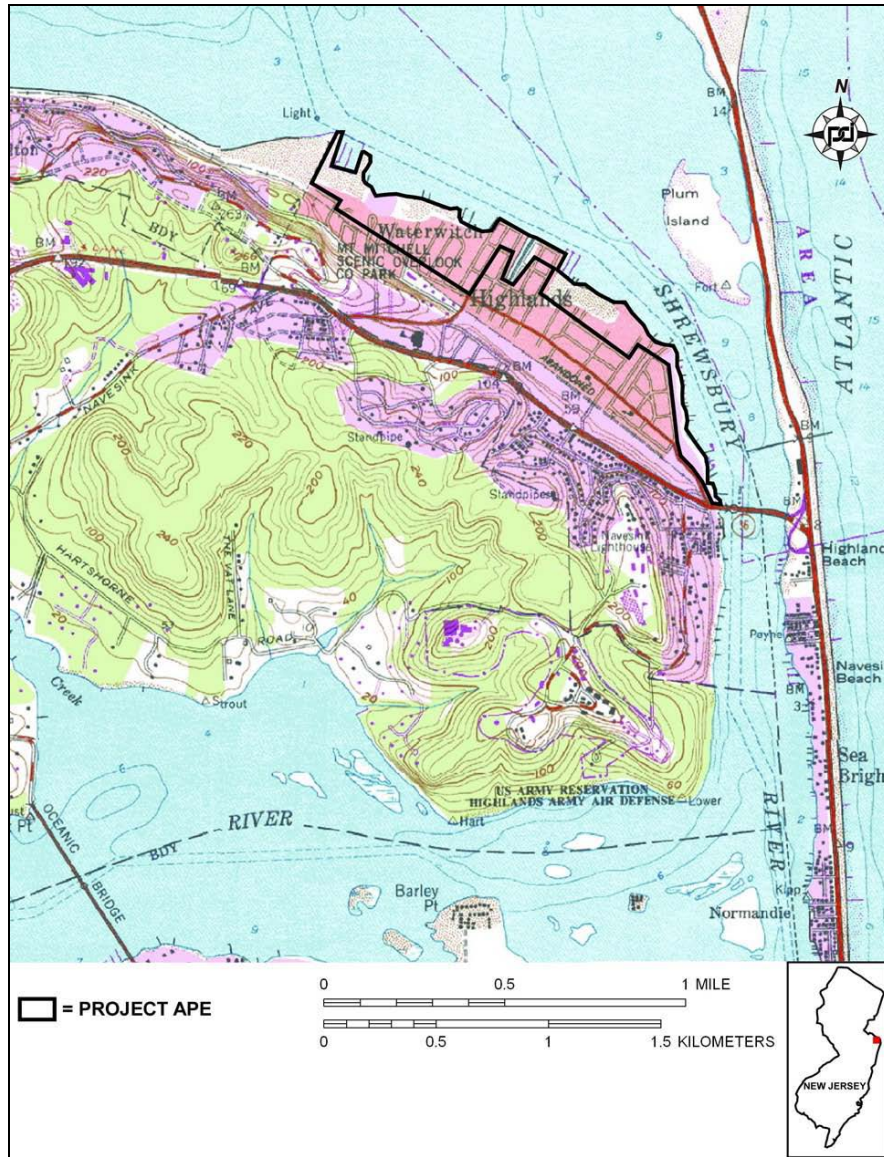


Figure 1. Project locations, Borough of Highlands, Monmouth County, NJ (Sandy Hook Quadrangle, USGS 1981 [1954]). The 2007 Historic Architectural Survey Area is outlined (Panamerican Consultants, Inc. 2007).

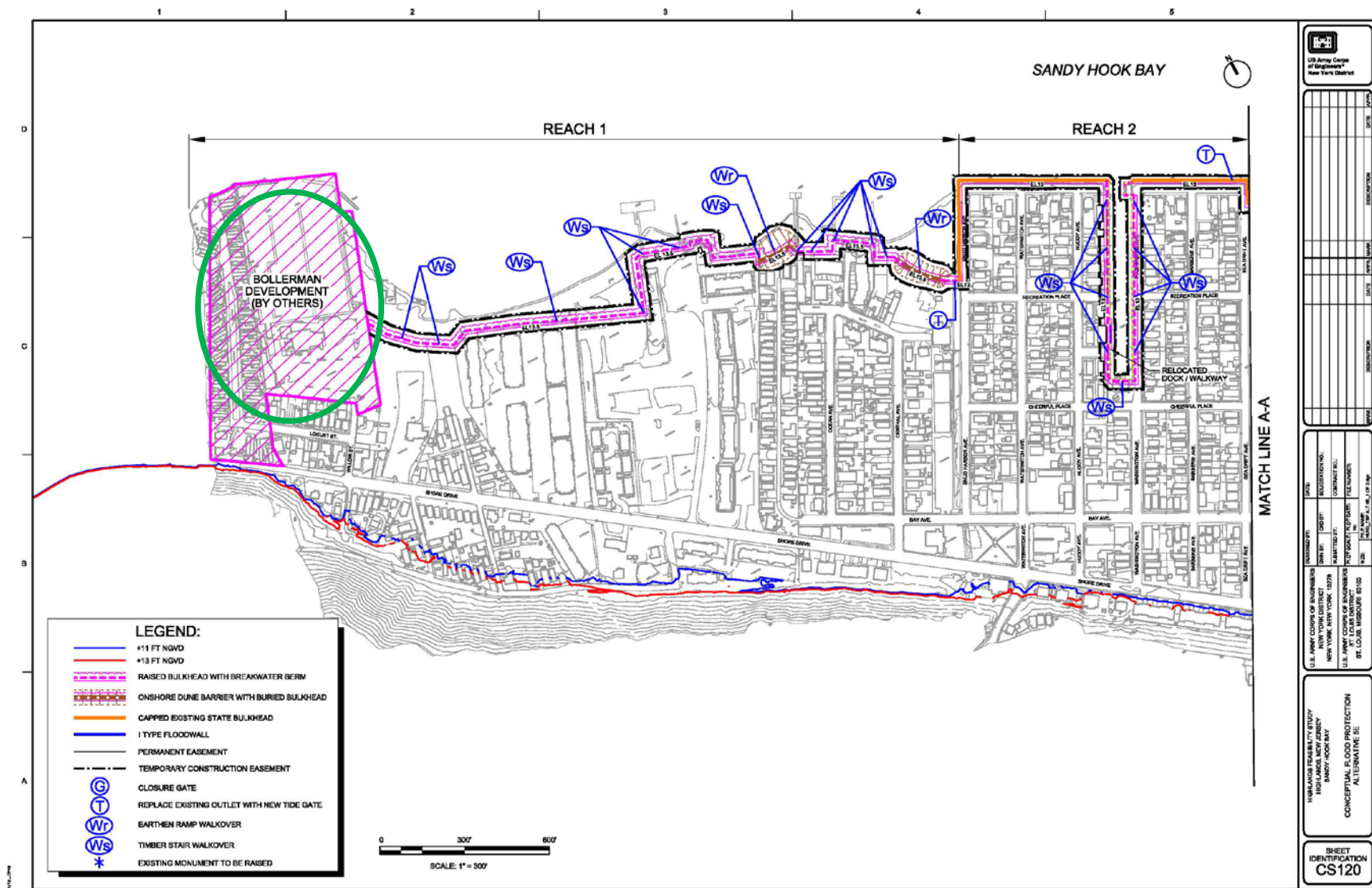


Figure 2. Tentatively Selected Plan. Change to former alignment at west end where a private development is being constructed (circled).

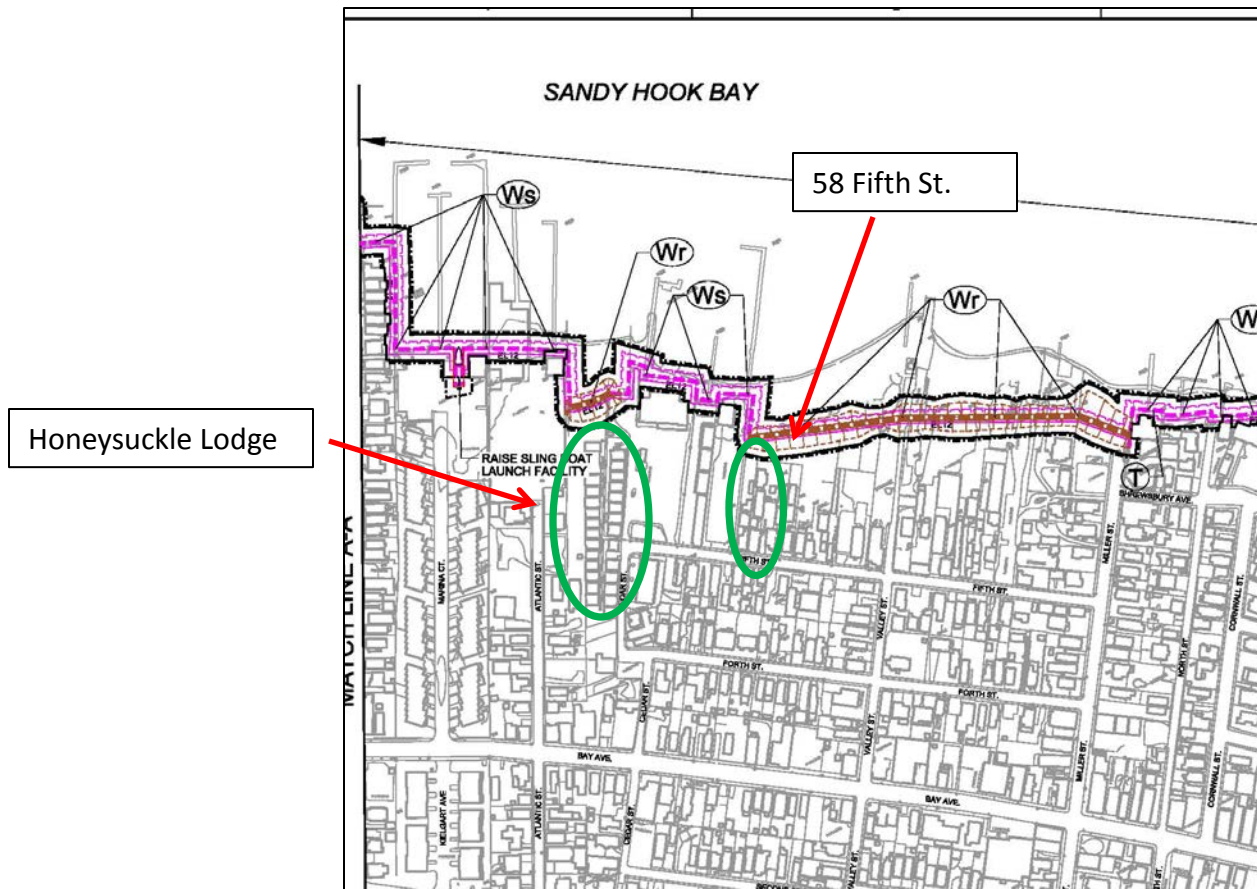


Figure 4. Potentially NRHP-eligible bungalow communities.

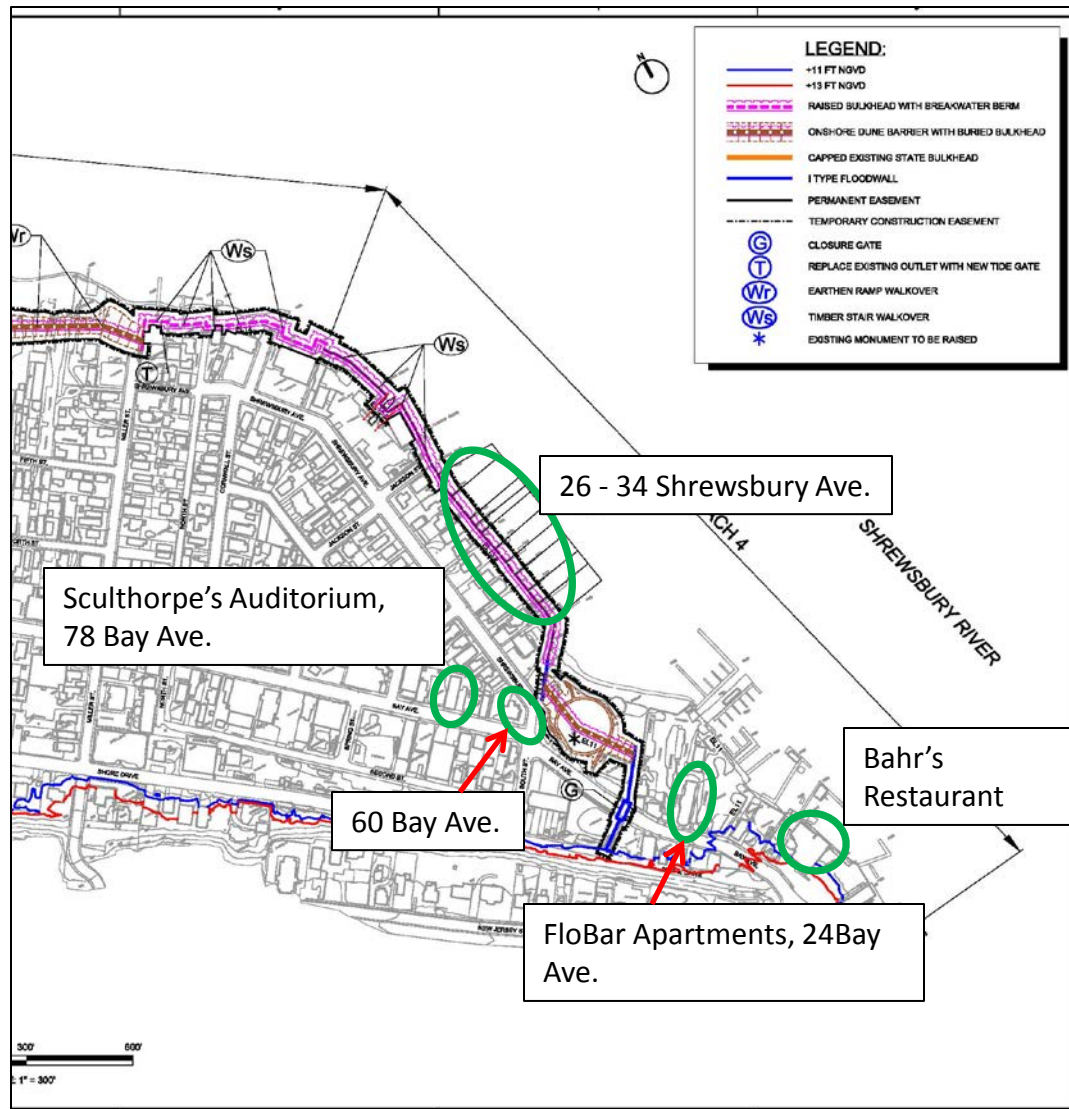


Figure 5. Identified properties



Figure 6. NJHPO Windshield survey – shoreline area



Figure 7. NJHPO Windshield survey – Bay Avenue area

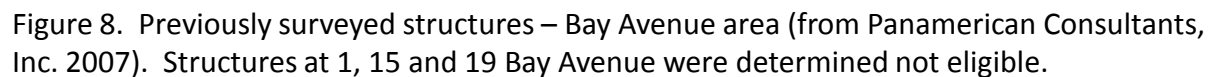


Figure 8. Previously surveyed structures – Bay Avenue area (from Panamerican Consultants, Inc. 2007). Structures at 1, 15 and 19 Bay Avenue were determined not eligible.

Enclosure 1

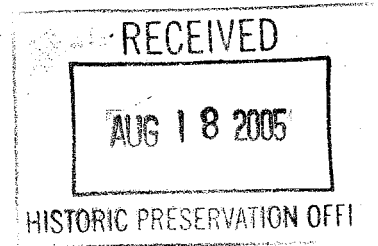
Correspondence



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

July 25, 2005



Environmental Analysis Branch

Ms. Dorothy P. Guzzo
Deputy State Historic Preservation Officer
Historic Preservation Office
New Jersey Department of Environmental Protection
CN 404
Trenton, New Jersey 08625-0404

Re: CORPS
Feasibility Study: Sandy Hook & Raritan Bay Cultural Resource Draft Phase 1A Report,
Borough of Highlands, Monmouth County, New Jersey

Dear Ms. Guzzo:

The U.S. Army Corps of Engineers, New York District (Corps), is pleased to furnish you with a draft copy of the Feasibility Study: Sandy Hook & Raritan Bay Cultural Resource Draft Phase 1A Report, Borough of Highlands, Monmouth County, New Jersey. The United States Army Corps of Engineers is the lead Federal Agency and the New Jersey Department of Environmental Protection is the lead state agency for the ongoing feasibility study to assess the potential alternative to aid in combined erosion control and storm damage reduction within the Borough of Highlands.

In keeping with the Section 106 process please provide and comments and/or concurrence with this report within 30 days of its receipt.

Thank you for your participation in the Section 106 process for this project. If you have any questions, please contact the Project Archaeologist, Kirsten Davis, (917) 790-8710.

Sincerely,

Leonard Houston
Chief, Environmental Analysis Branch



State of New Jersey

Richard J. Codey
Acting Governor

Department of Environmental Protection
Natural and Historic Resources, Historic Preservation Office
PO Box 404, Trenton, NJ 08625-0404
TEL: (609) 292-2023 FAX: (609) 984-0578
www.state.nj.us/dep/hpo

Bradley M. Campbell
Commissioner

HPO-I2005-137
106/05-2109-1
September 15, 2005

Leonard Houston
Chief, Environmental Analysis Branch
Department of the Army
Corps of Engineers New York District
Jacob K. Javits Federal Building
New York, NY 10278-0090

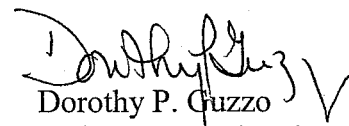
ATTN: Kirsten Davis

Dear Mr. Houston:

Thank you for providing the opportunity to review the July 2005 draft copy of the Feasibility Study: Sandy Hook & Raritan Bay Cultural Resource Draft Phase IA Report, Borough of Highlands, Monmouth County, New Jersey. The report is acceptable as prepared. In terms of U.S. Army Corps of Engineers' recommendations for additional cultural resource survey, unless there are project changes, the Office does not believe that Phase IB archaeological survey is likely to result in identification of National Register eligible archaeological properties. However, architectural survey to identify significant buildings and historic districts within the Area of Potential Effects and to assess project impacts to eligible properties should be conducted.

Thank you again for providing this opportunity for review and Consultation. If you have any questions, please do not hesitate to contact Deborah Fimbel, staff reviewer for this project, at 609-984-6019.

Sincerely,


Dorothy P. Guzzo
Deputy State Historic
Preservation Officer

DPG:DRF



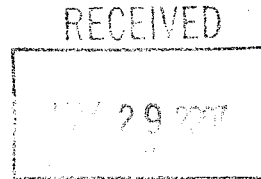
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

Environmental Assessment Branch

May 2, 2007

Ms. Dorothy P. Guzzo
Deputy State Historic Preservation Officer
Historic Preservation Office
New Jersey Department of Environmental Protection
CN 404
Trenton, New Jersey 08625-0404



HISTORIC PRESERVATION OFFICE

07-1388-1 JF

Re: CORPS

National Register of Historic Places Evaluation and Historic Context for the Borough of
Highlands, Monmouth County, New Jersey

Dear Ms. Guzzo:

The U.S. Army Corp
with a draft copy of the *Nati*
the Borough of Highlands, A
Engineers is the lead Federal
alternatives to aid in combin
of Highlands.

SNRA

strict (Corps), is pleased to furnish you
es Evaluation and Historic Context for
The United States Army Corps of
bility study to assess the potential
damage reduction within the Borough

This study has found one structure and two districts that are eligible for the National Register of Historic Places. The FloBar Apartments (ca. 1907) are recommended as being individually eligible for the NRHP under Criterion A. The two districts that were identified as potentially eligible are: 1) Shrewsbury Avenue District and a portion of Bay Avenue. All three recommendations are being made based upon the building or districts relevance to the popularity of the Jersey Shore as a summer resort throughout the 20th century.

Please review and provide comments and/or concurrence on this report within 30 days of receipt of this letter.

Thank you for your participation in the Section 106 process for this project. If you have any questions, please contact the Project Archaeologist, Kirsten Smyth, (917) 790-8710.

Sincerely,

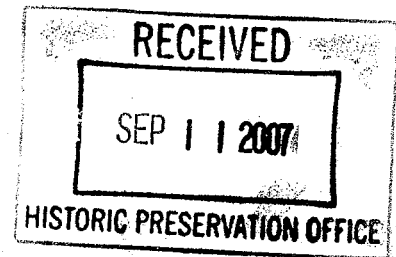
Leonard Houston
Chief, Environmental Analysis Branch



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF
Environmental Assessment Branch

August 22, 2007



Ms. Dorothy P. Guzzo
Deputy State Historic Preservation Officer
Historic Preservation Office
New Jersey Department of Environmental Protection
CN 404
Trenton, New Jersey 08625-0404

Re: CORPS
National Register of Historic Places Evaluation and Historic Context for the Borough of
Highlands, Monmouth County, New Jersey

Dear Ms. Guzzo:

The U.S. Army Corps of Engineers, New York District (Corps), is pleased to furnish you with a final copy of the *National Register of Historic Places Evaluation and Historic Context for the Borough of Highlands, Monmouth County, New Jersey*. The United States Army Corps of Engineers is the lead Federal Agency for the ongoing feasibility study to assess the potential alternatives to aid in combined erosion control and storm damage reduction within the Borough of Highlands.

This study has found one structure and two districts that are eligible for the National Register of Historic Places. The FloBar Apartments (ca. 1907) are recommended as being individually eligible for the NRHP under Criterion A. The two districts that were identified as potentially eligible are: 1) Shrewsbury Avenue District and a portion of Bay Avenue. All three recommendations are being made based upon the building or districts relevance to the popularity of the Jersey Shore as a summer resort throughout the 20th century.

As of August 20, 2007, we have not received comments from your office. We have finalized the document and will proceed as recommend in the report.

Thank you for your participation in the Section 106 process for this project. If you have any questions, please contact the Project Archaeologist, Kirsten Smyth, (917) 790-8710.

Sincerely,

Leonard Houston
Chief, Environmental Analysis Branch

Enclosure 2: Identified Properties within the APE and NRHP-eligibility Determinations

Name	Address	NRHP Eligibility
Honeysuckle Lodge	Between Atlantic and Cedar Street	Potentially eligible
58 Fifth Street Bungalows	58 Fifth Street	Potentially eligible
Shrewsbury Avenue District	26 – 34 Shrewsbury Avenue	Not eligible
Clam Shanty	Bay end of Miller Street	Not eligible
Bay Avenue Historic District		Potentially eligible
The following Bay Avenue properties may be found to be contributing elements to the potential Bay Avenue Historic District. Individual eligibility is given below for each structure.		
Creighton Hotel (FLoBar Apartments)	24 Bay Avenue	Potentially eligible
Sculthorpe's Auditorium (the "Purple Building")	78 Bay Avenue	Potentially eligible
Sasha's Boutique Outlet	1 Bay Avenue	Not eligible
Bahrs Real Estate	15 Bay Avenue	Not eligible
Mewes Bros. Dairy	19 Bay Avenue	Not eligible
Sears, Roebuck & Co. kit house	257 Bay Avenue	Not eligible
Dwelling	60 Bay Avenue	Potentially eligible
Bahr's Landing Restaurant and Marina	2 Bay Avenue	Eligible

Enclosure 3

Draft Programmatic Agreement

Please See Draft EA Appendix A5



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

15 July 2015

Environmental Assessment Section
Environmental Analysis Branch

Mr. Reid Nelson, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
The Old Post Office Building
1100 Pennsylvania Avenue, N.W., Suite 809
Washington, D.C. 20004

Dear Mr. Nelson:

The U.S. Army Corps of Engineers, New York District (Corps) is preparing a feasibility study report for the Raritan Bay and Sandy Hook Bay, New Jersey, Combined Erosion Control and Coastal Storm Risk Management Project, Borough of Highlands. This report presents potential solutions to manage coastal storm risk in the Borough of Highlands, Monmouth County, New Jersey (Figure 1). The community has had a history of flooding and was severely impacted by Hurricane Sandy on October 2012. A feasibility study was under way at the time of Hurricane Sandy and alternatives have been reevaluated since the storm.

Undertaking

The shoreline of Highlands is composed primarily of bulkheads, which range in elevation from around +5 feet NAVD88 at low points to approximately +9 feet NAVD88 at the highest point. Small marinas, restaurants, and houses characterize the shoreline. Small beaches with public access are also located in the Borough. Several alternatives were considered as storm risk management measures. The Tentatively Selected Plan (TSP) consists of approximately 10,636 linear feet of raised bulkheads, raised ground surfaces, floodwalls, and reinforced dunes (seawalls with sand cover and vegetation cap). The project spans a geographic distance of approximately 8,000 linear feet along the bayshore of Highlands and ties into high ground (+10ft NAVD88 to +12ft NAVD88) at either end. For each segment of the project, features were chosen to match the existing surroundings, ie., elevated bulkheads where the shoreline has bulkhead and reinforced dunes on the existing beaches. A closure gate is proposed to cross Bay Avenue (Figures 2 and 3). The final length and heights will be determined during project optimization

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Archaeology

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The 2007 report identified the potential Shrewsbury Avenue Historic District comprised of five houses along the east side of Shrewsbury Avenue (Numbers 26 - 34). Following Hurricane Sandy and subsequent repair the NJHPO has determined that these structures are not eligible as an historic district nor are any of the properties individually eligible (Michelle Hughes, personal communication, 2015).

The 2007 study identified two bungalow communities as remains of what was once a larger collection of bungalow/cottage communities within Highlands. Honeysuckle Lodge (between Atlantic and Cedar Street) is a large intact group of bungalows while 58 Fifth Street consists of a small group of bungalows (Figure 4). The authors of the 2007 report noted that there is a lack of context for these middle-class bungalow and cottage communities of the New Jersey shore and they suggest that should a multiple property nomination be prepared these two properties should be included. It is the Corps' opinion that Honeysuckle Lodge and 58 Fifth Street are potentially eligible for the NRHP under Criterion A as part of a multiple property of bungalow and cottage communities.

The NJHPO conducted a "windshield survey" of above ground resources immediately following Hurricane Sandy. The survey was limited to the areas that experienced surge from the storm. This survey identified for the Federal Emergency Management Agency (FEMA) and others involved in disaster recovery areas of known historic resources, potential historic properties/districts and properties/districts that were not likely to be significant. This survey identified four locations along the Highlands shoreline that had the potential for significant resources. One of the parcels was Honeysuckle Lodge, discussed above. The three other parcels identified in the windshield survey were surveyed in 2007 and no significant structures were identified.

The NJHPO windshield survey highlighted three structures on Bay Avenue. It must be noted that the survey did not extend far onto Bay Avenue due to survey limits associated with the storm surge. While Bay Avenue was also outside the immediate CENAN study area and APE at the time of the 2007 survey, the authors noted that this mixed-use main artery of Highlands had the potential to be a historic district but it was not considered in any detail as it was outside of the APE.

One structure noted by both surveys was 78 Bay Avenue, (Sculthorpe's Auditorium), also known as the "Purple Building" due to its paint color. It was built in 1909 and was the first theater in Highlands dedicated exclusively to stage and motion picture entertainment. No NRHP-eligibility assessment was given for this structure by either survey. Also noted in the windshield survey was the 24 Bay Avenue. The structure was built c. 1907 as the Creighton Hotel and is now the FLoBar Apartments. It is one of few remaining middle-class, pre-WWII hotels on the New Jersey shore that retains any integrity and was determined potentially individually eligible. The other structure noted in the windshield survey is 60 Bay Avenue which is included in the 2007 report but was also not given an evaluation of eligibility. As indicated in the 2007 report, previous studies by others determined that Sasha's Boutique Outlet (1 Bay Avenue), Bahrs Real Estate (15 Bay Avenue), and Mewes Bros. Dairy (19 Bay Avenue) were not eligible for the NRHP but may be determined to contribute to the Bay Avenue Historic District. At 2 Bay Avenue is Bahr's Landing Restaurant and Marina which is an NRHP-eligible property located 500 feet east of the APE.

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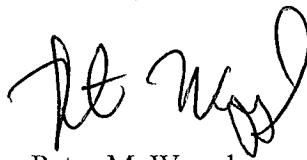
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We invite you to consult with us on the Borough of Highlands Combined Erosion Control and Coastal Storm Risk Management Project and participate in the PA as per 36 CFR Part 800.6. If you or your staff require additional information or have any questions, please contact Lynn Rakos, Project Archaeologist, at (917) 790-8629

Sincerely,

A handwritten signature in black ink, appearing to read "Peter M. Wepler", written in a cursive style.

Peter M. Wepler
Chief, Environmental Analysis Branch

Enclosures



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

15 July 2015

Environmental Assessment Section
Environmental Analysis Branch

Mr. Jason Ross
Delaware Nation
Section 106 Manager
P.O. Box 825
Anadarko, OK 73005

Dear Mr. Ross:

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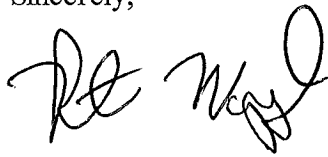
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Chief, Environmental Analysis Branch

Enclosures



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

15 July 2015

Environmental Assessment Section
Environmental Analysis Branch

Ms. Blair Fink
Delaware Tribe Historic Preservation Representatives
Department of Anthropology
Gladfelter Hall
Temple University
1115 W. Polett Walk
Philadelphia, PA 19122

Dear Ms. Fink:

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Enclosures



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

15 July 2015

Environmental Assessment Section
Environmental Analysis Branch

Ms. Kim Jumper
Tribal Historic Preservation Officer
Shawnee Tribe of Oklahoma
29 S Highway 69A
Miami, OK 74355

Dear Ms. Jumper:

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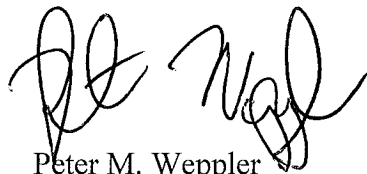
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REPLY TO
ATTENTION OF

15 July 2015

Environmental Assessment Section
Environmental Analysis Branch

Mr. Russell Card, President
The Historical Society of Highlands
P.O. Box 13,
Highlands, New Jersey 07732

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Standing Structures

The Phase IA report recommended a survey of historic architecture and streetscapes within the APE. In 2007 Panamerican Consultants, Inc, conducted a survey for the Corps which identified a number of properties potentially eligible for the National Register of Historic Places (NRHP) (See Figures 1, 4 and 5 and Enclosure 2).

The 2007 report identified the potential Shrewsbury Avenue Historic District comprised of five houses along the east side of Shrewsbury Avenue (Numbers 26 - 34). Following Hurricane Sandy and subsequent repair the NJHPO has determined that these structures are not eligible as an historic district nor are any of the properties individually eligible (Michelle Hughes, personal communication, 2015).

The 2007 study identified two bungalow communities as remains of what was once a larger collection of bungalow/cottage communities within Highlands. Honeysuckle Lodge (between Atlantic and Cedar Street) is a large intact group of bungalows while 58 Fifth Street consists of a small group of bungalows (Figure 4). The authors of the 2007 report noted that there is a lack of context for these middle-class bungalow and cottage communities of the New Jersey shore and they suggest that should a multiple property nomination be prepared these two properties should be included. It is the Corps' opinion that Honeysuckle Lodge and 58 Fifth Street are potentially eligible for the NRHP under Criterion A as part of a multiple property of bungalow and cottage communities.

The NJHPO conducted a "windshield survey" of above ground resources immediately following Hurricane Sandy. The survey was limited to the areas that experienced surge from the storm. This survey identified for the Federal Emergency Management Agency (FEMA) and others involved in disaster recovery areas of known historic resources, potential historic properties/districts and properties/districts that were not likely to be significant. This survey identified four locations along the Highlands shoreline that had the potential for significant resources. One of the parcels was Honeysuckle Lodge, discussed above. The three other parcels identified in the windshield survey were surveyed in 2007 and no significant structures were identified.

The NJHPO windshield survey highlighted three structures on Bay Avenue. It must be noted that the survey did not extend far onto Bay Avenue due to survey limits associated with the storm surge. While Bay Avenue was also outside the immediate CENAN study area and APE at the time of the 2007 survey, the authors noted that this mixed-use main artery of Highlands had the potential to be a historic district but it was not considered in any detail as it was outside of the APE.

One structure noted by both surveys was 78 Bay Avenue, (Sculthorpe's Auditorium), also known as the "Purple Building" due to its paint color. It was built in 1909 and was the first theater in Highlands dedicated exclusively to stage and motion picture entertainment. No NRHP-eligibility assessment was given for this structure by either survey. Also noted in the windshield survey was the 24 Bay Avenue. The structure was built c. 1907 as the Creighton Hotel and is now the FLoBar Apartments. It is one of few remaining middle-class, pre-WWII hotels on the New Jersey shore that retains any integrity and was determined potentially individually eligible. The other structure noted in the windshield survey is 60 Bay Avenue which is included in the 2007 report but was also not given an evaluation of eligibility. As indicated in the 2007 report, previous studies by others determined that Sasha's Boutique Outlet (1 Bay Avenue), Bahrs Real Estate (15 Bay Avenue), and Mewes Bros. Dairy (19 Bay Avenue) were not eligible for the NRHP but may be determined to contribute to the Bay Avenue Historic District. At 2 Bay Avenue is Bahr's Landing Restaurant and Marina which is an NRHP-eligible property located 500 feet east of the APE.

Two properties in the APE were identified by the Borough of Highlands in its Master Plan as historically interesting; a Sears, Roebuck & Co. kit house at 257 Bay Avenue and the former clam-processing plant (Clam Shanty) at the end of Miller Street. They were both determined by the 2007 survey as too altered and lacking integrity to be individually NRHP-eligible.

The Twin Lights (Navesink Lighthouse) National Historic Landmark (NHL) and the Water Witch Casino, an NRHP-listed property, are on high ground rising above the Borough of Highlands approximately one mile west of the APE. The NRHP-listed Fort Hancock and Sandy Hook Proving Grounds Historic District and the Sandy Hook Lighthouse NHL are located approximately three miles north, across Sandy Hook Bay, from the APE. While well outside the APE, sections of the LOP are within the viewsheds of these historic properties.

Assessment of Effects

It is the Corps' opinion that the NRHP eligibility of Honeysuckle Lodge and 58 Fifth St., both identified previously as eligible as part of a thematic bungalow/cottage communities of the New Jersey shore, will need to be re-assessed following impacts from Hurricane Sandy and recovery measures. As the alignment is now proposed to cross Bay Avenue the eligibility of Bay Avenue, previously noted as a potentially eligible historic district before Hurricane Sandy, will need to be evaluated. The FloBar Apartments, determined to be a potentially individually eligible property by the Corps, is just three parcels from the now proposed closure gate. Sculthorpe's Auditorium and 60 Bay Street would be included in the overall Bay Street evaluation but will also be evaluated for individual eligibility. It is clear that no above ground resources, if determined eligible, will be directly impacted by the proposed plan however indirect impacts to any

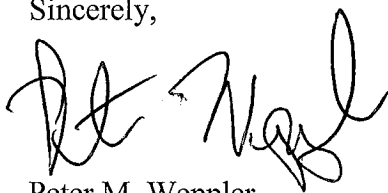
properties determined significant will need to be evaluated and these include effects on viewsheds and setting. The project will have no effect on 2 Bay Avenue, Bahrs Restaurant and Marina, due to the distance of the property from the LOP.

Sections of the LOP are visible from the Sandy Hook Lighthouse NHL, the Twin Lights (Navesink Lighthouse) NHL, the Water Witch Casino and Fort Hancock Historic District. It is the Corps' opinion that the project will have no adverse effect on the viewsheds from these properties as the views from them are focused out to sea. Also, the project as proposed will match existing shoreline features so when viewed from these distant historic properties there will be little change from existing conditions.

The Corps has prepared a draft Programmatic Agreement (PA) which stipulates the work the Corps will undertake to assess the NRHP eligibility of the structures and potential Bay Avenue Historic District discussed above (Enclosure 3). The PA includes stipulations for archeological testing of locations where the LOP has shifted to cross Bay Avenue. An assessment of effects to any properties determined eligible will be made in coordination with NJHPO and other interested parties. Mitigation measures will be developed, as per the PA, if avoidance of impacts to significant properties is not feasible. It should be noted that the Borough of Highlands has Master Plan which contains a Design Manual for the Central Business District which may be used to develop mitigation measures, if necessary, for Bay Avenue. The Corps will coordinate the draft PA with NJHPO, the Advisory Council on Historic Preservation, Federally Recognized Tribes and other interested parties. The draft PA will be available for public review in the Draft Environmental Assessment which will serve as the USACE's Section 106 public coordination.

We invite you to consult with us on the Borough of Highlands Combined Erosion Control and Coastal Storm Risk Management Project and participate in the PA. If you or your staff require additional information or have any questions, please contact Lynn Rakos, Project Archaeologist, at (917) 790-8629

Sincerely,

A handwritten signature in black ink, appearing to read "Peter M. Wepler", written in a cursive style.

Peter M. Wepler
Chief, Environmental Analysis Branch

Enclosures

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Raritan Bay and Sandy Hook Bay, New Jersey Combined Erosion Control and Coastal Storm Risk Management Project Borough of Highlands Feasibility Study

**Draft Feasibility Report
June 2015**

**Appendix A5:
Cultural Resources
Draft Programmatic Agreement**

DRAFT PROGRAMMATIC AGREEMENT
AMONG
THE U. S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT,
AND
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICE
REGARDING
RARITAN BAY AND SANDY HOOK BAY, HIGHLANDS, NEW JERSEY
COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY
MONMOUTH COUNTY, NEW JERSEY

WHEREAS, the U.S. Army Corps of Engineers, New York District, (New York District) has been authorized to conduct a coastal storm risk management feasibility study along the Raritan Bay shore in the Borough of Highlands, Monmouth County, New Jersey, and

WHEREAS, the New York District was originally authorized to undertake a feasibility study through a resolution by the Committee on Public Works and Transportation of the U.S. House of Representatives, dated August 1990 for the purposes of erosion control and storm damage prevention within Raritan Bay and Sandy Hook Bay, NJ.

WHEREAS, authorization to complete the feasibility study for this Undertaking has been provided to the New York District under P.L. 113-2, the Disaster Relief Appropriations Act of 2013, following October 2012 Hurricane Sandy; and

WHEREAS, the Undertaking as proposed consists of approximately 10,636 linear feet of raised bulkheads, raised ground surfaces, floodwalls, and reinforced dunes (seawalls with sand cover and vegetation cap). The project spans a geographic distance of approximately 8,000 linear feet along the bayshore of Highlands and ties into high ground (+10ft NAVD88 to +12ft NAVD88) at either end. For each segment of the project, features were chosen to match the existing surroundings, ie., elevated bulkheads where the shoreline has bulkhead and reinforced dunes on the existing beaches. A closure gate is proposed to cross Bay Avenue (Appendix A). The final length and heights will be determined during project optimization; and

WHEREAS, the New York District has defined the Area of Potential Effect (APE) for this Undertaking to include all areas impacted by activities required to construct the raised bulkheads, raised ground surfaces, floodwalls, buried stone seawalls and any required environmental mitigation measures and staging areas; the locations for some project features have yet to be determined; and

WHEREAS, the New York District is applying the National Register of Historic Places (NRHP) Criteria (Criteria) to properties identified within the APE on a phased basis, and to date has completed surveys within a substantial portion of the APE (Appendix B) and has determined NRHP eligibility of properties (Appendix C), with the recognition that additional identifications and evaluations are required for project actions that have subsequently been modified or which have not yet been finalized; and

WHEREAS, the New York District identified the following National Historic Landmarks (NHL) and NRHP-listed or eligible properties within the APE: Sandy Hook Lighthouse NHL, Twin Lights (Navesink Lighthouse) NHL, Fort Hancock and Sandy Hook Proving Grounds Historic District (NRHP-listed), the Water Witch Casino (NRHP-listed) and Bahr's Landing Restaurant and Marina (NRHP-eligible); and

WHEREAS, the New York District had prior to Hurricane Sandy identified the following properties within the APE as potentially NRHP-eligible: Honeysuckle Lodge (between Atlantic and Cedar Street), a group of bungalows at 58 Fifth Street, Sculthorpe's Auditorium at 78 Bay Avenue, the Flo-Bar Apartments (Creighton Hotel) at 24 Bay Avenue, the Bay Avenue Historic District and the Shrewsbury Avenue Historic District, comprised of five houses along the east side of Shrewsbury Avenue (Numbers 26 - 34); and

WHEREAS, the NJHPO has determined that following Hurricane Sandy and subsequent repair 26 through 34 Shrewsbury Avenue are not eligible as a historic district nor are any structures individually NRHP-eligible; and

WHEREAS, the NJHPO post-Hurricane Sandy survey identified the following individual property within the APE as a potentially historic property but gave no eligibility determination: 60 Bay Avenue; and

WHEREAS, the New York District will assess the NRHP-eligibility, as individual properties and/or districts as appropriate, of the following: Honeysuckle Lodge (between Atlantic and Cedar Street), a group of bungalows at 58 Fifth Street, Sculthorpe's Auditorium at 78 Bay Avenue, the Flo-Bar Apartments (Creighton Hotel) at 24 Bay Avenue, and the Bay Avenue Historic District and will also assess NRHP-eligibility of 60 Bay Avenue; and

WHEREAS, the New York District has determined that the Undertaking will have no adverse effect on the viewsheds from the Fort Hancock and Sandy Hook Proving Grounds Historic District, the Sandy Hook Lighthouse NHL, the Twin Lights (Navesink Lighthouse) NHL and the Water Witch Casino, or on the setting of Bahr's Landing Restaurant and Marina; and

WHEREAS, the New Jersey Historic Preservation Office determined that a Phase 1B archaeological investigation was not required for the shoreline project features in the APE; archaeological surveys may be required where the alignment on the east end of the APE has been modified (Appendix D) and in proposed environmental mitigation areas, once determined; and

WHEREAS, the New York District has invited the Advisory Council on Historic Preservation (ACHP), the Delaware Nation, the Delaware Tribe of Indians, the Shawnee Tribe of Oklahoma and the Historical Society of Highlands to participate in the Section 106 consultation process; and

WHEREAS the New York District made the Draft Programmatic Agreement (PA) available for public review in the Draft Environmental Assessment prepared under the National

Environmental Policy Act which will serve as the District's Section 106 public coordination for this undertaking; and

WHEREAS, in accordance with 36 CFR Part 800.14, the New York District and the NJHPO have determined that execution of this PA will establish alternative procedures to streamline the coordination of the Project; and

WHEREAS, the New York District shall continue to consult with the NJHPO regarding plans and surveys to identify, evaluate and treat historic properties as the New York District implements all phases of the Undertaking; and

WHEREAS, the New York District will implement the provisions for the PA as funding for the project is appropriated in future years; and

NOW, THEREFORE, the New York District and the NJHPO agree that the Undertaking shall be administered in accordance with the following stipulations to satisfy the New York District's Section 106 responsibility for all individual actions of the Undertaking.

Stipulations

The New York District shall ensure that the following measures are carried out:

I. IDENTIFICATION

A. The New York District shall consult with the NJHPO to develop plans to complete the identification of historic properties within the Undertakings APE.

B. The New York District shall revise plans to address comments and recommendations provided by the NJHPO prior to proceeding with identification and evaluation activities.

C. The New York District shall ensure that qualified professionals meeting the NPS professional qualifications for the appropriate discipline [National Park Service Professional Qualification Standards, Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44738-39)] are used to complete all identification and evaluation plans related to this undertaking, to include archaeological surveys and testing, historic structure inventories, and documentation.

D. The New York District and the NJHPO shall consider the views of the public or interested parties in completing its identification and evaluation responsibilities. See Stipulation VIII.A., below, for review periods.

II. EVALUATION AND EFFECTS DETERMINATION

1. Application of Criteria: The New York District, in consultation with the NJHPO, shall evaluate historic properties using the Criteria established for the NRHP [36 CFR 800.4(c)(1)]:
 - a. If the New York District and the NJHPO agree that the Criteria apply or do not apply, in evaluating the NRHP eligibility of a property, the property shall be treated accordingly for purposes of this PA.
 - b. If the New York District and the NJHPO disagree regarding NRHP eligibility, or if the ACHP so requests, prior to the start of any project-related work at the site or in the vicinity of the property, the New York District shall obtain a formal Determination of Eligibility (DOE) from the Keeper of the National Register (Keeper), National Park Service, whose determination shall be final.
2. The New York District shall ensure that the identification and evaluation of historic properties that may be affected by each phase of the Undertaking is completed prior to the initiation of any formal action by the Corps including rehabilitation, relocation, demolition, etc.
3. Disagreements on effect determinations. Should the New York District and NJHPO disagree as to whether the criteria of adverse effect apply to the effects of the Undertaking on particular historic properties, the New York District will request the ACHP to review the finding and request their written opinion within 30 days, in accordance with 36 CFR 800.5(c). The New York District will take the ACHP's opinion into account when reaching a final decision.
4. The New York District shall maintain records of all decisions it makes related to the NRHP eligibility and determination of effects on properties.

III. TREATMENT OF HISTORIC PROPERTIES.

The New York District shall adhere to the following treatment strategies in order to avoid adverse effect to historic properties.

- A. The New York District, in consultation with the NJHPO, shall develop appropriate treatment plans for historic properties identified within the APE which may be affected by the Undertaking. Unless the NJHPO objects within 30 days of receipt of any plan, the New York District shall ensure that treatment plans are implemented by the New York District or its representative(s). The New York District shall revise Plans to address comments and recommendations provided by the NJHPO.
- B. The New York District shall ensure that qualified professionals meeting the NPS professional qualifications for the appropriate discipline [National Park Service Professional Qualification Standards, Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44738-39)] are used to develop and implement all treatment plans.

C. Avoidance. The preferred treatment is avoidance of effects to historic properties. The New York District shall, to the extent feasible, avoid historic properties either through project design changes, use of temporary fencing or barricades, realignments, landscaping, or other measures that will protect historic properties. The New York District, and the NJHPO shall consult to develop plans for avoiding effects to historic properties. The New York District shall incorporate feasible avoidance measures into project activities as part of the implementation of the Undertaking. If, in consultation with the NJHPO, avoidance is determined to be infeasible, the New York District shall develop and implement treatment/mitigation plans consistent with Stipulation II of this PA.

D. Preservation In Place. When the New York District and NJHPO agree that complete avoidance of historic properties is infeasible, the New York District shall explore preservation in place, if appropriate. Preservation in place may entail partial avoidance or protection of historic properties against project-related activities in proximity to the property. The New York District shall preserve properties in place through project design, i.e. incorporating color, texture, scale, and/or materials which are compatible with the architectural or historic character of the historic property; use of fencing, berms or barricades; and/or preservation of vegetation including mature trees, landscaping and planting which screen the property. If the New York District, in consultation with the NJHPO, determines that preservation in place is infeasible, the New York District shall develop and implement treatment/mitigation plans consistent with Stipulation II of this PA.

E. Buildings and Structures and Districts. The New York District, in consultation with the NJHPO, shall determine the effect the Undertaking will have on listed or eligible historic building, district, and structure and ensure that a treatment plan be developed for these properties.

F. Archaeological Sites

a. Archaeological Data Recovery: The District shall develop a data recovery plan for archaeological sites eligible solely under NRHP Criterion D which the New York District and the NJHPO agree cannot be avoided or appropriately preserved in place. The data recovery plan to retrieve significant archaeological information will be developed and implemented by the New York District or its representative(s), following approval from the NJHPO and prior to the implementation of project-related activities within or in the vicinity of the archaeological sites.

b. The New York District shall ensure that the data recovery plan for each eligible site addresses substantive research questions developed in consultation with the NJHPO and Federally Recognized Tribes, as appropriate. The plan shall be consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 FR 44734-37) and take into account the ACHP's publication, Treatment of Archaeological Properties.

c. The New York District shall submit data recovery plans to the NJHPO for review and approval. The New York District and NJHPO shall consult to resolve any objections to the data recovery plan as proposed. The data recovery plan shall then be implemented by the New York District once approved by the NJHPO. If no response is received from the NJHPO after 30

days of receipt of adequate documentation, the New York District may assume the NJHPO's concurrence and proceed with implementation of the plan submitted.

G. Historic Landscapes

a. The New York District, in consultation with the NJHPO, shall develop a plan to identify and evaluate design alternatives which will avoid, minimize, or compensate for impacts when it is determined that a historic landscape will be affected by Undertaking activities.

b. Treatment measures for historic landscapes shall consider, in order of priority, preservation, rehabilitation, restoration, reconstruction, and additions in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (1996) and Protecting Cultural Landscapes, National Park Service Preservation Brief Number 36.

IV. CURATION AND DISSEMINATION OF INFORMATION

A. The New York District shall maintain all decision records on identification, evaluation, effects determination and mitigation of historic properties for this Undertaking.

B. The New York District or its designee, in consultation with the NJHPO shall ensure that all materials and records resulting from the survey, evaluation, and data recovery conducted for the Undertaking will be curated in accordance with 36 CFR Part 79 "Curation of Federally-Owned and Administered Archaeological Collections" and ER 1130-2- 433 "Project Operations: Collections Management and Curation of Archaeological and Historical Data." All material and records recovered from non-Federally owned land shall be maintained in accordance with 36 CFR Part 79 until their analysis is complete and, if necessary, are returned to their owner(s).

V. RESOLUTION OF ADVERSE EFFECTS

A. When the New York District, in consultation with the NJHPO, determines that Undertaking related activities cannot adhere to treatment plans developed in accordance with Stipulation II.E. or would otherwise have an adverse effect, the New York District shall:

1. Develop a Standard Mitigation Agreement (SMA) with the NJHPO; or
2. Consult with the ACHP to develop a Memorandum of Agreement (MOA) in accordance with 36 CFR Part 800.6 (c).

B. The New York District shall invite the ACHP to participate in consultation when:

1. The New York District and SHPO determine that an agreement or a SMA cannot be reached;
2. a National Historic Landmark is involved;
3. human remains have been identified; or
4. there is widespread public interest in a historic property or properties.

C. The New York District and the NJHPO, and interested parties as appropriate, shall consult to develop alternatives to mitigate or minimize adverse effects. The analysis of alternatives shall consider program needs, cost, public benefit and values, and design feasibility.

D. Development of Standard Mitigation Agreements (SMA).

1. The New York District, in consultation with the NJHPO and interested parties, as appropriate, shall develop SMAs for historic properties which will be adversely affected by the Undertaking. The New York District shall submit the SMA to the NJHPO for review and approval by certified mail. The NJHPO shall have 30 days from receipt of adequate information in which to review and comment on the SMA(s). If the NJHPO fails to respond within 30 days, or if there is disagreement, the New York District shall notify the ACHP and consult to develop the proposed SMA into an MOA and submit copies of background information and the proposed SMA to facilitate consultation to develop an MOA in accordance with 36 CFR Part 800. After signing by the New York District and NJHPO, the New York District shall file all SMAs with the ACHP.

Standard Mitigation Agreements (SMA)

1. SMAs developed between the New York District and the NJHPO may include one or more of the following stipulations which address routine adverse effects that may occur to historic properties as a result of project implementation.

2. Recordation. The New York District shall consult with the NJHPO or Historic American Building Survey/Historic American Engineering Record (HABS/HAER) to determine the appropriate level and type of recordation for affected resources. For historic properties with state and/or local significance, recordation shall be consistent with the requirements and standards of the Department of the Interior (April 2003). All documentation must be submitted to NJHPO and HABS/HAER for acceptance, prior to the initiation of project activities, unless otherwise agreed to by the NJHPO.

3. Salvage and Donation of Significant Architectural Elements. Prior to demolition, partial demolition, or substantial alteration of historic properties, the New York District, in consultation with the NJHPO, shall develop a salvage and donation plan to identify appropriate parties willing and capable of receiving and preserving the salvaged significant architectural elements. The New York District shall submit the plans to the NJHPO for review and approval.

4. Alternative Treatments or Design Plan which meet the Standards. Prior to demolition partial demolition, or substantial alteration of historic properties, the New York District, in consultation with the NJHPO, shall develop a plan identifying protocols for developing treatment guidelines and evaluating design standards for new construction within historic districts in keeping with the Secretary's Standards. The New York District shall submit the plans to the NJHPO for review and approval.

5. Data recovery for archaeological sites eligible under Criterion D and others and data recovery and treatment of archaeological sites where data recovery will not result in a finding of no adverse effect. The New York District shall conduct data recovery on archaeological sites following agreement on the prospective data recovery and treatment plans between the New York District and the NJHPO when the archaeological sites are eligible for National Register

inclusion under additional Criteria than Criterion D (for the information which they contain) or when the full informational value of the site cannot be substantially preserved through the conduct of appropriate research to professional standards and guidelines. To the maximum extent feasible, data recovery and treatment plans shall be developed to take into account and mitigate for the fullest range of archaeological site values and significance. Prior to construction, the New York District shall develop a data recovery plan for archaeological sites eligible under Criterion D and others. The New York District shall submit the plans to the NJHPO for review and approval.

VI. UNANTICIPATED DISCOVERY

A. If previously unidentified properties are discovered during Undertaking implementation, the New York District shall cease all work in the vicinity of the discovered property until it can be evaluated pursuant to the guidelines in Stipulation I of this PA. If the property is determined to be eligible, the New York District shall consult with the NJHPO to develop a treatment plan or SMA in accordance with Stipulation II of this PA.

B. The New York District shall implement the treatment or SMA once approved by the NJHPO.

VII. TREATMENT OF HUMAN REMAINS:

If any human remains and/or grave-associated artifacts are encountered, the New York District, the NJHPO and Tribes shall consult to develop a treatment plan that is responsive to the ACHP's "Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects" (February 23, 2007), the Native American Grave Protection and Repatriation Act, As Amended (PL 101-601, 25 U.S.C. 3001 et seq.) and the U.S. Army Corps of Engineers, Tribal Consultation Policy (4 October 2012).

A. Human remains must be treated with the utmost respect and dignity. All work must stop in the vicinity of the find and the site will be secured.

B. The medical examiner/coroner, local law enforcement, the NJHPO and tribes will be notified. The coroner and local law enforcement will determine if the remains are forensic or archaeological in nature.

C. If the human remains are determined to be Native American they shall be left in place and protected from further disturbance until a treatment plan has been developed and approved by the New York District, NJHPO and Tribes.

D. If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for avoidance or removal is developed and approved by the New York District, NJHPO, Federally Recognized Tribes and other parties, as appropriate.

E. Avoidance of human remains is the preferred treatment.

VIII. ADMINISTRATIVE TERMS

A. REVIEW PERIODS

The NJHPO, ACHP, the Delaware Nation, the Delaware Tribe of Indians, the Shawnee Tribe of Oklahoma and any other interested party shall have 30 days to review and/or object to determinations, evaluations, plans, reports, and other documents submitted to them by the New York District.

B. DISPUTE RESOLUTION

1. The New York District and the signatories shall attempt to resolve any disagreement arising from implementation of this PA. If there is a determination that the disagreement cannot be resolved, the New York District shall request the ACHP's recommendations or request the comments of the ACHP in accordance with 36 CFR Part 800.7.

2. Any ACHP recommendations or comments provided in response will be considered in accordance with 36 CFR Part 800.7, with reference only to the subject of the dispute. The New York District shall respond to ACHP recommendations or comments indicating how the New York District has taken the ACHP's recommendations or comments into account and complied with same prior to proceeding with Undertaking's activities that are subject to dispute. Responsibility to carry out all other actions under this PA that are not the subject of the dispute will remain unchanged.

C. TERMINATION

Any signatory to this PA may terminate it by providing thirty days notice to the signatories, provided that the signatories will consult during the period prior to termination by certified mail to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the New York District will comply with 36 CFR Parts 800.4 through 800.6 with regard to individual Undertaking actions covered by this Agreement.

D. SUNSET CLAUSE

This PA will continue in full force and effect until the construction of the Undertaking is complete and all terms of this PA are met, unless the Project is terminated or authorization is rescinded.

E. AMENDMENT

This PA may be amended upon agreement in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

F. ANTI-DEFICIENCY ACT

All requirements set forth in this PA requiring expenditure of funds by the New York District are expressly subject to the availability of appropriations and the requirements of the Anti-Deficiency Act (31 U.S.C. 1341). No obligation undertaken by the New York District under the terms of this PA shall require or be interpreted to require a commitment to extend funds not appropriated for a particular purpose. If the New York District cannot perform any obligation set forth in this PA because of unavailability of funds, that obligation must be renegotiated among the New York District and the signatories as necessary.

Execution and implementation of this PA evidences that the New York District has satisfied its Section 106 responsibilities for all individual Undertakings of the Project, and that the New York District has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

U.S. ARMY CORPS OF ENGINEERS

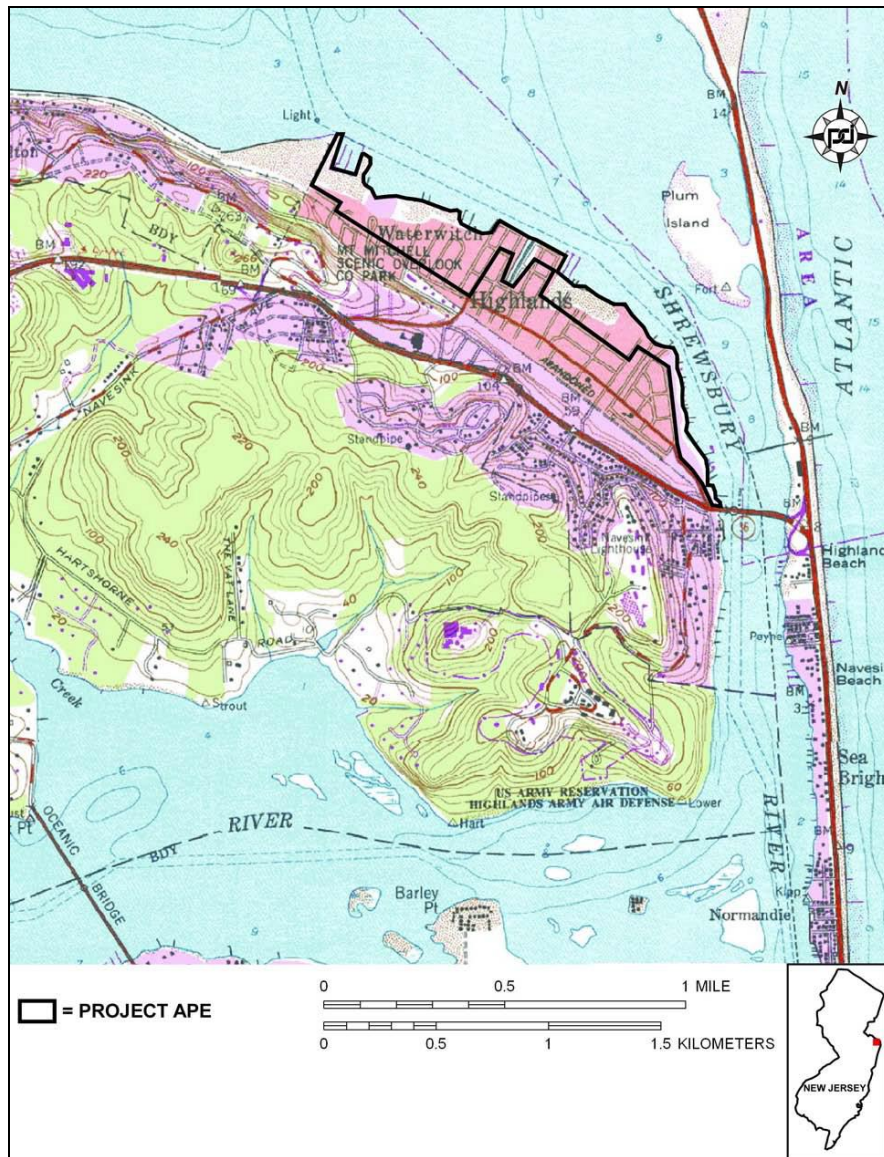
By: _____ Date: _____

David A. Caldwell
Colonel, U.S. Army
Commander

NEW JERSEY STATE HISTORIC PRESERVATION OFFICE

By: _____ Date: _____

Daniel Saunders, Deputy State Historic Preservation Officer



Appendix B. Investigated portion of Area of Potential Effect (APE). Historic architectural survey and archaeological assessment were conducted. Borough of Highlands, Monmouth County, NJ (Sandy Hook Quadrangle, USGS 1981 [1954]).

Appendix C: Identified Properties within the APE and NRHP-eligibility Determinations

Name	Address	NRHP Eligibility
Honeysuckle Lodge	Between Atlantic and Cedar Street	Potentially eligible
58 Fifth Street Bungalows	58 Fifth Street	Potentially eligible
Shrewsbury Avenue District	26 – 34 Shrewsbury Avenue	Not eligible
Clam Shanty	Bay end of Miller Street	Not eligible
Bay Avenue Historic District		Potentially eligible
The following Bay Avenue properties may be found to be contributing elements to the potential Bay Avenue Historic District. Individual eligibility is given below for each structure.		
FLoBar Apartments (Creighton Hotel)	24 Bay Avenue	Potentially eligible
Sculthorpe's Auditorium (the "Purple Building")	78 Bay Avenue	Potentially eligible
Sasha's Boutique Outlet	1 Bay Avenue	Not eligible
Bahrs Real Estate	15 Bay Avenue	Not eligible
Mewes Bros. Dairy	19 Bay Avenue	Not eligible
Sears, Roebuck & Co. kit house	257 Bay Avenue	Not eligible
Dwelling	60 Bay Avenue	Potentially eligible
Bahr's Landing Restaurant and Marina	2 Bay Avenue	Eligible

Raritan Bay and Sandy Hook Bay, New Jersey Combined Erosion Control and Coastal Storm Risk Management Project Borough of Highlands Feasibility Study

**Draft Feasibility Report
July 2015**

Appendix A6:

**Clean Air Act Conformity
Record of Non-Applicability**

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DRAFT RECORD OF NON-APPLICABILITY (RONA)

Project Name: Raritan Bay and Sandy Hook Bay Highlands, New Jersey Coastal Storm Risk Management Feasibility Study

Project/Action Point of Contact: Matthew Voisine, 917.790.8718

Begin Date: September 2017

End Date: April 2020

1. The project described above has been evaluated for Section 176 of the Clean Air Act. Project related emissions associated with the federal action were estimated to evaluate the applicability of General Conformity regulations (40CFR§93 Subpart B).
2. The requirements of this rule do not apply because the total direct and indirect emissions from this project are anticipated to be significantly less than the 100 tons trigger levels for NO_x, VOC, PM_{2.5}, or CO for each project year (40CFR§93.153(b)(1) & (2)). These estimates are based on another project, Union Beach that USACE is studying. The Union Beach project is a much larger and more complex project than the Highlands project. The estimated totals for the Union Beach project are; NO_x emissions 23.7 tons for 2016 and 51.3 tons for 2017. VOC, PM_{2.5}, and, CO are significantly lower than the NO_x emission estimates as NO_x is the primary mass criteria pollutant from diesel equipment.
3. The project is presumed to conform with the General Conformity requirements and is exempted from Subpart B under 40CFR§93.153(c)(1).

Sincerely,

Peter Weppeler
Chief, Environmental Analysis Branch